Avaya Definity G3si MV1.3 using E1 QSIG to Cisco Unified CallManager 4.0

November 15, 2007 Revision 2

Table of Contents
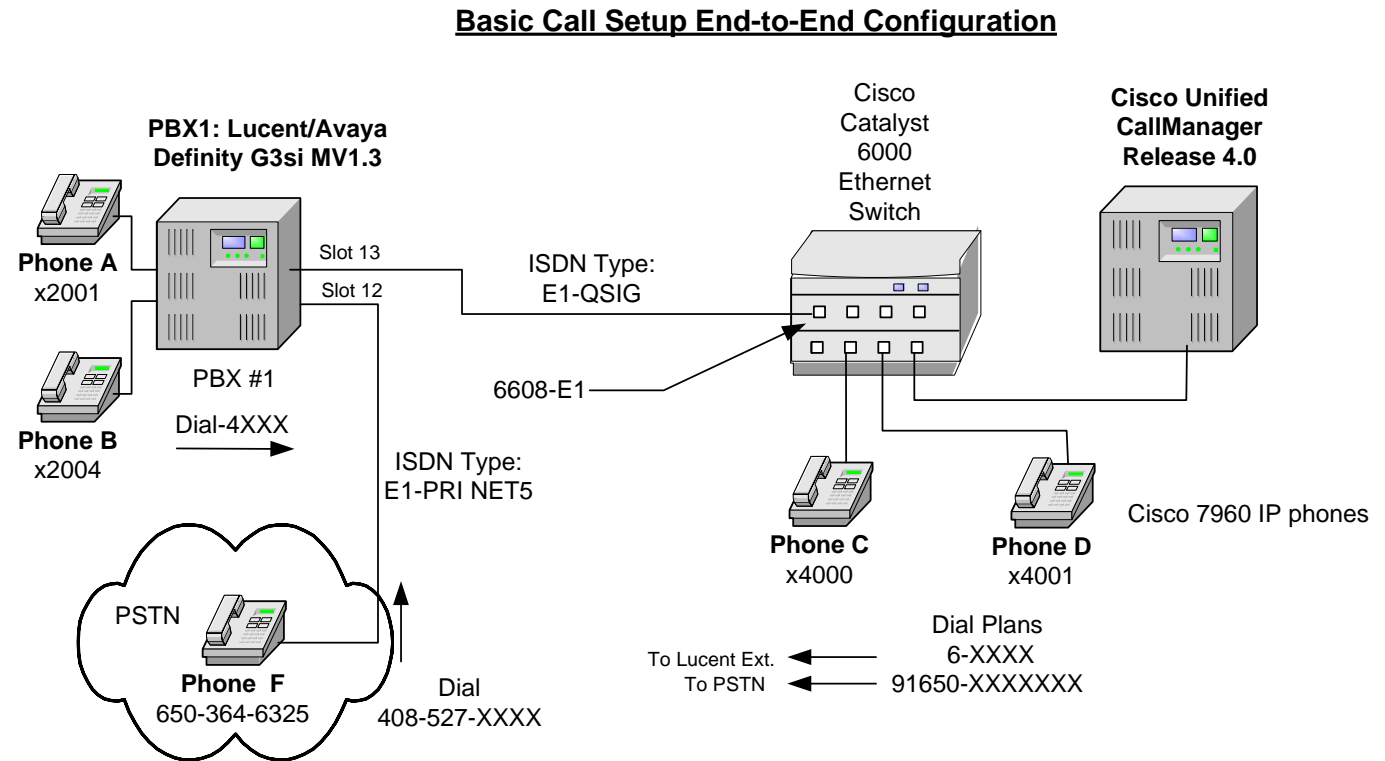
Introduction

- This is an application note for connectivity of Avaya Definity G3si MV1.3 PBX with Cisco Unified CallManager (CUCM) Rel 4.0 using Cisco 6608-E1 QSIG as MGCP gateway.

- The network topology diagram (Figure 1) shows the test setup for end-to-end interoperability with the Cisco Unified CallManager connected to the PBX via 6608-E1 QSIG link as MGCP gateway.

- Connectivity is achieved by using the PRI ISO QSIG E1 protocol type on the MGCP gateway and QSIG protocol (with option "b" for Supplementary Service Protocol) on the Avaya PBX.

- Basic calls worked fine in both directions with Calling/Connected Name and Calling/Connected Number features support.

Network Topology

Figure 1. Network Topology

Basic Call Setup End-to-End Configuration

Limitations

Calling Name and Number Features
- CUCM Release 4.0 (Parche release) does not support sending Alerting Name or Busy Name Identification information.

