

# IP Office 8.0

## Using IP Office Customer Call Reporter

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# Chapter 1.
# What is New in 8.0

# 1. What is New in 8.0

- **Statistics**
  The following changes have been made to the statistics:
  - **SYSTEM Values**
    The Talk statistics and the Agent Productivity factor are now available as System queues.
  - **Presented Calls Statistics**
    A new statistic is available to record calls that have reached to a particular hunt group or an agent. This statistic is now available for the system, queues and agents. It is the sum of the existing statistics available for agents and queues.
- **Reports**
  The following changes have been made to reports:
  - **Copying a Report Template**
    A supervisor can copy a report template from another supervisor. Supervisors can now use the Copy icon under Recent reports to copy report templates that have been created by other supervisors. This process will reduce the time taken to install and configure similar report templates.
  - **Agent Productivity Factor**
    The Agent productivity factor is now reported in the Agent Time Card Performance section.
  - **Agent privacy**
    IP Office Customer Call Reporter now provides this feature to hide agent's personal information, for example the last three digits of the telephone number, on Call Details Report and Trace Report.
  - **Average Answer Time Calculation for Call Summary Report**
    The Average Answer Time is independent of the Average Answer Time threshold. The system counts all the calls received by a particular agent or a queue irrespective of the threshold setting that you have set for Call Summary Report. IP Office Customer Call Reporter calculates the average answer time for all the calls received within the time interval set in the **Working Hours** field.
  - **15 minutes and 30 minutes Grouping**
    Following the same format as hourly grouping, IP Office Customer Call Reporter can now be used to group call records in 15-minute and 30-minute slabs. This grouping is only available for Call Summary and Call Details reports.
  - **Custom Reports**
    In addition to the standard report types, supervisors can also create a customized report template in Microsoft Report Builder.
- **Other Features**
  The following changes have been made to other call features:
  - **Using DECT (R4) Telephones**
    IP Office Customer Call Reporter now reports on both real-time and historical statistics on agents using the DECT (R4) telephones.

# Chapter 2. Introduction

# 2. Introduction

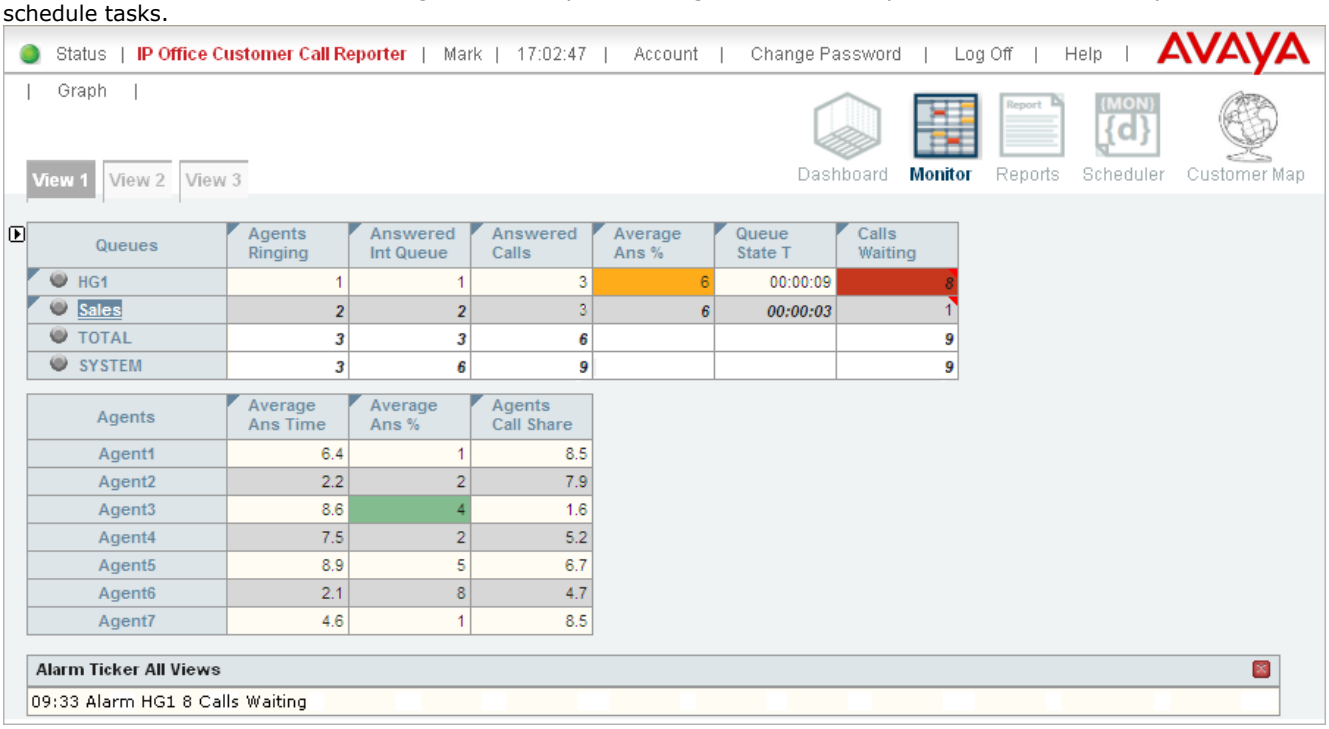
IP Office Customer Call Reporter is a call center reporting application for use with Avaya IP Office telephone systems. IP Office Customer Call Reporter can report on both individual call center 'agents' and on the queues (hunt groups) of which those agents are members. IP Office Customer Call Reporter provides both current and historical reports.

This document covers IP Office Customer Call Reporter version 8.0.

IP Office Customer Call Reporter is accessed through a web browser using a name and password to login. Those login details determine whether the IP Office Customer Call Reporter web client runs in agent, supervisor, administrator or wallboard mode.

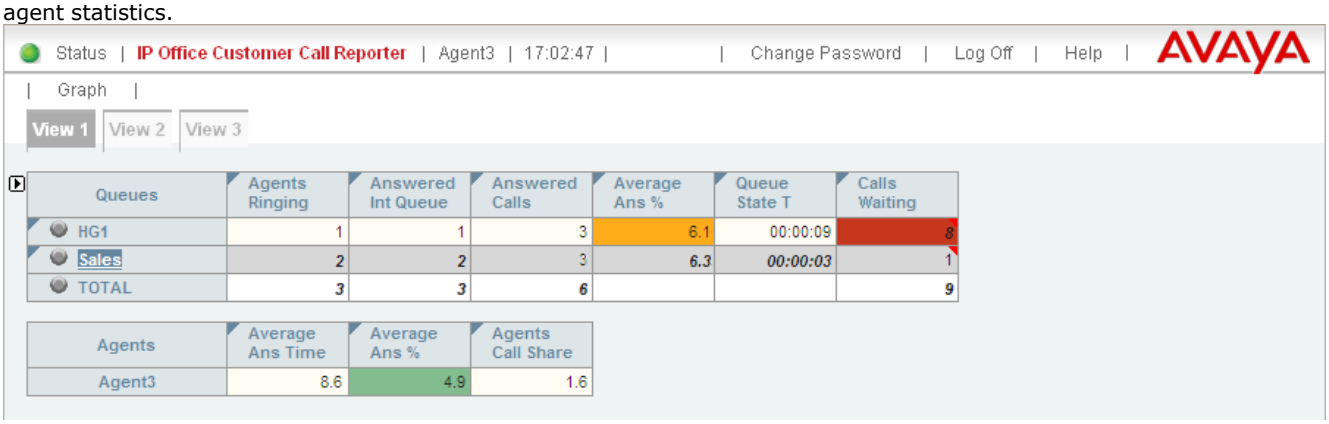
## Supervisor Mode 23

This mode is used to create and manage 'views' of queue and agent statistics. Supervisors can also run reports and schedule tasks.



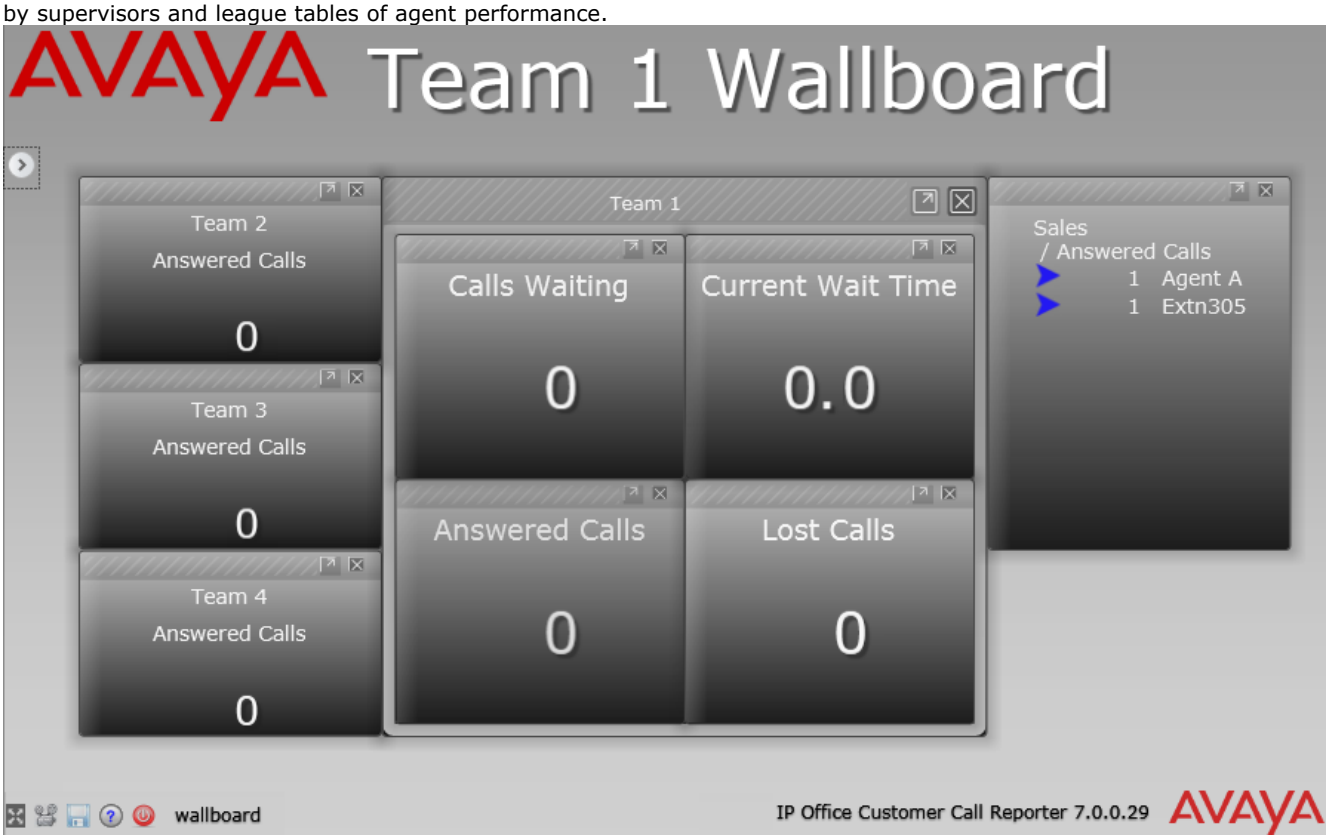

## Agent Mode 108

This mode is used by individual agents. It displays their supervisor's view to them but adjusted to show only their own agent statistics.



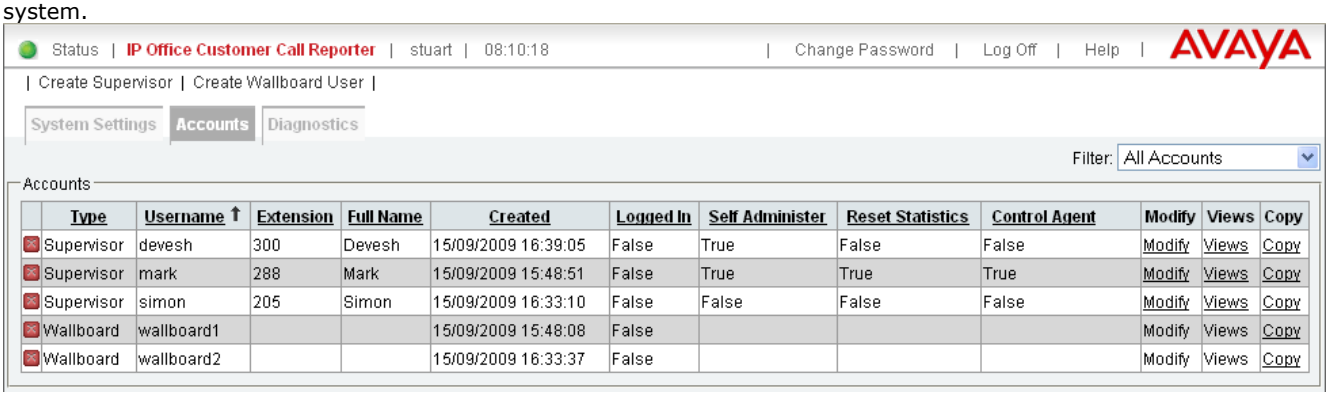
## Wallboard Mode

This mode is used to display queue statistics as sets of values and graphs. It can also be used to display messages sent by supervisors and league tables of agent performance.




## Administrator Mode

This mode is used by the IP Office Customer Call Reporter administrator to configure the IP Office Customer Call Reporter system.




| Type | Username | Extension | Full Name | Created | Logged In | Self Administer | Reset Statistics | Control Agent | Modify | Views | Copy |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Supervisor | devesh | 300 | Devesh | 15/09/2009 16:39:05 | False | True | False | False | Modify | Views | Copy |
| Supervisor | mark | 288 | Mark | 15/09/2009 15:48:51 | False | True | True | True | Modify | Views | Copy |
| Supervisor | simon | 205 | Simon | 15/09/2009 16:33:10 | False | False | False | False | Modify | Views | Copy |
| Wallboard | wallboard1 | | | 15/09/2009 15:48:08 | False | | | | Modify | Views | Copy |
| Wallboard | wallboard2 | | | 15/09/2009 16:33:37 | False | | | | Modify | Views | Copy |

# 2.1 How Do I...

## General

| Get Started | | |
|---|---|---|
| • Log in 16<br>• Change my password 17 | • Reset a forgotten password 18<br>• Get help 19 | • Log off 20 |

## Supervisor Account

| As a Supervisor ... | | |
|---|---|---|
| • View my account details 104 | • Use the dashboard 26 | • Backup the Database 98 |
| **Use Monitor Views** | | |
| • Edit my monitor views. 80<br>• Sort on a statistic 79<br>• Remove a queue from a view 79<br>• Change the column order 79 | • Change the queue rows order 79<br>• View Agent details 79<br>• Understand the statistic colors 83<br>• Use alarms and warnings 84 | • Change an agents status 85<br>• Reset the statistics manually 86<br>• Reset the statistics automatically 98<br>• Graph a statistic 87 |
| **Run Reports** | | |
| • Create a report template 38<br>• Run a manual report 41 | • Schedule a report 44<br>• Copy a report template 46 | • Delete a report 47<br>• Using custom reports 63 |
| **Schedule events** | | |
| • Schedule a report 100<br>• Automatically reset the statistics 98 | • Backup the database 98 | • Send Wallboard messages 102. |
| **Use the Customer Map** | | |
| • View the customer map 88<br>• Understand the pin colors 90 | • Select the map type 93<br>• Map historical calls 94 | • Add a map overlay 95 |

## Wallboard Accounts

| Use a Wallboard Account | | |
|---|---|---|
| • Create a Wallboard Account 125<br>• Log in a Wallboard 127<br>• Edit the wallboard 129 | • Add a League Table 136<br>• Add a Logo 137<br>• Add a Title Bar 139 | • Add a Graph 141<br>• Add a message bar 143<br>• Send a message 144 |

## Administrator Account

| As an Administrator... | | |
|---|---|---|
| • View accounts 160<br>• Create a supervisor account 161 | • Create a wallboard account 164<br>• Edit a supervisor's views 165 | • Restart a service 170<br>• Setup e-mail services 171 |

## 2.2 Key Terms

The following are the definitions for some of the key elements of IP Office Customer Call Reporter operation covered in this documentation. Additional definitions are included where appropriate. A full set of definitions is found in the Glossary/ Definitions 289 section.

### Administrator

The administrator can amend IP Office Customer Call Reporter system preferences plus create and administer supervisors. That includes assigning which queues a supervisor can see or granting the supervisor self-administration rights to amend their own settings including queues.

The administrator does not have any views of call statistics. However they can setup and amend the views used by supervisors and their agents.

There is only one administrator account and only one person can log in as the administrator at any time.

### Supervisor

Supervisors can create 80 and amend views 79 of the agent queues assigned to them. Those views are then viewable by the supervisor and the agents. Supervisors can also create reports 38 that they then either run manually 41 or that they schedule 44 to run automatically at regular intervals.

IP Office Customer Call Reporter supports up to 30 supervisors. However the maximum number of supervisors that can be logged in at any time is controlled by the number of available Supervisor licenses (each license enables a simultaneous Supervisor login and Wallboard login).

### Agent

An agent is a user who handles calls to queues on the IP Office telephone system. Unlike general IP Office users they have been specifically configured as agents in the IP Office configuration. IP Office Customer Call Reporter supports up to 150 agents.

- To make and receive calls, the agent must login to a telephone on the IP Office telephone system. Note that T3 Series and T3 IP Series telephones are not currently supported.
- The agent's telephone status is recorded by IP Office Customer Call Reporter. For example when they logged in to a telephone, answer a call, log off, etc.
- The agents are also configured as members of queues and are then presented with call targeted to those queues. An agent can be a member of several queues.
- Using the web client, agents can see the same screen views as their supervisor. However, unlike the supervisor, the agents can only see their own statistics and for those queues to which they belong.

### Queues

A queue is a hunt group configured for IP Office Customer Call Reporter operation. Calls to a queue are presented the first available agent 291 in the queue using a pattern set in the queue's configuration. If the call is not answered it is presented to the next available agent and so on until answered. The order in which the agents are used is set in it's configuration to one of the following orders: Collective 292, Sequential 297, Rotary 297 and Longest Waiting 293).

### Statistics

IP Office Customer Call Reporter collects information about calls to queues and agents and stores this in its database. It also collects information about the current state of the queues and agents. Statistics based on this information are then used in web views and historical reports.

- Except where specifically indicated, usually by the term 'Non-Queue', all statistics relate to calls targeted to queues.
- Each statistic can only be added once within each view.
- Statistics are calculated values. They are affected by configurable settings on the particular view, wallboard or report such as whether to include or exclude internal calls. Those settings can be varied for each instance where a particular statistic is used.
  - The exception is statistics that use answer and lost calls thresholds values in their calculation. The same threshold values are used for all such statistics in the same view or wallboard display.
- The statistics value in views and wallboards can be manually reset when required by any supervisor for who the administrator 289 has enabled the Reset Statistics 86 option. Resetting the statistics affects the view and wallboard statistics for all supervisors and agents. It does not affect the statistics used for historical reports.
- The statistics in views are updated approximately every 2 seconds.

## Monitor View

The term view is used for the first 3 tabs displayed to supervisors and agents. Each view consists of a table of queues and queue statistics. Clicking on any of the queue names will display an additional table of agent statistics for the agents in that queue. An alarm list or ticker can also be added to each view to show alarms and warnings for that view or all the supervisor's views. The views can be amended by the supervisor and administrator.

Agents are able to see the same views as their supervisor but cannot change the queues or statistics. The agent's version of the view will only show queues to which the agent belongs and their own agent details.

## Wallboard

The IP Office Customer Call Reporter administrator can create wallboard accounts. When logged in with one of these accounts, the browser can be used to display queue statistics for any queues plus other information such as messages sent or scheduled by IP Office Customer Call Reporter supervisors.

IP Office Customer Call Reporter supports up to 30 wallboards. However the maximum number of wallboards that can be logged in at any time is controlled by the number of available Supervisor licenses (each license enables a simultaneous Supervisor login and Wallboard login).

# 2.3 Client Computer Requirements

## Web Browser Requirements

IP Office Customer Call Reporter was designed and tested with the listed web browsers. If used with other any other browser a warning will be displayed but the access is allowed.

- **Google Chrome 10 and later**
- **Firefox 3.0 and later**
- **Windows Safari 4.0 and later**
- **Internet Explorer 8 and later**

## Required Browser Features

- JavaScript enabled.
- Pop-ups allowed. Required for graph and help windows.
- If audio for alarms has been enabled, an audio plug-in is required for user's browsers. Use Windows Media Player or Quick Time.
  - When using a browser other than Internet Explorer, the browser may require the addition of the Firefox Windows Media Play plug-in to support Windows Media Player. The Firefox Windows Media Play plug-in is available for download at http://port25.technet.com/pages/windows-media-player-firefox-plugin-download.aspx . Currently this plug-in can be used with the Google Chrome, Mozilla Firefox, and Windows Safari browsers.
- **Microsoft Silverlight**
  The IP Office Customer Call Reporter wallboard and customer map functions use Silverlight. When logging in at a computer without Silverlight installed, if the computer has access to the internet, you will be prompted to install Silverlight. If the computer does not have access to the internet, Silverlight must be installed manually. Full details of Silverlight and the browsers on which it is supported can be obtained at http://www.microsoft.com/silverlight.
  - For the display features to operate smoothly, especially when a large number of rapidly changing statistics are being displayed, use a dedicated graphics card in your computer rather than an integrated graphics card provided on the motherboard. The required minimum specification is a DirectX 9.0c or above compatible graphics card for GPU hardware acceleration via DirectDraw with 1GB or greater video memory. Support for 60Hz or greater refresh rate at the chosen resolution, for both card and monitor.

# 2.4 Account Settings

To login to IP Office Customer Call Reporter requires username, password, and e-mail address. The way these are assigned depends on the type of account.

| Role | Username | Password | E-mail Address |
|---|---|---|---|
| **Administrator** | Created the first time IP Office Customer Call Reporter is run after installation. | Created the first time IP Office Customer Call Reporter is run after installation.<br>You can then change it through the system settings 169 after logging in as administrator. | An address is entered during installation when the administrator account is first created. This address can be changed by after logging in by going to the System Settings 169 tab. |
| **Supervisor** | Created by the administrator when creating your supervisor account. If you also take calls on the telephone system, the administrator can configure it to match your IP Office username. | Set by the administrator when they create a supervisor account.<br>The administrator can change supervisor passwords 161 if required.<br>You can change it through your account details 104 after logging in. | Set by the administrator when they create your supervisor account. They can also change your address.<br>You can change it through your account details 104 after logging in. |
| **Agent** | Your IP Office Customer Call Reporter username matches your username on the IP Office telephone system. This can be different from the name displayed on your telephone screen. Consult your supervisor, if you are unsure. | You will be requested to enter a password the first time you login.<br>If you have an address already configured in the IP Office configuration that is shown as the default. | An address is requested by IP Office Customer Call Reporter when you first log in.<br>If you already have an address set in the IP Office configuration, that address will be displayed by default. |
| **Wallboard** | Created by the administrator when they create the wallboard account. | Created by the administrator when they create the wallboard account. | No e-mail address is used for wallboard accounts. |

1. E-mail addresses must be unique. IP Office Customer Call Reporter does not support two users having the same e-mail address. Users who have already logged in can set a new password using the Change Password 17 function. All users can request a new password by e-mail using the Forgotten Password 18 function if they have an e-mail address known to the IP Office Customer Call Reporter system.
2. Logging in multiple sessions using the same account will consume multiple licenses.
3. Usernames are not case sensitive. Passwords are case sensitive.

# 2.5 Logging In

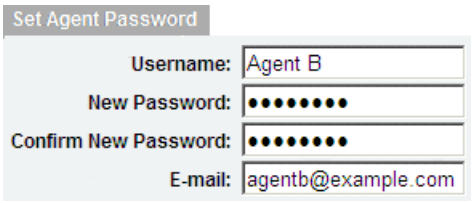
This refers to logging in to the IP Office Customer Call Reporter web client, not to logging in to a telephone 113 to receive calls.

1. Using your browser, enter the path to the IP Office Customer Call Reporter web service - ***http://<server_path>/CCRWebClient***. The login window should be displayed.

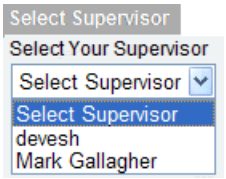



2. Enter your **Username** and **Password**.
   - If you have forgotten your password but have an e-mail address set in IP Office Customer Call Reporter, click **Forgot Password** 18.
   - If you are an agent logging in for the first time leave the password field blank. You will be asked to set your password and e-mail address as part of the login.
3. If you want the IP Office Customer Call Reporter web client to run in a different language, you can use the **Language** drop down to select a language from the list.

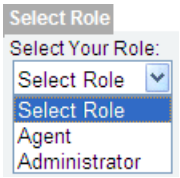
   Supported languages are ***Dutch***, ***English (UK)***, ***English (US)***, ***French***, ***German***, ***Italian***, ***Brazilian Portuguese***, ***Russian*** and ***Spanish***. Some parts of customer call maps are third party components delivered over the internet and may run in different languages, for example the zoom and pan controls.
4. Click **Logon**.
   - **Agent's First Time Login**
     If you are an agent logging in for the first time, the **Set Agent Password** window will be displayed. Enter a password of your choice and then click **OK**. Your unique e-mail address is also requested. Enter an e-mail address to be able to use the Forgot Password 18 feature.




   - **All Agent Logins**
     If multiple supervisors have been configured, agents need to indicate the supervisor they are working for.




   - **Multiple Role Login (Optional)**
     If your username is configured for more than one role 285, the **Select Role** window will be displayed. Select the required role and click **OK**.



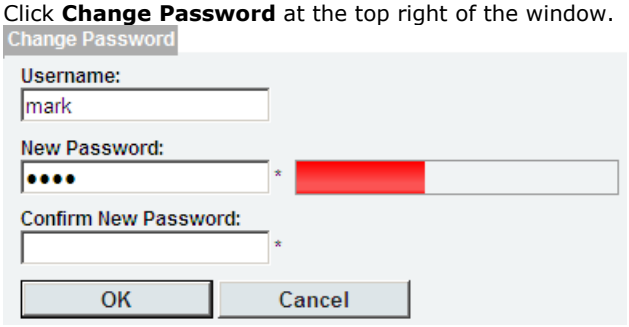

5. The web client will open in the appropriate mode: Agent 108, Supervisor 23 or Administrator 157.
   - You have three attempts to enter the correct password or username. If you fail to enter valid login details the login window will close and your account is locked for 5 minutes.
   - Logged in users who are inactive for more than a set time are automatically logged off. The default time is 30 minutes but this can be adjusted by the administrator.

# 2.6 Changing Your Password

The administrator, supervisors and agents who have logged in can select to change their password. This option is unavailable for wallboards.

**To change your password**

1. Logon to the client application using your current password.
2. Click **Change Password** at the top right of the window.




3. Enter your details:
   - **Username**
     The name you use when you login to the IP Office Customer Call Reporter web client. This cannot be changed.
   - **New Password**
     Enter your new password.
   - **Confirm New Password**
     Re-enter your new password. Remember that passwords are case sensitive.
4. Click **OK**. You have changed your password.
5. Click any of the tabs, including the current one, to return to normal viewing.

# 2.7 Forgotten Passwords

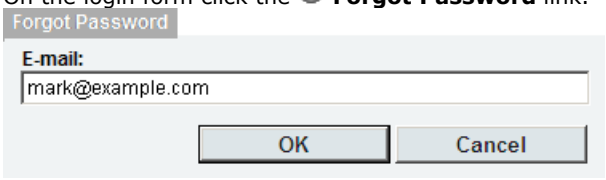
If you have forgotten your password, you can request a new password to be sent to you by e-mail. This option is unavailable for wallboards.

**How is my e-mail address set for IP Office Customer Call Reporter?**

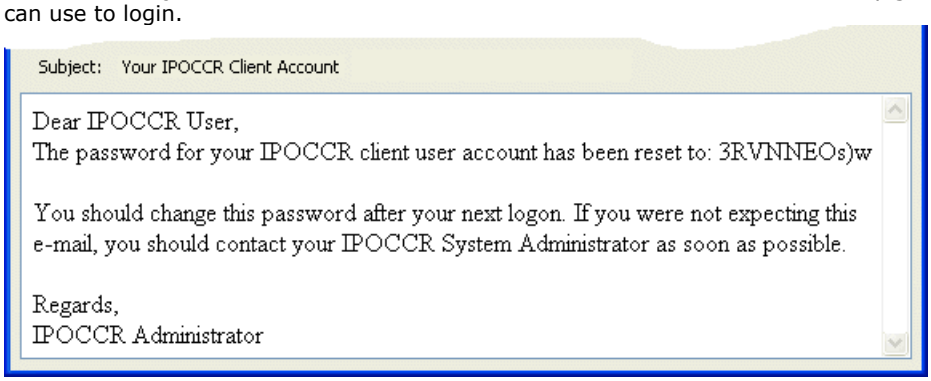
- **Agent** 289
  Your e-mail address is requested by IP Office Customer Call Reporter the first time you log in. If you already have an e-mail address set in the IP Office telephone system, that address is displayed by default.
- **Supervisor** 298
  When the administrator creates or amends a supervisor account 161 they can enter a unique e-mail address. Supervisors can also check and change their e-mail address when logged in by clicking on **Account** 104.
- **Administrator** 289
  The administrator's e-mail address is entered when IP Office Customer Call Reporter is first run. When logged in as the administrator, the e-mail address can be checked and changed through the **System Settings** 169 tab.

**To request a new password**

1. Using your web browser access the web address for your IP Office Customer Call Reporter system.
2. On the login form click the **Forgot Password** link.




3. Enter your e-mail address.
4. Click **OK** to request a new password e-mail. You are returned to the main IP Office Customer Call Reporter web client **Logon Window** 16 and an e-mail is sent to your e-mail address.
5. The e-mail subject will be **Your IPOCCR Client Account**. It contains a randomly generated password that you can use to login.




*Example of forgotten password email.*

6. You can then use the **Change Password** 17 function after you have logged in.

# 2.8 Additional Help

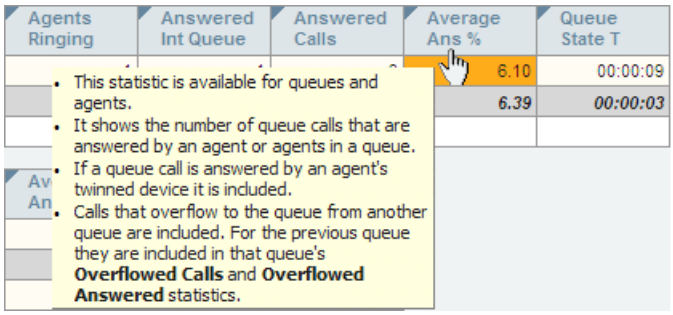
Except for wallboard views, the following methods can be used to access help:

**Viewing Help**

Click **Help** to access this document as embedded help from IP Office Customer Call Reporter. The help will open in a separate browser window. Help is supported in ***English***, ***French***, ***Italian***, ***German***, ***Brazilian Portuguese*** and ***Latin Spanish***. For IP Office Customer Call Reporter running in any other languages, the help will be displayed in ***English***.

**Popup Help Tooltips**

For each of the different possible statistics, popup tooltip help is provided. To access this place the cursor over the statistic name (the cursor should change to a hand icon). After a short delay the popup help will be displayed. Help is supported in **English**, **French**, **German**, **Italian**, **Spanish** and **Brazilian Portuguese**. For IP Office Customer Call Reporter running in any other languages, the help will be displayed in English.




- The use of help tooltips is enabled or disabled through the **Help Tooltips Enabled** within the Supervisor account settings 104.

**Statistic Help**

In addition to the popup help above, more detailed help on each statistic is available. Click the statistic name at the top of the column and select **Help** from the menu that is displayed.

**Additional Information**

Additional help and information on IP Office Customer Call Reporter and IP Office can also be found at the Avaya support web site (http://support.avaya.com) and the IP Office Knowledge Base web site (http://marketingtools.avaya.com/knowledgebase).

## 2.9 Logging Off

Once you have started the IP Office Customer Call Reporter web client you can exit at any time. It is important that you exit correctly rather than just closing the web browser. If you try to log on  to another computer without logging off from the current one, you will need to wait for the previous session to time out (during which time a supervisor or agent license will also continue to be in use).

IP Office Customer Call Reporter wallboards do not have a log off option. The wallboard account is logged off by closing the browser.

**To exit**

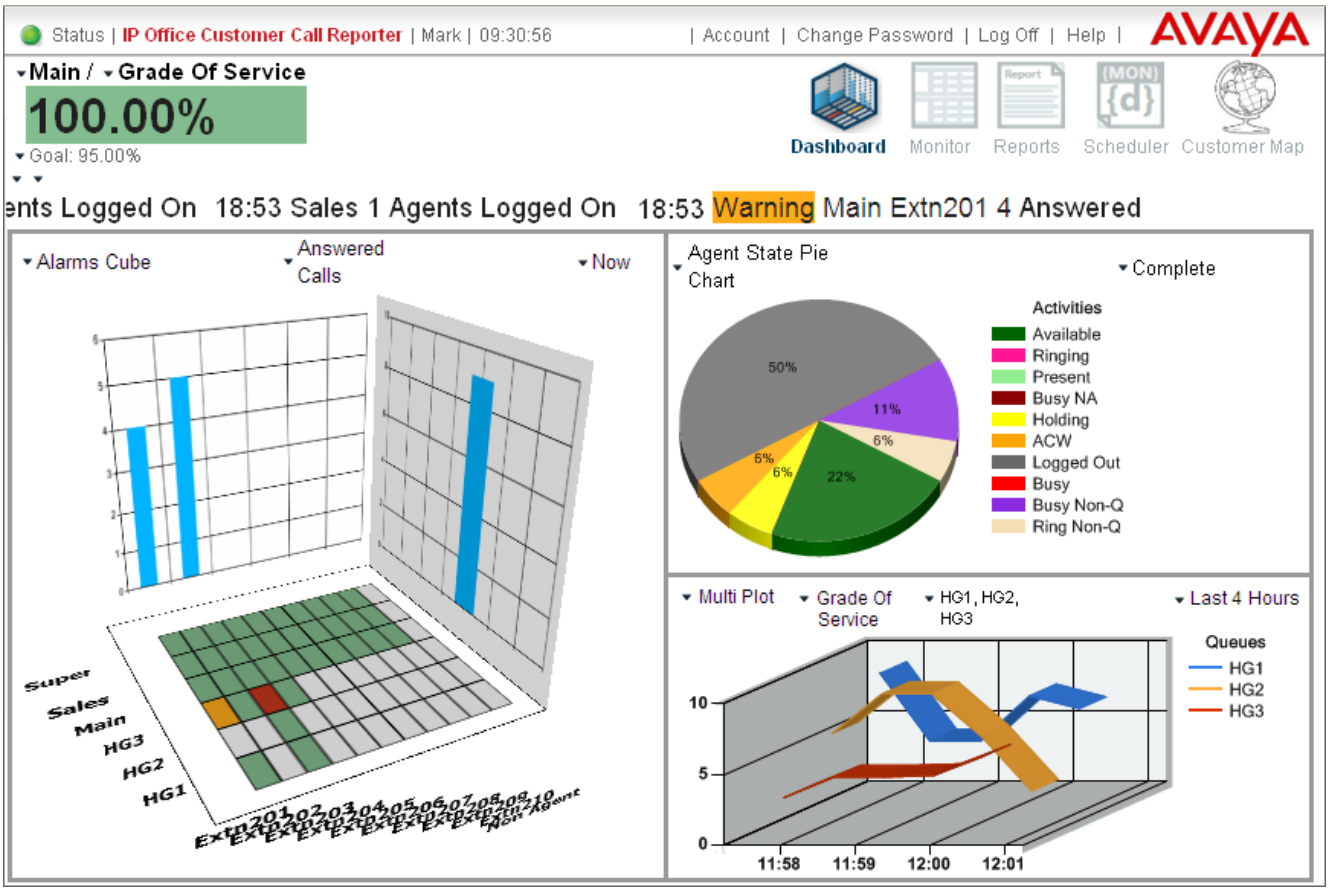
1. Click **Log Off** to log off from IP Office Customer Call Reporter. You are returned to the login 16 window.
   - If using the Customer Map, click .
2. This action logs you off the IP Office Customer Call Reporter. For agents, it does not log you off your current telephone extension. See Logging Out 115.

# Chapter 3. Supervisor

# 3. Supervisor

Supervisors can create[80] and amend views[79] of the agent queues assigned to them. Those views are then viewable by the supervisor and the agents. Supervisors can also create reports[38] that they then either run manually[41] or that they schedule[44] to run automatically at regular intervals.

IP Office Customer Call Reporter supports up to 30 supervisors. However the maximum number of supervisors that can be logged in at any time is controlled by the number of available Supervisor licenses (each license enables a simultaneous Supervisor login and Wallboard login).




- **Dashboard**[26]
  This is the default page shown when a supervisor logs in. It shows information graphs for selected queues, agents and statistics.

- **Monitor**[80]
  Each supervisor has 3 information views, each showing a table of different of queue and agent statistics. These views are initially created by the administrator[165] but can be adjusted by the supervisor. By default the views are called ***View 1***, ***View 2*** and ***View 3*** but they can be renamed through the supervisor's account settings[104].

- **Reports**[38]
  Create and save report templates for both manual and automatic reports. For manual reports the report is run from this tab after having selected the required template.

- **Scheduler**[44]
  Schedule events such as saved reports, wallboard messages and general housekeeping tasks.

- **Customer Map**[88]
  The customer displays customer calls for a selected period on a map that plots the position of customers based on calling number information.

| As a Supervisor ... | | |
|---|---|---|
| • View my account details 104 | • Use the dashboard 26 | • Backup the Database 98 |
| **Use Monitor Views** | | |
| • Edit my monitor views. 80<br>• Sort on a statistic 79<br>• Remove a queue from a view 79<br>• Change the column order 79 | • Change the queue rows order 79<br>• View Agent details 79<br>• Understand the statistic colors 83<br>• Use alarms and warnings 84 | • Change an agents status 85<br>• Reset the statistics manually 86<br>• Reset the statistics automatically 98<br>• Graph a statistic 87 |
| **Run Reports** | | |
| • Create a report template 38<br>• Run a manual report 41 | • Schedule a report 44<br>• Copy a report template 46 | • Delete a report 47<br>• Using custom reports 63 |
| **Schedule events** | | |
| • Schedule a report 100<br>• Automatically reset the statistics 98 | • Backup the database 98 | • Send Wallboard messages 102. |
| **Use the Customer Map** | | |
| • View the customer map 88<br>• Understand the pin colors 90 | • Select the map type 93<br>• Map historical calls 94 | • Add a map overlay 95 |

## The Status Bar

| | |
|---|---|
| **Status** 169 | This button indicates the overall status of IP Office Customer Call Reporter. Clicking on the icon displays a **System Settings** 169 tab which shows the status of the individual IP Office Customer Call Reporter components.<br>• **Green:** IP Office Customer Call Reporter is running.<br>• **Yellow:** Some parts of IP Office Customer Call Reporter are still in the process of starting.<br>• **Red:** There may be a problem in IP Office Customer Call Reporter. |
| **Change Password** 17 | While logged in to IP Office Customer Call Reporter, you can change your password. |
| **Log Off** 20 | Close the IP Office Customer Call Reporter connection. It is important to close a connection using this control rather than just closing the browser or tab within the browser. Failing to use this button will cause a 5 minute delay before you can log in again on another computer. |
| **Help** 19 | Access this documentation in online format. Where possible the appropriate page for the current IP Office Customer Call Reporter screen is displayed. |
| **Account** 104 | This tab displays details of the supervisor's account. You can change these details that include the supervisor password and e-mail address. |

# 3.1 Logging In

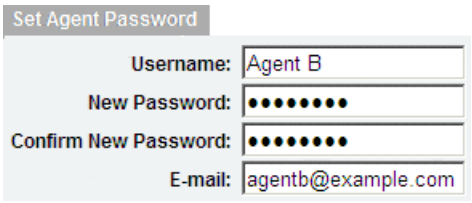
This refers to logging in to the IP Office Customer Call Reporter web client, not to logging in to a telephone 113 to receive calls.

1. Using your browser, enter the path to the IP Office Customer Call Reporter web service - ***http://<server_path>/CCRWebClient***. The login window should be displayed.

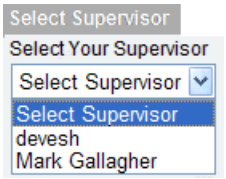



2. Enter your **Username** and **Password**.
   - If you have forgotten your password but have an e-mail address set in IP Office Customer Call Reporter, click **Forgot Password** 18.
   - If you are an agent logging in for the first time leave the password field blank. You will be asked to set your password and e-mail address as part of the login.
3. If you want the IP Office Customer Call Reporter web client to run in a different language, you can use the **Language** drop down to select a language from the list.

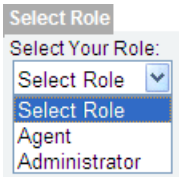
   Supported languages are ***Dutch***, ***English (UK)***, ***English (US)***, ***French***, ***German***, ***Italian***, ***Brazilian Portuguese***, ***Russian*** and ***Spanish***. Some parts of customer call maps are third party components delivered over the internet and may run in different languages, for example the zoom and pan controls.
4. Click **Logon**.
   - **Agent's First Time Login**
     If you are an agent logging in for the first time, the **Set Agent Password** window will be displayed. Enter a password of your choice and then click **OK**. Your unique e-mail address is also requested. Enter an e-mail address to be able to use the Forgot Password 18 feature.




   - **All Agent Logins**
     If multiple supervisors have been configured, agents need to indicate the supervisor they are working for.




   - **Multiple Role Login (Optional)**
     If your username is configured for more than one role 285, the **Select Role** window will be displayed. Select the required role and click **OK**.

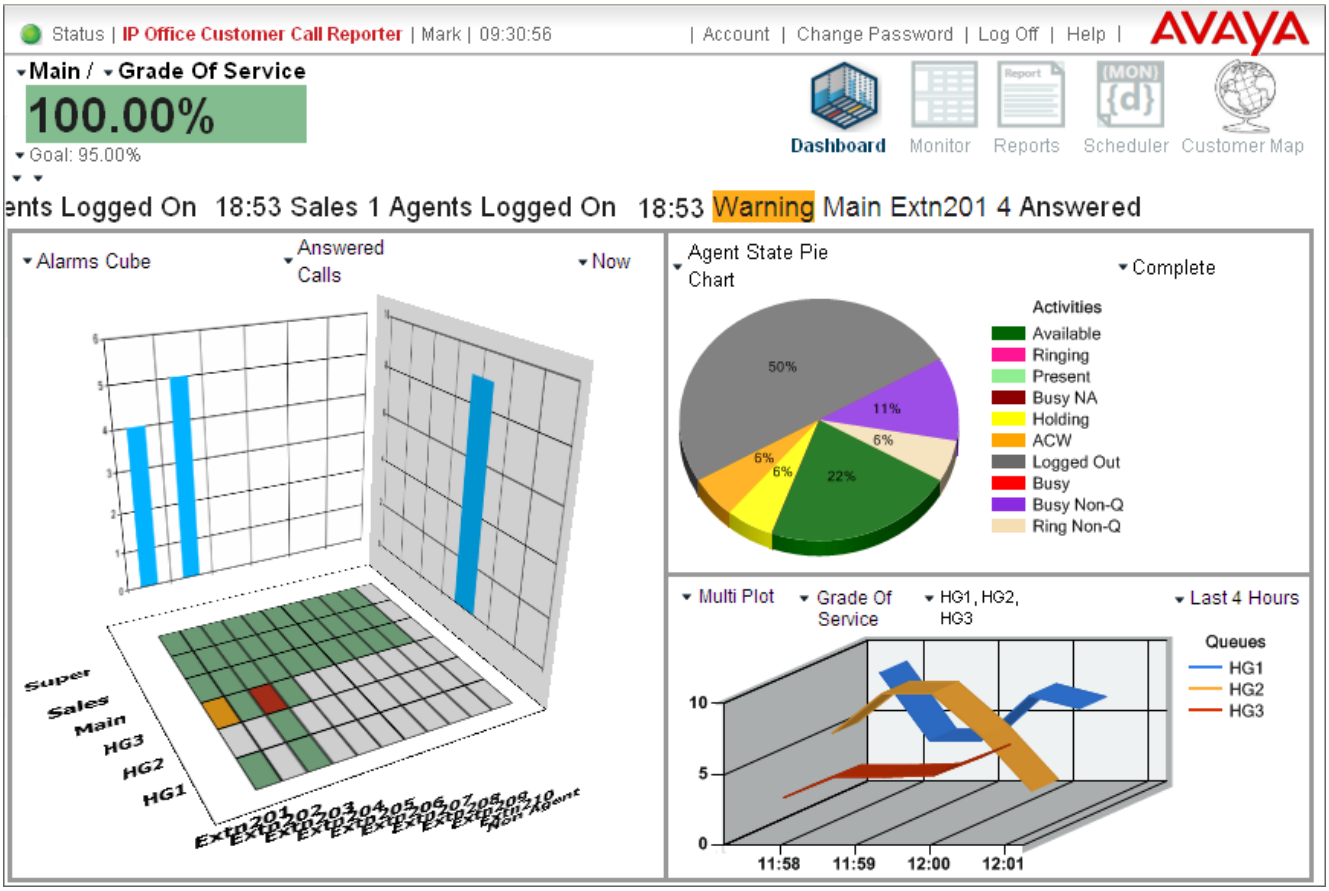



5. The web client will open in the appropriate mode: Agent 108, Supervisor 23 or Administrator 157.
   - You have three attempts to enter the correct password or username. If you fail to enter valid login details the login window will close and your account is locked for 5 minutes.
   - Logged in users who are inactive for more than a set time are automatically logged off. The default time is 30 minutes but this can be adjusted by the administrator.

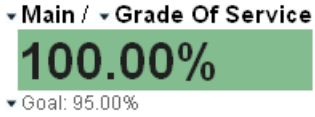
# 3.2 Dashboard

For a supervisor account, this is the default page shown after logging in. It consists of a number of adjust information elements; a dashboard goal, a statistics information ticker and a set of graph display panels. The elements are described below.

Items in the dashboard are updated approximately every 10 seconds.




## Dashboard Goal

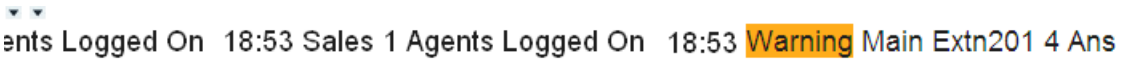



This is displayed at the top left of the dashboard. The goal is based on a selected queue and either its **Average Speed of Answer**, **Grade of Service** or **Agent Productivity** statistic. Instead of a specific queue, ***SYSTEM*** can be selected for all queues. The background color of the goal is changed from red to green when the goal target is met or exceeded.

By clicking on the ▾ icons next to each part of the dashboard goal, you can select the queue or ***SYSTEM***, the queue statistic and the target value.

## Dashboard Warnings, Alarms and Information Ticker

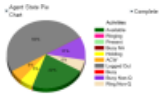
The area just above the display panels is used to show an all views alarms and warnings ticker. You can also configure it to show statistics information for selected queues and queue statistics. The option ***SYSTEM*** can be selected to show values for the whole system.



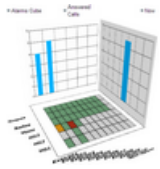

The alarms and warnings in the ticker match those configured in your monitor views. The general information included in the ticker can be adjusted by clicking on the ▾ icons. Use these to select which queues and queue statistics are to be included.

## Dashboard Plot Panels

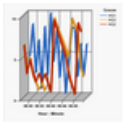
The main part of the dashboard is divided into a large display panel and two small display panels. Each panel has a header row of ▾ icons which can be clicked to select the type of item displayed in the panel and to then adjust its settings. The options are:



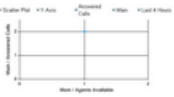
- **Agent State Pie Chart** 28
  This is a 3D effect pie chart of the agent states for all agents on the system. It can be set to show either the current states or it can summarize the time in each state for a selected historical time period.



- **Alarms Cube** 29
  This is a 3D cube that plots a selected statistic value for the system queues on one wall, for the agents in those queues on the other wall and for agent alarms and warnings on the base.



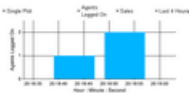
- **Multi Plot Graph** 30
  This is a 3D plot of a queue statistic over time for multiple selected queues.



- **Scatter Plot** 31
  This 2D graph plots two statistics for two queues over a period of time. Points are plotted using one statistic for the X axis value and the other statistic for the Y-axis value.



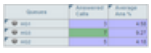
- **Single Pie** 32
  This pie chart shows each queue's share of the total for a selected queue statistic.



- **Single Plot Graph** 33
  This is a 2D graph of a single queue statistic for a selected queue over time.



- **Statistics Cube** 34
  This is a 3D plot of 3 statistics against each other. It can plot either points representing combinations of the values or a plane joining the value combinations.



- **Statistics Table** 35
  This is the queue statistics table repeating the queues and queue statistics settings from one of the monitor views. The table cannot be adjusted directly, that must be done through the matching monitor view.

## Dashboard Queues

The queues available for display in the dashboard are those allocated in your supervisor account settings 104. In addition, you can select **SYSTEM** with many features for an overall view of all queues, not just your own. However some statistics 176 do not have a SYSTEM value and will return a zero value if selected in combination with **SYSTEM** rather than an individual queue.

## Dashboard Statistics

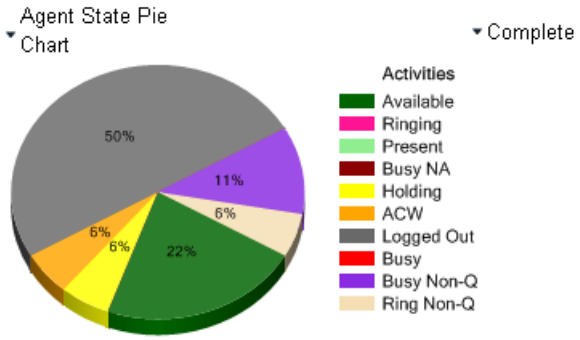
Use the panels to select statistics that each item displays. For all statistics, the call scope includes both internal and external calls. This cannot be changed.

If a statistic that relies on thresholds for its calculation is selected for display (Agent Productivity 180, Average Answer % 198 or Grade of Service 207), the thresholds is taken from those of the same statistic in the supervisor's first view. The thresholds cannot be changed through the dashboard.

The time period selectable for each display is ***Now***, ***Last 4 Hours***, ***Last Day***, ***Last 2 Days***, ***Last 3 Days***, ***Last Week***, ***Last 2 Weeks***, ***Last Month***, or ***Complete***. However, for some items, the selectable time is limited to ***Now*** and ***Complete***. ***Complete*** displays the proportion of time that the agents spent in that state since the dashboard view was started.

- Note that the dashboard uses realtime statistics, so any data before the last manual reset 86 or automatic reset 98 of realtime statistics are not shown regardless of the time range setting.

## 3.2.1 Agent State Pie

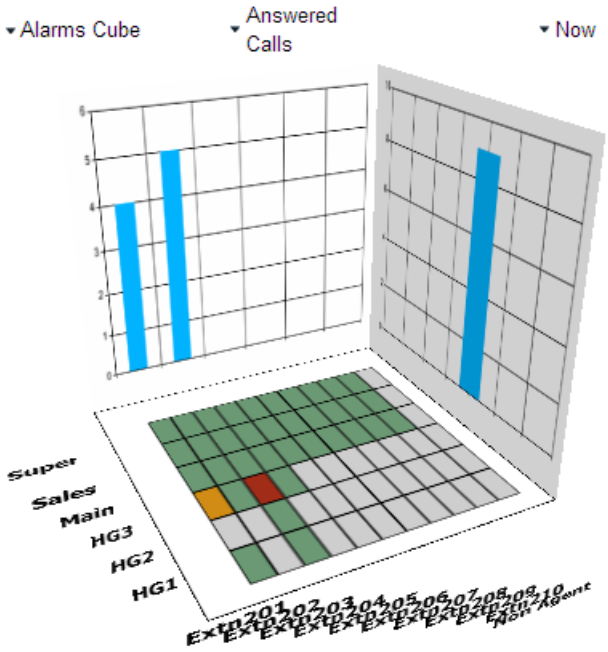



This is a pie chart of the agent states for all agents (equivalent to the Agent Stat (System) 185 statistic). It can be set to show either the current states or it can summarize the time in each state since dashboard was displayed.

- **Type: *Agent State Pie***
- **Time Range**
  Either ***Now*** or ***Complete***. ***Complete*** show the proportion of time the agents spent in that state since the dashboard view was started.

## 3.2.2 Alarms Cube

This is a 3D cube that plots a selected statistic value for all the system queues and agents. Only statistics supported by both queues and agents can be used.




The statistic values for the queues are shown on the right hand wall. The statistic values for the agents are shown on the left hand wall. The base is used to shows agent alarms and warnings for the statistic.



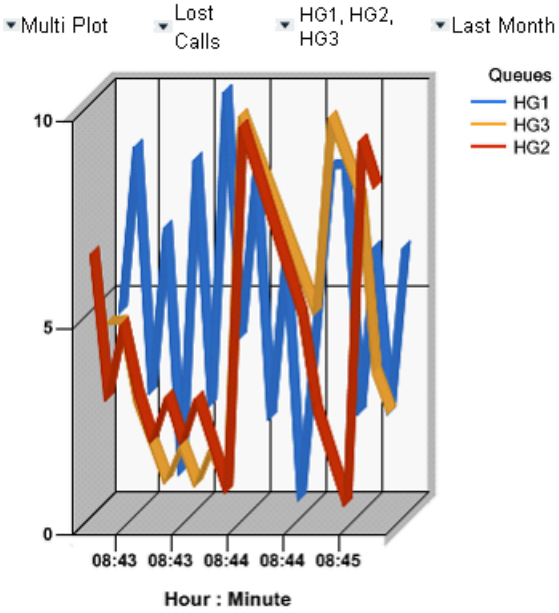

The alarms and warnings use the settings as configured through the first monitor view. They cannot be configured through the alarm cube. The colors used on the base of the alarms cube are shown below. The alarm, warning and acknowledged colors are removed when the statistic value returns to below the threshold.

| **Enabled / Cleared** (Green) | **Warning** (Orange) | **Alarm** (Red) | **Acknowledged** (Blue) |
|---|---|---|---|

- **Type: *Alarms Cube***
- **Statistic**
  The statistic to plot. This is limited to only those statistics supported by both queues and agents.
  Agent Productivity 180, Answered Calls 194, Answered Internal (Queue) 197, Average Answer % 198, Average Answer Time 200, Lost Calls 211, No Answer 213, Presented Calls 219, Routed to Other 223, Routed to Voicemail 224, Talk Average 225, Talk Inbound 226, Talk Inbound Average 227, Talk Internal 228, Talk Outbound 229, Talk Outbound Average 230, Talk Total 231 and Transferred 232.
  - Note that the dashboard uses realtime statistics, so any data before the last manual reset 86 or automatic reset 98 of realtime statistics are not shown regardless of the time range setting.
- **Time Range**
  The time period is fixed to **Now**.

## 3.2.3 Multi Plot Graph

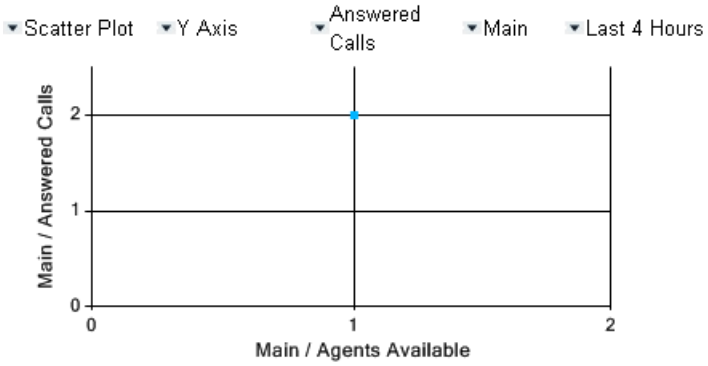
This is a 3D plots of a selected queue statistic over time for multiple selected queues. By default the first 2 queues are shown but you can select which queues to include. To change the type of graph, click the current graph. The options are: straight line graph, curved line graph and point graph.




- **Type: *Multi Plot***
- **Statistic**
  The queue statistic to plot for the selected queues.
  Agent Productivity 180, Agents ACW 188, Agents Available 189, Agents Logged On 191, Agents Present 192, Agents Ringing 193, Answered Calls 194, Answered Internal (Queue) 197, Average Answer % 198, Average Answer Time 200, Average Wait Time 202, Busy Not Available 203, Call Waiting 204, Current Wait Time 206, Grade of Service 207, Longest Wait Time 210, Lost Calls 211, New Messages 212, No Answer 213, Overflowed Answered 216, Overflowed Calls 214, Overflowed Calls Waiting 217, Overflowed Lost 218, Presented Calls 219, Routed to Other 223, Routed to Voicemail 224, Talk Average 225, Talk Inbound 226, Talk Inbound Average 227, Talk Internal 228, Talk Outbound 229, Talk Outbound Average 230, Talk Total 231 and Transferred 232.
  - Note that the dashboard uses realtime statistics, so any data before the last manual reset 86 or automatic reset 98 of realtime statistics are not shown regardless of the time range setting.
- **Queue**
  Use to select which queues to display. ***SYSTEM*** can be selected for all queues.
- **Time Range**
  The options are ***Last 4 Hours***, ***Last Day***, ***Last 2 Days***, ***Last 3 Days***, ***Last Week***, ***Last 2 Weeks*** or ***Last Month***. Note that the dashboard uses realtime statistics, so any data before the last reset 86 is not shown.

## 3.2.4 Scatter Plot

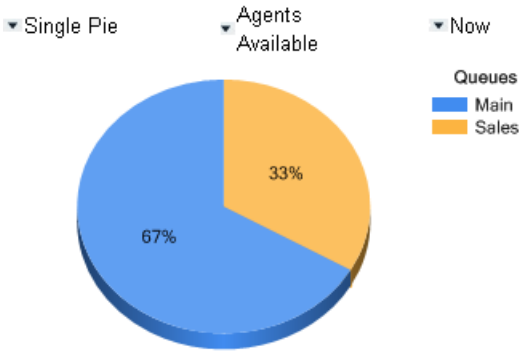
This 2D graph plots two statistics for two queues over a period of time. Points are plotted using one statistic for the X axis value and the other statistic for the Y-axis value.




- **Type: *Scatter Plot***
- **Axis**
  Select ***X Axis*** or ***Y Axis*** to then adjust which queue and queue statistic is plotted on that axis.
- **Statistic**
  The queue statistic to plot on the currently selected axis.
  Agent Productivity 180, Agents ACW 188, Agents Available 189, Agents Logged On 191, Agents Present 192, Agents Ringing 193, Answered Calls 194, Answered Internal (Queue) 197, Average Answer % 198, Average Answer Time 200, Average Wait Time 202, Busy Not Available 203, Call Waiting 204, Current Wait Time 206, Grade of Service 207, Longest Wait Time 210, Lost Calls 211, New Messages 212, No Answer 213, Overflowed Answered 216, Overflowed Calls 214, Overflowed Calls Waiting 217, Overflowed Lost 218, Presented Calls 219, Routed to Other 223, Routed to Voicemail 224, Talk Average 225, Talk Inbound 226, Talk Inbound Average 227, Talk Internal 228, Talk Outbound 229, Talk Outbound Average 230, Talk Total 231 and Transferred 232.
  - Note that the dashboard uses realtime statistics, so any data before the last manual reset 86 or automatic reset 98 of realtime statistics are not shown regardless of the time range setting.
- **Queue**
  The queue for which the statistic is being plotted on the currently selected axis. ***SYSTEM*** can be selected for all queues.
- **Time Range**
  The options are ***Last 4 Hours***, ***Last Day***, ***Last 2 Days***, ***Last 3 Days***, ***Last Week***, ***Last 2 Weeks*** or ***Last Month***. Note that the dashboard uses realtime statistics, so any data before the last reset 86 is not shown.

## 3.2.5 Single Pie

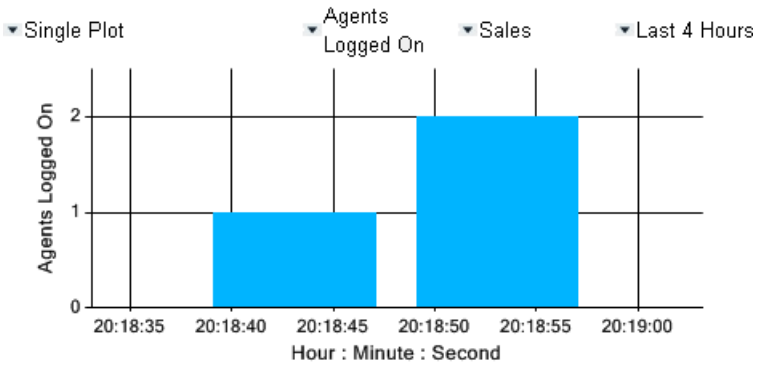
This is a 3D effect pie chart which shows each queue's share of the total for a selected queue statistic.




- **Type: *Single Pie***
- **Statistic**
  The queue statistic used for the comparison.
  Agent Productivity 180, Agents ACW 188, Agents Available 189, Agents Logged On 191, Agents Present 192, Agents Ringing 193, Answered Calls 194, Answered Internal (Queue) 197, Average Answer % 198, Average Answer Time 200, Average Wait Time 202, Busy Not Available 203, Call Waiting 204, Current Wait Time 206, Grade of Service 207, Longest Wait Time 210, Lost Calls 211, New Messages 212, No Answer 213, Overflowed Answered 216, Overflowed Calls 214, Overflowed Calls Waiting 217, Overflowed Lost 218, Presented Calls 219, Routed to Other 223, Routed to Voicemail 224, Talk Average 225, Talk Inbound 226, Talk Inbound Average 227, Talk Internal 228, Talk Outbound 229, Talk Outbound Average 230, Talk Total 231 and Transferred 232.
  - Note that the dashboard uses realtime statistics, so any data before the last manual reset 86 or automatic reset 98 of realtime statistics are not shown regardless of the time range setting.
- **Time Range**
  The time period is fixed to **Now**.

## 3.2.6 Single Plot Graph

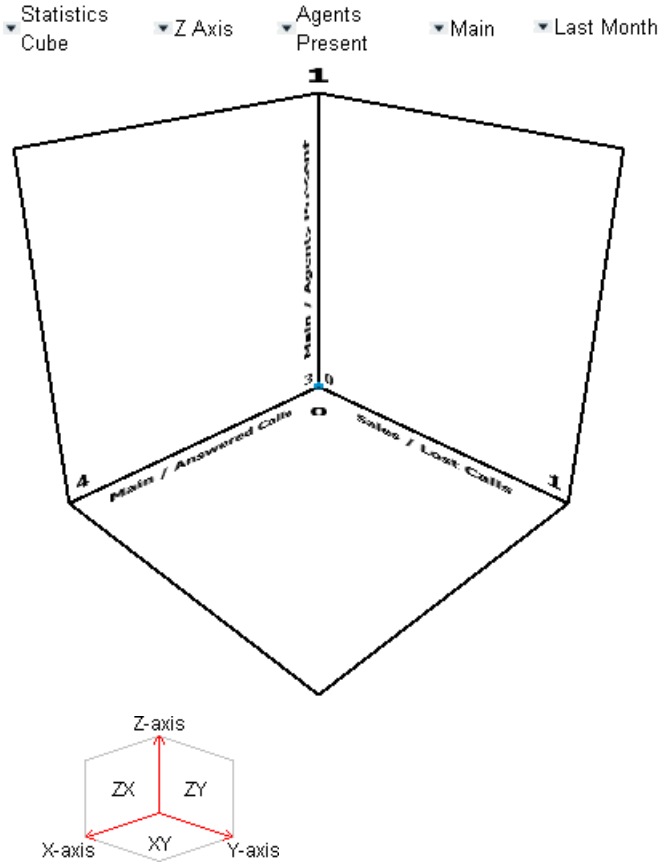
This is a 2D graph of a single queue statistic for a selected queue over time. To change the type of graph, click the current graph. The options are: column bar graph, row bar graph, straight line graph, area graph, curved line graph and point graph.




- **Type: *Single Plot Graph***
- **Statistic**
  The queue statistic to plot. Supported statistics are:
  Agent Productivity 180, Agents ACW 188, Agents Available 189, Agents Logged On 191, Agents Present 192, Agents Ringing 193, Answered Calls 194, Answered Internal (Queue) 197, Average Answer % 198, Average Answer Time 200, Average Wait Time 202, Busy Not Available 203, Call Waiting 204, Current Wait Time 206, Grade of Service 207, Longest Wait Time 210, Lost Calls 211, New Messages 212, No Answer 213, Overflowed Answered 216, Overflowed Calls 214, Overflowed Calls Waiting 217, Overflowed Lost 218, Presented Calls 219, Routed to Other 223, Routed to Voicemail 224, Talk Average 225, Talk Inbound 226, Talk Inbound Average 227, Talk Internal 228, Talk Outbound 229, Talk Outbound Average 230, Talk Total 231 and Transferred 232.
  - Note that the dashboard uses realtime statistics, so any data before the last manual reset 86 or automatic reset 98 of realtime statistics are not shown regardless of the time range setting.
- **Queue**
  The queue for which the statistic is plotted. ***SYSTEM*** can be selected for all queues.
- **Time Range**
  The options are ***Last 4 Hours***, ***Last Day***, ***Last 2 Days***, ***Last 3 Days***, ***Last Week***, ***Last 2 Weeks*** or ***Last Month***. Note that the dashboard uses realtime statistics, so any data before the last reset 86 is not shown.

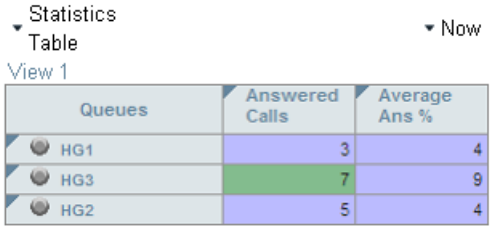
## 3.2.7 Statistics Cube

This is a 3D cube that plots the values of three numeric statistics, each configurable for a different queue and queue statistic. The points formed by each value pair (xy, xz, zy) are used to plots either a set of points or a plane. To switch between the two display modes, click the graph.




- **Type: *Statistics Cube***
- **Axis**
  Select ***X Axis***, ***Y Axis*** or ***Z Axis*** to then adjust which queue and queue statistic are plotted on that axis.
- **Statistic**
  The queue statistic to plot on the currently selected axis.
  Agent Productivity 180, Agents ACW 188, Agents Available 189, Agents Logged On 191, Agents Present 192, Agents Ringing 193, Answered Calls 194, Answered Internal (Queue) 197, Average Answer % 198, Average Answer Time 200, Average Wait Time 202, Busy Not Available 203, Call Waiting 204, Current Wait Time 206, Grade of Service 207, Longest Wait Time 210, Lost Calls 211, New Messages 212, No Answer 213, Overflowed Answered 216, Overflowed Calls 214, Overflowed Calls Waiting 217, Overflowed Lost 218, Presented Calls 219, Routed to Other 223, Routed to Voicemail 224, Talk Average 225, Talk Inbound 226, Talk Inbound Average 227, Talk Internal 228, Talk Outbound 229, Talk Outbound Average 230, Talk Total 231 and Transferred 232.
  - Note that the dashboard uses realtime statistics, so any data before the last manual reset 86 or automatic reset 98 of realtime statistics are not shown regardless of the time range setting.
- **Queue**
  The queue for which the statistic is being plotted on the currently selected axis. ***SYSTEM*** can be selected for all queues.
- **Time Range**
  The options are ***Last 4 Hours***, ***Last Day***, ***Last 2 Days***, ***Last 3 Days***, ***Last Week***, ***Last 2 Weeks*** or ***Last Month***. Note that the dashboard uses realtime statistics, so any data before the last reset 86 is not shown.

## 3.2.8 Statistics Table




This is the queue statistics table repeating the queues and statistics settings from one of your monitor views 78. To switch to another view, click the view name shown above the table.

The table cannot be adjusted directly, that must be done through the matching view 80. However you can click a statistic to acknowledge an alarm or warning.

Scroll bars are shown if the table does not fit the display panel. Typically up to 4 queue statistics fit horizontally without the need of the scroll bar. Vertically the display panel can show approximately 10 queues.

# 3.3 Reports




This section describes how supervisors can configure, view and save reports using the standard report templates of IP Office Customer Call Reporter. Those reports can be run when required or can be scheduled to run automatically at preset intervals.

- Manually run reports are first viewed on screen in a browser window. From there they can be printed and/or exported to a range of formats including Adobe PDF, Word, Excel and Crystal Reports.
- Automatically scheduled reports are sent either to a network printer or to an e-mail address as an attachment in Adobe PDF, Word, Excel or Crystal Reports format.

Supported languages are ***Dutch***, ***English (UK)***, ***English (US)***, ***French***, ***German***, ***Italian***, ***Brazilian Portuguese***, ***Russian*** and ***Spanish***. Some parts of customer call maps are third party components delivered over the internet and may run in different languages, for example the zoom and pan controls.

| Run Reports | | |
|---|---|---|
| • Create a report template 38<br>• Run a manual report 41 | • Schedule a report 44<br>• Copy a report template 46 | • Delete a report 47<br>• Using custom reports 63 |

## Standard Report Types

The following standard report types are provided with IP Office Customer Call Reporter. The settings for these can be edited and then saved to create personal report templates.

| Report | Description |
|---|---|
| **Agent Summary Report** 51 | This report type details the call activity for agents in a queue or for specific agents. |
| **Agent Time Card Report** 52 | This report summarizes an agent's performance, including time logged in, talk time, time in various states, calls made and answered, and agent performance. It includes only queue calls. However, it does not include internal calls. |
| **Alarm Report** 54 | This report lists the warning and alarms that have occurred. |
| **Call Details Report** 55 | This report details the individual calls for the selected target or targets. For internal calls, the report only reflects the call data for the receiving end, not for the originator. External calls are accounted and shown for the extension making the outbound call. |
| **Call Summary Report** 58 | This report provides a summary for the selected target of calls presented, answered, overflowed and lost. The average answer percentage, average answer time, average abandon time and grade of service are also listed. |
| **Trace Report** 60 | This report lists in chronological order all the events for the selected target or targets within the selected period. |
| **Voicemail Report** 61 | Reports based on the Voicemail Report template of IP Office Customer Call Reporter can be used to track the usage of customized call flows that have been added to Voicemail Pro. The reporting is not automatic, only specific labels that have been assigned to call flow actions are reported on. |

## Custom Report Types

In addition to the standard report types above, custom report types can be added and then used to create personal reports. Custom report types are created using a separate tool (Microsoft Report Builder) and can then be copied between supervisors or uploaded into a supervisor account.

## Standard Report Options

- You can use all reports as manual or automatic reports and specify the **Report Date Range** and **Working Hours**.

Supported languages are ***Dutch***, ***English (UK)***, ***English (US)***, ***French***, ***German***, ***Italian***, ***Brazilian Portuguese***, ***Russian*** and ***Spanish***. Some parts of customer call maps are third party components delivered over the internet and may run in different languages, for example the zoom and pan controls.

| Report Options\Report | | Agent Summary | Agent Time Card | Alarm Report | Call Details | Call Summary | Trace Report | Voicemail Report |
|---|---|---|---|---|---|---|---|---|
| **Targets** | **Agents** | ✓ | ✓ | – | ✓ | ✓ | ✓ | – |
| | **Queues** | ✓ | – | – | ✓ | ✓ | – | – |
| | **Views** | ✓ | – | ✓[1] | ✓ | ✓ | – | – |
| | **DDIs** | – | – | – | ✓ | ✓ | – | – |
| | **CLIs** | – | – | – | ✓ | ✓ | ✓ | – |
| | **Account Codes** | – | – | – | ✓ | ✓ | – | – |
| | **Call References** | – | – | – | – | – | ✓ | – |
| | **Voicemail** | – | – | – | – | – | – | ✓[1] |
| **Include** | **Include Internal** | ✓[1] | – | ✓[1] | ✓ | ✓ | ✓[1] | ✓[1] |
| | **Date Range** | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | **Working Hours** | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | **Include Saturdays** | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | **Include Sundays** | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| **Group result by** | **Ungrouped** | – | – | ✓[1] | ✓ | ✓ | ✓[1] | ✓ |
| | **15 minutes** | – | – | – | ✓ | ✓ | – | – |
| | **30 minutes** | – | – | – | ✓ | ✓ | – | – |
| | **Hour** | – | – | – | ✓ | ✓ | – | ✓ |
| | **Day** | – | ✓ | – | ✓ | ✓ | – | ✓ |
| | **Week** | – | ✓ | – | ✓ | ✓ | – | ✓ |
| | **Queue** | ✓[1] | – | – | ✓ | ✓ | – | – |
| | **Agent** | – | ✓ | – | – | ✓ | – | – |
| | **CLI** | – | – | – | ✓ | ✓ | – | ✓ |
| | **DDI** | – | – | – | ✓ | ✓ | – | ✓ |
| | **Account Code** | – | – | – | ✓ | ✓ | – | – |

1. Fixed non-adjustable setting. When this is the case the control for the setting is not displayed in the report configuration settings.

## Grouped Reports

- When a report is grouped, each set of grouped records will have its own summary except when there is only one record in the group.
- Records that do not match the grouping being used will be grouped at the start of the report. For example, in a report grouped by CLI, records that have no associated CLI will be displayed at the start of the report.
- The grouped records will still contain data appropriate for the selected report targets. For example, in a Call summary report targeted on a queue but grouped by agents, each report record will still detail how the queue handled the call even though the records will be grouped against the answering agents. Therefore, the average answer time for the call will be how long the call was in the queue to get answered by any member of the queue, and not by just the agent who did answer.
- Following the same logic as hour grouping, if **15 minutes grouping** is selected, the call records will get grouped in 15-minute slabs. For example, xx:00 to 00:14, xx:00 to xx:29, xx:30 to xx:44 and xx:45 to xx:59. Similarly, if **30 minutes** grouping is selected, then call records will get grouped in 30-minute slabs.

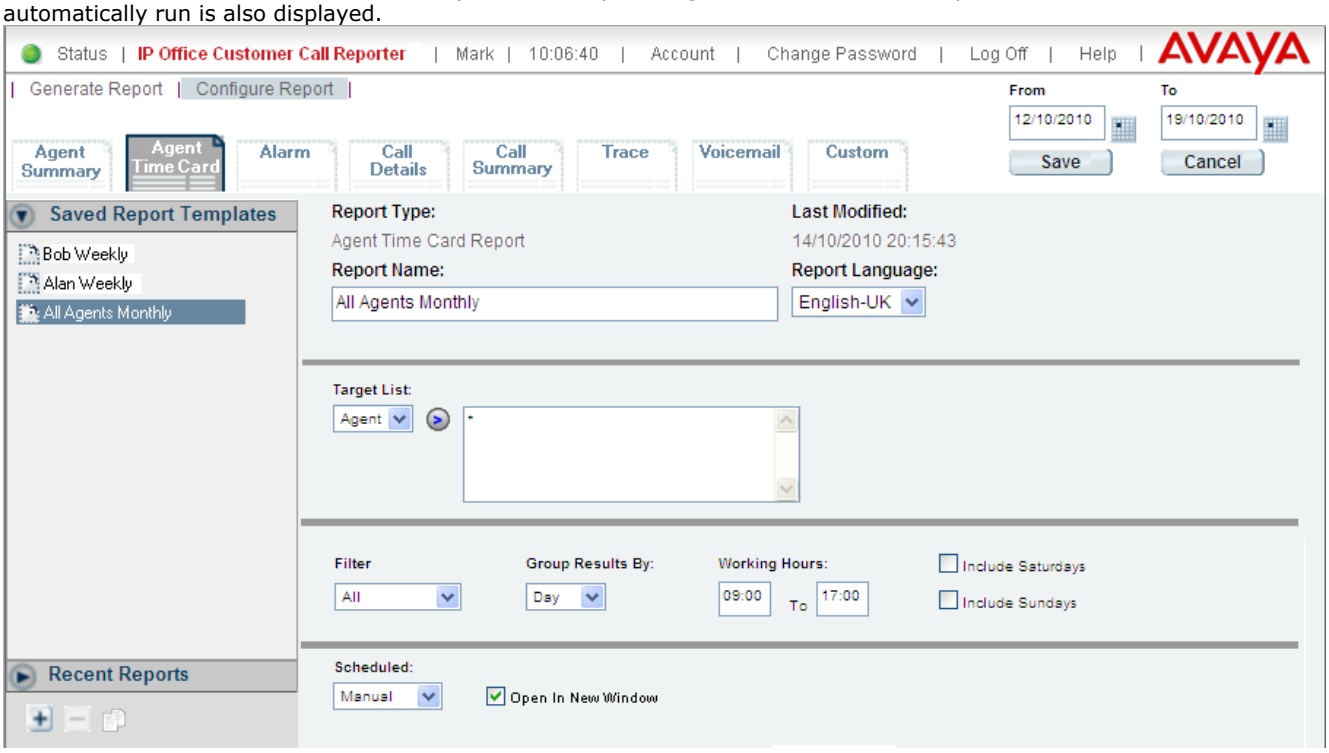
## Non-IP Office Customer Call Reporter Agent and Queue Reporting

Reports can include values for calls that involved hunt groups or hunt group members not configured for IP Office Customer Call Reporter. These are reported as **Non Hunt Group** and **Non Agent**. Only a single set of values is reported, not separate values for each hunt group or agent.

## 3.3.1 Creating/Editing Reports

Use the process below to enter the settings for a report. That report can then be run immediately or saved for later use. Saved reports can also be configured for use as automatic scheduled reports.

1. Click the **Reports** icon.
2. Click the tab for the type of report required: **Agent Summary**, **Agent Time Card**, **Alarm**, **Call Details**, **Call Summary**, **Trace** or **Voicemail**.
   - To use a custom report, click the **Custom** tab. The page will list the Custom Reports 63 available to you. Click the icon of the custom report type that you require.
3. Select the action that you want to perform:
   - To create an entirely new report template, click .
   - To edit an existing template or use it as the base for a new template, drag it to the right hand panel.
     - If the selected template is a manual report, **Generate Report** is selected by default. The option **Generate Report** is used to manually view reports 41 when the template settings are completed. Click **Configure Report** to change to editing the template.
     - If the selected template is set as a scheduled report, **Configure Report** is selected by default.
4. With **Configure Report** selected (top left), the report settings are displayed. Details about when the template was last modified and last run are shown. If the report is already a being used as a scheduled report, when it will next be automatically run is also displayed.




   - The example above shows settings where the report template is **Scheduled** as ***Manual***. For this type of template the date and time fields are shown at the top right. If the **Scheduled** option is set to ***Automatic***, for use with the IP Office Customer Call Reporter scheduler 44, the date range fields are hidden.
5. Enter a **Report Name**. This will be shown at the top of the report. It needs to be unique, it cannot be the same as another report.
6. Use the **Target List** drop-down to select the types of targets of the report, for example queue or agents.
   - Select the type of target required. Enter the target numbers or names, separating each by a comma.
   - For some target types (not account codes and DDI numbers), you can click to display a list from which you can select targets.
   - The wildcard * can be used to specify match all targets of the type selected in the **Target List** drop-down. When * is used, the report may include entries for **Non Hunt Group** and **Non Agent** if some IP Office Customer Call Reporter calls have been handled by non-IP Office Customer Call Reporter parties.

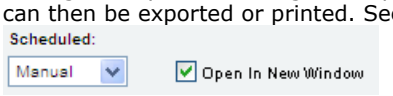
   **Note**: The Target List option **is unavailable** for custom report types.
7. **Other Settings**
   The range and type of settings will vary according to the type of report.

- **Report Language**
  Select the language to be used for the report. By default the same language as being used for the web client is selected.
  Supported languages are ***Dutch***, ***English (UK)***, ***English (US)***, ***French***, ***German***, ***Italian***, ***Brazilian Portuguese***, ***Russian*** and ***Spanish***. Some parts of customer call maps are third party components delivered over the internet and may run in different languages, for example the zoom and pan controls.
- **Include Internal**
  For reports based on the ***Call Details Report*** 55 and ***Call Summary Report*** 58 templates, select whether the report should include internal calls.

  **Note**: This option is always selectable for custom report types. It will have no effects on custom reports not reporting on calls.
- **Group Results By**
  By default the records in a report are shown in alphabetic or time order (depending on the report type and target). For reports based on the ***Call Details Report*** 55, ***Call Summary Report*** 58 and ***Voicemail Report*** 61 templates, the records output in the report can be grouped by a common factor such as account code.
  - Reports based on the Agent Summary Report 51 template are automatically grouped by queue. Reports based on the Alarm Report 54 and Trace Report 60 templates cannot be grouped, they show events in time order.
  - When a report is grouped, each set of grouped records will have its own summary except when there is only one record in the group.
  - Records that do not match the grouping being used will be grouped at the start of the report. For example, in a report grouped by CLI, records that have no associated CLI will be displayed at the start of the report.
  - The grouped records will still contain data appropriate for the selected report targets. For example, in a Call summary report targeted on a queue but grouped by agents, each report record will still detail how the queue handled the call even though the records will be grouped against the answering agents. Therefore, the average answer time for the call will be how long the call was in the queue to get answered by any member of the queue, and not by just the agent who did answer.
  - Following the same logic as hour grouping, if **15 minutes grouping** is selected, the call records will get grouped in 15-minute slabs. For example, xx:00 to 00:14, xx:00 to xx:29, xx:30 to xx:44 and xx:45 to xx:59. Similarly, if **30 minutes** grouping is selected, then call records will get grouped in 30-minute slabs.

  **Note**: The Group Results By option **is unavailable** for custom report types.
- **Thresholds**
  Use thresholds to calculate performance statistics like Agent Productivity Factor (APF) and Grade of Services (GOS). Thresholds can be used only for ***Agent Time Card*** 52, ***Call Summary Report*** 58, and ***Custom Reports*** 63 - the reports that include performance statistics.
- **Working Hours**
  Set the time frame for calls to be included in the report. By default the hours are set to 09:00 to 17:00.
- **Include Saturdays/Include Sundays**
  Select whether calls occurring on these days should be included in the report.
- 
- **Filter**
  This option is only available for ***Call Details*** 55 and ***Agent Time Card*** 52 type reports.
  - **Call Details Report Filter Options**
    Use the filter to select which calls are to be included in the report based on the end state of the calls: ***All***, ***Answered***, ***No Answer***, ***Overflowed Lost***, ***Overflowed Answered***, ***Transferred***, ***Lost*** or ***Routed to Voicemail***. The options ***Overflowed Lost*** and ***Overflowed Answered*** are unavailable if the report target is an agent or agents. ***Overflowed Lost*** and ***Overflowed Answered*** are only included in reports on the queue from which the call overflowed.
  - **Agent Time Card Report Filter Options**
    The filter field is used to select which fields are included in the report: ***All***, ***Shifts***, ***Lunch***, ***Breaks***, ***Calls***, ***Talk Time*** and ***Performance***.

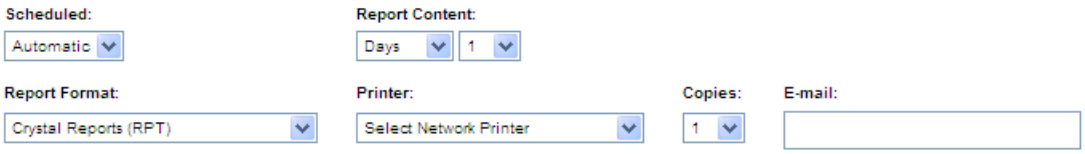
8. **Set when the report should occur**
   The **Scheduled** field can be set to either ***Manual*** or ***Automatic***.
   - **Manual**
     Use this setting for reports that are only run when you select it. The system displays the report configuration settings that you can change, if required, before the report runs. The report is displayed in a browser window but can then be exported or printed. See Running Manual Reports 41.

     - Use the **Open in New Window** setting as follows. If selected, manually run reports are opened in separate pop-up windows, and you can open multiple reports at the same time. However, it requires the browser to be configured to allow popup windows. If not selected, reports are opened in the right-hand panel of the IP Office Customer Call Reporter window. The default value of this setting is set in the supervisor account settings 104 and is also used for recent reports viewing.
     - Use the **Report Range** to specify the period that should be covered by the report.

- If you do not want to save the report as a template for future use click **Generate Report** to run the report now. The report is displayed in a browser window[41] from which you can print it or save it in a number of file formats.
- Even for reports that you are planning to schedule as **Automatic**, first run the report manually to confirm that it contains the required data and targets.

- **Automatic**
  Use this setting for reports that will run automatically at regular intervals, that is 'scheduled reports'. When selected, the report settings change from those used for ***Manual*** (above) to those listed below. Note that these settings are separate from the scheduling of when and how frequently the report is run[44].



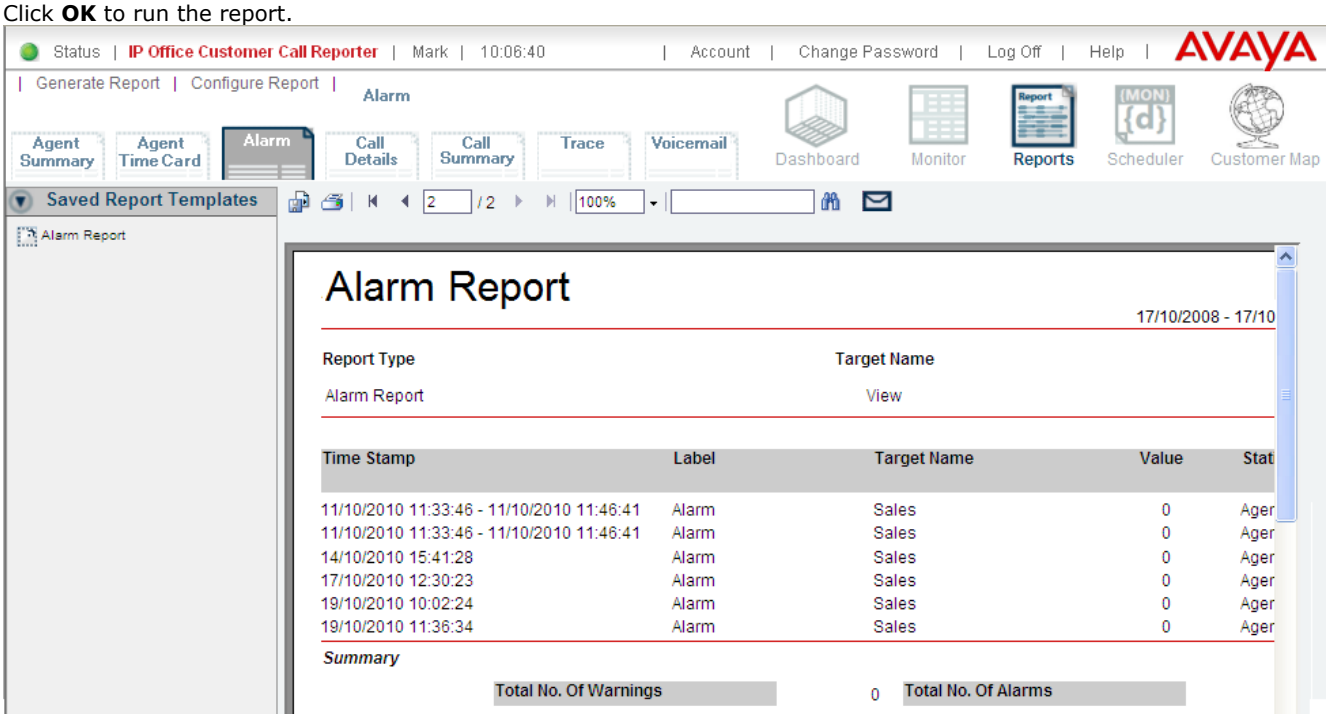

  - **Report Content:**
    These fields set the range of data to include in the report. Select ***Days***, ***Weeks*** or ***Months***.
    - The number of days or weeks is counted back from the date that the report is actually run. For example ***Days 1*** will report on the previous day, ***Weeks 2*** will report on the previous 2 weeks.
    - Months are for the last full month or months. For example if a report set to ***Months 1*** is run in February, the report will use the data for January.
  - **Report Format**
    Select the format that the report is to be produced in. The options available depend on whether the report was based on one of the standard report types supplied with IP Office Customer Call Reporter or on a custom report type added later. Note that for schedule reports sent in ***Excel*** format, no formatting is applied to the report data.
    - **Formats available for Standard Reports**
      ***PDF*** (Adobe Acrobat .pdf), ***Microsoft Word*** (.doc), ***Microsoft Excel***, (.xls), ***Rich Text Format*** (.rtf), ***Crystal Reports*** (.rpt), ***XML***, ***Comma Delimited*** (.csv), ***HTML*** or ***Text***.
    - **Formats available for Custom Reports**
      ***PDF*** (Adobe Acrobat .pdf), ***Microsoft Word*** (.doc), ***Microsoft Excel***, (.xls) or ***TIFF Image*** (.tiff).
  - **Printer**
    Select the printer that the report should be sent to if you want it to be printed automatically. Only printers available to the IP Office Customer Call Reporter server computer are displayed in this list.
  - **Copies**
    Select the number of copies of the report that should be produced. You can select between 1 and 10, the default number being 1.
  - **E-mail Address**
    Enter an e-mail address if you want the report to be sent to an e-mail account.

