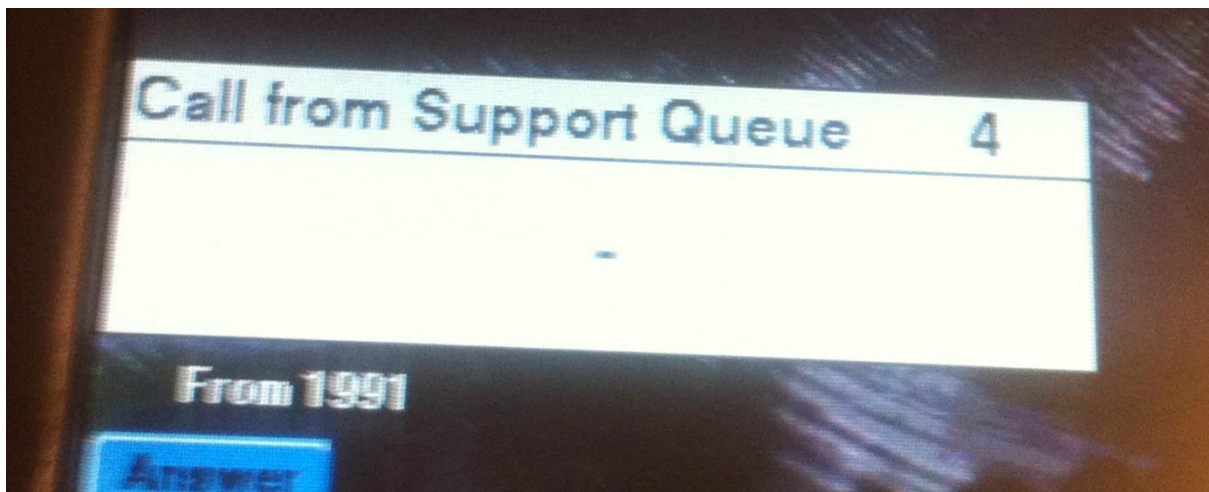
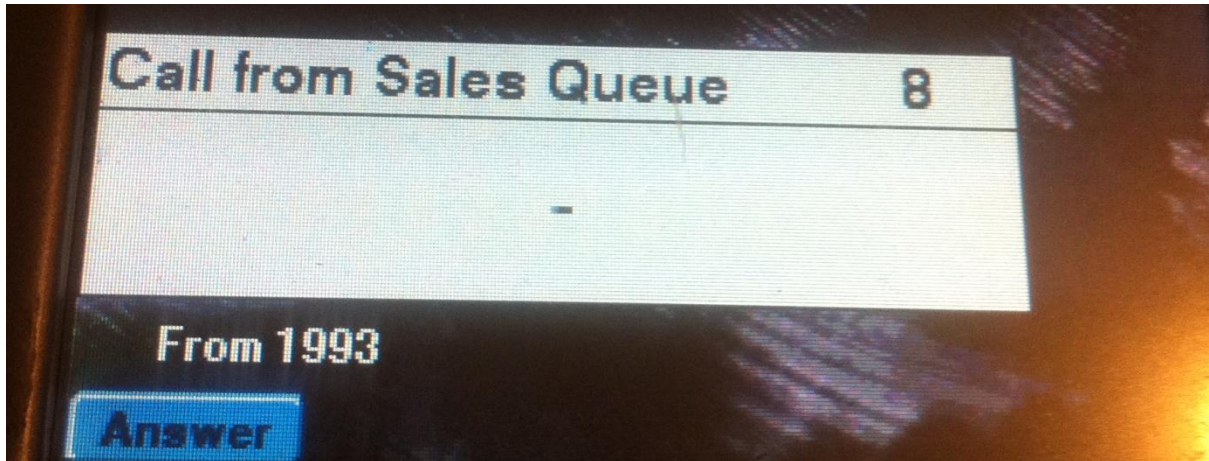


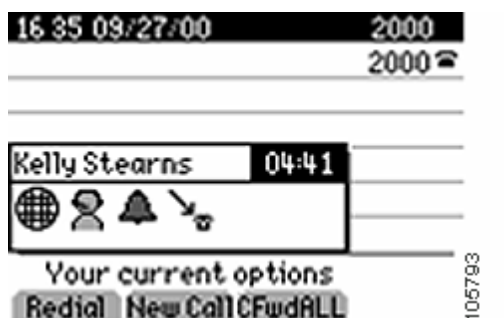
This is an example of how to display the CCX queue name on the agents phone.



