



Sample Avaya Communication Manager Meet-me Conference Configuration for the Conservation of DID Numbers - Issue 1.0

Abstract

These Application Notes describe how to configure a sample Avaya Communication Manager Meet-me Conference configuration for the conservation of Direct Inward Dialing (DID) numbers. Since the Meet-me conference feature uses Vector Directory Numbers (VDNs), a global DID extension can be configured to map to a vector that collects the Meet-me conference VDN extension and checks in a vector routing table for the collected extension. If the collected extension is in the routing table, external users are automatically routed to the appropriate Meet-me Conference; otherwise they are disconnected.

1. Introduction

These Application Notes describe how to configure a sample Avaya Communication Manager Meet-me Conference configuration for the conservation of Direct Inward Dialing (DID) numbers. Since as the Meet-me conference feature uses Vector Directory Numbers (VDNs), a global DID extension can be configured to map to a vector that collects the Meet-me conference VDN extension and checks in a vector routing table for the collected extension. If the collected extension is in the routing table, external users are automatically routed to the appropriate Meet-me Conference; otherwise they are disconnected.

The configuration depicted in **Figure 1** illustrates the network configuration used to verify the Avaya Communication Manager Meet-me Conference configuration described in these Application Notes.

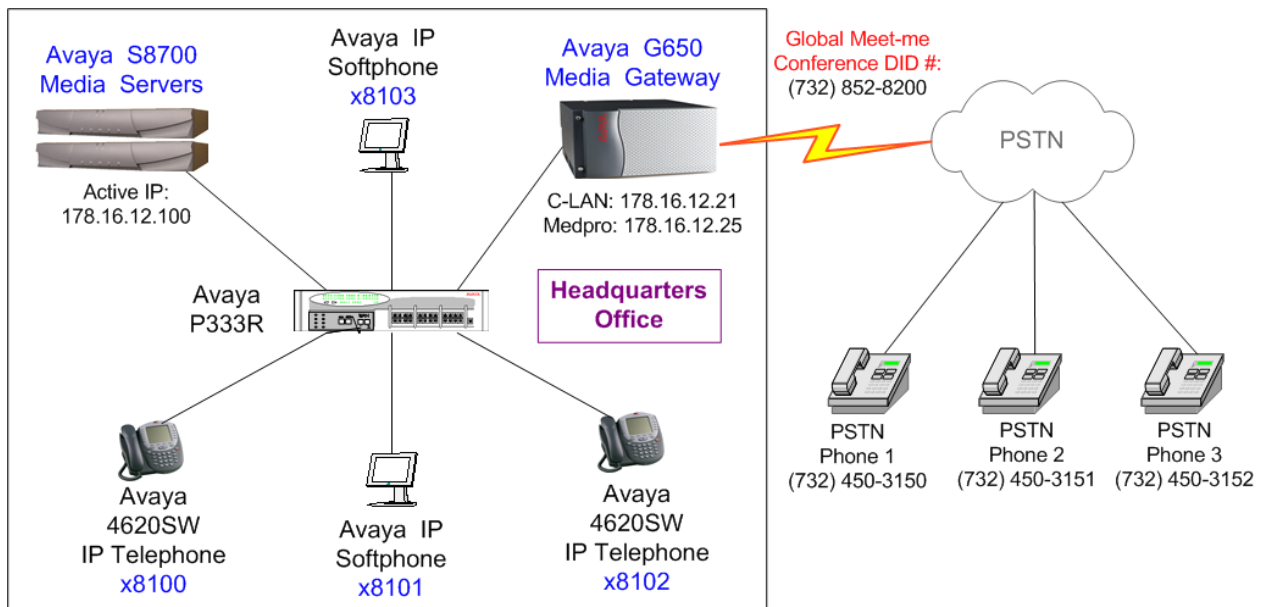


Figure 1: Avaya Communication Manager Meet-me Conference Configuration

2. Equipment and Software Validated

The following equipment and software were used for the sample configuration provided:

Equipment	Version
Avaya S8700 Media Servers running Avaya Communication Manager	2.1.1
Avaya G650 Media Gateway <ul style="list-style-type: none">• Avaya TN2312BP IPSI Circuit Packs• Avaya TN799DP C-LAN Circuit Pack• Avaya TN2302AP MEDPRO Circuit Pack• Avaya TN464F DS1 Interface Circuit Pack	HW03 – FW0009 HW01 – FW0011 HW03 – FW0075 Vintage 20
Avaya 4620SW IP Telephones	2.1.1
Avaya IP Softphones	5.1

Table 1: Equipment and Software Validated

3. Avaya S8700 Media Server Configuration

The following sections describe how to configure the necessary parameters to build a Meet-me conference configuration for the conservation of DID numbers.