9. When the report settings are as required click **Save**. The report will be saved under **Saved Report Templates**. There is no limit to the number of reports that you can save. If you try to save a report with a name that already exists you will receive a warning. You can select to overwrite the existing report or to return to editing the new report where you can change its name.
10. When the report has been saved a message window opens stating that the report was saved successfully. Click **OK** to continue.
11. Reports **Scheduled** as ***Automatic*** still need to be added to the **Scheduler**[44] list to run.

## 3.3.2 Running Manual Reports

For those reports templates where you set the Schedule as Manual, you can manually run a report at any time. The report results are displayed in a browser window. You can then select to print the report or save it to a number of file formats.

1. Click the **Reports** icon.
2. Click the tab for the type of report required: **Agent Summary**, **Agent Time Card**, **Alarm**, **Call Details**, **Call Summary**, **Trace** or **Voicemail**.
   - To use a custom report, click the **Custom** tab. The page will list the Custom Reports 63 available to you. Click the icon of the custom report type that you require.
3. Drag the saved report template that you want to run over to the right hand panel or click to create a new report 38.
4. Change the **Scheduled** option to ***Manual***.
5. Check the current settings. Set the date range settings and the report target as required.
6. The **Open in New Window** setting controls where the report will be displayed. If selected, manually run reports are opened in separate pop-up windows, and you can open multiple reports at the same time. However, it requires your browser to be configured to allow popup windows. If not selected, reports are opened in the right-hand panel of the IP Office Customer Call Reporter client window.
7. Click **Generate Report** (top left).
8. Click **OK** to run the report.




9. The following options are available for the generated report:

- **For Standard reports**
  - **Export**
    1. Click .
    2. In the pop-up window, select the report file format. The available formats are: ***Crystal Reports*** (.rpt), ***PDF*** (Adobe Acrobat .pdf), ***Microsoft Excel*** (.xls), ***Comma delimited*** (.csv), ***Microsoft Word*** (.doc), ***Rich Text Format*** (.rtf), and **XML** (.xml).
    3. Select the page range for the report.
    4. Click the **Export** button.
  - **Print**
    1. Click .
    2. In the pop-up window, select the page range for the report.

3. Click the **Export** button to create a Adobe Acrobat PDF file which you can view as a print preview. You then either print that file or save it. This requires your computer to have Acrobat Reader or a similar application that can display PDF files.

- **Page Forward/Page Back**
  You can use these controls to select the page of the report that is currently displayed.
- **Zoom**
  Select the zoom level applied to the report view. You can either enter a value in the text box or use the drop-down to select a value.
- **Search**
  Search the report using the name or number specified in the preceding field.
- **E-mail**
  Click to e-mail the report. Before e-mailing the report, you can specify the destination address or addresses and the report format. The available formats are: ***PDF*** (Adobe Acrobat .pdf), ***Microsoft Word*** (.doc), ***Microsoft Excel*** (.xls), **Comma delimited** (.csv), ***Rich Text Format*** (.rtf), ***Crystal Reports*** (.rpt), **XML** (.xml), ***Web page*** (.htm), and ***Text*** (.txt).

- **For Custom reports**
  - **Export**
    1. Click .
    2. From the drop-down menu, select the file format for exporting the report. The available file formats are: ***PDF*** (Adobe Acrobat .pdf), ***Microsoft Word*** (.doc), ***Microsoft Excel*** (.xls), and ***TIFF Image*** (.tiff).

    **Note**: The system does not retain tooltips when you export a custom report. Also, formatting is not applied to the report data that you export in the Excel format.

  - **Print**

    The print function creates a Adobe Acrobat PDF file as a print preview. You can then either print the file or save it. This requires your computer to have Acrobat Reader or a similar application that can display PDF files.
  - **Page Forward/Page Back**
    You can use these controls to select the page of the report that is currently displayed.
  - **Zoom**
    Select the zoom level applied to the report view. You can use the drop down to display and select a value.

    **Note:** The zoom function is supported only in Internet Explorer. However, for other browsers you can use the browser's own zoom functions. For example, when using Firefox, you can zoom in (Ctrl +), zoom out (Ctrl -), and reset the zoom (Ctrl 0)
  - **Search**
    Search the report using the name or number specified in the preceding field.
  - **E-mail**
    Click to e-mail the report. Before e-mailing the report, you can specify the destination address or addresses and the report format. The available formats are: ***PDF*** (Adobe Acrobat .pdf), ***Microsoft Word*** (.doc), ***Microsoft Excel*** (.xls), and ***TIFF Image*** (.tiff).

10. The report is also added to the **Recent Reports** section, with the time and date added to the report name. You can use that copy to view the report results again 48.

## Document Map

A document map, which can be used to navigate through the report, is seen in the online display of reports **based on custom report types**.

This feature is unavailable for reports based on standard report types or in export reports.

## Communication Failure Report

IP Office Customer Call Reporter records details of any times when it was unable to communicate with the IP Office telephone system. For reports based on standard report types, if the report covers a time period that includes any such events, details of the communication failure are included at the start of the report. This is not used for reports based on custom report types.

**Note:** The following report is available for standard reports only.

**Note : The following IP Offices experienced communication failure with CCR for the periods stated, report data during these periods may be incomplete.**

| IP Office Name | IP Address | Connection Lost | Connection Restored |
|---|---|---|---|
| Simulation1 | 135.64.185.202 | 09/07/2009 12:24:44 | 09/07/2009 12:30:14 |

*Example Communication Failure Report Prefix*

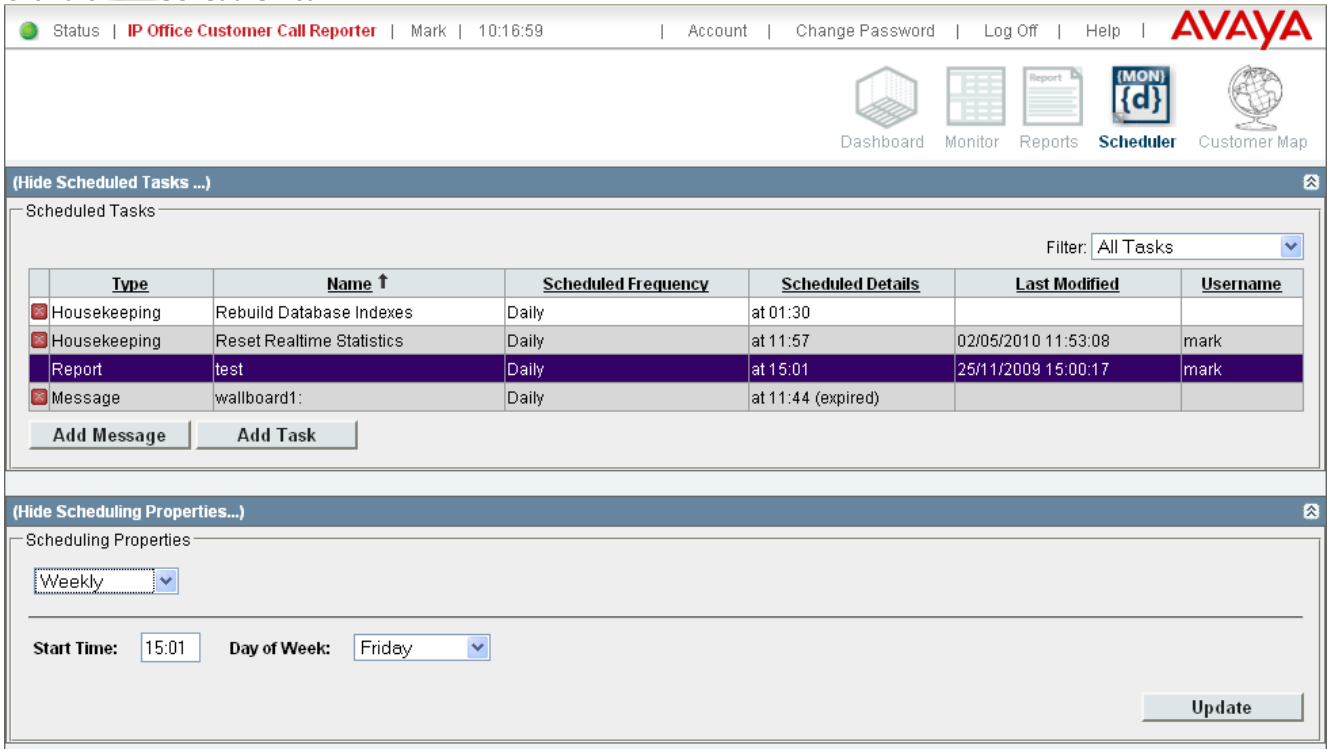
## Non-IP Office Customer Call Reporter Agent and Queue Reporting

Reports can include values for calls that involved hunt groups or hunt group members not configured for IP Office Customer Call Reporter. These are reported as **Non Hunt Group** and **Non Agent**. Only a single set of values is reported, not separate values for each hunt group or agent.

## 3.3.3 Scheduling Reports

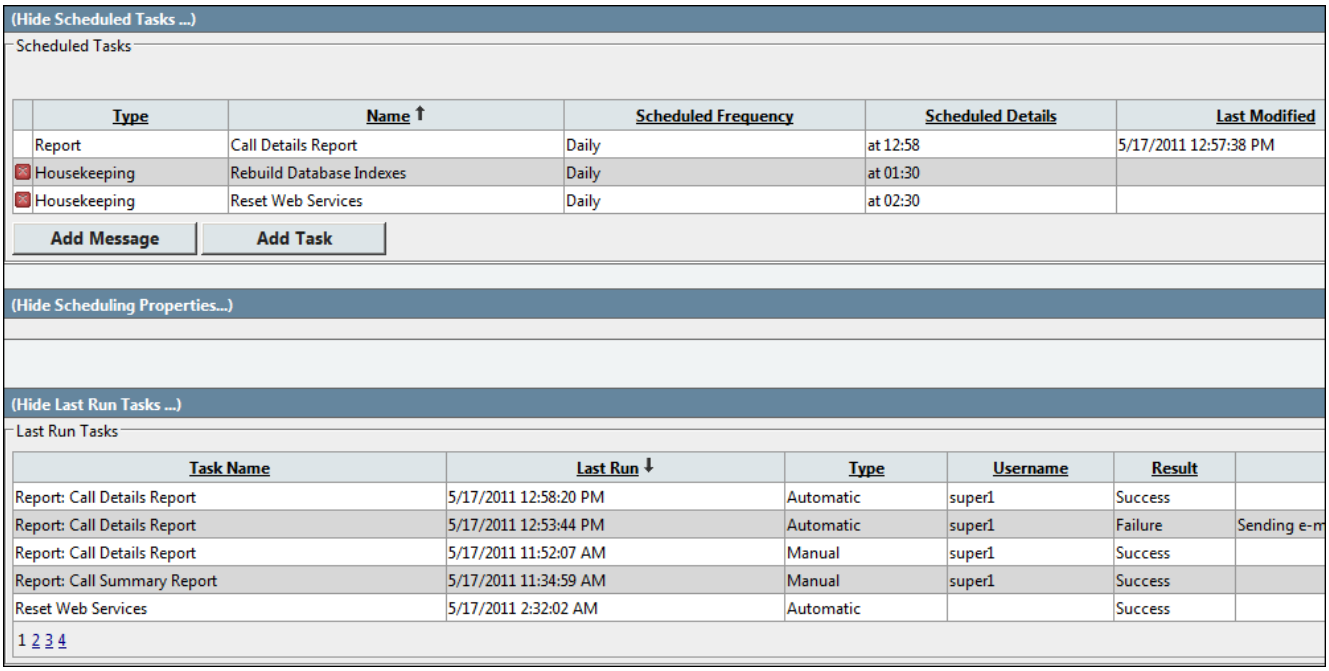
The **Scheduler** tab shows tasks including any reports you have created that have been saved with their **Scheduled** setting set to ***Automatic***.

1. Create a report as required and set its **Scheduled** option to ***Automatic***. The report destination, format and time range that it covers are set when creating and editing the report.
2. Click the **Scheduler** icon.




3. To schedule a report or to change the schedule, click the report to be amended in the **Scheduled Tasks** section.
4. Select the required option in the **Scheduling Properties**. Amend the report properties as required.
   - **Daily**
     If selected, you can then set a **Start Time** for when the report should be run each day. The default is ***09:00***. The option Include Weekends should be selected if you also want the report to run at weekends (Saturdays and Sundays).
   - **Weekly**
     If selected, you can then set a **Start Time** and **Day of Week** for when the report should be run each week. The default is ***9:00 Sunday***.
   - **Monthly**
     If selected, you can then choose either a day such as the last Friday of the month or a specific date within a month. If you select a date that exceeds the number of days in the month, the report gets scheduled for the last calendar day of the month. For example, if you select the report to be run on the 31st day of a month, the report will run on the 30th day of a month if there are only 30 days in the month.
   - **Unscheduled**
     Stop running the report on an automatic schedule.
5. Click **Update** to save your changes.

The system displays the recently run reports in the **Last Run Tasks** section. The **Result** column will display success if the report has been generated successfully or "failure" if the report does not generate.

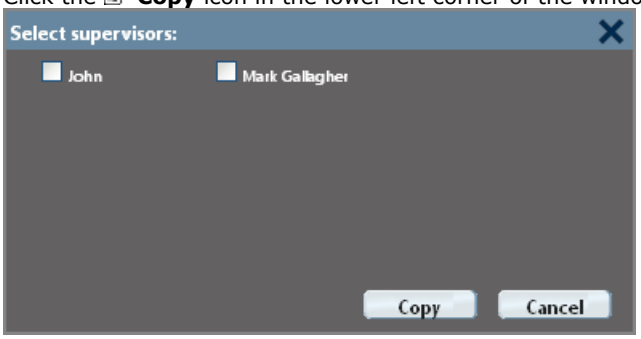


## 3.3.4 Copying a Template to Another Supervisor

You can copy any of your saved report templates to another supervisor or supervisors. If you copy a report that is based on a custom report type, the source file for the custom report type is also copied.

### To Copy a Saved Report Template to Another Supervisor:

1. Click the **Reports** icon.
2. Click the tab for the type of report required: **Agent Summary**, **Agent Time Card**, **Alarm**, **Call Details**, **Call Summary**, **Trace** or **Voicemail**.
   - To use a custom report, click the **Custom** tab. The page will list the Custom Reports available to you. Click the icon of the custom report type that you require.
3. Select the report that you want to copy in the list of **Saved Report Templates**.
4. Click the **Copy** icon in the lower left corner of the window. The **Select Supervisor** menu is displayed.




5. Select the supervisors who you want to share the saved report template with. If the supervisor already has a copy, a new copy is created with a new name.

   **Note**: When you are using copy function with custom reports and a custom report file exists at the target destination with the same name, IP Office Customer Call Reporter will create a duplicate custom report file with the originating supervisor name appended to the file. If a custom report file already exists with the supervisor name appended, then it is overwritten.

6. Click **Copy**.
7. The report is now available to the other supervisors in their own **Saved Report Templates** lists.

## 3.3.5 Deleting a Report

1. Click the **Reports** icon.
2. Click the tab for the type of report required: **Agent Summary**, **Agent Time Card**, **Alarm**, **Call Details**, **Call Summary**, **Trace** or **Voicemail**.
   - To use a custom report, click the **Custom** tab. The page will list the Custom Reports available to you. Click the icon of the custom report type that you require.
3. Select the report that you want to delete in either the **Saved Report Templates** or the **Recent Reports** list.
4. Click at the bottom of the report screen can be used to delete both saved report templates and recent reports.

## 3.3.6 Viewing Recent Reports

Copies of reports that you have previously run manually [41] are saved in the **Recent Reports** section along with their time and date. Note that the maximum duration for which recent reports are kept is part of your supervisor account settings [104] and can be changed by the administrator.

- The **Open in New Window** setting in the supervisor account settings [104] controls where recent reports are opened. If selected, manually run reports are opened in separate pop-up windows, and you can open multiple reports at the same time. However, it requires the browser to be configured to allow popup windows. If not selected, reports are opened in the right-hand panel of the IP Office Customer Call Reporter client window.

1. Click the **Reports** icon.
2. Click the tab for the type of report required: **Agent Summary**, **Agent Time Card**, **Alarm**, **Call Details**, **Call Summary**, **Trace** or **Voicemail**.
   - To use a custom report, click the **Custom** tab. The page will list the Custom Reports [63] available to you. Click the icon of the custom report type that you require.
3. Select **Recent Reports**.
4. Select the recent report that you want to view and drag it to the right pane.
5. If you select a Standard report, the following options are available for the generated report:
   - **Export**
     1. Click .
     2. In the pop-up window, select the report file format. The available formats are: ***Crystal Reports*** (.rpt), ***PDF*** (Adobe Acrobat .pdf), ***Microsoft Excel*** (.xls), ***Comma delimited*** (.csv), ***Microsoft Word*** (.doc), ***Rich Text Format*** (.rtf), and **XML** (.xml).
     3. Select the page range for the report.
     4. Click the **Export** button.
   - **Print**
     1. Click .
     2. In the pop-up window, select the page range for the report.
     3. Click the **Export** button to create a Adobe Acrobat PDF file which you can view as a print preview. You then either print that file or save it. This requires your computer to have Acrobat Reader or a similar application that can display PDF files.
   - 2 / 2 **Page Forward/Page Back**
     You can use these controls to select the page of the report that is currently displayed.
   - 100% **Zoom**
     Select the zoom level applied to the report view. You can either enter a value in the text box or use the drop-down to select a value.
   - **Search**
     Search the report using the name or number specified in the preceding field.
   - **E-mail**
     Click to e-mail the report. Before e-mailing the report, you can specify the destination address or addresses and the report format. The available formats are: ***PDF*** (Adobe Acrobat .pdf), ***Microsoft Word*** (.doc), ***Microsoft Excel*** (.xls), **Comma delimited** (.csv), ***Rich Text Format*** (.rtf), ***Crystal Reports*** (.rpt), **XML** (.xml), ***Web page*** (.htm), and ***Text*** (.txt).
6. Custom reports are re-generated in the PDF file format. Therefore, to view recent custom reports you must have PDF file viewer installed on your computer. You can download PDF file viewer from http://get.adobe.com/reader.

### Communication Failure Report

IP Office Customer Call Reporter records details of any times when it was unable to communicate with the IP Office telephone system. For reports based on standard report types, if the report covers a time period that includes any such events, details of the communication failure are included at the start of the report. This is not used for reports based on custom report types.

**Note:** The following report is available for standard reports only.

**Note : The following IP Offices experienced communication failure with CCR for the periods stated, report data during these periods may be incomplete.**

| IP Office Name | IP Address | Connection Lost | Connection Restored |
|---|---|---|---|
| Simulation1 | 135.64.185.202 | 09/07/2009 12:24:44 | 09/07/2009 12:30:14 |

*Example Communication Failure Report Prefix*

## Non-IP Office Customer Call Reporter Agent and Queue Reporting

Reports can include values for calls that involved hunt groups or hunt group members not configured for IP Office Customer Call Reporter. These are reported as **Non Hunt Group** and **Non Agent**. Only a single set of values is reported, not separate values for each hunt group or agent.

## 3.3.7 Standard Report Types

The following standard report types are provided with IP Office Customer Call Reporter:

| Report | Description |
|---|---|
| Agent Summary Report 51 | This report type details the call activity for agents in a queue or for specific agents. |
| Agent Time Card Report 52 | This report summarizes an agent's performance, including time logged in, talk time, time in various states, calls made and answered, and agent performance. It includes only queue calls. However, it does not include internal calls. |
| Alarm Report 54 | This report lists the warning and alarms that have occurred. |
| Call Details Report 55 | This report details the individual calls for the selected target or targets. For internal calls, the report only reflects the call data for the receiving end, not for the originator. External calls are accounted and shown for the extension making the outbound call. |
| Call Summary Report 58 | This report provides a summary for the selected target of calls presented, answered, overflowed and lost. The average answer percentage, average answer time, average abandon time and grade of service are also listed. |
| Trace Report 60 | This report lists in chronological order all the events for the selected target or targets within the selected period. |
| Voicemail Report 61 | Reports based on the Voicemail Report template of IP Office Customer Call Reporter can be used to track the usage of customized call flows that have been added to Voicemail Pro. The reporting is not automatic, only specific labels that have been assigned to call flow actions are reported on. |

### Communication Failure Report

IP Office Customer Call Reporter records details of any times when it was unable to communicate with the IP Office telephone system. For reports based on standard report types, if the report covers a time period that includes any such events, details of the communication failure are included at the start of the report. This is not used for reports based on custom report types.

**Note:** The following report is available for standard reports only.

Note : The following IP Offices experienced communication failure with CCR for the periods stated, report data during these periods may be incomplete.

| IP Office Name | IP Address | Connection Lost | Connection Restored |
|---|---|---|---|
| Simulation1 | 135.64.185.202 | 09/07/2009 12:24:44 | 09/07/2009 12:30:14 |

*Example Communication Failure Report Prefix*

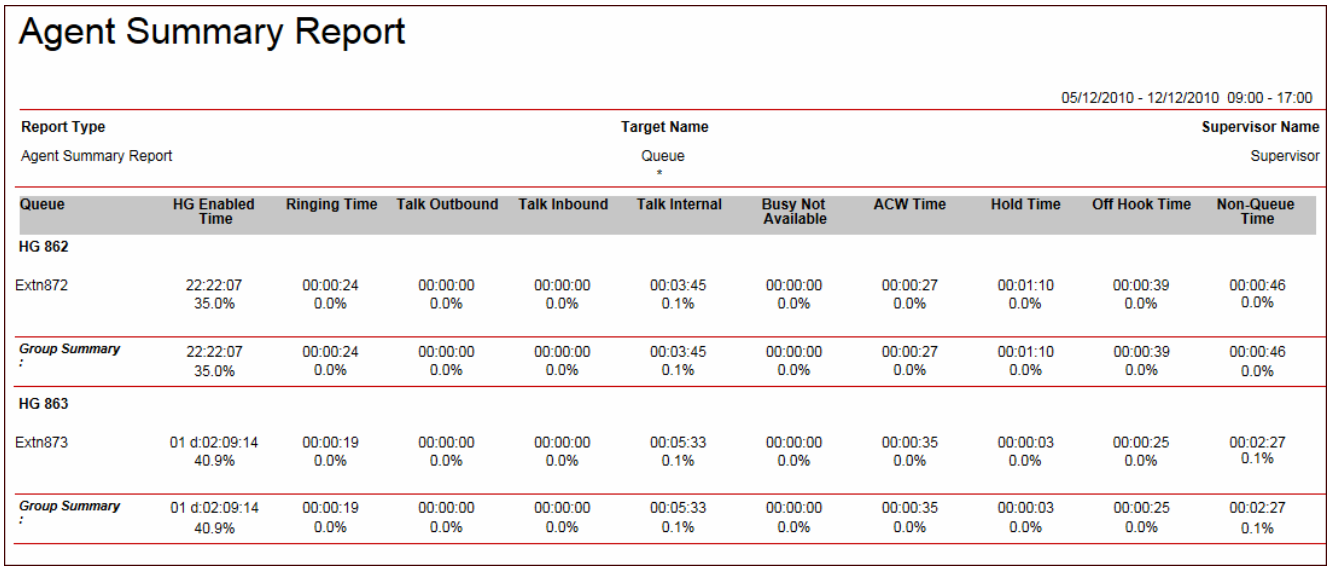
### Non-IP Office Customer Call Reporter Agent and Queue Reporting

Reports can include values for calls that involved hunt groups or hunt group members not configured for IP Office Customer Call Reporter. These are reported as **Non Hunt Group** and **Non Agent**. Only a single set of values is reported, not separate values for each hunt group or agent.

### 3.3.7.1 Agent Summary Report

This report type details the call activity for agents in a queue or for specific agents.

- **Target options: *Queue***, ***View*** or ***Agent***.
  Used to select which agent or set of agents are being reported.
- **Group by: *Queue*** *(Fixed)*



Agent Summary Report

05/12/2010 - 12/12/2010 09:00 - 17:00

| Report Type | Target Name | Supervisor Name |
|---|---|---|
| Agent Summary Report | Queue<br>* | Supervisor |

| Queue | HG Enabled Time | Ringing Time | Talk Outbound | Talk Inbound | Talk Internal | Busy Not Available | ACW Time | Hold Time | Off Hook Time | Non-Queue Time |
|---|---|---|---|---|---|---|---|---|---|---|
| **HG 862** | | | | | | | | | | |
| Extn872 | 22:22:07<br>35.0% | 00:00:24<br>0.0% | 00:00:00<br>0.0% | 00:00:00<br>0.0% | 00:03:45<br>0.1% | 00:00:00<br>0.0% | 00:00:27<br>0.0% | 00:01:10<br>0.0% | 00:00:39<br>0.0% | 00:00:46<br>0.0% |
| ***Group Summary :*** | 22:22:07<br>35.0% | 00:00:24<br>0.0% | 00:00:00<br>0.0% | 00:00:00<br>0.0% | 00:03:45<br>0.1% | 00:00:00<br>0.0% | 00:00:27<br>0.0% | 00:01:10<br>0.0% | 00:00:39<br>0.0% | 00:00:46<br>0.0% |
| **HG 863** | | | | | | | | | | |
| Extn873 | 01 d:02:09:14<br>40.9% | 00:00:19<br>0.0% | 00:00:00<br>0.0% | 00:00:00<br>0.0% | 00:05:33<br>0.1% | 00:00:00<br>0.0% | 00:00:35<br>0.0% | 00:00:03<br>0.0% | 00:00:25<br>0.0% | 00:02:27<br>0.1% |
| ***Group Summary :*** | 01 d:02:09:14<br>40.9% | 00:00:19<br>0.0% | 00:00:00<br>0.0% | 00:00:00<br>0.0% | 00:05:33<br>0.1% | 00:00:00<br>0.0% | 00:00:35<br>0.0% | 00:00:03<br>0.0% | 00:00:25<br>0.0% | 00:02:27<br>0.1% |

The following information is shown for each target. The actual time and the percentage of the report period are shown.

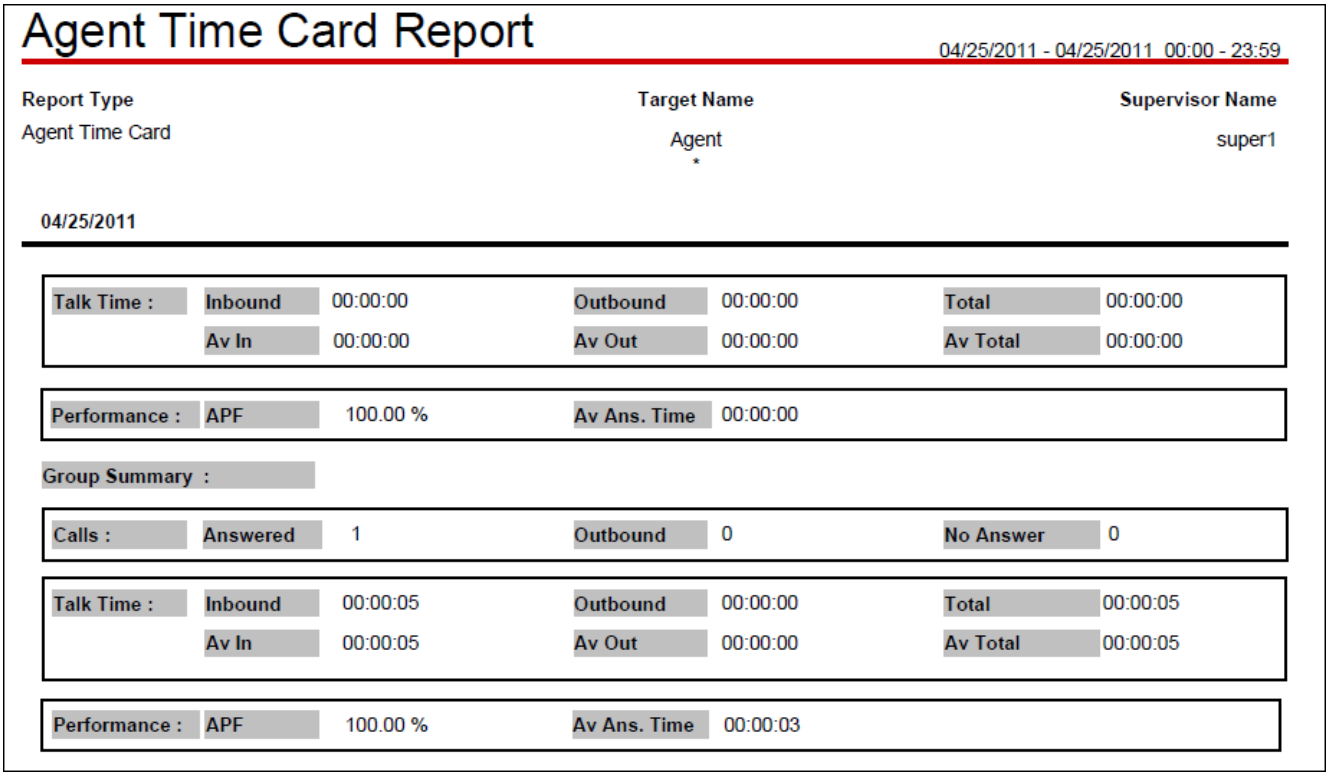
- **Hunt Group Enabled Time**
  For the queue being reported, the total time the agent was logged in and had their membership of the queue being reported enabled.
- **Busy Not Available Time**
  The total time that the agent was in the Busy Not Available 291 state.
- **ACW Time**
  The total time that the agent was in the after call work 289 state.
- **Hold Time**
  The total time that the agent had calls on hold or parked.
- **Off Hook Time**
  The total time the agent's extension was off hook 295 but not connected to a trunk. It includes picking up handset, dialing and ring time. For an external trunk it is the time until the trunk is seized.
- The other columns relate to time either ringing or connected to calls. The column used will depend on the call type as follows:

| Call Type | | Incoming | | Outgoing | |
|---|---|---|---|---|---|
| | | Internal | External | Internal | External |
| **Direct Call** | **Ringing** | Non-Queue Time | Non-Queue Time | Talk Internal | Talk Outbound |
| | **Connected** | Non-Queue Time | Non-Queue Time | Talk Internal | Talk Outbound |
| **Queue Call** | **Ringing** | Ringing Time | Ringing Time | – | – |
| | **Connected** | Talk Internal | Talk Inbound | – | – |

This report is grouped by queue and for each queue a summary totaling each of the values is provided. An additional summary totaling the whole report is included at the end of the report.

### 3.3.7.2 Agent Time Card Report

This report summarizes an agent's performance, including time logged in, talk time, time in various states, calls made and answered, and agent performance. It includes only queue calls. However, it does not include internal calls.



Agent Time Card Report

04/25/2011 - 04/25/2011 00:00 - 23:59

| Report Type | Target Name | Supervisor Name |
|---|---|---|
| Agent Time Card | Agent<br>* | super1 |

04/25/2011

| | | | | | | |
|---|---|---|---|---|---|---|
| Talk Time : | Inbound | 00:00:00 | Outbound | 00:00:00 | Total | 00:00:00 |
| | Av In | 00:00:00 | Av Out | 00:00:00 | Av Total | 00:00:00 |
| Performance : | APF | 100.00 % | Av Ans. Time | 00:00:00 | | |
| Group Summary : | | | | | | |
| Calls : | Answered | 1 | Outbound | 0 | No Answer | 0 |
| Talk Time : | Inbound | 00:00:05 | Outbound | 00:00:00 | Total | 00:00:05 |
| | Av In | 00:00:05 | Av Out | 00:00:00 | Av Total | 00:00:05 |
| Performance : | APF | 100.00 % | Av Ans. Time | 00:00:03 | | |

- **Target options: *Agent***.
- **Filter:**
  The report template supports a number of filters which control what information is included in the report.
  - ***Shifts***
    If selected, the report includes the times each agent logged in and out and total logged in time.
  - ***Lunch***
    If selected, the report includes the time each agent went into and came out of Busy Not Available 291 state using reason code 296 1.
  - ***Breaks***
    If selected, the report includes the time each agent went into and came out of other Busy Not Available 291 states other than reason code 296 1.
  - ***Calls***
    If selected, the report includes the **Answered Calls**, **Outbound Calls** and **No Answer** call count statistics for each agent.
  - ***Talk Time***
    If selected, the report includes the **Talk Inbound**, **Talk Outbound**, **Talk Total**, **Talk Inbound Average** and **Talk Outbound Average** statistics for each agent.
  - ***Performance***
    If selected, the report includes the **Average Answer Time** statistics and the **Agent Productivity Factor** for each agent.
    - **Average Answer Time**
      IP Office Customer Call Reporter uses the straight average method to calculate the average answer time.

      Note: The Average Answer Time in the Agent Time Card includes direct calls to agents (like supervised transfers) and that causes the Average Answer Time in this report to be different than the one in the Monitor or the Call Summary Report. Since this report is Agent-centric and not Queue-centric, Agent Time Card includes direct calls in the calculation of Average Answer Time.

    - **Agent Productivity Factor**
      An agent's productivity is measured by the parameters for lost calls, answered calls, minimum talk time, and maximum talk time. Any deviation from the set parameters has an effect on the total productivity of an agent.

      The following parameter settings are available for the Agent Productivity factor calculation:

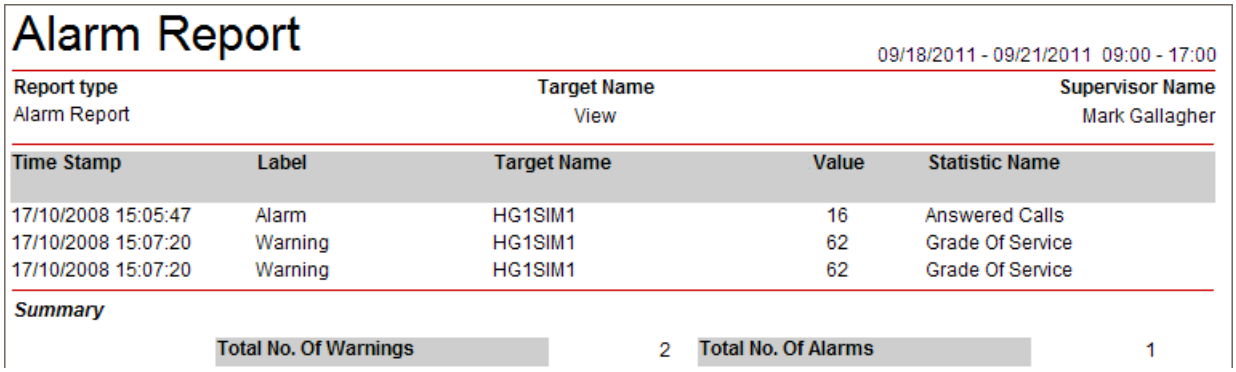
| Parameters | Range | Default |
|---|---|---|
| **Lost calls threshold** | 1 to 600 seconds | 5 seconds |
| **Answered calls** | 1 to 600 seconds | 20 seconds |
| **Minimum talk time** | 1 to 3600 seconds | 1 second |
| **Maximum talk time** | 1 to 3600 seconds | 600 seconds |

- **Group Result by:** ***Agent***, ***Day*** or ***Week***.
  The start and end time for shifts, breaks and lunch are only displayed when the report is grouped by Agent. All groupings show total time for these fields.

### 3.3.7.3 Alarm Report

This report lists the warning and alarms that have occurred.

- **Target options: *View*** *(fixed)*.
- **Group Result by: *Ungrouped*** *(fixed)*.



Alarm Report

09/18/2011 - 09/21/2011 09:00 - 17:00

| Report type | Target Name | Supervisor Name |
|---|---|---|
| Alarm Report | View | Mark Gallagher |

| Time Stamp | Label | Target Name | Value | Statistic Name |
|---|---|---|---|---|
| 17/10/2008 15:05:47 | Alarm | HG1SIM1 | 16 | Answered Calls |
| 17/10/2008 15:07:20 | Warning | HG1SIM1 | 62 | Grade Of Service |
| 17/10/2008 15:07:20 | Warning | HG1SIM1 | 62 | Grade Of Service |

*Summary*

| Total No. Of Warnings | 2 | Total No. Of Alarms | 1 |
|---|---|---|---|

The following information is shown for each alarm or warning:

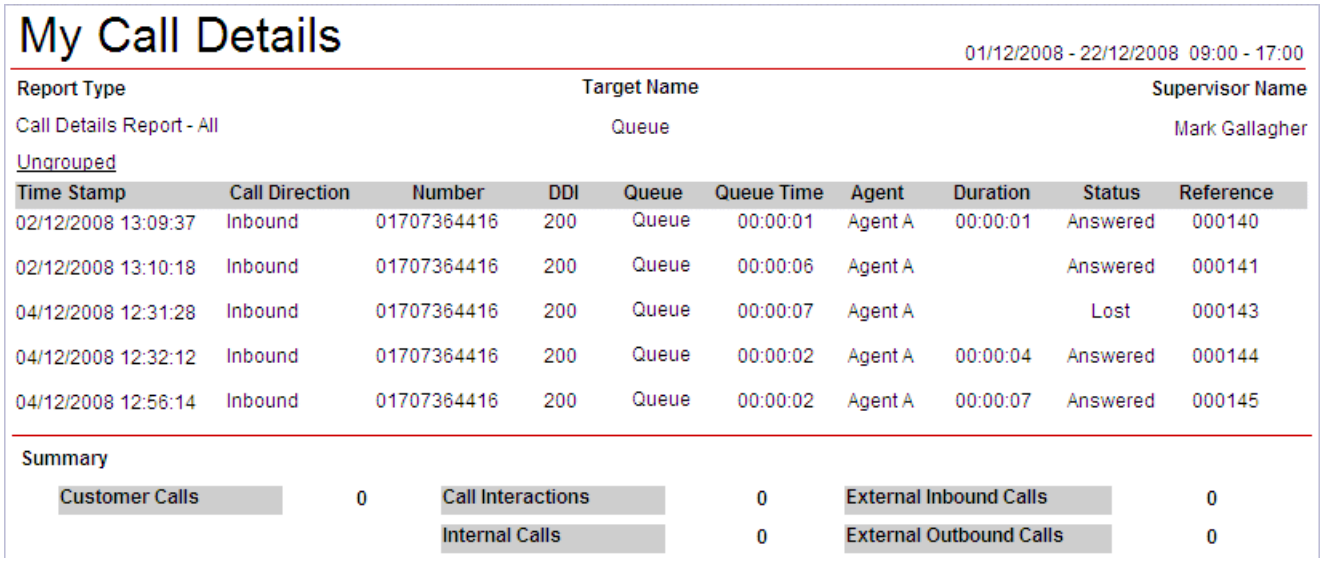
- **Time Stamp**
  The date and time the alarm or warning was triggered and, for alarms that have been cleared, the date and time the alarm or warning was cleared.
- **Label**
  Whether it was an alarm or a warning.
- **Target Name**
  The hunt group or agent that triggered the warning.
- **Value**
  The value of the statistic when the alarm or warning occurred.
- **Statistic Name**
  The statistic name. For agent and queue state alarms the state is included in the name, along with the reason code for a **Busy Not Available** alarm.

The summary at the end of the report details the total number of warnings and alarms included in the report period.

### 3.3.7.4 Call Details Report

This report details the individual calls for the selected target or targets. For internal calls, the report only reflects the call data for the receiving end, not for the originator. External calls are accounted and shown for the extension making the outbound call.

- **Target options: *Agent***, ***Queue***, ***View***, ***CLI***, ***DDI*** or ***Account Code***.
- **Filter: *All***, ***Answered***, ***No Answer***, ***Overflowed Lost***, ***Overflowed Answered***, ***Transferred***, ***Lost*** or ***Routed to Voicemail***.
  - The options ***Overflowed Lost*** and ***Overflowed Answered*** are unavailable if the report target is an agent or agents.
  - ***Overflowed Lost*** and ***Overflowed Answered*** are only included in reports on the queue from which the call overflowed.
  - ***Routed to Voicemail*** is not included in the report if a call to a hunt group is routed to voicemail and the report target is an agent or agents.
- **Group Result by: *Ungrouped***, ***15 minutes, 30 minutes***, ***Hour***, ***Day***, ***Week***, ***Queue***, ***CLI***, ***DDI*** or ***Account Code***.
  - When a report is grouped, each set of grouped records will have its own summary except when there is only one record in the group.
  - Records that do not match the grouping being used will be grouped at the start of the report. For example, in a report grouped by CLI, records that have no associated CLI will be displayed at the start of the report.
  - The grouped records will still contain data appropriate for the selected report targets. For example, in a Call summary report targeted on a queue but grouped by agents, each report record will still detail how the queue handled the call even though the records will be grouped against the answering agents. Therefore, the average answer time for the call will be how long the call was in the queue to get answered by any member of the queue, and not by just the agent who did answer.
  - Following the same logic as hour grouping, if **15 minutes grouping** is selected, the call records will get grouped in 15-minute slabs. For example, xx:00 to 00:14, xx:00 to xx:29, xx:30 to xx:44 and xx:45 to xx:59. Similarly, if **30 minutes** grouping is selected, then call records will get grouped in 30-minute slabs.
- **Optional:** Whether the report includes internal calls is an option.



My Call Details

01/12/2008 - 22/12/2008 09:00 - 17:00

| Report Type | Target Name | Supervisor Name |
|---|---|---|
| Call Details Report - All | Queue | Mark Gallagher |

Ungrouped

| Time Stamp | Call Direction | Number | DDI | Queue | Queue Time | Agent | Duration | Status | Reference |
|---|---|---|---|---|---|---|---|---|---|
| 02/12/2008 13:09:37 | Inbound | 01707364416 | 200 | Queue | 00:00:01 | Agent A | 00:00:01 | Answered | 000140 |
| 02/12/2008 13:10:18 | Inbound | 01707364416 | 200 | Queue | 00:00:06 | Agent A | | Answered | 000141 |
| 04/12/2008 12:31:28 | Inbound | 01707364416 | 200 | Queue | 00:00:07 | Agent A | | Lost | 000143 |
| 04/12/2008 12:32:12 | Inbound | 01707364416 | 200 | Queue | 00:00:02 | Agent A | 00:00:04 | Answered | 000144 |
| 04/12/2008 12:56:14 | Inbound | 01707364416 | 200 | Queue | 00:00:02 | Agent A | 00:00:07 | Answered | 000145 |

Summary

| | | | | | |
|---|---|---|---|---|---|
| Customer Calls | 0 | Call Interactions | 0 | External Inbound Calls | 0 |
| | | Internal Calls | 0 | External Outbound Calls | 0 |

The following information is shown for each target:

- **Time Stamp**
  The date and time of the call.
- **Call Direction**
  ***Inbound*** or ***Outbound*** for external calls. ***Internal*** for internal calls.
- **Number**
  For inbound calls, this is the CLI of the caller. For outbound calls, this is the number dialed by the agent. For outgoing external calls, the system can partially mask the number.
- **DDI**
  For incoming calls, the destination number received.
- **Queue**
  The queue to which the call was targeted.
- **Queue Time**
  The time from when the call arrived until it was answered, lost or overflowed. Queue time is not displayed for calls routed to voicemail.

- **Agent**
  When answered, the agent who answered the call.
- **Duration**
  The total call duration. No duration is shown for overflowed lost calls or routed to voicemail calls. A duration is only shown for overflowed answered calls when the report is run using the filter ***Overflowed Answered***.
- **Status**
  Whether the call was:
  - **Answered**
  - **Enquiry Answered**
  - **Holding**
  - **Lost**
  - **No Answer**
  - **Not Answered**
  - **Overflowed Answered**
  - **Overflowed Lost**
  - **Routed to Voicemail**
  - **Transferred**
- **Reference**
  The unique reference 297 number for a particular call. This number is also reported in reports based on the **Trace Reports** 60 template and can be used as the target for a trace report.

A summary is provided for each item on which the report has been grouped. An additional summary is included at the end of the report for the whole report. The summary details:

- **Customer Calls**
  The number of unique calls covered by the report.
- **Call Interactions**
  The total of calls answered, lost, overflowed answered, overflowed lost and held/reconnected. Note that this is not the same as the call interactions value shown in reports based on the Call Summary Report 58 template.
- **Internal Calls**
  The total number of internal calls.
- **External Inbound Calls**
  The total number of external calls received.
- **External Outbound Calls**
  The total number of external calls made.

## Call Details Report and Transferred Calls

**For the agent doing the transfer:**
For the queue/agent that the call is transferred from, the Call Details Report will detail the following call events:

| Call Records | Details included... |
|---|---|
| **Answered Call** | As per a normal call. |
| **Holding Call** | • The **Call Reference**, **Direction**, **Agent**, **Number** and **Queue** are those of the answered call.<br>• The **Date/Time** are when the call was held.<br>• The **Duration** is the time from the call being held to the transfer being completed.<br>• The **DDI** is that of the original call.<br>• The **Queue Time** is blank.<br>• The **Status** is ***Holding***. |
| **Transferred Call** | Reports the same details as the original answered call except:-<br>• The **Date/Time** are when the transfer was completed.<br>• The **Queue Time** is blank.<br>• The **Duration** is from the transfer initiation to the end of the transfer (ie. it includes the duration of the enquiry call). |

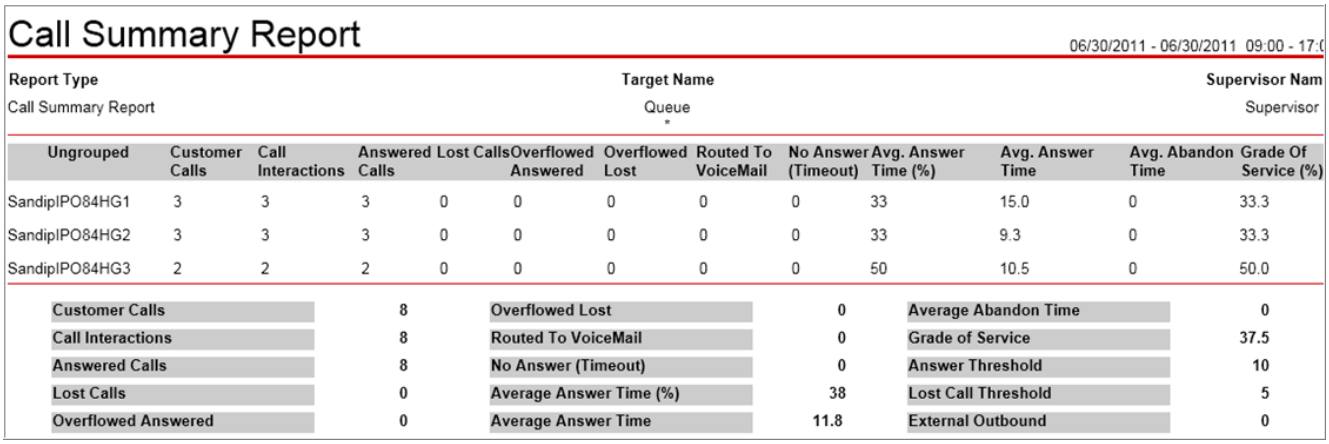
**For the queue/agent receiving the transfer:**
A call detail report run against the Queue/Agent, that receives a transfer, will detail:

| Call Records | Details included... |
|---|---|
| **Enquiry Answered** | Note that this record is not present for unsupervised transfers.<br>• **Date/Time** is the point ringing is heard.<br>• **Call direction** is internal.<br>• **Number** is the calling parties' number.<br>• **DDI** is the number dialed.<br>• **Queue** is the target queue or blank if agent.<br>• **Queue Time** is the ringing time of the enquiry call.<br>• **Agent** is the agent answering the call.<br>• **Duration** is from the agent answering to the transfer being completed.<br>• **Status** is ***Enquiry Answered***.<br>• **Call Reference** is a new call reference. |
| **Answered Call** | Reports the same details as the original transferred call except:-<br>• The **Date/Time** are when the transfer was completed.<br>• The **Queue** is the target of the transfer.<br>• The **Queue Time** is the time from the initial queuing at the transferee until the transfer is completed.<br>• The **Duration** is from the transfer initiation to the end of the call leg (ie. it includes the duration of the enquiry call). |

### 3.3.7.5 Call Summary Report

This report provides a summary for the selected target of calls presented, answered, overflowed and lost. The average answer percentage, average answer time, average abandon time and grade of service are also listed.

- **Target options: *Agent***, ***Queue***, ***View***, ***CLI***, ***DDI*** or ***Account Code***.
- **Group Result by: *Ungrouped***, ***Hour***, ***15 minutes***, ***30 minutes***, ***Day***, ***Week***, ***Queue***, ***Agent***, ***CLI***, ***DDI*** or ***Account Code***.
  - When a report is grouped, each set of grouped records will have its own summary except when there is only one record in the group.
  - Records that do not match the grouping being used will be grouped at the start of the report. For example, in a report grouped by CLI, records that have no associated CLI will be displayed at the start of the report.
  - The grouped records will still contain data appropriate for the selected report targets. For example, in a Call summary report targeted on a queue but grouped by agents, each report record will still detail how the queue handled the call even though the records will be grouped against the answering agents. Therefore, the average answer time for the call will be how long the call was in the queue to get answered by any member of the queue, and not by just the agent who did answer.
  - Following the same logic as hour grouping, if **15 minutes grouping** is selected, the call records will get grouped in 15-minute slabs. For example, xx:00 to 00:14, xx:00 to xx:29, xx:30 to xx:44 and xx:45 to xx:59. Similarly, if **30 minutes** grouping is selected, then call records will get grouped in 30-minute slabs.
- **Optional:** Whether the report includes internal calls is an option.



Call Summary Report

06/30/2011 - 06/30/2011 09:00 - 17:0

| Report Type | Target Name | Supervisor Nam |
|---|---|---|
| Call Summary Report | Queue<br>* | Supervisor |

| Ungrouped | Customer Calls | Call Interactions | Answered Calls | Lost Calls | Overflowed Answered | Overflowed Lost | Routed To VoiceMail | No Answer (Timeout) | Avg. Answer Time (%) | Avg. Answer Time | Avg. Abandon Time | Grade Of Service (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SandipIPO84HG1 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 33 | 15.0 | 0 | 33.3 |
| SandipIPO84HG2 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 33 | 9.3 | 0 | 33.3 |
| SandipIPO84HG3 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 50 | 10.5 | 0 | 50.0 |

| | | | | | |
|---|---|---|---|---|---|
| Customer Calls | 8 | Overflowed Lost | 0 | Average Abandon Time | 0 |
| Call Interactions | 8 | Routed To VoiceMail | 0 | Grade of Service | 37.5 |
| Answered Calls | 8 | No Answer (Timeout) | 0 | Answer Threshold | 10 |
| Lost Calls | 0 | Average Answer Time (%) | 38 | Lost Call Threshold | 5 |
| Overflowed Answered | 0 | Average Answer Time | 11.8 | External Outbound | 0 |

The following information is shown for each target selected for the report:

- **Customer Calls**
  The total number of unique calls.
- **Call Interactions**
  The total number of calls answered, lost, overflowed answered, overflowed lost, or routed to voicemail. Depending on the report targets included and how the report is grouped, the same call may be included more than once within the report. Therefore this value is different from the number of unique customer calls. Note that this is not the same as the call interactions value shown in reports based on the Call Details Report 55 template.
- **Answered Calls**
  The number of queue calls 296 answered. This includes calls that were **Routed to Other**.
- **Average Answer Time**
  The sum of the answer time for queue calls answered divided by the number of queue calls answered.

  The Call Summary Report displays the average answer time value in seconds.

  The Average Answer Time is independent of the Average Answer Time threshold. The system includes all the calls received by a particular agent or a queue irrespective of the threshold setting that you have set for Call Summary Report. IP Office Customer Call Reporter calculates the average answer time for all the calls received within the time interval set in the **Working Hours** field.
- **Lost Calls**
  The number of queue calls lost. The **Lost Call Threshold** doesn't impact this statistics (it is used for the **Grade Of Service** below).
- **Overflowed Answered**
  The number of queue calls that overflowed and were then answered. This value is 0 when the report target is an agent or the report is grouped by agent.
- **Overflowed Lost**
  The number of queue calls that overflowed and were then lost. Calls lost before the report's **Lost Call Threshold** are not counted. This value is 0 when the report target is an agent or the report is grouped by agent.
- **Routed to Voicemail**
  The number of queue calls routed to voicemail.

- **No Answer (Timeout)**
  The number of times a call was presented to an agent and not answered before being presented to another agent.

The Call Summary Report displays the following values unless the report target is an agent (for which the values are blank).

- **Average Answer Time (%)**
  The number of calls answered within the report's specified answer threshold time, divided by the total number of calls answered.
- **Average Abandon Time**
  For lost queue calls, this is the average time from when the calls were received by the IP Office system till they were lost. This value is 0 when the report target is an agent.
- **Grade of Service**
  The number of queue calls answered within the report's answer threshold as a percentage of all calls presented. Calls lost before the report's **Lost Call Threshold** are not included in the calculation. This value is reported for queues but is not reported for agents.

The report summary totals the individual values for all the targets included in the report with the following differences:

- **Lost Calls Threshold:** *Default = 1, Range = 1 to 600.*
  The value in seconds used by the report for calculating the **Grade of Service** values. Calls lost before this time are not included in the calculation.
- **Answer Threshold:** *Default = 1, Range = 1 to 600.*
  The value in seconds used by the report for calculating the **Grade of Service** values and **Average Answer %** values.
- **External Outbound Calls**
  Provides a count of calls made by any agents being reported on. This will be 0 if the report target is a queue.
- **Customer Calls**
  The total number of unique calls from a system wide point of view. It is not necessarily the sum of the target customer calls. For example, a call transferred between agents would show as a unique call for each agent (2 calls total) but in the summary section it shows as a single system call. Another example would be where a call spans 2 time grouping. It would show as a unique call for each of the time group (2 calls total) but in the summary section it would show as a single system call.

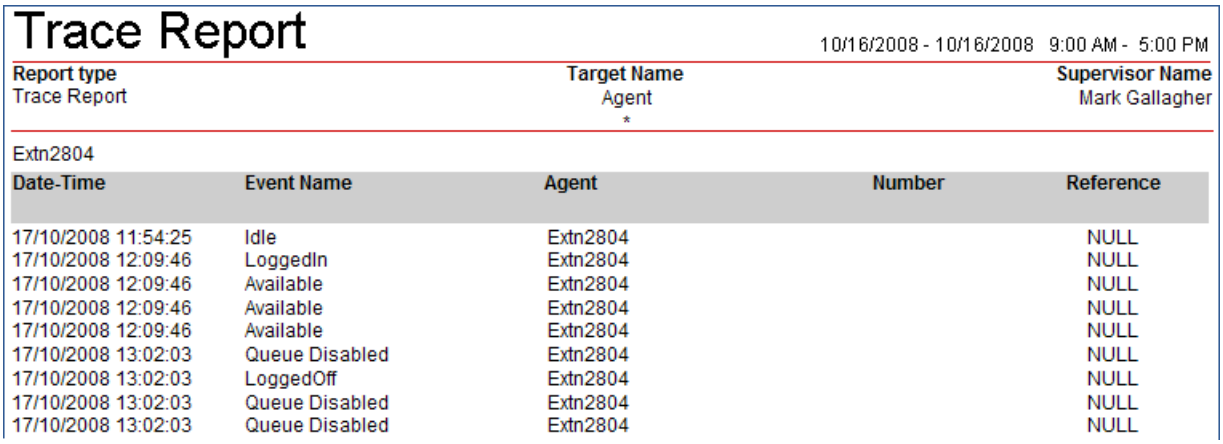
**Note:**

**Routed to Voicemail**, **Overflowed Lost** and **Overflowed Answered** are reported against the queue from which the call overflowed. For an agent, **Overflowed Lost** and **Overflowed Answered** are reported as 0.

### 3.3.7.6 Trace Report

This report lists in chronological order all the events for the selected target or targets within the selected period.

- **Target options:** ***Agent*** 289, ***CLI*** 292, or ***Call Reference*** 297.
  - The call reference for individual calls can be obtained from reports based on the **Call Details** 55 report template.
- **Group Result by:** ***Ungrouped*** *(fixed)*.



Trace Report

10/16/2008 - 10/16/2008 9:00 AM - 5:00 PM

| Report type | Target Name | Supervisor Name |
|---|---|---|
| Trace Report | Agent<br>* | Mark Gallagher |

Extn2804

| Date-Time | Event Name | Agent | Number | Reference |
|---|---|---|---|---|
| 17/10/2008 11:54:25 | Idle | Extn2804 | | NULL |
| 17/10/2008 12:09:46 | LoggedIn | Extn2804 | | NULL |
| 17/10/2008 12:09:46 | Available | Extn2804 | | NULL |
| 17/10/2008 12:09:46 | Available | Extn2804 | | NULL |
| 17/10/2008 12:09:46 | Available | Extn2804 | | NULL |
| 17/10/2008 13:02:03 | Queue Disabled | Extn2804 | | NULL |
| 17/10/2008 13:02:03 | LoggedOff | Extn2804 | | NULL |
| 17/10/2008 13:02:03 | Queue Disabled | Extn2804 | | NULL |
| 17/10/2008 13:02:03 | Queue Disabled | Extn2804 | | NULL |

For each target being report on, the report will list events where one of the targets changed state.

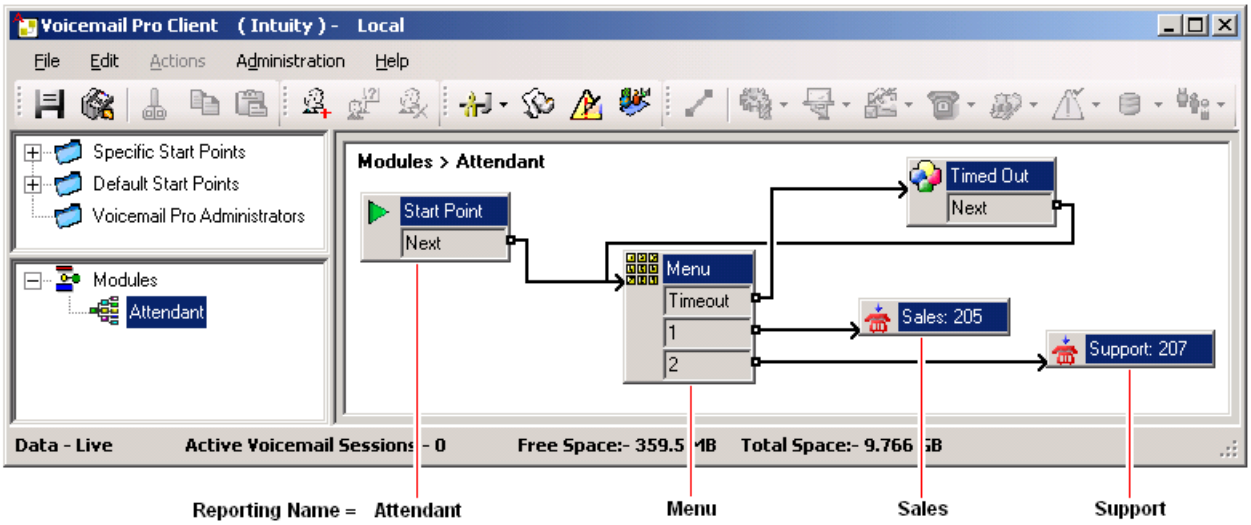
- **Date - Time**
  The date and time of the event.
- **Event Name**
  - **ACW:** The agent went into the After Call Work state.
  - **Available:** The agent was logged in or enabled in a hunt group and could be offered queue calls.
  - **Busy:** The agent went off hook.
  - **Busy Not Available:** The agent entered the Busy Not Available state.
  - **Holding:** The agent put a call on hold or parked a call.
  - **Idle:** The agent was idle and could be offered another call.
  - **Incoming:** The agent received an incoming external call.
  - **Internal Made:** The agent made an internal call that was connected or reconnected.
  - **Internal Received:** The agent received an internal call.
  - **Logged In:** The agent logged in.
  - **Logged Off:** The agent logged off.
  - **Lost:** The caller disconnected before the agent answered the call.
  - **No Answer:** The agent did not answer the call when the call was presented.
  - **Outgoing:** The agent made an outgoing external call.
  - **Queue Disabled:** The agent's membership of a queue was disabled.
  - **Ringing:** The agent received an alert for an incoming queue call.
  - **Routed To VoiceMail**: The received call was redirected to Voicemail.
- **Agent**
  The agent to which the event applies.
- **Number**
  For call events, on incoming calls the CLI received with the call, on outgoing calls the number dialed. For outgoing external calls, the system can partially mask the number.
- **Reference**
  The unique call reference 297 number of the call. Shown for events that involve a call, otherwise ***Null***.

### 3.3.7.7 Voicemail Report

Reports based on the Voicemail Report template of IP Office Customer Call Reporter can be used to track the usage of customized call flows that have been added to Voicemail Pro. The reporting is not automatic, only specific labels that have been assigned to call flow actions are reported on.

- **Target options: *Voicemail*** *(fixed)*.
- **Report on: *All calls*** *(fixed)*.
- **Group Result by: *Ungrouped***, ***Hour***, ***Day***, ***Week***, ***CLI***, or ***DDI***.
  - When a report is grouped, each set of grouped records will have its own summary except when there is only one record in the group.
  - Records which do not match the grouping being used will be grouped at the start of the report. For example, in a report grouped by CLI, records that have no associated CLI will be displayed at the start of the report.
  - The grouped records will still contain data appropriate for the selected report targets. For example, in a Call summary report targeted on a queue but grouped by agents, each report record will still detail how the queue handled the call even though the records will be grouped against the answering agents. Therefore, the average answer time for the call will be how long the call was in the queue to get answered by any member of the queue, and not by just the agent who did answer.

The example Voicemail Pro call flow below is a simple auto attendant that lets callers select to be transferred to either sales or support.




Reporting names have been assigned to some of the actions in the call flow. For example, the **Start Point** action has been given the name ***Attendant*** (see Adding a Name to an Action 62 below). The names are used in IP Office Customer Call Reporter reports based on the Voicemail Report template.

VoicemailReport

14/01/2009 - 14/01/2009 07:44 - 17:00

| Report Type | Target Name | Supervisor Name |
|---|---|---|
| Voicemail Report | Voicemail | Mark Gallagher |

| Name | No. of Calls | No.Lost Calls | No. of Times triggered |
|---|---|---|---|
| Attendant | 7 | 0 | 7 |
| Menu | 5 | 3 | 8 |
| Sales | 2 | 0 | 2 |
| Support | 2 | 0 | 2 |
| *Summary* | 7 | 3 | 20 |

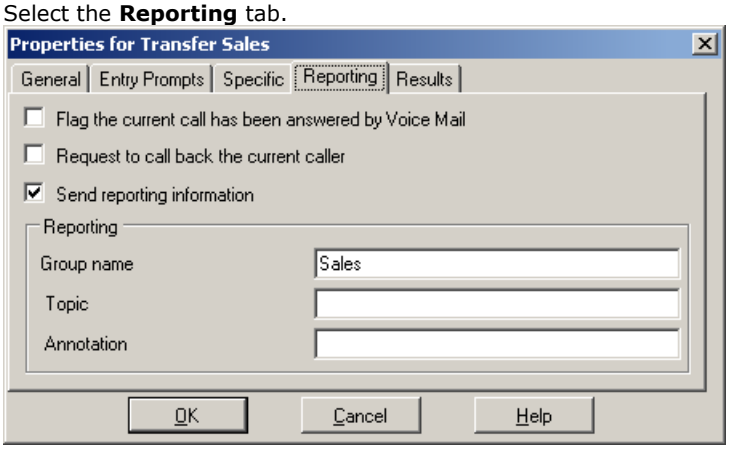
Total calls Answered 7 Total calls Lost 3

- **Name**
  This is the text name assigned to an action or actions in Voicemail Pro customized call flows.
  - The same name can be assigned to several actions in the same call flow and to actions in different call flows. For example, if you have several call flows with actions that transfer calls to your Sales team, you can name all those actions as "Sales". This will result in a single reporting line in the Voicemail report for calls that went from voicemail to sales, independent of the actual call flow used.
- **No. of Calls**
  When a call reaches a named action it is counted as an answered call for that name.
- **No. Lost Calls**
  If, having reached a named action, the call is disconnected by the caller or by the voicemail server before it reaches another named action, it is counted as lost.

- **No. of Times Triggered**
  Each time a call reaches a named action, the call is counted as having triggered that name. The same call can be counted as triggering the same action more than once if the call flow loops. Note however that the call must go via another named action rather than simply looping from one of the named actions own result.

## Adding a Reporting Name to a Voicemail Action

1. Double-click the action.
2. Select the **Reporting** tab.




3. Select **Send reporting information**.
4. In the **Group name** field enter the name to associate with the action. This is the name that will be used in reports based on the Voicemail Report template. None of the other fields are used by IP Office Customer Call Reporter.
5. Click **OK**.

## 3.3.8 Custom Reports

In addition to creating report templates and running reports based on the standard report types[50], you can use custom report types for the same purpose. When you click the **Custom** tab, the custom reports types that you have available are listed. Once you select a custom report type[66] from the list, you can access the same functions are for standard report types.

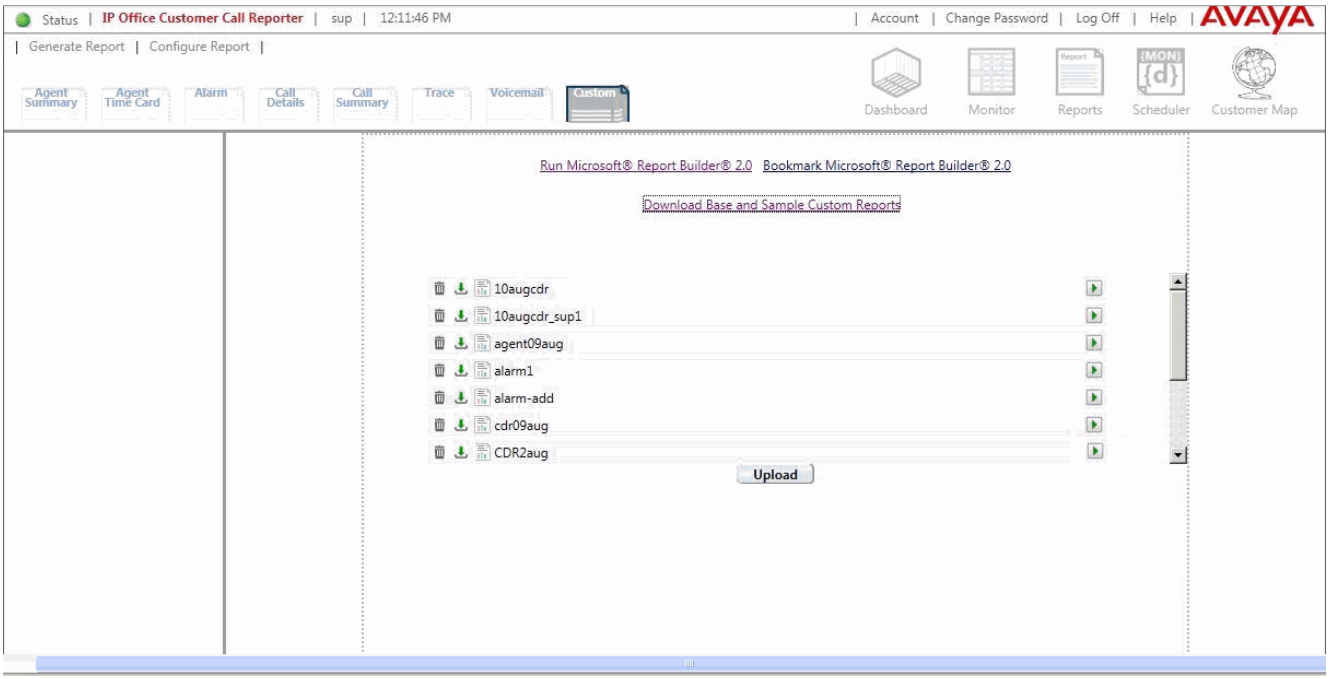
Custom report types are created outside IP Office Customer Call Reporter using a separate tool - Microsoft Report Builder. However, you do not need to have permission to use Report Builder to make use of custom report types.

To use a custom report type, you first need to have a custom report file available to you. This can be achieved in the following ways:

- **Upload a Custom Report Type**[65]
  You can upload the definition file for a custom report type that has been provided to you by your administrator or another supervisor.
- **Copy a Saved Report Based on a Custom Report Type**[46]
  If another supervisor copies a saved report template to you that they have based on a custom report file that they have, the custom report file is also copied and is available for you to use for your own reports.
- **Create a New Custom Report Type File**[69]
  This is done using the Microsoft Report Builder. This option requires you to have Report Builder installed and to have security access to the IP Office Customer Call Reporter server. Therefore, this option may not be available to all or any of the supervisors.

### Accessing Custom Reports

The custom reports section is accessed by selecting the Custom tab within Reports.




A number of links are displayed at the top of the page for installing and running Report Builder[69].

- If the links are not present, it may indicate that the Report Builder configuration required on the IP Office Customer Call Reporter server has not been completed. Contact the system maintainer.

Below the links, any custom report types that you have available already are listed. You can use the icons adjacent to each type:

- **Delete:**[67]
  Delete the custom report type. Note that this will delete any saved report templates and recent reports that are based on the custom report type.
- **Download:**[68] Download the custom report file. You can then edit the report file or upload it on another system or supervisor account.
- **Use:**[66] See the listed of **Saved Report Templates** and **Recent Reports** that you have that are based on the selected custom report type. You can use these in the same way as the standard report types on the other tabs.
- **Upload**[65]
  The upload link below the list can be used to select a custom file that you have edited or have been given and load it into IP Office Customer Call Reporter for your use.

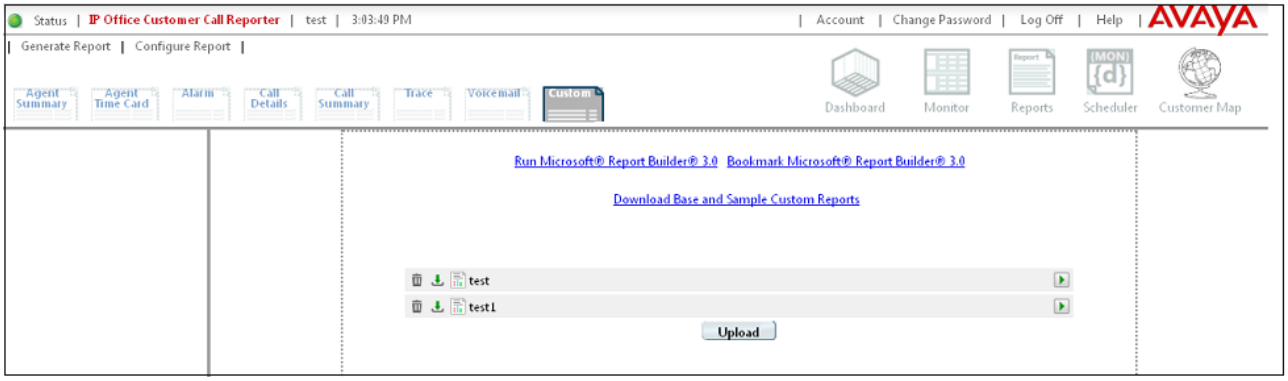
### 3.3.8.1 Uploading a Custom Report Type

Custom report files are stored as ***.rdl*** files. These are created using Report Builder 69. If you have created a new file or have been provided with one created by another supervisor or you administrator, you can upload it to your IP Office Customer Call Reporter account to then use it.

- Existing custom report files being used by another supervisor can also be copied to other supervisors rather than having to download and then upload the file. This is done by copying any saved report template 46 that has been created using that custom report file.

## Uploading a custom report type file

1. Click the **Reports** icon.
2. Click the **Custom** tab.




3. Click **Upload**. The system displays **Report Name** and the **Select File** fields.
4. In the **Report Name** field, enter a name for the report.
5. Click **Browse** and locate the file that you want uploaded. The file path will be displayed in the **Select File** field.
6. Click **OK**.

The new custom report type is now listed on the **Custom** tab. You can now use that custom report type 66.

### 3.3.8.2 Using a Custom Report Type

Within IP Office Customer Call Reporter, the custom report types available to you are listed on the Custom tab page. Custom report types are added to the page by either uploading files 65 or copying files 46 from another supervisor.

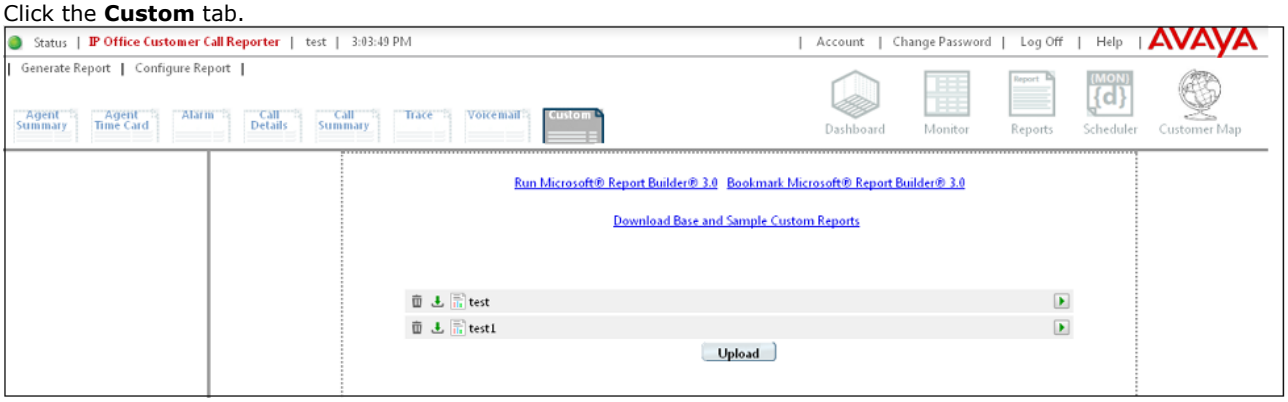
Once you select a particular custom report file for the list that you have available, you can see the **Save Report Templates** and **Recent Reports** you have which were based on that custom report file. You can then also create new reports based on that report type.

Note that **Custom Recent Reports** are PDF files. Therefore, to view recent custom reports you must have PDF file viewer installed on your computer. You can download PDF file viewer from http://get.adobe.com/reader.

You can also save the **Recent Report** on your hard disk.

## Using a custom report type

1. Click the **Reports** icon.
2. Click the **Custom** tab.




3. In the list of available custom report types, click next to the report type that you want to use.
4. The **Save Report Template** and **Recent Reports** lists for that custom report type are now shown on the left.
   - **Creating a Report Template** 38.
   - **Running a Manual Report** 41.
   - **Deleting a Report** 47.
   - **Viewing Recent Reports** 48.
5. To select a different custom report type click the **Custom** tab again.

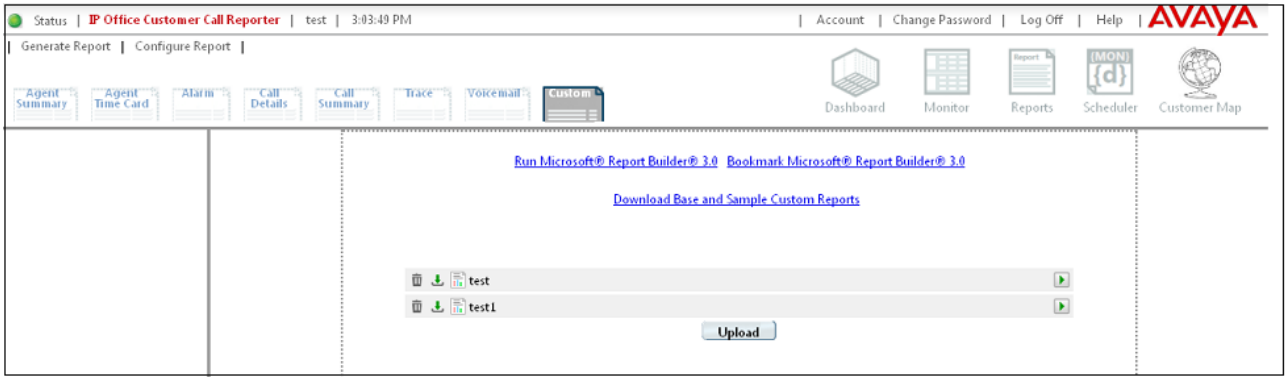
### 3.3.8.3 Deleting a Custom Report Type

You can delete a custom report type from the list of report types you have available.

- **! WARNING**
  Deleting the custom report type will also delete any saved report templates and recent reports that you have that were based on the deleted custom report type.

## Deleting a custom report type

1. Click the **Reports** icon.
2. Click the **Custom** tab.




3. Click next to the custom report type that you want to delete.
4. You will be prompted to confirm the deletion. Remember that deleting the custom report type will also delete any saved report templates and recent reports that you have that were based on the deleted custom report type.

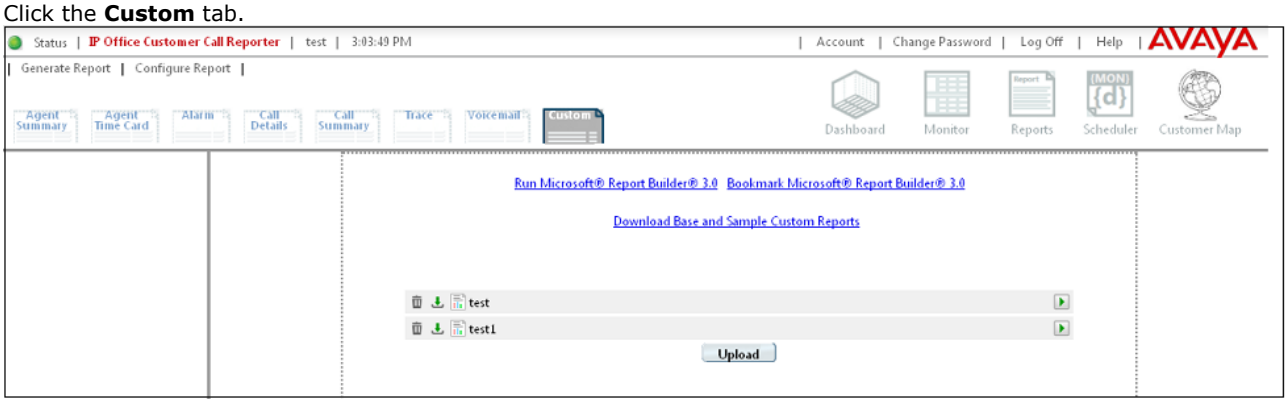
### 3.3.8.4 Downloading a Custom Report Type

To create a new custom report type[69], it is easier to download an existing file which you can then edit rather than creating it from scratch. You can either download a sample file supplied with IP Office Customer Call Reporter or download one of your existing custom report types.

You can also download a file to supply it to another supervisor so that they can then upload[65] it into their custom report types.

## Downloading a custom report type

1. Click the **Reports** icon.
2. Click the **Custom** tab.




- **To download an existing custom report type**
  In the list of available custom report types, click next to the report type that you want to download.
- **To download a sample custom report type**
  Click the **Download Base and Sample Custom Reports** link.

3. Select where you want the file saved on your computer.

### 3.3.8.5 Creating a Custom Report Type

In most cases, any custom report type that you use will be supplied to you by your administrator or by another supervisor. However, if you have appropriate security permissions, you can install Microsoft Report Builder to create and edit your own custom report types.

Report Builder is a separate application to IP Office Customer Call Reporter. It is installed onto the IP Office Customer Call Reporter server during IP Office Customer Call Reporter installation and configured to be able to have read-only access to the IP Office Customer Call Reporter database. Through IP Office Customer Call Reporter you can then download and install Report Builder onto your own computer to create and edit custom report files.

1. **Install Report Builder**
   Report Builder can be installed using the links shown with the IP Office Customer Call Reporter Custom tab page.
2. **Download a Custom Report File**
   To create a new custom report type it is easiest to base it on an existing file downloaded from the IP Office Customer Call Reporter server.
3. **Edit the Custom Report File**
   Using Report Builder, edit an existing report file.
4. **Upload the Custom Report File to IP Office Customer Call Reporter**
   Using IP Office Customer Call Reporter, upload the new file into IP Office Customer Call Reporter.

#### 3.3.8.5.1 Installing Report Builder

Microsoft Report Builder is the tool used to create and edit custom report type files. Those files are then can then be uploaded to IP Office Customer Call Reporter.

Report Builder is installed on the IP Office Customer Call Reporter server as part of the IP Office Customer Call Reporter installation and can then be accessed through links in the IP Office Customer Call Reporter menus shown to supervisors. When you click the link to start Report Builder from IP Office Customer Call Reporter, if you do not have it already installed, you will be prompted to download and install the application.

#### Installing Report Builder from IP Office Customer Call Reporter

1. Log in to IP Office Customer Call Reporter as a supervisor.
2. Click **Reports** .
3. Select the **Custom** tab.
4. Click the **Run Microsoft Report Builder 3.0** link.
   - If the links are not present, it may indicate that the Report Builder configuration required on the IP Office Customer Call Reporter server has not been completed. Contact the system maintainer.
5. Depending on how Report Builder was installed on the IP Office Customer Call Reporter server, you may be required to enter a name and password to access that server.
6. Follow the prompts to download and install Report Builder.

#### Bookmarking Report Builder

You can bookmark the path to Report Builder. You can then use the link to start Report Builder without having to log into IP Office Customer Call Reporter.

1. Log in to IP Office Customer Call Reporter as a supervisor.
2. Click **Reports** .
3. Select the **Custom** tab.
4. Click the **Bookmark Microsoft Report Builder 3.0** link.
   - If the links are not present, it may indicate that the Report Builder configuration required on the IP Office Customer Call Reporter server has not been completed. Contact the system maintainer.

If you already have Report Builder installed[69], you can run it without having to log into IP Office Customer Call Reporter. Alternatively you can use the links in IP Office Customer Call Reporter to start Report Builder. Using this latter method will install report builder if it is not already installed on your computer.

Full details of how to use Report Builder are not covered in this manual. Additional information can be found in the *Avaya IP Office IP Office Customer Call Reporter Custom Reporting* manual available from the same sources as this manual. Also a range of information is available on the Microsoft support site.

## Starting Report Builder Directly

This method can be used to start Report Builder if it is already installed on your computer.

1. From the desktop, select **Programs | Microsoft SQL Server 2008 R2 Report Builder 3.0 | Report Builder 3.0** .
2. Select **Open** from the **Getting Started** menu.
3. Browse to the report file that you want to edit and click **OK** to load the file.

## Running Report Builder from IP Office Customer Call Reporter

Using this method, if Report Builder is not already installed you will be prompted to go through the installation process.

1. Log in to IP Office Customer Call Reporter as a supervisor.
2. Click **Reports** .
3. Select the **Custom** tab.
4. Click the **Run Microsoft Report Builder 3.0** link.
   - If the links are not present, it may indicate that the Report Builder configuration required on the IP Office Customer Call Reporter server has not been completed. Contact the system maintainer.
5. Depending on how Report Builder was installed on the IP Office Customer Call Reporter server, you may be required to enter a name and password to access that server.
6. Select **Open** from the **Getting Started** menu.
7. Browse to the report file that you want to edit, and click **OK** to load the file.

Note: If you have run Report Builder using the IP Office Customer Call Reporter link, click the **Disconnect** link at the bottom-left of the Report Builder window.

