



**Advanced call analytics  
for small to mid-size organisations**

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## **Product Documentation**

Last Updated: February 2016

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# Home

## Legal & copyright notices

### Software license

When you purchase this software, you are actually purchasing a license to use it.

One license covers one installation, although one installation may cover up to five sites.

Your support contract, if applicable, will cover all sites logged by this TIM Plus installation.

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The contact details of the copyright holders are:

Tri-Line Network Telephony Limited  
9-10 Telfords Yard  
The Highway  
London  
E1W 2BS

Switchboard: +44 20 7265 2600  
Technical Support: +44 20 7265 2626  
Website: <http://www.tri-line.com/>

### Free upgrades

We operate a free upgrade scheme for customers who purchase maintenance at the same time as purchasing a license; whilst a maintenance contract is in place, minor software updates and enhancements are made available free of charge.

Free upgrades are solely at the discretion of Tri-Line and are usually delivered by electronic means over the internet. It is the customer's responsibility to ensure that these updates can be received.

Customers without a maintenance contract will be charged for any software upgrades they require, as well as for any technical assistance needed during the upgrade procedure.

## System requirements

### Hardware

A computer with the following specification will comfortably run a single copy of TIM Plus:

- **CPU:** 2 GHz Dual-Core x86/x86-64 CPU
- **Memory:** 2 GB
- **Hard disk:** 80 GB
- **Operating system:** Windows XP SP3 - Windows 8 (inc. Server editions)
- **Network:** Ethernet TCP/IP
- **I/O:** Dedicated serial RS232-C port for each PBX (if required)

We do not recommend integration of the internal SQL database of TIM Plus with third-party applications such as CRM systems; for this type of solution, we would recommend our [TIM Enterprise](#) product.

### Software



- Microsoft Internet Explorer 6+
- Mozilla Firefox 2+
- Apple Safari
- Google Chrome
- Opera



For automatic licensing during installation of the software, a connection to the internet is also required. For best results, ensure that the PC can access external websites on TCP ports 80 (HTTP) and 443 (HTTPS) without the need for a proxy login.

### Summary

- TIM Plus must be installed on a Windows PC but can be viewed from any web browser running on any operating system without the need for additional client software.
- TIM Plus comes with its own in-built web server, so a server edition of Windows is not required nor is an external web server such as IIS or Apache.

## Setup

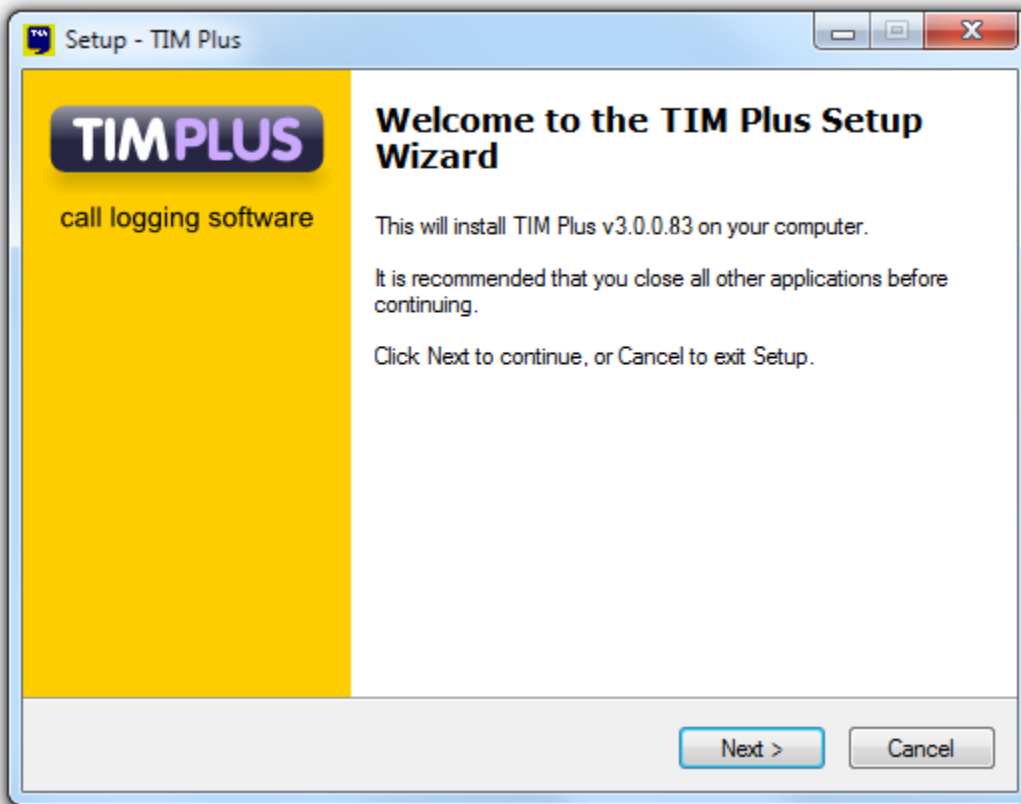
### Obtaining and installing TIM Plus

Log on to the [Tri-Line Gateway](#) using the credentials you created when you first enquired about TIM Plus. Once logged on, you will be directed to your [Home](#) page, from where you can download your personal copy of the software.



It is important that you download your software only from this location, since each installation package is tagged with a unique ID bound to your account.

When you have downloaded the setup package, double-click on it and follow the setup wizard in order to complete the installation.



When prompted to select a tariff table, scroll down the list to locate the one relevant to your country and click on [Set as default](#). If the tariff is not installed by default, click on the [Download](#) link first.



## Tariff

Progress **1 2 3 4 5 6 7 8 9**

The list below shows tariff tables that are already installed, along with those available for download. To install a new tariff, click the "Download" link alongside it. (Additional tariffs can be added later)

You must also select a default tariff to use when calls are not explicitly costed by other tariffs.

Iceland	✓ Installed	
India	✓ Installed	
Ireland	✓ Installed	
Netherlands	✓ Installed	
Saudi Arabia	✓ Installed	
UAE	✓ Installed	
UK	✓ Installed	★ Default
USA	✓ Installed	<a href="#">Set as default</a>
Afghanistan	↓ Download	
Albania	↓ Download	
Algeria	↓ Download	
American Samoa	↓ Download	

**Back** **Next**

When asked to provide a license certificate, click on the **Get license** button to retrieve this automatically from our servers.

License Progress **1 2 3 4 5 6 7 8**

TIM Plus needs a valid software license in order to run.  
You can obtain a license right now if you allow the software to contact a license server.

Ensure this computer is connected to the internet, then press the **Get license** button.

**Get license**

**Back** **Next**

### Obtaining a license manually

If you cannot update your software license automatically, you can apply this manually by following the steps below:

1. In the `Get license` window, click on the **Next** button and copy the product key displayed in the `License` box, as shown below:

```

--- BEGIN PRODUCT KEY -----
UAAAHAicAVAAr/9s8zxjdyBcmwqLZ8IknMhQr3UEToj9j3DJ
O36fheDXOz5PAFW9GwPDDffai6UUh1tu06+HqtIXrPK6PaAV
yy/arfUj1Avz8EOx5xNkp2qOLRhgJ/c=
--- END PRODUCT KEY -----

```

2. Log in to the `Gateway` using your username and password.
3. In the `Products` panel, click on the TIM Plus product.
4. In the `Software license` panel, click on the `Activate now` link.
5. Paste the product code in the activation text box.
6. Enter the number of users you intend to log and the version number of the software, then click on the **Activate Now** to obtain the license certificate.
7. Copy and paste the certificate in the `License` box of the TIM Plus setup wizard.


## Connecting to your PBX

### 3COM


#### 3COM VCX


These instructions help you configure your 3COM VCX phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus receives FTP transfers from this PBX.

**Support Files**

 3Com VCX-NBX.TDT

 3Com VCX-NBX.TDS

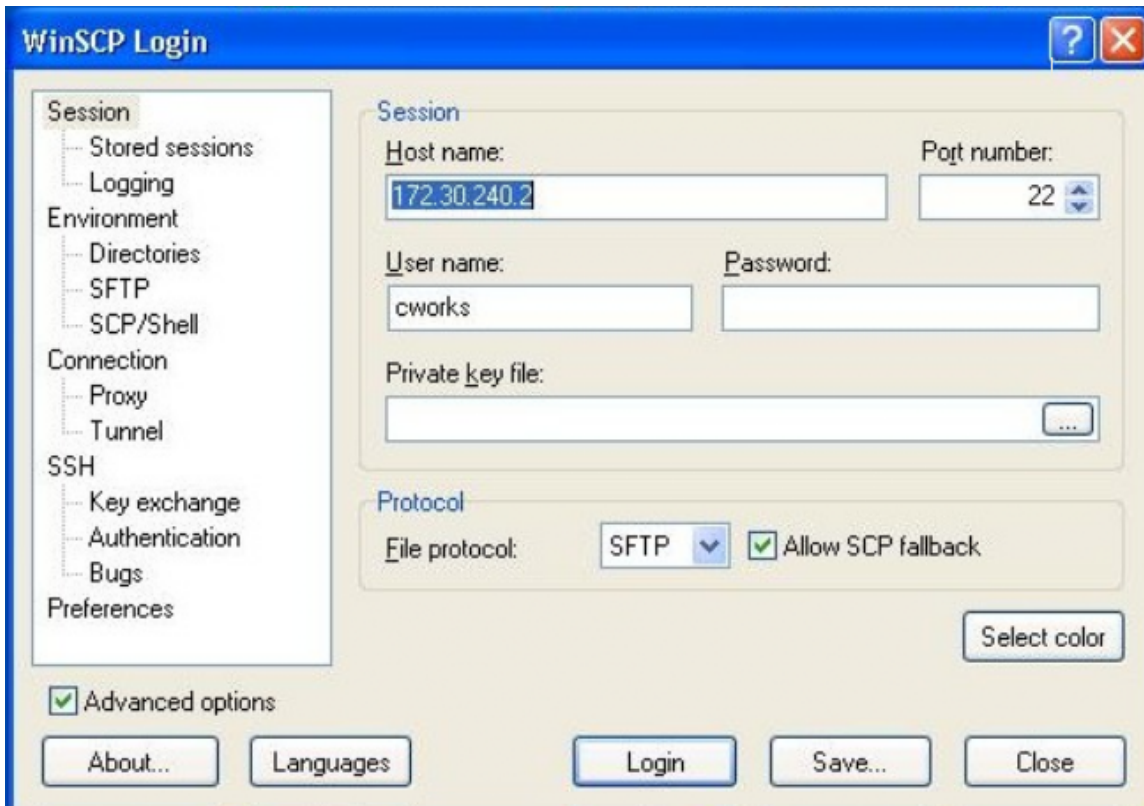
**Required Tasks**

Configure the SMDR output

Configure TIM Plus

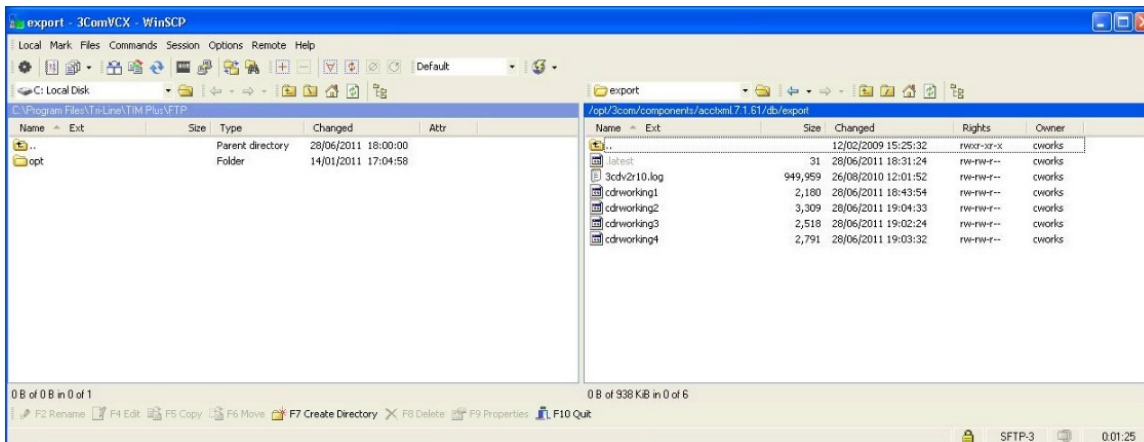
#### Configuring your SMDR output

To retrieve call logging data from your 3COM VCX phone system, you need to set up an SFTP transfer. Below is an example of how to configure this, using WinSCP - a free FTP client software. Any other third-party client software can be used instead.

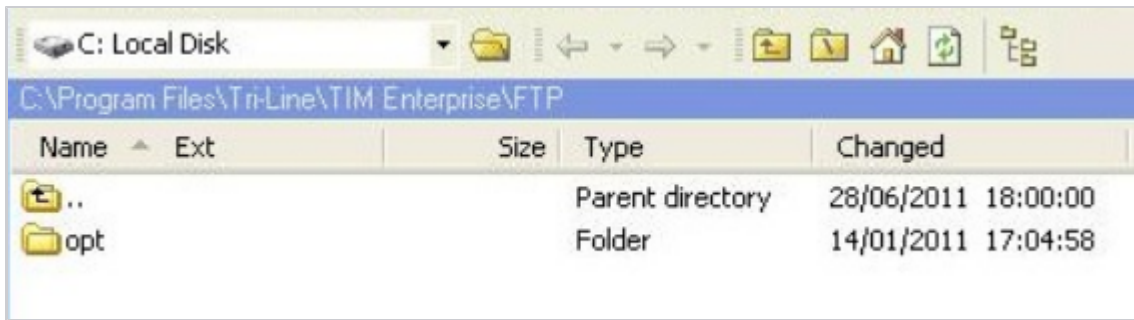


Field	Description
<b>Host name</b>	The IP address or host name of the phone system
<b>Port number</b>	The port number for the SFTP transfer. The default port number is 22
<b>User name</b>	The username required to log in to your 3COM VCX phone system
<b>Password</b>	The password required to log in to your 3COM VCX phone system

Once connected to the phone system, you can transfer the CDR files, located by default in `opt/3com/VCX/acctxml/db/export`, to the PC running TIM Plus.



In this example, the XML files are being copied in the following location: `C:\Program Files\Tri-Line\TIM Enterprise\FTP`, given the `FTP` folder has been created in advance for this purpose.



### Creating a batch file

To enable TIM Plus to collect and process the XML files, you need to create a batch file containing the following lines:

```
xcopy/Y "C:\Program Files\Tri-Line\TIM Plus\FTP\*.XML"
"C:\Program Files\Tri-Line\TIM Plus\spool\*.{sitecode}"
cd "\Program Files\Tri-Line\TIM Plus\FTP\"
del *.* /q
cd\
```



In the above example, the `{sitecode}` needs to be replaced with the unique ID of the site object you are trying to send the data to. To obtain the ID of a site, hover the mouse pointer over it on the **Directory** screen in TIM Plus and it will be displayed as a tooltip.

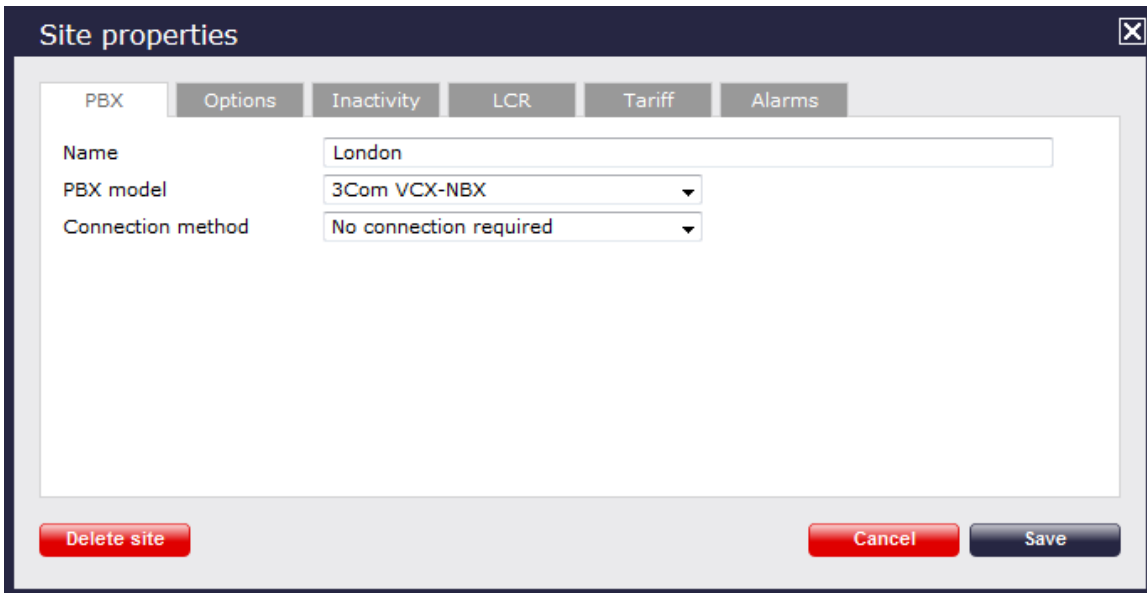
The batch file will change the `.xml` file extension to the designated site code and move the files in the `spool` folder for processing.

A Windows scheduled task must be set up as well in order to run the batch file every 5 minutes or so.

### Configuring TIM Plus

Once the batch file has been configured, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: 3Com VCX-NBX

Connection method: No connection required

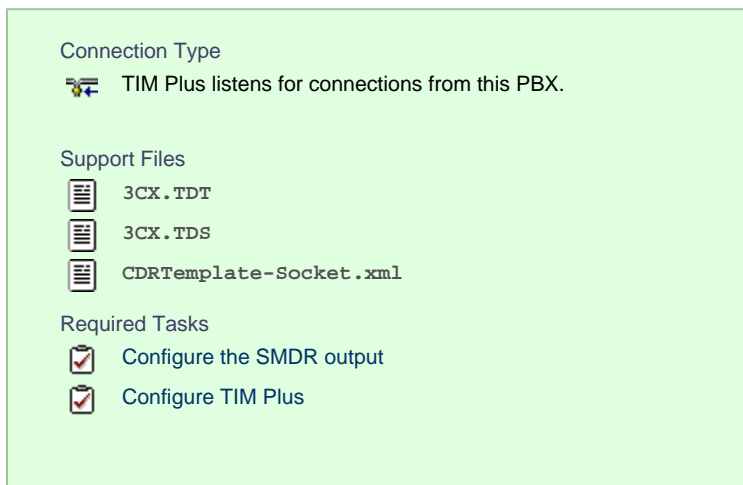
Delete site Cancel Save

3. In the **Site Properties** window, select **3Com VCX-NBX** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.


## 3CX

### 3CX (below v14)




These instructions help you configure your 3CX phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.



**Connection Type**

 TIM Plus listens for connections from this PBX.

**Support Files**

-  3CX.TDT
-  3CX.TDS
-  CDRTemplate-Socket.xml

**Required Tasks**


- Configure the SMDR output
- Configure TIM Plus

### Configuring your SMDR output


#### Download the interface file

1. Visit the [Gateway](#) and download the interface files from the **Related downloads** section, as shown below:


### Downloads

-  **Full install package**  
TIM Plus

---


-  **Upgrade package**  
TIM Plus

---


-  **Documentation**  
Product documentation for your TIM Plus

### Software license

[View license certificate](#)


 **This product is licensed**  
The license for this product is valid and up-to-date.

### Maintenance

 **This product is maintained**  
You have maintenance until **19 September 2020**, giving you full access to our technical support resources during this time.

### Related downloads

Download executables and documents related to the PBXs you are using with this software

Name	Version
3CX <small>3CX interface file for this TIM Plus.</small>	 <b>TDT file (zip)</b>

2. Extract the **3CX.ZIP** file onto the desktop.
3. Copy the **3CX.TDT** and **3CX.TDS** files into `C:\Program Files\Tri-Line\TIM Plus\config`, overwriting any existing files with the same name.

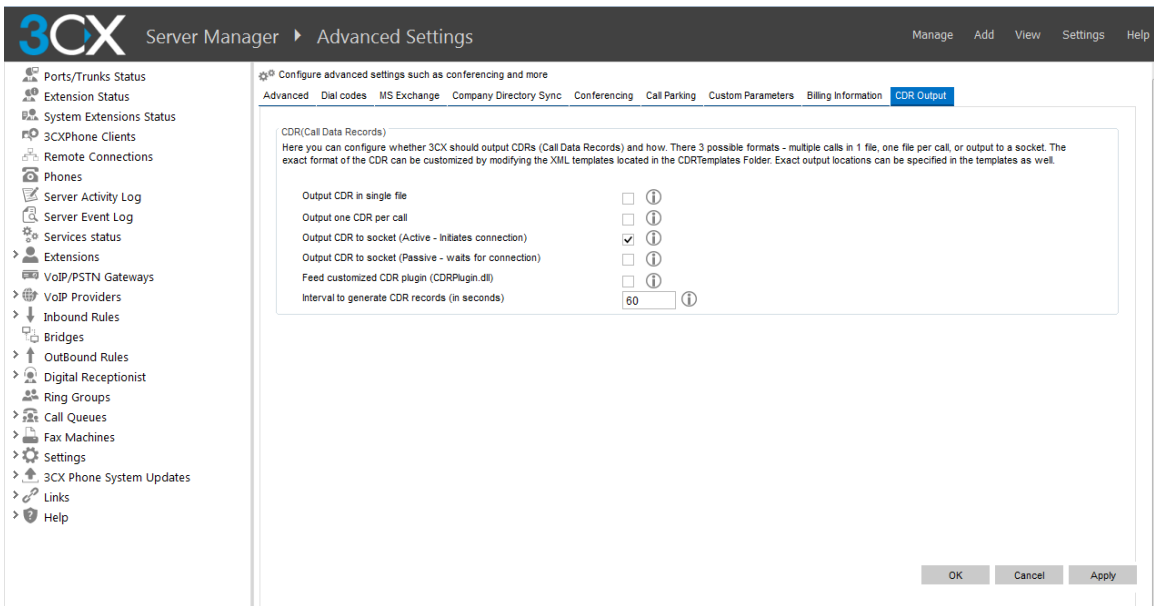
#### Configure the interface file

1. Transfer the `CDRTemplate-Socket.xml` file onto the 3CX server and place it in the following location: `C:\Documents and Settings\All Users\Application Data\3CX\Data\CDRTemplates`.
2. Edit `CDRTemplate-Socket.xml` and update the relevant entry to point to the IP address of the machine running TIM Plus.

```
<?xml version="1.0" encoding="utf-8"?>
<CallTemplate Host="127.0.0.1" Port="33555" outboundonly="false">
  <idcallhistory3 fmt="&#xD;&#xA;&quot;call {0}&quot;;" />
  <callid fmt="&quot;{0}&quot;;" />
  <duration fmt="&quot;{0}&quot;;" />
  <starttime fmt="&quot;{0:yyyy-MM-dd HH:mm:ss}&quot;;" />
  <answertime fmt="&quot;{0:yyyy-MM-dd HH:mm:ss}&quot;;" />
  <endtime fmt="&quot;{0:yyyy-MM-dd HH:mm:ss}&quot;;" />
  <from_no fmt="&quot;{0}&quot;;" />
  <to_no fmt="&quot;{0}&quot;;" />
  <group_no fmt="&quot;{0}&quot;;" />
  <line_no fmt="&quot;{0}&quot;;" />
</CallTemplate>
```

#### Enable the CDR output

1. Log in to your 3CX server and from the main menu go to `Settings->Advanced`.
2. Select `CDR output` from the `Advanced Settings` screen, as shown below:

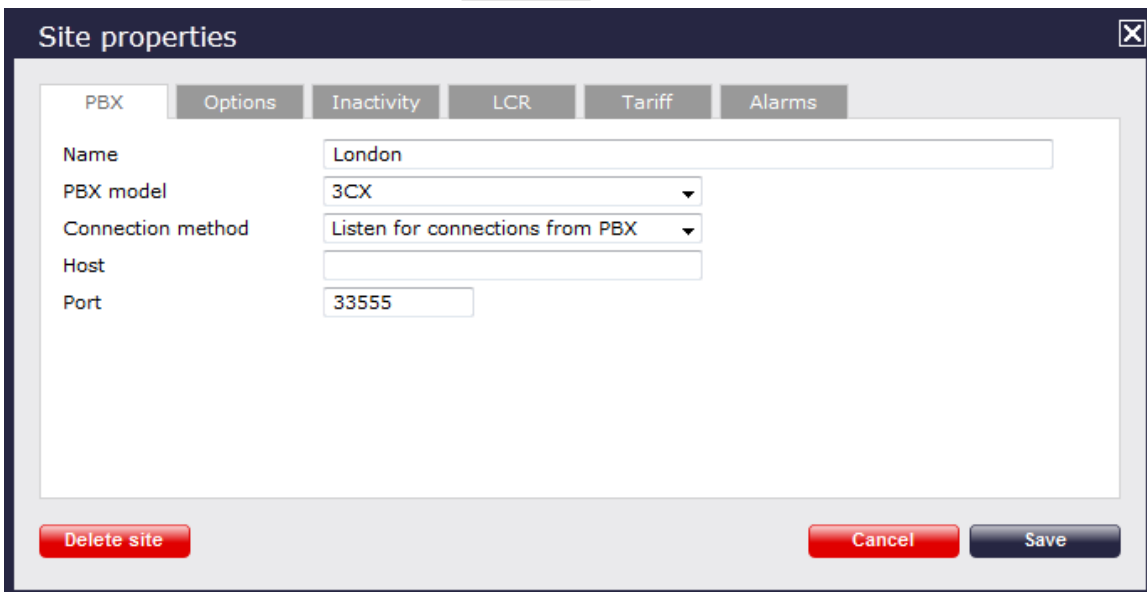


3. Enable the tick box for **Output CDR to Socket (Active - Initiates connection)** and click **Apply** .
4. Under **3CX Phone System**, click **Service Status** and within the **Service Name** section, select **3CX PhoneSystem Call History**.
5. Click **Restart** to load the new XML file.

## Configuring TIM Plus

Follow the steps below to configure TIM Plus to listen for SMDR data from your 3CX phone system:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties** .




3. In the **Site Properties** window, select **3CX** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Listen for connections from PBX** from the drop-down list.

5. Leave the **Host** field blank.
6. In the **Port** field, enter **33555** as the default port for connections to this PBX.
7. Click on the **Save** button to apply the settings.


## 3CX v14 SP2+


These instructions help you configure your 3CX phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a TCP connection to this PBX.

**Support Files**

 3CX v14 SP2+.TDS

 3CX v14 SP2+.TDT

**Required Tasks**

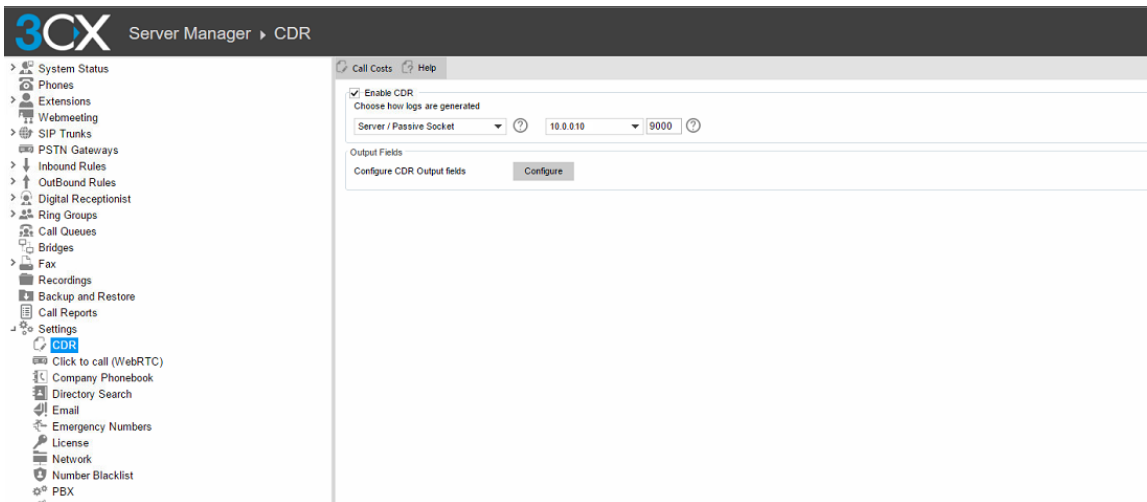
Configure the SMDR output

Configure TIM Plus

## Configure the SMDR output

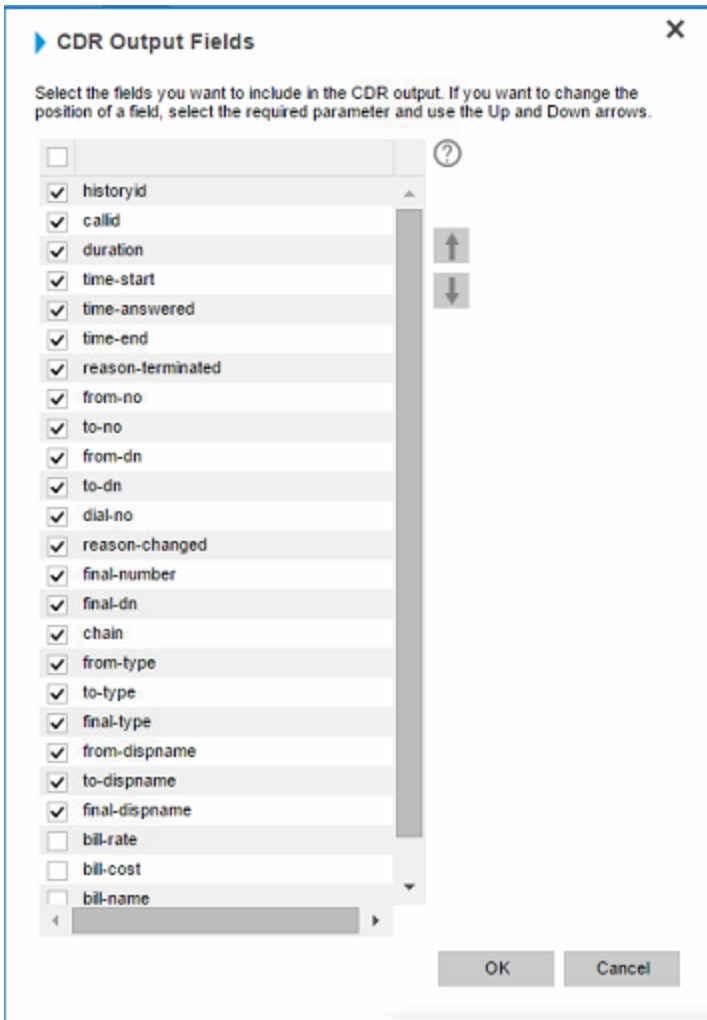
Follow the steps below to enable the SMDR output in your telephone system:

1. Log in to your 3CX server and from the main menu go to **Settings->CDR**, as shown below:



2. Tick the **Enable CDR** box and from the drop-down list, select the **Server/Passive Socket** option.
3. In the IP address field, enter the IP address of the machine running TIM Plus and select a listening port. We recommend using the 9000 range.
4. To configure the SMDR output, click on the **Configure** tab. Enable the required fields, as shown in the screenshot below:





5. Click **OK** to save the changes.

## Configure TIM Plus

Follow the steps below to configure TIM Plus to connect to your telephone system:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.

**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: 3CX

PBX model: 3CX v14 SP2+

Connection method: Actively connect to PBX

Host: 192.168.0.1

Port: 9000

Username:

Password:

Connection script: 3CX

Delete site Cancel Save


3. In the **Site Properties** window, select **3CX v14 SP2+.TDT** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Actively connect to PBX** from the drop-down list.
5. In the **Host** field, enter the IP address of your telephone system.
6. In the **Port** field, enter the port number configured in the telephone system.
7. Leave the **Username** and **Password** fields blank.
8. In the **Connection script** field, select **3CX** from the drop-down list.
9. Click on the **Save** button to apply the settings.

## Aastra (Mitel)


### Aastra BP


These instructions help you configure your Aastra BP phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a serial connection with this PBX.

**Support Files**

 Aastra BP.TDT

 Aastra BP.TDS

**Required Tasks**

Configure the SMDR output

Install NetPBX

Configure TIM Plus

### Configuring your SMDR output

BP firmware R12 or older

If you are using firmware older than R12, set the SMDR output to type **CIL 3** which is a fixed format requiring no further configuration.

BP firmware R13+

If you are using firmware R13+, set the SMDR output to **Flexible CIL** and configure the options as below:

Index	Offset	Field type	Edit	Insert	Delete
1	1	Message code	...	Insert	Delete
2	4	Sequence number CIL4	...	Insert	Delete
3	8	TAG identifier	...	Insert	Delete
4	14	Call date CIL4	...	Insert	Delete
5	21	End time hh:mm:ss	...	Insert	Delete
6	30	Caller's number DDI	...	Insert	Delete
7	39	Call duration CIL4	...	Insert	Delete
8	45	Dialled access code CIL4	...	Insert	Delete
9	50	Dialled number CIL4	...	Insert	Delete
10	75	Information status 3	...	Insert	Delete
11	84	ORG/TERM DEFINITION	...	Insert	Delete
12	87	Account code CIL4	...	Insert	Delete
13	103	Authorisation code DDI	...	Insert	Delete
14	112	Queue time, answer CIL4	...	Insert	Delete
15	117	Meter pulses CIL4	...	Insert	Delete
16	122	Cost state CIL4	...	Insert	Delete
17	124	Cost CIL4	...	Insert	Delete
18	136	Trunk number CIL4	...	Insert	Delete
19	141	Sent access code CIL4	...	Insert	Delete
20	146	Sent number CIL4	...	Insert	Delete
21	171	A-number CIL4	...	Insert	Delete
22	192	Carriage return/LF	...	Insert	Delete
23		----- not used -----	...	Insert	Delete
24		----- not used -----	...	Insert	Delete
25		----- not used -----	...	Insert	Delete
26		----- not used -----	...	Insert	Delete
27		----- not used -----	...	Insert	Delete
28		----- not used -----	...	Insert	Delete
29		----- not used -----	...	Insert	Delete
30		----- not used -----	...	Insert	Delete

**Installing NetPBX**

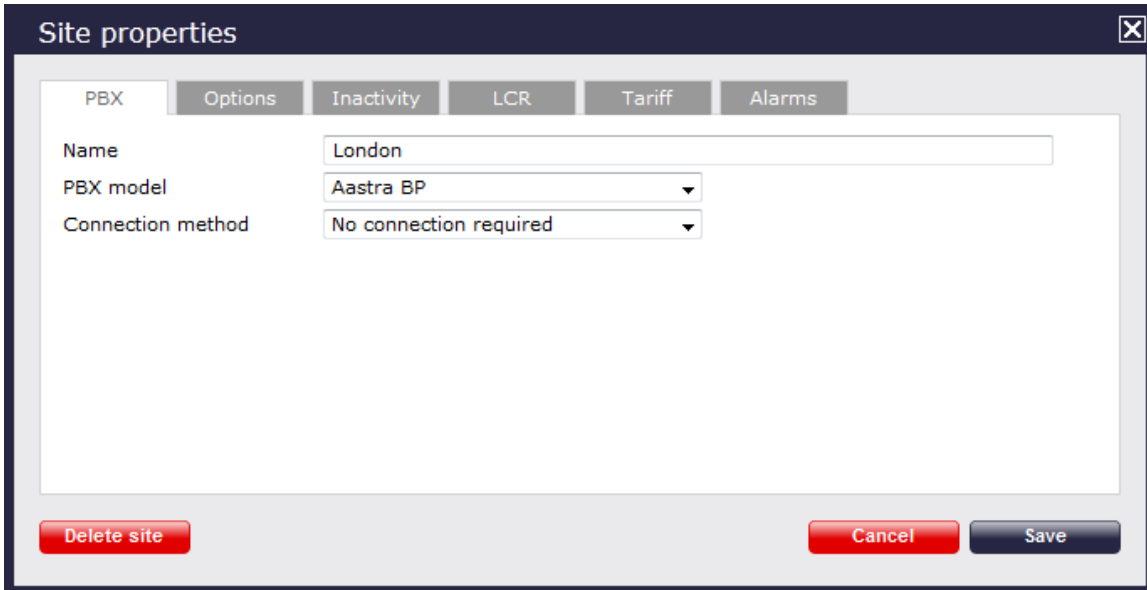
The Aastra BP phone system sends SMDR information via a serial connection. To collect the data from the serial port and send it to TIM Plus, you first need to install the NetPBX software. For setup instructions, click on the link below:

## Install and configure NetPBX

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the following steps:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



The screenshot shows a 'Site properties' dialog box with the following configuration:

Field	Value
Name	London
PBX model	Aastra BP
Connection method	No connection required


3. In the `Site Properties` window, choose `Aastra BP` from the `PBX model` drop-down list.
4. In the `Connection method` field, select `No connection required` from the drop-down list.
5. Click on the **Save** button to apply the settings.



### Aastra Intelligate Series

The Aastra Intelligate Series can be configured to send its SMDR data over a serial (RS232) or an IP connection. Click on one of the links below that relates to your preferred connection method.

#### Aastra Intelligate Series - Serial connection


These instructions help you configure your Aastra Intelligate phone system to work with TIM Enterprise. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**  
 Aastra\_PC5.TDT  
 Aastra\_PC5.TDS

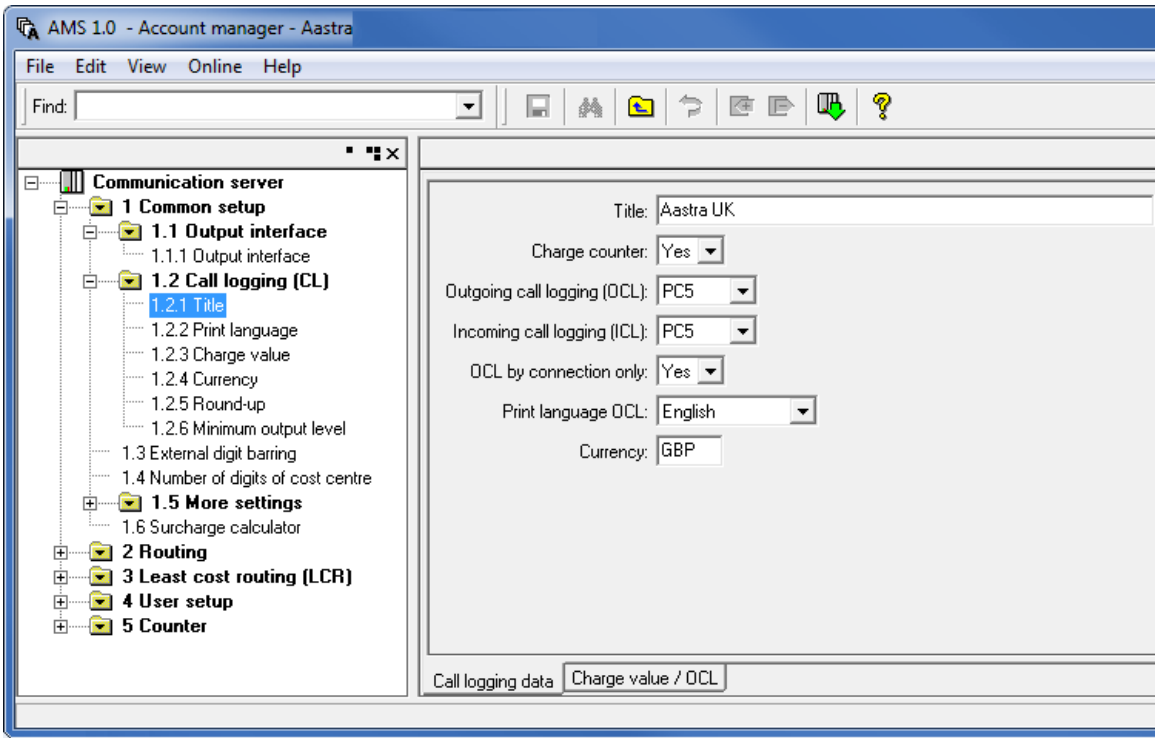
**Required Tasks**  
 Configure the SMDR output  
 Install NetPBX  
 Configure TIM Plus

**Configuring your SMDR output**

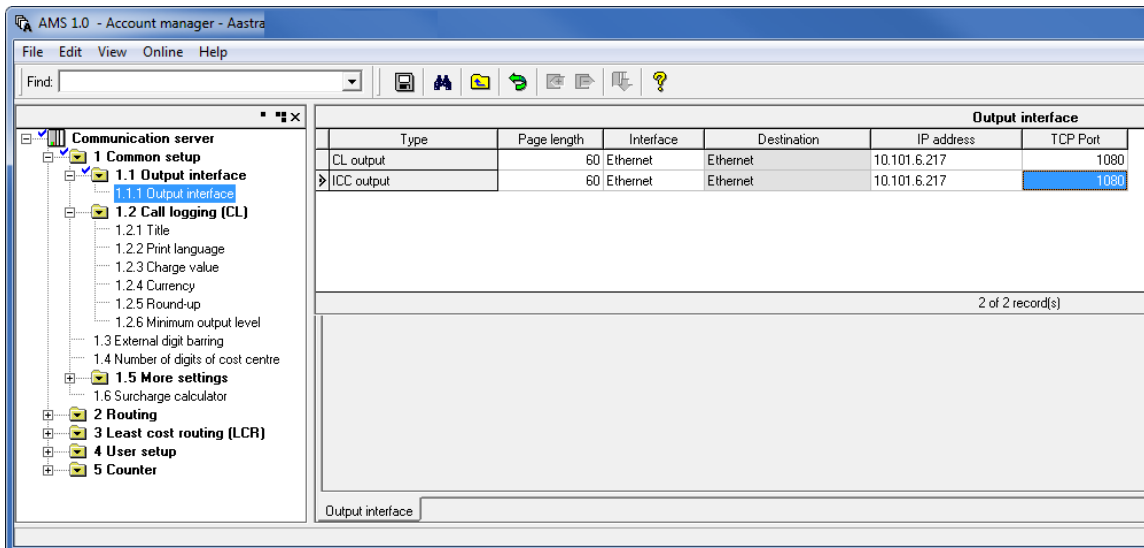
 The Aastra Intelligate Series can output SMDR information in multiple formats. You should always select the PC5 format for use with TIM Plus.

Below are some screenshots to demonstrate how the Aastra Intelligate Series should be configured:

Setting the SMDR format to PC5



Setting the SMDR format to TCP/IP



Setting the SMDR format to PC5

The OIP Server has a very basic call logging module. If you intend to install TIM Plus alongside the OIP Server, you need to uninstall the call logging module from the OIP Server suite, otherwise, when configuring your Aastra to output the data to the PC running TIM Plus, the OIP Server will overwrite some required settings.

### Installing NetPBX

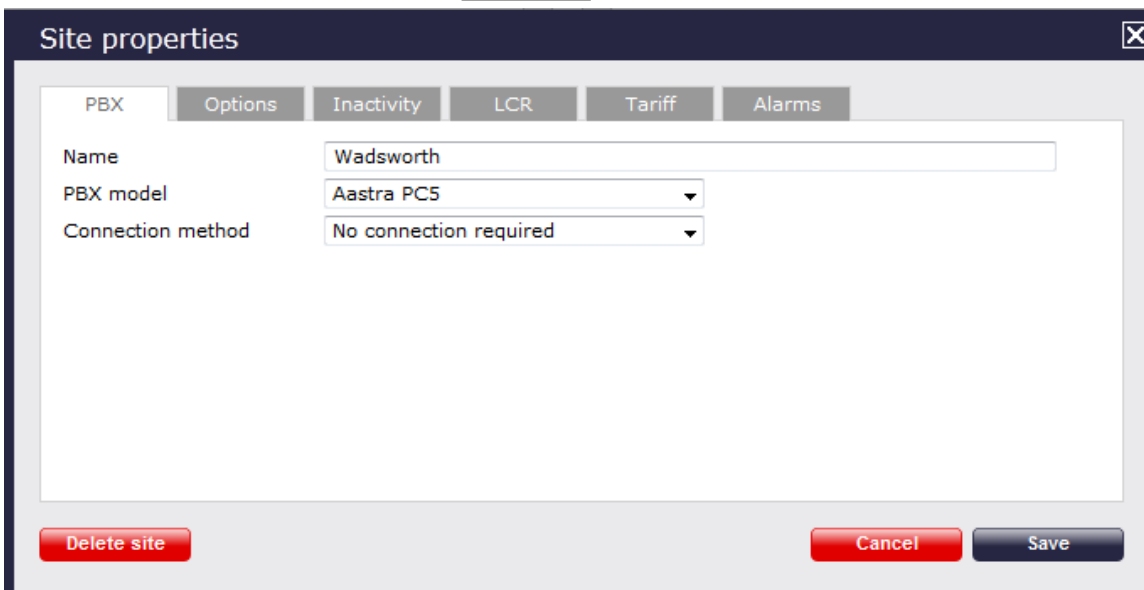
If your Aastra Intelligate has been configured to send SMDR data via a serial connection, you first need to install the NetPBX software to collect the data from the serial port and send it to TIM Plus. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the following steps:

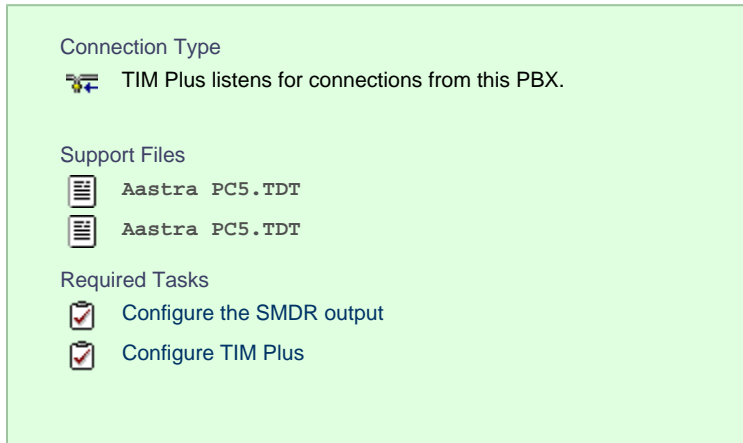
1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



3. In the **Site Properties** window, select **Aastra PC5** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the changes.

### Aastra Intelligate Series - IP connection

These instructions help you configure your Aastra Intelligate phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.



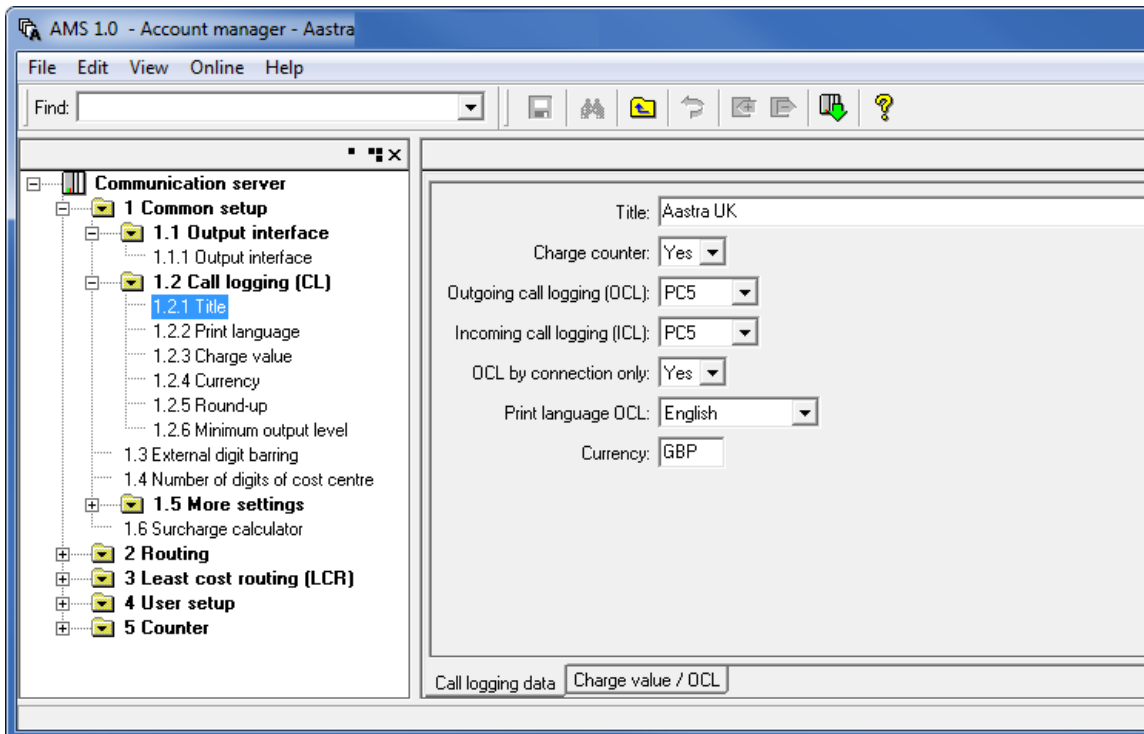
#### Configuring your SMDR output



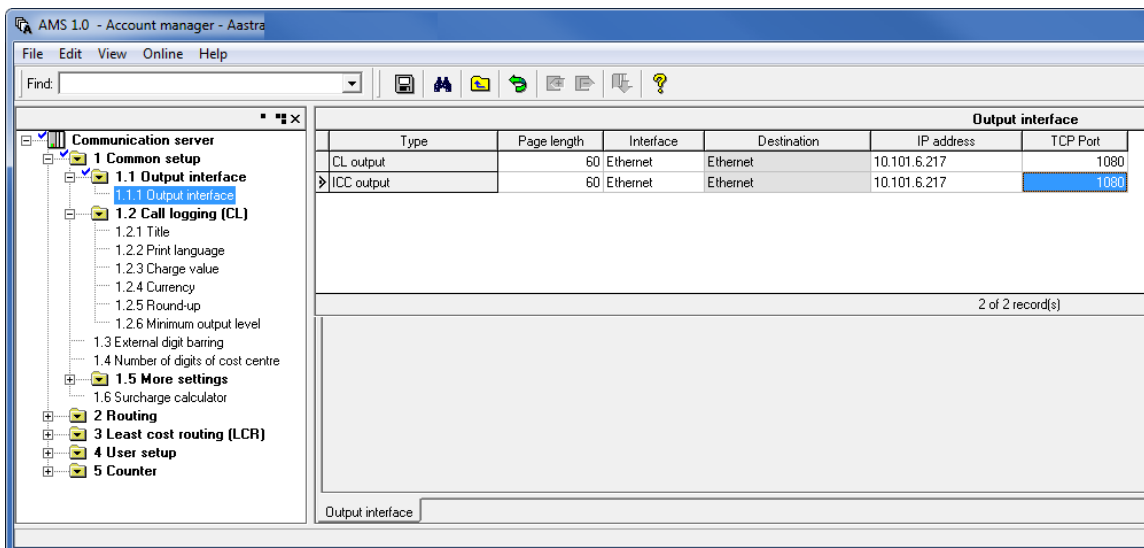
Note that the Aastra Intelligate Series can output SMDR information in multiple formats. You should always select the **PC5** format for use with TIM Plus.

Below are some screenshots to demonstrate how the Aastra Intelligate Series should be configured:

Setting the SMDR format to **PC5**



### Setting the SMDR format to TCP/IP



### OIP Server and TIM Plus

The OIP Server has a very basic call logging module. If you intend to install TIM Plus alongside the OIP Server, you need to uninstall the call logging module from the OIP Server suite, otherwise, when configuring your Aastra to output the data to the PC running TIM Plus, the OIP Server will overwrite some required settings.

### Configuring TIM Plus

Follow the steps below to configure TIM Plus to listen for SMDR data from your Aastra Intelligate Series:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



The screenshot shows the 'Site properties' dialog box with the following configuration:

- Name:** London
- PBX model:** Aastra PC5
- Connection method:** Listen for connections from PBX
- Host:** (empty field)
- Port:** 1080

Buttons at the bottom: Delete site (red), Cancel (red), Save (dark blue).

3. In the **Site Properties** window, select **Aastra PC5** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Listen for connections from PBX** from the drop-down list.
5. Leave the **Host** field blank.
6. In the **Port** field, enter **1080**, the default port number for your Aastra Intelligate phone system.
7. Click on the **Save** button to apply the settings.


## Aastra MX-ONE

The Aastra MX-ONE can be configured to send its SMDR data over a serial (RS232) or an IP connection. Click on one of the links below that relates to your preferred connection method.



### Aastra MX-ONE - IP connection

These instructions help you configure your Aastra MX-ONE phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.



**Connection Type**

 TIM Plus listens for connections from this PBX.

**Support Files**

-  Aastra MX-ONE - BC13.TDT
-  Aastra MX-ONE - BC13.TDS

**Required Tasks**

-  [Configure the SMDR output](#)
-  [Configure TIM Plus](#)

### Configuring your SMDR output

The MX-One phone system saves the call logging information into a local database, located by default in:

```
/var/opt/eri_sn/call_logging
```

```

mc - /var/opt/eri_sn/call_logging
Left File Command Options Right
<-- /var/opt/eri_sn/call_logging
Name Size MTime
./.. UP--DIR
log0.0.dat 45451 Sep 27 15:55
log0.1.dat 563230 Sep 28 21:48
log0.2.dat 661380 Sep 29 21:15
log0.3.dat 699281 Sep 30 18:55
log0.4.dat 634049 Oct 1 18:56
log0.5.dat 419327 Oct 2 15:32
log0.6.dat 142242 Sep 26 17:48

/var/opt/eri_sn/call_logging
Name Size MTime
./.. UP--DIR
log0.0.dat 45451 Sep 27 15:55
log0.1.dat 563230 Sep 28 21:48
log0.2.dat 661380 Sep 29 21:15
log0.3.dat 699281 Sep 30 18:55
log0.4.dat 634049 Oct 1 18:56
log0.5.dat 419327 Oct 2 15:32
log0.6.dat 142242 Sep 26 17:48

Hint: Do you want lynx-style navigation? Set it in the Configuration dialog.
eri_sn_admin@OSP-MXSVRI:/var/opt/eri_sn/call_logging>
:Help 2Menu 3View 4Edit 5Copy 6RenMov 7Mkdir 8Delete 9PullIn 10Quit

```



To edit the default path, SSH into each MX-One and use the `mc` command. To configure the directory structure, use the `mkdir` (key 7) command.

Next, you need to enter the following commands for the primary MX-One (the one that will send the data via IP to TIM Plus):

```

callinfo_output_set -output 0 -lim 1 -type file -subtype general
-local -dbname /var/opt/eri_sn/call_logging/log0 -format ": {stoptime
mdl10date L 4 4}{stoptime mdl10time L 4 4}{stoptime second OR 2 2}
{duration mdl10duration L 5 5}; [taxpulses != 0]: {taxpulses R 4 4};
[taxpulses == 0]: ; {conditionCodeUserDefined L 3 3} {accesscode1 R 5
5}{accesscode2 R 5 5}; [conditionCodePos == 17]: {chargedNumber R 20 20};
[conditionCodePos != 17]: {dialednumber R 20 20}; {callingnumber L 20 20}
{accountcode L 15 15} {cilcode L 6 6} {queueTimeCounter OR 3 3}
{ringTimeCounter OR 3 3} {ogTrnkId R 10 10} {incTrnkId R 10 10}
{connectedNumber R 16 16}{return}{newline};" -eol NL -record call
-localtime

```

```
callinfo_output_set -output 1 -lim 1 -type tcp -subtype general
-server 192.168.0.1 -port 9000 -format ": {stoptime md110date L 4
4}{stoptime md110time L 4 4}{stoptime second OR 2 2} {duration
md110duration L 5 5}; [taxpulses != 0]: {taxpulses R 4 4}; [taxpulses ==
0]: ; {conditionCodeUserDefined L 3 3} {accesscode1 R 5 5}{accesscode2
R 5 5}; [conditionCodePos == 17]: {chargedNumber R 20 20};
[conditionCodePos != 17]: {dialednumber R 20 20}; {callingnumber L 20 20}
{accountcode L 15 15} {cilcode L 6 6} {queueTimeCounter OR 3 3}
{ringTimeCounter OR 3 3} {ogTrnkId R 10 10} {incTrnkId R 10 10}
{connectedNumber R 16 16}{return}{newline};" -eol NL -record call
-localtime
```



The server IP address specified above will be the IP address of the TIM Plus machine. The port number can be set to any free TCP port, but we would recommend one in the 9000 range.

```
callinfo_output_set -output 2 -lim 1 -type file -subtype none -record
call -utc
callinfo_output_set -output 3 -lim 1 -type file -subtype none -record
call -utc
callinfo_output_set -output 4 -lim 1 -type file -subtype none -record
call -utc
callinfo_output_set -output 5 -lim 1 -type file -subtype none -record
call -utc
callinfo_output_set -output 6 -lim 1 -type file -subtype none -record
call -utc
callinfo_output_set -output 7 -lim 1 -type file -subtype none -record
call -utc
callinfo_output_set -output 8 -lim 1 -type file -subtype none -record
call -utc
callinfo_output_set -output 9 -lim 1 -type file -subtype none -record
call -utc
```

To send the data, add the following two commands for the primary MX-One:

```
callinfo_status_set -lim 1 -output 0 -state on
callinfo_status_set -lim 1 -output 1 -state on
```

For each additional MX-One in the cluster, the following commands need to be entered, applying `lim 2, 3, 4...n`, accordingly.

```

callinfo_output_set -output 0 -lim 2 -type file -subtype general
-local -dbname /var/opt/eri_sn/call_logging/log0 -format ": {stoptime
mdl10date L 4 4}{stoptime mdl10time L 4 4}{stoptime second OR 2 2}
{duration mdl10duration L 5 5}; [taxpulses != 0]: {taxpulses R 4 4};
[taxpulses == 0]: ; {conditionCodeUserDefined L 3 3} {accesscode1 R 5
5}{accesscode2 R 5 5}; [conditionCodePos == 17]: {chargedNumber R 20 20};
[conditionCodePos != 17]: {dialednumber R 20 20}; {callingnumber L 20 20}
{accountcode L 15 15} {cilcode L 6 6} {queueTimeCounter OR 3 3}
{ringTimeCounter OR 3 3} {ogTrnkId R 10 10} {incTrnkId R 10 10}
{connectedNumber R 16 16}{return}{newline};" -eol NL -record call
-localtime

```

```

callinfo_output_set -output 1 -lim 2 -type file -subtype none -record
call -utc
callinfo_output_set -output 2 -lim 2 -type file -subtype none -record
call -utc
callinfo_output_set -output 3 -lim 2 -type file -subtype none -record
call -utc
callinfo_output_set -output 4 -lim 2 -type file -subtype none -record
call -utc
callinfo_output_set -output 5 -lim 2 -type file -subtype none -record
call -utc
callinfo_output_set -output 6 -lim 2 -type file -subtype none -record
call -utc
callinfo_output_set -output 7 -lim 2 -type file -subtype none -record
call -utc
callinfo_output_set -output 8 -lim 2 -type file -subtype none -record
call -utc
callinfo_output_set -output 9 -lim 2 -type file -subtype none -record
call -utc

```

```

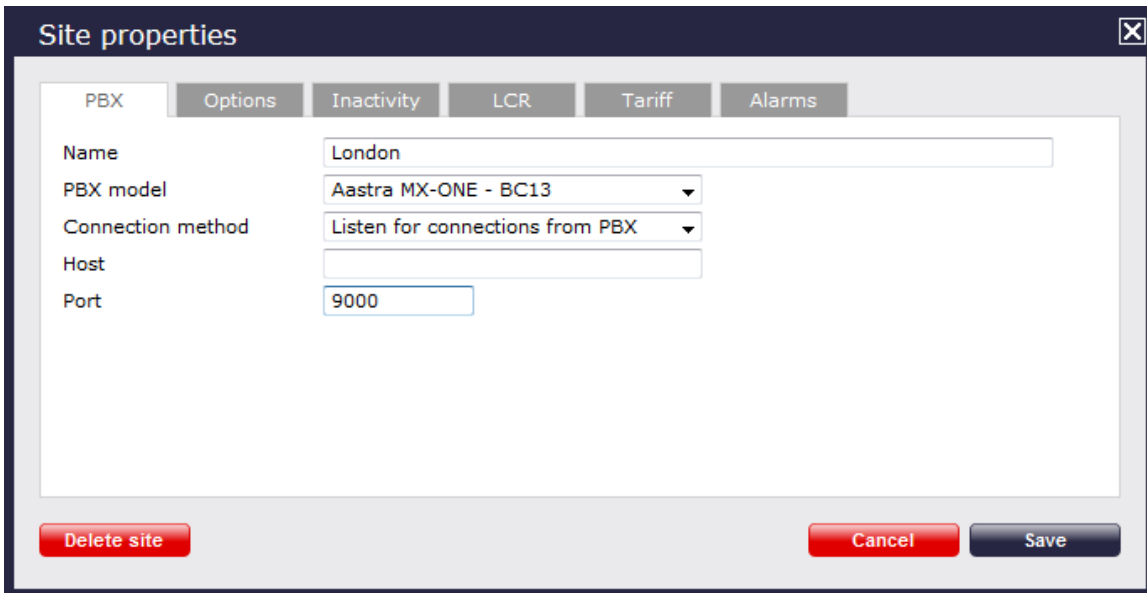
callinfo_status_set -lim 2 -forward 1 -state on

```

### Configuring TIM Plus

Follow the steps below to configure TIM Plus to listen for SMDR data from your MX-One:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: Aastra MX-ONE - BC13

Connection method: Listen for connections from PBX

Host:

Port: 9000


Delete site Cancel Save

3. In the **Site Properties** window, select **Aastra MX-ONE - BC13** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Listen for connections from PBX** from the drop-down list.
5. Leave the **Host** field blank.
6. In the **Port** field, enter the port number you have configured in the phone system.
7. Click on the **Save** button to apply the settings.


### Aastra MX-ONE - Serial connection


These instructions help you configure your Aastra MX-ONE phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**


 TIM Plus establishes a serial connection with this PBX.


**Support Files**


 Aastra MX-ONE BC10.TDT

 Aastra MX-ONE BC10.TDS

**Required Tasks**

 [Configure the SMDR output](#)

 [Install NetPBX](#)

 [Configure TIM Plus](#)

#### Configuring your SMDR output

The Aastra MX-ONE supports multiple SMDR output formats. TIM Plus requires the SMDR format to be set to either **BC8**, **BC10** or **BC13**. For more information on how to configure the data output, please contact your system maintainer.

#### Installing NetPBX

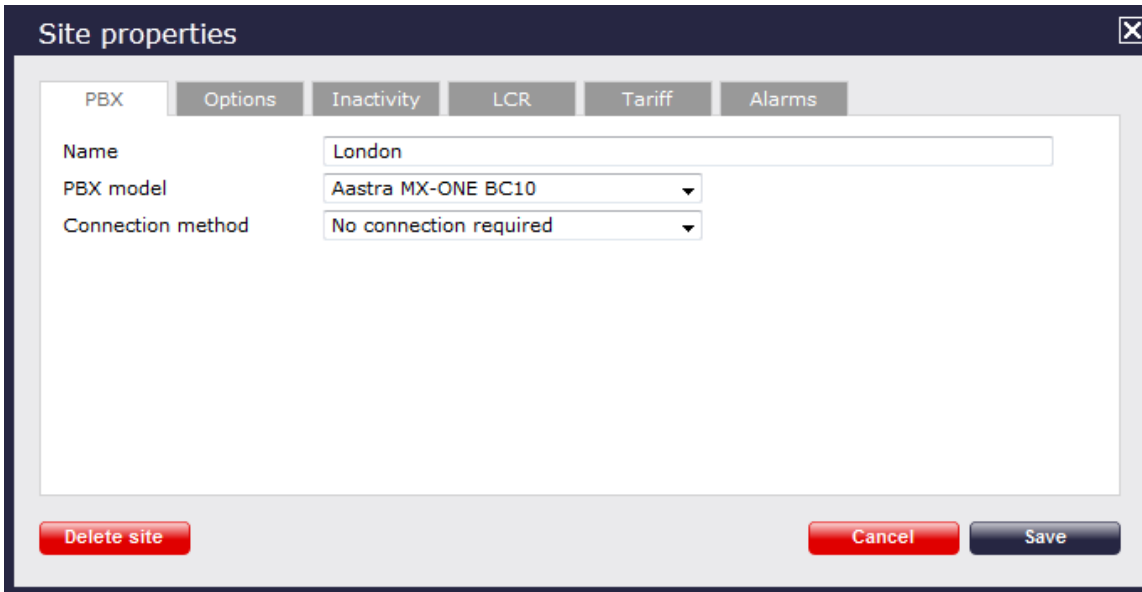
The Aastra MX-ONE phone system sends SMDR information via a serial connection. To collect the data from the serial port and send it to TIM Plus you first need to install the [NetPBX](#) software. For setup instructions, click on the link below:

## Install and configure NetPBX

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the following steps:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



The screenshot shows a 'Site properties' window with the following configuration:

- Name:** London
- PBX model:** Aastra MX-ONE BC10
- Connection method:** No connection required

Buttons at the bottom: Delete site, Cancel, Save.


3. In the **Site Properties** window, select **Aastra MX-ONE BC10** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.

## AGFEO


### AGFEO AC-AS Series

These instructions help you configure your AGFEO AC-AS phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a serial connection with this PBX.

**Support Files**

 AGFEO AC-AS Series.TDT

**Required Tasks**

- Configure the SMDR output
- Install NetPBX
- Configure TIM Plus

### Configuring your SMDR output

The AGFEO AC-AS Series outputs its call records via a serial connection. You need to directly connect a serial cable between your AGFEO AC-AS phone system and the PC that NetPBX is installed and running on.

For more information about the output and configuration of your SMDR data, please contact your system maintainer.

## Installing NetPBX

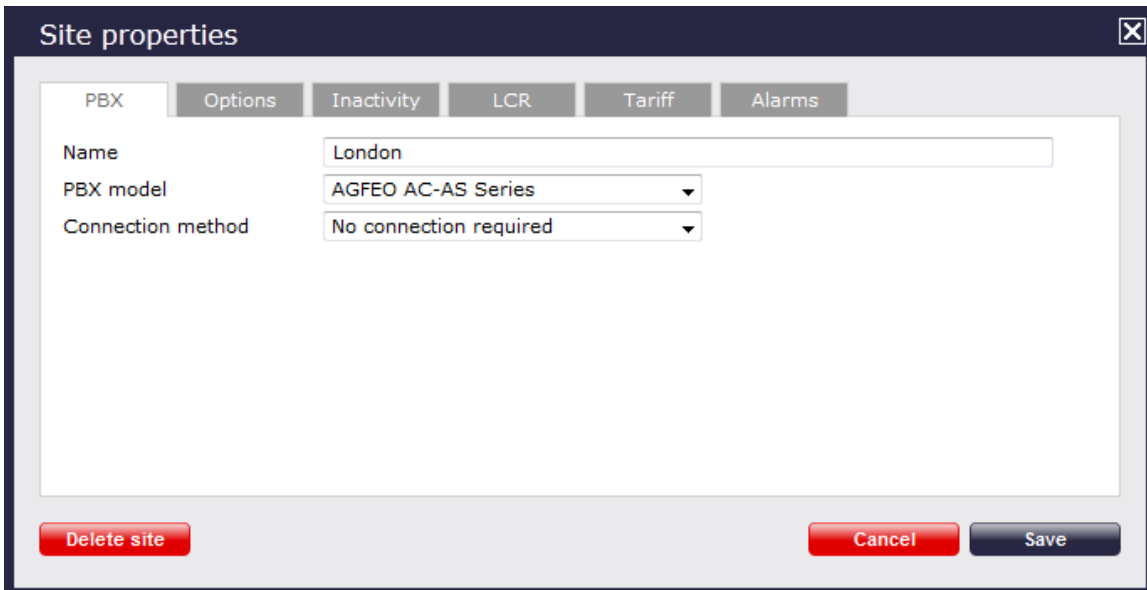
The AGFEO phone system sends SMDR information via a serial connection. To collect the call logging data from the serial port and send it to TIM Plus, you first need to install the NetPBX software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

## Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the following steps:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



The screenshot shows a 'Site properties' dialog box with the following configuration:


Field	Value
Name	London
PBX model	AGFEO AC-AS Series
Connection method	No connection required


3. In the Site Properties window, select **AGFEO AC-AS Series** from the PBX model drop-down list.
4. In the Connection method field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.

## Alcatel

### Alcatel 4200-4400e

These instructions help you configure your Alcatel 4200-4400e phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**  
 Alcatel\_4400E.TDT

**Required Tasks**

- Configure the SMDR output
- Download the interface file
- Install NetPBX
- Configure TIM Plus

**Configuring your SMDR output**


The Alcatel 4200-4400e phone system sends its call records via a serial connection. The most recent units already have a .v24 port but, for older units, you may need to purchase a .v24 module. Connect a serial cable between your Alcatel 4200-4400e .v24 module and the PC that NetPBX is installed and running on. See the table below for a summary of data output from Alcatel 4200-4400e:

Manufacturer	Model	Account Codes	CLI	DDI	Internal Calls	Ring Time	Unanswered
Alcatel	4200	Y	Y	N	N	Y	Y
	4300	Y	Y	N	N	Y	Y
	4400e	N	Y	Y	Y	Y	Y
	OmniPCX Enterprise	N	Y	Y	Y	Y	Y
	OmniPCX Office	Y	Y	N	Y	Y	Y


**Download the interface file**

1. Visit Tri-Line's Gateway and download the interface file, as shown below:


**Downloads**

 **Full install package**  
TIM Plus


---

 **Upgrade package**  
TIM Plus

---


 **Documentation**  
Product documentation for your TIM Plus

**Software license** [View license certificate](#)

 **This product is licensed**  
The license for this product is valid and up-to-date.


---

**Maintenance**

 **This product is maintained**  
You have maintenance until **19 September 2020**, giving you full access to our technical support resources during this time.

**Related downloads**

Download executables and documents related to the PBXs you are using with this software

Name	Version
Alcatel 4400E	 <b>TDT file (zip)</b>



2. Extract the **Alcatel 4400E.ZIP** file onto your computer's Desktop. This ZIP file contains the following file: **Alcatel 4400E.TDT**.
3. Copy the file into the **C:\Program Files\Tri-Line\TIM Plus\config** folder.

## Installing NetPBX

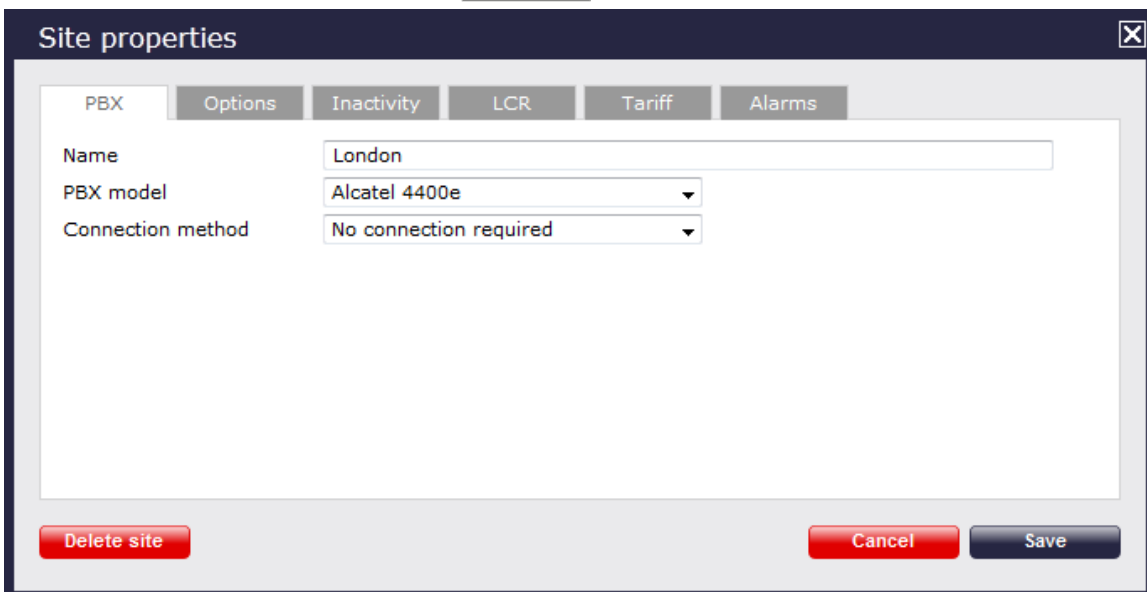
The Alcatel 4200-4400e phone system sends its call records via a serial connection. To collect the data from the serial port and send it to TIM Plus, you first need to install the **NetPBX** software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

## Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the following steps:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.




3. In the **Site Properties** window, select **Alcatel 4400e** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.



## Alcatel OmniPCX Enterprise

The Alcatel OmniPCX Enterprise can be configured to send its SMDR data over a serial (RS232) or an IP connection. Click on one of the links below that relates to your preferred connection method.

### Alcatel OmniPCX Enterprise - Serial connection

These instructions help you configure your Alcatel OmniPCX Enterprise phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**  
 Alcatel OmniPCX Enterprise.TDT  
 Alcatel OmniPCX Enterprise.TDS

**Required Tasks**  
 Configure the SMDR output  
 Install NetPBX  
 Configure TIM Plus

### Configuring your SMDR output



Before enabling the SMDR output, you will need to speak with your phone maintainer to buy the required licenses for your Alcatel phone system.

Follow the instructions below to configure the SMDR output via a serial connection. These instructions are taken from the Alcatel OmniPCX Enterprise manual:

Using Telnet, connect to the IP address of your Alcatel OmniPCX Enterprise and follow the steps below:

1. Applications (  )
2. Accounting (  )
3. Review/Modify (  )
4. All Instance (  )
5. Realtime ticket Output: Set this to **ethernet**. Note that if you don't have an appropriate license, you may only select V24 (serial) here.
6. Save changes and exit.

Below is an example of the data output from an Alcatel OmniPCX Enterprise:

Manufacturer	Model	Account Codes	CLI	DDI	Internal Calls	Ring Time	Unanswered
Alcatel	4200	Y	Y	N	N	Y	Y
	4300	Y	Y	N	N	Y	Y
	4400e	N	Y	Y	Y	Y	Y
	OmniPCX Enterprise	N	Y	Y	Y	Y	Y
	OmniPCX Office	Y	Y	N	Y	Y	Y

### Installing NetPBX

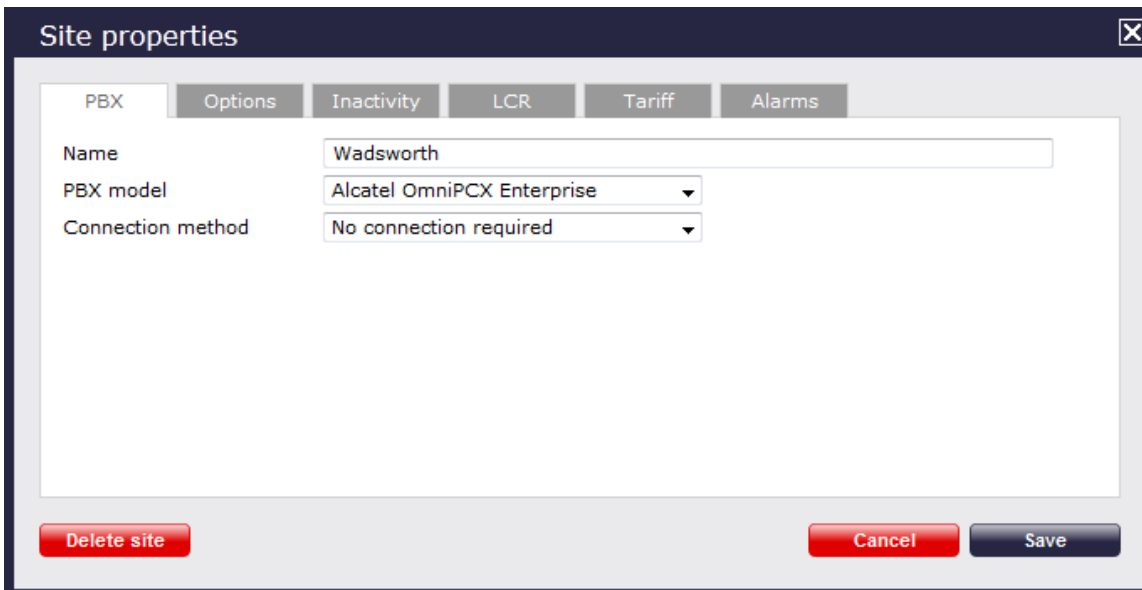
If your Alcatel OmniPCX Enterprise has been configured to send SMDR data via a serial connection, you first need to install the [NetPBX](#) software to collect the data from the serial port and send it to TIM Plus. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the following steps:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.




The screenshot shows a 'Site properties' window with the following details:

- Tab:** PBX (selected)
- Name:** Wadsworth
- PBX model:** Alcatel OmniPCX Enterprise
- Connection method:** No connection required
- Buttons:** Delete site, Cancel, Save



3. In the **Site Properties** window, select **Alcatel OmniPCX Enterprise** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.

### Alcatel OmniPCX Enterprise - IP connection

These instructions help you configure your Alcatel OmniPCX Enterprise phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a TCP connection to this PBX.

**Support Files**

-  Alcatel OmniPCX Enterprise.TDT
-  Alcatel OmniPCX Enterprise.TDS

**Required Tasks**

- Configure the SMDR output
- Configure TIM Plus

#### Configuring your SMDR output



Before enabling the SMDR output, you will need to speak with your phone maintainer to buy the required licenses for your Alcatel phone system.

Follow the instructions below to configure the SMDR output via an IP connection. These instructions are taken from the Alcatel OmniPCX Enterprise manual:

Connect to your PBX via telnet and follow the steps below:

1. Applications (  )
2. Accounting (  )
3. Review/Modify (  )
4. All Instance (  )
5. Realtime ticket Output: Set this to **ethernet**. Note that if you don't have appropriate license, you can only select V24 (serial) here.
6. Save changes and exit

The table below presents a summary of data output from Alcatel:

Manufacturer	Model	Account Codes	CLI	DDI	Internal Calls	Ring Time	Unanswered
Alcatel	4200	Y	Y	N	N	Y	Y
	4300	Y	Y	N	N	Y	Y
	4400e	N	Y	Y	Y	Y	Y
	OmniPCX Enterprise	N	Y	Y	Y	Y	Y
	OmniPCX Office	Y	Y	N	Y	Y	Y

### Configuring TIM Plus

Follow the steps below to configure TIM Plus to collect the SMDR data from your Alcatel OmniPCX Enterprise:

1. Click on the  tab.
2. Choose the site you want to configure and click  .

**Site properties**

PBX | Options | Inactivity | LCR | Tariff | Alarms

Name: London

PBX model: Alcatel OmniPCX Enterprise

Connection method: Actively connect to PBX

Host: 192.168.1.1

Port: 2533

Username:

Password:

Connection script: Alcatel OmniPCX Enterprise 7.1+

Buttons: Delete site, Cancel, Save

3. In the **Site Properties** window, select **Alcatel OmniPCX Enterprise** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Actively connect to PBX** from the drop-down list.
5. In the **Host** field, enter the IP address of your Alcatel OmniPCX Enterprise.
6. In the **Port** field, enter **2533** as the default port number for this PBX.
7. Leave the **Username** and **Password** fields blank.
8. In the **Connection script** field, select **Alcatel OmniPCX Enterprise 7.1+** from the drop-down list.
9. Click on the **Save** button to apply the changes.


## Alcatel OmniPCX Office

The Alcatel OmniPCX Office can be configured to send its SMDR data over a serial (RS232) connection or it can be outputted to a file. Click on one of the links below that relates to your preferred connection method.


### Alcatel OmniPCX Office - Serial connection


These instructions help you configure your Alcatel OmniPCX Office phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a serial connection with this PBX.

**Support Files**

 Alcatel OmniPCX Office.TDT

 Alcatel OmniPCX Office.TDS

**Required Tasks**

Configure the SMDR output

Install NetPBX

Configure TIM Plus

### Configuring your SMDR output



Before enabling the SMDR output, you will need to speak with your phone maintainer to buy the required licenses for your Alcatel phone system.

Alcatel-Lucent OmniPCX Office Communication Server supports two types of call metering:

- V24 metering supports V24 printing for all call metering tickets
- IP metering supports IP printing for call metering tickets originating from a 3rd party application (Business or Hotel) via an IP connection

The type of metering must be specified when the Office Link driver is installed. The driver can be set to one of two modes: **hotel** or **metering**. You can use the **OMC Counting** function to specify the type of call metering for hardcopy printouts.

To set printing options for call metering tickets, follow the steps below:

1. Open the **Counting** function window in the OMC console and select the **Accounting Printout** tab.
2. Select the metering type from the drop-down list: **Ext. Accounting Activation IP** Or **Ext. Accounting Activation V24**.
3. Click **OK** to save the settings.

The table below presents a summary of the data output from an Alcatel:

Manufacturer	Model	Account Codes	CLI	DDI	Internal Calls	Ring Time	Unanswered
Alcatel	4200	Y	Y	N	N	Y	Y
	4300	Y	Y	N	N	Y	Y
	4400e	N	Y	Y	Y	Y	Y
	OmniPCX Enterprise	N	Y	Y	Y	Y	Y
	OmniPCX Office	Y	Y	N	Y	Y	Y

### Installing NetPBX

If your Alcatel OmniPCX Office has been configured to send SMDR data via a serial connection, you first need to install the **NetPBX** software to collect the data from the serial port and send it to TIM Plus. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the following steps:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.

The screenshot shows a 'Site properties' dialog box with the following details:

- Tab:** PBX
- Name:** London
- PBX model:** Alcatel OminPCX Office
- Connection method:** No connection required
- Buttons:** Delete site, Cancel, Save

3. In the **Site Properties** window, select **Alcatel OmniPCX Office** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.

### Alcatel OmniPCX Office - File output

These instructions help you configure your Alcatel OmniPCX Office phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

The SMDR data is outputted to a file

**Support Files**

Alcatel OmniPCX Office.TDT

Alcatel OmniPCX Office.TDS

Alcatel OmniPCX Office OHL.DBS

**Required Tasks**

Configure the SMDR output

Install Alcatel Office Link Driver

Configure the interface file

Set up a DSN connection

Configure TIM Plus

### Configuring your SMDR output



Before enabling the SMDR output, you will need to speak with your phone maintainer to buy the required licenses for your Alcatel phone system.

Follow the instructions below to configure the SMDR output for your Alcatel OmniPCX Office phone system:

Alcatel-Lucent OmniPCX Office Communication Server supports two types of call metering:

- V24 metering supports V24 printing for all call metering tickets
- IP metering supports IP printing for call metering tickets originating from a 3rd party application (Business or Hotel) via an IP connection

The type of metering must be specified when the Office Link driver is installed. The driver can be set to one of two modes: **hotel** or **metering**. You can use the OMC Counting function to specify the type of call metering for hardcopy printouts.

To set printing options for call metering tickets, follow the steps below:

1. Open the **Counting** function window in the OMC console and select the **Accounting Printout** tab.
2. Select the metering type from the drop-down list: **Ext. Accounting Activation IP** or **Ext. Accounting Activation V24**.
3. Click **OK** to save the settings.

The table below presents a summary of the data output from an Alcatel:

Manufacturer	Model	Account Codes	CLI	DDI	Internal Calls	Ring Time	Unanswered
Alcatel	4200	Y	Y	N	N	Y	Y
	4300	Y	Y	N	N	Y	Y
	4400e	N	Y	Y	Y	Y	Y
	OmniPCX Enterprise	N	Y	Y	Y	Y	Y
	OmniPCX Office	Y	Y	N	Y	Y	Y

### Installing the Alcatel Office Link Driver

If your Alcatel OmniPCX Office has been configured to send SMDR data via IP, you need to install the Alcatel Office Link Driver to enable the SMDR output.

For information on how to install the Alcatel Office Link Driver, please refer to the Alcatel OmniPCX Office manual or speak to your system maintainer.

### Configuring the interface file

Once the OHL driver is installed, the SMDR data will be outputted to a file, called the `TicketCollector.xml`, which is located by default in `C:\Program Files (x86)\Alcatel\OHL Driver\TicketCollector.xml`

For TIM Plus to collect the data from this location, follow the steps below:

1. Go to TIM's installation folder and open the `config` folder.
2. Locate the `Alcatel OmniPCX Office.tdt` file, right-click on it and select `Edit`.
3. Enable the `File path` option by removing the apostrophe sign in front of it, and enter the path of the Ticket Collector file, as shown in

the screenshot below:

```
'For TIM pre-processing modules
Type                = SCRIPT

[Options]
ScriptFile          = Alcatel OminPCX Office.tds
PrePendCLIZero     = False
FilePath            = C:\Program Files (x86)\Alcatel\OHL Driver\TicketCollector.xml
OutputUserName      = True
UseTimeStamp        = True
'HuntGroups         = 2XX
'Use voice enabled if the RTA needs to be queried for transfers
VoiceEnabled        = True
```

4. Save the changes to apply the settings.

### Setting up a DSN connection for TIM Plus

To enable TIM to regularly check for new data being outputted in the `Ticket Collector` file, you need to setup a DSN connection. Follow the instructions below to perform this operation within Microsoft Windows:

1. Open `Windows Control Panel`.
2. Double click on the `Administrative tools` icon.
3. Double click on the `Data Sources (ODBC)` icon to open the `ODBC Data Source Administrator` window.

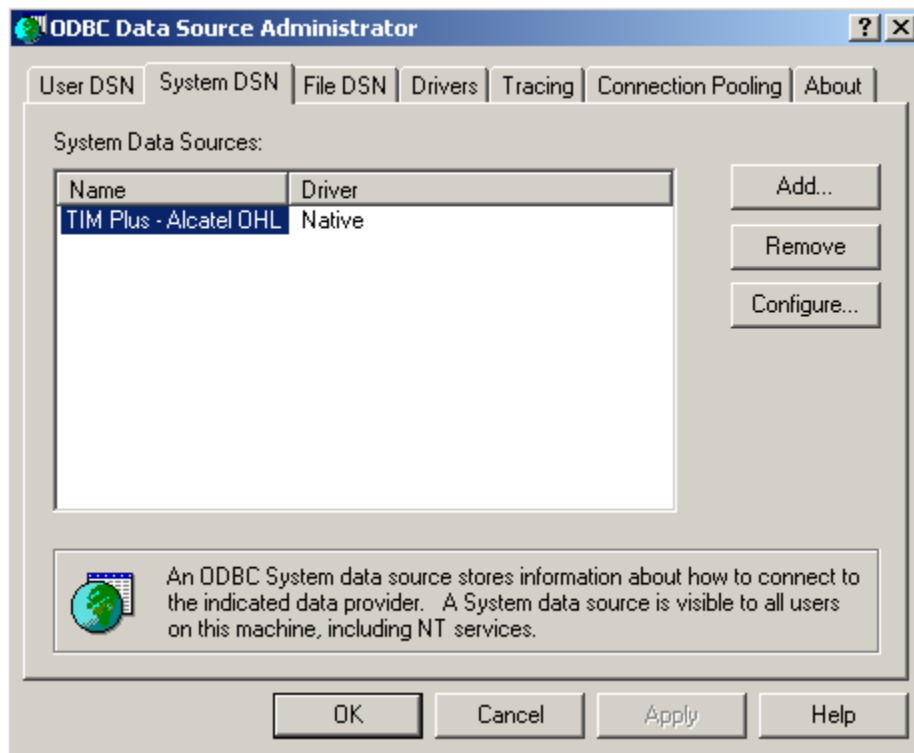


For a 64 bit system, access the `ODBC Data Source Administrator` from the following location `C:\Windows\System32\odbcad32.exe`



4. Click on the **System DSN** tab.
5. Click on the **Add** button.
6. Select **Native** from the list of drivers and click **Finish**.
7. In the **Name** field enter: **TIM Plus - Alcatel OHL**.
8. In the **Database name** field enter: **Native**.
9. Click on the **OK** button, then close the window.

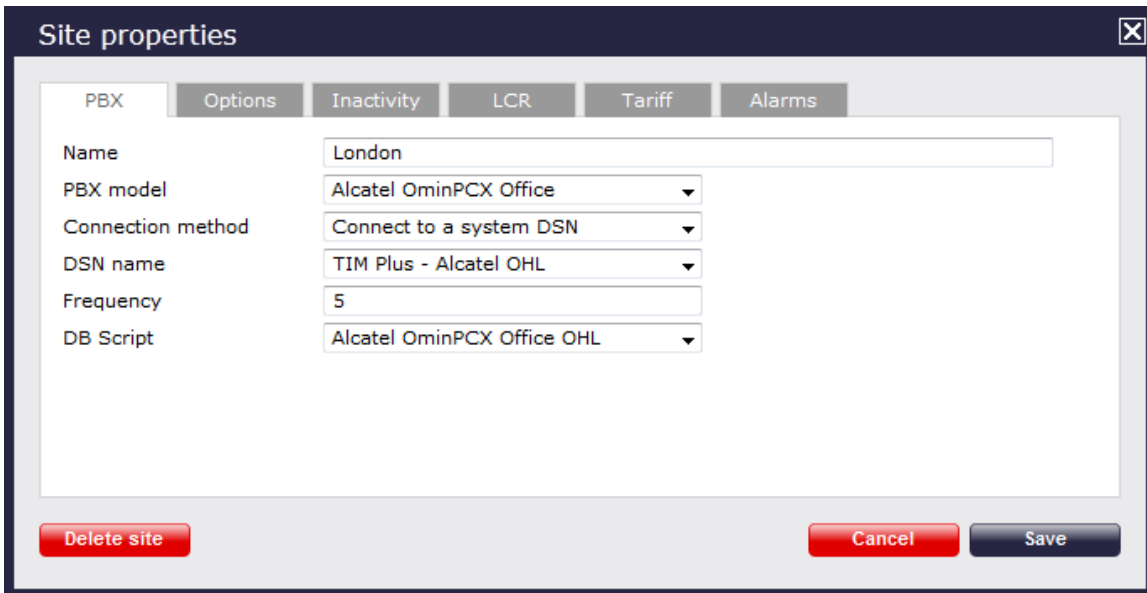
An example of an ODBC setup is shown below:



### Configuring TIM Plus

Once the DSN connection has been set up, log in to TIM Plus and perform the following steps:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: Alcatel OminPCX Office

Connection method: Connect to a system DSN

DSN name: TIM Plus - Alcatel OHL

Frequency: 5

DB Script: Alcatel OminPCX Office OHL

Delete site Cancel Save


3. In the **Site Properties** window, select **Alcatel OmniPCX Office** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Connect to a system DSN** from the drop-down list.
5. In the **DSN name** field, select **TIM Plus - Alcatel OHL** from the drop-down list.
6. In the **Frequency** field, enter **5** to check for data every five seconds.
7. In the **DB script** field, select **Alcatel OmniPCX Office OHL** from the drop-down list.
8. Click on the **Save** button to apply the settings.

## Asterisk


### Asterisk PBX


These instructions help you configure your Asterisk phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a TCP connection to this PBX.

**Support Files**

 Asterisk.TDT

 Asterisk.TDS

**Required Tasks**

Configure the SMDR output

Configure TIM Plus

### Configuring your SMDR output

Follow the steps below to enable the SMDR output on your Asterisk phone system:

1. Enter the `server Setup System`.

- Under the **Advanced** section, edit the `manager_custom.conf` file.
- Add the following lines to the file:

```
[CDRout]
secret =
cdrdeny = 0.0.0.0/0.0.0.0
permit = 10.0.0.0/255.0.0.0
permit = 192.168.0.0/255.255.0.0
permit = 212.57.232.128/255.255.255.128
read =
write =
```

- Verify and save the changes.

## Configuring TIM Plus

Follow the steps below to configure TIM Plus to collect the SMDR data from your Asterisk phone system:


- Log in to TIM Plus and click on the **Directory** tab.
- Choose the site you want to configure and click **Properties**.



- In the **Site Properties** window, select **Asterisk** from the **PBX model** drop-down list.
- In the **Connection method** field, select **Actively connect to PBX** from the drop-down list.
- In the **Host** field, enter the IP address of your Asterisk phone system.
- In the **Port** field, enter **5038**.
- In the **Username** and **Password** fields, enter your username and password accordingly.
- In the **Connection script** field, select **Asterisk** from the drop-down list.
- Click on the **Save** button to apply the settings.

## Avaya

## Avaya BCM up to v3.x

These instructions help you configure your Avaya BCM phone system (up to v3.x) to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a TCP connection to this PBX.

**Support Files**  
 Avaya BCM.TDT  
 Avaya BCM.TDS

**Required Tasks**  
 Configure the SMDR output  
 Create a CDR user  
 Install and configure NetPBX  
 Configure TIM Plus

### Configuring your SMDR output

Follow the steps below to configure your Avaya BCM (up to v3.x) to output SMDR to TIM Plus:

1. Open your Business Communications Manager Unified Manager.
2. Click on the **Services** tree node.
3. Click on the **Call Detail Recording** node.
4. On the right-hand panel the **summary** window will appear. Ensure that **Up** is selected in the **status** drop-down list.
5. Select the **Report Parameters** tree node and configure the fields as shown below:

SMDR field	Value
Format	Norstar
Report Type	All
Language	English
Report Filter	All

6. Select the **Report Options** tree node and configure the fields as shown below:

SMDR field	Value
------------	-------

<b>Date Format</b>	<b>MM/DD/YY</b>
<b>Header Format</b>	<b>Line/Station</b>
<b>DNIS Info</b>	<b>Enabled</b>
<b>Connection Char</b>	Leave as default
<b>Clip File Schedule</b>	Leave as default
<b>Clip File Size</b>	Leave as default
<b>CDR Disk Space Limit</b>	Leave as default

- For the **Market Parameters** settings, please leave as the system defaults.
- For the **Prefix Bin Options** setting please leave as the system defaults.
- Once you have completed the above changes, choose **Commit** from the **Configuration** file menu.

## Creating a CDR User

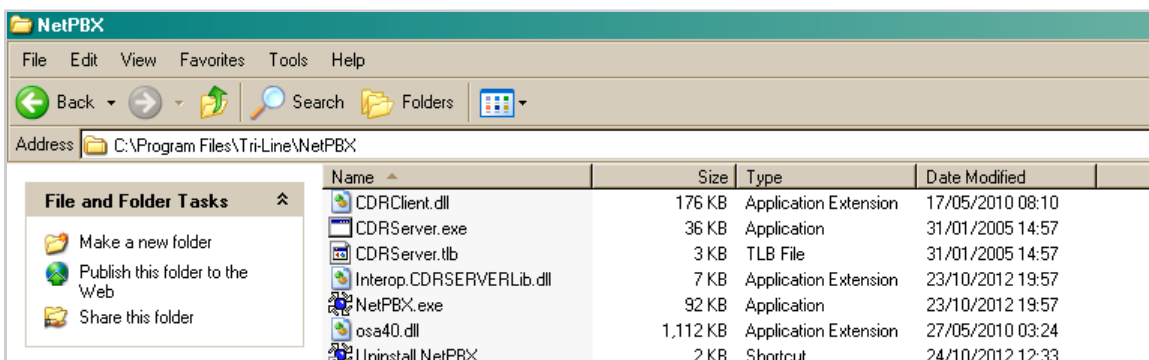
To enable TIM Plus to connect to your Avaya BCM you will need to create a **CDR User** in the **System** option of your BCM Unified Manager configuration utility. The Avaya BCM connection requires the DCOM service to be enabled on the machine running TIM Plus. Following the introduction of enhanced security in Windows XP Service Pack 2, the username and password for the **CDR User** now need to be exactly the same as the credentials of the Windows account under which TIM Plus runs.

## Installing and configuring NetPBX

To collect the call logging data from the Avaya BCM up to v3.x phone system and send it to TIM Plus, you first need to [install the NetPBX software](#).

After the installation, follow the instructions below to set up a connection between BCM and NetPBX:

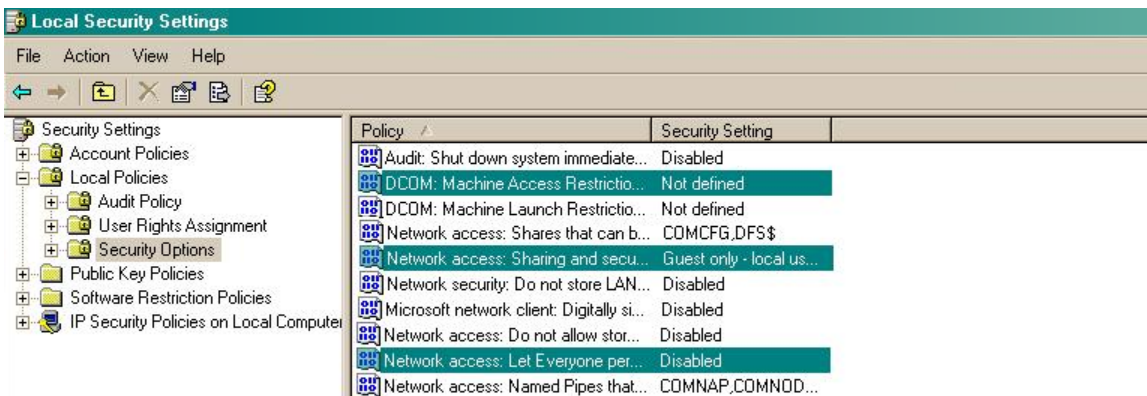
- Make sure the **CDRServer.EXE** and **Interop.CDRSERVERLib.dll** files are placed in the same folder as **NetPBX.EXE**, usually located in **{pf}\Tri-Line\NetPBX**.



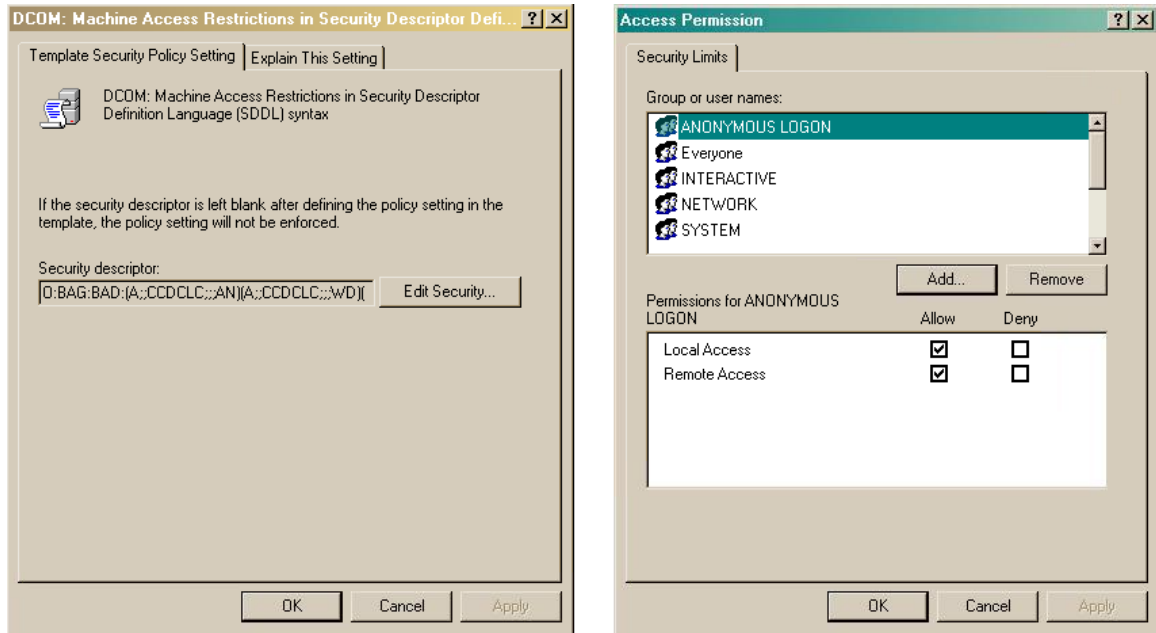
2. Register `CDRServer.EXE` by running the command line with administrator privileges and typing the following command under the directory path of the NetPBX folder: `CDRServer.EXE/regserver`.
3. Open the computer's local security policies: `Start -> Control Panel -> Administrative Tools -> Local Security Policy`.



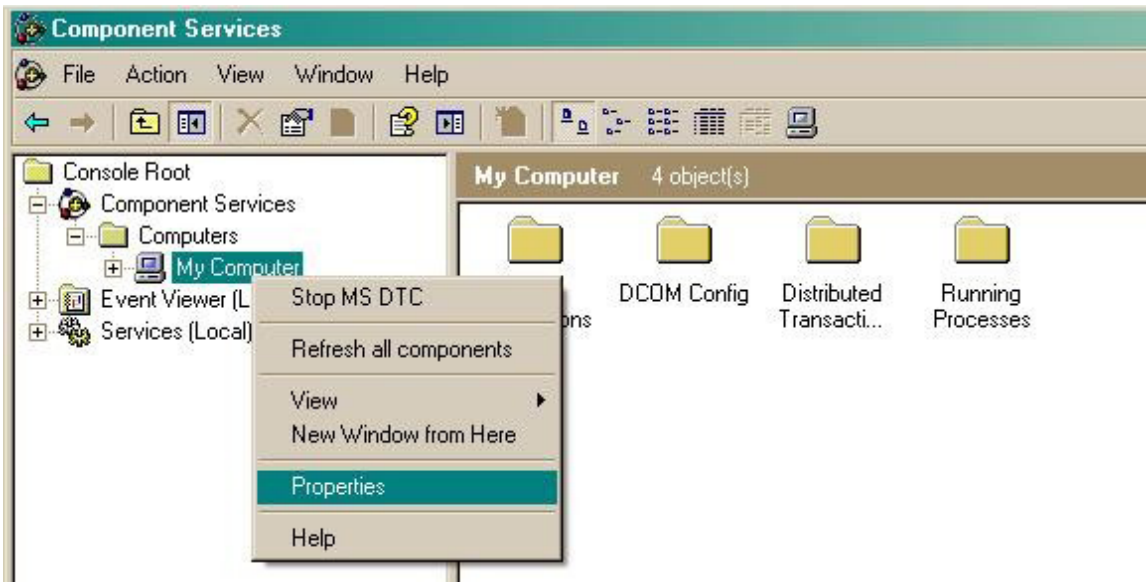
4. Within the `Security Settings\Local Policies\Security Options` tree, change the following items as highlighted in the screenshot below:



- a. Network Access: Let Everyone permissions apply to anonymous users. Set this to **Enabled**.
- b. Network Access: Sharing security model for local accounts. Set this to **Classic**.
- c. DCOM: Machine Access Restrictions: Click on **Edit Security** and add the following user accounts: **Anonymous**, **Everyone**, **Interactive**, **Network**, **System**. Set each one to have full access rights.

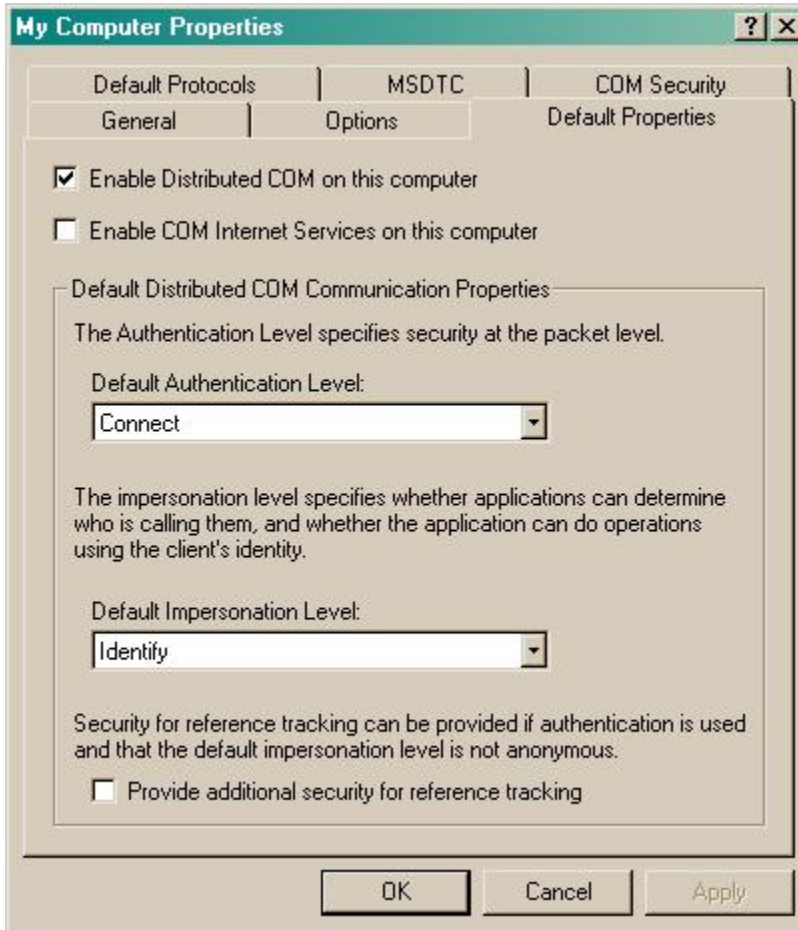


5. Next step is to modify the way DCOM behaves on the computer by executing the DCOM configuration program: `Start -> Run -> DCOMCNFG [enter]`. Browse the tree to the following location: `Console Root -> Component Services -> Computers -> My Computer`. Right-click on `My Computer` for `Properties` and amend or update the following options:



- a. On the `Default Properties` tab:
  - Enable Distributed COM on this computer: tick the box for his option
  - Default Authentication Level: set this to `Connect`

Default Impersonation Level: set this to **Identify**

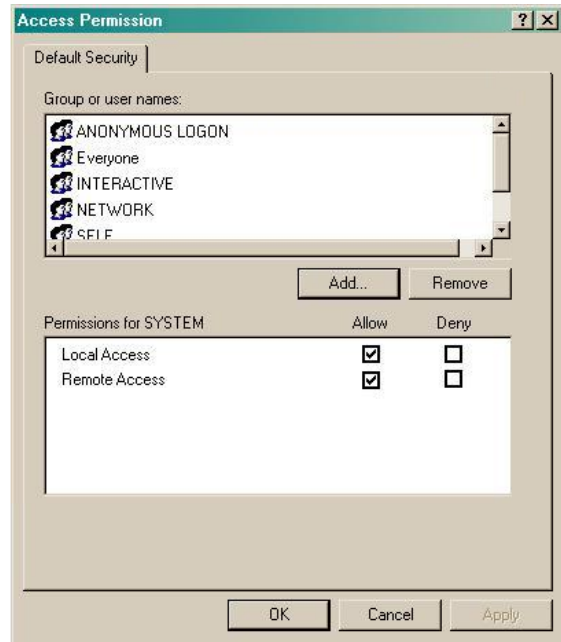
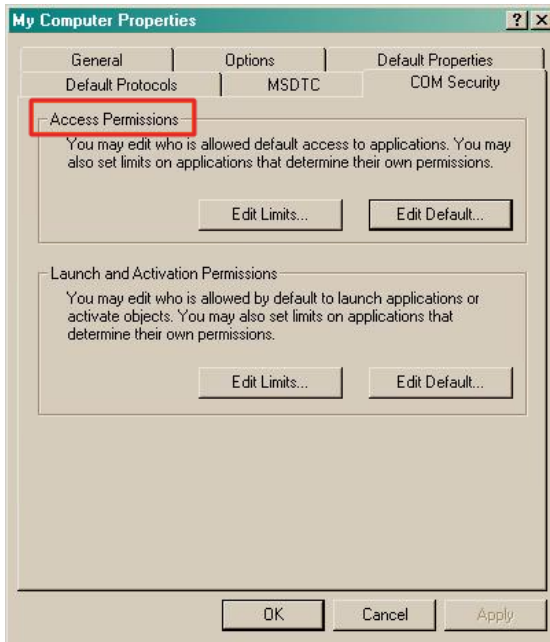


b. On the **COM Security** tab:

Go to the **Access Permissions** section and select **Edit default** .

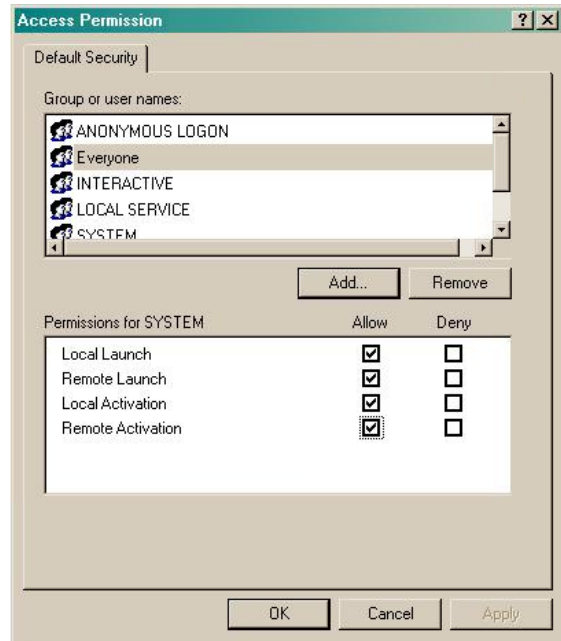
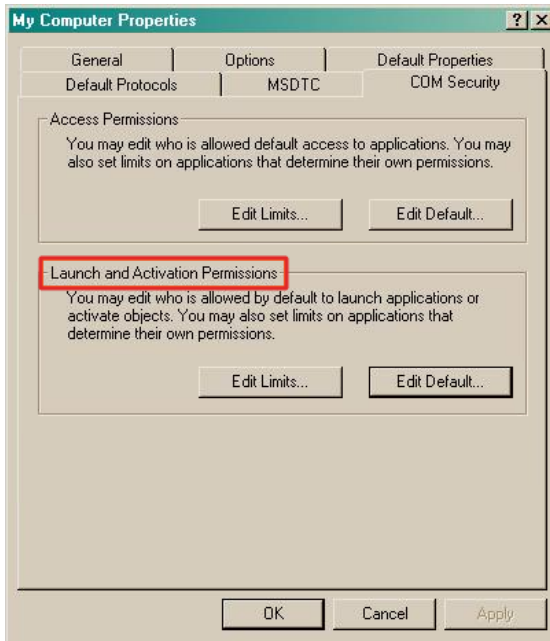
Add the following accounts and set both local and remote access permissions: **Anonymous** , **Everyone** , **Interactive** , **Network** , **Local Service** and **System**.





Go to the **Launch and Activation Permissions** section and click on **Edit default** tab.

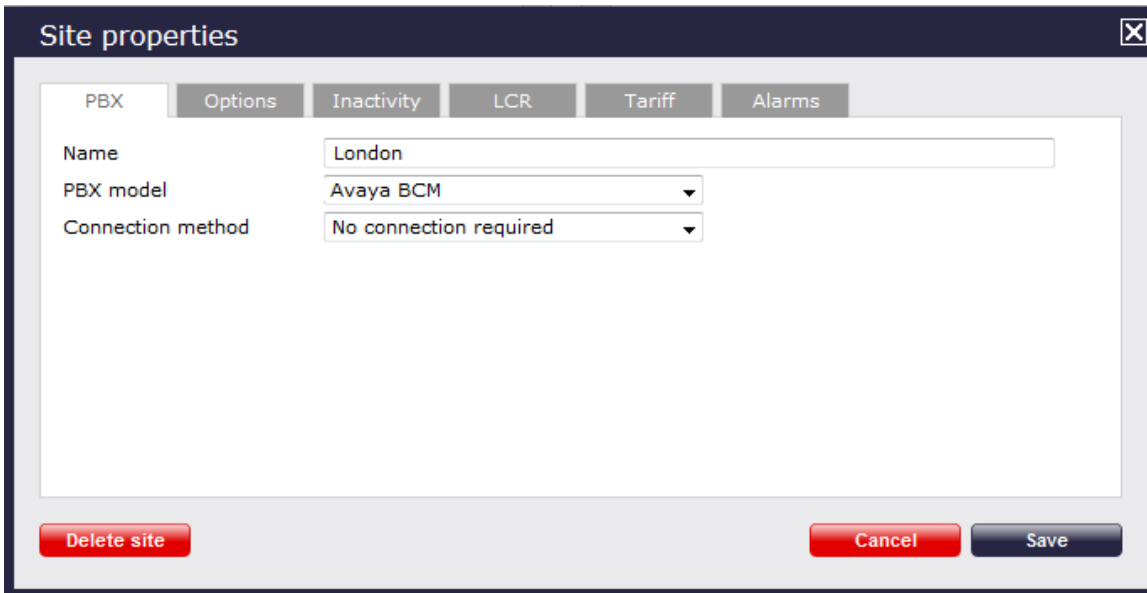
Add or update the following accounts to give them all local and remote access permissions: **Anonymous**, **Everyone**, **Interactive**, **Network**, **Local Service** and **System**.



## Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the following steps:

1. Log in to TIM Plus and click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: Avaya BCM

Connection method: No connection required


Delete site Cancel Save

3. In the **Site Properties** window, select **Avaya BCM** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.


## Avaya BCM v4.0+


These instructions help you configure your Avaya BCM (v4.0+) phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a TCP connection to this PBX.

**Support Files**

 Avaya BCM.TDT

 Avaya BCM.TDS

**Required Tasks**

Configure the SMDR output

Configure a CDR user

Configure TIM Plus

### Configuring your SMDR output

Follow the steps below to configure your Avaya BCM to output SMDR data to TIM Plus:

1. Log in to the BCM Element Manager.
2. On the **Task Navigation Panel**, click the **Configuration** tab.
3. Click on **Telephony**.
4. Click on **Call Detail Recording**.
5. In the **Call Detail Recording** panel that appears, configure the options as below:

SMDR field	Value
Format	Norstar
Report Type	All
Language	English
Date Format	MM/DD/YY
Header Format	Line/Station
Filter Type	All
Feature Code F9	Leave as default
Minimum Call Duration	Leave as default
Hospitality Records	Leave as default
Include DNIS Info	Enable
Include CLID with call type	Enable
Include Long CLID	Leave as default
Use answer supervision	Leave as default
Display connection character	Leave as default
Suppress digits after connect	Leave as default
Maximum digits after connect	Leave as default

## CDR User

To enable TIM Plus to connect to your Avaya BCM, you need to create a **CDR User** under the **System** option in the BCM Unified Manager configuration utility.

## Configuring TIM Plus

Follow the steps below to configure TIM Plus to collect SMDR data from your Avaya BCM:

1. Log in to TIM Plus and click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.

The screenshot shows the 'Site properties' window with the following configuration:


Field	Value
Name	London
PBX model	Avaya BCM
Connection method	Actively connect to PBX
Host	192.168.1.1
Port	4000
Username	CDR User
Password	••••••••
Connection script	Avaya BCM v4

3. In the **Site Properties** window, select **Avaya BCM** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Actively connect to PBX** from the drop-down list.
5. In the **Host** field, enter the IP address of your Avaya BCM.
6. In the **Port** field, enter **4000**.
7. In the **Username** field, enter the username of the CDR user you configured in the BCM Unified Manager utility (above)
8. In the **Password** field, enter the password for the CDR user.
9. In the **Connection script** field, select **Avaya BCM v4** from the drop-down list.
10. Click on the **Save** button to apply the settings.


## Avaya Communications Manager


These instructions help you configure your Avaya Communications Manager phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus listens for connections from this PBX.

**Support Files**

 Avaya Communications Manager.TDT

 Avaya Communications Manager.TDS

**Required Tasks**

Configure the SMDR output

Configure TIM Plus

### Configuring your SMDR output

Connect to your Avaya Communications Manager using an RS232 or IP terminal client and, after logging in with your administrative credentials, follow the steps below:

**Configuring node-names ip**

Issue the `change node-names` command to add a new node. Two fields need to be specified as follows:

- **Name:** `TIMPlus`.
- **IP Address:** (the IP address of the machine running TIM Plus)

Here is an example of a `node-names` configuration:

```
change node-names ip                                     Page 1 of 1
```

Name	IP Address	IP NODE NAMES Name	IP Address
CLAN	10. 10 .2 .211		. . .
MEDPRO	10. 10 .2 .212		. . .
RDTT	10. 10 .2 .50		. . .
SiteB	10. 10 .3 .13		. . .
<b>TIMPlus</b>	<b>10. 10 .2 .80</b>		. . .
default	0 .0 .0 .0		. . .
procr	10. 10 .2 .201		. . .

**Configuring ip-services**

Issue the `change ip-services` command to add or amend IP services. There are three pages to configure:

On **Page 1**, the following fields are required:

- **Service type:** `CDR1`
- **Local Node:** (set this to the node-name of the CLAN board)
- **Local Port:** `0` (this cannot be changed)
- **Remote Node:** `TIMPlus` (the same node-name as created in the `node-names` section above)
- **Remote Port:** (the TCP port that TIM Plus will use to listen for CDR data, e.g. `9000`)

Here is an example of an `ip-services` configuration (page 1):

```
change ip-services                                     Page 1 of 3
```

Service Type	Enabled	Local Node	IP SERVICES		
			Local Port	Remote Node	Remote Port
CDR1		CLAN	0	TIMPlus	9000

On **Page 2** no configuration changes are needed.

On **Page 3** the following fields are required:

- **Reliable Protocol:** `n`
- **Packets Resp Timer:** `30` (default value)
- **Sessions Connect Message Cntr:** `3` (default value)
- **SPDU Cntr:** `3` (default value)
- **Connectivity Timer:** `60` (default value)

Here is an example of an `ip-services` configuration (page 3):

change ip-services		Page 3 of 3			
SESSION LAYER TIMERS					
Service Type	Reliable Protocol	Packet Resp Timer	Session Connect Message Cntr	SPDU Cntr	Connectivity Timer
CDR1	n	30	3	3	60

### Configuring system-parameters cdr

Use the `change system-parameters cdr` command to amend the CDR format. The following screenshots describe how the settings should appear on your system:

#### Page 1

change system-parameters cdr		Page 1 of 2	
CDR SYSTEM PARAMETERS			
Node Number (Local PBX ID): 1	CDR Date Format: day/month		
Primary Output Format: customized	Primary Output Endpoint: CDR1		
Secondary Output Format:			
Use ISDN Layouts? n	Enable CDR Storage on Disk? n		
Use Enhanced Formats? n	Condition Code 'T' For Redirected Calls? n		
Use Legacy CDR Formats? y	Remove # From Called Number? n		
Modified Circuit ID Display? y	Intra-switch CDR? y		
Record Outgoing Calls Only? n	Outg Trk Call Splitting? y		
Suppress CDR for Ineffective Call Attempts? y	Outg Attd Call Record? y		
Disconnect Information in Place of FRL? n	Interworking Feat-flag? n		
Force Entry of Acct Code for Calls Marked on Toll Analysis Form? n	Calls to Hunt Group - Record: member-ext		
Record Called Vector Directory Number Instead of Group or Member? n			
Inc Trk Call Splitting? y	Inc Attd Call Record? y		
Record Non-Call-Assoc TSC? n	Call Record Handling Option: warning		
Record Call-Assoc TSC? n	Digits to Record for Outgoing Calls: dialed		
Privacy - Digits to Hide: 0	CDR Account Code Length: 6		

#### Page 2

change system-parameters cdr		Page 2 of 2	
CDR SYSTEM PARAMETERS			
Data Item - Length	Data Item - Length	Data Item - Length	Data Item - Length
1: date - 6	17: dialed-num - 18	33: auth-code - 13	
2: space - 1	18: space - 1	34: return - 1	
3: time - 4	19: in-trk-code - 4	35: line-feed - 1	
4: space - 1	20: space - 1	36: -	
5: sec-dur - 5	21: in-crt-id - 3	37: -	
6: space - 1	22: space - 1	38: -	
7: cond-code - 1	23: calling-num - 15	39: -	
8: space - 1	24: space - 1	40: -	
9: attd-console - 2	25: vdn - 5	41: -	
10: space - 1	26: space - 1	42: -	
11: code-used - 4	27: bcc - 1	43: -	
12: space - 1	28: space - 1	44: -	
13: out-crt-id - 3	29: ppm - 5	45: -	
14: space - 1	30: space - 1	46: -	
15: code-dial - 4	31: acct-code - 15	47: -	
16: space - 1	32: space - 1	48: -	
Record length = 126			

### Configuring trunk-group

To ensure that response times for incoming calls are included in your CDR data, the CDR field for each trunk group must be set to `r`. This must be applied to all trunk groups using the following command:

```
change trunk-group X (where X is the trunk group number)
```

An example trunk-groups configuration screen is shown below:

```

change trunk-group 3                                     Page 1 of 21
                                     TRUNK GROUP
Group Number:3                                         Group Type: isdn      CDR Reports: r
  Group Name: ToSimulatedPSTN                         COR: 1                TN: 1          TAC: 113
  Direction: two-way                                  Outgoing Display? y   Carrier Medium: PRI/BRI
  Dial Access? y                                       Busy Threshold: 255   Night Service:
Queue Length: 0
Service Type: tie                                     Auth Code? n          TestCall ITC: rest
TestCall BCC: 4                                     Far End Test Line No:

```

### Configuring intra-switch-cdr

To have internal calls included in your CDRs, ensure that the `intra-switch-cdr` table is populated with the extension numbers you are interested in. To modify the table, issue the following command:

```
change intra-switch-cdr
```

Here is an example of an `intra-switch-cdr` configuration table:

```

change intra-switch-cdr                                     Page 1 of 3
                                     INTRA-SWITCH CDR
                                     Assigned Members: 4 of 5000 administered
Extension           Extension           Extension           Extension
301
302
303
311

```

### Configuring multiple Avaya Communications Manager systems

If you have more than one Avaya Communications Manager, configuration of your CDR depends on which of the following scenarios you have implemented:

- LSPs (Local Survivable Processors)

If your Avaya Communications Manager systems are connected and the remote sites are LSPs then you need only configure the `Master /Primary` Avaya Communications Manager. When TIM Plus receives the CDR information, it will include CDRs from all of the remote LSPs.

- Not linked

If you have multiple Avaya Communications Manager systems where LSPs aren't in use, you need to configure each Avaya Communications Manager separately. You must ensure that each Avaya Communications Manager has its own unique Remote Port (IP-services) setup.

### Configuring TIM Plus

Follow the steps below to configure TIM Plus to listen for SMDR data from your Avaya Communications Manager:

1. Click on the `Directory` tab.
2. Choose the site you want to configure and click `Properties` .

**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name London

PBX model Avaya Communications Manager

Connection method Listen for connections from PBX

Host

Port 9000

Delete site Cancel Save

3. In the **Site Properties** window, select **Avaya Communications Manager** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Listen for connections from PBX** from the drop-down list.
5. Leave the **Host** field blank.
6. In the **Port** field, enter the **Remote Port (ip-services)** that you configured above.
7. Click on the **Options** tab and tick the box **Timestamp received data**.

**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Save a backup of any data received from this PBX, to the following file:

Timestamp received data

Binary data

Delay processing of received data by  ms


Cancel Save



8. Click on the **Save** button to apply the settings.

## Avaya EuroGeneris

These instructions help you configure your Avaya EuroGeneris phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.



**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**  
 Avaya EuroGeneris.TDT  
 Avaya EuroGeneris.TDS

**Required Tasks**  
 Configure the SMDR output  
 Install NetPBX  
 Configure TIM Plus



To obtain the Avaya EuroGeneris.TDS and Avaya EuroGeneris.TDT support files, contact our Technical Support team.

## Configuring your SMDR output

The Avaya EuroGeneris has multiple SMDR output options and formats. TIM Plus requires the SMDR output type to be set to `customized` and the format to `Format 5 rows 80 columns`. For more information about the output and configuration of your SMDR data, contact your system maintainer.

## Installing NetPBX

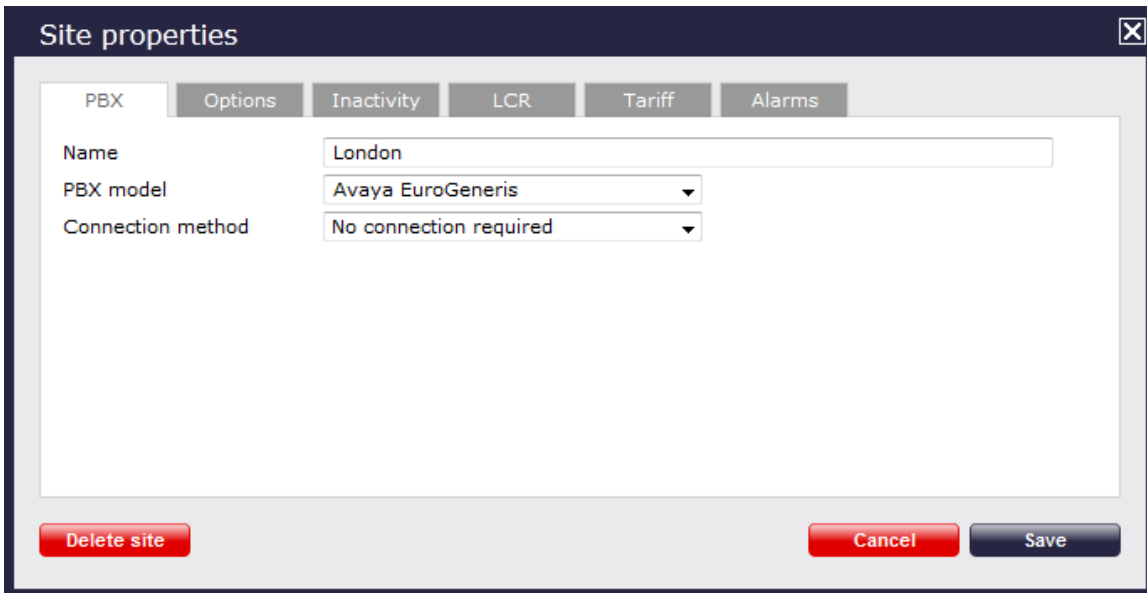
The Avaya EuroGeneris phone system sends SMDR information via a serial connection. To collect the data from the serial port and send it to TIM Plus, you first need to install the [NetPBX](#) software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

## Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: Avaya EuroGeneris

Connection method: No connection required


Delete site Cancel Save

3. In the **Site Properties** window, select **Avaya EuroGeneris** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the changes.


## Avaya INDeX


These instructions help you configure your Avaya INDeX phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a serial connection with this PBX.

**Support Files**

 Avaya INDeX v7.TDT

 Avaya INDeX v7.TDS

**Required Tasks**

Configure the SMDR output

Install NetPBX

Configure TIM Plus

### Configuring your SMDR output

To configure the SMDR output from your Avaya INDeX, follow the steps below:

1. Log in to your Avaya INDeX through a terminal.
2. Select option 1 for **Reports**.
3. Select option 2 for **Set up SMDR**.
4. Configure the SMDR options as shown below:

- Reports > Set up SMDR [1-4]

```

Set up SMDR 1

1. Minimum call time      : 0
2. Call type              : Any
3. International included : yes
4. Long distance included : yes
5. Other outgoing included : yes
6. Page size              : 60
7. Line spacing           : 1

<ESC> Reports

```

5. Press the **Esc** key to return to the Reports menu.
6. Select option 5 for Start Logs/DECT.
7. Use the arrows keys to select the port you intend to use for the SMDR output.
8. Enable the SMDR and Event or SMDR option, depending on the version of your PBX.

## Installing NetPBX

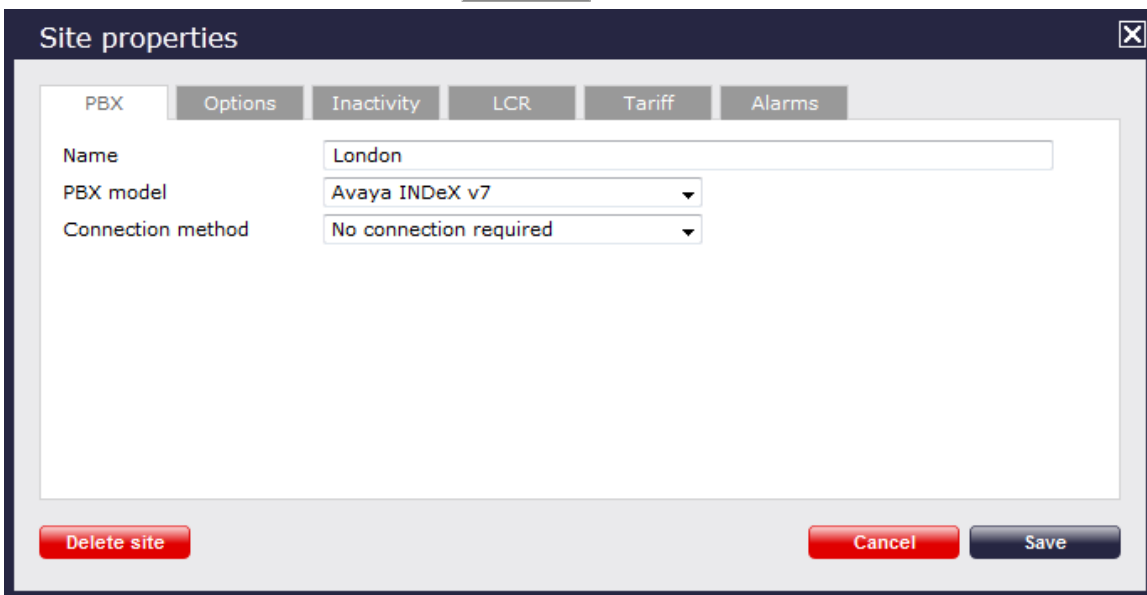
The Avaya INDeX phone system sends SMDR information via a serial connection. To collect the data from the serial port and send it to TIM Plus, you first need to install the NetPBX software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

## Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:


1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.








3. In the Site Properties window, select **Avaya INDeX v7** from the PBX model drop-down list.
4. In the Connection method field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.

## Avaya IP Office up to v5

These instructions help you configure your Avaya IP Office up to v5 phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a TCP connection to this PBX.

**Support Files**  
 Avaya IP Office.TDT  
 Avaya IP Office.TDS

**Required Tasks**  
 Configure the SMDR output  
 Configure Avaya Delta Server  
 Configure TIM Plus

### Configuring your SMDR output

The Avaya IP Office version 5 or lower uses the Avaya Delta Server software to configure the SMDR output. If you don't have a copy of the Avaya Delta Server, you should be able to get this from your Avaya Administration CD; otherwise, contact your system maintainer to obtain a copy.

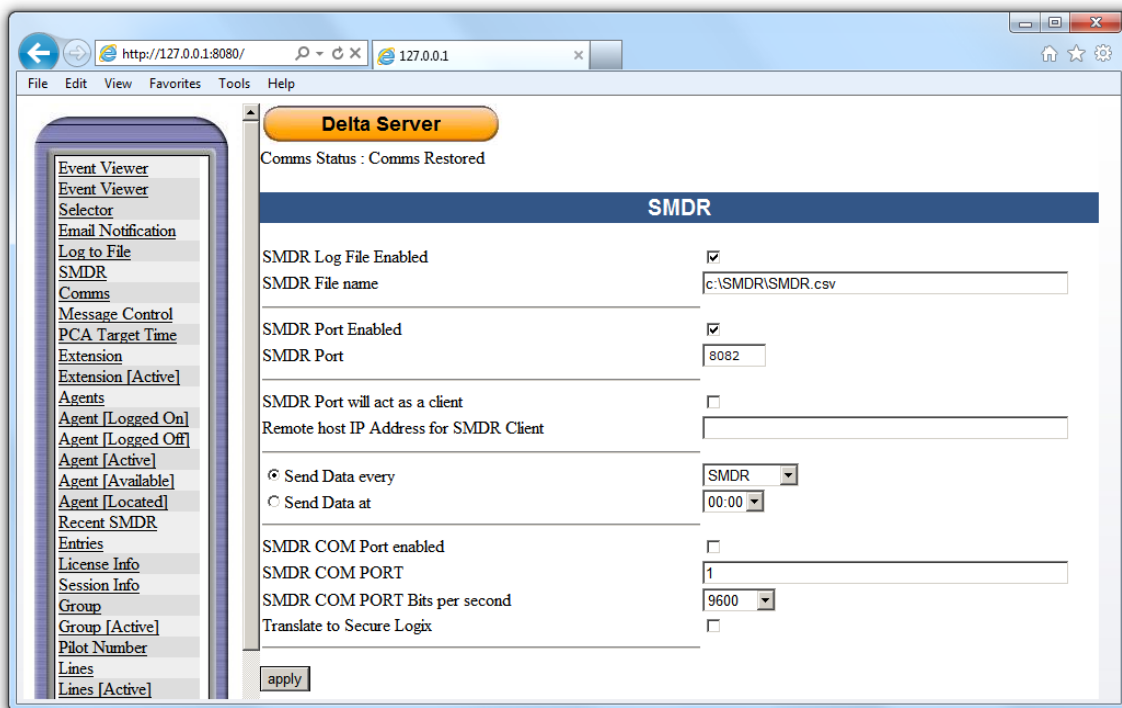


The Avaya Delta Server is known to be compatible with older versions of the Avaya IP Office as far back as v3.x.

#### Configuring Avaya Delta Server

Ensure the CCC Delta Server service is started, then follow the instructions below to configure the Avaya Delta Server to work with TIM Plus:

1. On the computer running Delta Server, open a web browser and navigate to: <http://127.0.0.1:8080>.
2. Ensure that Delta Server is connected to your Avaya IP Office by verifying that **Comms Status** is displaying **Comms Restored**.  
 Alternatively, select the **Comms** option from the left-hand side menu and click on the **Search** button. When the system finds your Avaya IP Office unit, select it from the **Connection** drop-down list and click **Apply**.
3. When connected, click on the **SMDR** option from the left-hand menu and configure each of the fields on the SMDR screen, as shown below:

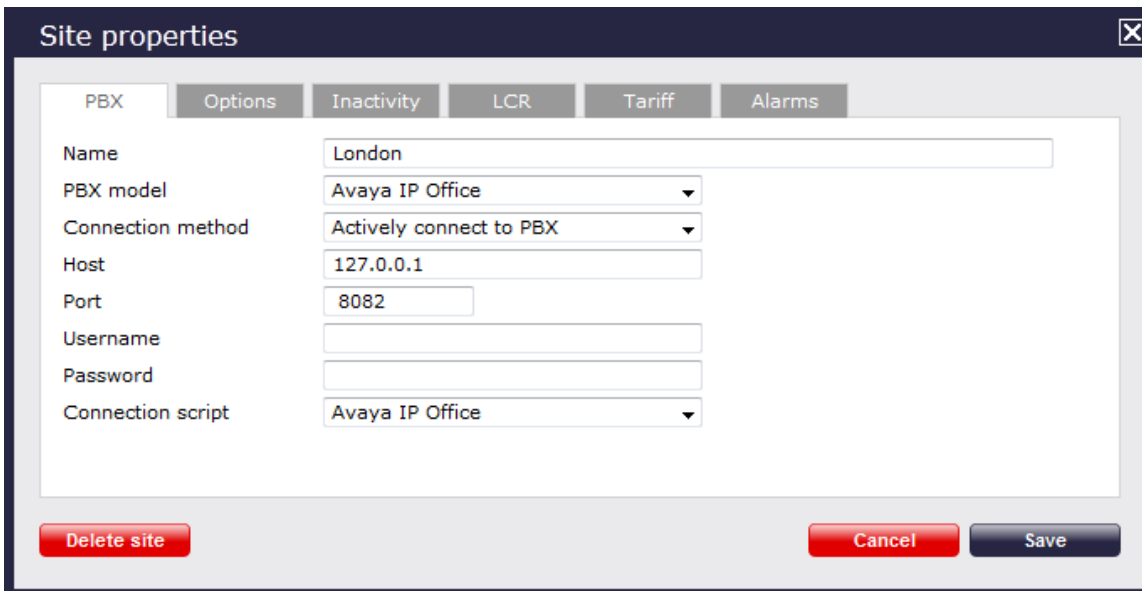


- Click on the **Apply** button for the changes to take effect.

## Configuring TIM Plus

Follow the steps below to configure TIM Plus to collect the SMDR data from the Delta Server::

- Log in to TIM Plus and click on the **Directory** tab.
- Choose the site you want to configure and click **Properties**.



- In the **Site Properties** window, select **Avaya IP Office** from the **PBX model** drop-down list.
- In the **Connection method** field, select **Actively connect to PBX** from the drop-down list.
- In the **Host** field, enter the IP address of the Avaya Delta Server.

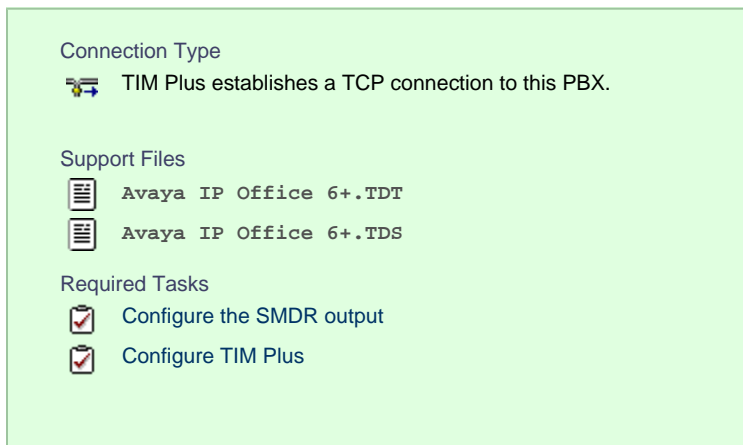
6. In the **Port** field, enter **8082**.
7. Leave the **Username** and **Password** fields blank.
8. In the **Connection script** field, select **Avaya IP Office** from the drop-down list.
9. Click on the **Save** button to apply the settings.

## Avaya IP Office v6+

The Avaya IP Office 6+ can be configured to send its SMDR data over an active or passive TCP connection. Click on one of the links below that relates to your preferred connection method.

### Avaya IP Office v6+ - Active connection

These instructions help you configure your Avaya IP Office v6+ phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

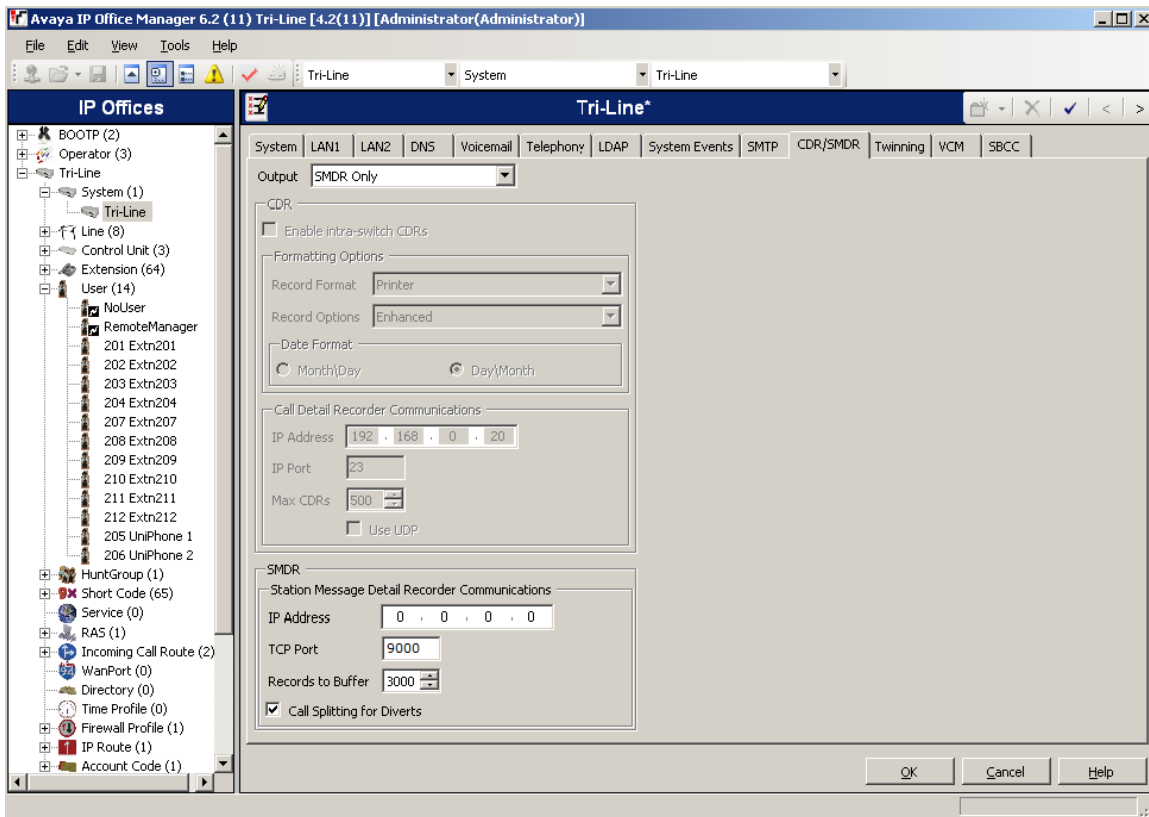


### Configuring your SMDR output

The Avaya IP Office can be configured to accept an incoming TCP connection, in order to output its SMDR data. Using the Avaya IP Office Manager application, perform the following steps to enable the output:

1. Log in to your Avaya IP Office unit using the Avaya IP Office Manager.
2. Click on **System** from the left-hand menu and select your Avaya IP Office unit.
3. On the right-hand side, click on the **CDR/SMDR** tab.
4. From the **Output** drop-down menu, select **SMDR only**. The **SMDR** section will now become active at the bottom of the page.
5. In the **IP Address** field, enter **0.0.0.0**.
6. In the **TCP Port** field, enter the port number that you want your SMDR data to be sent to. You can use any free TCP port, but we would recommend one in the 9000 range.
7. In the **Records to Buffer** option, increase the value to the maximum available.
8. Check the **Call Splitting for Diverts** option.
9. Click on the **OK** button, then save and merge the configuration for the settings to take effect.

Here is an example of the SMDR screen and how it should be configured:



## Configuring TIM Plus

Follow the steps below to configure TIM Plus to collect SMDR data from your Avaya IP Office:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.

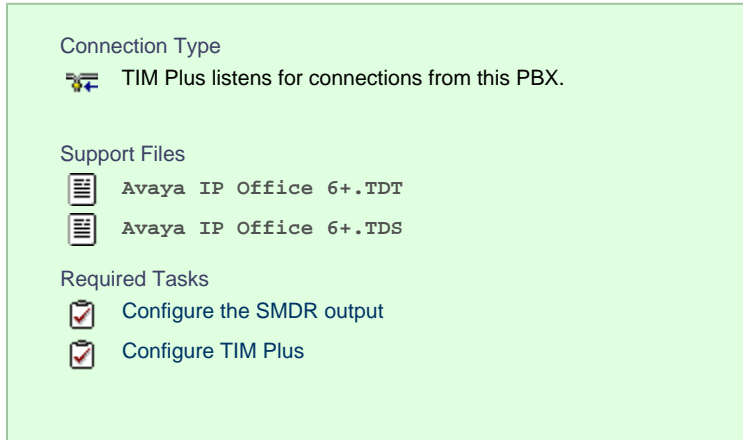


3. In the **Site Properties** window, select **Avaya IP Office v6+** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Actively connect to PBX** from the drop-down list.
5. In the **Host** field, enter the IP address of your Avaya IP Office.

6. In the `Port` field, enter the port number configured in the phone system.
7. Leave the `Username` and `Password` fields blank.
8. In the `Connection script` field, select **Avaya IP Office** from the drop-down list.
9. Click on the **Save** button to apply the settings.

### Avaya IP Office v6+ - Listening connection

These instructions help you configure your Avaya IP Office v6+ phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.



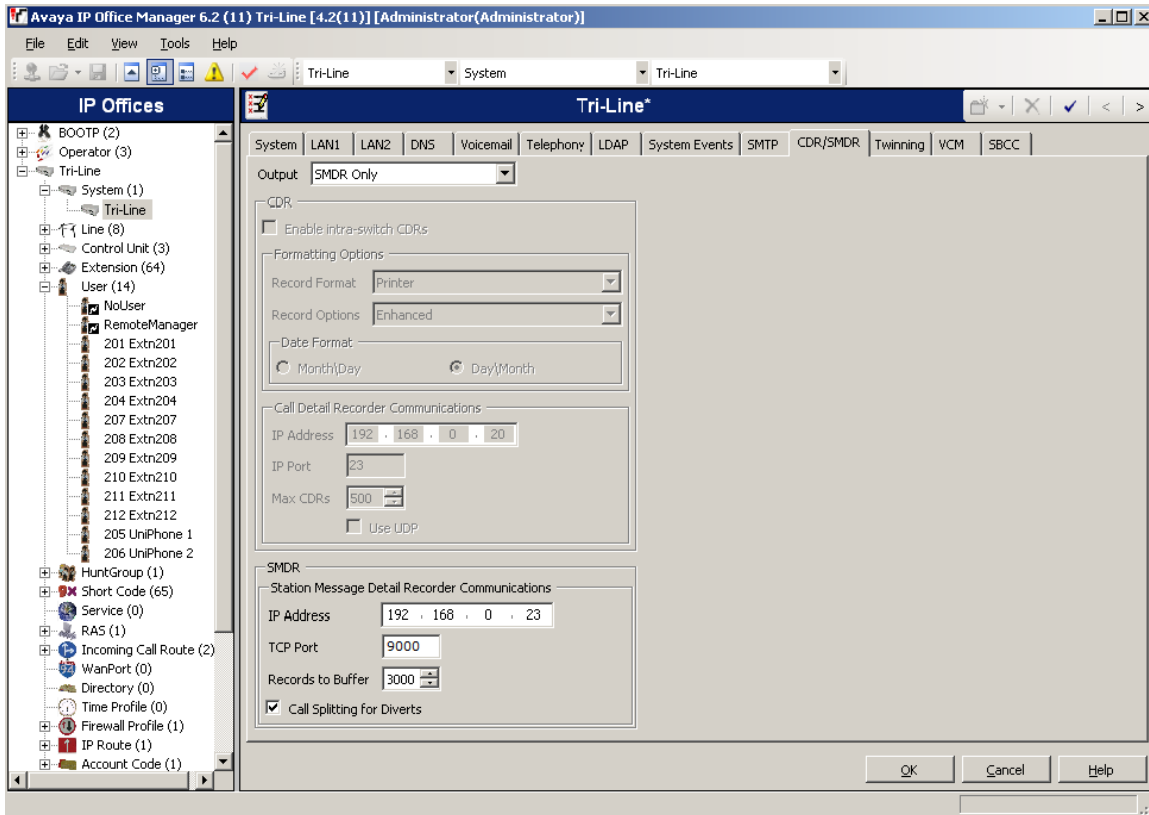
### Configuring your SMDR output

To configure the Avaya IP Office to output SMDR you must program the Avaya IP Office unit to send the SMDR data to the computer running TIM Plus. Using the Avaya IP Office Manager application, perform the following steps to configure the SMDR output:

1. Log in to your Avaya IP Office unit using the Avaya IP Office Manager.
2. Click on **System** from the left-hand menu and select your Avaya IP Office unit.
3. On the right-hand side, click on the **CDR/SMDR** tab.
4. From the `Output` drop-down menu, select **SMDR only**. The `SMDR` section will now become active at the bottom of the page.
5. In the `IP Address` field, enter the IP address of the machine that TIM Plus is installed on.
6. In the `TCP Port` field, enter the port number that you want your SMDR data to be sent to. You can use any free TCP port, but we would recommend one in the 9000 range.
7. In the `Records to Buffer` option, increase the value to the maximum available.
8. Check the `Call Splitting for Diverts` option.
9. Click on the **OK** button, then save and merge the configuration for the settings to take effect.

Here is an example of the SMDR screen and how it should be configured:

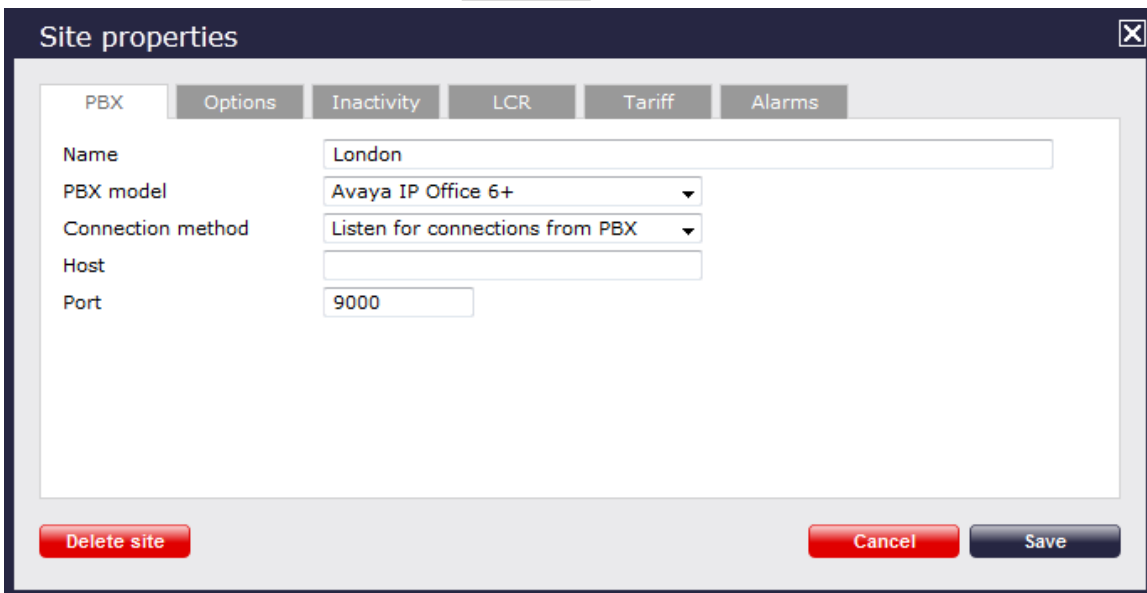




## Configuring TIM Plus

Follow the steps below to configure TIM Plus to listen for SMDR data from your Avaya IP Office v6+:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.






3. In the **Site Properties** window, select **Avaya IP Office 6+** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Listen for connections from PBX** from the drop-down list.
5. Leave the **Host** field blank.

6. In the `Port` field, enter `9000`.
7. Click on the `Save` button to apply the settings.

## Avaya Matra 65xx series

These instructions help you configure your Avaya Matra 65xx series to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**  
 Avaya Matra 6500.TDT  
 Avaya Matra 6500.TDS

**Required Tasks**  
 Configure the SMDR output  
 Install NetPBX  
 Configure TIM Plus

### Configuring your SMDR output

The Avaya Matra 65xx series is outputting the SMDR data via a serial connection. You need to connect a serial cable between your Avaya Matra 65xx phone system and the PC running NetPBX. For more information about the output and configuration of the SMDR data, please contact your system maintainer.

### Installing NetPBX

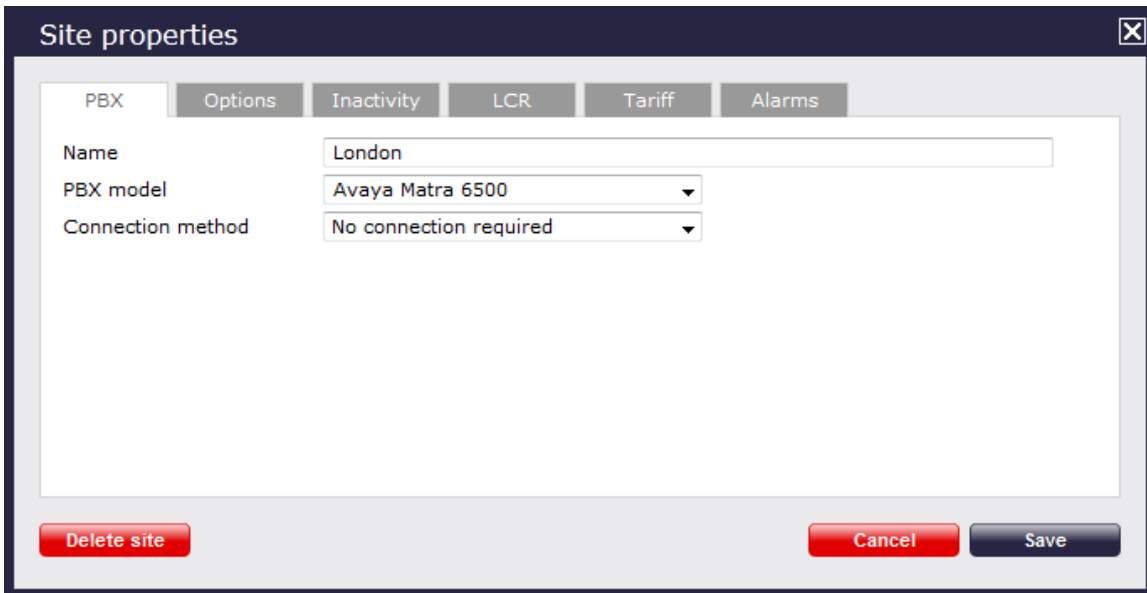
To collect the data from the serial port and send it to TIM Plus, you first need to install the NetPBX software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

1. Click on the `Directory` tab.
2. Choose the site you want to configure and click `Properties`.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: Avaya Matra 6500


Connection method: No connection required

Delete site Cancel Save



3. In the **Site Properties** window, select **Avaya Matra 6500** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.

## Avaya Meridian Option Series

These instructions help you configure your Avaya Meridian Option Series to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**

-  Avaya Meridian.TDT
-  Avaya Meridian.TDS

**Required Tasks**

- Configure the SMDR output
- Install NetPBX
- Configure TIM Plus

### Configuring your SMDR output

By default, the SMDR output in the Avaya Meridian Option Series is disabled. You need to speak to your system maintainer to have this enabled for incoming, outgoing and internal calls. Additionally, CLI, DNIS, response time and abandoned calls should be enabled for incoming calls.

You need to configure one of the **TTY** ports on the Meridian to output SMDR information and connect a serial cable between this port and the PC running NetPBX.

Using the following commands, configure each option as shown below:

1. **Enable CDR (command: LD 21)**

```
>LD 21
PT1000
```

```
REQ: PRT
TYPE: CDR
TYPE CDR_DATA
CUST 0
```

```
TYPE CDR_DATA
CUST 00
CDR YES
  IMPH NO
  OMPH NO
  AXID YES
  TRCR YES
  CDPR NO
  ECDR YES
  PORT [TTY port used on PBX]
CHLN 0
FCAF NO
```

## 2. Port Setup (command: LD 22)

```
>LD 22

ADAN  TTY [TTY port used on PBX]
  CARD 00 [card it resides on]
  PORT [port on that card]
  DES  [description]
  BPS 1200 ← baud rate
  BITL 8 ← bit length
  STOP 1 ← stop bit
  PARY NONE ← parity
  FLOW NO ← flow control
  USER CTY ← type of TTY port for CDR
  XSM NO
```

## 3. CDR Format (commands: LD 22; LD 17)

## CDR Format (commands: LD 22; LD 17)

\*\*\*\* *the following is part System config. for CDR printed in LD 22; changed in LD 17.*

PARM

```

LP1B 125
HP1B 50
500B 200
NCR 300
MGCR NULL
CSQI 020
CSQO 020
NCPU 1
CFWS NO
PCML MU
ALRM YES
ERRM ERR BUG AUD
DTRB 100
TMRK 128

```

\*\*\*\*\* *start CDR section*

### **FCDR NEW**

```

PCDR NO
TPO NO
TSO NO
CLID NO
DUR5 NO

```

\*\*\*\*\* *end CDR section*



### CDR output port values:

**Baud** = 1200;

**Data bits** = 8;

**Parity** = None;

**Stop bits** = 1;

**Flow control** = DTR/RTS

**Use CDR format** #511 (Meridian / SL1-X11) or #526 (CS 1000 Rel 4+ / Meridian 1).

## Installing NetPBX

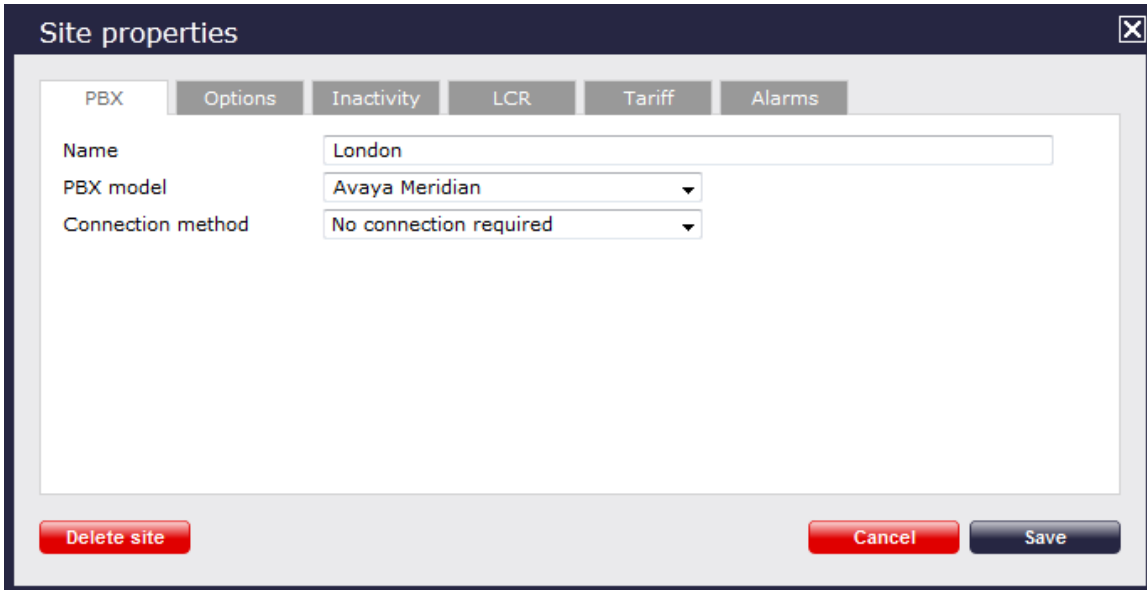
The Meridian sends SMDR information via a serial connection. To collect the data from the serial port and send it to TIM Plus, you first need to install the [NetPBX](#) software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

## Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



3. In the **Site Properties** window, select **Avaya Meridian** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.

## Avaya Network Alchemy

These instructions help you configure your Avaya Network Alchemy to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

- The SMDR data is outputted to a file

**Support Files**

- Avaya Network Alchemy.TDT
- Avaya Network Alchemy.TDS

**Required Tasks**

- Configure the SMDR output
- Configure Avaya Call Log
- Configure TIM Plus

### Configuring your SMDR output

The Avaya Network Alchemy uses the Avaya Call Log software to configure the SMDR data. As the application will be outputting the data to a file, the installation of the Avaya Call Log software needs to be performed on the same machine as TIM Plus. A copy of the Avaya Call Log application can be found on your Avaya Administration CD. Your system maintainer should be able to supply you with a copy of the software.

**NOTE**

The Avaya Call Log software does not run as a Windows Service; therefore, you must ensure that the application is never stopped because you may lose SMDR data.

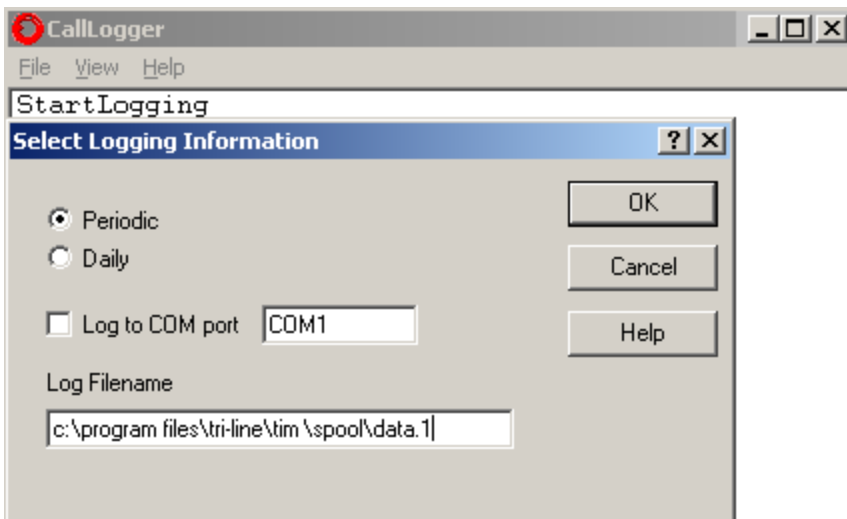
### Configuring Avaya Call Log

Follow the steps below to configure the Avaya Call Log software:

1. Start the Avaya Call Log application.
2. From the **File** menu, select **Select Unit** .
3. In the first field, enter the IP address of your Avaya Network Alchemy.
4. In the second field, enter the password for your Avaya Network Alchemy and click the **OK** button.
5. From the **File** menu, select **Log Option** .
6. From the **Select Logging Information** window, choose the **Periodic** option.
7. Type **C:\Program Files\Tri-Line\TIM Plus\spool\data.{sitecode}** in the **Log Filename** field, replacing **{sitecode}** with the ID of the site you are logging. To obtain the ID of a site, hover the mouse pointer over it on the **Directory** page in TIM Plus and it will be displayed as a tooltip as shown below:



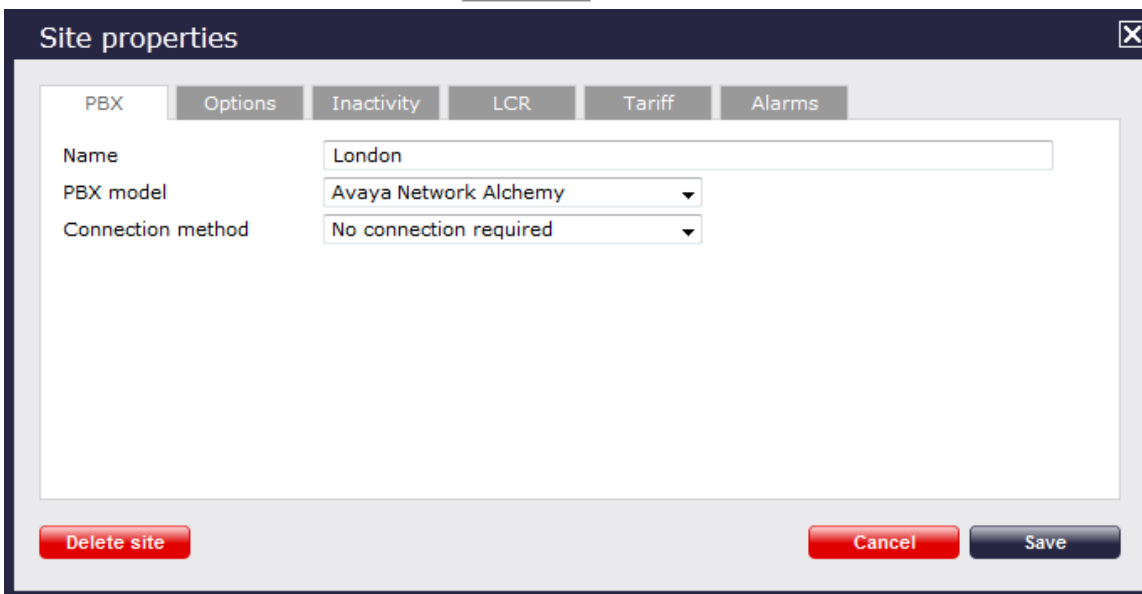
8. Click on the **OK** button to apply the settings.



## Configuring TIM Plus

Follow the steps below to configure TIM Plus to receive SMDR data from your Avaya Network Alchemy:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.






3. In the **Site Properties** window, select **Avaya Network Alchemy** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the changes.

## Avaya Norstar

These instructions help you configure your Avaya Norstar to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.



**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**  
 Avaya BCM.TDT  
 Avaya BCM.TDS

**Required Tasks**  
 Configure the SMDR output  
 Install NetPBX  
 Configure TIM Plus



To obtain the `Avaya Norstar.TDT` and `Avaya Norstar.TDS` support files, contact our Technical Support team.

## Configuring your SMDR output

Follow the steps below to configure your Avaya Norstar to output SMDR data to TIM Plus. You must perform these operations from a system programming phone:

1. On your programming phone, press the **Feature** key, followed by **9** **\*** **2** to access the CLI menu.
2. Press **Next** to display the **Printer** settings showing the baud rate that the data is sent at. To change this value, select **Change** and choose a new baud rate.
3. Press **Next** to display the **Format** settings. Ensure this is set to **Norstar**.
4. Press **Next** to show **Report** settings. Ensure this is set to **All**.
5. Press the **Rls** button to complete the programming steps.

## Installing NetPBX

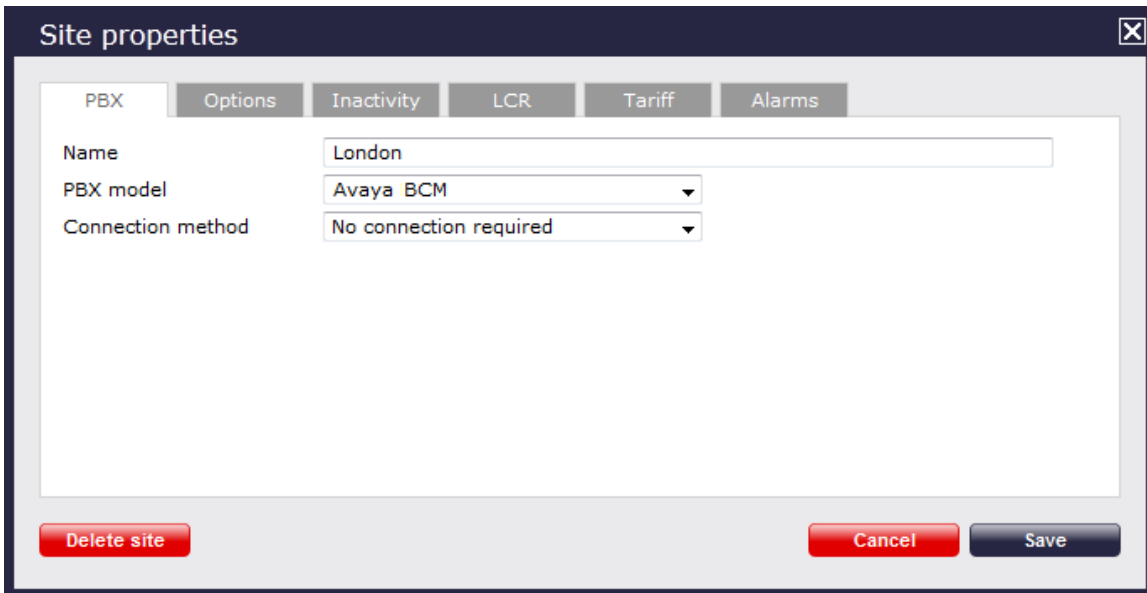
The Avaya Norstar phone system sends SMDR information via a serial connection to the computer running TIM Plus. To collect serial data, you first need to install the [NetPBX](#) software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

## Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the following steps:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: Avaya BCM


Connection method: No connection required


Delete site Cancel Save

3. In the **Site Properties** window, select **Avaya BCM** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to save settings.

## Avaya Tenovis

These instructions help you configure your Avaya Tenovis to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**  
 Avaya Tenovis i55.TDT

**Required Tasks**

- Configure the SMDR output
- Install NetPBX
- Configure TIM Plus

### Configuring your SMDR

For specific information about the output and configuration of the SMDR data of your Avaya Tenovis phone system, please contact your system maintainer.

### Installing NetPBX

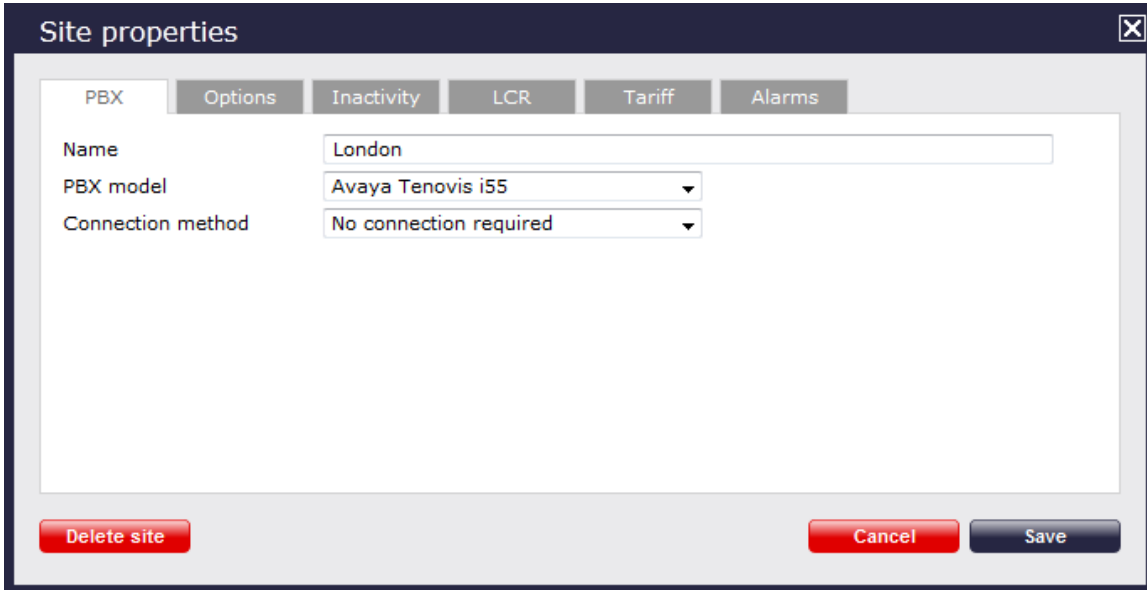
The Avaya Tenovis outputs its SMDR data via a serial connection. To collect the data from the serial port and send it to TIM Plus, you first need to install the **NetPBX** software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

## Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and follow the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



The screenshot shows a 'Site properties' window with the following details:

- Tab:** PBX (selected), Options, Inactivity, LCR, Tariff, Alarms
- Name:** London
- PBX model:** Avaya Tenovis i55
- Connection method:** No connection required
- Buttons:** Delete site, Cancel, Save


3. In the Site Properties window, select **Avaya Tenovis i55** from the PBX model drop-down list.
4. In the Connection method field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to save settings.

## AYCTelecom



### AYCTelecom IPcts

These instructions help you configure your AYCTelecom IPcts to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus listens for connections from this PBX.

**Support Files**

-  AYCTelecom IPCTS.TDT
-  AYCTelecom IPCTS.TDS

**Required Tasks**

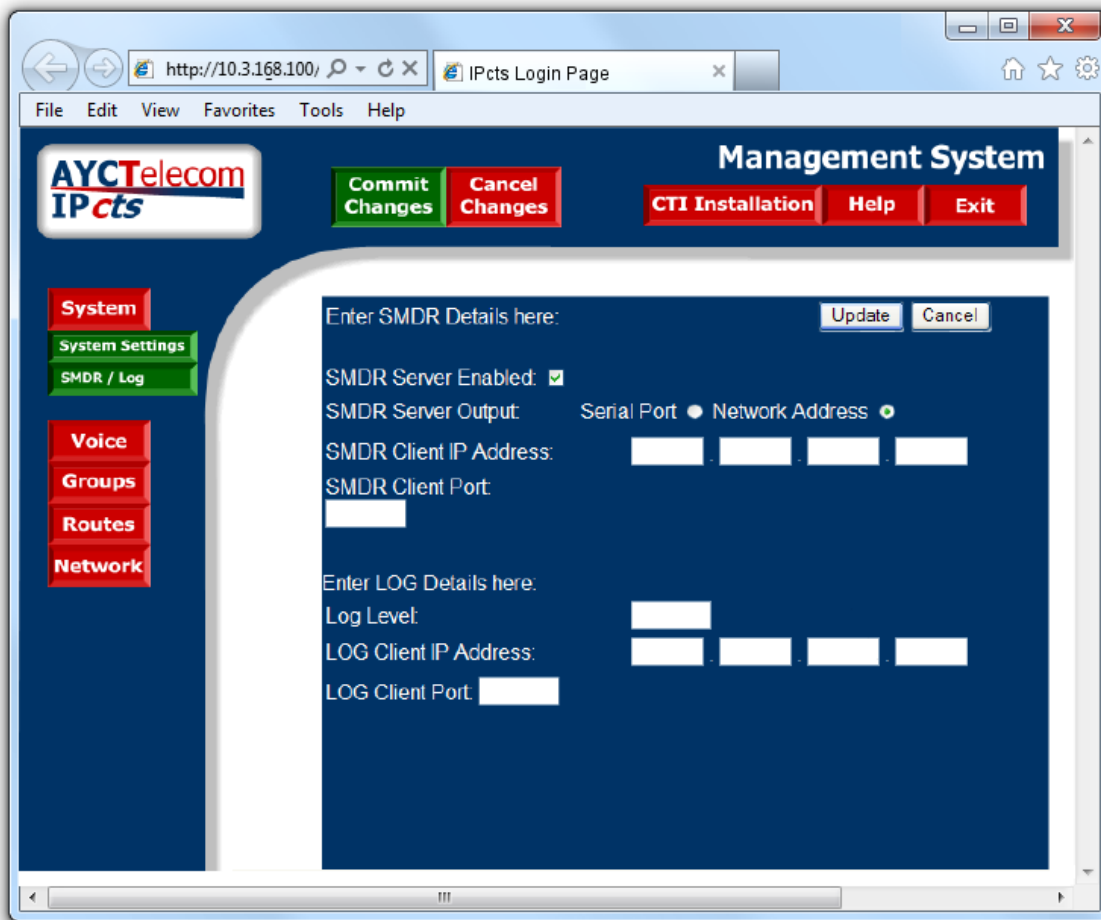
- Configure the SMDR output
- Configure TIM Plus

### Configuring your SMDR output

Follow the steps below to set up the SMDR output of your IPcts through its management web page:

1. Log in to your AYCTelecom IPcts management web page.
2. Select the **System** tab
3. Select the **SMDR/Log** tab and configure the fields on the page as below:
  - **SMDR Server Enabled:** Enable the check box.
  - **SMDR Server Output:** Choose **Network Address**.
  - **SMDR Client IP Address:** Enter the IP address of the computer running TIM Plus.
  - **SMDR Client Port:** Enter the TCP port number you want to send the SMDR data to. You can use any free TCP port, but we would recommend one in the 9000 range.
4. Click the **Update** button.
5. Click the **Commit Changes** button at the top of the page so save your settings.

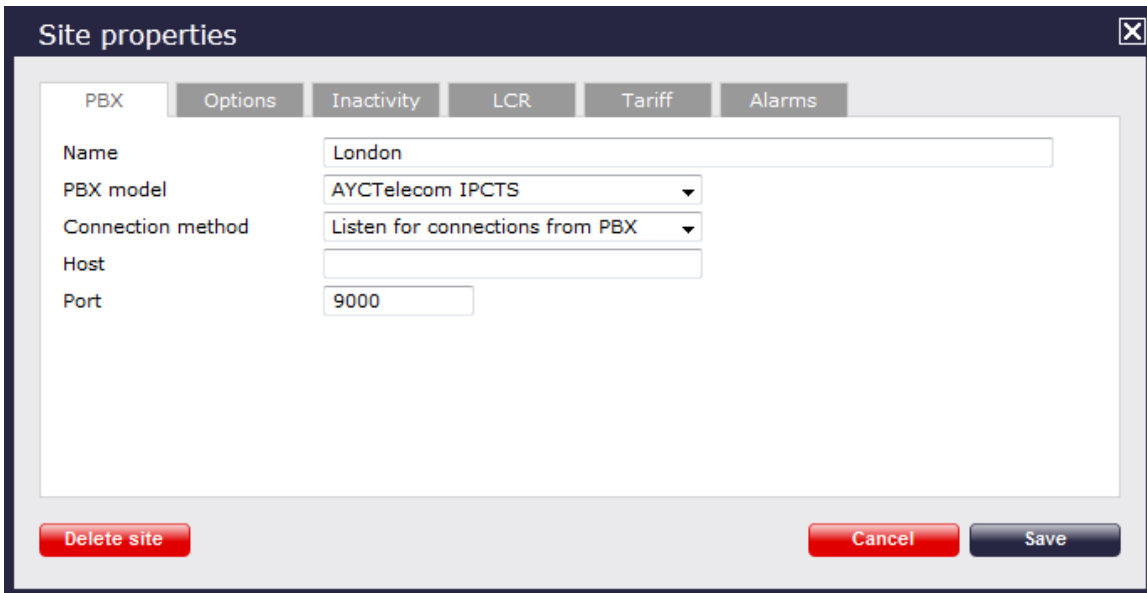
Here is an example screenshot of the SMDR configuration screen from the AYCTelecom IPcts management web page:



## Configuring TIM Plus

Follow the steps below to configure TIM Plus to listen for SMDR data from your AYCTelecom IPcts phone system:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name London

PBX model AYCTelecom IPCTS

Connection method Listen for connections from PBX

Host

Port 9000

Delete site Cancel Save


3. In the **Site Properties** window, select **AYCTelecom IPCTS** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Listen for connections from PBX** from the drop-down list.
5. Leave the **Host** field blank.
6. In the **Port** field, enter the TCP port that was configured on your AYCTelecom IPcts (e.g. **9000**).
7. Click on the **Save** button to apply the changes.

## BT


### BT Inspiration

These instructions help you configure your BT Inspiration phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a serial connection with this PBX.

**Support Files**

 BT Inspiration.TDT

**Required Tasks**

- Configure the SMDR output
- Install NetPBX
- Configure TIM Plus

### Configuring your SMDR output

To configure SMDR settings on your BT Inspiration you need to have a BT System Phone and be familiar with how to use it for system programming purposes. To enable SMDR output, follow the steps below:

1. From the programming position, press the phone setup key **P** and select **System programming**.
2. Enter the PIN and select **System**.

3. Select **Call logging** and choose **Call logging on** .
4. Press **HANDSFREE/MONITOR** to finish configuring the system.

## Installing NetPBX

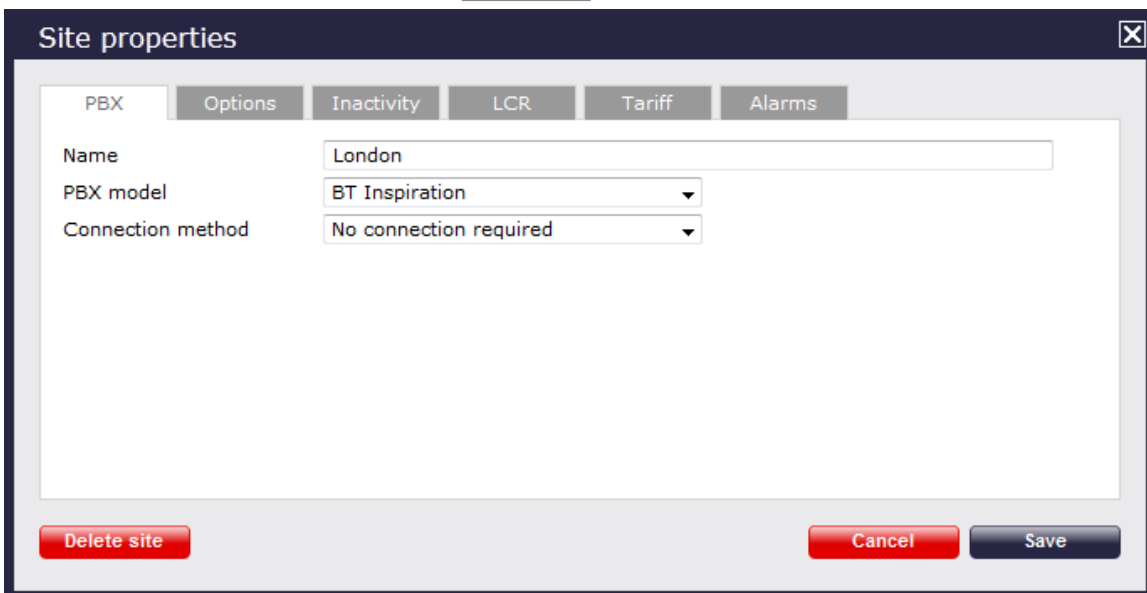
The BT Inspiration phone system sends SMDR information via a serial connection. To collect the data from the serial port and send it to TIM Plus, you first need to install the [NetPBX](#) software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

## Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and follow the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties** .




The screenshot shows a 'Site properties' dialog box with the following configuration:


Field	Value
Name	London
PBX model	BT Inspiration
Connection method	No connection required

3. In the **Site Properties** window, select **BT Inspiration** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.

## BT Monarch

These instructions help you configure your BT Monarch to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**  
 BT Monarch.TDT

**Required Tasks**

- Configure the SMDR output
- Install NetPBX
- Configure TIM Plus

### Configuring your SMDR output

Please contact your system maintainer for information about how to configure the SMDR output of your BT Monarch.

### Installing NetPBX

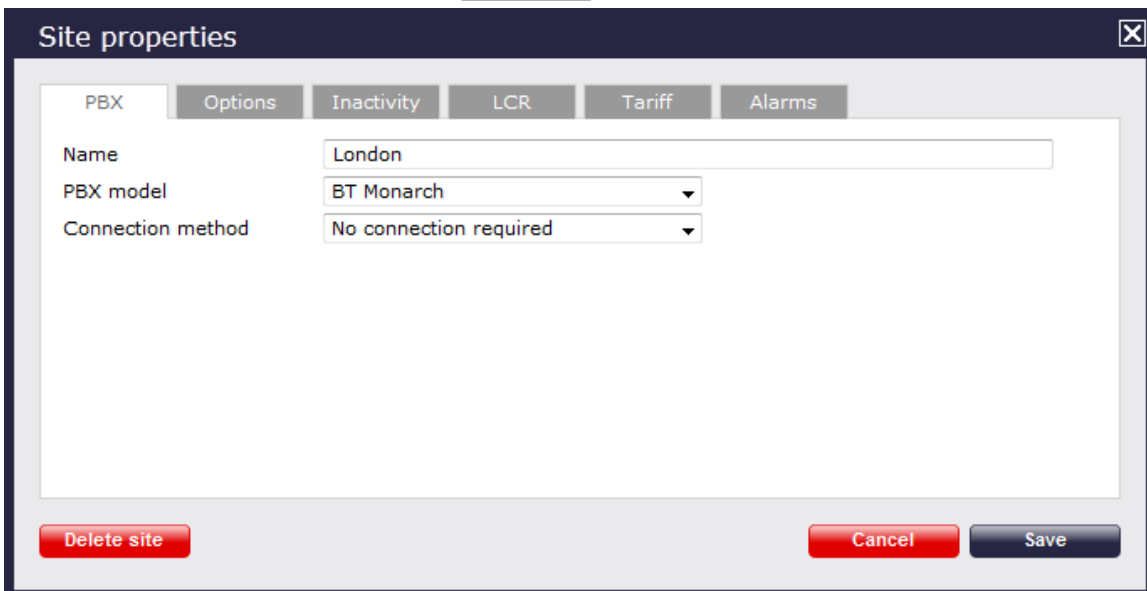
The BT Monarch phone system sends SMDR information via a serial connection. To collect the data from the serial port and send it to TIM Plus, you first need to install the [NetPBX](#) software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and follow the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.





3. In the **Site Properties** window, select **BT Monarch** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.

- Click on the **Save** button to apply the settings.

## BT Pathway

These instructions help you configure your BT Pathway to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**  
 **BT Pathway.TDT**

**Required Tasks**

- Configure the SMDR output
- Install NetPBX
- Configure TIM Plus



To obtain the **BT Pathway.TDT** interface file, contact our **Technical Support** team.

## Configuring your SMDR output

To receive SMDR data from your BT Pathway you need to have a BT System Phone and be familiar with how to use it to perform system programming. To enable SMDR output, follow the steps below:

- From the programming position, press the phone setup key **P** and select **System programming**.
- Enter the PIN and select **System**.
- Select **Call logging** and choose **Call logging on**.
- Press **HANDSFREE/MONITOR** to finish.

