UCx Contact Center Reporting Guide

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Chapter 1

Introduction

What is UCx Contact Center Reporting?

UC^{X} Contact Center Reporting is a monitoring and reporting system for the UC^{X} Contact Center.

The software allows you to obtain reports about your contact center activity, divided and filtered by queue, agent and date/time period, showing you in detail the workings of your contact center operation.

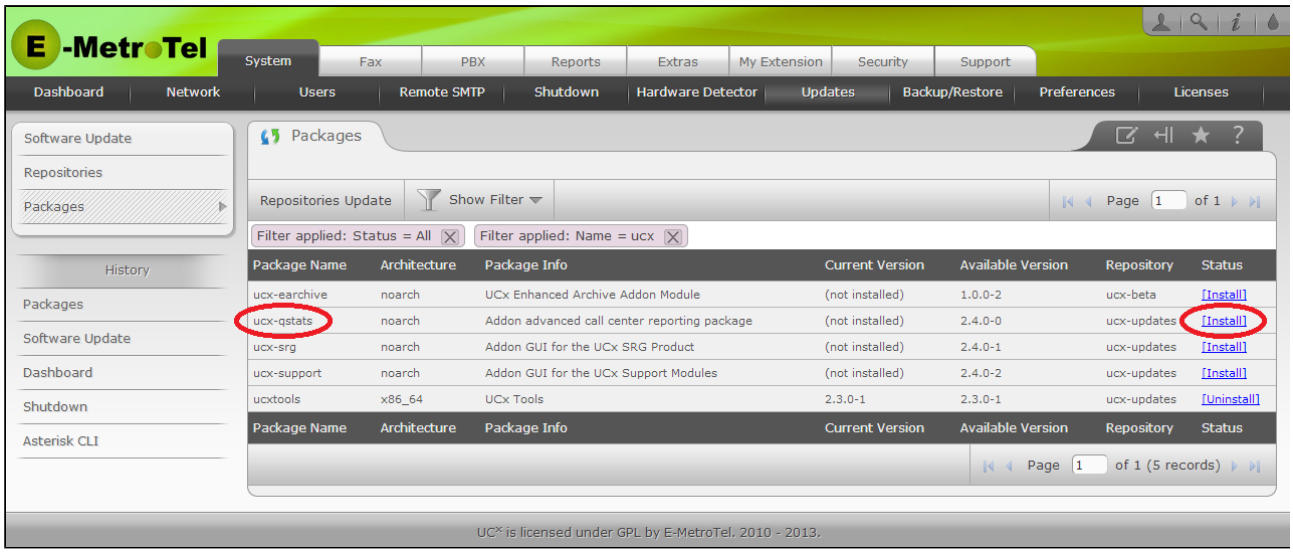
The Advanced Contact Center Reporting requires the **Queue Repor**t (QR) License to be installed before it can be used. First obtain the license and then install the license code using the following steps:

Install Queue Report (QR) License

1. Open the UC^{X} Web-based Configuration Utility
2. From the **System** tab, select **Licenses**
3. From the left side column, select **Enter License**
4. Copy the entire license string provided by E-MetroTel in the **License String** field and press the ***Save*** button to activate the license.

Install the Software Package

1. From the **System** tab, select **Updates**
2. From the left side column, select **Packages**
3. Click on Show Filter under name field enter **ucx**
4. Under **Status** pull-down, select All
5. Locate the **ucx-qstats** package and click on the **Install** link in the **Status** column.



Features

With UC^X Contact Center Reporting you can see:

- Answered calls
- Unanswered or Abandoned calls
- Agent Logins/Logouts and Pauses
- Call Distribution per different criteria: queue, time and date ranges
- Realtime view of queues and waiting calls

Reports can be generated while the contact center is operational. You can see what is happening in real time with virtually no delays.

It is possible to create users with restricted permissions. You can grant access to specific queues or agents for your contact center supervisors or users.

Finally, you can export data to comma separated files .csv or PDF documents.

Chapter 2

Requirements

Installation Requirements

The UC^{X} Contact Center Reporting package is a UC^{X} add-on that can be purchased from an authorized E-MetroTel reseller.

Client requirements

UC^{X} Contact Center Reporting is a web based application, which means there is no need to install any software on the client's computer, except for a modern web browser like Firefox or Chrome. To see the interactive graphs you must have the Adobe Flash Player installed for your browser.

Chapter 3

Administration and configuration

Accessing the UCx Contact Center Reporting System

You can access the UC^X Contact Center Reporting System in one of two ways.

Embedded Mode Access

Embedded mode access allows you to view the reporting within the standard UC^X application interface. You have access to all the UC^X administration navigation while viewing the report. However, you will need a UC^X user account with the appropriate privileges to access the UC^X Contact Center Reporting System with this method. This is why some administrators prefer the Standalone Access method described below.

To view the UC^X Contact Center Reporting system, perform the following steps:

1. Open the UC^X Web-based Configuration Utility
2. From the **Reports** tab, select **Queue Reports**

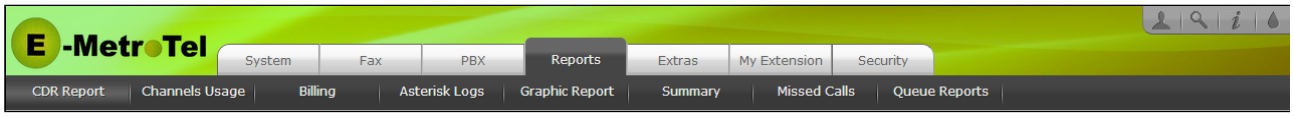


Figure 3.1: Embedded Model Reporting Access

> The Queue Reports tab is only visible if the UC^X Contact Center Reporting package is installed.

Standalone Access

The standalone method allows you to access the UC^X Contact Center Reporting system without the need to first login to the UC^X web-based configuration utility.

If your UC^X still uses the default IP address of 192.168.1.200, you access the reporting by loading the following IP address in your web browser:

```
http://192.168.1.200/qstats
```

> Replace 192.168.1.200 with the IP address of your UC^X if it does not use the default IP address

Identifying you as user

Once you connect to the UC^X Contact Center Reporting system from your web browser you must login with valid credentials. As you can see in Figure 3.2. UC^X Contact Center Reporting has a powerful access control system for controlling access to resources and reports, which is fully configurable by the administrator.

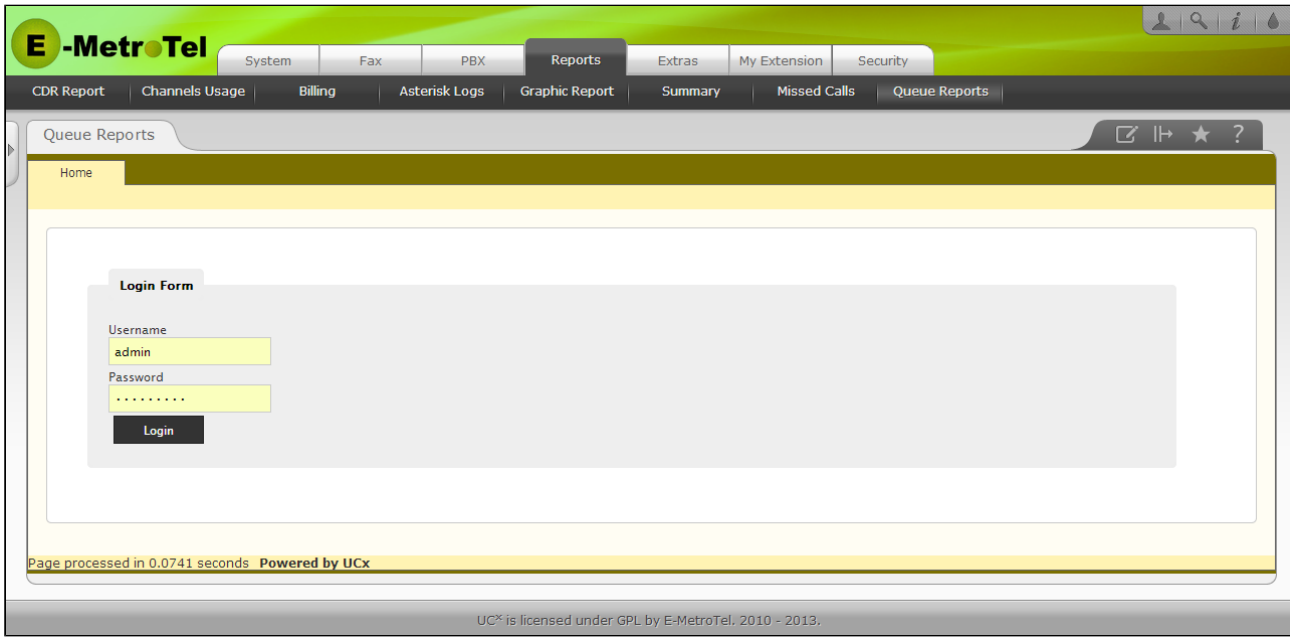


Figure 3.2: Home Screen

A default installation will create two users with different privileges:

Username	Password	Notes
user	emetr0tel	Basic access with no access to user administration, system preferences or configurations.
admin	emetr0tel	Administrator level. Can perform all operations, including user administration.