3.3.8.5.3 Dataset Definitions

The following table lists the fields that can be accessed for generating custom reports. Most of the types are self-explanatory. Those that are type **Condition** (Boolean values) take the value 0 or 1.

| Field Name | Type | Definition |
|---|---|---|
| **Agent_After_Call_Work_Time** | Time duration | Total time for which the agent's extension is in the After Call Work (ACW) state. It is the sum of all the items that are displayed in the ACW Time column of Agent Summary Report and correspond to the ACW times in the queues that the agent is a member of. ACW state indicates that the agent is not available to receive queue calls while they perform some other call-related activity. ACW state is independent of queue memberships and enabled state and is typically used for activities such as creating call records and data entry that need to be completed before handling another call. A number of controls are available for ACW. Agents can be configured to be automatically put into the ACW state after a queue call or they can manually select to enter the state when required.<br>**Note:** The ACW state is similar to busy wrap up of the CCC product. |
| **Agent_Answered_Calls** | Numeric | Number of queue calls that are answered by the agents. It is same as the item displayed in the Answered Calls column in Call Summary Report. It includes the calls that are displayed as routed to other in real-time. It does not include queue calls that are answered by non-queue members using methods such as call pickup, calls that go to voicemail, and direct calls answered by agents. |
| **Agent_Average_Answer_Time_Seconds** | Time span | Average answer time for an agent calculated as a simple, non-weighted mean of the call answer times. It is same as the item displayed in the Average Answer Time column in Call Summary Report. It is the sum of the answer times in seconds for answered queue calls divided by the number of answered queue calls. The system considers the calls received by a particular agent or a queue irrespective of the answer threshold setting. The average answer time for a call is measured from it arriving at the queue or agent, but there may be a delay between the time a call is presented to a queue and the time the call arrives to the agent. It does not include direct calls to the agent. For example, if an agent has only answered one queue call in 6 seconds and then a second queue call in 8 seconds, the average answer time is 7 seconds. If the agent has answered no calls, then the value is 0. |
| **Agent_Busy_Not_Available_Time** | Time duration | Total time for which an agent's extension is in the Busy Not Available state. It is the sum of all the items that are displayed in the Busy Not Available Time column of Agent Summary Report and correspond to the Busy Not Available times in the queues that the agent is a member of. The Busy Not Available state indicates that an agent is not available to receive calls while performing an activity that is not call-related such as attending a meeting. It is independent of queue memberships and enabled state. This state can be selected by an agent using the Do Not Disturb (DND) or Send All Calls (SAC) button of the telephone. This also requires the agent to select one of the reason codes displayed on the telephone to indicate the reason for getting into the Busy Not Available state. If this state is enabled while a queue call is being presented, the call will go to the next available agent and cause the No Answer statistic for the agent and the queue to be incremented. An agent using the DND or SAC feature is treated as selecting the Busy Not Available state. |
| **Agent_Customer_Calls** | Numeric | Total number of unique calls handled by an agent, that is, the number of calls with unique values for the Call_ID field as displayed in the Customer Calls column in Call Summary Report. |
| **Agent_Hold_Time** | Time duration | Total time for which the agent had calls on hold or had calls parked. It is the sum of all the hold times in the queues that the agent is a member of, as displayed in the Hold Time column in Agent Summary Report. In this state the agent is not talking to a caller. |
| **Agent_ID** | Numeric | Unique identification number for an agent, as used in system configuration. |
| **Agent_Inbound_Talk_Time** | Time duration | Total time that the agent spent on incoming answered queue calls, excluding the ringing time. It is the sum of all the inbound talk times in the queues that the agent is a member of, as displayed in the Talk Inbound column in Agent Summary Report. It includes talk times for incoming external trunk calls only. It does not include the talk times for direct calls, internal calls, and outgoing external calls. It excludes the hold, parked, and ACW call times. It does not include queue calls answered by non-queue members using methods such as call pickup. |
| **Agent_Internal_Talk_Time** | Time duration | Total time that the agent spent on calls between internal parties, inbound, and outbound. It is the sum of all the internal talk times in the queues that the agent is a member of, as displayed in the Talk Internal column of Agent Summary Report. It includes the ringing time for direct calls, but not for queue calls. It does not include held, parked, and ACW call time. It does not include queue calls answered by non-queue members using methods such as call pickup. |
| **Agent_Lost_Calls** | Numeric | Number of queue calls lost by the agent, as displayed in the Lost Calls column of Call Summary Report. A lost call is one where the caller disconnects before the call is answered by the agent. The lost call threshold does not impact this statistic. Queue calls that are lost are reported as lost against both the queue and the last agent to who the call is presented. It does not include calls that are routed to voicemail. |
| **Agent_Name** | Alphanumeric | Username of the agent configured in the IP Office Telephone System, as displayed in the first column of Call Summary Report for agents. |
| **Agent_Non_Queue_Time** | Time duration | Total time for which the agent is talking on incoming direct calls, including the ringing times. It is the sum of all the non-queue times in the queues that the agent is a member of, as displayed in the Non-Queue Time column of Agent Summary Report. It is independent of queue memberships and state. |

| Field Name | Type | Definition |
|---|---|---|
| **Agent_Off_Hook_Time** | Time duration | Total time for which the agent's extension is off hook but is not connected to a trunk. It is the sum of all the off hook times in the queues that the agent is a member of, as displayed in the Off Hook Time column of Agent Summary Report. It is independent of queue memberships or enabled state. Off hook is a telephony term for the state when the handset on a traditional telephone is lifted from the phone, but here it is used for any state where the agent's telephone is in use but not connected to a call. It includes the time taken to pick up handset and dial a call and the ringing time. For an external trunk, it is the time taken until the trunk is seized. |
| **Agent_Outbound_Talk_Time** | Time duration | Total time spent by an agent on direct outbound calls, including the ringing time. It is the sum of all the outbound talk times in the queues that the agent is a member of, as displayed in the Outbound Talk column of Agent Summary Report. It is independent of queue memberships or enabled state. It does not the talk times for internal calls. It excludes the hold, parked, and ACW call times. It is unlike the real-time talk outbound statistic which considers only the time from when an agent gets connected to an external call. |
| **Agent_Presented_Calls** | Numeric | Sum of answered, lost, and routed to voicemail call statistics for an agent. For agents, it includes direct calls. For queues, it does not include direct calls and enquiry calls. The same call may be presented more than once, therefore this value is different from the number of unique customer calls. This statistic has the same value as those in the Call Interactions column of Call Summary Report, but not the same as Call Interactions in the Call Details Report summary box. |
| **Agent_Queue_Enabled_Time** | Time duration | Total time for which an agent is logged in and has the membership of any queue reported enabled. It is the sum of all the enabled times in the queues that the agent is a member of, as displayed in the HG Enabled Time column of Agent Summary Report. |
| **Agent_Refused_Calls** | Numeric | Number of times a call is presented to an agent and not answered before it is presented to another agent, as displayed in the No Answer (Timeout) column of Call Summary Report. For an agent, it shows the number of queue calls presented to the agent which rang unanswered for the queue's full no answer time before it is presented elsewhere. It includes queue calls and queue calls that overflowed to the agent's queue. It does not include direct calls. If an agent enables the Busy Not Available state while being presented with a queue call, it is counted against the agent and the queue. |
| **Agent_Ringing_Time** | Time duration | Total time for which the agent's extension is ringing for incoming queue calls. It is the sum of all the ringing times in the queues that the agent is a member of, as displayed in the Ringing Time column of Agent Summary Report. Ringing time is when the agent is presented with a call targeted to a queue that the agent is a member of. |
| **Agent_Routed_To_Voicemail** | Numeric | Number of queue calls presented to an agent that were then routed to voicemail, as displayed in the Routed To Voicemail column of Call Summary Report. It does not include announcements played by the voicemail server to the caller. |
| **Agent_Total_Calls** | Numeric | Sum of answered, lost, routed to voicemail, and refused call statistics for an agent. This is the sum of the presented calls and the refused calls for an agent, as displayed in the Call Interactions and No Answer (Timeout) columns of Call Summary Report. |
| **Agent_Within_Answer_Threshold_Calls** | Numeric | Number of answered calls for an agent that are answered within the answer threshold. |
| **Alarm_Clear_Date_Time** | Date and Time | Date and time when the alarm or warning is cleared. It is empty if the alarm is active. It is displayed after a hyphen in the Time Stamp column of Alarm Report. |
| **Alarm_Definition_ID** | Numeric | Unique identification number for the real-time alarm definition, as used in system configuration. |
| **Alarm_Definition_State_Description** | Alphanumeric | Agent or queue state to which a state based alarm is targeted. It is empty for non agent or queue state based alarms. It is displayed after a hyphen in the Statistic Name column of Alarm Report. |
| **Alarm_Definition_State_ID** | Numeric | Identification number for agent or queue state to which state based alarm is targeted. It is zero for non agent or queue state based alarms, as used in system configuration. |
| **Alarm_Definition_Statistic_Description** | Alphanumeric | Name of the real-time statistic which is subject to the alarm, as displayed in the Statistic Name column of Alarm Report. |
| **Alarm_Definition_Statistic_ID** | Numeric | Identification number for real-time statistic which is subject to the alarm, as used in system configuration. |
| **Alarm_ID** | Numeric | Unique identification number for triggering of the real-time alarm warning or alarm, as used in system configuration. |
| **Alarm_Reason_Description** | Alphanumeric | The Busy Not Available reason code associated with an agent state based alarm where the agent state is Busy Not Available. It is displayed in brackets in the Statistic Name column of Alarm Report for relevant alarms. For agents on the 1400, 1600, 2400, 5400, 4600, 5600, 9500 and 9600 Series telephones with available programmable buttons, when they select the Busy Not Available state using a button on their phone, they are prompted to select a reason code, if any has been configured on the telephone system. The codes are configured on the telephone system by the system maintainer. Up to eight custom reasons can be configured in addition to the following two fixed reasons:<br>1. **Automatic** - This reason is used if the agents are using a telephone that allows reason code selection but fail to select a reason. For example, if they enable Busy Not Available through a short code, using Phone Manager, or are forced into it by the IP Office's Agent Status on No Answer feature.<br>2. **Unsupported** - This reason code is used for agents using telephones that do not allow the selection of a reason code. |
| **Alarm_Status_Description** | Alphanumeric | Description of the alarm state, whether it is an alarm or a warning that is triggered, as displayed in the Type column of Alarm Report. |
| **Alarm_Status_ID** | Numeric | Identification number for the alarm warning or alarm state, as used in system configuration. |

| Field Name | Type | Definition |
|---|---|---|
| **Alarm_Target_Name** | Alphanumeric | Name of the queue or username of the agent that triggers the warning or alarm, as displayed in the Target Name column of Alarm Report. |
| **Alarm_Trigger_Date_Time** | Date and Time | Date and time when the alarm or warning is triggered, as displayed in the Time Stamp column of Alarm Report before any hyphen and clear date and time. |
| **Alarm_Trigger_Value** | Numeric | Value of the real-time statistic when the alarm or warning trigger occurred, as displayed in the Value column of Alarm Report. |
| **Call_Agent_Name** | Alphanumeric | Username of the agent who answered the call, the overflowed call, or the transferred call, according to the call status. It is displayed in the Agent column of Call Details Report. |
| **Call_CLI_Number** | Alphanumeric | For inbound calls, this is the CLI or telephone number of the caller provided with the call. For outbound calls, this is the number dialed by the agent. For outgoing external calls, the system can partially mask the number according to privacy settings configured by the system administrator. This is displayed in the CLI column of Call Details Report. It is also known as the CLID or ICLID (Incoming Calling Line ID). |
| **Call_Date_Time** | Date and Time | Date and time of the call, the overflow, the transfer, the putting on hold or the start of the enquiry call ring, depending on the call status. It is displayed in the Date - Time column of Call Details Report. |
| **Call_DDI_Number** | Alphanumeric | For incoming calls, this is the destination number received. For outbound calls, this is the destination number used to make the call. It is displayed in the DDI column of Call Details Report. |
| **Call_Direction_Description** | Alphanumeric | Description of the call direction, Inbound or Outbound for external calls and Internal for internal calls, as displayed in the Call Direction column of Call Details Report. |
| **Call_Direction_ID** | Numeric | Identification number of the call direction, as used in system configuration. |
| **Call_ID** | Numeric | Identification number of the call, as used in system configuration. It is unique per call handled by the IP Office Telephone System, even if the system is rebooted. It is not unique within the data set since the set contains all call events for a single call such as transfers, holds, and overflows. |
| **Call_Or_Held_Duration** | Time duration | Total call duration or the hold duration depending on call status. No duration is shown for overflowed lost calls or routed to voicemail call status and the value may be empty for other call status. It is displayed in the Duration column of Call Details Report. The duration for the hold call status is the time until a transfer is completed. The duration for the transfer call status is from the transfer initiation to the end of the transfer (i.e. it includes the duration of the enquiry call). The duration for the enquiry answered call status, is from the agent answering to the transfer being completed. |
| **Call_Or_Overflow_Queue_Time** | Time duration | Time from when the call arrived until it was answered, was lost, or it overflowed. It is not displayed for calls that are routed to voicemail and may be empty for some call status. It is displayed in the Queue Timed column of Call Details Report. For the enquiry answered call status, it is the ringing time of the enquiry call and when answering a transfer, it is the time from the initial queuing at the transferee until the transfer is completed. |
| **Call_Record_Count** | Numeric | Number of rows present in the data set that have the same Call_ID as the current row. |
| **Call_Record_Index** | Numeric | Index number running from 1 to the value of the Call_Record_Count field, representing each call status event for the current call, accounting for each call hold, transfer, overflow, and voicemail event. |
| **Call_Reference_Number** | Numeric | Identification number assigned to the call by the IP Office telephone system. It is unique and automatically incrementing until the system is rebooted, remaining with the call whilst it is handled by the system. This is displayed as Reference in Trace Report. It may be empty if an agent event is not associated with a call and for the enquiry answered call status, it is the new call reference. It is not unique within the data set since the set contains all call events for a single call such as holds and overflows. |
| **Call_Reference_Number_Formatted** | Alphanumeric | Identification number assigned to the call by the IP Office telephone system. It is unique and automatically incrementing until the system is rebooted, remaining with the call whilst it is handled by the system. This value is the six character string formatted version of the Call_Reference_Number field, as displayed in the Reference column of Call Details Report. For enquiry answered call status, it is the new call reference. |
| **Call_Status_Description** | Alphanumeric | Overall description of the call status, as displayed in the Status column of Call Details Report. The status Answered is applied to all calls that go to voicemail. Possible English values are: Answered, No Answer, Overflowed Answered, Enquiry Answered, Not Answered, Lost, Overflowed Lost, Holding, Transferred and Routed to Voicemail. |
| **Call_Status_ID** | Numeric | Identification number for the call status, as used in the system configuration. |
| **Call_Transfer_Agent_Name** | Alphanumeric | Username of the agent to who the call was transferred for calls with the status Transferred. It is empty for any other call status. It is used in the Agent grouping option of Call Details Report, to show transferred calls grouped against the transfer agent. |
| **Downtime_Connected_Date_Time** | Date and Time | Date and time of the end of a time period of downtime when the system was unable to communicate with the IP Office telephone system. It may be empty if the communication loss is ongoing. It is displayed in the Connection Restored column of Communication Failure Report. |
| **Downtime_Disconnected_Date_Time** | Date and Time | Date and time of the beginning of a time period of downtime when the system was unable to communicate with the IP Office telephone system. It is displayed in the Connection Lost column of Communication Failure Report. |
| **Downtime_ID** | Numeric | Unique identification number for period of downtime experienced by the IP Office telephone system. |
| **Event_Activity_Description** | Alphanumeric | Description of the agent activity, as displayed in the Event Name column of Trace Report. |
| **Event_Activity_ID** | Numeric | Identification number for the agent activity, as used in system configuration. |
| **Event_ID** | Numeric | Unique identification number for the agent event, as used in system configuration. |

| Field Name | Type | Definition |
|---|---|---|
| **Event_Number** | Alphanumeric | For agent events that are related to a call, this is the CLI received with the call for incoming calls and it is the number dialed for outgoing calls. In non call related agent events, the value will be empty. For outgoing external calls, the system can partially mask the number according to privacy settings configured by the system administrator. It is displayed in the Number column of Trace Report. |
| **Event_Start_Date_Time** | Date and time | Date and time of the agent event, as displayed in the Date - Time column of Trace Report. |
| **LIMITED** | Condition | Condition that indicates if the number of rows in the data set has been limited due to the configured maximum number of rows set by the system administrator. It applies independently for each data set where the field is located. If any data set is limited, then a warning message will also be displayed when the report is manually generated. |
| **Queue_After_Call_Work_Time** | Time duration | Total time for which the agent's extension is in the ACW state, for all agents in the queue, as displayed in the ACW Time group summary box of Agent Summary Report. The ACW state indicates that an agent is not available to receive queue calls while performing some other call-related activity. It is independent of queue memberships and enabled state. Typically it is used for activities such as call records and data entry that need to be completed before handling another call. A number of controls are available for ACW. Agents can be configured to be automatically put into the ACW state after a queue call or they can manually select to enter the state when required.<br>**Note:** The ACW state is similar to busy wrap up of the CCC product. |
| **Queue_Answered_Calls** | Numeric | Number of queue calls that agents in the queue have answered, as displayed in the Answered Calls column of Call Summary Report. This includes calls that are shown as routed to other in real-time. It does not include queue calls answered by non-queue members using methods such as call pickup, or calls that go to voicemail, or direct calls answered by agents. Once a call has overflowed, then if it is answered, it is reported as overflowed answered against the queue. |
| **Queue_Average_Abandon_Time** | Time duration | For lost queue calls, this is the average time from when the calls were received by the IP Office system till they were lost, as displayed in the Average Abandon Time column of Call Summary Report. It is a simple mean (non-weighted average) of call abandon times for individual lost calls. For example, if an agent has lost one call after 6 seconds and lost another call after 8 seconds, this would result in an Average Abandon Time of 7 seconds. If no queue calls have been lost, then the value is 0. |
| **Queue_Average_Answer_Time_Seconds** | Time duration | Average duration of the answer time for the queue calculated as a simple, non-weighted mean of the call answer times, as displayed in the Average Answer Time column of Call Summary Report. This is the sum of the answer times for answered queue calls divided by the number of answered queue calls, displayed in seconds. The system considers the calls received by a particular agent or a queue irrespective of the answer threshold setting. The average answer time of a call is measured from it arriving at the queue or agent, but there may be a delay between the time a call is presented to a queue and the time the call arrives to an agent. For example, if a queue has answered one call in 6 seconds and another call in 8 seconds, this would result in an Average Answer Time of 7 seconds. If the queue has answered no calls, then the value is 0. |
| **Queue_Average_Speed_To_Answer_Percent** | Numeric | Number of calls answered within the answer threshold time, divided by the total number of calls answered, expressed as a percentage, as displayed in the Average Answer Time (%) column of Call Summary Report. It shows the number of queue calls answered by the queue within the specified answer threshold time, divided by the total number of calls answered. It includes overflow answered calls. For example, with an answer threshold of 30 seconds, 35 calls into a queue were answered within the target time, 5 calls were answered after 30 seconds (no overflows). The calculation would be (Answered Within Threshold + Overflow Answered Within Threshold) / (Answered + Overflow Answered) = (35 + 0) / (40 + 0) = 35 / 40 = 0.875. The average speed to answer percentage (ASA%) therefore is 87.5%. If no calls have been answered within the answer threshold, the value is 0%, or if no calls have been answered at all then the value is 100%. |
| **Queue_Busy_Not_Available_Time** | Time duration | Total time for which the agent's extension is in the Busy Not Available state, for all agents in the queue, as displayed in the Busy Not Available Time column of Agent Summary Report. The Busy Not Available state indicates that the agent is not available to receive calls while performing a non call related activity such as attending a meeting. It is independent of queue memberships and enabled state. This state can be selected by an agent using the DND or SAC button on the phone. This also requires the agent to select one of the reason codes displayed on the telephone to indicate the reason for getting into the Busy Not Available state. If this state is enabled while a queue call is being presented, the call will go to the next available agent and cause the No Answer statistic for the agent and queue to be incremented. An agent using any DND or SAC feature is treated as selecting the Busy Not Available state. |
| **Queue_Customer_Calls** | Numeric | Total number of unique calls handled by the queue, that is, the number of calls with unique values for the Call_ID field, as displayed in the Customer Calls column in Call Summary Report. |
| **Queue_Grade_Of_Service_Percent** | Numeric | Number of queue calls answered within the answer threshold as a percentage of all calls presented, as displayed in the Grade of Service (%) column in Call Summary Report. Calls lost before the lost call threshold are not included in the calculation, measured from when the call was presented to the queue, and it does not include calls that are routed elsewhere or to voicemail. It includes calls that become lost calls and overflowed answered and lost calls. For example, with an answer threshold of 30 seconds and a lost call threshold of 5 seconds, if 20 calls into a queue are answered within the target time, 4 calls are answered after 30 seconds and 1 call is lost after 10 seconds (no overflows). The calculation would be (Answered Within Threshold + Overflow Answered Within Threshold) / (Answered + Overflow Answered + Lost Outside Threshold + Overflow Lost Outside Threshold) = (20 + 0) / (24 + 0 + 1 + 0) = 20 / 25 = 0.8. The Grade of Service, therefore, is 80%. If no calls are answered within the answer threshold, the value is 0%, or if no calls are answered or lost at all then the value is 100%. |

| Field Name | Type | Definition |
|---|---|---|
| **Queue_Hold_Time** | Time duration | Total time that the agent had calls on hold or calls parked, for all agents in the queue, as displayed in the Hold Time group summary box in Agent Summary Report. In this state the agent is not talking to a caller. |
| **Queue_ID** | Numeric | Unique identification number of the queue, as used in system configuration. |
| **Queue_Inbound_Talk_Time** | Time duration | Total time that the agent spent on incoming answered queue calls, not including the ringing time, for all agents in the queue, as displayed in the Talk Inbound group summary box of Agent Summary Report. It includes incoming external trunk calls only, not internal and outgoing external calls. It does not include the time spent on direct calls. It excludes the hold, parked, and ACW call time. It does not include queue calls answered by non-queue members using methods such as call pickup. |
| **Queue_Internal_Talk_Time** | Time duration | Total time that the agent spent on internal calls, inbound and outbound, for all agents in the queue, as displayed in the Talk Internal group summary box of Agent Summary Report. It includes the ringing time for direct calls, but not for queue calls. It does not include held, parked, and ACW call time. It does not include queue calls answered by non-queue members using methods such as call pickup. |
| **Queue_Lost_Calls** | Numeric | Number of calls lost by the queue, as displayed in the Lost Calls column of Call Summary Report. A lost call is one where the caller disconnected before being answered by an agent in the queue. The lost call threshold does not impact this statistic. Queue calls that are lost are reported as lost against both the queue and against the last agent to which the call was presented. It does not include calls that go to voicemail. Once a call has overflowed, if lost for the queue, it is reported as overflowed lost. Note that the number of lost calls for a queue can be higher than the total of lost calls for the agents in the queue as calls can be lost before being presented to any agent. |
| **Queue_Name** | Alphanumeric | Name of the queue as configured in the IP Office telephony system, as displayed in the first column of Call Summary Report for queues. |
| **Queue_Non_Queue_Time** | Time duration | Total time for which the agent is talking on incoming direct calls, including the ringing times, for all agents in the queue, as displayed in the Non-Queue Time group summary box of Agent Summary Report. It is independent of queue memberships and state. |
| **Queue_Off_Hook_Time** | Time duration | Total time for which the agent's extension was off hook but not connected to a trunk, for all agents in the queue, as displayed in the Off Hook Time group summary box of Agent Summary Report. It is independent of queue memberships or enabled state. Off-hook is a telephony term for the state when the handset on a traditional telephone is lifted from the phone, but here it is used for any state where the agent's telephone is in use but not connected to a call. It includes all the time taken when making a call, picking up handset, dialing, and ringing. For an external trunk it is the time until the trunk is seized. |
| **Queue_Outbound_Talk_Time** | Time duration | Total time that an agent spent on direct outbound calls, including the ringing time, for all agents in the queue, as displayed in the Outbound Talk group summary box of Agent Summary Report. It is independent of queue memberships or enabled state. It does not include the time for internal calls. It excludes the held, parked, and ACW call time. It is unlike the real-time talk outbound statistic which considers only the time from when an agent gets connected to an external call. |
| **Queue_Outside_Lost_Threshold_Calls** | Numeric | Number of calls lost by a queue outside the lost call threshold, that is, the number of calls for the queue with abandon times greater than the lost call threshold. This includes lost calls that overflowed to the queue. This value is used in the calculation of the Queue_Grade_Of_Service_Percent field. |
| **Queue_Overflow_Answered_Calls** | Numeric | Number of overflow answered calls for a queue, as displayed in the Overflow Answered column of Call Summary Report. It shows the number of queue calls answered after overflowing to another queue. This applies even if the overflowed call is answered by an agent in the queue from which it overflowed. It does not include calls that go to voicemail. It does include queue calls answered by methods such as call pickup. |
| **Queue_Overflow_Lost_Calls** | Numeric | Number of overflowed lost calls for the queue, as displayed in the Overflow Lost column of Call Summary Report. It does not include calls that go to voicemail. Calls that are lost before the lost call threshold are not counted. |
| **Queue_Presented_Calls** | Numeric | Sum of the answered, lost, overflow answered, overflow lost, and routed to voicemail statistics for the queue. This statistic has the same value as the Call Interactions column of Call Summary Report, but not the same value as Call Interactions in the Call Details Report summary box. |
| **Queue_Queue_Enabled_Time** | Time duration | Total time for which the agents, who are members of a queue, are logged in and have the membership of the queue reported enabled, as displayed in the HG Enabled Time group summary box of Agent Summary Report. |
| **Queue_Refused_Calls** | Numeric | Number of times a call is presented to an agent in the queue and not answered before being presented to another agent, as displayed in the No Answer (Timeout) column of Call Summary Report. Therefore, for a queue, this is the total number of no answer events for the agents in the queue. If an agent enables the Busy Not Available state while being presented with a queue call, that will be counted against the agent and the queue. |
| **Queue_Ringing_Time** | Time duration | Total time that the agent's extension is ringing for incoming queue calls, for all agents in the queue, as displayed in the Ringing Time group summary box of Agent Summary Report. This is when an agent is being presented with a call targeted to a queue that the agent is a member of. |
| **Queue_Routed_To_Voicemail_Calls** | Numeric | Number of queue calls presented to a queue that are routed to voicemail, as displayed in the Routed To Voicemail column of Call Summary Report. It does not include announcements played by the voicemail server to the caller. |
| **Queue_Total_Calls** | Numeric | Sum of the answered, lost, overflow answered, overflow lost, routed to voicemail, and refused call statistics for a queue. This is the sum of the presented calls for a queue and the refused calls for the queue, as displayed in the Call Interactions and No Answer (Timeout) columns of Call Summary Report. |

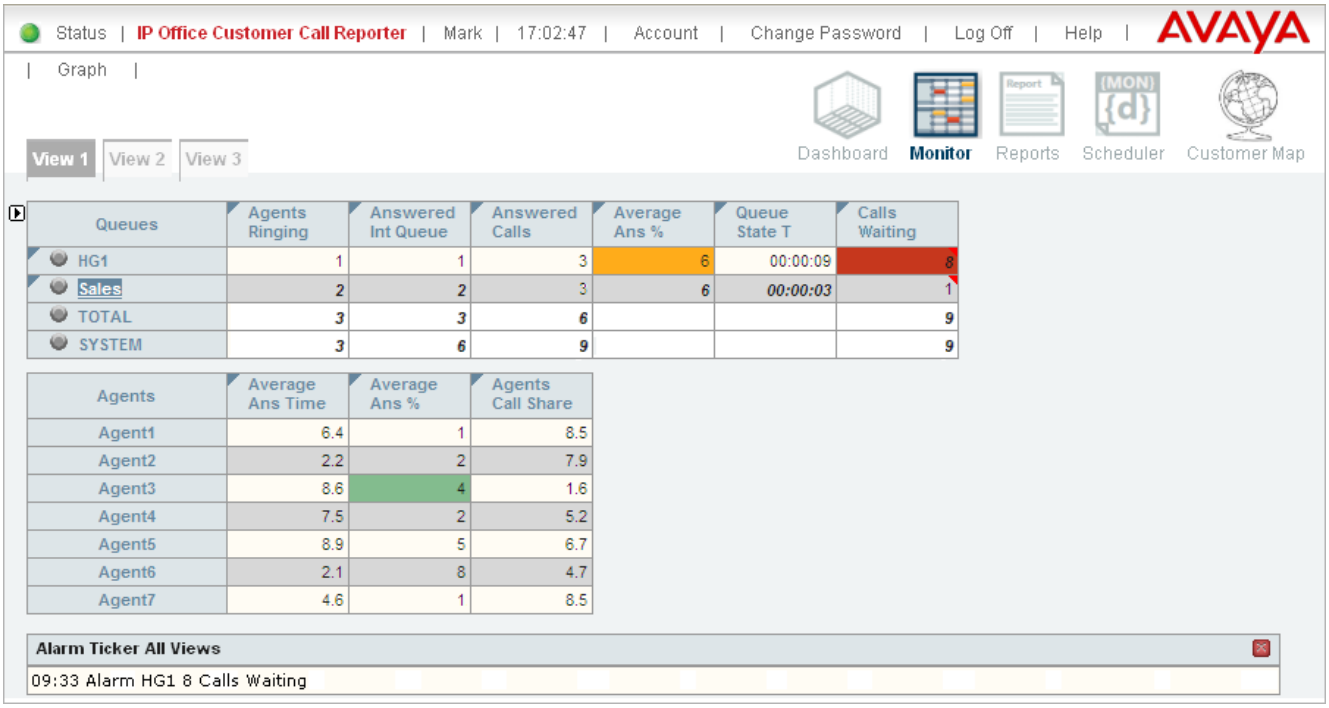
| Field Name | Type | Definition |
|---|---|---|
| **Queue_Within_Answer_Threshold_Calls** | Numeric | Number of those calls for a queue that are answered within the answer threshold time, that is, the number of calls for the queue with answer times less than the answer threshold. This includes answered calls that overflowed to the queue. This value is used in the calculation of the Queue_Average_Speed_To_Answer_Percent and Queue_Grade_Of_Service_Percent fields. |
| **Supervisor_ID** | Numeric | Unique identification number for the supervisor account who created the real-time alarm, as used in system configuration. |
| **Switch_ID** | Numeric | Unique identification number for the IP Office telephone system, as used in system configuration. |
| **Switch_IP_Address** | Alphanumeric | IP address configured for the IP Office telephone system, as displayed in the IP Address column of Communication Failure Report. |
| **Switch_Name** | Alphanumeric | Name of the IP Office telephony system, as displayed in the IP Office Name column of Communication Failure Report. |
| **System_After_Call_Work_Time** | Time duration | Total time for which the agent's extension is in the ACW state, for all agents in the system, as displayed in the ACW Time summary box of Agent Summary Report. The ACW state indicates that the agent is not available to receive queue calls while performing some other call-related activity. It is independent of queue memberships and enabled state. The ACW state is used for activities such as call records and data entry that need to be completed before handling another call. A number of controls are available for ACW. Agents can be configured to be automatically put into the ACW state after a queue call or they can manually select to enter the state when required.<br>Note: The ACW state is similar to busy wrap up of the CCC product. |
| **System_Answered_Calls** | Numeric | Number of queue calls that agents in the system have answered, as displayed in the Answered Calls summary box of Call Summary Report. This includes calls that are shown as routed to other in real-time. It does not include queue calls answered by non-queue members using methods such as call pickup, or calls that go to voicemail, or direct calls answered by agents. Once a call has overflowed, if it is answered, it is reported as overflowed answered against the system. |
| **System_Busy_Not_Available_Time** | Time duration | Total time for which the agent's extension is in the Busy Not Available state, for all agents in the system, as displayed in the Busy Not Available Time summary box of Agent Summary Report. The Busy Not Available state indicates that the agent is not available to receive calls while performing a non-call related activity such as attending a meeting. It is independent of queue memberships and enabled state. This state can be selected by an agent using the DND or SAC button on the phone. This also requires the agent to select one of the reason codes displayed on the telephone to indicate the reason for getting into the Busy Not Available state. If this state is enabled while a queue call is being presented, the call will go to the next available agent and cause the No Answer statistic for the agent and the queue to be incremented. An agent using any DND or SAC feature is treated as selecting the Busy Not Available state. |
| **System_Customer_Calls** | Numeric | Total number of unique calls from a system wide point of view, as displayed in the Customer Calls summary box of Call Summary Report. It is not necessarily the sum of the per queue or per agent customer call values. For example, a call transferred between agents would show as a unique call for each agent (two calls total) but in the summary section it shows as a single system call. Another example would be where a call spans two time grouping. It would show as a unique call for each of the time group (two calls total) but in this system wide field it would show as a single system call. |
| **System_Hold_Time** | Time duration | Total time for which an agent had calls on hold or calls parked, for all agents in the system, as displayed in the Hold Time summary box of Agent Summary Report. In this state, an agent is not talking to a caller. |
| **System_Inbound_Talk_Time** | Time duration | Total time that an agent spent on incoming answered queue calls, not including the ringing time, for all agents in the system, as displayed in the Talk Inbound summary box of Agent Summary Report. It includes incoming external trunk calls only, not internal and outgoing external calls. It does not include time for direct calls. It excludes the hold, parked, and ACW call time. It does not include queue calls answered by non-queue members using methods such as call pickup. |
| **System_Internal_Talk_Time** | Time duration | Total time that the agent spent on internal calls, inbound and outbound, for all agents in the system, as displayed in the Talk Internal summary box of Agent Summary Report. It includes the ringing time for direct calls, but not for queue calls. It does not include the held, parked, and ACW call time. It does not include queue calls answered by non-queue members using methods such as call pickup. |
| **System_Lost_Calls** | Numeric | Number of calls lost by the system, as displayed in the Lost Calls summary box of Call Summary Report. A lost call is one where the caller disconnected before being answered by an agent in the queue. The lost call threshold does not impact this statistic. Queue calls that are lost are reported as lost against both the system and against the last agent to which the call is presented. It does not include calls that go to voicemail. Once a call has overflowed, if lost for the system, it is reported as overflowed lost. Note that the number of lost calls can be higher than the total of lost calls for agents in the system, as calls can be lost before being presented to any agent. |
| **System_Non_Queue_Time** | Time duration | Total time that the agent is talking on incoming direct calls, including the ringing times, for all agents in the system, as displayed in the Non-Queue Time summary box of Agent Summary Report. It is independent of queue memberships and state. |
| **System_Off_Hook_Time** | Time duration | Total time for which an agent's extension is off hook but not connected to a trunk, for all agents in the system, as displayed in the Off Hook Time summary box of Agent Summary Report. It is independent of queue memberships or enabled state. Off-hook is a telephony term for the state when the handset on a traditional telephone is lifted from the telephone, but here it is used for any state where the agent's telephone is in use but not connected to a call. It includes all the time taken when making a call, picking up handset, dialing, and ringing. For an external trunk it is the time until the trunk is seized. |

| Field Name | Type | Definition |
|---|---|---|
| **System_Outbound_Talk_Time** | Time duration | Total time that the agent spent on direct outbound calls, including the ringing time, for all agents in the system. as displayed in the Outbound Talk summary box of Agent Summary Report. It is independent of queue memberships or enabled state. It does not include time for internal calls. It excludes the held, parked, and ACW call times. It is unlike the real-time talk outbound statistic which considers only the time from when an agent gets connected to an external call. |
| **System_Overflow_Answered_Calls** | Numeric | Number of overflow answered calls for the system, as displayed in the Overflow Answered summary box of Call Summary Report. It shows the number of queue calls answered after overflowing to another queue. This applies even if the overflowed call is answered by an agent in the queue from which the call overflowed. It does not include calls that go to voicemail. It does include queue calls answered by methods such as call pickup. |
| **System_Overflow_Lost_Calls** | Numeric | Number of overflow lost calls for the system, as displayed in the Overflow Lost summary box of Call Summary Report. It shows the number of calls which overflowed from any queue and were then lost. It does not include calls that go to voicemail. Calls lost before the lost call threshold are not counted. |
| **System_Presented_Calls** | Numeric | Sum of the answered, lost, overflow answered, overflow lost, and routed to voicemail statistics for all queues. This statistic has the same value as Call Interactions in Call Summary Report summary box, but not the same as Call Interactions in the Call Details Report summary box. |
| **System_Queue_Enabled_Time** | Time duration | Total time for which all agents of the system were logged in and had their membership of at least one queue as reported enabled, as displayed in the HG Enabled Time summary box of Agent Summary Report. |
| **System_Refused_Calls** | Numeric | Number of times that a call is presented to an agent in the system and not answered before being presented to another agent, as displayed in the No Answer (Timeout) summary box of Call Summary Report. Therefore for the system, this is the total number of no answer events for all the agents in the system. If an agent enables the Busy Not Available state while being presented with a queue call, that will be counted against the agent and the system. |
| **System_Ringing_Time** | Time duration | Total time for which the agent's extension was ringing for incoming queue calls, for all agents in the system, as displayed in the Ringing Time summary box of Agent Summary Report. This is when the agent is being presented with a call targeted to a queue of which they are a member. |
| **System_Routed_To_Voicemail_Calls** | Numeric | Number of queue calls presented to any queue in the system that are routed to voicemail, as displayed in the Routed To Voicemail summary box of Call Summary Report. It does not include announcements played by the voicemail server to the caller. |
| **System_Total_Calls** | Numeric | Sum of the answered, lost, overflow answered, overflow lost, routed to voicemail, and refused call statistics for the system. This is the sum of presented calls for the system and refused calls for the system, as displayed in the Call Interactions and No Answer (Timeout) summary boxes of Call Summary Report. |
| **Total_Answered_Calls** | Numeric | Number of calls that have reached a named Voicemail action. These are counted as answered for that action and in total. This value is displayed in the Total Calls Answered summary box of Voicemail Report. |
| **Total_Lost_Calls** | Numeric | Number of calls that have reached a named Voicemail action where the call is disconnected by the caller or by the voicemail server before it reaches another named action. These are counted as lost for that action and in total. This value is displayed in the Total Calls Lost summary box of Voicemail Report. |
| **View_ID** | Numeric | Unique identification number for the supervisor real-time view in which the real-time alarm is defined, as used in system configuration. |

# 3.4 Monitor

The monitor facility shows tables of real time statistics[176] about queues and the agents in those queues. Each supervisor can have up to 3 views, each configured with a different set of queues and statistics.

A supervisors views and any changes to them are also shared by their agents except the agent will only see queue statistics for queues to which they belong and agent statistics for themselves.




| Use Monitor Views | | |
|---|---|---|
| • Edit my monitor views.[80]<br>• Sort on a statistic[79]<br>• Remove a queue from a view[79]<br>• Change the column order[79] | • Change the queue rows order[79]<br>• View Agent details[79]<br>• Understand the statistic colors[83]<br>• Use alarms and warnings[84] | • Change an agents status[85]<br>• Reset the statistics manually[86]<br>• Reset the statistics automatically[98]<br>• Graph a statistic[87] |

## 3.4.1 Using a View

When a view has been created there are several controls available that you can use to further customize the screen.

### Showing/Hiding the Options Panels

1. The ◧/▣ icon is used to switch between adding elements to a view and running a view. To add elements to a view click ▣ to display the list of elements that can be added. While in this mode the statistics already in the view are go blank and are not updated. When completed click ◧ to hide the list and return to updating the view.

### Adjusting Statistics

Once a statistic has been added to a view, its name is displayed at the top of the column.

1. Click the statistic name to display the statistic options:

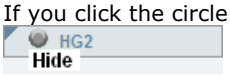



- **Sort Up**
  Sort the view in ascending order using column's current values. When selected the statistic name displays an up arrow icon. Separate sorting can be applied to the agent statistics and the queue statistics. Note that while the queue section of a view is sorted, the selected queue to show in the agent section of the view cannot be changed.
- **Sort Down**
  Sot the view in descending order using this column's current values When selected the statistic name displays a down arrow icon. Separate sorting can be applied to the agent statistics and the queue statistics. Note that while the queue section of a view is sorted, the selected queue to show in the agent section of the view cannot be changed.
- **Sort Off**
  Remove the sort. The queues section returns to the order in which the supervisor or administrator arranged the queues when setting up the view. The agents section returns to alphabetical order except for logged off agents who are placed at the bottom of the view.
- **Help**
  Access help on the statistic.
- **Hide**
  Remove the selected statistic from the view.
- **Settings**
  Depending on the particular statistic you can change parameters such as which calls are used to calculate the statistic, and set warning and alarm thresholds. See Statistics for the settings options for particular statistics.

Note: The sort options are not available while editing a view, ie. while the ◧ icon is displayed.

### Removing a Queue

1. If you click the circle by a queue you can select **Hide** to remove the queue from the view.




### Changing the Order of the Statistic Columns

1. Click the ▣ icon. Then click the ◤corner icon and drag the column to the required position. When completed, click the ◧ icon to return the view to normal operation.

### Changing the Order of Queues

2. Click the ▣ icon. Then click the ◤corner icon and drag the queue to the required position. When completed, click the ◧ icon to return the view to normal operation.

### Display Additional Information

Statistic can include additional information, indicated by a ◥ red corner icon. Place your cursor over the ◥ icon to display the addition information.

### View/Hide the Agents in a Queue

1. To view the members of a queue, click the queue name. If a row for SYSTEM has been included in the view, clicking on SYSTEM will display the list of all CCR agents in all CCR queues.

| Queues | Agents Ringing | Answered Int Queue | Answered Calls |
|---|---|---|---|
| HG1 | 1 | 1 | 3 |
| HG2 | 2 | 2 | 3 |
| TOTAL | 3 | 3 | 6 |

| Agents | Average Ans Time | Average Ans % |
|---|---|---|
| Agent2 | 6.41 | 1.18 |

2. To hide the members of a queue, click the queue name again.

**Note**: IP Office Customer Call Reporter hides **logged off agents** depending on the setting selected by the user for viewing logged off agents.

## 3.4.2 Editing a View

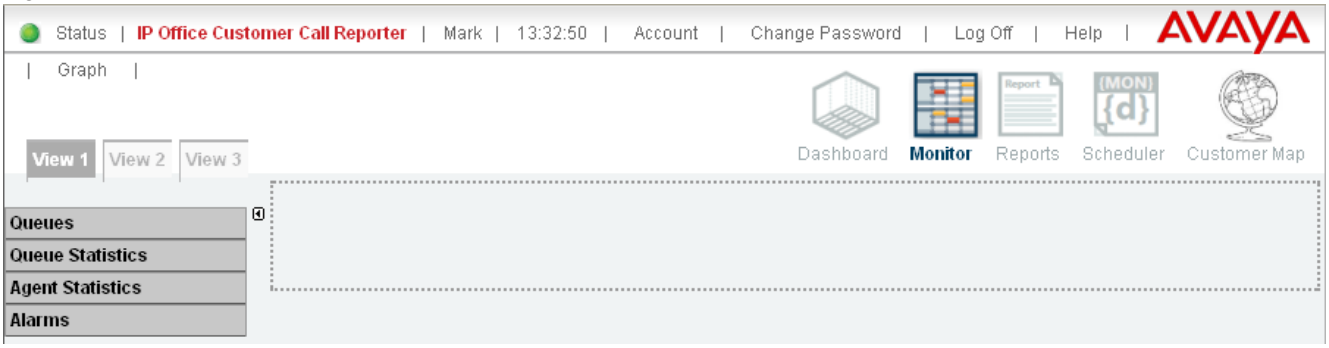
Each supervisor can have up to 3 views showing statistics and alarms for selected queues. Views are setup and amended by the administrator but they can then be adjusted by the supervisor.

Agents are able to see the same views as their supervisor but cannot change the queues or statistics. The agent's version of the view will only show queues to which the agent belongs and their own agent details.

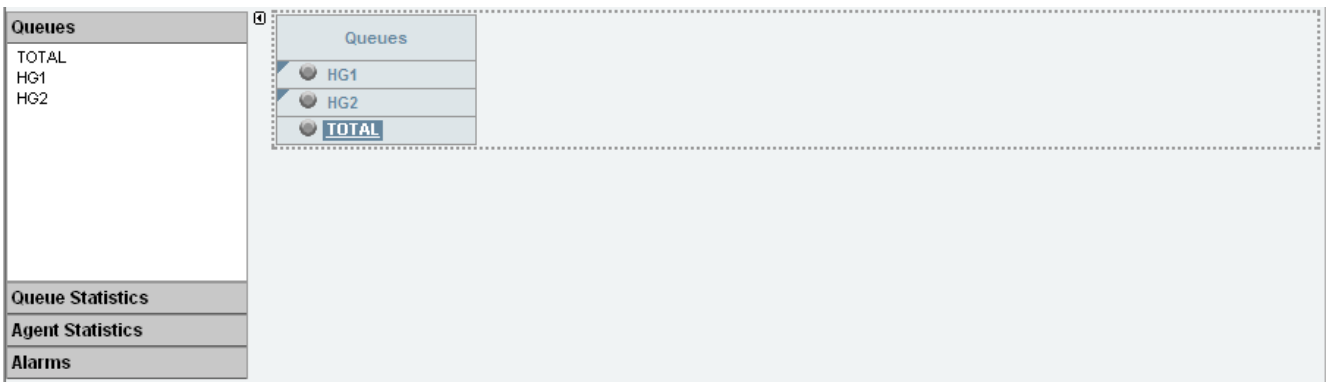
**To edit a monitor view**

A. Select the view that you want to change.

B. Click the ▣ icon to display the list of elements that can be added to a view. Note that while the list of displayable elements is in view, IP Office Customer Call Reporter does not show or update the statistics and alarms within the view.




1. **Adding Queues**
   By default all the queues configured for the supervisor are already shown. These are the Queues that the supervisor has permission to view as specified when creating their supervisor account 161.

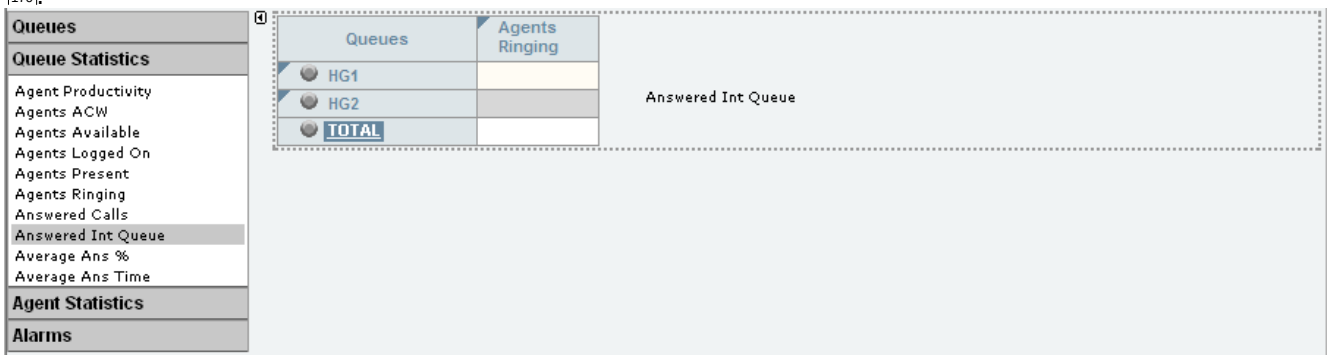



- To add a queue to the view, click **Queues**. Drag and drop the required queue into the view and when the hatched lines are displayed drop it into that area.
- **TOTAL**
  This option can be used to add a summary row to a view. Alarms and warning settings are not applied to ***TOTAL*** values.
  - For most statistics, the total value will be a total of the queues included in the view.

- For statistics that are averages, the total value is a weighted average 300 for the queues. For **Longest Wait Time** total is the highest value for any queue in the view. The **Current Wait Time** total is a mean average of all the current wait times of the queues in the view.
- For those queue statistics that are not support as total values, the value displayed is a –.

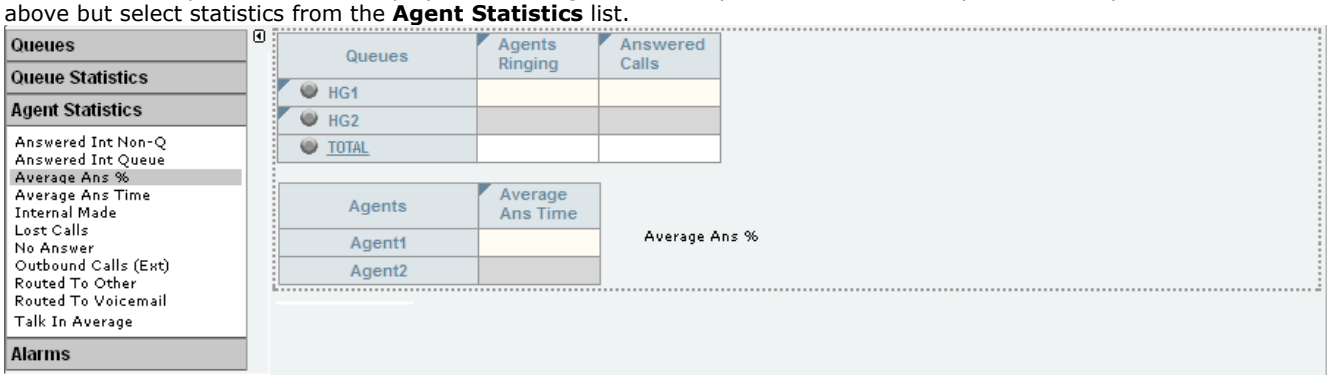
- **SYSTEM**
  IP Office Customer Call Reporter 7.0+ supports reporting some queue statistics as values for the whole system. This target type always follows the same rule as queues. Alarms and warning settings are not applied to **SYSTEM** values. **SYSTEM** can also be selected in the dashboard and wallboard.
  - For most queue statistics, the system value is a total of all queues including those not in the current view.
  - For queue statistics that are averages, the system value uses the same type of average as defined for individual queue - simple, combined, or weighted average 300. For the **Current Wait Time** and **Longest Wait Time**, it is the largest value from all queue.
  - For those queue statistics that are not supported as system values, the value displayed is a – (or plotted as a zero value).
- To remove a queue from the view, click the ● circle next to its name and select **Hide**.
- To adjust the order of the queues, click the ◤ corner icon and drag the queue to the required position.

**2. Add Queue Statistics**
You can select which statistics should be displayed for the queues. For details of the available statistics see Statistics 176.



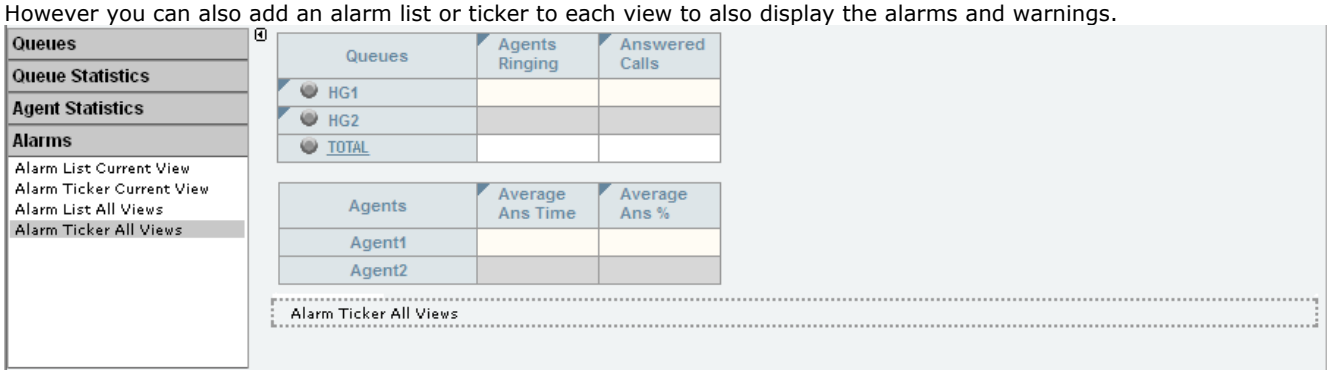

- To add a statistic to the view, click **Queue Statistics** to view available statistics. Drag and drop the required statistic into the area surrounded by hatched lines in the view.
- Only one instance of each agent and queue statistic can be added to a view.
- Newly added statistic will display the appropriate values for activity since the last statistics reset rather than since the statistic was added to the view.
- To remove a statistics from the view, click the statistic name in the view and select **Hide**.
- To adjust the order of the statistics, click the ◤ corner icon and drag the statistic to the required position.
- To adjust the settings used for a statistic, click the statistic name and select **Settings** 176.

**3. Add Agent Statistics**
Click one of the queue names to display the list of agents in that queue. Use the same options as for queue statistics above but select statistics from the **Agent Statistics** list.



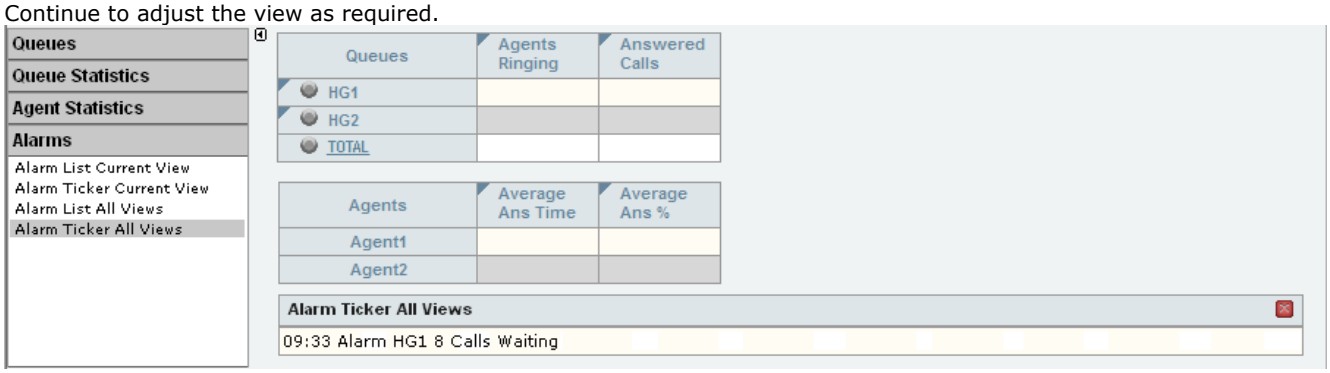
**4. Adding an Alarm Summary**

Each statistic configured to provides alarms and or warnings does so by displaying different color backgrounds. However you can also add an alarm list or ticker to each view to also display the alarms and warnings.




- Click **Alarms**. Drag and drop the required type of alarm list or ticker to the area either above or below the currently displayed statistics. If required you can have two sets of alarms, one above and one below.
  - An alarm list shows the 100 most recent current alarms and warnings is a scrollable list of all the current alarms and warning. Alarms are shown first in chronological order followed by warnings in chronological order.
    - Alarms in the **Alarm List All Views** can also trigger an audible alarm if the supervisor's account is set as **Audio Enabled**. This will be played to all users looking at that supervisor's views.
  - An alarm ticker shows the 5 most recent current alarms and warnings one at a time, showing each for a few seconds before displaying the next.
  - Alarms and warnings take the form: *Time, Type (Alarm or Warning), Name (Queue name, agent name), Current value, Statistic name.* For agent and queue state alarms, the state is included in the name. For ***Busy Not Available*** state alarms the reason code is included. For example:
    - *12:45 Alarm Sales 15 Calls Waiting*
    - *16:31 Warning Sales 120 Average Answer Time*
    - *17:20 Alarm Extn2101 Agent State Q – Busy Not Available (paper work)*
  - Alarms and warnings are updated approximately every 8 seconds.
  - Clicking on the underlined text in an alarm or warning will change the view to the one containing the alarm or warning and will also select the appropriate queue in that view.
  - Alarms and warnings are removed from the list in when the relevant statistic drops back to the threshold level. The supervisor or agent viewer can also remove an alarm or warning by clicking on the appropriate colored cell of statistic value. Acknowledging an alarm or warning only affects their view.
  - Alarms for database capacity are not shown within the alarm lists and trackers. They are shown during log in.

**5.** Continue to adjust the view as required.




C. When completed, click again to hide list of elements. IP Office Customer Call Reporter will start updating the statistics and alarms.

## 3.4.3 Statistic Colors

A number of different color backgrounds are used while displaying statistics. The following colors are used for normal statistics (these colors are not used in wallboards). The colors for changing statistic number values are optional (enabled by the supervisor's account setting [104] **Highlighting Enabled**) and are not applied to agent state and time values. They are also reset if you change view.

| **Normal** (White) | **Alternate Row** (Light Gray) | **Just Changed** (Purple) | **Recently Changed** (Light Purple) |
|---|---|---|---|

The following additional colors are used when any statistic is configured to display warnings and alarms. These colors override the ones above. Wallboards only display the colors for warnings and alarms.

| **Enabled / Cleared** (Green) | **Warning** (Orange) | **Alarm** (Red) | **Acknowledged** (Blue) |
|---|---|---|---|

Alarms and warnings are automatically cleared when the statistic value returns to the threshold level of the alarm or warning. Agents and supervisors can acknowledge an alarm or warning in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarms list.

## 3.4.4 Alarms and Warnings

For many statistics, alarm and warning thresholds can be set by supervisors. These thresholds are then applied to the whole column. They are also applied to the views seen by agents.

If the value in any cell in the column goes past one of the thresholds, the background color of that cell is changed. The following colors are used for the cells if the statistic has been enabled for alarms and or warnings.

| Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
|---|---|---|---|

Alarms and warnings are automatically cleared when the cell returns to the threshold level of the alarm or warning. Supervisors and agents can also acknowledge an alarm or warning by clicking on the relevant cell in their view. That cell is then indicated as acknowledged until the value returns to the threshold value and the alarm or warning is cleared.

**Statistic Settings**

All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset 86. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

For a summary of which statistics can be set to give alarms and or warnings refer to the list of Available Statistics 178 or the individual statistic description.

### Alarm Views and Lists

If an alarm list or ticker has been added to the view, it also shows the alarms and warnings.

- An alarm list shows the 100 most recent current alarms and warnings is a scrollable list of all the current alarms and warning. Alarms are shown first in chronological order followed by warnings in chronological order.
  - Alarms in the **Alarm List All Views** can also trigger an audible alarm if the supervisor's account 104 is set as **Audio Enabled**. This will be played to all users looking at that supervisor's views.
- An alarm ticker shows the 5 most recent current alarms and warnings one at a time, showing each for a few seconds before displaying the next.
- Alarms and warnings take the form: *Time, Type (Alarm or Warning), Name (Queue name, agent name), Current value, Statistic name.* For agent and queue state alarms, the state is included in the name. For ***Busy Not Available*** state alarms the reason code is included. For example:
  - *12:45 Alarm Sales 15 Calls Waiting*
  - *16:31 Warning Sales 120 Average Answer Time*
  - *17:20 Alarm Extn2101 Agent State Q – Busy Not Available (paper work)*
- Alarms and warnings are updated approximately every 8 seconds.
- Clicking on the underlined text in an alarm or warning will change the view to the one containing the alarm or warning and will also select the appropriate queue in that view.
- Alarms and warnings are removed from the list in when the relevant statistic drops back to the threshold level. The supervisor or agent viewer can also remove an alarm or warning by clicking on the appropriate colored cell of statistic value. Acknowledging an alarm or warning only affects their view.
- Alarms for database capacity are not shown within the alarm lists and trackers. They are shown during log in.

### Reporting Alarms and Warnings

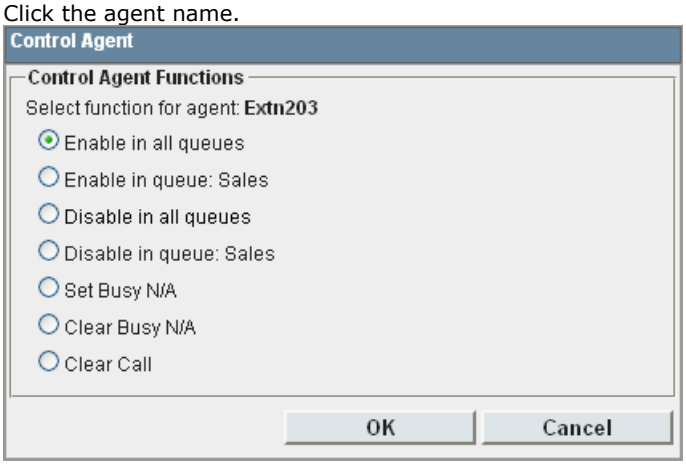
IP Office Customer Call Reporter can provide a historical report of the alarms and warnings that have occurred. This is done by running a report based on the Alarm Report 54 template.

## 3.4.5 Controlling Agent Status

Within a monitor view, clicking on an agent name displays a menu for changing the status of an agent. For example, if an agent has forgotten to log out at the end of their shift, you can use this menu to log them out.

This feature requires the system to have access to an one-X Portal for IP Office server and is not available unless configured by your IP Office Customer Call Reporter administrator. The option is also not available unless your supervisor account has been configured with the option **Control Agent** 104 enabled.

1. Click a queue to which the agent belongs to display the list of agents.
2. Click the agent name.




3. Select the state that you want applied to the agent.
   - **Enable in all queues**
     The agent is logged in and enabled in all queues to which they belong. Agents using the SIP telephones, including IP Office Video Softphone, are not logged in but are enabled in all queues when they log themselves in.
   - **Enable in this queue**
     The agent is enabled in the currently selected queue. This action does not log the agent in if they are currently logged out.
   - **Disable in all queues**
     The agent's membership of all queues to which they belong is disabled and the agent is logged out.
   - **Disable in queue**
     The agent's membership of the currently selected queue is disabled.
   - **Set Busy N/A**
     The agent's status is set to Busy Not Available with the reason code of automatic.
   - **Clear Busy N/A**
     The agent is taken out of the Busy Not Available state.
   - **Clear Call**
     Clears the agent's current connected call. It does not affect calls parked or held by the agent. If the agent is in a conference call, it clears just the agent's connection to the conference.
4. If the agent was already in the state selected, the command has no effect.

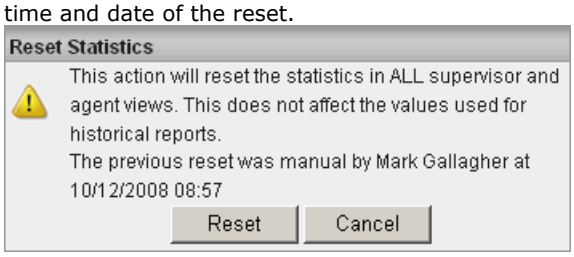
## 3.4.6 Manually Resetting Statistics

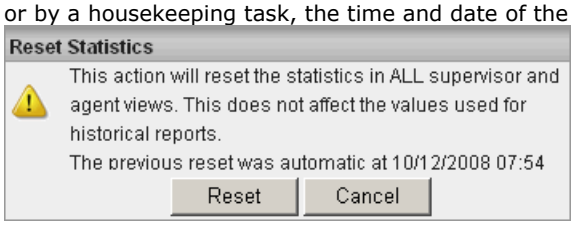
Supervisors for who the administrator has enabled the **Reset Statistics** option can reset all the statistics currently being used for supervisor views, agent views and wallboards. This will affect all supervisors, agents and wallboards. It does not affect the statistics used for historical reports.

- **IMPORTANT**
  Resetting statistics will reset the view statistics seen by ALL agents and supervisors.
- Note that after resetting statistics, it may take a couple of minutes for all views and wallboards to update and return to normal operation.
- View and wallboard statistics are also reset if the IP Office Customer Call Reporter server computer or the IP Office Customer Call Reporter services are restarted.
- Automatic statistic resets can be scheduled 98.

**To reset the view and wallboard statistics**

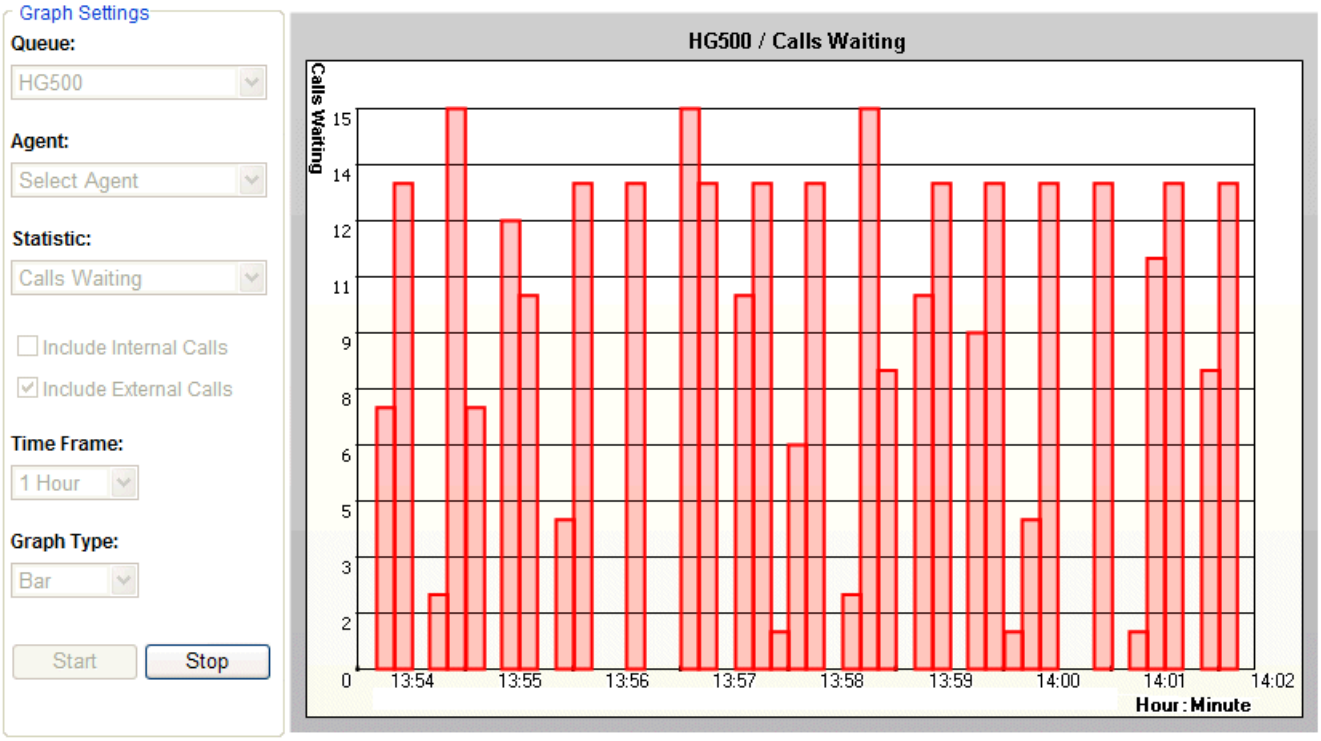
1. Click **Account**. If the **Reset Statistics** check box is ticked (this is done by the administrator) then your account has permission to reset the view statistics when required.
2. Click **Reset Statistics**.
3. A warning box will be displayed advising that this will affect all supervisor and agent views. Information about the last time the statistics were reset is also displayed.
   - If the view statistics were previously reset by a supervisor, the name of the supervisor is shown along with the time and date of the reset.

     
     
   - If the view statistics were previously reset due to the IP Office Customer Call Reporter services being restarted or by a housekeeping task, the time and date of the automatic reset is shown.

     
     
4. Click **Reset**.

## 3.4.7 Graph View

Supervisors and agents can select to have a graph running showing a selected statistic for a queue or agent. The graph is displayed in a new window or tab depending on the browser being used. Agents are restricted to their own statistics or queues to which they belong.



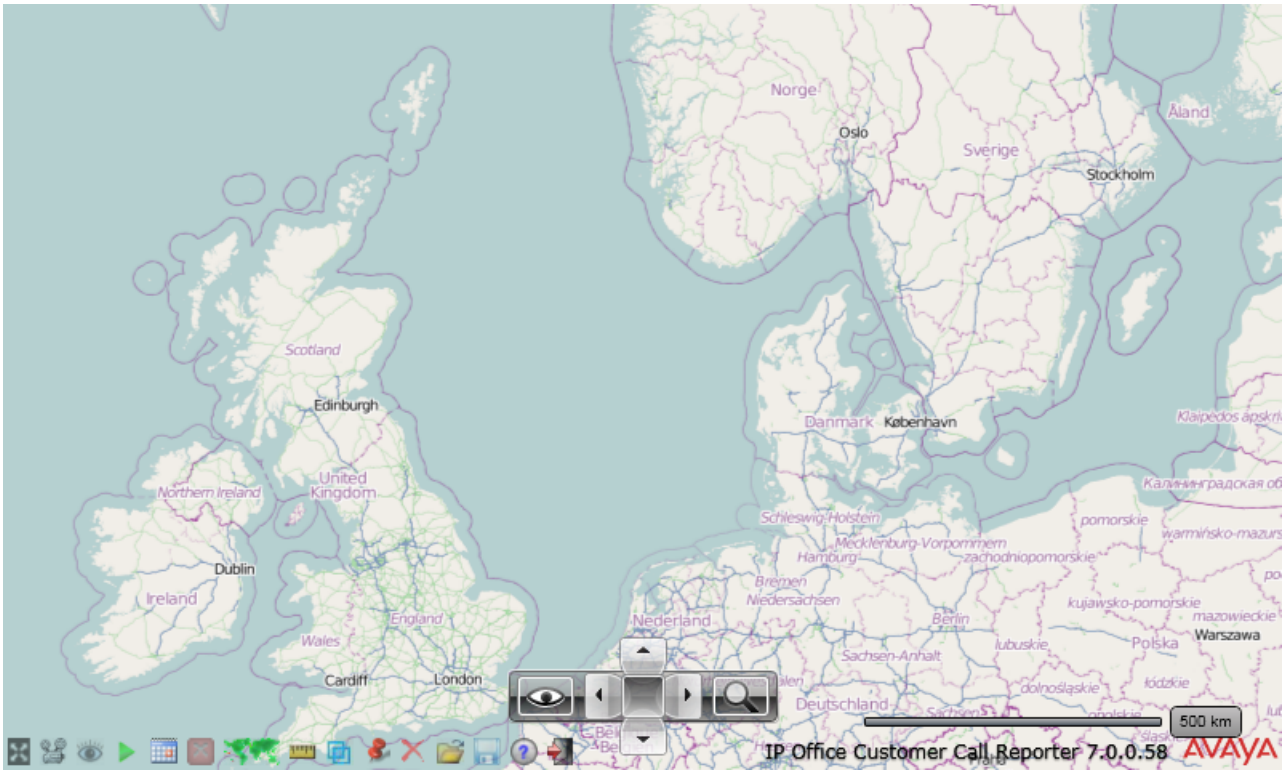

*Example Graph*

**To view a graph**

1. Click **Graph**. The graph is displayed in a new window or tab depending on the browser being used.
2. Select the queue from the **Queue** drop down list. Then either select an agent from the **Agent** drop down list or select a statistic from the **Statistics** drop-down list. Agents can only select themselves or a queue of which they are a member.
3. Select the statistic to monitor and whether it should include internal and or external calls.
4. Select the **Time Frame** for the horizontal axis. The graph will be updated approximately every 1/360th of the selected time frame, for example a time frame of 1 hour means the graph will update approximately every 10 seconds. Once the full time frame is filled, old data points are removed as new data points are added.
5. Click **Start** to run the graph.
6. If you want to change the settings, click **Stop** to halt the graph, and then change the settings. Clicking **Start** again will clear the existing data from the graph.

# 3.5 Customer Map

The customer map shows the location of callers based on the caller's number. When a caller's location has been identified 91, a pin is placed on the map at that location. The color of the pin 90 changes with the volume of calls that match that same location. When the caller cannot be resolved beyond just a country, a colored button is used instead of a pin. Hovering your cursor over a pin or button displays details of the location and the number of callers from that location.



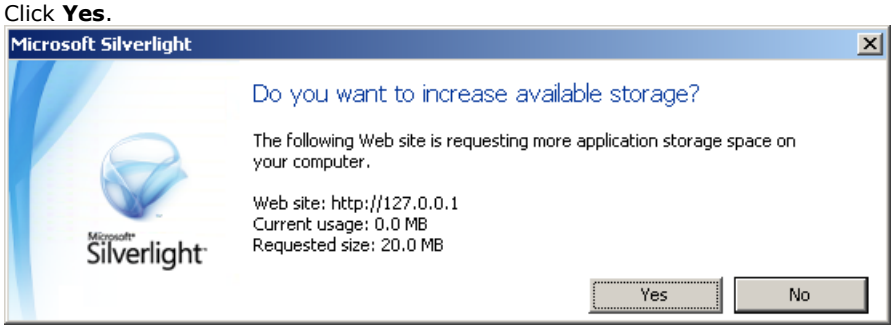

The map controller in the middle is used to zoom, scroll and select the type of map detail required. The scrolling and zooming functions can also be done with a mouse (click and drag to scroll, use a scroll wheel to zoom). To show/hide the map controller click its middle square.

| Use the Customer Map | | |
|---|---|---|
| • View the customer map 88<br>• Understand the pin colors 90 | • Select the map type 93<br>• Map historical calls 94 | • Add a map overlay 95 |

## 3.5.1 Starting the Customer Map

- **Microsoft Silverlight**
  The IP Office Customer Call Reporter wallboard and customer map functions use Silverlight. When logging in at a computer without Silverlight installed, if the computer has access to the internet, you will be prompted to install Silverlight. If the computer does not have access to the internet, Silverlight must be installed manually. Full details of Silverlight and the browsers on which it is supported can be obtained at http://www.microsoft.com/silverlight.

1. Login to IP Office Customer Call Reporter as a supervisor.
2. Click the **Customer Map** icon.
   - While running, the Microsoft Silverlight used by the customer map needs to store data on the browser computer. If it does not have sufficient space you will be prompted to allow it to use space on your computer. Click **Yes**.




3. Click the **Start** icon to start plotting calls as they arrive. Click **Pause** icon to pause realtime plotting

## 3.5.2 Map Icons

The icons at the bottom left can be used to access a range of functions.

- **Toggle Full Screen Mode**
  Switch the customer map between full screen and normal view.
- **Change Animation Settings** 96
  Change the Silverlight animation settings.
- **Best Fit**
  Set the zoom to best fit the current pins on the map.
- **Start / Pause Realtime Plotting**
  When loading pins for historical calls 94, the process can be paused and restarted.
- **Historical Plot Range** 94
  Specify a date and time range for pins that should be added to the map.
- **Stop Historical Plotting**
  Stop historical plotting.
- **Select Map Provider**
  Switch to a different map provider.
- **Toggle Scale**
  Switch the map scale between miles or kilometers.
- **Select Overlay**
  Use this to select an overlay file to combine with the map.
- **Find Location**
  Use this option to enter a telephone number or place name to test pin location operation.
- **Delete**
  Clear all pins from the view.
- **Load File**
  Load a previously saved set of pins.
- **Save Current Map**
  Save the current set of pins as a file.
- **Help**
  Display customer call map help. Not clickable in full screen mode.
- **Exit**
  Exit the customer map view. Not clickable in full screen mode.

## 3.5.3 Map Pins

When a caller's location has been identified[91], a pin is placed on the map at that location. The color of the pin changes with the volume of calls that match that same location. When the caller cannot be resolved beyond just a country, a colored button is used instead of a pin.

| Pin | Color | Calls | Button |
|---|---|---|---|
|  | **Black** | 1 call |  |
|  | **Dark Blue** | 2 - 10 |  |
|  | **Light Blue** | 11 - 100 |  |
|  | **Green** | 101 - 1,000 |  |
|  | **Yellow** | 1,001 - 10,000 |  |
|  | **Orange** | 10,001 - 100,000 |  |
|  | **Red** | 100,001+ |  |

Hovering your cursor over a pin or button displays details of the location and the number of callers from that location.



## 3.5.4 How is the Caller's Location Determined

IP Office Customer Call Reporter includes files that can match the telephone country codes for all countries and area codes within most countries. Once the call is matched to a named place, a query is sent to the map provider service to identify where that place is on the geographic map.

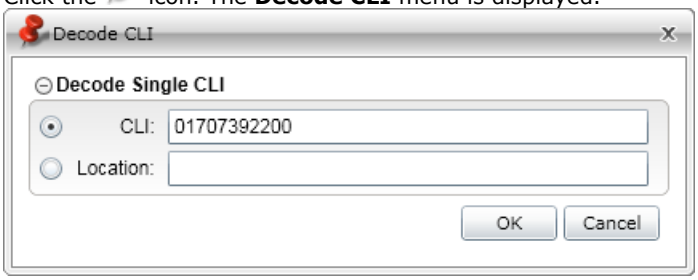
Where additional detail is required, the IP Office Customer Call Reporter maintainer can edit the set of files to add additional area and local area codes.

For India and the United States, an enquiry using the number is sent to the mapping services, so IP Office Customer Call Reporter does not need its own area code files to match numbers to country and area names.

### Testing a PIN Location Match

You can use the customer map to manually place a pin at a location based on a telephone number or location name.

1. Click the  icon. The **Decode CLI** menu is displayed.



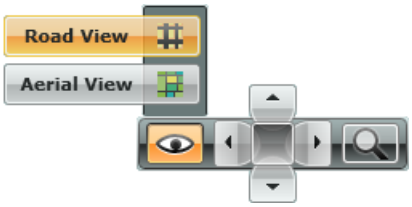

2. Select either **CLI** for a match by number or **Location** for a match by place name.
3. Enter either a telephone number or location. Adding more details increases the chances of an accurate location match.
   - Enter a CLI without any external dialing prefix even if your telephone system uses an external dialing prefix for outgoing calls. If you do not include a international dialing country code or an area code, the default settings configured by the system administrator will be used.
   - Enter a location in decreasing detail, for example *"town, state, country"* with each part separated by a comma.
4. Click **OK**.
5. If a match is obtained, a pin will be inserted at the matching location.

## 3.5.5 Map Control

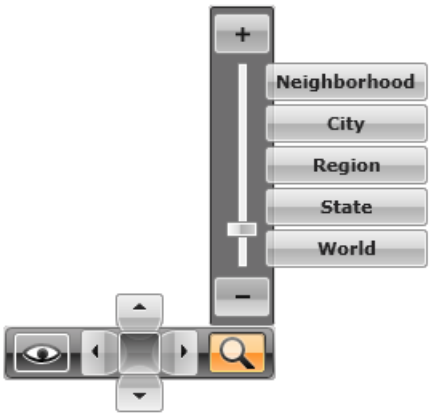
The map controller in the middle is used to zoom, scroll and select the type of map detail required.



- To hide the map controller, click its middle square.
- To unhide the controller, click the  square.
- To scroll the map, click the ◀ ▲ ▼ ▶ arrow buttons. Alternatively you can click and drag the map.



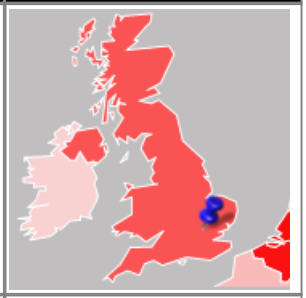

- To change the map detail, place the cursor over the eye icon and select the type of map detail required.
- The options available will depend on the currently selected map provider.




- To change the zoom, place the cursor over the magnifying glass icon. Use the slider to change the zoom level or click one of the preset zoom levels.
  - Alternatively:
    - You can change the zoom levels using a mouse with a scroll wheel.
    - To zoom in on a particular spot, double-click it.

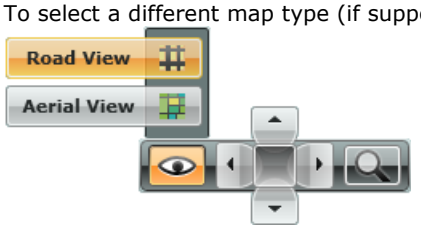
## 3.5.6 Map Selection

The customer map can use a number of different map backgrounds. These vary by map provider and map type.

| Map Type | Map Provider | | |
|---|---|---|---|
| | Open Street Maps | Yahoo Maps | Outline Map |
| Road View |  |  |  |
| Aerial View |  |  | |

The outline map is provided directly by IP Office Customer Call Reporter and is useful when Internet speed for map picture updates is limited. However it is a limited country outline only map.

- To switch between the different map providers click the  icon.
- To select a different map type (if supported by the provider) use the map controller.



## 3.5.7 Create an Historical Map

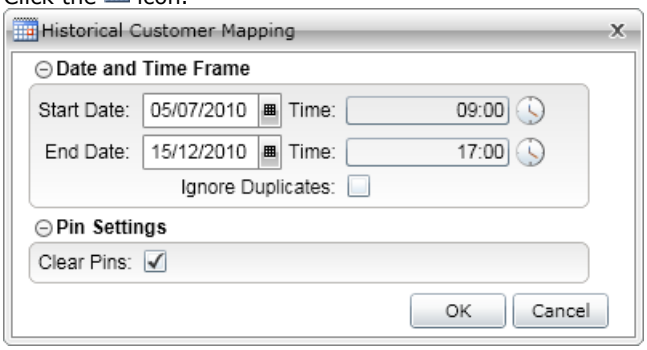
You can use the customer map to plot previous calls within a selected time range.

### Stopping and Clearing Realtime Call Plotting

By default, the customer map plots calls as they occur. Use the and icons to pause and resume real-time call plotting.

### Plotting Historical Calls

1. Click the icon.




2. Enter the date and time range for which you want the calls plotted.
   - If **Ignore Duplicates** is selected, calls from the same number are only counted and plotted once. For scenarios where you have frequent calls from the same customers, this improves the speed of the map plotting. However it means that the pin count shown is for the number of unique callers rather than the total number of calls.
   - The **Clear Pins** option can be used to select whether any existing pins and buttons on the map are removed or not before the historical pins are plotted.
3. Click **OK**.
4. IP Office Customer Call Reporter will begin plotting the call pins for the specified time range in roughly the order that calls occurred.
5. Clicking on the icon stops the historical plotting. To restart it specify the range again using the icon.

### Saving a Historical Plot

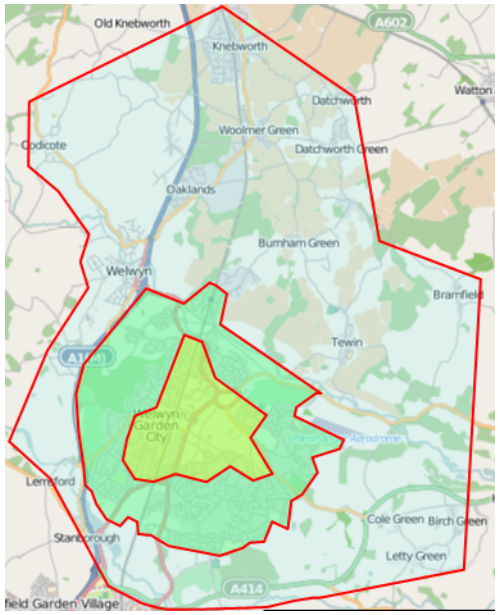
If the plot is of interest, you can save it as a file by clicking the icon and specifying a file name. The map can then be reloaded at anytime by clicking on the icon rather than having to replot all the calls. You can only load one historical file at any time.

## 3.5.8 Viewing an Overlay

You can place an overlay over the map. An overlay consists of placemarker icons, names, lines and shapes. An overlay is useful if you want to include additional information on the map. For example the location of your company's branches or boundaries to different sales areas.




*Map with no overlay.*




*Map with local delivery area overlay.*

Your system maintainer can set a default overlay that will be automatically added to all customer map views. If you load your own overlay, it will replace the default one for your viewing as only one overlay is supported at a time.

To add an overlay to the current display, click the icon and select the KML file from a location accessible by your computer.

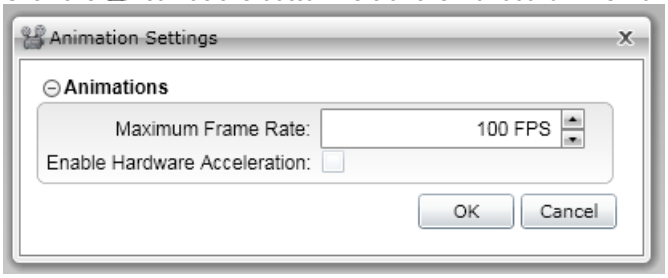
The overlay files use a format called KML which is used by many mapping programs. You can create and save your own simple KML overlay file using tools such a Google Earth or ScribbleMaps. IP Office Customer Call Reporter supports simple placemarkers, polygons and paths. It does not support ground and screen overlays.

Additional details are contained in the *Avaya IP Office Implementing IP Office Customer Call Reporter* (15-601133) manual.

## 3.5.9 Changing the Animation Settings

Silverlight is used by the IP Office Customer Call Reporter wallboard and the customer call map features can be used to control the frame rate and change other settings.

1. Click the icon at the bottom left of the wallboard. The wallboard animation settings are displayed.

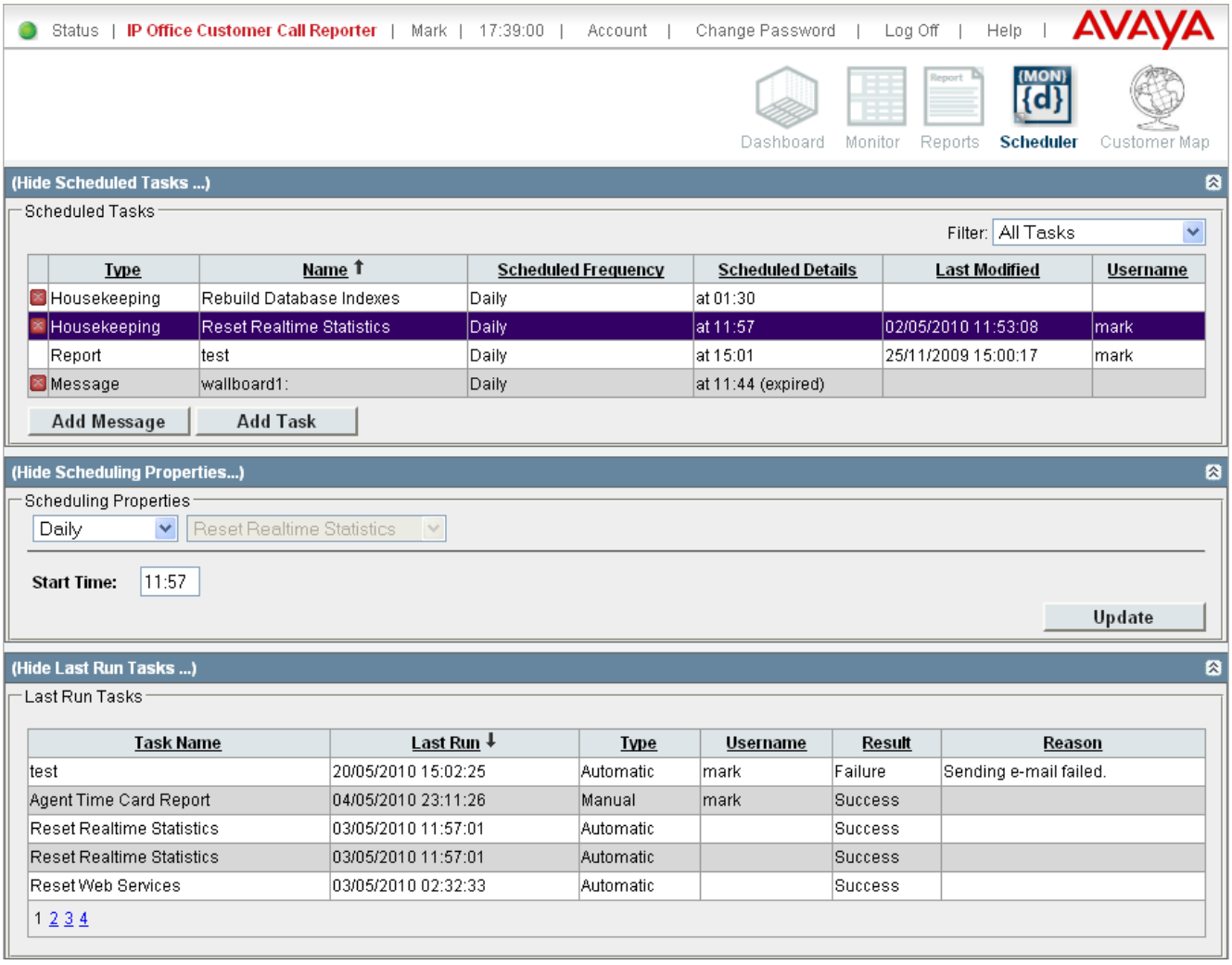



- **Maximum Frame Rate**
  This options sets the maximum frame rate that the wallboard can use. This can be used to limit the maximum CPU usage. It does not set the actual current frame rate which depends on both the wallboard content and on other processes being performed by the wallboard computer.
- **Enable Hardware Acceleration**
  This option is grayed out if not supported by the wallboard computer. If supported it is enabled by default. Note that for some wallboard computers, for example MACs, this settings only has an effect when running the wallboard in full-screen mode 142.

2. Click **OK** to save any changes.

# 3.6 Scheduler

Supervisors can use the **Scheduler** options to schedule reports, wallboard messages and housekeeping tasks. The results of recently run scheduled tasks are also shown.

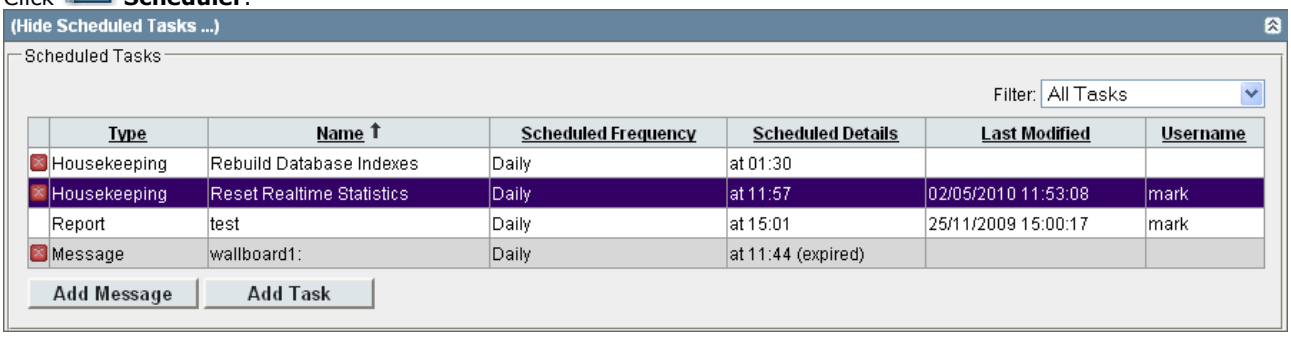



| Schedule events | | |
|---|---|---|
| • Schedule a report<br>• Automatically reset the statistics | • Backup the database | • Send Wallboard messages. |

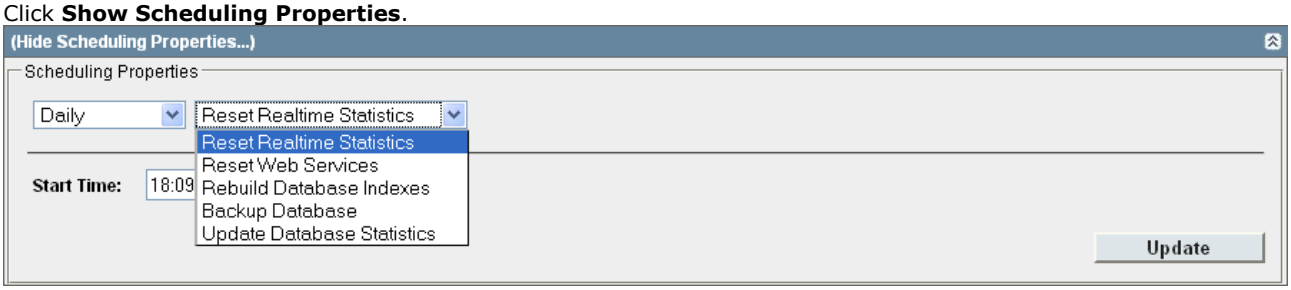
## 3.6.1 Scheduling Housekeeping Tasks

Supervisors for who the administrator has enabled the **Self-Administer** option can setup housekeeping tasks including tasks to reset all the statistics at specified times. This will affect all supervisor and agent views. It does not affect the statistics used for historical reports.

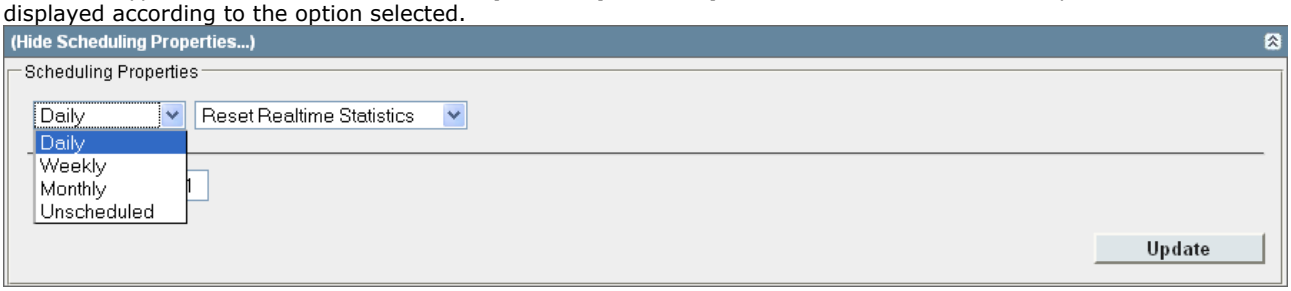
1. Click **Scheduler**.



