



IP Office

Customer Call Reporter 1.1 User Guide

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Documentation information

For the most current versions of documentation, go to the Avaya Support web site (<http://www.avaya.com/support>) or the IP Office Knowledge Base (<http://marketingtools.avaya.com/knowledgebase/>).

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Avaya provides a telephone number for you to use to report problems or to ask questions about your contact center. The support telephone number is 1 800 628 2888 in the United States. For additional support telephone numbers, see the Avaya Web site: <http://www.avaya.com/support>.

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Chapter 1.

Introduction

1. 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.

The screenshot displays the IP Office Customer Call Reporter interface. At the top, there are navigation tabs: View 1, View 2, View 3, Historical Reporting, Report Scheduler, and Account. Below these are utility buttons: Graph, Change Password, Log Off, Status, and Help. The main content area is divided into two sections: 'Alarm Ticker Current Views' and 'Alarm List All Views'.

Alarm Ticker Current Views

09:33 Alarm HG502 7 Calls Waiting

Queues	Calls Waiting	Answered Calls	Lost Calls	Average Ans %	Average Ans Time	Grade Of Service
HG510	2	931	28	17.61	3.8	10.91
HG503	7	103	28	21.12	3.74	11.11
HG501	2	242	26	14.14	3.66	7.14
HG502	7	617	95	39.48	3.75	29.74
HG500	1	103	4	65.46	3.71	57.65
TOTAL			97	31.56	3.73	23.31

Longest Wait Time Internal: 49
Average Wait Time Internal: 16

Agents	Answered Calls	Refused Calls
Extn255		

Alarm List All Views

09:33 Alarm HG502 35 Calls Waiting
 09:33 Alarm HG500 57.65% Grade Of Service
 09:33 Alarm HG510 2 Calls Waiting
 09:33 Alarm HG503 11.12% Grade Of Service
 09:33 Alarm HG510 10.91% Grade Of Service

This document covers usage of IP Office Customer Call Reporter version 1.1 with IP Office 5.0 telephone systems.

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 or administrator mode.

1.1 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](#) 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](#) and [amend views](#) of the agent queues assigned to them. Those views are then viewable by the supervisor and the agents. Supervisors can also [create reports](#) that they then either run [manually](#) or that they [schedule](#) 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.

? 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 phone on the IP Office telephone system. Note that T3 Series and T3 IP Series phones are not currently supported.
- The agent's phone status is recorded by IP Office Customer Call Reporter. For example when they logged in to a phone, answer a call, log off, etc.
- The agents are added to queues and then answer call targeted to those queues. An agent can be a member of several queues.
- Using the web client allows the agent to see the same views as their supervisor. However unlike the supervisors view the agent will only see their own statistics and those for queues which they belong.

? 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](#) 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](#), [Sequential](#), [Rotary](#) and [Longest Waiting](#).

? 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 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 statistics value in views can be manually reset when required by any supervisor for who the [administrator](#) has enabled the [Reset Statistics](#) option. Resetting the statistics affects the view 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.

? View

The term view is used for the first 3 tabs displayed to supervisors and agents when they login to IP Office Customer Call Reporter. 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.

1.2 Client PC Requirements

To login to IP Office Customer Call Reporter you need the following:

Information	Details		
Computer	As per the requirements of the operating system and the web browser being used. No specific software is installed for user web access to IP Office Customer Call Reporter. • 1024 x 768 pixel display.	Browser access is tested and supported on the following operating systems: <ul style="list-style-type: none"> • Windows XP Professional SP2. • Windows Vista Ultimate (32Bit and 64Bit versions). • Windows Vista Enterprise (32Bit and 64Bit versions). • Windows Vista Business (32Bit and 64Bit versions). • Windows Vista Home Premium (32Bit and 64Bit versions). 	
Web Browser	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. ^[3]	Browsers <ul style="list-style-type: none"> • Google Chrome • Mozilla Firefox 3.0. • Windows Safari 3.1. • Internet Explorer 8. • Internet Explorer 7^[2]. 	Required Browser Features <ul style="list-style-type: none"> • JavaScript enabled. • Pop-ups allowed. Required for report viewing, graph and help windows. • If audio for alarms has been enabled, an audio plugin is required for user's browsers. Use Windows Media Player^[5] or Quick Time.

Required	Agent	Supervisor	Administrator
Username	Your IP Office Customer Call Reporter username matches your username on the IP Office phone system. This may differ from the name shown on your phone so consult your supervisor if unsure.	Created by the administrator when they create your supervisor account. If you also take calls on the phone system they may configure it to match your IP Office username.	Created the first time IP Office Customer Call Reporter is run after installation.
Password	You will be requested to enter a password the first time you login. If you have an address already configured in the IP Office configuration that is shown as the default.	Set by the administrator when they create a supervisor account. The administrator can change supervisor passwords ^[12] if required. You can change it through your account details ^[32] after logging in.	Created the first time IP Office Customer Call Reporter is run after installation. You can then change it through the system settings ^[132] after logging in as administrator.
	Users who have already logged in can set a new password using the Change Password ^[15] function. All users can request a new password by email using the Forgotten Password ^[16] function if they have an email address known to the IP Office Customer Call Reporter system.		
Email Address ^[1]	An address is requested by IP Office Customer Call Reporter when you first log in. If you already have an address set in the IP Office configuration, that will be displayed by default.	Set by the administrator when they create your supervisor account. They can also change your address. You can change it through your account details ^[32] after logging in.	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 ^[132] tab.

1. Email addresses must be unique. IP Office Customer Call Reporter does not support two users having the same email address.
2. IE7 is supported for only 100 statistics values in any section of a view. That is up to 100 statistic values for queues and up to 100 statistic values for the agents in the currently selected queue. It is also limited to 1500 calls per hour.
3. IP Office Customer Call Reporter will display a warning when a user attempts to log in using a non supported browser. However it does not prevent access.
4. Logging in more than one browser session at the same time on the same PC using the same IP Office Customer Call Reporter account is not supported. Doing this may lead to incorrect data display. Logging in multiple session using the same account will consume multiple licenses and is not recommended.
5. When using a browser other than Internet Explorer, Windows Media Player may be supported by the addition of the Firefox Windows Media Play plugin. This plugin is available from <http://port25.technet.com/pages/windows-media-player-firefox-plugin-download.aspx>. Currently this plugin is useable with Google Chrome, Mozilla Firefox and Windows Safari.

1.3 Logging In

This refers to logging in to the IP Office Customer Call Reporter web client, not to [logging in to a phone](#)^[114] to receive calls.

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

- Enter your **Username** and **Password**.

- If you have forgotten your password but have an email address known to the IP Office Customer Call Reporter system, click [Forgot Password](#)^[116].
- If you are an agent logging in for the first time leave the password field blank. You will then be asked to set your IP Office Customer Call Reporter password and enter your unique email address as part of the login process.

- 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**.

- Click **Logon**.

- Agent's First Time Login**

If you are an agent logging in for the first time, the **Set Agent Password** window will appear. Enter a password of your choice and then click **OK**. Your unique email address is also requested. You need to enter an address in order to use the [Forgot Password](#)^[116] feature in future.

- 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](#)^[184], the **Select Role** window will appear. Select the required role and click **OK**.

- The web client will open in the appropriate mode: [Agent](#)^[108], [Supervisor](#)^[20] or [Administrator](#)^[122].

- 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.

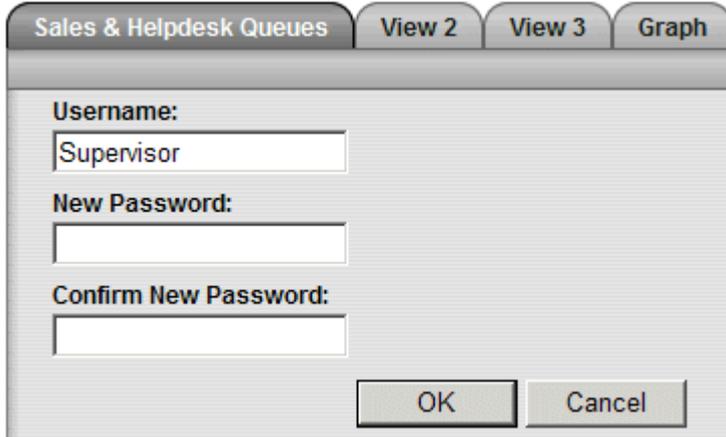
-
- Logged in users who are inactive for more than a set time are automatically logged off. The default time is 30 minutes but this can be adjusted by the administrator.

1.4 Changing Your Password

Users who have logged in can select to change their password.

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.



The Change Password window

3. Enter your details:
 - **Username**
The name you use when you login to the IP Office Customer Call Reporter web client. This can not 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.

1.5 Forgotten Passwords

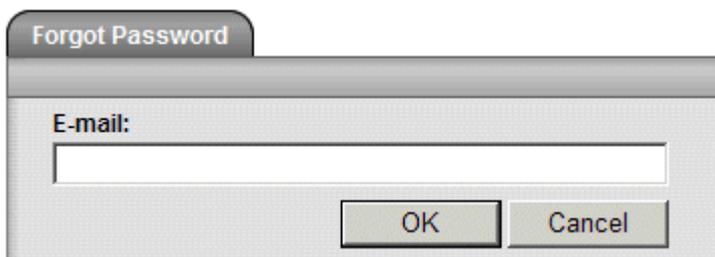
If you have forgotten your password, you can request a new password to be sent to you by email.

How is my Email address set for IP Office Customer Call Reporter?

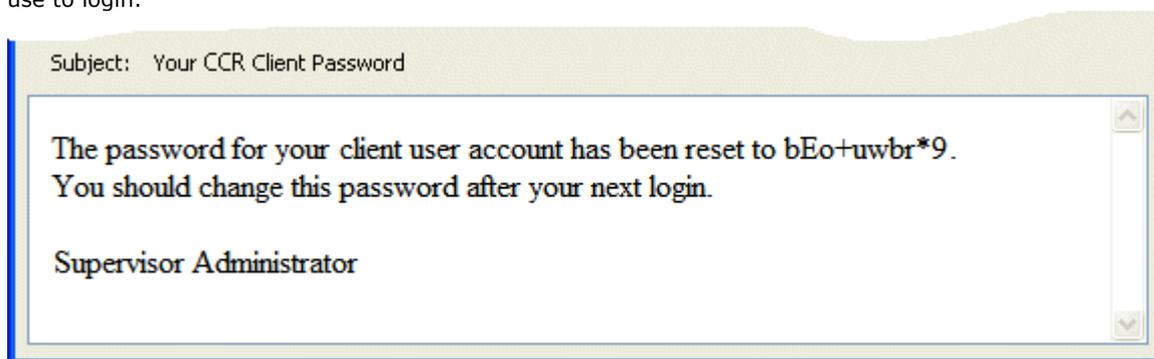
- **Agent** ^[188]
Your email address is requested by IP Office Customer Call Reporter the first time you log in. If you already have an email address set in the IP Office telephone system, that address is displayed by default.
- **Supervisor** ^[199]
When the administrator creates or amends a [supervisor account](#) ^[125] they can enter a unique email address. Supervisors can also check and change their email address when logged using the [Account Details](#) ^[32] tab.
- **Administrator** ^[188]
The administrator's email address is entered when IP Office Customer Call Reporter is first run. When logged in as the administrator, the email address can be checked and changed through the [System Settings](#) ^[132] 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 email address.
4. Click **OK** to request a new password email. You are returned to the main IP Office Customer Call Reporter web client [Logon Window](#) ^[13] and an email is sent to your email address.
5. The email subject will be **Your CCR Client Password**. 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](#) ^[15] function after you have logged in.

1.6 Additional Help

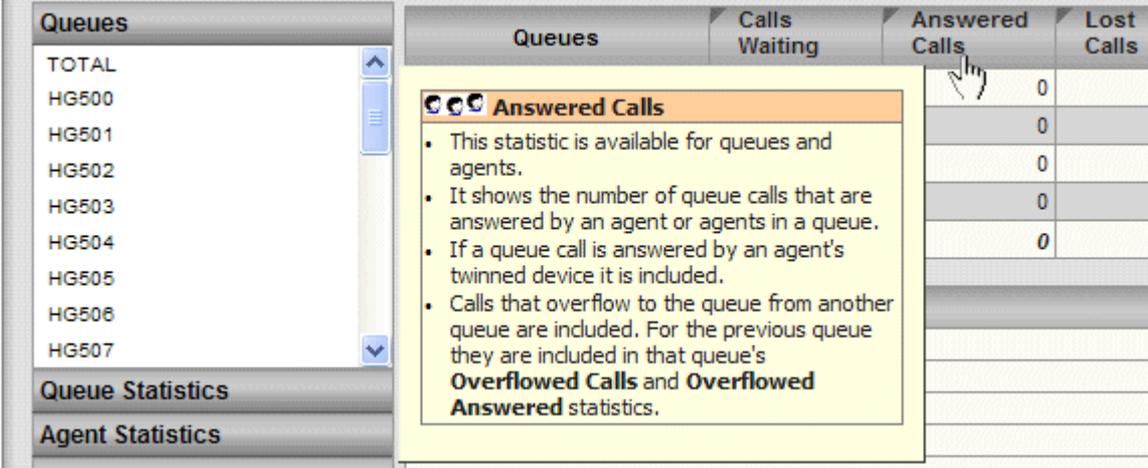
The following methods can be used to access help:

Viewing Help

Clicking the  Help button allows you 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, Italian and Brazilian Portuguese. For IP Office Customer Call Reporter running in any other languages, the help will appear 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 appear. Help is supported in **English, Italian** and **Brazilian Portuguese**. For IP Office IP Office Customer Call Reporter running in any other languages, the help will appear in English.



Queues	Calls Waiting	Answered Calls	Lost Calls
TOTAL		0	
HG500		0	
HG501		0	
HG502		0	
HG503		0	
HG504		0	
HG505		0	
HG506		0	
HG507		0	

Answered Calls

- This statistic is available for queues and agents.
- It shows the number of queue calls that are answered by an agent or agents in a queue.
- If a queue call is answered by an agent's twinned device it is included.
- Calls that overflow to the queue from another queue are included. For the previous queue they are included in that queue's **Overflowed Calls** and **Overflowed Answered** statistics.

- The use of help tooltips is enabled or disabled through the **Help Tooltips Enabled** within the [Supervisor account settings](#)^[32].

Statistic Help

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

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>).

1.7 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 login on another machine without previously logging off, you may need to wait 5 minutes for the previous session to time out (during which time a supervisor or agent license may also be consumed).

To exit

1. Click  **Log Off** to close the application. The application closes and you are returned to the [login](#)^[13] window.
2. This action logs you off the IP Office Customer Call Reporter. For agents, it does not log you off your current phone extension. See [Logging Out](#)^[116].

Chapter 2.

Supervisor

2. Supervisor

? Supervisor

Supervisors can [create](#)^[24] and [amend views](#)^[27] of the agent queues assigned to them. Those views are then viewable by the supervisor and the agents. Supervisors can also [create reports](#)^[90] that they then either run [manually](#)^[93] or that they [schedule](#)^[94] 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.

As a supervisor you can:

- [Create views](#)^[24]
Select the queues and statistics to include in a view. Set whether a statistic should include internal and or external calls and whether the statistic should provide alarms and warnings.
- [Use and amend views](#)^[27]
While the view is showing live data, sort and move the rows and columns.
- [Run a Graph](#)^[31]
You can select a separate browser window that will run a selected statistic to plot in a graph.
- [Reset all statistics](#)^[30]
The administrator can allow selected supervisor accounts to reset all view statistics whenever required.
- [Create reports](#)^[90]
Using the standard report template provided with IP Office Customer Call Reporter you can create a custom report which you can then either run or save.
- [Run reports](#)^[93]
You can run any report that you have saved or one that you have just created. Manually run reports are displayed in a separate browser window. Once displayed you can select whether to email or print the report if required.
- [Schedule reports](#)^[94]
For reports that you have created and saved, you can select a schedule when the report should automatically run. Automatically run reports are either emailed or printed.
- [Check your account details](#)^[32]
You can view your supervisor account details and amend many of the settings if required.

The screenshot shows the IP Office web client interface for a supervisor. At the top, there are navigation tabs: View 1, View 2, View 3, Historical Reporting, Report Scheduler, and Account. Below these are utility buttons: Graph, Change Password, Log Off, Status, and Help. The main content area is divided into two sections:

Alarm Ticker Current Views

Queues	Calls Waiting	Answered Calls	Lost Calls	Average Ans %	Average Ans Time	Grade Of Service
HG510	2	931	26	17.61	3.8	10.91
HG503	7	103	28	21.12	3.74	11.11
HG501	2	242	26	14.14	3.66	7.14
HG502	7	617	95	39.48	3.75	29.74
HG500	1	463	4	65.46	3.71	57.65
TOTAL		1453	97	31.56	3.73	23.31

Below the table, there are statistics for the selected queue (HG500):
 Longest Wait Time Internal: 49
 Average Wait Time Internal: 16

Agents

Agents	Answered Calls	Refused Calls
Extn255		

Alarm List All Views

- 09:33 Alarm HG502 7 Calls Waiting
- 09:33 Alarm HG500 57.65% Grade Of Service
- 09:33 Alarm HG510 2 Calls Waiting
- 09:33 Alarm HG503 11.12% Grade Of Service
- 09:33 Alarm HG510 10.91% Grade Of Service

Example web client when logged in as a supervisor.

Tabs

- [View 1/2/3](#) ^[24]
Each supervisor has 3 information views, each showing different sets of queues and statistics. These views are initially created by the [administrator](#) ^[128] 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](#) ^[32].
- [Historical Reporting](#) ^[90]
This tab is used to 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.
- [Report Scheduler](#) ^[94]
This tab is used to set and adjust the schedule for automatic reports. It also shows a listing of the most recent manual and automatic reports.
- [Account](#) ^[32]
This tab shows details for the supervisor's account. It also allows those details to be changed including the supervisor password and email address.

Buttons

	Graph ^[31] Display a separate graph of a statistic for a selected queue or agent.
	Reset Statistics ^[30] This button is only shown on the Account Details ^[32] tab for supervisors who have been given the right to Reset Statistics by the administrator.
	Change Password ^[15] While logged in to IP Office Customer Call Reporter, you can change your password.
	Log Off ^[18] 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 PC.
	Status ^[132] This button indicates the overall status of IP Office Customer Call Reporter. Clicking on the icon displays a System Settings ^[132] tab which shows the status of the individual IP Office Customer Call Reporter components. <ul style="list-style-type: none"> •  Green Circle - On: IP Office Customer Call Reporter is running. •  Yellow Bars - Slow Flash: Some parts of IP Office Customer Call Reporter are still in the process of starting. •  Red Box - Flash: There may be a problem in IP Office Customer Call Reporter.
	Help ^[17] Access this documentation in online format. Where possible the appropriate page for the current IP Office Customer Call Reporter screen is displayed.

2.1 Logging In

This refers to logging in to the IP Office Customer Call Reporter web client, not to [logging in to a phone](#)^[114] to receive calls.

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

- Enter your **Username** and **Password**.

- If you have forgotten your password but have an email address known to the IP Office Customer Call Reporter system, click [Forgot Password](#)^[116].
- If you are an agent logging in for the first time leave the password field blank. You will then be asked to set your IP Office Customer Call Reporter password and enter your unique email address as part of the login process.

- 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**.

- Click **Logon**.

- Agent's First Time Login**

If you are an agent logging in for the first time, the **Set Agent Password** window will appear. Enter a password of your choice and then click **OK**. Your unique email address is also requested. You need to enter an address in order to use the [Forgot Password](#)^[116] feature in future.

- 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](#)^[118], the **Select Role** window will appear. Select the required role and click **OK**.

- The web client will open in the appropriate mode: [Agent](#)^[108], [Supervisor](#)^[20] or [Administrator](#)^[122].

- 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.

2.2 Editing a View

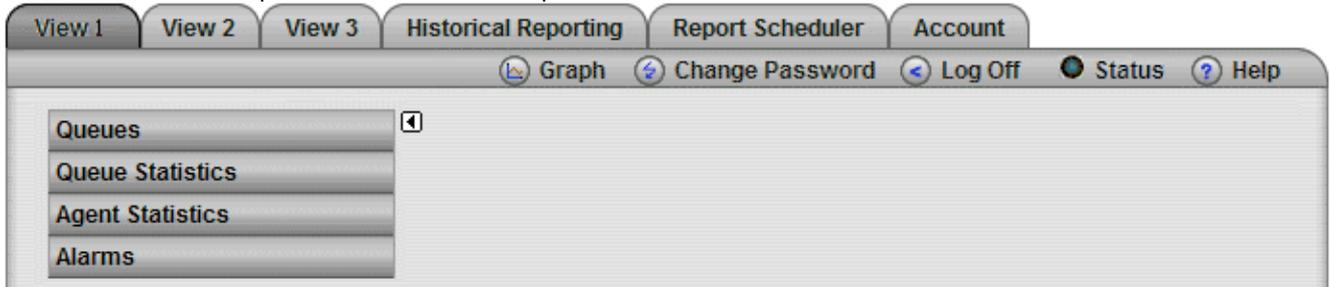
Each supervisor can have up to 3 views showing statistics and alarms for selected queues. Views are setup and amended by the administrator but they can then be adjusted by the supervisor.

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 view

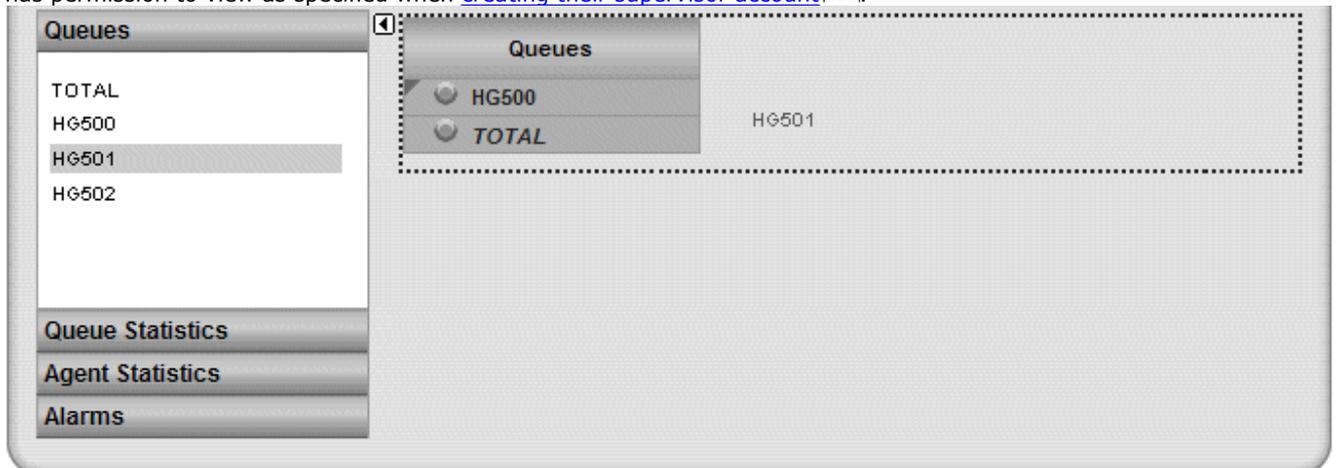
A. Select the view that you want to change.

B. Click on the  icon to display the list of elements that can be added to a view (this is already done and the  icon missing if the view currently contains no elements). Note that while the list of displayable elements is in view, the IP Office Customer Call Reporter does not show or update the statistics and alarms within the view.



1. Adding Queues

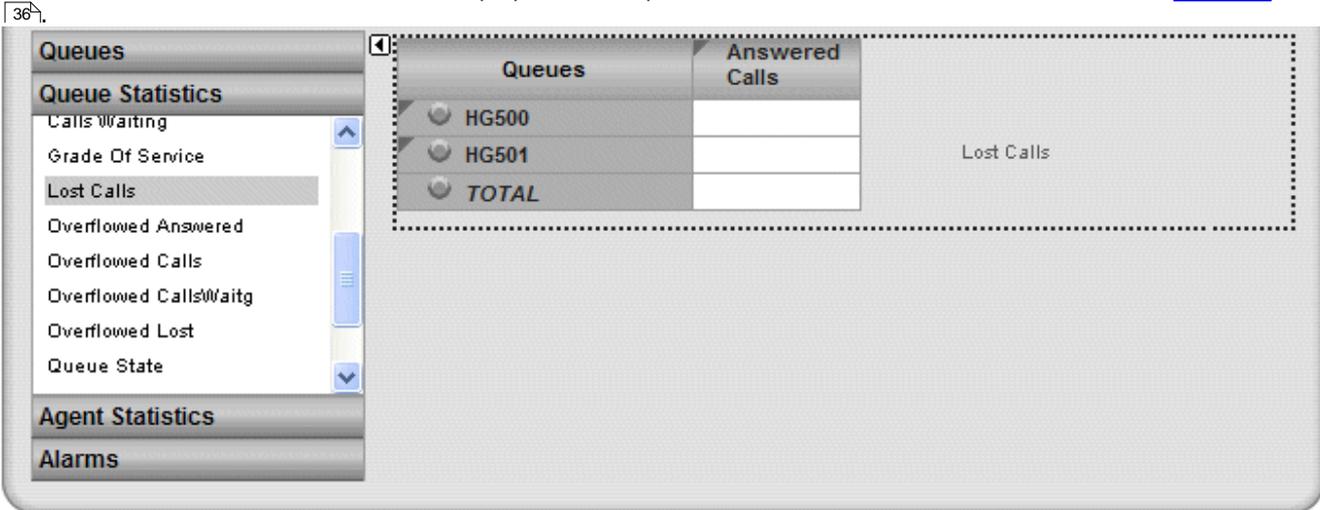
By default all the queues configured for the supervisor are already shown. These are the Queues that the supervisor has permission to view as specified when [creating their supervisor account](#)^[125].



- To add a queue to the view, click **Queues**. Drag and drop the required queue into the view and when the hatched lines appear drop it into that area.
- **TOTAL** can be used to add a summary row to the view. For statistics that are averages, the total will be a [weighted average](#)^[200]. For other statistics, it provides a simple total of the column. For the **Longest Waiting Time** it is blank.
- To remove a queue from the view, click on the  circle next to its name and select **Hide**.
- To adjust the order of the queues, click on the  corner icon and drag the queue to the required position.

