



## **Avaya Solution & Interoperability Test Lab**

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# **Application Notes for AGC Networks VoiceNet 1.3 with Avaya Voice Portal 5.1, Avaya Aura® Application Enablement Services 5.2.2 and Avaya Aura® Communication Manager 6.0 – Issue 1.0**

## **Abstract**

These Application Notes describe the configuration steps required for AGC Networks VoiceNet 1.3 to interoperate with Avaya Voice Portal 5.1, Avaya Aura® Application Enablement Services 5.2.2 and Avaya Aura® Communication Manager 6.0. VoiceNet is a software solution that works in conjunction with Avaya Voice Portal to reach people with personalized messages and with call transfer to live agents. VoiceNet campaign functions in two modes – Proactive Contact and CallBack Manager. It uses the Voice Portal Web Services to initiate the outbound calls.

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 describe the configuration steps required for AGC Networks VoiceNet 1.3 to interoperate with Avaya Voice Portal 5.1, Avaya Aura® Application Enablement Services 5.2.2 and Avaya Aura® Communication Manager 6.0. VoiceNet is a software solution that works in conjunction with Avaya Voice Portal to reach customers with personalized messages. VoiceNet campaign functions in two modes – Proactive Contact and CallBack Manager. It uses the Voice Portal Web Services to initiate the outbound calls.

For callback functionality, VoiceNet can be incorporated into existing call routing strategies using the call vectoring functionality available on Avaya Aura® Communication Manager. These Application Notes describe a sample call vector for VoiceNet integration. For more details on vector programming, please refer to References [3], [4] and [5].

## 2. General Test Approach and Test Results

The feature test cases were performed manually.

For the Proactive Contact function, campaigns were configured and started using the VoiceNet Administrator web interface to various destinations such as internal extensions, PSTN land lines, mobile phones and international numbers.

For the Callback Manager function, calls were placed to the Vector Directory Number (VDN) and in the associated vector steps, the calls were routed to the VoiceNet Voice XML (VXML) application running on the Voice Portal, where the caller provided the callback number and optionally, the date and time for a scheduled callback. At the scheduled time, VoiceNet launched a call back to the same VDN to find an available agent, and then put the agent on hold while making a call to the customer. When the customer answered, VoiceNet transferred the call to the agent to complete the callback.

For both functions, call scenarios such as destination phone busy or no answer and invalid number were tested.

The serviceability test cases were performed manually by rebooting the VoiceNet server and Voice Portal server.

## 2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing.

The feature testing focused on verifying AGC Networks VoiceNet for the following:

- Placing proactive contact calls to internal extensions, PSTN land lines, mobile phones and international numbers.
- Placing a successful proactive contact call under normal conditions.
- Placing calls to destinations which are busy or no answer, or invalid number.
- Rescheduling of the proactive contact calls when not successful.
- Requesting an immediate or a scheduled callback.
- Performing a successful callback under normal conditions.
- Performing a callback under various call scenarios such as, customer phone busy or no answer and invalid callback number.
- Rescheduling of the callback when not successful.

The serviceability testing focused on verifying the ability of AGC Networks VoiceNet to recover from adverse conditions, such as rebooting VoiceNet and Voice Portal.

## 2.2. Test Results

All feature and serviceability test cases were executed and passed.

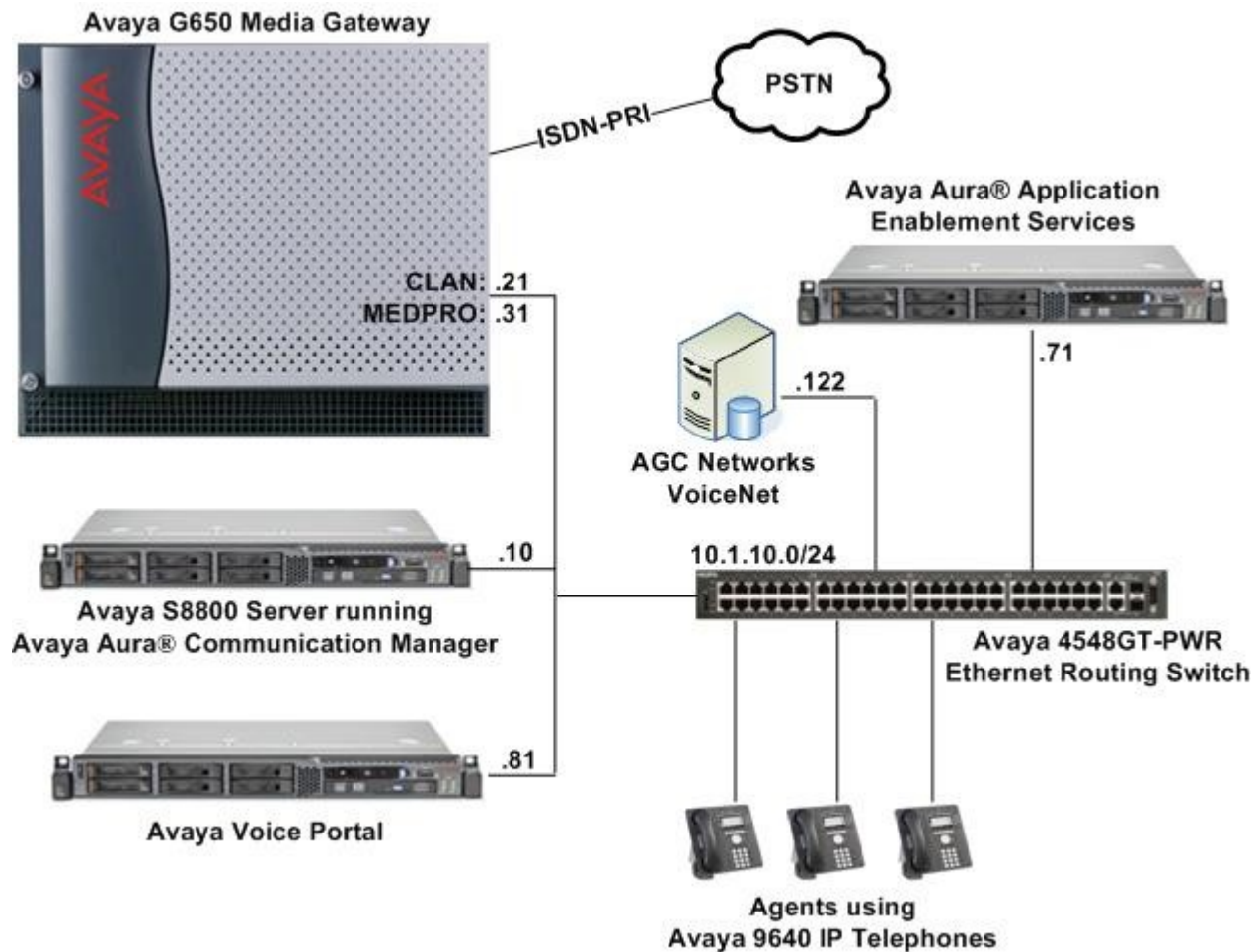
## 2.3. Support

Technical support on AGC Networks VoiceNet can be obtained through the following:

- Phone: + 91-79-66130600
- Web: <http://www.agcnetworks.com/service-request.aspx?Type=16>

### 3. Reference Configuration

**Figure 1** illustrates a sample configuration consisting of an Avaya S8800 Server running Avaya Aura® Communication Manager, an Avaya G650 Media Gateway, Avaya Voice Portal running on a single server and Avaya 9640 IP Telephones. AGC Networks VoiceNet is installed on a Windows 2003 Server together with Microsoft SQL Server 2005 for database support. For the callback functionality, VoiceNet voice application uses the Avaya Dialog Designer CTI Connector to obtain the customers' calling number from the Avaya Aura® Application Enablement Services. The Avaya 4548GT-PWR Ethernet Routing Switch provides Ethernet connectivity to the servers and IP telephones.