Note: These Application Notes assume the C-LAN and IP Media Processor (also known as Prowler or MedPro) circuit packs in the Avaya G650 Media Gateway and Avaya S8700 Media Server have been previously administered.

3.1. Checking Avaya Communication Manager Licenses

To configure Meet-me Conference, Avaya Communication Manager licenses must be obtained and activated. The next series of steps can be performed to check if Avaya Communication Manager has sufficient licenses to configure Meet-me Conferences. Contact your Avaya representative if the required highlighted feature below is not enabled.

Step	Description
1.	<p>From the Avaya Communication Manager SAT screen, issue the command “display system-parameters customer-options”. Go to Page 4 and verify that the “Enhanced Conferencing” feature is set to “y”.</p> <div><pre>display system-parameters customer-options Page 4 of 11 OPTIONAL FEATURES Emergency Access to Attendant? y ISDN Feature Plus? y Enable 'dadmin' Login? n ISDN Network Call Redirection? y Enhanced Conferencing? y ISDN-BRI Trunks? y Enhanced EC500? y ISDN-PRI? y Extended Cvg/Fwd Admin? y Local Spare Processor? n External Device Alarm Admin? y Malicious Call Trace? y Five Port Networks Max Per MCC? n Media Encryption Over IP? y Flexible Billing? y Mode Code for Centralized Voice Mail? n Forced Entry of Account Codes? y Global Call Classification? y Multifrequency Signaling? y Hospitality (Basic)? y Multimedia Appl. Server Interface (MASI)? y Hospitality (G3V3 Enhancements)? y Multimedia Call Handling (Basic)? y IP Trunks? y Multimedia Call Handling (Enhanced)? y Multinational Locations? n IP Attendant Consoles? y Multiple Level Precedence & Preemption? y IP Stations? y Multiple Locations? y Internet Protocol (IP) PNC? y Personal Station Access (PSA)? y (NOTE: You must logoff & login to effect the permission changes.)</pre></div>

3.2. Administering Feature Access Codes

Administer Communication Manager Features Access Codes for Meet-me Conference.

Step	Description
1.	<p>From the Avaya Communication Manager SAT screen, issue the command “change system-parameters features”. Administer the “Announcement Access Code” to record the vector announcements for Meet-me Conference.</p> <div><pre>change feature-access-codes Page 1 of 9 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: 142 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: All: 145 Deactivation: 146 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: Contact Closure Open Code: Close Code: Contact Closure Pulse Code:</pre></div>

Step	Description
2.	<p data-bbox="302 233 1494 302">Go to Page 2 and administer the “Meet-me Conference Access Code Change” for Meet-me Conference hosts to change the Meet-me Conference access code.</p> <div data-bbox="305 338 1490 909" style="border: 1px solid black; padding: 10px; background-color: #f0f0f0;"> <p data-bbox="321 344 708 365">change feature-access-codes</p> <p data-bbox="1235 344 1451 365" style="text-align: right;">Page 2 of 9</p> <p data-bbox="764 371 1120 392" style="text-align: center;">FEATURE ACCESS CODE (FAC)</p> <p data-bbox="578 396 992 417">Data Origination Access Code:</p> <p data-bbox="634 422 992 443">Data Privacy Access Code:</p> <p data-bbox="521 447 992 468">Directed Call Pickup Access Code:</p> <p data-bbox="391 472 992 493">Emergency Access to Attendant Access Code:</p> <p data-bbox="618 497 992 518">Enhanced EC500 Activation: 130</p> <p data-bbox="350 522 992 543">Extended Call Fwd Activate Busy D/A All:</p> <p data-bbox="435 548 992 569">Extended Group Call Pickup Access Code:</p> <p data-bbox="532 573 992 594">Facility Test Calls Access Code:</p> <p data-bbox="735 598 992 619">Flash Access Code:</p> <p data-bbox="508 623 992 644">Group Control Restrict Activation:</p> <p data-bbox="605 648 992 669">Hunt Group Busy Activation:</p> <p data-bbox="751 674 992 695">ISDN Access Code:</p> <p data-bbox="548 699 992 720">Last Number Dialed Access Code:</p> <p data-bbox="391 724 992 745">Leave Word Calling Message Retrieval Lock:</p> <p data-bbox="362 749 992 770">Leave Word Calling Message Retrieval Unlock:</p> <p data-bbox="505 774 992 795">Leave Word Calling Send A Message:</p> <p data-bbox="475 800 992 821">Leave Word Calling Cancel A Message:</p> <p data-bbox="532 825 992 846">Malicious Call Trace Activation:</p> <p data-bbox="448 850 992 871">Meet-me Conference Access Code Change: 144</p> <div data-bbox="1092 472 1352 871" style="float: right; width: 30%;"> <p data-bbox="1092 472 1292 493">Access Code 2:</p> <p data-bbox="1092 497 1352 518">Deactivation: 131</p> <p data-bbox="1092 522 1292 543">Deactivation:</p> <p data-bbox="1092 632 1292 653">Deactivation:</p> <p data-bbox="1092 657 1292 678">Deactivation:</p> <p data-bbox="1092 850 1292 871">Deactivation:</p> </div> <div style="clear: both;"></div> </div>

