



## Avaya Solution & Interoperability Test Lab

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# Application Notes for Jebson & Jessen Communications Enhanced Meet Me Conference with Avaya Communication Manager - Issue 1.0

### Abstract

These Application Notes describe the procedures for configuring Jebson & Jessen Communications Enhanced Meet Me Conference to interoperate with Avaya Communication Manager.

Enhanced Meet Me Conference (EMMC) is a collection of software applications design to enhance the Avaya Meet-me Conference feature available in Avaya Communication Manager 1.3 and above.

Enhanced Meet Me Conference allows the administrator to schedule a Meet-me Conference session without the need to know Avaya Communication Manager System Access Terminal (SAT) commands. In addition, Enhanced Meet Me Conference provides the ability to send out notifications to each participant via the web-enabled Avaya IP Telephone, Short Message Service (SMS) message and email.

Information in these Application Notes has been obtained through compliance testing and additional technical discussions. Testing was conducted via the Developer*Connection* Program at the Avaya Solution and Interoperability Test Lab.

# 1. Introduction

These Application Notes describe the compliance-tested configuration used to validate Jebsen & Jessen Communications Enhanced Meet Me Conference 2.0 with Avaya Communication Manager 3.1.2.

Enhanced Meet Me Conference allows an administrator to manage a pool of Meet-me Conferences set up on Avaya Communication Manager. It allows the scheduling of conferences of up to six parties, changing of the Conference Access Codes and notification of participants via the web-enabled Avaya IP Telephones, Short Message Service (SMS) messages or emails.

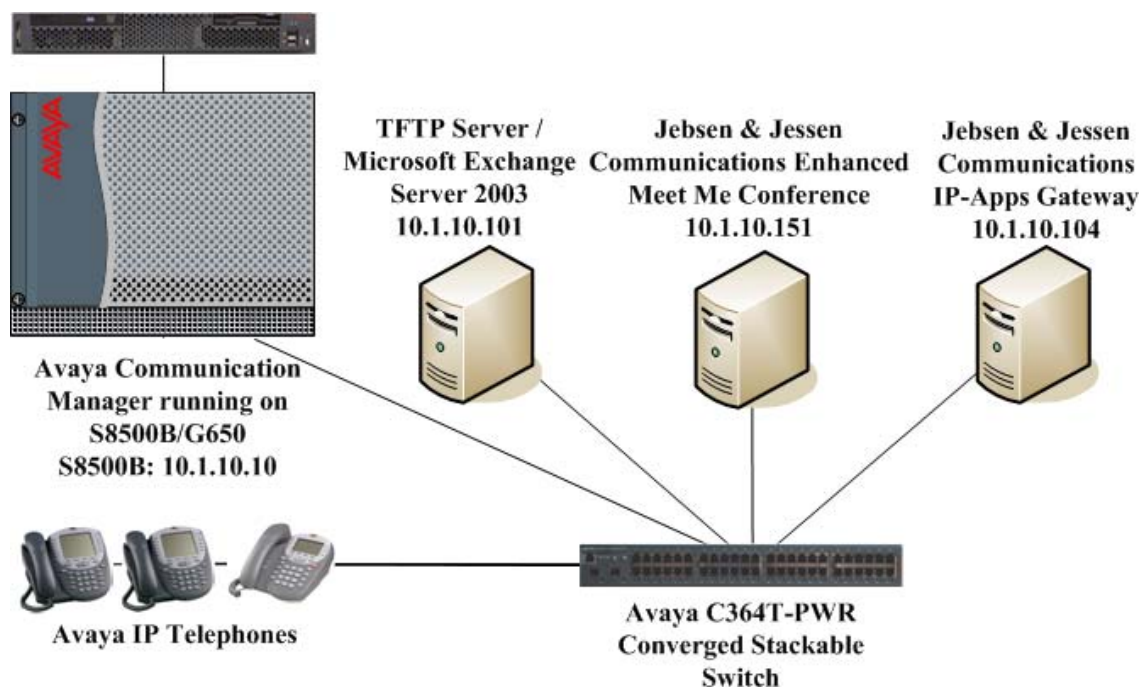
Enhanced Meet Me Conference connects to Avaya Communication Manager via telnet to the System Access Terminal (SAT) in order to modify the Conference Access Code found in the Meet-me Conference vector directory number (VDN) form prior to the start of the conference. At the end of the conference, it resets the Conference Access Code to a default value to prevent any unauthorized usage of the Meet-me Conference.

