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GUIDE

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ACD User Guide

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Mitel
Powering connections

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INTRODUCTION TO MICC ENTERPRISE ACD

MiCC Enterprise ACD is a set of XML scripts that enables MiCC Enterprise Phone Agents to log on as a call center agent using a Soft key button on their 6739i SIP terminal. The XML scripts have also been verified to work on the 6867i, 6869i and 6873i and the 6920, 6930 and 6940 SIP terminals.

Another button on the phone is used to change the status of the logged on agent between Ready and Not Ready. The LED associated with the buttons will indicate the status of the agent:

- Logon/Logoff LED is on: Agent is Logged Off
- Logon LED is off: Agent is Logged On
- Ready/Not Ready LED is on: The agent is Not Ready
- Ready/Not Ready LED is off: The agent is Ready

A third button on the phone can be used to display a snapshot of the Service Group real-time statistics. The data shown is:

- Number of calls currently in Service Group queue
- Longest wait time in Service Group queue
- Number of Logged on agents servicing the Service Group
- Number of Logged On and Not Ready agents servicing the Service Group
- Number of Logged on, Ready and Idle agents servicing the Service Group queue

When the MiCC Enterprise agent receives a service call then an XML script is used to display Service Group name information to the agent.

INSTALLATION

All necessary files are installed by the MiCC Enterprise server installation.

Note: It is a prerequisite to have the VC++ 2012 run time libraries installed on the IIS server. They are included in the External folder on the Media Kit (DVD).

The main functionality of MiCC Enterprise ACD is implemented in a web application that is installed on the IIS server together with the other MiCC Enterprise web services such as the Logon web service and the Report web service etc. The web application is developed in PHP using the Mitel XML API SDK.

Note: PHP-CGI is used on the IIS server so make sure CGI support is enabled on the IIS server.

If the MiCC Enterprise web services are installed on a different server than the MiCC Enterprise Agent Service then the MiCC Enterprise ACD web application needs to be re-configured to connect to the MiCC Enterprise server where the MiCC Enterprise Agent Service is installed. In this case the solidus_acd.conf file for MiCC Enterprise ACD needs to be updated. This can be done using e.g. Notepad.

1. Start Notepad and open the file <MiCC Enterprise Installation Path>/Services/Web/SolidusACD/config/solidus_acd.conf
2. Find the section [Agent_service] and change *localhost* to the IP address of the MiCC Enterprise server (where the MiCC Enterprise Agent Service is installed).

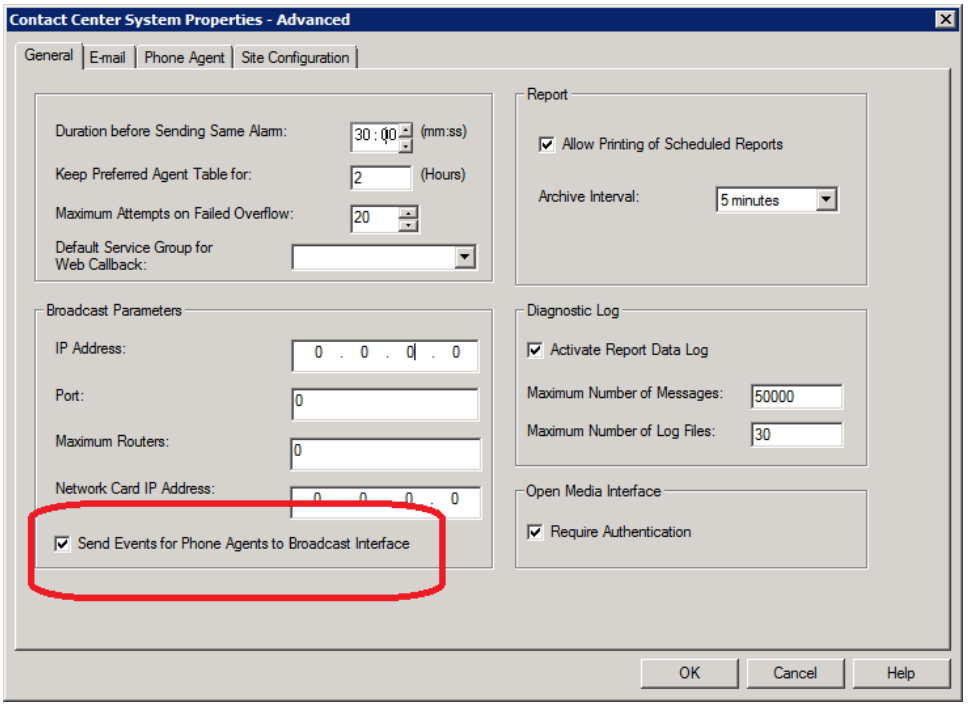
Note: When upgrading or re-installing the MiCC Enterprise server, first backup the solidus_acd.conf file since it will be overwritten during installation.

