imagicle

Cisco UCM and CME Configurations

Cisco Unified CallManagerâ ¢ Configuration

Queue Manager Enterprise can run interacts with CuCM using a SIP trunk to accept incoming call and transfer calls to the targets/agents.

The required configuration on the CallManager includes the following steps:

- SIP Profile configuration
- SIP Security profile configuration
- SIP trunk configuration
- Route pattern configuration
- TAPI devices association (associate all the phones to the ImagicleCTI user)

1. SIP Profile

Define a new SIP Profile named ***Imagicle QME SIP Profile***, with following settings respect to the default values:

Redirect by Application:	enabled

2. SIP trunk security profile

Define a new SIP trunk security profile named "***Imagicle QME Security Profile***", with following settings different from the default values:

Incoming Transport Type	TCP + UDP
Outgoing Transport Type	UDP
Incoming Port	5062
Enable Digest Authentication:	disabled
Enable Application Authorization:	disabled
Accept Out-of-Dialog REFER:	enabled
Accept Unsolicited Notification:	enabled
Accept Replaces Header:	enabled

3. SIP trunk

Define a new SIP trunk named "***Imagicle_QME_SIP_Trunk***", with following settings different from the default values:

Device Information	
Device pool:	A device pool containing all CUCM nodes handling incoming calls
Call classification:	OnNet
Retry Video Call as Audio	enabled
Run On All Active Unified CM Nodes (CUCM 8.X and later):	enabled
Outbound calls	
Redirecting Diversion Header Delivery - Outbound:	enabled
Calling Party Selection:	Originator
Inbound calls	
Redirecting Diversion Header Delivery - Inbound:	enabled
Calling Search Space:	A CSS suitable to reach agents phones and the QME Trunk itself*
SIP Information	

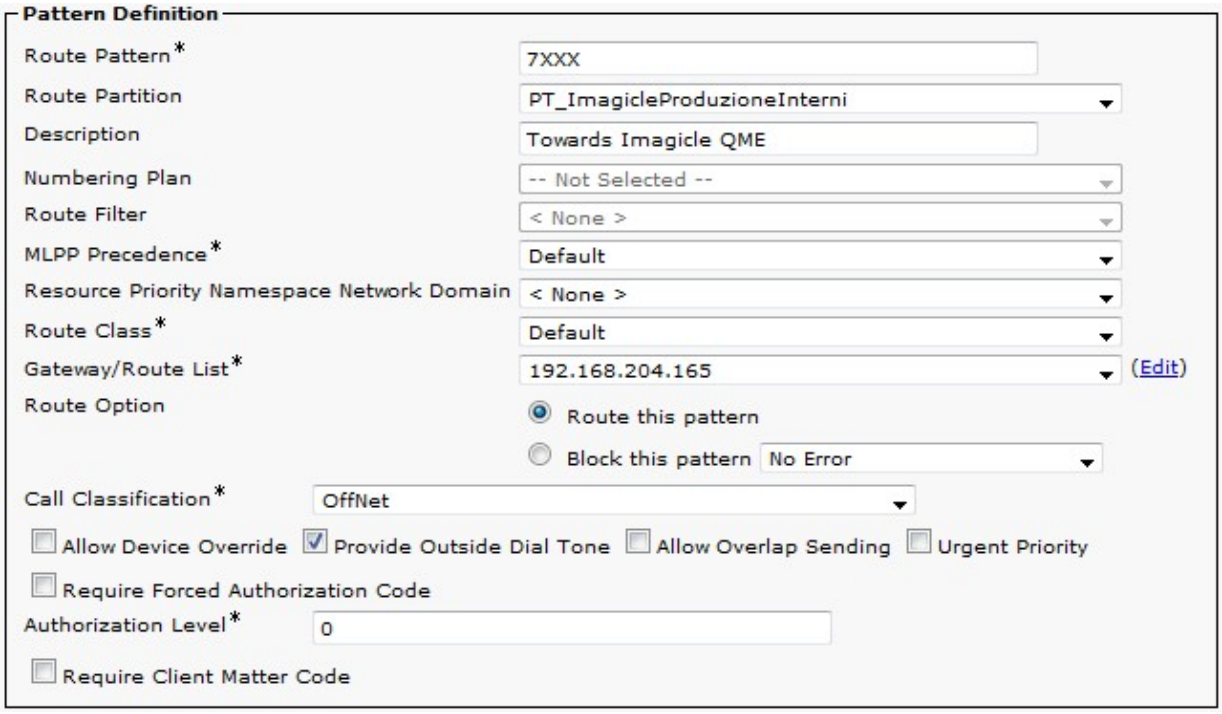
Destination Address:	IP address of the Imagicle server (IPv4)
Destination Port:	5062
Out of Dialog Refer CSS:	A CSS suitable to reach agents phones and the QME Trunk itself
SIP Trunk Security Profile:	*Imagicle QME Security Profile*
SIP Profile:	*Imagicle QME Profile*
Rerouting Calling Search Space:	A CSS suitable to reach agents phones and the QME Trunk itself

