

# Cisco Unified CallManager Express Release 3.2 - PBX Interoperability: Avaya S8700 Communication Manager 2.2 Using H323 Trunk

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## Introduction

This is an application note for interoperability connectivity of Avaya S8700 Communication Manager 2.2 PBX with Cisco Unified CallManager Express Release 3.2 via H.323 trunk.

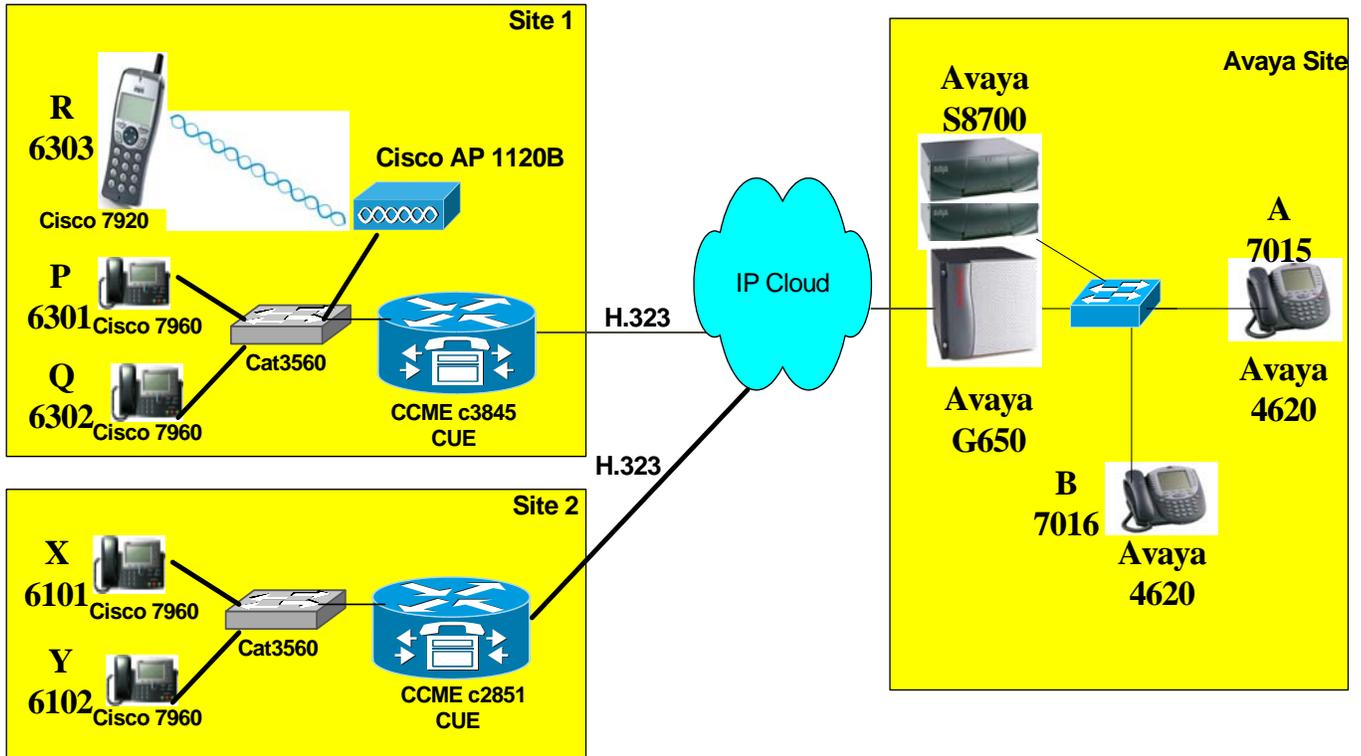
The network topology diagram (Figure 1) shows the test setup for end-to-end interoperability with two different sites of Cisco Unified CallManager Express that has Cisco Unity Express built in connected to an Avaya PBX via H323 trunks.



## Network Topology

Figure 1. Network Topology or Test Setup

### H.323 Call Setup End-to-End Configuration



## Limitations

Called Name only displayed on Avaya phone when calling CME phone

Called Number only displayed on CME phone when calling Avaya phone

H450.2 and H450.3 supplementary services must be disabled and "allow-connections H323 to H323" must be enabled on CME to support call transfer and call forward to Avaya

Inbound H323 call from remote CME transferred or forwarded to Avaya phone disconnects after 30 seconds

Inbound H323 call with G.711 codec from Avaya blind transferred or forwarded from CME to remote CME transcoded to G729 fails

## System Components

### Hardware Requirements

Cisco Unified CallManager Express Cisco 3845 with NM-CUE

Cisco Unified CallManager Express Cisco 2851 with NM-CUE

Cisco Catalyst Switch 3560 48 ports

Cisco Aironet 1100 Series Access Point

Cisco 7960 and 7920 phones.



Avaya S8700 Call Server

Avaya G650 Media gateway

Avaya 4620 IP phones.

### **Software Requirements**

Cisco Unified CallManager Express Release 3.2

Cisco IOS software Release 12.3(11)T3

Cisco CatOS software Release 12.1(19)EA1c

Cisco 7960 IP phone Firmware P00305000301

Cisco 7920 IP phone Firmware cmterm\_7920.4.0-01-08

Avaya Communication Manager 2.2

Avaya IP phone Firmware Version 2.1.3

### **Features**

The following features are supported between the Avaya S8700 Communication Manager 2.2 PBX using an H323 trunk with Cisco Unified CallManager Express Release 3.2.

CLIP-Calling Line (Number) Identification Presentation

CNIP-Calling Name Identification Presentation

CT-Call Transfer by Join (Please see the Limitation section)

CFU-Call Forwarding Unconditional (Please see the Limitation section)

CFB-Call Forwarding Busy (Please see the Limitation section)

CFNR-Call Forwarding no reply (Please see the Limitation section)

COLP-Connected Line (Number) Identification Presentation (Please see the Limitation section)

CONP-Connected Name Identification Presentation (Please see the Limitation section)

Transcoding-CT, CFU, CFB, and CFNR (Please see the Limitation section)

CUE VM- Integration (Please see the Limitation section)

Call Hold / Resume

3-Way Conference

### **Features Not Supported**

MWI- Message Waiting Indication (lamp ON, lamp OFF) across the H.323 Trunk

Call Completion (Callback; Automatic Callback) across H323 Trunk

Alerting Name from CME across H323 Trunk

### **Configuration**

Configure Avaya Site which includes the S8700 call Server and the G650 media gateway

Configure Site 1 which includes C3845, NM-CUE, Cat3560, and Cisco AP 1120B

Configure Site 2 which includes C2851, NM-CUE, Cat3560



**Avaya S8700/G650 Configuration**

**AAR Analysis**

display aar analysis 6

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AAR DIGIT ANALYSIS TABLE

Percent Full: 2

Dialed	Total	Route	Call	Node	ANI	
String	Min	Max	Pattern	Type	Num	Reqd
61	4	4	302	aar		n
62	4	4	301	aar		n
63	4	4	301	aar		n
64	4	4	303	aar		n
7	7	7	999	aar		n
70007950	8	8	45	aar		n
8	7	7	999	aar		n
88001	5	5	65	aar		n
9	7	7	999	aar		n
						n
						n
						n
						n
						n
						n





No	Mrk	Lmt	List	Del	Digits	QSIG
						Intw
						Dgts
1:	301	0				n user
2:						n user
3:						n user
4:						n user
5:						n user
6:						n user

