



5. Web Interface Settings on Unified Communications Manager 12.5

1. To login to CUCM navigate to the IP address you assigned and select “Cisco Unified Communications Manager” from the list, accept any security warnings and enter your username and password and press login

Note: you will receive a few warnings about licensing, a backup device and emergency notification paging, you will be able to clear the emergency paging notification by pressing the “click here” button and selecting “do not show warning message” the others are permanent unless you create a backup

2. In the top right corner select “Cisco Unified Serviceability” and click Go
3. Select Tools -> Service Activation and press the select all services checkbox but deselect the DHCP Monitor Service and then click save

Select Server

Server*

☒ Check All Services 1

CM Services

Service Name

- Go back to Cisco Unified CM Administration by going to the top right corner and selecting the option and clicking Go
- Navigate to System -> Server, click find and then select the server, there should only be one. Set the Hostname/IP Address field to the IP of the CM Server and press save

Server Configuration	
Save Delete Add New	
Status Status: Ready	
Server Information	
Server Type	CUCM Voice/Video
Database Replication	Publisher
Host Name/IP Address *	10.3.3.1
IPv6 Address (for dual IPv4/IPv6)	
MAC Address	
Description	

- Navigate to System -> Enterprise Parameters and set the Auto Registration Protocol to whatever you will use the most, SCCP or SIP and set BLF for Call Lists to Enabled. Scroll down until you see a bunch of URLs and replace the Hostname of the server to the IP and then press Save then Reset.

Phone URL Parameters	
URL Authentication	http://10.3.3.1:8080/ccmcip/authenticate.jsp
URL Directories	http://HQ-CUCM-PUB:8080/ccmcip/xmldirectory.jsp
URL Idle	
URL Idle Time	0
URL Information	http://10.3.3.1:8080/ccmcip/GetTelecasterHelpText.jsp
URL Messages	
IP Phone Proxy Address	
URL Services	http://10.3.3.1:8080/ccmcip/getservicesmenu.jsp
Secure Phone URL Parameters	
Secure Authentication URL	https://10.3.3.1:8443/ccmcip/authenticate.jsp
Secure Directory URL (XML)	https://10.3.3.1:8443/ccmcip/xmldirectory.jsp
Secure Contact Search URL (UDS)	https://10.3.3.1:8443/cucm-uds/users
Secure Idle URL	
Secure Information URL	https://10.3.3.1:8443/ccmcip/GetTelecasterHelpText.jsp
Secure Messages URL	
Secure Services URL	https://HQ-CUCM-PUB:8443/ccmcip/getservicesmenu.jsp

Note: I missed out on URL Directories, just also set that to the IP of the server

7. Navigate to System -> Service Parameters, Select your server and select the service as the Cisco Callmanager (Active) Use find in your browser to search for “302” and set

T302 Timer *	3000	15000
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them to 3000. Then search for “Stop Routing” and set all of them to false then set the “Default inter region max audio bitrate to 16kbps

H225 T302 Timer *	3000	15000
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Clusterwide Parameters (Route Plan)		
Stop Routing on Out of Bandwidth Flag *	False	False
Stop Routing on Unallocated Number Flag *	False	True
Stop Routing on User Busy Flag *	False	True

There are hidden parameters in this group. Click on Advanced button to see hidden parameters.

8. Then set the “ Matching caller ID with remote destination” to Partial match and the “number of digits for caller ID partial match” to 7 and press save

Matching Caller ID with Remote Destination *	Partial Match
Number of Digits for Caller ID Partial Match *	7

9. Navigate to System -> Phone NTP Reference and click Add New and then enter the NTP server information and press save

Phone NTP Reference Information	
IP Address**	10.3.3.100
IPv6 Address**	
Description	10.3.3.100
Mode *	Unicast

10. Navigate to System -> Date/Time Group -> CMLocal and set the Name to HQ, set your timezone, your separator, format and time format. Then add your Phone NTP Reference and press save

Date/Time Group Information	
Date/Time Group: CMLocal (used by 7 devices)	
Group Name*	HQ
Time Zone*	
Separator*	/ (slash)
Date Format*	M/D/Y
Time Format*	12-hour