Table 3.1: Default users created during setup

User creation and permissions assignment

Login to the system with the default user admin to have admin privileges. Once you're logged in you must click on the User Access tab (Figure 3.3) where you can modify or create new accounts with their respective permissions.

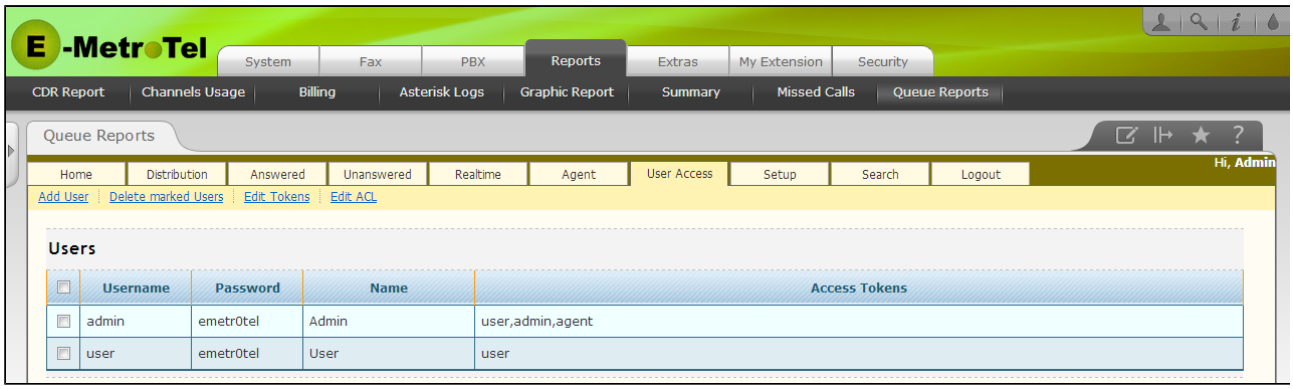


Figure 3.3: Users Administration

Important

We recommend to change the admin password the first time you login to the system by clicking on the User Access tab, and then clicking over admin.

To add a new user just select that option in the submenu. If you want to erase a user, click on the check box for the users you want to delete and select the submenu option Delete marked users. To modify a user, just click over the user line in the list. It will open the user editing screen (Figure 3.4).

Note

Agents and Queues become available the first time they are used. If the Agent or Queue does not appear, make an agent call and it should be available on the home screen.

Editing a User

In the User editing screen you can change login credentials (like login, password and name) as well as assigning access tokens and choosing which agents and queues the user will be able to report on. You can select the all tag or choose queues or agents individually in their respective selection lists.

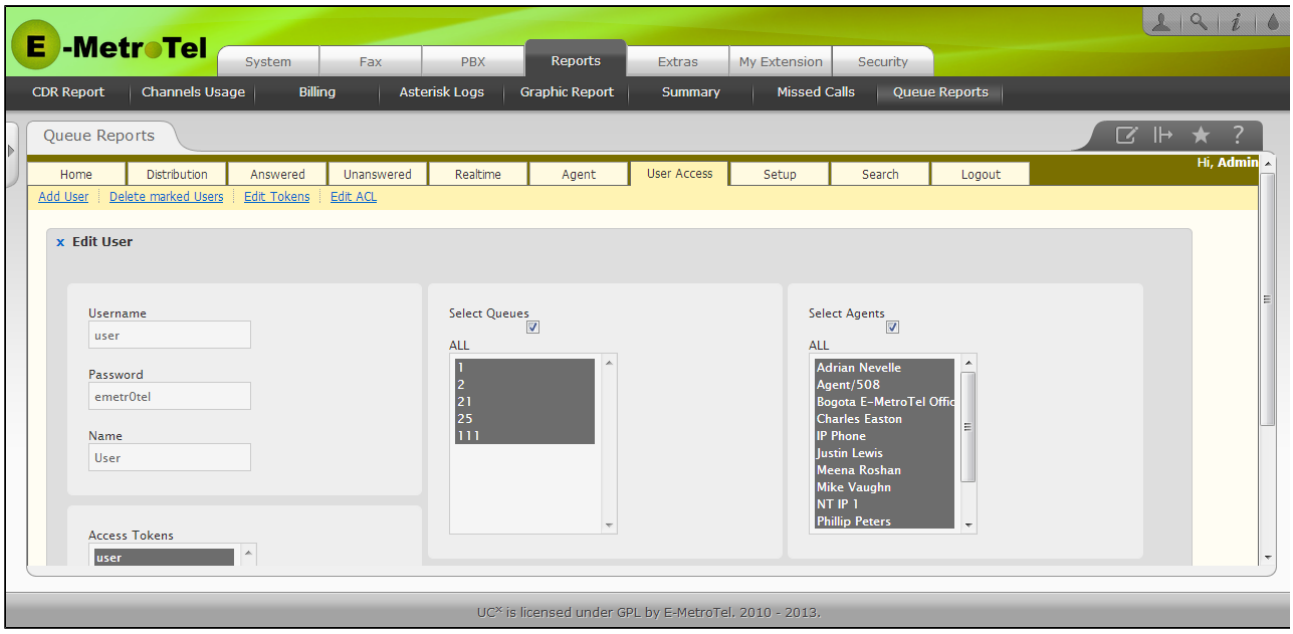


Figure 3.4: User edition

Access Tokens

There are 3 access tokens in UC^X Contact Center Reporting: admin, user and agent. These tokens can be assigned individually or together to any account you choose.

Depending on which tokens an account has assigned, it will be able to view different reports just like they're defined in the Edit ACL screen inside the User Access tab. For example, it is possible to restrict the service level report to accounts that have the agent tokens only. In this way, if an account does not have this token assigned, it won't be able to see that report.

Access Control (Edit ACL)

This submenu (located in the Users Access tab) allows you to determine the access tokens that are required to access to specific reports and options. Under normal use no modifications are needed. However it is possible to restrict reports to different user levels assigning them any of the three available access tokens.

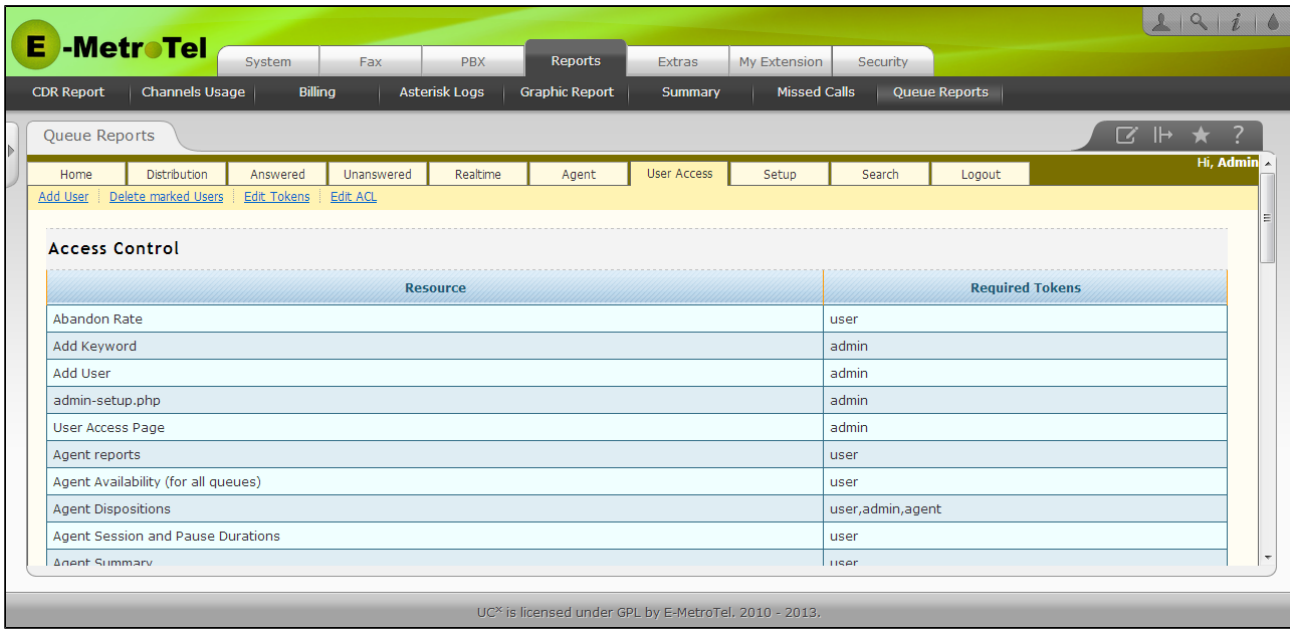


Figure 3.5: Access Control

In order to modify any of the access controls, just click on the resource you want to modify and it will display the access control edition screen (Figure 3.6). From here you can determine which access tokens will be required to see or to select the chosen resource.