3.3. Meet-me Conference Configuration

The following configuration shows how to administer the internal Meet-me Conference VDNs on Avaya Communication Manager. Meet-me conference VDN extensions 8140-8150 (vectors 10-20) were configured to verify these Applications Notes.

Step	Description
1.	<p>Administer the Meet-me Conference announcements. The following announcements need to be configured.</p> <ul style="list-style-type: none"> • WelcomeMMC, extension 2001 – Welcome to <Person's_Name> Meet-me Conference. Please enter your access code. • WelcomeMMC2, extension 2002 – The access code entered is not valid. Please enter the access code again. • MMCInvalidCode, extension 2003 – This access code is invalid. Please contact the conference call coordinator to make sure you have the correct telephone number and access code. • MMCInProgress, extension 2004 – Your conference call is already in progress. • MMCFirstParty, extension 2005 – You are the first party to join the conference. • MMCFull, extension 2006 – The Meet-me Conference is filled to capacity. Please contact the conference call coordinator for assistance. Goodbye. <p>All announcements in Avaya Communication Manager are administered by typing the “change announcements” command. The following screen shows the administered Meet-me Conference announcements.</p> <div> <pre> change announcements ANNOUNCEMENTS/AUDIO SOURCES Page 1 of 16 Ann. No. Ext. Type COR TN Name Q QLen Pr Rt Port 1 2001 integrated 1 1 WelcomeMMC n NA n 64 01A09 2 2002 integrated 1 1 WelcomeMMC2 n NA n 64 01A09 3 2003 integrated 1 1 MMCInvalidCode n NA n 64 01A09 4 2004 integrated 1 1 MMCInProgress n NA n 64 01A09 5 2005 integrated 1 1 MMCFirstParty n NA n 64 01A09 6 2006 integrated 1 1 MMCFull n NA n 64 01A09 </pre> </div>

Step	Description
2.	<p>Record the Meet-me Conference announcements. To do this, use the following procedure:</p> <p>Note: The phone used to record the announcements must have Console Permissions enabled in the COS (Class of Service) of the station record. If it is not, “Intercept Tone” will be received when attempting to dial the FAC for announcement recording.</p> <ul style="list-style-type: none"> • Dial the FAC for announcement recording. Dial tone will be received. • Dial the extension of an announcement previously defined. • If the extension was successfully defined, dial tone will be received. • There are three options when working with an announcement: <ul style="list-style-type: none"> ○ Press 1 to record the announcement and # to terminate the recording. ○ Press 2 to playback the announcement. ○ Press 3 to erase the announcement. • Once satisfied with the recording, simply hang up. <p>Repeat this procedure for all announcements.</p>
3.	<p>Create a Meet-me Conference vector.</p> <p>From the Avaya Communication Manager SAT screen, issue the command “change vector x”, where “x” is the number of the vector to create or change. In the “Meet-me Conf” field, type “y” to designate the vectors as a Meet-me Conference vector. Use the numbered fields to create the Meet-me Conference vector as shown below.</p> <pre> change vector 10 Page 1 of 3 CALL VECTOR Number: 10 Name: MeetMe Conf Background BSR Poll? n Multimedia? n Attendant Vectoring? n Meet-me Conf? y Lock? y Basic? y EAS? y G3V4 Enhanced? y ANI/II-Digits? y ASAI Routing? y Prompting? y LAI? y G3V4 Adv Route? y CINFO? y BSR? y Holidays? y Variables? y 01 collect 6 digits after announcement 2001 02 goto step 6 if digits = meet-me-access 03 collect 6 digits after announcement 2002 04 goto step 6 if digits = meet-me-access 05 disconnect after announcement 2003 06 goto step 11 if meet-me-idle 07 goto step 14 if meet-me-full 08 announcement 2004 09 route-to meetme 10 stop 11 announcement 2005 Press 'Esc f 6' for Vector Editing </pre>

