Avaya Solution & Interoperability Test Lab

Configuring Connectivity between Avaya Communication Manager, the Avaya Meeting Exchange S6200 Conferencing Server and the Cantata Technology Integrated Media Gateway 1010 Utilizing CAS and SIP - Issue 1.0

Abstract

These Application Notes present the procedures for configuring connectivity between Avaya Communication Manager, the Avaya Meeting Exchange S6200 Conferencing Server (Avaya Meeting Exchange) and the Cantata Technology Integrated Media Gateway 1010 (IMG). The IMG provided T1 CAS to SIP gateway functionality between Avaya Communication Manager and Avaya Meeting Exchange. This configuration enables telephones registered to either Avaya Communication Manager, or Avaya SIP Enablement Services access to a rich set of audio conferencing options provided by Avaya Meeting Exchange via the IMG.

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

1. Introduction

These Application Notes present the procedures for configuring connectivity between Avaya Communication Manager, the Avaya Meeting Exchange S6200 Conferencing Server (Avaya Meeting Exchange) and the Cantata Technology Integrated Media Gateway 1010 (IMG). The IMG provided Channel Associated Signaling (CAS) connectivity to Avaya Communication Manager, as well as SIP connectivity to Avaya Meeting Exchange. This configuration enables telephones registered to either Avaya Communication Manager, or Avaya SIP Enablement Services access to a rich set of audio conferencing options provided by Avaya Meeting Exchange via the IMG.

Figure 1 illustrates the sample configuration utilized for this compliance tested solution. Avaya Communication Manager provided endpoint aggregation and media gateway functionality. For example, any telephone or trunk type associated with Avaya Communication Manager can interoperate with Avaya Meeting Exchange via the IMG. For this sample configuration, SIP, H.323, Digital and Analog telephones were utilized.

Avaya Meeting Exchange is a SIP-based voice conferencing solution that runs on an S6200 server and provides mid-market enterprise customers with an IP based audio conferencing system. For this sample configuration, Avaya Meeting Exchange was provisioned to accept calls from Avaya Communication Manager via the IMG through call branding that supported both direct and scan call flows. A direct call flow allows access to conferences provisioned on Avaya Meeting Exchange without entering a passcode. Conversely, to enter a conference via a basic call flow requires a passcode. Avaya Meeting Exchange was also administered for outbound calling, which enabled call origination from Avaya Meeting Exchange to participants registered to either Avaya Communication Manager, or Avaya SIP Enablement Services.

The IMG provides network connectivity for voice services, enabling the delivery of VoIP services via SIP into ISDN-PRI, CAS and SS7 networks, as well as IP to IP transcoding for network peering applications. For this sample configuration, the IMG provided SIP connectivity to Avaya Meeting Exchange and T1 CAS connectivity to Avaya Communication Manager.

It should be noted that Avaya Communication Manager supports direct SIP connectivity with Avaya Meeting Exchange. However, the premise of this compliance test effort was to validate the media gateway functionality of the IMG. Therefore, Avaya Communication Manager was configured for T1 CAS connectivity with the IMG, and the IMG was configured for SIP connectivity with Avaya Meeting Exchange. To account for the SIP telephones in this sample configuration, Avaya SIP Enablement Services was utilized as a SIP registration server only.

The end-to-end signaling and media connectivity is as follows:

- Signaling (SIP) and media (RTP) connectivity between Avaya Meeting Exchange and the IMG is depicted by the green dashed line.
- T1 signaling and media (CAS) connectivity between Avaya Communication Manager and the IMG is depicted by the blue dotted line.

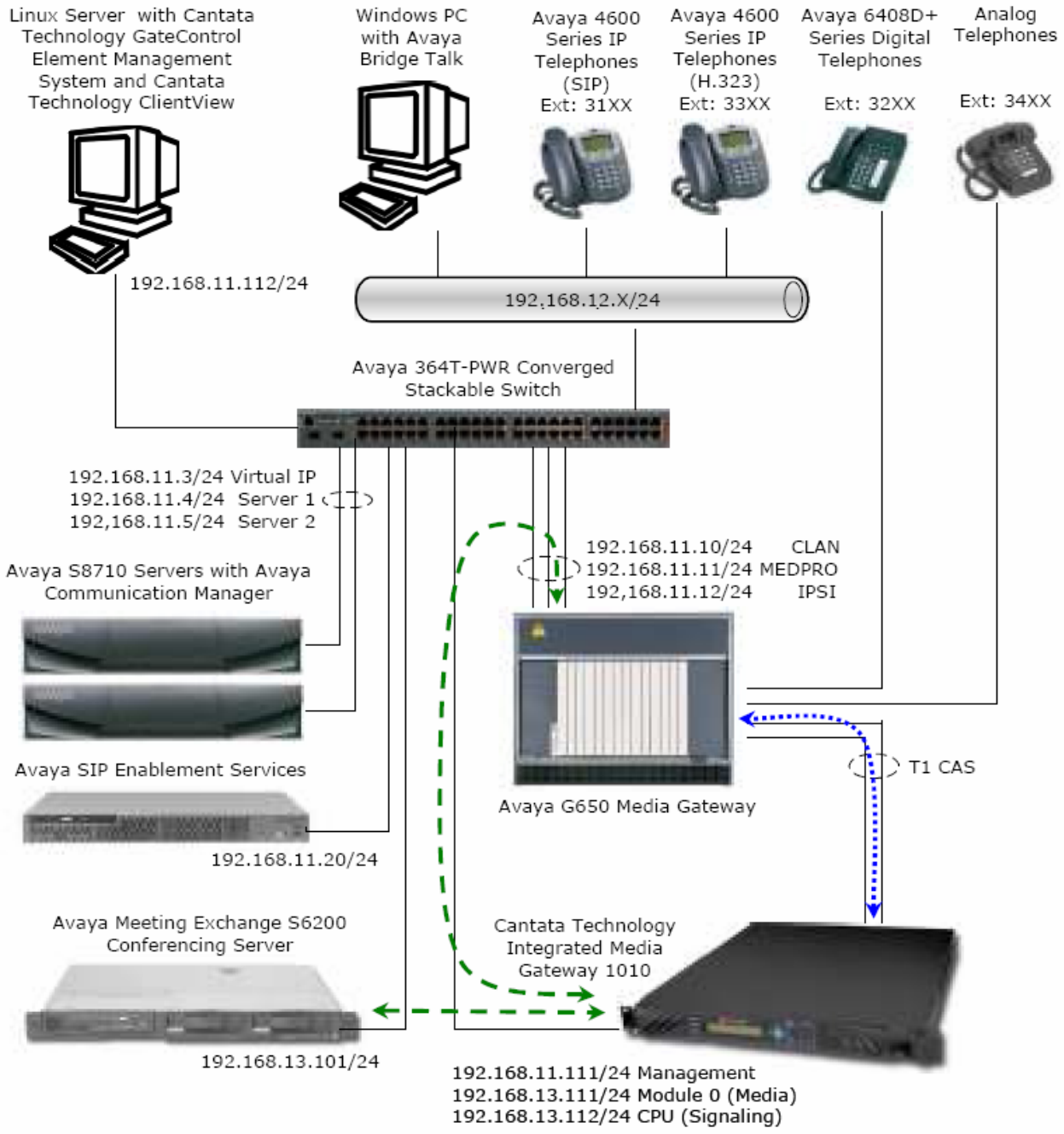


Figure 1: Sample Configuration

2. Equipment and Software Validated

The following equipment and software versions were used for this sample configuration:

Equipment	Software Version
Avaya S8710 Servers	Avaya Communication Manager 4.0 (R014x.00.1.731.2)
Avaya G650 Media Gateway • Avaya TN2312BP (IPSI) • Avaya TN799DP (C-LAN) • Avaya TN2302AP (MEDPRO)	 HW12 FW040 HW01 FW024 HW20 FW117
Avaya Meeting Exchange S6200 Conferencing Server	40102h mx7_1.3.00-84
Avaya Bridge Talk	4.0.03a
Avaya SIP Enablement Services	SES04.0-04.0.033.6
Avaya C364T-PWR Converged Stackable Switch	4.5.14
Avaya 4600 Series IP Telephones	2.8 (H.323)
Avaya 4600 Series IP Telephones	2.2.2 (SIP)
Avaya 6408D+ Digital Telephones	--
Analog Telephones	--
Cantata Technology Integrated Media Gateway 1010	10.3.3
Cantata Technology GateControl Element Management System	10.3.3.174
Cantata Technology ClientView	10.3.3.174

Table 1: Equipment and Software Versions

3. Avaya Communication Manager Configuration

This section displays the configuration for enabling Avaya Communication Manager to interoperate with Avaya Meeting Exchange via the IMG.

Avaya Communication Manager was administered from the System Access Terminal (SAT). In these Application Notes, the SAT screens are shown with a gray shaded background. In some instances, the information from the original screen has been edited or annotated for brevity or clarity in presentation. For example, entries and/or fields in the SAT screens that were either modified or were required for these Application Notes are displayed with boldface type. Refer to [**1**] and [**2**] for additional information regarding the configuration displayed in this section.

3.1. Verify Licensing

The following steps verify licensing on Avaya Communication Manager that is required to support the configuration displayed in these Application Notes. If a required feature is not enabled or there is insufficient capacity, contact an authorized Avaya account representative to make the appropriate changes.

Step	Description
3.1.1	Issue the command "**display system-parameters customer-options**" and proceed to Page 3. Verify that the **ARS/AAR Dialing without FAC** field is enabled. ***Note**: The **ARS/AAR Dialing without FAC** feature allows direct access to Automatic Alternate Routing (AAR) and Automatic Route Selection (ARS) from the dial plan analysis table.*

```
display system-parameters customer-options                    Page   3 of  11

                                OPTIONAL FEATURES

    Abbreviated Dialing Enhanced List? n           Audible Message Waiting? y
        Access Security Gateway (ASG)? n               Authorization Codes? n
        Analog Trunk Incoming Call ID? n Backup Cluster Automatic Takeover? n
 A/D Grp/Sys List Dialing Start at 01? n                        CAS Branch? n
Answer Supervision by Call Classifier? n                          CAS Main? n
                                 ARS? y                 Change COR by FAC? n
                ARS/AAR Partitioning? y  Computer Telephony Adjunct Links? y
          ARS/AAR Dialing without FAC? y   Cvg Of Calls Redirected Off-net? n
          ASAI Link Core Capabilities? n                       DCS (Basic)? n
          ASAI Link Plus Capabilities? n                DCS Call Coverage? n
       Async. Transfer Mode (ATM) PNC? n               DCS with Rerouting? n
  Async. Transfer Mode (ATM) Trunking? n
             ATM WAN Spare Processor? n    Digital Loss Plan Modification? n
                               ATMS? n                             DS1 MSP? n
                   Attendant Vectoring? y            DS1 Echo Cancellation? n



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

3.2. Configure Connectivity

This section describes the steps for configuring CAS trunking between Avaya Communication Manager and the IMG.

Step	Description
3.2.1	Issue the command "**add ds1 <xxxxx>**", where **xxxxx** is the location of the DS1 circuit pack in the Avaya G650 Media Gateway and administer settings as displayed. • Enter a descriptive name for the DS1 circuit pack in the **Name** field. • Set the **Signaling Mode** field to **robbed-bit**. • Configure additional fields with boldface type as displayed and use default settings for remaining fields.

```
add ds1 1a07                                                Page   1 of   2
                                DS1 CIRCUIT PACK

            Location: 01A07                          Name: IMG CAS
            Bit Rate: 1.544                   Line Coding: b8zs
   Line Compensation: 1                      Framing Mode: esf
      Signaling Mode: robbed-bit



Interface Companding: mulaw
           Idle Code: 11111111




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

Step	Description
3.2.2	Issue the command "**add trunk-group <n**>", where **n** is the number of an unallocated trunk group and administer settings as displayed. • Enter a descriptive name for the trunk group in the **Group Name** field. • Set the **Group Type** field to **tie**. • Enter a number in the **TAC** (Trunk Access Code) field that is consistent with the configuration for the dial plan. • Set the **Trunk Type** field to a value that is compatible with the IMG media gateway settings. • Configure additional fields with boldface type as displayed and use default settings for remaining fields.

```
add trunk-group 7                                          Page   1 of  21
                              TRUNK GROUP

Group Number: 7                    Group Type: tie           CDR Reports: y
  Group Name: CAS Trunk to IMG-1010       COR: 1        TN: 1        TAC: 107
   Direction: two-way        Outgoing Display? y Trunk Signaling Type:
 Dial Access? y              Busy Threshold: 255  Night Service:
Queue Length: 0                            Incoming Destination:
   Comm Type: voice                 Auth Code? n
                                  Trunk Flash? n

Trunk Type (in/out): wink/wink
```

Step	Description
3.2.3	Proceed to Page 5 and administer the members for the trunk group as displayed. • Enter **xxxxxyy** in the **Port** field, where **xxxxx** corresponds the location of the DS1 circuit pack in the Avaya G650 Media Gateway and **yy** corresponds to the trunk group member.

```
change trunk-group 7                                          Page   5 of  21
                                  TRUNK GROUP
                                       Administered Members (min/max):   1/24
GROUP MEMBER ASSIGNMENTS                   Total Administered Members:  24

       Port    Code Sfx Name        Night           Mode      Type   Ans Delay
  1: 01A0701  TN464  F
  2: 01A0702  TN464  F
  3: 01A0703  TN464  F
  4: 01A0704  TN464  F
  5: 01A0705  TN464  F
  6: 01A0706  TN464  F
  7: 01A0707  TN464  F
  8: 01A0708  TN464  F
  9: 01A0709  TN464  F
 10: 01A0710  TN464  F
 11: 01A0711  TN464  F
 12: 01A0712  TN464  F
 13: 01A0713  TN464  F
 14: 01A0714  TN464  F
 15: 01A0715  TN464  F
 16: 01A0716  TN464  F
 17: 01A0717  TN464  F
 18: 01A0718  TN464  F
 19: 01A0719  TN464  F
 20: 01A0720  TN464  F
 21: 01A0721  TN464  F
 22: 01A0722  TN464  F
 23: 01A0723  TN464  F
 24: 01A0724  TN464  F
```

3.3. Configure Call Routing

This section describes the steps for configuring call routing from Avaya Communication Manager to Avaya Meeting Exchange via the IMG. For this sample configuration, ARS/AAR dialing without FAC is utilized to route calls to Avaya Meeting Exchange. Note that other forms of call routing may be utilized.

Step	Description
3.3.1	Issue the command "**change dialplan analysis**" and administer settings to route any numbers beginning with a **5** and totaling **3** digits in length via AAR as displayed.

```
change dialplan analysis                                    Page   1 of  12

                           DIAL PLAN ANALYSIS TABLE
                                                          Percent Full:    1

       Dialed   Total  Call    Dialed   Total  Call     Dialed   Total  Call
       String   Length Type    String   Length Type     String   Length Type
        0          1   fac
        1          3   dac
        2          3   aar
        3          5   ext
        4          3   aar
        5          3   aar
        6          3   aar
        7          5   ext
        8          2   fac
        9          2   dac
        *          1   fac
        #          3   fac
```

Step	Description
3.3.2	Issue the command "**change route-pattern <n>**", where **n** is the number of an unallocated route pattern. Administer settings to utilize the trunk group provisioned in **Step 3.2.2** to route calls from Avaya Communication Manager to the IMG. • Enter the number of the trunk group that was provisioned in **Step 3.2.2** in the **Grp No** field. • To disable restrictions for call routing via this route pattern, set the Facility Restriction Level (**FRL**) field to the lowest setting. • Configure additional fields with boldface type as displayed and use default settings for remaining fields.

```
change route-pattern 7                                        Page   1 of   3

                     Pattern Number: 7   Pattern Name: CAS Rt To IMG
                                   SCCAN? n     Secure SIP? n
    Grp FRL NPA Pfx Hop Toll No.  Inserted                              DCS/ IXC
    No          Mrk Lmt List Del  Digits                                QSIG
                             Dgts                                       Intw
 1: 7    0                    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 PARM  No. Numbering LAR
    0 1 2 M 4 W     Request                                   Dgts Format
                                                           Subaddress
 1: y y y y y n  n           rest                                       none
 2: y y y y y n  n           rest                                       none
 3: y y y y y n  n           rest                                       none
 4: y y y y y n  n           rest                                       none
 5: y y y y y n  n           rest                                       none
 6: y y y y y n  n           rest                                       none
```

Step	Description
3.3.3	Issue the command "**change aar analysis x**" and add entries in the table to utilize the route pattern provisioned in **Step 3.3.2**. • Enter a number in the **Dialed String** field that will be utilized by Avaya Meeting Exchange to map to call branding for a direct call flow (see **Step 4.3.2**). • Enter the number of the route pattern provisioned in **Step 3.3.2** in the **Route Pattern** field. • Configure additional fields with boldface type as displayed and use default settings for remaining fields. • Repeat these steps to add an entry that will be utilized by Avaya Meeting Exchange to map to call branding for a scan call flow (see **Step 4.3.3**).

```
change aar analysis 5                                        Page   1 of   2

                            AAR DIGIT ANALYSIS TABLE
                                                          Percent Full:    1

          Dialed           Total      Route    Call   Node  ANI
          String          Min  Max  Pattern   Type   Num   Reqd
    502                   3    3     7        aar           n
    501                   3    3     7        aar           n
```

4. Avaya Meeting Exchange Configuration

This section displays the configuration for enabling Avaya Meeting Exchange to interoperate with Avaya Communication Manager via the IMG. Call routing, call branding and SIP connectivity are administered on Avaya Meeting Exchange via a Command Line Interface (CLI) accessed via a telnet connection. Conference related attributes are administered and maintained via the Avaya Bridge Talk application. Refer to [**3**], [**4**] and [**5**] for additional information regarding the configuration displayed in this section.

4.1. Configure Connectivity

This section describes the steps for configuring SIP connectivity between Avaya Meeting Exchange and other SIP User Agents (UA). The provisioning depicted in this section was administered via the CLI.

Step	Description
4.1.1	Administer settings that enable SIP connectivity between Avaya Meeting Exchange and the IMG by editing the **system.cfg** file as follows: • From the **/usr/ipcb/config** directory, edit the **system.cfg** file with a text editor. • Enter the IP address of Avaya Meeting Exchange (as defined in the **/etc/hosts** file) for the **IPAddress** variable. • Enter a SIP URI for Avaya Meeting Exchange that conforms to SIP standards for the **MyListener** variable. This entry is used to populate the "From" header field in SIP INVITE messages from Avaya Meeting Exchange. To enable SIP connectivity on port 5060, this entry must contain **5060** and **transport=tcp**. The user field, **S6200**, must conform to SIP standards and is selected to uniquely identify this server. For example, **S6200** will be inserted in the "From" header field of SIP INVITE messages from Avaya Meeting Exchange and will display on a participant's endpoint when Dial-Out procedures from Avaya Meeting Exchange are invoked. This allows end-users to identify a call from Avaya Meeting Exchange. • Enter a SIP URI for Avaya Meeting Exchange that conforms to SIP standards for the **respContact** variable. This entry is used to provide the IMG a Contact address to use for acknowledging SIP messages from Avaya Meeting Exchange. • Enter a value in seconds for the **sessionRefreshTimerValue** and **minSETimerValue** variables. These entries correspond to the Min-SE timer in SIP INVITE messages from Avaya Meeting Exchange.

```
# ip address of the server
IPAddress=192.168.13.101

# request we will be listening to
MyListener=sip:S6200@192.168.13.101:5060;transport=tcp

# if this setting is populated will Overwrite the contact field in responses
respContact=<sip:S6200@192.168.13.101:5060;transport=tcp>

# diff serv this value will appear on the TOS field of the IP packet
DiffServTOSValue=0
# vlan value
EthernetVlanValue=0

# initipcb process keep-alive time (seconds)
processKeepAlivePollTime=11

# softms time interval (microseconds)
softmsTimeInterval=20000

# bridgeTranslator time interval (seconds)
bridgetranslatorTimeInterval=6

sessionRefreshTimerValue=86400
minSETimerValue=86400
```

4.2. Configure Call Routing

The following steps show procedures to enable call routing for Avaya Meeting Exchange, where call routing is defined as follows:

- For outbound calls from Avaya Meeting Exchange, telephone number to URI translations are utilized. These translations associate a telephone number pattern with a corresponding SIP URI, thus allowing call origination from Avaya Meeting Exchange.
- For inbound calls to Avaya Meeting Exchange, URI to telephone number translations are utilized. These translations associate calls to Avaya Meeting Exchange with corresponding call branding, based on incoming SIP URIs.

The provisioning depicted in this section was administered via the CLI.