Enhanced Meet Me Conference consists of the following applications:

- TNet32 PABX Interface – The TNet32 PABX Interface application accesses the SAT using telnet to modify the Conference Access Code.
- Call Conference Messenger (CCMessenger) – The CCMessenger application talks to different notification systems such as an email server, Jebsen & Jessen Communications SMS Gateway and IP-Apps Gateway.
- Call Conference Manager (CCManager) – The CCManager application is used to setup user accounts and groups for the scheduling of conferences.
- Call Conference Booking Client (CBooking) – The CBooking application allows users to schedule conferences.

**Figure 1** illustrates the sample configuration used to verify Jebsen & Jessen Communications Enhanced Meet Me Conference interoperability with Avaya Communication Manager. It consists of Avaya Communication Manager running on an Avaya S8500B Media Server with an Avaya G650 Media Gateway. The Avaya 4610SW, 4621SW, and 4625SW IP Telephones obtain firmware updates and web-related settings from the TFTP server. Microsoft Exchange Server 2003 with Service Pack 2 running on Microsoft Windows Server 2003 Service Pack 1 allows participants to be notified via emails. Jebsen & Jessen Communications Enhanced Meet Me Conference was installed on a PC running Microsoft Windows XP Professional with Service Pack 2. The Jebsen & Jessen Communications IP-Apps Gateway was installed another server running on Microsoft Windows Server 2003 Service Pack 1 to allow notifications to be sent to Avaya IP Telephones. Systems are connected using an Avaya C364T-PWR Converged Stackable Switch for network connectivity.

In this configuration, notifications using SMS messages are not available as the Jebsen & Jessen Communications SMS Gateway was not available for testing.



**Figure 1: Sample Configuration**

## 2. Equipment and Software Validated

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

Equipment	Software
Avaya S8500B Media Server	3.1.2 (R013x.01.2.632.1)
Avaya G650 Media Gateway <ul style="list-style-type: none"> <li>TN2312BP IP Server Interface</li> <li>TN799DP C-LAN Interface</li> <li>TN2302AP IP Media Processor</li> </ul>	- HW15, FW036 HW01, FW017 HW20, FW115
Avaya 4610SW IP telephones	R2.6
Avaya 4621SW IP telephones	R2.6
Avaya 4625SW IP telephones	R2.6
Avaya C364T-PWR Converged Stackable Switches	4.5.14
Jebsen & Jessen Communications Enhanced Meet Me Conference	2.0
Jebsen & Jessen Communications IP-Apps Gateway	1.0
Microsoft Windows XP Professional	Service Pack 2
Microsoft Windows Server 2003	Service Pack 1
Microsoft Exchange Server 2003	Service Pack 2
SolarWinds.Net TFTP Server	8.2.7

### 3. Configure Avaya Communication Manager

This section describes the steps to configure Avaya Communication Manager to interoperate with Jebsen & Jessen Communications Enhanced Meet Me Conference. It includes the steps to verify the prerequisites for Meet-me Conference, create a login account for Enhanced Meet Me Conference to access Avaya Communication Manager, the assigning of permissions to the login account and the steps to configure Meet-me Conference. All the steps are performed from the Avaya Communication Manager System Access Terminal (SAT).

#### 3.1. Verify Prerequisites for Meet-me Conference

Before the Meet-me Conference feature can be administered, verify that the required optional features are enabled on Avaya Communication Manager.

Step	Description
1.	<p>Enter the <b>display system-parameters customer-options</b> command. On page 4 of the <b>OPTIONAL FEATURES</b> form, verify that <b>Enhanced Conferencing</b> is set to <b>y</b>. If this feature is not activated, contact an Avaya representative for assistance.</p> <pre>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? n     <b>Enhanced Conferencing? y</b>   ISDN Feature Plus? n       Enhanced EC500? y   ISDN Network Call Redirection? n Enterprise Survivable Server? n   ISDN-BRI Trunks? y   Enterprise Wide Licensing? n   ISDN-PRI? y     ESS Administration? n   Local Survivable Processor? n       Extended Cvg/Fwd Admin? y   Malicious Call Trace? y External Device Alarm Admin? n   Media Encryption Over IP? y Five Port Networks Max Per MCC? n  Mode Code for Centralized Voice Mail? n   Flexible Billing? n Forced Entry of Account Codes? n   Multifrequency Signaling? y   Global Call Classification? n Multimedia Appl. Server Interface (MASI)? n     Hospitality (Basic)? y   Multimedia Call Handling (Basic)? n Hospitality (G3V3 Enhancements)? n  Multimedia Call Handling (Enhanced)? n       IP Trunks? y  IP Attendant Consoles? y</pre>

## 3.2. Configure SAT Login Account

Enhanced Meet Me Conference logs into Avaya Communication Manager to modify the Conference Access Codes on the Meet-me Conference VDN forms. As Enhanced Meet Me Conference only needs to make modification to the Meet-me Conference VDNs, creating a separate SAT login account with limited permissions is recommended.

