

# Enhanced Location Call Admission Control using RSVP

Last updated: November 10, 2017

## Tasks

- Register Site C Phone 1 to HQ Cluster. Ensure between Site C Phone 1 and HQ Phones you use g729 as the preferred audio codec.
- Only 2 calls should be permitted between the sites.
- RSVP should be triggered at both sites.

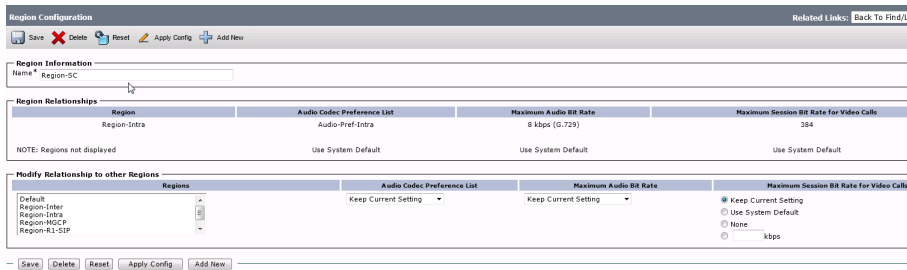
## Configuration: [Click to collapse](#)

Change the TFTP to point to HQ Cluster on the Phone.  
 Register Site C Phone 1 on HQ Cluster with extension 4001

### HQ – Publisher

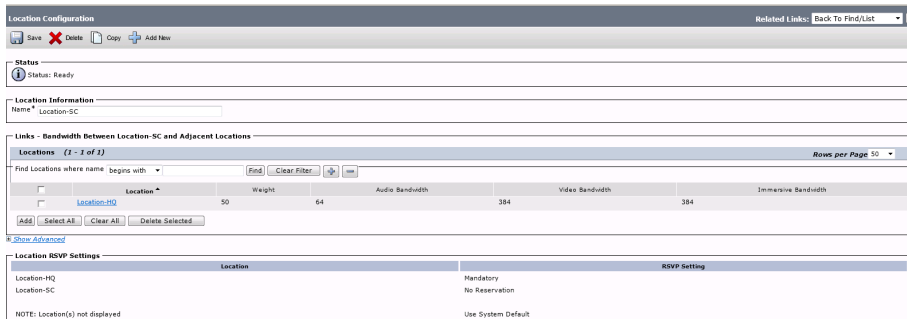
Region > Region Information

Use the Audio Codec Preference as Audio-Pref-Intra and make relationship with Region of HQ as below



System > Location Info > Location

Create 2 locations **Location-HQ** & **Location-SC**



Location Configuration Related Links: [Back To](#)

Save ~~Delete~~ Copy Add New

**Status**  
 Status: Ready

**Location Information**  
 Name: Location-HQ

**Links - Bandwidth Between Location-HQ and Adjacent Locations**

Locations (1 - 2 of 2) Rows per page

Find Locations where name begins with

Location	Weight	Audio Bandwidth	Video Bandwidth	Immersive Bandwidth
<input type="checkbox"/> <a href="#">Hub_Note</a>	50	UNLIMITED	384	384
<input type="checkbox"/> <a href="#">Location-SC</a>	50	64	384	384

Add

[Show Advanced](#)

**Location RSVP Settings**

Location	RSVP Setting
Location-HQ	No Reservation
Location-SC	Mandatory

NOTE: Location(s) not displayed Use System Default

Media Resources > Media Termination Point

**Media Termination Point Configuration**

Save ~~Delete~~ Copy Reset Apply Config Add New

**Status**  
 Status: Ready

**Media Termination Point Information**

Registration Registered with Cisco Unified Communications Manager 11.100.64.12  
 IP Address 11.102.64.254  
 IPv6 Address 0000:0000:0000:0000:0000:0000:0000:0000  
 Media Termination Point Type\* Cisco IOS Enhanced Software Media Termination Point  
 Media Termination Point Name\*   
 Description   
 Device Pool\*   
 Trusted Relay Point

Save Delete Copy Reset Apply Config Add New

**Media Termination Point Configuration**

Save ~~Delete~~ Copy Reset Apply Config Add New

**Status**  
 Status: Ready

**Media Termination Point Information**

Registration Registered with Cisco Unified Communications Manager 11.100.64.12  
 IP Address 11.102.66.254  
 IPv6 Address 0000:0000:0000:0000:0000:0000:0000:0000  
 Media Termination Point Type\* Cisco IOS Enhanced Software Media Termination Point  
 Media Termination Point Name\*   
 Description   
 Device Pool\*   
 Trusted Relay Point

Save Delete Copy Reset Apply Config Add New

Media Resources > Media Resources Group

### Media Resource Group Configuration

Save Delete Copy Add New

**Status**  
*i* Status: Ready

**Media Resource Group Status**  
 Media Resource Group: MRG-HQ (used by 5 devices)

**Media Resource Group Information**  
 Name\* MRG-HQ  
 Description

**Devices for this Group**  
 Available Media Resources\*\* SC-MTP

Selected Media Resources\*  
 ANN\_2 (ANN)  
 ANN\_3 (ANN)  
 CFB\_2 (CFB)  
 CFB\_3 (CFB)  
 HQ-MTP (MTP)

Use Multi-cast for MOH Audio (If at least one multi-cast MOH resource is available)