## Installing NetPBX

The BT Pathway phone system transmits SMDR information via a serial connection. To collect the data from the serial port and send it to TIM Plus, you first need to install the **NetPBX** software. For setup instructions, click on the link below:

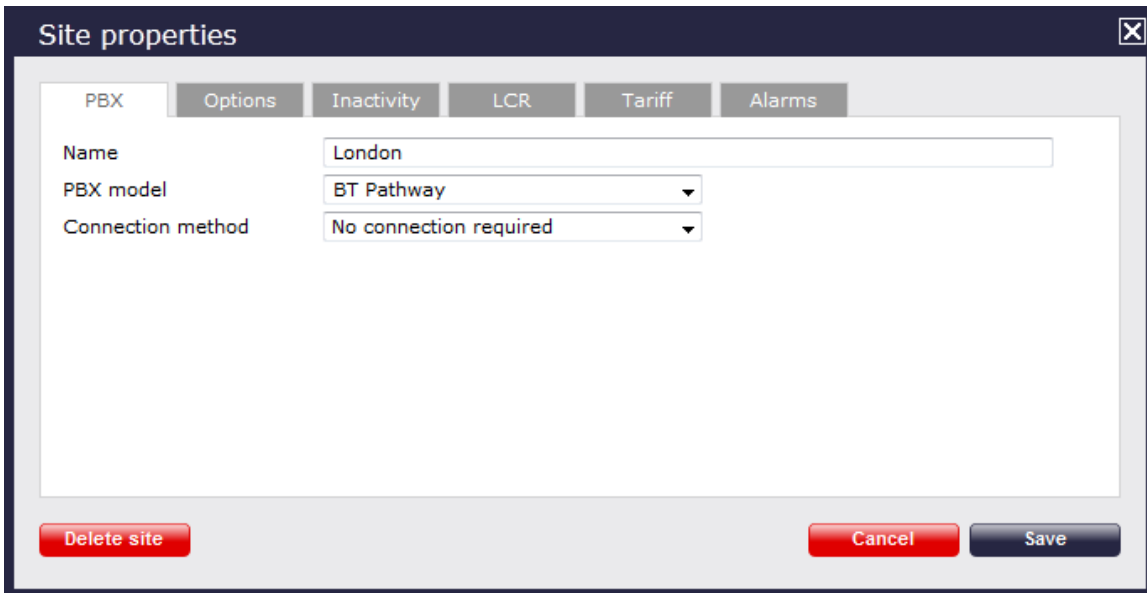
[Install and configure NetPBX](#)

## Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and follow the steps below:

- Click on the **Directory** tab.
- Choose the site you want to configure and click **Properties**.





**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: BT Pathway


Connection method: No connection required


Delete site Cancel Save

3. In the **Site Properties** window, select **BT Pathway** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.

## BT Versatility

These instructions help you configure your BT Versatility to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**  
 BT Versatility.TDT

**Required Tasks**

- Configure the SMDR output
- Install NetPBX
- Configure TIM Plus

### Configuring your SMDR output

The BT Versatility outputs its SMDR data via a serial port. The default communication parameters for this serial connection are:

- Speed – 4800, 9600, 19200, 38400 or 115200 bps;
- Data - 8 bits;
- Parity - None.

The phone system has an in-built buffer to store the last 500 call records in case the receiving equipment becomes disconnected. This buffered data can be set to output to the serial port during system programming. An **X-ON/X-OFF** signal can be enabled to allow the Versatility to detect if a compatible device is receiving its SMDR data

successfully. The Versatility can also be set to output SMDR data using `restricted call logging`, whereby the last four digits of any dialled number is masked out.

Follow the instructions below to configure your BT Versatility for use with TIM Plus:

Calls are printed out in the following format as they are completed:


1	2	3	4	5	6	7	8	9	10
O/G	1234	10/01/99	12.00:01	00:00:30	L01	S21	S21	:000.00	1234567
O/G		10/02/99	12.00:10	00:01:56	L02	S25	S25	:000.00	567890
I/C	5678	10/13/99	12.01:13	00:06:32	L03	S22	S24	:000.00	

The explanation of the data output is as follows:

Column Number	Data Output Explanation
1	Incoming (I/C) or Outgoing (O/G) call
2	Account Codes
3	Date (day/month/year)
4	Start time
5	Duration of the call
6	Line used
7	Initiating Extension
8	Terminating Extension
9	Cost. (Not Available)
10	Digits entered (outgoing calls only)

## To enable/disable Call Logging


Call Logging is disabled by default on power up.

- From the Programming Extension, press the PROGRAMME Key 
- Press the Scroll Down Key (⏴) until 'System programming' is displayed.
- Select 'System programming'.
- Enter the System Programming Password and select 'System'.
- Press the Scroll Down Key (⏴) until 'Call logging' is displayed.
- Select 'Call logging'.
- Select either 'Call logging On', 'Call logging off', 'Restricted call log ON', 'Enable Xon / Xoff' or 'Print Log'

Press the Hands-free Key to finish programming.


## To prevent calls from individual Extensions being logged

If Call Logging is enabled, then by default all calls from all extensions will be logged. However individual extensions can be programmed to prevent their calls being logged.

- From the Programming Extension, press the PROGRAMME Key 
- Press the Scroll Down Key (⏴) until 'System programming' is displayed.
- Select 'System programming'.
- Enter the System Programming Password and select 'Extensions'.
- Press the Scroll Down Key (⏴) until 'No call logging' is displayed.
- Select 'No call logging'.
- Select the Extensions whose calls are not to be logged. The selected Extensions will be indicated with a ♦.

Press the Hands-free Key to finish programming.

## To set the call logging interface speed for connecting a Printer or PC

- From the Programming Extension, press the PROGRAMME Key 
- Press the Scroll Down Key (⏴) until 'System programming' is displayed.
- Select 'System programming'.
- Enter the System Programming Password and select 'System'.
- Press the Scroll Down Key (⏴) until 'Set v24 baud rate' is displayed.
- Select 'Set v24 baud rate'.
- Select the speed you require – 4800, 9600, 19,200, 38,400 or 115,200 bps.

Press the Hands-free Key to finish programming.

**Note:** To connect a printer or PC for call logging, use the call logging interface module and cable provided and connect one end to the V24 interface on the CCU and the other end to the serial device e.g. a PC or a printer.

## Installing NetPBX

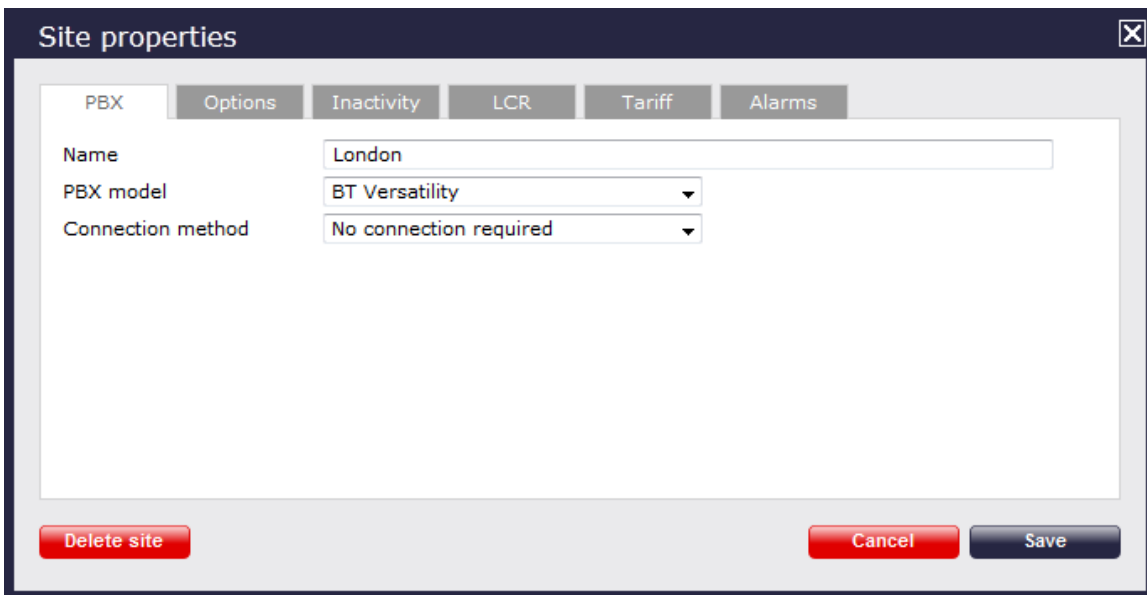
To collect the SMDR data from the serial port and send it to TIM Plus, you first need to install the [NetPBX](#) software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

## Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and follow the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: BT Versatility

Connection method: No connection required

Delete site Cancel Save


3. In the **Site Properties** window, select **BT Versatility** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.

## Cisco




### Cisco UCM (below v5)

These instructions help you configure your Cisco UCM to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a DSN connection with this PBX.

**Support Files**

-  Cisco UCM v4 DSN.TDT
-  Cisco UCM v4 DSN.TDS
-  Cisco UCM 4.DBS

**Required Tasks**

- Configure the SMDR output
- Set up a DSN connection
- Configure TIM Plus

### Configuring your SMDR output

This version of the Cisco UCM stores its call records in a Microsoft SQL Server database. However, by default, this functionality is not enabled. To enable it, the following settings must be configured on the **Publisher** using the **Service Parameters** configuration window:

- CDR Enabled
- CDR Log Calls With Zero Duration Flag

- Call Diagnostics Enabled

This version of the UCM outputs its call records to a table named `CallDetailRecord` in a database entitled `CDR`. Rather than have TIM Plus read and remove CDRs from the live `CallDetailRecord` table, we recommend you replicate this into a second table - leaving the original intact - so that it may be used by other applications that require it. Normally, there already exists a SQL User with the following credentials:

- **Username:** `CiscoCCMCDR`
- **Password:** `dipsy`

To set up replication you may need to speak to your database administrator or your Cisco UCM maintainer. Ensure that the SQL user described above has full access rights to this replicated table.

You need to know the following information in order for TIM Plus to be able to connect to the Cisco UCM CDR database:

- The IP address or hostname of the Microsoft SQL Server database located on the `Publisher` node.
- The username and password to connect to the `CDR` database.

### Setting up a DSN connection for TIM Plus

To enable TIM Plus to work with your Cisco UCM, you first need to set up a DSN connection. Follow the steps below to perform this task within Microsoft Windows:

1. Open Windows **Control Panel**
2. Double click on the `Administrative tools` icon
3. Double click on the `Data Sources (ODBC)` icon to open the `ODBC Data Source Administrator` window

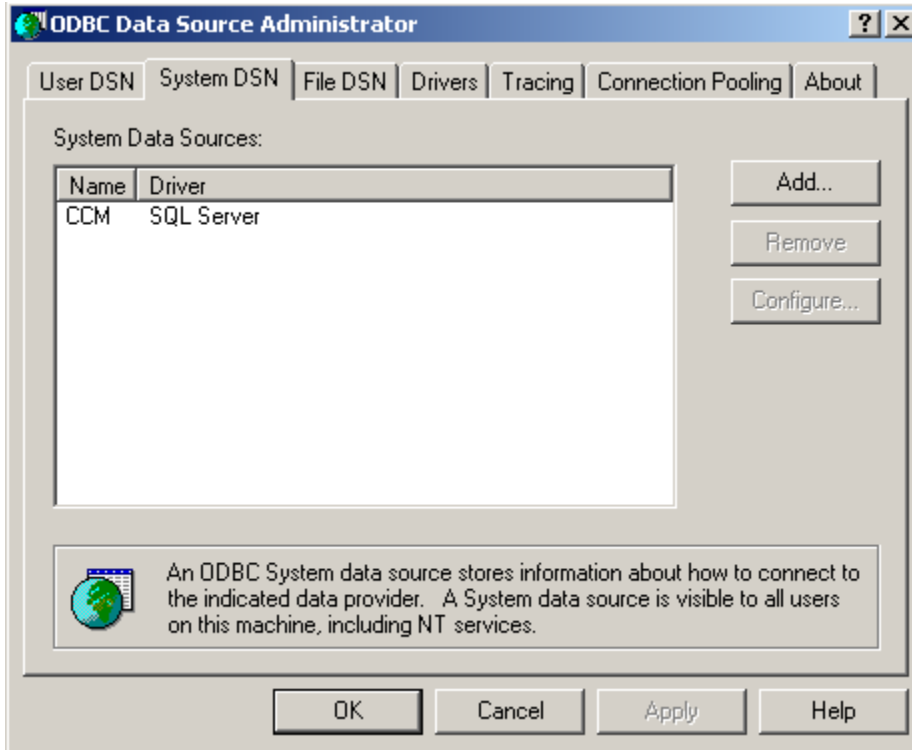


For a 64 bit system, access the `ODBC Data Source Administrator` from the following location `C:\Windows\System32\odbcad32.exe`

4. Select the `System DSN` tab and click the `Add` button
5. Select `SQL server` from the list of available drivers and click `Finish`
6. In the `Name` field, enter `CCM`
7. In the `Description` field enter the following: `TIM Plus link to CCM`
8. In the `Database name` field enter the database type e.g `SQL`, `MySQL` etc.
9. In the `server` drop-down list select the Cisco UCM Publisher IP address or machine name
10. Click the `Next` button
11. Select the option `With SQL Server authentication using a login ID and password entered by the user`, then click `Next`
12. Enable the checkbox `Change the default database to:`, select `CDR`, then click the `Next` button
13. Click the `Finish` button
14. Click the `Test Data Source` button to verify your settings and, if the test is successful, click `OK`

- Click the **OK** button to close the control panel applet

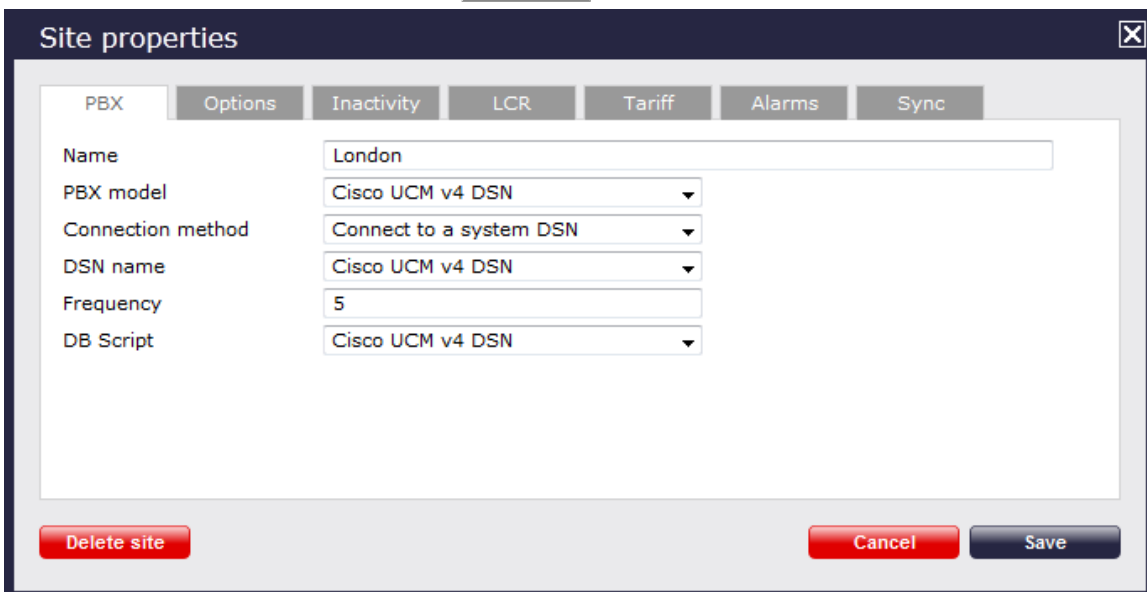
An example of an ODBC setup is shown below:



## Configuring TIM Plus

Once the DSN connection has been set up, log in to TIM Plus and perform the steps below:

- Click on the **Directory** tab.
- Choose the site you want to configure and click **Properties**.




- In the **Site Properties** window, select **Cisco UCM v4 DSN** from the **PBX model** drop-down list.



4. Select **Connect to a system DSN** from the **Connection method** drop-down list.
5. Select **Cisco UCM v4 DSN** from the **DSN name** drop-down list.
6. Enter **5** in the **Frequency** field.
7. Select **Cisco UCM v4 DSN** from the **DB script** drop-down list.
8. Click the **Save** button to apply the settings.

## Cisco UCM / Business Edition (Call Manager) version 5+

These instructions help you configure your Cisco UCM version 5.0 - 8.6 to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus receives FTP transfers from this PBX.

**Support Files**

-  Cisco UCM 5+.TDT
-  Cisco UCM 5+.TDS

**Required Tasks**

- Create Cisco Application User for AXL sync
- Configure Cisco AXL sync
- Configure TIM Plus to receive data by FTP
- Set up FTP/SFTP in Cisco UCM

### Create Cisco Application User for AXL sync

To enable TIM Plus to query the Cisco database, you need to create an **Application User** on your Cisco UCM. Follow the steps below to complete this task:

1. Connect to the web management interface of your UCM node and select **Cisco Unified CM Administration** from the **Navigation** drop-down list.
2. Log in to the system and click **User Management** from the main menu. Select **Application User** from the drop-down list.
3. Click **Add New** to create a new user:

**User ID:** **TIM\_AXL**

**Password:** **Clsc0**

**Confirm Password:** **Clsc0**

**Application User Information**

User ID\*

Password

Confirm Password

Digest Credentials

Confirm Digest Credentials

Presence Group\*

Accept Presence Subscription

Accept Out-of-dialog REFER

Accept Unsolicited Notification

Accept Replaces Header



The credentials above are shown as an example. In the interests of security, you should choose your own values.

4. Scroll down to the **Permissions Information** section and click **Add to User Group**.
5. In the new window, enter **Standard Tab** and then click **Find**. Tick the **Standard TabSync User** box, and then click on the **Add Selected** tab.

**User Group (1 - 1 of 1)**

Find User Group where Name begins with  **Find** **Clear Filter**

<input type="checkbox"/>	
<input checked="" type="checkbox"/>	Standard TabSync User

**Select All** **Clear All** **Add Selected** **Close**

6. Click **Save** to apply the settings.

## Configuring Cisco AXL sync

Follow the steps below to configure TIM Plus to synchronise with the directory of your Cisco UCM:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.
3. In the **Site Properties** window, select the **Sync** tab.
4. Tick the **Synchronise with the following device** box, and enter your UCM details, as shown below:



**Site properties**

PBX Options Inactivity LCR Tariff Alarms **Sync**

Synchronise with the following device every

Host

Enter the login details of an Application User that is authorised to access the system

Username

Password

5. In the `Host` field, enter the IP address of the UCM Publisher node.
6. In the `Username` field, enter the username of the Cisco Application User you configured in the previous section, e.g. `TIM_AXL`.
7. Click on the  button and enter the password of the Cisco Application User you configured in the previous section, e.g. `Cisco`, then click .
8. Click on the  button to apply the settings.

TIM Plus will now connect to your Cisco UCM and synchronise with its directory.

### Configuring TIM Plus to receive data by FTP

Follow the steps below to configure TIM Plus to receive data from your Cisco UCM:

1. Click on the  tab.
2. Choose the site you want to configure and click .

**Site properties**

PBX Options Inactivity LCR Tariff Alarms **Sync**

Name

PBX model

Connection method

Use SFTP protocol

Username

Password

3. In the `Site Properties` window, select `Cisco UCM 5+` from the `PBX model` drop-down list.

- In the **Connection method** field, select **Receive FTP transfers from PBX** from the drop-down list.
- In the **Username** field, enter a user name for FTP/SFTP transfers, e.g. **TIM**
- In the **Password** field, enter a password for the FTP account, e.g. **Ciscoftp**
- Click on the **Save** button to apply the changes.

## Set up FTP/SFTP in Cisco UCM

You will need to configure your Cisco UCM to send the CDR data to TIM Plus. Note that the UCM can be configured with cluster wide or server specific settings, depending on how the system maintainer has installed it. Please note that, by default, CDR records are turned off.

- Log in to **Cisco UCM Administration** and from the left-hand menu click on the **System** tab and select **Service Parameters**.
- Choose your UCM node from the **Server** drop-down list.
- Select **Cisco Call Manager** from the **Service** drop-down list.
- In the **System** section, change the **CDR Enabled Flag** to **True**. Enable this parameter on all servers within the cluster you want to log calls for.

System	
<a href="#">CDR Enabled Flag</a> *	True
<a href="#">CDR Log Calls with Zero Duration Flag</a> *	True
<a href="#">Digit Analysis Complexity</a> *	StandardAnalysis

- Change the **CDR Log Calls with Zero Duration Flag** to **True**. This parameter enables or disables the logging of CDRs for calls which did not connect.
- Click on the **Save** button.
- Click on the **Navigation** drop-down list from the top right-hand corner, and select **Cisco Unified Serviceability**. You may need to log in with a user account that has administrative permissions.

Select **Tools**, then click on the **CDR Management** tab.

Click the **Add New** button. You will now see the **Billing Application Server Parameters** window. Enter the following parameters:

**Host Name / IP Address:** The IP address or hostname of the machine running TIM Plus.

**User Name:** Enter the user name for FTP/SFTP transfers you set up in TIM Plus, e.g. **TIM**

**Password:** Enter the password for the FTP account you set up in TIM Plus, e.g. **Ciscoftp**

**Protocol:** Select FTP or SFTP as desired.

**Directory Path:** Enter a forward-slash character to indicate root (/).

Remove the tick from **Resend on Failure**.

The screenshot shows a web interface titled "CDR Management" with a menu bar (Alarm, Trace, Tools, Snmp, Help). Below the menu is a "Billing Application Server Parameters" form with the following fields:

- Host Name / IP Address\*: 192.168.0.22
- User Name\*: TIM
- Password\*: [masked with dots]
- Protocol\*: FTP (dropdown menu)
- Directory Path\*: /
- Resend on Failure:  (unchecked)

8. Next, click on the **Add** button to complete the billing server configuration. The UCM node will check that the FTP/SFTP details are valid and will write a test file to the FTP/SFTP directory. If this fails, you should double-check the details you entered.

## Cisco UCME / UC500 (Call Manager Express)

The Cisco UCME / UC500 can be configured to send RADIUS or SysLog events. Click on one of the links below for your preferred connection method.

- Cisco recommends that you use RADIUS events because they provide more detailed call logging information.

### Cisco UCME / UC500 - RADIUS

These instructions help you configure your Cisco UCME / UC500 to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

TIM Plus captures RADIUS packets from this PBX.

**Support Files**

- Cisco UCME - RADIUS.TDT
- Cisco UCME - RADIUS.TDS

**Required Tasks**

- Configure Cisco AXL sync
- Configure UCME to send RADIUS events
- Configure TIM Plus to capture RADIUS packets

### Configuring Cisco AXL sync

Follow the steps below to configure TIM Plus to perform directory synchronisation with your Cisco UCME:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.
3. In the **Site Properties** window, select the **Sync** tab.
4. Tick the option entitled **Synchronise with the following device**.

**Site properties**

PBX Options Inactivity LCR Tariff Alarms **Sync**

Synchronise with the following device every

Host

Optionally, enter a username and password to access IOS

Username

Password

5. In the **Host** field, enter the IP address of your UCME.
6. In the **Port** field, enter the port number of the IOS service, e.g. **23**.
7. In the **Username** field, enter the username of the IOS login that can perform synchronisation.
8. Click on the **Set** button and enter the password of the IOS login that can perform synchronisation.
9. Click on the **Save** button to apply the changes.

#### Configuring UCME to send RADIUS events

Use Telnet to connect to the IP address of your UCME as shown below:

```

Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\k>telnet 192.168.1.1
  
```

### Single site configuration

Enter the following commands to enable the UCME to send RADIUS events to TIM Plus:

Step	IOS commands	Description
1	<code>enable</code>	Causes the UCME to enter EXEC mode. Type your EXEC password if requested
2	<code>conf t</code>	Enters the global configuration mode
3	<code>aaa new-model</code>	Enables aaa accounting mode
	<code>aaa accounting connection h323 start-stop group RADIUS</code>	
	<code>gw-accounting aaa</code>	
	<code>acct-template callhistory-detail</code>	
4	<code>RADIUS-server host 192.168.0.1 auth-port 0 acct-port 1612</code>	Specifies the IP address and port of TIM Plus's RADIUS, to which CDR data will be sent, e.g. <code>192.168.0.1:1612</code>
5	<code>RADIUS-server key C1sco</code>	Specifies a RADIUS authentication secret that will be used by TIM Plus (configured in the next section), e.g. <code>C1sco</code>
6	<code>RADIUS-server vsa send accounting</code>	Enables VSA events
7	<code>end</code>	Exits configuration mode
8	<code>wr</code>	Saves the changes



### Multi-site configuration


If you need to send the data to more than one server, such as TIM Plus and UCC server for example, you can set up multiple RADIUS connections in the phone system. To configure a multi-site system, follow the steps below:



Replace **SITE\_NAME** with a unique name for the destination RADIUS information.  
 Replace **SITE\_IP** with the IP address of the RADIUS server.  
 Replace **SITE\_KEY** with the secret you want to assign to that specific site.

Step	IOS Commands	Description
1	<code>enable</code>	Causes the UCME to enter EXEC mode. Type your EXEC password if requested
2	<code>conf t</code>	Enters the global configuration mode
3	<code>aaa new-model</code>	Enables aaa accounting mode

4	<code>aaa accounting update newinfo</code>	
5	<code>radius-server vsa send accounting</code>	Enables VSA events
6	<code>gw-accounting aaa</code>	Enables aaa accounting
	<code>acct-template callhistory-detail</code>	
	<code>exit</code>	
7	<code>radius server SITE_NAME</code>	Configures the call accounting for each separate site
	<code>address ipv4 SITE_IP acct-port 1612</code>	Specifies the IP address and port of TIM Plus's RADIUS, to which CDR data will be sent, e.g. <code>192.168.0.1:1612</code>
	<code>key SITE_KEY</code>	Specifies a RADIUS authentication secret that will be used by TIM Plus (configured in the next section), e.g. <code>Clisco</code>
	<code>exit</code>	Exits current site configuration
<div style="background-color: #e0f2f7; padding: 10px; border: 1px solid #ccc;">  Repeat step 7 for each individual site </div>		
8	<code>aaa group server radius SITE_NAME</code>	Configures a specified aaa server group
	<code>server name SITE_NAME</code>	Specifies a RADIUS server to use for this aaa group
	<code>exit</code>	Exits current site configuration
<div style="background-color: #e0f2f7; padding: 10px; border: 1px solid #ccc;">  Repeat step 8 for each individual site </div>		
9	<code>aaa accounting connection h323</code>	Configures the aaa connection information
	<code>action-type start-stop</code>	Setting the action type will send RADIUS information when the call starts and stops

	<code>broadcast</code>	Enabling broadcast means that all the <code>aaa</code> groups will be sent RADIUS data
10	<code>group SITE_NAME</code>	Specifies the <code>aaa</code> group(s) that the accounting system will send RADIUS data to
<div style="background-color: #e0f2f7; padding: 10px; border: 1px solid #ccc;"> <p> Repeat step 10 for each system</p> </div>		
11	<code>end</code>	Exits configuration mode
12	<code>wr</code>	Saves the changes



For a system with five or more RADIUS servers, it is recommended to amend the `server retransmit` options in the UCME, in order to reduce the stress on the phone system.

#### IP radius source-interface

To force RADIUS to use the IP address of a specified interface for all outgoing RADIUS packets, use the `ip radius source-interface` command in global configuration mode. If you don't wish to use the IP address of a specified interface, use the `no` form of this command.

Step	IOS Command
1	<code>ip radius source-interface SUBINTERFACE_NAME</code>
2	<code>no ip radius source-interface</code>

#### Configuring TIM Plus to capture RADIUS packets

Follow the steps below to configure TIM Plus to receive RADIUS data from your UCME:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.

**Site properties**

PBX Options Inactivity LCR Tariff Alarms Sync

Name: London

PBX model: Cisco UCME - RADIUS

Connection method: RADIUS connection

Client IP: 192.168.1.1

Secret: ●●●●●

Delete site Cancel Save

3. In the **Site Properties** window, select **Cisco UCME - RADIUS** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **RADIUS connection** from the drop-down list.
5. In the **Client IP** field, enter the IP address of your UCME.
6. In the **Secret** field, enter the RADIUS-server key you configured on your UCME in the section above, e.g. **Cisco**.
7. Click on the **Save** button to apply the settings.

### Cisco UCME / UC500 - SysLog

These instructions help you configure your Cisco UCME / UC500 to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

- TIM Plus captures SysLog packets from this PBX.

**Support Files**

- Cisco UCME - SysLog.TDT
- Cisco UCME - SysLog.TDS

**Required Tasks**

- Configure Cisco AXL sync
- Configure UCME to send SysLog events
- Configure TIM Plus to capture SysLog packets

### Configuring Cisco AXL sync

Follow the steps below to configure TIM Plus to perform directory synchronisation with your Cisco UCME:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.
3. In the **Site Properties** window, select the **Sync** tab.



4. Tick the option entitled **Synchronise with the following device** .

**Site properties**

PBX Options Inactivity LCR Tariff Alarms **Sync**

Synchronise with the following device every  hours

Host

Optionally, enter a username and password to access IOS

Username

Password

5. In the **Host** field, enter the IP address of your UCME.
6. In the **Port** field, enter the port number of the IOS service, e.g. **23** .
7. In the **Username** field, enter the username of the IOS login that can perform synchronisation.
8. Click on the **Set** button and enter the password of the IOS login that can perform synchronisation.
9. Click on the **Save** button to apply the changes.

#### Configuring UCME to send SysLog events

Use Telnet to connect to the IP address of your UCME as shown below:

```
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.
C:\Users\k>telnet 192.168.1.1
```

Once connected, enter the following commands to enable the UCME to send SysLog events to TIM Plus:

Step	IOS commands	Description
------	--------------	-------------

1	<code>enable</code>	Causes the UCME to enter EXEC mode. Type your EXEC password if requested
2	<code>conf t</code>	Enters the global configuration mode
3	<code>aaa new-model</code> <code>aaa accounting connection h323</code> <code>start-stop group SysLog</code> <code>gw-accounting syslog</code> <code>acct-template callhistory-detail</code>	Enables aaa accounting mode
4	<code>logging 192.168.0.1</code>	Specifies the IP address of TIM Plus's SysLog server, to which CDR data will be sent, e.g. <code>192.168.0.1</code>
5	<code>end</code>	Exits configuration mode
6	<code>wr</code>	Saves changes

### Configuring TIM Plus to capture SysLog packets

Follow the steps below to configure TIM Plus to receive SysLog data from your Cisco UCME:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.

The screenshot shows a 'Site properties' dialog box with the following configuration:

- Name:** London
- PBX model:** Cisco UCME - SysLog
- Connection method:** SysLog connection
- Client IP:** 192.168.1.1

Buttons at the bottom: Delete site (red), Cancel (red), Save (dark blue).

3. In the Site Properties window, select **Cisco UCME - SysLog** from the PBX model drop-down list.
4. In the Connection method field, select **SysLog connection** from the drop-down list.
5. In the Client IP field, enter the IP address of the UCME.
6. Click on the **Save** button to apply the settings.

## DrayTek

## DrayTek UG-Vigour

These instructions help you configure your Draytek phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus captures SysLog packets from this PBX.

**Support Files**  
 Draytek.TDT  
 Draytek.TDS

**Required Tasks**  
 Configure your router  
 Configure TIM Plus

### Configuring your router

Follow the steps below to enable SysLog events on your DrayTek phone system:

1. Access the web interface of your DrayTek router and navigate to **System Maintenance >> SysLog/Mail Alert Setup**, as shown below:

**System Maintenance >> SysLog / Mail Alert Setup**

---

**SysLog / Mail Alert Setup**

<p><b>SysLog Access Setup</b></p> <p><input checked="" type="checkbox"/> Enable</p> <p>Syslog Save to:</p> <p><input checked="" type="checkbox"/> Syslog Server  <input type="checkbox"/> USB Disk</p> <p><b>Router Name</b> <input style="width: 100%;" type="text"/></p> <p>Server IP Address <input style="width: 100%;" type="text" value="192.168.1.10"/></p> <p>Destination Port <input style="width: 100%;" type="text" value="514"/></p> <p>Enable syslog message:</p> <p><input type="checkbox"/> Firewall Log  <input type="checkbox"/> VPN Log  <input type="checkbox"/> User Access Log  <input checked="" type="checkbox"/> Call Log  <input type="checkbox"/> WAN Log  <input type="checkbox"/> Router/DSL information</p>	<p><b>Mail Alert Setup</b></p> <p><input type="checkbox"/> Enable <span style="float: right;"><input type="button" value="Send a test e-mail"/></span></p> <p>SMTP Server <input style="width: 100%;" type="text"/></p> <p>Mail To <input style="width: 100%;" type="text"/></p> <p>Return-Path <input style="width: 100%;" type="text"/></p> <p><input type="checkbox"/> Authentication</p> <p>User Name <input style="width: 100%;" type="text"/></p> <p>Password <input style="width: 100%;" type="text"/></p> <p>Enable E-Mail Alert:</p> <p><input checked="" type="checkbox"/> DoS Attack  <input checked="" type="checkbox"/> IM-P2P</p>
--	---

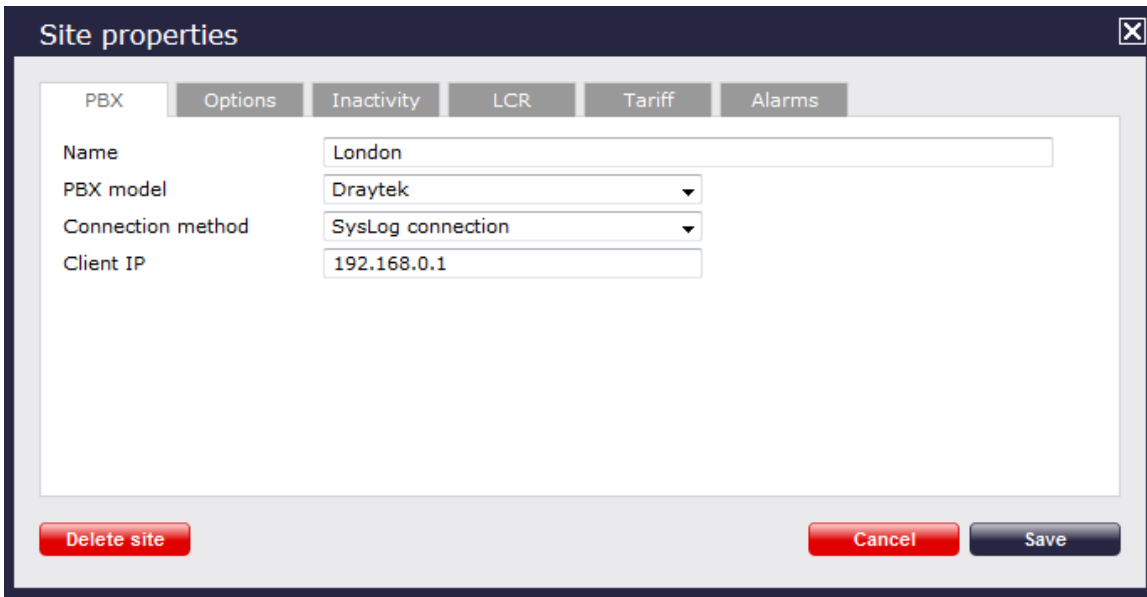
2. Check the **Enable** box to activate the SysLog function.
3. Check the **Syslog Server** box to save the logs directly to the server.
4. Enter the IP address of TIM Plus's SysLog server, to which CDR data will be sent.
5. Check the **Call Log** box to enable the output of call logging data.

- Click on the **OK** button to save the settings.

## Configuring TIM Plus

Follow the steps below to configure TIM Plus to receive SysLog data from your DrayTek phone system:

- Log in to TIM Plus and click on the **Directory** tab.
- Choose the site you want to configure and click **Properties**.



- In the **Site Properties** window, select **Draytek** from the **PBX model** drop-down list.
- In the **Connection method** field, select **SysLog connection** from the drop-down list.
- In the **Client IP** field, enter the IP address of your DrayTek router.
- Click on the **Save** button to apply the settings.

## Ericsson


### Ericsson BP


Please refer to [Aastra BP](#).

## Fujitsu

### Fujitsu Rhapsody Rio

These instructions help you configure your Fujitsu Rhapsody Rio phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**  
 Fujitsu Rhapsody Rio.TDT

**Required Tasks**

- Configure the SMDR output
- Install NetPBX
- Configure TIM Plus

### Configuring your SMDR output

The Fujitsu Rhapsody Rio phone system sends SMDR information via a serial connection. You need to directly connect a serial cable from the Fujitsu Rhapsody Rio phone system to the PC that NetPBX is installed and running on. For more information about the output and configuration of your SMDR data, please contact your system maintainer.

### Installing NetPBX

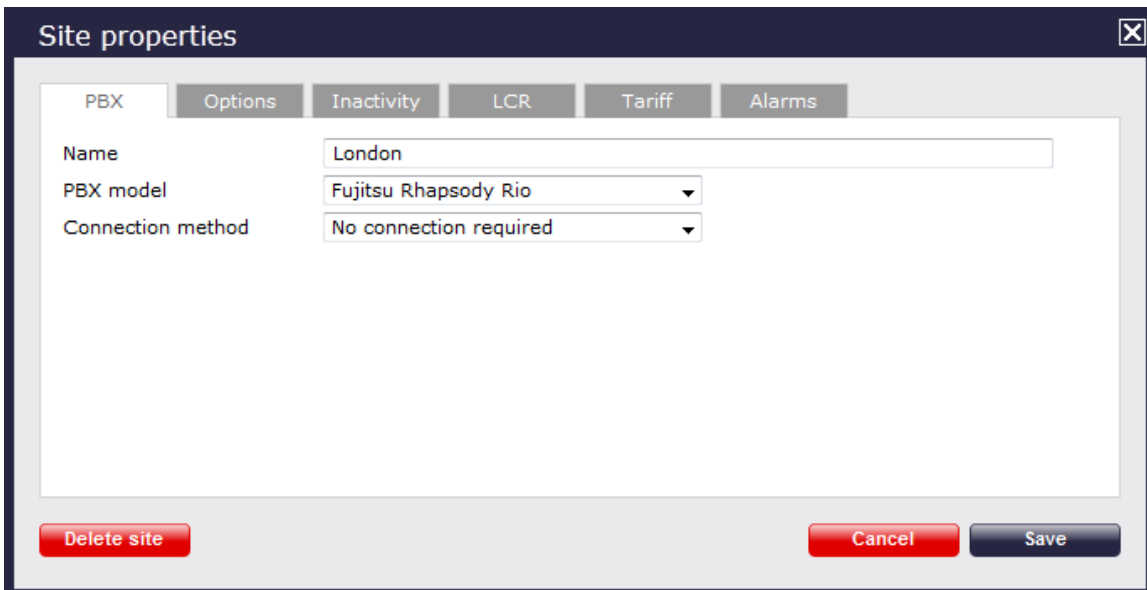
To collect call logging data from the serial port and send it to TIM Plus, you first need to install the NetPBX software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the following steps:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties** ✕

PBX   Options   Inactivity   LCR   Tariff   Alarms

Name:

PBX model:

Connection method:


3. In the **Site Properties** window, select **Fujitsu Rhapsody Rio** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.


5. Click on the **Save** button to apply the settings.

## GEC

### GEC BTEX

These instructions help you configure your GEC BTEX phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**  
 GEC BTEX 600S.TDT

**Required Tasks**

- Configure the SMDR output
- Install NetPBX
- Configure TIM Plus

### Configuring your SMDR output



Note that the GEC BTEX can output SMDR information in multiple formats. You should select the **600s** format for use with TIM Plus.

The GEC BTEX phone system sends SMDR information via a serial connection. You need to directly connect a serial cable from the GEC BTEX phone system to the PC that NetPBX is installed and running on.

For more information about the output and configuration of your SMDR data, please contact your system maintainer.

### Installing NetPBX

To collect the call logging data from the serial port and send it to TIM Plus, you first need to install the NetPBX software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.

**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: GEC BTEX600S

Connection method: No connection required

Delete site Cancel Save

3. In the **Site Properties** window, select **GEC BTEX 600S** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.

## Inter-Tel

### Inter-Tel Axxess up to V7.x

Please refer to [Mitel MiVoice Office \(Mitel 5000-7000\)](#).

### Inter-Tel Axxess V8 plus


Please refer to [Mitel MiVoice Office \(Mitel 5000-7000\)](#).

## IPCortex


### VoIPCortex


These instructions help you configure your VoIPCortex phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a TCP connection to this PBX.

**Support Files**

 VoIPCortex.TDT

 VoIPCortex.TDS

**Required Tasks**

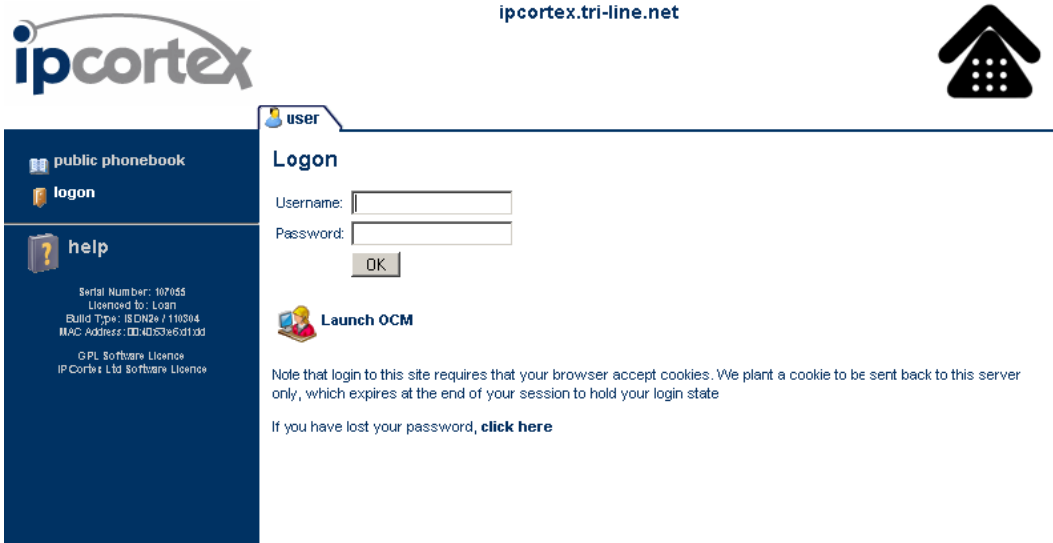
Configure the SMDR output

Configure TIM Plus

## Configuring your SMDR output

Follow the steps below to enable the SMDR output on your VoIPcortex phone system:

1. Log in to the VoIPcortex phone system using your admin username and password.



2. Click on the **System** tab and from the left-hand side menu expand the **Global** tree node.
3. In the **Passwords** section, create a password for **xtelsio** and **Call Data Collection** fields to allow events to be retrieved by TIM Plus, as shown below:



ipcortex.tri-line.net




[user](#) | [system](#) | [pabx](#) | [routing](#) | [record](#) | [call-log](#) | [monitor](#)

phone hardware

remote phonebooks

system backup

shutdown / reboot

global

network

telephony

email

passwords

general

dhcp server

handsets

advanced

advanced/network

advanced/groups

high availability

remote support

upgrades

---

logout

help

Serial Number: 107055  
 Licensed to: Loan  
 Build Type: ISDN2+ / 110204  
 MAC Address: 00:40:85:3e:6d:13d  
 GPL Software Licence  
 IPCortex Ltd Software Licence

### Manage Global Settings

NOTE: It is possible that the system will need to be rebooted (powered off and on) if settings marked \* are altered. Settings marked \*\* require a further activation step before being used.

[Update](#)

#### Default passwords

Description of Setting	Current	Change to
Admin PIN for phones	0000	<input type="text" value="0000"/>
Admin PIN for phone provisioning		<input type="text"/>
Default voicemail PIN	000	<input type="text" value="000"/>
Nightmode PIN	0000	<input type="text" value="0000"/>
IVR recording PIN	0000	<input type="text" value="0000"/>
User PIN overrides call barring	false / off	<input type="checkbox"/>
User PIN overrides phone rights	false / off	<input type="checkbox"/>
Password for Sugar CRM / Voice RD		<input type="text"/>
Password for xtelsio	trtnet1	<input type="text" value="trtnet1"/>
Password for Call Data Collection	trtnet	<input type="text" value="trtnet"/>

[Update](#)

- Once you have completed the configuration, restart the phone system for the changes to take affect.

## Configuring TIM Plus

Follow the steps below to configure TIM Plus to collect SMDR data from your VoIPcortex phone system:

- Click on the [Directory](#) tab.
- Choose the site you want to configure and click [Properties](#) .

**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: VoIPcortex

Connection method: Actively connect to PBX

Host: 192.168.1.1

Port: 5038

Username: xtelsio

Password: ●●●●●●●

Connection script: VoIPcortex

Delete site Cancel Save

3. In the **Site Properties** window, select **VoIPcortex** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Actively connect to PBX** from the drop-down list.
5. In the **Host** field, enter the IP address of your VoIPcortex.
6. In the **Port** field, enter **5038**.
7. In the **Username** field, enter **xtelsio**.
8. In the **Password** field, enter the password you configured in the phone system..
9. In the **Connection script** field, select **VoIPcortex** from the drop-down list.
10. Click on the **Options** tab and tick the box **Timestamp received data**.

**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Save a backup of any data received from this PBX, to the following file:  
 {app}\backup\backup-{year}-{month}-{day}.{uiv}

Timestamp received data

Binary data

Delay processing of received data by 250 ms


Cancel Save


11. Click on the **Save** button to apply the settings.

## Iridiacom

### Iridiacom Telrad

These instructions help you configure your Iridiacom Telrad phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**  
 Iridiacom Telrad IS.TDT

**Required Tasks**

- Configure the SMDR output
- Install NetPBX
- Configure TIM Plus

### Configuring your SMDR output

The Iridiacom Telrad phone system sends SMDR information via a serial connection. You need to directly connect a serial cable from the Iridiacom Telrad phone system to the PC that [NetPBX](#) is installed and running on.

For more information about the output and configuration of your SMDR data, please contact your system maintainer.

### Installing NetPBX

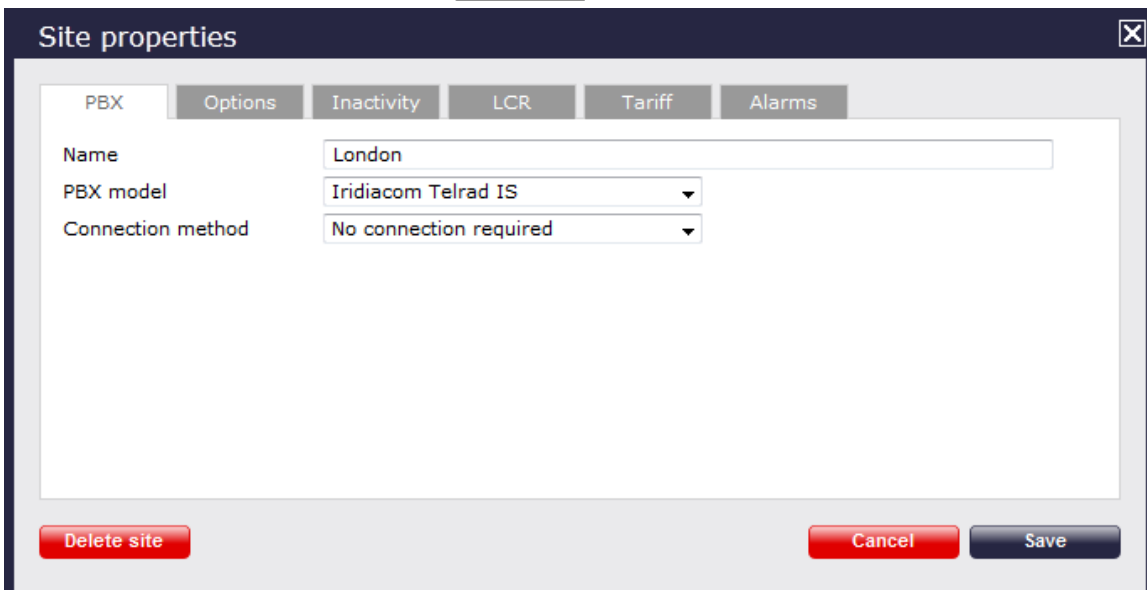
To collect call logging data from the serial port and send it to TIM Plus, you first need to install the NetPBX software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the following steps:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: Iridiacom Telrad IS

Connection method: No connection required

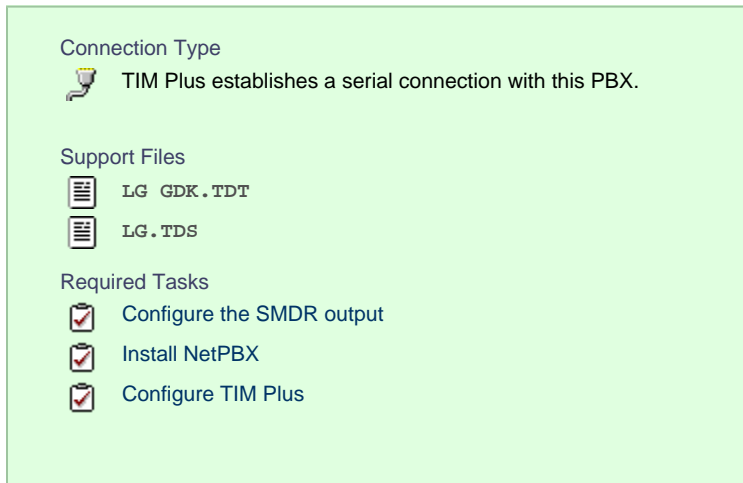
Delete site Cancel Save

3. In the **Site Properties** window, select **Iridiacom Telrad IS** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings

## LG

### LG GDK

These instructions help you configure your LG GDK phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.



### Configuring your SMDR output

The LG GDK phone system sends SMDR information via a serial connection. You need to directly connect a serial cable from the LG GDK phone system to the PC that NetPBX is installed and running on.

Since the LG GDK doesn't have the SMDR output enabled by default, you need to ask your system maintainer to enable SMDR logging for outgoing, incoming and abandoned calls.

### Installing NetPBX

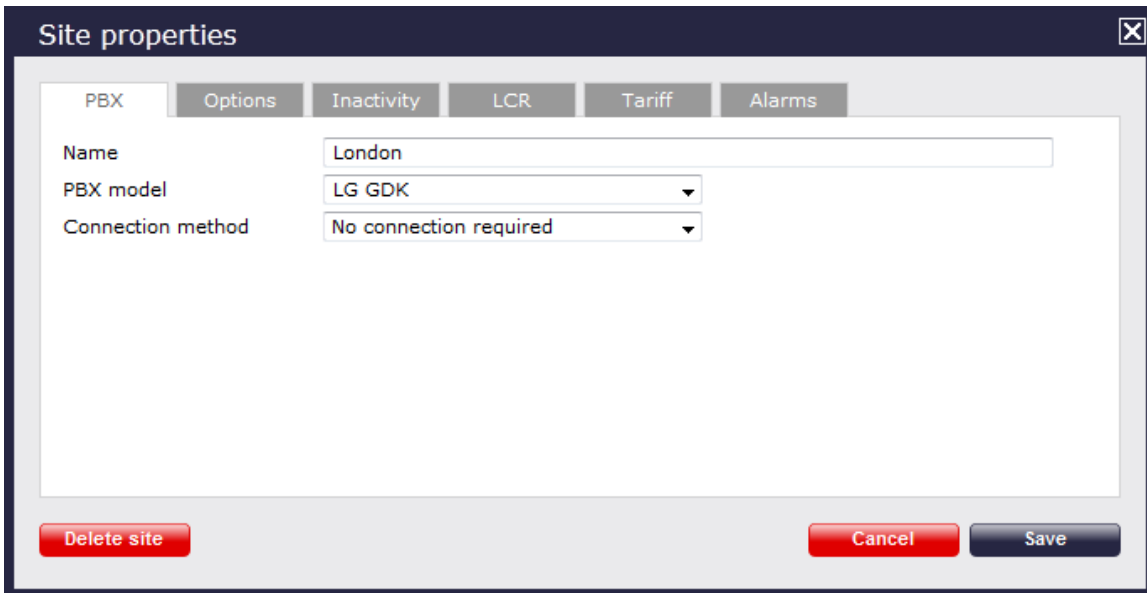
To collect call logging data from the serial port and send it to TIM Plus, you first need to install the NetPBX software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the following steps:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: LG GDK

Connection method: No connection required

Delete site Cancel Save

3. In the **Site Properties** window, select **LG GDK** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.


## LG iPECS

The LG iPECS can be configured to send its SMDR data over a serial (RS232) or an IP connection. Click on one of the links below that relates to your preferred connection method.


### LG iPECS - Serial connection


These instructions help you configure your LG iPECS phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a serial connection with this PBX.

**Support Files**

 LG iPECS.TDT

 LG.TDS

**Required Tasks**

Configure the SMDR output

Install NetPBX

Configure TIM Plus

### Configure the SMDR output

The SMDR output in LG iPECS is disabled by default. To enable the output, you need to amend the following settings in the programming sections below:

SMDR Attributes (PGM 177)

Field	Description
<b>Save Enable</b>	Leave this as the default which is unticked
<b>Print Enable</b>	This needs to be enabled by clicking on the check box
<b>SMDR Record Call Type</b>	This needs to be set to 'All Calls', you will need to select this from the drop-down list
<b>Records In Detail</b>	This needs to be enabled by clicking on the check box
<b>Print Incoming Call</b>	This needs to be enabled by clicking on the check box
<b>Print Lost Call</b>	This needs to be enabled by clicking on the check box
<b>SMDR Dial Digit Hidden</b>	Leave this as the default which is '0'
<b>SMDR Currency Unit</b>	Leave this as the default which is blank
<b>SMDR Cost Per Metering Pulse</b>	Leave this as the default which is blank
<b>SMDR Fraction</b>	Leave this as the default which is '0'
<b>SMDR Start Time</b>	Leave this as the default which is '0'
<b>SMDR Hidden Digit</b>	Leave this as the default which is 'Right'
<b>Long Distance Call Digit Counter</b>	Leave this as the default which is '0'
<b>Long Distance Code (Max 2 Digits)</b>	Leave this as the default
<b>MSN Print on SMDR</b>	Leave this is the default which is unticked
<b>Print Caller Number</b>	This needs to be enabled by clicking on the check box

Here is an example of a populated **SMDR Attributes** screen:

**[ SMDR Attributes ]**

Attribute	Value	Range
Save Enable	OFF	
Print Enable	ON	
Record Type	All Call	
Long Distance Call Digit Counter	7	07-15
Print Incoming Call	ON	
Print Lost Call	ON	
Records In Detail	ON	
Hidden Dialed Digit	0	0-9
Dialed Digit Hide Option	Right	
SMDR Currency Unit		Max 3 characters
SMDR Cost Per Metering Pulse	000000	Must be 6 digits
SMDR Decimal Location	0	0-5
Start Timer	0 (*1sec)	000-250
SMTP Mail Server IP Address	0.0.0.0	
SMDR User Mail Address		MAX 40 characters
SMDR System Domain Name		MAX 18 characters
SMDR Mail Send Weekly Set	N/A	
SMDR Mail Send Daily Set	00	00-23
SMDR Mail Auto Send Set	OFF	
SMDR Mail Auto Delete Set	OFF	
Long Distance Code	1 0	Max 2 digits
	2	Max 2 digits
	3	Max 2 digits
	4	Max 2 digits
	5	Max 2 digits
SMDR Ring/CLICPN Service-I	Ring	
SMDR Ring/CLICPN Service-II	CPN	
Print MSN	OFF	
Print Serial No	ON	
SMDR Interface Service	OFF	
SMDR ICM Save	OFF	
SMDR ICM Print	ON	
SMDR Disconnect Cause	OFF	
Long Time Call	0 (*10min)	000-144

Save

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Printer Port Selection (PGM 175)

In the Printer Port Selection (PGM 175) window, set Info/On-line SMDR to COM1/COM2 to send call logging data by serial port.

ISDN Attributes (PGM 200)

To enable CLI information in the call records produced by your LG iPECS, you need to set the CLI Print To Serial to ON, as shown below:

**iPECS**  
System Attributes(100-100,100)

Administration | SAV Upgrade | System Management

[ ISDN Attributes ]

Attribute	Value	Range
CO ATD Code	0	MAX 2 Digits
CLI Print To Serial	ON	

Save

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## Installing NetPBX

If your LG iPECS has been configured to send SMDR data via a serial connection, you first need to install the [NetPBX](#) software to collect data from the serial port and send it to TIM Plus. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

## Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the following steps:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties** .

**Site properties**

PBX | Options | Inactivity | LCR | Tariff | Alarms

Name: London

PBX model: LG iPECS

Connection method: No connection required

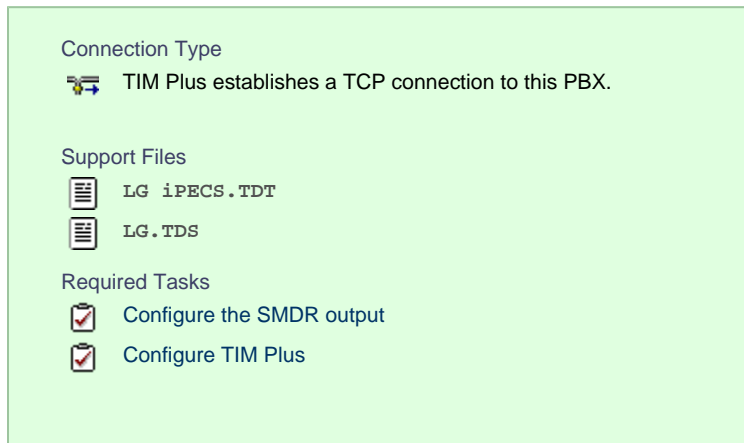
Delete site | Cancel | Save



3. In the **Site Properties** window, select **LG iPECS** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.

## LG iPECS - IP connection

These instructions help you configure your LG iPECS phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.



### Configuring the SMDR output

The SMDR output in LG iPECS is disabled by default. To enable the output, you need to amend the following settings in the programming sections below:

#### SMDR Attributes (PGM 177)

Field	Description
<b>Save Enable</b>	Leave this as the default, which is unticked
<b>Print Enable</b>	This needs to be enabled by clicking on the check box
<b>SMDR Record Call Type</b>	This needs to be set to 'All Calls', you will need to select this from the drop-down list
<b>Records In Detail</b>	This needs to be enabled by clicking on the check box
<b>Print Incoming Call</b>	This needs to be enabled by clicking on the check box
<b>Print Lost Call</b>	This needs to be enabled by clicking on the check box
<b>SMDR Dial Digit Hidden</b>	Leave this as the default which is '0'
<b>SMDR Currency Unit</b>	Leave this as the default which is blank
<b>SMDR Cost Per Metering Pulse</b>	Leave this as the default which is blank
<b>SMDR Fraction</b>	Leave this as the default which is '0'

<b>SMDR Start Time</b>	Leave this as the default which is '0'
<b>SMDR Hidden Digit</b>	Leave this as the default which is 'Right'
<b>Long Distance Call Digit Counter</b>	Leave this as the default which is '0'
<b>Long Distance Code (Max 2 Digits)</b>	Leave this as the default
<b>MSN Print on SMDR</b>	Leave this is the default which is unticked
<b>Print Caller Number</b>	This needs to be enabled by clicking on the check box

Here is an example of a populated **SMDR Attributes** screen:

The screenshot shows the IPECS Administration interface. The left sidebar contains a navigation menu with categories like Board Based Data, CO Line Data, System Data, Station Group Data, and ISDN Line Data. The 'System Data' category is expanded, showing various system attributes. The 'SMDR Attributes(177)' option is selected, displaying a configuration table.

The main configuration table is titled '[ SMDR Attributes ]' and has a 'Save' button to the right. The table has three columns: Attribute, Value, and Range.

Attribute	Value	Range
Save Enable	OFF	
Print Enable	ON	
Record Type	All Call	
Long Distance Call Digit Counter	7	07-15
Print Incoming Call	ON	
Print Lost Call	ON	
Records In Detail	ON	
Hidden Dialed Digit	0	0-9
Dialed Digit Hide Option	Right	
SMDR Currency Unit		Max 3 characters
SMDR Cost Per Metering Pulse	000000	Must be 6 digits
SMDR Decimal Location	0	0-5
Start Timer	0 (*1sec)	000-250
SMTP Mail Server IP Address	0.0.0.0	
SMDR User Mail Address		MAX 40 characters
SMDR System Domain Name		MAX 18 characters
SMDR Mail Send Weekly Set	N/A	
SMDR Mail Send Daily Set	00	00-23
SMDR Mail Auto Send Set	OFF	
SMDR Mail Auto Delete Set	OFF	
Long Distance Code	1 0	Max 2 digits
	2	Max 2 digits
	3	Max 2 digits
	4	Max 2 digits
	5	Max 2 digits
SMDR Ring/CLUCPN Service-I	Ring	
SMDR Ring/CLUCPN Service-II	CPN	
Print MSN	OFF	
Print Serial No	ON	
SMDR Interface Service	OFF	
SMDR ICM Save	OFF	
SMDR ICM Print	ON	
SMDR Disconnect Cause	OFF	
Long Time Call	0 (*10min)	000-144

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## Printer Port Selection (PGM 175)

In the **Printer Port Selection (PGM 175)** window, set **Info/On-line SMDR** to **Telnet 1** to send call logging data to TIM Plus over TCP to port 23.

## ISDN Attributes (PGM 200)

To enable CLI information in the call records produced by your LG iPECS, you need to set the **CLI Print To Serial** to **ON**, as shown below:

The screenshot shows the iPECS Administration interface. The left sidebar contains a navigation menu with categories like Station Group Data, ISDN Line Data, Tables Data, and Networking Data. The 'ISDN Attributes(200)' option is selected. The main content area displays a table for ISDN Attributes with the following data:

Attribute	Value	Range
CO ATD Code	0	MAX 2 Digits
CLI Print To Serial	ON	

A 'Save' button is visible in the top right corner of the configuration area.

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## Configuring TIM Plus

If your LG iPECS has been configured to send its call logging data via TCP/IP, follow the steps below to configure TIM Plus:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.

**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: LG iPECS

Connection method: Actively connect to PBX

Host: 192.168.1.1

Port: 23

Username:

Password:

Connection script: Generic Simple

Delete site Cancel Save

3. In the **Site Properties** window, select **LG iPECS** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Actively connect to PBX** from the drop-down list.
5. In the **Host** field, enter the IP address of your LG iPECS.
6. In the **Port** field, enter **23**.
7. Leave the **Username** and **Password** fields blank.
8. In the **Connection script** field, select **Generic Simple** from the drop-down list.
9. Click on the **Save** button to apply the settings.


## LG IPLDK

The LG IPLDK can be configured to send its SMDR data via a serial (RS232) or an IP connection. Click on one of the links below that relates to your preferred connection method.


### LG IPLDK - Serial connection


These instructions help you configure your LG IPLDK phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a serial connection with this PBX.

**Support Files**

 LG IPLDK.TDT

 LG.TDS

**Required Tasks**

Configure the SMDR output

Install NetPBX

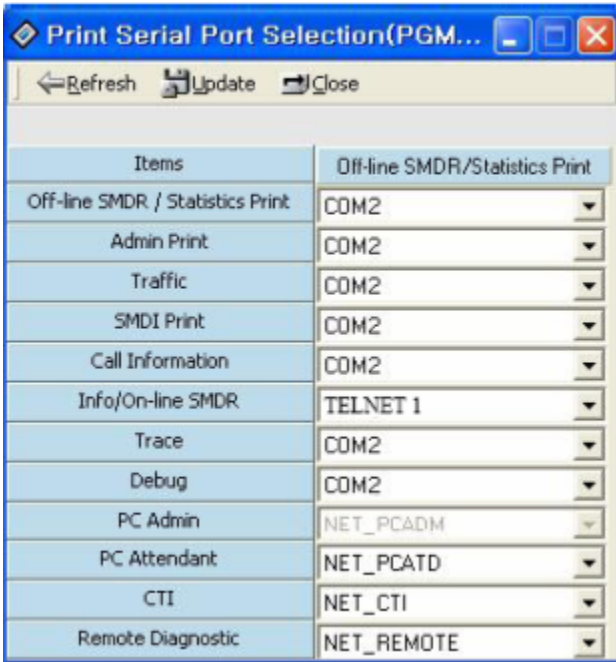
Configure TIM Plus

### Configuring your SMDR output

The SMDR output on the LG IPLDK is disabled by default. To enable the output, you need to amend the following settings in the programming sections below:

#### Print Serial Port Selection (PGM 175)

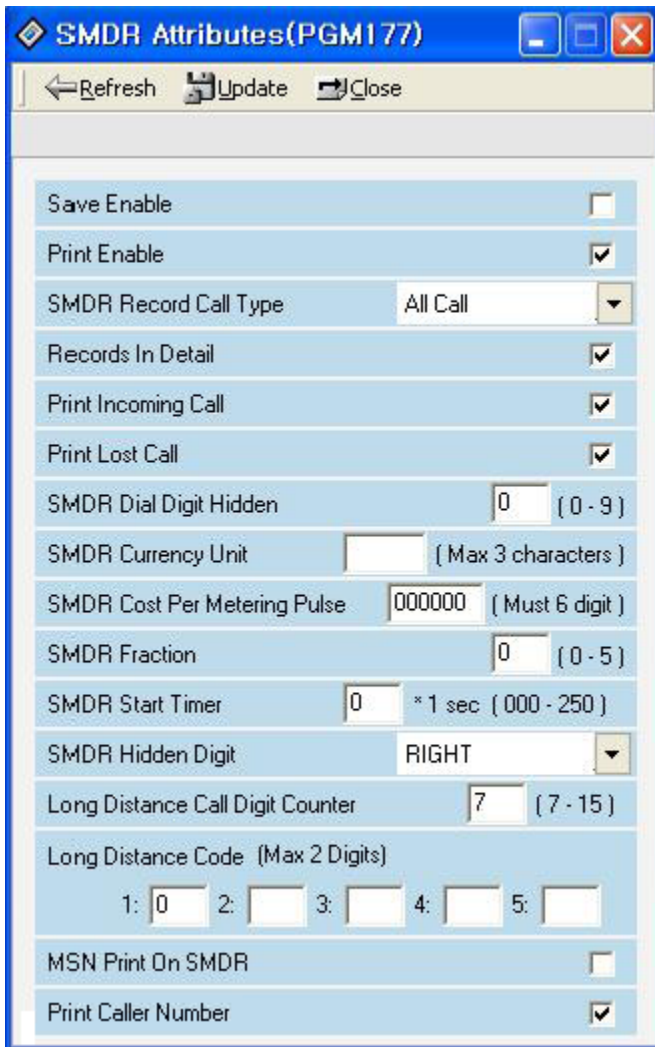
In the `Print Serial Port Selection (PGM 175)` window, set `Info/On-line SMDR` to `COM1/COM2` to send call logging data to the serial port.



#### SMDR Attributes (PGM 177)

Field	Description
<b>Save Enable</b>	Leave this as the default, which is unticked
<b>Print Enable</b>	This needs to be enabled by clicking on the check box
<b>SMDR Record Call Type</b>	This needs to be set to 'All Calls', you will need to select this from the drop-down list
<b>Records In Detail</b>	This needs to be enabled by clicking on the check box
<b>Print Incoming Call</b>	This needs to be enabled
<b>Print Lost Call</b>	This needs to be enabled
<b>SMDR Dial Digit Hidden</b>	Leave this as the default which is '0'
<b>SMDR Currency Unit</b>	Leave this as the default which is blank
<b>SMDR Cost Per Metering Pulse</b>	Leave this as the default which is blank
<b>SMDR Fraction</b>	Leave this as the default which is '0'
<b>SMDR Start Time</b>	Leave this as the default which is '0'

<b>SMDR Hidden Digit</b>	Leave this as the default which is 'Right'
<b>Long Distance Call Digit Counter</b>	Leave this as the default which is '0'
<b>Long Distance Code (Max 2 Digits)</b>	Leave this as the default
<b>MSN Print on SMDR</b>	This needs to be disabled
<b>Print Caller Number</b>	This needs to be disabled



ISDN Attributes (PGM 200)

Enable the CLI Print to serial field, as shown the ISDN Attributes window below:

### Installing NetPBX

If your LG IPLDK has been configured to send SMDR data via a serial connection, you first need to install the [NetPBX](#) software to collect the data from the serial port and send it to TIM Plus. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus


Once NetPBX is configured and collecting data, log in to TIM Plus and perform the following steps:



1. Click on the **Directory** tab.
2. Choose the sites you want to configure and click **Properties**.

3. In the **Site Properties** window, select **LG IPLDK** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.

### LG IPLDK - IP connection

These instructions help you configure your LG IPLDK phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a TCP connection to this PBX.

**Support Files**  
 LG IPLDK.TDT  
 LG.TDS

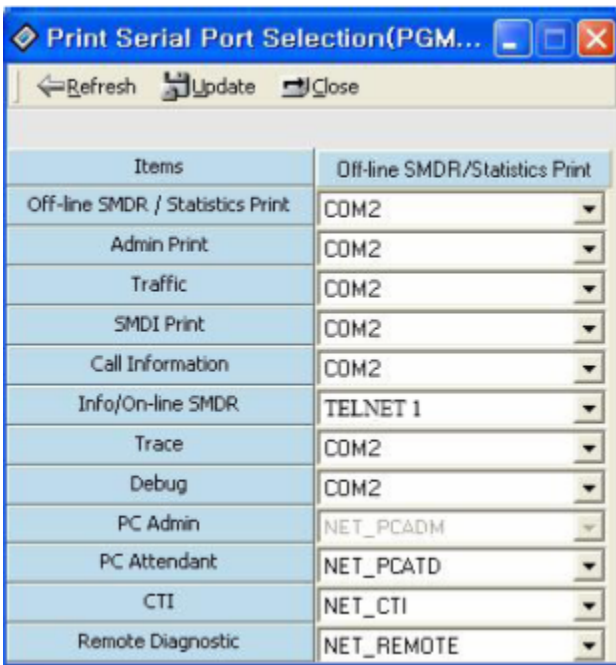
**Required Tasks**  
 Configure the SMDR output  
 Configure TIM Plus

**Configuring your SMDR output**

The SMDR output on the LG IPLDK is disabled by default. To enable the output, you need to amend the following settings in the programming sections below:

Print Serial Port Selection (PGM 175)

In this window, set **Info/On-line SMDR** to **Telnet 1** to send call logging data to TIM Plus over TCP to port 23.



SMDR Attributes (PGM 177)

Set the **SMDR Attributes** as shown below:



Save Enable	<input type="checkbox"/>
Print Enable	<input checked="" type="checkbox"/>
SMDR Record Call Type	All Call
Records In Detail	<input checked="" type="checkbox"/>
Print Incoming Call	<input checked="" type="checkbox"/>
Print Lost Call	<input checked="" type="checkbox"/>
SMDR Dial Digit Hidden	0 (0 - 9)
SMDR Currency Unit	( Max 3 characters )
SMDR Cost Per Metering Pulse	000000 ( Must 6 digit )
SMDR Fraction	0 (0 - 5)
SMDR Start Timer	0 * 1 sec ( 000 - 250 )
SMDR Hidden Digit	RIGHT
Long Distance Call Digit Counter	7 (7 - 15)
Long Distance Code (Max 2 Digits)	
1:	0
2:	
3:	
4:	
5:	
MSN Print On SMDR	<input type="checkbox"/>
Print Caller Number	<input checked="" type="checkbox"/>

#### ISDN Attributes (PGM 200)

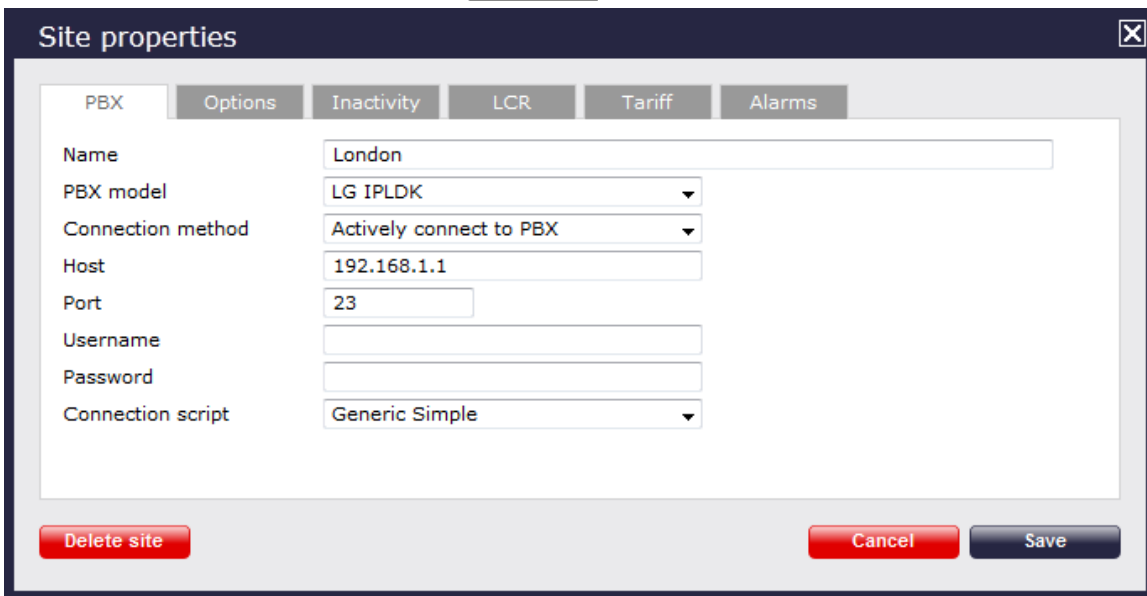
Set the ISDN Attributes as shown below, ensuring that the CLI Print to serial field is enabled:

Advice Of Charge	Do not Service AOC
CO ATD Code	Max 2 Digits
CLI Print To Serial	<input checked="" type="checkbox"/>
Int'l Access Code	Max 4 Digits
My Area Code	Max 6 Digits
My Area Prefix Code	0 Max 4 Digits
Maintain DID Name	<input type="checkbox"/>
PC Application Station	1000

#### Configuring TIM Plus

If your LG IPLDK has been configured to send its call logging data via TCP/IP, follow the steps below to configure TIM Plus:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name London

PBX model LG IPLDK

Connection method Actively connect to PBX

Host 192.168.1.1

Port 23

Username

Password

Connection script Generic Simple

Delete site Cancel Save

3. In the **Site Properties** window, select **LG IPLDK** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Actively connect to PBX** from the drop-down list.
5. In the **Host** field, enter the IP address of your LG IPLDK.
6. In the **Port** field, enter **23**.
7. Leave the **Username** and **Password** fields blank.
8. In the **Connection script** field, select **Generic Simple** from the drop-down list.
9. Click on the **Save** button to apply the settings.

## Lucent

### Lucent EuroGeneris

Please refer to [Avaya EuroGeneris](#).

## Matracom


### Matracom Matra 65xx series

Please refer to [Avaya Matra 65xx series](#).




## Microsoft

### Skype for Business (Microsoft Lync)

These instructions help you configure your Skype for Business phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a DSN connection with this PBX.

**Support Files**

-  Skype for Business.TDT
-  Skype for Business.TDS
-  Skype for Business.DBS

**Required Tasks**

- Configure the SMDR output
- Set up a DSN connection
- Configure TIM Plus

### Configuring the SMDR output

The Skype for Business phone system writes its CDR data to a MSSQL database called `LcsCDR` on the `Monitoring Server`. In order for TIM Plus to connect to the database and collect the call logging data, a Windows or SQL authenticated login will have to be created to allow access. Contact your system maintainer if you are not familiar with this procedure.

The following information is required for TIM Plus to connect to the `LcsCDR` database:

- IP address or hostname of the `Monitoring Server` where the `LcsCDR` database resides.
- Username and Password of the `LcsCDR` database.

### Setting up a DSN connection

To enable TIM Plus to work with your Skype for Business phone system, you first need to set up a DSN connection by following the steps below:

1. Open Windows Control Panel and select the `Administrative Tools` icon
2. Double-click on the `Data Sources (ODBC)` icon to open the `ODBC Data Source Administrator` window

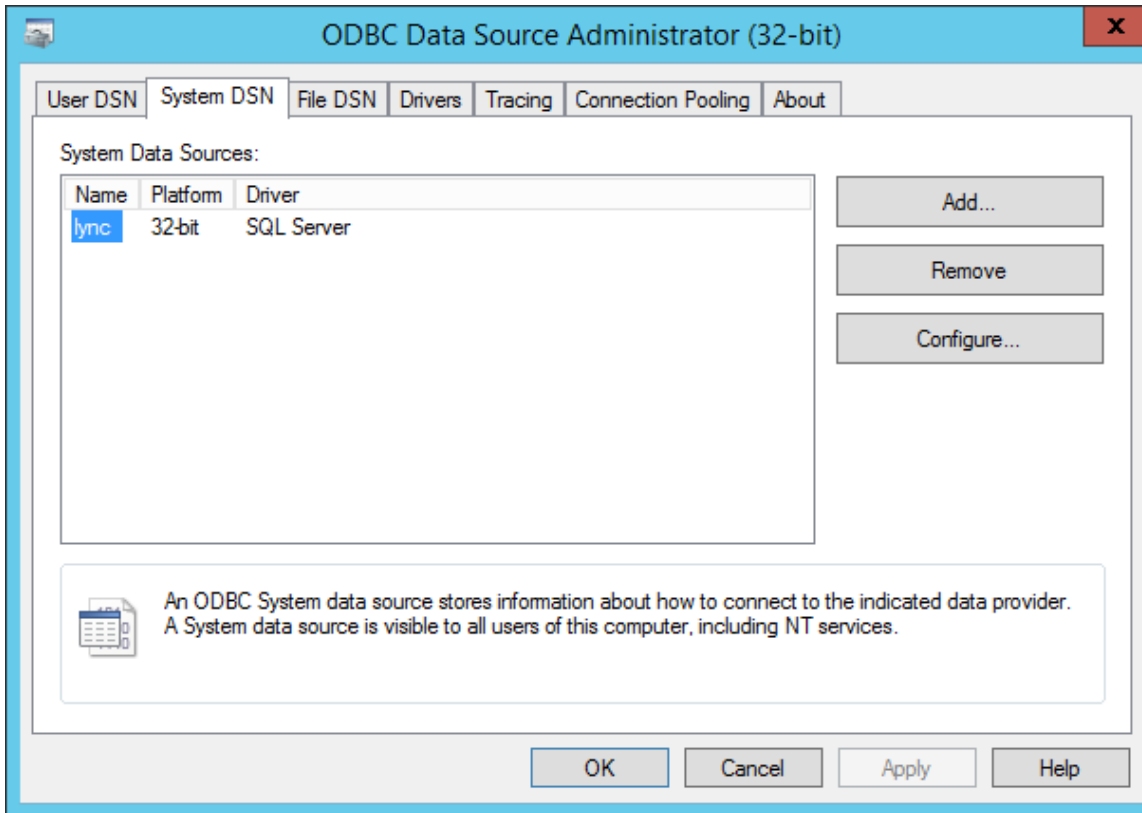


For a 64 bit system, access the `ODBC Data Source Administrator` from the following location `C:\Windows\System32\odbcad32.exe`

3. Click on the `System DSN` tab.
4. Click on the `Add` button.
5. Select `SQL Native Client` from the driver list and click `Finish`.
6. In the `Name` field, enter `lync`.
7. In the `Description` field, enter `TIM Plus link to LcsCDR`.
8. In the `Server` field, enter the IP address or hostname of your `Monitoring Server`.
9. In the `Username` field, enter the username for your `LcsCDR` database.

10. In the **Password** field, enter the password for your **LcsCDR** database.
11. In the **Database** drop-down list, select **LcsCDR**.
12. Click on the **Test** button to confirm the information you entered is correct and that the connection is successful.
13. Click on the **OK** button to close the window.

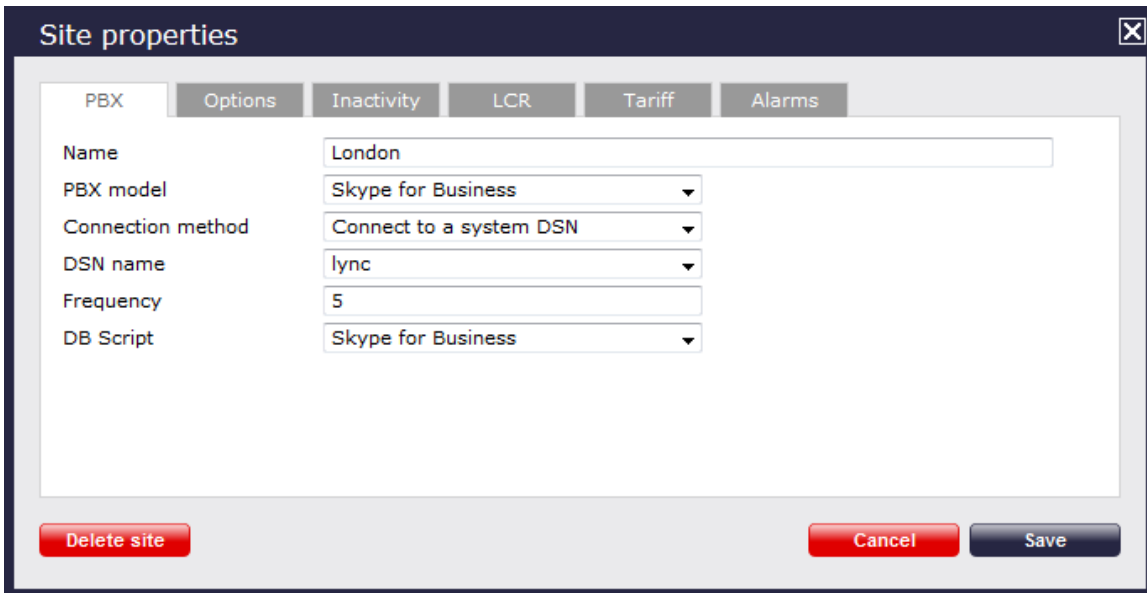
An example of an ODBC entry is shown below:



## Configuring TIM Plus

Once the DSN connection has been set up, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: Skype for Business

Connection method: Connect to a system DSN

DSN name: lync

Frequency: 5

DB Script: Skype for Business

Delete site Cancel Save


3. In the **Site Properties** window, select **Skype for Business** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Connect to a system DSN** from the drop-down list.
5. In the **DSN name** field, select **lync** from the drop-down list.
6. In the **Frequency** field, enter 5.
7. In the **DB script** field, select **Skype for Business** from the drop-down list.
8. Click on the **Save** button to apply the settings.

## Mitel


### Mitel 3100

These instructions help you configure your Mitel 3100 phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a serial connection with this PBX.

**Support Files**

 Mitel 3100.TDT

**Required Tasks**

- Configure the SMDR output
- Install NetPBX
- Configure TIM Plus

### Configuring your SMDR output

Follow the steps below to configure your Mitel 3100 to output SMDR data via a serial connection:

1. Using an RS-232 cable, connect the PC running TIM Plus to the serial port of the Mitel 3100.
2. Launch the Mitel System Tool.

3. Choose **Voice** from the selection menu.
4. Click on the **Management** tab, select **Call Logging**.
5. Click **Change** to set the following parameters:
  - Set the **Cost per minute** to **00**. (This functionality is not supported in NA systems)
  - Set the **Minimum call duration to be recorded** option to **00:00:00**.
  - Set the **Type of calls** option to **All**.
  - Set the **Minimum page length** to **1**.
  - Enable call logging.
6. Click **Save** and commit the changes.

### Installing NetPBX

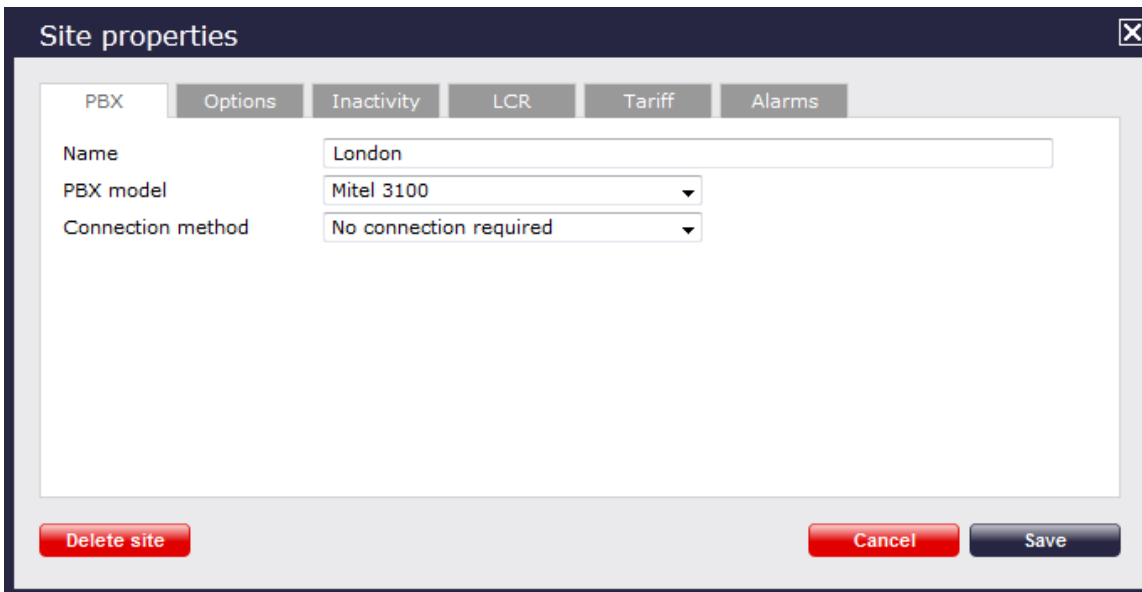
The Mitel 3100 phone system sends SMDR information via a serial connection. To collect the data from the serial port and send it to TIM Plus, you first need to install the **NetPBX** software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.





The screenshot shows the 'Site properties' dialog box. The 'PBX' tab is active. The 'Name' field contains 'London'. The 'PBX model' dropdown is set to 'Mitel 3100'. The 'Connection method' dropdown is set to 'No connection required'. The 'Delete site' button is red, 'Cancel' is red, and 'Save' is dark blue.

3. In the **Site Properties** window, select **Mitel 3100** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.

## Mitel Imagination

These instructions help you configure your Mitel Imagination phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**  
 `Mitel Imagination.TDT`

**Required Tasks**

- Configure the SMDR output
- Install NetPBX
- Configure TIM Plus

### Configuring your SMDR output

The Mitel Imagination phone system sends SMDR information via a serial connection. You need to directly connect a serial cable from your Mitel to the PC that [NetPBX](#) is installed and running on.

For more information about the output and configuration of your SMDR data, please contact your system maintainer.

### Installing NetPBX

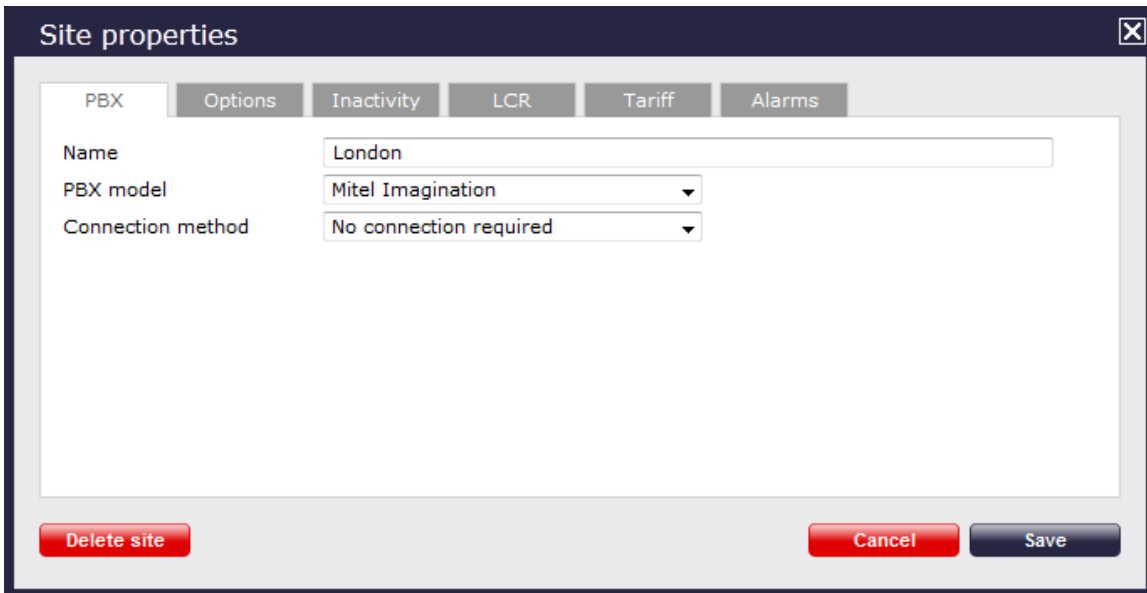
To collect the data from the serial port and send it to TIM Plus, you first need to install the NetPBX software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: Mitel Imagination

Connection method: No connection required


Delete site Cancel Save

3. In the **Site Properties** window, select **Mitel Imagination** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.


## Mitel MiVoice Business (Mitel 3300)


These instructions help you configure your Mitel 3300 phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a TCP connection to this PBX.

**Support Files**

 Mitel 3300.TDT

 Mitel 3300.TDS

**Required Tasks**

Configure the SMDR output

Configure TIM Plus

### Configuring your SMDR output

Follow the steps below to configure the SMDR options of your Mitel 3300:

1. Log in to the Mitel Communication Director software
2. Click on **System Properties**
3. Click on **System Feature Settings**
4. Click on **SMDR Options**



**MITEL** Node 'Mitel3300' Alarm Status: ! Major 2014

Mitel3300  
View by Category SDS Share

**SMDR Options on Mitel3300**

**SMDR Options**

- DASS II - Call Charge In
- Extended Digit Length
- MCD - Report Transfer: Network Format
- Report Account Codes
- Report Incoming Calls
- Report Internal Calls
- Report Meter Pulses
- Report Outgoing Calls
- SMDR Meter Unit Per S
- SMDR Record Transfer
- System Identification
- Time Change Reporting
- Twenty-four Hour Time
- ANI/DNIS/ISDN/CLASS 1
- SMDR Real Time Report
- OLI Node ID Format for
- Extended Time To Answer
- SMDR File Transfer
- Standardized Network
- Standardized Call ID Format
- Suite Services Reporting
- Report Internal Unanswered

Set the SMDR options as shown below:

## SMDR Options

DASS II - Call Charge Information Provided	<input checked="" type="radio"/> No <input type="radio"/> Yes
Extended Digit Length	<input type="radio"/> No <input checked="" type="radio"/> Yes
MCD - Report Transfers	All <input type="checkbox"/> <input checked="" type="checkbox"/>
Network Format	<input checked="" type="radio"/> No <input type="radio"/> Yes
Report Account Codes	<input type="radio"/> No <input checked="" type="radio"/> Yes
Report Incoming Calls	<input type="radio"/> No <input checked="" type="radio"/> Yes
Report Internal Calls	<input type="radio"/> No <input checked="" type="radio"/> Yes
Report Meter Pulses	<input checked="" type="radio"/> No <input type="radio"/> Yes
Report Outgoing Calls	<input type="radio"/> No <input checked="" type="radio"/> Yes
SMDR Meter Unit Per Station	<input checked="" type="radio"/> No <input type="radio"/> Yes
SMDR Record Transfer	<input type="radio"/> No <input checked="" type="radio"/> Yes
System Identification	10
Time Change Reporting	<input checked="" type="radio"/> No <input type="radio"/> Yes
Twenty-four Hour Time Reporting	<input type="radio"/> No <input checked="" type="radio"/> Yes
ANI/DNIS/ISDN/CLASS Number Delivery Reporting	<input type="radio"/> No <input checked="" type="radio"/> Yes
SMDR Real Time Reporting	<input checked="" type="radio"/> No <input type="radio"/> Yes
OLI Node ID Format for Incoming Trunk Calls	<input checked="" type="radio"/> No <input type="radio"/> Yes
Extended Time To Answer	<input type="radio"/> No <input checked="" type="radio"/> Yes
SMDR File Transfer	<input checked="" type="radio"/> No <input type="radio"/> Yes
Standardized Network OLI	<input type="radio"/> No <input checked="" type="radio"/> Yes
Standardized Call ID Format	<input type="radio"/> No <input checked="" type="radio"/> Yes
Suite Services Reporting	<input checked="" type="radio"/> No <input type="radio"/> Yes
Report Internal Unanswered Calls	<input type="radio"/> No <input checked="" type="radio"/> Yes
SMDR Extended Reporting Level 1	<input type="radio"/> No <input checked="" type="radio"/> Yes
Report Attendant Name	<input checked="" type="radio"/> No <input type="radio"/> Yes
Account Code Reporting for Internal Calls	<input type="radio"/> No <input checked="" type="radio"/> Yes
Tag Call Reporting	<input checked="" type="radio"/> No <input type="radio"/> Yes
Tag Call Identifier	
Path Reporting for Internal ACD2 Calls	<input checked="" type="radio"/> No <input type="radio"/> Yes
Number of destination address digits to mask	0
SMDR Extended Reporting Level 2	<input type="radio"/> No <input checked="" type="radio"/> Yes
Two B-Channel Transfer Reporting	<input checked="" type="radio"/> No <input type="radio"/> Yes
External Hot Desk User Reporting	<input checked="" type="radio"/> No <input type="radio"/> Yes
Suppress Initial SMDR Record with Account Code Entered Timer	5
Location Information Reporting	<input checked="" type="radio"/> No <input type="radio"/> Yes

**i** The `System Identification` option needs to be configured for each of your Mitel switches to be able to uniquely identify them on the network.

If you are using SIP trunks, you need to add an SMDR tag with a unique ID to each of your SIP trunks for this to be identified in the CDR data.

SIP Peer Profile						
Network Element	SIP Peer Profile Label	Outbound Proxy Server	CPN Restriction	Trunk Service	Session Timer	Zone
Gamma_SIP	Gamma_SIP	MBG	No	3	0	1
SIP_PMN	PMN		No	4	0	1

Save Cancel

---

**SIP Peer Profile**

Basic | Call Routing | Calling Line ID | SDP Options | Signaling and Header Manipulation | Timers | Key Press Event

Profile Information

IP Address: 192.168.1.2

**Administration Options**

Interconnect Restriction	1
Maximum Simultaneous Calls	4
Outbound Proxy Server	MBG
<b>SMDR Tag</b>	<b>0</b>
Trunk Service	3
Zone	1



In addition to these settings, ensure the `Class of Service` options have been configured to output SMDR.

## Configuring TIM Plus

Follow the steps below to configure TIM Plus to collect SMDR data from your Mitel 3300:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.

**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: Mitel 3300

Connection method: Actively connect to PBX

Host: 192.168.1.1

Port: 1752

Username:

Password:

Connection script: Mitel 3300


Delete site Cancel Save

3. In the **Site Properties** window, select **Mitel 3300** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Actively connect to PBX** from the drop-down list.
5. In the **Host** field, enter the IP address of your Mitel 3300.
6. In the **Port** field, enter **1752**.
7. Leave the **Username** and **Password** fields blank.
8. In the **Connection script** field, select **Mitel 3300** from the drop-down list.
9. Click on the **Save** button to apply the settings.


## Mitel MiVoice Office (Mitel 5000-7000)


These instructions help you configure your Mitel 5000-7000 phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a TCP connection to this PBX.

**Support Files**

 Mitel 5000-7000.TDT

 Mitel 5000-7000.TDS

**Required Tasks**

Configure the SMDR output

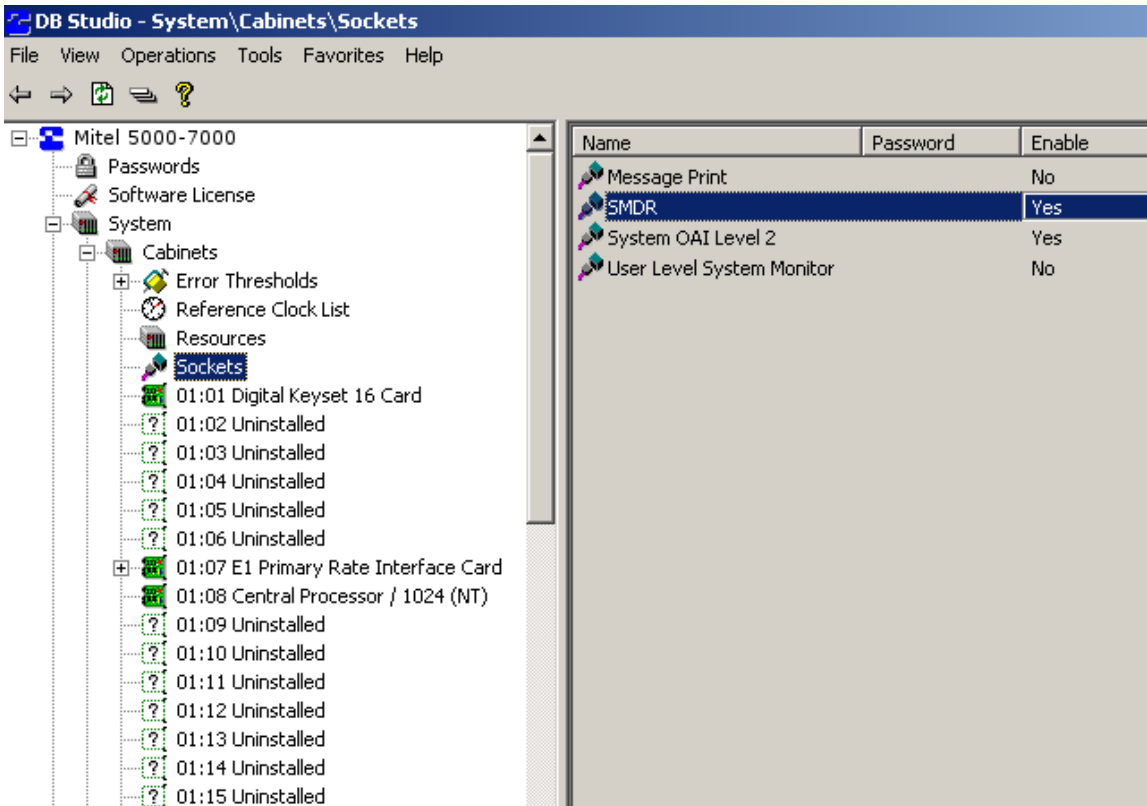
Configure TIM Plus

### Configuring your SMDR output

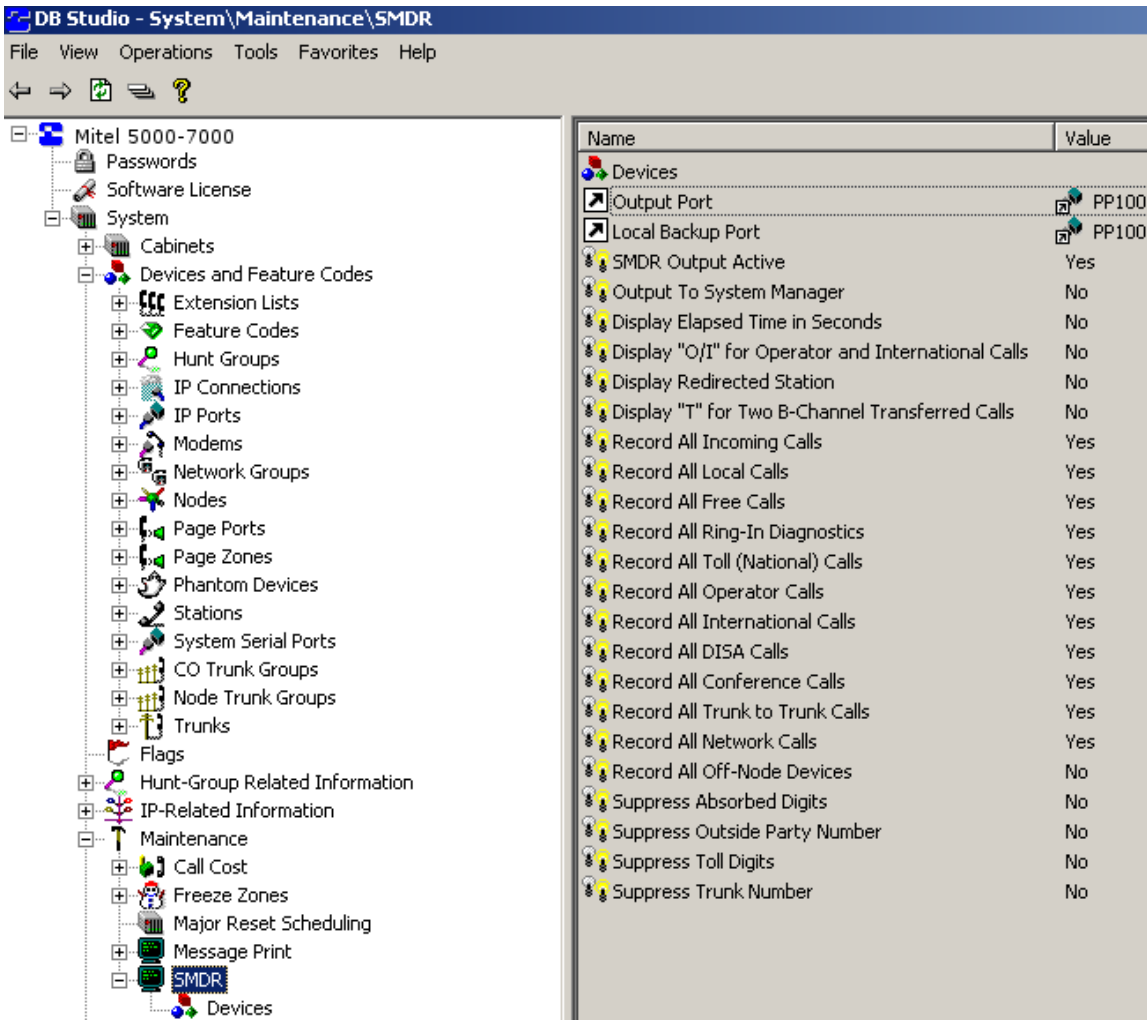
By default, the Mitel 5000-7000 has its SMDR output disabled. Follow the steps below to enable it:

1. Log in to the Mitel DB Studio software.

2. Click and expand the **System** node.
3. Click and expand the **Cabinet** node.
4. Select the **Sockets** node.
5. In the right-hand window, click on the *SMDR* parameter to set its enabled state to **Yes**.



6. Click and expand the **System** icon.
7. Click and expand the **Maintenance** icon.
8. Click on the **SMDR** icon.
9. On the right-hand side you will have the SMDR fields that need to be configured, as shown below:



## Configuring TIM Plus

Follow the steps below to configure TIM Plus to collect the SMDR data from your Mitel 5000-7000:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.

**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: Mitel 5000-7000

Connection method: Actively connect to PBX

Host: 192.168.1.1

Port: 4000

Username:

Password:

Connection script: Mitel 5000-7000


Delete site Cancel Save

3. In the **Site Properties** window, select **Mitel 5000-7000** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Actively connect to PBX** from the drop-down list.
5. In the **Host** field, enter the IP address of your Mitel 5000-7000.
6. In the **Port** field, enter **4000**.
7. Leave the **Username** and **Password** fields blank.
8. In the **Connection script** field, select **Mitel 5000-7000** from the drop-down list.
9. Click on the **Save** button to apply the settings.


## Mitel SX50


These instructions help you configure your Mitel SX50 phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a serial connection with this PBX.

**Support Files**

 Mitel SX50.TDT

 Mitel SX50.TDS

**Required Tasks**

Configure the SMDR output

Install NetPBX

Configure TIM Plus

### Configuring your SMDR output

By default, the SMDR output of your Mitel is not enabled. To enable it, perform the steps below:

1. Within the PBX programming interface choose **Systems Options Programming**.

2. Access `Command 100, register 14`.
3. Set the `Enabled for both incoming and outgoing trunk calls` option.
4. Ensure SMDR is enabled in all of your `Class of Services (Commands 121-129)` and `Trunk Groups (Commands 151-156)`.

## Installing NetPBX

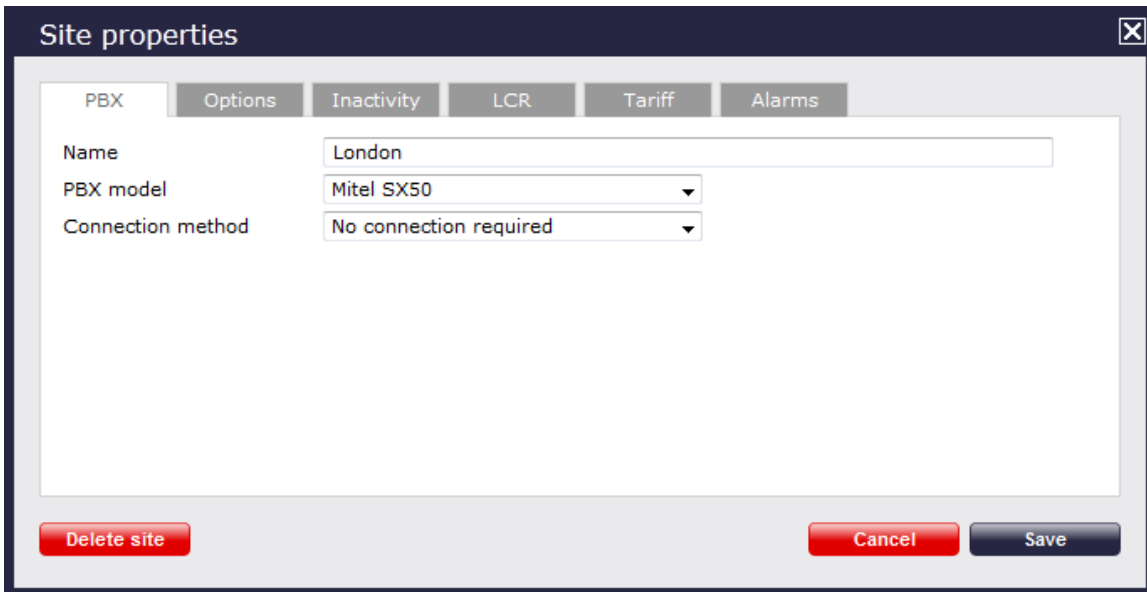
The Mitel SX50 phone system sends SMDR information via a serial connection. To collect the data from the serial port and send it to TIM Plus, you first need to install the [NetPBX](#) software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

## Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the following steps:

1. Click on the `Directory` tab.
2. Choose the site you want to configure and click `Properties`.




3. In the `Site Properties` window, select `Mitel SX50` from the `PBX model` drop-down list.
4. In the `Connection method` field, select `No connection required` from the drop-down list.
5. Click on the `Save` button to apply the settings.



## Mitel SX2000

These instructions help you configure your Mitel SX2000 phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.



**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**

-  Mitel SX2000.TDT
-  Mitel SX2000.TDS

**Required Tasks**

- Configure the SMDR output
- Install NetPBX
- Configure TIM Plus

### Configuring your SMDR output

The Mitel SX2000 phone system sends SMDR information via a serial connection. You need to directly connect a serial cable from your Mitel to the PC that NetPBX is installed and running on. By default, the SMDR output of your Mitel is not enabled. For more information about enabling and configuring the SMDR output, you should speak to your system maintainer.

### Installing NetPBX

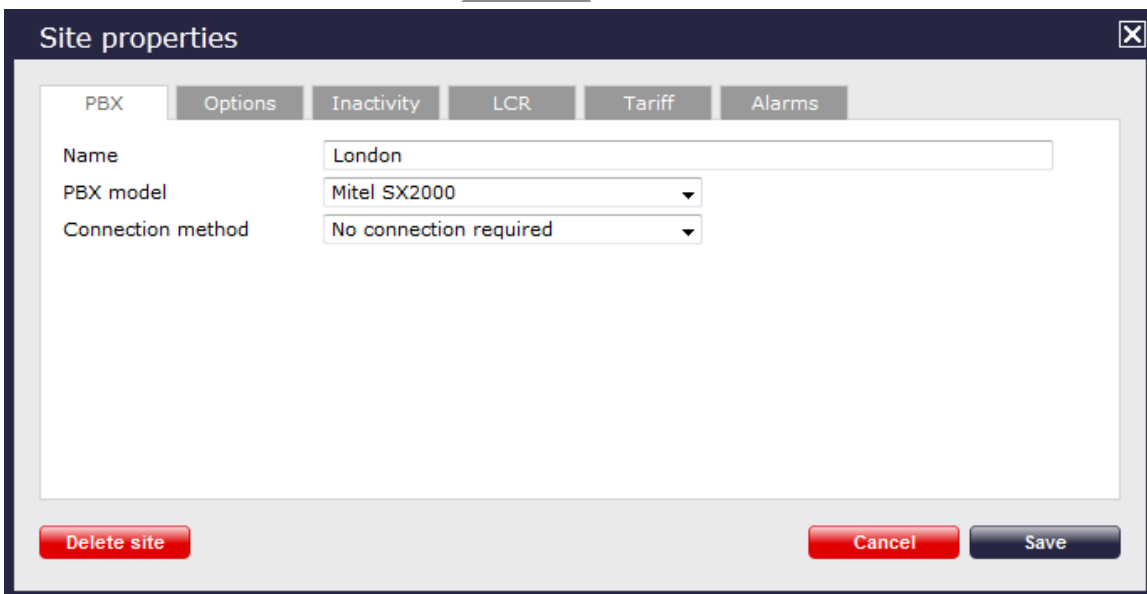
To collect call logging data from the serial port of your Mitel and send it to TIM Plus, you first need to install the NetPBX software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



3. In the **Site Properties** window, select **Mitel SX2000** from the **PBX model** drop-down list.

4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.

## NEC


### NEC Aspire

The NEC Aspire can be configured to send its SMDR data over a serial (RS232) or an IP connection. Click on one of the links below that relates to your preferred connection method.


#### NEC Aspire - Serial connection


These instructions help you configure your NEC Aspire phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a serial connection with this PBX.

**Support Files**

 NEC Aspire.TDT

 NEC Aspire.TDS

**Required Tasks**

Configure the SMDR output

Install NetPBX

Configure TIM Plus

#### Configuring your SMDR output

Follow the steps below to configure the SMDR output on your NEC Aspire:

1. Log in to your PC Pro/Web Pro software.
2. To configure SMDR output by serial port, apply the following settings for each system adapter:

Adapter	Programming code	Value	Description
NTCPU - Serial	10-21-02	1	NTCPU Hardware Setup - Baud Rate for COM Port. Choose the baud rate from the three available options: 0 = 4800, 1 = 9600, and 2 = 38400
	35-01-01	1	SMDR Options - Output Port Type

<b>CTA/CTU</b> <b>- Serial</b>	<b>15-02-19</b>	<b>1</b>	Multi-Line Telephone Basic Data Setup - CTA/CTU Data Communication Module
	<b>15-02-20</b>	<b>1</b>	Multi-Line Telephone Basic Data Setup - Baud Rate for CTA/CTU port. Choose from the three available options: 0 = 4800, 1 = 9600, and 2 = 38400
	<b>35-01-01</b>	<b>4</b>	SMDR Options - Output Port Type
	<b>35-01-02</b>	Extension number that the CTA/CTU adaptor is attached to.	SMDR Options - Output Destination Number

3. Apply the following settings in the programming sections below:

<b>Programming code</b>	<b>Value</b>	<b>Description</b>
<b>14-01-06</b>	<b>1</b>	Basic Trunk Data Setup - SMDR Print.
<b>15-01-03</b>	<b>1</b>	Basic Extension Data Setup - SMDR Print.
<b>35-01-03</b>	<b>0</b>	SMDR Options - Header Language.
<b>35-01-04</b>	<b>0</b>	SMDR Options - Omit (Mask) Digits.
<b>35-01-05</b>	<b>0</b>	SMDR Options - Minimum Number of SMDR Digits.
<b>35-01-06</b>	<b>0</b>	SMDR Options - Minimum Call Duration.
<b>35-01-07</b>	<b>0</b>	SMDR Options - Minimum Ringing Time.
<b>35-01-08</b>	Default	SMDR Options - SMDR Format.
<b>35-02-01</b>	<b>0</b>	SMDR Output Options - Toll Restricted Call.
<b>35-02-02</b>	<b>1</b>	SMDR Output Options - PBX Calls.
<b>35-02-03</b>	<b>1</b>	SMDR Output Options - Display Trunk Name or Numbers.

<b>35-02-04</b>	0	SMDR Output Options - Daily Summary.
<b>35-02-05</b>	0	SMDR Output Options - Weekly Summary.
<b>35-02-06</b>	0	SMDR Output Options - Monthly Summary.
<b>35-02-08</b>	1	SMDR Output Options - Incoming calls.
<b>35-02-09</b>	0	SMDR Output Options - Print Name or Numbers.
<b>35-02-10</b>	0	SMDR Output Options - All Lines Busy (ALB) Output.
<b>35-02-12</b>	0	SMDR Output Options - DID Table Name Output.
<b>35-02-13</b>	1	SMDR Output Options - CLI Output when DID to Trunk.
<b>35-02-14</b>	1	SMDR Output Options - Date.
<b>35-02-15</b>	1	SMDR Output Options - CLI/DID Number Switching.
<b>35-02-16</b>	1	SMDR Output Options - Print Trunk Name or Received Dialed Number.
<b>35-02-17</b>	0	SMDR Output Options - Print Account Code or Caller ID Name.
<b>35-02-18</b>	Default	SMDR Output Options - Caller ID Name Output Method.
<b>80-05-01</b>	1	Date Format for SMDR and System Reports.

### Installing NetPBX

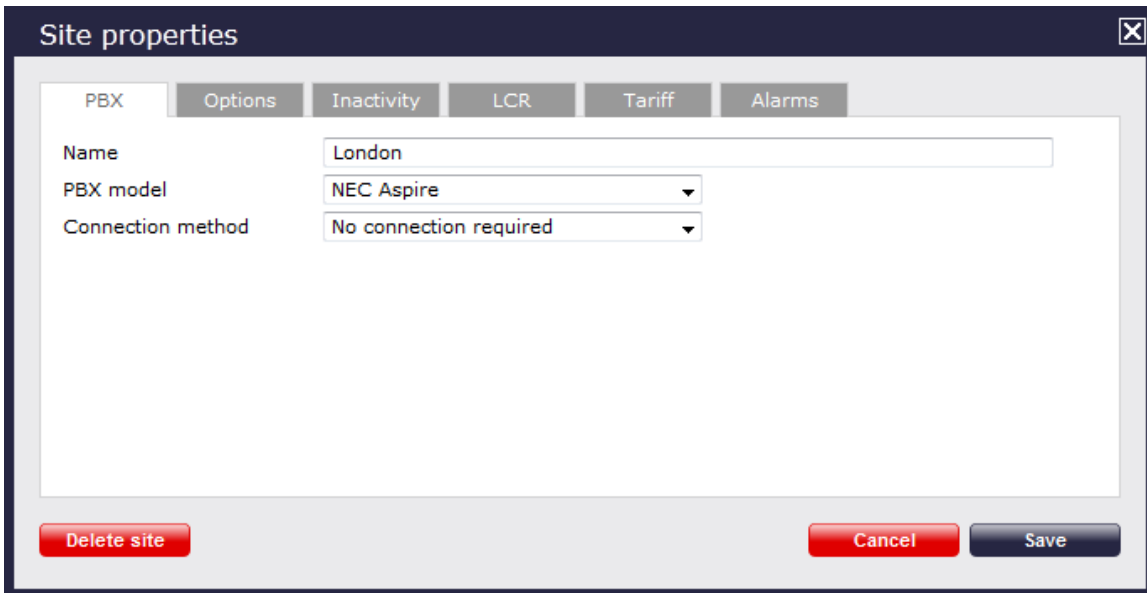
To capture SMDR data from your NEC Aspire using a serial connection, you first need to install the [NetPBX](#) software to collect the data from the serial port and send it to TIM Plus. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties** .



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: NEC Aspire

Connection method: No connection required


Delete site Cancel Save

3. In the **Site Properties** window, select **NEC Aspire** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.



### NEC Aspire - IP connection

These instructions help you configure your NEC Aspire to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a TCP connection to this PBX.

**Support Files**

-  NEC Aspire.TDT
-  NEC Aspire.TDS

**Required Tasks**

- Configure the SMDR output
- Configure TIM Plus

### Configuring your SMDR output

Follow the steps below to configure the SMDR output on your NEC Aspire:

1. Log in to your PC Pro/Web Pro software.
2. To configure SMDR output using an IP connection, apply the following settings for each system adapter:

Adapter	Programming code	Value	Description

<b>NTCPU - IP</b>	<b>10-12-01</b>	IP address that TIM Plus will connect to.	NTUCPU Network Setup - IP Address.
	<b>10-20-01</b>	TCP port that TIM Plus will connect to. We recommend using <b>9000</b> and incrementing it for each NEC Aspire you configure.	LAN Setup for External Equipment.

3. Apply the following settings in the programming sections below:

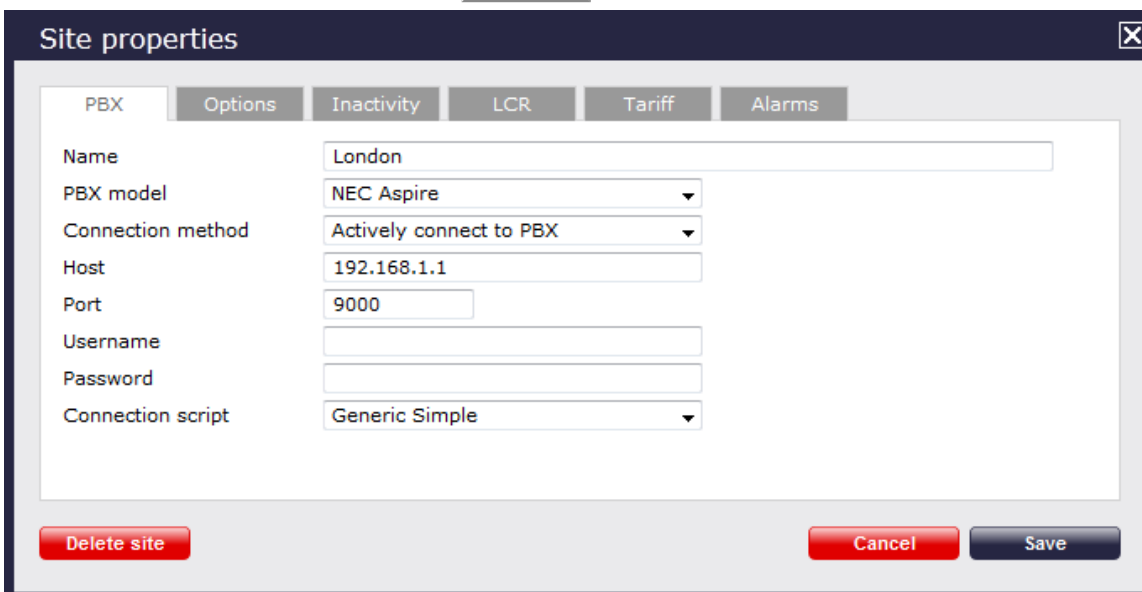
<b>Programming code</b>	<b>Value</b>	<b>Description</b>
<b>14-01-06</b>	<b>1</b>	Basic Trunk Data Setup - SMDR Print.
<b>15-01-03</b>	<b>1</b>	Basic Extension Data Setup - SMDR Print.
<b>35-01-03</b>	<b>0</b>	SMDR Options - Header Language.
<b>35-01-04</b>	<b>0</b>	SMDR Options - Omit (Mask) Digits.
<b>35-01-05</b>	<b>0</b>	SMDR Options - Minimum Number of SMDR Digits.
<b>35-01-06</b>	<b>0</b>	SMDR Options - Minimum Call Duration.
<b>35-01-07</b>	<b>0</b>	SMDR Options - Minimum Ringing Time.
<b>35-01-08</b>	Default	SMDR Options - SMDR Format.
<b>35-02-01</b>	<b>0</b>	SMDR Output Options - Toll Restricted Call.
<b>35-02-02</b>	<b>1</b>	SMDR Output Options - PBX Calls.
<b>35-02-03</b>	<b>1</b>	SMDR Output Options - Display Trunk Name or Numbers.
<b>35-02-04</b>	<b>0</b>	SMDR Output Options - Daily Summary.
<b>35-02-05</b>	<b>0</b>	SMDR Output Options - Weekly Summary.
<b>35-02-06</b>	<b>0</b>	SMDR Output Options - Monthly Summary.
<b>35-02-08</b>	<b>1</b>	SMDR Output Options - Incoming calls.

<b>35-02-09</b>	0	SMDR Output Options - Print Name or Numbers.
<b>35-02-10</b>	0	SMDR Output Options - All Lines Busy (ALB) Output.
<b>35-02-12</b>	0	SMDR Output Options - DID Table Name Output.
<b>35-02-13</b>	1	SMDR Output Options - CLI Output when DID to Trunk.
<b>35-02-14</b>	1	SMDR Output Options - Date.
<b>35-02-15</b>	1	SMDR Output Options - CLI/DID Number Switching.
<b>35-02-16</b>	1	SMDR Output Options - Print Trunk Name or Received Dialed Number.
<b>35-02-17</b>	0	SMDR Output Options - Print Account Code or Caller ID Name.
<b>35-02-18</b>	Default	SMDR Output Options - Caller ID Name Output Method.
<b>80-05-01</b>	1	Date Format for SMDR and System Reports

### Configuring TIM Plus

If your NEC Aspire has been configured to send its SMDR data using an IP connection, follow the steps below to configure TIM Plus:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.




3. In the **Site Properties** window, select **NEC Aspire** from the **PBX model** drop-down list.

4. In the **Connection method** field, select **Actively connect to PBX** from the drop-down list.
5. In the **Host** field, enter the IP address of your NEC Aspire.
6. In the **Port** field, enter the port number you configured whilst programming code **10-20-01** (above).
7. Leave the **Username** and **Password** fields blank.
8. In the **Connection script** field, select **Generic Simple** from the drop-down list.
9. Click on the **Save** button to apply the settings.


## NEC DXE


These instructions help you configure your NEC DXE phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a serial connection with this PBX.

**Support Files**

 NEC DXE.TDT

 NEC DXE.TDS

**Required Tasks**

[Configure the SMDR output](#)

[Install NetPBX](#)

[Configure TIM Plus](#)

### Configure your SMDR output

The NEC DXE phone system sends SMDR information via a serial connection. You need to directly connect a serial cable from your NEC DXE to the PC that **NetPBX** is installed and running on. By default, the SMDR output of your NEC DXE is not enabled. For more information about enabling and configuring the SMDR output, contact your system maintainer.

### Installing NetPBX

To collect call logging data from the serial port of your NEC DXE and send it to TIM Plus, you first need to install the NetPBX software. For setup instructions, click on the link below:

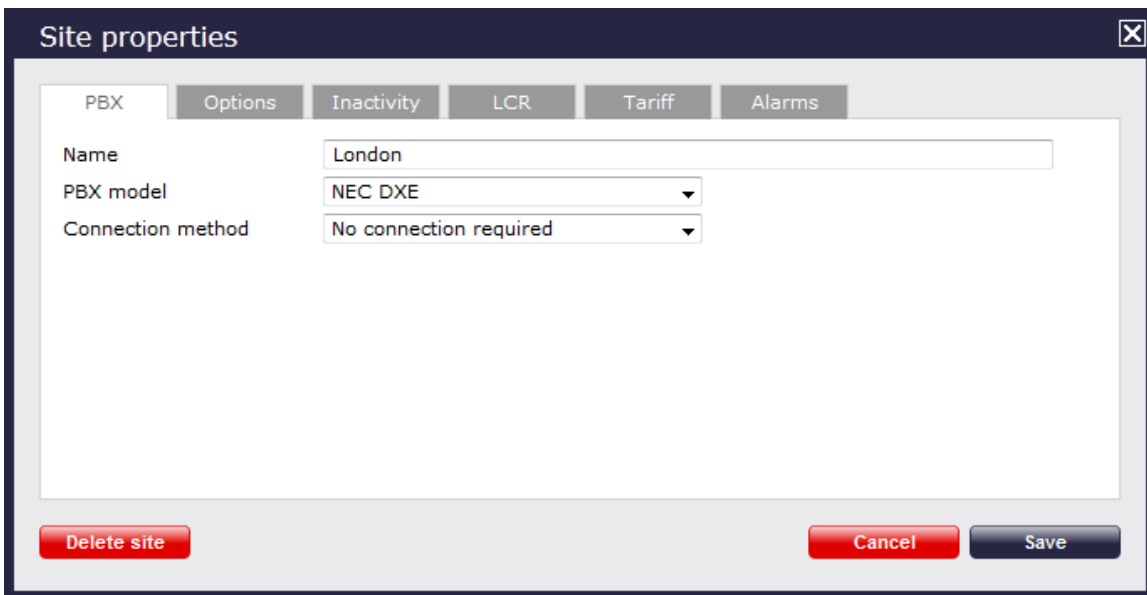
[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the following steps:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.





**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: NEC DXE

Connection method: No connection required

Delete site Cancel Save

3. In the **Site Properties** window, select **NEC DXE** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the changes.


## NEC NEAX

The NEC NEAX can be configured to send its SMDR data over a serial (RS232) or an IP connection. Click on one of the links below that relates to your preferred connection method.


### NEC NEAX - Serial connection


These instructions help you configure your NEC NEAX phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a serial connection with this PBX.

**Support Files**

 NEC\_NEAX.TDT

 NEC\_NEAX.TDS

**Required Tasks**

Configure the SMDR output


Install NetPBX

Configure TIM Plus

### Configuring your SMDR output

Using the Customer Administration Terminal (CAT), enter the following settings in the system-programming mode:

Field name	Details

<b>CM40</b>	Default output port and attributes: <b>9600 baud, 8 data bits, no parity, 2 stop bits, DTR/RTS flow control.</b>
<b>CM13+05</b>	Enable SMDR for incoming calls to required stations.
<b>CM13+06</b>	Enable SMDR for outgoing calls to required stations.
<b>CM35+14</b>	Enable SMDR for outgoing calls to required trunk routes.
<b>CM35+49</b>	Enable SMDR for incoming calls to required trunk routes.
<b>CM08</b>	<p>If SMDR for incoming calls is enabled, specify whether the setting applies to all incoming calls or only to those that use account codes. Also, include <code>ANI/Caller ID</code> for incoming calls.</p> <div style="background-color: #e0f2e0; padding: 10px; margin: 10px 0;"> <p> <b>NOTE 1:</b> The <code>ANI/Caller ID</code> is required to provide SMDR data for incoming calls, even if this feature is enabled by <b>CM13+05</b> and <b>CM35+49</b>.</p> <p><b>NOTE 2:</b> Use CDR formats <b>#501</b> (2400 IMS), <b>#505</b> (2000 IPS), <b>#506</b> (2000 IVS).</p> </div>

### Installing NetPBX

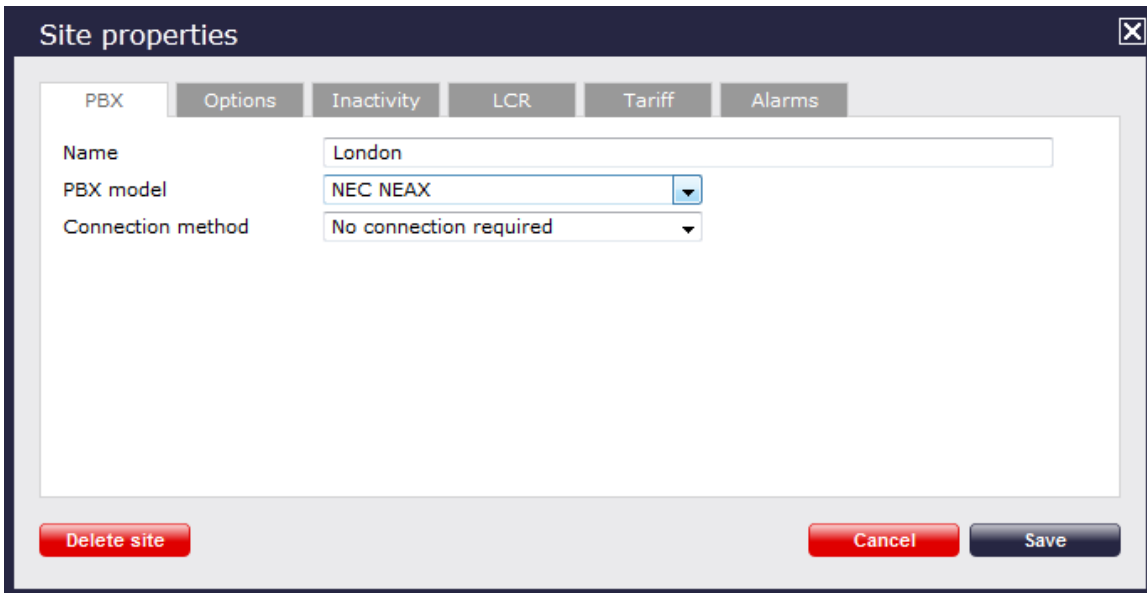
To capture SMDR data from your NEC NEAX using a serial connection, you first need to install the [NetPBX](#) software to collect the data from the serial port and send it to TIM Plus. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: NEC NEAX

Connection method: No connection required


Delete site Cancel Save

3. In the **Site Properties** window, select **NEC NEAX** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.


### NEC NEAX - IP connection


These instructions help you configure your NEC NEAX phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a TCP connection to this PBX.

**Support Files**

 NEC NEAX.TDT

 NEC NEAX.TDS

**Required Tasks**

Configure the SMDR output

Configure TIM Plus

#### Configure the SMDR output

By default, the SMDR output of your NEC NEAX is not enabled. For more information about enabling and configuring the SMDR output, contact your system maintainer.

#### Configuring TIM Plus

If your NEC NEAX has been configured to send its SMDR data using an IP connection, follow the steps below to configure TIM Plus:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.

**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: NEC NEAX

Connection method: Actively connect to PBX

Host: 192.168.1.1

Port: 2599

Username:

Password:

Connection script: Generic Simple

Delete site Cancel Save

3. In the `Site Properties` window, select `NEC NEAX` from the `PBX model` drop-down list.
4. In the `Connection method` field, select `Actively connect to PBX` from the drop-down list.
5. In the `Host` field, enter the IP address of your NEC NEAX.
6. In the `Port` field, enter `2599`.
7. Leave the `Username` and `Password` fields blank.
8. In the `Connection script` field, select `Generic Simple` from the drop-down list.
9. Click on the `Save` button to apply the settings.


## NEC XN120

The NEC XN120 can be configured to send its SMDR data over a serial (RS232) or an IP connection. Click on one of the links below that relates to your preferred connection method.


### NEC XN120 - Serial connection


These instructions help you configure your NEC XN120 phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**


 TIM Plus establishes a serial connection with this PBX.


**Support Files**


 NEC DXE.TDT

 NEC DXE.TDS

**Required Tasks**

 [Configure the SMDR output](#)

 [Install NetPBX](#)

 [Configure TIM Plus](#)

### Configuring your SMDR output

Follow the steps below to configure the SMDR output on your NEC XN120:

1. Log in to your PC Pro/Web Pro software.
2. To configure SMDR output by serial port, apply the following settings:

Adapter	Programming code	Value	Description
NTCPU - Serial	10-21-02	1	NTCPU Hardware Setup - Baud Rate for Com Port. Choose from the three available options: 0(4800), 1(9600) and 2(38400).
	35-01-01	1	SMDR Options - Output Port Type.

3. Apply the following settings in the programming sections below:

Programming code	Value	Description
14-01-06	1	Basic Trunk Data Setup - SMDR Print.
15-01-03	1	Basic Extension Data Setup - SMDR Print.
35-01-03	0	SMDR Options - Header Language.
35-01-04	0	SMDR Options - Omit (Mask) Digits.
35-01-05	0	SMDR Options - Minimum Number of SMDR Digits.
35-01-06	0	SMDR Options - Minimum Call Duration.
35-01-07	0	SMDR Options - Minimum Ringing Time.
35-01-08	Default	SMDR Options - SMDR Format.
35-02-01	0	SMDR Output Options - Toll Restricted Call.
35-02-02	1	SMDR Output Options - PBX Calls.
35-02-03	1	SMDR Output Options - Display Trunk Name or Numbers.

<b>35-02-04</b>	0	SMDR Output Options - Daily Summary.
<b>35-02-05</b>	0	SMDR Output Options - Weekly Summary.
<b>35-02-06</b>	0	SMDR Output Options - Monthly Summary.
<b>35-02-08</b>	1	SMDR Output Options - Incoming calls.
<b>35-02-09</b>	0	SMDR Output Options - Print Name or Numbers.
<b>35-02-10</b>	0	SMDR Output Options - All Lines Busy (ALB) Output.
<b>35-02-12</b>	0	SMDR Output Options - DID Table Name Output.
<b>35-02-13</b>	1	SMDR Output Options - CLI Output when DID to Trunk.
<b>35-02-14</b>	1	SMDR Output Options - Date.
<b>35-02-15</b>	1	SMDR Output Options - CLI/DID Number Switching.
<b>35-02-16</b>	1	SMDR Output Options - Print Trunk Name or Received Dialed Number.
<b>35-02-17</b>	0	SMDR Output Options - Print Account Code or Caller ID Name.
<b>35-02-18</b>	Default	SMDR Output Options - Caller ID Name Output Method.
<b>80-05-01</b>	1	Date Format for SMDR and System Reports.

### Installing NetPBX

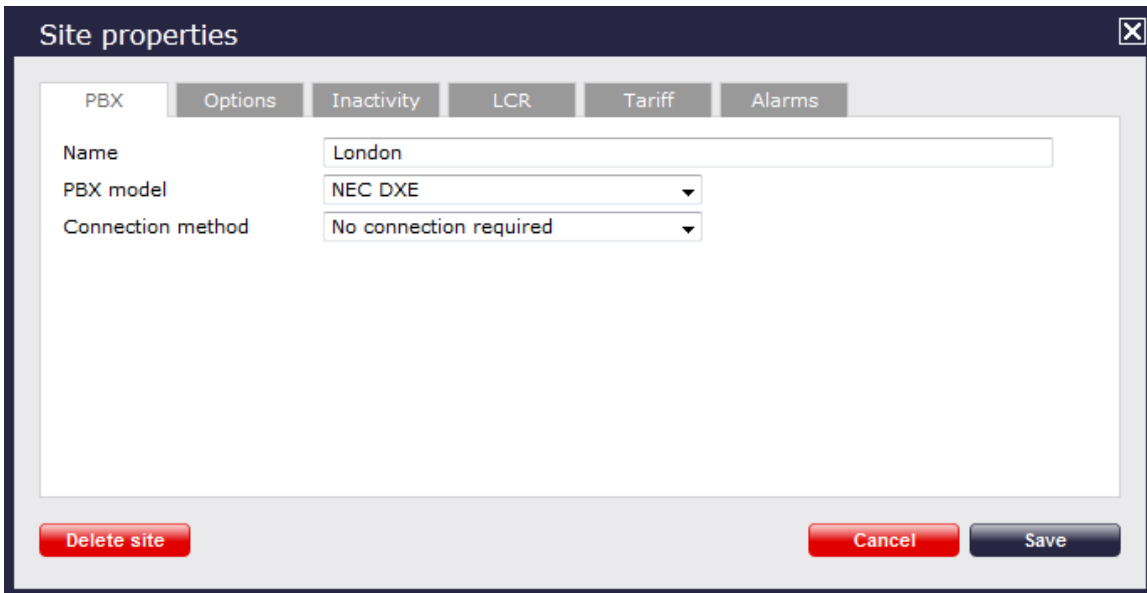
To capture SMDR data from your NEC XN120 using a serial connection, you first need to install the [NetPBX](#) software to collect the data from the serial port and send it to TIM Plus. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: NEC DXE

Connection method: No connection required


Delete site Cancel Save

3. In the **Site Properties** window, select **NEC DXE** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.



### NEC XN120 - IP connection

These instructions help you configure your NEC XN120 phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a TCP connection to this PBX.

**Support Files**

-  NEC DXE.TDT
-  NEC DXE.TDS

**Required Tasks**

- Configure the SMDR output
- Configure TIM Plus

#### Configuring your SMDR output

Follow the steps below to configure the SMDR output on your NEC XN120:

1. Log in to your PC Pro/Web Pro software.
2. To configure SMDR output using an IP connection, apply the following settings:

Adapter	Programming code	Value	Description

<b>NTCPU - IP</b>	<b>10-12-01</b>	IP address that TIM Plus will connect to.	NTUCPU Network Setup - IP Address.
	<b>10-20-01</b>	TCP port that TIM Plus will connect to. We recommend using <b>9000</b> and incrementing it for each NEC XN120 you configure.	LAN Setup for External Equipment.

3. Apply the following settings in the programming sections below:

<b>Programming code</b>	<b>Value</b>	<b>Description</b>
<b>14-01-06</b>	<b>1</b>	Basic Trunk Data Setup - SMDR Print.
<b>15-01-03</b>	<b>1</b>	Basic Extension Data Setup - SMDR Print.
<b>35-01-03</b>	<b>0</b>	SMDR Options - Header Language.
<b>35-01-04</b>	<b>0</b>	SMDR Options - Omit (Mask) Digits.
<b>35-01-05</b>	<b>0</b>	SMDR Options - Minimum Number of SMDR Digits.
<b>35-01-06</b>	<b>0</b>	SMDR Options - Minimum Call Duration.
<b>35-01-07</b>	<b>0</b>	SMDR Options - Minimum Ringing Time.
<b>35-01-08</b>	Default	SMDR Options - SMDR Format.
<b>35-02-01</b>	<b>0</b>	SMDR Output Options - Toll Restricted Call.
<b>35-02-02</b>	<b>1</b>	SMDR Output Options - PBX Calls.
<b>35-02-03</b>	<b>1</b>	SMDR Output Options - Display Trunk Name or Numbers.
<b>35-02-04</b>	<b>0</b>	SMDR Output Options - Daily Summary.
<b>35-02-05</b>	<b>0</b>	SMDR Output Options - Weekly Summary.
<b>35-02-06</b>	<b>0</b>	SMDR Output Options - Monthly Summary.
<b>35-02-08</b>	<b>1</b>	SMDR Output Options - Incoming calls.



<b>35-02-09</b>	0	SMDR Output Options - Print Name or Numbers.
<b>35-02-10</b>	0	SMDR Output Options - All Lines Busy (ALB) Output.
<b>35-02-12</b>	0	SMDR Output Options - DID Table Name Output.
<b>35-02-13</b>	1	SMDR Output Options - CLI Output when DID to Trunk.
<b>35-02-14</b>	1	SMDR Output Options - Date.
<b>35-02-15</b>	1	SMDR Output Options - CLI/DID Number Switching.
<b>35-02-16</b>	1	SMDR Output Options - Print Trunk Name or Received Dialed Number.
<b>35-02-17</b>	0	SMDR Output Options - Print Account Code or Caller ID Name.
<b>35-02-18</b>	Default	SMDR Output Options - Caller ID Name Output Method.
<b>80-05-01</b>	1	Date Format for SMDR and System Reports.

### Configuring TIM Plus

If your NEC XN120 has been configured to send its SMDR data using an IP connection, follow the steps below to configure TIM Plus:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.

The screenshot shows a 'Site properties' dialog box with the following configuration:

- Name:** London
- PBX model:** NEC DXE
- Connection method:** Actively connect to PBX
- Host:** 192.168.1.1
- Port:** 9000
- Username:** (empty)
- Password:** (empty)
- Connection script:** Generic Simple

Buttons at the bottom: Delete site, Cancel, Save.


3. In the **Site Properties** window, select **NEC DXE** from the **PBX model** drop-down list.

4. In the **Connection method** field, select **Actively connect to PBX** from the drop-down list.
5. In the **Host** field, enter the IP address of your NEC XN120.
6. In the **Port** field, enter the port number you configured whilst programming code **10-20-01**.
7. Leave the **Username** and **Password** fields blank.
8. In the **Connection script** field, select **Generic Simple** from the drop-down list.
9. Click on the **Save** button to apply the settings.



## NEC SV8100

These instructions help you configure your NEC SV8100 phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a TCP connection to this PBX.

**Support Files**

-  NEC DXE.TDT
-  NEC DXE.TDS

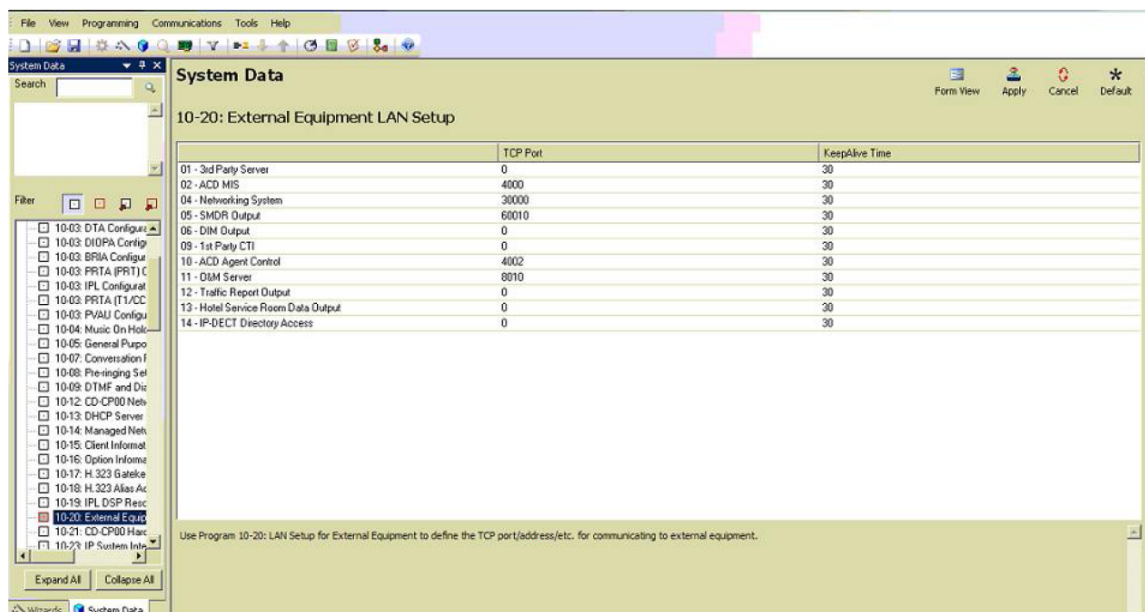
**Required Tasks**

- Configure the SMDR output
- Configure TIM Plus

### Configuring the SMDR output

Follow the instructions below to configure your NEC SV8100 for use with TIM Plus:

#### External equipment LAN setup

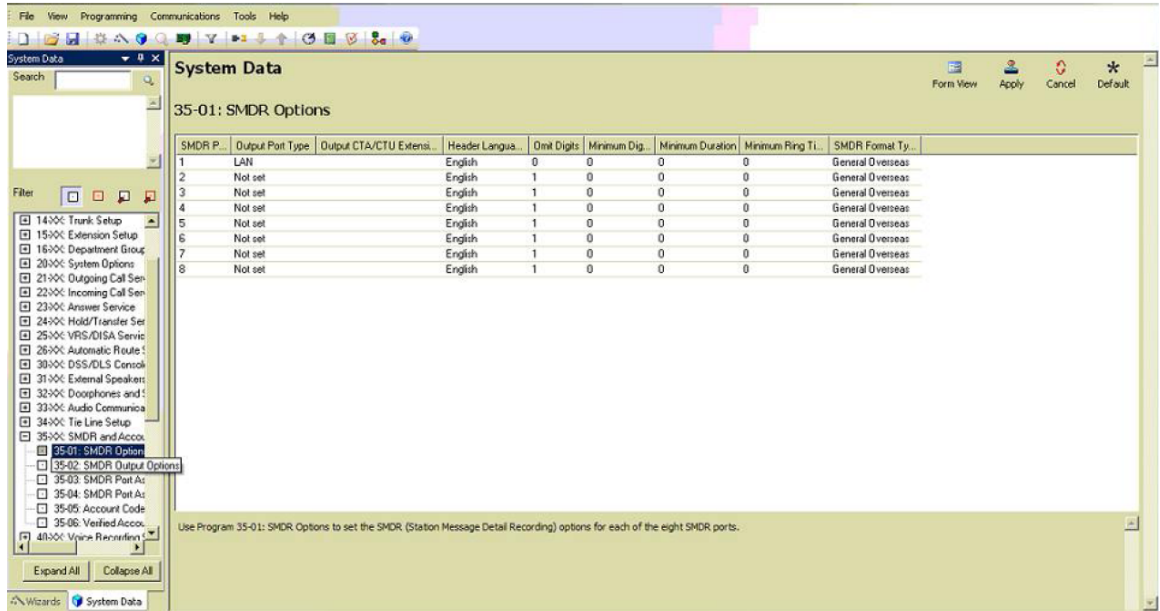


The screenshot shows the 'System Data' configuration window for the NEC SV8100. The main area displays the '10-20: External Equipment LAN Setup' table, which lists various external equipment and their corresponding TCP ports and KeepAlive times.

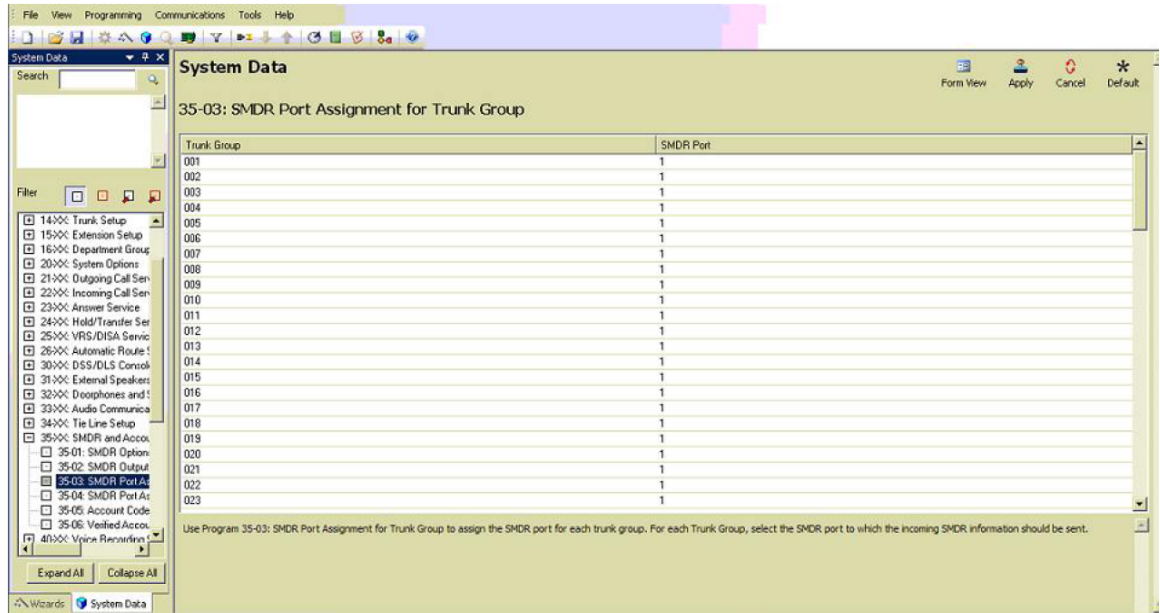
	TCP Port	KeepAlive Time
01 - 3rd Party Server	0	30
02 - ACD MIS	4000	30
04 - Networking System	30000	30
05 - SMDR Output	60010	30
06 - DIM Output	0	30
09 - 1st Party CTI	0	30
10 - ACD Agent Control	4002	30
11 - ODM Server	8010	30
12 - Traffic Report Output	0	30
13 - Hotel Service Room Data Output	0	30
14 - IP-DECT Directory Access	0	30

Use Program 10-20: LAN Setup for External Equipment to define the TCP port/address/etc. for communicating to external equipment.

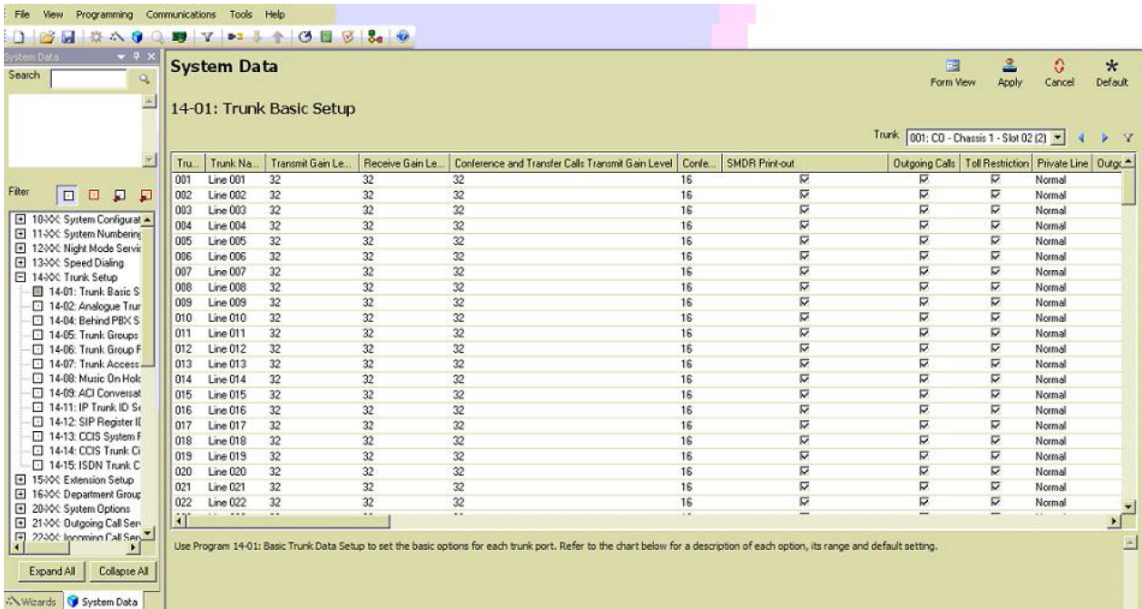
SMDR options



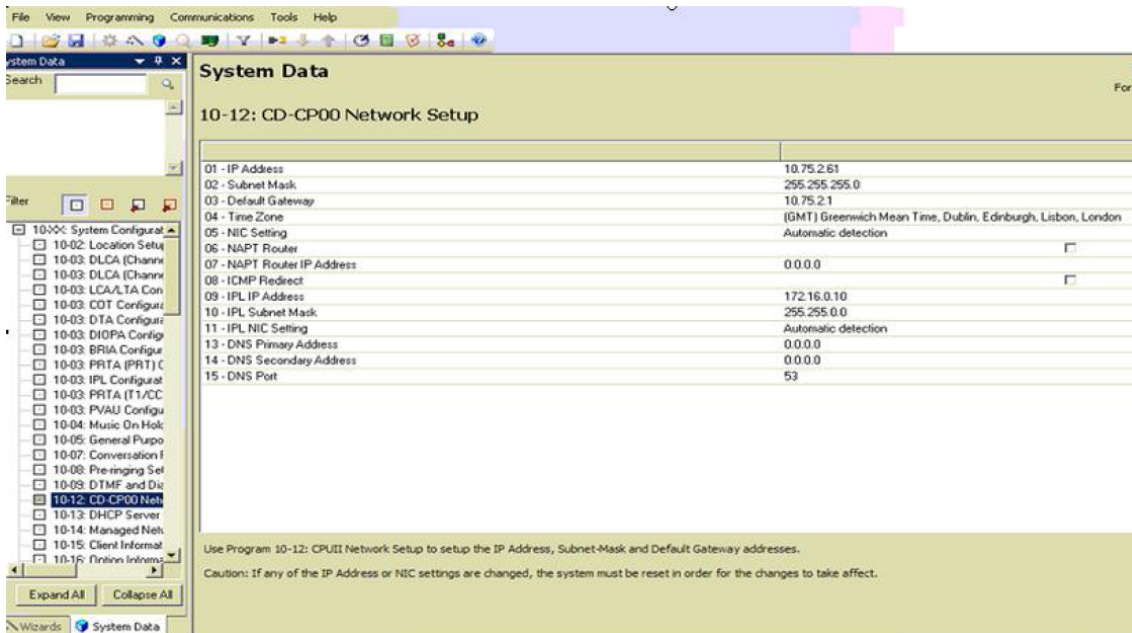
SMDR port assignment for trunk groups



Trunk Basic setup



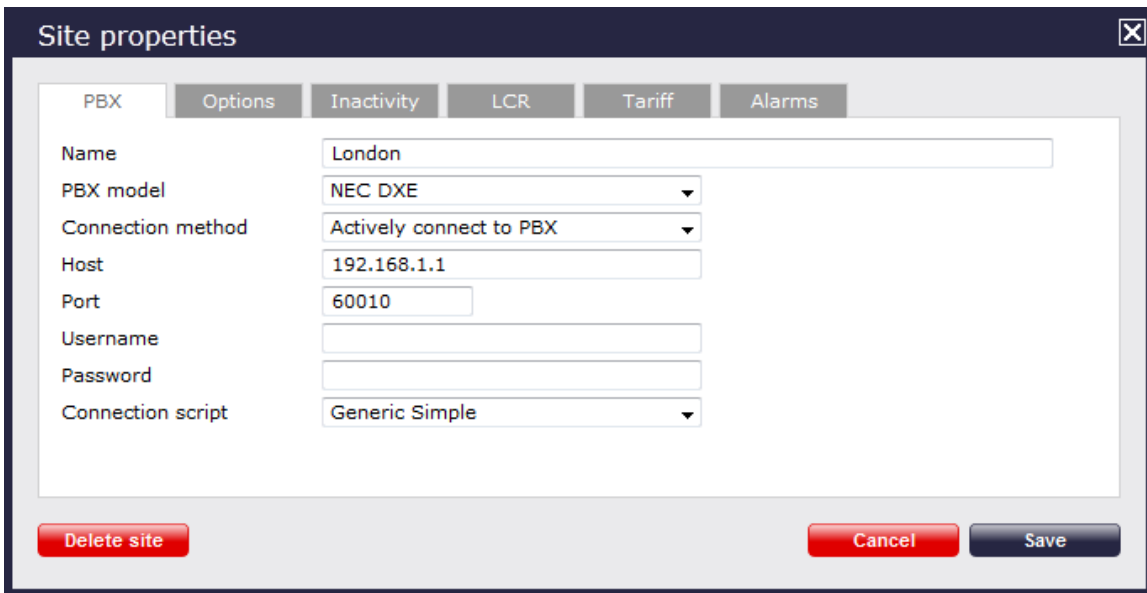
### CD DP00 Network setup



### Configuring TIM Plus

Follow the steps below to configure TIM Plus to collect the SMDR data from your NEC SV8100:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name London

PBX model NEC DXE

Connection method Actively connect to PBX

Host 192.168.1.1

Port 60010

Username

Password

Connection script Generic Simple

Delete site Cancel Save

3. In the `Site Properties` window, select `NEC DXE` from the `PBX model` drop-down list.
4. In the `Connection method` field, select `Actively connect to PBX` from the drop-down list.
5. In the `Host` field, enter the IP address of your NEC SV8100.
6. In the `Port` field, enter `60010`.
7. Leave the `Username` and `Password` fields blank.
8. In the `Connection script` field, select `Generic Simple` from the drop-down list.
9. Click on the `Save` button to apply the settings.

## Nortel

### Nortel BCM up to v3.x

Please refer to [Avaya BCM up to v3.x](#).

### Nortel BCM v4.x+

Please refer to [Avaya BCM v4.x+](#).

### Nortel Meridian Option Series

Please refer to [Avaya Meridian Option Series](#).


### Nortel Norstar


Please refer to [Avaya Norstar](#).

## Panasonic

## Panasonic DBS Series

These instructions help you configure your Panasonic DBS Series phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**  
 Panasonic DBS Series.TDT

**Required Tasks**

- Configure the SMDR output
- Install NetPBX
- Configure TIM Plus

### Configuring your SMDR output

Follow the steps below to configure your Panasonic DBS Series to output SMDR data to TIM Plus. The configuration needs to be performed from the Operator phone:

1. Press the **ON/OFF** key.
2. Press the **RECALL** key.
3. Press **# #** to enter the **Programming mode**.
4. Navigate to **Call logging/Remote programming** parameters.
5. Go to **Call logging - Parity check** and select **1**, then press the **#** key.
6. Go to **Call logging - Even/Odd parity** and select **1**, then press the **#** key.
7. Go to **Call logging - Baud rate (SMDR)** and select **4**, then press the **#** key.
8. Go to **Call logging - Stop bit** and select **1**, then press the **#** key.
9. Go to **Call logging - Data length** and select **4**, then press the **#** key.
10. Go to **Call logging - Printing selection out/in** and select **1** for incoming and outgoing calls.
11. Go to **Call logging - Printing selection local/long distance calls** and select **1** to print all outgoing calls, then press the **#** key.
12. Press the **ON/OFF** key to save the settings.

### Installing NetPBX

The Panasonic DBS Series phone system sends SMDR information via a serial connection. To collect the call logging data from the serial port and send it to TIM Plus, you first need to install the **NetPBX** software. For setup instructions, click on the link below:

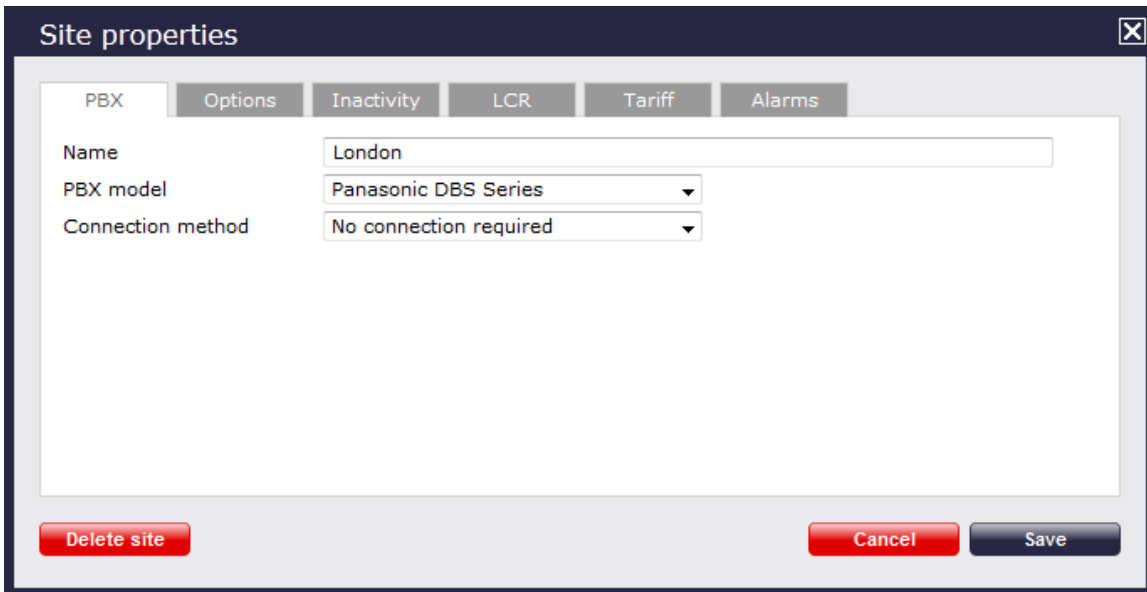
[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting call logging data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.

- Choose the site you want to configure and click **Properties**.



**Site properties**

**PBX** Options Inactivity LCR Tariff Alarms

Name: London

PBX model: Panasonic DBS Series

Connection method: No connection required


Delete site Cancel Save

- In the **Site Properties** window, select **Panasonic DBS Series** from the **PBX model** drop-down list.
- In the **Connection method** field, select **No connection required** from the drop-down list.
- Click on the **Save** button to apply the settings.


## Panasonic ICX/S-ICX

These instructions help you configure your Panasonic ICX/S-ICX phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a serial connection with this PBX.

**Support Files**

 Panasonic ICX S-ICX.TDT

**Required Tasks**

- Configure the SMDR output
- Install NetPBX
- Configure TIM Plus

### Configuring the SMDR output

The Panasonic ICX/S-ICX phone system sends SMDR information via a serial connection. You need to directly connect a serial cable from the Panasonic ICX/S-ICX phone system to the PC that **NetPBX** is installed and running on. For more information about the output and configuration of your SMDR data, please contact your system maintainer.

### Installing NetPBX

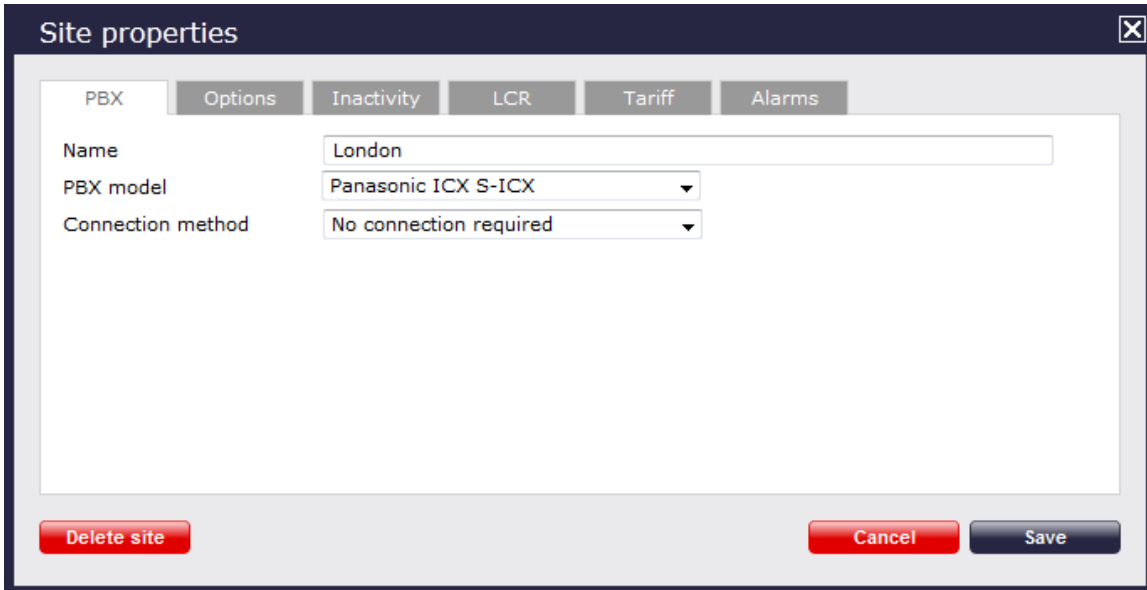
The Panasonic ICX/S-ICX phone system sends SMDR information via a serial connection. To collect the call logging data from the serial port and send it to TIM Plus, you first need to install the **NetPBX** software. For setup instructions, click on the link below:

## Install and configure NetPBX

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.




3. In the **Site Properties** window, select **Panasonic ICX S-ICX** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.


### Panasonic KX-TA/TE


These instructions help you configure your Panasonic KX-TA/TE phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a serial connection with this PBX.

**Support Files**

 Panasonic KX-TD Series.TDT

 Panasonic KX-TD Series.TDS

**Required Tasks**

Configure the SMDR output

Install NetPBX

Configure TIM Plus

### Configuring the SMDR output



Follow the steps below to configure your Panasonic KX-TA/TE to output SMDR data to TIM Plus. The configuration needs to be performed from a Panasonic KX-T7130 phone:

1. Set the System Program Switch on the EMSS Control Unit to the **Programming** position.
2. Press **-** **\*** followed by the **#** key, then enter your system password.
3. Press **#** **#** to enter the **Programming mode**.
4. Go to programming code **800** and set each of the fields as shown below. Press **Store** and then **Next** after each entry in order to move to the next field:

SMDR field	Value
NL-Code	CR+LF
Baud Rate	9600
Word Length	8 bits
Parity	None
Stop Bit	1 bit

5. Go to programming code **801** and set each of the fields as shown below. Press **Store** and then **Next** after each entry in order to move to the next field:

SMDR field	Value
Page Length	Leave as default
Skip Perf	Leave as default

6. Go to programming code **802** and set each of the fields as shown below. Press **Store** and then **Next** after each entry in order to move to the next field:

SMDR field	Value
Outgoing	On
Incoming	On

7. Set the System Program Switch back to **Store** position.

## Installing NetPBX

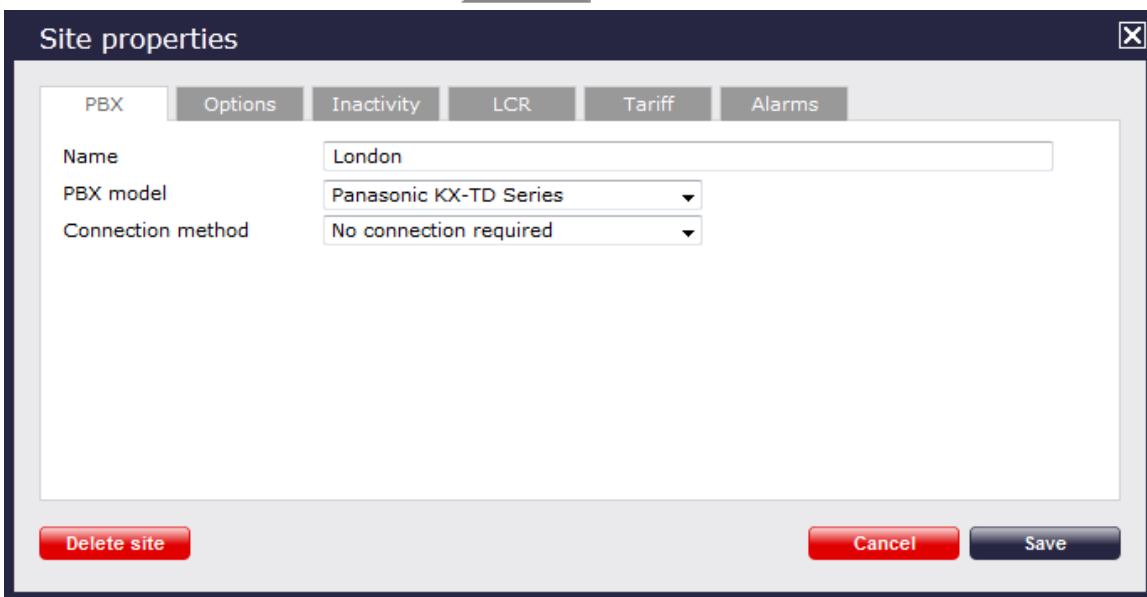
The Panasonic KX-TA/TE phone system sends SMDR information via a serial connection. To collect the call logging data from the serial port and send it to TIM Plus, you first need to install the **NetPBX** software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

## Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.




3. In the **Site Properties** window, select **Panasonic KX-TD Series** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings

## Panasonic KX-TDA/E/NCP500-1000/NS1000



The Panasonic KX-TDA/E/NCP500/1000 can be configured to send its SMDR data over a serial (RS232) or an IP connection. Click on one of the links below that relates to your preferred connection method.

### Panasonic KX-TDA/E/NCP500-1000/NS1000 - Serial connection

These instructions help you configure your Panasonic KX-TDA/E/NCP500/1000 phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**

-  Panasonic KX-TD Series.TDT
-  Panasonic KX-TD Series.TDS

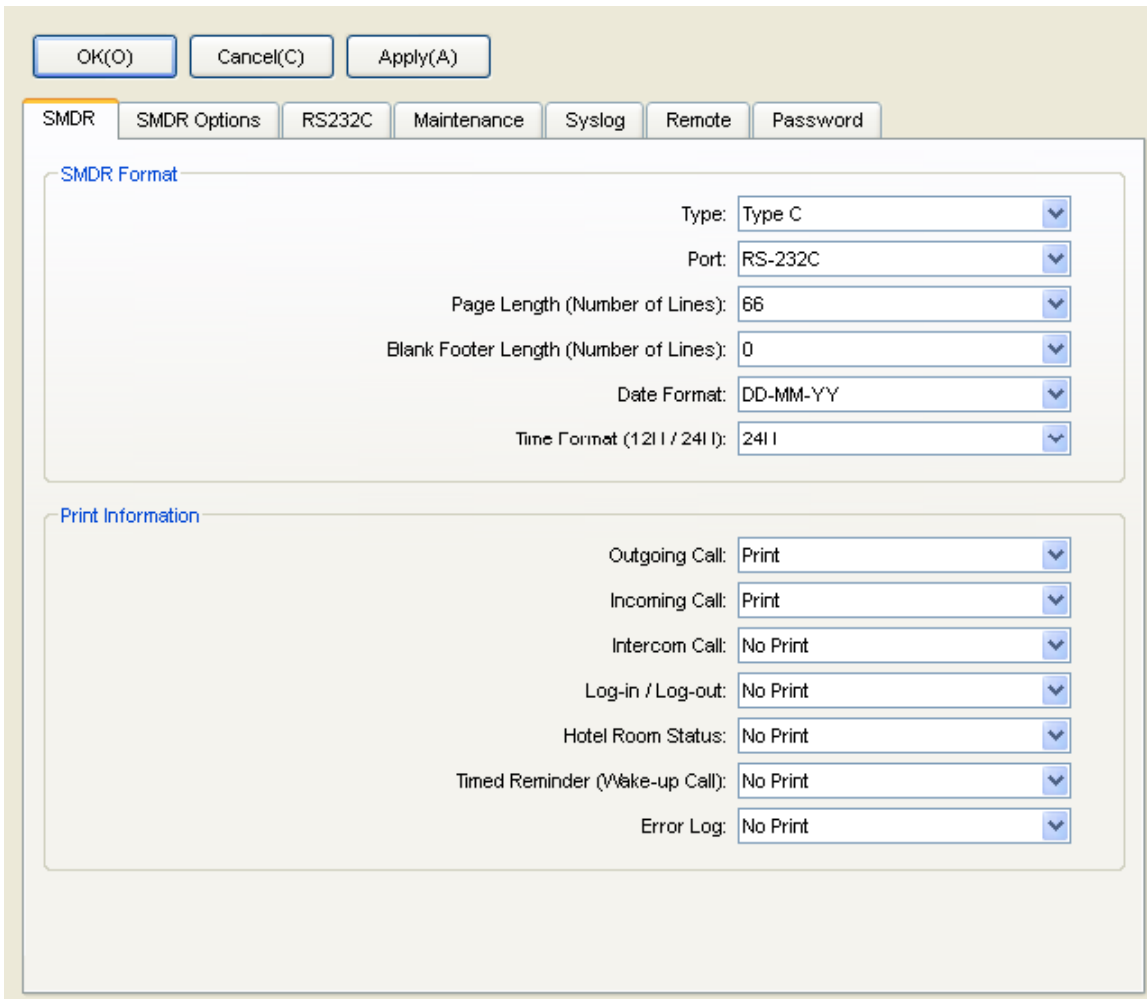
**Required Tasks**

- Configure the SMDR output
- Install NetPBX
- Configure TIM Plus

### Configuring the SMDR output

Follow the steps below to configure your Panasonic phone system to output SMDR to TIM Plus.

1. Log in to the Panasonic Maintenance Console program.
2. Click on the **11. Maintenance** tab from the left-hand menu.
3. Click on the **SMDR** tab and configure the options as shown below:



The screenshot shows the SMDR configuration window with the following settings:

Section	Parameter	Value
SMDR Format	Type:	Type C
	Port:	RS-232C
	Page Length (Number of Lines):	66
	Blank Footer Length (Number of Lines):	0
	Date Format:	DD-MM-YY
	Time Format (1211 / 2411):	2411
Print Information	Outgoing Call:	Print
	Incoming Call:	Print
	Intercom Call:	No Print
	Log-in / Log-out:	No Print
	Hotel Room Status:	No Print
	Timed Reminder (Wake-up Call):	No Print
	Error Log:	No Print

4. Click on the **SMDR Options** tab and configure the options as shown below:

OK(O) Cancel(C) Apply(A)

SMDR SMDR Options RS232C Maintenance Syslog Remote Password

**Option**

ARS Dial: Dial after ARS Modification

Caller ID Number & Name: Number

DDI / DID Number & Name: Number

Secret Dial: Print "..." (Secret)

Privacy Mode: Print Dialed Number

Condition Code "RC": Print

Condition Code "AN": Print

Caller ID Modification: After Modification

**LAN**

SMDR Port Number: 2300

SMDR Password: PCCSMDR

New-Line Code for Telnet: CR + LF

\* ) Perform System Reset for changes to take effect

5. Click on the **Apply** button to save the changes.

### Installing NetPBX

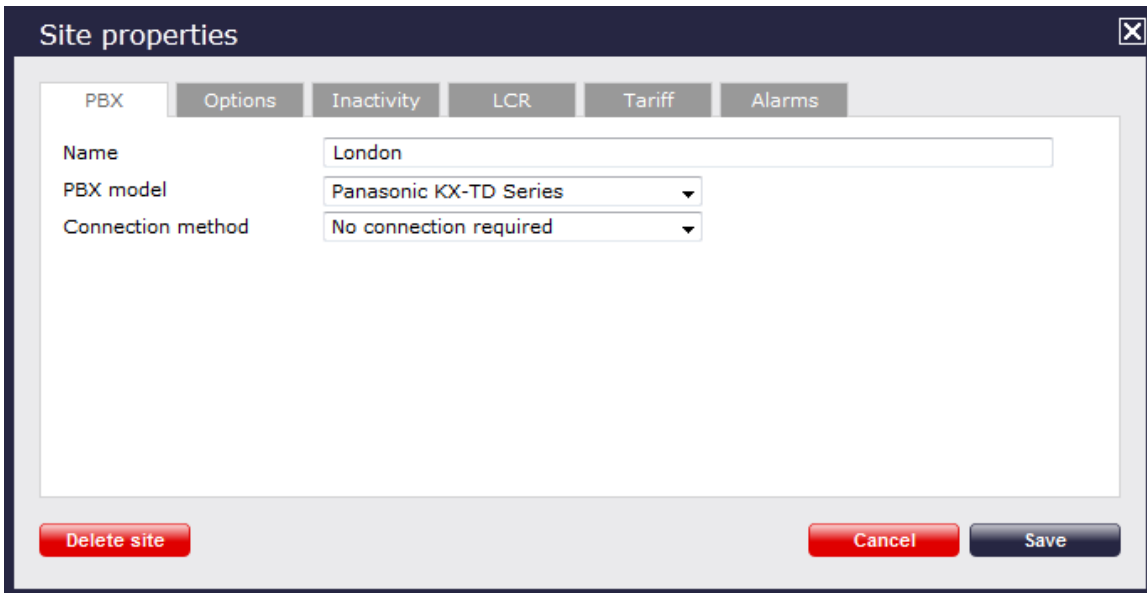
The Panasonic KX-TDA/E/NCP500/1000 phone systems can send SMDR information via a serial connection. To collect the call logging data from the serial port and send it to TIM Plus, you first need to install the NetPBX software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: Panasonic KX-TD Series

Connection method: No connection required


Delete site Cancel Save

3. In the **Site Properties** window, select **Panasonic KX-TD Series** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.



### Panasonic KX-TDA/E/NCP500-1000/NS1000 - IP connection

These instructions help you configure your Panasonic KX-TDA/E/NCP500/1000 phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a TCP connection to this PBX.

**Support Files**

-  Panasonic KX-TD Series.TDT
-  Panasonic KX-TD Series.TDS

**Required Tasks**

- Configure the SMDR output
- Configure TIM Plus

### Configuring your SMDR

Follow the instructions below to configure your Panasonic to output SMDR data to TIM Plus via an IP connection:

1. Log in to the Panasonic Maintenance Console program.
2. Click on the **11. Maintenance** tab from the left-hand menu.
3. Click on the **SMDR** tab and configure the options as shown below:

OK(O) Cancel(C) Apply(A)

SMDR SMDR Options RS232C Maintenance Syslog Remote Password

**SMDR Format**

Type:	Type C
Port:	LAN
Page Length (Number of Lines):	66
Blank Footer Length (Number of Lines):	0
Date Format:	DD-MM-YY
Time Format (1211 / 2411):	2411

**Print Information**

Outgoing Call:	Print
Incoming Call:	Print
Intercom Call:	No Print
Log-in / Log-out:	No Print
Hotel Room Status:	No Print
Timed Reminder (Wake-up Call):	No Print
Error Log:	No Print

- Click on the **SMDR Options** tab and configure the options as shown below:

OK(O) Cancel(C) Apply(A)

SMDR SMDR Options RS232C Maintenance Syslog Remote Password

**Option**

ARS Dial: Dial after ARS Modification

Caller ID Number & Name: Number

DDI / DID Number & Name: Number

Secret Dial: Print "..." (Secret)

Privacy Mode: Print Dialed Number

Condition Code "RC": Print

Condition Code "AN": Print

Caller ID Modification: After Modification

**LAN**

SMDR Port Number: 2300

SMDR Password: PCCSMDR

New-Line Code for Telnet: CR + LF

\* ) Perform System Reset for changes to take effect

5. Click on the **Apply** button to save the changes.

### Configuring TIM Plus

Follow the steps below to configure TIM Plus to connect to your Panasonic phone system:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties** .

The screenshot shows a 'Site properties' dialog box with the following fields and values:


Field	Value
Name	London
PBX model	Panasonic KX-TD Series
Connection method	Actively connect to PBX
Host	192.168.1.1
Port	2300
Username	
Password	••••••
Connection script	Panasonic

Buttons at the bottom: Delete site (red), Cancel (red), Save (dark blue).



3. In the **Site Properties** window, select **Panasonic KX-TD Series** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Actively connect to PBX** from the drop-down list.
5. In the **Host** field, enter the IP address of your phone system.
6. In the **Port** field, enter **2300**.
7. Leave the **Username** field blank.
8. In the **Password** field, enter the password required to connect to your phone system, by default **PCCSMDR**.
9. In the **Connection script** field, select **Panasonic** from the drop-down list.
10. Click on the **Save** button to apply the settings.

### Panasonic KX-TD Series

These instructions help you configure your Panasonic KX-TD Series phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**

-  Panasonic KX-TD Series.TDT
-  Panasonic KX-TD Series.TDS

**Required Tasks**

- Configure the SMDR output
- Install NetPBX
- Configure TIM Plus

### Configuring your SMDR output



Follow the instructions below to configure your Panasonic KX-TD phone system to output SMDR data to TIM Plus. The configuration needs to be performed from a Digital Proprietary Telephone (DPT) such as the KX-T7431, KX-T7433, KX-T7436, KX-T7230, KX-T7235.

1. Press the **PROG** + **\*** + **#** buttons simultaneously, then enter your system password.
2. Enter programming mode **800** and press the **Next** button.
3. Press the **Select** button to set the **Outgoing** option to **All**, then click on the **Store** button. Click **Next**.
4. Press the **Select** button to set the **Incoming** option to **All**, then press the **Store** button.
5. Press the **End** button to complete the configuration.

## Installing NetPBX

The Panasonic KX-TD Series phone system sends SMDR information via a serial connection. To collect the call logging data from the serial port and send it to TIM Plus, you first need to install the [NetPBX](#) software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

## Configuring TIM Plus

Once NetPBX is configured and collecting call logging data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.

The screenshot shows a 'Site properties' window with the following details:

- Tab:** PBX
- Name:** London
- PBX model:** Panasonic KX-TD Series
- Connection method:** No connection required
- Buttons:** Delete site, Cancel, Save


3. In the **Site Properties** window, select **Panasonic KX-TD Series** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.



## Samsung

### Samsung DCS

These instructions help you configure your Samsung DCS phone system to work with TIM Plus. Contact your system maintainer if you are not

familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**  
 Samsung DCS . TDT  
 Samsung DCS . TDS

**Required Tasks**  
 Configure the SMDR output  
 Install NetPBX  
 Configure TIM Plus

### Configuring your SMDR output

Follow the instructions below to configure your Samsung DCS to output SMDR data to TIM Plus. The configuration needs to be performed from an LCD handset.

1. Open **Programming** and select 725.
2. Program each option as presented below:

SMDR field	Value
Page Header	Yes
Lines per page	1
Incoming Call	Yes
Outgoing Call	Yes
Authorise Code	Yes
SMDR Start Time	Yes
In/Out Group	No
DND Calls	No
Wake-Up Calls	No
Directory Names	None

<b>Caller ID Data</b>	<b>Yes</b>
<b>Abandoned Call</b>	<b>Yes</b>
<b>No of Dial Mask</b>	<b>00</b>
<b>DID Num/Name</b>	<b>Yes</b>

- Next, press the **SPKR** key and select 804.
- Dial 0 and use the arrow keys to select **SMDR**.
- Press the **TRSF** key to complete the configuration.

## Installing NetPBX

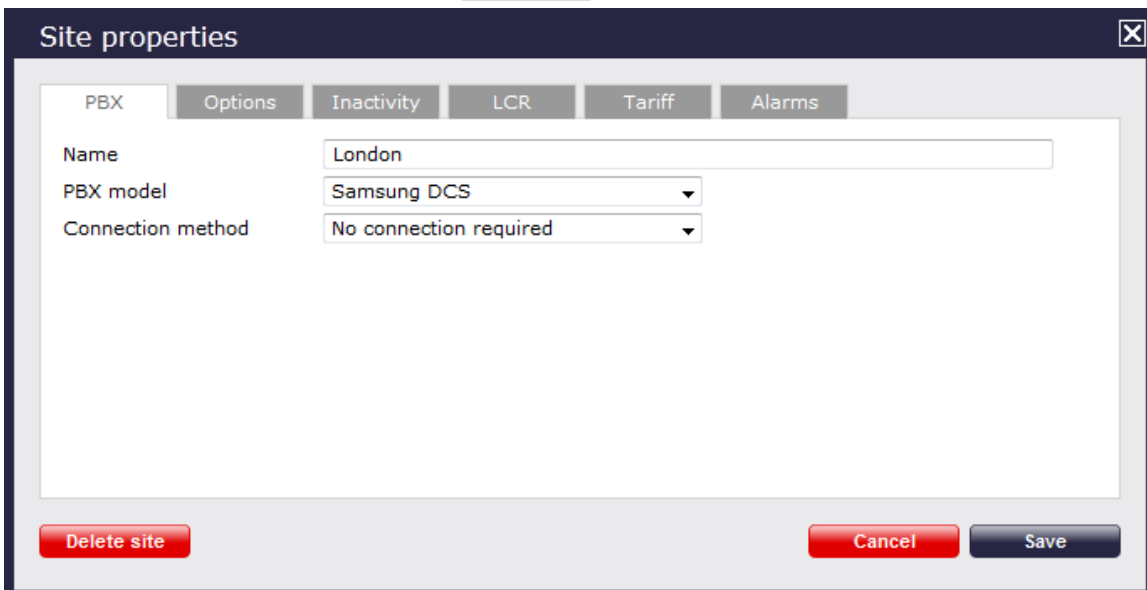
The Samsung DCS phone system sends SMDR data via a serial connection. To collect the data from the serial port and send it to TIM Plus, you first need to install the **NetPBX** software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

## Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

- Click on the **Directory** tab.
- Choose the site you want to configure and click **Properties**.



- In the **Site Properties** window, select **Samsung DCS** from the **PBX model** drop-down list.
- In the **Connection method** field, select **No connection required** from the drop-down list.
- Click on the **Save** button to apply the settings.


## Samsung iDCS

The Samsung iDCS can be configured to send its SMDR data over a serial (RS232) or an IP connection. Click on one of the links below that relates to your preferred connection method.


### Samsung iDCS - Serial connection


These instructions help you configure your Samsung iDCS phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a serial connection with this PBX.

**Support Files**

 [Samsung DCS . TDT](#)

 [samsung DCS . TDS](#)

**Required Tasks**

[Configure the SMDR output](#)

[Install NetPBX](#)

[Configure TIM Plus](#)

### Configuring your SMDR output

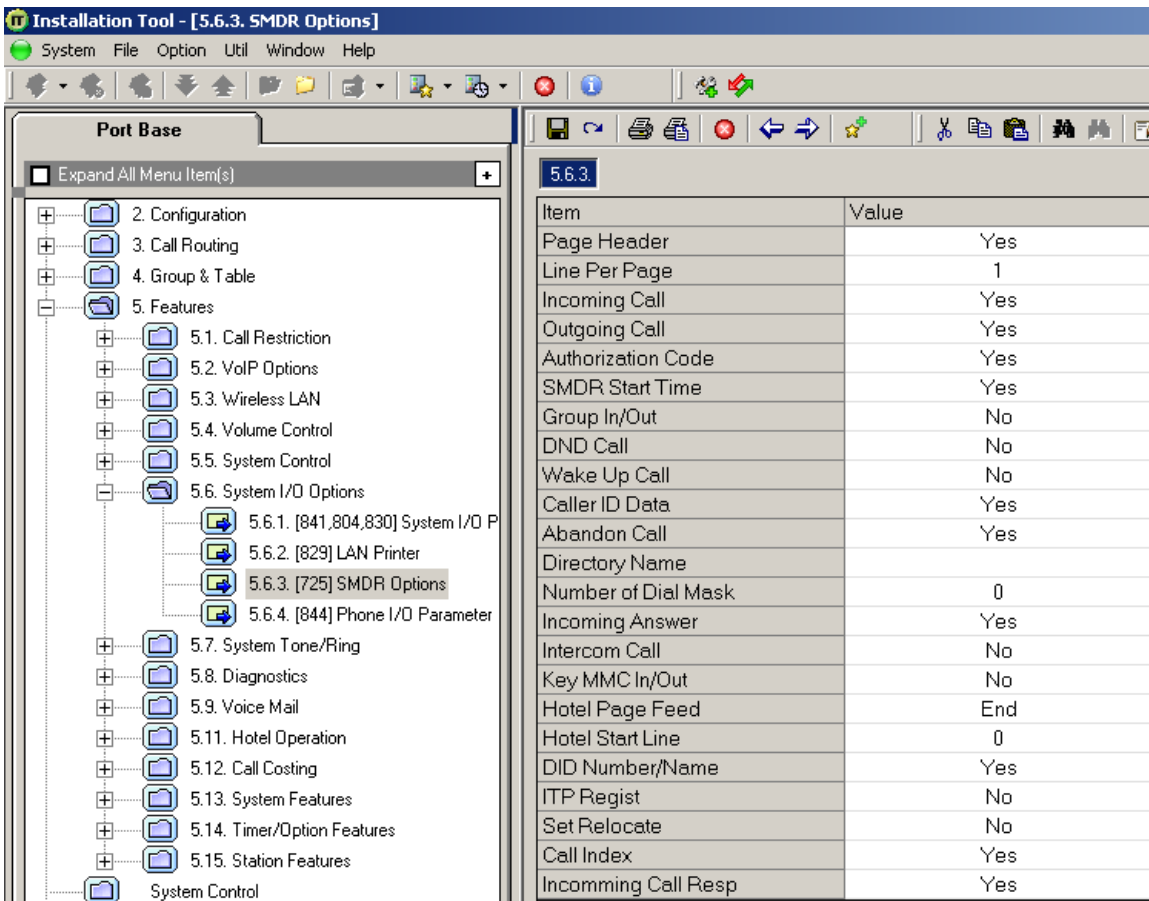
Follow the instructions below to configure your Samsung iDCS to output SMDR data to TIM Plus.