**Figure 1: Test Configuration**

## 4. Equipment and Software Validated

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

Equipment/Software	Version
Avaya S8800 Server	Avaya Aura® Communication Manager 6.0 (Service Pack 00.0.345.0-18567)
Avaya G650 Media Gateway <ul style="list-style-type: none"><li>TN2312BP IP Server Interface</li><li>TN799DP C-LAN Interface</li><li>TN2302AP IP Media Processor</li><li>TN2185B BRI Trunk</li></ul>	- HW07, FW049 HW01, FW034 HW20, FW120 000004
Avaya Voice Portal	5.1
Avaya Aura® Application Enablement Services	5.2.2 Patch 3
Avaya 4548GT-PWR Ethernet Routing Switch	V5.4.0.008
Avaya 9640 IP Telephones	3.1.1 (H.323)
AGC Networks VoiceNet on Dell PowerEdge 1950 <ul style="list-style-type: none"><li>Microsoft SQL Server</li><li>Sun Java SE Development Kit (JDK)</li><li>Apache Tomcat</li></ul>	1.3  Microsoft Windows Server 2003, SP2 Microsoft SQL Server 2005, SP3 Version 6 Update 10 5.5.27

## 5. Configure Avaya Aura® Communication Manager

These Application Notes assume that Communication Manager is installed and operational. This section describes the steps for configuring Communication Manager to work with AGC Networks VoiceNet as well as the integration steps for Voice Portal and Application Enablement Services. All configurations in the section are administered using the System Access Terminal (SAT). The procedures covered include the following:

- Verify Special Applications
- Configure Avaya Voice Portal H.323 Stations
- Configure Avaya Voice Portal Hunt Group
- Configure Vector Routing Table, Vectors and VDNs
- Configure AES and CTI Links
- Verify Auto Route Selection (ARS) Access Code

## 5.1. Verify Special Applications

For these Application Notes, H.323 stations will provide the integration between Communication Manager and Voice Portal. Calls to these stations will be routed to Voice Portal which will run a VXML application from the VoiceNet server. The H.323 stations are configured as 7434ND type, which allows it to receive call status messages through the activation of the SA8874 special application. Enter the **display system-parameters special-applications** command. On Page 6, verify that **(SA8874) - Call Status Messages for 7434ND IP Softphone** is set to **y**. If not, contact an authorized Avaya account representative to obtain the activation.

<b>display system-parameters special-applications</b>	Page	6 of	9
SPECIAL APPLICATIONS			
(SA8758) - Auto Exclusion for Analog Bridged Extensions? n			
(SA8759) - Invoke NCR Transfer on Answer Only? n			
(SA8796) - Incoming Call Display with No/Delayed Ringing? n			
(SA8797) - CTI Agent Call Capture by FAC? n			
(SA8835) - Conference to VDN? n			
(SA8847) - Forced Disconnect of Diverted Predictive Calls? n			
(SA8851) - Remove Caller Id from Set Display? n			
(SA8852) - Display VDN Information on Route-To Calls? n			
(SA8853) - Support of LSPs Behind NAT? n			
(SA8854) - NCR OOB Transfer & Connect/Courtesy Transfer? n			
(SA8859) - Default PSA Station? n			
(SA8869) - SIP Caller-ID Blocking in a Hosted Environment? n			
(SA8870) - Tandem Network Call Redirection? n			
<b>(SA8874) - Call Status Messages for 7434ND IP Softphone? y</b>			
(SA8876) - Expanded Holiday Table? n			
(SA8879) - DCP Xfer Lamp Control/Buttonless Auto Exclusion? n			

## 5.2. Configure Avaya Voice Portal H.323 Stations

Enter the **add station n** command. In the station form, set the **Type** to **7434ND**, set **Port** to **IP** and provide a descriptive **Name**. Specify a **Security Code**, which will be used in **Section 6.1 Step 2** when configuring Voice Portal and set the **Display Module** and **IP SoftPhone** fields to **y**.

<b>add station 10201</b>	Page	1 of	6
STATION			
Extension: 10201	Lock Messages? n	BCC: 0	
<b>Type: 7434ND</b>	<b>Security Code: 1234</b>	TN: 1	
<b>Port: IP</b>	Coverage Path 1:	COR: 1	
<b>Name: VP #1</b>	Coverage Path 2:	COS: 1	
	Hunt-to Station:		
STATION OPTIONS			
	Time of Day Lock Table:		
Loss Group: 2	Personalized Ringing Pattern: 1		
Data Module? n	Message Lamp Ext: 10201		
<b>Display Module? y</b>			
Display Language: english	Coverage Module? n		
Survivable COR: internal	Media Complex Ext:		
Survivable Trunk Dest? y	<b>IP SoftPhone? y</b>		
	Remote Office Phone? n		
	IP Video Softphone? n		
	Short/Prefixed Registration Allowed: default		

On Page 2 set **MultiMedia Mode** to **enhanced**.

add station 10201		Page 2 of 6
STATION		
FEATURE OPTIONS		
LWC Reception: spe	Auto Select Any Idle Appearance? n	
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		
H.320 Conversion? n	Per Station CPN - Send Calling Number?	
Service Link Mode: as-needed	EC500 State: disabled	
<b>Multimedia Mode: enhanced</b>		
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: 10201 Always Use? n IP Audio Hairpinning? y		

On Page 4 add **ucid-info** to button 10.

add station 10201		Page 4 of 6
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	6:	
2: call-appr	7:	
3: call-appr	8:	
4:	9:	
5:	10: <b>ucid-info</b>	

On Page 6 add a **normal** button to the station.

add station 10201		Page 6 of 6
STATION		
DISPLAY BUTTON ASSIGNMENTS		
1: <b>normal</b>		
2:		

Repeat the above steps for each Voice Portal station. In this configuration, ten Voice Portal stations were configured with an extension range of 10201-10210.

### 5.3. Configure Avaya Voice Portal Hunt Group

To route the calls to Voice Portal, a hunt group is created to include all the Voice Portal stations configured in the steps above. To add a hunt group, use the command **add hunt-group n**. Enter a descriptive name for **Group Name**, set **Group Extension** to an available extension number and set **Group Type** to **ucd-mia**.

add hunt-group 200		Page 1 of 60
HUNT GROUP		
Group Number: 200	ACD? n	
Group Name: Voice Portal	Queue? n	
Group Extension: 10200	Vector? n	
Group Type: ucd-mia	Coverage Path:	
TN: 1	Night Service Destination:	
COR: 1	MM Early Answer? n	
Security Code:	Local Agent Preference? n	
ISDN/SIP Caller Display: grp-name		

On **Page 3**, add the Voice Portal stations configured in **Section 5.2** to the hunt group.

add hunt-group 200		Page 3 of 60
HUNT GROUP		
Group Number: 200	Group Extension: 10200	Group Type: ucd-mia
Member Range Allowed: 1 - 1500	Administered Members (min/max): 1 /10	
Total Administered Members: 10		
GROUP MEMBER ASSIGNMENTS		
Ext	Name(19 characters)	Ext
1: 10201	VP #1	14:
2: 10202	VP #2	15:
3: 10203	VP #3	16:
4: 10204	VP #4	17:
5: 10205	VP #5	18:
6: 10206	VP #6	19:
7: 10207	VP #7	20:
8: 10208	VP #8	21:
9: 10209	VP #9	22:
10: 10210	VP #10	23:
11:		24:
12:		25:
13:		26:



## 5.4. Configure Vector Routing Table, Vectors and VDNs

### 5.4.1. Configure Vector Routing Table

A Vector Routing Table is used to match calls originating from Voice Portal in the vector. To add a Vector Routing Table, enter the **add vrt n** command. Add the Voice Portal stations configured in **Section 5.2** to the Vector Routing Table.

<b>add vrt 1</b>		Page 1 of 3
VECTOR ROUTING TABLE		
Number: 1	Name: VoiceNet CBM	Sort? n
1: 10201		17:
2: 10202		18:
3: 10203		19:
4: 10204		20:
5: 10205		21:
6: 10206		22:
7: 10207		23:
8: 10208		24:
9: 10209		25:
10: 10210		26:
11:		27:
12:		28:
13:		29:
14:		30:
15:		31:
16:		32:

### 5.4.2. Configure Vector to Integrate VoiceNet

To add the callback functionality of VoiceNet to an existing call center ACD, a sample modification of the vectors and VDNs that queued the calls to the agents is shown below. A brief explanation of the relevant vector steps are as follows:

- **Step 02** checks if the call is originating from the Voice Portal using the Vector Routing Table created in **Section 5.4.1**. This occurs when VoiceNet is performing the callback. If yes, it will jump to **Step 07** to queue the call to the agents.
- **Step 03** checks if there are agents available. If yes, it will route the call to the agent.
- **Step 04** routes the call to the Voice Portal hunt group configured in **Section 5.3** and the VoiceNet application will prompt the caller for callback details.
- **Step 07 to 09** queues the call to the agents and provides music playback to the caller.