BCC	VALUE	TSC	CA-TSC	ITC	BCIE	Service/Feature	BAND	No.	Numbering	LAR
0	1	2	3	4	W	Request				
							Dgts	Format		
							Subaddress			
1:	y	y	y	y	y	n	n	rest	none	
2:	y	y	y	y	y	n	n	rest	none	
3:	y	y	y	y	y	n	n	rest	none	
4:	y	y	y	y	y	n	n	rest	none	
5:	y	y	y	y	y	n	n	rest	none	
6:	y	y	y	y	y	n	n	rest	none	

display route-pattern 301

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Pattern Number: 301

Grp FRL NPA Pfx Hop Toll No. Inserted

DCS/ IXC



No	Mrk	Lmt	List	Del	Digits	QSIG
						Intw
						Dgts
7:						n user
8:						n user
9:						n user
10:						n user
11:						n user
12:						n user

BCC	VALUE	TSC	CA-TSC	ITC	BCIE	Service/Feature	BAND	No.	Numbering	LAR
0	1	2	3	4	W	Request				
							Dgts	Format		
							Subaddress			
7:	y	y	y	y	y	n	n	rest	none	
8:	y	y	y	y	y	n	n	rest	none	
9:	y	y	y	y	y	n	n	rest	none	
10:	y	y	y	y	y	n	n	rest	none	
11:	y	y	y	y	y	n	n	rest	none	
12:	y	y	y	y	y	n	n	rest	none	

display route-pattern 301

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Pattern Number: 301

Grp FRL NPA Pfx Hop Toll No. Inserted

DCS/ IXC



```

No          Mrk Lmt List Del  Digits          QSIG
          Dgts          Intw
13:
14:
15:
16:

```

```

BCC VALUE  TSC CA-TSC    ITC BCIE Service/Feature BAND  No. Numbering LAR
0 1 2 3 4 W      Request          Dgts Format
          Subaddress
13: y y y y y n  n          rest          none
14: y y y y y n  n          rest          none
15: y y y y y n  n          rest          none
16: y y y y y n  n          rest          none

```

**Route Pattern 302**

display route-pattern 302

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Pattern Number: 302 Pattern Name: CCME2

SCCAN? n Secure SIP? n

Grp FRL NPA Pfx Hop Toll No. Inserted DCS/ IXC

```

No          Mrk Lmt List Del  Digits          QSIG
          Dgts          Intw
1: 302 0
2:

```





```

3:                                     n  user
4:                                     n  user
5:                                     n  user
6:                                     n  user

```

```

      BCC VALUE  TSC CA-TSC      ITC BCIE Service/Feature BAND  No. Numbering LAR
      0 1 2 3 4 W      Request                                     Dgts Format
                                                                Subaddress
1:  y y y y y n  n      rest                                     none
2:  y y y y y n  n      rest                                     none
3:  y y y y y n  n      rest                                     none
4:  y y y y y n  n      rest                                     none
5:  y y y y y n  n      rest                                     none
6:  y y y y y n  n      rest                                     none

```

display route-pattern 302

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Pattern Number: 302

```

Grp FRL NPA Pfx Hop Toll No.  Inserted      DCS/ IXC
No      Mrk Lmt List Del  Digits      QSIG
                                     Dgts      Intw
7:                                     n  user
8:                                     n  user

```



```

9:                                     n  user
10:                                    n  user
11:                                    n  user
12:                                    n  user

```

```

      BCC VALUE  TSC CA-TSC   ITC BCIE Service/Feature BAND  No. Numbering LAR
      0 1 2 3 4 W      Request                                Dgts Format
                                                    Subaddress
7:  y y y y y n  n                rest                            none
8:  y y y y y n  n                rest                            none
9:  y y y y y n  n                rest                            none
10: y y y y y n  n                rest                            none
11: y y y y y n  n                rest                            none
12: y y y y y n  n                rest                            none

```

```

display route-pattern 302                                     Page 3 of 3

```

Pattern Number: 302

```

Grp FRL NPA Pfx Hop Toll No.  Inserted          DCS/ IXC
No           Mrk Lmt List Del  Digits          QSIG
                                Dgts          Intw
13:                                     n  user
14:                                     n  user

```



```

15:                                     n  user
16:                                     n  user

```

	BCC	VALUE	TSC	CA-TSC	ITC	BCIE	Service/Feature	BAND	No.	Numbering	LAR
	0	1	2	3	4	W	Request		Dgts	Format	Subaddress
13:	y	y	y	y	y	n	n		rest		none
14:	y	y	y	y	y	n	n		rest		none
15:	y	y	y	y	y	n	n		rest		none
16:	y	y	y	y	y	n	n		rest		none

**Signaling Group 301**

```

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```

SIGNALING GROUP

```

Group Number: 301          Group Type: h.323

Remote Office? n          Max number of NCA TSC: 0
SBS? n                    Max number of CA TSC: 0
Trunk Group for NCA TSC:

Trunk Group for Channel Selection: 301

Supplementary Service Protocol: a          Network Call Transfer? n
T303 Timer(sec): 10

```



Near-end Node Name: CLAN1

Far-end Node Name: CCME1

Near-end Listen Port: 1720

Far-end Listen Port: 1720

Far-end Network Region: 1

LRQ Required? n

Calls Share IP Signaling Connection? y

RRQ Required? n

Media Encryption? n

Bypass If IP Threshold Exceeded? y

DTMF over IP: out-of-band

Direct IP-IP Audio Connections? n

IP Audio Hairpinning? y

Interworking Message: PROGRESS

display signaling-group 301

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ADMINISTERED NCA TSC ASSIGNMENT

Service/Feature:

As-needed Inactivity Time-out (min):

TSC	Local	Adj.	Mach.				
Index	Ext.	Enabled	Established	Dest. Digits	Appl.	Name	ID
1:		n					
2:		n					
3:		n					
4:		n					
5:		n					
6:		n					



7: n  
8: n  
9: n  
10: n  
11: n  
12: n  
13: n  
14: n  
15: n  
16: n

display signaling-group 301

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ADMINISTERED NCA TSC ASSIGNMENT

TSC	Local					Adj.	Mach.
Index	Ext.	Enabled	Established	Dest. Digits	Appl.	Name	ID
17:		n					
18:		n					
19:		n					
20:		n					
21:		n					
22:		n					
23:		n					



24: n  
25: n  
26: n  
27: n  
28: n  
29: n  
30: n  
31: n  
32: n

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ADMINISTERED NCA TSC ASSIGNMENT

TSC	Local					Adj.	Mach.
Index	Ext.	Enabled	Established	Dest. Digits	Appl.	Name	ID
33:		n					
34:		n					
35:		n					
36:		n					
37:		n					
38:		n					
39:		n					
40:		n					



41: n  
42: n  
43: n  
44: n  
45: n  
46: n  
47: n  
48: n

display signaling-group 301

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ADMINISTERED NCA TSC ASSIGNMENT

TSC	Local					Adj.	Mach.
Index	Ext.	Enabled	Established	Dest. Digits	Appl.	Name	ID
49:		n					
50:		n					
51:		n					
52:		n					
53:		n					
54:		n					
55:		n					
56:		n					
57:		n					



58: n  
59: n  
60: n  
61: n  
62: n  
63: n  
64: n

### Signaling Group 302

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#### SIGNALING GROUP

Group Number: 302

Group Type: h.323

Remote Office? n

Max number of NCA TSC: 0

SBS? n

Max number of CA TSC: 0

Trunk Group for NCA TSC:

Trunk Group for Channel Selection: 302

Supplementary Service Protocol: a

Network Call Transfer? n

T303 Timer(sec): 10

Near-end Node Name: CLAN2

Far-end Node Name: CCME2

Near-end Listen Port: 1720

Far-end Listen Port: 1720

Far-end Network Region: 1





LRQ Required? n                      Calls Share IP Signaling Connection? y

RRQ Required? n

Media Encryption? n                      Bypass If IP Threshold Exceeded? y

DTMF over IP: out-of-band              Direct IP-IP Audio Connections? n

IP Audio Hairpinning? y

Interworking Message: PROGRESS

display signaling-group 302

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ADMINISTERED NCA TSC ASSIGNMENT

Service/Feature:                      As-needed Inactivity Time-out (min):

TSC	Local	Enabled	Established	Dest. Digits	Appl.	Adj.	Mach.
Index	Ext.					Name	ID
1:		n					
2:		n					
3:		n					
4:		n					
5:		n					
6:		n					
7:		n					
8:		n					
9:		n					



10: n  
11: n  
12: n  
13: n  
14: n  
15: n  
16: n

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ADMINISTERED NCA TSC ASSIGNMENT

TSC	Local					Adj.	Mach.
Index	Ext.	Enabled	Established	Dest. Digits	Appl.	Name	ID
17:		n					
18:		n					
19:		n					
20:		n					
21:		n					
22:		n					
23:		n					
24:		n					
25:		n					
26:		n					



27: n  
28: n  
29: n  
30: n  
31: n  
32: n

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ADMINISTERED NCA TSC ASSIGNMENT

TSC	Local					Adj.	Mach.
Index	Ext.	Enabled	Established	Dest. Digits	Appl.	Name	ID
33:		n					
34:		n					
35:		n					
36:		n					
37:		n					
38:		n					
39:		n					
40:		n					
41:		n					
42:		n					
43:		n					



44: n  
45: n  
46: n  
47: n  
48: n

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ADMINISTERED NCA TSC ASSIGNMENT

TSC	Local					Adj.	Mach.
Index	Ext.	Enabled	Established	Dest. Digits	Appl.	Name	ID
49:		n					
50:		n					
51:		n					
52:		n					
53:		n					
54:		n					
55:		n					
56:		n					
57:		n					
58:		n					
59:		n					
60:		n					



61: n  
 62: n  
 63: n  
 64: n

**System Parameters**

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OPTIONAL FEATURES

G3 Version: V12

Location: 1 RFA System ID (SID): 21096

Platform: 8 RFA Module ID (MID): 1

USED

Maximum Ports: 226 176

Maximum XMOBILE Stations: 10 3

Maximum Off-PBX Telephones - EC500: 5 3

Maximum Off-PBX Telephones - OPS: 15 0

Maximum Off-PBX Telephones - SCCAN: 0 0

(NOTE: You must logoff & login to effect the permission changes.)

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OPTIONAL FEATURES

IP PORT CAPACITIES	USED
Maximum Administered H.323 Trunks: 8000	69
Maximum Concurrently Registered IP Stations: 137	3
Maximum Administered Remote Office Trunks: 0	0
Maximum Concurrently Registered Remote Office Stations: 0	0
Maximum Concurrently Registered IP eCons: 0	0
Maximum Administered SIP Trunks: 15	0
Maximum Number of DS1 Boards with Echo Cancellation: 400	0
Maximum TN2501 VAL Boards: 1	1
Maximum G700/G350 VAL Sources: 10	1

(NOTE: You must logoff & login to effect the permission changes.)

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OPTIONAL FEATURES

Abbreviated Dialing Enhanced List? y	Audible Message Waiting? y
Access Security Gateway (ASG)? n	Authorization Codes? y
Analog Trunk Incoming Call ID? y	Backup Cluster Automatic Takeover? n



A/D Grp/Sys List Dialing Start at 01? y CAS Branch? n  
Answer Supervision by Call Classifier? y CAS Main? n  
ARS? y Change COR by FAC? n  
ARS/AAR Partitioning? y Computer Telephony Adjunct Links? y  
ARS/AAR Dialing without FAC? n Co-Res DEFINITY LAN Gateway? n  
ASAI Link Core Capabilities? n Cvg Of Calls Redirected Off-net? y  
ASAI Link Plus Capabilities? n DCS (Basic)? y  
Async. Transfer Mode (ATM) PNC? n DCS Call Coverage? y  
Async. Transfer Mode (ATM) Trunking? n DCS with Rerouting? y  
ATM WAN Spare Processor? n  
ATMS? y Digital Loss Plan Modification? y  
Attendant Vectoring? y DS1 MSP? n  
DS1 Echo Cancellation? y

(NOTE: You must logoff & login to effect the permission changes.)

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#### OPTIONAL FEATURES

Emergency Access to Attendant? y IP Stations? y  
Enable 'dadmin' Login? y Internet Protocol (IP) PNC? y  
Enhanced Conferencing? y ISDN Feature Plus? n  
Enhanced EC500? y ISDN Network Call Redirection? y  
Enterprise Wide Licensing? n ISDN-BRI Trunks? y  
Extended Cvg/Fwd Admin? y ISDN-PRI? y









```

DTMF Feedback Signals For VRU? y           Timed ACW? y
      Dynamic Advocate? n                 Vectoring (Basic)? y
Expert Agent Selection (EAS)? y           Vectoring (Prompting)? y
      EAS-PHD? y                         Vectoring (G3V4 Enhanced)? y
      Forced ACD Calls? n                 Vectoring (ANI/II-Digits Routing)? y
                                           Vectoring (G3V4 Advanced Routing)? y
      Lookahead Interflow (LAI)? y       Vectoring (CINFO)? y
Multiple Call Handling (On Request)? n     Vectoring (Best Service Routing)? y
      Multiple Call Handling (Forced)? n   Vectoring (Holidays)? y
                                           Vectoring (Variables)? y

```

(NOTE: You must logoff & login to effect the permission changes.)

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CALL CENTER OPTIONAL FEATURES

```

VDN of Origin Announcement? y           VuStats? y
      VDN Return Destination? y         VuStats (G3V4 Enhanced)? y

```

USED