CONFIGURATION

SYSTEM CONFIGURATION

ENABLE PHONE AGENT EVENTS IN THE AGENT SERVICE API

In order for the MiCC Enterprise server to send out necessary Phone Agent information from the server to the XML page the System properties of the MiCC Enterprise server needs to be configured. Start Configuration manager and enter the System Properties. Click on Advanced and make sure the check box for 'Send Events for Phone Agents to Broadcast Interface in set:

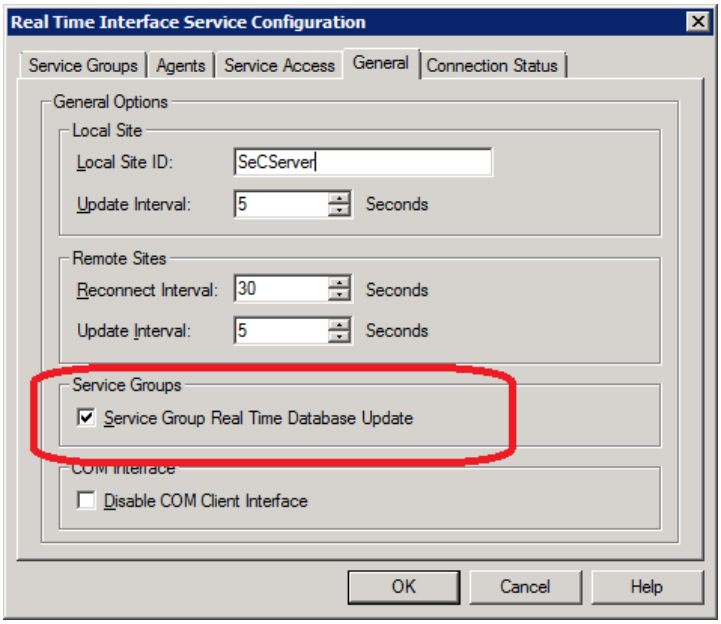


RTI DATABASE UPDATES

The MiCC Enterprise Real Time Interface license, FAL1047798, needs to be loaded in the license server and the RTI service needs to be configured to perform database updates in order for the Service Group real time data to be shown on the phone display.

On the server click on the Start menu and start the MiCC Enterprise RTI configuration tool. On the Service Group tab you can select the groups you want show or leave it as is to show information for all groups.

In the General tab enable the database updates by checking the Service group Real Time database Update box:



SQL DATABASE LOCATION

The SQL database location must be entered in the web application configuration file, solidus_acd.conf, using e.g. Notepad.

1. Start Notepad and open solidus_acd.conf from the location; <MiCC Enterprise installation path>/Services/Web/SolidusACD/Config
2. Locate the section [DB_Server] and edit the values of the parameters sec_sql_user and sec_sql_password to match the settings of your system. The entered SQL user needs to have read access privileges to the nextccdb database.

SYSTEM PARAMETERS

System parameters are configured in the file solidus_acd.conf file. The file is located in the folder <MiCC Enterprise installation path>/Services/Web/SolidusACD/Config and can be edited with e.g. Notepad.

Ready After Logon

A system parameter called ready_after_logon is used to control the Ready status of an agent after Logon. The default value is yes, which means the agent will be ready to receive service calls right after logon, without having to first press the Ready key.