Step	Description
4.	<p>Go to Page 2 and to finish the Meet-me conference vector configuration.</p> <pre> change vector 10 CALL VECTOR Page 2 of 3 12 route-to meetme 13 stop 14 disconnect after announcement 2006 15 stop 16 </pre>
5.	<p>Create a Meet-me Conference VDN.</p> <p>From the Avaya Communication Manager SAT screen, issue the command “add vdn x”, where “x” is the VDN extension. In the “Name” field, type a name to identify the VDN. In the “Vector Number” field, type the Meet-me Conference vector configured in Step 2. Set the “Meet-me Conferencing” field to “y”.</p> <pre> add vdn 8140 VECTOR DIRECTORY NUMBER Page 1 of 2 Extension: 8140 Name: MeetMe Conference Vector Number: 10 Meet-me Conferencing? y COR: 1 TN: 1 </pre>
6.	<p>Go to Page 2 and set the Meet-me Conference VDN parameters. In the “Conference Access Code” field, assign a six digit access code for the Meet-me Conference. In the “Conference Controller” field, type the extension of the conference host responsible for controlling the Meet-me Conference access code. The host can use the Feature Access Code (FAC) assigned in Section 3.2, Step 2 to change the Meet-me Conference access code.</p> <pre> add vdn 8140 VECTOR DIRECTORY NUMBER Page 2 of 2 MEET-ME CONFERENCE PARAMETERS: Conference Access Code: 123456 Conference Controller: 8100 </pre>
7.	<p>Repeat Steps 3-6 to create the rest of the meet-me conferences VDNs (8141-8150) and vectors (11-20).</p>

3.4. Meet-me Conference Vector Routing Table Configuration

The following configuration shows how to create a Meet-me conference Vector Routing Table (VRT) for a company's Meet-me conference VDNs. Avaya Communication Manager supports up to 100 VRTs with 100 entries each. Vector Routing Table 1 with VDN extensions 8140-8150 were used in these Application Notes.

Step	Description																																																			
1.	<p>Create the Meet-me Conference Vector Routing Table.</p> <p>From Avaya Communication Manager SAT screen, issue the command “add vrt x”, where “x” is the vector routing table number. In the “Name” field, enter the routing table name and use the numbered fields to enter the Meet-me conference VDNs.</p> <div><div>add vrt 1</div><div>Page 1 of 3</div><div>VECTOR ROUTING TABLE</div><table><tr><td>Number: 1</td><td>Name: Meet-me VDNs</td><td>Sort? n</td></tr><tr><td>1: 8140</td><td></td><td>17:</td></tr><tr><td>2: 8141</td><td></td><td>18:</td></tr><tr><td>3: 8142</td><td></td><td>19:</td></tr><tr><td>4: 8143</td><td></td><td>20:</td></tr><tr><td>5: 8144</td><td></td><td>21:</td></tr><tr><td>6: 8145</td><td></td><td>22:</td></tr><tr><td>7: 8146</td><td></td><td>23:</td></tr><tr><td>8: 8147</td><td></td><td>24:</td></tr><tr><td>9: 8148</td><td></td><td>25:</td></tr><tr><td>10: 8149</td><td></td><td>26:</td></tr><tr><td>11: 8150</td><td></td><td>27:</td></tr><tr><td>12:</td><td></td><td>28:</td></tr><tr><td>13:</td><td></td><td>29:</td></tr><tr><td>14:</td><td></td><td>30:</td></tr><tr><td>15:</td><td></td><td>31:</td></tr><tr><td>16:</td><td></td><td>32:</td></tr></table></div>	Number: 1	Name: Meet-me VDNs	Sort? n	1: 8140		17:	2: 8141		18:	3: 8142		19:	4: 8143		20:	5: 8144		21:	6: 8145		22:	7: 8146		23:	8: 8147		24:	9: 8148		25:	10: 8149		26:	11: 8150		27:	12:		28:	13:		29:	14:		30:	15:		31:	16:		32:
Number: 1	Name: Meet-me VDNs	Sort? n																																																		
1: 8140		17:																																																		
2: 8141		18:																																																		
3: 8142		19:																																																		
4: 8143		20:																																																		
5: 8144		21:																																																		
6: 8145		22:																																																		
7: 8146		23:																																																		
8: 8147		24:																																																		
9: 8148		25:																																																		
10: 8149		26:																																																		
11: 8150		27:																																																		
12:		28:																																																		
13:		29:																																																		
14:		30:																																																		
15:		31:																																																		
16:		32:																																																		