Note: This is a sample vector. It is possible to provide additional call treatment within the vector such as queue announcements, expected-wait-time evaluation and time of day routing, please see References [3], [4] and [5] for further information.

change vector 201				Page 1 of 6	
CALL VECTOR					
Number: 201		Name: CBMVector			
		Meet-me Conf? n		Lock? n	
Basic? y	EAS? y	G3V4 Enhanced? y	ANI/II-Digits? y	ASAI Routing? y	
Prompting? y	LAI? y	G3V4 Adv Route? y	CINFO? y	BSR? y	Holidays? y
Variables? y	3.0 Enhanced? y				
01 wait-time	1 secs hearing ringback				
02 goto step	7	if ani	in	table 1	
03 check	skill 6	pri m	if available-agents > 0	all-levels	
04 route-to	number 10200	with cov n if unconditionally			
05 stop					
06					
07 queue-to	skill 6	pri m			
08 wait-time	300 secs hearing music				
09 goto step	7	if unconditionally			

### 5.4.3. Configure VDN to Queue to Agents

The VDN to queue to the agents was created prior to the integration with VoiceNet. It is included here for reference.

change vdn 2200		Page 1 of 3	
VECTOR DIRECTORY NUMBER			
Extension: 2200			
Name*: VDN: CBCon Eg-Q2Agts			
Destination: Vector Number		201	
Meet-me Conferencing? n			
Allow VDN Override? n			
COR: 1			
TN*: 1			
Measured: none			

## 5.5. Configure AES and CTI Links

Applicable Enablement Services forwards CTI requests, responses, and events between VoiceNet Server and Communication Manager. Applicable Enablement Services communicates with Communication Manager over an AES link. Within the AES link, CTI links are configured to provide CTI services to CTI applications such as VoiceNet. The following steps demonstrate the configuration of the Communication Manager side of the AES and CTI links. See **Section 6** for the details of configuring the Applicable Enablement Services side of the AES and CTI links.

Step	Description
1.	<p>Enter the <b>display system-parameters customer-options</b> command. On Page 3, verify that <b>Computer Telephony Adjunct Links</b> is set to <b>y</b>. If not, contact an authorized Avaya account representative to obtain the license.</p> <pre> 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              CAS Branch? n A/D Grp/Sys List Dialing Start at 01? n       CAS Main? n Answer Supervision by Call Classifier? n       Change COR by FAC? n ARS? y   Computer Telephony Adjunct Links? y ARS/AAR Partitioning? y                      Cvg Of Calls Redirected Off-net? n ARS/AAR Dialing without FAC? y                DCS (Basic)? n ASAI Link Core Capabilities? n                DCS Call Coverage? n ASAI Link Plus Capabilities? n                DCS with Rerouting? n Async. Transfer Mode (ATM) PNC? n             Digital Loss Plan Modification? n Async. Transfer Mode (ATM) Trunking? n        DS1 MSP? y ATM WAN Spare Processor? n                    DS1 Echo Cancellation? y ATMS? n Attendant Vectoring? n </pre>
2.	<p>Enter the <b>add cti-link n</b> command, where <b>n</b> is a number between 1 and 64, inclusive. Enter a valid <b>Extension</b> under the provisioned dial plan in Avaya Communication Manager, set the <b>Type</b> field to <b>ADJ-IP</b>, and assign a descriptive <b>Name</b> to the CTI link.</p> <pre> add cti-link 1                                     Page 1 of 3                                 CTI LINK  CTI Link: 1 Extension: 10091 Type: ADJ-IP Name: TSAPI Services COR: 1 </pre>
3.	<p>Enter the <b>change ip-services</b> command. On Page 1, configure the <b>Service Type</b> field to <b>AESVCS</b> and the <b>Enabled</b> field to <b>y</b>. During the compliance test, the <b>Local Node</b> field is set to the processor Ethernet interface <b>procr</b> which is IP address of the S8800 Server as shown in <b>Figure 1</b>. The default port <b>8765</b> was utilized for the <b>Local Port</b> field.</p>

Step	Description																																
	<div><div>change ip-services<div>Page1 of 3</div></div><div><div>IP SERVICES</div><table><thead><tr><th>Service Type</th><th>Enabled</th><th>Local Node</th><th>Local Port</th><th>Remote Node</th><th>Remote Port</th></tr></thead><tbody><tr><td>AESVCS</td><td>y</td><td>procr</td><td>8765</td><td></td><td></td></tr></tbody></table></div></div> <div><p>On Page 3, enter the hostname of the Applicable Enablement Services server for the <b>AE Services Server</b> field. The server name may be obtained by logging in to the Applicable Enablement Services server using Secure Shell (SSH), and running the <b>uname -a</b> command. Enter an alpha-numeric password for the <b>Password</b> field and set the <b>Enabled</b> field to <b>y</b>. The same password will be configured on the Applicable Enablement Services server in <b>Section 6.3 Step 2</b>.</p></div> <div><div>change ip-services<div>Page3 of 3</div></div><div><div>AE Services Administration</div><table><thead><tr><th>Server ID</th><th>AE Services Server</th><th>Password</th><th>Enabled</th><th>Status</th></tr></thead><tbody><tr><td>1:</td><td>aes1</td><td>xxxxxxxxxxxxxxxxxx</td><td>y</td><td></td></tr><tr><td>2:</td><td></td><td></td><td></td><td></td></tr><tr><td>3:</td><td></td><td></td><td></td><td></td></tr></tbody></table></div></div>	Service Type	Enabled	Local Node	Local Port	Remote Node	Remote Port	AESVCS	y	procr	8765			Server ID	AE Services Server	Password	Enabled	Status	1:	aes1	xxxxxxxxxxxxxxxxxx	y		2:					3:				
Service Type	Enabled	Local Node	Local Port	Remote Node	Remote Port																												
AESVCS	y	procr	8765																														
Server ID	AE Services Server	Password	Enabled	Status																													
1:	aes1	xxxxxxxxxxxxxxxxxx	y																														
2:																																	
3:																																	

## 5.6. Verify Auto Route Selection (ARS) Access Code

The Auto Route Selection (ARS) Access Code is used to route calls to the PSTN. Enter the command **display feature-access-codes** and take note of the **Auto Route Selection (ARS) - Access Code 1**, which will be used to configure VoiceNet in **Section 8.1**.

<b>display feature-access-codes</b>	Page 1 of 9	
FEATURE ACCESS CODE (FAC)		
Abbreviated Dialing List1 Access Code: *00		
Abbreviated Dialing List2 Access Code: *01		
Abbreviated Dialing List3 Access Code: *02		
Abbreviated Dial - Prgm Group List Access Code: *03		
Announcement Access Code: *04		
Answer Back Access Code: *05		
Auto Alternate Routing (AAR) Access Code: 8		
<b>Auto Route Selection (ARS) - Access Code 1: 9</b>		Access Code 2:
Automatic Callback Activation: *06		Deactivation: *07
Call Forwarding Activation Busy/DA: *08	All: *09	Deactivation: *10
Call Forwarding Enhanced Status: *11	Act: *12	Deactivation: *13
Call Park Access Code: *14		
Call Pickup Access Code: *15		
CAS Remote Hold/Answer Hold-Unhold Access Code:		
CDR Account Code Access Code: *16		
Change COR Access Code:		
Change Coverage Access Code:		
Conditional Call Extend Activation:		Deactivation:
Contact Closure	Open Code:	Close Code:

## 6. Configure Avaya Aura® Application Enablement Services

This section provides the procedures for configuring Application Enablement Services (AES). The procedures fall into the following areas:

- Verify Application Enablement Services License
- Administer CTI User
- Administer Switch Connection
- Administer TSAPI link
- Administer CTI user permission

### 6.1. Verify Application Enablement Services License

Step	Description
1.	<p>Launch a web browser and enter <b>https://&lt;IP address of AES server&gt;</b> to access the Application Enablement Services Management Console. Log in using an administrative login and password (not shown), and the Welcome To OAM screen will be displayed.</p>

Step	Description
2.	<p>Select <b>AE Services</b> from the left menu. From the Welcome to AE Services page, verify that the Application Enablement Services has proper license for the feature illustrated in these Application Notes by ensuring the <b>License Mode</b> for <b>TSAPI Service</b> is <b>NORMAL MODE</b>, as shown below. If the TSAPI Service is not licensed, then contact the Avaya sales team or business partner for the proper license to install onto the WebLM Server.</p>

AES Management Console - Windows Internet Explorer

https://10.1.10.71/aesvcs/view/welcome/ctiWelcomeWarningPage.xhtml?ci

Certificate Error

GoogleSG

**AVAYA** Application Enablement Services Management Console

Welcome: User craft  
Last login: Fri Feb 18 12:25:44 2011 from 10.1.10.152  
HostName/IP: aes1/10.1.10.71  
Server Offer Type: TURNKEY  
SW Version: r5-2-2-105-0

**AE Services** Home | Help | Logout

▼ AE Services

- ▶ CVLAN
- ▶ DLG
- ▶ DMCC
- ▶ SMS
- ▶ TSAPI
- ▶ Communication Manager Interface
- ▶ Licensing
- ▶ Maintenance
- ▶ Networking
- ▶ Security
- ▶ Status
- ▶ User Management
- ▶ Utilities
- ▶ Help

### AE Services

IMPORTANT: AE Services must be restarted for administrative changes to fully take effect. Changes to the Security Database do not require a restart.