In order to set the agent in Not Ready state after Logon then change the value of the ready_after_logon parameter to no.

Screen Timeout

A system parameter called screen_timeout is used to set the amount of time (in seconds) the call information data for Service Calls are shown to the agent on the telephone display. The default value is 8 seconds. After 8 seconds the display returns to show the standard call information

Screen Timeout for Real Time display

A system parameter called screen_timeout_rt is used to set the amount of time (in seconds) the Real Time queue information is shown to the agent on the telephone display. The default value is 25 seconds. After this time the display returns to show normal idle information.

Key labels for Logon and Ready keys

Four different parameters are used to configure the Text labels for the Logon/Logoff and Ready/Not Ready keys. The text label will change depending on the current agent state.

- logon_label — this string is shown on the key label when the agent is in Logoff state. Default values is 'ACD Logon'
- logoff_label — this string is shown on the key label when the agent is Logged on. Default values is 'ACD Logoff'
- ready_label — this string is shown on the key label when the agent is in Ready state. Default values is 'Make Not Ready'
- notready_label — this string is shown on the key label when the agent is in Not Ready state. Default values is 'Make Ready'

Not Ready Reason

A system parameter called notready_reason is used to control whether the agent will be prompted to select a Not Ready reason before entering Not Ready state. Default value is no.

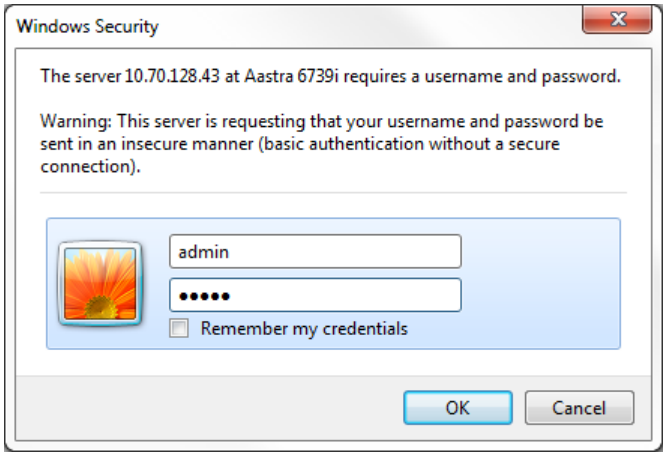
CONFIGURATION OF THE SIP TERMINALS

The buttons need to be defined on the SIP terminal. There are two ways of doing this. The terminal can be accessed by a web interface using a web browser or the key settings can be defined in the configuration file on the SIP terminal Configuration Server.