Step	Description
1.	<p>Enter the <b>add login <i>login-id</i></b> command, where <i>login-id</i> is the name of login account to be created. Set <b>Login Type</b> to <i>customer</i> and <b>Service Level</b> to <i>non-super-user</i>.</p> <pre> add login emmc Page 1 of 1  LOGIN ADMINISTRATION  LOGIN BEING ADMINISTERED Login's Name: emmc Login Type: customer Service Level: non-super-user Days To Disable After Inactivity:  Disable Following a Security Violation? y  LOGIN'S PASSWORD INFORMATION Login's Password: Reenter Password: Change Password at First Login? n Password Aging Cycle Length (Days):  LOGOFF NOTIFICATION Facility Test Call Notification? y Acknowledgement Required? y Remote Access Notification? y Acknowledgement Required? y </pre>
2.	<p>Enter the <b>change permissions <i>login-id</i></b> command, where <i>login-id</i> is the login account created in Step 1. Set <b>Display Admin. and Maint. Data</b> and <b>Administer Stations</b> to <i>y</i>.</p> <pre> change permissions emmc Page 1 of 1  COMMAND PERMISSION CATEGORIES Login Name: emmc  COMMON COMMANDS Display Admin. and Maint. Data? y System Measurements? n System Mgmt Data Transfer Only? n  ADMINISTRATION COMMANDS Administer Stations? y Administer Features? n Administer Trunks? n Administer Permissions? n Additional Restrictions? n  MAINTENANCE COMMANDS Maintain Stations? n Maintain Switch Circuit Packs? n Maintain Trunks? n Maintain Process Circuit Packs? n Maintain System? n Maintain Enhanced DS1? n </pre>

### 3.3. Configure Meet-me Conference Vector

A vector is a series of commands that tell the system how to handle the incoming calls. A sample of the Meet-me Conference vector is described in detail on page 1041 in [1]. The vector used in this configuration is as shown below.

Step	Description
1.	<p>To create the vector, enter the <b>change vector v</b> command, where <b>v</b> is the Meet-me conference vector number.</p> <pre> change vector 90 CALL VECTOR  Number: 90          Name: Meet-Me 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    3.0 Enhanced? y 01 collect      6      digits after announcement 18901 02 goto step    6              if digits          =      meet-me-access 03 collect      6      digits after announcement 18902 04 goto step    6              if digits          =      meet-me-access 05 disconnect   after announcement 18903 06 goto step    11             if meet-me-idle 07 goto step    14             if meet-me-full 08 announcement 18906 09 route-to     meetme 10 stop 11 announcement 18904  Press 'Esc f 6' for Vector Editing </pre>
	<pre> change vector 90 CALL VECTOR  12 route-to     meetme 13 stop 14 disconnect   after announcement 18905 15 stop 16 17 18 19 20 21 22 </pre>

### 3.4. Configure Meet-me Conference Vector Directory Numbers

A Meet-me Conference Vector Directory Number (VDN) is a special VDN used to direct an incoming call to a Meet-me Conference vector. In this configuration, five Meet-me Conference VDNs were created with the extensions 14901 to 14905.

Step	Description
1.	<p>Enter the <b>add vdn <i>n</i></b> command, where <b><i>n</i></b> is the extension to use for the VDN. On page 1 of the form, specify a descriptive <b>Name</b> and enter the vector number created in <b>Step 3.3</b> for <b>Vector Number</b>. Set <b>Meet-me Conferencing</b> to <b>y</b>.</p> <pre>add vdn 14901                                     Page 1 of 3  VECTOR DIRECTORY NUMBER  Extension: 14901  Name: Meet-me Conf 1  Vector Number: 90  Meet-me Conferencing? y  COR: 1  TN: 1</pre>
2.	Repeat <b>Step 1</b> to create the four remaining Meet-me VDNs.

### 3.5. Configure Web Settings on Avaya IP Telephones

For the Avaya IP Telephones to receive notifications of scheduled conferences, edit the **46xxsettings.txt** file on the TFTP server and enter the following lines in the **PUSH Interface parameters** section:

```
SET TPSLIST 10.1.10.104
SET SUBSCRIBELIST http://10.1.10.104:8080/Subscribe/servlet/Subscribe
```


Note: **10.1.10.104** is the IP address of the Jebsen & Jessen IP-Apps Gateway server.

