Mitel MiContact Center Enterprise

MIGRATING FROM OAS TO TAS – CONFIGURATION GUIDE

RELEASE 9.4

NOTICE

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TRADEMARKS

MiContact Center Enterprise - Migrating from OAS to TAS

Release 9.4 – March 2020

INTRODUCTION

This document describes the procedure when migrating an OAS based MiCC Enterprise system to be based on TAS. It is strongly recommended that you first read the introductory sections of the document *Installation Instructions, TAS Integration with MiCC Enterprise* (6/1531-LXA 119 154) available in the CPI library to familiarize yourself with the solution.

The steps to consider involve:

- Making necessary changes in MX-ONE:
    - Removing SIP extensions used as IP media channels towards OAS
    - Dimension and configure SIP trunk to TAS
    - Removing or re-configuring SIP extensions used by MCC Agent soft phone users
- Installing TAS and ACS Media Server(s)
- Copying the existing voice prompts (wav) files from OAS media server to the ACS Media Server(s)
- Configuring MiCC Enterprise to use TAS instead of OAS
- Configuring Language(s), Play Message List(s) and Play Messages in MiCC Enterprise
- Configuring BVDs in MiCC Enterprise and removing or re-configuring the corresponding CTI-groups in MX-ONE
- Configuring MiCC Enterprise to use the new BVDs for Service Accesses, system devices for Re-queue, Logon etc.
- Configuring MiCC Enterprise Service Groups with Language info, Queue and Repeat queue messages
- Check and re-configure Script Manager IVR scripts
- Un-installing OAS

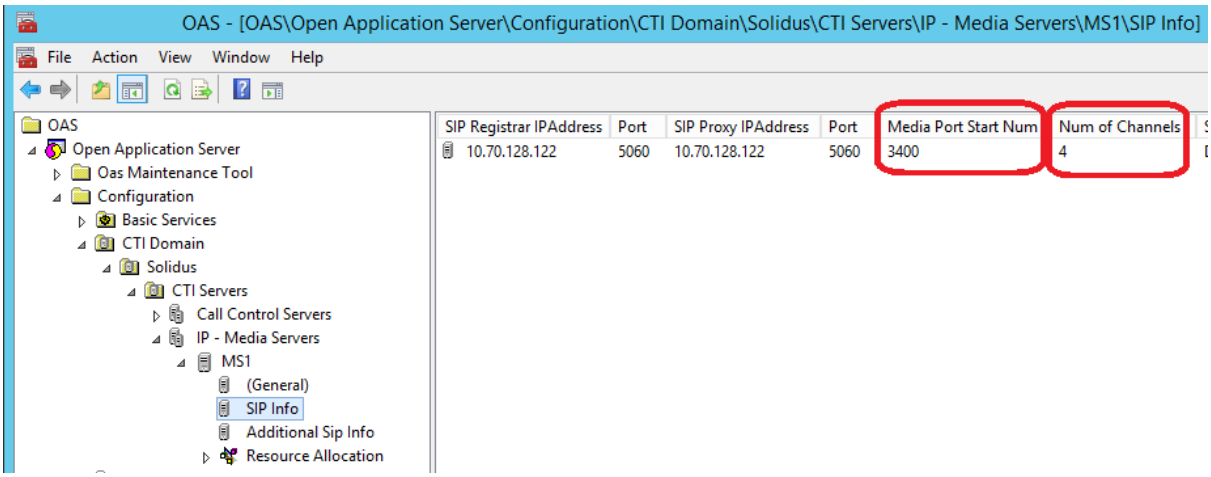
CHANGES TO MX-ONE

Before doing any changes make sure a safety backup is in place so the system could be reverted back. Once the changes outlined below is completed in full, and the TAS based system has been tested and is working well, then make another safety backup.

If VMware is used, take a snapshot.

REMOVAL OF EXTENSIONS USED AS IP MEDIA PORTS

The SIP extensions used as IP Media ports in the OAS Media Server(s) are no longer needed. AI media services will be provided over the SIP trunk. To find what extensions are being used then look under SIP Info in the Media Server configuration in OAS:



In the example above the SIP extensions are 3400 to 3403. These extensions can safely be removed or reused for other purposes. Repeat this for any other configured OAS media servers if the system is configured with more than one.

CONFIGURE SIP TRUNK TO TAS

Dimensioning

Incoming Service Calls

Since each call in and out of the contact center will be terminated or originated in the ACS Media Server special consideration will have to be taken when configuring the SIP trunk in order to ensure enough channels are licensed and configured.