Save Delete Copy Add New

### Media Resource Group Configuration

Save Delete Copy Add New

**Status**  
*i* Status: Ready

**Media Resource Group Status**  
 Media Resource Group: MRG-SC (used by 2 devices)

**Media Resource Group Information**  
 Name\* MRG-SC  
 Description

**Devices for this Group**  
 Available Media Resources\*\* HQ-MTP

Selected Media Resources\*  
 ANN\_2 (ANN)  
 ANN\_3 (ANN)  
 CFB\_2 (CFB)  
 CFB\_3 (CFB)  
 HQXcode (XCODE)

Use Multi-cast for MOH Audio (If at least one multi-cast MOH resource is available)

Save Delete Copy Add New

Media Resources > Media Resources Group List

### Media Resource Group List Configuration

Save Delete Copy Add New

**Status**  
Status: Ready

**Media Resource Group List Status**  
Media Resource Group List: MRGL-HQ (used by 5 devices)

**Media Resource Group List Information**  
Name\* MRGL-HQ

**Media Resource Groups for this List**  
Available Media Resource Groups: MRG-SC  
Selected Media Resource Groups: MRG-HQ

Save Delete Copy Add New

### Media Resource Group List Configuration

Save Delete Copy Add New

**Status**  
Status: Ready

**Media Resource Group List Status**  
Media Resource Group List: MRGL-SC (used by 2 devices)

**Media Resource Group List Information**  
Name\* MRGL-SC

**Media Resource Groups for this List**  
Available Media Resource Groups: MRG-HQ  
Selected Media Resource Groups: MRG-SC

Save Delete Copy Add New

System > Device Pool

## Device Pool Configuration

Save Delete Copy Reset Apply Config Add New

### Device Pool Information

Device Pool: DP-Phones (5 members\*\*)

### Device Pool Settings

Device Pool Name*	DP-Phones
Cisco Unified Communications Manager Group*	Default
Calling Search Space for Auto-registration	< None >
Adjunct CSS	< None >
Reverted Call Focus Priority	Default
Local Route Group	R1
Intercompany Media Services Enrolled Group	< None >

### Roaming Sensitive Settings

Date/Time Group*	CMLocal
Region*	Region-Intra
Media Resource Group List	MRGL-HQ
Location	Location-HQ

## Device Pool Configuration

Save Delete Copy Reset Apply Config Add New

### Device Pool Information

Device Pool: DP-SC (2 members\*\*)

### Device Pool Settings

Device Pool Name*	DP-SC
Cisco Unified Communications Manager Group*	Default
Calling Search Space for Auto-registration	< None >
Adjunct CSS	< None >
Reverted Call Focus Priority	Default
Local Route Group	< None >
Intercompany Media Services Enrolled Group	< None >

### Roaming Sensitive Settings

Date/Time Group*	CMLocal
Region*	Region-SC
Media Resource Group List	MRGL-SC
Location	Location-SC

## Device > Phones

### Phone Configuration

Save Delete Copy Reset Apply Config Add New

#### Status

Status: Ready

#### Association Information

Modify Button Items

- 1 Line [1] - 4001 (no partition)
  - 2 Line [2] - Add a new DN
  - 3 Add a new SD
  - 4 Add a new SD
  - 5 Add a new SD
  - 6 Add a new SD
  - 7 Add a new SD
  - 8 Add a new SURL
- ..... Unassigned Associated Items .....

#### Phone Type

Product Type: Cisco 7965  
Device Protocol: SCCP

#### Device Information

Registration Registered with Cisco Unified Communications Manager 11.100.64.12  
 IP Address [11.102.66.37](#)  
 Active Load ID SCCP45.9-3-ISR1-1S  
 Download Status Unknown  
 Device is Active  
 Device is trusted  
 MAC Address\* 0023EB548CDA  
 Description Site C Phone 1  
 Device Pool\* DP-SC [View Details](#)

On R1

```
dspfarm profile 2 mtp
  codec g729ar8
  codec g729r8
  rsvp
  maximum sessions software 20
  associate application SCCP
!
sccp ccm group 1
  associate profile 2 register HQ-MTP
no sccp
sccp
!
interface GigabitEthernet0/0.10
  ip rsvp bandwidth
!
interface GigabitEthernet0/1
  ip rsvp bandwidth 64
!
interface Serial0/0/0.201 point-to-point
  ip rsvp bandwidth 64
!
```

## On R3

```
dspfarm profile 2 mtp
  codec g729ar8
  codec g729r8
  rsvp
  maximum sessions software 20
  associate application SCCP
!
sccp local Vlan502
sccp ccm 11.100.64.11 identifier 2 priority 2 version 7.0
sccp ccm 11.100.64.12 identifier 1 priority 1 version 7.0
!
sccp ccm group 1
  bind interface Vlan502
  associate ccm 1 priority 1
  associate ccm 2 priority 2
  associate profile 2 register SC-MTP
!
interface GigabitEthernet0/1
  ip rsvp bandwidth 64
!
interface Serial0/0/0.201 point-to-point
  ip rsvp bandwidth 64
```

## Verification

Make a call from HQ Phone 1 to Site C Phone 1. Pickup the call.

Make another call from HQ Phone 2 to Site C Phone 1. Pickup the call.

Place a call from Site C Phone 1 to any HQ Phone and you should see NOT ENOUGH BANDWIDTH

<https://t.me/learningnets>

**Note:**

MOH from HQ to Site B and PSTN would break. Fix this as a Troubleshooting Task.  
However if we do not create MRGL then it would not break as everyone can access MRGL None.

Assign the MRGL to HQ MGCP Gateway Device Pool.

Assign the MRGL to the SIP Trunk going from HQ to Site B (R2 CUBE)