## 4. Configure Jebsen & Jessen Communications Enhanced Meet Me Conference

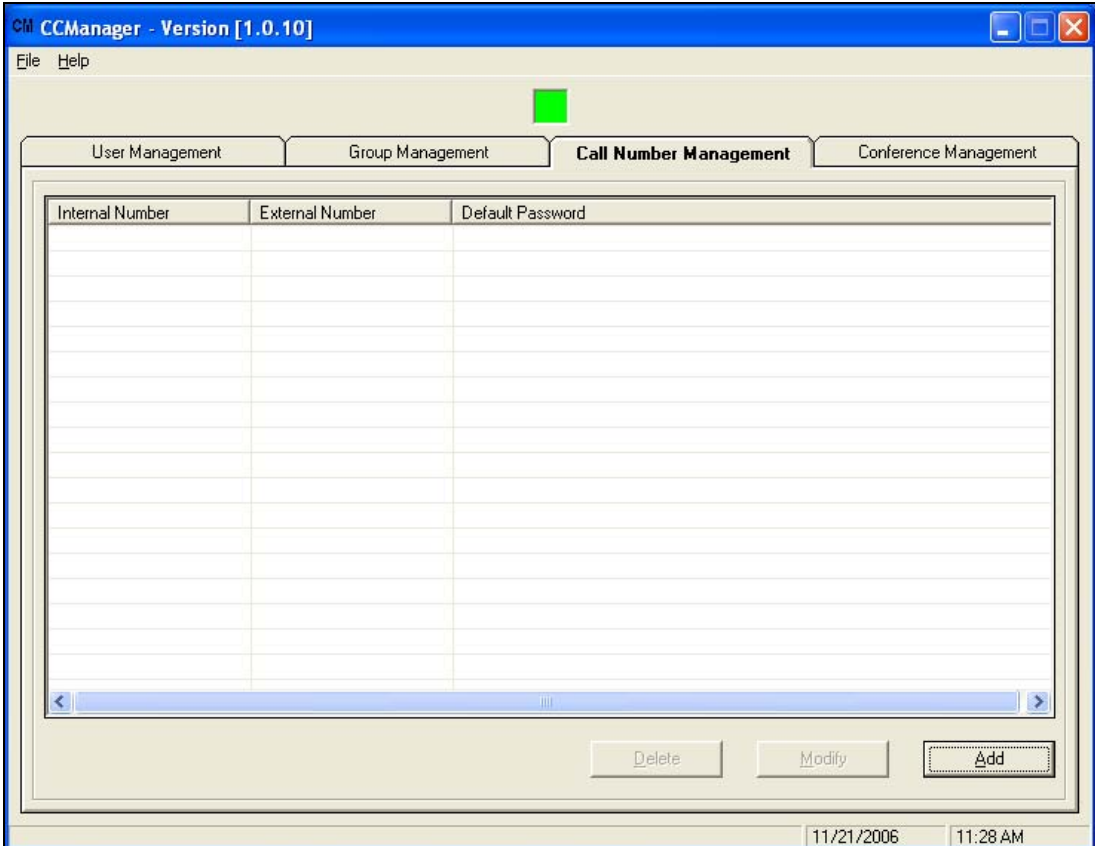
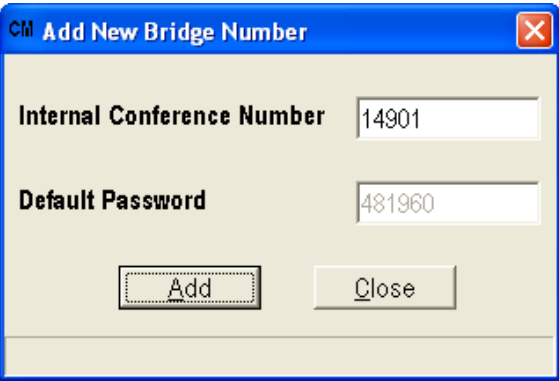
This section describes the configuration of Jebsen & Jessen Communications Enhanced Meet Me Conference required to interoperate with Avaya Communication Manager.

