



## Avaya Solution & Interoperability Test Lab

---

# **Application Notes for the Amcom Smart Console and Desktop Applications; Phone Server, Operator Saver, Call Statistics and Parking Lot, with Avaya Communication Manager and Avaya Application Enablement Services - Issue 1.0**

### **Abstract**

These Application Notes describe a compliance-tested configuration comprised of Avaya Communication Manager, Avaya Application Enablement Services, Avaya IP and Digital Telephones, and Amcom Smart Console and desktop applications (Phone Server, Operator Saver, Call Statistics, and Parking Lot).

Smart Console applications provide efficient operations through screen-based interactive functions including automatic screen displays (screen pops) of incoming calls, single button call transfers, conferencing, speed dialing and other telephony functions. This Windows-based application provides easy access to database information, messaging and staff tracking options.

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

# 1. Introduction

These Application Notes describe a compliance-tested configuration comprised of Avaya Communication Manager, Avaya Application Enablement Services (AES), Avaya IP and Digital Telephones, and Amcom Smart Console with its desktop applications (Phone Server, Operator Saver, Call Statistics, and Parking Lot).

Phone Server allows a user to operate a physical telephone, view call and telephone display information through a graphical user interface (GUI).

Operator Saver is a Windows application that uses automated greetings to ensure that every call is answered professionally and pleasantly. Each time a call is answered, Operator Saver answers the agent's incoming call.

Operator Statistics provides real-time monitoring of call center activity and reporting procedures including call processing statistics, messaging and paging activity. Reports may be generated for a particular day, operator, or time period; and an entire year of statistics can be stored online.

Parking Lot allows operators to centrally park callers so that any agent can finish servicing the parked call. Smart Park allows the agent to store information such as the caller's name, call back number, and other notes when parking a call.

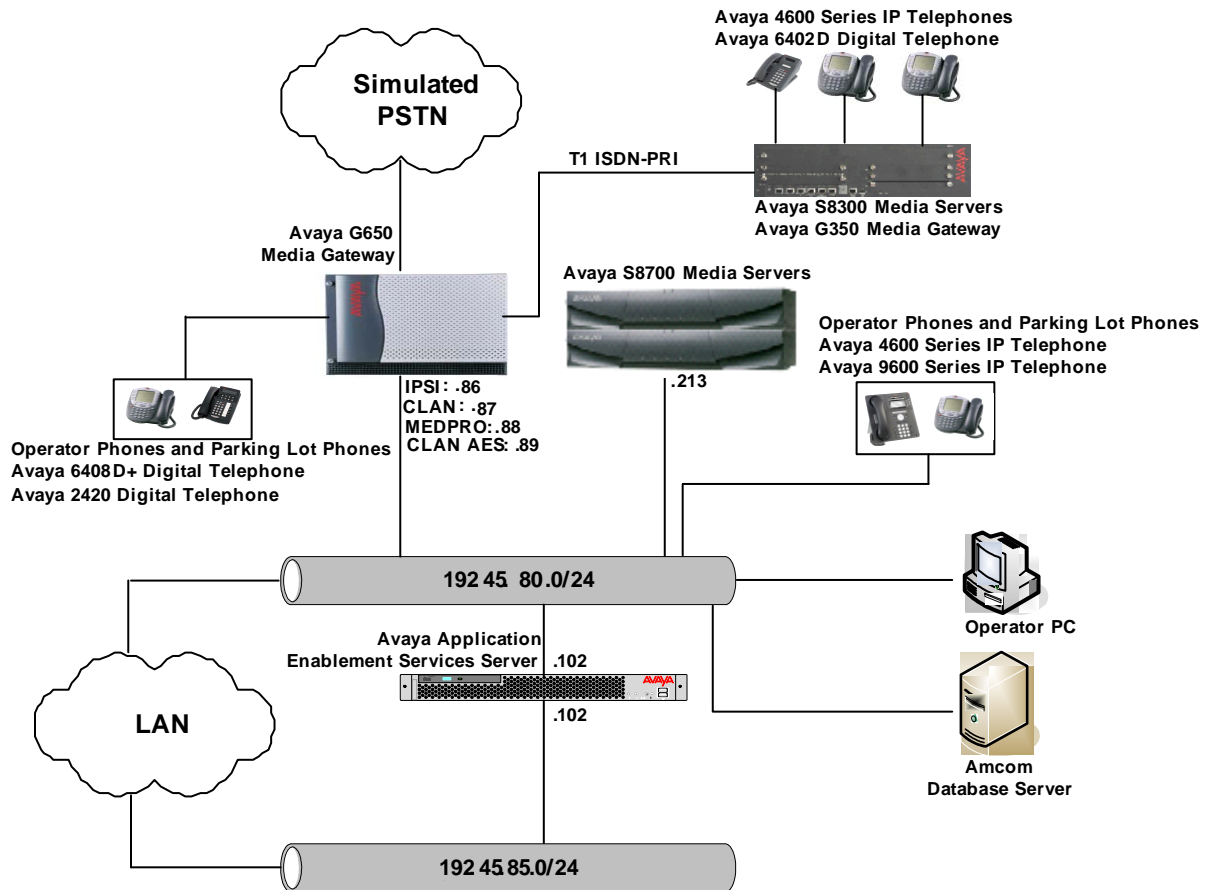
Amcom utilizes first party call control structures to maximize the efficiencies of Smart Console applications and to provide cost-efficient choices for any call center size and budget.