Step	Description
4.2.1	Administer settings to enable outbound calling from Avaya Meeting Exchange to Avaya Communication Manager via the IMG by adding telephone number to URI translations to the **telnumToUri.tab** file as follows: • From the **/usr/ipcb/config** directory, edit the **telnumToUri.tab** file with a text editor. • Add rules, separated by either tabs or single spaces, as a line in the file to route outbound calls from Avaya Meeting Exchange to the IMG. Metacharacters such as * (refers to a character string) or ? (refers to a single character) may be utilized. o The rule entered under the **TelnumPattern** column matches any five digit pattern with a leading "3". o The rule entered under the **TelnumConversion** column routes the call to the IP address of the CPU on the IMG via SIP/TCP. To enable SIP connectivity utilizing TCP, the rule must syntactically conform to SIP standards regarding URI and contain **5060** and **transport=tcp**. Avaya Meeting Exchange will replace **$0** with the dialed number in outgoing SIP INVITE messages. For example, if *31001* is dialed, Avaya Meeting Exchange will format a SIP INVITE message with the following line in the SIP URI and "To" header field: ▪ sip:*31001*@192.168.13.112:5060;transport=tcp ***Note**: Alternatively, call routing to Avaya Communication Manager via the IMG could have been enabled with the following entry:* **** sip:$0@192.168.13.112:5060;transport=tcp**, where ***** is a wildcard and routes any dialed digits to the IMG.*

```
# telnum to uri conversion table
#
# This file is for dialing out from the Bridge to an external party. The
# digits that are dialed are converted into the Request URI in the SIP INVITE.
# For example, if the digits dialed were 936543 and one of the patterns was
# "93????" a match would take place. If the conversion for that match was
# $1 then the Request URI for the SIP INVITE would be sip:936543@10.221.11.250
#THE COMMENT COLLUM OR ANY OF THE COLLUMS SHOULD HAVE NO SPACES

TelnumPattern   TelnumConversion                          comment
3????           sip:$0@192.168.13.112:5060;transport=tcp  IMG
```

Step	Description
4.2.2	Administer settings to associate incoming calls to Avaya Meeting Exchange with corresponding call branding by adding URI to telephone number translations to the **UriToTelnum.tab** file. These translations extract a value for the Direct Inward Dial (DID, also known as DDI in Europe). • From the **/usr/ipcb/config** directory, edit the **UriToTelnum.tab** file with a text editor. • Add rules, separated by either tabs or single spaces, as a line in the file to match the pattern of the "To" header field in SIP INVITE messages from the IMG. If the match is successful, the DID is extracted from the "To" header field. Metacharacters such as * or ? may be utilized. o The rules under the **TelnumPattern** and **TelnumConversion** columns work in conjunction. Assume the IMG sends a SIP INVITE message with the following "To" header field. The rule **"*<sip:*@*"** matches the following: ▪ To: <sip:*502*@192.168.13.101>, where **$2** utilizes *502* (the variable mapped to the second *****) as the DID value for the call. • Enable an undefined caller to receive a prompt for operator assistance by adding an entry for a wildcard as the last line in this file. This entry accounts for the condition of an unmatched "To" header field. ***Note**: Entries in this file are read sequentially, therefore, the entry for the wildcard must be the last line in the file. Otherwise, all calls to Avaya Meeting Exchange would match the wildcard and thus receive a prompt for operator assistance.*

	`# request URI to telnum conversion table`
	`#`
	`# This table converts the Request URI in the SIP INVITE request to the`
	`# appropriate value specified when a pattern is matched. For example, if the`
	`# request Uri was "<sip:3333@10.220.10.4>" and one of the patterns was`
	`# "<sip:*@*" a match would take place. If the conversion for that match was`
	`# $1 then 3333 would be passed as the ddi for the call. If the conversion for`
	`# that match were "0000" then 0000 would be passed as their ddi for the call.`
	`#THE COMMENT COLLUM OR ANY OF THE COLLUMS SHOULD HAVE NO SPACES`
	
	`TelnumPattern  TelnumConversion` `comment`
	`"*<sip:*@*"  $2` `IMG1010`
	`*  $0` `wildcard`

4.2.3	Reboot Avaya Meeting Exchange for changes to take effect.
	`[S6200]>` **`init 6`**

4.3. Configure Call Branding

The following steps provide examples of how to provision direct and scan call branding by utilizing the Call Branding Utility (CBUTIL) on Avaya Meeting Exchange. A command line utility, CBUTIL enables administrators to assign a specific annunciator message, line name, company name, system function, reservation group and prompt sets to a maximum of 30,000 DNIS or DID entries. Avaya Meeting Exchange parses these entries in numerically ascending order, with the wildcard character "?" last in the list. For example, 129? follows 1299. The last entry in the table consists entirely of wildcard characters. The number of characters in this entry corresponds to the number of DNIS/DDI digits specified in the Digit Parameters configuration.

Step	Description
4.3.1	Prior to utilizing the CBUTIL utility, set the UNIX shell environment as follows: • If not already logged on, login to the Avaya Meeting Exchange console to access the CLI with the appropriate credentials. • At the command prompt, enter "**tcsh**" to set the UNIX shell environment. • At the command prompt, enter "**cbutil**" to view a list and description of commands associated with the call branding utility.

```
# tcsh
.tcshrc on /dev/pts002

You are connected to the root account.
Your environment has been set to vt220.

This system currently has release 40102h of software installed.

S6200->cbutil
cbutil
Copyright 2004 Avaya, Inc. All rights reserved.

Usage: cbutil <command> [command-specific args...]
 where <command> may be one of:
  add           Add an entry to the Call Branding table
  remove        Remove an entry from the Call Branding table
  update        Update an entry in the Call Branding table
  lookup        Display an entry in the Call Branding table
  count         Display the number of entries in the Call Branding table
  list          List entries in the Call Branding table
  dnissize      Set system configured max dnis length (1-16)
   Note:  This command should only be used when the bridge is not running.
Use "cbutil<command> -help" to get help on a specific command
```

Step	Description
4.3.2	Administer call branding for a direct call flow as follows: • Add an entry to the call branding table to map the DID value obtained from procedures in **Step 4.2.2** to a conference by entering **cbutil add 502 0 301 1 n direct** at the command prompt. The syntax for this command is case insensitive and is defined as follows. cbutil add <dnis> <rg> <msg> <ps> <ucps> <func> [-l <ln> -c <cn>], where, o <dnis> DNIS o <rg> Reservation group o <msg> Annunciator message number o <ps> Prompt set number (0-20) o <ucps> Use conference prompt set (y/n) o <func> One of: DIRECT/SCAN/ENTER/HANGUP/AUTOVL/FLEX o -l <"ln"> Optional line name to associate with caller o -c <"cn"> Optional company name to associate with caller
	S6200-> **cbutil add 502 0 301 1 n direct** cbutil Copyright 2004 Avaya, Inc. All rights reserved.
4.3.3	Repeat **Step 4.3.2** to add an entry to the call branding table for a scan call flow.
	S6200-> **cbutil add 501 0 1 1 n scan** cbutil Copyright 2004 Avaya, Inc. All rights reserved.
4.3.4	At the command prompt, enter "**cbutil list**" to verify the entries provisioned in **Step 4.3.2** and **Step 4.3.3**. ***Note**: The last entry in the call branding table, with a **DNIS** value **???**, was added previously and is a wild card entry. This entry captures any wrong number (e.g., unmatched **DID** values) and places the call into the enter queue for operator assistance.*
	S6200-> **cbutil list** cbutil Copyright 2004 Avaya, Inc. All rights reserved. **DNIS Grp Msg PS CP Function Line Name** Company Name --- --- --- --- -- -------- ---------- ---------- **501 0 1 1 N SCAN** **502 0 301 1 N DIRECT** **??? 0 208 1 N ENTER**

4.4. Administer Conferences

The following steps utilize Avaya Bridge Talk to provision conferences on Avaya Meeting Exchange. Avaya Bridge Talk is an application that runs on a standard Windows based PC and is utilized for provisioning and managing conferencing applications on Avaya Meeting Exchange. Refer to [**5**] for information regarding the PC requirements. If any of the features displayed in the Avaya Bridge Talk screen captures are not present, contact an authorized Avaya sales representative to make the appropriate changes.

Figure 2 illustrates the main window of the Avaya Bridge Talk application. The following is a brief description of the task areas of the window that were utilized for these Application Notes.

1. The Menu Bar, which includes menus for both Avaya Meeting Exchange specific and Windows-based commands.
2. The Main Tool Bar, which includes commands for entering command-line text.
3. The Conference Room, which displays information about features and attributes for individual conferences; and lists participants, moderators and their status.
4. The Conference Navigator, which displays a portion of the conferences currently running on the bridge as well as individual conference attributes or features.

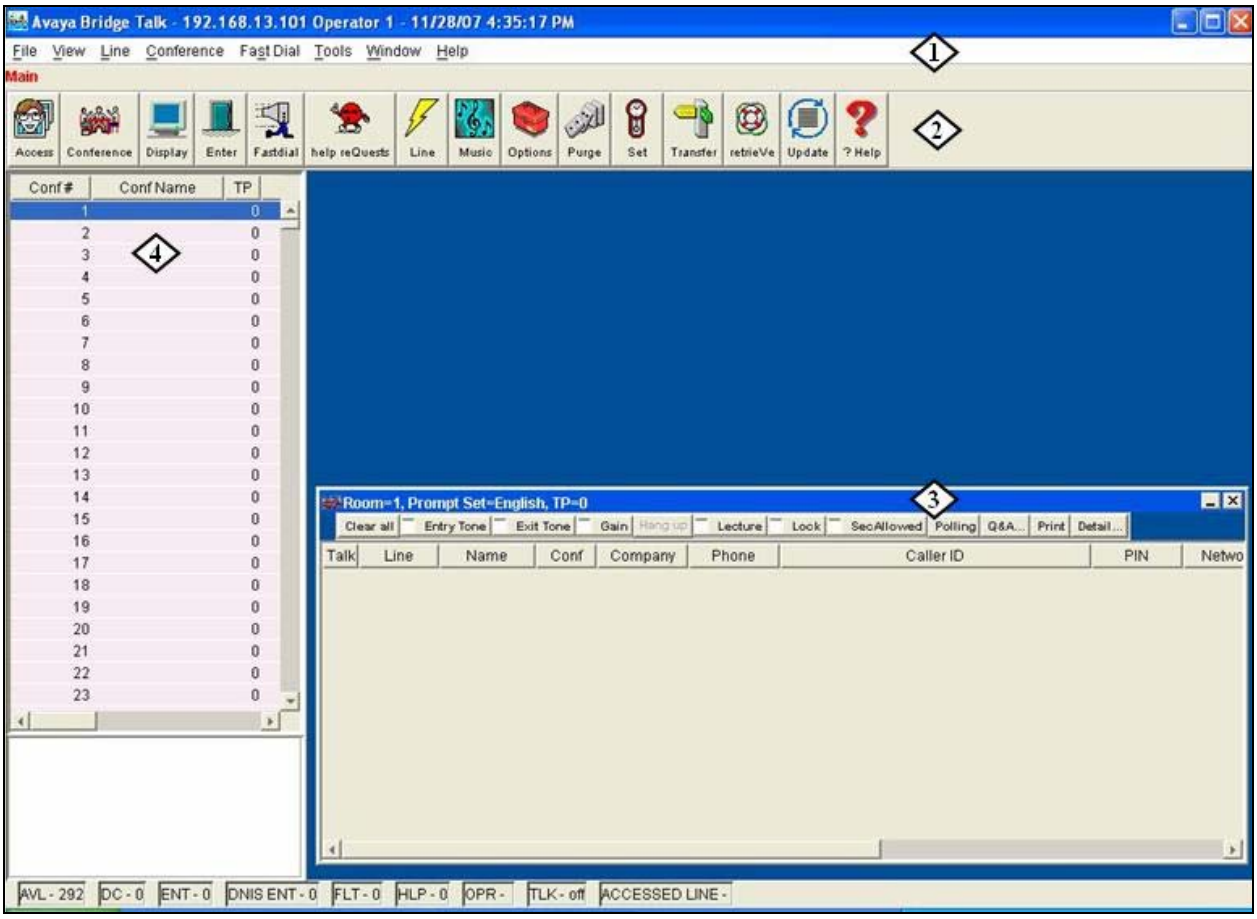
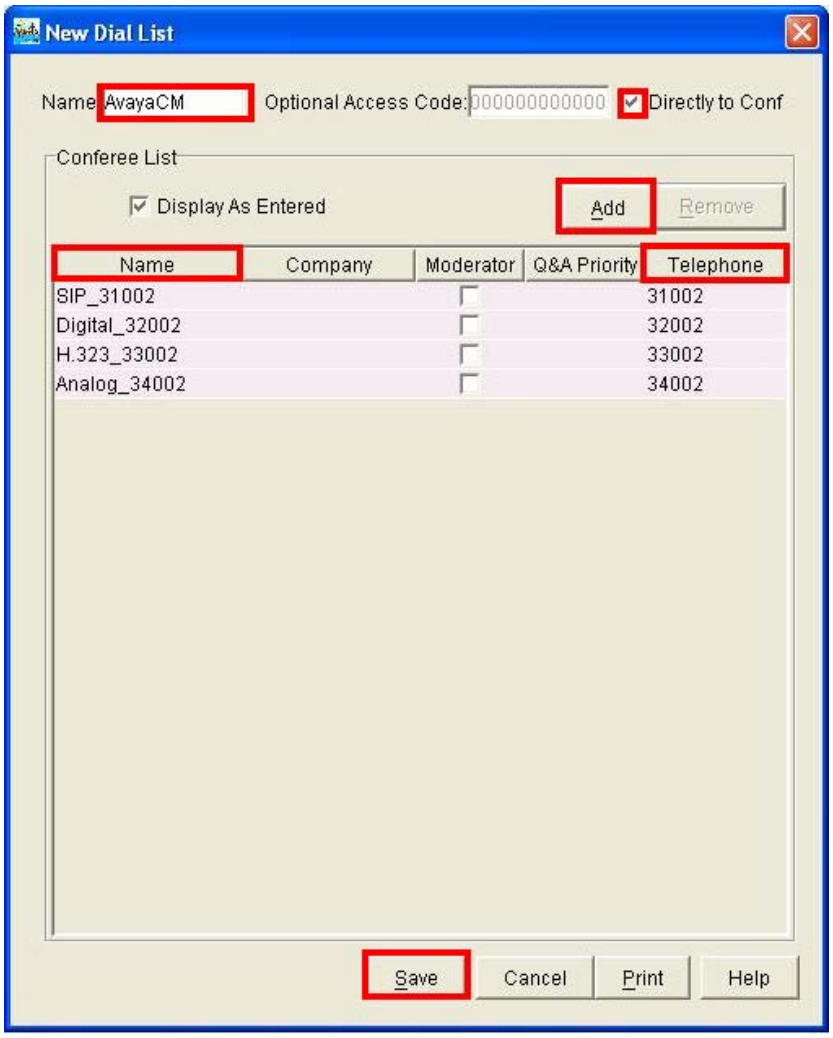
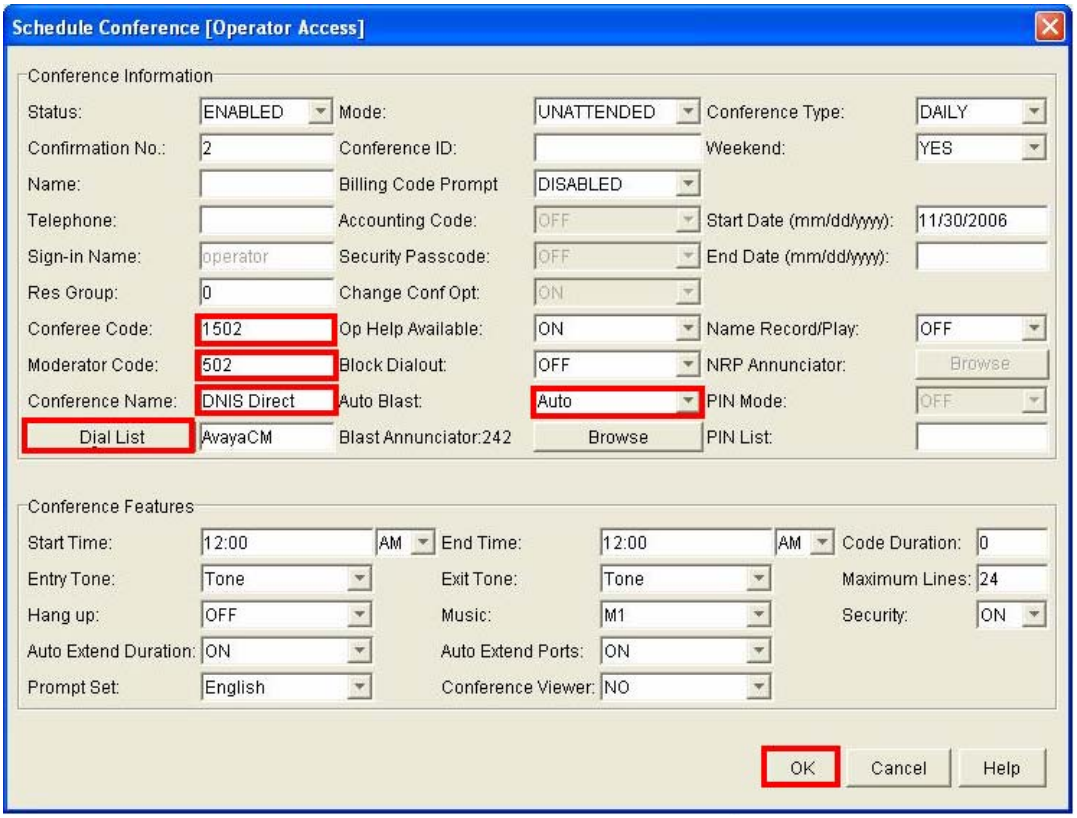


Figure 2: Avaya Bridge Talk Main Window

Step	Description
4.4.1	Create a new dial list for outbound calling from Avaya Meeting Exchange. From the Avaya Bridge Talk Menu Bar, select **Fast Dial ➔ New**. From the **New Dial List** window that is displayed, add participants to the dial list as follows: • Enter a descriptive label for this dial list in the **Name** field. • Add entries to the dial list by clicking on the **Add** button for each participant. o Enter a descriptive label for each participant in the **Name** field. o Enter a number in the **Telephone** field that corresponds to telephones registered to either Avaya Communication Manager or Avaya SIP Enablement Services. • Enable conference participants on the dial list to enter the conference without a passcode by checking the **Directly to Conf** box. • Refer to [**5**] for provisioning the remaining fields in this screen. • Click on the **Save** button on the bottom of the screen. 

Step	Description
4.4.2	Schedule conferences that utilize the call branding for a direct call flow provisioned in **Section 4.3** as follows. From the Menu Bar, click **View ➔ Conference Scheduler**. From the **Conference Scheduler** window that is displayed, click **File ➔ Schedule Conference**. From the **Schedule Conference** window that is displayed, administer settings as follows: • Enter a unique passcode in the **Conferee Code** field to allow access to this conference. • Enter a unique passcode in the **Moderator Code** field to allow access to this conference with moderator/host privileges. ***Note**: Enable direct access (without entering a passcode) to this conference by ensuring the **Moderator Code** has associated call branding for a direct call flow (see **Step 4.3.2**).* • Enter a descriptive label for this conference in the **Conference Name** field. • Administer settings to enable an auto blast dial by setting the **Auto Blast** field to **Auto** and selecting the dial list provisioned in **Step 4.4.1** in the **Dial List** field. o Select a dial list by clicking on the **Dial List** button. o [***Not Shown***] *Select a dial list from the **Create, Select or Edit Dial List** window that is displayed.* • Refer to [**5**] for provisioning of the remaining fields in this screen. • Click on the **OK** button on the bottom of the screen. 

5. Cantata Technology Integrated Media Gateway 1010 Configuration

This section displays the configuration for enabling the IMG to interoperate with Avaya Communication Manager as well as Avaya Meeting Exchange.

The IMG was administered with the Cantata Technology ClientView (ClientView) application which is accessible from the Cantata Technology GateControl Element Management System (GCEMS). Refer to the Cantata website for on-line documentation regarding the IMG, ClientView and GCEMS.

Note that this section displays the provisioning that was utilized for this sample configuration and does not show exhaustive procedures for administering an initial configuration. For example, the screens for adding “new” elements to this sample configuration are not shown. However, the sequence of these procedures is relevant, as the configuration was administered in the order presented. Refer to the on-line help available on the Cantata website regarding procedures/commands to administer an initial configuration.

Figure 3 illustrates the main window of the ClientView application that was utilized to provision the IMG. The following panes appear in the main window:

- The **Configuration Tree**, which is located in the top-left portion of the main window. This pane contains all of the items that can be configured. Right-click an item to access additional configuration items. Creating an entry in the Configuration Tree opens the corresponding Configuration Pane.
- The **Configuration Pane**, which is located in the top-right portion of the main window. This pane shows the properties of the selected object. This pane is used to view and edit the configuration.
    - The column titled **As-Configured**, shows the current configuration for parameters, as defined by the **Property** column. Enter or edit values in the **User-Specified** column.