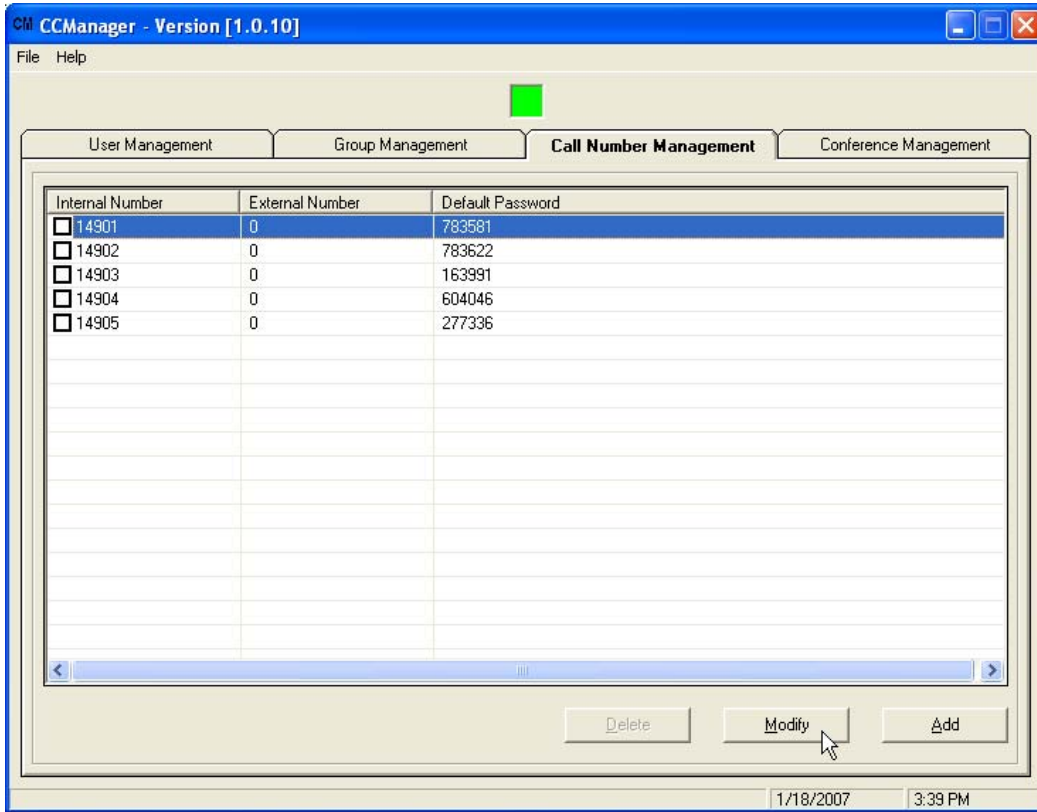
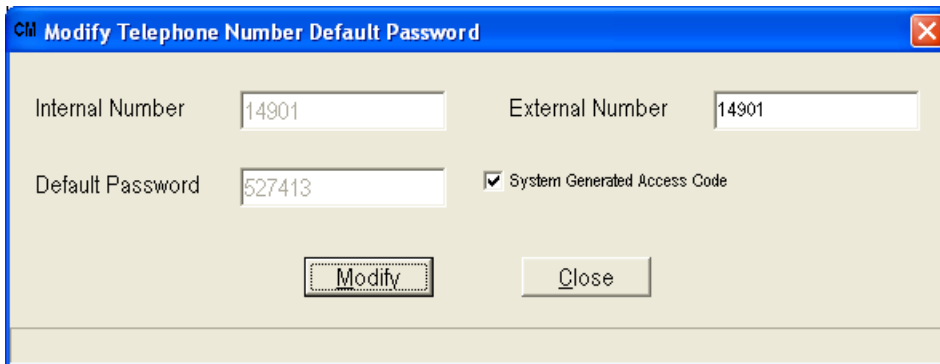
### 4.1. Assign Meet-me Conference VDNs