To assign tokens you must click them in the selection list. You can select more than one using ctrl-click.

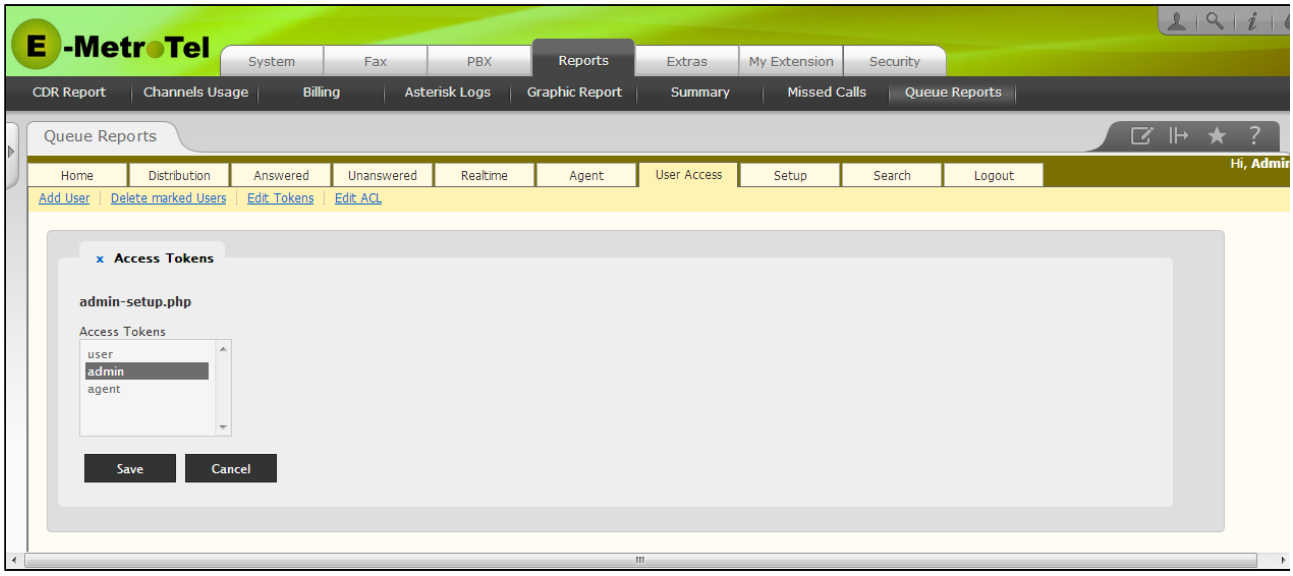


Figure 3.6: Edit ACL

Setup and Preferences

Setup tab allows you to select preferences and general configurations, like time periods in different reports, language, default disconnection times, etc.

Figure 3.7: Setup

The setup engine consists of a list of keyword-parameter-values entries. The main setup parameter should be set as the "keyword". Some keywords allow modifiers, for example to set a specific language or time zone per user, the parameter should be set to that user name. Finally the value for the keyword, depending on the type could be a free text value, or a zero or one to turn the feature off and on respectively.

For example, to set the user John to english language, and the user Maria to spanish, and the default language to english, you should have three entries:

```
Keyword:  language
Parameter:  john
Value:  en

Keyword:  language
Parameter:  maria
Value:  es

Keyword:  language
Parameter:
Value:  en
```

SETUP VARIABLES

- agent_row_color: To paint the whole cell background to the status color for an agent, set this to 1. If turned off, only a small rectangle with the same color will be displayed.
- alarm_hold_duration: Alarm in seconds for wait time in queue in realtime view. Can be set per queue.
- alarm_last_call: Alarm in seconds for last call taken by agent, also for the realtime view. Can be set per queue.

- alarm_pause_duration: Alarm in seconds for pause duration by agent for the realtime view. Can be set per queue.
- alarm_wait_count: Alarm (in number of calls) for calls waiting in a queue.
- alarm_wait_threshold: Threshold (in percentage) from which to start coloring in alarm calls.
- asterisk_12: Set it to 1 if you use Asterisk 1.2.X. It will make the realtime page work.
- coachcontext: Dialplan context where to send coach calls. It must be similar to this one (if you use Agent type channel you will need to change SIP to Agent in the ChanSpy call):

```
[coach]
exten =>  _X.,1,ChanSpy(SIP/$ \{EXTEN},w)
exten =>  _X.,2,Hangup
```

- count_transfers_as_connected: Count transferred calls as connected/answered when doing percentage calculations in the distribution reports. Set to 1 to enable, 0 to disable.
- csv_separator: Separator character to use in CSV files. Default value is ';'. If you need to use ',' set this value.
- custom_pauses: If value is set to 1, the realtime page will check the ASTDB for PAUSECUSTOM family and it will show the pause code stored there for a particular Agent as stored in astdb Key. Eg: PAUSECUSTOM/1000 = Break:$ {EPOCH} stored in ASTDB will show Agent 1000 as break when paused, since ${EPOCH}.
- default_end_hour: Default end hour in HH:SS format for the date/time selection in the Home tab.
- default_start_hour: Default start hour in HH:SS format for the date/time selection in the Home tab.
- dict_agent: Dictionary entry for Agents. It will replace the agent set as the parameter to the value you specify (So you can use names instead of interfaces).
- dict_queue: Dictionary entry for Queues. Same as the agent dictionary, but for replacing queue names.
- distribution_interval: Time interval (in minutes) to be used in distribution per hour reports.
- first_page: Initial page to load (Eg: answered.php, unanswered.php, distribution.php, agent.php). Can be set per user
- graph_size: Set initial graph size in percentage. Default is 100%. You can reduce or increase the size by changing this value.
- honor_timeframe_in_agent: To Honor time period when reports are shown in Agents tab. Valid values: true or false (In case of being in true, agents list will be shown using the 00:00 to 24:00 range, independently of the selection you have done in Home tab. This is used to avoid possible incorrect values of agents time sessions during the day).

- ignore_none_abandons: If you do not want to count for inbound abandoned calls when selecting some agents from a report, set this parameter to one. This is useful when you are tracking outbound campaigns and want to track performance per agent on outbound as it filters out the inbound abandoned calls that are assigned to the whole queue (agent NONE) and not a particular agent. If you select all agents for a report it will include also the NONE agent, so inbound abandons will count normally event if this parameter is set to one.
- language: Used Language. Possible options:en (english) and es (spanish). If it specifies a username as parameter, language will only apply for that user. If you want to create a language file, you must create inside html/lang directory a file, for example, de.php, based in some existing language, so you can specify "de" (deustch) in this setting.
- minimum_abandon_duration: Minimum time (in seconds) for a call to be considered abandoned. If it specifies queue name as parameter it will apply only for that queue. For example, if you put 5 as a value in that field, every 5 seconds or less abandoned calls will not be considered in the queue system.
- no_animation: Set this if you want to disable animations in flash charts.
- realtime_refresh: Time in seconds to refresh the realtime information. Default value is 5 seconds.
- recordings_path: Recordings location/directory in the hardrive to perform the direct download or recording streaming.
- shared_lastcall: Share last call information for agents in all the queues (for the realtime page). Only the shortest time will be displayed. If tracking outbound calls and the astdb family LASTCALL is set, it will also read timestamp from there to account for them.
- show_agent_call: Show all call events when drilling down on agent reports.
- show_agent_field: Show agent column in outgoing reports (only useful when tracking outbound calls)
- show_url_field: Show the url field in answered reports. It will also add answered and unanswered reports by URL.
- sla_interval: Time period (in minutes) to be used in Level Service reports.
- spychannel: Channel or device to use for spying/coaching, the parameter must be set to the stats user name and the value to the full channel name, like SIP/1234
- spycontext: UC^{X} context where to send spy calls, it must be similar to this one:

```
[spy]
exten =>  _X.,1,ChanSpy(SIP/$ \{EXTEN})
exten =>  _X.,2,Hangup
```

- timezone: Timezone Configuration for user, in the format [emetro:+-]HH:MM

Chapter 4

Using UCx Contact Center Reporting

Report Selection

In the Home tab you set the initial filters on the reports: you can select the date range, time frame, queues and agents you want to report on.