2. Add Queue Statistics

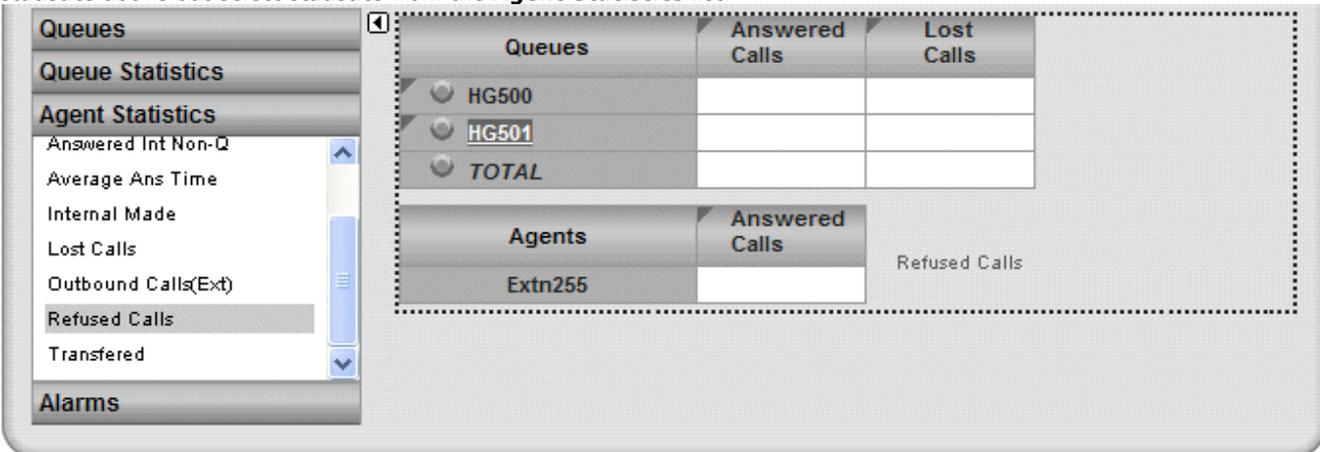
You can select which statistics should be displayed for the queues. For details of the available statistics see [Statistics](#)



- 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, ie. they are not based on activity since the statistic was added to the view.
- To remove a statistics from the view, click on the statistic name in the view and select **Hide**.
- To adjust the order of the statistics, click on the corner icon and drag the statistic to the required position.
- To adjust the settings used for a statistic, click on the statistic name and select [Settings](#)

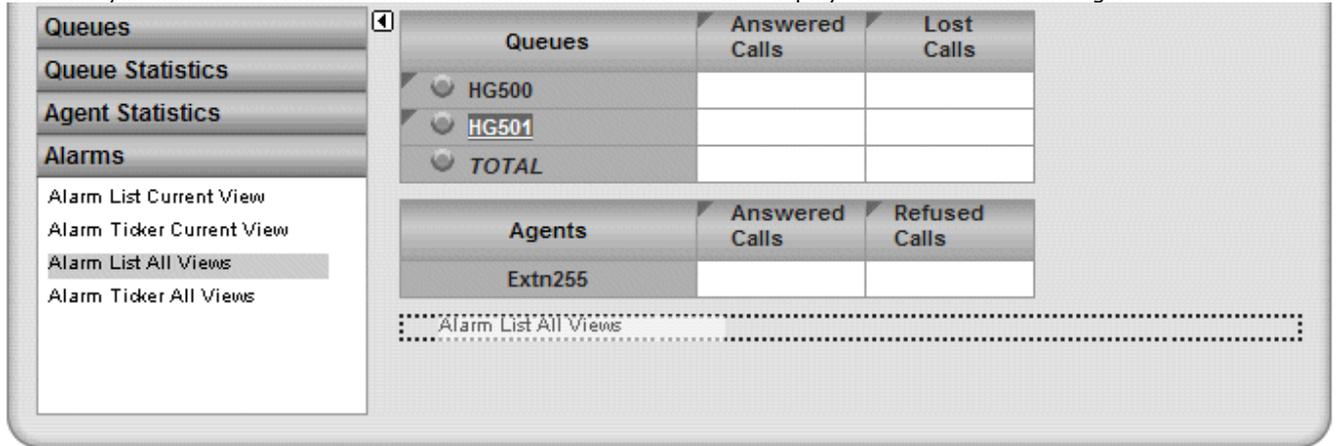
3. Add Agent Statistics

Click on 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.



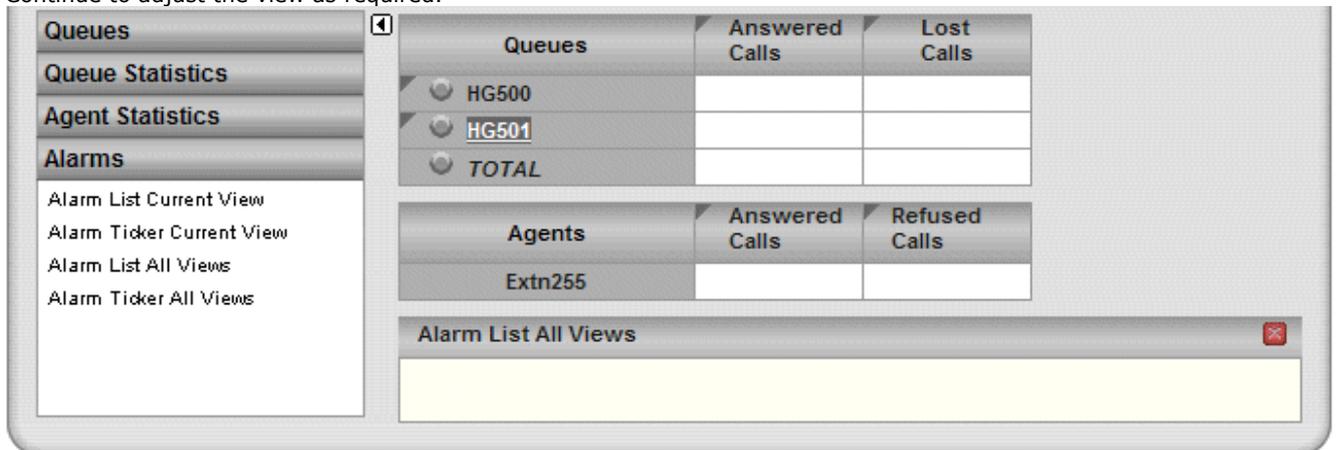
4. Adding an Alarm Summary

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 in a scrollable list of all the current alarms and warnings. 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 alarm or 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 NA (paper work)
 - The 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 on again to hide list of elements. IP Office Customer Call Reporter will start updating the statistics and alarms.

2.3 Using a View

When a view has been [created](#)^[24] there are several controls available that allow you to further customize the screen.

Showing/Hiding the Options Panels

- The / icon is used to switch between [adding elements to a view](#)^[24] and running a view. To add elements to a view click on  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 on  to hide the list and return to updating the view.

Adjusting Statistics

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

- Click the statistic name to display the statistic options:

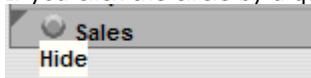


- Sort Up**
 Sort the view in ascending order using column's current values. When selected the statistic name displays an up arrow icon. Separate sorting can be applied to the agent statistics and the queue statistics. Note that while the queue section of a view is sorted, the selected queue to show in the agent section of the view cannot be changed.
- Sort Down**
 Sort 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](#)^[36] 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

- 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

- Click on the  icon. Then click on the  corner icon and drag the column to the required position. When completed, click on the  icon to return the view to normal operation.

Changing the Order of Queues

- Click on the  icon. Then click on the  corner icon and drag the queue to the required position. When completed, click on 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 additional information.

View/Hide the Agents in a Queue

1. To view the members of a queue click the queue name.

Queues	Answered Calls	Lost Calls
<input type="radio"/> HG500		
<input checked="" type="radio"/> HG501		
<input type="radio"/> TOTAL		

Agents	Answered Calls	Refused Calls
Extn255		

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

2.4 Statistic Colors

A number of different color backgrounds are used while displaying statistics. The following colors are used for normal statistics. The colors for changing statistic number values are optional (enabled by the [supervisor's account setting](#)^[32] **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.

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

Alarms and warnings are automatically cleared when the cell returns back 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 alarm list.

2.5 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 (Yellow)	Alarm (Red)	Acknowledged (Blue)
-------------------------------------	----------------------------	-----------------------	-------------------------------

Alarms and warnings are automatically cleared when the cell returns back 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 back 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](#)^[30]. Click on 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](#)^[38] 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](#)^[32] 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 alarm or 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 NA (paper work)
- The 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](#)^[98] template.

2.6 Resetting View Statistics

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

- **IMPORTANT**

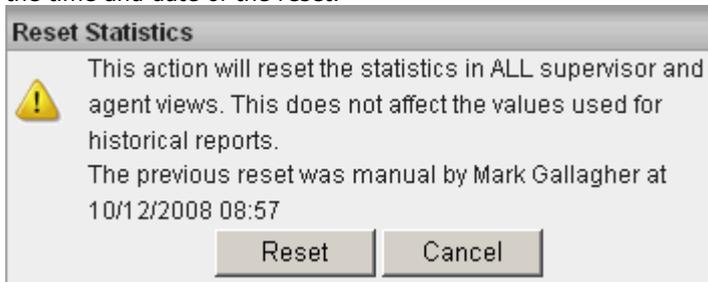
Resetting statistics will reset the view statistics seen by ALL agents and supervisors.

- Note that when resetting the statistics, it may take a couple of minutes for all views to update and return to normal operation.
- View statistics are also reset if the IP Office Customer Call Reporter server PC or the IP Office Customer Call Reporter services are restarted.

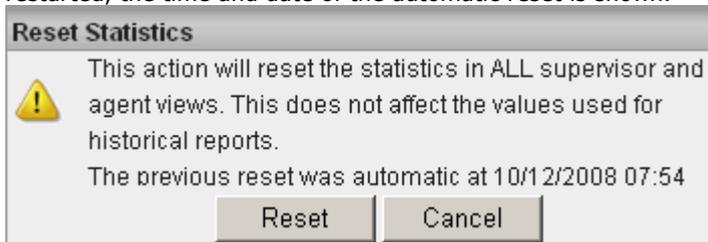
To reset the view statistics

1. Select the **Account** tab. If the **Reset Statistics** check box is ticked (this is done by the Administrator) then your supervisor account has permission to reset the view statistics when required.
2. Click the **Reset Statistics** button at the top-left.
3. A warning box will appear 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.



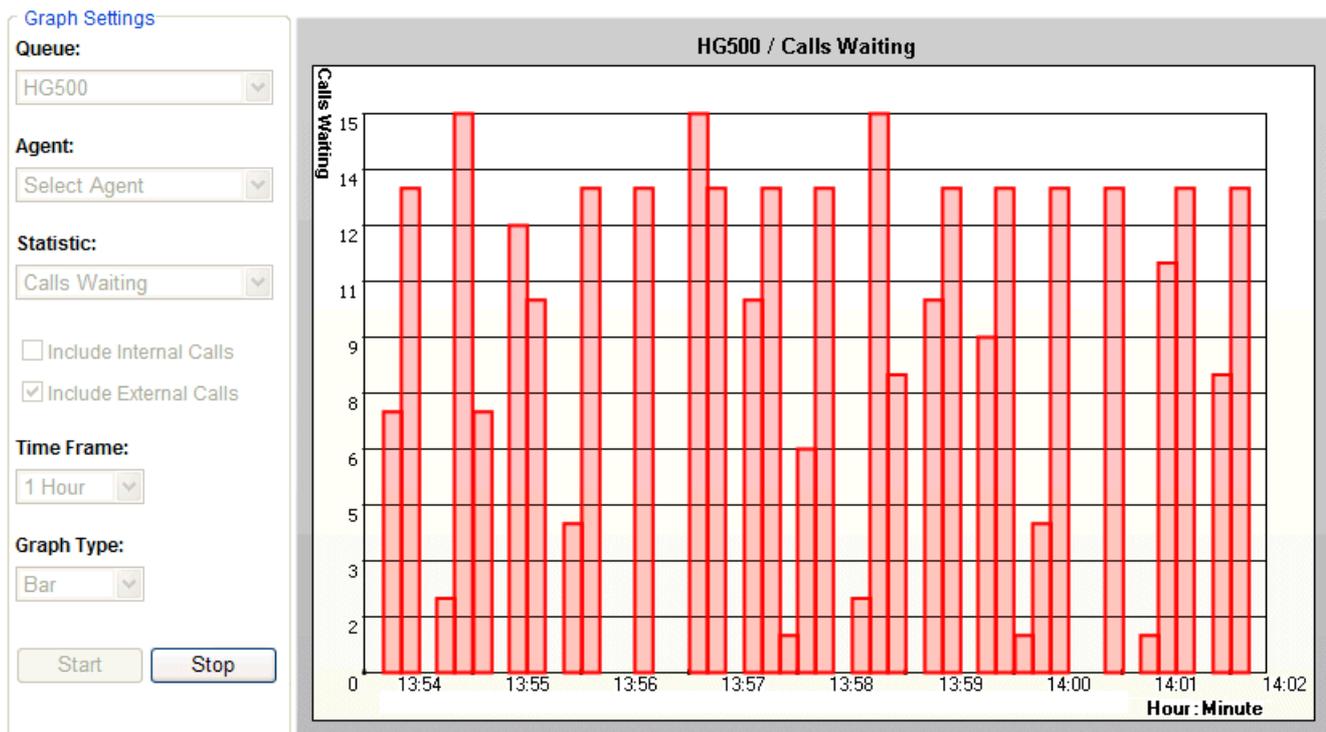
- If the view statistics were previously reset due to the IP Office Customer Call Reporter services being restarted, the time and date of the automatic reset is shown.



4. Click **Reset**.

2.7 Graph View

Supervisors and agents can select to have a graph running showing a selected statistic for a queue or agent. The graph appears 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 the  **Graph** button. The graph appears 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.
 - Once a graph is running, clicking the **Graph** button again will stop the graph and clear the existing graph data and settings.
6. Note that clicking **Stop** will halt the graph to allow changing the settings. Clicking **Start** again will clear the existing data from the graph.

2.8 Account Details

The administrator [creates supervisor accounts](#)^[125] and can amend those accounts. During that process they can specify whether you can self administer your account settings. There is a greyed out check box next to the heading **Self Administer**. If ticked then you are able to update your account details. If not ticked then the whole tab is greyed out and the message "You are not permitted to administer the account" appears.

To view/amend your account details

1. Click the **Account** tab to view your account details.

2. If the greyed out option **Self Administer** has a tick mark you can amend your account details.

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 ^[184] .
Password	This is the password used for browser access to IP Office Customer Call Reporter.
Confirm Password	All supervisors, even those without Self Administer rights, can use the Change Password ^[15] option to change their 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.
Email	The unique email address associated with the supervisor. This is used for the forgotten password ^[16] feature.
Self Administer	If selected by the administrator, the supervisor has self administration rights and is able to edit their their Account Details ^[32] . Supervisors without this option are only able to edit views.
Reset Statistics	Supervisors for who the Administrator enabled the Reset Statistics option can reset all the statistics currently being used for views. This will affect all supervisor and agent views. It does not affect the statistics used for historical reports.

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

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

Field	Description
Views	These fields allow you to rename the 3 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 PC. The sound is played to all users looking at that supervisor's views. <ul style="list-style-type: none"> This option is off by default. If enabled, an audio plug-in is required for all user browsers. Use either Quick Time (Non IE browsers) or Windows Media Player/Center (IE).
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.

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

Chapter 3.

Statistics

3. Statistics

This section provides details on the statistic used in the views seen by supervisors and agents.

? 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 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 statistics value in views can be manually reset when required by any supervisor for who the [administrator](#)^[188] has enabled the [Reset Statistics](#)^[30] option. Resetting the statistics affects the view 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 Types

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

Statistic Type	Description
State Statistics	<p>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^[97] template. Examples:</p> <ul style="list-style-type: none"> • Agent State (Queue) shows the current state (<i>logged off, available, busy, etc</i>) of each agent in a queue. • Agent State (Queue) Time shows the time each agent in a queue has been in their current state.
Calls/Agents	<p>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:</p> <ul style="list-style-type: none"> • Agents ACW shows the number of agents in a queue who are currently in the after call work (ACW) state. • Calls Waiting shows the number of calls ringing or queued waiting to be answered.
Call Counts	<p>Depending on the statistic, these statistics increment each time the queue or agent makes, loses, refuses or answers a call. Examples:</p> <ul style="list-style-type: none"> • Answered Calls shows the number of queue calls answered by an agent or all the agents in a queue. • Internal Made shows the number of internal calls made by an agent.
Performance Measures	<p>These statistics combine call counts and target values set by Supervisors to provide a measure of queue or agent performance. Examples:</p> <ul style="list-style-type: none"> • Agent Call Share shows an agents share of queue calls answered out of all queue calls answered for a particular queue. • 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. The colors for changing statistic number values are optional (enabled by the [supervisor's account setting](#)^[32] **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)
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The following additional colors are used when any statistic is configured to display warnings and alarms. These colors override the ones above.

Enabled / Cleared (Green)	Warning (Yellow)	Alarm (Red)	Acknowledged (Blue)
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Alarms and warnings are automatically cleared when the cell returns back 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 alarm list.

3.1 Available Statistics

Statistic Full Name	Available for		Call Type ^[1]		Warning/ Alarm Type	Include Overflow		Statistic Type
	Queue	Agent	Ext'	Int'		From	To	
Agent State (Queue) ^[39]	-	✓	-	-	None	-	-	State
Agent State (Queue) Time ^[41]	-	✓	-	-	>1-999 ^[2]	-	-	State
Agent State (System) ^[42]	-	✓	-	-	None	-	-	State
Agent State (System) Time ^[45]	-	✓	-	-	None	-	-	State
Agents ACW ^[46]	✓	-	-	-	>1-150	-	-	Current
Agents Available ^[47]	✓	-	-	-	<1-150	-	-	Current
Agents Call Share ^[48]	-	✓	-	-	None	-	✓	Performance
Agents Logged On ^[49]	✓	-	-	-	<1-150	-	-	Current
Agents Present ^[50]	✓	-	-	-	None	-	-	Current
Agents Ringing ^[51]	✓	-	✓	✓	None	-	✗	Current
Answered Calls ^[52]	✓	✓	✓	✓	>1-999	✗	✗/✓ ^[3]	Call Count
Answered External (Non-Queue) ^[53]	-	✓	✓	-	>1-999	-	-	Call Count
Answered Internal (Non-Queue) ^[54]	-	✓	-	✓	>1-999	-	-	Call Count
Answered Internal (Queue) ^[55]	✓	✓	-	✓	>1-999	✗	✗	Call Count
Average Answer % ^[56]	✓	✓	✓	✓	<1-100%	✓	✗	Performance
Average Answer Time ^[58]	✓	✓	✓	✓	>1-600	✓	✗	Performance
Average Wait Time ^[60]	✓	-	✓	✓	>1-600	✓	✗	
Busy Not Available ^[61]	✓	-	-	-	>1-150	-	-	Current
Calls Waiting ^[62]	✓	-	✓	✓	>1-999	✗	✓	Current
Current Wait Time ^[64]	✓	-	✓	✓	>1-600	✓	✓	
Grade of Service ^[65]	✓	-	✓	✓	<1-100%	✓	✗	Performance
Internal Made ^[67]	-	✓	-	✓	>1-999	-	-	Call Count
Longest Wait Time ^[68]	✓	-	✓	✓	>1-600	✓	✗	
Lost Calls ^[69]	✓	✓	✓	✓	>1-999	✗	✗/✓ ^[3]	Call Count
New Messages ^[71]	✓	-	-	-	>1-999	-	-	Call Count
No Answer ^[72]	✓	✓	✓	✓	>1-999	✗	✗/✓ ^[3]	Call Count
Outbound Calls (External) ^[73]	-	✓	✓	-	>1-999	-	-	Call Count
Overflowed Answered ^[74]	✓	-	✓	✓	>1- 999	✓	✗	Call Count
Overflowed Calls ^[75]	✓	-	✓	✓	>1-999	✓	✗	Call Count
Overflowed Calls Waiting ^[76]	✓	-	✓	✓	>1-999	✓	✗	Call Count
Overflowed Lost ^[77]	✓	-	✓	✓	>1-999	✓	✗	Call Count
Queue State ^[78]	✓	-	-	-	None	-	-	State
Queue State Time ^[79]	✓	-	-	-	>1-600 ^[2]	-	-	State
Routed to Other ^[80]	✓	✓	✓	✓	>1-999	✓	✗	Call Count
Routed to Voicemail ^[81]	✓	✓	✓	✓	>1-999	✓	✗	Call Count
Transferred ^[82]	✓	✓	✓	✓	>1-999	✓	✗	Call Count

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** and **No Answer**, 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 may use abbreviated names. The statistics however remain the same

3.2 Agent State (Queue)

 **Agent State (Queue)** ^[39]

- 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](#) ^[41] can be used to show how long each agent has been in their current state.

- Possible agent states include:

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-Queue	Alerting with a call for another queue of which they are a member or that has overflowed.	Busy Alt-Queue	On a call from another queue of which they are a member or that has overflowed.
Ring Non-Queue	Alerting with a non-queue call.	Busy Non-Queue	On a direct call ^[192] 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 NA	In Busy Not Available state.

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 NA state. The individual reasons are configured by the IP Office phone system maintainer. A reason is selected by the agent when going they go into Busy NA state.

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 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.

After Call Work (ACW)

After Call Work indicates that the agent is not available to receive [queue calls](#)^[197] 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](#)^[117]. 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](#)^[206] feature briefly applied to the end of all calls including queue calls is also reported as **After Call Work** state.

Busy Alt-Queue

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 (NA)

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 phone, see [Agent Phone Controls](#)^[114]. This also requires the agent to select one of the [reason codes](#)^[197] displayed on their phone 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.

Busy Non-Queue

This agent state is reported when the agent answers a call that wasn't 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](#)^[116] from the phone system. Note that this is the default state assumed by IP Office Customer Call Reporter when it cannot determine the exact state, for example when restarting.

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 may still be [available](#)^[196].

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](#)^[197].

Ring Alt-Queue

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-Queue](#)^[197]. It is also used when the agent is being presented a call that has overflowed from a queue.

Ring Non-Queue

This agent state is reported when the agent is being presented with a call that isn't targeted to any queue of which they are a member. If answered the call their state will change to [Busy Non-Queue](#)^[197].

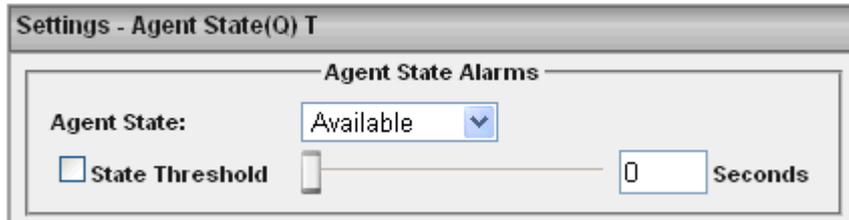
3.3 Agent State (Queue) Time

[Agent State \(Queue\) Time](#) ⁴¹

- 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 \(Queue\)](#) ³⁹.

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](#) ³⁰. Click on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.



Alarms

These controls allow you 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 (Yellow)	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.
 - The alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is are 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 may only get used 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.

3.4 Agent State (System)

Agent State (System) 42

- 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](#) 45 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 current state in each of those queues.

State	Meaning
Busy	On a call targeted to a queue.
Busy Non-Queue	On a direct call or picked up call.
Holding	With a call on hold.
Ringing	Alerting with a queue call.
Ring Non-Queue	Alerting with a non-queue call.
Busy NA	In Busy Not Available status.
Available	Logged in but not on a call.
ACW	In After Call Work State.
Present	Logged in but disabled from all queues.
Logged Out	The agent has logged out.

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 NA state. The individual reasons are configured by the IP Office phone system maintainer. A reason is selected by the agent when going they go into Busy NA state.

Settings

This statistic has no customizable settings.



Description of Agent States

The following agent states can be reported for the system, that is for all queues of which the agent is a member:

Available

This agent state is reported when an agent is logged in and is not in any other state. That is when 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.

After Call Work (ACW)

After Call Work indicates that the agent is not available to receive [queue calls](#)^[197] 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](#)^[117]. 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](#)^[206] feature briefly applied to the end of all calls including queue calls is also reported as **After Call Work** state.

Busy Not Available (NA)

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 phone, see [Agent Phone Controls](#)^[114]. This also requires the agent to select one of the [reason codes](#)^[197] displayed on their phone 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.

Busy Non-Queue

This agent state is reported when the agent answers a call that wasn't 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](#)^[116] from the phone system. Note that this is the default state assumed by IP Office Customer Call Reporter when it cannot determine the exact state, for example when restarting.

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](#)^[197].

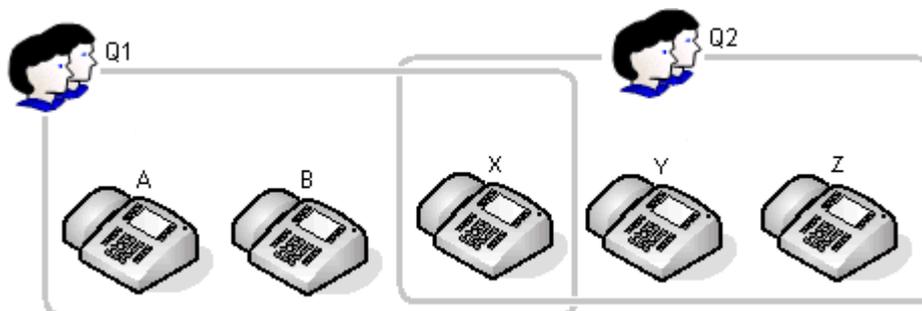
Ring Non-Queue

This agent state is reported when the agent is being presented with a call that isn't targeted to any queue of which they are a member. If answered the call their state will change to [Busy Non-Queue](#)^[197].