Service	Status	State	License Mode	Cause*
ASAI Link Manager	N/A	Running	N/A	N/A
CVLAN Service	ONLINE	Running	NORMAL MODE	N/A
DLG Service	OFFLINE	Running	N/A	N/A
DMCC Service	ONLINE	Running	NORMAL MODE	N/A
TSAPI Service	ONLINE	Running	NORMAL MODE	N/A
Transport Layer Service	N/A	Running	N/A	N/A

For status on actual services, please use [Status and Control](#)

\* -- For more detail, please mouse over the Cause, you'll see the tooltip, or go to help page.

**License Information**  
You are licensed to run Application Enablement (CTI) version 5.0

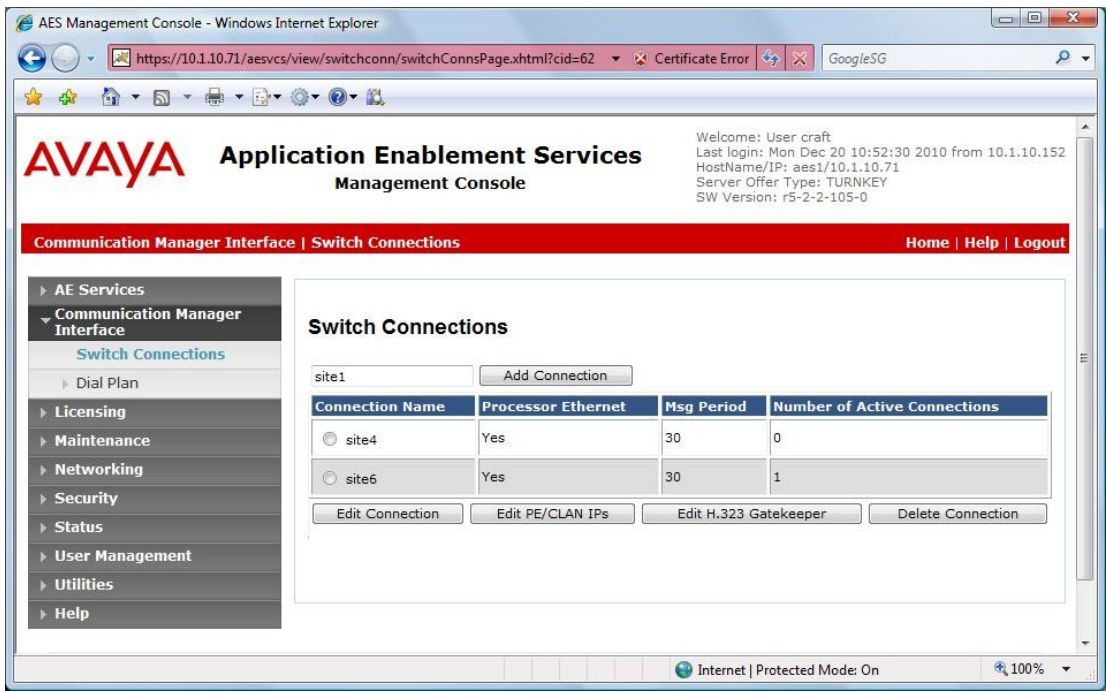
## 6.2. Administer CTI User

Click **User Management**, then **User Admin > Add User** in the left pane. Specify a value for **User Id**, **Common Name**, **Surname**, **User Password** and **Confirm Password**. Set **CT User** to **Yes**. Use the values for **User Id** and **User Password** to configure AGC Networks VoiceNet in **Section 7** to access the TSAPI Service on the Applicable Enablement Services. Scroll down to the bottom of the page and click **Apply** (not shown).

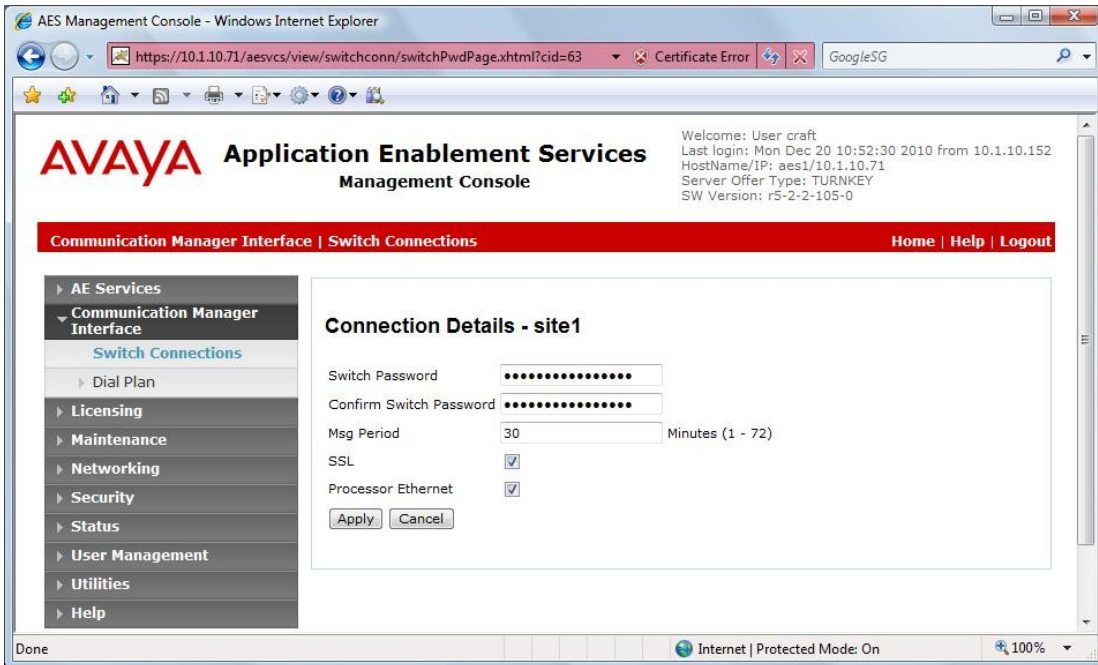
The screenshot shows the Avaya Application Enablement Services Management Console in a Windows Internet Explorer browser window. The address bar shows the URL: `https://10.1.10.71/aesvcs/view/usermgmt/createUserPage.xhtml`. The page title is "AES Management Console - Windows Internet Explorer". The Avaya logo is on the left, and the page title "Application Enablement Services Management Console" is in the center. A welcome message on the right says: "Welcome: User craft", "Last login: Fri Feb 18 12:25:44 2011 from 10.1.10.152", "HostName/IP: aes1/10.1.10.71", "Server Offer Type: TURNKEY", and "SW Version: r5-2-2-105-0". A red navigation bar at the top contains "User Management | User Admin | Add User" and "Home | Help | Logout". The left sidebar shows a tree view with categories: "AE Services", "Communication Manager Interface", "Licensing", "Maintenance", "Networking", "Security", "Status", "User Management" (expanded), "Service Admin", "User Admin" (expanded), and "Utilities". Under "User Admin", the "Add User" link is selected. The main content area is titled "Add User" and contains a form with the following fields: "User Id" (voicenet), "Common Name" (VoiceNet), "Surname" (AGC), "User Password" (masked with dots), "Confirm Password" (masked with dots), "Admin Note" (empty), "Avaya Role" (None), "Business Category" (empty), "Car License" (empty), "CM Home" (empty), "Css Home" (empty), and "CT User" (Yes). A note at the top of the form states: "Fields marked with \* can not be empty."



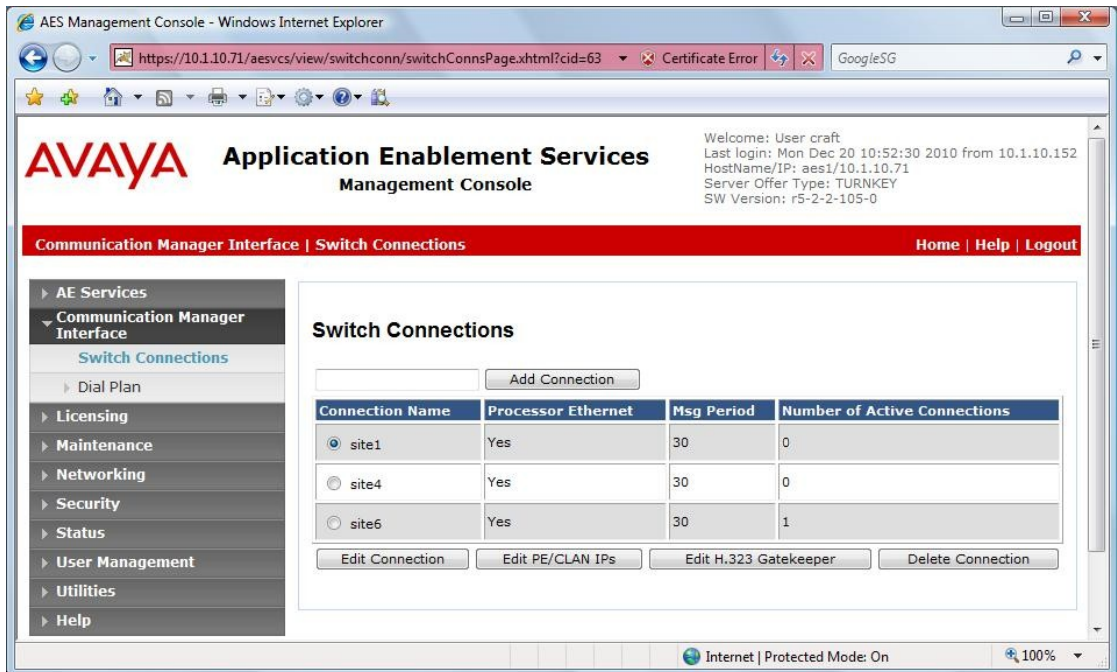
## 6.3. Administer Switch Connection

Step	Description
1.	<p>From the left menu, select <b>Communication Manager Interface &gt; Switch Connections</b>. Enter a descriptive name for the switch connection and click <b>Add Connection</b>. In this configuration, <b>site1</b> is used.</p> 