**Figure 1** illustrates a sample configuration consisting of the following:

- a pair of redundant Avaya S8700 Media Servers
- an Avaya G650 Media Gateway
- an Avaya Application Enablement Services (AES) server
- Avaya S8300 Media Server with Avaya G350 Media Gateway
- Avaya 4600 Series IP Telephones
- Avaya 9600 series IP Telephone
- an Avaya 6402D Digital Telephone
- an Avaya 6408D+ Digital Telephone
- an Avaya 2420 Digital Telephone
- Amcom client computers, each running an Amcom CTI Service instance and Amcom Phone Server, Operator Saver, Call Statistics, and Parking Lot applications
- an Amcom Database server.

Avaya Communication Manager runs on the S8700 Media Servers. The solution described herein is also extensible to other Avaya Media Servers and Media Gateways. The Amcom CTI Service instances register with Avaya Communication Manager via the AES server as Device and Media Call Control API stations in shared control mode in order to monitor and control the Avaya 4600 Series IP Telephones, Avaya 9630 IP Telephone, Avaya 6408D+ Digital Telephone,

and Avaya 2420 Digital Telephone. The Phone Server applications regularly provide the Database server with call and lamp state information concerning the controlled telephones.



**Figure 1: Sample Configuration.**

## 2. Equipment and Software Validated

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

Equipment		Software/Firmware
Avaya S8700 Media Servers		Avaya Communication Manager 3.1.2 (R013x.01.2.632.1)
Avaya G650 Media Gateway		-
	TN2312BP IP Server Interface	HW12 FW22
	TN799DP C-LAN Interface	HW1 FW16
	TN2302AP IP Media Processor	HW11 FW107
Avaya S8300 Media Server with Avaya G350 Media Gateway		Avaya Communication Manager 3.1.2 (R013x.01.2.632.1)
Avaya Application Enablement Services Server		3.1. (r3-1-0-build-33-1-0)
Avaya 4600 Series IP Telephones		2.6
Avaya 9600 series IP Telephone		1.1
Avaya 6408D+ Digital Telephone		-
Avaya 6402D Digital Telephone		-
Avaya 2420 Digital Telephone		-
Amcom Smart Console		4.0.6
Amcom Call Statistics		4.0.6
Amcom Phone Server		4.0.6
Amcom Operator Saver		4.0.6
Amcom Parking Lot		4.0.6

### 3. Configure Avaya Communication Manager

This section describes the configuration in Avaya Communication Manager for the stations controlled/monitored by Amcom CTI Service instances.

#### 3.1. Device and Media Call Control API Station Licenses

The Amcom CTI Service instances appear as “virtual” stations/softphones to Avaya Communication Manager. Each of these virtual stations, hereafter called Device, Media and Call Control (DMCC) stations, requires an IP\_API\_A license. Note that this is separate and independent of Avaya IP Softphone licenses, which are required for Avaya IP Softphones but not required for Device, Media and Call Control stations. From the Avaya Communication Manager System Access Terminal (SAT) interface, enter the **display system-parameters customer-options** command. On Page 10 of the system-parameters customer-options form, verify there are sufficient **IP\_API\_A** licenses. If not, contact an authorized Avaya account representative to enable this feature.

display system-parameters customer-options			Page 10 of 11
MAXIMUM IP REGISTRATIONS BY PRODUCT ID			
Product ID	Rel. Limit	Used	
IP_API_A	: 200	1	
IP_API_B	: 0	0	
IP_API_C	: 0	0	
IP_Agent	: 50	0	
IP_IR_A	: 0	0	
IP_Phone	: 12000	3	
IP_ROMax	: 12000	0	
IP_Soft	: 5	0	
IP_eCons	: 0	0	

#### 3.2. Configure AES Services

Enter the **display system-parameters customer-options** command. On Page 3 of the system-parameters customer-options form, verify that the ASAI Link Core Capabilities field is set to **y**. If not, contact an authorized Avaya account representative to enable this feature.

display system-parameters customer-options		Page 3 of 11
OPTIONAL FEATURES		
Abbreviated Dialing Enhanced List? n	Audible Message Waiting? n	
Access Security Gateway (ASG)? n	Authorization Codes? y	
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? n	
ARS/AAR Dialing without FAC? y	Cvg Of Calls Redirected Off-net? n	
ASAI Link Core Capabilities? y	DCS (Basic)? n	
ASAI Link Plus Capabilities? y	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? y	

Enter the **change node-names ip** command. The C-LAN board (CLAN-AES) was enabled with Application Enablement Services to serve the AES link.

change node-names ip				Page 1 of 1			
Name		IP Address		Name		IP Address	
CDR_buffer		192.45 .80 .250				. . .	
CLAN		192.45 .80 .87				. . .	
CLAN-AES		192.45 .80 .89				. . .	
G350		192.45 .82 .2				. . .	
MEDPRO		192.45 .80 .88				. . .	
MEDPRO2		192.45 .80 .161				. . .	
S8300		192.45 .81 .11				. . .	
default		0 .0 .0 .0				. . .	
		. . .				. . .	