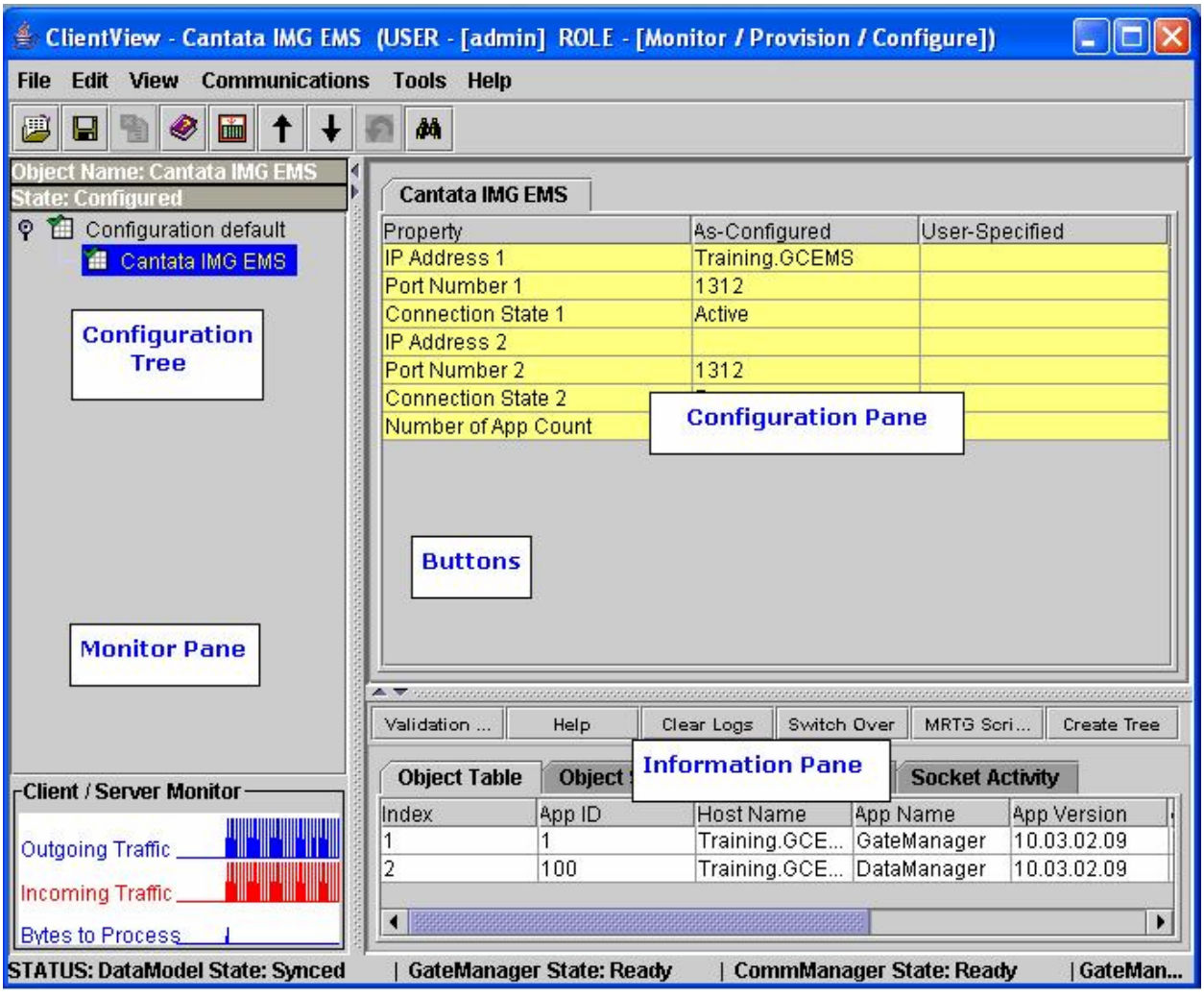
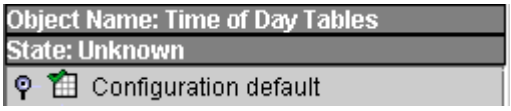
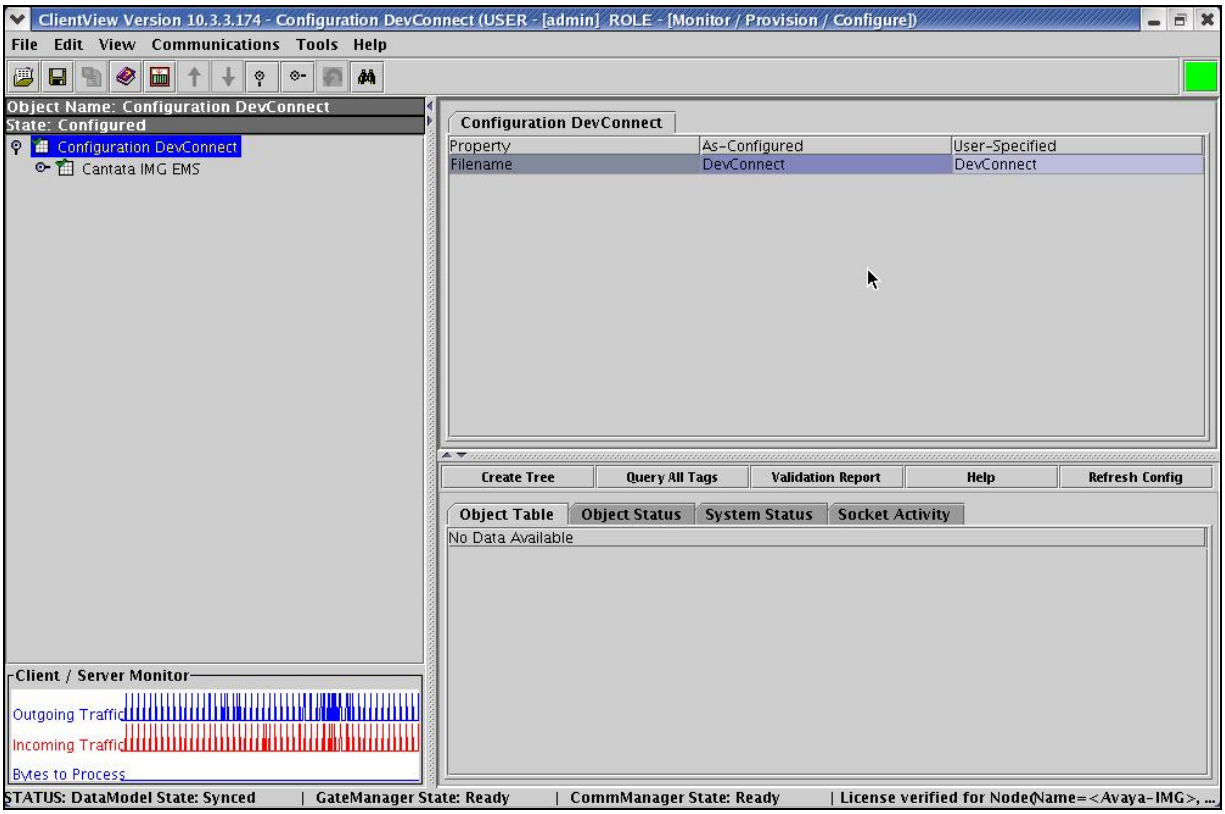
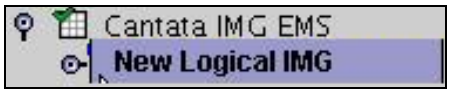
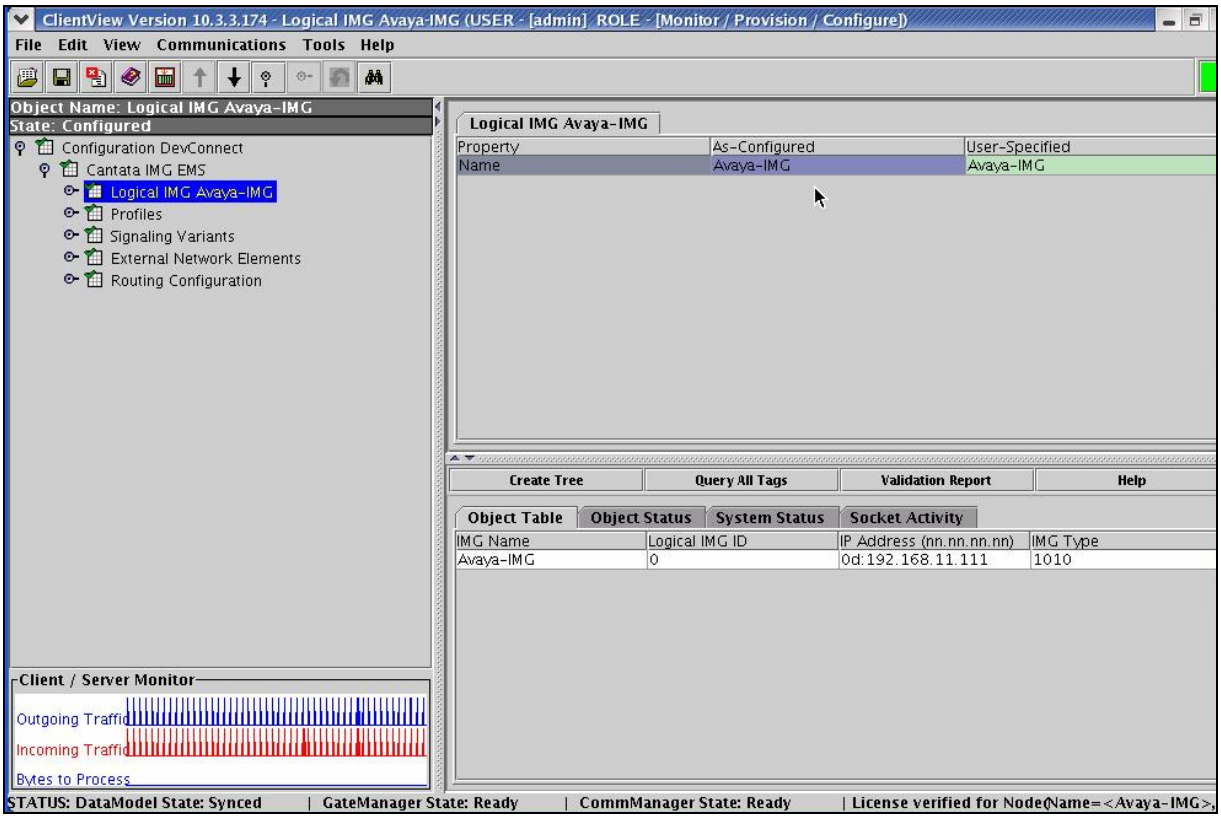
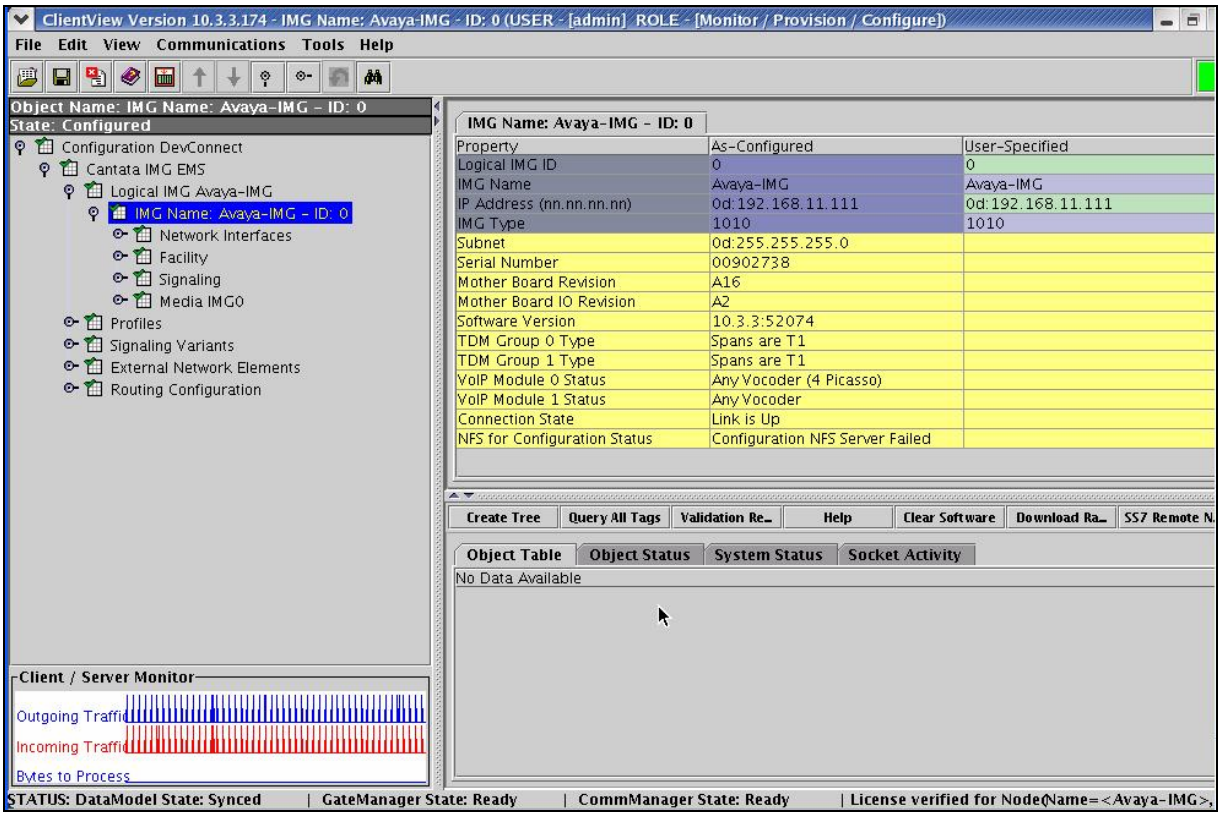
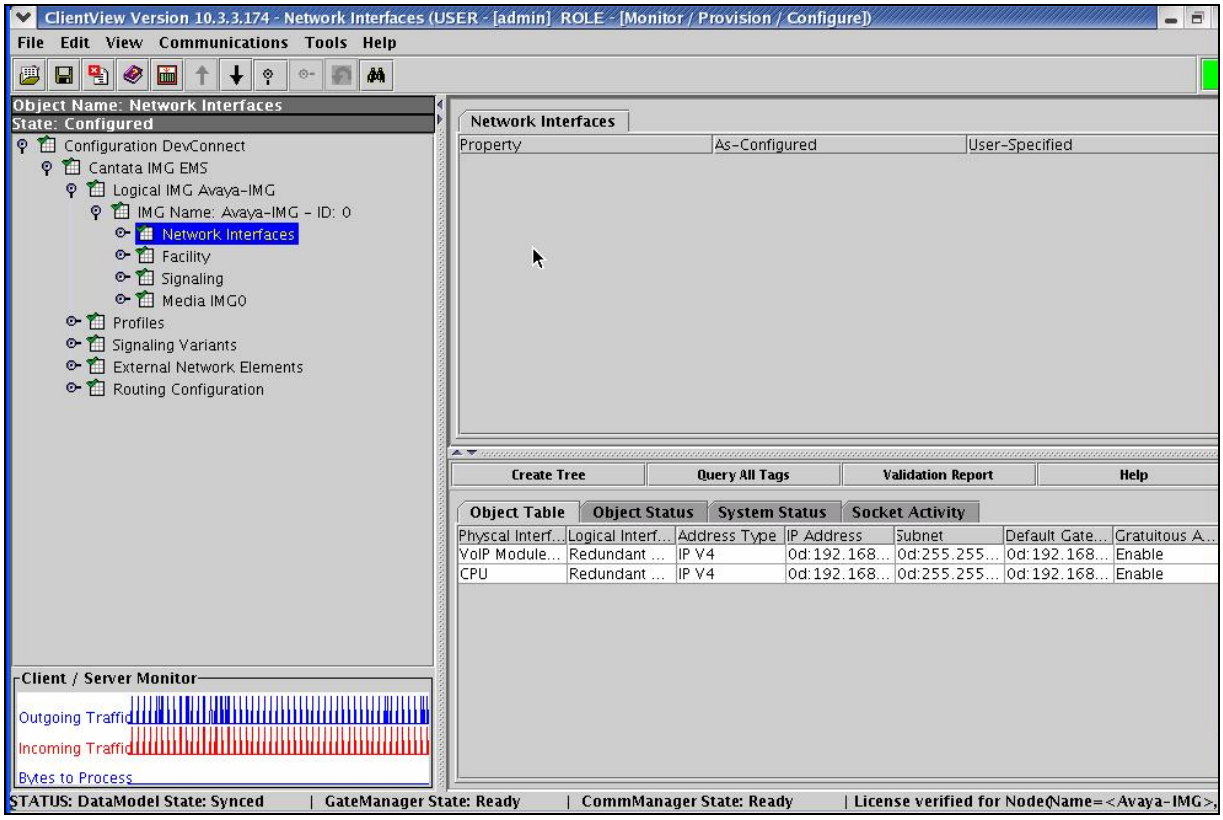


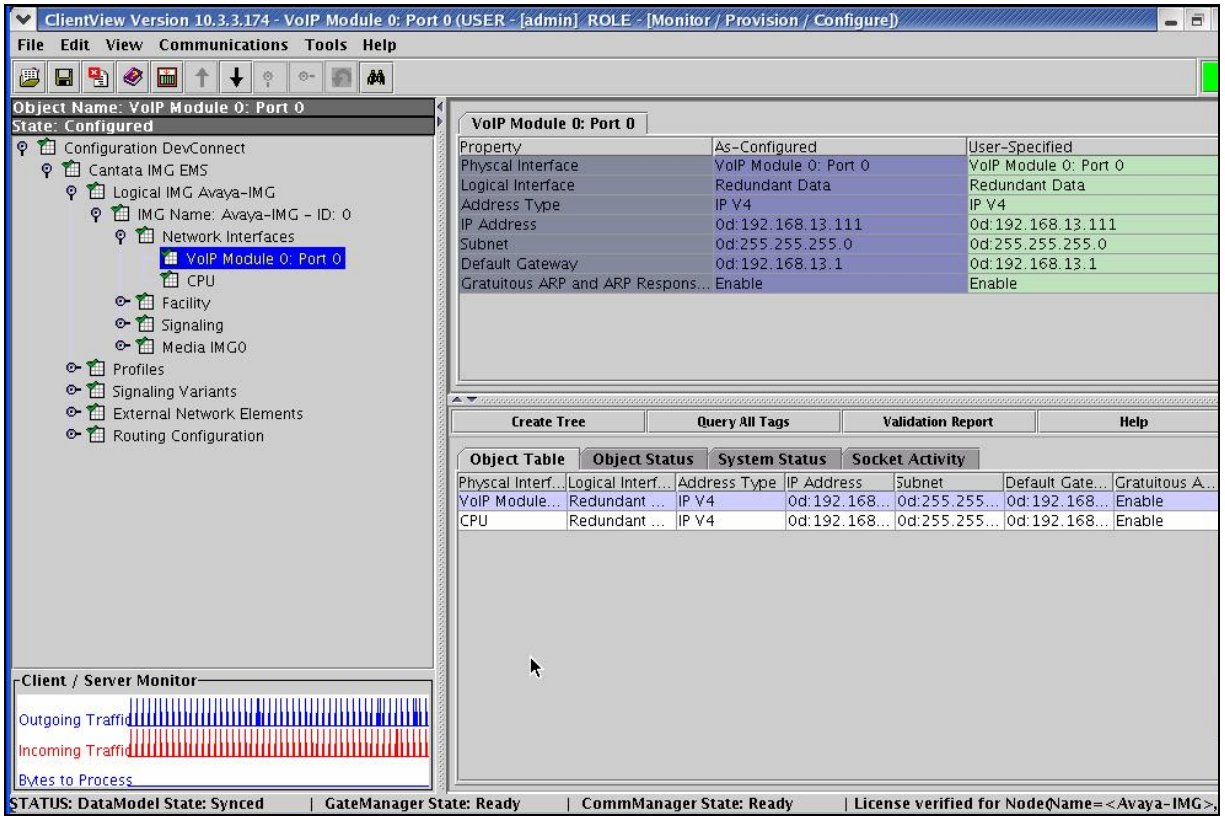
Figure 3: Cantata Technology ClientView Main Window

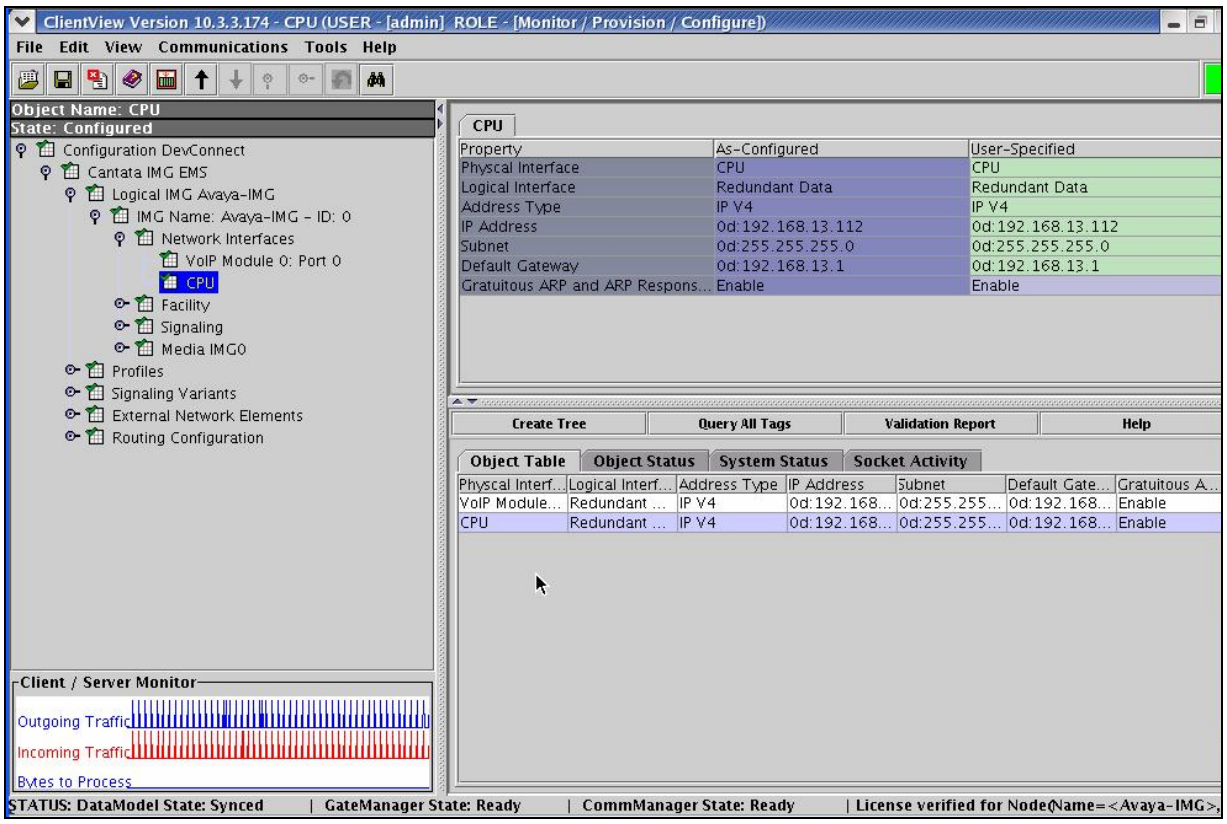
Step	Description
5.1.1	A default configuration file named "default" is created when ClientView connects to GCEMS. To save the configuration file with a new name: • Right-click **Configuration default** in the Configuration Tree and select **Modify**.  In the Configuration Pane: o Enter a descriptive name in the **Filename** field. • To save the changes, right-click **Configuration DevConnect** and select **Commit**. • The resultant provisioning is shown below. 