* **NOTE**: Camp-On queues may be used by malicious users in order to place phone calls to destinations that they normally are not able to reach because of restrictions applied to their phones (for instance long distance calls or international calls). Therefore, we suggest to assign to the SIP trunk a CSS able to reach only internal destinations or the minimum set of destinations you need to park-on.

4. Route Pattern

A route pattern is needed to route incoming calls to the Queue Manager Enterprise. The route pattern pointing to *Imagicle QME Trunk* should be defined accordingly with the PBX numbering plan and with the queues phone number. For example, defining a route pattern 8XX will allow to manage queues with phone number 801, 802, etc..

The route patterns and the other rules used to send calls to QME should never change the called party number. This way QME will be able to tell which calls are coming back from the operators or other queues.



Another route pattern must be defined to match the Camp-On prefix. Ensure that allows to reach the configured prefix followed by all the digits of the internal extensions.

Pattern Definition

Route Pattern*	*!
Route Partition	PT_ImagicleProduzioneInterni
Description	QME CampOn
Numbering Plan	-- Not Selected --
Route Filter	< None >
MLPP Precedence*	Default
Resource Priority Namespace Network Domain	< None >
Route Class*	Default
Gateway/Route List*	192.168.204.165 (Edit)
Route Option	(•) Route this pattern ( ) Block this pattern No Error
Call Classification*	OnNet

[ ] Allow Device Override [x] Provide Outside Dial Tone [ ] Allow Overlap Sending [ ] Urgent Priority

[ ] Require Forced Authorization Code

Authorization Level* 0

[ ] Require Client Matter Code

Once the system is configured and running, if your extensions are (for example) four digits long (3001, 3002...) you can test Camp-On by dialling *3001.

5. TAPI devices association

To allow QME monitoring the telephony activity of targets (agents or other internal phones), such devices must be monitored through TAPI. This means that in the CallManager, such telephones must be associated to the application user **ImagicleCTI**. Associate the physical device (the IP phone) to the application user. If you are using extension mobility, make sure that both the physical devices and the extension mobility profiles are associated to the ImagicleCTI application user.

Also, make sure that the "Allow Control of Device from CTI" flag is set for all the devices.

Note: you must associate the operators' phones to control them via the attendant console. You must associate ALL the devices (IP phones, mobile phones, soft phones...) to the ImagicleCTI users to be able to see their status on the Attendant console BLF.

Setup the ImagicleCTI account is described in the IAS General configuration section.

You can find the TSP installation procedure in the IAS installation section of this guide.

Cisco Unified CallManagerâ ¢ Express Configuration

Enter the privileged mode and in the global configuration add this command:

```
voice service voip
no supplementary-service sip refer
sip
rel1xx supported "rel100"
```

Then create a dial-peer to route the calls to the queues. For example, if your queues pilot numbers begin by 9:

```
dial-peer voice 9000 voip
description Imagicle QueueManager Enterprise
destination-pattern 9...
session protocol sipv2
session target ipv4:10.10.10.10:5062
dtmf-relay rtp-nte
```

```
codec g711ulaw
no vad
```

Where 10.10.10.10 it the Imagicle Application Suite server IP address.

Please remember that Queue Manager Enterprise makes outgoing calls to the operators' dn and must be able to reach them by placing SIP calls to the CME ip address.