Enter the **change ip-services** command. On Page 1 of the ip-services form, configure entries for the C-LAN board that is dedicated for the AES link:

- Service Type – set to **AESVCS**.
- Enabled – set to **y**.
- Local Node – **CLAN-AES** [Set to the node name of the C-LAN that serves the AES link].
- Local Port – set to **8765**.

change ip-services

Page1 of 4

IP SERVICES					
Service Type	Enabled	Local Node	Local Port	Remote Node	Remote Port
AESVCS	y	CLAN-AES	8765		

On Page 4 of the ip-services form, enter the hostname of the AES server (ssh into the AES server and run “uname -a” to get the hostname) for the AE Services Server field and an alphanumeric password for the Password field. Set the Enabled field to **y**. The same password will be configured on the AES server in Section 4.1.

display ip-services					Page	4 of	4
AE Services Administration							
Server ID	AE Services Server	Password	Enabled	Status			
1:	server1	xxxxxxxxxxxxxxxxxx	y	idle			
2:							

### 3.3. Feature Access Codes

Enter the **display feature-access-codes** command. On Page 5 of the feature-access-codes form, note the Login Access Code and Logout Access Code.

display feature-access-codes	Page 5 of 7
FEATURE ACCESS CODE (FAC)	
Automatic Call Distribution Features	
After Call Work Access Code: 120	
Assist Access Code:	
Auto-In Access Code: 122	
Aux Work Access Code: 123	
Login Access Code: 124	
Logout Access Code: 125	
Manual-in Access Code:	
Service Observing Listen Only Access Code:	
Service Observing Listen/Talk Access Code:	
Service Observing No Talk Access Code:	
Add Agent Skill Access Code:	
Remove Agent Skill Access Code:	
Remote Logout of Agent Access Code:	

### 3.4. Abbreviated Dialing

Enter the **add abbreviated-dialing group g** command, where **g** is the number of an available abbreviated dialing group. In the DIAL CODE list, enter the Feature Access Codes for ACD Login and Logout from Section 3.3.

add abbreviated-dialing group 1	Page 1 of 1
ABBREVIATED DIALING LIST	
Group List: 1	Group Name: Call Center
Size (multiple of 5): 5	Program Ext: Privileged? n
DIAL CODE	
11: 124	
12: 125	
13:	
14:	
15:	

### 3.5. Configure Physical Telephones

Enter the **change station r** command, where **r** is the extension of a registered, physical Avaya IP or Digital telephone. On Page 1 of the STATION form, enter a Security Code and set the IP SoftPhone field to **y** to allow the physical station to be controlled by a softphone such as the Phone Server application.

change station 22001	Page 1 of 4	
STATION		
Extension: 22001	Lock Messages? n	BCC: 0
Type: 4620	Security Code: *	TN: 1
Port: S00000	Coverage Path 1:	COR: 1
Name: 22001	Coverage Path 2:	COS: 1
	Hunt-to Station:	
STATION OPTIONS		
Loss Group: 19	Personalized Ringing Pattern: 1	
	Message Lamp Ext: 22001	
Speakerphone: 2-way	Mute Button Enabled? y	
Display Language: english	Expansion Module? n	
Survivable GK Node Name:		
Survivable COR: internal	Media Complex Ext:	
Survivable Trunk Dest? y	IP SoftPhone? y	
	IP Video Softphone? n	

On Page 2 of the STATION form, verify that the Auto Select Any Idle Appearance field is enabled.

change station 22001	Page 2 of 4
STATION	
FEATURE OPTIONS	
LWC Reception: spe	Auto Select Any Idle Appearance? y
LWC Activation? y	Coverage Msg Retrieval? y
LWC Log External Calls? n	Auto Answer: none
CDR Privacy? n	Data Restriction? n
Redirect Notification? y	Idle Appearance Preference? n
Per Button Ring Control? n	Bridged Idle Line Preference? n
Bridged Call Alerting? n	Restrict Last Appearance? y
Active Station Ringing: single	Conf/Trans on Primary Appearance? n
	EMU Login Allowed? n
H.320 Conversion? n	Per Station CPN - Send Calling Number?
Service Link Mode: as-needed	
Multimedia Mode: enhanced	
MWI Served User Type:	Display Client Redirection? n
AUDIX Name:	Select Last Used Appearance? n
IP Hoteling? n	Coverage After Forwarding? s
Remote Softphone Emergency Calls: as-on-local	Direct IP-IP Audio Connections? y
Emergency Location Ext: 22001	Always Use? n IP Audio Hairpinning? n



On Page 3 of the STATION form, for ABBREVIATED DIALING List 2, enter the abbreviated dialing group configured in Section 3.4. On Pages 3 and 4 of the STATION forms, configure the following BUTTON ASSIGNMENTS in addition to the call-appr (call appearance) buttons:

- release
- auto-in
- aux-work
- abrv-dial – configure two of these buttons, one for Login and one for Logout.
- after-call

change station 22001		Page 3 of 4	
STATION			
SITE DATA			
Room:		Headset?	n
Jack:		Speaker?	n
Cable:		Mounting:	d
Floor:		Cord Length:	0
Building:		Set Color:	
ABBREVIATED DIALING			
List1: personal 1	List2: group 1	List3:	
BUTTON ASSIGNMENTS			
1: call-appr	5: auto-in	Grp:	
2: call-appr	6: aux-work	RC:	Grp:
3: call-appr	7: abrv-dial	List: 2	DC: 11
4: abrdg-appr Ext:25001	8: abrv-dial	List: 2	DC: 12

change station 22001		Page 4 of 4	
STATION			
FEATURE BUTTON ASSIGNMENTS			
9: after-call	Grp:		
10: Release			
11: q-calls	Grp:		

The following screen shows the operator's private line configuration. Enter the **add station r** command, where **r** is the extension of a virtual telephone. On Page 1 of the STATION form, configure the highlighted fields, shown below.

add station 25001		Page 1 of 3
STATION		
Extension: 25001	Lock Messages? n	BCC: 0
Type: 2500	Security Code:	TN: 1
Port: x	Coverage Path 1:	COR: 1
Name: Abrdg on 22001	Coverage Path 2:	COS: 1
	Hunt-to Station:	Tests? y
STATION OPTIONS		
Loss Group: 1	Message Waiting Indicator: none	
Off Premises Station? n		
Survivable COR: internal		
Survivable Trunk Dest? y		

Repeat the instructions provided in this section for each physical station (and its private line) that is to be controlled/monitored by an Amcom CTI Service instance.