Each incoming call to a Service Access (BVD) in will be terminated in the Media Server and typically connected to Music on Hold or being played a Welcome message etc. This connection uses one channel on the SIP trunk. Now when the call is deflected to a free agent, then if the agent is using a hard- or soft-phone connected to the call manager then a second channel on the SIP trunk is used. So as a rule of thumb it can be said that each active agent call needs **two** SIP trunk channels and each queued call needs **one** channel.

Outgoing Service Call, or call initiated using Agent or Web Agent applications

When an agent using a hard- or soft-phone connected to the call manager then a call is first initiated from the Media Server to the agent's phone, and when answered, a second call is initiated from the Media Server to the intended destination. So, **two** SIP trunk channels are then being used.

If the agent is manually dialing from a hard- or soft-phone connected to the call manager then no channel on the SIP trunk is used.

Agents using MiCC Agent as soft-phone

Agents using MiCC Agent in soft-phone mode will only use **one** SIP trunk channel in these two call scenarios above. This is because the connection between the Agents' soft-phone and the Media Server is not done over the SIP trunk.

Example

Consider a system with 100 concurrent agents. 50 of them will use hard-phones and 50 of tem will use MiCC Agent in soft-phone mode. At most the system will have 75 customers in queue.

- You would need 100 SIP trunk channels for the 50 agents using hard-phones (2 channels per agent)
- You would need 50 SIP trunk channels for the 50 agents using MiCC Agent soft-phones
- You would need 75 SIP trunk channels for the 75 calls in queue

In total 225 SIP trunk channels are needed.

The number agents and number of queued calls will also determine the load on the ACS Media Server. The same formula, 2 connections per agent and 1 connection per queued call, is also used when calculating number of simultaneous connections to the Media Server. In this example there would be 275 connections since there is no difference between MiCC Agents using hard- or soft-phone when calculating Media Server connections. The Media Server is benchmarked to handle up to 500 connections, so in this example one single Media Server can handle these calls. But an additional Media Server could of course still be used in order to provide redundancy.

Setting up SIP trunk in MX-ONE

Use the TAS SIP profile in MX-ONE when setting up the trunk to TAS. Please refer to the section *MX-ONE INTEGRATION WITH TAS / MICC ENTERPRISE* in the TAS Integration Installation Instructions for details.

RECONFIGUE OR RE-USE SIP EXTENSIONS USED BY AGENT SOFT-PHONES

Since MiCC Agent soft-phones will be registering in TAS and not in MX-ONE, these SIP extensions will no longer be needed. But if the use wants to keep the extension number in MX-ONE and have calls to this number sent to the MiCC Agent soft-phone (which is now registered in TAS) then calls will have to be sent over the SIP trunk to the soft-phone extension in TAS. The Call List feature can be used for this.

Example

- An agent used SIP extension number 41222 to register the MiCC Agent soft-phone in their OAS based system.
- The trunk access code from MX-ONE to reach TAS over the SIP trunk is 07.

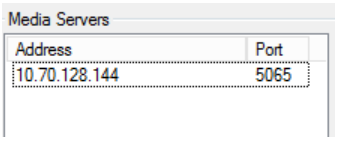
- The agent is now using MiCC Agent soft-phone registered in TAS as 1010.
- Unanswered calls should go to voice mail after 20 seconds or if busy. Voice mail pilot number is 67000.
- The IP extension 41222 can be removed (ip_extension –e –d 41222)
- The generic extension 41222 can be converted to virtual, i.e. without having and terminal/client registered (extension –c –d 41222 --virtual 1)
- Define a call list for extension 41222 to send the calls to TAS:
  - call_list –i –d 41222 --position 1 --dest-number 071010 --busy-position 2 \ --ringing-time 20
  - call_list –i –d 41222 --position 2 --dest-number 67000

INSTALLING TAS AND ACS MEDIA SERVER(S)

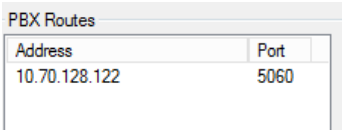
Follow the installation instructions in the document *Installation Instructions, TAS Integration with MiCC Enterprise* (6/1531-LXA 119 154) available in the CPI library.

Initial TAS configuration

Using TAS Config, set the IP address of the Media Server(s):



Using TAS Config, configure the SIP trunk(s) to the MX-ONE:



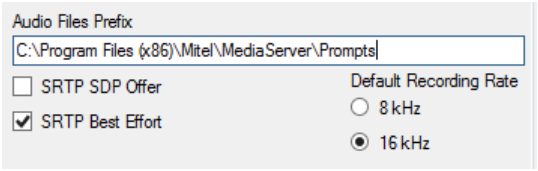
Using TAS Config, configure X-Link port to MX-ONE:

COPYING VOICE PROMPTS (WAV) FILES

The existing voice prompts and system messages can be re-used when migrating from OAS to TAS.

