



Avaya S8700 Communication Manager 2.2 using H323 to Cisco CallManager Express Release 3.2

January 16, 2009 - Revision 5

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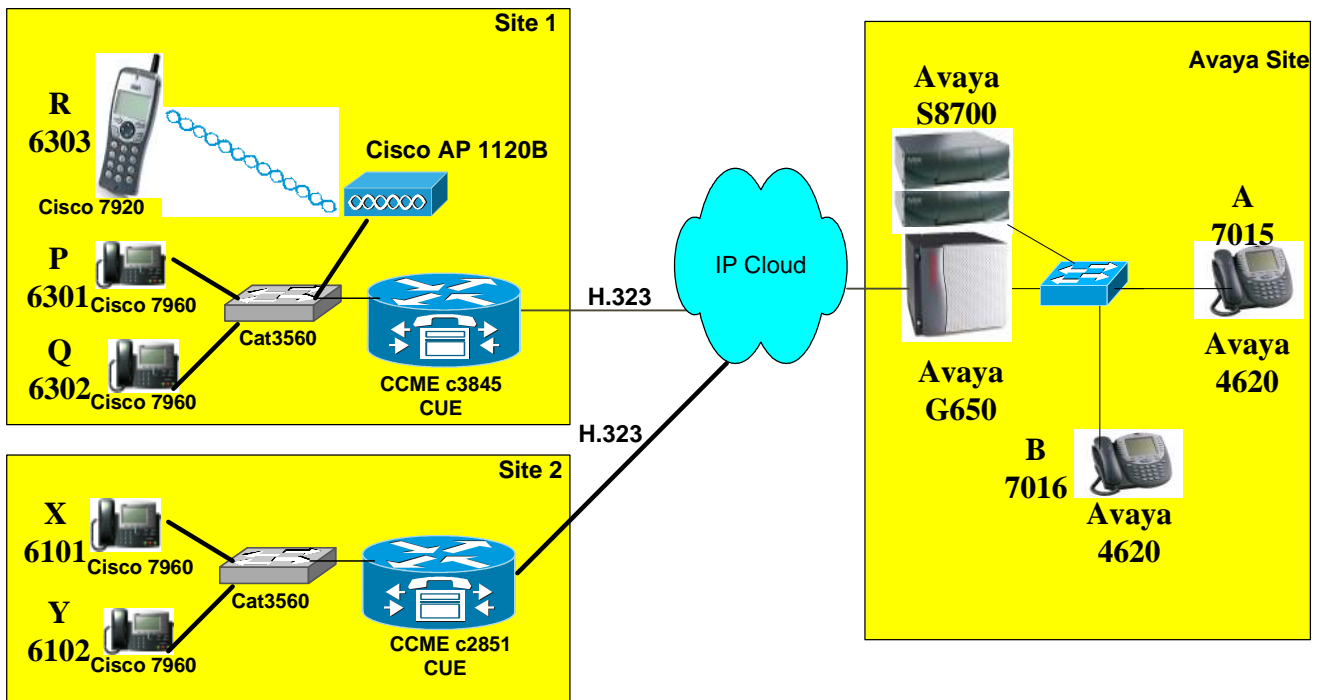
Introduction

- This is an application note for interoperability connectivity of Avaya S8700 Communication Manager 2.2 PBX with Cisco 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 CallManager Express that has Cisco Unity Express built in connected to an Avaya PBX via H323 trunks.

Network Topology

Figure 1. Basic Call Setup

H.323 Call Setup End-to-End Configuration



Limitations

These are the known limitations, caveats, or integration issues.

- 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

The following hardware is required:

- Cisco CallManager Express Cisco 3845 with NM-CUE
- Cisco 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

The following software is required:

- Cisco 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

This section lists supported and unsupported features.

Features Supported

- 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



```

display route-pattern 301                               Page 1 of 3
                Pattern Number: 301 Pattern Name: CCME1
                SCCAN? n      Secure SIP? n

  Grp FRL NPA Pfx Hop Toll No.  Inserted   DCS/  IXC
  No   No   Mrk Lmt List Del  Digits   QSIG  Intw
1: 301  0
2:
3:
4:
5:
6:

                BCC VALUE  TSC CA-TSC   ITC BCIE Service/Feature BAND  No. Numbering  LAR
                0 1 2 3 4 W      Request Request  Subaddress  Dgts Format
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                               Page 2 of 3
                Pattern Number: 301

  Grp FRL NPA Pfx Hop Toll No.  Inserted   DCS/  IXC
  No   No   Mrk Lmt List Del  Digits   QSIG  Intw
7:
8:
9:
10:
11:
12:

                BCC VALUE  TSC CA-TSC   ITC BCIE Service/Feature BAND  No. Numbering  LAR
                0 1 2 3 4 W      Request Request  Subaddress  Dgts Format
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                               Page 3 of 3
                Pattern Number: 301

  Grp FRL NPA Pfx Hop Toll No.  Inserted   DCS/  IXC
  No   No   Mrk Lmt List Del  Digits   QSIG  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 Request  Subaddress  Dgts Format
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