### 3.6. Configure Parking Lot Telephones

Enter the **add station r** command, where **r** is the extension of a registered, physical Avaya IP or Digital telephone. On Page 1 of the STATION form, enter a Type, a Security Code, and set the IP SoftPhone field to **y** to allow the physical station to be controlled by a softphone such as the Phone Server application.

add station 27001		Page 1 of 5
STATION		
Extension: 27001	Lock Messages? n	BCC: 0
Type: 4620	Security Code: *	TN: 1
Port: IP	Coverage Path 1:	COR: 1
Name: Parking Lot 1	Coverage Path 2:	COS: 1
	Hunt-to Station:	
STATION OPTIONS		
Loss Group: 19	Time of Day Lock Table:	
	Personalized Ringing Pattern: 1	
Speakerphone: 2-way	Message Lamp Ext: 27001	
Display Language: english	Mute Button Enabled? y	
Survivable GK Node Name:	Expansion Module? n	
Survivable COR: internal	Media Complex Ext:	
Survivable Trunk Dest? y	IP SoftPhone? y	
	IP Video Softphone? n	
	Customizable Labels? y	

On Page 2 of the STATION form, configure the highlighted fields, as shown below.

add station 27001		Page 2 of 4
STATION		
FEATURE OPTIONS		
LWC Reception: spe	Auto Select Any Idle Appearance? y	
LWC Activation? y	Coverage Msg Retrieval? y	
LWC Log External Calls? n	Auto Answer: none	
CDR Privacy? n	Data Restriction? n	
Redirect Notification? y	Idle Appearance Preference? n	
Per Button Ring Control? n	Bridged Idle Line Preference? n	
Bridged Call Alerting? n	Restrict Last Appearance? y	
Active Station Ringing: single	Conf/Trans on Primary Appearance? y	
	EMU Login Allowed? n	
H.320 Conversion? n	Per Station CPN - Send Calling Number?	
Service Link Mode: as-needed		
Multimedia Mode: enhanced		
MWI Served User Type:	Display Client Redirection? n	
AUDIX Name:	Select Last Used Appearance? n	
	Coverage After Forwarding? s	
Remote Softphone Emergency Calls: as-on-local Direct IP-IP Audio Connections? y		
Emergency Location Ext: 27001 Always Use? n IP Audio Hairpinning? n		

On Page 3 of the STATION form, configure the highlighted fields, as shown below.

add station 27001		Page 3 of 4
STATION		
SITE DATA		
Room:	Headset? n	
Jack:	Speaker? n	
Cable:	Mounting: d	
Floor:	Cord Length: 0	
Building:	Set Color:	
ABBREVIATED DIALING		
List1:	List2:	List3:
BUTTON ASSIGNMENTS		
1: call-appr	5: abrdg-appr	Ext:28003
2: call-appr	6: abrdg-appr	Ext:28004
3: abrdg-appr	Ext:28001	7:
4: abrdg-appr	Ext:28002	8: release

The following screen shows the configuration of a companion station for the Parking Lot station. On Page 1 of the STATION form, configure the highlighted fields, as shown below.

add station 28001		Page 1 of 3
STATION		
Extension: 28001	Lock Messages? n	BCC: 0
Type: 2500	Security Code:	TN: 1
Port: x	Coverage Path 1:	COR: 1
Name: park ext 27001	Coverage Path 2:	COS: 1
	Hunt-to Station:	Tests? y
STATION OPTIONS		
Loss Group: 1	Message Waiting Indicator: none	
Off Premises Station? n		
Survivable COR: internal		
Survivable Trunk Dest? y		

Repeat the instructions provided in this section for each Parking Lot station and its companion station that are to be controlled/monitored by an Amcom CTI Service instance.

## 4. Configure AES

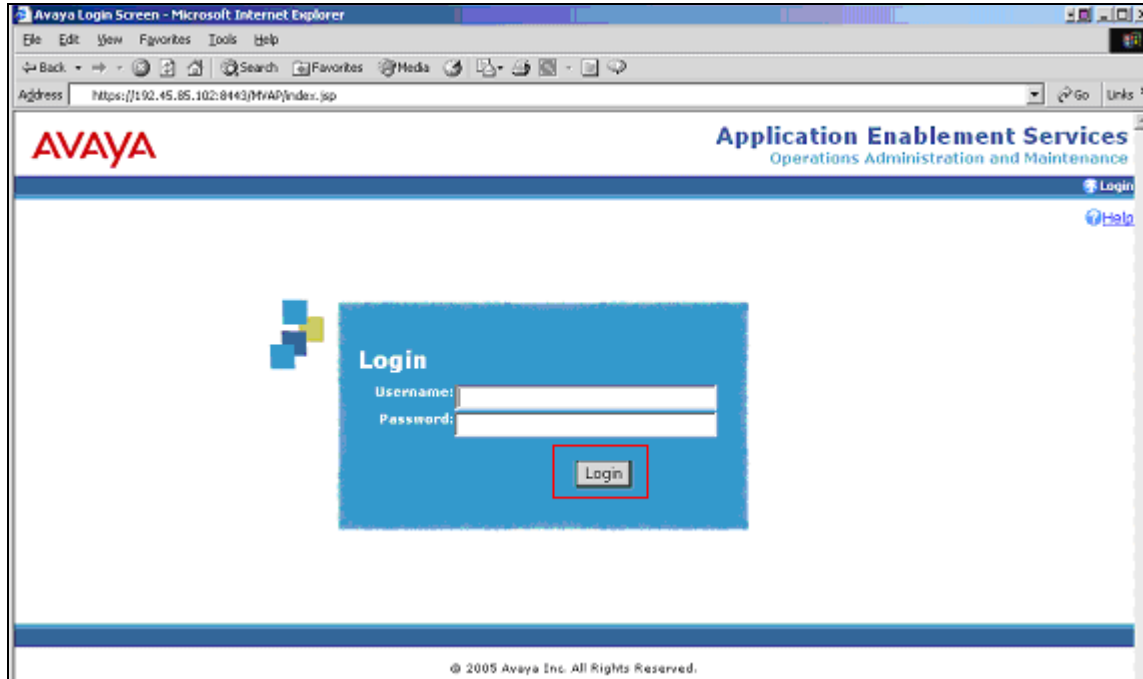
Avaya Application Enablement Services (AES) server enables Computer Telephony Interface (CTI) applications to control and monitor telephony resources on Avaya Communication Manager. The Avaya Application Enablement Services (AES) server receives requests from CTI applications, and forwards the request to Avaya Communication Manager. Conversely, the Avaya Application Enablement Services (AES) server receives responses and events from Avaya Communication Manager and forwards them to the appropriate CTI applications.