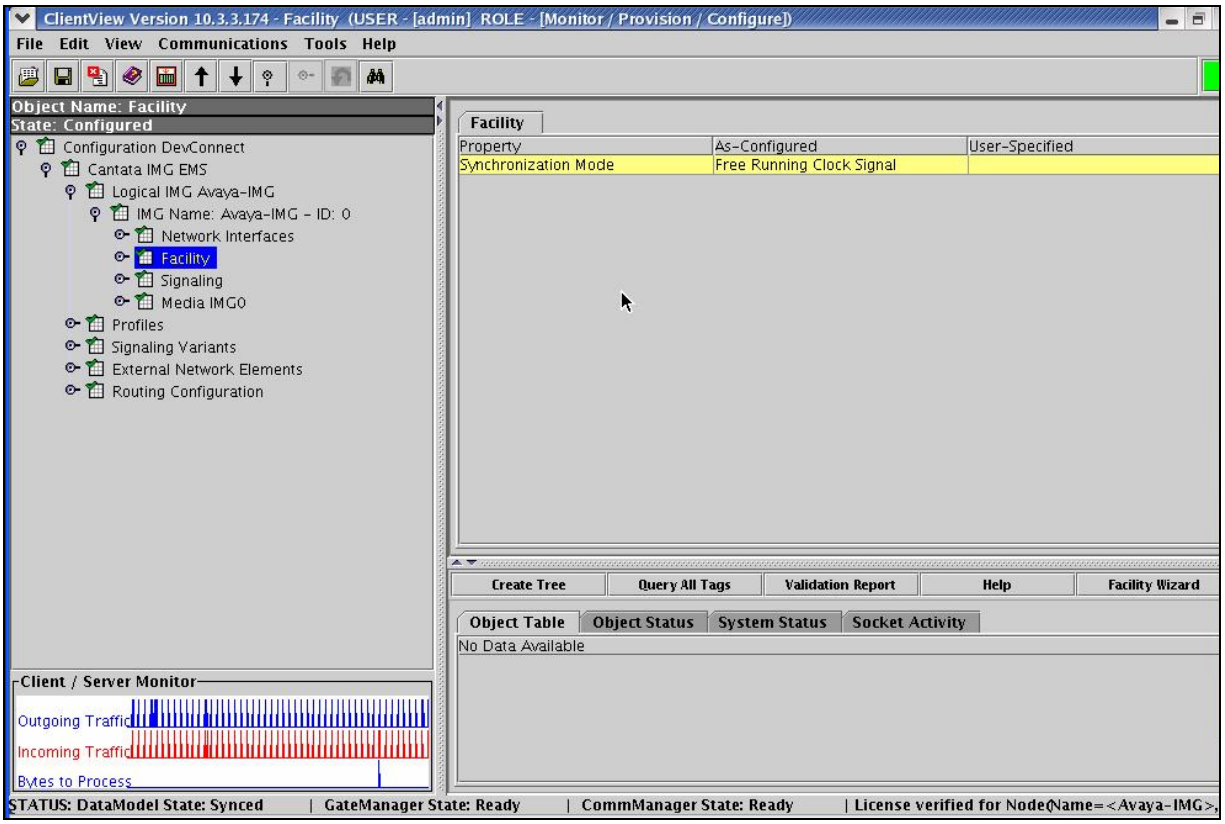
Step	Description
5.1.2	Create a logical IMG as follows: • Right-click **Cantata IMG EMS** in the Configuration Tree and select **New Logical IMG**.  In the Configuration Pane: o Enter a descriptive name for the logical IMG in the **Name** field. • To save the changes, right-click **Logical IMG Avaya-IMG** and select **Commit**. • The resultant provisioning is shown below. 

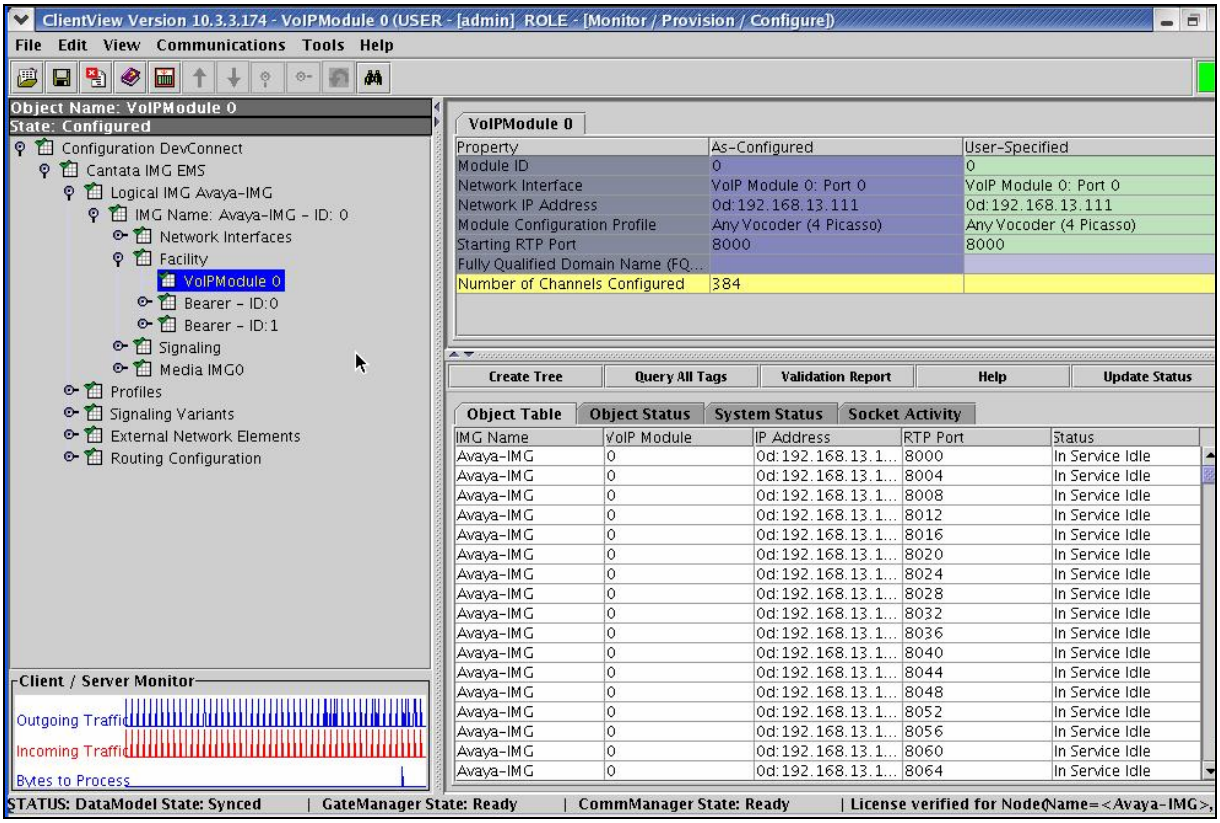
Step	Description
5.1.3	Create a physical IMG as follows: • Right-click the logical IMG in the Configuration Tree and select **New Physical IMG**. In the Configuration Pane: o Enter a descriptive name for the physical IMG in the **IMG Name** field. o Enter the IP address of the physical IMG in the **IP Address** field. This is the same IP address assigned to the CTRL 0 port on the back of the IMG. o Use default settings for remaining fields. • To save the changes, right-click **IMG Name: Avaya-IMG - ID:0** and select **Commit**. • The resultant provisioning is shown below. 

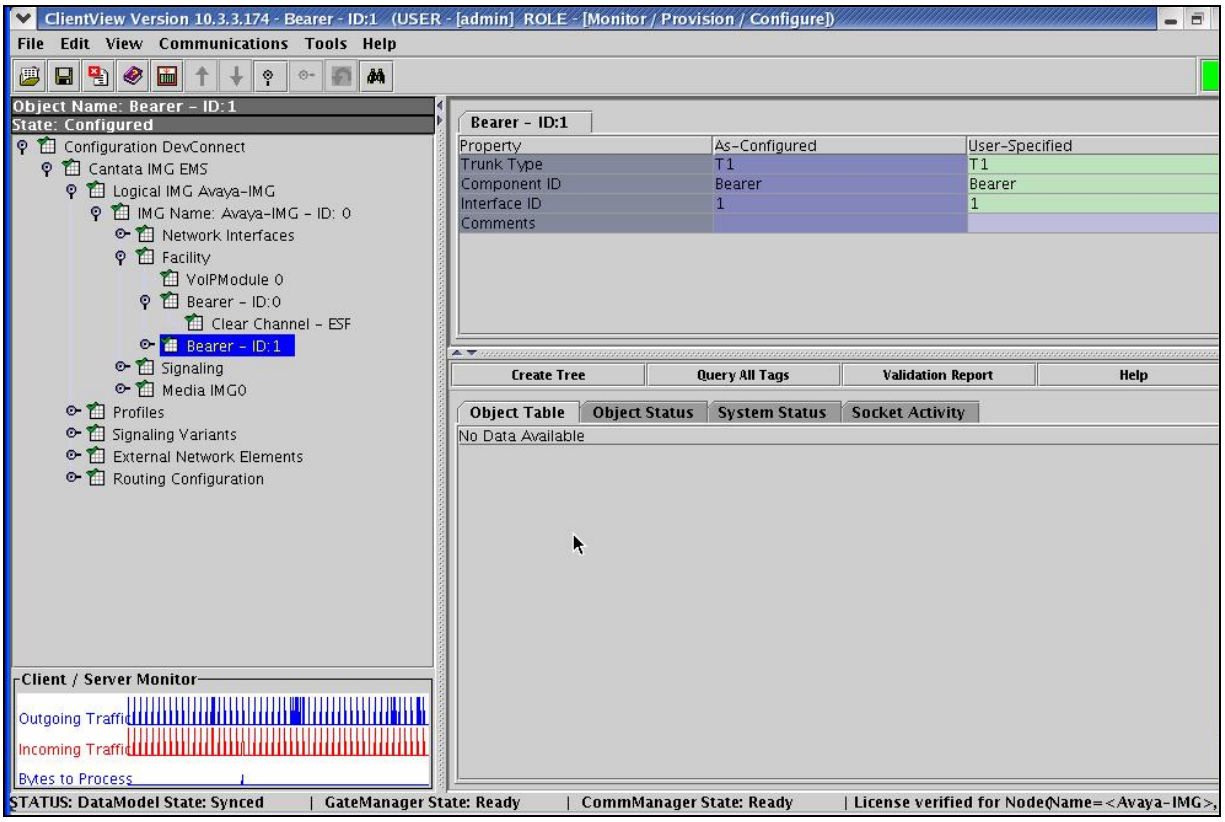
Step	Description
5.1.4	Create an object for Network Interfaces as follows: • Right-click the physical IMG in the Configuration Tree and select **New Network Interfaces**. • To save the changes, right-click **Network Interfaces** and select **Commit**. • The resultant provisioning is shown below. 

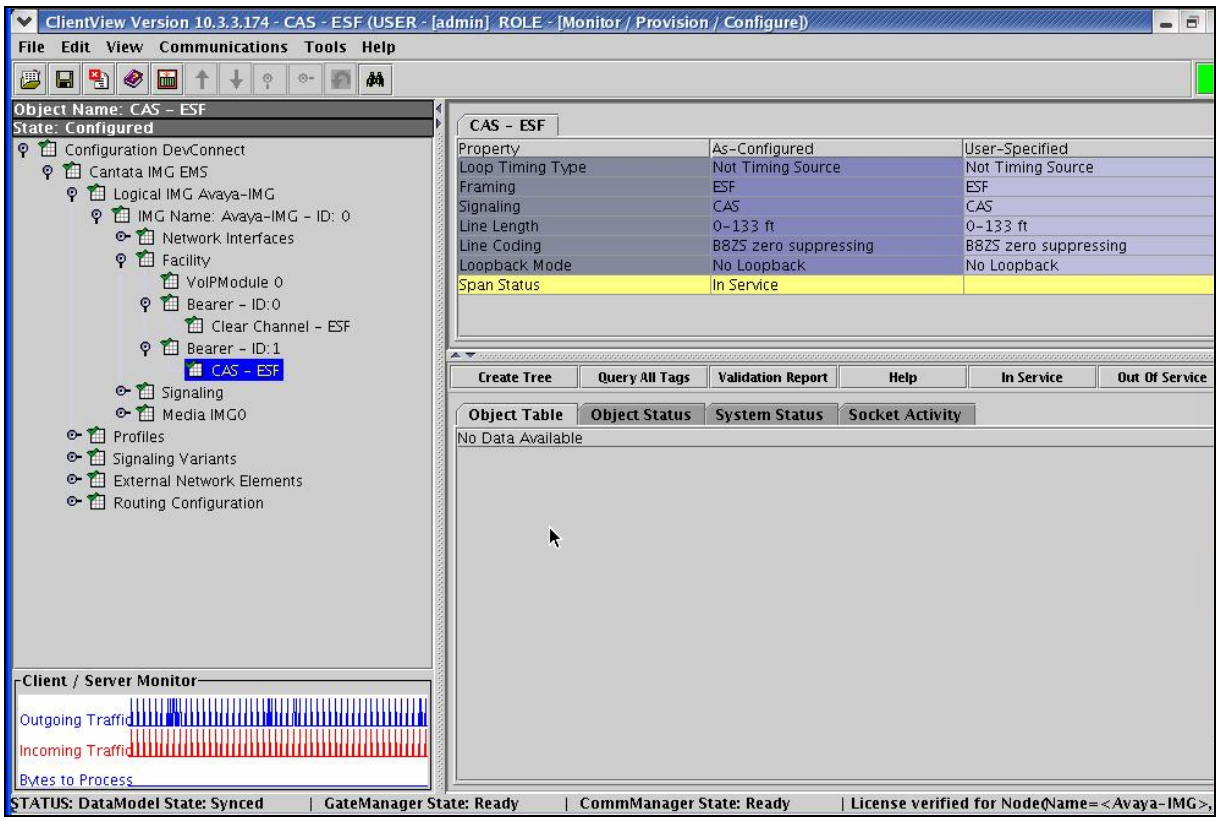
Step	Description
5.1.5	Create a Network Interface corresponding to VoIP Module 0: Port 0 as follows: • Right-click **Network Interfaces** in the Configuration Tree and select **New Network Interface**. In the Configuration Pane: o Select **VoIP Module 0: Port 0** from the drop down list for the **Physical Interface** field. o Administer settings for the module's IP network configuration in the **IP Address**, **Subnet** and **Default Gateway** fields respectively. o Use default settings for remaining fields. • To save the changes, right-click **VoIP Module 0: Port 0** and select **Commit**. • The resultant provisioning is shown below. 

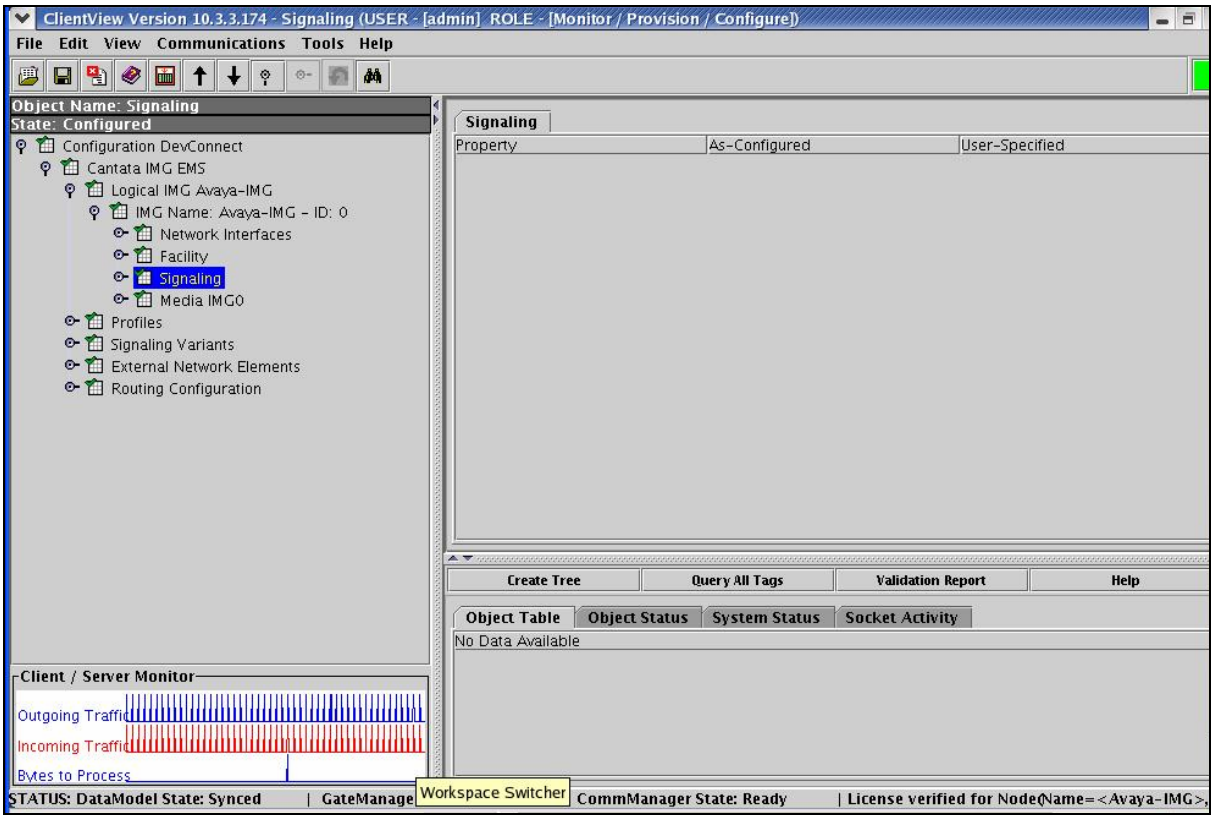
Step	Description
5.1.6	Create a Network Interface corresponding to the CPU as follows: • Right-click **Network Interfaces** in the Configuration Tree and select **New Network Interface**. In the Configuration Pane: o Select **CPU** from the drop down list for the **Physical Interface** field. o Administer settings for the module's IP network configuration in the **IP Address**, **Subnet** and **Default Gateway** fields respectively. o Use default settings for remaining fields. • To save the changes, right-click **CPU** and select **Commit**. • The resultant provisioning is shown below. 

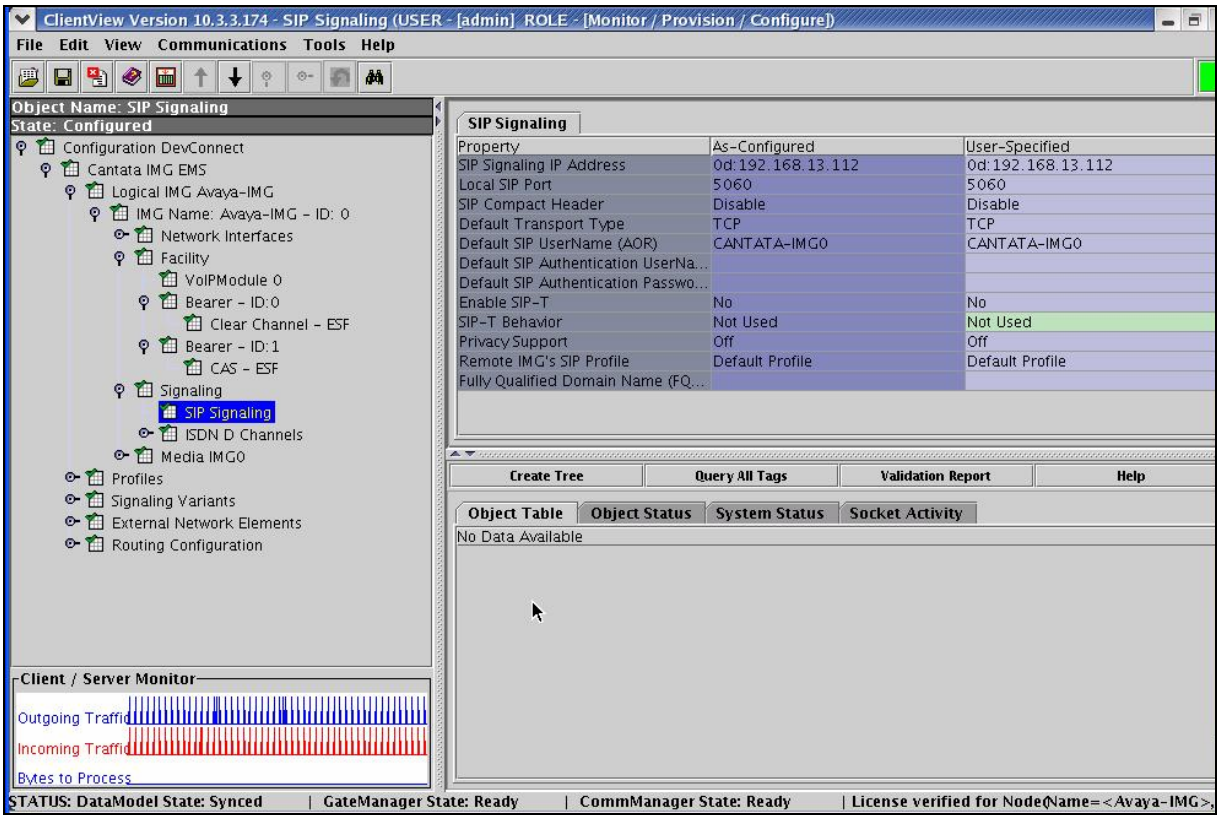
Step	Description
5.1.7	Create an object for a Facility as follows: • Right-click the physical IMG in the Configuration Tree and select **New Facility**. • To save the changes, right-click **Facility** and select **Commit**. • The resultant provisioning is shown below. 