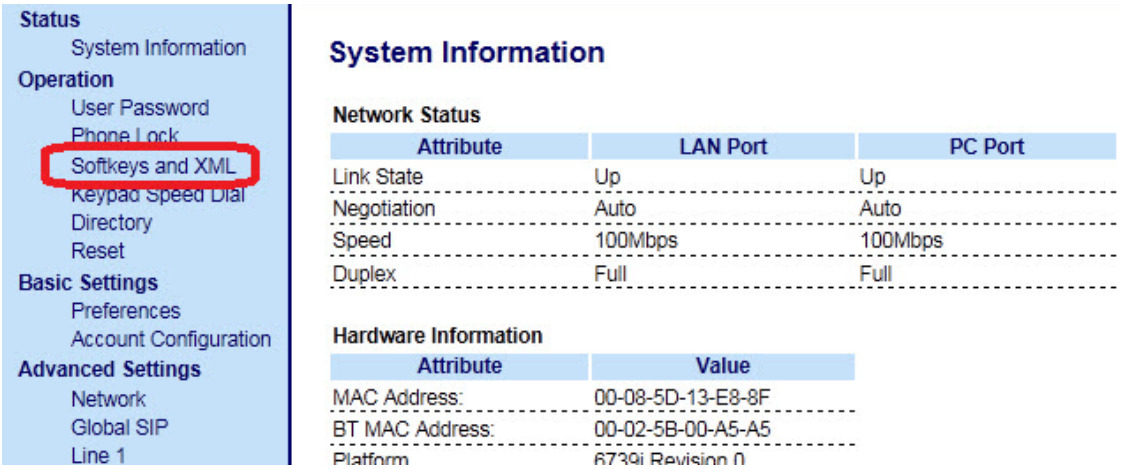
VIA WEB INTERFACE

Using a web browser, e.g. Internet Explorer, enter the telephone's IP address in the address field. The IP address can be found using the buttons on the phone. Press Options and the Advanced or Admin menu depending on the phone type. You will then be prompted to enter the password (default is 22222 but could have been changed by your administrator). Then select network Settings and then IP Address and you should see the assigned IP address.

For example, if your telephone has been assigned IP address 10.10.50.23 the enter http://10.10.50.23 in the browser's address field. You will then be prompted for the password (default is 22222). Enter the password and click OK



In the Web interface, click on **Softkeys and XML** in the left menu pane.



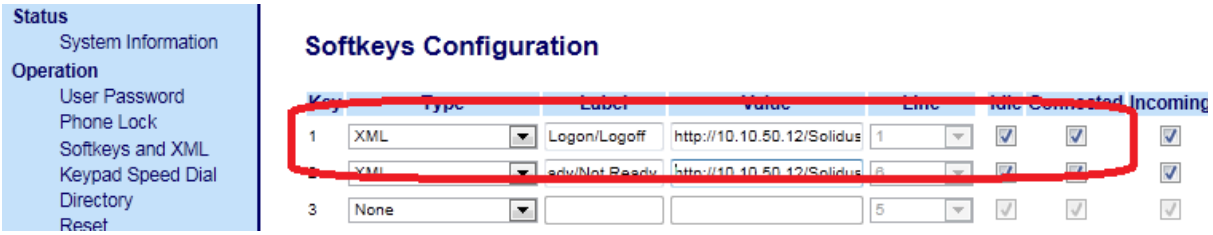
Two buttons should be assigned: one button for Log on/Log off, and one button to make the agent Ready and Not Ready.

The two buttons shall be assigned to be of Type XML and the labels could be for instance Logon/Logoff and Ready/Not Ready.

Logon button

The Value shall be assigned the URL for the XML application installed on the MiCC Enterprise server. If the IP address of MiCC Enterprise server is 10.10.50.12 then a sample URL could look like this:

http://10.10.50.12/SolidusACD/acd/acd.php?action=logon&extension=$$SIPAUTHNAME$$&tenant=-1&oas=1&bl=softkey9&br=softkey10&trace=0



Parameters:

- *action*: set to ‘logon’ for the Logon/Logoff function
- *extension*: the extension number that the agent will use. Normally this can be set to the system parameter ‘$$SIPAUTHNAME$$’, which is the Authentication Name set for Line 1. You can also enter the actual phone number if you plan to use another line than Line 1
- *tenant*: the tenant id for this user. If tenanting is not used then set to -1
- *oas*: the id column in the oas_server_param table in the nextccdb database. If only one OAS is used in the system then this parameter should be set to 1
- *bl*: the soft key number of the Logon/Logoff key (softkeyX). On 68xx and 69xx phones, the Top Keys (the buttons with LEDs that are located on the left or right hand side of the display area) should be reference by the parameter topsoftkeyX
- *br*: the soft key number of the Ready/Not Ready key (softkeyX). On 68xx and 69xx phones, the Top Keys (the buttons with LEDs that are located on the left or right hand side of the display area) should be reference by the parameter topsoftkeyX
- *trace*: set to 1 if tracing should be enabled for this phone. See section Troubleshooting below for more information about tracing and log files

Note: Make sure the words softkey and topsoftkey are entered in lower case only. For instance, entering the bl or br parameters as Topsoftkey will cause the updating of the LED to fail and possibly other issues as well. A correct entry would be bl=topsoftkey3.