3.5. Global DID VDN Configuration

The following steps show how to configure the global DID VDN extension and vector that collects and validates the Meet-me conference extension (NON-DID-VDN) entered by a user. In these Application Notes, global DID number (732) 852-8200 was mapped to VDN extension 8200.

Step	Description																																																
1.	<p>Administer the global DID vector announcements. The following announcements need to be configured.</p> <ul style="list-style-type: none">• MMCext, extension 2007 – Welcome to <CompanyName> Meet-Me-Conference Service. Please enter the conference extension.• MMCInvEntry, extension 2008 – The Number that you entered is invalid. Please try again.• MMCInvEntryBye, extension 2009 – You have made an Invalid entry. Please contact your conference coordinator for the correct conference extension and access code. <p>All announcements in Avaya Communication Manager are administered by typing the “change announcements” command. The following screen shows the administered announcements.</p> <div><div>change announcements</div><div>ANNOUNCEMENTS/AUDIO SOURCES</div><div>Page 1 of 16</div><table><tr><th>Ann.</th><th>No.</th><th>Ext.</th><th>Type</th><th>COR</th><th>TN</th><th>Name</th><th>Q</th><th>QLen</th><th>Pr</th><th>Rt</th><th>Por</th></tr><tr><td></td><td>1</td><td>2007</td><td>integrated</td><td>1</td><td>1</td><td>MMCext</td><td>n</td><td>NA</td><td>n</td><td>64</td><td>01A09</td></tr><tr><td></td><td>2</td><td>2008</td><td>integrated</td><td>1</td><td>1</td><td>MMCInvEntry</td><td>n</td><td>NA</td><td>n</td><td>64</td><td>01A09</td></tr><tr><td></td><td>3</td><td>2009</td><td>integrated</td><td>1</td><td>1</td><td>MMCInvEntryBye</td><td>n</td><td>NA</td><td>n</td><td>64</td><td>01A09</td></tr></table></div>	Ann.	No.	Ext.	Type	COR	TN	Name	Q	QLen	Pr	Rt	Por		1	2007	integrated	1	1	MMCext	n	NA	n	64	01A09		2	2008	integrated	1	1	MMCInvEntry	n	NA	n	64	01A09		3	2009	integrated	1	1	MMCInvEntryBye	n	NA	n	64	01A09
Ann.	No.	Ext.	Type	COR	TN	Name	Q	QLen	Pr	Rt	Por																																						
	1	2007	integrated	1	1	MMCext	n	NA	n	64	01A09																																						
	2	2008	integrated	1	1	MMCInvEntry	n	NA	n	64	01A09																																						
	3	2009	integrated	1	1	MMCInvEntryBye	n	NA	n	64	01A09																																						