On the OAS server, use Windows Explorer and copy all the content under the ..\OAS\root_container (except the Data folder which is not needed) and paste it in under the

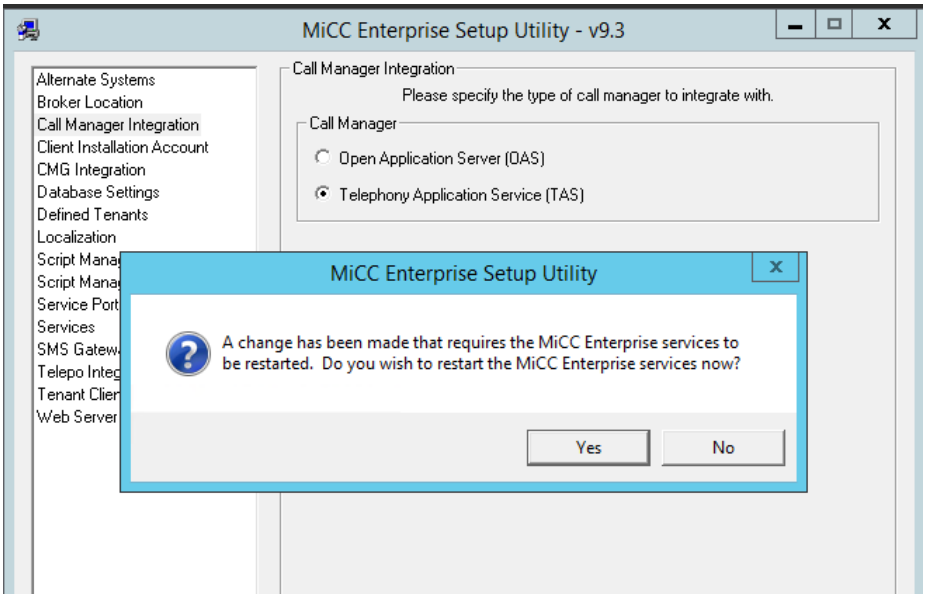
folder specified as Audio Files Prefix in the Mediaserver Config tool (or TASConfig if Media Server is installed on the TAS server):



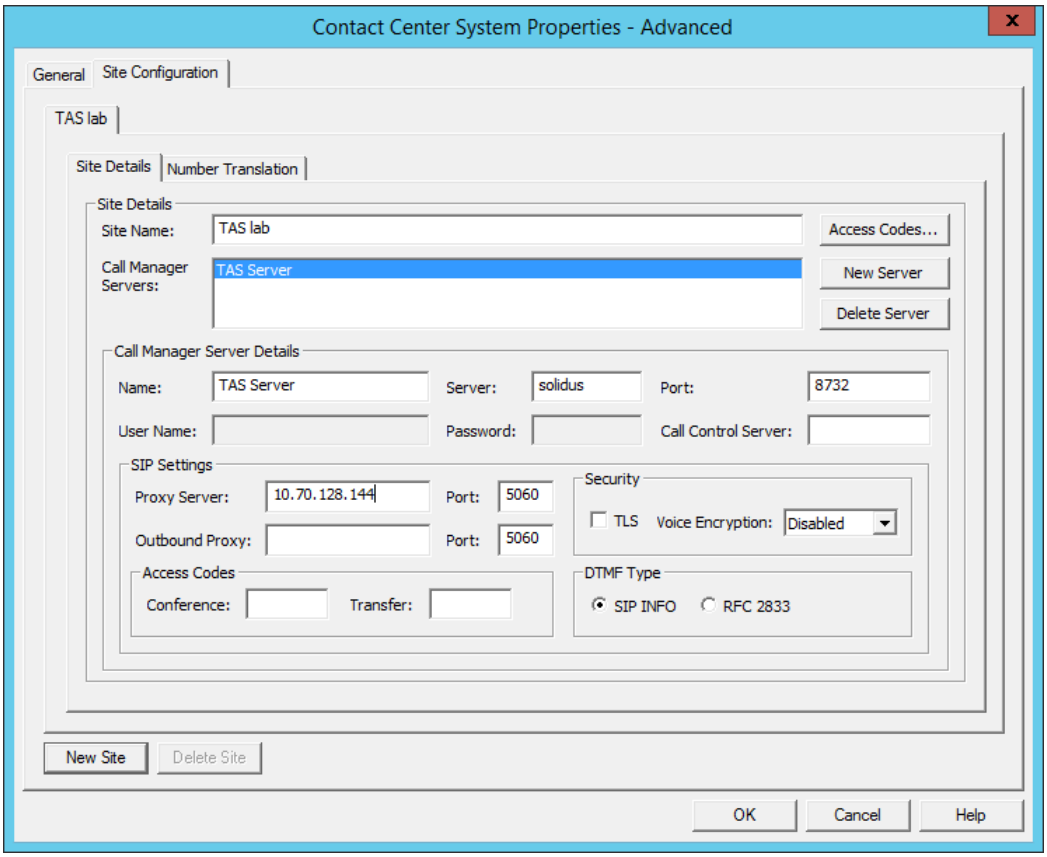
(In this example, a Prompts folder has been created under the MediaServer folder.)