Step	Description
2.	<p>The Connection Details – site1 screen is displayed. For the <b>Switch Password</b> and <b>Confirm Switch Password</b> fields, enter the password that was administered in Communication Manager using the IP Services form in <b>Section 5.5 Step 3</b>. Both the <b>SSL</b> and <b>Processor Ethernet</b> fields need to be checked. Click on <b>Apply</b>.</p> 

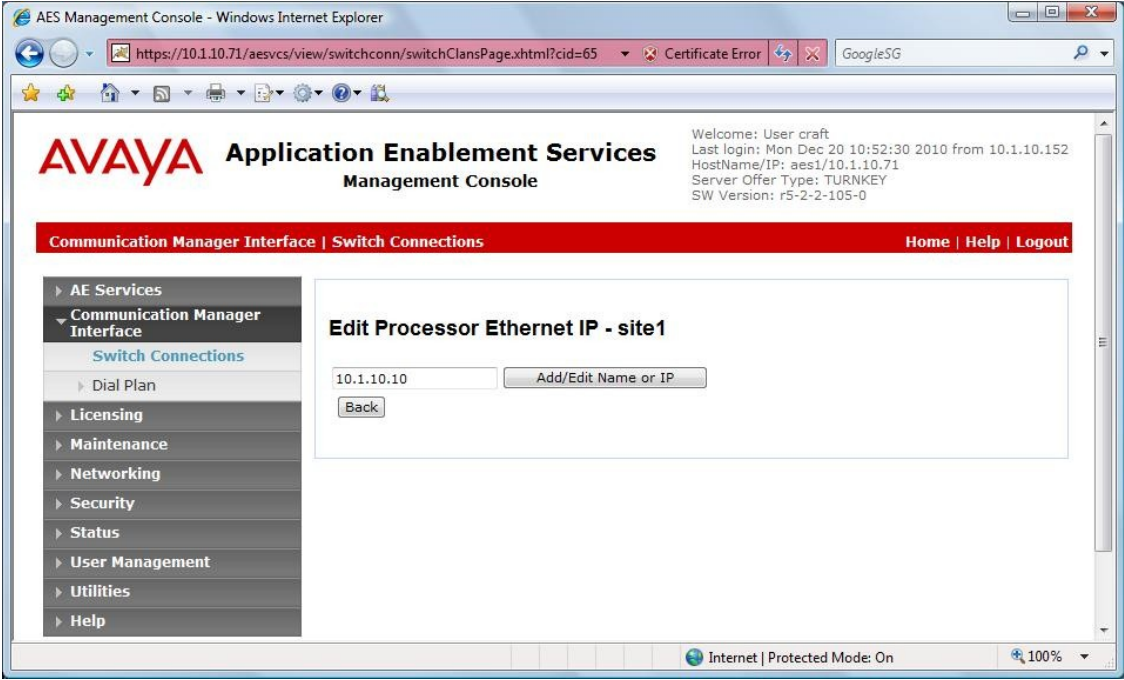
Step	Description
3.	The Switch Connections screen is displayed again. Select the new switch connection name <b>site1</b> and click <b>Edit PE/CLAN IPs</b> .



The screenshot shows the Avaya AES Management Console in a Windows Internet Explorer browser. The address bar shows the URL: https://10.1.10.71/aesvcs/view/switchconn/switchConnsPage.xhtml?cid=63. The page title is AVAYA Application Enablement Services Management Console. A welcome message for User craft is displayed, along with login details. The main navigation bar includes Communication Manager Interface | Switch Connections and links for Home | Help | Logout. The left sidebar lists various services and interfaces. The central Switch Connections section contains a table with the following data:

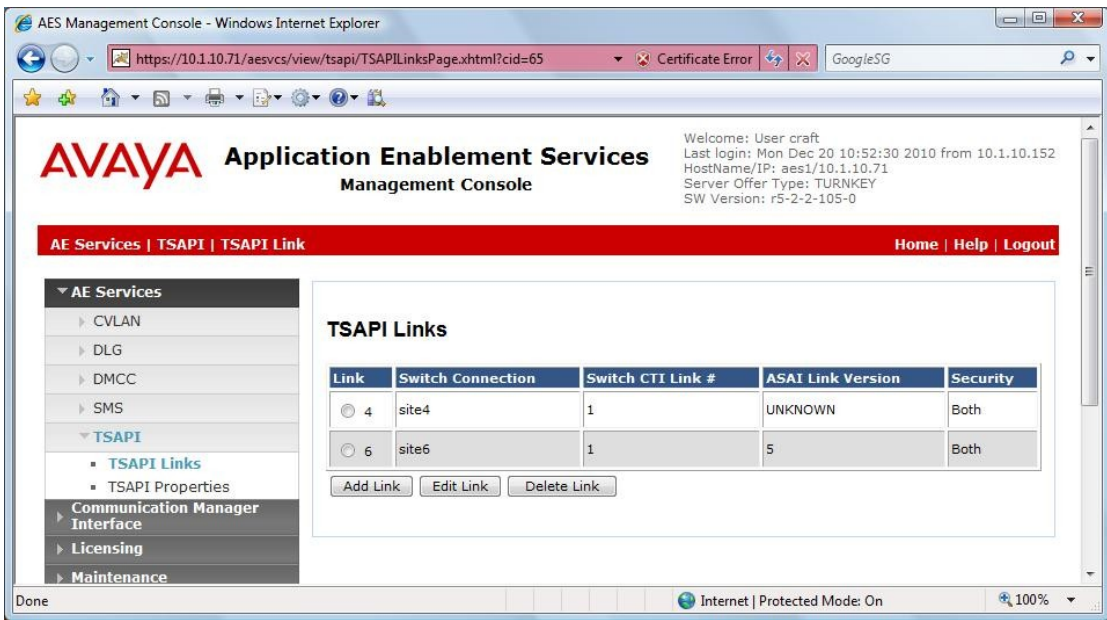
Connection Name	Processor Ethernet	Msg Period	Number of Active Connections
<input checked="" type="radio"/> site1	Yes	30	0
<input type="radio"/> site4	Yes	30	0
<input type="radio"/> site6	Yes	30	1

Below the table are four buttons: Edit Connection, Edit PE/CLAN IPs, Edit H.323 Gatekeeper, and Delete Connection. The Edit PE/CLAN IPs button is highlighted in the original image.

Step	Description
4.	<p>In the Edit Processor Ethernet IP – site1 screen, enter the host name or IP address of the Communication Manager processor Ethernet. In this case, <b>10.1.10.10</b> is used, which corresponds to the IP address of the S8800 Server as shown in <b>Figure 1</b>. Click <b>Add/Edit Name or IP</b>.</p> 