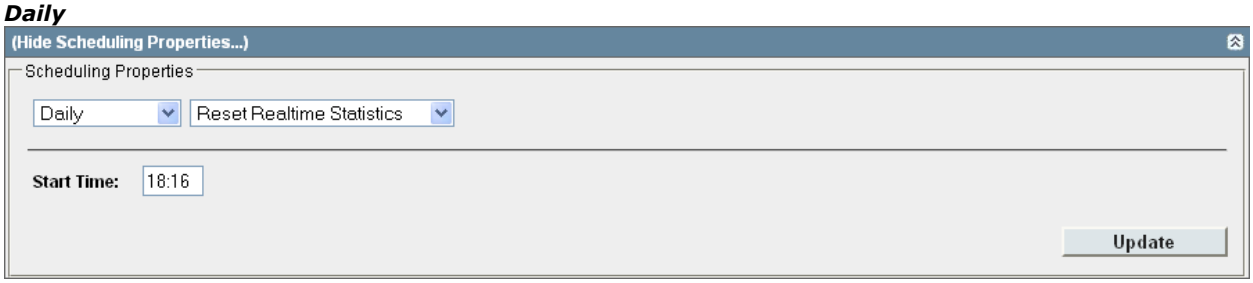

2. To add a new housekeeping task, click **Add Task**. To edit an existing housekeeping task, click it.
3. Click **Show Scheduling Properties**.



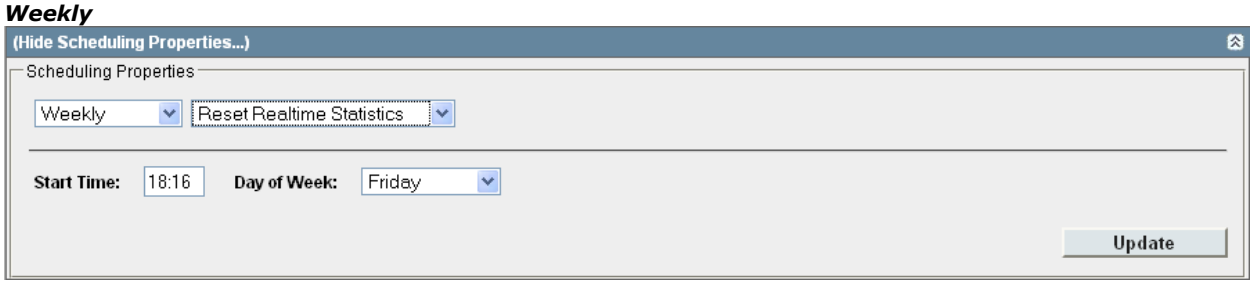

4. If adding a new task, select the type of task.
   - **Reset Realtime Statistics**
     Reset the statistics shown in all supervisor, agent and wallboard views.
   - **Reset Web Services**
     By default this task is already scheduled and occurs at 02:30. Note that when this action occurs, it will interrupt any connected browser session for several minutes and reset the session timeout for those sessions once operation is restored.
   - **Rebuild Database Indexes**
     By default this task is already scheduled and occurs at 23:00. It updates the database statistics and re-indexes the database. Doing this causes reports on historical data to run faster, however during the actual re-indexing the response of IP Office Customer Call Reporter is slowed.
   - **Update Database Statistics**
     This task is similar to **Rebuild Database Indexes** but does not include the database re-indexing part of that action. Following this, action reports will run slightly faster, however while the action is being performed it has less of an effect on the response of IP Office Customer Call Reporter than the **Rebuild Database Indexes** action.
   - **Backup Database**
     The backup database is placed into the default MS-SQL backups folder with a date and time prefix to the file name.
5. Select the type of schedule for the task: ***Daily***, ***Weekly***, ***Monthly*** or ***Unscheduled***. Additional options are displayed according to the option selected.



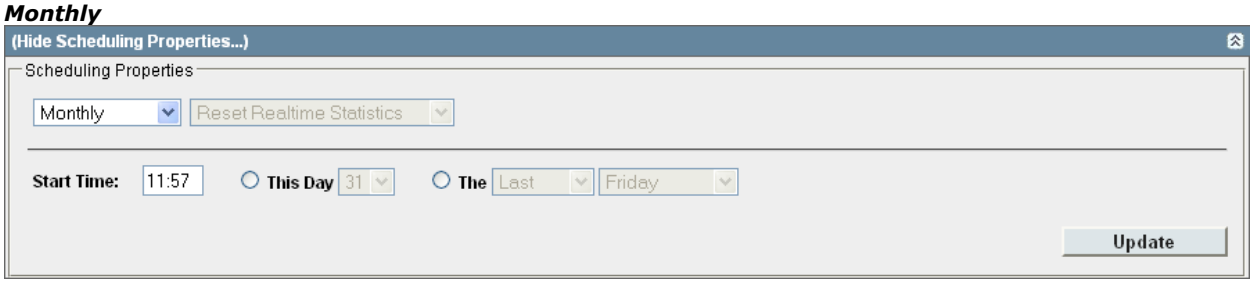
- ***Daily***




- ***Weekly***




- ***Monthly***



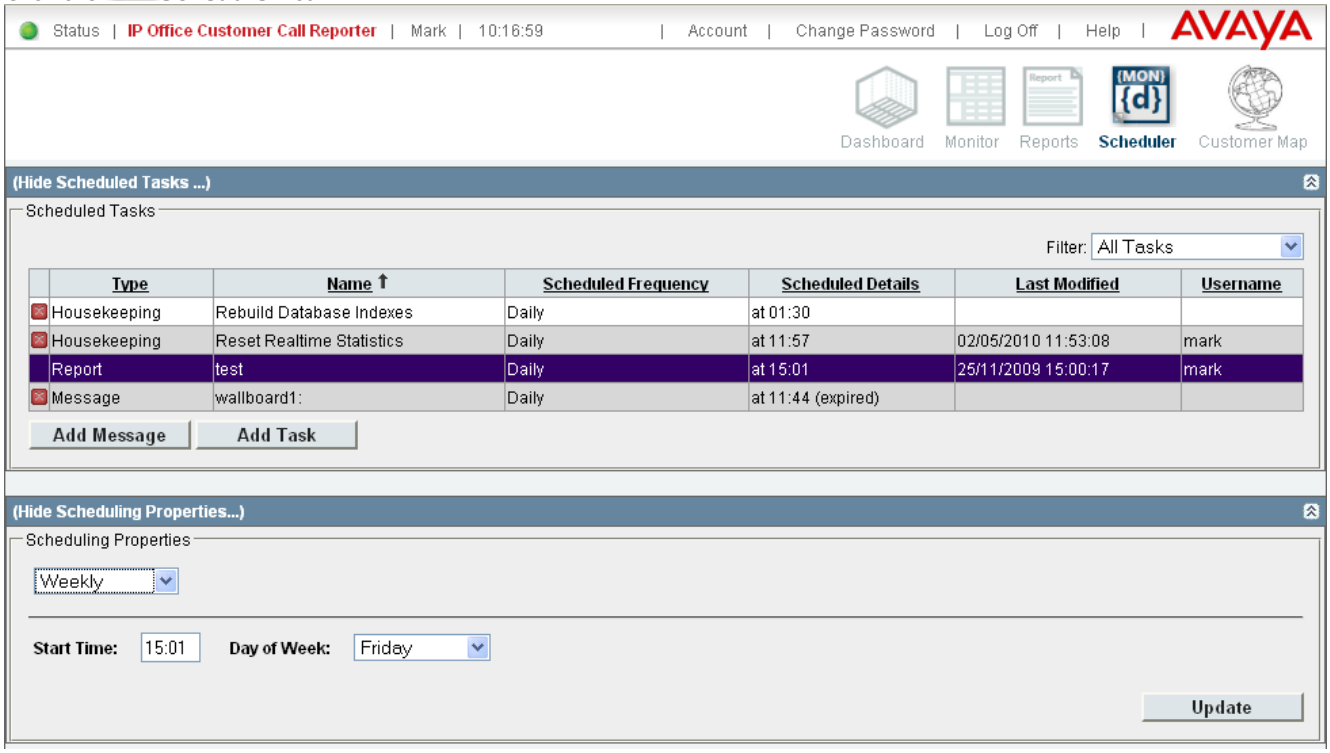

- ***Unscheduled***
  This schedule option has no other settings. It disables the task without deleting it from the task list.

6. Once the task is scheduled as required, click **Update**.
7. The task settings are shown in the **Scheduled Tasks** list.

## 3.6.2 Scheduling Reports

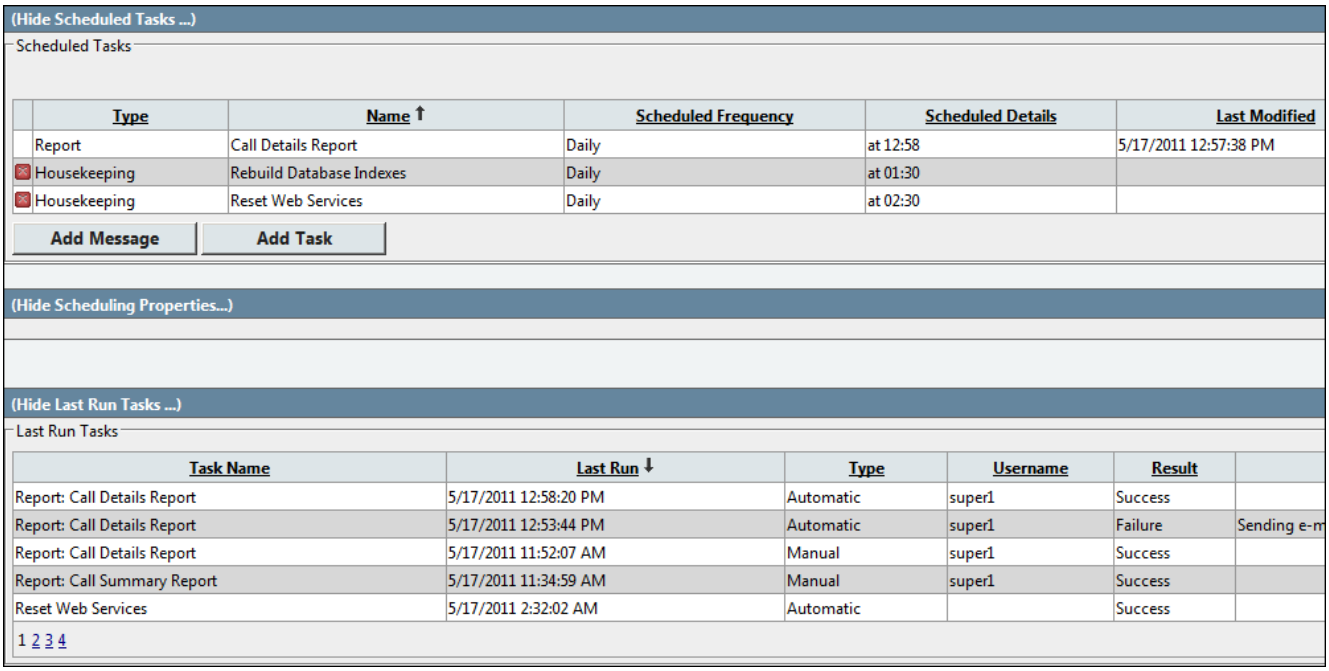
The **Scheduler** tab shows tasks including any reports you have created that have been saved with their **Scheduled** setting set to ***Automatic***.

1. Create a report as required and set its **Scheduled** option to ***Automatic***. The report destination, format and time range that it covers are set when creating and editing the report.
2. Click the **Scheduler** icon.




3. To schedule a report or to change the schedule, click the report to be amended in the **Scheduled Tasks** section.
4. Select the required option in the **Scheduling Properties**. Amend the report properties as required.
   - **Daily**
     If selected, you can then set a **Start Time** for when the report should be run each day. The default is ***09:00***. The option Include Weekends should be selected if you also want the report to run at weekends (Saturdays and Sundays).
   - **Weekly**
     If selected, you can then set a **Start Time** and **Day of Week** for when the report should be run each week. The default is ***9:00 Sunday***.
   - **Monthly**
     If selected, you can then choose either a day such as the last Friday of the month or a specific date within a month. If you select a date that exceeds the number of days in the month, the report gets scheduled for the last calendar day of the month. For example, if you select the report to be run on the 31st day of a month, the report will run on the 30th day of a month if there are only 30 days in the month.
   - **Unscheduled**
     Stop running the report on an automatic schedule.
5. Click **Update** to save your changes.

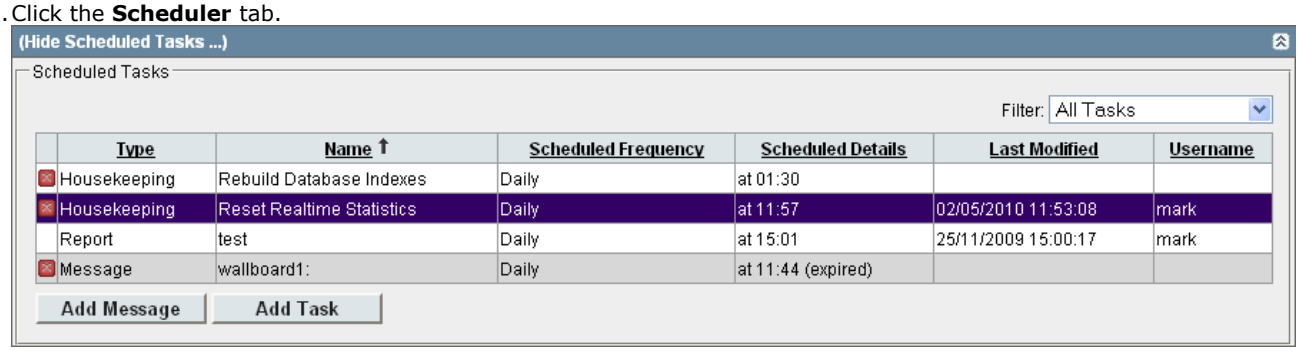
The system displays the recently run reports in the **Last Run Tasks** section. The **Result** column will display success if the report has been generated successfully or "failure" if the report does not generate.



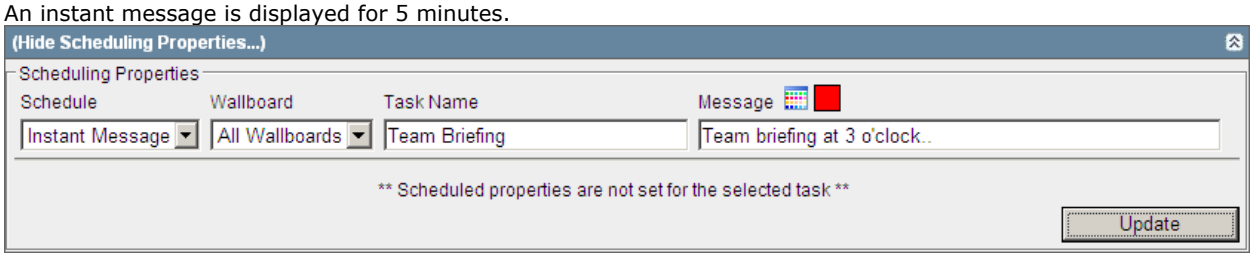
## 3.6.3 Scheduling Wallboard Messages

You can schedule messages to be sent to any wallboard. Alternatively you can send an immediate message that will be displayed for 5 minutes. When there are multiple messages scheduled for a wallboard, the messages are appended to each other as they are scrolled across the wallboard.

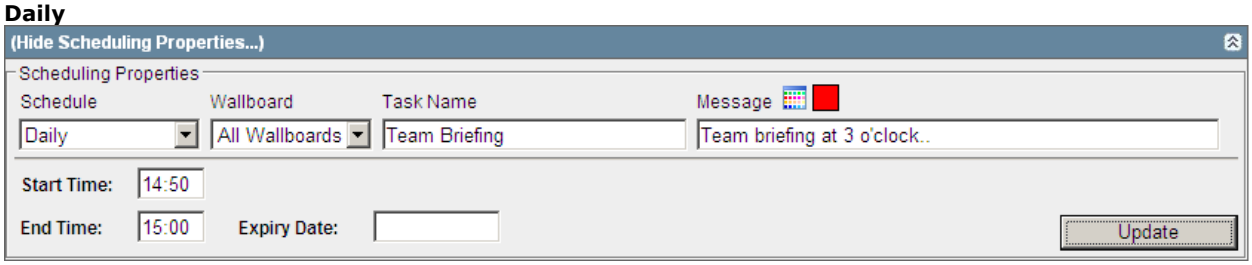
1. Click the **Scheduler** tab.



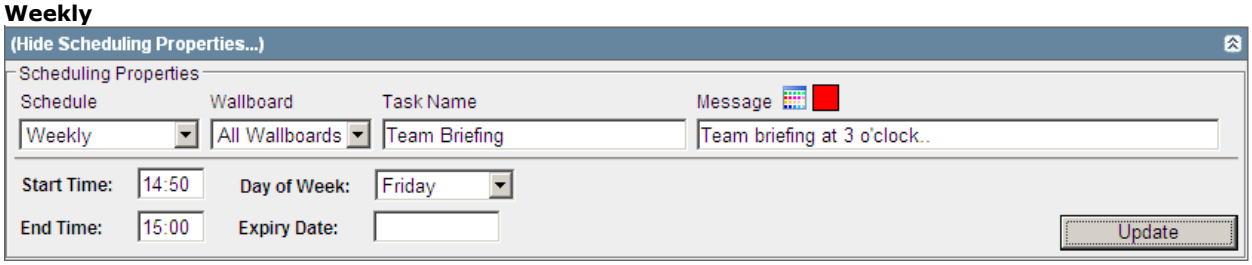

2. To add a new message click **Add Message**. To edit an existing message task, click it.
3. Click **Show Scheduling Properties** if you want to edit the scheduling settings.
4. Enter the text for the **Message**. This is the text that will be scrolled across the message area of the selected wallboard. Remember that this message may be included amongst other schedule messages and messages set by other supervisors. A space is automatically added at the end of each message but it may be useful to add more spaces or characters, for example, after the message text so that each message is clearly separated from any following message.
   - By clicking on the color palette icon you can select the color for the text message. The currently selected color is displayed in the colored square next to the icon.
5. Also enter a short **Task Name**. This is displayed in the task list.
6. Use the **Wallboard** list to select the wallboard to which the message should be sent.
7. Use the **Schedule** option to select when the message should be sent.
   - **Instant Message**
     An instant message is displayed for 5 minutes.



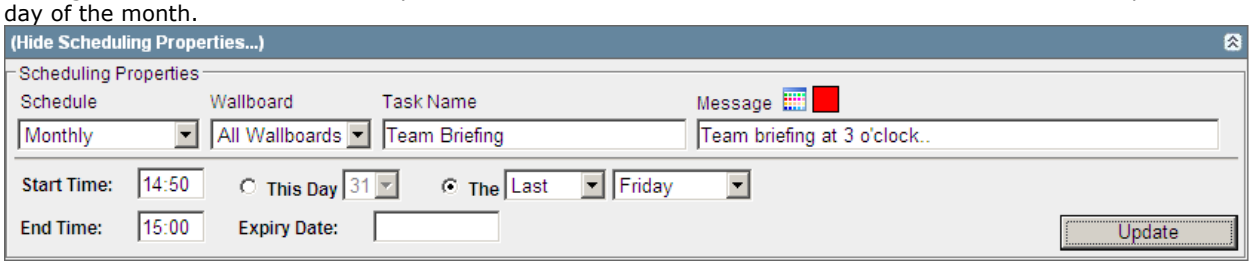

   - **Daily**




   - **Weekly**



- **Monthly**
  Messages that are scheduled monthly can be set to either occur on the same date each month or on a specific day of the month.




- If an **Expiry Date** is specified, the message scheduling ends on that date. However the message remains in the task list until deleted and can be reactivated by removing or changing the expiry date.

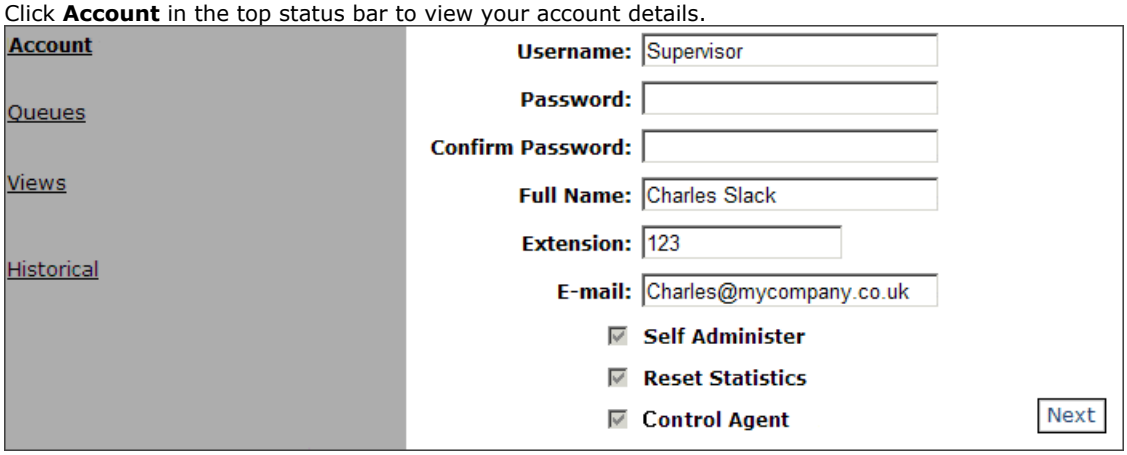
8. When the message is set as required click **Update**. The message details will be shown in the task list. If the schedule setting was Instant Message, the message will start being displayed for 5 minutes unless overridden by another scheduled message.

# 3.7 Account Details

The administrator creates supervisor accounts[161] and can amend those accounts. During that process they can specify whether you can self administer your account settings. There is a grayed out check box next to the heading **Self Administer**. If ticked, you are able to update your account details. If not ticked, all the tab fields are grayed out and the message *"You are not permitted to administer the account"* is displayed.

**To view/amend your account details**

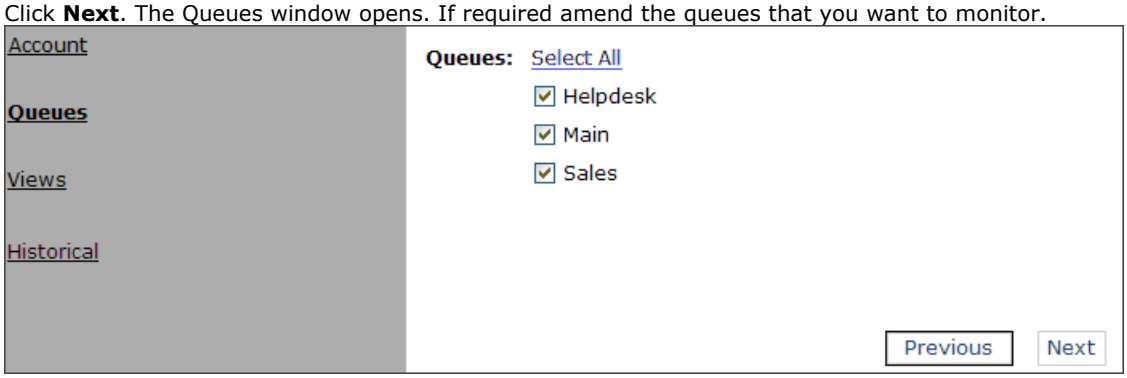
1. Click **Account** in the top status bar to view your account details.



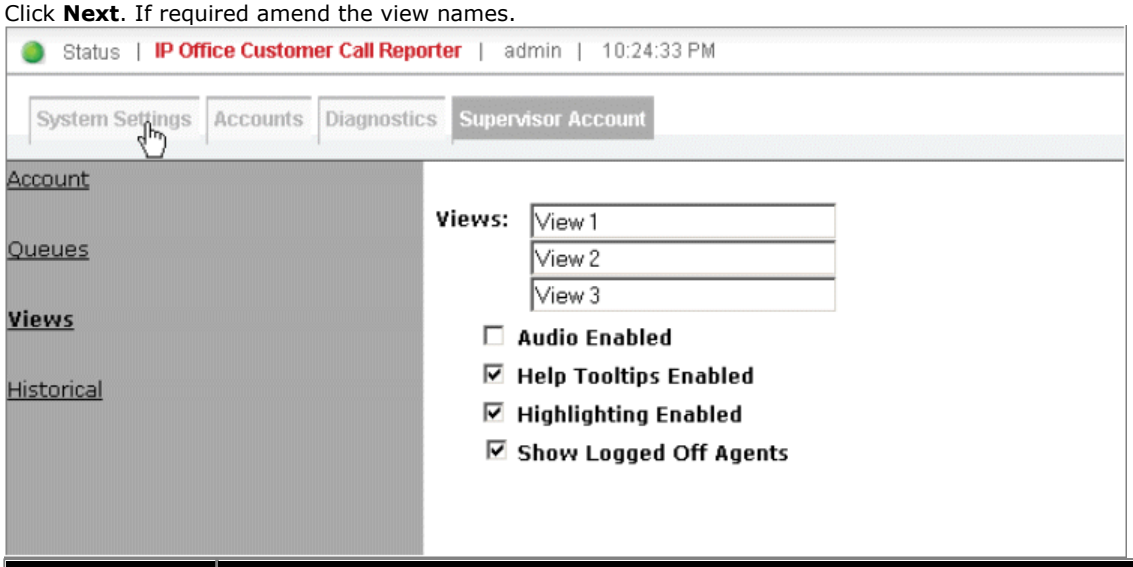

2. If the grayed out option **Self Administer** has a tick mark you can amend your account details. If not, you can only view the first page of your account settings and cannot make any changes.

| Field | Description |
|---|---|
| **Username** | This is the supervisor username used for logging in to IP Office Customer Call Reporter. If the name matches the administrator name and or an agent name then the user can also login in those roles. Supervisors cannot change their username. See Multiple Roles[285]. |
| **Password** | This is the password used for browser access to IP Office Customer Call Reporter. All supervisors, even those without **Self Administer** rights, can use the Change Password[17] option to change their password. |
| **Confirm Password** | |
| **Full Name** | This name is shown to agents when they login and select their supervisor. It is also used in reports to indicate which supervisor created and ran the report. |
| **Extension** | The telephone extension number associated with the supervisor account. |
| **E-mail** | The unique e-mail address associated with the supervisor. This is used for the forgotten password[18] feature. |
| **Self Administer** | If selected, the supervisor has self administration rights and is able to edit some of their own Account Details[104]. Supervisors with this option are also able to schedule housekeeping tasks[98] such as database backups and automatic statistic resets. Supervisors without this option are only able to edit views. |
| **Reset Statistics** | Supervisors for who the administrator has enabled the **Reset Statistics** option can reset all the statistics currently being used for supervisor views, agent views and wallboards. This will affect all supervisors, agents and wallboards. It does not affect the statistics used for historical reports. |
| **Control Agent** | Supervisors with this option enabled are able to click an agent name in a view and select from a list of actions that change the state of that agent. For example to force the agent to log in or log out. See Controlling Agent Status[85]. This option requires IP Office Customer Call Reporter to be configured with details of the one-X Portal for IP Office[172] server. |

3. Click **Next**. The Queues window opens. If required amend the queues that you want to monitor.

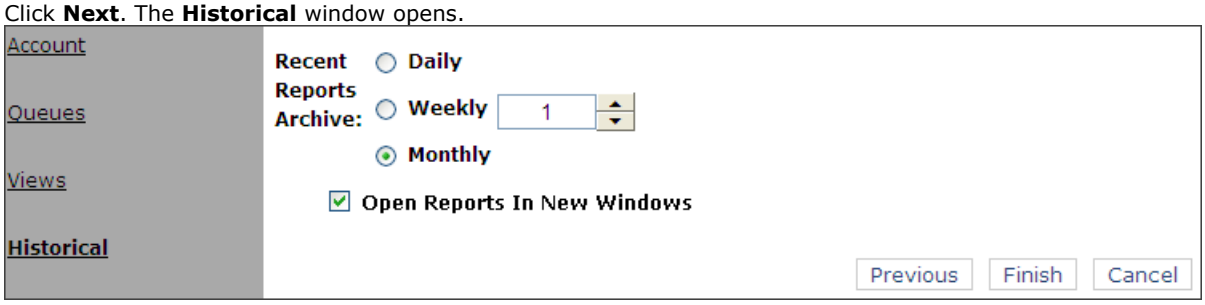



4. Click **Next**. If required amend the view names.




| Field | Description |
|---|---|
| **Views** | Use these fields to rename the three views. |
| **Audio Enabled** | This option is used in conjunction with any view that includes an **All Views Alarm List**. When enabled, if an alarm occurs, the browser's media player is used to play a sound file from the IP Office Customer Call Reporter server computer. The sound is played to all users looking at that supervisor's views.<br>• This option is off by default. If enabled, an audio plug-in is required for all user browsers. Use either Quick Time or Windows Media Player. |
| **Help Tooltips Enabled** | If enabled, when the cursor is placed over the statistic name in a view, pop-up help for the statistic is displayed. Tooltips are on by default. |
| **Highlighting Enabled** | If enabled, when a statistic in a view changes value, its background briefly changes to purple, then light purple and then back to the normal background color. This option is not applied to agent state and time values. Highlighting is on by default. |
| **Show Logged Off Agents** | This option is on by default. By default, the supervisor's monitor views include a row for each agent in the selected queue including agents who are currently logged off. If this option is de-selected, agents who are logged off are removed from the monitor view. |

5. Click **Next**. The **Historical** window opens.




- **Recent Reports Archive:** *Default = 1 Week, Range = Up to 12*
  This value set how long the server should store copies of reports run by the Supervisor. Whenever the supervisor logs in, reports beyond this duration will be automatically deleted.

- **Open Reports in New Windows:** *Default = On.*
  This setting is used in two ways. It sets the default value for new reports 38. However, the value can be changed within the report if required. It is also used as the setting for the display of recent reports 48. If selected, manually run reports are opened in separate pop-up windows, and you can open multiple reports at the same time. However, it requires the browser to be configured to allow popup windows. If not selected, reports are opened in the right-hand panel of the IP Office Customer Call Reporter client window.

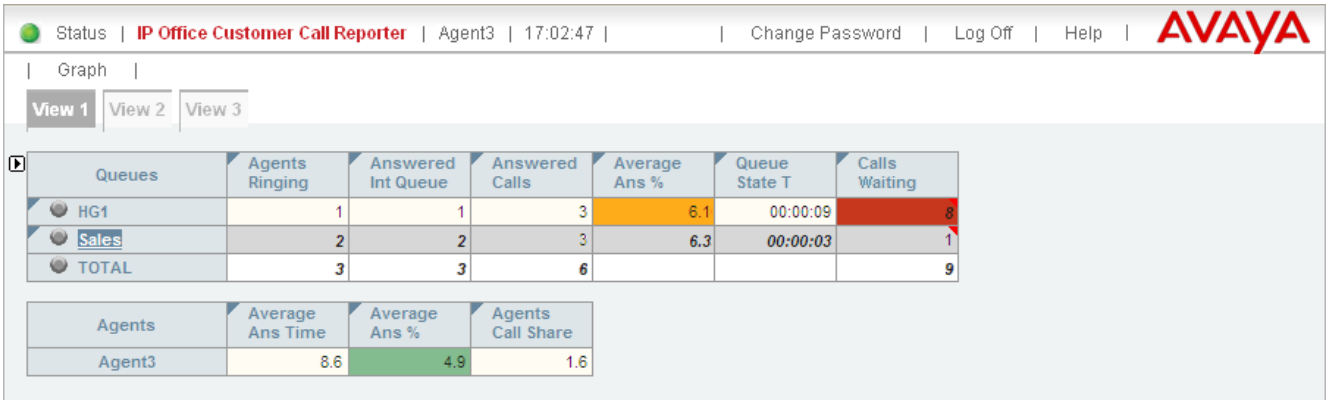
6. Click **Finish** to save your changes.

# Chapter 4.
# Agent

# 4. Agent

An agent is a user who handles calls to queues on the IP Office telephone system. Unlike general IP Office users they have been specifically configured as agents in the IP Office configuration. IP Office Customer Call Reporter supports up to 150 agents.

- To make and receive calls, the agent must login to a telephone on the IP Office telephone system. Note that T3 Series and T3 IP Series telephones are not currently supported.
- The agent's telephone status is recorded by IP Office Customer Call Reporter. For example when they logged in to a telephone, answer a call, log off, etc.
- The agents are also configured as members of queues and are then presented with call targeted to those queues. An agent can be a member of several queues.
- Using the web client, agents can see the same screen views as their supervisor. However, unlike the supervisor, the agents can only see their own statistics and for those queues to which they belong.




- **Blank Views!** While it is possible that the supervisor has not configured any content for a particular view, if all views are blank then you might have selected a supervisor whose views do not include any queues to which you belong.

**Tabs**

- **View 1/2/3** 110
  The 3 view tabs match those of the agent's supervisor. However unlike the supervisor's version you cannot adjust the view. Also you will only see queue statistics for the queues to which you belong and agent statistics for yourself.

| | |
|---|---|
| **Status** 169 | This button indicates the overall status of IP Office Customer Call Reporter. Clicking on the icon displays a **System Settings** 169 tab which shows the status of the individual IP Office Customer Call Reporter components.<br>• **Green:** IP Office Customer Call Reporter is running.<br>• **Yellow:** Some parts of IP Office Customer Call Reporter are still in the process of starting.<br>• **Red:** There may be a problem in IP Office Customer Call Reporter. |
| **Change Password** 17 | While logged in to IP Office Customer Call Reporter, you can change your password. |
| **Log Off** 20 | Close the IP Office Customer Call Reporter connection. It is important to close a connection using this control rather than just closing the browser or tab within the browser. Failing to use this button will cause a 5 minute delay before you can log in again on another computer. |
| **Help** 19 | Access this documentation in online format. Where possible the appropriate page for the current IP Office Customer Call Reporter screen is displayed. |
| **Graph** 87 | Display a separate graph of a statistic for a selected queue or agent. |

# 4.1 Logging In (Quick Start)

As an agent there are 2 main parts to using IP Office Customer Call Reporter. Logging in on a telephone extension and logging in to IP Office Customer Call Reporter using a web browser.

| Information Required | |
|---|---|
| • **Your Extension Number** | This will be different from the number of the extension at which you log in. |
| • **Your Login Code** | This is assigned by the system maintainer. |
| • **Your Username** | This is assigned by the system maintainer. |
| • **Your Password** | Your initial password is blank but you will be asked to set one as part of the logging in process. |
| • **Your E-mail Address** | To use the Forgot Password 18 function, you must enter a valid e-mail address. If you have already entered an e-mail address in the IP Office configuration, it will be displayed. |
| • **Supervisor Name** | The name of your call center supervisor is requested while logging in to IP Office Customer Call Reporter. You then share their views of the statistics. |
| • **Web Address** | IP Office Customer Call Reporter is viewed using a web browser and so you will need to know its web address. |

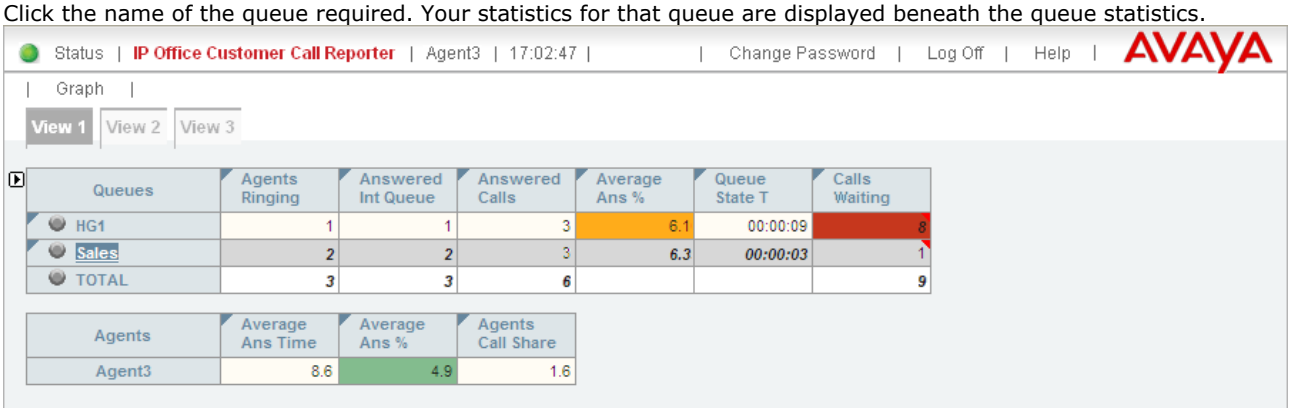
**Logging In**

1. **Login to an extension**
   You will need to know your own extension number (not that of the telephone at which you are logging on) and login code to do this.
   - If the telephone has a **Login** button on the display:
     - Press the **Login** button.
     - Dial your extension number and select **Next**.
     - Dial your login code and select **Done**.
   - The default dialing short code for logging in is ****35***.
     - Dial ***35**.
     - Dial ***** and then your extension number.
     - Dial ***** and then your login code.
     - Dial **#** to finish.
2. **Login to IP Office Customer Call Reporter**
   You will need to know your username and password to do this. If this is the first time you have logged in to IP Office Customer Call Reporter you will be asked to set a password and enter an e-mail address. For full details of the login process refer to Logging In 16.
   - Start your web browser.
   - Enter the web address of the IP Office Customer Call Reporter.
   - Enter your username and password. If this is the first time you have logged in to IP Office Customer Call Reporter, leave the password blank as you will be asked to enter one.
   - Click **OK** and select your supervisor.
3. **Select a View**
   There will be 3 tabs, each containing a view setup by your supervisor.
4. **Select a Queue**
   Select a queue within the view to see your own statistics for that queue.

# 4.2 Viewing Statistics

When you open the IP Office Customer Call Reporter web client in agent mode the window will look similar to the one illustrated. The view tabs, up to 3, are views that your supervisor has created. However, unlike their version of the view, you will only see queue statistics for the queues to which you belong and agent statistics for yourself.

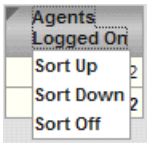
1. Click the name of the queue required. Your statistics for that queue are displayed beneath the queue statistics.




2. For details of what the different statistics mean see Statistics 176.

## Adjusted Statistics

Once a statistic has been added to a view, its name is displayed at the top of the column.




1. Click the statistic name to display the statistic options:

- **Sort Up**
  Sort the view in ascending order using column's current values. When selected the statistic name displays an up arrow icon. Separate sorting can be applied to the agent statistics and the queue statistics. Note that while the queue section of a view is sorted, the selected queue to show in the agent section of the view cannot be changed.
- **Sort Down**
  Sot the view in descending order using this column's current values When selected the statistic name displays a down arrow icon. Separate sorting can be applied to the agent statistics and the queue statistics. Note that while the queue section of a view is sorted, the selected queue to show in the agent section of the view cannot be changed.
- **Sort Off**
  Remove the sort. The queues section returns to the order in which the supervisor or administrator arranged the queues when setting up the view. The agents section returns to alphabetical order except for logged off agents who are placed at the bottom of the view.
- **Help**
  Access help on the statistic.

### Alarms and Warnings

For many statistics, alarm and warning thresholds can be set by supervisors. These thresholds are then applied to the whole column. They are also applied to the views seen by agents.

If the value in any cell in the column goes past one of the thresholds, the background color of that cell is changed. The following colors are used for the cells if the statistic has been enabled for alarms and or warnings.

| **Enabled / Cleared** (Green) | **Warning** (Orange) | **Alarm** (Red) | **Acknowledged** (Blue) |
|---|---|---|---|

Alarms and warnings are automatically cleared when the cell returns to the threshold level of the alarm or warning. Supervisors and agents can also acknowledge an alarm or warning by clicking on the relevant cell in their view. That cell is then indicated as acknowledged until the value returns to the threshold value and the alarm or warning is cleared.

If an alarm list or ticker has been added to the view, that also shows alarms and warnings.

- An alarm list shows the 100 most recent current alarms and warnings is a scrollable list of all the current alarms and warning. Alarms are shown first in chronological order followed by warnings in chronological order.
  - Alarms in the **Alarm List All Views** can also trigger an audible alarm if the supervisor's account 104 is set as **Audio Enabled**. This will be played to all users looking at that supervisor's views.
- An alarm ticker shows the 5 most recent current alarms and warnings one at a time, showing each for a few seconds before displaying the next.
- Alarms and warnings take the form: *Time, Type (Alarm or Warning), Name (Queue name, agent name), Current value, Statistic name.* For agent and queue state alarms, the state is included in the name. For ***Busy Not Available*** state alarms the reason code is included. For example:
  - *12:45 Alarm Sales 15 Calls Waiting*
  - *16:31 Warning Sales 120 Average Answer Time*
  - *17:20 Alarm Extn2101 Agent State Q – Busy Not Available (paper work)*
- Alarms and warnings are updated approximately every 8 seconds.
- Clicking on the underlined text in an alarm or warning will change the view to the one containing the alarm or warning and will also select the appropriate queue in that view.
- Alarms and warnings are removed from the list in when the relevant statistic drops back to the threshold level. The supervisor or agent viewer can also remove an alarm or warning by clicking on the appropriate colored cell of statistic value. Acknowledging an alarm or warning only affects their view.
- Alarms for database capacity are not shown within the alarm lists and trackers. They are shown during log in.

## 4.3 Statistic Colors

A number of different color backgrounds are used while displaying statistics. The following colors are used for normal statistics (these colors are not used in wallboards). The colors for changing statistic number values are optional (enabled by the supervisor's account setting 104 **Highlighting Enabled**) and are not applied to agent state and time values. They are also reset if you change view.

| **Normal** (White) | **Alternate Row** (Light Gray) | **Just Changed** (Purple) | **Recently Changed** (Light Purple) |
|---|---|---|---|

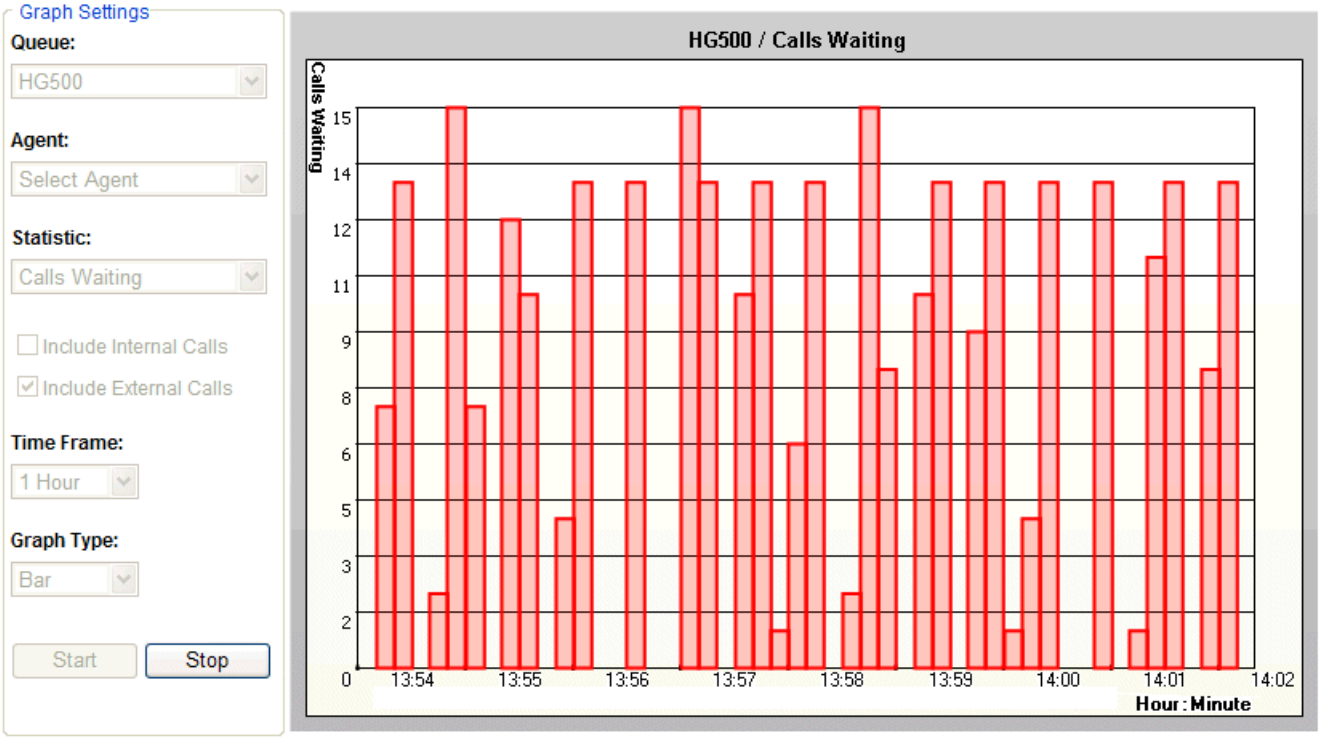
The following additional colors are used when any statistic is configured to display warnings and alarms. These colors override the ones above. Wallboards only display the colors for warnings and alarms.

| **Enabled / Cleared** (Green) | **Warning** (Orange) | **Alarm** (Red) | **Acknowledged** (Blue) |
|---|---|---|---|

Alarms and warnings are automatically cleared when the statistic value returns to the threshold level of the alarm or warning. Agents and supervisors can acknowledge an alarm or warning in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarms list.

# 4.4 Graph View

Supervisors and agents can select to have a graph running showing a selected statistic for a queue or agent. The graph is displayed in a new window or tab depending on the browser being used. Agents are restricted to their own statistics or queues to which they belong.




*Example Graph*

**To view a graph**

1. Click **Graph**. The graph is displayed in a new window or tab depending on the browser being used.
2. Select the queue from the **Queue** drop down list. Then either select an agent from the **Agent** drop down list or select a statistic from the **Statistics** drop-down list. Agents can only select themselves or a queue of which they are a member.
3. Select the statistic to monitor and whether it should include internal and or external calls.
4. Select the **Time Frame** for the horizontal axis. The graph will be updated approximately every 1/360th of the selected time frame, for example a time frame of 1 hour means the graph will update approximately every 10 seconds. Once the full time frame is filled, old data points are removed as new data points are added.
5. Click **Start** to run the graph.
6. If you want to change the settings, click **Stop** to halt the graph, and then change the settings. Clicking **Start** again will clear the existing data from the graph.

# 4.5 Agent Telephone Controls

IP Office Customer Call Reporter tracks your status through your telephone extension. Many of the states that IP Office Customer Call Reporter reports are automatically determined by the system but you can control the following key states through your telephone.

Note that all of these features may not be available to you. The features that are available to you may have been configured using different text labels or dialing codes.

- **Logging In** 114
  The state 'Logged In' refers to being logged onto a telephone on the telephone system and therefore able to start receiving and making calls. To log in, you need your extension number and your login code. When you login at an extension, your user settings are applied to that telephone. If the extension has a normal user, they are logged off while you are logged in. If you were previously logged in at another extension, you are automatically logged off from that extension.
- **Logging Out** 115
  Logging out stops you from receiving any further calls. If the log off is successful you will either see the name of the telephone's normal user on the display or ***NoUser***.
- **After Call Work** 116
- **Busy Not Available** 117
- **Queue Membership** 118
- **Phone Manager** 121

A range of other telephone controls and their effects on statistics are discussed in the Call Scenarios 239 section. They are:

- **Bridged Call Appearances** 279.
- **Call Pickup** 279.
- **Calls on DECT R4 Set** 280.
- **Do Not Disturb** 280.
- **Call Coverage** 280.
- **Follow Me** 282.
- **Forwarding Calls** 282.
- **Internal Twinning** 283.
- **Line Appearances** 283.
- **Mobile Twinning** 283.
- **Telecommuter** 283.
- **Transferring Calls** 246.
- **Voicemail** 277.

Most Avaya telephones have a number of programmable buttons which can be used for special functions which can include functions specific to IP Office Customer Call Reporter. Buttons can be provided by the telephone system maintainer for logging in, logging out, enabling/disabling group membership and controlling Busy Not Available and After Call Work.

Various IP Office functions can be programmed against sequence of numbers that can be dialed from user telephones. This includes functions used by IP Office Customer Call Reporter agents.

## 4.5.1 Logging In

The state 'Logged In' refers to being logged onto a telephone on the telephone system and therefore able to start receiving and making calls. To log in, you need your extension number and your login code. When you login at an extension, your user settings are applied to that telephone. If the extension has a normal user, they are logged off while you are logged in. If you were previously logged in at another extension, you are automatically logged off from that extension.

- **Programmable Button** 296
  Most Avaya feature telephones supported by IP Office have programmable buttons 296. The IP Office system maintainer can program each of these buttons with features for use by the telephone's user.
  - If the telephone has a **Login** button on the display:
    - Press the **Login** button.
    - Dial your extension number and select **Next**.
    - Dial your login code and select **Done**.

- **Dialing Short Code** 297
  The IP Office telephone system maintainer can set up dialing short codes 297 that support special features to be accessed by dialing the short code number.
  - The default dialing short code for logging in is ***35***.
    - Dial ***35**.
    - Dial * and then your extension number.
    - Dial * and then your login code.
    - Dial # to finish.

- **one-X Portal for IP Office Login**
  When you log in to one-X Portal for IP Office, you can use the **Login to phone** options on the one-X Portal for IP Office login menu to specify at which telephone you want to login, if you are not already logged in.

- **Phone Manager Agent Login/Logout**
  For agents who hot desk 292, Phone Manager can be used to login 293 to the required telephone extension. When the user start Phone Manager, they enter the extension at which they want to login. When they close Phone Manager they are logged off.

The IP Office maintainer can setup a method for agents to change their login code themselves if required.

## 4.5.2 Logging Out

Logging out stops you from receiving any further calls. If the log off is successful you will either see the name of the telephone's normal user on the display or ***NoUser***.

- **Programmable Button** 296
  Most Avaya feature telephones supported by IP Office have programmable buttons 296. The IP Office system maintainer can program each of these buttons with features for use by the telephone's user.
  - A **Hunt Group Enable** button, depending on how it is configured, can be used to enable/disable an agent's membership of a particular group or all groups to which of which they are a member. The button indicates the current state of the membership.

- **Dialing Short Code** 297
  The IP Office telephone system maintainer can set up dialing short codes 297 that support special features to be accessed by dialing the short code number.
  - If the phone does not have a **Logoff** button, you can dial a short code. The default for most IP Office telephone systems is **36*.

- **one-X Portal for IP Office Logout**
  For IP Office Customer Call Reporter agents, when you log out of one-X Portal for IP Office you are also automatically logged out of the telephone you were using.

- **Phone Manager Agent Login/Logout**
  For agents who hot desk 292, Phone Manager can be used to login 293 to the required telephone extension. When the user start Phone Manager, they enter the extension at which they want to login. When they close Phone Manager they are logged off.

## 4.5.3 After Call Work

After Call Work indicates that the agent is not available to receive queue calls 296 while they perform some other call related activity. Typically this is used for activities such as call records and data entry that need to be completed before handling another call. A number of controls are available for After Call Work 116. Agents can be configured to be automatically put into ACW state after a queue call or else they can manually select to enter the state when required.

Note: The Wrap-Up 300 feature briefly applied to the end of all calls including queue calls is also reported as **After Call Work** state.

- **Programmable Button** 296
  Most Avaya feature telephones supported by IP Office have programmable buttons 296. The IP Office system maintainer can program each of these buttons with features for use by the telephone's user.
  - **After Call Work Button**
    You press the **ACW** button on your telephone. The button will indicate when you are in After Call Work state (manual or automatic). You can press the **ACW** button on your telephone to manually exit After Call Work state.
    - 1400, 1600, 2400, 5400, 4600, 5600, 9500 and 9600 Series telephones with available programmable buttons.

- **Dialing Short Codes**
  The short code features ***Start ACW*** and ***Clear ACW*** can be used to manually start and clear after call work.

- **one-X Portal for IP Office After Call Work**
  Using the **Agent Control** gadget, under **Agent State** select ***After Call Work***. The system can be configured to do this automatically after each queue call. To exit after call work status use the control to select ***Available***.

- **Phone Manager**
  There are no Phone Manager controls for this feature.

### Automatic After Call Work

The IP Office telephone system maintainer can configure individual agents to be automatically put into After Call Work state when they end a queue call. This option is only supported for agents when using a telephone with an ACW button as detailed about.

### Disabling After Call Work

The IP Office system maintainer can disable the use of After Call Work by all agents or an individual agent. When this is done, buttons and dialing short codes for After Call Work will not operate.

### Wrap Up

For all telephone users, the IP Office telephone system applies a short delay, by default 2 seconds, during which the user is indicated as still being busy to further calls. The main function of wrap up is to give analog telephone users, who have just finished a call, the opportunity to start dialing a short code or to start making a call before another incoming call is presented to them.

For users set as agents, the period of wrap up applied to their telephone is reported as their being in the **After Call Work** 289 state. If the agent is also set for automatic after call work, the wrap up period is applied first and then the automatic after call work period is begun.

## 4.5.4 Busy Not Available

This agent state indicates that the agent is not available to receive calls while they perform a non-call related activity such as attending a meeting. This state can be selected by an agent using the DND or SAC button on their telephone, see Agent Telephone Controls 113. This also requires the agent to select one of the reason codes 296 displayed on their telephone to indicate the reason they are going into the **Busy Not Available** state.

If this state is enabled while a queue call is being presented, the call will go to the next available agent and cause the **No Answer** statistic for the agent and queue to be incremented.

For agent on the following telephones, when they select the Busy Not Available state using a button on their telephone they will be prompted to select a reason code if any have been configured on the telephone system.

- 1400, 1600, 2400, 5400, 4600, 5600, 9500 and 9600 Series telephones with available programmable buttons.

The codes are configured on the telephone system by the system maintainer. The reason code is displayed as part of Agent State (Queue) statistic information.

Up to 8 custom reasons can be configured plus the following two fixed reasons:

- **Automatic**
  This reason is used if the agent is using a telephone that supports reason code selection but fails to select a reason. For example if they enabled Busy Not Available through a short code, using Phone Manager or were forced into it by the IP Office's **Agent Status on No Answer** feature.
- **Unsupported**
  This reason code is used for agents using telephones that do not support the selection of a reason code.

- **Programmable Button** 296
  Most Avaya feature telephones supported by IP Office have programmable buttons 296. The IP Office system maintainer can program each of these buttons with features for use by the telephone's user.
  - You can select the Busy Not Available state by pressing a **DND** (Do Not Disturb) or **SAC** (Send All Calls) button on your telephone. You will then be requested to select a reason code from a list displayed on the telephone. The available reason codes are configured by the IP Office system maintainer.

- **Dialing Short Code** 297
  The IP Office telephone system maintainer can set up dialing short codes 297 that support special features to be accessed by dialing the short code number.
  - Dial a **Do Not Disturb On** short code. The default short code is ***08**. This method does not require the entry of a reason code and so is reported just **Busy Not Available**.
  - Dial a **Do Not Disturb Off** short code. The default short code is ***09**.

- **one-X Portal for IP Office Busy Not Available**
  Using the **Agent Control** gadget, under **Agent State** select ***Busy Not Available***. Under **Reason Codes** select the reason you want reported for the period you remain in the busy not available state. To exit busy not available status use the control to select ***Available***.

- **Phone Manager Agent Mode**
  Phone Manager Pro users can select ***Agent Mode*** within the applications preferences. This enables a number of additional icons. Note that selection of this mode can be disabled by the IP Office maintainer. Note: In this mode, the F1 and F3 functions are swapped. F1 becomes 'account call' and F3 becomes 'make call'.

|  | **Busy Not Available** |
|---|---|
| | An agent can use this icon to select **Busy Not Available** 291 state with the default reason code 296 ***Busy Not Available***. The icon can also be used to exit the state. |

## 4.5.5 Enable/Disable Membership

- The hunt group queues of which an agent is a member are configured by the IP Office telephone system maintainer. They cannot be changed by the agent or supervisor. However an agent's membership of a hunt group queue can be disabled.
  - When an agent's membership of a queue is disabled, the agent's state for that queue will be reported as ***Present*** when it would otherwise have been ***Available***.
  - On many Avaya display telephones, a **G** on the display indicates that the user currently has their membership of at least one group enabled.

- **Programmable Button** 296
  Most Avaya feature telephones supported by IP Office have programmable buttons 296. The IP Office system maintainer can program each of these buttons with features for use by the telephone's user.
  - A **Hunt Group Enable** button, depending on how it is configured, can be used to enable/disable an agent's membership of a particular group or all groups to which of which they are a member. The button indicates the current state of the membership.

- **Phone Menu Controls**
  On many newer Avaya telephones (1400, 1600, 9500 and 9600 Series), the telephone menu can be used to change various hunt group settings, including enabling or disabling membership. The selection of which functions and hunt groups is controlled by the telephone system administrator.

- **Dialing Short Code** 297
  The IP Office telephone system maintainer can set up dialing short codes 297 that support special features to be accessed by dialing the short code number.
  - Short codes using the **Hunt Group Enable** function can be used to enable the agent's membership of the queues to which they belong.
  - Short codes using the **Hunt Group Disable** function can be used to enable the agent's membership of the queues to which they belong.

- **one-X Portal for IP Office Queue Membership Control**
  Select the Agent Control gadget and select/deselect the queues for which you want to enable/disable your queue membership. Note that the administrator can restrict for which queues you can change your membership state.

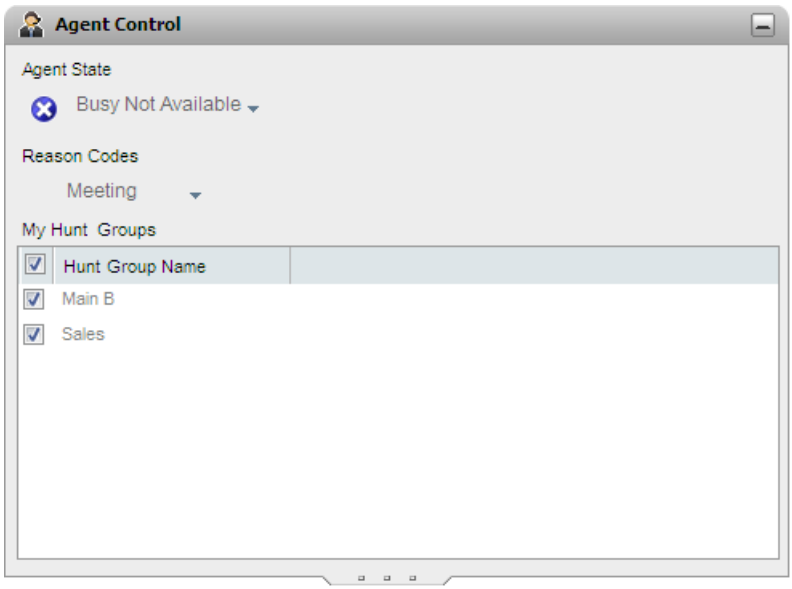
- **Phone Manager Agent Mode**
  Phone Manager Pro users can select ***Agent Mode*** within the applications preferences. This enables a number of additional icons. Note that selection of this mode can be disabled by the IP Office maintainer. Note: In this mode, the F1 and F3 functions are swapped. F1 becomes 'account call' and F3 becomes 'make call'.

|  | **Select Group** |
|---|---|
| | This icon will display a list of the queues of which the agent is a member. The tick box next to each indicates whether their membership of that queue is currently enabled. |

## 4.5.6 one-X Portal for IP Office Controls

If you are also a IP Office Customer Call Reporter agent, this gadget is displayed in the one-X Portal for IP Office. You can use it to see your current agent state and to change that state. You can also use it to change your membership status in the various IP Office Customer Call Reporter queues to which you belong.

The changes you make using the gadget, such as the time you spend in each agent state, will be included in the reports generated by the IP Office Customer Call Reporter. They can be seen by your IP Office Customer Call Reporter supervisor and can in some cases be overridden by the supervisor.




### Changing Your Agent State

The agent state shown is controlled both by you and by the telephone system. For example, after each call, your state can automatically change to ***After Call Work*** for a short period and then automatically change back to ***Available***. However, you can also change it when want. For example, when you have finished your after call work, you can manually change the state back to ***Available***.

- ***Available***
  In this state you are available to receive and answer queue calls when you are not already on a call. Note that this is different from the available presence status used by the one-X Portal for IP Office itself.
- ***After Call Work***
  Use this state after queue calls to perform actions such as completing call records. It is meant to be a temporary state and is automatically canceled by the telephone system after a time set by the system administrator.
- ***Busy Not Available***
  Select this state to remain logged in but stop receiving queue calls. You will be prompted to select a **Reason Code** for being in the Busy Not Available state from the set of codes available on the telephone system.

### Your Queues

The **My Hunt Groups** section displays the IP Office Customer Call Reporter queues of which you have been configured as a member. You can use the list to enable or disable your current membership. You only receive calls for queues for which your membership is currently enabled.

Note that the telephone system administrator is able to configure for which queues you can change your membership state. For some of the queues list the settings shown my be for information only for you. Disabling your membership of all your queues is reported in IP Office Customer Call Reporter as a special state called ***Present***.

The telephone system administrator can use the checkbox at the top of the list to enabled/disable your membership for all queues for which you are allowed to change your membership.

- **one-X Portal for IP Office Login**
  When you log in to one-X Portal for IP Office, you can use the **Login to phone** options on the one-X Portal for IP Office login menu to specify at which telephone you want to login, if you are not already logged in.
- **one-X Portal for IP Office Logout**
  For IP Office Customer Call Reporter agents, when you log out of one-X Portal for IP Office you are also automatically logged out of the telephone you were using.
- **one-X Portal for IP Office After Call Work**
  Using the **Agent Control** gadget, under **Agent State** select ***After Call Work***. The system can be configured to do this automatically after each queue call. To exit after call work status use the control to select ***Available***.
- **one-X Portal for IP Office Busy Not Available**
  Using the **Agent Control** gadget, under **Agent State** select ***Busy Not Available***. Under **Reason Codes** select the reason you want reported for the period you remain in the busy not available state. To exit busy not available status use the control to select ***Available***.
- **one-X Portal for IP Office Queue Membership Control**
  Select the Agent Control gadget and select/deselect the queues for which you want to enable/disable your queue membership. Note that the administrator can restrict for which queues you can change your membership state.

## 4.5.7 Phone Manager Controls

Phone Manager is an IP Office application that can be used by telephone users to display call information, control their telephone extension and to change many telephone settings.

- IP Office Customer Call Reporter does not support the **Blind Transfer** option provided by IP Office Phone Manager and IP Office Softphone. Agent's using Phone Manager or IP Office Softphone should use supervised transfers only.

Full details of Phone Manager operation are provided within that application's help. However there are a number of Phone Manager features specifically for call center agents.

- **Phone Manager Agent Login/Logout**
  For agents who hot desk 292, Phone Manager can be used to login 293 to the required telephone extension. When the user start Phone Manager, they enter the extension at which they want to login. When they close Phone Manager they are logged off.

- **Phone Manager Agent Mode**
  Phone Manager Pro users can select ***Agent Mode*** within the applications preferences. This enables a number of additional icons. Note that selection of this mode can be disabled by the IP Office maintainer. Note: In this mode, the F1 and F3 functions are swapped. F1 becomes 'account call' and F3 becomes 'make call'.

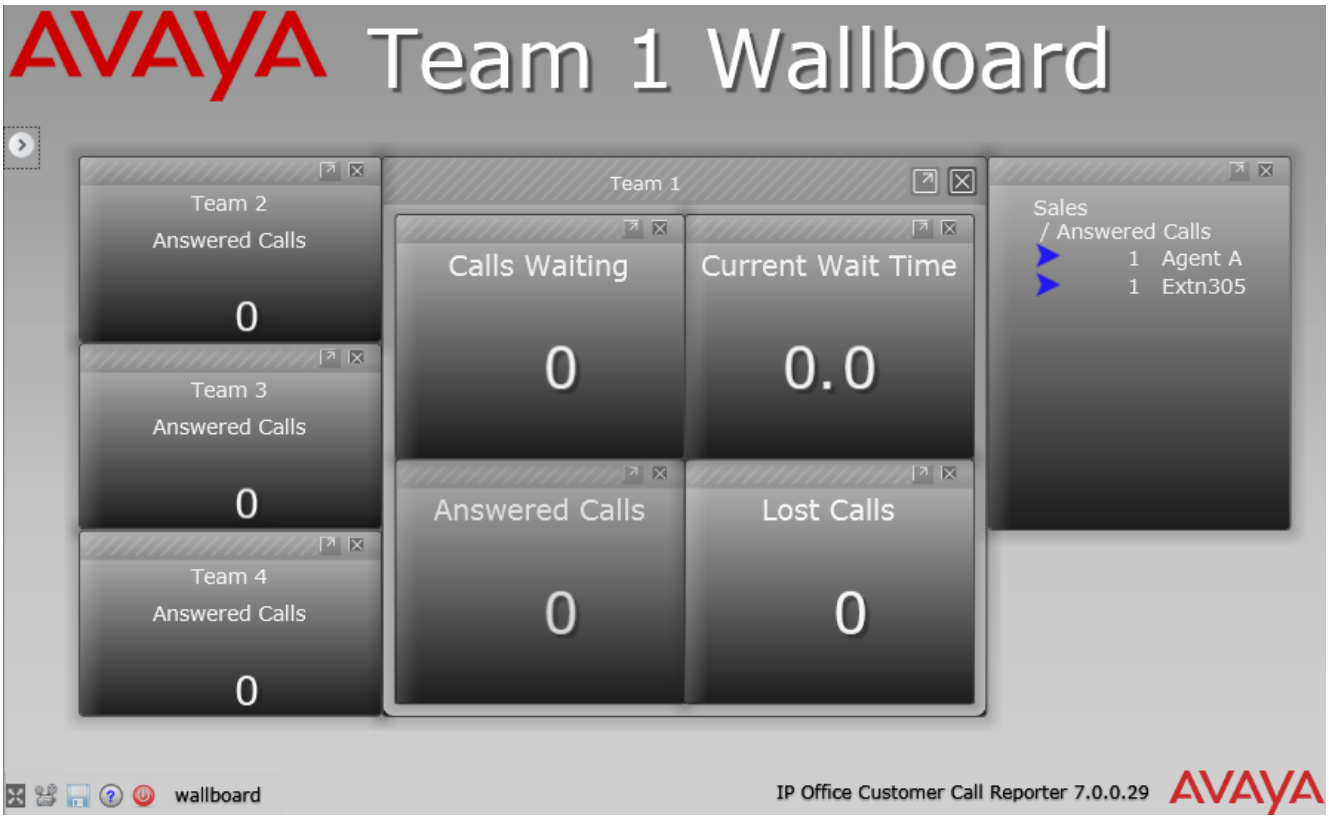
| | |
|---|---|
|  | **Busy Not Available** |
| | An agent can use this icon to select **Busy Not Available** 291 state with the default reason code 296 ***Busy Not Available***. The icon can also be used to exit the state. |
|  | **Busy Wrap Up** |
| | ***Busy Wrap Up*** is an agent state used by the IP Office CCC 292 application. It is not supported by IP Office Customer Call Reporter. The equivalent state for IP Office Customer Call Reporter is to report the agent as ***Present*** when their memberships of all the groups to which they belong are all disabled.<br>This is different from Wrap Up 300. |
|  | **Select Group** |
| | This icon will display a list of the queues of which the agent is a member. The tick box next to each indicates whether their membership of that queue is currently enabled. |

# Chapter 5. Wallboard

# 5. Wallboard

The IP Office Customer Call Reporter administrator can create wallboard accounts. When logged in with one of these accounts, the browser can be used to display queue statistics for any queues plus other information such as messages sent or scheduled by IP Office Customer Call Reporter supervisors.

IP Office Customer Call Reporter supports up to 30 wallboards. However the maximum number of wallboards that can be logged in at any time is controlled by the number of available Supervisor licenses (each license enables a simultaneous Supervisor login and Wallboard login).



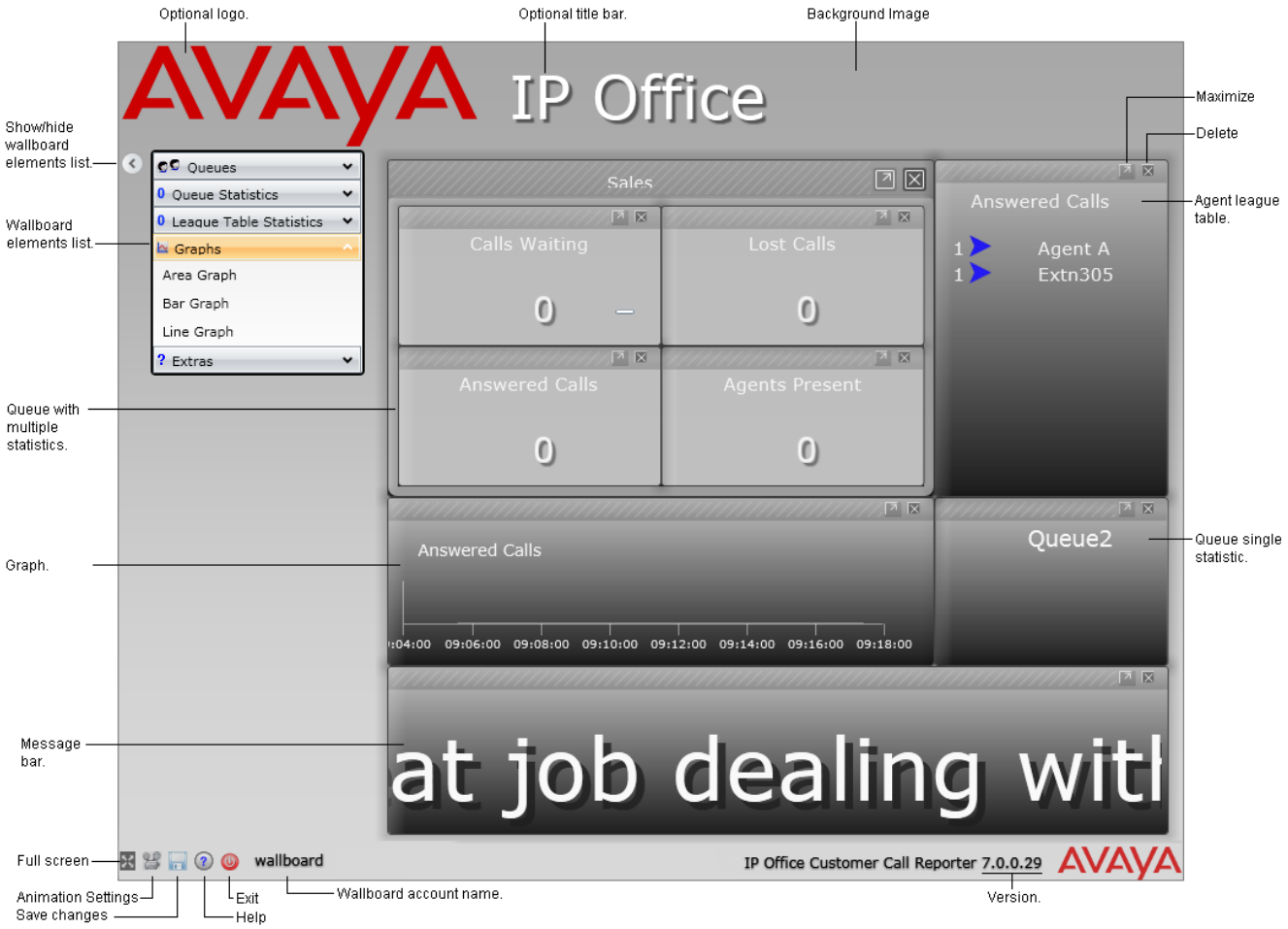

*Example web client when logged in as a wallboard.*

| Use a Wallboard Account | | |
|---|---|---|
| • Create a Wallboard Account 125 | • Add a League Table 136 | • Add a Graph 141 |
| • Log in a Wallboard 127 | • Add a Logo 137 | • Add a message bar 143 |
| • Edit the wallboard 129 | • Add a Title Bar 139 | • Send a message 144 |

- **Microsoft Silverlight**
  The IP Office Customer Call Reporter wallboard and customer map functions use Silverlight. When logging in at a computer without Silverlight installed, if the computer has access to the internet, you will be prompted to install Silverlight. If the computer does not have access to the internet, Silverlight must be installed manually. Full details of Silverlight and the browsers on which it is supported can be obtained at http://www.microsoft.com/silverlight.
  - For the display features to operate smoothly, especially when a large number of rapidly changing statistics are being displayed, use a dedicated graphics card in your computer rather than an integrated graphics card provided on the motherboard. The required minimum specification is a DirectX 9.0c or above compatible graphics card for GPU hardware acceleration via DirectDraw with 1GB or greater video memory. Support for 60Hz or greater refresh rate at the chosen resolution, for both card and monitor.

# 5.1 Wallboard Elements and Controls

The wallboard display is edited directly through the browser to add or remove the elements required.



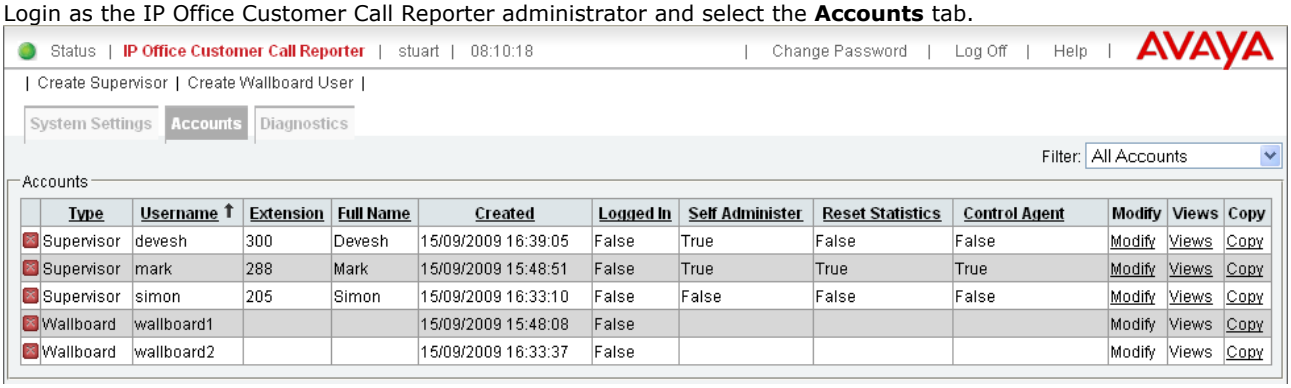

Each wallboard can contain the following different types of elements:

- **Logo** 137
  You can display a logo image at the top of the wallboard.
- **Title** 139
  You can display a title at the top of the wallboard.
- **Queue Statistics** 130
  Statistics for any IP Office Customer Call Reporter queues can be added to a wallboard. These can be grouped in sets or added individually. Individual warning and alarm settings can be applied to each statistic added.
- **Message Bar** 143
  Message bars can be added to scroll messages across the wallboard display. The messages are scheduled and sent to the wallboard 144 by IP Office Customer Call Reporter supervisors.
- **League Table** 136
  League tables of the top and bottom performing agents in a queue can be added to the wallboard.
- **Graphs** 141
  Selected queue statistics can be displayed in graphs.
- **Background Image** 132
  The image shown in the wallboard background can be customized.

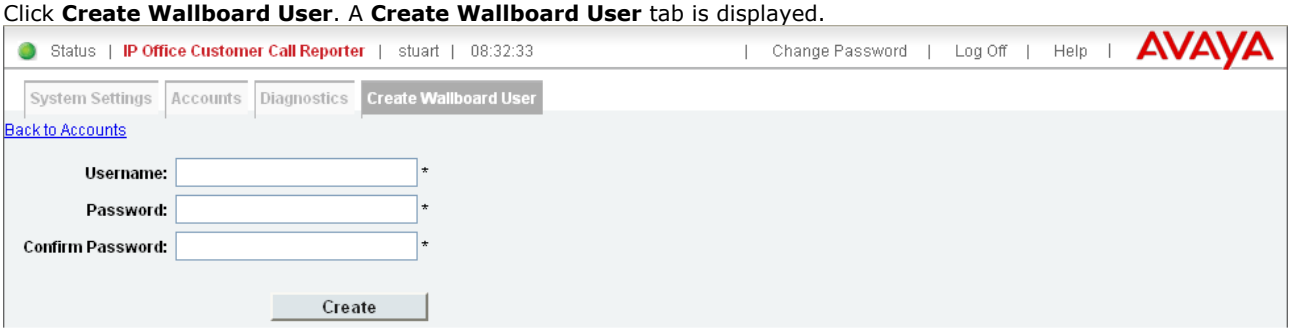
# 5.2 Creating Wallboard Accounts

To create a wallboard account you must login as the IP Office Customer Call Reporter administrator 159.

1. Login as the IP Office Customer Call Reporter administrator and select the **Accounts** tab.




2. Click **Create Wallboard User**. A **Create Wallboard User** tab is displayed.

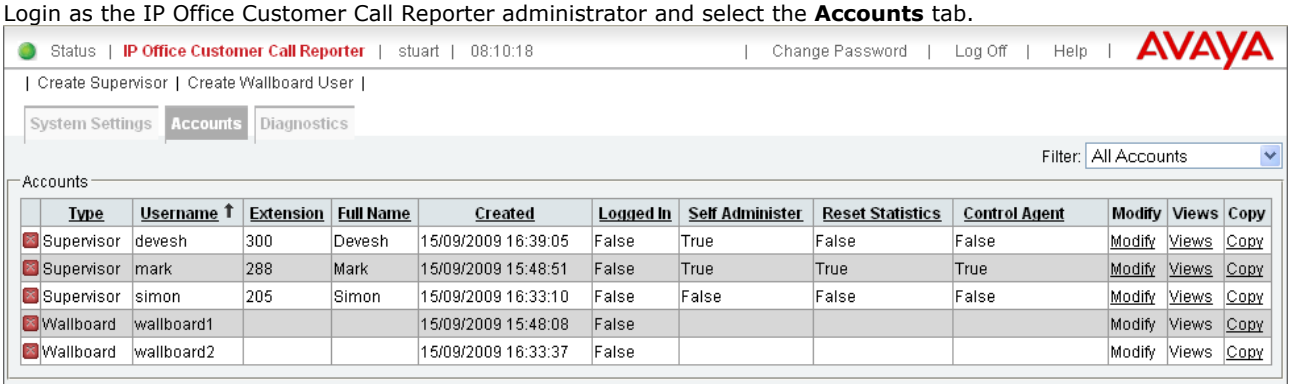



3. Enter the details for the account and click **Create**. Note that * indicates a mandatory field that must be completed.
4. Log off and then login using the wallboard account 127 details to verify account operation.
5. Once logged in using the wallboard account you can edit the wallboard view 129.

# 5.3 Changing a Wallboard Account

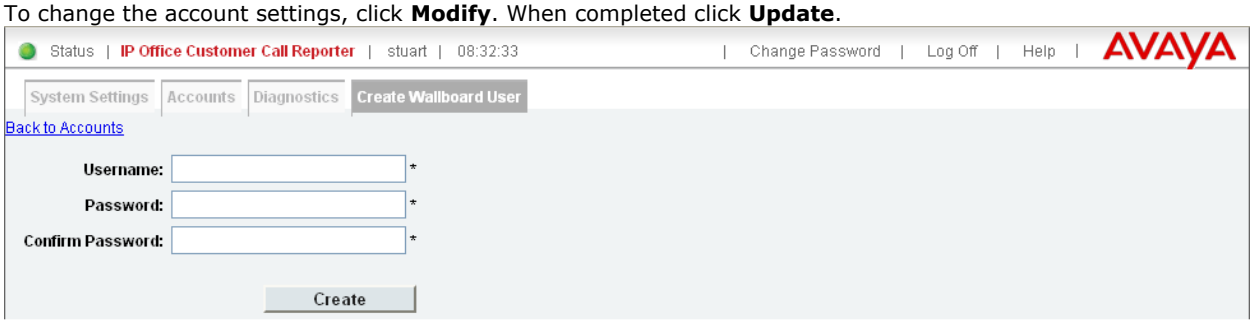
To edit a wallboard account you must login as the IP Office Customer Call Reporter administrator 159.

1. Login as the IP Office Customer Call Reporter administrator and select the **Accounts** tab.




| Type | Username | Extension | Full Name | Created | Logged In | Self Administer | Reset Statistics | Control Agent | Modify | Views | Copy |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Supervisor | devesh | 300 | Devesh | 15/09/2009 16:39:05 | False | True | False | False | Modify | Views | Copy |
| Supervisor | mark | 288 | Mark | 15/09/2009 15:48:51 | False | True | True | True | Modify | Views | Copy |
| Supervisor | simon | 205 | Simon | 15/09/2009 16:33:10 | False | False | False | False | Modify | Views | Copy |
| Wallboard | wallboard1 | | | 15/09/2009 15:48:08 | False | | | | Modify | Views | Copy |
| Wallboard | wallboard2 | | | 15/09/2009 16:33:37 | False | | | | Modify | Views | Copy |

- To delete an account click the icon on the left of the account name.
- To change the account settings, click **Modify**. When completed click **Update**.



# 5.4 Logging In

An IP Office Customer Call Reporter wallboard account is accessed by web browser in the same way as other IP Office Customer Call Reporter roles.

## Computer/Browser Requirements

In addition to the normal IP Office Customer Call Reporter browser and computer requirements14, the following apply for accessing an IP Office Customer Call Reporter wallboard.

- **Microsoft Silverlight**
  The IP Office Customer Call Reporter wallboard and customer map functions use Silverlight. When logging in at a computer without Silverlight installed, if the computer has access to the internet, you will be prompted to install Silverlight. If the computer does not have access to the internet, Silverlight must be installed manually. Full details of Silverlight and the browsers on which it is supported can be obtained at http://www.microsoft.com/silverlight.
  - For the display features to operate smoothly, especially when a large number of rapidly changing statistics are being displayed, use a dedicated graphics card in your computer rather than an integrated graphics card provided on the motherboard. The required minimum specification is a DirectX 9.0c or above compatible graphics card for GPU hardware acceleration via DirectDraw with 1GB or greater video memory. Support for 60Hz or greater refresh rate at the chosen resolution, for both card and monitor.
- Before running a wallboard on a computer, switch off the computer's screen saver and any monitor power saving modes.
- Unlike other IP Office Customer Call Reporter login accounts, a wallboard login does not automatically expire after the **Session Expiration Minutes** set by the IP Office Customer Call Reporter administrator.

## Logging In to a Wallboard

1. Using a browser, enter the path to the IP Office Customer Call Reporter web service - ***http://<server_path>/CCRWebClient***. The login window should be displayed.




2. Enter the **Username** and **Password** for a wallboard account.
3. If you want the IP Office Customer Call Reporter web client to run in a different language, you can use the **Language** drop down to select a language from the list.

   Supported languages are ***Dutch***, ***English (UK)***, ***English (US)***, ***French***, ***German***, ***Italian***, ***Brazilian Portuguese***, ***Russian*** and ***Spanish***. Some parts of customer call maps are third party components delivered over the internet and may run in different languages, for example the zoom and pan controls.
4. Click **Logon**.

## 5.5 Logging Out

Unlike other IP Office Customer Call Reporter login accounts, a wallboard login does not automatically expire after the **Session Expiration Minutes** set by the IP Office Customer Call Reporter administrator. However, to access the wallboard in a different role, you must log out from the wallboard.

### Logging Out of a Wallboard

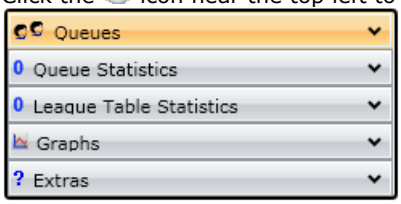
1. If the wallboard is currently running full screen, click the  icon in the bottom left of the wallboard.
2. To log out a wallboard click  shown in the bottom left of the wallboard.

# 5.6 Editing a Wallboard View

The icon on the left is used to show and hide a list of items that can be added to a wallboard.

## Adding Elements to a Wallboard

1. Log in using the wallboard account.
2. Click the icon near the top left to display the list of items that can be added to a wallboard.




3. Click and drag the items required to the view area. As items are added, the existing items will automatically reposition and resize themselves.

- **Logo** 137
  You can display a logo image at the top of the wallboard.
- **Title** 139
  You can display a title at the top of the wallboard.
- **Queue Statistics** 130
  Statistics for any IP Office Customer Call Reporter queues can be added to a wallboard. These can be grouped in sets or added individually. Individual warning and alarm settings can be applied to each statistic added.
- **Message Bar** 143
  Message bars can be added to scroll messages across the wallboard display. The messages are scheduled and sent to the wallboard 144 by IP Office Customer Call Reporter supervisors.
- **League Table** 136
  League tables of the top and bottom performing agents in a queue can be added to the wallboard.
- **Graphs** 141
  Selected queue statistics can be displayed in graphs.

4. To change the settings of an item click it and select **Settings**.
5. To hide the list of items click the icon.
6. To save the wallboard settings click the icon at the bottom left of the wallboard.

## Editing Settings

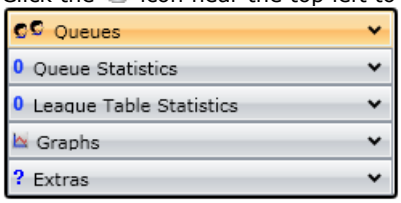
1. Click the area or element of the graph that you want to edit. In the menu that is displayed click **Settings**. and edit the settings as required.
2. To hide the settings, close the settings menu by clicking the icon.
3. Click the icon to save the wallboard settings.

## Deleting Elements from a Wallboard

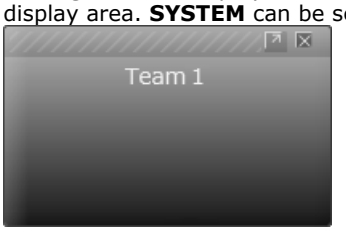
To delete an element from the wallboard click the **X** icon at its top-right. For some elements the X icon is not shown until you first click the element.

# 5.7 Adding Queues and Queue Statistics

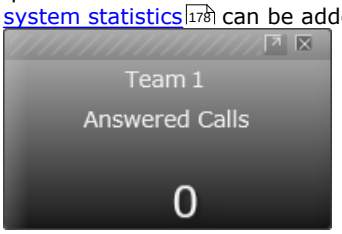
1. Click the icon near the top left to display the list of items that can be added to a wallboard.



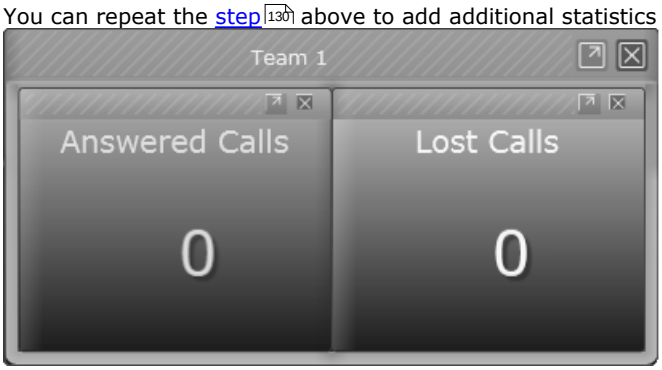

2. Click **Queues** to display a list of the available queues. Click and drag the required queue over to the wallboard display area. **SYSTEM** can be selected to display combined statistic values for all queues and agents.



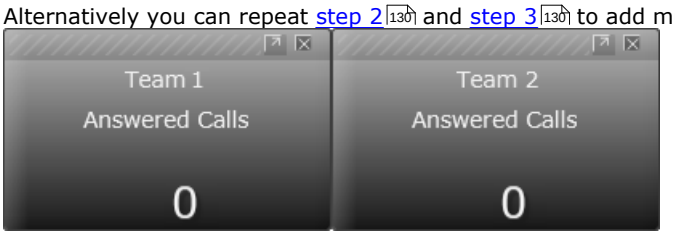

3. Click **Queue Statistics** to display a list of available statistics. Click and drag the required statistic over onto the queue container. If the **SYSTEM** queue was added to the wallboard, only those statistics that are supported as system statistics 178 can be added.