```

      Logged-In ACD Agents: 5           0
      Logged-In Advocate Agents: 5      0
      Logged-In IP Softphone Agents: 5   0

```



(NOTE: You must logoff & login to effect the permission changes.)

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QSIG OPTIONAL FEATURES

Basic Call Setup? y

Basic Supplementary Services? y

Centralized Attendant? y

Interworking with DCS? y

Supplementary Services with Rerouting? y

Transfer into QSIG Voice Mail? y

Value-Added (VALU)? y

(NOTE: You must logoff & login to effect the permission changes.)

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ASAI ENHANCED FEATURES

Increased Adjunct Route Capacity? n

ASAI PROPRIETARY FEATURES

Agent States? n





(NOTE: You must logoff & login to effect the permission changes.)

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MAXIMUM IP REGISTRATIONS BY PRODUCT ID

Product ID	Rel. Limit	Used
	: 0	0
	: 0	0
	: 0	0
	: 0	0
	: 0	0
	: 0	0
	: 0	0
	: 0	0
	: 0	0
	: 0	0
	: 0	0
	: 0	0
	: 0	0
	: 0	0
	: 0	0
	: 0	0

(NOTE: You must logoff & login to effect the permission changes.)



## Trunk Group 301

display trunk-group 301

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### TRUNK GROUP

Group Number: 301                      Group Type: isdn                      CDR Reports: y  
Group Name: CCME1                      COR: 90                      TN: 1                      TAC: #01  
Direction: two-way                      Outgoing Display? y                      Carrier Medium: IP  
Dial Access? n                      Busy Threshold: 255                      Night Service:  
Queue Length: 5  
Service Type: cbc                      Auth Code? n                      TestCall ITC: rest  
Usage Alloc? n                      Far End Test Line No:  
TestCall BCC: 4                      TestCall Service:

### TRUNK PARAMETERS

Codeset to Send Display: 0                      Codeset to Send National IEs: 6  
Max Message Size to Send: 260                      Charge Advice: none  
Supplementary Service Protocol: a                      Digit Handling (in/out): enbloc/enbloc  
Trunk Hunt: ascend                      QSIG Value-Added? n  
Digital Loss Group: 18  
Incoming Calling Number - Delete:                      Insert:                      Format:  
Bit Rate: 1200                      Synchronization: async                      Duplex: full  
Disconnect Supervision - In? y                      Out? n



Answer Supervision Timeout: 0

display trunk-group 301

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TRUNK FEATURES

ACA Assignment? n Measured: both Wideband Support? y

Maintenance Tests? y

Data Restriction? n NCA-TSC Trunk Member:

Send Name: y Send Calling Number: y

Used for DCS? n

Suppress # Outpulsing? n Format: public

Outgoing Channel ID Encoding: preferred UUI IE Treatment: service-provider

Replace Restricted Numbers? n

Replace Unavailable Numbers? n

Send Connected Number: y

Network Call Redirection: none Hold/Unhold Notifications? y

Send UUI IE? y Modify Tandem Calling Number? n

Send UCID? y

Send Codeset 6/7 LAI IE? y

SBS? n Network (Japan) Needs Connect Before Disconnect? n



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INCOMING CALL HANDLING TREATMENT

Service/	Called	Called	Del	Insert	Per Call	Night
Feature	Len	Number			CPN/BN	Serv

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INCOMING CALL HANDLING TREATMENT

Service/	Called	Called	Del	Insert	Per Call	Night
Feature	Len	Number			CPN/BN	Serv

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INCOMING CALL HANDLING TREATMENT

Service/	Called	Called	Del	Insert	Per Call	Night
Feature	Len	Number			CPN/BN	Serv

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WIDEBAND SUPPORT OPTIONS

H0? n

H11? n

H12? n

NXDS0? n





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TRUNK GROUP

Administered Members (min/max): 1/6

GROUP MEMBER ASSIGNMENTS

Total Administered Members: 6

Port	Code Sfx Name	Night	Sig Grp
1:	T00052		301
2:	T00053		301
3:	T00054		301
4:	T00068		301
5:	T00069		301
6:	T00070		301
7:			
8:			
9:			
10:			
11:			
12:			
13:			
14:			
15:			



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TRUNK GROUP

Administered Members (min/max): 1/6

GROUP MEMBER ASSIGNMENTS

Total Administered Members: 6

Port	Code	Sfx	Name	Night	Sig	Grp
16:						
17:						
18:						
19:						
20:						
21:						
22:						
23:						
24:						
25:						
26:						
27:						
28:						
29:						
30:						

**Trunk Group 302**



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TRUNK GROUP

Group Number: 302                      Group Type: isdn                      CDR Reports: y  
Group Name: CCME2                      COR: 90                      TN: 1                      TAC: #02  
Direction: two-way                      Outgoing Display? y                      Carrier Medium: IP  
Dial Access? n                      Busy Threshold: 255                      Night Service:  
Queue Length: 5  
Service Type: cbc                      Auth Code? n                      TestCall ITC: rest  
Usage Alloc? n                      Far End Test Line No:  
TestCall BCC: 4                      TestCall Service:

TRUNK PARAMETERS

Codeset to Send Display: 0                      Codeset to Send National IEs: 6  
Max Message Size to Send: 260                      Charge Advice: none  
Supplementary Service Protocol: a                      Digit Handling (in/out): enbloc/enbloc  
Trunk Hunt: ascend                      QSIG Value-Added? n  
Digital Loss Group: 18  
Incoming Calling Number - Delete:                      Insert:                      Format:  
Bit Rate: 1200                      Synchronization: async                      Duplex: full  
Disconnect Supervision - In? y                      Out? y  
Answer Supervision Timeout: 0



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TRUNK FEATURES

ACA Assignment? n Measured: both Wideband Support? y

Maintenance Tests? y

Data Restriction? n NCA-TSC Trunk Member:

Send Name: y Send Calling Number: y

Used for DCS? n

Suppress # Outpulsing? n Format: public

Outgoing Channel ID Encoding: preferred UUI IE Treatment: service-provider

Replace Restricted Numbers? n

Replace Unavailable Numbers? n

Send Connected Number: y

Network Call Redirection: none Hold/Unhold Notifications? y

Send UUI IE? y Modify Tandem Calling Number? n

Send UCID? y

Send Codeset 6/7 LAI IE? y

SBS? n Network (Japan) Needs Connect Before Disconnect? n

display trunk-group 302

Page 3 of 23

INCOMING CALL HANDLING TREATMENT

Service/ Feature	Called Len	Called Number	Del	Insert	Per Call CPN/BN	Night Serv
---------------------	---------------	------------------	-----	--------	--------------------	---------------



display trunk-group 302

Page 4 of 23

INCOMING CALL HANDLING TREATMENT

Service/	Called	Called	Del	Insert	Per Call	Night
Feature	Len	Number			CPN/BN	Serv

display trunk-group 302

Page 5 of 23

INCOMING CALL HANDLING TREATMENT

Service/	Called	Called	Del	Insert	Per Call	Night
Feature	Len	Number			CPN/BN	Serv

display trunk-group 302

Page 6 of 23

WIDEBAND SUPPORT OPTIONS

H0? n

H11? n

H12? n

NXDS0? n

display trunk-group 302

Page 7 of 23

TRUNK GROUP

Administered Members (min/max): 1/6

GROUP MEMBER ASSIGNMENTS

Total Administered Members: 6



Port	Code Sfx Name	Night	Sig Grp
1:	T00071		302
2:	T00072		302
3:	T00081		302
4:	T00082		302
5:	T00083		302
6:	T00084		302
7:			
8:			
9:			
10:			
11:			
12:			
13:			
14:			
15:			

display trunk-group 302

Page 8 of 23

TRUNK GROUP

Administered Members (min/max): 1/6

GROUP MEMBER ASSIGNMENTS

Total Administered Members: 6



Port	Code	Sfx	Name	Night	Sig	Grp
16:						
17:						
18:						
19:						
20:						
21:						
22:						
23:						
24:						
25:						
26:						
27:						
28:						
29:						
30:						

**Uniform-Dial Plan**

display uniform-dialplan 61

Page 1 of 2

UNIFORM DIAL PLAN TABLE

Percent Full: 0

Matching	Insert	Node	Matching	Insert	Node
----------	--------	------	----------	--------	------



Pattern	Len	Del	Digits	Net	Conv	Num	Pattern	Len	Del	Digits	Net	Conv	Num
61	4	0		aar	n							n	
62	4	0		aar	n							n	
63	4	0		aar	n							n	
64	4	0		aar	n							n	
					n							n	
					n							n	
					n							n	
					n							n	
					n							n	
					n							n	
					n							n	
					n							n	
					n							n	
					n							n	
					n							n	
					n							n	
					n							n	
					n							n	

display uniform-dialplan 61

UNIFORM DIAL PLAN TABLE

Percent Full: 0

Matching	Insert	Node	Matching	Insert	Node
----------	--------	------	----------	--------	------







Current configuration : 4514 bytes

```
!  
version 12.3  
  
service timestamps debug datetime msec  
service timestamps log datetime msec  
  
no service password-encryption  
  
!  
  
hostname Site-1  
  
!  
  
boot-start-marker  
  
boot system flash:c3845-ipvoice-mz.123-11.T3.bin  
  
boot-end-marker  
  
!  
  
enable password cisco  
  
!  
  
username user1 password 0 6301  
username user2 password 0 6302  
  
username 3  
  
clock timezone PST -8  
  
clock summer-time PST recurring  
  
no aaa new-model  
  
ip subnet-zero
```



```
ip cef

!

!

ip dhcp excluded-address 10.1.5.1

!

ip dhcp pool phone

    network 10.1.5.0 255.255.255.128

    default-router 10.1.5.1

    option 150 ip 172.28.221.108

!

!

no ip domain lookup

no ftp-server write-enable

!