System Components

Hardware Requirements

- Cisco Hardware:

  - Cisco Catalyst 6000 switch with 6608-E1 gateway

  - Cisco Unified CallManager 4.0

- Avaya Definity G3si MV1.3 PBX Hardware:

  - TN464F, DS1 INTFC 24/32

Software Requirements

  - PBX Software MV1.3

  - Cisco Unified CallManager 4.0

  - Cisco WS-X6608-E1 gateway Version 7.6(2)

Features

Features Supported

- Calling Name Identification Presentation

- Calling Number Identification Presentation

- Connected Name Identification Presentation

- Connected Number Identification Presentation

Features Not Supported

- Sending Alerting Name Identification

- Sending Busy Name Identification

Configuration

Configuring the Avaya Definity G3si MV1.3 PBX

Configure in the following sequence:

1. Add the new circuit pack.
2. Add the new signaling group.
3. Add the new trunk group.
4. Add Uniform Dialing Plan.

Configuration Menus and Commands

DS1 Circuit Pack

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File   Edit   View   System   Action   Tools   Window   Help                          _ | 8 | X

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change ds1 a13           send (return)    help (f5)   cancel (esc)   enter (f3)   schedule (f9)   next (f7)   previous (f8)

  1

                                   DS1 CIRCUIT PACK

              Location: 01A13                            Name: U11 to U9
              Bit Rate: 2.048                      Line Coding: hdb3

         Signaling Mode: isdn-pri
                Connect: pbx                         Interface: peer-slave
        TN-C7 Long Timers? n                     Peer Protocol: Q-SIG
    Interworking Message: PROGress                        Side: b
    Interface Companding: alaw                            CRC? y
              Idle Code: 11111111           Channel Numbering: sequential
                                   DCP/Analog Bearer Capability: 3.1kHz




         Slip Detection? n                  Near-end CSU Type: other
```

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Signaling Group

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change signaling-group 13   ▼   send (return) | help (f5) | cancel (esc) | enter (f3) | schedule (f9) | next (f7) | previous (f8)

┌1┐

                              SIGNALING GROUP

    Group Number: 13                 Group Type: isdn-pri
                         Associated Signaling? y        Max number of NCA TSC: 5
                          Primary D-Channel: 01A1316     Max number of CA TSC: 23
                                                       Trunk Group for NCA TSC: 13
              Trunk Group for Channel Selection: 13    X-Mobility/Wireless Type: NONE
                     Supplementary Service Protocol: b


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Trunk Group

```
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[toolbar icons]                                    multivantage          ▼ [icons]

change trunk-group 13        ▼  send (return)   help (f5)   cancel (esc)   enter (f3)   schedule (f9)   next (f7)   previous (f8)

 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
                              TRUNK GROUP

  Group Number: 13                    Group Type: isdn          CDR Reports: y
   Group Name: QSIG TIE to V9              COR: 1         TN: 1        TAC: 613
    Direction: two-way          Outgoing Display? y      Carrier Medium: PRI/BRI
  Dial Access? y               Busy Threshold: 99        Night Service:
  Queue Length: 0
  Service Type: tie                  Auth Code? n            TestCall ITC: rest
                       Far End Test Line No:
  TestCall BCC: 4
  TRUNK PARAMETERS
              Codeset to Send Display: 0     Codeset to Send National IEs: 6
              Max Message Size to Send: 260  Charge Advice: during-on-request
          Supplementary Service Protocol: b  Digit Handling (in/out): enbloc/enbloc

                  Trunk Hunt: ascend                     QSIG Value-Added? y
                                                   Digital Loss Group: 13
  Calling Number - Delete:     Insert:             Numbering Format: lev0-pvt
                 Bit Rate: 1200        Synchronization: async    Duplex: full
  Disconnect Supervision - In? y  Out? y
  Answer Supervision Timeout: 0




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| change trunk-group 13 | ▾ | send (return) | help (f5) | cancel (esc) | enter (f3) | schedule (f9) | next (f7) | previous (f8) |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

```
TRUNK FEATURES
                    ACA Assignment? n        Measured: none        Wideband Support? n
                                         Internal Alert? n         Maintenance Tests? y
                                       Data Restriction? n        NCA-TSC Trunk Member: 1
                                            Send Name: y         Send Calling Number: y
                    Used for DCS? n            Hop Dgt? y
        Suppress # Outpulsing? n      Numbering Format: private
    Outgoing Channel ID Encoding: preferred      UUI IE Treatment: service-provider
             Charge Conversion: 1
                 Decimal Point: none                  Replace Restricted Numbers? y
                Currency Symbol:                      Replace Unavailable Numbers? n
                   Charge Type: units        Send Called/Busy/Connected Number: y


                   Send UUI IE? n
                    Send UCID? n
       Send Codeset 6/7 LAI IE? y                        Ds1 Echo Cancellation? n


    Path Replacement with Retention? n
       Path Replacement Method: better-route
                          SBS? n  Network (Japan) Needs Connect Before Disconnect? n
```