In this section, the following steps will be discussed:

- Configuring a Switch Connection
- Configuring an AES (CMAPI) user and a CMAPI port.

## 4.1. Configure Switch Connection

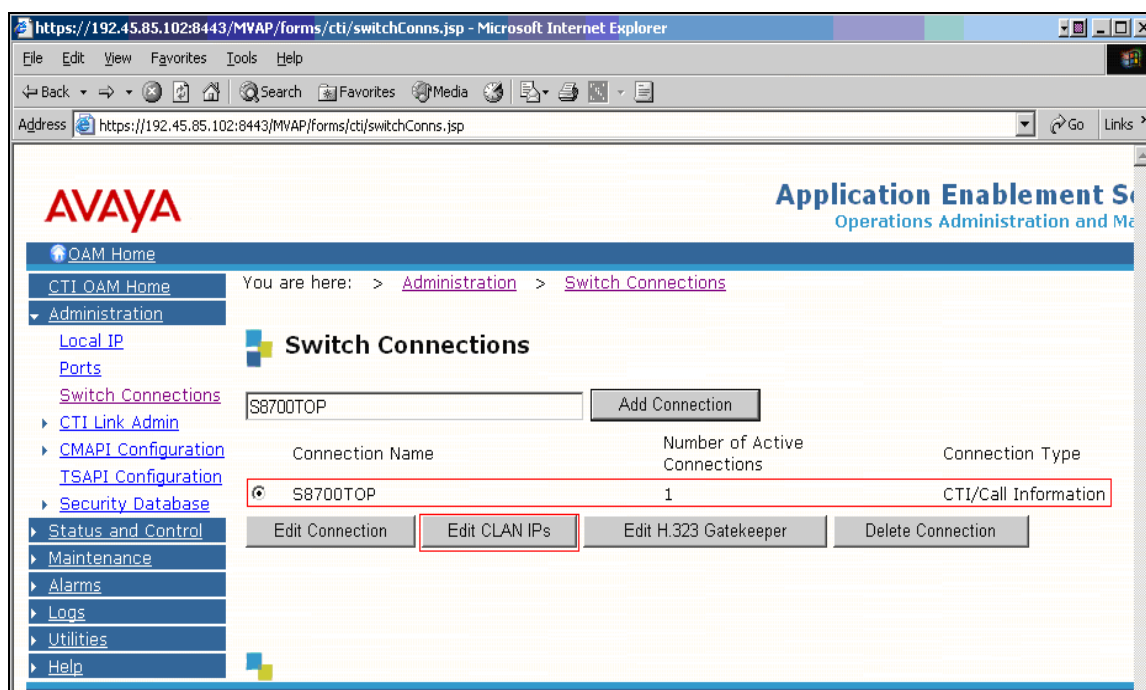
Launch a web browser, enter <https://<IP address of AES server>:8443/MVAP> in the URL, and log in with the appropriate credentials for accessing the AES CTI OAM pages.



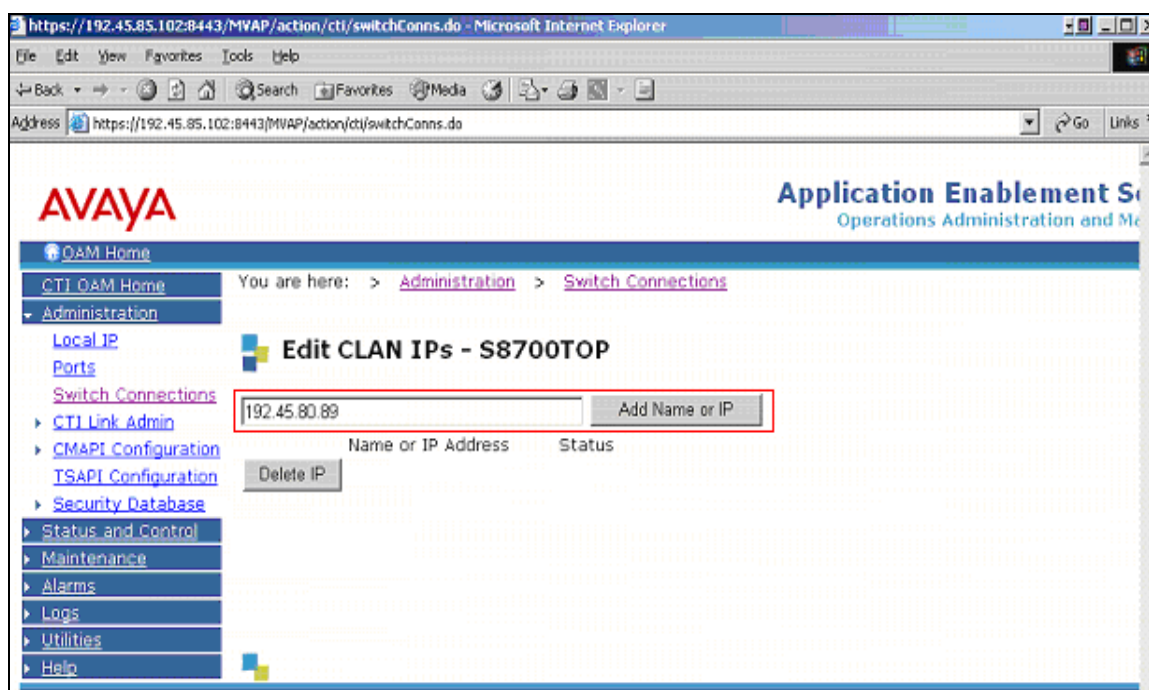
Click on **CTI OAM Home** → **Administration** → **Switch Connections** in the left pane to invoke the Switch Connections page. A Switch Connection defines a connection between the AES server and Avaya Communication Manager. Enter a descriptive name for the Switch Connection and click on **Add Connection**.