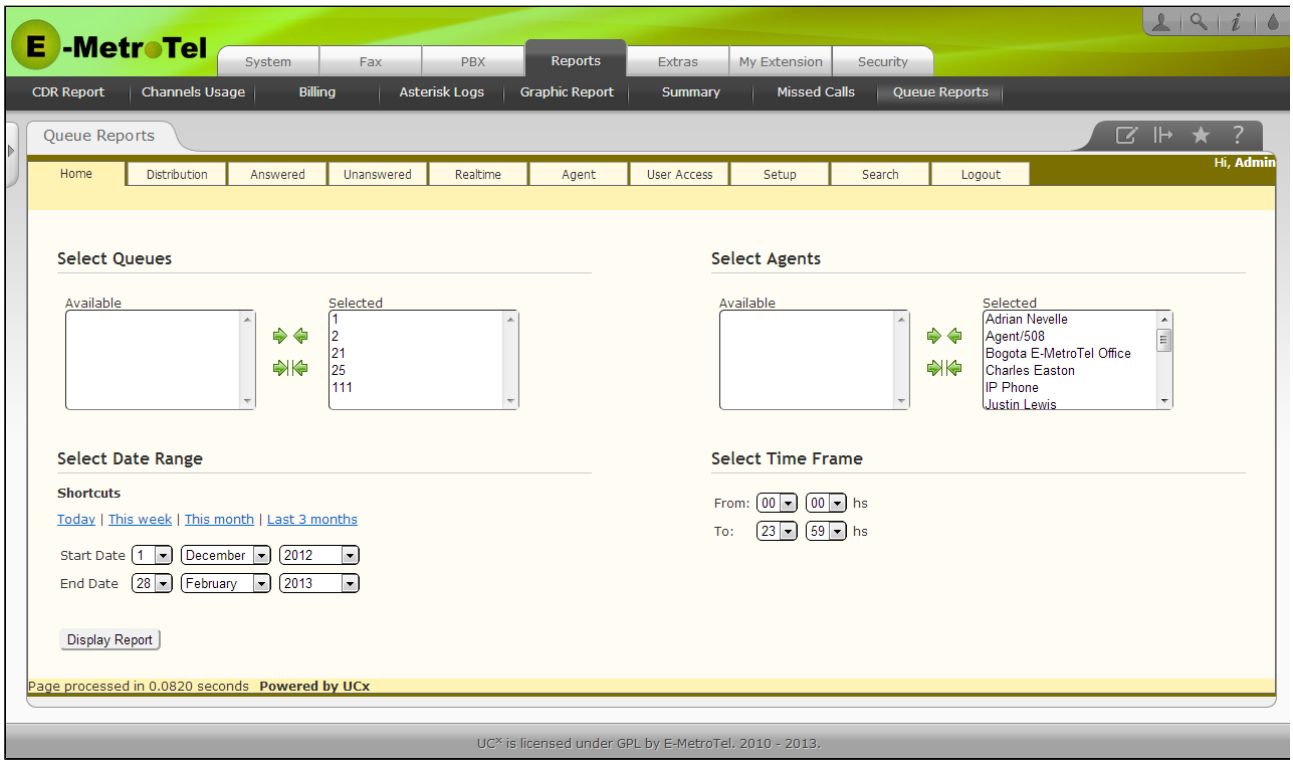


Figure 4.1: Filters Selection

Queues and Agents filter

You can choose which agents or queues you want to report on from all of the available ones for the user you are logged in as (as configured in its user profile). This data is collected from the UC^X queue log file, so you will only see queues or agents that had at least one call delivered to them. You can choose some queues/agents or all of them.

In the two selectors you can see a box at left with the available elements, and another at right with the ones that will be included in the report. It is essential to select at least one queue and one agent to generate reports.

Filtering by date and time period

It's also possible to select the date range and time frame. There are a number of shortcuts provided:

- Today: actual day
- This week: selects the week starting from last monday
- This month: selects from the 1st until last day of month.
- Last 3 months: selects last 3 months, taking as last day the last day of the actual month.

Note that selecting a shortcut will only set the corresponding dates in the selection fields. To execute the report you must click the Show Report button.

You can also choose a date range manually from start to end, choosing any time period you like. The system will check automatically that selected dates and ranges are valid. In case of an error, the system will alert you or select the appropiate day number.

To create the report, you must push the Show Report button. After that you will be automatically redirected to the Distribution tab, or to any page that was configured as the setup parameter first_page from the Setup tab.

About Results

Once filters and date range / time frame are selected, you will have access to the results tabs. There is a summary header that is common to all reports, with current report information including the analized queues, agents, the time period, start and end dates and total number of days included in the report.

Next to this summary box there is another one that varies slightly from tab to tab, including totals summary and important information for each report, as shown in the following picture:

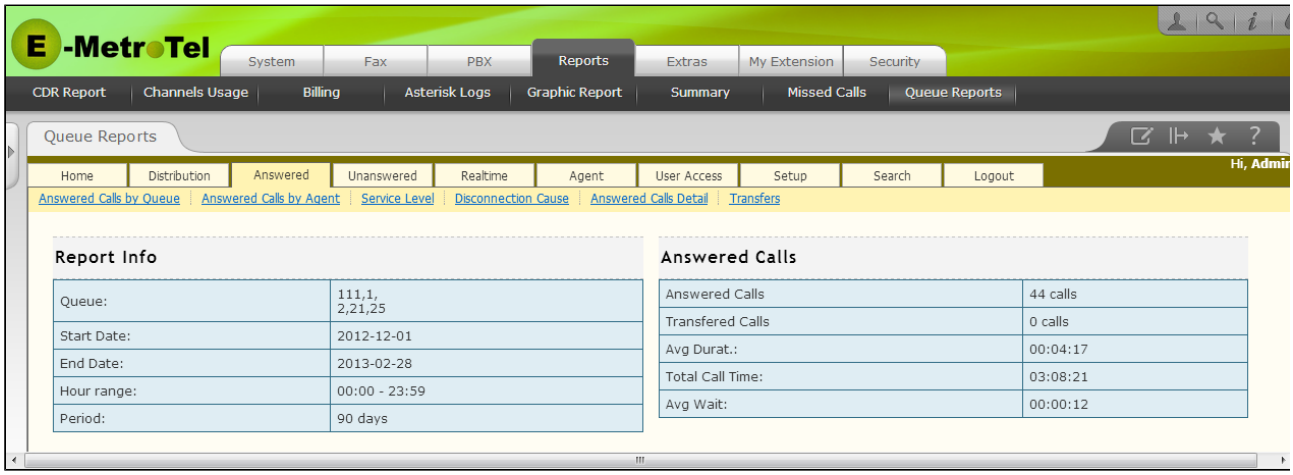


Figure 4.2: Reports Summary

After the summary information, the detailed reports are shown. They differ depending on the report type (tab) you are viewing. Each report has the option of being exported to PDF or CSV files, showing a link to each format at the bottom of each sub-section. In the upper part of screen you will see tabs for each type of report. There are four available, which are detailed next.

Important

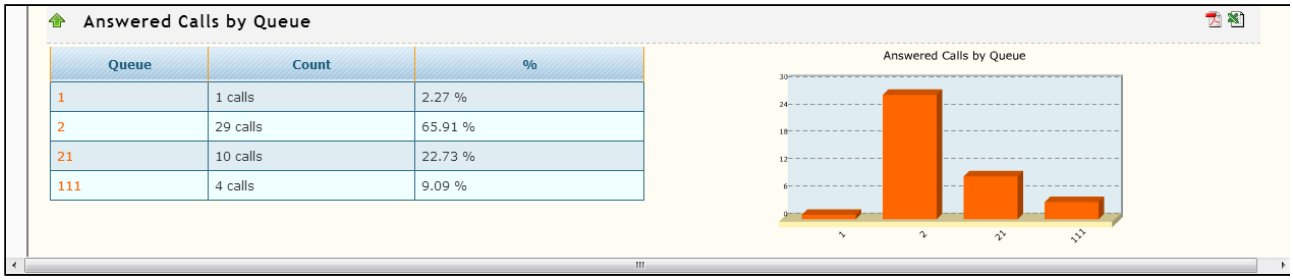
Every item in the right column that lists elements with a hyperlink lets you open detailed information (drill down) about each row. To export detailed information you must do it from the detailed report , like the 'Answered Calls Detail' or 'Unanswered Calls Details' reports.