4. You can repeat the step 130 above to add additional statistics to the queue container.




5. Alternatively you can repeat step 2 130 and step 3 130 to add multiple queue containers each with a single statistic.




6. To hide the list of items again click the icon.
7. To save the wallboard settings click the icon at the bottom left of the wallboard.

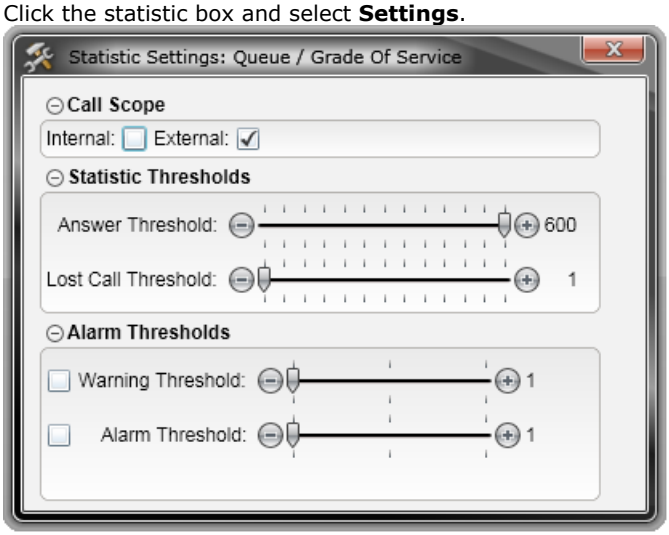
# 5.8 Editing Statistic Settings

For many of the statistics, you can select what types of calls should be included in the statistic. You can also set whether the statistic should indicate warnings or alarms when its value passes the thresholds that you set.

Alarms and warning settings are not applicable to ***SYSTEM*** statistic values.

## Statistic Settings

1. Click the statistic box and select **Settings**.




- The options available will vary according to the type of statistic. For details of the individual statistics refer to the Statistics 176 section. Some statistics have no settings in which case the menu will be blank.
- In the **Call Scope** section, if available, select the type of calls that should be included in the statistic.
- In the **Statistic Thresholds** section, if available, set the thresholds for calls included in the statistic.

**Answer Threshold:** *Default = 600 seconds, Range = 1 to 600 seconds.*
Used for statistics calculated as a percentage of calls answered within the set time out of all calls presented. Sets the target time for calls to be answered from when they are first presented to the queue or agent. Note that for agents, calls are only presented for the queue's no answer time before being presented to the next agent. Note that this setting is shared between the **Agent Productivity** 180, **Average Answer %** 198 and **Grade of Service** 207 statistics in the same monitor or wallboard view.

- **Lost Calls Threshold:** *Default = 1 second, Range = 1 to 600 seconds***.**
  Lost calls are calls where the caller disconnects before the call is answered. This threshold sets the minimum time in seconds for a call to be available to be answered before it will be counted as lost. Lost calls are not included in the calculation of this statistic. Note that this setting is shared between the **Agent Productivity** 180 and **Grade of Service** 207 statistics in the same monitor or wallboard view.
  - In the **Alarm Thresholds** section, select whether you want the statistic to include a warnings and or alarms. If either is selected, use the slider to adjust the threshold levels at which it occurs.
    - Warnings are shown by the statistic background color changing to yellow.
    - Alarms are show by the statistic background color changing to red.

2. To hide the settings, close the settings menu by clicking the  icon.
3. Click the  icon to save the wallboard settings.

## Changing the Displayed Name

The queue and statistic names displayed can be edited without affecting the operation of the element. Click the existing text and enter the required name.

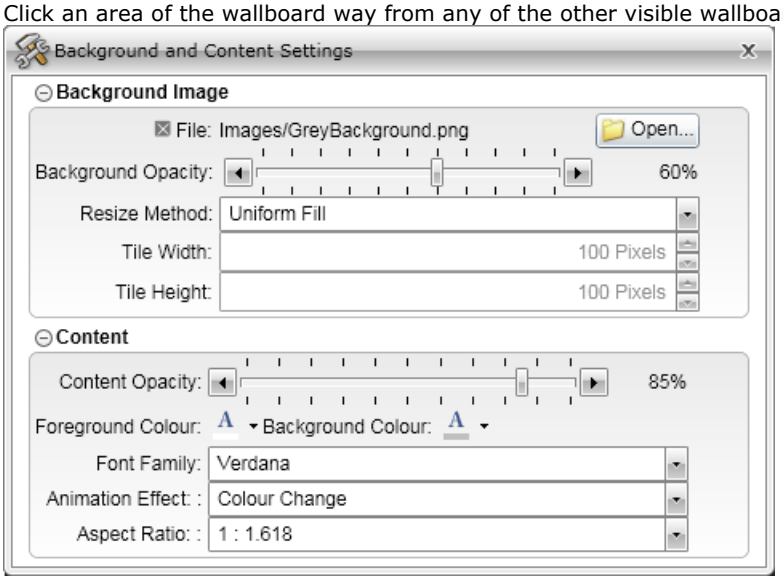
# 5.9 Changing the Background Image

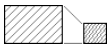
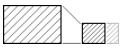
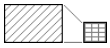
The background of the wallboard is an image file which can be replaced with a file of your choice.

### Tip

- The default uniform grey background does not distract from the information displayed. If you change the default background image, select an image that is not distracting.

1. Click an area of the wallboard way from any of the other visible wallboard elements and then click **Settings**.




- The **Background Image** section contains the settings for the image file.
  - To load an image file click **Open** and browse to the image that you want to use. The selected file is copied from its location to the IP Office Customer Call Reporter server.
  - To change how the image is resized when the wallboard is resized select the required **Resize Method**.
    - **Fill** 
      If this method is selected, the image size is change so that both its height and width fit the space provided for it on the wallboard. This means that the image's original ratio between height and width is not maintained but the image fits the full display area.
    - **Uniform** 
      If this method is selected, the image size is changed, maintaining its original ratio between height and width, until both fit within the space provided for it on the wallboard. This method means that some blank space is left along either the horizontal or vertical edges.
    - **Uniform Fill** 
      If this method is selected, the image size is changed, maintaining its original ratio between height and width, until one of them fits the space provided for it on the wallboard. This means that some part of the image (at the bottom or the right) is cropped.
    - **Tiled** 
      If this method is selected, the image is resized using the **Tile Width** and **Tile Height** settings. The space provided for the image on the wallboard is then filled with multiple copies of the image at that size.
  - Use the **Background Opacity** slider to change the transparency applied to the image.
  - To delete the existing image click the **X** icon. When there is no image loaded the general background of the wallboard is white.
2. To hide the settings, close the settings menu by clicking the  icon.
3. Click the  icon to save the wallboard settings.

# 5.10 Changing the General Colors and Font

The background and font colors used for the elements added to the wallboard can be changed. The same colors are used for all elements added to the wallboard. The exception is the general background which uses an image file or is white[132].

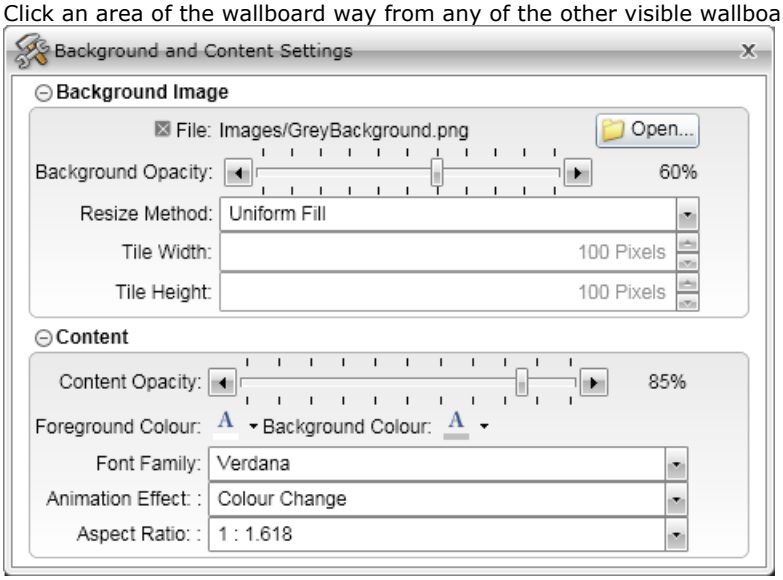
These settings are for the general font and colors used. Some wallboard elements, for example the title bar[139], have their own specific settings for fonts and colors that can be set to differ from the general settings.

### Tip

- The choice of font and contrast colors between the foreground and background content are important. A fatter font and vivid color provide high visibility at distance. For example use Verdana, neon green (#FF00FF00) foreground and charcoal grey (#FF595959) background.
- Warnings and alarms cause statistics shown in the wallboard to turn orange or red respectively. So, use such colors for the background and foreground that the content can be red in case of a warning or an alarm.
- A high opacity, for example greater than 90% improves the readability of the wallboard. However a low value, for example 60%, makes is easier to see the highlighted element while editing a wallboard. Therefore it is useful to select a low opacity while editing and return it to a high value when finished.
- If the wallboard doesn't show an opacity change, save it and then refresh or restart the browser.

### General Font and Color Settings

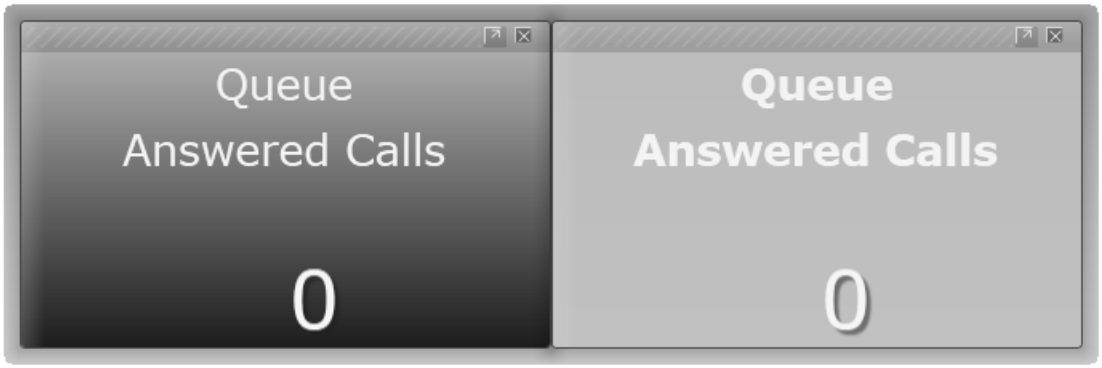
1. Click an area of the wallboard way from any of the other visible wallboard elements and then click **Settings**.




   - The **Content** section contains the general color and font settings for the wallboard elements:
     - Use the **Content Opacity** slider to change the transparency applied to the wallboard elements.
     - To change the font color, click the down arrow shown after **Foreground Color** and select the color required.
     - To change the background color used for the element shading click the down arrow shown after **Background Color** and select the color required.
     - To select the font used for most wallboard elements can be selected in the **Font Family** drop down. The font size is adjusted automatically.
       - The fonts available for use are restricted to those widely supported by web browsers. These are: ***Arial***, ***Arial Black***, ***Comic Sans MS***, ***Courier New***, ***Lucida Grande***, ***Times New Roman***, ***Trebuchet MS*** and ***Verdana***.
     - The **Animation Effect** is applied to statistic values while it changes. If no animation effect is required select ***None***.
     - You can use the **Aspect Ratio** setting to control the ratio between the height and width used to display the wallboard elements (excluding the logo and title bar which always occupy the top of the display).
2. To hide the settings, close the settings menu by clicking the  icon.
3. Click the  icon to save the wallboard settings.

## 5.11 Changing the Background Style of Elements

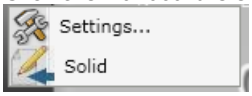
By default each element uses a shading style based on the background color selected above. This can be changed to a solid background if required.




### Tip

- Depending on the colors selected for the content foreground and background, using a solid background instead of a shaded background may make it easier to read the data from a distance.

1. Click the wallboard element.




2. From the menu click **Solid** to change the setting between a solid or a shaded background. The option is ticked if it is currently enabled.

# 5.12 Moving and Arranging Elements

As you add or delete elements from the wallboard, the existing elements are automatically moved and resized. Except for the logo and title bar elements which have fixed positions, you can also grab and move existing elements.

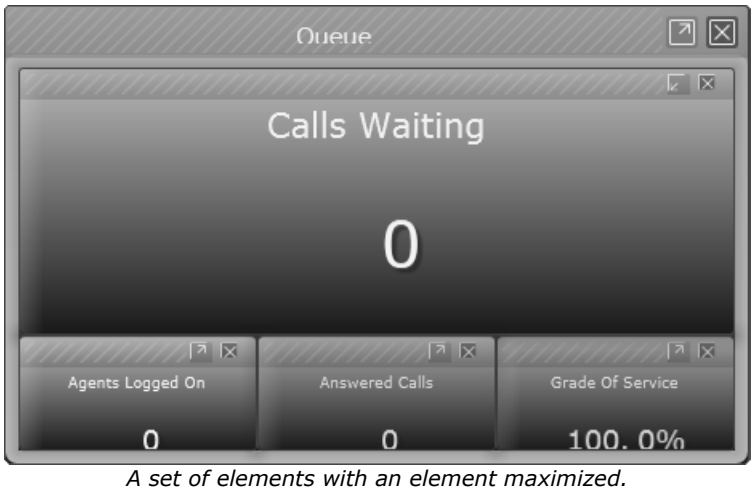
To move an element, click the element's title bar and drag it to the required position. The position of other elements will be adjusted also.

## Maximizing Elements

Within a set of elements, one of the elements can be set to be maximized by clicking on the up arrow at the top right of the element. When you do this, the element is enlarged and any element that is already maximized returned to it normal size. You can also return an element to its normal size by clicking on the down arrow at its top right.




*A set of elements with none maximized.*



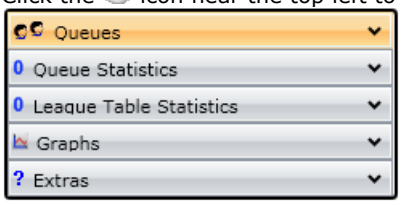

*A set of elements with an element maximized.*

# 5.13 Adding a League Table

For a selected queue, the performance of the agents in that queue against a selected agent statistic can be displayed as a league table. Either the top, the bottom or a combination of the top and bottom performers can be displayed. The actual number of agents included in the display varies depending on the wallboard display area available.

## Adding the League Table to the Wallboard

1. Click the icon near the top left to display the list of items that can be added to a wallboard.

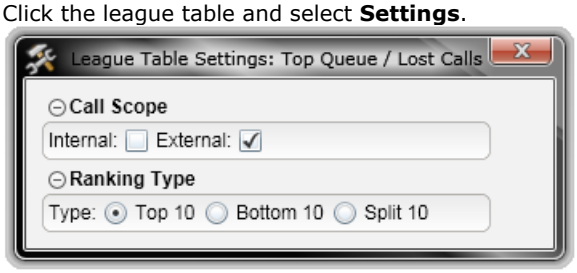



2. Click **League Table Statistics** to display the list of agent statistics that can be used in a league table. Click and drag the required statistic to the wallboard display area. A box for the league table will be added to the display.
3. Click **Queues** to display the list of queues. Click and drag the queue whose agents you want show over onto the league table.
4. To hide the list of items again click the icon.
5. To save the wallboard settings click the icon at the bottom left of the wallboard.

## Editing the League Table Settings

You can select whether the league table should display the top, bottom or a combination of the top and bottom performers in the queue.

1. Click the league table and select **Settings**.




- Depending on the agent statistic being tracked by the league table, the **Call Scope** section may be available. If it is, use the settings to select what types of calls should be included in the statistic.
- Use the **Ranking Type** section to select the type of league table.
  - **Top 10**
    Show the top 10 agents for the selected statistic.
  - **Bottom 10**
    Show the bottom 10 agents for the selected statistic.
  - **Split 10**
    Show the top 5 and the bottom 5 agents for the selected statistic.

2. To hide the settings, close the settings menu by clicking the icon.
3. Click the icon to save the wallboard settings.

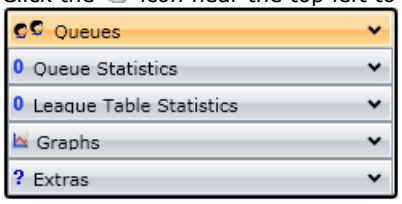
# 5.14 Adding and Editing the Logo

You can add a logo image to the top right of the wallboard. If the wallboard includes a title, the logo and title are positioned adjacent to each other across the top of the wallboard.

## Adding the Logo to the Wallboard

Each wallboard can include only one title bar. The title bar is always positioned above any other elements added to the wallboard and to the right of the logo if also added.

1. Click the icon near the top left to display the list of items that can be added to a wallboard.

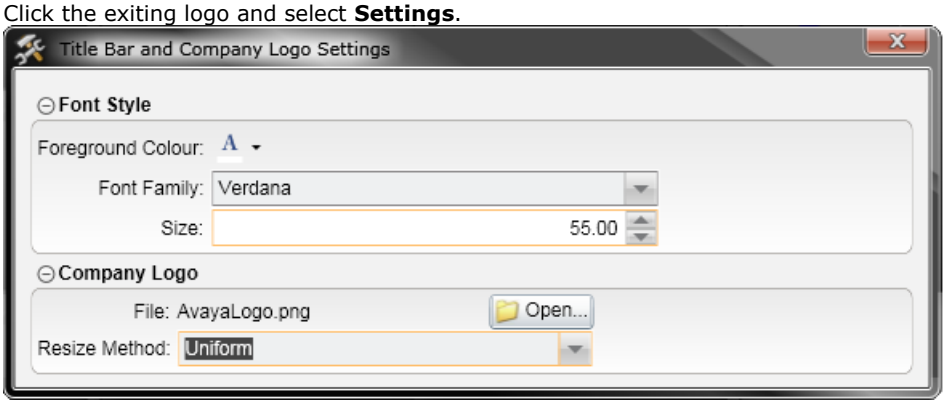



2. Click **Extras** to display the list of items which includes the **Company Logo** element.
3. Click and drag the **Company Logo** element to the display area.
4. To hide the list of items again click the icon.
5. To save the wallboard settings click the icon at the bottom left of the wallboard.

## Editing the Logo Image Settings

You can change the image used for the logo and how it is resized when the wallboard size is changed.

1. Click the exiting logo and select **Settings**.




- In the **Company Logo** section:
  - To load an image file click **Open** and browse to the image that you want to use. The selected file is copied from its location to the IP Office Customer Call Reporter server.
  - To change how the image is resized when the wallboard is resized select the required **Resize Method**.
    - **Fill**
      If this method is selected, the image size is change so that both its height and width fit the space provided for it on the wallboard. This means that the image's original ratio between height and width is not maintained but the image fits the full display area.
    - **Uniform**
      If this method is selected, the image size is changed, maintaining its original ratio between height and width, until both fit within the space provided for it on the wallboard. This method means that some blank space is left along either the horizontal or vertical edges.
    - **Uniform Fill**
      If this method is selected, the image size is changed, maintaining its original ratio between height and width, until one of them fits the space provided for it on the wallboard. This means that some part of the image (at the bottom or the right) is cropped.
    - **Fixed**
      If this method is selected, the image size is not changed. Instead the display area provided for it on the wallboard is changed.

2. To hide the settings, close the settings menu by clicking the icon.

3. Click the icon to save the wallboard settings.

### Removing the Logo

1. Click the existing logo image. It will become outlined by a box. Click the **X** icon at the top-right of the outline.
2. Click the icon to save the wallboard settings.

# 5.15 Adding and Editing the Title Bar

A title can be added to the top of the wallboard. You can then adjust the font style, size and color used for the title. If the wallboard includes a logo, the logo and title are positioned adjacent to each other across the top of the wallboard.

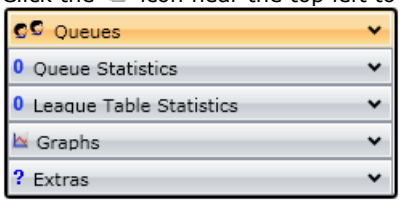
### Tip

- The title bars height is determined automatically, based partially on the selected font size. There is a point at which reducing the font size will have no further effect on the title bar height. At this point, there is no need to use a smaller font.

## Adding the Title to the Wallboard

Each wallboard can include only one title bar. The title bar is always positioned above any other elements added to the wallboard and to the right of the logo if also added.

1. Click the icon near the top left to display the list of items that can be added to a wallboard.




2. Click **Extras** to display the list of items which includes the **Title Bar** element.
3. Click and drag the **Title Bar** element to the display area.
4. To hide the list of items again click the icon.
5. To save the wallboard settings click the icon at the bottom left of the wallboard.

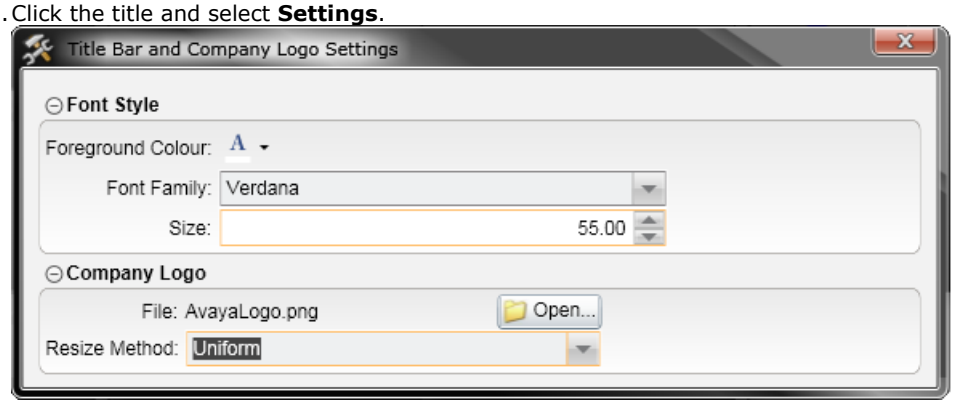
## Editing the Wallboard Title

1. Click the existing title area. It will become outlined by a box.
2. Click the existing text to display a cursor. Edit or enter the title text required.
3. Click elsewhere on the wallboard.
4. To save the wallboard settings click the icon at the bottom left of the wallboard.

## Editing the Title Bar Settings

You can adjust the speed and direction of scrolling applied to the messages that the wallboard displays. You can also select the font and limit the font sizes.

1. Click the title and select **Settings**.




- In the **Font Style** section, select the font, font color and font size. The size of the title is automatically adjusted to fit the wallboard.
    - The fonts available for use are restricted to those widely supported by web browsers. These are: ***Arial***, ***Arial Black***, ***Comic Sans MS***, ***Courier New***, ***Lucida Grande***, ***Times New Roman***, ***Trebuchet MS*** and ***Verdana***.

2. To hide the settings, close the settings menu by clicking the icon.
3. Click the icon to save the wallboard settings.

### Removing the Title Bar

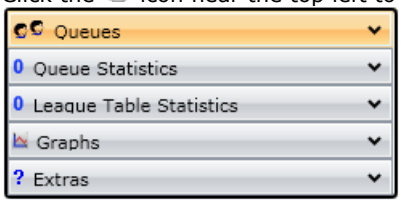
1. Click the existing title. It will become outlined by a box. Click the **X** icon at the top-right of the outline.
2. Click the  icon to save the wallboard settings.

# 5.16 Adding and Editing Graphs

Queue statistics can be displayed as graphs showing the statistic value changing over time. Each graph only shows one statistics for one queue, however you can add multiple graphs.

## Adding a Graph

1. Click the icon near the top left to display the list of items that can be added to a wallboard.



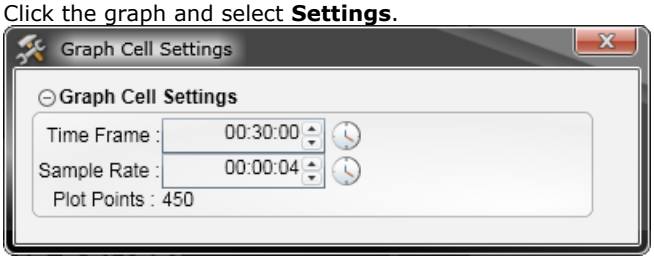

2. Click Graphs to display the list of the different types of graphs available. Current options are ***Area Graph***, ***Bar Graph*** and ***Line Graph***. Click and drag the required type of graph onto the wallboard display area.
3. Click **Queues** to display the list of queues. Click and drag the queue for which you want to plot a statistic onto the graph.
4. Click **Queue Statistics** to display the list of queue statistics. Click and drag the required statistic over onto the graph.
5. To hide the list of items again click the icon.
6. To save the wallboard settings click the icon at the bottom left of the wallboard.

## Changing a Graphs Contents

1. Using the same method as for adding a graph, simply drag a different queue or queue statistic onto an existing graph to change its contents.

## Editing the Graph Settings

1. Click the graph and select **Settings**.



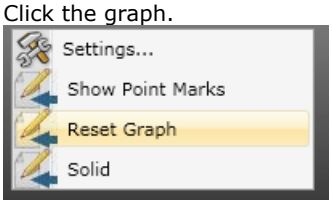

- The **Time Frame** setting sets the maximum length of time (hours:minutes:seconds) that should be included in the graph as data is added.
- The **Sample Rate** sets how often (hours:minutes:seconds) the graph should be updated.
- The **Plot Points** value indicates how many points will be used to plot the complete graph using the two settings above. The maximum possible is 500 plot points or for bar graphs 30 bars. The range of selectable values for **Time Frame** and **Sample Rate** above will adjust according to the current value of the other and vice versa.

2. To hide the settings, close the settings menu by clicking the icon.
3. Click the icon to save the wallboard settings.

### Resetting a Graph

The current data in a graph can be cleared without having to remove the graph or restart the wallboard.

1. Click the graph.

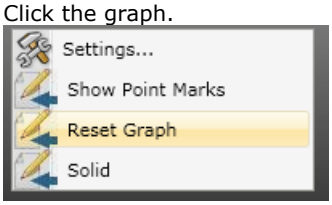



2. From the menu displayed select **Reset Graph**.

### Show/Hide Plot Points

In addition to plotting a line or solid area, the individual data points can be shown on the graph or hidden.

1. Click the graph.




2. From the menu displayed select **Show Point Marks**. The option is ticked if it is currently enabled.

## 5.17 Running the Wallboard Full Screen

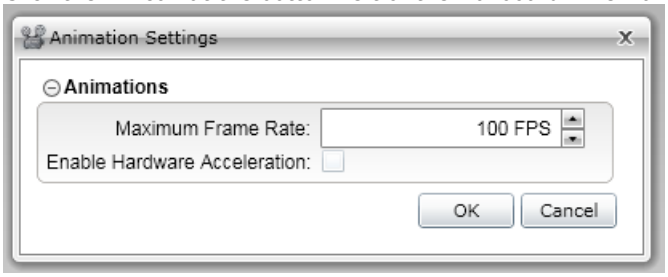
To run the wallboard full screen click the icon at the bottom left of the wallboard. Note that while running in full screen mode, some controls cannot be accessed, for example the help and exit icons.

To exit full screen mode, either press ***Esc*** or click the icon again.

## 5.18 Changing the Animation Settings

Silverlight is used by the IP Office Customer Call Reporter wallboard and the customer call map features can be used to control the frame rate and change other settings.

1. Click the icon at the bottom left of the wallboard. The wallboard animation settings are displayed.




- **Maximum Frame Rate**
  This options sets the maximum frame rate that the wallboard can use. This can be used to limit the maximum CPU usage. It does not set the actual current frame rate which depends on both the wallboard content and on other processes being performed by the wallboard computer.
- **Enable Hardware Acceleration**
  This option is grayed out if not supported by the wallboard computer. If supported it is enabled by default. Note that for some wallboard computers, for example MACs, this settings only has an effect when running the wallboard in full-screen mode 142.

2. Click **OK** to save any changes.

# 5.19 Adding and Editing a Message Bar

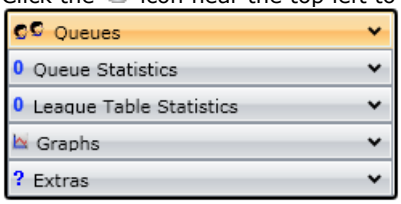
When a wallboard includes a message bar, IP Office Customer Call Reporter supervisors can send messages to it or schedule messages 144 to be sent in the future.

### Tip

- The message bar is always as wide as the width of the entire queues shown on the wallboard. If only one or two queues are needed, the message bar will be more useful if the queues and their stats are added as rows.

## Adding the Message Bar to the Wallboard

1. Click the icon near the top left to display the list of items that can be added to a wallboard.

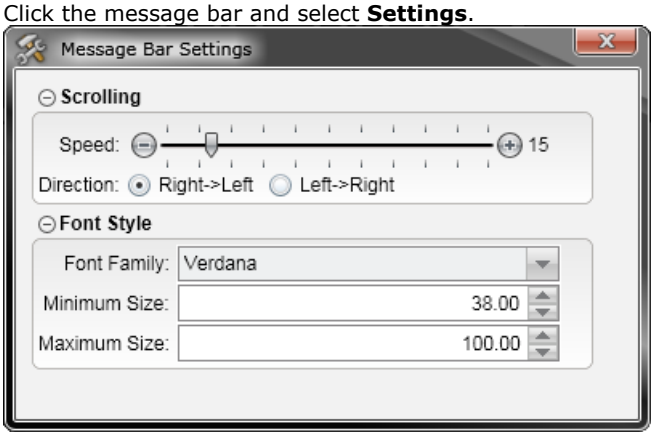



2. Click **Extras** to display the list of items which includes the **Message Bar** element.
3. Click and drag the **Message Bar** element to the display area.
4. To hide the list of items again click the icon.
5. To save the wallboard settings click the icon at the bottom left of the wallboard.

## Editing the Message Bar Settings

You can adjust the speed and direction of scrolling applied to the messages that the wallboard displays. You can also select the font and limit the font sizes.

1. Click the message bar and select **Settings**.



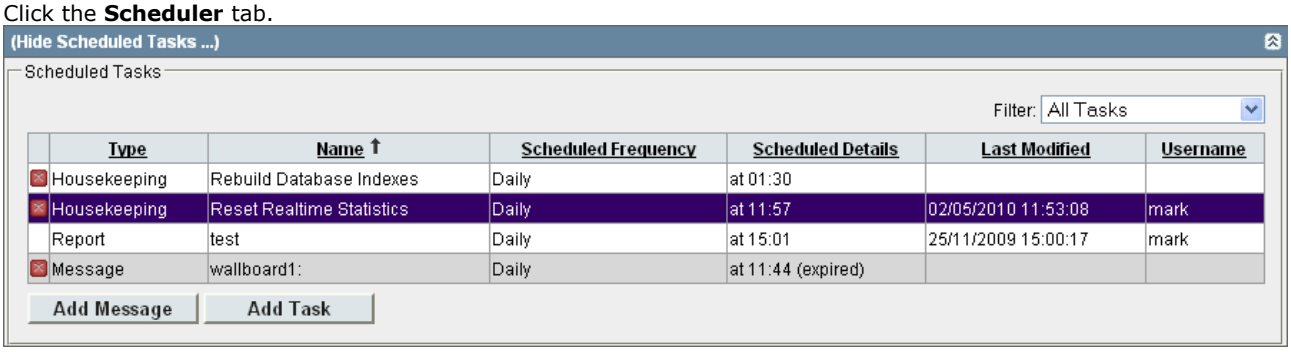

- In the **Scrolling** section select the direction of scrolling required and use the slider to adjust the speed.
- In the **Font Style** section select the font to use and the size limits. The size of the message bar is automatically adjusted to fit the wallboard and the font size within the message bar is also automatically adjusted unless it reaches one of the limits set here.
    - The fonts available for use are restricted to those widely supported by web browsers. These are: ***Arial***, ***Arial Black***, ***Comic Sans MS***, ***Courier New***, ***Lucida Grande***, ***Times New Roman***, ***Trebuchet MS*** and ***Verdana***.

2. To hide the settings, close the settings menu by clicking the icon.
3. Click the icon to save the wallboard settings.

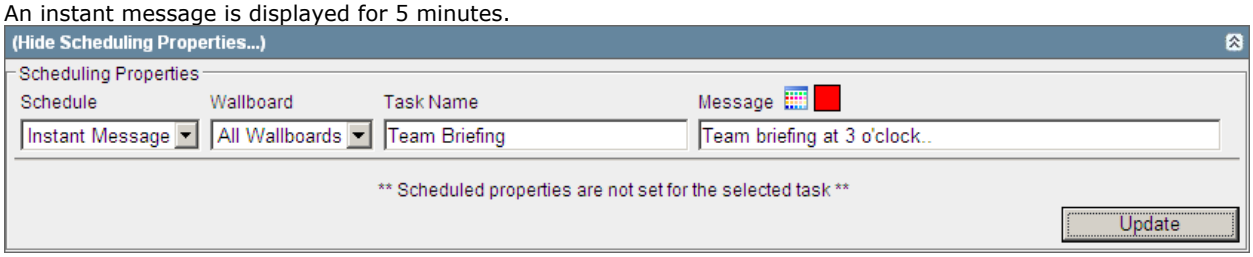
# 5.20 Sending Wallboard Messages

You can schedule messages to be sent to any wallboard. Alternatively you can send an immediate message that will be displayed for 5 minutes. When there are multiple messages scheduled for a wallboard, the messages are appended to each other as they are scrolled across the wallboard.

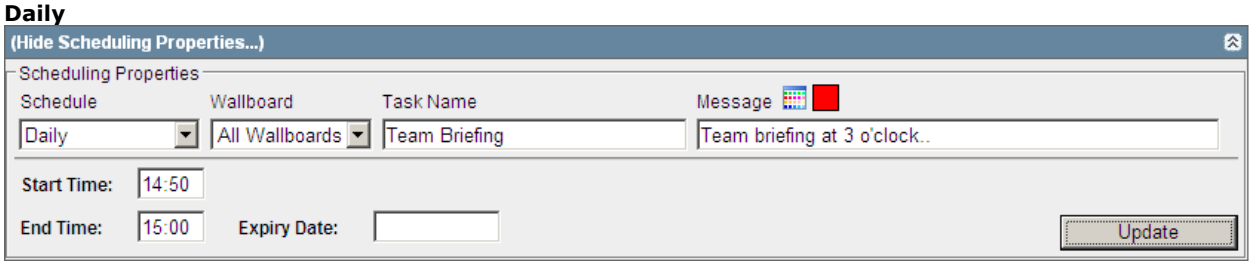
1. Click the **Scheduler** tab.



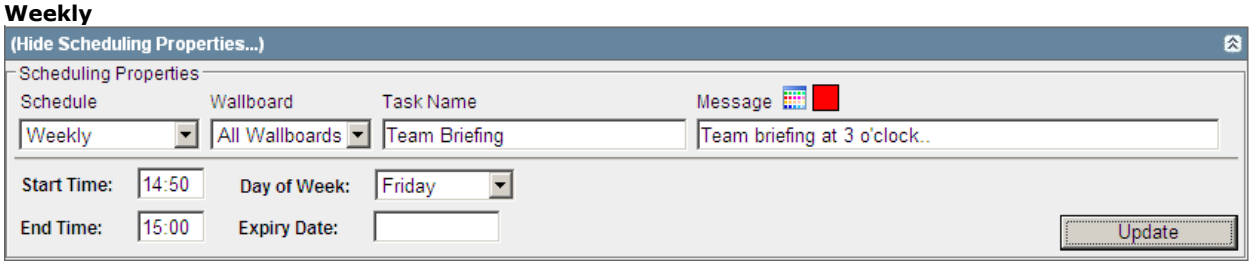

2. To add a new message click **Add Message**. To edit an existing message task, click it.
3. Click **Show Scheduling Properties** if you want to edit the scheduling settings.
4. Enter the text for the **Message**. This is the text that will be scrolled across the message area of the selected wallboard. Remember that this message may be included amongst other schedule messages and messages set by other supervisors. A space is automatically added at the end of each message but it may be useful to add more spaces or characters, for example, after the message text so that each message is clearly separated from any following message.
   - By clicking on the color palette icon you can select the color for the text message. The currently selected color is displayed in the colored square next to the icon.
5. Also enter a short **Task Name**. This is displayed in the task list.
6. Use the **Wallboard** list to select the wallboard to which the message should be sent.
7. Use the **Schedule** option to select when the message should be sent.
   - **Instant Message**
     An instant message is displayed for 5 minutes.



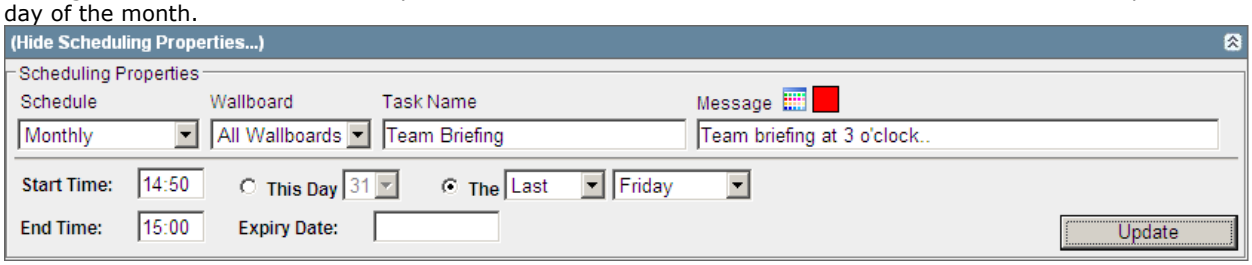

   - **Daily**




   - **Weekly**



- **Monthly**
  Messages that are scheduled monthly can be set to either occur on the same date each month or on a specific day of the month.




- If an **Expiry Date** is specified, the message scheduling ends on that date. However the message remains in the task list until deleted and can be reactivated by removing or changing the expiry date.

8. When the message is set as required click **Update**. The message details will be shown in the task list. If the schedule setting was Instant Message, the message will start being displayed for 5 minutes unless overridden by another scheduled message.

## 5.21 Wallboard Hints and Tips

Wallboards can be used to show a community of agents some statistics that are important to the way they operate. A wallboard can also be used:

- by supervisors to monitor the activity on specific statistics for specific queues.
- to improve customer satisfaction by highlighting areas that need immediate attention.
- to increase agent’s productivity.

Because a wallboard can provide so much functionality, it is important to figure out what is the goal that the Contact Center Manager is trying to achieve and try to design one or multiple wallboards to reach that goal.

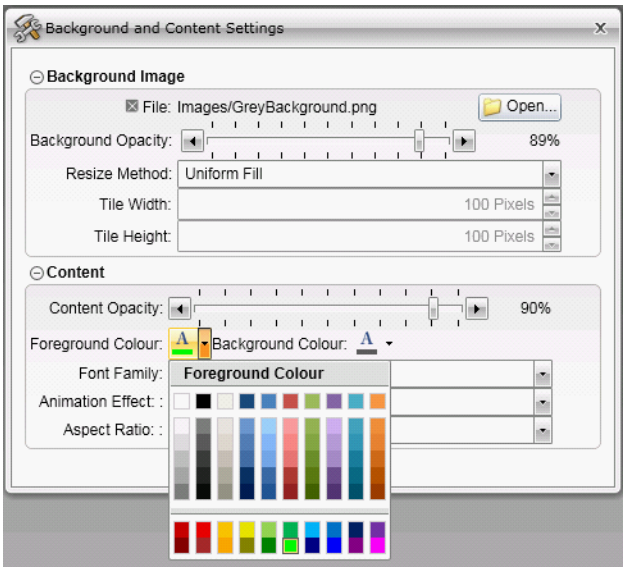
This document is meant to provide some tips when designing a wallboard when the goal is to maximize the amount of different statistics that can be displayed.

- Always wait until the wallboard has rearranged the screen before adding the next item to it.
- The choice of font and contrast colors between the foreground and background content are important. A fatter font and vivid color provide high visibility at distance. For example use Verdana, neon green (#FF00FF00) foreground and charcoal grey (#FF595959) background.
- Warnings and alarms cause statistics shown in the wallboard to turn orange or red respectively. So, use such colors for the background and foreground that the content can be red in case of a warning or an alarm.
- The default uniform grey background does not distract from the information displayed. If you change the default background image, select an image that is not distracting.
- The message bar is always as wide as the width of the entire queues shown on the wallboard. If only one or two queues are needed, the message bar will be more useful if the queues and their stats are added as rows.
- A high opacity, for example greater than 90% improves the readability of the wallboard. However a low value, for example 60%, makes is easier to see the highlighted element while editing a wallboard. Therefore it is useful to select a low opacity while editing and return it to a high value when finished.
- If the wallboard doesn't show an opacity change, save it and then refresh or restart the browser.
- The title bars height is determined automatically, based partially on the selected font size. There is a point at which reducing the font size will have no further effect on the title bar height. At this point, there is no need to use a smaller font.
- Depending on the colors selected for the content foreground and background, using a solid background instead of a shaded background may make it easier to read the data from a distance.
- When the goal of the wallboard design is to provide as many statistics as possible, the Company Logo and Message Bar are of fixed size and if not needed should not be added. Changing the font size of the Message Bar has no impact on the real estate it uses.

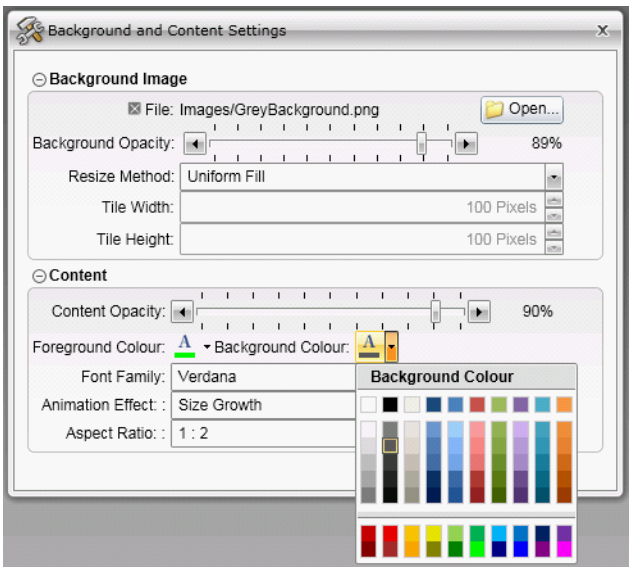
## 5.21.1 Maximizing Content

When designing a wallboard where a lot of information needs to be made available, there are a couple of factors to take into account: the size of the wallboard display itself and the distance between the wallboard and the furthest person that needs to read that information.

The choice of font and contrast colors between the foreground and background content is extremely important. A fatter font is preferable. This example will use the Verdana font, neon green (#FF00FF00) content foreground and charcoal grey (#FF595959) content background in its examples:




Content Foreground




Content Background

Warnings and alarms will cause the statistics boxes to turn yellow or red respectively when the conditions occur. Make sure that the colors used for the background or foreground content don't make it difficult to read when a warning or alarm occur.

Also, not to create "visual noise", it is also important that the wallboard background be of a uniform scheme, like the ***GreyBackground*** provided by default.

## 5.21.2 Maximizing Real Estate

When the goal of the wallboard design is to provide as many statistics as possible on one screen, it is important to realize that the **Company Logo** and **Message Bar** wallboard elements are of fixed size and if not needed they should not be used. Changing the font size of the **Message Bar** has no impact on the real estate it uses.

**League Tables** and **Graphs** are also using real estate that effectively provides duplicate information and therefore breaks the goal of the design.

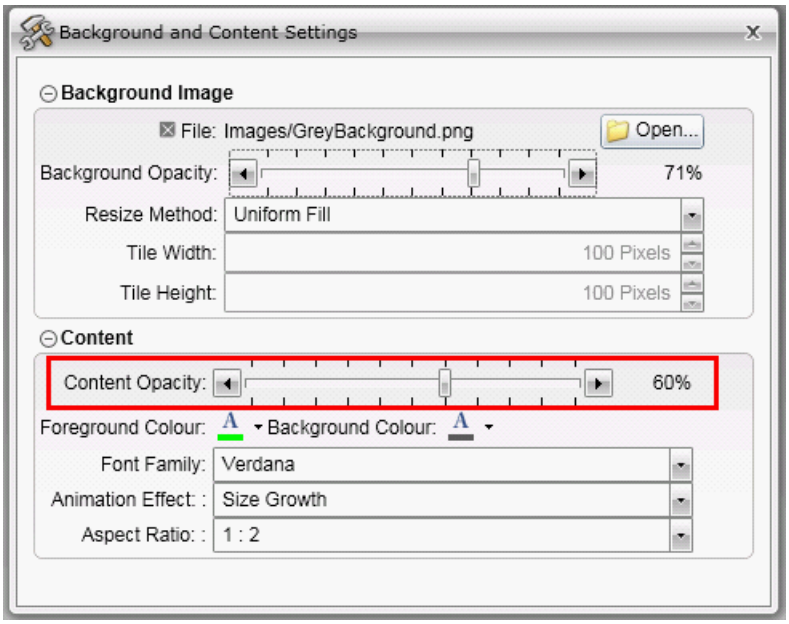
The **Title bar** can be sized to a smaller font and therefore does not really impede with the design.

## 5.21.3 Design Consideration

If you choose to present the statistics for queues in columns instead of rows, the display of the report is better. Depending on the size of the wallboard and the distance to the furthest individual needing to read it, up to five (5) statistics for five (5) Hung Groups can be displayed.

If a **Message Bar** is needed, it will take up the equivalent of 1 row of statistics. The **Message Bar** will always be as wide as the width of the entire queues shown on the wallboard. If only one or two queues are needed, the **Message Bar** will be more useful if the queues are added as rows. However the amount of statistics that can be added is significantly less before they become unreadable.

Because it is easier to see the highlights of a border when the opacity is set to a smaller number, you must lower the content opacity when designing the wallboard (60%). When the wallboard is ready for operation, the opacity can be set to a high number (>90%). That will increase the contrast between the content background and foreground and therefore it will increase readability.



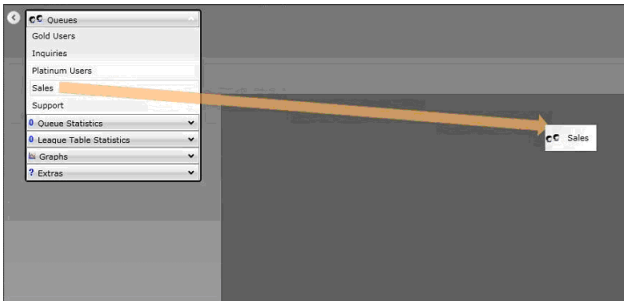

Content Opacity

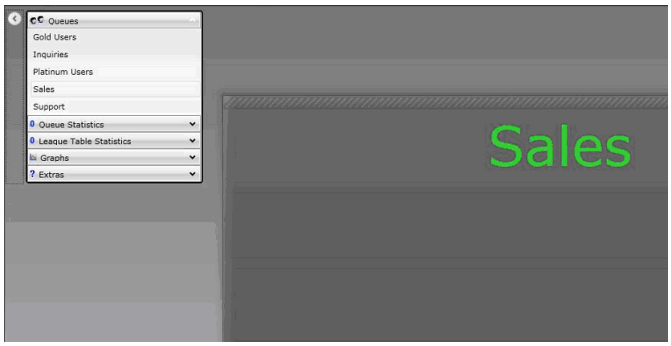
Always wait until the wallboard rearranged the screen before adding the next item to it.

## 5.21.4 Adding Queues

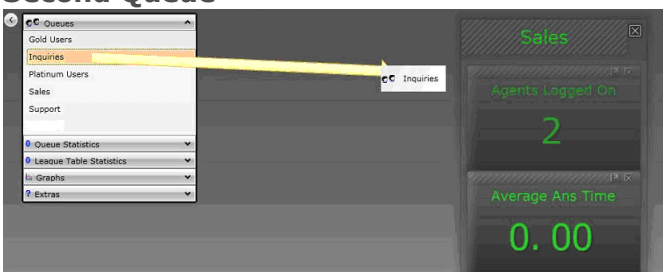
Because it will be easier to add items from right to left, a queue will be added and all the statistics associated with it before the next queue is added. When adding a queue, pull it from the element list and drop it to the left of the header of the already added queue. It does not matter where the first queue is dropped on a blank palette.

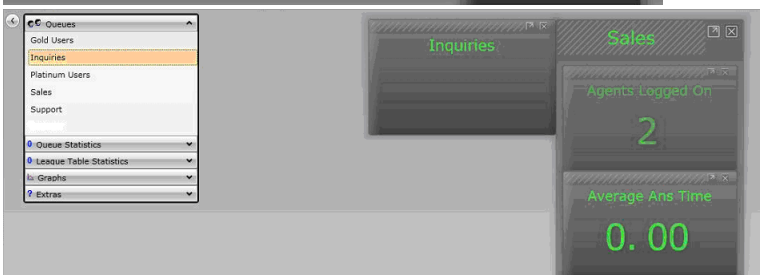
### First Queue



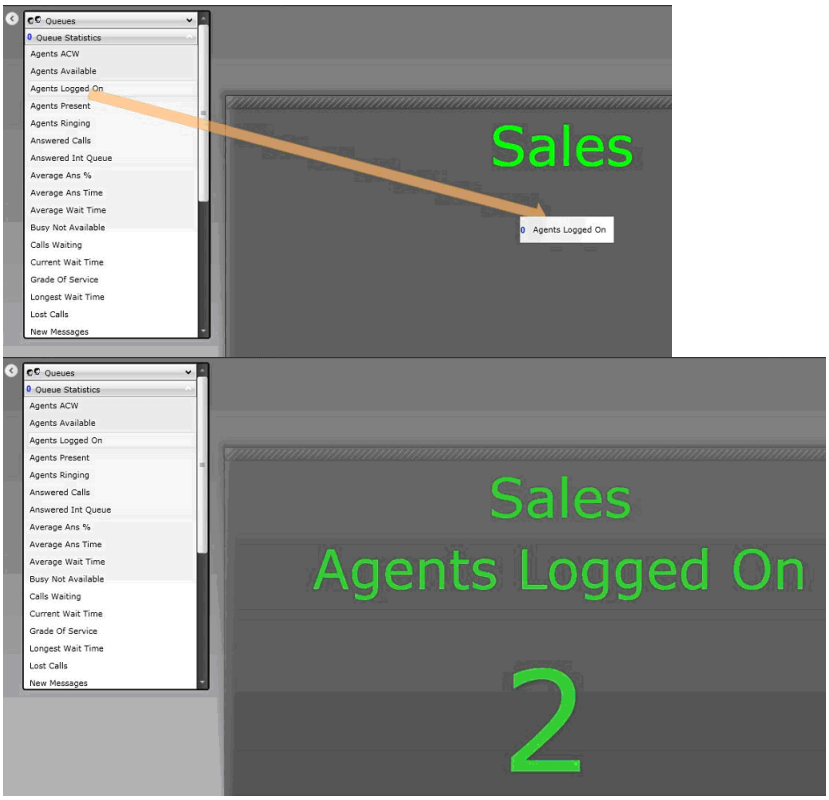

### Second Queue



## 5.21.5 Adding Statistics

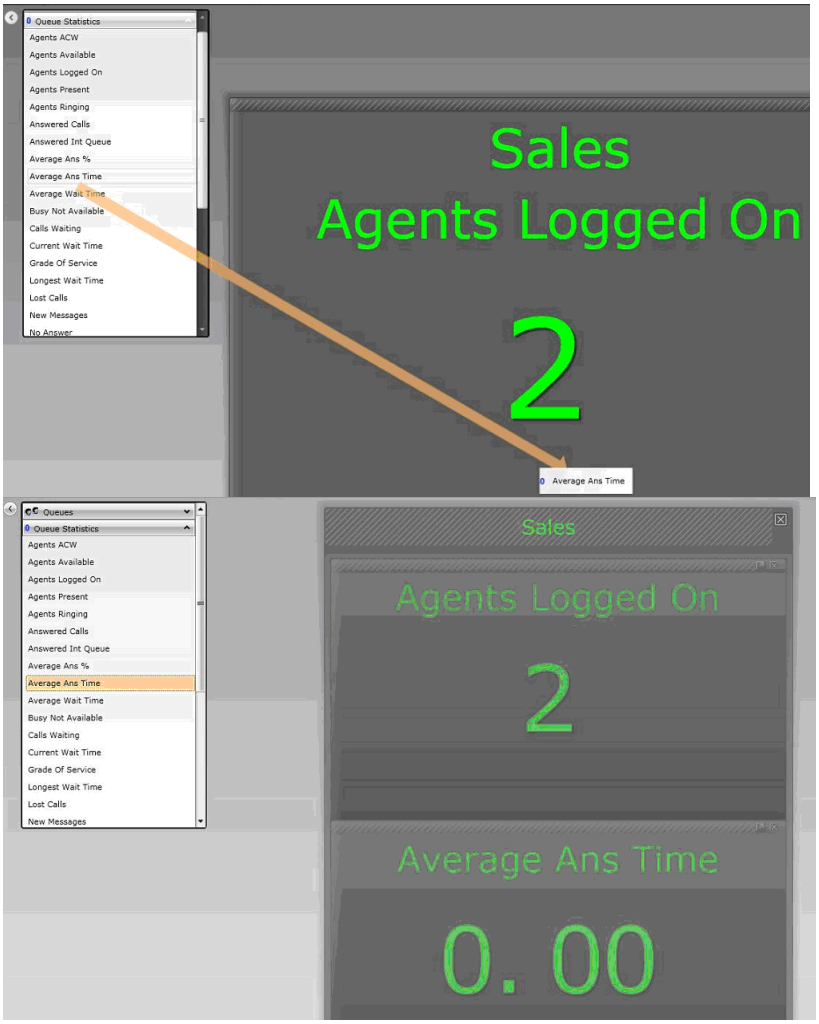
The first statistic is added to the queue by pulling it from the element list and dropping it inside the queue box. The box will become highlighted when the cursor is inside the box.



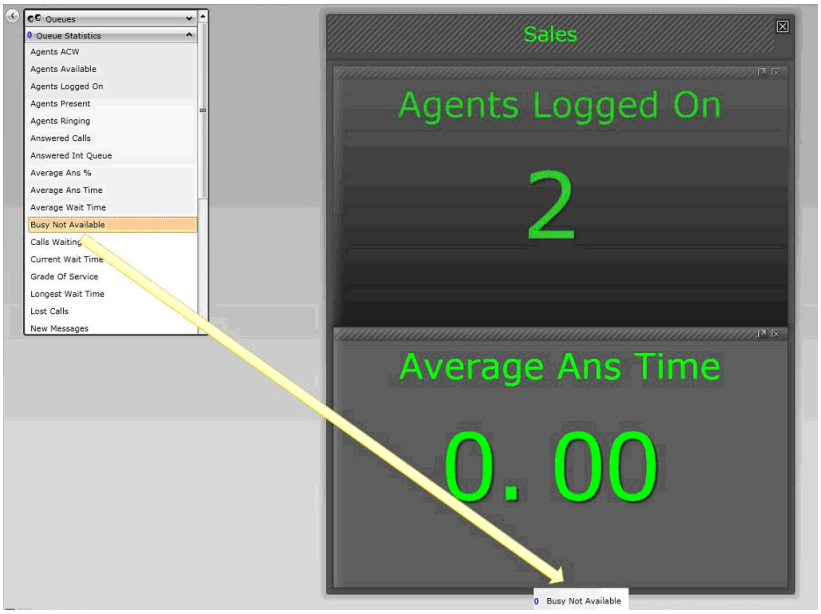




The second statistic can be added by pulling it from the element list and dropping inside the first statistic box, at the bottom near the middle. The box will be highlighted when the cursor is located within it.

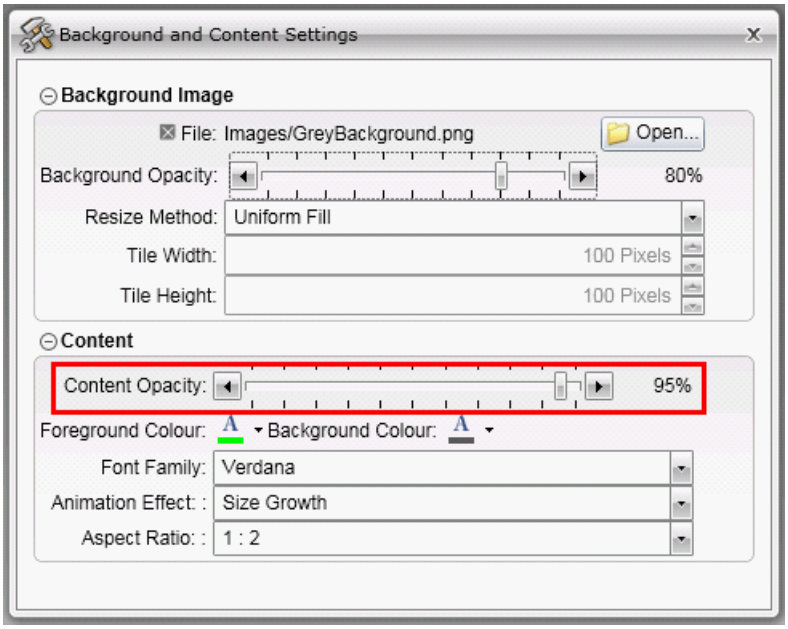



The rest of the statistics are added by pulling the statistic from the element list and dropping it on the bottom border of the queue column. The whole queue associated items will be highlighted when the cursor is properly located at a border. It is possible that the dropping will not properly work. In this case, just remove it if it was added incorrectly and try again.




## Content Opacity

Change the Content Opacity to at least 90%. In some cases, it is possible that the wallboard will not react properly to the new opacity settings; refreshing the screen or restarting the browser will correct this.

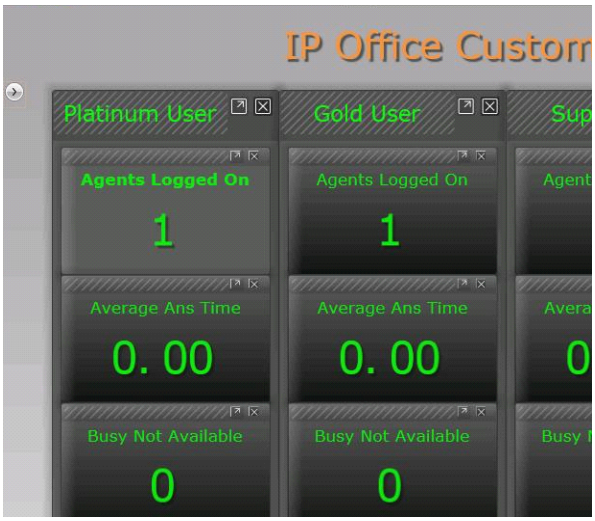

Background and Content Settings
Background Image
File: Images/GreyBackground.png
Open...
Background Opacity:
80%
Resize Method:
Uniform Fill
Tile Width:
100 Pixels
Tile Height:
100 Pixels
Content
Content Opacity:
95%
Foreground Colour:
Background Colour:
Font Family:
Verdana
Animation Effect: :
Size Growth
Aspect Ratio: :
1 : 2

## 5.21.6 Statistics Box Background

You can change each statistic box to use solid background instead of the default shaded background. Depending on the colors selected for the content foreground and background, it can be easier to read the data from a distance without the shaded background.



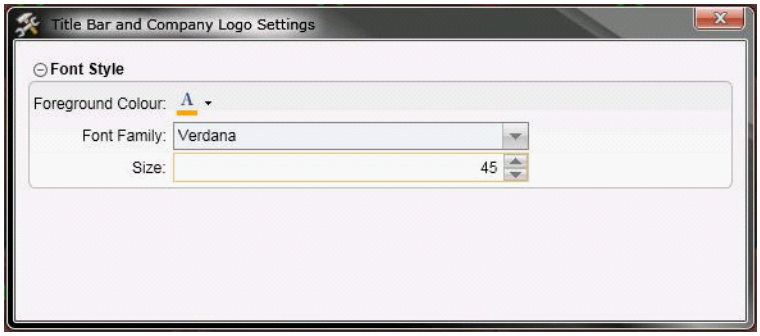

Solid Background Setting




Solid Background Shown

## 5.21.7 Title Bar Font

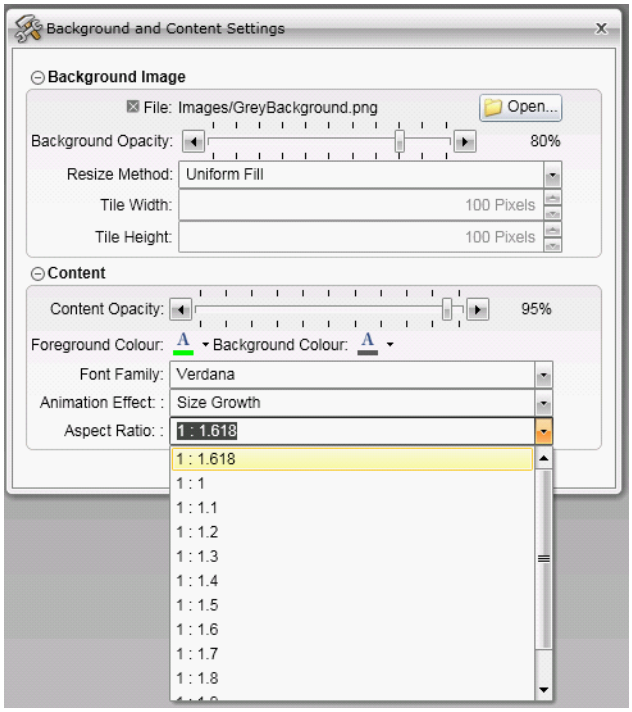
Add the **Title Bar** and resize the font to a value as small as possible. At one point, reducing the size of the font will no longer have an impact on the real estate used by the statistics. Experiment with the font size until that value is found. At this point, there is no need to use a smaller font.




Title Bar Settings

## 5.21.8 Aspect Ratio settings

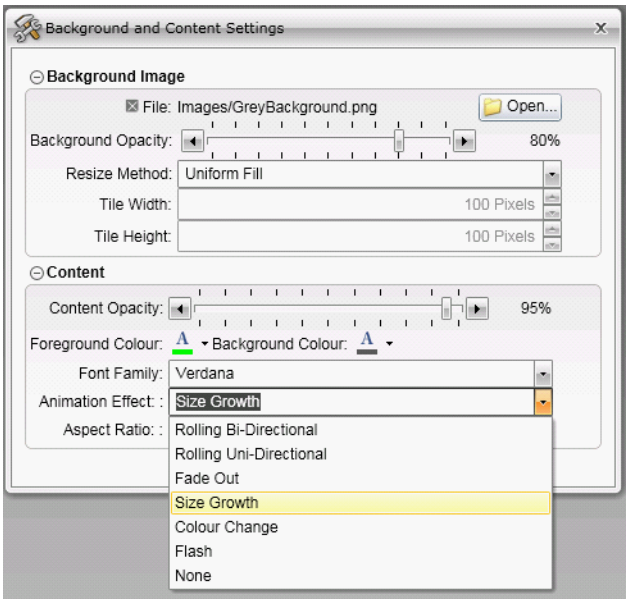
Change the Aspect Ratio to try to use more of the screen real-estate. Experiment with the different ratios until the desired result is achieved.




Aspect Ratio Settings

## 5.21.9 Animation Effect settings

To help bring attention to changing statistics, the animation effect can be used. Experiment with the different type of effects until the desired result is achieved.




Animation Effect Setting

Save your wallboard design by selecting the icon at the bottom left corner of the screen.

Change to Full Screen Mode by selecting the icon at the bottom left corner of the screen.

## 5.21.10 Final Result



# Chapter 6. Administrator

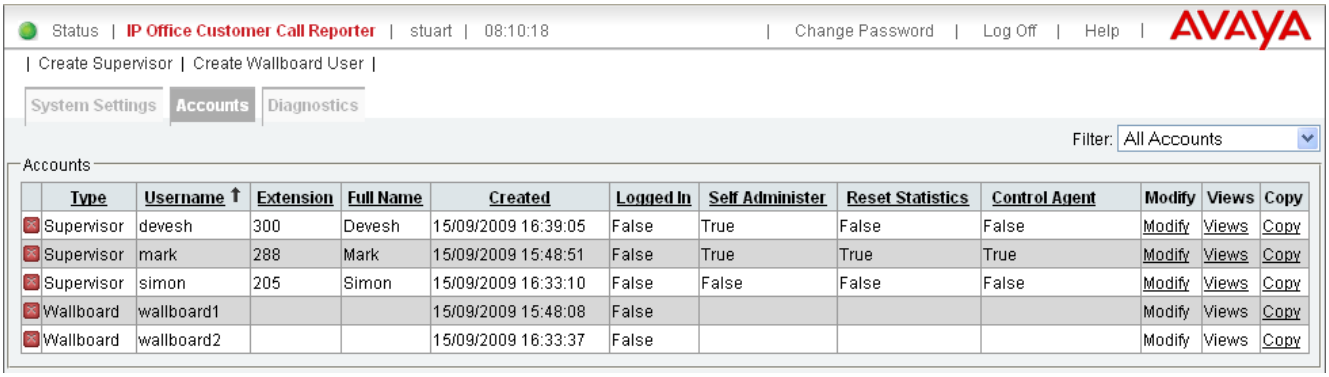
# 6. Administrator

The administrator can amend IP Office Customer Call Reporter system preferences plus create and administer supervisors. That includes assigning which queues a supervisor can see or granting the supervisor self-administration rights to amend their own settings including queues.

The administrator does not have any views of call statistics. However they can setup and amend the views used by supervisors and their agents.

There is only one administrator account and only one person can log in as the administrator at any time.

When you login 16 as the administrator you view a listing of all the supervisor accounts. You can then create and modify supervisor accounts 161. In the **System Settings** 169 window you can see all the monitored IP Office switches together with the name and address of all discovered IP Offices and their connection state. You can also modify the system preferences 169.




| Type | Username | Extension | Full Name | Created | Logged In | Self Administer | Reset Statistics | Control Agent | Modify | Views | Copy |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Supervisor | devesh | 300 | Devesh | 15/09/2009 16:39:05 | False | True | False | False | Modify | Views | Copy |
| Supervisor | mark | 288 | Mark | 15/09/2009 15:48:51 | False | True | True | True | Modify | Views | Copy |
| Supervisor | simon | 205 | Simon | 15/09/2009 16:33:10 | False | False | False | False | Modify | Views | Copy |
| Wallboard | wallboard1 | | | 15/09/2009 15:48:08 | False | | | | Modify | Views | Copy |
| Wallboard | wallboard2 | | | 15/09/2009 16:33:37 | False | | | | Modify | Views | Copy |

*Example web client when logged in as an administrator.*

- **! Important**
  The first time you log in as the administrator, select the **System Settings** 169 tab and confirm the information in the **Preference Details** section, especially your unique e-mail address.

| As an Administrator... | | |
|---|---|---|
| • View accounts 160 | • Create a wallboard account 164 | • Restart a service 170 |
| • Create a supervisor account 161 | • Edit a supervisor's views 165 | • Setup e-mail services 171 |

### The Status Bar

| | |
|---|---|
| **Status** 169 | This button indicates the overall status of IP Office Customer Call Reporter. Clicking on the icon displays a **System Settings** 169 tab which shows the status of the individual IP Office Customer Call Reporter components.<br>• **Green:** IP Office Customer Call Reporter is running.<br>• **Yellow:** Some parts of IP Office Customer Call Reporter are still in the process of starting.<br>• **Red:** There may be a problem in IP Office Customer Call Reporter. |
| **Change Password** 17 | While logged in to IP Office Customer Call Reporter, you can change your password. |
| **Log Off** 20 | Close the IP Office Customer Call Reporter connection. It is important to close a connection using this control rather than just closing the browser or tab within the browser. Failing to use this button will cause a 5 minute delay before you can log in again on another computer. |
| **Help** 19 | Access this documentation in online format. Where possible the appropriate page for the current IP Office Customer Call Reporter screen is displayed. |

### Tabs

- **Accounts** 160
  This tab displays the existing supervisor accounts created by the administrator. It can be used to create and modify accounts.
- **System Settings** 169
  Use this tab to adjust system wide IP Office Customer Call Reporter settings, such as the e-mail server.
- **Diagnostics** 174
  This tab should only be used under guidance of an Avaya support engineer when requested.

# 6.1 Logging In

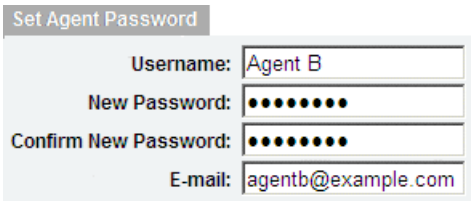
This refers to logging in to the IP Office Customer Call Reporter web client, not to logging in to a telephone 113 to receive calls.

1. Using your browser, enter the path to the IP Office Customer Call Reporter web service - ***http://<server_path>/CCRWebClient***. The login window should be displayed.

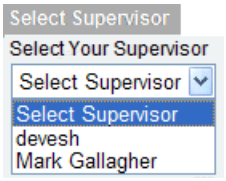



2. Enter your **Username** and **Password**.
   - If you have forgotten your password but have an e-mail address set in IP Office Customer Call Reporter, click **Forgot Password** 18.
   - If you are an agent logging in for the first time leave the password field blank. You will be asked to set your password and e-mail address as part of the login.
3. If you want the IP Office Customer Call Reporter web client to run in a different language, you can use the **Language** drop down to select a language from the list.

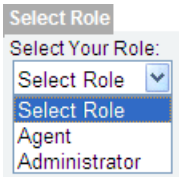
   Supported languages are ***Dutch***, ***English (UK)***, ***English (US)***, ***French***, ***German***, ***Italian***, ***Brazilian Portuguese***, ***Russian*** and ***Spanish***. Some parts of customer call maps are third party components delivered over the internet and may run in different languages, for example the zoom and pan controls.
4. Click **Logon**.
   - **Agent's First Time Login**
     If you are an agent logging in for the first time, the **Set Agent Password** window will be displayed. Enter a password of your choice and then click **OK**. Your unique e-mail address is also requested. Enter an e-mail address to be able to use the Forgot Password 18 feature.




   - **All Agent Logins**
     If multiple supervisors have been configured, agents need to indicate the supervisor they are working for.



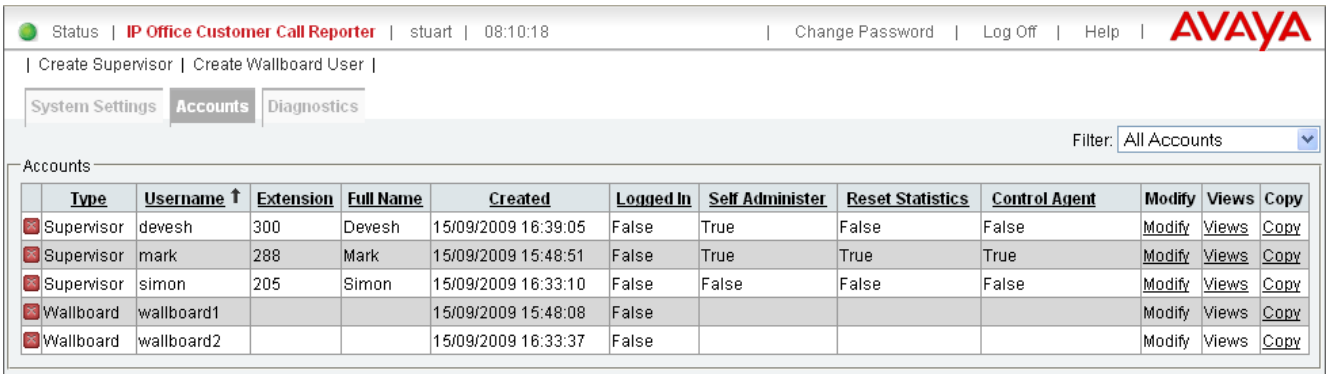

   - **Multiple Role Login (Optional)**
     If your username is configured for more than one role 285, the **Select Role** window will be displayed. Select the required role and click **OK**.




5. The web client will open in the appropriate mode: Agent 108, Supervisor 23 or Administrator 157.
   - You have three attempts to enter the correct password or username. If you fail to enter valid login details the login window will close and your account is locked for 5 minutes.
   - Logged in users who are inactive for more than a set time are automatically logged off. The default time is 30 minutes but this can be adjusted by the administrator.

# 6.2 Viewing Accounts

As administrator you are able to create, edit, and delete login account for IP Office Customer Call Reporter supervisors and wallboards. The details of existing accounts can be viewed on the **Accounts** tab. Use the two additional commands in the menu bar, **Create Supervisor** 161 and **Create Wallboard User** 164, to create new accounts.




| | Type | Username | Extension | Full Name | Created | Logged In | Self Administer | Reset Statistics | Control Agent | Modify | Views | Copy |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Supervisor | devesh | 300 | Devesh | 15/09/2009 16:39:05 | False | True | False | False | Modify | Views | Copy |
| | Supervisor | mark | 288 | Mark | 15/09/2009 15:48:51 | False | True | True | True | Modify | Views | Copy |
| | Supervisor | simon | 205 | Simon | 15/09/2009 16:33:10 | False | False | False | False | Modify | Views | Copy |
| | Wallboard | wallboard1 | | | 15/09/2009 15:48:08 | False | | | | Modify | Views | Copy |
| | Wallboard | wallboard2 | | | 15/09/2009 16:33:37 | False | | | | Modify | Views | Copy |

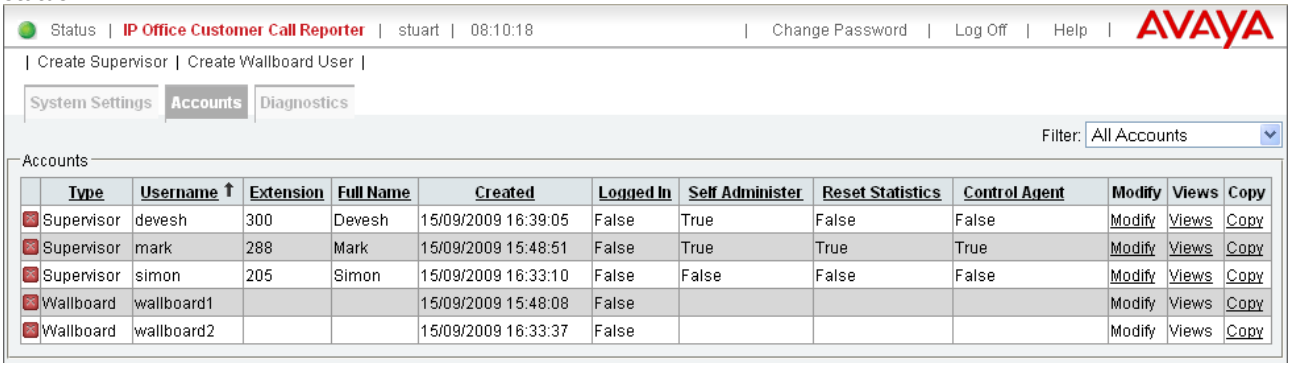
| Field | Description |
|---|---|
| | Click this icon to delete an account. |
| **Type** | Indicates whether the account is a supervisor account or a wallboard account. The Filter selection at the top-right of the menu can be used to select which types of accounts are displayed. |
| **Username** | This is the supervisor username used for logging in to IP Office Customer Call Reporter. If the name matches the administrator name and or an agent name then the user can also login in those roles. Supervisors cannot change their username. See Multiple Roles 285. |
| **Extension** | The telephone extension number associated with the supervisor account. |
| **Full Name** | This name is shown to agents when they login and select their supervisor. It is also used in reports to indicate which supervisor created and ran the report. |
| **Created** | Details when the account was added to the IP Office Customer Call Reporter configuration. |
| **Logged In** | Details whether the account is currently logged in or not. |
| **Self Administer** | If selected, the supervisor has self administration rights and is able to edit some of their own Account Details 104. Supervisors with this option are also able to schedule housekeeping tasks 98 such as database backups and automatic statistic resets. Supervisors without this option are only able to edit views. |
| **Reset Statistics** | Supervisors for who the administrator has enabled the **Reset Statistics** option can reset all the statistics currently being used for supervisor views, agent views and wallboards. This will affect all supervisors, agents and wallboards. It does not affect the statistics used for historical reports. |
| **Control Agent** | Supervisors with this option enabled are able to click an agent name in a view and select from a list of actions that change the state of that agent. For example to force the agent to log in or log out. See Controlling Agent Status 85. This option requires IP Office Customer Call Reporter to be configured with details of the one-X Portal for IP Office 172 server. |
| **Modify** | Click this option to modify the supervisor account 161 or wallboard account 164 settings. |
| **Views** | Click this option to edit the supervisor's views 165. This option is not available for wallboard accounts. |
| **Copy** | Click this option to copy the supervisor account 168. This option is not available for wallboard accounts. |

# 6.3 Creating/Editing Supervisor Accounts

Before any supervisors can use the application they need to have an account created for them. You can create up to 30 supervisor accounts. However the maximum number of supervisors that can be logged in at any time is restricted by the number of supervisor licenses.

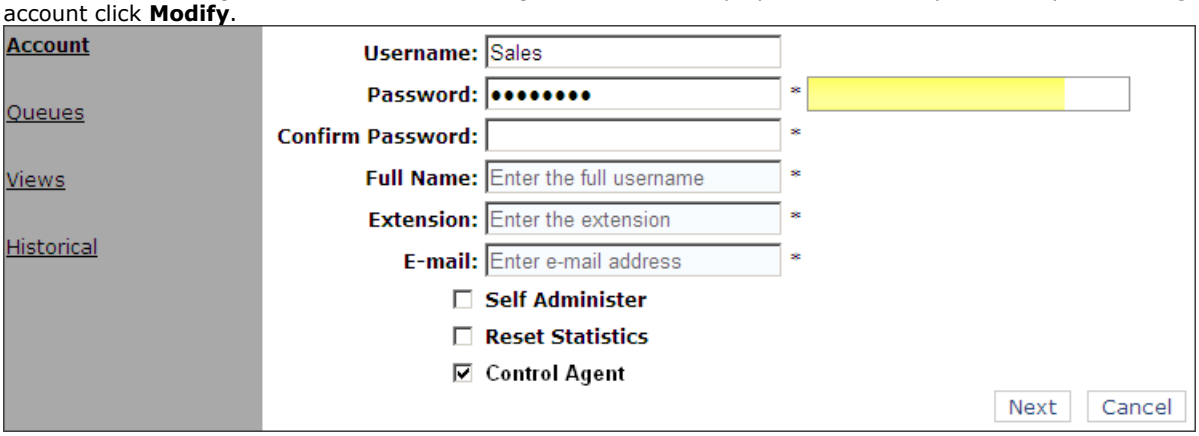
**To create a supervisor account**

1. Click the **Accounts** tab. All the existing supervisor and wallboard accounts are listed together with their current status.




| Type | Username | Extension | Full Name | Created | Logged In | Self Administer | Reset Statistics | Control Agent | Modify | Views | Copy |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Supervisor | devesh | 300 | Devesh | 15/09/2009 16:39:05 | False | True | False | False | Modify | Views | Copy |
| Supervisor | mark | 288 | Mark | 15/09/2009 15:48:51 | False | True | True | True | Modify | Views | Copy |
| Supervisor | simon | 205 | Simon | 15/09/2009 16:33:10 | False | False | False | False | Modify | Views | Copy |
| Wallboard | wallboard1 | | | 15/09/2009 15:48:08 | False | | | | Modify | Views | Copy |
| Wallboard | wallboard2 | | | 15/09/2009 16:33:37 | False | | | | Modify | Views | Copy |

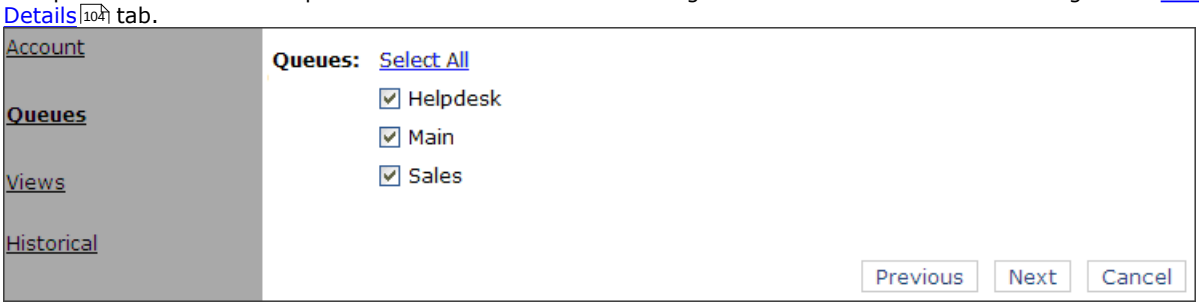
2. Click the **Create Supervisor** link. A **Create Supervisor** tab is displayed. Alternatively, to modify an existing account click **Modify**.



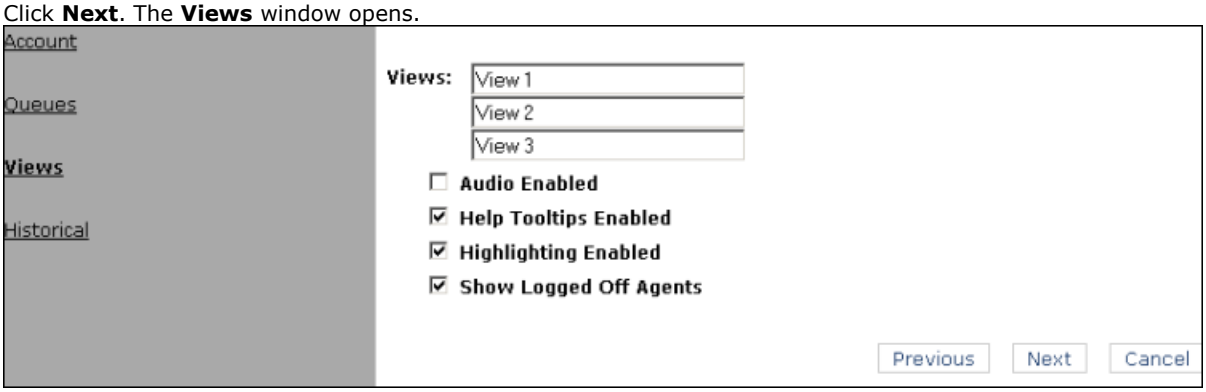

3. Complete each field with the relevant details. Note that * indicates a mandatory field that must be completed.

| Field | Description |
|---|---|
| **Username** | This is the supervisor username used for logging in to IP Office Customer Call Reporter. If the name matches the administrator name and or an agent name then the user can also login in those roles. Supervisors cannot change their username. See Multiple Roles 285. |
| **Password** | This is the password used for browser access to IP Office Customer Call Reporter. All supervisors, even those without **Self Administer** rights, can use the Change Password 17 option to change their password. |
| **Confirm Password** | |
| **Full Name** | This name is shown to agents when they login and select their supervisor. It is also used in reports to indicate which supervisor created and ran the report. |
| **Extension** | The telephone extension number associated with the supervisor account. |
| **E-mail** | The unique e-mail address associated with the supervisor. This is used for the forgotten password 18 feature. |
| **Self Administer** | If selected, the supervisor has self administration rights and is able to edit some of their own Account Details 104. Supervisors with this option are also able to schedule housekeeping tasks 98 such as database backups and automatic statistic resets. Supervisors without this option are only able to edit views. |
| **Reset Statistics** | Supervisors for who the administrator has enabled the **Reset Statistics** option can reset all the statistics currently being used for supervisor views, agent views and wallboards. This will affect all supervisors, agents and wallboards. It does not affect the statistics used for historical reports. |
| **Control Agent** | Supervisors with this option enabled are able to click an agent name in a view and select from a list of actions that change the state of that agent. For example to force the agent to log in or log out. See Controlling Agent Status 85. This option requires IP Office Customer Call Reporter to be configured with details of the one-X Portal for IP Office 172 server. |

4. Click **Next**. The **Queues** window opens. Select the queues that the supervisor will be able to view. By default all of the queues are selected. Supervisors with self administration rights can amend the selection through their Account Details 104 tab.

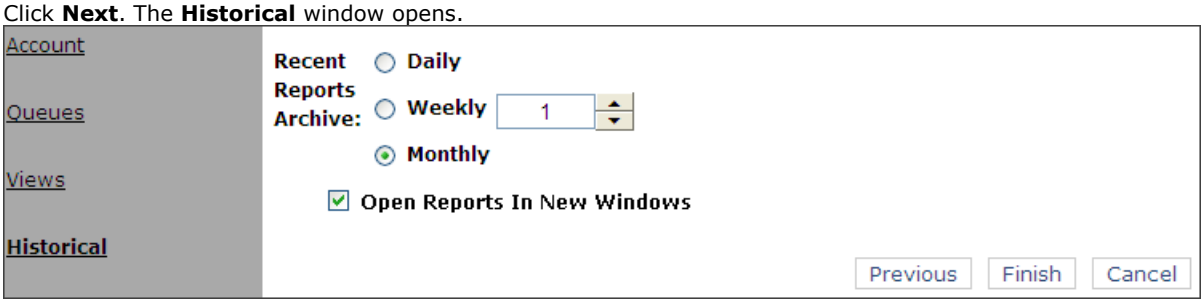



5. Click **Next**. The **Views** window opens.




| Field | Description |
|---|---|
| **Views** | Use these fields to rename the three views. |
| **Audio Enabled** | This option is used in conjunction with any view that includes an **All Views Alarm List**. When enabled, if an alarm occurs, the browser's media player is used to play a sound file from the IP Office Customer Call Reporter server computer. The sound is played to all users looking at that supervisor's views.<br>• This option is off by default. If enabled, an audio plug-in is required for all user browsers. Use either Quick Time or Windows Media Player. |
| **Help Tooltips Enabled** | If enabled, when the cursor is placed over the statistic name in a view, pop-up help for the statistic is displayed. Tooltips are on by default. |
| **Highlighting Enabled** | If enabled, when a statistic in a view changes value, its background briefly changes to purple, then light purple and then back to the normal background color. This option is not applied to agent state and time values. Highlighting is on by default. |
| **Show Logged Off Agents** | This option is on by default. By default, the supervisor's monitor views include a row for each agent in the selected queue including agents who are currently logged off. If this option is de-selected, agents who are logged off are removed from the monitor view. |

6. Click **Next**. The **Historical** window opens.




- **Recent Reports Archive:** *Default = 1 Week, Range = Up to 12*
  This value set how long the server should store copies of reports run by the Supervisor. Whenever the supervisor logs in, reports beyond this duration will be automatically deleted.
- **Open Reports in New Windows:** *Default = On.*
  This setting is used in two ways. It sets the default value for new reports 38. However, the value can be changed within the report if required. It is also used as the setting for the display of recent reports 48. If selected, manually run reports are opened in separate pop-up windows, and you can open multiple reports at the same time. However, it requires the browser to be configured to allow popup windows. If not selected, reports are opened in the right-hand panel of the IP Office Customer Call Reporter client window.

7. Click **Finish** to create the new supervisor account. The new account will be listed in the **Supervisors Accounts** tab.

8. Once the account has been created you can create views 165 for the supervisor account. All supervisors can also amend and create their own views.

**To change the details of a supervisor account**

1. Display the list of current supervisor accounts.
2. Click **Modify** for the account that you want to change.
3. Click through each window and change the details.
4. Click **Finish** in the last window. The details are updated.
5. Click **Accounts** to return to the list of accounts.

**To delete a supervisor account**

1. Display the list of current supervisor accounts.
2. Click **Delete** for the account that you want to remove.
3. Confirm that you want to delete the account by clicking **OK**. The supervisor account is deleted.

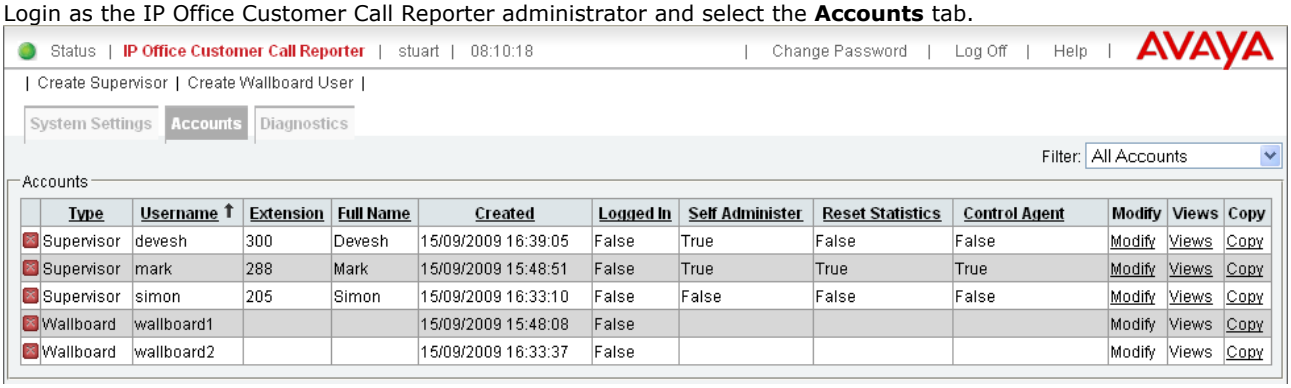
**To copy a supervisor Account**

- See **Copying a Supervisor Account** 168.