Example:

http://10.10.50.12/SolidusACD/acd/acd.php?action=logon&extension=$$SIPAUTHNAME$$&tenant=1&oas=1&bl=softkey9&br=softkey10&trace=0

Ready button

The Ready button uses a similar URL, the *action* parameter is in this case set to ‘ready’ and there is no need for the *oas* parameter.

Example:

http://10.10.50.12/SolidusACD/acd/acd.php?action=ready&extension=$$SIPAUTHNAME$$&tenant=-1&bl=softkey9&br=softkey10&trace=0

Real Time button

The Real time button only uses four parameters. The action parameter should be set to *stats* and then *tenant* and *trace* parameters should be passed. It includes an optional parameter called *sglist* that can be used to restrict the Service Groups that can be viewed. If omitted or left without any value, the user can view statistics for all Service Groups that are being reported via the RTI database table. To restrict the viewing enter the names of the allowed Service Groups as a comma separated list.

Example 1, agent is allowed to view real-time info for Service groups Service, Support and HelpDesk:

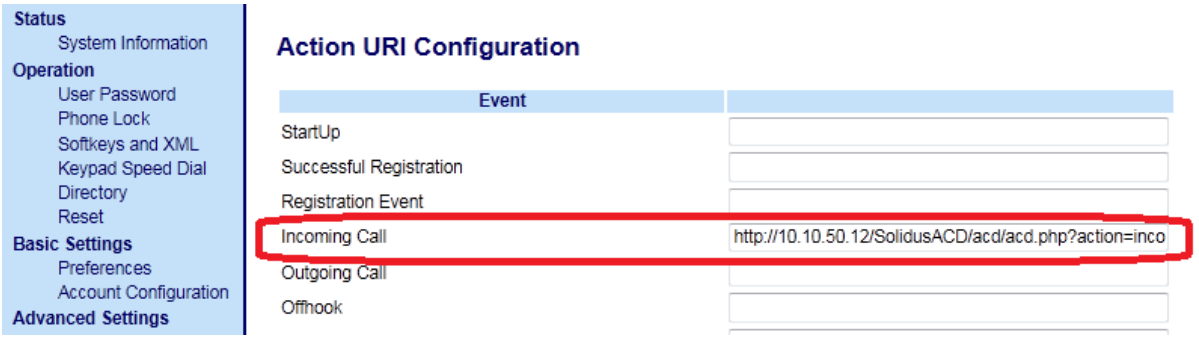
http://10.10.50.12/SolidusACD/acd/acd.php?action=stats&tenant=-1&sglist=Service,Support,HelpDesk&trace=1

Example 2 (Agent is allowed to view real-time info for all Service Groups):

http://10.10.50.12/SolidusACD/acd/acd.php?action=stats&tenant=-1&sglist=&trace=1

Incoming call information

An action URI can be configured in order to display call information for incoming service call to this telephone. To configure this click on the Action URI on the left hand side in the browser. Enter a URL in the Incoming Call field:



For example:

http://10.10.50.12/SolidusACD/acd/acd.php?action=incoming&extension=$$SIPAUTHNAME$$&callerid=$$REMOTENUMBER$$&callingname=$$INCOMINGNAME$$&tenant=-1&trace=0

Action is in this case ‘incoming’