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change trunk-group 13    |▼| send (return) | help (f5) | cancel (esc) | enter (f3) | schedule (f9) | next (f7) | previous (f8)

 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

                              TRUNK GROUP
                                        Administered Members (min/max):   1/30
      GROUP MEMBER ASSIGNMENTS              Total Administered Members:   30


            Port      Code  Sfx Name         Night            Sig Grp
       1:  01A1301   TN464   F  [        ]   [        ]        [13]
       2:  01A1302   TN464   F  [        ]   [        ]        [13]
       3:  01A1303   TN464   F  [        ]   [        ]        [13]
       4:  01A1304   TN464   F  [        ]   [        ]        [13]
       5:  01A1305   TN464   F  [        ]   [        ]        [13]
       6:  01A1306   TN464   F  [        ]   [        ]        [13]
       7:  01A1307   TN464   F  [        ]   [        ]        [13]
       8:  01A1308   TN464   F  [        ]   [        ]        [13]
       9:  01A1309   TN464   F  [        ]   [        ]        [13]
      10:  01A1310   TN464   F  [        ]   [        ]        [13]
      11:  01A1311   TN464   F  [        ]   [        ]        [13]
      12:  01A1312   TN464   F  [        ]   [        ]        [13]
      13:  01A1313   TN464   F  [        ]   [        ]        [13]
      14:  01A1314   TN464   F  [        ]   [        ]        [13]
      15:  01A1315   TN464   F  [        ]   [        ]        [13]




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change trunk-group 13 ▼ send (return) | help (f5) | cancel (esc) | enter (f3) | schedule (f9) | next (f7) | previous (f8)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

TRUNK GROUP

Administered Members (min/max): 1/30

GROUP MEMBER ASSIGNMENTS   Total Administered Members: 30

	Port	Code	Sfx	Name	Night	Sig Grp
16:	01A1317	TN464	F			13
17:	01A1318	TN464	F			13
18:	01A1319	TN464	F			13
19:	01A1320	TN464	F			13
20:	01A1321	TN464	F			13
21:	01A1322	TN464	F			13
22:	01A1323	TN464	F			13
23:	01A1324	TN464	F			13
24:	01A1325	TN464	F			13
25:	01A1326	TN464	F			13
26:	01A1327	TN464	F			13
27:	01A1328	TN464	F			13
28:	01A1329	TN464	F			13
29:	01A1330	TN464	F			13
30:	01A1331	TN464	F			13

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Uniform Dialing Plan

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```
change dialplan analysis    |   send (return)   help (f5)   cancel (esc)   enter (f3)   schedule (f9)   next (f7)   previous (f8)
```

| 1 | 2 | 3 |

```
                         DIAL PLAN ANALYSIS TABLE
                                              Percent Full:    7


   Dialed    Total   Call      Dialed    Total   Call      Dialed    Total   Call
   String    Length  Type      String    Length  Type      String    Length  Type
     0         1     attd
    16         4     ext
    20         4     ext
     3         4     ext
     4         4     ext
     5         4     ext
     6         3     dac
     8         1     fac
     9         1     fac
     *         3     fac
```

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Ready                                                              NUM
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```
change uniform-dialplan 0 ▼   send (return)   help (f5)   cancel (esc)   enter (f3)   schedule (f9)   next (f7)   previous (f8)
```

1 | **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
2012	4	0	333	aar	n							n	
30	4	0	333	aar	n							n	
31	4	0	310	aar	n							n	
4	4	0	444	aar	n							n	
5	4	0	555	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	
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					n							n	

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`change aar analysis 1` | send (return) | help (f5) | cancel (esc) | enter (f3) | schedule (f9) | next (f7) | previous (f8)

| 1 | 2 |

AAR DIGIT ANALYSIS TABLE

Percent Full: 7

Dialed String	Total Min	Max	Route Pattern	Call Type	Node Num	ANI Reqd
111	7	7	111	aar		n
2	7	7	254	aar		n
214	4	10	12	aar		n
223	7	7	12	aar		n
3	7	7	254	aar		n
310	7	7	15	aar		n
333	7	7	14	aar		n
444	7	7	104	lev0	2	n
5	7	7	254	aar		n
555	7	7	105	lev0	3	n
6	7	7	254	aar		n
608	7	7	8	aar		n
609	7	7	9	aar		n
611	7	7	11	aar		n
612	7	7	13	aar		n