```

o **Route Pattern 302**

```

display route-pattern 302                               Page 1 of 3
                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  Intw   QSIG
1: 302  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 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                               Page 2 of 3
                Pattern Number: 302
  Grp FRL NPA Pfx Hop Toll No.  Inserted DCS/  IXC
  No   Mrk Lmt List Del  Digits  Intw   QSIG
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 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  Intw   QSIG
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

o **Signaling Group 301**

display signaling-group 301 Page 1 of 5

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 Page 2 of 5

ADMINISTERED NCA TSC ASSIGNMENT

Index	Service/Feature:		As-needed Inactivity Time-out (min):					
	TSC	Local	Enabled	Established	Dest. Digits	Appl.	Adj. Name	Mach. 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 Page 3 of 5
ADMINISTERED NCA TSC ASSIGNMENT

TSC Index	Local Ext.	Enabled	Established	Dest. Digits	Appl.	Adj. Name	Mach. 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 Index	Local Ext.	Enabled	Established	Dest. Digits	Appl.	Adj. Name	Mach. 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 Page 5 of 5
ADMINISTERED NCA TSC ASSIGNMENT

TSC Index	Local Ext.	Enabled	Established	Dest. Digits	Appl.	Adj. Name	Mach. 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					



o **Signaling Group 302**

```
display signaling-group 302                                     Page 1 of 5
                                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                                     Page 2 of 5
                                ADMINISTERED NCA TSC ASSIGNMENT
```

Service/Feature:		As-needed Inactivity Time-out (min):						
TSC Index	Local Ext.	Enabled	Established	Dest. Digits	Appl.	Adj. Name	Mach. 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 302                                     Page 3 of 5
                                ADMINISTERED NCA TSC ASSIGNMENT
```

TSC Index	Local Ext.	Enabled	Established	Dest. Digits	Appl.	Adj. Name	Mach. 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

```

```

display signaling-group 302                               Page 4 of 5
                ADMINISTERED NCA TSC ASSIGNMENT

```

TSC Index	Local Ext.	Enabled	Established	Dest. Digits	Appl.	Adj. Name	Mach. 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 302                               Page 5 of 5
                ADMINISTERED NCA TSC ASSIGNMENT

```

TSC Index	Local Ext.	Enabled	Established	Dest. Digits	Appl.	Adj. Name	Mach. 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					

o System Parameters

```

display system-parameters customer-options               Page 1 of 11
                OPTIONAL FEATURES

```

```

G3 Version: V12
Location: 1
Platform: 8
RFA System ID (SID): 21096
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.)

display system-parameters customer-options Page 2 of 11
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.)

display system-parameters customer-options Page 3 of 11
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.)

display system-parameters customer-options Page 4 of 11
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
External Device Alarm Admin? y Local Spare Processor? n
Five Port Networks Max Per MCC? n Malicious Call Trace? y
Flexible Billing? n Media Encryption Over IP? y
Forced Entry of Account Codes? y Mode Code for Centralized Voice Mail? y
Global Call Classification? y
Hospitality (Basic)? y Multifrequency Signaling? y
Hospitality (G3V3 Enhancements)? y Multimedia Appl. Server Interface (MASI)? n
IP Trunks? y Multimedia Call Handling (Basic)? y
Multimedia Call Handling (Enhanced)? y
IP Attendant Consoles? y

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

display system-parameters customer-options Page 5 of 11
OPTIONAL FEATURES



```

Multinational Locations? n
Multiple Level Precedence & Preemption? n
    Multiple Locations? y
Personal Station Access (PSA)? y
    Posted Messages? n
    PNC Duplication? n
    Port Network Support? y
Processor and System MSP? n
    Private Networking? y
    Processor Ethernet? y
    Remote Office? y
Restrict Call Forward Off Net? y
    Secondary Data Module? y
Station and Trunk MSP? n
Station as Virtual Extension? y
System Management Data Transfer? y
    Tenant Partitioning? y
Terminal Trans. Init. (TTI)? y
    Time of Day Routing? y
    Uniform Dialing Plan? y
Usage Allocation Enhancements? y
    TN2501 VAL Maximum Capacity? y
    wideband Switching? y
    wireless? n

```

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

```

display system-parameters customer-options                               Page 6 of 11
CALL CENTER OPTIONAL FEATURES

```

Call Center Release: 12.0