!

voice service voip

    allow-connections h323 to h323

    allow-connections h323 to sip

    supplementary-service h450.12

!

!

interface GigabitEthernet0/0

    ip address 172.28.221.108 255.255.255.240
```



```
duplex auto

speed auto

media-type rj45

h323-gateway voip interface

h323-gateway voip id site1 ipaddr 172.28.221.242 1719

h323-gateway voip h323-id cme-site1

h323-gateway voip tech-prefix 1#

h323-gateway voip bind srcaddr 172.28.221.108

!

interface GigabitEthernet0/1

no ip address

shutdown

duplex auto

speed auto

media-type rj45

!

interface Service-Engine1/0

ip address 192.168.1.1 255.255.255.0

service-module ip address 192.168.1.2 255.255.255.0

service-module ip default-gateway 192.168.1.1

!

ip classless

ip route 0.0.0.0 0.0.0.0 172.28.221.107
```



```
!  
  
ip http server  
  
ip http authentication local  
  
ip http path flash:  
  
!  
  
!  
  
tftp-server flash:ATA030100SCCP040211A.zup  
  
tftp-server flash:CP7902040000SCCP040701A.sbin  
  
tftp-server flash:CP7905040000SCCP040701A.sbin  
  
tftp-server flash:P00403020214.bin  
  
tftp-server flash:CP7912040000SCCP040701A.sbin  
  
tftp-server flash:S00103020002.bin  
  
tftp-server flash:P00503010100.bin  
  
tftp-server flash:cmterm_7936.3-3-5-0.bin  
  
tftp-server flash:P00303020214.bin  
  
tftp-server flash:P00305000301.sbn  
  
tftp-server flash:cmterm_7920.4.0-01-08.bin  
  
!  
  
control-plane  
  
!  
  
!  
  
dial-peer voice 10 pots  
  
destination-pattern 9T
```



```
!  
  
dial-peer voice 11 pots  
    destination-pattern 9T  
  
!  
  
dial-peer voice 12 pots  
    destination-pattern 9T  
  
!  
  
dial-peer voice 13 pots  
    destination-pattern 9T  
  
!  
  
dial-peer voice 1 voip  
    destination-pattern 70..  
    session target ipv4:172.28.221.50  
    dtmf-relay h245-alphanumeric  
    codec g711ulaw  
    no vad  
  
!  
  
dial-peer voice 2 voip  
    destination-pattern 61..  
    session target ipv4:172.28.221.226  
    dtmf-relay h245-alphanumeric  
    codec g711ulaw  
    no vad
```



```
!  
  
dial-peer voice 3 voip  
  
destination-pattern 6300  
  
session protocol sipv2  
  
session target ipv4:192.168.1.2  
  
dtmf-relay sip-notify  
  
codec g711ulaw  
  
no vad  
  
!  
  
dial-peer voice 4 voip  
  
shutdown  
  
destination-pattern ....  
  
session target ras  
  
dtmf-relay h245-alphanumeric  
  
codec g711ulaw  
  
no vad  
  
!  
  
gateway  
  
timer receive-rtp 1200  
  
!  
  
!  
  
telephony-service  
  
load 7910 P00403020214
```



```
load 7935 P00503010100

load 7960-7940 P00303020214

load 7914 S00103020002

load ATA ATA030100SCCP040211A.zup

load 7905 CP7905040000SCCP040701A.sbin

load 7902 CP7902040000SCCP040701A.sbin

load 7920 cmterm_7920.4.0-01-08.bin

load 7912 CP7912040000SCCP040701A.sbin

max-ephones 96

max-dn 192

ip source-address 172.28.221.108 port 2000

system message XYZ Corp

create cnf-files version-stamp Jan 01 2002 00:00:00

voicemail 6300

max-conferences 8

call-forward pattern .T

moh music-on-hold.au

web admin system name cisco password cisco

dn-webedit

time-webedit

transfer-system full-consult

transfer-pattern ....

secondary-dialtone 9
```





```
!  
!  
ephone-dn 1 dual-line  
  
  number 6301  
  
  label 6301  
  
  description Site 1 Phone1  
  
  name Site 1 Phone1  
  
  call-forward busy 7015  
  
  call-forward noan 6300 timeout 10  
  
  huntstop channel  
  
!  
!  
ephone-dn 2 dual-line  
  
  number 6302  
  
  label 6302  
  
  description Site 1 Phone2  
  
  name Site 1 Phone2  
  
  call-forward busy 6301  
  
  call-forward noan 6301 timeout 10  
  
  huntstop channel  
  
!  
!  
ephone-dn 3 dual-line
```



```
number 6303

name Site 1 Phone3

!

!

ephone-dn 10

number 8000....

mwi on

!

!

ephone-dn 11

number 8001....

mwi off

!

!

ephone 1

username "user1" password 6301

mac-address 000B.BEF9.E87D

type 7960

keep-conference

button 1:1

!

!

ephone 2
```



```
username "user2" password 6302

mac-address 000D.2890.C92E

type 7960

button 1:2

!

!

ephone 3

username "user3" password 6303

mac-address 00D0.59D3.5144

button 1:3

!

!

line con 0

password cisco

stopbits 1

line aux 0

stopbits 1

line 66

no activation-character

no exec

transport preferred none

transport input all

transport output all
```



```
line vty 0 4

 password cisco

 login

!

scheduler allocate 20000 1000

!

end
```

Site-1#

NM-CUE Configuration

*Show run*

se-192-168-1-2#

se-192-168-1-2# sh run

Generating configuration:

```
clock timezone America/Los_Angeles
```

```
hostname se-192-168-1-2
```

```
ip domain-name unspecified
```

```
groupname Administrators create
```

```
groupname hunt1 create
```

```
groupname hunt2 create
```



```
username admin create
```

```
username user1 create
```

```
username user2 create
```

```
username user3 create
```

```
groupname hunt1 phonenumber "190"
```

```
groupname hunt2 phonenumber "111"
```

```
username user1 phonenumberE164 "7301"
```

```
username user2 phonenumberE164 "7302"
```

```
username user3 phonenumberE164 "7303"
```

```
username user1 phonenumber "6301"
```

```
username user2 phonenumber "6302"
```

```
username user3 phonenumber "6303"
```

```
groupname hunt1 owner admin
```

```
groupname hunt2 owner admin
```

```
groupname Administrators member admin
```

```
groupname Administrators member user1
```

```
groupname Administrators member user2
```

```
groupname hunt1 member user1
```

```
groupname hunt1 member user2
```



```
groupname hunt2 member user1
```

```
groupname hunt2 member user2
```

```
groupname Administrators privilege superuser
```

```
groupname Administrators privilege ManagePrompts
```

```
backup server url "ftp://127.0.0.1/ftp" credentials hidden "EWlTygcMhYmjazXhE/VN
```

```
XHCkplVV4KjescbDaLa4fl4WLSPFvv1rWUUnfGWTYHfmPSd8ZZNgd+Y9J3xlk2B35jwAAAAA="
```

```
ccn application autoattendant
```

```
description "autoattendant"
```

```
enabled
```

```
maxsessions 8
```

```
script "aa.aef"
```

```
parameter "MaxRetry" "3"
```

```
parameter "operExtn" "6333"
```

```
parameter "welcomePrompt" "AAWelcome.wav"
```

```
end application
```

```
ccn application ciscomwiapplication
```

```
description "ciscomwiapplication"
```

```
enabled
```

```
maxsessions 8
```

```
script "setmwi.aef"
```



```
parameter "strMWI_OFF_DN" "8001"  
  
parameter "strMWI_ON_DN" "8000"  
  
parameter "CallControlGroupID" "0"  
  
end application
```

```
ccn application customaa  
  
description "customaa"  
  
enabled  
  
maxsessions 8  
  
script "sl_main-officehours.aef"  
  
parameter "MainOperExt" "100"  
  
end application
```

```
ccn application promptmgmt  
  
description "promptmgmt"  
  
enabled  
  
maxsessions 1  
  
script "promptmgmt.aef"  
  
end application
```

```
ccn application voicemail  
  
description "voicemail"  
  
enabled
```



```
maxsessions 8
```

```
script "voicebrowser.aef"
```

```
parameter "logoutUri" "http://localhost/voicemail/vxmlscripts/mbxLogout.jsp"
```