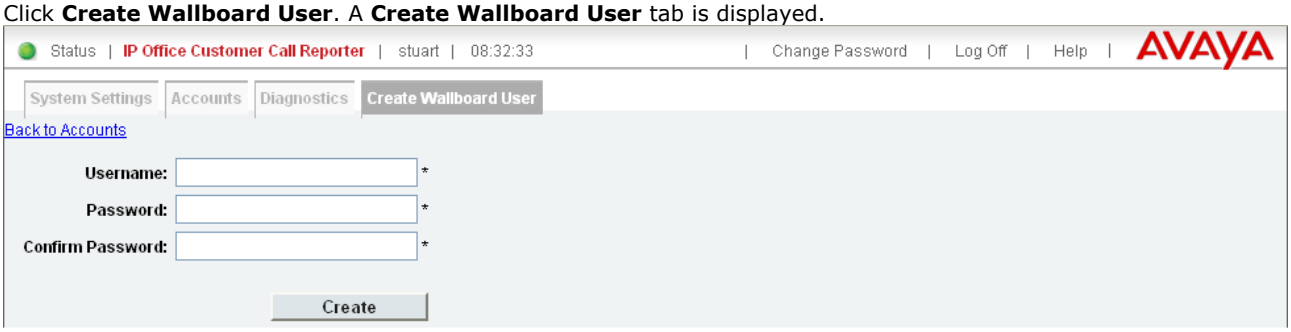
# 6.4 Creating a Wallboard Account

To create a wallboard account you must login as the IP Office Customer Call Reporter administrator 159.

1. Login as the IP Office Customer Call Reporter administrator and select the **Accounts** tab.




2. Click **Create Wallboard User**. A **Create Wallboard User** tab is displayed.




3. Enter the details for the account and click **Create**. Note that * indicates a mandatory field that must be completed.
4. Log off and then login using the wallboard account 127 details to verify account operation.
5. Once logged in using the wallboard account you can edit the wallboard view 129.

# 6.5 Amending Supervisor Views

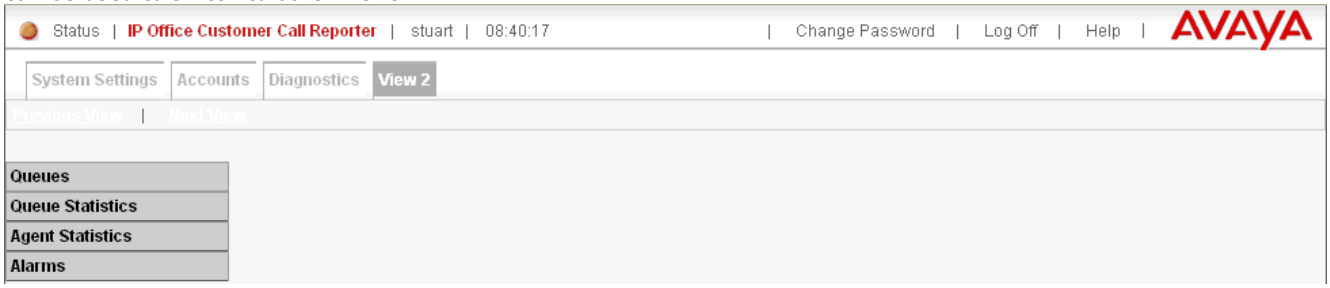
Each supervisor has three views which are displayed as their first three tabs. Each view can be configured to show different queues and statistics. The queues usable are those selected for the supervisor account 161.

All supervisors, even those without self administration rights, can also adjust their own views 80. Supervisors can also rename their three views.

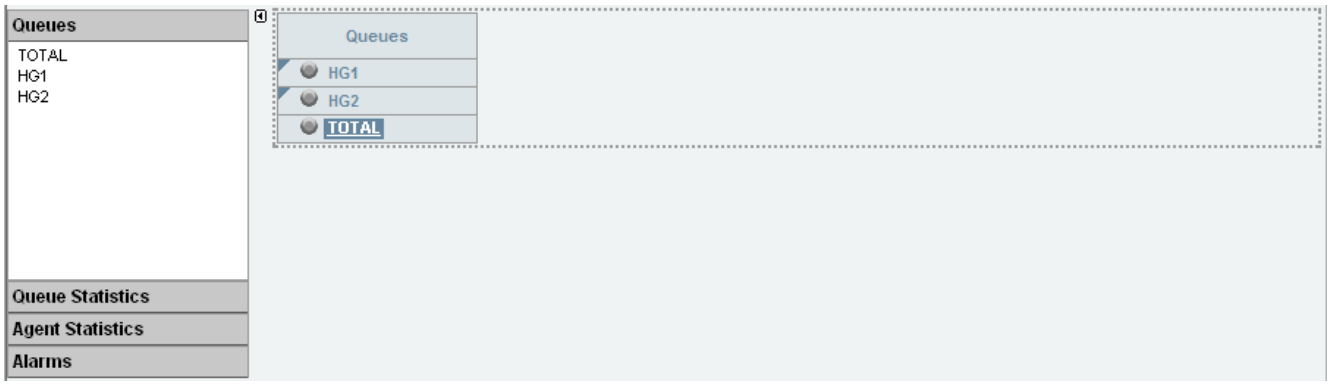
**To create a view**

A. Select the **Accounts** tab and locate the supervisor in the list of supervisor accounts.

B. Click the **Views** link. The settings for the supervisor's first view are shown. The Next View and Previous View links can be used to switch to other views.




1. **Adding Queues**
   By default all the queues configured for the supervisor are already shown. These are the Queues that the supervisor has permission to view as specified when creating their supervisor account 161.




- To add a queue to the view, click **Queues**. Drag and drop the required queue into the view and when the hatched lines are displayed drop it into that area.
- **TOTAL**
  This option can be used to add a summary row to a view. Alarms and warning settings are not applied to ***TOTAL*** values.
  - For most statistics, the total value will be a total of the queues included in the view.
  - For statistics that are averages, the total value is a weighted average 300 for the queues. For **Longest Wait Time** total is the highest value for any queue in the view. The **Current Wait Time** total is a mean average of all the current wait times of the queues in the view.
  - For those queue statistics that are not support as total values, the value displayed is a –.
- **SYSTEM**
  IP Office Customer Call Reporter 7.0+ supports reporting some queue statistics as values for the whole system. This target type always follows the same rule as queues. Alarms and warning settings are not applied to **SYSTEM** values. **SYSTEM** can also be selected in the dashboard and wallboard.
  - For most queue statistics, the system value is a total of all queues including those not in the current view.
  - For queue statistics that are averages, the system value uses the same type of average as defined for individual queue - simple, combined, or weighted average 300. For the **Current Wait Time** and **Longest Wait Time**, it is the largest value from all queue.
  - For those queue statistics that are not supported as system values, the value displayed is a – (or plotted as a zero value).
- To remove a queue from the view, click the ● circle next to its name and select **Hide**.
- To adjust the order of the queues, click the ◤ corner icon and drag the queue to the required position.

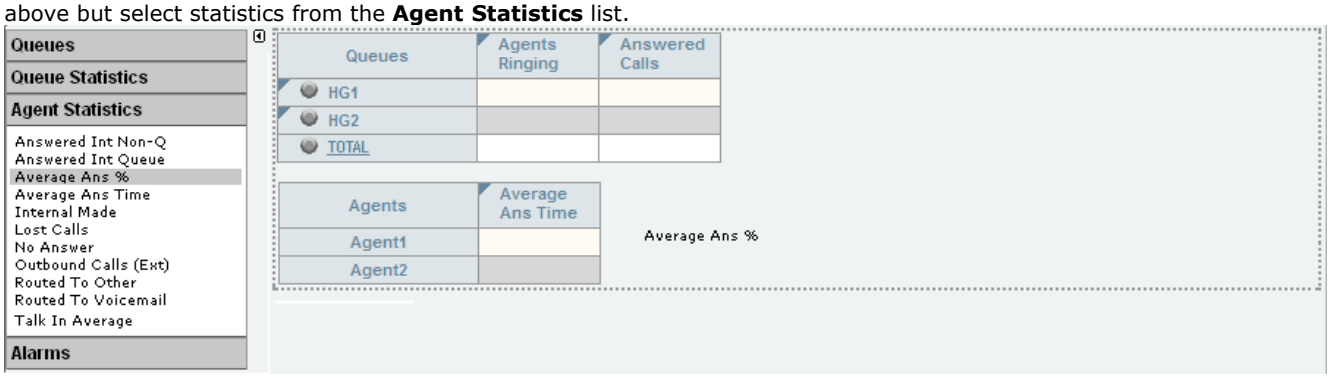
2. **Add Queue Statistics**
   You can select which statistics should be displayed for the queues. For details of the available statistics see Statistics 176.




- To add a statistic to the view, click **Queue Statistics** to view available statistics. Drag and drop the required statistic into the area surrounded by hatched lines in the view.
- Only one instance of each agent and queue statistic can be added to a view.
- Newly added statistic will display the appropriate values for activity since the last statistics reset rather than since the statistic was added to the view.
- To remove a statistics from the view, click the statistic name in the view and select **Hide**.
- To adjust the order of the statistics, click the ◤ corner icon and drag the statistic to the required position.
- To adjust the settings used for a statistic, click the statistic name and select **Settings** 176.

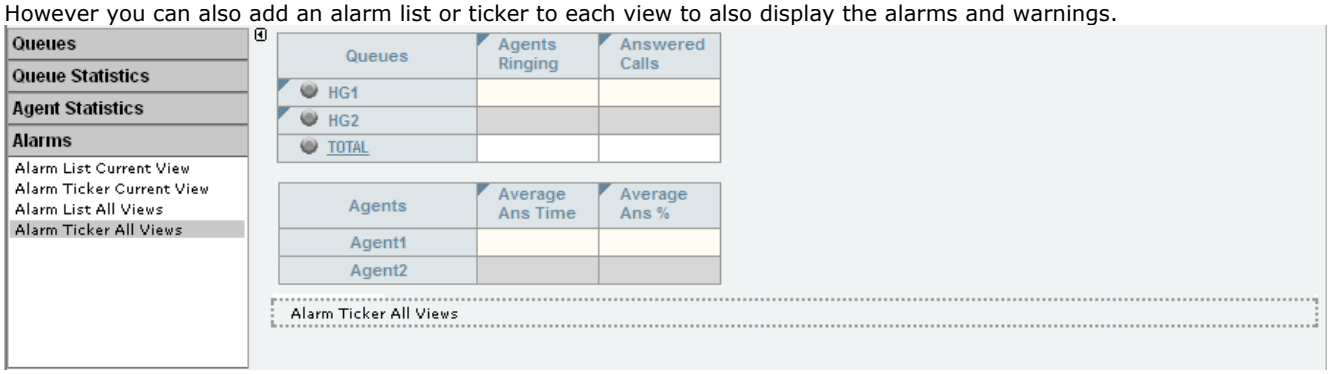
**3. Add Agent Statistics**

Click one of the queue names to display the list of agents in that queue. Use the same options as for queue statistics above but select statistics from the **Agent Statistics** list.



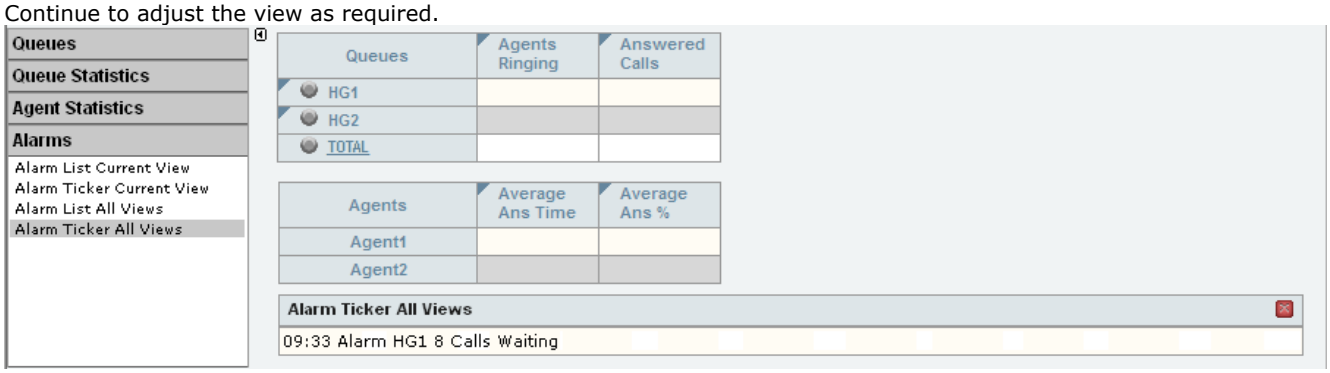
**4. Adding an Alarm Summary**

Each statistic configured to provides alarms and or warnings does so by displaying different color backgrounds. However you can also add an alarm list or ticker to each view to also display the alarms and warnings.




- Click **Alarms**. Drag and drop the required type of alarm list or ticker to the area either above or below the currently displayed statistics. If required you can have two sets of alarms, one above and one below.
  - An alarm list shows the 100 most recent current alarms and warnings is a scrollable list of all the current alarms and warning. Alarms are shown first in chronological order followed by warnings in chronological order.
    - Alarms in the **Alarm List All Views** can also trigger an audible alarm if the supervisor's account is set as **Audio Enabled**. This will be played to all users looking at that supervisor's views.
  - An alarm ticker shows the 5 most recent current alarms and warnings one at a time, showing each for a few seconds before displaying the next.
  - Alarms and warnings take the form: *Time, Type (Alarm or Warning), Name (Queue name, agent name), Current value, Statistic name.* For agent and queue state alarms, the state is included in the name. For ***Busy Not Available*** state alarms the reason code is included. For example:
    - *12:45 Alarm Sales 15 Calls Waiting*
    - *16:31 Warning Sales 120 Average Answer Time*
    - *17:20 Alarm Extn2101 Agent State Q – Busy Not Available (paper work)*
  - Alarms and warnings are updated approximately every 8 seconds.
  - Clicking on the underlined text in an alarm or warning will change the view to the one containing the alarm or warning and will also select the appropriate queue in that view.
  - Alarms and warnings are removed from the list in when the relevant statistic drops back to the threshold level. The supervisor or agent viewer can also remove an alarm or warning by clicking on the appropriate colored cell of statistic value. Acknowledging an alarm or warning only affects their view.
  - Alarms for database capacity are not shown within the alarm lists and trackers. They are shown during log in.

**5.** Continue to adjust the view as required.




C. When completed, click the **Accounts** tab again.

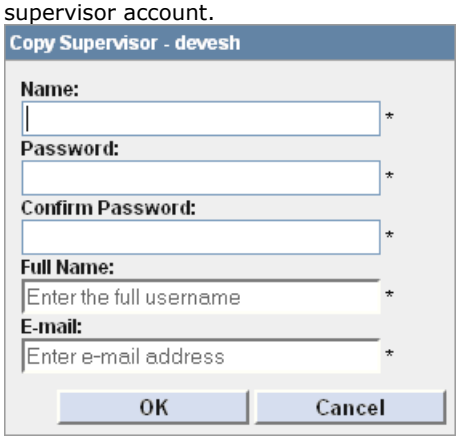
# 6.6 Copying a Supervisor Account

You can create a new supervisor account based on an existing one.

- All the queues that have been selected to be monitored are copied.
- The following settings of the existing supervisor are not copied: name, password, full name, e-mail address and views.

**To copy an existing account**

1. Click the **Accounts** tab to view the list of supervisor accounts that have been created.
2. Click the **Copy** link next to the existing supervisor account which you want to use as the basis for the new supervisor account.




3. Enter the new supervisors name in the **Username** field.
4. Enter a **Password** and confirm the password.
5. Enter the supervisor's **Full Name**.
6. Enter the supervisor's unique **E-mail** address. This is used for functions such as Forgotten Password 18.
7. Click **OK** to create the account.
8. You can now amend the supervisor account 161 and create views 165 for the account.

# 6.7 System Settings

The **System Settings** tab contains several sections. The information in each section is shown or hidden by clicking on the section name. This tab can also be accessed by supervisors and agents clicking on the **Status** option. However they will not see the **Preferences** section and cannot restart services.

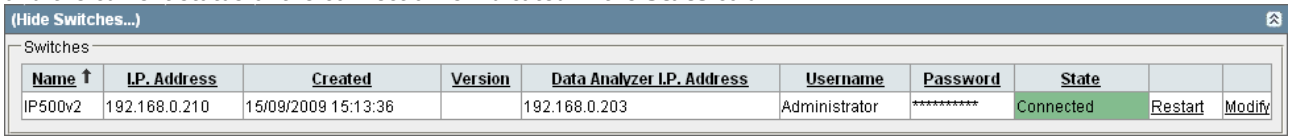
The information sections are:

- **Switches** 169
  This section displays information about the telephone systems (switches) that the IP Office Customer Call Reporter is aware of and which one it is connected to.
- **Services** 170
  This section displays information about the different IP Office Customer Call Reporter services and their status.
- **Preferences** 171
  This section is only available to the administrator.

## 6.7.1 Switches

This section displays information about the telephone systems (switches) that the IP Office Customer Call Reporter is aware of and which one it is connected to.

1. Click the **System Settings** tab.
2. Click **Show Switches**.
   The details of the IP Office system to which the IP Office Customer Call Reporter is configured to work are shown and the current status of the connection is indicated in the **State** column.


(Hide Switches...)

Switches

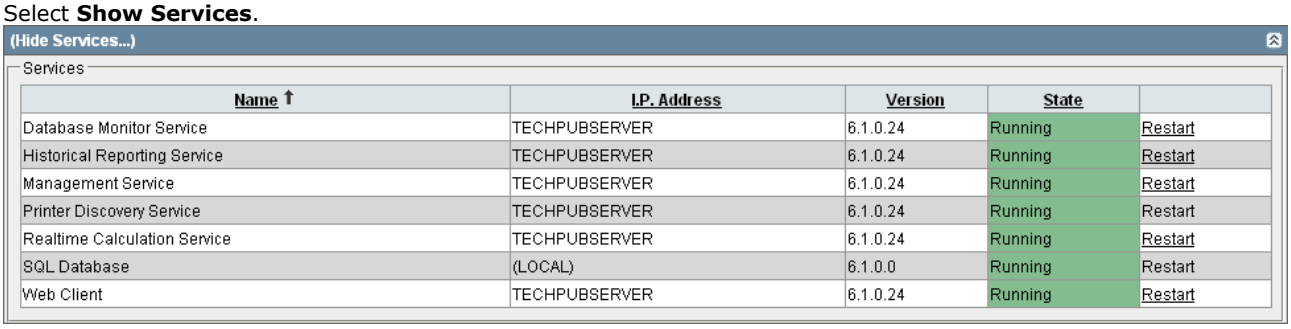
| Name | I.P. Address | Created | Version | Data Analyzer I.P. Address | Username | Password | State | | |
|---|---|---|---|---|---|---|---|---|---|
| IP500v2 | 192.168.0.210 | 15/09/2009 15:13:36 | | 192.168.0.203 | Administrator | ********** | Connected | Restart | Modify |

3. Click a column name to sort the list using that column. The arrow icon indicates the column that the list is sorted by and if it is in ascending ⇧ or descending ⇩ order.
4. The information displayed cannot be changed here. Refer to the *Avaya IP Office Implementing IP Office Customer Call Reporter* (15-601133) manual for details on changing this information.
   - **Name**
     The name of the IP Office 293 telephone system.
   - **IP Address**
     The IP address of the IP Office telephone system.
   - **Created**
     When the connection was configured for use by IP Office Customer Call Reporter.
   - **Version**
     The IP Office core software version of the IP Office telephone system.
   - **Data Analyzer IP Address**
     The data analyzer is an IP Office Customer Call Reporter component which collects information from the IP Office telephone system and passes it to the other IP Office Customer Call Reporter components.
   - **Username**
     The IP Office service user name that has been used for the connection to the IP Office.
   - **Password**
     This field is masked except when being modified.
   - **State**
     This column shows the state of the connection from the IP Office Customer Call Reporter server to the data analyzer and IP Office. The required state for normal operation is ***Connected***.
   - **Restart**
     This option is disabled for non-administrators.
   - **Modify**
     This option can be used by the IP Office Customer Call Reporter administrator to change to ***IP Address***, ***Username*** and or ***Password*** that is being used for the connection to the IP Office. Refer to the *Avaya IP Office Implementing IP Office Customer Call Reporter* (15-601133) manual for full details as changing the IP Address has implications for the existing queue and agent data already collected in the IP Office Customer Call Reporter database.

## 6.7.2 Services

This section displays information about the separate software services used by IP Office Customer Call Reporter.

1. Select the **System Settings** tab.
2. Select **Show Services**.




| Name | IP. Address | Version | State | |
|---|---|---|---|---|
| Database Monitor Service | TECHPUBSERVER | 6.1.0.24 | Running | Restart |
| Historical Reporting Service | TECHPUBSERVER | 6.1.0.24 | Running | Restart |
| Management Service | TECHPUBSERVER | 6.1.0.24 | Running | Restart |
| Printer Discovery Service | TECHPUBSERVER | 6.1.0.24 | Running | Restart |
| Realtime Calculation Service | TECHPUBSERVER | 6.1.0.24 | Running | Restart |
| SQL Database | (LOCAL) | 6.1.0.0 | Running | Restart |
| Web Client | TECHPUBSERVER | 6.1.0.24 | Running | Restart |

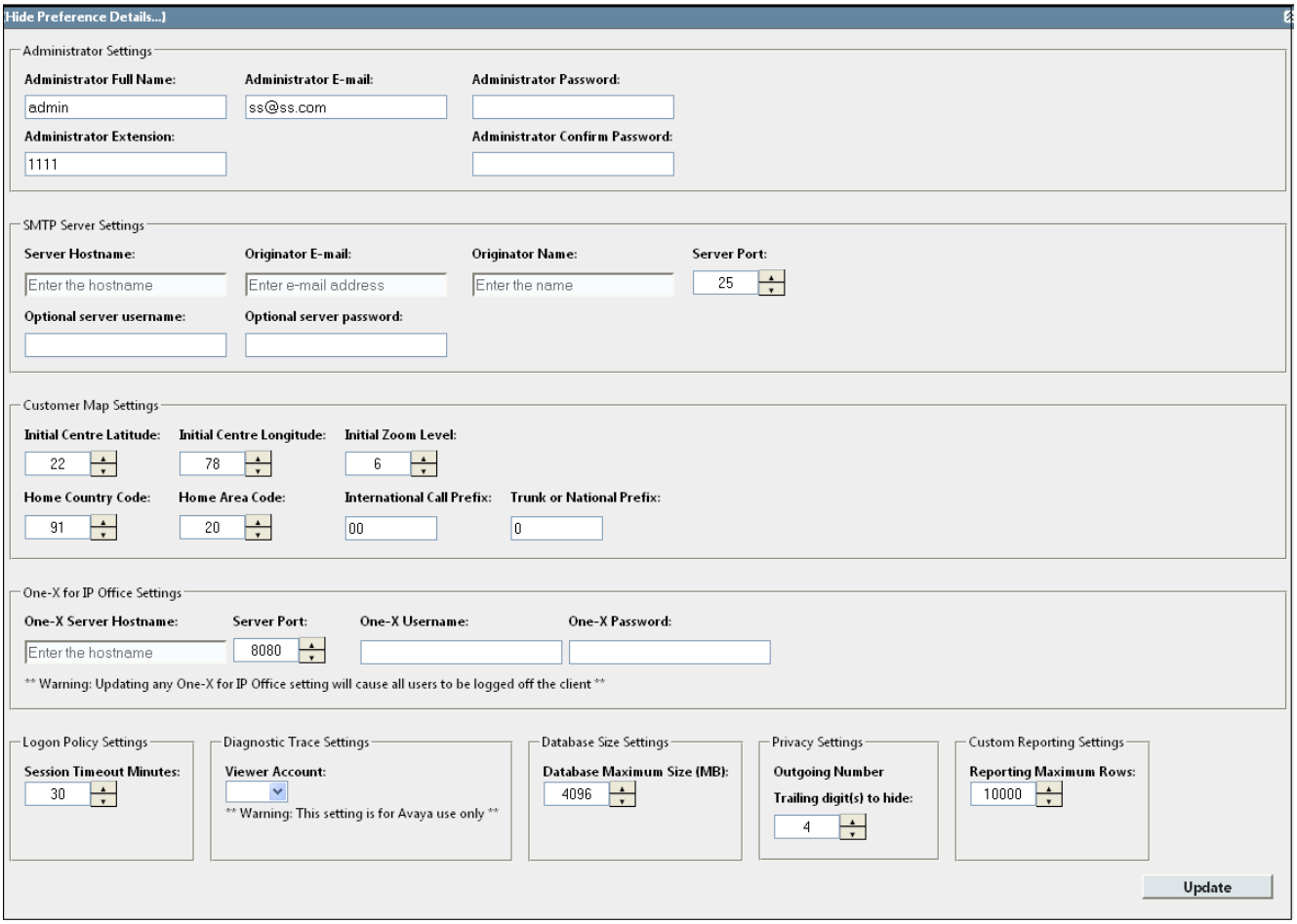
3. Click a column name to sort the list using that column. The arrow icon indicates the column that the list is sorted by and if it is in ascending ⇧ or descending ⇩ order.
4. The information displayed is:

- **Name**
  The name of the service.
- **IP Address**
  The address or host name of the server computer on which the service is running.
- **Software Version**
  The version of the service.
- **State**
  The current state of the service.
- **Restart**
  This option is disabled for non-administrators. If underlined, the option can be used to restart the related service. Note that restarting any services may reset the statistics seen in views.

## 6.7.3 Preferences

This section is only available to the administrator. The administrator can use this section to set or change various IP Office Customer Call Reporter settings.

1. Select the **System Settings** tab.
2. Select **Show Preference Details**.
3. Adjust the settings to match the requirements of the system. Refer to the following sections for details of the individual controls and settings.
4. Click **Update**. Anyone who is using the client application will be logged off as soon as you update the settings.




### Administrator Settings

The following parameters are used to configure the administrator account.

- **Administrator Full Name**
  This field is for general information only.
- **Administrator E-mail**
  This field is used in conjunction with the forgotten password 18 function.
- **Administrator Extension**
  This field is for general information only.
- **Administrator Password** and **Administrator Confirm Password**
  Use these fields to change your administrator password.

### SMTP Server Settings

Access to an SMTP server is required for sending the reports to an e-mail address and for the forgotten password function.

- **Server Hostname**
  This should be the full name of the SMTP server including its domain name.
- **Originator E-mail**
  The sender's e-mail address to be used for e-mails from IP Office Customer Call Reporter. Note that most SMTP servers will require this to match the e-mail address of an account configured on the SMTP server or to be an address configured as one that the SMTP server will relay.

- **Originator Name**
  The name to use on e-mails sent from IP Office Customer Call Reporter.
- **Server Port**
  The port of the SMTP server on which it receives e-mails. The default for most SMTP servers is 25.
- **Optional Server Username** and **Optional Server Password**
  If the SMTP server uses authentication, enter a username and password that matches the security details of an e-mail account for IP Office Customer Call Reporter configured on the SMTP server.

## Customer Map Settings

These settings control the default customer map operation.

- **Initial Centre Latitude:** *Default = 55, Range = -90 to 90*
  Sets the default map center for a customer map view when started.
- **Initial Centre Longitude:** *Default = -5, Range = -180 to 180*
  Sets the default map center for a customer map view when started.
- **Initial Zoom Level:** *Default = 6, Range = 1 (Neighborhood) to 20 (World)*
  Sets the default zoom level for a customer map view when started.
- **Home Country Code:** *Default =44 (United Kingdom)*
  For calls that do not include a country code, this value will be used as the country code.
- **Home Area Code:** *Default = 20 (London)*
  For calls that do not include an area code, this value will be used as the area code.
- **International call Prefix:** *Default = 00*
  The number that must be dialled to make an international call from the country of origin.
- **Trunk or National Prefix:** Default = 0
  This is the number that must be dialled in a domestic (within country) call before any area codes or individual numbers.

## one-X Portal for IP Office Settings

A connection to the one-X Portal for IP Office server is used to by IP Office Customer Call Reporter for the control agent state 85 function. These settings are used to set the location of the one-X Portal for IP Office server and the details of the one-X Portal for IP Office user configured as a ***User Manager*** (refer to the *Avaya IP Office Implementing IP Office Customer Call Reporter* (15-601133) manual). For supervisors to use the function, their account must be configured 161 with the **Control Agent** setting enabled.

- **one-X Server Hostname**
  Enter the address of the one-X Portal for IP Office server.
- **Server Port**
  By default the one-X Portal for IP Office server uses port 8080.
- **one-X Username and one-X Password**
  Enter the name and password of the one-X Portal for IP Office ***User Manager*** account.

## Logon Policy Settings

- **Session Timeout Minutes:** *Default = 30 minutes.*
  This setting controls how long users logged in to an IP Office Customer Call Reporter web client can be inactive. When this timeout is exceeded, the user is required to login again. The timeout setting can be set for between 1 minute and 1440 minutes (1 day). The default setting is 30 minutes. This setting is not applied to wallboard logins.
  - Note that other events, for example manually restarting the IP Office Customer Call Reporter services, can also cause users to be required to login again.
  - Setting the timeout to a large value may not work as intended if the time period is likely to include a scheduled reset of the web services 98. During a scheduled reset, any connected sessions are temporarily interrupted while the reset occurs but then continued with the timeout period reset.
  - The session timeout for a particular supervisor does not occur if they have a dashboard or graph setup for a longer period. For example, if they have a dashboard graph set for four hours and the session timeout is set to a smaller value, their session will not timeout until four hours have expired. Supervisors are, therefore, able to get all the requested data without being interrupted by a session timeout.

## Diagnostic Trace Settings

- **Viewer Account**
  This option will only be used when advised by Avaya when they require additional information to diagnose a possible problem.

## Database Size

- **Database Maximum Size:** *Default = 4096MB*
  Once the database has reached 75% of its maximum size, an alarm will be generated and displayed whenever users log in to IP Office Customer Call Reporter. At 80% an alarm will be generated and the IP Office Customer Call Reporter application will begin to take the required actions to continue recording new data. The action taken is to automatically erase the oldest 10% of data.
  **Note**: This setting applies only to the Express Editions of SQL Server and does not apply to any other commercial Editions.

## Privacy

The system can completely or partially mask the number dialed for outgoing external calls in reports based on the Call Details Report or Trace Report standard report types. For reports based on customer report types, it also masks digits in the **Call_Dialed_Number** field used in the report.

- **Trailing Digits to Hide:** *Default = 0, Range = 0 to 20.*
  This field is used to set the number of digits to hide from the end of the dialed number on outgoing external calls. Up to 20 digits can be masked, from the end of the number. If the number dialed has less digits than the number of digits to mask, the system masks all the digits. Note that for recent reports, when you view the report the number of masked digits remains the same as the setting when the report was first viewed.

## Custom Report Settings

- **Reporting Maximum Range**: *Default = 10000 , Range = 1 to 250,000.*

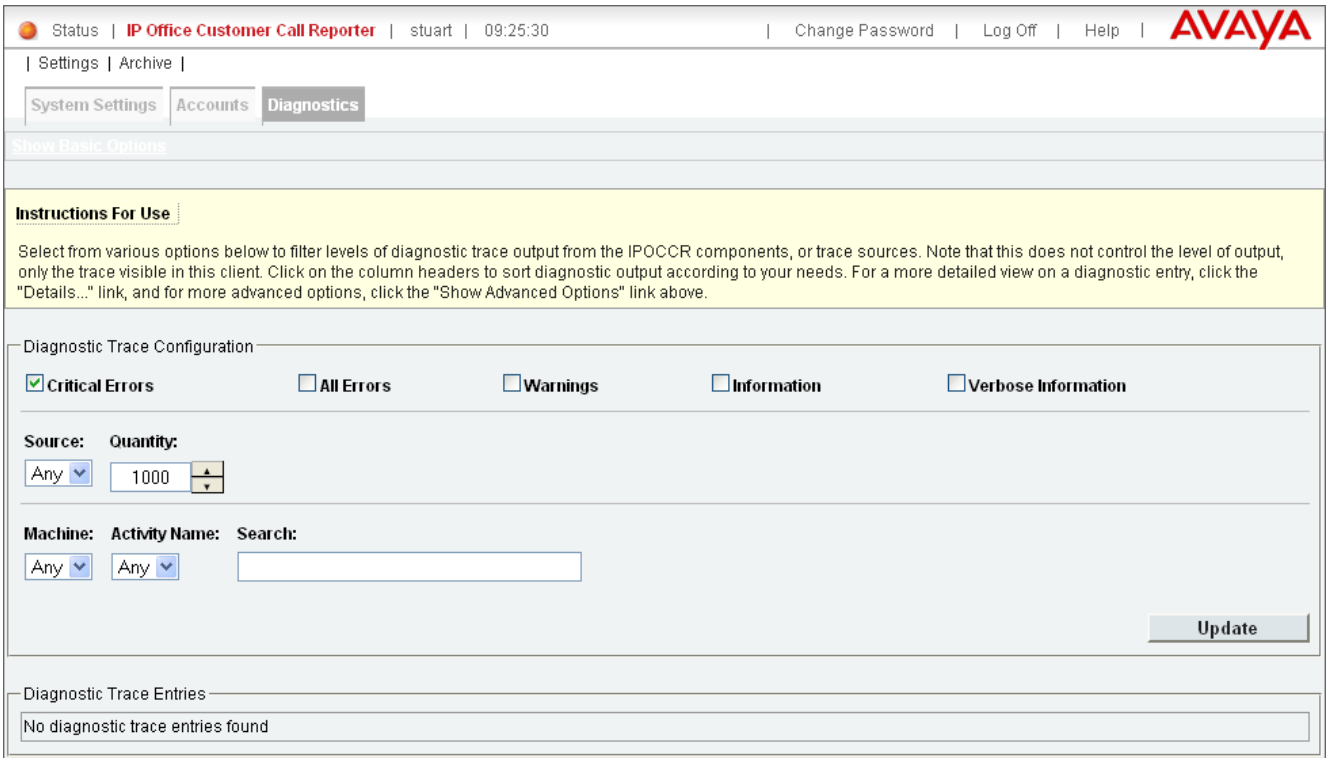
  This field is used to set the maximum number of rows for each data set for a custom report and applies independently for each Data Set in custom reporting. You can set the maximum number of rows to 250,000. This prevents any formatting issues and failures in generating the reports if the reports are heavy. This setting does not apply to standard reporting.

  **Note:** If the custom report that you are generating contains more rows than the configured value in the Custom Report settings, a warning is displayed as follows" Warning: This report will contain more than xxx rows". You can cancel the report generation by using the **Cancel** link. If you go ahead and generate the report, the report is truncated to accommodate the only the maximum number of rows that are configured in the Custom Report settings. This is applicable only to the Custom Reports.

## 6.8 Diagnostics

The options available on the **Diagnostic** tab should only be used under guidance by an Avaya authorized engineer.

When run the diagnostics traces are written into the IP Office Customer Call Reporter database and so consume space. Therefore diagnostics trace should only be run when absolutely required for fault resolution.



# Chapter 7.
# Statistics

# 7. Statistics

This section provides details on the statistic used in the supervisor views, agent views and wallboards.

IP Office Customer Call Reporter collects information about calls to queues and agents and stores this in its database. It also collects information about the current state of the queues and agents. Statistics based on this information are then used in web views and historical reports.

- Except where specifically indicated, usually by the term 'Non-Queue', all statistics relate to calls targeted to queues.
- Each statistic can only be added once within each view.
- Statistics are calculated values. They are affected by configurable settings on the particular view, wallboard or report such as whether to include or exclude internal calls. Those settings can be varied for each instance where a particular statistic is used.
  - The exception is statistics that use answer and lost calls thresholds values in their calculation. The same threshold values are used for all such statistics in the same view or wallboard display.
- The statistics value in views and wallboards can be manually reset when required by any supervisor for who the administrator 289 has enabled the Reset Statistics 86 option. Resetting the statistics affects the view and wallboard statistics for all supervisors and agents. It does not affect the statistics used for historical reports.
- The statistics in views are updated approximately every 2 seconds.

## Statistic Targets

Statistics can be reported on the following types of target. Some statistics can be reported on some or all of the target types, refer to the Available Statistics 178 table.

- **Agents**
  Statistics selectable for an agent return the value for that individual agent only.
- **Queues**
  Statistics selectable for a queue return the value for all agents in the queue or all calls targeted to the queue depending on the particular statistic.
- **TOTAL**
  This option can be used to add a summary row to a view. Alarms and warning settings are not applied to ***TOTAL*** values.
  - For most statistics, the total value will be a total of the queues included in the view.
  - For statistics that are averages, the total value is a weighted average 300 for the queues. For **Longest Wait Time** total is the highest value for any queue in the view. The **Current Wait Time** total is a mean average of all the current wait times of the queues in the view.
  - For those queue statistics that are not support as total values, the value displayed is a –.
- **SYSTEM**
  IP Office Customer Call Reporter 7.0+ supports reporting some queue statistics as values for the whole system. This target type always follows the same rule as queues. Alarms and warning settings are not applied to **SYSTEM** values. **SYSTEM** can also be selected in the dashboard and wallboard.
  - For most queue statistics, the system value is a total of all queues including those not in the current view.
  - For queue statistics that are averages, the system value uses the same type of average as defined for individual queue - simple, combined, or weighted average 300. For the **Current Wait Time** and **Longest Wait Time**, it is the largest value from all queue.
  - For those queue statistics that are not supported as system values, the value displayed is a – (or plotted as a zero value).

## Statistic Types

The statistics kept by IP Office Customer Call Reporter can be categorized into the following types:

| Statistic Type | Description |
|---|---|
| **State Statistics** | These statistics show the current state of a queue or agent. Each of these statistics also has a complementary statistic that shows how long the queue or agent has been in its current state. The total time agents have spent in different states is available through historical reports based on the **Agent Summary Report** 51 template. Examples:<br>• **Agent State (Queue)** shows the current state (*logged off, available, busy, etc*) of each agent in a queue.<br>• **Agent State (Queue) Time** shows the time each agent in a queue has been in their current state. |
| **Calls/Agents** | These statistics show the current number of agents or calls in particular states. The value of these statistics can go up and down and are not available as historical report values. Examples:<br>• **Agents ACW** shows the number of agents in a queue who are currently in the after call work (ACW) state.<br>• **Calls Waiting** shows the number of calls ringing or queued waiting to be answered. |
| **Call Counts** | Depending on the statistic, these statistics increment each time the queue or agent makes, loses, refuses or answers a call. Examples:<br>• **Answered Calls** shows the number of queue calls answered by an agent or all the agents in a queue.<br>• **Internal Made** shows the number of internal calls made by an agent. |
| **Performance Measures** | These statistics combine call counts and target values set by Supervisors to provide a measure of queue or agent performance. Examples:<br>• **Agent Call Share** shows an agents share of queue calls answered out of all queue calls answered for a particular queue.<br>• **Average Answer %** shows the percentage of calls answered that were answered within the target time set by the supervisor. |

## Statistic Colors

A number of different color backgrounds are used while displaying statistics. The following colors are used for normal statistics (these colors are not used in wallboards). The colors for changing statistic number values are optional (enabled by the supervisor's account setting 104 **Highlighting Enabled**) and are not applied to agent state and time values. They are also reset if you change view.

| **Normal** (White) | **Alternate Row** (Light Gray) | **Just Changed** (Purple) | **Recently Changed** (Light Purple) |
|---|---|---|---|

The following additional colors are used when any statistic is configured to display warnings and alarms. These colors override the ones above. Wallboards only display the colors for warnings and alarms.

| **Enabled / Cleared** (Green) | **Warning** (Orange) | **Alarm** (Red) | **Acknowledged** (Blue) |
|---|---|---|---|

Alarms and warnings are automatically cleared when the statistic value returns to the threshold level of the alarm or warning. Agents and supervisors can acknowledge an alarm or warning in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarms list.

# 7.1 Available Statistics

| Statistic Full Name | Available for ... | | | | Call Type [1] | | Warning /Alarm Type | Include Overflow | |
|---|---|---|---|---|---|---|---|---|---|
| | System | Queue | Agent | Total | Ext' | Int' | | From | To |
| Agent Productivity 180 | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | >1-99% | ✓ | ✗ |
| Agent State (Queue) 182 | - | - | ✓ | - | - | - | - | - | - |
| Agent State (Queue) Time 184 | - | - | ✓ | - | - | - | >1-999[2] | - | - |
| Agent State (System) 185 | - | - | ✓ | - | - | - | - | - | - |
| Agent State (System) Time 187 | - | - | ✓ | - | - | - | - | - | - |
| Agents ACW 188 | ✓ | ✓ | - | ✓ | - | - | >1-150 | - | - |
| Agents Available 189 | ✓ | ✓ | - | ✓ | - | - | <1-150 | - | - |
| Agents Call Share 190 | - | - | ✓ | - | - | - | - | - | ✓ |
| Agents Logged On 191 | ✓ | ✓ | - | ✓ | - | - | <1-150 | - | - |
| Agents Present 192 | ✓ | ✓ | - | ✓ | - | - | - | - | - |
| Agents Ringing 193 | ✓ | ✓ | - | ✓ | ✓ | ✓ | - | - | ✗ |
| Answered Calls 194 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | >1-999 | ✗ | ✗/✓[3] |
| Answered External (Non-Queue) 195 | - | - | ✓ | - | ✓ | - | >1-999 | - | - |
| Answered Internal (Non-Queue) 196 | - | - | ✓ | - | - | ✓ | >1-999 | - | - |
| Answered Internal (Queue) 197 | ✓ | ✓ | ✓ | ✓ | - | ✓ | >1-999 | ✗ | ✗ |
| Average Answer % 198 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | <1-100% | ✓ | ✗ |
| Average Answer Time 200 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | >1-600 | ✓ | ✗ |
| Average Wait Time 202 | ✓ | ✓ | - | ✓ | ✓ | ✓ | >1-600 | ✓ | ✗ |
| Busy Not Available 203 | ✓ | ✓ | - | ✓ | - | - | >1-150 | - | - |
| Calls Waiting 204 | ✓ | ✓ | - | ✓ | ✓ | ✓ | >1-999 | ✗ | ✓ |
| Current Wait Time 206 | ✓ | ✓ | - | ✓ | ✓ | ✓ | >1-600 | ✓ | ✓ |
| Grade of Service 207 | ✓ | ✓ | - | ✓ | ✓ | ✓ | <1-100% | ✓ | ✗ |
| Internal Made 209 | - | - | ✓ | - | - | ✓ | >1-999 | - | - |
| Longest Wait Time 210 | ✓ | ✓ | - | ✓ | ✓ | ✓ | >1-600 | ✓ | ✗ |
| Lost Calls 211 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | >1-999 | ✗ | ✗/✓[3] |
| New Messages 212 | ✓ | ✓ | - | ✓ | - | - | >1-999 | - | - |
| No Answer 213 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | >1-999 | ✗ | ✗/✓[3] |
| Outbound Calls (External) 215 | - | - | ✓ | - | ✓ | - | >1-999 | - | - |
| Overflowed Answered 216 | ✓ | ✓ | - | ✓ | ✓ | ✓ | >1- 999 | ✓ | ✗ |
| Overflowed Calls 214 | ✓ | ✓ | - | ✓ | ✓ | ✓ | >1-999 | ✓ | ✗ |
| Overflowed Calls Waiting 217 | ✓ | ✓ | - | ✓ | ✓ | ✓ | >1-999 | ✓ | ✗ |
| Overflowed Lost 218 | ✓ | ✓ | - | ✓ | ✓ | ✓ | >1-999 | ✓ | ✗ |
| Presented Calls 219 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | >1-999 | ✓ | ✗/✓[3] |
| Queue State 221 | - | ✓ | - | - | - | - | - | - | - |
| Queue State Time 222 | - | ✓ | - | - | - | - | >1-600[2] | - | - |
| Routed to Other 223 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | >1-999 | ✓ | ✗ |
| Routed to Voicemail 224 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | >1-999 | ✓ | ✗ |
| Talk Average 225 | - | ✓ | ✓ | ✓ | ✓ | ✗ | >1-600 | ✗ | ✗/✓[3] |
| Talk Inbound 226 | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | - | ✗ | ✗/✓[3] |
| Talk Inbound Average 227 | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | - | ✗ | ✗/✓[3] |
| Talk Internal 228 | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | - | ✓ | ✗ |
| Talk Outbound 229 | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | - | - | - |
| Talk Outbound Average 230 | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | >1-600 | - | - |
| Talk Total 231 | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | - | ✗ | ✗/✓[3] |
| Transferred 232 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | >1-999 | ✓ | ✗ |

1. With statistics that support both internal and or external calls, the selection of which call types are reported is selectable through the statistic's settings.
2. For **Agent State (Queue) Time** and **Queue State Time**, separate time thresholds can be set for each state that has been selected to alarm.
3. ✗/✓* For **Answered Calls**, **Lost Calls, No Answer**, **Talk Inbound**, **Talk Inbound Average**, **Talk Total**, **Talk Average**, and **Presented Calls** queue calls that overflowed to a queue are included in agent statistics but not in queue statistics.

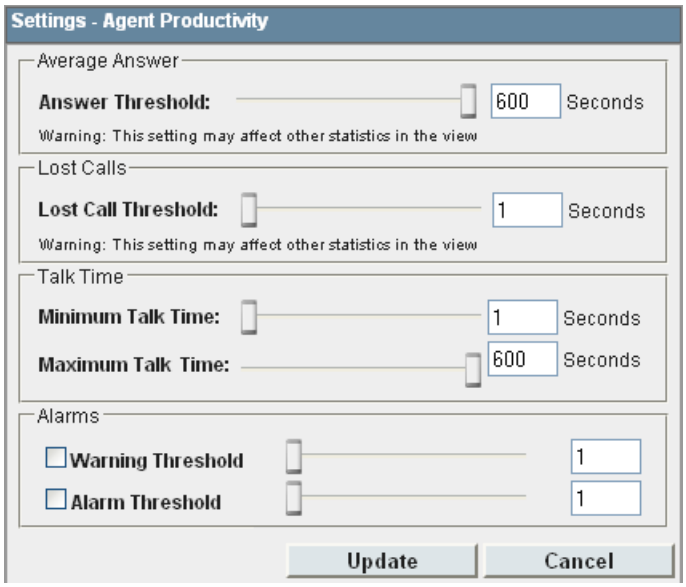
4. This documentation uses the full name for IP Office Customer Call Reporter statistics and states. However, for the display in browser screens, the IP Office Customer Call Reporter can use abbreviated names. The statistics however remain the same.

# 7.2 Agent Productivity

- This statistic is available for the system, queues, and agents.
- For a queue it shows the number of queue calls answered within a set of service criteria as a percentage of all queue calls presented.
- For an agent it shows the percentage of calls an agent has handled within a set of service criteria over all calls.
- It excludes calls disconnected before the Lost Calls threshold setting, measured from when the call was presented to the queue.
- It excludes direct calls presented to the agents and outbound external calls.
- It includes lost calls.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| Queue | ✓ | - | ✗ | ✓ | ✓/✗ |
| Agent | ✓ | - | ✗ | ✓ | ✓/✗ |

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset 86. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Answer Threshold:** *Default = 600 seconds, Range = 1 to 600 seconds.*
  Used for statistics calculated as a percentage of calls answered within the set time out of all calls presented. Sets the target time for calls to be answered from when they are first presented to the queue or agent. Note that for agents, calls are only presented for the queue's no answer time before being presented to the next agent. Note that this setting is shared between the **Agent Productivity** 180, **Average Answer %** 198 and **Grade of Service** 207 statistics in the same monitor or wallboard view.

- **Lost Calls Threshold:** *Default = 1 second, Range = 1 to 600 seconds***.**
  Lost calls are calls where the caller disconnects before the call is answered. This threshold sets the minimum time in seconds for a call to be available to be answered before it will be counted as lost. Lost calls are not included in the calculation of this statistic. Note that this setting is shared between the **Agent Productivity** 180 and **Grade of Service** 207 statistics in the same monitor or wallboard view.

- **Talk Time**
  These settings define the minimum and maximum talk time targets for a call to be counted towards improving an agent's productivity. Talk time includes hold and after call work.
  - **Minimum:** *Default = 60 seconds. Range 1 to 600 seconds.*
    The minimum target for call talk time.
  - **Maximum:** *Default = 600 seconds. Range 1 to 3600 seconds.*
    The maximum target for call talk time.
- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

| Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
|---|---|---|---|

- Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
- The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
- Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
- Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
- Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.

- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

## Notes:

- The answer time is measured from the point when a call is presented to an agent. It does not include any previous ring time for the call.
- When calculated for a queue, the calculation is a weighted average of the agents performance for that Queue.
- For the purposes of this statistic, calls presented to the agent and then answered by voicemail or presented to another agent due to the no answer timeout are included in the call count. Calls taken from the agent and answered by another user, for example by call pickup, are not included.
- Each time the same call is presented to an agent it is counted in their Agent Productivity.

# 7.3 Agent State (Queue)

- This statistic is only available for agents.
- It shows the current state of each agent in the selected queue.
- The related statistic Agent State (Queue) Time 184 can be used to show how long each agent has been in their current state.

Possible agent states are:

| State | Meaning | State | Meaning |
|---|---|---|---|
| **Available** | Logged in but not on a call. | **Logged Out** | The agent has logged out. |
| **Ringing** | Alerting with a queue call. | **Busy** | On a call presented to the queue. |
| **Ring Alt-Q** | Alerting with a call for another queue of which they are a member or that has overflowed. | **Busy Alt-Q** | On a call from another queue of which they are a member or that has overflowed. |
| **Ring Non-Q** | Alerting with a non-queue call. | **Busy Non-Q** | On a direct call 292 or a picked up call. |
| **Present** | Logged in but not enabled for this queue. | **ACW** | In the After Call Work state. |
| **Holding** | With a call on hold. | **Busy Not Available** | In the Busy Not Available state. |

**Additional Information**
Statistic can include additional information, indicated by a red corner icon. Place your cursor over the red corner icon to display the addition information. This type of information is updated approximately every 5 seconds.

| Information | Shown for: |
|---|---|
| **Number** | Displayed for ringing, busy and hold states. |
| **Internal** or **External** | |
| **Inbound** or **Outbound** | |
| **Busy NA Reason** | Displayed for the **Busy Not Available** state. The individual reasons are configured by the IP Office telephone system maintainer. A reason is selected by the agent when going they go into **Busy Not Available** state. |

**Statistic Settings**
This statistic has no customizable settings.



## Description of Agent States

The following agent states can be reported for a queue:

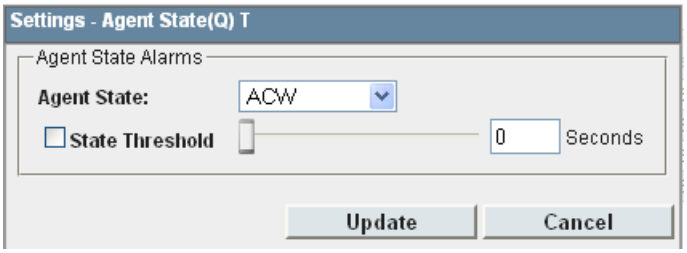
| | |
|---|---|
| **Available** | This agent state is reported when an agent is logged in and is not in any other state. That is, when the agent is available to receive and answer queue calls. |
| **Busy** | This agent state is reported when the agent answers and is connected to a call to a queue of which they are a member. |
| **ACW** | After Call Work indicates that the agent is not available to receive queue calls 296 while they perform some other call related activity. Typically this is used for activities such as call records and data entry that need to be completed before handling another call. A number of controls are available for After Call Work 116. Agents can be configured to be automatically put into ACW state after a queue call or else they can manually select to enter the state when required.<br><br>Note: The Wrap-Up 300 feature briefly applied to the end of all calls including queue calls is also reported as **After Call Work** state. |
| **Busy Alt-Q** | This agent state is reported when, while viewing the agent's status in one queue of which they are a member, the agent is connected to a call belonging to another queue of which they are a member. It is also used when the agent is connected to a call that has overflowed from a queue. |
| **Busy Not Available** | This agent state indicates that the agent is not available to receive calls while they perform a non-call related activity such as attending a meeting. This state can be selected by an agent using the DND or SAC button on their telephone, see Agent Telephone Controls 113. This also requires the agent to select one of the reason codes 296 displayed on their telephone to indicate the reason they are going into the **Busy Not Available** state.<br><br>If this state is enabled while a queue call is being presented, the call will go to the next available agent and cause the **No Answer** statistic for the agent and queue to be incremented. |
| **Busy Non-Q** | This agent state is reported when the agent answers a call that was not targeted to the queue to which they belong. It is also reported when an agent makes a call. |
| **Holding** | This agent state is reported when an agent has a call on hold. |
| **Logged Out** | This agent state is reported when an agent has logged out 115 from the telephone system. Note that this is the default state reported by IP Office Customer Call Reporter if it cannot determine the exact state, for example when restarting. |
| **Queue Disabled** | This agent state is reported when an agent is logged in but their membership of the particular queue has been disabled. In this state they will not be presented with calls targeted to that queue. The agent's state for other queues will still be Available 291. |
| **Ringing** | This agent state is reported when the agent is being presented with a call targeted to a queue of which they are a member. If they answer the call their state will change to Busy 291. |
| **Ring Alt-Q** | This agent state is reported when the agent is being presented with a call from another queue of which they are a member. If they answer the call their state will change to Busy Alt-Q 291. It is also used when the agent is being presented a call that has overflowed from a queue. |
| **Ring Non-Q** | This agent state is reported when the agent is being presented with a call that is not targeted to any queue of which they are a member. If answered the call their state will change to Busy Non-Q 291. |

# 7.4 Agent State (Queue) Time

- This statistic is only available for agents.
- It shows how long the agent has been in their current state for the selected queue.
- The agent's current state can be shown by the related statistic Agent State (Queue) 182.

**Statistic Settings**

All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset 86. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given. Different thresholds times can be set for each of the states selectable in the drop down list.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

    | Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
    |---|---|---|---|

  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.5 Agent State (System)

- This statistic is only available for agents.
- It shows the agent activity across all queues to which the agent belongs, ie. the whole system.
- The related statistic Agent State (System) Time 187 can be used to show how long each agent has been in their current state.

The possible agent states on the system are listed below. They are listed in order of priority, from the highest priority downwards. The priority is important if the agent belongs to several queues and has a different state in each of those queues.

| State | Meaning |
|---|---|
| **Busy** | This agent state is reported when the agent answers and is connected to a call to a queue of which they are a member. |
| **Busy Non-Q** | This agent state is reported when the agent answers a call that was not targeted to the queue to which they belong. It is also reported when an agent makes a call. |
| **Holding** | This agent state is reported when an agent has a call on hold. |
| **Ringing** | This agent state is reported when the agent is being presented with a call targeted to a queue of which they are a member. If they answer the call their state will change to Busy 291. |
| **Ring Non-Q** | This agent state is reported when the agent is being presented with a call that is not targeted to any queue of which they are a member. If answered the call their state will change to Busy Non-Q 291. |
| **Busy Not Available** | This agent state indicates that the agent is not available to receive calls while they perform a non-call related activity such as attending a meeting. This state can be selected by an agent using the DND or SAC button on their telephone, see Agent Telephone Controls 113. This also requires the agent to select one of the reason codes 296 displayed on their telephone to indicate the reason they are going into the **Busy Not Available** state.<br><br>If this state is enabled while a queue call is being presented, the call will go to the next available agent and cause the **No Answer** statistic for the agent and queue to be incremented. |
| **Available** | This agent state is reported when an agent is logged in and is not in any other state. That is, when the agent is available to receive and answer queue calls. |
| **ACW** | After Call Work indicates that the agent is not available to receive queue calls 296 while they perform some other call related activity. Typically this is used for activities such as call records and data entry that need to be completed before handling another call. A number of controls are available for After Call Work 116. Agents can be configured to be automatically put into ACW state after a queue call or else they can manually select to enter the state when required.<br><br>Note: The Wrap-Up 300 feature briefly applied to the end of all calls including queue calls is also reported as **After Call Work** state. |
| **Present** | This agent state is reported when an agent is logged in but their membership of the particular queue has been disabled. In this state they will not be presented with calls targeted to that queue. The agent's state for other queues will still be Available 291. |
| **Logged Out** | This agent state is reported when an agent has logged out 115 from the telephone system. Note that this is the default state reported by IP Office Customer Call Reporter if it cannot determine the exact state, for example when restarting. |

**Additional Information**
Statistic can include additional information, indicated by a red corner icon. Place your cursor over the icon to display the addition information. This type of information is updated approximately every 5 seconds.

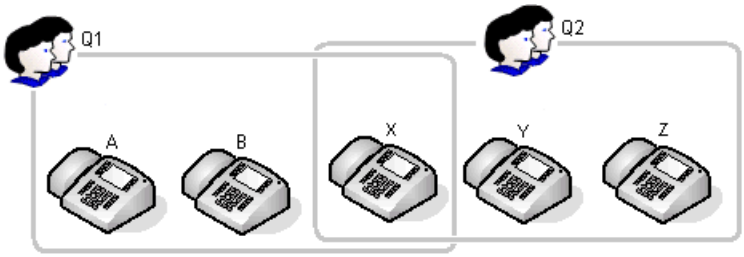
| Information | Shown for: |
|---|---|
| **Number** | Displayed for ringing, busy and hold states. |
| **Internal** or **External** | |
| **Inbound** or **Outbound** | |
| **Busy NA Reason** | Displayed for the **Busy Not Available** state. The individual reasons are configured by the IP Office telephone system maintainer. A reason is selected by the agent when going they go into **Busy Not Available** state. |

**Statistic Settings**
This statistic has no customizable settings.

## Example of How Agent State Queue is Determined

When an agent is a member of more than one queue, their state for each queue may differ. The example below shows how the different state for different queues is resolved into a single system state.

***Agent X*** is a member of 2 queues; ***Q1*** and ***Q2***. In the following scenarios we see how Agent X's state is reported for each of those queues using the **Agent State (Queue)** statistic and for the systems as a whole using the **Agent State (System)** statistic.




| Scenarios | | Agent State (Queue) | | Agent State (System) |
|---|---|---|---|---|
| | | Q1 | Q2 | |
| **Starting Work** | • Agent X is not logged in at an extension. | *Logged Out* | *Logged Out* | *Logged Out* |
| | • Agent X logs in to an extension. | *Available* | *Available* | *Available* |
| **Answering a Queue Call** | • A call to the queue Q1 is presented to Agent X. | *Ringing* | *Ring Alt-Q* | *Ringing* |
| | • Agent X answers the call. | *Busy* | *Busy Alt-Q* | *Busy* |
| | • Agent X puts the call on hold. | *Holding* | *Busy Alt-Q* | *Busy* |
| | • Agent X reconnects the call. | *Busy* | *Busy Alt-Q* | *Busy* |
| | • The call ends. The system automatically applies a short period of wrap up 300, usually 2 seconds. | *After Call Work* | *After Call Work* | *After Call Work* |
| | • Since it was a queue call the system may then automatically apply After Call Work 289. | *After Call Work* | *After Call Work* | *After Call Work* |
| | • The system automatically ends After Call Work (by default after 10 seconds). | *Available* | *Available* | *Available* |
| **Answering a Direct Call** | • A call is targeted directly to Agent X rather than a queue. | *Ring Non-Q* | *Ring Non-Q* | *Ring Non-Q* |
| | • Agent X answers the call. | *Busy Non-Q* | *Busy Non-Q* | *Busy Non-Q* |
| | • The call ends. The system automatically applies a short period of wrap up 300, usually 2 seconds. | *After Call Work* | *After Call Work* | *After Call Work* |
| | • The system automatically ends wrap up. | *Available* | *Available* | *Available* |
| **Making a Call** | • Agent X makes a call. | *Busy Non-Q* | *Busy Non-Q* | *Busy Non-Q* |
| | • The call ends. The system automatically applies a short period of wrap up 300, usually 2 seconds. | *After Call Work* | *After Call Work* | *After Call Work* |
| | • The system automatically ends wrap up. | *Available* | *Available* | *Available* |
| **Doing Other Work** | • Agent X selects Busy Not Available. | *Busy Not Available* | *Busy Not Available* | *Busy Not Available* |
| | • When completed, Agent X ends Busy Not Available. | *Available* | *Available* | *Available* |
| **Enabling/ Disabling Queue Membership** | • Agent X disables their membership of the Q1 queue. | *Present* | *Available* | *Available* |
| | • Agent X disables their membership of the Q2 queue. They are now disabled from all queues. | *Present* | *Present* | *Present* |
| | • Agent X re-enables their membership of both queues. | *Available* | *Available* | *Available* |
| **Ending Work** | • Agent X logs out from the extension. | *Logged out* | *Logged out* | *Logged out* |

# 7.6 Agent State (System) Time

- This statistic is only available for agents.
- It shows how long the agent has been in their current system state.
- The agent's current state can be shown by the related statistic Agent State (System) 185.

**Statistic Settings**
This statistic has no customizable settings.



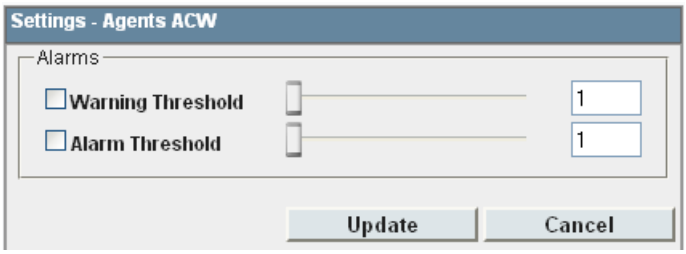
# 7.7 Agents ACW

- This statistic is available for the system and queues.
- Its shows the number of agents who are currently in the After Call Work (ACW) state.
- For users who previously used CCC, the ACW state is similar to Busy Wrap Up.

After Call Work indicates that the agent is not available to receive queue calls 296 while they perform some other call related activity. Typically this is used for activities such as call records and data entry that need to be completed before handling another call. A number of controls are available for After Call Work 116. Agents can be configured to be automatically put into ACW state after a queue call or else they can manually select to enter the state when required.

Note: The Wrap-Up 300 feature briefly applied to the end of all calls including queue calls is also reported as **After Call Work** state.

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset 86. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

| Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
|---|---|---|---|

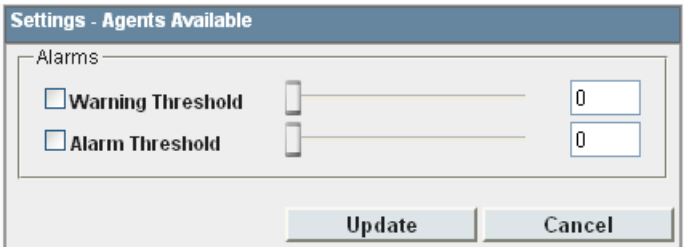
  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.8 Agents Available

- This statistic is available for the system and queues.
- It shows the number of agents in the queue who are currently available to answer calls.

This agent state is reported when an agent is logged in and is not in any other state. That is, when the agent is available to receive and answer queue calls.

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset 86. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Alarms**
  Use these controls to select whether a warning or an alarm is given for the statistic. You can also set the threshold levels below which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

    | Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
    |---|---|---|---|

  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be higher than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be lower that the warning threshold.

# 7.9 Agents Call Share

- This statistic is only available for agents.
- It shows the percentage of queue calls 296 answered by the agent out of all queue calls answered by the agents in the queue.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| Queue | - | - | - | - | -/- |
| Agent | ✓ | ✗ | ✓ | ✓ | -/✓ |

**Example**
There are 4 agents in a Sales group. Together they answer 200 calls. The number of calls answered by each agent can be shown as a percentage of the total calls answered.

- Agent 1 answers 62 calls = Call Share 31%.
- Agent 2 answers 56 calls = Call Share 28%.
- Agent 3 answers 58 calls = Call Share 29%.
- Agent 4 answers 24 calls = Call Share 12%.

**Statistic Settings**
This statistic has no customizable settings.



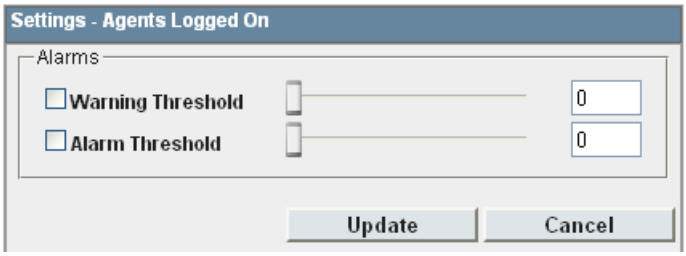
# 7.10 Agents Logged On

- This statistic is available for the system and queues.
- It shows the number of agents who are members of the queue and are currently logged in.
- When logged in an agent can also be in other states.

An agent is "logged in" when they use an extension on the telephone system to enter their extension number and login code. Their telephone settings are then applied to that extension and they are then able to make and receive calls including calls targeted to queue of which they are members.

Agents can log in to an extension either by pressing the Login button if displayed or dialing a login short code. The default short code is *35*<agent extension number>*<agent login code>#.

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset 86. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




**Alarms**
Use these controls to select whether a warning or an alarm is given for the statistic. You can also set the threshold levels below which the warning or alarm is given.

- When enabled, the background color of the cells is used to indicate their current alarm state.

| Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
|---|---|---|---|

- Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
- The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
- Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
- Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
- Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.

- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be higher than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be lower that the warning threshold.

# 7.11 Agents Present

- This statistic is available for the system and queues.
- It shows the number of agents who are logged in but whose membership of the queue is currently disabled.

This agent state is reported when an agent is logged in but their membership of the particular queue has been disabled. In this state they will not be presented with calls targeted to that queue. The agent's state for other queues will still be Available 291.

**Statistic Settings**
This statistic has no customizable settings.



# 7.12 Agents Ringing

- This statistic is available for the system and queues.
- It shows the number of agents with queue calls[296] ringing but not yet answered.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| Queue | ✓ | ✗ | ✓ | ✓ | ✗/✗ |
| Agent | - | - | - | - | -/- |

**Statistic Settings**
This statistic has no customizable settings.

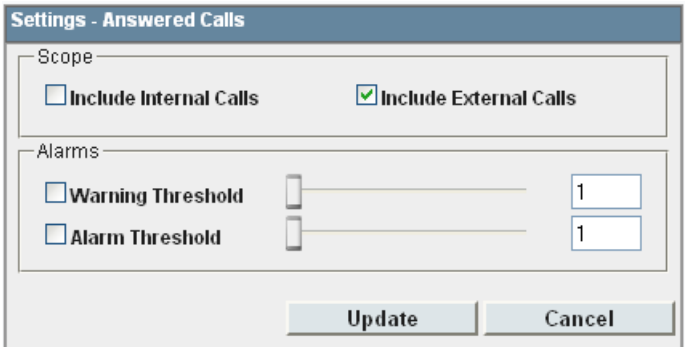


# 7.13 Answered Calls

- This statistic is available for the system, queues, and agents.
- It shows the number of queue calls 296 that has been answered by the agents in the queue or the agent being reported on.
- It does not include direct calls answered by agents.
- Once a call has overflowed, if answered, for the queue it is reported as **Overflowed Answered**.
- It does not include queue calls answered by non-queue members using methods such as call pickup.
- It does not include calls that go to voicemail.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| **Queue** | ✓ | ✗ | *Optional* | *Optional* | ✗/✗ |
| **Agent** | ✓ | ✗ | *Optional* | *Optional* | -/✓ |

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset 86. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Scope**
  Supervisors can select which types of calls are included in the calculation of this statistic. By default external calls are included.
  - **Include Internal Calls:** Select to include internal calls in the statistic.
  - **Include External Calls:** Select to include external calls in the statistic.
- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

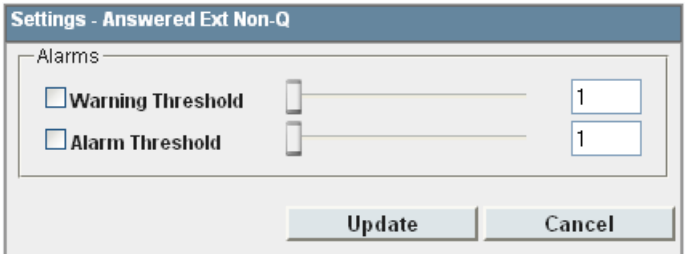
    | Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
    |---|---|---|---|
  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
  - **Warning Threshold**
    Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
  - **Alarm Threshold**
    Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.14 Answered External (Non-Queue)

- This statistic is only available for agents.
- It shows the number of external inbound calls that are targeted directly to an agent and answered by that agent.
- It does not includes queue calls to a queue of which the agent is a member.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| Queue | - | - | - | - | -/- |
| Agent | ✗ | ✓ | ✗ | ✓ | -/- |

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

| Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
|---|---|---|---|

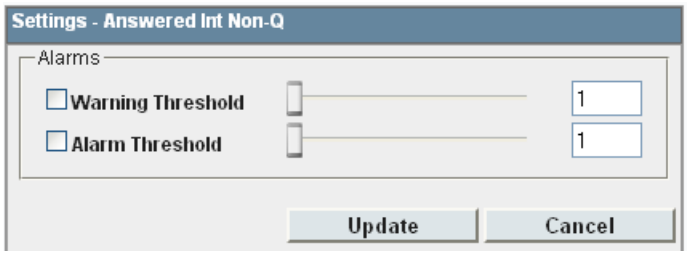
  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.15 Answered Internal (Non-Queue)

- This statistic is only available for agents.
- It shows the number of internal inbound calls that are targeted directly to an agent and answered by that agent.
- It does not includes queue calls to a queue of which the agent is a member.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| Queue | - | - | - | - | -/- |
| Agent | ✗ | ✓ | ✓ | ✗ | ✗/✗ |

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

| Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
|---|---|---|---|

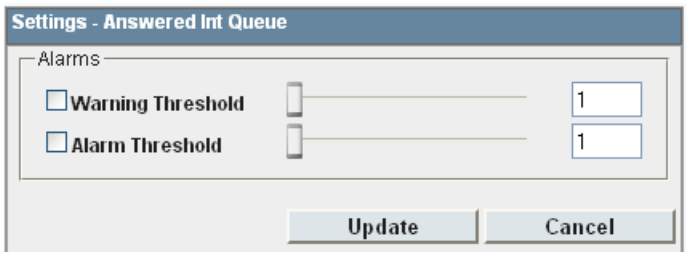
  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.16 Answered Internal (Queue)

- This statistic is available for the system, queues, and agents.
- It shows the number of internal calls to the queue that were then answered by the agents in the queue or the agent being reported on.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| Queue | ✓ | ✗ | ✓ | ✗ | ✗/✗ |
| Agent | ✓ | ✗ | ✓ | ✗ | -/✓ |

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

| Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
|---|---|---|---|

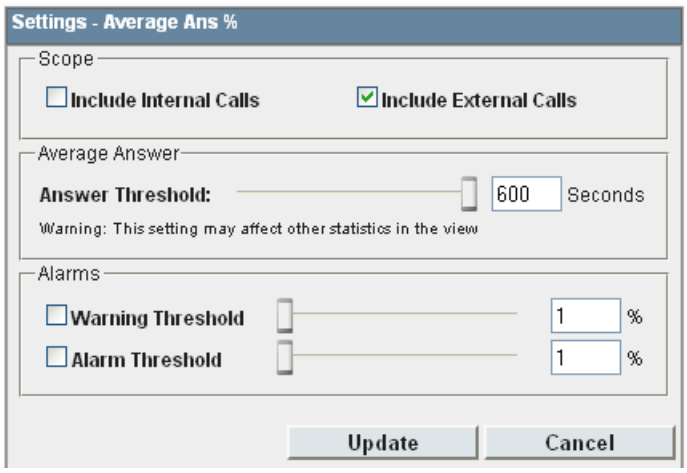
  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.17 Average Answer %

- This statistic is available for the system, queues, and agents.
- It shows the number of queue calls 296 answered by the queue within the specified answer threshold time, divided by the total number of calls answered.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| **Queue** | ✓ | ✗ | *Optional* | *Optional* | ✓/✗ |
| **Agent** | ✓ | ✗ | *Optional* | *Optional* | ✓/✗ |

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset 86. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Scope**
  Supervisors can select which types of calls are included in the calculation of this statistic. By default external calls are included.
  - **Include Internal Calls:** Select to include internal calls in the statistic.
  - **Include External Calls:** Select to include external calls in the statistic.
- **Answer Threshold:** *Default = 600 seconds, Range = 1 to 600 seconds.*
  Used for statistics calculated as a percentage of calls answered within the set time out of all calls presented. Sets the target time for calls to be answered from when they are first presented to the queue or agent. Note that for agents, calls are only presented for the queue's no answer time before being presented to the next agent. Note that this setting is shared between the **Agent Productivity** 180, **Average Answer %** 198 and **Grade of Service** 207 statistics in the same monitor or wallboard view.
- **Alarms**
  Use these controls to select whether a warning or an alarm is given for the statistic. You can also set the threshold levels below which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

    | Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
    |---|---|---|---|

  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be higher than the alarm threshold.

- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be lower that the warning threshold.

## Transferred Call and Performance Statistics

For performance statistics, **Average Answer Time**, **Average Answer %** and **Grade of Service**, transferred calls are treated as follows:

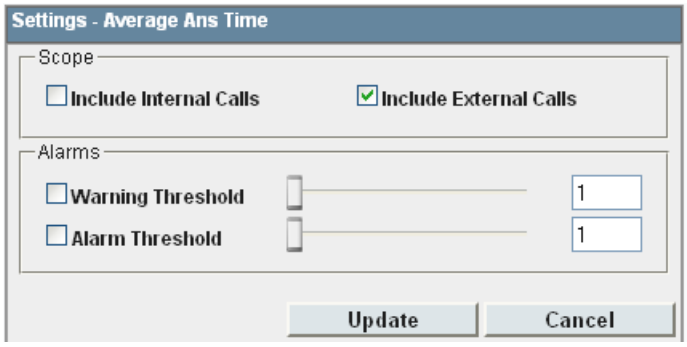
- For supervised transfers, the duration of the enquiry call is treated as the ringing time of the transferred call. Note also that the ring time of the enquiry call is included a separate answered call value.
- For unsupervised transfers, the transferred call is treated the same as a call targeted directly to the queue or agent.

# 7.18 Average Answer Time

- This statistic is available for the system, queues, and agents.
- It shows the sum of answer times divided by the number of queue calls answered by the queue or by the agent being reported.
- The answer time is measured from the time when the call arrives at the target (queue or agent). It does not include t he delay between the time when a call is presented to a Hunt Group and the time when the call arrives at the target.
- When calculated for an agent, the statistic is only based on the calls that the agent handled on behalf of the hunt group selected in the view.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| **Queue** | ✓ | ✗ | *Optional* | *Optional* | ✓/✗ |
| **Agent** | ✓ | ✗ | *Optional* | *Optional* | ✓/✗ |

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Scope**
  Supervisors can select which types of calls are included in the calculation of this statistic. By default external calls are included.
  - **Include Internal Calls:** Select to include internal calls in the statistic.
  - **Include External Calls:** Select to include external calls in the statistic.
- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

    | Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
    |---|---|---|---|
  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
  - **Warning Threshold**
    Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
  - **Alarm Threshold**
    Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

## Transferred Call and Performance Statistics

For performance statistics, **Average Answer Time**, **Average Answer %** and **Grade of Service**, transferred calls are treated as follows:

- For supervised transfers, the duration of the enquiry call is treated as the ringing time of the transferred call. Note also that the ring time of the enquiry call is included a separate answered call value.
- For unsupervised transfers, the transferred call is treated the same as a call targeted directly to the queue or agent.

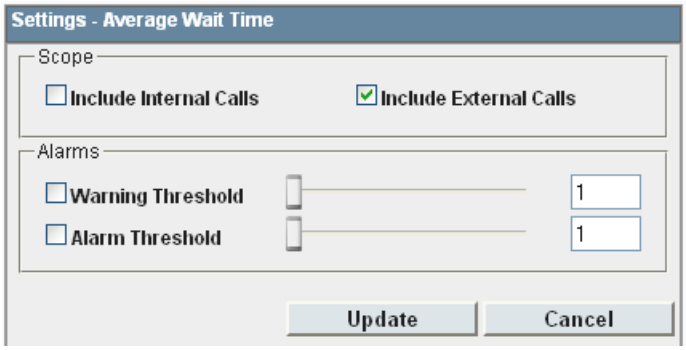
# 7.19 Average Wait Time

- This statistic is available for the system and queues.
- Average waiting time of calls.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| **Queue** | ✓ | ✗ | *Optional* | *Optional* | ✓/✗ |
| **Agent** | ✗ | ✗ | - | - | -/- |

- For supervised transfers (including transfers using park 283), the duration the call is held or parked is included in the **Average Wait Time** 200 and **Longest Wait Time** 210 calculations for the queue to which the call is transferred.

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset 86. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Scope**
  Supervisors can select which types of calls are included in the calculation of this statistic. By default external calls are included.
  - **Include Internal Calls:** Select to include internal calls in the statistic.
  - **Include External Calls:** Select to include external calls in the statistic.
- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

| Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
|---|---|---|---|

  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

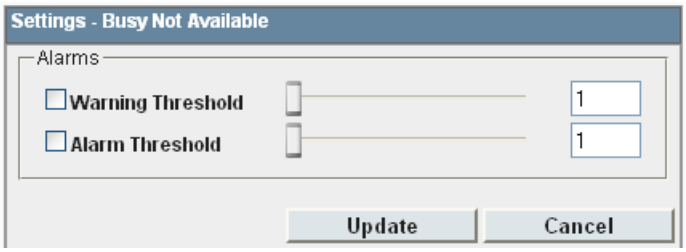
# 7.20 Busy Not Available

- This statistic is available for the system and queues.
- It shows the total number of agents in the queue who have currently indicated they are Busy Not Available 291.
- Busy Not Available is a state selected by an agent when they need to stop receiving queue calls to do some non-call related activity.

This agent state indicates that the agent is not available to receive calls while they perform a non-call related activity such as attending a meeting. This state can be selected by an agent using the DND or SAC button on their telephone, see Agent Telephone Controls 113. This also requires the agent to select one of the reason codes 296 displayed on their telephone to indicate the reason they are going into the **Busy Not Available** state.

If this state is enabled while a queue call is being presented, the call will go to the next available agent and cause the **No Answer** statistic for the agent and queue to be incremented.

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset 86. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

| Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
|---|---|---|---|

  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.21 Calls Waiting

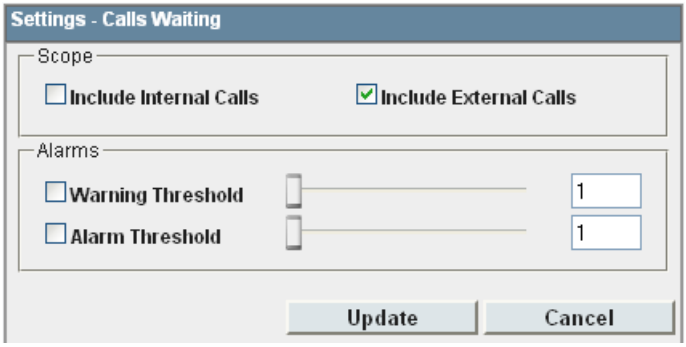
- This statistic is available for the system and queues.
- It shows the number of calls targeted to the queue that are waiting to be answered by the agents in the queue or the agent being reported on.
- It includes calls currently ringing at agent telephones.
- Calls that overflow from the queue and are still waiting to be answered are reported using Overflowed Calls Waiting 217.

| Call types | Queue Calls | Direct Call | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| **Queue** | ✓ | ✗ | *Optional* | *Optional* | ✗/✓ |
| **Agent** | - | - | - | - | -/- |

**Additional Information**
Statistic can include additional information, indicated by a red corner icon. Place your cursor over the icon to display the addition information. This type of information is updated approximately every 5 seconds.

- The additional information provided by this statistic is the peak waiting time, the average waiting time and the current longest waiting time.
- The information is shown for internal and or external calls depending on the statistic settings.

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset 86. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Scope**
  Supervisors can select which types of calls are included in the calculation of this statistic. By default external calls are included.
  - **Include Internal Calls:** Select to include internal calls in the statistic.
  - **Include External Calls:** Select to include external calls in the statistic.
- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

    | Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
    |---|---|---|---|

  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.

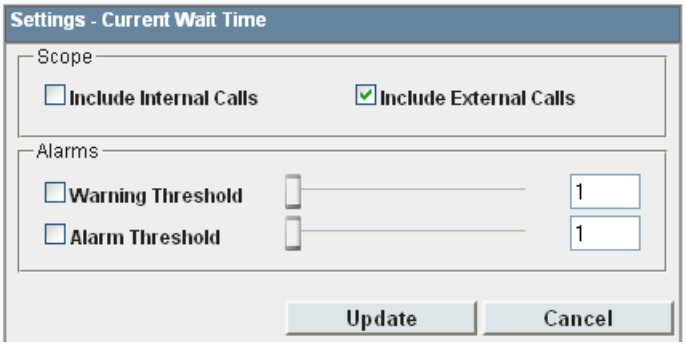
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.22 Current Wait Time

- This statistic is available for the system and queues.
- Time of the longest currently waiting call.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| **Queue** | ✓ | ✗ | *Optional* | *Optional* | ✓/✓ |
| **Agent** | ✗ | ✗ | *Optional* | *Optional* | -/- |

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Scope**
  Supervisors can select which types of calls are included in the calculation of this statistic. By default external calls are included.
  - **Include Internal Calls:** Select to include internal calls in the statistic.
  - **Include External Calls:** Select to include external calls in the statistic.
- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

    | Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
    |---|---|---|---|
  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
  - **Warning Threshold**
    Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
  - **Alarm Threshold**
    Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

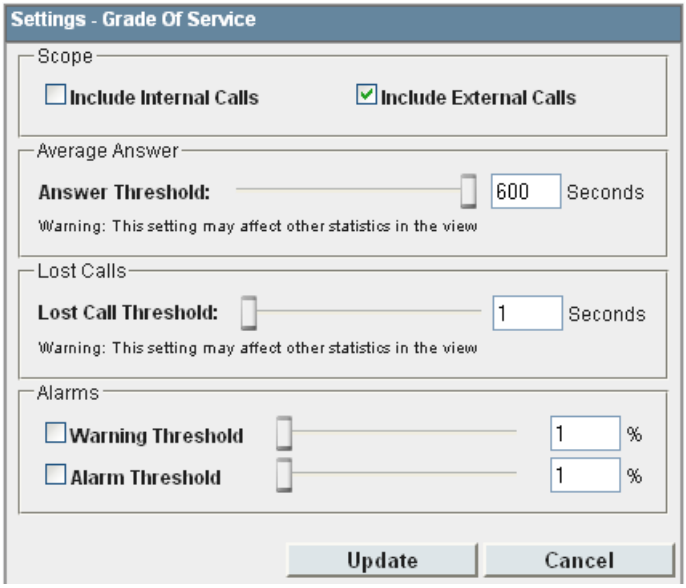
# 7.23 Grade of Service

- This statistic is available for the system and queues.
- It shows the number of queue calls answered within the defined answer threshold as a percentage of all queue calls presented.
- It excludes calls where the caller disconnects before the statistic's **Lost Calls Threshold** setting, measured from when the call was presented to the queue.
- It includes calls that become lost calls.
- It does not include calls that were routed elsewhere (**Routed to Other**) or to voicemail (**Routed to Voicemail**).

| Call types | Queue Calls | Direct Call | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| **Queue** | ✓ | ✗ | *Optional* | *Optional* | ✓/✗ |
| **Agent** | - | - | - | - | -/- |

**Example**
A supervisor has specified that calls should be answered within 30 seconds. 20 calls into a queue were answered within the target time, 4 calls were answered after 30 seconds and 1 call was lost. The calculation would be 20 /25 = 0.8. The Grade of Service therefore is 80%.

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset 86. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Scope**
  Supervisors can select which types of calls are included in the calculation of this statistic. By default external calls are included.
  - **Include Internal Calls:** Select to include internal calls in the statistic.
  - **Include External Calls:** Select to include external calls in the statistic.
- **Answer Threshold:** *Default = 600 seconds, Range = 1 to 600 seconds.*
  Used for statistics calculated as a percentage of calls answered within the set time out of all calls presented. Sets the target time for calls to be answered from when they are first presented to the queue or agent. Note that for agents, calls are only presented for the queue's no answer time before being presented to the next agent. Note that this setting is shared between the **Agent Productivity** 180, **Average Answer %** 198 and **Grade of Service** 207 statistics in the same monitor or wallboard view.
- 
  - **Lost Calls Threshold:** *Default = 1 second, Range = 1 to 600 seconds***.**
    Lost calls are calls where the caller disconnects before the call is answered. This threshold sets the minimum time in seconds for a call to be available to be answered before it will be counted as lost. Lost calls are not included in the calculation of this statistic. Note that this setting is shared between the **Agent Productivity** 180 and **Grade of Service** 207 statistics in the same monitor or wallboard view.
  - **Alarms**
    Use these controls to select whether a warning or an alarm is given for the statistic. You can also set the threshold levels below which the warning or alarm is given.
    - When enabled, the background color of the cells is used to indicate their current alarm state.

| Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
|---|---|---|---|

- Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
- The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
- Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
- Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
- Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.

- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be higher than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be lower that the warning threshold.

## Transferred Call and Performance Statistics

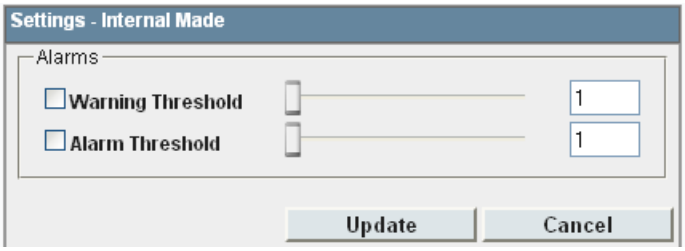
For performance statistics, **Average Answer Time**, **Average Answer %** and **Grade of Service**, transferred calls are treated as follows:

- For supervised transfers, the duration of the enquiry call is treated as the ringing time of the transferred call. Note also that the ring time of the enquiry call is included a separate answered call value.
- For unsupervised transfers, the transferred call is treated the same as a call targeted directly to the queue or agent.

# 7.24 Internal Made

- This statistic is only available for agents.
- It shows the number of internal calls made by an agent. Only internal calls that are answered are included.

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

| Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
|---|---|---|---|

  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

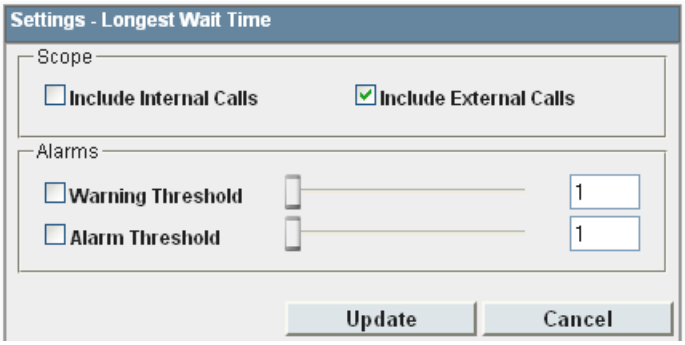
# 7.25 Longest Wait Time

- This statistic is available for the system and queues.
- Waiting time of the longest waiting call.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| **Queue** | ✓ | ✗ | *Optional* | *Optional* | ✓/✗ |
| **Agent** | ✗ | ✗ | *Optional* | *Optional* | -/- |

- For supervised transfers (including transfers using park 283), the duration the call is held or parked is included in the **Average Wait Time** 200 and **Longest Wait Time** 210 calculations for the queue to which the call is transferred.
- The value displayed for the **TOTAL** is the longest waiting time.