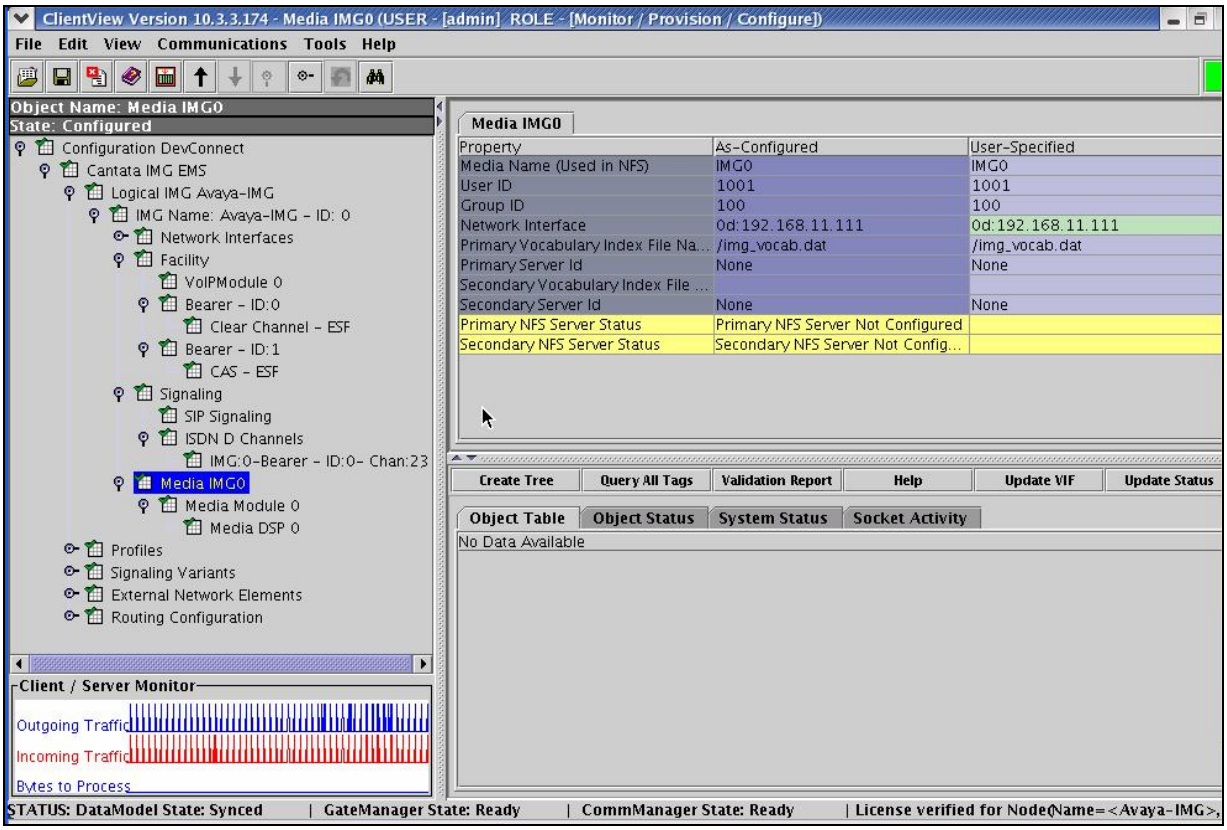
Step	Description
5.1.8	Configure VoIP Facilities as follows: • Right-click **Facility** in the Configuration Tree and select **New Bearer - IP**. In the Configuration Pane: o Use default settings for all fields. ***Note**: The **Network IP Address** field is populated from the configuration provided for VoIP Module 0: Port 0 in **Step 5.1.5**.* • To save the changes, right-click **VoIPModule 0** and select **Commit**. • The resultant provisioning is shown below. 

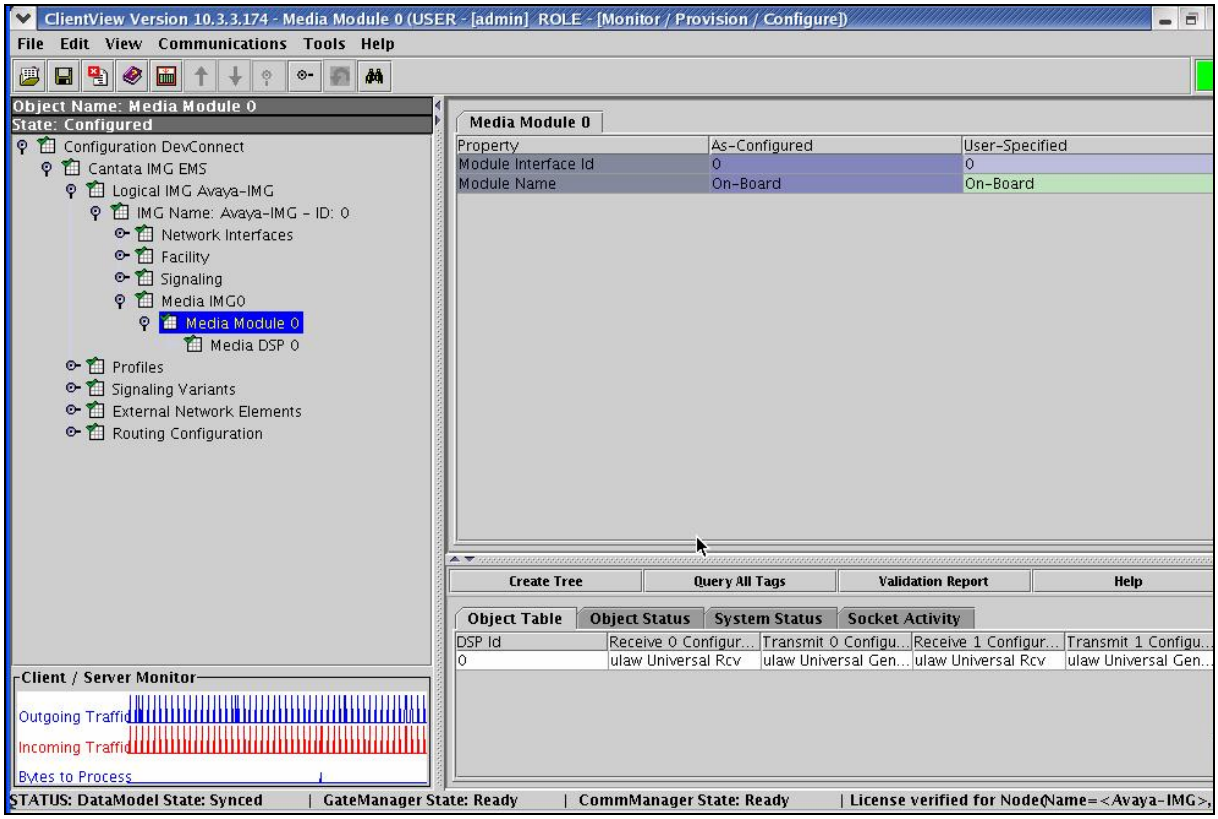
Step	Description
5.1.9	Configure a TDM DS1 as follows: • Right-click **Facility** in the Configuration Tree and select **New TDM DS1**. In the Configuration Pane: o Select **Bearer** from the drop down list for the **Component ID** field. o Use default settings for remaining fields. • To save the changes, right-click **Bearer - ID:1** and select **Commit**. • The resultant provisioning is shown below. 

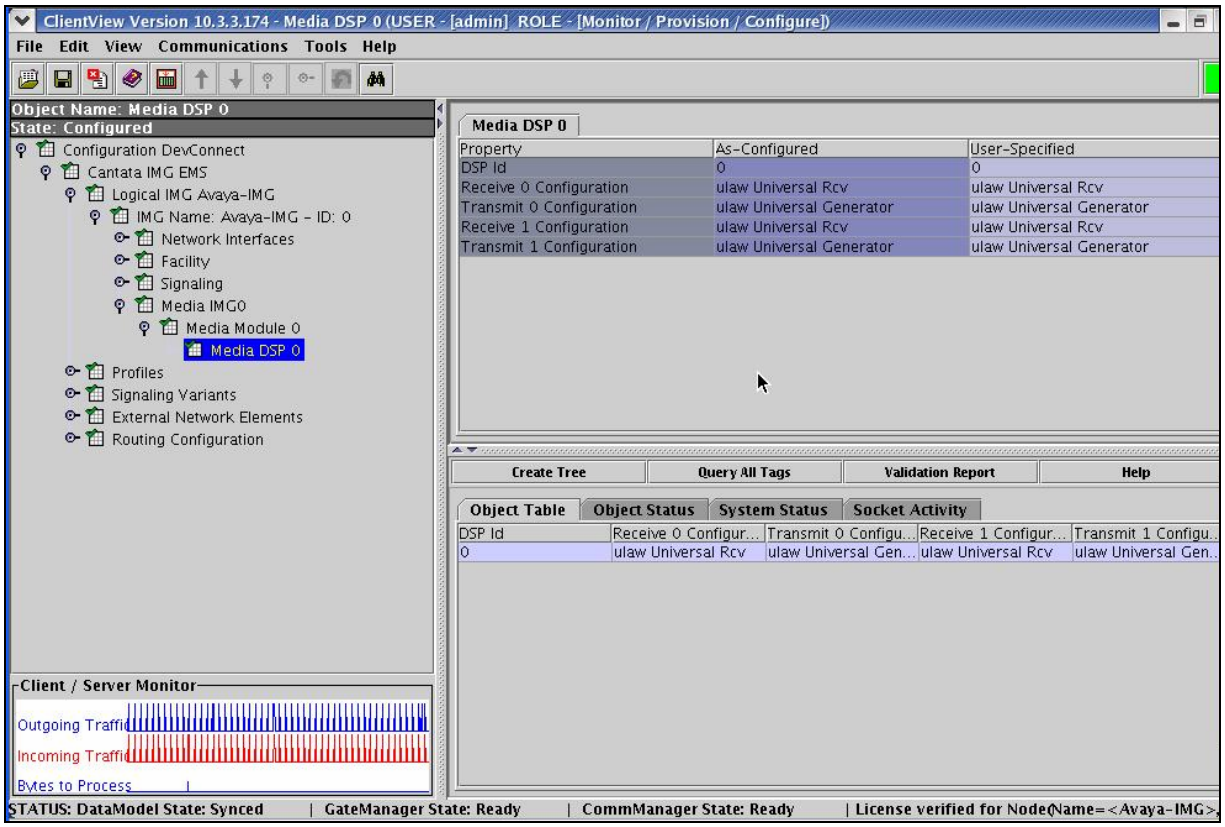
Step	Description
5.1.10	Configure a T1 Physical Span for CAS as follows • Right-click the TDM DS1 created in **Step 5.1.9** in the Configuration Tree and select **New T1 Physical Span**. In the Configuration Pane: o Select **CAS** from the drop down list for the **Signaling** field. o Administer settings for the **Framing** and **Line Coding** fields that correspond to the configuration on Avaya Communication Manager (see **Step 3.2.1**). o Use default settings for remaining fields. • To save the changes, right-click **CAS - ESF** and select **Commit**. • The resultant provisioning is shown below. 

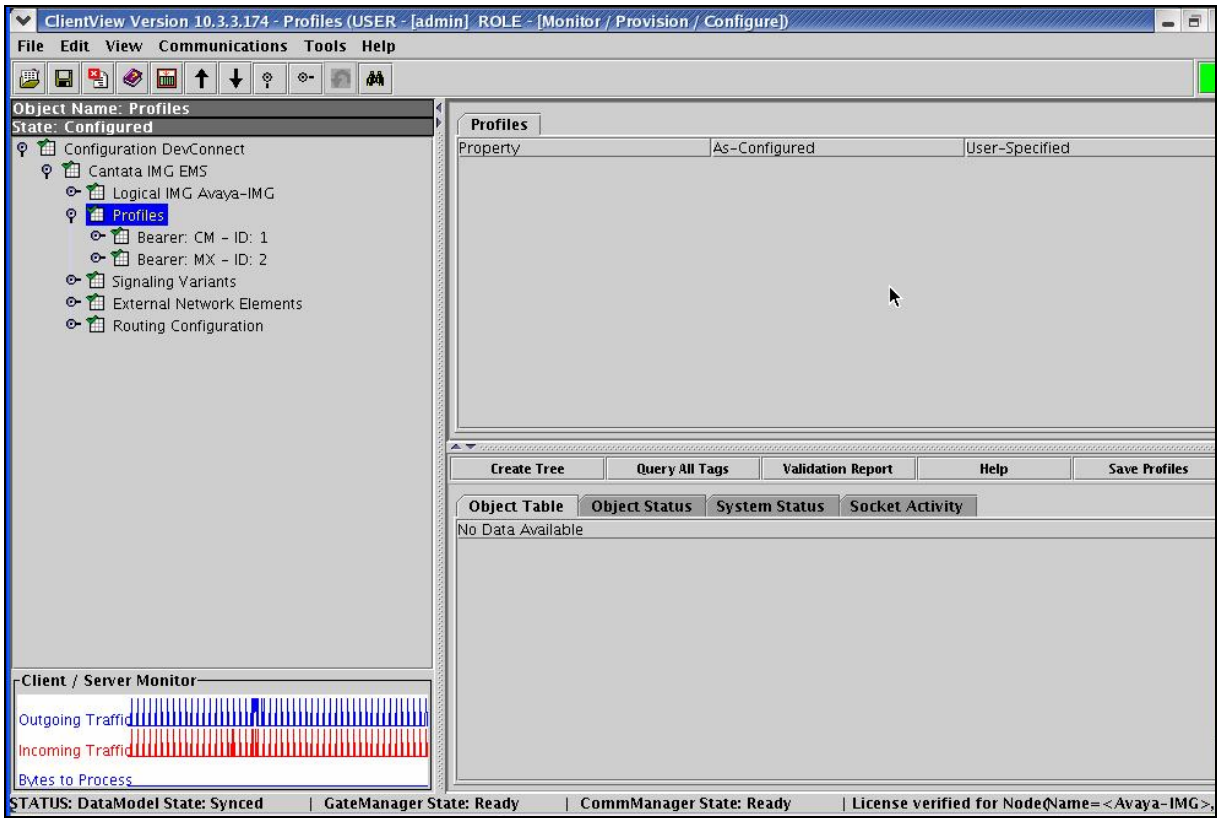
Step	Description
5.1.11	Create an object for Signaling as follows: • Right-click the physical IMG in the Configuration Tree and select **New Signaling**. • To save the changes, right-click **Signaling** and select **Commit**. • The resultant provisioning is shown below. 

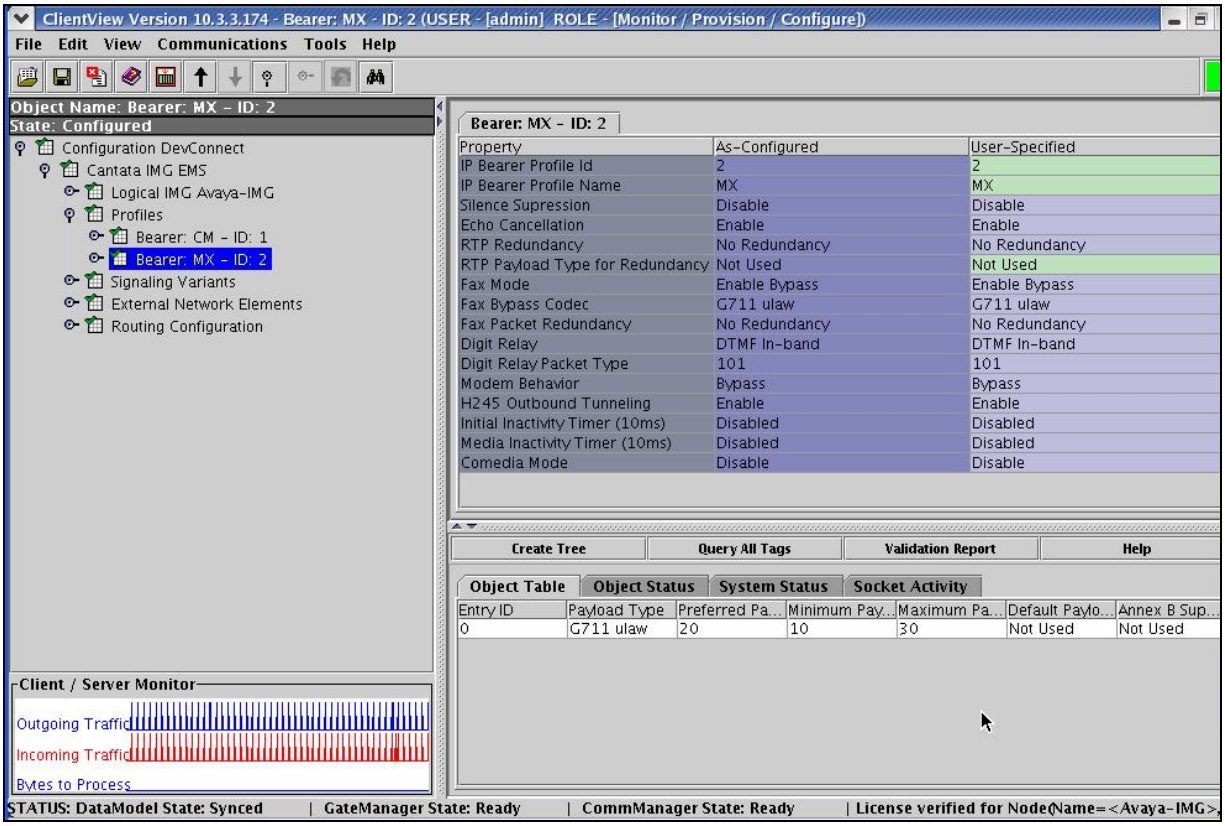
Step	Description
5.1.12	Configure SIP Signaling to enable SIP connectivity between the IMG and other SIP UAs as follows • Right-click **Signaling** in the Configuration Tree and select **New SIP**. In the Configuration Pane: o Enter the IP address assigned to the CPU on the IMG in **Step 5.1.6** in the **SIP Signaling IP Address** field. o Enter values in the **Local SIP Port** and **Default Transport Type** fields that correspond to the configuration on Avaya Meeting Exchange (see **Step 4.1.1**). o Use default settings for remaining fields. • To save the changes, right-click **SIP Signaling** and select **Commit**. • The resultant provisioning is shown below. 

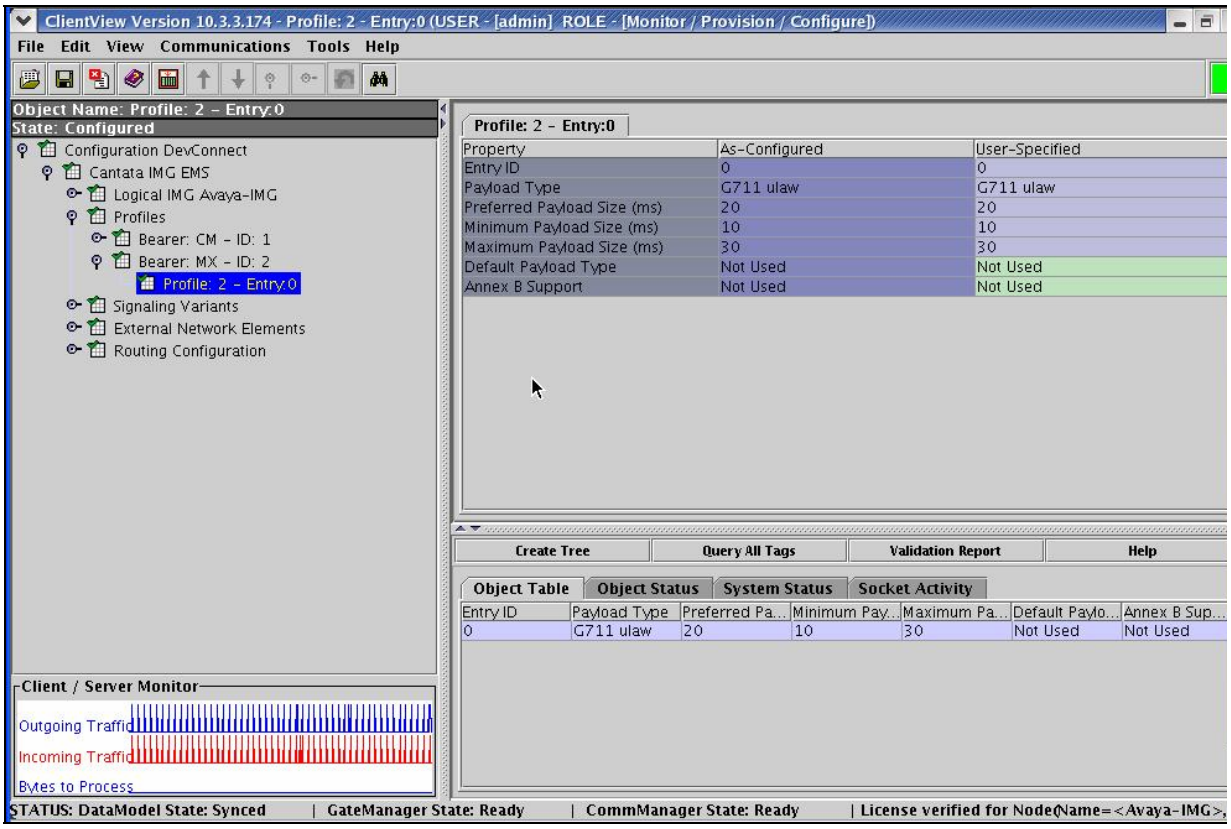
Step	Description
5.1.13	Configure settings for Media as follows: • Right-click the physical IMG in the Configuration Tree and select **New Media**. In the Configuration Pane: o Select the Network File Server (NFS) from the drop down list for the **Media Name** field. o Enter the User ID of the NFS for UNIX permissions in the **User ID** field. o Enter the Group ID of the NFS for UNIX permissions in the **Group ID** field. o Use default settings for remaining fields. ***Note**: The **Network Interface** field is automatically populated with the IP address provisioned for the management interface for the IMG.* • To save the changes, right-click **Media IMG0** and select **Commit**. • The resultant provisioning is shown below. 