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change route-pattern 104    ▼| send (return) |  help (f5) | cancel (esc) | enter (f3) | schedule (f9) | next (f7) | previous (f8)

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              Pattern Number: 104 Pattern Name: [                    ]

      Grp  FRL NPA Pfx Hop Toll No.  Inserted                             DCS/ IXC
      No               Mrk Lmt List Del  Digits                          QSIG
                                     Dgts                                 Intw
   1: [13]  [0]  [  ] [ ] [6 ] [  ] [3 ] [                              ] [n] [user]
   2: [14]  [0]  [  ] [ ] [6 ] [  ] [3 ] [                              ] [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] [y] [as-needed] [both][ept] [          ] [ ] [lev0-pvt] [none]
   2: [y][y][y][y][y][n] [y] [as-needed] [both][ept] [          ] [ ] [lev0-pvt] [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]

Right-click in a field to see a list of valid entries or help text
Ready                                                              |    | NUM |    | //
```

PSTN DS1 Circuit Pack Configuration

File Edit View System Action Tools Window Help

change ds1 a12   send (return)   help (f5)   cancel (esc)   enter (f3)   schedule (f9)   next (f7)   previous (f8)

1

```
                              DS1 CIRCUIT PACK

              Location: 01A12                          Name: E1 PRI
              Bit Rate: 2.048                    Line Coding: hdb3

          Signaling Mode: isdn-pri
                 Connect: network
      TN-C7 Long Timers? n                   Country Protocol: etsi
    Interworking Message: PROGress           Protocol Version: a
    Interface Companding: alaw                           CRC? y
               Idle Code: 11111111
                                  DCP/Analog Bearer Capability: 3.1kHz




          Slip Detection? y             Near-end CSU Type: other
```

Right-click in a field to see a list of valid entries or help text

Ready   NUM

PSTN Signaling Group

```
File  Edit  View  System  Action  Tools  Window  Help                              _ | 8 | X

[toolbar icons]                                     [ ] multivantage        ▼ ⚡ ⚡

change signaling-group 12   ▼  send (return)    help (f5)   cancel (esc)   enter (f3)   schedule (f9)   next (f7)   previous (f8)

  1 | 2 | 3 | 4 | 5 |

                               SIGNALING GROUP

    Group Number: 12                    Group Type: isdn-pri
                            Associated Signaling? [u]        Max number of NCA TSC: [5]
                             Primary D-Channel: [01A1216]      Max number of CA TSC: [23]
                                                           Trunk Group for NCA TSC: [12]
           Trunk Group for Channel Selection: [12]       X-Mobility/Wireless Type: [NONE]
                   Supplementary Service Protocol: [a]
```

Right-click in a field to see a list of valid entries or help text
Ready   NUM

PSTN Trunk Configuration

```
File   Edit   View   System   Action   Tools   Window   Help                    _|&|X|

[toolbar icons]                        multivantage            ▼ [icons]

change trunk-group 12        ▼  send (return)  help (f5)  cancel (esc)  enter (f3)  schedule (f9)  next (f7)  previous (f8)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
                                TRUNK GROUP

 Group Number: 12                     Group Type: isdn          CDR Reports: y
   Group Name: MV1.2 to PSTN on V6      COR: 1      TN: 1        TAC: 612
    Direction: two-way      Outgoing Display? y      Carrier Medium: PRI/BRI
  Dial Access? y            Busy Threshold: 99       Night Service:
 Queue Length: 0
 Service Type: public-ntwrk       Auth Code? n            TestCall ITC: rest
                     Far End Test Line No:
 TestCall BCC: 4
 TRUNK PARAMETERS
           Codeset to Send Display: 0    Codeset to Send National IEs: 7
          Max Message Size to Send: 260  Charge Advice: none
       Supplementary Service Protocol: c  Digit Handling (in/out): enbloc/enbloc

              Trunk Hunt: ascend                   QSIG Value-Added? n
                                             Digital Loss Group: 13
 Calling Number - Delete:    Insert:              Numbering Format:
               Bit Rate: 1200     Synchronization: async    Duplex: full
  Disconnect Supervision - In? y  Out? n
  Answer Supervision Timeout: 0