The next window that appears prompts for the Switch Connection password. Enter the same password that was administered in Avaya Communication Manager in Section 3.2. Default values may be used in the remaining fields. Click on **Apply**.

After returning to the Switch Connections page, select the radio button corresponding to the switch connection added previously, and click on **Edit CLAN IPs**.

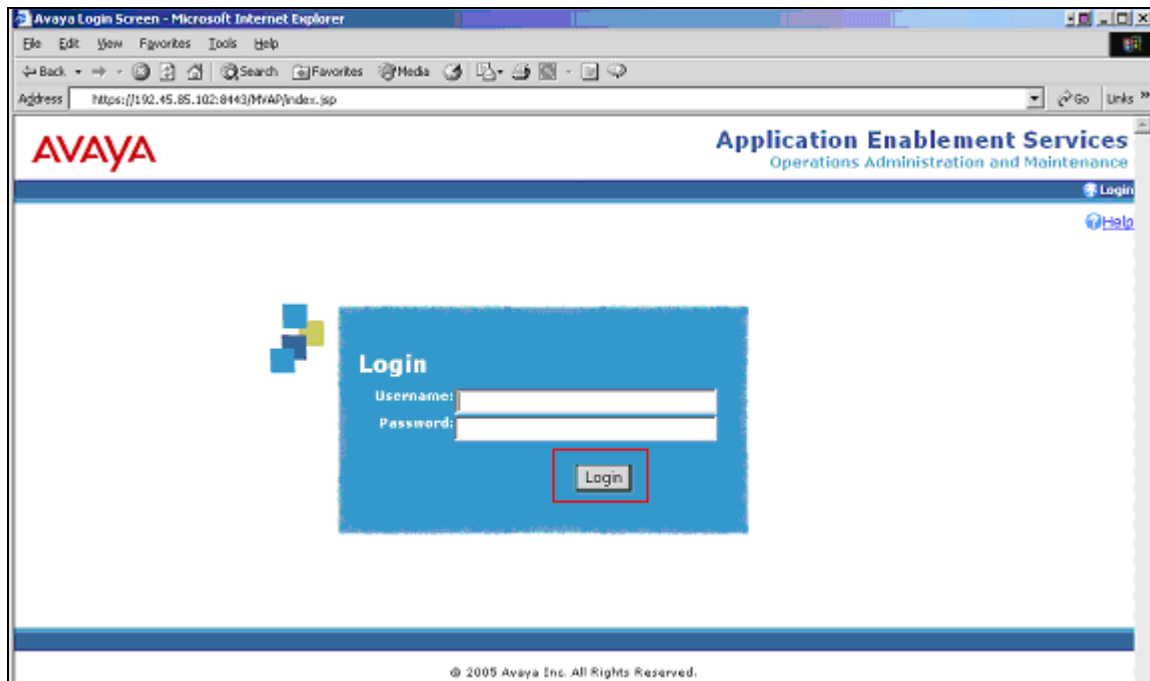


Enter the IP address of a C-LAN board enabled with Application Enablement Services (see Section 3.2) and click on **Add Name or IP**. Repeat this step as necessary to add other C-LAN boards enabled with Application Enablement Services.



## 4.2. Configure CMAPI User

The steps in this section describe the configuration of an AES (CMAPI) user and a CMAPI port. Launch a web browser, enter <https://<IP address of AES server>:8443/MVAP> in the URL, and log in with the appropriate credentials for accessing the OAM Home page.



From the OAM Home page, navigate to the **OAM Home → User Management → User Management → Add User** page to add a CMAPI user.