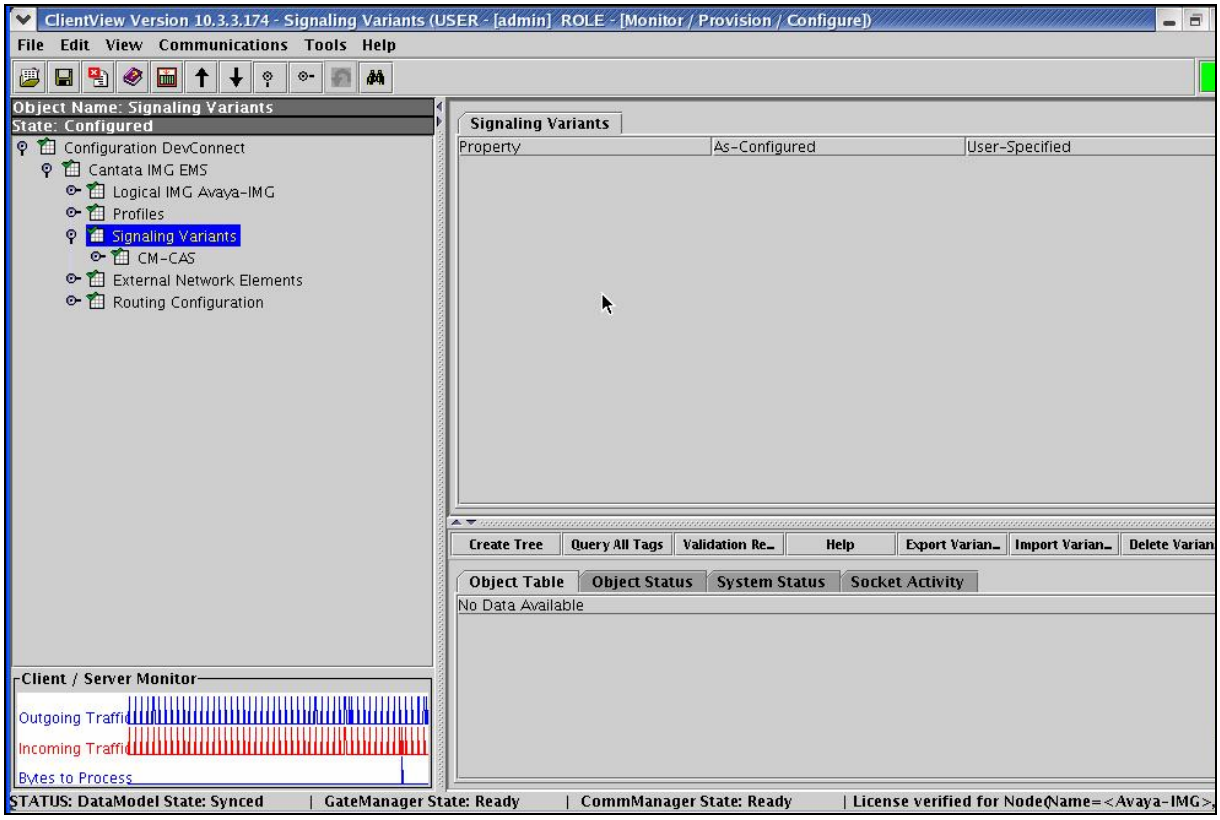
Step	Description
5.1.14	Create an object for a Media Module as follows: • Right-click **Media IMGO** in the Configuration Tree and select **New Media Module**. • Use default settings for all fields. • To save the changes, right-click **Media Module 0** and select **Commit**. • The resultant provisioning is shown below. 

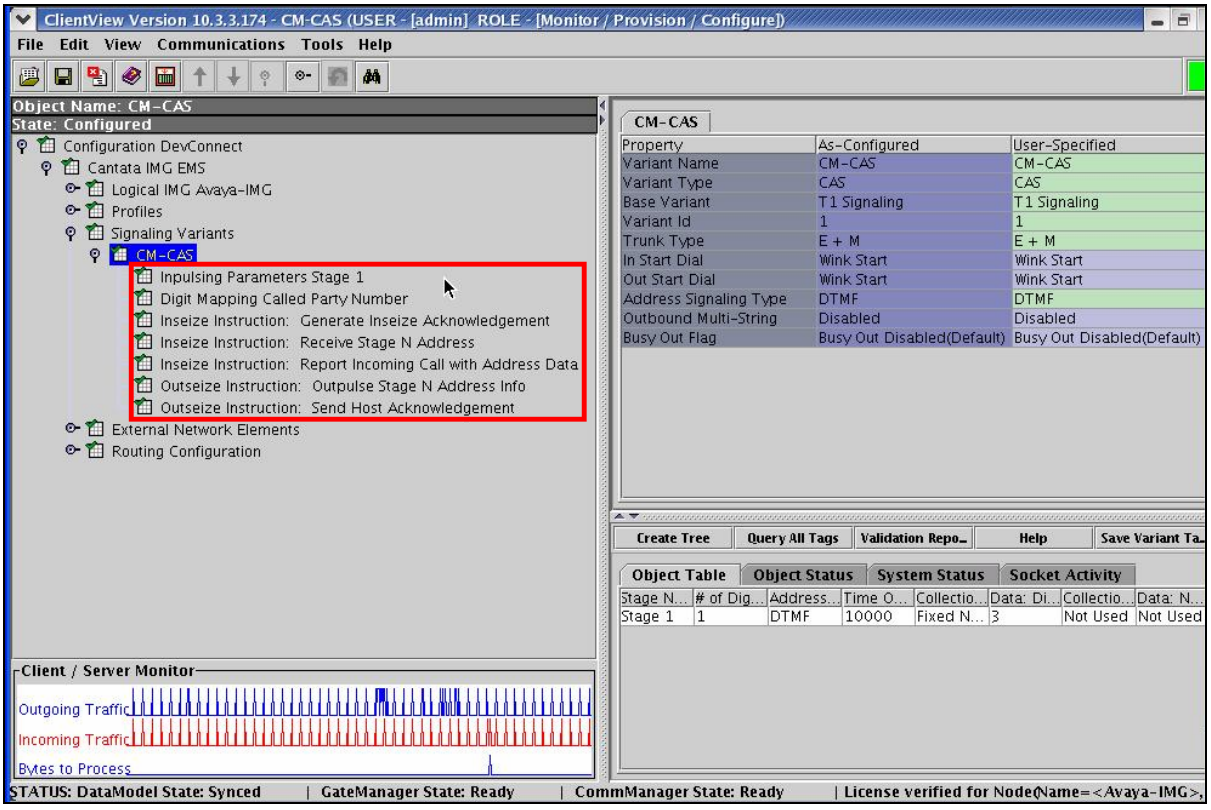
Step	Description
5.1.15	Configure the Media Module DSP as follows: • Right-click the Media Module created in **Step 5.1.14** in the Configuration Tree and select **New Media DSP**. In the Configuration Pane: o Use default settings for all fields. • To save the changes, right-click **Media DSP 0** and select **Commit**. • The resultant provisioning is shown below. 

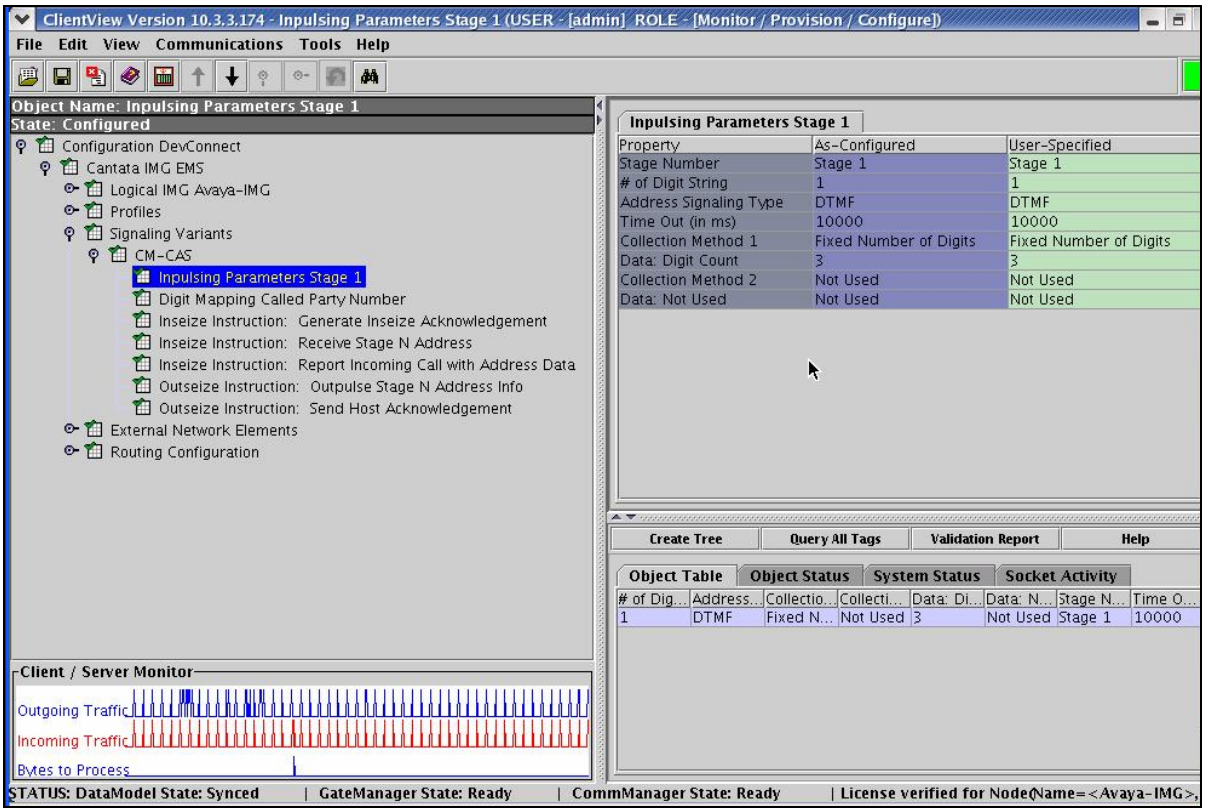
Step	Description
5.1.16	Create an object for Profiles as follows: • Right-click **Cantata IMG EMS** in the Configuration Tree and select **New Profiles**. • To save the changes, right-click **Profiles** and select **Commit**. • The resultant provisioning is shown below. 

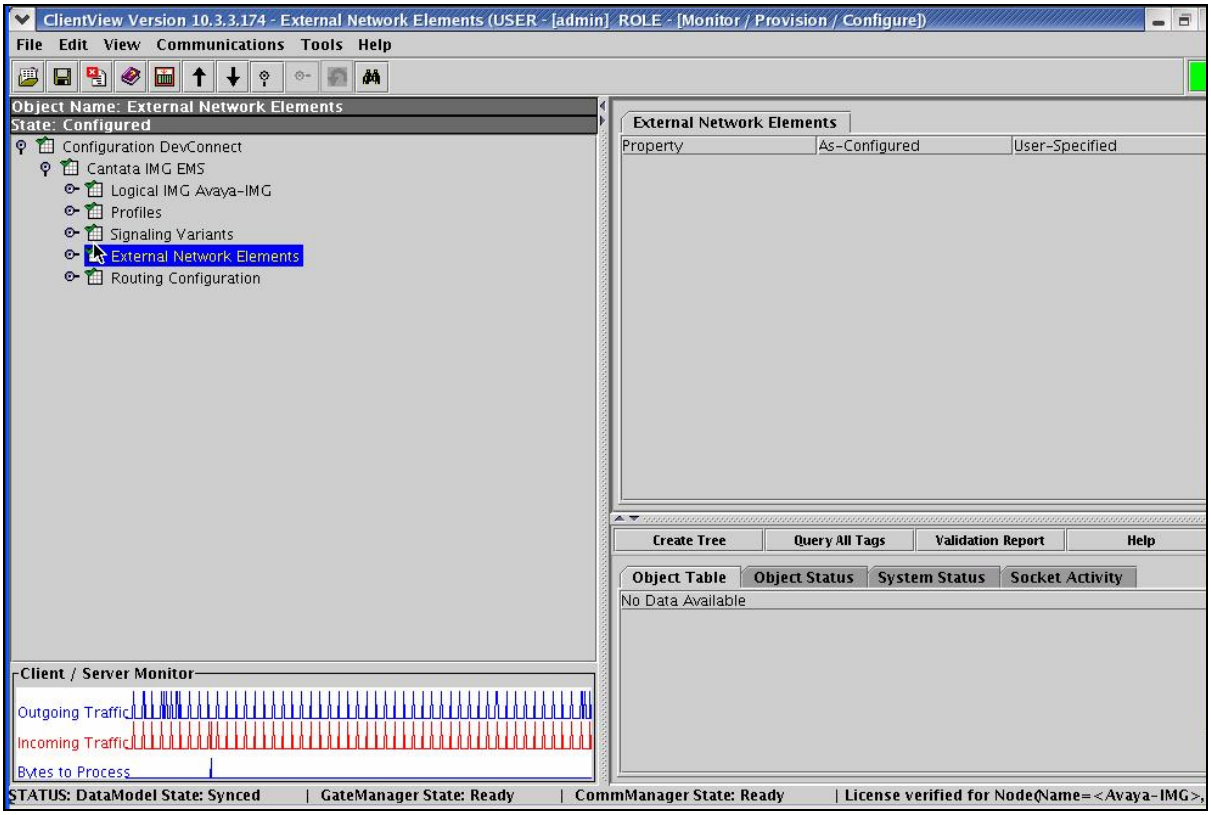
Step	Description
5.1.17	Configure an IP Bearer Profile corresponding to Avaya Meeting Exchange as follows: • Right-click **Profiles** in the Configuration Tree and select **New IP Bearer Profile**. In the Configuration Pane: o Enter a descriptive name for the IP Bearer Profile in the **IP Bearer Profile Name** field. o Use default settings for remaining fields. • To save the changes, right-click **Bearer: MX - ID:2** and select **Commit**. • The resultant provisioning is shown below. 

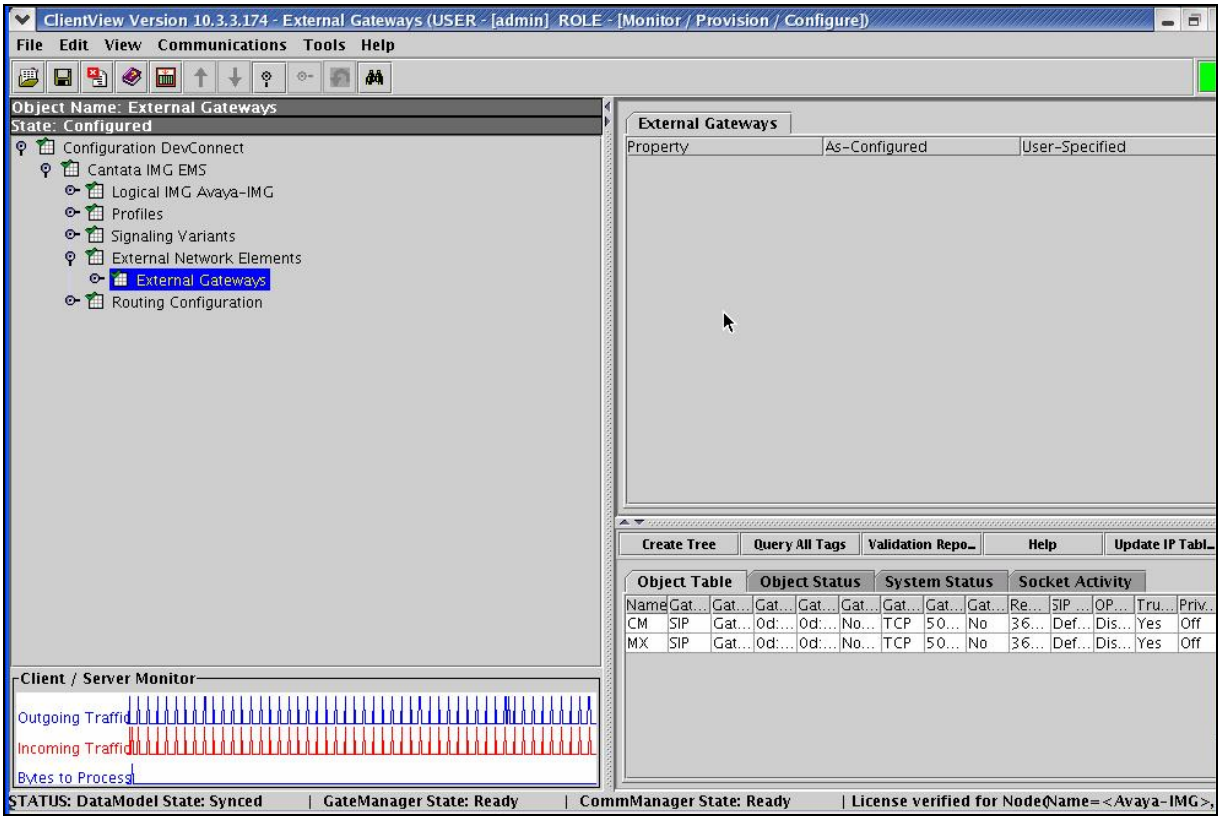
Step	Description
5.1.18	Assign a codec to the IP Bearer Profile corresponding to Avaya Meeting Exchange as follows: • Right-click the IP Bearer Profile created in **Step 5.1.17** in the Configuration Tree and select **New Supported Vocoders**. In the Configuration Pane: o Select a codec from the drop down list for the **Payload Type** field that is supported on Avaya Meeting Exchange. o Use default settings for remaining fields. • To save the changes, right-click **Profile: 2 - Entry:0** and select **Commit**. • The resultant provisioning is shown below. 

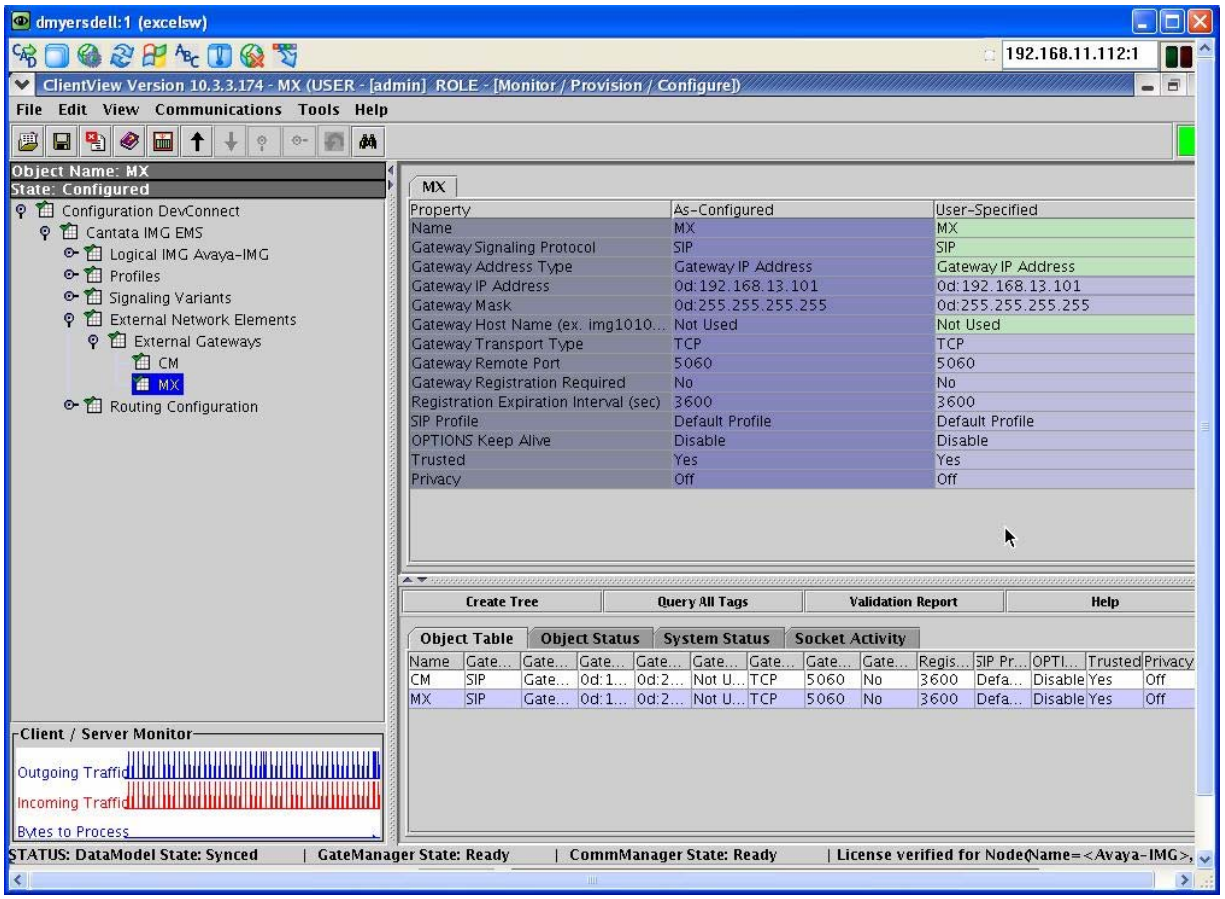
Step	Description
5.1.19	Create an object for Signaling Variants as follows: • Right-click **Cantata IMG EMS** in the Configuration Tree and select **New Signaling Variants**. • To save the changes, right-click **Signaling Variants** and select **Commit**. • The resultant provisioning is shown below. 