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 show 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.	<i>Logged Out</i>	<i>Logged Out</i>	<i>Logged Out</i>
	• Agent X logs in to an extension.	<i>Available</i>	<i>Available</i>	<i>Available</i>
Answering a Queue Call	• A call to the queue Q1 is presented to Agent X.	<i>Ringing</i>	<i>Ring Alt-Queue</i>	<i>Ringing</i>
	• Agent X answers the call.	<i>Busy</i>	<i>Busy Alt-Queue</i>	<i>Busy</i>
	• Agent X puts the call on hold.	<i>Holding</i>	<i>Busy Alt-Queue</i>	<i>Busy</i>
	• Agent X reconnects the call.	<i>Busy</i>	<i>Busy Alt-Queue</i>	<i>Busy</i>
	• The call ends. The system automatically applies a short period of wrap up ^[206] , usually 2 seconds.	<i>After Call Work</i>	<i>After Call Work</i>	<i>After Call Work</i>
	• Since it was a queue call the system may then apply automatically After Call Work ^[188] .	<i>After Call Work</i>	<i>After Call Work</i>	<i>After Call Work</i>
	• The system automatically ends After Call Work (by default after 10 seconds).	<i>Available</i>	<i>Available</i>	<i>Available</i>
Answering a Direct Call	• A call is targeted directly to Agent X rather than a queue.	<i>Ring Non-Queue</i>	<i>Ring Non-Queue</i>	<i>Ring Non-Queue</i>
	• Agent X answers the call.	<i>Busy Non-Queue</i>	<i>Busy Non-Queue</i>	<i>Busy Non-Queue</i>
	• The call ends. The system automatically applies a short period of wrap up ^[206] , usually 2 seconds.	<i>After Call Work</i>	<i>After Call Work</i>	<i>After Call Work</i>
	• The system automatically ends wrap up.	<i>Available</i>	<i>Available</i>	<i>Available</i>
Making a Call	• Agent X makes a call.	<i>Busy Non-Queue</i>	<i>Busy Non-Queue</i>	<i>Busy Non-Queue</i>
	• The call ends. The system automatically applies a short period of wrap up ^[206] , usually 2 seconds.	<i>After Call Work</i>	<i>After Call Work</i>	<i>After Call Work</i>
	• The system automatically ends wrap up.	<i>Available</i>	<i>Available</i>	<i>Available</i>
Doing Other Work	• Agent X selects Busy Not Available.	<i>Busy NA</i>	<i>Busy NA</i>	<i>Busy NA</i>
	• When completed, Agent X ends Busy Not Available.	<i>Available</i>	<i>Available</i>	<i>Available</i>
Enabling/Disabling Queue Membership	• Agent X disables their membership of the Q1 queue.	<i>Present</i>	<i>Available</i>	<i>Available</i>
	• Agent X disables their membership of the Q2 queue. They are now disabled from all queues.	<i>Present</i>	<i>Present</i>	<i>Present</i>
	• Agent X re-enables their membership of both queues.	<i>Available</i>	<i>Available</i>	<i>Available</i>
Ending Work	• Agent X logs out from the extension.	<i>Logged out</i>	<i>Logged out</i>	<i>Logged out</i>

3.5 Agent State (System) Time

[Agent State \(System\) Time](#) ⁴⁵

- 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 \(System\)](#) ⁴².

Settings

This statistic has no customizable settings.



3.6 Agents ACW

Agents ACW ⁴⁶

- This statistic is only available for queues.
- Its shows the number of agents in the queue 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 (ACW)

After Call Work indicates that the agent is not available to receive [queue calls](#)¹⁹⁷ 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](#)¹¹⁷. 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](#)²⁰⁶ 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](#)³⁰⁷. Click on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Alarms

These controls allow you 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 (Yellow)	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.
 - 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 may only get used 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 than the warning threshold.

3.7 Agents Available

Agents Available 47

- This statistic is only available for queues.
- It shows the number of agents in the queue who are currently available to answer calls.

Available

This agent state is reported when an agent is logged in and is not in any other state. That is when 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](#). Click on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Alarms

These controls allow you to select whether a warning and 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 (Yellow)	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.
 - The alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is are 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 may only get used 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.

3.8 Agents Call Share

Agents Call Share ⁴⁸

- This statistic is only available for agents.
- It shows the percentage of [queue calls](#) ¹⁹⁷ 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%.

Settings

This statistic has no customizable settings.



3.9 Agents Logged On

Agents Logged On 49

- This statistic is only available for queues.
- It shows the number of agents who are members of the queue who are currently logged in.
- When logged in an agent can also be in other states.

? 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>#.

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](#)^[30]. Click on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Alarms

These controls allow you to select whether a warning and 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 (Yellow)	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.
 - 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 may only get used 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 than the warning threshold.

3.10 Agents Present

Agents Present ⁵⁰

- This statistic is only available for queues.
- It shows the number of agents who are logged in but whose membership of the queue is currently disabled.

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 may still be [available](#) ¹⁹⁰.

Settings

This statistic has no customizable settings.



3.11 Agents Ringing

Agents Ringing ⁵¹

- This statistic is only available for queues.
- It shows the number of agents with [queue calls](#) ¹⁹⁷ ringing but not yet answered.

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

Settings

This statistic has no customizable settings.



3.12 Answered Calls

Answered Calls ^[52]

- This statistic is available for queues and agents.
- It shows the number of [queue calls](#) ^[197] that answered by the agents in the queue or the agent being reported on.
- It does not include direct calls answered by agents.
- It does not include queue calls answered by 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](#) ^[30]. Click on 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 type of calls are included in the calculation of this statistic. By default both internal and 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

These controls allow you 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 (Yellow)	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.
 - The alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is are 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 may only get used 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.

3.13 Answered External (Non-Queue)

Answered External Non-Queue ⁵³

- 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 include 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](#) ³⁰. Click on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Settings - Answered Ext Non-Q

Alarms

Warning Threshold

Alarm Threshold

Alarms

These controls allow you 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 (Yellow)	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.
- 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 may only get used 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 than the warning threshold.

3.14 Answered Internal (Non-Queue)

Answered Internal Non-Queue 54

- 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 include 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	X	✓	✓	X	X/X

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 on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Settings - Answered Int Non-Q

Alarms

Warning Threshold

Alarm Threshold

Alarms

These controls allow you 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 (Yellow)	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.
- 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 may only get used 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 than the warning threshold.

3.15 Answered Internal (Queue)

Answered Internal (Queue) 55

- This statistic is available for 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	✓	✗	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 on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Settings - Answered Int Queue

Alarms

Warning Threshold

Alarm Threshold

Alarms

These controls allow you 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 (Yellow)	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.
 - The alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is are 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 may only get used 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 than the warning threshold.

3.16 Average Answer %

Average Answer % ⁵⁶

- This statistic is available for queues and agents.
- It shows the number of [queue calls](#) ¹⁹⁷ 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](#) ³⁰. Click on 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 type of calls are included in the calculation of this statistic. By default both internal and 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 statistic calculated as a percentage of calls answered within the set time over 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.

Alarms

These controls allow you to select whether a warning and 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 (Yellow)	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.
- The alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is are 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 may only get used 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 than 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 as 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.

3.17 Average Answer Time

Average Answer Time 58

- This statistic is available for 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 average answer time is measured from the call arriving at the target (queue or agent).
- 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 on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Settings - Average Ans Time

Scope

Include Internal Calls Include External Calls

Alarms

Warning Threshold

Alarm Threshold

- **Scope**

Supervisors can select which type of calls are included in the calculation of this statistic. By default both internal and 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

These controls allow you 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 (Yellow)	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.
 - The alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is are 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 may only get used 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 than 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.

3.18 Average Wait Time

Average Wait Time ^[60]

- This statistic is only available for 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, the enquiry call duration is included in the [Average Wait Time](#) ^[58] and [Longest Wait Time](#) ^[68] calculations for the queue to which the call is transferred.

Statistic Settings

All supervisors can customize the settings of each statistic included in a view. The changes are applied to the existing data since the last [view statistics reset](#) ^[30]. Click on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Settings - Average Wait Time

Scope

Include Internal Calls Include External Calls

Alarms

Warning Threshold

Alarm Threshold

Scope

Supervisors can select which type of calls are included in the calculation of this statistic. By default both internal and 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

These controls allow you 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 (Yellow)	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.
 - 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 may only get used 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 than the warning threshold.

3.19 Busy Not Available

Busy Not Available ^[61]

- This statistic is only available for queues.
- It shows the total number of agents in the queue who have currently indicated they are [Busy Not Available](#) ^[19].
- Busy Not Available is a state selected by an agent when they need to stop receiving queue calls in order to do some non-call related activity.

Busy Not Available (NA)

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 phone, see [Agent Phone Controls](#) ^[114]. This also requires the agent to select one of the [reason codes](#) ^[197] displayed on their phone 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.

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.

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](#) ^[30]. Click on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Alarms

These controls allow you 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 (Yellow)	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.
 - The alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is are 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 may only get used 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.

3.20 Calls Waiting

Calls Waiting 62

- This statistic is only available for 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 phones.
- Calls that overflow from the queue and are still waiting to be answered are reported using [Overflowed Calls Waiting](#) 76.

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](#) 30. Click on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Settings - Calls Waiting

Scope

Include Internal Calls Include External Calls

Alarms

Warning Threshold

Alarm Threshold

- **Scope**
Supervisors can select which type of calls are included in the calculation of this statistic. By default both internal and 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

These controls allow you 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 (Yellow)	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.
- 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 may only get used 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 than the warning threshold.

3.21 Current Wait Time

Current Wait Time ⁶⁴

- This statistic is only available for 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](#) ³⁰. Click on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Settings - Current Wait Time

Scope

Include Internal Calls Include External Calls

Alarms

Warning Threshold

Alarm Threshold

Scope

Supervisors can select which type of calls are included in the calculation of this statistic. By default both internal and 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

These controls allow you 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 (Yellow)	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.
 - The alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is are 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 may only get used 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 than the warning threshold.

3.22 Grade of Service

Grade of Service ⁶⁵

- This statistic is only available for queues.
- It is 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](#) ³⁰. Click on 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 type of calls are included in the calculation of this statistic. By default both internal and 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 statistic calculated as a percentage of calls answered within the set time over 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.
- **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 before it will be counted as lost when the caller disconnects and not included in the calculation of this statistic.

Alarms

These controls allow you to select whether a warning and 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 (Yellow)	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.
 - The alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is are 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 may only get used 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.

3.23 Internal Made

Internal Made 67

- 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 on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Settings - Internal Made

Alarms

Warning Threshold |

Alarm Threshold |

Alarms

These controls allow you 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 (Yellow)	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.
- 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 may only get used 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 than the warning threshold.

3.24 Longest Wait Time

Longest Wait Time ^[68]

- This statistic is only available for 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, the enquiry call duration is included in the [Average Wait Time](#) ^[58] and [Longest Wait Time](#) ^[68] calculations for the queue to which the call is transferred.
- No value is displayed for the **TOTAL** of a Longest Wait Time column.

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](#) ^[30]. Click on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Settings - Longest Wait Time

Scope

Include Internal Calls Include External Calls

Alarms

Warning Threshold

Alarm Threshold

• Scope

Supervisors can select which type of calls are included in the calculation of this statistic. By default both internal and 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

These controls allow you 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 (Yellow)	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.
 - 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 may only get used 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 than the warning threshold.

3.25 Lost Calls

Lost Calls

- This statistic is available for 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.
- It does not include calls that go to voicemail.

? Lost Call

- 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 on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Settings - Lost Calls

Scope

Include Internal Calls Include External Calls

Alarms

Warning Threshold

Alarm Threshold

- **Scope**
Supervisors can select which type of calls are included in the calculation of this statistic. By default both internal and 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

These controls allow you 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 (Yellow)	Alarm (Red)	Acknowledged (Blue)
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- 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.
- 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 may only get used 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 than the warning threshold.

3.26 New Messages

New Messages ⁷¹

- This statistic is only available for 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](#)³⁰. Click on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Alarms

These controls allow you 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 (Yellow)	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.
 - The alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is are 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 may only get used 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.

3.27 No Answer

No Answer 72

- This statistic is available for 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](#) ^[30]. Click on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Settings - Refused Calls

Scope

Include Internal Calls
 Include External Calls

Alarms

Warning Threshold

Alarm Threshold

• Scope

Supervisors can select which type of calls are included in the calculation of this statistic. By default both internal and 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

These controls allow you 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 (Yellow)	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.
 - 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 may only get used 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 than the warning threshold.

3.28 Outbound Calls (External)

 [Outbound Calls \(External\)](#) 73

- 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 on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Alarms

These controls allow you 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 (Yellow)	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.
 - The alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is are 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 may only get used 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 than the warning threshold.

3.29 Overflowed Answered

Overflowed Answered ⁷⁴

- This statistic is only available for 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](#) ⁸⁰).
- 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](#) ³⁰. Click on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Settings - Overflowed Answered

Scope

Include Internal Calls Include External Calls

Alarms

Warning Threshold

Alarm Threshold

Scope

Supervisors can select which type of calls are included in the calculation of this statistic. By default both internal and 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

These controls allow you 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 (Yellow)	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.
 - The alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is are 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 may only get used 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.

3.30 Overflowed Calls

Overflowed Calls ⁷⁵

- This statistic is only available for queues.
- It shows the number of calls that have overflowed from the queue to its overflow destination.
- Once a call has overflowed, it may also appear in the queue's [Overflowed Calls Waiting](#) ¹⁹⁶, [Overflowed Answered](#) ¹⁹⁶ and [Overflowed Lost](#) ¹⁹⁶ 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 included in a view. The changes are applied to the existing data since the last [view statistics reset](#) ³⁰. Click on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Settings - Overflowed Calls

Scope

Include Internal Calls Include External Calls

Alarms

Warning Threshold

Alarm Threshold

- **Scope**

Supervisors can select which type of calls are included in the calculation of this statistic. By default both internal and 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

These controls allow you 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 (Yellow)	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.
 - 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 may only get used 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 than the warning threshold.

3.31 Overflowed Calls Waiting

Overflowed Calls Waiting ⁷⁶

- This statistic is only available for 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](#)³⁰. Click on 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 type of calls are included in the calculation of this statistic. By default both internal and 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

These controls allow you 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 (Yellow)	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.
- The alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is are 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 may only get used 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 than the warning threshold.

3.32 Overflowed Lost

Overflowed Lost  

- This statistic is only available for queues.
- The number of calls which overflowed from the queue and were then lost.
- It does not include calls that go to voicemail.

? Lost Call

- 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](#)^[30]. Click on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Settings - Overflowed Lost

Scope

Include Internal Calls **Include External Calls**

Alarms

Warning Threshold

Alarm Threshold

- **Scope**

Supervisors can select which type of calls are included in the calculation of this statistic. By default both internal and 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

These controls allow you 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 (Yellow)	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.
 - The alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is are 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 may only get used 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.

3.33 Queue State

Queue State ⁷⁸

- 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](#) ⁷⁹ can be used to show the time that the queue has been in its current state.

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.

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](#) ⁷⁸ statistic. The time the queue has been in a particular state is reported by the [Queue State Time](#) ⁷⁹ statistic.

Out of Service

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](#) ⁷⁸ statistic. The time the queue has been in a particular state is reported by the [Queue State Time](#) ⁷⁹ 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.

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](#) ⁷⁸ statistic. The time the queue has been in a particular state is reported by the [Queue State Time](#) ⁷⁹ statistic.

All Agents Busy

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](#) ⁷⁸ statistic. The time the queue has been in a particular state is reported by the [Queue State Time](#) ⁷⁹ statistic.

No Agents

This queue state is reported for a queue where no agents are logged in.

This queue state is reported by the [Queue State](#) ⁷⁸ statistic. The time the queue has been in a particular state is reported by the [Queue State Time](#) ⁷⁹ statistic.

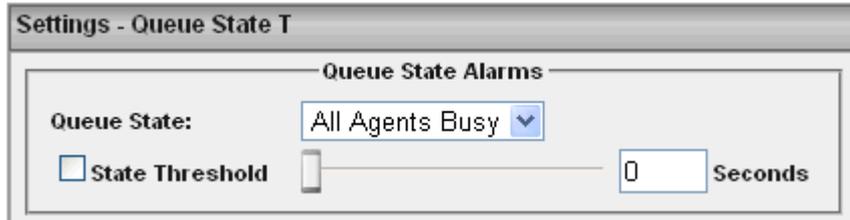
3.34 Queue State Time

Queue State Time ^[79]

- This statistic is only available for queues.
- It shows the time the queue has been in its current state.
- The related statistic [Queue State](#) ^[78] 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](#) ^[30]. Click on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.



Alarms

These controls allow you 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 (Yellow)	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.
- The alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is are 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 may only get used 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.

3.35 Routed to Other

Routed to Other 80

- This statistic is available for queues and agents.
- It shows the number of queue calls to the agent or queue that were subsequently retargeted to or answered by a party that is not a member of the same queue. For example calls picked up by another user while it was ringing at an agent.

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 on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Settings - Routed to Other

Scope

Include Internal Calls Include External Calls

Alarms

Warning Threshold

Alarm Threshold

Alarms

These controls allow you 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 (Yellow)	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.
 - The alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is are 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 may only get used 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 than the warning threshold.

3.36 Routed to Voicemail

Routed to Voicemail 87

- This statistic is available for 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 on the statistic name at the top of the column and select **Settings**. Customize the statistics settings as required and then click **Update**.

Settings - Routed To VoiceMail

Scope

Include Internal Calls Include External Calls

Alarms

Warning Threshold

Alarm Threshold

- **Scope**

Supervisors can select which type of calls are included in the calculation of this statistic. By default both internal and 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

These controls allow you 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 (Yellow)	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.
 - 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 may only get used 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 than the warning threshold.

3.37 Transferred

Transferred ⁸²

- This statistic is available for 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](#) ¹⁹² 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](#) ³⁰. Click on 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 type of calls are included in the calculation of this statistic. By default both internal and 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

These controls allow you 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 (Yellow)	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.
- The alarm and warning settings are applied to all cells in the statistic column. When applied to an agent statistic, the same setting is are 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 may only get used 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.

3.38 Statistic Summary

[Agent State \(Queue\)](#) ^[39]

- 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](#) ^[41] can be used to show how long each agent has been in their current state.

[Agent State \(Queue\) Time](#) ^[41]

- 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 \(Queue\)](#) ^[39].

[Agent State \(System\)](#) ^[42]

- 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](#) ^[45] can be used to show how long each agent has been in their current state.

[Agent State \(System\) Time](#) ^[45]

- 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 \(System\)](#) ^[42].

[Agents ACW](#) ^[46]

- This statistic is only available for queues.
- It shows the number of agents in the queue 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](#) ^[47]

- This statistic is only available for queues.
- It shows the number of agents in the queue who are currently available to answer calls.

[Agents Call Share](#) ^[48]

- This statistic is only available for agents.
- It shows the percentage of [queue calls](#) ^[19] answered by the agent out of all queue calls answered by the agents in the queue.

[Agents Logged On](#) ^[49]

- This statistic is only available for queues.
- It shows the number of agents who are members of the queue who are currently logged in.
- When logged in an agent can also be in other states.

[Agents Present](#) ^[50]

- This statistic is only available for queues.
- It shows the number of agents who are logged in but whose membership of the queue is currently disabled.

[Agents Ringing](#) ^[51]

- This statistic is only available for queues.
- It shows the number of agents with [queue calls](#) ^[19] ringing but not yet answered.

[Answered Calls](#) ^[52]

- This statistic is available for queues and agents.
- It shows the number of [queue calls](#) ^[19] that answered by the agents in the queue or the agent being reported on.
- It does not include direct calls answered by agents.
- It does not include queue calls answered by methods such as call pickup.
- It does not include calls that go to voicemail.

[Answered External Non-Queue](#) ^[53]

- 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 include queue calls to a queue of which the agent is a member.

[Answered Internal Non-Queue](#) ⁵⁴

- 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 include queue calls to a queue of which the agent is a member.

[Answered Internal \(Queue\)](#) ⁵⁵

- This statistic is available for 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 %](#) ⁵⁶

- This statistic is available for queues and agents.
- It shows the number of [queue calls](#) ¹⁹⁷ answered by the queue within the specified answer threshold time, divided by the total number of calls answered.

[Average Answer Time](#) ⁵⁸

- This statistic is available for 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 average answer time is measured from the call arriving at the target (queue or agent).
- 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](#) ⁶⁰

- This statistic is only available for queues.
- Average waiting time of calls.

[Busy Not Available](#) ⁶¹

- This statistic is only available for queues.
- It shows the total number of agents in the queue who have currently indicated they are [Busy Not Available](#) ¹⁹¹.
- Busy Not Available is a state selected by an agent when they need to stop receiving queue calls in order to do some non-call related activity.

[Calls Waiting](#) ⁶²

- This statistic is only available for 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 phones.
- Calls that overflow from the queue and are still waiting to be answered are reported using [Overflowed Calls Waiting](#) ⁷⁶.

[Current Wait Time](#) ⁶⁴

- This statistic is only available for queues.
- Time of the longest currently waiting call.

[Grade of Service](#) ⁶⁵

- This statistic is only available for queues.
- It is 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](#) ⁶⁷

- 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](#) ⁶⁸

- This statistic is only available for queues.
- Waiting time of the longest waiting call.

 **Lost Calls** ⁶⁹

- This statistic is available for 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.
- It does not include calls that go to voicemail.

 **New Messages** ⁷¹

- This statistic is only available for 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)** ⁷³

- 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** ⁷⁴

- This statistic is only available for 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](#) ⁸⁰).
- It does not include calls that go to voicemail.

 **Overflowed Calls** ⁷⁵

- This statistic is only available for queues.
- It shows the number of calls that have overflowed from the queue to its overflow destination.
- Once a call has overflowed, it may also appear in the queue's [Overflowed Calls Waiting](#) ¹⁹⁶, [Overflowed Answered](#) ¹⁹⁶ and [Overflowed Lost](#) ¹⁹⁶ statistics.

 **Overflowed Calls Waiting** ⁷⁶

- This statistic is only available for queues.
- It shows the number of calls overflowed from the queue and still waiting to be answered.

 **Overflowed Lost** ⁷⁷

- This statistic is only available for queues.
- The number of calls which overflowed from the queue and were then lost.
- It does not include calls that go to voicemail.

 **Queue State** ⁷⁸

- 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](#) ⁷⁹ can be used to show the time that the queue has been in its current state.

 **Queue State Time** ⁷⁹

- This statistic is only available for queues.
- It shows the time the queue has been in its current state.
- The related statistic [Queue State](#) ⁷⁸ can be used to show current state.

 **No Answer** ⁷²

- This statistic is available for 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 being 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.

  **Routed to Other** ⁸⁰

- This statistic is available for queues and agents.
- It shows the number of queue calls to the agent or queue that were subsequently retargeted to or answered by a party that is not a member of the same queue. For example calls picked up by another user while it was ringing at an agent.

  **Routed to Voicemail** ⁸¹

- This statistic is available for 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.

  **Transferred** ⁸²

- This statistic is available for 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](#) ¹⁹² to agents that they then transfer.

Chapter 4.

Reports

4. Reports

This section describes how supervisors can configure, view and save reports using the CCR's standard report templates. 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 emailed 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**.

Using Reports

Report activity can be divided into the following supervisor activities:

- **Creating Reports** ⁹⁰
Using the standard reports as templates, you can customize the settings and then save these as Saved Report templates.
- **Scheduling Reports** ⁹⁴
For saved reports scheduled as automatic you can activate or deactivate when the report should be run automatically.
- **Running Manual Reports** ⁹³
You can manually run a standard report or save report at any time. The report is initially displayed in a browser window from where you can select to print it or to export it to a number of file formats.

Standard Report Templates

The following report templates are provided:

Report	Description
Agent Summary Report ⁹⁷	This report type details the <u>call activity for agents</u> in a queue or for specific agents.
Alarm Report ⁹⁸	This report lists the warning and alarms that have occurred.
Call Details Report ⁹⁹	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 ¹⁰²	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 ¹⁰⁴	This report lists in chronological order all the events for the selected target or targets within the selected period.
Voicemail Report ¹⁰⁵	Reports based on the CCR's Voicemail Report template 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.

Standard Report Options

- All reports can be used as manual or automatic reports and allow specification of the **Report Date Range** and **Working Hours**.

Supported languages are *Dutch, English (UK), English (US), French, German, Italian, Brazilian Portuguese, Russian* and *Spanish*.

Report Options\Report		Agent Summary	Alarm Report	Call Details	Call Summary	Trace Report	Voicemail Report
Targets	Agent	✓	-	✓	✓	✓	-
	Queue	✓	-	✓	✓	-	-
	View	✓	✓ ^[1]	✓	✓	-	-
	DDI	-	-	✓	✓	-	-
	CLI	-	-	✓	✓	✓	-
	Account Code	-	-	✓	✓	-	-
	Call Reference	-	-	-	-	✓	-
	Voicemail	-	-	-	-	-	✓ ^[1]
Include	Include Internal	✓ ^[1]	✓ ^[1]	✓	✓	✓ ^[1]	✓ ^[1]
	Date Range	✓	✓	✓	✓	✓	✓
	Working Hours	✓	✓	✓	✓	✓	✓
	Include Saturdays	✓	✓	✓	✓	✓	✓
	Include Sundays	✓	✓	✓	✓	✓	✓
Group result by	Ungrouped	-	✓ ^[1]	✓	✓	✓ ^[1]	✓
	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 normally 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 which do not match the grouping being used, for example records that have no associated CLI in a report group by CLI, will be grouped 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. This the average answer time for the call will be how long it waited to be answered by any member of the queue, not by just the agent who did answer.