Answered Calls

By clicking the 'Answered' tab you will be taken to a report which shows detailed information about every answered call. This tab includes several reports for answered calls, listed one after the other. There are also shorcuts just down the report tabs to jump to the appropiate report more quickly. Sub-reports for the Answered Calls tab are the following:

Answered Calls by Queue

In this report we can see all answered calls grouped by queue.



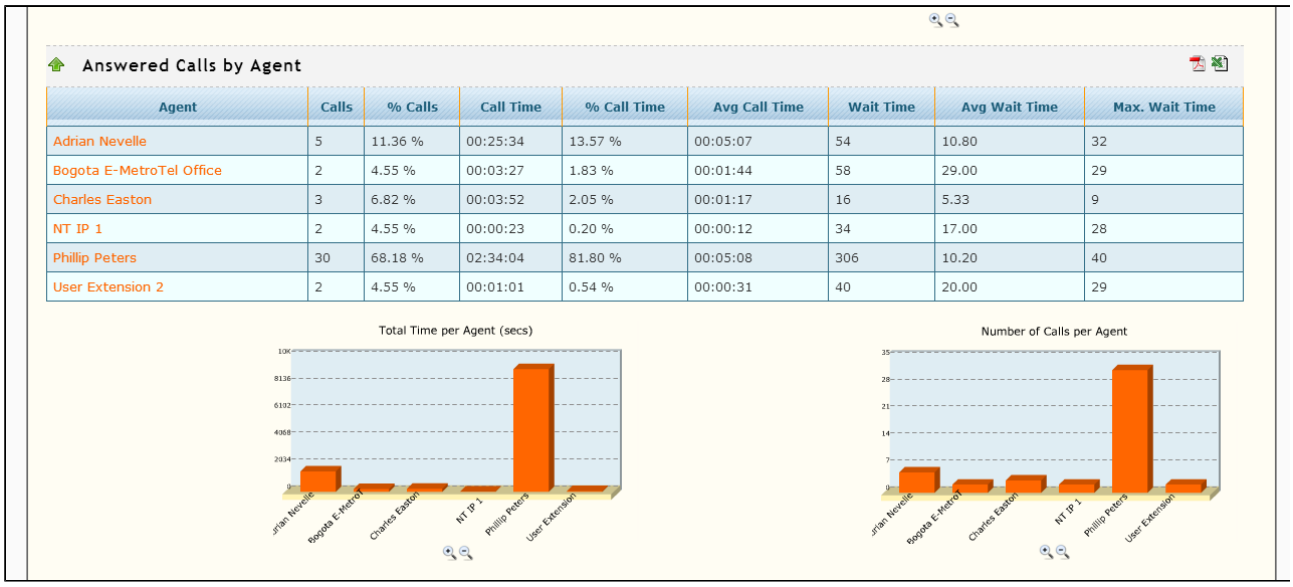
Queue	Count	%
1	1 calls	2.27 %
2	29 calls	65.91 %
21	10 calls	22.73 %
111	4 calls	9.09 %

Figure 4.3: Answered calls By queue

There are 3 columns: the queue itself, the number of answered calls, and the percentage of answered calls for that queue in relation to the total number of answered calls for all the selected queues in the report. If you select just one queue the percentage will be always 100%.

It is possible to drill down on each queue by clicking on its name (orange links). That way you will open up another report with all the calls that are part of that grouped element, in this case, all answered calls for that particular queue.

Answered calls by agent



Answered Calls by Agent

Agent	Calls	% Calls	Call Time	% Call Time	Avg Call Time	Wait Time	Avg Wait Time	Max. Wait Time
Adrian Nevelle	5	11.36 %	00:25:34	13.57 %	00:05:07	54	10.80	32
Bogota E-MetroTel Office	2	4.55 %	00:03:27	1.83 %	00:01:44	58	29.00	29
Charles Easton	3	6.82 %	00:03:52	2.05 %	00:01:17	16	5.33	9
NT IP 1	2	4.55 %	00:00:23	0.20 %	00:00:12	34	17.00	28
Phillip Peters	30	68.18 %	02:34:04	81.80 %	00:05:08	306	10.20	40
User Extension 2	2	4.55 %	00:01:01	0.54 %	00:00:31	40	20.00	29

Figure 4.4: Answered calls by agent

This report will display a summary of all answered calls grouped by Agent. By clicking on each agent you can drill down and see the list of individual calls for that agent.

The columns are the following:

Column	Description
Agent	Name of channel/agent, if clicked it will open a report (drill down) with all answered calls for that agent.
Calls	Number of answered calls by this agent.
% calls	Percentage of answered calls in the current selection. (Agent Answered Calls % Total Answered Calls)
Call Time	Total accumulated time (in minutes) of all answered calls.
% Call Time	Percentage of talk time in the current selection. (Agent Call Time % Total Answered Calls)
Avg Call Time	Average call time for this agent. (Agent Call Time % Agent Answered Calls)
Wait Time	Accumulated wait time for all calls answered by this agent
Avg Wait Time	Average wait time for all calls answered by this agent (Agent Wait Time % Agent Answered Calls)
Max Wait Time	Max wait time for that agent.

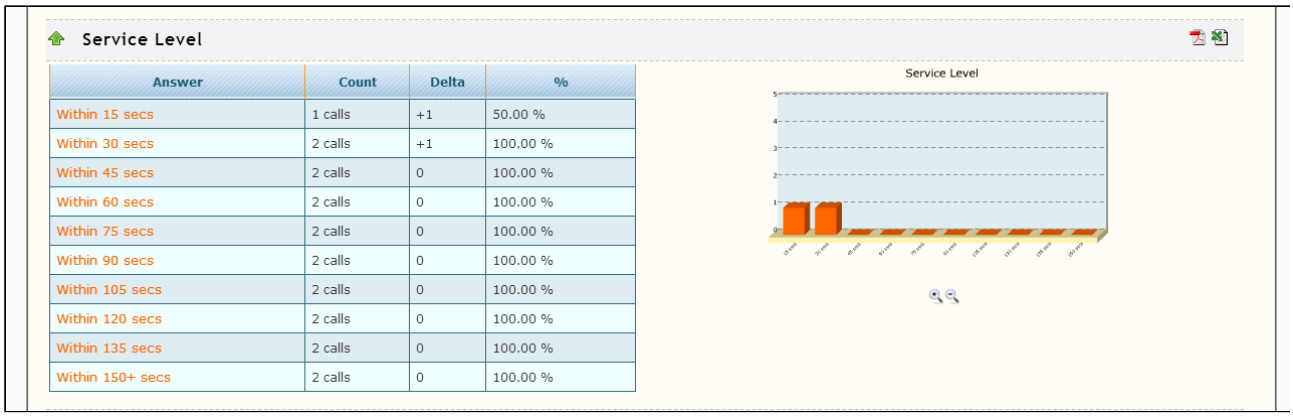
There are also interactive bar charts, showing accumulated time of answered calls by agent, number of calls, etc. If you mouse over the columns you can see some details about the numbers of calls.

Important

Take into account that averages for call time and wait time are calculated based on that particular agent number of answered calls, not based on answered calls by all agents. The total number of answered calls is also limited to the queues and agents selected on a report, so if you select only one agent to report on, the percentages will be always 100% as the "universe" for the calls is limited to that agent only. This rule applies to every report on the system.

Service Level

This report shows the call distribution based on wait times, with time cuts at 15 second intervals. The interval can be configured in the Setup tab by setting the sla_interval keyword.



Service Level

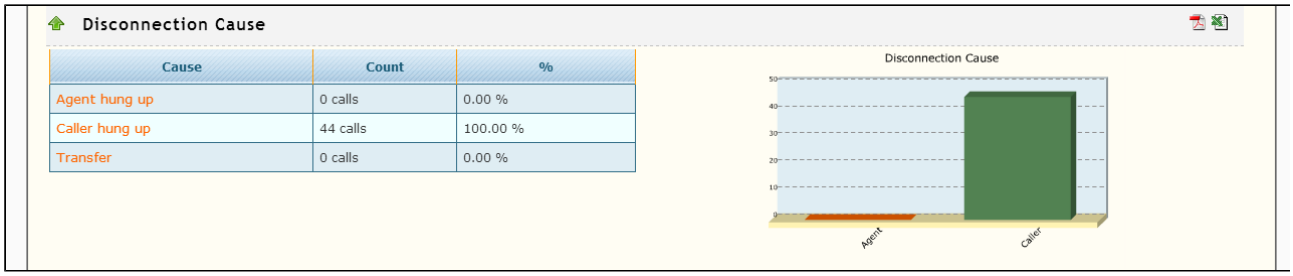
Answer	Count	Delta	%
Within 15 secs	1 calls	+1	50.00 %
Within 30 secs	2 calls	+1	100.00 %
Within 45 secs	2 calls	0	100.00 %
Within 60 secs	2 calls	0	100.00 %
Within 75 secs	2 calls	0	100.00 %
Within 90 secs	2 calls	0	100.00 %
Within 105 secs	2 calls	0	100.00 %
Within 120 secs	2 calls	0	100.00 %
Within 135 secs	2 calls	0	100.00 %
Within 150+ secs	2 calls	0	100.00 %

Figure 4.5: Service Level

You will see the number and percentage of calls answered within each time period. Delta column shows the additional number of calls compared to the previous time period. Each subsequent time period will total the previous ones, so you finally reach 100% for all calls. The numbers will grow step by step. So, in the delta column you will see the exact number of calls for that time period (for example, between 15 and 30 seconds of wait time), while in the percentage and number columns you will see the cumulative total up to that time period, including all the previous ones.