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset 86. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Scope**
  Supervisors can select which types of calls are included in the calculation of this statistic. By default external calls are included.
  - **Include Internal Calls:** Select to include internal calls in the statistic.
  - **Include External Calls:** Select to include external calls in the statistic.
- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

    | Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
    |---|---|---|---|

  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

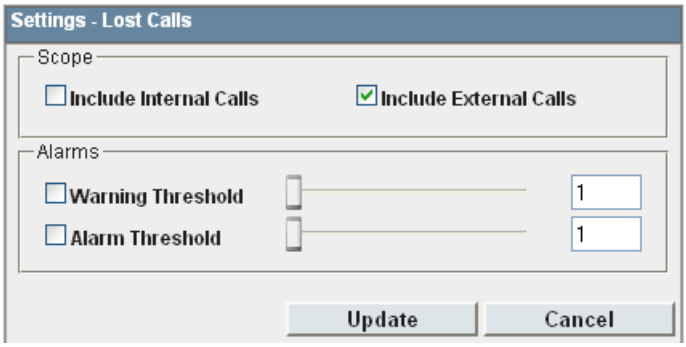
# 7.26 Lost Calls

- This statistic is available for the system, queues, and agents.
- It shows the number of queue calls where the caller disconnected before they were answered by an agent in the queue or the agent being reported on.
- Queue calls that are lost are reported as lost against both the queue and against the last agent to which the call was presented.
- Once a call has overflowed, if lost, for the queue it is reported as **Overflowed Lost**.
- It does not include calls that go to voicemail.
- A lost call is one where the caller disconnects before being answered.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| **Queue** | ✓ | ✗ | *Optional* | *Optional* | ✗/✗ |
| **Agent** | ✓ | ✗ | *Optional* | *Optional* | ✗/✓ |

- Note that for a queue, the number of lost calls can be higher than the total of lost calls for agent in the queue as calls can be lost before being presented to any agent.

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Scope**
  Supervisors can select which types of calls are included in the calculation of this statistic. By default external calls are included.
  - **Include Internal Calls:** Select to include internal calls in the statistic.
  - **Include External Calls:** Select to include external calls in the statistic.
- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

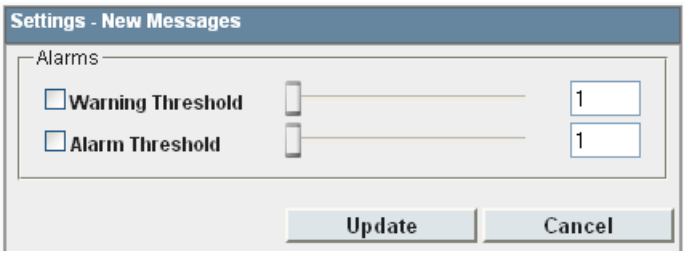
| Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
|---|---|---|---|

  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
  - **Warning Threshold**
    Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
  - **Alarm Threshold**
    Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.27 New Messages

- This statistic is available for the system and queues.
- It shows the current number of unread messages in the mailbox of the selected queue.
- This is not an IP Office Customer Call Reporter statistic that can be reset, it is a value reported by the voicemail server providing the mailbox.

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

| Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
|---|---|---|---|

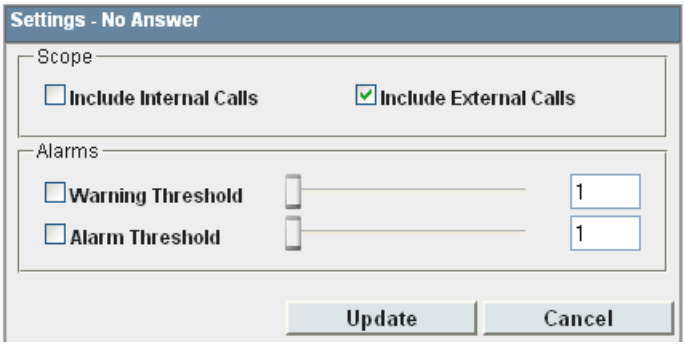
  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.28 No Answer

- This statistic is available for the system, queues and agents.
- For an agent it shows the number of queue calls presented to the agent which rang unanswered for the queue's full no answer time before be presented elsewhere.
- For a queue it shows the total number of no answer events for the agents in the queue.
- For an agent it includes queue calls and queue calls that overflowed to the agent's queue. It does not include non-queue calls.
- If an agent enables Busy Not Available while being presented with a queue call, that will be counted against the agent and queue.

| Call types | Queue Calls | Direct Call | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| **Queue** | ✓ | ✗ | *Optional* | *Optional* | ✗/✗ |
| **Agent** | ✓ | ✗ | *Optional* | *Optional* | ✗/✓ |

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Scope**
  Supervisors can select which types of calls are included in the calculation of this statistic. By default external calls are included.
  - **Include Internal Calls:** Select to include internal calls in the statistic.
  - **Include External Calls:** Select to include external calls in the statistic.
- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

    | Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
    |---|---|---|---|

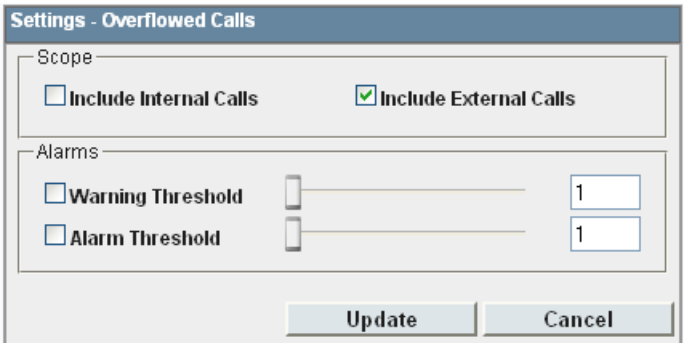
  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
  - **Warning Threshold**
    Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
  - **Alarm Threshold**
    Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.29 Overflowed Calls

- This statistic is available for the system and queues.
- It shows the number of calls that have overflowed from the queue to its overflow destination.
- Once a call has overflowed, it can also be included in the queue's Overflowed Calls Waiting 295, Overflowed Answered 295, and Overflowed Lost 295 statistics.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| **Queue** | ✓ | ✗ | *Optional* | *Optional* | ✓/✗ |
| **Agent** | - | - | - | - | -/- |

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset 86. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Scope**
  Supervisors can select which types of calls are included in the calculation of this statistic. By default external calls are included.
  - **Include Internal Calls:** Select to include internal calls in the statistic.
  - **Include External Calls:** Select to include external calls in the statistic.
- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

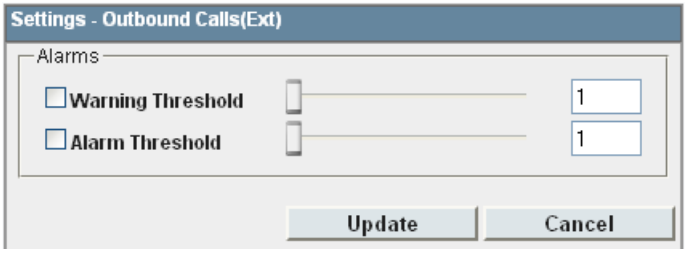
    | Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
    |---|---|---|---|

  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.30 Outbound Calls (External)

- This statistic is only available for agents.
- It shows the number of outbound external calls made by the agent.
- If the outgoing call attempts to seize an external trunk but is unsuccessful, for example getting busy tone, it is still included.

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

    | Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
    |---|---|---|---|

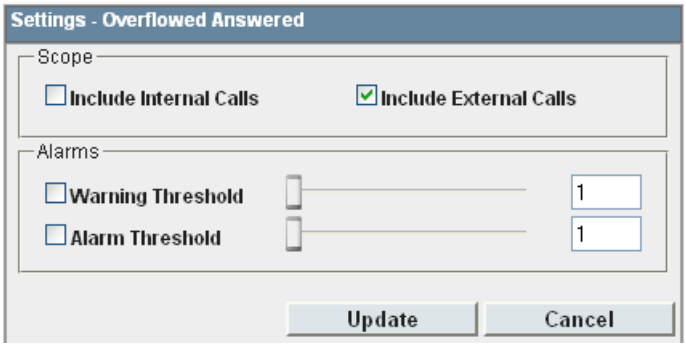
  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.31 Overflowed Answered

- This statistic is available for the system and queues.
- It shows the number of queue calls answered after overflowing to another queue.
- This applies even if the overflowed call is answered by an agent in the queue from which it overflowed.
- It does not include queue calls answered by methods such as call pickup (use **Routed to Other** 223).
- It does not include calls that go to voicemail.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| **Queue** | ✓ | ✗ | *Optional* | *Optional* | ✓/✗ |
| **Agent** | - | - | - | - | -/- |

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset 86. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Scope**
  Supervisors can select which types of calls are included in the calculation of this statistic. By default external calls are included.
  - **Include Internal Calls:** Select to include internal calls in the statistic.
  - **Include External Calls:** Select to include external calls in the statistic.
- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

    | Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
    |---|---|---|---|
  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
  - **Warning Threshold**
    Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
  - **Alarm Threshold**
    Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.32 Overflowed Calls Waiting

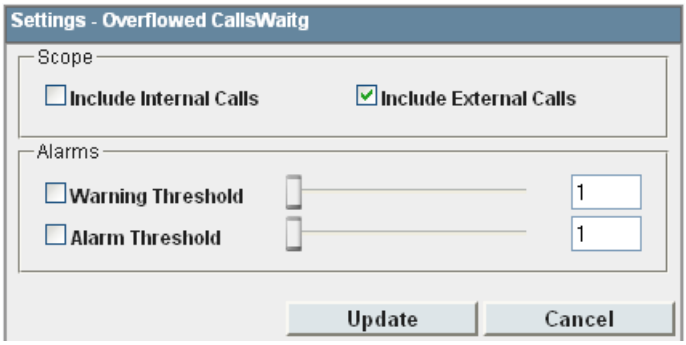
- This statistic is available for the system and queues.
- It shows the number of calls overflowed from the queue and still waiting to be answered.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| **Queue** | ✓ | ✗ | *Optional* | *Optional* | ✓/✗ |
| **Agent** | - | - | - | - | -/- |

**Additional Information**
Statistic can include additional information, indicated by a red corner icon. Place your cursor over the icon to display the addition information. This type of information is updated approximately every 5 seconds.

- The additional information provided by this statistic is the peak waiting time, the average waiting time and the current longest waiting time.
- The information is shown for internal and or external calls depending on the statistic settings.

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Scope**
  Supervisors can select which types of calls are included in the calculation of this statistic. By default external calls are included.
  - **Include Internal Calls:** Select to include internal calls in the statistic.
  - **Include External Calls:** Select to include external calls in the statistic.
- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

    | Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
    |---|---|---|---|

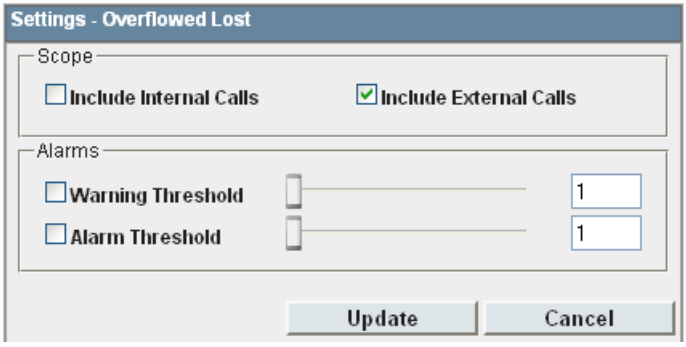
  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
  - **Warning Threshold**
    Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
  - **Alarm Threshold**
    Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.33 Overflowed Lost

- This statistic is available for the system and queues.
- It shows the number of calls which overflowed from the queue and were then lost.
- It does not include calls that go to voicemail.
- A lost call is one where the caller disconnects before being answered.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| **Queue** | ✓ | ✗ | *Optional* | *Optional* | ✓/✗ |
| **Agent** | - | - | - | - | -/- |

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Scope**
  Supervisors can select which types of calls are included in the calculation of this statistic. By default external calls are included.
  - **Include Internal Calls:** Select to include internal calls in the statistic.
  - **Include External Calls:** Select to include external calls in the statistic.
- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

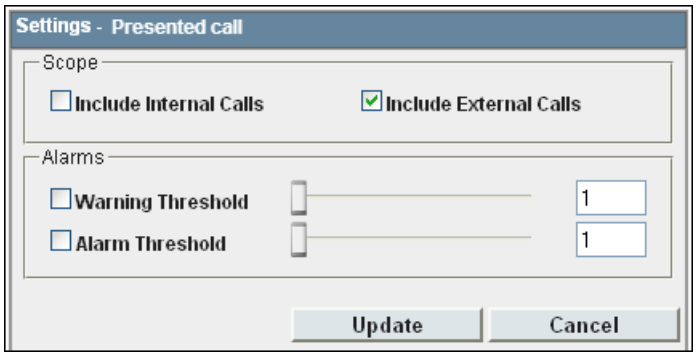
    | Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
    |---|---|---|---|
  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
  - **Warning Threshold**
    Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
  - **Alarm Threshold**
    Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.34 Presented Calls

- This statistic is available for the system, queues, and agents.
- For queues, it is the sum of Answered calls 290, Routed to Voicemail 297, Overflow answered calls 295, Routed to others 297, Lost calls 293 and Overflowed lost calls 295.
- For agents, it is the sum of Answered calls 290, Agent's voicemail answered calls 297, Routed to others 297, Answered non-queue external 290, Answered non-queue internal 290, No answer 294, and Lost calls 293
- For agents, it includes Direct Calls.
- Calls to agents that are disconnected by the caller are not counted as Lost Calls; hence, these calls are not counted in Presented Calls.
- For queues, it does NOT include Direct Calls and Enquiry Calls.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| **Queue** | ✓ | - | *Optional* | *Optional* | ✓/✗ |
| **Agent** | ✓ | ✓ | *Optional* | *Optional* | ✓/✓ |

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset 86. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Scope**
  Supervisors can select which types of calls are included in the calculation of this statistic. By default external calls are included.
  - **Include Internal Calls:** Select to include internal calls in the statistic.
  - **Include External Calls:** Select to include external calls in the statistic.

- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

| Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
|---|---|---|---|

  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
  - **Warning Threshold**
    Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.

- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.35 Queue State

- This statistic is only available for queues.
- It shows the current state of the queue as one of the following: In Service, Agents Busy, No Agents, Night Service or Out of Service.
- The related statistic Queue State Time 222 can be used the show the time that the queue has been in its current state.

**Statistic Settings**
This statistic has no customizable settings.



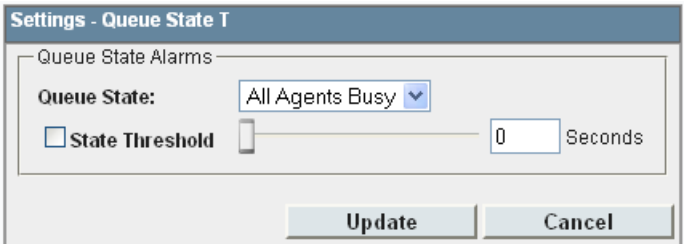

Possible queue states are:

| | |
|---|---|
| **Night Service** | A queue can be set in 'night service' state either manually or as the result of an automatic time schedule.<br>Agents in the queue will no longer be presented with calls targeted to that queue. Depending on how the queue has been configured by the telephone system maintainer, the calls will either overflow to another queue or to voicemail.<br>This queue state is reported by the Queue State 221 statistic. The time the queue has been in a particular state is reported by the Queue State Time 222 statistic. |
| **Out of Service** | A queue can be set as 'out of service'.<br>Agents in the queue will no longer be presented with calls targeted to that queue. Depending on how the queue has been configured by the telephone system maintainer, the calls will either overflow to another queue or to voicemail.<br>This queue state is reported by the Queue State 221 statistic. The time the queue has been in a particular state is reported by the Queue State Time 222 statistic. |
| **In Service** | This queue state is reported for a queue in normal operation, ie. with some agents logged in and available to answer calls.<br>Agents in the queue will no longer be presented with calls targeted to that queue. Depending on how the queue has been configured by the telephone system maintainer, the calls will either overflow to another queue or to voicemail.<br>This queue state is reported by the Queue State 221 statistic. The time the queue has been in a particular state is reported by the Queue State Time 222 statistic. |
| **Agents Busy** | This queue state is reported for a queue when all the logged in agents are in a busy state.<br>This queue state is reported by the Queue State 221 statistic. The time the queue has been in a particular state is reported by the Queue State Time 222 statistic. |
| **No Agents** | This queue state is reported for a queue where no agents are logged in.<br>This queue state is reported by the Queue State 221 statistic. The time the queue has been in a particular state is reported by the Queue State Time 222 statistic. |

# 7.36 Queue State Time

- This statistic is only available for queues.
- It shows the time the queue has been in its current state.
- The related statistic Queue State 221 can be used the show current state.

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset 86. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

    | Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
    |---|---|---|---|

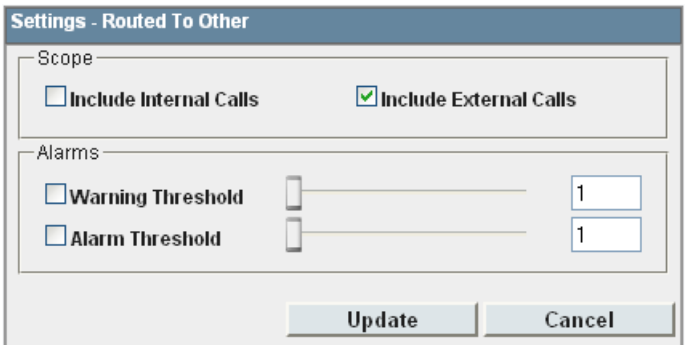
  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.37 Routed to Other

- This statistic is available for the system, queues, and agents.
- Sum of calls targeted at the queue or agent that are subsequently answered by a party, other than a member of the original queue, the overflow or voicemail. Only direct calls to agents will affect the **Routed to Other** for agents. Queued calls to agents will affect the Queue statistic.

| Call types | Queue Calls | Direct Call | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| **Queue** | ✓ | ✗ | *Optional* | *Optional* | ✓/✗ |
| **Agent** | ✗ | ✓ | *Optional* | *Optional* | ✓/✗ |

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset 86. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

| Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
|---|---|---|---|

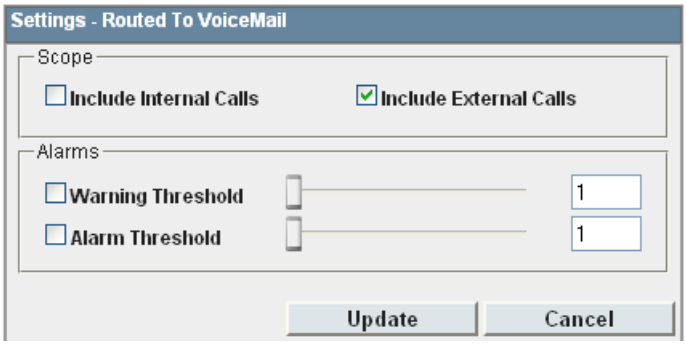
  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.38 Routed to Voicemail

- This statistic is available for the system, queues, and agents.
- For a queue it shows the number of queue calls presented and then routed to voicemail.
- For an agent it shows the number of direct calls to the agent that were then routed to voicemail.
- It does not include announcements played by voicemail to the caller.

| Call types | Queue Calls | Direct Call | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| **Queue** | ✓ | ✗ | *Optional* | *Optional* | ✓/✗ |
| **Agent** | ✗ | ✓ | *Optional* | *Optional* | ✗/✗ |

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Scope**
  Supervisors can select which types of calls are included in the calculation of this statistic. By default external calls are included.
  - **Include Internal Calls:** Select to include internal calls in the statistic.
  - **Include External Calls:** Select to include external calls in the statistic.
- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

    | Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
    |---|---|---|---|

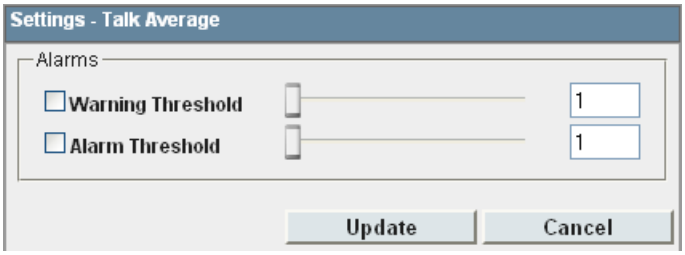
  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.39 Talk Average

- This statistic is available for the system, queues, and agents.
- It is calculated as the total talk time divided by the total number of inbound queue calls and outbound external calls.
- It does not include queue calls answered by non-queue members using methods such as call pickup.
- It does not include held, parked, and ACW call time.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| Queue | ✓ | - | ✗ | ✓ | ✗/✗ |
| Agent | ✓ | ✓ | ✗ | ✓ | ✗/✓ |

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

    | Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
    |---|---|---|---|

  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.40 Talk Inbound

- This statistic is available for the system, queues and agents.
- It includes incoming external trunk calls. It does not include internal calls and outgoing external calls.
- It shows the time the agent has spent on handling incoming queue calls.
- It does not include queue calls answered by non-queue members using methods such as call pickup.
- It does not include held, parked, and ACW call time.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| Queue | ✓ | - | ✗ | ✓ | ✗/✗ |
| Agent | ✓ | ✗ | ✗ | ✓ | ✗/✓ |

**Statistic Settings**
This statistic has no customizable settings.



# 7.41 Talk Inbound Average

- This statistic is available for the system, queues, and agents.
- It includes incoming external trunk calls. It does not include internal calls and outgoing external calls.
- It shows the average time the agent has spent on incoming external calls for the queue. Calculated as: Talk Inbound calls divided by calls answered by the agent or queue.
- It does not include queue calls answered by non-queue members using methods such as call pickup.
- It does not include held, parked, and ACW call time.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| Queue | ✓ | - | ✗ | ✓ | ✗/✗ |
| Agent | ✓ | - | ✗ | ✓ | ✗/✓ |

**Statistic Settings**
This statistic has no customizable settings.



# 7.42 Talk Internal

- This statistic is available for the system, queues, and agents.
- It shows the time an agent has spent on internal calls (inbound and outbound).
- It does not include queue calls answered by non-queue members using methods such as call pickup.
- It does not include held, parked, and ACW call time.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| **Queue** | ✓ | - | ✓ | ✗ | ✓/✗ |
| **Agent** | ✓ | ✓ | ✓ | ✗ | ✓/✗ |

**Statistic Settings**
This statistic has no customizable settings.



# 7.43 Talk Outbound

- This statistic is available for the system, queues, and agents.
- For a queue it is the talk outbound time of all agents in the queue even if the agent queue membership is currently disabled.
- Shows the time the agent has spent on outgoing external calls. The system calculates the time from when an agent gets connected to an external call.
- Shows the sum of outbound talk time for all agents even when the system calculates statistics for a queue. This is because outbound calls are not related to a queue.
- It does not include held, parked, and ACW call time.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| Queue | ✓ | - | ✗ | ✓ | -/- |
| Agent | ✓ | ✓ | ✗ | ✓ | -/- |

**Statistic Settings**
This statistic has no customizable settings.

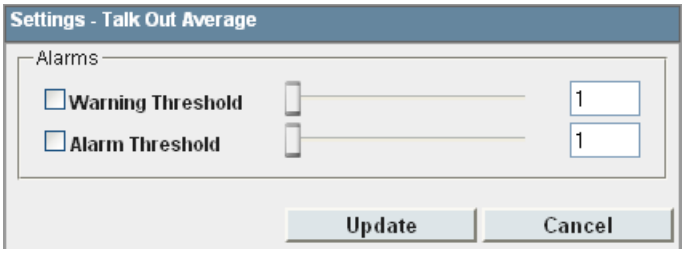


# 7.44 Talk Outbound Average

- This statistic is available for the system, queues, and agents.
- It shows the average time an agent has spent on outbound external calls. Calculated as: the sum of outbound talk time divided by the number of outbound calls that have seized a trunk successfully.
- It does not include held, parked, and ACW call time.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| Queue | ✓ | - | ✗ | ✓ | -/- |
| Agent | ✓ | ✓ | ✗ | ✓ | -/- |

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset 86. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

    | Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
    |---|---|---|---|

  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
- **Warning Threshold**
  Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
- **Alarm Threshold**
  Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.45 Talk Total

- This statistic is available for the system, queues, and agents.
- It shows the time spent by agents on external outgoing calls and external incoming calls for a queue.
- For external outgoing calls, the system starts calculating the time only when the call gets connected.
- It does not include internal calls (incoming or outgoing).
- It does not include queue calls answered by non-queue members using methods such as call pickup.
- It does not include held, parked, and ACW call time.

| Call types | Queue Calls | Direct Calls | Internal Calls | External Calls | Overflowed from/to |
|---|---|---|---|---|---|
| Queue | ✓ | - | ✗ | ✓ | ✗/✗ |
| Agent | ✓ | ✗ | ✗ | ✓ | ✗/✓ |

**Statistic Settings**
This statistic has no customizable settings.

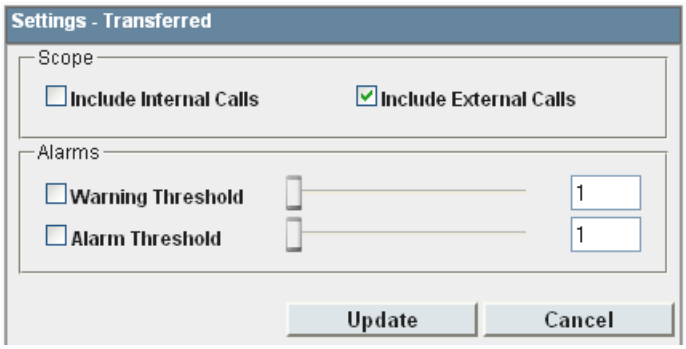


# 7.46 Transferred

- This statistic is available for the system, queues, and agents.
- For a queue it is the number of calls originally targeted at the queue and then successfully transferred by the queue's agents.
- For an agent it is the number of the queue's calls that they have transferred.
- It includes both supervised and unsupervised transfers.
- It does not include direct calls 292 to agents that they then transfer.

| Call types | Queue Calls | Direct Call | Internal Calls | External Calls | Calls Overflowed from/to |
|---|---|---|---|---|---|
| **Queue** | ✓ | ✗ | *Optional* | *Optional* | -/- |
| **Agent** | ✓ | ✗ | *Optional* | *Optional* | -/- |

**Statistic Settings**
All supervisors can customize the settings of each statistic column included in a view. The changes are applied to the existing data since the last view statistics reset 86. Click the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.




- **Scope**
  Supervisors can select which types of calls are included in the calculation of this statistic. By default external calls are included.
  - **Include Internal Calls:** Select to include internal calls in the statistic.
  - **Include External Calls:** Select to include external calls in the statistic.
- **Alarms**
  Use these controls to select whether a warning and or an alarm is given for the statistic. You can also set the threshold level above which the warning or alarm is given.
  - When enabled, the background color of the cells is used to indicate their current alarm state.

    | Enabled / Cleared (Green) | Warning (Orange) | Alarm (Red) | Acknowledged (Blue) |
    |---|---|---|---|
  - Alarms and warning are updated approximately every 8 seconds. An alarm when it occurs, overrides a warning.
  - The alarms or warning is automatically cleared when the cell value goes back past the threshold level.
  - Agents and supervisors can acknowledge alarms and warnings in their views by clicking on the colored cell. This only affects their view. Acknowledging an alarm also removes it from the alarm list.
  - Within views, the alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is applied to the whole column, even when you change which queue's agents are being viewed.
  - Note that when enabling or disabling alarms and warnings, the new settings are effective at the next change in the value of the relevant cells.
  - **Warning Threshold**
    Select to enable a warning threshold and to set that threshold. The warning threshold must be lower than the alarm threshold.
  - **Alarm Threshold**
    Select to enable an alarm threshold and to set that threshold. The alarm threshold must be higher that the warning threshold.

# 7.47 Statistic Summary

## Agent Productivity 180

- This statistic is available for the system, queues, and agents.
- For a queue it shows the number of queue calls answered within a set of service criteria as a percentage of all queue calls presented.
- For an agent it shows the percentage of calls an agent has handled within a set of service criteria over all calls.
- It excludes calls disconnected before the Lost Calls threshold setting, measured from when the call was presented to the queue.
- It excludes direct calls presented to the agents and outbound external calls.
- It includes lost calls.

## Agent State (Queue) 182

- This statistic is only available for agents.
- It shows the current state of each agent in the selected queue.
- The related statistic Agent State (Queue) Time 184 can be used to show how long each agent has been in their current state.

## Agent State (Queue) Time 184

- This statistic is only available for agents.
- It shows how long the agent has been in their current state for the selected queue.
- The agent's current state can be shown by the related statistic Agent State (Queue) 182.

## Agent State (System) 185

- This statistic is only available for agents.
- It shows the agent activity across all queues to which the agent belongs, ie. the whole system.
- The related statistic Agent State (System) Time 187 can be used to show how long each agent has been in their current state.

## Agent State (System) Time 187

- This statistic is only available for agents.
- It shows how long the agent has been in their current system state.
- The agent's current state can be shown by the related statistic Agent State (System) 185.

## Agents ACW 188

- This statistic is available for the system and queues.
- Its shows the number of agents who are currently in the After Call Work (ACW) state.
- For users who previously used CCC, the ACW state is similar to Busy Wrap Up.

## Agents Available 189

- This statistic is available for the system and queues.
- It shows the number of agents in the queue who are currently available to answer calls.

## Agents Call Share 190

- This statistic is only available for agents.
- It shows the percentage of queue calls 296 answered by the agent out of all queue calls answered by the agents in the queue.

## Agents Logged On 191

- This statistic is available for the system and queues.
- It shows the number of agents who are members of the queue and are currently logged in.
- When logged in an agent can also be in other states.

## Agents Present 192

- This statistic is available for the system and queues.
- It shows the number of agents who are logged in but whose membership of the queue is currently disabled.

## Agents Ringing 193

- This statistic is available for the system and queues.
- It shows the number of agents with queue calls 296 ringing but not yet answered.

## Answered Calls 194

- This statistic is available for the system, queues, and agents.
- It shows the number of queue calls 296 that has been answered by the agents in the queue or the agent being reported on.
- It does not include direct calls answered by agents.
- Once a call has overflowed, if answered, for the queue it is reported as **Overflowed Answered**.
- It does not include queue calls answered by non-queue members using methods such as call pickup.
- It does not include calls that go to voicemail.

## Answered External Non-Queue 195

- This statistic is only available for agents.
- It shows the number of external inbound calls that are targeted directly to an agent and answered by that agent.
- It does not includes queue calls to a queue of which the agent is a member.

## Answered Internal Non-Queue 196

- This statistic is only available for agents.
- It shows the number of internal inbound calls that are targeted directly to an agent and answered by that agent.
- It does not includes queue calls to a queue of which the agent is a member.

## Answered Internal (Queue) 197

- This statistic is available for the system, queues, and agents.
- It shows the number of internal calls to the queue that were then answered by the agents in the queue or the agent being reported on.

## Average Answer % 198

- This statistic is available for the system, queues, and agents.
- It shows the number of queue calls 296 answered by the queue within the specified answer threshold time, divided by the total number of calls answered.

## Average Answer Time 200

- This statistic is available for the system, queues, and agents.
- It shows the sum of answer times divided by the number of queue calls answered by the queue or by the agent being reported.
- The answer time is measured from the time when the call arrives at the target (queue or agent). It does not include t he delay between the time when a call is presented to a Hunt Group and the time when the call arrives at the target.
- When calculated for an agent, the statistic is only based on the calls that the agent handled on behalf of the hunt group selected in the view.

## Average Wait Time 200

- This statistic is available for the system and queues.
- Average waiting time of calls.

## Busy Not Available 203

- This statistic is available for the system and queues.
- It shows the total number of agents in the queue who have currently indicated they are Busy Not Available 291.
- Busy Not Available is a state selected by an agent when they need to stop receiving queue calls to do some non-call related activity.

## Calls Waiting 204

- This statistic is available for the system and queues.
- It shows the number of calls targeted to the queue that are waiting to be answered by the agents in the queue or the agent being reported on.
- It includes calls currently ringing at agent telephones.
- Calls that overflow from the queue and are still waiting to be answered are reported using Overflowed Calls Waiting 217 .

## Current Wait Time 206

- This statistic is available for the system and queues.
- Time of the longest currently waiting call.

## Grade of Service 207

- This statistic is available for the system and queues.
- It shows the number of queue calls answered within the defined answer threshold as a percentage of all queue calls presented.
- It excludes calls where the caller disconnects before the statistic's **Lost Calls Threshold** setting, measured from when the call was presented to the queue.
- It includes calls that become lost calls.
- It does not include calls that were routed elsewhere (**Routed to Other**) or to voicemail (**Routed to Voicemail**).

## Internal Made 209

- This statistic is only available for agents.
- It shows the number of internal calls made by an agent. Only internal calls that are answered are included.

## Longest Wait Time 210

- This statistic is available for the system and queues.
- Waiting time of the longest waiting call.

## Lost Calls 211

- This statistic is available for the system, queues, and agents.
- It shows the number of queue calls where the caller disconnected before they were answered by an agent in the queue or the agent being reported on.
- Queue calls that are lost are reported as lost against both the queue and against the last agent to which the call was presented.
- Once a call has overflowed, if lost, for the queue it is reported as **Overflowed Lost**.
- It does not include calls that go to voicemail.

## New Messages 212

- This statistic is available for the system and queues.
- It shows the current number of unread messages in the mailbox of the selected queue.
- This is not an IP Office Customer Call Reporter statistic that can be reset, it is a value reported by the voicemail server providing the mailbox.

## Outbound Calls (External) 215

- This statistic is only available for agents.
- It shows the number of outbound external calls made by the agent.
- If the outgoing call attempts to seize an external trunk but is unsuccessful, for example getting busy tone, it is still included.

## Overflowed Answered 216

- This statistic is available for the system and queues.
- It shows the number of queue calls answered after overflowing to another queue.
- This applies even if the overflowed call is answered by an agent in the queue from which it overflowed.
- It does not include queue calls answered by methods such as call pickup (use **Routed to Other** 223).
- It does not include calls that go to voicemail.

## Overflowed Calls 214

- This statistic is available for the system and queues.
- It shows the number of calls that have overflowed from the queue to its overflow destination.
- Once a call has overflowed, it can also be included in the queue's Overflowed Calls Waiting 295, Overflowed Answered 295, and Overflowed Lost 295 statistics.

## Overflowed Calls Waiting 217

- This statistic is available for the system and queues.
- It shows the number of calls overflowed from the queue and still waiting to be answered.

## Overflowed Lost 218

- This statistic is available for the system and queues.
- It shows the number of calls which overflowed from the queue and were then lost.
- It does not include calls that go to voicemail.

## Presented Calls 219

- This statistic is available for the system, queues, and agents.
- For queues, it is the sum of Answered calls 290, Routed to Voicemail 297, Overflow answered calls 295, Routed to others 297, Lost calls 293 and Overflowed lost calls 295.

- For agents, it is the sum of Answered calls[290], Agent's voicemail answered calls[297], Routed to others[297], Answered non-queue external[290], Answered non-queue internal[290], No answer[294], and Lost calls[293]
- For agents, it includes Direct Calls.
- Calls to agents that are disconnected by the caller are not counted as Lost Calls; hence, these calls are not counted in Presented Calls.
- For queues, it does NOT include Direct Calls and Enquiry Calls.

## Queue State[221]

- This statistic is only available for queues.
- It shows the current state of the queue as one of the following: In Service, Agents Busy, No Agents, Night Service or Out of Service.
- The related statistic Queue State Time[222] can be used the show the time that the queue has been in its current state.

## Queue State Time[222]

- This statistic is only available for queues.
- It shows the time the queue has been in its current state.
- The related statistic Queue State[221] can be used the show current state.

## Routed to Other[223]

- This statistic is available for the system, queues, and agents.
- Sum of calls targeted at the queue or agent that are subsequently answered by a party, other than a member of the original queue, the overflow or voicemail. Only direct calls to agents will affect the **Routed to Other** for agents. Queued calls to agents will affect the Queue statistic.

## Routed to Voicemail[224]

- This statistic is available for the system, queues, and agents.
- For a queue it shows the number of queue calls presented and then routed to voicemail.
- For an agent it shows the number of direct calls to the agent that were then routed to voicemail.
- It does not include announcements played by voicemail to the caller.

## Talk Average[225]

- This statistic is available for the system, queues, and agents.
- It is calculated as the total talk time divided by the total number of inbound queue calls and outbound external calls.
- It does not include queue calls answered by non-queue members using methods such as call pickup.
- It does not include held, parked, and ACW call time.

## Talk Inbound[226]

- This statistic is available for the system, queues and agents.
- It includes incoming external trunk calls. It does not include internal calls and outgoing external calls.
- It shows the time the agent has spent on handling incoming queue calls.
- It does not include queue calls answered by non-queue members using methods such as call pickup.
- It does not include held, parked, and ACW call time.

## Talk Inbound Average[227]

- This statistic is available for the system, queues, and agents.
- It includes incoming external trunk calls. It does not include internal calls and outgoing external calls.
- It shows the average time the agent has spent on incoming external calls for the queue. Calculated as: Talk Inbound calls divided by calls answered by the agent or queue.
- It does not include queue calls answered by non-queue members using methods such as call pickup.
- It does not include held, parked, and ACW call time.

## Talk Internal[228]

- This statistic is available for the system, queues, and agents.
- It shows the time an agent has spent on internal calls (inbound and outbound).
- It does not include queue calls answered by non-queue members using methods such as call pickup.
- It does not include held, parked, and ACW call time.

## Talk Outbound[229]

- This statistic is available for the system, queues, and agents.
- For a queue it is the talk outbound time of all agents in the queue even if the agent queue membership is currently disabled.
- Shows the time the agent has spent on outgoing external calls. The system calculates the time from when an agent gets connected to an external call.
- Shows the sum of outbound talk time for all agents even when the system calculates statistics for a queue. This is because outbound calls are not related to a queue.
- It does not include held, parked, and ACW call time.

## Talk Outbound Average 230

- This statistic is available for the system, queues, and agents.
- It shows the average time an agent has spent on outbound external calls. Calculated as: the sum of outbound talk time divided by the number of outbound calls that have seized a trunk successfully.
- It does not include held, parked, and ACW call time.

## Talk Total 231

- This statistic is available for the system, queues, and agents.
- It shows the time spent by agents on external outgoing calls and external incoming calls for a queue.
- For external outgoing calls, the system starts calculating the time only when the call gets connected.
- It does not include internal calls (incoming or outgoing).
- It does not include queue calls answered by non-queue members using methods such as call pickup.
- It does not include held, parked, and ACW call time.

## Transferred 232

- This statistic is available for the system, queues, and agents.
- For a queue it is the number of calls originally targeted at the queue and then successfully transferred by the queue's agents.
- For an agent it is the number of the queue's calls that they have transferred.
- It includes both supervised and unsupervised transfers.
- It does not include direct calls 292 to agents that they then transfer.

# Chapter 8.
# Call Scenarios

# 8. Call Scenarios

This section provides a number of examples of the statistics collected by IP Office Customer Call Reporter for different call scenarios. It also explains some of the features of call handling provided by the telephone system and how those are interpreted by IP Office Customer Call Reporter.


**Queue Calls** 240

- Queue Call Answered by 1st Agent 240
- Queue Call Answered by 2nd Agent 241
- Queue Call Which is Lost 242
- Queue Call Picked Up by Another Agent 243
- Queue Call Picked Up by a Non Agent 244
- Queue Call Timed Out to Voicemail 245

**Transferring Calls** 246

- Queue Call Supervised Transfer to Queue 248
- Queue Call Supervised Transfer to Agent 250
- Queue Call Supervised Transfer to Non-Agent 251
- Queue Call Supervised Transfer to Agent in Same Queue 252
- Queue Call Unsupervised Transfer to Queue 253
- Queue Call Unsupervised Transfer to Agent 254
- Queue Call Unsupervised Transfer to Non-Agent 256
- Queue Call Unsupervised Transfer to Agent in Same Queue 257
- Direct Call Supervised Transfer to Queue 258
- Direct Call Supervised Transfer to Agent 259
- Direct Call Supervised Transfer to Non-Agent 260
- Direct Call Unsupervised Transfer to Queue 261
- Direct Call Unsupervised Transfer to Agent 262
- Direct Call Unsupervised Transfer to Non-Agent 263

**Overflow Calls** 264

- Unanswered Call Overflows and is Answered 266.
- Overflowed and Answered by 1st Agent 268.
- Overflowed and Answered by 2nd Agent 269.
- Overflowed and Lost 270.
- Overflowed and Timed Out to Voicemail 271.
- Overflowed Call Picked Up 272.

**Voicemail** 277

- Queue Call Timed Out to Voicemail 277
- Overflowed and Timeout to Voicemail 278

**Non-Queue Calls (Direct Calls)** 273

- Internal Call to an Agent (Unanswered) 276
- Internal Call to an Agent (Answered) 275
- External Call to an Agent (Unanswered) 274
- External Call to an Agent (Answered) 273

**Other Call Features**

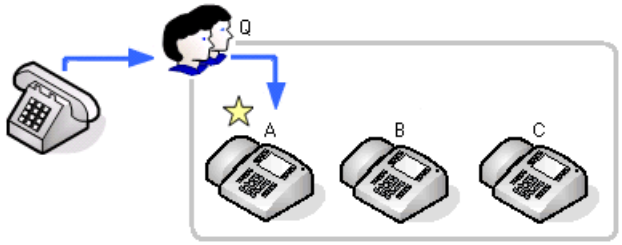
- After Call Work 116
- Announcements 279
- Bridged Appearances 279
- Busy Not Available 117
- Call Pickup 279
- Call Coverage 280
- Do Not Disturb/Send All Calls 280
- Follow Me 282
- Forwarding Calls 282
- Group Membership 118
- Holding Calls 282
- Internal Twinning 283
- Line Appearance Buttons 283
- Logging In 114
- Logging Out 115
- Mobile Twinning 283
- Parking Calls 283
- Trunk to Trunk Calls 283
- Wrap Up 283

# 8.1 Queue Calls

This term is used for calls targeted to a queue, either by the telephone system or by the caller dialing the queue's extension number. Unless otherwise specifically stated, most statistics shown by IP Office Customer Call Reporter are only for queue calls. Calls direct to an agent (non-queue calls 292) rather than to the queue to which they belong are not included.

## 8.1.1 Queue Call Answered by 1st Agent

An external call is targeted to a queue. The call is answered by the first available agent.



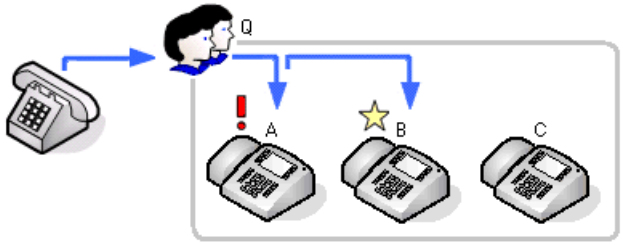

| Events | Queue Q | Agent A |
|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – |
| • The call is presented to the first available agent. | Agents Ringing 1 | – |
| • The call is answered. | Answered Calls 1 | Answered Calls 1 |
| **Historical** | **Answered Calls 1** | **Answered Calls 1** |

| Queues | Answered Calls | No Answer | Lost Calls |
|---|---|---|---|
| Queue Q | 1 | 0 | 0 |
| *TOTAL* | 1 | 0 | 0 |

| Agents | Answered Calls | No Answer | Lost Calls |
|---|---|---|---|
| **Agent A** | 1 | 0 | 0 |
| **Agent B** | 0 | 0 | 0 |
| **Agent C** | 0 | 0 | 0 |

## 8.1.2 Queue Call Answered by 2nd Agent

An external call is targeted to a queue. The call is not answered by the first available agent. The call is answered by the second available agent.



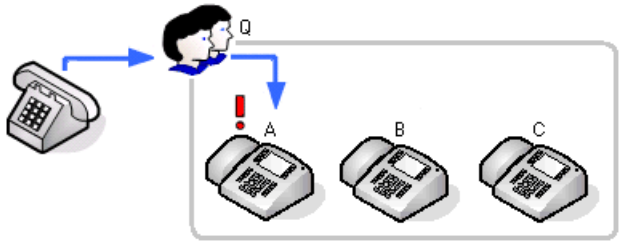

| Events | Queue | Agent A | Agent B |
|---|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – | – |
| • The call is presented to the first available agent. | Agents Ringing 1 | – | – |
| • The call is not answered. | No Answer 1 | No Answer 1 | – |
| • The call is presented to the next available agent. | Agents Ringing 1 | – | – |
| • The call is answered. | Answered Calls 1 | – | Answered Calls 1 |
| **Historical** | **No Answer 1 Answered Calls 1** | **No Answer 1** | **Answered Calls 1** |

| Queues | Answered Calls | No Answer | Lost Calls |
|---|---|---|---|
| Queue Q | 1 | 1 | 0 |
| *TOTAL* | 1 | 1 | 0 |

| Agents | Answered Calls | No Answer | Lost Calls |
|---|---|---|---|
| Agent A | 0 | 1 | 0 |
| Agent B | 1 | 0 | 0 |
| Agent C | 0 | 0 | 0 |

## 8.1.3 Queue Call Which is Lost

An external call is targeted to a queue. The call is not answered before the caller hangs up.




| Events | Queue Q | Agent A |
|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – |
| • The call is presented to the first available agent. | Agents Ringing 1 | – |
| • The caller hangs up. | Lost Calls 1 | Lost Calls 1 |
| **Historical** | **Lost Calls 1** | **Lost Calls 1** |

| Queues | Answered Calls | No Answer | Lost Calls |
|---|---|---|---|
| Queue Q | 0 | 0 | 1 |
| *TOTAL* | 0 | 0 | 1 |

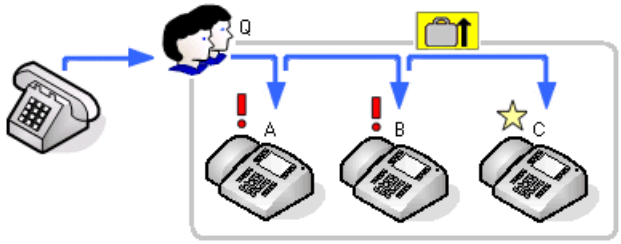
| Agents | Answered Calls | No Answer | Lost Calls |
|---|---|---|---|
| **Agent A** | 0 | 0 | 1 |
| **Agent B** | 0 | 0 | 0 |
| **Agent C** | 0 | 0 | 0 |

**Notes:**

- When a queue call is lost, it is recorded as lost against the queue and against the last agent to which is was presented.

## 8.1.4 Queue Call Picked Up by Another Agent

This scenario shows a queue call being picked up by another agent in the queue.




| Events | Queue Q | Agent A | Agent B | Agent C |
|---|---|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – | – | – |
| • The call is presented to the first available agent. | Agents Ringing 1 | – | – | – |
| • The call is not answered. | No Answer 1 | No Answer 1 | – | – |
| • The call is presented to the next available agent. | Agents Ringing 1 | – | – | – |
| • Another agent in the queue picks up the ringing call. | Answered 1 | – | – | Answered 1 |
| **Historical** | **No Answer 1 Answered 1** | **No Answer 1** | **–** | **Answered 1** |

| Queues | Answered Calls | No Answer | Lost Calls |
|---|---|---|---|
| Queue Q | 1 | 0 | 0 |
| *TOTAL* | 0 | 0 | 0 |

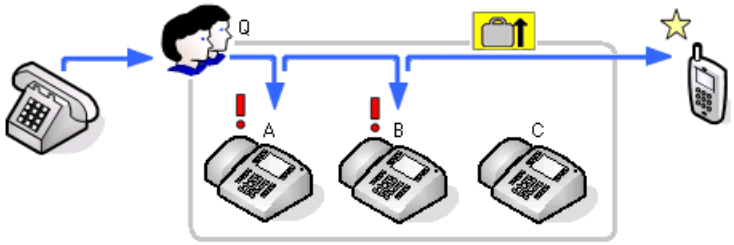
| Agents | Answered Calls | No Answer | Lost Calls |
|---|---|---|---|
| Agent A | 0 | 1 | 0 |
| Agent B | 0 | 0 | 0 |
| Agent C | 1 | 0 | 0 |

**Notes:**

- The call presented to the first agent but not answered by them is counted as a **No Answer** call for both the agent and the queue as it rang them for the queue's full no answer time before being automatically presented to the next available agent.
- The agent to which the call was being presented when it was picked up does not have the call counted as a **No Answer** call as it was not presented for the queue's full no answer time before it was picked up.
- For the agent who picked up the calls it is recorded as **Answered External (Non-Queue)**.

## 8.1.5 Queue Call Pickup by Non Agent

This scenario shows a queue call being picked up by someone who is not a member of the queue, in this case a normal extension.




| Events | Queue Q | Agent A | Agent B | Agent C |
|---|---|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – | – | – |
| • The call is presented to the first available agent. | Agents Ringing 1 | – | – | – |
| • The call is not answered. | No Answer 1 | No Answer 1 | – | – |
| • The call is presented to the next available agent. | Agents Ringing 1 | – | – | – |
| • A non-agent in the queue picks up the ringing call. | Routed to Other 1 | – | – | – |
| **Historical** | **No Answer 1 Routed to Other 1** | **No Answer 1** | **–** | **–** |

| Queues | Answered Calls | No Answer | Lost Calls | Routed to Other |
|---|---|---|---|---|
| Queue Q | 0 | 0 | 0 | 1 |
| *TOTAL* | 0 | 0 | 0 | 1 |

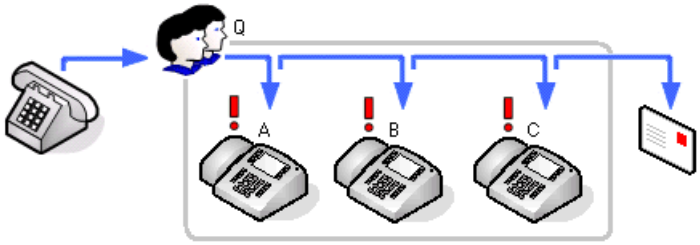
| Agents | Answered Calls | No Answer | Lost Calls | Routed to Other |
|---|---|---|---|---|
| Agent A | 0 | 1 | 0 | 0 |
| Agent B | 0 | 0 | 0 | 0 |
| Agent C | 0 | 0 | 0 | 0 |

**Notes:**

- The call presented to the first agent but not answered by them is counted as a **No Answer** call for both the agent and the queue as it rang them for the queue's full no answer time before being automatically presented to the next available agent.
- The agent to which the call was being presented when it was picked up does not have the call counted as a **No Answer** call as it was not presented for the queue's full no answer time before it was picked up.
- The picked up call is not recorded as an answered call for the queue. Instead the call is recorded as **Routed to Other**.

## 8.1.6 Queue Call Timed Out to Voicemail

An external call is targeted to a queue. The call is presented to each available agent in turn but remains unanswered. When the queue's voicemail timeout occurs the call goes to the queue's voicemail mailbox immediately.




| Events | Queue Q | Agent A | Agent B | Agent C |
|---|---|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – | – | – |
| • The call is presented to the first available agent. | Agents Ringing 1 | – | – | – |
| • The call is not answered. | No Answer 1 | No Answer 1 | – | – |
| • The call is presented to the next available agent. | Agents Ringing 1 | – | – | – |
| • The call is not answered. | No Answer 1 | – | No Answer 1 | – |
| • The call is presented to the next available agent. | Agents Ringing 1 | – | – | – |
| • The call is not answered. | | – | – | No Answer 1 |
| • While being presented the call times out to voicemail. | Routed to VM 1 | – | – | – |
| • The caller leaves a message. | New Messages 1 | | | |
| **Historical** | **No Answer 2 Routed to VM 1 New Messages 1** | **No Answer 1** | **No Answer 1** | **No Answer 1** |

| Queues | Answered Calls | No Answer | Lost Calls | Routed to Other | Routed to Voicemail |
|---|---|---|---|---|---|
| Queue Q | 0 | 3 | 0 | 0 | 1 |
| *TOTAL* | 0 | 3 | 0 | 0 | 1 |

| Agents | Answered Calls | No Answer | Lost Calls | Routed to Other |
|---|---|---|---|---|
| Agent A | 0 | 1 | 0 | 0 |
| Agent B | 0 | 1 | 0 | 0 |
| Agent C | 0 | 1 | 0 | 0 |

# 8.2 Transferring Calls

Transferred calls consist of a number of stages:

1. The current call is put on hold pending transfer.
2. An enquiry call is made to the transfer target.
   - For an unsupervised transfer, the transfer process is completed while the enquiry call is still ringing.
   - For a supervised transfer the transfer process is only completed after the enquiry call is answered.

IP Office Customer Call Reporter reports transferred calls in the following way depending on whether the transfer is supervised or unsupervised and on whether the transfer target is a queue, an agent or any other target.

| **Supervised Transfer to...** | **Queue** | **Agent** | **Other** |
|---|---|---|---|
| **Enquiry Call** | • Increments the transferring agent's **Internal Made** statistic.<br>• The enquiry call is treated as an internal call by IP Office Customer Call Reporter, however the IP Office will present it to the target as internal or external as appropriate for the call that has been put on hold pending transfer. | | • The enquiry call is not recorded in any agent statistic. |
| **Enquiry Answered** | • Increments **Answered Calls** for the targeted queue and agent answering. | • Increments **Answered Internal Non-Queue** for the targeted agent. | • Increments the **Answered Calls** statistic for the transferring queue. |
| **Successful Transfer** | • If the call transferred is a queue call, transfer completion increments **Transferred** for the queue and agent transferring. | | |
| | • Increments **Answered Calls** for the targeted queue and agent answering with an internal or external call as appropriate for the call transferred. | • Increments the answering agent's **Answered Internal Non-Queue** or **Answered External Non-Queue** as appropriate for the type of call being transferred. | • No further statistics are incremented. |
| **Unsupervised Transfer to...** | **Queue** | **Agent** | **Other** |
| **Enquiry Call** | • The enquiry call is not recorded in any queue or agent statistic. | | |
| **Successful Transfer** | • If the call being transferred was a queue call, it increments the transferring queue and agent's **Transferred** statistics. | | |
| | • Increments **Answered Calls** for the targeted queue and answering agent. | • Increments the answering agent's **Answered Internal Non-Queue** or **Answered External Non-Queue** as appropriate for the call being transferred. | • No further statistics are incremented. |

## Transferred Call and Performance Statistics

For performance statistics, **Average Answer Time**, **Average Answer %** and **Grade of Service**, transferred calls are treated as follows:

- For supervised transfers, the duration of the enquiry call is treated as the ringing time of the transferred call. Note also that the ring time of the enquiry call is included a separate answered call value.
- For unsupervised transfers, the transferred call is treated the same as a call targeted directly to the queue or agent.

## Transferred Calls and Wait Time

- For supervised transfers (including transfers using park 283), the duration the call is held or parked is included in the **Average Wait Time** 200 and **Longest Wait Time** 210 calculations for the queue to which the call is transferred.

## Call Details Report and Transferred Calls

**For the agent doing the transfer:**

For the queue/agent that the call is transferred from, the Call Details Report will detail the following call events:

| Call Records | Details included... |
|---|---|
| **Answered Call** | As per a normal call. |
| **Holding Call** | • The **Call Reference**, **Direction**, **Agent**, **Number** and **Queue** are those of the answered call.<br>• The **Date/Time** are when the call was held.<br>• The **Duration** is the time from the call being held to the transfer being completed.<br>• The **DDI** is that of the original call.<br>• The **Queue Time** is blank.<br>• The **Status** is ***Holding***. |
| **Transferred Call** | Reports the same details as the original answered call except:-<br>• The **Date/Time** are when the transfer was completed.<br>• The **Queue Time** is blank.<br>• The **Duration** is from the transfer initiation to the end of the transfer (ie. it includes the duration of the enquiry call). |

**For the queue/agent receiving the transfer:**
A call detail report run against the Queue/Agent, that receives a transfer, will detail:

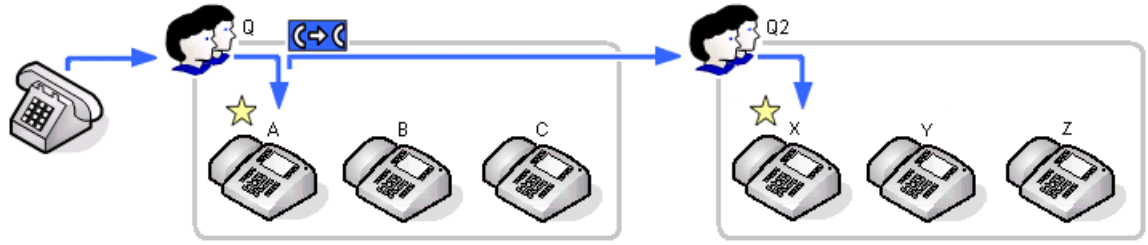
| Call Records | Details included... |
|---|---|
| **Enquiry Answered** | Note that this record is not present for unsupervised transfers.<br>• **Date/Time** is the point ringing is heard.<br>• **Call direction** is internal.<br>• **Number** is the calling parties' number.<br>• **DDI** is the number dialed.<br>• **Queue** is the target queue or blank if agent.<br>• **Queue Time** is the ringing time of the enquiry call.<br>• **Agent** is the agent answering the call.<br>• **Duration** is from the agent answering to the transfer being completed.<br>• **Status** is ***Enquiry Answered***.<br>• **Call Reference** is a new call reference. |
| **Answered Call** | Reports the same details as the original transferred call except:-<br>• The **Date/Time** are when the transfer was completed.<br>• The **Queue** is the target of the transfer.<br>• The **Queue Time** is the time from the initial queuing at the transferee until the transfer is completed.<br>• The **Duration** is from the transfer initiation to the end of the call leg (ie. it includes the duration of the enquiry call). |

Within reports there is a difference in where the transferred calls ringing time is reported. In an **Agent Summary Report**, the ringing time is included in the **Hold** time. In a **Call Details Report** it is part of the **Queue Time** values.

- IP Office Customer Call Reporter does not support the **Blind Transfer** option provided by IP Office Phone Manager and IP Office Softphone. Agent's using Phone Manager or IP Office Softphone should use supervised transfers only.

## 8.2.1 Queue Call Supervised Transfer to Queue

In this scenario the agent who answered an external call to the queue transfers it to another queue.




| Events | Queue Q | Agent A | Queue Q2 | Agent X |
|---|---|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – | – | – |
| • The call is presented to the first available agent. | Agents Ringing 1 | – | – | – |
| • The call is answered. | Answered Calls 1 | Answered Calls 1 | – | – |
| • The call is put on hold pending transfer. | – | – | – | – |
| • The agent dials the transfer target. | – | Internal Made 1 | – | – |
| • The call is answered. | – | – | Answered Calls 1 | Answered Calls 1 |
| • The agent completes the transfer. | Transferred 1 | Transferred 1 | Answered Calls 1 | Answered Calls 1 |
| **Historical** | **Answered Calls 1 Transferred 1** | **Answered Calls 1 Internal Made 1 Transferred 1** | **Answered Calls 2** | **Answered Calls 2** |

| Queues | Answered Calls | No Answer | Transferred | Answered Int Queue |
|---|---|---|---|---|
| Queue Q | 1 | 0 | 1 | 0 |
| Queue Q2 | 2 | 0 | 0 | 1 |
| *TOTAL* | 3 | 0 | 1 | 1 |

| Agents | Answered Calls | Internal Made | Transferred | Answered Int Queue |
|---|---|---|---|---|
| Agent A | 1 | 1 | 1 | 0 |
| Agent B | 0 | 0 | 0 | 0 |
| Agent C | 0 | 0 | 0 | 0 |

| Queues | Answered Calls | No Answer | Transferred | Answered Int Queue |
|---|---|---|---|---|
| Queue Q | 1 | 0 | 1 | 0 |
| Queue Q2 | 2 | 0 | 0 | 1 |
| *TOTAL* | 3 | 0 | 1 | 1 |

| Agents | Answered Calls | Internal Made | Transferred | Answered Int Queue |
|---|---|---|---|---|
| Agent X | 2 | 0 | 0 | 1 |
| Agent Y | 0 | 0 | 0 | 0 |
| Agent Z | 0 | 0 | 0 | 0 |

The following is an example report, using the Call Details Report template, for a supervised transfer from queue to queue. It shows the initial call being answered, put on hold, an enquiry call being made and answered and then the initial call being transferred.

CDR

From 02/12/2008 - 02/12/2008 07:35 - 17:00

| Report type | Target Name | Supervisor Name |
|---|---|---|
| Call Details Report - All | Queue | Mark Gallagher |
| Ungrouped | * | |

| Date - Time | Call Direction | Number | DDI | Queue | Queue Time | Agent | Duration | Status | Reference |
|---|---|---|---|---|---|---|---|---|---|
| 02/12/2008 07:36:53 | Inbound | 01707364416 | 200 | Queue | 00:00:07 | Agent A | 00:00:38 | Answered | 000129 |
| 02/12/2008 07:37:23 | Inbound | 01707364416 | | Queue | | Agent A | 00:00:08 | Holding | 000129 |
| 02/12/2008 07:37:27 | Internal | 288 | 300 | Queue2 | | Agent X | 00:00:04 | Enquiry Answered | 000130 |
| 02/12/2008 07:37:31 | Inbound | 01707364416 | 200 | Queue | | Agent X | 00:00:17 | Transferred | 000129 |
| 02/12/2008 07:37:31 | Inbound | 01707364416 | 200 | Queue2 | | Agent X | 00:00:17 | Answered | 000129 |

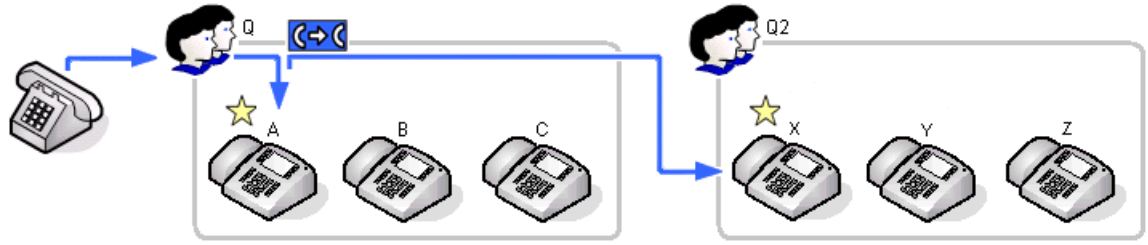
Summary

| | | | | | |
|---|---|---|---|---|---|
| Customer Calls | 2 | Call Interactions | 2 | External Inbound Calls | 1 |
| | | Internal Calls | 1 | External Outbound Calls | 0 |

The report shows the initial call being answered after 7 seconds. That call is then put on hold for 8 seconds as shown by the second line. An internal enquiry call is made and 4 seconds after that is answered the transfer is completed. Note that the transfer completion causes two lines to be included for a supervised transfer, one with the status **Transferred** for the queue from which the call was transferred and the other with the status **Answered** for the queue to which the call was transferred.

## 8.2.2 Queue Call Supervised Transfer to Agent

In this scenario the agent who answered an external call to the queue transfers it to an agent in another queue.




| Events | Queue Q | Agent A | Queue Q2 | Agent X |
|---|---|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – | – | – |
| • The call is presented to the first available agent. | Agents Ringing 1 | – | – | – |
| • The call is answered. | Answered Calls 1 | Answered Calls 1 | – | – |
| • The call is put on hold pending transfer. | – | – | – | – |
| • The agent dials the transfer target. | – | Internal Made 1 | – | – |
| • The call is answered. | – | – | – | Answered Internal Non-Queue 1 |
| • The agent completes the transfer. | Transferred 1 | Transferred 1 | – | Answered External Non-Queue 1 |
| **Historical** | **Answered Calls 1 Transferred 1** | **Answered Calls 1 Internal Made 1 Transferred 1** | **–** | **Answered Internal Non-Queue 1 Answered External Non-Queue 1** |

| Queues | Answered Calls | No Answer | Transferred | Answered Int Queue |
|---|---|---|---|---|
| Queue Q | 1 | 0 | 1 | 0 |
| Queue Q2 | 0 | 0 | 0 | 0 |
| *TOTAL* | 1 | 0 | 1 | 0 |

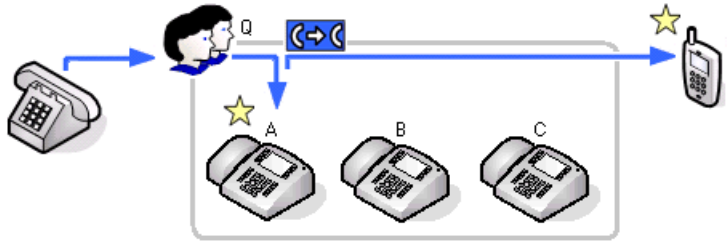
| Agents | Answered Calls | Internal Made | Transferred | Answered Int Non-Q | Answered Ext Non-Q |
|---|---|---|---|---|---|
| Agent A | 1 | 1 | 1 | 0 | 0 |
| Agent B | 0 | 0 | 0 | 0 | 0 |
| Agent C | 0 | 0 | 0 | 0 | 0 |

| Queues | Answered Calls | No Answer | Transferred | Answered Int Queue |
|---|---|---|---|---|
| Queue Q | 1 | 0 | 1 | 0 |
| Queue Q2 | 0 | 0 | 0 | 0 |
| *TOTAL* | 1 | 0 | 1 | 0 |

| Agents | Answered Calls | Internal Made | Transferred | Answered Int Non-Q | Answered Ext Non-Q |
|---|---|---|---|---|---|
| Agent X | 0 | 0 | 0 | 1 | 1 |
| Agent Y | 0 | 0 | 0 | 0 | 0 |
| Agent Z | 0 | 0 | 0 | 0 | 0 |

## 8.2.3 Queue Call Supervised Transfer to Non-Agent

In this scenario the agent who answered an external call to the queue transfers it to a non-agent.



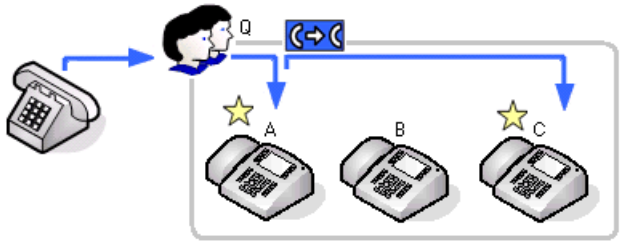

| Events | Queue Q | Agent A |
|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – |
| • The call is presented to the first available agent. | Agents Ringing 1 | – |
| • The call is answered. | Answered Calls 1 | Answered Calls 1 |
| • The call is put on hold pending transfer. | – | – |
| • The agent dials the transfer target. | – | – |
| • The call is answered. | Answered Call 1 | – |
| • The agent completes the transfer. | Transferred 1 | Transferred 1 |
| **Historical** | Answered Calls 2<br>Transferred 1 | Answered Calls 1<br>Transferred 1 |

| Queues | Answered Calls | No Answer | Transferred |
|---|---|---|---|
| Queue Q | 2 | 0 | 1 |
| Queue Q2 | 0 | 0 | 0 |
| *TOTAL* | 2 | 0 | 1 |

| Agents | Answered Calls | Internal Made | Transferred |
|---|---|---|---|
| Agent A | 1 | 0 | 1 |
| Agent B | 0 | 0 | 0 |
| Agent C | 0 | 0 | 0 |

## 8.2.4 Queue Call Supervised Transfer to Agent in Same Queue

In this scenario the agent who answered an external call to the queue transfers it to another agent in the same queue.



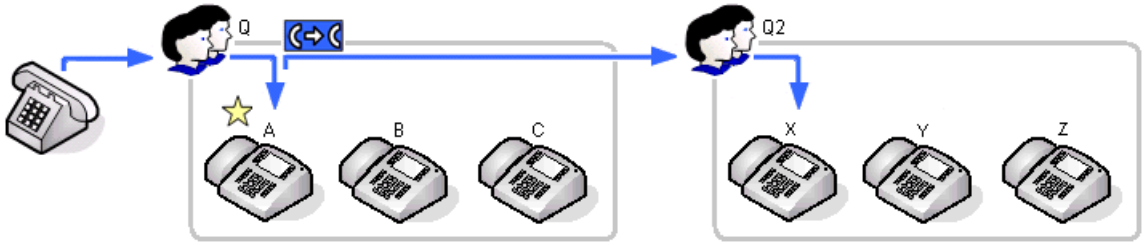

| Events | Queue Q | Agent A | Agent C |
|---|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – | – |
| • The call is presented to the first available agent. | Agents Ringing 1 | – | – |
| • The call is answered. | Answered Calls 1 | Answered Calls 1 | – |
| • The call is put on hold pending transfer. | – | – | – |
| • The agent dials the transfer target. | – | Internal Made 1 | – |
| • The call is answered. | – | – | Answered Internal Non Queue 1 |
| • The agent completes the transfer. | Transferred 1 | Transferred 1 | Answered External Non Queue 1 |
| **Historical** | **Answered Calls 1<br>Transferred 1** | **Answered Calls 1<br>Internal Made 1<br>Transferred 1** | **Answered Internal Non Queue 1<br>Answered External Non Queue 1** |

| Queues | Answered Calls | No Answer | Transferred |
|---|---|---|---|
| Queue Q | 1 | 0 | 1 |
| Queue Q2 | 0 | 0 | 0 |
| *TOTAL* | 1 | 0 | 1 |

| Agents | Answered Calls | Internal Made | Transferred | Answered Int Non-Q | Answered Ext Non-Q |
|---|---|---|---|---|---|
| Agent A | 1 | 1 | 1 | 0 | 0 |
| Agent B | 0 | 0 | 0 | 0 | 0 |
| Agent C | 0 | 0 | 0 | 1 | 1 |

## 8.2.5 Queue Call Unsupervised Transfer to Queue

In this scenario the agent who answered an external call to the queue transfers it to another queue and completes the transfer without waiting to be answered.




| Events | Queue Q | Agent A | Queue Q2 | Agent X |
|---|---|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – | – | – |
| • The call is presented to the first available agent. | Agents Ringing 1 | – | – | – |
| • The call is answered. | Answered Calls 1 | Answered Calls 1 | – | – |
| • The call is put on hold pending transfer. | – | – | – | – |
| • The agent dials the transfer target. | – | – | – | – |
| • The agent completes the transfer without waiting to be answered. | Transferred 1 | Transferred 1 | Answered Calls 1 | Answered Calls 1 |
| **Historical** | **Answered Calls 1 Transferred 1** | **Answered Calls 1 Transferred 1** | **Answered Calls 1** | **Answered Calls 1** |

| Queues | Answered Calls | No Answer | Transferred |
|---|---|---|---|
| Queue Q | 1 | 0 | 1 |
| Queue Q2 | 1 | 0 | 0 |
| *TOTAL* | 2 | 0 | 1 |

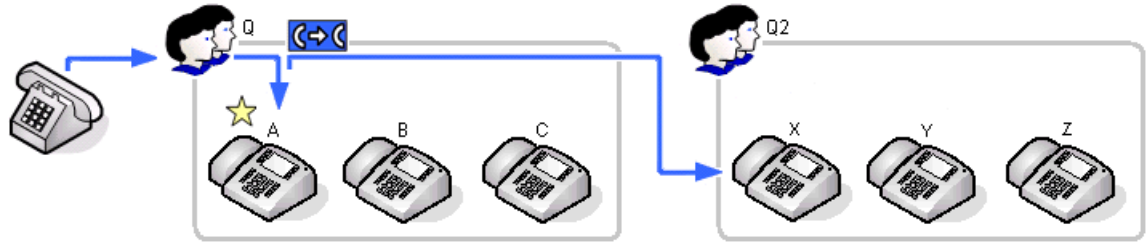
| Agents | Answered Calls | Internal Made | Transferred |
|---|---|---|---|
| Agent A | 1 | 0 | 1 |
| Agent B | 0 | 0 | 0 |
| Agent C | 0 | 0 | 0 |

| Queues | Answered Calls | No Answer | Transferred |
|---|---|---|---|
| Queue Q | 1 | 0 | 1 |
| Queue Q2 | 1 | 0 | 0 |
| *TOTAL* | 2 | 0 | 1 |

| Agents | Answered Calls | Internal Made | Transferred |
|---|---|---|---|
| Agent X | 1 | 0 | 0 |
| Agent Y | 0 | 0 | 0 |
| Agent Z | 0 | 0 | 0 |

## 8.2.6 Queue Call Unsupervised Transfer to Agent

In this scenario the agent who answered an external call to the queue transfers it to an agent in another queue and completes the transfer without waiting to be answered.




| Events | Queue Q | Agent A | Queue Q2 | Agent X |
|---|---|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – | – | – |
| • The call is presented to the first available agent. | Agents Ringing 1 | – | – | – |
| • The call is answered. | Answered Calls 1 | Answered Calls 1 | – | – |
| • The call is put on hold pending transfer. | – | – | – | – |
| • The agent dials the transfer target. | – | – | – | – |
| • The agent completes the transfer without waiting to be answered. | Transferred 1 | Transferred 1 | – | – |
| • The call is answered. | – | – | – | Answered External Non Queue 1 |
| **Historical** | **Answered Calls 1 Transferred 1** | **Answered Calls 1 Transferred 1** | **–** | **Answered External Non Queue 1** |

| Queues | Answered Calls | No Answer | Transferred |
|---|---|---|---|
| Queue Q | 1 | 0 | 1 |
| Queue Q2 | 0 | 0 | 0 |
| *TOTAL* | 1 | 0 | 1 |

| Agents | Answered Calls | Internal Made | Transferred | Answered Ext Non Q |
|---|---|---|---|---|
| Agent A | 1 | 0 | 1 | 0 |
| Agent B | 0 | 0 | 0 | 0 |
| Agent C | 0 | 0 | 0 | 0 |

| Queues | Answered Calls | No Answer | Transferred |
|---|---|---|---|
| Queue Q | 1 | 0 | 1 |
| Queue Q2 | 0 | 0 | 0 |
| *TOTAL* | 1 | 0 | 1 |

| Agents | Answered Calls | Internal Made | Transferred | Answered Ext Non Q |
|---|---|---|---|---|
| Agent X | 0 | 0 | 0 | 1 |
| Agent Y | 0 | 0 | 0 | 0 |
| Agent Z | 0 | 0 | 0 | 0 |

The following is an example report, using the Call Details Report template, for an unsupervised transfer from a queue to an agent in another queue. It shows the initial call being answered, put on hold and then the initial call transferred.

CDR

From 02/12/2008 - 02/12/2008 07:55 - 17:00

| Report type | Target Name | Supervisor Name |
|---|---|---|
| Call Details Report - All | Queue | Mark Gallagher |
| | * | |

Ungrouped

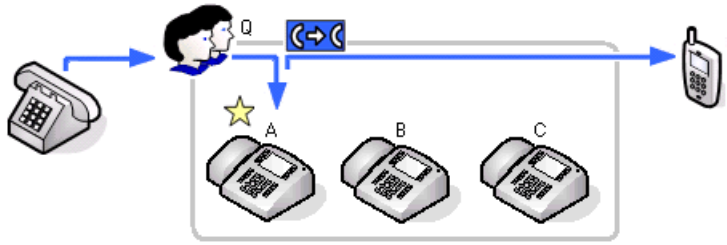
| Date - Time | Call Direction | Number | DDI | Queue | Queue Time | Agent | Duration | Status | Reference |
|---|---|---|---|---|---|---|---|---|---|
| 02/12/2008 07:55:44 | Inbound | 01707364416 | 200 | Queue | 00:00:02 | Agent A | 00:00:07 | Answered | 000133 |
| 02/12/2008 07:55:46 | Inbound | 01707364416 | | Queue | | Agent A | 00:00:07 | Holding | 000133 |
| 02/12/2008 07:55:53 | Inbound | 01707364416 | 200 | Queue | | Agent X | 00:00:04 | Transferred | 000133 |

Summary

| | | | | | |
|---|---|---|---|---|---|
| Customer Calls | 1 | Call Interactions | 1 | External Inbound Calls | 1 |
| | | Internal Calls | 0 | External Outbound Calls | 0 |

## 8.2.7 Queue Call Unsupervised Transfer to Non-Agent

In this scenario the agent who answered an external call to the queue transfers it to an agent in another queue and completes the transfer without waiting to be answered.



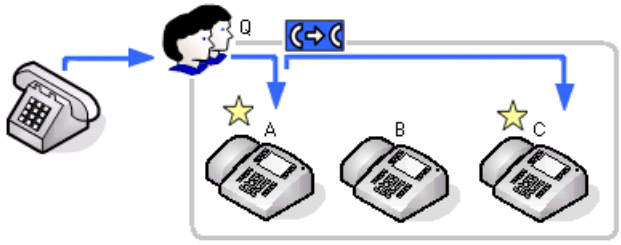

| Events | Queue Q | Agent A |
|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – |
| • The call is presented to the first available agent. | Agents Ringing 1 | – |
| • The call is answered. | Answered Calls 1 | Answered Calls 1 |
| • The call is put on hold pending transfer. | – | – |
| • The agent dials the transfer target. | – | – |
| • The agent completes the transfer without waiting to be answered. | Transferred 1 | Transferred 1 |
| **Historical** | **Answered Calls 1 Transferred 1** | **Answered Calls 1 Transferred 1** |

| Queues | Answered Calls | No Answer | Transferred |
|---|---|---|---|
| Queue Q | 1 | 0 | 1 |
| Queue Q2 | 0 | 0 | 0 |
| *TOTAL* | 1 | 0 | 1 |

| Agents | Answered Calls | Internal Made | Transferred |
|---|---|---|---|
| Agent A | 1 | 0 | 1 |
| Agent B | 0 | 0 | 0 |
| Agent C | 0 | 0 | 0 |

## 8.2.8 Queue Call Unsupervised Transfer to Agent in Same Queue

In this scenario the agent who answered an external call to the queue transfers it to another agent in the same queue.



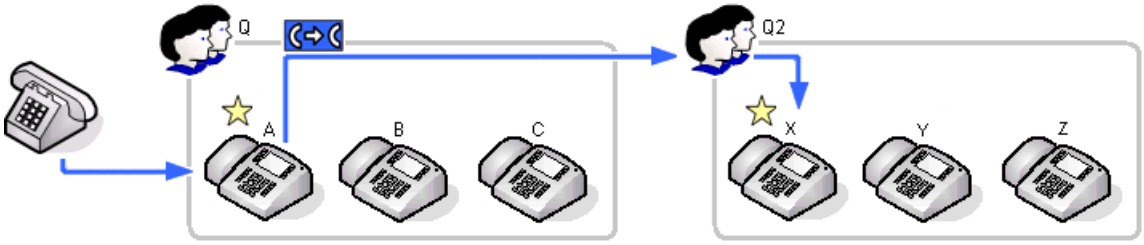

| Events | Queue Q | Agent A | Agent C |
|---|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – | – |
| • The call is presented to the first available agent. | Agents Ringing 1 | – | – |
| • The call is answered. | Answered Call 1 | Answered Calls 1 | – |
| • The call is put on hold pending transfer. | – | – | – |
| • The agent dials the transfer target. | – | – | – |
| • The agent completes the transfer without waiting to be answered. | Transferred 1 | Transferred 1 | – |
| • The call is answered. | – | – | Answered External Non Queue 1 |
| **Historical** | **Answered Call 1 Transferred 1** | **Answered Call 1 Transferred 1** | **Answered External Non Queue 1** |

| Queues | Answered Calls | No Answer | Transferred |
|---|---|---|---|
| Queue Q | 1 | 0 | 1 |
| Queue Q2 | 0 | 0 | 0 |
| *TOTAL* | 1 | 0 | 1 |

| Agents | Answered Calls | Internal Made | Transferred | Answered Ext Non-Q |
|---|---|---|---|---|
| Agent A | 1 | 0 | 1 | 0 |
| Agent B | 0 | 0 | 0 | 0 |
| Agent C | 0 | 0 | 0 | 1 |

## 8.2.9 Direct Call Supervised Transfer to Queue

In this scenario the agent who answered a direct call transfers it to another queue.




| Events | Queue Q | Agent A | Queue Q2 | Agent X |
|---|---|---|---|---|
| • An external call is routed direct to an agent. | – | – | | |
| • The call is answered. | – | Answered External Non Queue 1 | | |
| • The call is put on hold pending transfer. | – | – | – | – |
| • The agent dials the transfer target. | – | Internal Made 1 | | |
| • The call is answered. | – | – | Answered Calls 1 | Answered Calls 1 |
| • The agent completes the transfer. | – | – | Answered Calls 1 | Answered Calls 1 |
| **Historical** | **–** | **Answered External Non Queue 1 Internal Made 1** | **Answered Calls 2** | **Answered Calls 2** |

| Queues | Answered Calls | No Answer | Transferred |
|---|---|---|---|
| Queue Q | 0 | 0 | 0 |
| Queue Q2 | 2 | 0 | 0 |
| *TOTAL* | 2 | 0 | 0 |

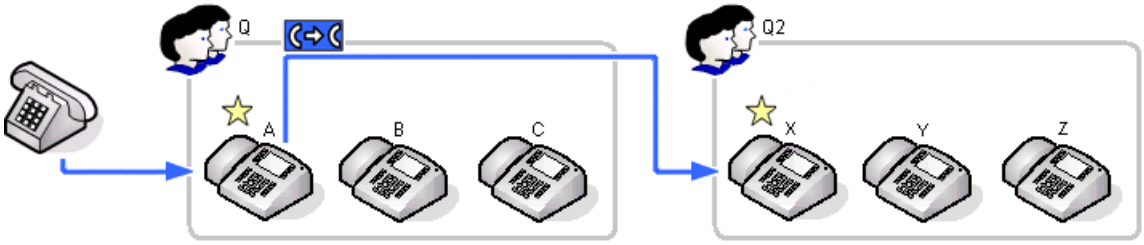
| Agents | Answered Calls | Internal Made | Transferred | Answered Ext Non Q |
|---|---|---|---|---|
| Agent A | 0 | 1 | 0 | 1 |
| Agent B | 0 | 0 | 0 | 0 |
| Agent C | 0 | 0 | 0 | 0 |

| Queues | Answered Calls | No Answer | Transferred |
|---|---|---|---|
| Queue Q | 0 | 0 | 0 |
| Queue Q2 | 2 | 0 | 0 |
| *TOTAL* | 2 | 0 | 0 |

| Agents | Answered Calls | Internal Made | Transferred | Answered Ext Non Q |
|---|---|---|---|---|
| Agent X | 2 | 0 | 0 | 0 |
| Agent Y | 0 | 0 | 0 | 0 |
| Agent Z | 0 | 0 | 0 | 0 |

## 8.2.10 Direct Call Supervised Transfer to Agent

In this scenario an agent transfers a direct call to an agent in another queue.




| Events | Queue Q | Agent A | Queue Q2 | Agent X |
|---|---|---|---|---|
| • An external call is routed direct to an agent. | – | – | – | – |
| • The call is answered. | – | Answered External Non Queue 1 | – | – |
| • The call is put on hold pending transfer. | – | – | – | – |
| • The agent dials the transfer target. | – | Internal Made 1 | – | – |
| • The call is answered. | – | – | – | Answered Internal Non Queue 1 |
| • The agent completes the transfer. | – | – | – | Answered External Non Queue 1 |
| **Historical** | **–** | **Answered External Non Queue 1 Internal Made 1** | **–** | **Answered Internal Non Queue 1 Answered External Non Queue 1** |

| Queues | Answered Calls | No Answer | Transferred |
|---|---|---|---|
| Queue Q | 0 | 0 | 0 |
| Queue Q2 | 0 | 0 | 0 |
| *TOTAL* | 0 | 0 | 0 |

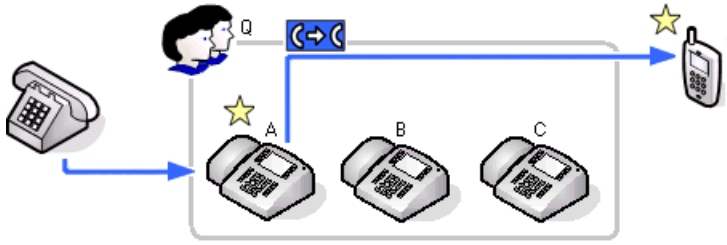
| Agents | Answered Calls | Internal Made | Answered Ext Non Q | Answered Int Non Q |
|---|---|---|---|---|
| Agent A | 0 | 1 | 1 | 0 |
| Agent B | 0 | 0 | 0 | 0 |
| Agent C | 0 | 0 | 0 | 0 |

| Queues | Answered Calls | No Answer | Transferred |
|---|---|---|---|
| Queue Q | 0 | 0 | 0 |
| Queue Q2 | 0 | 0 | 0 |
| *TOTAL* | 0 | 0 | 0 |

| Agents | Answered Calls | Internal Made | Answered Ext Non Q | Answered Int Non Q |
|---|---|---|---|---|
| Agent X | 0 | 0 | 1 | 1 |
| Agent Y | 0 | 0 | 0 | 0 |
| Agent Z | 0 | 0 | 0 | 0 |

## 8.2.11 Direct Call Supervised Transfer to Non-Agent

In this scenario the agent transfers a direct call to a non-agent.