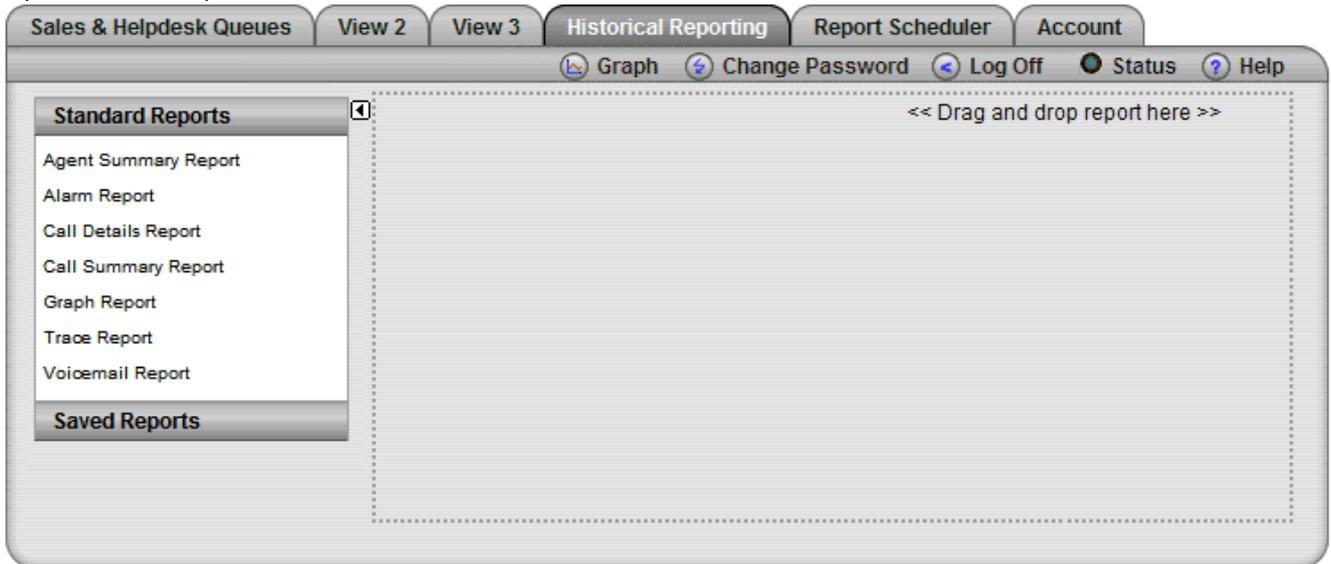
Non-IP Office Customer Call Reporter Agent and Queue Reporting

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

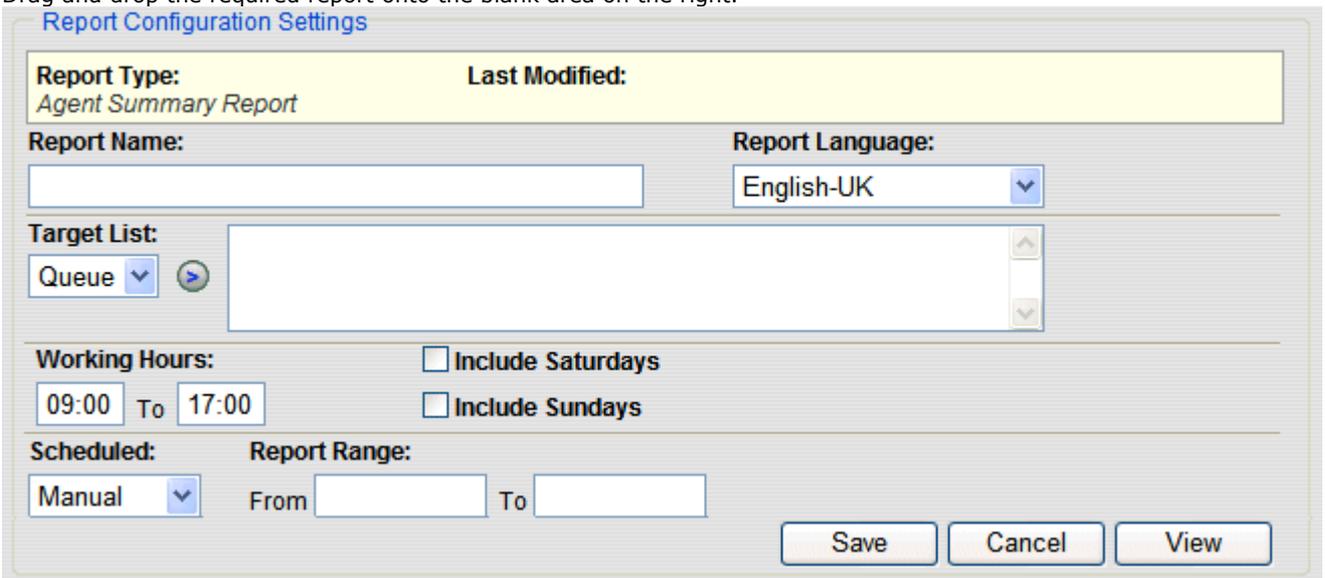
4.1 Creating Reports

Use the process below to create a report. The report can then be run immediately or saved for later use. Saved reports can be configured for use within automatic scheduling.

1. Click the **Historical Reporting** tab.
 - The / icons can be used to hide/show the list of standard and saved reports.
2. Click **Standard Reports** to view the available report templates or **Saved Reports** to use one of your existing saved reports as the template.



3. Drag and drop the required report onto the blank area on the right.

The screenshot shows the 'Report Configuration Settings' form. At the top, there is a yellow header bar with 'Report Type: Agent Summary Report' and 'Last Modified:'. Below this, the form is organized into several sections. The 'Report Name:' section has a text input field. The 'Report Language:' section has a dropdown menu set to 'English-UK'. The 'Target List:' section has a dropdown menu set to 'Queue' and a large text input field. The 'Working Hours:' section has two time input fields: '09:00' and '17:00', with 'To' between them. There are two checkboxes: 'Include Saturdays' and 'Include Sundays'. The 'Scheduled:' section has a dropdown menu set to 'Manual'. The 'Report Range:' section has 'From' and 'To' text input fields. At the bottom right, there are three buttons: 'Save', 'Cancel', and 'View'.

4. The settings for the report are displayed. The required fields are **Report Name**, **Target List** and **Report Range**.
5. **Set a Report Name**
Enter a **Report Name**., this will be shown at the top of the report. This is a required field.
6. **Select the Report Targets**
The **Target List** drop-down allows selection of what type of targets, for example queue or agents, are the target of the report.
 - Select the type of target required and then click on  to display a list from which matching possible targets can be selected. Once you have selected a target or targets they are displayed in the text box next to the **Target List** drop-down. The listed can be edited manually if required.
 - Alternatively, 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.
7. **Other Settings**
The range and type of settings will vary according to the type of report selected.

- 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.
- Include Internal**
 For reports based on the [Call Details Report](#)^[99] and [Call Summary Report](#)^[102] templates, select whether the report should include internal calls. Other reports include internal calls automatically.
- Group Results By**
 By default 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](#)^[99], [Call Summary Report](#)^[102] and [Voicemail Report](#)^[103] 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](#)^[97] template are automatically grouped by queue. Reports based on the [Alarm Report](#)^[98] and [Trace Report](#)^[104] 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 which do not match the grouping being used, for example records that have no associated CLI in a report group by CLI, will be grouped 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. This the average answer time for the call will be how long it waited to be answered by any member of the queue, not by just the agent who did answer.
- 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 reports based on the [Call Details Report](#)^[99] template. It allows you to select which calls are included in the report based on the end state of the call.

8. **Set when the report should occur**

By default **Scheduled** field is set to **Manual** which means that you can run the report whenever you require it.

Manual

Use this setting for reports that are only run when you select it. The report configuration settings are displayed to allow changes if required before the report runs. The report is displayed in the browser window but can then be exported or printed. See [Running Manual Reports](#)^[93].

Scheduled: **Manual** Report Range: From To

- Use the **Report Range** to specify the period that should be covered by the report.
- If you don't want to save the report as a template for future use click **View** to run the report now. The report is displayed in a [browser window](#)^[93] 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**, running the report manually first allows you to confirm that it contains the data and targets required.

Automatic

Use this setting for reports that will run automatic at repeated regular intervals. When select 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](#)^[94].

Scheduled: **Automatic** Report Period: **Daily** **1**

Report Format: **Crystal** Printer: **Select Network Printer** Copies: **1** E-mail:

- Report Period: Range = 1 to 52.**
 These fields set the range of data to include in the report. Select **Daily**, **Weekly** or **Monthly**. The number of days or weeks is counted back from the date that the report is actually run. For example **Daily 1** will report on the previous day, **Weekly 2** will report on the previous 2 weeks. Months are from the last full month, for example if a report set to **Month 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 from either **Adobe PDF**, **Word**, **Excel**, **Rich Text** or **Crystal**. Note that if the report is [scheduled](#)^[94] and sent in **Excel** format, formatting is not applied.

- **Printer**

Select the printer that the report should be sent to if you want it to be printed automatically. Only network printers available to the IP Office Customer Call Reporter server PC appear 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.

- **Email Address**

Enter an email address if you want the report to be sent to an email account.

9. When the report settings are as required click **Save**. The report will be saved under **Saved Reports**. 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 an error message and a prompt to give the report a different name. When the report has been saved a message window opens stating that the report was saved successfully. Click **OK** to continue. If you saved an automatic report you need to schedule when the report should run. For more information, see [Scheduling Reports](#).
10. Reports **Scheduled** as **Automatic** still need to be added to the [Report Scheduler](#) list in order to run.

4.2 Running Manual Reports

You can manually run a report at any time after the report has been created. The report is displayed in a browser window for viewing. You can then select to print the report or save it to a number of file formats.

- **Important: Manual Reports Use Popup Windows**

Manually run reports require your browser to support popups. Depending on your browsers settings you may be prompted on whether you want to allow the pop-up when you run the report. If the report does not appear you will have to enable popups for the IP Office Customer Call Reporter server website through your browser's options. Note that many security software suites also block popups unless you allow them.

To manually run a report

1. Select the **Historical Reporting** tab.
2. Click on **Standard Reports** to select a standard report template or click on **Saved Reports** to view a list of your previously saved reports.
3. Drag and drop the required report on the main area of the window. All the report details are shown.
4. Adjust the report details if necessary.
5. In the **Report Scheduling** area select the scheduled type as **Manual**.
6. Click **View**. A new web browser window opens containing the report.

Report type		Target Name	Supervisor Name
Trace Report		Agent *	Mark Gallagher
Extn2804			
Date-Time	Event Name	Agent	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

7. When you are viewing the report you have the following options available.

- **Print**

Click and select the printer that the report should be sent to.

- **Export**

Click to export the file. The file formats available are:

- **Adobe Acrobat (PDF)**
- **Crystal Reports (RPT)**
- **Microsoft Excel 97-2000 (XLS)**
- **Microsoft Excel 98-2000 - Data only (XLS)**
- **Microsoft Word (RTF)**
- **Microsoft Word - Editable (RTF)**
- **Rich Text Format (RTF)**

4.3 Scheduling Reports

The **Report Scheduler** tab shows all reports [you have created](#)⁹⁰ that have been saved with their **Scheduled** setting set to **Automatic**. A list of the last 10 reports that have been run is shown at the bottom of the screen. This includes both automatically scheduled reports and manually run reports.

1. Ensure you have [created a report](#)⁹⁰ as required and set the **Scheduled** option as **Automatic**. The report destination, format and time range that it covers are set when creating and editing the report.
2. Click the **Report Scheduler** tab.

The screenshot shows the 'Report Scheduler' tab in a software interface. At the top, there are navigation tabs: 'Sales & Helpdesk Queues', 'View 2', 'View 3', 'Historical Reporting', 'Report Scheduler' (selected), and 'Account'. Below these are utility buttons: 'Graph', 'Change Password', 'Log Off', 'Status', and 'Help'. The main content area is divided into three sections:

- Scheduled Reports:** A table with two columns: 'Report Name' and 'Scheduled Details'.

Report Name	Scheduled Details
All Queue Call Details	Daily at 09:00
All Agents Summary	Daily at 13:00
Trace Report for Agents	Daily at 09:00
All Alarms	Unscheduled
Voicemail Report	Weekly on everyMonday at 09:00
- Scheduling Properties:** A section with a dropdown menu set to 'Monthly', a 'Start Time' field set to '10:22', radio buttons for 'This Day' (with a dropdown set to '31') and 'The' (with a dropdown set to 'Last') followed by a day dropdown set to 'Friday', and an 'Update' button.
- Last 10 Run Reports:** A table with five columns: 'Report Name', 'Report Type', 'Result', and 'Reason'.

Report Name	Report Type	Result	Reason	
All Queue Call Details	29/04/2008 09:01:10	A	False	Printing reports failedand sending email failed
Trace Report for Agents	29/04/2008 13:00:54	A	True	
All Agents Summary	26/04/2008 13:00:34	A	True	
All Queue Call Details	27/04/2008 09:00:45	A	False	Printing reports failedand sending email failed
Trace Report for Agents	27/04/2008 13:00:28	A	True	
All Agents Summary	27/04/2008 13:00:28	A	True	
All Queue Call Details	28/04/2008 09:00:58	A	False	Printing reports failedand sending email failed

3. To schedule a report or to change the schedule, click the report to be amended in the **Scheduled Reports** section.
4. Select the required option in the **Scheduled 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**.
 - **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 days in the month, the setting is considered to be the last calendar day of the month. For example, if you select the report to always be run on the 31st day of a month, the report will be run on the 30th day of a month when there are only 30 days in the month.
 - **Unscheduled**
Stop running the report on an automatic schedule.
5. Click **Update** to save your changes.

4.4 Modifying a Report

1. Select the **Historical Reporting** tab.
2. Click **Saved Reports** to view a list of the saved reports.
3. Drag and drop the required report on the main area of the window and amend the details in the same way as for [creating a report](#)^[90].
4. Click **Save** to save the changes.

4.5 Deleting a Report

1. View the **Historical Reporting** tab.
2. Click **Saved Reports** to view a list of all the saved reports.
3. Click  next to the report that you want to delete. A confirmation window opens. Click **OK** to delete the report or **No** to keep the report. This will also delete any scheduled reports based on the report.

4.6 Standard Report Templates

The following report templates are provided:

Report	Description
Agent Summary Report ⁽⁹⁷⁾	This report type details the <u>call activity for agents</u> in a queue or for specific agents.
Alarm Report ⁽⁹⁸⁾	This report lists the warning and alarms that have occurred.
Call Details Report ⁽⁹⁹⁾	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 ⁽¹⁰²⁾	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 ⁽¹⁰⁴⁾	This report lists in chronological order all the events for the selected target or targets within the selected period.
Voicemail Report ⁽¹⁰⁵⁾	Reports based on the CCR's Voicemail Report template 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.

Non-IP Office Customer Call Reporter Agent and Queue Reporting

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

4.6.1 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										
17/10/2008 - 17/10/2008 09:00 - 17:00										
Report Type		Target Name					Supervisor Name			
Agent Summary		Queue HG1SIM1					Mark Gallagher			
Queue	HGEnabled Time	Ringing Time	Talk Outbound	Talk Inbound	Talk Internal	Busy Not Available	ACW Time	Hold Time	Off Hook Time	Non-Queue Time
HG1SIM1										
Extn2101	01:50:46	00:07:24 6.68%	00:00:00 0.00%	00:00:00 0.00%	00:00:00 0.00%	00:00:00 0.00%	00:00:00 0.00%	00:00:00 0.00%	00:00:00 0.00%	00:00:00 0.00%
Extn2102	01:50:46	00:07:03 6.36%	00:00:00 0.00%	00:00:00 0.00%	00:06:00 5.42%	00:00:00 0.00%	00:00:00 0.00%	00:00:00 0.00%	00:00:00 0.00%	00:00:00 0.00%
Extn2103	01:50:46	00:07:17 6.58%	00:00:00 0.00%	00:00:00 0.00%	00:00:46 0.69%	00:00:00 0.00%	00:00:00 0.00%	00:00:00 0.00%	00:00:00 0.00%	00:00:00 0.00%
Extn2104	01:50:44	00:06:35 5.95%	00:00:00 0.00%	00:00:00 0.00%	00:06:56 6.26%	00:00:00 0.00%	00:00:00 0.00%	00:00:01 0.02%	00:00:00 0.00%	00:00:00 0.00%
Summary	07:23:02	00:28:19 6.39%	00:00:00 0.00%	00:00:00 0.00%	00:13:42 3.09%	00:00:00 0.00%	00:00:00 0.00%	00:00:01 0.00%	00:00:05 0.02%	00:00:00 0.00%

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 state.
- **ACW Time**
The total time that the agent was in the after call work 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 but not connected to a trunk. It includes picking up handset, dialling 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:

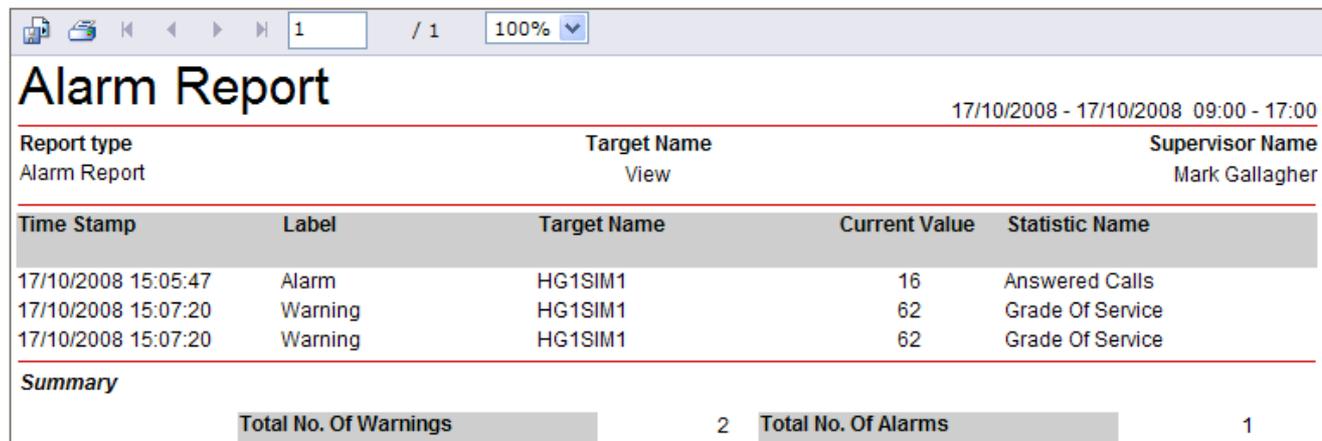
Call Type		Incoming		Outgoing	
		Internal	External	Internal	External
Direct Call	Ringing	Non-Queue Time	Non-Queue Time	Talk Internal	Talk Outbound
	Connected	Non-Queue Time	Non-Queue Time	Talk Internal	Talk Outbound
Queue Call	Ringing	Ringing Time	Ringing Time	-	-
	Connected	Talk Inbound	Talk Inbound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

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.

4.6.2 Alarm Report

This report lists the warning and alarms that have occurred.

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



The screenshot shows a web-based interface for an Alarm Report. At the top, there are navigation icons and a page indicator '1 / 1' with a '100%' zoom level. The main title 'Alarm Report' is displayed on the left, and the report period '17/10/2008 - 17/10/2008 09:00 - 17:00' is on the right. Below the title, there are three columns: 'Report type' (Alarm Report), 'Target Name' (View), and 'Supervisor Name' (Mark Gallagher). A table follows with columns: 'Time Stamp', 'Label', 'Target Name', 'Current Value', and 'Statistic Name'. The table contains three rows of data. Below the table is a 'Summary' section with two rows: 'Total No. Of Warnings' (2) and 'Total No. Of Alarms' (1).

Report type	Target Name	Supervisor Name
Alarm Report	View	Mark Gallagher

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

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

4.6.3 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 not available if the report target is an agent or agents.
 - Also **Overflowed Lost** and **Overflowed Answered** are only included in reports on the queue from which the call overflowed.
- **Group Result by:** *Ungrouped, 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 which do not match the grouping being used, for example records that have no associated CLI in a report group by CLI, will be grouped 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. This the average answer time for the call will be how long it waited to be answered by any member of the queue, not by just the agent who did answer.
- **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				
<u>Ungrouped</u>									
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									
		Total Calls	28	External Inbound Calls		23			
		Internal Calls	5	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.
- **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 display 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**
- **No Answer**
- **Overflowed Answered**
- **Enquiry Answered**
- **Lost**
- **Overflowed Lost**
- **Holding**
- **Transferred**

- The status **Answered** is applied to all calls that go to voicemail.

- **Reference**

The unique [reference](#)^[198] number for a particular call. This number is also reported in reports based on the [Trace Reports](#)^[104] 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. The summary details the total call, total internal calls, total incoming external calls and the total outgoing external calls. An additional summary is included at the end of the report for the whole report.

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	<ul style="list-style-type: none"> The Call Reference, Direction, Agent, Number and Queue are those of the the answered call. The Date/Time are when the call was held. The Duration is the time from the call being held to the transfer being completed. The DDI is that of the original call. The Queue Time is blank. The Status is Holding.
Transferred Call	<p>Reports the same details as the original answered call except:-</p> <ul style="list-style-type: none"> The Date/Time are when the transfer was completed. The Queue Time is blank. 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	<p>Note that this record is not present for unsupervised transfers.</p> <ul style="list-style-type: none"> Date/Time is the point ringing is heard. Call direction is internal. Number is the calling parties number. DDI is the number dialled. Queue is the target queue or blank if agent. Queue Time is the ringing time of the enquiry call. Agent is the agent answering the call. Duration is from the agent answering to the transfer being completed. Status is Enquiry Answered. Call Reference is a new call reference.
Answered Call	<p>Reports the same details as the original transferred call except:-</p> <ul style="list-style-type: none"> The Date/Time are when the transfer was completed. The Queue is the target of the transfer. The Queue Time is the time from the initial queuing at the transferee until the transfer is completed. The Duration is from the transfer initiation to the end of the call leg (ie. it includes the duration of the enquiry call).

4.6.4 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, 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 which do not match the grouping being used, for example records that have no associated CLI in a report group by CLI, will be grouped 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. This the average answer time for the call will be how long it waited to be answered by any member of the queue, not by just the agent who did answer.
- **Optional:** Whether the report includes internal calls is an option.

My Call Summary Report											
											01/12/2008 - 22/12/2008 9:00 - 17:00
Report Type	Target Name							Supervisor Name			
Call Summary Report	Queue							Mark Gallagher			
Ungrouped	Total Calls	Answered Calls	Lost Calls	Overflowed Answered	Overflowed Lost	Routed To Voicemail	No Answer	Avg. Speed to Answer (%)	Avg. Speed to Answer (Time)	Avg. Abandon Time	Grade Of Service (%)
MainB	1	1	0	0	0	0	0	0.00			0.00
Queue	23	17	9	0	0	0	0	52.94	00:00:01	00:00:08	37.50
Queue2	2	2	0	0	0	0	0	0.00	00:00:02		0.00
Total Calls					26	Average Speed to Answer (%)					50.00
Answered Calls					20	Average Speed to Answer (Time)					00:00:01
Lost Calls					9	Average Abandon Time					00:00:08
Overflowed Answered					0	Grade of Service					36.00
Overflowed Lost					0	Answer Threshold					1
Routed To Voicemail					0	Lost Call Threshold					1
No Answer					0	External Outbound					0

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

- **Total Calls**
The total number of answered, lost, overflowed answered, overflowed lost and routed to voicemail calls. The value used in the report summary is the total unique presented calls.
- **Answered Calls**
The number of [queue calls](#)⁽¹⁹⁷⁾ answered. This includes calls that were **Routed to Other**.
- **Lost Calls**
The number of queue calls lost. Calls lost before the report's **Lost Call Threshold** are not counted.
- **Overflowed Answered**
The number of queue calls that overflowed and were then answered. This value is 0 when the report target is an 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.
- **Routed to Voicemail**
The number of queue calls routed to voicemail. This value is not reported for agents and reports grouped by agents.
- **No Answer**
The number of times a call was presented to an agent and not answered before being presented to another agent.

The following values are shown unless the report target is an agent (for which the values are blank).

- **Average Speed to Answer %**
The number of calls answered within the report's specified answer threshold time, divided by the total number of calls answered.

- **Average Speed to Answer Time**
The sum of the answer time for queue calls answered divided by the number of queue 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.

Note

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

4.6.5 Trace Report

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

- **Target options:** [Agent](#)^[188], [CLI](#)^[192] or [Call Reference](#)^[198].
 - The call reference for individual calls can be obtained from reports based on the [Call Details](#)^[99] report template.
- **Group Result by:** *Ungrouped* (fixed).

The screenshot shows a web-based interface for a Trace Report. At the top, there are navigation icons and a status bar showing '1 / 1' and '100%'. The main title is 'Trace Report' with a date and time range of '10/16/2008 - 10/16/2008 9:00 AM - 5:00 PM'. Below the title, there are three columns: 'Report type' (Trace Report), 'Target Name' (Agent), and 'Supervisor Name' (Mark Gallagher). A red line separates this header from the main data table. The data table has five columns: 'Date-Time', 'Event Name', 'Agent', 'Number', and 'Reference'. The 'Agent' column consistently shows 'Extn2804'. The 'Reference' column shows 'NULL' for all events. The events listed are: Idle, LoggedIn, Available, Available, Available, Queue Disabled, LoggedOff, Queue Disabled, and Queue Disabled.

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.

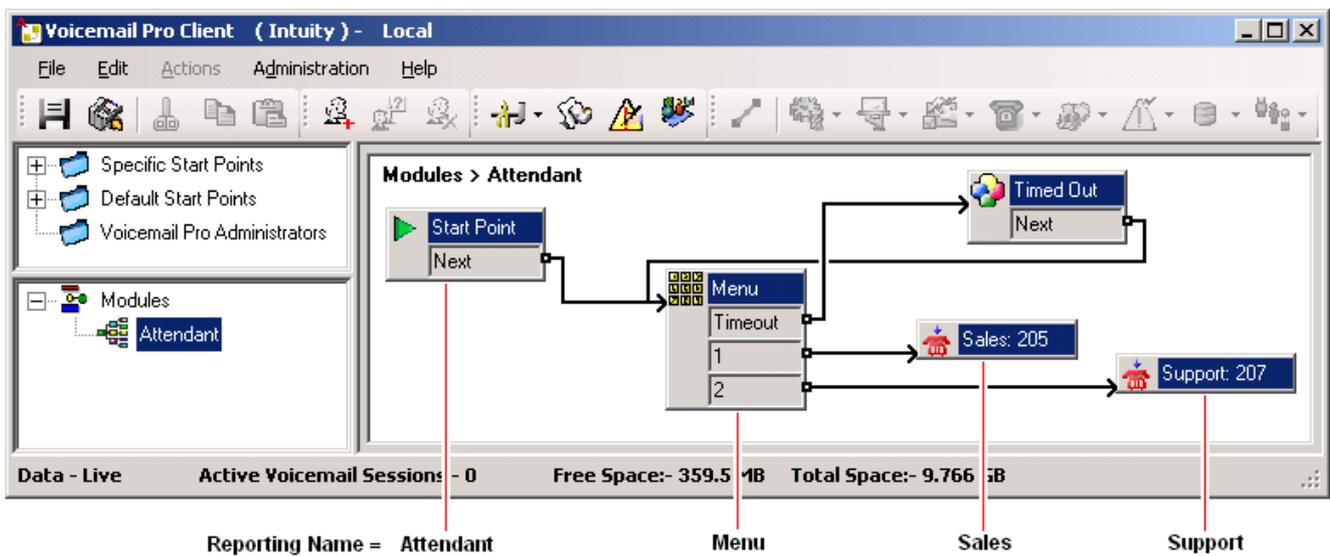
- **Date - Time**
The date and time of the event.
- **Event Name**
 - **Available:** The agent became available to answer calls.
 - **ACW:** The agent when into the After Call Work state.
 - **BNA:** The agent entered Busy Not Available state.
 - **Busy:** The agent went off hook.
 - **Holding:** The agent put a call on hold or parked a call.
 - **Idle:** The agent returned to the idle state.
 - **Incoming:** An incoming external call was received.
 - **Internal Made:** An internal call was made and connected/reconnected.
 - **Internal Received:** An internal call was received.
 - **Logged Off:** The agent logged off.
 - **Lost:** The caller disconnected before being answered.
 - **Logged In:** The agent logged in.
 - **No Answer:** The agent did not answer the call when it was presented to them.
 - **Outgoing:** An outgoing external call was made.
 - **Queue Disabled:** The agent's membership of a queue was disabled.
 - **Ring:** A call is presented.
 - **Transferred:** The call has been successfully transferred.
- **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.
- **Reference**
The unique call [reference](#)^[198] number of the call. Shown for events that involve a call, otherwise **Null**.