## 6.4. Administer TSAPI Link

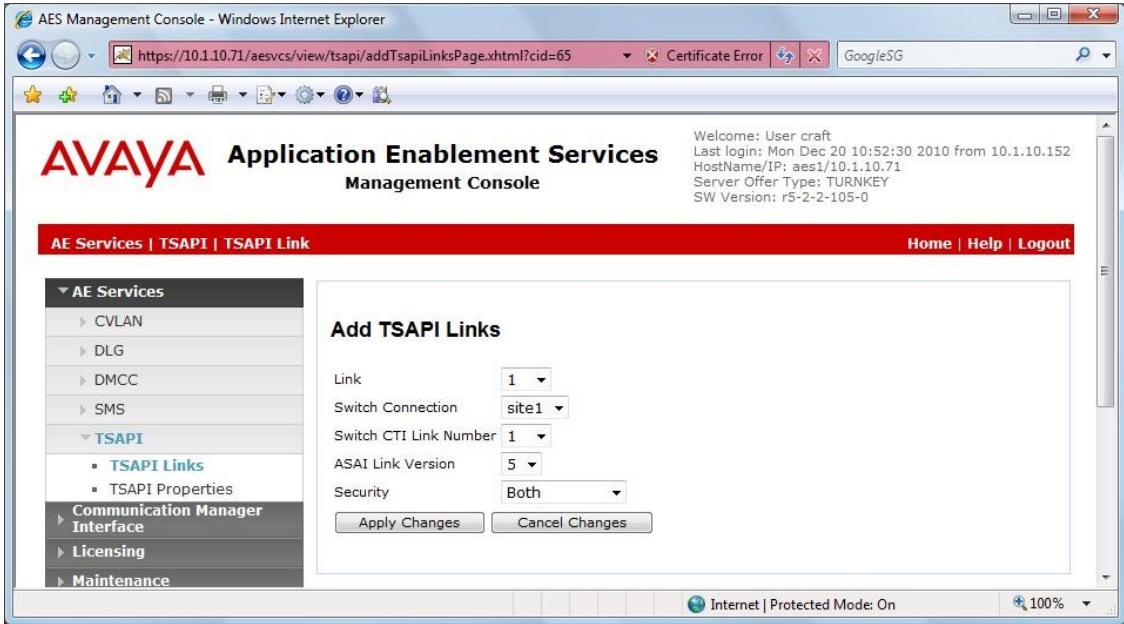
Step	Description
1.	To administer a TSAPI Link, select <b>AE Services &gt; TSAPI &gt; TSAPI Links</b> from the left menu. Click <b>Add Link</b> .

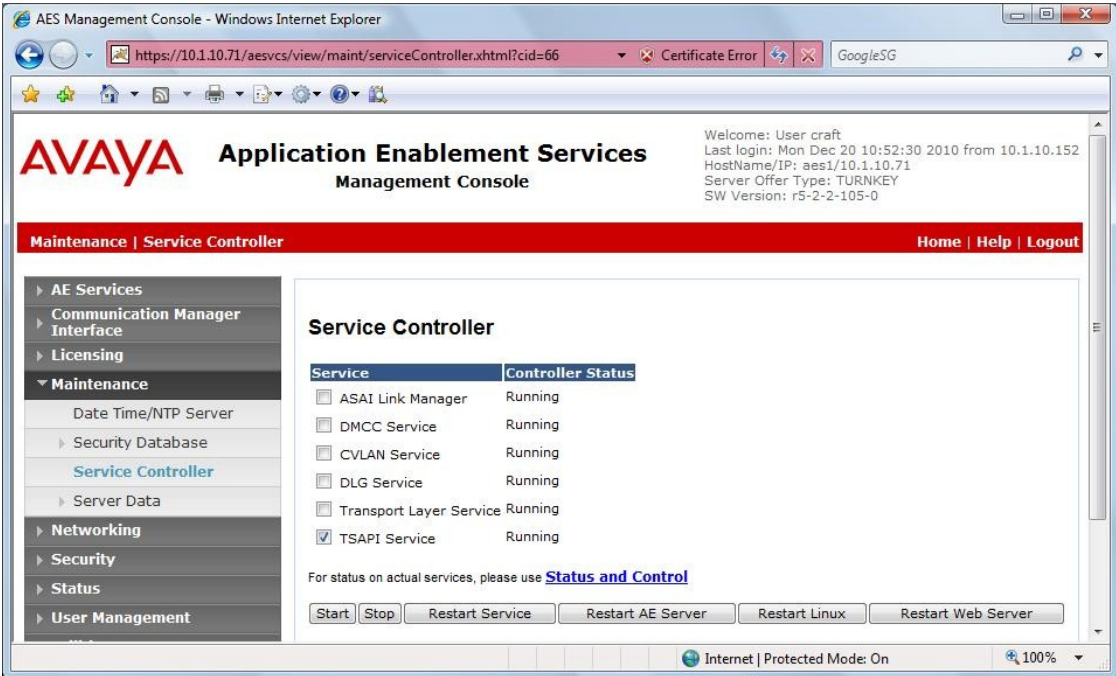


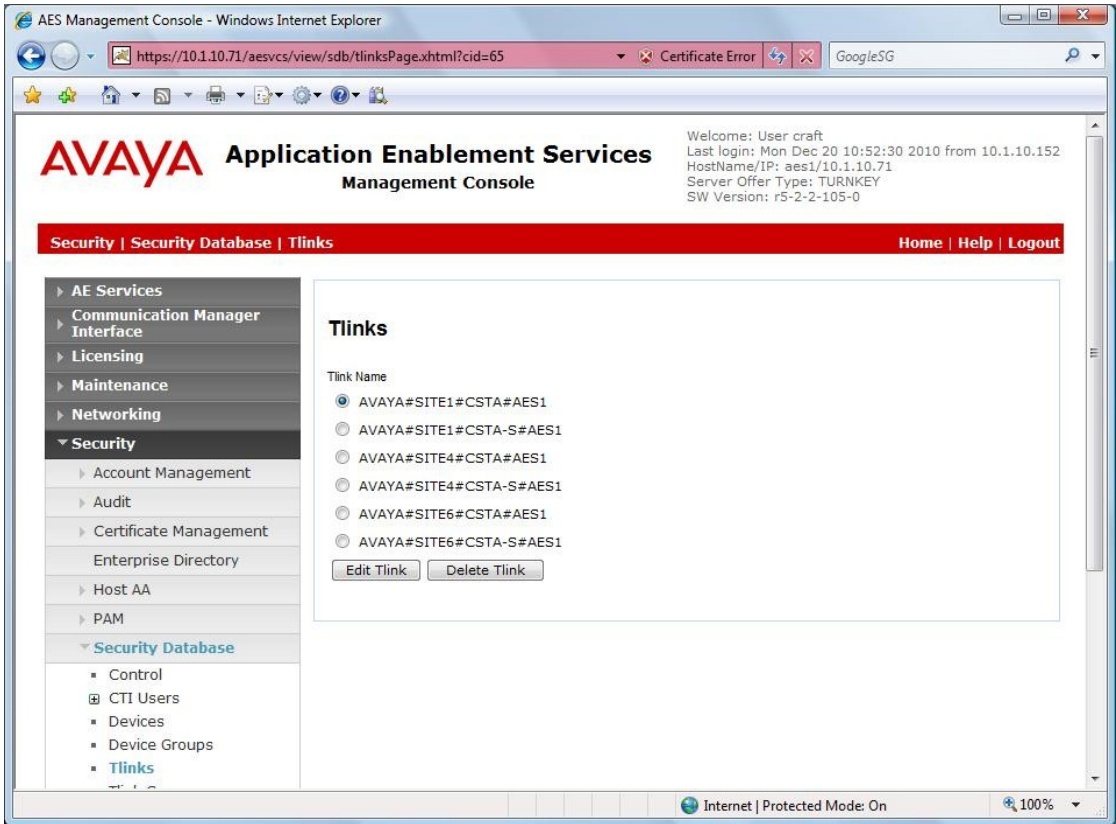
The screenshot shows the Avaya Application Enablement Services Management Console in a Windows Internet Explorer browser. The address bar shows the URL <https://10.1.10.71/aesvcs/view/tsapi/TSAPILinksPage.xhtml?cid=65>. The page title is "AVAYA Application Enablement Services Management Console". The left navigation menu is expanded to "TSAPI" and "TSAPI Links". The main content area displays a table of TSAPI Links with the following data:

Link	Switch Connection	Switch CTI Link #	ASAI Link Version	Security
<input checked="" type="radio"/> 4	site4	1	UNKNOWN	Both
<input type="radio"/> 6	site5	1	5	Both

Below the table are buttons for "Add Link", "Edit Link", and "Delete Link".