```
parameter "uri" "http://localhost/voicemail/vxmlscripts/login.vxml"
```

```
end application
```

```
ccn engine
```

```
end engine
```

```
ccn subsystem jtapi
```

```
ccm-manager address
```

```
end subsystem
```

```
ccn subsystem sip
```

```
gateway address "192.168.1.1"
```

```
end subsystem
```

```
ccn trigger sip phonenumber 112
```

```
application "autoattendant"
```

```
enabled
```

```
locale "en_US"
```

```
maxsessions 8
```

```
end trigger
```





```
ccn trigger sip phonenumber 113
```

```
application "customaa"
```

```
enabled
```

```
locale "en_US"
```

```
maxsessions 8
```

```
end trigger
```

```
ccn trigger sip phonenumber 114
```

```
application "promptgmt"
```

```
enabled
```

```
locale "en_US"
```

```
maxsessions 1
```

```
end trigger
```

```
ccn trigger sip phonenumber 200
```

```
application "voicemail"
```

```
enabled
```

```
locale "en_US"
```

```
maxsessions 8
```

```
end trigger
```

```
ccn trigger sip phonenumber 6300
```



```
application "voicemail"
```

```
enabled
```

```
locale "en_US"
```

```
maxsessions 8
```

```
end trigger
```

```
ccn trigger sip phonenumber 6333
```

```
application "autoattendant"
```

```
enabled
```

```
locale "en_US"
```

```
maxsessions 8
```

```
end trigger
```

```
voicemail default expiration time 30
```

```
voicemail default language en_US
```

```
voicemail default mailboxsize 3000
```

```
voicemail recording time 900
```

```
voicemail default messagesize 60
```

```
voicemail operator telephone 100
```

```
voicemail capacity time 6000
```

```
voicemail mailbox owner "hunt1" size 3000
```

```
description "hunt1 mailbox"
```

```
zerooutnumber "100"
```



```
end mailbox

voicemail mailbox owner "hunt2" size 3000

description "hunt2 mailbox"

end mailbox

voicemail mailbox owner "user1" size 3000

zerooutnumber "100"

end mailbox

voicemail mailbox owner "user2" size 3000

end mailbox

voicemail mailbox owner "user3" size 3000

zerooutnumber "100"

end mailbox

end
```

### **Cisco Catalyst 3560 Configuration**

*Show run*

Cat3560#

Cat3560#sh run

Building configuration...



Current configuration : 6264 bytes

```
!  
version 12.1  
  
no service pad  
  
service timestamps debug uptime  
  
service timestamps log uptime  
  
no service password-encryption  
  
!  
  
hostname Cat3560  
  
!  
  
enable secret 5 $1$0jWf$9pDNvRAwcvJScOoqBLsA41  
  
enable password cisco  
  
!  
  
ip subnet-zero  
  
!  
  
!  
  
spanning-tree mode pvst  
  
no spanning-tree optimize bpdu transmission  
  
spanning-tree extend system-id  
  
!  
  
!  
  
interface FastEthernet0/1
```



```
description 3600-2

switchport trunk encapsulation dot1q

switchport trunk native vlan 99

switchport mode trunk

no ip address

duplex full

speed 100

no mdix auto

!

interface FastEthernet0/2

switchport access vlan 500

no ip address

no mdix auto

!

interface FastEthernet0/3

switchport access vlan 500

no ip address

no mdix auto

!

interface FastEthernet0/4

no ip address

no mdix auto

!
```



```
interface FastEthernet0/5
```

```
no ip address
```

```
no mdix auto
```

```
!
```

```
interface FastEthernet0/6
```

```
no ip address
```

```
no mdix auto
```

```
!
```

```
interface FastEthernet0/7
```

```
switchport access vlan 500
```

```
no ip address
```

```
mdix auto
```

```
!
```

```
interface FastEthernet0/8
```

```
no ip address
```

```
no mdix auto
```

```
!
```

```
interface FastEthernet0/9
```

```
no ip address
```

```
no mdix auto
```

```
!
```

```
interface FastEthernet0/10
```

```
no ip address
```



```
no mdix auto

!

interface FastEthernet0/11

    switchport access vlan 500

    no ip address

    no mdix auto

!

interface FastEthernet0/12

    no ip address

    no mdix auto

!

interface FastEthernet0/13

    switchport access vlan 140

    no ip address

    no mdix auto

    spanning-tree portfast

!

interface FastEthernet0/14

    switchport trunk encapsulation dot1q

    switchport trunk native vlan 902

    switchport mode trunk

    switchport voice vlan 901

    no ip address
```



```
no mdix auto

spanning-tree portfast

!

interface FastEthernet0/15

switchport trunk encapsulation dot1q

switchport trunk native vlan 902

switchport mode trunk

switchport voice vlan 901

no ip address

no mdix auto

spanning-tree portfast

!

interface FastEthernet0/16

no ip address

no mdix auto

!

interface FastEthernet0/17

no ip address

no mdix auto

!

interface FastEthernet0/18

switchport trunk encapsulation dot1q

switchport trunk native vlan 502
```





```
switchport mode trunk

switchport voice vlan 501

no ip address

no mdix auto

spanning-tree portfast

!

interface FastEthernet0/19

switchport trunk encapsulation dot1q

switchport trunk native vlan 502

switchport mode trunk

switchport voice vlan 501

no ip address

no mdix auto

spanning-tree portfast

!

interface FastEthernet0/20

switchport trunk encapsulation dot1q

switchport trunk native vlan 502

switchport mode trunk

switchport voice vlan 501

no ip address

no mdix auto

spanning-tree portfast
```



```
!  
  
interface FastEthernet0/21  
  
    switchport trunk encapsulation dot1q  
  
    switchport trunk native vlan 502  
  
    switchport mode trunk  
  
    switchport voice vlan 501  
  
    no ip address  
  
    no mdix auto  
  
    spanning-tree portfast
```

```
!  
  
interface FastEthernet0/22  
  
    switchport trunk encapsulation dot1q  
  
    switchport trunk native vlan 502  
  
    switchport mode trunk  
  
    switchport voice vlan 501  
  
    no ip address  
  
    no mdix auto  
  
    spanning-tree portfast
```

```
!  
  
interface FastEthernet0/23  
  
    no ip address  
  
    no mdix auto  
  
!
```



```
interface FastEthernet0/24

  switchport access vlan 888

  no ip address

  no mdix auto

!

interface FastEthernet0/25

  switchport trunk encapsulation dot1q

  switchport trunk native vlan 890

  switchport voice vlan 889

  no ip address

  no mdix auto

  spanning-tree portfast

!

interface FastEthernet0/26

  switchport trunk encapsulation dot1q

  switchport trunk native vlan 890

  switchport voice vlan 889

  no ip address

  no mdix auto

  spanning-tree portfast

!

interface FastEthernet0/27

  no ip address
```



```
no mdix auto

!

interface FastEthernet0/28

no ip address

no mdix auto

!

interface FastEthernet0/29

no ip address

no mdix auto

!

interface FastEthernet0/30

no ip address

no mdix auto

!

interface FastEthernet0/31

switchport trunk encapsulation dot1q

switchport trunk native vlan 890

switchport voice vlan 889

no ip address

no mdix auto

spanning-tree portfast

!