 Right-click in a field to see a list of valid entries or help text
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change trunk-group 12 ▼ send (return) │ help (f5) │ cancel (esc) │ enter (f3) │ schedule (f9) │ next (f7) │ previous (f8)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

```
TRUNK FEATURES
                 ACA Assignment? n          Measured: none     Wideband Support? n
                                                               Maintenance Tests? y
                                    Data Restriction? n    NCA-TSC Trunk Member:
                                        Send Name: y     Send Calling Number: y
               Used for DCS? n
       Suppress # Outpulsing? n      Numbering Format: public
  Outgoing Channel ID Encoding: preferred      UUI IE Treatment: service-provider

                                            Replace Restricted Numbers? n
                                            Replace Unavailable Numbers? n
                                                Send Connected Number: y


             Send UUI IE? n
             Send UCID? n
  Send Codeset 6/7 LAI IE? y                        Ds1 Echo Cancellation? n



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

Right-click in a field to see a list of valid entries or help text

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File   Edit   View   System   Action   Tools   Window   Help   _ ⊡ ×

| change trunk-group 12 ▼ | send (return) | help (f5) | cancel (esc) | enter (f3) | schedule (f9) | next (f7) | previous (f8) |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

INCOMING CALL HANDLING TREATMENT

Service/ Feature	Called Len	Called Number	Del	Insert	Per Call CPN/BN	Night Serv
public-ntwrk	10	408527	6			

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change trunk-group 12 | ▼ | send (return) | | help (f5) | cancel (esc) | enter (f3) | schedule (f9) | next (f7) | previous (f8) |

| 1 | 2 | 3 | **4** | 5 | 6 | 7 | 8 | 9 | 10 |

TRUNK GROUP

Administered Members (min/max):   1/15

GROUP MEMBER ASSIGNMENTS   Total Administered Members: 15

	Port	Code	Sfx	Name	Night	Sig Grp
1:	01A1201	TN464	F			12
2:	01A1202	TN464	F			12
3:	01A1203	TN464	F			12
4:	01A1204	TN464	F			12
5:	01A1205	TN464	F			12
6:	01A1206	TN464	F			12
7:	01A1207	TN464	F			12
8:	01A1208	TN464	F			12
9:	01A1209	TN464	F			12
10:	01A1210	TN464	F			12
11:	01A1211	TN464	F			12
12:	01A1212	TN464	F			12
13:	01A1213	TN464	F			12
14:	01A1214	TN464	F			12
15:	01A1215	TN464	F			12

Right-click in a field to see a list of valid entries or help text

Ready   NUM

PSTN Access Code (9)

```
File   Edit   View   System   Action   Tools   Window   Help                        _ 8 X

change feature-access-codes  ▼   send (return)    help (f5)   cancel (esc)   enter (f3)   schedule (f9)   next (f7)   previous (f8)

 1 | 2 | 3 | 4 | 5 | 6 | 7 |
                            FEATURE ACCESS CODE (FAC)
              Abbreviated Dialing List1 Access Code: [    ]
              Abbreviated Dialing List2 Access Code: [    ]
              Abbreviated Dialing List3 Access Code: [    ]
      Abbreviated Dial - Prgm Group List Access Code: [    ]
                       Announcement Access Code: [    ]
                       Answer Back Access Code: [    ]
          Auto Alternate Routing (AAR) Access Code: [8   ]
        Auto Route Selection (ARS) - Access Code 1: [9   ]     Access Code 2: [    ]
                Automatic Callback Activation: [    ]    Deactivation: [    ]
    Call Forwarding Activation Busy/DA: [*66 ]   All: [*67 ]   Deactivation: [*69 ]
                        Call Park Access Code: [    ]
                      Call Pickup Access Code: [    ]
  CAS Remote Hold/Answer Hold-Unhold Access Code: [    ]
                CDR Account Code Access Code: [    ]
                      Change COR Access Code: [    ]
                 Change Coverage Access Code: [    ]

                 Data Origination Access Code: [    ]
                    Data Privacy Access Code: [    ]
              Directed Call Pickup Access Code: [    ]



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PSTN Dialing Plan

File Edit View System Action Tools Window Help

change ars analysis 165 | send (return) | help (f5) | cancel (esc) | enter (f3) | schedule (f9) | next (f7) | previous (f8)

1 | 2

ARS DIGIT ANALYSIS TABLE
Location: all   Percent Full: 8

Dialed String	Total Min	Max	Route Pattern	Call Type	Node Num	ANI Reqd
165	11	11	111	fnpa		n
166	11	11	deny	fnpa		n
167	11	11	deny	fnpa		n
168	11	11	deny	fnpa		n
169	11	11	deny	fnpa		n
170	11	11	deny	fnpa		n
1700	11	11	deny	fnpa		n
171	11	11	deny	fnpa		n
172	11	11	deny	fnpa		n
173	11	11	deny	fnpa		n
174	11	11	deny	fnpa		n
175	11	11	deny	fnpa		n
176	11	11	deny	fnpa		n
177	11	11	deny	fnpa		n
178	11	11	deny	fnpa		n