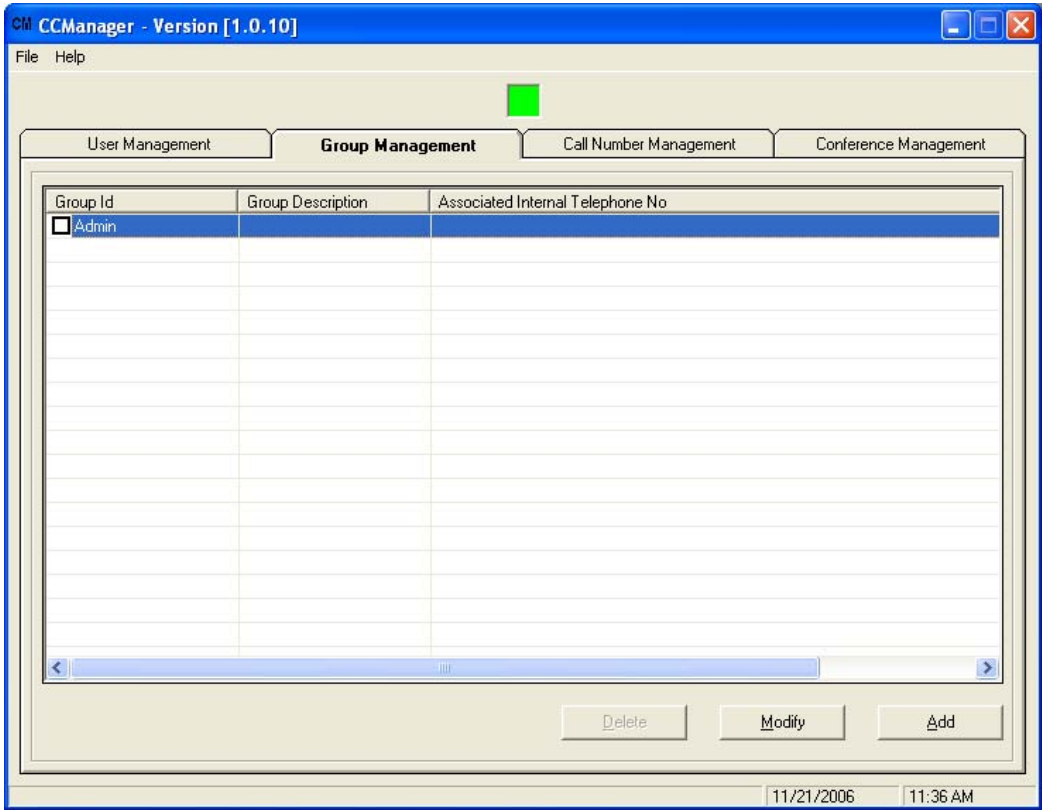
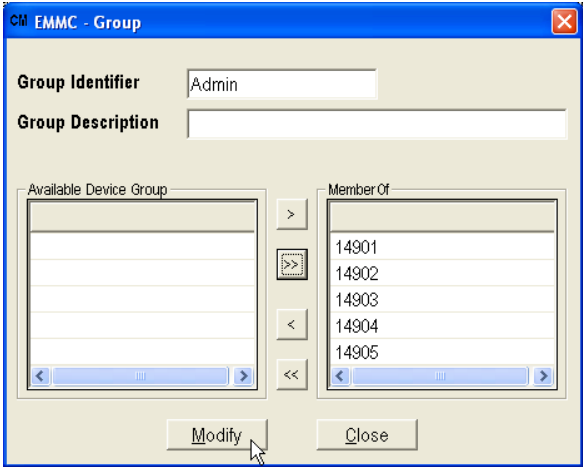
The Call Conference Manager (CCManager) application is used to assign the Meet-me Conference VDNs created in **Section 3.4** to be managed by Enhanced Meet Me Conference.

Step	Description
1.	<p>On the Enhanced Meet Me Conference server, click <b>Start</b>→<b>All Programs</b>→<b>EMMC</b>→<b>CCManager</b> to start the CCManager application. Enter the password for the administrator account to log in and click <b>Ok</b>.</p> 



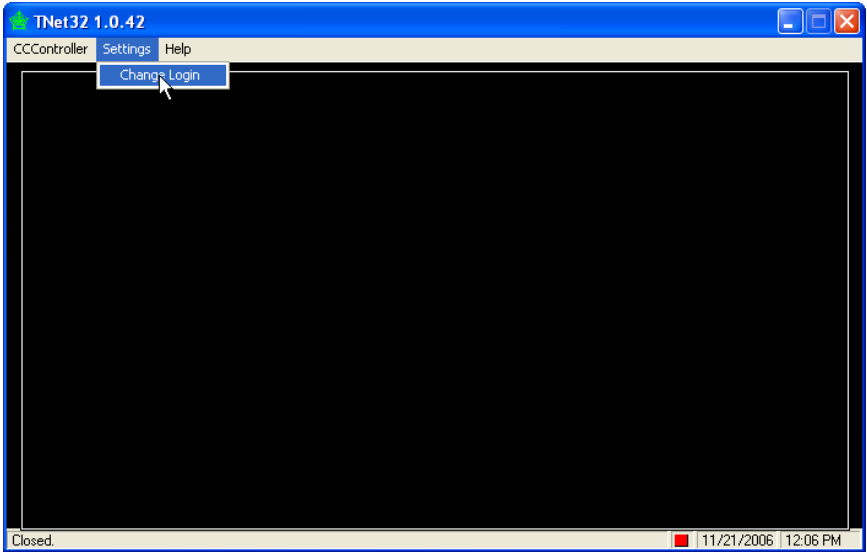
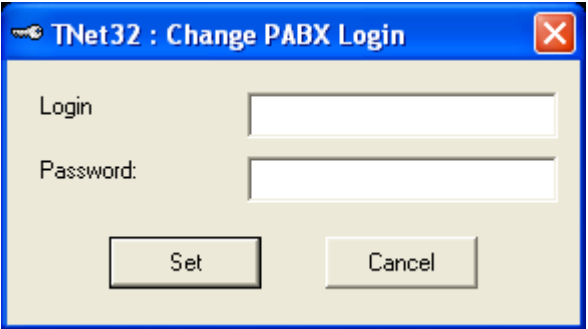
Step	Description
2.	<p>To assign the Meet-me Conference VDNs, select <b>Call Number Management</b> tab and click <b>Add</b>.</p> 
3.	<p>In the <b>Add New Bridge Number</b> window, enter a Meet-me Conference VDN created in <b>Section 3.4</b> for <b>Internal Conference Number</b>. Click <b>Add</b>. Repeat for the remaining four Meet-me Conference VDNs. Click <b>Close</b> to proceed.</p> 

