Cisco Unified Communications Manager Express Configuration and Test for Cisco ATA 190

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Introduction

Cisco Unified Communications Manager Express (CME), formerly known as Cisco Unified Call Manager Express, is a call-processing application in Cisco IOS software that enables Cisco routers to deliver Cisco Unified Communications Manager (Cisco UCM) -like functions for enterprise branch offices or small businesses.

Generally, CME works on Cisco routers and provides functions similar to the functions that Cisco UCM provides.

For ATA 190, CME can support a subset of Cisco UCM functions:

- Call Forward All
- Call Transfer
- Call Waiting
- Redial
- Ad-hoc Conference Call (Local 3-way call)
- Hold/Resume

The only supported call sequence mode of CME is **US mode**.

Mechanism

CME can be configured only through CLI. The CME version can be checked with **show telephony-service**. The latest CME version is 10.5. 10.5 and previous versions do not support Cisco ATA 190 directly. All Cisco ATA 190 CME features are now supported through the fast-track method that is based on Cisco ATA 187. Soon, the CME team will support Cisco ATA 190 with built-in mode in the new version.

Configuration

CME features are configured through Cisco CLI.

- Configure ATA190 Fast-Track

```
CME> enable
```

```
CME# configure terminal
CME(config)# voice register pool-type ATA-190
CME(config-register-pooltype)# reference-pooltype ATA-187
CME(config-register-pooltype)# exit
```

- Create directory number (phone number)

```
CME(config)# voice register dn <tag>
CME(config-register-dn)# number <phone number>
CME(config-register-dn)# exit
CME(config)# do show voice register dn <tag>
```

- Create pool for ATA190 line

```
CME(config)# voice register pool <tag>
CME(config-register-pool)# id mac xxxx.xxxx.xxxx
CME(config-register-pool)# type ATA-190
CME(config-register-pool)# number 1 dn <dn-tag>
CME(config-register-pool)# template 1
CME(config-register-pool)# preference 1
CME(config-register-pool)# username <user> password <pwd>
CME(config-register-pool)# codec g711alaw
CME(config-register-pool)# exit
CME(config)# do show voice register pool <pool-tag>
```

- Create profile for ATA190 line. After the following operations, ATA<mac>.cnf.xml file will be generated.

  Note: The ATA190 has two phone ports, and two phone ports map to two devices. The first device uses the MAC address of ATA190, and the second device uses the shifted MAC address (example: AABBCCDDEEFF to BBCCDDEEFF01).

```
CME(config)# voice register global
CME(config-register-global)# create profile
CME(config-register-global)# exit
```

- Check that the ATA<mac>.cnf.xml has been created successfully.

```
CME # more system:cme/sipphone/?       (check profile status)
```

Test

- Call Forward Test
  - Dials **#72** + call forward destination + **#** to activate call forward all.
  - Dials **#73** to deactivate call forward all.
- Call Transfer Test

  To perform blind call transfer:

  Step 1: Press the flash button on the telephone handset to put the other party on hold and get a dial tone.

  Step 2: Press **#90** (the transfer service activation code) on your telephone keypad, then enter the phone number to which you want to transfer the other party, then press **#**.

  Step 3: When you hear the ringing tone, hang up your phone.

  To perform early call transfer:

Step 1: Press the flash button on the telephone handset to put the other party on hold and get a dial tone.

Step 2: Dial the telephone number to which you want to transfer the other party.

Step 3: Wait for at least one ringback tone, and then hang up your phone to transfer the other party.

To perform attended call transfer:

Step 1: Press the flash button on the telephone handset to put the existing party on hold and get a dial tone.

Step 2: Dial the telephone number to which the existing party is being transferred.

Step 3: When the callee answers the phone, you may consult with the callee and then transfer the existing party by hanging up your telephone handset.

- Call Waiting Test

  Call Waiting is enabled by default. User can enable or disable call waiting as follows, but it is always enabled because of a known issue:

```
CME(config)# voice register pool <tag>
CME(config-register-pool)# call-waiting      (Enable call waiting)
CME(config-register-pool)# no call-waiting      (Disable call waiting)
```

  If another call is incoming, the call waiting tone is heard. Hook flash puts the current call on hold and switches to the waiting call.

  Hook flash in such a scenario cannot establish a conference but only switch between calls.

- Redial Test

  Press ***#** to call the number that was dialed last time.

- Ad-hoc Conference Test

  For the current CME version, audio mix can only be done at the Cisco ATA 190 side. This behavior is similar to SRST.

  — Dial the first number.

  — When the person you called answers, press the flash button on the phone. This action puts the first person that you called on hold and you receive a dial tone.

  — Dial the second person and speak normally after that person answers.

  — To conference with both callers at the same time, perform a hook flash.

- Call hold/resume Test

  Pressing hook flash places the current connected call on hold, and pressing hook flash again resumes the held call.

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