Right-click in a field to see a list of valid entries or help text
Ready   NUM

File Edit View System Action Tools Window Help

change route-pattern 111 ▼ send (return) help (f5) cancel (esc) enter (f3) schedule (f9) next (f7) previous (f8)

1

Pattern Number: 111 Pattern Name: [   ]

	Grp No	FRL	NPA	Pfx Mrk	Hop Lmt	Toll List	No. Del Dgts	Inserted Digits		DCS/ QSIG Intw	IXC
1:	12	0	408							n	user
2:										n	user
3:										n	user
4:										n	user
5:										n	user
6:										n	user

	BCC VALUE 0 1 2 3 4 W	TSC	CA-TSC Request	ITC	BCIE Service/Feature	BAND	No. Dgts Subaddress	Numbering Format	LAR
1:	y y y y y n	n		rest				natl-pub	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

Right-click in a field to see a list of valid entries or help text

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Configuring the Cisco Unified CallManager

6608-E1 Gateway Configuration

System   Route Plan   Service   Feature   Device   User   Application   Help

Cisco CallManager Administration
For Cisco IP Telephony Solutions

CISCO SYSTEMS

Gateway Configuration

Back to Find/List Gateways
Dependency Records

Product : Cisco Catalyst 6000 E1 VoIP Gateway
Gateway : S0/DS1-0@SDA0001C9D8633E
Device Protocol: Digital Access PRI
Registration: Registered with Cisco CallManager 172.20.32.254
IP Address: 172.20.32.103

Status: Ready

[Update]   [Delete]   [Reset Gateway]

Device Information

MAC Address*	0001C9D8633E
Description	SDA0001C9D8633E
Device Pool*	Default
Network Locale	United States
Media Resource Group List	< None >
Location	< None >
AAR Group	< None >
Load Information	

Multilevel Precedence and Preemption (MLPP) Information

MLPP Domain (e.g., "0000FF")	
MLPP Indication	Not available on this device
MLPP Preemption	Not available on this device

Interface Information

PRI Protocol Type*	PRI ISO QSIG E1
Protocol Side*	Network
Channel Selection Order*	Top Down
Channel IE Type*	Continuous Number

PCM Type*   A-law ▼

Delay for first restart (1/8 sec ticks)   32

Delay between restarts (1/8 sec   4
ticks)

☑ Inhibit restarts at PRI initialization

☑ Enable status poll

Call Routing Information

Inbound Calls

Significant Digits*   All ▼

Calling Search Space   Incoming Trunk ▼

AAR Calling Search Space   < None > ▼

Prefix DN

Outbound Calls

Calling Line ID Presentation*   Default ▼

Calling Party Selection*   Originator ▼

Called party IE number type   Cisco CallManager ▼
unknown*

Calling party IE number type   Cisco CallManager ▼
unknown*

Called Numbering Plan*   Cisco CallManager ▼

Calling Numbering Plan*   Cisco CallManager ▼

Number of digits to strip*   0 ▼

Caller ID DN

SMDI Base Port*   0

PRI Protocol Type Specific Information

☑ Display IE Delivery

☑ Redirecting Number IE Delivery - Outbound

☑ Redirecting Number IE Delivery - Inbound

☑ Send Extra Leading Character In DisplayIE***

☐ Setup non-ISDN Progress Indicator IE Enable****

☐ MCDN Channel Number Extension Bit Set to Zero**

☐ Send Calling Name In Facility IE

☐ Interface Identifier Present**

Interface Identifier Value**   `0`

Connected Line ID Presentation (QSIG Inbound Call)*   `Default ▼`

Connected PBX Model   `None ▼`

Product Specific Configuration   ℹ️

Clock Reference*	`Network ▼`
Framing*	`CRC4 ▼`
Audio Signal Adjustment into IP Network*	`NoDbPadding ▼`
Audio Signal Adjustment from IP Network*	`NoDbPadding ▼`
Zero Suppression*	`HDB3 ▼`
Digit On Duration(50-500ms)*	`100`
Interdigit Duration(50-500msec)*	`100`
SNMP Community String	`public`
Disable SNMP Set operations*	☐
Debug Port Enable*	☑
Hold Tone Silence Duration*	`0`
Port Used for Voice Calls*	☑
Port Used for Modem Calls*	☑
Port Used for Fax Calls*	☑

Fax and Modem Parameters

Fax Relay Enable*	☑
Fax Error Correction Mode Override*	☑
Maximum Fax Rate*	`14400bps ▼`
Fax Payload Size*	`20`
Non Standard Facilities Country Code*	`65535`