Step	Description
2.	<p>In the Add TSAPI Links screen, select the following values:</p> <ul style="list-style-type: none"> <li>• <b>Link:</b> Select an available Link number from 1 to 16.</li> <li>• <b>Switch Connection:</b> Select the switch connection in <b>Section 6.3 Step 1</b>.</li> <li>• <b>Switch CTI Link Number:</b> Corresponding CTI link number in <b>Section 5.5 Step 2</b>.</li> <li>• <b>ASAI Link Version:</b> Set to <b>5</b>.</li> <li>• <b>Security:</b> Set to <b>Both</b> so that both encrypted and unencrypted TSAPI Links can be used.</li> </ul> <p>Note that the actual values may vary. Click <b>Apply Changes</b>.</p>  <p>In the next page, click <b>Apply</b> to confirm the changes (not shown).</p>

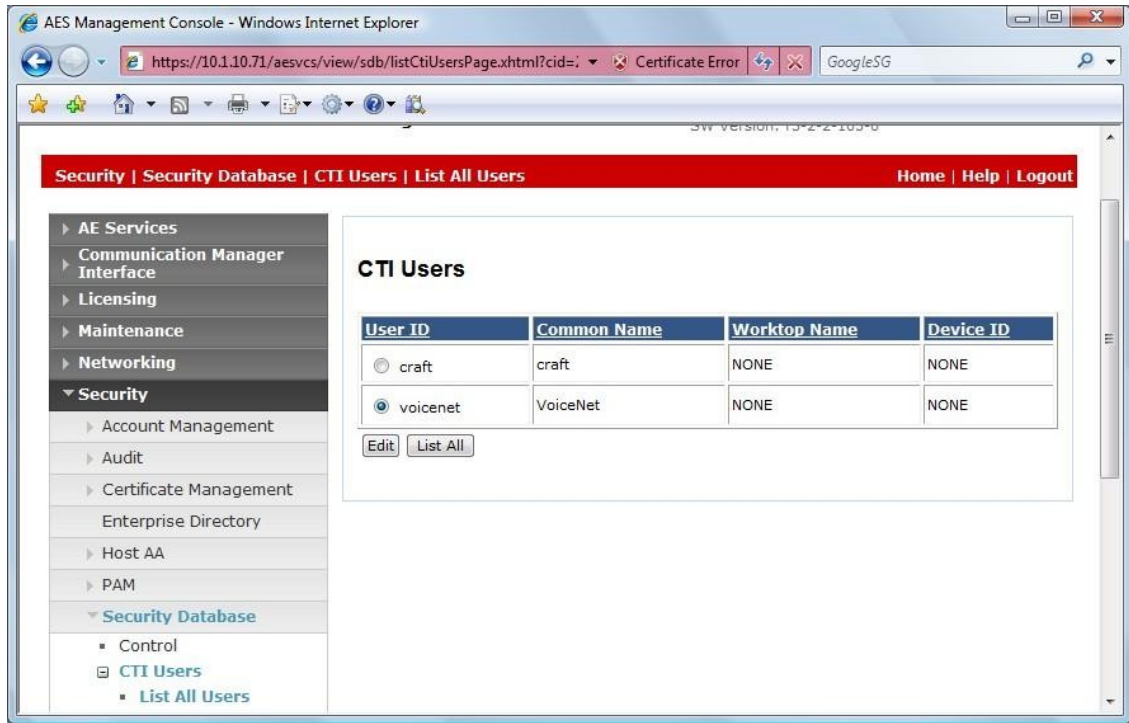
Step	Description
3.	<p>To restart the TSAPI Service, select <b>Maintenance &gt; Service Controller</b> from the left menu. Check the <b>TSAPI Service</b> checkbox and click <b>Restart Service</b>. In the next page, click <b>Restart</b> to confirm the restart (not shown).</p>  <p>The screenshot shows the AVAYA Application Enablement Services Management Console. The left sidebar contains a navigation menu with the following items: AE Services, Communication Manager Interface, Licensing, Maintenance (expanded), Date Time/NTP Server, Security Database, Service Controller (selected), Server Data, Networking, Security, Status, and User Management. The main content area is titled 'Service Controller' and contains a table with two columns: 'Service' and 'Controller Status'. The table lists the following services: ASAI Link Manager (Running), DMCC Service (Running), CVLAN Service (Running), DLG Service (Running), Transport Layer Service (Running), and TSAPI Service (Running). The 'TSAPI Service' row has a checked checkbox. Below the table, there is a link for 'Status and Control' and a row of buttons: Start, Stop, Restart Service, Restart AE Server, Restart Linux, and Restart Web Server. The top of the console shows a welcome message for 'User craft' and a 'Maintenance   Service Controller' breadcrumb.</p>

Step	Description
4.	<p>Navigate to the Tlinks screen by selecting <b>Security &gt; Security Database &gt; Tlinks</b> from the left menu. Note the value of the <b>Tlink Name</b>, as this will be needed to configure the VoiceNet Server in <b>Section 7</b>. In this configuration, the unencrypted <b>Tlink Name</b> <b>AVAYA#SITE1#CSTA#AES1</b> is used.</p> 



## 6.5. Administer CTI User Permission

Step	Description
1.	Select <b>Security &gt; Security Database &gt; CTI Users &gt; List All Users</b> from the left menu. Select the <b>User ID</b> created in <b>Section 6.2</b> and click <b>Edit</b> .

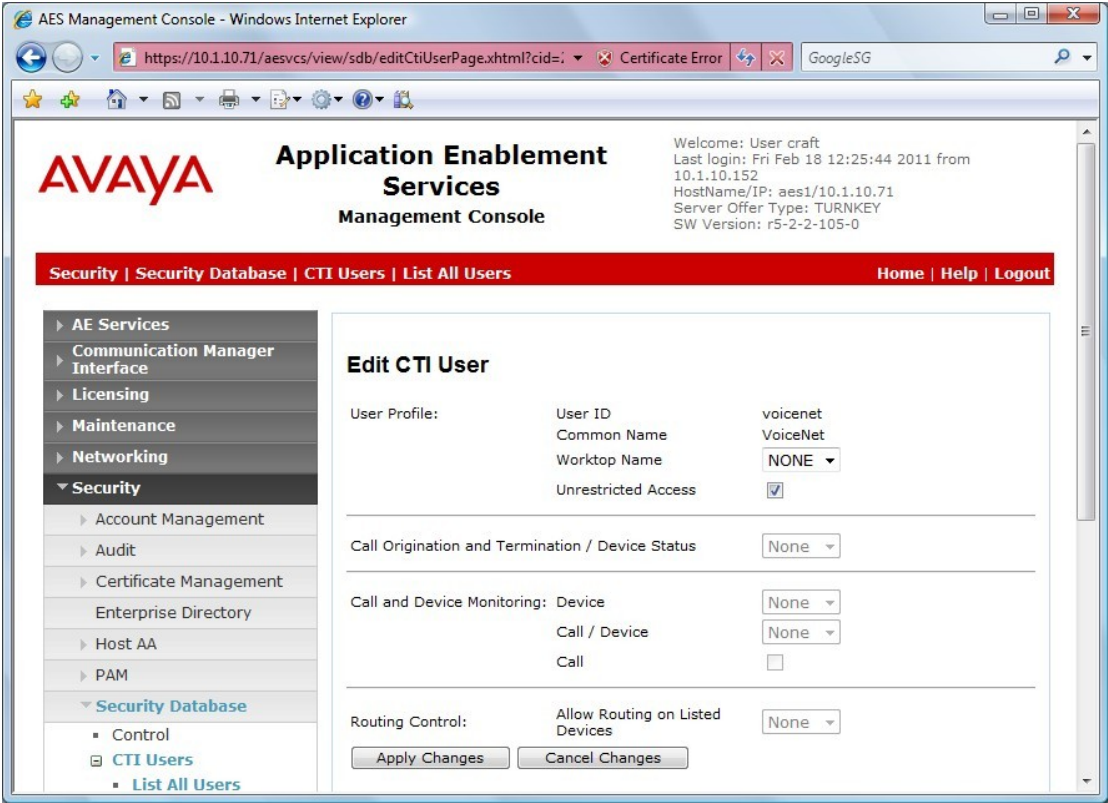


The screenshot shows the AES Management Console in a Windows Internet Explorer browser. The address bar displays the URL: https://10.110.71/aesvcs/view/sdb/listCtiUsersPage.xhtml?cid=... There is a 'Certificate Error' warning. The page title is 'AES Management Console - Windows Internet Explorer'. The breadcrumb navigation at the top reads: Security | Security Database | CTI Users | List All Users. On the right side of the breadcrumb are links for Home, Help, and Logout. The left sidebar contains a tree view with the following items: AE Services, Communication Manager Interface, Licensing, Maintenance, Networking, Security (expanded), Account Management, Audit, Certificate Management, Enterprise Directory, Host AA, PAM, Security Database (expanded), Control, CTI Users (expanded), and List All Users (selected). The main content area is titled 'CTI Users' and contains a table with the following data:

User ID	Common Name	Worktop Name	Device ID
<input type="radio"/> craft	craft	NONE	NONE
<input checked="" type="radio"/> voicenet	VoiceNet	NONE	NONE

Below the table are two buttons: 'Edit' and 'List All'.