CONFIGURING MICC ENTERPRISE TO USE TAS

Run the MiCC Enterprise Setup utility and click on Call Manager Integration and select Telephony Application Service (TAS). Note that this requires all MiCC Enterprise services to be restarted before the change takes effect.



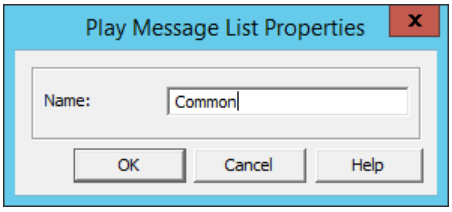
The site information in the MiC Enterprise System Properties needs to be defined. Using Configuration Manager enter System Properties and click on Advanced. Then enter the Site information. Note that the Proxy Server in this scenario is the default TAS server the Agent soft-phone users will be registering to. In a multi-TAS server system the Agent user can override this setting by changing the Settings in the MiCC Agent application.



CONFIGURING CALL MANAGER RESOURCES

Configure Play Message List(s)

In both OAS and TAS, play messages can be grouped into Play Message Lists and these lists are then associated with a Language. One Message List is created and it is called Default List and this list contains a few Play Messages, all related to the on-hook waiting feature. If the OAS system only used the default message list (Common) then create a new Play Message List in MiCC Enterprise also called Common.



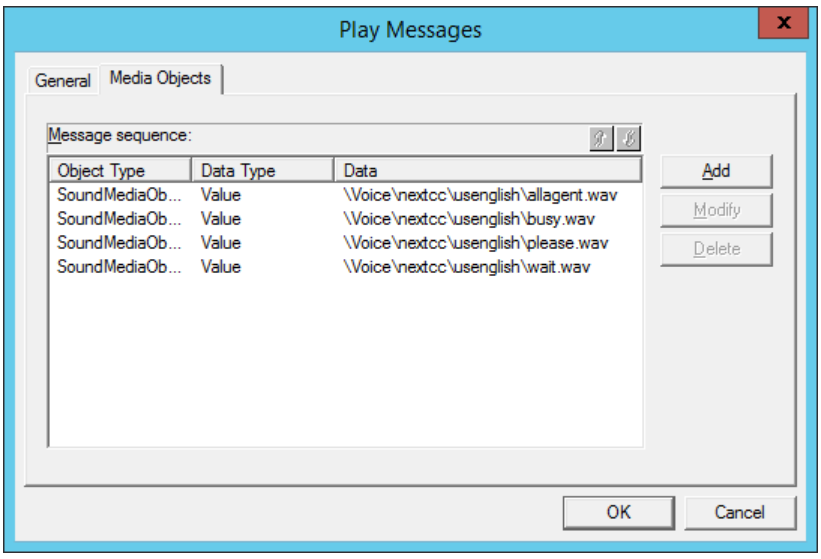
Once this list is configured to be used by we can just add the messages in the Common play message list in OAS to the Common list in MiCC Enterprise.

If there are additional Play Message Lists in OAS they need to be defined in MiCC Enterprise using Configuration Manager:

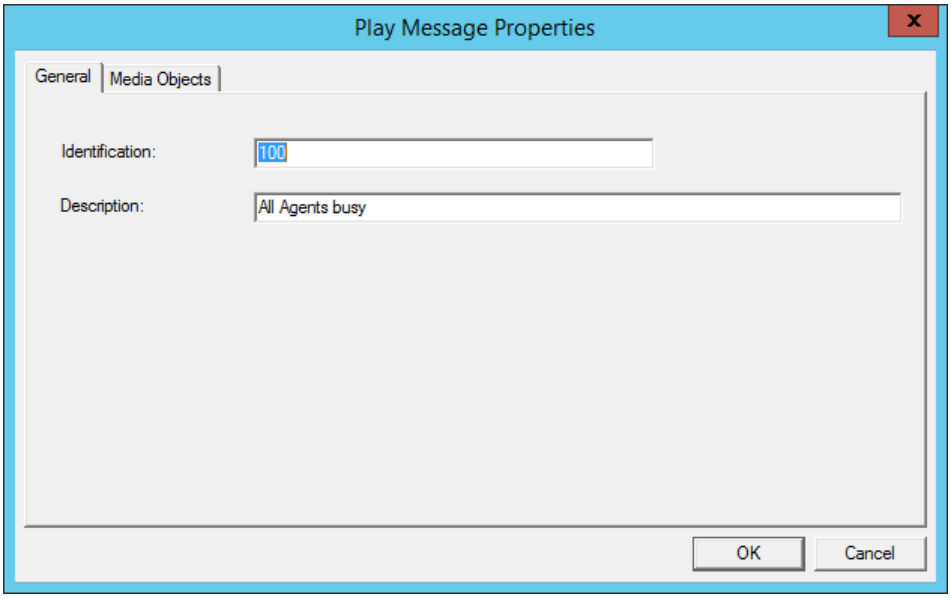
Configure Play Messages

This is potentially the most tedious step in the migration process. **Tip**: create one or two messages initially and verify that they can be played OK.

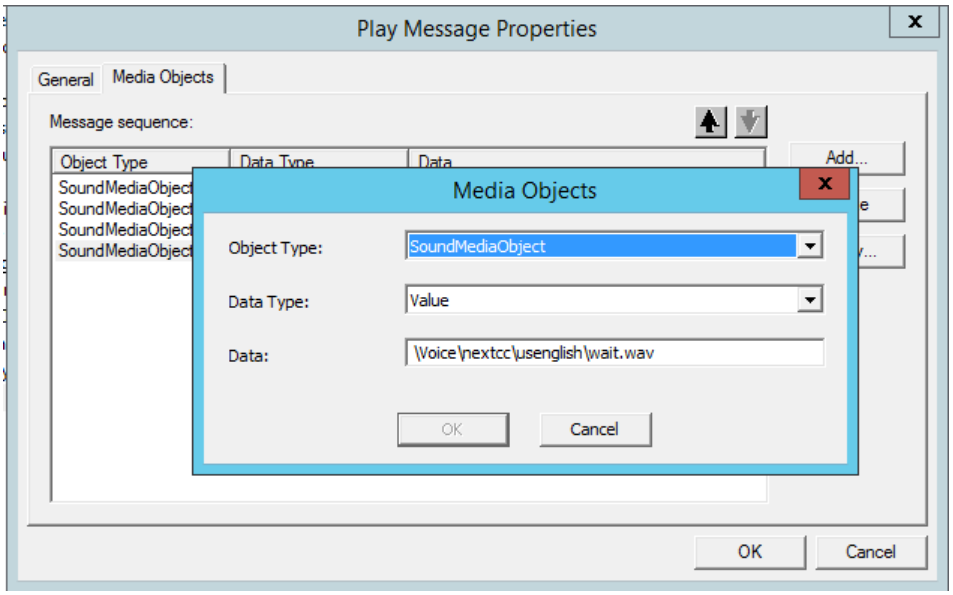
Open up the Properties of the first Play Message on OAS:



Create a new Play Message in MiCC Enterprise using Configuration Manager (copy/paste from OAS MMC to CM can be used):



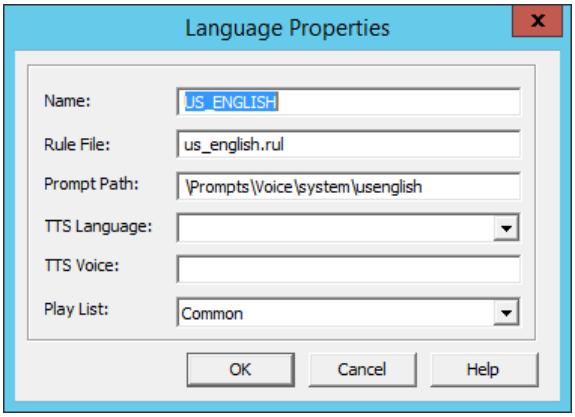
Tip: use the same message id (Identification). This is especially important to avoid having to modify all Play blocks in the Script Manager IVR scripts.