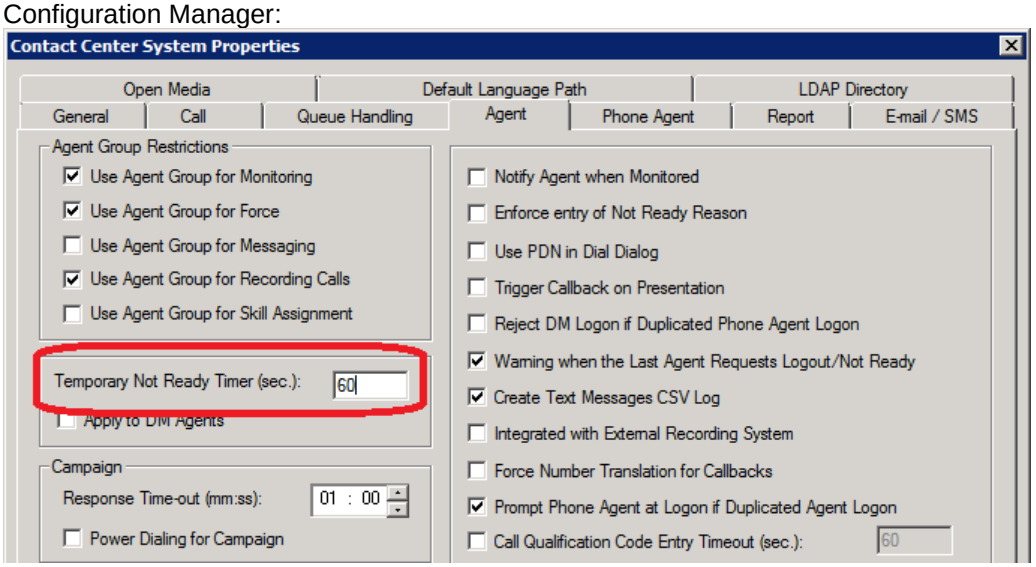
Synchronization of status

Under certain circumstances the status of the LED for the Logon or Ready buttons can get out of sync with the actual state in MiCC Enterprise. This could happen for instance if the MiCC Enterprise server is restarted or if an agent fails to answer a call in time and is forced to Not Ready status by the system.

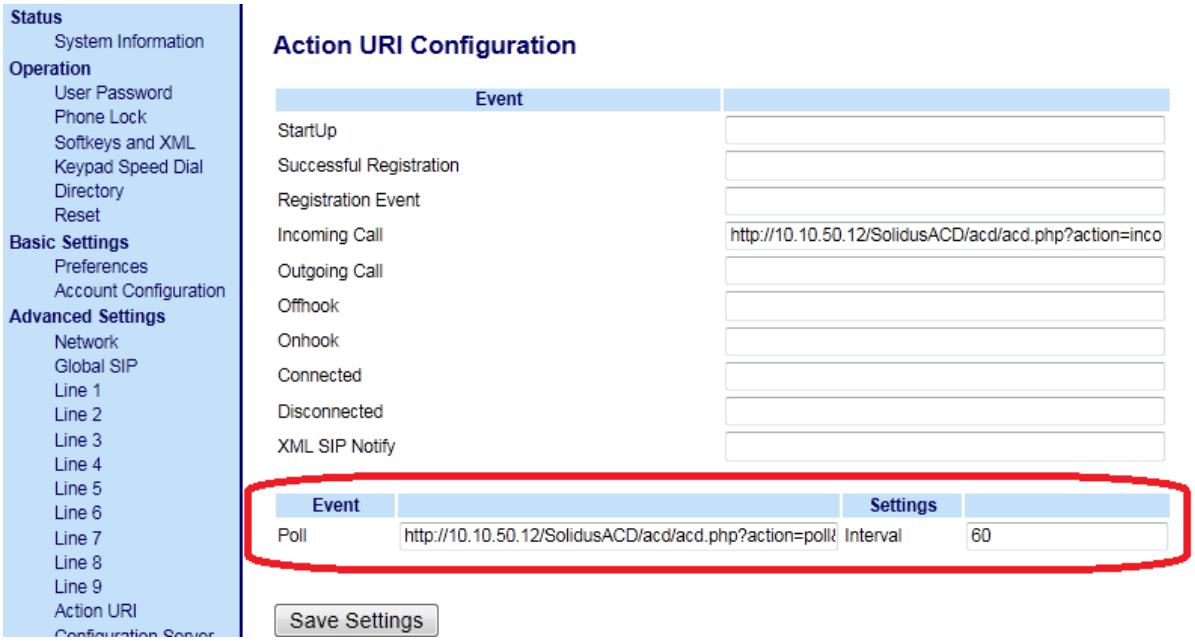
In order for the phone LEDs to get back in correct state again, two different mechanisms exist.