Phone NTP References for this Date/Time Group	
Selected Phone NTP References**	10.3.3.100
Add Phone NTP References Remove Phone NTP References	

Save	Delete	Copy	Reset	Apply Config	Add New
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11. Navigate to System -> Region Information -> Region -> Default and rename it to HQ and press save

Region Information

Name* HQ

Region Relationships

Region	Audio Codec Preference List
Default	Use System Default (Factory Default low loss)

NOTE: Regions not displayed Use System Default

Modify Relationship to other Regions

Regions	Audio Codec Preference List
Default	

Keep Current Setting

12. Then navigate to System -> Location Info -> Location -> Hub_None and rename it to HQ

Location Information

Name* HQ

13. Now navigate to Call Routing -> Class of Control -> Partition and press add new, add an INTERNAL partition and press save

Partition Information

To enter multiple partitions, use one line for each partition entry. You can enter up to 75 partitions; the names and descriptions can have up to a total of 1475 characters. The partition name cannot exceed 50 characters. Use a comma (,) to separate the partition name and description on each line. If a description is not entered, Cisco Unified Communications Manager uses the partition name as the description. For example:
<< partitionName >> , << description >>
CiscoPartition, Cisco employee partition
DallasPartition

Name* INTERNAL

14. Now navigate to Call Routing -> Class of Control -> Calling Search Space and add a new CSS called INTERNAL with the INTERNAL partition selected and press save

Calling Search Space Information

Name* INTERNAL

Description

Route Partitions for this Calling Search Space

Available Partitions**

HQ
HQ-ANI-IN
HQ-DNIS-OUT
PSTN
STRIP

Selected Partitions

INTERNAL

15. Navigate to Media Resources -> Media Resource Group and add a new group and call it HQ and select all of the Media Resources and press save

Media Resource Group Information	
Name*	HQ
Description	

Devices for this Group	
Available Media Resources**	
▼ ▲	
Selected Media Resources*	ANN_2 CFB_2 IVR_2 MOH_2 MTP_2
<input type="checkbox"/> Use Multi-cast for MOH Audio (If at least one multi-cast MOH resource is available)	

16. Navigate to Media Resources -> Media Resource Group List and add a new group called HQ and assign the HQ Media Resource Group

Media Resource Group List Information	
Name*	HQ

Media Resource Groups for this List	
Available Media Resource Groups	BR1 BR2
▼ ▲	
Selected Media Resource Groups	HQ

17. Navigate to System -> Device Pool -> Default and rename it to HQ and copy the values below and press save followed by reset

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

Roaming Sensitive Settings	
Date/Time Group*	HQ

18. To create users navigate to User Management -> End user and add a new user and enter your user information, for this document we will be creating the user hqphone1 and press save

User Information	
User Status	Enabled Local User
User ID*	hqphone1
Password	•••••
Confirm Password	•••••
Self-Service User ID	
PIN	•••••
Confirm PIN	•••••
Last name*	Phone1
Middle name	
First name	HQ
Display name	HQ Phone 1
Title	

- a. Scroll all the way down and under permissions information click “add to access control group” and add the following permissions, then press add selected followed by save and repeat for any other users (phones) you’d like to add

Access Control Group (1 - 29 of 29)	
Find Access Control Group where Name begins with Find	
<input type="checkbox"/>	
<input type="checkbox"/>	Admin-3rd Party API
<input type="checkbox"/>	Application Client Users
<input type="checkbox"/>	Standard Audit Users
<input type="checkbox"/>	Standard CAR Admin Users
<input type="checkbox"/>	Standard CCM Admin Users
<input checked="" type="checkbox"/>	Standard CCM End Users
<input type="checkbox"/>	Standard CCM Gateway Administration
<input type="checkbox"/>	Standard CCM Phone Administration
<input type="checkbox"/>	Standard CCM Read Only
<input type="checkbox"/>	Standard CCM Server Maintenance
<input type="checkbox"/>	Standard CCM Server Monitoring
<input type="checkbox"/>	Standard CCM Super Users
<input type="checkbox"/>	Standard CTI Allow Call Monitoring
<input type="checkbox"/>	Standard CTI Allow Call Park Monitoring
<input type="checkbox"/>	Standard CTI Allow Call Recording
<input type="checkbox"/>	Standard CTI Allow Calling Number Modification
<input type="checkbox"/>	Standard CTI Allow Control of All Devices
<input type="checkbox"/>	Standard CTI Allow Control of Phones supporting Connected Xfer and conf