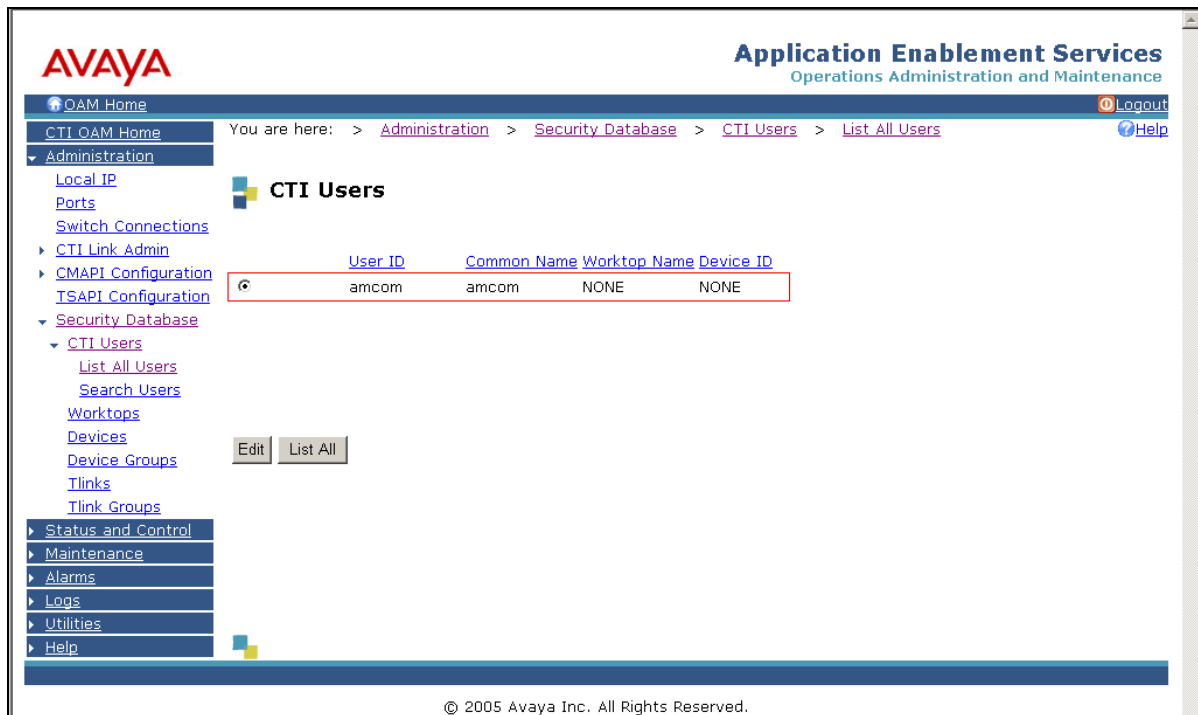


On the Add User page, provide the following information:

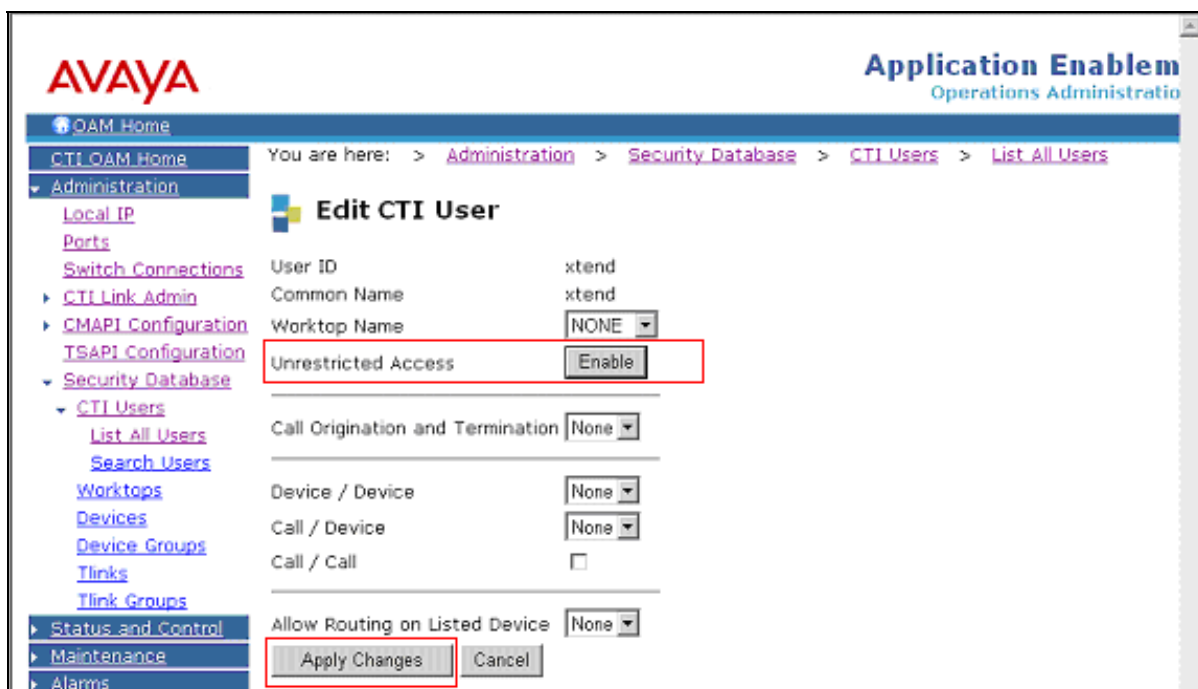
- User Id
- Common Name
- Surname
- User Password
- Confirm Password

Select **Yes** using the drop down menu on the CT User field. This enables the user as a CT user. Click the **Apply** button (not shown here) at the bottom of the screen to complete the process. Default values may be used in the remaining fields

Once the user is created, navigate to the **OAM Home → CTI OAM Admin → Administration → Security Database → CTI Users → List All Users** page. Select an appropriate Used ID, and click the **Edit** button to set the permission of the user.



Provide the user with unrestricted access privileges by clicking the **Enable** button on the Unrestricted Access field. Click the **Apply Changes** button.



Navigate to the **OAM Home** → **CTI OAM Admin** → **Administration** → **Ports** page to set the CMAPI server port. During the compliance test, the default port values were utilized. The following screen displays the default port values. If CMAPI Server Ports are changed, then, click the **Apply Changes** button to submit new values.