```

ACD? y          PASTE (Display PBX Data on Phone)? y
BCMS (Basic)? y          Reason Codes? y
BCMS/VuStats Service Level? y          Service Level Maximizer? n
BSR Local Treatment for IP & ISDN? y          Service Observing (Basic)? y
    Business Advocate? y          Service Observing (Remote/By FAC)? y
    Call Work Codes? y          Service Observing (VDNS)? 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
Lookahead Interflow (LAI)? y          Vectoring (G3V4 Advanced Routing)? y
Multiple Call Handling (On Request)? n          Vectoring (CINFO)? y
Multiple Call Handling (Forced)? n          Vectoring (Best Service Routing)? y
                                          Vectoring (Holidays)? y
                                          Vectoring (Variables)? y

```

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

```

display system-parameters customer-options                               Page 7 of 11
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.)

```

display system-parameters customer-options                               Page 8 of 11
QSIG OPTIONAL FEATURES

```

```

Basic Call Setup? y
Basic Supplementary Services? y
Centralized Attendant? y
Interworking with DCS? y

```




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

o Trunk Group 301

```

display trunk-group 301                                     Page 1 of 23
                                     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                                     Page 2 of 23
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
Hold/Unhold Notifications? y
Modify Tandem Calling Number? n

Network Call Redirection: none
Send UUI IE? y
Send UCID? y
Send Codeset 6/7 LAI IE? y

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

```

```

display trunk-group 301                                     Page 3 of 23
INCOMING CALL HANDLING TREATMENT
Service/   Called   Called   Del   Insert   Per Call   Night
Feature    Len    Number

```

```

display trunk-group 301                                     Page 4 of 23
INCOMING CALL HANDLING TREATMENT
Service/   Called   Called   Del   Insert   Per Call   Night
Feature    Len    Number

```



display trunk-group 301 Page 5 of 23

Service/ Feature	Called Len	INCOMING CALL Called Number	CALL HANDLING Del	TREATMENT Insert	Per Call CPN/BN	Night Serv
---------------------	---------------	-----------------------------------	----------------------	---------------------	--------------------	---------------

display trunk-group 301 Page 6 of 23

WIDEBAND SUPPORT OPTIONS

H0? n
H11? n
H12? n
NXDS0? n

display trunk-group 301 Page 7 of 23

TRUNK GROUP
Administered Members (min/max): 1/6
Total Administered Members: 6

GROUP MEMBER ASSIGNMENTS

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:				

display trunk-group 301 Page 8 of 23

TRUNK GROUP
Administered Members (min/max): 1/6
Total Administered Members: 6

GROUP MEMBER ASSIGNMENTS

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



o 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

```

display trunk-group 302 Page 2 of 23

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

display trunk-group 302 Page 5 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 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
Total Administered Members: 6

GROUP MEMBER ASSIGNMENTS

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:				

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TRUNK GROUP

Administered Members (min/max): 1/6
Total Administered Members: 6

GROUP MEMBER ASSIGNMENTS

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

o **Uniform-Dial Plan**

display uniform-dialplan 61 Page 1 of 2

UNIFORM DIAL PLAN TABLE

Percent Full: 0

Matching Pattern	Len	Del	Insert Digits	Net	Conv	Node Num	Matching Pattern	Len	Del	Insert Digits	Net	Conv	Node 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							



1 cisco service engine(s)
DRAM configuration is 64 bits wide with parity enabled.
479K bytes of NVRAM.
62720K bytes of ATA System CompactFlash (Read/Write)

Configuration register is 0x2102

Site-1#
Site-1#sh run
Building configuration...

```
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#
```

Configuring the NM-CUE

```
se-192-168-1-2# sh ver
CPU Model:      Pentium III (Coppermine)
CPU Speed (MHz): 498.68
CPU Cache (KByte): 256
Chassis Type:   UNKNOWN
Chassis Serial: FHK0847F0W7
Module Type:    NM
Module Serial:  FOC08230LM7
CF info:        IC25N020ATMR04-0
se-192-168-1-2#
```

```
se-192-168-1-2#
se-192-168-1-2# sh software versions
Installed Packages:
- Core 1.1.2
- Auto Attendant 1.1.2
- Voice Mail 1.1.2
- Boot Loader 1.0.17
```

```
Installed Languages:
- US English 1.1.2
```

- o **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 "EWITygcMhYmjazXhE/VN
XHCKplVV4KjescbDaLa4fl4WLSPFvv1rWUnfGWTYHfmPSd8ZZNgd+Y9J3xIk2B35jwAAAAA="

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 "s1_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 "promptmgmt"
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 Series**
- **Show version**