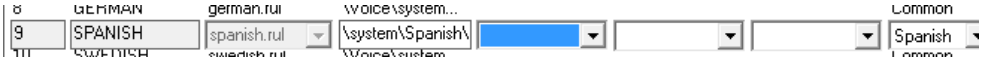
Repeat these steps for all messages in all Play Message Lists.

Configure Language(s)

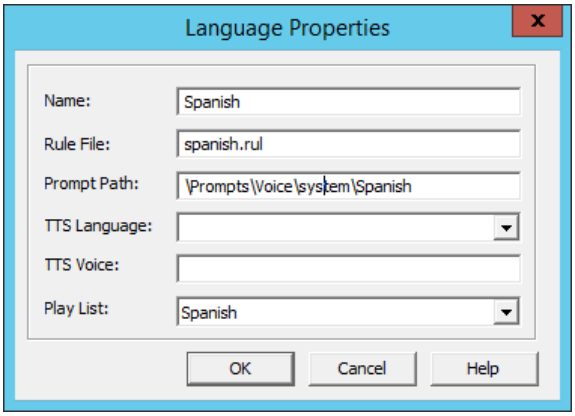
When converting to TAS from OAS one language (US_ENGLISH) is created in the process. Additional languages that are being used need to be defined, and if US_ENGLISH is not going to be used it can be deleted. If used, then the US_ENGLISH language might have to be changed to reflect the patch to where the system prompts are located. If the instructions above were followed, to copy the root_container content to a Prompts folder under the ..\Mitel\Media Server folder, then US_ENGLISH should be changed like this:



Proceed to configure any other languages used in a similar way. For example let's look at configuring Spanish. Spanish looks like this in OAS:



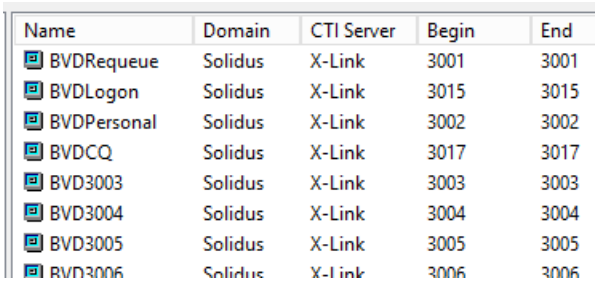
That would translate to this configuration in MiCC Enterprise:



Note: the Play List *Spanish* must be crated if not already done so in the steps above.

Configure BVDs

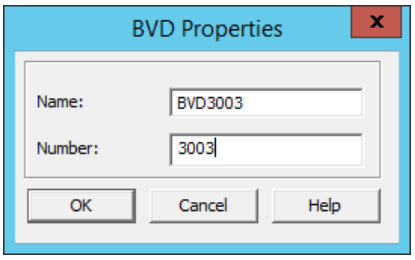
Start the OAS Management console on the OAS server and select Configuration->Virtual Devices->Basic Virtual Devices:



Name	Domain	CTI Server	Begin	End
BVDRequeue	Solidus	X-Link	3001	3001
BVDLogon	Solidus	X-Link	3015	3015
BVDPersonal	Solidus	X-Link	3002	3002
BVDCQ	Solidus	X-Link	3017	3017
BVD3003	Solidus	X-Link	3003	3003
BVD3004	Solidus	X-Link	3004	3004
BVD3005	Solidus	X-Link	3005	3005
BVD3006	Solidus	X-Link	3006	3006

Then enter the BVD information into MiCC Enterprise by using Configuration manager. Use the same name as before to avoid having to change Script Manager scripts. The number

could be the same or could be changed, depending on how the SIP trunk from MX-ONE is configured.



Removing or re-configuring the CTI-groups in MX-ONE

Depending on how the access codes to the SIP trunk to TAS is configured we can decide what to do with the CTI-groups previously used by OAS. In the example above, calls to 3003 triggered a call to BVD3003. So customers called 3003 in order to reach a Service Access in MiCC Enterprise. Now if we have added a trunk access code to the SIP trunk, such as 07 used in the example above, then there are a few different ways this can be handled. One option if all callers into 3003 are external we can use Number Translation on the dialed number on the incoming route to add the trunk access code 07 to the DID number 3003. After doing this the CTI-Group can be removed in MX-ONE (by command ACGRE).