4.6.6 Voicemail Report

Reports based on the CCR's Voicemail Report template 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, for example records that have no associated CLI in a report group by CLI, will be grouped 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. This the average answer time for the call will be how long it waited to be answered by any member of the queue, 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](#) 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 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 may want to name all those action "Sales". This will result in a single reporting line in the Voicemail report for calls that went to from voicemail to sales independent 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 on the action.
2. Select the **Reporting** tab.



The screenshot shows a dialog box titled "Properties for Transfer Sales" with a close button (X) in the top right corner. The dialog has five tabs: "General", "Entry Prompts", "Specific", "Reporting", and "Results". The "Reporting" tab is selected and active. Inside the "Reporting" tab, there are three checkboxes: "Flag the current call has been answered by Voice Mail" (unchecked), "Request to call back the current caller" (unchecked), and "Send reporting information" (checked). Below these checkboxes is a "Reporting" section with three text input fields: "Group name" (containing "Sales"), "Topic" (empty), and "Annotation" (empty). At the bottom of the dialog are three buttons: "OK", "Cancel", and "Help".

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 the Voicemail Report template. None of the other fields are used by IP Office Customer Call Reporter.
5. Click **OK**.

Chapter 5.

Agent

5. Agent

? 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 phone on the IP Office telephone system. Note that T3 Series and T3 IP Series phones are not currently supported.
- The agent's phone status is recorded by IP Office Customer Call Reporter. For example when they logged in to a phone, answer a call, log off, etc.
- The agents are added to queues and then answer call targeted to those queues. An agent can be a member of several queues.
- Using the web client allows the agent to see the same views as their supervisor. However unlike the supervisors view the agent will only see their own statistics and those for queues which they belong.

Queues	Overflowed Answered	Overflowed CallsWaitg	Transferred	Queue State	Answered Calls
Queue	0	0	0	In Service	0
TOTAL	0	0	0		0

Agents	Agent State(Q) T	Answered Calls	Agent State(Q)
Agent A	00:00:32	0	Available

Example web client when logged in as an agent.

- **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 may have selected a supervisor whose views do not include any queues to which you belong.

Tabs

- [View 1/2/3](#) ⁽¹¹⁾
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.

Buttons

	Graph ⁽³¹⁾ Display a separate graph of a statistic for a selected queue or agent.
	Change Password ⁽¹⁵⁾ While logged in to IP Office Customer Call Reporter, you can change your password.
	Log Off ⁽¹⁸⁾ 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 PC.
	Status ⁽¹³⁾ This button indicates the overall status of IP Office Customer Call Reporter. Clicking on the icon displays a System Settings ⁽¹³⁾ tab which shows the status of the individual IP Office Customer Call Reporter components. <ul style="list-style-type: none"> • Green Circle - On: IP Office Customer Call Reporter is running. • Yellow Bars - Slow Flash: Some parts of IP Office Customer Call Reporter are still in the process of starting. • Red Box - Flash: There may be a problem in IP Office Customer Call Reporter.



Help 

Access this documentation in online format. Where possible the appropriate page for the current IP Office Customer Call Reporter screen is displayed.

5.1 Logging In (Quick Start)

As an agent there are 2 main parts to using IP Office Customer Call Reporter. Logging in on a phone 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	You initial password is blank but you will be asked to set one as part of the logging in process.
• Your Email Address	An email address is highly recommended as it allows you to use the Forgot Password function. If one has already been entered in the IP Office configuration it will be shown.
• 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 phone at which you are logging on) and login code to do this.

- If the phone 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 email address. For full details of the login process refer to [Logging In](#).

- 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.

5.2 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.

To view your own statistics

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

The screenshot shows a web client interface with three view tabs (View 1, View 2, View 3) and a navigation bar with buttons for Graph, Change Password, Log Off, Status, and Help. Below the navigation bar is an 'Alarm Ticker All Views' section. The main content area contains two tables:

Queues	Overflowed Answered	Overflowed CallsWaitg	Transferred	Queue State	Answered Calls
Queue	0	0	0	In Service	0
TOTAL	0	0	0		0

Agents	Agent State(Q) T	Answered Calls	Agent State(Q)
Agent A	00:00:32	0	Available

Below the tables is an 'Alarm List All Views' section.

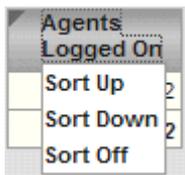
2. For details of what the different statistics mean see [Statistics](#) ³⁶.

Viewing Your Own Statistics

- To view your own statistics in any queue, click on the queue name.
- The **TOTAL** is shown as a summary for all queues. It cannot be used selected to display your performance in all the queues.

Adjusted Statistics

Once a statistic has been added to a view, its name appears 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**
Sort 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 (Yellow)	Alarm (Red)	Acknowledged (Blue)
-------------------------------------	----------------------------	-----------------------	-------------------------------

Alarms and warnings are automatically cleared when the cell returns back 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 back 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](#)^[32] 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 alarm or 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 NA (paper work)
- The 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.

5.3 Statistic Colors

A number of different color backgrounds are used while displaying statistics. The following colors are used for normal statistics. The colors for changing statistic number values are optional (enabled by the [supervisor's account setting](#)^[32] **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.

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

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

5.5 Agent Phone Controls

IP Office Customer Call Reporter tracks your status through your phone extension. Many of the states it reports are automatically determined by the system but you may be able to control the following key states through your phone.

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

- [Logging In](#) ^[11]
The state 'Logged In' refers to being logged onto a phone on the telephone system and therefore able to start receiving and making calls. In order to login you need to know your extension number and your login code. When you login at an extension, your user settings are applied to that phone. 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](#) ^[11]
Logging out stops you from receiving any further calls. If the log off is successful you will either see the name of the phone's normal user on the display or **NoUser**.
- [After Call Work](#) ^[11]
- [Busy Not Available](#) ^[11]
- [Queue Membership](#) ^[11]
- [Phone Manager](#) ^[12]

A range of other phone controls and their effects on statistics are discussed in the [Call Scenarios](#) ^[13] section. They are:

- [Bridged Call Appearances](#) ^[17].
- [Call Pickup](#) ^[17].
- [Do Not Disturb](#) ^[18].
- [Call Coverage](#) ^[18].
- [Follow Me](#) ^[18].
- [Forwarding Calls](#) ^[18].
- [Internal Twinning](#) ^[18].
- [Line Appearances](#) ^[18].
- [Mobile Twinning](#) ^[18].
- [Transferring Calls](#) ^[14].
- [Voicemail](#) ^[17].

? Programmable Button

Most Avaya phones 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.

? Short Code

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

5.5.1 Logging In

The state 'Logged In' refers to being logged onto a phone on the telephone system and therefore able to start receiving and making calls. In order to login you need to know your extension number and your login code. When you login at an extension, your user settings are applied to that phone. 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**^[196]

Most Avaya feature phones supported by IP Office have [programmable buttons](#)^[196]. The IP Office system maintainer can program each of these buttons with features for use by the phone's user.

- If the phone 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**^[198]

The IP Office telephone system maintainer can setup dialing [short codes](#)^[198] that allow 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.

- **Phone Manger Agent Login/Logout**

For agents who [hot desk](#)^[193], Phone Manager can be used to [login](#)^[193] to the required phone 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.

5.5.2 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 phone's normal user on the display or **NoUser**.

- **Programmable Button**^[196]
Most Avaya feature phones supported by IP Office have [programmable buttons](#)^[196]. The IP Office system maintainer can program each of these buttons with features for use by the phone'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**^[198]
The IP Office telephone system maintainer can setup dialing [short codes](#)^[198] that allow special features to be accessed by dialing the short code number.
 - If the phone does not have a **Logof** button, you may be able to dial a short code. The default for most IP Office telephone systems is *36.
- **Phone Manger Agent Login/Logout**
For agents who [hot desk](#)^[193], Phone Manager can be used to [login](#)^[193] to the required phone 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.

5.5.3 After Call Work

After Call Work (ACW)

After Call Work indicates that the agent is not available to receive [queue calls](#)^[197] 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](#)^[117]. 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](#)^[206] feature briefly applied to the end of all calls including queue calls is also reported as **After Call Work** state.

- **Programmable Button**^[196]

Most Avaya feature phones supported by IP Office have [programmable buttons](#)^[196]. The IP Office system maintainer can program each of these buttons with features for use by the phone's user.

- **After Call Work Button**

You press the **ACW** button on your phone. The button will indicate when you are in After Call Work state (manual or automatic). You can press the **ACW** button on your phone to manually exit After Call Work state.

- 2410, 5410, 2420, 5420, 4610, 5610, 5620, 5621, 4620, 4621, 4625, 1708, 1716.

- **Dialing Short Codes**

The short code features **Start ACW** and **Clear ACW** can be used to manually start and clear After Call Work.

- **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 phone 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 phone users, the IP Office phone system normally 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 allow analog phone users who have just finished a call the opportunity to start dialing a short code or to make a call before another incoming call is presented to them.

For users set as agents, the period of wrap up applied to their phone is reported as their being in [After Call Work](#)^[186] 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.

5.5.4 Busy Not Available

Busy Not Available (NA)

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 phone, see [Agent Phone Controls](#)^[114]. This also requires the agent to select one of the [reason codes](#)^[197] displayed on their phone 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.

Reason Codes

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

- 2410, 5410, 2420, 5420, 4610, 5610, 5620, 5621, 4620, 4621, 4625, 1708, 1716.

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 phone that allows reason code selection but fails to select a reason. For example if they enabled Busy NA 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 phones that do not allow the selection of a reason code.

- **Programmable Button**^[196]

Most Avaya feature phones supported by IP Office have [programmable buttons](#)^[196]. The IP Office system maintainer can program each of these buttons with features for use by the phone's user.

- You can select Busy Not Available state by pressing a **DND** (Do Not Disturb) or **SAC** (Send All Calls) button on your phone. You will then be requested to select a reason code from a list displayed on the phone. The available reason codes are configured by the IP Office system maintainer.

- **Dialing Short Code**^[198]

The IP Office telephone system maintainer can setup dialing [short codes](#)^[198] that allow 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 allow the entry of a reason code and so is reported just **Busy NA**.
- Dial a **Do Not Disturb Off** short code. The default short code is ***09**.

- **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](#)^[197] state with the default [reason code](#)^[197] **Busy NA**. The icon can also be used to exit the state.

5.5.5 Enable/Disable Membership

? 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 normally have been **Available**.
 - On many Avaya display phones, a **G** on the display indicates that the user currently has their membership of at least one group enabled.
- **Programmable Button** ⁽¹⁹⁶⁾
Most Avaya feature phones supported by IP Office have [programmable buttons](#) ⁽¹⁹⁶⁾. The IP Office system maintainer can program each of these buttons with features for use by the phone'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** ⁽¹⁹⁸⁾
The IP Office telephone system maintainer can setup dialing [short codes](#) ⁽¹⁹⁸⁾ that allow 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.
- **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.

5.5.6 Phone Manager Controls

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

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

- **Phone Manger Agent Login/Logout**

For agents who [hot desk](#)^[193], Phone Manager can be used to [login](#)^[193] to the required phone 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 ^[191] state with the default reason code ^[197] Busy NA . 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 ^[192] application. It is not supported by IP Office Customer Call Reporter. The equivalent state for IP Office 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 ^[206] .
	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 6.

Administrator

6. Administrator

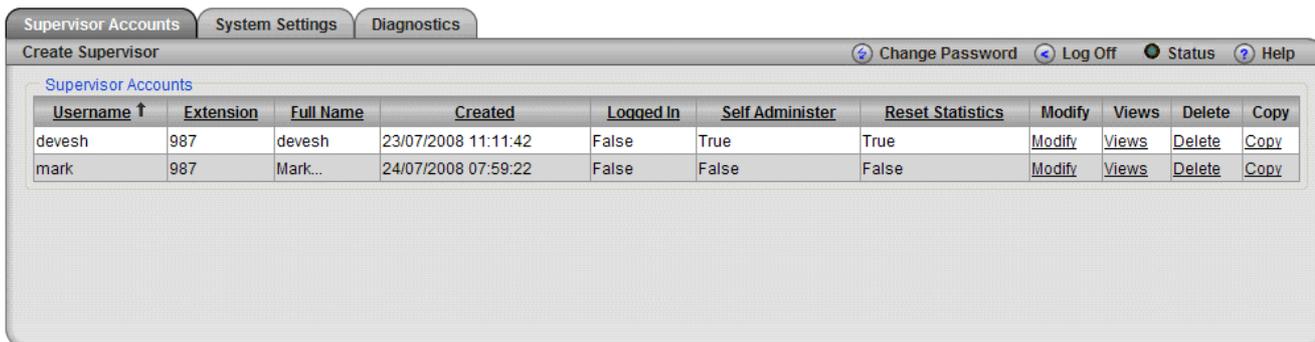
? Administrator

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](#) as the administrator you view a listing of all the supervisor accounts. You can then [create and modify supervisor accounts](#). In the [System Settings](#) 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](#).



Example web client when logged in as an administrator.

• Important

The first time you log in as the administrator, it is recommended that you select the [System Settings](#) tab and confirm the information in the **Preference Details** section, especially your unique email address.

Tabs

- [Supervisor Accounts](#)
This tab displays the existing supervisor accounts created by the administrator. It can be used to create and modify accounts.
- [System Settings](#)
This tab allows adjustment of system wide IP Office Customer Call Reporter settings such as the email server.
- [Diagnostics](#)
This tab should only be used under guidance of an Avaya support engineer when requested.

Buttons

	Change Password While logged in to IP Office Customer Call Reporter, you can change your password.
	Log Off 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 PC.
	Status This button indicates the overall status of IP Office Customer Call Reporter. Clicking on the icon displays a System Settings tab which shows the status of the individual IP Office Customer Call Reporter components. <ul style="list-style-type: none"> • Green Circle - On: IP Office Customer Call Reporter is running. • Yellow Bars - Slow Flash: Some parts of IP Office Customer Call Reporter are still in the process of starting. • Red Box - Flash: There may be a problem in IP Office Customer Call Reporter.
	Help Access this documentation in online format. Where possible the appropriate page for the current IP Office Customer Call Reporter screen is displayed.

6.1 Logging In

This refers to logging in to the IP Office Customer Call Reporter web client, not to [logging in to a phone](#)^[114] to receive calls.

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

- Enter your **Username** and **Password**.

- If you have forgotten your password but have an email address known to the IP Office Customer Call Reporter system, click [Forgot Password](#)^[116].
- If you are an agent logging in for the first time leave the password field blank. You will then be asked to set your IP Office Customer Call Reporter password and enter your unique email address as part of the login process.

- 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**.

- Click **Logon**.

- Agent's First Time Login**

If you are an agent logging in for the first time, the **Set Agent Password** window will appear. Enter a password of your choice and then click **OK**. Your unique email address is also requested. You need to enter an address in order to use the [Forgot Password](#)^[116] feature in future.

- 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](#)^[118], the **Select Role** window will appear. Select the required role and click **OK**.

- The web client will open in the appropriate mode: [Agent](#)^[108], [Supervisor](#)^[20] or [Administrator](#)^[122].

- 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 Controlling 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 **Supervisor Accounts** tab. All the existing supervisor accounts are listed together with their current status.
2. Click the **Create Supervisor** link. The **Create New Supervisor Account** window opens.

3. Complete the fields with the relevant details.

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 ^[18] .
Password	This is the password used for browser access to IP Office Customer Call Reporter.
Confirm Password	All supervisors, even those without Self Administer rights, can use the Change Password ^[15] option to change their 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.
Email	The unique email address associated with the supervisor. This is used for the forgotten password ^[16] feature.
Self Administer	If selected by the administrator, the supervisor has self administration rights and is able to edit their their Account Details ^[32] . Supervisors without this option are only able to edit views.
Reset Statistics	Supervisors for who the Administrator enabled the Reset Statistics option can reset all the statistics currently being used for views. This will affect all supervisor and agent views. It does not affect the statistics used for historical reports.

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 themselves if required through their [Account Details](#)^[32] tab.

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

Field	Description
Views	These fields allow you to rename the 3 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 PC. The sound is played to all users looking at that supervisor's views. <ul style="list-style-type: none"> This option is off by default. If enabled, an audio plug-in is required for all user browsers. Use either Quick Time (Non IE browsers) or Windows Media Player/Center (IE).
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.

6. Click **Finish** to create the new supervisor account. The new account will be listed in the **Supervisors Accounts** tab.
7. Once the account has been created you can [create views](#)^[128] 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 amend the details as necessary.
4. Click **Finish** in the last window. The details are updated.
5. Click **Back to Supervisors Summary** to return to the list of supervisor 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](#)^[13].

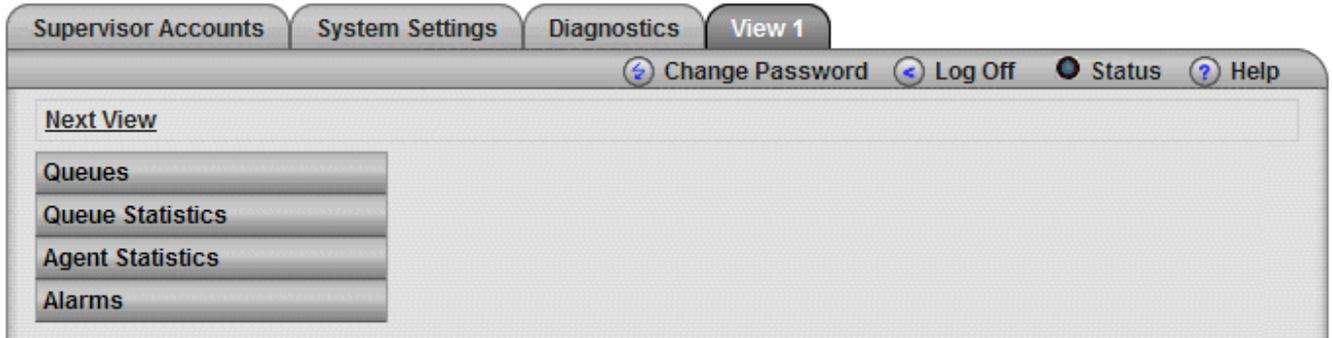
6.3 Amending Supervisor Views

Each supervisor has 3 views which appear as their first 3 tabs. Each view can be configured to show different queues and statistics. The queues usable are those selected for the [supervisor account](#)^[125].

All supervisors, even those without self administration rights, can also [adjust their own views](#)^[24]. Supervisors can also rename their 3 views.

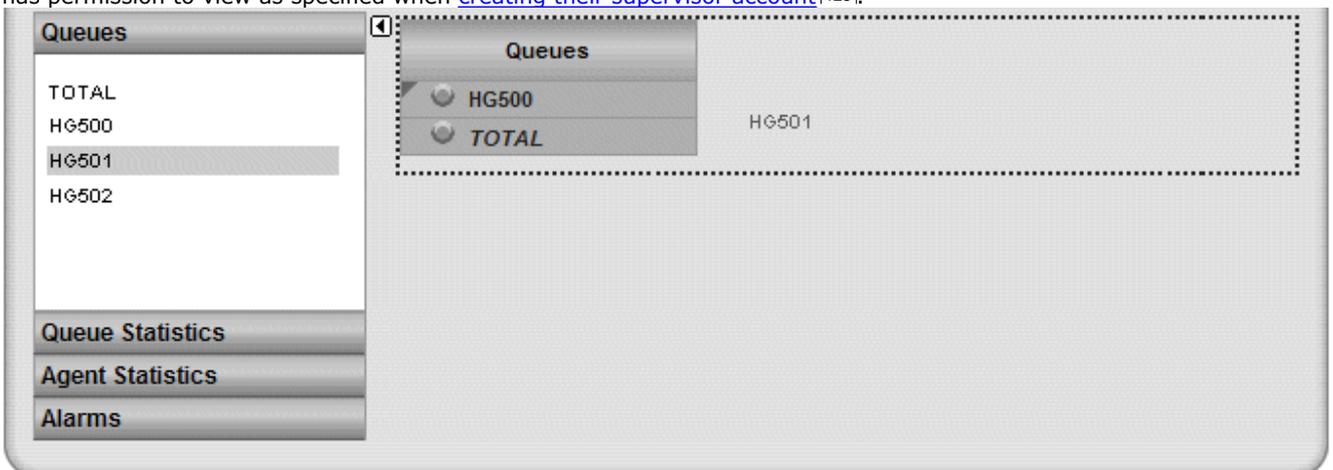
To create a view

- A. Select the **Supervisor Accounts** tab and locate the supervisor in the list of supervisor accounts.
- B. Click the **Views** link.



1. Adding Queues

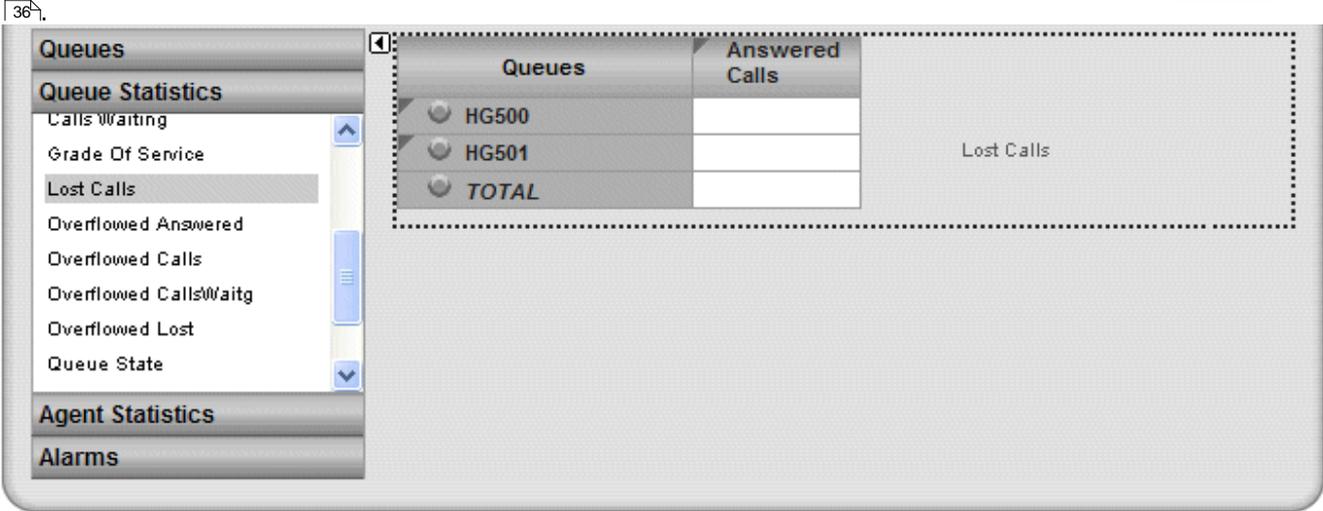
By default all the queues configured for the supervisor are already shown. These are the Queues that the supervisor has permission to view as specified when [creating their supervisor account](#)^[125].



- To add a queue to the view, click **Queues**. Drag and drop the required queue into the view and when the hatched lines appear drop it into that area.
- **TOTAL** can be used to add a summary row to the view. For statistics that are averages, the total will be a [weighted average](#)^[200]. For other statistics, it provides a simple total of the column. For the **Longest Waiting Time** it is blank.
- To remove a queue from the view, click on the circle next to its name and select **Hide**.
- To adjust the order of the queues, click on the  corner icon and drag the queue to the required position.

2. Add Queue Statistics

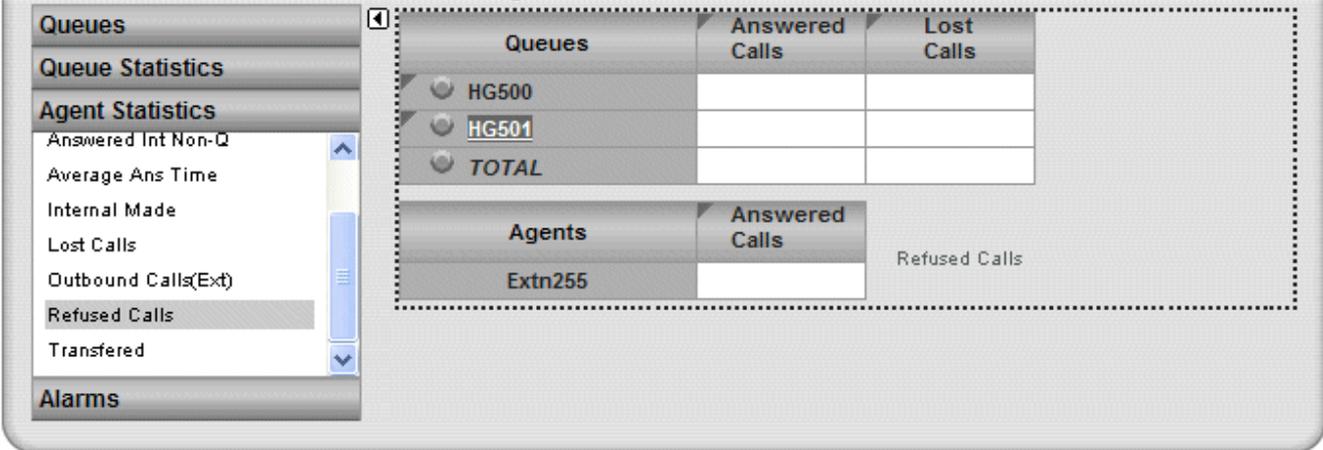
You can select which statistics should be displayed for the queues. For details of the available statistics see [Statistics](#)



- 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, ie. they are not based on activity since the statistic was added to the view.
- To remove a statistics from the view, click on the statistic name in the view and select **Hide**.
- To adjust the order of the statistics, click on the corner icon and drag the statistic to the required position.
- To adjust the settings used for a statistic, click on the statistic name and select [Settings](#).