Disconnection Cause

This report shows the reason for call disconnect.



Disconnection Cause

Cause	Count	%
Agent hung up	0 calls	0.00 %
Caller hung up	44 calls	100.00 %
Transfer	0 calls	0.00 %

Figure 4.6: Disconnection Cause

Basically it shows us how many calls were ended by the agent, how many by the caller, and the number of transfers.

Answered Calls Detail

This report shows all answered calls in detail for the selected period, with no data grouping. You can also drill down on an individual call to see the complete call flow. From here you can also filter the results by callerid, by entering the numbers in the top right search box. You will also have links to download or listen to recordings if they are available and if they were setup both in UC^{X} and in UC^{X} Contact Center Reporting.

Answered Calls Detail

Date	Queue	Agent	Phone Number	Event	Wait Time	Call Time	Actions
2013-02-04 15:07:54	111	NT IP 1	326	COMPLETECALLER	6	00:00:01	
2013-02-04 15:35:29	111	NT IP 1	326	COMPLETECALLER	28	00:00:22	
2013-02-04 15:36:44	111	User Extension 2	326	COMPLETECALLER	29	00:00:29	
2013-02-04 15:52:42	111	User Extension 2	325	COMPLETECALLER	11	00:00:32	
2013-02-04 15:55:38	2	Phillip Peters	15531116181	COMPLETECALLER	8	00:03:09	
2013-02-05 09:55:24	2	Phillip Peters	15575565917	COMPLETECALLER	3	00:00:02	
2013-02-05 11:38:58	2	Phillip Peters	15531116181	COMPLETECALLER	9	00:01:01	
2013-02-05 11:49:33	2	Phillip Peters	15528439999	COMPLETECALLER	40	00:01:53	
2013-02-05 12:07:20	2	Phillip Peters	15528439999	COMPLETECALLER	9	00:01:05	
2013-02-05 14:35:47	21	Phillip Peters	15562674910	COMPLETECALLER	11	00:02:14	
2013-02-05 14:50:38	21	Phillip Peters	1Restricted	COMPLETECALLER	6	00:02:26	
2013-02-05 16:19:33	2	Phillip Peters	15558717051	COMPLETECALLER	13	00:05:13	
2013-02-05 16:38:19	2	Phillip Peters	15558717051	COMPLETECALLER	8	00:00:44	
2013-02-05 16:42:31	21	Phillip Peters	155337007443	COMPLETECALLER	11	00:00:55	
2013-02-07 10:19:20	2	Phillip Peters	15574444827	COMPLETECALLER	10	00:39:40	
2013-02-07 12:29:20	21	Charles Easton	15527856009	COMPLETECALLER	6	00:02:47	
2013-02-07 12:59:56	2	Phillip Peters	15569947100	COMPLETECALLER	6	00:02:26	
2013-02-07 13:13:19	2	Bogota E-MetroTel Office	15569947100	COMPLETECALLER	29	00:02:11	
2013-02-07 14:52:49	2	Phillip Peters	15531116181	COMPLETECALLER	11	00:03:06	
2013-02-07 15:03:06	21	Phillip Peters	15562674910	COMPLETECALLER	9	00:00:53	

1 2 3 > »

Figure 4.7: Answered Calls Detail

Transfer

This report shows how many calls were transferred to each extension in the selected time range. This lets you visualize who is answering exception calls. Note: when a call is transferred, the system does not log the total duration of the call - it logs only up to the time the transfer took place.

Transfers

Agent	To:	Count
SIP/2014	46733351@from-internal	1
SIP/2014	2005@from-internal	2
SIP/2011	96285692@from-internal	1
SIP/2014	2012@from-internal	3
SIP/2011	41228411@from-internal	1
SIP/2009	2010@from-internal	1
SIP/2011	813@from-internal	1
SIP/2009	541@from-internal	3
SIP/2014	813@from-internal	2
SIP/2010	313@from-internal	1
SIP/2011	2010@from-internal	8

Figure 4.8: Transfer Summary

Unanswered Calls

Unanswered calls are the ones that entered and exited the queue without being delivered to an agent.

This could happen when a user decides to disconnect because they don't want to wait in the queue anymore (ABANDON), when the queue system decides to disconnect the user for reaching the maximum waiting time that was setup for that queue (EXITWITHTIMEOUT), or when the user exited the queue by pressing a digit (EXITWITHKEY). The last two options must be configured in UC^{X} (maximum wait time or option to exit a queue by pressing a digit).

Abandon Rate

This report is the counterpart of the Service Level report for answered calls. It will cut the report in intervals of seconds as defined in the sla_interval parameter, showing all calls that exited the queue in each time interval.

Abandon Rate

Unanswer	Count	Delta	%
Within 15 secs	4 calls	+4	100.00 %
Within 30 secs	4 calls	0	100.00 %
Within 45 secs	4 calls	0	100.00 %
Within 60 secs	4 calls	0	100.00 %
Within 75 secs	4 calls	0	100.00 %
Within 90 secs	4 calls	0	100.00 %
Within 105 secs	4 calls	0	100.00 %
Within 120 secs	4 calls	0	100.00 %
Within 135 secs	4 calls	0	100.00 %
Within 150+ secs	4 calls	0	100.00 %

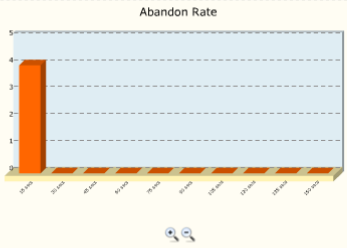


Figure 4.9: Abandon Rate

The delta value will show the number of unserved calls in that particular time interval, while the number and percentage will grow in each interval to reach 100% in the last interval. As with any other report you can drill down and see individual calls by clicking on the Unanswer column. When drilling down you will also see the actual disposition for every call, either ABANDON, TIMEOUT or EXITWITHKEY.

Disconnection Cause

This report shows unanswered calls grouped by disconnection cause.

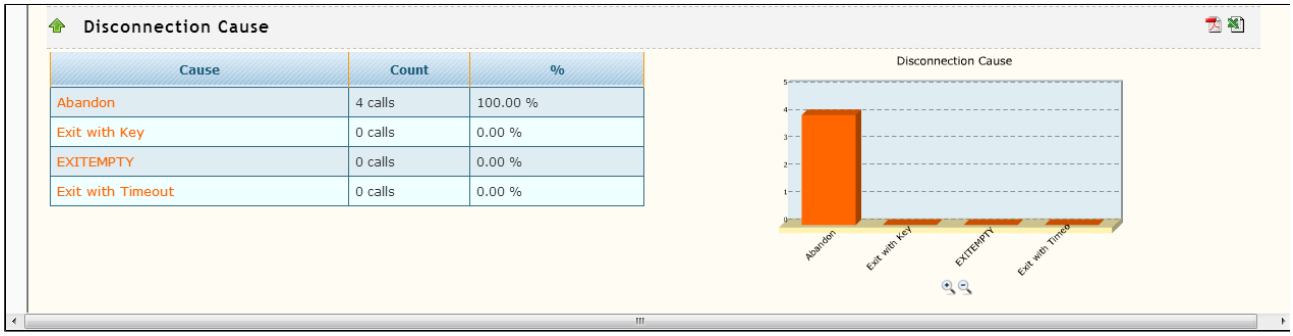


Figure 4.10: Unanswered Calls Disconnection Cause

As mentioned before, there are 3 possible call dispositions for unserved calls.

UNANSWERED CALLS DISPOSITIONS

- Abandon: User hang up
- Exit with Timeout: The maximum wait time was reached (as configured in UC^{X})
- Exit with Key: The user exited the queue by pressing a digit (as configured in UC^{X})

Unanswered calls by queue

In this report we can see the details for incomplete calls grouped by queue.