The Agents phone must support the IP Phone Command "CiscoIPPhoneStatus". This is only supported on phones that have a graphic screen. Generally IP phones with a small screen are text only phones and will not work. Phones with a large screen have graphics and will work.

The CiscoIPPhoneStatus has to be used as it hovers over the call plane of the phone and will display while the phone is ringing.

For those of you with long memories this is used by the IP Manager/Assistant.



This example does everything in the CCX script, it does not require any external servers.

How it works.

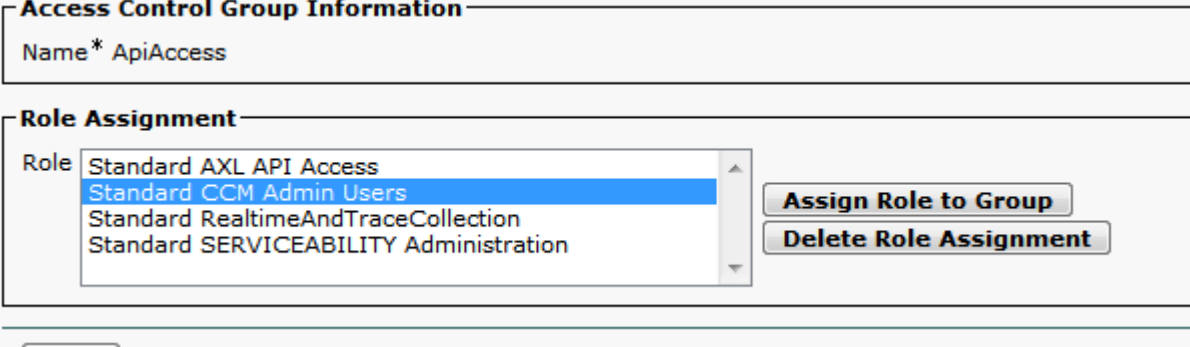
In your scripting set the Select Recourse step to not connect. When the Engine selects the agent it will put them in a Reserved state and return in the Selected label. From this you can find the agents extension.

You can then make a call to the UCM Serviceability API to map the Agent Extension to the Agents Phone IP address. With the IP address of the agents phone you can send the CiscoIPPhoneStatus command to display the queue name.

After you have sent the CiscoIPPhoneStatus you can use the script Connect step to send the call to the agent phone.

Permissions

In order to use the UCM Serviceability API and to send the CiscoIPPhoneStatus command you need a UCM user ID and password with the appropriate permissions.



The screenshot displays the 'Access Control Group Information' section in the UCM Administration console. The 'Name' field is set to 'ApiAccess'. Below this, the 'Role Assignment' section shows a list of roles. The role 'Standard CCM Admin Users' is selected and highlighted in blue. To the right of the role list are two buttons: 'Assign Role to Group' and 'Delete Role Assignment'.

Access Control Group Information	
Name *	ApiAccess

Role Assignment	
Role	<div>Standard AXL API Access</div> <div>Standard CCM Admin Users</div> <div>Standard RealtimeAndTraceCollection</div> <div>Standard SERVICEABILITY Administration</div>
<div>Assign Role to Group</div> <div>Delete Role Assignment</div>	

Certificates

The UCM Serviceability API is a https access. You must use the fully qualified domain name and your UCM servers need to have had their certificates installed. Specifically you must generate a certificate signing request (CSR) on UCM and generate the UCM tomcat certificate.