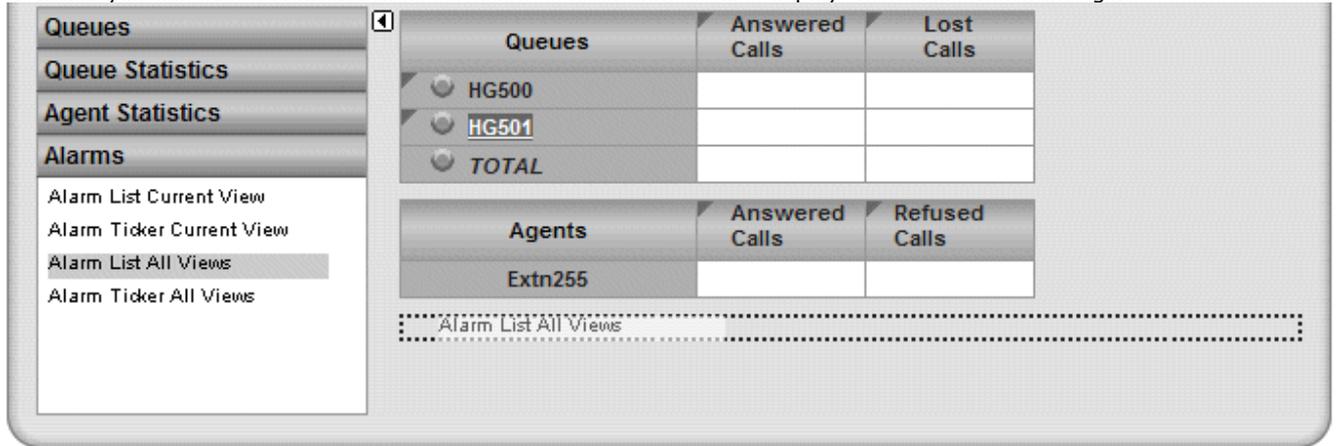
3. Add Agent Statistics

Click on 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.



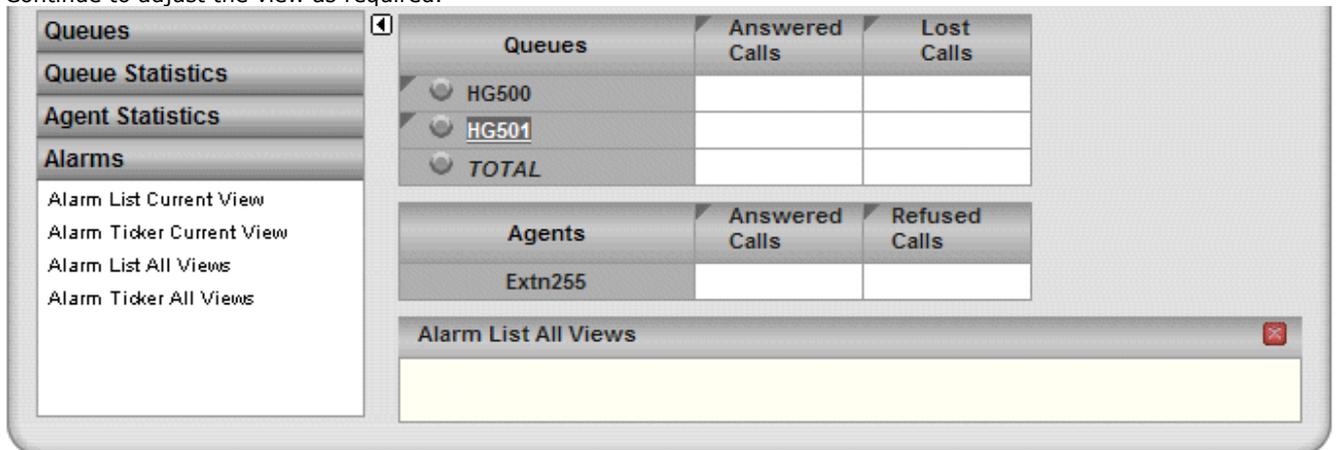
4. Adding an Alarm Summary

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 in a scrollable list of all the current alarms and warnings. 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 alarm or 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 NA (paper work)
 - The 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 you have created the view as required, click on **Next View**. Each supervisor has 3 views.
- D. When completed, click **Back to Supervisor Summary**.

6.4 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, email address and views.

To copy an existing account

1. Click **Supervisor 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.



The screenshot shows a dialog box titled "Copy Supervisor - devesh". It contains the following fields and labels:

- Name:** [Enter the supervisors name]
- Password:** []
- Confirm Password:** []
- Full Name:** [Enter the full username]
- E-mail:** [Enter e-mail address]

At the bottom of the dialog are two buttons: "OK" and "Cancel".

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 **Email** address. This is used for functions such as [Forgotten Password](#)^[16].
7. Click **OK** to create the account.
8. You can now [amend the supervisor account](#)^[12b] and [create views](#)^[12b] for the account.

6.5 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**^[132]
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**^[133]
This section displays information about the different IP Office Customer Call Reporter services and their status.
- **Preferences Details**^[134]
This section is only available to the administrator.

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 **System Settings** tab. If necessary, click on **Show Switches**. A list of all the telephone systems is shown. The system to which the IP Office Customer Call Reporter is working is indicated by **Connected** in the **Connected State** column.

Name ↑	I.P. Address	Created	Firmware Version	Data Analyzer I.P. Address	Connection State	
IP403 Site C	192.168.46.1	19/11/2008 10:51:59	3.2 (17)	192.168.42.203	Disconnected	Restart
IP406v2	192.168.44.1	19/11/2008 10:52:00	4.2 (101110)	192.168.42.203	Disconnected	Restart
IP500 Site A	192.168.42.1	19/11/2008 10:51:13	4.2 (101110)	192.168.42.203	Connected	Restart

2. Click on 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.
3. The information displayed cannot be changed here. Refer to the IP Office Customer Call Reporter Installation Manual for details on changing this information:
 - **Name**
The name of the [IP Office](#)^[193] 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.
 - **Firmware Version**
The IP Office core software version of the IP Office telephone system.
 - **Data Analyzer IP Address**
The data analyzer is a service which collects information from the IP Office telephone system and passes it to the IP Office Customer Call Reporter server database.
 - **Connected**
This column shows the state of the connection from the IP Office Customer Call Reporter server to the data analyzer and IP Office. False may indicate a problem that requires attention by your system maintainer.
 - **Restart**
This option is disabled for non-administrators.

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	I.P. Address	Software Version ↓	State	
SQL Database	192.168.42.203	0.18.0.0	Running	Restart
Database Monitor Service	localhost	0.20.0.0	Faulted	Restart
Realtime Calculation Service	192.168.42.203	0.20.0.0	Running	Restart
Management Service	192.168.42.203	0.20.0.0	Running	Restart
Historical Reporting Service	192.168.42.203	0.20.0.0	Running	Restart
Web Client	192.168.42.203	0.20.0.0	Running	Restart
Printer Discovery Service	192.168.42.203	0.20.0.0	Running	Restart

3. Click on 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 PC 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 the statistics seen in all supervisor and agent views.

Preferences

This section is only available to the administrator. It allows various IP Office Customer Call Reporter settings to be set and changed.

1. Select the **System Settings** tab.
2. Select **Show Preference Details**.

The screenshot shows the 'System Settings' window with the following details:

- Administrator Settings:**
 - Administrator Full Name: Stuart Mackintosh
 - Administrator E-mail: admin@example.com
 - Administrator Password: [Empty]
 - Administrator Extension: 9879
 - Administrator Confirm Password: [Empty]
- SMTP Server Settings:**
 - Server Hostname: smtp.example.com
 - Originator E-mail: ccr@example.com
 - Originator Name: CCR Server
 - Server Port: 25
 - Optional server username: [Empty]
 - Optional server password: [Empty]
- Logon Policy Settings:**
 - Session Timeout Minutes: 30
- Diagnostic Trace Settings:**
 - Viewer Account: [Dropdown]
 - ** Warning: This setting is for Avaya use only **

An 'Update' button is located at the bottom right of the window.

• Administrator Settings

The following parameters are used for general administrator information.

- **Administrator Full Name**
This field is for general information only.
- **Administrator E-mail**
This field is used in conjunction with the [forgotten password](#) function.
- **Administrator Extension**
This field is for general information only.
- **Administrator Password** and **Administrator Confirm Password**
These fields allow you to change your administrator password.

• SMTP Server Settings

Access to an SMTP server is required for the emailing of reports and for the forgotten password function.

- **Server Hostname**
This should be the full name of the SMTP server including its domain name.
- **Originator Email**
The sender's email address to be used for emails from IP Office Customer Call Reporter. Note that most SMTP servers will require this to match the email 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 emails sent from IP Office Customer Call Reporter.
- **Server Port**
The port of the SMTP server on which it receives emails. 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 email account for IP Office Customer Call Reporter configured on the SMTP server.

• Logon Policy Settings

- **Session Timeout Minutes**

This settings 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 time out setting can be off or set for between 1 minute and 600 minutes. The default setting is 30 minutes.

- **Diagnostic Trace Settings**

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

3. Click **Update**. Anyone who is using the client application will be logged off as soon as you update the settings.

6.6 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.

The screenshot shows the 'Diagnostics' tab in the 'System Settings' section. The interface includes a navigation bar with 'Supervisor Accounts', 'System Settings', and 'Diagnostics'. Below the navigation bar, there are links for 'Settings | Archive', 'Change Password', 'Log Off', 'Status', and 'Help'. A 'Show Advanced Options' link is visible. A yellow box contains 'Instructions For Use' with the text: 'Select from the different options below to see diagnostic trace output from various CCR components or trace sources. Click on the column headers to sort diagnostic output according to your needs. For a more detailed view on a diagnostic entry, click the details link.' Under 'Diagnostic Trace Configuration', there are checkboxes for 'Critical Errors' (checked), 'All Errors', 'Warnings', 'Information', and 'Verbose Information'. Below these are 'Source:' (a dropdown menu set to 'Any') and 'Quantity:' (a spinner set to '1000'). An 'Update' button is located at the bottom right of the configuration section. The 'Diagnostic Trace Entries' section shows 'No diagnostic trace entries found' with a scrollable area below it.

Chapter 7.

Call Scenarios

7. Call Scenarios

This section provides a number of examples of the statistics collected by the 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 the IP Office Customer Call Reporter.

[Queue Calls](#) ^[139]

- [Queue Call Answered by 1st Agent](#) ^[139]
- [Queue Call Answered by 2nd Agent](#) ^[140]
- [Queue Call Which is Lost](#) ^[141]
- [Queue Call Picked Up by Another Agent](#) ^[142]
- [Queue Call Picked Up by a Non Agent](#) ^[143]
- [Queue Call Timed Out to Voicemail](#) ^[144]

[Transferring Calls](#) ^[145]

- [Queue Call Supervised Transfer to Queue](#) ^[147]
- [Queue Call Supervised Transfer to Agent](#) ^[149]
- [Queue Call Supervised Transfer to Non-Agent](#) ^[150]
- [Queue Call Supervised Transfer to Agent in Same Queue](#) ^[151]
- [Queue Call Unsupervised Transfer to Queue](#) ^[152]
- [Queue Call Unsupervised Transfer to Agent](#) ^[153]
- [Queue Call Unsupervised Transfer to Non-Agent](#) ^[155]
- [Queue Call Unsupervised Transfer to Agent in Same Queue](#) ^[156]
- [Direct Call Supervised Transfer to Queue](#) ^[157]
- [Direct Call Supervised Transfer to Agent](#) ^[158]
- [Direct Call Supervised Transfer to Non-Agent](#) ^[159]
- [Direct Call Unsupervised Transfer to Queue](#) ^[160]
- [Direct Call Unsupervised Transfer to Agent](#) ^[161]
- [Direct Call Unsupervised Transfer to Non-Agent](#) ^[162]

[Overflow Calls](#) ^[163]

- [Unanswered Call Overflows and is Answered](#) ^[165].
- [Overflowed and Answered by 1st Agent](#) ^[167].
- [Overflowed and Answered by 2nd Agent](#) ^[168].
- [Overflowed and Lost](#) ^[169].
- [Overflowed and Timed Out to Voicemail](#) ^[170].
- [Overflowed Call Picked Up](#) ^[171].

[Voicemail](#) ^[176]

- [Queue Call Timed Out to Voicemail](#) ^[176]
- [Overflowed and Timeout to Voicemail](#) ^[178]

[Non-Queue Calls \(Direct Calls\)](#) ^[172]

- [Internal Call to an Agent \(Unanswered\)](#) ^[175]
- [Internal Call to an Agent \(Answered\)](#) ^[174]
- [External Call to an Agent \(Unanswered\)](#) ^[173]
- [External Call to an Agent \(Answered\)](#) ^[172]

[Other Call Features](#)

- [After Call Work](#) ^[117]
- [Announcements](#) ^[179]
- [Bridged Appearances](#) ^[179]
- [Busy Not Available](#) ^[118]
- [Call Pickup](#) ^[179]
- [Call Coverage](#) ^[180]
- [Do Not Disturb/Send All Calls](#) ^[180]
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- [Forwarding Calls](#) ^[181]
- [Group Membership](#) ^[119]
- [Holding Calls](#) ^[181]
- [Internal Twinning](#) ^[182]
- [Line Appearance Buttons](#) ^[182]
- [Logging In](#) ^[118]
- [Logging Out](#) ^[118]
- [Mobile Twinning](#) ^[182]
- [Parking Calls](#) ^[182]
- [Wrap Up](#) ^[182]

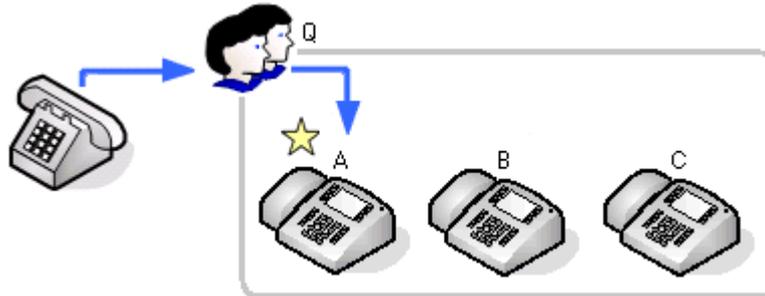
7.1 Queue Calls

? 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](#)^[192]) rather than to the queue to which they belong are not normally included.

7.1.1 Queue Call Answered by 1st Agent

An external call is targeted to a queue. The call is answered by the first available agent.



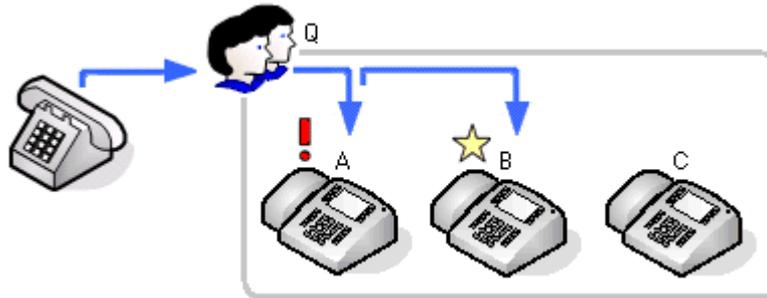
Events	Queue Q	Agent A
• A call is routed to the queue.	Calls Waiting 1	-
• The call is presented to the first available agent.	Agents Ringing 1	-
• The call is answered.	Answered Calls 1	Answered Calls 1
Historical	Answered Calls 1	Answered Calls 1

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

7.1.2 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.



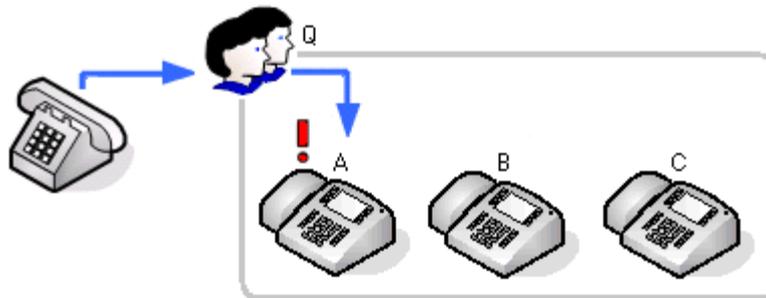
Events	Queue	Agent A	Agent B
• A call is routed to the queue.	Calls Waiting 1	-	-
• The call is presented to the first available agent.	Agents Ringing 1	-	-
• The call is not answered.	No Answer 1	No Answer 1	-
• The call is presented to the next available agent.	Agents Ringing 1	-	-
• The call is answered.	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

7.1.3 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

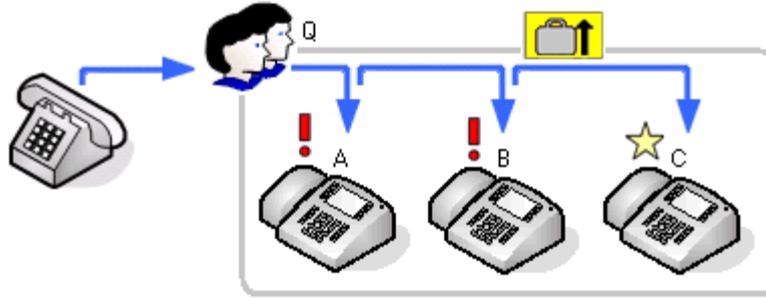
Agents	Answered Calls	No Answer	Lost Calls
Agent A	0	0	1
Agent B	0	0	0
Agent C	0	0	0

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.

7.1.4 Queue Call Picked Up by Another Agent 1

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.	Routed to Other 1	-	-	Answered 1
Historical	No Answer 1 Routed to Other 1	No Answer 1	-	Answered 1

Queues	Answered Calls	No Answer	Lost Calls	Routed to Other
Queue Q	0	0	0	1
TOTAL	0	0	0	1

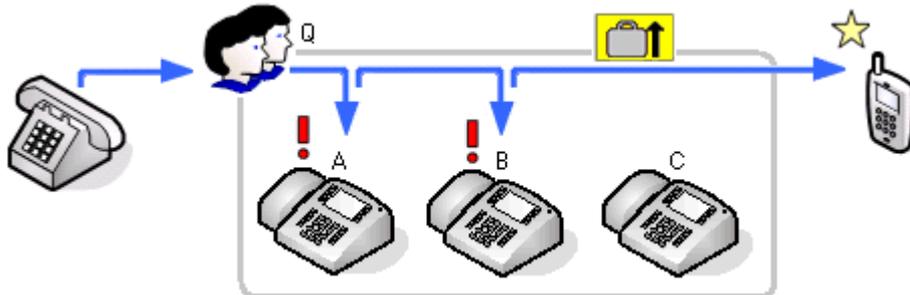
Agents	Answered Calls	No Answer	Lost Calls	Routed to Other
Agent A	0	1	0	0
Agent B	0	0	0	0
Agent C	1	0	0	0

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**.
- For the agent who picked up the calls it is recorded as **Answered External (Non-Queue)**.

7.1.5 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	-	-	-
• Another agent in the queue picks up the ringing call.	Routed to Other 1	-	-	-
Historical	No Answer 1 Routed to Other 1	No Answer 1	Routed to Other 1	-

Queues	Answered Calls	No Answer	Lost Calls	Routed to Other
Queue Q	0	0	0	1
TOTAL	0	0	0	1

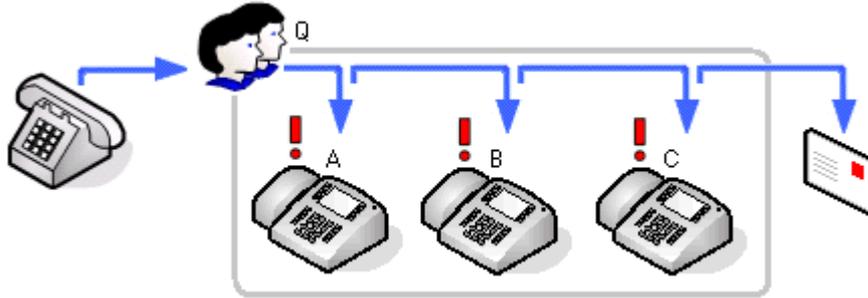
Agents	Answered Calls	No Answer	Lost Calls	Routed to Other
Agent A	0	1	0	0
Agent B	0	0	0	0
Agent C	0	0	0	0

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**.

7.1.6 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

7.2 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	<ul style="list-style-type: none"> • Increments the transferring agent's Internal Made statistic. • 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. 		<ul style="list-style-type: none"> • The enquiry call is not recorded in any agent statistic.
Enquiry Answered	<ul style="list-style-type: none"> • Increments Answered Calls for the targeted queue and agent answering. 	<ul style="list-style-type: none"> • Increments Answered Internal Non-Queue for the targeted agent. 	<ul style="list-style-type: none"> • Increments the Answered Calls statistic for the transferring queue.
Successful Transfer	<ul style="list-style-type: none"> • If the call transferred is a queue call, transfer completion increments Transferred for the queue and agent transferring. 		
	<ul style="list-style-type: none"> • Increments Answered Calls for the targeted queue and agent answering with an internal or external call as appropriate for the call transferred. 	<ul style="list-style-type: none"> • Increments the answering agent's Answered Internal Non-Queue or Answered External Non-Queue as appropriate for the type of call being transferred. 	<ul style="list-style-type: none"> • No further statistics are incremented.
Unsupervised Transfer to...	Queue	Agent	Other
Enquiry Call	<ul style="list-style-type: none"> • The enquiry call is not recorded in any queue or agent statistic. 		
Successful Transfer	<ul style="list-style-type: none"> • If the call being transferred was a queue call, it increments the transferring queue and agent's Transferred statistics. 		
	<ul style="list-style-type: none"> • Increments Answered Calls for the targeted queue and answering agent. 	<ul style="list-style-type: none"> • Increments the answering agent's Answered Internal Non-Queue or Answered External Non-Queue as appropriate for the call being transferred. 	<ul style="list-style-type: none"> • 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, the enquiry call duration is included in the [Average Wait Time](#) and [Longest Wait Time](#) 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	<ul style="list-style-type: none"> The Call Reference, Direction, Agent, Number and Queue are those of the the answered call. The Date/Time are when the call was held. The Duration is the time from the call being held to the transfer being completed. The DDI is that of the original call. The Queue Time is blank. The Status is Holding.
Transferred Call	Reports the same details as the original answered call except:- <ul style="list-style-type: none"> The Date/Time are when the transfer was completed. The Queue Time is blank. 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:

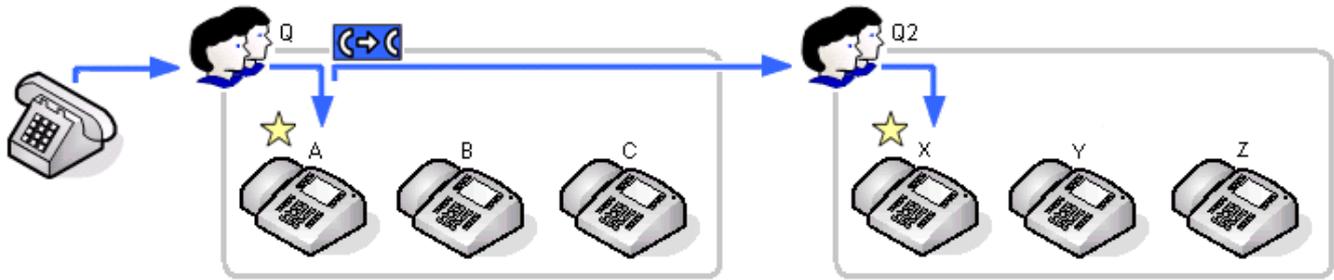
A call detail report run against the Queue/Agent, that receives a transfer, will detail:

Call Records	Details included...
Enquiry Answered	Note that this record is not present for unsupervised transfers. <ul style="list-style-type: none"> Date/Time is the point ringing is heard. Call direction is internal. Number is the calling parties number. DDI is the number dialled. Queue is the target queue or blank if agent. Queue Time is the ringing time of the enquiry call. Agent is the agent answering the call. Duration is from the agent answering to the transfer being completed. Status is Enquiry Answered. Call Reference is a new call reference.
Answered Call	Reports the same details as the original transferred call except:- <ul style="list-style-type: none"> The Date/Time are when the transfer was completed. The Queue is the target of the transfer. The Queue Time is the time from the initial queuing at the transferee until the transfer is completed. 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.

7.2.1 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

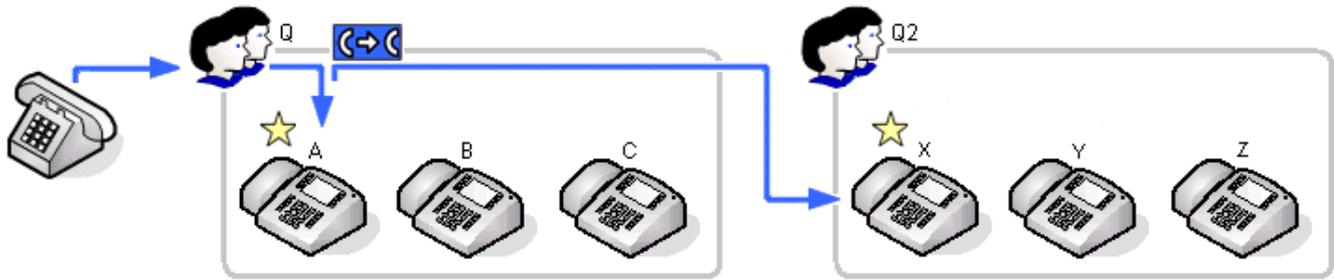
From 02/12/2008 - 02/12/2008 07:35 - 17:00

Report type	Target Name		Supervisor Name						
Call Details Report - All	Queue		Mark Gallagher						
<u>Ungrouped</u>									
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									
Total Calls		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 cause two lines to appear for a supervised transfer, one with the status **Transferred** for the queue from which the call was transferred and one with the status **Answered** for the queue to which the call was transferred.

7.2.2 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

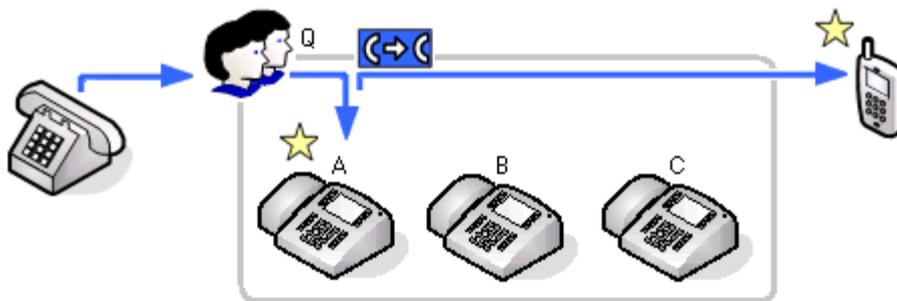
Agents	Answered Calls	Internal Made	Transferred	Answered Int Non-Q	Answered Ext Non-Q
Agent A	1	1	1	0	0
Agent B	0	0	0	0	0
Agent C	0	0	0	0	0

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

7.2.3 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.