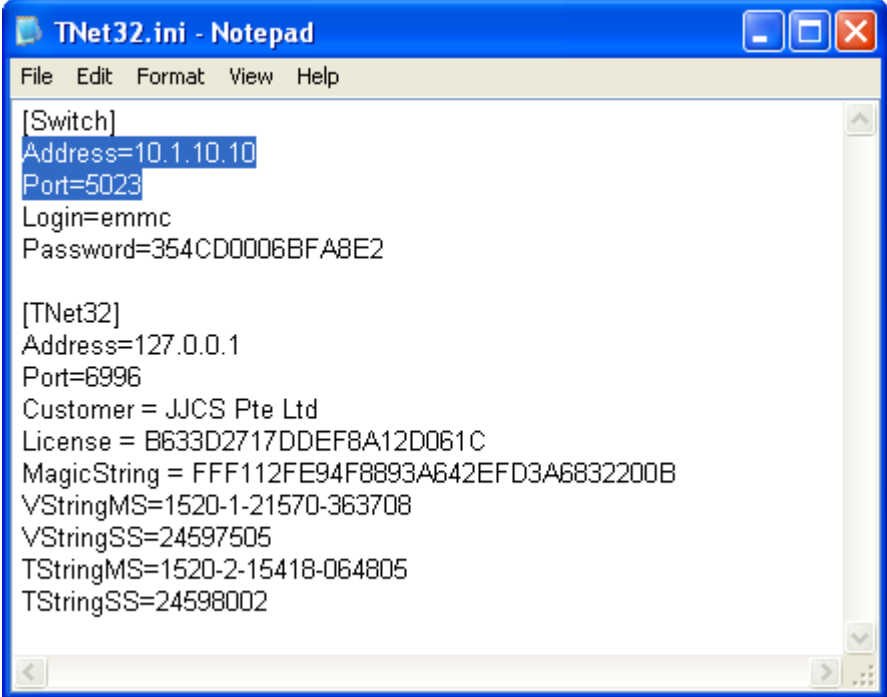
Step	Description
4.	<p>In the <b>Call Number Management</b> tab, select the first VDN created in <b>Step 3</b> and click <b>Modify</b>.</p> 
5.	<p>Check <b>System Generated Access Code</b> to allow the system to randomly assign access codes for each scheduled conference. For <b>External Number</b>, enter the number to dial to reach the Meet-me Conference VDN. This can be a DID number for external parties to call into the conference, which the system will use to notify participants. In this configuration, testing is done with internal callers only. As such, the same Meet-me VDN extension is used. Click <b>Modify</b>. Repeat for the remaining four Meet-me Conference VDNs. Click <b>Close</b> to proceed.</p> 

Step	Description
6.	<p>In the <b>Group Management</b> tab, select the <b>Admin Group Id</b> and click <b>Modify</b>.</p> 
7.	<p>Click on the &gt;&gt; button to add all Meet-me Conference VDNs to the <b>Admin</b> group. Click <b>Modify</b> to proceed. This will allow the default Administrator login account to manage all assigned Meet-me Conference VDNs. Click <b>Close</b> to exit.</p> 

## 4.2. Configure Access to Avaya Communication Manager

The TNet32 PABX Interface application is responsible for the modification of the Meet-me Conference VDN Access Code. Prior to the start of a scheduled conference, the TNet32 PABX Interface application will set the access code to the one randomly generated by the system.