1. There is a function on the MiCC Enterprise server that can automatically (based on a configurable timer) put a Phone Agent back into Ready state if the agent has been forced into Not Ready state. This option is configured in the System Properties using the

Configuration Manager:

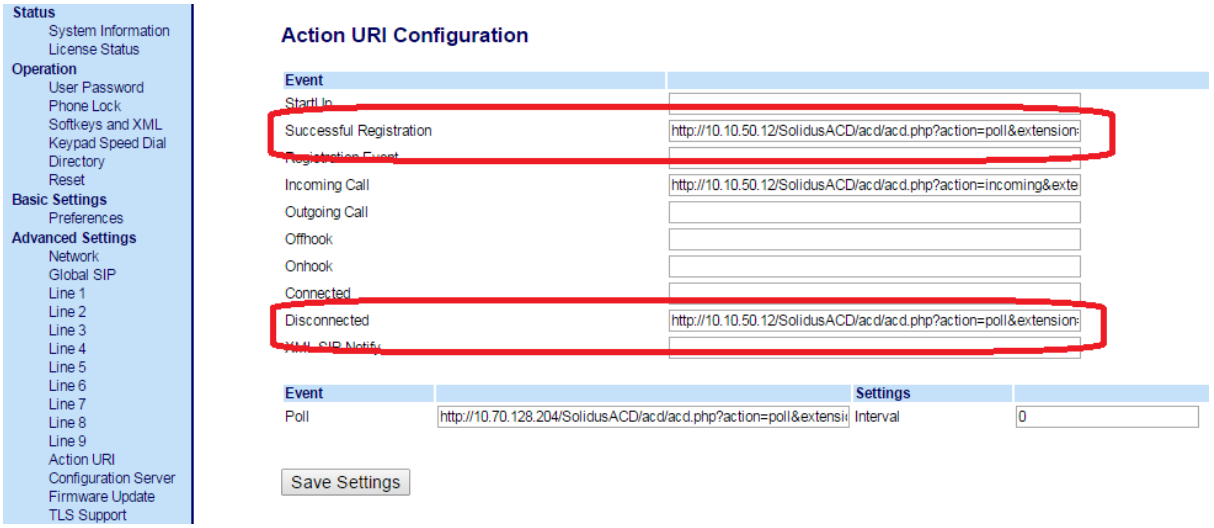


2. Another option is to use the Poll function in the telephone. A URL with *action* set to 'poll' can be configured in the Poll settings in the Action URI settings. The poll frequency can be set, default is 60 seconds:



The following is a sample URL for the Poll function:
http://10.10.50.12/SolidusACD/acd/acd.php?action=poll&extension=$$SIPAUTHNAME$$&tenant=-1&bl=softkey9&br=softkey10&trace=0

3. You can also use the Successful Registration and Disconnected events to trigger the Poll function. By putting the URL for polling in these fields, an immediate status synchronization will take place when the SIP phone is registered and as well every time a call is disconnected:



CONFIGURE SIP PHONE VIA CONFIGURATION SERVER

Instead of using the web interface, the configuration file for the SIP terminal can be edited to include the MiCC Enterprise ACD settings. The configuration file is residing at the SIP Phone Configuration Server and is loaded at startup of the SIP terminal. In order to perform the same configuration as the examples above, put the following entries in the configuration file:

Softkey9 type: xml

Softkey9 label: Logon/Logoff

Softkey9 value: http://10.10.50.12/SolidusACD/acd/acd.php?action=logon
&extension=$$SIPAUTHNAME$$&tenant=-1&oas=1&bl=softkey9
&br=softkey10&trace=0

Softkey10 type: xml

Softkey10 label: "Ready/Not Ready"

Softkey10 value: http://10.10.50.12/SolidusACD/acd/acd.php?action=ready
&extension=$$SIPAUTHNAME$$&tenant=-1&bl=softkey9&br=softkey10
&trace=0

Softkey11 type: xml

Softkey11 label: "ACD Real Time"