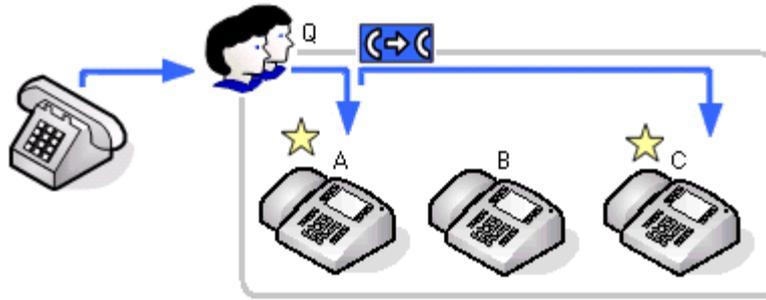
Events	Queue Q	Agent A
• A call is routed to the queue.	Calls Waiting 1	-
• The call is presented to the first available agent.	Agents Ringing 1	-
• The call is answered.	Answered Calls 1	Answered Calls 1
• The call is put on hold pending transfer.	-	-
• The agent dials the transfer target.	-	-
• The call is answered.	Answered Call 1	-
• The agent completes the transfer.	Transferred 1	Transferred 1
Historical	Answered Calls 2 Transferred 1	Answered Calls 1 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

7.2.4 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.



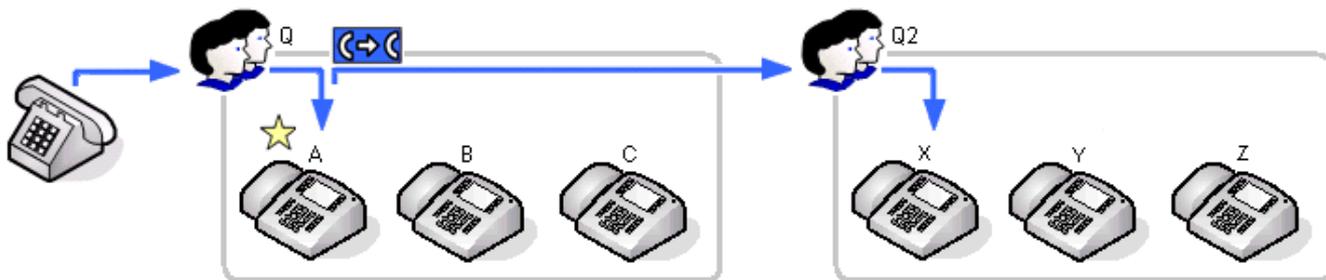
Events	Queue Q	Agent A	Agent C
• A call is routed to the queue.	Calls Waiting 1	-	-
• The call is presented to the first available agent.	Agents Ringing 1	-	-
• The call is answered.	Answered Calls 1	Answered Calls 1	-
• The call is put on hold pending transfer.	-	-	-
• The agent dials the transfer target.	-	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 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
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

7.2.5 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 complete 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

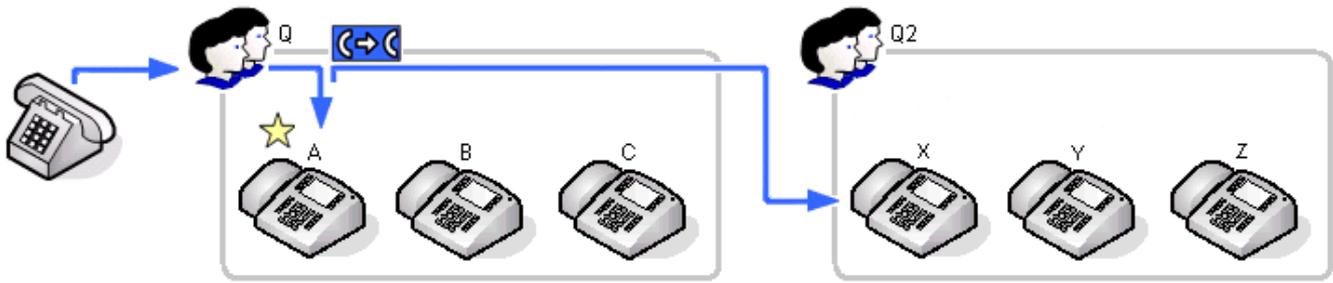
Agents	Answered Calls	Internal Made	Transferred
Agent A	1	0	1
Agent B	0	0	0
Agent C	0	0	0

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

7.2.6 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 complete 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](#) ⁹⁹ 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.

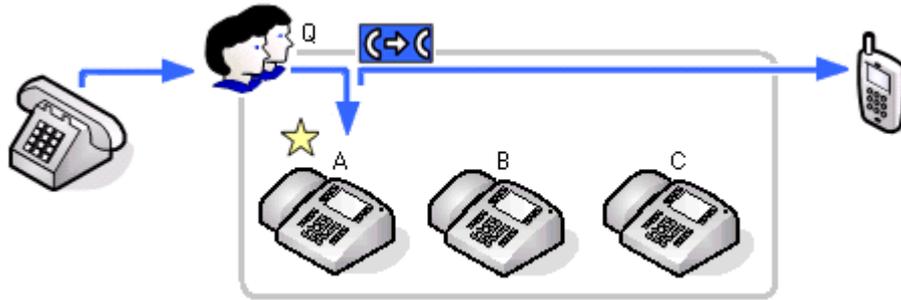
CDR

From 02/12/2008 - 02/12/2008 07:55 - 17:00

Report type	Target Name	Supervisor Name							
Call Details Report - All	Queue	Mark Gallagher							
<u>Ungrouped</u>									
<u>Date - Time</u>	<u>Call Direction</u>	<u>Number</u>	<u>DDI</u>	<u>Queue</u>	<u>Queue Time</u>	<u>Agent</u>	<u>Duration</u>	<u>Status</u>	<u>Reference</u>
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									
	Total Calls		1	External Inbound Calls				1	
	Internal Calls		0	External Outbound Calls				0	

7.2.7 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 complete the transfer without waiting to be answered.



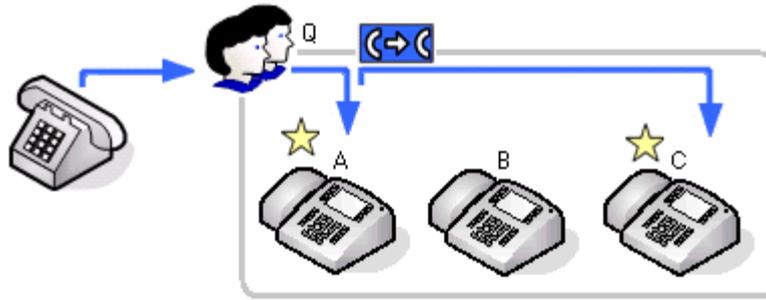
Events	Queue Q	Agent A
• A call is routed to the queue.	Calls Waiting 1	-
• The call is presented to the first available agent.	Agents Ringing 1	-
• The call is answered.	Answered Calls 1	Answered Calls 1
• The call is put on hold pending transfer.	-	-
• The agent dials the transfer target.	-	-
• The 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

7.2.8 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.



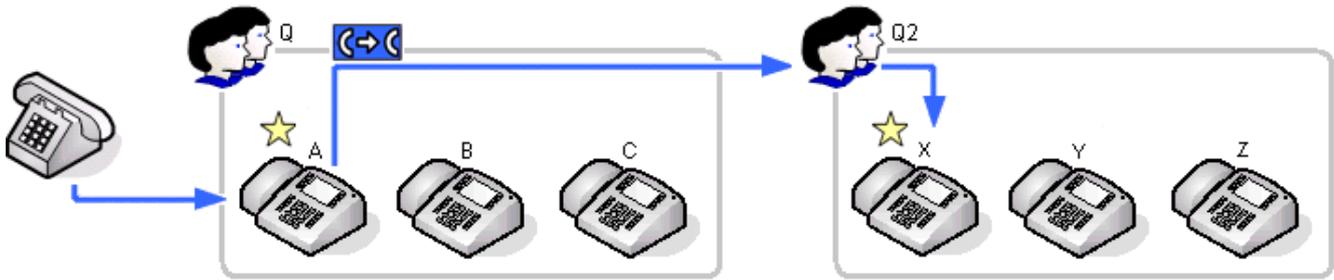
Events	Queue Q	Agent A	Agent C
• A call is routed to the queue.	Calls Waiting 1	-	-
• The call is presented to the first available agent.	Agents Ringing 1	-	-
• The call is answered.	Answered Call 1	Answered Calls 1	-
• The call is put on hold pending transfer.	-	-	-
• The agent dials the transfer target.	-	-	-
• 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

7.2.9 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

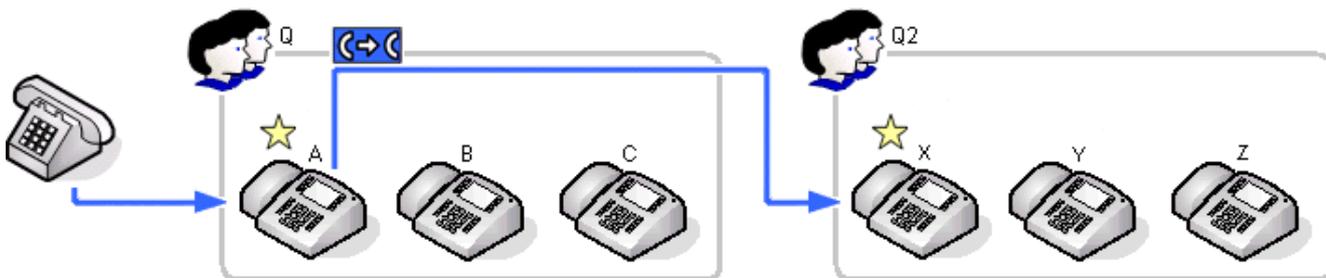
Agents	Answered Calls	Internal Made	Transferred	Answered Ext Non Q
Agent A	0	1	0	1
Agent B	0	0	0	0
Agent C	0	0	0	0

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

7.2.10 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

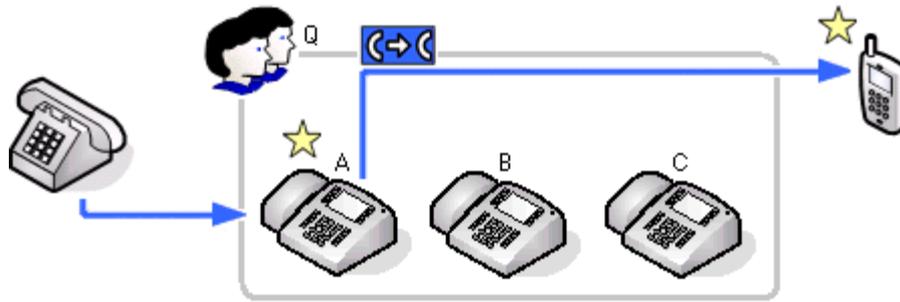
Agents	Answered Calls	Internal Made	Answered Ext Non Q	Answered Int Non Q
Agent A	0	1	1	0
Agent B	0	0	0	0
Agent C	0	0	0	0

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

7.2.11 Direct Call Supervised Transfer to Non-Agent

In this scenario the agent transfers a direct call to a non-agent.



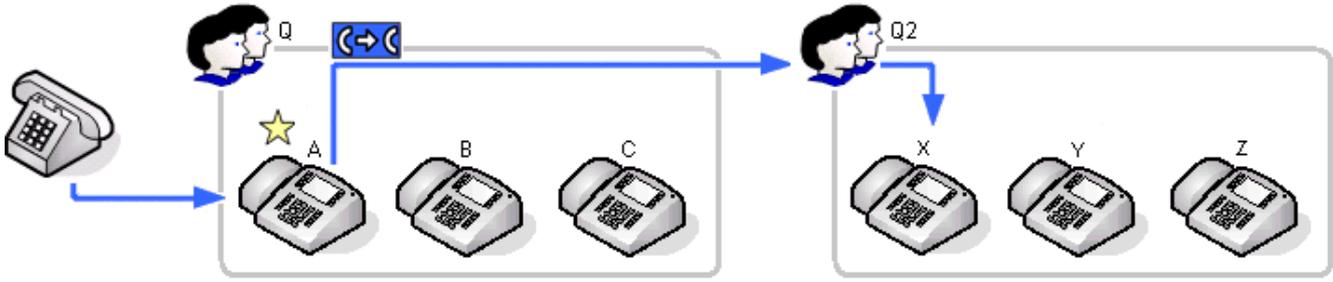
Events	Queue Q	Agent A
• An external call is routed direct to an agent.	-	-
• The call is answered.	Answered External Non-Queue 1	-
• The call is put on hold pending transfer.	-	-
• The agent dials the transfer target.	-	-
• The call is answered.	-	-
• The agent completes the transfer.	-	-
Historical	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

7.2.12 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

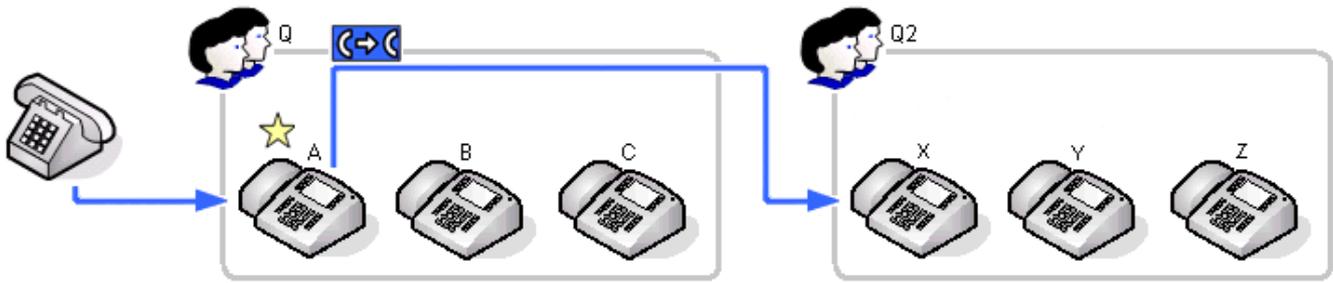
Agents	Answered Calls	Internal Made	Transferred	Answered Ext Non Q
Agent A	0	0	0	1
Agent B	0	0	0	0
Agent C	0	0	0	0

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

7.2.13 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 complete 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

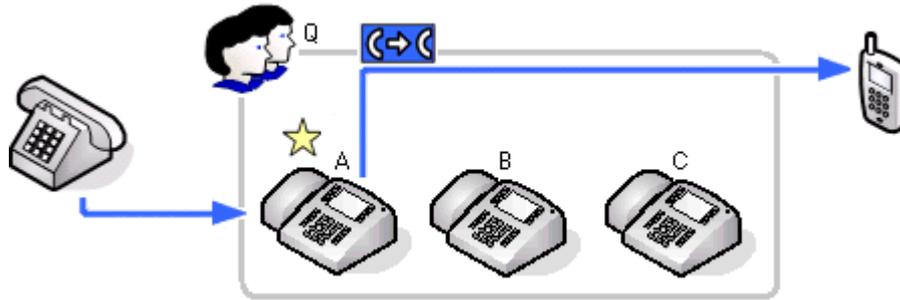
Agents	Answered Calls	Internal Made	Transferred	Answered Ext Non Q
Agent A	0	0	0	1
Agent B	0	0	0	0
Agent C	0	0	0	0

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

7.2.14 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 complete 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

7.3 Overflow Calls

? Overflowed Calls ¹⁶³

- 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.

? 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.

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, enable 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)
An **Overflow Time** can be set though this is not necessary 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](#)^{19b} and [No Answer Time](#)^{19b} 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](#) ^[75] 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](#) ^[62], [Answered Calls](#) ^[52] and [Lost Calls](#) ^[69] statistics. Instead they are included in its [Overflowed Calls Waiting](#) ^[76], [Overflowed Answered](#) ^[74] and [Overflowed Lost](#) ^[77] statistics.
 - The calls are included in the queue's performance statistics; [Average Answer %](#) ^[56], [Average Answer Time](#) ^[58] and [Grade of Service](#) ^[65].
 - If the overflowing call goes to voicemail they are included in the queue's [Routed to Voicemail](#) ^[81] 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](#) ^[198] statistics.
- For the queue which queue calls overflowed to:
 - The calls are only included in the queue's [Calls Waiting](#) ^[62] statistic.
 - For agents, the calls are included in their [Agent Call Share](#) ^[48], [Answered Calls](#) ^[52], [No Answer](#) ^[72] and [Lost Calls](#) ^[69].
- 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 ^[48]	-	-	-	✓
Agents Ringing ^[51]	-	-	-	-
Answered Calls ^[52]	✗	✗	✗	✓
Answered Internal (Queue) ^[55]	✗	✗	✗	✓
Average Answer % ^[56]	✓	✗	✗	✗
Average Answer Time ^[58]	✓	✗	✗	✗
Calls Waiting ^[62]	✗	✗	✓	✓
Grade of Service ^[65]	✓	✗	✗	✗
Lost Calls ^[69]	✗	✗	✗	✓
Overflowed Answered ^[74]	✓	-	✗	-
Overflowed Calls ^[75]	✓	-	✗	-
Overflowed Calls Waiting ^[76]	✓	-	✗	-
Overflowed Lost ^[77]	✓	-	✗	-
No Answer ^[72]	✗	✗	✗	✓
Routed to Other ^[80]	✓	✗	✗	✗
Routed to Voicemail ^[81]	✓	✗	✗	✗
Transferred ^[82]	✓	✗	✗	✗

- Statistics not included in the table and those marked - are not applicable.

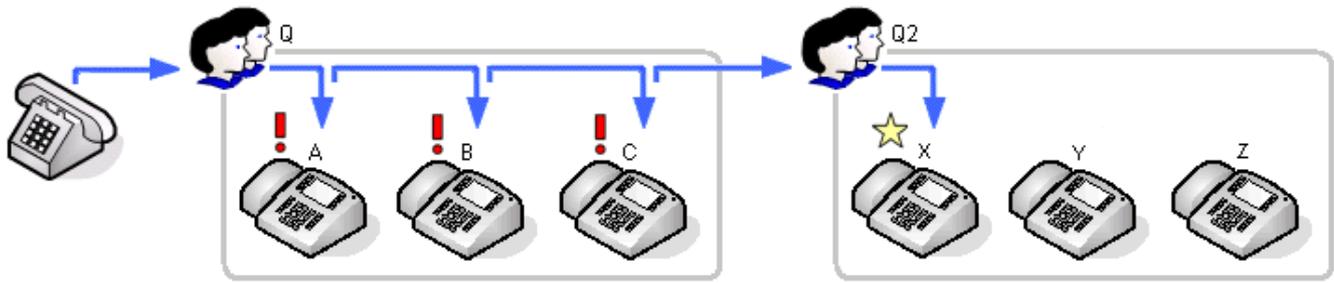
Overflowed Calls and Reports

Queue reports based on the [Call Summary Report](#) ^[102] 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](#) ^[99] 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.

7.3.1 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 Overflowed Calls 1 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

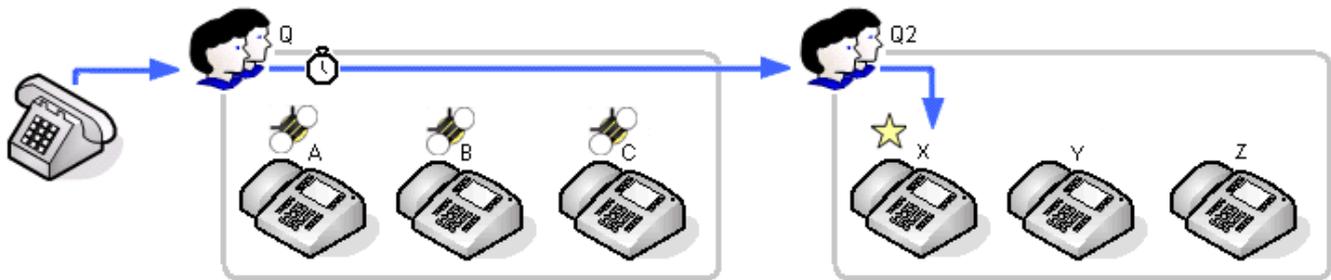
Agents	Answered Calls	No Answer	Lost Calls
Agent X	1	0	0
Agent Y	0	0	0
Agent Z	0	0	0

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.

7.3.2 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

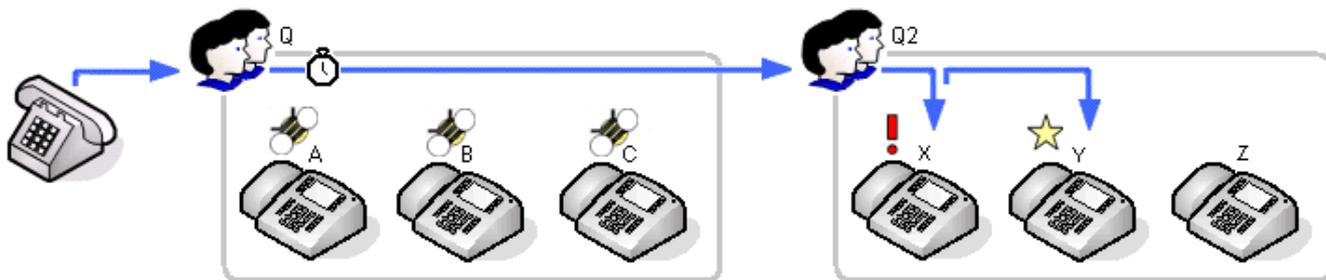
Agents	Answered Calls	No Answer	Lost Calls
Agent X	1	0	0
Agent Y	0	0	0
Agent Z	0	0	0

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.

7.3.3 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 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

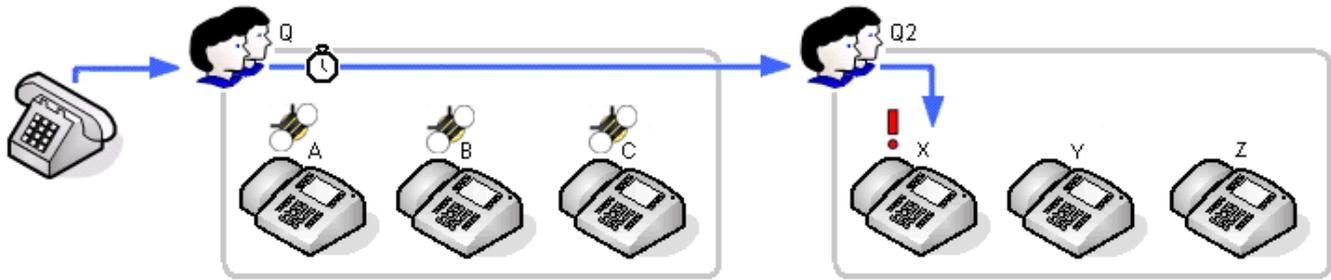
Agents	Answered Calls	No Answer	Lost Calls
Agent X	0	1	0
Agent Y	1	0	0
Agent Z	0	0	0

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.

7.3.4 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

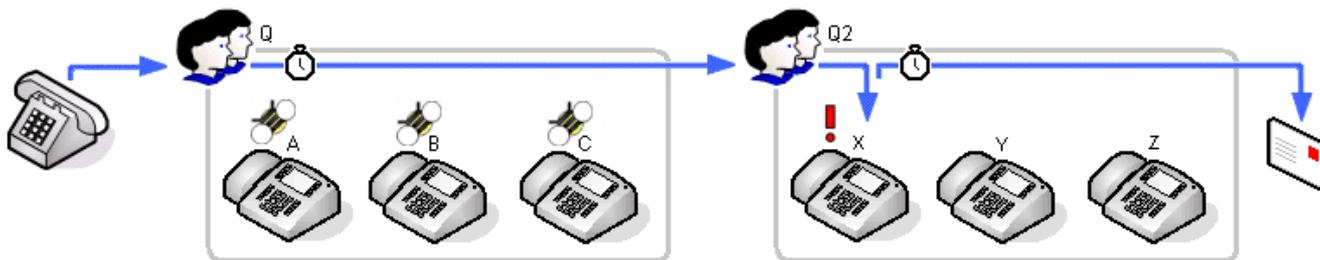
Agents	Answered Calls	No Answer	Lost Calls
Agent X	0	0	0
Agent Y	0	0	0
Agent Z	0	0	0

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.

7.3.5 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 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

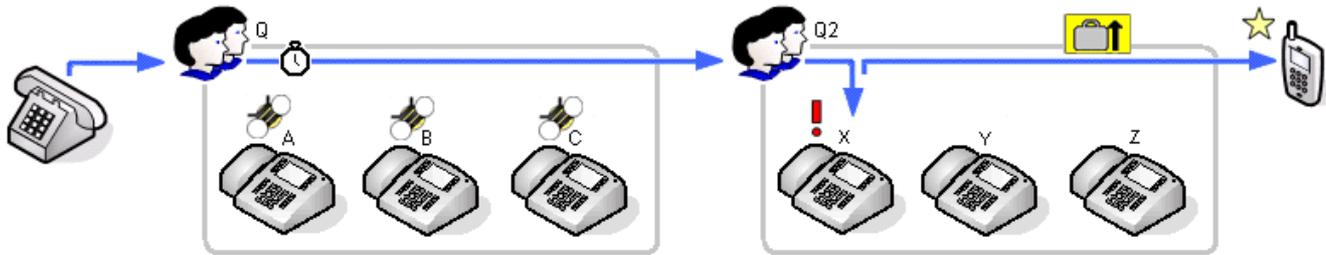
Agents	Answered Calls	No Answer	Lost Calls
Agent X	0	0	0
Agent Y	0	0	0
Agent Z	0	0	0

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.

7.3.6 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 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.

7.4 Non-Queue Calls (Direct Calls)

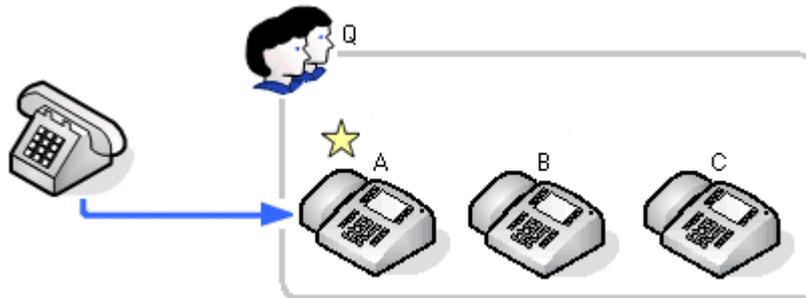
? Direct Call

The terms 'non-queue call' or 'direct call' is 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-Queue.