1. Log in to the Samsung Installation Tool software.
2. Click on the **5. Features** option from the left-hand menu.
3. Click on the **5.6 System I/O Options** tab and select **5.6.2. LAN Printer**.
4. In the **LAN Printer** options configure the entries in the **SMDR** column, as shown below:

The screenshot shows the 'Installation Tool - [5.6.2. LAN Printer]' window. The left pane shows a tree view under 'Port Base' with '5.6.2. [829] LAN Printer' selected. The right pane displays a table of settings for SMDR.

Data Type	SMDR
Current Status	Off
Buffered Data Printout	No
Update to LAN Card	Yes
Printer IP Address	192.168.1.1
Printer TCP Port	5100
LAN TCP Port	10020
Printer Destination	PC
Retry Count	3
Retry Interval (sec)	10
PJL Enable	False
Printer Language	Raw
Paper Size	Letter
Font Type	Courier
Duplex Enable	False
Orientation	Portrait
Printer Tray	Default
Resolution	300 DPI
Line per Page	1

5. Click on the **Save** icon to save the settings.
6. Click on the **5.6.3. SMDR Options** tab and configure the following settings:



7. Click on the **Save** icon at the top of the window to save the settings.

### Installing NetPBX

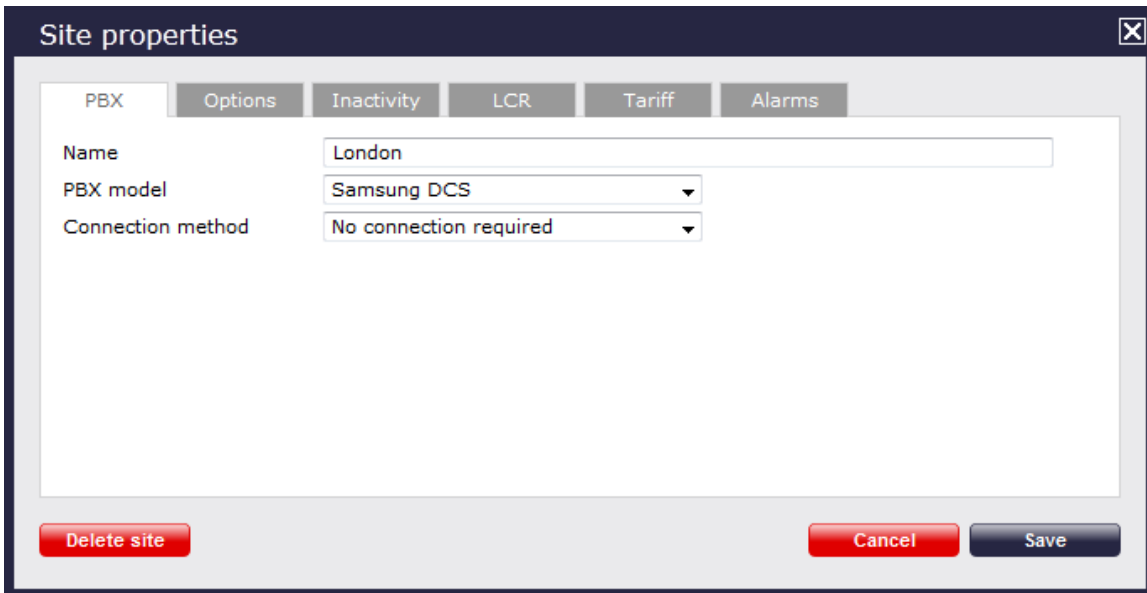
The Samsung iDCS phone system can send its SMDR data via a serial connection. To collect the data from the serial port and send it to TIM Plus, you first need to install the [NetPBX](#) software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the following steps:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: Samsung DCS

Connection method: No connection required


Delete site Cancel Save

3. In the **Site Properties** window, select **Samsung DCS** from the **PBX model** drop-down list.
4. In the **Connection method** field select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.



### Samsung iDCS - IP connection

These instructions help you configure your Samsung iDCS phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a TCP connection to this PBX.

**Support Files**

-  Samsung DCS . TDT
-  Samsung DCS . TDS

**Required Tasks**

- Configure the SMDR output
- Configure TIM Plus

### Configuring your SMDR output

Follow the instructions below to configure your Samsung iDCS phone system to output SMDR data to TIM Plus.

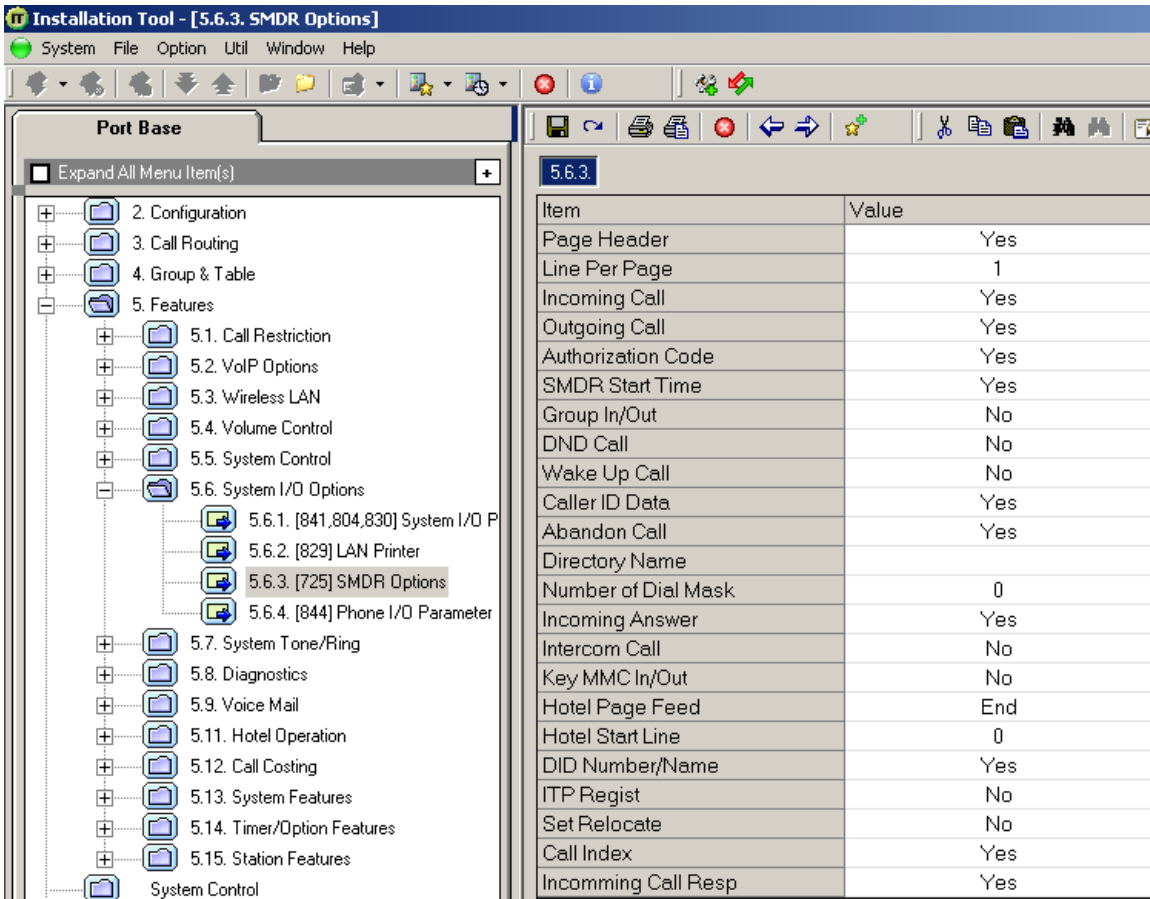
1. Log in to the Samsung Installation Tool software.
2. Click on the **5. Features** option from the left-hand menu.
3. Click on the **5.6 System I/O Options** tab and select **5.6.2. LAN Printer**.
4. In the **LAN Printer** options, configure the entries in the **SMDR** column, as shown below:

The screenshot shows the 'Installation Tool - [5.6.2. LAN Printer]' window. The left pane shows a tree view under 'Port Base' with '5.6.2. [829] LAN Printer' selected. The right pane displays a table of settings for SMDR.

Data Type	SMDR
Current Status	Off
Buffered Data Printout	No
Update to LAN Card	Yes
Printer IP Address	192.168.1.1
Printer TCP Port	5100
LAN TCP Port	10020
Printer Destination	PC
Retry Count	3
Retry Interval (sec)	10
PJL Enable	False
Printer Language	Raw
Paper Size	Letter
Font Type	Courier
Duplex Enable	False
Orientation	Portrait
Printer Tray	Default
Resolution	300 DPI
Line per Page	1

- Click on the **Save** icon to save the settings.
- Click on the **5.6.3. SMDR Options** tab and configure the following settings:



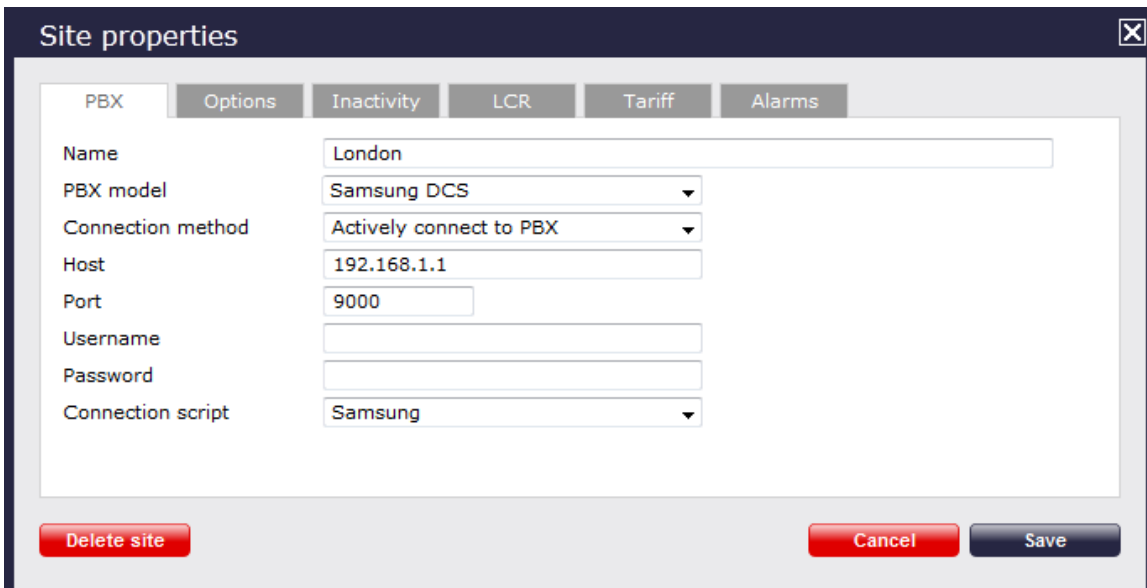


7. Click on the **Save** icon at the top to save the settings.

### Configuring TIM Plus

Follow the steps below to configure TIM Plus to collect the SMDR data from your Samsung iDCS:

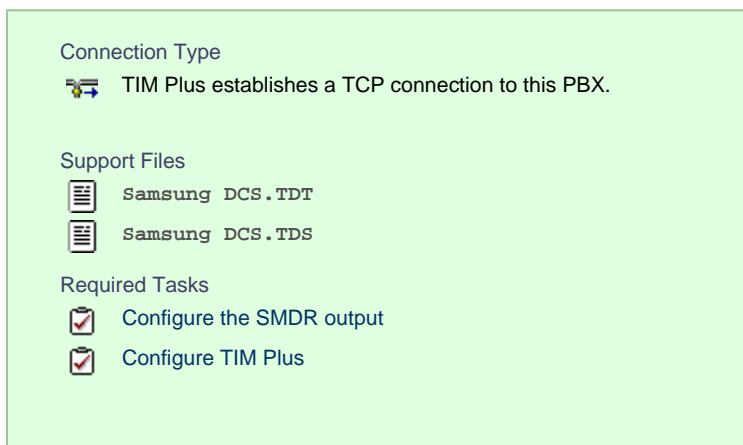
1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



3. In the `Site Properties` window, select `Samsung DCS` from the `PBX model` drop-down list.
4. In the `Connection method` field, select `Actively connect to PBX` from the drop-down list.
5. In the `Host` field, enter the IP address of your Samsung iDCS.
6. In the `Port` field, enter `9000`.
7. Leave the `Username` and `Password` fields blank.
8. In the `Connection script` field, select `Samsung` from the drop-down list.
9. Click on the `Save` button to apply the settings.

## Samsung OfficeServ

These instructions help you configure your Samsung OfficeServ phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.



## Configuring your SMDR output

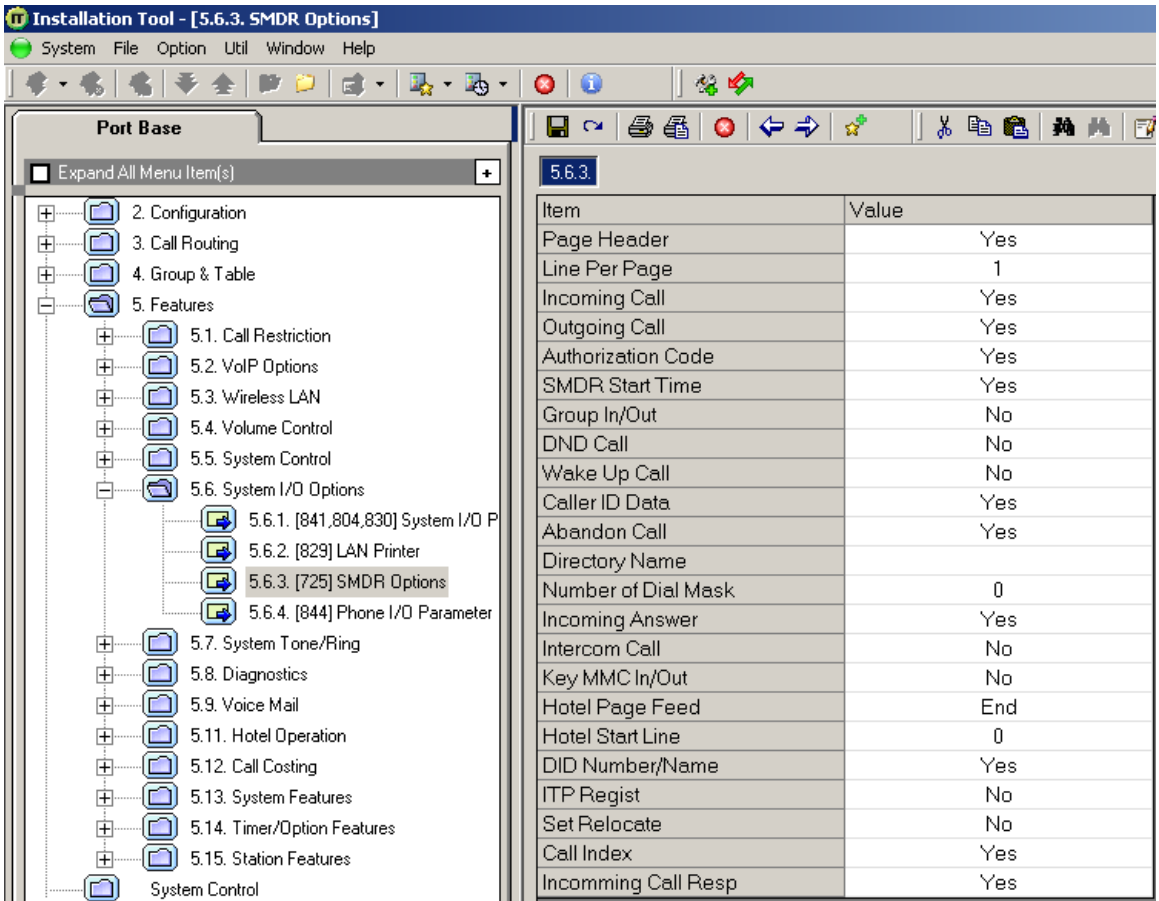
Follow the instructions below to configure your Samsung OfficeServ phone system to output SMDR data to TIM Plus.

1. Log in to the Samsung Installation Tool software.
2. Click on the `5. Features` option from the left-hand menu.
3. Click on the `5.6 System I/O Options` tab and select `5.6.2. LAN Printer`.
4. In the `LAN Printer` options, configure the entries in the `SMDR` column, as shown in the screenshot below, modifying the value of the `Printer IP Address` field accordingly, in order to match the IP address of the computer running TIM Plus.

The screenshot shows the 'Installation Tool - [5.6.2. LAN Printer]' window. The left pane shows a tree view under 'Port Base' with '5.6.2. [829] LAN Printer' selected. The right pane shows a table of settings for SMDR.

Data Type	SMDR
Current Status	Off
Buffered Data Printout	No
Update to LAN Card	Yes
Printer IP Address	192.168.1.1
Printer TCP Port	5100
LAN TCP Port	10020
Printer Destination	PC
Retry Count	3
Retry Interval (sec)	10
PJL Enable	False
Printer Language	Raw
Paper Size	Letter
Font Type	Courier
Duplex Enable	False
Orientation	Portrait
Printer Tray	Default
Resolution	300 DPI
Line per Page	1

5. Click on the **Save** icon to save the settings.
6. Click on the **5.6.3. SMDR Options** tab and configure the following settings:

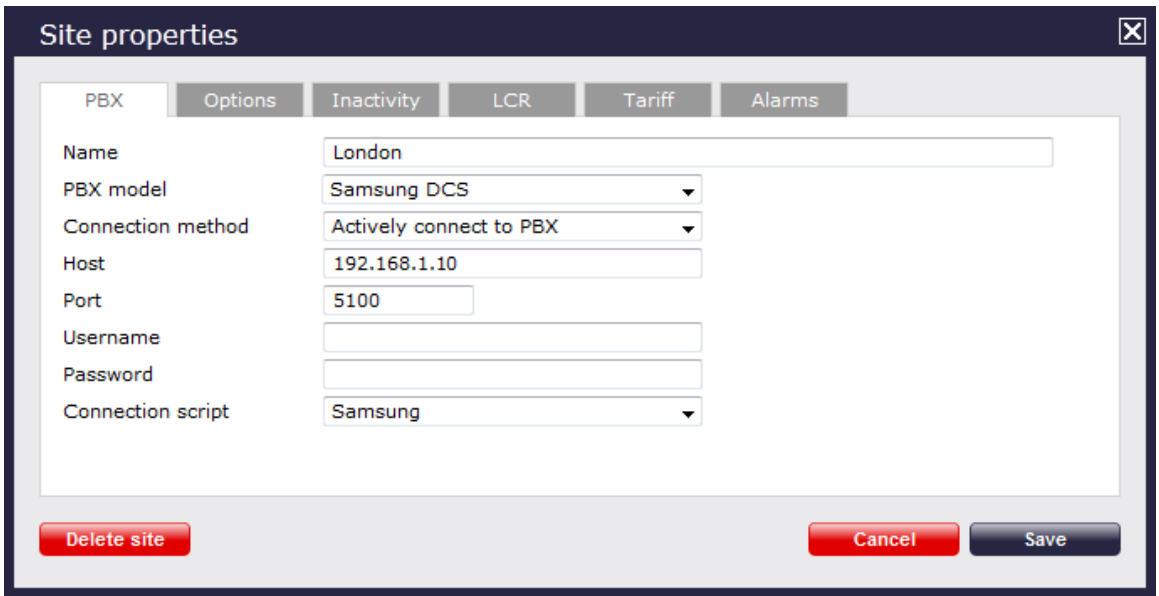


7. Click on the **Save** icon at the top to save the settings.

### Configuring TIM Plus

Follow the instructions below to configure TIM Plus to collect the SMDR data from your Samsung OfficeServ:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.




3. In the **Site Properties** window, select **Samsung DCS** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Actively connect to PBX** from the drop-down list.
5. In the **Host** field, enter the IP address of your Samsung OfficeServ.
6. In the **Port** field, enter **5100**.
7. Leave the **Username** and **Password** fields blank.
8. In the **Connection script** field, select **Samsung** from the drop-down list.
9. Click on the **Save** button to apply the settings.

## ShoreTel




### ShoreTel PBX

These instructions help you configure your ShoreTel phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a DSN connection with this PBX.

**Support Files**

-  ShoreTel.TDT
-  ShoreTel.TDS
-  ShoreTel.DBS

**Required Tasks**

- Configure the SMDR output
- Set up a DSN connection
- Configure TIM Plus

### Configuring your SMDR output

By default, the ShoreTel phone system writes its CDR data to a MySQL database called `shoreWareCDR`. In order for TIM Plus to connect to the database and collect the call logging data, you need to create a username and password in the MySQL database on the ShoreWare Server. Contact your system maintainer if you are not familiar with this procedure.

The following information is required for TIM Plus to connect to the ShoreTel ShoreWareCDR database:

- IP address or hostname of the ShoreWare Server where the MySQL database resides.
- Username and Password of the `shoreWareCDR` database.

The default credentials for the ShoreWareCDR database are shown below:



Username: `st_cdrreport`  
Password: `passwordcdrreport`

## Setting up a DSN connection

To enable TIM Plus to work with your ShoreTel phone system, you first need to set up a DSN connection by following the steps below:

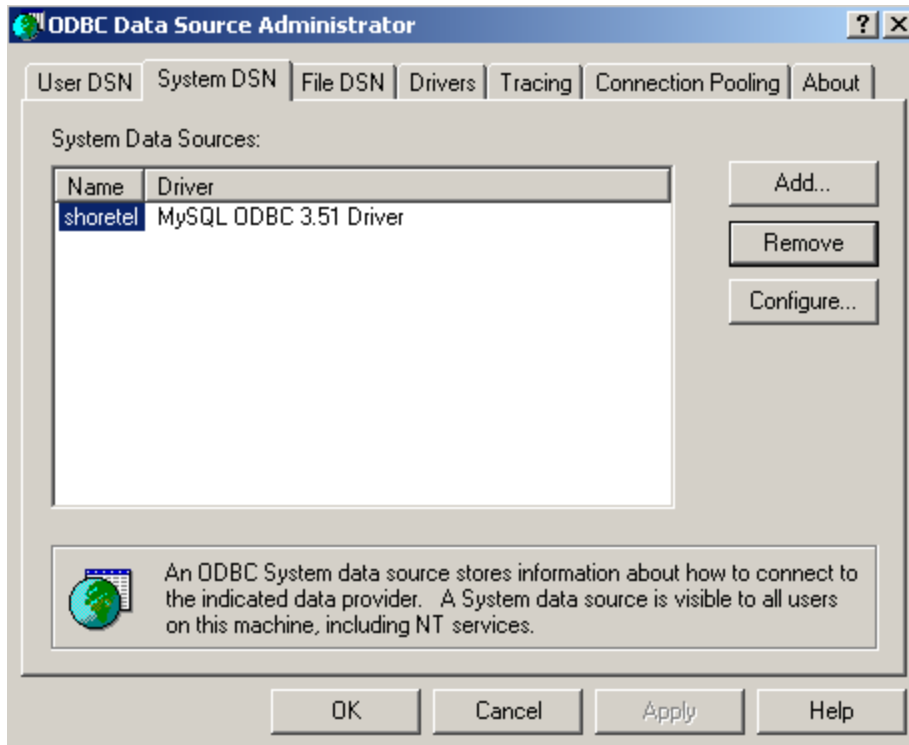
1. Open Windows Control Panel and select the **Administrative Tools** icon
2. Double-click on the **Data Sources (ODBC)** icon to open the ODBC Data Source Administrator window



For a 64 bit system, access the ODBC Data Source Administrator from the following location `C:\Windows\System32\odbcad32.exe`

3. Click on the **System DSN** tab
4. Click on the **Add** button
5. Select **MySQL ODBC 3.51 Driver** from the driver list and click **Finish**. If you cannot see the **MySQL ODBC 3.51 Driver** option in the drop-down list, you can download it from <http://www.mysql.com>
6. In the **Name** field, enter `shoretel`
7. In the **Description** field, enter `TIM Plus link to ShoreTel`
8. In the **Server** field, enter the IP address or hostname of your ShoreWare Server
9. In the **Username** field, enter the username for your ShoreWareCDR database
10. In the **Password** field, enter the password for your ShoreWareCDR database
11. In the **Database** drop-down list, select `ShoreWareCDR`
12. Click on the **Test** button to confirm the information you entered is correct and that the connection is successful
13. Click on the **OK** button to close the window

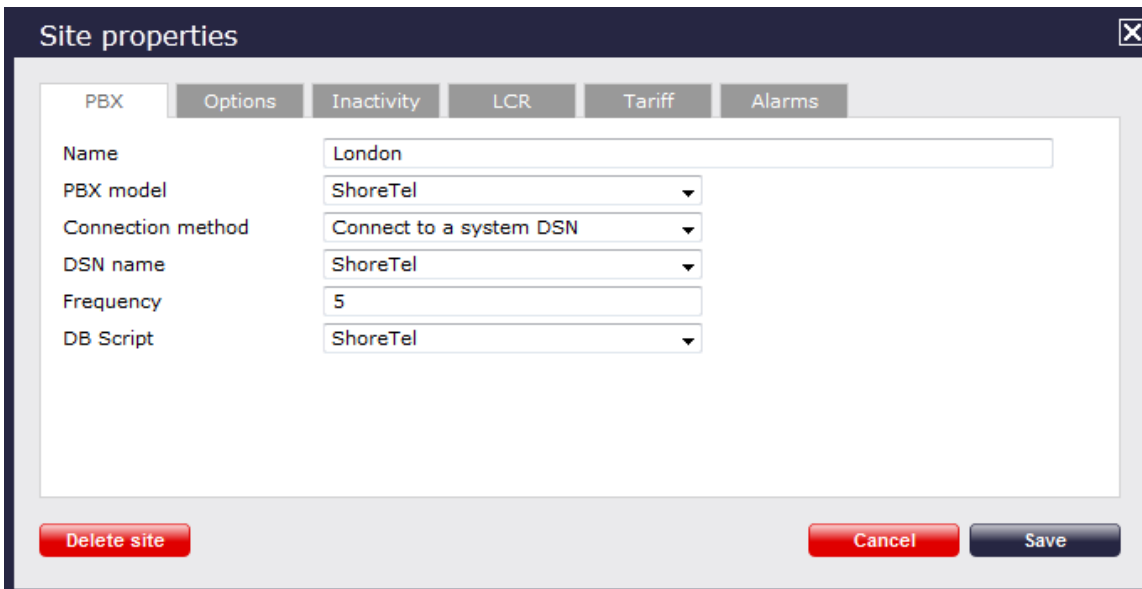
An example of an ODBC entry is shown below:



## Configuring TIM Plus

Once the DSN connection has been set up, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



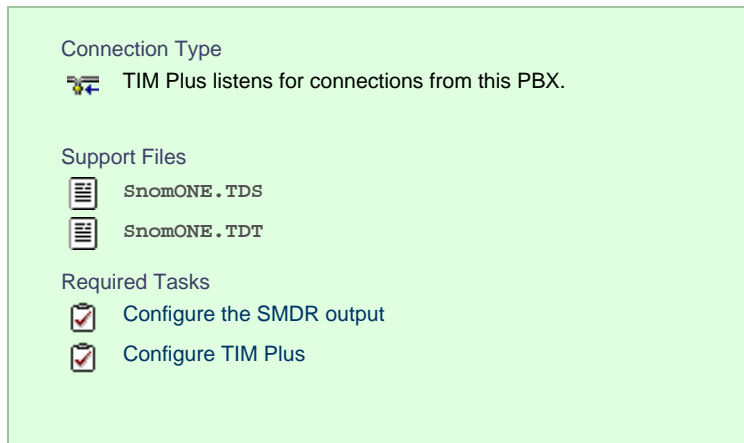
3. In the **Site Properties** window, select **ShoreTel** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Connect to a system DSN** from the drop-down list.
5. In the **DSN name** field, select **ShoreTel** from the drop-down list.
6. In the **Frequency** field, enter 5.

7. In the `DB script` field, select `ShoreTel` from the drop-down list.
8. Click on the **Save** button to apply the settings.

## SnomONE

### SnomONE PBX

These instructions help you configure your SnomONE phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.



### Configuring the SMDR output

The Snom telephone system can be configured to send its CDR records via a TCP/IP connection. To configure the output, enter the IP address of the PC running TIM Plus and the port number you want to use for the data output in the `CDR URL` settings of the phone system, as shown below:

**CDR URL:** `cdr:192.168.1.2:1000`

The CDR string must be configured in the `Long` format, using the variables presented in the table below:



Short	Long	Description	Value
SS	SS	A dollar sign	\$
Si	S(call_id)	Caller-ID of call, as seen in the SIP packet	
Sv	S(call_type)	Type of call. Default is attendant*	attendant
Sm	S(domain)	Domain name of the call	domain.com
Sl	S(lang)	Language of the call	en
Sf	S(sip_from)	The From header, as seen in SIP packet	
St	S(sip_to)	The To header, as seen in the SIP packet	
SF	S(calling)	Extension number of the caller	123
ST	S(called)	Extension number of the called party	123
Sx	S(orig_trunk)	Name of originating trunk, if present	Trunk 1
Sy	S(dest_trunk)	Name of destination trunk, if present	Trunk 1
SR	S(account)	Account that is charged for redirected call	
Sr	S(redirect_dest)	Destination for a redirected call (used only if call is redirected)	
SS	S(start_time)	Start time in seconds	
SC	S(talk_duration)	Connected duration of the call	
SA	S(ring_duration)	Answered duration of call (useful if the call is ringing/answered through queue)	
SE	S(hold_duration)	Hold duration for the call	
SW	S(wait_duration)	IVR duration for the call	
Sw	S(start_date_time)	Start time (YYYYMMDDHHMMSS)	20071023123224
Sb	S(date)	Date (YYYYMMDD) (version 2.1.9)	20071023
SB	S(time)	Time (HHMMSS) (version 2.1.9)	
Se	S(extension)	Extension number of call (originating or receiving)	
So	S(direction)	Direction of call (i for inbound; o for out)	i or o
Sc	S(remote_call_id)	Caller-ID of remote party	
Sd	S(duration)	Duration of call in seconds (inc. hold time)	
Ss	S(extn_duration)	Speaking duration (does not inc. hold time)	
SM	S(cmc)	Client matter code (CMC)	781299
S(record_location)		The location of recorded files	

An example of a CDR string configured in the `LONG` format is presented below:

```

$$ (start_date_time);$(wait_duration);$(ring_duration);$(duration);$(direction);$(orig_trunk);$(calling);$(extension);$(called);$(dest_trunk);$(redirect_dest);$(account);$(lang);$(domain);$(call_id);$(primary_call_id);$(remote_call_id)

```

## Configuring TIM Plus

Follow the steps below to configure TIM Plus to listen for SMDR data from your telephone system:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.

The screenshot shows a 'Site properties' dialog box with the following fields and values:

Field	Value
Name	Test
PBX model	SnomONE
Connection method	Listen for connections from PBX
Host	
Port	1000


Buttons at the bottom: Delete site (red), Cancel (red), Save (dark blue).



3. In the **Site Properties** window, select **SnomOne** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Listen for connections from PBX** from the drop-down list.
5. Leave the **Host** field blank.
6. In the **Port** field, enter the port number configured in the phone system.
7. Click on the **Save** button to apply the settings.

## SpliceCom

### SpliceCom Maximiser

These instructions help you configure your SpliceCom Maximiser phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a TCP connection to this PBX.

**Support Files**  
 SpliceCom Maximiser.TDT  
 SpliceCom Maximiser.TDS

**Required Tasks**  
 Configure the SMDR output  
 Configure TIM Plus

### Configuring the SMDR output

By default, the call logging output of the SpliceCom Maximiser is enabled and you do not normally require a password to obtain it. To protect your call logging data, you can set a *Call Logging Password* in the *System Details* screen of your Maximiser's web management interface. If you decide to set a password, you need to enter this when configuring TIM Plus (below).

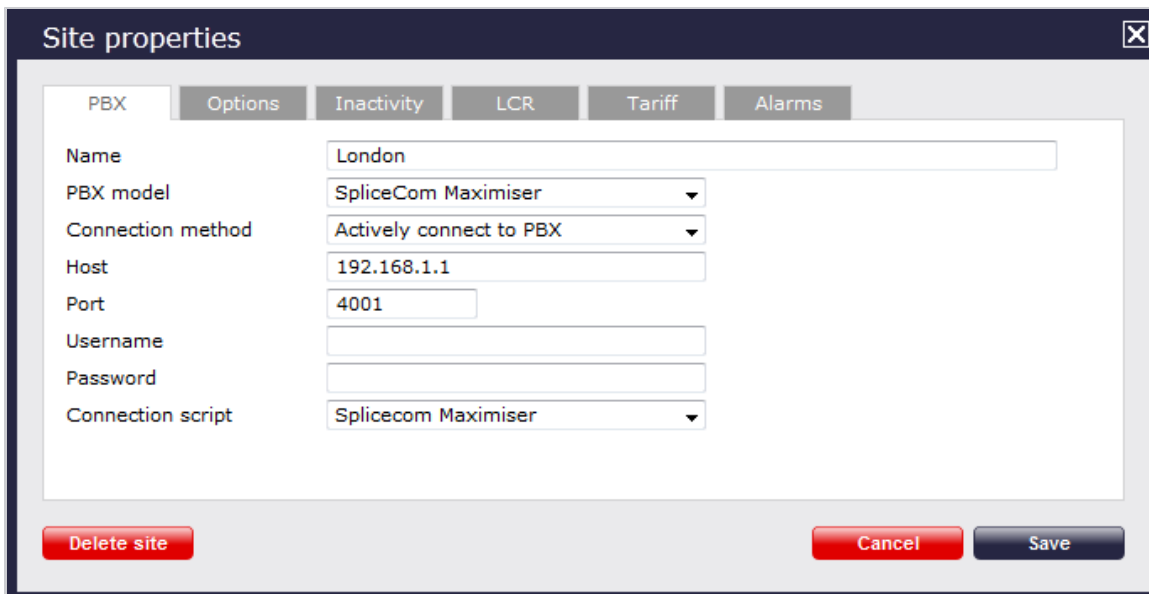


Your system maintainer may have already set a call logging password for you.

### Configuring TIM Plus

Follow the steps below to configure TIM Plus to collect call logging data from your SpliceCom Maximiser:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



The image shows a 'Site properties' dialog box with a dark blue title bar and a close button (X) in the top right corner. The dialog has several tabs: 'PBX', 'Options', 'Inactivity', 'LCR', 'Tariff', and 'Alarms'. The 'PBX' tab is selected. The form contains the following fields and controls:

- Name:** Text input field containing 'London'.
- PBX model:** Drop-down menu showing 'SpliceCom Maximiser'.
- Connection method:** Drop-down menu showing 'Actively connect to PBX'.
- Host:** Text input field containing '192.168.1.1'.
- Port:** Text input field containing '4001'.
- Username:** Empty text input field.
- Password:** Empty text input field.
- Connection script:** Drop-down menu showing 'Splicecom Maximiser'.

At the bottom of the dialog, there are three buttons: 'Delete site' (red), 'Cancel' (red), and 'Save' (grey).

3. In the *Site Properties* window, select *Splicecom Maximiser* from the *PBX model* drop-down list.

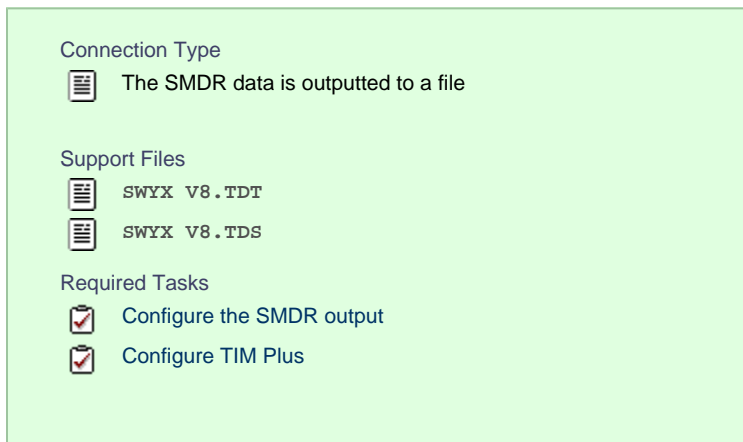
4. In the `Connection method` field, select **Actively connect to PBX** from the drop-down list.
5. In the `Host` field, enter the IP address of your SpliceCom Maximiser.
6. In the `Port` field, enter **4001**.
7. Leave the `Username` field blank.
8. If your Maximiser has a `call logging password` set, enter it in the `Password` field; if not, leave it blank.
9. In the `Connection script` field, select **SpliceCom Maximiser** from the drop-down list.
10. Click on the **Save** button to apply the changes.

## Swyx

The Swyx telephone system can be configured to send its SMDR over a database connection or it can be outputted to a file. Click on one of the links below that relates to your preferred connection method.

### SwyxWare - File output

These instructions help you configure your SwyxWare phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

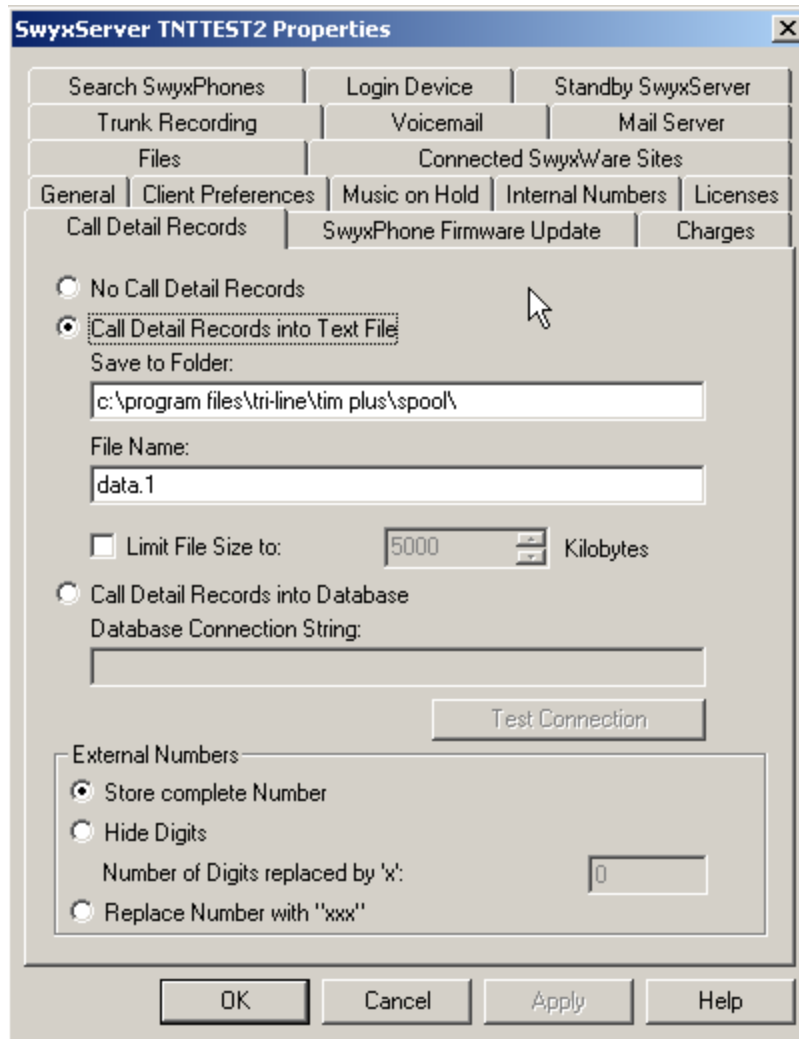


### Configuring your SMDR output

Follow the steps below to configure the SwyxWare to output SMDR data to a file in a specific location:

1. Log in to your SwyxWare Administration Tool.
2. Right-click on the Swyx server you want to configure and click on the **Properties** button.
3. In the `Properties` window, click on the **Call Detail Records** tab.
4. Click on the **Call Detail Records into Text File** radio button.
5. In the `Save to Folder` field, enter `\program files\tri-line\tim plus\spool\`. If you are using a mapped drive enter the driver letter.
6. In the `File Name` field, enter `data.{sitecode}`, replacing `{sitecode}` with the ID of the site you are logging. To obtain the ID of a site, hover the mouse pointer over it on the **Directory** page in TIM Plus and it will be displayed as a tooltip.
7. Click on the **OK** button and close the SwyxWare Administration Tool.

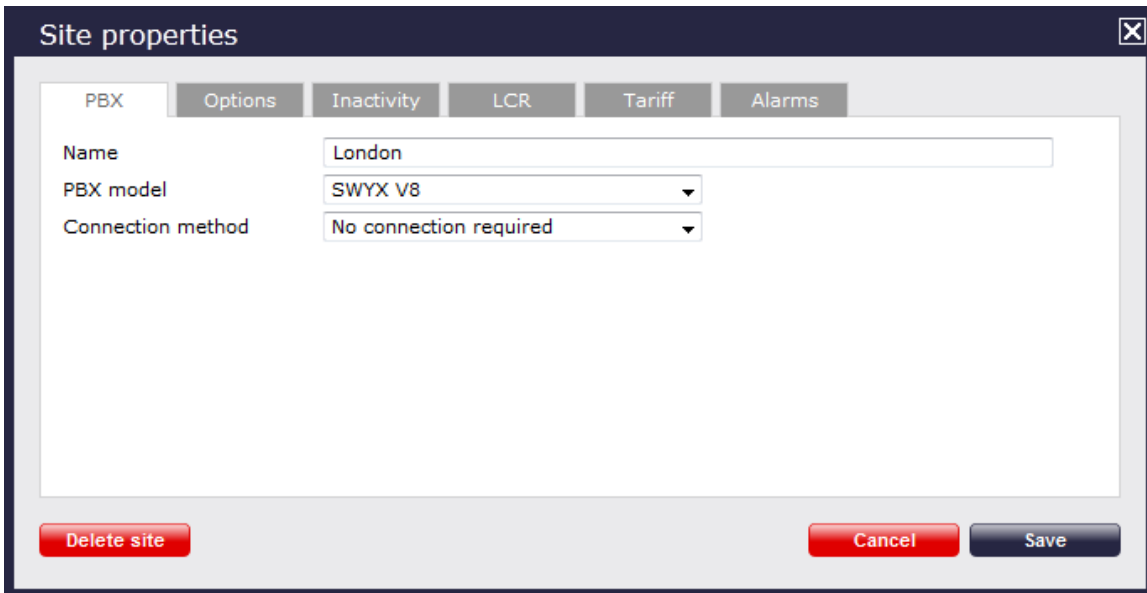
Here is an example of the SwyxWare Administration properties window:



## Configuring TIM Plus

Follow the steps below to configure TIM Plus to receive SMDR data from your SwyxWare:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: SWYX V8

Connection method: No connection required


Delete site Cancel Save

3. In the **Site Properties** window, select **SWYX V8** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.




## SwyxWare - DSN connection

These instructions help you configure your SwyxWare phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a DSN connection with this PBX.

**Support Files**

-  SWYX V8.TDT
-  SWYX V8.TDS
-  SWYX V8.DBS

**Required Tasks**

- Configure the SMDR output
- Configure the DSN connection
- Configure TIM Plus

### Configuring your SMDR output

By default, the Swyx telephone system writes its CDR data to a MSSQL database. In order for TIM Enterprise to connect to the database and collect the call logging data, you need to create a username and password in the MSSQL database on the Swyx server. Contact your system maintainer if you are not familiar with this procedure.

The following information is required for TIM Enterprise to connect to the Swyx database:

- IP address or hostname of the Swyx server where the MSSQL database resides.

- Username and Password of the Swyx database.

The default credentials for the Swyx database are shown below:



Username: Swyxcdr  
Password: Swyxcdr

## Setting up a DSN connection

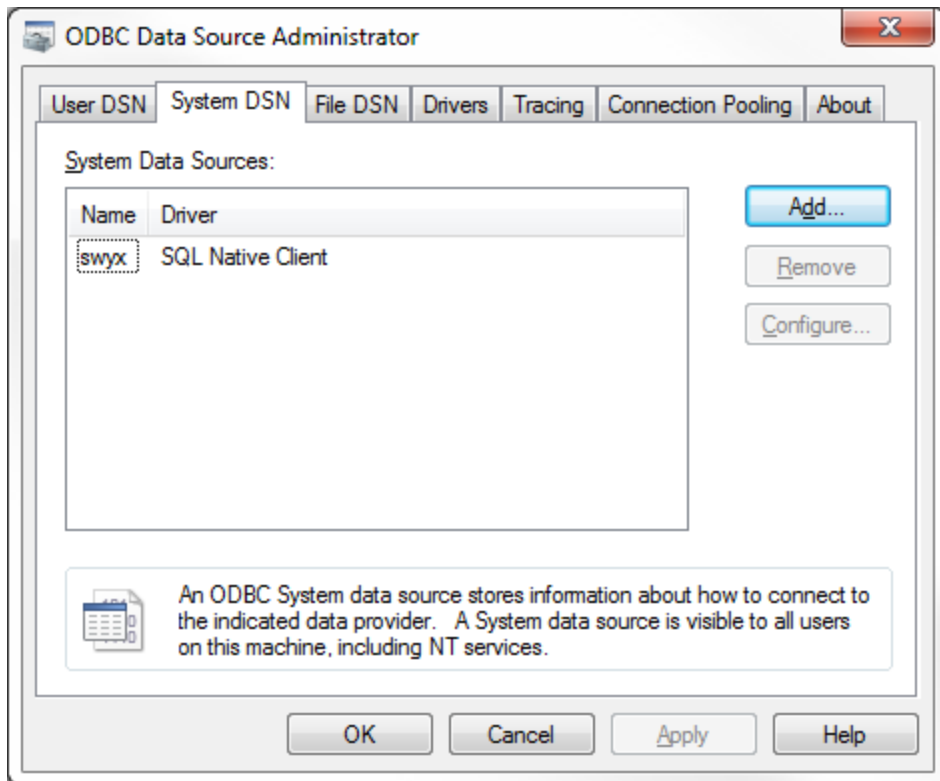
To enable TIM Plus to work with your Skype for Business phone system, you first need to set up a DSN connection by following the steps below:

1. Open Windows Control Panel and select the **Administrative Tools** icon
2. Double-click on the **Data Sources (ODBC)** icon to open the ODBC Data Source Administrator window.



For a 64 bit system, access the ODBC Data Source Administrator from the following location `C:\Windows\System32\odbcad32.exe`

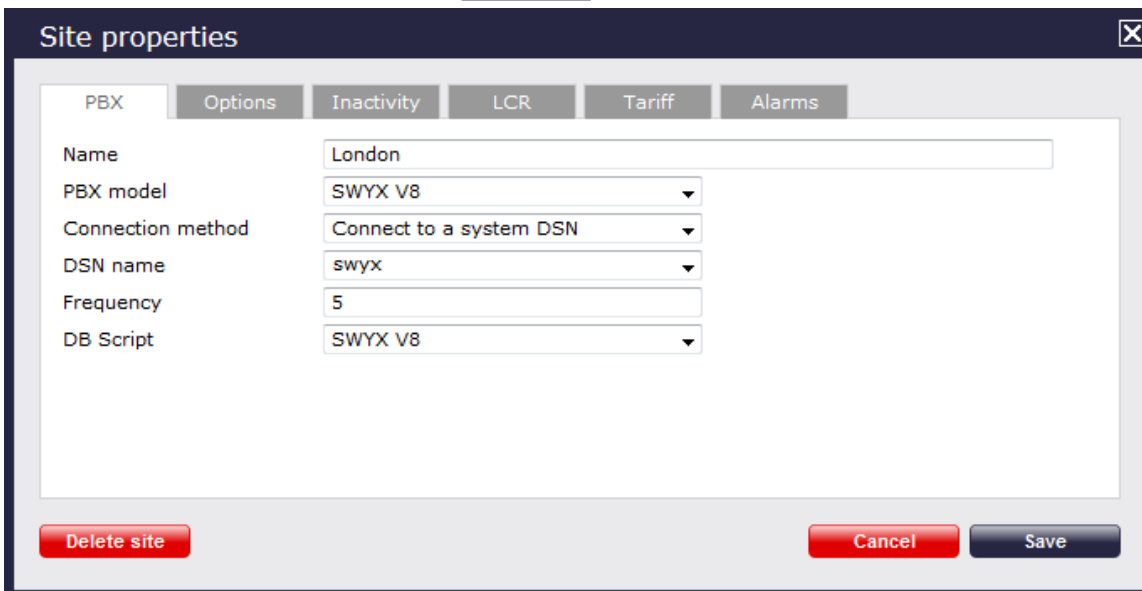
3. Click on the **System DSN** tab.
4. Click on the **Add** button.
5. Select **SQL Native Client** from the driver list and click **Finish**.
6. In the **Name** field, enter **swyx**.
7. In the **Description** field, enter **TIM Plus link to swyx**.
8. In the **Server** field, enter the IP address or hostname of your Swyx server.
9. In the **Username** field, enter the username for your Swyx database.
10. In the **Password** field, enter the password for your Swyx database.
11. In the **Database** drop-down list, select **swyx**.
12. Click on the **Test** button to confirm the information you entered is correct and that the connection is successful.
13. Click on the **OK** button to close the window.



## Configuring TIM Plus

Once the DSN connection has been set up, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



3. In the Site Properties window, select **SWYX V8** from the PBX model drop-down list.
4. In the Connection method field, select **Connect to a system DSN** from the drop-down list.
5. In the DSN name field, select **swyx** from the drop-down list.

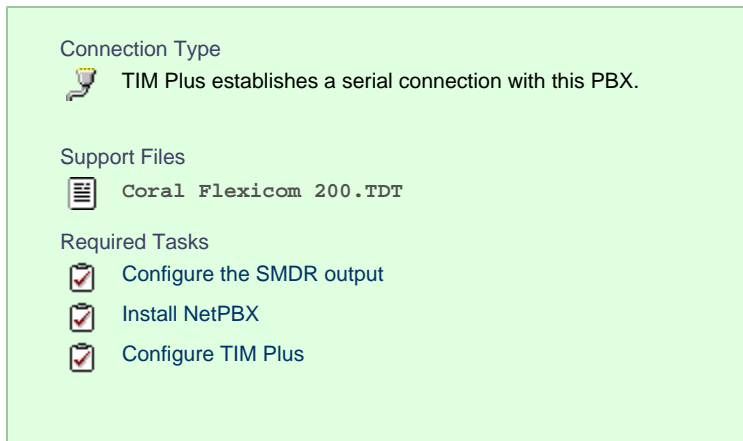


6. In the **Frequency** field, enter 5.
7. In the **DB script** field, select **SWYX V8** from the drop-down list.
8. Click on the **Save** button to apply the settings.

## Tadiran

### Coral Flexicom

These instructions help you configure your Coral Flexicom phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.



### Configuring your SMDR output

The Coral Flexicom phone system sends its SMDR data via a serial connection. You need to directly connect a serial cable from the phone system to the PC that **NetPBX** is installed and running on.

For more information about the output and configuration of your SMDR data, contact your system maintainer.

### Installing NetPBX

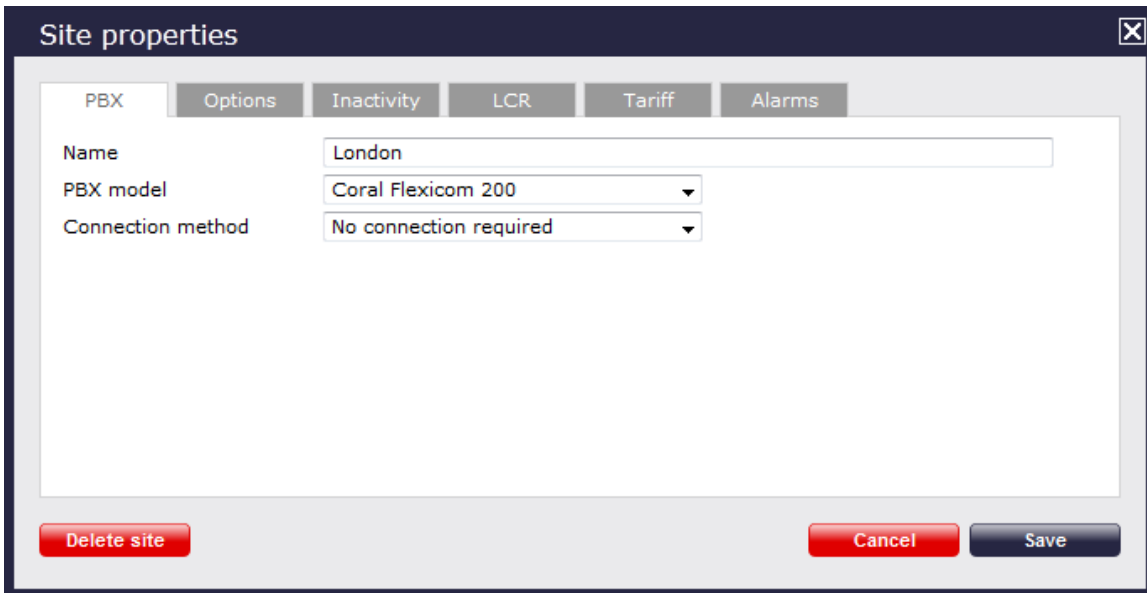
To collect call logging data from the serial port and send it to TIM Plus, you need to install the NetPBX software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: Coral Flexicom 200

Connection method: No connection required

Delete site Cancel Save

3. In the **Site Properties** window, select **Coral Flexicom 200** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.

## Toshiba


### Toshiba CIX/CTX

The Toshiba CIX/CTX can be configured to send its SMDR data over a serial (RS232) or an IP connection. Click on one of the links below that relates to your preferred connection method.


#### Toshiba CIX/CTX - Serial connection


These instructions help you configure your Toshiba CIX/CTX phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a serial connection with this PBX.

**Support Files**

 Toshiba CIX-CTX.TDT

 Toshiba CIX-CTX.TDS

**Required Tasks**

Configure the SMDR output

Install NetPBX

Configure TIM Plus

#### Configuring your SMDR output

When configuring your Toshiba CIX/CTX phone system to output its SMDR data via a serial connection, you need to directly connect a serial cable from the phone system to the PC running NetPBX.

For more information about the output and configuration of your SMDR data, contact your system maintainer.

### Installing NetPBX

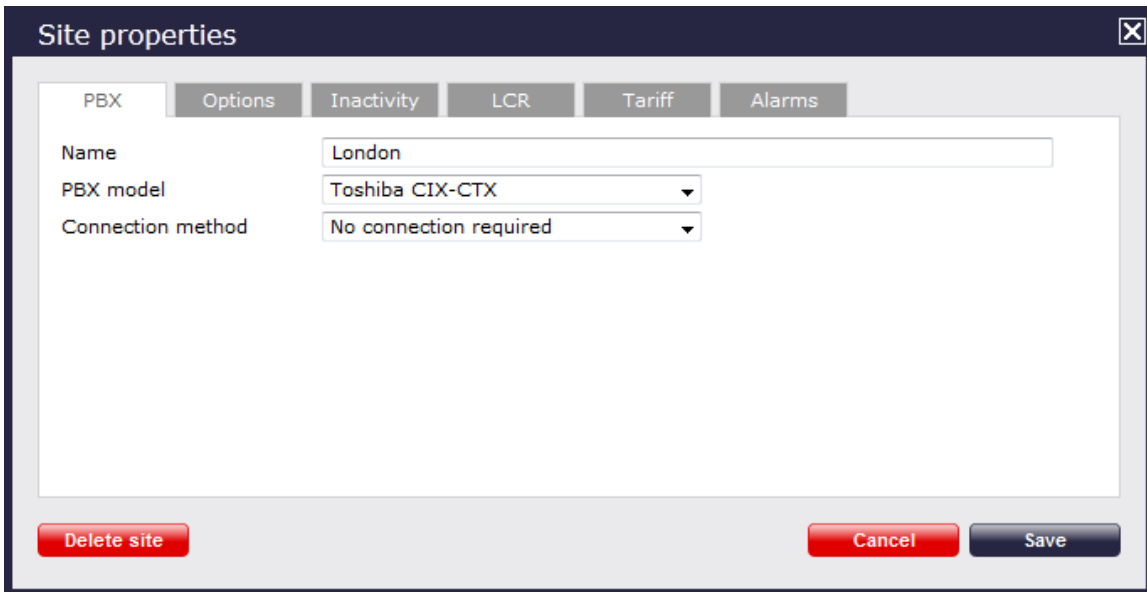
To collect call logging data from the serial port and send it to TIM Plus, you first need to install the NetPBX software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



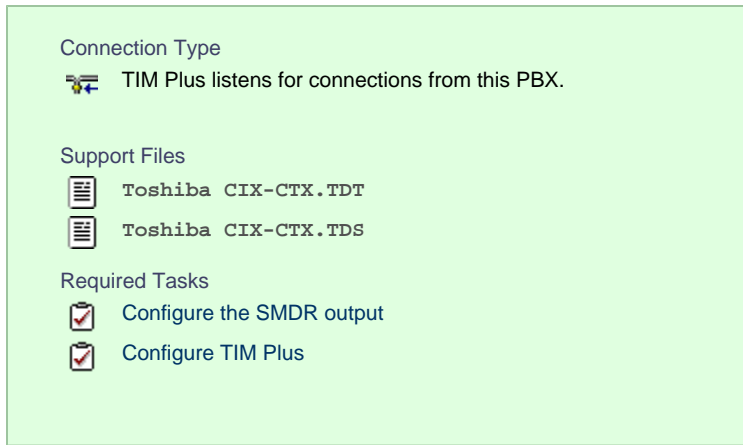
The screenshot shows a 'Site properties' dialog box with the following configuration:

Field	Value
Name	London
PBX model	Toshiba CIX-CTX
Connection method	No connection required

3. In the **Site Properties** window, select **Toshiba CIX-CTX** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.

### Toshiba CIX/CTX - IP Connection

These instructions help you configure your Toshiba CIX/CTX phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.



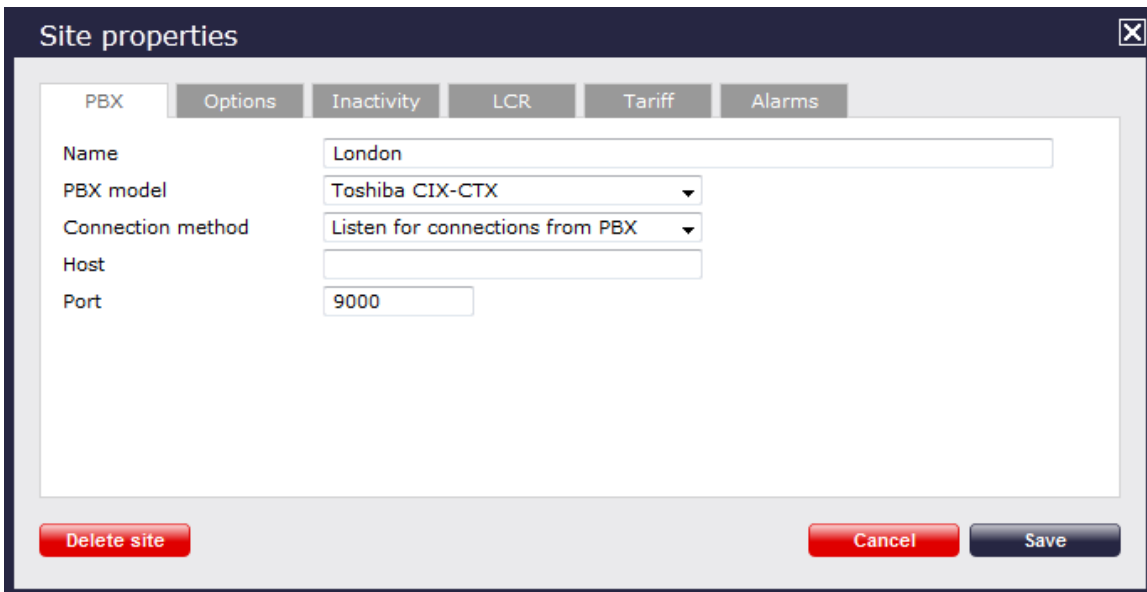
### Configuring your SMDR output

By default, the SMDR output of your Toshiba CIX/CTX is not enabled. Contact your system maintainer to enable call logging output for incoming, outgoing and internal calls.

### Configuring TIM Plus

Follow the steps below to configure TIM Plus to listen for SMDR data from your Toshiba CIX/CTX:


1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.





3. In the **Site Properties** window, select **Toshiba CIX-CTX** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Listen for connections from PBX** from the drop-down list.
5. Leave the **Host** field blank.
6. In the **Port** field enter **9000**.
7. Click on the **Save** button to apply the settings.

## Toshiba Strata DK

These instructions help you configure your Toshiba Strata DK phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a serial connection with this PBX.

**Support Files**  
 Toshiba Strata DK.TDT  
 Toshiba Strata DK.TDS

**Required Tasks**  
 Configure the SMDR output  
 Install NetPBX  
 Configure TIM Plus

### Configuring your SMDR output

The Toshiba Strata DK phone system sends SMDR information via a serial connection when it is fitted with a Small Options Card. You need to directly connect a serial cable from the phone system to the PC that NetPBX is installed and running on.

For more information about the output and configuration of your SMDR data, contact your system maintainer.

### Installing NetPBX

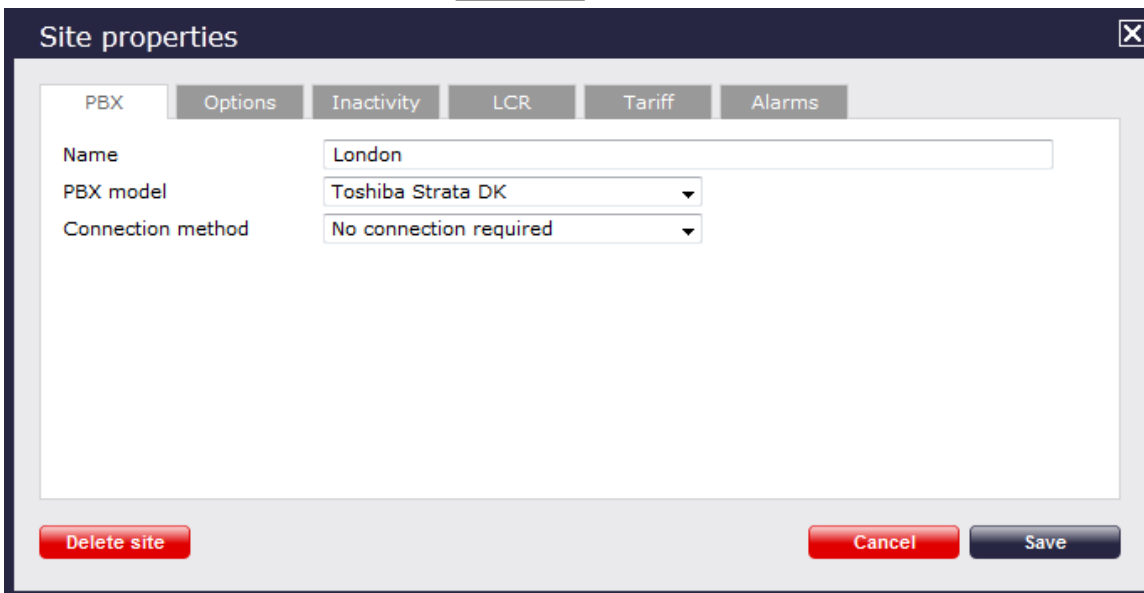
To collect call logging data from the serial port and send it to TIM Plus, you first need to install the NetPBX software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties** ✕

PBX   Options   Inactivity   LCR   Tariff   Alarms

Name:

PBX model:

Connection method:

3. In the **Site Properties** window, select **Toshiba Strata DK** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.

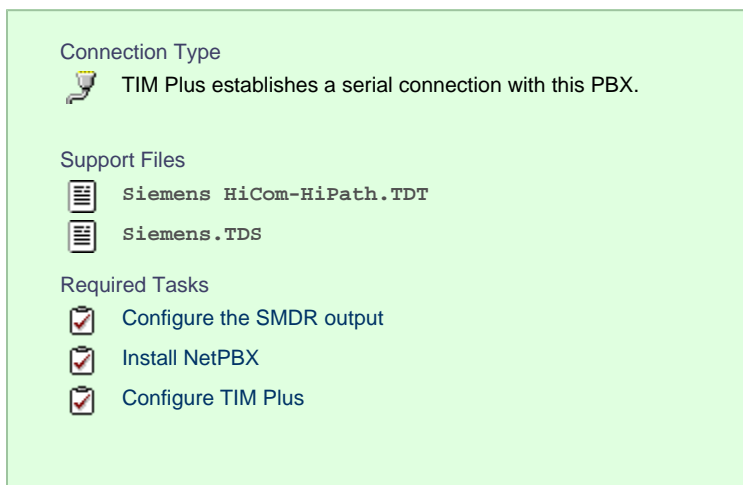
## Unify (Siemens)

### Unify (Siemens) HiCom-HiPath

The Siemens HiCom/HiPath can be configured to send its SMDR data over a serial (RS232) or an IP connection. Click on one of the links below that relates to your preferred connection method.

#### Unify (Siemens) HiCom-HiPath - Serial connection

These instructions help you configure your Siemens HiCom/HiPath phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.



#### Configuring your SMDR output

When configuring your Siemens HiCom/HiPath phone system to send SMDR data via a serial connection, you need to directly connect a serial cable from the Siemens HiCom/HiPath phone system to the PC that **NetPBX** is installed and running on.

For more information about the output and configuration of your SMDR data, please contact your system maintainer.

#### Installing NetPBX

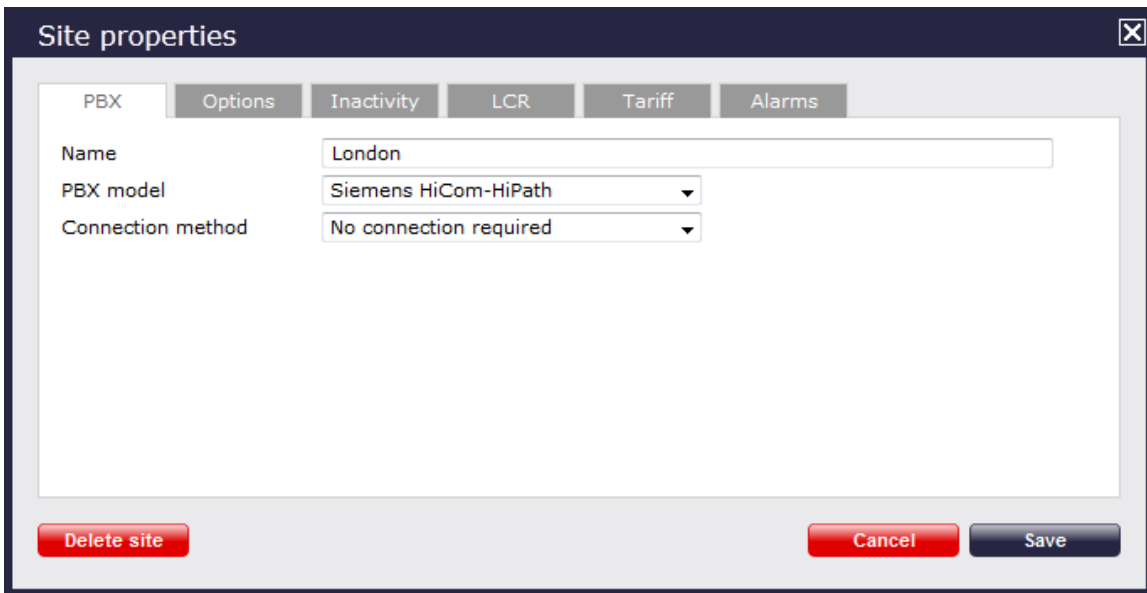
To collect call logging data from the serial port and send it to TIM Plus, you first need to install the NetPBX software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

#### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: Siemens HiCom-HiPath

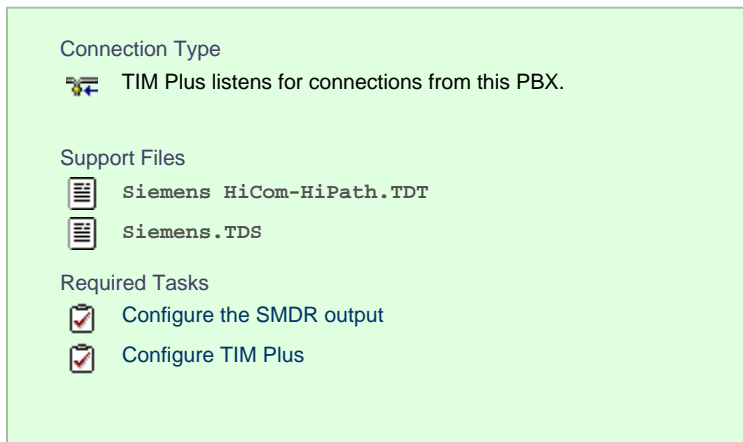
Connection method: No connection required

Delete site Cancel Save


3. In the **Site Properties** window, select **Siemens HiCom-HiPath** from the **PBX model** drop-down list.
4. In the **Connection method** field select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.

### Unify (Siemens) HiCom-HiPath - IP connection


These instructions help you configure your Siemens HiCom/HiPath phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.




**Connection Type**

 TIM Plus listens for connections from this PBX.

**Support Files**

 Siemens HiCom-HiPath.TDT

 Siemens.TDS

**Required Tasks**

Configure the SMDR output

Configure TIM Plus

#### Configuring your SMDR output

By default, the SMDR output of a Siemens HiCom/HiPath phone system is not enabled. Contact your system maintainer to enable it for incoming, outgoing and internal calls.

#### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.

**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: Siemens HiCom-HiPath

Connection method: Listen for connections from PBX

Host:

Port: 9000

Delete site Cancel Save

3. In the **Site Properties** window, select **Siemens HiCom-HiPath** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Listen for connections from PBX** from the drop-down list.
5. Leave the **Host** field blank.
6. In the **Port** field, enter **9000**.
7. Click on the **Save** button to apply the settings.

## Unify (Siemens) HiPath 4000

These instructions help you configure your Siemens HiPath 4000 phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

TIM Plus establishes a TCP connection to this PBX.

**Support Files**

Siemens HiPath 4000.TDT

Siemens HiPath 4000.TDS

**Required Tasks**

Configure the SMDR output

Configure TIM Plus

### Configuring your SMDR output

By default, the SMDR output of a Siemens HiPath 4000 is not enabled. To enable it for incoming, outgoing and internal calls, contact your system maintainer.

### Configuring TIM Plus

Follow the steps below to configure TIM Plus to collect the SMDR data from your Siemens HiPath 4000:

1. Click on the **Directory** tab.



- Choose the site you want to configure and click **Properties**.

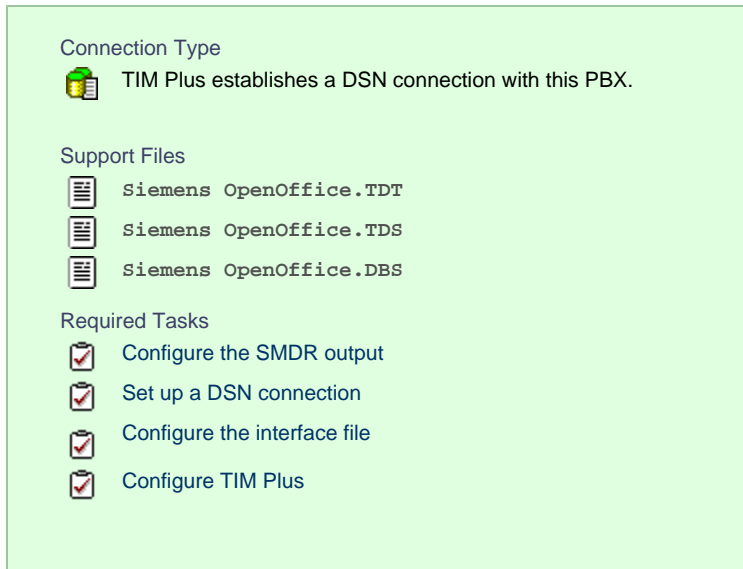
- In the **Site Properties** window, select **Siemens HiPath 4000** from the **PBX model** drop-down list.
- In the **Connection method** field, select **Actively connect to PBX** from the drop-down list.
- In the **Host** field, enter the IP address of your Siemens HiPath 4000.
- In the **Port** field, enter **9000**.
- Leave the **Username** and **Password** fields blank.
- In the **Connection script** field, select **Generic Simple** from the drop-down list.
- Click on the **Save** button to apply the settings.

## Unify (Siemens) OpenOffice

The Unify (Siemens) OpenOffice can be configured to send its SMDR data over an IP or database connection. Click on one of the links below that relates to your preferred connection method.

### Unify (Siemens) OpenOffice - DSN connection

These instructions help you configure your Siemens OpenOffice phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.



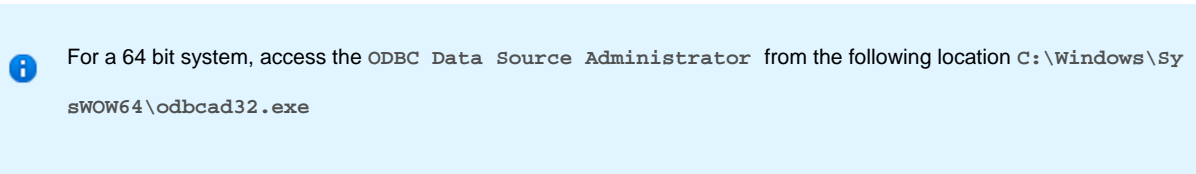
### Configuring your SMDR output

By default, the SMDR output of a Siemens OpenOffice is not enabled. Contact your system maintainer to enable it for incoming, outgoing and internal calls.

### Setting up a DSN connection

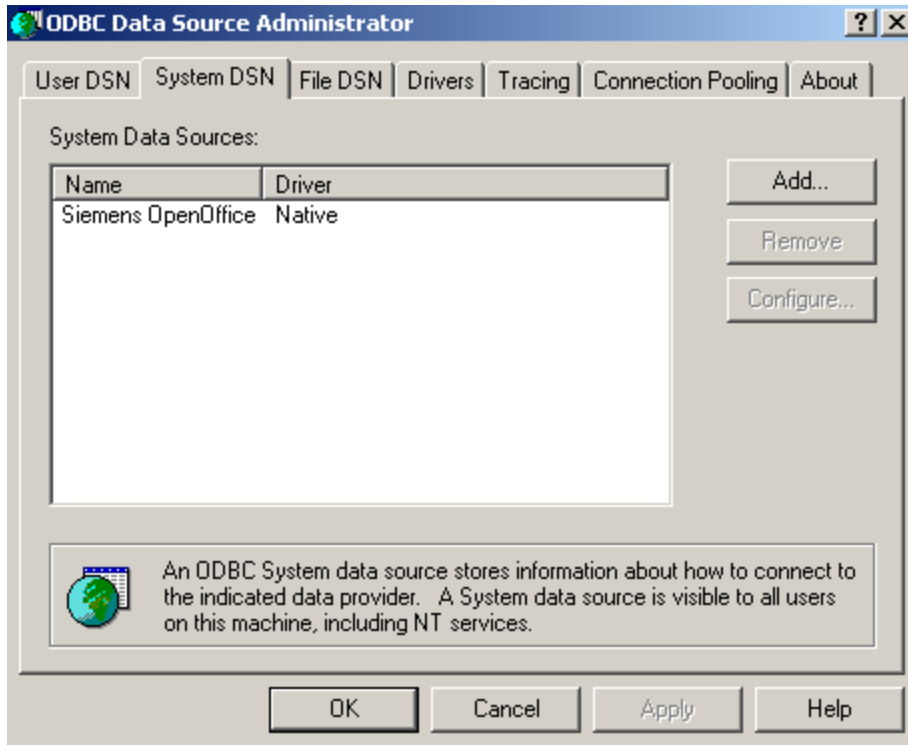
To enable TIM Plus to work with the Siemens OpenOffice, you first need to set up a DSN connection, by following the steps below:

1. Open Windows Control Panel
2. Double-click on the **Administrative tools** icon
3. Double-click on the **Data Sources (ODBC)** icon to open the ODBC Data Source Administrator window



4. Click on the **System DSN** tab
5. Click on the **Add** button
6. Select **Native** from the driver list and click **Finish**
7. In the **Data source name** field enter **Siemens OpenOffice**
8. Click on the **OK** button to save the changes

An example of an ODBC entry is shown below:



#### Configuring the interface file

Follow the steps below to configure the interface file to establish an HTTPS connection with your Siemens OpenOffice:

1. Open the `Siemens OpenOffice.TDT` file, located by default in `C:\Program Files (x86)\Tri-Line\TIM Plus\config`.
2. Edit the file to point to the IP address of your Siemens OpenOffice and enter the relevant username and password, as shown below:

```
'Siemens-OpenOffice
'
' When using the https connection method, add the following to the main.cfg in the [Options] section
' GhostFile = data.pbx
' FileScoutInterval = 10

Type = SCRIPT

[Options]

ScriptFile = Siemens.tds

' Options, None, Https
ConnectionType = Https

' Options, Fixed Width, Delimited
FileFormat = Delimited

' Options, for Delimited File type
Delimiter = |

' Options, for Https Connection
' IPAddress = 127.0.0.1
' Username = user
' Password = password

BackupFile = {app}\backup\{year}\{month}\backup-{year}{month}{day}.{sitecode}

' Access codes, comma delimited and sorted in descending length order
' default value is none
AccessCodes = 9

'SplitTandem = True
```

3. Remove the apostrophe (') in front of the amended fields to enable them. An example of a configured interface file is shown below:

```
'Siemens-OpenOffice
'
' When using the https connection method, add the following to the main.cfg in the [Options] section
' GhostFile = data.pbx
' FileScoutInterval = 10

Type = SCRIPT

[Options]

ScriptFile = Siemens.tds

' Options, None, Https
ConnectionType = Https

' Options, Fixed Width, Delimited
FileFormat = Delimited

' Options, for Delimited File type
Delimiter = |

' Options, for Https Connection
IPAddress = 192.168.1.1
Username = Siemens
Password = OpenOffice

BackupFile = {app}\backup\{year}\{month}\backup-{year}{month}{day}.{sitecode}

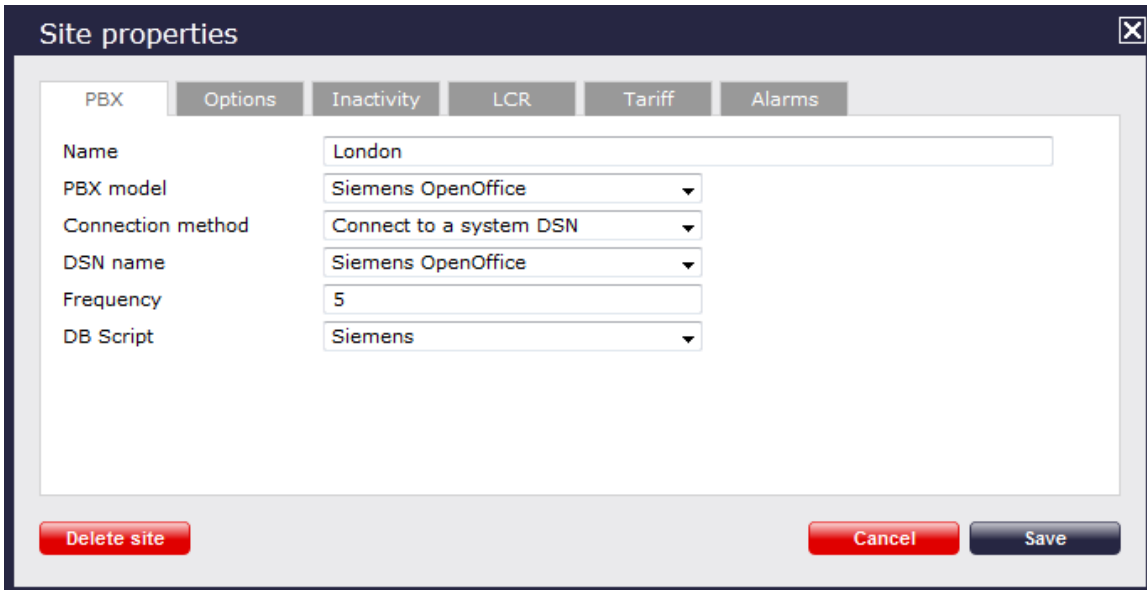
' Access codes, comma delimited and sorted in descending length order
' default value is none
AccessCodes = 9

'SplitTandem = True
```

## Configuring TIM Plus

Once the DSN connection has been set up, log in to TIM Plus and follow the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: Siemens OpenOffice

Connection method: Connect to a system DSN

DSN name: Siemens OpenOffice

Frequency: 5

DB Script: Siemens


Delete site Cancel Save

3. In the **Site Properties** window, select **Siemens OpenOffice** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Connect to a system DSN** from the drop-down list.
5. In the **DSN name** field, select **Siemens OpenOffice** from the drop-down list.
6. In the **Frequency** field, enter 5.
7. In the **DB script** field, select **Siemens** from the drop-down list.
8. Click on the **Save** button to apply the settings.


### Unify (Siemens) OpenOffice - IP connection


These instructions help you configure your Siemens OpenOffice phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

 TIM Plus establishes a TCP connection to this PBX.

**Support Files**

 Siemens OpenOffice.TDT

 Siemens OpenOffice.TDS

**Required Tasks**

Configure the SMDR output

Configure TIM Plus

#### Configure the SMDR output

Follow the steps below to enable the SMDR output in your telephone system:

1. Log in to the Siemens OpenOffice web portal.
2. Click on **Expert Mode** and then select **Basic Settings**.
3. Under the **Call Charges** menu options, select **Call Charges - Output Format** and tick the SMDR options shown below:

The screenshot shows the 'Basic Settings' web interface. On the left is a navigation menu with categories like System, DynDNS, Date and Time, and Call Charges. The 'Call Charges' category is expanded, and 'Call Charges - Output Format' is selected. The main content area is titled 'Call Charges - Output Format' and contains a tab 'Edit Output Format'. Below the tab is the 'Format of Call Records' section with the following options:

- Compressed Output
- Last 4 digits suppressed
- Log incoming calls
- Call Duration
- On Ringing
- Output MSN
- Decimal format
- Display amounts instead of units
- Outgoing without connection
- Output LCR number outgoing or dialled number incoming

Below the 'Format of Call Records' section is the 'CDR system' section, which includes:

- Output Format:
- TCP-Client:

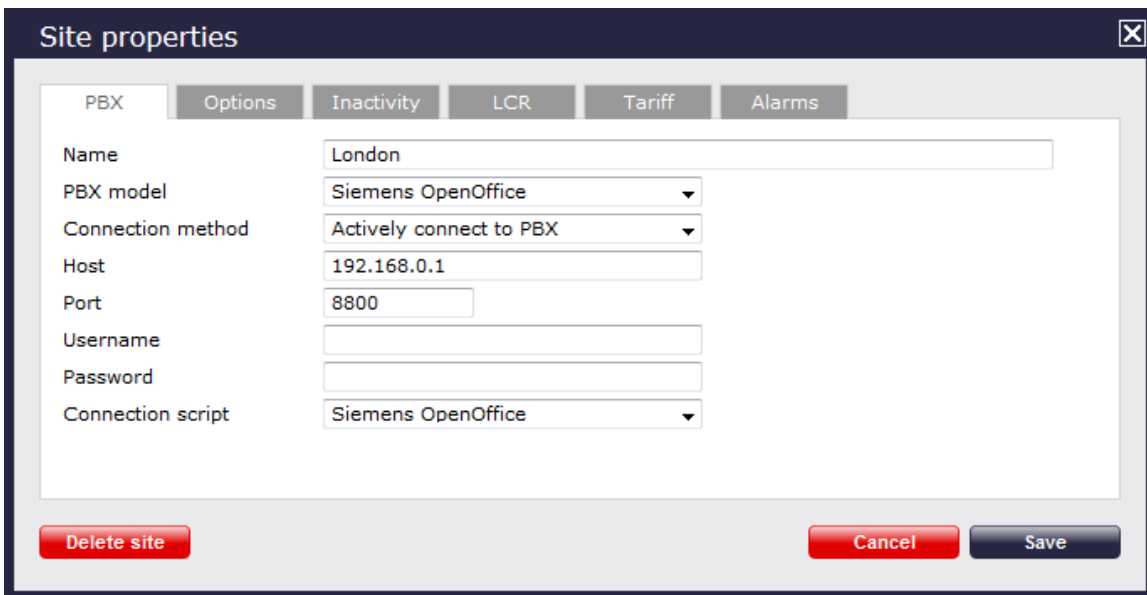
At the bottom of the page are three buttons: 'Apply', 'Undo', and 'Help'.

4. Under **CDR system** options, select **LAN-TCP-Client** from the drop-down list, as the output format.
5. In the **TCP-Client** field, enter the IP address of the PC running TIM Plus and the port number that you want your SMDR data to be sent to.
6. Click on the **Apply** tab to save the changes.

### Configure TIM Plus

Follow the steps below to configure TIM Plus to collect the SMDR data from your telephone system:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: Siemens OpenOffice

Connection method: Actively connect to PBX

Host: 192.168.0.1

Port: 8800

Username:

Password:

Connection script: Siemens OpenOffice

Delete site Cancel Save


3. In the **Site Properties** window, select **Siemens OpenOffice** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Actively connect to PBX** from the drop-down list.
5. In the **Host** field, enter the IP address of your Siemens OpenOffice telephone system.
6. In the **Port** field, enter the port number configured in the phone system.
7. Leave the **Username** and **Password** fields blank.
8. In the **Connection script** field, select **Siemens OpenOffice** from the drop-down list.
9. Click on the **Save** button to apply the settings.

## Unify (Siemens) OpenScape Business




The Unify OpenScape Business can be configured to send its SMDR data over an IP or database connection. Click on one of the links below that relates to your preferred connection method.

### Unify (Siemens) OpenScape Business - DSN connection

These instructions help you configure your Unify OpenScape Business phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a DSN connection with this PBX.

**Support Files**

-  Unify OpenScape Business.TDT
-  Unify OpenScape Business.TDS
-  Unify OpenScape Business.DBS

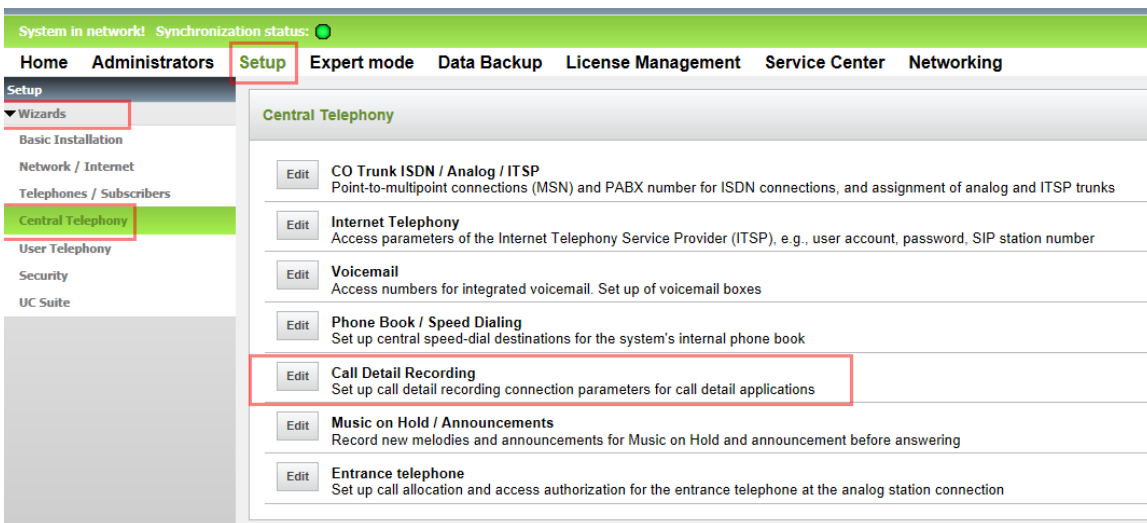
**Required Tasks**

- Configure the SMDR output
- Set up a DSN connection
- Configure the interface file
- Configure TIM Plus

### Configuring the SMDR output

Follow the instructions below to configure the SMDR output in your phone system. These instructions are taken from the Unify OpenScape Business manual.

1. Log on to OpenScape Business Assistant and click on **Setup** -> **Wizards** -> **Central Telephony**, as shown below:



System in network Synchronization status: ●

Home Administrators **Setup** Expert mode Data Backup License Management Service Center Networking

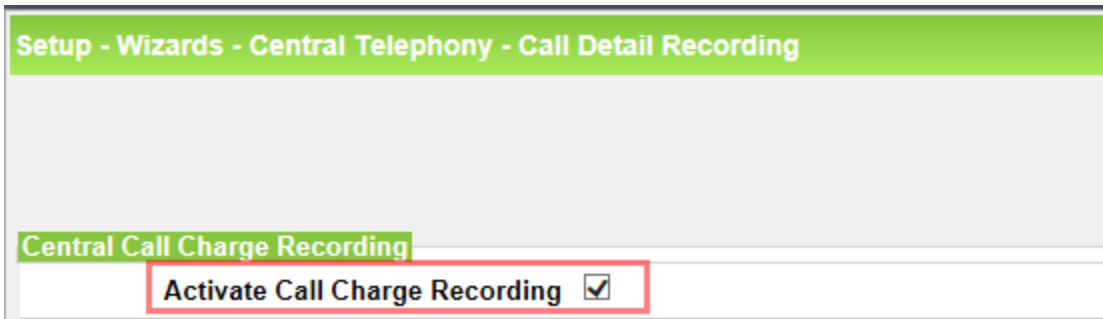
Setup

- ▼ Wizards
  - Basic Installation
  - Network / Internet
  - Telephones / Subscribers
  - Central Telephony**
  - User Telephony
  - Security
  - UC Suite

**Central Telephony**

- Edit** CO Trunk ISDN / Analog / ITSP  
Point-to-multipoint connections (MSN) and PABX number for ISDN connections, and assignment of analog and ITSP trunks
- Edit** Internet Telephony  
Access parameters of the Internet Telephony Service Provider (ITSP), e.g., user account, password, SIP station number
- Edit** Voicemail  
Access numbers for integrated voicemail. Set up of voicemail boxes
- Edit** Phone Book / Speed Dialing  
Set up central speed-dial destinations for the system's internal phone book
- Edit** Call Detail Recording  
Set up call detail recording connection parameters for call detail applications
- Edit** Music on Hold / Announcements  
Record new melodies and announcements for Music on Hold and announcement before answering
- Edit** Entrance telephone  
Set up call allocation and access authorization for the entrance telephone at the analog station connection

2. Click **Edit** to start the Call Detail Recording wizard.
3. In the new window that opens, tick the **Activate Call Charge Recording** to enable the CDR output, as shown below:



**Setup - Wizards - Central Telephony - Call Detail Recording**

**Central Call Charge Recording**


**Activate Call Charge Recording**



### Setting up a DSN connection

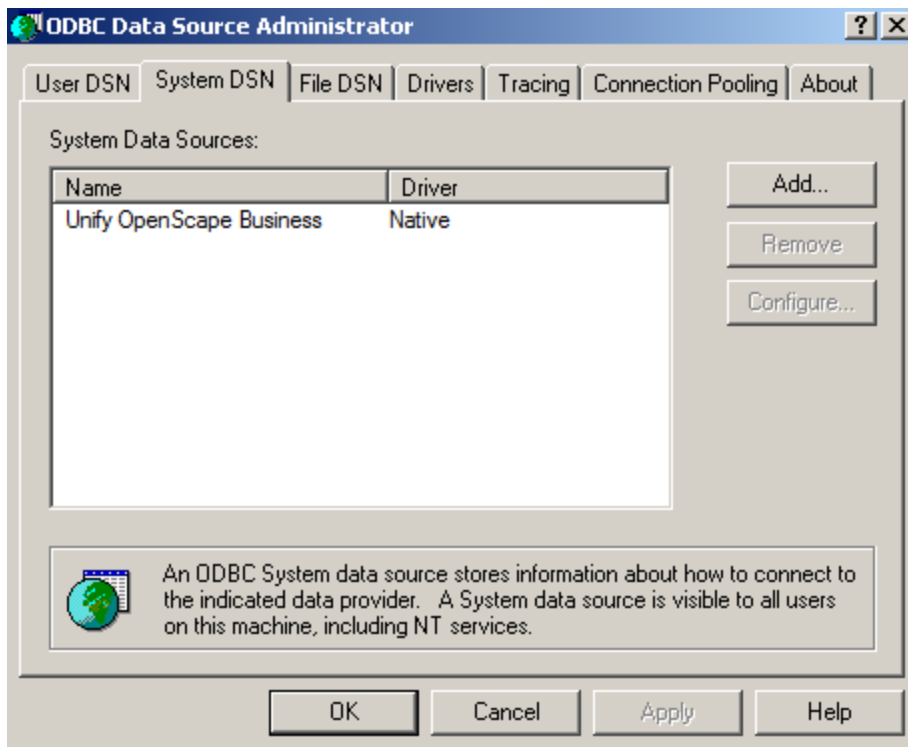
The default SMDR output option in the Unify OpenScape Business phone system is `HTTPS`. To enable TIM Plus to work with Unify OpenScape Business, you first need to set up a DSN connection, by following the steps below:

1. Open Windows Control Panel
2. Double-click on the `Administrative tools` icon
3. Double-click on the `Data Sources (ODBC)` icon to open the `ODBC Data Source Administrator` window

 For a 64 bit system, access the `ODBC Data Source Administrator` from the following location `C:\Windows\System32\odbcad32.exe`

4. Click on the `System DSN` tab
5. Click on the `Add` button
6. Select `Native` from the driver list and click `Finish`
7. In the `Data source name` field enter `Unify OpenScape Business`
8. Click on the `OK` button to save the changes

An example of an ODBC entry is shown below:



### Configuring the interface file

Follow the steps below to configure the interface file to establish an `HTTPS` connection with your Unify OpenScape Business:

1. Open the Unify OpenScape Business.TDT file, located by default in C:\Program Files\Tri-Line\TIM Plus\config.
2. Edit the file to point to the IP address of your Unify OpenScape Business and enter the relevant username and password, as shown below:

```
' Unify OpenScape Business
'
' When using the https connection method, add the following to the main.cfg in the [Options] section
' GhostFile = data.pbx
' FileScoutInterval = 10

Type = SCRIPT

[Options]

ScriptFile = Unify OpenScape Business.tds

' Options, None, Https
ConnectionType = Https

' Options, Fixed Width, Delimited
FileFormat = Delimited

' Options, for Delimited File type
Delimiter = |

' Options, for Https Connection
' IPAddress = 127.0.0.1
' Username = user
' Password = password

BackupFile = {app}\backup\{year}\{month}\backup-{year}{month}{day}.{sitecode}

' Access codes, comma delimited and sorted in descending length order
' default value is none
AccessCodes = 9

' SplitTandem = True
```

3. Remove the apostrophe (') in front of the amended fields to enable them. An example of a configured interface file is shown below:

```
' Unify OpenScape Business
'
' When using the https connection method, add the following to the main.cfg in the [Options] section
' GhostFile = data.pbx
' FileScoutInterval = 10

Type = SCRIPT

[Options]

ScriptFile = Unify OpenScape Business.tds

' Options, None, Https
ConnectionType = Https

' Options, Fixed Width, Delimited
FileFormat = Delimited

' Options, for Delimited File type
Delimiter = |

' Options, for Https Connection
IPAddress = 192.168.1.1
Username = Siemens
Password = OpenOffice

BackupFile = {app}\backup\{year}\{month}\backup-{year}{month}{day}.{sitecode}

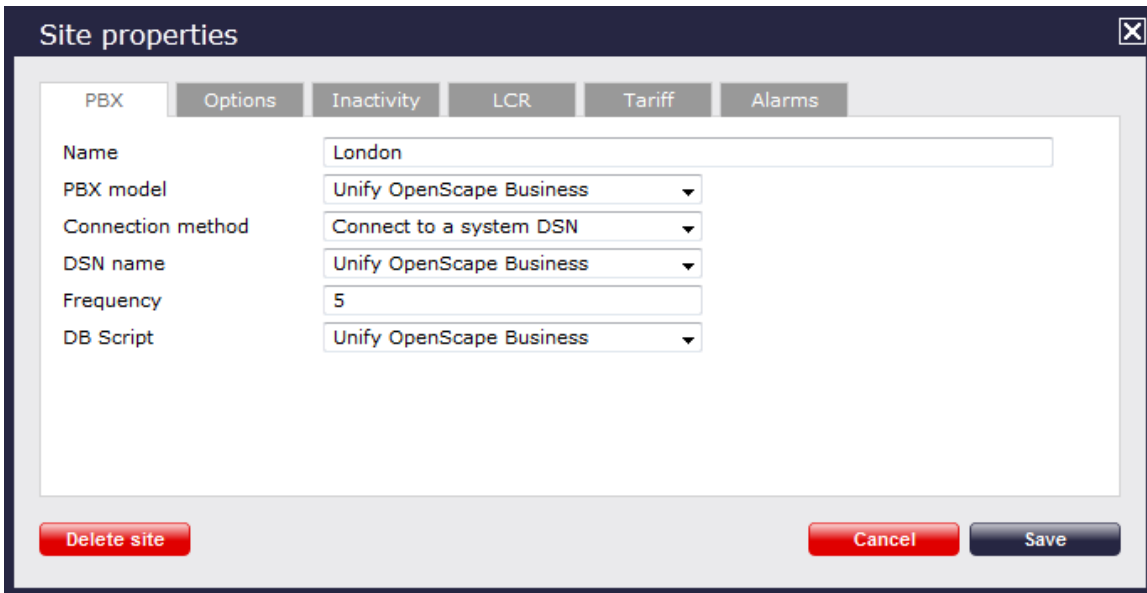
' Access codes, comma delimited and sorted in descending length order
' default value is none
AccessCodes = 9

' SplitTandem = True
```

## Configuring TIM Plus

Once the DSN connection has been set up, log in to TIM Plus and follow the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

Options: PBX, Options, Inactivity, LCR, Tariff, Alarms

Name: London

PBX model: Unify OpenScape Business

Connection method: Connect to a system DSN

DSN name: Unify OpenScape Business

Frequency: 5

DB Script: Unify OpenScape Business


Buttons: Delete site, Cancel, Save

3. In the **Site Properties** window, select **Unify OpenScape Business** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Connect to a system DSN** from the drop-down list.
5. In the **DSN name** field, select **Unify OpenScape Business** from the drop-down list.
6. In the **Frequency** field, enter 5.
7. In the **DB script** field, select **Unify OpenScape Business** from the drop-down list.
8. Click on the **Save** button to apply the settings.


## Unify (Siemens) OpenScape Business - IP connection


These instructions help you configure your Unify OpenScape Business phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**


 TIM Plus listens for connections from this PBX.


**Support Files**

 Unify OpenScape Business.TDS

 Unify OpenScape Business.TDT

**Required Tasks**

 Configure the SMDR output

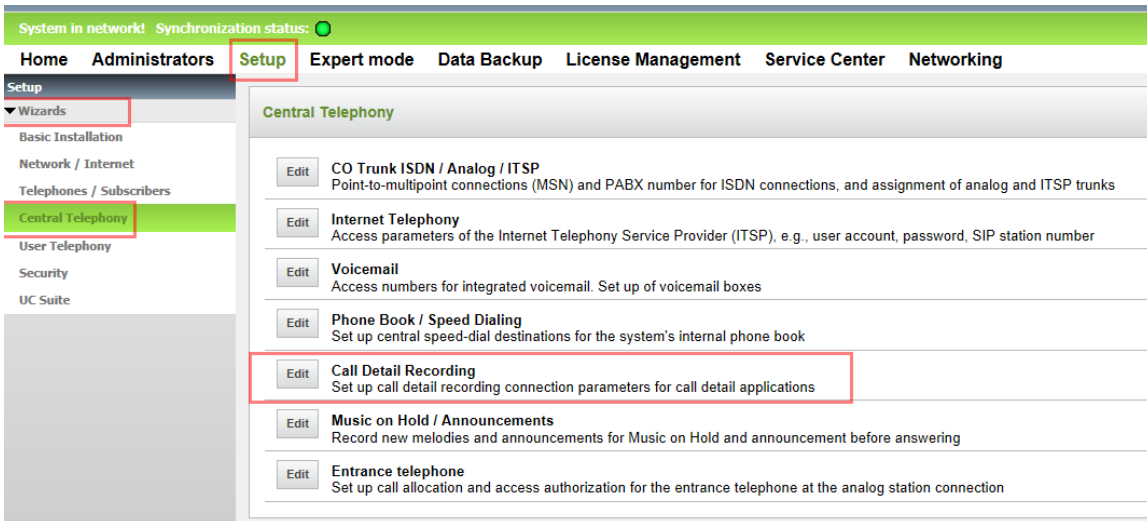
 Configure TIM Plus

### Configuring the SMDR output

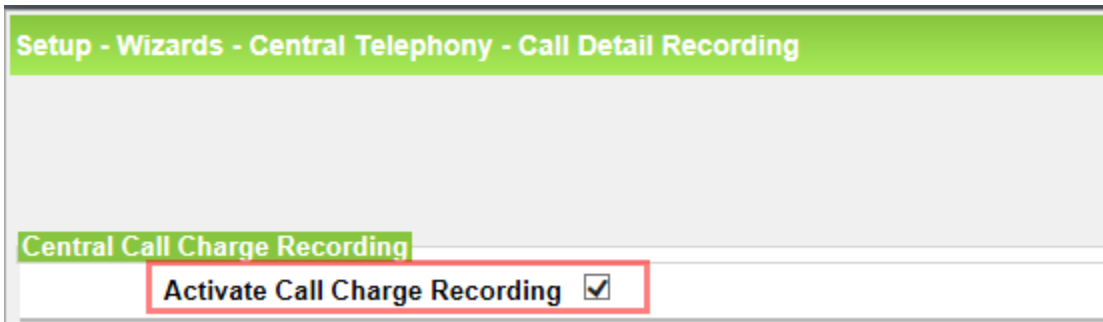
## Enabling the SMDR output

Follow the instructions below to configure the SMDR output in your phone system. These instructions are taken from the Unify OpenScape Business manual:

1. Log on to OpenScape Business Assistant and click on **Setup** -> **Wizards** -> **Central Telephony**, as shown below:



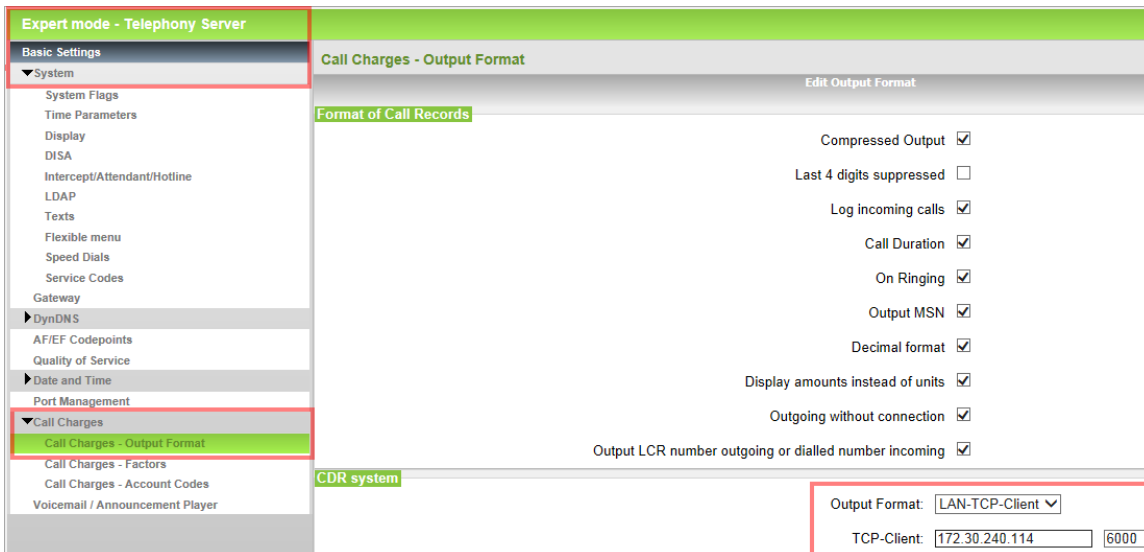
2. Click **Edit** to start the Call Detail Recording wizard.
3. In the new window that opens, tick the **Activate Call Charge Recording** to enable the CDR output, as shown below:



## Sending the SMDR via TCP/IP

By default, the Unify OpenScape Business phone system send its SMDR output via HTTPS. To send the data via a TCP/IP, follow the steps below:

1. Log on to OpenScape Business Assistant with **Expert** profile
2. Click on **Telephony Server** -> **Basic Settings** in the navigation tree
3. Click on **Basic Settings** -> **Call charges** -> **Call charges** -> **output format**
4. In the **CDR system** section, select **LAN-TCP-Client** from the drop-down list
5. In the **TCP-Client** field, enter the IP address of the PC running TIM Plus and the port number you want to use for the SMDR output, as shown in the screenshot below:

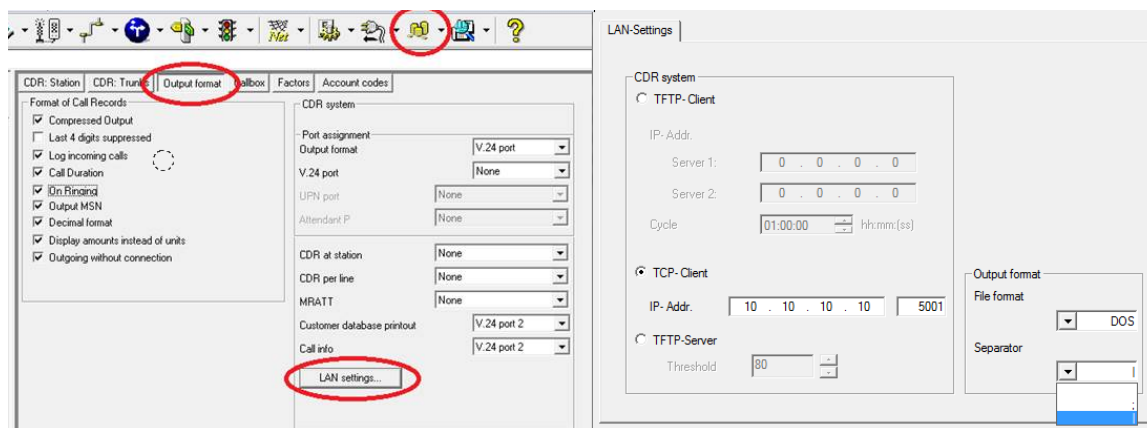


**Please note the following:**

1. If the system was upgraded from HiPath 3000 using the convert tool, the data format will use ; as a separator
2. If the system was upgraded from HiPath 3000, but the database was retyped subsequently, the data format will use | as a separator
3. If the system was new, the data format will use | as a separator

If the HiPath 3K database was simply converted and not retyped, no change will be required, since both the old and the new database will use ; as a separator. If the database was retyped, the new platforms default to | separator. This is the most notable in a networked environment where the same template must be used.

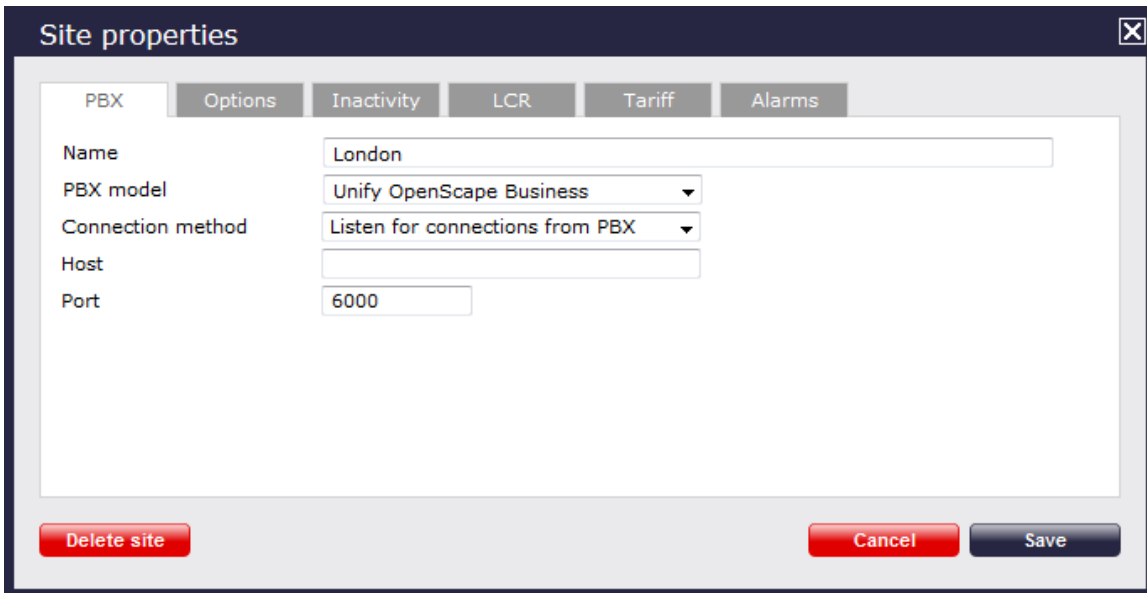
However, the | separator cannot be set in the new WBM tool, and can only be configured using the Manager E, as shown below:



### Configuring TIM Plus

Follow the steps below to configure TIM Plus to listen for SMDR data from your telephone system:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



**Site properties**

PBX Options Inactivity LCR Tariff Alarms

Name: London

PBX model: Unify OpenScape Business

Connection method: Listen for connections from PBX

Host:

Port: 6000

Delete site Cancel Save

3. In the **Site Properties** window, select **Unify OpenScape Business** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Listen for connections from PBX** from the drop-down list.
5. Leave the **Host** field blank.
6. In the **Port** field, enter the port number configured in the telephone system.
7. Click on the **Save** button to apply the settings


## Unify (Siemens) Realitis/HiPath DX

The Siemens Realitis/HiPath DX can be configured to send its CIL output via a serial (RS232) or an IP connection. Click on the link below that relates to your preferred connection method.


### Unify (Siemens) Realitis/HiPath DX - Serial connection


These instructions help you configure your Siemens Realitis/HiPath DX phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**


 TIM Plus establishes a serial connection with this PBX.


**Support Files**


 Siemens HiPath DX.TDT

 Siemens HiPath DX.TDS

**Required Tasks**

 Configure the CIL output

 Install NetPBX

 Configure TIM Plus

### Configuring your CIL output

When configuring your Siemens Realitis/HiPath DX to send its CIL information via a serial connection, you need to directly connect a serial cable from the phone system's wall box to the PC running **NetPBX**.

Your system maintainer needs to enable CIL output by setting it to the **Full** or **unrestricted CIL** format.

### Installing NetPBX

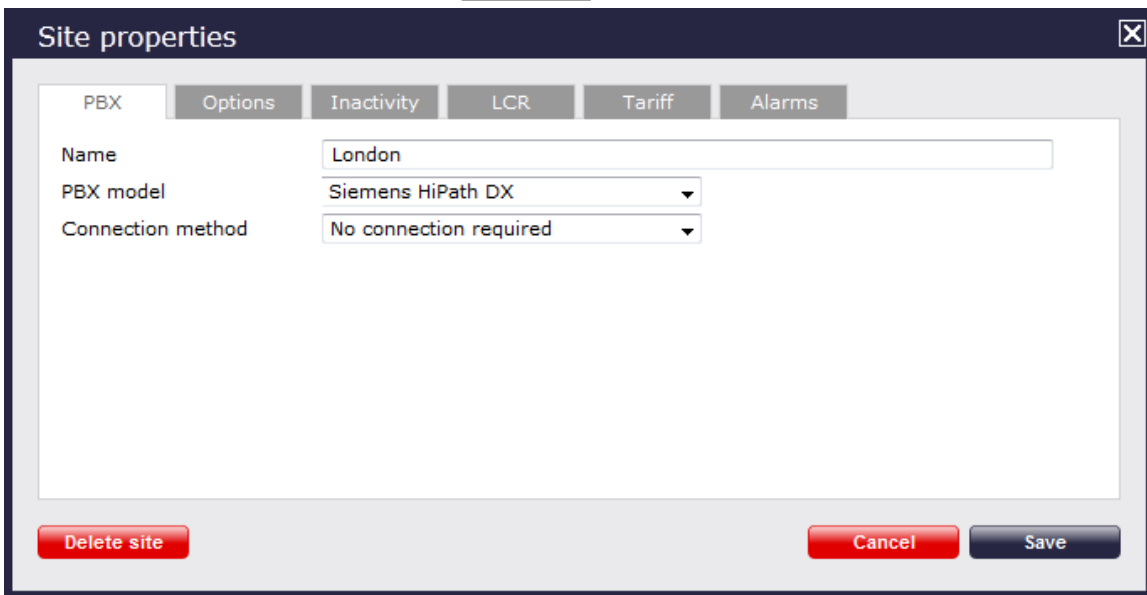
To collect call logging data from the serial port of your phone system and send it to TIM Plus, you first need to install the NetPBX software. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

### Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.






The screenshot shows a 'Site properties' dialog box. It has a title bar with a close button. Below the title bar are several tabs: 'PBX', 'Options', 'Inactivity', 'LCR', 'Tariff', and 'Alarms'. The 'PBX' tab is active. Inside the dialog, there are three fields: 'Name' (text input with 'London'), 'PBX model' (dropdown menu with 'Siemens HiPath DX'), and 'Connection method' (dropdown menu with 'No connection required'). At the bottom, there are three buttons: 'Delete site' (red), 'Cancel' (red), and 'Save' (dark blue).



3. In the **Site Properties** window, select **Siemens HiPath DX** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to save the settings.

### Unify (Siemens) Realitis/HiPath DX - IP connection

These instructions help you configure your Siemens Realitis/HiPath DX phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**  
 TIM Plus establishes a TCP connection to this PBX.

**Support Files**  
 Siemens HiPath DX.TDT  
 Siemens HiPath DX.TDS

**Required Tasks**  
 Configure the CIL output  
 Configure TIM Plus

### Configuring your CIL output

#### CIL access over Ethernet



In addition to CIL access over V.24 ports, all Realitis DX and iSDX systems with firmware revision 6.0 and above can send their CIL information by Ethernet. The System/UPI card - ACI - only allows a maximum of three such connections; subsequent connection requests are rejected.

To set up and activate this feature, a request must be made to Product Management at Siemens, Beeston.

#### Connecting to the CIL server

TIM Plus establishes a TCP connection to the IP address of the System/UPI card of your Siemens phone system.

You can choose the IP address of the System/UPI card by setting the variable `IPACT` in the permanent database. Your local maintenance engineer should be able to program this address for you.

The default listening port is 17257.

### Configuring TIM Plus

Follow the steps below to configure TIM Plus to collect SMDR data from your Siemens Realitis/HiPath DX:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



The screenshot shows a 'Site properties' dialog box with the following configuration:

Field	Value
Name	London
PBX model	Siemens - HiPath DX
Connection method	Actively connect to PBX
Host	192.168.1.1
Port	17257
Username	
Password	
Connection script	Siemens Realitis DX


3. In the **Site Properties** window, select **Siemens HiPath DX** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **Actively connect to PBX** from the drop-down list.
5. In the **Host** field, enter the IP address of the System/UIP card of your phone system.
6. In the **Port** field, enter **17257**.
7. Leave the **Username** and **Password** fields blank.
8. In the **Connection script** field, select **Siemens Realitis DX** from the drop-down list.
9. Click on the **Save** button to apply the settings.

## VoiSpeed


### VoiSpeed PBX

These instructions help you configure your VoiSpeed PBX phone system to work with TIM Plus. Contact your system maintainer if you are not familiar with the configuration of your PBX.

**Connection Type**

-  The SMDR data is outputted to a file

**Support Files**

-  Voispeed.TDT

**Required Tasks**

- Configure the SMDR output
- Install NetPBX
- Configure TIM Plus

### Configuring your CDR output

The VoiSpeed phone system outputs its CDR data to a file. To configure the output, contact your system maintainer.

TIM Plus can be installed on the same machine as the VoiSpeed server; however, you should confirm this first with your system maintainer as it may impact system performance.

## Installing NetPBX

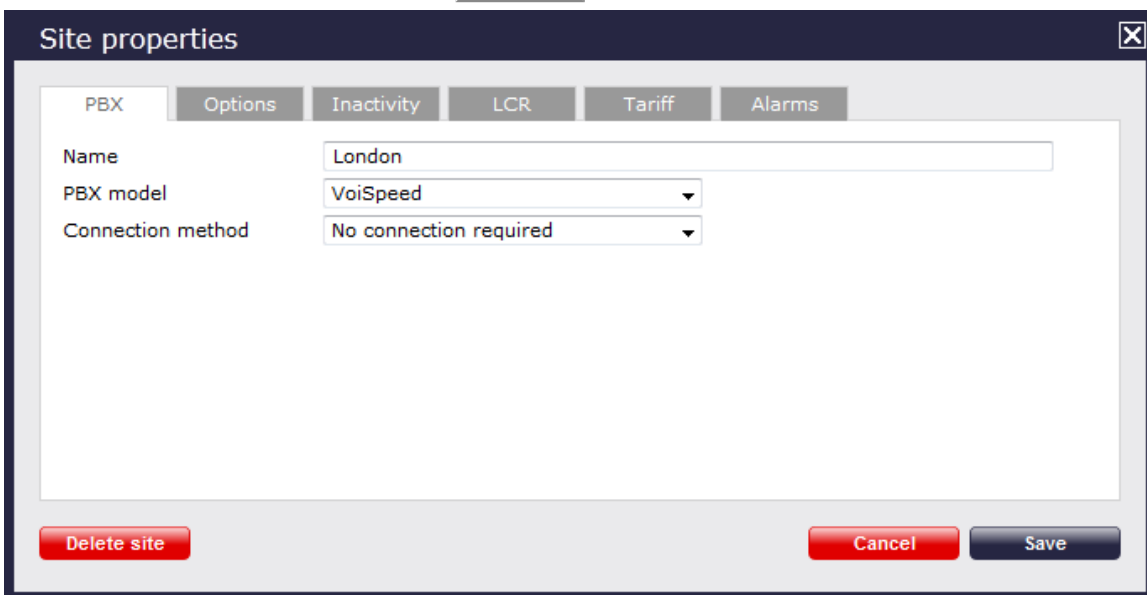
Since your VoiSpeed phone system outputs its call logging data to a file, you first need to install the [NetPBX](#) software in order to collect the contents of the call logging file and forward it to TIM Plus. For setup instructions, click on the link below:

[Install and configure NetPBX](#)

## Configuring TIM Plus

Once NetPBX is configured and collecting data, log in to TIM Plus and perform the steps below:

1. Click on the **Directory** tab.
2. Choose the site you want to configure and click **Properties**.



The screenshot shows a 'Site properties' dialog box with the following configuration:

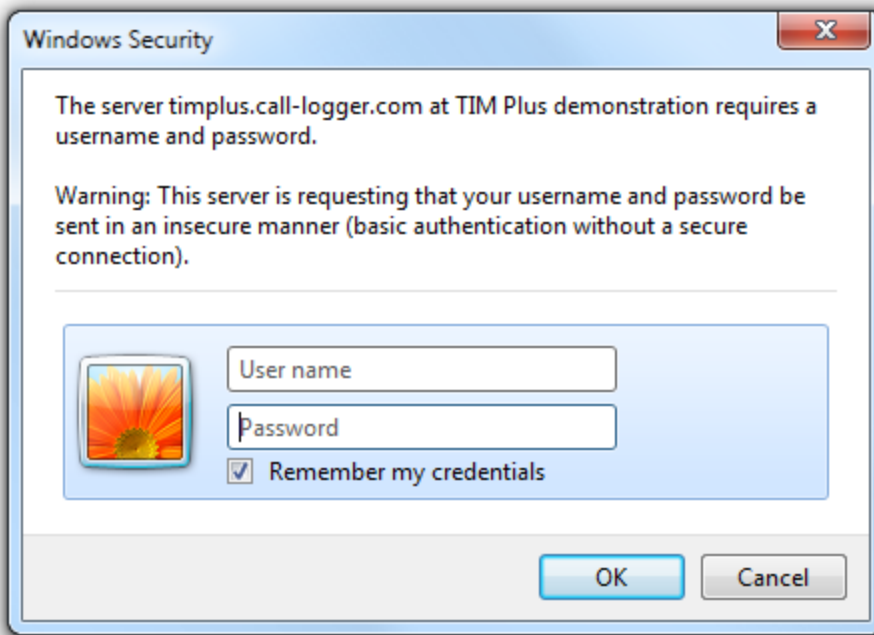
Field	Value
Name	London
PBX model	VoiSpeed
Connection method	No connection required

3. In the **Site Properties** window, select **VoiSpeed** from the **PBX model** drop-down list.
4. In the **Connection method** field, select **No connection required** from the drop-down list.
5. Click on the **Save** button to apply the settings.

## Accessing the system

TIM Plus resides on a centralised machine within your network where it runs as a service and, due to its in-built web server, it can be accessed via a standard web browser from any other PC on your network.

To access TIM Plus, open a web browser, go to the IP address or host name of the computer running TIM Plus and log in using your username and password.



After successfully logging in, the following "dashboard" screen will be displayed.

**TIMPLUS**
Reports   Directory   Call view   Live stats   Tariff editor   Settings   Alerts

Call volumes by call type

Call volumes by half hour

Call volumes by charge band

**Quick call search**

Call type: All call types

Period: Today

Dialled number:

CLI:

Site: (All sites)

Group:

User:

Limit results to:  calls

**Most recent calls** Columns   Save

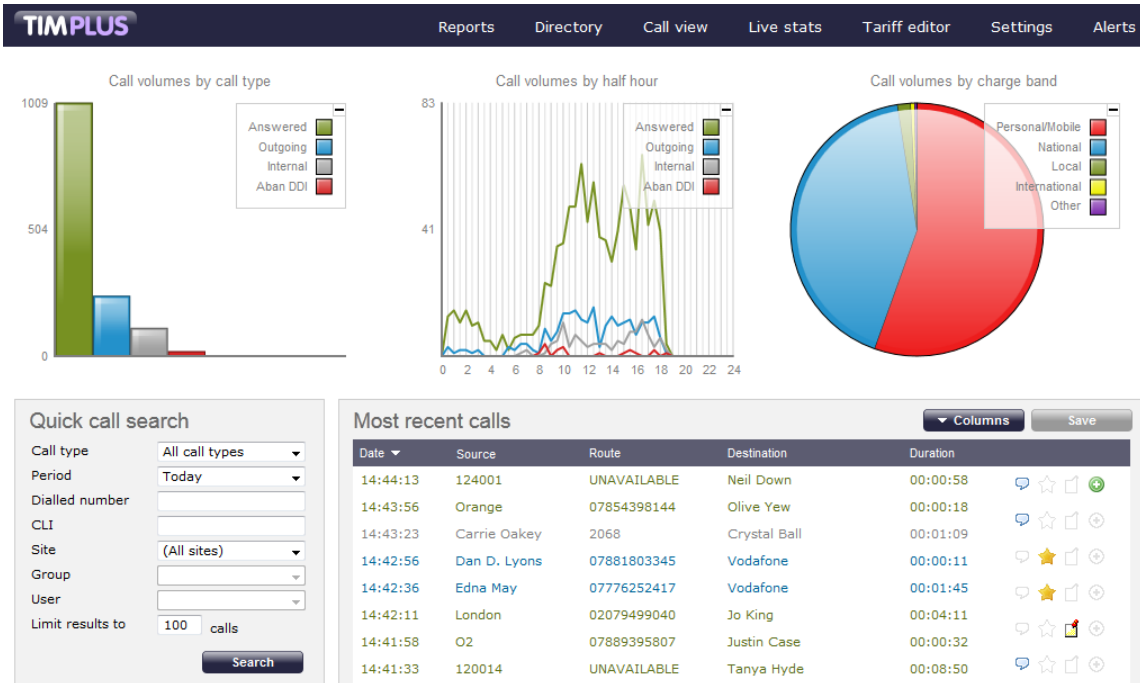
Date	Source	Route	Destination	Duration	
14:44:13	124001	UNAVAILABLE	Neil Down	00:00:58	<span>🗨️</span> <span>☆</span> <span>📄</span> <span>+</span>
14:43:56	Orange	07854398144	Olive Yew	00:00:18	<span>🗨️</span> <span>☆</span> <span>📄</span> <span>+</span>
14:43:23	Carrie Oakey	2068	Crystal Ball	00:01:09	<span>🗨️</span> <span>☆</span> <span>📄</span> <span>+</span>
14:42:56	Dan D. Lyons	07881803345	Vodafone	00:00:11	<span>🗨️</span> <span>★</span> <span>📄</span> <span>+</span>
14:42:36	Edna May	07776252417	Vodafone	00:01:45	<span>🗨️</span> <span>★</span> <span>📄</span> <span>+</span>
14:42:11	London	02079499040	Jo King	00:04:11	<span>🗨️</span> <span>☆</span> <span>📄</span> <span>+</span>
14:41:58	O2	07889395807	Justin Case	00:00:32	<span>🗨️</span> <span>☆</span> <span>📄</span> <span>+</span>
14:41:33	120014	UNAVAILABLE	Tanya Hyde	00:08:50	<span>🗨️</span> <span>☆</span> <span>📄</span> <span>+</span>

i You may find that your access is restricted to a specific site or group. If you need to access other sites or groups, speak to your system administrator to get additional privileges.

## Main screen

## Overview

When logging in to TIM Plus, the following dashboard screen is displayed:



The information you see on this screen is relevant only to the area to which you've been granted access. For example:

- If you are a site administrator, the graphs, live call view and any other call-related information will be derived from calls that happened only on your own site and not those from any other sites within the system.
- If your login account is restricted to a specific user group (department), the statistics will relate only to the call information for users within that particular group.

The dashboard screen consists of a toolbar along the top of the page and three main panels.

The toolbar is the main menu that you use to navigate the major features of TIM Plus. The tabs that make up the toolbar differ according to the type of account you use to log in with. The screenshot above displays an example dashboard screen for a user account that has administrative privileges whereby all of the tabs are present; however, for a restricted web user account, some of the tabs might not be visible, such as **Directory** or **Settings**.

The three panels that make up the dashboard screen are as follows:

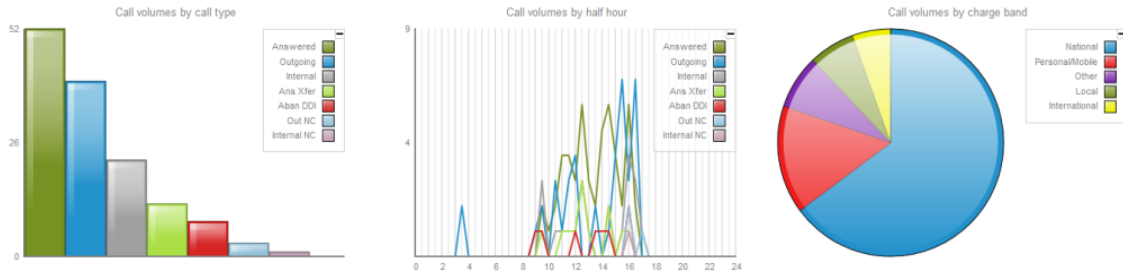
- Summary graphs
- Quick call search
- Most recent calls

## Summary graphs

The summary graphs panel consists of three separate graphs, each organising their information using different criteria, as described below:

- Call volumes by call type
- Call volumes by half hour

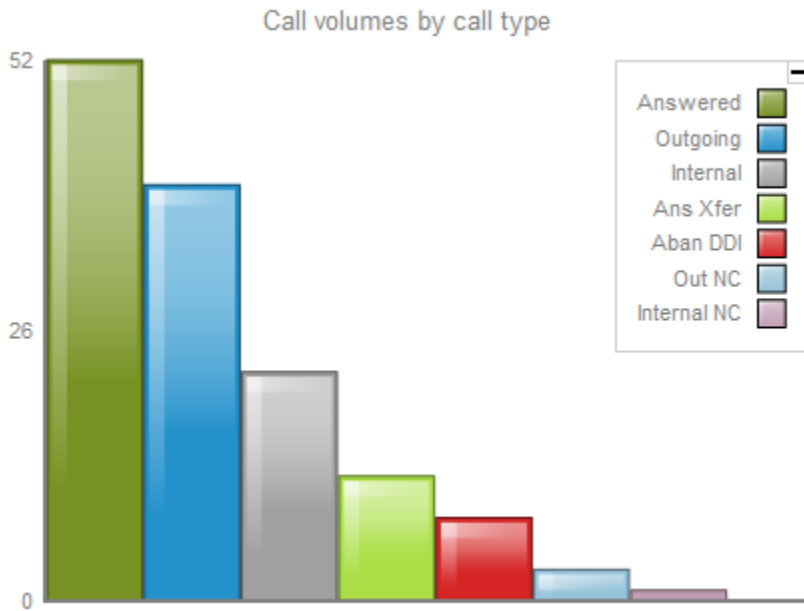
■ Call volumes by charge band



The information you see in each graph pertains only to the area to which the logged-in user has been granted access.

**Call volume by call type**

This first graph shows a snapshot of calls for the current day, based on the type of call, e.g. inbound, outbound, missed.



Each call type is colour-coded using a system-wide colour scheme, as follows:

- **Green:** Incoming calls
- **Light green:** Answered transferred calls
- **Blue:** Outgoing calls
- **Light blue:** Outgoing non-connected calls
- **Grey:** Internal calls
- **Mauve:** Internal non-connected calls
- **Red:** Abandoned DDI (Direct Dialed In) calls

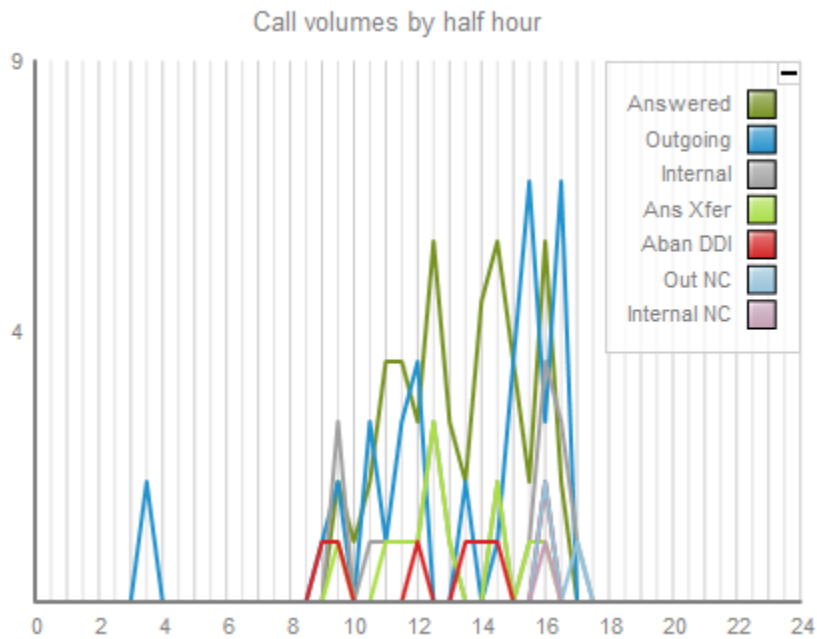
- **Pink:** Tandem calls



The same call type colour coding system applies throughout TIM Plus.

### Call volume by half hour

This graph shows a snapshot of calls for the current day, broken down by half-hour, allowing you to quickly identify peaks and troughs in call volumes to identify busy periods.



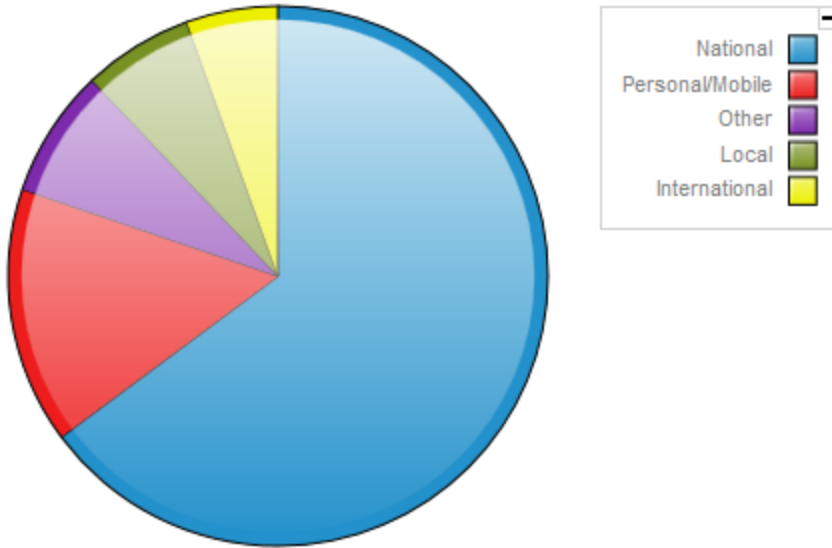
Each call type is colour-coded using a system-wide colour scheme as follows:

- **Green:** Incoming calls
- **Light green:** Answered transferred calls
- **Blue:** Outgoing calls
- **Light blue:** Outgoing non-connected calls
- **Grey:** Internal calls
- **Mauve:** Internal non-connected calls
- **Red:** Abandoned DDI (Direct Dialed In) calls
- **Pink:** Tandem calls

### Call volume by charge band

This graph shows a snapshot of calls for the current day, based on their destination, allowing you to identify where you call most often. Calls are grouped into geographical locations such as *Mobile, National, Local, International* etc.

Call volumes by charge band



By default, the following colour scheme is used to identify calls to each geographical group:

- **Red:** Personal/Mobile calls
- **Green:** Local calls
- **Blue:** National calls
- **Yellow:** International calls
- **Purple:** Other calls

## Quick call search

The `quick call search` panel offers a rapid way to locate specific calls in the central database, as an alternative to running a full call report. You can refine your search results by using the filters described below:

**Quick call search**

Call type:

Period:

Dialled number:

CLI:

Site:

Group:

User:

Limit results to:  calls

**Most recent calls**

Time	Source	Route	Destination	Duration

### Call type

This filter allows you to define the type of call you want your search results to cover, e.g. incoming, outgoing, internal etc. To include all types of call, set this to **All call types**.

Call type

- All call types
- Answered
- Outbound
- Missed

## Period

The **Period** search field defines the time period the results should cover. To choose a period, select it from the drop-down list.

Period

- Custom
- Today
- Yesterday
- This week
- Last week
- This month
- Last month
- This year
- All calls
- Custom

There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table describes how the start and end times are defined for each preset period:

Field	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to <b>00:00:00</b> and the end time to <b>23:59:59</b> .
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to <b>00:00:00</b> and the end time to <b>23:59:59</b> .
<b>This week</b>	The start date is set to the first day (normally Monday) of the current week. The end date is set to the current day. The start time is set to <b>00:00:00</b> and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to <b>00:00:00</b> and the end time to <b>23:59:59</b> .
<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to <b>00:00:00</b> and the end time to the current time.
<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to <b>00:00:00</b> and <b>23:59:59</b> respectively.
<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to <b>00:00:00</b> and <b>23:59:59</b> respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.
<b>Custom</b>	Enter the start and end dates and times into the boxes provided. The start and end times are linked to their respective dates.



## Dialled number

The **Dialled number** field allows you to filter your results by the number that was dialled. You can also specify a partial number to match all calls beginning with that number, e.g. to show all calls to London, enter **0207**.

Dialled number

You can use the \* symbol as a wildcard in digit pattern matching, e.g. for calls to Tri-Line, enter **020726526\***.

## CLI

Calling Line Identification (CLI) is the telephone number of the remote caller in an incoming call scenario.

You can filter your results to show only calls that originate from a specific CLI or those whose CLI matches a particular pattern of digits. For example, to report on all incoming calls from London, you could enter **0207**.

CLI

You can use the \* symbol as a wildcard in digit pattern matching, e.g. for calls from Tri-Line, enter **020726526\***.

## Site

The **site** search field enables you to specify the site you want your results to cover. Select **(All sites)** to search across all sites.

Site

- (All sites)
- London
- Madrid
- Manchester
- Newcastle

## Group

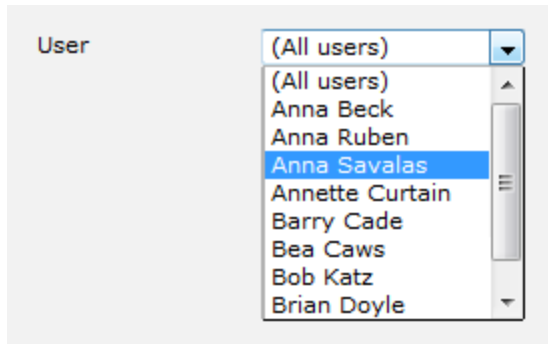
Having chosen a specific site, you can limit the search results to a specific user group within that site by selecting it from the drop-down list.

Group

- (All groups)
- User groups—**
- Accounts
- Accounts Admin
- Administrators
- Billing Team
- Call centre
- Credit Card Machines
- Development

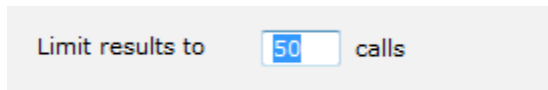
## User

If both a site and group have been selected, you can further limit the search results to include only calls involving a particular user, by selecting the user from the drop-down list.



### Limit results to

This feature enables you to specify the maximum number of search results you want to retrieve. Set the limit by entering a value in the field provided, e.g. entering 50 in the `Limit results to` field, will return a maximum of 50 results.



The search results will show in a new panel entitled `Search results`, as shown below:

Search results:					<a href="#">Back to recent calls</a>
Time	Source	Route	Destination	Duration	
10:17:53	London	02074372526	Rose Pink	00:01:36	
10:16:31	Rachel Vaughn	3388	Justin Case	00:00:30	
10:16:18	London	02076382847	AJ Singh	00:00:50	
10:16:08	London	02076788000	Shane Winrey	00:02:22	
10:15:06	London	02089443192	11042	00:00:35	
10:14:58	London	02089173800	Cliff Jones	00:00:03	
10:14:53	Chastity Case	02078239990	London	00:00:45	
10:14:51	120021	UNAVAILABLE	Wayne Robert	00:02:43	
10:14:38	Orange	07854369212	Pearl E White	00:00:12	
10:14:36	120031	UNAVAILABLE	Rose Pink	00:01:35	
10:14:23	Orange	07854180526	Sarah Connors	00:00:11	
10:12:01	Orson Carte	07751390118	O2	00:00:25	

To close the search results and return to the `Most recent calls` panel, click on the [Back to recent calls](#) link, at the top-right corner of the panel.

## Most recent calls

By default, the `Most recent calls` panel displays the latest calls to have been processed by TIM Plus, with the most recent towards the top of the list. To sort the results by a different column, click on the relevant column header.

**Search results:** [Back to recent calls](#)

Time ▼	Source	Route	Destination	Duration	
10:17:53	London	02074372526	Rose Pink	00:01:36	
10:16:31	Rachel Vaughn	3388	Justin Case	00:00:30	
10:16:18	London	02076382847	AJ Singh	00:00:50	
10:16:08	London	02076788000	Shane Winrey	00:02:22	
10:15:06	London	02089443192	11042	00:00:35	
10:14:58	London	02089173800	Cliff Jones	00:00:03	
10:14:53	Chastity Case	02078239990	London	00:00:45	
10:14:51	120021	UNAVAILABLE	Wayne Robert	00:02:43	
10:14:38	Orange	07854369212	Pearl E White	00:00:12	
10:14:36	120031	UNAVAILABLE	Rose Pink	00:01:35	
10:14:23	Orange	07854180526	Sarah Connors	00:00:11	
10:12:01	Orson Carte	07751390118	O2	00:00:25	

Each call type is colour-coded using a system-wide colour scheme, as follows:

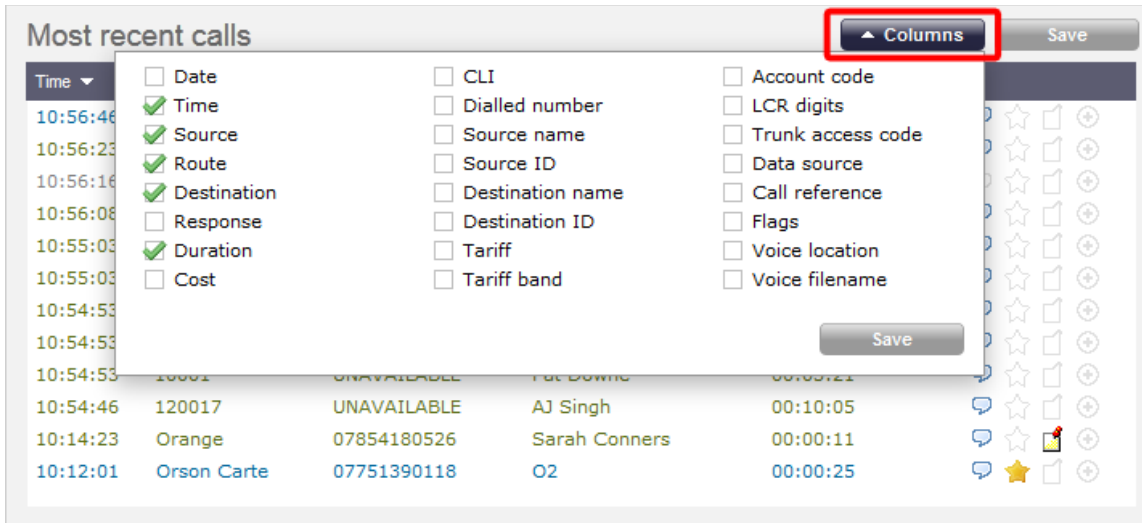
- **Green:** Incoming calls
- **Light green:** Answered transferred calls
- **Blue:** Outgoing calls
- **Light blue:** Outgoing non-connected calls
- **Grey:** Internal calls
- **Mauve:** Internal non-connected calls
- **Red:** Abandoned DDI (Direct Dialed In) calls
- **Pink:** Tandem calls



The calls you see in the **Most recent calls** panel pertain only to the area to which the logged-in user has been granted access; administrators see calls from all sites.

## Columns headers

The column headers shown in the most recent calls list are specific to each web user and can be customised by clicking on the **Columns** button, which will display the following panel:



Include a column header in the list by ticking the box alongside each one. Click on the **Save** button to apply any changes.

Each column header is described below:

Field name	Description
<b>Date</b>	The date the call started.
<b>Time</b>	The time the call started.
<b>Source</b>	The place from where the call originated.
<b>Route</b>	The information displayed in this field is determined by the type of call: <ul style="list-style-type: none"> <li>▪ for incoming calls, this shows the CLI of the caller;</li> <li>▪ for incoming internal calls, this shows either the caller's username or extension number;</li> <li>▪ for outgoing calls, this shows the dialled number.</li> </ul>
<b>Destination</b>	The information displayed in this field is determined by the type of call: <ul style="list-style-type: none"> <li>▪ for incoming calls, this shows the name of the user whose extension answered the call, or the extension number if not available;</li> <li>▪ for outgoing calls, this shows the geographical location that was dialled, or an alias if defined in your contacts list;</li> <li>▪ for internal calls, this shows the extension that was dialled, enclosed in square brackets [ ].</li> </ul>
<b>Response</b>	The time it took for the call to be answered (in seconds).
<b>Duration</b>	The duration of the call (in hours, minutes and seconds).
<b>Cost</b>	The cost of the call.
<b>CLI</b>	The telephone number of the remote caller for inbound calls.

<b>Dialled number</b>	The number that was dialled in order to reach a particular destination.
<b>Source name</b>	The name of the person who made the call.
<b>Source ID</b>	The ID of the person who made the call.
<b>Destination name</b>	The name of the destination called, e.g. Manchester, Tri-Line, London.
<b>Destination ID</b>	The ID of the destination called.
<b>Tariff</b>	The name of the tariff table that was used to cost the call, e.g. BT.
<b>Tariff band</b>	The specific tariff band that was used to cost the call, e.g. International, National, Mobile etc.
<b>Account code</b>	The account code associated with the call.
<b>LCR Digits</b>	The Least Cost Routing (LCR) digits used to route the call.
<b>Trunk access code</b>	The trunk access code used to access a group of channels.
<b>Data source</b>	The location where the call originated.
<b>Call reference</b>	Any call reference number associated with the call.
<b>Flags</b>	<p>Any flags associated with a call, as described below:</p> <ul style="list-style-type: none"> <li>▪ The call has no associated voice recording.</li> <li>▪ The call has an associated voice recording; click on the icon to listen to the call.</li> <li>▪ The call has not been scored; click on the icon to score the call.</li> <li>▪ The call has been scored; click on the icon to review scoring information for the call.</li> <li>▪ The call has not been annotated; click on the icon to add a note to the call.</li> <li>▪ The call has one or more associated notes; click on the icon to review the note(s).</li> <li>▪ The call has no related transfer legs.</li> <li>▪ The call has related transfer legs; click on the icon to view all transfers associated with the call.</li> </ul>
<b>Voice location</b>	The unique ID of the call recording device that captured audio for the call.
<b>Voice filename</b>	The unique call reference identifying any voice recording associated with the call.

### Reordering column headers

Each column header can be reordered by clicking and dragging it to the new location, as shown below:

Most recent calls

Columns Save

Time	Source	Route	Destination	Duration	
10:17:53	London	02074572526	Rose Pink	00:01:36	🗨️ ☆ 📄 +
10:16:31	Rachel Vaughn	3388	Justin Case	00:00:30	🗨️ ☆ 📄 +
10:16:18	London	02076382847	AJ Singh	00:00:50	🗨️ ★ 📄 +
10:16:08	London	02076788000	Shane Winrey	00:02:22	🗨️ ☆ 📄 +
10:15:06	London	02089443192	11042	00:00:35	🗨️ ☆ 📄 +
10:14:58	London	02089173800	Cliff Jones	00:00:03	🗨️ ☆ 📄 +
10:14:53	Chastity Case	02078239990	London	00:00:45	🗨️ ★ 📄 +
10:14:51	120021	UNAVAILABLE	Wayne Robert	00:02:43	🗨️ ☆ 📄 +
10:14:38	Orange	07854369212	Pearl E White	00:00:12	🗨️ ☆ 📄 +
10:14:36	120031	UNAVAILABLE	Rose Pink	00:01:35	🗨️ ☆ 📄 +
10:14:23	Orange	07854180526	Sarah Connors	00:00:11	🗨️ ☆ 📄 +
10:12:01	Orson Carte	07751390118	O2	00:00:25	🗨️ ★ 📄 +

Columns can be sorted by clicking the relevant column header, with each click toggling between ascending and descending order.



Any layout changes you make to the `Most recent calls` panel are saved only for the current web user and do not affect other web users.

## Reports

### What are reports?

Reports are the means by which your telephone call data is presented to you in a visual, meaningful way. Although the results of each report type differ substantially, running each of them involves following a similar, wizard-style procedure. Each report accepts several filters and options, allowing you to tailor the results to exactly the information you are looking for.

They can be run [on demand](#) at any time, or be [scheduled](#) to run at predetermined times in the future.

Below is an example output of the `Call Analysis` report:

### Reports overview video

### Running reports on demand

To run a report on demand, click on the `Reports` tab and, from the list of reports in the left-hand panel, select the report you want to run. Click on the `Select this report` button to start the report wizard, as shown below:

The screenshot shows the TIMPLUS Reports interface. The top navigation bar includes 'Reports', 'Directory', 'Call view', 'Live stats', 'Tariff editor', 'Settings', and 'Alerts'. The 'Reports' section is active, displaying a sidebar with various report options: Account summary, Busy channels, Busy times, Call analysis (highlighted), Call geography, Call scoring, Call volumes, Custom report, Daily activity, Enterprise overview, Frequent numbers, and Missed calls. The main content area is titled 'Call analysis' and features a line graph showing call metrics over time. A red box highlights a 'Select this report' button. Below the graph, there is a table with columns for 'Missed', 'Answered', and 'Outbound' calls, and a 'Properties' button with a 'Delete' button next to it.

**Call analysis**

My call analysis 2011-04-19 14:27:01

Breaks down your working day into half-hour segments and details important information about your calls. You get a clear graphical representation of how many outbound, answered and abandoned calls you've made.

Figures are shown as maximum and averages so you can more effectively plan your staffing requirements throughout each working day.

**Scheduled reports**

Report	Runs every	Last run	Next runs
My busy times	1 month	Never	16 August 2012 00:00:00
My call analysis	1 month	Never	16 November 2012 00:00:00

A new window will open, where you can set the parameters of your report. If you do not want to change any of the default settings, click on the **Finish** button, as shown below:

The screenshot shows the 'Enterprise overview' dialog box. It has a title bar with 'Enterprise overview' and a close button. The main content area is titled 'Select a reporting period' and contains the following text: 'Define the period you want the report to encompass.' and 'Remember, you can always filter your results later, so choose a big enough period.' The dialog includes a 'Period' dropdown menu set to 'Yesterday', and fields for 'From date' (01 Jul 2011), 'To date' (02 Apr 2013), 'From time' (00:00:00), and 'To time' (23:59:59). At the bottom, there are three buttons: 'Cancel', 'Finish >>' (highlighted with a red box), and 'Next >'.

**Enterprise overview**

Select a reporting period

Define the period you want the report to encompass.

Remember, you can always filter your results later, so choose a big enough period.

Period: Yesterday

From date: 01 Jul 2011

To date: 02 Apr 2013

From time: 00 : 00 : 00

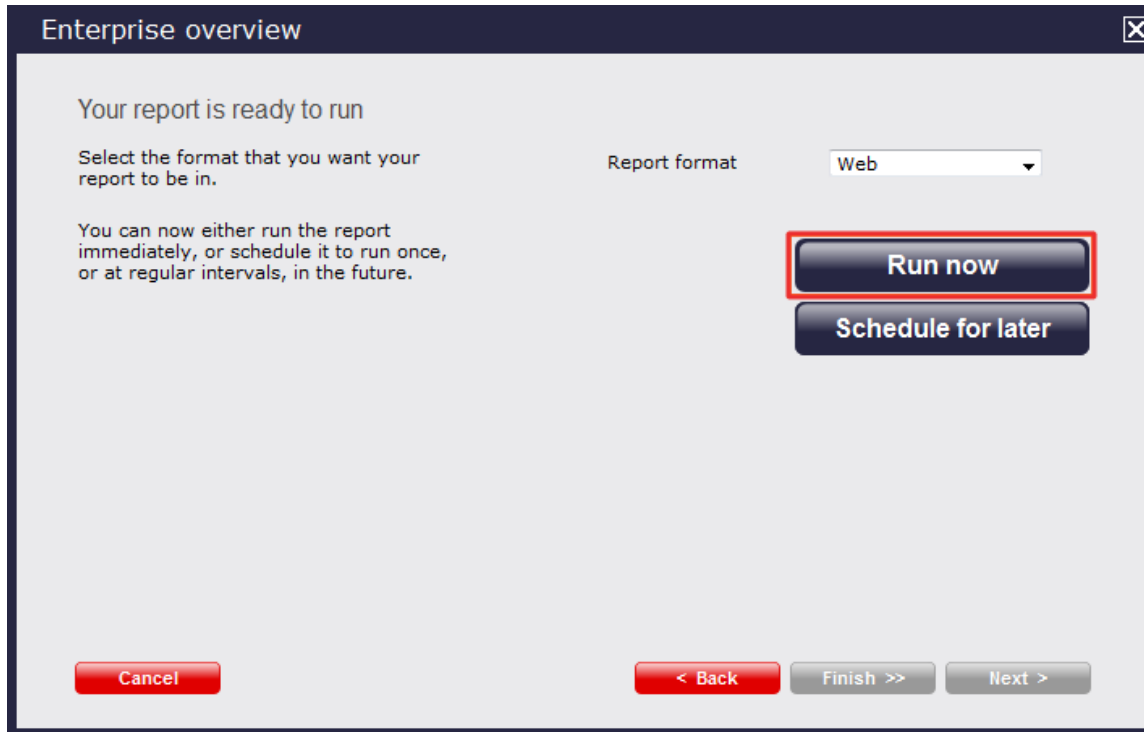
To time: 23 : 59 : 59

Buttons: Cancel, < Back, **Finish >>**, Next >

If you want to change any of the report's parameters, refer to the relevant page in the list below:

- Setting the report period
- Setting the report entity
- Setting the report filters
- Setting the report options
- Setting the report formats

When you are ready to run the report, click on the **Run now** button, as shown below:



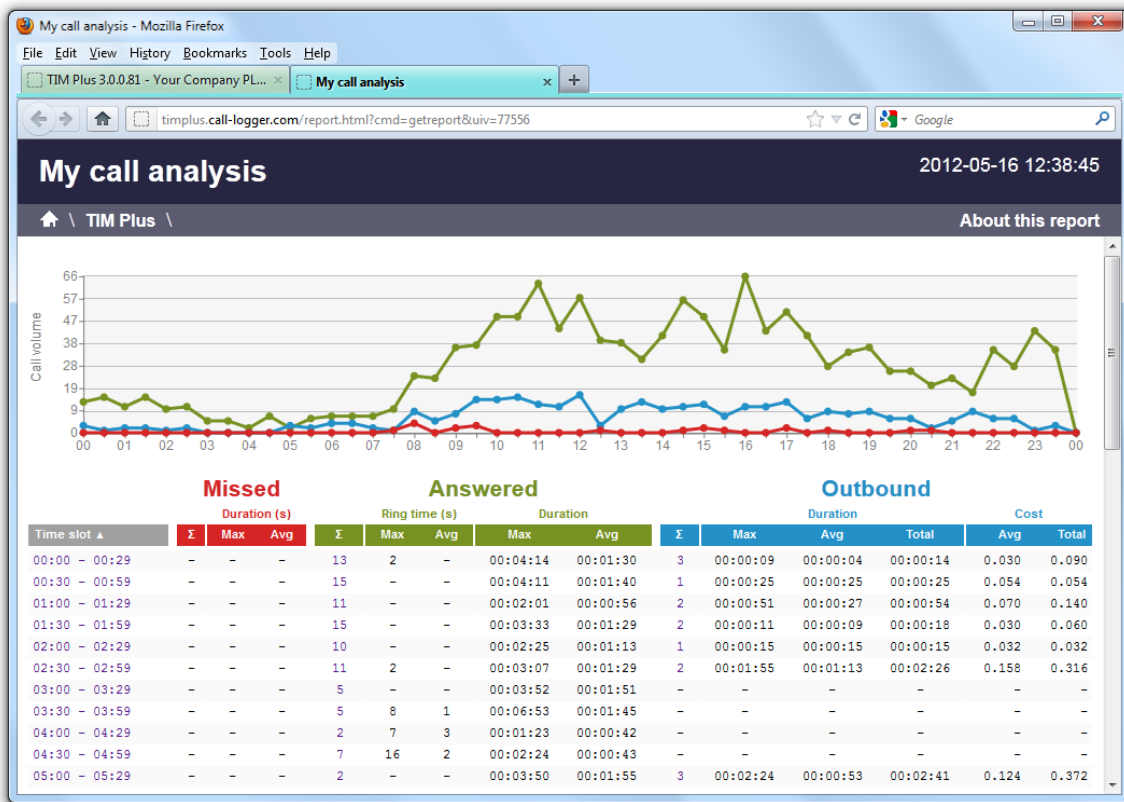
When the report has finished, its results will open in a new browser window.



If the results window does not appear after running your report, it may be because your browser is using a pop-up blocker. You should disable pop-up blocking for the TIM Plus web address.

The example below shows a [Call Analysis](#) report in web format:





## Scheduling reports

### Scheduling reports

- Preparing the report
- Setting the scheduling parameters
- Editing a scheduled report
- Deleting a scheduled report

## Preparing the report

To schedule a report, choose the one you want to run from the list in the left-hand panel, then click on the **Select this report** button to start the report wizard, as shown below:

**TIMPLUS** Reports Directory Call view Live stats Tariff editor Settings Alerts

### Reports

- Account summary
- Busy channels
- Busy times
- Call analysis**
- Call geography
- Call scoring
- Call volumes
- Custom report
- Daily activity
- Enterprise overview
- Frequent numbers
- Missed calls

### Call analysis

My call analysis 2011-04-19 14:27:01

Breaks down your working day into half-hour segments and details important information about your calls. You get a clear graphical representation of how many outbound, answered and abandoned calls you've made.

Figures are shown as maximum and averages so you can more effectively plan your staffing requirements throughout each working day.

**Select this report**

### Scheduled reports

Properties Delete

Report	Runs every	Last run	Next runs
My busy times	1 month	Never	16 August 2012 00:00:00
My call analysis	1 month	Never	16 November 2012 00:00:00

In the same way as with running a report on demand, you can modify the report period, entity, filters, options and format before scheduling, by referring to the relevant pages below:

- Setting the report period
- Setting the report entity
- Setting the report filters
- Setting the report options
- Setting the report formats

If you do not want to change any of the default settings, click on the **Finish** button, as shown below:

### Busy times

Select a reporting period

Define the period you want the report to encompass.

Remember, you can always filter your results later, so choose a big enough period.

Period: Yesterday ⓘ

From date: 01 Jul 2011

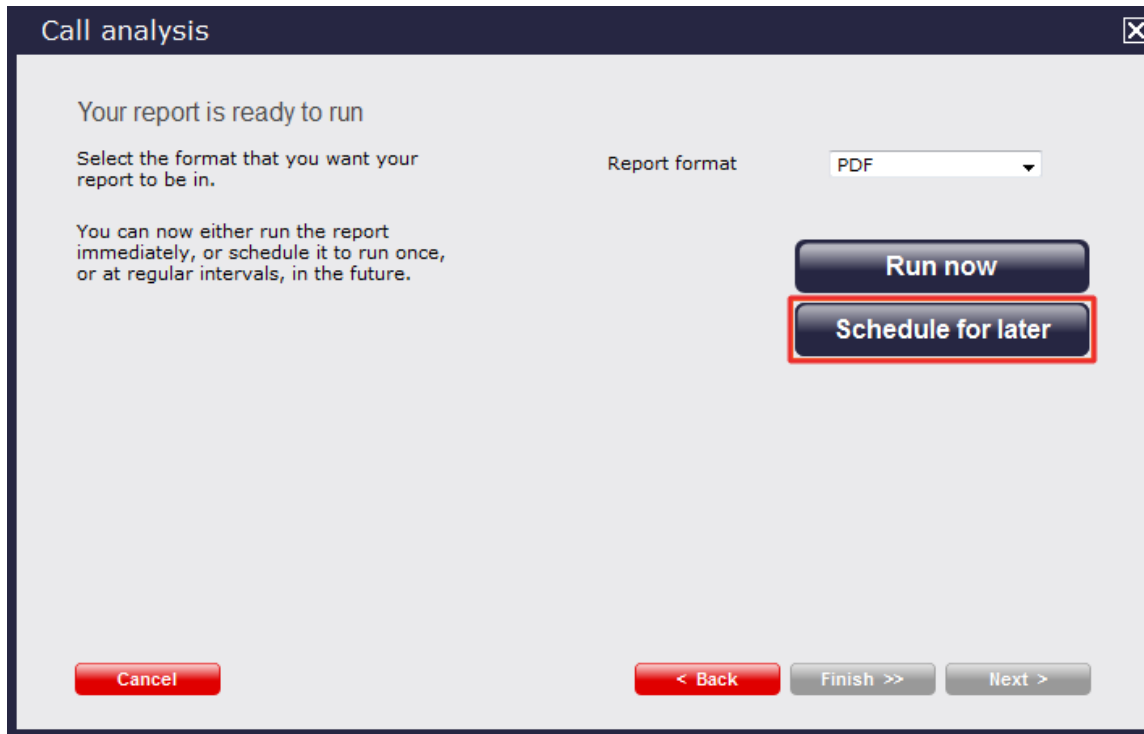
To date: 16 May 2012

From time: 00 : 00 : 00

To time: 23 : 59 : 59

Cancel < Back **Finish >>** Next >

Once you have selected your report's parameters, click on the **Schedule for later** button.



In the new window that opens you can set the scheduling parameters of the report:

- when you want the report to first run
- how frequently you want the report to run
- how you want the report delivered
- who should receive the report

## Setting the scheduling parameters

### When do you want the first report to run?

Enter the future date and time that you want the report to run at, as shown below:

### Call analysis ✕

Choose when you want the report to be delivered

Choose the date and time you want the report to be generated.

Start running the report on  
 2 Apr 2013 at 00 : 00 : 00

Repeat the report every

1 months

Cancel
< Back
Finish >>
Next >

#### How often do you want the report to recur?

If you want the report to recur, tick the `Repeat the report` box and select the frequency for re-runs from the drop-down list, as shown below:

### Call analysis ✕

Choose when you want the report to be delivered

Choose the date and time you want the report to be generated.

Start running the report on

2 Apr 2013 at 00 : 00 : 00

Repeat the report every

1 months  
 hours  
 days  
 weekdays  
 weeks  
 months  
 years

Cancel
< Back
Finish >>
Next >

#### How do you want the report delivered?

The report can be delivered by e-mail or saved as a file to a specific location, by choosing a delivery method from the drop-down list:

### Call analysis ✕

How is the report to be delivered?

Choose how you would like this report to be delivered.

You can save the report as a file or have it sent by email.

Delivery method ▼  
 Email address ▼

Email  
 Email  
 File

Cancel
< Back
Finish >>
Next >

#### Who receives the report?

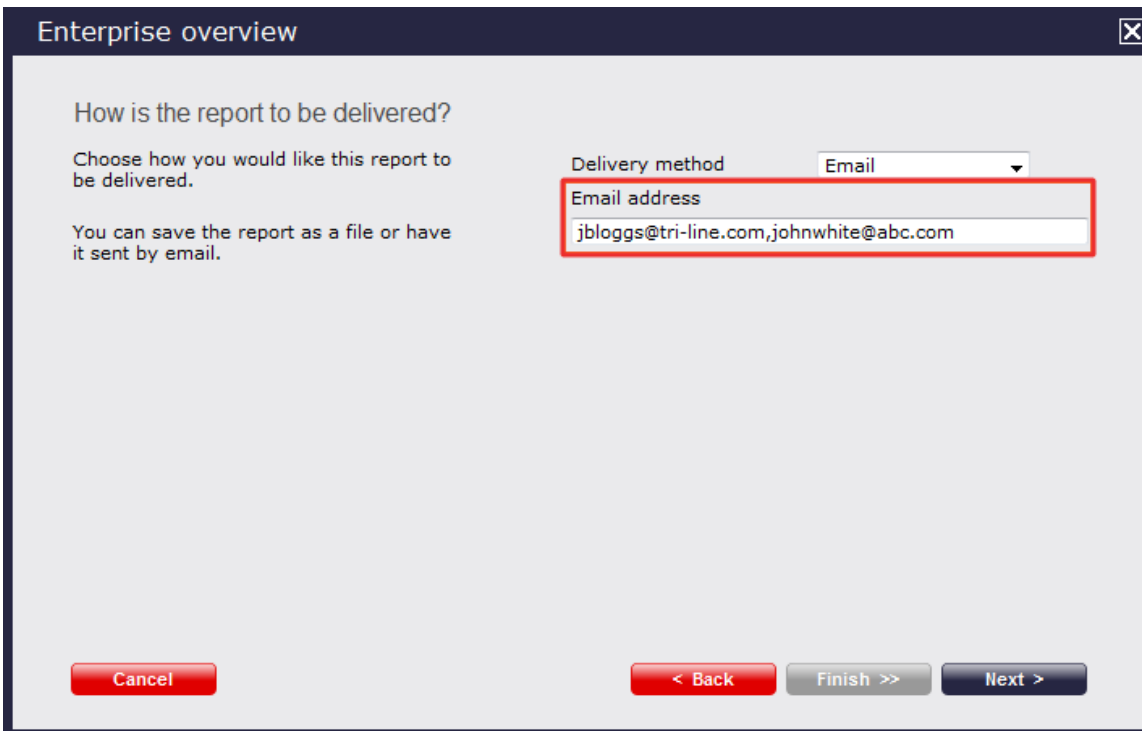
Delivery method	Description
<b>E-mail</b>	<ul style="list-style-type: none"> <li>▪ Enter the e-mail address that you want the report to be delivered to</li> <li>▪ If you want the report to be e-mailed to more than one person, separate each address using the ; symbol.</li> </ul>

**File**

- Type the full filename, including folder, of the location that you want the report to be saved as, e.g. `C:\My Reports\My Call Analysis.html`
- The filename can include the following variables:

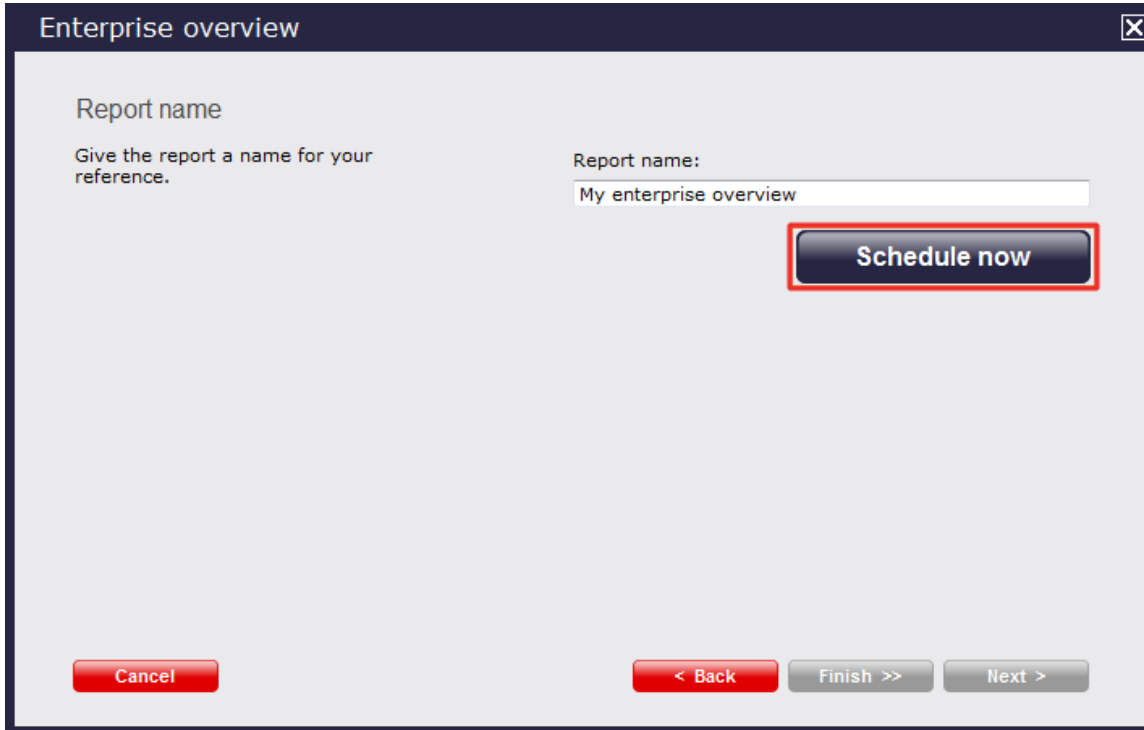
Variable	Description
{year}	The current year
{month}	The current month
{week}	The current week number
{day}	The current day of the month
{hhmmss}	The time that the report ran, in a compact hours, minutes and seconds format
{name}	The name given to the report
{uiv}	A unique numeric report identifier

- To save the report to a network share, specify the filename using a UNC path. You must ensure that the user account running the TIM Plus service has access privileges to write to the file you have specified.

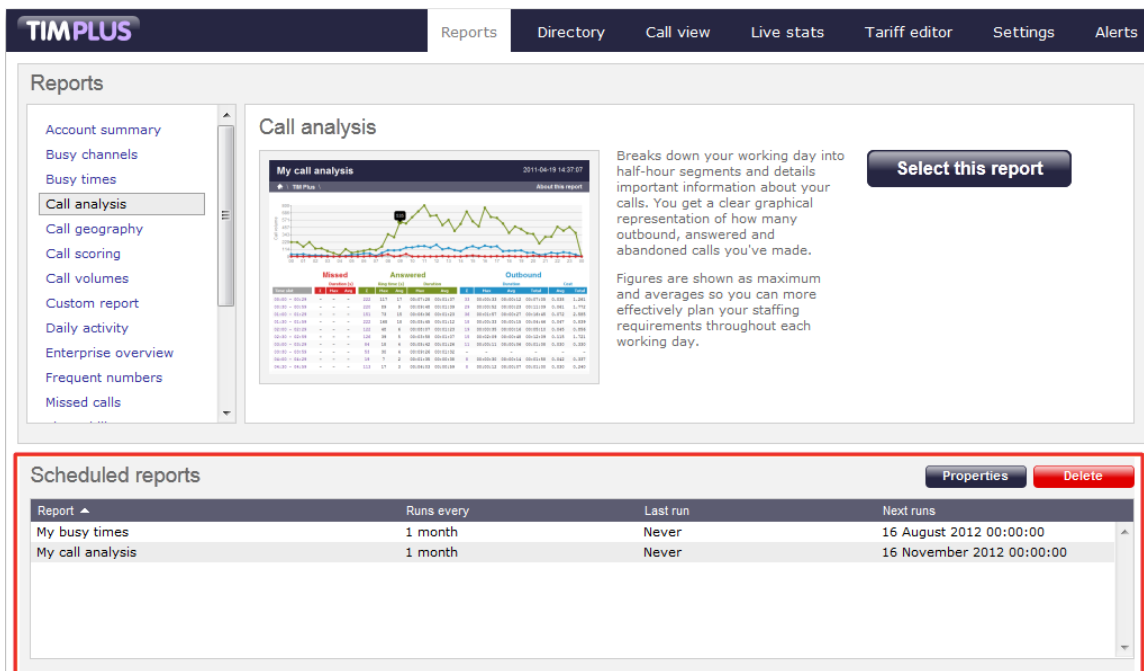


**Schedule now**

When you have configured the scheduling parameters, click on the **Schedule now** button to save the report's definition.



Notice that your newly-scheduled reports are now listed in the **scheduled reports** panel at the bottom of the screen, as shown below:



**i** The properties of a scheduled reports are web user specific, and can be seen or edited only by the web user that initially added the report in the system.

## Editing a scheduled report

To edit a scheduled report, select it from the **scheduled reports** panel, and click on the **Properties** button, as shown below:

The screenshot shows the TIMPLUS interface. At the top, there is a navigation bar with 'Reports', 'Directory', 'Call view', 'Live stats', 'Tariff editor', 'Settings', and 'Alerts'. Below this, the 'Reports' section is visible, containing a sidebar with various report categories and a main area for 'Call analysis'. The 'Call analysis' report includes a line graph titled 'My call analysis' and a table with columns for 'Missed', 'Answered', and 'Outbound'. To the right of the graph is a 'Select this report' button. Below the 'Reports' section is the 'Scheduled reports' section, which contains a table with columns for 'Report', 'Runs every', 'Last run', and 'Next runs'. A 'Properties' button is highlighted in red above the table.

A new window with the properties of the report will open, where you can edit the period, entity, filters, options and format of the report.

The screenshot shows the 'Call analysis' properties dialog box. It has a title bar 'Call analysis' and a subtitle 'Select a reporting period'. The main text says 'Define the period you want the report to encompass.' and 'Remember, you can always filter your results later, so choose a big enough period.' The dialog contains several input fields: 'Period' (set to 'Yesterday'), 'From date' (01 Jul 2011), 'To date' (17 May 2012), 'From time' (00:00:00), and 'To time' (23:59:59). At the bottom, there are buttons for 'Cancel', '< Back', 'Finish >>', and 'Next >'.

Click on the links below for details of how to configure these parameters:

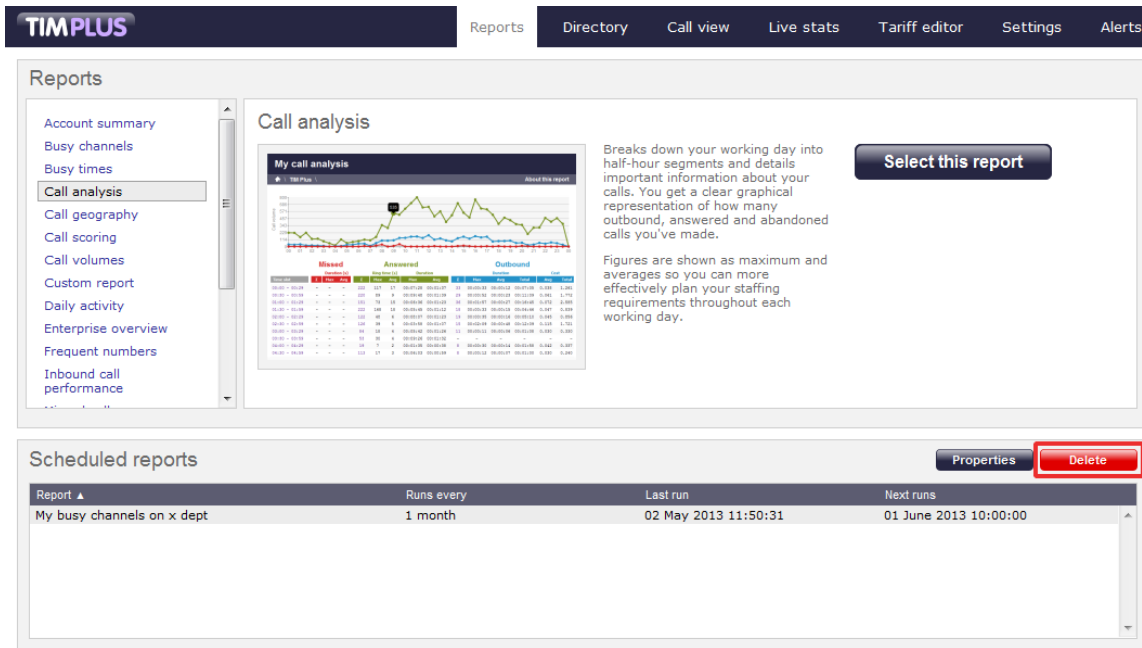
- [Setting the report period](#)
- [Setting the report entity](#)



- Setting the report filters
- Setting the report options
- Setting the report formats

## Deleting a scheduled report

To delete a scheduled report, select it from the **scheduled reports** panel and click the **Delete** button, as shown below:



## Report parameters

### Setting the report period

For each report, you must specify a time span that covers the calls you want the report to include. This is known as the "reporting period".



#### Preset period

There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table

describes how the start and end times are defined for each preset period:

Period	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This week</b>	The start date is set to the first day of the current week (normally Monday). The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.

### Custom period

In addition to the presets described above, it is possible to specify a custom reporting period by choosing **Custom period** from the **Period** drop-down list and specifying your own **Start date**, **Start time**, **End date** and **End time** of the period you want to report on.

### Select a reporting period

Define the period you want the report to encompass.

Remember, you can always filter your results later, so choose a big enough period.

Period	Custom period <span style="float: right;">?</span>
From date	01 Jul 2011
To date	02 Apr 2013
From time	00 : 00 : 00
To time	23 : 59 : 59

### Run or schedule the report

To run or schedule the report without setting any further parameters, select the **Finish** button; to apply further settings, click on the **Next** button, which will direct you to the **Entity** section of the report wizard.




### Setting the report entity

The **Reporting entity** parameter allows you to select the part of your organisation whose calls the report should include, e.g. a site, a group or an individual user.

### Choose a reporting entity


Select a specific section of your organisation whose calls will feature in the report. To run the report across your entire organisation, select **(All sites)**.

Alternatively, select a specific site, user group, channel group, individual user or channel.

Site	(All sites)	
Group		
User		


#### Site

To report on a particular site, select it from the drop-down list or select **All sites**.

Site	All sites	
------	-----------	---


#### Group

If a site has been selected, you are able to further limit the report's results by selecting a group from the drop-down list.

Group	All groups	
-------	------------	---

#### User

If both a site and group have been selected, you can further limit the report's results to include only calls involving a particular user, by selecting that user from the drop-down list.

User	All users	
------	-----------	---



If your web account is restricted to a specific site or group, only those entities to which you have access will be available in the drop-down lists.

### Run or schedule the report

To run or schedule the report without setting any further parameters, select the **Finish** button; to apply further settings, click on the **Next** button, which will direct you to the [Filters](#) section of the report wizard.

### Setting the report filters

Below is a list of all report filters available in TIM Plus, although not all filters are relevant to all reports:

**Filter the results of the report**

Account code	<input type="text"/>		Dialled number	<input type="text"/>	
Call type	All calls		Duration	<input type="text"/>	
Carrier	(All carriers)		LCR code	<input type="text"/>	
CLI	<input type="text"/>		Response	<input type="text"/>	
Cost	<input type="text"/>		Start time	<input type="text"/>	
Destination	<input type="text"/>		Trunk access code	<input type="text"/>	

#### Account code

To produce a report consisting only of calls that were made using a particular account code, enter the account code in the field provided.

Account code

To report on more than one account code, separate each code using a comma.

#### Call type

This filter allows you to select the type of call you want to report on, in terms of where the call originated and where it was delivered, e.g. incoming, outgoing, internal, etc. To report on all types of call, set this to [All calls](#).

Call type

#### Carrier

If you use more than one carrier, you can limit the results to include only calls that were made using a specific carrier.

Carrier

If you use only one carrier, there will be no drop-down list available and no option to choose a carrier.

#### CLI

Calling Line Identification (CLI) is the telephone number of the remote caller in an incoming call scenario.


You can report on calls that originate from a specific CLI or those whose CLI matches a particular pattern of digits. For example, to report on all incoming calls from Tri-Line, you could enter [02072652600](#).

CLI

You can use the **!** symbol to explicitly exclude a CLI from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls from Tri-Line, but include all others, you could use [!020726526\\*](#). To report on more than one CLI, use a comma to separate each entry.

#### Cost

You can define a cost filter to include calls above or below specific values by entering your criteria, as shown below:

Cost <2.00 

You can specify a cost range by using the – symbol; to specify limits, use the comparison operators, >, <, and ! .

### Destination

If you want to filter calls to a specific, known destination, type the name of the destination in the text box provided. This filter accepts the ! and \* symbols for excluding values and specifying partial matches, respectively.


For example, if you wanted to exclude all calls to France, you could enter !France\*, as shown below:

Destination !France\* 

### Dialled number

To filter calls to a specific dialled number, type it in the text box provided. The dialled number is defined as the number that is dialled (in the case of an outbound call), or the DDI number that the remote party dialled to reach a particular extension or group (in the case of an inbound call).

To filter calls to a specific area, a partial number can be entered (e.g. 0033 for calls to France).

Dialled number 0033 

You can use the ! symbol to explicitly exclude a dialled number from the report's results, and/or the \* symbol as a wildcard in digit pattern matching. For example, to exclude calls to Tri-Line, but include all others, you could use !020726526\*. To report on more than one dialled number, use a comma to separate each entry.

### Duration

To filter calls above or below a particular duration, enter the desired duration in seconds.

Duration >1800 

You can specify a duration range by using the – symbol; to specify limits, use the comparison operators, >, <, and ! .

In the above example, the report will return only calls longer than 1800 seconds (30 minutes).

### LCR code


To filter your results to include only calls that used a Least Cost Routing (LCR) code, enter it in the text box provided.

LCR code 162 

You can use the ! symbol to explicitly exclude a LCR code from the report's results, and/or the \* symbol as a wildcard in digit pattern matching. For example, to exclude calls made using all LCR codes beginning 162, you could enter !162\*. To report on more than one LCR code, use a comma to separate each entry.

### Response

This option allows you to filter calls based on their response time, measured in seconds. Specify the desired response time threshold in the text box provided.

Response time >10 


In the above example, the search results will display calls that have a response time greater than 10 seconds.

You can specify a response time range by using the – symbol and; to specify limits, use the comparison operators, >, <, and ! .

### Start time

This option allows you to filter calls based on the time the call started. Specify the start time in the text box provided using the hh:m m:ss format.

For example, to include only calls that began after 10 am, you could enter **10:00:00** in the `start time` field, as shown below:

Start time	<input type="text" value="10:00:00"/>	
------------	---------------------------------------	---

### Trunk access code

If your telephone system uses trunk access codes to connect calls using specific channels, you can limit your report's results to include only calls made using those codes. Specify the trunk access code in the text box provided.

Trunk access code	<input type="text" value="9"/>	
-------------------	--------------------------------	---

You can use the **!** symbol to explicitly exclude a trunk access code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using the **9** trunk access code, you could enter **!9**. To report on more than one trunk access code, use a comma to separate each entry.

### Run or schedule the report

To run or schedule the report without setting any further parameters, select the **Finish** button; to apply further settings, click on the **Next** button, which will direct you to the [Options](#) section of the report wizard.






## Setting the report options

### Reporting options

This section allows you to further narrow down your report results, by excluding certain types of call or sorting the results in a particular manner. These options are specific to the type of report you are running and differ between report types. Next to each option there is an **Information** icon which, if clicked, opens a help prompt describing that particular option.

### Options

Specify one or more of any additional report options shown here.

<input checked="" type="checkbox"/>	Exclude weekends	
<input checked="" type="checkbox"/>	Exclude transfers	
Sort order	<input type="text" value="Ascending"/>	
Sort results by	<input type="text" value="Time slot"/>	
Ignore missed calls shorter than	<input type="text" value="3"/> seconds	

In the example above, the user wants to exclude weekends and transferred calls, as well as missed calls shorter than 3 seconds.

### Run or schedule the report

To run or schedule the report without setting any further parameters, select the **Finish** button; to apply further settings, click on the **Next** button, which will direct you to the [Format](#) section of the report wizard.

## Setting the report formats

### Report format

This section allows you to choose the media format of your completed report. To select a media format, select it from the

drop-down list:

**Your report is ready to run**

Select the format that you want your report to be in.










You can now either run the report immediately, or schedule it to run once, or at regular intervals, in the future.

Report format

- Web
- PDF
- Excel
- CSV
- XML

**Schedule for later**

The following formats are available:

Format	Description
 <b>Web</b>	<ul style="list-style-type: none"> <li>The web format is the default interface for all report types. The results are displayed in a new browser window which contains a combination of HTML, CSS and JavaScript content.</li> <li>To navigate through a report consisting of multiple pages, click on the , ,  or  icons at the top-right corner of the screen.</li> <li>Universally-accessible, the web format provides a mixture of graphical charts and tabular data, whose column headers are click-able to allow dynamic sorting of results.</li> </ul>
 <b>PDF</b>	<ul style="list-style-type: none"> <li>The PDF format guarantees an identical look across all operating systems, making it an ideal report format for printing out on paper, or for e-mailing to colleagues inside and outside of your organisation.</li> <li>Due to the static nature of the PDF format, dynamic sorting of column headers is not available, although results can be pre-sorted using the filters and options available during report creation.</li> </ul>
 <b>XLS</b>	The Excel format is useful for onward manipulation of the data contained in your reports, or for including results in popular spreadsheet packages.
 <b>CSV</b>	<p>The CSV format allows report results to be arranged in comma-separated lists of data.</p> <p>CSV files are often used for transferring data between different applications, such as databases, spreadsheets, and other third-party programs.</p>
 <b>XML</b>	The XML format can be useful when transferring the structured data from your report results to third-party applications, such as billing, accounting and time management applications.

## Run or schedule the report

This is the final screen of the report wizard. Click on the **Run now** button to run the report immediately, or select the **Schedule for later** button to schedule the report to run at a later time. To revise the report parameters you have entered, click on the **Back** button, which will lead you to the previous report options.

## Report types

### Account Summary

#### The Account Summary report

- Introduction
- Running the report
- Creating the report
- The report's results

### Introduction

The Account Summary report produces a type of phone bill for tracking how much billable time you've spent with each client, grouping its results by account code.



In order to use this report, your telephone system needs to be capable of providing account code information as part of its call logging data.