Step	Description
2.	<p>Record the vector announcements. To do this, use the following procedure:</p> <p>Note: The phone used to record the announcements must have Console Permissions enabled in the COS (Class of Service) of the station record. If it is not, “Intercept Tone” will be received when attempting to dial the FAC for announcement recording.</p> <ul style="list-style-type: none"> • Dial the FAC for announcement recording. Dial tone will be received. • Dial the extension of an announcement previously defined. • If the extension was successfully defined, dial tone will be received. • There are three options when working with an announcement: <ul style="list-style-type: none"> ○ Press 1 to record the announcement and # to terminate the recording. ○ Press 2 to playback the announcement. ○ Press 3 to erase the announcement. • Once satisfied with the recording, simply hang up. <p>Repeat this procedure for all announcements.</p>
3.	<p>Create the vector for the global DID VDN.</p> <p>From Avaya Communication Manager SAT screen, issue the command “change vector x”, where “x” is the number of the vector to create or change. In the “Meet-me Conf” field, type “n”. Use the numbered fields to create the vector as shown below.</p> <div data-bbox="302 1039 1481 1614" data-label="Code-Block"> <pre> change vector 1 Page 1 of 3 CALL VECTOR Number: 1 Name: MeetMeExt Background BSR Poll? n Multimedia? n Attendant Vectoring? n Meet-me Conf? n Lock? y Basic? y EAS? y G3V4 Enhanced? y ANI/II-Digits? y ASAI Routing? y Prompting? y LAI? y G3V4 Adv Route? y CINFO? y BSR? y Holidays? y Variables? y 01 wait-time 2 secs hearing silence 02 collect 4 digits after announcement 2007 for none 03 goto step 9 if digits in table 1 04 announcement 2008 05 collect 4 digits after announcement 2007 for none 06 goto step 9 if digits in table 1 07 disconnect after announcement 2009 08 stop 09 route-to digits with coverage n 10 stop 11 Press 'Esc f 6' for Vector Editing </pre> </div> <p>Note: Since each Vector Routing Table (VRT) can only support up to 100 entries, additional VRTs can be configured if more than 100 Meet-me Conferences exist. In such cases, the vector above can be modified to look in those tables by adding additional verification steps after steps 3 and 6. The steps would look like steps 3 and 6, but with a different VRT numbers.</p>

Step	Description
4.	<p>Create the global DID VDN.</p> <p>From Avaya Communication Manager SAT screen, issue the command “add vdn x”, where “x” is the VDN extension. In the “Name” field, type a name to identify the VDN. In the “Vector Number” field, type the vector configured in Step 3. Set the “Meet-me Conferencing” field to “n”.</p> <div data-bbox="305 485 1490 785" style="border: 1px solid black; padding: 10px; background-color: #f0f0f0;"> <pre> add vdn 8200 VECTOR DIRECTORY NUMBER Extension: 8200 Name: MeetMe Conference Vector Number: 1 Meet-me Conferencing? n COR: 1 TN: 1 </pre> </div>

4. Verification Steps

The following tests can be performed in the field to verify the Avaya Communication Manager Meet-me Conference configuration shown in these Application Notes.

Step	Description
1.	Dial the global DID number and enter a valid Meet-me Conference extension when prompted by the recorded announcement. Verify Avaya Communication Manager checks the collected digits against the vector routing table and routes the caller to the appropriate Meet-me conference.
2.	Enter the Meet-me conference access code when prompted by the recorded announcement. Verify Avaya Communication Manager validates the access code and connects the caller to the appropriate Meet-me conference. An entry tone lets the caller know that he joined the conference.
3.	Repeat Steps 1-2 to add a second user to the Meet-me conference.
4.	Use the “ status meet-me vdn ” command to verify the status of the Meet-me conference. There should be two active users in the conference as shown below. <div><pre>status meet-me-vdn 38140 GENERAL STATUS Service State: active Extension: 38140 Connected Ports: 01A0501 01A0502</pre></div>
5.	Hang-up all conference parties.
6.	Dial the global DID extension again and enter an extension not defined in the vector routing table. Verify the caller is disconnected and the disconnect announcement is played upon entering the wrong extension twice.

5. Conclusion

These Application Notes provide administrators with the basic steps necessary to configure a sample Avaya Communication Manager Meet-me Conference with a global DID extension for external network user access. The steps provided should be helpful for implementing most deployments, but they do not address all possible configuration scenarios.

6. Additional References

[1] “*Administration for Network Connectivity for Avaya Communication Manager*”, Document ID: 555-233-504.

[2] “*Feature Description and Implementation for Avaya Communication Manager*”, Document ID: 555-245-205, June 2004.

©2004 Avaya Inc. All Rights Reserved.

Avaya and the Avaya Logo are trademarks of Avaya Inc. All trademarks identified by ® and ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners. The information provided in these Application Notes is subject to change without notice. The configurations, technical data, and recommendations provided in these Application Notes are believed to be accurate and dependable, but are presented without express or implied warranty. Users are responsible for their application of any products specified in these Application Notes.

Please e-mail any questions or comments pertaining to these Application Notes along with the full title name and filename, located in the lower right corner, directly to the Avaya Solution & Interoperability Test Lab at interoplabnotes@list.avaya.com