**AVAYA** Application Enablement Services  
Operations Administration and Maintenance

[OAM Home](#) You are here: > [Administration](#) > [Ports](#) [Logout](#) [Help](#)

**Ports**

CVLAN Port	TCP Port	9999
DLG Port	TCP Port	5678
TSAPI Port	TCP Port	450

CSTA Tlinks Port

TCP Port Min	1050
TCP Port Max	1065

**CMAPI Server Ports**

		Enabled	Disabled
Unencrypted Port	4721	<input checked="" type="radio"/>	<input type="radio"/>
Encrypted Port	4722	<input checked="" type="radio"/>	<input type="radio"/>

H.323 Port

TCP Port Min	3000
TCP Port Max	4100
Local UDP Port Min	7000
Local UDP Port Max	8100
RTP Local UDP Port Min	5000
RTP Local UDP Port Max	5300

[Apply Changes](#) [Restore Defaults](#)

## 5. Configure Amcom Phone Server and Operator Saver

Amcom installs, configures, and customizes Phone Server and Operator Saver applications for their end customers.

## 6. Interoperability Compliance Testing

The interoperability compliance testing included feature and serviceability testing. The feature testing evaluated the ability of the Amcom Phone Server/Operator Saver desktop applications to operate/monitor Avaya IP and Digital telephones and view display and first party call information. The serviceability testing introduced failure scenarios to see if the Amcom CTI Service is able to resume operation after failure recovery.

### 6.1. General Test Approach

The general approach was to exercise basic telephone and call operations on Avaya IP and Digital telephones using the aforementioned Amcom desktop applications. The main objectives were to verify that:

- The user may successfully use Phone Server to perform off-hook, on-hook, dial, answer, hold, retrieve, transfer, conference, and release operations on the physical telephone.
- The agent user may successfully use Phone Server to log into and out of an ACD, and move between agent work modes.
- Manual operations performed on the physical telephone are correctly reflected in the Phone Server GUI.
- Phone Server and manual telephone operations may be used interchangeably; for example, go off-hook using Phone Server and manually dial digits.
- Display and call information on the physical telephone is accurately reflected in the Phone Server GUI.
- Call Stats are consistent between Phone Server and the physical telephone.
- The configured Operator Saver greeting is correctly played to the caller when an inbound call is answered.
- Incoming calls can be parked and retrieve the parked calls.

For serviceability testing, cable disconnects and reconnects, application restarts, and device resets were applied.

### 6.2. Test Results

The objectives of Section 6.1 were verified. For serviceability testing, the Amcom CTI Service was able to regain control of the physical telephone after restarts of the Amcom CTI Service, the computer on which it runs, and the Avaya Application Enablement Services (AES) server.

The following observation was obtained from testing:

- If the Amcom CTI Service is unexpectedly<sup>1</sup> unregistered by Avaya Communication Manager or AES, it does not attempt to re-register. The workaround is to restart the Amcom CTI Service.

## 7. Verification Steps

The following steps may be used to verify the configuration:

- From the Amcom client computers, ping IP interfaces, in particular the Avaya Application Enablement Services server, and verify connectivity.
- For the physical IP telephones, verify that the physical telephones are registered by using the **list registered-ip-stations** command from Avaya Communication Manager SAT interface. For the physical Digital telephones, verify that the telephones are attached to the correct ports.
- Verify that the Amcom CTI Service instances are registered with Avaya Communication Manager by using the **list registered-ip-stations** command from Avaya Communication Manager SAT interface.
- Verify that the AES link between Avaya AES and Avaya Communication Manager, by using the **status aes link** and **status aes interface** commands from Avaya Communication Manager SAT interface.
- Go off-hook and on-hook on the controlled telephones manually and using Phone Server, and verify consistency.
- Place and answer calls from the controlled telephones manually and using Phone Server, and verify consistency.
- Answer calls on the controlled telephones, and verify that the appropriate Operator Saver recorded greeting is played to the caller.
- Verify that operators can park and retrieve incoming calls.

## 8. Support

For technical support on Amcom products, contact Amcom at 1-888-797-7487 or log into the Amcom Customer Care web support center at <http://www.amcomsoft.com/custcare.cfm>.

## 9. Conclusion

These Application Notes illustrate the procedures for configuring Amcom Smart Console and its desktop applications to operate with Avaya Application Enablement Services and Avaya Communication Manager. During compliance testing, all applications are successfully tested and verified:

- Phone Server allowed a user to operate a physical telephone and view call and telephone display information through a graphical user interface (GUI).
- Operator Saver played a recorded greeting when an incoming call is answered.

---

<sup>1</sup> An example of an “unexpected” registration is one where the physical station monitored by the Amcom CTI Service resets and is thereby unregistered. An “expected” registration is one in which the Amcom CTI Service instance requests unregistration and then receives unregistration confirmation from Avaya Communication Manager via AES.

- Operator Statistics application provided the call detail statistics (source, destination, and a call duration).
- Parking Lot allows operators to centrally park callers so that any agent can finish servicing the parked call.

## 10. Additional References

Product documentation for Avaya products may be found at <http://support.avaya.com>.

[1] *Feature Description and Implementation For Avaya Communication Manager*, Release 3.1, Issue 4, February 2006, Document Number 555-245-205.

[2] *Application Enablement Services Administration and Maintenance Guide*, Release 3.1, Issue 2, February 2006, Document Number 02-300357

[3] *Amcom Smart Console Integration Documentation for Avaya Communication Manager*

Product information for Amcom products may be found at <http://www.amcomsoft.com/products.cfm>.

---

**©2007 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 Developer*Connection* Program at [devconnect@avaya.com](mailto:devconnect@avaya.com).