Softkey11 value: http://10.10.50.12/SolidusACD/acd/acd.php?action=stats
&tenant=-1&sglist=&trace=1

action uri incoming: http://10.10.50.12/SolidusACD/acd/acd.php?
action=incoming&extension=$$SIPAUTHNAME$$&
callerid=$$REMOTENUMBER$$&callingname=$$INCOMINGNAME$$
&tenant=-1&trace=0

action uri poll: http://10.10.50.12/SolidusACD/acd/acd.php?action=poll
&extension=$$SIPAUTHNAME$$&tenant=-1&bl=softkey9&br=softkey10
&trace=0

action uri poll interval: 60

If you want to put the logon, ready and real-time buttons on a different soft keys then change Softkey9, Softkey10 and Softkey11 above to new key numbers.
On 68xx and 69xx phones, the Top Keys (the buttons with LEDs that are located on the left or right hand side of the display area) should be reference by the parameter topsoftkeyX. Note that topsoftkey must be entered in lower case.

USING MICC ENTERPRISE ACD

LOGON

Press the Logon/Logoff button and when presented with the Enter Password: prompt enter the PIN code/password end press Enter. The LED for the Logon/Logoff button will go off, indicating that you are now logged on. Depending on if the system parameter is set to also make you Ready after logon then the LED for the Ready/Not Ready button could also be turned off, indicating that you are ready to receive service calls.

LOGOFF

While logged on, simply press the Logon/Logoff button again to logoff from MiCC Enterprise. Both the Logon/Logoff and Ready/Not Ready LEDs will be turned on and you will not receive any more service calls.

READY

While being logged on (Logon/Logoff LED is turned off) and Not Ready (the Ready/Not Ready LED is turned on) then press the Ready/Not Ready button to make yourself ready to receive service calls. The Ready/Not Ready LED will be turned off.

NOT READY

While being logged on (Logon/Logoff LED is turned off) and Ready (the Ready/Not Ready LED is also turned off) then press the Ready/Not Ready button to make yourself Not Ready. You will not receive any more service calls and the Ready/Not Ready LED will be turned on. If the system is set to ask for Not Ready Reasons, the agent will be prompted to select a Not Ready reason code from a list presented on the telephone display.

INCOMING SERVICE CALLS

When receiving an incoming service call you will be presented with the name of the Service Group the call came from the calling number and name (if available). You can answer the call by lifting the receiver, pressing the Answer soft key or by pressing the Line key. The call information will disappear after a while (default time is 8 seconds).

VIEW REAL-TIME STATISTICS

To view the real time info for Service Groups then press then press the SeC Real Time soft key on the phone. You will see real-time data for 2 Service Groups at a time on the screen. Use the arrow keys on the right hand lower side to scroll through the Service Groups.

The data shown per Service Group is:

Que Number of calls in queue for this Service Group

Wait The actual waiting time for the longest waiting call in the Service Group queue

Log Number of Logged On agents servicing this Service Group

Unav Number of Logged On and Unavailable/Not Ready agents servicing this Service Group

Idle Number of Logged On, Ready and Idle agents servicing this Service Group

TROUBLESHOOTING

CCAS COM OBJECT

The MiCC Enterprise ACD application is a web service written in PHP and is using the Agent Service Open API to communicate with the MiCC Enterprise server. If the web service is installed on another server than the MiCC Enterprise services then the CCAS COM object must be installed and registered. How to do this is described in Chapter 2 of the Agent Service Open Interface description

LOG FILE

Logging/tracing can be enabled either for just one telephone or for the whole system. To enable logging for one telephone change the variable *trace* to 1 in the URL associated with a button or function. For example:
http://10.10.50.12/SolidusACD/acd/acd.php?action=logon&extension=$$SIPAUTHNAME$$&tenant=-1&oas=1&bl=softkey9&br=softkey10&trace=1

To enable logging for the whole system then edit the file server.conf stored in the <MiCC Enterprise install path>/Services/Web/SolidusACD/config folder on the web server. Open the file in Notepad and set trace =1 and save the file.

The log file is stored in the < MiCC Enterprise install path>/Services/Bin/Log folder. The file name is MiCC Enterprise_ACD_<date>.log and a new file is generated each day.