```
Cat3560#
Cat3560#sh ver
Cisco Internetwork Operating System Software
```



IOS (tm) C3560 Software (C3560-I9-M), Version 12.1(19)EA1c, RELEASE SOFTWARE (fc2)

Copyright (c) 1986-2004 by cisco Systems, Inc.
Compiled Tue 03-Feb-04 07:47 by yenanh
Image text-base: 0x00003000, data-base: 0x007C8968

ROM: Bootstrap program is C3560 boot loader
BOOTLDR: C3560 Boot Loader (C3560-HBOOT-M) Version 12.1(19r)EA1b, RELEASE SOFTWARE (fc2)

Cat3560 uptime is 2 days, 22 hours, 15 minutes
System returned to ROM by power-on
System image file is "flash:c3560-i9-mz.121-19.EA1c/c3560-i9-mz.121-19.EA1c.bin"

cisco WS-C3560-48PS (PowerPC405) processor (revision F0) with 118776K/12288K bytes of memory.
Processor board ID CAT0823Z0Y0
Last reset from power-on
2 Virtual Ethernet/IEEE 802.3 interface(s)
48 FastEthernet/IEEE 802.3 interface(s)
4 Gigabit Ethernet/IEEE 802.3 interface(s)
The password-recovery mechanism is enabled.

512K bytes of flash-simulated non-volatile configuration memory.
Base ethernet MAC Address : 00:11:5C:11:BD:00
Motherboard assembly number : 73-9298-01
Power supply part number : 341-0029-03
Motherboard serial number : CAT08220F1V
Power supply serial number : DTH08171L4R
Model revision number : F0
Motherboard revision number : E0
Model number : WS-C3560-48PS-S
System serial number : CAT0823Z0Y0
SFP Module assembly part number : 73-7757-02
SFP Module revision Number : A0
SFP Module serial number : CAT08220EFX
Top Assembly Part Number : 800-24787-01
Top Assembly Revision Number : H0
Version ID : N/A
Hardware Board Revision Number : 0x0B

Switch	Ports	Model	SW Version	SW Image
* 1	52	WS-C3560-48PS	12.1(19)EA1c	C3560-I9-M

Configuration register is 0xF

o **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#



Configuring the Cisco IOS Gateway 2851

```
Site-2#sh ver
Cisco IOS Software, 2800 Software (C2800NM-IPVOICE-M), Version 12.3(11)T3, RELEA
SE SOFTWARE (fc4)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2005 by Cisco Systems, Inc.
Compiled Wed 26-Jan-05 02:49 by pwade
```

```
ROM: System Bootstrap, Version 12.3(8r)T7, RELEASE SOFTWARE (fc1)
```

```
Site-2 uptime is 3 days, 3 hours, 43 minutes
System returned to ROM by power-on
System image file is "flash:c2800nm-ipvoice-mz.123-11.T3.bin"
```

```
Cisco 2851 (revision 53.51) with 249856K/12288K bytes of memory.
Processor board ID FHK0853F18Q
9 FastEthernet interfaces
2 Gigabit Ethernet interfaces
1 terminal line
1 cisco service engine(s)
DRAM configuration is 64 bits wide with parity enabled.
239K bytes of non-volatile configuration memory.
62720K bytes of ATA CompactFlash (Read/Write)
```

```
Configuration register is 0x2102
```

```
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
sdsfarm units 1
sdsfarm transcode sessions 8
sdsfarm 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#

```
se-192-168-1-2# sh ver  
CPU Model: Pentium III (Coppermine)  
CPU Speed (MHz): 498.674  
CPU Cache (KByte): 256  
Chassis Type: C2851  
Chassis Serial: FHK0853F18Q  
Module Type: NM  
Module Serial: JAD07080GA7
```

se-192-168-1-2#

se-192-168-1-2#

```
se-192-168-1-2# sh software versions
```

Installed Packages:

- Bootloader (Primary) 1.0.17
- Global 2.1.1
- Voice Mail 2.1.0
- Bootloader (Secondary) 2.0.0
- Core 2.1.0
- Installer 2.1.0
- Auto Attendant 2.1.0

Installed Languages:

- US English 2.1.0

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 localdomain
```



```
software download server url "ftp://127.0.0.1/ftp" credentials hidden "6u/dKTN/h
sEuSAEfw40XIF2eFHnZfyUTSd8ZZNgd+Y9J3xIk2B35j0nfGWTYHfmPSd8ZZNgd+Y9J3xIk2B35jwAAA
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 "EWITygcMhYmjazXhE/VN
XHCkplVV4KjescbDaLa4fl4WLSPFvv1rWUnfGWTYHfmPSd8ZZNgd+Y9J3xIk2B35jwAAAAA="
```

```
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

Acronym	Definitions
CCME	Cisco 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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