## My account summary

2012-05-17 15:05:01

[↑](#) \ TIM Plus \ London \ Accounts \

About this report

### Calls with no account code

Carrier▲	Charge band	Σ	Total duration	Total cost
London	No charge band	95	01:06:29	-
BT	International	2	00:00:06	0.087
BT	Local	31	00:41:59	3.730
BT	National	51	02:13:01	13.059
		<b>179</b>	<b>04:01:35</b>	<b>16.876</b>

### 52003

Carrier▲	Charge band	Σ	Total duration	Total cost
BT	National	3	00:03:45	0.377
		<b>3</b>	<b>00:03:45</b>	<b>0.377</b>

### 52004

Carrier▲	Charge band	Σ	Total duration	Total cost
BT	National	5	00:30:32	1.987
		<b>5</b>	<b>00:30:32</b>	<b>1.987</b>

### 52005

Carrier▲	Charge band	Σ	Total duration	Total cost
BT	National	3	00:05:23	0.374

## Running the report

On the Reports screen, select the Account summary report from the left-hand pane and click the **Select this report** button.

The screenshot shows the TIMPLUS Reports interface. On the left, a sidebar lists various report categories, with 'Account summary' highlighted. The main area displays the 'Account summary' report, which includes a table of call data and a 'Select this report' button. The table shows call counts and durations for different carriers and charge bands. The text explains that this report produces a type of phone bill, grouped by account code(s), and is used for collating calls for billing and tracking.

A new window will appear, where you can set the parameters of your report.

## Selecting the reporting period

For each report, you must specify a time span that covers the calls you want the report to include. This is known as the "reporting period".

### Select a reporting period

Define the period you want the report to encompass.

Remember, you can always filter your results later, so choose a big enough period.

Period

From date

To date

From time

To time

Yesterday  
**Today**  
 Yesterday  
 This week  
 Last week  
 This month  
 Last month  
 This year  
 All calls  
 Custom period

There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table describes how the start and end times are defined for each preset period:

Period	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This week</b>	The start date is set to the first day (normally Monday) of the current week. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.

In addition to the presets described above, it is possible to specify a custom reporting period by choosing **Custom period** from the **Period** drop-down list and specifying your own **Start date**, **Start time**, **End date** and **End time** of the period you want to report on.

Period Custom period

From date 01 Jul 2011

To date 14 Feb 2013

From time 00 : 00 : 00

To time 23 : 59 : 59

Once you have set the reporting period, click on the **Next** button to set additional report parameters and options, or select the **Finish** button to run the report immediately.




## Selecting the reporting entity

The **Reporting entity** parameter allows you to select the part of your organisation whose calls the report should include, e.g. a site, a group or an individual user.

### Choose a reporting entity

Select a specific section of your organisation whose calls will feature in the report. To run the report across your entire organisation, select **(All sites)**.


Alternatively, select a specific site, user group, channel group, individual user or channel.

Site	<input type="text" value="(All sites)"/>	
Group	<input type="text"/>	
User	<input type="text"/>	

### Site

To report on a particular site, select it from the drop-down list or select **All sites**.

Site



### Group

If a site has been selected, you are able to further limit the report's results by selecting a group from the drop-down list.


Group



### User

If both a site and group have been selected, you can further limit the report's results to include only calls involving a particular user, by selecting that user from the drop-down list.

User





If your web account is restricted to a specific site or group, only those entities to which you have access will be available in the drop-down lists.

Once you have selected the scope of your report, click on the **Next** button to set additional report parameters and options, or to run the report immediately, click the **Finish** button.

## Selecting the report filters

You can limit the results of your report by choosing one or more of the following filters:

**Filter the results of the report**

Account code	<input type="text"/>		Dialled number	<input type="text"/>	
Call type	All calls		Duration	<input type="text"/>	
Carrier	(All carriers)		LCR code	<input type="text"/>	
CLI	<input type="text"/>		Response	<input type="text"/>	
Cost	<input type="text"/>		Start time	<input type="text"/>	
Destination	<input type="text"/>		Trunk access code	<input type="text"/>	

#### Account code

To produce a report consisting only of calls that were made using a particular account code, enter the account code in the field provided.

Account code

To report on more than one account code, separate each code using a comma.

#### Call type

This filter allows you to define the type of call you want to report on, in terms of where the call originated and where it was delivered, e.g. incoming, outgoing, internal etc. To report on all types of call, set this to **All calls**.

Call type

#### Carrier

If you use more than one carrier, you can limit the results to include only calls that were made using a specific carrier.

Carrier

If you use only one carrier, there will be no drop-down list available and no option to choose a carrier.

#### CLI

Calling Line Identification (CLI) is the telephone number of the remote caller in an incoming call scenario.

You can report on calls that originate from a specific CLI or those whose CLI matches a particular pattern of digits. For example, to report on all incoming calls from Tri-Line, you could enter **02072652600**.

CLI

You can use the **!** symbol to explicitly exclude a CLI from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls from Tri-Line, but include all others, you could use **!020726526\***. To report on more than one CLI, use a comma to separate each entry.

#### Cost

You can define a cost filter to include calls above or below specific values by entering your criteria, as shown below:

Cost <2.00 

You can specify a cost range by using the – symbol; to specify limits, use the comparison operators, >, <, and ! .

### Destination

If you want to filter calls to a specific, known destination, type the name of the destination in the text box provided. This filter accepts the ! and \* symbols for excluding values and specifying partial matches, respectively.


For example, if you wanted to exclude all calls to France, you could enter !France\*, as shown below:

Destination !France\* 

### Dialled number

To filter calls to a specific dialled number, type it in the text box provided. The dialled number is defined as the number that is dialled (in the case of an outbound call), or the DDI number that the remote party dialled to reach a particular extension or group (in the case of an inbound call).

To filter calls to a specific area, a partial number can be entered (e.g. 0033 for calls to France).

Dialled number 0033 

You can use the ! symbol to explicitly exclude a dialled number from the report's results, and/or the \* symbol as a wildcard in digit pattern matching. For example, to exclude calls to Tri-Line, but include all others, you could use !020726526\*. To report on more than one dialled number, use a comma to separate each entry.

### Duration

To filter calls above or below a particular duration, enter the desired duration in seconds.

Duration >1800 

You can specify a duration range by using the – symbol; to specify limits, use the comparison operators, >, <, and ! .

In the above example, the report will return only calls longer than 1800 seconds (30 minutes).

### LCR code

To filter your results to include only calls that used a Least Cost Routing (LCR) code, enter it in the text box provided.

LCR code 162 

You can use the ! symbol to explicitly exclude a LCR code from the report's results, and/or the \* symbol as a wildcard in digit pattern matching. For example, to exclude calls made using all LCR codes beginning 162, you could enter !162\*. To report on more than one LCR code, use a comma to separate each entry.

### Response

This option allows you to filter calls based on their response time, measured in seconds. Specify the desired response time threshold in the text box provided.

Response time >10 


In the above example, the search results will display calls that have a response time greater than 10 seconds.

You can specify a response time range by using the – symbol and; to specify limits, use the comparison operators, >, <, and ! .

### Start time

This option allows you to filter calls based on the time the call started. Specify the start time in the text box provided using the hh:m m:ss format.

For example, to include only calls that began after 10 am, you could enter `10:00:00` in the `Start time` field, as shown below:

Start time	<input type="text" value="10:00:00"/>	
------------	---------------------------------------	---

### Trunk access code

If your telephone system uses trunk access codes to connect calls using specific channels, you can limit your report's results to include only calls made using those codes. Specify the trunk access code in the text box provided.

Trunk access code	<input type="text" value="9"/>	
-------------------	--------------------------------	---




You can use the `!` symbol to explicitly exclude a trunk access code from the report's results, and/or the `*` symbol as a wildcard in digit pattern matching. For example, to exclude calls made using the `9` trunk access code, you could enter `!9`. To report on more than one trunk access code, use a comma to separate each entry.


### Selecting the report options


This section enables you to further narrow down your report results, by excluding certain types of calls. It also allows you to sort the report's results in a particular manner.


#### Options

Specify one or more of any additional report options shown here.

- Exclude weekends 
- Exclude transfers 
- Don't replace numbers with contact names 

Sort order  

Sort results by  

Ignore missed calls shorter than  seconds 


#### Exclude weekends

To exclude weekend calls from your report's results, select the `Exclude weekends` option.

<input checked="" type="checkbox"/> Exclude weekends 
--


#### Exclude transfers

To exclude transferred calls from your report's results, select the `Exclude transfers` option.

<input checked="" type="checkbox"/> Exclude transfers 
---

#### Don't replace numbers with contact names


Tick this option if you do not want to replace dialled numbers, CLIs and account codes with their associated names, as defined in your web user's contacts list.

<input checked="" type="checkbox"/> Don't replace numbers with contact names 
--

#### Sort order


Choose from the `Sort order` drop-down list whether you want the results of the report to appear in ascending or descending

order.

Sort order	Ascending	
------------	-----------	---


### Sort results by

To sort your report's results by a particular column, select it from the `sort results by` drop-down list.

Sort results by	Carrier	
-----------------	---------	---

### Ignore short missed calls

Missed calls below a certain duration can sometimes pollute the meaning of a report's results. To exclude such short calls from your report, enter a duration threshold in the text box provided, e.g. to ignore calls below 3 seconds, enter `3`.

Ignore missed calls shorter than	<input type="text" value="3"/>	seconds	
----------------------------------	--------------------------------	---------	---

### Selecting the report format

This section allows you to choose the media format of your completed report. The formats available are `Web`, `PDF`, `Excel`, `CSV` and `XML`.

More details about each report format are available in the [Setting the report format](#) section above.

### Creating the report

When you have selected a reporting period and have chosen any filters and options, you can either run the report immediately by clicking on the `Run now` button, or [schedule it for future delivery](#).

Your report is ready to run

Select the format that you want your report to be in.

You can now either run the report immediately, or schedule it to run once, or at regular intervals, in the future.

Report format:

### The report's results

The results of this report are presented as a tabular breakdown of calls - grouped by account code - according to the parameters you've selected.

Below is an example of this report's output in `Web` format, showing a summary of account code usage:

## My account summary

2012-05-17 15:05:01

[↑](#) \ [TIM Plus](#) \ [London](#) \ [Accounts](#) \
[About this report](#)

## Calls with no account code

Carrier▲	Charge band	Σ	Total duration	Total cost
London	No charge band	95	01:06:29	-
BT	International	2	00:00:06	0.087
BT	Local	31	00:41:59	3.730
BT	National	51	02:13:01	13.059
		179	04:01:35	16.876

## 52003

Carrier▲	Charge band	Σ	Total duration	Total cost
BT	National	3	00:03:45	0.377
		3	00:03:45	0.377

## 52004

Carrier▲	Charge band	Σ	Total duration	Total cost
BT	National	5	00:30:32	1.987
		5	00:30:32	1.987

## 52005

Carrier▲	Charge band	Σ	Total duration	Total cost
BT	National	3	00:05:23	0.374

As with all reports produced by TIM Plus, each page of the report includes the following information:

- the report's title
- the date and time that the report was generated
- the name of the report, if applicable

The web format is the most interactive of all formats: all column headers are click-sortable and most graphical and tabular elements can be drilled down into, allowing deeper analysis of your results.

The headers of this report are as follows:

Header	Description
Carrier	The carrier used to route the call.
Charge band	The charge band used to cost the call.
	The total volume of calls to each charge band.
Total duration	The total time spent on calls to each charge band.
Total cost	The total cost of calls to each charge band.

By clicking on the [About this report](#) link at the top-right corner of the page, you can review any filters and options that have been applied to the report.

To modify your report to cover a larger organisational scope, click on an element of the breadcrumb as shown below:

[↑](#) \ [TIM Plus](#) \ [London](#) \ [Accounts](#) \
[About this report](#)



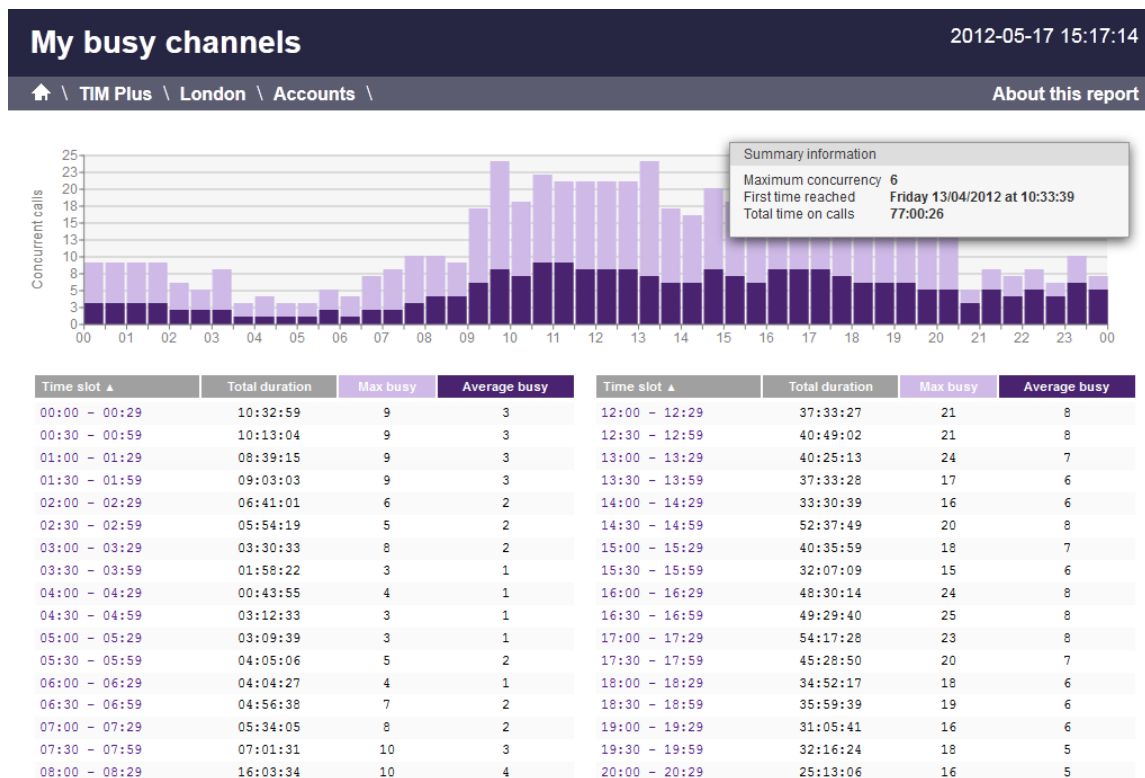
## Busy Channels

**The Busy Channels report**

- Introduction
- Running the report
- Creating the report
- The report's results

### Introduction

The Busy Channels report allows you to break down each business day into half-hour periods, showing the maximum and average number of telephone lines in use for each half-hour period. This report is useful for determining whether or not you have enough lines or if you have too many.



### Running the report

On the Reports screen, select the Busy channels report from the left-hand pane and click the Select this report button.

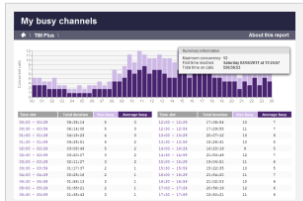
TIMPLUS

[Reports](#) | [Directory](#) | [Call view](#) | [Live stats](#) | [Tariff editor](#) | [Settings](#) | [Alerts](#)

### Reports

- Account summary
- Busy channels
- Busy times
- Call analysis
- Call geography
- Call scoring
- Call volumes
- Custom report
- Daily activity
- Enterprise overview
- Frequent numbers
- Inbound call performance
- Missed calls
- Phone bill
- Random call selection
- Target response
- Top calls
- Unused devices
- User activity

#### Busy channels



Allows you to break down each business day into half-hour periods, showing the maximum and average number of telephone lines in use in any particular half-hour.

This report is ideal for determining whether or not you have enough lines, or if you have too many!

Running this report over longer periods increases the reliability of its results.

**Select this report**

A new window will appear, where you can set the parameters of your report.

### Selecting the reporting period

For each report, you must specify a time span that covers the calls you want the report to include. This is known as the "reporting period".

### Select a reporting period

Define the period you want the report to encompass.

Remember, you can always filter your results later, so choose a big enough period.

**Period**

From date

To date

From time

To time

Yesterday
i


Today
Yesterday
This week
Last week
This month
Last month
This year
All calls
Custom period

There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table describes how the start and end times are defined for each preset period:

Period	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to <b>00:00:00</b> and the end time to <b>23:59:59</b> .
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to <b>00:00:00</b> and the end time to <b>23:59:59</b> .
<b>This week</b>	The start date is set to the first day of the current week (normally Monday). The end date is set to the current day. The start time is set to <b>00:00:00</b> and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to <b>00:00:00</b> and the end time to <b>23:59:59</b> .
<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to <b>00:00:00</b> and the end time to the current time.

<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to <b>00:00:00</b> and <b>23:59:59</b> respectively.
<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to <b>00:00:00</b> and <b>23:59:59</b> respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.

In addition to the presets described above, it is possible to specify a custom reporting period by choosing **Custom period** from the **Period** drop-down list and specifying your own **Start date**, **Start time**, **End date** and **End time** of the period you want to report on.

Period	Custom period	
From date	01 Jul 2011	
To date	14 Feb 2013	
From time	00 : 00 : 00	
To time	23 : 59 : 59	

Once you have set the reporting period, click on the **Next** button to set additional report parameters and options, or select the **Finish** button to run the report immediately.



Running this report over longer periods of time gives a more accurate picture of your telephone line usage.




### Selecting the reporting entity

The **Reporting entity** parameter allows you to select the part of your organisation whose calls the report should include, e.g. a site, a group or an individual user.

#### Choose a reporting entity


Select a specific section of your organisation whose calls will feature in the report. To run the report across your entire organisation, select **(All sites)**.

Alternatively, select a specific site, user group, channel group, individual user or channel.

Site	(All sites)	
Group		
User		


#### Site

To report on a particular site, select it from the drop-down list or select **All sites**.

Site	All sites	
------	-----------	---


#### Group

If a site has been selected, you are able to further limit the report's results by selecting a group from the drop-down list.

Group	All groups	
-------	------------	---

### User

If both a site and group have been selected, you can further limit the report's results to include only calls involving a particular user, by selecting that user from the drop-down list.

User	All users	
------	-----------	---















If your web account is restricted to a specific site or group, only those entities to which you have access will be available in the drop-down lists.

Once you have selected the scope of your report, click on the **Next** button to set additional report parameters and options, or to run the report immediately, click the **Finish** button.


### Selecting the report filters

You can limit the results of your report by choosing one or more of the following filters:

Filter the results of the report					
Account code	<input type="text"/>		Dialled number	<input type="text"/>	
Call type	All calls		Duration	<input type="text"/>	
Carrier	(All carriers)		LCR code	<input type="text"/>	
CLI	<input type="text"/>		Response	<input type="text"/>	
Cost	<input type="text"/>		Start time	<input type="text"/>	
Destination	<input type="text"/>		Trunk access code	<input type="text"/>	

#### Account code


To produce a report consisting only of calls that were made using a particular account code, enter the account code in the field provided.

Account code	0140	
--------------	------	---

To report on more than one account code, separate each code using a comma.

#### Call type

This filter allows you to define the type of call you want to report on, in terms of where the call originated and where it was delivered, e.g. incoming, outgoing, internal etc. To report on all types of call, set this to **All calls**.

Call type	All calls	
-----------	-----------	---

#### Carrier

If you use more than one carrier, you can limit the results to include only calls that were made using a specific carrier.

<input type="text"/>
----------------------

Carrier 

If you use only one carrier, there will be no drop-down list available and no option to choose a carrier.

## CLI

Calling Line Identification (CLI) is the telephone number of the remote caller in an incoming call scenario.

You can report on calls that originate from a specific CLI or those whose CLI matches a particular pattern of digits. For example, to report on all incoming calls from Tri-Line, you could enter **02072652600**.

CLI



You can use the **!** symbol to explicitly exclude a CLI from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls from Tri-Line, but include all others, you could use **!020726526\***. To report on more than one CLI, use a comma to separate each entry.

## Cost

You can define a cost filter to include calls above or below specific values by entering your criteria, as shown below:

Cost



You can specify a cost range by using the **-** symbol; to specify limits, use the comparison operators, **>**, **<**, and **!**.

## Destination

If you want to filter calls to a specific, known destination, type the name of the destination in the text box provided. This filter accepts the **!** and **\*** symbols for excluding values and specifying partial matches, respectively.

For example, if you wanted to exclude all calls to France, you could enter **!France\***, as shown below:

Destination



## Dialled number

To filter calls to a specific dialled number, type it in the text box provided. The dialled number is defined as the number that is dialled (in the case of an outbound call), or the DDI number that the remote party dialled to reach a particular extension or group (in the case of an inbound call).

To filter calls to a specific area, a partial number can be entered (e.g. **0033** for calls to France).

Dialled number



You can use the **!** symbol to explicitly exclude a dialled number from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls to Tri-Line, but include all others, you could use **!020726526\***. To report on more than one dialled number, use a comma to separate each entry.

## Duration

To filter calls above or below a particular duration, enter the desired duration in seconds.

Duration



You can specify a duration range by using the **-** symbol; to specify limits, use the comparison operators, **>**, **<**, and **!**.

In the above example, the report will return only calls longer than 1800 seconds (30 minutes).

### LCR code

To filter your results to include only calls that used a Least Cost Routing (LCR) code, enter it in the text box provided.

LCR code	<input type="text" value="162"/>	
----------	----------------------------------	---

You can use the **!** symbol to explicitly exclude a LCR code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using all LCR codes beginning **162**, you could enter **!162\***. To report on more than one LCR code, use a comma to separate each entry.

### Response

This option allows you to filter calls based on their response time, measured in seconds. Specify the desired response time threshold in the text box provided.

Response time	<input type="text" value="&gt;10"/>	
---------------	-------------------------------------	---


In the above example, the search results will display calls that have a response time greater than 10 seconds.

You can specify a response time range by using the **-** symbol and; to specify limits, use the comparison operators, **>**, **<**, and **!**.

### Start time

This option allows you to filter calls based on the time the call started. Specify the start time in the text box provided using the **hh:mm:ss** format.

For example, to include only calls that began after 10 am, you could enter **10:00:00** in the **start time** field, as shown below:

Start time	<input type="text" value="10:00:00"/>	
------------	---------------------------------------	---

### Trunk access code

If your telephone system uses trunk access codes to connect calls using specific channels, you can limit your report's results to include only calls made using those codes. Specify the trunk access code in the text box provided.

Trunk access code	<input type="text" value="9"/>	
-------------------	--------------------------------	---






You can use the **!** symbol to explicitly exclude a trunk access code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using the **9** trunk access code, you could enter **!9**. To report on more than one trunk access code, use a comma to separate each entry.

### Selecting the report options

This section enables you to further narrow down your report results, by excluding certain types of calls. It also allows you to sort the report's results in a particular manner.


#### Options

Specify one or more of any additional report options shown here.

<input type="checkbox"/>	Exclude weekends	
<input type="checkbox"/>	Exclude transfers	
Sort order	<input type="text" value="Ascending"/>	
Sort results by	<input type="text" value="Time slot"/>	
Ignore missed calls shorter than	<input type="text" value="3"/> seconds	


### Exclude weekends

To exclude weekend calls from your report's results, select the **Exclude weekends** option.

Exclude weekends 


### Exclude transfers

To exclude transferred calls from your report's results, select the **Exclude transfers** option.

Exclude transfers 


### Sort order

Choose from the **Sort order** drop-down list whether you want the results of the report to appear in ascending or descending order.

Sort order  


### Sort results by

To sort your report's results by a particular column, select it from the **Sort results by** drop-down list.

Sort results by  

### Ignore short missed calls

Missed calls below a certain duration can sometimes pollute the meaning of a report's results. To exclude such short calls from your report, enter a duration threshold in the text box provided, e.g. to ignore calls below 3 seconds, enter **3**.

Ignore missed calls shorter than  seconds 

### Selecting the report format

This section allows you to choose the media format of your completed report. The formats available are **Web**, **PDF**, **Excel**, **CSV** and **XML**.

More details about each report format are available in the [Setting the report format](#) section above.

### Creating the report

When you have selected a reporting period and have chosen any filters and options, you can either run the report immediately by clicking on the **Run now** button, or [schedule it for future delivery](#).

**Your report is ready to run**

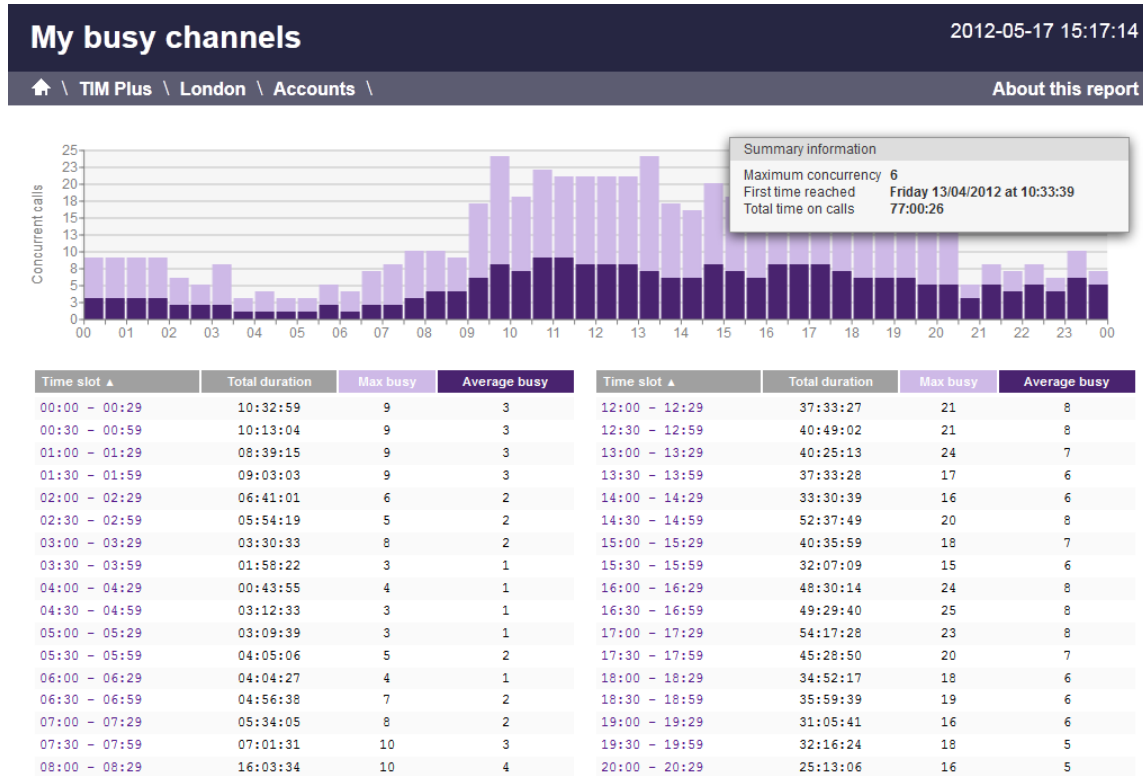
Select the format that you want your report to be in. Report format

You can now either run the report immediately, or schedule it to run once, or at regular intervals, in the future.

## The report's results

### Web format

Below is an example of this report's output in web format, displaying the activity of your telephone lines grouped in half-hour time slots:



The web format is the most interactive of all formats: all column headers are click-sortable and most graphical and tabular elements can be drilled down into, allowing deeper analysis of your results. By clicking on the [About this report](#) link at the top-right corner of the page, you can review any filters and options that have been applied to the report.

As with all reports produced by TIM Plus, each page of the report includes the following information:

- the report's title
- the date and time that the report was generated
- the name of the report, if applicable

The body of the report consists of a graph and a table:

- The graph is a quick and easy indication of your line usage, broken down into half-hour time slots. The percentage on the y-axis shows the number of lines utilised, and the x-axis shows each half-hour of the day. The bars on the graph coloured light-purple show the *maximum* number of busy trunks in each particular half-hour, and the overlaid dark-purple ones show the *average* number of busy trunks in the same time period.
- The table displays the actual data organised in columns for maximum and average busy lines and the total duration for each half-hour time slot. Each column is described below:

Header	Description
--------	-------------



<b>Time slot</b>	The time of day in half-hour periods
<b>Total duration</b>	The total duration of all calls made or received within the time slot shown
<b>Max busy</b>	The maximum number of trunks in use during the time slot shown
<b>Average busy</b>	The average number of trunks in use during the time slot shown



All column headers are clickable, allowing you to dynamically reorder the results.

To modify your report to cover a larger organisational scope, click on an element of the breadcrumb as shown below:



### PDF format

If you chose to run the report in PDF format, the report will consist of three pages.

The first page shows the login name of the person who has prepared/scheduled the report, the entity you are reporting on, the period covered and any filters used in the report.

## My busy channels

---

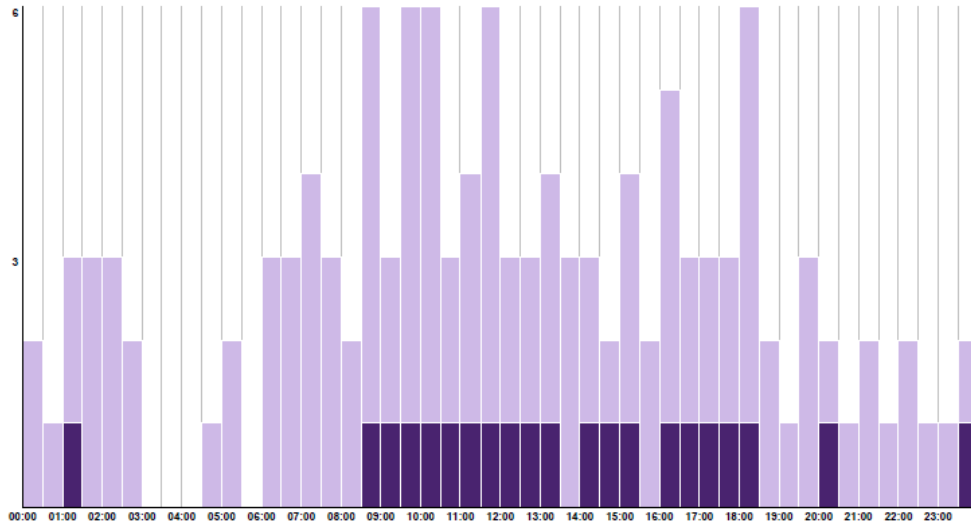
Prepared by Joe Bloggs

Covering period 01 April 2012 00:00:00  
to 30 April 2012 23:59:59

Entity \ TIM Plus \ London \ Accounts

The second page has a graph depicting the average and maximum number of channels used, as shown below:

# Report



The third page contains a table of time slots, showing the maximum and average number of channels that were busy, along with the total duration of time spent on calls during each time slot.

## Data

Time slot	Total duration	Max busy	Average busy	Time slot	Total duration	Max busy	Average busy
00:00 - 00:29	00:09:06	2	-	12:00 - 12:29	01:11:24	3	1
00:30 - 00:59	00:01:24	1	-	12:30 - 12:59	00:36:41	3	1
01:00 - 01:29	00:52:45	3	1	13:00 - 13:29	00:58:11	4	1
01:30 - 01:59	00:12:54	3	-	13:30 - 13:59	00:07:28	2	-
02:00 - 02:29	00:52:27	3	-	14:00 - 14:29	00:58:04	3	1
02:30 - 02:59	00:22:47	2	-	14:30 - 14:59	01:34:11	2	1
03:00 - 03:29	-	-	-	15:00 - 15:29	01:36:15	4	1
03:30 - 03:59	-	-	-	15:30 - 15:59	00:21:46	2	-
04:00 - 04:29	-	-	-	16:00 - 16:29	00:27:52	5	1
04:30 - 04:59	00:15:08	1	-	16:30 - 16:59	01:44:27	3	1
05:00 - 05:29	00:01:19	2	-	17:00 - 17:29	00:45:47	3	1
05:30 - 05:59	-	-	-	17:30 - 17:59	02:18:00	3	1
06:00 - 06:29	00:09:22	3	-	18:00 - 18:29	02:40:29	6	1
06:30 - 06:59	00:39:00	3	-	18:30 - 18:59	01:28:19	2	-
07:00 - 07:29	00:34:10	4	-	19:00 - 19:29	00:31:57	1	-
07:30 - 07:59	00:47:09	3	-	19:30 - 19:59	00:01:43	3	-
08:00 - 08:29	00:51:53	2	-	20:00 - 20:29	00:56:20	2	1
08:30 - 08:59	01:49:55	6	1	20:30 - 20:59	00:13:47	1	-
09:00 - 09:29	03:59:58	3	1	21:00 - 21:29	00:46:09	2	-
09:30 - 09:59	04:19:29	6	1	21:30 - 21:59	00:14:49	1	-
10:00 - 10:29	02:38:48	6	1	22:00 - 22:29	01:46:40	2	-
10:30 - 10:59	01:22:58	3	1	22:30 - 22:59	00:13:29	1	-
11:00 - 11:29	02:07:29	4	1	23:00 - 23:29	01:11:27	-	-
11:30 - 11:59	01:44:31	6	1	23:30 - 23:59	00:01:28	2	1

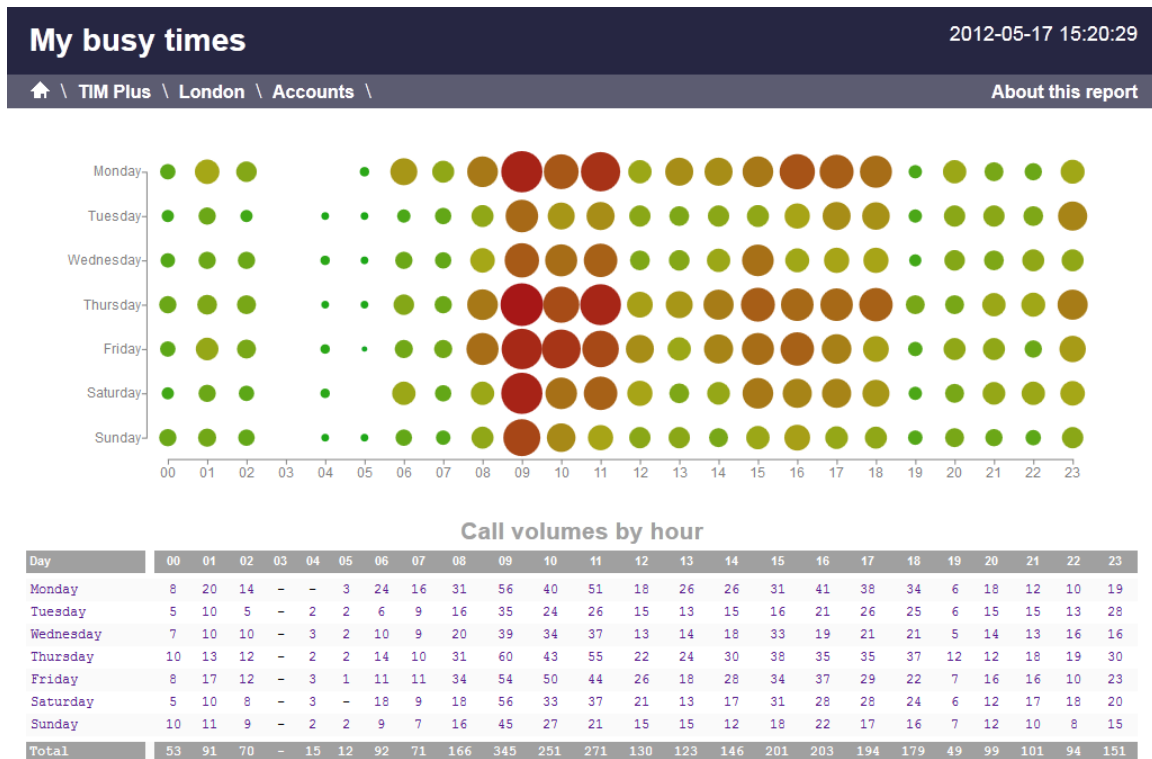
## Busy Times

**The Busy Times report**

- Introduction
- Running the report
- Creating the report
- The report's results

### Introduction

The Busy Times report provides an hour-by-hour graphical representation of your call volumes for each day, giving a detailed breakdown of calls by type, for each time slot. This report is useful for identifying call traffic trends and can readily highlight your busiest periods, allowing you to more effectively plan your staffing requirements.



### Running the report

On the Reports screen, select the **Busy times** report from the left-hand pane and click the Select this report button.

A new window will appear, where you can set the parameters of your report.

### Selecting the reporting period


For each report, you must specify a time span that covers the calls you want the report to include. This is known as the "reporting period".

There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table describes how the start and end times are defined for each preset period:

Period	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This week</b>	The start date is set to the first day of the current week (normally Monday). The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.

<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to <b>00:00:00</b> and <b>23:59:59</b> respectively.
<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to <b>00:00:00</b> and <b>23:59:59</b> respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.

In addition to the presets described above, it is possible to specify a custom reporting period by choosing **Custom period** from the **Period** drop-down list and specifying your own **Start date**, **Start time**, **End date** and **End time** of the period you want to report on.

Period	Custom period	
From date	01 Jul 2011	
To date	14 Feb 2013	
From time	00 : 00 : 00	
To time	23 : 59 : 59	

Once you have set the reporting period, click on the **Next** button to set additional report parameters and options, or select the **Finish** button to run the report immediately.




### Selecting the reporting entity

The **Reporting entity** parameter allows you to select the part of your organisation whose calls the report should include, e.g. a site, a group or an individual user.

#### Choose a reporting entity


Select a specific section of your organisation whose calls will feature in the report. To run the report across your entire organisation, select **(All sites)**.

Alternatively, select a specific site, user group, channel group, individual user or channel.

Site	(All sites)	
Group		
User		


#### Site

To report on a particular site, select it from the drop-down list or select **All sites**.

Site	All sites	
------	-----------	---


#### Group

If a site has been selected, you are able to further limit the report's results by selecting a group from the drop-down list.

Group	All groups	
-------	------------	---

#### User

If both a site and group have been selected, you can further limit the report's results to include only calls involving a particular user, by selecting that user from the drop-down list.

User  















If your web account is restricted to a specific site or group, only those entities to which you have access will be available in the drop-down lists.

Once you have selected the scope of your report, click on the **Next** button to set additional report parameters and options, or to run the report immediately, click the **Finish** button.

### Selecting the report filters

You can limit the results of your report by choosing one or more of the following filters:

Filter the results of the report

Account code	<input type="text"/>		Dialled number	<input type="text"/>	
Call type	<input type="text" value="All calls"/>		Duration	<input type="text"/>	
Carrier	<input type="text" value="(All carriers)"/>		LCR code	<input type="text"/>	
CLI	<input type="text"/>		Response	<input type="text"/>	
Cost	<input type="text"/>		Start time	<input type="text"/>	
Destination	<input type="text"/>		Trunk access code	<input type="text"/>	

#### Account code


To produce a report consisting only of calls that were made using a particular account code, enter the account code in the field provided.

Account code  

To report on more than one account code, separate each code using a comma.


#### Call type

This filter allows you to define the type of call you want to report on, in terms of where the call originated and where it was delivered, e.g. incoming, outgoing, internal, etc. To report on all types of call, set this to **All calls**.

Call type  

#### Carrier

If you use more than one carrier, you can limit the results to include only calls that were made using a specific carrier.

Carrier  



If you use only one carrier, there will be no drop-down list available and no option to choose a carrier.

## CLI

Calling Line Identification (CLI) is the telephone number of the remote caller in an incoming call scenario.

You can report on calls that originate from a specific CLI or those whose CLI matches a particular pattern of digits. For example, to report on all incoming calls from Tri-Line, you could enter **02072652600**.

CLI	<input type="text" value="02072652600"/>	
-----	--	---

You can use the **!** symbol to explicitly exclude a CLI from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls from Tri-Line, but include all others, you could use **!020726526\***. To report on more than one CLI, use a comma to separate each entry.

## Cost

You can define a cost filter to include calls above or below specific values by entering your criteria, as shown below:

Cost	<input type="text" value="&lt;2.00"/>	
------	---------------------------------------	---

You can specify a cost range by using the **-** symbol; to specify limits, use the comparison operators, **>**, **<**, and **!**.

## Destination

If you want to filter calls to a specific, known destination, type the name of the destination in the text box provided. This filter accepts the **!** and **\*** symbols for excluding values and specifying partial matches, respectively.

For example, if you wanted to exclude all calls to France, you could enter **!France\***, as shown below:

Destination	<input type="text" value="!France*"/>	
-------------	---------------------------------------	--

## Dialled number

To filter calls to a specific dialled number, type it in the text box provided. The dialled number is defined as the number that is dialled (in the case of an outbound call), or the DDI number that the remote party dialled to reach a particular extension or group (in the case of an inbound call).

To filter calls to a specific area, a partial number can be entered (e.g. **0033** for calls to France).

Dialled number	<input type="text" value="0033"/>	
----------------	-----------------------------------	---

You can use the **!** symbol to explicitly exclude a dialled number from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls to Tri-Line, but include all others, you could use **!020726526\***. To report on more than one dialled number, use a comma to separate each entry.

## Duration

To filter calls above or below a particular duration, enter the desired duration in seconds.

Duration	<input type="text" value="&gt;1800"/>	
----------	---------------------------------------	---

You can specify a duration range by using the **-** symbol; to specify limits, use the comparison operators, **>**, **<**, and **!**.

In the above example, the report will return only calls longer than 1800 seconds (30 minutes).

## LCR code

To filter your results to include only calls that used a Least Cost Routing (LCR) code, enter it in the text box provided.

LCR code	<input type="text" value="162"/>	
----------	----------------------------------	---

You can use the **!** symbol to explicitly exclude a LCR code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using all LCR codes beginning **162**, you could enter **!162\***. To report on more than one LCR code, use a comma to separate each entry.

### Response

This option allows you to filter calls based on their response time, measured in seconds. Specify the desired response time threshold in the text box provided.

Response time	>10	
---------------	-----	---


In the above example, the search results will display calls that have a response time greater than 10 seconds.

You can specify a response time range by using the **-** symbol and; to specify limits, use the comparison operators, **>**, **<**, and **!**.

### Start time

This option allows you to filter calls based on the time the call started. Specify the start time in the text box provided using the **hh:mm:ss** format.

For example, to include only calls that began after 10 am, you could enter **10:00:00** in the **Start time** field, as shown below:

Start time	10:00:00	
------------	----------	---

### Trunk access code

If your telephone system uses trunk access codes to connect calls using specific channels, you can limit your report's results to include only calls made using those codes. Specify the trunk access code in the text box provided.

Trunk access code	9	
-------------------	---	--


You can use the **!** symbol to explicitly exclude a trunk access code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using the **9** trunk access code, you could enter **!9**. To report on more than one trunk access code, use a comma to separate each entry.


## Selecting the report options


This section enables you to further narrow down your report results, by excluding certain types of calls. It also allows you to sort the report's results in a particular manner.

### Options

Specify one or more of any additional report options shown here.

Exclude weekends 

Exclude transfers 

Ignore missed calls shorter than  seconds 


### Exclude weekends

To exclude weekend calls from your report's results, select the **Exclude weekends** option.

<input checked="" type="checkbox"/> Exclude weekends 
--

### Exclude transfers

To exclude transferred calls from your report's results, select the **Exclude transfers** option.


<input type="checkbox"/> Exclude transfers 
--



Exclude transfers 

### Ignore short missed calls

Missed calls below a certain duration can sometimes pollute the meaning of a report's results. To exclude such short calls from your report, enter a duration threshold in the text box provided, e.g. to ignore calls below 3 seconds, enter 3 .

Ignore missed calls shorter than  seconds 

### Selecting the report format

This section allows you to choose the media format of your completed report. The formats available are `web`, `PDF`, `Excel`, `CSV` and `XML`.

More details about each report format are available in the [Setting the report format](#) section above.

### Creating the report

When you have selected a reporting period and have chosen any filters and options, you can either run the report immediately by clicking on the **Run now** button, or [schedule it for future delivery](#).

Your report is ready to run

Select the format that you want your report to be in.

You can now either run the report immediately, or schedule it to run once, or at regular intervals, in the future.

Report format

**Run now**

**Schedule for later**

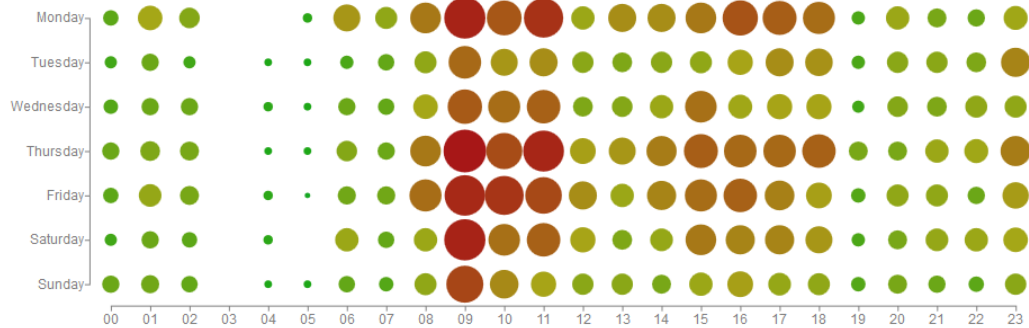
### The report's results

Below is an example of this report's output in `web` format, showing a graphical representation of calls grouped into time slots of one hour.

# My busy times

2012-05-17 15:20:29


---

↑ \ TIM Plus \ London \ Accounts \
About this report


Call volumes by hour

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Monday	8	20	14	-	-	3	24	16	31	56	40	51	18	26	26	31	41	38	34	6	18	12	10	19
Tuesday	5	10	5	-	2	2	6	9	16	35	24	26	15	13	15	16	21	26	25	6	15	15	13	28
Wednesday	7	10	10	-	3	2	10	9	20	39	34	37	13	14	18	33	19	21	21	5	14	13	16	16
Thursday	10	13	12	-	2	2	14	10	31	60	43	55	22	24	30	38	35	35	37	12	12	18	19	30
Friday	8	17	12	-	3	1	11	11	34	54	50	44	26	18	28	34	37	29	22	7	16	16	10	23
Saturday	5	10	8	-	3	-	18	9	18	56	33	37	21	13	17	31	28	28	24	6	12	17	18	20
Sunday	10	11	9	-	2	2	9	7	16	45	27	21	15	15	12	18	22	17	16	7	12	10	8	15
Total	53	91	70	-	15	12	92	71	166	345	251	271	130	123	146	201	203	194	179	49	99	101	94	151

The large, dark red dots represent your busiest periods, whereas the small, green dots represent quieter periods; by hovering your cursor over a particular dot a tooltip will be displayed, showing the volume of calls for that dot's time period.

The time slot data is also displayed in tabular form, each value being a hyperlink which, if clicked, will drill down into a detailed list of calls for that time slot.

# My busy times

2012-10-03 15:27:11


---

↑ \ TIM Plus \
About this report

All | Outbound | Answered | Missed | Internal
Show all | 1 of 37

Date & Time ▲	Source	CLI	Route	Destination	Response	Duration	Cost
2012-09-04 00:00:46	London	02070108072	-	Laura Thompson	-	00:00:10	-
2012-09-04 00:00:56	Amanda Lynn	-	07957357127	T-Mobile	-	00:00:01	0.030
2012-09-04 00:03:36	T-Mobile	07940367495	-	Louise Lucas	-	00:01:17	-
2012-09-04 00:03:46	T-Mobile	07981955275	-	Winston Horn	-	00:01:37	-
2012-09-04 00:03:51	London	02076636000	-	David Ellis	-	00:01:03	-
2012-09-04 00:07:21	T-Mobile	07957584564	-	Matt Earley	-	00:01:41	-
2012-09-04 00:09:26	O2	07714247647	-	Graham Manning	-	00:01:49	-
2012-09-04 00:10:56	Vodafone	07825068611	-	Floyd Tomlinson	-	00:01:47	-
2012-09-04 00:14:38	Vodafone	07775668307	-	Yu Woo	-	00:00:03	-
2012-09-04 00:15:06	Vodafone	07747862786	-	Derek Smith	-	00:01:15	-
2012-09-04 00:18:33	Orange	07967625420	-	Hannah Soras	-	00:04:01	-
2012-09-04 00:19:13	London	02072293477	-	David Ellis	-	00:02:48	-
2012-09-04 00:19:33	O2	07803831958	-	George Evans	-	00:00:01	-
2012-09-04 00:20:13	Orange	07929200231	-	Edward James	-	00:02:47	-
2012-09-04 00:20:23	Amanda Lynn	-	07939006896	T-Mobile	-	00:00:07	0.030
2012-09-04 00:20:28	O2	07926262196	-	Dean Tomkins	-	00:00:07	-
2012-09-04 00:21:38	London	02073878885	-	Holly Wood	-	00:00:01	-
2012-09-04 00:27:43	T-Mobile	07950488657	-	Alastair Burnett	-	00:00:16	-
2012-09-04 00:28:43	1081	-	07961150000	T-Mobile	-	00:00:09	0.030
2012-09-04 00:28:51	London	02072843500	-	Ricardo De Souza	-	00:01:34	-
2012-09-04 00:33:01	Vodafone	07901750601	-	Floyd Tomlinson	-	00:01:44	-
2012-09-04 00:34:36	Vodafone	07717530155	-	Natt Chen	-	00:03:24	-
2012-09-04 00:34:56	Vodafone	07767777666	-	Sally Gansa	-	00:01:16	-
2012-09-04 00:35:36	Vodafone	07825041492	-	Floyd Tomlinson	-	00:01:02	-
2012-09-04 00:38:03	Hutchison 3G	07723054591	-	Jack Garrett	-	00:02:55	-
2012-09-04 00:38:31	London	02072528275	-	Sam Thornton	-	00:00:07	-
2012-09-04 00:39:36	UNAVAILABLE	-	-	Pete Moore	-	00:00:45	-
2012-09-04 00:42:13	UNAVAILABLE	-	-	Prakash Findoria	-	00:00:53	-
2012-09-04 00:45:21	Jack Garrett	-	07904034692	T-Mobile	-	00:00:53	0.115

As with all reports produced by TIM Plus, each page of the report includes the following information:

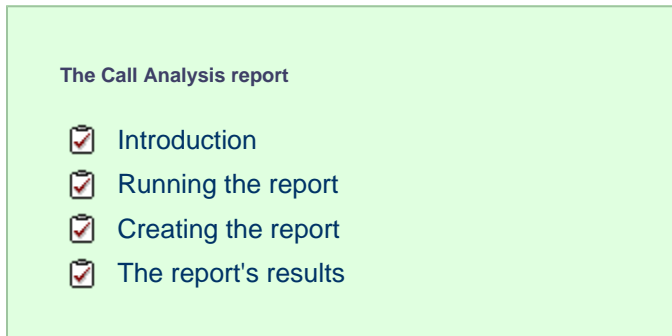
- the report's title
- the date and time that the report was generated
- the name of the report, if applicable

The **web** format is the most interactive of all formats: all column headers are click-sortable and most graphical and tabular elements can be drilled down into, allowing deeper analysis of your results. By clicking on the [About this report](#) link at the top-right corner of the page, you can review any filters and options that have been applied to the report.

To modify your report to cover a larger organisational scope, click on an element of the breadcrumb as shown below:



## Call Analysis

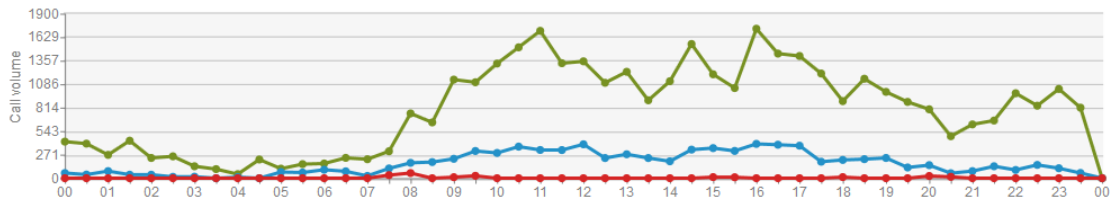


### Introduction

The Call Analysis report breaks down your working day into half-hour segments, providing a clear graphical representation of your outbound, answered and abandoned calls. Call volumes are shown as *maximums* and *averages* which can help with staff planning.

# My call analysis 2012-05-16 12:38:45

↑ \ TIM Plus \ London \ Accounts \ About this report



Time slot ▲	Missed			Answered				Outbound			Cost			
	Σ	Max	Avg	Σ	Ring time (s)		Duration		Σ	Max	Avg	Total	Avg	Total
00:00 - 00:29	-	-	-	426	11	-	00:07:34	00:01:28	60	00:00:32	00:00:11	00:11:45	0.036	2.171
00:30 - 00:59	-	-	-	403	-	-	00:09:26	00:01:35	42	00:00:53	00:00:23	00:16:47	0.057	2.406
01:00 - 01:29	-	-	-	272	-	-	00:07:57	00:01:34	83	00:02:31	00:00:29	00:41:18	0.073	6.051
01:30 - 01:59	-	-	-	437	-	-	00:05:19	00:01:23	41	00:00:35	00:00:13	00:09:29	0.039	1.615
02:00 - 02:29	-	-	-	236	10	-	00:08:02	00:01:30	41	00:00:34	00:00:14	00:10:02	0.039	1.592
02:30 - 02:59	-	-	-	255	4	-	00:03:30	00:01:05	16	00:02:06	00:01:10	00:18:54	0.155	2.476
03:00 - 03:29	-	-	-	139	-	-	00:04:43	00:01:29	18	00:00:11	00:00:06	00:01:50	0.030	0.540
03:30 - 03:59	-	-	-	106	-	-	00:09:51	00:01:16	-	-	-	-	-	-
04:00 - 04:29	-	-	-	47	8	1	00:01:35	00:00:43	13	00:00:34	00:00:13	00:03:01	0.038	0.490
04:30 - 04:59	-	-	-	218	19	2	00:06:12	00:00:51	-	-	-	-	-	-
05:00 - 05:29	-	-	-	111	25	2	00:06:33	00:01:20	72	00:02:25	00:00:29	00:35:17	0.073	5.276
05:30 - 05:59	-	-	-	164	8	1	00:11:33	00:01:33	66	00:00:49	00:00:14	00:15:26	0.040	2.628
06:00 - 06:29	-	-	-	171	25	2	00:05:11	00:01:10	99	00:00:35	00:00:09	00:16:21	0.033	3.290
06:30 - 06:59	-	-	-	237	13	-	00:05:14	00:01:10	80	00:00:34	00:00:10	00:13:58	0.034	2.696
07:00 - 07:29	-	-	-	221	25	1	00:06:54	00:01:29	27	00:00:29	00:00:13	00:06:07	0.038	1.029
07:30 - 07:59	36	51	16	314	39	2	00:03:31	00:00:52	114	00:26:48	00:02:24	04:33:49	0.149	16.997

## Running the report

On the Reports screen, select the **Call analysis** report from the left-hand pane and click the **Select this report** button.

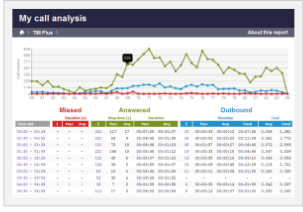
TIMPLUS

Reports
Directory
Call view
Live stats
Tariff editor
Settings
Alerts

**Reports**

- Account summary
- Busy channels
- Busy times
- Call analysis**
- Call geography
- Call scoring
- Call volumes
- Custom report
- Daily activity
- Enterprise overview
- Frequent numbers
- Inbound call performance
- Missed calls
- Phone bill
- Random call selection
- Target response
- Top calls
- Unused devices
- User activity

**Call analysis** About this report



Breaks down your working day into half-hour segments and details important information about your calls. You get a clear graphical representation of how many outbound, answered and abandoned calls you've made.

Figures are shown as maximum and averages so you can more effectively plan your staffing requirements throughout each working day.

Select this report

A new window will appear, where you can set the parameters of your report.

## Selecting the reporting period

For each report, you must specify a time span that covers the calls you want the report to include. This is known as the "reporting period".

### Select a reporting period

Define the period you want the report to encompass.

Remember, you can always filter your results later, so choose a big enough period.

Period:  ⓘ

From date:

To date:

From time:

To time:

Yesterday  
**Today**  
 Yesterday  
 This week  
 Last week  
 This month  
 Last month  
 This year  
 All calls  
 Custom period

There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table describes how the start and end times are defined for each preset period:

Period	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This week</b>	The start date is set to the first day of the current week (normally Monday). The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.

In addition to the presets described above, it is possible to specify a custom reporting period by choosing **Custom period** from the **Period** drop-down list and specifying your own **Start date**, **Start time**, **End date** and **End time** of the period you want to report on.

Period:  ⓘ

From date:

To date:

From time:

To time:

Once you have set the reporting period, click on the **Next** button to set additional report parameters and options, or select the **Finish** button to run the report immediately.




## Selecting the reporting entity

The **Reporting entity** parameter allows you to select the part of your organisation whose calls the report should include, e.g. a site, a group or an individual user.

### Choose a reporting entity

Select a specific section of your organisation whose calls will feature in the report. To run the report across your entire organisation, select **(All sites)**.


Alternatively, select a specific site, user group, channel group, individual user or channel.

Site	<input type="text" value="(All sites)"/>	
Group	<input type="text"/>	
User	<input type="text"/>	

### Site

To report on a particular site, select it from the drop-down list or select **All sites**.


Site



### Group

If a site has been selected, you are able to further limit the report's results by selecting a group from the drop-down list.


Group



### User

If both a site and group have been selected, you can further limit the report's results to include only calls involving a particular user, by selecting that user from the drop-down list.

User

















If your web account is restricted to a specific site or group, only those entities to which you have access will be available in the drop-down lists.

Once you have selected the scope of your report, click on the **Next** button to set additional report parameters and options, or to run the report immediately, click the **Finish** button.

## Selecting the report filters


You can limit the results of your report by choosing one or more of the following filters:

**Filter the results of the report**

Account code	<input type="text"/>		Dialled number	<input type="text"/>	
Call type	<input type="text" value="All calls"/>		Duration	<input type="text"/>	
Carrier	<input type="text" value="(All carriers)"/>		LCR code	<input type="text"/>	
CLI	<input type="text"/>		Response	<input type="text"/>	
Cost	<input type="text"/>		Start time	<input type="text"/>	
Destination	<input type="text"/>		Trunk access code	<input type="text"/>	

#### Account code


To produce a report consisting only of calls that were made using a particular account code, enter the account code in the field provided.

Account code  

To report on more than one account code, separate each code using a comma.


#### Call type


This filter allows you to define the type of call you want to report on, in terms of where the call originated and where it was delivered, e.g. incoming, outgoing, internal, etc. To report on all types of call, set this to **All calls**.

Call type  

#### Carrier

If you use more than one carrier, you can limit the results to include only calls that were made using a specific carrier.

Carrier  

 If you use only one carrier, there will be no drop-down list available and no option to choose a carrier.

#### CLI

Calling Line Identification (CLI) is the telephone number of the remote caller in an incoming call scenario.


You can report on calls that originate from a specific CLI or those whose CLI matches a particular pattern of digits. For example, to report on all incoming calls from Tri-Line, you could enter **02072652600**.

CLI  

You can use the **!** symbol to explicitly exclude a CLI from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls from Tri-Line, but include all others, you could use **!020726526\***. To report on more than one CLI, use a comma to separate each entry.

#### Cost

You can define a cost filter to include calls above or below specific values by entering your criteria, as shown below:

Cost <2.00 

You can specify a cost range by using the – symbol; to specify limits, use the comparison operators, >, <, and ! .

### Destination

If you want to filter calls to a specific, known destination, type the name of the destination in the text box provided. This filter accepts the ! and \* symbols for excluding values and specifying partial matches, respectively.

For example, if you wanted to exclude all calls to France, you could enter !France\*, as shown below:

Destination !France\* 

### Dialled number

To filter calls to a specific dialled number, type it in the text box provided. The dialled number is defined as the number that is dialled (in the case of an outbound call), or the DDI number that the remote party dialled to reach a particular extension or group (in the case of an inbound call).

To filter calls to a specific area, a partial number can be entered (e.g. 0033 for calls to France).

Dialled number 0033 

You can use the ! symbol to explicitly exclude a dialled number from the report's results, and/or the \* symbol as a wildcard in digit pattern matching. For example, to exclude calls to Tri-Line, but include all others, you could use !020726526\*. To report on more than one dialled number, use a comma to separate each entry.

### Duration

To filter calls above or below a particular duration, enter the desired duration in seconds.

Duration >1800 

You can specify a duration range by using the – symbol; to specify limits, use the comparison operators, >, <, and ! .

In the above example, the report will return only calls longer than 1800 seconds (30 minutes).

### LCR code


To filter your results to include only calls that used a Least Cost Routing (LCR) code, enter it in the text box provided.

LCR code 162 

You can use the ! symbol to explicitly exclude a LCR code from the report's results, and/or the \* symbol as a wildcard in digit pattern matching. For example, to exclude calls made using all LCR codes beginning 162, you could enter !162\*. To report on more than one LCR code, use a comma to separate each entry.

### Response

This option allows you to filter calls based on their response time, measured in seconds. Specify the desired response time threshold in the text box provided.

Response time >10 

In the above example, the search results will display calls that have a response time greater than 10 seconds.


You can specify a response time range by using the – symbol and; to specify limits, use the comparison operators, >, <, and ! .

### Start time

This option allows you to filter calls based on the time the call started. Specify the start time in the text box provided using the hh:m m:ss format.



For example, to include only calls that began after 10 am, you could enter **10:00:00** in the **Start time** field, as shown below:

Start time	<input type="text" value="10:00:00"/>	
------------	---------------------------------------	---

### Trunk access code

If your telephone system uses trunk access codes to connect calls using specific channels, you can limit your report's results to include only calls made using those codes. Specify the trunk access code in the text box provided.

Trunk access code	<input type="text" value="9"/>	
-------------------	--------------------------------	---






You can use the **!** symbol to explicitly exclude a trunk access code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using the **9** trunk access code, you could enter **!9**. To report on more than one trunk access code, use a comma to separate each entry.

### Selecting the report options

This section enables you to further narrow down your report results, by excluding certain types of calls. It also allows you to sort the report's results in a particular manner.

#### Options

Specify one or more of any additional report options shown here.

<input type="checkbox"/>	Exclude weekends	
<input type="checkbox"/>	Exclude transfers	
Sort order	<input type="text" value="Ascending"/>	
Sort results by	<input type="text" value="Time slot"/>	
Ignore missed calls shorter than	<input type="text" value="3"/> seconds	


#### Exclude weekends

To exclude weekend calls from your report's results, select the **Exclude weekends** option.

<input checked="" type="checkbox"/>	Exclude weekends	
-------------------------------------	------------------	---


#### Exclude transfers

To exclude transferred calls from your report's results, select the **Exclude transfers** option.

<input checked="" type="checkbox"/>	Exclude transfers	
-------------------------------------	-------------------	---


#### Sort order

Choose from the **Sort order** drop-down list whether you want the results of the report to appear in ascending or descending order.

Sort order	<input type="text" value="Ascending"/>	
------------	--	---


#### Sort results by

To sort your report's results by a particular column, select it from the **Sort results by** drop-down list.

Sort results by	<input type="text" value="Time slot"/>	
-----------------	--	---

### Ignore short missed calls

Missed calls below a certain duration can sometimes pollute the meaning of a report's results. To exclude such short calls from your report, enter a duration threshold in the text box provided, e.g. to ignore calls below 3 seconds, enter 3 .

Ignore missed calls shorter than  seconds 

### Selecting the report format

This section allows you to choose the media format of your completed report. The formats available are **Web**, **PDF**, **Excel**, **CSV** and **XML**.

More details about each report format are available in the [Setting the report format](#) section above.

### Creating the report

When you have selected a reporting period and have chosen any filters and options, you can either run the report immediately by clicking on the **Run now** button, or schedule it for future delivery.

Your report is ready to run

Select the format that you want your report to be in.

Report format

You can now either run the report immediately, or schedule it to run once, or at regular intervals, in the future.

**Run now**

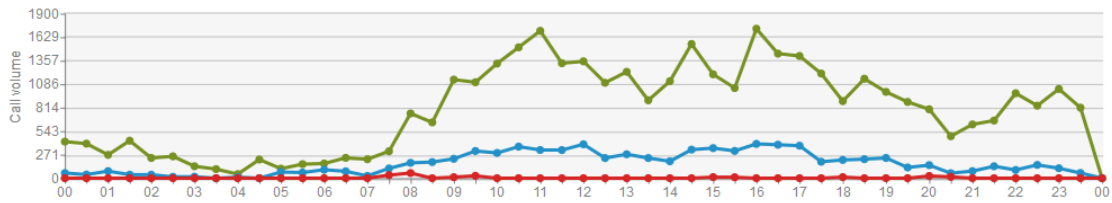
**Schedule for later**

### The report's results

Below is an example of this report's output in **web** format, displaying a breakdown of calls organised in half-hour time slots:

# My call analysis 2012-05-16 12:38:45

↑ \ TIM Plus \ London \ Accounts \
About this report



Time slot ▲	Missed			Answered				Outbound			Cost			
	Duration (s)			Ring time (s)		Duration		Duration			Total			
	Σ	Max	Avg	Σ	Max	Avg	Max	Avg	Σ	Max	Avg	Total	Avg	Total
00:00 - 00:29	-	-	-	426	11	-	00:07:34	00:01:28	60	00:00:32	00:00:11	00:11:45	0.036	2.171
00:30 - 00:59	-	-	-	403	-	-	00:09:26	00:01:35	42	00:00:53	00:00:23	00:16:47	0.057	2.406
01:00 - 01:29	-	-	-	272	-	-	00:07:57	00:01:34	83	00:02:31	00:00:29	00:41:18	0.073	6.051
01:30 - 01:59	-	-	-	437	-	-	00:05:19	00:01:23	41	00:00:35	00:00:13	00:09:29	0.039	1.615
02:00 - 02:29	-	-	-	236	10	-	00:08:02	00:01:30	41	00:00:34	00:00:14	00:10:02	0.039	1.592
02:30 - 02:59	-	-	-	255	4	-	00:03:30	00:01:05	16	00:02:06	00:01:10	00:18:54	0.155	2.476
03:00 - 03:29	-	-	-	139	-	-	00:04:43	00:01:29	18	00:00:11	00:00:06	00:01:50	0.030	0.540
03:30 - 03:59	-	-	-	106	-	-	00:09:51	00:01:16	-	-	-	-	-	-
04:00 - 04:29	-	-	-	47	8	1	00:01:35	00:00:43	13	00:00:34	00:00:13	00:03:01	0.038	0.490
04:30 - 04:59	-	-	-	218	19	2	00:06:12	00:00:51	-	-	-	-	-	-
05:00 - 05:29	-	-	-	111	25	2	00:06:33	00:01:20	72	00:02:25	00:00:29	00:35:17	0.073	5.276
05:30 - 05:59	-	-	-	164	8	1	00:11:33	00:01:33	66	00:00:49	00:00:14	00:15:26	0.040	2.628
06:00 - 06:29	-	-	-	171	25	2	00:05:11	00:01:10	99	00:00:35	00:00:09	00:16:21	0.033	3.290
06:30 - 06:59	-	-	-	237	13	-	00:05:14	00:01:10	80	00:00:34	00:00:10	00:13:58	0.034	2.696
07:00 - 07:29	-	-	-	221	25	1	00:06:54	00:01:29	27	00:00:29	00:00:13	00:06:07	0.038	1.029
07:30 - 07:59	36	51	16	314	39	2	00:03:31	00:00:52	114	00:26:48	00:02:24	04:33:49	0.149	16.997

By clicking on the [About this report](#) link at the top-right corner of the page, you can review any filters and options that have been applied to the report.

As with all reports produced by TIM Plus, each page of the report includes the following information:

- the report's title
- the date and time that the report was generated
- the name of the report, if applicable

The **web** format is the most interactive of all formats: all column headers are click-sortable and most graphical and tabular elements can be drilled down into, allowing deeper analysis of your results. The headers of this report are as follows:

Header	Description
<b>Time slot</b>	The time period to which the other headers' results relate.
<b>Missed</b>	<ul style="list-style-type: none"> <li>■ <b>Σ</b>: The total number of missed calls.</li> <li>■ <b>Max</b>: The maximum length of time a caller waited before abandoning the call (in seconds).</li> <li>■ <b>Avg</b>: The average length of time a caller waited before abandoning the call (in seconds).</li> </ul>

<p><b>Answered</b></p>	<ul style="list-style-type: none"> <li>▪ : The total number of answered calls.</li> <li>▪ <b>Ring time Max:</b> The maximum length of time a caller waited before a call was answered (in seconds).</li> <li>▪ <b>Ring time Avg:</b> The average length of time a caller waited before the call was answered (in seconds).</li> <li>▪ <b>Duration Max:</b> The duration of the longest answered call (in hours, mins, secs).</li> <li>▪ <b>Duration Avg:</b> The average length of all answered calls (in hours, mins, secs).</li> </ul>
<p><b>Outbound</b></p>	<ul style="list-style-type: none"> <li>▪ : The total number of outbound calls.</li> <li>▪ <b>Duration Max:</b> The duration of the longest outbound call (in hours, mins, secs).</li> <li>▪ <b>Duration Avg:</b> The average length of all outbound calls (in hours, mins, secs).</li> <li>▪ <b>Duration Total:</b> The total duration of time spent on outbound calls.</li> <li>▪ <b>Cost Avg:</b> The average cost of all outbound calls.</li> <li>▪ <b>Cost Total:</b> The total cost of all outbound calls.</li> </ul>

To modify your report to cover a larger organisational scope, click on an element of the breadcrumb as shown below:



## Call Geography

**The Call Geography report**

- Introduction
- Running the report
- Creating the report
- The report's results

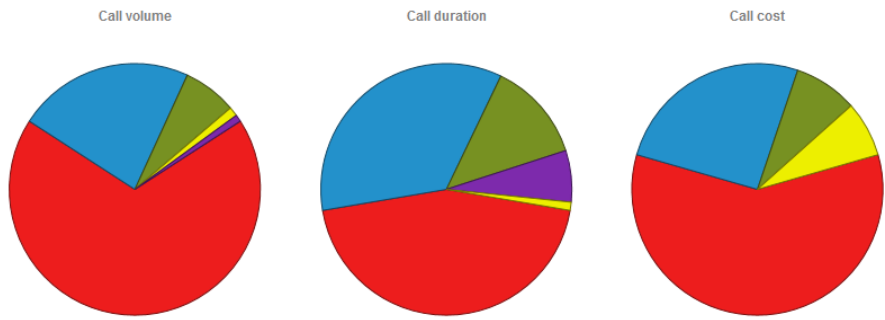
### Introduction

The Call Geography report consists of three pie charts, each showing call information grouped by volume, duration and cost. An accompanying table is also shown, containing details of where - geographically - your calls are made, classified by their tariff band, such as local, national, mobile or international.

The proportion of calls to each geographical destination is shown in terms of volume, duration and cost, highlighting the calls that are costing you the most and taking up most of your time.

# My call geography 2012-05-17 15:24:42

⬆ \ TIM Plus \ London \ Accounts \ About this report



Charge band ▲	% of all calls	Number of calls	% of total duration	Average duration	Total duration	% of total cost	Average cost	Total cost
Local	7%	579	13%	00:01:39	15:51:14	8%	0.115	66.539
Personal/Mobile	68%	5706	45%	00:00:35	55:04:15	59%	0.084	477.608
National	23%	1902	35%	00:01:21	42:56:33	26%	0.110	208.876
International	1%	99	1%	00:00:47	01:17:43	7%	0.584	57.850
Other	1%	75	7%	00:06:31	08:09:12	-	-	-
<b>5 charge bands</b>		<b>8361</b>		<b>00:00:53</b>	<b>123:18:57</b>		<b>0.097</b>	<b>810.873</b>

## Running the report

On the Reports screen, select the Call geography report from the left-hand pane and click the **Select this report** button.

TIMPLUS

[Reports](#) | [Directory](#) | [Call view](#) | [Live stats](#) | [Tariff editor](#) | [Settings](#) | [Alerts](#)

**Reports**

- Account summary
- Busy channels
- Busy times
- Call analysis
- Call geography**
- Call scoring
- Call volumes
- Custom report
- Daily activity
- Enterprise overview
- Frequent numbers
- Inbound call performance
- Missed calls
- Phone bill
- Random call selection
- Target response
- Top calls
- Unused devices
- User activity

**Call geography**

Includes graphical pie charts by volume and cost, along with a table containing complete information about where, geographically, you're making your calls to.

Calls are classified by their tariff band, eg. local, national, mobile, international, etc.

Quickly enables you to see which calls are costing you the most, and taking up the most call time.

**Select this report**

A new window will appear, where you can set the parameters of your report.

## Selecting the reporting period

For each report, you must specify a time span that covers the calls you want the report to include. This is known as the "reporting period".

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### Select a reporting period

Define the period you want the report to encompass.

Remember, you can always filter your results later, so choose a big enough period.

Period:  ⓘ

From date:

To date:

From time:

To time:

Yesterday  
**Today**  
 Yesterday  
 This week  
 Last week  
 This month  
 Last month  
 This year  
 All calls  
 Custom period

There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table describes how the start and end times are defined for each preset period:

Period	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This week</b>	The start date is set to the first day of the current week (normally Monday). The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.

In addition to the presets described above, it is possible to specify a custom reporting period by choosing **Custom period** from the **Period** drop-down list and specifying your own **Start date**, **Start time**, **End date** and **End time** of the period you want to report on.

Period:  ⓘ

From date:

To date:

From time:

To time:

Once you have set the reporting period, click on the **Next** button to set additional report parameters and options, or select the **Finish** button to run the report immediately.




## Selecting the reporting entity

The **Reporting entity** parameter allows you to select the part of your organisation whose calls the report should include, e.g. a site, a group or an individual user.

### Choose a reporting entity

Select a specific section of your organisation whose calls will feature in the report. To run the report across your entire organisation, select **(All sites)**.


Alternatively, select a specific site, user group, channel group, individual user or channel.

Site	(All sites) ▾	
Group	▾	
User	▾	

### Site

To report on a particular site, select it from the drop-down list or select **All sites**.


Site



### Group

If a site has been selected, you are able to further limit the report's results by selecting a group from the drop-down list.


Group



### User

If both a site and group have been selected, you can further limit the report's results to include only calls involving a particular user, by selecting that user from the drop-down list.

User





If your web account is restricted to a specific site or group, only those entities to which you have access will be available in the drop-down lists.

Once you have selected the scope of your report, click on the **Next** button to set additional report parameters and options, or to run the report immediately, click the **Finish** button.

## Selecting the report filters

You can limit the results of your report by choosing one or more of the following filters:

**Filter the results of the report**

Account code	<input type="text"/>		Dialled number	<input type="text"/>	
Call type	All calls		Duration	<input type="text"/>	
Carrier	(All carriers)		LCR code	<input type="text"/>	
CLI	<input type="text"/>		Response	<input type="text"/>	
Cost	<input type="text"/>		Start time	<input type="text"/>	
Destination	<input type="text"/>		Trunk access code	<input type="text"/>	

#### Account code

To produce a report consisting only of calls that were made using a particular account code, enter the account code in the field provided.

Account code

To report on more than one account code, separate each code using a comma.

#### Call type

This filter allows you to define the type of call you want to report on, in terms of where the call originated and where it was delivered, e.g. incoming, outgoing, internal, etc. To report on all types of call, set this to **All calls**.

Call type

#### Carrier

If you use more than one carrier, you can limit the results to include only calls that were made using a specific carrier.

Carrier

If you use only one carrier, there will be no drop-down list available and no option to choose a carrier.

#### CLI

Calling Line Identification (CLI) is the telephone number of the remote caller in an incoming call scenario.

You can report on calls that originate from a specific CLI or those whose CLI matches a particular pattern of digits. For example, to report on all incoming calls from Tri-Line, you could enter **02072652600**.


CLI

You can use the **!** symbol to explicitly exclude a CLI from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls from Tri-Line, but include all others, you could use **!020726526\***. To report on more than one CLI, use a comma to separate each entry.

#### Cost

You can define a cost filter to include calls above or below specific values by entering your criteria, as shown below:



Cost <2.00 

You can specify a cost range by using the – symbol; to specify limits, use the comparison operators, >, <, and ! .

### Destination

If you want to filter calls to a specific, known destination, type the name of the destination in the text box provided. This filter accepts the ! and \* symbols for excluding values and specifying partial matches, respectively.

For example, if you wanted to exclude all calls to France, you could enter !France\*, as shown below:

Destination !France\* 

### Dialled number

To filter calls to a specific dialled number, type it in the text box provided. The dialled number is defined as the number that is dialled (in the case of an outbound call), or the DDI number that the remote party dialled to reach a particular extension or group (in the case of an inbound call).

To filter calls to a specific area, a partial number can be entered (e.g. 0033 for calls to France).

Dialled number 0033 

You can use the ! symbol to explicitly exclude a dialled number from the report's results, and/or the \* symbol as a wildcard in digit pattern matching. For example, to exclude calls to Tri-Line, but include all others, you could use !020726526\*. To report on more than one dialled number, use a comma to separate each entry.

### Duration

To filter calls above or below a particular duration, enter the desired duration in seconds.

Duration >1800 

You can specify a duration range by using the – symbol; to specify limits, use the comparison operators, >, <, and ! .

In the above example, the report will return only calls longer than 1800 seconds (30 minutes).

### LCR code


To filter your results to include only calls that used a Least Cost Routing (LCR) code, enter it in the text box provided.

LCR code 162 

You can use the ! symbol to explicitly exclude a LCR code from the report's results, and/or the \* symbol as a wildcard in digit pattern matching. For example, to exclude calls made using all LCR codes beginning 162, you could enter !162\*. To report on more than one LCR code, use a comma to separate each entry.

### Response

This option allows you to filter calls based on their response time, measured in seconds. Specify the desired response time threshold in the text box provided.

Response time >10 


In the above example, the search results will display calls that have a response time greater than 10 seconds.

You can specify a response time range by using the – symbol and; to specify limits, use the comparison operators, >, <, and ! .

### Start time

This option allows you to filter calls based on the time the call started. Specify the start time in the text box provided using the hh:m m:ss format.

For example, to include only calls that began after 10 am, you could enter **10:00:00** in the **start time** field, as shown below:

Start time	10:00:00	
------------	----------	---

### Trunk access code

If your telephone system uses trunk access codes to connect calls using specific channels, you can limit your report's results to include only calls made using those codes. Specify the trunk access code in the text box provided.

Trunk access code	9	
-------------------	---	---






You can use the **!** symbol to explicitly exclude a trunk access code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using the **9** trunk access code, you could enter **!9**. To report on more than one trunk access code, use a comma to separate each entry.

### Selecting the report options

This section enables you to further narrow down your report results, by excluding certain types of calls. It also allows you to sort the report's results in a particular manner.


#### Options

Specify one or more of any additional report options shown here.

<input checked="" type="checkbox"/> Exclude weekends	
<input checked="" type="checkbox"/> Exclude transfers	
Sort order	Ascending 
Sort results by	Charge band 
Ignore missed calls shorter than	3 seconds 


#### Exclude weekends

To exclude weekend calls from your report's results, select the **Exclude weekends** option.

<input checked="" type="checkbox"/> Exclude weekends	
--	---


#### Exclude transfers

To exclude transferred calls from your report's results, select the **Exclude transfers** option.

<input checked="" type="checkbox"/> Exclude transfers	
---	---


#### Sort order

Choose from the **sort order** drop-down list whether you want the results of the report to appear in ascending or descending order.

Sort order	Ascending	
------------	-----------	---


#### Sort results by

To sort your report's results by a particular column, select it from the **sort results by** drop-down list.

Sort results by	Charge band	
-----------------	-------------	---

### Ignore short missed calls

Missed calls below a certain duration can sometimes pollute the meaning of a report's results. To exclude such short calls from your report, enter a duration threshold in the text box provided, e.g. to ignore calls below 3 seconds, enter 3 .

Ignore missed calls shorter than  seconds 

### Selecting the report format

This section allows you to choose the media format of your completed report. The formats available are `Web`, `PDF`, `Excel`, `CSV` and `XML`.

More details about each report format are available in the [Setting the report format](#) section above.

### Creating the report

When you have selected a reporting period and have chosen any filters and options, you can either run the report immediately by clicking on the `Run now` button, or schedule it for future delivery.

Your report is ready to run

Select the format that you want your report to be in.

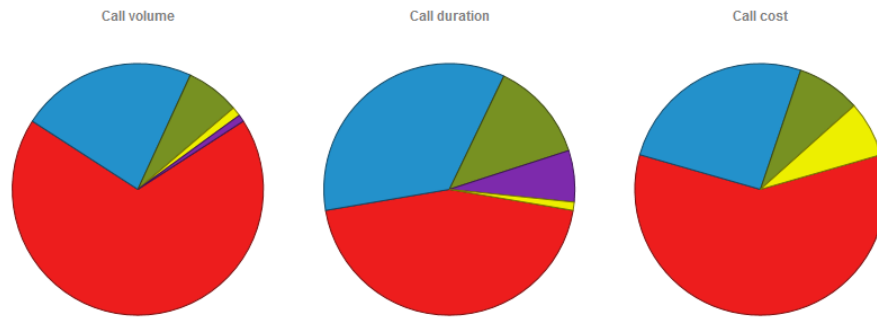
Report format

You can now either run the report immediately, or schedule it to run once, or at regular intervals, in the future.

### The report's results

Below is an example of this report's output in `Web` format:

# My call geography

2012-05-17 15:24:42
↑ \ TIM Plus \ London \ Accounts \
About this report


Charge band ▲	% of all calls	Number of calls	% of total duration	Average duration	Total duration	% of total cost	Average cost	Total cost
Local	7%	579	13%	00:01:39	15:51:14	8%	0.115	66.539
Personal/Mobile	68%	5706	45%	00:00:35	55:04:15	59%	0.084	477.608
National	23%	1902	35%	00:01:21	42:56:33	26%	0.110	208.876
International	1%	99	1%	00:00:47	01:17:43	7%	0.584	57.850
Other	1%	75	7%	00:06:31	08:09:12	-	-	-
5 charge bands		8361		00:00:53	123:18:57		0.097	810.873

The final report consists of three pie charts and a table.

## Pie charts

- The left-hand pie chart shows the amount of calls to each location
- The centre chart shows the time spent on calls to each location
- The right-hand chart shows the cost of calls to each location

## Table

The table shows the following information about the calls made to each charge band location:

Header	Description
<b>Charge band</b>	The charge band, e.g. Local, National, International, Mobile, etc. Each listed charge band is click-able, allowing you to drill-down to see which site, department or user made calls to that charge band location.
<b>% of calls</b>	The number of calls per charge band location as a percentage of the total calls made. To reorder, click on the header to alternate between descending and ascending.
<b>Number of calls</b>	The total volume of calls made to each charge band location.
<b>% of total duration</b>	The total duration of calls made to each charge band location, expressed as a percentage of all charge bands.
<b>Average duration</b>	The average duration spent on calls to the corresponding charge band.
<b>Total duration</b>	The total amount of time spent on calls to the corresponding charge band.

<b>% of total cost</b>	The total cost of all calls made to each charge band location, expressed as a percentage of the total cost of all calls.
<b>Average cost</b>	The average cost of calls made to each charge band location.
<b>Total cost</b>	The total cost of calls made to each charge band location.

The summary line at the foot of the table shows the total number of calls included in the report, the total duration of calls, average and total costs.

As with all reports produced by TIM Plus, each page of the report includes the following information:

- the report's title
- the date and time that the report was generated
- the name of the report, if applicable

The web format is the most interactive of all formats: all column headers are click-sortable and most graphical and tabular elements can be drilled down into, allowing deeper analysis of your results. By clicking on the [About this report](#) link at the top-right corner of the page, you can review any filters and options that have been applied to the report.

To modify your report to cover a larger organisational scope, click on an element of the breadcrumb as shown below:



## Call Scoring



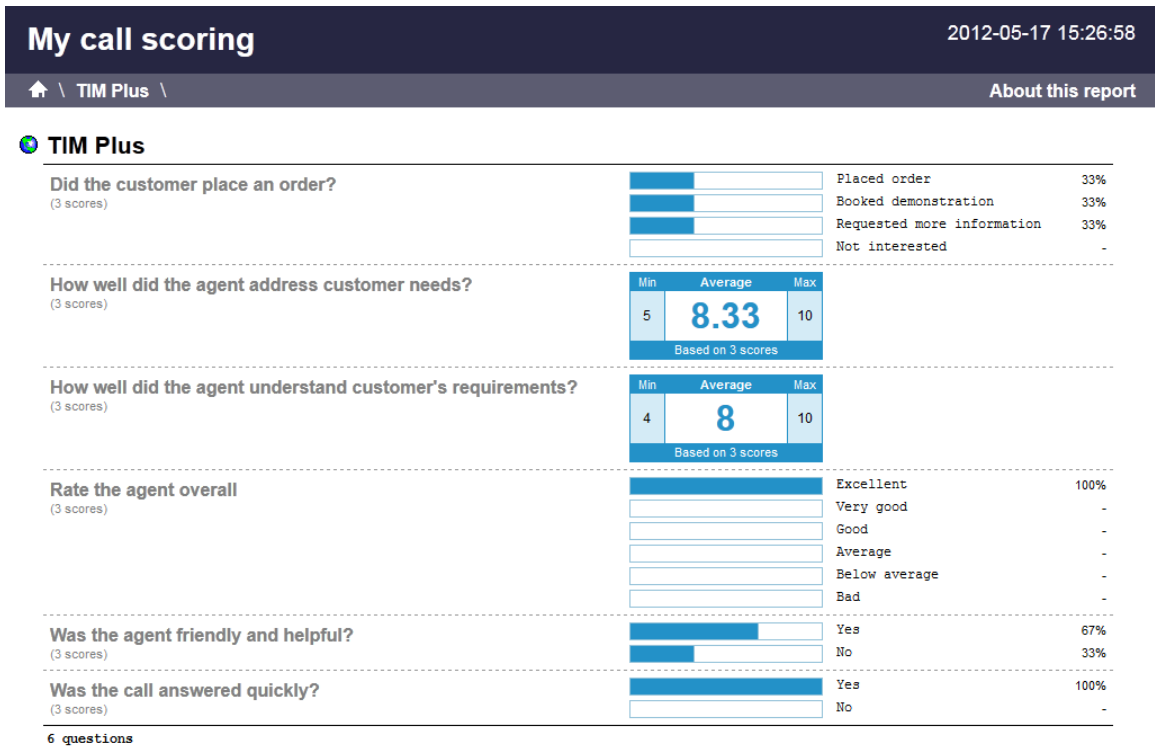
### Introduction

The Call Scoring report provides a comprehensive analysis of previously-scored calls, enabling you to more efficiently assess the performance of your staff. TIM Plus gives you the option to create your own score cards, so you can specifically rate any call according to a set of custom evaluation criteria.

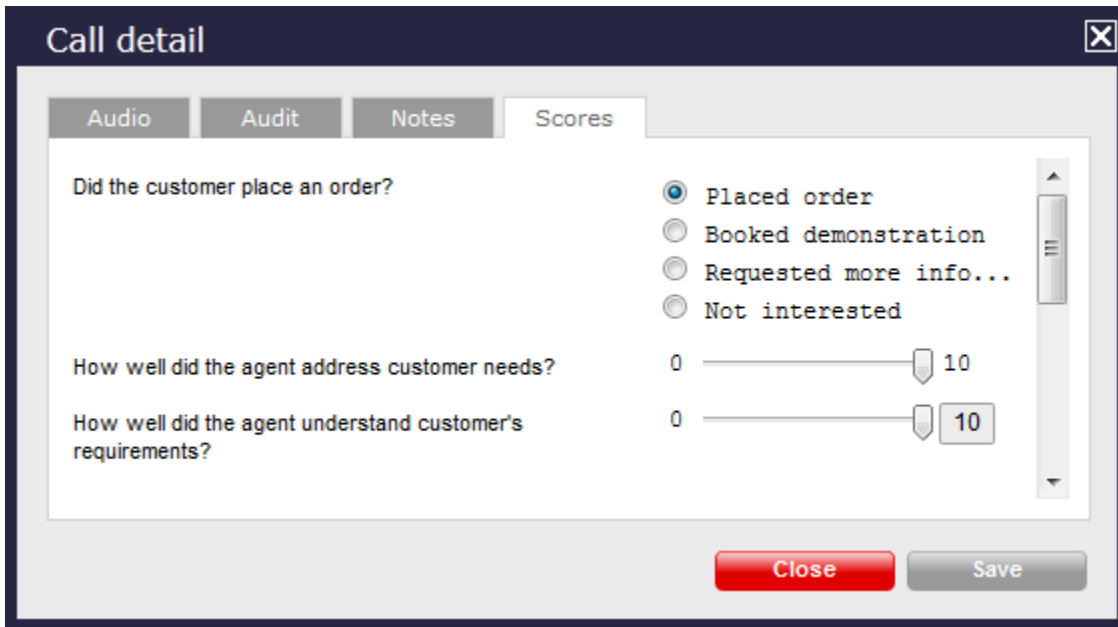
The scores can be based on any combination of questions whose answers are of the following type:

- **Yes/No**
- **A value range**
- **Multiple choice**

All questions are summarised in a clear, easy-to-understand format and are displayed separately, grouped into their respective categories.

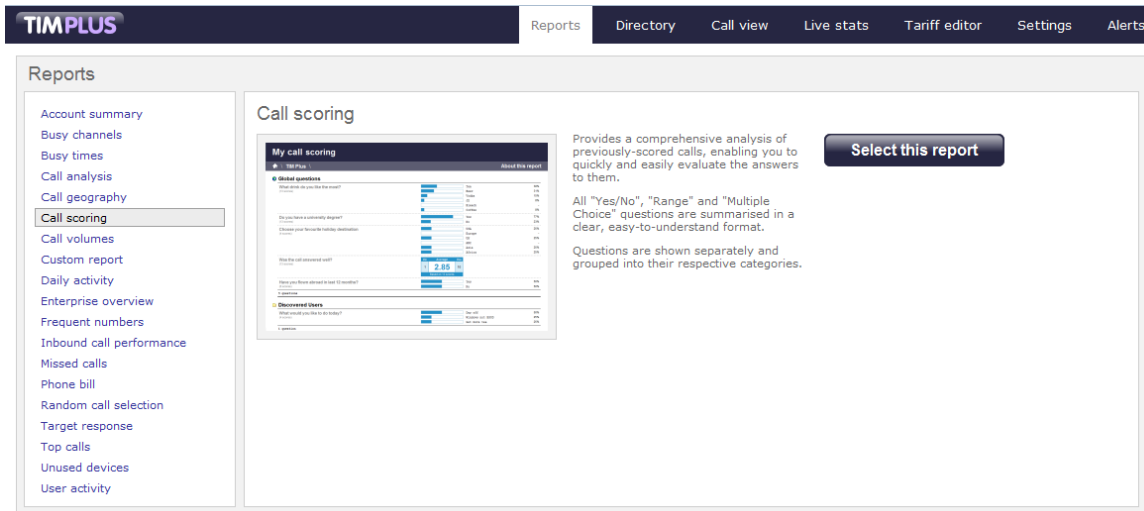


An example of a scoring card can be seen below:



### Running the report

On the Reports screen, select the Call scoring report from the left-hand pane and click the **Select this report** button.



A new window will appear, where you can set the parameters of your report.

### Selecting the reporting period

For each report, you must specify a time span that covers the calls you want the report to include. This is known as the "reporting period".




There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table describes how the start and end times are defined for each preset period:

Period	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This week</b>	The start date is set to the first day of the current week (normally Monday). The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.

<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to <b>00:00:00</b> and <b>23:59:59</b> respectively.
<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to <b>00:00:00</b> and <b>23:59:59</b> respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.

In addition to the presets described above, it is possible to specify a custom reporting period by choosing **Custom period** from the **Period** drop-down list and specifying your own **Start date**, **Start time**, **End date** and **End time** of the period you want to report on.

<b>Period</b>	Custom period 
<b>From date</b>	01 Jul 2011
<b>To date</b>	14 Feb 2013
<b>From time</b>	00 : 00 : 00
<b>To time</b>	23 : 59 : 59

Once you have set the reporting period, click on the **Next** button to set additional report parameters and options, or select the **Finish** button to run the report immediately.




### Selecting the reporting entity

The **Reporting entity** parameter allows you to select the part of your organisation whose calls the report should include, e.g. a site, a group or an individual user.

#### Choose a reporting entity


Select a specific section of your organisation whose calls will feature in the report. To run the report across your entire organisation, select **(All sites)**.

Alternatively, select a specific site, user group, channel group, individual user or channel.

<b>Site</b>	(All sites) 
<b>Group</b>	<input type="text"/> 
<b>User</b>	<input type="text"/> 


#### Site

To report on a particular site, select it from the drop-down list or select **All sites**.

<b>Site</b>	All sites 
-------------	---

#### Group

If a site has been selected, you are able to further limit the report's results by selecting a group from the drop-down list.

<b>Group</b>	All groups 
--------------	--

#### User

If both a site and group have been selected, you can further limit the report's results to include only calls involving a particular user, by selecting that user from the drop-down list.



User  















If your web account is restricted to a specific site or group, only those entities to which you have access will be available in the drop-down lists.

Once you have selected the scope of your report, click on the **Next** button to set additional report parameters and options, or to run the report immediately, click the **Finish** button.

### Selecting the report filters


You can limit the results of your report by choosing one or more of the following filters:

Filter the results of the report

Account code	<input type="text"/>		Dialled number	<input type="text"/>	
Call type	<input type="text" value="All calls"/>		Duration	<input type="text"/>	
Carrier	<input type="text" value="(All carriers)"/>		LCR code	<input type="text"/>	
CLI	<input type="text"/>		Response	<input type="text"/>	
Cost	<input type="text"/>		Start time	<input type="text"/>	
Destination	<input type="text"/>		Trunk access code	<input type="text"/>	

#### Call type

This filter allows you to define the type of call you want to report on, in terms of where the call originated and where it was delivered, e.g. incoming, outgoing, internal, etc. To report on all types of call, set this to **All calls**.

Call type  

#### CLI

Calling Line Identification (CLI) is the telephone number of the remote caller in an incoming call scenario.


You can report on calls that originate from a specific CLI or those whose CLI matches a particular pattern of digits. For example, to report on all incoming calls from Tri-Line, you could enter **02072652600**.

CLI  

#### Dialled number

To filter calls to a specific dialled number, type it in the text box provided. The dialled number is defined as the number that is dialled (in the case of an outbound call), or the DDI number that the remote party dialled to reach a particular extension or group (in the case of an inbound call).

To filter calls to a specific area, a partial number can be entered (e.g. **0033** for calls to France).

Dialled number  

You can use the **!** symbol to explicitly exclude a dialled number from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls to Tri-Line, but include all others, you could use **!020726526\***). To report on more than one dialled number, use a comma to separate each entry.

## Duration

To filter calls above or below a particular duration, enter the desired duration in seconds.

Duration  

You can specify a duration range by using the – symbol; to specify limits, use the comparison operators, >, <, and ! .


In the above example, the report will return only calls longer than 1800 seconds (30 minutes).


## Selecting the report options


This section enables you to further narrow down your report results, by excluding certain types of calls. It also allows you to sort the report's results in a particular manner.

**Options**

Specify one or more of any additional report options shown here.


Exclude weekends 

Exclude transfers 

Hide unused 


### Exclude weekends

To exclude weekend calls from your report's results, select the **Exclude weekends** option.

Exclude weekends 


### Exclude transfers

To exclude transferred calls from your report's results, select the **Exclude transfers** option.

Exclude transfers 

### Hide unused

To exclude unused extensions from your report's results, select the **Hide unused** option.

Hide unused 

## Selecting the report format

This section allows you to choose the media format of your completed report. The formats available are **Web**, **PDF**, **Excel**, **CSV** and **XML**.

More details about each report format are available in the [Setting the report format](#) section above.

## Creating the report

When you have selected a reporting period and have chosen any filters and options, you can either run the report immediately by clicking on the **Run now** button, or [schedule it for future delivery](#).

**Your report is ready to run**

Select the format that you want your report to be in.

You can now either run the report immediately, or schedule it to run once, or at regular intervals, in the future.

Report format: Web

**Run now**

**Schedule for later**

### The report's results

Below is an example of this report's output in web format:

**My call scoring** 2012-05-17 15:26:58

[Home](#) \ [TIM Plus](#) \ [About this report](#)

**TIM Plus**

<b>Did the customer place an order?</b> (3 scores)	<input type="checkbox"/>	Placed order	33%
	<input type="checkbox"/>	Booked demonstration	33%
	<input type="checkbox"/>	Requested more information	33%
	<input type="checkbox"/>	Not interested	-
<hr/>			
<b>How well did the agent address customer needs?</b> (3 scores)	Min	Average	Max
	5	<b>8.33</b>	10
Based on 3 scores			
<hr/>			
<b>How well did the agent understand customer's requirements?</b> (3 scores)	Min	Average	Max
	4	<b>8</b>	10
Based on 3 scores			
<hr/>			
<b>Rate the agent overall</b> (3 scores)	<input type="checkbox"/>	Excellent	100%
	<input type="checkbox"/>	Very good	-
	<input type="checkbox"/>	Good	-
	<input type="checkbox"/>	Average	-
	<input type="checkbox"/>	Below average	-
	<input type="checkbox"/>	Bad	-
<hr/>			
<b>Was the agent friendly and helpful?</b> (3 scores)	<input type="checkbox"/>	Yes	67%
	<input type="checkbox"/>	No	33%
<hr/>			
<b>Was the call answered quickly?</b> (3 scores)	<input type="checkbox"/>	Yes	100%
	<input type="checkbox"/>	No	-

6 questions

The web format is the most interactive of all formats: all column headers are click-sortable and most graphical and tabular elements can be drilled down into, allowing deeper analysis of your results. By clicking on the [About this report](#) link at the top-right corner of the page, you can review any filters and options that have been applied to the report.

As with all reports produced by TIM Plus, each page of the report includes the following information:

- the report's title
- the date and time that the report was generated
- the name of the report, if applicable

The results of the call scoring report will vary depending on the type of questions used to create your score cards:

**Yes/No** questions show their answers as two bars, each indicating the proportion of total answers.

**Was the call answered quickly?** 100%

(3 scores)

<input type="checkbox"/>	Yes	
<input type="checkbox"/>	No	-

**Range** questions show the minimum and maximum scores, as well as the average score.

**How well did the agent address customer needs?**

(3 scores)

Min	Average	Max
5	8.33	10
Based on 3 scores		

**Multiple choice** questions show each possible answer as a percentage of the total number of answers.

**Did the customer place an order?**

(3 scores)

<input type="checkbox"/>	Placed order	33%
<input type="checkbox"/>	Booked demonstration	33%
<input type="checkbox"/>	Requested more information	33%
<input type="checkbox"/>	Not interested	-

To modify your report to cover a larger organisational scope, click on an element of the breadcrumb as shown below:



## Call Volumes

**The Call Volumes report**

- Introduction
- Running the report
- Creating the report
- The report's results

### Introduction

The Call Volumes report gives you a complete picture of your call volumes organised by site, group or user. It provides a clear, graphical and tabular representation of your outbound, answered and abandoned calls, broken down into hourly time slots. Internal and external calls are itemised separately and every value can be toggled between a percentage or a number. Additionally, all of the displayed values are shown as hyperlinks, allowing you to drill down further into the results.

My call volumes
2012-05-17 15:37:04

[Home](#) \ [TIM Plus](#) \ [London](#) \ [Accounts](#) \
 
About this report

Graph
Details
Summary

■ Answered
■ Outbound
■ Missed

[Show values | percentages](#)

Name ▲	Total			Timeslots
	Σ	External	Internal	
Al Dente	2532	2077	455	
	-	-	-	
	1309	852	457	
Anna Beck	497	226	271	
	-	-	-	
	333	305	28	
Anna Ruben	341	288	53	
	86	86	-	
	388	354	34	
Anna Savalas	7613	6931	682	
	52	52	-	
	1488	648	840	
Annette Curtain	6165	5851	314	
	221	221	-	
	1597	1221	376	
Bea Caws	8041	7849	192	
	93	93	-	
	1064	709	355	

### Running the report

On the Reports screen, select the Call volumes report from the left-hand pane and click the **Select this report** button.

**TIMPLUS**
Reports
Directory
Call view
Live stats
Tariff editor
Settings
Alerts

**Reports**

- Account summary
- Busy channels
- Busy times
- Call analysis
- Call geography
- Call scoring
- Call volumes**
- Custom report
- Daily activity
- Enterprise overview
- Frequent numbers
- Inbound call performance
- Missed calls
- Phone bill
- Random call selection
- Target response
- Top calls
- Unused devices
- User activity

Call volumes
Select this report

Get a complete picture of your call volumes by site, group or user.

This drill-able report provides a clear, graphical and tabular representation of your outbound, answered and abandoned calls, broken down into hourly blocks.

Internal and external calls are itemised separately and every value can be shown as either a percentage or a number.

A new window will appear, where you can set the parameters of your report.

### Selecting the reporting period

For each report, you must specify a time span that covers the calls you want the report to include. This is known as the "reporting period".

### Select a reporting period

Define the period you want the report to encompass.

Remember, you can always filter your results later, so choose a big enough period.

Period:  ⓘ

From date:

To date:

From time:

To time:

Yesterday  
**Today**  
 Yesterday  
 This week  
 Last week  
 This month  
 Last month  
 This year  
 All calls  
 Custom period

There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table describes how the start and end times are defined for each preset period:

Period	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This week</b>	The start date is set to the first day of the current week (normally Monday). The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.

In addition to the presets described above, it is possible to specify a custom reporting period by choosing **Custom period** from the **Period** drop-down list and specifying your own **Start date**, **Start time**, **End date** and **End time** of the period you want to report on.

Period:  ⓘ

From date:

To date:

From time:

To time:

Once you have set the reporting period, click on the **Next** button to set additional report parameters and options, or select the **Finish** button to run the report immediately.




## Selecting the reporting entity

The **Reporting entity** parameter allows you to select the part of your organisation whose calls the report should include, e.g. a site, a group or an individual user.

### Choose a reporting entity

Select a specific section of your organisation whose calls will feature in the report. To run the report across your entire organisation, select **(All sites)**.


Alternatively, select a specific site, user group, channel group, individual user or channel.

Site	(All sites) ▼	
Group	▼	
User	▼	

### Site

To report on a particular site, select it from the drop-down list or select **All sites**.


Site



### Group

If a site has been selected, you are able to further limit the report's results by selecting a group from the drop-down list.


Group



### User

If both a site and group have been selected, you can further limit the report's results to include only calls involving a particular user, by selecting that user from the drop-down list.

User





If your web account is restricted to a specific site or group, only those entities to which you have access will be available in the drop-down lists.

Once you have selected the scope of your report, click on the **Next** button to set additional report parameters and options, or to run the report immediately, click the **Finish** button.

## Selecting the report filters

You can limit the results of your report by choosing one or more of the following filters:

**Filter the results of the report**

Account code	<input type="text"/>		Dialled number	<input type="text"/>	
Call type	All calls		Duration	<input type="text"/>	
Carrier	(All carriers)		LCR code	<input type="text"/>	
CLI	<input type="text"/>		Response	<input type="text"/>	
Cost	<input type="text"/>		Start time	<input type="text"/>	
Destination	<input type="text"/>		Trunk access code	<input type="text"/>	

#### Account code

To produce a report consisting only of calls that were made using a particular account code, enter the account code in the field provided.

Account code

To report on more than one account code, separate each code using a comma.

#### Call type

This filter allows you to define the type of call you want to report on, in terms of where the call originated and where it was delivered, e.g. incoming, outgoing, internal, etc. To report on all types of call, set this to **All calls**.

Call type

#### Carrier

If you use more than one carrier, you can limit the results to include only calls that were made using a specific carrier.

Carrier

If you use only one carrier, there will be no drop-down list available and no option to choose a carrier.

#### CLI

Calling Line Identification (CLI) is the telephone number of the remote caller in an incoming call scenario.

You can report on calls that originate from a specific CLI or those whose CLI matches a particular pattern of digits. For example, to report on all incoming calls from Tri-Line, you could enter **02072652600**.

CLI

You can use the **!** symbol to explicitly exclude a CLI from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls from Tri-Line, but include all others, you could use **!020726526\***. To report on more than one CLI, use a comma to separate each entry.

#### Cost

You can define a cost filter to include calls above or below specific values by entering your criteria, as shown below:



Cost	<2.00	
------	-------	---

You can specify a cost range by using the – symbol; to specify limits, use the comparison operators, >, <, and ! .

### Destination

If you want to filter calls to a specific, known destination, type the name of the destination in the text box provided. This filter accepts the ! and \* symbols for excluding values and specifying partial matches, respectively.

For example, if you wanted to exclude all calls to France, you could enter **!France\***, as shown below:

Destination	!France*	
-------------	----------	---

### Dialled number

To filter calls to a specific dialled number, type it in the text box provided. The dialled number is defined as the number that is dialled (in the case of an outbound call), or the DDI number that the remote party dialled to reach a particular extension or group (in the case of an inbound call).

To filter calls to a specific area, a partial number can be entered (e.g. **0033** for calls to France).

Dialled number	0033	
----------------	------	---

You can use the ! symbol to explicitly exclude a dialled number from the report's results, and/or the \* symbol as a wildcard in digit pattern matching. For example, to exclude calls to Tri-Line, but include all others, you could use **!020726526\***. To report on more than one dialled number, use a comma to separate each entry.

### Duration

To filter calls above or below a particular duration, enter the desired duration in seconds.

Duration	>1800	
----------	-------	---

You can specify a duration range by using the – symbol; to specify limits, use the comparison operators, >, <, and ! .

In the above example, the report will return only calls longer than 1800 seconds (30 minutes).

### LCR code

To filter your results to include only calls that used a Least Cost Routing (LCR) code, enter it in the text box provided.

LCR code	162	
----------	-----	---

You can use the ! symbol to explicitly exclude a LCR code from the report's results, and/or the \* symbol as a wildcard in digit pattern matching. For example, to exclude calls made using all LCR codes beginning 162, you could enter **!162\***. To report on more than one LCR code, use a comma to separate each entry.

### Response

This option allows you to filter calls based on their response time, measured in seconds. Specify the desired response time threshold in the text box provided.

Response time	>10	
---------------	-----	---


In the above example, the search results will display calls that have a response time greater than 10 seconds.

You can specify a response time range by using the – symbol and; to specify limits, use the comparison operators, >, <, and ! .

### Start time

This option allows you to filter calls based on the time the call started. Specify the start time in the text box provided using the **hh:m m:ss** format.

For example, to include only calls that began after 10 am, you could enter **10:00:00** in the `start time` field, as shown below:

Start time	<input type="text" value="10:00:00"/>	
------------	---------------------------------------	---

### Trunk access code

If your telephone system uses trunk access codes to connect calls using specific channels, you can limit your report's results to include only calls made using those codes. Specify the trunk access code in the text box provided.

Trunk access code	<input type="text" value="9"/>	
-------------------	--------------------------------	---




You can use the **!** symbol to explicitly exclude a trunk access code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using the **9** trunk access code, you could enter **!9**. To report on more than one trunk access code, use a comma to separate each entry.


### Selecting the report options


This section enables you to further narrow down your report results, by excluding certain types of calls. It also allows you to sort the report's results in a particular manner.

#### Options

Specify one or more of any additional report options shown here.


- Exclude weekends 
- Show unconnected calls 
- Hide unused 

Sort order  

Sort results by  

#### Exclude weekends

To exclude weekend calls from your report's results, select the `Exclude weekends` option.

<input checked="" type="checkbox"/> Exclude weekends 
--


#### Show unconnected calls

To show unconnected calls in your report results, select the `show unconnected calls` option:

<input checked="" type="checkbox"/> Show unconnected calls 
--


#### Hide unused

To exclude unused extensions from your report's results, select the `Hide unused` option.

<input checked="" type="checkbox"/> Hide unused 
---

#### Sort order

Choose from the `sort order` drop-down list whether you want the results of the report to appear in ascending or descending order.

Sort order	<input type="text" value="Ascending"/>	
------------	--	---

### Sort results by

To sort your report's results by a particular column, select it from the `sort results by` drop-down list.



A screenshot of a user interface element. On the left, the text 'Sort results by' is displayed. To its right is a dropdown menu with the word 'Name' selected. Further to the right is a small blue circular icon containing a white lowercase letter 'i'.

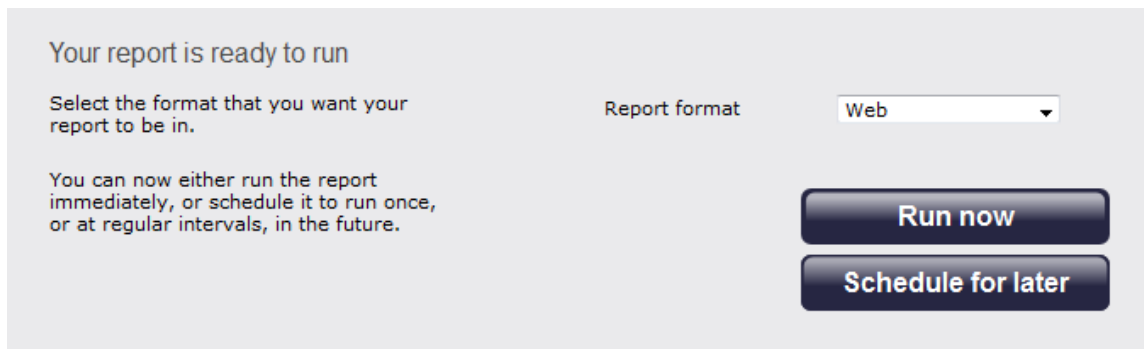
### Selecting the report format

This section allows you to choose the media format of your completed report. The formats available are `Web`, `PDF`, `Excel`, `CSV` and `XML`.

More details about each report format are available in the [Setting the report format](#) section above.

### Creating the report

When you have selected a reporting period and have chosen any filters and options, you can either run the report immediately by clicking on the `Run now` button, or [schedule it for future delivery](#).



A screenshot of a dialog box titled 'Your report is ready to run'. The text inside reads: 'Select the format that you want your report to be in.' Below this, it says: 'You can now either run the report immediately, or schedule it to run once, or at regular intervals, in the future.' To the right of the text is a label 'Report format' followed by a dropdown menu showing 'Web'. At the bottom right of the dialog are two dark blue buttons: 'Run now' and 'Schedule for later'.

### The report's results

Below is an example of this report's output in `web` format:

My call volumes
2012-05-17 15:37:04

[Home](#) \ [TIM Plus](#) \ [London](#) \ [Accounts](#) \
 
About this report

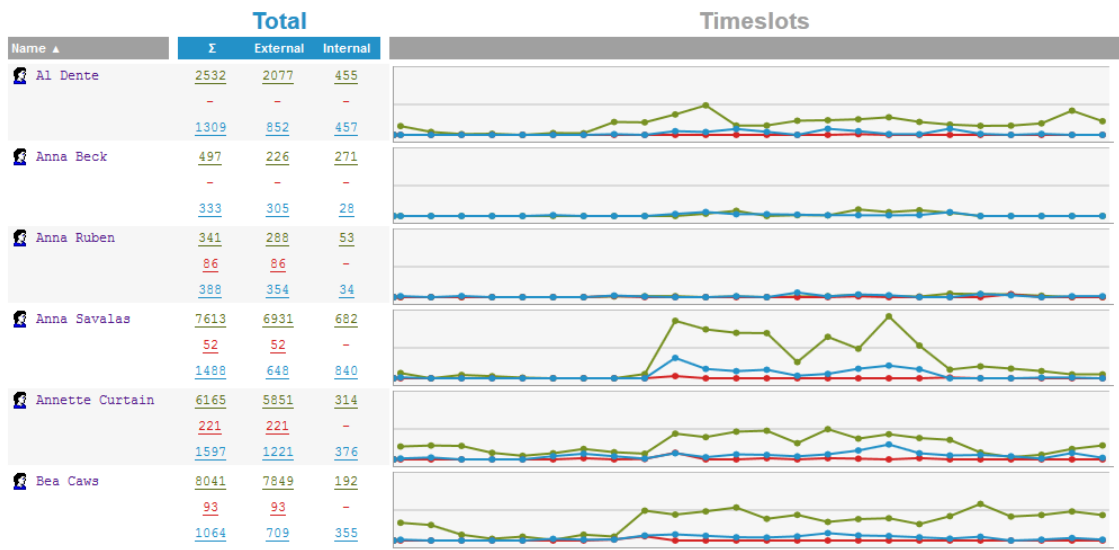
Graph

Details

Summary

■ Answered
■ Outbound
■ Missed

Show values | [percentages](#)



As with all reports produced by TIM Plus, each page of the report includes the following information:

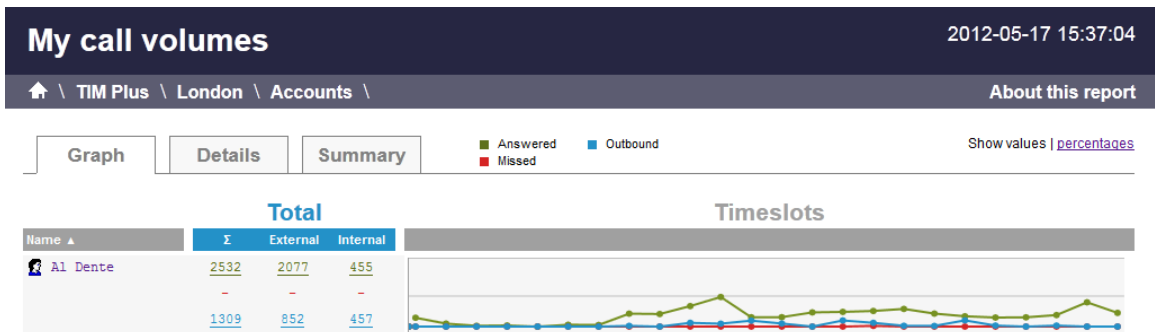
- the report's title
- the date and time that the report was generated
- the name of the report, if applicable

The web format is the most interactive of all formats: all column headers are click-sortable and most graphical and tabular elements can be drilled down into, allowing deeper analysis of your results. To view details of any filters or parameters used in creating this report, click on [About this report](#) at the top-right corner of the page.

The report is divided into three sections: [Graph](#), [Details](#) and [Summary](#).

### Graph

The [Graph](#) tab provides a visual representation of all inbound, outbound and missed calls for both external and internal call activity. A simple toggle button at the top right of the screen enables you to flip between call volumes and percentages.



### Details

The [Details](#) tab shows the actual volumes (or percentages) of calls for each time slot throughout the day.

My call volumes																	2012-10-04 12:44:50	
<a href="#">Home</a> \ <a href="#">TIM Plus</a> \ <a href="#">London</a> \ <a href="#">Accounts Admin</a> \															About this report			
<a href="#">Graph</a>			<a href="#">Details</a>			<a href="#">Summary</a>			<span style="color: green;">■</span> Answered <span style="color: blue;">■</span> Outbound <span style="color: red;">■</span> Missed		Show values   <a href="#">percentages</a>							
Name	Total			Timeslots														
	Σ	External	Internal	05	06	07	08	09	10	11	12	13	14	15	16	17	18	
Al Dente	<a href="#">360</a>	<a href="#">151</a>	<a href="#">209</a>	-	-	-	-	-	<a href="#">40</a>	<a href="#">76</a>	-	-	-	<a href="#">52</a>	<a href="#">49</a>	<a href="#">85</a>	<a href="#">58</a>	
	<a href="#">145</a>	<a href="#">145</a>	-	-	-	-	-	-	<a href="#">70</a>	<a href="#">31</a>	<a href="#">17</a>	-	-	-	<a href="#">12</a>	-	<a href="#">15</a>	
Andrew Montgomery	<a href="#">122</a>	<a href="#">60</a>	<a href="#">62</a>	-	-	-	-	-	-	-	-	<a href="#">15</a>	<a href="#">11</a>	<a href="#">62</a>	<a href="#">19</a>	<a href="#">15</a>	-	
	<a href="#">99</a>	<a href="#">85</a>	<a href="#">14</a>	<a href="#">16</a>	-	-	-	-	-	-	-	-	-	<a href="#">14</a>	-	<a href="#">17</a>	<a href="#">52</a>	
Barbara Seville	<a href="#">15</a>	<a href="#">15</a>	-	-	-	-	-	-	-	<a href="#">15</a>	-	-	-	-	-	-	-	
	<a href="#">39</a>	<a href="#">39</a>	-	-	-	-	-	-	-	-	-	<a href="#">15</a>	<a href="#">24</a>	-	-	-	-	
Misty Waters	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	<a href="#">50</a>	<a href="#">36</a>	<a href="#">14</a>	-	-	-	-	<a href="#">36</a>	-	-	-	-	-	<a href="#">14</a>	-	-	-	
4 items	<a href="#">830</a>	<a href="#">531</a>	<a href="#">299</a>	<a href="#">16</a>	-	-	-	<a href="#">36</a>	<a href="#">110</a>	<a href="#">122</a>	<a href="#">32</a>	<a href="#">39</a>	<a href="#">25</a>	<a href="#">128</a>	<a href="#">80</a>	<a href="#">117</a>	<a href="#">125</a>	

All numeric figures are shown as hyperlinks, allowing you to drill down into an itemised list of the calls that they represent.

My call volumes										2012-10-04 12:48:19	
<a href="#">Home</a> \ <a href="#">TIM Plus</a> \ <a href="#">London</a> \ <a href="#">Accounts</a> \										About this report	
<a href="#">All</a>		<a href="#">Outbound</a>		<a href="#">Answered</a>		<a href="#">Missed</a>		<a href="#">Internal</a>		<a href="#">Show all</a> 1 of 19	
Date & Time ▲	Source	CLI	Route	Destination	Response	Duration	Cost				
24/09/2012 13:15:26	London	02073536734	-	Norma Leigh	-	00:00:40	-				
24/09/2012 13:15:36	Vodafone	07775872259	-	Brock Lee	14	00:00:11	-				
24/09/2012 13:19:33	Pearl E White	-	07810669018	Vodafone	-	00:00:25	0.054				
24/09/2012 13:27:48	Penny Wise	-	07841401258	02	-	00:02:28	0.321				
24/09/2012 13:38:38	Pearl E White	-	02071051229	London	-	00:00:33	0.055				
24/09/2012 13:49:33	London	02087729999	-	Brock Lee	10	00:01:06	-				
24/09/2012 13:56:33	Penny Wise	-	2054	Harry Patel	-	00:00:31	-				
24/09/2012 14:01:51	Gaye Barr	-	07960425550	T-Mobile	-	00:00:04	0.030				
24/09/2012 14:05:11	London	02071847559	-	Brock Lee	7	00:00:08	-				
24/09/2012 14:10:31	London	02074956590	-	Brock Lee	10	00:00:06	-				
24/09/2012 14:10:31	London	02074131490	-	Doug Hole	-	00:02:32	-				
24/09/2012 14:18:01	Easton West	-	07760202596	Vodafone	-	00:00:09	0.030				
24/09/2012 14:44:43	Orange	07973894927	-	Mika Stal	-	00:03:28	-				
24/09/2012 14:44:46	Orange	07973894927	-	Mika Stal	2	00:01:09	-				
24/09/2012 14:48:08	London	02078022337	-	Don Key	5	00:00:01	-				
24/09/2012 15:02:38	Gene Poole	-	2071	Pearl E White	-	00:01:22	-				

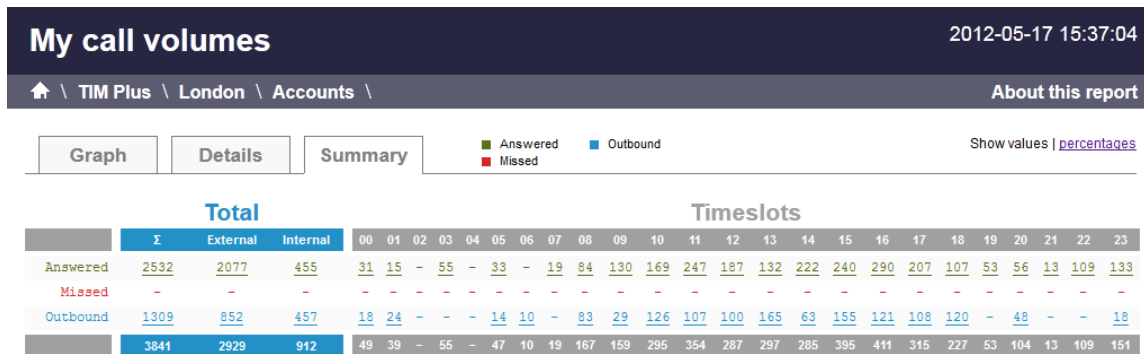
Below is a description of each table header:

Header	Description
Date & Time	The date and time the call started
Source	The place from where the call originated
CLI	The telephone number of the remote caller for inbound calls

<b>Route</b>	The information displayed in this field is determined by the type of call: <ul style="list-style-type: none"> <li>for incoming calls, this shows the CLI of the caller</li> <li>for incoming internal calls, this shows either the caller's username or extension number</li> <li>for outgoing calls, this shows the dialled number</li> </ul>
<b>Destination</b>	The information displayed in this field is determined by the type of call: <ul style="list-style-type: none"> <li>for incoming calls, this shows the name of the user whose extension answered the call, or the extension number if not available</li> <li>for outgoing calls, this shows the geographical location that was dialled, or an alias if defined in your contacts list</li> <li>for internal calls, this shows the extension that was dialled, enclosed in square brackets [ ]</li> </ul>
<b>Response</b>	The length of time it took for the call to be answered (i.e. the response time)
<b>Duration</b>	The duration of the call (in hours, minutes and seconds)
<b>Cost</b>	The cost of the call

**Summary**

The  tab shows a summary of all call activity for the reporting period you selected.



To modify your report to cover a larger organisational scope, click on an element of the breadcrumb as shown below:



**Custom**

### The Custom report

- Introduction
- Running the report
- Creating the report
- The report's results

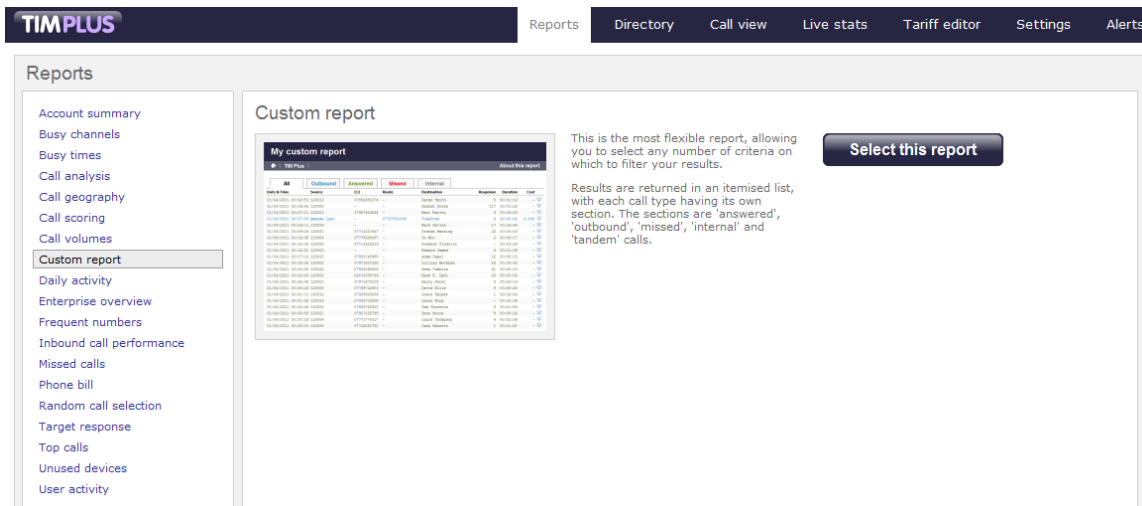
## Introduction

The Custom report allows a wide range of options and filtering criteria to be selected, enabling you to search for very specific phone calls. The results are displayed as an itemised list, grouped by call type: **All**, **Outbound**, **Answered**, **Missed**, **Internal** and **Tandem**.

My custom report								2012-05-17 15:34:00
<a href="#">Home</a> \ <a href="#">TIM Plus</a> \ <a href="#">London</a> \ <a href="#">Accounts</a> \ <span style="float: right;"><a href="#">About this report</a></span>								
All	Outbound	Answered	Missed	Internal	<a href="#">Show all</a> <span style="float: right;">1 of 16</span>			
Date & Time	Source	CLI	Route	Destination	Response	Duration	Cost	
01/03/2012 00:07:53	Adam Zapel	-	07767254860	Vodafone	-	00:00:27	0.058	
01/03/2012 00:20:23	Adam Zapel	-	07939041916	T-Mobile	-	00:00:04	0.030	
01/03/2012 00:41:18	Adam Zapel	-	02074787000	London	-	00:00:08	0.030	
01/03/2012 01:00:56	London	02070108086	-	Tom Morrow	-	00:01:03	-	
01/03/2012 01:59:31	London	02079603334	-	Tom Morrow	-	00:02:10	-	
01/03/2012 02:09:08	Orange	07968426619	-	Tom Morrow	-	00:01:35	-	
01/03/2012 04:31:41	O2	07921668518	-	Tom Morrow	-	00:01:44	-	
01/03/2012 06:03:28	Adam Zapel	-	07932040779	T-Mobile	-	00:00:10	0.030	
01/03/2012 06:50:38	London	02086719759	-	Tom Morrow	-	00:00:40	-	
01/03/2012 08:12:13	Orange	07971060111	-	Cheri Pitts	-	00:00:46	-	
01/03/2012 08:17:11	London	02070152800	-	Cheri Pitts	-	00:00:21	-	
01/03/2012 08:26:48	Adam Zapel	-	07949250374	T-Mobile	-	-	0.030	
01/03/2012 08:43:41	Adam Zapel	-	07985980159	T-Mobile	-	00:00:13	0.030	
01/03/2012 08:50:03	T-Mobile	07957503577	-	Cheri Pitts	-	00:06:37	-	
01/03/2012 09:01:08	Adam Zapel	-	07788646633	Vodafone	-	00:00:18	0.039	
01/03/2012 09:04:23	O2	07834585328	-	Tom Morrow	-	00:01:05	-	
01/03/2012 09:10:51	London	02085103628	-	Tom Morrow	-	-	-	
01/03/2012 09:12:56	Adam Zapel	-	07786276358	Vodafone	-	00:00:22	0.048	
01/03/2012 09:14:48	Adam Zapel	-	07717514310	Vodafone	-	00:00:01	0.030	
01/03/2012 09:20:46	London	02073511550	-	Tom Morrow	-	00:00:20	-	
01/03/2012 09:26:43	UNAVAILABLE	-	-	Tom Morrow	-	00:01:09	-	
01/03/2012 09:28:18	Vodafone	07796251027	-	Claire Annette	-	00:00:30	-	
01/03/2012 09:29:18	London	02073368085	-	Tom Morrow	-	00:03:12	-	
01/03/2012 09:42:38	Adam Zapel	-	02073076700	London	-	00:00:15	0.030	
01/03/2012 09:43:26	London	02078227654	-	Tom Morrow	-	00:00:28	-	
01/03/2012 09:50:01	London	02087402420	-	Claire Annette	-	00:02:34	-	
01/03/2012 09:51:26	Tom Morrow	-	07944789366	T-Mobile	-	00:01:09	0.150	
01/03/2012 09:57:51	UNAVAILABLE	-	-	Cheri Pitts	-	00:01:38	-	
01/03/2012 10:05:16	O2	07739071992	-	Tom Morrow	-	-	-	

## Running the report

On the Reports screen, select **Custom report** from the left-hand pane and click the **Select this report** button.



A new window will appear, where you can set the parameters of your report.

### Selecting the reporting period

For each report, you must specify a time span that covers the calls you want the report to include. This is known as the "reporting period".




There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table describes how the start and end times are defined for each preset period:

Period	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This week</b>	The start date is set to the first day of the current week (normally Monday). The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.



<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to <b>00:00:00</b> and <b>23:59:59</b> respectively.
<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to <b>00:00:00</b> and <b>23:59:59</b> respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.

In addition to the presets described above, it is possible to specify a custom reporting period by choosing **Custom period** from the **Period** drop-down list and specifying your own **Start date**, **Start time**, **End date** and **End time** of the period you want to report on.

<b>Period</b>	Custom period 
<b>From date</b>	01 Jul 2011
<b>To date</b>	14 Feb 2013
<b>From time</b>	00 : 00 : 00
<b>To time</b>	23 : 59 : 59

Once you have set the reporting period, click on the **Next** button to set additional report parameters and options, or select the **Finish** button to run the report immediately.




### Selecting the reporting entity

The **Reporting entity** parameter allows you to select the part of your organisation whose calls the report should include, e.g. a site, a group or an individual user.

#### Choose a reporting entity


Select a specific section of your organisation whose calls will feature in the report. To run the report across your entire organisation, select **(All sites)**.

Alternatively, select a specific site, user group, channel group, individual user or channel.

<b>Site</b>	(All sites) 
<b>Group</b>	<input type="text"/> 
<b>User</b>	<input type="text"/> 


#### Site

To report on a particular site, select it from the drop-down list or select **All sites**.

<b>Site</b>	All sites 
-------------	---


#### Group

If a site has been selected, you are able to further limit the report's results by selecting a group from the drop-down list.

<b>Group</b>	All groups 
--------------	--

#### User

If both a site and group have been selected, you can further limit the report's results to include only calls involving a particular user, by selecting that user from the drop-down list.

User  















If your web account is restricted to a specific site or group, only those entities to which you have access will be available in the drop-down lists.

Once you have selected the scope of your report, click on the **Next** button to set additional report parameters and options, or to run the report immediately, click the **Finish** button.

### Selecting the report filters


You can limit the results of your report by choosing one or more of the following filters:

Filter the results of the report

Account code	<input type="text"/>		Dialled number	<input type="text"/>	
Call type	<input type="text" value="All calls"/>		Duration	<input type="text"/>	
Carrier	<input type="text" value="(All carriers)"/>		LCR code	<input type="text"/>	
CLI	<input type="text"/>		Response	<input type="text"/>	
Cost	<input type="text"/>		Start time	<input type="text"/>	
Destination	<input type="text"/>		Trunk access code	<input type="text"/>	

#### Account code


To produce a report consisting only of calls that were made using a particular account code, enter the account code in the field provided.

Account code  

To report on more than one account code, separate each code using a comma.


#### Call type

This filter allows you to define the type of call you want to report on, in terms of where the call originated and where it was delivered, e.g. incoming, outgoing, internal, etc. To report on all types of call, set this to **All calls**.

Call type  

#### Carrier

If you use more than one carrier, you can limit the results to include only calls that were made using a specific carrier.

Carrier  



If you use only one carrier, there will be no drop-down list available and no option to choose a carrier.

## CLI

Calling Line Identification (CLI) is the telephone number of the remote caller in an incoming call scenario.


You can report on calls that originate from a specific CLI or those whose CLI matches a particular pattern of digits. For example, to report on all incoming calls from Tri-Line, you could enter **02072652600**.

CLI	<input type="text" value="02072652600"/>	
-----	--	---

You can use the **!** symbol to explicitly exclude a CLI from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls from Tri-Line, but include all others, you could use **!020726526\***. To report on more than one CLI, use a comma to separate each entry.

## Cost

You can define a cost filter to include calls above or below specific values by entering your criteria, as shown below:

Cost	<input type="text" value="&lt;2.00"/>	
------	---------------------------------------	---

You can specify a cost range by using the **-** symbol; to specify limits, use the comparison operators, **>**, **<**, and **!**.

## Destination

If you want to filter calls to a specific, known destination, type the name of the destination in the text box provided. This filter accepts the **!** and **\*** symbols for excluding values and specifying partial matches, respectively.

For example, if you wanted to exclude all calls to France, you could enter **!France\***, as shown below:

Destination	<input type="text" value="!France*"/>	
-------------	---------------------------------------	--

## Dialled number

To filter calls to a specific dialled number, type it in the text box provided. The dialled number is defined as the number that is dialled (in the case of an outbound call), or the DDI number that the remote party dialled to reach a particular extension or group (in the case of an inbound call).

To filter calls to a specific area, a partial number can be entered (e.g. **0033** for calls to France).

Dialled number	<input type="text" value="0033"/>	
----------------	-----------------------------------	---

You can use the **!** symbol to explicitly exclude a dialled number from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls to Tri-Line, but include all others, you could use **!020726526\***. To report on more than one dialled number, use a comma to separate each entry.

## Duration

To filter calls above or below a particular duration, enter the desired duration in seconds.

Duration	<input type="text" value="&gt;1800"/>	
----------	---------------------------------------	---

You can specify a duration range by using the **-** symbol; to specify limits, use the comparison operators, **>**, **<**, and **!**.

In the above example, the report will return only calls longer than 1800 seconds (30 minutes).

## LCR code

To filter your results to include only calls that used a Least Cost Routing (LCR) code, enter it in the text box provided.

LCR code	<input type="text" value="162"/>	
----------	----------------------------------	---

You can use the **!** symbol to explicitly exclude a LCR code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using all LCR codes beginning **162**, you could enter **!162\***. To report on more than one LCR code, use a comma to separate each entry.

### Response

This option allows you to filter calls based on their response time, measured in seconds. Specify the desired response time threshold in the text box provided.

Response time	<input type="text" value="&gt;10"/>	
---------------	-------------------------------------	---


In the above example, the search results will display calls that have a response time greater than 10 seconds.

You can specify a response time range by using the **-** symbol and; to specify limits, use the comparison operators, **>**, **<**, and **!**.

### Start time

This option allows you to filter calls based on the time the call started. Specify the start time in the text box provided using the **hh:mm:ss** format.

For example, to include only calls that began after 10 am, you could enter **10:00:00** in the **start time** field, as shown below:

Start time	<input type="text" value="10:00:00"/>	
------------	---------------------------------------	---

### Trunk access code

If your telephone system uses trunk access codes to connect calls using specific channels, you can limit your report's results to include only calls made using those codes. Specify the trunk access code in the text box provided.

Trunk access code	<input type="text" value="9"/>	
-------------------	--------------------------------	--









You can use the **!** symbol to explicitly exclude a trunk access code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using the **9** trunk access code, you could enter **!9**. To report on more than one trunk access code, use a comma to separate each entry.


### Selecting the report options


This section enables you to further narrow down your report results, by excluding certain types of calls. It also allows you to sort the report's results in a particular manner.


#### Options

Specify one or more of any additional report options shown here.

- Exclude weekends 
- Exclude transfers 
- Show transfer legs 
- Don't replace numbers with contact names 
- Show account codes 
- Notes only 
- Audio only 
- Scored only 


Sort order  

Sort results by  

Ignore missed calls shorter than  seconds 

### Exclude weekends

To exclude weekend calls from your report's results, select the **Exclude weekends** option.


Exclude weekends 


#### Exclude transfers

To exclude transferred calls from your report's results, select the **Exclude transfers** option.

Exclude transfers 

#### Show transfer legs

To show the legs of transferred calls, click on the **Show transfer legs** option. A  icon will be displayed next to any call with associated call legs.

Show transfer legs 


#### Don't replace numbers with contact names

Tick this option if you do not want to replace dialled numbers, CLIs and account codes with their associated names, as defined in your web user's contacts list.

Don't replace numbers with contact names 

#### Show account codes

Select this option to display any associated account codes as an additional column in this report.

Show account codes 


#### Notes only

Tick this option if you want your search results to include only calls that have notes associated with them.

Notes only 


#### Audio only

Tick this option if you want your search results to include only calls that have an associated voice recording.

Audio only 

#### Scored only


Tick this option to include only calls that have a score associated with them, e.g. calls that have already been listened to and scored

Scored only 

#### Sort order


Choose from the **Sort order** drop-down list whether you want the results of your report to appear in ascending or descending order.

---

Sort order	Ascending	
------------	-----------	---

### Sort results by

To sort your report's results by a particular column, select it from the `sort results by` drop-down list.

Sort results by	Date & time	
-----------------	-------------	---

### Ignore short missed calls

Missed calls below a certain duration can sometimes pollute the meaning of a report's results. To exclude such short calls from your report, enter a duration threshold in the text box provided, e.g. to ignore calls below 3 seconds, enter `3`.

### Selecting the report format

This section allows you to choose the media format of your completed report. The formats available are `Web`, `PDF`, `Excel`, `CSV` and `XML`.

More details about each report format are available in the [Setting the report format](#) section above.

### Creating the report

When you have selected a reporting period and have chosen any filters and options, you can either run the report immediately by clicking on the `Run now` button, or [schedule it for future delivery](#).

Your report is ready to run

Select the format that you want your report to be in.

You can now either run the report immediately, or schedule it to run once, or at regular intervals, in the future.

Report format

[Run now](#)

[Schedule for later](#)

### The report's results

Below is an example of this report's output in `web` format:

# My custom report

2012-05-17 15:34:00
[↑](#) \ [TIM Plus](#) \ [London](#) \ [Accounts](#) \

[About this report](#)

All		Outbound	Answered	Missed	Internal	<a href="#">Show all</a> 1 of 16		
Date & Time ▲	Source	CLI	Route	Destination	Response	Duration	Cost	
01/03/2012 00:07:53	Adam Zapel	-	07767254860	Vodafone	-	00:00:27	0.058	
01/03/2012 00:20:23	Adam Zapel	-	07939041916	I-Mobile	-	00:00:04	0.030	
01/03/2012 00:41:18	Adam Zapel	-	02074787000	London	-	00:00:08	0.030	
01/03/2012 01:00:56	London	02070108086	-	Tom Morrow	-	00:01:03	-	
01/03/2012 01:59:31	London	02079603334	-	Tom Morrow	-	00:02:10	-	
01/03/2012 02:09:08	Orange	07968426619	-	Tom Morrow	-	00:01:35	-	
01/03/2012 04:31:41	O2	07921668518	-	Tom Morrow	-	00:01:44	-	
01/03/2012 06:03:28	Adam Zapel	-	07932040779	I-Mobile	-	00:00:10	0.030	
01/03/2012 06:50:38	London	02086719759	-	Tom Morrow	-	00:00:40	-	
01/03/2012 08:12:13	Orange	07971060111	-	Cheri Pitts	-	00:00:46	-	
01/03/2012 08:17:11	London	02070152800	-	Cheri Pitts	-	00:00:21	-	
01/03/2012 08:26:48	Adam Zapel	-	07949250374	I-Mobile	-	-	0.030	
01/03/2012 08:43:41	Adam Zapel	-	07985980159	I-Mobile	-	00:00:13	0.030	
01/03/2012 08:50:03	T-Mobile	07957503577	-	Cheri Pitts	-	00:06:37	-	
01/03/2012 09:01:08	Adam Zapel	-	07788646633	Vodafone	-	00:00:18	0.039	
01/03/2012 09:04:23	O2	07834585328	-	Tom Morrow	-	00:01:05	-	
01/03/2012 09:10:51	London	02085103628	-	Tom Morrow	-	-	-	
01/03/2012 09:12:56	Adam Zapel	-	07786276358	Vodafone	-	00:00:22	0.048	
01/03/2012 09:14:48	Adam Zapel	-	07717514310	Vodafone	-	00:00:01	0.030	
01/03/2012 09:20:46	London	02073511550	-	Tom Morrow	-	00:00:20	-	
01/03/2012 09:26:43	UNAVAILABLE	-	-	Tom Morrow	-	00:01:09	-	
01/03/2012 09:28:18	Vodafone	07796251027	-	Claire Annette	-	00:00:30	-	
01/03/2012 09:29:18	London	02073368085	-	Tom Morrow	-	00:03:12	-	
01/03/2012 09:42:38	Adam Zapel	-	02073076700	London	-	00:00:15	0.030	
01/03/2012 09:43:26	London	02078227654	-	Tom Morrow	-	00:00:28	-	
01/03/2012 09:50:01	London	02087402420	-	Claire Annette	-	00:02:34	-	
01/03/2012 09:51:26	Tom Morrow	-	07944789366	I-Mobile	-	00:01:09	0.150	
01/03/2012 09:57:51	UNAVAILABLE	-	-	Cheri Pitts	-	00:01:38	-	
01/03/2012 10:05:16	O2	07739071992	-	Tom Morrow	-	-	-	

The web format is the most interactive of all formats: all column headers are click-sortable and most graphical and tabular elements can be drilled down into, allowing deeper analysis of your results. By clicking on the [About this report](#) link at the top-right corner of the page, you can review any filters and options that have been applied to the report.

As with all reports produced by TIM Plus, each page of the report includes the following information:

- the report's title
- the date and time that the report was generated
- the name of the report, if applicable

The report consists of a table containing an itemised list of the calls that matched your selection criteria. Each column header of the table is described below:

Header	Description
<b>Date &amp; Time</b>	The date and time the call started
<b>Source</b>	The place from where the call originated
<b>CLI</b>	The telephone number of the remote caller for inbound calls
<b>Route</b>	The information displayed in this field is determined by the type of call: <ul style="list-style-type: none"> <li>▪ for incoming and outgoing calls, this shows the number that was dialled</li> <li>▪ for incoming internal calls, this shows either the caller's username or extension number</li> </ul>

<b>Destination</b>	The information displayed in this field is determined by the type of call: <ul style="list-style-type: none"> <li>▪ for incoming calls, this shows the name of the user whose extension answered the call, or the extension number if not available</li> <li>▪ for outgoing calls, this shows the geographical location that was dialled, or an alias if defined in your contacts list</li> <li>▪ for internal calls, this shows the extension that was dialled, enclosed in square brackets [ ]</li> </ul>
<b>Response</b>	The length of time it took for the call to be answered (e.g. the response time)
<b>Duration</b>	The duration of the call (in hours, minutes and seconds)
<b>Cost</b>	The cost of the call

To modify your report to cover a larger organisational scope, click on an element of the breadcrumb as shown below:



## Daily Activity

**The Daily Activity report**

- Introduction
- Running the report
- Creating the report
- The report's results

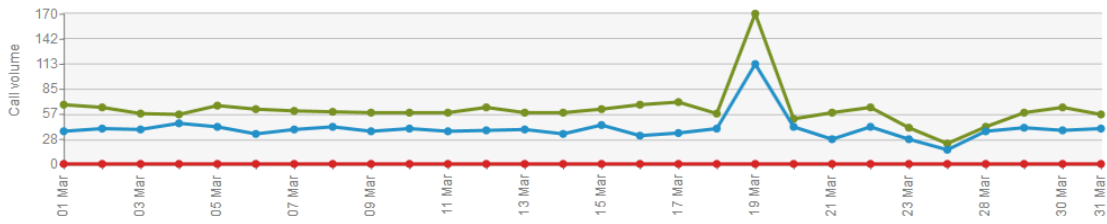
### Introduction

The Daily Activity report provides a summary showing the volume of all inbound, outbound and missed calls for each day. It is useful for organisations whose call traffic fluctuates throughout the year because, by identifying your busiest periods, it allows you to more effectively plan your staffing requirements.



# My daily activity 2012-05-17 15:44:25

Home \ TIM Plus \ London \ Accounts \ About this report



Day ▲	Inbound					Outbound				
	Σ	Total duration	Average duration	Average response	Missed	Σ	Total duration	Average duration	Cost	
<b>Week 9</b>										
01/03/2012 Thursday	67	01:23:43	00:01:14	1	-	37	00:11:15	00:00:18	1.799	
02/03/2012 Friday	64	01:38:29	00:01:32	1	-	40	00:14:01	00:00:21	2.169	
03/03/2012 Saturday	57	01:17:01	00:01:21	-	-	39	00:13:50	00:00:21	1.920	
04/03/2012 Sunday	56	01:05:03	00:01:09	1	-	46	00:12:45	00:00:16	1.948	
<b>Week 10</b>										
05/03/2012 Monday	66	01:18:40	00:01:11	1	-	42	00:14:16	00:00:20	2.307	
06/03/2012 Tuesday	62	01:41:42	00:01:38	1	-	34	00:08:26	00:00:14	1.566	
07/03/2012 Wednesday	60	01:44:11	00:01:44	1	-	39	00:10:10	00:00:15	1.919	
08/03/2012 Thursday	59	01:39:05	00:01:40	-	-	42	00:18:10	00:00:25	2.593	
09/03/2012 Friday	58	01:11:46	00:01:14	1	-	37	00:15:11	00:00:24	2.180	
10/03/2012 Saturday	58	01:22:38	00:01:25	1	-	40	00:08:36	00:00:12	1.512	
11/03/2012 Sunday	58	01:32:13	00:01:35	1	-	37	00:09:25	00:00:15	1.389	

## Running the report

On the Reports screen, select the Daily activity report from the left-hand pane and click the **Select this report** button.

**TIMPLUS**
Reports
Directory
Call view
Live stats
Tariff editor
Settings
Alerts

**Reports**

- Account summary
- Busy channels
- Busy times
- Call analysis
- Call geography
- Call scoring
- Call volumes
- Custom report
- Daily activity**
- Enterprise overview
- Frequent numbers
- Inbound call performance
- Missed calls
- Phone bill
- Random call selection
- Target response
- Top calls
- Unused devices

**Daily activity**

This report provides a summary showing the total volume of all inbound, outbound and lost calls for each day.

It's ideal for identifying call volume trends, and very quickly highlights your busy days, allowing you to more effectively plan your staffing requirements.

**Select this report**

A new window will appear, where you can set the parameters of your report.

## Selecting the reporting period

For each report, you must specify a time span that covers the calls you want the report to include. This is known as the "reporting period".

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### Select a reporting period

Define the period you want the report to encompass.

Remember, you can always filter your results later, so choose a big enough period.

Period

From date

To date

From time

To time

Yesterday  
**Today**  
 Yesterday  
 This week  
 Last week  
 This month  
 Last month  
 This year  
 All calls  
 Custom period

There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table describes how the start and end times are defined for each preset period:

Period	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This week</b>	The start date is set to the first day of the current week (normally Monday). The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.

In addition to the presets described above, it is possible to specify a custom reporting period by choosing **Custom period** from the **Period** drop-down list and specifying your own **Start date**, **Start time**, **End date** and **End time** of the period you want to report on.

Period Custom period i

From date 01 Jul 2011

To date 14 Feb 2013

From time 00 : 00 : 00

To time 23 : 59 : 59

Once you have set the reporting period, click on the **Next** button to set additional report parameters and options, or select the **Finish** button to run the report immediately.



## Selecting the reporting entity

The **Reporting entity** parameter allows you to select the part of your organisation whose calls the report should include, e.g. a site, a group or an individual user.

### Choose a reporting entity

Select a specific section of your organisation whose calls will feature in the report. To run the report across your entire organisation, select **(All sites)**.


Alternatively, select a specific site, user group, channel group, individual user or channel.

Site	(All sites) ▼	
Group	▼	
User	▼	

### Site

To report on a particular site, select it from the drop-down list or select **All sites**.

Site



### Group

If a site has been selected, you are able to further limit the report's results by selecting a group from the drop-down list.


Group



### User

If both a site and group have been selected, you can further limit the report's results to include only calls involving a particular user, by selecting that user from the drop-down list.

User





If your web account is restricted to a specific site or group, only those entities to which you have access will be available in the drop-down lists.

Once you have selected the scope of your report, click on the **Next** button to set additional report parameters and options, or to run the report immediately, click the **Finish** button.

## Selecting the report filters

You can limit the results of your report by choosing one or more of the following filters:

**Filter the results of the report**

Account code	<input type="text"/>		Dialled number	<input type="text"/>	
Call type	All calls		Duration	<input type="text"/>	
Carrier	(All carriers)		LCR code	<input type="text"/>	
CLI	<input type="text"/>		Response	<input type="text"/>	
Cost	<input type="text"/>		Start time	<input type="text"/>	
Destination	<input type="text"/>		Trunk access code	<input type="text"/>	

#### Account code

To produce a report consisting only of calls that were made using a particular account code, enter the account code in the field provided.

Account code

To report on more than one account code, separate each code using a comma.

#### Call type

This filter allows you to define the type of call you want to report on, in terms of where the call originated and where it was delivered, e.g. incoming, outgoing, internal etc. To report on all types of call, set this to **All calls**.

Call type

#### Carrier

If you use more than one carrier, you can limit the results to include only calls that were made using a specific carrier.

Carrier

If you use only one carrier, there will be no drop-down list available and no option to choose a carrier.

#### CLI

Calling Line Identification (CLI) is the telephone number of the remote caller in an incoming call scenario.

You can report on calls that originate from a specific CLI or those whose CLI matches a particular pattern of digits. For example, to report on all incoming calls from Tri-Line, you could enter **02072652600**.

CLI

You can use the **!** symbol to explicitly exclude a CLI from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls from Tri-Line, but include all others, you could use **!020726526\***. To report on more than one CLI, use a comma to separate each entry.

#### Cost

You can define a cost filter to include calls above or below specific values by entering your criteria, as shown below:

Cost <2.00 

You can specify a cost range by using the – symbol; to specify limits, use the comparison operators, >, <, and ! .

### Destination

If you want to filter calls to a specific, known destination, type the name of the destination in the text box provided. This filter accepts the ! and \* symbols for excluding values and specifying partial matches, respectively.

For example, if you wanted to exclude all calls to France, you could enter !France\*, as shown below:

Destination !France\* 

### Dialled number

To filter calls to a specific dialled number, type it in the text box provided. The dialled number is defined as the number that is dialled (in the case of an outbound call), or the DDI number that the remote party dialled to reach a particular extension or group (in the case of an inbound call).

To filter calls to a specific area, a partial number can be entered (e.g. 0033 for calls to France).

Dialled number 0033 

You can use the ! symbol to explicitly exclude a dialled number from the report's results, and/or the \* symbol as a wildcard in digit pattern matching. For example, to exclude calls to Tri-Line, but include all others, you could use !020726526\*. To report on more than one dialled number, use a comma to separate each entry.

### Duration

To filter calls above or below a particular duration, enter the desired duration in seconds.

Duration >1800 

You can specify a duration range by using the – symbol; to specify limits, use the comparison operators, >, <, and ! .

In the above example, the report will return only calls longer than 1800 seconds (30 minutes).

### LCR code

To filter your results to include only calls that used a Least Cost Routing (LCR) code, enter it in the text box provided.

LCR code 162 

You can use the ! symbol to explicitly exclude a LCR code from the report's results, and/or the \* symbol as a wildcard in digit pattern matching. For example, to exclude calls made using all LCR codes beginning 162, you could enter !162\*. To report on more than one LCR code, use a comma to separate each entry.

### Response

This option allows you to filter calls based on their response time, measured in seconds. Specify the desired response time threshold in the text box provided.

Response time >10 


In the above example, the search results will display calls that have a response time greater than 10 seconds.

You can specify a response time range by using the – symbol and; to specify limits, use the comparison operators, >, <, and ! .

### Start time

This option allows you to filter calls based on the time the call started. Specify the start time in the text box provided using the hh:m m:ss format.

For example, to include only calls that began after 10 am, you could enter **10:00:00** in the `start time` field, as shown below:

Start time	<input type="text" value="10:00:00"/>	
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### Trunk access code

If your telephone system uses trunk access codes to connect calls using specific channels, you can limit your report's results to include only calls made using those codes. Specify the trunk access code in the text box provided.

Trunk access code	<input type="text" value="9"/>	
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You can use the **!** symbol to explicitly exclude a trunk access code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using the **9** trunk access code, you could enter **!9**. To report on more than one trunk access code, use a comma to separate each entry.

### Selecting the report options

This section enables you to further narrow down your report results, by excluding certain types of calls. It also allows you to sort the report's results in a particular manner.


#### Options

Specify one or more of any additional report options shown here.

<input type="checkbox"/>	Exclude weekends	
<input type="checkbox"/>	Exclude transfers	
Sort order	<input type="text" value="Ascending"/>	
Sort results by	<input type="text" value="Day"/>	
Ignore missed calls shorter than	<input type="text" value=""/>	seconds 


#### Exclude weekends

To exclude weekend calls from your report's results, select the `Exclude weekends` option.

<input checked="" type="checkbox"/>	Exclude weekends	
-------------------------------------	------------------	---


#### Exclude transfers

To exclude transferred calls from your report's results, select the `Exclude transfers` option.

<input checked="" type="checkbox"/>	Exclude transfers	
-------------------------------------	-------------------	---


#### Sort order

Choose from the `sort order` drop-down list whether you want the results of the report to appear in ascending or descending order.

Sort order	<input type="text" value="Ascending"/>	
------------	--	---


#### Sort results by

To sort your report's results by a particular column, select it from the `sort results by` drop-down list.

Sort results by	<input type="text" value="Day"/>	
-----------------	----------------------------------	---

### Ignore short missed calls

Missed calls below a certain duration can sometimes pollute the meaning of a report's results. To exclude such short calls from your report, enter a duration threshold in the text box provided, e.g. to ignore calls below 3 seconds, enter 3 .

Ignore missed calls shorter than  seconds 

### Selecting the report format

This section allows you to choose the media format of your completed report. The formats available are [Web](#), [PDF](#), [Excel](#), [CSV](#) and [XML](#).

More details about each report format are available in the [Setting the report format](#) section above.

### Creating the report

When you have selected a reporting period and have chosen any filters and options, you can either run the report immediately by clicking on the [Run now](#) button, or [schedule it for future delivery](#).

Your report is ready to run

Select the format that you want your report to be in.

You can now either run the report immediately, or schedule it to run once, or at regular intervals, in the future.

Report format

[Run now](#)

[Schedule for later](#)

### The report's results

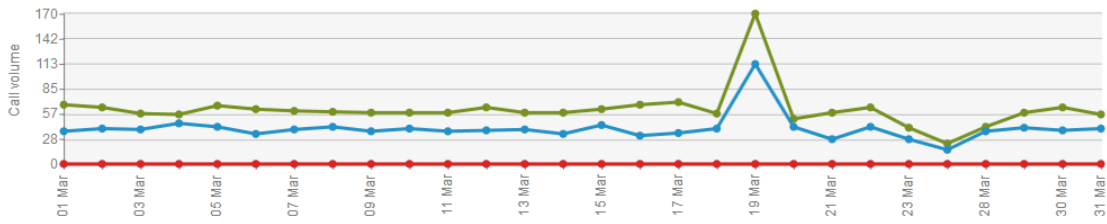
Below is an example of this report's output in [web](#) format, showing the total volume of all inbound, outbound and missed calls for each day.

# My daily activity

2012-05-17 15:44:25


---

🏠 \ TIM Plus \ London \ Accounts \
About this report



Inbound						Outbound				
Day ▲	Σ	Total duration	Average duration	Average response	Missed	Σ	Total duration	Average duration	Cost	
<b>Week 9</b>										
01/03/2012 Thursday	67	01:23:43	00:01:14	1	-	37	00:11:15	00:00:18	1.799	
02/03/2012 Friday	64	01:38:29	00:01:32	1	-	40	00:14:01	00:00:21	2.169	
03/03/2012 Saturday	57	01:17:01	00:01:21	-	-	39	00:13:50	00:00:21	1.920	
04/03/2012 Sunday	56	01:05:03	00:01:09	1	-	46	00:12:45	00:00:16	1.948	
<b>Week 10</b>										
05/03/2012 Monday	66	01:18:40	00:01:11	1	-	42	00:14:16	00:00:20	2.307	
06/03/2012 Tuesday	62	01:41:42	00:01:38	1	-	34	00:08:26	00:00:14	1.566	
07/03/2012 Wednesday	60	01:44:11	00:01:44	1	-	39	00:10:10	00:00:15	1.919	
08/03/2012 Thursday	59	01:39:05	00:01:40	-	-	42	00:18:10	00:00:25	2.593	
09/03/2012 Friday	58	01:11:46	00:01:14	1	-	37	00:15:11	00:00:24	2.180	
10/03/2012 Saturday	58	01:22:38	00:01:25	1	-	40	00:08:36	00:00:12	1.512	
11/03/2012 Sunday	58	01:32:13	00:01:35	1	-	37	00:09:25	00:00:15	1.389	

As with all reports produced by TIM Plus, each page of the report includes the following information:

- the report's title
- the date and time that the report was generated
- the name of the report, if applicable

The **web** format is the most interactive of all formats: all column headers are click-sortable and most graphical and tabular elements can be drilled down into, allowing deeper analysis of your results. By clicking on the **About this report** link at the top-right corner of the page, you can review any filters and options that have been applied to the report.

The body of the report consists of a table showing a summary of your incoming and outgoing calls for each day during the period you selected. Each row shows the following information:

Header	Description
<b>Day</b>	The day of the week that the data covers
<b>Inbound</b>	<ul style="list-style-type: none"> <li>■ : The total volume of calls received</li> <li>■ <b>Total duration:</b> The total length of time spent on incoming calls</li> <li>■ <b>Average duration:</b> The average call duration of inbound calls</li> <li>■ <b>Average response:</b> The average length of time taken to answer a call</li> <li>■ <b>Duration Avg:</b> The average length of time a caller waited before abandoning the call (in hours, minutes, seconds)</li> </ul>
<b>Missed</b>	The missed calls column is always displayed as red. It allows you to re-order your details based on the total number of missed calls for the date shown.



<b>Outbound</b>	<ul style="list-style-type: none"> <li>▪ : The total volume of outbound calls</li> <li>▪ <b>Total duration:</b> The total length of time spent on outbound calls</li> <li>▪ <b>Average duration:</b> The average duration of outbound calls</li> <li>▪ <b>Cost:</b> The total cost of all calls made, irrespective of each call's local currency</li> </ul>
-----------------	---

To modify your report to cover a larger organisational scope, click on an element of the breadcrumb as shown below:

[Home](#) \ [TIM Plus](#) \ [London](#) \ [Accounts](#) \ [About this report](#)

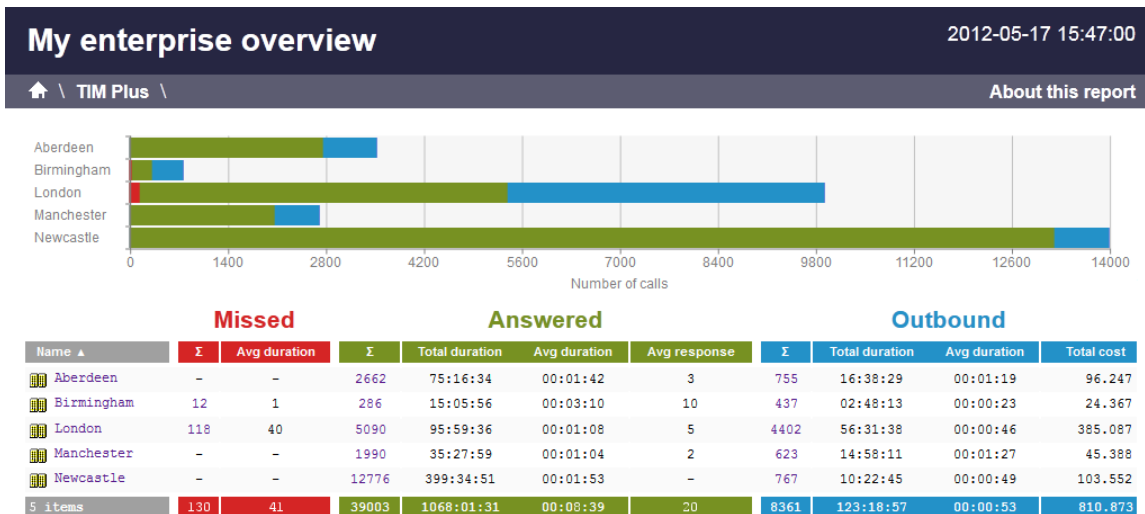
## Enterprise Overview

**The Enterprise Overview report**

- Introduction
- Running the report
- Creating the report
- The report's results

### Introduction

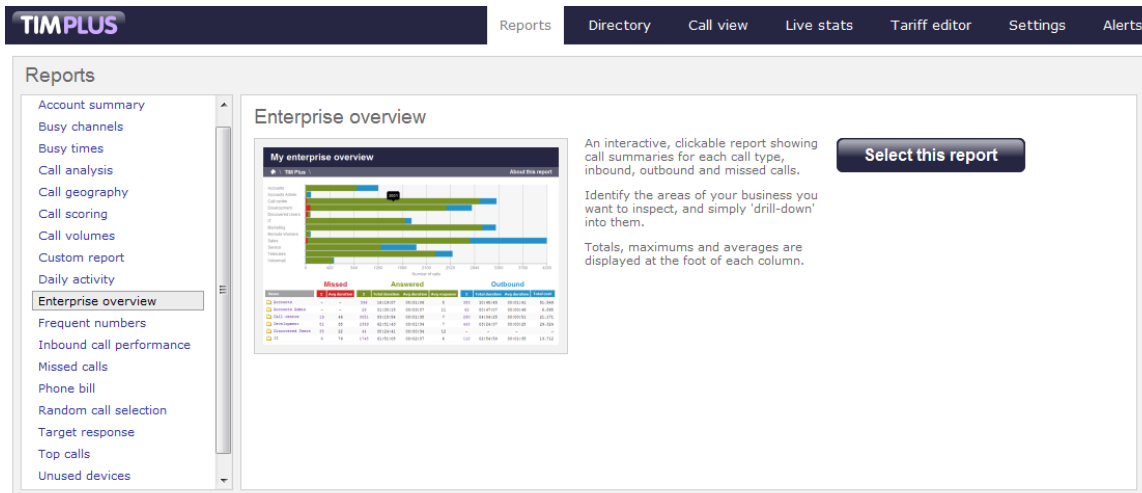
The Enterprise Overview report is an interactive, click-able report, showing call summaries for each type of call - inbound, outbound and missed. The report is useful for comparing call statistics between different parts of your organisation and allows you to drill-down into each value to see the same call information for subsequent groups or users. Totals, maximums and averages are displayed at the foot of each column.



### Running the report

On the Reports screen, select the Enterprise overview report from the left-hand pane and click the Select this report button

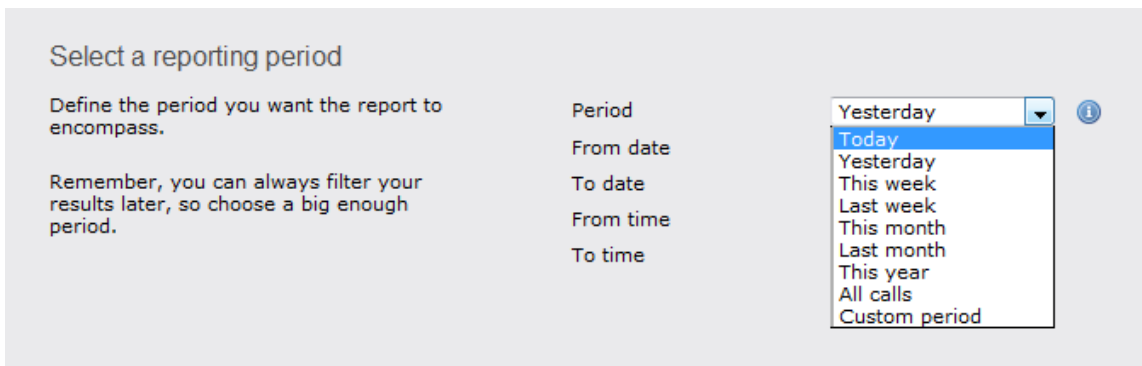
ttion.



A new window will appear, where you can set the parameters of your report.

### Selecting the reporting period

For each report, you must specify a time span that covers the calls you want the report to include. This is known as the "reporting period".



There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table describes how the start and end times are defined for each preset period:

Period	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This week</b>	The start date is set to the first day of the current week (normally Monday). The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.

<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to <b>00:00:00</b> and <b>23:59:59</b> respectively.
<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to <b>00:00:00</b> and <b>23:59:59</b> respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.

In addition to the presets described above, it is possible to specify a custom reporting period by choosing **Custom period** from the **Period** drop-down list and specifying your own **Start date**, **Start time**, **End date** and **End time** of the period you want to report on.

<b>Period</b>	Custom period 
<b>From date</b>	01 Jul 2011
<b>To date</b>	14 Feb 2013
<b>From time</b>	00 : 00 : 00
<b>To time</b>	23 : 59 : 59

Once you have set the reporting period, click on the **Next** button to set additional report parameters and options, or select the **Finish** button to run the report immediately.




### Selecting the reporting entity

The **Reporting entity** parameter allows you to select the part of your organisation whose calls the report should include, e.g. a site, a group or an individual user.

#### Choose a reporting entity


Select a specific section of your organisation whose calls will feature in the report. To run the report across your entire organisation, select **(All sites)**.

Alternatively, select a specific site, user group, channel group, individual user or channel.

<b>Site</b>	(All sites) 
<b>Group</b>	<input type="text"/> 
<b>User</b>	<input type="text"/> 


#### Site

To report on a particular site, select it from the drop-down list or select **All sites**.

<b>Site</b>	All sites 
-------------	---


#### Group

If a site has been selected, you are able to further limit the report's results by selecting a group from the drop-down list.

<b>Group</b>	All groups 
--------------	--

#### User

If both a site and group have been selected, you can further limit the report's results to include only calls involving a particular user, by selecting that user from the drop-down list.

User  















If your web account is restricted to a specific site or group, only those entities to which you have access will be available in the drop-down lists.

Once you have selected the scope of your report, click on the **Next** button to set additional report parameters and options, or to run the report immediately, click the **Finish** button.

### Selecting the report filters


You can limit the results of your report by choosing one or more of the following filters:

Filter the results of the report

Account code	<input type="text"/>		Dialled number	<input type="text"/>	
Call type	<input type="text" value="All calls"/>		Duration	<input type="text"/>	
Carrier	<input type="text" value="(All carriers)"/>		LCR code	<input type="text"/>	
CLI	<input type="text"/>		Response	<input type="text"/>	
Cost	<input type="text"/>		Start time	<input type="text"/>	
Destination	<input type="text"/>		Trunk access code	<input type="text"/>	

#### Account code


To produce a report consisting only of calls that were made using a particular account code, enter the account code in the field provided.

Account code  

To report on more than one account code, separate each code using a comma.


#### Call type

This filter allows you to define the type of call you want to report on, in terms of where the call originated and where it was delivered, e.g. incoming, outgoing, internal etc. To report on all types of call, set this to **All calls**.

Call type  

#### Carrier

If you use more than one carrier, you can limit the results to include only calls that were made using a specific carrier.

Carrier  




If you use only one carrier, there will be no drop-down list available and no option to choose a carrier.

## CLI

Calling Line Identification (CLI) is the telephone number of the remote caller in an incoming call scenario.


You can report on calls that originate from a specific CLI or those whose CLI matches a particular pattern of digits. For example, to report on all incoming calls from Tri-Line, you could enter **02072652600**.

CLI	<input type="text" value="02072652600"/>	
-----	--	---

You can use the **!** symbol to explicitly exclude a CLI from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls from Tri-Line, but include all others, you could use **!020726526\***. To report on more than one CLI, use a comma to separate each entry.

## Cost

You can define a cost filter to include calls above or below specific values by entering your criteria, as shown below:

Cost	<input type="text" value="&lt;2.00"/>	
------	---------------------------------------	---

You can specify a cost range by using the **-** symbol; to specify limits, use the comparison operators, **>**, **<**, and **!**.

## Destination

If you want to filter calls to a specific, known destination, type the name of the destination in the text box provided. This filter accepts the **!** and **\*** symbols for excluding values and specifying partial matches, respectively.

For example, if you wanted to exclude all calls to France, you could enter **!France\***, as shown below:

Destination	<input type="text" value="!France*"/>	
-------------	---------------------------------------	--

## Dialled number

To filter calls to a specific dialled number, type it in the text box provided. The dialled number is defined as the number that is dialled (in the case of an outbound call), or the DDI number that the remote party dialled to reach a particular extension or group (in the case of an inbound call).

To filter calls to a specific area, a partial number can be entered (e.g. **0033** for calls to France).

Dialled number	<input type="text" value="0033"/>	
----------------	-----------------------------------	---

You can use the **!** symbol to explicitly exclude a dialled number from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls to Tri-Line, but include all others, you could use **!020726526\***. To report on more than one dialled number, use a comma to separate each entry.

## Duration

To filter calls above or below a particular duration, enter the desired duration in seconds.

Duration	<input type="text" value="&gt;1800"/>	
----------	---------------------------------------	---

You can specify a duration range by using the **-** symbol; to specify limits, use the comparison operators, **>**, **<**, and **!**.

In the above example, the report will return only calls longer than 1800 seconds (30 minutes).

## LCR code

To filter your results to include only calls that used a Least Cost Routing (LCR) code, enter it in the text box provided.

LCR code	<input type="text" value="162"/>	
----------	----------------------------------	---

You can use the **!** symbol to explicitly exclude a LCR code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using all LCR codes beginning **162**, you could enter **!162\***. To report on more than one LCR code, use a comma to separate each entry.

### Response

This option allows you to filter calls based on their response time, measured in seconds. Specify the desired response time threshold in the text box provided.

Response time	>10	
---------------	-----	---


In the above example, the search results will display calls that have a response time greater than 10 seconds.

You can specify a response time range by using the **-** symbol and; to specify limits, use the comparison operators, **>**, **<**, and **!**.

### Start time

This option allows you to filter calls based on the time the call started. Specify the start time in the text box provided using the **hh:m** format.

For example, to include only calls that began after 10 am, you could enter **10:00:00** in the **Start time** field, as shown below:

Start time	10:00:00	
------------	----------	---

### Trunk access code

If your telephone system uses trunk access codes to connect calls using specific channels, you can limit your report's results to include only calls made using those codes. Specify the trunk access code in the text box provided.

Trunk access code	9	
-------------------	---	--







You can use the **!** symbol to explicitly exclude a trunk access code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using the **9** trunk access code, you could enter **!9**. To report on more than one trunk access code, use a comma to separate each entry.

## Selecting the report options

This section enables you to further narrow down your report results, by excluding certain types of calls. It also allows you to sort the report's results in a particular manner.

### Options

Specify one or more of any additional report options shown here.

<input type="checkbox"/> Exclude weekends	
<input type="checkbox"/> Exclude transfers	
<input checked="" type="checkbox"/> Hide unused	
Sort order	Ascending 
Sort results by	Name 
Ignore missed calls shorter than	<input type="text"/> seconds 


### Exclude weekends

To exclude weekend calls from your report's results, select the **Exclude weekends** option.

<input checked="" type="checkbox"/> Exclude weekends	
--	---


### Exclude transfers

To exclude transferred calls from your report's results, select the **Exclude transfers** option.

Exclude transfers 

#### Hide unused

To exclude unused extensions from your report's results, select the **Hide unused** option.

Hide unused 


#### Sort order

Choose from the **Sort order** drop-down list whether you want the results of the report to appear in ascending or descending order.

Sort order  


#### Sort results by

To sort your report's results by a particular column, select it from the **Sort results by** drop-down list.

Sort results by  

#### Ignore short missed calls

Missed calls below a certain duration can sometimes pollute the meaning of a report's results. To exclude such short calls from your report, enter a duration threshold in the text box provided, e.g. to ignore calls below 3 seconds, enter **3**.

Ignore missed calls shorter than  seconds 

#### Selecting the report format

This section allows you to choose the media format of your completed report. The formats available are **Web**, **PDF**, **Excel**, **CSV** and **XML**.

More details about each report format are available in the [Setting the report format](#) section above.

#### Creating the report

When you have selected a reporting period and have chosen any filters and options, you can either run the report immediately by clicking on the **Run now** button, or [schedule it for future delivery](#).

Your report is ready to run

Select the format that you want your report to be in.

Report format

You can now either run the report immediately, or schedule it to run once, or at regular intervals, in the future.

**Run now**

**Schedule for later**

## The report's results

The results of the report show a summary of call volumes - organised by call type - for the report entity you selected. By clicking on the [About this report](#) link at the top-right corner of the page, you can review any filters and options that have been applied to the report.

As with all reports produced by TIM Plus, each page of the report includes the following information:

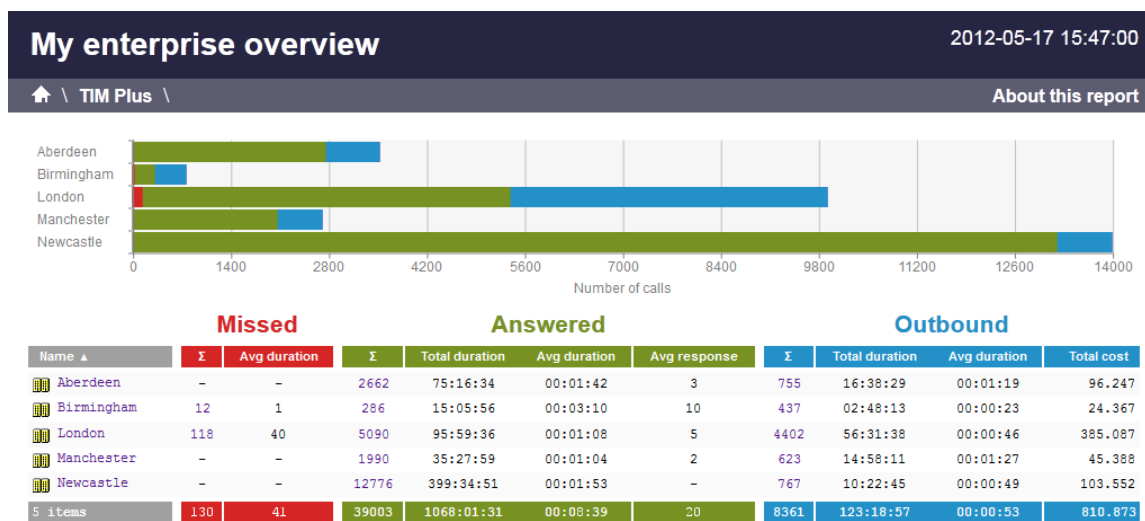
- the report's title
- the date and time that the report was generated
- the name of the report, if applicable

The **web** format is the most interactive of all formats: all column headers are click-sortable and most graphical and tabular elements can be drilled down into, allowing deeper analysis of your results.

The **web** format allows you to see the results of the report at different organisational levels: site level, group level, user level and as an itemised list.

### Site level

At site level, the report will show call summary information for each site, as shown below:



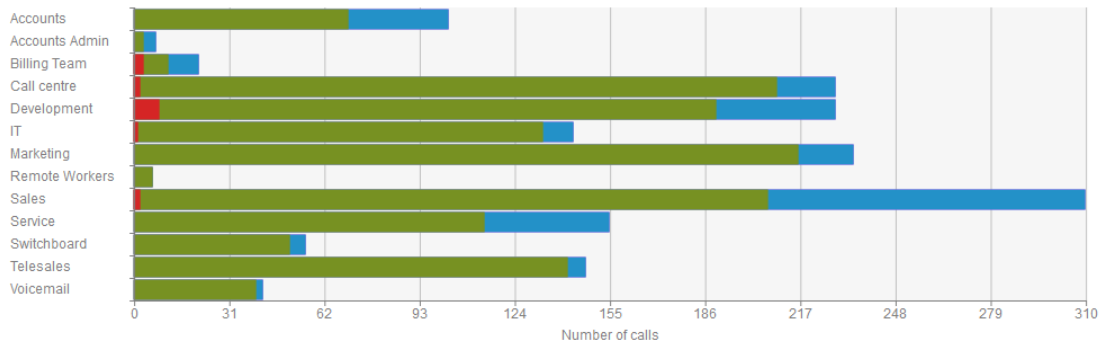
### Group level

By clicking on a site, you can drill down into group-level information, as shown below:



# My enterprise overview 2012-05-17 15:59:18

Home \ TIM Plus \ London \
About this report



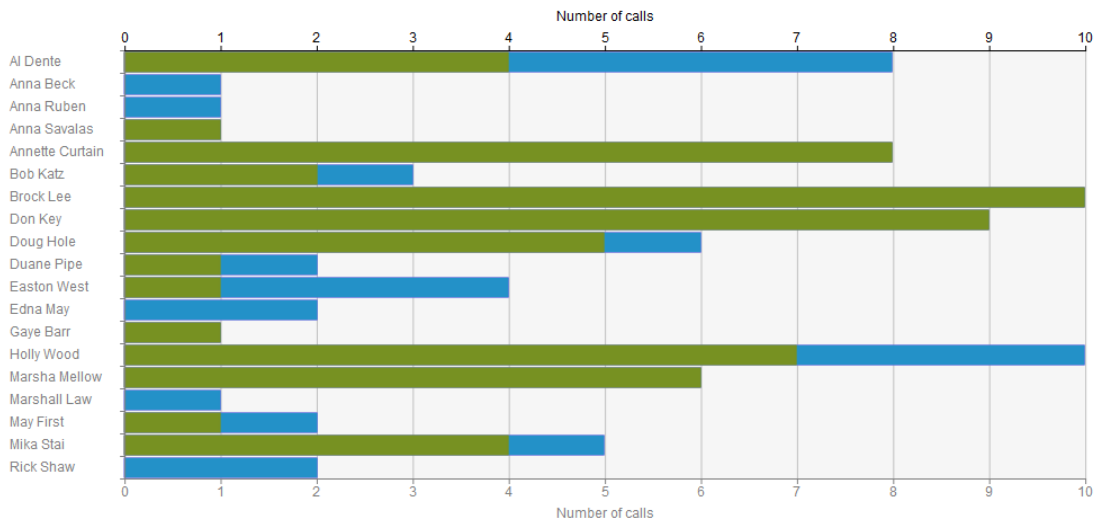
Name	Missed			Answered			Outbound			
	Σ	Avg duration	Σ	Total duration	Avg duration	Avg response	Σ	Total duration	Avg duration	Total cost
Accounts	-	-	70	01:12:30	00:01:02	9	33	00:32:48	00:01:00	3.727
Accounts Admin	-	-	3	00:01:22	00:00:27	19	4	00:02:46	00:00:42	0.409
Billing Team	3	28	8	00:14:05	00:01:46	7	10	00:08:14	00:00:49	1.063
Call centre	2	68	209	05:41:04	00:01:38	2	19	00:31:39	00:01:40	3.405
Development	8	32	183	04:35:09	00:01:30	2	39	00:18:42	00:00:29	2.683
IT	1	45	133	04:37:34	00:02:05	-	10	00:08:50	00:00:53	0.791
Marketing	-	-	218	06:38:25	00:01:50	1	18	00:13:46	00:00:46	1.146
Remote Workers	-	-	6	00:01:05	00:00:11	-	-	-	-	-
Sales	2	83	206	06:16:16	00:01:50	2	104	01:14:56	00:00:43	11.714
Service	-	-	115	02:05:22	00:01:05	2	41	00:34:15	00:00:50	4.792

### User level

When drilling down into a group, a new report is produced, showing the same summary information for each individual user within that group, as shown below:

# My enterprise overview 2012-05-17 16:01:51

Home \ TIM Plus \ London \ Accounts \
About this report



Name	Answered			Outbound				
	Σ	Total duration	Avg duration	Avg response	Σ	Total duration	Avg duration	Total cost
Al Dente	4	00:02:05	00:00:31	32	4	00:01:59	00:00:30	0.269
Anna Beck	-	-	-	-	1	00:00:04	00:00:04	0.030
Anna Ruben	-	-	-	-	1	00:00:03	00:00:03	0.030

At all organisational levels, the body of the report consists of a table containing call summary information about each entity. The column headers of this table are described below:

Header	Description
<b>Name</b>	The name of the entity for each line of data
<b>Missed</b>	<ul style="list-style-type: none"> <li>▪ : The total number of missed calls</li> <li>▪ <b>Avg duration:</b> The average duration of all missed calls (in seconds)</li> </ul>
<b>Answered</b>	<ul style="list-style-type: none"> <li>▪ : The number of incoming calls answered by extensions within the selected entity, including transferred calls</li> <li>▪ <b>Total duration:</b> The total duration of all incoming calls (in hours, minutes and seconds)</li> <li>▪ <b>Avg duration:</b> The average duration of all incoming calls (in hours, minutes and seconds)</li> <li>▪ <b>Avg response:</b> The average time taken to respond to all incoming calls (in seconds)</li> </ul>
<b>Outbound</b>	<ul style="list-style-type: none"> <li>▪ : The number of outbound calls</li> <li>▪ <b>Total duration:</b> The total duration of all outgoing calls (in hours, minutes and seconds)</li> <li>▪ <b>Avg duration:</b> The average duration of all outgoing calls (in hours, minutes and seconds)</li> <li>▪ <b>Total cost:</b> The total aggregate cost of all outbound calls</li> </ul>



In addition to summary information, totals and averages for each call type are shown in the footer of each column.

#### Itemised list

By clicking on the hyperlink of a particular user, a new report is produced that shows - in chronological order - an itemised list of calls made or received by that user, as shown below:

My enterprise overview
2012-05-17 16:07:50

↑ \ TIM Plus \ London \ Accounts \ Al Dente \
About this report

<span>All</span> <span style="border: 1px solid #2c3e50; padding: 2px;">Outbound</span> <span style="border: 1px solid #2c3e50; padding: 2px;">Answered</span> <span style="border: 1px solid #2c3e50; padding: 2px;">Missed</span> <span style="border: 1px solid #2c3e50; padding: 2px;">Internal</span>							
Date & Time ▲	Source	CLI	Route	Destination	Response	Duration	Cost
16/05/2012 10:41:21	Al Dente	-	07956186198	T-Mobile	-	00:00:34	0.074
16/05/2012 10:42:18	Jason Myers	-	2042	Al Dente	-	00:00:21	-
16/05/2012 10:47:23	David Ellis	-	2042	Al Dente	-	00:03:23	-
16/05/2012 10:59:51	Orange	07854181304	-	Al Dente	21	00:00:31	-
16/05/2012 11:09:53	Al Dente	-	02076132858	London	-	00:00:04	0.030
16/05/2012 11:42:13	Grace Harper	-	2042	Al Dente	-	00:01:58	-
16/05/2012 11:52:21	Sam Thornton	-	2042	Al Dente	-	00:00:14	-
16/05/2012 12:55:36	Al Dente	-	02074054600	London	-	00:01:21	0.135
16/05/2012 15:13:18	Orange	07967460922	-	Al Dente	4	00:00:47	-
16/05/2012 15:14:16	Orange	07854180689	-	Al Dente	43	00:00:30	-
16/05/2012 16:44:53	Warren Peace	-	2042	Al Dente	-	00:01:16	-
16/05/2012 17:38:36	T-Mobile	07958108040	-	Al Dente	61	00:00:17	-
16/05/2012 18:36:21	Al Dente	-	07854181108	Orange	-	-	0.030
<b>13 calls</b>						<b>00:11:16</b>	<b>0.269</b>

The headers of the itemised call table are described below:

Header	Description
<b>Date &amp; Time</b>	The date and time the call started
<b>Source</b>	The place from where the call originated
<b>CLI</b>	The telephone number of the remote caller for inbound calls
<b>Route</b>	<p>The information displayed in this field is determined by the type of call:</p> <ul style="list-style-type: none"> <li>▪ for incoming calls, this shows the CLI of the caller</li> <li>▪ for incoming internal calls, this shows either the caller's username or extension number</li> <li>▪ for outgoing calls, this shows the dialled number</li> </ul>
<b>Destination</b>	<p>The information displayed in this field is determined by the type of call:</p> <ul style="list-style-type: none"> <li>▪ for incoming calls, this shows the name of the user whose extension answered the call, or the extension number if not available</li> <li>▪ for outgoing calls, this shows the geographical location that was dialled, or an alias if defined in your contacts list</li> <li>▪ for internal calls, this shows the extension that was dialled, enclosed in square brackets [ ]</li> </ul>
<b>Response</b>	The length of time it took for the call to be answered (i.e. the response time)
<b>Duration</b>	The duration of the call (in hours, minutes and seconds)
<b>Cost</b>	The cost of the call

To modify your report to cover a larger organisational scope, click on an element of the breadcrumb as shown below:

## Frequent Numbers

### The Frequent Numbers report

- Introduction
- Running the report
- Creating the report
- The report's results

## Introduction

The Frequent Numbers report shows a top-ranking list of the numbers that you call, or are called by, most frequently. By highlighting your most frequently-called destinations, the report can help you to determine if private circuits to your commonly-called destinations would be beneficial; it can also help you negotiate call rates with your network provider.