interface FastEthernet0/32
```



```
switchport trunk encapsulation dot1q

switchport trunk native vlan 890

switchport voice vlan 889

no ip address

no mdix auto

spanning-tree portfast

!

interface FastEthernet0/33

switchport access vlan 160

no ip address

no mdix auto

!

interface FastEthernet0/34

no ip address

no mdix auto

!

interface FastEthernet0/35

no ip address

no mdix auto

!

interface FastEthernet0/36

no ip address

no mdix auto
```



```
!  
  
interface FastEthernet0/37  
  
    switchport access vlan 150  
  
    no ip address  
  
    no mdix auto  
  
!  
  
interface FastEthernet0/38  
  
    switchport trunk encapsulation dot1q  
  
    switchport trunk native vlan 152  
  
    switchport mode trunk  
  
    switchport voice vlan 151  
  
    no ip address  
  
    no mdix auto  
  
    spanning-tree portfast  
  
!  
  
interface FastEthernet0/39  
  
    switchport trunk encapsulation dot1q  
  
    switchport trunk native vlan 152  
  
    switchport mode trunk  
  
    switchport voice vlan 151  
  
    no ip address  
  
    no mdix auto  
  
    spanning-tree portfast
```



```
!  
  
interface FastEthernet0/40  
  
  no ip address  
  
  no mdix auto  
  
!  
  
interface FastEthernet0/41  
  
  switchport access vlan 500  
  
  no ip address  
  
  no mdix auto  
  
!  
  
interface FastEthernet0/42  
  
  switchport trunk encapsulation dot1q  
  
  switchport trunk native vlan 502  
  
  switchport mode trunk  
  
  switchport voice vlan 501  
  
  no ip address  
  
  no mdix auto  
  
  spanning-tree portfast  
  
!  
  
interface FastEthernet0/43  
  
  switchport trunk encapsulation dot1q  
  
  switchport trunk native vlan 502  
  
  switchport mode trunk
```



```
switchport voice vlan 501

no ip address

no mdix auto

spanning-tree portfast

!

interface FastEthernet0/44

description This is a test port to check DHCP issue with phone

switchport access vlan 501

no ip address

no mdix auto

!

interface FastEthernet0/45

no ip address

no mdix auto

!

interface FastEthernet0/46

no ip address

no mdix auto

!

interface FastEthernet0/47

switchport access vlan 501

no ip address

no mdix auto
```





```
!  
  
interface FastEthernet0/48  
  
  no ip address  
  
  no mdix auto  
  
!  
  
interface GigabitEthernet0/1  
  
  no ip address  
  
!  
  
interface GigabitEthernet0/2  
  
  no ip address  
  
!  
  
interface GigabitEthernet0/3  
  
  no ip address  
  
!  
  
interface GigabitEthernet0/4  
  
  no ip address  
  
!  
  
interface Vlan1  
  
  no ip address  
  
  shutdown  
  
!  
  
interface Vlan500  
  
  ip address 172.28.221.105 255.255.255.240
```



```
ip helper-address 172.28.221.22

no ip route-cache

!

ip default-gateway 172.28.221.107

ip classless

ip http server

!

!

line con 0

  password cisco

  login

line vty 0 4

  password cisco

  login

line vty 5 15

  password cisco

  login

!

end

Cat3560#
```



## CCME Site 2 Configuration

C2851 Configuration

*Show run*

Site-2#

Site-2#sh run

Building configuration...

Current configuration : 5251 bytes

```
!  
version 12.3  
  
service timestamps debug datetime msec  
service timestamps log datetime msec  
  
no service password-encryption  
  
!  
  
hostname Site-2  
  
!  
  
boot-start-marker  
  
boot system flash:c2800nm-ipvoice-mz.123-11.T3.bin  
  
boot-end-marker  
  
!  
  
enable password cisco  
  
!  
  
clock timezone PST -8  
  
clock summer-time PST recurring
```



```
no aaa new-model

ip subnet-zero

!

!

ip cef

ip dhcp excluded-address 10.1.15.1

!

ip dhcp pool phone

    network 10.1.15.0 255.255.255.128

    option 150 ip 172.28.221.226

    default-router 10.1.15.1

!

!

no ip domain lookup

no ftp-server write-enable

!

voice-card 0

    no dspfarm

    dsp services dspfarm

!

!

!

voice service voip
```



```
allow-connections h323 to h323

supplementary-service h450.12

!

!

interface GigabitEthernet0/0

ip address 172.28.221.226 255.255.255.240

duplex auto

speed auto

h323-gateway voip interface

h323-gateway voip id site2 ipaddr 172.28.221.242 1719

h323-gateway voip h323-id cme-site2

h323-gateway voip tech-prefix 1#

h323-gateway voip bind srcaddr 172.28.221.226

!

interface GigabitEthernet0/1

no ip address

shutdown

duplex auto

speed auto

!

interface FastEthernet0/1/0

switchport access vlan 10

no ip address
```



```
!  
  
interface FastEthernet0/1/1  
  
    switchport access vlan 10  
  
    no ip address  
  
!  
  
interface FastEthernet0/1/2  
  
    switchport access vlan 10  
  
    no ip address  
  
!  
  
interface FastEthernet0/1/3  
  
    switchport access vlan 10  
  
    no ip address  
  
!  
  
interface FastEthernet0/1/4  
  
    switchport access vlan 10  
  
    no ip address  
  
!  
  
interface FastEthernet0/1/5  
  
    switchport access vlan 10  
  
    no ip address  
  
!  
  
interface FastEthernet0/1/6  
  
    switchport access vlan 10
```



```
no ip address

!

interface FastEthernet0/1/7

    switchport access vlan 10

    no ip address

!

interface FastEthernet0/1/8

    switchport access vlan 10

    no ip address

!

interface Service-Engine1/0

    ip unnumbered Vlan10

    service-module ip address 192.168.1.2 255.255.255.0

    service-module ip default-gateway 192.168.1.1

!

interface Vlan1

    no ip address

!

interface Vlan10

    ip address 192.168.1.1 255.255.255.0

!

ip classless

ip route 0.0.0.0 0.0.0.0 172.28.221.225
```



```
ip route 192.168.1.2 255.255.255.255 Service-Engine1/0
```

```
!
```

```
ip http server
```

```
ip http authentication local
```

```
ip http path flash:
```

```
!
```

```
!
```

```
!
```

```
tftp-server flash:ATA030100SCCP040211A.zup
```

```
tftp-server flash:CP7902040000SCCP040701A.sbin
```

```
tftp-server flash:CP7905040000SCCP040701A.sbin
```

```
tftp-server flash:P00403020214.bin
```

```
tftp-server flash:CP7912040000SCCP040701A.sbin
```

```
tftp-server flash:S00103020002.bin
```

```
tftp-server flash:P00503010100.bin
```

```
tftp-server flash:cmterm_7936.3-3-5-0.bin
```

```
tftp-server flash:P00303020214.bin
```

```
tftp-server flash:P00305000301.sbn
```

```
tftp-server flash:cmterm_7920.4.0-01-08.bin
```

```
!
```

```
control-plane
```

```
!
```

```
!
```





```
!  
  
sccp local GigabitEthernet0/0  
  
sccp ccm 172.28.221.226 identifier 1  
  
sccp  
  
!  
  
sccp ccm group 1  
  
    associate ccm 1 priority 1  
  
    associate profile 1 register mtp0012d974a208  
  
    keepalive retries 5  
  
!  
  
dspfarm profile 1 transcode  
  
    codec g711ulaw  
  
    codec g711alaw  
  
    codec g729ar8  
  
    codec g729abr8  
  
    codec gsmfr  
  
    maximum sessions 8  
  
    associate application SCCP  
  
!  
  