19. Navigate to Device -> Phone and press add new, select your phone type, enter your phones mac address and a description and the following values below

MAC Address*	F8A5C5EB846E	
Description	HQ Phone 1	
Device Pool*	HQ	View Details
Common Device Configuration	< None >	View Details
Phone Button Template*	Standard 8845 SIP	
Softkey Template	Standard User	
Common Phone Profile*	Standard Common Phone Profile	View Details
Calling Search Space	HQ	

- a. Then associate the phone with a user

Owner	<input checked="" type="radio"/> User <input type="radio"/> Anc
Owner User ID*	hqphone1

- b. Set the Device Security Profile to Standard SIP Non-Secure Profile and the Sip Profile to Standard Sip Profile under Protocol Specific Information and then press save

Protocol Specific Information	
Packet Capture Mode*	None
Packet Capture Duration	0
BLF Presence Group*	Standard Presence group
SIP Dial Rules	< None >
MTP Preferred Originating Codec*	711ulaw
Device Security Profile*	Cisco 8845 - Standard SIP Non-Secure Profile
Rerouting Calling Search Space	< None >
SUBSCRIBE Calling Search Space	< None >
SIP Profile*	Standard SIP Profile View Details
Digest User	< None >

- c. Under association on the left side of your screen press Line[1] - Add a new DN and assign a DN with the following values below

Directory Number Information	
Directory Number*	2001
Route Partition	INTERNAL
Description	HQ Phone 1
Alerting Name	HQ Phone 1
ASCII Alerting Name	HQ Phone 1
External Call Control Profile	< None >
<input checked="" type="checkbox"/> Active	

- d. Then setup call forwarding by assigning the values as shown below with the Calling Search space as INTERNAL

Call Forward and Call Pickup Settings

	Voice Mail	Destination	Calling Search Space
Calling Search Space Activation Policy			With Configured CSS
Forward All	<input type="checkbox"/> or		< None >
Secondary Calling Search Space for Forward All			< None >
Forward Busy Internal	<input checked="" type="checkbox"/> or		HQ Set to Internal (different to any system)
Forward Busy External	<input checked="" type="checkbox"/> or		HQ
Forward No Answer Internal	<input checked="" type="checkbox"/> or		HQ
Forward No Answer External	<input checked="" type="checkbox"/> or		HQ
Forward No Coverage Internal	<input type="checkbox"/> or		< None >
Forward No Coverage External	<input type="checkbox"/> or		< None >
Forward on CTI Failure	<input type="checkbox"/> or		< None >
Forward Unregistered Internal	<input checked="" type="checkbox"/> or		HQ
Forward Unregistered External	<input checked="" type="checkbox"/> or		HQ
No Answer Ring Duration (seconds)	10		
Call Pickup Group	< None >		

- e. Now setup caller ID with the values below being the Alerting Name you setup earlier and press save

Line 1 on Device SEPF8A5C5EB846E

Display (Caller ID)	HQ Phone 1	D
the person receiving a call may not see the proper identity of the		
ASCII Display (Caller ID)	HQ Phone 1	
Line Text Label		
External Phone Number Mask	XXXX	

- f. Now scroll all the way down and press Associate End users and select the User that you have setup for this phone, now press go by related links in the top right and save on the phone, and then press reset. Repeat for all other phones

21. On your phone press the settings cogwheel and navigate to Admin Settings -> Ethernet Setup -> IPv4 Setup and scroll down to Alternate TFTP and enter the IP Address of your CUCM Server (on an 88x series phone)

That's It! You should now have your phones registered and be able to make a call between them!