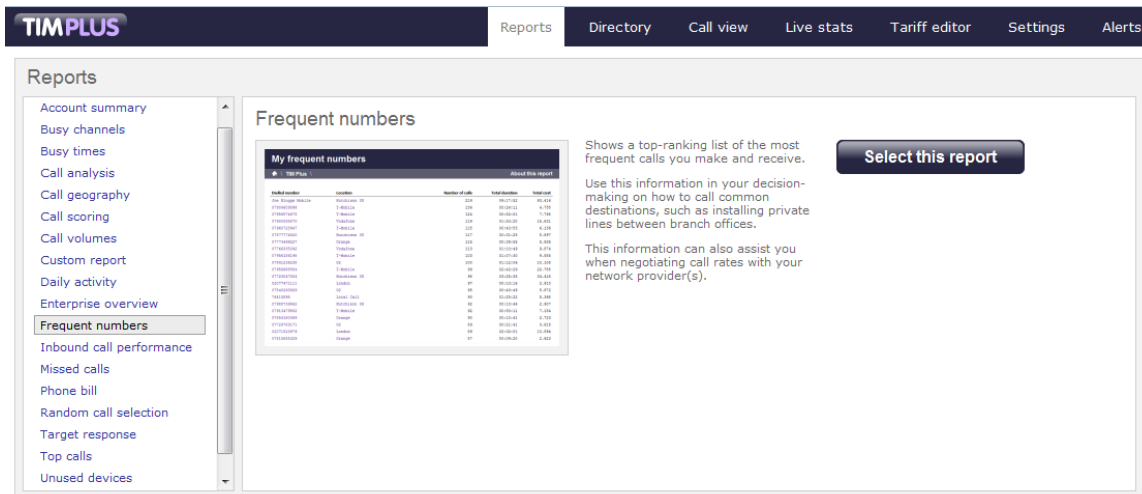
## My frequent numbers

2012-05-17 16:11:54

Dialled number ▲	Location	Number of calls	Total duration	Total cost
07966465332	Orange	11	00:01:07	0.330
07932138688	T-Mobile	9	00:00:53	0.270
07985980159	T-Mobile	16	00:04:52	0.715
07722702388	T-Mobile	10	00:01:21	0.300
02087355100	London	14	00:01:21	0.420
07958048138	T-Mobile	8	00:10:00	1.302
07867996393	Vodafone	11	00:00:59	0.330
02075849901	London	9	00:02:05	0.271
07849093682	O2	12	00:01:52	0.367
07867525709	Vodafone	19	00:07:11	1.095
01342833313	East Grinstead	14	00:01:11	0.420
02075362601	London	8	00:00:40	0.240
02085977789	London	9	00:05:07	0.418
02074787000	London	9	00:01:02	0.270
07852616027	T-Mobile	14	00:08:53	1.191
07786276358	Vodafone	16	00:05:55	0.826
07968385191	Orange	10	00:03:03	0.437
00972525456330	Israel Mobile	9	00:02:27	2.646
07944789366	T-Mobile	13	00:09:00	1.243
07779599573	Orange	9	00:00:57	0.270
07957357127	T-Mobile	10	00:02:39	0.430
07854180071	Orange	12	00:01:14	0.360
02077497500	London	7	00:02:36	0.279
02088705151	London	12	00:02:46	0.396
07930410804	T-Mobile	14	00:06:52	0.910
07785546623	Vodafone	16	00:01:17	0.480
02080801502	London	9	00:03:23	0.346

## Running the report

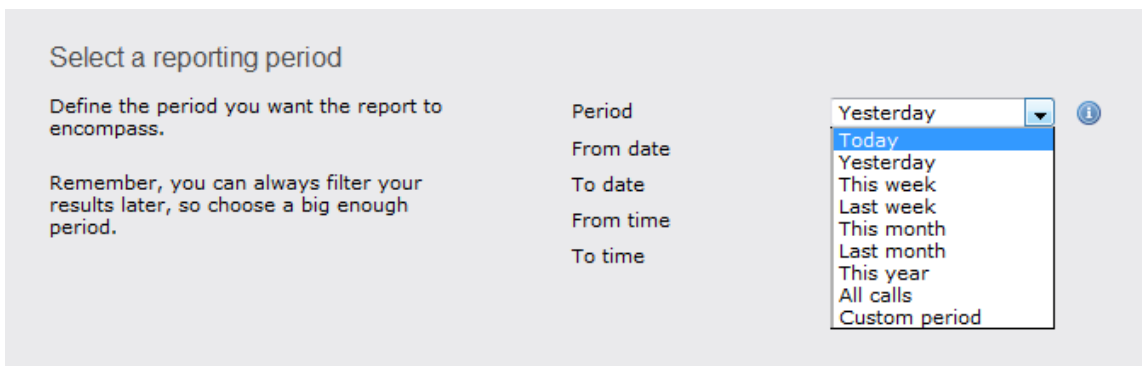
On the Reports screen, select the Frequent numbers report from the left-hand pane and click the [Select this report](#) button



A new window will appear, where you can set the parameters of your report.

### Selecting the reporting period

For each report, you must specify a time span that covers the calls you want the report to include. This is known as the "reporting period".



There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table describes how the start and end times are defined for each preset period:

Period	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This week</b>	The start date is set to the first day of the current week (normally Monday). The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to 00:00:00 and 23:59:59 respectively.

<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.

In addition to the presets described above, it is possible to specify a custom reporting period by choosing **Custom period** from the **Period** drop-down list and specifying your own **Start date**, **Start time**, **End date** and **End time** of the period you want to report on.

Period	Custom period	
From date	01 Jul 2011	
To date	14 Feb 2013	
From time	00 : 00 : 00	
To time	23 : 59 : 59	

Once you have set the reporting period, click on the **Next** button to set additional report parameters and options, or select the **Finish** button to run the report immediately.

### Selecting the reporting entity

The **Reporting entity** parameter allows you to select the part of your organisation whose calls the report should include, e.g. a site, a group or an individual user.

#### Choose a reporting entity

Select a specific section of your organisation whose calls will feature in the report. To run the report across your entire organisation, select **(All sites)**.

Alternatively, select a specific site, user group, channel group, individual user or channel.

Site	(All sites)	
Group		
User		

#### Site

To report on a particular site, select it from the drop-down list or select **All sites**.

Site	All sites	
------	-----------	--

#### Group

If a site has been selected, you are able to further limit the report's results by selecting a group from the drop-down list.

Group	All groups	
-------	------------	--

#### User

If both a site and group have been selected, you can further limit the report's results to include only calls involving a particular user, by selecting that user from the drop-down list.

User	All users	
------	-----------	--



If your web account is restricted to a specific site or group, only those entities to which you have access will be available in the drop-down lists.

Once you have selected the scope of your report, click on the **Next** button to set additional report parameters and options, or to run the report immediately, click the **Finish** button.

### Selecting the report filters

You can limit the results of your report by choosing one or more of the following filters:

**Filter the results of the report**

Account code	<input type="text"/>	<a href="#">i</a>	Dialled number	<input type="text"/>	<a href="#">i</a>
Call type	<input type="text" value="All calls"/>	<a href="#">i</a>	Duration	<input type="text"/>	<a href="#">i</a>
Carrier	<input type="text" value="(All carriers)"/>	<a href="#">i</a>	LCR code	<input type="text"/>	<a href="#">i</a>
CLI	<input type="text"/>	<a href="#">i</a>	Response	<input type="text"/>	<a href="#">i</a>
Cost	<input type="text"/>	<a href="#">i</a>	Start time	<input type="text"/>	<a href="#">i</a>
Destination	<input type="text"/>	<a href="#">i</a>	Trunk access code	<input type="text"/>	<a href="#">i</a>

#### Account code

To produce a report consisting only of calls that were made using a particular account code, enter the account code in the field provided.

Account code  [i](#)

To report on more than one account code, separate each code using a comma.

#### Call type

This filter allows you to define the type of call you want to report on, in terms of where the call originated and where it was delivered, e.g. incoming, outgoing, internal etc. To report on all types of call, set this to **All calls**.

Call type  [i](#)

#### Carrier

If you use more than one carrier, you can limit the results to include only calls that were made using a specific carrier.

Carrier  [i](#)



If you use only one carrier, there will be no drop-down list available and no option to choose a carrier.

#### CLI

Calling Line Identification (CLI) is the telephone number of the remote caller in an incoming call scenario.

You can report on calls that originate from a specific CLI or those whose CLI matches a particular pattern of digits. For example, to report on all incoming calls from Tri-Line, you could enter **02072652600**.

CLI	<input type="text" value="02072652600"/>	
-----	--	---

You can use the **!** symbol to explicitly exclude a CLI from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls from Tri-Line, but include all others, you could use **!020726526\***. To report on more than one CLI, use a comma to separate each entry.

### Cost

You can define a cost filter to include calls above or below specific values by entering your criteria, as shown below:

Cost	<input type="text" value="&lt;2.00"/>	
------	---------------------------------------	---

You can specify a cost range by using the **-** symbol; to specify limits, use the comparison operators, **>**, **<**, and **!**.

### Destination

If you want to filter calls to a specific, known destination, type the name of the destination in the text box provided. This filter accepts the **!** and **\*** symbols for excluding values and specifying partial matches, respectively.

For example, if you wanted to exclude all calls to France, you could enter **!France\***, as shown below:

Destination	<input type="text" value="!France*"/>	
-------------	---------------------------------------	---

### Dialled number

To filter calls to a specific dialled number, type it in the text box provided. The dialled number is defined as the number that is dialled (in the case of an outbound call), or the DDI number that the remote party dialled to reach a particular extension or group (in the case of an inbound call).

To filter calls to a specific area, a partial number can be entered (e.g. **0033** for calls to France).

Dialled number	<input type="text" value="0033"/>	
----------------	-----------------------------------	---

You can use the **!** symbol to explicitly exclude a dialled number from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls to Tri-Line, but include all others, you could use **!020726526\***). To report on more than one dialled number, use a comma to separate each entry.

### Duration

To filter calls above or below a particular duration, enter the desired duration in seconds.

Duration	<input type="text" value="&gt;1800"/>	
----------	---------------------------------------	---

You can specify a duration range by using the **-** symbol; to specify limits, use the comparison operators, **>**, **<**, and **!**.

In the above example, the report will return only calls longer than 1800 seconds (30 minutes).

### LCR code

To filter your results to include only calls that used a Least Cost Routing (LCR) code, enter it in the text box provided.

LCR code	<input type="text" value="162"/>	
----------	----------------------------------	---

You can use the **!** symbol to explicitly exclude a LCR code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using all LCR codes beginning **162**, you could enter **!162\***. To report on more than one LCR code, use a comma to separate each entry.



## Response

This option allows you to filter calls based on their response time, measured in seconds. Specify the desired response time threshold in the text box provided.

Response time	>10	
---------------	-----	---


In the above example, the search results will display calls that have a response time greater than 10 seconds.

You can specify a response time range by using the - symbol and; to specify limits, use the comparison operators, >, <, and ! .

## Start time

This option allows you to filter calls based on the time the call started. Specify the start time in the text box provided using the **hh:mm:ss** format.

For example, to include only calls that began after 10 am, you could enter **10:00:00** in the **start time** field, as shown below:

Start time	10:00:00	
------------	----------	---

## Trunk access code

If your telephone system uses trunk access codes to connect calls using specific channels, you can limit your report's results to include only calls made using those codes. Specify the trunk access code in the text box provided.

Trunk access code	9	
-------------------	---	---










You can use the ! symbol to explicitly exclude a trunk access code from the report's results, and/or the \* symbol as a wildcard in digit pattern matching. For example, to exclude calls made using the 9 trunk access code, you could enter !9. To report on more than one trunk access code, use a comma to separate each entry.

## Selecting the report options

This section enables you to further narrow down your report results, by excluding certain types of calls. It also allows you to sort the report's results in a particular manner.

### Options

Specify one or more of any additional report options shown here.

<input type="checkbox"/>	Exclude weekends	
<input type="checkbox"/>	Exclude transfers	
<input type="checkbox"/>	Don't replace numbers with contact names	
Call frequency	<input type="text" value="2"/>	
Group results by	<input type="text" value="Dialled number"/>	
Sort data by	<input type="text" value="Number of calls"/>	
Sort order	<input type="text" value="Ascending"/>	
Sort results by	<input type="text" value="Dialled number"/>	
Ignore missed calls shorter than	<input type="text" value=""/> seconds	

### Exclude weekends

To exclude weekend calls from your report's results, select the **Exclude weekends** option.

<input checked="" type="checkbox"/>	Exclude weekends	
-------------------------------------	------------------	---

**Exclude transfers**

To exclude transferred calls from your report's results, select the **Exclude transfers** option.

Exclude transfers 

**Don't replace numbers with contact names**

Tick this option if you do not want to replace dialled numbers, CLIs and account codes with their associated names, as defined in your web user's contacts list.

Don't replace numbers with contact names 


**Call frequency**

This option determines how frequently a call must have been dialled in order to feature in the results of this report. For example, to include only phone numbers that have been dialled twenty times or more, enter **20** as the minimum frequency, as shown below:

Call frequency  

**Group results by**

Choose from the drop-down list whether to group your results by CLI or dialled number.

Group results by  


**Sort data by**

To choose the criteria that is used in determining the most frequent calls, select a field from the **sort data by** drop-down list.

Sort data by  

**Sort order**

Choose from the **sort order** drop-down list whether you want the results of the report to appear in ascending or descending order.

Sort order  


**Sort results by**

To sort your report's results by a particular column, select it from the **sort results by** drop-down list.

Sort results by  

**Ignore short missed calls**

Missed calls below a certain duration can sometimes pollute the meaning of a report's results. To exclude such short calls from your report, enter a duration threshold in the text box provided, e.g. to ignore calls below 3 seconds, enter **3**.

Ignore missed calls shorter than  seconds 

**Selecting the report format**

This section allows you to choose the media format of your completed report. The formats available are Web, PDF, Excel, CSV and XML.

More details about each report format are available in the [Setting the report format](#) section above.

## Creating the report

When you have selected a reporting period and have chosen any filters and options, you can either run the report immediately by clicking on the **Run now** button, or [schedule it for future delivery](#).

Your report is ready to run

Select the format that you want your report to be in.

You can now either run the report immediately, or schedule it to run once, or at regular intervals, in the future.

Report format: Web

Run now  
Schedule for later

## The report's results

Below is an example of this report's output in web format. By clicking on the [About this report](#) link at the top-right corner of the page, you can review any filters and options that have been applied to the report.

My frequent numbers <span style="float: right;">2012-05-17 16:11:54</span>				
🏠 \ TIM Plus \ London \ Accounts \				About this report
Dialled number ▲	Location	Number of calls	Total duration	Total cost
07966465332	Orange	11	00:01:07	0.330
07932138688	T-Mobile	9	00:00:53	0.270
07985980159	T-Mobile	16	00:04:52	0.715
07722702388	T-Mobile	10	00:01:21	0.300
02087355100	London	14	00:01:21	0.420
07958048138	T-Mobile	8	00:10:00	1.302
07867996393	Vodafone	11	00:00:59	0.330
02075849901	London	9	00:02:05	0.271
07849093682	O2	12	00:01:52	0.367
07867525709	Vodafone	19	00:07:11	1.095
01342833313	East Grinstead	14	00:01:11	0.420
02075362601	London	8	00:00:40	0.240
02085977789	London	9	00:05:07	0.418
02074787000	London	9	00:01:02	0.270
07852616027	T-Mobile	14	00:08:53	1.191
07786276358	Vodafone	16	00:05:55	0.826
07968385191	Orange	10	00:03:03	0.437
00972525456330	Israel Mobile	9	00:02:27	2.646
07944789366	T-Mobile	13	00:09:00	1.243
07779599573	Orange	9	00:00:57	0.270
07957357127	T-Mobile	10	00:02:39	0.430
07854180071	Orange	12	00:01:14	0.360
02077497500	London	7	00:02:36	0.279
02088705151	London	12	00:02:46	0.396
07930410804	T-Mobile	14	00:06:52	0.910
07785546623	Vodafone	16	00:01:17	0.480
02080801502	London	9	00:03:23	0.346

As with all reports produced by TIM Plus, each page of the report includes the following information:

- the report's title
- the date and time that the report was generated

- the name of the report, if applicable

The **web** format is the most interactive of all formats: all column headers are click-sortable and most graphical and tabular elements can be drilled down into, allowing deeper analysis of your results.

The body of the report contains a table showing a summary of each frequently dialled number or CLI along with their associated destinations. The column headers of the table are described below:

Header	Description
<b>Dialled number</b>	The telephone number that was dialled
<b>Location</b>	The location name associated with the dialled number or CLI
<b>Number of calls</b>	The total number of calls made to each unique dialled number or from each unique CLI
<b>Total duration</b>	The total time spent on calls to each dialled number or from each CLI, displayed in <b>hh:mm:ss</b> format
<b>Total cost</b>	The total cost of calls for each unique dialled number

All dialled numbers, CLIs and locations in the table are shown as hyperlinks; clicking on any of them displays an itemised list of calls to/from each one.

To modify your report to cover a larger organisational scope, click on an element of the breadcrumb as shown below:



## Inbound Call Performance

**The Inbound Call Performance report**

- Introduction
- Running the report
- Creating the report
- The report's results

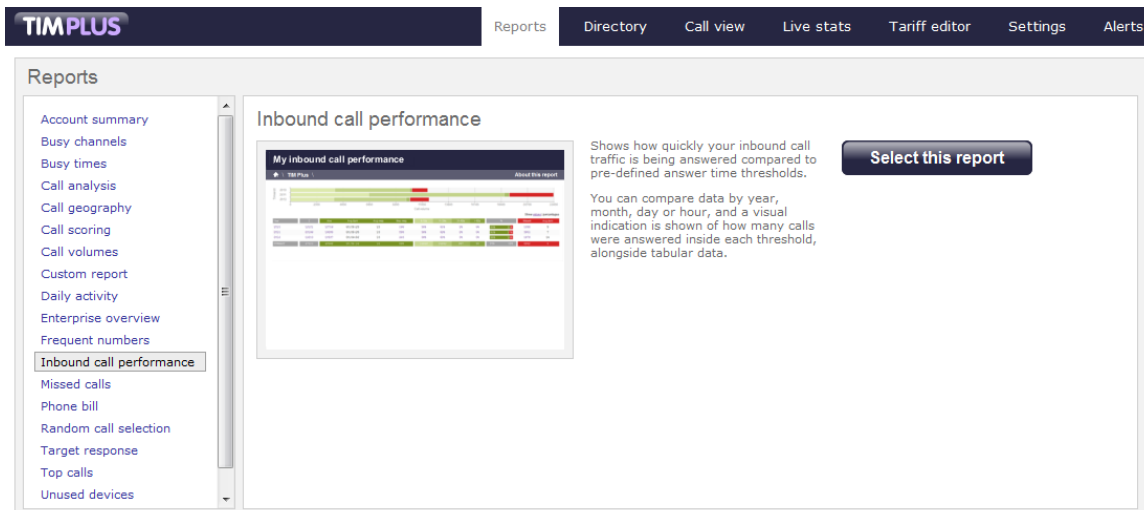
### Introduction

The Inbound Call Performance report displays how quickly your inbound calls are being answered, compared to your target thresholds, grouped by year, month, day or hour. A visual representation of how well each target is met is shown alongside a table containing the actual response time values.



## Running the report

On the Reports screen, select the **Inbound call performance** report from the left-hand pane and click the **Select this report** button.



A new window will appear, where you can set the parameters of your report.

## Selecting the reporting period

For each report, you must specify a time span that covers the calls you want the report to include. This is known as the "reporting period".

### Select a reporting period

Define the period you want the report to encompass.

Remember, you can always filter your results later, so choose a big enough period.

Period:  ⓘ

From date:

To date:

From time:

To time:

Yesterday  
**Today**  
 Yesterday  
 This week  
 Last week  
 This month  
 Last month  
 This year  
 All calls  
 Custom period

There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table describes how the start and end times are defined for each preset period:

Period	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This week</b>	The start date is set to the first day of the current week (normally Monday). The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.

In addition to the presets described above, it is possible to specify a custom reporting period by choosing **Custom period** from the **Period** drop-down list and specifying your own **Start date**, **Start time**, **End date** and **End time** of the period you want to report on.

Period:  ⓘ

From date:

To date:

From time:

To time:

Once you have set the reporting period, click on the **Next** button to set additional report parameters and options, or select the **Finish** button to run the report immediately.




## Selecting the reporting entity

The **Reporting entity** parameter allows you to select the part of your organisation whose calls the report should include, e.g. a site, a group or an individual user.

### Choose a reporting entity

Select a specific section of your organisation whose calls will feature in the report. To run the report across your entire organisation, select **(All sites)**.


Alternatively, select a specific site, user group, channel group, individual user or channel.

Site	(All sites) ▾	
Group	▾	
User	▾	

### Site

To report on a particular site, select it from the drop-down list or select **All sites**.

Site



### Group

If a site has been selected, you are able to further limit the report's results by selecting a group from the drop-down list.


Group



### User

If both a site and group have been selected, you can further limit the report's results to include only calls involving a particular user, by selecting that user from the drop-down list.

User





If your web account is restricted to a specific site or group, only those entities to which you have access will be available in the drop-down lists.

Once you have selected the scope of your report, click on the **Next** button to set additional report parameters and options, or to run the report immediately, click the **Finish** button.

## Selecting the report filters

You can limit the results of your report by choosing one or more of the following filters:

### Filter the results of the report

Account code	<input type="text"/>		Dialled number	<input type="text"/>	
Call type	<input type="text" value="All calls"/>		Duration	<input type="text"/>	
Carrier	<input type="text" value="(All carriers)"/>		LCR code	<input type="text"/>	
CLI	<input type="text"/>		Response	<input type="text"/>	
			Start time	<input type="text"/>	
			Trunk access code	<input type="text"/>	

#### Account code

To produce a report consisting only of calls that were made using a particular account code, enter the account code in the field provided.

Account code	<input type="text" value="0140"/>	
--------------	-----------------------------------	--

To report on more than one account code, separate each code using a comma.

#### Call type

This filter allows you to define the type of call you want to report on, in terms of where the call originated and where it was delivered, e.g. incoming, outgoing, internal etc. To report on all types of call, set this to [All calls](#).

Call type	<input type="text" value="All calls"/>	
-----------	--	--

#### Carrier

If you use more than one carrier, you can limit the results to include only calls that were made using a specific carrier.

Carrier	<input type="text" value="All carriers"/>	
---------	---	--

If you use only one carrier, there will be no drop-down list available and no option to choose a carrier.

#### CLI

Calling Line Identification (CLI) is the telephone number of the remote caller in an incoming call scenario.

You can report on calls that originate from a specific CLI or those whose CLI matches a particular pattern of digits. For example, to report on all incoming calls from Tri-Line, you could enter [02072652600](#).

CLI	<input type="text" value="02072652600"/>	
-----	--	--

You can use the **!** symbol to explicitly exclude a CLI from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls from Tri-Line, but include all others, you could use [!020726526\\*](#). To report on more than one CLI, use a comma to separate each entry.

#### Dialled number

To filter calls to a specific dialled number, type it in the text box provided. The dialled number is defined as the number that is



dialled (in the case of an outbound call), or the DDI number that the remote party dialled to reach a particular extension or group (in the case of an inbound call).

To filter calls to a specific area, a partial number can be entered (e.g. 0033 for calls to France).

Dialled number	<input type="text" value="0033"/>	
----------------	-----------------------------------	---

You can use the ! symbol to explicitly exclude a dialled number from the report's results, and/or the \* symbol as a wildcard in digit pattern matching. For example, to exclude calls to Tri-Line, but include all others, you could use !020726526\*. To report on more than one dialled number, use a comma to separate each entry.

### Duration

To filter calls above or below a particular duration, enter the desired duration in seconds.

Duration	<input type="text" value="&gt;1800"/>	
----------	---------------------------------------	---

You can specify a duration range by using the – symbol; to specify limits, use the comparison operators, >, <, and ! .

In the above example, the report will return only calls longer than 1800 seconds (30 minutes).

### LCR code

To filter your results to include only calls that used a Least Cost Routing (LCR) code, enter it in the text box provided.

LCR code	<input type="text" value="162"/>	
----------	----------------------------------	---

You can use the ! symbol to explicitly exclude a LCR code from the report's results, and/or the \* symbol as a wildcard in digit pattern matching. For example, to exclude calls made using all LCR codes beginning 162, you could enter !162\*. To report on more than one LCR code, use a comma to separate each entry.

### Response

This option allows you to filter calls based on their response time, measured in seconds. Specify the desired response time threshold in the text box provided.

Response time	<input type="text" value="&gt;10"/>	
---------------	-------------------------------------	---


In the above example, the search results will display calls that have a response time greater than 10 seconds.

You can specify a response time range by using the – symbol and; to specify limits, use the comparison operators, >, <, and ! .

### Start time

This option allows you to filter calls based on the time the call started. Specify the start time in the text box provided using the **hh:m m:ss** format.

For example, to include only calls that began after 10 am, you could enter 10:00:00 in the `start time` field, as shown below:

Start time	<input type="text" value="10:00:00"/>	
------------	---------------------------------------	---

### Trunk access code

If your telephone system uses trunk access codes to connect calls using specific channels, you can limit your report's results to include only calls made using those codes. Specify the trunk access code in the text box provided.

Trunk access code	<input type="text" value="9"/>	
-------------------	--------------------------------	---

You can use the ! symbol to explicitly exclude a trunk access code from the report's results, and/or the \* symbol as a wildcard in digit pattern matching. For example, to exclude calls made using the 9 trunk access code, you could enter !9. To report on more than one trunk access code, use a comma to separate each entry.

## Selecting the report options

This section enables you to further narrow down your report results, by excluding certain types of calls. It also allows you to sort the report's results in a particular manner.

### Options

Specify one or more of any additional report options shown here.

Exclude weekends i

Exclude transfers i

Hide unused i

Thresholds  i

Group by  i

### Exclude weekends

To exclude weekend calls from your report's results, select the `Exclude weekends` option.

Exclude weekends i

### Exclude transfers

To exclude transferred calls from your report's results, select the `Exclude transfers` option.

Exclude transfers i

### Hide unused

To exclude unused extensions from your report's results, select the `Hide unused` option.

Hide unused i

### Thresholds

Define your response target threshold(s) by entering comma-separated values in the text box provided. The example below shows response time targets for calls answered within 5, 10 and 20 seconds, respectively.

Thresholds  i

### Group by

Select the time period by which you want to group your calls.

Group by  i

## Selecting the report format

This section allows you to choose the media format of your completed report. The formats available are `Web`, `PDF`, `Excel`, `CSV` and `XML`.

More details about each report format are available in the [Setting the report format](#) section above.

## Creating the report

When you have selected a reporting period and have chosen any filters and options, you can either run the report immediately by clicking on the **Run now** button, or schedule it for future delivery.

Your report is ready to run

Select the format that you want your report to be in.

You can now either run the report immediately, or schedule it to run once, or at regular intervals, in the future.

Report format: Web

Run now  
Schedule for later

## The report's results

Below is an example of this report's output in **web** format. By clicking on the **About this report** link at the top-right corner of the page, you can review any filters and options that have been applied to the report.



As with all reports produced by TIM Plus, each page of the report includes the following information:

- the report's title
- the date and time that the report was generated
- the name of the report, if applicable

The **web** format is the most interactive of all formats: all column headers are click-sortable and most graphical and tabular elements can be drilled down into, allowing deeper analysis of your results.

The achievement of each response time target is displayed as either percentages or actual values, and can be toggled using the link at the top-right of the graph.

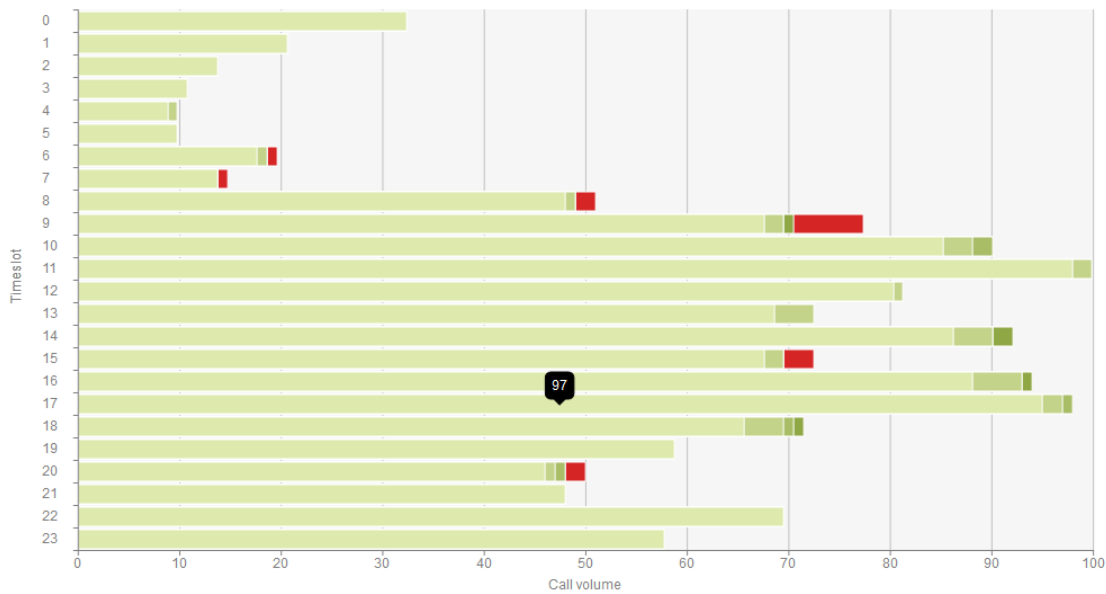
The body of the report consists of a table showing a summary of your incoming calls, grouped by the period you selected. A description of the column headers are shown below:

Header	Description
<b>Hour / Day / Month / Year</b>	The time period.
	The total number of calls in each period.
<b>Answered</b>	<ul style="list-style-type: none"> <li>▪ <b>Ans:</b> The total number of answered calls in each period.</li> <li>▪ <b>Avg durn:</b> The average length of time of all answered calls in each period.</li> <li>▪ <b>Avg resp:</b> The average response time of all answered calls in each period.</li> <li>▪ <b>Max resp:</b> The maximum time it took to answer a call in each period.</li> <li>▪ <b>x-xx s:</b> The percentage of calls that were answered within each predefined target, e.g. if 50% is displayed under the 0-5s heading, means that half of all calls were answered within 5 seconds.</li> </ul>
%	The number of answered versus missed calls within each period, expressed as a percentage.
<b>Missed</b>	<ul style="list-style-type: none"> <li>▪ : The total number of missed calls in each period.</li> <li>▪ <b>Avg durn:</b> The average length of time that missed calls rang before they were abandoned.</li> </ul>

Each period is shown as a hyperlink which, if clicked on, re-runs the report using a more granular period.

**My inbound call performance** 2012-10-11 11:08:45

Home \ **TIM Plus** \ About this report



Show values | percentages

Hour	Σ	Ans	Avg durn	Avg resp	Max resp	0-10s	11-30s	31-60s	> 60s	%	Missed	Avg durn
00:00	33	33	00:01:19	-	-	100%	-	-	-	100%	-	-
01:00	21	21	00:01:48	-	-	100%	-	-	-	100%	-	-
02:00	14	14	00:01:37	-	6	100%	-	-	-	100%	-	-
03:00	11	11	00:01:08	-	-	100%	-	-	-	100%	-	-
04:00	10	10	00:00:24	4	20	90%	10%	-	-	100%	-	-
05:00	10	10	00:01:12	1	6	100%	-	-	-	100%	-	-
06:00	20	19	00:01:08	2	22	95%	5%	-	-	95%	5%	1 35
07:00	15	14	00:00:51	-	-	100%	-	-	-	93%	7%	1 1
08:00	52	50	00:01:30	1	21	98%	2%	-	-	96%	4%	2 22
09:00	79	72	00:01:37	2	67	96%	3%	-	1%	91%	9%	7 48
10:00	92	92	00:01:47	2	38	95%	3%	2%	-	100%	-	-
11:00	102	102	00:01:30	1	14	98%	2%	-	-	100%	-	-
12:00	83	83	00:01:33	-	11	99%	1%	-	-	100%	-	-
13:00	74	74	00:02:23	1	27	95%	5%	-	-	100%	-	-
14:00	94	94	00:01:23	3	70	94%	4%	-	2%	100%	-	-
15:00	74	71	00:01:34	1	15	97%	3%	-	-	96%	4%	3 29
16:00	96	96	00:01:38	2	64	94%	5%	-	1%	100%	-	-
17:00	100	100	00:01:50	1	34	97%	2%	1%	-	100%	-	-
18:00	73	73	00:02:11	3	77	92%	5%	1%	1%	100%	-	-
19:00	60	60	00:01:46	-	5	100%	-	-	-	100%	-	-
20:00	51	49	00:01:36	1	31	96%	2%	2%	-	96%	4%	2 13
21:00	49	49	00:01:30	-	6	100%	-	-	-	100%	-	-
22:00	71	71	00:01:16	-	-	100%	-	-	-	100%	-	-
23:00	59	59	00:01:20	-	9	100%	-	-	-	100%	-	-
<b>SUMMARY</b>	<b>1343</b>	<b>1327</b>	<b>00:01:37</b>	<b>1</b>	<b>77</b>	<b>1284</b>	<b>33</b>	<b>5</b>	<b>5</b>	<b>99%</b>	<b>1%</b>	<b>16 33</b>

To modify your report to cover a larger organisational scope, click on an element of the breadcrumb as shown below:

Home \ **TIM Plus** \ **London** \ Accounts \ About this report

## Missed Calls

**The Missed Calls report**

- Introduction
- Running the report
- Creating the report
- The report's results

## Introduction

The Missed Calls report analyses your missed calls in order to highlight which callers have and haven't been responded to. Each missed call is given a priority rating depending on how many times and how often the caller attempted to make contact. The time window in which a call must be responded to, if it is to be considered handled, is user-definable.

My missed calls						2012-05-17 16:14:30
<a href="#">Home</a> \ <a href="#">TIM Plus</a> \ <a href="#">London</a> \ <a href="#">Accounts</a> \						About this report
<input checked="" type="button" value="Missed"/> <input type="button" value="Handled"/>						<a href="#">Expand all</a>   <a href="#">Collapse all</a>
First attempt ▲	CLI	Contact	Avg ring time	Attempts	Priority	
02 September 2012 09:57:13	07854181348	Simon Mason, ...	00:01:30	2	<div style="width: 100%; height: 10px; background-color: red;"></div>	
Date & time		Dialled number	Contact	Ring time		
02 September 2012 09:57:13			Simon Mason	00:01:56		
02 September 2012 09:58:36			Bruce Stanton	00:01:04		
02 September 2012 09:58:26	07743409903	Simon Mason	00:00:09	1	<div style="width: 100%; height: 10px; background-color: #ccc;"></div>	
02 September 2012 12:30:33	07854180254	Bruce Stanton	00:00:23	1	<div style="width: 100%; height: 10px; background-color: #ccc;"></div>	
02 September 2012 14:41:23	07854180338	Bruce Stanton	00:00:02	1	<div style="width: 100%; height: 10px; background-color: #ccc;"></div>	
02 September 2012 17:10:28	07854180075	Bruce Stanton	00:00:06	1	<div style="width: 100%; height: 10px; background-color: #ccc;"></div>	
02 September 2012 20:05:41	07854180960	John Slater	00:00:08	1	<div style="width: 100%; height: 10px; background-color: #ccc;"></div>	
03 September 2012 09:45:18	07854181014	Bruce Stanton	00:01:07	1	<div style="width: 100%; height: 10px; background-color: #ccc;"></div>	
03 September 2012 09:55:56	07743391073	Bruce Stanton, ...	00:00:57	2	<div style="width: 100%; height: 10px; background-color: red;"></div>	
Date & time		Dialled number	Contact	Ring time		
03 September 2012 09:55:56			Bruce Stanton	00:00:53		
03 September 2012 09:58:26			Simon Mason	00:01:01		
03 September 2012 09:57:13	07854181348	Simon Mason, ...	00:01:00	2	<div style="width: 100%; height: 10px; background-color: red;"></div>	
Date & time		Dialled number	Contact	Ring time		
03 September 2012 09:57:13			Simon Mason	00:01:54		
03 September 2012 09:58:36			Bruce Stanton	00:00:05		
03 September 2012 17:10:28	07854832625	Bruce Stanton	00:00:06	1	<div style="width: 100%; height: 10px; background-color: #ccc;"></div>	

## Running the report

On the Reports screen, select the Missed calls report from the left-hand pane and click the  button.

A new window will appear, where you can set the parameters of your report.

### Selecting the reporting period

For each report, you must specify a time span that covers the calls you want the report to include. This is known as the "reporting period".

There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table describes how the start and end times are defined for each preset period:

Period	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This week</b>	The start date is set to the first day of the current week (normally Monday). The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to 00:00:00 and 23:59:59 respectively.

<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.

In addition to the presets described above, it is possible to specify a custom reporting period by choosing **Custom period** from the **Period** drop-down list and specifying your own **Start date**, **Start time**, **End date** and **End time** of the period you want to report on.

Period	Custom period	
From date	01 Jul 2011	
To date	14 Feb 2013	
From time	00 : 00 : 00	
To time	23 : 59 : 59	

Once you have set the reporting period, click on the **Next** button to set additional report parameters and options, or select the **Finish** button to run the report immediately.

### Selecting the reporting entity

The **Reporting entity** parameter allows you to select the part of your organisation whose calls the report should include, e.g. a site, a group or an individual user.

#### Choose a reporting entity

Select a specific section of your organisation whose calls will feature in the report. To run the report across your entire organisation, select **(All sites)**.

Alternatively, select a specific site, user group, channel group, individual user or channel.

Site	(All sites)	
Group		
User		

#### Site

To report on a particular site, select it from the drop-down list or select **All sites**.

Site	All sites	
------	-----------	--

#### Group

If a site has been selected, you are able to further limit the report's results by selecting a group from the drop-down list.

Group	All groups	
-------	------------	--

#### User

If both a site and group have been selected, you can further limit the report's results to include only calls involving a particular user, by selecting that user from the drop-down list.

User	All users	
------	-----------	--





If your web account is restricted to a specific site or group, only those entities to which you have access will be available in the drop-down lists.

Once you have selected the scope of your report, click on the **Next** button to set additional report parameters and options, or to run the report immediately, click the **Finish** button.

### Selecting the report filters

You can limit the results of your report by choosing one or more of the following filters:

#### Filter the results of the report

Account code	<input type="text"/>		Dialled number	<input type="text"/>	
Call type	<input type="text" value="All calls"/>		Duration	<input type="text"/>	
Carrier	<input type="text" value="(All carriers)"/>		LCR code	<input type="text"/>	
CLI	<input type="text"/>		Response	<input type="text"/>	
Cost	<input type="text"/>		Start time	<input type="text"/>	
Destination	<input type="text"/>		Trunk access code	<input type="text"/>	

#### Account code

To produce a report consisting only of calls that were made using a particular account code, enter the account code in the field provided.

Account code

To report on more than one account code, separate each code using a comma.

#### Call type

This filter allows you to define the type of call you want to report on, in terms of where the call originated and where it was delivered, e.g. incoming, outgoing, internal, etc. To report on all types of call, set this to **All calls**.

Call type

#### Carrier

If you use more than one carrier, you can limit the results to include only calls that were made using a specific carrier.

Carrier



If you use only one carrier, there will be no drop-down list available and no option to choose a carrier.

#### CLI

Calling Line Identification (CLI) is the telephone number of the remote caller in an incoming call scenario.

You can report on calls that originate from a specific CLI or those whose CLI matches a particular pattern of digits. For example, to report on all incoming calls from Tri-Line, you could enter **02072652600**.

CLI	<input type="text" value="02072652600"/>	
-----	--	---

You can use the **!** symbol to explicitly exclude a CLI from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls from Tri-Line, but include all others, you could use **!020726526\***. To report on more than one CLI, use a comma to separate each entry.

### Cost

You can define a cost filter to include calls above or below specific values by entering your criteria, as shown below:

Cost	<input type="text" value="&lt;2.00"/>	
------	---------------------------------------	---

You can specify a cost range by using the **-** symbol; to specify limits, use the comparison operators, **>**, **<**, and **!**.

### Destination

If you want to filter calls to a specific, known destination, type the name of the destination in the text box provided. This filter accepts the **!** and **\*** symbols for excluding values and specifying partial matches, respectively.

For example, if you wanted to exclude all calls to France, you could enter **!France\***, as shown below:

Destination	<input type="text" value="!France*"/>	
-------------	---------------------------------------	---

### Dialled number

To filter calls to a specific dialled number, type it in the text box provided. The dialled number is defined as the number that is dialled (in the case of an outbound call), or the DDI number that the remote party dialled to reach a particular extension or group (in the case of an inbound call).

To filter calls to a specific area, a partial number can be entered (e.g. **0033** for calls to France).

Dialled number	<input type="text" value="0033"/>	
----------------	-----------------------------------	---

You can use the **!** symbol to explicitly exclude a dialled number from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls to Tri-Line, but include all others, you could use **!020726526\***). To report on more than one dialled number, use a comma to separate each entry.

### Duration

To filter calls above or below a particular duration, enter the desired duration in seconds.

Duration	<input type="text" value="&gt;1800"/>	
----------	---------------------------------------	---

You can specify a duration range by using the **-** symbol; to specify limits, use the comparison operators, **>**, **<**, and **!**.

In the above example, the report will return only calls longer than 1800 seconds (30 minutes).

### LCR code

To filter your results to include only calls that used a Least Cost Routing (LCR) code, enter it in the text box provided.

LCR code	<input type="text" value="162"/>	
----------	----------------------------------	---

You can use the **!** symbol to explicitly exclude a LCR code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using all LCR codes beginning **162**, you could enter **!162\***. To report on more than one LCR code, use a comma to separate each entry.

## Response

This option allows you to filter calls based on their response time, measured in seconds. Specify the desired response time threshold in the text box provided.

Response time  


In the above example, the search results will display calls that have a response time greater than 10 seconds.

You can specify a response time range by using the `-` symbol and; to specify limits, use the comparison operators, `>`, `<`, and `!`.

## Start time

This option allows you to filter calls based on the time the call started. Specify the start time in the text box provided using the `hh:mm` format.

For example, to include only calls that began after 10 am, you could enter `10:00:00` in the `start time` field, as shown below:






Start time  


## Selecting the report options


This section enables you to further narrow down your report results, by excluding certain types of calls. It also allows you to sort the report's results in a particular manner.


### Options


Specify one or more of any additional report options shown here.

- Exclude weekends 
- Summary only 
- Don't replace numbers with contact names 
- Notes only 
- Audio only 

Sort order  


Sort results by  

Ignore missed calls shorter than  seconds 

Callback interval  


### Exclude weekends

To exclude weekend calls from your report's results, select the `Exclude weekends` option.

Exclude weekends 

### Summary only

To show only a summary of your missed calls, instead of an itemised list, tick the box `Summary only`, as shown below:

Summary only 

### Don't replace numbers with contact names

Tick this option if you do not want to replace dialled numbers, CLIs and account codes with their associated names, as defined in your web user's contacts list.

Don't replace numbers with contact names 


### Notes only

Tick this option if you want your search results to include only calls that have notes associated with them.

Notes only 

### Audio only

Tick this option if you want your search results to include only calls that have an associated voice recording.

Audio only 

### Sort order

Choose from the `sort order` drop-down list whether you want the results of your report to appear in ascending or descending order.

Sort order  


### Sort results by

To sort your report's results by a particular column, select it from the `sort results by` drop-down list.

Sort results by  

### Ignore short missed calls

Missed calls below a certain duration can sometimes pollute the meaning of a report's results. To exclude such short calls from your report, enter a duration threshold in the text box provided, e.g. to ignore calls below 3 seconds, enter `3`.

Ignore missed calls shorter than  seconds 

### Callback interval

This option allows you to define, in hours, the time window in which a call must be responded to, in order to be considered handled. The default callback interval is 24 (hours), but you may enter your own value, as shown below:

### Selecting the report format

This section allows you to choose the media format of your completed report. The formats available are `Web`, `PDF`, `Excel`, `CSV` and `XML`.

More details about each report format are available in the [Setting the report format](#) section above.

### Creating the report

When you have selected a reporting period and have chosen any filters and options, you can either run the report immediately by clicking on the `Run now` button, or [schedule it for future delivery](#).

Your report is ready to run

Select the format that you want your report to be in.

You can now either run the report immediately, or schedule it to run once, or at regular intervals, in the future.

Report format:

[Run now](#)

[Schedule for later](#)

## The report's results

Below is an example of this report's output in `Web` format. By clicking on the `About this report` link at the top-right corner of the page, you can review any filters and options that have been applied to the report.

My missed calls						2012-05-17 16:14:30												
<a href="#">↑</a> \ TIM Plus \ London \ Accounts \						<a href="#">About this report</a>												
<input checked="" type="checkbox"/> Missed <input type="checkbox"/> Handled						<a href="#">Expand all</a>   <a href="#">Collapse all</a>												
First attempt ▲	CLI	Contact	Avg ring time	Attempts	Priority													
02 September 2012 09:57:13	07854181348	Simon Mason, ...	00:01:30	2														
<table border="1"> <thead> <tr> <th>Date &amp; time</th> <th>Dialled number</th> <th>Contact</th> <th>Ring time</th> </tr> </thead> <tbody> <tr> <td>02 September 2012 09:57:13</td> <td></td> <td>Simon Mason</td> <td>00:01:56</td> </tr> <tr> <td>02 September 2012 09:58:36</td> <td></td> <td>Bruce Stanton</td> <td>00:01:04</td> </tr> </tbody> </table>							Date & time	Dialled number	Contact	Ring time	02 September 2012 09:57:13		Simon Mason	00:01:56	02 September 2012 09:58:36		Bruce Stanton	00:01:04
Date & time	Dialled number	Contact	Ring time															
02 September 2012 09:57:13		Simon Mason	00:01:56															
02 September 2012 09:58:36		Bruce Stanton	00:01:04															
02 September 2012 09:58:26	07743409903	Simon Mason	00:00:09	1														
02 September 2012 12:30:33	07854180254	Bruce Stanton	00:00:23	1														
02 September 2012 14:41:23	07854180338	Bruce Stanton	00:00:02	1														
02 September 2012 17:10:28	07854180075	Bruce Stanton	00:00:06	1														
02 September 2012 20:05:41	07854180960	John Slater	00:00:08	1														
02 September 2012 09:45:18	07854181014	Bruce Stanton	00:01:07	1														
03 September 2012 09:55:56	07743391073	Bruce Stanton, ...	00:00:57	2														
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Date & time	Dialled number	Contact	Ring time															
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03 September 2012 09:57:13	07854181348	Simon Mason, ...	00:01:00	2														
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Date & time	Dialled number	Contact	Ring time															
03 September 2012 09:57:13		Simon Mason	00:01:54															
03 September 2012 09:58:36		Bruce Stanton	00:00:05															
03 September 2012 17:10:28	07854832625	Bruce Stanton	00:00:06	1														

As with all reports produced by TIM Plus, each page of the report includes the following information:

- the report's title
- the date and time that the report was generated
- the name of the report, if applicable

The `Web` format is the most interactive of all formats: all column headers are click-sortable and most graphical and tabular elements can be drilled down into, allowing deeper analysis of your results.

The report consists of two sections: `Missed` calls and `Handled` calls.

### Missed calls

The  `Missed` calls tab displays a table containing the calls that were missed and not responded to. Each column header of the table is described below:

Header	Description
<b>First attempt</b>	The date and time of the first missed call
<b>CLI</b>	The telephone number of the remote caller
<b>Contact</b>	The person who missed the call. If several people were called, the field will display the caption, <i>Various</i>
<b>Avg ring time</b>	The average length of time a missed call rang before being abandoned
<b>Attempts</b>	The number of times the caller attempted to reach the specified contact without success
<b>Priority</b>	The priority is calculated by dividing the difference in time between the first and last call attempt by the total number of call attempts

### Handled calls

The  calls tab displays a table containing the calls that were initially missed but eventually responded to. Each column header of the table is described below:

Header	Description
<b>Handled</b>	The date and time the call was handled
<b>CLI</b>	The telephone number of the remote caller
<b>Contact</b>	The person who eventually handled the call
<b>Duration</b>	The duration of the handled call
<b>Attempts</b>	The number of call attempts made before the call was eventually handled
<b>Priority</b>	The priority is calculated by dividing the difference in time between the first and last call attempt by the total number of call attempts



Clicking on an individual call will show an itemised list of all call attempts made by that same caller; clicking on the [Expand all](#) link at the top-right corner of the screen will show this itemised list for all missed calls on the page.

To modify your report to cover a larger organisational scope, click on an element of the breadcrumb as shown below:



## Phone Bill

### The Phone Bill report

- Introduction
- Running the report
- Creating the report
- The report's results

## Introduction

The Phone Bill report produces a fully itemised telephone bill for billing back telephone usage to your clients, with the option of adding a percentage markup to each phone call. These bills can also include fixed charges for items other than phone calls, such as room rental, internet services and additional sundry items. You can fully customise the style of the report's output to reflect your own brand, including a company logo, for example.

My phone bill					2012-05-17 16:17:44
<a href="#">↑</a> \ TIM Plus \ London \ Accounts \					About this report
<b>Mary Quant (4329)</b>					
<b>Call charges</b>					
Date & time ▲	Dialled number	Destination	Duration	Cost	
02/03/2012 14:50:26	07904910757	T-Mobile	00:01:30	0.195	
03/03/2012 14:50:26	07904910757	T-Mobile	00:00:34	0.074	
05/03/2012 14:50:26	07904691257	T-Mobile	00:00:58	0.126	
07/03/2012 14:50:26	07904691337	T-Mobile	00:00:11	0.030	
08/03/2012 14:50:26	07904028757	T-Mobile	00:01:42	0.221	
10/03/2012 14:50:26	07904671427	T-Mobile	00:01:58	0.256	
11/03/2012 14:50:26	07904910757	T-Mobile	00:01:11	0.154	
19/03/2012 14:50:26	07904390957	T-Mobile	00:00:03	0.030	
19/03/2012 14:50:26	07904910757	T-Mobile	00:01:37	0.210	
22/03/2012 14:50:26	07904910757	T-Mobile	00:00:16	0.035	
23/03/2012 14:50:26	07904910757	T-Mobile	00:02:00	0.260	
<b>11 calls</b>			<b>00:12:00</b>	<b>1.591</b>	
<b>Subtotal</b>				<b>1.590</b>	

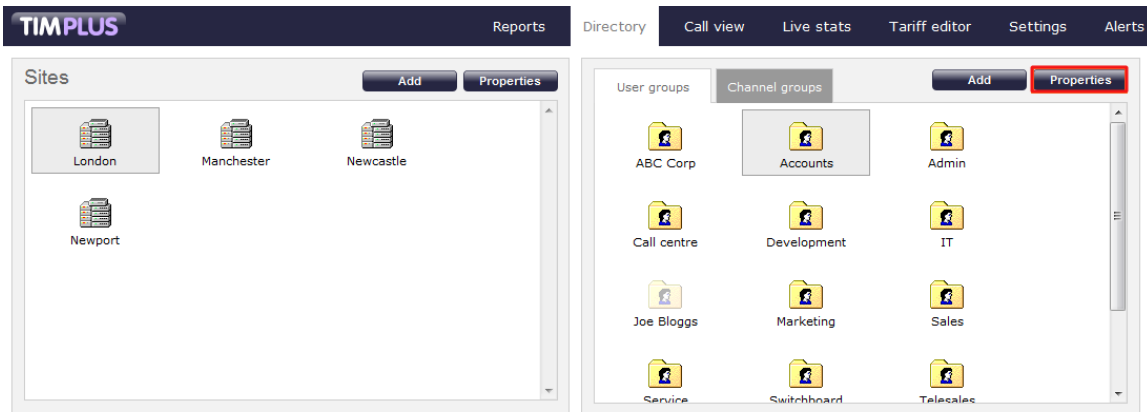
## Summary of bill

<b>Bill total</b>	<b>572.06</b>
Tax (20.0%)	114.41
<b>Total payable</b>	<b>686.47</b>

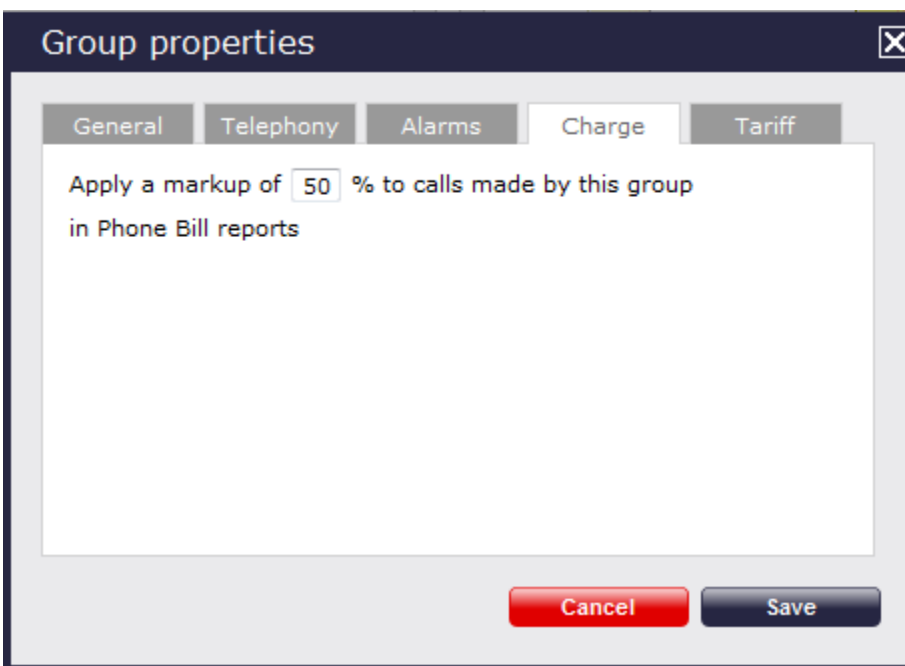
## Marking up calls

You can apply a call markup at both user group and individual user level, by setting a charge value inside the Directory.

To apply a markup for a user group, navigate to the **Directory** tab, select the user group and click the **Properties** button.



In the **Group properties** window that appears, select the **Charge** tab and enter a percentage markup in the box provided, then click on the **Save** button. In the example below, a 50% charge would be added to all calls in the selected group.



To apply a markup for an individual user, navigate to the **Directory** tab, locate the user you are interested in and click the **Properties** button. In the **User properties** window that appears, select the **Markup** tab and enter a description and percentage markup in the boxes provided, then click on the **Save** button.



**User properties** [X]

General | Telephony | **Charge** | Markup

Enter a description and percentage to charge this user per call on a Phone Bill report

Description

Amount  %

Cancel Save

### Adding a fixed charge

You can also add a fixed charge for items other than phone calls for each individual user that will feature in your bill.

To add a fixed charge, navigate to the **Directory** tab, select the user and click the **Properties** button. On the **User properties** window that appears, select the **Charge** tab and enter a description and a charge in the boxes provided, then click on the **Save** button.

**User properties** [X]

General | Telephony | **Charge** | Markup

Enter a description and amount to charge this user whenever they feature on a Phone Bill report

Description

Amount

Cancel Save

### Running the report

On the **Reports** screen, select the **Phone bill** report from the left-hand pane and click the **Select this report** button.

The screenshot shows the TIMPLUS Reports interface. On the left is a navigation menu with options like 'Account summary', 'Busy channels', 'Busy times', 'Call analysis', 'Call geography', 'Call scoring', 'Call volumes', 'Custom report', 'Daily activity', 'Enterprise overview', 'Frequent numbers', 'Inbound call performance', 'Missed calls', 'Phone bill' (highlighted), 'Random call selection', 'Target response', 'Top calls', and 'Unused devices'. The main content area is titled 'Phone bill' and contains a preview of a report titled 'My phone bill' for account 11042. The report shows call charges with columns for 'Account', 'Start time', 'End time', 'Duration', and 'Cost'. Below the preview is a 'Select this report' button. To the right of the preview, there is explanatory text: 'For use in situations where you need to produce a telephone bill for clients or company cost centres. Examples include business centres, serviced offices, hospitality, or any organisation that needs to bill back calls made by clients. The bill can include fixed charges for items other than telephone calls.'

A new window will appear, where you can set the parameters of your report.

### Selecting the reporting period

For each report, you must specify a time span that covers the calls you want the report to include. This is known as the "reporting period".

The screenshot shows a dialog box titled 'Select a reporting period'. It contains the following text: 'Define the period you want the report to encompass.' and 'Remember, you can always filter your results later, so choose a big enough period.' To the right, there are input fields for 'Period', 'From date', 'To date', 'From time', and 'To time'. A dropdown menu is open, showing the following options: 'Yesterday', 'Today' (highlighted), 'Yesterday', 'This week', 'Last week', 'This month', 'Last month', 'This year', 'All calls', and 'Custom period'. An information icon (i) is visible next to the dropdown.

There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table describes how the start and end times are defined for each preset period:

Period	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This week</b>	The start date is set to the first day (normally Monday) of the current week. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.

<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to <b>00:00:00</b> and <b>23:59:59</b> respectively.
<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to <b>00:00:00</b> and <b>23:59:59</b> respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.

In addition to the presets described above, it is possible to specify a custom reporting period by choosing **Custom period** from the **Period** drop-down list and specifying your own **Start date**, **Start time**, **End date** and **End time** of the period you want to report on.

Once you have set the reporting period, click on the **Next** button to set additional report parameters and options, or select the **Finish** button to run the report immediately.

### Selecting the reporting entity

The **Reporting entity** parameter allows you to select the part of your organisation whose calls the report should include, e.g. a site, a group or an individual user.

#### Site


To report on a particular site, select it from the drop-down list or select **All sites**.

#### Group

If a site has been selected, you are able to further limit the report's results by selecting a group from the drop-down list.

#### User

If both a site and group have been selected, you can further limit the report's results to include only calls involving a particular user, by selecting that user from the drop-down list.

User  















If your web account is restricted to a specific site or group, only those entities to which you have access will be available in the drop-down lists.

Once you have selected the scope of your report, click on the **Next** button to set additional report parameters and options, or to run the report immediately, click the **Finish** button.

### Selecting the report filters


You can limit the results of your report by choosing one or more of the following filters:

Filter the results of the report

Account code	<input type="text"/>		Dialled number	<input type="text"/>	
Call type	<input type="text" value="All calls"/>		Duration	<input type="text"/>	
Carrier	<input type="text" value="(All carriers)"/>		LCR code	<input type="text"/>	
CLI	<input type="text"/>		Response	<input type="text"/>	
Cost	<input type="text"/>		Start time	<input type="text"/>	
Destination	<input type="text"/>		Trunk access code	<input type="text"/>	

#### Account code


To produce a report consisting only of calls that were made using a particular account code, enter the account code in the field provided.

Account code  

To report on more than one account code, separate each code using a comma.


#### Call type

This filter allows you to define the type of call you want to report on, in terms of where the call originated and where it was delivered, e.g. incoming, outgoing, internal etc. To report on all types of call, set this to **All calls**.

Call type  

#### Carrier

If you use more than one carrier, you can limit the results to include only calls that were made using a specific carrier.

Carrier  




If you use only one carrier, there will be no drop-down list available and no option to choose a carrier.

## CLI

Calling Line Identification (CLI) is the telephone number of the remote caller in an incoming call scenario.


You can report on calls that originate from a specific CLI or those whose CLI matches a particular pattern of digits. For example, to report on all incoming calls from Tri-Line, you could enter **02072652600**.

CLI	<input type="text" value="02072652600"/>	
-----	--	---

You can use the **!** symbol to explicitly exclude a CLI from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls from Tri-Line, but include all others, you could use **!020726526\***. To report on more than one CLI, use a comma to separate each entry.

## Cost

You can define a cost filter to include calls above or below specific values by entering your criteria, as shown below:

Cost	<input type="text" value="&lt;2.00"/>	
------	---------------------------------------	---

You can specify a cost range by using the **-** symbol; to specify limits, use the comparison operators, **>**, **<**, and **!**.

## Destination

If you want to filter calls to a specific, known destination, type the name of the destination in the text box provided. This filter accepts the **!** and **\*** symbols for excluding values and specifying partial matches, respectively.

For example, if you wanted to exclude all calls to France, you could enter **!France\***, as shown below:

Destination	<input type="text" value="!France*"/>	
-------------	---------------------------------------	--

## Dialled number

To filter calls to a specific dialled number, type it in the text box provided. The dialled number is defined as the number that is dialled (in the case of an outbound call), or the DDI number that the remote party dialled to reach a particular extension or group (in the case of an inbound call).

To filter calls to a specific area, a partial number can be entered (e.g. **0033** for calls to France).

Dialled number	<input type="text" value="0033"/>	
----------------	-----------------------------------	---

You can use the **!** symbol to explicitly exclude a dialled number from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls to Tri-Line, but include all others, you could use **!020726526\***. To report on more than one dialled number, use a comma to separate each entry.

## Duration

To filter calls above or below a particular duration, enter the desired duration in seconds.

Duration	<input type="text" value="&gt;1800"/>	
----------	---------------------------------------	---

You can specify a duration range by using the **-** symbol; to specify limits, use the comparison operators, **>**, **<**, and **!**.

In the above example, the report will return only calls longer than 1800 seconds (30 minutes).

## LCR code

To filter your results to include only calls that used a Least Cost Routing (LCR) code, enter it in the text box provided.

LCR code	<input type="text" value="162"/>	
----------	----------------------------------	---

You can use the **!** symbol to explicitly exclude a LCR code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using all LCR codes beginning **162**, you could enter **!162\***. To report on more than one LCR code, use a comma to separate each entry.

### Response

This option allows you to filter calls based on their response time, measured in seconds. Specify the desired response time threshold in the text box provided.

Response time	>10	
---------------	-----	---


In the above example, the search results will display calls that have a response time greater than 10 seconds.

You can specify a response time range by using the **-** symbol and; to specify limits, use the comparison operators, **>**, **<**, and **!**.

### Start time

This option allows you to filter calls based on the time the call started. Specify the start time in the text box provided using the **hh:mm:ss** format.

For example, to include only calls that began after 10 am, you could enter **10:00:00** in the **Start time** field, as shown below:

Start time	10:00:00	
------------	----------	---

### Trunk access code

If your telephone system uses trunk access codes to connect calls using specific channels, you can limit your report's results to include only calls made using those codes. Specify the trunk access code in the text box provided.

Trunk access code	9	
-------------------	---	--







You can use the **!** symbol to explicitly exclude a trunk access code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using the **9** trunk access code, you could enter **!9**. To report on more than one trunk access code, use a comma to separate each entry.


### Selecting the report options


This section enables you to further narrow down your report results, by excluding certain types of calls. It also allows you to sort the report's results in a particular manner.


#### Options

Specify one or more of any additional report options shown here.

- Exclude weekends 
- Exclude transfers 
- Summary only 
- Don't replace numbers with contact names 
- Hide unused 
- Hide charges 


Sort order:  

Sort results by:  

Group calls by:  


### Exclude weekends

To exclude weekend calls from your report's results, select the **Exclude weekends** option.

Exclude weekends 


#### Exclude transfers

To exclude transferred calls from your report's results, select the **Exclude transfers** option.

Exclude transfers 

#### Summary only

To show only a summary of calls, instead of an itemised list, tick the box **Summary only**, as shown below:

Summary only 


#### Don't replace numbers with contact names

Tick this option if you do not want to replace dialled numbers, CLIs and account codes with their associated names, as defined in your web user's contacts list.

Don't replace numbers with contact names 


#### Hide unused

To exclude unused extensions from your report's results, select the **Hide unused** option.

Hide unused 

#### Hide charges

To hide the charges applied to this report, select the **Hide charges** option:

Hide charges 

#### Sort order

Choose from the **Sort order** drop-down list whether you want the results of the report to appear in ascending or descending order.

Sort order  

#### Sort results by

To sort your report's results by a particular column, select it from the **Sort results by** drop-down list.

Sort results by  

#### Group calls by

Choose from the **Group calls by** drop-down list how you want to group your results:

Group calls by  

## Selecting the report format

This section allows you to choose the media format of your completed report. The formats available are [Web](#), [PDF](#), [Excel](#), [CSV](#) and [XML](#).

More details about each report format are available in the [Setting the report format](#) section above.

## Creating the report

When you have selected a reporting period and have chosen any filters and options, you can either run the report immediately by clicking on the [Run now](#) button, or schedule it for future delivery.

**Your report is ready to run**

Select the format that you want your report to be in.

You can now either run the report immediately, or schedule it to run once, or at regular intervals, in the future.

Report format

Web ▼

Run now

Schedule for later

## The report's results

Below is an example of this report's output in [Web](#) format. By clicking on the [About this report](#) link at the top-right corner of the page, you can review any filters and options that have been applied to the report.

My phone bill				2012-05-17 16:17:44	
<a href="#">↑</a> \ <a href="#">TIM Plus</a> \ <a href="#">London</a> \ <a href="#">Accounts</a> \				<a href="#">About this report</a>	
<b>Mary Quant (4329)</b>					
Call charges					
Date & time ▲	Dialled number	Destination	Duration	Cost	
02/03/2012 14:50:26	07904910757	T-Mobile	00:01:30	0.195	
03/03/2012 14:50:26	07904910757	T-Mobile	00:00:34	0.074	
05/03/2012 14:50:26	07904691257	T-Mobile	00:00:58	0.126	
07/03/2012 14:50:26	07904691337	T-Mobile	00:00:11	0.030	
08/03/2012 14:50:26	07904028757	T-Mobile	00:01:42	0.221	
10/03/2012 14:50:26	07904671427	T-Mobile	00:01:58	0.256	
11/03/2012 14:50:26	07904910757	T-Mobile	00:01:11	0.154	
19/03/2012 14:50:26	07904390957	T-Mobile	00:00:03	0.030	
19/03/2012 14:50:26	07904910757	T-Mobile	00:01:37	0.210	
22/03/2012 14:50:26	07904910757	T-Mobile	00:00:16	0.035	
23/03/2012 14:50:26	07904910757	T-Mobile	00:02:00	0.260	
<b>11 calls</b>			<b>00:12:00</b>	<b>1.591</b>	
<b>Subtotal</b>				<b>1.590</b>	

## Summary of bill

<b>Bill total</b>	<b>572.06</b>
Tax (20.0%)	114.41
<b>Total payable</b>	<b>686.47</b>

As with all reports produced by TIM Plus, each page of the report includes the following information:



- the report's title
- the date and time that the report was generated
- the name of the report, if applicable

The **web** format is the most interactive of all formats: all column headers are click-sortable and most graphical and tabular elements can be drilled down into, allowing deeper analysis of your results.

The body of the report consists of an itemised call list for each billed user. Each itemised list has the following column headers:

Header	Description
<b>Date &amp; Time</b>	The date and time the call started.
<b>Dialled number</b>	The telephone number that was dialled.
<b>Destination</b>	The location name associated with the dialled number.
<b>Duration</b>	The total time spent on the call, in <b>hh:mm:ss</b> format.
<b>Cost</b>	The cost of the call(s).
<b>Subtotal</b>	The total cost of all outgoing calls for each user.
<b>Bill total</b>	The total cost of all outgoing calls for all users.
<b>Tax</b>	The sales tax to apply to the bill (if applicable).
<b>Total payable</b>	The total amount payable, including taxes.

To modify your report to cover a larger organisational scope, click on an element of the breadcrumb as shown below:



## Random Call Selection

**The Random Call Selection report**

- Introduction
- Running the report
- Creating the report
- The report's results

### Introduction

The Random Call Selection report is useful for obtaining a sample of phone calls from across your organisation for the purposes of call auditing and quality control, especially when coupled with the integrated call recording features of TIM Plus. **YOU CAN** annotate, score, or listen to any of the calls that appear in the report's results.

My random call selection
2012-05-17 16:14:30

[Home](#) \ [TIM Plus](#) \ [London](#) \ [Accounts](#) \
 
About this report

All	Outbound	Answered	Missed	Internal			
Date & Time	Source	CLI	Route	Destination	Response	Duration	Cost
2012-03-01 15:15:43	London	02072998500	-	Tom Morrow	-	00:00:02	-
2012-03-02 08:50:06	Jean Poole	-	2062	Adam Zapel	-	00:00:44	-
2012-03-02 15:08:26	T-Mobile	07957218628	-	Claire Annette	-	00:00:10	-
2012-03-05 18:20:58	UNAVAILABLE	-	-	Tom Katz	-	00:01:02	-
2012-03-06 09:29:18	London	02073368085	-	Tom Morrow	-	00:08:43	-
2012-03-06 14:22:13	Hutchison 3G	07861384392	-	Susan Travis	12	00:02:09	-
2012-03-07 10:17:56	UNAVAILABLE	-	-	Tom Morrow	-	00:04:09	-
2012-03-07 10:53:28	Vodafone	07798607843	-	Tom Morrow	-	00:00:26	-
2012-03-07 11:09:03	London	02073836420	-	Claire Annette	-	00:01:26	-
2012-03-07 18:37:58	Adam Zapel	-	07779599573	Orange	-	00:00:01	0.030
2012-03-07 20:33:43	Ajith Tarasinghe	-	07930410804	T-Mobile	-	00:00:40	0.087
2012-03-08 08:50:06	Jean Poole	-	2062	Adam Zapel	-	00:01:16	-
2012-03-08 23:42:46	T-Mobile	07961749227	-	Ajith Tarasinghe	-	00:01:45	-
2012-03-09 07:48:28	Orange	07977404409	-	Cheri Pitts	-	00:02:42	-
2012-03-09 08:48:26	London	02078376433	-	Tanya Burrell	8	00:00:11	-
2012-03-09 10:50:23	London	02079018300	-	Cheri Pitts	-	00:02:08	-
2012-03-10 08:50:06	Jean Poole	-	2062	Adam Zapel	-	00:00:10	-
2012-03-10 15:31:56	Adam Zapel	-	02074372526	London	-	00:00:17	0.030
2012-03-10 17:08:18	London	02077935870	-	Tom Morrow	-	00:01:29	-
2012-03-11 01:00:56	London	02070108086	-	Tom Morrow	-	00:00:30	-
2012-03-11 09:14:48	Adam Zapel	-	07717813220	Vodafone	-	00:00:09	0.030
2012-03-13 09:26:38	London	02073076700	-	Cheri Pitts	-	00:01:19	-
2012-03-13 17:40:58	London	02073230660	-	Tom Katz	-	00:00:46	-
2012-03-14 10:17:56	UNAVAILABLE	-	-	Tom Morrow	-	00:00:14	-
2012-03-14 10:36:18	Adam Zapel	-	02077584475	London	-	00:00:06	0.030
2012-03-14 17:33:56	London	02071585500	-	Tom Katz	-	00:01:19	-
2012-03-14 22:01:41	London	02072263521	-	Tom Morrow	-	00:04:11	-
2012-03-15 09:59:51	Claire Annette	-	2071	Lance Boyle	-	00:01:04	-
2012-03-16 01:02:16	Adam Zapel	-	07779715284	Orange	-	00:00:39	0.085

## Running the report

On the Reports screen, select the Random call selection report from the left-hand pane and click the **Select this report** button.

TIMPLUS

[Reports](#) | [Directory](#) | [Call view](#) | [Live stats](#) | [Tariff editor](#) | [Settings](#) | [Alerts](#)

### Reports

- Account summary
- Busy channels
- Busy times
- Call analysis
- Call geography
- Call scoring
- Call volumes
- Custom report
- Daily activity
- Enterprise overview
- Frequent numbers
- Inbound call performance
- Missed calls
- Phone bill
- Random call selection
- Target response
- Top calls
- Unused devices

### Random call selection

When used in conjunction with call recording, this report provides a perfect tool to select calls at random for spot-checking purposes.

Annotate, score, or listen to each of the calls that the report produces.

Select this report

A new window will appear, where you can set the parameters of your report.

## Selecting the reporting period

For each report, you must specify a time span that covers the calls you want the report to include. This is known as the "reporting period".

### Select a reporting period

Define the period you want the report to encompass.

Remember, you can always filter your results later, so choose a big enough period.

Period

From date

To date

From time

To time

Yesterday  
**Today**  
 Yesterday  
 This week  
 Last week  
 This month  
 Last month  
 This year  
 All calls  
 Custom period

There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table describes how the start and end times are defined for each preset period:

Period	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This week</b>	The start date is set to the first day of the current week (normally Monday). The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.

In addition to the presets described above, it is possible to specify a custom reporting period by choosing **Custom period** from the **Period** drop-down list and specifying your own **Start date**, **Start time**, **End date** and **End time** of the period you want to report on.

Period Custom period

From date 01 Jul 2011

To date 14 Feb 2013

From time 00 : 00 : 00

To time 23 : 59 : 59

Once you have set the reporting period, click on the **Next** button to set additional report parameters and options, or select the **Finish** button to run the report immediately.




## Selecting the reporting entity

The **Reporting entity** parameter allows you to select the part of your organisation whose calls the report should include, e.g. a site, a group or an individual user.

### Choose a reporting entity

Select a specific section of your organisation whose calls will feature in the report. To run the report across your entire organisation, select **(All sites)**.


Alternatively, select a specific site, user group, channel group, individual user or channel.

Site	<input type="text" value="(All sites)"/>	
Group	<input type="text"/>	
User	<input type="text"/>	

### Site

To report on a particular site, select it from the drop-down list or select **All sites**.


Site



### Group

If a site has been selected, you are able to further limit the report's results by selecting a group from the drop-down list.


Group



### User

If both a site and group have been selected, you can further limit the report's results to include only calls involving a particular user, by selecting that user from the drop-down list.

User

















If your web account is restricted to a specific site or group, only those entities to which you have access will be available in the drop-down lists.

Once you have selected the scope of your report, click on the **Next** button to set additional report parameters and options, or to run the report immediately, click the **Finish** button.

## Selecting the report filters


You can limit the results of your report by choosing one or more of the following filters:

**Filter the results of the report**

Account code	<input type="text"/>		Dialled number	<input type="text"/>	
Call type	<input type="text" value="All calls"/>		Duration	<input type="text"/>	
Carrier	<input type="text" value="(All carriers)"/>		LCR code	<input type="text"/>	
CLI	<input type="text"/>		Response	<input type="text"/>	
Cost	<input type="text"/>		Start time	<input type="text"/>	
Destination	<input type="text"/>		Trunk access code	<input type="text"/>	

#### Account code


To produce a report consisting only of calls that were made using a particular account code, enter the account code in the field provided.

Account code  

To report on more than one account code, separate each code using a comma.


#### Call type


This filter allows you to define the type of call you want to report on, in terms of where the call originated and where it was delivered, e.g. incoming, outgoing, internal, etc. To report on all types of call, set this to **All calls**.

Call type  

#### Carrier

If you use more than one carrier, you can limit the results to include only calls that were made using a specific carrier.

Carrier  

 If you use only one carrier, there will be no drop-down list available and no option to choose a carrier.

#### CLI

Calling Line Identification (CLI) is the telephone number of the remote caller in an incoming call scenario.

You can report on calls that originate from a specific CLI or those whose CLI matches a particular pattern of digits. For example, to report on all incoming calls from Tri-Line, you could enter **02072652600**.

CLI  

You can use the **!** symbol to explicitly exclude a CLI from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls from Tri-Line, but include all others, you could use **!020726526\***. To report on more than one CLI, use a comma to separate each entry.

#### Cost

You can define a cost filter to include calls above or below specific values by entering your criteria, as shown below:

Cost <2.00 

You can specify a cost range by using the – symbol; to specify limits, use the comparison operators, >, <, and ! .

### Destination

If you want to filter calls to a specific, known destination, type the name of the destination in the text box provided. This filter accepts the ! and \* symbols for excluding values and specifying partial matches, respectively.

For example, if you wanted to exclude all calls to France, you could enter !France\*, as shown below:

Destination !France\* 

### Dialled number

To filter calls to a specific dialled number, type it in the text box provided. The dialled number is defined as the number that is dialled (in the case of an outbound call), or the DDI number that the remote party dialled to reach a particular extension or group (in the case of an inbound call).

To filter calls to a specific area, a partial number can be entered (e.g. 0033 for calls to France).

Dialled number 0033 

You can use the ! symbol to explicitly exclude a dialled number from the report's results, and/or the \* symbol as a wildcard in digit pattern matching. For example, to exclude calls to Tri-Line, but include all others, you could use !020726526\*. To report on more than one dialled number, use a comma to separate each entry.

### Duration

To filter calls above or below a particular duration, enter the desired duration in seconds.

Duration >1800 

You can specify a duration range by using the – symbol; to specify limits, use the comparison operators, >, <, and ! .

In the above example, the report will return only calls longer than 1800 seconds (30 minutes).

### LCR code


To filter your results to include only calls that used a Least Cost Routing (LCR) code, enter it in the text box provided.

LCR code 162 

You can use the ! symbol to explicitly exclude a LCR code from the report's results, and/or the \* symbol as a wildcard in digit pattern matching. For example, to exclude calls made using all LCR codes beginning 162, you could enter !162\*. To report on more than one LCR code, use a comma to separate each entry.

### Response

This option allows you to filter calls based on their response time, measured in seconds. Specify the desired response time threshold in the text box provided.

Response time >10 


In the above example, the search results will display calls that have a response time greater than 10 seconds.

You can specify a response time range by using the – symbol and; to specify limits, use the comparison operators, >, <, and ! .

### Start time

This option allows you to filter calls based on the time the call started. Specify the start time in the text box provided using the hh:m m:ss format.

For example, to include only calls that began after 10 am, you could enter **10:00:00** in the **Start time** field, as shown below:

Start time	<input type="text" value="10:00:00"/>	
------------	---------------------------------------	---

#### Trunk access code

If your telephone system uses trunk access codes to connect calls using specific channels, you can limit your report's results to include only calls made using those codes. Specify the trunk access code in the text box provided.

Trunk access code	<input type="text" value="9"/>	
-------------------	--------------------------------	---






You can use the **!** symbol to explicitly exclude a trunk access code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using the **9** trunk access code, you could enter **!9**. To report on more than one trunk access code, use a comma to separate each entry.


#### Selecting the report options


This section enables you to further narrow down your report results, by excluding certain types of calls. It also allows you to sort the report's results in a particular manner.


### Options

Specify one or more of any additional report options shown here.

- Don't replace numbers with contact names 
- Show account codes 
- Notes only 
- Audio only 
- Scored only 


Maximum results  

Sort order  

Sort results by  


#### Don't replace numbers with contact names

Tick this option if you do not want to replace dialled numbers, CLIs and account codes with their associated names, as defined in your web user's contacts list.

<input checked="" type="checkbox"/> Don't replace numbers with contact names 
--


#### Show account codes

Select this option if you would like to display any associated account codes as an additional column in this report.

<input checked="" type="checkbox"/> Show account codes 
--


#### Notes only

Tick this option if you want your search results to include only calls that have notes associated with them.

<input checked="" type="checkbox"/> Notes only 
--


#### Audio only

Tick this option if you want your search results to include only calls that have an associated voice recording.

 Audio only 

#### Scored only

Tick this option to include only calls that have been previously scored.

 Scored only 


#### Maximum results

To limit the report's results, enter the maximum number of results you want the report to display in the **Maximum results** option, e.g. if you enter **50** in the text box provided, only 50 results will be displayed.


#### Sort order

Choose from the **Sort order** drop-down list whether you want the results of your report to appear in ascending or descending order.

#### Sort results by

To sort your report's results by a particular column, select it from the **Sort results by** drop-down list.

#### Selecting the report format

This section allows you to choose the media format of your completed report. The formats available are **Web**, **PDF**, **Excel**, **CSV** and **XML**.

More details about each report format are available in the [Setting the report format](#) section above.

#### Creating the report

When you have selected a reporting period and have chosen any filters and options, you can either run the report immediately by clicking on the **Run now** button, or schedule it for future delivery.

**Your report is ready to run**

Select the format that you want your report to be in. Report format

You can now either run the report immediately, or schedule it to run once, or at regular intervals, in the future.

#### The report's results



Below is an example of this report's output in web format. By clicking on the [About this report](#) link at the top-right corner of the page, you can review any filters and options that have been applied to the report.

My random call selection							2012-05-17 16:14:30	
<a href="#">↑</a> \ TIM Plus \ London \ Accounts \							<a href="#">About this report</a>	
All	Outbound	Answered	Missed	Internal				
Date & Time ▲	Source	CLI	Route	Destination	Response	Duration	Cost	
2012-03-01 15:15:43	London	02072998500	-	Tom Morrow	-	00:00:02	-	🔍
2012-03-02 08:50:06	Jean Poole	-	2062	Adam Zapel	-	00:00:44	-	🔍
2012-03-02 15:08:26	T-Mobile	07957218628	-	Claire Annette	-	00:00:10	-	🔍
2012-03-05 18:20:58	UNAVAILABLE	-	-	Tom Katz	-	00:01:02	-	🔍
2012-03-06 09:29:18	London	02073368085	-	Tom Morrow	-	00:08:43	-	🔍
2012-03-06 14:22:13	Hutchison 3G	07861384392	-	Susan Travis	12	00:02:09	-	🔍
2012-03-07 10:17:56	UNAVAILABLE	-	-	Tom Morrow	-	00:04:09	-	🔍
2012-03-07 10:53:28	Vodafone	07798607843	-	Tom Morrow	-	00:00:26	-	🔍
2012-03-07 11:09:03	London	02073836420	-	Claire Annette	-	00:01:26	-	🔍
2012-03-07 18:37:58	Adam Zapel	-	07779599573	Orange	-	00:00:01	0.030	🔍
2012-03-07 20:33:43	Ajith Tarasinghe	-	07930410804	T-Mobile	-	00:00:40	0.087	🔍
2012-03-08 08:50:06	Jean Poole	-	2062	Adam Zapel	-	00:01:16	-	🔍
2012-03-08 23:42:46	T-Mobile	07961749227	-	Ajith Tarasinghe	-	00:01:45	-	🔍
2012-03-09 07:48:28	Orange	07977404409	-	Cheri Pitts	-	00:02:42	-	🔍
2012-03-09 08:48:26	London	02078376433	-	Tanya Burrell	8	00:00:11	-	🔍
2012-03-09 10:50:23	London	02079018300	-	Cheri Pitts	-	00:02:08	-	🔍
2012-03-10 08:50:06	Jean Poole	-	2062	Adam Zapel	-	00:00:10	-	🔍
2012-03-10 15:31:56	Adam Zapel	-	02074372526	London	-	00:00:17	0.030	🔍
2012-03-10 17:08:18	London	02077935870	-	Tom Morrow	-	00:01:29	-	🔍
2012-03-11 01:00:56	London	02070108086	-	Tom Morrow	-	00:00:30	-	🔍
2012-03-11 09:14:48	Adam Zapel	-	07717813220	Vodafone	-	00:00:09	0.030	🔍
2012-03-13 09:26:38	London	02073076700	-	Cheri Pitts	-	00:01:19	-	🔍
2012-03-13 17:40:58	London	02073230660	-	Tom Katz	-	00:00:46	-	🔍
2012-03-14 10:17:56	UNAVAILABLE	-	-	Tom Morrow	-	00:00:14	-	🔍
2012-03-14 10:36:18	Adam Zapel	-	02077584475	London	-	00:00:06	0.030	🔍
2012-03-14 17:33:56	London	02071585500	-	Tom Katz	-	00:01:19	-	🔍
2012-03-14 22:01:41	London	02072263521	-	Tom Morrow	-	00:04:11	-	🔍
2012-03-15 09:59:51	Claire Annette	-	2071	Lance Boyle	-	00:01:04	-	🔍
2012-03-16 01:02:16	Adam Zapel	-	07779715284	Orange	-	00:00:39	0.085	🔍

As with all reports produced by TIM Plus, each page of the report includes the following information:

- the report's title
- the date and time that the report was generated
- the name of the report, if applicable

The web format is the most interactive of all formats: all column headers are click-sortable and most graphical and tabular elements can be drilled down into, allowing deeper analysis of your results.

The body of the report consists of a table showing a randomly-chosen summary of calls for the period you selected. Each column header of the table is described below:

Header	Description
<b>Date &amp; Time</b>	The date and time the call started.
<b>Source</b>	The place from where the call originated.
<b>CLI</b>	The telephone number of the remote caller, for inbound calls.
<b>Route</b>	<p>The information displayed in this field is determined by the type of call:</p> <ul style="list-style-type: none"> <li>▪ for incoming calls, this shows the CLI of the caller;</li> <li>▪ for incoming internal calls, this shows either the caller's username or extension number;</li> <li>▪ for outgoing calls, this shows the dialled number.</li> </ul>

<b>Destination</b>	<p>The information displayed in this field is determined by the type of call:</p> <ul style="list-style-type: none"> <li>for incoming calls, this shows the name of the user whose extension answered the call, or the extension number if not available;</li> <li>for outgoing calls, this shows the geographical location that was dialled, or an alias if defined in your contacts list;</li> <li>for internal calls, this shows the extension that was dialled, enclosed in square brackets [ ].</li> </ul>
<b>Response</b>	The length of time it took for the call to be answered (i.e. the response time).
<b>Duration</b>	The duration of the call (in hours, minutes and seconds).
<b>Cost</b>	The cost of the call.

To modify your report to cover a larger organisational scope, click on an element of the breadcrumb as shown below:

[Home](#) \ [TIM Plus](#) \ **London** \ [Accounts](#) \ [About this report](#)

## Target Response

**The Target Response report**

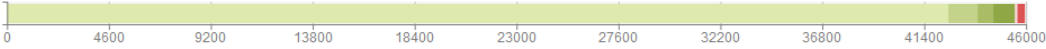
- Introduction
- Running the report
- Creating the report
- The report's results

### Introduction

The Target Response report enables you to assess how well calls to your company are answered, compared to user-defined targets. The report provides a visual representation as well as a line-by-line summary of the proportion of calls answered inside and outside your set targets.

My target response
2012-05-17 16:30:43

Home \ TIM Plus \
About this report

London 

Number of calls

Name ▲	Answered						Missed					
	Σ	Avg resp	0 - 5 s	6 - 10 s	11 - 15 s	> 15 s	Σ	Avg durn	0 - 5 s	6 - 10 s	11 - 15 s	> 15 s
London	45672	1	93%	3%	2%	2%	465	37	22%	7%	6%	65%
1 items	45672	1	93%	3%	2%	2%	465	37	22%	7%	6%	65%

## Running the report

On the Reports screen, select the Target response report from the left-hand pane and click the **Select this report** button.

The screenshot shows the TIMPLUS Reports interface. On the left, a navigation pane lists various report categories, with 'Target response' highlighted. The main area displays the 'Target response' report, which includes a bar chart showing call performance over time and a table with columns for 'Answered' and 'Missed' calls. A 'Select this report' button is located on the right side of the report preview.

A new window will appear, where you can set the parameters of your report.

### Selecting the reporting period

For each report, you must specify a time span that covers the calls you want the report to include. This is known as the "reporting period".

The 'Select a reporting period' dialog box provides instructions on defining the reporting period. It includes a dropdown menu with the following options: Yesterday, Today, Yesterday, This week, Last week, This month, Last month, This year, All calls, and Custom period. The 'Today' option is currently selected.

There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table describes how the start and end times are defined for each preset period:

Period	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This week</b>	The start date is set to the first day of the current week (normally Monday). The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to 00:00:00 and the end time to 23:59:59.

<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.

In addition to the presets described above, it is possible to specify a custom reporting period by choosing **Custom period** from the **Period** drop-down list and specifying your own **Start date**, **Start time**, **End date** and **End time** of the period you want to report on.

Period	Custom period	
From date	01 Jul 2011	
To date	14 Feb 2013	
From time	00 : 00 : 00	
To time	23 : 59 : 59	

Once you have set the reporting period, click on the **Next** button to set additional report parameters and options, or select the **Finish** button to run the report immediately.




### Selecting the reporting entity

The **Reporting entity** parameter allows you to select the part of your organisation whose calls the report should include, e.g. a site, a group or an individual user.

#### Choose a reporting entity


Select a specific section of your organisation whose calls will feature in the report. To run the report across your entire organisation, select **(All sites)**.

Alternatively, select a specific site, user group, channel group, individual user or channel.

Site	(All sites)	
Group		
User		


#### Site

To report on a particular site, select it from the drop-down list or select **All sites**.

Site	All sites	
------	-----------	---


#### Group

If a site has been selected, you are able to further limit the report's results by selecting a group from the drop-down list.

Group	All groups	
-------	------------	---

## User

If both a site and group have been selected, you can further limit the report's results to include only calls involving a particular user, by selecting that user from the drop-down list.

User  















If your web account is restricted to a specific site or group, only those entities to which you have access will be available in the drop-down lists.

Once you have selected the scope of your report, click on the **Next** button to set additional report parameters and options, or to run the report immediately, click the **Finish** button.

## Selecting the report filters

You can limit the results of your report by choosing one or more of the following filters:

Filter the results of the report

Account code	<input type="text"/>		Dialled number	<input type="text"/>	
Call type	<input type="text" value="All calls"/>		Duration	<input type="text"/>	
Carrier	<input type="text" value="(All carriers)"/>		LCR code	<input type="text"/>	
CLI	<input type="text"/>		Response	<input type="text"/>	
Cost	<input type="text"/>		Start time	<input type="text"/>	
Destination	<input type="text"/>		Trunk access code	<input type="text"/>	

### Account code


To produce a report consisting only of calls that were made using a particular account code, enter the account code in the field provided.

Account code  

To report on more than one account code, separate each code using a comma.


### Call type

This filter allows you to define the type of call you want to report on, in terms of where the call originated and where it was delivered, e.g. incoming, outgoing, internal, etc. To report on all types of call, set this to **All calls**.

Call type  

### Carrier

If you use more than one carrier, you can limit the results to include only calls that were made using a specific carrier.

Carrier  



If you use only one carrier, there will be no drop-down list available and no option to choose a carrier.

## CLI

Calling Line Identification (CLI) is the telephone number of the remote caller in an incoming call scenario.

You can report on calls that originate from a specific CLI or those whose CLI matches a particular pattern of digits. For example, to report on all incoming calls from Tri-Line, you could enter **02072652600**.

CLI	<input type="text" value="02072652600"/>	
-----	--	--

You can use the **!** symbol to explicitly exclude a CLI from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls from Tri-Line, but include all others, you could use **!020726526\***. To report on more than one CLI, use a comma to separate each entry.

## Cost

You can define a cost filter to include calls above or below specific values by entering your criteria, as shown below:

Cost	<input type="text" value="&lt;2.00"/>	
------	---------------------------------------	--

You can specify a cost range by using the **-** symbol; to specify limits, use the comparison operators, **>**, **<**, and **!**.

## Destination

If you want to filter calls to a specific, known destination, type the name of the destination in the text box provided. This filter accepts the **!** and **\*** symbols for excluding values and specifying partial matches, respectively.

For example, if you wanted to exclude all calls to France, you could enter **!France\***, as shown below:

Destination	<input type="text" value="!France*"/>	
-------------	---------------------------------------	--

## Dialled number

To filter calls to a specific dialled number, type it in the text box provided. The dialled number is defined as the number that is dialled (in the case of an outbound call), or the DDI number that the remote party dialled to reach a particular extension or group (in the case of an inbound call).

To filter calls to a specific area, a partial number can be entered (e.g. **0033** for calls to France).

Dialled number	<input type="text" value="0033"/>	
----------------	-----------------------------------	--

You can use the **!** symbol to explicitly exclude a dialled number from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls to Tri-Line, but include all others, you could use **!020726526\***. To report on more than one dialled number, use a comma to separate each entry.

## Duration

To filter calls above or below a particular duration, enter the desired duration in seconds.

Duration	<input type="text" value="&gt;1800"/>	
----------	---------------------------------------	--

You can specify a duration range by using the **-** symbol; to specify limits, use the comparison operators, **>**, **<**, and **!**.

In the above example, the report will return only calls longer than 1800 seconds (30 minutes).

### LCR code

To filter your results to include only calls that used a Least Cost Routing (LCR) code, enter it in the text box provided.

LCR code	<input type="text" value="162"/>	
----------	----------------------------------	---

You can use the **!** symbol to explicitly exclude a LCR code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using all LCR codes beginning **162**, you could enter **!162\***. To report on more than one LCR code, use a comma to separate each entry.

### Response

This option allows you to filter calls based on their response time, measured in seconds. Specify the desired response time threshold in the text box provided.

Response time	<input type="text" value="&gt;10"/>	
---------------	-------------------------------------	---


In the above example, the search results will display calls that have a response time greater than 10 seconds.

You can specify a response time range by using the **-** symbol and; to specify limits, use the comparison operators, **>**, **<**, and **!**.

### Start time

This option allows you to filter calls based on the time the call started. Specify the start time in the text box provided using the **hh:mm:ss** format.

For example, to include only calls that began after 10 am, you could enter **10:00:00** in the **start time** field, as shown below:

Start time	<input type="text" value="10:00:00"/>	
------------	---------------------------------------	--

### Trunk access code

If your telephone system uses trunk access codes to connect calls using specific channels, you can limit your report's results to include only calls made using those codes. Specify the trunk access code in the text box provided.

Trunk access code	<input type="text" value="9"/>	
-------------------	--------------------------------	---


You can use the **!** symbol to explicitly exclude a trunk access code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using the **9** trunk access code, you could enter **!9**. To report on more than one trunk access code, use a comma to separate each entry.


### Selecting the report options


This section enables you to further narrow down your report results, by excluding certain types of calls. It also allows you to sort the report's results in a particular manner.


## Options


Specify one or more of any additional report options shown here.


Exclude weekends 


Exclude transfers 


Hide unused 

Include internal 

Thresholds  


Sort order  

Sort results by  

Ignore missed calls shorter than  seconds 


### Exclude weekends

To exclude weekend calls from your report's results, select the **Exclude weekends** option.

Exclude weekends 


### Exclude transfers

To exclude transferred calls from your report's results, select the **Exclude transfers** option.

Exclude transfers 


### Hide unused

To exclude unused extensions from your report's results, select the **Hide unused** option.

Hide unused 

### Include internal

Tick this box if you want to include internal calls in your report's results.

Include internal 


### Thresholds

Use this option to define your response time target thresholds. The example below shows response time targets of 5, 10 and 20 seconds.

Thresholds  

### Sort order


Choose from the **Sort order** drop-down list whether you want the results of your report to appear in ascending or descending order.

Sort order  



### Sort results by

To sort your report's results by a particular column, select it from the **Sort results by** drop-down list.

Sort results by  

### Ignore short missed calls

Missed calls below a certain duration can sometimes pollute the meaning of a report's results. To exclude such short calls from your report, enter a duration threshold in the text box provided, e.g. to ignore calls below 3 seconds, enter **3**.

## Selecting the report format

This section allows you to choose the media format of your completed report. The formats available are **Web**, **PDF**, **Excel**, **CSV** and **XML**.

More details about each report format are available in the [Setting the report format](#) section above.

## Creating the report

When you have selected a reporting period and have chosen any filters and options, you can either run the report immediately by clicking on the **Run now** button, or [schedule it for future delivery](#).

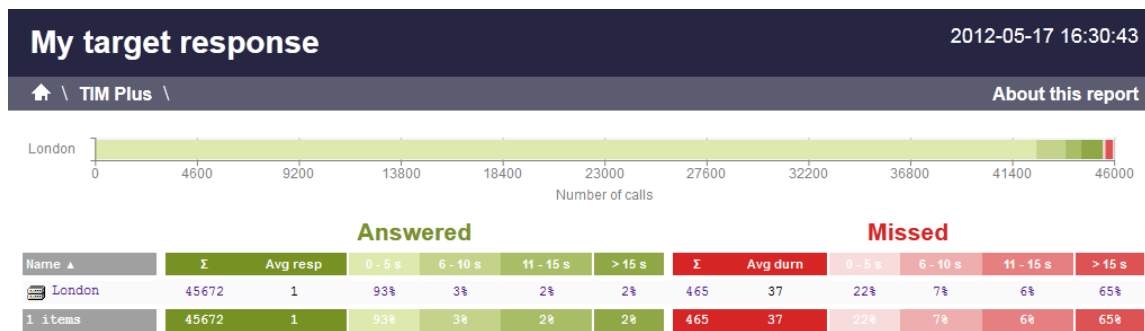
**Your report is ready to run**

Select the format that you want your report to be in. Report format

You can now either run the report immediately, or schedule it to run once, or at regular intervals, in the future.

## The report's results

Below is an example of this report's output in **web** format. By clicking on the **About this report** link at the top-right corner of the page, you can review any filters and options that have been applied to the report.



As with all reports produced by TIM Plus, each page of the report includes the following information:

- the report's title
- the date and time that the report was generated

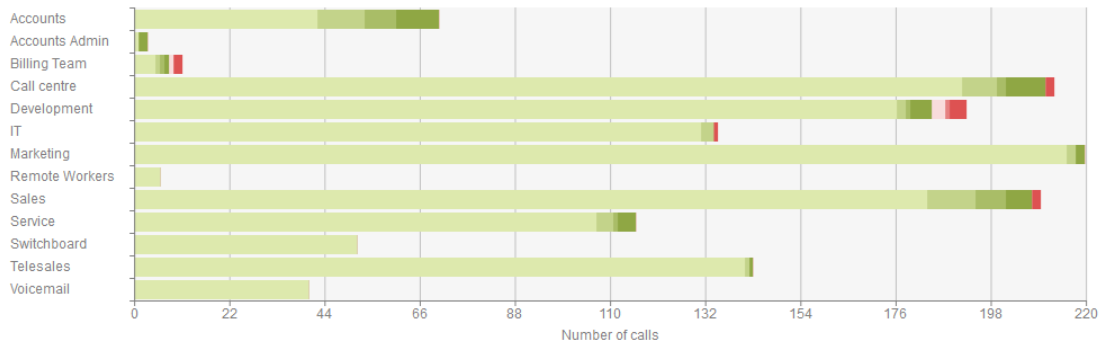
- the name of the report, if applicable

The **web** format is the most interactive of all formats: all column headers are click-sortable and most graphical and tabular elements can be drilled down into, allowing deeper analysis of your results.

The body of the report consists of a table showing a summary of call information for the period you selected, grouped by entity. Each column header of the table is described below:

Header	Description
<b>Name</b>	The name of the entity for each line of data
<b>Answered</b>	<ul style="list-style-type: none"> <li>▪ : The total volume of calls received for each entity</li> <li>▪ <b>Avg resp:</b> The average response time of all answered calls in each period</li> <li>▪ <b>x-xx s:</b> The percentage of calls that were answered within each predefined target, e.g. if <b>50%</b> is displayed under the <b>0-5s</b> heading, half of all calls were answered sooner than 5 seconds You can define your own thresholds in the <b>Options</b> section of the report wizard (above)</li> </ul>
<b>Missed</b>	<ul style="list-style-type: none"> <li>▪ : The total number of missed calls for each entity</li> <li>▪ <b>Avg durn:</b> The average length of time a missed call rang before being abandoned</li> <li>▪ <b>x-xx s:</b> The percentage of calls that were abandoned within each predefined target, e.g. if <b>50%</b> is displayed under the <b>0-5s</b> heading, half of all calls were abandoned sooner than 5 seconds You can define your own thresholds in the <b>Options</b> section of the report wizard (above)</li> </ul>

Each entity is shown as a hyperlink which, if clicked on, re-runs the report to include only call information pertaining to that entity, allowing you to inspect the performance of specific teams and individual users.



Name ▲	Answered						Missed					
	Σ	Avg resp	0 - 5 s	6 - 10 s	11 - 15 s	> 15 s	Σ	Avg durn	0 - 5 s	6 - 10 s	11 - 15 s	> 15 s
Accounts	70	9	60%	16%	10%	14%	-	-	-	-	-	-
Accounts Admin	3	19	33%	-	-	67%	-	-	-	-	-	-
Billing Team	8	7	63%	13%	13%	13%	3	28	33%	-	-	67%
Call centre	209	2	91%	4%	1%	4%	2	68	-	-	-	100%
Development	183	2	96%	1%	1%	3%	8	32	38%	-	13%	50%
IT	133	-	98%	2%	-	-	1	45	-	-	-	100%
Marketing	218	1	98%	1%	-	1%	-	-	-	-	-	-
Remote Workers	6	-	100%	-	-	-	-	-	-	-	-	-
Sales	206	2	88%	5%	3%	3%	2	83	-	-	-	100%
Service	115	2	92%	3%	1%	3%	-	-	-	-	-	-

To modify your report to cover a larger organisational scope, click on an element of the breadcrumb as shown below:

## Top Calls

**The Top Calls report**

- Introduction
- Running the report
- Creating the report
- The report's results

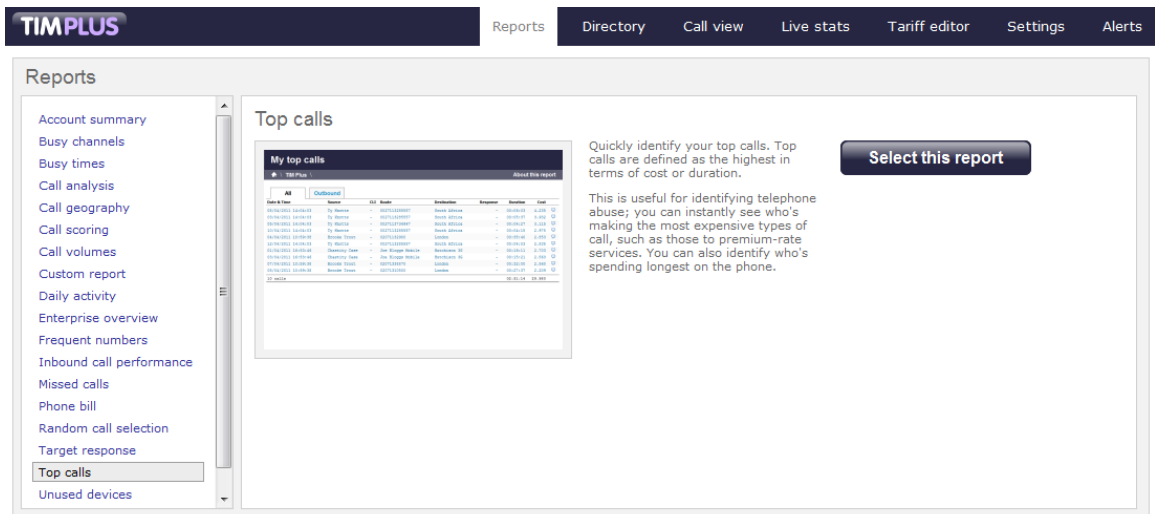
### Introduction

The Top Calls report is useful for discovering unusual calling patterns and identifying potential abuse, by highlighting the longest and most costly calls made by people in your organisation.

My top calls								2012-05-17 16:23:56
↑ \ TIM Plus \ London \ Accounts \								About this report
All		Outbound						
Date & Time	Source	CLI	Route	Destination	Response	Duration	Cost	
16/05/2012 17:32:06	Mika Stai	-	76414028	Local Call	-	00:11:17	1.128	
16/05/2012 16:14:38	Ming Xao	-	01702222638	Southend-on-Sea	-	00:03:40	0.367	
16/05/2012 13:41:28	Doug Hole	-	71892748	Local Call	-	00:02:16	0.227	
16/05/2012 13:46:01	Norma Leigh	-	72942005	Local Call	-	00:02:03	0.205	
16/05/2012 17:57:06	Norma Leigh	-	01753800800	Slough	-	00:02:02	0.203	
16/05/2012 12:55:36	Al Dente	-	02074054600	London	-	00:01:21	0.135	
16/05/2012 18:20:56	Pearl E White	-	07854180499	Orange	-	00:00:53	0.115	
16/05/2012 15:24:01	Duane Pipe	-	71162017	Local Call	-	00:00:58	0.097	
16/05/2012 11:58:43	Pearl E White	-	07955872193	O2	-	00:00:43	0.093	
16/05/2012 08:13:33	Easton West	-	07956961145	T-Mobile	-	00:00:41	0.089	
10 calls						00:25:54	2.659	

### Running the report

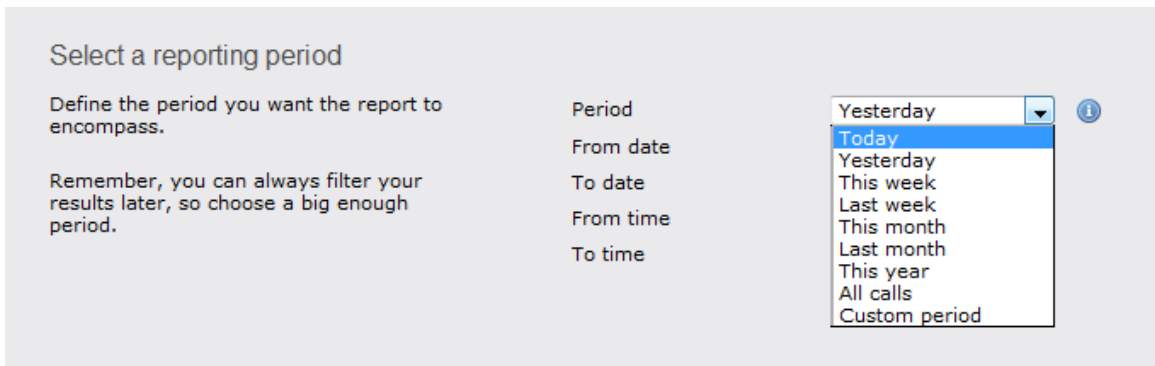
On the Reports screen, select the Top calls report from the left-hand pane and click the **Select this report** button.



A new window will appear, where you can set the parameters of your report.

### Selecting the reporting period


For each report, you must specify a time span that covers the calls you want the report to include. This is known as the "reporting period".



There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table describes how the start and end times are defined for each preset period:

Period	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This week</b>	The start date is set to the first day of the current week (normally Monday). The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.




In addition to the presets described above, it is possible to specify a custom reporting period by choosing **Custom period** from the **Period** drop-down list and specifying your own **Start date**, **Start time**, **End date** and **End time** of the period you want to report on.

Period	Custom period	
From date	01 Jul 2011	
To date	14 Feb 2013	
From time	00 : 00 : 00	
To time	23 : 59 : 59	

Once you have set the reporting period, click on the **Next** button to set additional report parameters and options, or select the **Finish** button to run the report immediately.


### Selecting the reporting entity

The **Reporting entity** parameter allows you to select the part of your organisation whose calls the report should include, e.g. a site, a group or an individual user.

<b>Choose a reporting entity</b>		
Select a specific section of your organisation whose calls will feature in the report. To run the report across your entire organisation, select <b>(All sites)</b> .	Site	(All sites) 
	Group	
Alternatively, select a specific site, user group, channel group, individual user or channel.	User	


## Site

To report on a particular site, select it from the drop-down list or select **All sites**.

Site	All sites	
------	-----------	---

## Group

If a site has been selected, you are able to further limit the report's results by selecting a group from the drop-down list.

Group	All groups	
-------	------------	---

## User

If both a site and group have been selected, you can further limit the report's results to include only calls involving a particular user, by selecting that user from the drop-down list.

User	All users	
------	-----------	---













If your web account is restricted to a specific site or group, only those entities to which you have access will be available in the drop-down lists.

Once you have selected the scope of your report, click on the **Next** button to set additional report parameters and options, or to run the report immediately, click the **Finish** button.


## Selecting the report filters

You can limit the results of your report by choosing one or more of the following filters:

Filter the results of the report					
Account code	<input type="text"/>		Dialled number	<input type="text"/>	
Call type	All calls		Duration	<input type="text"/>	
Carrier	(All carriers)		LCR code	<input type="text"/>	
CLI	<input type="text"/>		Response	<input type="text"/>	
			Start time	<input type="text"/>	
			Trunk access code	<input type="text"/>	

### Account code

To produce a report consisting only of calls that were made using a particular account code, enter the account code in the field provided.


Account code	0140	
--------------	------	---

To report on more than one account code, separate each code using a comma.

### Call type


This filter allows you to define the type of call you want to report on, in terms of where the call originated and where it was


delivered, e.g. incoming, outgoing, internal etc. To report on all types of call, set this to **All calls**.

Call type	All calls	
-----------	-----------	---

### Carrier

If you use more than one carrier, you can limit the results to include only calls that were made using a specific carrier.

Carrier	All carriers	
---------	--------------	---

 If you use only one carrier, there will be no drop-down list available and no option to choose a carrier.

### CLI

Calling Line Identification (CLI) is the telephone number of the remote caller in an incoming call scenario.

You can report on calls that originate from a specific CLI or those whose CLI matches a particular pattern of digits. For example, to report on all incoming calls from Tri-Line, you could enter **02072652600**.


CLI	02072652600	
-----	-------------	---

You can use the **!** symbol to explicitly exclude a CLI from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls from Tri-Line, but include all others, you could use **!020726526\***. To report on more than one CLI, use a comma to separate each entry.

### Dialled number

To filter calls to a specific dialled number, type it in the text box provided. The dialled number is defined as the number that is dialled (in the case of an outbound call), or the DDI number that the remote party dialled to reach a particular extension or group (in the case of an inbound call).

To filter calls to a specific area, a partial number can be entered (e.g. **0033** for calls to France).

Dialled number	0033	
----------------	------	---

You can use the **!** symbol to explicitly exclude a dialled number from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls to Tri-Line, but include all others, you could use **!020726526\***. To report on more than one dialled number, use a comma to separate each entry.

### Duration

To filter calls above or below a particular duration, enter the desired duration in seconds.

Duration	>1800	
----------	-------	---


You can specify a duration range by using the **-** symbol; to specify limits, use the comparison operators, **>**, **<**, and **!**.

In the above example, the report will return only calls longer than 1800 seconds (30 minutes).

### LCR code

To filter your results to include only calls that used a Least Cost Routing (LCR) code, enter it in the text box provided.


LCR code		
----------	--	---

LCR code 162 

You can use the **!** symbol to explicitly exclude a LCR code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using all LCR codes beginning 162, you could enter **!162\***. To report on more than one LCR code, use a comma to separate each entry.

### Response

This option allows you to filter calls based on their response time, measured in seconds. Specify the desired response time threshold in the text box provided.

Response time >10 


In the above example, the search results will display calls that have a response time greater than 10 seconds.

You can specify a response time range by using the **-** symbol and; to specify limits, use the comparison operators, **>**, **<**, and **!**.

### Start time


This option allows you to filter calls based on the time the call started. Specify the start time in the text box provided using the **hh:mm:ss** format.

For example, to include only calls that began after 10 am, you could enter **10:00:00** in the **start time** field, as shown below:

Start time 10:00:00 

### Trunk access code

If your telephone system uses trunk access codes to connect calls using specific channels, you can limit your report's results to include only calls made using those codes. Specify the trunk access code in the text box provided.

Trunk access code 9 








You can use the **!** symbol to explicitly exclude a trunk access code from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls made using the 9 trunk access code, you could enter **!9**. To report on more than one trunk access code, use a comma to separate each entry.


## Selecting the report options


This section enables you to further narrow down your report results, by excluding certain types of calls. It also allows you to sort the report's results in a particular manner.


### Options


Specify one or more of any additional report options shown here.


- Exclude weekends 
- Exclude transfers 
- Don't replace numbers with contact names 
- Show account codes 
- Notes only 
- Audio only 
- Scored only 

Maximum results  

Sort data by  

Sort order  

Sort results by  

Ignore missed calls shorter than  seconds 



**Exclude weekends**

To exclude weekend calls from your report's results, select the **Exclude weekends** option.

Exclude weekends 

**Exclude transfers**

To exclude transferred calls from your report's results, select the **Exclude transfers** option.

Exclude transfers 


**Don't replace numbers with contact names**

Tick this option if you do not want to replace dialled numbers, CLIs and account codes with their associated names, as defined in your web user's contacts list.

Don't replace numbers with contact names 

**Show account codes**

Select this option to display any associated account codes as an additional column in this report.

Show account codes 


**Notes only**

Tick this option if you want your search results to include only calls that have notes associated with them.

Notes only 

**Audio only**

Tick this option if you want your search results to include only calls that have an associated voice recording.

Audio only 

**Scored only**

Tick this option to include only calls that have a score associated with them, e.g. calls that have already been listened to and scored

Scored only 


**Maximum results**

To limit the report's results, enter the maximum number of results you want the report to display in the **Maximum results** option, e.g. if you enter **50** in the text box provided, only 50 results will be displayed.

Maximum results  


**Sort data by**

To choose the criteria that is used in determining the top calls, select a field from the `sort data by` drop-down list.

Sort data by  


#### Sort order

Choose from the `sort order` drop-down list whether you want the results of your report to appear in ascending or descending order.

Sort order  

#### Sort results by

To sort your report's results by a particular column, select it from the `sort results by` drop-down list.

Sort results by  

#### Ignore short missed calls

Missed calls below a certain duration can sometimes pollute the meaning of a report's results. To exclude such short calls from your report, enter a duration threshold in the text box provided, e.g. to ignore calls below 3 seconds, enter `3`.

## Selecting the report format

This section allows you to choose the media format of your completed report. The formats available are `Web`, `PDF`, `Excel`, `CSV` and `XML`.

More details about each report format are available in the [Setting the report format](#) section above.

## Creating the report

When you have selected a reporting period and have chosen any filters and options, you can either run the report immediately by clicking on the `Run now` button, or [schedule it for future delivery](#).

**Your report is ready to run**

Select the format that you want your report to be in.

You can now either run the report immediately, or schedule it to run once, or at regular intervals, in the future.

Report format

**Run now**

**Schedule for later**

## The report's results

Below is an example of this report's output in `web` format:

My top calls							2012-05-17 16:23:56	
<a href="#">↑</a> \ <a href="#">TIM Plus</a> \ <a href="#">London</a> \ <a href="#">Accounts</a> \							<a href="#">About this report</a>	
<b>All</b>		<b>Outbound</b>						
Date & Time ▲	Source	CLI	Route	Destination	Response	Duration	Cost	
16/05/2012 17:32:06	Mika Stai	-	76414028	Local Call	-	00:11:17	1.128	
16/05/2012 16:14:38	Ming Xao	-	01702222638	Southend-on-Sea	-	00:03:40	0.367	
16/05/2012 13:41:28	Doug Hole	-	71892748	Local Call	-	00:02:16	0.227	
16/05/2012 13:46:01	Norma Leigh	-	72942005	Local Call	-	00:02:03	0.205	
16/05/2012 17:57:06	Norma Leigh	-	01753800800	Slough	-	00:02:02	0.203	
16/05/2012 12:55:36	Al Dente	-	02074054600	London	-	00:01:21	0.135	
16/05/2012 18:20:56	Pearl E White	-	07854180499	Orange	-	00:00:53	0.115	
16/05/2012 15:24:01	Duane Pipe	-	71162017	Local Call	-	00:00:58	0.097	
16/05/2012 11:58:43	Pearl E White	-	07955872193	O2	-	00:00:43	0.093	
16/05/2012 08:13:33	Easton West	-	07956961145	T-Mobile	-	00:00:41	0.089	
10 calls						00:25:54	2.659	

The web format is the most interactive of all formats: all column headers are click-sortable and most graphical and tabular elements can be drilled down into, allowing deeper analysis of your results. By clicking on the [About this report](#) link at the top-right corner of the page, you can review any filters and options that have been applied to the report.

As with all reports produced by TIM Plus, each page of the report includes the following information:

- the report's title
- the date and time that the report was generated
- the name of the report, if applicable

The report consists of a table containing a list of your top calls, as defined by your selection criteria. Each column header of the table is described below:

Header	Description
<b>Date &amp; Time</b>	The date and time the call started
<b>Source</b>	The place from where the call originated
<b>CLI</b>	The telephone number of the remote caller for inbound calls
<b>Route</b>	The information displayed in this field is determined by the type of call: <ul style="list-style-type: none"> <li>▪ for incoming calls, this shows the CLI of the caller</li> <li>▪ for incoming internal calls, this shows either the caller's username or extension number</li> <li>▪ for outgoing calls, this shows the dialled number</li> </ul>
<b>Destination</b>	The information displayed in this field is determined by the type of call: <ul style="list-style-type: none"> <li>▪ for incoming calls, this shows the name of the user whose extension answered the call, or the extension number if not available</li> <li>▪ for outgoing calls, this shows the geographical location that was dialled, or an alias if defined in your contacts list</li> <li>▪ for internal calls, this shows the extension that was dialled, enclosed in square brackets [ ]</li> </ul>

<b>Response</b>	The length of time it took for the call to be answered (i.e. the response time)
<b>Duration</b>	The duration of the call (in hours, minutes and seconds)
<b>Cost</b>	The cost of the call

To modify your report to cover a larger organisational scope, click on an element of the breadcrumb as shown below:

[Home](#) \ [TIM Plus](#) \ [London](#) \ [Accounts](#) \ [About this report](#)

## Unused Devices

**The Unused Devices report**

- Introduction
- Running the report
- Creating the report
- The report's results

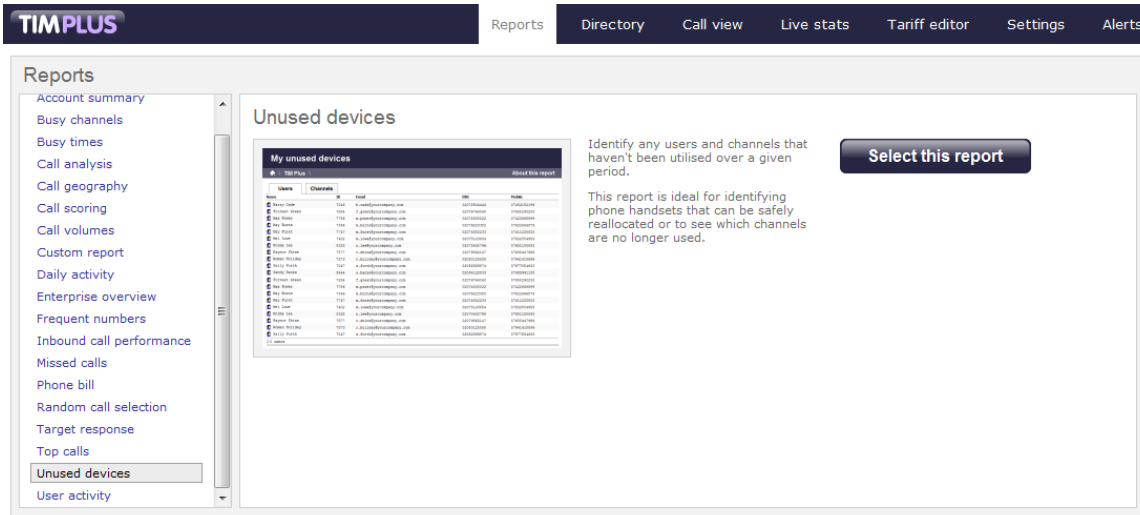
### Introduction

The Unused Devices report identifies any users and channels that haven't been utilised in a given period of time. It is useful for identifying telephone handsets that can be safely reallocated to other users or which channels are no longer used.

My unused devices		2012-05-17 16:14:30			
<a href="#">Home</a> \ <a href="#">TIM Plus</a> \ <a href="#">London</a> \ <a href="#">Accounts</a> \ <a href="#">About this report</a>					
Users		Channels			
Name ▲	ID	Email	DDI	Mobile	
Danny Lehman	7300	-	-	-	
Jake Bolger	7289	-	-	-	
Jo Balham	7311	-	-	-	
Jon Southgate	1962	js@abc.com	-	-	
Lucy Smart	7081	-	-	-	
Malcolm Hughes	11043	-	-	-	
Marie Barrett	7725	-	-	-	
Michael Faulty	7210	-	-	-	
Mohan Patel	7089	-	-	-	
Natasha Levy	7305	-	-	-	
Oisín Kennedy	7294	-	-	-	
Peta Lacey	1946	-	-	-	
Phil Rogers	7209	-	-	-	
Ros Leftley	7208	-	-	-	
Sarah Baker	7309	-	-	-	
Sean Mason	7297	-	-	-	
Tina Ridgley	7310	-	-	-	
17 users					

### Running the report

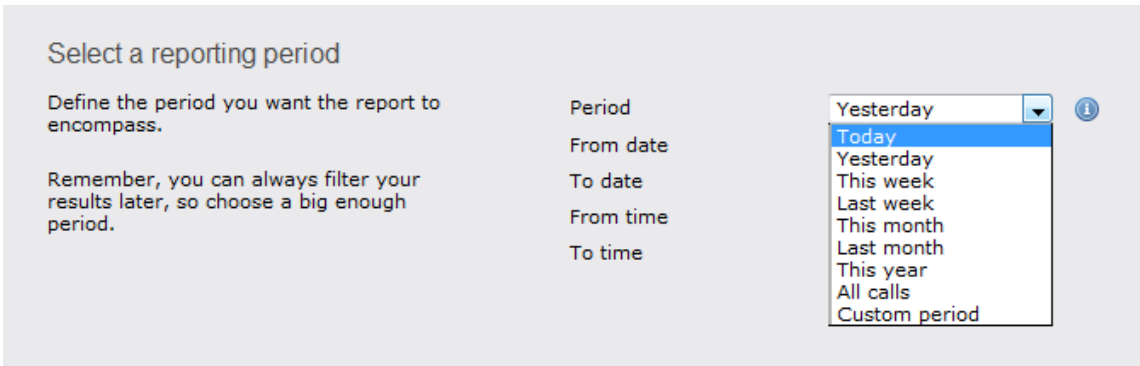
On the Reports screen, select the Unused devices report from the left-hand pane and click the **Select this report** button.



A new window will appear, where you can set the parameters of your report.

### Selecting the reporting period

For each report, you must specify a time span that covers the calls you want the report to include. This is known as the "reporting period".




There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table describes how the start and end times are defined for each preset period:

Period	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This week</b>	The start date is set to the first day of the current week (normally Monday). The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.

<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to <b>00:00:00</b> and <b>23:59:59</b> respectively.
<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to <b>00:00:00</b> and <b>23:59:59</b> respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.

In addition to the presets described above, it is possible to specify a custom reporting period by choosing **Custom period** from the **Period** drop-down list and specifying your own **Start date**, **Start time**, **End date** and **End time** of the period you want to report on.

<b>Period</b>	Custom period 
<b>From date</b>	01 Jul 2011
<b>To date</b>	14 Feb 2013
<b>From time</b>	00 : 00 : 00
<b>To time</b>	23 : 59 : 59

Once you have set the reporting period, click on the **Next** button to set additional report parameters and options, or select the **Finish** button to run the report immediately.




### Selecting the reporting entity

The **Reporting entity** parameter allows you to select the part of your organisation whose calls the report should include, e.g. a site, a group or an individual user.

#### Choose a reporting entity


Select a specific section of your organisation whose calls will feature in the report. To run the report across your entire organisation, select **(All sites)**.

Alternatively, select a specific site, user group, channel group, individual user or channel.

<b>Site</b>	(All sites) 
<b>Group</b>	<input type="text"/> 
<b>User</b>	<input type="text"/> 


#### Site

To report on a particular site, select it from the drop-down list or select **All sites**.

<b>Site</b>	All sites 
-------------	---

#### Group

If a site has been selected, you are able to further limit the report's results by selecting a group from the drop-down list.

<b>Group</b>	All groups 
--------------	--

#### User

If both a site and group have been selected, you can further limit the report's results to include only calls involving a particular user, by selecting that user from the drop-down list.

User  



If your web account is restricted to a specific site or group, only those entities to which you have access will be available in the drop-down lists.


Once you have selected the scope of your report, click on the **Next** button to set additional report parameters and options, or to run the report immediately, click the **Finish** button.


## Selecting the report options


You can limit the results of your report by choosing one or more of the following filters:

**Options**

Specify one or more of any additional report options shown here.

Show "Do not log" devices 

Sort order  

Sort results by  


### Show "Do not log" devices

Tick this box if you would like to include devices whose status is set to not log calls.

Show "Do not log" devices 


### Sort order

Choose from the `sort order` drop-down list whether you want the results of your report to appear in ascending or descending order.

Sort order  

### Sort results by

To sort your report's results by a particular column, select it from the `sort results by` drop-down list.

Sort results by  

## Selecting the report format

This section allows you to choose the media format of your completed report. The formats available are `Web`, `PDF`, `Excel`, `CSV` and `XML`.

More details about each report format are available in the [Setting the report format](#) section above.

## Creating the report

When you have selected a reporting period and have chosen any filters and options, you can either run the report immediately by clicking on the **Run now** button, or [schedule it for future delivery](#).

Your report is ready to run

Select the format that you want your report to be in.

You can now either run the report immediately, or schedule it to run once, or at regular intervals, in the future.

Report format

[Run now](#)

[Schedule for later](#)

## The report's results

Below is an example of this report's output in web format, showing both unused users and unused channels:

### My unused devices 2012-05-17 16:14:30

[↑](#) \ [TIM Plus](#) \ [London](#) \ [Accounts](#) \ [About this report](#)

Name ▲	ID	Email	DDI	Mobile
Danny Lehman	7300	-	-	-
Jake Bolger	7289	-	-	-
Jo Balham	7311	-	-	-
Jon Southgate	1962	js@abc.com	-	-
Lucy Smart	7081	-	-	-
Malcolm Hughes	11043	-	-	-
Marie Barrett	7725	-	-	-
Michael Faulty	7210	-	-	-
Mohan Patel	7089	-	-	-
Natasha Levy	7305	-	-	-
Oisin Kennedy	7294	-	-	-
Peta Lacey	1946	-	-	-
Phil Rogers	7209	-	-	-
Ros Leftley	7208	-	-	-
Sarah Baker	7309	-	-	-
Sean Mason	7297	-	-	-
Tina Ridgley	7310	-	-	-

17 users

### My unused devices 2012-05-17 16:14:30

[↑](#) \ [TIM Plus](#) \ [London](#) \ [Accounts](#) \ [About this report](#)

[Show all](#)
⏪ ⏩
1 of 2
⏪ ⏩

Name	ID
10004	10004
25001	25001
25002	25002
25003	25003
25004	25004
25005	25005
25006	25006
25007	25007
25008	25008
25009	25009

The web format is the most interactive of all formats: all column headers are click-sortable and most graphical and tabular elements can be drilled down into, allowing deeper analysis of your results. By clicking on the [About this report](#) link at the top-right corner of the page, you can review any filters and options that have been applied to the report.

As with all reports produced by TIM Plus, each page of the report includes the following information:



- the report's title
- the date and time that the report was generated
- the name of the report, if applicable

The results will display as a paginated list of unused devices with each type of device being grouped in its own tab:

The **Users** tab shows the following information:

Header	Description
<b>Name</b>	The name of the user
<b>ID</b>	The extension number associated with the user
<b>Email</b>	The e-mail address associated with the user
<b>DDI</b>	The DDI associated with the user, if available
<b>Mobile</b>	The mobile number associated with the user, if available

The **Channels** tab shows the following information:

Header	Description
<b>Name</b>	The name of the channel
<b>ID</b>	The ID associated with the channel

To modify your report to cover a larger organisational scope, click on an element of the breadcrumb as shown below:



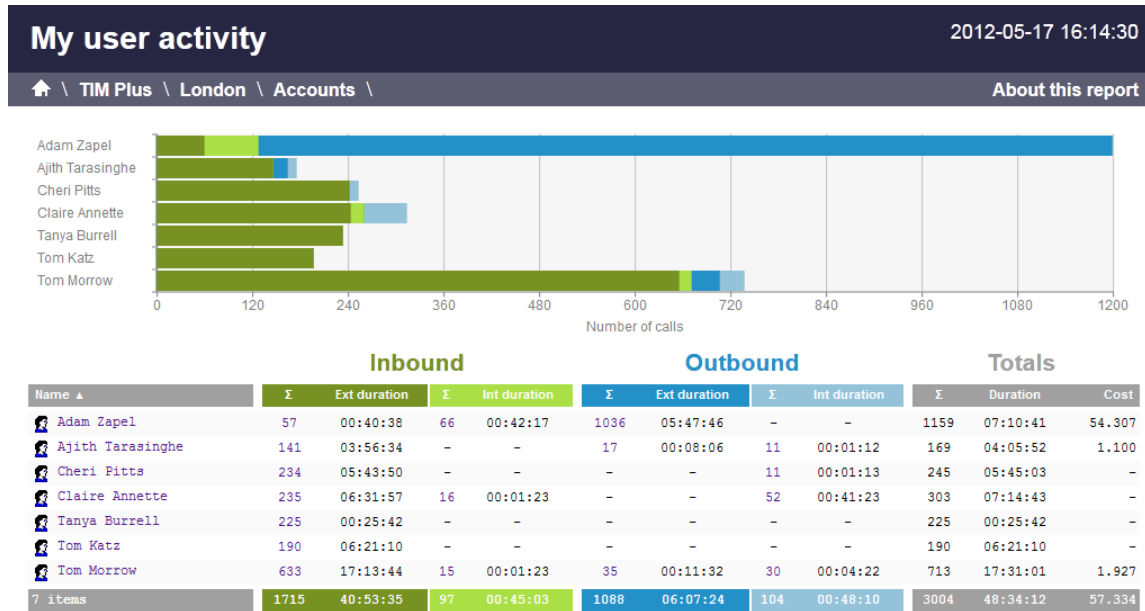
## User Activity

**The User Activity report**

- Introduction
- Running the report
- Creating the report
- The report's results

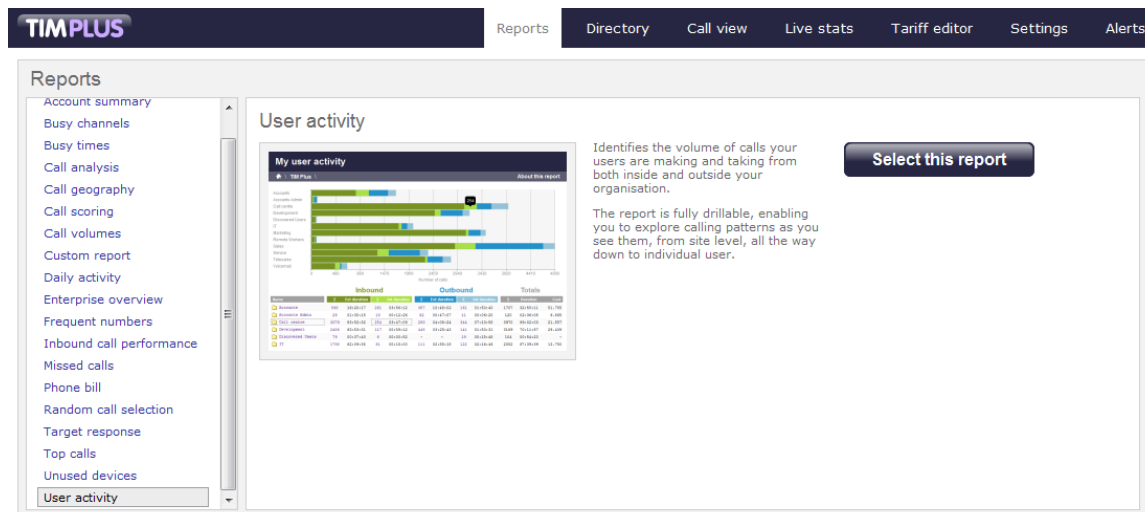
### Introduction

The User Activity report provides a comprehensive summary of internal and external call activity - both inbound and outbound - for each site, group or user. It is also possible to drill down into each entity to obtain the same call information at a more detailed level.



### Running the report

On the Reports screen, select the Enterprise overview report from the left-hand pane and click the **Select this report** button.



A new window will appear, where you can set the parameters of your report.

### Selecting the reporting period

For each report, you must specify a time span that covers the calls you want the report to include. This is known as the "reporting period".

**Select a reporting period**

Define the period you want the report to encompass.

Remember, you can always filter your results later, so choose a big enough period.

Period:  ⓘ

From date:

To date:

From time:

To time:

Yesterday  
**Today**  
 Yesterday  
 This week  
 Last week  
 This month  
 Last month  
 This year  
 All calls  
 Custom period

There are several preset reporting periods available for selection, based on the standard Gregorian calendar. The following table describes how the start and end times are defined for each preset period:

Period	Description
<b>Today</b>	The start and end dates are set to the current date. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>Yesterday</b>	The start and end dates are set to the current date minus one day. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This week</b>	The start date is set to the first day of the current week (normally Monday). The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last week</b>	The start date is set to the date of the last Monday, and the end date is set to the start date plus seven days. The start time is set to 00:00:00 and the end time to 23:59:59.
<b>This month</b>	The start date is set to the first day of the current month. The end date is set to the current day. The start time is set to 00:00:00 and the end time to the current time.
<b>Last month</b>	The start date for this period is set in three stages: The day is set to the first day of the month. The month is set to the previous month. The year is set to the current year, unless it is currently January, in which case, the previous year is used. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>This year</b>	The start date is set to the first day of the first month of the current year, whilst the end date is set to today's date. The start and end times are set to 00:00:00 and 23:59:59 respectively.
<b>All calls</b>	The start and end dates and times are set to the dates and times of the first and last call in the entire call database, respectively.

In addition to the presets described above, it is possible to specify a custom reporting period by choosing **Custom period** from the **Period** drop-down list and specifying your own **Start date**, **Start time**, **End date** and **End time** of the period you want to report on.

Period:  ⓘ

From date:

To date:

From time:

To time:

Once you have set the reporting period, click on the **Next** button to set additional report parameters and options, or select the **Finish** button to run the report immediately.




## Selecting the reporting entity

The **Reporting entity** parameter allows you to select the part of your organisation whose calls the report should include, e.g. a site, a group or an individual user.

### Choose a reporting entity

Select a specific section of your organisation whose calls will feature in the report. To run the report across your entire organisation, select **(All sites)**.


Alternatively, select a specific site, user group, channel group, individual user or channel.

Site	<input type="text" value="(All sites)"/>	
Group	<input type="text"/>	
User	<input type="text"/>	

### Site

To report on a particular site, select it from the drop-down list or select **All sites**.


Site



### Group

If a site has been selected, you are able to further limit the report's results by selecting a group from the drop-down list.


Group



### User

If both a site and group have been selected, you can further limit the report's results to include only calls involving a particular user, by selecting that user from the drop-down list.

User

















If your web account is restricted to a specific site or group, only those entities to which you have access will be available in the drop-down lists.

Once you have selected the scope of your report, click on the **Next** button to set additional report parameters and options, or to run the report immediately, click the **Finish** button.

## Selecting the report filters


You can limit the results of your report by choosing one or more of the following filters:

**Filter the results of the report**

Account code	<input type="text"/>		Dialled number	<input type="text"/>	
Call type	All calls		Duration	<input type="text"/>	
Carrier	(All carriers)		LCR code	<input type="text"/>	
CLI	<input type="text"/>		Response	<input type="text"/>	
Cost	<input type="text"/>		Start time	<input type="text"/>	
Destination	<input type="text"/>		Trunk access code	<input type="text"/>	

#### Account code


To produce a report consisting only of calls that were made using a particular account code, enter the account code in the field provided.

Account code  

To report on more than one account code, separate each code using a comma.


#### Call type


This filter allows you to define the type of call you want to report on, in terms of where the call originated and where it was delivered, e.g. incoming, outgoing, internal etc. To report on all types of call, set this to [All calls](#).

Call type  

#### Carrier

If you use more than one carrier, you can limit the results to include only calls that were made using a specific carrier.

Carrier  

 If you use only one carrier, there will be no drop-down list available and no option to choose a carrier.

#### CLI

Calling Line Identification (CLI) is the telephone number of the remote caller in an incoming call scenario.


You can report on calls that originate from a specific CLI or those whose CLI matches a particular pattern of digits. For example, to report on all incoming calls from Tri-Line, you could enter [02072652600](#).

CLI  

You can use the **!** symbol to explicitly exclude a CLI from the report's results, and/or the **\*** symbol as a wildcard in digit pattern matching. For example, to exclude calls from Tri-Line, but include all others, you could use [!020726526\\*](#). To report on more than one CLI, use a comma to separate each entry.

#### Cost

You can define a cost filter to include calls above or below specific values by entering your criteria, as shown below:

Cost <2.00 

You can specify a cost range by using the – symbol; to specify limits, use the comparison operators, >, <, and ! .

### Destination

If you want to filter calls to a specific, known destination, type the name of the destination in the text box provided. This filter accepts the ! and \* symbols for excluding values and specifying partial matches, respectively.

For example, if you wanted to exclude all calls to France, you could enter !France\*, as shown below:

Destination !France\* 

### Dialled number

To filter calls to a specific dialled number, type it in the text box provided. The dialled number is defined as the number that is dialled (in the case of an outbound call), or the DDI number that the remote party dialled to reach a particular extension or group (in the case of an inbound call).

To filter calls to a specific area, a partial number can be entered (e.g. 0033 for calls to France).

Dialled number 0033 

You can use the ! symbol to explicitly exclude a dialled number from the report's results, and/or the \* symbol as a wildcard in digit pattern matching. For example, to exclude calls to Tri-Line, but include all others, you could use !020726526\*. To report on more than one dialled number, use a comma to separate each entry.

### Duration

To filter calls above or below a particular duration, enter the desired duration in seconds.

Duration >1800 

You can specify a duration range by using the – symbol; to specify limits, use the comparison operators, >, <, and ! .

In the above example, the report will return only calls longer than 1800 seconds (30 minutes).

### LCR code


To filter your results to include only calls that used a Least Cost Routing (LCR) code, enter it in the text box provided.

LCR code 162 

You can use the ! symbol to explicitly exclude a LCR code from the report's results, and/or the \* symbol as a wildcard in digit pattern matching. For example, to exclude calls made using all LCR codes beginning 162, you could enter !162\*. To report on more than one LCR code, use a comma to separate each entry.

### Response

This option allows you to filter calls based on their response time, measured in seconds. Specify the desired response time threshold in the text box provided.

Response time >10 


In the above example, the search results will display calls that have a response time greater than 10 seconds.

You can specify a response time range by using the – symbol and; to specify limits, use the comparison operators, >, <, and ! .

### Start time

This option allows you to filter calls based on the time the call started. Specify the start time in the text box provided using the hh:m m:ss format.

For example, to include only calls that began after 10 am, you could enter `10:00:00` in the `Start time` field, as shown below:

Start time	<input type="text" value="10:00:00"/>	
------------	---------------------------------------	---

### Trunk access code

If your telephone system uses trunk access codes to connect calls using specific channels, you can limit your report's results to include only calls made using those codes. Specify the trunk access code in the text box provided.

Trunk access code	<input type="text" value="9"/>	
-------------------	--------------------------------	---







You can use the `!` symbol to explicitly exclude a trunk access code from the report's results, and/or the `*` symbol as a wildcard in digit pattern matching. For example, to exclude calls made using the `9` trunk access code, you could enter `!9`. To report on more than one trunk access code, use a comma to separate each entry.

### Selecting the report options

This section enables you to further narrow down your report results, by excluding certain types of calls. It also allows you to sort the report's results in a particular manner.


#### Options

Specify one or more of any additional report options shown here.

<input type="checkbox"/> Exclude weekends	
<input type="checkbox"/> Exclude transfers	
<input checked="" type="checkbox"/> Hide unused	
Sort order	<input type="text" value="Ascending"/> 
Sort results by	<input type="text" value="Name"/> 
Ignore missed calls shorter than	<input type="text" value=""/> seconds 


#### Exclude weekends

To exclude weekend calls from your report's results, select the `Exclude weekends` option.

<input checked="" type="checkbox"/> Exclude weekends	
--	---


#### Exclude transfers

To exclude transferred calls from your report's results, select the `Exclude transfers` option.

<input checked="" type="checkbox"/> Exclude transfers	
---	---


#### Hide unused

To exclude unused extensions from your report's results, select the `Hide unused` option.

<input checked="" type="checkbox"/> Hide unused	
---	---

#### Sort order

Choose from the `Sort order` drop-down list whether you want the results of the report to appear in ascending or descending order.

Sort order	<input type="text" value="Ascending"/>	
------------	--	---

### Sort results by

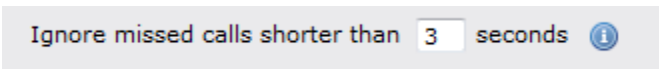
To sort your report's results by a particular column, select it from the `Sort results by` drop-down list.



A screenshot of a web interface showing a dropdown menu labeled "Sort results by". The dropdown is open, and the word "Name" is selected and displayed in a text box. To the right of the text box is a small blue circular icon with a white lowercase 'i' inside, representing an information tooltip.

### Ignore short missed calls

Missed calls below a certain duration can sometimes pollute the meaning of a report's results. To exclude such short calls from your report, enter a duration threshold in the text box provided, e.g. to ignore calls below 3 seconds, enter `3`.



A screenshot of a web interface showing a text input field with the label "Ignore missed calls shorter than". The number "3" is entered into the field, followed by the word "seconds". To the right of the text is a small blue circular icon with a white lowercase 'i' inside, representing an information tooltip.

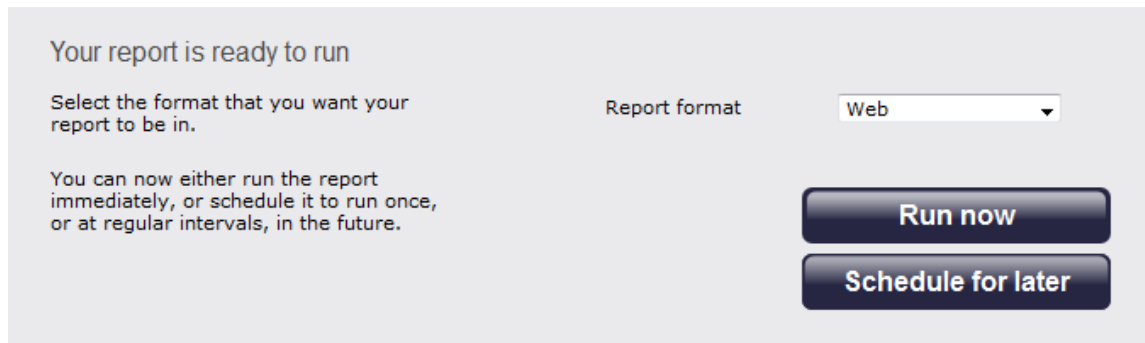
## Selecting the report format

This section allows you to choose the media format of your completed report. The formats available are `Web`, `PDF`, `Excel`, `CSV` and `XML`.

More details about each report format are available in the [Setting the report format](#) section above.

## Creating the report

When you have selected a reporting period and have chosen any filters and options, you can either run the report immediately by clicking on the `Run now` button, or [schedule it for future delivery](#).



A screenshot of a web interface showing a report creation screen. The heading is "Your report is ready to run". Below this, there is a text prompt: "Select the format that you want your report to be in." To the right of this prompt is a dropdown menu labeled "Report format" with "Web" selected. Below the dropdown, there is a paragraph of text: "You can now either run the report immediately, or schedule it to run once, or at regular intervals, in the future." At the bottom right of the screen, there are two large, dark blue buttons: "Run now" and "Schedule for later".

## The report's results

The results of the report show comprehensive call summary information - organised by call type - for the report entity you selected. By clicking on the `About this report` link at the top-right corner of the page, you can review any filters and options that have been applied to the report.

As with all reports produced by TIM Plus, each page of the report includes the following information:

- the report's title
- the date and time that the report was generated
- the name of the report, if applicable

The `Web` format is the most interactive of all formats: all column headers are click-sortable and most graphical and tabular elements can be drilled down into, allowing deeper analysis of your results.

Results are shown for each organisational level: site, group and individual user, where a table is shown with the following headers:





Header	Description
<b>Name</b>	The name of the entity for each line of data
<b>Inbound</b>	<ul style="list-style-type: none"> <li><b>Number of calls</b>: The number of inbound answered calls, including transferred calls</li> <li><b>Ext duration</b>: The total duration of all inbound external calls (in hours, minutes and seconds)</li> <li><b>Int duration</b>: The total duration of all inbound internal calls (in hours, minutes and seconds)</li> </ul>
<b>Outbound</b>	<ul style="list-style-type: none"> <li><b>Number of calls</b>: The number of outbound calls made</li> <li><b>Ext duration</b>: The total duration of all outbound external calls (in hours, minutes and seconds)</li> <li><b>Int duration</b>: The total duration of all outbound internal calls (in hours, minutes and seconds)</li> </ul>
<b>Totals</b>	<ul style="list-style-type: none"> <li><b>Number of calls</b>: The total number of calls including all inbound and outbound, both internal and external</li> <li><b>Duration</b>: The total duration of time spent on all inbound and outbound calls</li> <li><b>Cost</b>: The total cost of all calls</li> </ul>

### Site Level

My user activity
2012-05-17 16:14:30

↑ \ TIM Plus \
About this report

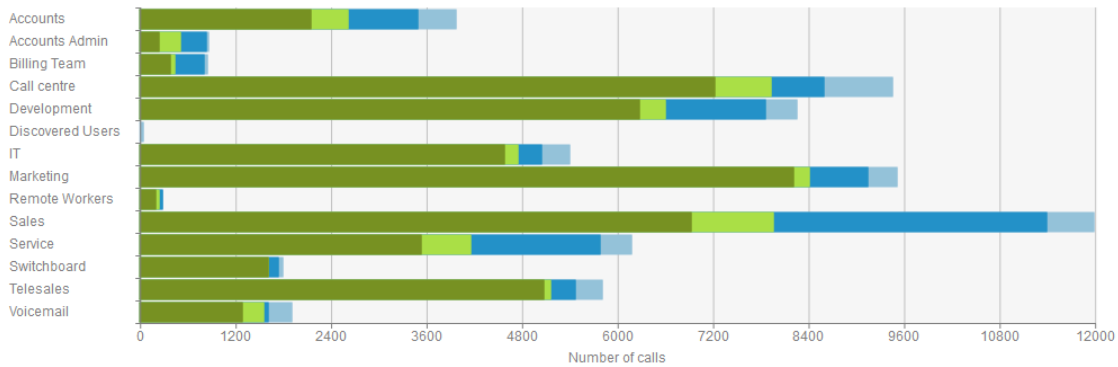
London 

Name ▲	Inbound				Outbound				Totals		
	Σ	Ext duration	Σ	Int duration	Σ	Ext duration	Σ	Int duration	Σ	Duration	Cost
 London	46137	1252:10:36	4100	55:21:51	9785	130:59:38	4100	55:21:51	64122	1493:53:56	931.509
1 item	46137	1252:10:36	4100	55:21:51	9785	130:59:38	4100	55:21:51	64122	1493:53:56	931.509

### Group level

# My user activity 2012-05-17 16:14:30

Home \ TIM Plus \ London \ About this report

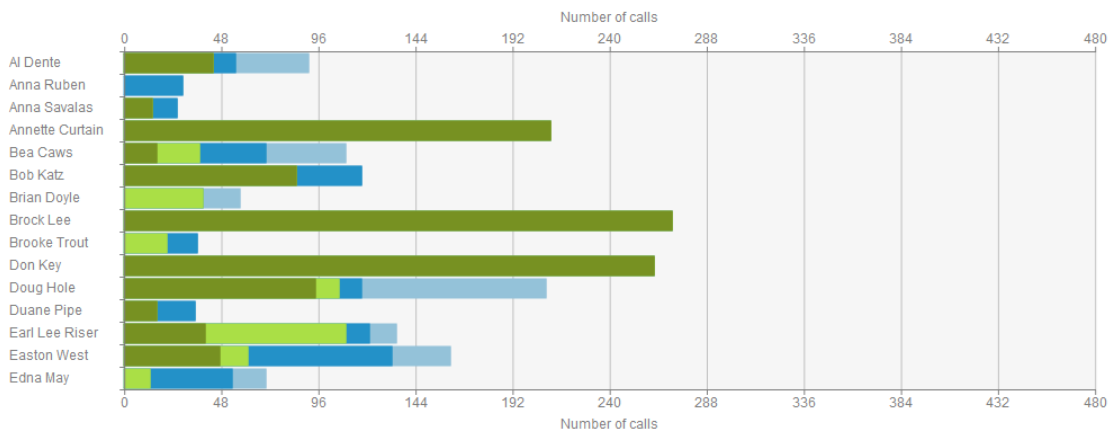


Name ▲	Inbound				Outbound				Totals		
	Σ	Ext duration	Σ	Int duration	Σ	Ext duration	Σ	Int duration	Σ	Duration	Cost
Accounts	2077	39:14:02	455	04:43:24	852	20:42:23	457	04:34:54	3841	69:14:43	114.224
Accounts Admin	226	05:29:02	271	05:51:20	305	05:21:51	28	00:14:04	830	16:56:17	34.801
Billing Team	374	05:32:41	53	00:48:13	354	03:04:10	34	00:21:31	815	09:46:35	23.187
Call centre	6983	185:34:44	682	09:27:18	648	10:26:12	840	16:20:27	9153	221:48:41	58.739
Development	6072	153:01:03	314	03:03:38	1221	09:32:01	376	04:52:50	7983	170:29:32	76.876
Discovered Users	-	-	-	-	-	-	46	00:46:03	46	00:46:03	-
IT	4431	154:24:48	161	01:02:56	290	07:46:17	336	04:54:17	5218	168:08:18	44.065
Marketing	7942	245:38:46	192	02:00:30	709	11:19:41	355	03:54:53	9198	262:53:50	61.085
Remote Workers	194	00:59:28	45	00:14:29	29	00:12:20	-	-	268	01:26:17	1.128

## Individual user level

# My user activity 2012-05-17 16:14:30

Home \ TIM Plus \ London \ Accounts \ About this report



Name ▲	Inbound				Outbound				Totals		
	Σ	Ext duration	Σ	Int duration	Σ	Ext duration	Σ	Int duration	Σ	Duration	Cost
Al Dente	44	01:14:58	-	-	11	00:00:50	36	00:09:29	91	01:25:17	0.330
Anna Ruben	-	-	-	-	29	00:06:16	-	-	29	00:06:16	1.084
Anna Savalas	14	00:21:48	-	-	12	02:15:05	-	-	26	02:36:53	9.091
Annette Curtain	210	07:31:55	-	-	-	-	-	-	210	07:31:55	-
Bea Caws	16	00:10:25	21	00:02:16	33	01:17:00	39	00:11:02	109	01:40:43	5.228
Bob Katz	85	01:24:58	-	-	32	00:12:51	-	-	117	01:37:49	1.620
Brian Doyle	-	-	39	00:05:11	-	-	18	00:12:11	57	00:17:22	-

## Itemised call list

When drilling down into an individual user, the report style changes to an itemised call list rather than a call summary table:

My user activity								2012-05-17 16:07:50
<a href="#">↑</a> \ <a href="#">TIM Plus</a> \ <a href="#">London</a> \ <a href="#">Accounts</a> \ <a href="#">Al Dente</a> \ <a href="#">About this report</a>								
<span>All</span> <span>Outbound</span> <span>Answered</span> <span>Missed</span> <span>Internal</span>								
Date & Time ▲	Source	CLI	Route	Destination	Response	Duration	Cost	
16/05/2012 10:41:21	Al Dente	-	07956186198	T-Mobile	-	00:00:34	0.074	
16/05/2012 10:42:18	Jason Myers	-	2042	Al Dente	-	00:00:21	-	
16/05/2012 10:47:23	David Ellis	-	2042	Al Dente	-	00:03:23	-	
16/05/2012 10:59:51	Orange	07854181304	-	Al Dente	21	00:00:31	-	
16/05/2012 11:09:53	Al Dente	-	02076132858	London	-	00:00:04	0.030	
16/05/2012 11:42:13	Grace Harper	-	2042	Al Dente	-	00:01:58	-	
16/05/2012 11:52:21	Sam Thornton	-	2042	Al Dente	-	00:00:14	-	
16/05/2012 12:55:36	Al Dente	-	02074054600	London	-	00:01:21	0.135	
16/05/2012 15:13:18	Orange	07967460922	-	Al Dente	4	00:00:47	-	
16/05/2012 15:14:16	Orange	07854180689	-	Al Dente	43	00:00:30	-	
16/05/2012 16:44:53	Warren Peace	-	2042	Al Dente	-	00:01:16	-	
16/05/2012 17:38:36	T-Mobile	07958108040	-	Al Dente	61	00:00:17	-	
16/05/2012 18:36:21	Al Dente	-	07854181108	Orange	-	-	0.030	
13 calls						00:11:16	0.269	

The column headers of the itemised call list are as follows:

Header	Description
<b>Date &amp; Time</b>	The date and time the call started
<b>Source</b>	The place from where the call originated
<b>CLI</b>	The telephone number of the remote caller for inbound calls
<b>Route</b>	<p>The information displayed in this field is determined by the type of call:</p> <ul style="list-style-type: none"> <li>for incoming calls, this shows the CLI of the caller</li> <li>for incoming internal calls, this shows either the caller's username or extension number</li> <li>for outgoing calls, this shows the dialled number</li> </ul>
<b>Destination</b>	<p>The information displayed in this field is determined by the type of call:</p> <ul style="list-style-type: none"> <li>for incoming calls, this shows the name of the user whose extension answered the call, or the extension number if not available</li> <li>for outgoing calls, this shows the geographical location that was dialled, or an alias if defined in your contacts list</li> <li>for internal calls, this shows the extension that was dialled, enclosed in square brackets [ ]</li> </ul>
<b>Response</b>	The length of time it took for the call to be answered (i.e. the response time)
<b>Duration</b>	The duration of the call (in hours, minutes and seconds)
<b>Cost</b>	The cost of the call

To modify your report to cover a larger organisational scope, click on an element of the breadcrumb as shown below:

## Directory

### Directory overview

The Directory is the place where all of your sites, groups, users and channels are configured. In here, objects can be added, moved around your organisation and be inspected and modified.

To access the Directory, select the **Directory** tab from the main menu, as shown below:

Name	Extension	Email address	Mobile	Direct line	Alt extension
Anna Beck	2013			02075263300	
Anna Ruben	1020				
Annette Curtain	13406				
Barry Cade	7046			02072651111	
Bob Katz	1966	bkatz@tri-line.com		02030124578	
Brian Doyle	2083				
Brooke Trout	3105				
Doug Hole	3803				
Duane Pipe	2050				

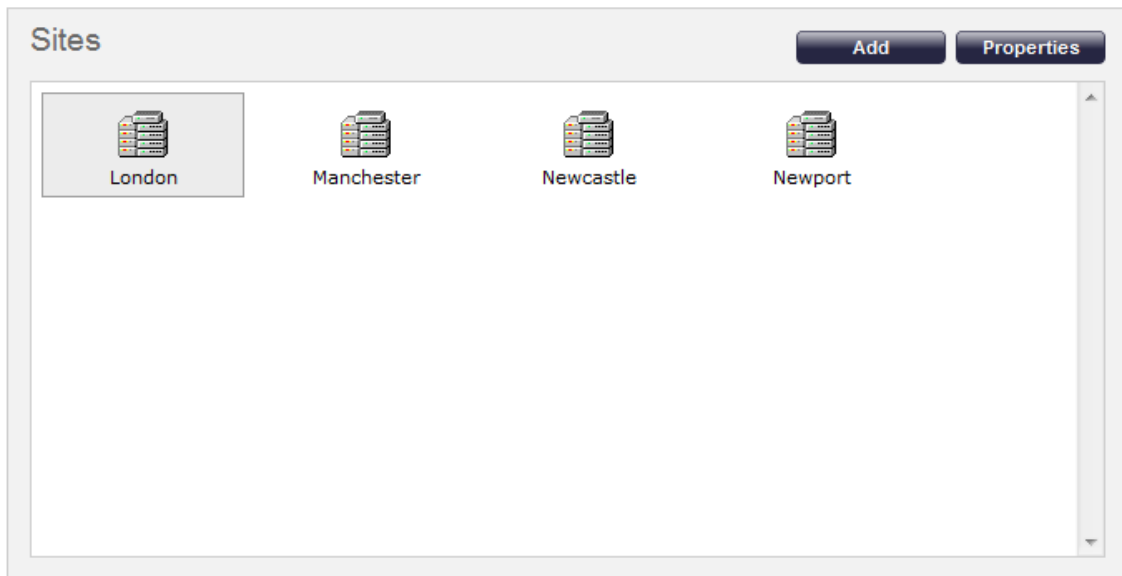


If you are logged in as a standard web user whose access is restricted to a specific group, the **Directory** tab will not be displayed. For administrative privileges, contact your system maintainer.

The Directory screen contains three panels, as detailed below:

#### Sites

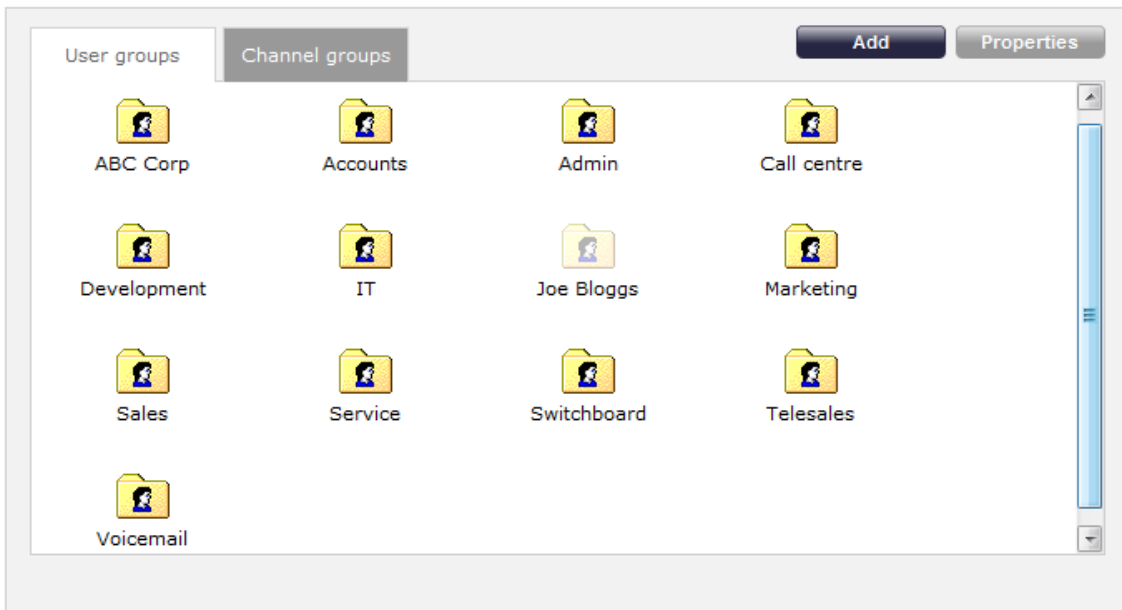
The **Sites** panel is located at the top-left of the Directory screen. The function of a site object is to acquire call logging data from a telephone system, as well as serving as a representation of a hierarchical level in your organisation. TIM Plus allows the logging of data from up to five telephone systems and a site object must be configured for each one.



For more information, click on the [Sites](#) page.

## Groups

The **Groups** panel is located at the top-right of the Directory screen and contains groups of users (extensions) and channels (trunks), with each type of group divided into separate tabs. By selecting a tab, all of the groups of that type will be displayed in the panel.



For more information, click on the [Groups](#) page.

## Contents

The **Contents** panel is located at the bottom-half of the Directory screen. This contains the individual objects belonging to the previously-selected user or channel group.

Name	Extension	Email address	Mobile	Direct line	All extension
Anna Beck	2013			02075263300	
Anna Ruben	1020				
Annette Curtain	13406				
Barry Cade	7046			02072651111	
Bob Katz	1966	bkatz@tri-line.com		02030124578	
Brian Doyle	2083				
Brooke Trout	3105				
Doug Hole	3803				
Duane Pipe	2050				
Earl Lee Riser	3026				
Easton West	1978				
Edna May	2084				
Forrest Green	7284				

For more information, click on the [Contents](#) page.

## Sites

### Sites overview

**Sites overview**

- What is a site?
- Adding a site
- Deleting a site

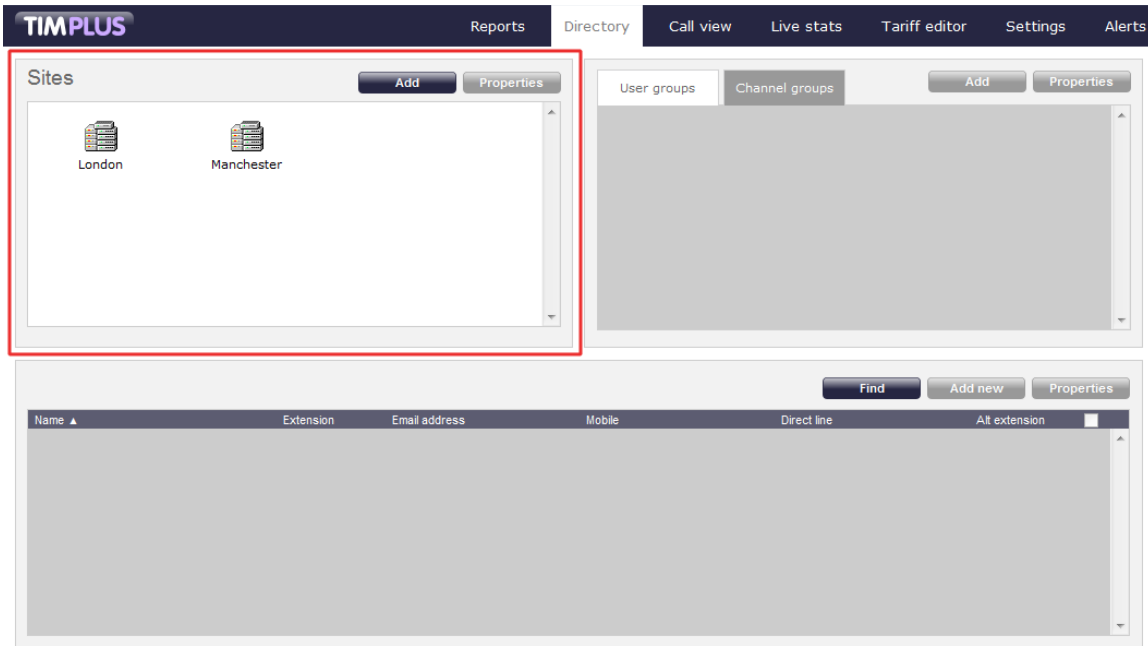
### What is a site?

The function of a site object is to acquire call logging data from a telephone system, as well as serving as a representation of a hierarchical level in your organisation. TIM Plus allows the logging of data from up to five telephone systems and a site object must be configured for each one.



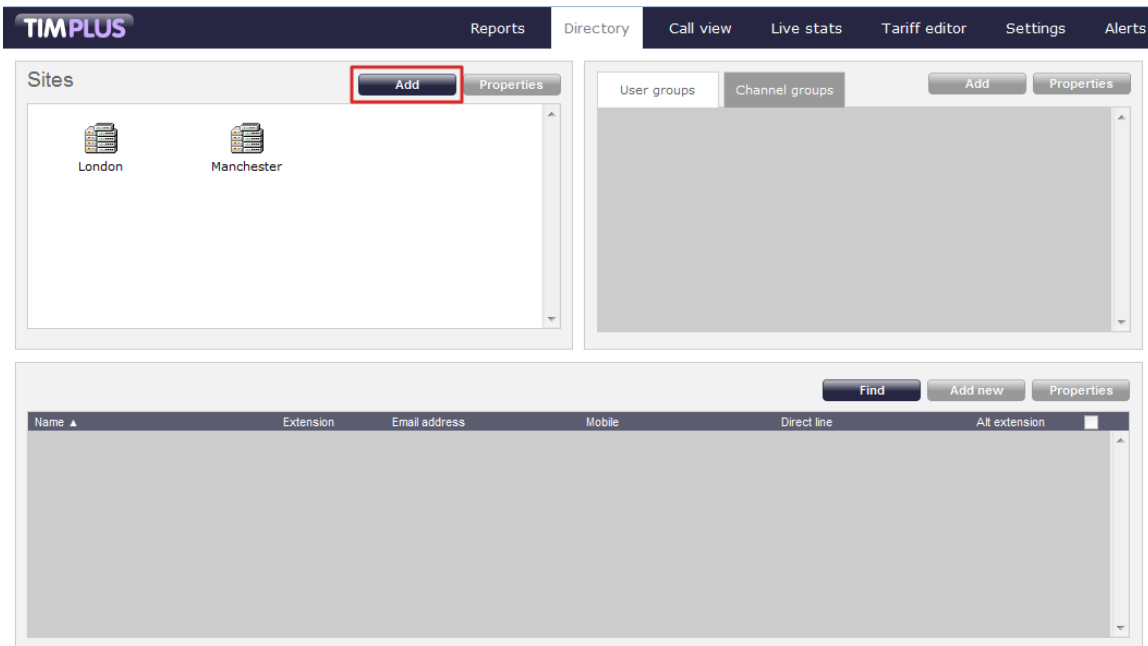
If your organisation makes use of more than five telephone systems, you should upgrade to the TIM Enterprise product.

The **Sites** panel is located on the top-left side of the Directory screen.

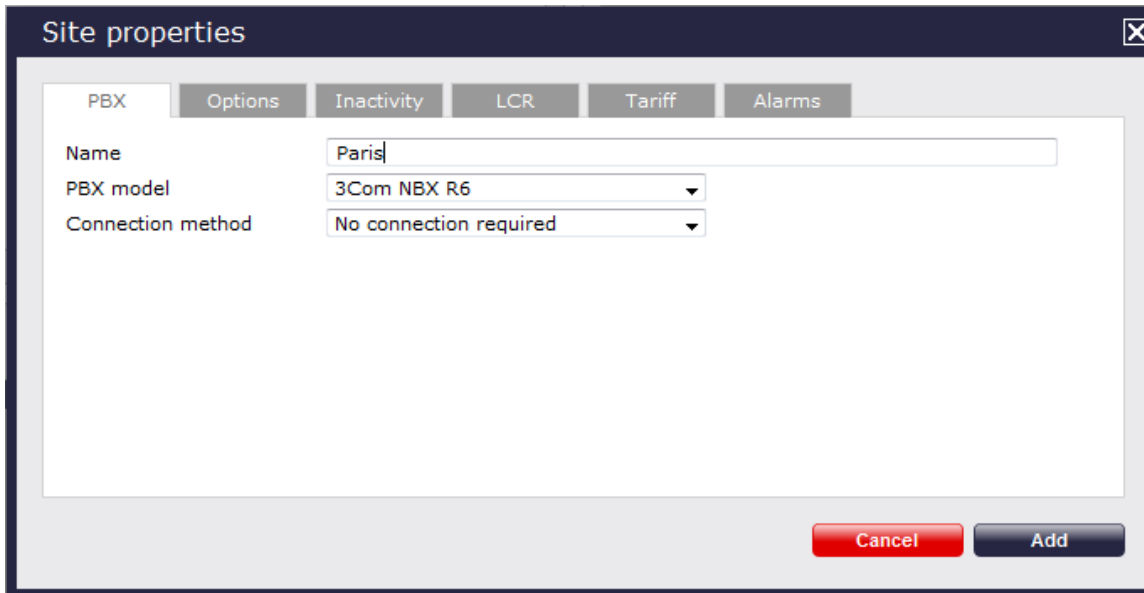


## Adding a site

To add a site to the Directory, click on the **Add** button at the top-left of the panel, as shown below:

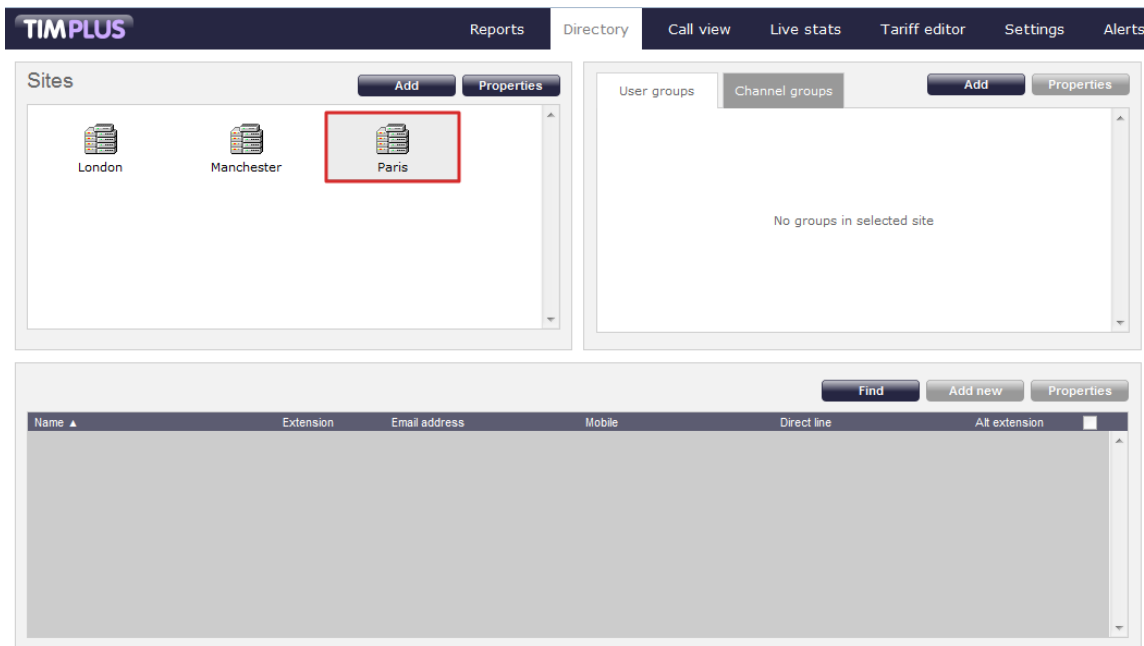


The **site properties** window will appear, where you can enter the site's name, the PBX make and model, as well as the connection method used by your telephone system to deliver call logging data. For information on how to configure the rest of the site's properties, refer to the [Configuring a site](#) section.



The 'Site properties' dialog box has a dark blue title bar with a close button (X) on the right. Below the title bar are six tabs: 'PBX', 'Options', 'Inactivity', 'LCR', 'Tariff', and 'Alarms'. The 'PBX' tab is selected. The form contains three fields: 'Name' with the text 'Paris', 'PBX model' with a dropdown menu showing '3Com NBX R6', and 'Connection method' with a dropdown menu showing 'No connection required'. At the bottom right, there are two buttons: a red 'Cancel' button and a dark blue 'Add' button.

When you have configured the site's properties, click on the **Add** button to add the site to the Directory.



The TIMPLUS Directory interface features a dark blue header with the 'TIMPLUS' logo and navigation tabs: 'Reports', 'Directory', 'Call view', 'Live stats', 'Tariff editor', 'Settings', and 'Alerts'. The 'Directory' tab is active. On the left, a 'Sites' panel shows three site icons: 'London', 'Manchester', and 'Paris'. The 'Paris' icon is highlighted with a red border. Above the icons are 'Add' and 'Properties' buttons. On the right, a 'Channel groups' panel shows 'No groups in selected site' and has 'Add' and 'Properties' buttons. Below these panels is a table with columns: 'Name', 'Extension', 'Email address', 'Mobile', 'Direct line', and 'Alt extension'. The table is currently empty. Above the table are 'Find', 'Add new', and 'Properties' buttons.

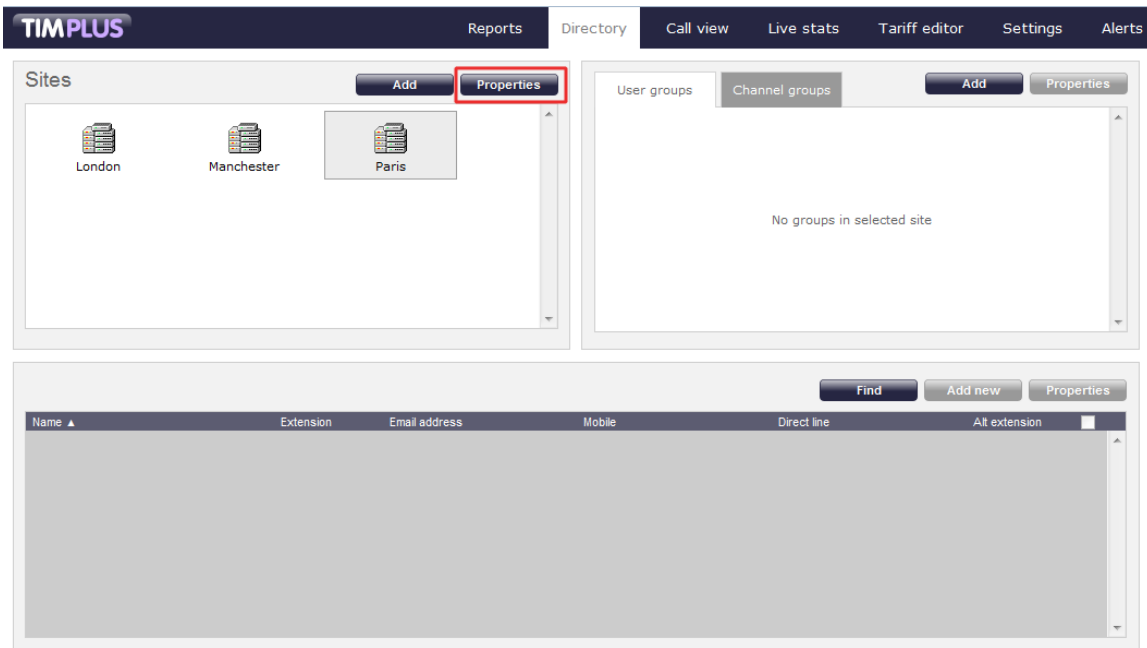
## Deleting a site



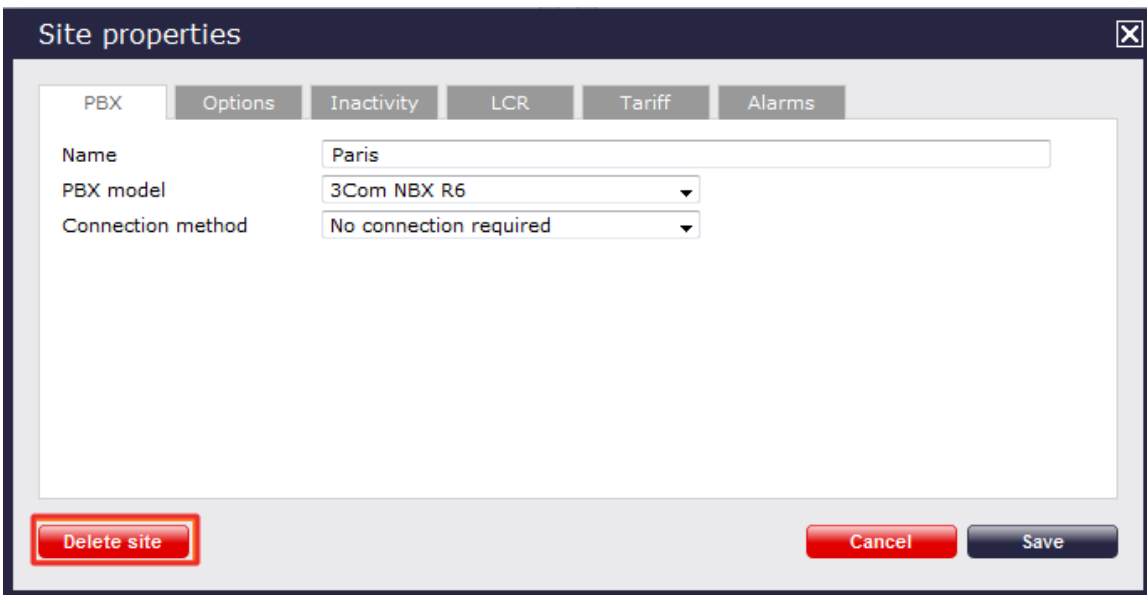
When you delete a site, you are deleting all the information contained within that site, including its users and channels, and any calls associated with those items!

To delete a site from the Directory, select the site you want to remove, then click on the **Properties** button, as shown below:





The site **Properties** window will appear. Click on the **Delete site** tab at the bottom-left of the window to remove the site from the Directory; a confirmation will be required, to prevent the site being deleted accidentally.

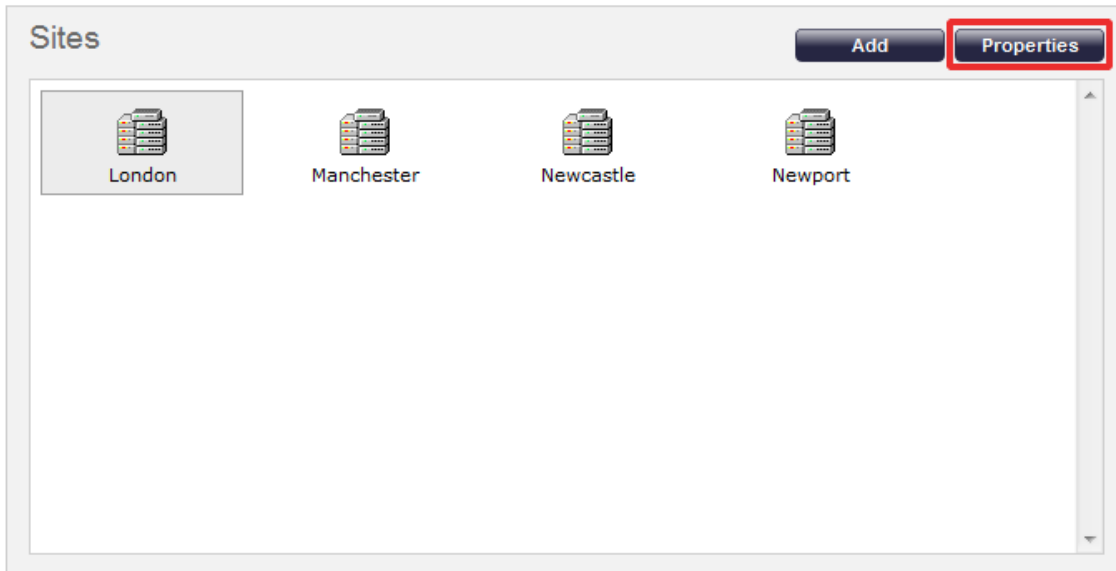


## Configuring a site



## Overview

To configure a site, go to the Directory screen, select the site you want to configure and click on the **Properties** button at the top-right of the panel, as shown below:



The following window will appear, where you can configure the properties of your site:

The screenshot shows a 'Site properties' dialog box with a dark blue header and a close button (X) in the top right corner. Below the header is a row of tabs: 'PBX', 'Options', 'Inactivity', 'LCR', 'Tariff', and 'Alarms'. The 'PBX' tab is selected and highlighted. The main area contains three fields: 'Name' with a text input containing 'London', 'PBX model' with a dropdown menu showing 'Internal', and 'Connection method' with a dropdown menu showing 'No connection required'. At the bottom of the dialog, there are three buttons: a red 'Delete site' button, a red 'Cancel' button, and a dark blue 'Save' button.

Each tab in the `Site properties` window are described below:

## PBX

The `PBX` tab allows you to configure the properties of your telephone system. The properties presented in this tab will vary, depending on the connection method used by your telephone system to provide call logging data.

### For all connection types

This screenshot is identical to the one above, showing the 'PBX' tab of the 'Site properties' dialog. The fields are: Name (London), PBX model (Internal), and Connection method (No connection required). The buttons at the bottom are Delete site, Cancel, and Save.

Field	Description
<b>Name</b>	The name by which you want your site to be identified.
<b>PBX model</b>	The name of your telephone system.
<b>Connection method</b>	The connection method used by your telephone system to provide call logging data.

### For listening connections

PBX	Options	Inactivity	LCR	Tariff	Alarms
Name	<input type="text" value="London"/>				
PBX model	<input type="text" value="Avaya IP Office 6+"/>				
Connection method	<input type="text" value="Listen for connections from PBX"/>				
Host	<input type="text"/>				
Port	<input type="text" value="9000"/>				

Field	Description
<b>Host</b>	Specify the IP address of your PBX to only allow data to be sent from that address. You may leave this field blank to accept data from any IP address.
<b>Port</b>	The port number that TIM Plus should listen on for call logging data.

**For active connections**

PBX	Options	Inactivity	LCR	Tariff	Alarms
Name	<input type="text" value="London"/>				
PBX model	<input type="text" value="Avaya IP Office"/>				
Connection method	<input type="text" value="Actively connect to PBX"/>				
Host	<input type="text" value="192.168.0.1"/>				
Port	<input type="text" value="9000"/>				
Username	<input type="text"/>				
Password	<input type="text"/>				
Connection script	<input type="text" value="Generic Simple"/>				

Field	Description
<b>Host</b>	The IP address of the telephone system.
<b>Port</b>	The port number that your telephone system listens on.
<b>Username</b>	The username required to log in to your telephone system, if applicable.
<b>Password</b>	The password required to log in to your telephone system, if applicable.

**For FTP transfer connections**

PBX	Options	Inactivity	LCR	Tariff	Alarms	Sync
Name	London					
PBX model	Cisco UCM 5+					
Connection method	Receive FTP transfers from PBX					
	<input type="checkbox"/> Use SFTP protocol					
Username	cmadmin					
Password	●●●●●●					

Field	Description
<b>Username</b>	The username of the FTP account on your telephone system.
<b>Password</b>	The password of the FTP account on your telephone system.

#### For DSN connections

PBX	Options	Inactivity	LCR	Tariff	Alarms
Name	London				
PBX model	Alcatel OminPCX Office				
Connection method	Connect to a system DSN				
DSN name	TIM Plus - Alcatel OHL				
Frequency	5				
DB Script	Alcatel OminPCX Office OHL				

Field	Description
<b>DSN name</b>	The name of the system DSN connection to use when connecting to your telephone system's database.
<b>Frequency</b>	The frequency, in seconds, of the checks that TIM Plus makes when connecting to the database to determine if new data is available.
<b>DB Script</b>	The database script that TIM Plus uses when checking for new data.

#### For RADIUS connections


PBX	Options	Inactivity	LCR	Tariff	Alarms	Sync
Name	<input type="text" value="London"/>					
PBX model	Cisco UCME - RADIUS					
Connection method	RADIUS connection					
Client IP	<input type="text" value="192.168.1.1"/>					
Secret	<input type="password" value="•••••"/>					

Field	Description
<b>Client IP</b>	The IP address of your telephone system responsible for sending RADIUS packets.
<b>Secret</b>	The secret key used in RADIUS authentication between TIM Plus and your telephone system.

**For SysLog connections**

PBX	Options	Inactivity	LCR	Tariff	Alarms	Sync
Name	<input type="text" value="London"/>					
PBX model	Cisco UCME - SysLog					
Connection method	SysLog connection					
Client IP	<input type="text" value="192.168.1.1"/>					

Field	Description
<b>Client IP</b>	The IP address of your telephone system responsible for sending SysLog events to TIM Plus.

 For detailed information about connecting to all makes/models of PBX, refer to the [Connecting to your PBX section](#).

**Options**

The **Options** tab enables you to keep a backup of any call logging data received, timestamp incoming call records and delay processing of call records. These options are explained below in more detail:

The screenshot shows a configuration window with several tabs: PBX, Options, Inactivity, LCR, Tariff, and Alarms. The 'Options' tab is active. It contains the following settings:

- Save a backup of any data received from this PBX, to the following file:
  - File path: `{app}\backup\backup-{year}-{month}-{day}.{uiv}`
- Timestamp received data
- Binary data
- Delay processing of received data by  ms

#### Save a backup of any data received from this PBX

TIM Plus allows you to save a backup of any call logging data received from your telephone system(s).

To enable backups, tick the **Save a backup of any data received from this PBX** box and enter the location of the folder you want to store the files in. The default path is `{app}\backup\backup-{year}-{month}-{day}.{uiv}` and can contain dynamic variables, as detailed below:

Item	Description
<code>app</code>	The full installation path of TIM Plus
<code>year</code>	The year the data was captured in <code>yyyy</code> format
<code>month</code>	The month the data was captured in <code>mm</code> format
<code>day</code>	The day of the month when data was captured in <code>dd</code> format
<code>uiv</code>	A unique ID representing each site in the Directory

#### Timestamp received data

TIM Plus can timestamp call records from your telephone system as they are received, if they do not already include dates and times.

#### Binary data

Select this option if your telephone system sends call records in a non-textual format.

#### Delay processing of received data

Enable this option and enter a time delay, in milliseconds, if call records are sent from your telephone system over a slow connection. This helps to prevent data loss when call records are processed before they are fully received.

## Inactivity

The **Inactivity** tab allows you to set up an inactivity timer, which can notify you by e-mail when TIM Plus has not received data from your telephone system for a given amount of time.

PBX Options **Inactivity** LCR Tariff Alarms

Enable inactivity timer

After  minutes of inactivity, send email to:-

Reset connection on inactivity

Exclude the following days and hours from inactivity monitoring

<input type="checkbox"/> Monday	<input checked="" type="checkbox"/> 00	<input checked="" type="checkbox"/> 07	<input type="checkbox"/> 14	<input checked="" type="checkbox"/> 21
<input type="checkbox"/> Tuesday	<input checked="" type="checkbox"/> 01	<input checked="" type="checkbox"/> 08	<input type="checkbox"/> 15	<input checked="" type="checkbox"/> 22
<input type="checkbox"/> Wednesday	<input checked="" type="checkbox"/> 02	<input type="checkbox"/> 09	<input type="checkbox"/> 16	<input checked="" type="checkbox"/> 23
<input type="checkbox"/> Thursday	<input checked="" type="checkbox"/> 03	<input type="checkbox"/> 10	<input type="checkbox"/> 17	
<input type="checkbox"/> Friday	<input checked="" type="checkbox"/> 04	<input type="checkbox"/> 11	<input checked="" type="checkbox"/> 18	
<input checked="" type="checkbox"/> Saturday	<input checked="" type="checkbox"/> 05	<input type="checkbox"/> 12	<input checked="" type="checkbox"/> 19	
<input checked="" type="checkbox"/> Sunday	<input checked="" type="checkbox"/> 06	<input type="checkbox"/> 13	<input checked="" type="checkbox"/> 20	

### Enable inactivity timer

Select this option to enable inactivity monitoring for the site you are configuring. Enter the amount of time, in minutes, that must pass with no call activity, before an e-mail is sent. Next, enter the e-mail address that will receive inactivity alerts for this site.