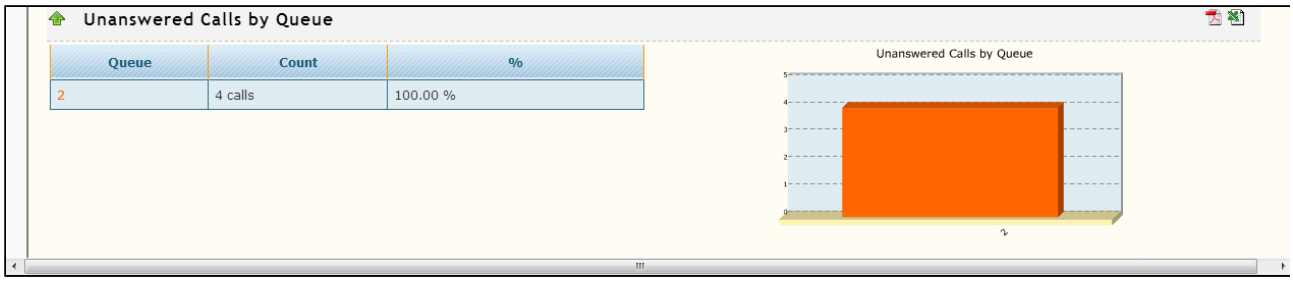


Figure 4.11: Unanswered calls by queue

If the report includes more than one queue it will be possible to see the number and percentage of unanswered calls per queue, accompanied by an illustrative chart.

Unanswered calls detail

This report will show every unanswered call in detail. It is possible to drill down on each one to see the actual call flow.

Unanswered Calls Detail

Date	Queue	Phone Number	Event	Start Position	End Position	Wait Time
2013-02-08 12:29:11	2	558	Abandoned	1	1	1
2013-02-08 12:29:22	2	558	Abandoned	1	1	8
2013-02-08 13:09:44	2	558	Abandoned	1	1	6
2013-02-11 13:21:18	2	15531116181	Abandoned	1	1	9

Figure 4.12: Unanswered Calls Detail

Distribution

Here we can see the distribution of calls by different time periods or metrics. Call Distribution includes both Answered and Unanswered calls on its reports.

In the event that you configure the UC^{X} for login and log out of agents you will also see the number of times the agents logins/logouts of the queues.

Distribution per Queue

Report that shows call distribution (answered and unanswered) for each of the queues selected.

Call Distribution per queue

Queue	Received	Answered	Unanswered	Transfers	% Answ	% Unansw	Avg Durat.	Avg Wait
1	1	1	0	0	100.00 %	0.00 %	00:00:11	00:00:01
2	33	29	4	0	87.88 %	12.12 %	00:05:48	00:00:11
21	10	10	0	0	100.00 %	0.00 %	00:01:52	00:00:11
111	4	4	0	0	100.00 %	0.00 %	00:00:21	00:00:19
Total	48	44	4	0	91.67 %	8.33 %		

Figure 4.13: Distribution per Queue

The columns are the following:

Column	Description
Queue	Name of the queue, if clicked it will open a report (drill down) with all calls for that queue.
Received	Number of received calls in the queue, it will count answered, unanswered and transferred calls.
Answered	Number of calls that were answered, including dispositions COMPLETECALLER and COMPLETEAGENT.
Unanswered	Number of unserved calls, including all possible dispositions (ABANDON, EXITWITHKEY and EX- ITWITHTIMEOUT).
Transfers	Number of transferred calls.
% Answered	Percentage of answered calls for that particular queue. (%answered + %unanswered in the row should total 100%)

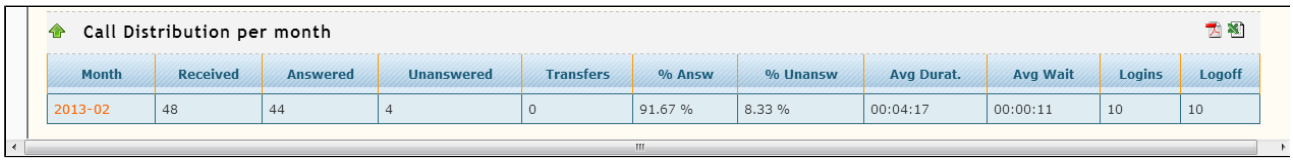
% Unanswered	Percentage of unanswered calls for that particular queue. (%answered + %unanswered in the row should total 100%)
Average Duration	Average call duration on that particular queue.
Average Wait	Average wait time for that particular queue

By default, Transfers are not counted as answered calls

> **Important**
>
> By default, transferred calls are not counted as answered calls. So if you have many transfers you will think that the percentages are wrong. They are not as transfers are a 3rd category on call dispositions. If you do want to count them as Answered calls in the percentage calculations, you should add the count_transfer_as_connected keyword in the Setuptab.

Distribution per Month

Report that shows call distribution (answered,unanswered and transfers) grouped by month.



Call Distribution per month

Month	Received	Answered	Unanswered	Transfers	% Answ	% Unansw	Avg Durat.	Avg Wait	Logins	Logoff
2013-02	48	44	4	0	91.67 %	8.33 %	00:04:17	00:00:11	10	10

Figure 4.14: Distribution per Month

All Distribution by Time Interval reports have the same columns as the Distribution per Queue report with the difference on the first column which will display the time interval instead of the queue name, and with the addition of two new columns at the end:

- Login: number of agent logins to system
- Logoff: number of agent logoffs from system

These two columns will show information only if you configure dynamic queue members on your UC^{X} system. If you use static queue membership they will be always zero.

Distribution per Day

This report will show distribution of calls by day.

Call Distribution per day

Date	Received	Answered	Unanswered	Transfers	% Answ	% Unansw	Avg Durat.	Avg Wait	Logins	Logoff
2013-02-04	5	5	0	0	100.00 %	0.00 %	00:00:55	00:00:16	1	1
2013-02-05	9	9	0	0	100.00 %	0.00 %	00:01:44	00:00:12	0	0
2013-02-07	9	9	0	0	100.00 %	0.00 %	00:06:48	00:00:13	0	0
2013-02-08	7	4	3	0	57.14 %	42.86 %	00:01:26	00:00:06	9	9
2013-02-10	1	1	0	0	100.00 %	0.00 %	00:00:11	00:00:01	0	0
2013-02-11	7	6	1	0	85.71 %	14.29 %	00:04:51	00:00:12	0	0
2013-02-12	6	6	0	0	100.00 %	0.00 %	00:08:36	00:00:09	0	0
2013-02-13	4	4	0	0	100.00 %	0.00 %	00:05:07	00:00:10	0	0

Figure 4.15: Distribution per Day

Distribution per Hour

This report shows an hour-by-hour analysis grouping data by hour of the day.

While the report name indicates `Distribution by Hour`, the time interval can be specified in the Setup tab . If the distribution_interval setting is configured to 60 minutes, the cut will be done by the hour, but it is possible to specify 15 or 30 minute intervals, or any other value you choose (always in minutes). The system will use those time intervals to do the grouping and presentation for this report.

Call Distribution per hour

Hour	Received	Answered	Unanswered	Transfers	% Answ	% Unansw	Avg Durat.	Avg Wait	Logins	Logoff
00:00 - 00:59	0	0	0	0	0.00 %	0.00 %	00:00:00	00:00:00	0	0
01:00 - 01:59	0	0	0	0	0.00 %	0.00 %	00:00:00	00:00:00	0	0
02:00 - 02:59	0	0	0	0	0.00 %	0.00 %	00:00:00	00:00:00	0	0
03:00 - 03:59	0	0	0	0	0.00 %	0.00 %	00:00:00	00:00:00	0	0
04:00 - 04:59	0	0	0	0	0.00 %	0.00 %	00:00:00	00:00:00	0	0
05:00 - 05:59	0	0	0	0	0.00 %	0.00 %	00:00:00	00:00:00	0	0
06:00 - 06:59	0	0	0	0	0.00 %	0.00 %	00:00:00	00:00:00	0	0
07:00 - 07:59	0	0	0	0	0.00 %	0.00 %	00:00:00	00:00:00	0	0
08:00 - 08:59	0	0	0	0	0.00 %	0.00 %	00:00:00	00:00:00	0	0
09:00 - 09:59	3	3	0	0	100.00 %	0.00 %	00:06:13	00:00:05	0	0
10:00 - 10:59	3	3	0	0	100.00 %	0.00 %	00:16:26	00:00:09	0	0
11:00 - 11:59	4	4	0	0	100.00 %	0.00 %	00:01:51	00:00:18	0	0
12:00 - 12:59	7	5	2	0	71.43 %	28.57 %	00:05:21	00:00:06	0	0
13:00 - 13:59	9	7	2	0	77.78 %	22.22 %	00:02:04	00:00:10	9	9
14:00 - 14:59	4	4	0	0	100.00 %	0.00 %	00:03:49	00:00:11	0	0
15:00 - 15:59	11	11	0	0	100.00 %	0.00 %	00:03:21	00:00:17	1	1
16:00 - 16:59	6	6	0	0	100.00 %	0.00 %	00:03:16	00:00:10	0	0
17:00 - 17:59	0	0	0	0	0.00 %	0.00 %	00:00:00	00:00:00	0	0
18:00 - 18:59	0	0	0	0	0.00 %	0.00 %	00:00:00	00:00:00	0	0
19:00 - 19:59	0	0	0	0	0.00 %	0.00 %	00:00:00	00:00:00	0	0
20:00 - 20:59	1	1	0	0	100.00 %	0.00 %	00:00:11	00:00:01	0	0
21:00 - 21:59	0	0	0	0	0.00 %	0.00 %	00:00:00	00:00:00	0	0
22:00 - 22:59	0	0	0	0	0.00 %	0.00 %	00:00:00	00:00:00	0	0
23:00 - 23:59	0	0	0	0	0.00 %	0.00 %	00:00:00	00:00:00	0	0