Non Standard Facilities Vendor Code*   65535

Fax/Modem Packet Redundancy*   ☐

NSE Type*   Non-IOS Gateways ▼

Playout Delay Parameters

Initial Playout Delay*   40

Minimum Playout Delay*   20

Maximum Playout Delay*   150

Echo Canceller Configuration

Echo TailLength (ms)*   32 ms ▼

Minimum ERL (db)*   6 db ▼

* indicates required item
** applicable to DMS-100 protocol only
*** applicable to DMS-100 protocol and DMS-250 protocol only
**** may be required to force ringback from some PBXs

Back to Find/List Gateways

Enbloc Route Pattern Configuration

Route Pattern/Hunt Pilot: 6.XXXX

Status: Update completed
Note: Any update to this Route Pattern or Hunt Pilot automatically resets the associated gateway or Route/Hunt List

| Copy | Update | Delete |

Pattern Definition

Route Pattern/Hunt Pilot*	6.XXXX
Partition	< None >
Description	
Numbering Plan*	North American Numbering Plan
Route Filter	< None >
MLPP Precedence	Default
Gateway or Route/Hunt List*	S0/DS1-0@SDA0001C9D8633E (Edit)
Route Option	⦿ Route this pattern
	○ Block this pattern — Not Selected —

☑ Provide Outside Dial Tone ☐ Allow Overlap Sending ☐ Urgent Priority

Calling Party Transformations

☐ Use Calling Party's External Phone Number Mask

Calling Party Transform Mask	
Prefix Digits (Outgoing Calls)	
Calling Line ID Presentation	Default
Calling Name Presentation	Default

Connected Party Transformations

Connected Line ID Presentation	Default
Connected Name Presentation	Default

Called Party Transformations

Discard Digits	PreDot
Called Party Transform Mask	
Prefix Digits (Outgoing Calls)	

ISDN Network-Specific Facilities Information Element

Carrier Identification Code	
Network Service Protocol	— Not Selected —

Network Service	Service Parameter Name	Service Parameter Value
— Not Selected —	< Not Exist >	

Overlap Sending Route Pattern Configuration

Route Pattern/Hunt Pilot: 9.X

Status: Ready
Note: Any update to this Route Pattern or Hunt Pilot automatically resets the associated gateway or Route/Hunt List

[Copy] [Update] [Delete]

Pattern Definition

Route Pattern/Hunt Pilot*	9.X
Partition	< None >
Description	
Numbering Plan*	North American Numbering Plan
Route Filter	< None >
MLPP Precedence	Default
Gateway or Route/Hunt List*	S0/DS1-0@SDA0001C9D8633E (Edit)
Route Option	⦿ Route this pattern
	○ Block this pattern — Not Selected —

☑ Provide Outside Dial Tone ☑ Allow Overlap Sending ☐ Urgent Priority

Calling Party Transformations

☐ Use Calling Party's External Phone Number Mask

Calling Party Transform Mask	
Prefix Digits (Outgoing Calls)	
Calling Line ID Presentation	Default
Calling Name Presentation	Default

Connected Party Transformations

Connected Line ID Presentation	Default
Connected Name Presentation	Default

Called Party Transformations

Discard Digits	PreDot
Called Party Transform Mask	
Prefix Digits (Outgoing Calls)	

ISDN Network-Specific Facilities Information Element

Carrier Identification Code	
Network Service Protocol	— Not Selected —

Network Service	Service Parameter Name	Service Parameter Value
— Not Selected —	< Not Exist >	

PSTN Route Pattern Configuration

Route Pattern/Hunt Pilot: 91650XXXXXXX

Status: Ready
Note: Any update to this Route Pattern or Hunt Pilot automatically resets the associated gateway or Route/Hunt List

[Copy] [Update] [Delete]

Pattern Definition

Route Pattern/Hunt Pilot*	91650XXXXXX
Partition	< None > ▼
Description	
Numbering Plan*	North American Numbering Plan ▼
Route Filter	< None > ▼
MLPP Precedence	Default ▼
Gateway or Route/Hunt List*	S0/DS1-0@SDA0001C9D8633E ▼ (Edit)
Route Option	⦿ Route this pattern
	○ Block this pattern — Not Selected — ▼

☑ Provide Outside Dial Tone   ☐ Allow Overlap Sending   ☐ Urgent Priority

Calling Party Transformations

☐ Use Calling Party's External Phone Number Mask

Calling Party Transform Mask	
Prefix Digits (Outgoing Calls)	408527
Calling Line ID Presentation	Default ▼
Calling Name Presentation	Default ▼

Connected Party Transformations

Connected Line ID Presentation	Default ▼
Connected Name Presentation	Default ▼

Called Party Transformations

Discard Digits	< None > ▼
Called Party Transform Mask	
Prefix Digits (Outgoing Calls)	