### Reset connection on inactivity

TIM Plus can reset the network connection to your telephone system when an inactivity alert is sent, in order to cause the telephone system to restart its connection.

### Exclude days and hours from inactivity monitoring

Tick the box alongside the days and hours when it is legitimate that no call activity takes place, such as at night or at weekends, so as not to receive unnecessary e-mail notifications for those periods.

## LCR

The  tab allows you to administer any least cost routing (LCR) codes you may use to route calls via different carriers.

PBX Options Inactivity **LCR** Tariff Alarms

LCR digits route your telephone calls through different carriers. Create LCR entries below:

LCR digits  routes to

LCR digits ▲	Routes to	
141	Default	<input checked="" type="checkbox"/>
1470	Default	<input checked="" type="checkbox"/>
1620	Default	<input checked="" type="checkbox"/>
1620141	Default	<input checked="" type="checkbox"/>
16201470	Default	<input checked="" type="checkbox"/>
1623	Default	<input checked="" type="checkbox"/>

### Adding LCR codes

To add an LCR code, enter it in the `LCR digits` field and select its associated tariff table from the drop-down list, as shown above.

### Removing LCR codes

To remove an LCR code, click on the  icon alongside it.



## Tariff

The **Tariff** tab allows you to select a default tariff table to use when costing calls made by users from this site.

Apply the following tariff to any calls made by users within this site

BT



By default, TIM Plus is supplied with a standard tariff table for the country of installation, which automatically includes details of national, international and mobile/cellphone dial codes. Bespoke tariffs can also be provided on request.

## Alarms

TIM Plus can send e-mail alerts when calls whose properties match certain criteria have happened, such as calls above a particular duration, calls to specific phone numbers, or when user-defined cost thresholds are exceeded.

Raise an alarm when **any** of the following criteria are met

Dialled number starts with

Cost is above

Duration longer than  seconds

Enable missed call alarms for this site

Send alarms to the following email address(es):

### Dialled number alarm

An alarm can be activated when a full or partial number is dialled. To add a series of full or partial numbers, separate each one with a comma, as shown above. An example might be 00, 020, 020726526, 02072652600.

### Cost alarm

An alarm can be activated when a call exceeds a specific cost.

### Duration alarm

An alarm can be activated when a call exceeds a predetermined duration, specified in seconds.

### Missed call alarm

E-mail notifications of missed calls can be activated, by ticking the [Enable missed call alarms for this site](#) option.

### Delivering the alarm notification

To receive an e-mail notification from TIM Plus about any of the aforementioned alarms, enter the address of the e-mail recipient in the box provided; to send alerts to multiple email addresses, separate each one with a semicolon.

## Groups

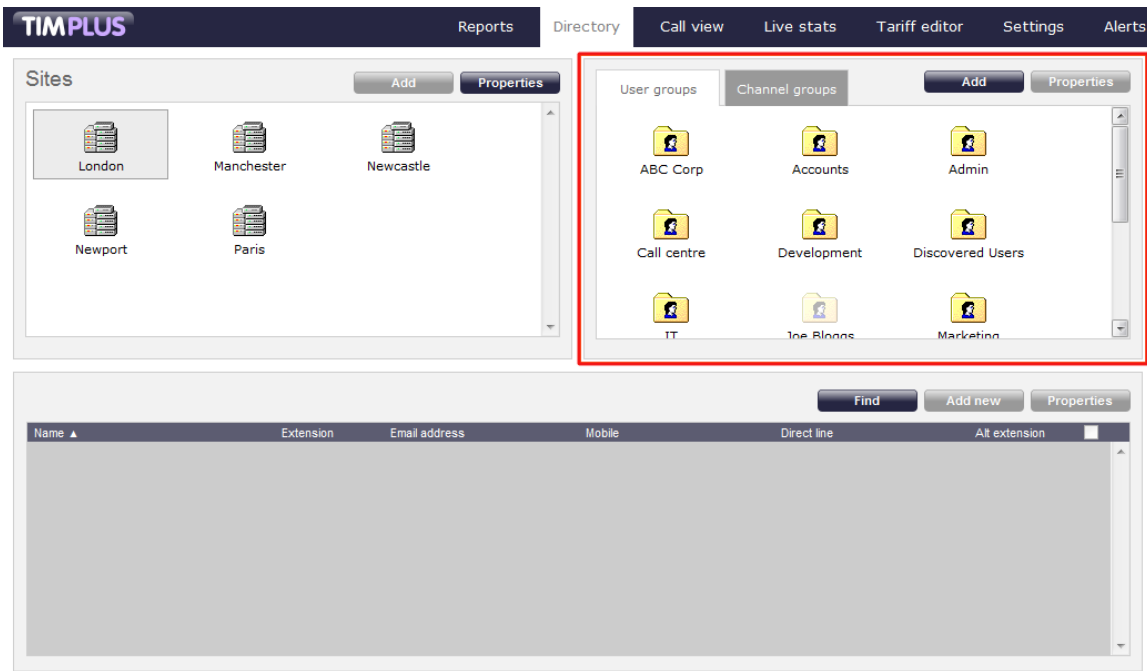
### User groups

**User groups**

- What is a user group?
- Adding a user group
- Configuring a user group
- Renaming a user group
- Deleting a user group

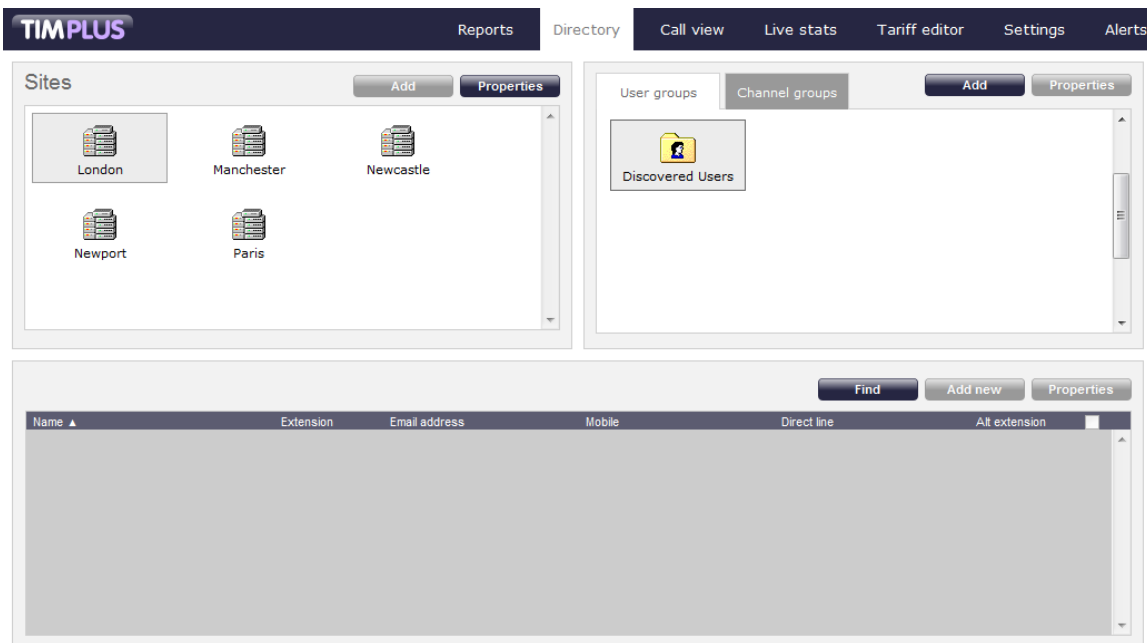
### What is a user group?

A user group is a container of individual users, and together they mimic the organisational structure of your company, enabling you to run reports on, and [restrict access](#) to, parts of the TIM Plus directory.



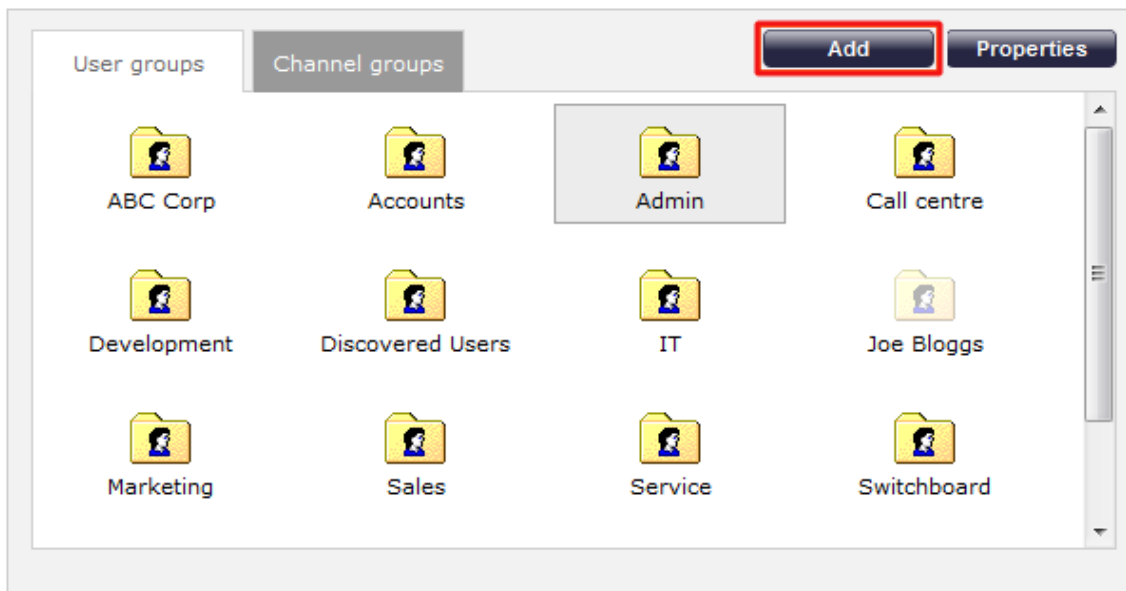
### The Discovered Users folder

A special user group, **Discovered Users**, is automatically created in TIM Plus to harvest hitherto-unknown user information from the call data received from your telephone system. Over time, when all possible users have been collected by the Discovered Users folder, you can create your own user groups based on the structure of your organisation, and move users into these new groups.

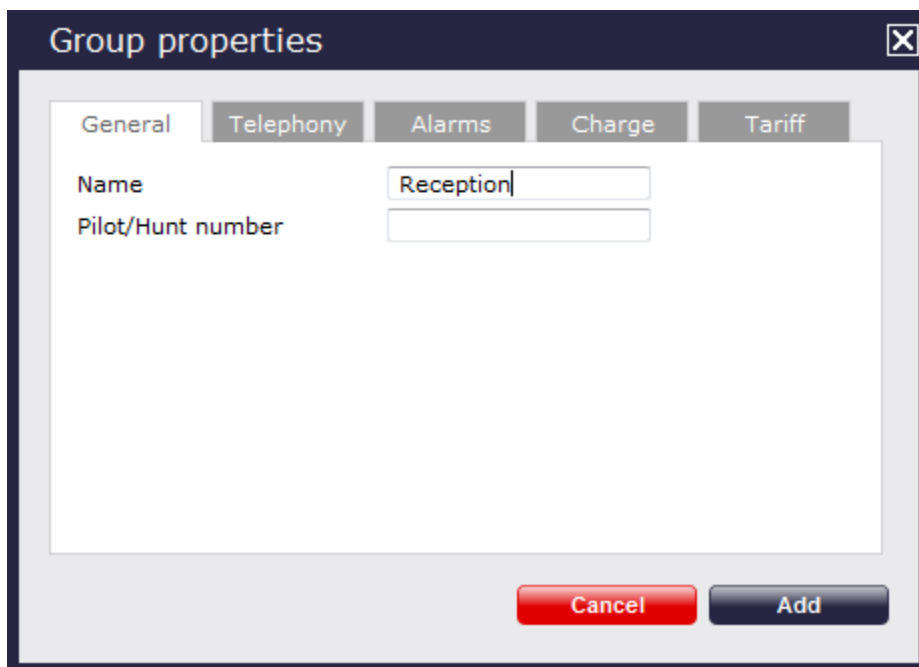


### Adding a user group

To add a new user group to the Directory, select the **User groups** tab from the Groups panel and click on the **Add** button.



A new window will appear, allowing you to add the name of the group and its associated pilot/hunt group number, if applicable.



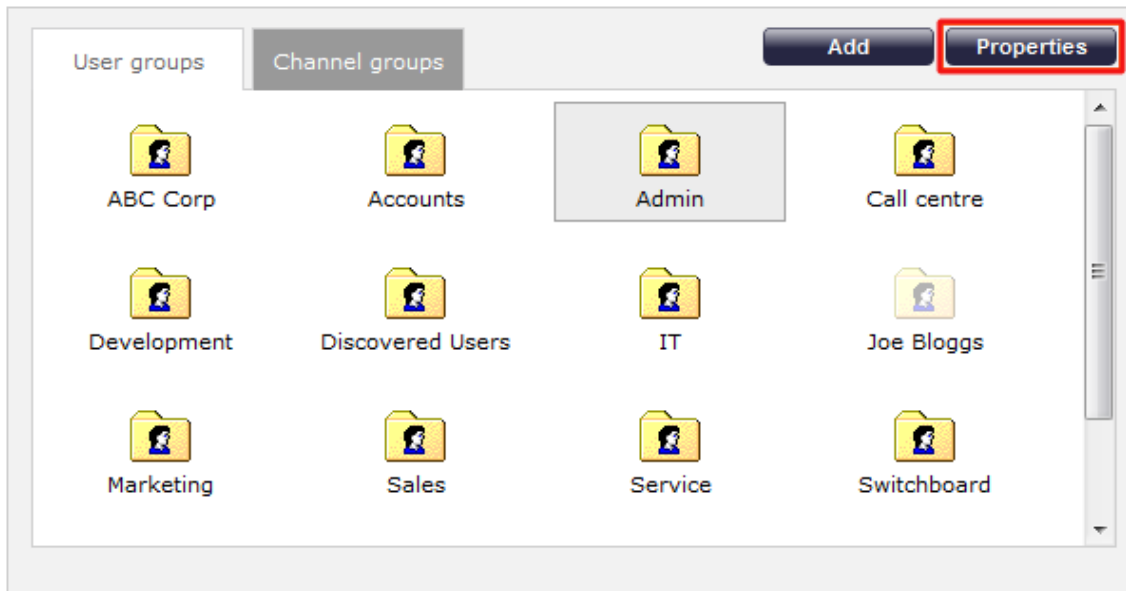
Click on the **Add** button to add the new group to the Directory.



If you use synchronisation, such as Cisco AXL, you need not manually configure user groups, since TIM Plus automatically imports users from your telephone system, placing them in their respective groups.

## Configuring a user group

To configure the properties of a user group, highlight the group you want to configure and click on the **Properties** button at the top-right corner of the panel:



A new window will open, where you can configure the properties of the user group. Each tab in the `Group properties` window is described below:

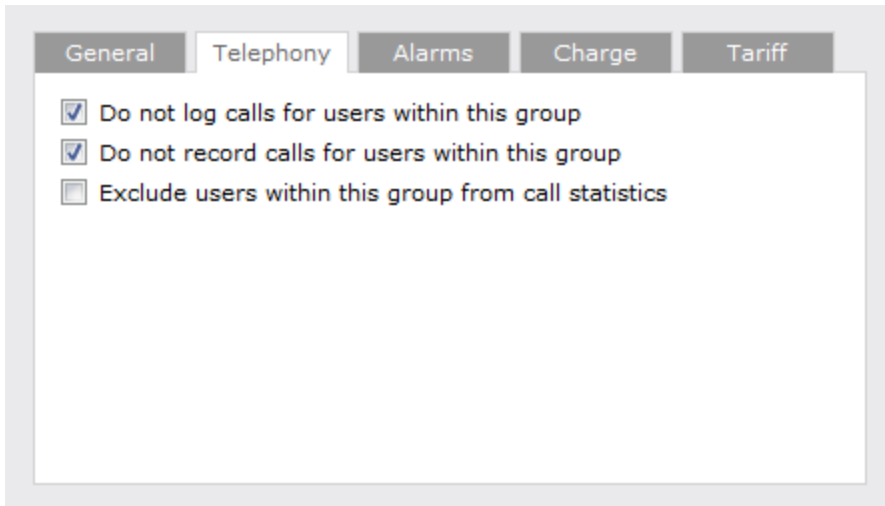
#### General

In the `General` tab you can edit the name of the user group and its associated pilot/hunt group number, if applicable.

 A screenshot of the 'General' tab in the 'Group properties' window. The window has five tabs: 'General', 'Telephony', 'Alarms', 'Charge', and 'Tariff'. The 'General' tab is active. Below the tabs are two input fields: 'Name' with the value 'Accounts' and 'Pilot/Hunt number' with the value '7000'.

#### Telephony

The `Telephony` tab gives you the option to exclude the currently-selected group from being logged by TIM Plus. If call recording integration is enabled, you can also exclude calls from being recorded.



General | **Telephony** | Alarms | Charge | Tariff

- Do not log calls for users within this group
- Do not record calls for users within this group
- Exclude users within this group from call statistics

The following options can be enabled or disabled in this panel:

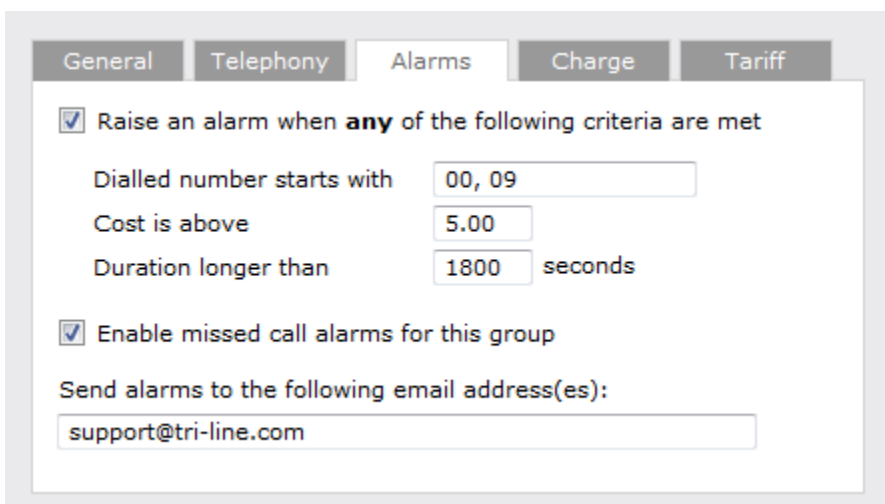
Option	Description
Do not log	Calls to and from this user group will not be logged by TIM Plus. In addition, if integrated call recording is used, no audio recordings will be available
Do not record calls	Calls to and from this user group will not be recorded, if integrated call recording is in use
Exclude users from call statistics	Collection of statistics will not be performed for calls to and from this user group



Your software license user capacity does not include users inside groups whose **Do not log** option is enabled.

## Alarms

TIM Plus can send e-mail alerts when calls whose properties match certain criteria have happened, such as calls above a particular duration, calls to specific phone numbers, or when user-defined cost thresholds are exceeded.



General | Telephony | **Alarms** | Charge | Tariff

- Raise an alarm when **any** of the following criteria are met
  - Dialled number starts with
  - Cost is above
  - Duration longer than  seconds
- Enable missed call alarms for this group

Send alarms to the following email address(es):

### Dialled number alarm

An alarm can be activated when a full or partial number is dialled by any user within the selected group. To add a series of full or partial numbers, separate each one with a comma, as shown above. An example might be `00, 020, 020726526, 02072652600`.

### Cost alarm

An alarm can be activated when a call made by any user within the selected group exceeds a specific cost.

### Duration alarm

An alarm can be activated when a call made by any user within the selected group exceeds a predetermined duration, measured in seconds.

### Missed call alarm

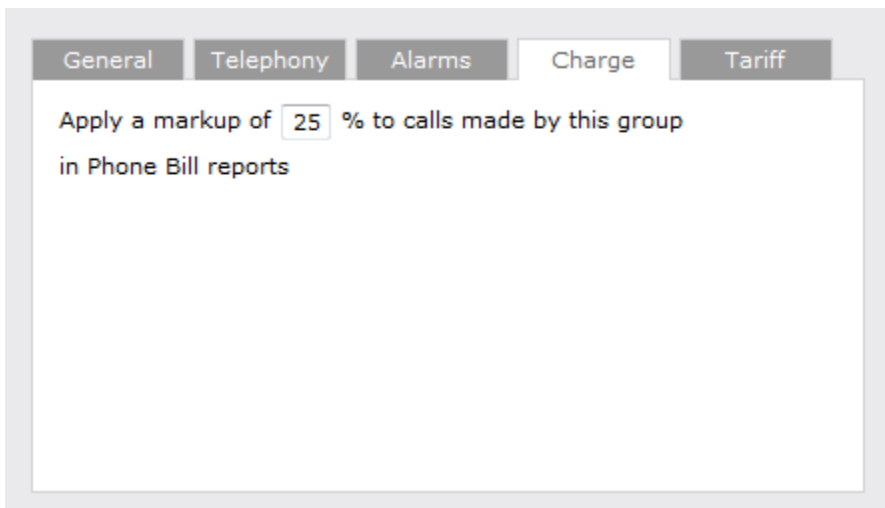
E-mail notifications of missed calls can be activated for users in the selected group, by ticking the `Enable missed call alarms for this site` option.

### Delivering the alarm notification

To receive an e-mail notification from TIM Plus about any of the aforementioned alarms, enter the address of the e-mail recipient in the box provided; to send alerts to multiple e-mail addresses, separate each one with a semicolon.

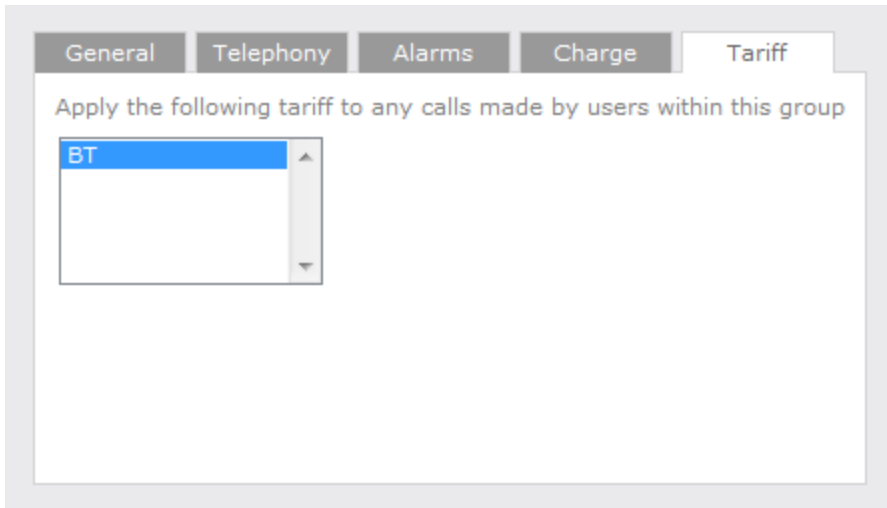
## Charge

The `Charge` tab gives you the ability to add a percentage markup to all calls in the selected group. To apply the charge, enter the percentage by which you would like to mark up calls, as shown below:



## Tariff

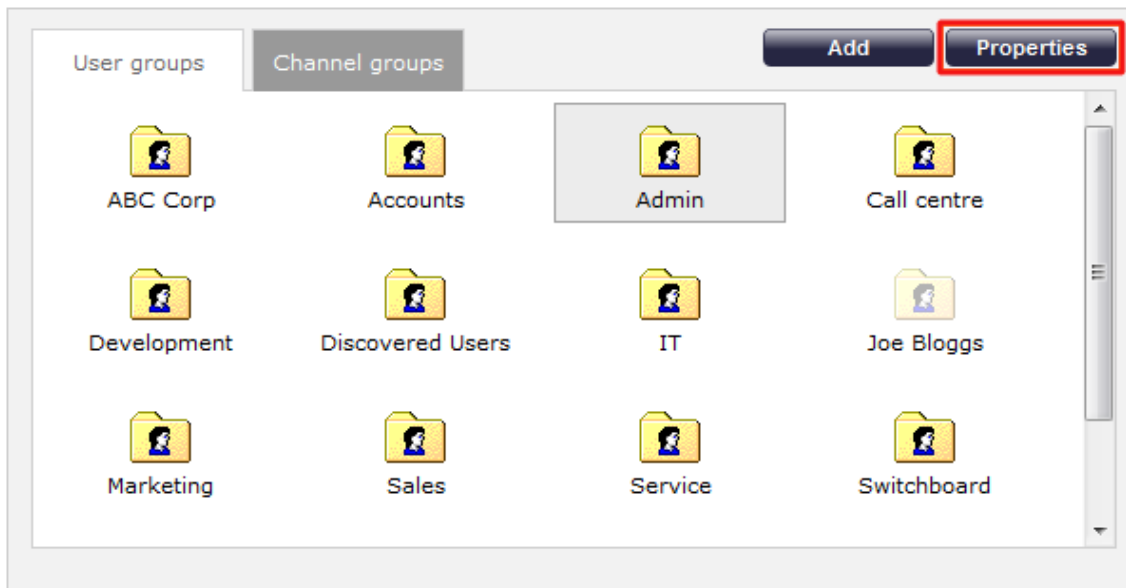
The `Tariff` tab gives you the ability to select a default tariff table to use when costing calls made by users in this group.



By default, TIM Plus is supplied with a standard tariff table for the country of installation, which automatically includes details of national, international and mobile/cellphone dial codes. Bespoke tariffs can also be provided on request.

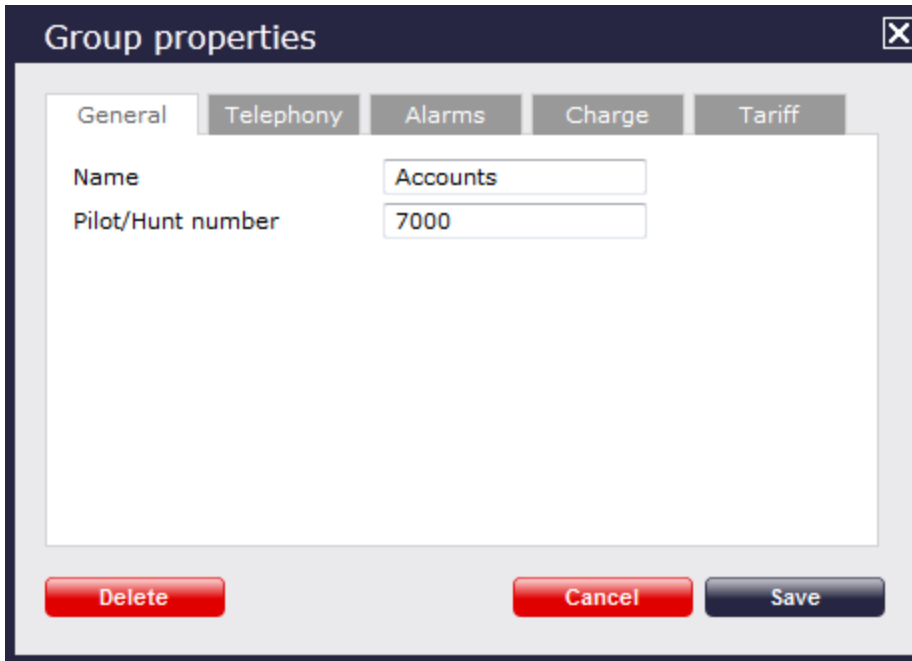
## Renaming a user group

To rename a user group, locate it in the Directory and click on the **Properties** button.



A new window will open, where you can specify a new name for the group. Click **Save** to apply the changes.





**Group properties** [X]

General | Telephony | Alarms | Charge | Tariff

Name: Accounts

Pilot/Hunt number: 7000

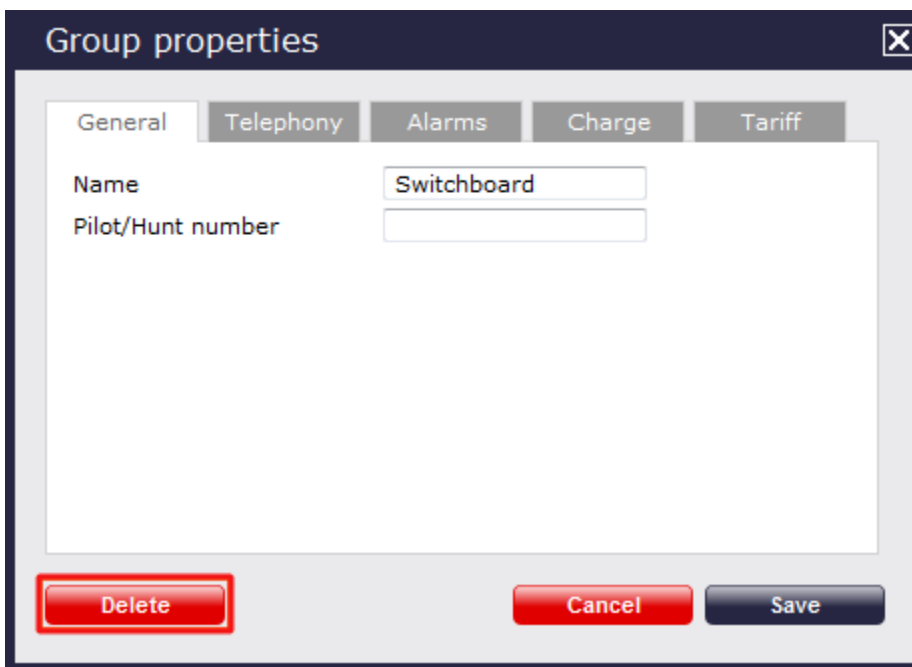
Buttons: Delete, Cancel, Save

## Deleting a user group



When you delete a user group, you are deleting all the information contained within that group, including all users and calls associated with those users!

To delete a user group from the Directory, select the group you want to remove and click on the **Properties** button.



**Group properties** [X]

General | Telephony | Alarms | Charge | Tariff

Name: Switchboard

Pilot/Hunt number:

Buttons: Delete, Cancel, Save

The **Group properties** window will appear. Click on the **Delete site** tab at the bottom-left of the window to remove the group from the Directory; a confirmation will be required, to prevent the group being deleted accidentally.

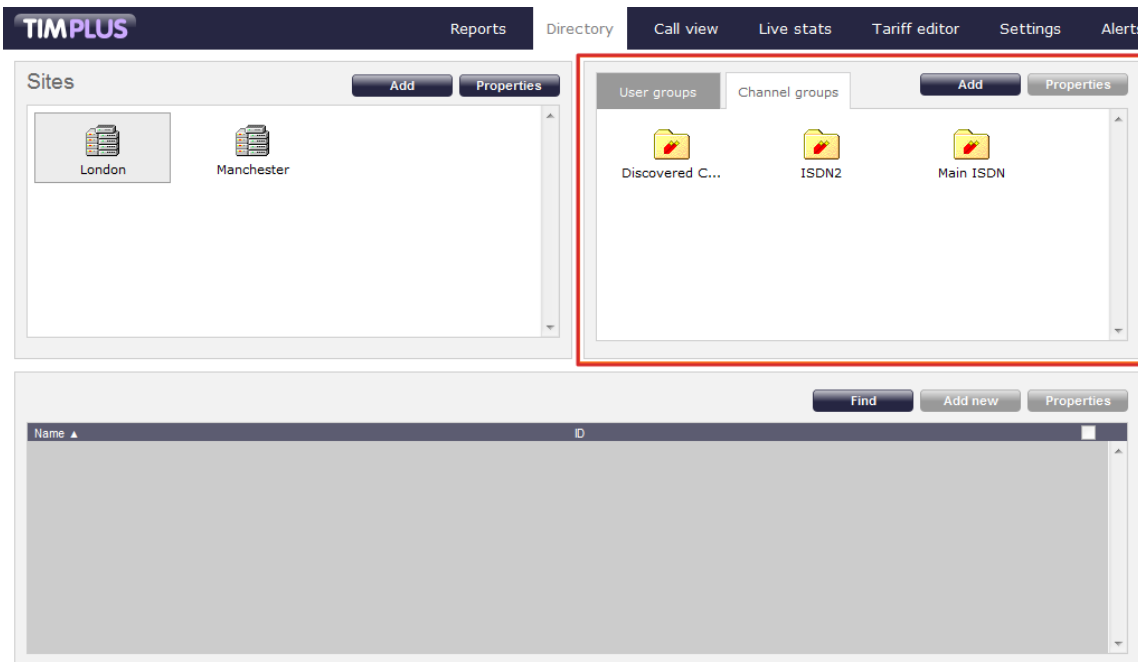
## Channel groups

### Channel groups

- What is a channel group?
- Adding a channel group
- Configuring a channel group
- Renaming a channel group
- Deleting a channel group

### What is a channel group?

A channel group is a container of individual channels and is normally named to reflect the type of channel it contains, such as ISDN30, ISDN2, Analogue, etc.

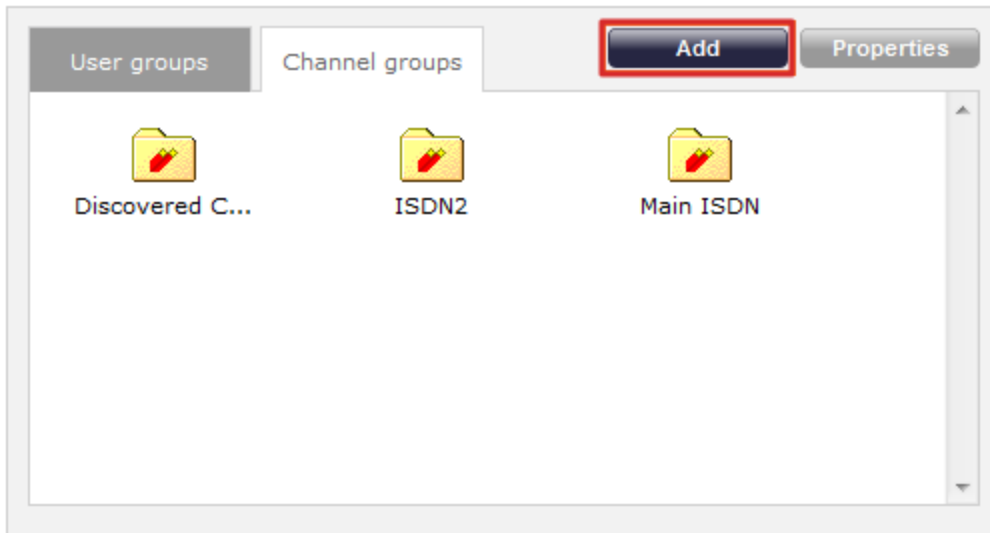


### The Discovered Channels folder

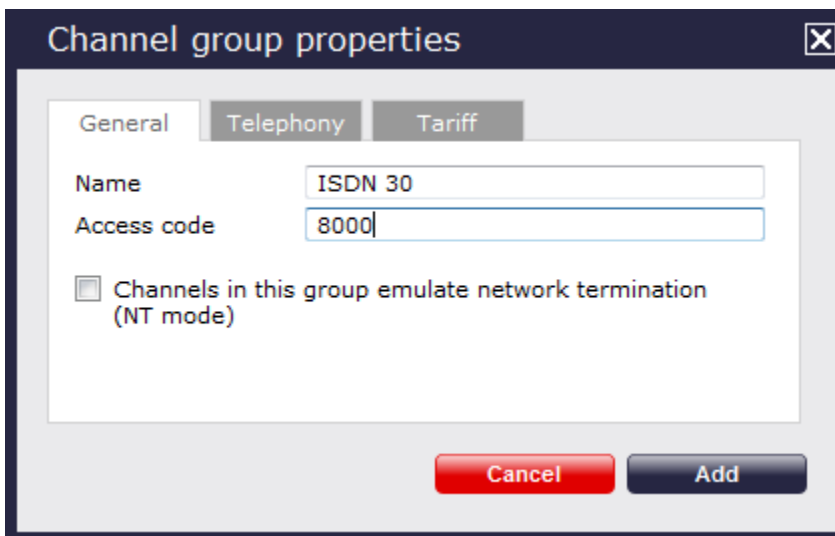
A special channel group, *Discovered Channels*, is automatically created in TIM Plus to harvest hitherto-unknown channel information from the call data received from your telephone system. Over time, when all possible channels have been collected by the Discovered Channels folder, you can create your own channel groups based on the structure of your organisation, and **move** channels into these new groups.

### Adding a channel group

To add a new channel group to the Directory, select the  tab from the Groups panel and click on the  button.



A new window will appear, allowing you to enter the group's name and its associated trunk access code (TAC), if applicable.



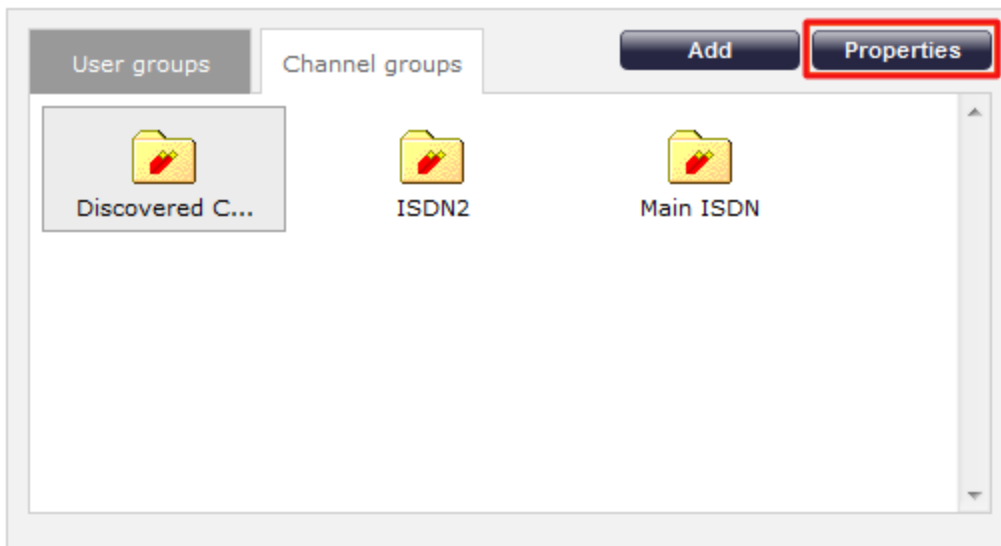
Click on the **Add** button to add the new group to the Directory.



If you use synchronisation, such as Cisco AXL, you need not manually configure channel groups, since TIM Plus automatically imports channels from your telephone system, placing them in their respective groups.

## Configuring a channel group

To configure the properties of a channel group, highlight the group you want to configure and click on the **Properties** button at the top-right corner of the panel:



A new window will open, where you can configure the properties of your channel group. Each tab in the `Group properties` window is described below:

### General

In the `General` tab you can edit the name of the channel group and its associated access code, if applicable.

#### Channels in this group emulate network termination

This option only applies if you have enabled integrated call recording on your system. Its purpose is to indicate that the far end of the channel's physical connection is emulating PSTN network termination (NT), such as in a private circuit scenario.

### Telephony

The `Telephony` tab gives you the option to exclude the currently-selected group from being logged by TIM Plus. If call recording integration is enabled, you can also exclude calls from being recorded.

General Telephony **Tariff**

- Do not log calls for channels in this group
- Do not record calls for channels in this group
- Exclude channels in this group from call statistics

Option	Description
Do not log	Calls for this channel group will not be logged by TIM Plus. In addition, if integrated call recording is in use, no audio recordings will be available
Do not record calls	Calls for this channel group will not be recorded, if integrated call recording is in use
Exclude channels from call statistics	Collection of statistics will not be performed for this channel group

## Tariff

The **Tariff** tab gives you the ability to select a default tariff table to use, when costing calls for this channel group.

General Telephony **Tariff**

Apply the following tariff to any calls that are made using channels within this group

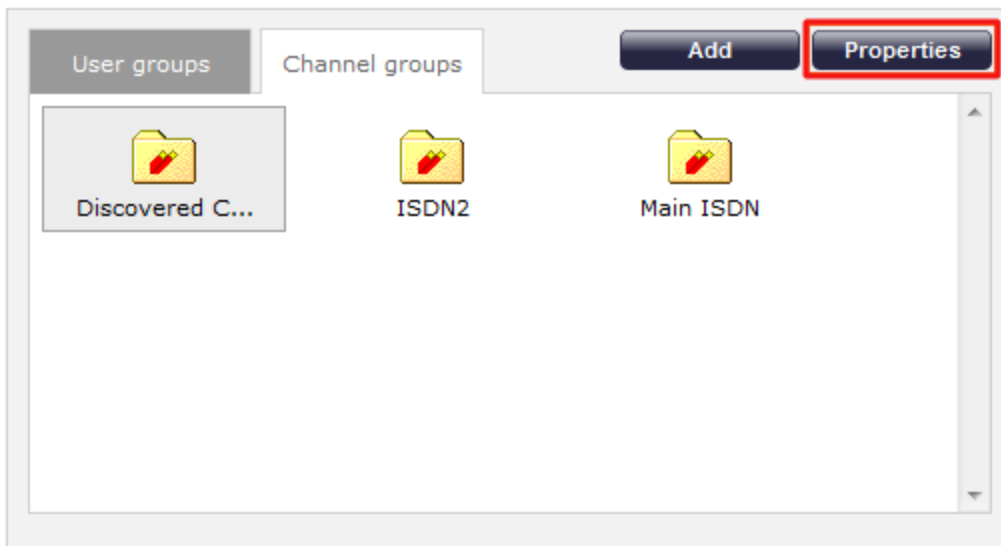
BT



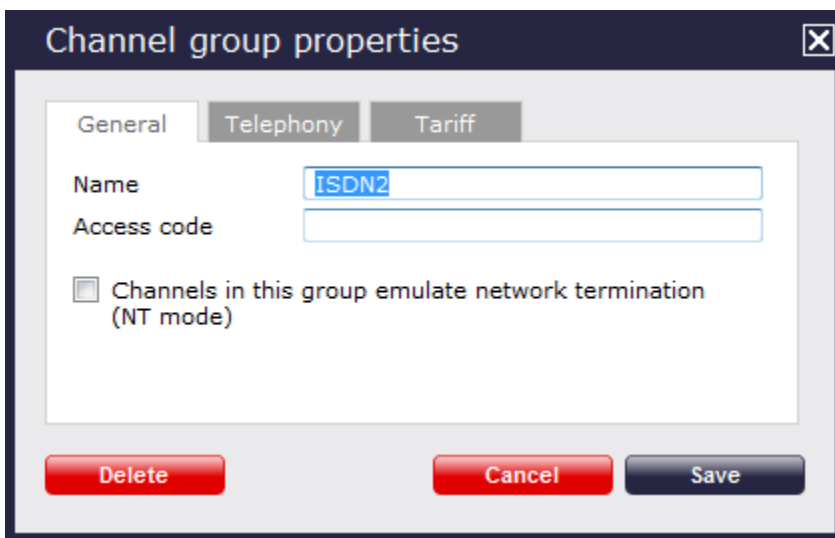
By default, TIM Plus is supplied with a standard BT tariff which will automatically pick up national, international and mobile dial codes. Bespoke tariffs can also be provided on request.

## Renaming a channel group

To rename a channel group, locate it in the Directory and click on the **Properties** tab.



A new window will open, where you can specify a new name for the group. Click **Save** to apply the changes.



## Deleting a channel group



When you delete a channel group, you are deleting all the information contained within that group, including all channels and the calls associated with those channels!

To remove a channel group from the Directory, select the group you want to remove and click on the **Properties** button. In the **Channel properties** window that will open, click on the **Delete** button to remove the channel from the Directory; a confirmation will be required, to prevent users being deleted accidentally.

## Channel group properties

General
Telephony
Tariff

Name

Access code

Channels in this group emulate network termination (NT mode)

Delete
Cancel
Save

## Contents

### What are Contents?

The **Contents** panel is located at the bottom-half of the Directory screen. This contains the individual objects belonging to the previously-selected user or channel group.

If a user group is currently selected, the **Contents** panel will display a list of users contained in that group, as shown below:

**TIMPLUS**
Reports
Directory
Call view
Live stats
Tariff editor
Settings
Alerts

**Sites** Add Properties

London

Manchester

Newcastle

Newport

Paris

**User groups** Add Properties

User groups
Channel groups

IT

Joe Bloggs

Marketing

Sales

Service

Switchboard

17 items Find Add new Properties

Name	Extension	Email address	Mobile	Direct line	Alt extension	
AJ Singh	12030					<input type="checkbox"/>
Danny Blackwell	1002					<input type="checkbox"/>
Gary Stock	11087					<input type="checkbox"/>
George Evans	12024					<input type="checkbox"/>
Kerri Tai	2005					<input type="checkbox"/>
Lance King	13405					<input type="checkbox"/>
Malory Jones	3303					<input type="checkbox"/>
Melvyn Coutts	11065					<input type="checkbox"/>
Mohan Patel	2039					<input type="checkbox"/>
Nathan Levy	2301					<input type="checkbox"/>

If a channel group is currently selected, the **Contents** panel will display a list of channels contained in that group, as shown below:

The screenshot displays the TIM Plus web interface. At the top, a navigation bar contains the following tabs: Reports, Directory, Call view, Live stats, Tariff editor, Settings, and Alerts. The main content area is split into two sections. On the left, the 'Sites' section features five site icons labeled London, Manchester, Newcastle, Newport, and Paris, with 'Add' and 'Properties' buttons. On the right, the 'User groups' section shows three folder icons labeled Discovered C..., ISDN2, and Main ISDN, also with 'Add' and 'Properties' buttons. Below these sections is a large table with 228 items, outlined in red. The table has columns for Name and ID, and a 'Find' button is located at the top right of the table area.

Name	ID
10001	10001
10003	10003
10004	10004
120001	120001
120002	120002
120003	120003
120004	120004
120005	120005
120006	120006
120007	120007

## Users

### Users

- Overview
- Finding a user
- Adding a user
- Editing a user's properties
- Moving a user between two groups
- Deleting a user

### Overview

Users represent the people in your organisation who make use of devices such as telephone extensions, fax machines, etc. When you first configure TIM Plus, your users are automatically harvested from the data received from the phone system into a folder named *Discovered Users*. The properties of each user can be edited afterwards, and users can also be subsequently organised into new user groups, if preferred.

### Finding a user

To locate a user in the Directory, select the **Directory** tab and click on the **Find** button at the top-right corner of the Contents panel, as shown below:



The screenshot shows the TIMPLUS Directory interface. At the top, there are navigation tabs: Reports, Directory, Call view, Live stats, Tariff editor, Settings, and Alerts. Below this, there are two main panels: 'Sites' and 'Channel groups'. The 'Sites' panel shows five locations: London, Manchester, Newcastle, Newport, and Paris. The 'Channel groups' panel shows several groups: ABC Corp, Accounts, Admin, Call centre, Development (highlighted), Discovered Users, IT, Joe Bloggs, and Marketing. Below these panels is a table with 17 items. A 'Find' button is highlighted with a red box.

Name	Extension	Email address	Mobile	Direct line	Alt extension
Alastair Burnett	13409				
Bruce Stanton	3508				
Caroline Bulmer	7838				
Dean Tomkins	7849				
Graham Manning	11066				
Harry Patel	2054				
Lillian Beckham	13413				
Louise Lucas	11040				
Rome Jarrett	2011				
Sally Francis	7850				

In the new window that opens, enter the name or extension number of the user you are looking for, then click on the **Search** button. The results will appear in the same window, as shown below:

The screenshot shows a 'Search the directory' dialog box. It has a search input field containing 'Anna' and a 'Search' button. Below the input field is a checked checkbox labeled 'Search in all properties'. The search results are displayed in a table with columns: Name, ID, Site, and Group.

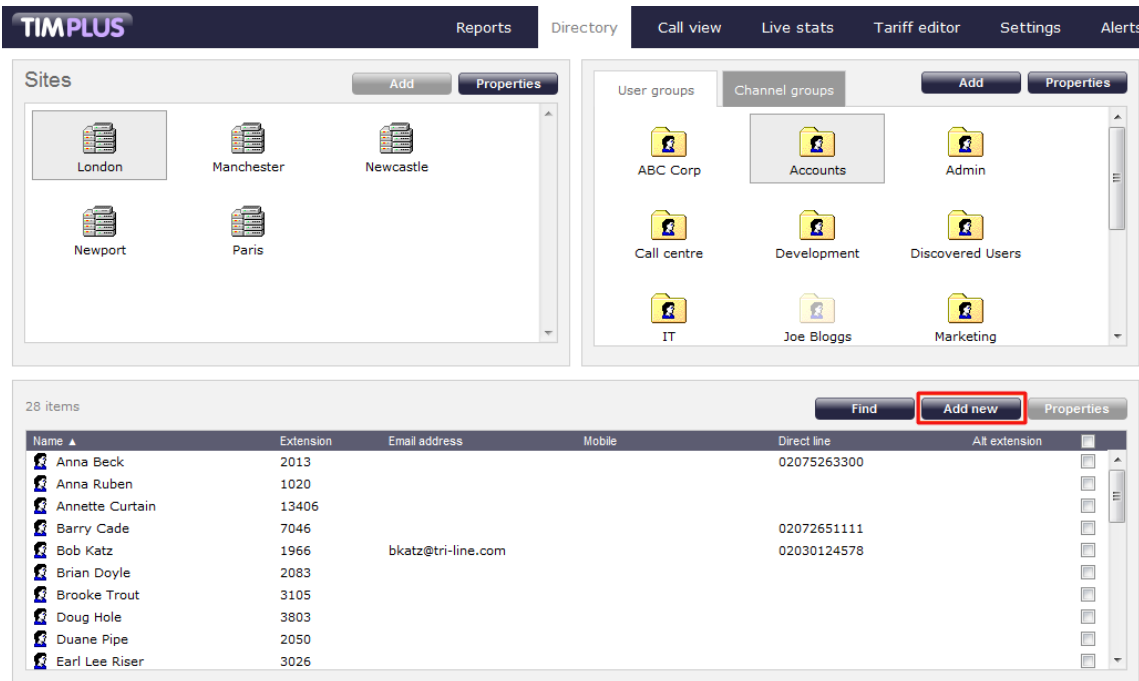
Name	ID	Site	Group
Anna Beck	2013	London	Accounts
Anna Hobbs	12032	London	Telesales
Anna Prentice	7623	London	Call centre
Anna Ruben	1020	London	Accounts
Anna Savalas	1975	London	Accounts
Hannah Soras	11038	London	Call centre

### Adding a user

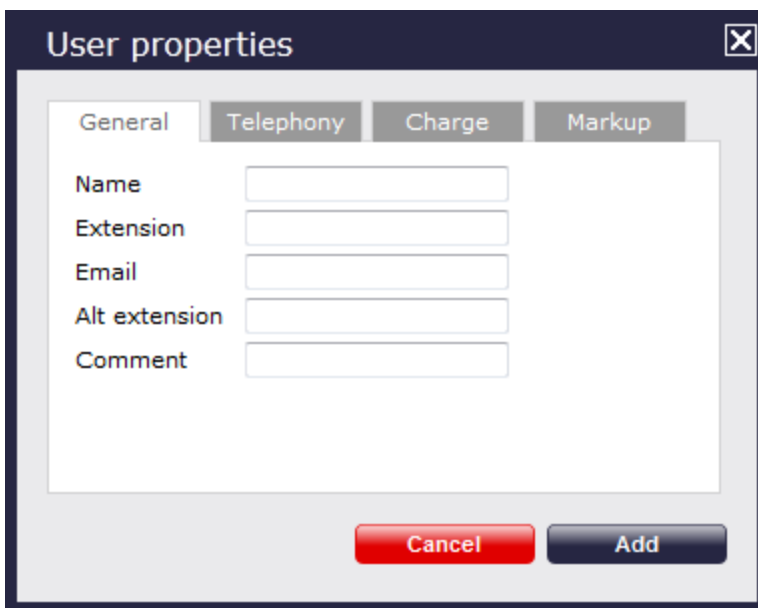


Before adding a new user to the system, check that it doesn't already exist, by searching for it in the Directory.

To manually add a user to the system, click on the **Directory** tab, select the group where you want the new user to be added, then click on the **Add new** button at the top-right corner of the Contents panel.



A new window will open, allowing you to configure the properties of the new user:



Each field in the `User properties` window is described below:

Field	Description
<b>Name</b>	The name of the user. If no name is entered, the extension number will show instead
<b>Extension</b>	The extension number of the user
<b>E-mail</b>	The e-mail address of the user

<b>Alt extension</b>	The alternative extension number(s) or the DDI digits of the user's extension, if applicable
<b>Comment</b>	Any comments you want to add for this user

Once you have configured the properties of the user, click on the **Add** button, as shown below:

The screenshot shows a 'User properties' dialog box with a dark blue title bar and a close button (X) in the top right. Below the title bar are four tabs: 'General', 'Telephony', 'Charge', and 'Markup'. The 'General' tab is active, displaying a form with the following fields: 'Name' (Anne), 'Extension' (Nickolson), 'Email' (anick@tri-line.com), 'Alt extension' (empty), and 'Comment' (empty). At the bottom of the dialog are two buttons: a red 'Cancel' button and a dark blue 'Add' button.

## Editing a user's properties

To edit the properties of a user, select it and click on the **Properties** button at the top-right corner of the Contents panel:

The screenshot shows a table with 28 items. The table has columns: Name, Extension, Email address, Mobile, Direct line, and Alt extension. The row for 'Anna Ruben' is highlighted with a red box. The 'Properties' button in the top right corner of the table is also highlighted with a red box.

Name	Extension	Email address	Mobile	Direct line	Alt extension
Anna Beck	2013			02075263300	
Anna Ruben	1020				
Annette Curtain	13406				
Barry Cade	7046			02072651111	
Bob Katz	1966	bkatz@tri-line.com		02030124578	
Brian Doyle	2083				
Brooke Trout	3105				
Doug Hole	3803				
Duane Pipe	2050				
Earl Lee Riser	3026				

The **User properties** window will open, displaying each property of the user, arranged over the following tabs:

### General

General	Telephony	Charge	Markup
Name	<input type="text" value="Anna Savalas"/>		
Extension	<input type="text" value="1975"/>		
Email	<input type="text" value="asavalas@tri-line.com"/>		
Alt extension	<input type="text"/>		
Comment	<input type="text"/>		

Field	Description
<b>Name</b>	The name of the user. If no name is entered, the extension number will show instead
<b>Extension</b>	The extension number of the user
<b>Email</b>	The e-mail address of the user
<b>Alt extension</b>	The alternative extension number(s) or the DDI digits of the user, if applicable
<b>Comment</b>	Any comments you want to add for this user

## Telephony

General	Telephony	Charge	Markup
DDI	<input type="text" value="02075238715"/>		
IP Phone	<input type="text"/>		
Mobile	<input type="text" value="07810101101"/>		
Home	<input type="text" value="02071829356"/>		
<input type="checkbox"/> Do not log calls for this user <input checked="" type="checkbox"/> Do not record calls for this user <input checked="" type="checkbox"/> Exclude this user from call statistics			

Field	Description
<b>DDI</b>	The DDI number of the user
<b>IP Phone</b>	The IP phone number of the user
<b>Mobile</b>	The mobile number of the user
<b>Home</b>	The home telephone number of the user

<b>Do not log calls for this user</b>	When selected, calls for this user will not be logged
<b>Do not record calls for this user</b>	When selected, calls for this user will not be recorded
<b>Exclude this user from call statistics</b>	When selected, collection of statistics will not be performed for calls to and from this user

## Charge

The **Charge** tab allows you add or edit a fixed charge for the user, such as room rental, internet services or additional sundry items.

The screenshot shows the 'Charge' tab selected in a user management interface. The interface has four tabs: 'General', 'Telephony', 'Charge', and 'Markup'. The 'Charge' tab is active. Below the tabs, there is a text prompt: 'Enter a description and amount to charge this user whenever they feature on a Phone Bill report'. There are two input fields: 'Description' with the value 'Monthly user fee' and 'Amount' with the value '30.00'.

## Markup

The **Markup** tab allows you to add or edit a markup charge to calls made by the user.

The screenshot shows the 'Markup' tab selected in a user management interface. The interface has four tabs: 'General', 'Telephony', 'Charge', and 'Markup'. The 'Markup' tab is active. Below the tabs, there is a text prompt: 'Enter a description and percentage to charge this user per call on a Phone Bill report'. There are two input fields: 'Description' with the value 'Call markup' and 'Amount' with the value '20' followed by a '%' symbol.

After editing the properties of the user, click on the **Save** button to save your changes.

## Moving a user between two groups

Follow the steps below to move a user from one group to another:

1. Click on the **Directory** tab and open the contents of the group which contains the user you want to move.
2. Select the user by ticking the box alongside it. The top-left panel of the screen will temporarily change to a **Move items** p

anel containing the selected user.

Name	Extension	Email address	Mobile	Direct line	Alt extension
Misty Waters	1980				
Marsha Mellow	1979				
May First	3801				
Al Dente	2042	adente@tri-line.com			
Barbara Seville	1000				
Bea Caws	2000				
Andrew Montgomery	2068				
Anna Savalas	1975	asavalas@tri-line.com		02075238715	
John White	2999				
Norma Lee	8328				

3. Next, select the destination group that you want the user to be moved into, and click on the **Move** button, as shown below:

Name	Extension	Email address	Mobile	Direct line	Alt extension
Alastair Burnett	13409				
Bruce Stanton	3508				
Caroline Bulmer	7838				
Dean Tomkins	7849				
Graham Manning	11066				
Harry Patel	2054				
Lillian Beckham	13413				
Louise Lucas	11040				
Rome Jarrett	2011				
Sally Francis	7850				

## Deleting a user



When you delete a user, you are also deleting the calls associated with that user!

To delete a user from the system, select it and click on the **Properties** button at the top-right corner of the Contents panel:

Name	Extension	Email address	Mobile	Direct line	Alt extension
Anna Beck	2013			02075263300	
Anna Ruben	1020				
Annette Curtain	13406				
Barry Cade	7046			02072651111	
Bob Katz	1966	bkatz@tri-line.com		02030124578	
Brian Doyle	2083				
Brooke Trout	3105				
Doug Hole	3803				
Duane Pipe	2050				
Earl Lee Riser	3026				

In the **User properties** window that will open, click on the **Delete** button to remove the user from the Directory; a confirmation will be required, to prevent users being deleted accidentally.

**User properties**

General | Telephony | Charge | Markup

Name: Anna Ruben

Extension: 1020

Email:

Alt extension:

Comment:

Delete Cancel Save

## Channels

### Channels

- Overview
- Finding a channel
- Adding a channel
- Editing a channel's properties
- Moving a channel between two groups
- Deleting a channel

## Overview

Channels are system objects representing your telephone lines. When you first configure TIM Plus, your channels are automatically harvested from the data received from the phone system, into a folder named *Discovered Channels*. The properties of each channel can be edited afterwards, and channels can also be organised subsequently into new channel groups, if preferred.

## Finding a channel

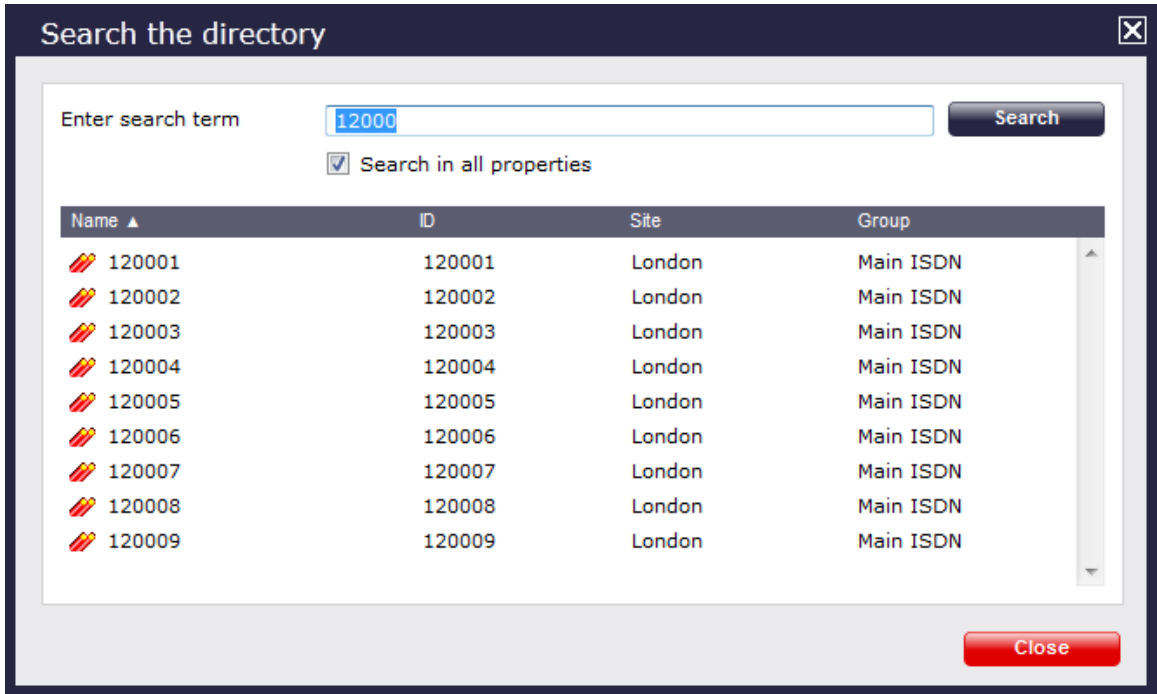
To locate a channel in the Directory, select the **Directory** tab and click on the **Find** button at the top-right corner of the Contents panel, as shown below:

The screenshot shows the TIM PLUS web interface. At the top, there is a navigation bar with tabs: Reports, Directory (selected), Call view, Live stats, Tariff editor, Settings, and Alerts. Below the navigation bar, there are two main panels. The left panel is titled 'Sites' and contains icons for London, Manchester, Newcastle, Newport, and Paris. The right panel is titled 'Channel groups' and contains icons for Discovered C..., ISDN2, and Main ISDN. At the bottom, there is a table with 228 items. The table has columns for Name and ID. The 'Find' button is highlighted with a red box.

Name	ID
10001	10001
10003	10003
10004	10004
120001	120001
120002	120002
120003	120003
120004	120004
120005	120005
120006	120006
120007	120007

In the new window that opens, enter the name or ID of the channel you are looking for, then click on the **Search** button. The results will appear in the same window, as shown below:



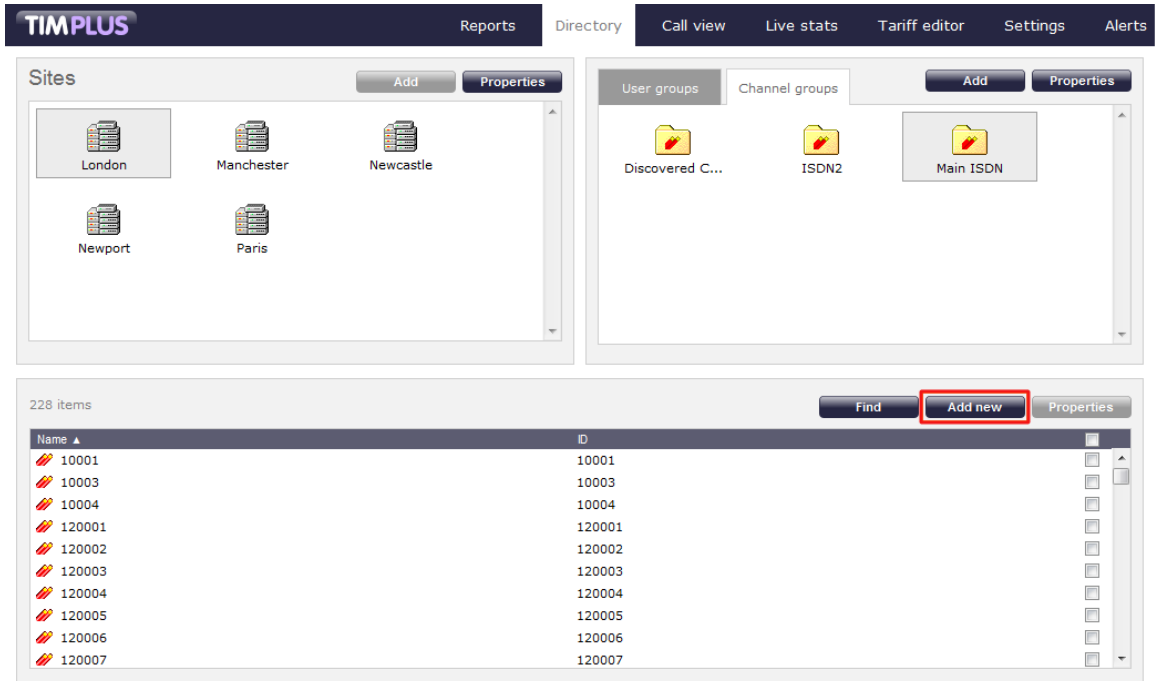


### Adding a channel

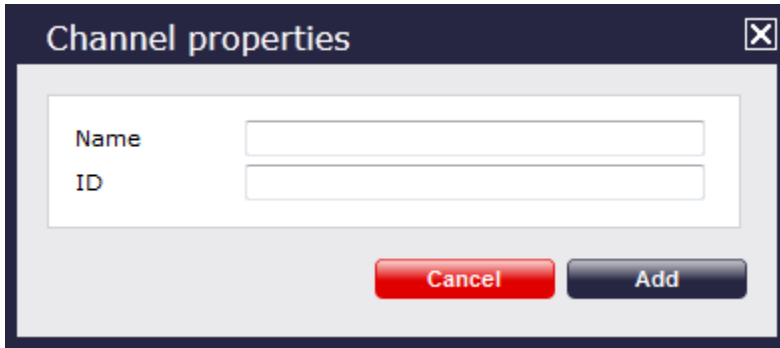


Before adding a new channel to the system, check that it doesn't already exist, by searching for it in the Directory.

To manually add a channel to the system, click on the **Directory** tab and select the group where you want the new channel to be added, then click on the **Add new** button at the top-right corner of the Contents panel:

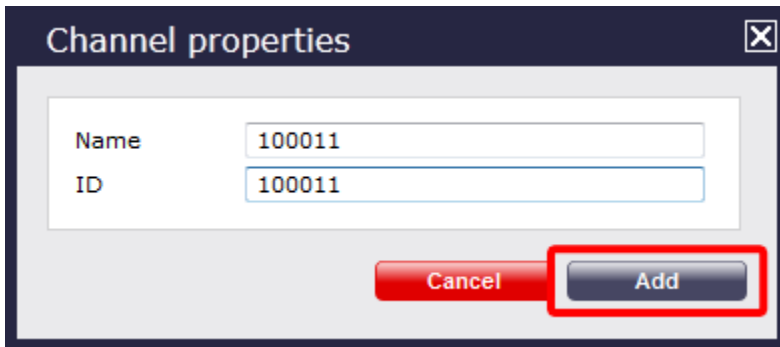


A new window will open, allowing you to configure the properties of the channel:



The dialog box titled "Channel properties" has a close button (X) in the top right corner. It contains two input fields: "Name" and "ID". Below the input fields are two buttons: "Cancel" (red) and "Add" (dark blue).

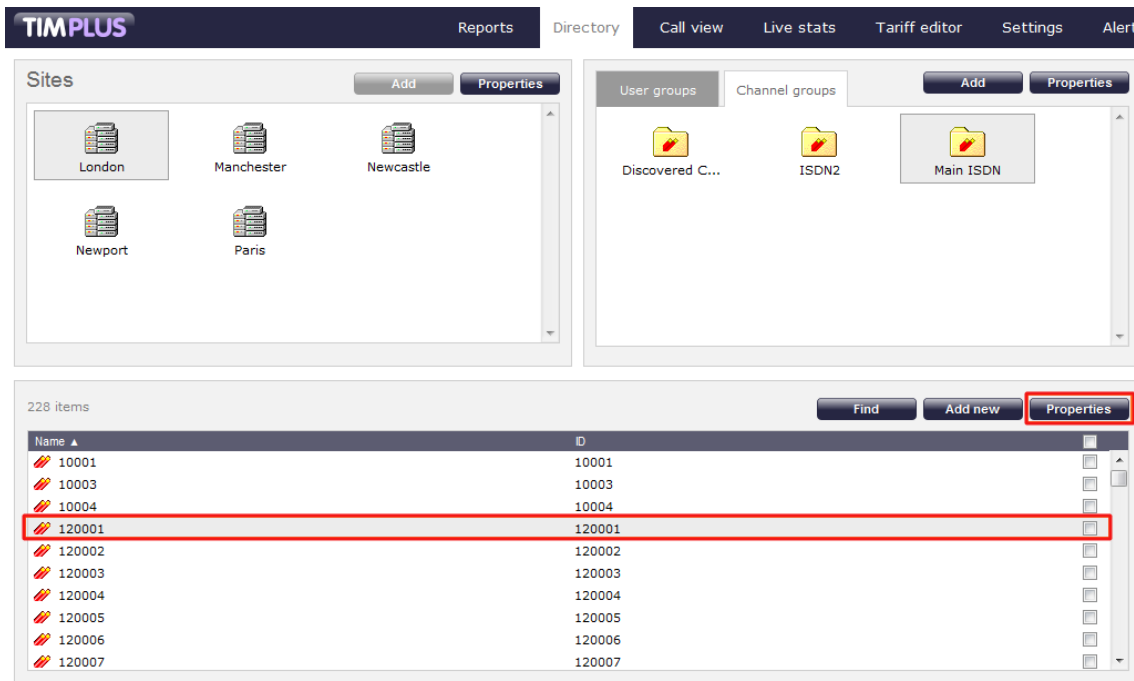
Once you have configured the properties of the channel, click on the **Add** button, as shown below:



The dialog box titled "Channel properties" now has the "Name" field containing "100011" and the "ID" field containing "100011". The "Add" button is highlighted with a red rectangular border.

## Editing a channel's properties

To edit the properties of a channel, select it and click on the **Properties** button at the top-right corner of the Contents panel:



The screenshot shows the TIMPLUS interface. At the top, there is a navigation bar with "Reports", "Directory", "Call view", "Live stats", "Tariff editor", "Settings", and "Alerts". Below this, there are two panels: "Sites" and "Channel groups". The "Sites" panel shows icons for London, Manchester, Newcastle, Newport, and Paris. The "Channel groups" panel shows icons for "Discovered C...", "ISDN2", and "Main ISDN". Below these panels is a table with 228 items. The table has columns for "Name" and "ID". The row with "Name" 120001 and "ID" 120001 is highlighted with a red border. To the right of the table, there are buttons for "Find", "Add new", and "Properties", with the "Properties" button highlighted with a red border.

Name	ID
10001	10001
10003	10003
10004	10004
120001	120001
120002	120002
120003	120003
120004	120004
120005	120005
120006	120006
120007	120007

A new window will open, allowing you to edit the properties of the channel. Click **Save** to apply the changes.



**Channel properties** [X]

Name: 120001

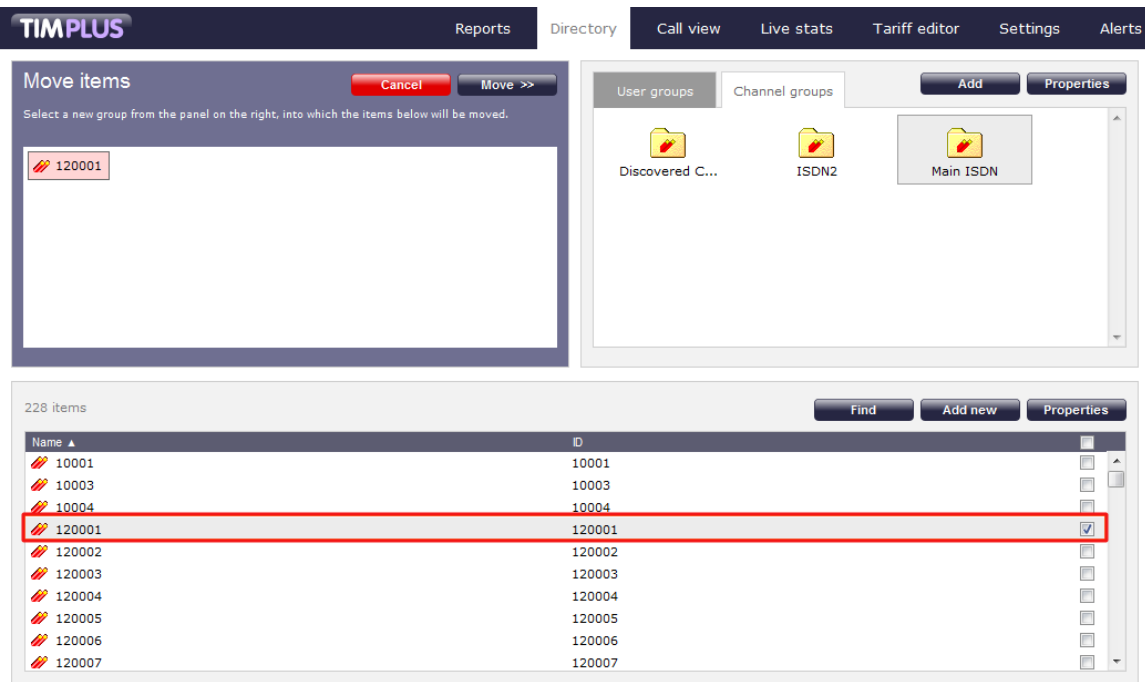
ID: 120001

Buttons: Delete, Cancel, Save

## Moving a channel between two groups

Follow the steps below to move a channel from one group to another.

1. Click on the **Directory** tab and select the group which contains the channel you want to move.
2. Select the channel, by ticking the box alongside it. The top-left panel of the screen will temporarily change to a **Move items** panel containing the selected channel.



The screenshot shows the TIMPLUS interface with the 'Directory' tab selected. A 'Move items' dialog is open, showing a list of items with '120001' selected. The dialog has 'Cancel' and 'Move >>' buttons. To the right, there are 'User groups' and 'Channel groups' panels. The 'Channel groups' panel shows 'Discovered C...', 'ISDN2', and 'Main ISDN' with 'Add' and 'Properties' buttons. Below the dialog is a table of 228 items:

Name	ID	
10001	10001	<input type="checkbox"/>
10003	10003	<input type="checkbox"/>
10004	10004	<input type="checkbox"/>
120001	120001	<input checked="" type="checkbox"/>
120002	120002	<input type="checkbox"/>
120003	120003	<input type="checkbox"/>
120004	120004	<input type="checkbox"/>
120005	120005	<input type="checkbox"/>
120006	120006	<input type="checkbox"/>
120007	120007	<input type="checkbox"/>

3. Next, select the destination group that you want the channel to be moved into, and click on the **Move** button.

## Deleting a channel



When you delete a channel, you are also deleting the calls associated with that channel!

To delete a channel from the system, select it and click on the **Properties** button at the top-right corner of the Contents panel:

The screenshot shows the TIMPLUS interface with the following components:

- Navigation Bar:** Reports, Directory, Call view, Live stats, Tariff editor, Settings, Alerts.
- Sites Panel:** Add, Properties buttons. Contains icons for London, Manchester, Newcastle, Newport, and Paris.
- Channel Groups Panel:** Add, Properties buttons. Contains icons for Discovered C..., ISDN2, and Main ISDN.
- Directory Table:** 228 items. Columns: Name, ID. The row for ID 120001 is highlighted in red. The Properties button in the top right of the table is also highlighted in red.

Name	ID
10001	10001
10003	10003
10004	10004
120001	120001
120002	120002
120003	120003
120004	120004
120005	120005
120006	120006
120007	120007

In the Channel properties window that will open, click on the **Delete** button to remove the channel from the Directory; a confirmation will be required, to prevent channels being deleted accidentally.

The Channel properties dialog box contains the following fields and buttons:

- Name:** 120001
- ID:** 120001
- Buttons:** Delete (red), Cancel (red), Save (dark blue).

## Call view

The **Call view** screen displays a live list of calls, showing each call the moment it is received from your telephone system(s) and successfully processed by TIM Plus. The call list is arranged so that the most recent calls are at the top of the list.

TIMPLUS							Reports	Directory	Call view	Live stats	Tariff editor	Settings	Alerts	
Most recent calls							Clear	Columns	Save					
Time	Source	Route	Destination	Datasource	Duration	Cost								
18:02:53	Jason Myers	13366	Orson Carte	London	00:00:33	0.00								
18:02:16	O2	07710500475	Sarah Lee	London	00:08:56	0.00								
18:01:23	London	02079110166	Billy Elliot	London	00:01:45	0.00								
18:00:18	Orange	07854107769	Simon Mason	London	00:00:36	0.00								
18:00:06	London	02076122530	Lance King	London	00:00:51	0.00								
17:57:46	Sam Thornton	2063	Greg Richards	London	00:00:31	0.00								
17:56:56	May Day	02071523915	London	London	00:00:49	0.08								
17:56:33	T-Mobile	07958527131	Mika Stai	London	00:01:13	0.00								
17:55:38	London	02074477680	Grace Harper	London	00:00:52	0.00								
17:52:43	Eve Royal	07932807770	T-Mobile	London	00:00:05	0.03								
17:52:13	Vodafone	07775584498	Ty Knotts	London	00:00:23	0.00								
17:52:01	T-Mobile	07960389762	Linda Palmer	London	00:01:08	0.00								
17:48:48	London	02074004500	George Evans	London	00:01:40	0.00								
17:48:08	London	02074247500	Gail Storm	London	00:01:11	0.00								
17:48:03	Orange	07854180526	Pauline Hunter	London	00:01:24	0.00								
17:47:13	Vodafone	07786802296	Misty Shore	London	00:00:18	0.00								
17:46:58	124001	UNAVAILABLE	William Masters	London	00:03:34	0.00								
17:45:31	120014	UNAVAILABLE	Jason Myers	London	00:00:29	0.00								

Each call type is colour-coded using a system-wide colour scheme, as follows:

- Green: Incoming calls
- Light green: Answered transferred calls
- Blue: Outgoing calls
- Light blue: Outgoing non-connected calls
- Grey: Internal calls
- Mauve: Internal non-connected calls
- Red: Abandoned DDI (Direct Dialed In) calls
- Pink: Tandem calls



The calls you see in the Call view screen pertain only to the area to which the logged-in user has been granted access; administrators see calls from all sites.

## Column headers

The Call view screen can be customised by each web user to show only the columns they are interested in. To add or remove columns, click on the Columns tab, which will display the following panel:

TIMPLUS							Reports	Directory	Call view	Live stats	Tariff editor	Settings	Alerts	
Most recent calls							Clear	Columns	Save					
Time	Route	Destination	Duration	Cost	CLI	Source								
15:35:41	2010	Dusty Rhodes	00:00:18	0.00		Grace								
15:35:33	07980661443	Viv Hollands	00:03:04	0.00	07980661443	Orange								
15:34:38	73684200	Local Call	00:03:42	0.37		William								
15:32:41	02076055000	Wayne Robert	00:00:44	0.00	02076055000	London								
15:32:26	UNAVAILABLE	Derek Smith	00:00:22	0.00		120020								
15:32:18	07747461965	Chris P. Bacon	00:00:33	0.00	07747461965	Vodafone	120017	12027	London	2013				
15:31:56	02074372526	London	00:00:07	0.03		Amanda Lynn	2062	123012	London	02074372526	17 May 2013			

<input checked="" type="checkbox"/> Date	<input checked="" type="checkbox"/> CLI	<input type="checkbox"/> Account code
<input checked="" type="checkbox"/> Time	<input checked="" type="checkbox"/> Dialed number	<input type="checkbox"/> LCR digits
<input checked="" type="checkbox"/> Source	<input type="checkbox"/> Source name	<input type="checkbox"/> Trunk access code
<input checked="" type="checkbox"/> Route	<input checked="" type="checkbox"/> Source ID	<input checked="" type="checkbox"/> Data source
<input checked="" type="checkbox"/> Destination	<input type="checkbox"/> Destination name	<input type="checkbox"/> Call reference
<input type="checkbox"/> Response	<input checked="" type="checkbox"/> Destination ID	<input type="checkbox"/> Flags
<input checked="" type="checkbox"/> Duration	<input type="checkbox"/> Tariff	<input type="checkbox"/> Voice location
<input checked="" type="checkbox"/> Cost	<input type="checkbox"/> Tariff band	<input type="checkbox"/> Voice filename

Include a column header in the list by ticking the box alongside each one. Click the Save button to apply your changes.

Each column header displayed in the **Call view** list is described in the table below:

Field name	Description
<b>Date</b>	The date the call started
<b>Time</b>	The time the call started
<b>Source</b>	The place from where the call originated
<b>Route</b>	The information displayed in this field is determined by the type of call: <ul style="list-style-type: none"> <li>▪ for incoming calls, this shows the CLI of the caller;</li> <li>▪ for incoming internal calls, this shows either the caller's username or extension number;</li> <li>▪ for outgoing calls, this shows the dialled number.</li> </ul>
<b>Destination</b>	The information displayed in this field is determined by the type of call: <ul style="list-style-type: none"> <li>▪ for incoming calls, this shows the name of the user whose extension answered the call, or the extension number if not available;</li> <li>▪ for outgoing calls, this shows the geographical location that was dialled, or an alias if defined in your contacts list;</li> <li>▪ for internal calls, this shows the extension that was dialled, enclosed in square brackets [ ].</li> </ul>
<b>Response</b>	The time it took for the call to be answered (in seconds)
<b>Duration</b>	The duration of the call (in hours, minutes and seconds)
<b>Cost</b>	The cost of the call
<b>CLI</b>	The telephone number of the remote caller for inbound calls
<b>Dialled number</b>	The number that was dialled in order to reach a particular destination
<b>Source name</b>	The name of the person who made the call
<b>Source ID</b>	The ID of the person who made the call
<b>Destination name</b>	The name of the destination called, e.g. Manchester, Tri-Line, London
<b>Destination ID</b>	The ID of the destination called
<b>Tariff</b>	The name of the tariff table that was used to cost the call, e.g. BT
<b>Tariff band</b>	The specific tariff band that was used to cost the call, e.g. International, National, Mobile etc.

<b>Account code</b>	The account code associated with the call
<b>LCR Digits</b>	The Least Cost Routing (LCR) digits used to route the call
<b>Trunk access code</b>	The trunk access code used to access a group of channels
<b>Data source</b>	The location where the call originated
<b>Call reference</b>	Any call reference number associated with the call
<b>Flags</b>	<p>Any flags associated with a call, as described below:</p> <ul style="list-style-type: none"> <li>▪ The call has no associated voice recording</li> <li>▪ The call has an associated voice recording; click on the icon to listen to the call</li> <li>▪ The call has not been scored; click on the icon to score the call</li> <li>▪ The call has been scored; click on the icon to review scoring information for the call</li> <li>▪ The call has not been annotated; click on the icon to add a note to the call</li> <li>▪ The call has one or more associated notes; click on the icon to review the note(s)</li> <li>▪ The call has no related transfer legs</li> <li>▪ The call has related transfer legs; click on the icon to view all transfers associated with the call</li> </ul>
<b>Voice location</b>	The unique ID of the call recording device that captured audio for the call
<b>Voice filename</b>	The unique call reference identifying any voice recording associated with the call

## Reordering column headers

Each column header can be reordered by clicking and dragging it to the new location, as shown below:

Time	Source	Route	Destination	Datasource	Duration	Cost
18:08:23	London	02072459888	Candy Carr	London	00:00:23	0.00
18:07:16	Andrew Montgomery	07940686284	T-Mobile	London	00:00:06	0.03
18:06:08	Lance King	2091	Norma Leigh	London	00:00:34	0.00
18:05:48	London	02077359478	Sally Francis	London	00:00:02	0.00
18:03:33	London	02076777676	Christina Andrews	London	00:00:26	0.00
18:02:53	Jason Myers	13366	Orson Carte	London	00:00:33	0.00

Columns can be sorted by clicking the relevant column header, with each click toggling between ascending and descending order. A small triangle is displayed alongside the column header to indicate the current sorting order.



Any layout changes you make to the **Live calls** panel are saved only for the current web user and do not affect other web users.

## Live stats

## Display boards


### What is a display board?

A display board is a user-definable screen that can comprise any live, up-to-the-minute information, such as call statistics, leaderboards or RSS feeds. It can also pull content from third-party systems, such as sales management, accounting or CRM software.

Starting from either a blank canvas or from a pre-defined template, a display board can be customised by adding any combination of the following types of panel, using an on-screen designer:

-  **Label panel**
-  **Leaderboard panel**
-  **Summary panel**
-  **RSS panel**
-  **Web panel**


The example below shows a display board containing a label panel at the top of screen, a leaderboard panel on the left-hand side, and a series of 6 summary panels on the right-hand side. An RSS panel is displayed at the bottom of the screen. At the top-left corner of the display board, an additional transparent label panel was added to represent a company logo.



# All Telesales

19:47:31

Best performers					Summary stats	
Pos	Name	Calls ▼	Total dur	Avg dur	Total In <b>107</b>	Longest In <b>00:09:16</b> <small>Grace Harper</small>
1	Grace Harper	24	00:51:43	00:02:09	Total Out <b>14</b>	Longest Out <b>00:04:27</b> <small>Lee Faithful</small>
2	Christina Andrews	22	00:40:13	00:01:50	Total Lost <b>0</b>	Most Expensive <b>0.44</b> <small>Lee Faithful</small>
3	Mark Longhorn	21	00:24:25	00:01:10		
4	Sally Gansa	12	00:14:32	00:01:13		
5	Ricardo De Souza	12	00:25:30	00:02:08		
6	Jason Myers	12	00:22:17	00:01:51		
7	Billy Elliot	7	00:16:37	00:02:22		
8	Malcolm Meehan	3	00:02:28	00:00:49		
9	Lee Faithful	3	00:05:04	00:01:41		



**Fire rages near N. Mexico nuclear plant**  
 The fire is about a mile from the Los Alamos National Laboratory. All nuclear materials are protected, lab officials said in a statement.



The following pages contain details of how to create and customise display boards.

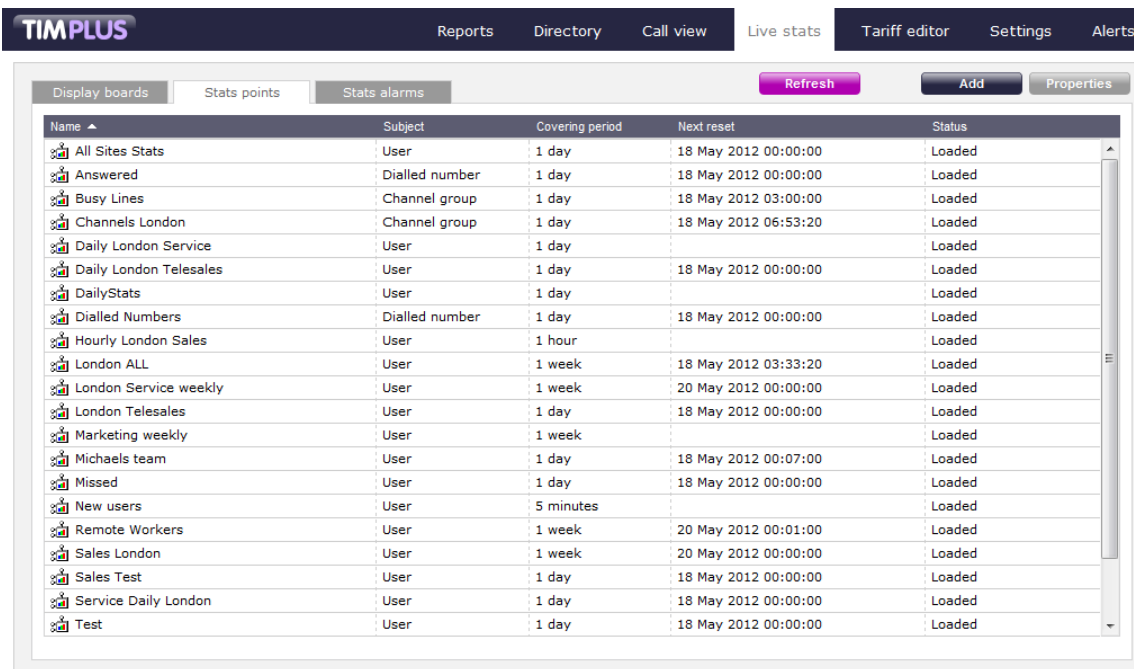
## Display boards overview video

## How are display boards populated?

Whilst display boards can be populated by various external data feeds, their principal use is to display up-to-the-minute information about your organisation's phone calls, for which objects known as "stats points" are employed. These statistics collection points are mathematical "counters" whose scope is determined by their placement in your directory hierarchy. For example, placing a stats point inside a specific user group ensures that call information is collected only for users that inhabit the selected group. Similarly, placing a stats point inside a site will collect only call information for the chosen site.

Additionally, when configuring a stats point, a subject must be specified, which determines the property of each call whose value will be used when grouping its collated information into distinct sets. For example, specifying a subject of "user" will group its collated call information into sets of data for each distinct user.

Stats points are defined in the **Stats points** tab on the **Live stats** screen, as shown below:



Name	Subject	Covering period	Next reset	Status
All Sites Stats	User	1 day	18 May 2012 00:00:00	Loaded
Answered	Dialled number	1 day	18 May 2012 00:00:00	Loaded
Busy Lines	Channel group	1 day	18 May 2012 03:00:00	Loaded
Channels London	Channel group	1 day	18 May 2012 06:53:20	Loaded
Daily London Service	User	1 day		Loaded
Daily London Telesales	User	1 day	18 May 2012 00:00:00	Loaded
DailyStats	User	1 day		Loaded
Dialled Numbers	Dialled number	1 day	18 May 2012 00:00:00	Loaded
Hourly London Sales	User	1 hour		Loaded
London ALL	User	1 week	18 May 2012 03:33:20	Loaded
London Service weekly	User	1 week	20 May 2012 00:00:00	Loaded
London Telesales	User	1 day	18 May 2012 00:00:00	Loaded
Marketing weekly	User	1 week		Loaded
Michaels team	User	1 day	18 May 2012 00:07:00	Loaded
Missed	User	1 day	18 May 2012 00:00:00	Loaded
New users	User	5 minutes		Loaded
Remote Workers	User	1 week	20 May 2012 00:01:00	Loaded
Sales London	User	1 week	20 May 2012 00:00:00	Loaded
Sales Test	User	1 day	18 May 2012 00:00:00	Loaded
Service Daily London	User	1 day	18 May 2012 00:00:00	Loaded
Test	User	1 day	18 May 2012 00:00:00	Loaded

For more information about stats points and how to create them, refer to the [Stats points](#) section.



In order to create a display board containing call information, at least one stats point must be defined first.

## Accessing the display boards

To access your display boards, click on the **Live stats** tab and a list of display boards will appear on the left-hand panel.

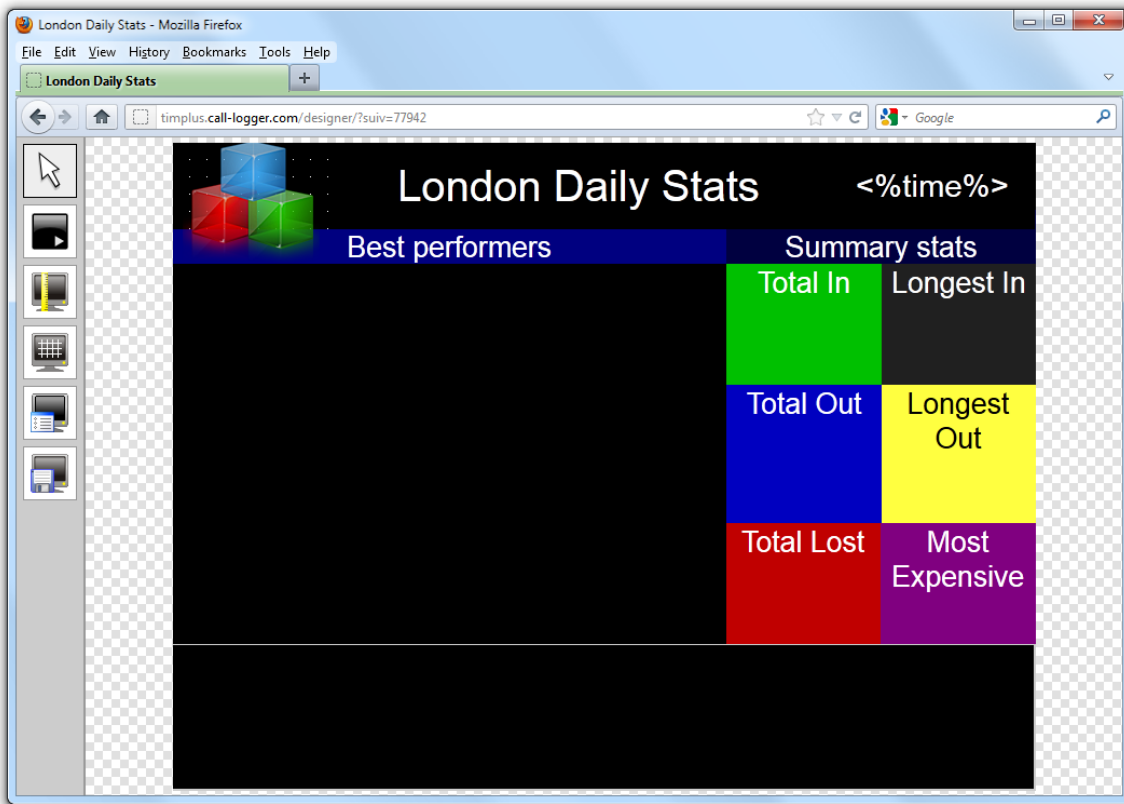


The list of display boards you are allowed to see depends on the place of your login account in the Directory. To be able to see additional display boards, contact your system administrator.

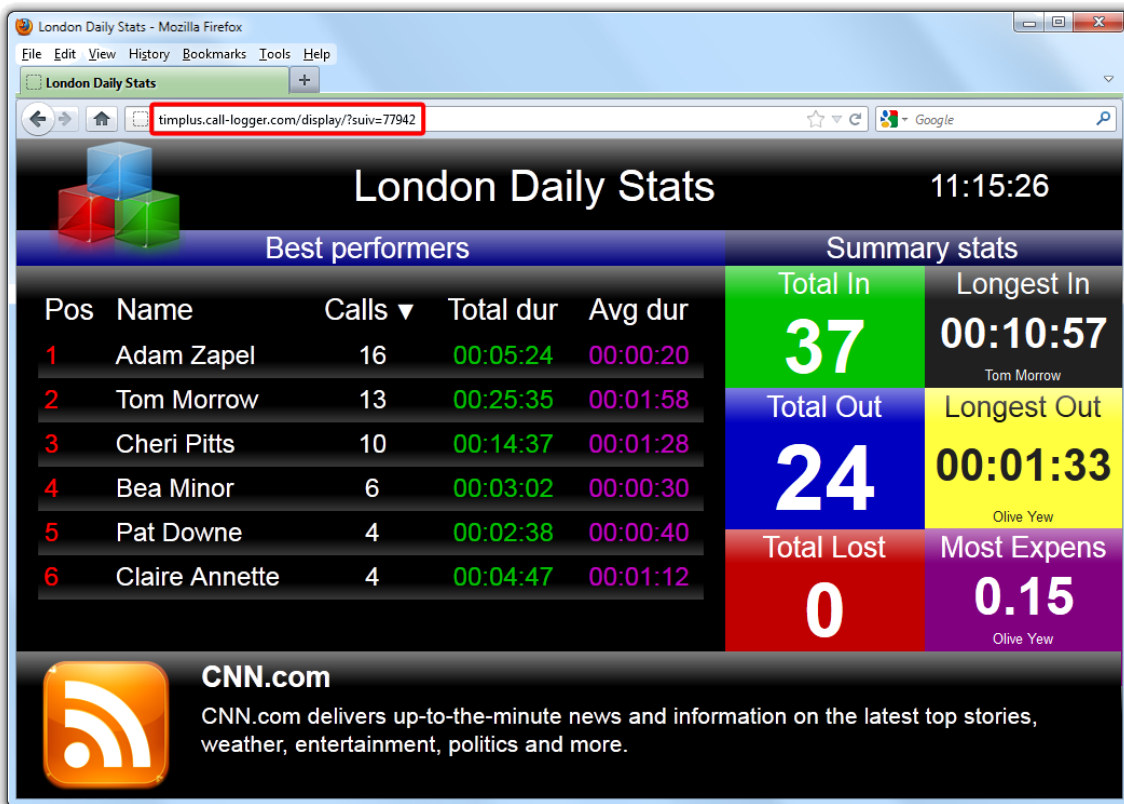
To view a display board, click on the **Display** button, as shown below:

The screenshot shows the TIMPLUS web interface. At the top, there is a navigation bar with the TIMPLUS logo and several menu items: Reports, Directory, Call view, Live stats, Tariff editor, Settings, and Alerts. Below this, there are tabs for 'Display boards', 'Stats points', and 'Stats alarms'. The 'Display boards' tab is active, showing a list of available display boards on the left and a preview of a 'New display board' on the right. The 'New display board' preview is titled 'New display board 14:07:54' and is divided into two main sections: 'Best performers' and 'Summary stats'. The 'Summary stats' section is further divided into six colored boxes: 'Total In' (green), 'Longest Out' (yellow), 'Total Out' (blue), 'Longest In' (black), 'Total Lost' (red), and 'Most Expensive' (purple). The 'Display' button in the top right corner of the preview is highlighted with a red border.

To design or edit a display board, click on the **Design** tab. The design mode of your display board will display as follows:



To access a display board directly, type its URL in the address bar of your web browser, as shown below:



The URL of the display board can be saved in your Favorites, to your desktop or mobile device - if you need to view this screen frequently. Alternatively, you may want to display this permanently on a large screen in your office so that everyone in your team can monitor the statistics.

## Adding a display board

### Adding a display board

- How to create a display board
- Create blank
- Create from template
- Create from an existing display board
- Restrict access to display boards

## How to create a display board



Before creating a display board, you must create a stats point object to populate it.

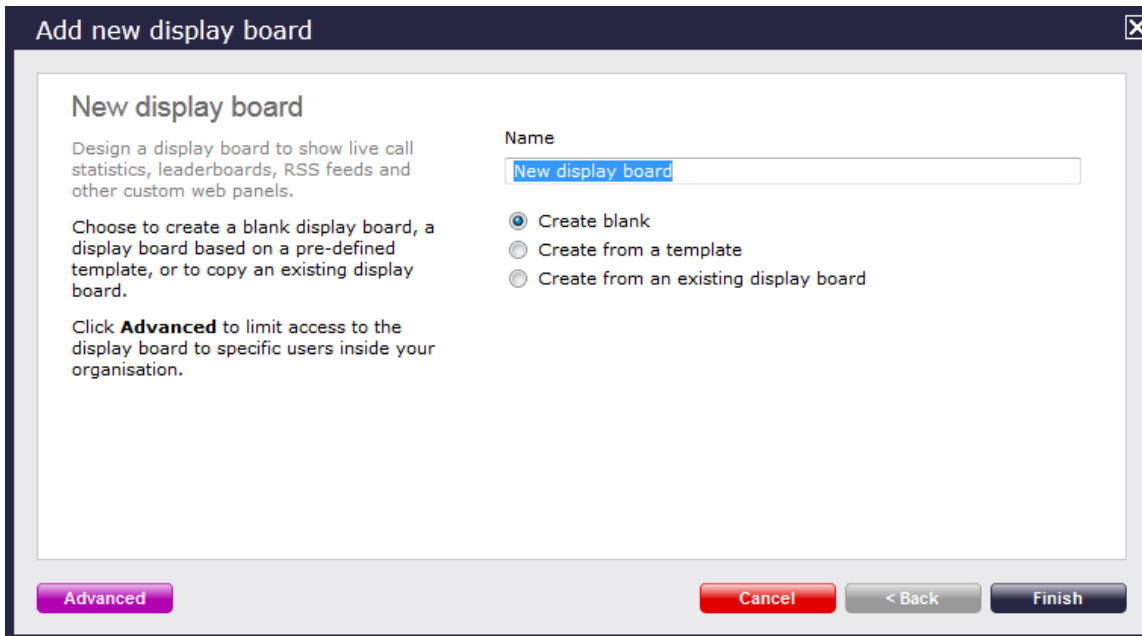
To add a new display board, select the **Live stats** tab and click on the **Add** button at the top-right corner of the **Display boards** list, as shown below:

The screenshot shows the TIMPLUS web interface. At the top, there is a navigation bar with the following tabs: Reports, Directory, Call view, Live stats (selected), Tariff editor, Settings, and Alerts. Below this, there are three sub-tabs: Display boards, Stats points, and Stats alarms. The 'Display boards' sub-tab is active, showing a list of display boards on the left and a preview of a selected board on the right. The 'Add' button in the top right of the list is highlighted with a red box. The preview board shows a date of 22 March 2013 and a time of 16:03:25. It has a title '<%title%>' and four main sections: Total Lost (red), Total Answered (green), Total Outbound (blue), and Avg Dur (orange). At the bottom of the preview, there are three sections: Max Lines Daily, Ave Resp (seconds), and Longest Call Duration.

A new window will open, allowing you to select one of the following three options:

- **Create blank:** This option allows you to design your own display board from scratch
- **Create from a template:** This option allows you to choose a predefined display board template

- **Create from an existing display board:** This option allows you to create a new display board based on an existing template



**Add new display board** [X]

### New display board

Design a display board to show live call statistics, leaderboards, RSS feeds and other custom web panels.

Choose to create a blank display board, a display board based on a pre-defined template, or to copy an existing display board.

Click **Advanced** to limit access to the display board to specific users inside your organisation.

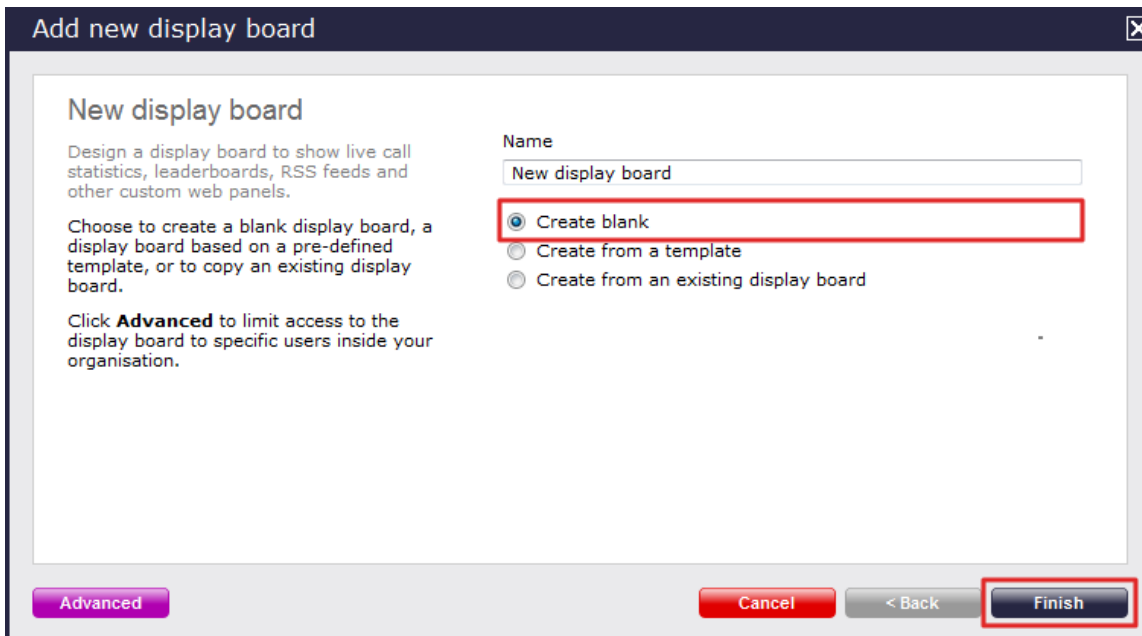
Name:

Create blank  
 Create from a template  
 Create from an existing display board

**Advanced** **Cancel** < Back **Finish**

## Create blank

To design your own display board from scratch, select the **Create blank** option and click on the **Finish** button, as shown below:



**Add new display board** [X]

### New display board

Design a display board to show live call statistics, leaderboards, RSS feeds and other custom web panels.

Choose to create a blank display board, a display board based on a pre-defined template, or to copy an existing display board.

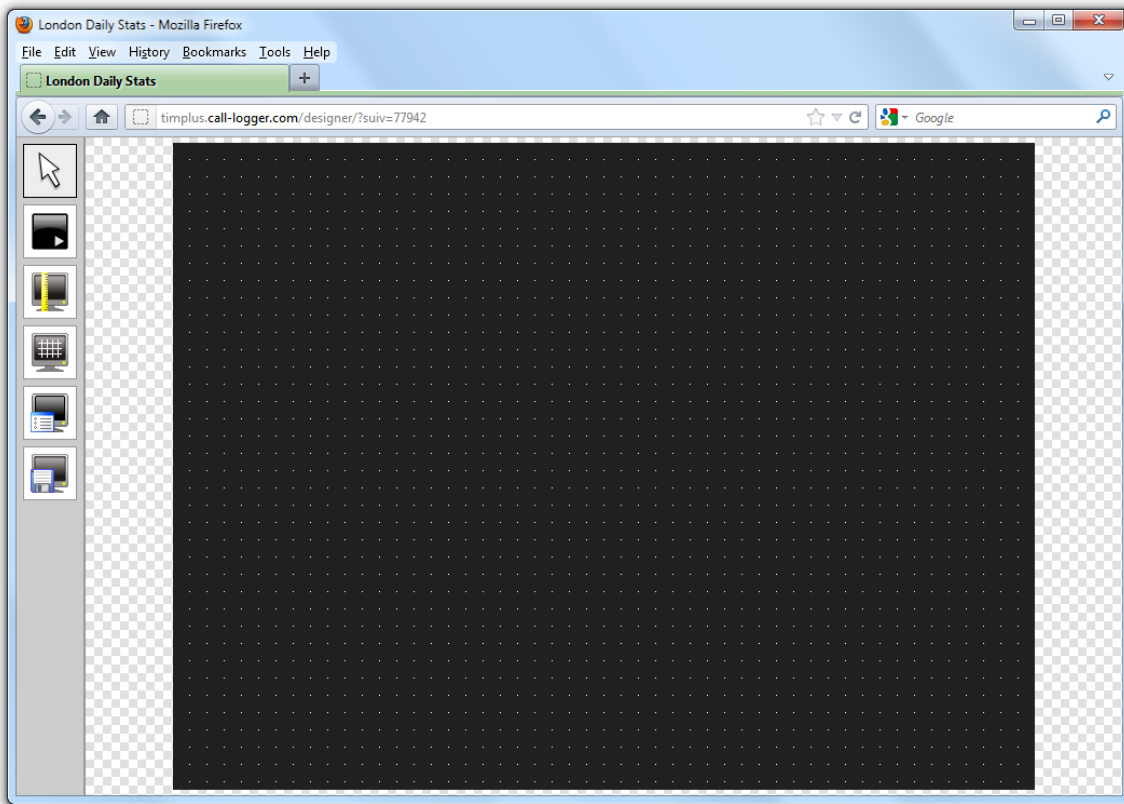
Click **Advanced** to limit access to the display board to specific users inside your organisation.

Name:

Create blank  
 Create from a template  
 Create from an existing display board

**Advanced** **Cancel** < Back **Finish**

A new window will open, showing the design mode of your display board, as shown below:



For information on how to design your own display board, refer to the [Designing a display board](#) section.

## Create from a template

To create a display board from a predefined template, select the **Create from template** option, then click on the **Next** button, as shown below:

### Add new display board

#### New display board

Design a display board to show live call statistics, leaderboards, RSS feeds and other custom web panels.

Choose to create a blank display board, a display board based on a pre-defined template, or to copy an existing display board.

Click **Advanced** to limit access to the display board to specific users inside your organisation.

Name

Create blank  
 **Create from a template**  
 Create from an existing display board

Advanced
Cancel
< Back
**Next >**

You can now select from a series of predefined templates, by clicking on its associated number, then click on the **Next** button.

Template display board

### Best performers

Provides a leader board to show who's spent most time on calls. For each user, the total and average call durations are also shown.

Summary panels highlight the longest and most expensive calls as well as showing a summary of inbound, outbound and lost calls for the group you select.

An RSS feed also provides rolling news and current affairs headlines.

< Prev 1 2 3 4 5 6 7 8 9 Next >

#### Telesales Stats

17:53:27

Best performers				Summary stats	
Pos	Name	Calls	Total dur	Avg dur	
1	Mark Longhorn	21	00:26:48	00:01:17	Total In: 76 Longest Out: 00:03:30
2	Grace Harper	19	00:42:29	00:02:14	Total Out: 6 Longest In: 00:17:14
3	Ricardo De Souza	16	00:26:10	00:01:38	Total Lost: 0 Most Expensive: 0.58
4	Sally Gansa	10	00:16:41	00:01:40	
5	Jason Myers	6	00:05:37	00:00:56	
6	Nimesh Shah	4	00:03:52	00:00:58	
7	Gillian Doyle	4	00:21:12	00:05:18	
8	Sandra Clooney	2	00:01:48	00:00:54	
9	Lisa Bennett	2	00:01:48	00:00:54	

CNN.com  
CNN.com delivers up-to-the-minute news and information on the latest top stories, weather, entertainment, politics and more.

Cancel < Back Next >

At this stage, you are asked to select a stats collection point or skip to the next section.

Stats collection point reference

Choose an existing stats collection point that each panel of the display board should reference.

Alternatively, add references to stats collection points later on from inside the designer.

Don't select a stats collection point  
 Select an existing stats collection point

Cancel < Back Finish

#### Don't select a stats collection point

If you don't want to select a stats point at this time, click **Finish** and your display board will be added to the **Display boards** list. A stats point can be added at a later stage, by accessing the **Designmode** of your display board. For information on how to configure a stats collection point, refer to the [Adding a stats point](#) section.

### Stats collection point reference ✕

Choose an existing stats collection point that each panel of the display board should reference.

Alternatively, add references to stats collection points later on from inside the designer.

Don't select a stats collection point  
 Select an existing stats collection point

Cancel
< Back
Finish



The display board will be blank until a stats point is selected.

#### Select an existing stats collection point

If you select this option, a list with the existing stats points objects will be displayed, as shown below:

### Stats collection point reference ✕

Choose an existing stats collection point that each panel of the display board should reference.

Alternatively, add references to stats collection points later on from inside the designer.

Don't select a stats collection point  
 Select an existing stats collection point

Name ▲	Subject	Covering period
All Sites Stats	User	1 day
All Stats	User	1 day
Answered	Dialled number	1 day
Busy Lines	Channel group	1 day
Call Groups	Channel	1 day
Channels London	Channel group	1 day
Daily London Service	User	1 day
Daily London Telesales	User	1 day
DailyStats	User	1 day
Dialled Numbers	Dialled number	1 day
Hourly London Sales	User	1 hour
London ALL	User	1 week

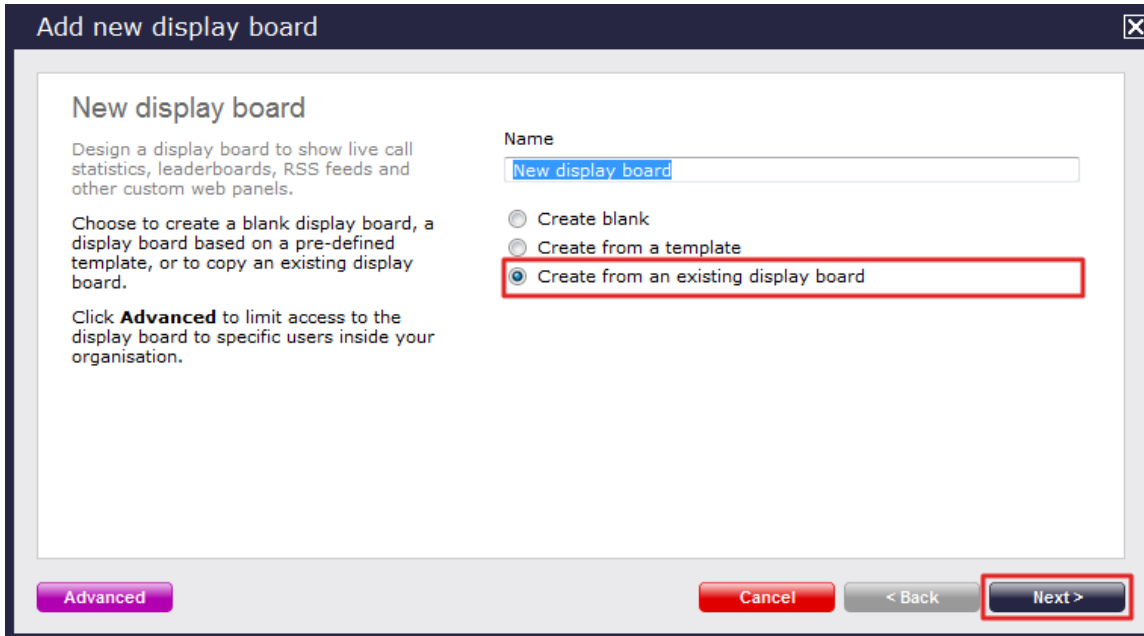
Cancel
< Back
Finish

Select the relevant stats point from the list and click on the Finish button to add the new display board to the Display boards list.

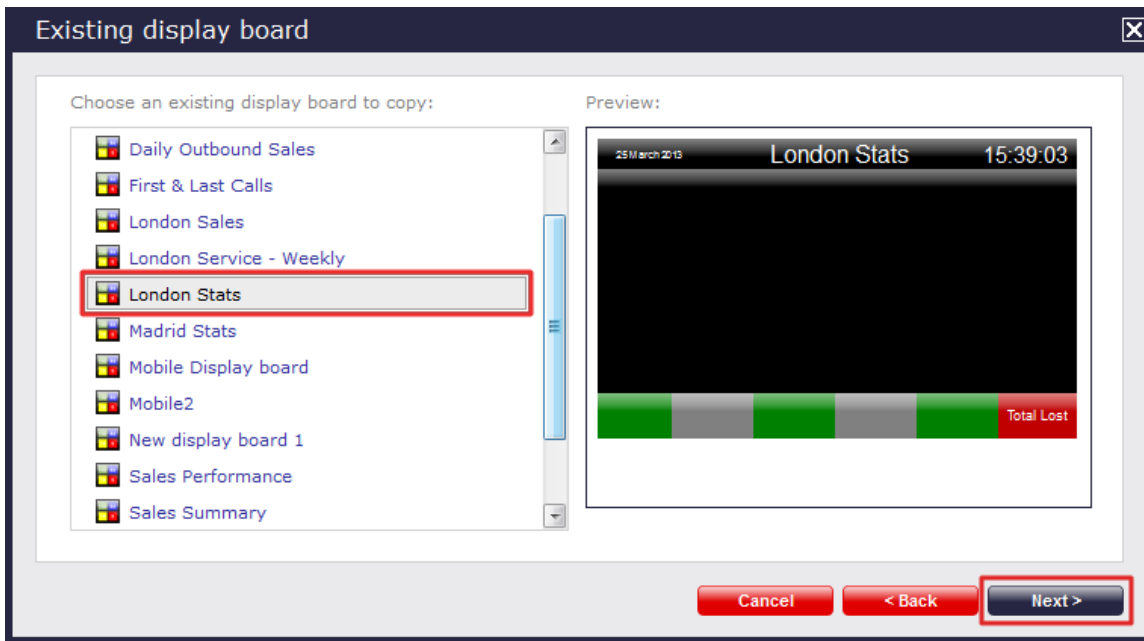
#### Create from an existing display board



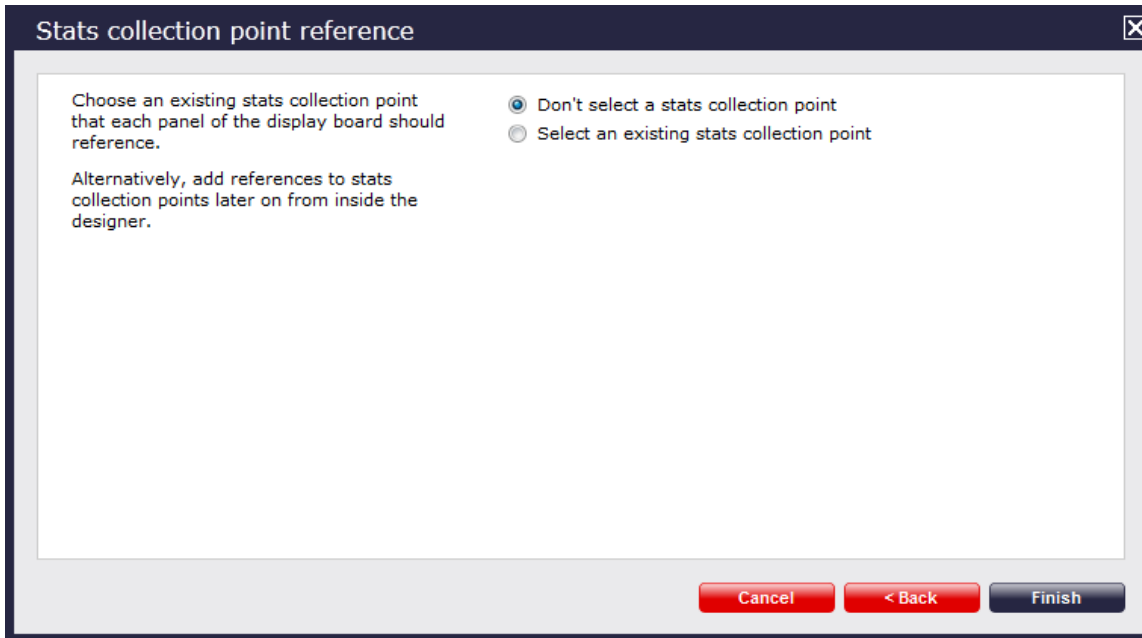
To create a display board from an existing template, select the **Create from an existing display board** option and click the **Next** button.



A list with the currently-available display boards will be shown. Select the one you want to copy, then click on the **Next** button.

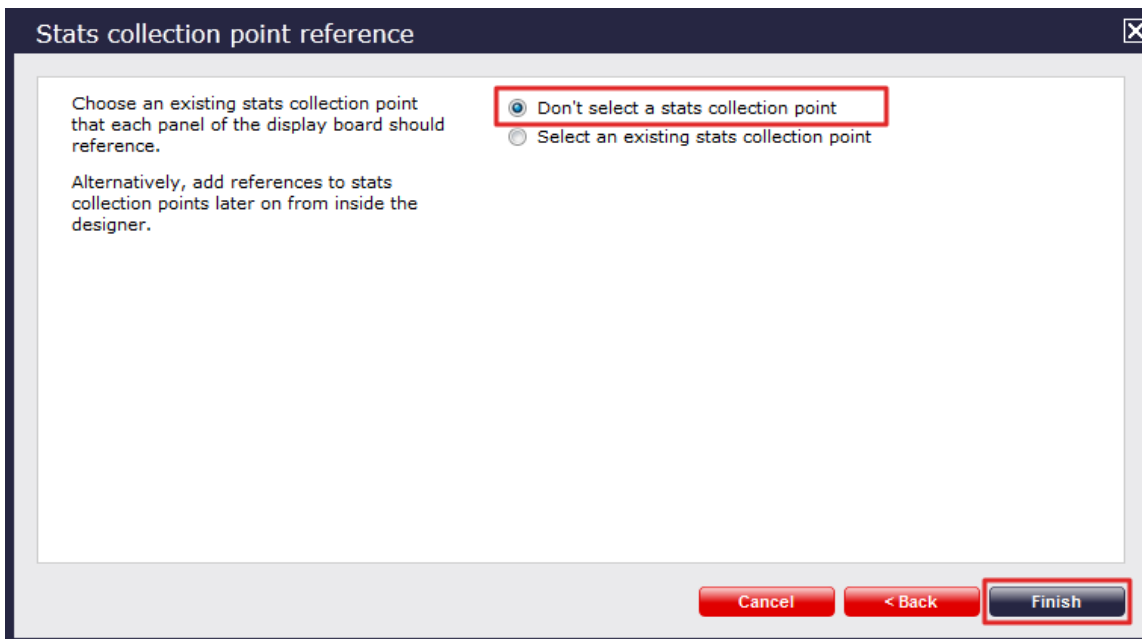


You are now given the option to add a stats collection point or skip this stage.



#### Don't select a stats collection point

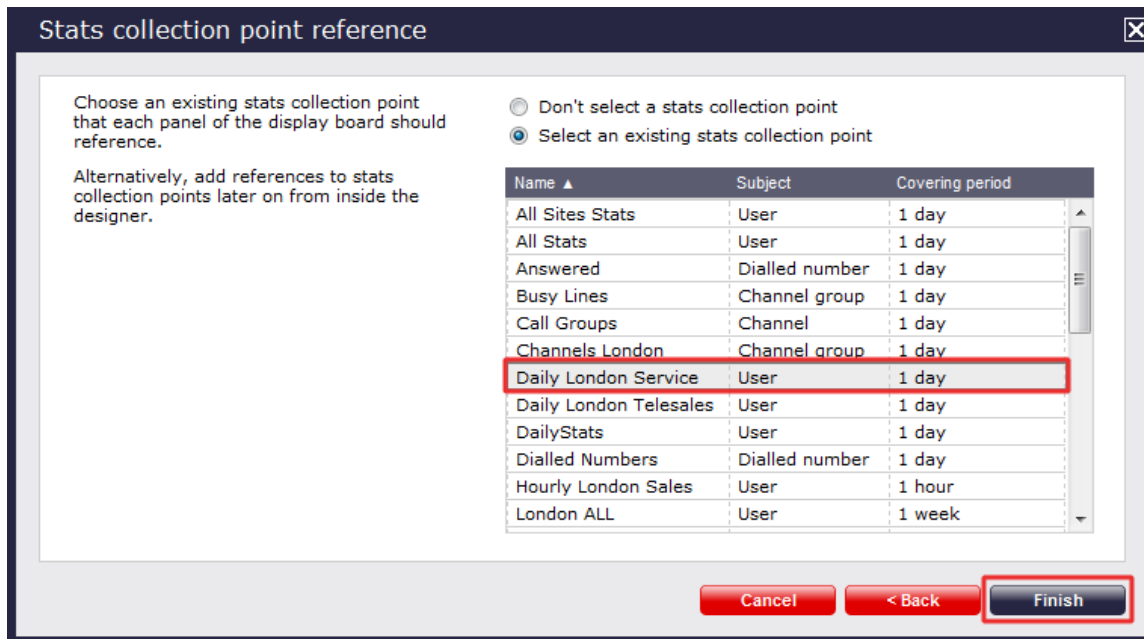
If you don't want to select a stats collection point at this time, click **Finish** and your display board will be added to the `Display boards` list. A stats point can be added at a later stage, by accessing the `Design` mode of your display board. For information about how to configure a stats collection point, refer to the [Adding a stats point](#) section.



The display board will be blank until a stats point is selected.

#### Select an existing stats collection point

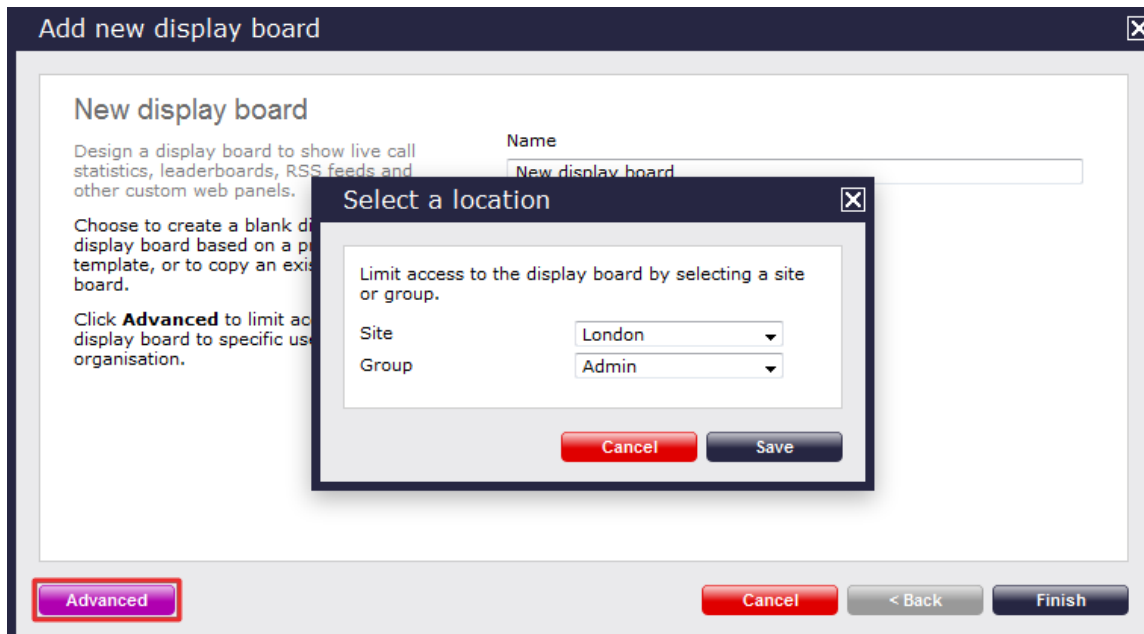
If you select this option, a list with the existing stats points objects will be displayed, as shown below:



Select the relevant stats point from the list and click on the **Finish** button to add the new display board in the **Display boards** list.

## Restrict access to display boards

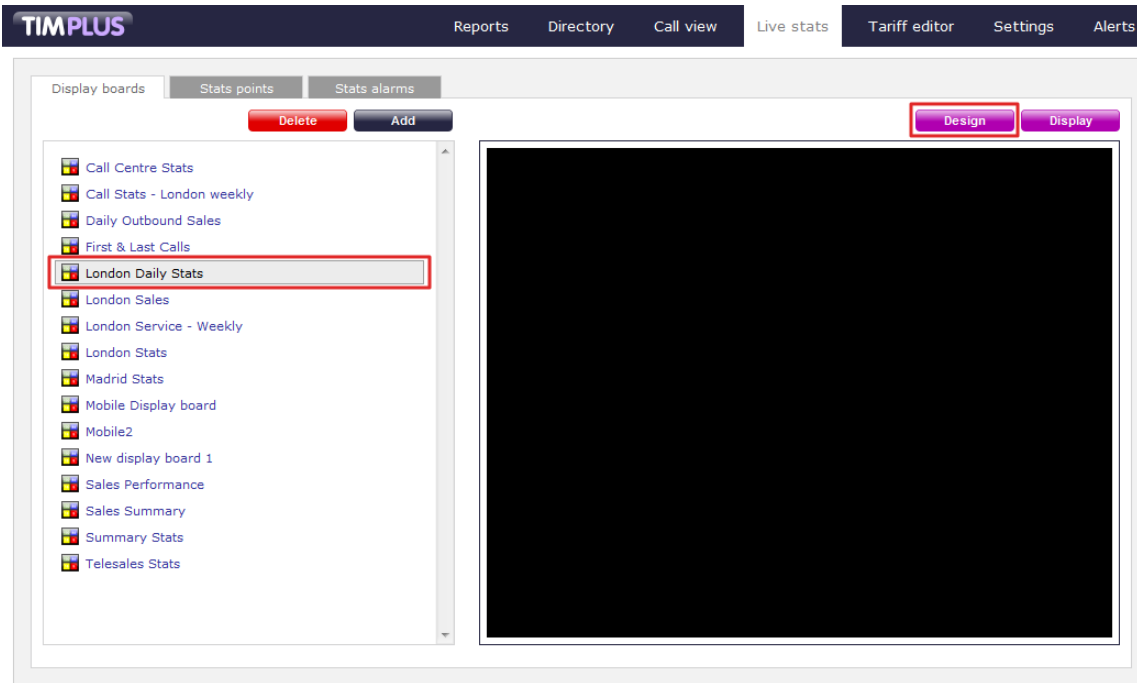
If you want to restrict specific web users from accessing a display board, click on the **Advanced** button at the bottom-left corner of the **Add new display board** window, and select the site and group to which you want to limit access to the display board:



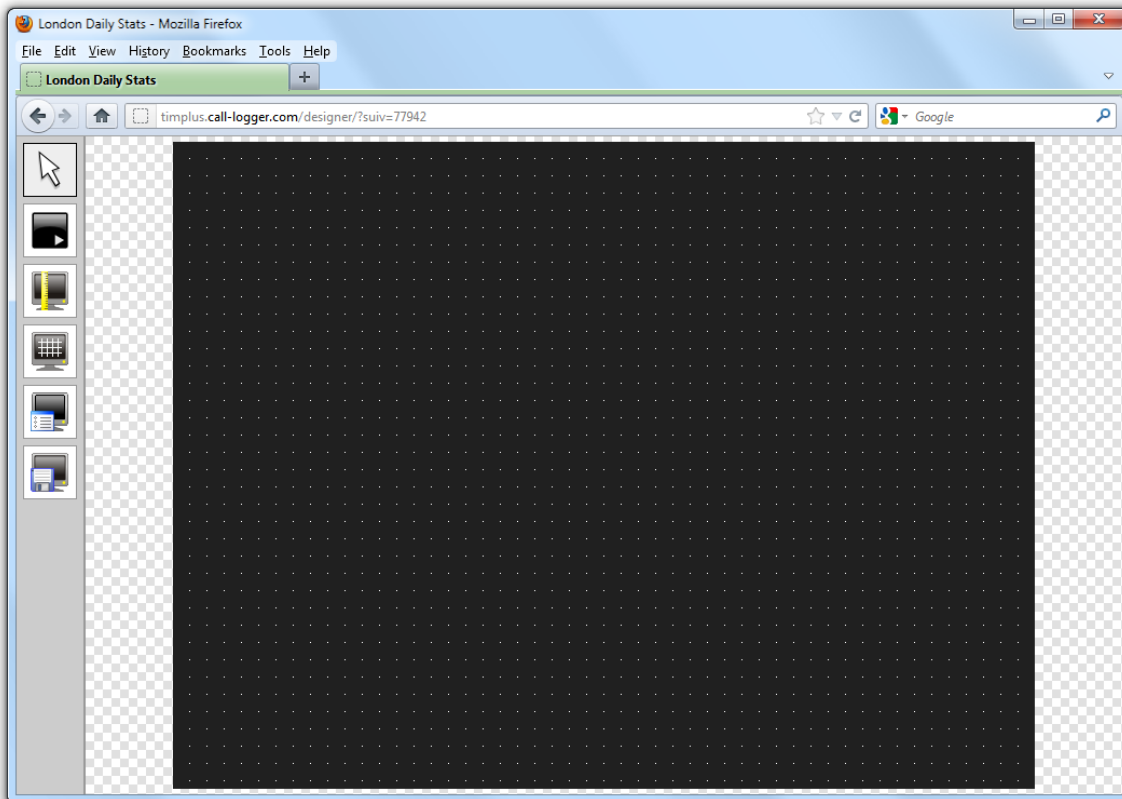
In the example above, your display board will be accessible to web users that have permissions to the **London-Admin** group. If a web user has access only to **London-Accounts** group, they will not be able to see this display board.

## Designing a display board

To design a display board, select it from the **Display boards** list and click on the **Design** button at the top-right corner of the panel, as shown below:



If you opted to design your display board from scratch, the following screen will appear:



To add or edit panels in your display board, use the toolbar on the left-hand side of the panel. Each toolbar button is described below:



**The pointer button**

The pointer (selector) button allows you to select an object and alter its properties.



**The panel type button**

This button allows you to select the type of panel you want to add to the canvas. The available [panel types](#) are presented below:



**Label panel**



**Leaderboard panel**



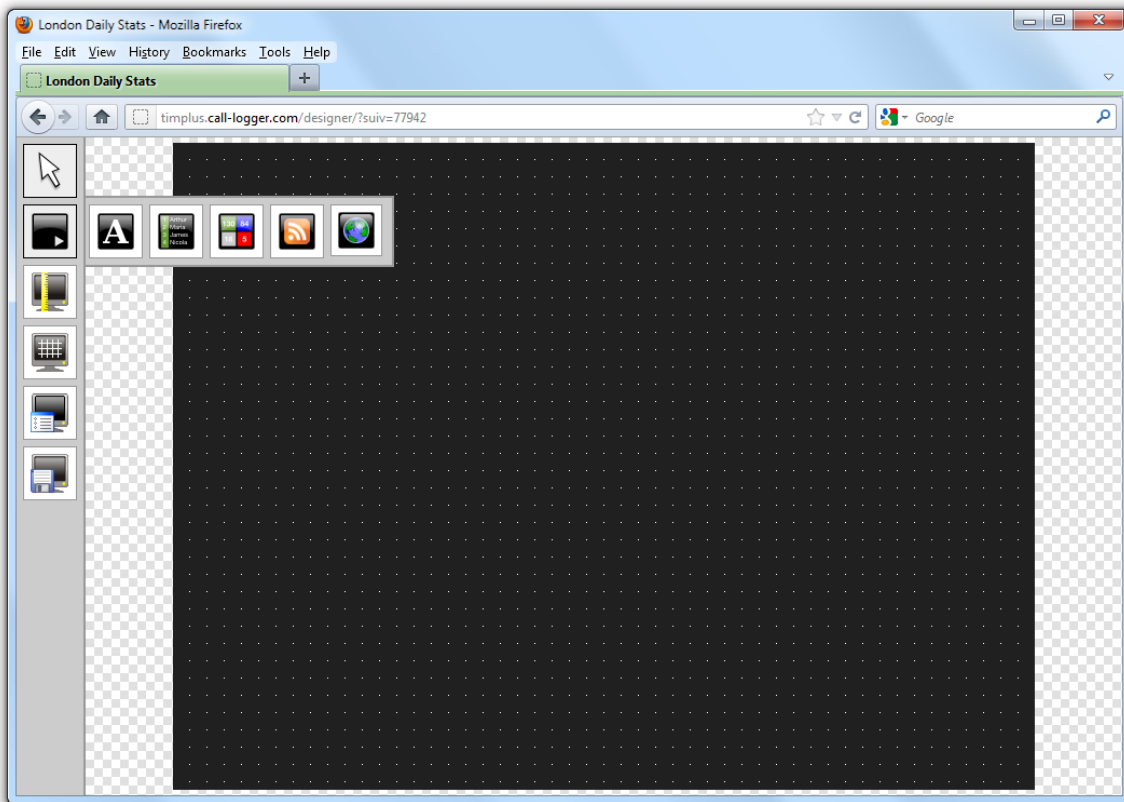
**Summary panel**



**RSS panel**



**Web panel**



**The aspect ratio button**

This button allows you to change the ratio of the screen. The defaults available are 16:10 and 4:3, but the board can be stretched to any value you set.



**The grid button**

The grid button is a simple toggle switch that shows or hides the grid.



**The canvas settings button**

This button allows you to change the background properties of the canvas.



**The save button**

This button allows you to save any changes made to the canvas.

## Display board panels

### Common features

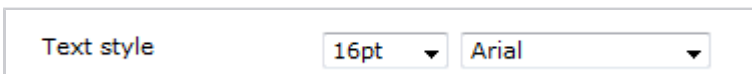
This section offers information about how to style the panels of your display boards.

Common features

- Selecting a font
- Colour picker
- Formatting buttons
- Text position

#### Selecting a font

To select a font style or a font size, expand the drop-down list and choose from the available options, as shown below:



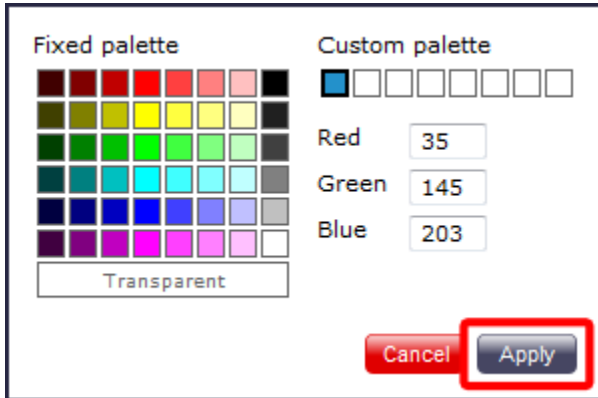
#### Colour picker

To select the colour of an object, click on the drop-down arrow to expand the colour palette.



To select a standard colour, choose from the **Fixed palette** section. If you are adding an image, select the background to be transparent, so it doesn't interfere with the appearance of the image.

To select a custom colour, click on one of the blank colour squares and type the RGB colour codes to add it to your custom palette. Click on the **Apply** button to set the chosen colour:






**Formatting buttons**

If you would like the text in your display board to appear as bold, italic or underlined, click on the relevant **B I U** button, as shown below:



**Text position**

To determine the position of your text, click on the relevant    button, as shown below:



## Label panel

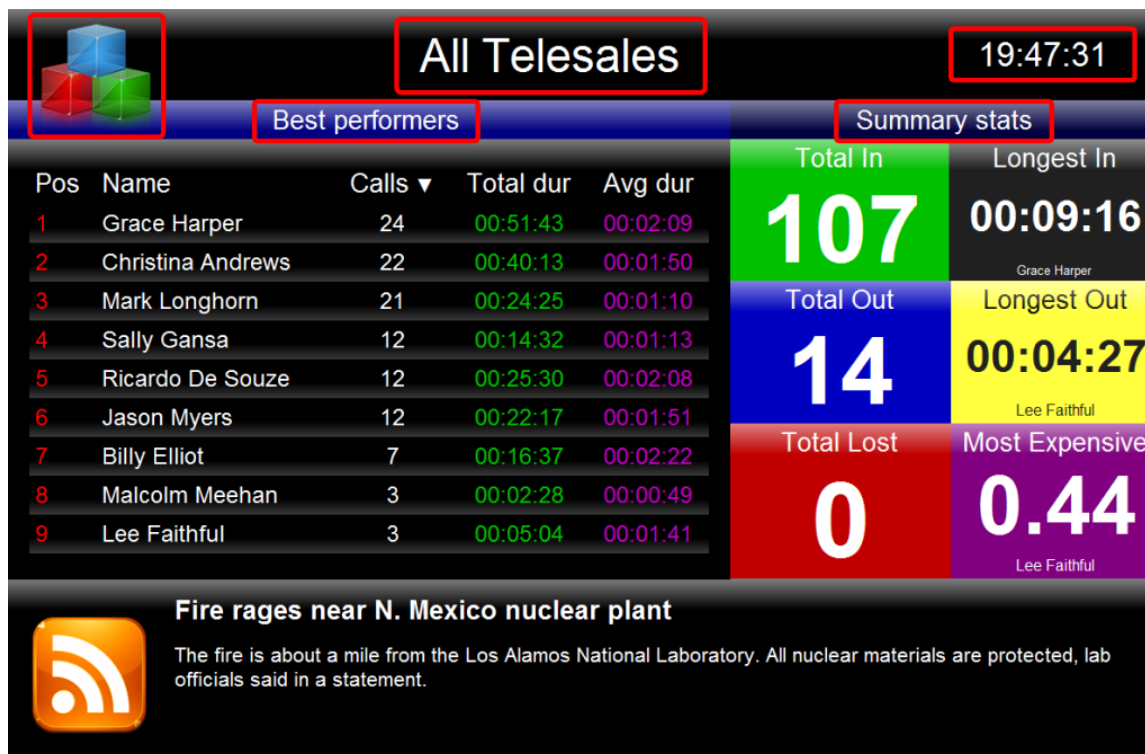
Label panel

- What is a label panel?
- Adding a label panel
- Customising a label panel
- Label panel - overview video

### What is a label panel?

The label panel allows you to add textual labels anywhere on your display board. These labels can consist of static text, dynamic text (such as the current date and time), and images (such as your company logo) by specifying no text but choosing a background image.

The example below shows how label panels - highlighted in red - appear on a display board; a large label panel, **All Telesales**, is shown at the top of the screen, followed by two smaller label panels, **Best Performers** and **Summary Stats**, describing the sections below them. Two further label panels were used to add a company logo (at the top-left of the page) and the current date and time (at the top-right of the page).



There is no limit to the number of label panels you can use on a display board.

### Adding a label panel



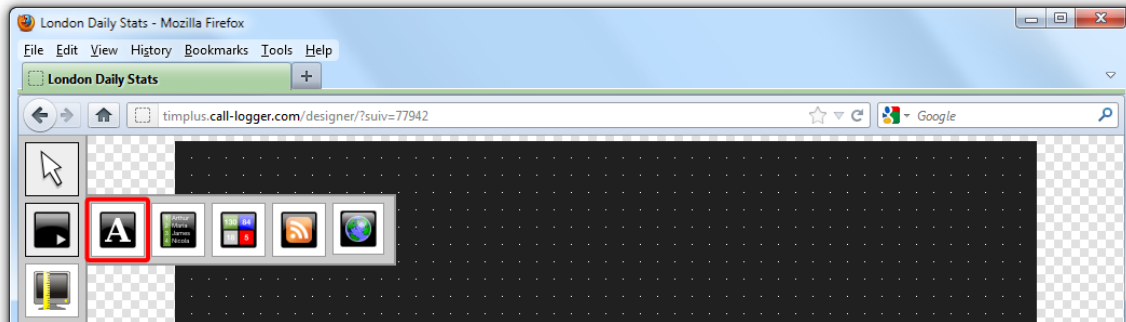


To add a label panel, click on the

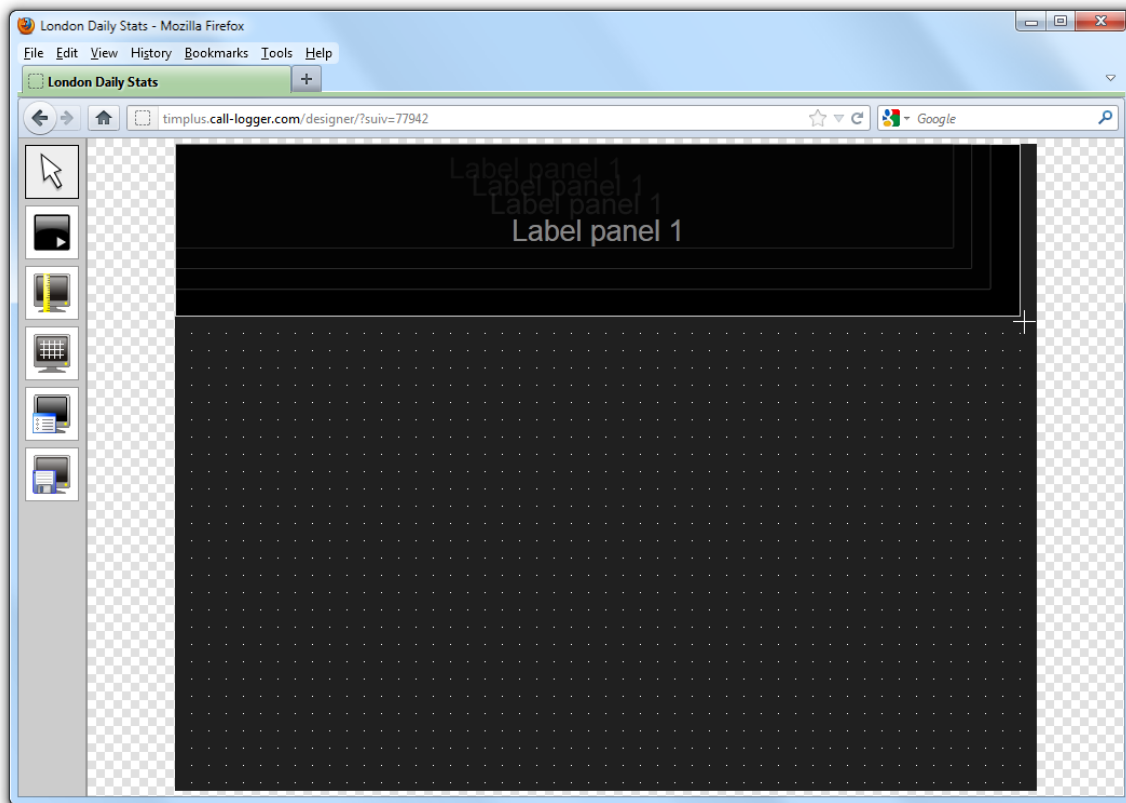
toolbar button to expand the list of panel types and choose the



button, as shown below:



After selecting the label panel button, the mouse pointer changes into a white crosshair pointer, indicating that the designer is ready to draw your panel. Click and hold your left mouse button, starting at the point defining the upper-left corner of your new panel. Whilst still holding down the left mouse button, drag the marquee that will appear to the point that will define the lower-right corner of your panel, as shown below:



### Customising a label panel



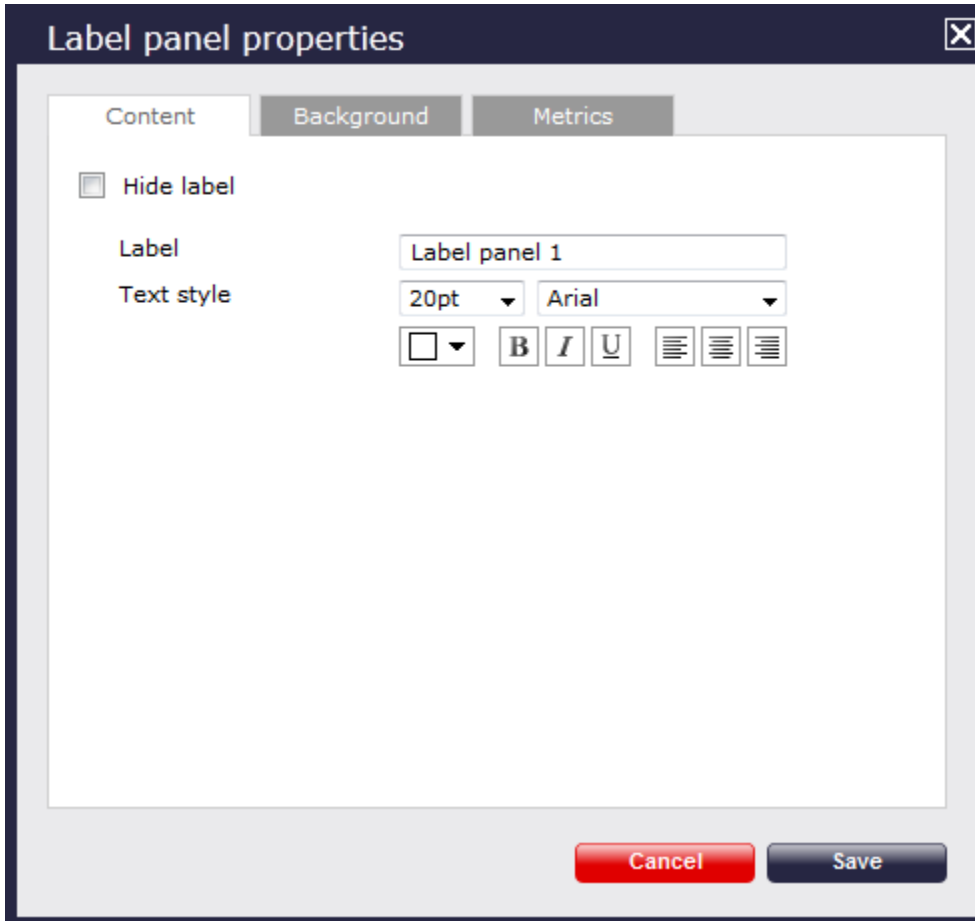
To customise a label panel, click on the

toolbar button to switch to panel selection mode. Hover your mouse pointer

over the label panel you want to customise and click on the  icon, when it appears towards the top-right corner of the panel, as shown below:

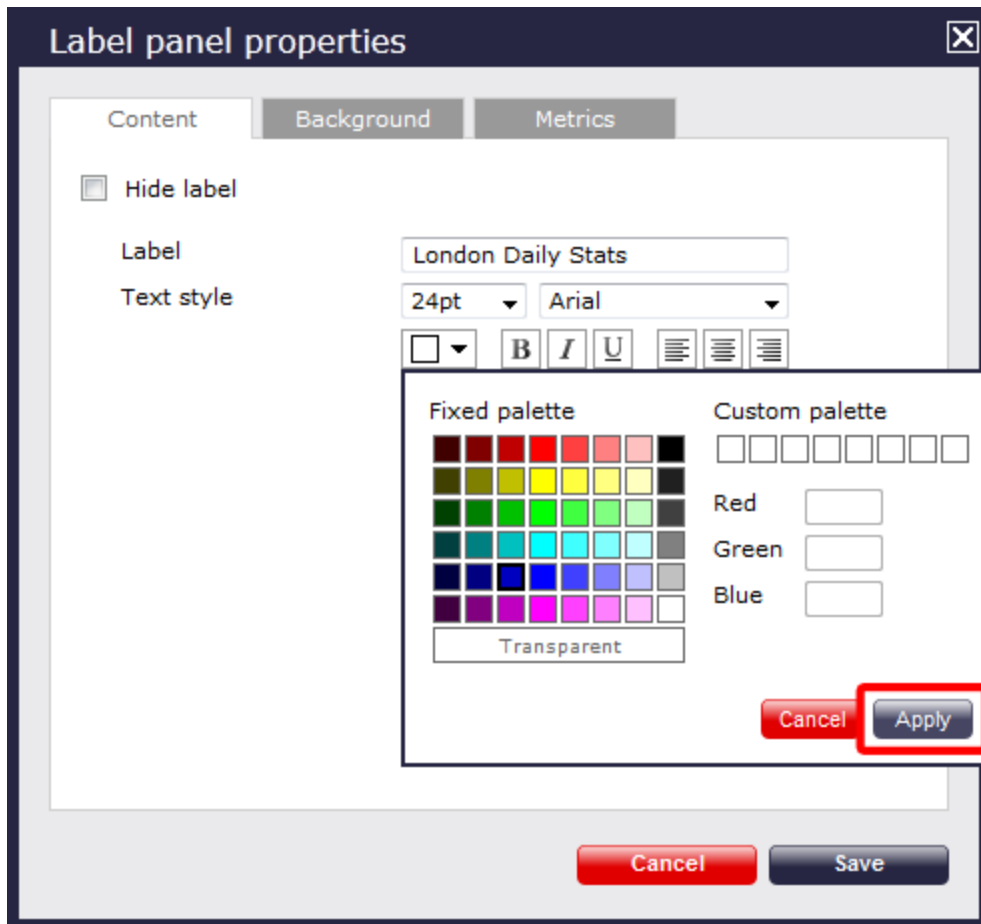


The `Label panel properties` window will open, containing the following tabs:



### Content

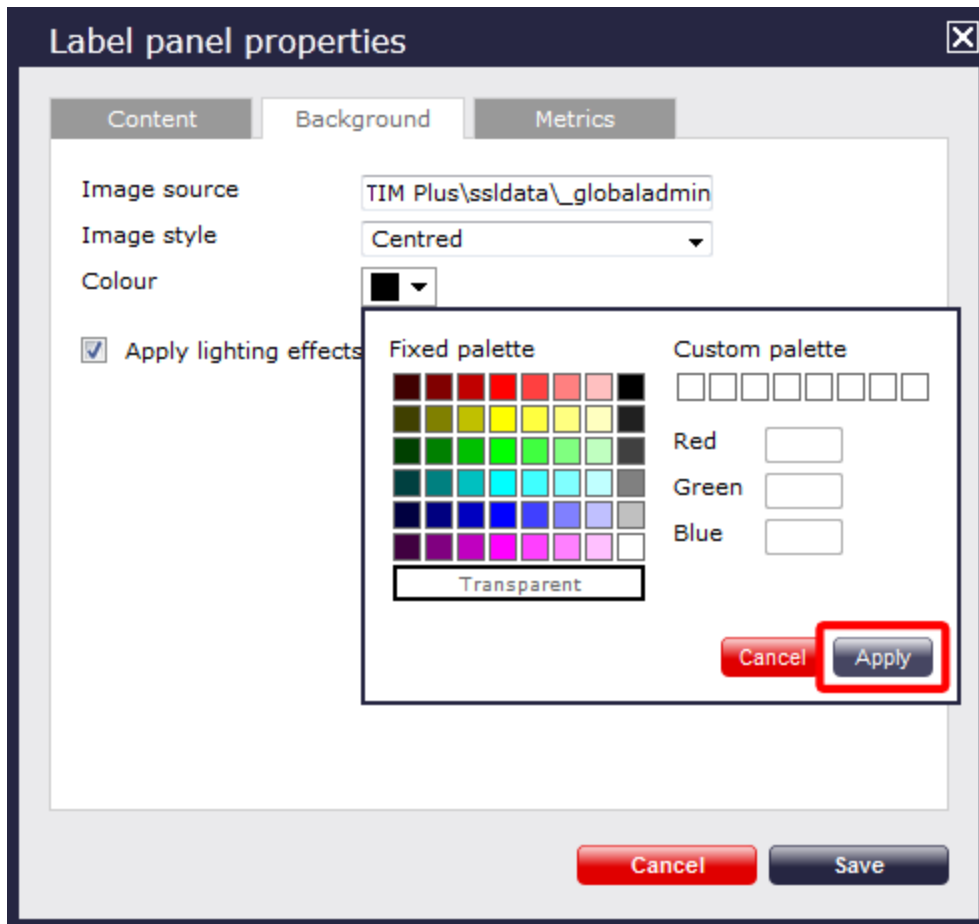
The `Content` tab allows you to enter the name you want to appear on the label panel and apply any styling properties, such as font size, font style, text colour, etc.



Field	Description
<b>Hide label</b>	Tick this option if you don't want your panel to display the textual element, such as when you are adding a stand-alone image in the panel's background property
<b>Label</b>	Enter the text you want to appear on the label panel
<b>Text style</b>	Select any <a href="#">styling properties</a> , such as font size, font style, text colour, etc.

### Background

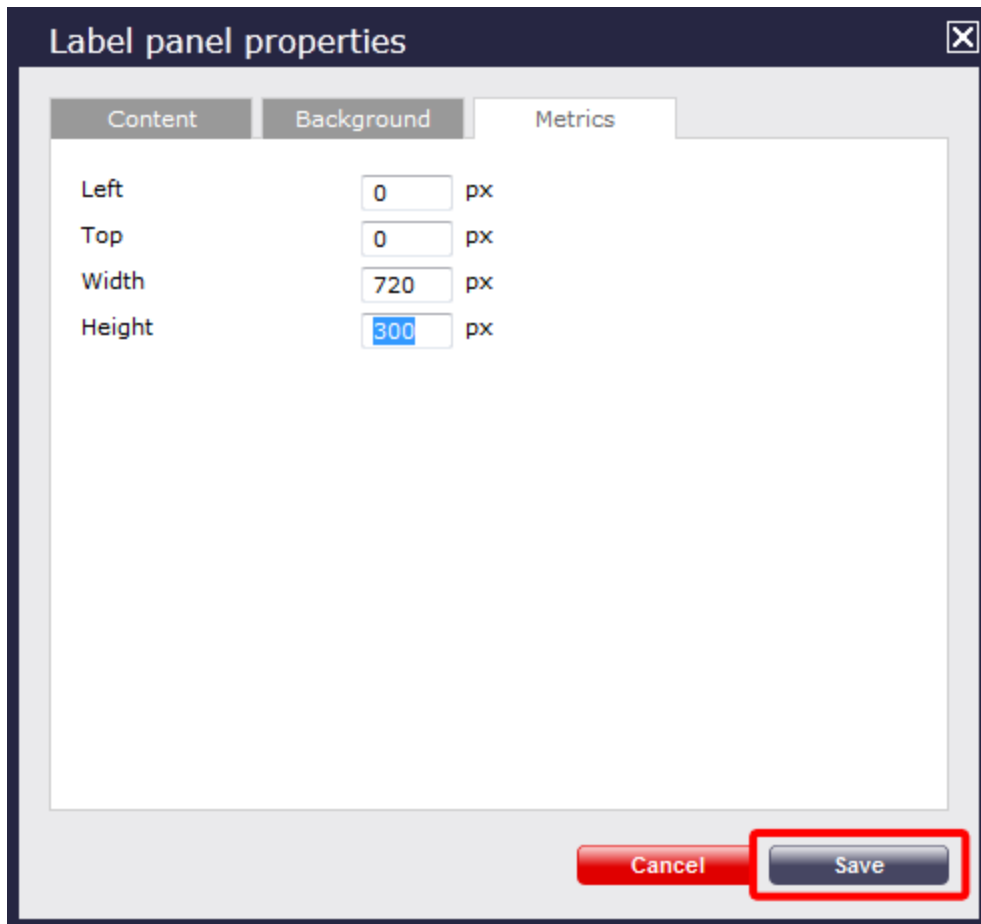
The Background tab allows you to configure the background properties of your label panel.



Field	Description
<b>Image source</b>	If you want your panel to display an image, type its source here, e.g. C:\Program Files (x86)\Tri-Line\TIM Plus\ssldata\_globaladmin. Remember, the path is relative to the folder on disk from which the web content is served, and is different for each class of web user
<b>Image style</b>	Choose how the image should be displayed
<b>Colour</b>	Choose the background colour of the panel; if you are adding an image, you may want to select <b>Transparent</b> so that this does not interfere with your image
<b>Apply lighting effects to this panel</b>	Tick this option to apply a shine effect to the entire panel; if you are using the panel to display an image, this may adversely affect how it appears

#### Metrics

The **Metrics** tab allows you to define the shape of the panel, by entering values for its position and size.



Once you have configured the properties of your Label panel, click on the **Save** button to apply any changes.

### Label panel - overview video

For a live demonstration of how to design and customise a label panel, watch the video below:

### Leaderboard panel

## Leaderboard panel

- What is a leaderboard panel?
- Adding a leaderboard panel
- Customising a leaderboard panel
- Leaderboard panel - overview video


**What is a leaderboard panel?**

The leaderboard panel allows you to display your live call logging data organised in columns placed next to each other, in order to provide a visual summary of any call information you wish to monitor. The content of each column is determined solely by your selection and the leaderboard can show any combination of column types. The fonts and background of the panel are also customisable.



The information shown in the leaderboard is updated every time a call finishes and has been logged by the system.

The example below shows a leaderboard panel containing the following columns: the total number of calls, inbound, outbound, lost calls, duration of inbound, duration of outbound, total duration of calls and is ordered by total number of calls per user:





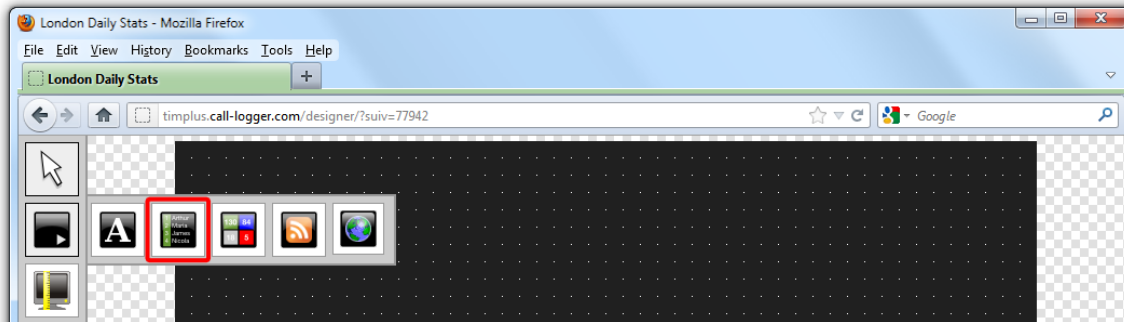
## Paris Weekly IT Team

Pos	Name	Total ▼	In	Out	Lost	Duration (In)	Duration (Out)	Total Duration
1	Adam Zapel	111	2	104	0	00:01:52	00:33:33	00:38:32
2	Tom Morrow	66	60	2	0	01:49:52	00:00:19	01:50:35
3	Dan D. Lyons	59	5	48	0	00:02:45	00:16:51	00:26:08
4	Amanda Lynn	57	8	42	0	00:05:42	00:10:49	00:20:12
5	Bea Minor	52	36	13	0	00:18:36	00:06:18	00:27:24
6	Bill Loney	45	14	13	0	00:06:02	00:14:16	00:45:22
7	Lance Boyle	38	12	15	0	00:07:37	00:13:39	00:32:47
8	Al Fresco	37	11	13	0	00:05:48	00:13:26	00:36:32
9	Claire Annette	34	26	0	0	00:39:48	00:00:00	00:46:34
10	Aretha Holly	31	5	19	0	00:06:04	00:29:31	00:39:47

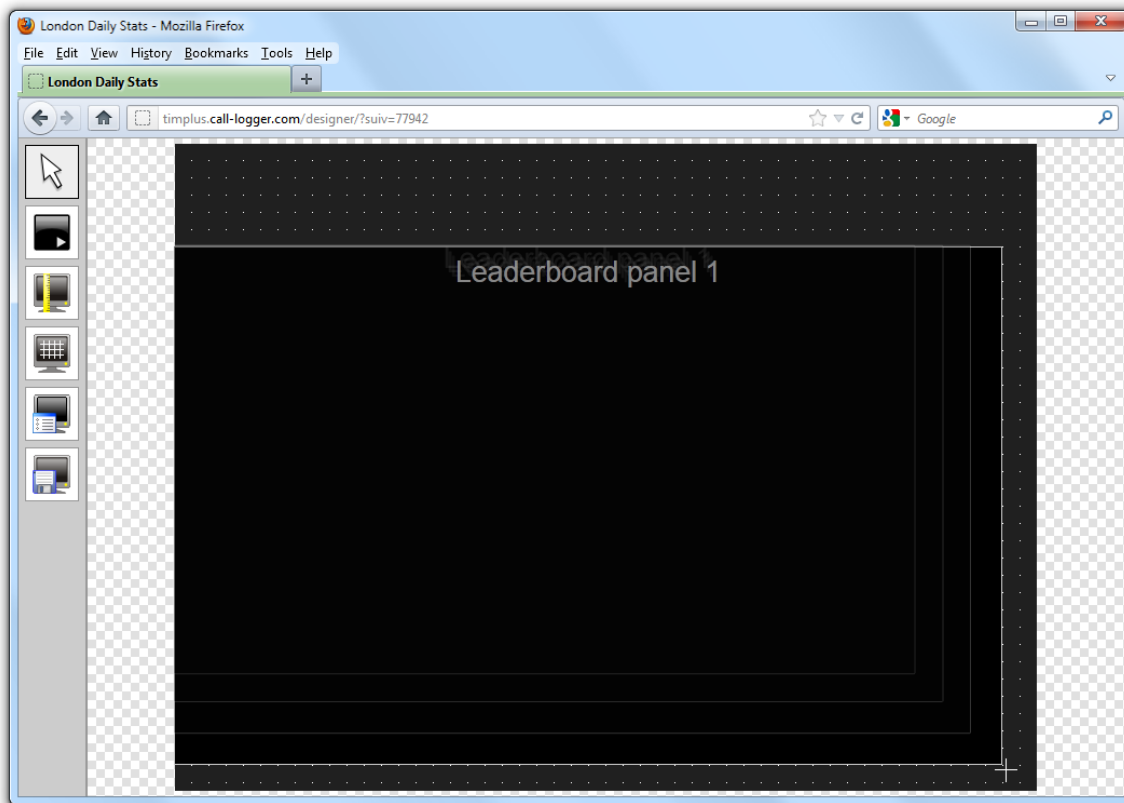
**Adding a leaderboard panel**



To add a leaderboard panel, click on the  toolbar button to expand the list of panel types and choose the  button, as shown below:





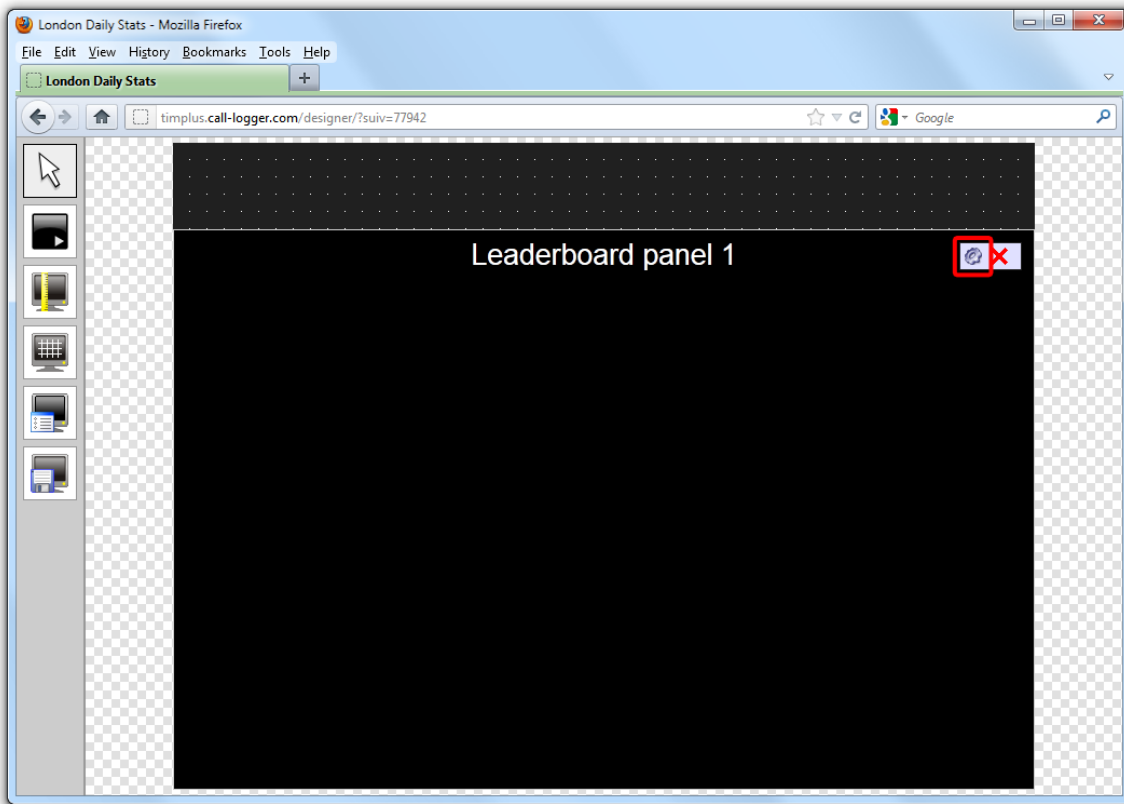
After selecting the leaderboard panel button, the mouse pointer changes into a white crosshair pointer, indicating that the designer is ready to draw your panel. Click and hold your left mouse button, starting at the point defining the upper-left corner of your new panel. Whilst still holding down the left mouse button, drag the marquee that will appear to the point that will define the lower-right corner of your panel, as shown below:



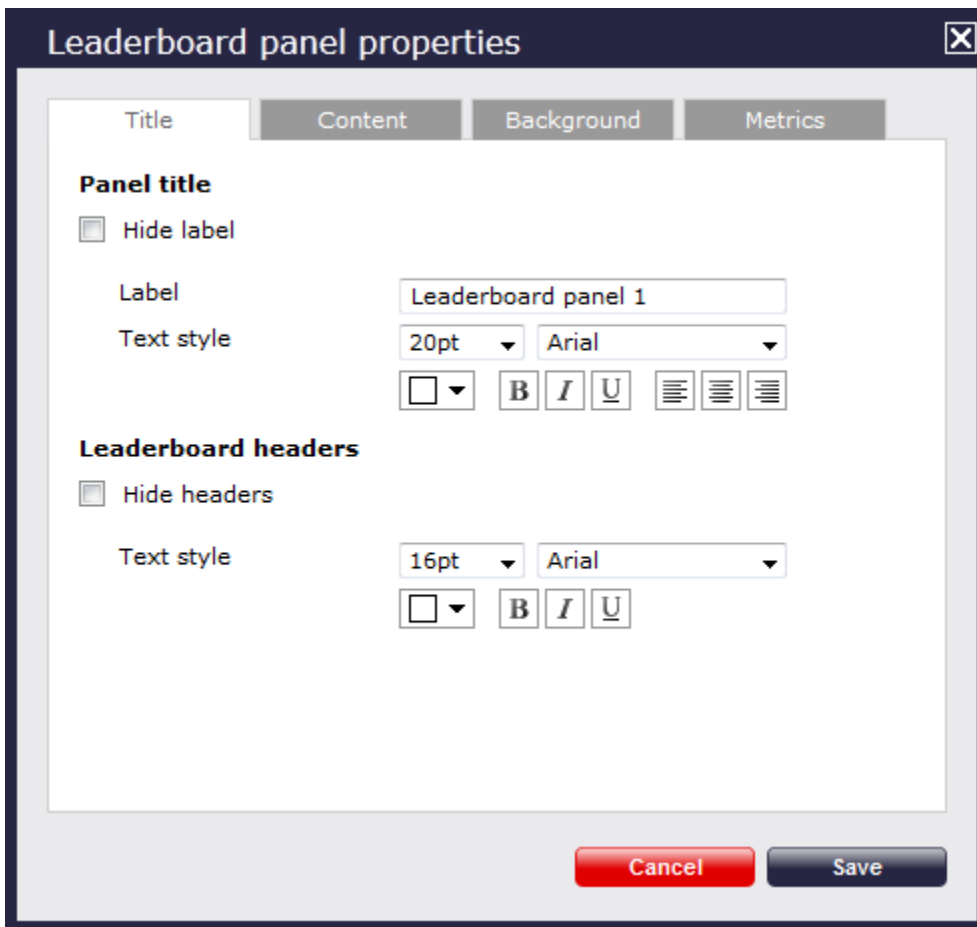
### Customising a leaderboard panel



To customize a leaderboard panel, click on the  toolbar button to switch to panel selection mode. Hover your mouse pointer over the leaderboard panel you want to customise and click on the  icon, when it appears towards the top-right corner of the panel, as shown below:



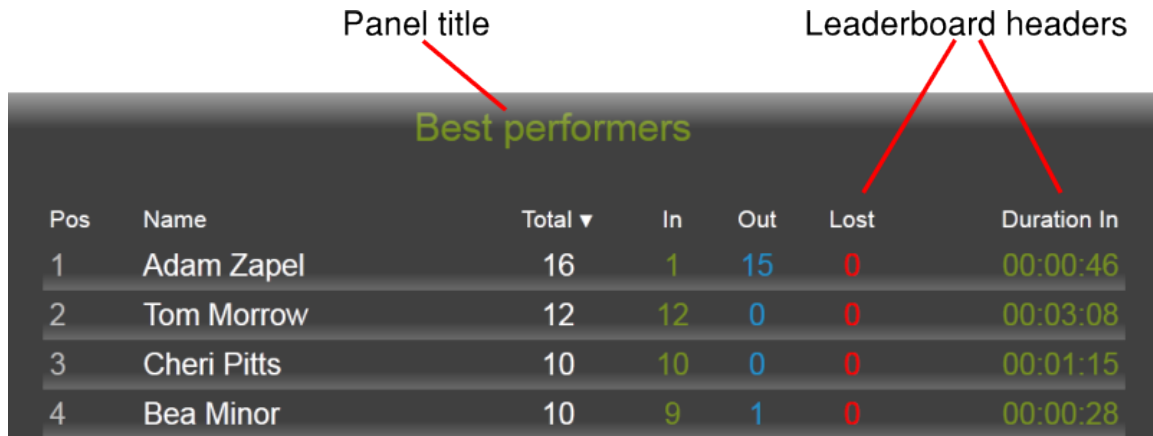
The `Leaderboard panel properties` window will open, containing the following tabs:



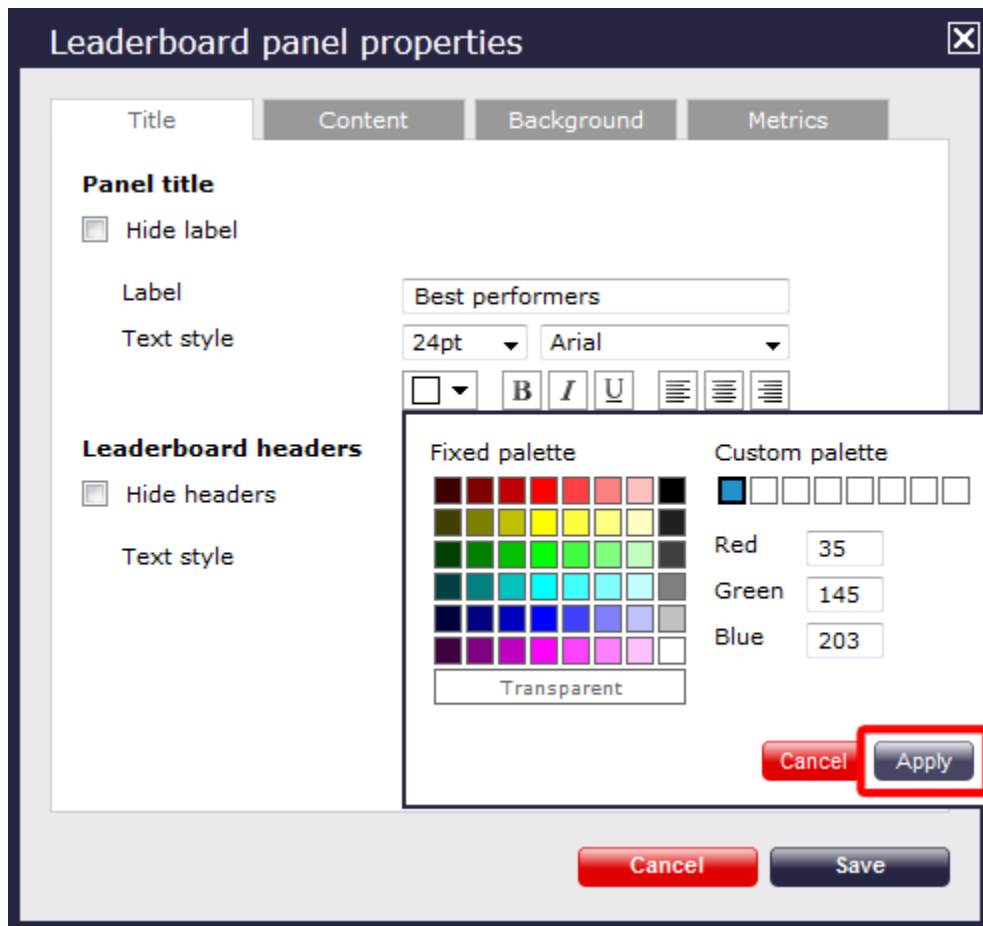


**Title**

The **Title** tab allows you to configure the properties of the panel title and of the leaderboard headers:



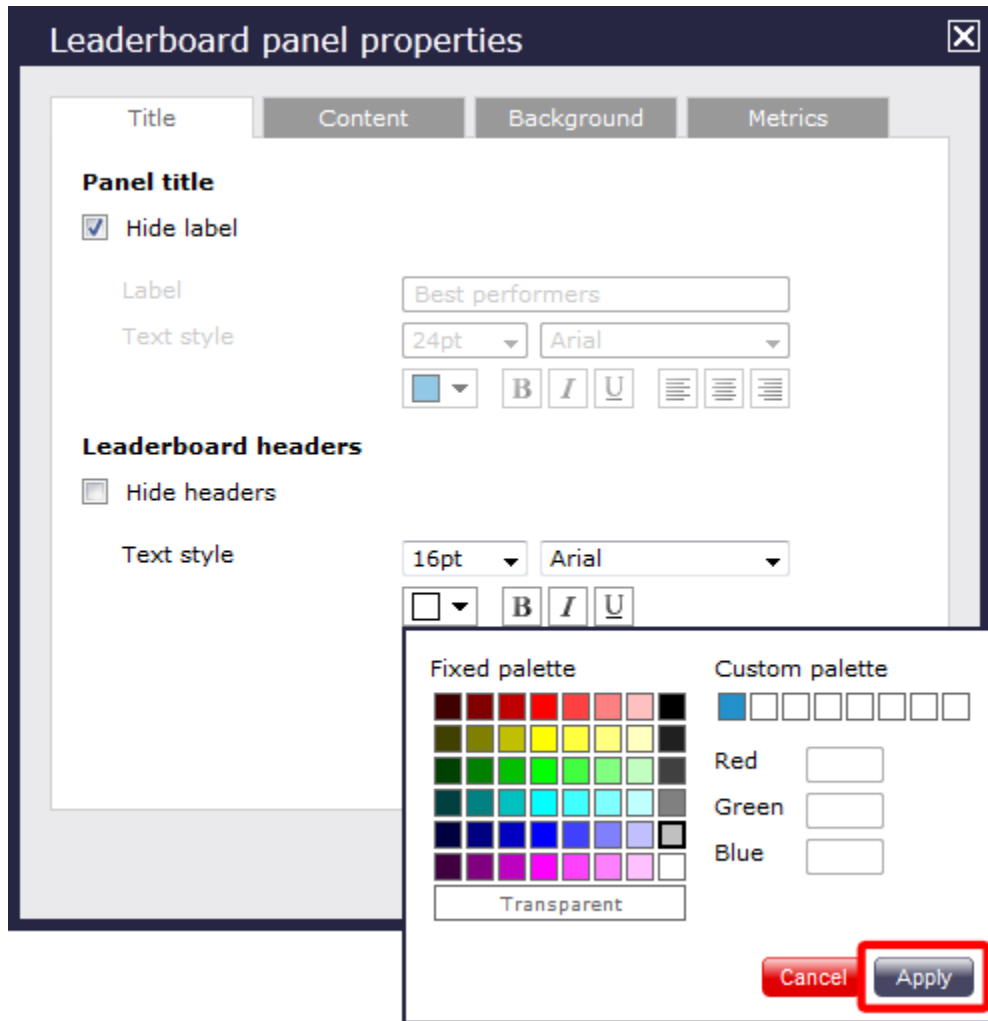
Panel title



Field	Description
<b>Hide label</b>	Tick this option if you don't want your panel to have a title
<b>Label</b>	Enter the name of your leaderboard

<b>Text style</b>	Select any <a href="#">styling properties</a> for your panel title, e.g font size, font style or text colour etc.
-------------------	---

### Leaderboard headers



Field	Description
<b>Hide label</b>	Tick this option if you don't want to add any column headers
<b>Text style</b>	Select any <a href="#">styling properties</a> for your column headers, e.g font size, font style or text colour etc.

### Content

The **Content** tab allows you to select the type of information you want to display in your leaderboard. Each column can comprise different call information (duration, response time, etc.), for different call types (inbound, outbound, etc.) and for different entities (sites, groups, users). For example, one column can show statistics for the total number of inbound calls on a daily basis, while in a different column you can display the same information, but for a different user group and on a weekly basis.

Perform the following steps to add a column to your leaderboard panel:

Select a stats point



To populate a leaderboard with call logging information, you first need to add a stats point object in the Directory to collect data for the site, group or user you want the leaderboard to display.

To select the relevant stats point for your leaderboard, click on the **Find** button, as shown below:

**Leaderboard panel properties**

**Title** | **Content** | **Background** | **Metrics**

Stats point  **Find**

Call type

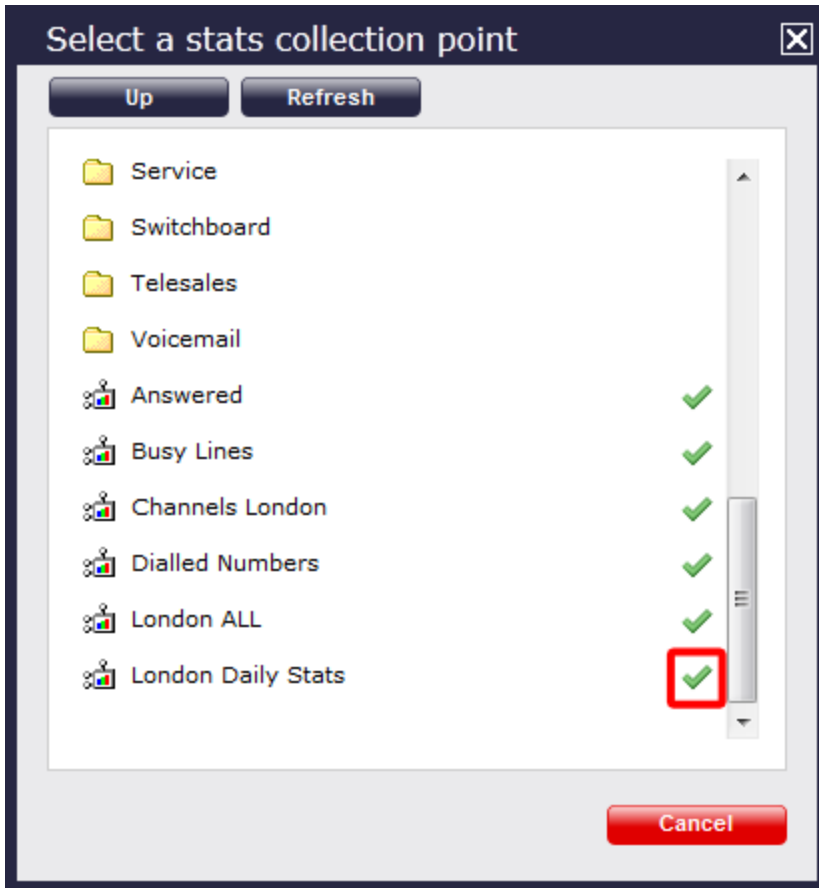
Column  **Add**

Column

Don't replace numbers with contact names

**Cancel** **Save**

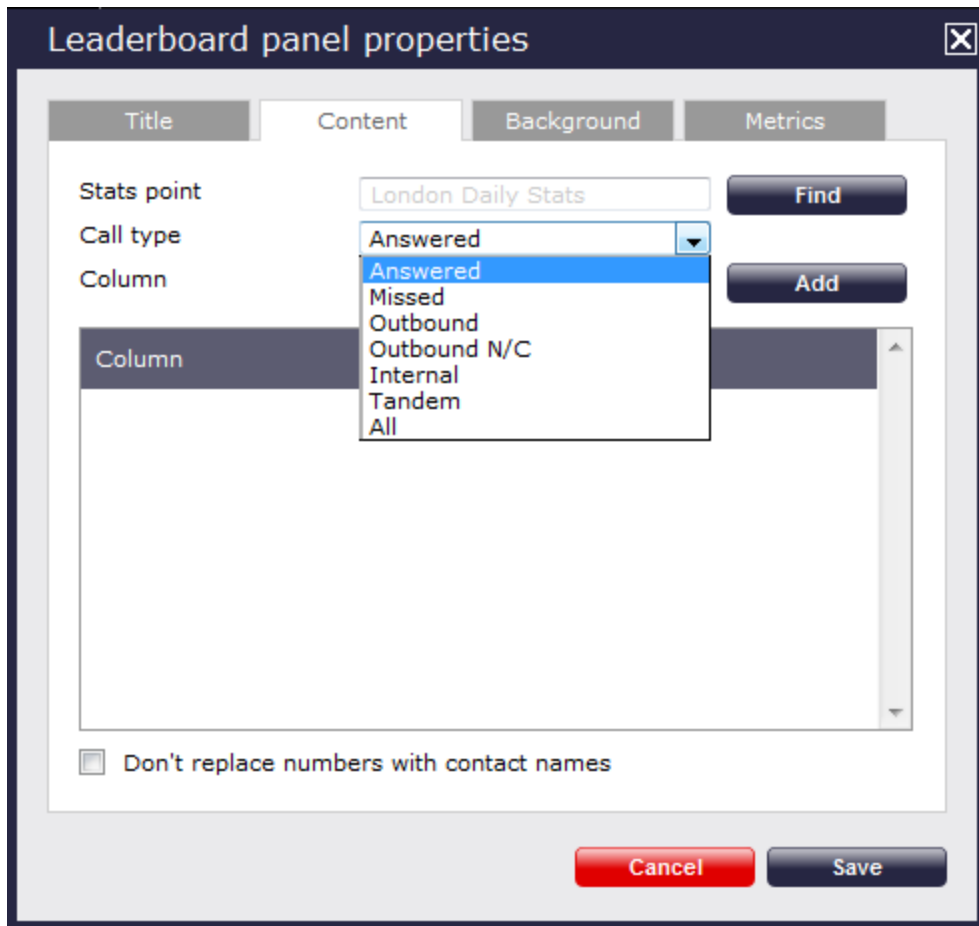
A new window will open, allowing you to drill-down to the site or group level in the Directory, where the stats point object you want to add resides. To select the stats point, click on the icon alongside it.



The selected stats point will automatically feed all columns in the leaderboard, but each individual column can be set afterwards to use a different stats point.