What's in the files.

CCX script DisplayQueueOnPhone.aef. This is designed as a subflow to make the UCM Serviceability API call and then send the CiscoIPPhoneStatus to display the queue name.

CCX Script ClearQueueOnPhone.aef. This is designed as a sub flow to clear the queue name from the phone display.

The CCX script TestQueueOnPhone.aef. This is an example script for how to queue the call, display the queue name by calling the sub flow DisplayQueueOnPhone.aef and then clear the phone display by calling ClearQueueOnPhone.aef when the agents answers the call. It will also clear the phone display if the agent does not answer the call or the caller hangs up.

Setting up your scripts.

You must edit both the DisplayQueueOnPhone.aef and the ClearQueueOnPhone.aef to set the UCM user ID and password you created above. You must also edit the DisplayQueueOnPhone.aef to set the UcmFqdn variable to the fully qualified domain name of your UCM publisher.

What to watch out for.

The first time you send the CiscoIPPhoneStatus to the agents phone it will authenticate the user ID and password you supplied with UCM. This is to test that the ID and password is valid and has permission to send commands to this phone.

This authentication can take 2 to 3 seconds to run. During this time the agent will be in a Reserved state but the phone will not ring. Once the phone has completed a successful authentication the queue name will display and the phone will ring.

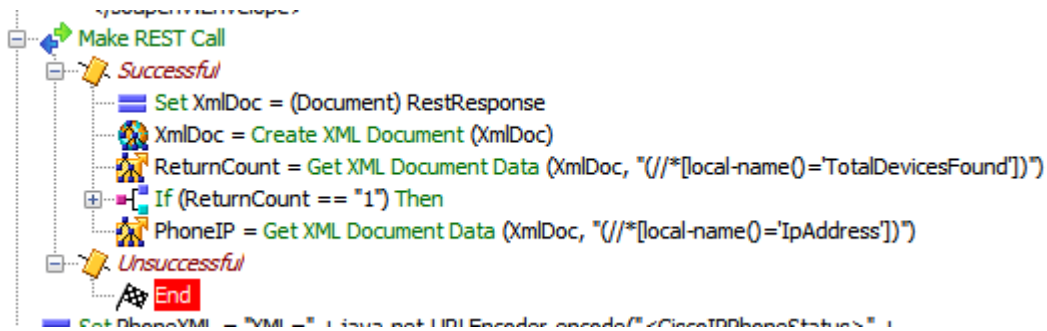
The phone caches this authentication so the next CiscoIPPhoneStatus will complete much faster.

If the CiscoIPPhoneStatus is not sent for a while such as over lunch it is likely the cached credentials will age out and the phone will again authenticate with UCM.

Do not send the CiscoIPPhoneStatus command to phones that do not support it such as text only phones. It seems to take the phone somewhere in the 10 to 15 seconds range to reject the command. During that time the agent will remain in Reserved but their phone will not ring.

Trouble Shooting

Making the REST call to the UCM Serviceability API.



If you hit the Unsuccessful Label, look at the RestCode Variable

RestCode	String	"403"
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Code	
401	Your UCM User ID or Password is wrong
403	Your UCM user ID does not have permission to read the UCM Serviceability API
412	Your UcmFqdn does not match the certificate

List of phones that support the CiscoIPPhoneStatus command as of release 11.5

Application Status Window Allowable Image Sizes			
Phone models	Maximum image area width	Minimum image area width	Maximum image area height
7937G	133	21	65
7940G, 7960G	106	21	21
7941G, 7941G-GE, 7942G, 7945G, 7961G, 7961G-GE, 7962G, 7965G	252	50	50
7970G, 7971G-GE, 7975G, IP Communicator	262	50	50
8811, 8841, 8845, 8851, 8851NR, 8861, 8865, 8865NR	414	70	70
8832			
8941, 8945	342	73	73
8961, 9951, 9971	342	73	73