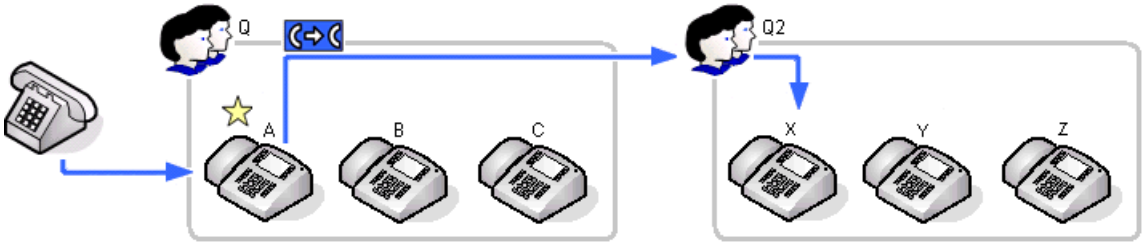

| Events | Queue Q | Agent A |
|---|---|---|
| • An external call is routed direct to an agent. | – | – |
| • The call is answered. | Answered External Non-Queue 1 | – |
| • The call is put on hold pending transfer. | – | – |
| • The agent dials the transfer target. | – | – |
| • The call is answered. | – | – |
| • The agent completes the transfer. | – | – |
| **Historical** | **Answered External Non-Queue 1** | **–** |

| Queues | Answered Calls | No Answer | Transferred |
|---|---|---|---|
| Queue Q | 0 | 0 | 0 |
| Queue Q2 | 0 | 0 | 0 |
| *TOTAL* | 0 | 0 | 0 |

| Agents | Answered Calls | Internal Made | Transferred | Answered Ext Non Q |
|---|---|---|---|---|
| Agent A | 0 | 0 | 0 | 1 |
| Agent B | 0 | 0 | 0 | 0 |
| Agent C | 0 | 0 | 0 | 0 |

## 8.2.12 Direct Call Unsupervised Transfer to Queue

In this scenario the agent transfers a direct call to another queue and completes the transfer without waiting to be answered.




| Events | Queue Q | Agent A | Queue Q2 | Agent X |
|---|---|---|---|---|
| • An external call is routed direct to an agent. | – | | | |
| • The call is answered. | – | Answered External Non Queue 1 | | |
| • The call is put on hold pending transfer. | – | – | – | – |
| • The agent dials the transfer target. | – | – | | |
| • The agent completes the transfer without waiting to be answered. | – | – | Calls Waiting 1 Agents Ring 1 | |
| • The call is answered. | | | Answered Calls 1 | Answered Calls 1 |
| **Historical** | **–** | **–** | **Answered Calls 1** | **Answered Calls 1** |

| Queues | Answered Calls | No Answer | Transferred |
|---|---|---|---|
| Queue Q | 0 | 0 | 0 |
| Queue Q2 | 1 | 0 | 0 |
| *TOTAL* | 1 | 0 | 0 |

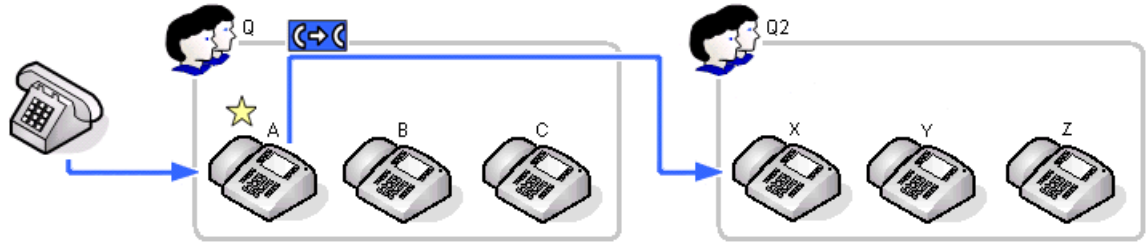
| Agents | Answered Calls | Internal Made | Transferred | Answered Ext Non Q |
|---|---|---|---|---|
| Agent A | 0 | 0 | 0 | 1 |
| Agent B | 0 | 0 | 0 | 0 |
| Agent C | 0 | 0 | 0 | 0 |

| Queues | Answered Calls | No Answer | Transferred |
|---|---|---|---|
| Queue Q | 0 | 0 | 0 |
| Queue Q2 | 1 | 0 | 0 |
| *TOTAL* | 1 | 0 | 0 |

| Agents | Answered Calls | Internal Made | Transferred | Answered Ext Non Q |
|---|---|---|---|---|
| Agent X | 1 | 0 | 0 | 0 |
| Agent Y | 0 | 0 | 0 | 0 |
| Agent Z | 0 | 0 | 0 | 0 |

## 8.2.13 Direct Call Unsupervised Transfer to Agent

In this scenario the agent who answered a direct call transfers it to an agent in another queue and completes the transfer without waiting to be answered.




| Events | Queue Q | Agent A | Queue Q2 | Agent X |
|---|---|---|---|---|
| • An external call is routed direct to an agent. | – | – | – | – |
| • The call is answered. | – | Answered External Non Queue 1 | – | – |
| • The call is put on hold pending transfer. | – | – | – | – |
| • The agent dials the transfer target. | – | – | – | – |
| • The agent completes the transfer without waiting to be answered. | – | – | – | – |
| • The call is answered. | – | – | – | Answered External Non Queue 1 |
| **Historical** | **–** | **Answered External Non Queue 1** | **–** | **Answered External Non Queue 1** |

| Queues | Answered Calls | No Answer | Transferred |
|---|---|---|---|
| Queue Q | 0 | 0 | 0 |
| Queue Q2 | 0 | 0 | 0 |
| *TOTAL* | 0 | 0 | 0 |

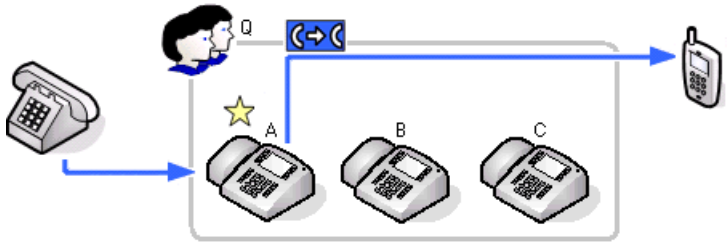
| Agents | Answered Calls | Internal Made | Transferred | Answered Ext Non Q |
|---|---|---|---|---|
| Agent A | 0 | 0 | 0 | 1 |
| Agent B | 0 | 0 | 0 | 0 |
| Agent C | 0 | 0 | 0 | 0 |

| Queues | Answered Calls | No Answer | Transferred |
|---|---|---|---|
| Queue Q | 0 | 0 | 0 |
| Queue Q2 | 0 | 0 | 0 |
| *TOTAL* | 0 | 0 | 0 |

| Agents | Answered Calls | Internal Made | Transferred | Answered Ext Non Q |
|---|---|---|---|---|
| Agent A | 0 | 0 | 0 | 1 |
| Agent B | 0 | 0 | 0 | 0 |
| Agent C | 0 | 0 | 0 | 0 |

## 8.2.14 Direct Call Unsupervised Transfer to Non-Agent

In this scenario the agent who answered an external call to the queue transfers it to an agent in another queue and completes the transfer without waiting to be answered.




| Events | Queue Q | Agent A |
|---|---|---|
| • An external call is routed direct to an agent. | – | – |
| • The call is answered. | – | Answered External Non Queue 1 |
| • The call is put on hold pending transfer. | – | – |
| • The agent dials the transfer target. | – | – |
| • The agent completes the transfer without waiting to be answered. | – | – |
| • The call is answered. | – | – |
| **Historical** | – | **Answered External Non Queue 1** |

| Queues | Answered Calls | No Answer | Transferred |
|---|---|---|---|
| Queue Q | 0 | 0 | 0 |
| Queue Q2 | 0 | 0 | 0 |
| *TOTAL* | 0 | 0 | 0 |

| Agents | Answered Calls | Internal Made | Transferred | Answered Ext Non Q |
|---|---|---|---|---|
| Agent A | 0 | 0 | 0 | 1 |
| Agent B | 0 | 0 | 0 | 0 |
| Agent C | 0 | 0 | 0 | 0 |

# 8.3 Overflow Calls

- An overflowed call is any call originally targeted at the queue that then overflows using the queue's overflow settings. The overflowing calls are then presented to members of other queues.
- IP Office Customer Call Reporter only supports overflow using other IP Office Customer Call Reporter queues as the overflow destinations.

Hunt groups on the telephone system can be configured to use queuing when the number of calls waiting to be answered exceeds the number of available agents to which waiting calls can be presented. With queuing enabled the additional callers continue to be treated as if ringing even though they are queued.

Without queuing, when the hunt group become busy, addition calls go directly to the overflow destination if set, else to voicemail if available, else return busy to the caller.

IP Office Customer Call Reporter is only supported for queues (hunt groups) that use queuing.

## Overflow Settings

Every queue can be configured by the telephone system maintainer with a number of overflow settings.

- **Overflow Group List**
  This is the key setting, which if set, enables overflow for the queue. The **Overflow Group List** is a list of other hunt groups whose members are used to answer overflowing calls. The list is used in sequential order, with the overflowed call being presented to the available agents in each group using the Ring Mode setting of that group. If still unanswered the overflowed call then goes to the next group in the list and eventually back to the overflowing group in a continuous loop until answered.
- **Overflow Time** (Optional)
  Use this setting to set a time after which a call will overflow. However, setting **Overflow Time** is not necessary to be able to use overflow, see *'When Do Calls Overflow?'* below.
- **Overflow Mode**
  By default, if the queue is using 'queuing', once one calls overflows all queued calls overflow. This can be switched off, with the overflow of each call being determined on a call by call basis.

## When Do Calls Overflow?

If an **Overflow Group List** has been setup for a queue, calls will overflow when:

- For a queue without 'queuing' enabled, a call overflows immediately if there are no available agents.
- For a queue with 'queuing' enabled but no **Overflow Time** set, a call will overflow when it has been presented to but not answered by each of the available agents.
- For queues with 'queuing' enabled and an **Overflow Time** set, a call will be presented to available agents or wait in the queue until the overflow time expires at which point the call will overflow.
  - If the call is currently being presented to an agent when the overflow time expires, the call will complete ringing for the No Answer Time at that agent before it actually overflows.
- The default IP Office operation is to overflow all 'queued' calls once any one call has overflowed. However if required the IP Office can be switched to overflow calls using the rules above on a call by call basis.

## How are Overflowed Calls Treated?

When a call overflows it still belongs to the original queue. The overflow list is used to expand the list of agents to whom the call can be presented for answer. The only setting of the hunt groups to which a call overflows that are applied are their own Ring Mode 297 and No Answer Time 294 settings. All other settings, including announcements and voicemail, applied to the call are those of the original queue. Similarly, for IP Office Customer Call Reporter, the call statistics belong to the overflowing queue.

For users to which the overflowed call is presented, the indication of the call source will be that of the queue from which it has overflowed.

## Overflowed Calls and Statistics

For IP Office Customer Call Reporter statistics, calls overflowing from a queue are treated as follows unless specifically stated as otherwise for a particular statistic:

- Calls that overflow from a queue to another queue are included in the original queue's **Overflowed Calls** 214 statistic.
- Queue calls overflowing to a non-queue hunt group are not supported.
- For the queue which queue calls overflowed from:
  - The calls are not included in the queue's **Calls Waiting** 204, **Answered Calls** 194 and **Lost Calls** 211 statistics. Instead they are included in its **Overflowed Calls Waiting** 217, **Overflowed Answered** 216 and **Overflowed Lost** 218 statistics.
  - The calls are included in the queue's performance statistics; **Average Answer %** 198, **Average Answer Time** 200 and **Grade of Service** 207.
  - If the overflowing call goes to voicemail they are included in the queue's **Routed to Voicemail** 224 statistic.
  - If the overflowing call is routed to somewhere outside the queue and its overflows it is included in the queue's **Routed to Other** 297 statistics.
- For the queue which queue calls overflowed to:
  - The calls are only included in the queue's **Calls Waiting** 204 statistic.
  - For agents, the calls are included in their **Agent Call Share** 190, **Agent Productivity** 180, **Answered Calls** 194, **No Answer** 213, **Lost Calls** 211 , **Talk Average** 225, **Talk Inbound** 226, **Talk Inbound Average** 227, **Talk Internal** 228, **Talk Outbound** 229, **Talk Outbound Average** 230 and **Talk Total** 231 statistics.
- Once a call has overflowed it remains an overflowed call. This applies even if it is answered by a member of the original queue from which it overflowed.

The table below summarizes which statistics include calls overflowing from the queue and calls that overflow to a queue:

| Statistic includes calls... | Overflowed from | | Overflowed to | |
|---|---|---|---|---|
| | Queue | Agent | Queue | Agent |
| **Agents Call Share** 190 | - | - | - | ✓ |
| **Agents Ringing** 193 | - | - | - | - |
| **Answered Calls** 194 | ✗ | ✗ | ✗ | ✓ |
| **Answered Internal (Queue)** 197 | ✗ | ✗ | ✗ | ✓ |
| **Average Answer %** 198 | ✓ | ✗ | ✗ | ✗ |
| **Average Answer Time** 200 | ✓ | ✗ | ✗ | ✗ |
| **Calls Waiting** 204 | ✗ | ✗ | ✓ | ✓ |
| **Grade of Service** 207 | ✓ | ✗ | ✗ | ✗ |
| **Lost Calls** 211 | ✗ | ✗ | ✗ | ✓ |
| **Overflowed Answered** 216 | ✓ | - | ✗ | - |
| **Overflowed Calls** 214 | ✓ | - | ✗ | - |
| **Overflowed Calls Waiting** 217 | ✓ | - | ✗ | - |
| **Overflowed Lost** 218 | ✓ | - | ✗ | - |
| **No Answer** 213 | ✗ | ✗ | ✗ | ✓ |
| **Routed to Other** 223 | ✓ | ✗ | ✗ | ✗ |
| **Routed to Voicemail** 224 | ✓ | ✗ | ✗ | ✗ |
| **Transferred** 232 | ✓ | ✗ | ✗ | ✗ |

- Statistics not included in the table and those marked - are not applicable.

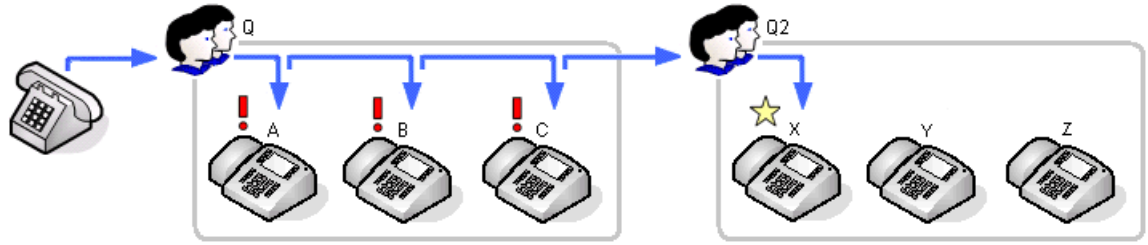
## Overflowed Calls and Reports

Queue reports based on the Call Summary Report 58 template will report overflowed calls against the queue from which they overflowed. They will not report the calls against the queue to which they overflow.

Queue reports based on the Call Details Report 55 template will behave the same as reports based on the Call Summary report above except when grouped by ***Queue***. When grouped by ***Queue***, the report reports overflowed calls against both the queue from which they overflowed and against the group to which they overflowed.

## 8.3.1 Unanswered Call Overflows and is Answered

This scenario shows a call being presented to and not answered by any of the agents in a queue and so overflowing. The call is then answered by the first agent in the overflow to which it is presented.




| Events | Queue Q | Agent A | Agent B | Agent C | Queue Q2 | Agent X |
|---|---|---|---|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – | – | – | – | – |
| • The call is presented to the first available agent. | Agents Ringing 1 | – | – | – | – | – |
| • The call is not answered. | No Answer 1 | No Answer 1 | – | – | – | – |
| • The call is presented to the next available agent. | Agents Ringing 1 | – | – | – | – | – |
| • The call is not answered. | No Answer 1 | – | No Answer 1 | – | – | – |
| • The call is presented to the next available agent. | Agents Ringing 1 | – | – | – | – | – |
| • The call is not answered. | No Answer 1 | – | – | No Answer 1 | – | – |
| • The call overflows to another queue. | Overflowed Calls 1 | – | – | – | Calls Waiting 1 | – |
| • The call is presented to the first available agent. | Overflowed Calls Waiting 1 | – | – | – | | – |
| • The call is answered. | Overflowed Answered 1 | – | – | – | – | Answered Calls 1 |
| **Historical** | **No Answer 3<br>Overflowed Calls 1<br>Overflowed Answered 1** | **No Answer 1** | **No Answer 1** | **No Answer 1** | **–** | **Answered Calls 1** |

| Queues | Answered Calls | No Answer | Lost Calls | Overflowed Calls | Overflowed Answered | Overflowed Lost |
|---|---|---|---|---|---|---|
| Queue Q | 0 | 3 | 0 | 1 | 1 | 0 |
| Queue Q2 | 0 | 0 | 0 | 0 | 0 | 0 |
| *TOTAL* | 0 | 3 | 0 | 1 | 1 | 0 |

| Agents | Answered Calls | No Answer | Lost Calls |
|---|---|---|---|
| Agent A | 0 | 1 | 0 |
| Agent B | 0 | 1 | 0 |
| Agent C | 0 | 1 | 0 |

| Queues | Answered Calls | No Answer | Lost Calls | Overflowed Calls | Overflowed Answered | Overflowed Lost |
|---|---|---|---|---|---|---|
| Queue Q | 0 | 3 | 0 | 1 | 1 | 0 |
| Queue Q2 | 0 | 0 | 0 | 0 | 0 | 0 |
| *TOTAL* | 0 | 3 | 0 | 1 | 1 | 0 |

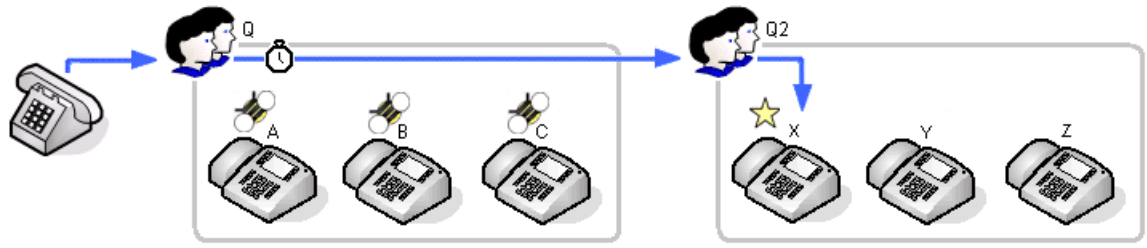
| Agents | Answered Calls | No Answer | Lost Calls |
|---|---|---|---|
| Agent X | 1 | 0 | 0 |
| Agent Y | 0 | 0 | 0 |
| Agent Z | 0 | 0 | 0 |

**Notes:**

- The overflowed call is included in the specific overflow statistics of the queue from which it overflowed.
- The overflowed call is included in the performance statistics of the queue from which it overflowed.
- The overflowed call is not included in any queue statistics of the queue to which it overflowed except the Call Waiting statistic while the call was waiting to be answered.
- The overflowed call is included in the answered, lost and no answer statistics of the agents in the queue to which it overflowed.

## 8.3.2 Overflowed and Answered by 1st Agent

In this scenario the queue has queuing enabled and an overflow time set. An external call to the queue is queued to be answered as there are no available agents. When the overflow timeout expires the call overflows. The call is then answered by the first agent in the overflow to which it is presented.




| Events | Queue Q | Queue Q2 | Agent X |
|---|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – | – |
| • The call overflows to another queue. | Overflowed Calls 1 | Calls Waiting 1 | – |
| • The call is presented to the first available agent. | Overflowed Calls Waiting 1 | Calls Waiting 1 | – |
| • The call is answered. | Overflowed Answered 1 | – | Answered Calls 1 |
| **Historical** | **Overflowed Calls 1 Overflowed Answered 1** | **–** | Answered Calls 1 |

| Queues | Answered Calls | No Answer | Lost Calls | Overflowed Calls | Overflowed Answered | Overflowed Lost |
|---|---|---|---|---|---|---|
| Queue Q | 0 | 0 | 0 | 1 | 1 | 0 |
| Queue Q2 | 0 | 0 | 0 | 0 | 0 | 0 |
| *TOTAL* | 0 | 0 | 0 | 1 | 1 | 0 |

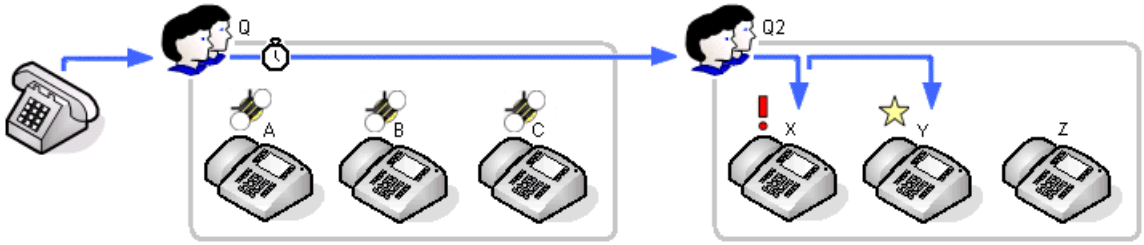
| Agents | Answered Calls | No Answer | Lost Calls |
|---|---|---|---|
| Agent X | 1 | 0 | 0 |
| Agent Y | 0 | 0 | 0 |
| Agent Z | 0 | 0 | 0 |

**Notes:**

- The overflowed call is included in the specific overflow statistics of the queue from which it overflowed.
- The overflowed call is included in the performance statistics of the queue from which it overflowed.
- The overflowed call is not included in any queue statistics of the queue to which it overflowed except the Call Waiting statistic while the call was waiting to be answered.
- The overflowed call is included in the answered, lost and no answer statistics of the agents in the queue to which it overflowed.

## 8.3.3 Overflowed and Answered by 2nd Agent

In this scenario, the call overflows but is not answered by the first agent in the overflow to which it is presented, however it is answered by the next available agent.




| Events | Queue Q | Queue Q2 | Agent X | Agent Y |
|---|---|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – | – | – |
| • The call overflows to another queue. | Overflowed Calls 1 | Calls Waiting 1 | – | – |
| • The call is presented to the first available agent. | Overflowed Calls Waiting 1 | Calls Waiting 1 | – | – |
| • The call is not answered. | – | Calls Waiting 1 | – | – |
| • The call is presented to the first available agent. | – | Calls Waiting 1 | No Answer 1 | – |
| • The call is answered. | Overflowed Answered 1 | – | – | Answered Calls 1 |
| **Historical** | **Overflowed Calls 1**<br>**Overflowed Answered 1** | **–** | **No Answer 1** | **Answered Calls 1** |

| Queues | Answered Calls | No Answer | Lost Calls | Overflowed Calls | Overflowed Answered | Overflowed Lost |
|---|---|---|---|---|---|---|
| Queue Q | 0 | 0 | 0 | 1 | 1 | 0 |
| Queue Q2 | 0 | 0 | 0 | 0 | 0 | 0 |
| *TOTAL* | 0 | 0 | 0 | 1 | 1 | 0 |

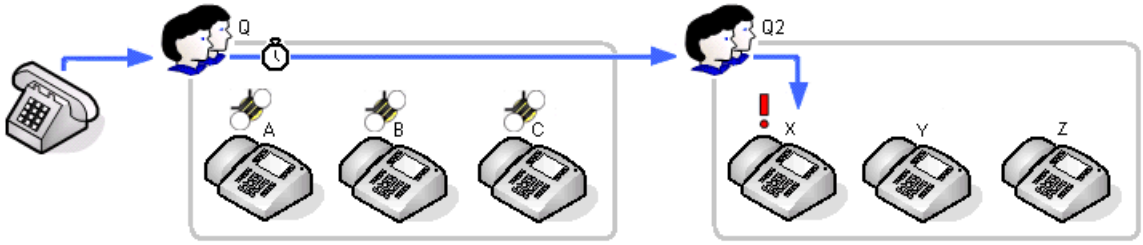
| Agents | Answered Calls | No Answer | Lost Calls |
|---|---|---|---|
| Agent X | 0 | 1 | 0 |
| Agent Y | 1 | 0 | 0 |
| Agent Z | 0 | 0 | 0 |

**Notes:**

- The overflowed call is included in the specific overflow statistics of the queue from which it overflowed.
- The overflowed call is included in the performance statistics of the queue from which it overflowed.
- The overflowed call is not included in any queue statistics of the queue to which it overflowed except the Call Waiting statistic while the call was waiting to be answered.
- The overflowed call is included in the answered, lost and no answer statistics of the agents in the queue to which it overflowed.

## 8.3.4 Overflowed and Lost

In this scenario, after the call overflows the caller disconnects before the call can be answered.




| Events | Queue Q | Queue Q2 | Agent X |
|---|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – | – |
| • The call overflows to another queue. | Overflowed Calls 1 | Calls Waiting 1 | |
| • The call is presented to the first available agent. | Overflowed Calls Waiting 1 | | – |
| • The caller hangs up. | Overflowed Lost 1 | – | Lost Calls 1 |
| **Historical** | **Overflowed Calls 1 Overflowed Lost 1** | **–** | **Lost Calls 1** |

| Queues | Answered Calls | No Answer | Lost Calls | Overflowed Calls | Overflowed Answered | Overflowed Lost |
|---|---|---|---|---|---|---|
| Queue Q | 0 | 0 | 0 | 1 | 0 | 1 |
| Queue Q2 | 0 | 0 | 0 | 0 | 0 | 0 |
| *TOTAL* | 0 | 0 | 0 | 1 | 0 | 1 |

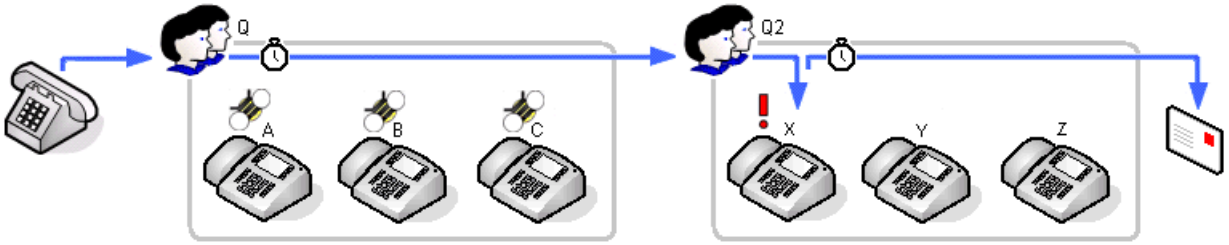
| Agents | Answered Calls | No Answer | Lost Calls |
|---|---|---|---|
| Agent X | 0 | 0 | 0 |
| Agent Y | 0 | 0 | 0 |
| Agent Z | 0 | 0 | 0 |

**Notes:**

- The overflowed call is included in the specific overflow statistics of the queue from which it overflowed.
- The overflowed call is included in the performance statistics of the queue from which it overflowed.
- The overflowed call is not included in any queue statistics of the queue to which it overflowed except the Call Waiting statistic while the call was waiting to be answered.
- The overflowed call is included in the answered, lost and no answer statistics of the agents in the queue to which it overflowed.

## 8.3.5 Overflow and Timed Out to Voicemail

In this scenario after a call overflows, the queue's voicemail timeout occurs. The call will then go to the original queue's voicemail mailbox.




| Events | Queue Q | Queue Q2 | Agent X |
|---|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – | – |
| • The call overflows to another queue. | Overflowed Calls 1 | Calls Waiting 1 | |
| • The call is presented to the first available agent. | Overflowed Calls Waiting 1 | | – |
| • While being presented the call times out to voicemail. | Routed to Voicemail 1 | – | – |
| **Historical** | **Overflowed Calls 1**<br>**Routed to Voicemail 1** | **–** | **–** |

| Queues | Answered Calls | No Answer | Lost Calls | Overflowed Calls | Overflowed Answered | Routed to Voicemail |
|---|---|---|---|---|---|---|
| Queue Q | 0 | 0 | 0 | 1 | 0 | 1 |
| Queue Q2 | 0 | 0 | 0 | 0 | 0 | 0 |
| *TOTAL* | 0 | 0 | 0 | 1 | 0 | 1 |

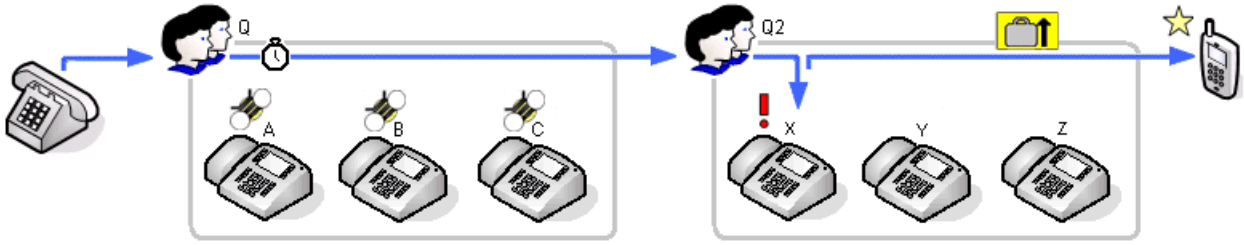
| Agents | Answered Calls | No Answer | Lost Calls |
|---|---|---|---|
| Agent X | 0 | 0 | 0 |
| Agent Y | 0 | 0 | 0 |
| Agent Z | 0 | 0 | 0 |

**Notes:**

- The overflowed call is included in the specific overflow statistics of the queue from which it overflowed.
- The overflowed call is included in the performance statistics of the queue from which it overflowed.
- The overflowed call is not included in any queue statistics of the queue to which it overflowed except the Call Waiting statistic while the call was waiting to be answered.
- The overflowed call is included in the answered, lost and no answer statistics of the agents in the queue to which it overflowed.
- The call is included in the **Routed to Voicemail** statistic of the queue from which it overflowed.

## 8.3.6 Overflowed Call Picked Up

In this scenario the overflowed call is pickup by someone outside the original and overflow queue.




| Events | Queue Q | Queue Q2 | Agent X |
|---|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – | – |
| • The call overflows to another queue. | Overflowed Calls 1 | Calls Waiting 1 | – |
| • The call is presented to the first available agent. | Overflowed Calls Waiting 1 | | – |
| • While being presented the call times out to voicemail. | Routed to Voicemail 1 | – | – |
| **Historical** | **Overflowed Calls 1**<br>**Routed to Other 1** | **–** | **–** |

| Queues | Answered Calls | No Answer | Lost Calls | Overflowed Calls | Overflowed Answered | Routed to Other |
|---|---|---|---|---|---|---|
| Queue Q | 0 | 0 | 0 | 1 | 0 | 1 |
| Queue Q2 | 0 | 0 | 0 | 0 | 0 | 0 |
| *TOTAL* | 0 | 0 | 0 | 1 | 0 | 1 |

| Agents | Answered Calls | No Answer | Lost Calls |
|---|---|---|---|
| Agent X | 0 | 0 | 0 |
| Agent Y | 0 | 0 | 0 |
| Agent Z | 0 | 0 | 0 |

**Notes:**

- The overflowed call is included in the specific overflow statistics of the queue from which it overflowed.
- The overflowed call is included in the performance statistics of the queue from which it overflowed.
- The overflowed call is not included in any queue statistics of the queue to which it overflowed except the Call Waiting statistic while the call was waiting to be answered.
- The overflowed call is included in the answered, lost and no answer statistics of the agents in the queue to which it overflowed.
- The overflowed call is included in the **Routed to Other** statistic of the queue from which it overflowed. The same would apply even if the call had been picked up by an agent in the original queue or the overflow queue.

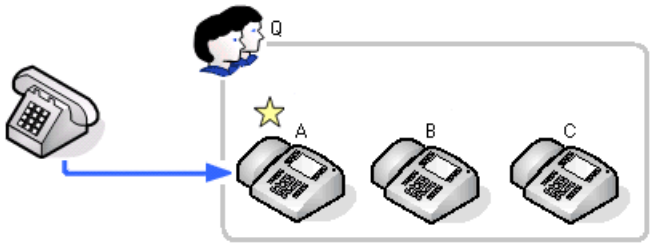
# 8.4 Non-Queue Calls (Direct Calls)

The terms 'non-queue call' or 'direct call' are used for calls targeted directly at a particular agent rather than at the queue to which they belong.

While handling a direct call and agent will not be presented with queue calls and will be indicated as Busy Non-Q.

## 8.4.1 Direct External Call to Agent (Answered)

An external call is targeted directly to an agent. The agent answers the call.




| Events | Queue Q | Agent A |
|---|---|---|
| • An external call is routed direct to an agent. | – | – |
| • The call is answered. | – | Answered External (Non Queue) 1 |
| **Historical** | – | **Answered External (Non Queue) 1** |

| Queues | Answered Calls | No Answer | Lost Calls | Routed To Other | Routed To Voicemail |
|---|---|---|---|---|---|
| Queue Q | 0 | 0 | 0 | 0 | 0 |
| *TOTAL* | 0 | 0 | 0 | 0 | 0 |

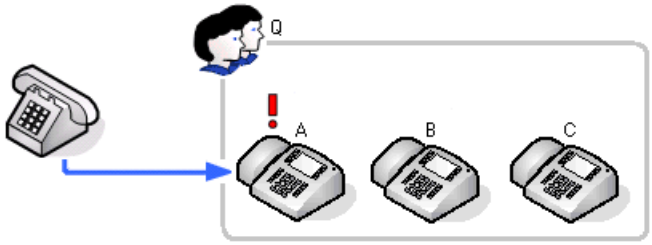
| Agent | Answered Calls | No Answer | Lost Calls | Routed To Other | Answered Ext Non-Q |
|---|---|---|---|---|---|
| **Agent A** | 0 | 0 | 0 | 0 | 1 |
| **Agent B** | 0 | 0 | 0 | 0 | 0 |
| **Agent C** | 0 | 0 | 0 | 0 | 0 |

**Notes:**

- Except for affecting the agent's state, direct calls 292 to an agent are not recorded unless the agent answers the call.
- The agent states used for direct calls are **Ring Non-Q** 297 and when connected **Busy Non-Q** 291.
- Direct calls are not recorded against any queue to which the agent belongs.

## 8.4.2 Direct External Call to Agent (Unanswered)

An external call is targeted directly to an agent. The agent does not answer and the caller disconnects.




| Events | Queue Q | Agent A |
|---|---|---|
| • An external call is routed direct to an agent. | – | – |
| • The call is not answered. | – | – |
| • The caller hangs up. | – | – |
| **Historical** | – | – |

| Queues | Answered Calls | No Answer | Lost Calls | Routed To Other | Routed To Voicemail |
|---|---|---|---|---|---|
| Queue Q | 0 | 0 | 0 | 0 | 0 |
| *TOTAL* | 0 | 0 | 0 | 0 | 0 |

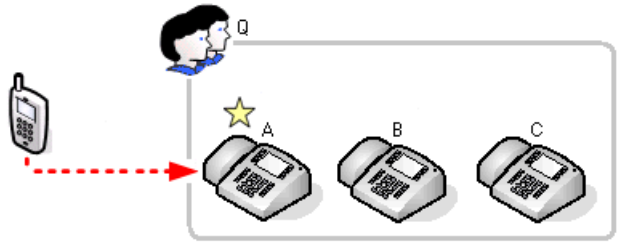
| Agent | Answered Calls | No Answer | Lost Calls | Routed To Other |
|---|---|---|---|---|
| Agent A | 0 | 0 | 0 | 0 |
| Agent B | 0 | 0 | 0 | 0 |
| Agent C | 0 | 0 | 0 | 0 |

**Notes:**

- Except for affecting the agent's state, direct calls 292 to an agent are not recorded unless the agent answers the call.
- The agent states used for direct calls are **Ring Non-Q** 297 and when connected **Busy Non-Q** 291.
- Direct calls are not recorded against any queue to which the agent belongs.
- Since the call was not targeted at a queue, it is not recorded as a lost call for the agent or queue.

## 8.4.3 Internal Call Direct to Agent (Answered)

An internal call to an agent. The agent answers.




| Events | Queue Q | Agent A |
|---|---|---|
| • An external call is routed direct to an agent. | – | |
| • The call is answered. | – | Answered Internal (Non-Queue) 1 |
| **Historical** | – | **Answered Internal (Non-Queue) 1** |

| Queues | Answered Calls | No Answer | Lost Calls | Routed To Other | Routed To Voicemail |
|---|---|---|---|---|---|
| Queue Q | 0 | 0 | 0 | 0 | 0 |
| *TOTAL* | 0 | 0 | 0 | 0 | 0 |

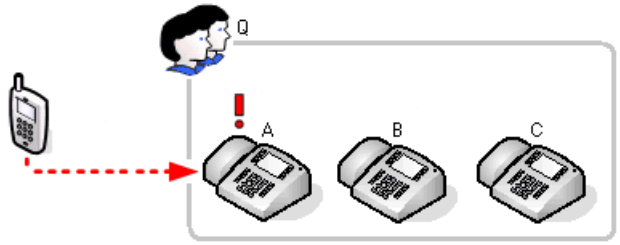
| Agent | Answered Calls | No Answer | Lost Calls | Routed To Other | Answered Int Non-Q |
|---|---|---|---|---|---|
| **Agent A** | 0 | 0 | 0 | 0 | 1 |
| **Agent B** | 0 | 0 | 0 | 0 | 0 |
| **Agent C** | 0 | 0 | 0 | 0 | 0 |

**Notes:**

- Except for affecting the agent's state, direct calls 292 to an agent are not recorded unless the agent answers the call.
- The agent states used for direct calls are **Ring Non-Q** 297 and when connected **Busy Non-Q** 291.
- Direct calls are not recorded against any queue to which the agent belongs.

## 8.4.4 Internal Call Direct to Agent (Unanswered)

An internal call to an agent who does not answer. Since this is not a call targeted to a queue, it is not recorded as a lost call. It would be displayed in statistics only if the agent has answered the call 275.




| Events | Queue Q | Agent A |
|---|---|---|
| • An external call is routed direct to an agent. | – | – |
| • The call is not answered. | – | – |
| • The caller hangs up. | – | – |
| **Historical** | – | – |

| Queues | Answered Calls | No Answer | Lost Calls | Routed to Other | Routed to Voicemail |
|---|---|---|---|---|---|
| Queue Q | 0 | 0 | 0 | 0 | 0 |
| *TOTAL* | 0 | 0 | 0 | 0 | 0 |

| Agent | Answered Calls | No Answer | Lost Calls | Routed to Other |
|---|---|---|---|---|
| Agent A | 0 | 0 | 0 | 0 |
| Agent B | 0 | 0 | 0 | 0 |
| Agent C | 0 | 0 | 0 | 0 |

**Notes:**

- Except for affecting the agent's state, direct calls 292 to an agent are not recorded unless the agent answers the call.
- The agent states used for direct calls are **Ring Non-Q** 297 and when connected **Busy Non-Q** 291.
- Direct calls are not recorded against any queue to which the agent belongs.
- Since the call was not targeted at a queue, it is not recorded as a lost call for the agent or queue.

# 8.5 Voicemail

For direct calls to an agent, if the call goes to voicemail, it is not recorded by any statistic.

Queue calls can be routed to voicemail if the queue has a **Voicemail Answer Time** set. This time is applied from the when a call is presented to a queue and if it expires the call is routed to voicemail and recorded as such in the **Routed to Voicemail** statistic of the queue and the last agent to which it was presented. Voicemail is used immediately the timeout expires regardless of how long the call has been ring an agent.

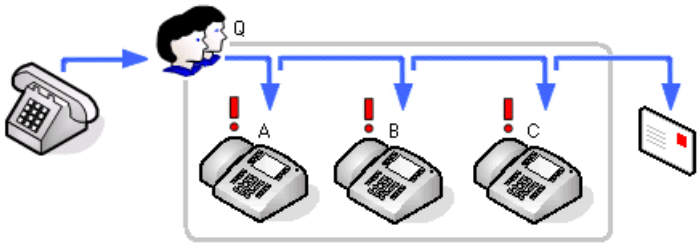
Other statistics (**Answered Calls**, **Lost Calls**, **Overflowed Answered**, **Overflowed Lost** etc.) are not incremented by queue calls that go to voicemail and are then waiting to be answered, answered or lost.

If using Voicemail Pro, details of what happened to calls that go to voicemail can be reported using reports based on the Voicemail Report 61 template.

Note that assisted transfers from the voicemail server to a queue or agent are not supported by IP Office Customer Call Reporter.

## 8.5.1 Queue Call Timed Out to Voicemail

An external call is targeted to a queue. The call is presented to each available agent in turn but remains unanswered. When the queue's voicemail timeout occurs the call goes to the queue's voicemail mailbox immediately.



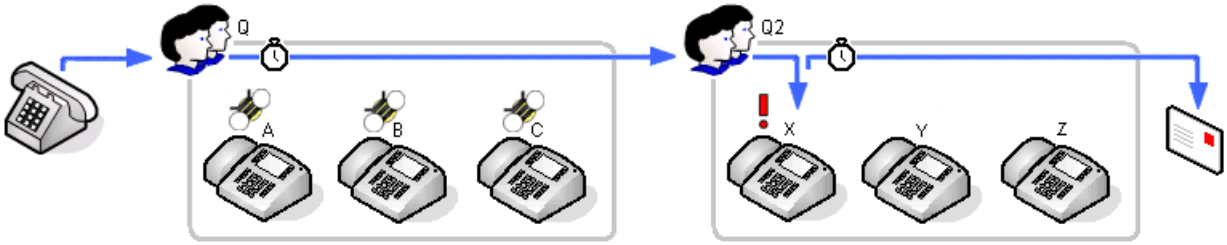

| Events | Queue Q | Agent A | Agent B | Agent C |
|---|---|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – | – | – |
| • The call is presented to the first available agent. | Agents Ringing 1 | – | – | – |
| • The call is not answered. | No Answer 1 | No Answer 1 | – | – |
| • The call is presented to the next available agent. | Agents Ringing 1 | – | – | – |
| • The call is not answered. | No Answer 1 | – | No Answer 1 | – |
| • The call is presented to the next available agent. | Agents Ringing 1 | – | – | – |
| • The call is not answered. | | – | – | No Answer 1 |
| • While being presented the call times out to voicemail. | Routed to VM 1 | – | – | – |
| • The caller leaves a message. | New Messages 1 | | | |
| **Historical** | **No Answer 2 Routed to VM 1 New Messages 1** | **No Answer 1** | **No Answer 1** | **No Answer 1** |

| Queues | Answered Calls | No Answer | Lost Calls | Routed to Other | Routed to Voicemail |
|---|---|---|---|---|---|
| Queue Q | 0 | 3 | 0 | 0 | 1 |
| *TOTAL* | 0 | 3 | 0 | 0 | 1 |

| Agents | Answered Calls | No Answer | Lost Calls | Routed to Other |
|---|---|---|---|---|
| Agent A | 0 | 1 | 0 | 0 |
| Agent B | 0 | 1 | 0 | 0 |
| Agent C | 0 | 1 | 0 | 0 |

## 8.5.2 Overflow and Timed Out to Voicemail

In this scenario after a call overflows, the queue's voicemail timeout occurs. The call will then go to the original queue's voicemail mailbox.




| Events | Queue Q | Queue Q2 | Agent X |
|---|---|---|---|
| • A call is routed to the queue. | Calls Waiting 1 | – | – |
| • The call overflows to another queue. | Overflowed Calls 1 | Calls Waiting 1 | |
| • The call is presented to the first available agent. | Overflowed Calls Waiting 1 | | – |
| • While being presented the call times out to voicemail. | Routed to Voicemail 1 | – | – |
| **Historical** | **Overflowed Calls 1**<br>**Routed to Voicemail 1** | **–** | **–** |

| Queues | Answered Calls | No Answer | Lost Calls | Overflowed Calls | Overflowed Answered | Routed to Voicemail |
|---|---|---|---|---|---|---|
| Queue Q | 0 | 0 | 0 | 1 | 0 | 1 |
| Queue Q2 | 0 | 0 | 0 | 0 | 0 | 0 |
| *TOTAL* | 0 | 0 | 0 | 1 | 0 | 1 |

| Agents | Answered Calls | No Answer | Lost Calls |
|---|---|---|---|
| Agent X | 0 | 0 | 0 |
| Agent Y | 0 | 0 | 0 |
| Agent Z | 0 | 0 | 0 |

**Notes:**

- The overflowed call is included in the specific overflow statistics of the queue from which it overflowed.
- The overflowed call is included in the performance statistics of the queue from which it overflowed.
- The overflowed call is not included in any queue statistics of the queue to which it overflowed except the Call Waiting statistic while the call was waiting to be answered.
- The overflowed call is included in the answered, lost and no answer statistics of the agents in the queue to which it overflowed.
- The call is included in the **Routed to Voicemail** statistic of the queue from which it overflowed.

# 8.6 Other Call Features

## 8.6.1 Announcements

While a call to a queue is waiting to be answered, the IP Office telephone system can play pre-recorded announcements to the caller. This option is configured by the IP Office telephone system maintainer. The playing of announcements to waiting calls does not affect IP Office Customer Call Reporter statistics.

Announcements can be configured on calls waiting to be answered within a queue or for direct calls waiting to be answered by an individual user. For IP Office Customer Call Reporter, queue announcements are supported and do not affect statistics. However the use of user announcements is not supported.

Note that the use of customized announcement call flows through Voicemail Pro that do anything other than provide prompts before returning the caller to the queue are not supported by IP Office Customer Call Reporter. For example, a customized call flow that callers can use to opt to leave a message or to be transferred to another number, is not supported by IP Office Customer Call Reporter.

## 8.6.2 Bridged Appearances

Queue calls to an agent will be reflected by any bridged appearance buttons on another user's telephone set to that agent.

- Use of this feature is not supported for agents. Using this feature may lead to statistics that are incorrect or are difficult to interpret.

## 8.6.3 Busy on Held

When an agent has a call on hold, their status is indicated as Holding, however they can be presented with other calls.

The IP Office has a **Busy on Held** setting for each user which can be enabled. When enabled, when the user has a call on hold they are not presented with any further hunt group or queue calls. This will not affect their IP Office Customer Call Reporter state which still shows ***Holding***. Direct calls follow their forward on busy setting or otherwise go to voicemail or else get busy tone.

## 8.6.4 Conference Calls

Conference calls are not supported for IP Office Customer Call Reporter agents.

- Use of this feature is not supported for agents. Using this feature may lead to statistics that are incorrect or are difficult to interpret.

## 8.6.5 Call Pickup

There are a wide range of features that can be used to pickup a call ringing elsewhere on the telephone system. For example the call pickup can be based on the line on which the call was received, the group to which it is presented or the user or extension at which it is ringing. Consult with the system maintainer for details of which pickup features are available and how to access them.

- Queue calls answered by this method will be reported as **Routed to Other** for the queue at which they were ringing unless the pickup was by an agent in the same queue.
- For an agent answering the call:
  - If they are an agent in the same queue, the call is recorded in the **Answered Calls** statistic (and **Answered Internal (Queue)** if internal) for the queue and answering agent.
  - If they are not in the same queue, the call is recorded as **Answered External (Non-Queue)** or **Answered Internal (Non-Queue)** for the answering agent.
- Non-queue calls answered this way are recorded as **Answered External (Non-Queue)** or **Answered Internal (Non-Queue)** for the answering agent.

## 8.6.6 Call Coverage

Call coverage is not applied to queue calls. Therefore, it does not affect statistics.

## 8.6.7 DECT R4 Set

IP Office Customer Call Reporter processes calls presented to the agents who use DECT (R4) telephones in the same way as it does for normal desk phones.

- Use of this feature is not supported for the calls answered on the twinned DECT set. Using this feature on twinned telephones may lead to statistics that are incorrect or difficult to interpret.

## 8.6.8 Do Not Disturb

An agent using any Do Not Disturb or Send All Calls feature is treated as selecting the Busy Not Available state. In that state the agent is not presented queue calls and the state and time in state is reported by the IP Office Customer Call Reporter.

This agent state indicates that the agent is not available to receive calls while they perform a non-call related activity such as attending a meeting. This state can be selected by an agent using the DND or SAC button on their telephone, see Agent Telephone Controls 113. This also requires the agent to select one of the reason codes 296 displayed on their telephone to indicate the reason they are going into the **Busy Not Available** state.

If this state is enabled while a queue call is being presented, the call will go to the next available agent and cause the **No Answer** statistic for the agent and queue to be incremented.

For agent on the following telephones, when they select the Busy Not Available state using a button on their telephone they will be prompted to select a reason code if any have been configured on the telephone system.

- 1400, 1600, 2400, 5400, 4600, 5600, 9500 and 9600 Series telephones with available programmable buttons.

The codes are configured on the telephone system by the system maintainer. The reason code is displayed as part of Agent State (Queue) statistic information.

Up to 8 custom reasons can be configured plus the following two fixed reasons:

- **Automatic**
  This reason is used if the agent is using a telephone that supports reason code selection but fails to select a reason. For example if they enabled Busy Not Available through a short code, using Phone Manager or were forced into it by the IP Office's **Agent Status on No Answer** feature.
- **Unsupported**
  This reason code is used for agents using telephones that do not support the selection of a reason code.

- **Programmable Button** 296
  Most Avaya feature telephones supported by IP Office have programmable buttons 296. The IP Office system maintainer can program each of these buttons with features for use by the telephone's user.
  - You can select the Busy Not Available state by pressing a **DND** (Do Not Disturb) or **SAC** (Send All Calls) button on your telephone. You will then be requested to select a reason code from a list displayed on the telephone. The available reason codes are configured by the IP Office system maintainer.

- **Dialing Short Code** 297
  The IP Office telephone system maintainer can set up dialing short codes 297 that support special features to be accessed by dialing the short code number.
  - Dial a **Do Not Disturb On** short code. The default short code is ***08**. This method does not require the entry of a reason code and so is reported just **Busy Not Available**.
  - Dial a **Do Not Disturb Off** short code. The default short code is ***09**.

- **one-X Portal for IP Office Busy Not Available**
  Using the **Agent Control** gadget, under **Agent State** select ***Busy Not Available***. Under **Reason Codes** select the reason you want reported for the period you remain in the busy not available state. To exit busy not available status use the control to select ***Available***.

- **Phone Manager Agent Mode**
  Phone Manager Pro users can select ***Agent Mode*** within the applications preferences. This enables a number of additional icons. Note that selection of this mode can be disabled by the IP Office maintainer. Note: In this mode, the F1 and F3 functions are swapped. F1 becomes 'account call' and F3 becomes 'make call'.

|  | **Busy Not Available** |
|---|---|
| | An agent can use this icon to select **Busy Not Available** 291 state with the default reason code 296 ***Busy Not Available***. The icon can also be used to exit the state. |

## 8.6.9 Follow Me

Agents can use follow me to redirect their calls to another internal users telephone. The calls remain associated with the agent and will be recorded in the statistics as if it was ringing against the extension at which the agent has logged on.

## 8.6.10 Forwarding Calls

Hunt groups and queues do not have call forwarding settings. However, agents can use their own call forwarding settings to forward calls including queue calls.

- An agent's **Forward on Busy** and **Forward on No Answer** settings are applied to their direct calls but are not applied to queue calls that they receive.
- An agent's **Forward Unconditional** settings can be optionally applied to queue calls by selecting the **Forward Hunt Group Calls** option. When selected, it is applied to all queue calls including internal calls regardless of the agent's **Forward Internal Calls** setting.
- Queue calls cannot be forwarded to another hunt group or queue.
- If a queue call is forwarded and then unanswered after the queue's **No Answer Time**, the IP Office will retrieve the call and present it to the next available agent.
  - Some trunks, for example analog trunks, cannot provide the call progress signaling used by the IP Office to retrieve a call if unanswered. Calls forwarded via such trunks are treated as answered immediately when they are forwarded.

For IP Office Customer Call Reporter this means:

- Direct calls to an agent forwarded by the agents call forwarding settings are not recorded by any statistics.
- Queue calls to an agent forwarded by the agents call forwarding settings only affect IP Office Customer Call Reporter if the call is answered while forwarded.
  - If the call is forwarded to another agent within the queue, any **Answered**, **Lost** and **No Answer** statistics as appropriate are incremented for the queue and for the agent to which the call was forwarded and not the agent from which it was forwarded.
  - If the call is forwarded to a non-agent destination, if answered there it will recorded as **Answered Other** for the queue. However, if lost or not answered, the **Lost** or **No Answer** statistic for the queue or its agents are not incremented.

- Use of this feature is not supported for agents. Using this feature may lead to statistics that are incorrect or are difficult to interpret.

## 8.6.11 Holding Calls

Calls held by an agent affect the agent's status (which becomes Holding) but do not affect any other statistics.

Retrieving the call from hold does not affect any statistics either. This also applies to hold calls that recall to the agent who put the call on hold. They are not counted as additional answered calls.

The length of time that agent's had calls on hold is reported in reports based on the **Agent Summary Report** 51 template.

## 8.6.12 Internal Twinning

Direct and queue calls for agents with internal twinning enabled are presented to both the agent's main and twinned extensions.

- Use of this feature is not supported for agents. Using this feature may lead to statistics that are incorrect or are difficult to interpret.

## 8.6.13 Line Appearance Buttons

Line appearance buttons indicate when an incoming call on that line is ringing. The button can be used to answer the call.

- Use of this feature is not supported for agents. Using this feature may lead to statistics that are incorrect or are difficult to interpret.

## 8.6.14 Mobile Twinning

Mobile Twinning is used to gets calls on both the normal extension and the external telephone numbers simultaneously. This feature is available for direct calls to the agents and not for the hunt group calls. However, to use this feature for calls to the hunt group, you must enable the **Hunt Group Calls Eligible for Mobile twinning** option in IP Office Manager.

- Use of this feature is not supported for agents. Using this feature may lead to statistics that are incorrect or are difficult to interpret.

## 8.6.15 Parking Calls

IP Office Customer Call Reporter treats calls parked by one agent and then unparked by another agent as supervised transfers 246 but omitting the enquiry answered stage.

## 8.6.16 Telecommuter

The telecommuter mode allows an agent to make and receive calls using a phone at a remote location with all calls being started by and going through the telephone system.

Use of this feature is not supported for agents. Using this feature may lead to statistics that are incorrect or are difficult to interpret.

## 8.6.17 Trunk to Trunk Calls

IP Office Customer Call Reporter is not supported for recording statistics relating to trunk to trunk calls including trunk to trunk transfers by agents.

## 8.6.18 Wrap Up

For all telephone users, the IP Office telephone system applies a short delay, by default 2 seconds, during which the user is indicated as still being busy to further calls. The main function of wrap up is to give analog telephone users, who have just finished a call, the opportunity to start dialing a short code or to start making a call before another incoming call is presented to them.

For users set as agents, the period of wrap up applied to their telephone is reported as their being in the **After Call Work** 289 state. If the agent is also set for automatic after call work, the wrap up period is applied first and then the automatic after call work period is begun.

# Chapter 9. Miscellaneous

# 9. Miscellaneous

## 9.1 Multiple Roles

A user can be configure to undertake more than one IP Office Customer Call Reporter role, selecting their current role (agent, supervisor or administrator) when they log in to the IP Office Customer Call Reporter web client. Full details are included in the *Avaya IP Office Implementing IP Office Customer Call Reporter* (15-601133) manual.

- **Administrator and Supervisor**
  The administrator's user name is setup during IP Office Customer Call Reporter installation. If a supervisor is added to the configuration then the user is able to login either as the administrator or as a supervisor.
- **Agent and Supervisor**
  Agent usernames for IP Office Customer Call Reporter login use the user's name within the IP Office configuration. If a supervisor account with the same name is created that user is able to login as either an agent or a supervisor.
- **Agent, Supervisor, and Administrator**
  You can create an IP Office user and a supervisor account with names that match the administrator name to allow that user to login as either an agent, a supervisor, or the administrator.

## 9.2 Configuration Changes

Changes to the IP Office switch configuration have an immediate effect on call routing and therefore on call statistics. However, as detailed below, it does not have an immediate effect on the agent and queue names visible in views and reports.

The IP Office Customer Call Reporter updates its information about the queues and agents configured on the IP Office telephone system every 5 minutes. Therefore adding, removing or renaming agents and queues do not affect views immediately. Instead it requires users to wait up to 5 minutes and to then refresh their view by either switching to another view and then back or by logging out and then logging in again.

**Agents**

- **Adding an Agent to a Queue**
  Wait up to 5 minutes and then refresh the view.
- **Removing an Agent from a Queue**
  Wait up to 5 minutes and then refresh the view. The agent's contribution to the queue's performance is still included in the queue statistics but they are not included in the view of agent statistics. The agent's statistics are still accessible within historical reporting.
- **Deleting an Agent**
  Wait up to 5 minutes and then refresh the view. The agents contribution to the queue's performance is still included in the queue statistics but they are not included in the view of agent statistics. The agent's statistics are still accessible within historical reporting.
- **Renaming an Agent**
  Wait up to 5 minutes and then refresh the view. The agent's contribution to the queue's performance is still included in the queue statistics but the agent's personal statistics are reset and are displayed with the agent's new name.
  - **Warning**
    When targeting a report on agents, for reports based on the ***Call Details Report*** template, the agent's statistics are split appropriately between the old and new names. For reports based on other templates (***Agent Summary Report***, ***Call Summary Report*** and ***Trace Report***), only the agent's statistics under the current name are reported.

**Queue**

- **Adding a Queue**
  Before the new queue can be added to any view, it must first be selected in the list of queues available to a supervisor. This is done within the supervisors account details by either the administrator 161 or by supervisors with self-administrator rights 104 for their own account. Again this cannot be done until up to 5 minutes after the new queue was added to the IP Office configuration.
- **Renaming a Queue**
  Wait up to 5 minutes and then refresh the view. The queue name is automatically removed from the view. To add the queue using the new name is the same as for adding a queue detailed above. The queue's statistics within historical reporting are split appropriately between the old and new names.
- **Deleting a Queue**
  Wait up to 5 minutes and then refresh the view. The queue name is automatically removed from the view. The queue's statistics are still accessible within historical reporting.

## 9.3 Troubleshooting

### Graph/Help are not Displayed

Using these options requires the browser to allow pop-up windows. If they are not displayed when selected, verify that the browser is not configured to block pop-up windows.

- Most browsers can be configured to allow all pop-ups, to allow pop-ups from a particular web server, or to prompt whenever a pop-up windows attempts to open.
- Additional software other than the browser, for example, a firewall software or a ad-blocker software, can also stop pop-up windows and need to be configured to allow pop-up windows for the IP Office Customer Call Reporter server address.

### The Monitor View/Wallboard Goes Gray

When a web client is displaying queue and agent statistics and alarms, it is regularly polling the IP Office Customer Call Reporter server for updated data. The statistics are updated approximately every 2 seconds. If the background of any section goes gray, it indicates that there has been an excessive delay in receiving updated data.

- If this is not a regular event then no action is required, the monitor view or wallboard will update automatically.
- If this occurs frequently, inform your administrator or maintainer, as it may indicate a failure in a IP Office Customer Call Reporter component.

### View is Blank

There are a number of reasons for a view to be blank:

- No content has been setup for the view by the administrator or supervisor.
- For an agent the view will be blank if it does contain any queues of which they are also a member.

### "Connection to the server has been lost. Realtime statistics might be out of date" Message

This message indicates that the connection is lost. For example, if the system administrator restarts some part of IP Office Customer Call Reporter, you will receive this error message. Refreshing the browser view should correct the web client.

### Call Map Does Not Display

The following are possible reasons for the Customer Call Map display to be blank:

1. The Customer Call Map requires an Internet connection to obtain background map information.
2. The Customer Call Map uses Silverlight. See the notes below.

### Customer Call Map/Wallboard Blank White

Both the Customer Call Map and Wallboard view use Silverlight. The automatic update option is enabled by default when Silverlight is installed. If the option is disabled manually after the installation of Silverlight, changes to the Silverlight components used by IP Office Customer Call Reporter may no longer match those available on the user's computer. Update Silverlight and log back into IP Office Customer Call Reporter.

# Chapter 10.
# Glossary

# 10. Glossary

This section provides definitions of key IP Office Customer Call Reporter terms.

## 10.1 Administrator

The administrator can amend IP Office Customer Call Reporter system preferences plus create and administer supervisors. That includes assigning which queues a supervisor can see or granting the supervisor self-administration rights to amend their own settings including queues.

The administrator does not have any views of call statistics. However they can setup and amend the views used by supervisors and their agents.

There is only one administrator account and only one person can log in as the administrator at any time.

## 10.2 After Call Work (ACW) [Agent State]

After Call Work indicates that the agent is not available to receive queue calls 296 while they perform some other call related activity. Typically this is used for activities such as call records and data entry that need to be completed before handling another call. A number of controls are available for After Call Work 116. Agents can be configured to be automatically put into ACW state after a queue call or else they can manually select to enter the state when required.

Note: The Wrap-Up 300 feature briefly applied to the end of all calls including queue calls is also reported as **After Call Work** state.

## 10.3 Agent

An agent is a user who handles calls to queues on the IP Office telephone system. Unlike general IP Office users they have been specifically configured as agents in the IP Office configuration. IP Office Customer Call Reporter supports up to 150 agents.

- To make and receive calls, the agent must login to a telephone on the IP Office telephone system. Note that T3 Series and T3 IP Series telephones are not currently supported.
- The agent's telephone status is recorded by IP Office Customer Call Reporter. For example when they logged in to a telephone, answer a call, log off, etc.
- The agents are also configured as members of queues and are then presented with call targeted to those queues. An agent can be a member of several queues.
- Using the web client, agents can see the same screen views as their supervisor. However, unlike the supervisor, the agents can only see their own statistics and for those queues to which they belong.

## 10.4 Agent Productivity [Statistic]

- This statistic is available for the system, queues, and agents.
- For a queue it shows the number of queue calls answered within a set of service criteria as a percentage of all queue calls presented.
- For an agent it shows the percentage of calls an agent has handled within a set of service criteria over all calls.
- It excludes calls disconnected before the Lost Calls threshold setting, measured from when the call was presented to the queue.
- It excludes direct calls presented to the agents and outbound external calls.
- It includes lost calls.

## 10.5 Agent State (Queue) [Statistic]

- This statistic is only available for agents.
- It shows the current state of each agent in the selected queue.
- The related statistic Agent State (Queue) Time 184 can be used to show how long each agent has been in their current state.

## 10.6 Agent State (Queue) Time [Statistic]

- This statistic is only available for agents.
- It shows how long the agent has been in their current state for the selected queue.
- The agent's current state can be shown by the related statistic Agent State (Queue) 182.

## 10.7 Agent State (System) [Statistic]

- This statistic is only available for agents.
- It shows the agent activity across all queues to which the agent belongs, ie. the whole system.
- The related statistic Agent State (System) Time 187 can be used to show how long each agent has been in their current state.

## 10.8 Agent State (System) Time [Statistic]

- This statistic is only available for agents.
- It shows how long the agent has been in their current system state.
- The agent's current state can be shown by the related statistic Agent State (System) 185.

## 10.9 Agents ACW [Statistic]

- This statistic is available for the system and queues.
- Its shows the number of agents who are currently in the After Call Work (ACW) state.
- For users who previously used CCC, the ACW state is similar to Busy Wrap Up.

## 10.10 Agents Available [Statistic]

- This statistic is available for the system and queues.
- It shows the number of agents in the queue who are currently available to answer calls.

## 10.11 Agents Busy [Queue State]

This queue state is reported for a queue when all the logged in agents are in a busy state.

This queue state is reported by the Queue State 221 statistic. The time the queue has been in a particular state is reported by the Queue State Time 222 statistic.

## 10.12 Agents Call Share [Statistic]

- This statistic is only available for agents.
- It shows the percentage of queue calls 296 answered by the agent out of all queue calls answered by the agents in the queue.

## 10.13 Agents Logged On [Statistic]

- This statistic is available for the system and queues.
- It shows the number of agents who are members of the queue and are currently logged in.
- When logged in an agent can also be in other states.

## 10.14 Agents Present [Statistic]

- This statistic is available for the system and queues.
- It shows the number of agents who are logged in but whose membership of the queue is currently disabled.

## 10.15 Agents Ringing [Statistic]

- This statistic is available for the system and queues.
- It shows the number of agents with queue calls 296 ringing but not yet answered.

## 10.16 Answered Calls [Statistic]

- This statistic is available for the system, queues, and agents.
- It shows the number of queue calls 296 that has been answered by the agents in the queue or the agent being reported on.
- It does not include direct calls answered by agents.
- Once a call has overflowed, if answered, for the queue it is reported as **Overflowed Answered**.
- It does not include queue calls answered by non-queue members using methods such as call pickup.
- It does not include calls that go to voicemail.

## 10.17 Answered External Non-Queue [Statistic]

- This statistic is only available for agents.
- It shows the number of external inbound calls that are targeted directly to an agent and answered by that agent.
- It does not includes queue calls to a queue of which the agent is a member.

## 10.18 Answered Internal Non-Queue [Statistic]

- This statistic is only available for agents.
- It shows the number of internal inbound calls that are targeted directly to an agent and answered by that agent.
- It does not includes queue calls to a queue of which the agent is a member.

## 10.19 Answered Internal Queue [Statistic]

- This statistic is available for the system, queues, and agents.
- It shows the number of internal calls to the queue that were then answered by the agents in the queue or the agent being reported on.

## 10.20 Announcements

While a call to a queue is waiting to be answered, the IP Office telephone system can play pre-recorded announcements to the caller. This option is configured by the IP Office telephone system maintainer. The playing of announcements to waiting calls does not affect IP Office Customer Call Reporter statistics.

## 10.21 Available [Agent State]

This agent state is reported when an agent is logged in and is not in any other state. That is, when the agent is available to receive and answer queue calls.

## 10.22 Average Answer % [Statistic]

- This statistic is available for the system, queues, and agents.
- It shows the number of queue calls 296 answered by the queue within the specified answer threshold time, divided by the total number of calls answered.

## 10.23 Average Answer Time [Statistic]

- This statistic is available for the system, queues, and agents.
- It shows the sum of answer times divided by the number of queue calls answered by the queue or by the agent being reported.
- The answer time is measured from the time when the call arrives at the target (queue or agent). It does not include t he delay between the time when a call is presented to a Hunt Group and the time when the call arrives at the target.
- When calculated for an agent, the statistic is only based on the calls that the agent handled on behalf of the hunt group selected in the view.

## 10.24 Average Wait Time [Statistic]

- This statistic is available for the system and queues.
- Average waiting time of calls.

## 10.25 Busy [State]

This agent state is reported when the agent answers and is connected to a call to a queue of which they are a member.

## 10.26 Busy Alt-Q [Agent State]

This agent state is reported when, while viewing the agent's status in one queue of which they are a member, the agent is connected to a call belonging to another queue of which they are a member. It is also used when the agent is connected to a call that has overflowed from a queue.

## 10.27 Busy Not Available [Agent State]

This agent state indicates that the agent is not available to receive calls while they perform a non-call related activity such as attending a meeting. This state can be selected by an agent using the DND or SAC button on their telephone, see Agent Telephone Controls 113. This also requires the agent to select one of the reason codes 296 displayed on their telephone to indicate the reason they are going into the **Busy Not Available** state.

If this state is enabled while a queue call is being presented, the call will go to the next available agent and cause the **No Answer** statistic for the agent and queue to be incremented.

## 10.28 Busy Not Available [Statistic]

- This statistic is available for the system and queues.
- It shows the total number of agents in the queue who have currently indicated they are Busy Not Available 291.
- Busy Not Available is a state selected by an agent when they need to stop receiving queue calls to do some non-call related activity.

## 10.29 Busy Non-Q [Agent State]

This agent state is reported when the agent answers a call that was not targeted to the queue to which they belong. It is also reported when an agent makes a call.

## 10.30 Busy Wrap Up

***Busy Wrap Up*** is an agent state used by the IP Office CCC 292 application. It is not supported by IP Office Customer Call Reporter. The equivalent state for IP Office Customer Call Reporter is to report the agent as ***Present*** when their memberships of all the groups to which they belong are all disabled.

This is different from Wrap Up 300.

## 10.31 Call Pickup

The IP Office supports a number of features that can be used to allow agents to pickup calls ringing in a queue.

## 10.32 Call Waiting [Statistic]

- This statistic is available for the system and queues.
- It shows the number of calls targeted to the queue that are waiting to be answered by the agents in the queue or the agent being reported on.
- It includes calls currently ringing at agent telephones.
- Calls that overflow from the queue and are still waiting to be answered are reported using Overflowed Calls Waiting 217.

## 10.33 CCC

Compact Call Center (CCC) is an alternate call center reporting application supported with IP Office telephone systems.

CCC and IP Office Customer Call Reporter are not supported on the same IP Office system except for the use of CCC Reporter to access historical CCC reports. However some CCC licenses can be used with IP Office Customer Call Reporter.

## 10.34 CLI

Called or Calling Line ID. Also known as CLID or ICLID (Incoming Calling Line ID). On incoming calls this is the telephone number of the caller if provided with the call. On outgoing calls it is the number called.

## 10.35 Connected

The state where the agent is talking to a caller. This state does not include time when the call is alerting the agent or the agent has the call on hold or parked.

## 10.36 Collective Group

Hunt groups configured as 'collective' present a waiting call to all available agents simultaneously. This type of hunt group is not supported for use as an IP Office Customer Call Reporter queue.

## 10.37 Current Wait Time [Statistic]

- This statistic is available for the system and queues.
- Time of the longest currently waiting call.

## 10.38 DECT R4 Support

Use of this feature is not supported for the calls answered on the twinned DECT set. Using this feature on twinned telephones may lead to statistics that are incorrect or difficult to interpret.

## 10.39 Direct Call

The terms 'non-queue call' or 'direct call' are used for calls targeted directly at a particular agent rather than at the queue to which they belong.

While handling a direct call and agent will not be presented with queue calls and will be indicated as Busy Non-Q.

## 10.40 Enquiry Call

While transferring a call, the original call is put on hold pending transfer and a call is made to the transfer target. The call to the transfer target is called an 'enquiry call'. It is also known as a 'consultation call'.

## 10.41 Grade of Service [Statistic]

- This statistic is available for the system and queues.
- It shows the number of queue calls answered within the defined answer threshold as a percentage of all queue calls presented.
- It excludes calls where the caller disconnects before the statistic's **Lost Calls Threshold** setting, measured from when the call was presented to the queue.
- It includes calls that become lost calls.
- It does not include calls that were routed elsewhere (**Routed to Other**) or to voicemail (**Routed to Voicemail**).

## 10.42 Holding [Agent State]

This agent state is reported when an agent has a call on hold.

## 10.43 Hot Desking

Since agents login at an extension to start receiving calls, they can use any extension available rather than needing a permanent telephone extension. Users who login at different extensions are referred to as 'hot deskers'.

## 10.44 In Service [Queue State]

This queue state is reported for a queue in normal operation, ie. with some agents logged in and available to answer calls.

Agents in the queue will no longer be presented with calls targeted to that queue. Depending on how the queue has been configured by the telephone system maintainer, the calls will either overflow to another queue or to voicemail.

This queue state is reported by the Queue State 221 statistic. The time the queue has been in a particular state is reported by the Queue State Time 222 statistic.

## 10.45 Internal Made [Statistic]

- This statistic is only available for agents.
- It shows the number of internal calls made by an agent. Only internal calls that are answered are included.

## 10.46 IP Office

IP Office is an Avaya telephone system for small businesses. It supports traditional analog telephones, Avaya digital feature telephones and Avaya IP features telephones.

## 10.47 Last Agent

In a queue with no overflow and voicemail, if there is only one available agent, when a call is present to them it will continuing ringing without regard to the No Answer Time of the queue and any related No Answer Time actions that the IP Office would apply. This applies even if the agent enables **Busy Not Available** while the call is being presented.

## 10.48 Licenses

Use of IP Office Customer Call Reporter is controlled by licenses entered by the maintainer into the IP Office telephone system. Insufficient licenses cause IP Office Customer Call Reporter to not work. Licenses control:

- The number of IP Office Customer Call Reporter agents (up to a maximum of 150).
- The number of IP Office Customer Call Reporter supervisors and wallboards that can be logged in at any time (up to a maximum of 30 of each).

## 10.49 Logged In

An agent is "logged in" when they use an extension on the telephone system to enter their extension number and login code. Their telephone settings are then applied to that extension and they are then able to make and receive calls including calls targeted to queue of which they are members.

Agents can log in to an extension either by pressing the Login button if displayed or dialing a login short code. The default short code is *35*<agent extension number>*<agent login code>#.

## 10.50 Logged Out [Agent State]

This agent state is reported when an agent has logged out 115 from the telephone system. Note that this is the default state reported by IP Office Customer Call Reporter if it cannot determine the exact state, for example when restarting.

## 10.51 Longest Waiting Group

Hunt groups configured as 'longest waiting' do not use the order in which agents has been configured as members of the queue. Instead a new call targeted to the queue is presented to the available agent who has been in the available state the longest.

## 10.52 Longest Wait Time [Statistic]

- This statistic is available for the system and queues.
- Waiting time of the longest waiting call.

## 10.53 Lost

- A lost call is one where the caller disconnects before being answered.

## 10.54 Lost Calls [Statistic]

- This statistic is available for the system, queues, and agents.
- It shows the number of queue calls where the caller disconnected before they were answered by an agent in the queue or the agent being reported on.
- Queue calls that are lost are reported as lost against both the queue and against the last agent to which the call was presented.
- Once a call has overflowed, if lost, for the queue it is reported as **Overflowed Lost**.
- It does not include calls that go to voicemail.

## 10.55 Membership

- The hunt group queues of which an agent is a member are configured by the IP Office telephone system maintainer. They cannot be changed by the agent or supervisor. However an agent's membership of a hunt group queue can be disabled.
  - When an agent's membership of a queue is disabled, the agent's state for that queue will be reported as ***Present*** when it would otherwise have been ***Available***.
  - On many Avaya display telephones, a **G** on the display indicates that the user currently has their membership of at least one group enabled.

## 10.56 Maintainer

In this documentation the term 'maintainer' or 'system maintainer' refers to the person who configures settings on the IP Office telephone system. That may not be the same person as the IP Office Customer Call Reporter Administrator 289.

## 10.57 New Messages [Statistic]

- This statistic is available for the system and queues.
- It shows the current number of unread messages in the mailbox of the selected queue.
- This is not an IP Office Customer Call Reporter statistic that can be reset, it is a value reported by the voicemail server providing the mailbox.

## 10.58 Night Service [Queue State]

A queue can be set in 'night service' state either manually or as the result of an automatic time schedule.

Agents in the queue will no longer be presented with calls targeted to that queue. Depending on how the queue has been configured by the telephone system maintainer, the calls will either overflow to another queue or to voicemail.

This queue state is reported by the Queue State 221 statistic. The time the queue has been in a particular state is reported by the Queue State Time 222 statistic.

## 10.59 No Agents [Queue State]

This queue state is reported for a queue where no agents are logged in.

This queue state is reported by the Queue State 221 statistic. The time the queue has been in a particular state is reported by the Queue State Time 222 statistic.

## 10.60 No Answer

When a queue call is presented to an agent it rings for a time set in the telephone system configuration (called the **No Answer Time**) before being presented to the next available agent. Calls that have rung for the full time without being answered are recorded as no answer calls. Calls that ring for only part of the time and are then answered elsewhere are not recorded.

The telephone system can be configured to change the agent's state if they do not answer a call. That can include logging the agent off or setting them into Busy Not Available 291 state with the reason code 296 ***Busy Not Available***.

## 10.61 No Answer [Statistic]

- This statistic is available for the system, queues and agents.
- For an agent it shows the number of queue calls presented to the agent which rang unanswered for the queue's full no answer time before be presented elsewhere.
- For a queue it shows the total number of no answer events for the agents in the queue.
- For an agent it includes queue calls and queue calls that overflowed to the agent's queue. It does not include non-queue calls.
- If an agent enables Busy Not Available while being presented with a queue call, that will be counted against the agent and queue.

## 10.62 No Answer Time

Hunt group queues and agents both have **No Answer Time** settings that are configured by the IP Office system maintainer.

For calls to a hunt group queue, the queue's **No Answer Time** is used. It sets how long a call will be presented to an agent before being presented to the next available agent. Each time a call is not answered within the **No Answer Time** and then presented elsewhere it is recorded as a **No Answer** 294 call for the queue and for the agent.

**No answer time** is not used for collective groups and when the agent is the last available agent in a group that does not have any overflow or voicemail set.

For direct calls to an agent rather than a queue of which the agent is a member, the agent's **No Answer Time** setting is used. It sets when calls should go to voicemail or use the agent's forward on no answer number if set. The agent's **No Answer Time** setting is not used for queue calls.

## 10.63 Non-Queue Call

The terms 'non-queue call' or 'direct call' are used for calls targeted directly at a particular agent rather than at the queue to which they belong.

## 10.64 Off Hook

This is a telephony term for when the handset on a traditional telephone is lifted from the telephone. For IP Office Customer Call Reporter, off hook time is used for any state where the agent's telephone is in use but not connected to a call. For example when in the process of making a call.

## 10.65 Out of Service [Queue State]

A queue can be set as 'out of service'.

Agents in the queue will no longer be presented with calls targeted to that queue. Depending on how the queue has been configured by the telephone system maintainer, the calls will either overflow to another queue or to voicemail.

This queue state is reported by the Queue State 221 statistic. The time the queue has been in a particular state is reported by the Queue State Time 222 statistic.

## 10.66 Outbound Calls External [Statistic]

- This statistic is only available for agents.
- It shows the number of outbound external calls made by the agent.
- If the outgoing call attempts to seize an external trunk but is unsuccessful, for example getting busy tone, it is still included.

## 10.67 Overflowed

- An overflowed call is any call originally targeted at the queue that then overflows using the queue's overflow settings. The overflowing calls are then presented to members of other queues.
- IP Office Customer Call Reporter only supports overflow using other IP Office Customer Call Reporter queues as the overflow destinations.

## 10.68 Overflowed Answered [Statistic]

- This statistic is available for the system and queues.
- It shows the number of queue calls answered after overflowing to another queue.
- This applies even if the overflowed call is answered by an agent in the queue from which it overflowed.
- It does not include queue calls answered by methods such as call pickup (use **Routed to Other** 223).
- It does not include calls that go to voicemail.

## 10.69 Overflowed Calls [Statistic]

- This statistic is available for the system and queues.
- It shows the number of calls that have overflowed from the queue to its overflow destination.
- Once a call has overflowed, it can also be included in the queue's Overflowed Calls Waiting 295, Overflowed Answered 295, and Overflowed Lost 295 statistics.

## 10.70 Overflowed Calls Waiting [Statistic]

- This statistic is available for the system and queues.
- It shows the number of calls overflowed from the queue and still waiting to be answered.

## 10.71 Overflowed Lost [Statistic]

- This statistic is available for the system and queues.
- It shows the number of calls which overflowed from the queue and were then lost.
- It does not include calls that go to voicemail.

## 10.72 Present [Agent State]

This agent state is reported when an agent is logged in but their membership of the particular queue has been disabled. In this state they will not be presented with calls targeted to that queue. The agent's state for other queues will still be Available 291.

## 10.73 Presented Calls [Statistic]

- This statistic is available for the system, queues, and agents.
- For queues, it is the sum of Answered calls 290, Routed to Voicemail 297, Overflow answered calls 295, Routed to others 297, Lost calls 293 and Overflowed lost calls 295.
- For agents, it is the sum of Answered calls 290, Agent's voicemail answered calls 297, Routed to others 297, Answered non-queue external 290, Answered non-queue internal 290, No answer 294, and Lost calls 293
- For agents, it includes Direct Calls.
- Calls to agents that are disconnected by the caller are not counted as Lost Calls; hence, these calls are not counted in Presented Calls.
- For queues, it does NOT include Direct Calls and Enquiry Calls.

## 10.74 Programmable Button

Most Avaya telephones have a number of programmable buttons which can be used for special functions which can include functions specific to IP Office Customer Call Reporter. Buttons can be provided by the telephone system maintainer for logging in, logging out, enabling/disabling group membership and controlling Busy Not Available and After Call Work.

## 10.75 Queue

A queue is a hunt group configured for IP Office Customer Call Reporter operation. Calls to a queue are presented the first available agent 291 in the queue using a pattern set in the queue's configuration. If the call is not answered it is presented to the next available agent and so on until answered. The order in which the agents are used is set in it's configuration to one of the following orders: Collective 292, Sequential 297, Rotary 297 and Longest Waiting 293).

## 10.76 Queue Call

This term is used for calls targeted to a queue, either by the telephone system or by the caller dialing the queue's extension number. Unless otherwise specifically stated, most statistics shown by IP Office Customer Call Reporter are only for queue calls. Calls direct to an agent (non-queue calls 292) rather than to the queue to which they belong are not included.

## 10.77 Queue State [Statistic]

- This statistic is only available for queues.
- It shows the current state of the queue as one of the following: In Service, Agents Busy, No Agents, Night Service or Out of Service.
- The related statistic Queue State Time 222 can be used the show the time that the queue has been in its current state.

## 10.78 Queue State Time [Statistic]

- This statistic is only available for queues.
- It shows the time the queue has been in its current state.
- The related statistic Queue State 221 can be used the show current state.

## 10.79 Queuing

Hunt groups on the telephone system can be configured to use queuing when the number of calls waiting to be answered exceeds the number of available agents to which waiting calls can be presented. With queuing enabled the additional callers continue to be treated as if ringing even though they are queued.

Without queuing, when the hunt group become busy, addition calls go directly to the overflow destination if set, else to voicemail if available, else return busy to the caller.

IP Office Customer Call Reporter is only supported for queues (hunt groups) that use queuing.

## 10.80 Reason Codes

For agent on the following telephones, when they select the Busy Not Available state using a button on their telephone they will be prompted to select a reason code if any have been configured on the telephone system.

- 1400, 1600, 2400, 5400, 4600, 5600, 9500 and 9600 Series telephones with available programmable buttons.

The codes are configured on the telephone system by the system maintainer. The reason code is displayed as part of Agent State (Queue) statistic information.

Up to 8 custom reasons can be configured plus the following two fixed reasons:

- **Automatic**
  This reason is used if the agent is using a telephone that supports reason code selection but fails to select a reason. For example if they enabled Busy Not Available through a short code, using Phone Manager or were forced into it by the IP Office's **Agent Status on No Answer** feature.
- **Unsupported**
  This reason code is used for agents using telephones that do not support the selection of a reason code.

## 10.81 Reference

Each call is assigned a unique call reference number that remains with the call whilst it is on the IP Office telephone system. The **Reference** number for a call is included in reports based on the **Trace Report** 60 and **Call Details Report** 55 templates. A call's **Reference** number can also be used as the target reports based on the **Trace Report** template.

## 10.82 Ring Mode

A hunt group's ring mode defines the order in which agents in the group are used. The options are **Collective** 292, **Sequential** 297, **Rotary** 297 and **Longest Waiting** 293.

## 10.83 Ringing [Agent State]

This agent state is reported when the agent is being presented with a call targeted to a queue of which they are a member. If they answer the call their state will change to Busy 291.

## 10.84 Ring Alt-Q [Agent State]

This agent state is reported when the agent is being presented with a call from another queue of which they are a member. If they answer the call their state will change to Busy Alt-Q 291. It is also used when the agent is being presented a call that has overflowed from a queue.

## 10.85 Ring Non-Q [Agent State]

This agent state is reported when the agent is being presented with a call that is not targeted to any queue of which they are a member. If answered the call their state will change to Busy Non-Q 291.

## 10.86 Rotary Group

Hunt groups configured as 'rotary' present calls waiting to be answered to the first available agent after the agent who last answered a call to that queue. This is done using the order in which the agents have been configured in the queue by the telephone system maintainer. Unanswered calls are presented to the next available agent using the same queue membership order. Each new call targeted to the queue is to the agent after the one who last answered a queue call.

## 10.87 Routed to Other [Statistic]

- This statistic is available for the system, queues, and agents.
- Sum of calls targeted at the queue or agent that are subsequently answered by a party, other than a member of the original queue, the overflow or voicemail. Only direct calls to agents will affect the **Routed to Other** for agents. Queued calls to agents will affect the Queue statistic.

## 10.88 Routed to Voicemail [Statistic]

- This statistic is available for the system, queues, and agents.
- For a queue it shows the number of queue calls presented and then routed to voicemail.
- For an agent it shows the number of direct calls to the agent that were then routed to voicemail.
- It does not include announcements played by voicemail to the caller.

## 10.89 Short Code

Various IP Office functions can be programmed against sequence of numbers that can be dialed from user telephones. This includes functions used by IP Office Customer Call Reporter agents.

## 10.90 Sequential Group

Hunt groups configured as 'sequential' present calls waiting to be answered to the first available agent in the queue, then if unanswered to the next available agent and so on. This is done using the order in which the agents have been configured in the queue by the telephone system maintainer. Each new call targeted to the queue is again presented to the first available agent in queue membership order.

## 10.91 Small Community Network (SCN)

This refers to a method of linking several IP Office telephone systems using IP trunks. Currently calls received on SCN trunks are reported as external calls by IP Office Customer Call Reporter.

IP Office Customer Call Reporter 1.2 does not support SCN operation, ie. agents and hunt groups on more than one IP Office system. In addition advanced small community networking features such as remote hot desking and/or distributed hunt groups are not supported.

## 10.92 Statistics

IP Office Customer Call Reporter collects information about calls to queues and agents and stores this in its database. It also collects information about the current state of the queues and agents. Statistics based on this information are then used in web views and historical reports.

- Except where specifically indicated, usually by the term 'Non-Queue', all statistics relate to calls targeted to queues.
- Each statistic can only be added once within each view.
- Statistics are calculated values. They are affected by configurable settings on the particular view, wallboard or report such as whether to include or exclude internal calls. Those settings can be varied for each instance where a particular statistic is used.
  - The exception is statistics that use answer and lost calls thresholds values in their calculation. The same threshold values are used for all such statistics in the same view or wallboard display.
- The statistics value in views and wallboards can be manually reset when required by any supervisor for who the administrator 289 has enabled the Reset Statistics 86 option. Resetting the statistics affects the view and wallboard statistics for all supervisors and agents. It does not affect the statistics used for historical reports.
- The statistics in views are updated approximately every 2 seconds.

## 10.93 Supervised Transfer

A supervised transfer is one where, having put your current call on hold pending transfer, you make an enquiry call 292 and wait for that call to be answered. When answered you can announce the transfer and then complete the transfer process. This is also called an assisted transfer.

## 10.94 Supervisor

Supervisors can create 80 and amend views 79 of the agent queues assigned to them. Those views are then viewable by the supervisor and the agents. Supervisors can also create reports 38 that they then either run manually 41 or that they schedule 44 to run automatically at regular intervals.

IP Office Customer Call Reporter supports up to 30 supervisors. However the maximum number of supervisors that can be logged in at any time is controlled by the number of available Supervisor licenses (each license enables a simultaneous Supervisor login and Wallboard login).

## 10.95 Wallboard

The IP Office Customer Call Reporter administrator can create wallboard accounts. When logged in with one of these accounts, the browser can be used to display queue statistics for any queues plus other information such as messages sent or scheduled by IP Office Customer Call Reporter supervisors.

IP Office Customer Call Reporter supports up to 30 wallboards. However the maximum number of wallboards that can be logged in at any time is controlled by the number of available Supervisor licenses (each license enables a simultaneous Supervisor login and Wallboard login).

## 10.96 System Status Application

The IP Office System Status Application (SSA) is a software tool used to view the status of the IP Office telephone system. It uses the same connection method to the IP Office as the IP Office Customer Call Reporter application and so cannot be run from the IP Office Customer Call Reporter server.

## 10.97 Talk Average [Statistic]

- This statistic is available for the system, queues, and agents.
- It is calculated as the total talk time divided by the total number of inbound queue calls and outbound external calls.
- It does not include queue calls answered by non-queue members using methods such as call pickup.
- It does not include held, parked, and ACW call time.

## 10.98 Talk Inbound [Statistic]

- This statistic is available for the system, queues and agents.
- It includes incoming external trunk calls. It does not include internal calls and outgoing external calls.
- It shows the time the agent has spent on handling incoming queue calls.
- It does not include queue calls answered by non-queue members using methods such as call pickup.
- It does not include held, parked, and ACW call time.

## 10.99 Talk Inbound Average [Statistic]

- This statistic is available for the system, queues, and agents.
- It includes incoming external trunk calls. It does not include internal calls and outgoing external calls.
- It shows the average time the agent has spent on incoming external calls for the queue. Calculated as: Talk Inbound calls divided by calls answered by the agent or queue.
- It does not include queue calls answered by non-queue members using methods such as call pickup.
- It does not include held, parked, and ACW call time.

## 10.100 Talk Internal [Statistic]

- This statistic is available for the system, queues, and agents.
- It shows the time an agent has spent on internal calls (inbound and outbound).
- It does not include queue calls answered by non-queue members using methods such as call pickup.
- It does not include held, parked, and ACW call time.

## 10.101 Talk Outbound [Statistic]

- This statistic is available for the system, queues, and agents.
- For a queue it is the talk outbound time of all agents in the queue even if the agent queue membership is currently disabled.
- Shows the time the agent has spent on outgoing external calls. The system calculates the time from when an agent gets connected to an external call.
- Shows the sum of outbound talk time for all agents even when the system calculates statistics for a queue. This is because outbound calls are not related to a queue.
- It does not include held, parked, and ACW call time.

## 10.102 Talk Outbound Average [Statistic]

- This statistic is available for the system, queues, and agents.
- It shows the average time an agent has spent on outbound external calls. Calculated as: the sum of outbound talk time divided by the number of outbound calls that have seized a trunk successfully.
- It does not include held, parked, and ACW call time.

## 10.103 Talk Total [Statistic]

- This statistic is available for the system, queues, and agents.
- It shows the time spent by agents on external outgoing calls and external incoming calls for a queue.
- For external outgoing calls, the system starts calculating the time only when the call gets connected.
- It does not include internal calls (incoming or outgoing).
- It does not include queue calls answered by non-queue members using methods such as call pickup.
- It does not include held, parked, and ACW call time.

## 10.104 Transferred [Statistic]

- This statistic is available for the system, queues, and agents.
- For a queue it is the number of calls originally targeted at the queue and then successfully transferred by the queue's agents.
- For an agent it is the number of the queue's calls that they have transferred.
- It includes both supervised and unsupervised transfers.
- It does not include direct calls 292 to agents that they then transfer.

## 10.105 Unsupervised Transfer

In an unsupervised transfer, having put your current call on hold pending transfer, after dialing the transfer destination you complete the transfer process without waiting to hear if the call is answered.

## 10.106 View

The term view is used for the first 3 tabs displayed to supervisors and agents. Each view consists of a table of queues and queue statistics. Clicking on any of the queue names will display an additional table of agent statistics for the agents in that queue. An alarm list or ticker can also be added to each view to show alarms and warnings for that view or all the supervisor's views. The views can be amended by the supervisor and administrator.

Agents are able to see the same views as their supervisor but cannot change the queues or statistics. The agent's version of the view will only show queues to which the agent belongs and their own agent details.

## 10.107 Weighted Average

A weighted average is used when combining statistics from different sources, for example when displaying the overall **Average Answer %** for several queues. The method used will take account of a weighting factor such as the number of calls answered by each individual queues.

The example below shows the **Average Answer %** for 3 queues.

| Statistic | Queue 1 | Queue 2 | Queue 3 |
|---|---|---|---|
| **Calls Answered** | 30 | 2 | 40 |
| **" within answer threshold** | 20 | 1 | 40 |
| **Average Answer %** | **66%** | **50%** | **100%** |

There are several ways in which the overall average for the queues could be expressed:

- **Simple Average: 72%**
  The method is the average of the individual averages.
  - Simple average = (66+50+100)/3 = 72%. .
- **Combined Average: 85%**
  This method treats the calls as if answered by a single combined queue.
  - Combined average = (20+1+40)/(30+2+40) = 85%.
- **Weighted Average: 88%**
  The weighted average is similar to the combined average but adjusts the contribution of each queue by the number of calls answered by that queue.
  - Weighted average = ((66x20) + (50x1) + (100x40))/(20+1+40) = 88%.

## 10.108 Wrap Up

For all telephone users, the IP Office telephone system applies a short delay, by default 2 seconds, during which the user is indicated as still being busy to further calls. The main function of wrap up is to give analog telephone users, who have just finished a call, the opportunity to start dialing a short code or to start making a call before another incoming call is presented to them.

For users set as agents, the period of wrap up applied to their telephone is reported as their being in the **After Call Work** 289 state. If the agent is also set for automatic after call work, the wrap up period is applied first and then the automatic after call work period is begun.

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