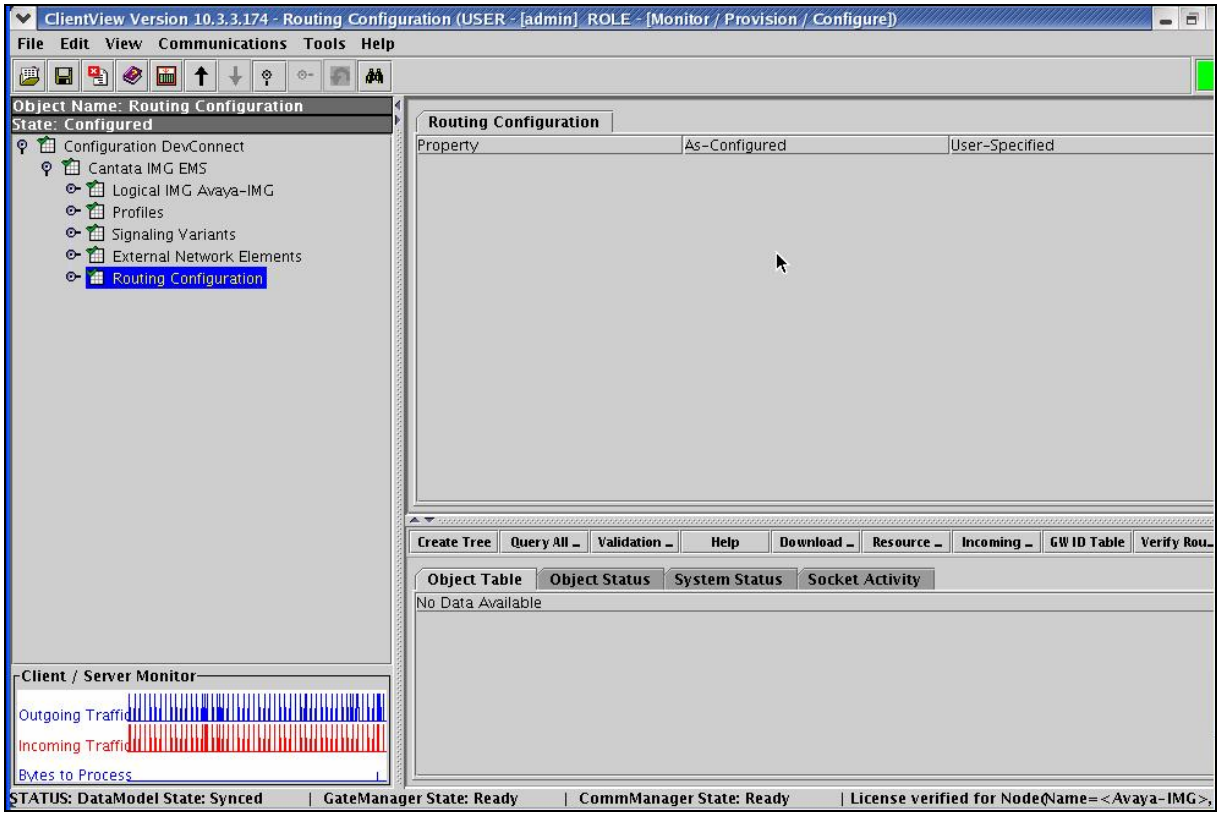
Step	Description
5.1.20	Configure a Signaling Variant to enable CAS connectivity with Avaya Communication Manager as follows: • Right-click **Signaling Variants** in the Configuration Tree and select **New Signaling Variant**. In the Configuration Pane: o Enter a descriptive name for the Signaling Variant in the **Variant Name** field. o Select **CAS** from the drop down list for the **Variant Type** field. o Use default settings for remaining fields. Ensure that the settings match those on Avaya Communication Manager in **Section 3.2**. • To save the changes, right-click **CM-CAS** and select **Commit**. o Right-click on **CM-CAS** to add objects. For this sample configuration, the objects shown in the configuration tree were added. • The resultant provisioning is shown below. 

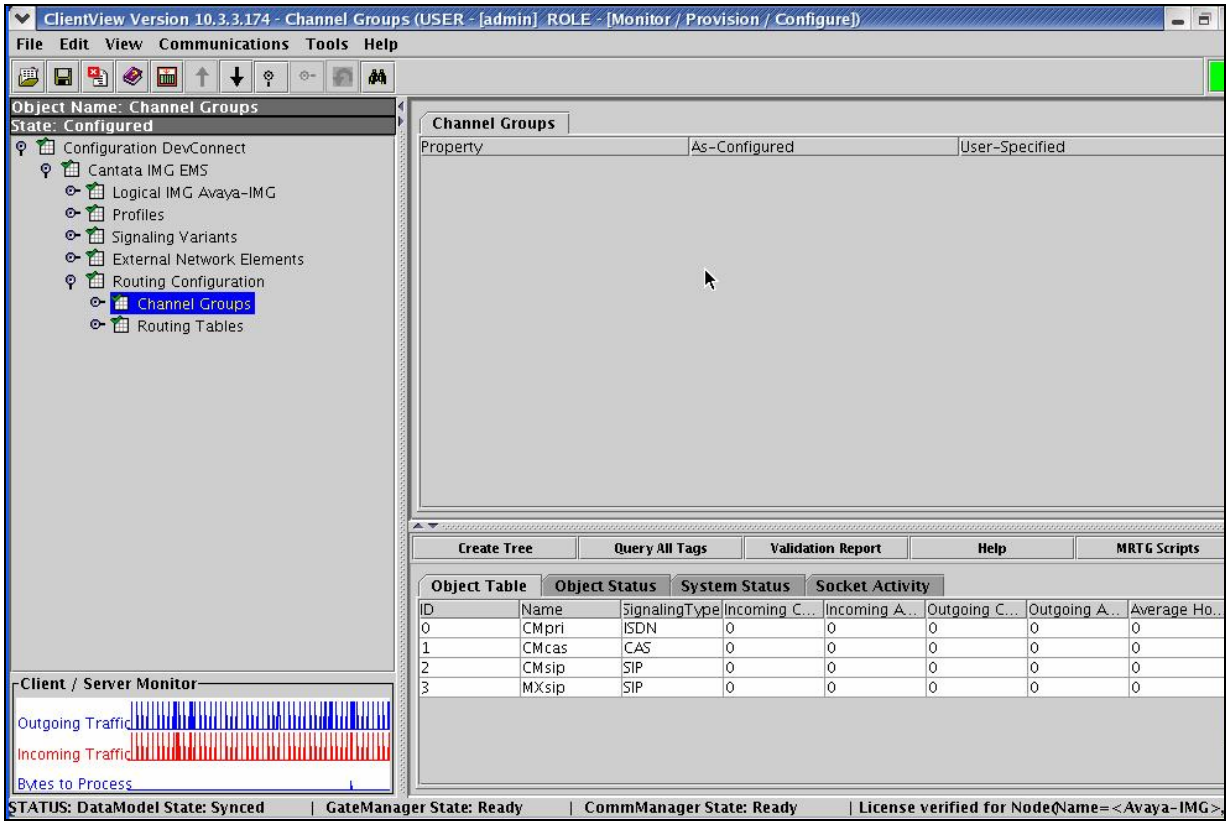
Step	Description
5.1.21	Modify the Inpulsing Parameters object as follows: • Right-click the Inpulsing Parameters object in the Configuration Tree. In the Configuration Pane: o Select **Stage 1** from the drop down list for the **Stage Number** field. o Use default settings for remaining fields. • To save the changes, right-click **Inpulsing Parameters Stage 1** and select **Commit**. • The resultant provisioning is shown below. 

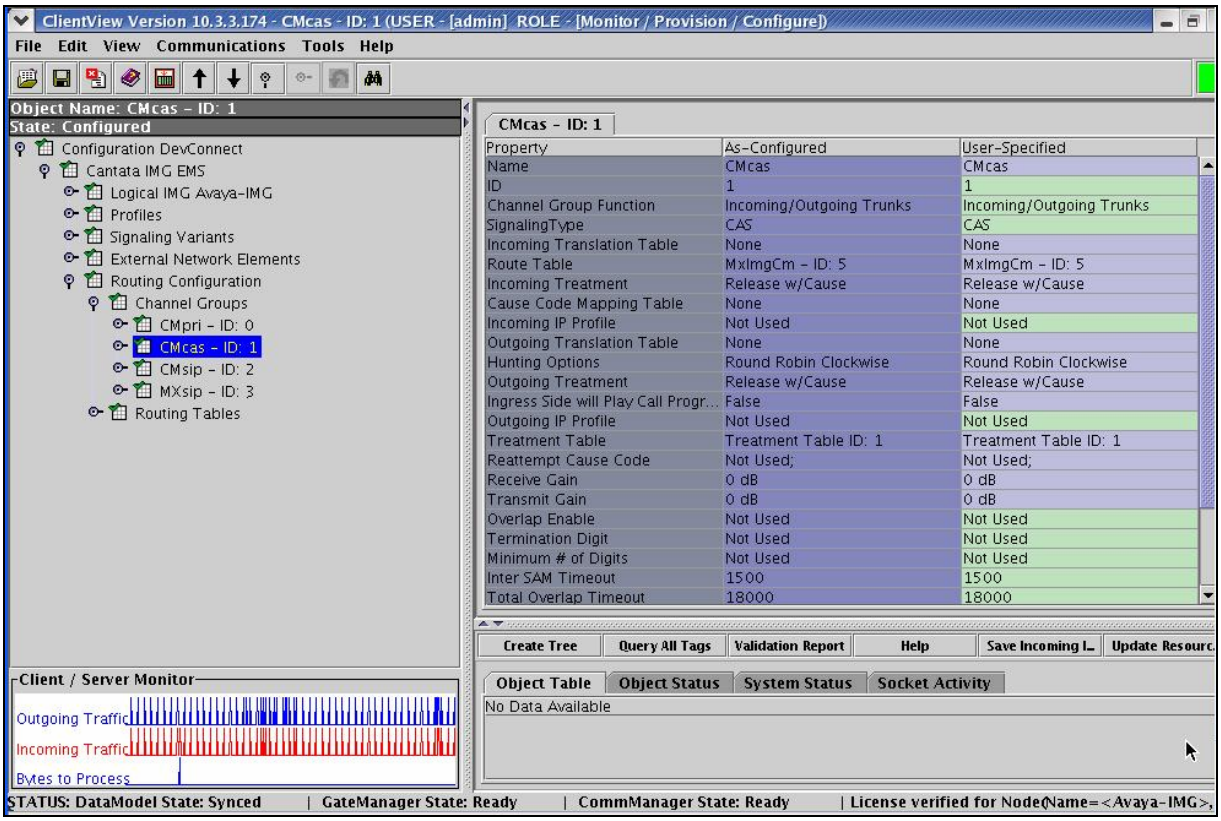
Step	Description
5.1.22	Create an object for External Network Elements as follows: • Right-click **Cantata IMG EMS** in the Configuration Tree and select **New External Network Elements**. • To save the changes, right-click **External Network Elements** and select **Commit**. • The resultant provisioning is shown below. 

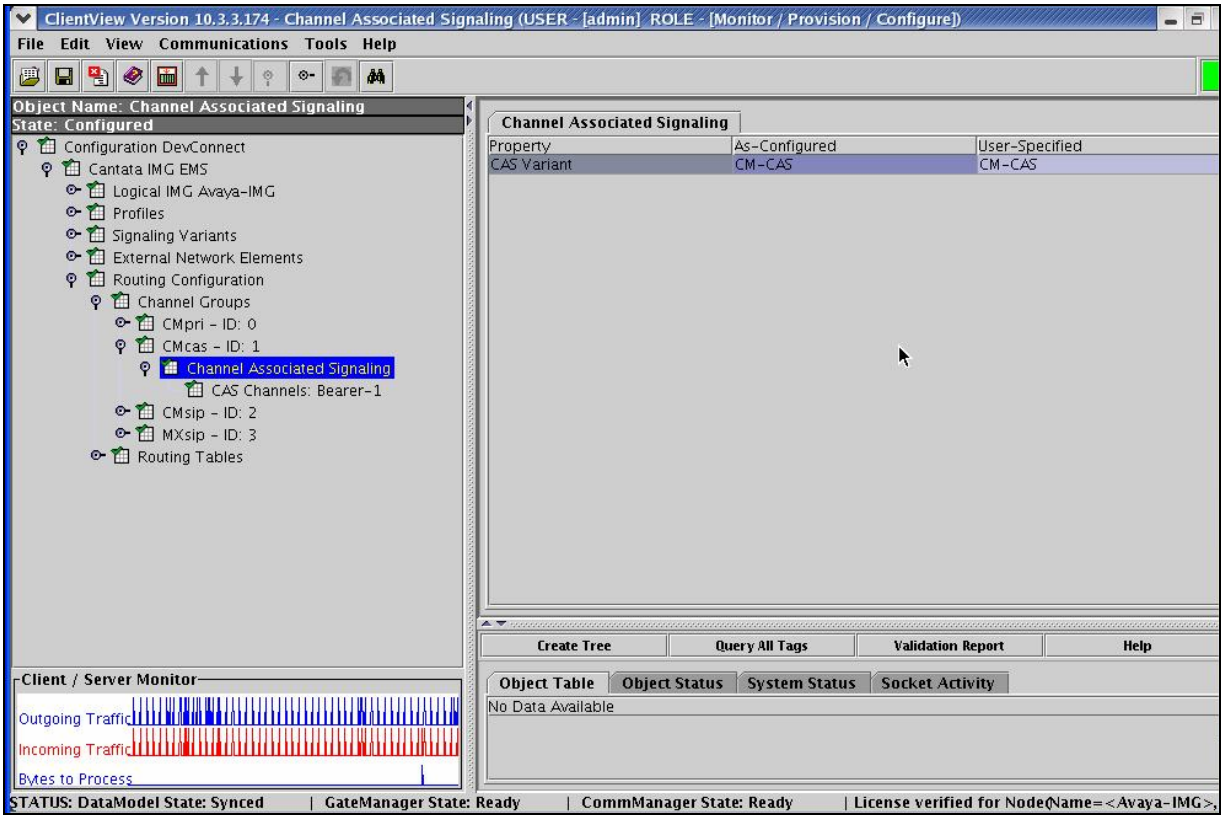
Step	Description
5.1.23	Create an object for External Gateways as follows: • Right-click **External Network Elements** in the Configuration Tree and select **New External Gateways**. • To save the changes, right-click **External Gateways** and select **Commit**. • The resultant provisioning is shown below. 

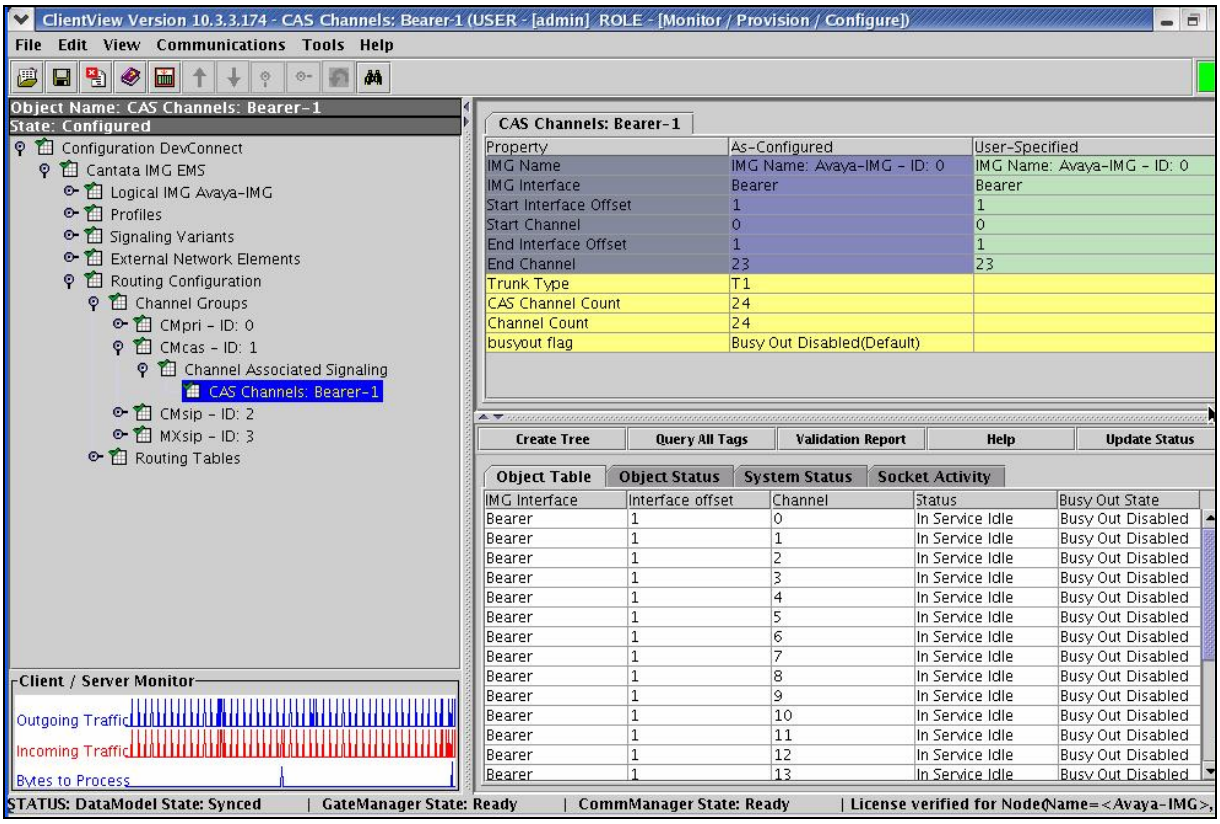
Step	Description
5.1.24	Configure an External Gateway corresponding to Avaya Meeting Exchange as follows: • Right-click **External Gateways** in the Configuration Tree and select **New External Gateway**. In the Configuration Pane: o Enter a descriptive name for the IP Bearer Profile in the **Name** field. o Select **SIP** from the drop down list for the **Gateway Signaling Protocol** field. o Enter the IP address of Avaya Meeting Exchange in the **Gateway IP Address** field. o Use default settings for remaining fields. ***Note**: The settings for the **Gateway Transport Type** and **Gateway Remote Port** fields are compatible with the configuration on Avaya Meeting Exchange (see **Step 4.2.1**).* • To save the changes, right-click **MX** and select **Commit**. • The resultant provisioning is shown below. 

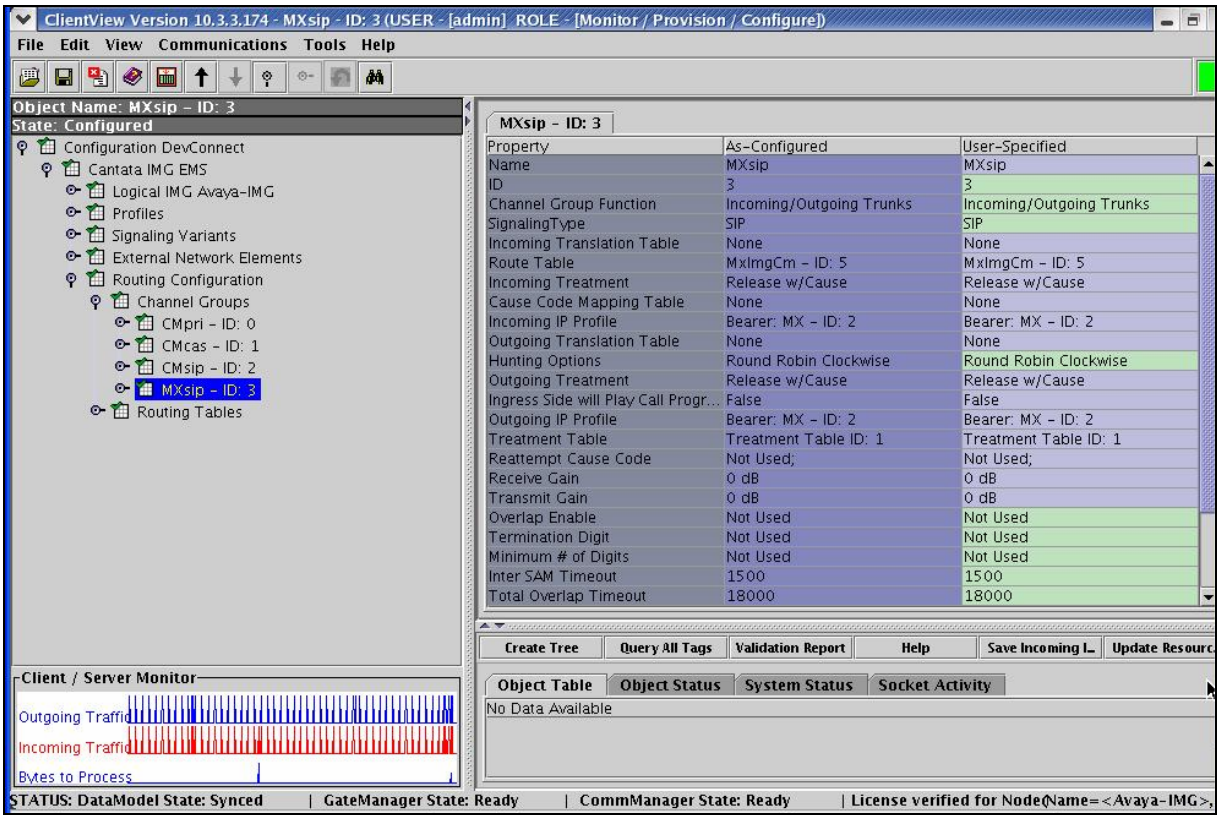
Step	Description
5.1.25	Create an object for Routing Configuration as follows: • Right-click **Cantata IMG EMS** in the Configuration Tree and select **New Routing Configuration**. • To save the changes, right-click **Routing Configuration** and select **Commit**. • The resultant provisioning is shown below. 