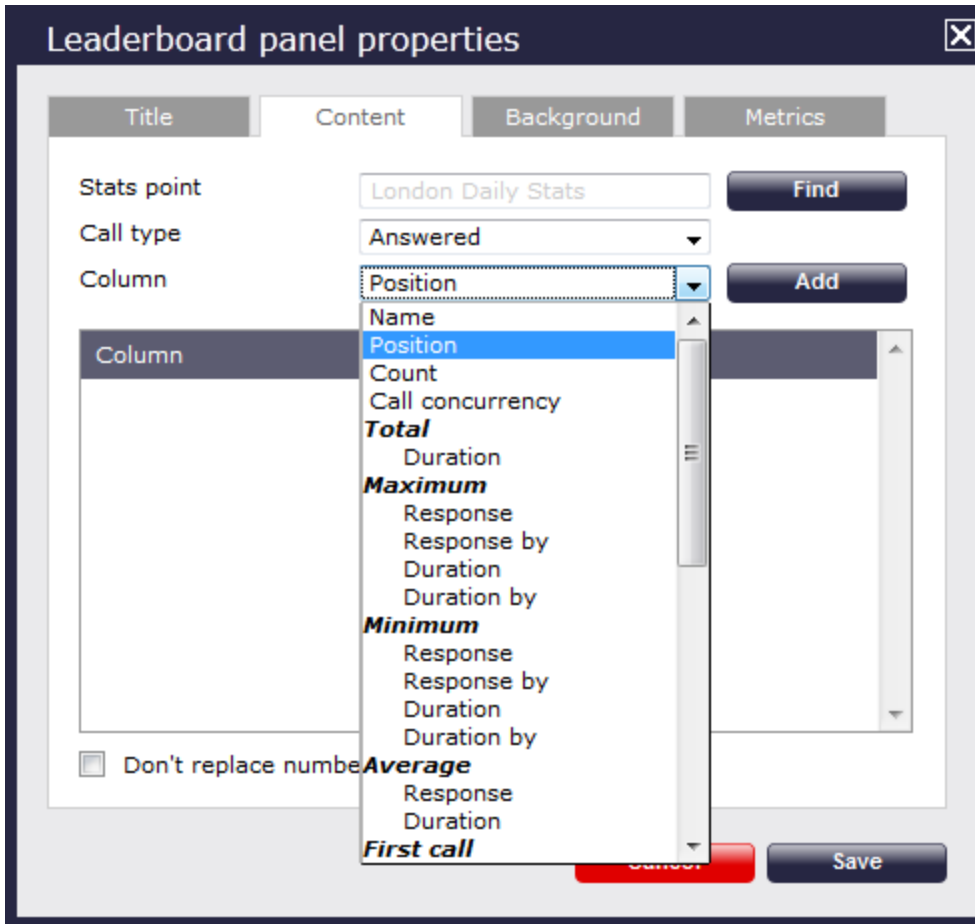
#### Select a call type

To select the type of call you want to display in this column, click on the `Call type` drop-down list and choose from the available options, as shown below:

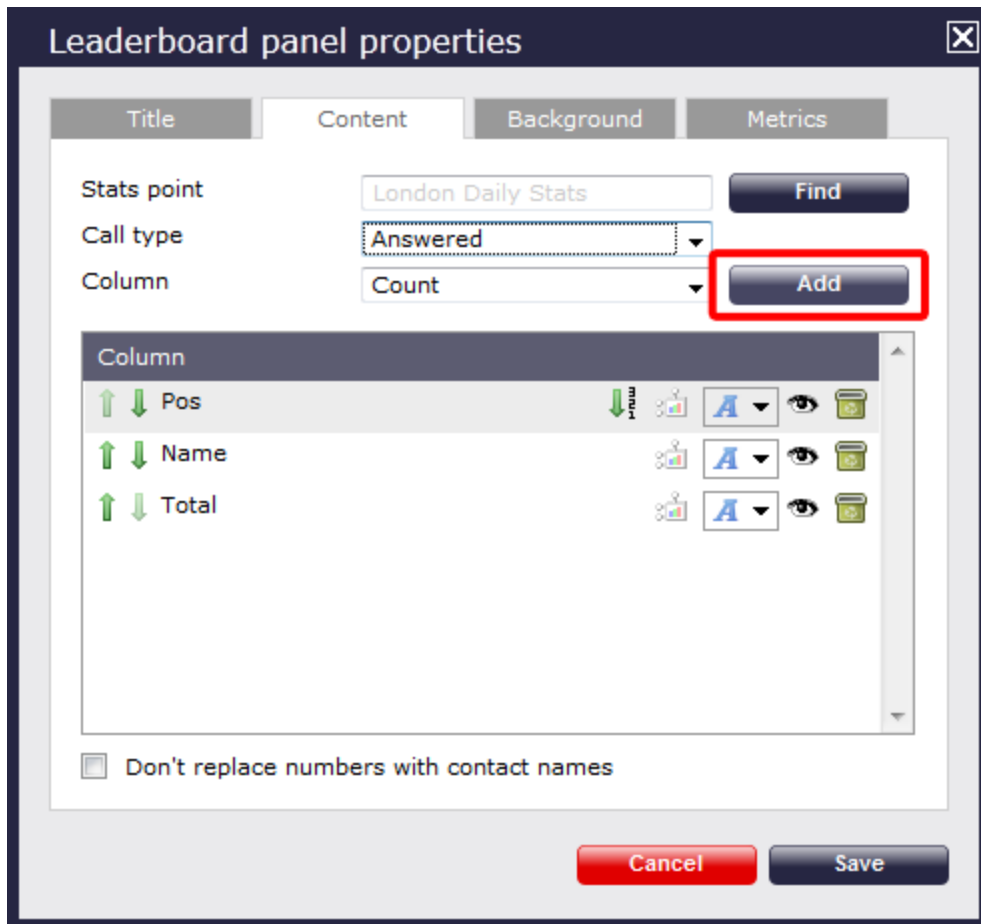


Select column information

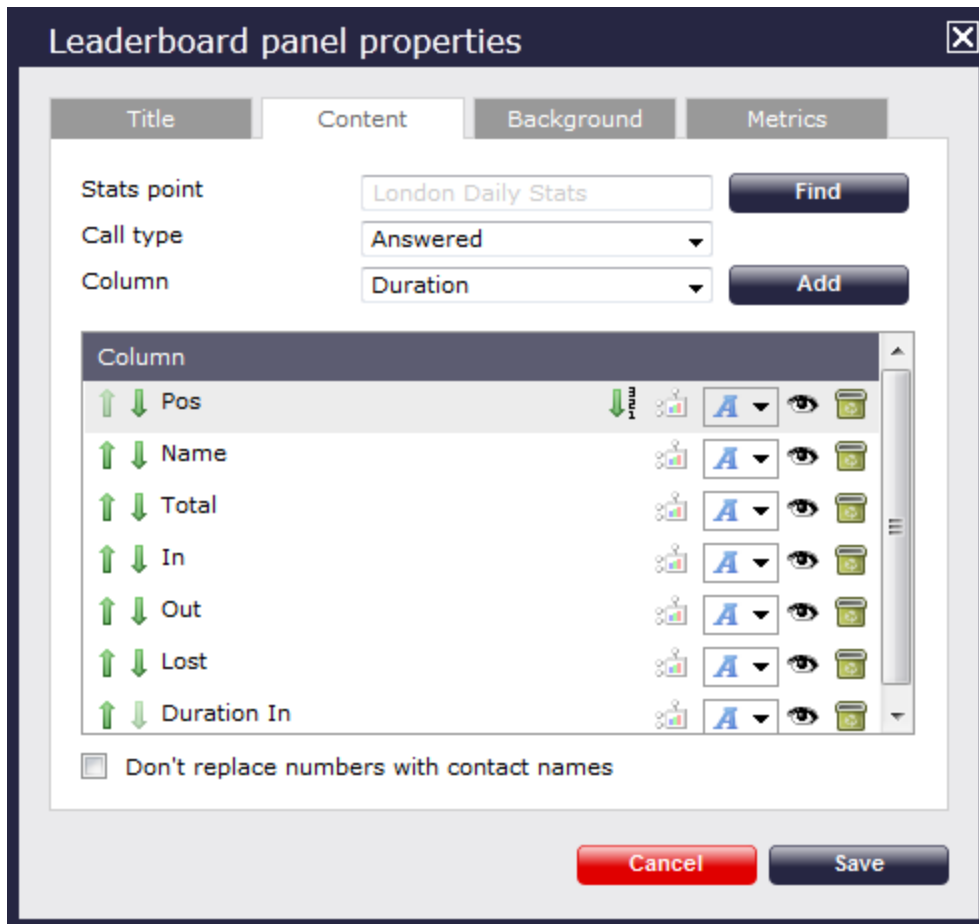
To select the type of call information you want to display in this column, such as total duration, response time, etc., click on the **Column** drop-down list and choose from the available options, as shown below:



Click on the **Add** button to add the column to the list and repeat the process if you need to add another column.



In the example below, the following settings for the `Call type` and `Column` fields have been selected in order to form the columns that appear in the list:

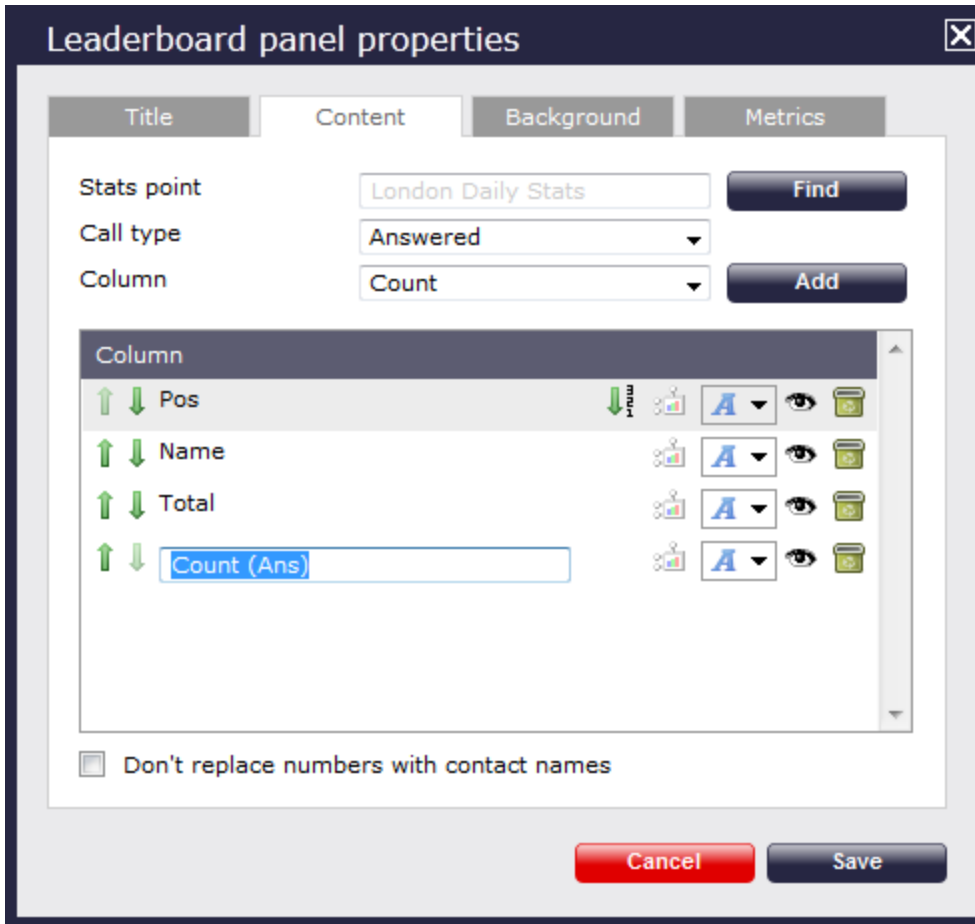


Name	Call type	Column
Pos	All	Position
Name	All	Name
Total	All	Count
In	Answered	Count
Out	Outbound	Count
Lost	Missed	Count
Duration In	Answered	Average duration

#### Changing column name

To change the name of a column, click on it to highlight the text and enter the new name. Press the **Enter** key to save the changes.

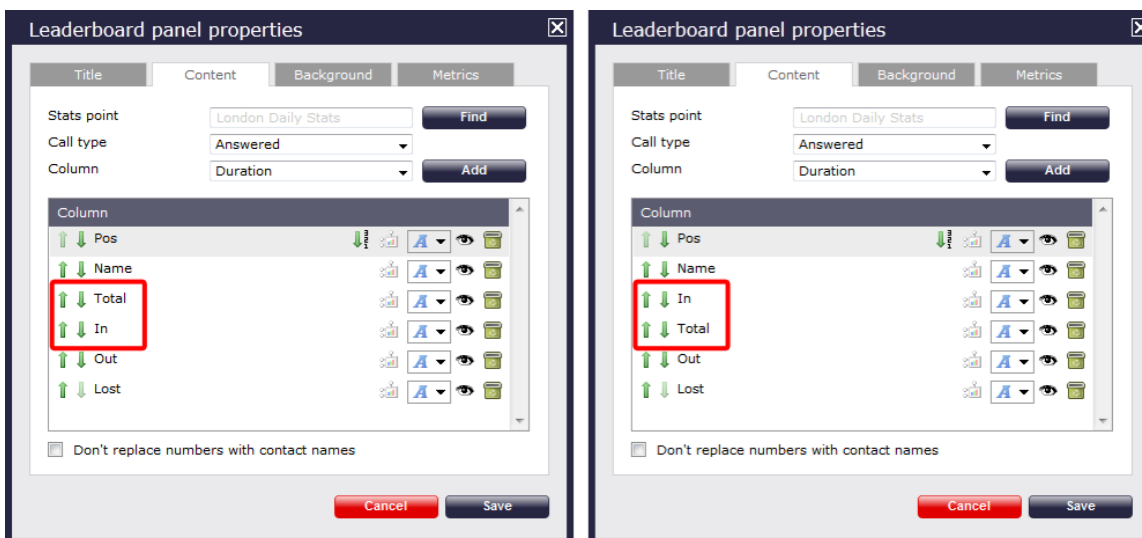




### Rearranging columns


To rearrange the columns in a different order, click on the icon alongside each column. By clicking on the icon, the column will move one level up in the design mode, and one column to the left on the live display board.

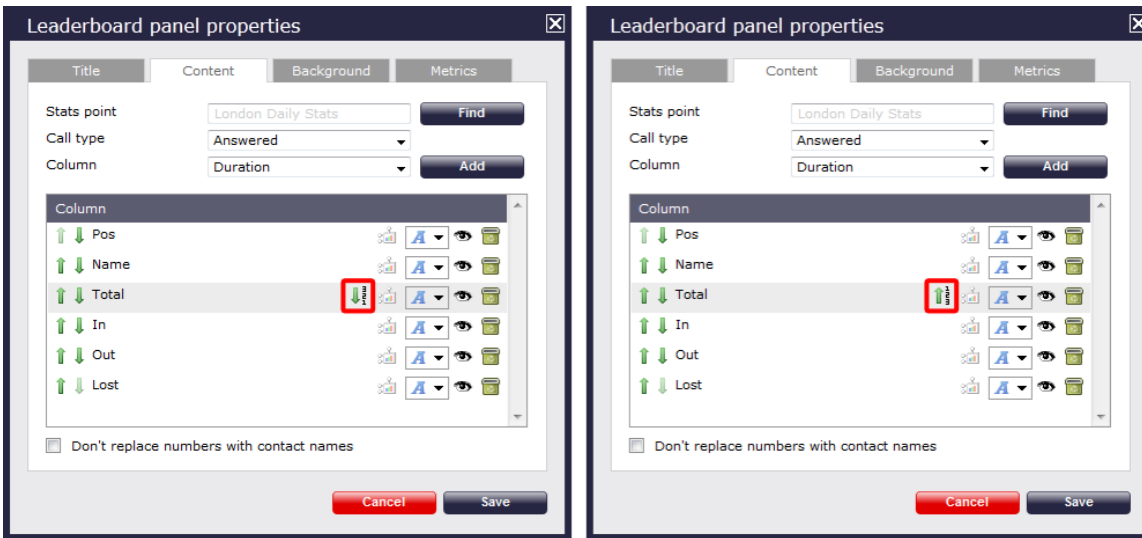
In the example below, we rearrange the **In** and **Total** columns. By clicking on the icon next to the **Total** column, we move it one level up.




### Changing a column's sorting

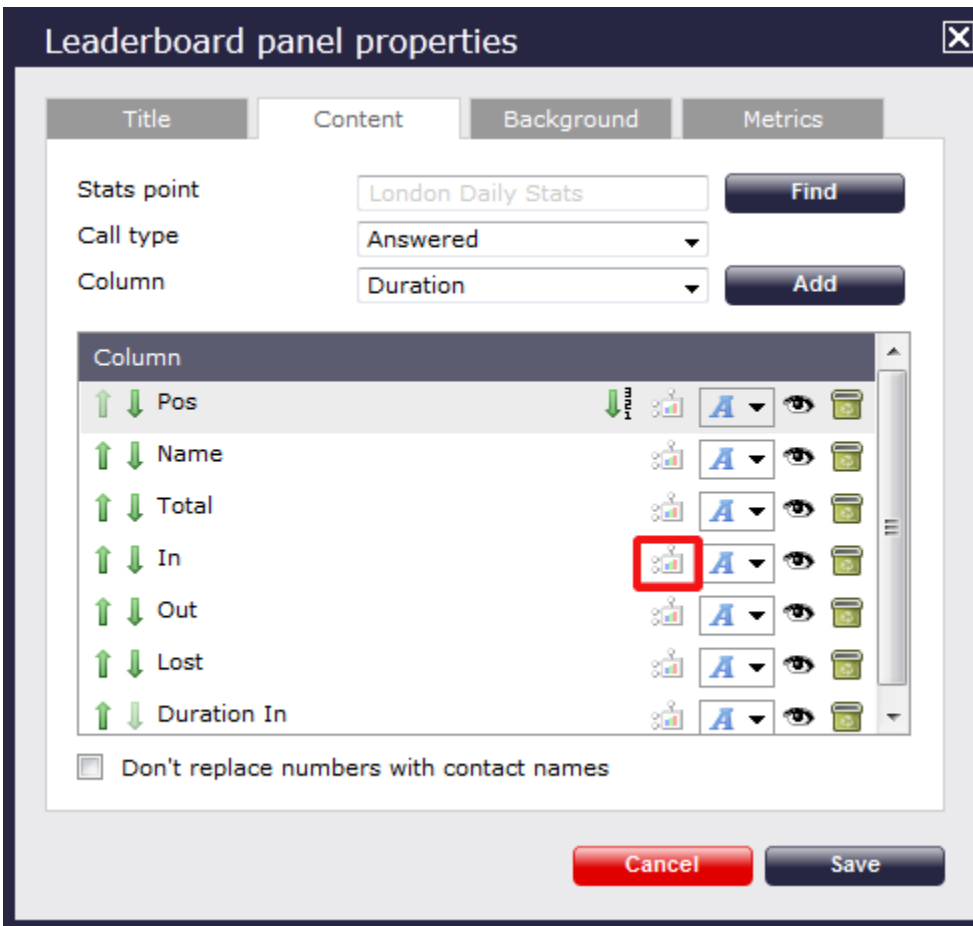
To sort the columns to appear in a specific order, click on the icon.


In the example below, we change the sorting of the **Total** column from descending to ascending. By clicking on the  icon alongside the **Total** column, we turn the sorting of this column to descending.

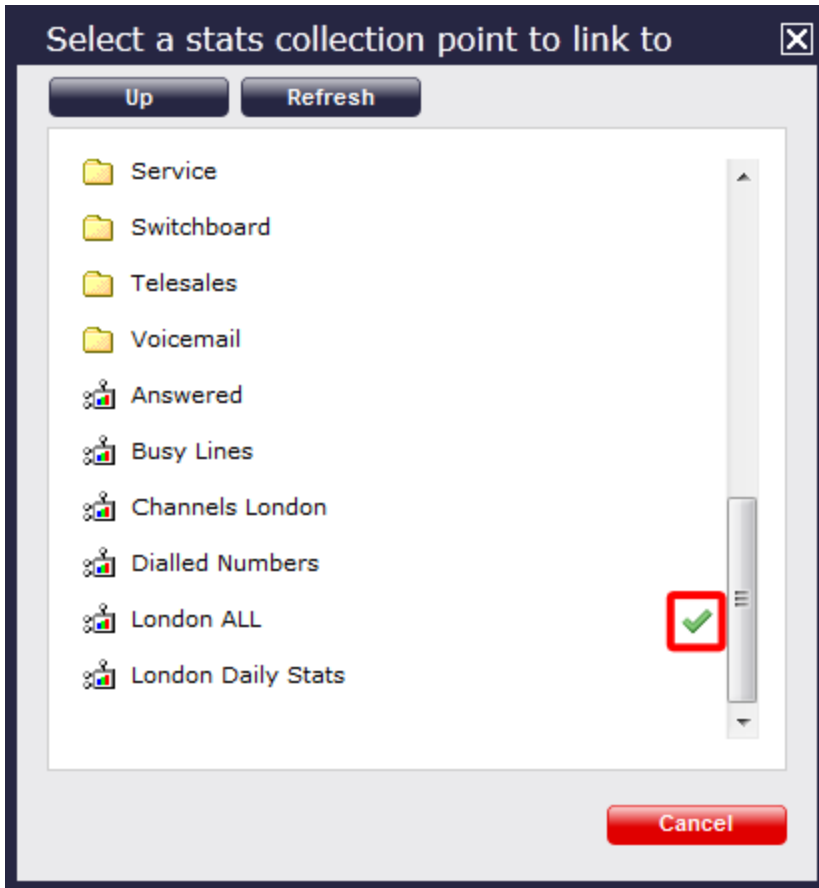




Changing the stats collection point

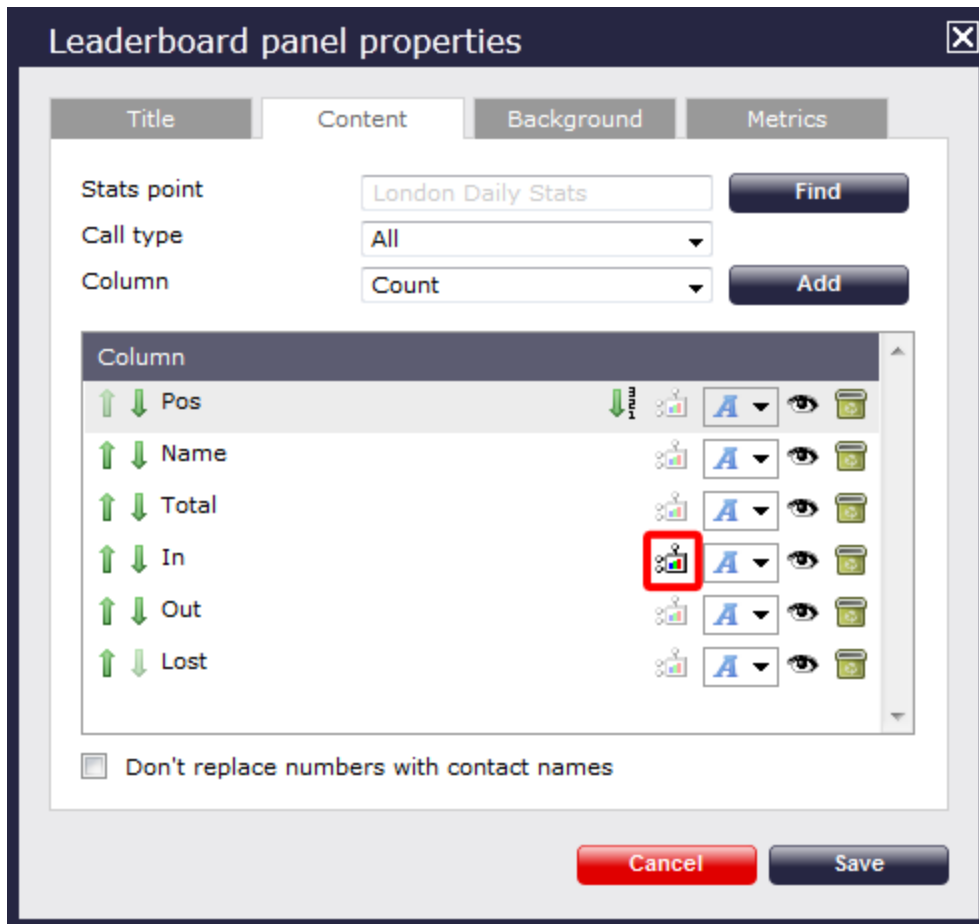
To change the stats collection point of a column, click on the  icon alongside it, as shown below:




A new window will open, allowing you to drill-down to the site or group level in the Directory, where the stats point object you want to add resides. To select the stats point, click on the  icon alongside it.

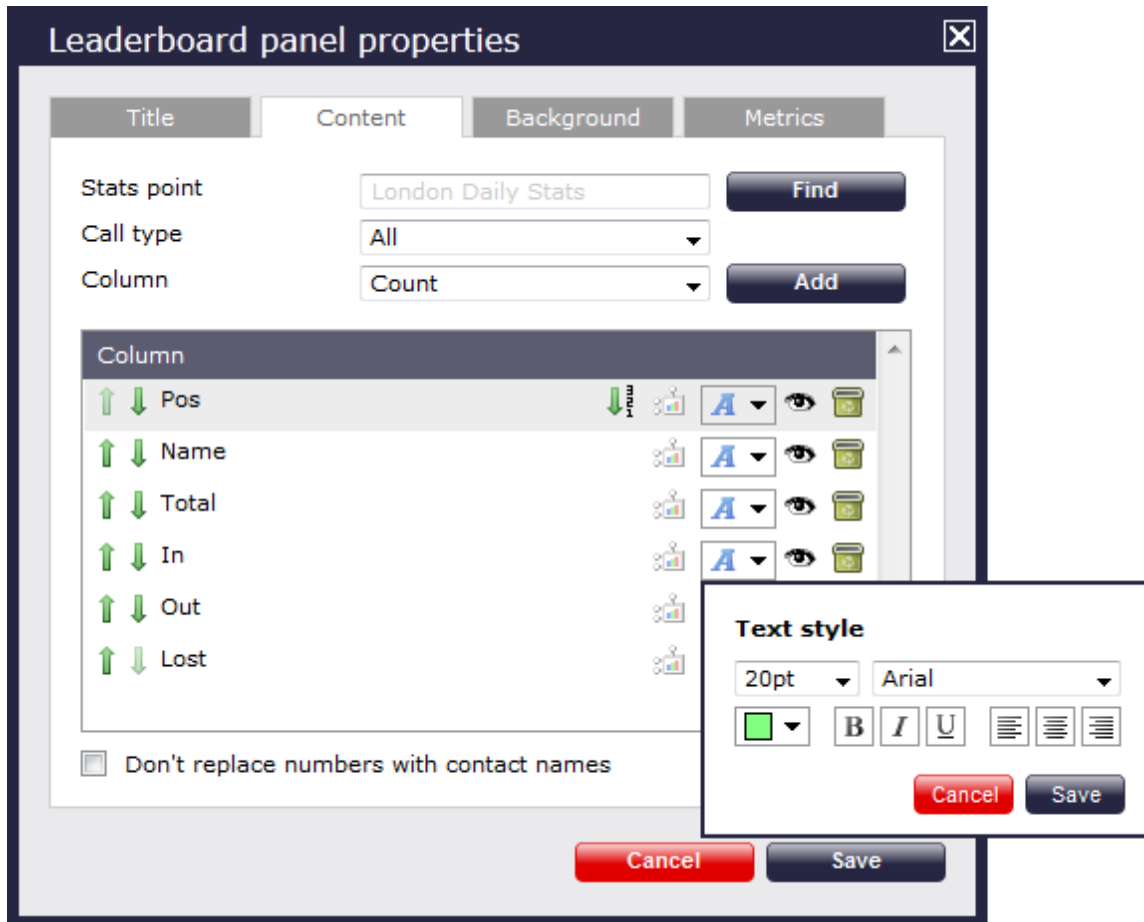


After selecting the new stats point, the  icon will automatically turn into , to highlight that the current column is using a different stats collection point.





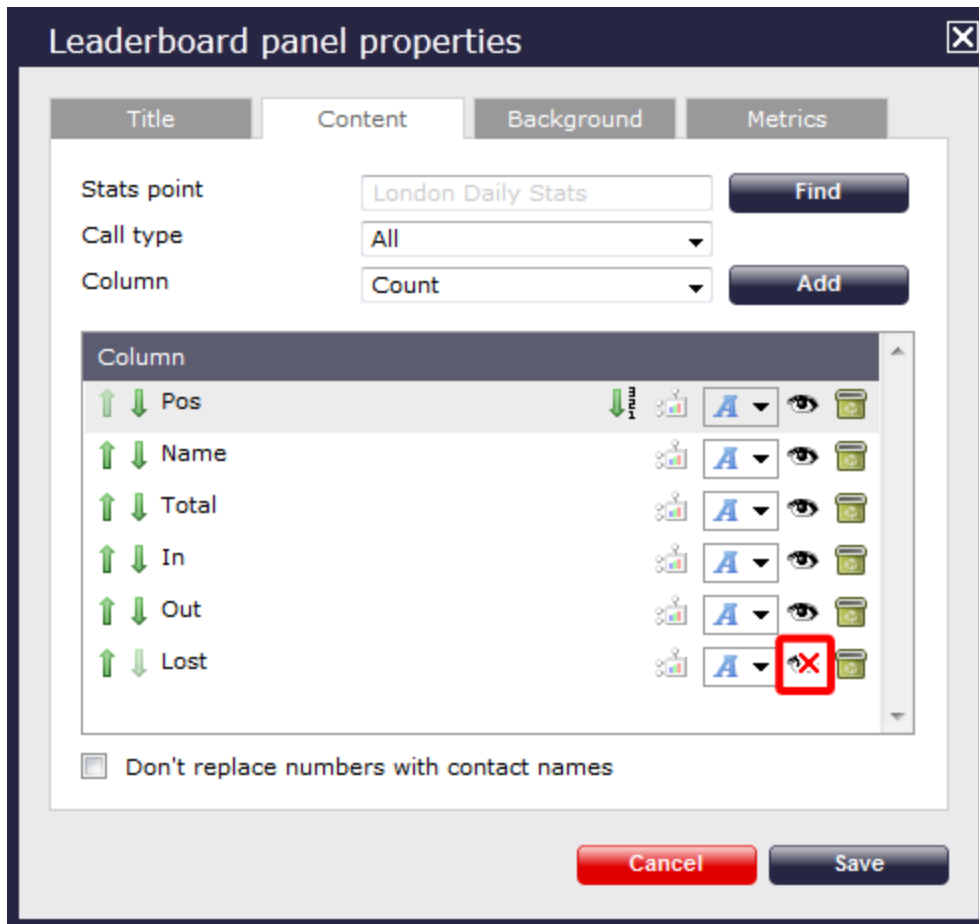
Changing the font properties

Click on the  icon to change any [styling properties](#) for the selected column, e.g font size, font style or text colour etc.




#### Hiding a column

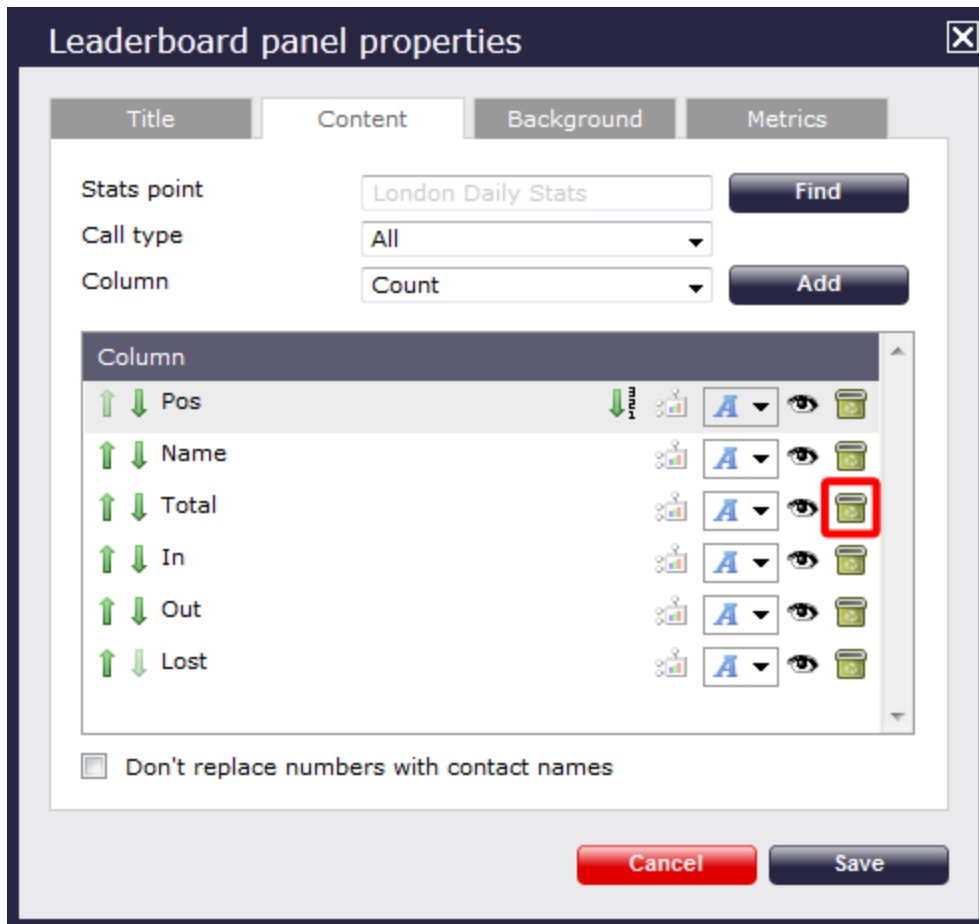
To temporarily hide a column from your leaderboard panel, click on the  icon, which will turn automatically into  highlighting the column is hidden.



To display the column again, click on the  icon, which will turn back into .

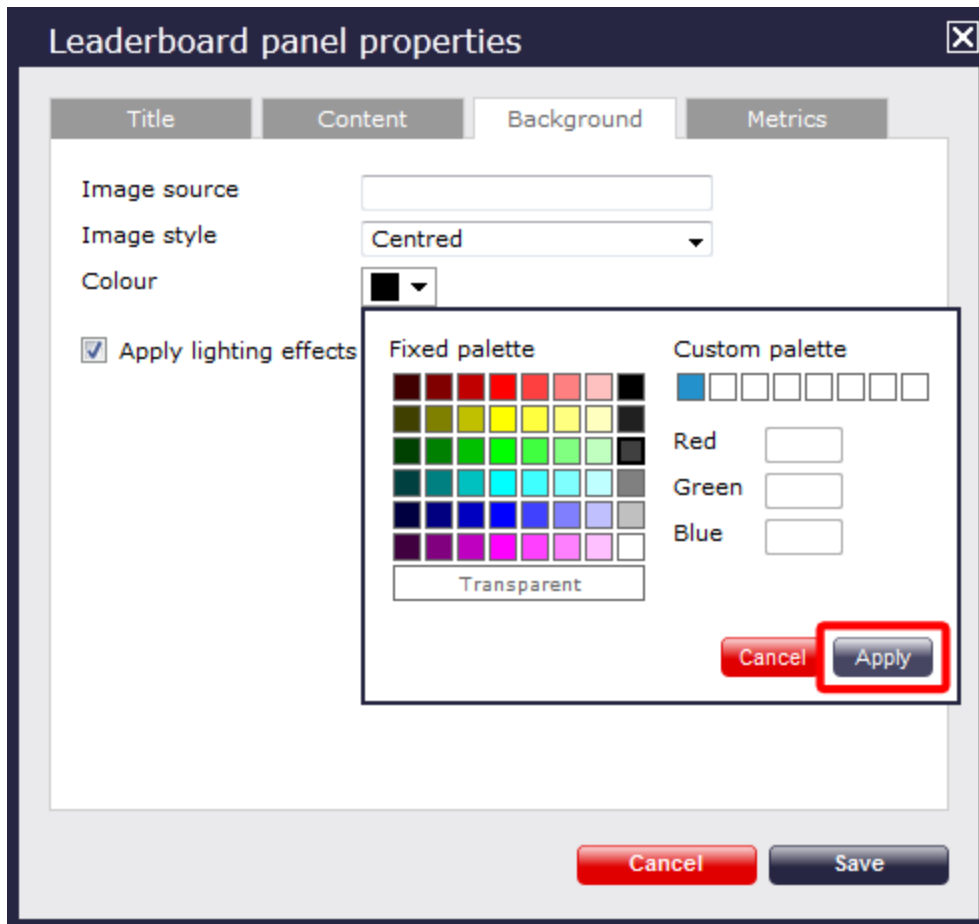
Deleting a column

If you would like to permanently delete a column from your leaderboard panel, click on the  icon, as shown below:



### Background

The **Background** tab allows you to configure the background properties of your leaderboard panel.



Field	Description
<b>Image source</b>	If you want your panel to display an image, type its source here. Remember, the path is relative to the folder on disk from which the web content is served, and is different for each class of web user
<b>Image style</b>	Choose how the image should be displayed
<b>Colour</b>	Choose the background colour of the panel; if you are adding an image, you may want to select <b>Transparent</b> so that this does not interfere with your image
<b>Apply lighting effects to this panel</b>	Tick this option to apply a shine effect to the entire panel; if you are using the panel to display an image, this may adversely affect how it appears

#### Metrics

The **Metrics** tab allows you to define the size of the leaderboard panel and the parameters of the page.



The screenshot shows a dialog box titled "Leaderboard panel properties" with a close button (X) in the top right corner. The dialog has four tabs: "Title", "Content", "Background", and "Metrics". The "Metrics" tab is selected. It contains the following settings:

- Left:** 0 px
- Top:** 159 px
- Width:** 940 px
- Height:** 650 px
- Paging:**
  - Use automatic paging
  - Page size:** 10
  - Show the first page only
  - Page speed:** 3 seconds

At the bottom of the dialog are two buttons: "Cancel" (red) and "Save" (dark blue).

#### Panel size

To define the shape of the panel, enter the values for its position and size.

#### Paging

If you want to use automatic paging, select the box provided; alternatively, enter the number of rows you want the leaderboard to show per page, or select *Show the first page only*. If the leaderboard has more than one page, you can set the rate at which you want the pages to change, by entering a value in the *Page speed* box.

Once you have configured the settings of your leaderboard panel, click on the **Save** button to apply any changes.

### Leaderboard panel - overview video

For a live demonstration of how to design and customise a leaderboard panel, watch the video below:

### Summary panel

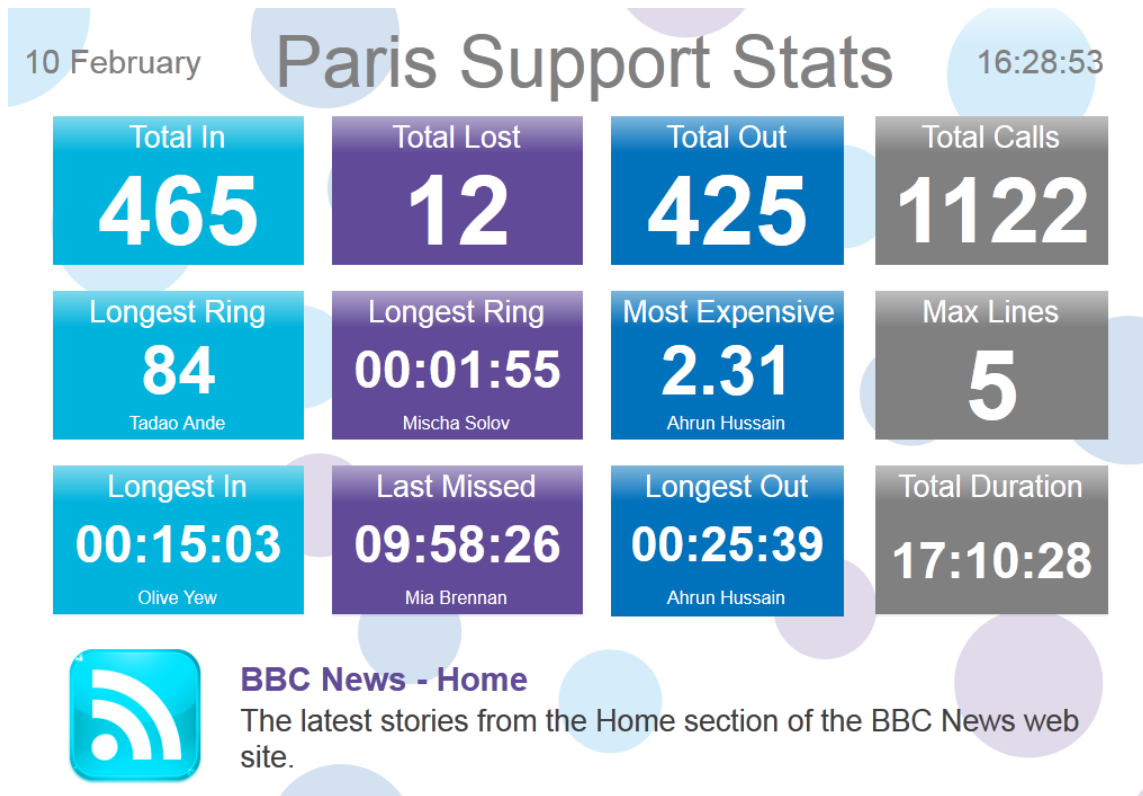
#### Summary panel

- What is a summary panel?
- Adding a summary panel
- Customising a summary panel
- Summary panel - overview video

## What is a summary panel?



Summary panels are normally used to display call statistics based on a particular call type or call property, e.g. the longest call, the most expensive call, the total number of inbound calls etc.

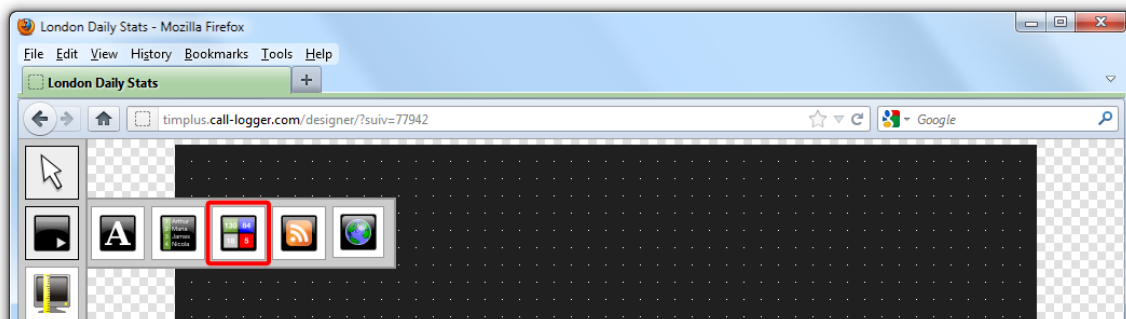
The display board in the screenshot below displays several summary panels, each of them showing call information grouped by different criteria



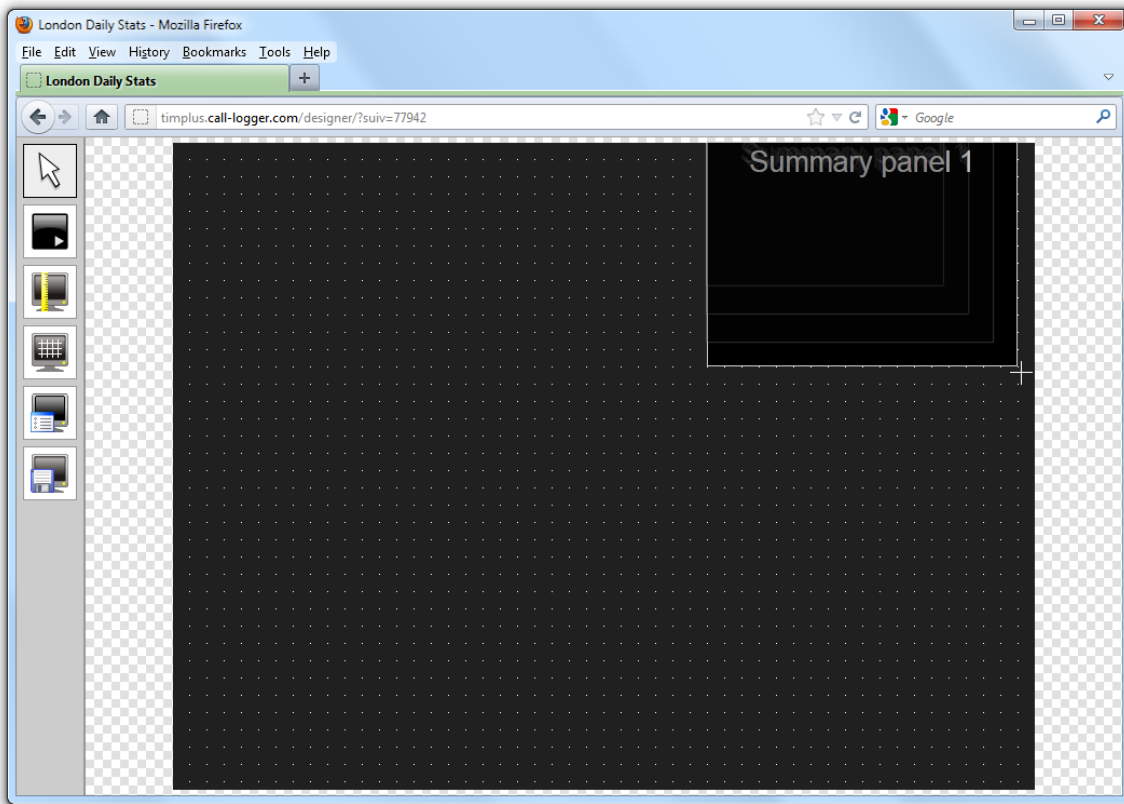
## Adding a summary panel



To add a summary panel, click on the  toolbar button to expand the list of panel types and choose the  button, as shown below:





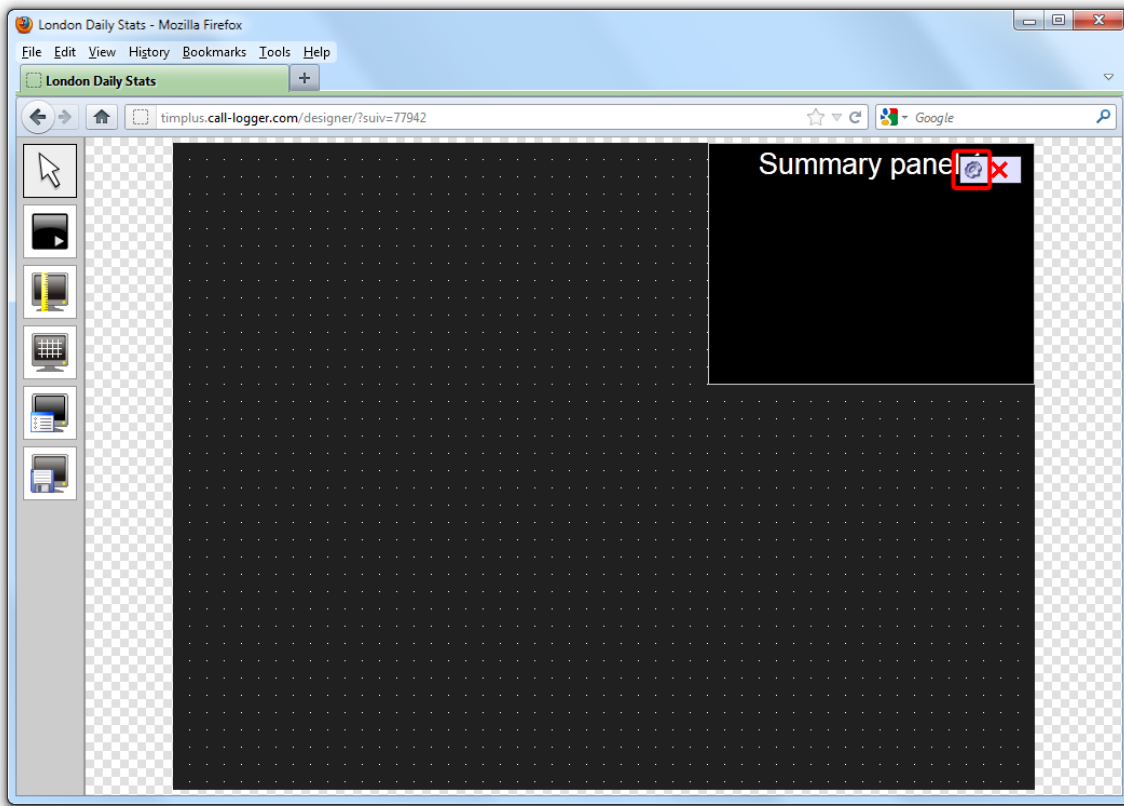
After selecting the summary panel button, the mouse pointer changes into a white crosshair pointer, indicating that the designer is ready to draw your panel. Click and hold your left mouse button, starting at the point defining the upper-left corner of your new panel. Whilst still holding down the left mouse button, drag the marquee that will appear to the point that will define the lower-right corner of your panel, as shown below:



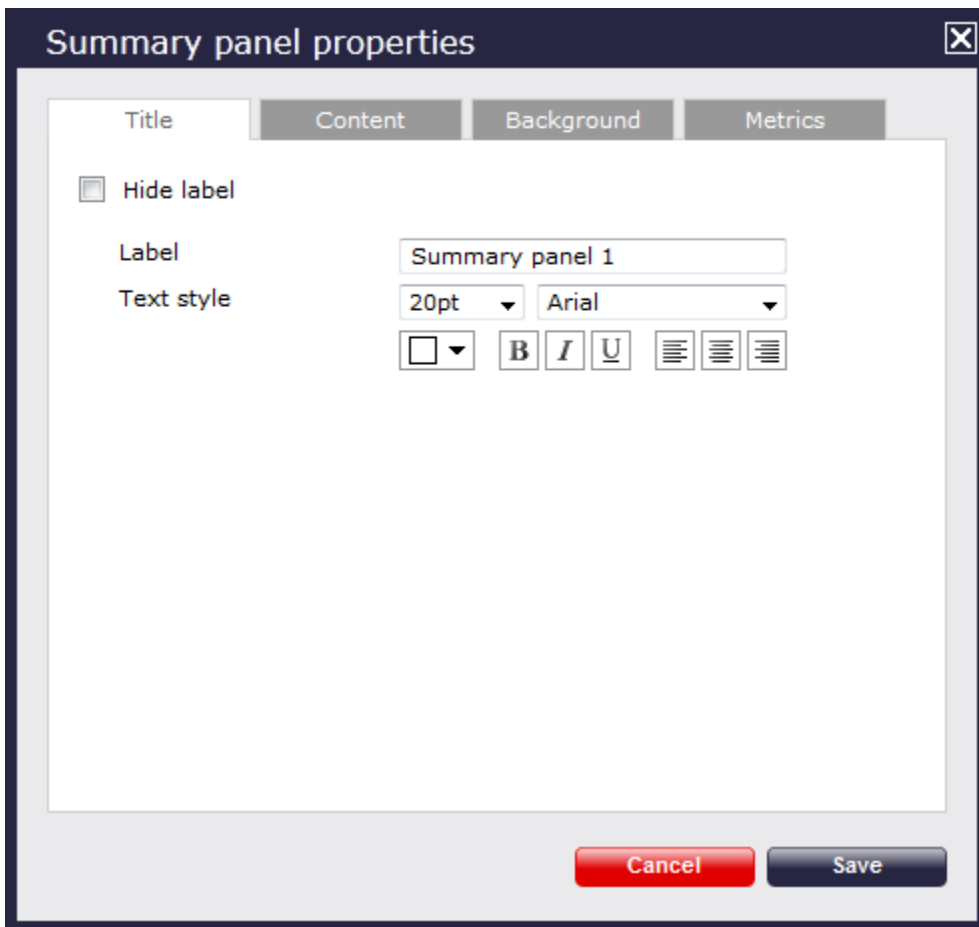
### Customising a summary panel



To customize a summary panel, click on the  toolbar button to switch to panel selection mode. Hover your mouse pointer over the label panel you want to customise and click on the  icon, when it appears towards the top-right corner of the panel, as shown below:

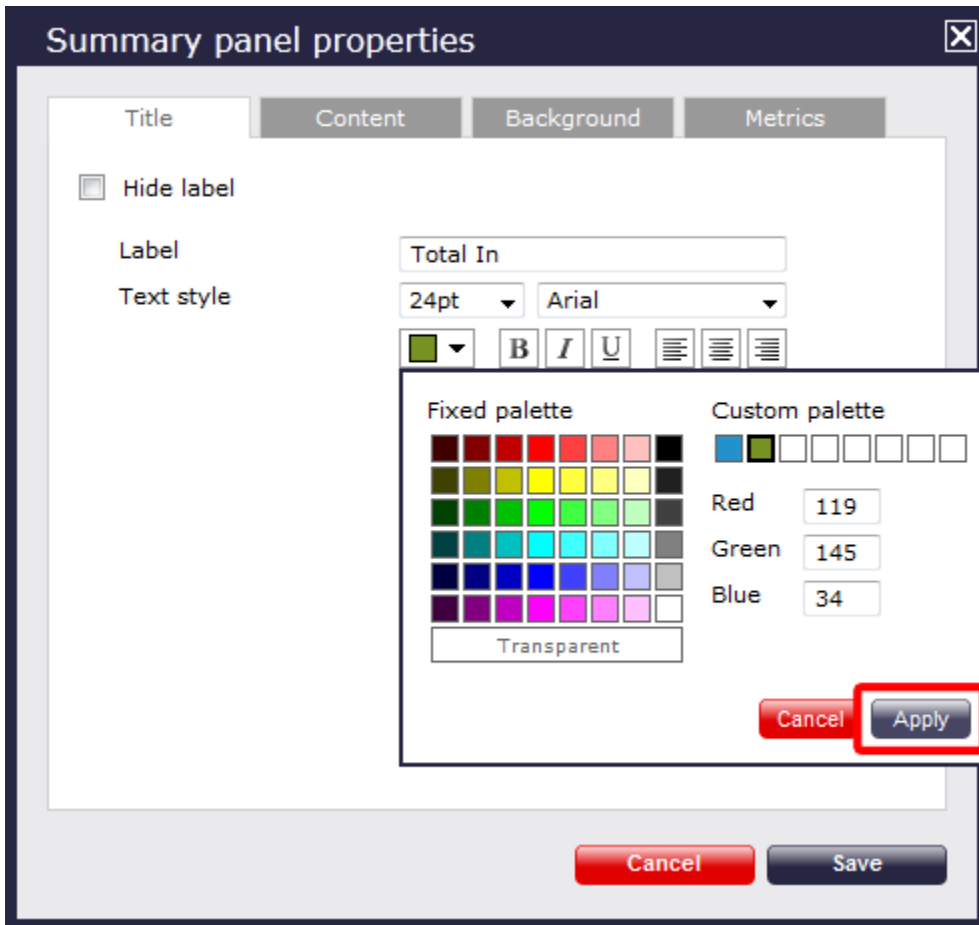


The `Summary pane` properties window will open, containing the following tabs:



## Title

The **Title** tab allows you to enter the name you want to appear on the summary panel and apply any styling properties, such as font size, font style, text colour, etc.



Field	Description
<b>Hide label</b>	Tick this option if you don't want your panel to have a title
<b>Label</b>	Enter a title for your summary panel
<b>Text style</b>	Select any styling properties for your panel title, e.g font size, font style or text colour etc.

## Content

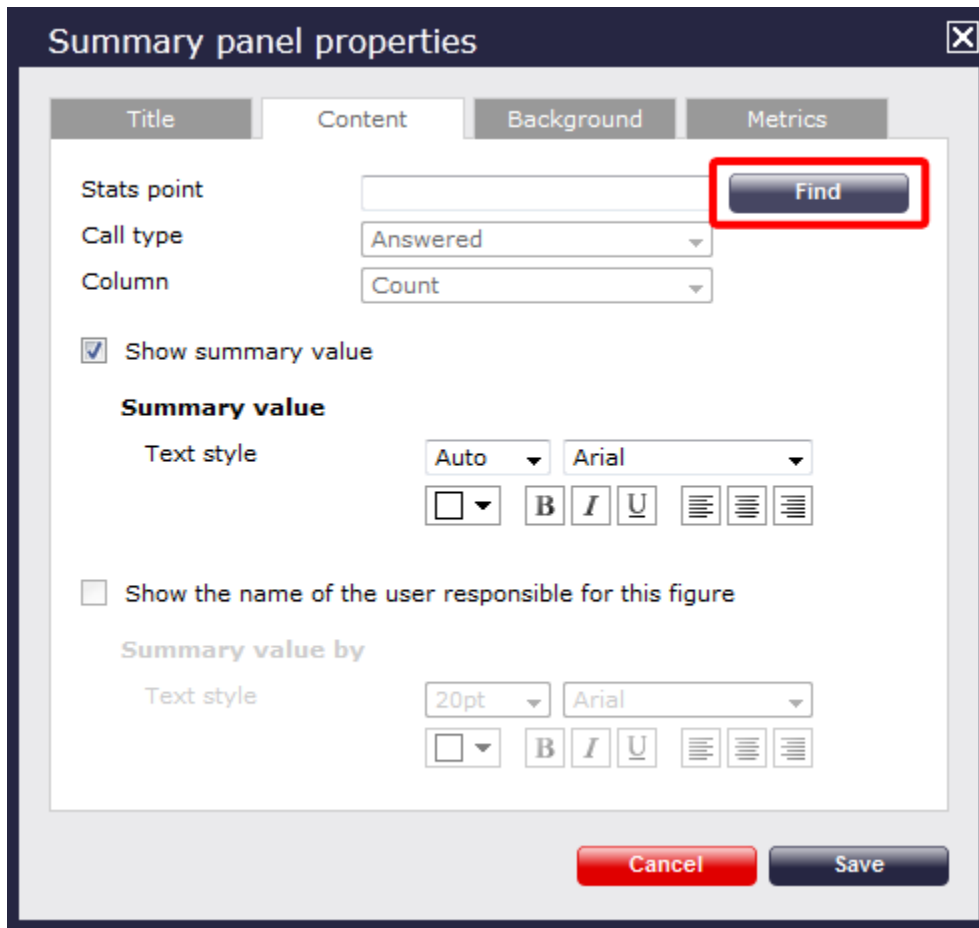
The **Content** tab allows you to select the type of call information you want to display in your summary panel.

Selecting a stats point



To populate the summary panel with call logging information, you first need to create a stats point object in the Directory to collect data for the site, group or user that you want the summary panel to display.


To choose the entity whose calls you want to display in this panel, select a stats collection point, by clicking on the **Find** button

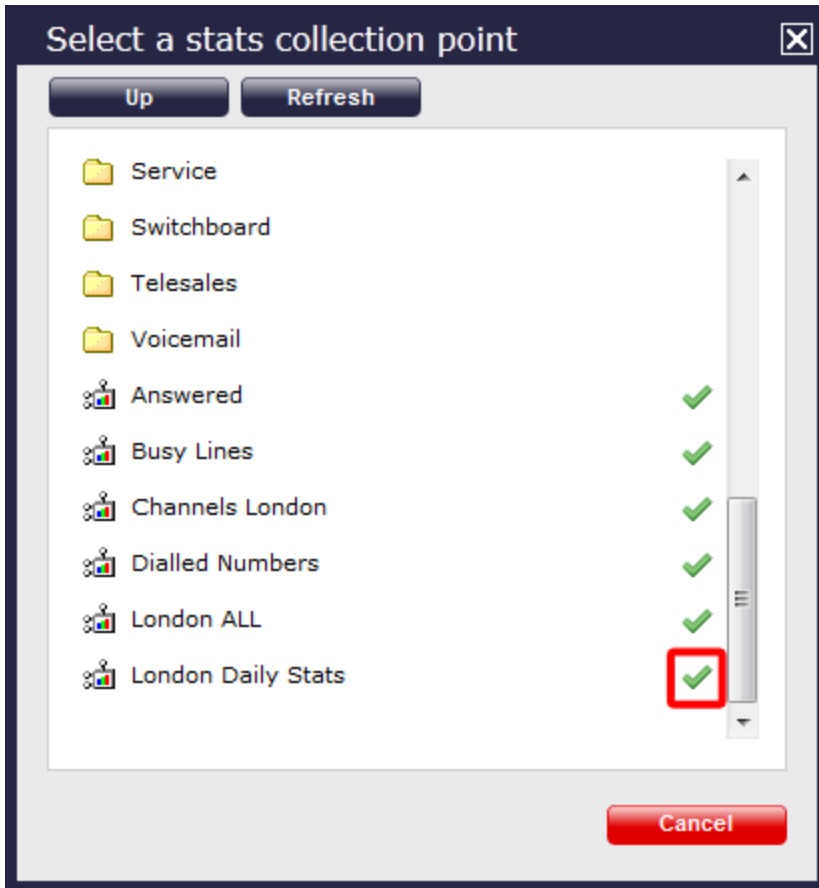


The image shows a dialog box titled "Summary panel properties" with a close button (X) in the top right corner. The dialog has four tabs: "Title", "Content", "Background", and "Metrics". The "Content" tab is selected. Inside the dialog, there are several fields and options:

- Stats point:** A text input field with a "Find" button to its right, which is highlighted with a red rectangle.
- Call type:** A dropdown menu showing "Answered".
- Column:** A dropdown menu showing "Count".
- Show summary value**
- Summary value:**
  - Text style:** A dropdown menu showing "Auto" and another dropdown menu showing "Arial".
  - Formatting icons: a square with a downward arrow, **B**, *I*, U, and three list icons (bulleted, numbered, and none).
- Show the name of the user responsible for this figure**
- Summary value by:**
  - Text style:** A dropdown menu showing "20pt" and another dropdown menu showing "Arial".
  - Formatting icons: a square with a downward arrow, **B**, *I*, U, and three list icons (bulleted, numbered, and none).

At the bottom of the dialog, there are two buttons: "Cancel" (red) and "Save" (dark blue).

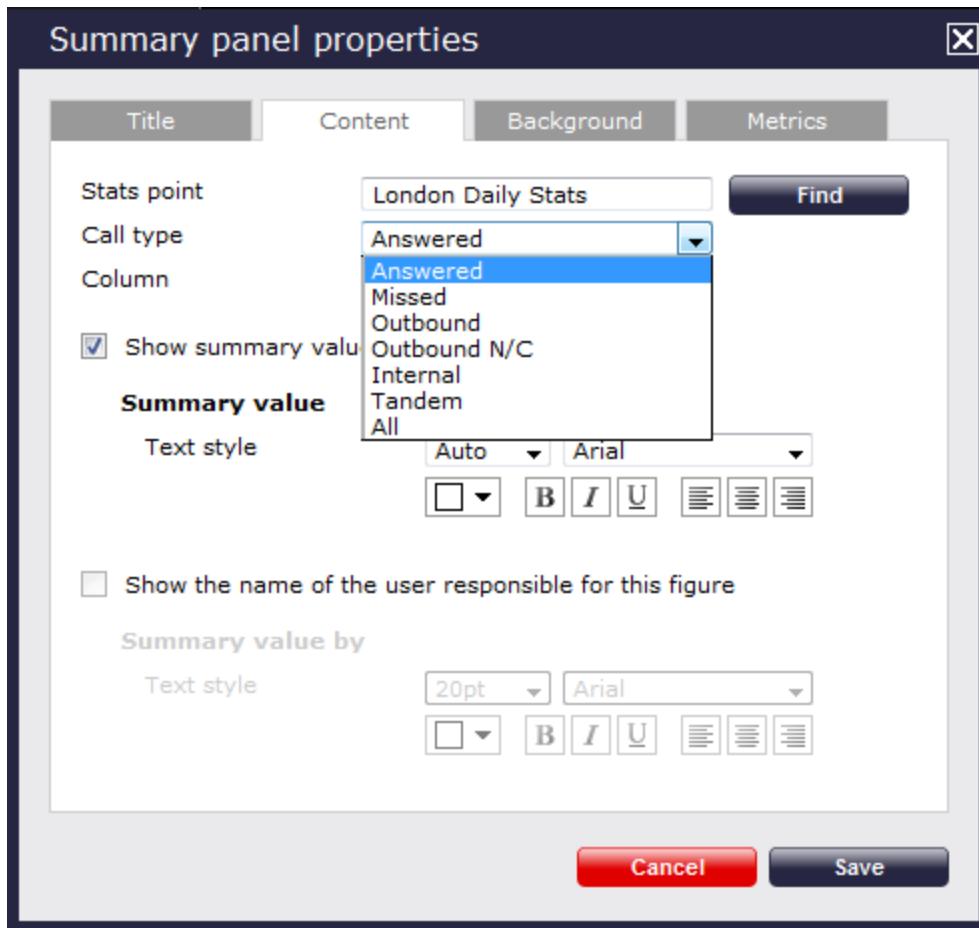
A new window will open, allowing you to drill-down to the site or group level in the Directory, where the stats point object you want to add resides. To select the stats point, click on the  icon alongside it.



This will now appear as your chosen stats point.

Selecting the call type

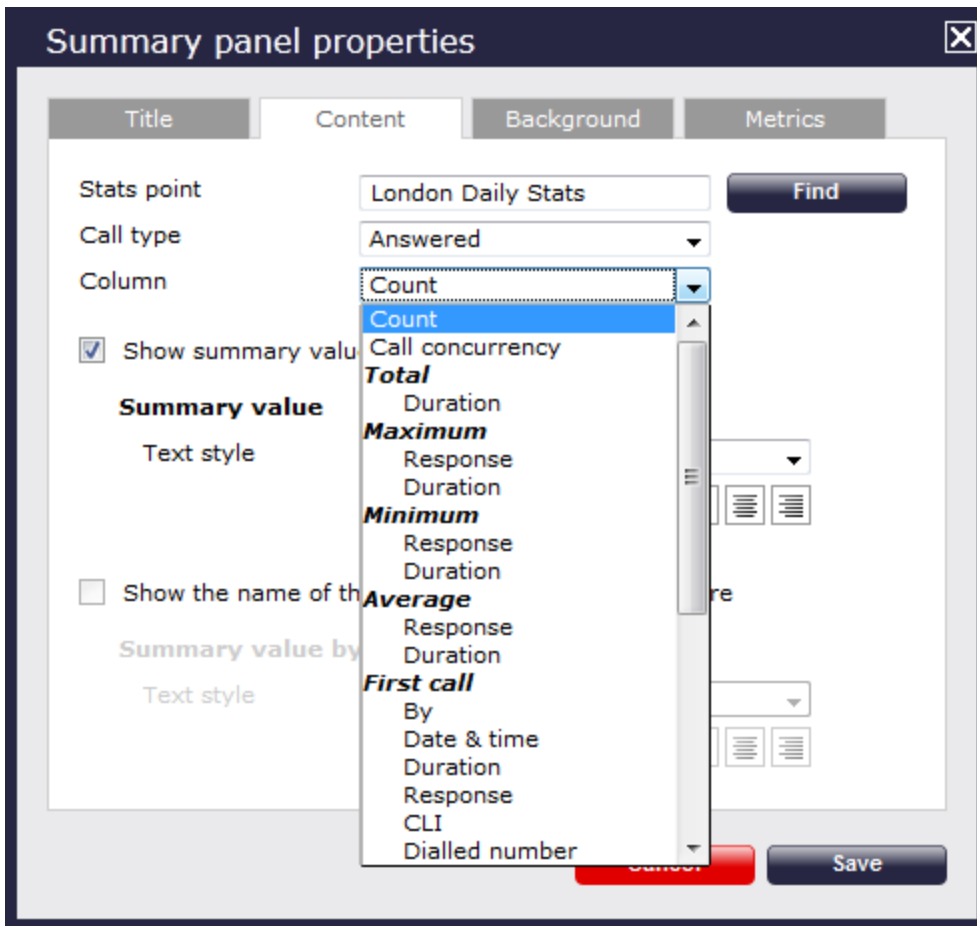
To select the call type you want to display in this column, click on the `Call type` drop-down list and choose from the available options, as shown below:



Selecting the information type

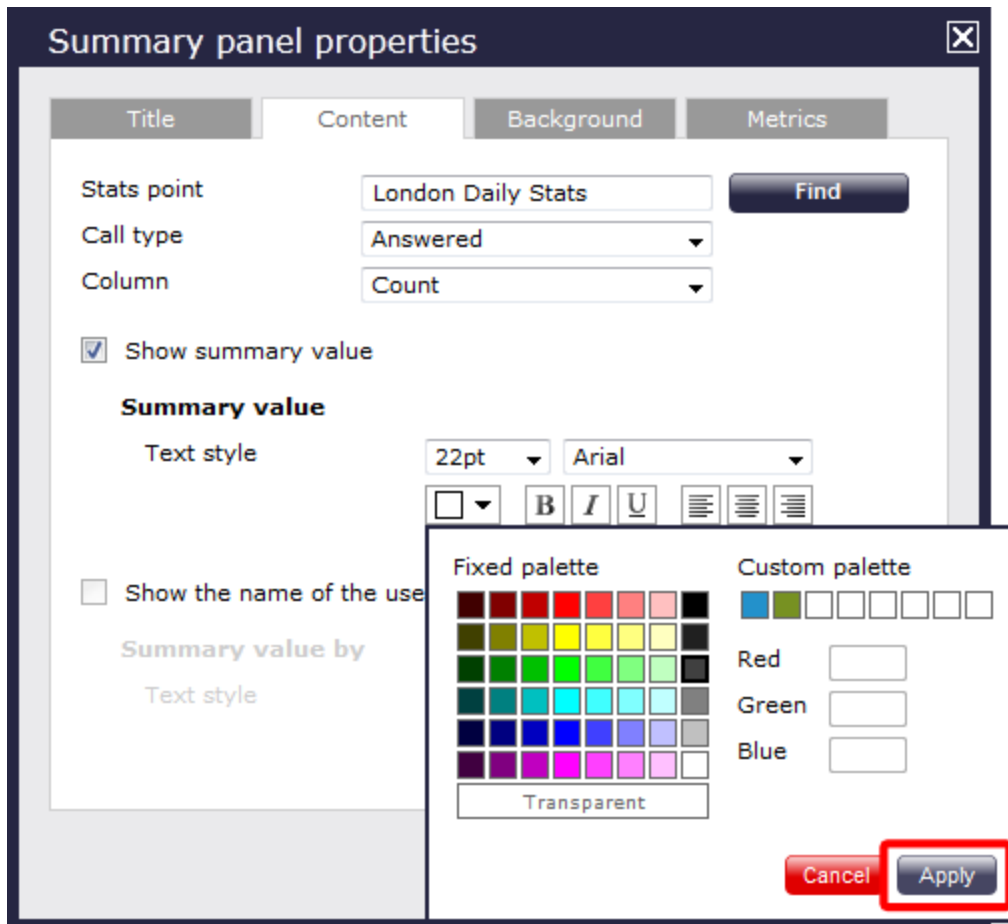
To select the type of call information you want to display in the summary panel, such as total duration, response time, etc., click on the `Column` drop-down list and choose from the available options, as shown below:





#### Show summary values

To see only the summary values for the information displayed in this panel, without the textual element, tick the available option and apply any [styling properties](#), if preferred.



Show the name of the user

To see the name of the user whose call information is displayed in this panel, tick the available option and apply any [styling properties](#), if preferred.

In the example below, we have selected to show the longest outbound call, so in the `Call type` field we have selected `Outbound`, and in the `Column` field we have selected `Maximum Duration`. Ticking the box to display the name of the user that meets the criteria above, the summary panel will display the outbound call with the max duration and the name of the person who achieved this.

**Summary panel properties**

**Title** | **Content** | **Background** | **Metrics**

Stats point: London Daily Stats **Find**

Call type: Outbound

Column: Duration

Show summary value

**Summary value**

Text style: 22pt Arial

Show the name of the user responsible for this figure

**Summary value by**

Text style: 20pt Arial

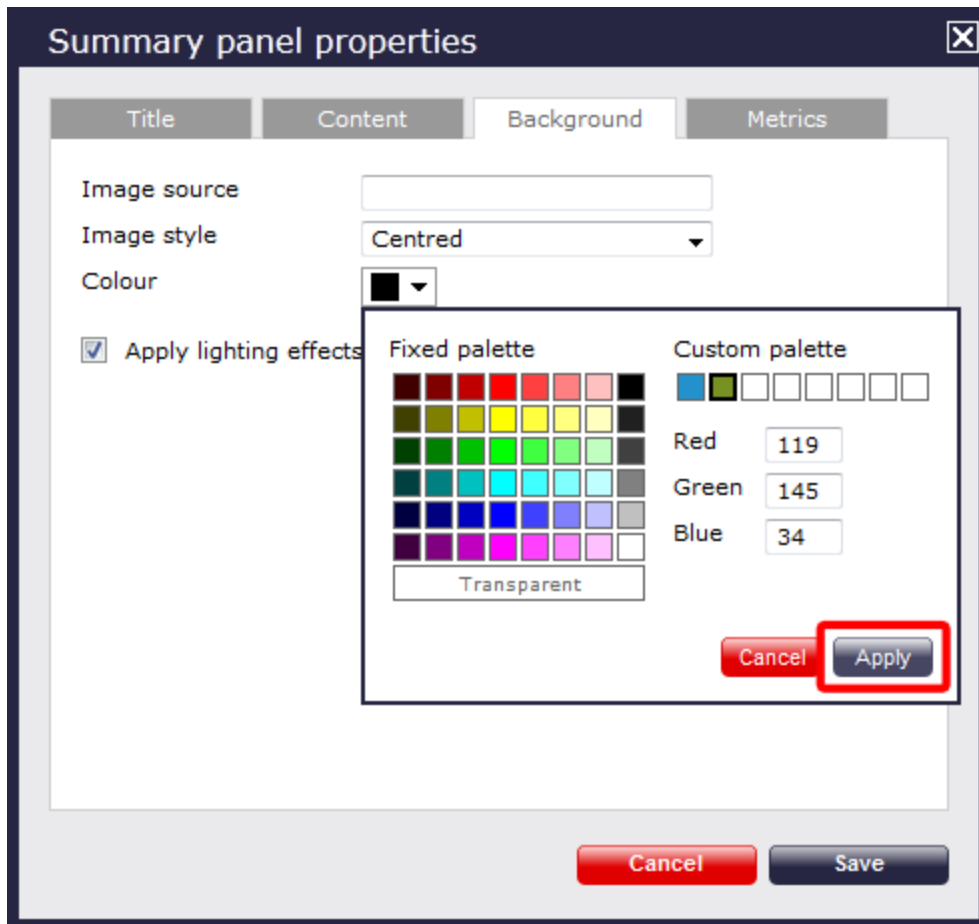
**Cancel** **Save**

The summary panel of this last example will display as shown below:



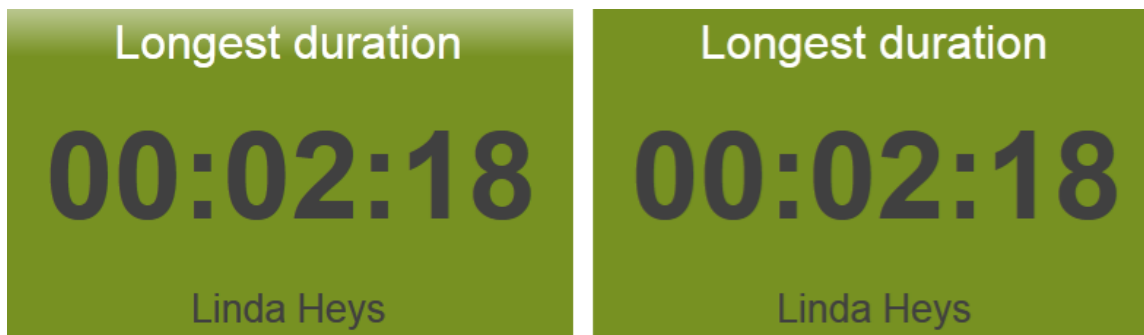
### Background

The **Background** tab allows you to configure the background properties of your summary panel.



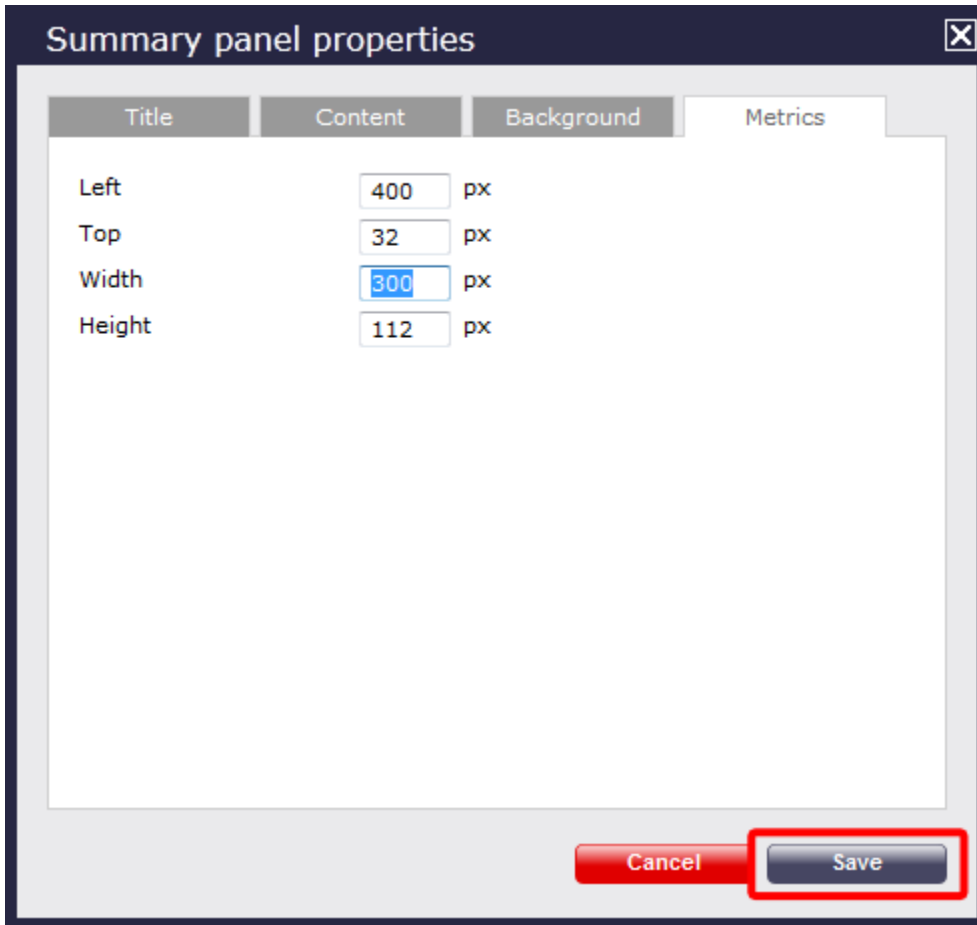
Field	Description
<b>Image source</b>	If you want your panel to display an image, type its source here. Remember, the path is relative to the folder on disk from which the web content is served, and is different for each class of web user
<b>Image style</b>	Choose how the image should be displayed
<b>Colour</b>	Choose the background colour of the panel; if you are adding an image, you may want to select <b>Transparent</b> so that this does not interfere with your image
<b>Apply lighting effects to this panel</b>	Tick this option to apply a shine effect to the entire panel; if you are using the panel to display an image, this may adversely affect how it appears

The two examples below show the difference between panels with and without lighting effects.



## Metrics

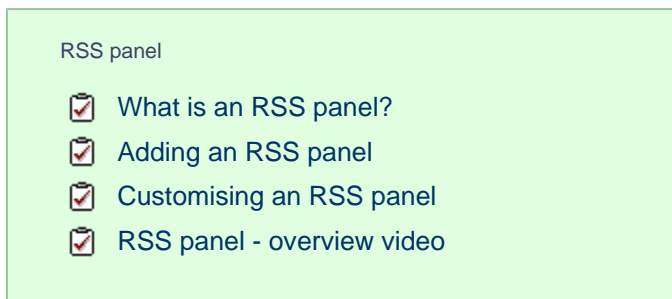
The **Metrics** tab allows you to define the shape of the panel, by entering values for its position and size.



## Summary panel - overview video


For a live demonstration of how to design and customise a summary panel, watch the video below:

## RSS panel



## What is an RSS panel?


An RSS panel allows you to send a live RSS feed to your display board. The example below shows an RSS panel displayed at the bottom of the board.



# All Telesales

19:47:31

Best performers					Summary stats	
Pos	Name	Calls ▼	Total dur	Avg dur	Total In <b>107</b>	Longest In <b>00:09:16</b> <small>Grace Harper</small>
1	Grace Harper	24	00:51:43	00:02:09	Total Out <b>14</b>	Longest Out <b>00:04:27</b> <small>Lee Faithful</small>
2	Christina Andrews	22	00:40:13	00:01:50	Total Lost <b>0</b>	Most Expensive <b>0.44</b> <small>Lee Faithful</small>
3	Mark Longhorn	21	00:24:25	00:01:10		
4	Sally Gansa	12	00:14:32	00:01:13		
5	Ricardo De Souza	12	00:25:30	00:02:08		
6	Jason Myers	12	00:22:17	00:01:51		
7	Billy Elliot	7	00:16:37	00:02:22		
8	Malcolm Meehan	3	00:02:28	00:00:49		
9	Lee Faithful	3	00:05:04	00:01:41		





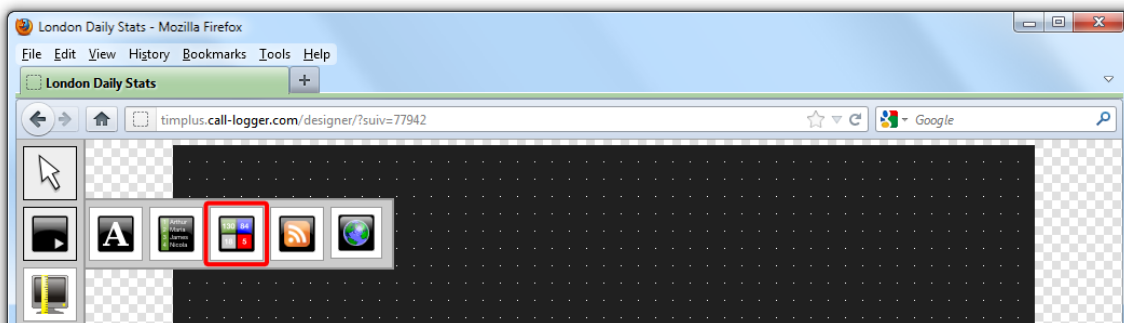
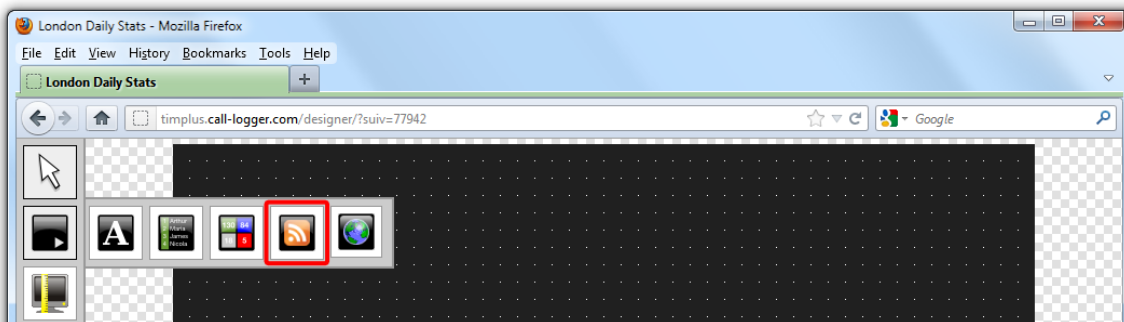
**Fire rages near N. Mexico nuclear plant**

The fire is about a mile from the Los Alamos National Laboratory. All nuclear materials are protected, lab officials said in a statement.

### Adding an RSS panel

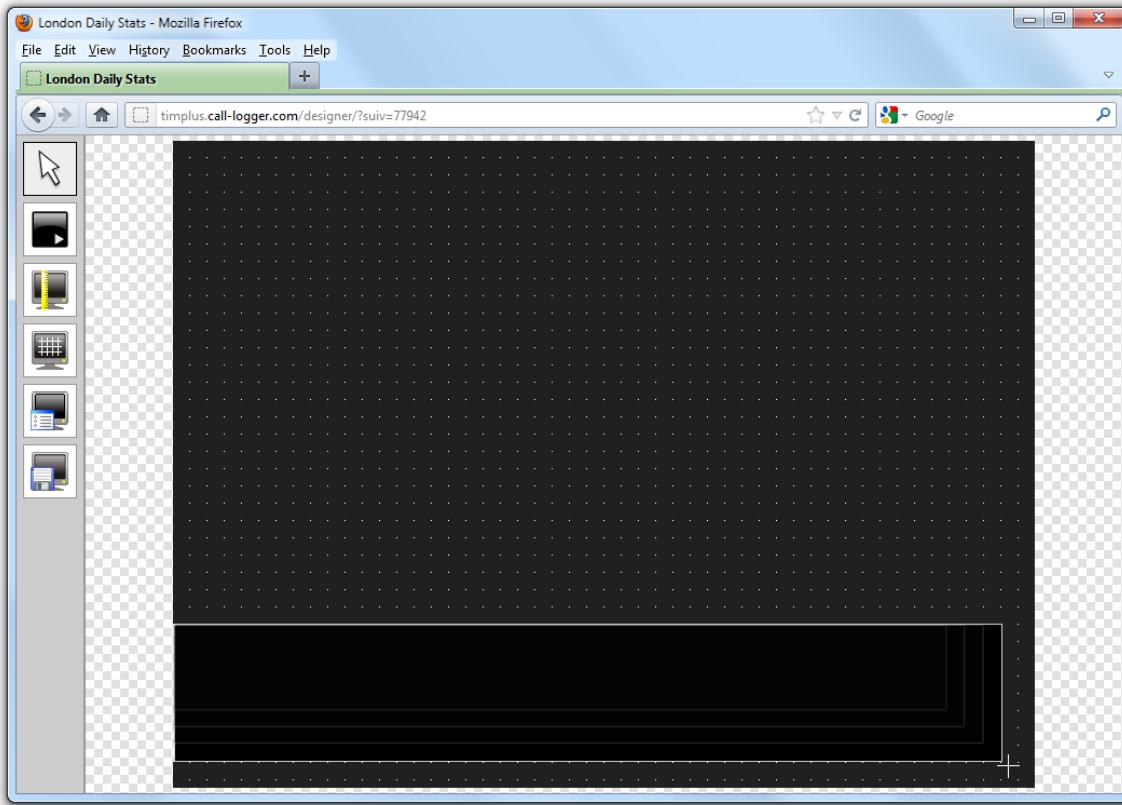


To add an RSS panel, click on the  toolbar button to expand the list of panel types and choose the  button, as shown below:





After selecting the RSS panel button, the mouse pointer changes into a white crosshair pointer, indicating that the designer is ready to draw your panel. Click and hold your left mouse button, starting at the point defining the upper-left corner of your new panel. Whilst still holding down the left mouse button, drag the marquee that will appear to the point that will define the lower-right

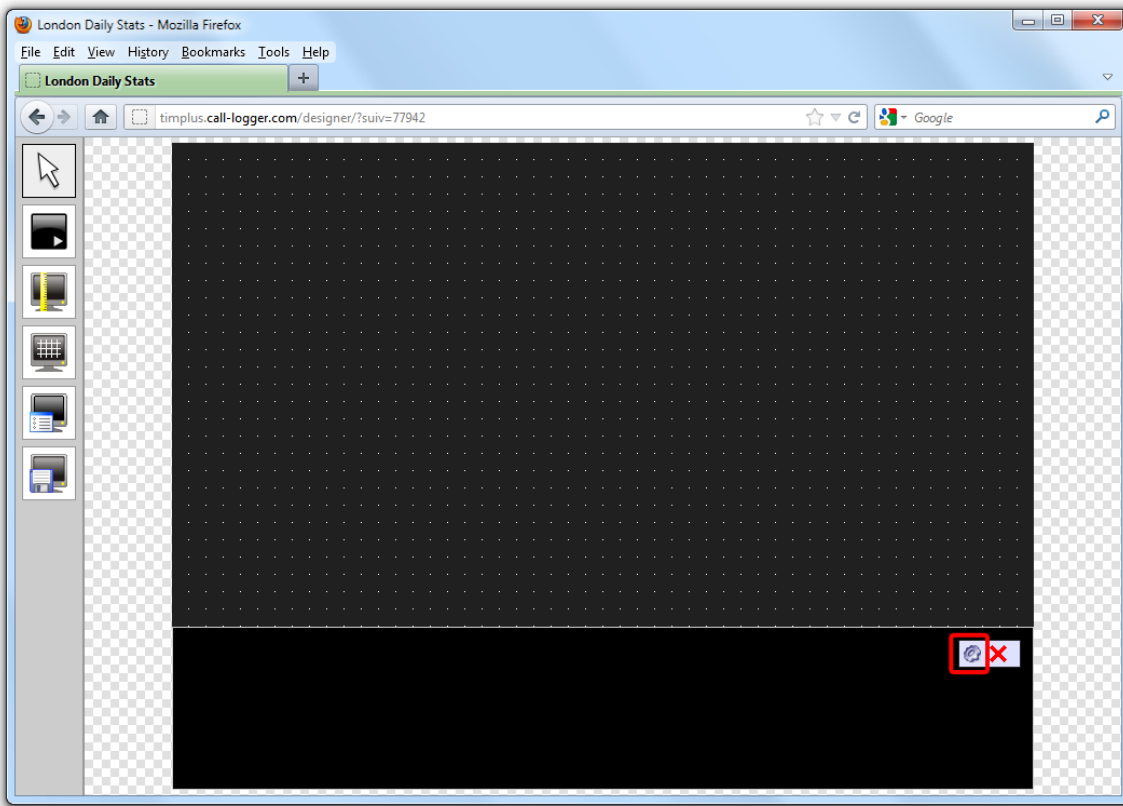
corner of your panel, as shown below:



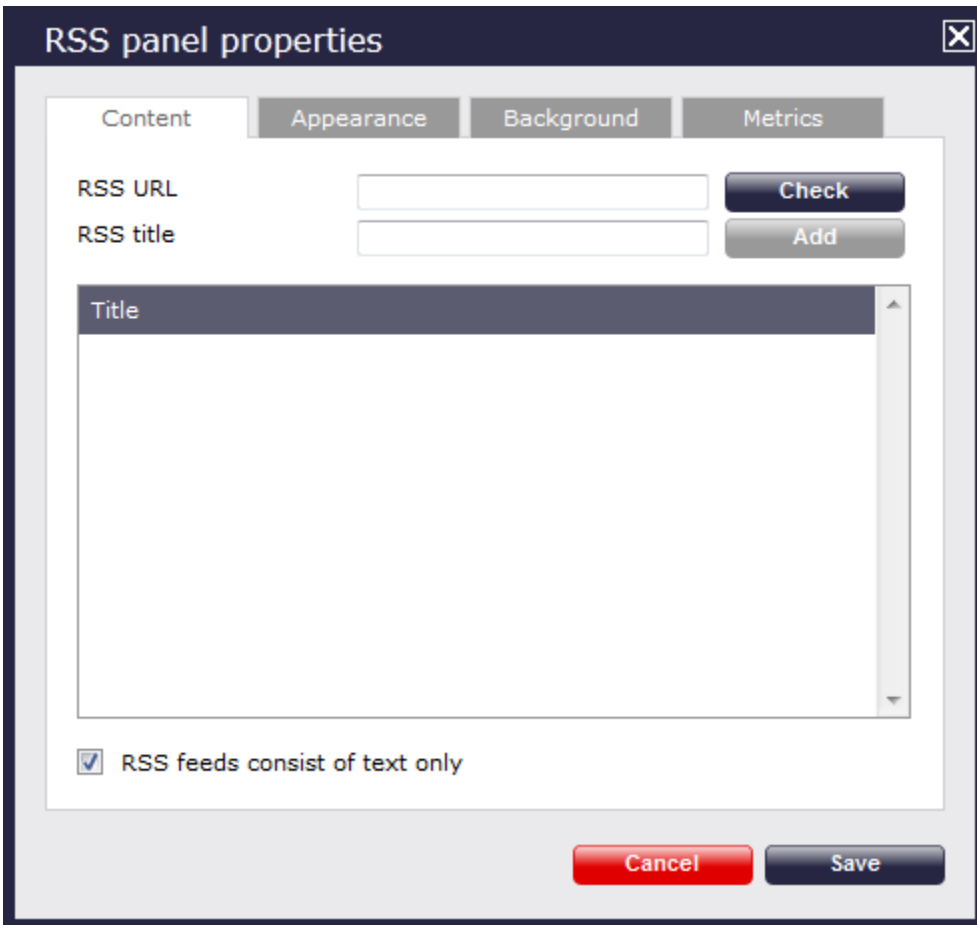
### Customising an RSS panel



To customize an RSS panel, click on the  toolbar button to switch to panel selection mode. Hover your mouse pointer over the label panel you want to customise and click on the  icon, when it appears towards the top-right corner of the panel, as shown below:



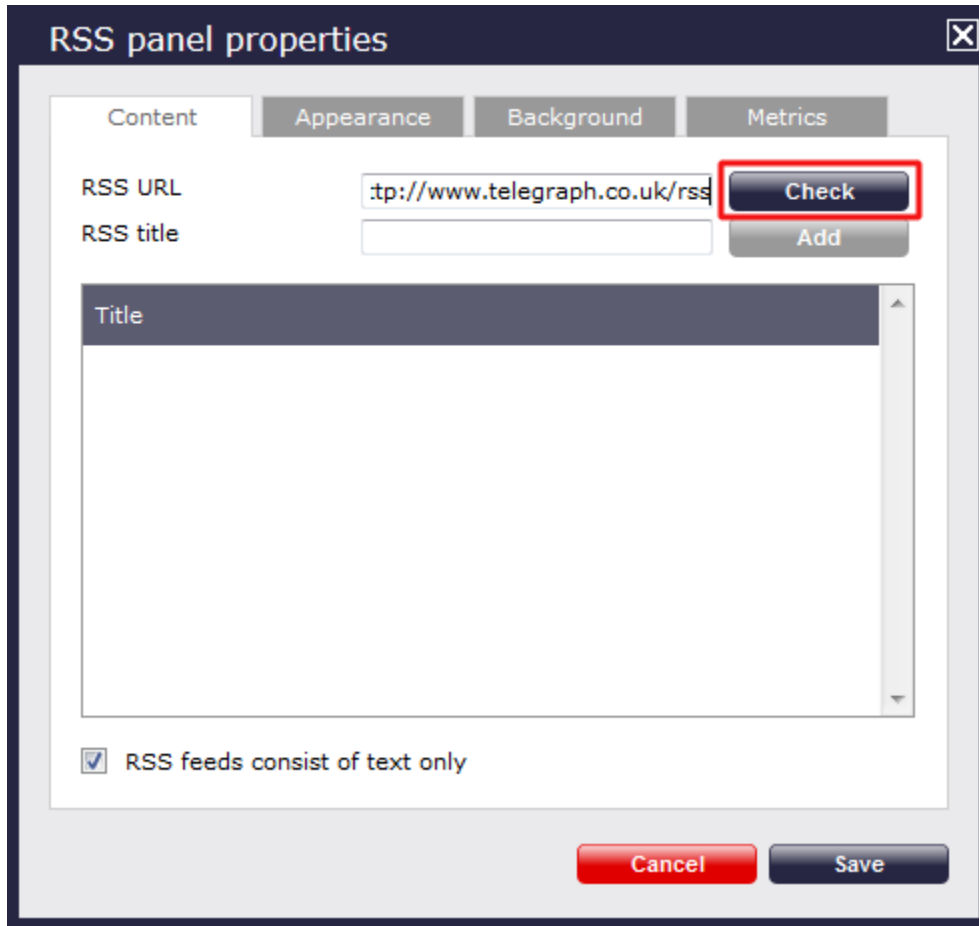
The RSS panel properties window will open, containing the following tabs:



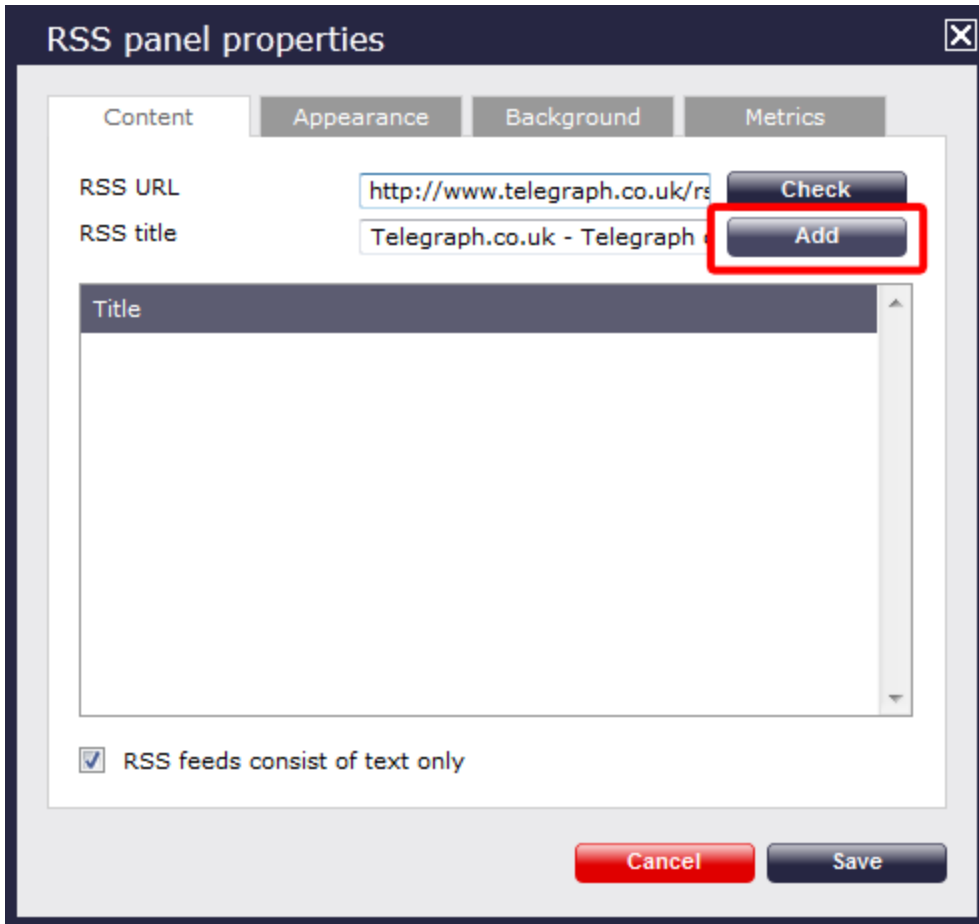


### Content

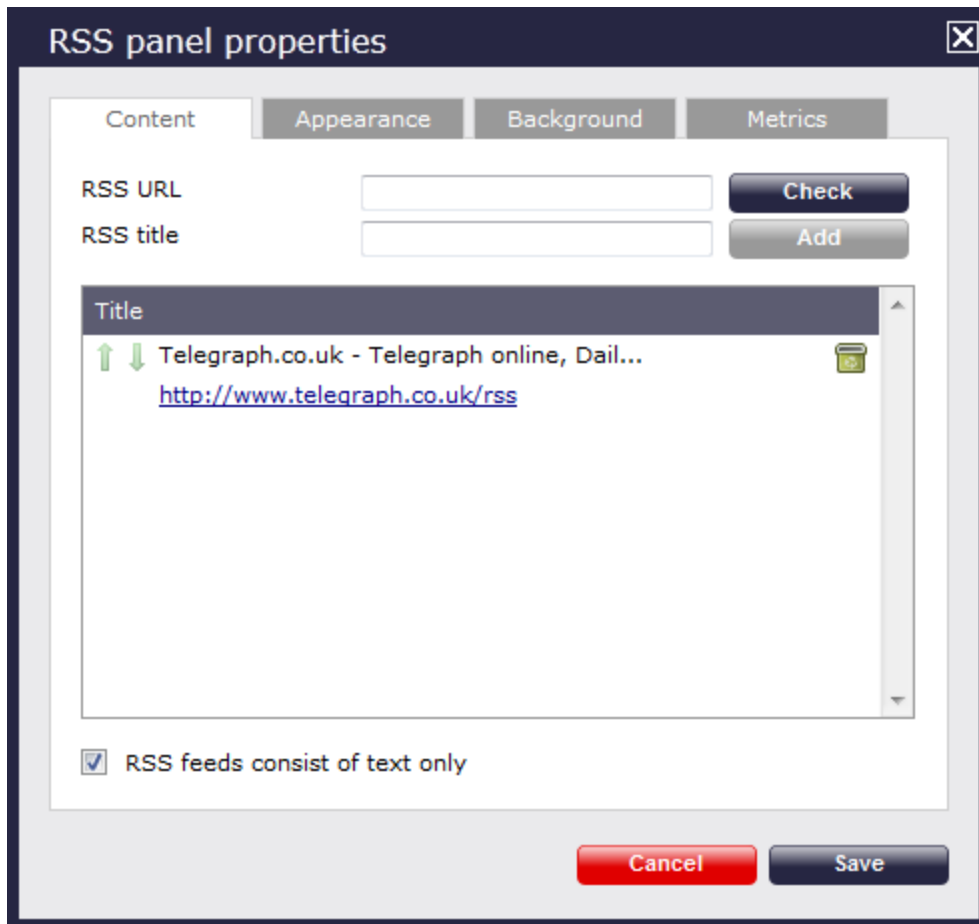
The **Content** tab allows you to add the URL of your RSS feed, e.g. <http://www.telegraph.co.uk/rss>. To verify that the feed is valid, click on the **Check** button.



If the entry is valid, the title of the RSS feed will appear in the `rss title` field. Click on the **Add** button to add this feed to your RSS panel, as shown below:





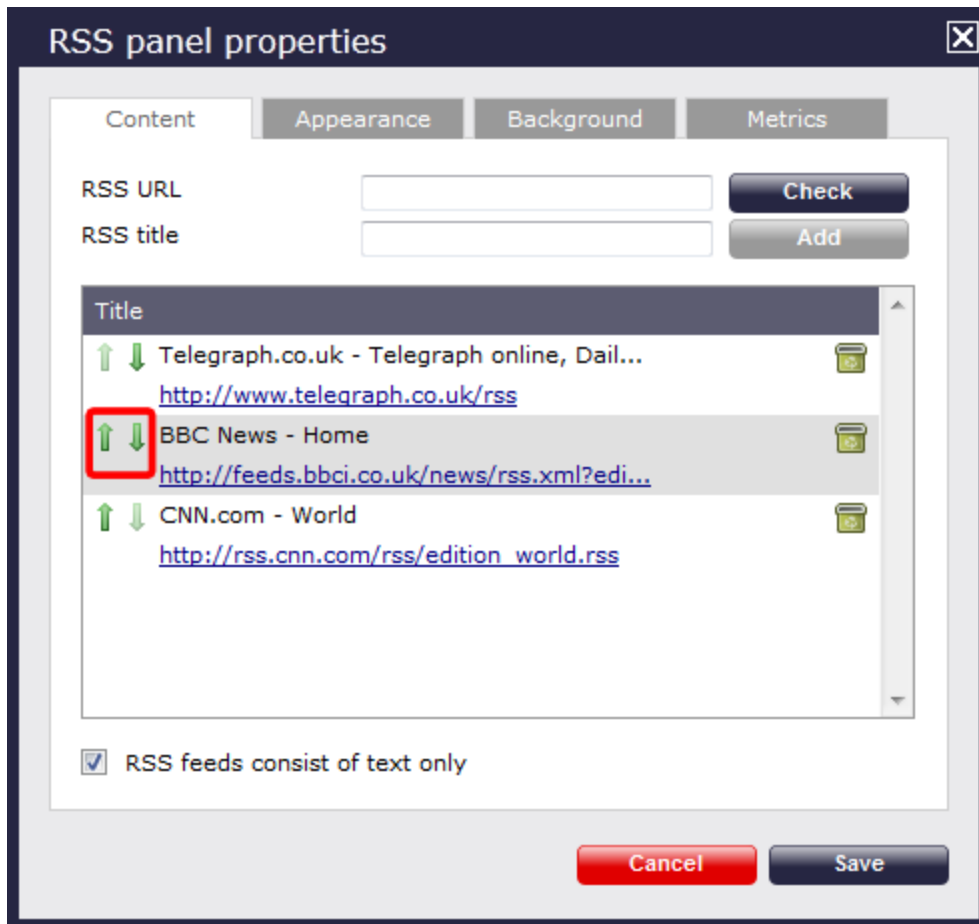
By default, this will appear in your RSS panel as follows:




To add another RSS feed to your panel, follow the same procedure as described above.

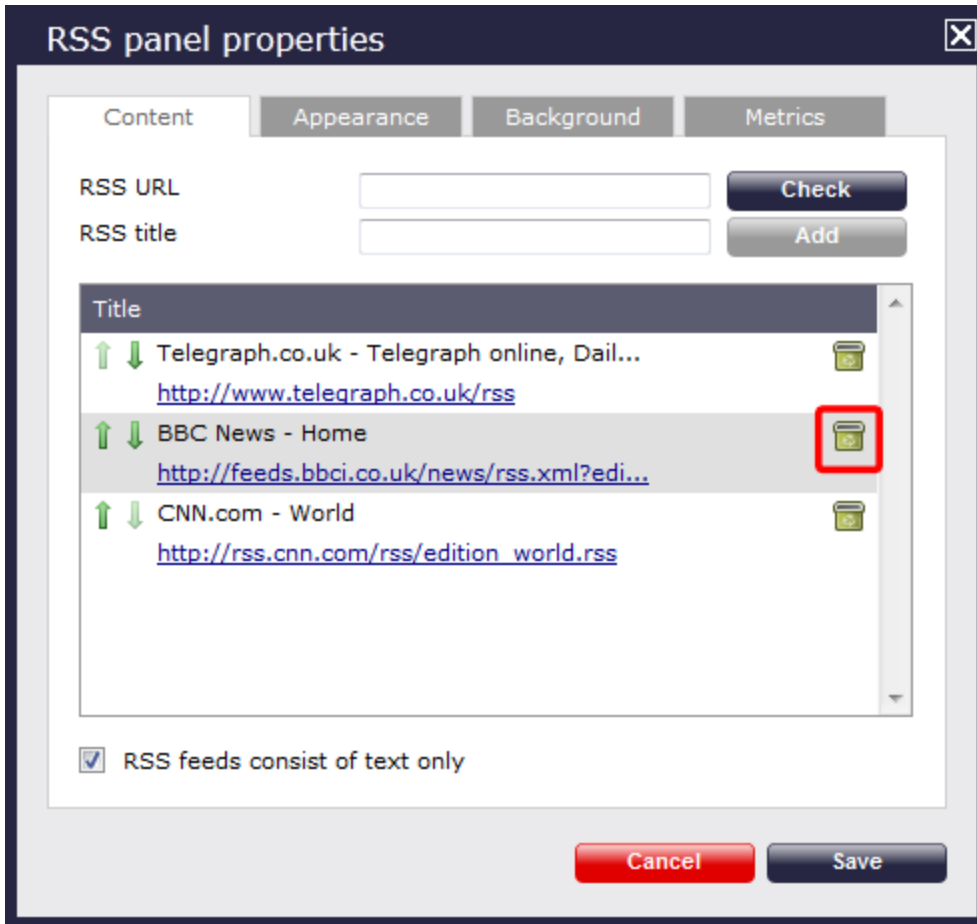
#### Reordering RSS feeds

If your RSS panel contains more than one RSS feed, you can change the order they will appear on your display board, by clicking on the   icons alongside each feed, as shown below:



Deleting an RSS feed

To delete an RSS feed from the panel, click on the  icon as shown below:



### Appearance

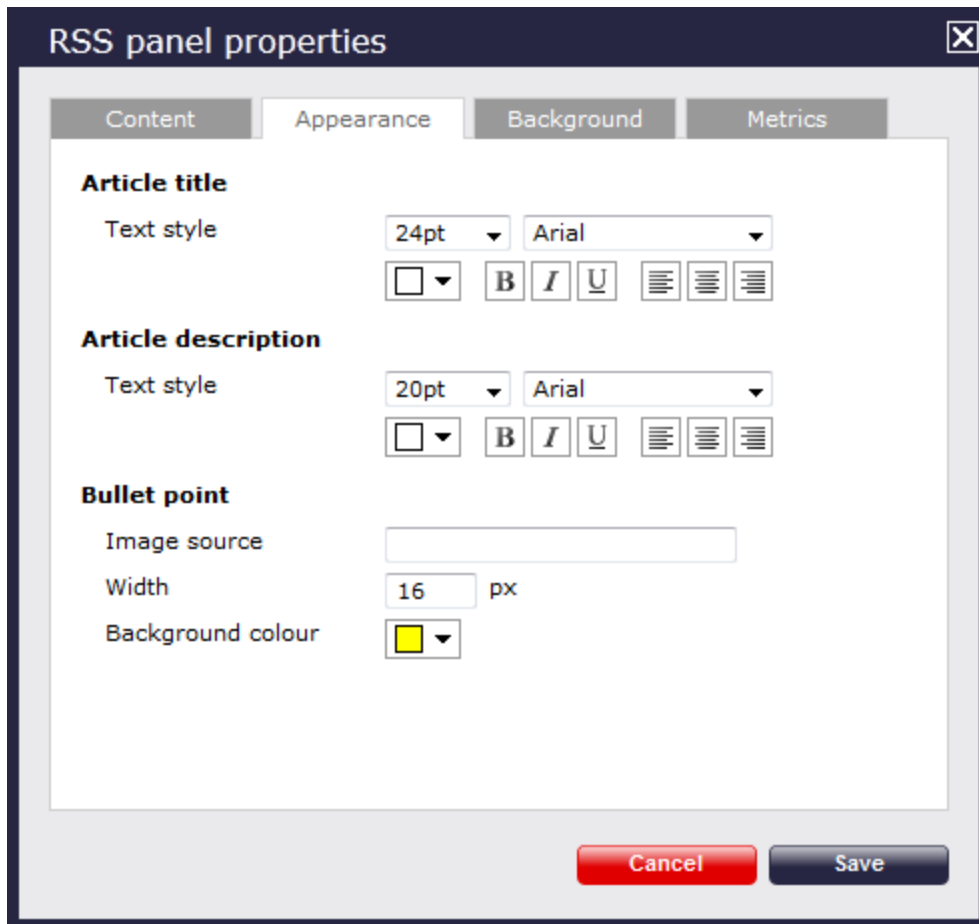
The **Appearance** tab allows you to change the look of your RSS feed, by amending one or more of the following properties: the article title, the article description and the bullet point, as shown below:

Bullet point

Article Title



Article description



#### Article title

Apply any [styling properties](#), such as font size, font style or text colour, if you want to change the appearance of your article title.

#### Article title

Text style

30pt    Arial

   **B**    *I*    U    
        

#### Article description

Apply any [styling properties](#), such as font size, font style or text colour, if you want to change the appearance of your article description.

#### Article description

Text style

22pt    Arial

   **B**    *I*    U    
        

#### Bullet point

**Bullet point**

Image source

Width  px

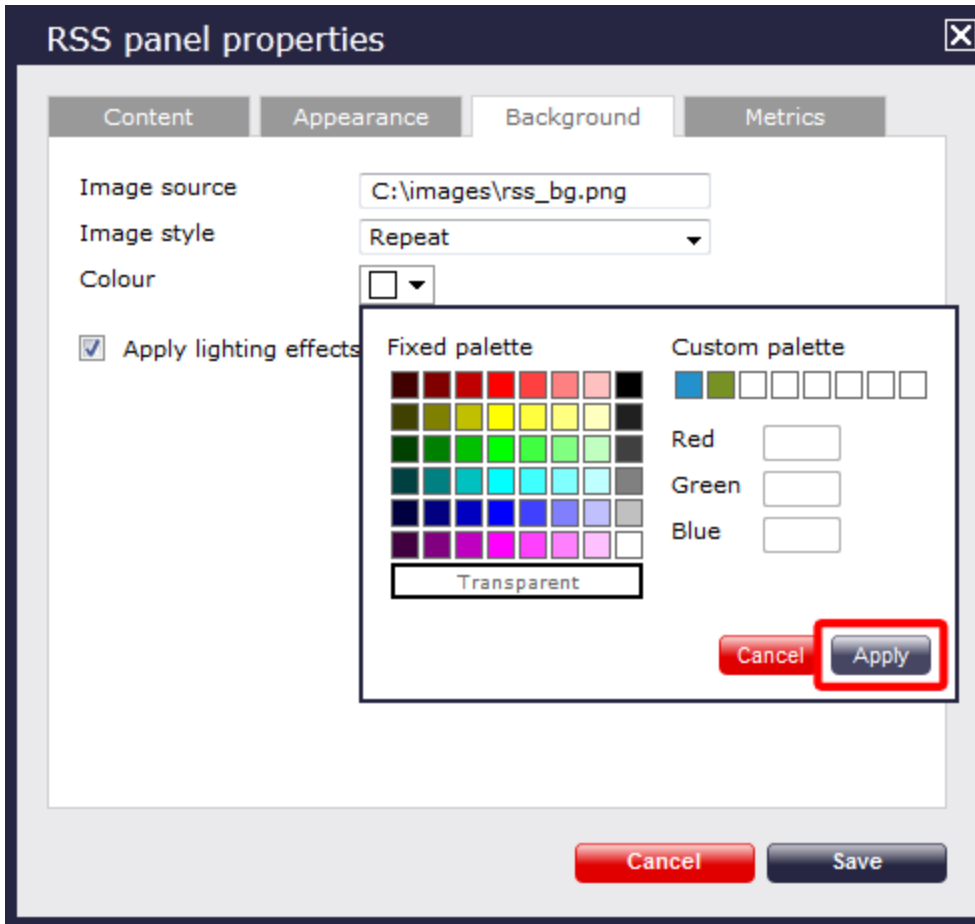
Background colour

Field	Description
<b>Image source</b>	To use an image rather than a plain colour as your bullet point, enter its source here; the path is relative to the folder on disk from which the web content is served, and is different for each class of web user; the background colour should be set as <b>Transparent</b> , so it does not interfere with your image
<b>Width</b>	Define the width of the image, in pixels
<b>Background colour</b>	If you don't want to use an image as your bullet point, you can <a href="#">select a background colour</a>

The example below shows two different bullet point implementations of the same RSS feed. On the left, you can see an image as a bullet point, whereas on the right the bullet point is a coloured rectangle of specific width.

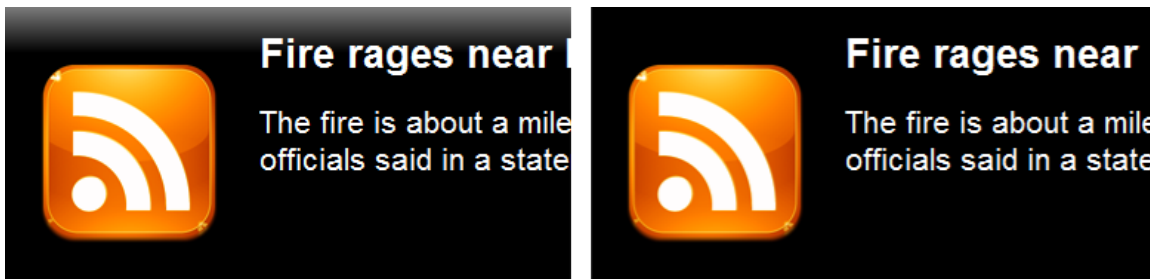
**Background**

The  tab allows you to configure the background properties of your RSS panel.



Field	Description
<b>Image source</b>	If you want your panel to display an image, type its source here. Remember, the path is relative to the folder on disk from which the web content is served, and is different for each class of web user
<b>Image style</b>	Choose how the image should be displayed
<b>Colour</b>	Choose the background colour of the panel; if you are adding an image, you may want to select <b>Transparent</b> so that this does not interfere with your image
<b>Apply lighting effects to this panel</b>	Tick this option to apply a shine effect to the entire panel; if you are using the panel to display an image, this may adversely affect how it appears

The two examples below show the difference between panels with and without lighting effects.







It is recommended that you check with the RSS feed provider that they are happy for you to use their feed.

## Metrics

The **Metrics** tab allows you to define the shape of the panel, by entering values for its position and size. You are also given the option to determine the refresh frequency of the page, by entering a value in the **Article refresh** box.

**RSS panel properties**

Content Appearance Background Metrics

Left  px

Top  px

Width  px

Height  px

Article refresh  seconds

Cancel Save

When you have finished configuring the properties of your RSS panel, click on the **Save** button to apply the changes.

## RSS panel - overview video

For a live demonstration of how to design and customise an RSS panel, watch the video below:

## Web panel

Web panel

- What is a web panel?
- Adding a web panel
- Customising a web panel
- Web panel - overview video

### What is a web panel?

A web panel allows you to display a web page in any section of your display board. In the example below, the BBC News page is displayed on the right-hand side of the board, alongside a leaderboard panel.



12 April
London Daily Stats
13:25:47

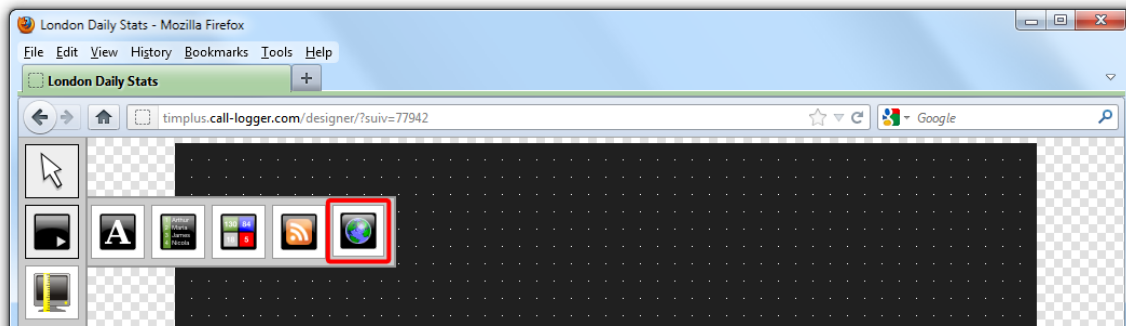
Pos	Name	▼ Total	Total Duration	In	Lost	Out
1	Adam Zapel	18	00:06:41	0	0	17
2	Tom Morrow	16	00:28:09	14	0	1
3	Bea Minor	11	00:03:05	6	0	5
4	Cheri Pitts	10	00:14:40	9	0	0
5	Claire Annette	6	00:12:55	5	0	0
6	Jo Sargeant	5	00:02:02	0	0	4
7	Pat Downe	4	00:03:05	1	0	1
8	Olive Yew	4	00:03:54	1	0	2
9	Gail Storm	3	00:01:30	3	0	0

The screenshot shows the BBC News website interface. At the top, there's a navigation bar with 'BBC' and links for 'News', 'Sport', and 'Weather'. The main content area features a large headline 'LONDON THURSDAY, 12 APRIL' with a clock icon. Below this is a featured article with a photo of two women and the title 'Should shops ban phone use when ordering?'. There are also smaller thumbnails for 'BBC TWO | FACTUAL' and 'BBC RADIO 4 | COMEDY'.

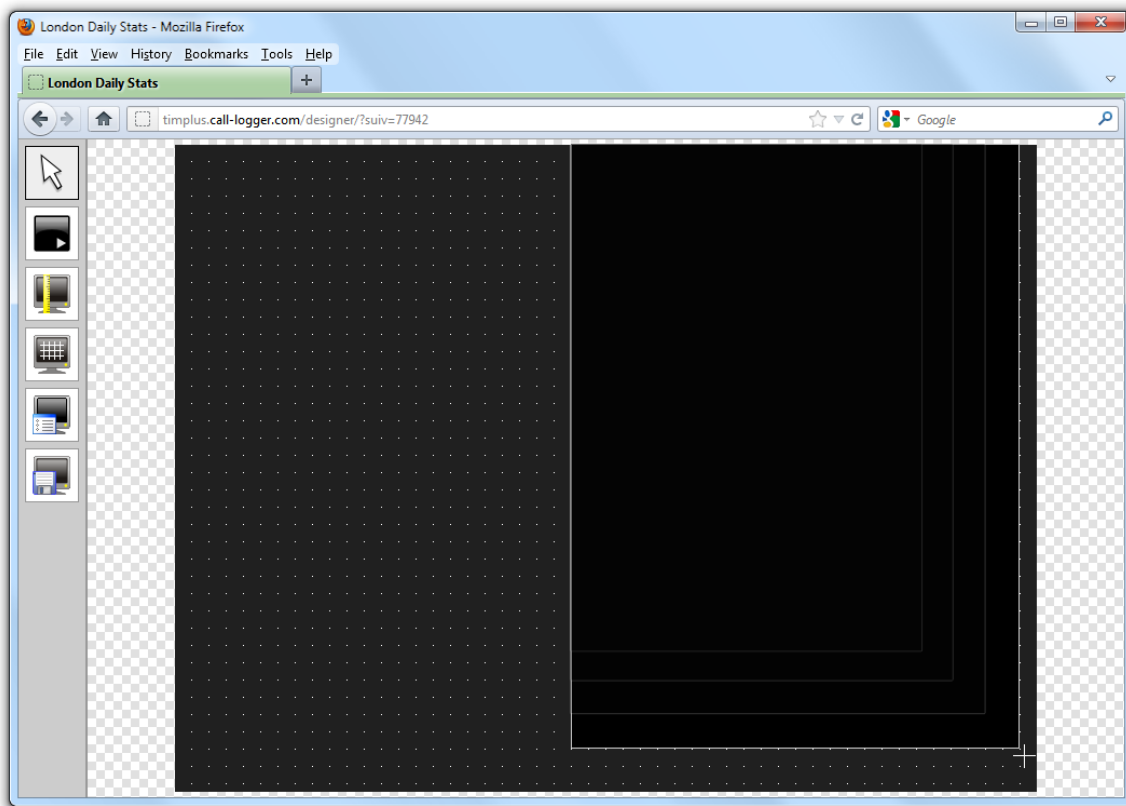
### Adding a web panel



To add a web panel, click on the  toolbar button to expand the list of panel types and choose the  button, as shown below:





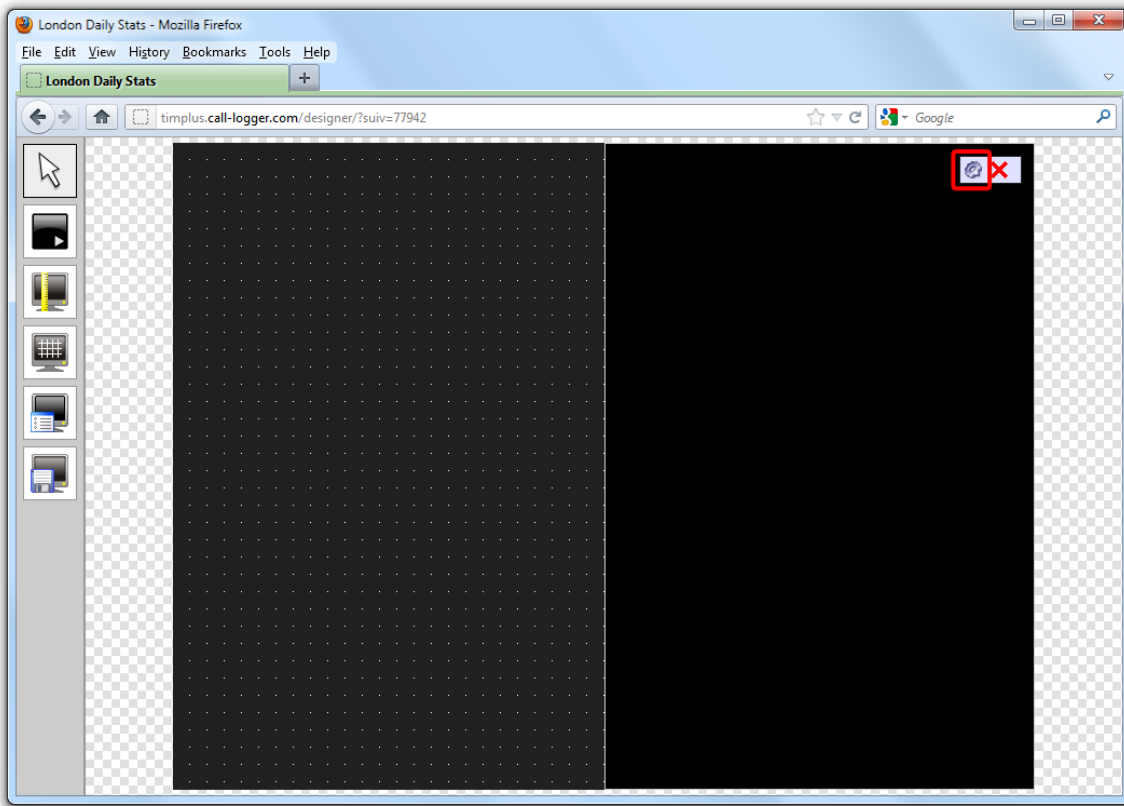
After selecting the web panel button, the mouse pointer changes into a white crosshair pointer, indicating that the designer is ready to draw your panel. Click and hold your left mouse button, starting at the point defining the upper-left corner of your new panel. Whilst still holding down the left mouse button, drag the marquee that will appear to the point that will define the lower-right corner of your panel, as shown below:



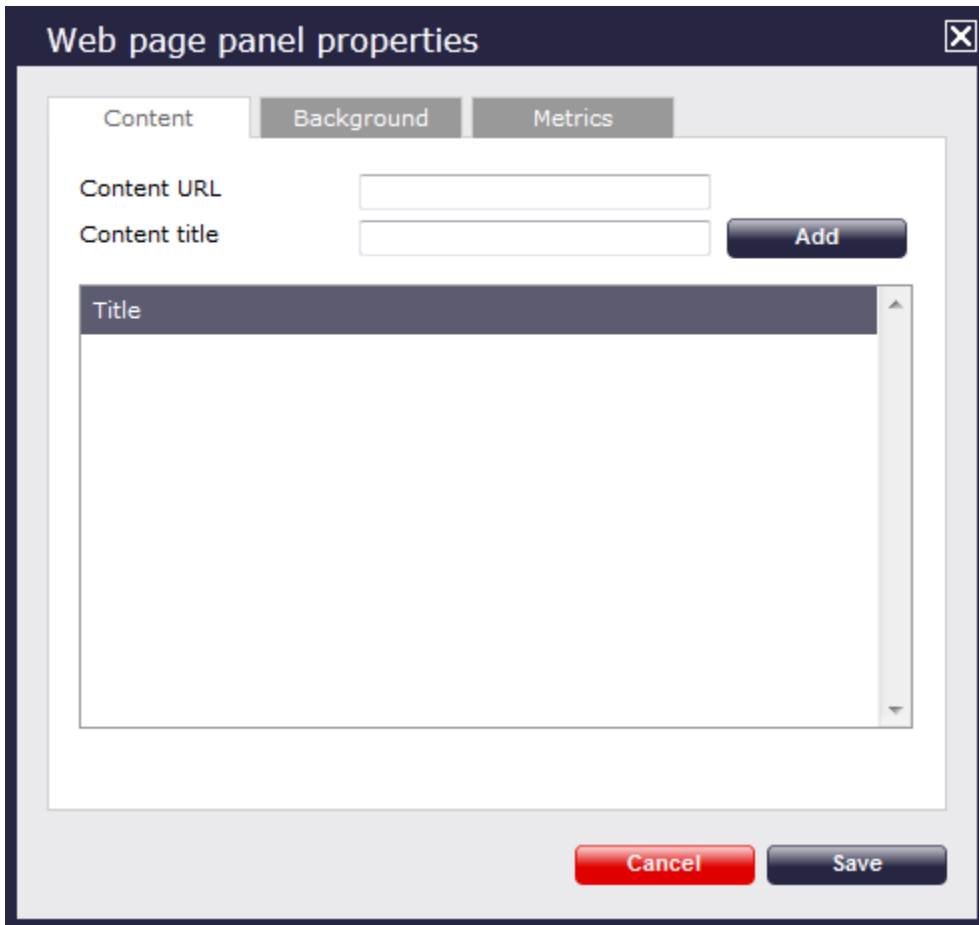
### Customising a Web panel



To customize a web panel, click on the  toolbar button to switch to panel selection mode. Hover your mouse pointer over the label panel you want to customise and click on the  icon, when it appears towards the top-right corner of the panel, as shown below:

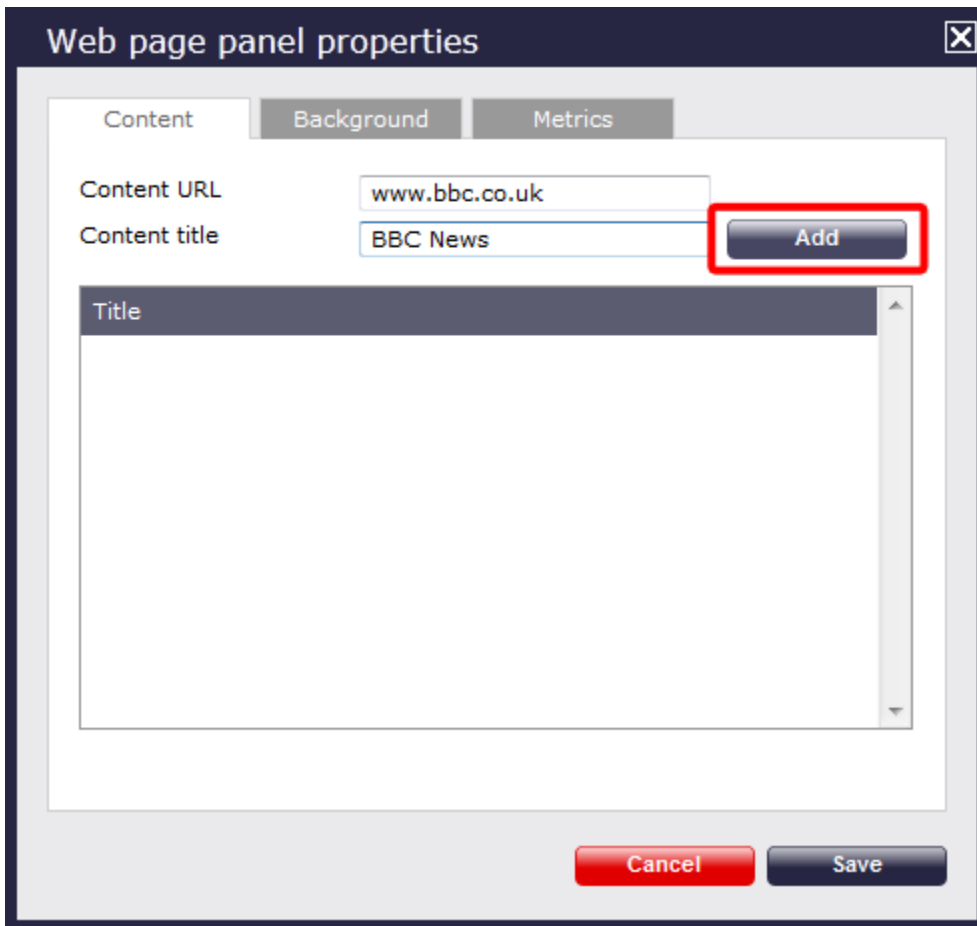


The Web page panel properties window will open, containing the following tabs:



## Content

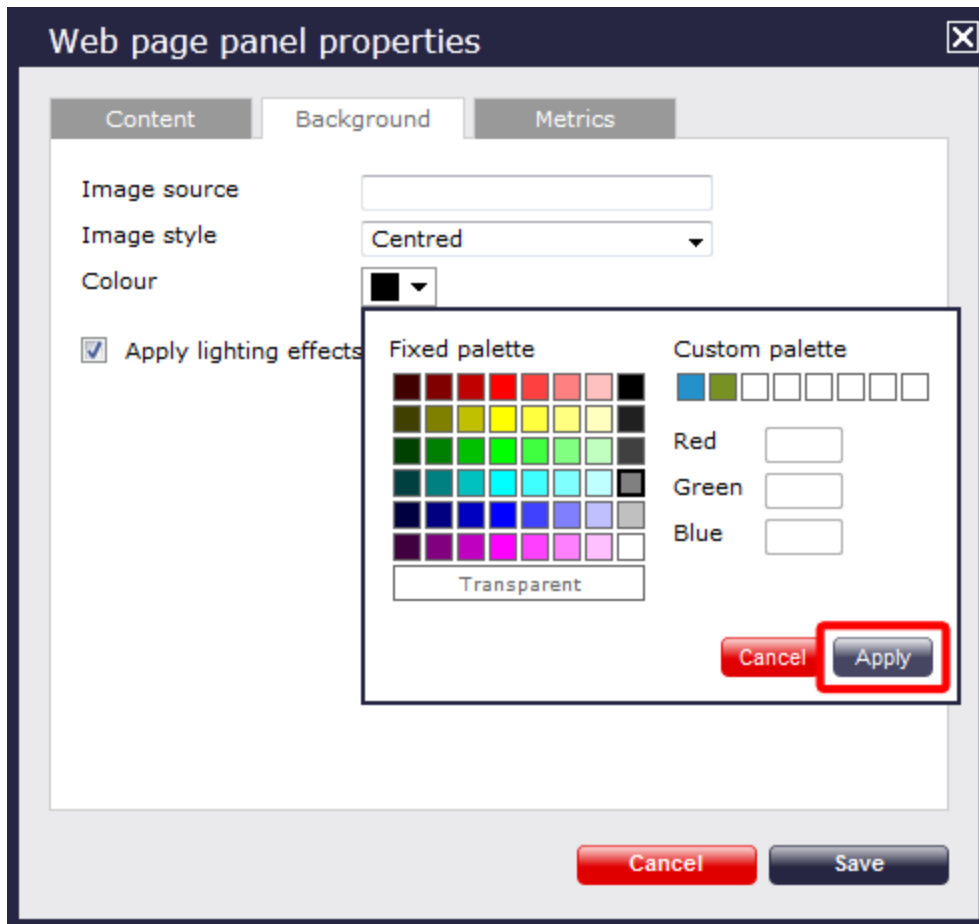
The **Content** tab allows you to add the URL and title of the web page you want to display. Click on the **Add** button to add the web page to the panel, as shown below:



The screenshot shows a dialog box titled "Web page panel properties" with a close button (X) in the top right corner. The dialog has three tabs: "Content", "Background", and "Metrics". The "Content" tab is selected. Inside the dialog, there are two input fields: "Content URL" with the text "www.bbc.co.uk" and "Content title" with the text "BBC News". To the right of the "Content title" field is a dark blue button labeled "Add", which is highlighted with a red rectangular border. Below these fields is a large, empty text area with a vertical scrollbar on the right side, labeled "Title" at the top left. At the bottom of the dialog, there are two buttons: a red "Cancel" button and a dark blue "Save" button.

## Background

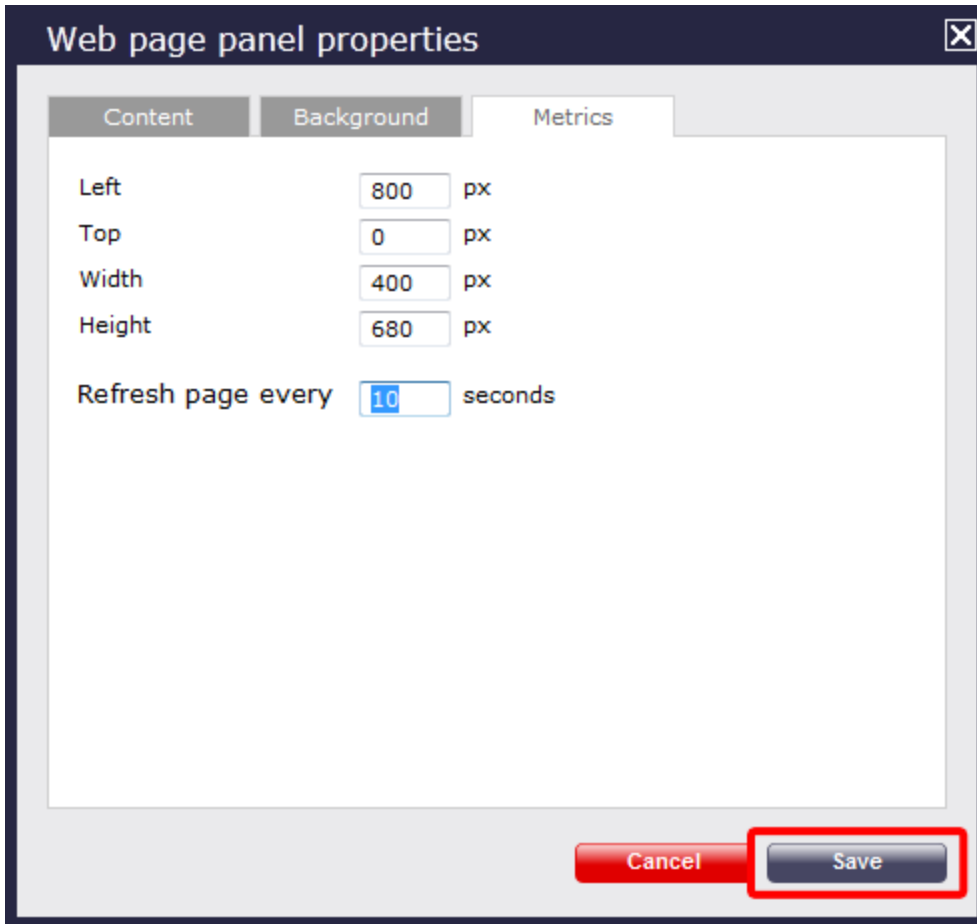
The **Background** tab allows you to configure the background properties of your web panel.



Field	Description
<b>Image source</b>	If you want your panel to display an image, type its source here. Remember, the path is relative to the folder on disk from which the web content is served, and is different for each class of web user
<b>Image style</b>	Choose how the image should be displayed
<b>Colour</b>	Choose the background colour of the panel; if you are adding an image, you may want to select <b>Transparent</b> so that this does not interfere with your image
<b>Apply lighting effects to this panel</b>	Tick this option to apply a shine effect to the entire panel; if you are using the panel to display an image, this may adversely affect how it appears

### Metrics

The **Metrics** tab allows you to define the shape of the panel, by entering values for its position and size. You are also given the option to determine the refresh frequency of the page, by entering a value in the **Refresh page** box, as shown below:



**Web page panel properties**

Content Background Metrics

Left 800 px

Top 0 px

Width 400 px

Height 680 px

Refresh page every 10 seconds

Cancel Save

When you have finished configuring the properties of your Web panel, click on the **Save** button to apply the changes.

### Web panel - overview video

For a live demonstration of how to design and customise a web panel, watch the video below:

## Deleting a display board

To delete a display board, select it from the **Display boards** list and click on the **Delete** button at the top-left corner of the screen, as shown below:

The screenshot shows the TIMPLUS web interface. At the top, there is a navigation bar with the following items: Reports, Directory, Call view, Live stats, Tariff editor, Settings, and Alerts. Below this, there are tabs for 'Display boards', 'Stats points', and 'Stats alarms'. The 'Display boards' tab is active, showing a list of boards on the left and a preview of a board on the right. The 'Delete' button is highlighted in red. The preview board is titled '<%title%>' and shows a time of 11:54:14. It is divided into two main sections: 'Best performers' and 'Summary stats'. The 'Summary stats' section is further divided into four colored boxes: 'Total In' (green), 'Longest Out' (yellow), 'Total Out' (blue), and 'Longest In' (black). Below these are 'Total Lost' (red) and 'Most Expensive' (purple).

## FAQs

### Q. How many display boards can I have?

A. There is no limit to the number of display boards allowed in TIM Plus.

### Q. How much do display boards cost?

A. There is no charge for adding additional display boards to TIM Plus.

Some sample display boards are shown below:



10 February

# Norway Weekly Stats

16:22:28

Total Lost

**12**

Total Outbound

**422**

Total Answered

**462**

Avg Dur

**00:00:55**

Name	Total Calls ▼	Ans	Ave dur (Ans)	Out	Ave dur (out)	Lost
Ali Katt	23	8	00:00:40	5	00:00:14	0
Bertrand Freur	20	1	00:03:01	12	00:00:16	0
Bill Board	17	5	00:01:40	2	00:00:19	0
Tom Katz	16	16	00:01:35	0	00:00:00	0
Pat Downe	16	4	00:01:30	7	00:00:53	0
Myles Long	16	9	00:03:34	5	00:01:57	0
Jo Sargeant	16	1	00:03:02	12	00:00:34	0
Crystal Ball	16	7	00:03:22	2	00:00:12	0

## Call Center

Your Logo

Pos	Name	Total ▼	In	Out	Missed
1	Adam Zapel	110	2	103	0
2	Tom Morrow	64	58	2	0
3	Dan D. Lyons	59	5	48	0
4	Amanda Lynn	56	8	41	0
5	Bea Minor	51	36	12	0
6	Bill Loney	45	14	13	0
7	Lance Boyle	38	12	15	0
8	Al Fresco	36	11	13	0
9	Claire Annette	32	24	0	0
10	Cheri Pitts	27	26	0	0
11	Aretha Holly	27	5	16	0
12	Anna Recksiek	27	8	10	0

Total In

**462**

Total Out

**422**

Total Missed

**12**

# New York Admin Team

Your Logo

Pos	Name	Total calls ▼	Total dur	In	Lost	Out
1	Adam Zapel	111	00:38:32	2	0	104
2	Tom Morrow	67	01:52:56	61	0	2
3	Dan D. Lyons	59	00:26:08	5	0	48
4	Amanda Lynn	57	00:20:12	8	0	42
5	Bea Minor	52	00:27:24	36	0	13
6	Bill Loney	45	00:45:22	14	0	13
7	Lance Boyle	38	00:32:47	12	0	15

Total In

**474**

Total Out

**429**

Missed

**12**

## CNN.com

CNN.com delivers up-to-the-minute news and information on the latest top stories, weather, entertainment, politics and more.

10 February

# Paris Support Stats


16:28:53

Total In <b>465</b>	Total Lost <b>12</b>	Total Out <b>425</b>	Total Calls <b>1122</b>
Longest Ring <b>84</b> Tadao Ande	Longest Ring <b>00:01:55</b> Mischa Solov	Most Expensive <b>2.31</b> Ahrun Hussain	Max Lines <b>5</b>
Longest In <b>00:15:03</b> Olive Yew	Last Missed <b>09:58:26</b> Mia Brennan	Longest Out <b>00:25:39</b> Ahrun Hussain	Total Duration <b>17:10:28</b>



## BBC News - Home

The latest stories from the Home section of the BBC News web site.



## Paris Weekly IT Team

Pos	Name	Total ▼	In	Out	Lost	Duration (In)	Duration (Out)	Total Duration
1	Adam Zapel	111	2	104	0	00:01:52	00:33:33	00:38:32
2	Tom Morrow	66	60	2	0	01:49:52	00:00:19	01:50:35
3	Dan D. Lyons	59	5	48	0	00:02:45	00:16:51	00:26:08
4	Amanda Lynn	57	8	42	0	00:05:42	00:10:49	00:20:12
5	Bea Minor	52	36	13	0	00:18:36	00:06:18	00:27:24
6	Bill Loney	45	14	13	0	00:06:02	00:14:16	00:45:22
7	Lance Boyle	38	12	15	0	00:07:37	00:13:39	00:32:47
8	Al Fresco	37	11	13	0	00:05:48	00:13:26	00:36:32
9	Claire Annette	34	26	0	0	00:39:48	00:00:00	00:46:34
10	Aretha Holly	31	5	19	0	00:06:04	00:29:31	00:39:47

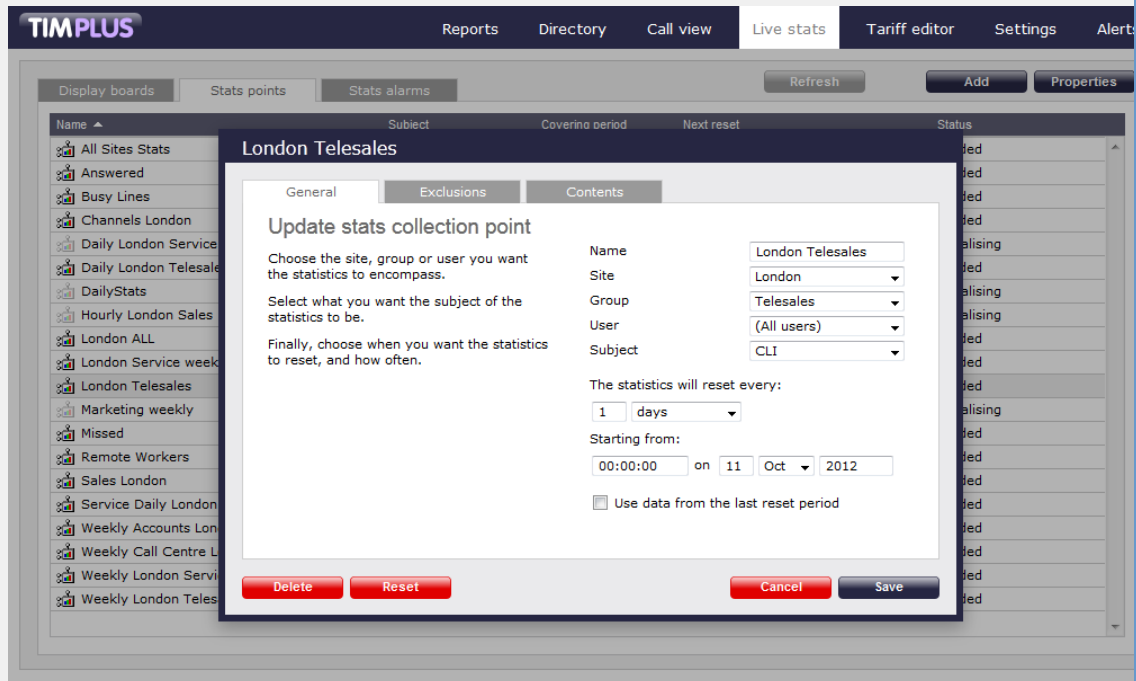
10 February **Barcelona Accounts** 16:24:42

Daily Statistics			Weekly Statistics		
In	<b>109</b>	Average duration 00:00:55	In	<b>463</b>	Average duration 00:01:08
Out	<b>111</b>	Average duration 00:00:54	Out	<b>423</b>	Average duration 00:00:46
Lost	<b>4</b>	Average ring 00:00:35	Lost	<b>12</b>	Average ring 00:00:27
<b>Total</b>	<b>286</b>		<b>Total</b>	<b>1117</b>	

## Q. Can I show only missed calls on a display board?

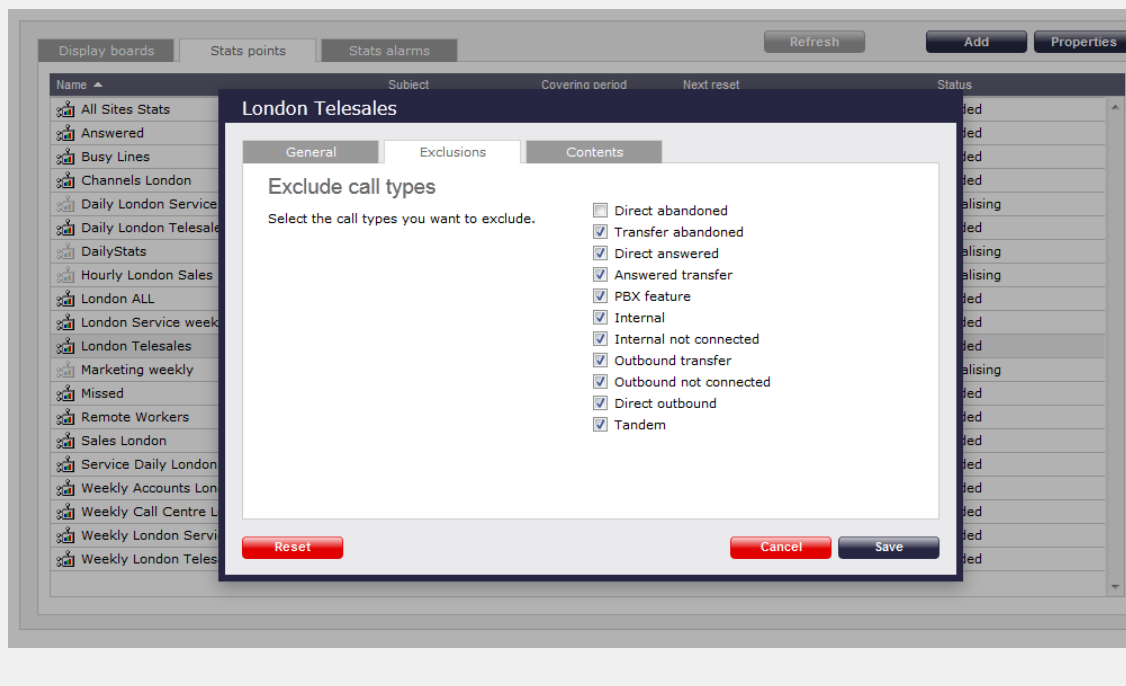
A. Yes. See details below:

1. When creating a stats collection point for your display board, select **CLI** from the drop-down list of the **Subject** field, as shown below:



2. Click on the **Exclusions** tab.

3. Tick the relevant boxes to exclude all call types except **Direct abandoned**.



## Stats points

### Stats points

- What is a stats point?
- Adding a stats point
- Configuring a stats point
- Excluding a user from a stats point
- Deleting a stats point
- Stats point - overview video

## What is a stats point?

A statistics collection point (stats point) object is a mathematical "counter" whose scope of data collection is determined by its placement in your directory hierarchy. As calls are made and received, the properties of each one are collated for future consumption by display boards. Stats points can be configured to only collect calls of a certain type or calls whose properties match certain criteria.

TIMPLUS					
Reports   Directory   Call view   Live stats   Tariff editor   Settings   Alerts					
Display boards   Stats points   Stats alarms   Refresh   Add   Properties					
Name	Subject	Covering period	Next reset	Status	
All Sites Stats	User	1 day	18 May 2012 00:00:00	Loaded	
Answered	Dialled number	1 day	18 May 2012 00:00:00	Loaded	
Busy Lines	Channel group	1 day	18 May 2012 03:00:00	Loaded	
Channels London	Channel group	1 day	18 May 2012 06:53:20	Loaded	
Daily London Service	User	1 day		Loaded	
Daily London Telesales	User	1 day	18 May 2012 00:00:00	Loaded	
DailyStats	User	1 day		Loaded	
Dialled Numbers	Dialled number	1 day	18 May 2012 00:00:00	Loaded	
Hourly London Sales	User	1 hour		Loaded	
London ALL	User	1 week	18 May 2012 03:33:20	Loaded	
London Service weekly	User	1 week	20 May 2012 00:00:00	Loaded	
London Telesales	User	1 day	18 May 2012 00:00:00	Loaded	
Marketing weekly	User	1 week		Loaded	
Michaels team	User	1 day	18 May 2012 00:07:00	Loaded	
Missed	User	1 day	18 May 2012 00:00:00	Loaded	
New users	User	5 minutes		Loaded	
Remote Workers	User	1 week	20 May 2012 00:01:00	Loaded	
Sales London	User	1 week	20 May 2012 00:00:00	Loaded	
Sales Test	User	1 day	18 May 2012 00:00:00	Loaded	
Service Daily London	User	1 day	18 May 2012 00:00:00	Loaded	
Test	User	1 day	18 May 2012 00:00:00	Loaded	

## Adding a stats point

To add a stats point, select the **Live stats** tab and click on the **Stats points** button.

There is no limit to the number of stats points allowed in TIM Plus.

The screenshot shows the TIMPLUS interface with a navigation bar at the top containing 'Reports', 'Directory', 'Call view', 'Live stats', 'Tariff editor', 'Settings', and 'Alerts'. Below this is a sub-panel with tabs for 'Display boards', 'Stats points', and 'Stats alarms'. The 'Stats points' tab is active, displaying a table of stats points. A red box highlights the 'Add' button in the top right corner of the sub-panel.

Name	Subject	Covering period	Next reset	Status
All Sites Stats	User	1 day	28 March 2013 00:00:00	Loaded
All Stats	User	1 day	28 March 2013 00:00:00	Loaded
Answered	Dialled number	1 day	28 March 2013 00:00:00	Loaded
Busy Lines	Channel group	1 day	28 March 2013 03:00:00	Loaded
Call Groups	Channel	1 day	28 March 2013 11:00:00	Loaded
Channels London	Channel group	1 day	28 March 2013 03:00:00	Loaded
Daily London Service	User	1 day	28 March 2013 00:00:00	Loaded
Daily London Telesales	User	1 day	28 March 2013 00:00:00	Loaded
DailyStats	User	1 day	28 March 2013 00:00:00	Loaded
Dialled Numbers	Dialled number	1 day	28 March 2013 00:00:00	Loaded
Hourly London Sales	User	1 hour	27 March 2013 16:00:00	Loaded
London ALL	User	1 week	29 March 2013 03:33:20	Loaded
London Daily Stats	User	1 day	28 March 2013 00:00:00	Loaded
London Service weekly	User	1 week	31 March 2013 00:00:00	Loaded
London Telesales	User	1 day	28 March 2013 00:00:00	Loaded
Marketing weekly	User	1 week	01 April 2013 00:00:00	Loaded
Missed	User	1 day	28 March 2013 00:00:00	Loaded
Non-Geographic No's	Dialled number	1 month	01 April 2013 00:00:00	Loaded
Sales London	User	1 week	31 March 2013 00:00:00	Loaded
Sales Test	User	1 day	28 March 2013 00:00:00	Loaded
Service Daily London	User	1 day	28 March 2013 00:00:00	Loaded
US Daily Stats	User	1 day	28 March 2013 01:00:00	Loaded

A new window will open, where you can [configure the properties of your stats point](#). Once you have entered all the parameters, click on the **Add** button to add the new stats point to the list.

The screenshot shows a dialog box titled 'Add new stats collection point'. It has two tabs: 'General' and 'Exclusions'. The 'General' tab is active and contains the following information:

**New stats collection point**  
 A stats collection point collects call data grouped by a common subject. This can be based on user, user group, channel, channel group, dialled number, chargeband, destination, half hour time slots, or account code.

Choose the site, group or user you want the statistics to encompass.

Select what you want the subject of the statistics to be.

Finally, choose when you want the statistics to reset, and how often.

**Name**:

**Site**: (All sites) ▼

**Group**: ▼

**User**: ▼

**Subject**: User ▼

The statistics will reset every:  days ▼

Starting from:  on   ▼

Use data from the last reset period

Buttons: **Cancel** (red), **Add** (dark blue)

## Configuring a stats point

To configure or edit a stats collection point, select it from the `stats points` list and click on the **Properties** button at the top-right corner of the panel, as shown below:

TIMPLUS								
		Reports	Directory	Call view	Live stats	Tariff editor	Settings	Alerts
Display boards			Stats points	Stats alarms	Refresh	Add	Properties	
Name	Subject	Covering period	Next reset	Status				
All Sites Stats	User	1 day	28 March 2013 00:00:00	Loaded				
All Stats	User	1 day	28 March 2013 00:00:00	Loaded				
Answered	Dialled number	1 day	28 March 2013 00:00:00	Loaded				
Busy Lines	Channel group	1 day	28 March 2013 03:00:00	Loaded				
Call Groups	Channel	1 day	28 March 2013 11:00:00	Loaded				
Channels London	Channel group	1 day	28 March 2013 03:00:00	Loaded				
Daily London Service	User	1 day	28 March 2013 00:00:00	Loaded				
Daily London Telesales	User	1 day	28 March 2013 00:00:00	Loaded				
DailyStats	User	1 day	28 March 2013 00:00:00	Loaded				
Dialled Numbers	Dialled number	1 day	28 March 2013 00:00:00	Loaded				
Hourly London Sales	User	1 hour	27 March 2013 16:00:00	Loaded				
London ALL	User	1 week	29 March 2013 03:33:20	Loaded				
London Daily Stats	User	1 day	28 March 2013 00:00:00	Loaded				
London Service weekly	User	1 week	31 March 2013 00:00:00	Loaded				
London Telesales	User	1 day	28 March 2013 00:00:00	Loaded				
Marketing weekly	User	1 week	01 April 2013 00:00:00	Loaded				
Missed	User	1 day	28 March 2013 00:00:00	Loaded				
Non-Geographic No's	Dialled number	1 month	01 April 2013 00:00:00	Loaded				
Sales London	User	1 week	31 March 2013 00:00:00	Loaded				
Sales Test	User	1 day	28 March 2013 00:00:00	Loaded				
Service Daily London	User	1 day	28 March 2013 00:00:00	Loaded				
US Daily Stats	User	1 day	28 March 2013 01:00:00	Loaded				

A new window will open, allowing you to configure the properties of your stats point object. Each tab in this window will be explained below:

### General properties

The **General** tab allows to configure the general properties of your stats collection point, such as name, entity, subject or reset frequency:

#### London Daily Stats

General
Exclusions
Contents

#### Update stats collection point

Choose the site, group or user you want the statistics to encompass.

Select what you want the subject of the statistics to be.

Finally, choose when you want the statistics to reset, and how often.

Name:

Site:

Group:

User:

Subject:

The statistics will reset every:

days

Starting from:

on

Use data from the last reset period

Delete
Reset
Cancel
Save

Name

Enter or edit the name of your stats collection point.

Name	London Daily Stats
------	--------------------

#### Site

If you want your stats point to include calls from one site only, select the site from the drop-down list.

Site	London
------	--------

#### Group

If you have selected a site and want your stats point to include only calls from one particular user group within that site, select the group from the drop-down list.

Group	Accounts
-------	----------

#### User

If you have selected a site and a user group and want your stats point to include only calls from one individual user within that user group, select the user from the drop-down list.

Users	(All users)
-------	-------------

#### Subject

The stats points can be configured to group the collected calls by a particular subject, such as users, channels, dialled number, half-hour time slot etc. To choose a subject, select it the drop-down list.

Subject	Channel group
---------	---------------

#### Reset frequency

Choose when to reset your stats point, by entering the date and time in the *Starting from* section; to choose the frequency with which you want them to reset, select a predefined period from the drop-down list, as shown below:

The statistics will reset every:

1	days
---	------

Starting from:

00:00:00	on	28	Mar	2013
----------	----	----	-----	------

#### Last reset period data

This option allows you to keep a copy of the previous stats for comparison purposes, e.g. if you want to compare today's stats with yesterday's. Select the tick-box provided to enable this feature.

Use data from the last reset period

In the example below, the stats point is set for all users of the `Accounts` team in `London` site, and it resets every day.



London Daily Stats
✕

General

Exclusions

Contents

### Update stats collection point

Choose the site, group or user you want the statistics to encompass.

Select what you want the subject of the statistics to be.

Finally, choose when you want the statistics to reset, and how often.

Name	<input type="text" value="London Daily Stats"/>
Site	<input type="text" value="London"/>
Group	<input type="text" value="Accounts"/>
User	<input type="text" value="(All users)"/>
Subject	<input type="text" value="User"/>

The statistics will reset every:

Starting from:

on

Use data from the last reset period



Because there is no limit on the number of stats points you are allowed to have in TIM Plus, you can add several stats points at any one place, refreshing at different times, e.g. daily, weekly and monthly.

## Exclusions

If you want to exclude certain call types from your statistics, click on the **Exclusions** tab and tick the box against the type of calls you don't want to include in your stats point.

**London Daily Stats** [X]

General | Exclusions | Contents

**Exclude call types**

Select the call types you want to exclude.

- Direct abandoned
- Transfer abandoned
- Direct answered
- Answered transfer
- PBX feature
- Internal
- Internal not connected
- Outbound transfer
- Outbound not connected
- Direct outbound
- Tandem

Reset Cancel Save

The example below shows an exclusion set for `Transfer abandoned` and `Internal not connected` calls.

**London Daily Stats** [X]

General | Exclusions | Contents

**Exclude call types**

Select the call types you want to exclude.

- Direct abandoned
- Transfer abandoned
- Direct answered
- Answered transfer
- PBX feature
- Internal
- Internal not connected
- Outbound transfer
- Outbound not connected
- Direct outbound
- Tandem

Reset Cancel Save

## Contents

The `Contents` tab allows you to check whether call stats are being collected by TIM Plus, and it is generally used for troubleshooting purposes.

**London Daily Stats** [X]

General Exclusions Contents

Iterator  Refresh

	x	o	a	m	i	r
a	504	80	358	8	58	
b	38970	2804	33849	299	2018	
c	1	1	1	1	1	
d	Hannah Soras	Amanda Lynn	Hannah Soras	Simon Gallion	Rose Pink	
e	867	329	867	68	168	
f	Mark Longhorn	Olive Yew	Mark Longhorn	Dan D. Lyons	David Ellis	
g	534		534			
h	1		1			
i	Don Key		Don Key			
j	93		93			
k	Christina Andrews	Amanda Lynn	Christina Andrews	Dan D. Lyons	Grace Harper	

Reset Cancel Save

Click on the **Refresh** button to refresh the statistics on that page and verify that the stats point is collecting data. If you click on the **Reset** button, you can clear the statistics and reload them for the period that they cover, e.g. last week.

## Excluding a user from a stats point

Follow the instructions below to exclude a user from a stats collection point, e.g. exclude the sales manager from the sales team stats:

1. Search the Directory to [locate the user](#) you want to exclude from your stats.
2. Select the user and click on the **Properties** tab.

28 items

Name	Extension	Email address	Mobile	Direct line	Alt extension
Anna Beck	2013			02075263300	
Anna Ruben	1020				
Annette Curtain	13406				
Barry Cade	7046			02072651111	
Bob Katz	1966	bkatz@tri-line.com		02030124578	
Brian Doyle	2083				
Brooke Trout	3105				
Doug Hole	3803				
Duane Pipe	2050				
Earl Lee Riser	3026				

3. A new window will appear. Click on the **Telephony** tab and tick the **Exclude this user from call statistics** box.

**User properties**

General **Telephony** Charge Markup

DDI

IP Phone

Mobile

Home

Do not log calls for this user

Do not record calls for this user

**Exclude this user from call statistics**

Cancel Save

4. Click on the **Save** button to apply the changes.



To perform the steps below you need administrative privileges to be able to access the Directory and the user properties.

## Deleting a stats point

To delete a stats point, select it from the `stats points` list and click on the `Properties` button at the top-right corner of the screen, as shown below:

The screenshot shows the TIMPLUS interface with the 'Stats points' tab selected. The 'Properties' button is highlighted in red. The table below lists the stats points:

Name	Subject	Covering period	Next reset	Status
All Sites Stats	User	1 day	28 March 2013 00:00:00	Loaded
All Stats	User	1 day	28 March 2013 00:00:00	Loaded
Answered	Dialled number	1 day	28 March 2013 00:00:00	Loaded
Busy Lines	Channel group	1 day	28 March 2013 03:00:00	Loaded
Call Groups	Channel	1 day	28 March 2013 11:00:00	Loaded
Channels London	Channel group	1 day	28 March 2013 03:00:00	Loaded
Daily London Service	User	1 day	28 March 2013 00:00:00	Loaded
Daily London Telesales	User	1 day	28 March 2013 00:00:00	Loaded
DailyStats	User	1 day	28 March 2013 00:00:00	Loaded
Dialled Numbers	Dialled number	1 day	28 March 2013 00:00:00	Loaded
Hourly London Sales	User	1 hour	27 March 2013 16:00:00	Loaded
London ALL	User	1 week	29 March 2013 03:33:20	Loaded
London Daily Stats	User	1 day	28 March 2013 00:00:00	Loaded
London Service weekly	User	1 week	31 March 2013 00:00:00	Loaded
London Telesales	User	1 day	28 March 2013 00:00:00	Loaded
Marketing weekly	User	1 week	01 April 2013 00:00:00	Loaded
Missed	User	1 day	28 March 2013 00:00:00	Loaded
Non-Geographic No's	Dialled number	1 month	01 April 2013 00:00:00	Loaded
Sales London	User	1 week	31 March 2013 00:00:00	Loaded
Sales Test	User	1 day	28 March 2013 00:00:00	Loaded
Service Daily London	User	1 day	28 March 2013 00:00:00	Loaded
US Daily Stats	User	1 day	28 March 2013 01:00:00	Loaded

A new window will open. Click on the `Delete` button at the bottom-left corner of the window to remove the selected stats point.

DailyStats
✕

General

Exclusions

Contents

### Update stats collection point

Choose the site, group or user you want the statistics to encompass.

Select what you want the subject of the statistics to be.

Finally, choose when you want the statistics to reset, and how often.

Name:

Site:

Group:

User:

Subject:

The statistics will reset every:

Starting from:

on

Use data from the last reset period

Delete

Reset

Cancel

Save

## Stats point - overview video

## Stats alarms

**Stats alarms**

- What is a stats alarm?
- Adding a stats alarm
- Configuring a stats alarm
- Deleting a stats alarm

### What is a stats alarm?

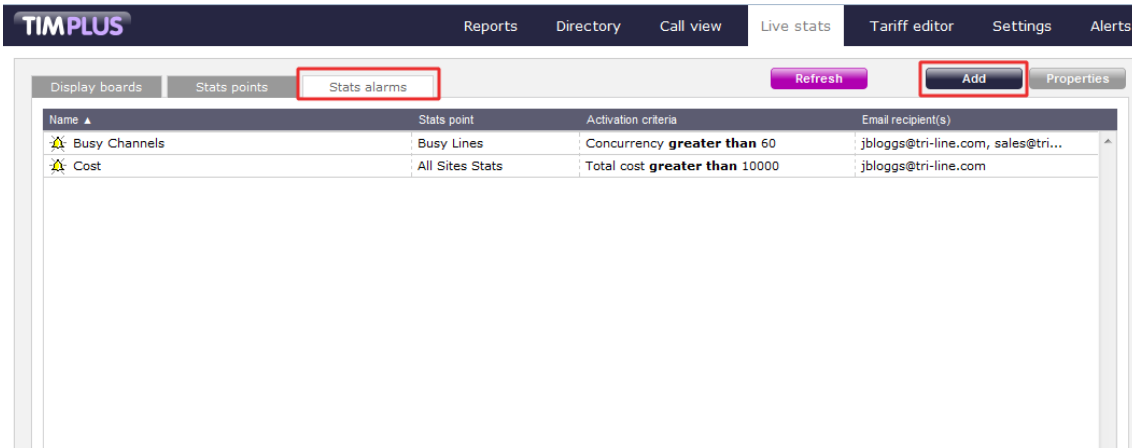
Stats alarms are alarms that can be added to a selected stats collection point in order to trigger an alert when calls whose properties match certain criteria have happened, such as calls above a particular duration, calls to specific phone numbers, or when user-defined cost thresholds are exceeded. The criteria that must be met to trigger an alarm is user-defined, and email alerts can be sent to one or more recipients.

Call statistics alarms are simply a variation of the standard "alarm" directory object and provide an additional means of keeping a tab on call patterns.

### Adding a stats alarm

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To add a stats alarm, go to the Live stats screen, select the **Stats alarms** tab and click on the **Add** button at the top-right corner of the screen, as shown below:



A new window will open, allowing you to configure the properties of your stats alarm. Each tab displayed in this window is described below:

The 'Add new stats alarm' dialog box has three tabs: 'General', 'Criteria', and 'Notification'. The 'General' tab is active and contains the following text:

**New stats alarm**

Stats Alarms watch a specific stats point in your organisation and, if one or more elements match your user-defined criteria, an email can be sent to one or more recipients.

Choose a name for the alarm and select a stats point to watch.

To select the criteria that must be met in order for the alarm to activate, click the **Criteria** tab.

To specify the recipient(s) of any alarm emails, or to customise the subject and body of the email message, click the **Notification** tab.

Fields for 'Name' and 'Stats point' are visible, along with a 'Find' button. At the bottom, there are 'Cancel' and 'Add' buttons.

## General

The **General** tab allows you to name the alarm object and select the stats point you want the alarm to monitor.

### Name

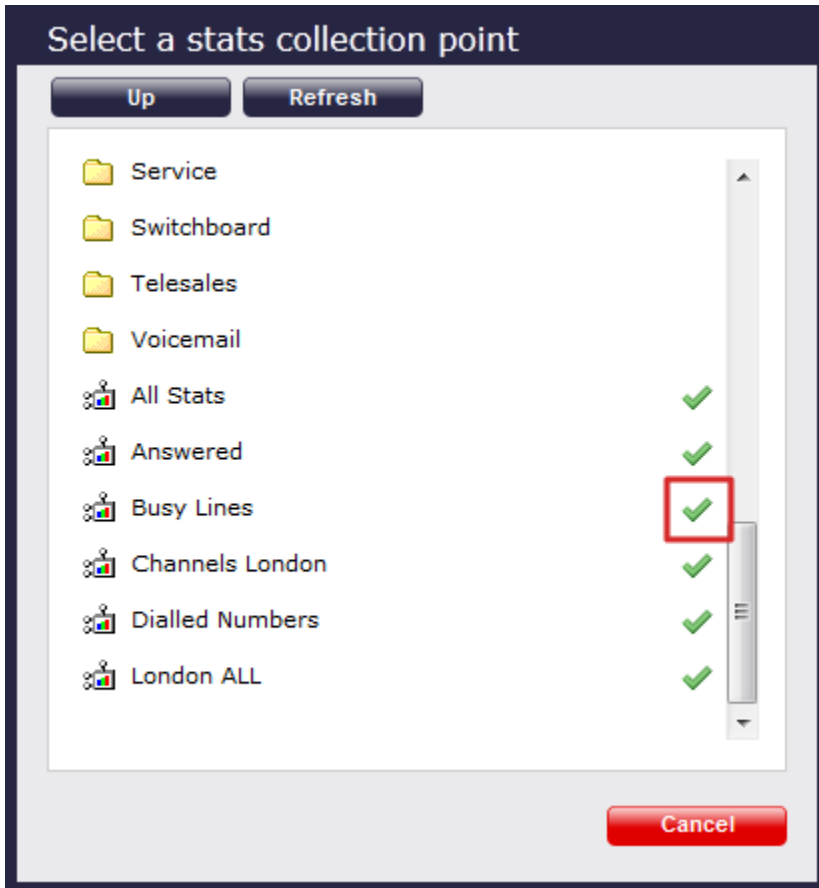
Enter a name for the alarm in the text box provided, as shown below:

Name	Busy Channels
------	---------------

### Stats point

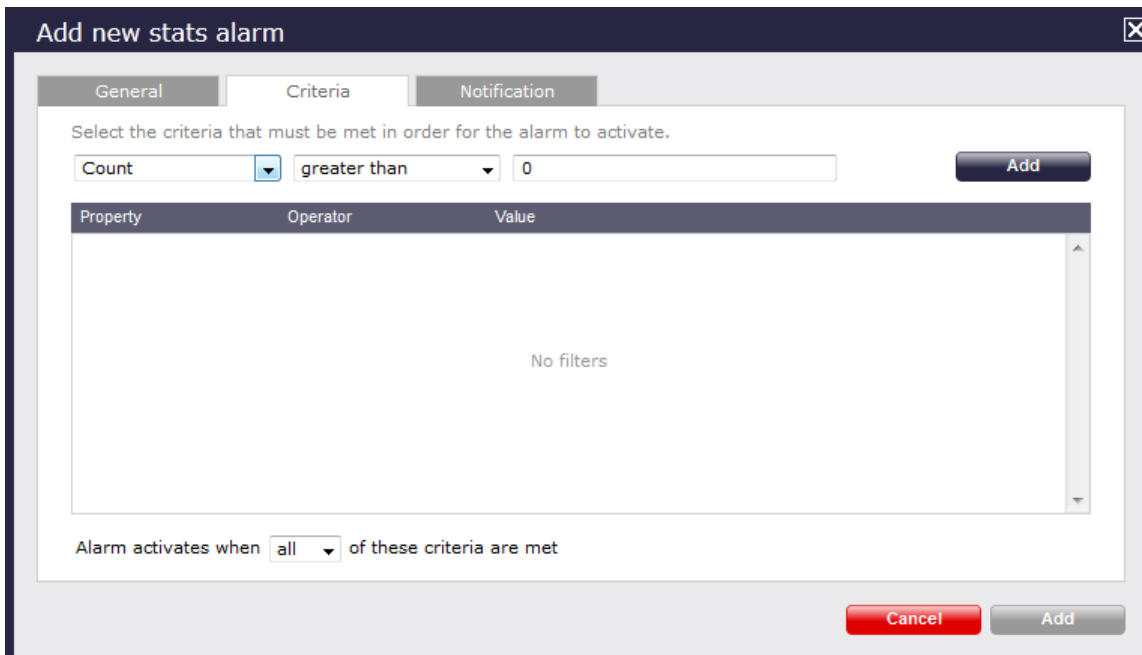
To select the stats point you want the alarm to monitor, click on the **Find** button. A new window will open, allowing you to drill-down to the site or group level in the Directory, where the stats point object you want to use resides. To select the stats point,

click on the  icon alongside it, as shown below:



### Criteria

This section allows you to choose the criteria that calls must match in order to activate the alarm. The criteria available for selection are described below:





**Count**

The alarm will be triggered when the **call count** of the calls collected in this stats point meets, exceeds, is less than or equal to a predetermined value, e.g. when busy channels equals 10 or busy channels > 10.

Count	greater than	10
-------	--------------	----

**Total duration**

The alarm will be triggered when the **total duration**, exceeds, is less than or equal to a predetermined value, e.g. when call duration is greater than 3600 seconds (1 hour).

Total duration	greater than	18000
----------------	--------------	-------

**Average duration**

The alarm will be triggered when the **average duration** meets, exceeds, is less than or equal to a predetermined value, e.g. when average call duration is less than 1 minute.

Average duration	less than	60
------------------	-----------	----

**Minimum duration**

The alarm will be triggered when the **minimum duration** meets, exceeds, is less than or equal to a predetermined value, e.g. when minimum duration equals 20 seconds.

Minimum duration	equals	20
------------------	--------	----

**Maximum duration**

The alarm will be triggered when the **maximum duration** meets, exceeds, is less than or equal to a predetermined value, e.g. when maximum call duration is greater than 1 hour.

Maximum duration	greater than	3600
------------------	--------------	------

**Total response**

The alarm will be triggered when the **total response** time exceeds, equals, is less than or is or equal to a predetermined value, e.g. total response time exceeds 30 seconds.

Total response	greater than	30
----------------	--------------	----

**Average response**

The alarm will be triggered when the **average response** time exceeds, equals, is less than or is equal to a predetermined value, e.g. average response time exceeds 20 seconds.

Average response	greater than	20
------------------	--------------	----

**Minimum response**

The alarm will be triggered when the **minimum response** time exceeds, equals, is less than or is equal to a predetermined value, e.g. minimum response time equals 2 seconds.

--	--	--

Minimum response equals 2

**Maximum response**

The alarm will be triggered when the **maximum response** time exceeds, equals, is less than or is equal to a pre-determined value, e.g. maximum response time exceeds 20 seconds.

Maximum response greater than 20

**Total cost**

The alarm will be triggered when the **total cost** exceeds, equals, is less than or is equal to a predetermined value, e.g. total cost exceeds £100.

Total cost greater 100

**Average cost**

The alarm will be triggered when the **average cost** exceeds, equals, is less than or is equal to a predetermined value, e.g. average cost exceeds £2.00.

Average cost greater than 2

**Minimum cost**

The alarm will be triggered when the **minimum cost** exceeds, equals, is less than or is equal to a predetermined value, e.g. minimum cost equals £1.00.

Minimum cost equals 1

**Maximum cost**

The alarm will be triggered when **maximum cost** exceeds, equals, is less than or is equal to a predetermined value, e.g. maximum cost exceeds £10.00.

Maximum cost greater than 10

**Concurrency**

The alarm will be triggered when the **call concurrency** exceeds, equals, is less than or is equal to a predetermined value, e.g. total number of simultaneous calls exceeds 20.

Concurrency greater than 20

Alarm activates when all of these criteria are met

all  
any



When adding multiple selection criteria, you are given the option to trigger an alarm when ALL or ANY of the criteria are met.

## Notification

The **Notification** tab allows you to set up an email alert when any of the above-mentioned alarms are triggered.

The screenshot shows a dialog box titled "Add new stats alarm" with a close button in the top right corner. It has three tabs: "General", "Criteria", and "Notification", with "Notification" selected. Below the tabs, there is a text instruction: "Specify the recipient(s) of any alarm emails and, optionally, customise the email message." The "Email" field contains "jbloggs@tri-line.com". There is a checkbox for "Customise email message" which is currently unchecked, and an "Insert field" button to its right. Below this, there are fields for "Subject" and "Message". At the bottom right of the dialog, there are "Cancel" and "Add" buttons.

To send the notification to multiple email addresses, separate each entry with a semicolon.

Email

You can also customise the email notification by adding a subject and/or a message in the boxes provided, as shown below:

This screenshot shows the same dialog box as above, but with the "Customise email message" checkbox checked. The "Subject" field contains ">20 lines in use" and the "Message" field contains "This e-mail is to advise that the number of concurrent lines in use just exceeded 20." The "Insert field" button is now highlighted in purple.

Once you have configured all the settings, click on the **Add** button to add your alarm to the `Stats alarm` list, as shown below:

The screenshot shows the TIMPLUS interface with the 'Stats alarms' tab selected. The table below shows the current configuration of stats alarms.

Name	Stats point	Activation criteria	Email recipient(s)
⚠ Busy Channels	Busy Lines	Concurrency <b>greater than 20</b>	jbloggs@tri-line.com, sales@tri...

## Configuring a stats alarm

To configure a stats alarm, select it from the existing list and click on the **Properties** button at the top-right corner of the screen, as shown below:

The screenshot shows the TIMPLUS interface with the 'Stats alarms' tab selected. The table below shows the current configuration of stats alarms. The 'Properties' button is highlighted with a red box.

Name	Stats point	Activation criteria	Email recipient(s)
⚠ Busy Channels	Busy Lines	Concurrency <b>greater than 60</b>	jbloggs@tri-line.com, sales@tri...
⚠ Cost	All Sites Stats	Total cost <b>greater than 10000</b>	jbloggs@tri-line.com

A new window will open, where you can edit the properties of the stats alarm.

**Busy Channels** [X]

General | **Criteria** | Notification

### Update stats alarm

Choose a name for the alarm and select a stats point to watch.

To select the criteria that must be met in order for the alarm to activate, click the **Criteria** tab.

To specify the recipient(s) of any alarm emails, or to customise the subject and body of the email message, click the **Notification** tab.

Name:

Stats point:

## Deleting a stats alarm

To delete a stats alarm, select it from the list and click on the **Properties** button at the top-right corner of the screen. In the new window that opens, click on the **Delete** button to remove the alarm from the system.

**Busy Channels** [X]

General | **Criteria** | Notification

### Update stats alarm

Choose a name for the alarm and select a stats point to watch.

To select the criteria that must be met in order for the alarm to activate, click the **Criteria** tab.

To specify the recipient(s) of any alarm emails, or to customise the subject and body of the email message, click the **Notification** tab.

Name:

Stats point:

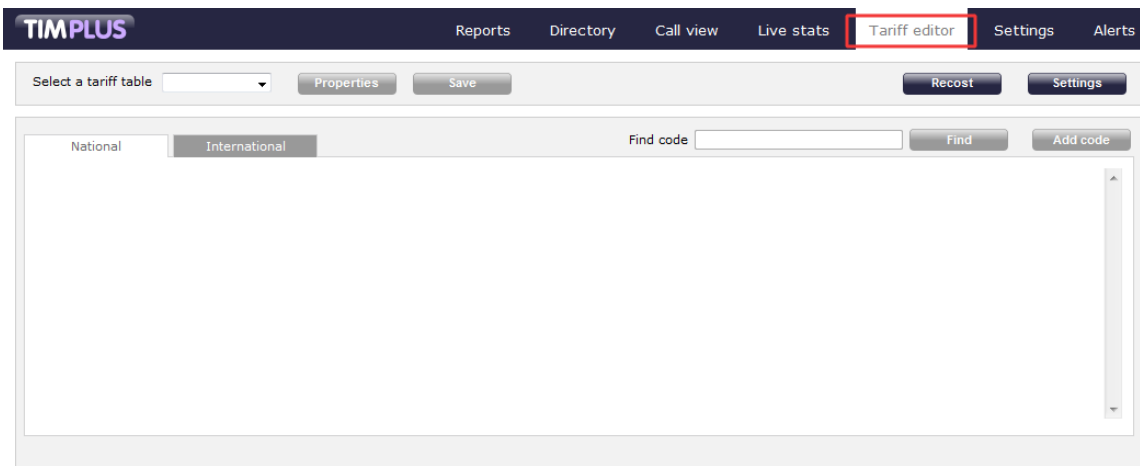
## Tariff editor

### General properties

- General properties**
- Accessing the tariff editor
  - Selecting a tariff table
  - Tariff properties
  - Recosting calls
  - Tariff settings

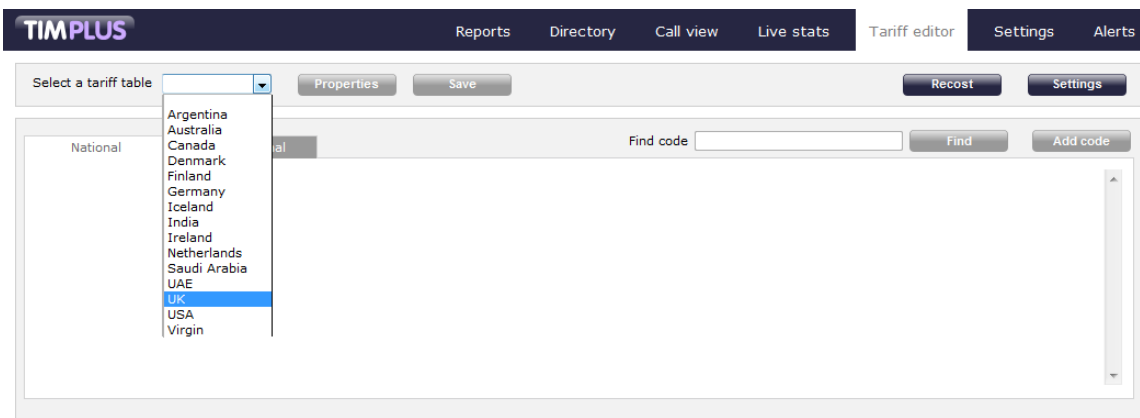
## Accessing the tariff editor

To access the tariff table, click on the **Tariff editor** tab from the menu bar, as shown below:



## Selecting a tariff table

To select a tariff table, expand the drop-down list on the left-hand side of the screen and choose from the available options, as shown below:



Once a tariff has been selected, the following screen will be displayed:

**TIMPLUS** Reports Directory Call view Live stats Tariff editor Settings Alerts

Select a tariff table UK **Properties** Save Recost Settings

National International Page 1 of 386 Find code Find Add code

Code	Band name	Location	Code pattern
0113	UKNAT	Leeds	
0114	UKNAT	Sheffield	
0115	UKNAT	Nottingham	
0116	UKNAT	Leicester	
0117	UKNAT	Bristol	
0118	UKNAT	Reading	
01200	UKNAT	Clitheroe	
01202	UKNAT	Bournemouth	
01204	UKNAT	Bolton	
01205	UKNAT	Boston	
01206	UKNAT	Colchester	
01207	UKNAT	Consett	

Bands Page 1 of 12 Find band Find Add band

Band name	Display name	Rate 1	Rate 2	Rate 3	Rate 4	Rate 5	Rateable unit	Min cost	Max cost	Start cost	Min duration	Connect time	Cap limit	Cap amount	Weekday rates	Saturday r
1	International	0.65	0.65	0.65				0.03								
10	International	3	3	3				0.03								
10 Mob	International	3.35	3.35	3.35				0.03								
2	International	0.7	0.7	0.7				0.03								
2 Mob	International	1.05	1.05	1.05				0.03								
3	International	0.95	0.95	0.95				0.03								
3 Mob	International	1.3	1.3	1.3				0.03								
4	International	1.3	1.3	1.3				0.03								
4 Mob	International	1.65	1.65	1.65				0.03								
5	International	1.5	1.5	1.5				0.03								
5 Mob	International	1.85	1.85	1.85				0.03								

## Tariff properties

To configure the general properties of your tariff table, click on the **Properties** button, as shown below:

**TIMPLUS** Reports Directory Call view Live stats Tariff editor Settings Alerts

Select a tariff table UK **Properties** Save Recost Settings

National International Page 1 of 386 Find code Find Add code

Code	Band name	Location	Code pattern
0113	UKNAT	Leeds	
0114	UKNAT	Sheffield	
0115	UKNAT	Nottingham	
0116	UKNAT	Leicester	
0117	UKNAT	Bristol	
0118	UKNAT	Reading	
01200	UKNAT	Clitheroe	
01202	UKNAT	Bournemouth	
01204	UKNAT	Bolton	
01205	UKNAT	Boston	
01206	UKNAT	Colchester	
01207	UKNAT	Consett	

A new window will open where you can configure the properties of your tariff table. Each field in this window is described in the table below:

Field name	Description																																																
<b>Tariff title</b>	The name of the tariff table.																																																
<b>Minimum dialled digits</b>	The minimum number of dialled digits required for the call to be logged.																																																
<b>Minimum search digits</b>	The minimum number of search digits required to start allocating a charge to a call. TIM Plus starts from 10 digits and works backwards in order to find the closest tariff match.																																																
<b>International digits</b>	The digits used to dial internationally, e.g. all international calls made from UK begin with 00.																																																
<b>Weekday rates</b>	<p>The weekday rates you want to apply to calls for each hour of the day. For example, in the table below rate 2 applies from midnight to 7:59 and from 18:00 to 23:59, and rate 1 applies from 8:00 to 17:59.</p> <p><b>Weekday rates</b> <input type="text" value="2222222111111111222222"/> <input type="button" value="..."/></p> <p>To see the rates in more detail, click on the <input type="button" value="..."/> button to expand, as shown below:</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><b>Rates by hour</b> <span style="float: right;">✕</span></p> <table style="width: 100%; text-align: center; border-collapse: collapse;"> <tr> <td>00</td><td>01</td><td>02</td><td>03</td><td>04</td><td>05</td><td>06</td><td>07</td><td>08</td><td>09</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td> </tr> <tr> <td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td> </tr> </table> <p style="text-align: right; margin-top: 10px;"> <input type="button" value="Cancel"/> <input type="button" value="Save"/> </p> </div>	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23																										
2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2																										



<p><b>Saturday rates</b></p>	<p>The Saturday rates you want to apply to calls for each hour of the day. For example, in the table below rate 3 applies at all times.</p> <p>Saturday rates <input type="text" value="33333333333333333333333333333333"/> <input type="button" value="..."/></p> <p>To see the rates in more detail, click on the <input type="button" value="..."/> button to expand, as shown below:</p> <div style="border: 1px solid black; padding: 5px;"> <p><b>Rates by hour</b> <input type="button" value="X"/></p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td>00</td><td>01</td><td>02</td><td>03</td><td>04</td><td>05</td><td>06</td><td>07</td><td>08</td><td>09</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td> </tr> <tr> <td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td> </tr> </table> <p style="text-align: right;"><input type="button" value="Cancel"/> <input type="button" value="Save"/></p> </div>	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
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3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3																										
<p><b>Sunday rates</b></p>	<p>The Sunday rates you want to apply to calls for each hour of the day. For example, in the table below rate 3 applies at all times.</p> <p>Sunday rates <input type="text" value="33333333333333333333333333333333"/> <input type="button" value="..."/></p> <p>To see the rates in more detail, click on the <input type="button" value="..."/> button to expand, as shown below:</p> <div style="border: 1px solid black; padding: 5px;"> <p><b>Rates by hour</b> <input type="button" value="X"/></p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td>00</td><td>01</td><td>02</td><td>03</td><td>04</td><td>05</td><td>06</td><td>07</td><td>08</td><td>09</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td> </tr> <tr> <td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td> </tr> </table> <p style="text-align: right;"><input type="button" value="Cancel"/> <input type="button" value="Save"/></p> </div>	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
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3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3																										
<p><b>Rounding</b></p>	<p>This option allows you to select whether you want to round decimal places up or down.</p> <p>Rounding <input type="button" value="Default"/> <div style="border: 1px solid black; padding: 2px;"> <p>Default</p> <p style="background-color: #e0e0e0;">Default</p> <p>Up</p> <p>Down</p> </div> </p>																																																

**Localising the tariff table**

To inform TIM Plus which calls should be treated as local by your tariff table, click on the  tab, as shown below:

**Tariff properties** [X]

General **Localise**

Tariff title: UK

Minimum dialled digits: 3

Minimum search digits: 10

International digits: 00

Weekday rates: 2222222111111111222222 ...