Figure 4.16: Distribution per Hour

This report's fields are:

Field	Description
Hour	Hour of the day

Answered	Number of calls answered in that hour
% answered	Answered calls percentage in relation to the whole day (24hs.)
Unanswered	Number of calls unanswered in that hour.
% unanswered	Unanswered calls percentage in relation to the whole day (24hs)
Average duration	Average duration of answered calls.
Average duration	Average duration of all calls
Average Wait Time	Average wait time for all calls.
Login	Number of agent logins
Logoff	Number of agent logoffs

This report includes several bar charts showing all above information, with average call duration, average wait time and relation between answered and unanswered calls.

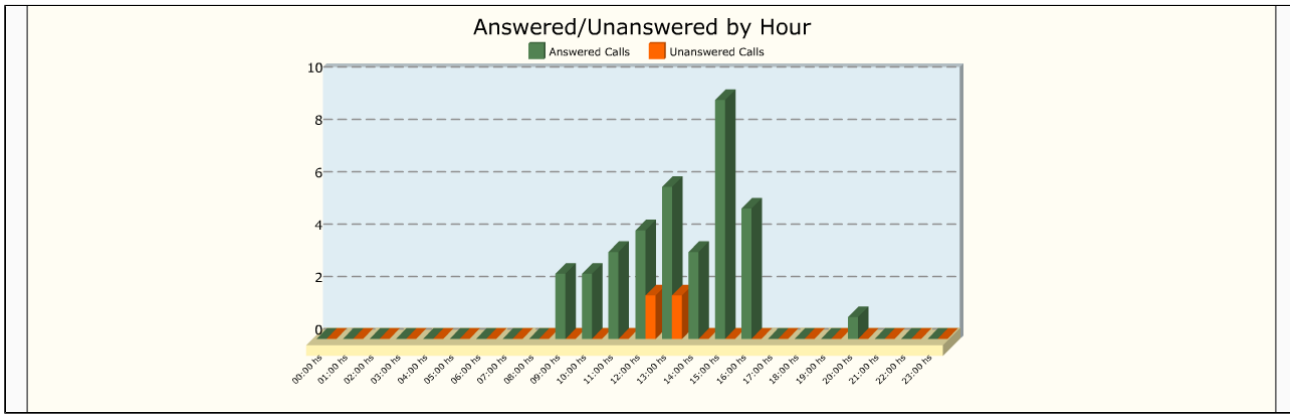


Figure 4.17: Distribution of Ans/Unans Calls per Hour

Distribution per Day of Week

This report will group calls per day of week which allows you to see the number of calls handled for each day of the week (Monday to Sunday).

Call Distribution per week

Week	Received	Answered	Unanswered	Transfers	% Answ	% Unansw	Avg Durat.	Avg Wait	Logins	Logoff
Week 05	30	27	3	0	90.00 %	10.00 %	00:03:14	00:00:12	10	10
Week 06	18	17	1	0	94.44 %	5.56 %	00:05:57	00:00:10	0	0

Figure 4.18: Distribution of Calls per Day of Week Summary

Agent

If your UC^{X} system is configured enabling agents to log in and out (dynamic queue membership, or by means of Agentlogin) then you would be able to see information about the duration of each agent session, and the number and duration of pauses the agent took. You can drill down on an agent to see the session details. If show_agent_call is set in the setup tab, then the details will include every call made for the agent.

Agent Availability

This report shows total length of sessions and total length of pauses taken by agents for the selected time period. Take into account that if you select more than one day, times for all selected days will be added.

Setting up the honor_timeframe_in_agent setting modifies this report behavior. If you set it to true, then out of range session periods will be excluded on the report total times. For example, if you show a report with a time frame from 10 to 18 hours, any session time outside that shift will be excluded/not accounted.

In the case that there is no event marking the start of a session for a particular agent, the system will count the session start from when the first call was answered by the agent. And if there is no session end event in the time frame selected, the end of the day or the end hour will be chosen as the session end. In any case when an event is missing, the system will compute a sensible value for it and it will mark them as COMPUTED.

Agent Availability (for all queues)

Agent	Session Time	Paused	Talk Time	Avg.Time
NT IP 1	00:29:44	00:00:04	00:00:23	0 %
IP Phone	552:50:57	00:00:00	00:00:00	9 %
User Extension 2	552:23:29	00:00:00	00:01:01	9 %
Support	552:03:15	00:00:00	00:00:00	9 %
Steven Richards	552:03:15	00:00:00	00:00:00	9 %
Phillip Peters	552:03:07	00:00:14	02:34:04	9 %
Meena Roshan	534:03:24	00:00:00	00:00:00	8 %
Charles Easton	483:29:25	00:00:00	00:03:52	8 %
Bogota E-MetroTel Office	482:45:26	00:00:00	00:03:27	8 %
Agent/508	458:57:21	00:00:00	00:00:00	7 %
Mike Vaughn	458:49:01	00:00:00	00:00:00	7 %
Justin Lewis	387:25:20	00:00:00	00:00:00	6 %
Adrian Nevelle	384:03:12	00:00:00	00:25:34	6 %

Figure 4.19: Agent Availability Summary

Agent Session and Pause Duration

This report shows a more detailed cut of session times and pauses, including number of sessions and number of pauses with their respective average times.

Agent Session and Pause Durations

Agent	Sessions	Avg.Session	Pauses	Avg.Pause Duration	% Paused	Pauses per session
NT IP 1	1	00:29:44	1	00:00:04	0	1
IP Phone	1	552:02:48	0	00:00:00	0	0
User Extension 2	1	551:35:20	0	00:00:00	0	0
Support	1	551:15:06	0	00:00:00	0	0
Steven Richards	1	551:15:06	0	00:00:00	0	0
Phillip Peters	1	551:14:58	3	00:00:04	0	3
Meena Roshan	1	533:15:15	0	00:00:00	0	0
Charles Easton	1	482:41:16	0	00:00:00	0	0
Bogota E-MetroTel Office	1	481:57:17	0	00:00:00	0	0
Agent/508	3	152:43:04	0	00:00:00	0	0
Mike Vaughn	1	458:00:52	0	00:00:00	0	0
Justin Lewis	1	386:37:11	0	00:00:00	0	0
Adrian Nevelle	1	383:15:03	0	00:00:00	0	0

Figure 4.20: Agent Session and Pause Duration Summary

Agent Dispositions

This report displays a summary of call dispositions grouped by Agent.

Agent Dispositions

Agent	Caller hung up	Agent hung up	Transfer	Ring No Answer
NT IP 1	2	0	0	1
IP Phone	0	0	0	5
User Extension 2	2	0	0	2
Support	0	0	0	33
Steven Richards	0	0	0	33
Phillip Peters	31	0	0	0
Meena Roshan	0	0	0	21
Charles Easton	3	0	0	1
Bogota E-MetroTel Office	2	0	0	0
Agent/508	0	0	0	0
Mike Vaughn	0	0	0	2
Justin Lewis	0	0	0	11
Adrian Nevelle	5	0	0	0

Figure 4.21: Agent Dispositions

AGENT DISPOSITIONS

Disposition	Description
Caller hangup	Caller hung up the call (COMPLETECALLER)
Agent hangup	Agent hung up the call (COMPLETEAGENT)
Transfer	Agent transferred the call (TRANSFER)

Ring no Answer	Agent missed a Ring to their phone (RINGNOANSWER). This metric could be used to measure how many times an agent was unable to pickup a call that was delivered by the queue system. This is not a "final" disposition, but intermediate status as the call will be presented to another agent. The other 3 dispositions identified are final. Therefore, you could have more Ring no Answer events than calls, as one call can be presented several times to various agents before being answered or abandoned.