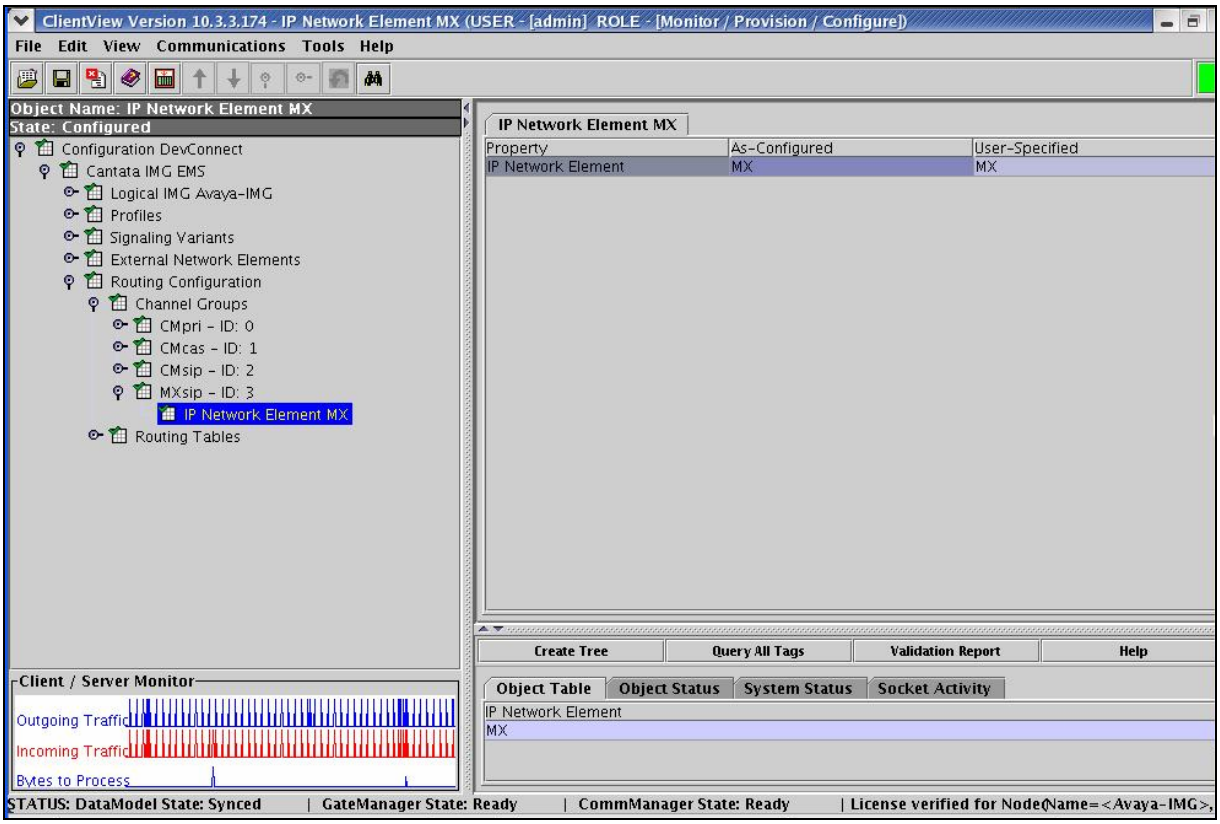
Step	Description
5.1.26	Create an object for Channel Groups as follows: • Right-click **Routing Configuration** in the Configuration Tree and select **New Channel Groups**. • To save the changes, right-click **Channel Groups** and select **Commit**. • The resultant provisioning is shown below. 

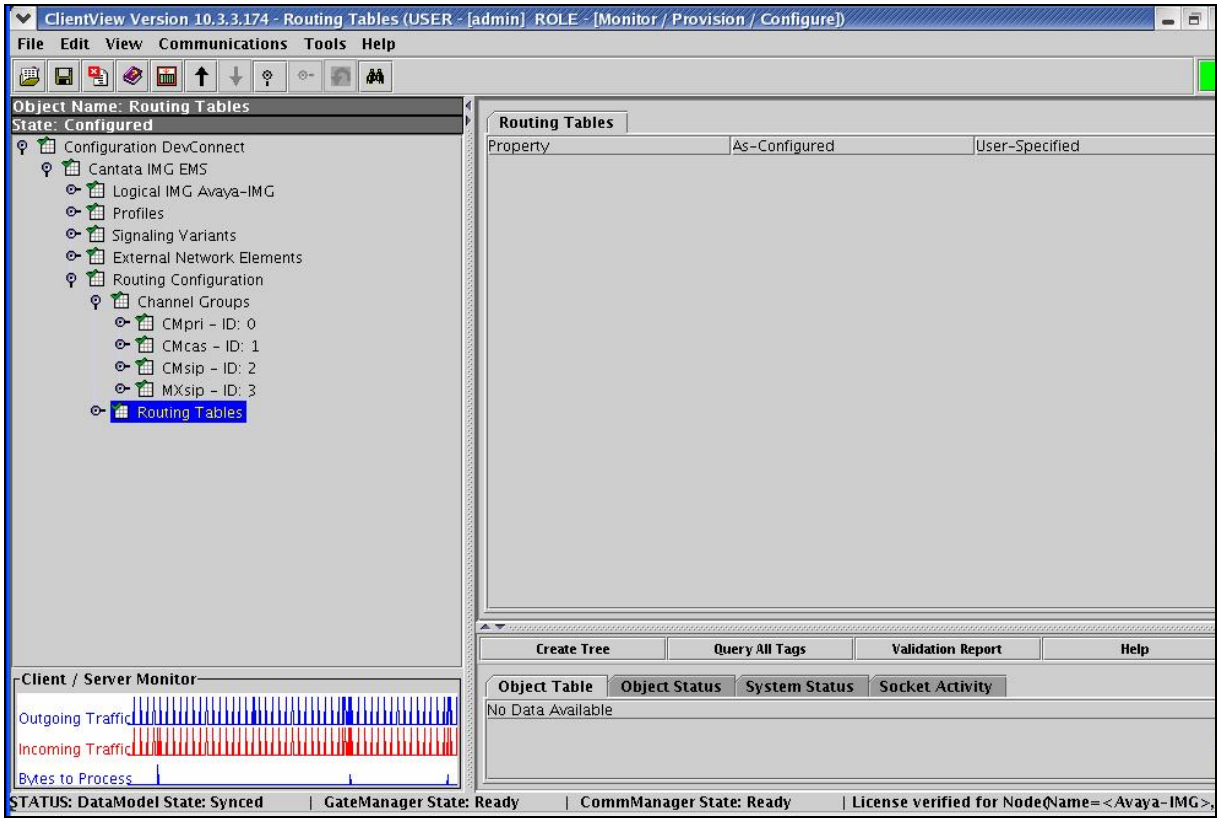
Step	Description
5.1.27	Configure a Channel Group corresponding to Avaya Communication Manager as follows: • Right-click **Channel Groups** in the Configuration Tree and select **New Channel Group**. In the Configuration Pane: o Enter a descriptive name for the Channel Group in the **Name** field. o Select **CAS** from the drop down list for the **Signaling Type** field. o Use default settings for remaining fields. ***Note**: The administration for the **Route Table** field is displayed in this screen capture, although the **Route Table** has not been created. When providing the IMG with an initial configuration, create a **Channel Group** first, then create a **Route Table**, then edit the **Channel Group** to include the **Route Table**.* • To save the changes, right-click **CMcas - ID: 1** and select **Commit**. • The resultant provisioning is shown below. 

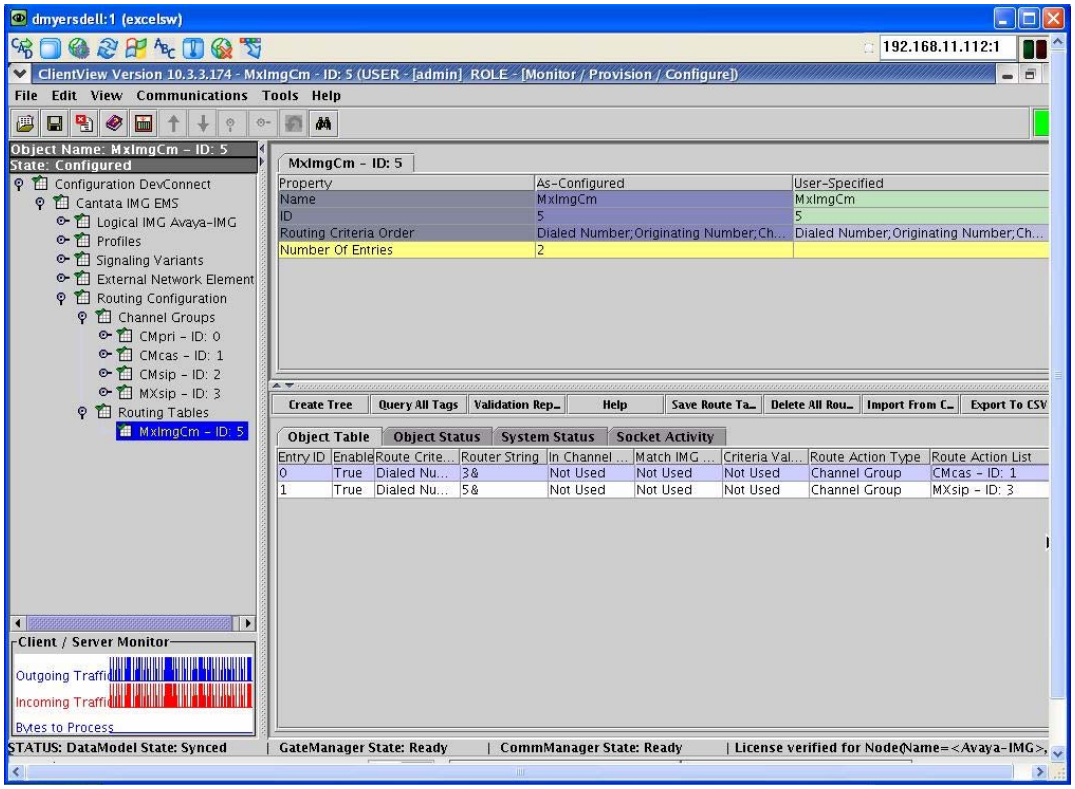
Step	Description
5.1.28	Create an object for Channel Associated Signaling as follows: • Right-click the Channel Group created in **Step 5.1.27** in the Configuration Tree and select **New Channel Associated Signaling**. • Select the CAS Variant provisioned in **Step 5.1.20** from the drop down list for the **CAS Variant** field. • To save the changes, right-click **Channel Associated Signaling** and select **Commit**. • The resultant provisioning is shown below. 

Step	Description
5.1.29	Assign Channels to the CAS Channel Group corresponding to Avaya Communication Manager as follows: • Right-click **Channel Associated Signaling** in the Configuration Tree and select **New CAS Circuits**. In the Configuration Pane: o Select **Bearer** from the drop down list for the **IMG Interface** field o Use default settings for remaining fields. • To save the changes, right-click **CAS Channels: Bearer-1** and select **Commit**. • The resultant provisioning is shown below. ***Note**: The IMG counts channels from zero, where Avaya Communication Manager counts from one*. 

Step	Description
5.1.30	Configure a Channel Group corresponding to Avaya Meeting Exchange as follows: • Right-click **Channel Groups** in the Configuration Tree and select **New Channel Group**. In the Configuration Pane: o Enter a descriptive name for the Channel Group in the **Name** field. o Select **SIP** from the drop down list for the **Signaling Type** field. o Use default settings for remaining fields. ***Note**: The administration for the **Route Table** field is displayed in this screen capture, although the **Route Table** has not been created. When providing the IMG with an initial configuration, create a **Channel Group** first, then create a **Route Table**, then edit the **Channel Group** to include the **Route Table**.* • To save the changes, right-click **MXsip - ID: 3** and select **Commit**. • The resultant provisioning is shown below. 

Step	Description
5.1.31	Assign an IP Network Element to the Channel Group corresponding to Avaya Meeting Exchange as follows: • Right-click the Channel Group created in **Step 5.1.30** in the Configuration Tree and select **New IP Network Element**. In the Configuration Pane: o Select the External Gateway provisioned in **Step 5.1.24** from the drop down list for the **IP Network Element** field. • To save the changes, right-click **IP Network Element MX** and select **Commit**. • The resultant provisioning is shown below. 

Step	Description
5.1.32	Create an object for Routing Tables as follows: • Right-click **Routing Configuration** in the Configuration Tree and select **New Routing Tables**. • To save the changes, right-click **Routing Tables** and select **Commit**. • The resultant provisioning is shown below. 
5.1.33	Configure a Route Table as follows: • Right-click **Routing Tables** in the Configuration Tree and select **New Route Table**. In the Configuration Pane: o Enter a descriptive name for the Route Table in the **Name** field. o Use default settings for remaining fields. • To save the changes, right-click the entry and select **Commit**. See **Step 5.1.34** for resultant provisioning.

Step	Description
5.1.34	Add route entries to the Route Table provisioned in **Step 5.1.33** as follows: • To add a route entry corresponding to Avaya Communication Manager, right-click the **Route Table** in the Configuration Tree and select **Add Route Entry**. o Enter a pattern to match extensions on Avaya Communication Manager, where & is a wildcard, in the **Router String** field in the **New Entry** dialog box. o Select the Channel Group provisioned in **Step 5.1.27** from the drop down list for the **Outgoing Channel Group** field. ***Note**: This is displayed below under the **Route Action List** column.* o Click **OK** in the **New Entry** dialog box. • To add a route entry corresponding to Avaya Meeting Exchange, right-click the **Route Table** in the Configuration Tree and select **Add Route Entry**. o Enter a pattern to match the provisioning for call branding on Avaya Meeting Exchange, where & is a wildcard, in the **Router String** field in the **New Entry** dialog box. o Select the Channel Group provisioned in **Step 5.1.30** from the drop down list for the **Outgoing Channel Group** field. ***Note**: This is displayed below under the **Route Action List** column.* o Click **OK** in the **New Entry** dialog box. • The resultant provisioning is shown below. 

6. Interoperability Compliance Testing

6.1. General Test Approach

The general test approach was to place calls between Avaya Communication Manager and Avaya Meeting Exchange via the IMG, utilizing the sample configuration displayed in **Figure 1**. The main objectives were to verify the following:

- Inbound calling from Avaya Communication Manager to scheduled and demand conferences provisioned on Avaya Meeting Exchange via the Cantata IMG 1010:
  - DNIS direct call branding (without participant-access-code)
  - SCAN call branding (with participant-access-code)
- Outbound calling from Avaya Meeting Exchange to telephones registered to either Avaya Communication Manager or Avaya SIP Enablement Services via the Cantata IMG 1010:
  - Auto/manual blast dial
  - Originator dial-out
  - Operator fast dial
- The following feature testing was executed:
  - Operator dial-out (Audio Path)
  - Operator dial-in (Audio Path)
  - Dial-out to a Flexible Digital Auxiliary Port Interface (FDAPI) channel for audio recording
  - Line Transfer initiated from Avaya Bridge Talk
  - Conference Transfer initiated from Avaya Bridge Talk
  - Moderator/participant conferencing features provided by Avaya Meeting Exchange
- The following sub-set of the SIPPING-19 supplementary features was verified:
  - Call hold
  - Attended/unattended call transfer
  - Call forward
  - Three-way conference
- The following transport methods for signaling were tested between Avaya Meeting Exchange and the Cantata IMG 1010:
  - TCP
  - UDP
- The following transport methods for signaling/media were tested between Avaya Communication Manager and the Cantata IMG 1010:
  - T1 CAS (Robbed-Bit)
- The following CODECS were tested:
  - G711MU
- Voice quality was subjectively verified using endpoints participating in a Conference.
- DTMF transmission was verified.

6.2. Test Results

All test cases, as defined by the general test approach, passed.

7. Verification Steps

The following steps were used to verify the administrative steps presented in these Application Notes and are applicable for similar configurations in the field.

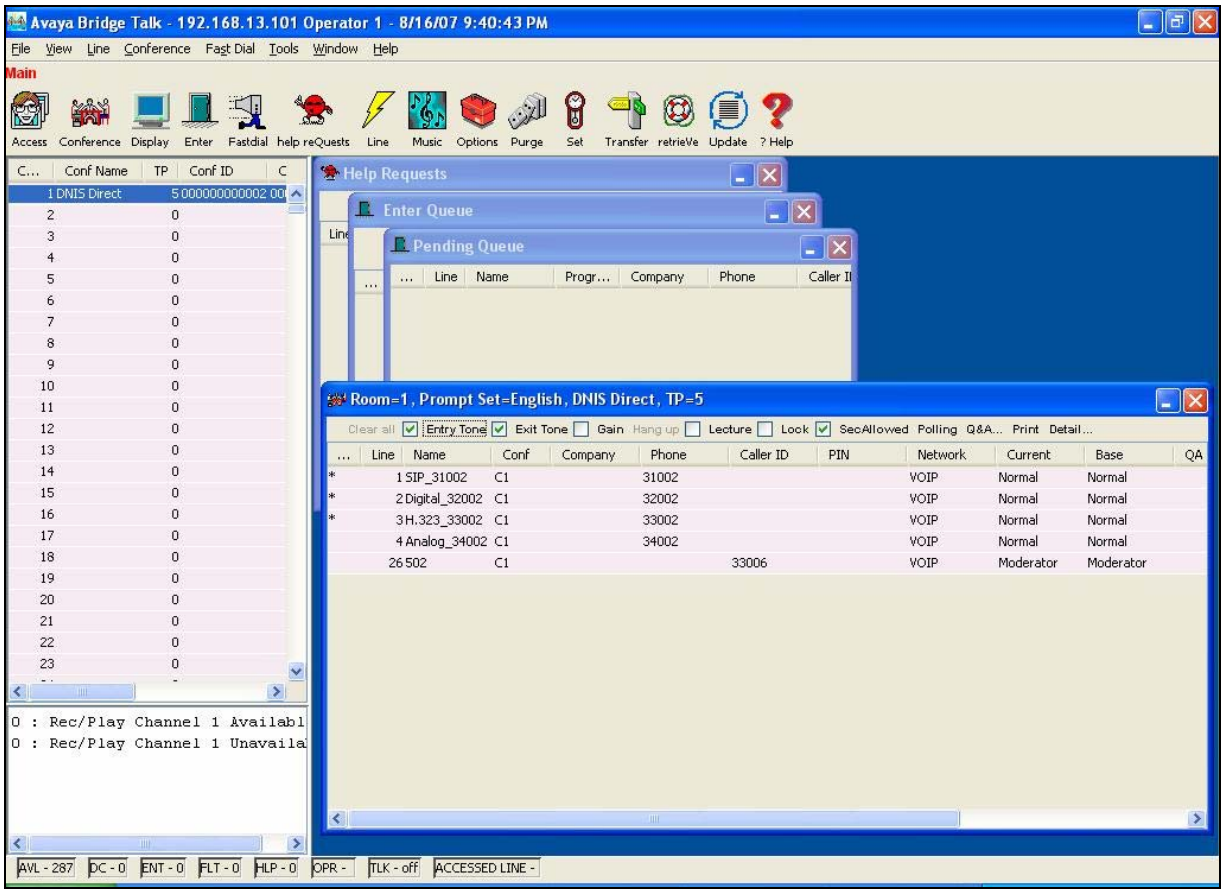
Step	Description
7.1.1	Verify CAS connectivity between Avaya Communication Manager and the IMG by retrieving status regarding the trunk group provisioned in **Step 3.2.2**. From a SAT session: • Issue the command "**status trunk <n>**", where **n** is the number of the trunk group to verify. • Verify that all members in the trunk group are **in-service/idle**.
7.1.2	Validate signaling and media connectivity for inbound calls to Avaya Meeting Exchange from Avaya Communication Manager via the IMG. This is accomplished by verifying that the trunk provisioned in **Step 3.2.2** is utilized when a call from a phone registered to either Avaya Communication Manager, or Avaya SIP Enablement Services dials in to a conference provisioned on Avaya Meeting Exchange. From a SAT session: • Issue the command "**list trace tac <n>**", where **n** is the TAC defined for the trunk group. • From a telephone registered to either Avaya Communication Manager, or Avaya SIP Enablement Services, dial **502** to enter the conference provisioned in **Section 4.4** as moderator via the call branding for a direct call flow provisioned in **Step 4.3.2**. ***Note**: The trace below shows a station (**33006**) that dialed (**502**) and utilized the call routing provisioned in **Section 3.3** to route the call to Avaya Meeting Exchange. This step may be repeated to verify signaling and media connectivity for outbound calls from Avaya Meeting Exchange to Avaya Communication Manager via the IMG.*

```
list trace tac 107                                                  Page   1

                                LIST TRACE

time           data

14:33:09     Calling party station    33006 cid 0x330
14:33:09     Calling Number & Name 33006 H.323 33006 V
14:33:09     dial 502 route:AAR
14:33:09     term trunk-group 7    cid 0x330
14:33:09     dial 502 route:AAR
14:33:09     route-pattern  7 preference 1  cid 0x330
14:33:09     seize trunk-group 7 member 8  cid 0x330
14:33:12     dial 502 route:AAR
14:33:12     outpulse done 502
14:33:12     active trunk-group 7 member 8  cid 0x330
```

Step	Description
7.1.3	Verify that calls to and from Avaya Meeting Exchange are managed correctly, e.g., participants are added/removed from conferences. This is accomplished by utilizing the Avaya Bridge Talk application. • From a telephone registered to either Avaya Communication Manager, or Avaya SIP Enablement Services, dial **502** to enter a conference as **Moderator** (without passcode) while simultaneously invoking the associated auto blast dial feature for this conference (see **Step 4.4.2**). • If not already logged on, log in to the Avaya Bridge Talk application with the appropriate credentials. • From the Conference Navigator, double-click the appropriate entry to open the corresponding Conference Room. • Verify conference participants are added/removed from conferences by observing the Conference Navigator and/or Conference Room windows. 

8. Conclusion

These Application Notes present a compliance-tested solution comprised of Avaya Communication Manager, the Avaya Meeting Exchange S6200 Conferencing Server and the Cantata Technology Integrated Media Gateway 1010. This solution enables connectivity between Avaya Communication Manager and the Avaya Meeting Exchange S6200 Conferencing Server via the Cantata Technology Integrated Media Gateway 1010 utilizing standards based SIP and CAS connectivity.

9. Additional References

Avaya references are available at http://support.avaya.com.

[1] *Administrator Guide for Avaya Communication Manager*, Issue 3.1, Doc ID: 03-300509, February 2007.

[2] *Administration for Network Connectivity for Avaya Communication Manager*, Issue 12, Doc ID: 555-233-504, February 2007.

[3] *Meeting Exchange 4.1 Administration and Maintenance S6200/S6800 Media Server*, Issue 1, Doc ID 04-601168, July 2006.

[4] *Meeting Exchange 4.1 Configuring S6200, S6500 and S6800 Conferencing Servers*, Issue 1, Doc ID 04-601338, July 2006.

[5] *Avaya Meeting Exchange Groupware Edition Version 4.1 User's Guide for Bridge Talk*, Doc ID 04-600878, Issue 2, July 2006.

Cantata references are available at: http://www.cantata.com/.

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 DevConnect Program at devconnect@avaya.com.