7.4.1 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

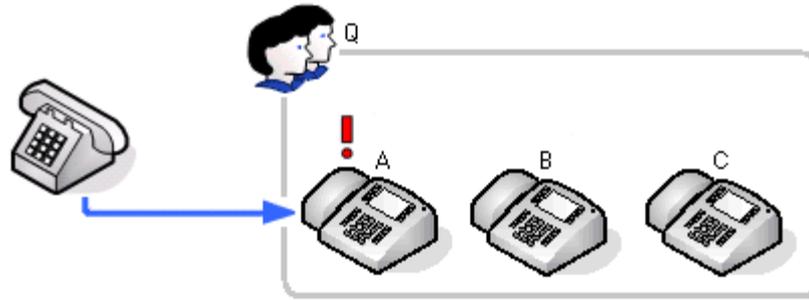
Agent	Answered Calls	No Answer	Lost Calls	Routed To Other	Answered Ext Non-Q
Agent A	0	0	0	0	1
Agent B	0	0	0	0	0
Agent C	0	0	0	0	0

Notes:

- Except for affecting the agent's state, [direct calls](#)^[192] to an agent are not recorded unless the agent answers the call.
- The agent states used for direct calls are [Ringing Non Queue](#)^[198] and when connected [Busy Non Queue](#)^[199].
- Direct calls are not recorded against any queue to which the agent belongs.

7.4.2 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

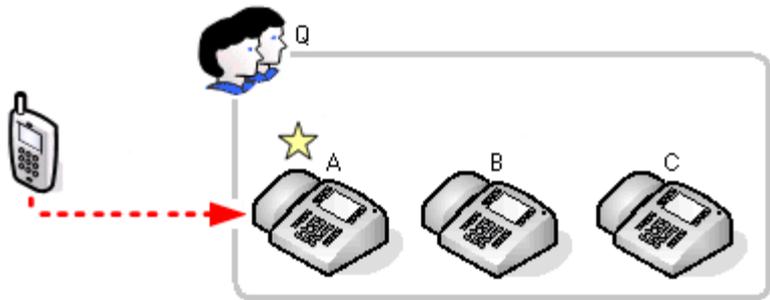
Agent	Answered Calls	No Answer	Lost Calls	Routed To Other
Agent A	0	0	0	0
Agent B	0	0	0	0
Agent C	0	0	0	0

Notes:

- Except for affecting the agent's state, [direct calls](#)^[192] to an agent are not recorded unless the agent answers the call.
- The agent states used for direct calls are [Ringing Non Queue](#)^[198] and when connected [Busy Non Queue](#)^[197].
- 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.

7.4.3 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

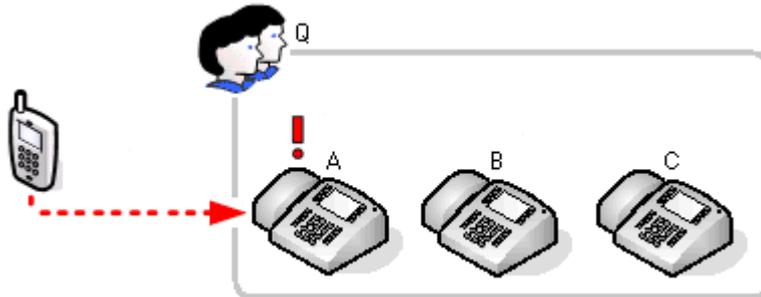
Agent	Answered Calls	No Answer	Lost Calls	Routed To Other	Answered Int Non-Q
Agent A	0	0	0	0	1
Agent B	0	0	0	0	0
Agent C	0	0	0	0	0

Notes:

- Except for affecting the agent's state, [direct calls](#)^[192] to an agent are not recorded unless the agent answers the call.
- The agent states used for direct calls are [Ringing Non Queue](#)^[198] and when connected [Busy Non Queue](#)^[197].
- Direct calls are not recorded against any queue to which the agent belongs.

7.4.4 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 isn't recorded as a lost call. It would only appear in statistics if the agent has [answered the call](#)^[174].



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](#)^[192] to an agent are not recorded unless the agent answers the call.
- The agent states used for direct calls are [Ringing Non Queue](#)^[198] and when connected [Busy Non Queue](#)^[191].
- 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.

7.5 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.

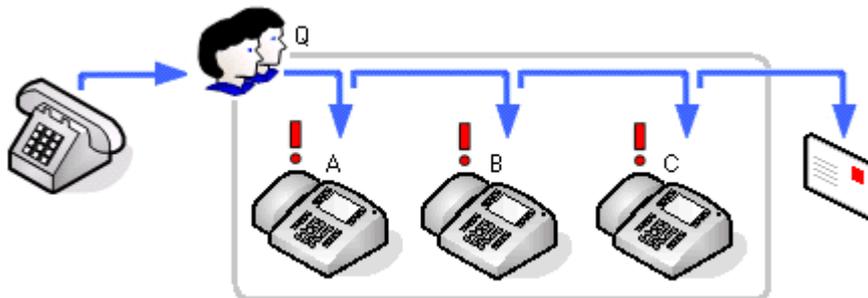
Other statistics (**Answered Calls, Lost Calls, Overflowed Answered, Overflowed Lost** etc.) are not incremented by queue calls that go to voicemail and are then waiting to be answered, answered or lost.

If using Voicemail Pro, details of what happened to calls that go to voicemail can be reported using reports based on the [Voicemail Report](#) ^[105] template.

Note that assisted transfers from the voicemail server to a queue or agent are not supported by IP Office Customer Call Reporter.

7.5.1 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.



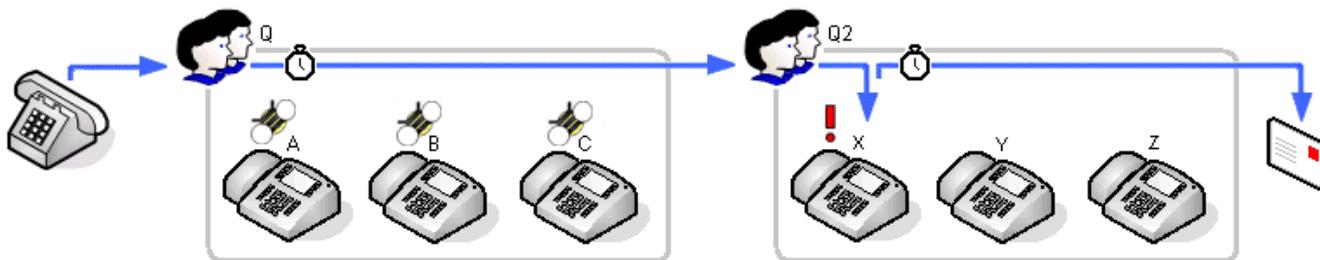
Events	Queue Q	Agent A	Agent B	Agent C
• A call is routed to the queue.	Calls Waiting 1	-	-	-
• The call is presented to the first available agent.	Agents Ringing 1	-	-	-
• The call is not answered.	No Answer 1	No Answer 1	-	-
• The call is presented to the next available agent.	Agents Ringing 1	-	-	-
• 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

7.5.2 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 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.

7.6 Other Call Features

7.6.1 Announcements

? Announcements

While a call to a queue is waiting to be answered, the IP Office telephone phone 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 is supported and does 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, using a customized call flow that allows callers to opt to leave a message or to be transferred to another number, are not supported by IP Office Customer Call Reporter.

7.6.2 Bridged Appearances

Queue calls to an agent will be reflected by any bridged appearance buttons on another user's phone set to that agent.

- Use of this feature is not supported for agents. Using this feature may lead to statistics that appear incorrect or that are difficult to interpret.

7.6.3 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.

7.6.4 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.
- 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.

7.6.5 Call Coverage

Call coverage is not applied to queue calls. Therefore it does not affect statistics.

7.6.6 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.

Busy Not Available (NA)

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 phone, see [Agent Phone Controls](#)^[114]. This also requires the agent to select one of the [reason codes](#)^[197] displayed on their phone 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.

Reason Codes

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

- 2410, 5410, 2420, 5420, 4610, 5610, 5620, 5621, 4620, 4621, 4625, 1708, 1716.

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 phone that allows reason code selection but fails to select a reason. For example if they enabled Busy NA 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 phones that do not allow the selection of a reason code.

- **Programmable Button**^[196]

Most Avaya feature phones supported by IP Office have [programmable buttons](#)^[196]. The IP Office system maintainer can program each of these buttons with features for use by the phone's user.

- You can select Busy Not Available state by pressing a **DND** (Do Not Disturb) or **SAC** (Send All Calls) button on your phone. You will then be requested to select a reason code from a list displayed on the phone. The available reason codes are configured by the IP Office system maintainer.

- **Dialing Short Code**^[198]

The IP Office telephone system maintainer can setup dialing [short codes](#)^[198] that allow 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 allow the entry of a reason code and so is reported just **Busy NA**.
- Dial a **Do Not Disturb Off** short code. The default short code is ***09**.

- **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](#)^[197] state with the default [reason code](#)^[197] **Busy NA**. The icon can also be used to exit the state.

7.6.7 Follow Me

Agents can use follow me to redirect their calls to another internal users phone. 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.

7.6.8 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 attempt to 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 appear incorrect or that are difficult to interpret.

7.6.9 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](#) ⁹⁷ template.

7.6.10 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 appear incorrect or that are difficult to interpret.

7.6.11 Line Appearance Buttons

Line appearance buttons can 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 appear incorrect or that are difficult to interpret.

7.6.12 Mobile Twinning

Mobile twinning is used to present calls to a user to both their normal extension and to an external number at the same time. This is not normally used with hunt group calls. However the option **Hunt Group Calls Eligible for Mobile Twinning** can be used to enable this.

- Use of this feature is not supported for agents. Using this feature may lead to statistics that appear incorrect or that are difficult to interpret.

7.6.13 Parking Calls

Parked calls are recorded in the similarly to supervised transfers unless unparked by the same agent.

<<<when unpark or unhold call it is no longer a queue call, it is your call, it is not a direct call and so automatic ACW is not longer applied - check with Ian W.>>>

7.6.14 Wrap Up

? Wrap Up

For all phone users, the IP Office phone system normally 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 allow analog phone users who have just finished a call the opportunity to start dialing a short code or to make a call before another incoming call is presented to them.

For users set as agents, the period of wrap up applied to their phone is reported as their being in [After Call Work](#)¹⁸⁸ 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 8.

Miscellaneous

8. Miscellaneous

8.1 Multiple Roles

A user can be configured 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 IP Office Customer Call Reporter Installation 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**

Creating an IP Office user and an supervisor account with names that match the administrator name allows that user to login as either an agent, a supervisor or as the administrator.

8.2 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 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.

- **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 appears with their new name and reset statistics. The agent's statistics within historical reporting are split appropriately between the old and new names.

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](#)^[125] or by [supervisors with self-administrator rights](#)^[32] 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.

8.3 Troubleshooting

Reports/Graph/Help Do Not Appear

Using these options requires the browser to allow pop-up windows. If they do not appear when selected, the browser may have been configured to block pop-up windows.

- Most browsers can be configured to either 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 some PC firewall software and ad-blocker software, may also stop pop-up windows and may need to be configured to allow pop-up windows for the IP Office Customer Call Reporter server address.

Part of a View Goes Gray

When a web client is displaying a view of queue and agent statistics and alarms, it is regularly polling the IP Office Customer Call Reporter server for updated data. The statistics in views are updated approximately every 2 seconds.

If the background of any section of a view goes grey with no data, 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 web client view will update automatically.
- If this occurs frequently inform your administrator or maintainer.

View is Blank

There are a number of reasons why a view may 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 connection may have been lost. For example the system administrator may have restarted some part of IP Office Customer Call Reporter. Refreshing the browser view should correct the web client.



Chapter 9.

Glossary

9. Glossary

This section provides definitions of key IP Office Customer Call Reporter terms.

Icon	Meaning
	General definition of a term.
	Definition of an agent or queue state reported by IP Office Customer Call Reporter.
	Definition of an agent statistic.
	Definition of a queue statistic.

9.1 Administrator

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.

9.2 After Call Work (ACW) [Agent State]

After Call Work (ACW)

After Call Work indicates that the agent is not available to receive [queue calls](#) ^[197] 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](#) ^[117]. 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](#) ^[200] feature briefly applied to the end of all calls including queue calls is also reported as **After Call Work** state.

9.3 Agent

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 phone on the IP Office telephone system. Note that T3 Series and T3 IP Series phones are not currently supported.
- The agent's phone status is recorded by IP Office Customer Call Reporter. For example when they logged in to a phone, answer a call, log off, etc.
- The agents are added to queues and then answer call targeted to those queues. An agent can be a member of several queues.
- Using the web client allows the agent to see the same views as their supervisor. However unlike the supervisors view the agent will only see their own statistics and those for queues which they belong.

9.4 Agent State (Queue) [Statistic]

[Agent State \(Queue\)](#) ^[39]

- 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](#) ^[41] can be used to show how long each agent has been in their current state.

9.5 Agent State (Queue) Time [Statistic]

[Agent State \(Queue\) Time](#) ^[41]

- 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 \(Queue\)](#) ^[39].

9.6 Agent State (System) [Statistic]

[Agent State \(System\)](#) ^[42]

- 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](#) ^[45] can be used to show how long each agent has been in their current state.

9.7 Agent State (System) Time [Statistic]

[Agent State \(System\) Time](#) ^[45]

- 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 \(System\)](#) ^[42].

9.8 Agents ACW [Statistic]

[Agents ACW](#) ^[46]

- This statistic is only available for queues.
- It shows the number of agents in the queue 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.

9.9 Agents Available [Statistic]

[Agents Available](#) ^[47]

- This statistic is only available for queues.
- It shows the number of agents in the queue who are currently available to answer calls.

9.10 Agents Busy [Queue State]

[All Agents Busy](#)

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](#) ^[78] statistic. The time the queue has been in a particular state is reported by the [Queue State Time](#) ^[79] statistic.

9.11 Agents Call Share [Statistic]

[Agents Call Share](#) ^[48]

- This statistic is only available for agents.
- It shows the percentage of [queue calls](#) ^[197] answered by the agent out of all queue calls answered by the agents in the queue.

9.12 Agents Logged On [Statistic]

[Agents Logged On](#) ^[49]

- This statistic is only available for queues.
- It shows the number of agents who are members of the queue who are currently logged in.
- When logged in an agent can also be in other states.

9.13 Agents Present [Statistic]

[Agents Present](#) ^[50]

- This statistic is only available for queues.
- It shows the number of agents who are logged in but whose membership of the queue is currently disabled.

9.14 Agents Ringing [Statistic]

[Agents Ringing](#) ^[51]

- This statistic is only available for queues.
- It shows the number of agents with [queue calls](#) ^[197] ringing but not yet answered.

9.15 Answered Calls [Statistic]

[Answered Calls](#) ^[52]

- This statistic is available for queues and agents.
- It shows the number of [queue calls](#) ^[197] that answered by the agents in the queue or the agent being reported on.
- It does not include direct calls answered by agents.
- It does not include queue calls answered by methods such as call pickup.
- It does not include calls that go to voicemail.

9.16 Answered External Non-Queue [Statistic]

[Answered External Non-Queue](#) ^[53]

- 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 include queue calls to a queue of which the agent is a member.

9.17 Answered Internal Non-Queue [Statistic]

[Answered Internal Non-Queue](#) ^[54]

- 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 include queue calls to a queue of which the agent is a member.

9.18 Answered Internal Queue [Statistic]

[Answered Internal \(Queue\)](#) ^[55]

- This statistic is available for 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.

9.19 Announcements

[Announcements](#)

While a call to a queue is waiting to be answered, the IP Office telephone phone 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.

9.20 Available [Agent State]

[Available](#)

This agent state is reported when an agent is logged in and is not in any other state. That is when available to receive and answer queue calls.

9.21 Average Answer % [Statistic]

[Average Answer %](#) ^[56]

- This statistic is available for queues and agents.
- It shows the number of [queue calls](#) ^[197] answered by the queue within the specified answer threshold time, divided by the total number of calls answered.

9.22 Average Answer Time [Statistic]

[Average Answer Time](#) ^[58]

- This statistic is available for 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 average answer time is measured from the call arriving at the target (queue or agent).
- 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.

9.23 Average Wait Time [Statistic]

[Average Wait Time](#) ^[60]

- This statistic is only available for queues.
- Average waiting time of calls.

9.24 Busy [State]

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.

9.25 Busy Alt-Queue [Agent State]

Busy Alt-Queue

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.

9.26 Busy Not Available [Agent State]

Busy Not Available (NA)

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 phone, see [Agent Phone Controls](#)^[114]. This also requires the agent to select one of the [reason codes](#)^[197] displayed on their phone 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.

9.27 Busy Not Available [Statistic]

Busy Not Available^[614]

- This statistic is only available for queues.
- It shows the total number of agents in the queue who have currently indicated they are [Busy Not Available](#)^[197].
- Busy Not Available is a state selected by an agent when they need to stop receiving queue calls in order to do some non-call related activity.

9.28 Busy Non-Queue [Agent State]

Busy Non-Queue

This agent state is reported when the agent answers a call that wasn't targeted to the queue to which they belong. It is also reported when an agent makes a call.

9.29 Busy Wrap Up

Busy Wrap Up

Busy Wrap Up is an agent state used by the IP Office [CCC](#)^[192] 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](#)^[200].

9.30 Call Pickup

Call Pickup

The IP Office supports a number of features that allow agents to pickup calls ringing in a queue.

9.31 Call Waiting [Statistic]

Calls Waiting^[624]

- This statistic is only available for 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 phones.
- Calls that overflow from the queue and are still waiting to be answered are reported using [Overflowed Calls Waiting](#)^[764].

9.32 CCC

? 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.

9.33 CLI

? 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.

9.34 Connected

? 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.

9.35 Collective Group

? Collective

Hunt groups configured as 'collective' presents 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.

9.36 Current Wait Time [Statistic]

CC Current Wait Time ⁶⁴

- This statistic is only available for queues.
- Time of the longest currently waiting call.

9.37 Direct Call

? Direct Call

The terms 'non-queue call' or 'direct call' is 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-Queue.

9.38 Enquiry Call

? 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'.

9.39 Grade of Service [Statistic]

CC Grade of Service ⁶⁵

- This statistic is only available for queues.
- It is 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**).

9.40 Holding [Agent State]

Holding

This agent state is reported when an agent has a call on hold.

9.41 Hot Desking

? Hot Desk

Since agents login at an extension in order to start receiving calls, they can use any extension available rather than needing a permanent phone extension. Users who login at different extensions are referred to as 'hot deskers'.

9.42 In Service [Queue State]

? In Service

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](#)^[78] statistic. The time the queue has been in a particular state is reported by the [Queue State Time](#)^[79] statistic.

9.43 Internal Made [Statistic]

Internal Made^[67]

- 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.

9.44 IP Office

? IP Office

IP Office is an Avaya telephone system for small businesses. It supports traditional analog phones, Avaya digital feature phones and Avaya IP features phones.

9.45 Last Agent

? Last Agent

In a queue with no overflow and no voicemail, if there is only one available agent, when a call is present to them it will continue ringing without regard to the No Answer Time of the queue and any related No Answer Time actions that the IP Office would normally apply. This applies even if the agent enables Busy Not Available while the call is being presented.

9.46 Licenses

? Licenses

Use of IP Office Customer Call Reporter is controlled by licenses entered by the maintainer into the IP Office telephone system. Insufficient licenses may 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 who can be logged in at any time (up to a maximum of 30).

9.47 Logged In

? 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>#.

9.48 Logged Out [Agent State]

Logged Out

This agent state is reported when an agent has [logged out](#)^[110] from the phone system. Note that this is the default state assumed by IP Office Customer Call Reporter when it cannot determine the exact state, for example when restarting.

9.49 Longest Waiting Group

? Longest Waiting

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.

9.50 Longest Wait Time [Statistic]

📊 Longest Wait Time ⁶⁸

- This statistic is only available for queues.
- Waiting time of the longest waiting call.

9.51 Lost

? Lost Call

- A lost call is one where the caller disconnects before being answered.

9.52 Lost Calls [Statistic]

📊 Lost Calls ⁶⁹

- This statistic is available for 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.
- It does not include calls that go to voicemail.

9.53 Membership

? 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 normally have been **Available**.
 - On many Avaya display phones, a **G** on the display indicates that the user currently has their membership of at least one group enabled.

9.54 Maintainer

? 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](#)¹⁸⁸.

9.55 New Messages [Statistic]

📊 New Messages ⁷¹

- This statistic is only available for 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.

9.56 Night Service [Queue State]

? Night Service

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](#)⁷⁸ statistic. The time the queue has been in a particular state is reported by the [Queue State Time](#)⁷⁹ statistic.

9.57 No Agents [Queue State]

? No Agents

This queue state is reported for a queue where no agents are logged in.

This queue state is reported by the [Queue State](#)^[78] statistic. The time the queue has been in a particular state is reported by the [Queue State Time](#)^[79] statistic.

9.58 No Answer

? 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](#)^[19] state with the [reason code](#)^[19] Busy NA.

9.59 No Answer [Statistic]

No Answer^[72]

- This statistic is available for 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.

9.60 No Answer Time

? 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](#)^[19] 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.

9.61 Non-Queue Call

? Non-Queue Call

The terms 'non-queue call' or 'direct call' is used for calls targeted directly at a particular agent rather than at the queue to which they belong.

9.62 Off Hook

? Off Hook

This is a telephony term for when the handset on a traditional phone is lifted from the phone. For IP Office Customer Call Reporter, off hook time is used for any state where the agent's phone is in use but not connected to a call. For example when in the process of making a call.

9.63 Out of Service [Queue State]

? Out of Service

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](#)^[78] statistic. The time the queue has been in a particular state is reported by the [Queue State Time](#)^[79] statistic.

9.64 Outbound Calls External [Statistic]

[Outbound Calls \(External\)](#) ^[73]

- 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.

9.65 Overflowed

[Overflowed Calls](#) ^[163]

- 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.

9.66 Overflowed Answered [Statistic]

[Overflowed Answered](#) ^[74]

- This statistic is only available for 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](#) ^[80]).
- It does not include calls that go to voicemail.

9.67 Overflowed Calls [Statistic]

[Overflowed Calls](#) ^[75]

- This statistic is only available for queues.
- It shows the number of calls that have overflowed from the queue to its overflow destination.
- Once a call has overflowed, it may also appear in the queue's [Overflowed Calls Waiting](#) ^[196], [Overflowed Answered](#) ^[196] and [Overflowed Lost](#) ^[196] statistics.

9.68 Overflowed Calls Waiting [Statistic]

[Overflowed Calls Waiting](#) ^[76]

- This statistic is only available for queues.
- It shows the number of calls overflowed from the queue and still waiting to be answered.

9.69 Overflowed Lost [Statistic]

[Overflowed Lost](#) ^[77]

- This statistic is only available for queues.
- The number of calls which overflowed from the queue and were then lost.
- It does not include calls that go to voicemail.

9.70 Present [Agent 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 may still be [available](#) ^[196].

9.71 Programmable Button

Programmable Button

Most Avaya phones 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.

9.72 Queue

? 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](#)^[190] 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](#)^[192], [Sequential](#)^[193], [Rotary](#)^[194] and [Longest Waiting](#)^[194].

9.73 Queue Call

? 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](#)^[192]) rather than to the queue to which they belong are not normally included.

9.74 Queue State [Statistic]

Queue State^[78]

- 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](#)^[79] can be used to show the time that the queue has been in its current state.

9.75 Queue State Time [Statistic]

Queue State Time^[79]

- This statistic is only available for queues.
- It shows the time the queue has been in its current state.
- The related statistic [Queue State](#)^[78] can be used to show current state.

9.76 Queuing

? 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, additional 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.

9.77 Reason Codes

? Reason Codes

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

- 2410, 5410, 2420, 5420, 4610, 5610, 5620, 5621, 4620, 4621, 4625, 1708, 1716.

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 phone that allows reason code selection but fails to select a reason. For example if they enabled Busy NA 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 phones that do not allow the selection of a reason code.

9.78 Reference

? 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](#)^[104] and [Call Details Report](#)^[99] templates. A call's **Reference** number can also be used as the target reports based on the **Trace Report** template.

9.79 Ring Mode

? Ring Mode

A hunt group's ring mode defines the order in which agents in the group are used. The options are [Collective](#)^[192], [Sequential](#)^[193], [Rotary](#)^[193] and [Longest Waiting](#)^[194].

9.80 Ringing [Agent State]

Ringling

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](#)^[191].

9.81 Ringing Alt-Queue [Agent State]

Ring Alt-Queue

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-Queue](#)^[191]. It is also used when the agent is being presented a call that has overflowed from a queue.

9.82 Ringing Non-Queue [Agent State]

Ring Non-Queue

This agent state is reported when the agent is being presented with a call that isn't targeted to any queue of which they are a member. If answered the call their state will change to [Busy Non-Queue](#)^[191].

9.83 Rotary Group

? Rotary

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.

9.84 Routed to Other [Statistic]

[Routed to Other](#)^[80]

- This statistic is available for queues and agents.
- It shows the number of queue calls to the agent or queue that were subsequently retargeted to or answered by a party that is not a member of the same queue. For example calls picked up by another user while it was ringing at an agent.

9.85 Routed to Voicemail [Statistic]

[Routed to Voicemail](#)^[81]

- This statistic is available for 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.

9.86 Short Code

? Short Code

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

9.87 Sequential Group

? Sequential

Hunt groups configured as 'sequential' present calls waiting to be answered to the first available agent in the group, 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 group is again presented to the first available agent in queue membership order.

9.88 Small Community Network (SCN)

? 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 1.0 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.

9.89 Statistics

? 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 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 statistics value in views can be manually reset when required by any supervisor for who the [administrator](#)^[188] has enabled the [Reset Statistics](#)^[30] option. Resetting the statistics affects the view 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.

9.90 Supervised Transfer

? Supervised Transfer

A supervised transfer is one where, having put your current call on hold pending transfer, you make an [enquiry call](#)^[192] 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.

9.91 Supervisor

? Supervisor

Supervisors can [create](#)^[24] and [amend views](#)^[27] of the agent queues assigned to them. Those views are then viewable by the supervisor and the agents. Supervisors can also [create reports](#)^[90] that they then either run [manually](#)^[93] or that they [schedule](#)^[94] 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.

9.92 System Status Application

? System Status Application (SSA)

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 normally be run from the IP Office Customer Call Reporter server.

9.93 Transferred [Statistic]

Transferred ⁽⁸²⁾

- This statistic is available for 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](#) ⁽¹⁹²⁾ to agents that they then transfer.

9.94 Unsupervised Transfer

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. This is also called a 'Blind Transfer'.

9.95 View

View

The term view is used for the first 3 tabs displayed to supervisors and agents when they login to IP Office Customer Call Reporter. 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.

9.96 Weighted Average

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 = $((66 \times 20) + (50 \times 1) + (100 \times 40)) / (20 + 1 + 40) = 88\%$.

9.97 Wrap Up

Wrap Up

For all phone users, the IP Office phone system normally 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 allow analog phone users who have just finished a call the opportunity to start dialing a short code or to make a call before another incoming call is presented to them.

For users set as agents, the period of wrap up applied to their phone is reported as their being in [After Call Work](#) ⁽¹⁸⁸⁾ 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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