Step	Description
1.	<p>On the Enhanced Meet Me Conference server, click <b>Start</b>→<b>All Programs</b>→<b>EMMC</b>→<b>TNet32</b> to start the TNet32 PABX Interface application. Click <b>Settings</b>→<b>Change Login</b>.</p> 
2.	<p>Enter the login and password created in <b>Section 3.2</b> so that TNet32 PABX Interface application can access Avaya Communication Manager SAT. Click <b>Set</b> to proceed.</p> 

Step	Description
3.	<p>To specify which Avaya Communication Manager system to connect to, edit the file <b>TNet32.ini</b> located in the directory <b>C:\Program Files\EMMC</b> using Notepad. Enter the IP address of the Media Server for <b>Address</b> and the port number for <b>Port</b>. In this configuration, the IP address of the Avaya S8500B Media Server is 10.1.10.10 and the port number is 5023. Select <b>File</b>→<b>Save</b> to save the changes.</p>  <pre> [Switch] Address=10.1.10.10 Port=5023 Login=emmc Password=354CD0006BFA8E2  [TNet32] Address=127.0.0.1 Port=6996 Customer = JJCS Pte Ltd License = B633D2717DDEF8A12D061C MagicString = FFF112FE94F8893A642EFD3A6832200B VStringMS=1520-1-21570-363708 VStringSS=24597505 TStringMS=1520-2-15418-064805 TStringSS=24598002 </pre>

## 5. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing.

The feature testing evaluated the ability of the Jebson & Jessen Communications Enhanced Meet Me Conference to correctly schedule Meet-me conferences, modify the Meet-me Conference VDN Access Codes and notify participants with the correct access codes prior to the start of the conference.

The serviceability testing introduced failure scenarios to see if Jebson & Jessen Communications Enhanced Meet Me Conference is able to resume service after failure recovery.

### 5.1. General Test Approach

The general approach was to use the Call Conference Booking Client (CBooking) application to schedule Meet-me conferences of up to six participants with different durations.

For feature testing, conferences of various numbers of participants and durations were scheduled. Notifications sent to the email addresses and Avaya IP Telephones of various participants were verified for accuracy. At the scheduled time of the conferences, the access codes received in the notifications were used to dial into the conferences to verify that the conferences were set up correctly.

For serviceability testing, reboots were applied to the Jebson & Jessen Communications Enhanced Meet Me Conference server and the Avaya Media Server to simulate system unavailability.

### 5.2. Test Results

All test cases passed successfully. Jebson & Jessen Communications Enhanced Meet Me Conference successfully interoperates with Avaya Communication Manager.

## 6. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Avaya Communication Manager and Jebson & Jessen Communications Enhanced Meet Me Conference.

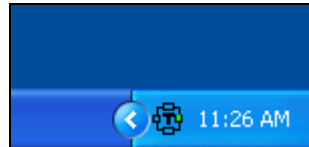
### 6.1. Verify Avaya Communication Manager

Verify that Jebson & Jessen Communications Enhanced Meet Me Conference is able to establish connection to the SAT by using the **status logins** command.

status logins						
USER LOGIN INFORMATION						
Login	Type	Location	Aux	Active Command	ID	
*dadmin	SYS-PORT	SSH	135.27.8.190	stat logins	1	
emmc	SYS-PORT	TELNET	10.1.10.151		3	

## 6.2. Verify Jebson & Jessen Communications Enhanced Meet Me Conference

Verify that the TNet32 PABX Interface application is able to establish a successful connection to Avaya Communication Manager. This is shown by the rotating icon in the Taskbar notification area (System Tray).



## 7. Support

For technical support on Jebson & Jessen Communications Enhanced Meet Me Conference, contact Jebson & Jessen Communications Support Team at:

- Phone: +65 6265-0040
- Email: [info\\_communications@jjsea.com](mailto:info_communications@jjsea.com)

## 8. Conclusion

These Application Notes describe the procedures for configuring Jebson & Jessen Communications Enhanced Meet Me Conference 2.0 to interoperate with Avaya Communication Manager 3.1.2. In the configuration described in these Application Notes, Jebson & Jessen Communications Enhanced Meet Me Conference was used to schedule Meet-me conferences of up to six participants with different durations. The notifications containing the Meet-me conference access codes were also verified for accuracy. During compliance testing, all test cases were completed successfully.

## 9. Additional References

The following documents can be found at <http://support.avaya.com/>:

- [1] Feature Description and Implementation for Avaya Communication Manager, 555-245-205, Issue 4, February 2006
- [2] Administrator Guide for Avaya Communication Manager, 03-300509, Issue 2, February 2006

Product information for Jebson & Jessen Communications Enhanced Meet Me Conference may be found at <http://www.comms.jjsea.com/>. The following documents are available on request:

- [3] Jebson & Jessen Communications Enhanced Meet-Me Conference User Guide, Version 1.0.0

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