Saturday rates: 3333333333333333333333333333 ...

Sunday rates: 3333333333333333333333333333 ...

Rounding: Default

Set this tariff as the system default

Cancel Save

Enter your local dial code in the field provided and click on the **Check** button. The surrounding area codes will be listed automatically. Click on the **Localise** button at the bottom-right corner of the window to localise your tariff.

**Tariff properties** [X]

General **Localise**

Area code: 020 **Check**

Local area codes for **LONDON**

020	01322	01372	01689	01707
01708	01727	01737	01753	01784
01883	01895	01923	01932	01959
01992				

**Localise**

Cancel Save

## Recosting calls

TIM Plus allows you to apply different rates to your already-logged calls, by re-running your data using a different tariff table. To recost calls, click on the **Recost** button, as shown below:

The screenshot shows the TIMPLUS web interface. At the top, there are navigation tabs: Reports, Directory, Call view, Live stats, Tariff editor, Settings, and Alerts. Below the navigation, there is a header area with 'Select a tariff table' set to 'UK', and buttons for 'Properties', 'Save', 'Recost', and 'Settings'. The 'Recost' button is highlighted with a red rectangle. Below this is a table with columns: Code, Band name, Location, and Code pattern. The table is currently showing 'International' calls, with 'Page 1 of 386' displayed. The table lists various codes and locations such as Leeds, Sheffield, Nottingham, Leicester, Bristol, Reading, Clitheroe, Bournemouth, Bolton, Boston, Colchester, and Consett.

A new window will open, allowing you to select the tariff table and the period you want to recost calls for. If you want to recost all calls currently in the database, select the **All calls** option.

The 'Call recosting' dialog box is shown. It has a title bar with a close button (X). The main content area contains the following options:

Select which tariff model to use:

- Use current tariff regime
- Use  tariff only

Select the period of calls to recost:

- All calls
- Selected period only:
  - Start date:
  - End date:

At the bottom of the dialog, there are three buttons: 'Cancel', 'Close', and 'Re-cost'.



The recosting procedure entails removing the selected calls from the database and re-running the data using different rates. If this procedure is interrupted, you may lose calls.

## Tariff settings

To check the status of a tariff table, click on the **Settings** button, as shown below:

The screenshot shows the TIMPLUS interface with the 'Settings' button highlighted in a red box. The interface includes a top navigation bar with 'Reports', 'Directory', 'Call view', 'Live stats', 'Tariff editor', 'Settings', and 'Alerts'. Below this, there is a 'Select a tariff table' dropdown set to 'UK', and buttons for 'Properties', 'Save', 'Recost', and 'Settings'. The main area displays a table of tariff codes with columns for 'Code', 'Band name', 'Location', and 'Code pattern'. The table is currently on 'Page 1 of 386'.

A new window will open, where you can update your current tariff table or download one that has not been installed by default.

The screenshot shows the 'Tariff settings' window with a table of international tariffs. The table has columns for 'Title', 'Last updated', 'Status', and 'Call count'. The 'Status' column contains links for 'Update' or 'Download'. The 'Call count' column shows the number of calls processed for each tariff.

Title	Last updated	Status	Call count
Canada	2014-07-03	<a href="#">Update</a>	0
Denmark	2014-11-19	Up-to-date	0
Finland	2014-07-08	<a href="#">Update</a>	0
Germany	2014-07-29	<a href="#">Update</a>	0
Iceland	2014-07-29	<a href="#">Update</a>	0
India	2014-07-29	<a href="#">Update</a>	0
Ireland	2014-08-12	<a href="#">Update</a>	0
Netherlands	2014-08-05	Up-to-date	0
Saudi Arabia	2014-08-06	Up-to-date	0
UAE	2014-08-08	Up-to-date	0
UK	2014-11-19	Up-to-date	0
USA	2014-08-08	Up-to-date	0
Virgin	2010-06-14		0
Afghanistan	Not installed	<a href="#">Download</a>	-
Albania	Not installed	<a href="#">Download</a>	-

A 'Close' button is located at the bottom right of the window.

The `call count` column will show the current number of calls that have been processed under the selected tariff.

## Adding a code

To add a code to the current tariff table, click on the `Add code` tab at the top-right corner of the screen, as shown below:

The screenshot shows the TIMPLUS interface with the 'Add code' button highlighted in a red box. The interface includes a top navigation bar with 'Reports', 'Directory', 'Call view', 'Live stats', 'Tariff editor', 'Settings', and 'Alerts'. Below this, there is a 'Select a tariff table' dropdown set to 'BT', and buttons for 'Properties', 'Save', 'Recost', 'Status', and 'Localise'. The main area displays a table of tariff codes with columns for 'Code', 'Band name', 'Location', and 'Code pattern'. The table is currently on 'Page 1 of 352'.

A new window will appear, where you can edit the properties of your dial code:

The screenshot shows the TIMPLUS Tariff editor interface. At the top, there are navigation tabs: Reports, Directory, Call view, Live stats, Tariff editor (selected), Settings, and Alerts. Below the tabs, there are buttons for 'Properties', 'Save', 'Recost', 'Status', and 'Localise'. The main area is divided into two sections: 'National' and 'International'. The 'International' section is active, showing a table of dial codes with columns for Code, Band name, Location, and Code pattern. A 'Dial code properties' dialog box is open in the center, with fields for Code, Band (set to 1), Location, and Code pattern. Below the dialog, there is a 'Bands' section with a table of bands and columns for Band name, Display name, Rate 1, Rate 2, Rate 3, Connect time, Cap limit, Cap amount, Weekday rates, and Saturday.

Each field in the `Dial code properties` window is described below:

Field	Description
<b>Code</b>	The new code you want to add to the tariff table.
<b>Band</b>	The charge band you want to apply to the current dial code.
<b>Location</b>	The geographical location you want to associate with the current dial code.
<b>Code pattern</b>	If your code needs to match a specific digit pattern, use the # symbol to construct the pattern and mask the necessary digits. For example, enter <code>020#####*</code> for a London phone number, which indicates that the number must start with 020 and to be followed by at least eight digits in order to be valid.

When you have finished configuring these properties, click on the `Save` button to apply the changes.

The close-up screenshot shows the 'Dial code properties' dialog box with the following values: Code: 0203, Band: LOCAL, Location: London, and Code pattern: (empty). The 'Save' button is highlighted with a red box.

## Finding a code or location

### Search for a dial code

To locate a dial code in the tariff table, enter it in the search box provided, as shown below:

The screenshot shows the TIMPLUS interface with the 'Find code' search box containing '0161'. The search results table is as follows:

Code	Band name	Location	Code pattern
0113	UKNAT	Leeds	
0114	UKNAT	Sheffield	
0115	UKNAT	Nottingham	
0116	UKNAT	Leicester	
0117	UKNAT	Bristol	

The dial code and its matching destination will show highlighted in grey, as shown below:

The screenshot shows the search results for '0161'. The row for '0161' is highlighted in grey. The search results table is as follows:

Code	Band name	Location	Code pattern
01609	UKNAT	Northallerton	
0161	UKNAT	Manchester	
01620	UKNAT	North Berwick	
01621	UKNAT	Maldon	
01622	UKNAT	Maidstone	
01623	UKNAT	Mansfield	
01624	UKNAT	Isle of Man	
01625	UKNAT	Macclesfield	
01626	UKNAT	Newton Abbot	
01628	UKNAT	Maidenhead	

### Search for a location

To search for a location in the tariff table, enter its name in the search box. The results will show all locations containing that name. In the example below the search word was **Chester**:

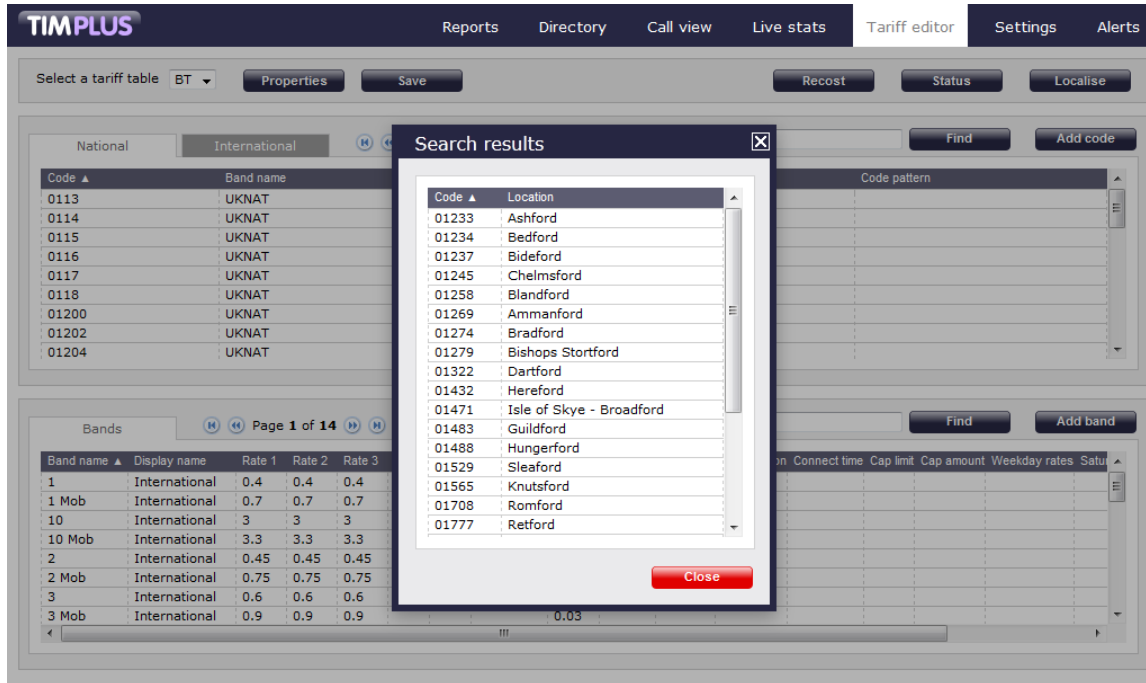
The screenshot shows a search results dialog box overlaid on the main interface. The dialog box contains the following search results:

Code	Location
01244	Chester
01246	Chesterfield

The background interface shows a search for 'Chester' in the 'Find code' box. The main table shows various codes and locations, with the search results dialog box providing a detailed view of the matches.

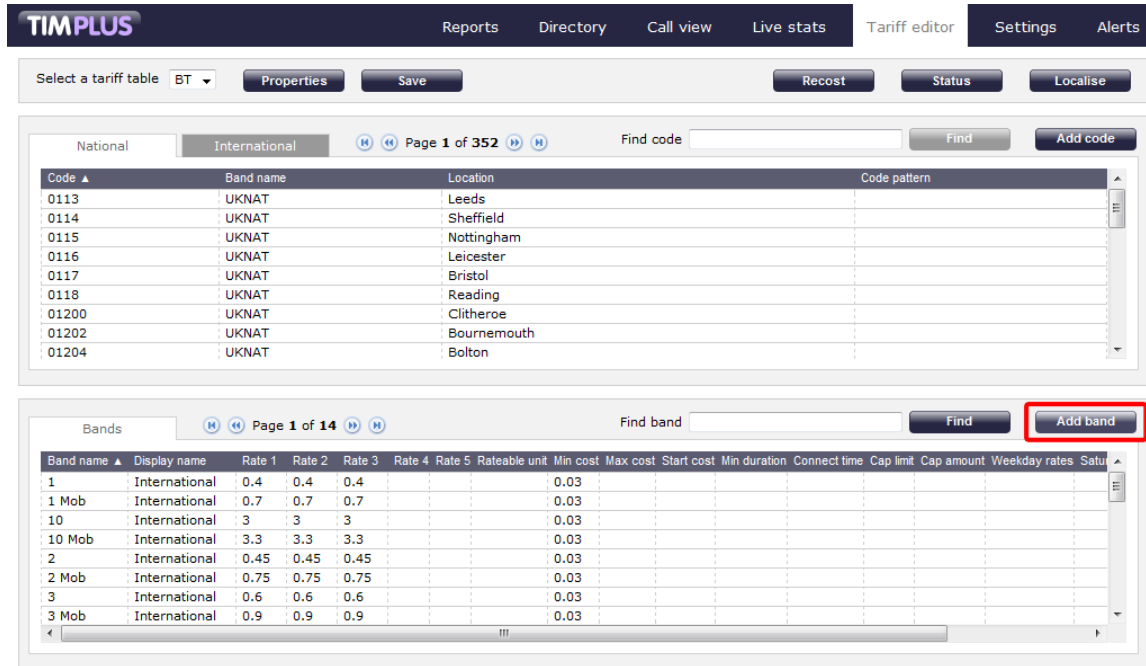
### Search for a partial code or location

To search for a name or number that is contained in a string, use \* character before or after the number or name you have entered. In the example below, the string \*ford was entered:



### Adding a band

To add a new band to the current tariff table, click on the **Add band** tab, as shown below:



A new window will appear, where you can edit the properties of your band:

The screenshot shows the TIMPLUS interface with the 'Band properties' dialog box open. The dialog box has the following fields:

- Band name
- Display name
- Min cost
- Max cost
- Start cost
- Min duration
- Connect time
- Weekday rates
- Saturday rates
- Sunday rates
- Cap limit
- Cap amount
- Rateable unit
- Rate 1
- Rate 2
- Rate 3
- Rate 4
- Rate 5

The background shows a list of bands with columns for Code, Band name, Rate 1, Rate 2, and Rate 3. The 'International' tab is selected. Below the list is a 'Bands' section with a table showing Band name, Display name, Rate 1, Rate 2, and Rate 3 for various bands.

Each field in the `Band properties` window is described below:

Field	Description
<b>Band name</b>	The name of the band
<b>Display name</b>	The band name displayed in the call view or reports
<b>Min cost</b>	The minimum cost of a call, regardless of whether the call totals less at the defined rate
<b>Max cost</b>	The maximum cost a call can reach, regardless of whether the call totals more at the defined rate
<b>Start cost</b>	The starting cost of a call, regardless of its duration
<b>Min duration</b>	The number of seconds a call must last in order to be chargeable
<b>Connect time</b>	A fixed period of time that is added to each call's duration
<b>Weekday rates</b>	The call rates during weekdays
<b>Saturday rates</b>	The call rates during Saturdays
<b>Sunday rates</b>	The call rates during Sundays
<b>Cap limit</b>	The maximum duration (in seconds) you want to restrict certain calls to




<b>Cap amount</b>	The maximum charge for a call to a particular number
<b>Rateable unit</b>	The unit of time (in seconds) that a call's duration is divided into, when used as a multiplier to determine the cost of a call. By default, the rateable unit in TIM Plus is 1 - per second - but could be changed to 60 to enable per minute billing, for example.

When you have finished configuring these properties, click on the **Save** button to apply the changes.


## Finding a band

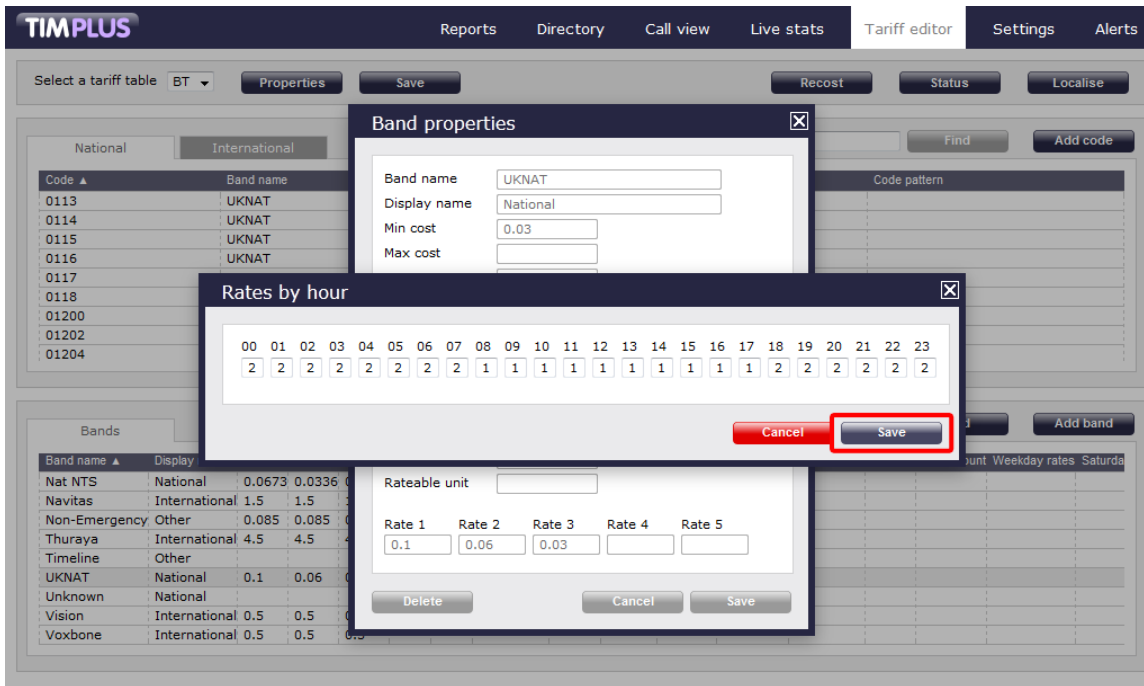
To locate a band in the tariff table, enter its name in the search box and click on the **Find** button, as shown below:



To see the applied rates, click on the  button, as shown below:

Weekday rates	<input type="text"/>	
Saturday rates	<input type="text"/>	
Sunday rates	<input type="text"/>	
Cap limit	<input type="text"/>	
Cap amount	<input type="text"/>	
Rateable unit	<input type="text"/>	

A new window will open, where you can update the current rates. To apply any changes, click on the  button.



The screenshot shows the TIMPLUS interface with several windows open. The 'Band properties' window is in the foreground, showing fields for Band name (UKNAT), Display name (National), Min cost (0.03), and Max cost. Below it, the 'Rates by hour' window is open, displaying a grid of rates for each hour of the day (00-23). The 'Save' button in the 'Rates by hour' window is highlighted with a red box. In the background, the 'Bands' table is visible, listing various bands like Nat NTS, Navitas, Non-Emergency, Thuraya, Timeline, UKNAT, Unknown, Vision, and Voxbone.

Code	Band name	Display	Rateable unit	Rate 1	Rate 2	Rate 3	Rate 4	Rate 5
0113	UKNAT	National	0.0673	0.0336				
0114	UKNAT	International	1.5	1.5				
0115	UKNAT	Other	0.085	0.085				
0116	UKNAT	International	4.5	4.5				
0117	UKNAT	Other						
0118								
01200								
01202								
01204								
Nat NTS	National		0.0673	0.0336				
Navitas	International		1.5	1.5				
Non-Emergency	Other		0.085	0.085				
Thuraya	International		4.5	4.5				
Timeline	Other							
UKNAT	National		0.1	0.06	0.03			
Unknown	National							
Vision	International		0.5	0.5				
Voxbone	International		0.5	0.5				

## Settings

## Web users

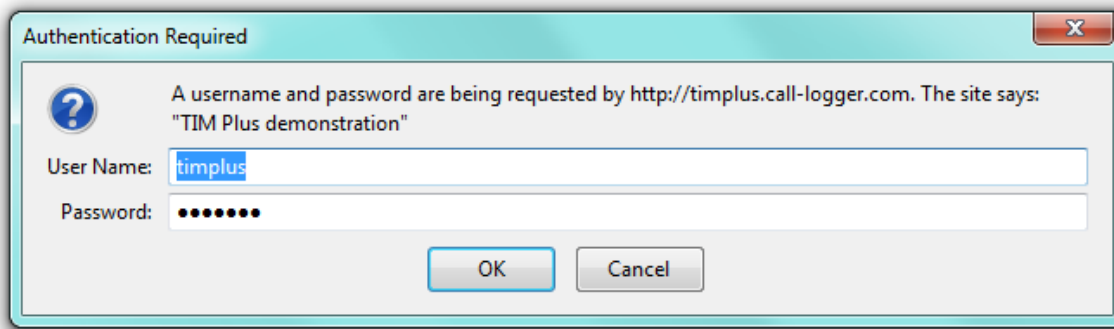
## Web users overview

**Web users overview**

- What is a web user?
- Adding a web user
- Deleting a web user

**What is a web user?**

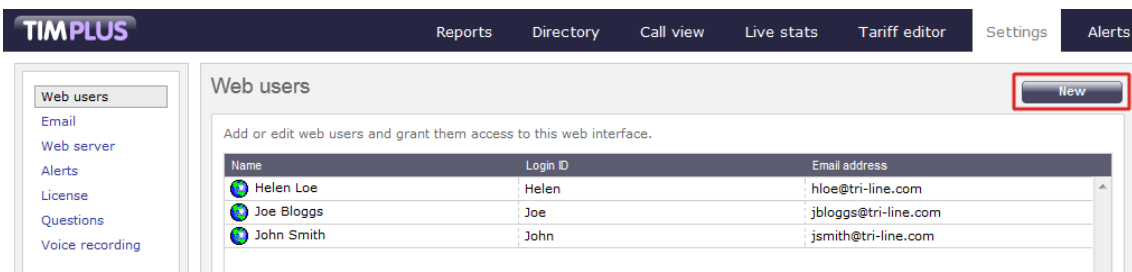
To access TIM Plus you are required to enter a username and password in the web browser, which form a login credential known as **web user**. The login account for **each user can be restricted** to a specific site or user group, allowing you to have full control over their Directory privileges.



**i** There is no limit on the amount of web users you are allowed to create in the system.

**Adding a web user**

To add a new web user, click on the **New** button, as shown below:



A new window will open, allowing you to **configure the properties of the web user**. When you have entered all the details, click on the **Save** button to apply the changes.

## Web user settings

General | Phone contacts | Account contacts

Enter a username and password that this web user will use to log in with.

Username

Password

Enter the following details to identify this web user in reports.

Display name

Email address

Restrict this web user's access to a specific site and/or group within a site.

Site

Group

Disable this webuser's account

## Deleting a web user

To delete a web user from the system, select it from the **web users** list, as shown below:

TIMPLUS | Reports | Directory | Call view | Live stats | Tariff editor | Settings | Alerts

Web users

Add or edit web users and grant them access to this web interface.

Name	Loain ID	Email address
Alfresco	Al Fresco	alfresco@abc.com
Joe Bloggs	timplus	jbloggs@tri-line.com
Sarah	Sarah Smith	
callcentre	callcenter	

The **Web users settings** window will appear. Click on the **Delete** button at the bottom-left corner of the window to remove the web user from the system:

## Web user settings ✕

General
Phone contacts
Account contacts

Enter a username and password that this web user will use to log in with.

Username

Password  Set

Enter the following details to identify this web user in reports.

Display name

Email address

Restrict this web user's access to a specific site and/or group within a site.

Site

Group

Disable this webuser's account

Delete user
Cancel
Save

## Configuring a web user

**Configuring a web user**

- Overview
- General properties
- Phone contacts
- Account contacts

## Overview

To configure the properties of a web user, select it from the **web users** list, as shown below:

TIMPLUS

[Reports](#)
[Directory](#)
[Call view](#)
[Live stats](#)
[Tariff editor](#)
[Settings](#)
[Alerts](#)

Web users

Email

Web server

Alerts

License

Questions

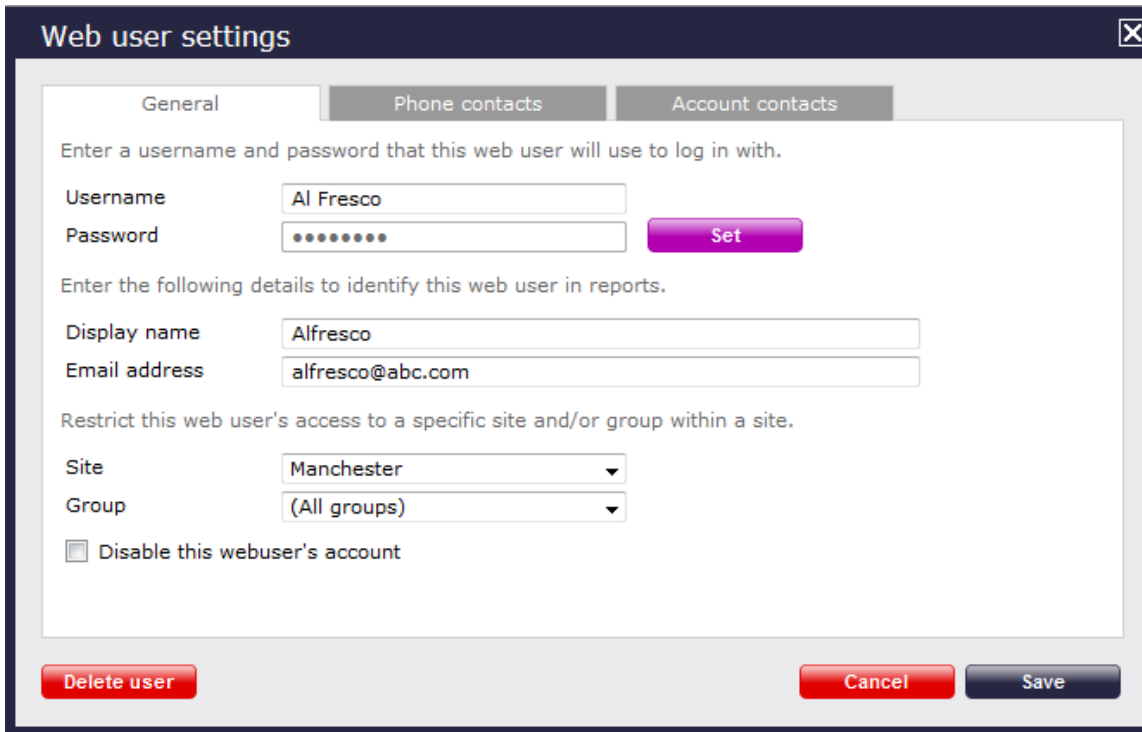
Voice recording

### Web users New

Add or edit web users and grant them access to this web interface.

Name	Login ID	Email address
Alfresco	Al Fresco	alfresco@abc.com
Joe Bloggs	timplus	jbloggs@tri-line.com
Sarah	Sarah Smith	
callcentre	callcenter	

A new window will open, where you can configure the properties of the selected web user.



**Web user settings**

General Phone contacts Account contacts

Enter a username and password that this web user will use to log in with.

Username

Password

Enter the following details to identify this web user in reports.

Display name

Email address

Restrict this web user's access to a specific site and/or group within a site.

Site

Group

Disable this webuser's account

Each tab in this window is described below:

## General properties

The **General** tab allows you to configure the login credentials of the currently-selected web user and apply any directory restrictions, if required.

### Configuring a web user's credentials

### Web user settings ✕

General
Phone contacts
Account contacts

Enter a username and password that this web user will use to log in with.

Username

Password  Set

Enter the following details to identify this web user in reports.

Display name

Email address

Restrict this web user's access to a specific site and/or group within a site.

Site  ▼

Group  ▼

Disable this webuser's account

Delete user
Cancel
Save

Field	Description
<b>Username</b>	The username the web user will use to log in with
<b>Password</b>	The password the web user will use to log in with
<b>Display name</b>	The name you want the web user to be identified in the reports
<b>Email address</b>	The email address of the web user; this can also be used when scheduling reports

#### Configuring a web user's Directory access

TIM Plus allows you to restrict a web user's access to specific parts of the Directory. To apply any restrictions, select from the drop-down list the site and group you want to allow the web user to access. If you select **All sites**, the web user will be able to access all parts of the Directory.



### Web user settings ✕

General
Phone contacts
Account contacts

Enter a username and password that this web user will use to log in with.

Username

Password  Set

Enter the following details to identify this web user in reports.

Display name

Email address

Restrict this web user's access to a specific site and/or group within a site.

Site

Group

Disable this webuser's account

Delete user
Cancel
Save

Field	Description
<b>Site</b>	The site to which the web user will be allowed access. If you don't want to restrict the current web user to a specific site, select <a href="#">All sites</a> .
<b>Group</b>	The user group - within the previously selected site - to which the web user will be allowed access. If you don't want to restrict the current web user to a specific group, select <a href="#">All groups</a> .

## Phone contacts

The Phone contacts tab allows you to add a list of contacts to each individual web user, replacing phone numbers with friendly names wherever they feature throughout the system, e.g. in reports, display boards, etc.

### Adding phone contacts manually

To manually add a phone contact to the currently-selected web user, enter the telephone number and the name you want to associate with it, then click on the Add button, as shown below:

**Web user settings** [X]

General | Phone contacts | Account contacts

Replace phone numbers with friendly names wherever they feature throughout the system.  
(For example, in reports, display boards, etc.)

Number  Name  **Add** **Search**

Page 1 of 1

Phone number ▲	Name
No contacts	

**Import** **Cancel** **Save**

To add a range of DDI numbers, enter the first part of the phone number only, and use \*\* as a wild character, e.g. enter 020726526\*\* for Tri-line's DDIs.

#### Importing phone contacts

To automatically import phone contacts in the system from an existing list, arrange your data in CSV format comprising of two columns separated by a common delimiter, such as comma, dash, semicolon, tab or space.

Click on the **Import** button and paste the CSV list in the box provided, then click on the **Next** button.

**Import contacts** [X]

Paste your CSV data into the box below:

```
02072652626, Tri-line
07737983718, Joe Bloggs Mobile
02076441422, Joe Bloggs
```

**Close** **Back** **Next**

Choose from the drop-down list the delimiter you want to use to separate the two columns, and whether you want to use the first row as a header:

### Import contacts

Select the delimiter and whether or not the first row is a header.

Choose a delimiter   The first row is a header

Column 1	Column 2
02072652626	Tri-line
07737983718	Joe Bloggs Mobile
02076441422	Joe Bloggs

Close Back Next

Select the column you want to use for the name and phone number information, then click on the **Next** button, as shown below:

### Import contacts

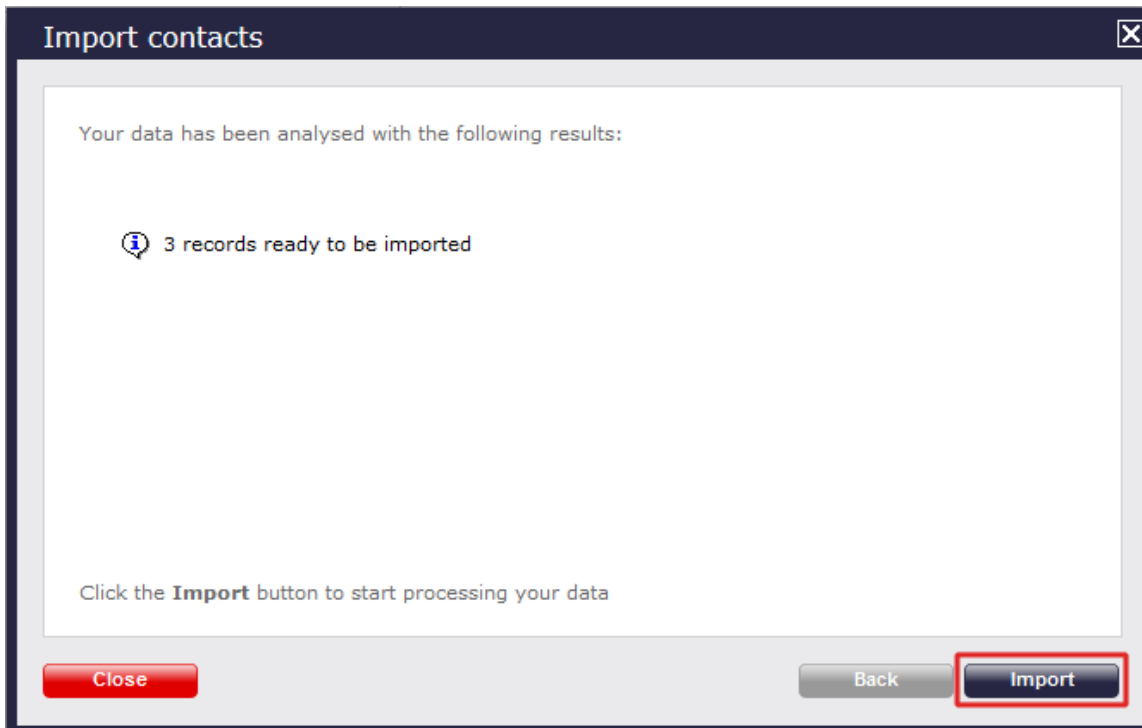
Select the fields that contain the name and phone number for each contact.

Phone number  Name

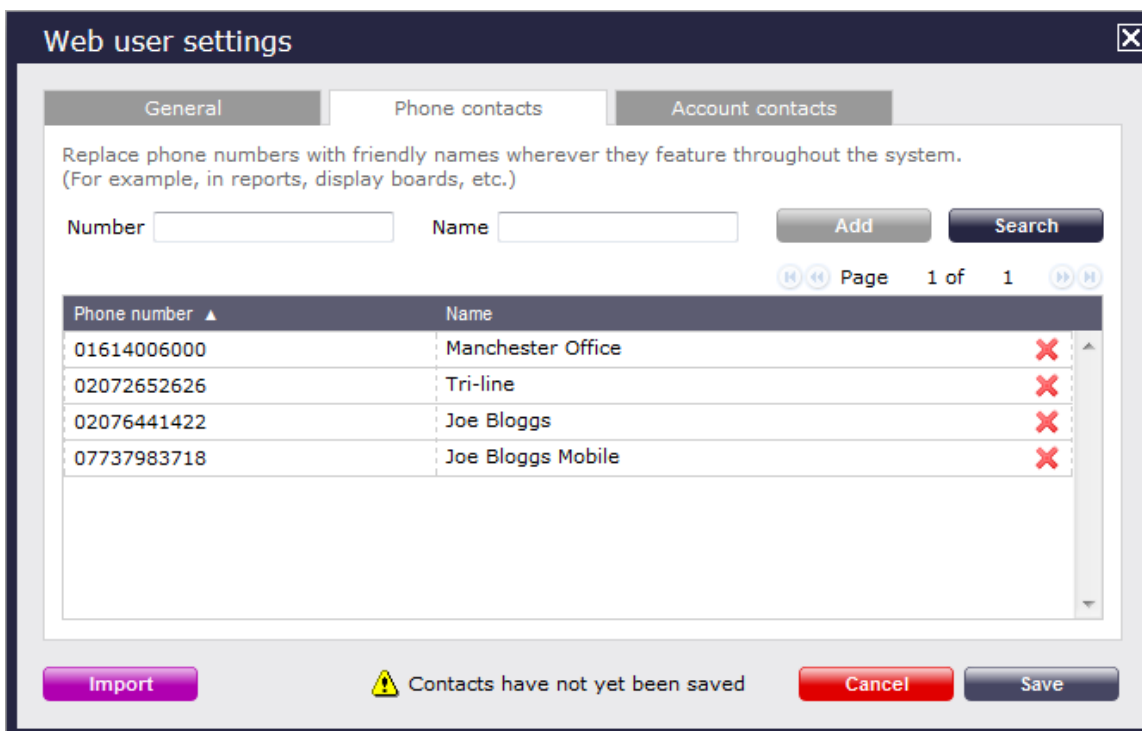
Phone number	Name
02072652626	Tri-line
07737983718	Joe Bloggs Mobile
02076441422	Joe Bloggs

Close Back Next

The system will analyse your data and will return the number of phone contacts ready to be imported:



Click on the **Import** button to automatically import the contacts in the system, as shown below:



#### Deleting a phone contact

If you no longer want a name associated with a particular phone number, click on the **✗** icon alongside it to delete it, as shown below:

### Web user settings


General Phone contacts Account contacts

Replace phone numbers with friendly names wherever they feature throughout the system.  
(For example, in reports, display boards, etc.)

Number  Name

Page 1 of 1

Phone number ▲	Name	
01614006000	Manchester Office	✗
02072652626	Tri-line	✗
02076441422	Joe Bloggs	✗
07737983718	Joe Bloggs Mobile	✗

 Contacts have not yet been saved

#### Searching for a phone contact

To search for a number in your existing list of contacts, click on the  button, as shown below:

### Web user settings

General Phone contacts Account contacts

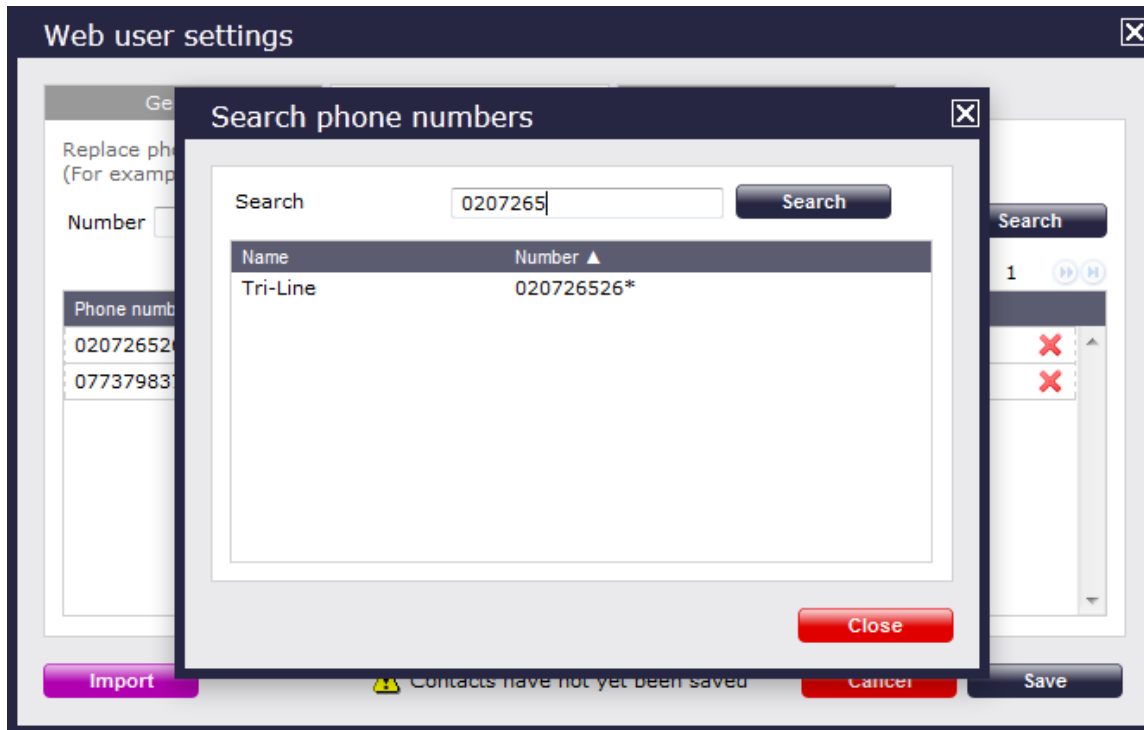
Replace phone numbers with friendly names wherever they feature throughout the system.  
(For example, in reports, display boards, etc.)

Number  Name

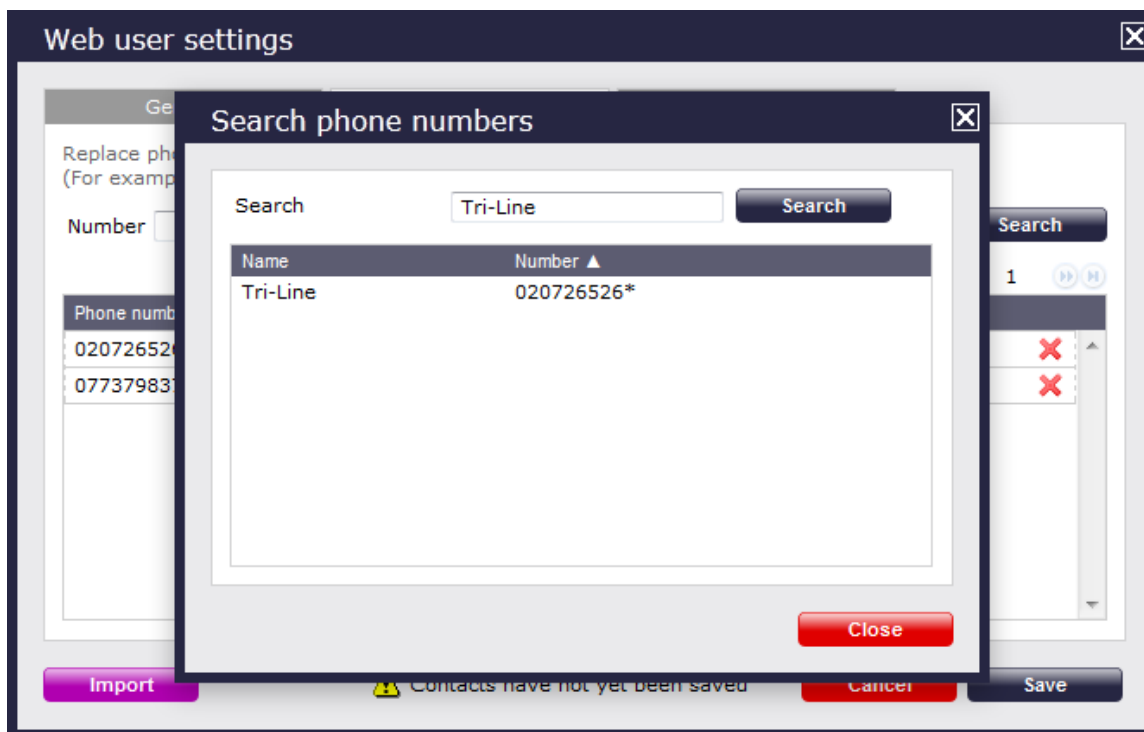
Page 1 of 1

Phone number ▲	Name	
020726526*	Tri-Line	✗
07737983718	Joe Bloggs Mobile	✗

A new window will open, where you can enter the phone number you are looking for, as shown below:



Follow the same procedure to search for a location name:



## Account contacts

The **Account contacts** tab allows you to add a list of contacts to each individual web user, replacing account codes with friendly names wherever they feature throughout the system, e.g. in reports, display boards, etc.

### Adding account code contacts manually

To manually add an account code contact, enter the account code number and the name you want to associate with it, then click

on the **Add** button, as shown below:

**Web user settings**

General | Phone contacts | **Account contacts**

Replace account codes with friendly names wherever they feature throughout the system.  
(For example, in reports, display boards, etc.)

Number  Name  **Add** **Search**

Page 1 of 1

Account code ▲	Name
No contacts	

**Import** **Cancel** **Save**

#### Importing account code contacts

To automatically import account code contacts in the system from an existing list, arrange your data in CSV format comprising of two columns separated by a common delimiter, such as comma, dash, semicolon, tab or space.

Click on the **Import** button and paste the CSV list in the box provided, then click on the **Next** button:

**Import contacts**

Paste your CSV data into the box below:

```
52001, Tom
52002, John
52003, Jane
```

**Close** **Back** **Next**

Choose from the drop-down list the delimiter you want to use to separate the two columns, and whether you want to use the first row as a header:

### Import contacts ✕

Select the delimiter and whether or not the first row is a header.

Choose a delimiter , ▼  The first row is a header

Column 1	Column 2
52001	Tom
52002	John
52003	Jane

Close
Next

Select the column you want to use for the name and account code information, then click on the Next button, as shown below:

### Import contacts ✕

Select the fields that contain the name and account code for each contact.

Account code Column 1 ▼

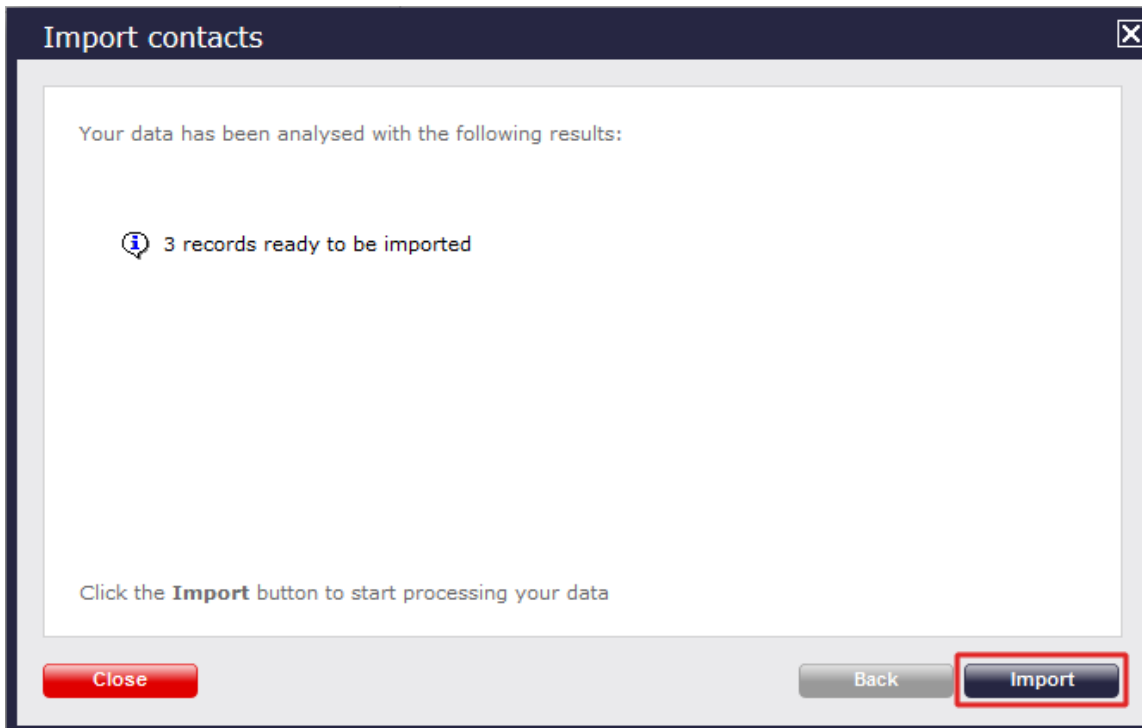
Name Column 2 ▼

Account code	Name
52001	Tom
52002	John
52003	Jane

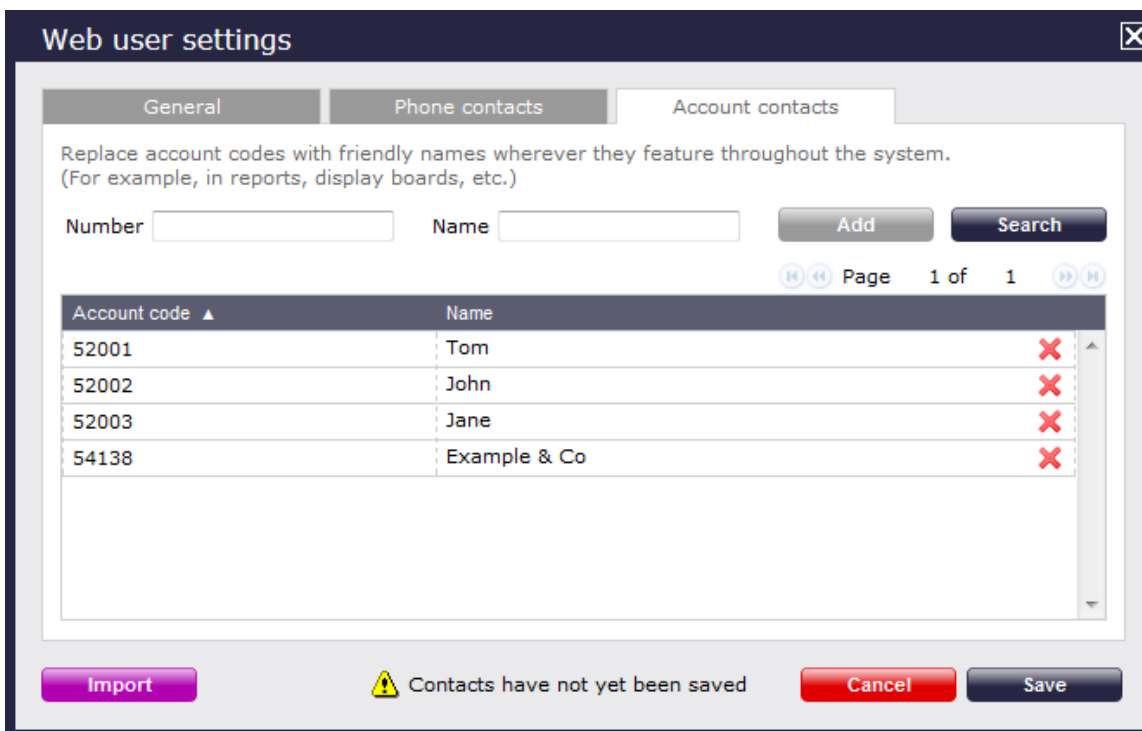
Close
Next

The system will analyse your data and will return the number of contacts ready to be imported:



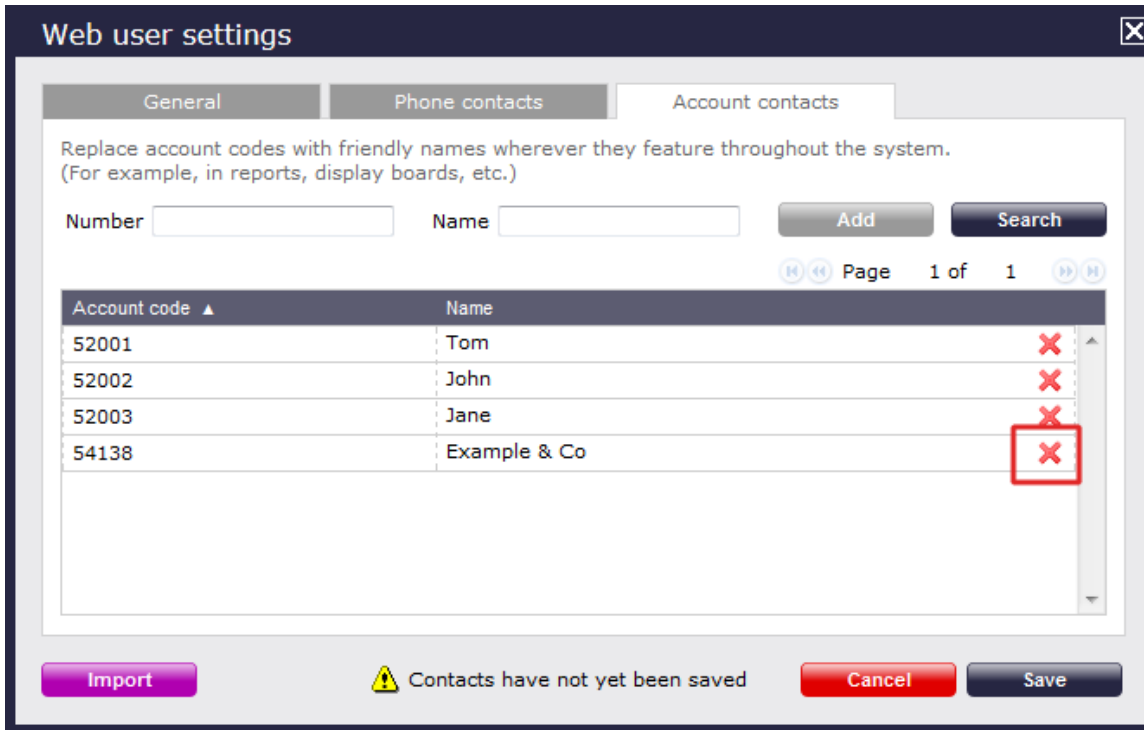


Click on the **Import** button to automatically import the contacts in the system.



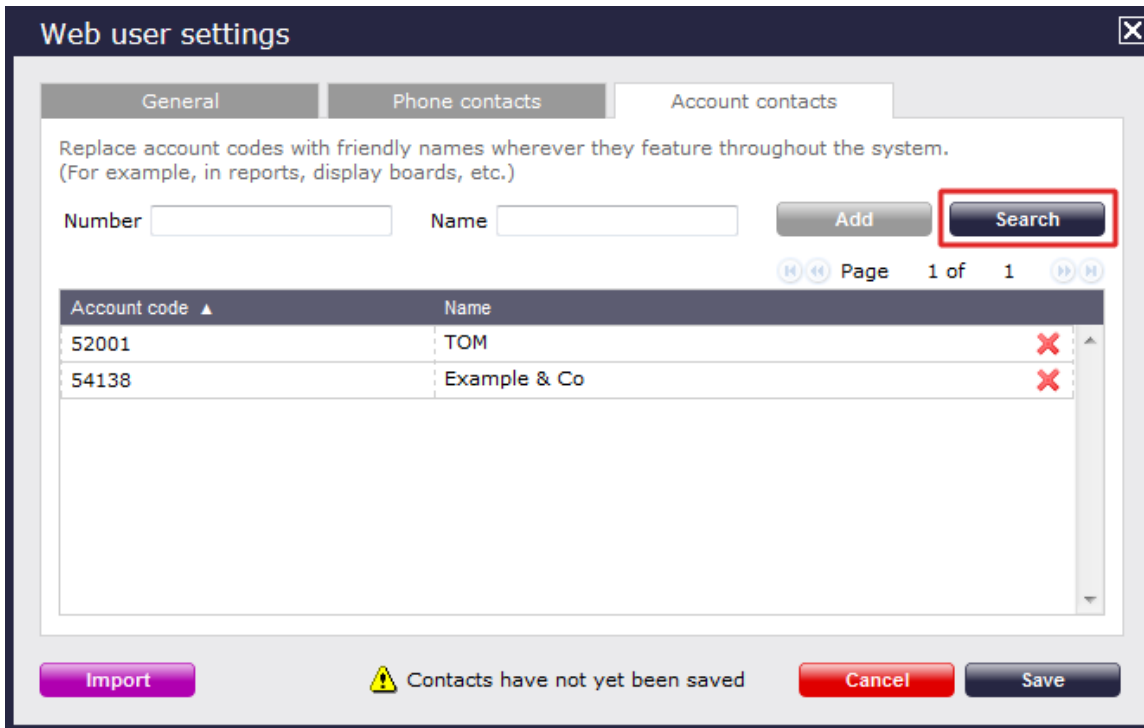
#### Deleting an account code contact

If you no longer want a name associated with a particular account code number, click on the **X** icon alongside it to delete it, as shown below:

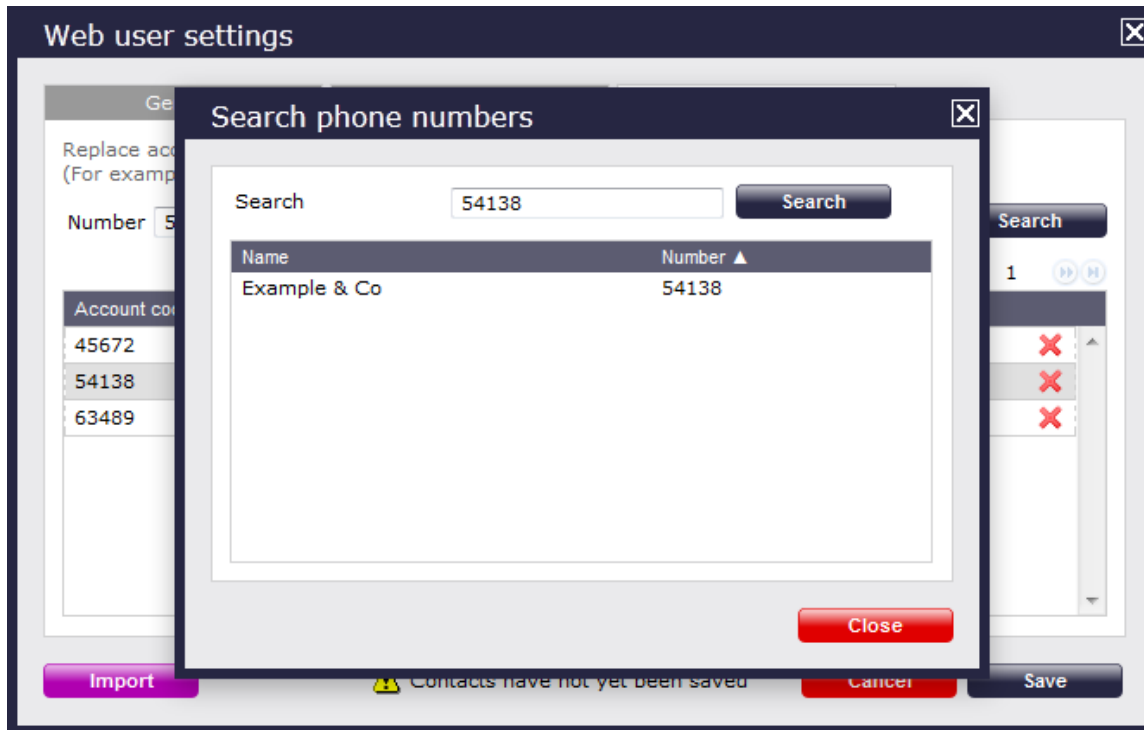


#### Searching for an account code

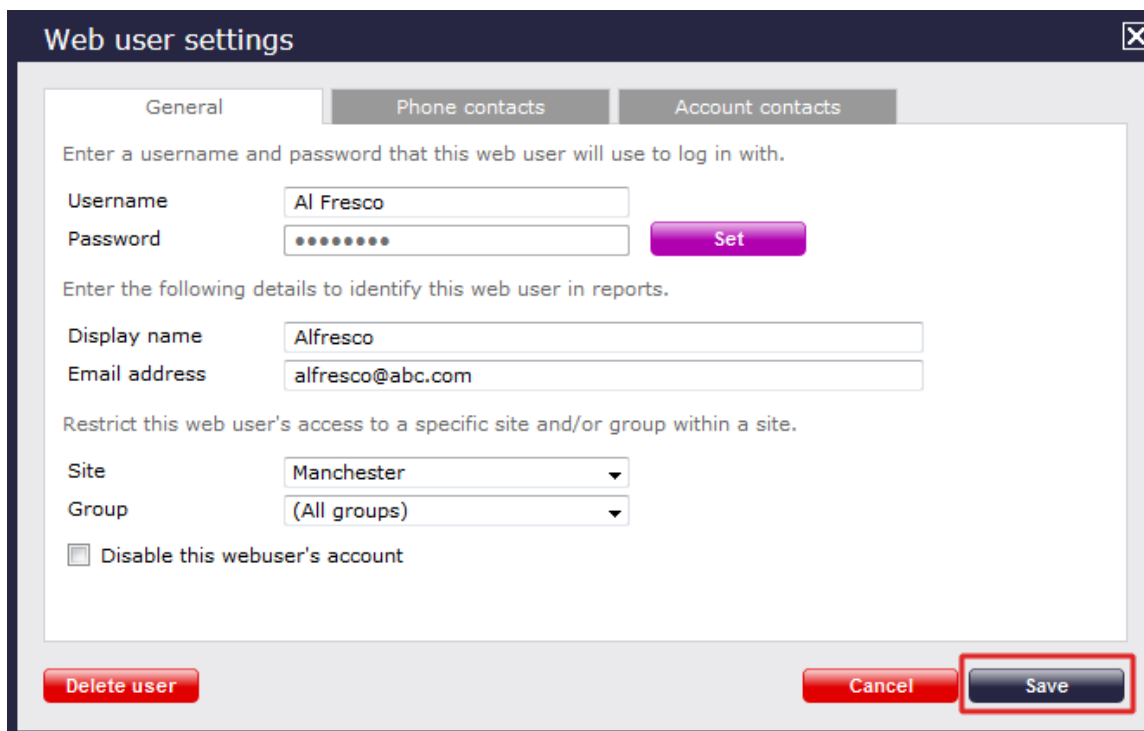
To search for an account number in your existing list of contacts, click on the **Search** button, as shown below:



A new window will open, where you can enter the account code you are looking for, as shown below:



When you have configured the properties of your web user, click on the **Save** button to apply the changes, as shown below:



## Email

This section allows you to configure the details of your mail server in order to enable TIM Plus to send out scheduled reports, call alarms, missed call notifications or system alerts.

TIMPLUS

[Reports](#)
[Directory](#)
[Call view](#)
[Live stats](#)
[Tariff editor](#)
[Settings](#)
[Alerts](#)

Web users

**Email**

Web server

Alerts

License

Questions

Voice recording

### Email

Check
Save

Enter your mail server properties.

Server host & port	<input type="text" value="mail.tri-line.net"/>	<input type="text" value="25"/>		
Greeting name	<input type="text"/>		Type	<input type="text" value="None"/>
"From" address	<input type="text" value="paris1@tri-line.com"/>		Username	<input type="text"/>
			Password	<input type="text"/>

Enter an email address to which a test email can be sent, in order to verify your settings.

Test address

The table below contains a description of each field in this section.

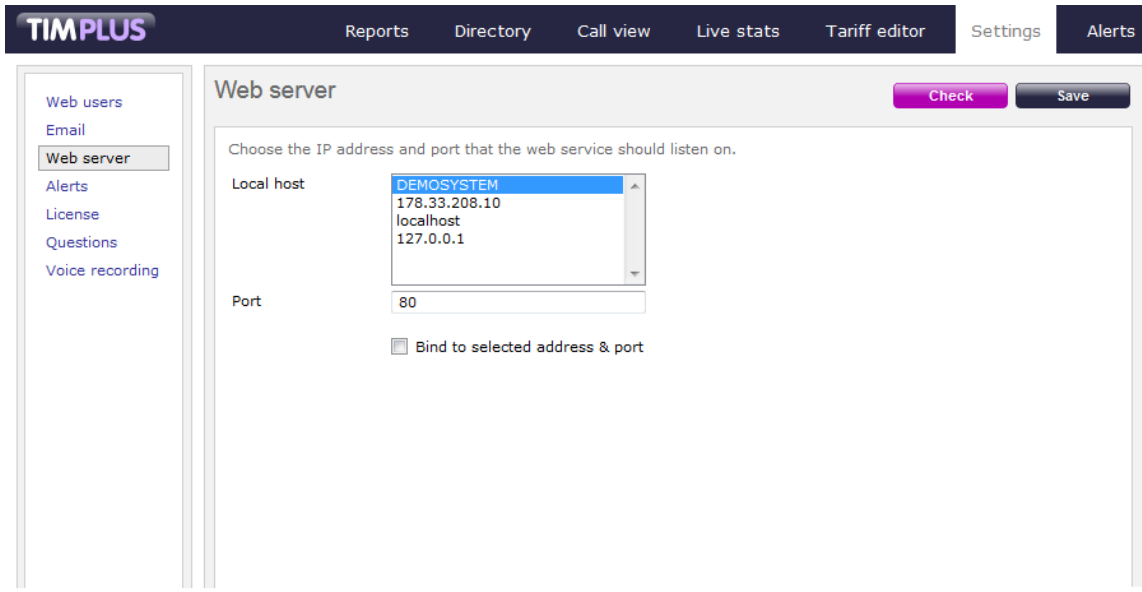
Field name	Description
<b>Server host &amp; port</b>	The IP address or host name of your company's mail server and the port number, which by default is 25.
<b>Greeting name</b>	The <b>Greeting name</b> required by your mail server to identify the computer that is sending the email. In most cases, this is the network name of the server running TIM Plus.
<b>"From" address</b>	The email address that will appear in the <b>From</b> section of any emails sent from TIM Plus.
<b>Test address</b>	The email address you want to use to send a test email, in order to verify your email settings.
<b>Type</b>	The authentication method used by your mail server. Choose <b>None</b> if the authentication is automatic or not used.
<b>Username</b>	Enter the username of the SMTP authentication.
<b>Password</b>	Enter the password of the SMTP authentication.



If you don't know any of the information required in this section, consult your system maintainer.

## Web server

TIM Plus has its own built-in web server and it can be accessed from any PC on your network without the need of any additional software. To configure, choose the IP address and port number that you want the web service to listen on.



It is preferable that you use the hostname of the PC running TIM Plus rather than the IP address, especially on networks that use an automatic IP addressing scheme, such as DHCP

If the PC running TIM Plus has more than one IP address, you can choose the one you want TIM Plus to use and bind the web service to listen on that particular address:



To verify your settings, click on the **Check** button at the top-right corner of the screen, as shown below:

The screenshot shows the 'Web server' configuration page in the TIMPLUS interface. The page title is 'Web server' and it includes a 'Check' button (highlighted with a red box) and a 'Save' button. The main content area prompts the user to 'Choose the IP address and port that the web service should listen on.' There are two input fields: 'Local host' and 'Port'. The 'Local host' dropdown menu is open, showing options: DEMOSYSTEM, 178.33.208.10 (highlighted in blue), localhost, and 127.0.0.1. The 'Port' field contains the value '81'. A checkbox labeled 'Bind to selected address & port' is checked.

If your settings are fine, click on the **Save** button to apply the changes:

This screenshot shows the same 'Web server' configuration page after the settings have been saved. A green checkmark and the message 'Your new settings seem fine' are displayed at the top of the main content area. The 'Check' button is now greyed out, and the 'Save' button is highlighted with a red box. The configuration details (Local host dropdown, Port field, and checked checkbox) remain the same as in the previous screenshot.

## Alerts

TIM Plus can be configured to raise an alert when particular events occur whilst the system is running. The alerts can be saved to a log file on disk or sent as an email notification. The table below describes the type of alerts emitted from TIM Plus:

Alert	Description
<b>Critical</b>	A critical alert notifies you of any events that are detrimental to the system, e.g. database failure
<b>Warning</b>	A warning alert notifies you of any non-critical events that have occurred on the system, e.g. you have exceeded your license limit
<b>Information</b>	An information alert notifies you of any system events that have occurred on the system, e.g. if the application service has been restarted
<b>Voice audit</b>	An alert that notifies you of progress during call recording operations
<b>Audit</b>	Provides very detailed information about ongoing system events, primarily used for fault-finding

To send an alert as a notification email, enter the email address in the text box alongside each type of alert, as shown below:



To send alerts to multiple email addresses, separate each entry with a semicolon.

By default, the alerts are also outputted to a log file, using the following dynamic variables to define the path of the folder where the files will be stored: `{app}\logs\{year}\{year}-{month}-{day}`. The dynamic variables used to define the path are explained in the table below:

Item	Description
<code>app</code>	The full installation path of TIM Plus
<code>year</code>	The year the data was captured in <code>yyyy</code> format
<code>month</code>	The month the data was captured in <code>mm</code> format
<code>day</code>	The day of the month when data was captured in <code>dd</code> format

To choose a different location to store the logs files, overtype the existing entry.

When you have finished configuring the settings, click on the **Save** button to apply the changes, as shown below:

## License

This section allows you to view and update your software license. To retrieve your license automatically from our servers, click on the **Get license** button, as shown below:



The screenshot shows the TIMPLUS interface with a navigation bar at the top containing 'Reports', 'Directory', 'Call view', 'Live stats', 'Tariff editor', 'Settings', and 'Alerts'. On the left, a sidebar lists 'Web users', 'Email', 'Web server', 'Alerts', 'License' (highlighted), 'Questions', and 'Voice recording'. The main content area is titled 'License' and contains the following text:

Here are your license details:-

<b>Company:</b>	Your Company PLC
<b>Capacity:</b>	400 users
<b>Expiry:</b>	14 September 2012
<b>Code:</b>	0

You can check for a new license online right now. Ensure the computer running TIM Plus is connected to the internet, then press the **Get license** button.

A 'Get license' button is visible at the bottom of the details section.



Internet access is required to be able to connect to our servers and retrieve the license automatically.

If the license updates successfully, the following message will be displayed:

The screenshot shows the TIMPLUS interface with a navigation bar at the top containing 'Reports', 'Directory', 'Call view', 'Live stats', 'Tariff editor', 'Settings', and 'Alerts'. On the left, a sidebar lists 'Web users', 'Email', 'Web server', 'Alerts', 'License' (highlighted), 'Questions', and 'Voice recording'. The main content area is titled 'License' and contains the following text:

✓ License was updated successfully.

Here are your license details:-

<b>Company:</b>	Your Company PLC
<b>Capacity:</b>	400 users
<b>Expiry:</b>	21 March 2014
<b>Code:</b>	0

You can check for a new license online right now. Ensure the computer running TIM Plus is connected to the internet, then press the **Get license** button.

A 'Get license' button is visible at the bottom of the details section.

### Obtaining a license manually

If you cannot update your software license automatically, you can apply this manually by following the steps below:

1. Click on the **Manual entry** button from the **License** window. The following screen will appear:

Copy the **product key** from the box below and send it to your vendor.

```


--- BEGIN PRODUCT KEY -----
UAAAAHicAVAAr//Nbr+xuGRkNYsVPRxM1avDr3UEToj9j3DJ
O36fheDXOz5PAFW9GwPpDffai6UUh1tu06+HqtIXrPK6PaAV
yy/arfUj1Avz8EOx5xNkp2qOLVQPKL0=
--- END PRODUCT KEY -----

```

Copy the **license certificate** given to you by your vendor into the box below.

2. Log in to the Gateway using your username and password.
3. In the **Products** panel, click on the TIM Plus product.
4. In the **Software license** panel, click on the **View license certificate** link, as shown below:

**Software license**
[View license certificate](#)



**This product is licensed**

The license for this product is valid until **20 September 2013**.

5. Copy the license certificate and paste it in the TIM Plus license box.

## Questions

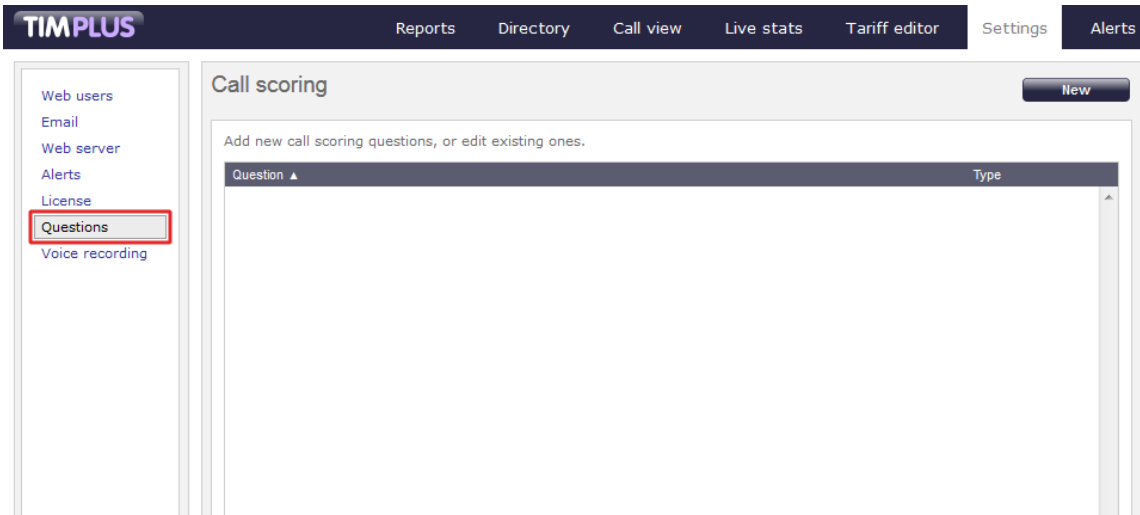
**Questions**

- Overview
- Adding a question
- Editing a question
- Using the score cards

## Overview

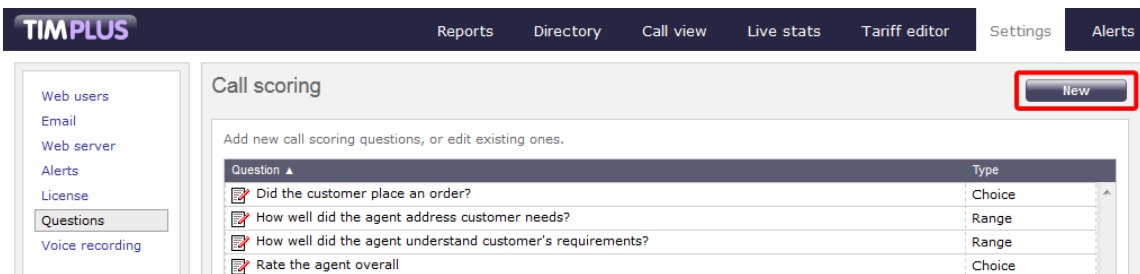
This section allows you to create your own score cards by defining a list of questions that must be completed for each call that you score, in order to rate calls for evaluation purposes.

To access the **Questions** section, click on the **Questions** button on the left-hand side menu. The following screen will be displayed:

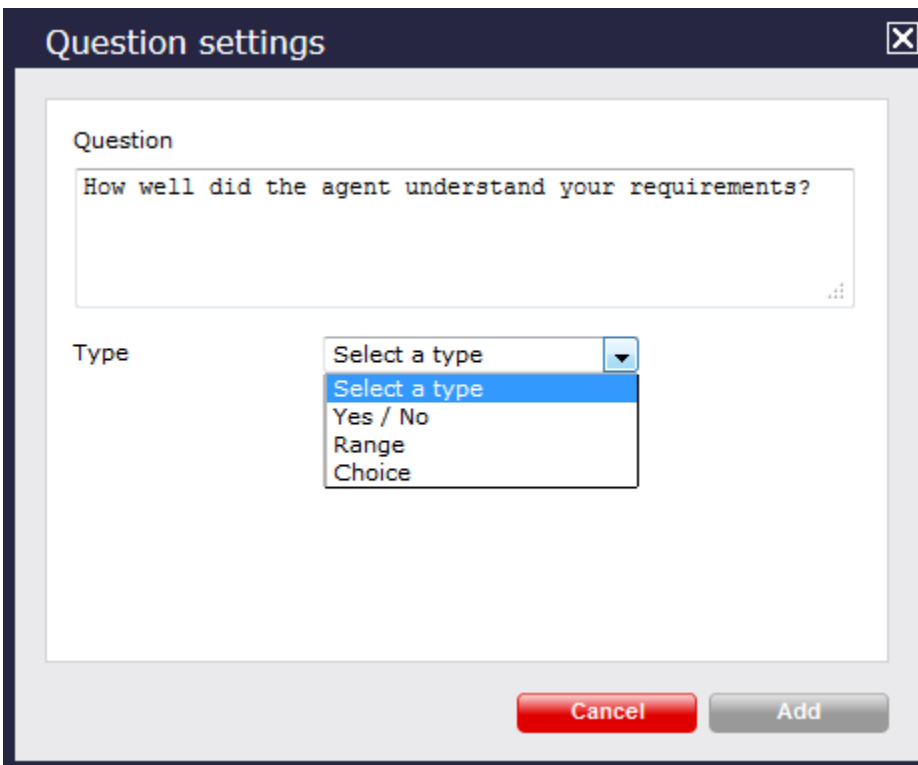


## Adding a question

To add a question, click on the **New** button at the top-right of the screen, as shown below:



The **Question settings** window will appear, where you can enter your question and define its answer type:



Each answer type is explained in the table below:

Answer type	Description
<b>Yes/No answer</b>	<p>Calls will be rated based on a yes/no answer, e.g. Was the call answered quickly?</p> <div style="border: 1px solid #ccc; padding: 10px;"> <p>Question</p> <div style="border: 1px solid #ccc; padding: 5px; min-height: 40px;">           Was the call answered quickly?         </div> <p>Type <span style="border: 1px solid #ccc; padding: 2px 10px;">Yes / No</span></p> </div>
<b>Range answers</b>	<p>Calls will be rated based on a defined range of values, e.g. On a scale of 1 to 10, how well did the agent understand the caller's requirements?</p> <div style="border: 1px solid #ccc; padding: 10px;"> <p>Question</p> <div style="border: 1px solid #ccc; padding: 5px; min-height: 40px;">           How well did the agent understand your requirements?         </div> <p>Type <span style="border: 1px solid #ccc; padding: 2px 10px;">Range</span></p> <p>Minimum value <span style="border: 1px solid #ccc; padding: 2px 10px;">1</span></p> <p>Maximum value <span style="border: 1px solid #ccc; padding: 2px 10px;">10</span></p> </div>

**Multiple choice answers**

Calls will be rated according to a fixed set of pre-defined answers, e.g. excellent, good, average, below average, bad.

Question

Rate the agent overall

Type: Choice

Choice text: [ ] Add

- Excellent [X]
- Very good [X]
- Good [X]
- Average [X]
- Below average [X]

To remove an answer from the list, click on the icon.

**Editing a question**

To edit a question, click on it to select it from the list of available questions, as shown below:

TIMPLUS

Reports Directory Call view Live stats Tariff editor Settings Alerts

Web users  
Email  
Web server  
Alerts  
License  
Questions  
Voice recording

Call scoring New

Add new call scoring questions, or edit existing ones.

Question	Type
<input checked="" type="checkbox"/> Did the customer place an order?	Choice
<input checked="" type="checkbox"/> How well did the agent address customer needs?	Range
<input checked="" type="checkbox"/> How well did the agent understand customer's requirements?	Range
<input checked="" type="checkbox"/> Rate the agent overall	Choice
<input checked="" type="checkbox"/> Was the agent friendly and helpful?	Yes / No
<input checked="" type="checkbox"/> Was the call answered quickly?	Yes / No

The **Question settings** window will open, where you can edit the question or modify its answer type:

**Question settings** [X]

Question  
Did the customer place an order?

Type: Choice

Choice text: [Empty] [Add]

- Placed order [X]
- Booked demonstration [X]
- Requested more information [X]
- Not interested [X]

[Delete] [Cancel] [Update]

To delete a question from the list, click on the **Delete** button at the bottom-left corner of the window, as shown below:

**Question settings** [X]

Question  
How well did the agent address customer needs?

Type: Range

Minimum value: 0


Maximum value: 10

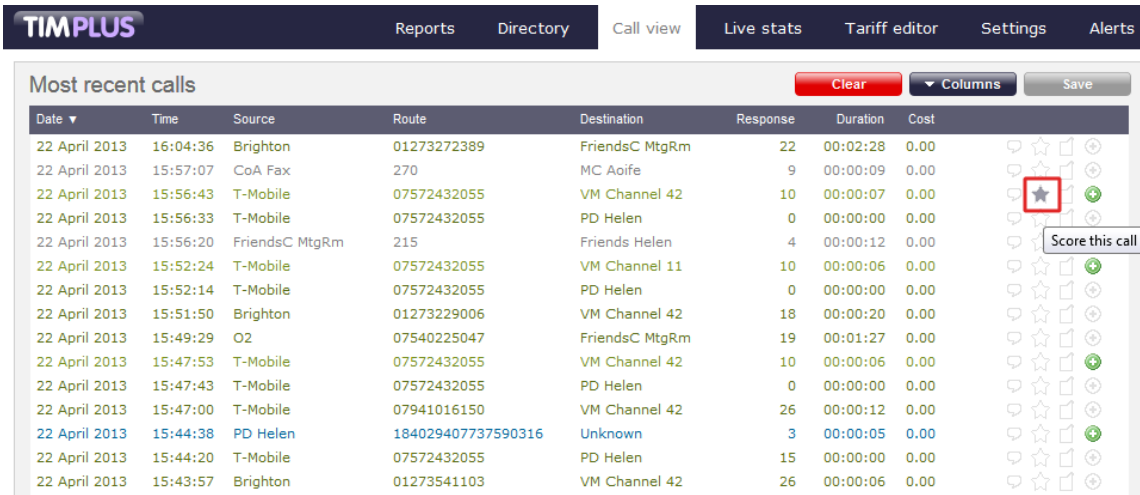
[Delete] [Cancel] [Update]

## Using the score cards

Once you have created your score cards, you can use them to score any call logged by the system. You can then run reports on these scored calls, in order to assess the performance of your staff.

## Scoring a call

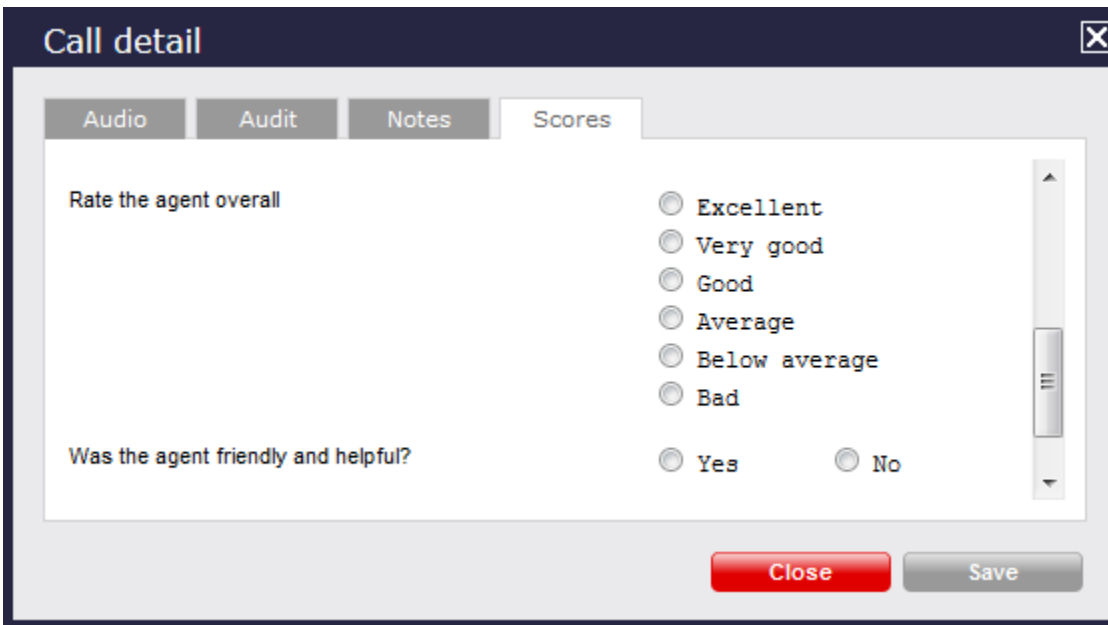
To score a call from the Call view screen, click on the  icon, as shown below:




The screenshot shows the TIMPLUS interface with a navigation bar containing 'Reports', 'Directory', 'Call view', 'Live stats', 'Tariff editor', 'Settings', and 'Alerts'. Below the navigation bar is a section titled 'Most recent calls' with a table of call records. The table has columns for Date, Time, Source, Route, Destination, Response, Duration, and Cost. The third row of the table is highlighted, and a star icon in the action column is enclosed in a red box. A tooltip 'Score this call' is positioned over the star icon.

Date	Time	Source	Route	Destination	Response	Duration	Cost
22 April 2013	16:04:36	Brighton	01273272389	FriendsC MtgRm	22	00:02:28	0.00
22 April 2013	15:57:07	CoA Fax	270	MC Aoife	9	00:00:09	0.00
22 April 2013	15:56:43	T-Mobile	07572432055	VM Channel 42	10	00:00:07	0.00
22 April 2013	15:56:33	T-Mobile	07572432055	PD Helen	0	00:00:00	0.00
22 April 2013	15:56:20	FriendsC MtgRm	215	Friends Helen	4	00:00:12	0.00
22 April 2013	15:52:24	T-Mobile	07572432055	VM Channel 11	10	00:00:06	0.00
22 April 2013	15:52:14	T-Mobile	07572432055	PD Helen	0	00:00:00	0.00
22 April 2013	15:51:50	Brighton	01273229006	VM Channel 42	18	00:00:20	0.00
22 April 2013	15:49:29	O2	07540225047	FriendsC MtgRm	19	00:01:27	0.00
22 April 2013	15:47:53	T-Mobile	07572432055	VM Channel 42	10	00:00:06	0.00
22 April 2013	15:47:43	T-Mobile	07572432055	PD Helen	0	00:00:00	0.00
22 April 2013	15:47:00	T-Mobile	07941016150	VM Channel 42	26	00:00:12	0.00
22 April 2013	15:44:38	PD Helen	184029407737590316	Unknown	3	00:00:05	0.00
22 April 2013	15:44:20	T-Mobile	07572432055	PD Helen	15	00:00:00	0.00
22 April 2013	15:43:57	Brighton	01273541103	VM Channel 42	26	00:00:06	0.00

The Call detail window will open, where you can score the call using the previously-created score cards, as shown below:



The screenshot shows the 'Call detail' window with a close button in the top right corner. It has four tabs: 'Audio', 'Audit', 'Notes', and 'Scores'. The 'Scores' tab is active and contains two sections. The first section is 'Rate the agent overall' with six radio button options: 'Excellent', 'Very good', 'Good', 'Average', 'Below average', and 'Bad'. The second section is 'Was the agent friendly and helpful?' with two radio button options: 'Yes' and 'No'. At the bottom of the window are 'Close' and 'Save' buttons.

To score a call from an itemised report, click on it to display the Call detail window, then select the  tab, as shown below:

The screenshot shows a web interface titled "My custom report" with a timestamp of 2013-06-04 18:19:02. The breadcrumb path is "TIM Plus \ London \". There are filter tabs for "All", "Outbound", "Answered", "Missed", and "Internal". A "Show all" button and a page indicator "1 of 8" are visible. The main table has columns: "Date & Time", "Source", "CLI", "Route", "Destination", "Response", "Duration", and "Cost". A "Call detail" modal window is open, showing tabs for "Audio", "Audit", "Notes", and "Scores" (which is highlighted with a red box). The "Scores" tab contains a "Direct link" and a "Close" button.

### Reporting on scored calls

Use the Call scoring report to obtain a comprehensive analysis of answers to previously-scored calls. All question types are summarised and grouped into their respective category.

#### TIM Plus

<b>Did the customer place an order?</b> (3 scores)		Placed order	33%									
		Booked demonstration	33%									
		Requested more information	33%									
		Not interested	-									
<b>How well did the agent address customer needs?</b> (3 scores)	<table border="1"> <thead> <tr> <th>Min</th> <th>Average</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>5</td> <td>8.33</td> <td>10</td> </tr> <tr> <td colspan="3">Based on 3 scores</td> </tr> </tbody> </table>	Min	Average	Max	5	8.33	10	Based on 3 scores				
Min	Average	Max										
5	8.33	10										
Based on 3 scores												
<b>How well did the agent understand customer's requirements?</b> (3 scores)	<table border="1"> <thead> <tr> <th>Min</th> <th>Average</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>8</td> <td>10</td> </tr> <tr> <td colspan="3">Based on 3 scores</td> </tr> </tbody> </table>	Min	Average	Max	4	8	10	Based on 3 scores				
Min	Average	Max										
4	8	10										
Based on 3 scores												
<b>Rate the agent overall</b> (3 scores)		Excellent	100%									
		Very good	-									
		Good	-									
		Average	-									
		Below average	-									
		Bad	-									
<b>Was the agent friendly and helpful?</b> (3 scores)		Yes	67%									
		No	33%									
<b>Was the call answered quickly?</b> (3 scores)		Yes	100%									
		No	-									
<b>6 questions</b>												

### Voice recording



### Voice recording

- How it works
- Adding recording equipment
- Configuring your recording device
- Voice recording - video overview

## How it works

By adding one or more of our supported voice recording options, it is possible to store the audio recording of every telephone call that TIM Plus processes.

Which option you choose depends on what type of telephone calls you want to record. In most cases, the recording equipment is placed between your telephone system and your telephone lines (channels) and any phone calls that are made over those channels are intercepted, recorded, then sent to TIM Plus to be attached to the logged call.

To record calls over PSTN channels such as ISDN30 (PRI/E1/T1/J1), ISDN2 (BRI) or analogue POT lines, a piece of physical hardware - the Magic Box - is used to physically connect into your lines.

For VoIP (SIP) channels, a PC with a standard network interface card (NIC) can be used to capture the voice packets from strategic points in your voice network. If many simultaneous VoIP calls are expected, a dedicated computer with multiple NICs becomes necessary.

Any number of recording devices can be configured to provide their audio recordings to TIM Plus, and a hybrid network of both types of interface can be used in a single TIM Plus deployment.

## Adding recording equipment

After installing either a Magic Box or Echo into your voice network, you need to configure its presence in TIM Plus.

Ensuring you are logged in to TIM Plus as an administrator, click on the **Settings** tab and select the **Voice recording** option from the left-hand side menu. To add a new voice recording option, click on the **New** tab, as shown below:

The screenshot shows the TIM Plus web interface. At the top, there is a navigation bar with tabs: Reports, Directory, Call view, Live stats, Tariff editor, Settings, and Alerts. The 'Settings' tab is active. On the left, a sidebar menu contains various options: Web users, Email, Web server, Alerts, License, Questions, and Voice recording. The 'Voice recording' option is highlighted with a red box. The main content area is titled 'Voice recording' and contains a 'New' button, also highlighted with a red box. Below the button, there is a table with the following structure:

Name ▲	ID	Type	IP
Add or edit recording devices to attach audio to your telephone calls.			

A new window will appear, allowing you to configure the settings of your call recording device.

## Configuring your recording device

To configure your recording device, enter the following settings in the **Recording device settings** window:

### Recording device settings ✕

General
Channel map

Device name

Choose the type of recording device:

Type Magic Box - PRI ▼

Enter specific settings for the selected device:

ID 0

Host & Port 127.0.0.1 8088

Time offset 60 seconds

Cancel
Add

Setting	Description
<b>Device name</b>	The name of your recording device
<b>Type</b>	The type of telephone lines you are using: PRI, BRI, Analogue, VOIP
<b>ID</b>	The unique identifier of each call recording device
<b>Host &amp; Port</b>	The IP address of the recording device, or computer to which the device is attached
<b>Time offset</b>	The time interval around which TIM Plus will search for calls when matching audio files

## Voice recording- overview video

## Call obfuscation (PCI-DSS)

TIM Plus offers the ability to obfuscate (mask out) one or more sections of the audio of a telephone call with an audible tone, preventing the listener from hearing the original speech.

This is normally required for compliance in certain industries where regulations dictate that certain spoken information be masked out, e.g. the Payment Card Industry - Data Security Standard (PCI-DSS).

## Programmatic obfuscation

Throughout this guide, we will adopt the **PCI-DSS** example above, where telephone calls that contain spoken credit card information need to be masked out by an audible tone, but only during those parts of the call when the card details are being spoken, leaving intact the rest of the call audio.

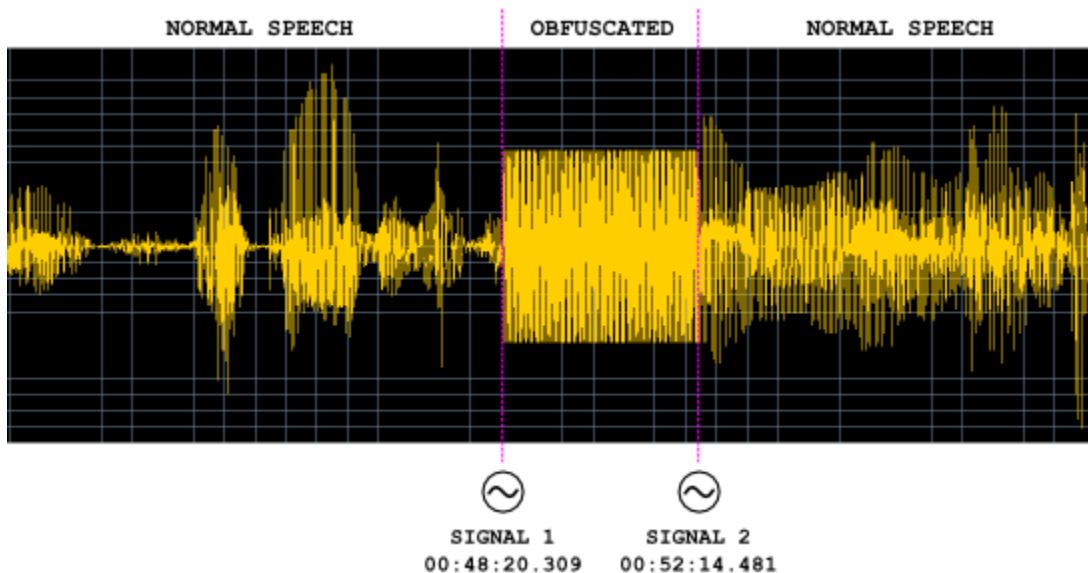
In this scenario, we will assume that agents (employees that make or receive telephone calls) utilise an in-house or third-party data entry system into which credit card details are entered using a computer.

## How it works

Considering TIM Plus (in conjunction with one or more Magic boxes) records the call audio at strategic boundaries in your telecom infrastructure - usually your organisation's telephone lines, rather than each user's telephone handset - some reconciliation is normally required between those boundaries and the actual agent that handled the call.

By default, this reconciliation occurs automatically in TIM Plus, which is how the agent-centric calls that you see in call reports are able to be associated (matched) with each call, as seen from the point of view of a telephone line which delivers calls to many agents.

During obfuscation, it is necessary that a user or device sends at least two signals to TIM Plus. Together, these two signals allow TIM Plus to mask out the audio between the two points in time that each signal was received.



At the point in time during an agent's call when obfuscation is necessary - e.g. *"Can I have your CVV number please?"* is spoken by the agent - a signal is sent by the agent to TIM Plus, which records the event along with the exact time it was sent. Similarly, when the sensitive part of the call has completed, a further signal is sent by the agent to TIM Plus, which is also being recorded.

A single telephone call can contain more than one obfuscation and the number of signals required is always twice the amount of obfuscations in a call.

## Assumptions

This guide assumes the following statements are true:

- You have a licensed copy of TIM Plus that includes voice recording
- Your installation is at least version 3.0.0.55

## Common solutions

Taking the example of masking out some digits of a phone call when a credit card number is being quoted, most solution providers modify the data entry system that an agent uses.

## Implementation

### HTTP request

To send a start or stop signal, a simple **HTTP GET** request must be sent to the TIM Plus web server.

Every request to the web server requires authentication, therefore you need to ensure that the relevant HTTP authentication headers are sent with your request and that the username and password combination match an existing web user object in the Directory.

The response status code will indicate success or failure.

### Request format

The request should be a **GET** request and take the following URL- encoded parameters, as per the following example:

```
http://192.168.0.1/signal.js?cmd=set&cat=4&type=1&objtype...
```

Valid parameters are described in the table below:

Parameter	Description
<b>cat</b>	Signal category. For audio masking, this value is always <b>0x04</b>
<b>type</b>	The type of signal. Valid values for <b>0x04-category</b> signals are: <ul style="list-style-type: none"> <li>▪ <b>0x01 Mute On</b></li> <li>▪ <b>0x02 Mute Off</b></li> </ul>
<b>objtype</b>	The type of object that this signal relates to. This can be one of two values: <ul style="list-style-type: none"> <li>▪ <b>user</b> (a user object)</li> <li>▪ <b>channel</b> (a channel object)</li> </ul>
<b>objid</b>	The unique ID of the object type as specified by the <b>objtype</b> parameter (above). This is used to locate the object in the Directory  The region of the Directory to search in is specified by the <b>key</b> parameter (below) and governed by the access implied by the placement of the web user whose credentials are used to effect the web request
<b>key</b>	Specifies the key relating to a container object in the directory (or blank, implying the whole directory) whereby a search on the object specified by <b>objtype</b> and <b>objid</b> is performed below

Return values are specified as **HTTP** response status code. Although the body of some responses may contain informational text, you should not rely on this text to make any decisions as to whether the request was successful or not.

Valid status codes are as follows:

Parameter	Description
<b>200</b>	The signal was received and stored successfully

400	<p>The request was not acceptable for one of the following reasons:</p> <ul style="list-style-type: none"> <li>▪ An invalid <b>type</b> parameter was specified. The <b>type</b> parameter is specific to the category specified by the <b>cat</b> parameter. Further, the <b>type</b> value (e.g. 0x01) can be used in multiple categories</li> <li>▪ The <b>objid</b> was missing. Specify the ID of the object you want the signal to relate to</li> <li>▪ The <b>cat</b> and <b>type</b> parameters - category and signal type, respectively - must be specified and cannot be zero</li> <li>▪ The version of TIM Plus you are running does not understand the <b>signal.js</b> script</li> </ul>
404	<p>The object specified by the combination of the <b>objtype</b> and <b>objid</b> parameters - and optionally the <b>key</b> parameter - could not be found</p>
500	<p><b>Internal Server Error</b> prevented the signal from being stored successfully. This may be due to a badly-configured database, or the lack of a <b>signals</b> table in the TIM Plus database</p>

## DTMF obfuscation

The system permits manual obfuscation of calls using a DTMF key sequence at the user's handset. When a user enters a specified sequence of digits, the obfuscation begins, and any audio will be immediately and irreversibly overwritten with the tone specified in the `/audio/obfuscation/tones/` section of the `settings.xml` file. To stop obfuscation, the `stop` key sequence must be entered, whereupon the audio will be written normally to the call's stream.

The `start` and `stop` key sequences can be defined in the `settings.xml` file located in `{app}\ProgramData\Tri-Line\Echo`, using the `dtmfStart` and `dtmfStop` elements. The following `settings.xml` snippet is an example of a configuration to enable manual call obfuscation when a user enters `**`

```
<audio>
  <obfuscation>
    <dtmfStart>**</dtmfStart>
    <dtmfStop>##</dtmfStop>
    <dtmfTimeout>2000</dtmfTimeout>
    <stopTimeout>50000</stopTimeout>
    <toneFile>
      <default>{app}/tones/alaw.wav</default>
      <codec id="0">{app}/tones/ulaw.wav</codec>
      <codec id="8">{app}/tones/alaw.wav</codec>
    </toneFile>
  </obfuscation>
</audio>
```

The `dtmfTimeout` element was provided to prevent a situation where extra digits have been erroneously entered, and therefore making it impossible to enter the correct sequence. After the specified DTMF timeout has passed, all the digits previously entered will be cleared. This also ensures that obfuscation does not occur during normal negotiation of DTMF telephone selection menus (inbound or outbound). To set a DTMF entry timeout, specify the value (in milliseconds) using the `dtmfTimeout` element.

Additionally, an obfuscation timeout can be specified to automatically stop the obfuscation after a specified period of time, to prevent the entire remaining call from being obfuscated in case the user forgets to manually stop the obfuscation. This timeout period can be specified (in milliseconds) using the `stopTimeout` element.



For the changes to take effect, access the Windows Services and restart the Echo service.

## Custom tones

Custom tones can be added to the call recorder in order to obfuscate part of a call recording. Since the tones are raw byte data that replace portions of the original WAV audio, they must respect the codec of the original file, e.g. a-law, u-law, etc., and use the same sample size and rate, e.g. 16-bit, 8 KHz.

Once the files have been encoded accordingly, they should be copied to the following location: `{app}\ProgramData\Tri-Line\Echo\tones`.

To enable the system to use these custom tones during the obfuscation, open the `settings.xml` file, located in `{app}\ProgramData\Tri-Line\Echo` and add the following snippet, specifying the filename of the custom tone using the `codec` element. The `id` attribute determines the codec type, e.g. "0" = u-law, "8" = a-law, as per RFC3551 (page 32). A `default` element can also be added as the fall-back tone to use.

```
<audio>
  <obfuscation>
    <toneFile>
      <default>{app}/tones/alaw.wav</default>
      <codec id="0">{app}/tones/ulaw.wav</codec>
      <codec id="8">{app}/tones/alaw.wav</codec>
    </toneFile>
  </obfuscation>
</audio>
```



A `<default>` element can be added as the fall-back tone to use.

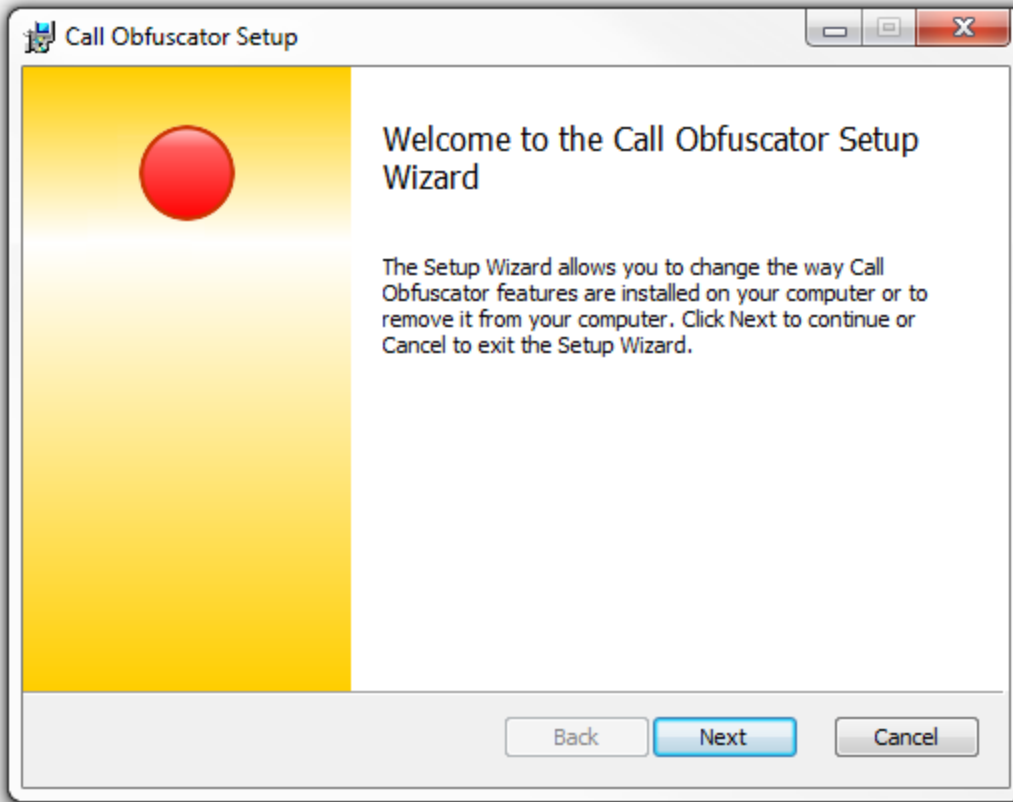
## Call obfuscator




To obtain a copy of the Call Obfuscator application, contact our [Technical Support team](#).

To install and configure the `Call Obfuscator` application, follow the steps below:

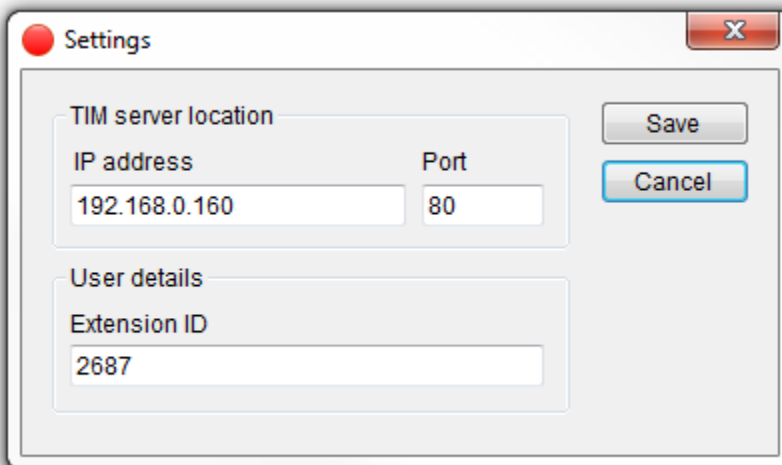
1. Double-click on the setup package and follow the wizard in order to complete the installation.



2. Start the application from the **All programs** list and notice the  icon appearing in the system tray.



- Right-click on the icon and select **Settings**. A new window will open allowing you to configure the application.



Field	Description
-------	-------------



IP address	The IP address of the PC running TIM Plus
Port	The port number that TIM Plus is listening on
Extension ID	The extension number of the user whose calls should be obfuscated by this instance of the Call Obfuscator





A web user with the following credentials must exist in the call logger, in order to authenticate the `http` request sent by the application:

username: `admin`

password: `tntnet`

1. During a phone call, start the obfuscation by left-clicking on the  icon which, after some milliseconds, will change to , indicating that the call is currently being obfuscated.



2. To stop an obfuscation, click on the  icon, which will revert to , indicating that the obfuscation has ceased.
3. To exit the application, right-click on the icon and select `Exit`.



Multiple obfuscations can be performed on a single call by repeatedly clicking the start and stop icon.

## Integration

### Programmatic audio retrieval

#### Overview

Normally, to retrieve call audio recordings from TIM Plus, an authenticated web user must log in to the web interface, navigate to the desired call using the `Call View` screen or by running a report, click on the call, then play it using the built-in web-based call player.

It is also possible to programmatically retrieve call recordings using a two-step authenticated request process. This works in the



following way:

- Obtain the `datasource`, `voicelocation` and `voicefilename` values from the `calls` table in the TIM Plus database for the call you want to retrieve.
- Request a security token from TIM Plus, by authenticating using an authorised web user's login credentials
- Request the call from the `Echo Service`, using the security token obtained above
- Receive the call audio in WAV format, forcibly obfuscated if any such events apply to the requested call

Below is an example code showing how to retrieve a voice recording from TIM Plus.

## C# Example Source

This is a very simple example of some C# code to request a call's voice recording from TIM Plus. A more complex example would describe passing parameters in the class's constructor, for instance, but this should demonstrate the logic behind the procedure.

Use the following code to request a security token from TIM Plus, plugging in the appropriate values for `_datasource`, `_voicefilename`, and `_voicelocation` for the call you want to retrieve. These values are obtained directly from the calls database table.

A security token in this context is a URL which is used to obtain the actual voice recording from the `Echo Service`.

### Simple call retrieval example

```

using System;
using System.Net;
using System.Text;

private class GetAudioFile
{
    string dataSource = "\\3\\";
    string voiceFilename = "344f91cf-ba35-48e4-8080-a80a3816f5e7";
    string voiceLocation = "4";
    string echoUrl = "";
    using (WebClient client = new WebClient())
    {
        client.Headers["User-Agent"] = "3rd-Party-Agent";
        client.Credentials = new NetworkCredential("username",
"password");

        byte[] responseBody =
client.DownloadData("http://enterprise.example.com/voice.wav?cmd=g
etvmsg&datasource=" + System.Uri.EscapeDataString(dataSource) +
                    "recordingid=" +
System.Uri.EscapeDataString(voiceFilename) +
                    "voicelocation=" +
System.Uri.EscapeDataString(voiceLocation) +
                    "salt=" +
System.DateTime.Now.Ticks);

        echoUrl = Encoding.UTF8.GetString(responseBody);
    }

    if (!string.IsNullOrEmpty(echoUrl))
    {
        // Use another WebClient object to query the URL provided in
"echoUrl" to retrieve the actual call recording...
    }
}

```

Assuming the request was successful (and the response status was a **200 OK**), the variable `rtUrl` will now contain a full URL which you must request in a similar way, using another `System.Net.WebClient` object.

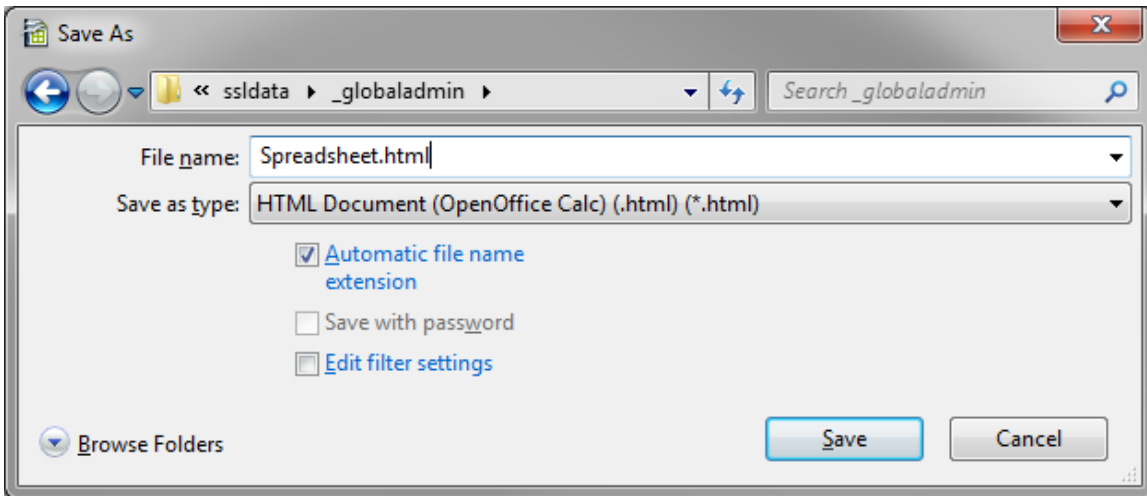
The security token URL is valid for one minute (60 seconds).

## Knowledgebase

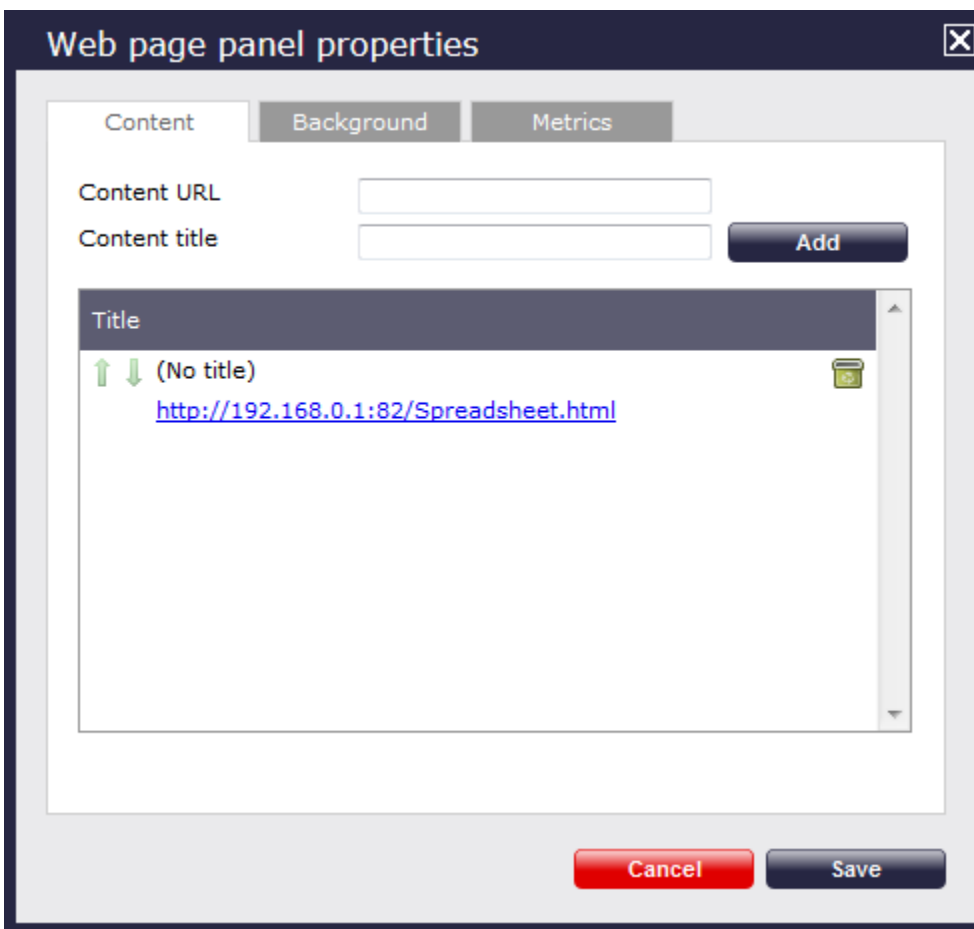
### Adding an Excel spreadsheet to a Display board

To add a spreadsheet file to a Display board, follow the steps below:

1. Open your spreadsheet document and save it in **HTML** format, using the **Save as** option, as shown below:



2. Save the document in the web folder of TIM Plus, located by default in {app}\TIM Plus\ssldata\\_globaladmin.
3. In the Live stats section of TIM, create a new display board from blank and add a Web panel .
4. In the Content URL field of the web panel properties, enter the IP address and port number of TIM Plus followed by name of HTML file, as shown below:



5. If your spreadsheet contains a graph or chart, create a folder to store the resulting image and update the URL accordingly.
6. Save the changes and your wallboard should now display your spreadsheet.

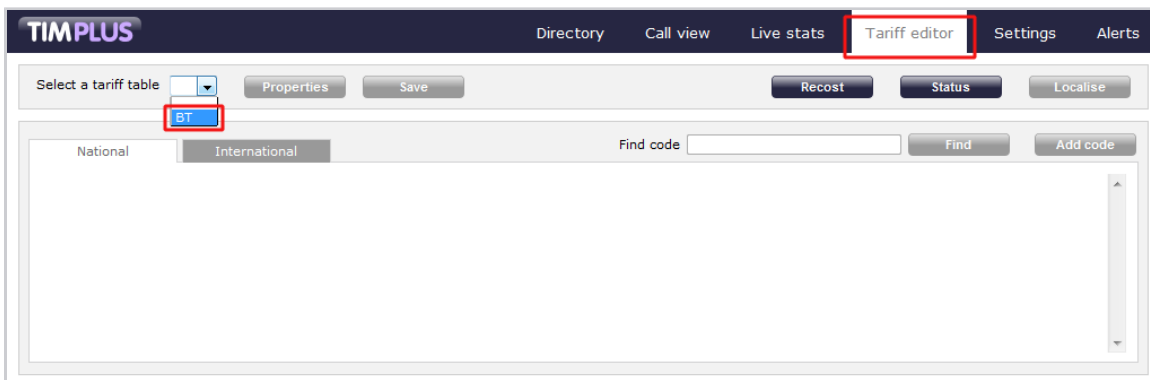


In order for the spreadsheet to show on the display board, the web panel background should be set to a colour different to that of the spreadsheet itself.

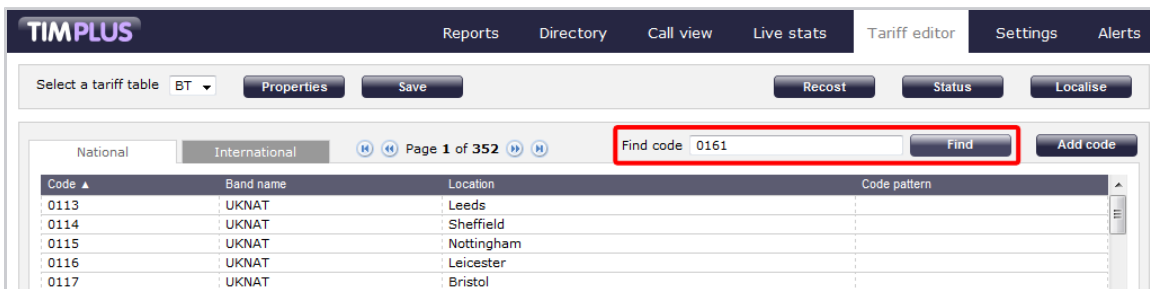
## Amending call charges

To modify call charges for a specific dial code or destination, follow the steps below:

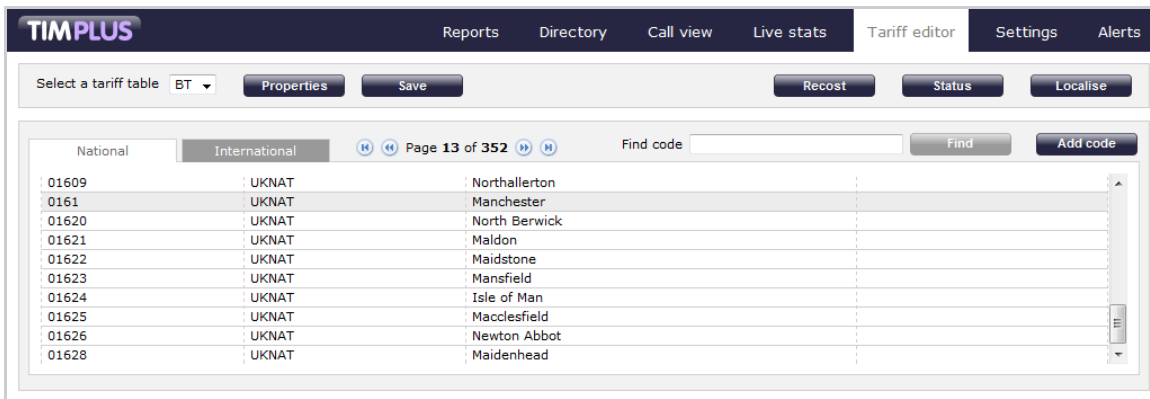
1. Log in to TIM Plus, click on the **Tariff editor** tab and select the tariff you want to amend from the drop-down list, as shown below:



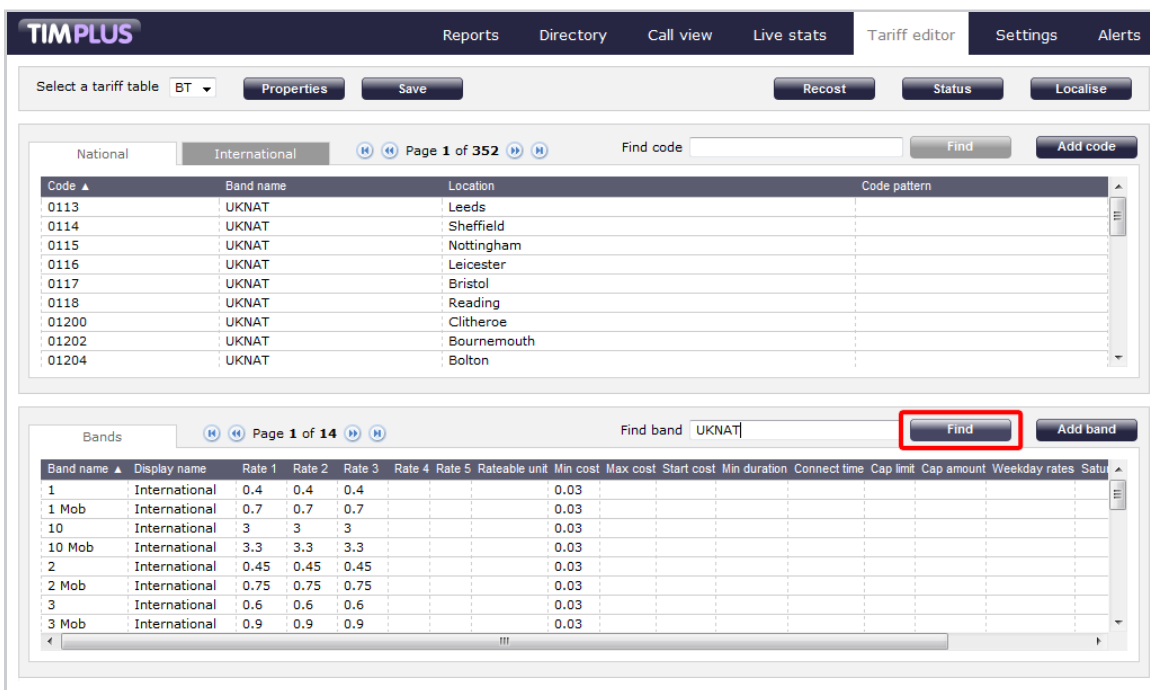
2. Locate the dial code for which you want to amend the charges, by entering the code in the search box provided.



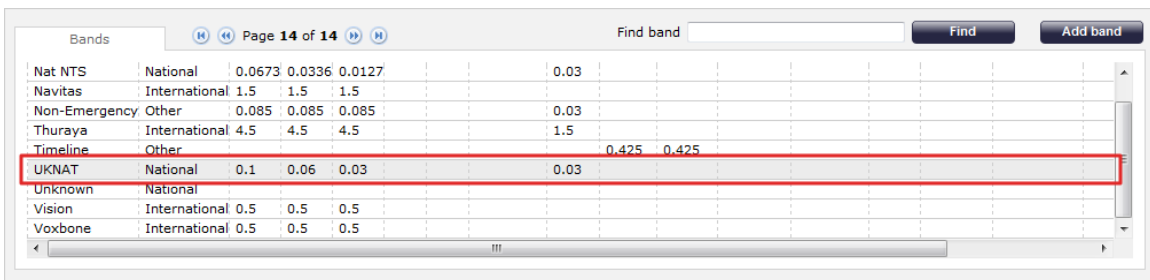
3. The matching dial code will be highlighted in grey, showing its associated charge band and destination name.



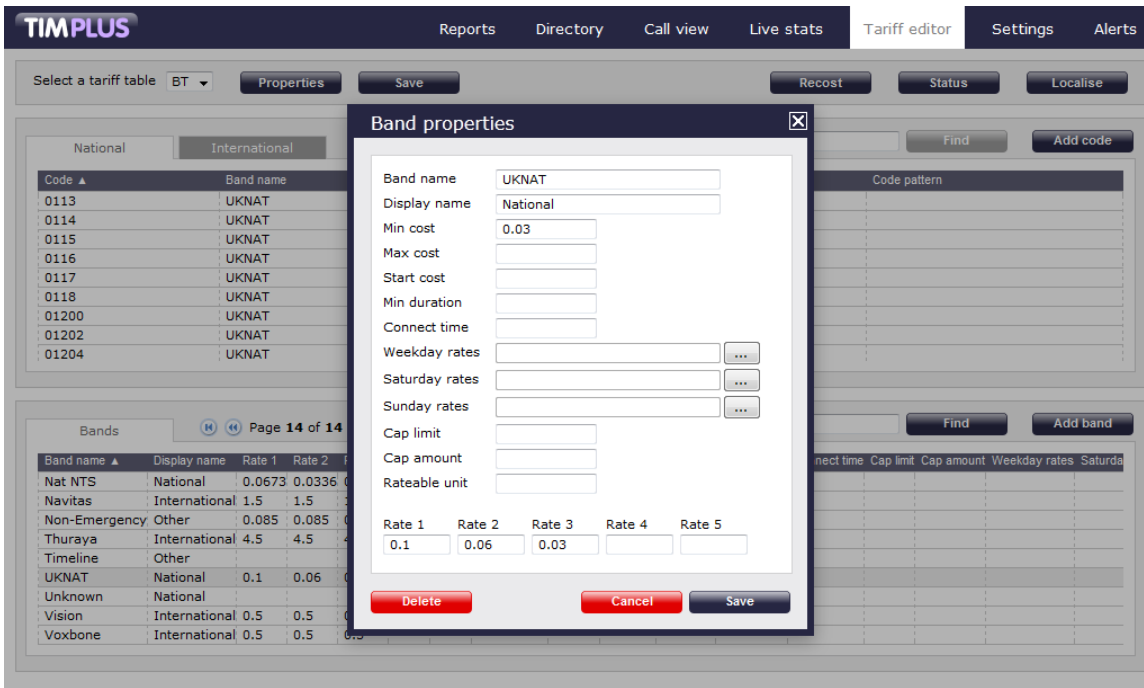
4. Enter the name of the charge band in the Find band search box, as shown below:



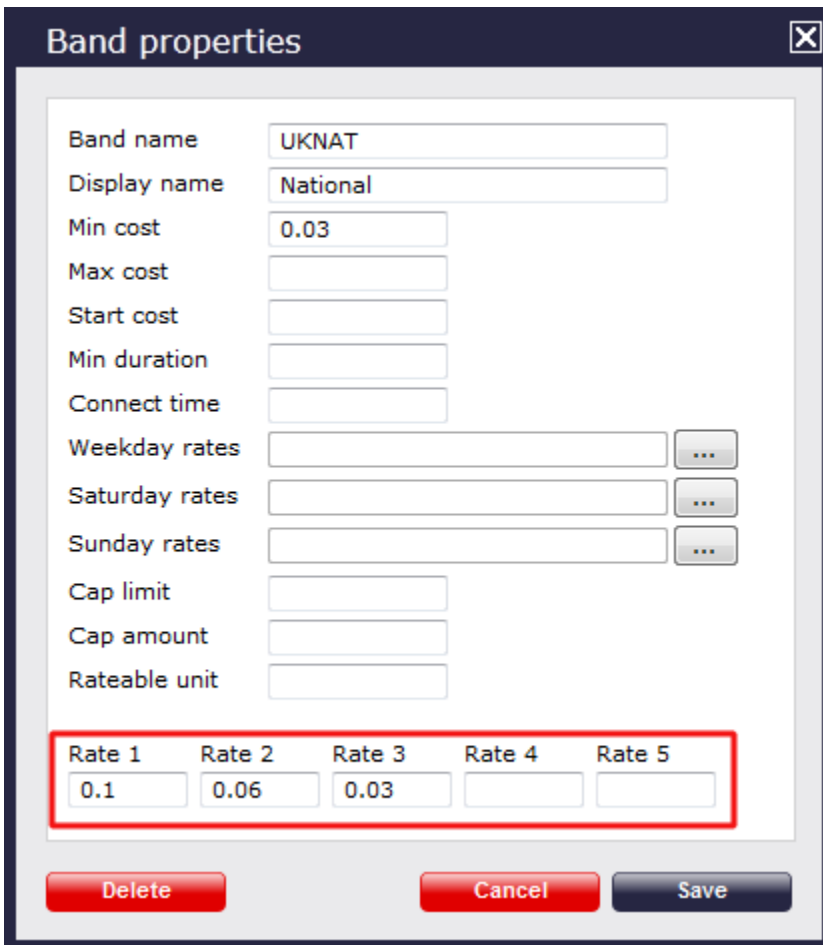
5. The matching band will show highlighted in grey, as shown below:



6. To configure the properties of the selected band, click on it to open the Band properties window.



7. To change the existing charges, e.g. Rate 1, Rate 2, etc, enter the preferred values in the field provided.



8. To see how each rate is applied, click on the ... button.

Weekday rates	<input type="text"/>	<input type="button" value="..."/>
Saturday rates	<input type="text"/>	<input type="button" value="..."/>
Sunday rates	<input type="text"/>	<input type="button" value="..."/>
Cap limit	<input type="text"/>	
Cap amount	<input type="text"/>	
Rateable unit	<input type="text"/>	

9. A new window will open, where you can edit the rate times. To apply any changes, click on the **OK** button.

**Rates by hour** ✕

00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2

## Automatic web login

### Background

All of the web pages and scripts that TIM Plus serves are protected by a login that is provided by a user when entering their username and password into a pop-up dialog presented by their web browser.

In some situations, it is desirable to suppress this dialog box demanding the username and password. An example might be the deployment of a stand-alone computer displaying a pre-defined wallboard on a large screen; it would become tedious having to log in to the web page every time that computer is restarted.

Different web browsers behave differently when asked to automatically log in to web sites. Various, they range from complete prohibition of the practise to permitting it only if certain system parameters are configured.

### Specifics

In this article, details of how to allow automatic logging-in to a web page concerns the Microsoft Internet Explorer (version 6 and above) browsers only. Please consult your browser documentation for a solution related to your own choice of browser.

The solution involves creating a specially-crafted URL in the following form:

```
http://username:password@serverhost/
```

### Solution

Although including the username and password in a URL is disabled by default on Windows Internet Explorer since it is considered a security risk, you can override this restriction by making the following changes to the Windows Registry.



Since you'll be exposing a username and password as part of a URL, it is recommended that you create a dedicated web user object inside the TIM Plus directory that will be used solely for this purpose. See the [Web users](#) page for details of how to set up a web user.

Open Windows Registry Editor, **REGEDIT.EXE**, from the Windows **Start Menu** and locate the following registry key:

- for a 32-bit system:

```
HKEY_LOCAL_MACHINE\Software\Microsoft\Internet
Explorer\Main\FeatureControl\FEATURE_HTTP_USERNAME_PASSWORD_DISABLE
```

- for a 64-bit system:

```
HKEY_LOCAL_MACHINE\Software\Wow6432Node\Microsoft\Internet
Explorer\Main\FeatureControl\FEATURE_HTTP_USERNAME_PASSWORD_DISABLE
```

Inside this registry key, add the following **DWORD** entries:

```
IEXPLORE.EXE (Set DWORD value to 0, zero)
EXPLORER.EXE (Set DWORD value to 0, zero)
```

Close the Registry Editor and create a bookmark in Internet Explorer, specifying the URL as per the following example:

```
http://USERNAME:PASSWORD@HOSTNAME/display?suiiv=12345
```

Replace the following entries:

- **USERNAME** replace with the username of the web user you use to access the page
- **PASSWORD** replace with the password of the web user you use to access the page
- **HOSTNAME** replace with the host name or IP address of the machine running TIM Plus

## References

This information is available in more detail at the Microsoft Support site:

<http://support.microsoft.com/kb/834489>

## Blacklisted users



### Blacklisted users

- What are blacklisted users?
- Setting users to not log calls
- Merging a DDI with its extension

## What are blacklisted users?

Blacklisted users are created in the system when your software license is insufficient for the number of users picked up in the Directory. The users will be blacklisted at random and they will not be logging calls.

To identify the total number of users currently logged in the system, you can run a **Unused devices** report for a period of time when no calls were made or received. The best option is to select a date in the future, e.g. **01-01-2020**.

The screenshot shows the TIMPLUS web interface with the 'Reports' menu open. A modal window titled 'Unused devices' is displayed, prompting the user to 'Select a reporting period'. The window contains the following text and form elements:

**Select a reporting period**

Define the period you want the report to encompass.

Remember, you can always filter your results later, so choose a big enough period.

Period: Custom period (dropdown menu)

From date: 01 Jan 2020

To date: 01 Jan 2020

From time: 00 : 00 : 00

To time: 23 : 59 : 59

Buttons: Cancel, < Back, Finish >>, Next >

The report will display the total number of users picked up in the system.

My unused devices		2013-10-10 14:55:12			
Entire organisation \		About this report			
Users		Channels			
Name ▲	ID	Email	DDI	Mobile	
1950	1950	-	-	-	
80100	-	-	-	-	
8888	8888	-	-	-	
A Tarpey	1301	-	-	-	
B Ahmed	1602	-	-	-	
C Chester	1000	-	-	-	
C Lowe	1603	-	-	-	
D Xue	1605	-	-	-	
Joe Bloggs	-	-	-	-	
John Smith	-	-	-	-	
L Anderson	1231	-	-	-	
M Thompson	1619	-	-	-	
New User	-	-	-	-	
New User 1	-	-	-	-	
New User 2	-	-	-	-	
R Londesborough	5105	-	-	-	
T Alexander	1248	-	-	-	
T Dangerfield	1903	-	-	-	
T Quirk	1904	-	-	-	
Test 1	-	-	-	-	
Test 2	-	-	-	-	
V Afanasiev	1334	-	-	-	
VM Channel 11	9511	-	-	-	
VM Channel 42	9542	-	-	-	
24 users					

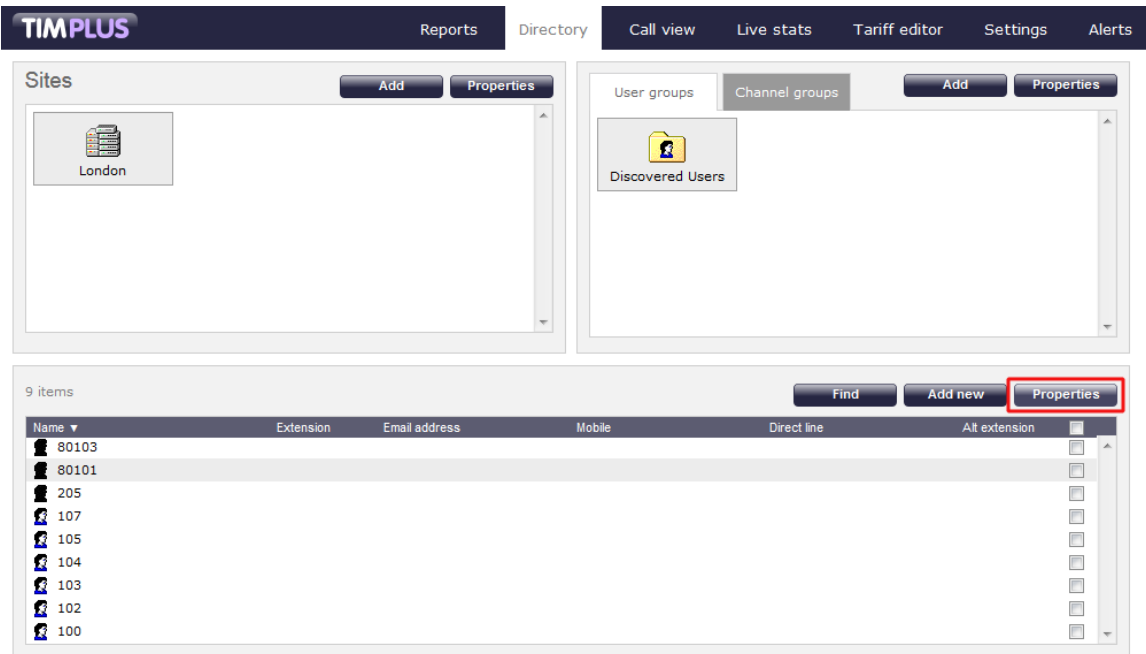
If the total number of users exceeds your license count, you can contact our [Sales](#) team to purchase more licenses for your users, alternatively you can check if any of the following applies:

- DDI numbers are picked up as extensions, in which case you can [merge the DDIs with their extension number](#) or [set them to not log calls](#)
- you have old extensions that you don't wish to monitor, in which case you can [set them to not log calls](#)

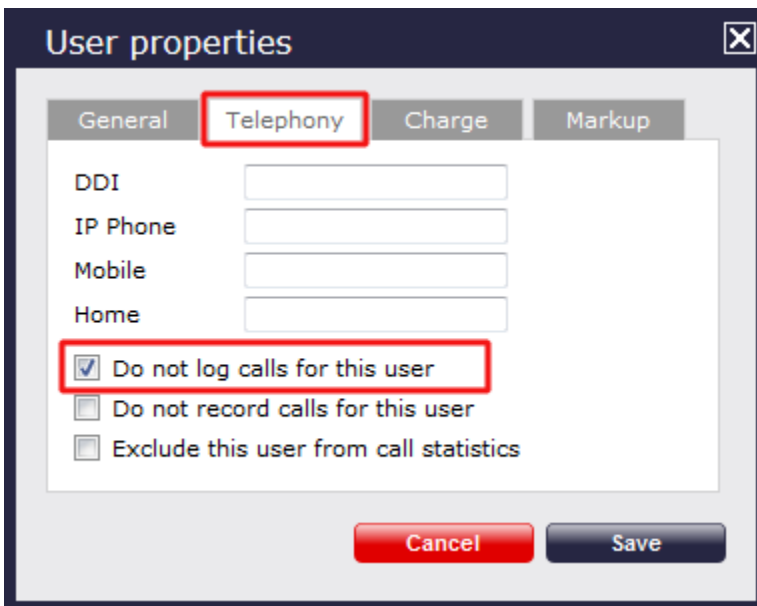
## Setting users to not log calls

Follow the steps below to set a user to not log calls:

1. Locate the extension you want to set to `Do not log` in the Directory, select it from the list and click on the **Properties** button, as shown below:



- The User properties window will open. Click on the **Telephony** tab and tick the **Do not log calls for this user** box.

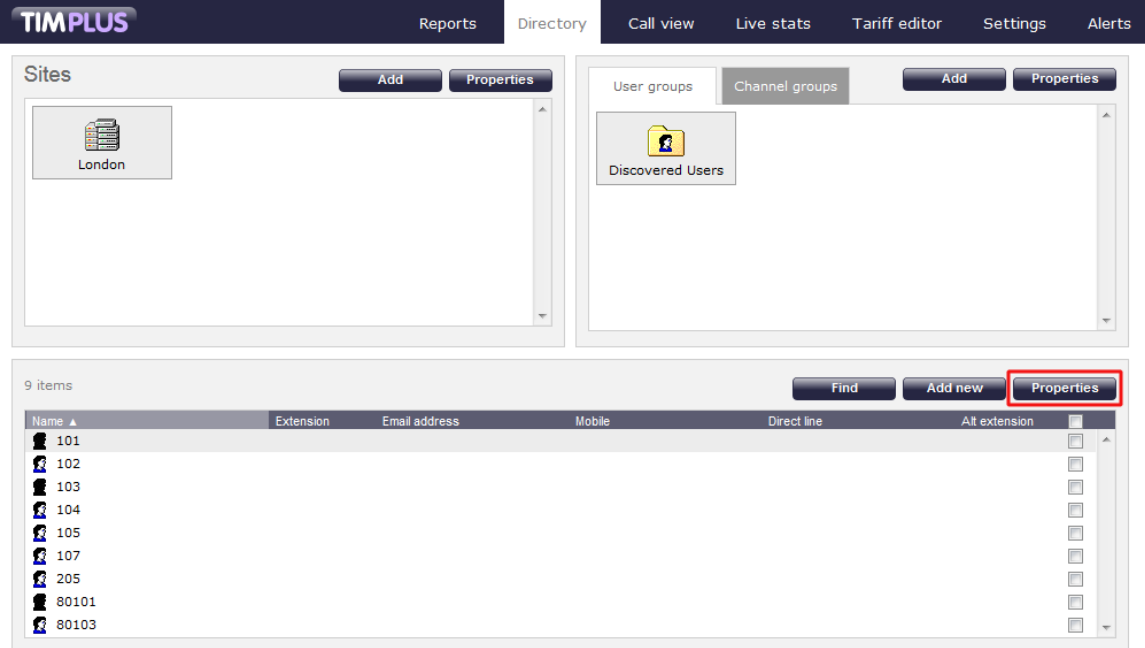


**i** For the changes to take effect, you need to restart the TIM Pus service.

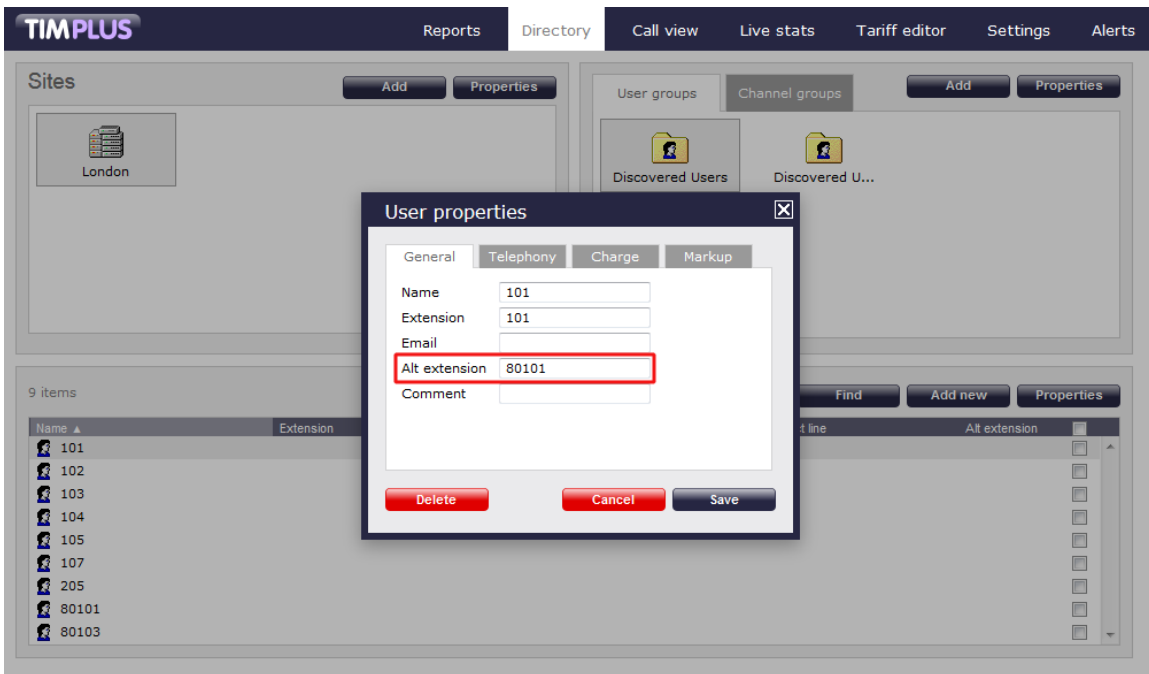
## Merging a DDI with its extension

Follow the steps below to merge a DDI with its extension:

1. Locate in the Directory the extension you want to merge, select it from the list and click on the **Properties** button, as shown below:



2. A new window will open, displaying the general properties of the user. In the **Alt extension** field, enter its DDI number and click on the **Save** button, as shown below:



3. Locate in the Directory the users object created for the DDI number and delete the user from the **User properties** window, as shown below:

The screenshot shows a 'User properties' dialog box with a dark blue title bar and a close button (X) in the top right corner. Below the title bar are four tabs: 'General', 'Telephony', 'Charge', and 'Markup'. The 'General' tab is active, displaying a form with the following fields: 'Name' (containing '80101'), 'Extension', 'Email', 'Alt extension', and 'Comment'. At the bottom of the dialog are three buttons: 'Delete' (highlighted with a red border), 'Cancel', and 'Save'.



For the changes to take effect, you need to restart the TIM Plus service.

## Cisco specific

### CDRs were being sent but have now stopped

If you stopped receiving data from your Cisco UCM, you need to restart the `CDR Services` on the `Publisher` node.



DO NOT delete the `Call Accounting and Billing` server, as this will remove any CDRs that have not been sent.

To restart the CDR services, log in to the `Cisco Unified Serviceability` screen and select `Tools -> Control Center -> Network Services` from the main menu. Locate the `CDR services` section in the list and restart the following services in the order specified below;

1. `Cisco Database Layer Monitor` (Depending on Cisco UCM version, you may not have this service)
2. `Cisco CDR Repository Manager`
3. `Cisco CDR Agent`
4. `Cisco CAR Scheduler` (if sending CMRs)

<input type="radio"/>	Cisco Change Credential Application	Running	Wed Apr 3 14:30:07 2013	42 days 06:13:15
<b>CDR Services</b>				
	Service Name	Status	Start Time	Up Time
<input type="radio"/>	Cisco CDR Repository Manager	Running	Wed May 15 19:42:05 2013	0 days 00:01:17
<input type="radio"/>	Cisco CDR Agent	Running	Wed May 15 19:42:49 2013	0 days 00:00:33
<input type="radio"/>	Cisco CAR Scheduler	Starting		
<input checked="" type="radio"/>	Cisco SOAP - CallRecord Service	Running	Wed Apr 3 14:26:51 2013	42 days 06:16:31
<input type="radio"/>	<b>Cisco CAR DB</b>	Running	Thu Oct 11 03:32:17 2012	216 days 17:11:05
<b>Security Services</b>				
	Service Name	Status	Start Time	Up Time
<input type="radio"/>	Cisco Trust Verification Service	Running	Thu Oct 11 03:31:35 2012	216 days 17:11:47

CDRs should now be sent to the configured `Call Accounting and Billing` server, i.e. the machine running TIM Plus.

## Importing historic data from Cisco UCM

### Exporting CDR/CMR records

The following procedure describes how to export CDR/CMR into a dump file. This information was taken from [Export CDR/CMR Records Configuration](#) section of Cisco's documentation.

1. Go to the `CDR Analysis and Reporting` section and select `CDR -> Export CDR/CMR` option. The Export CDR/CMR records window will display.
2. In the `From` and `To` date drop-down list boxes, choose a date range for the CDR/CMR `dump.TXT` file.
3. In `select records`, check the `CDR` and/or `CMR` check box.
4. Click  .

### Re-running the data

To re-run the CDRs in TIM Plus, you need to rename the dump file extension from `.TXT` to the unique identifier of your PBX object in TIM Plus. To obtain the ID of a site, hover the mouse pointer over it on the  page in TIM Plus and the site ID will be displayed as a tooltip as shown below:



After renaming the file extension, copy it into the following location on the computer running TIM Plus: `C:\Program Files\Tri-Line\TIM Plus\spool\`.

TIM Plus will now process the data and it should be visible on the `Call view` screen.

## RADIUS server retransmit

RADIUS server retransmission occurs when the connection to the RADIUS server fails or a response pack is not received by the UCME. When this happens, the default behaviour of the UCME is to try to reconnect three more times. This can lead to memory problems on the UCME, if there is a high number of packets failing. To avoid this, the global retransmit count can be amended accordingly, and it can also be configured differently for each RADIUS server.

To change the global setting, log in in the UCME CLI and enter the following commands:

Step	IOS Commands
1	<code>conf t</code>
2	<code>radius-server retransmit 0</code>
3	<code>exit</code>
4	<code>wr</code>

To change a specific RADIUS server settings, log in to the UCME CLI and enter the following commands:

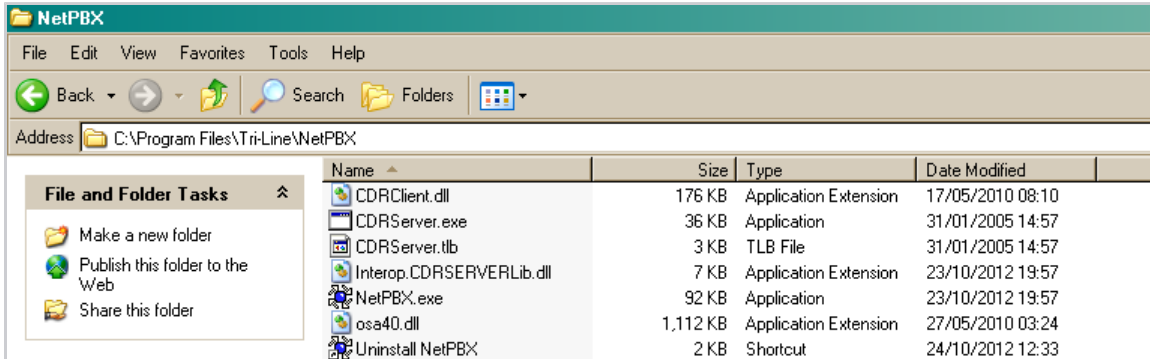
Step	IOS Commands
1	<code>conf t</code>
2	<code>radius server SERVER_NAME</code>
3	<code>retransmit 3</code>
4	<code>exit</code>
5	<code>wr</code>

With the above configuration, the specific server for which these settings apply will try to resend data if there is a failure, whilst the others will give up if the initial packet is lost.

## Connecting BCM v3.7 or below with NetPBX

Follow the instructions below to connect a BCM v3.7 or below with NetPBX:

1. Make sure the **CDRServer.EXE** and **Interop.CDRSERVERLib.dll** files are placed in the same folder as **NetPBX.EXE**, usually located in **{pf}\Tri-Line\NetPBX**.

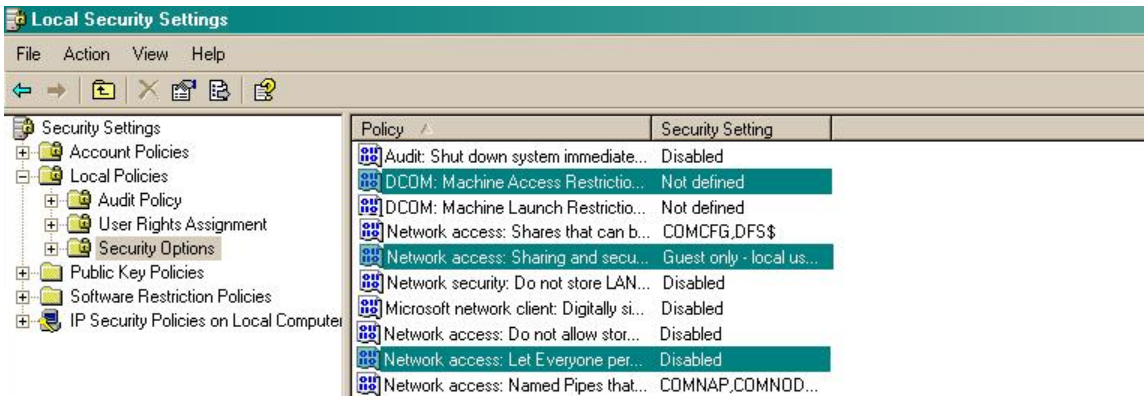


2. Register **CDRServer.EXE** by running the command line with administrator privileges and typing the following command under the directory path of the NetPBX folder: **CDRServer.EXE/regserver**.
3. Open the computer's local security policies: **Start -> Control Panel -> Administrative Tools -> Local Security Policy**.

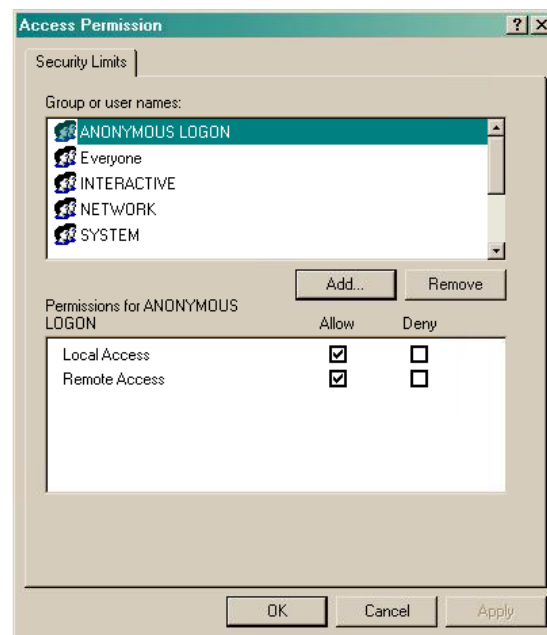
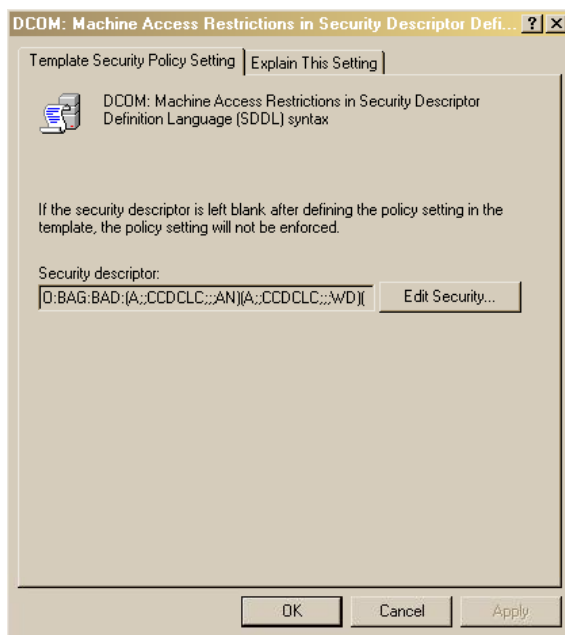


4. Within the **Security Settings\Local Policies\Security Options** tree, change the following items as highlighted in the screenshot below:

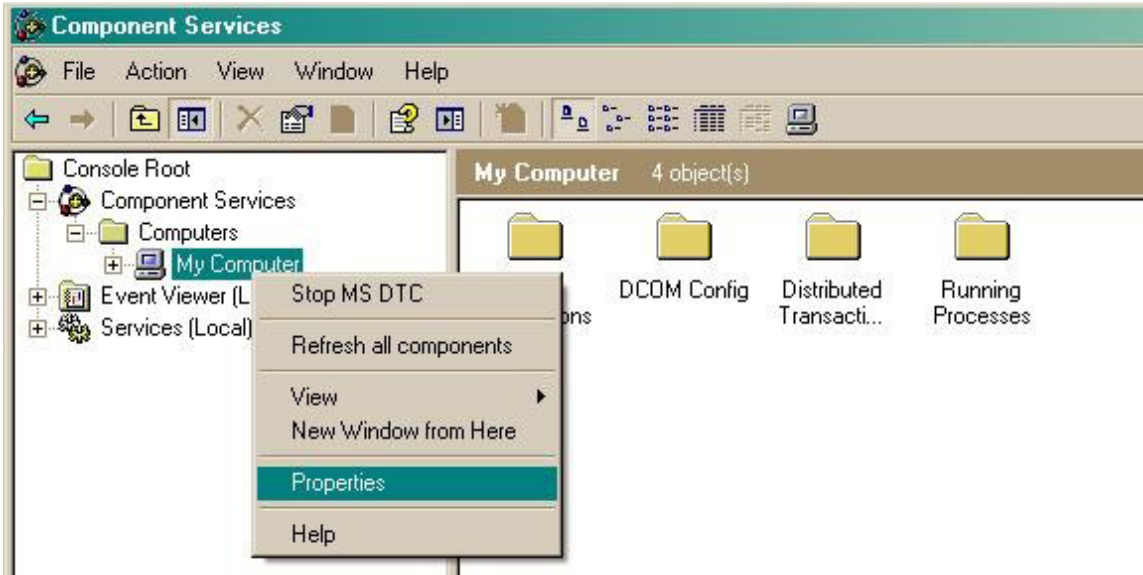




- a. Network Access: Let Everyone permissions apply to anonymous users. Set this to **Enabled**.
- b. Network Access: Sharing security model for local accounts. Set this to **Classic**.
- c. DCOM: Machine Access Restrictions: Click on **Edit Security** and add the following user accounts: **Anonymous**, **Everyone**, **Interactive**, **Network**, **System**. Set each one to have full access rights.



5. Next step is to modify the way DCOM behaves on the computer by executing the DCOM configuration program: `Start -> Run -> DCOMCNFG [enter]`. Browse the tree to the following location: `Console Root -> Component Services -> Computers -> My Computer`. Right-click on `My Computer` for **Properties** and amend or update the following options:

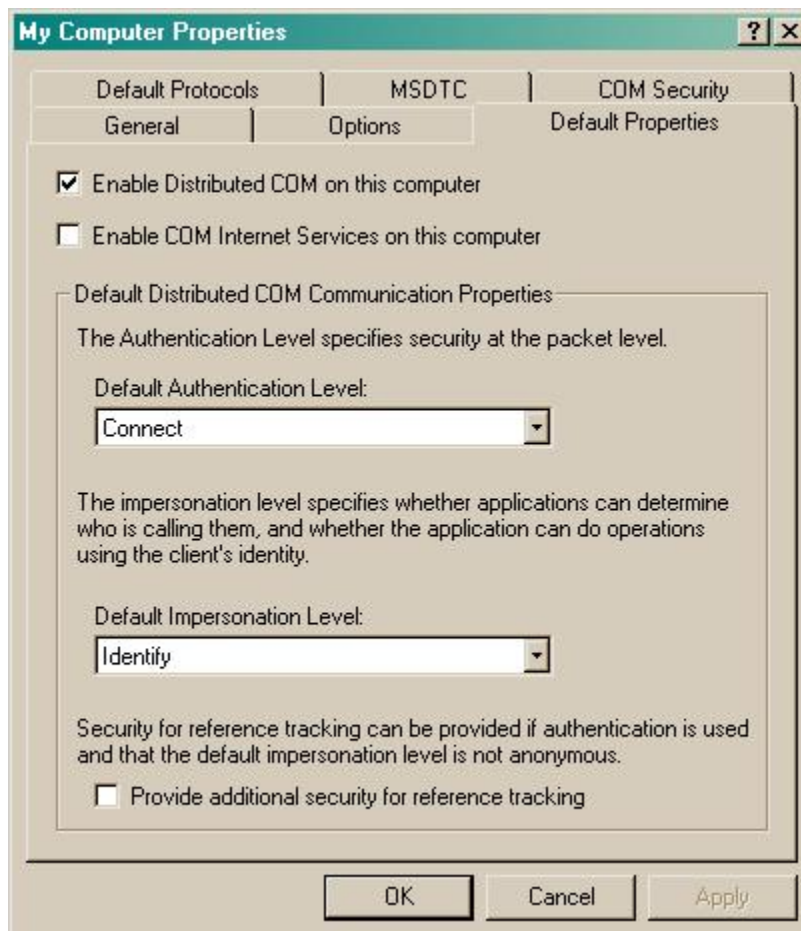


a. On the **Default Properties** tab:

Enable Distributed COM on this computer: tick the box for his option

Default Authentication Level: set this to **Connect**

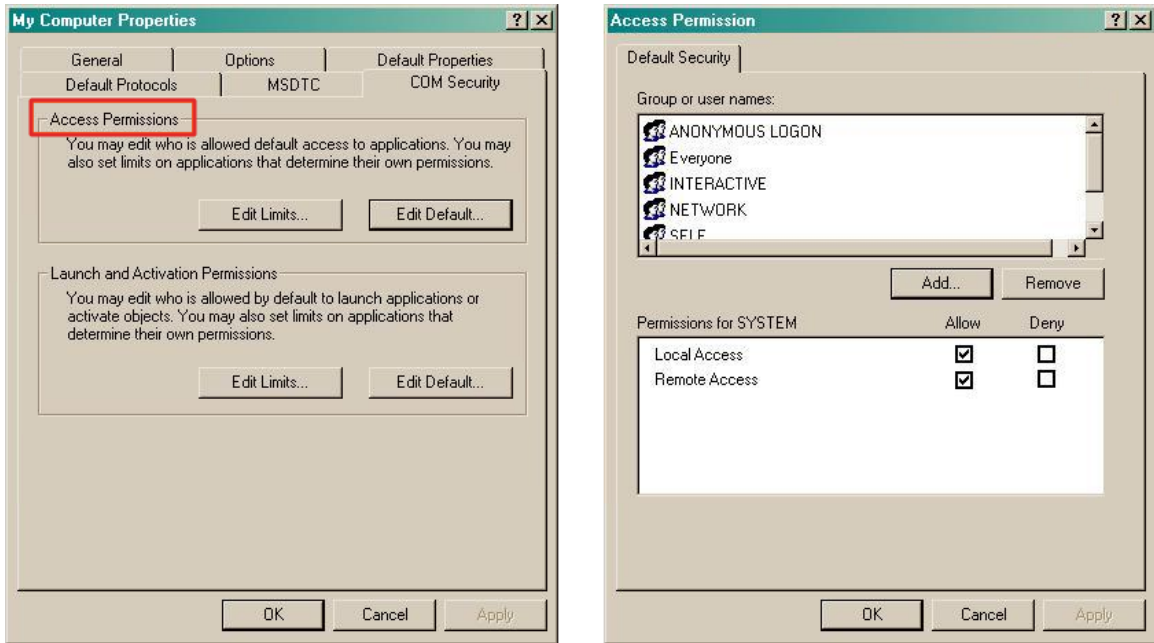
Default Impersonation Level: set this to **Identify**



b. On the **COM Security** tab:

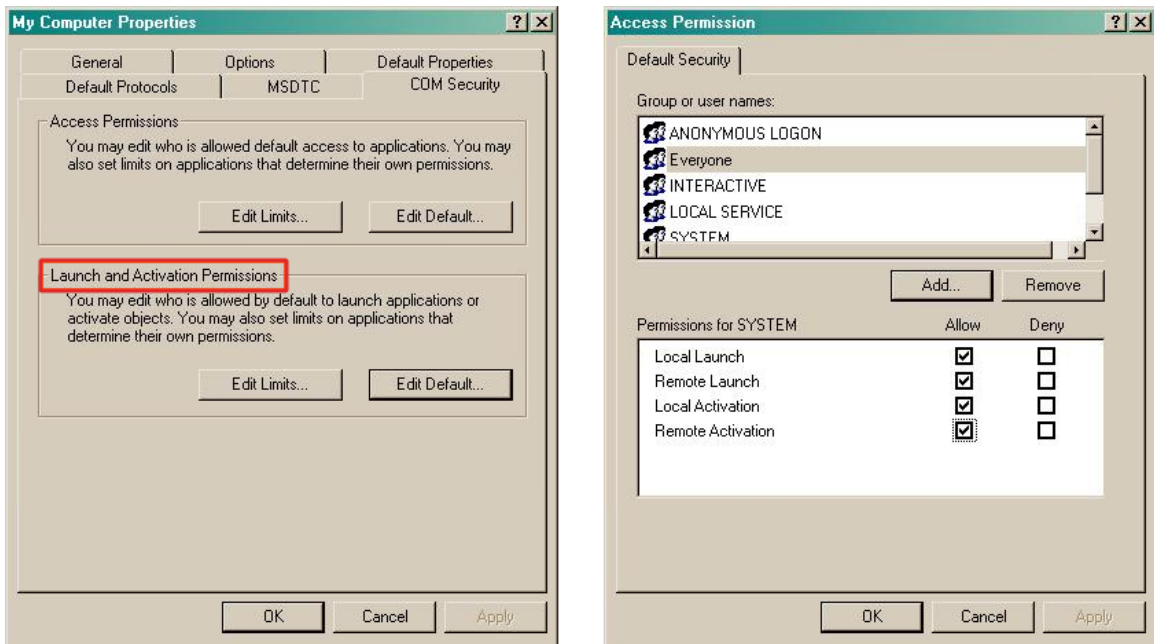
Go to the **Access Permissions** section and select **Edit default**.

Add the following accounts and set both local and remote access permissions: **Anonymous**, **Everyone**, **Interactive**, **Network**, **Local Service** and **System**.



Go to the **Launch and Activation Permissions** section and click on **Edit default** tab.

Add or update the following accounts to give them all local and remote access permissions: **Anonymous**, **Everyone**, **Interactive**, **Network**, **Local Service** and **System**.



## Migrating TIM Plus

To migrate TIM Plus from one computer to another requires the following actions:

1. Upgrade TIM Plus on the old computer
2. Install TIM Plus on the new computer
3. Migrate the historical data

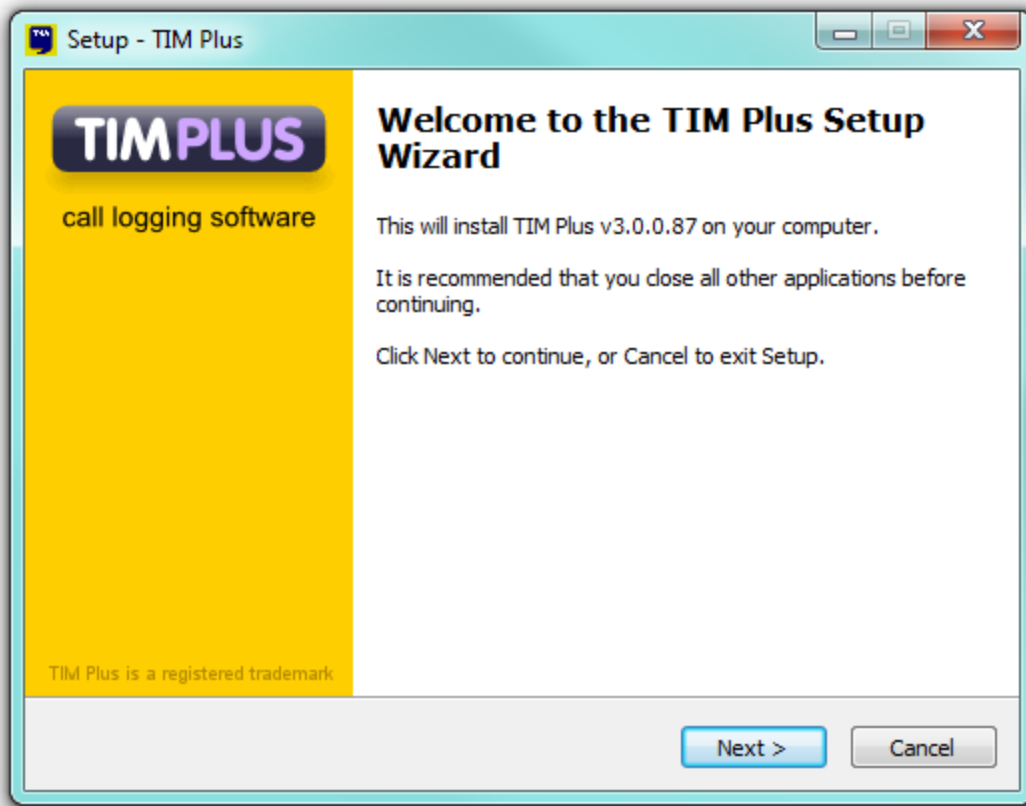
### Upgrading TIM Plus on the old computer

1. Log in to our [Gateway](#) and click on the TIM Plus product. Select the **Upgrade package** from the Downloads area and save the file on your computer.

The screenshot displays the TIM Plus product page. At the top left is the 'TIM PLUS' logo. Below it, there are three main sections:

- Downloads:** Contains three items: 'Full install package' (with a download icon), 'Upgrade package' (with a download icon and a red rectangular highlight around it), and 'Documentation' (with a book icon). The text 'TIM Plus' is visible below each item.
- Software license:** Features a green checkmark icon and the text 'This product is licensed'. Below this, it states 'The license for this product is valid until 17 January 2014.' A link 'View license certificate' is located in the top right corner of this section.
- Maintenance:** Features a green checkmark icon and the text 'This product is maintained'. Below this, it states 'You have maintenance until 14 January 2014, giving you full access to our technical support resources during this time.'

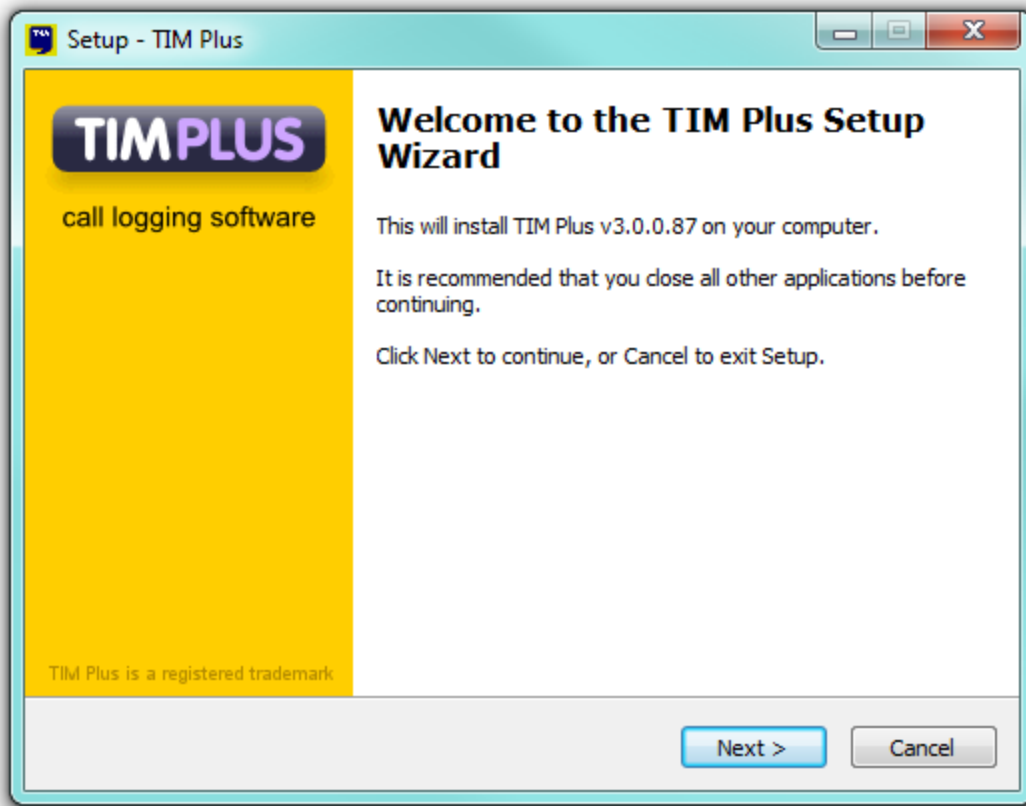
2. When you have downloaded the setup package, double-click on it and follow the setup wizard in order to complete the installation.



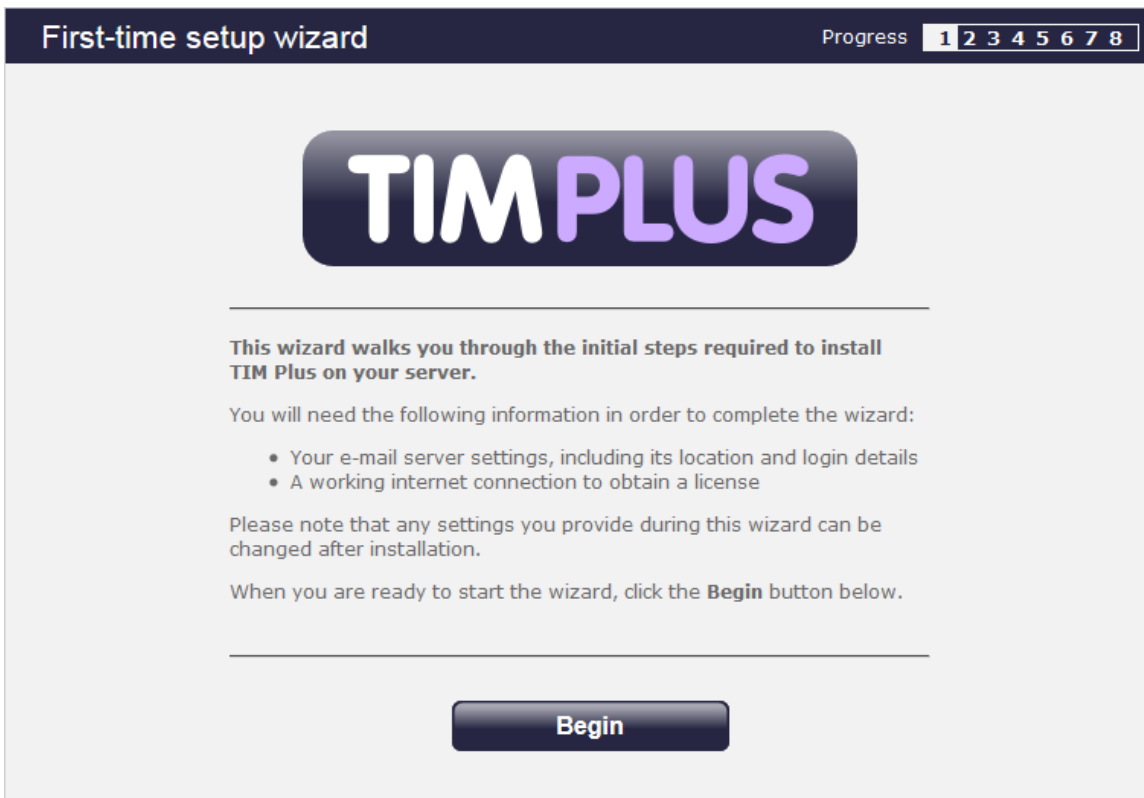
## Installing TIM Plus on the new computer

1. Log in to our [Gateway](#) and click on the TIM Plus product. Select the **Full install package** from the Downloads area and save the file on your computer.

2. To install TIM Plus, double-click on the setup package and follow the on-screen instructions.



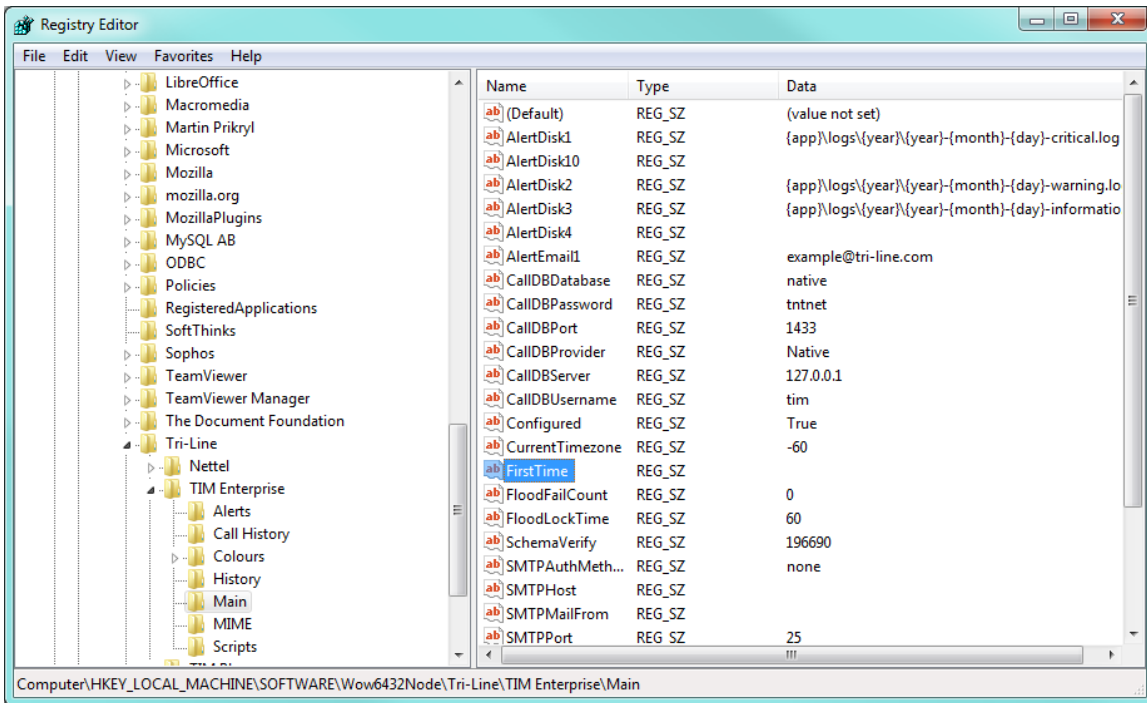
3. After installation, the **First-time setup wizard** screen will open automatically in a new web browser window.



4. Close the web page, access the Windows Services and stop the TIM Plus service.

5. Access Windows Registry Editor ( `start -> Run -> regedit.exe` ) and remove the `FirstTime` value from the following Registry key:

HKEY\_LOCALMACHINE\Software\Wow6432Node\Tri-Line\TIM Plus\Main



## Migrating the historical data

To restore your historical data on the new computer, copy the TIM Plus folder from the old machine, transfer it across on the new computer and paste it over the existing TIM Plus folder. This action will overwrite its content.

You can now start the TIM Plus service.



At this stage of the process you will be asked to provide a license key for the new installation. Copy the product key into a text file and email it to our [Technical Support](#) team.

## Re-running data

Follow the steps below to re-run data in TIM Plus:

1. Take a copy of the data you want to re-run back in the system, stored by default in the `backup` folder of the main installation program.

```
{Program Files}\Tri-Line\TIM Plus\backup
```

- Log in to TIM Plus as a `root` user, select the `Settings` tab and click on the `Query browser` button.
- To check the datasource for the PBX object you want to delete calls for, enter the following query:

```
SELECT name, fullkey from dir where type = 'pbx';
```

The screenshot shows the TIMPLUS web interface. The top navigation bar includes 'Directory', 'Call view', 'Live stats', 'Tariff editor', 'Settings', and 'Alerts'. The 'Settings' tab is active. On the left sidebar, 'Query browser' is selected. The main content area is titled 'Query browser' and has a 'Run query' button. Below the title, there is a 'Query 1' label and a 'New' button. The central text area contains the SQL query: `SELECT name, fullkey from dir where type = 'pbx';`. Below the text area, a table displays the results of the query:

Name	FullKey
London	\\1\'

- To delete calls for a specific PBX object and a specific time period, enter the following query:

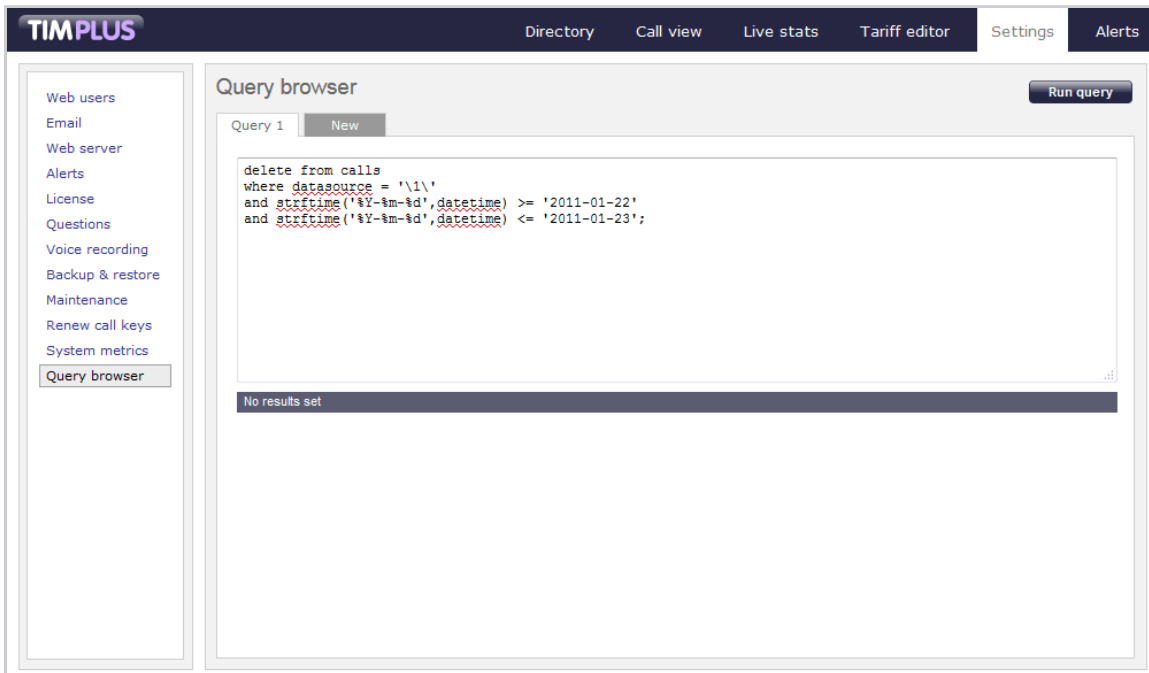
```
delete from calls
where datasource = '\\1\'
and strftime('%Y-%m-%d',datetime) >= '2011-01-22'
and strftime('%Y-%m-%d',datetime) <= '2011-01-23';
```



The `datasource` and `datetime` values must be modified accordingly, in order to match your requirements for the time period and the PBX object you want to delete calls for.

- The query should return a `No results set` message, confirming the selected calls have been deleted.





6. To re-spool the data back in the system, copy the previously-saved backup files and paste them into the following location:

```
{Program Files}\Tri-Line\TIM Plus\spool
```

7. While the system is processing the data, you can click on the **Call view** screen to monitor the calls that are being logged.

**i** The time to re-spool the data will vary, depending on the amount and size of the files your system is processing.

## Running TIM Plus over SSL (HTTPS)

To configure TIM Plus to run over HTTPS (HTTP over SSL), you need a valid SSL certificate issued by a certificate authority (CA), such as VeriSign or Thawte. The certificate should be a .PCX file in PKCS#12 format and containing an SSL key.

To apply the certificate to TIM Plus, follow the steps below:

- Place the certificate in the following location of the main TIM Plus installation folder: `{app}\Program Files (x86)\Tri-Line\TIM Plus\config`
- Access Windows Registry Editor ( `start -> Run -> regedit.exe` ) and go to the following Registry key:

HKEY\_LOCALMACHINE\Software\Wow6432Node\Tri-Line\TIM Plus\Main

3. Add the following string values, amending the certificate name and password accordingly:

String name	String value
SSLKey	{app}\Program Files\Tri-Line\TIM Plus\config\certificate.pfx
SSLCertificate	{app}\Program Files\Tri-Line\TIM Plus\config\certificate.pfx
SSLCertificatePassword	password
SSLKeyPassword	password

4. Change the registry entry of the server port to 443, as shown below:

Name	Type	Data
(Default)	REG_SZ	(value not set)
AlertDisk1	REG_SZ	{app}\logs\{year}\{year}-{month}-{day}-critical.log
AlertDisk10	REG_SZ	
AlertDisk2	REG_SZ	{app}\logs\{year}\{year}-{month}-{day}-warning.log
AlertDisk3	REG_SZ	{app}\logs\{year}\{year}-{month}-{day}-information.log
CallDBDatabase	REG_SZ	Native
CallDBProvider	REG_SZ	Native
CallDBServerType	REG_SZ	Standard
Configured	REG_SZ	True
CurrentTimezone	REG_SZ	-60
DefaultTariffTable	REG_SZ	UK
DisableDCs	REG_SZ	True
SchemaVerify	REG_SZ	196690
SSLCertificate	REG_SZ	C:\Program Files\Tri-Line\TIM Plus\config\certificate.pfx
SSLCertificatePa...	REG_SZ	password
SSLKey	REG_SZ	C:\Program Files\Tri-Line\TIM Plus\config\certificate.pfx
SSLKeyPassword	REG_SZ	password
WebContentCac...	REG_SZ	False
WWWServerPort	REG_SZ	443

5. Go to Windows services and restart the TIM Plus service.

## VAT rate adjustment

### VAT rate adjustment

- Introduction
- Changing Web format
- Changing PDF format

## Introduction

Every report in TIM Plus can be fully customised, from how they perform their calculations to the way they appear.

To amend a report, you need to edit its associated XSL or PDF script file, paying attention to the class of web user whose content you want to change, and which report format.

This document details how to change the tax rate in the `Phone Bill` report in both `web` and `PDF` formats, for any web user with a class of `Administrator`.

Every report has a unique ID number which the system uses to identify the report type (the report ID for a `Phone Bill` report is 2 )

## Changing Web format

Open the following file in a plain text editor such as Notepad:

```
{Program Files}\Tri-Line\TIM  
Plus\ssldata\_siteadmin\scripts\web\2.xsl
```

Look in the first few lines of code for the VAT amount, then change it to the new amount, respecting the decimal point and number of decimal places:

```

<?xml version="1.0" encoding="UTF-8" ?>
<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Tran
<xsl:output media-type="text/html" encoding="UTF-8" method="html" />
<!-- Phone bill -->
  <xsl:variable name="vat">20.0</xsl:variable>
  <xsl:include href="all.xsl" />
  <xsl:template match="report">
    <html>
      <head>
        <title>
          <xsl:value-of select="properties/name" />
        </title>
        <link rel="stylesheet" type="text/css" href="css/2.css"
        <link rel="stylesheet" type="text/css" href="furniture/c
        <link rel="stylesheet" type="text/css" href="furniture/c
        <link rel="stylesheet" type="text/css" href="furniture/c
        <script type="text/javascript" src="common/js/common.js"
        <script type="text/javascript" src="js/all.js" />
        <script type="text/javascript">
          <xsl:call-template name="definition" />
        </script>
      </head>
      <body onload="FixMozHeight();"
        <xsl:call-template name="load_frame" />
        <xsl:call-template name="optionssection" />
        <xsl:call-template name="filtersection" />

```

Save the file and run a new **Phone Bill** report in **web** format to verify whether the amount has changed. If it hasn't then you may be running the report as a web user with a different web class than **Administrator**; in which case, modify the file in the path specified above, but choose the appropriate folder other than **\_admin**.

## Changing PDF format

Again, in a plain text editor such as Notepad, edit the following file:

You'll notice that this is a Javascript file, and that it is located in the **\pdf\** folder of the **\scripts\** folder.

```
{Program Files}\Tri-Line\TIM Plus\ssldata\_admin\scripts\pdf\2.js
```

Search for the following line (the value shown below may be different on your system):

```
var _vat = 20.0;
```

Change the value to the new amount, then save the file.

Run a new **Phone Bill** report in **PDF** format to verify that the amount has changed.