!  
  
dial-peer voice 10 pots  
  
    destination-pattern 9T  
  
!
```



```
dial-peer voice 11 pots
```

```
destination-pattern 9T
```

```
!
```

```
dial-peer voice 12 pots
```

```
destination-pattern 9T
```

```
!
```

```
dial-peer voice 13 pots
```

```
destination-pattern 9T
```

```
!
```

```
dial-peer voice 1 voip
```

```
destination-pattern 7...
```

```
session target ipv4:172.28.221.56
```

```
dtmf-relay h245-alphanumeric
```

```
codec g711ulaw
```

```
no vad
```

```
!
```

```
dial-peer voice 2 voip
```

```
destination-pattern 63..
```

```
session target ipv4:172.28.221.108
```

```
dtmf-relay h245-alphanumeric
```

```
codec g711ulaw
```

```
no vad
```

```
!
```



```
dial-peer voice 4 voip

shutdown

destination-pattern ....

session target ras

dtmf-relay h245-alphanumeric

codec g711ulaw

no vad

!

gateway

timer receive-rtp 1200

!

!

telephony-service

load 7910 P00403020214

load 7935 P00503010100

load 7960-7940 P00303020214

load 7914 S00103020002

load ATA ATA030100SCCP040211A.zup

load 7905 CP7905040000SCCP040701A.sbin

load 7902 CP7902040000SCCP040701A.sbin

load 7920 cmterm_7920.4.0-01-08.bin

load 7912 CP7912040000SCCP040701A.sbin

max-ephones 96
```



```
max-dn 192

ip source-address 172.28.221.226 port 2000

system message ABC Corp

sdspfarm units 1

sdspfarm transcode sessions 8

sdspfarm tag 1 mtp0012d974a208

create cnf-files version-stamp Jan 01 2002 00:00:00

dialplan-pattern 1 6... extension-length 4

voicemail 9000

max-conferences 8

call-forward pattern .T

moh music-on-hold.au

web admin system name cmeadmin password cmeadmin

dn-webedit

time-webedit

transfer-system full-consult

transfer-pattern ....

secondary-dialtone 9

!

!

ephone-dn 1 dual-line

number 6101

label 6101
```



```
description Site 2 Phone 1

name Site 2 Phone 1

call-forward busy 7015

call-forward noan 7015 timeout 10

huntstop channel

!

!

ephone-dn 2 dual-line

number 6102

label 6102

description Site 2 Phone 2

name Site 2 Phone 2

call-forward busy 6101

call-forward noan 6101 timeout 10

huntstop channel

!

!

ephone 1

username "user1" password 6101

mac-address 000B.BEF2.D824

type 7960

keep-conference

button 1:1
```



```
!  
!  
!  
ephone 2  
  
  username "user2" password 6102  
  
  mac-address 000A.8A48.F9C9  
  
  type 7960  
  
  button 1:2  
  
!  
!  
line con 0  
  
line aux 0  
  
line 66  
  
  no activation-character  
  
  no exec  
  
  transport preferred none  
  
  transport input all  
  
  transport output all  
  
line vty 0 4  
  
  password cisco  
  
  login  
  
!  
  
scheduler allocate 20000 1000
```



!

end

Site-2#

### **NM-CUE Configuration**

*Show run*

se-192-168-1-2# sh run

Generating configuration:

clock timezone America/Los\_Angeles

hostname se-192-168-1-2

ip domain-name localdomain

software download server url "ftp://127.0.0.1/ftp" credentials hidden "6u/dKTN/h

sEuSAEfw40XlF2eFHnZfyUTSd8ZZNgd+Y9J3x1k2B35j0nfGWTYHfmPSd8ZZNgd+Y9J3x1k2B35jwAAA

AA="

groupname Administrators create

groupname Broadcasters create



```
username admin create
```

```
username user1 create
```

```
username user2 create
```

```
username user1 phonenumber "6101"
```

```
username user2 phonenumber "6102"
```

```
groupname Administrators member admin
```

```
groupname Administrators privilege superuser
```

```
groupname Administrators privilege ManagePrompts
```

```
groupname Administrators privilege ManagePublicList
```

```
groupname Administrators privilege ViewPrivateList
```

```
groupname Broadcasters privilege broadcast
```

```
backup server url "ftp://127.0.0.1/ftp" credentials hidden "EWlTygcMhYmjazXhE/VN
```

```
XHCkplVV4KjescbDaLa4fl4WLSPFvvlrWUnfGWTYHfmPSd8ZZNgd+Y9J3xlk2B35jwAAAAA="
```

```
calendar biz-schedule systemschedule
```

```
open day 1 from 00:00 to 24:00
```

```
open day 2 from 00:00 to 24:00
```

```
open day 3 from 00:00 to 24:00
```

```
open day 4 from 00:00 to 24:00
```

```
open day 5 from 00:00 to 24:00
```

```
open day 6 from 00:00 to 24:00
```





```
open day 7 from 00:00 to 24:00
```

```
end schedule
```

```
ccn application autoattendant
```

```
description "autoattendant"
```

```
enabled
```

```
maxsessions 8
```

```
script "aa.aef"
```

```
parameter "busOpenPrompt" "AABusinessOpen.wav"
```

```
parameter "holidayPrompt" "AAHolidayPrompt.wav"
```

```
parameter "busClosedPrompt" "AABusinessClosed.wav"
```

```
parameter "allowExternalTransfers" "false"
```

```
parameter "MaxRetry" "3"
```

```
parameter "operExtn" "0"
```

```
parameter "welcomePrompt" "AAWelcome.wav"
```

```
parameter "businessSchedule" "systemschedule"
```

```
end application
```

```
ccn application ciscomwiapplication
```

```
description "ciscomwiapplication"
```

```
enabled
```

```
maxsessions 8
```

```
script "setmwi.aef"
```



```
parameter "strMWI_OFF_DN" "8001"
```

```
parameter "strMWI_ON_DN" "8000"
```

```
parameter "CallControlGroupID" "0"
```

```
end application
```

```
ccn application promptmgmt
```

```
description "promptmgmt"
```

```
enabled
```

```
maxsessions 1
```

```
script "promptmgmt.aef"
```

```
end application
```

```
ccn application voicemail
```

```
description "voicemail"
```

```
enabled
```

```
maxsessions 8
```

```
script "voicebrowser.aef"
```

```
parameter "logoutUri" "http://localhost/voicemail/vxmlscripts/mbxLogout.jsp"
```

```
parameter "uri" "http://localhost/voicemail/vxmlscripts/login.vxml"
```

```
end application
```

```
ccn engine
```

```
end engine
```



```
ccn subsystem jtapi
```

```
ccm-manager address 0.0.0.0
```

```
end subsystem
```

```
ccn subsystem sip
```

```
gateway address "192.168.1.1"
```

```
end subsystem
```

```
ccn trigger sip phonenumber 6100
```

```
application "voicemail"
```

```
enabled
```

```
maxsessions 8
```

```
end trigger
```

```
voicemail default mailboxsize 3000
```

```
voicemail broadcast recording time 300
```

```
voicemail mailbox owner "user1" size 3000
```

```
zerooutnumber "100"
```

```
end mailbox
```

```
voicemail mailbox owner "user2" size 3000
```

```
zerooutnumber "100"
```



end mailbox

end

## Acronyms

<b>Acronym</b>	<b>Definitions</b>
CCME	Cisco Unified CallManager Express
CUE	Cisco Unity Express
CFB	Call Forwarding on Busy
CFNR	Call Forwarding No Reply
CFU	Call Forwarding Unconditional
CLIP	Calling Line (Number) Identification Presentation
CNIP	Calling Name Identification Presentation
COLP	Connected Line (Number) Identification Presentation
CONP	Connected Name Identification Presentation
CT	Call Transfer
MWI	Message Waiting Indicator



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