ISDN Network-Specific Facilities Information Element

Carrier Identification Code	
Network Service Protocol	— Not Selected — ▼

Network Service	Service Parameter Name	Service Parameter Value
— Not Selected — ▼	< Not Exist >	

7960 IP phone Configuration

Phone Configuration

Directory Numbers

Base Phone

Line 1 - 4001 in Phones

Line 2 - Add new DN

Phone: SEP003094C39863 (Auto 4001)
Registration: Registered with Cisco CallManager 172.20.32.254
IP Address: 172.20.32.110
Status: Ready

[Copy] [Update] [Delete] [Reset Phone]

Phone Configuration (Model = Cisco 7960)

Device Information

MAC Address*	003094C39863
Description	Auto 4001
Owner User ID	(Select User ID)
Device Pool*	Default (View details)
Calling Search Space	< None >
AAR Calling Search Space	< None >
Media Resource Group List	< None >
User Hold Audio Source	< None >
Network Hold Audio Source	< None >
Location	< None >
User Locale	< None >
Network Locale	< None >
Device Security Mode	Use System Default
Built In Bridge	Default
Privacy	Default

Phone Button Template Information

Phone Button Template*	Standard 7960 (View button list)

Softkey Template Information

Softkey Template	< None >

Expansion Module Information

Module 1	< None >
Module 2	< None >

Module 1 Load Name [   ] (Module 1 selection required)

Module 2 Load Name [   ] (Module 2 selection required)

Cisco IP Phone - External Data Locations (leave blank to use default)

Information [   ]

Directory [   ]

Messages [   ]

Services [   ]

Authentication Server [   ]

Proxy Server [   ]

Idle [   ]

Idle Timer (seconds) [   ]

Extension Mobility (Device Profile) Information

☐ Enable Extension Mobility Feature

Log Out Profile — Not Selected — ▼

Log In User ID < None >

Log In Time < None >

Log Out Time < None >

Multilevel Precedence and Preemption (MLPP) Information

MLPP Domain [   ] (e.g., "0000FF")

MLPP Indication Default ▼

MLPP Preemption Default ▼

Product Specific Configuration 🛈

Disable Speakerphone ☐

Disable Speakerphone and Headset ☐

Forwarding Delay* Disabled ▼

PC Port* Enabled ▼

Settings Access* Enabled ▼

Gratuitous ARP* Enabled ▼

PC Voice VLAN Access* Enabled ▼

Video Capabilities* Disabled ▼

Auto Line Select* Disabled ▼

Directory Number Configuration

Associated With

☎ **SEP003094C39863**
7960 **(Line 1)**

Directory Number: 4001 (Phones)

Status: Ready
Note: Any update to this Directory Number automatically resets the associated devices

Update	Remove from Device	Reset Devices

Directory Number

Directory Number*	4001
Partition	Phones

Directory Number Settings

Voice Mail Profile	< None >
	(Choose <None> to use default)
Calling Search Space	Phones
AAR Group	< None >
User Hold Audio Source	< None >
Network Hold Audio Source	< None >
Auto Answer	Auto Answer Off

Call Forward and Pickup Settings

	Voice Mail	Destination	Calling Search Space
Forward All	☐		< None >
Forward Busy	☐		< None >
Forward No Answer	☐		< None >
No Answer Ring Duration			(seconds)
Call Pickup Group	< None >		

MLPP Alternate Party Settings

Target (Destination)	
Calling Search Space	< None >
No Answer Ring Duration	(seconds)

Line Settings for this Device

Display (Internal Caller ID)	JOHN DOE
Line Text Label	
External Phone Number Mask	

Message Waiting Lamp Policy	Use System Policy ▼
Ring Setting (Phone Idle)	Use System Default ▼
Ring Setting (Phone Active)**	Use System Default ▼

Multiple Call / Call Waiting Settings

| Maximum Number of Calls* | 4 | (1 – 200) |
| Busy Trigger* | 2 | (<= Max. Calls) |

Forwarded Call Information Display

☑ Caller Name   ☑ Caller Number

☑ Redirected Number   ☑ Dialed Number

* indicates required item; changes to Line or Directory Number settings require restart.

** Ring Setting (Phone Active) applies to this line when any line on the phone has a call in progress.

Note:
If you are using a language other than English for Display (Internal Caller ID) or Line Text Label text, make sure the correct character set (shown below) is selected. Text displays incorrectly if the wrong characterset is selected. (English characters are included in all character sets.)

Character Set   Western European (Latin 1) ▼

Acronyms

Acronym	Definitions
CUCM	Cisco Unified CallManager
PSTN	Public Switched Telephone Network

Important Information

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