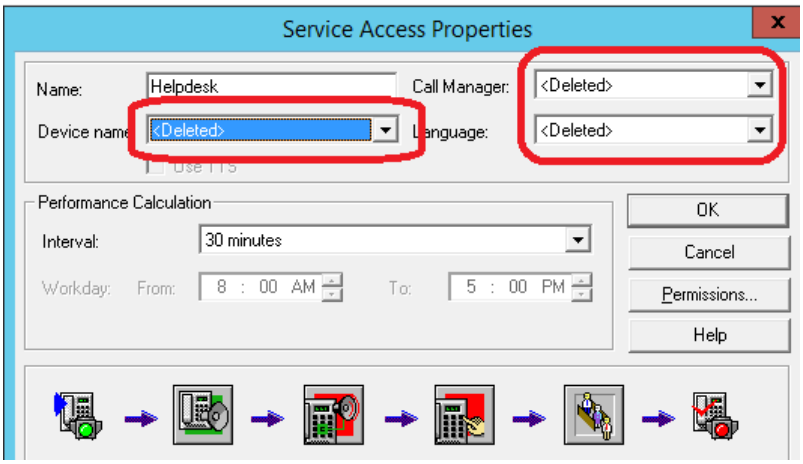
If we also need to consider internal callers to 3003 then one way to solve this is to keep the CTI-group and add a diversion on the group, forwarding all calls to the SIP trunk. For example the command:

diversion -i -d 3003 --div-destination-number 073003

Configure MiCC Enterprise to use the BVDs, Languages and Play Messages

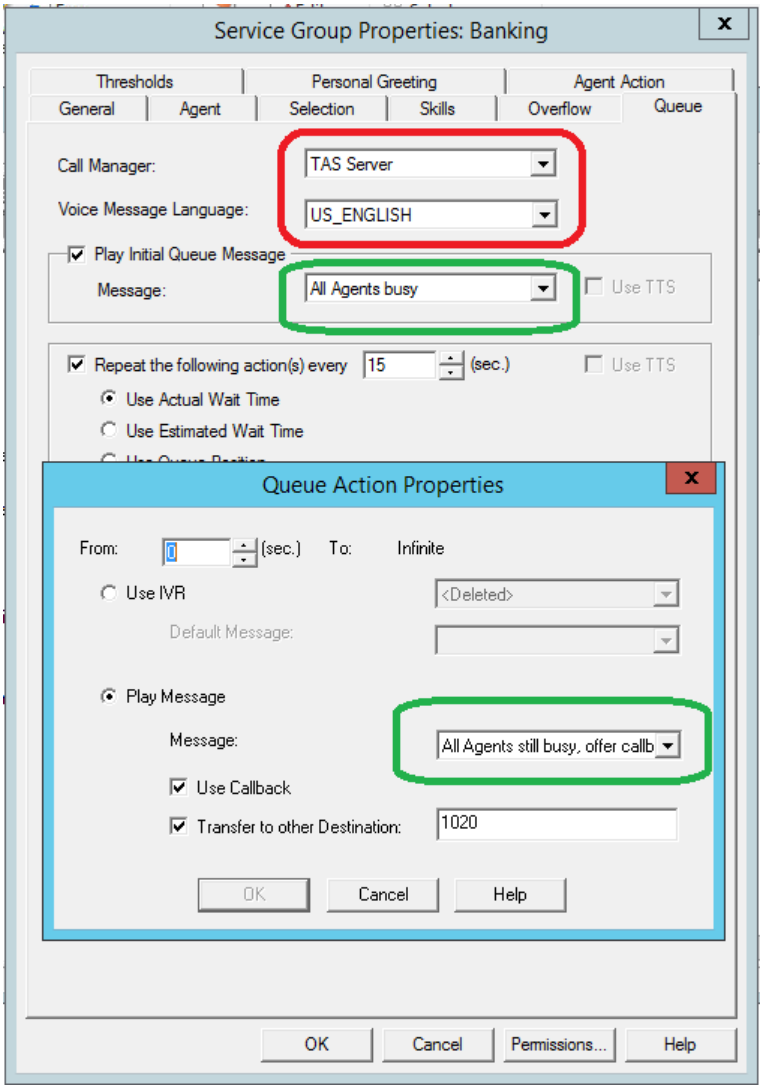
Service Accesses

All Service Accesses need to be updated with new Call Manager info (it will show <Deleted> after the switch from OAS to TAS). The Voice Message Language will show <Deleted> and needs to be changed as well as the Device name field. If the same Message IDs were used when defining the Play Messages the Welcome, Selection and Ask for Input boxes should retain their values and not have to be updated:



Service Groups

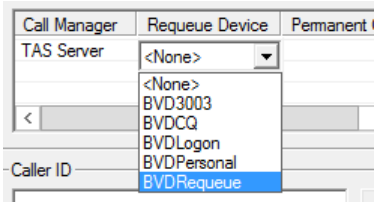
All Service Groups need to be updated with new Call Manager info (it will show <Deleted> after the switch from OAS to TAS). Also, the Voice Message Language will show <Deleted> and needs to be changed. If the same Message IDs were used when defining the Play Messages the Initial and Repeat Queue message field should retain their values and not have to be updated:



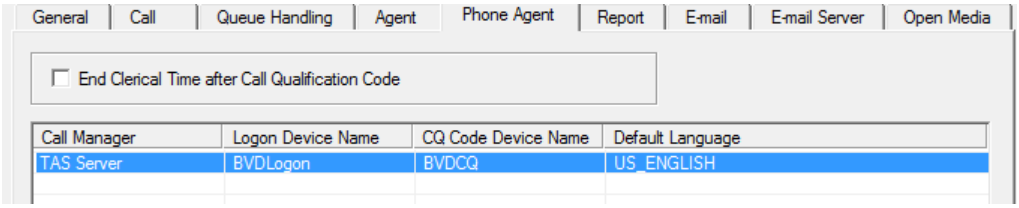
Configure MiCC Enterprise to use the new BVDs

System Properties

In the System Properties, in the Call tab, the Requeue device needs to be configured:



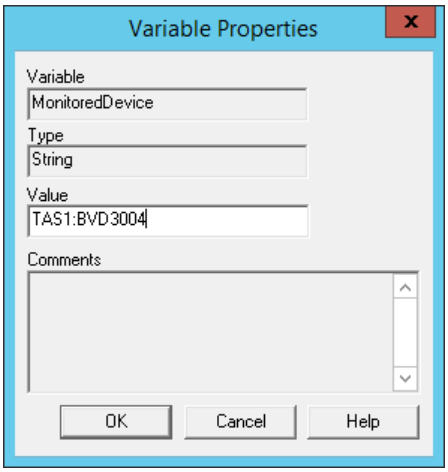
In the Phone Agent tab, Logon Device, CQ Code Device and Default languege has to be set:



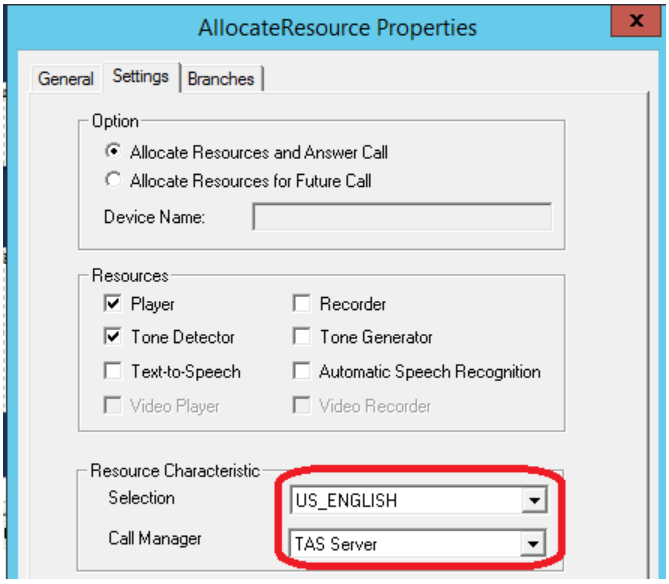
Script Manager scripts

Open up each script in Script Designer and check the following:

In the OnCallDelivered block, make sure the info in the Monitored Device List and Delivered Device fields is still valid. If the same BVD names are used in MiCC Enterprise as it was in OAS then normally there should not be any need for changes. The only case would be if this is a multi OAS/TAS system. Then the name of the site might have to be adjusted. For example, if the Monitored Device was managed by the OAS server named ‘OAS1’ and BVD ‘BVD3004’ then the Device name was previously entered as ‘OAS1:BVD3004’. That might have to be adjusted to the currently used names. Note that if this was entered by a Configurable variable, e.g. @MonitoredDevice, the change shall be made in the Properties of the Service Access, by clicking on the Variable button and then selecting the variable:



Check the Allocate Resource block and make sure the Language info and the Call Manager fields are correct:



Note: Tone generator resources are not available in TAS based systems.

Any Record block used in the scripts needs to be updated. Follow the instructions in section SCRIPT MANAGER RECORD BLOCK VS OAS-BASED SYSTEM in the *Installation Instructions, TAS Integration with MiCC Enterprise* (6/1531-LXA 119 154) available in the CPI library.

UN-INSTALLING OAS

After a successful migration, the OAS system can be un-installed. Follow the instructions in the document *Installation Instruction, Open Application Server* (4/1531-FAS 104 55), section *Removal of OAS* at the end.