Step	Description
2.	<p>Assign access rights and call/device privileges according to customer requirements. For simplicity in configuration, <b>Unrestricted Access</b> was enabled during compliance testing. If <b>Unrestricted Access</b> is not desired, then consult Reference [6] for guidance on configuring the call/device privileges as well as devices and device groups. Click <b>Apply Changes</b>.</p>  <p>In the next page, click <b>Apply</b> to confirm the changes (not shown).</p>


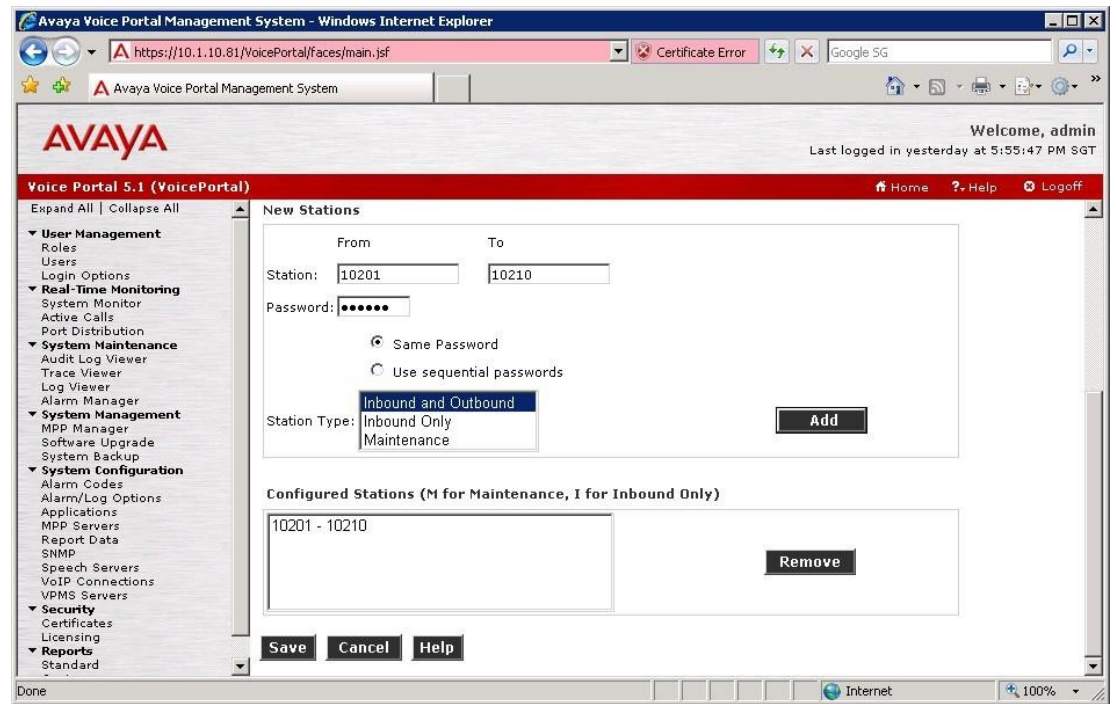
## 7. Configure Avaya Voice Portal

This section provides the procedures for configuring Voice Portal. Voice Portal is configured via an Internet browser using Voice Portal Management System (VPMS) web interface. It is assumed that Voice Portal and the WebLM license file have already been installed. In this configuration, Voice Portal is connected to Communication Manager using H.323 VoIP Connection. The procedures fall into the following areas:

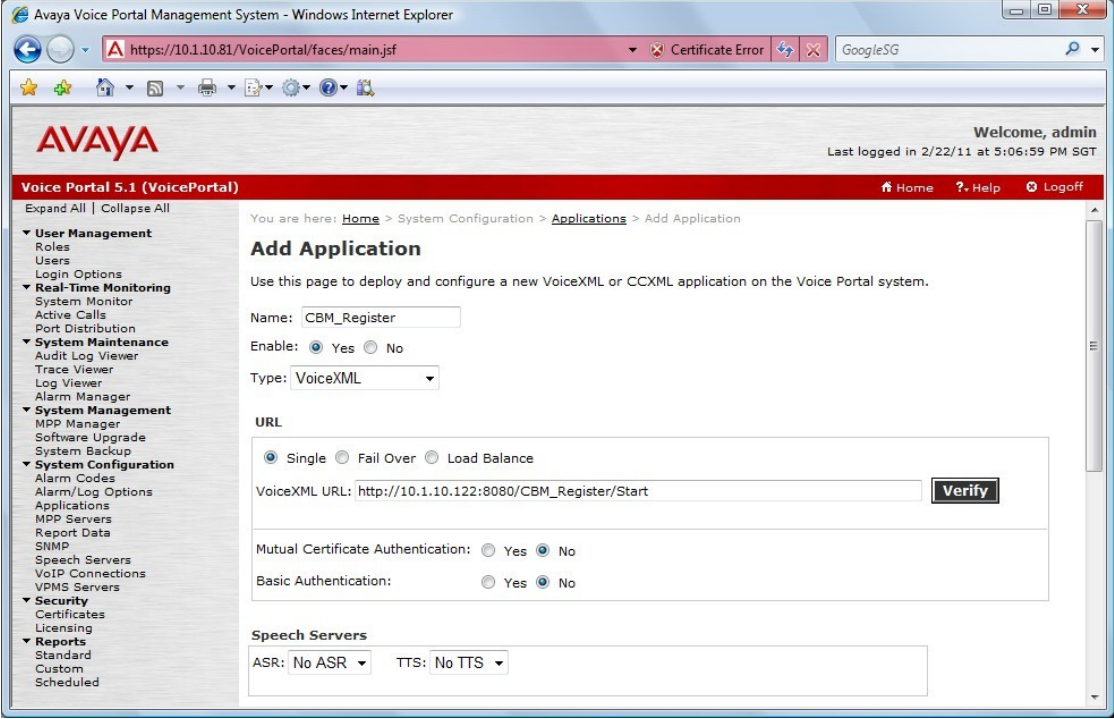
- Configuring H.323 Connection to Avaya Aura® Communication Manager
- Add Applications
- Configure Web Service Authentication

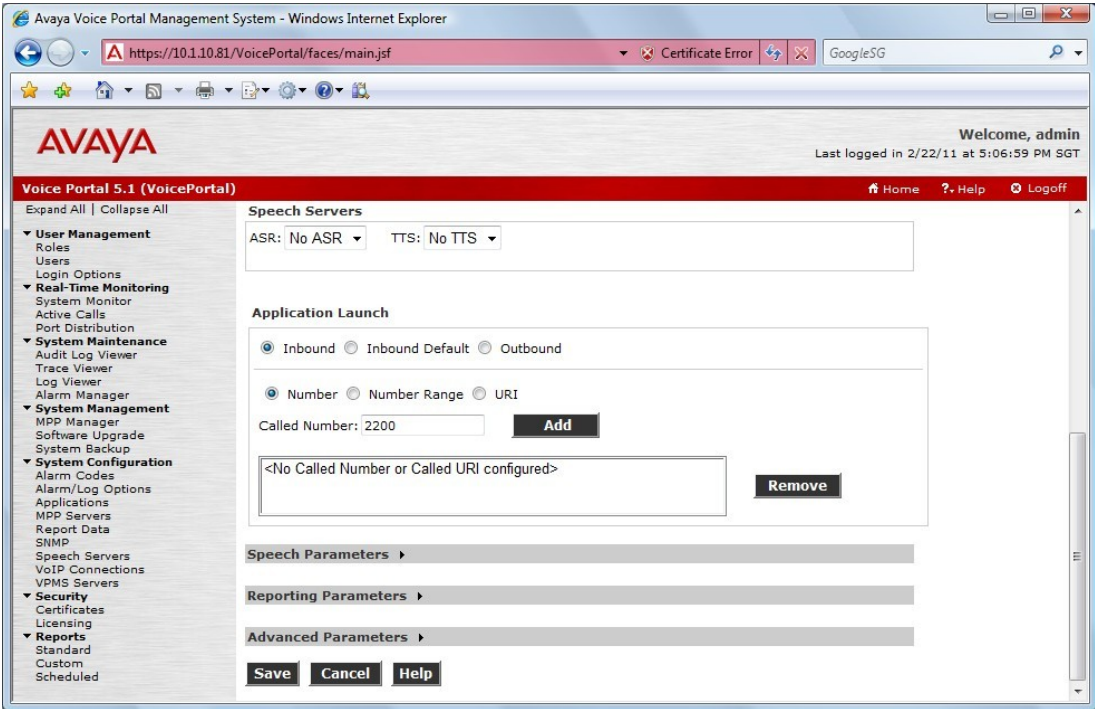
### 7.1. Configuring H.323 Connection to Avaya Aura® Communication Manager

Step	Description
1.	<p>Using a web browser, browse to <b>http://&lt;IP Address of VPMS&gt;/</b> and log in using an account with administrative privileges. Click <b>VoIP Connections</b> from the left menu and click <b>Add</b> from the <b>H.323</b> tab.</p> 

Step	Description
2.	<p>In the Add H.323 Connection screen, specify a <b>Name</b> and enter the IP address of the Avaya S8800 Server in the <b>Gatekeeper Address</b> field. Set <b>Media Encryption</b> to <b>No</b> as it was not configured on Communication Manager for this testing.</p> 
	<p>In the New Stations section, set the <b>Station From</b>, <b>To</b> and <b>Password</b> fields according to the stations configured in <b>Section 5.2</b>. Highlight <b>Inbound and Outbound</b> for <b>Station Type</b> and click <b>Add</b>. Accept the default values for the other fields and click <b>Save</b>.</p> 

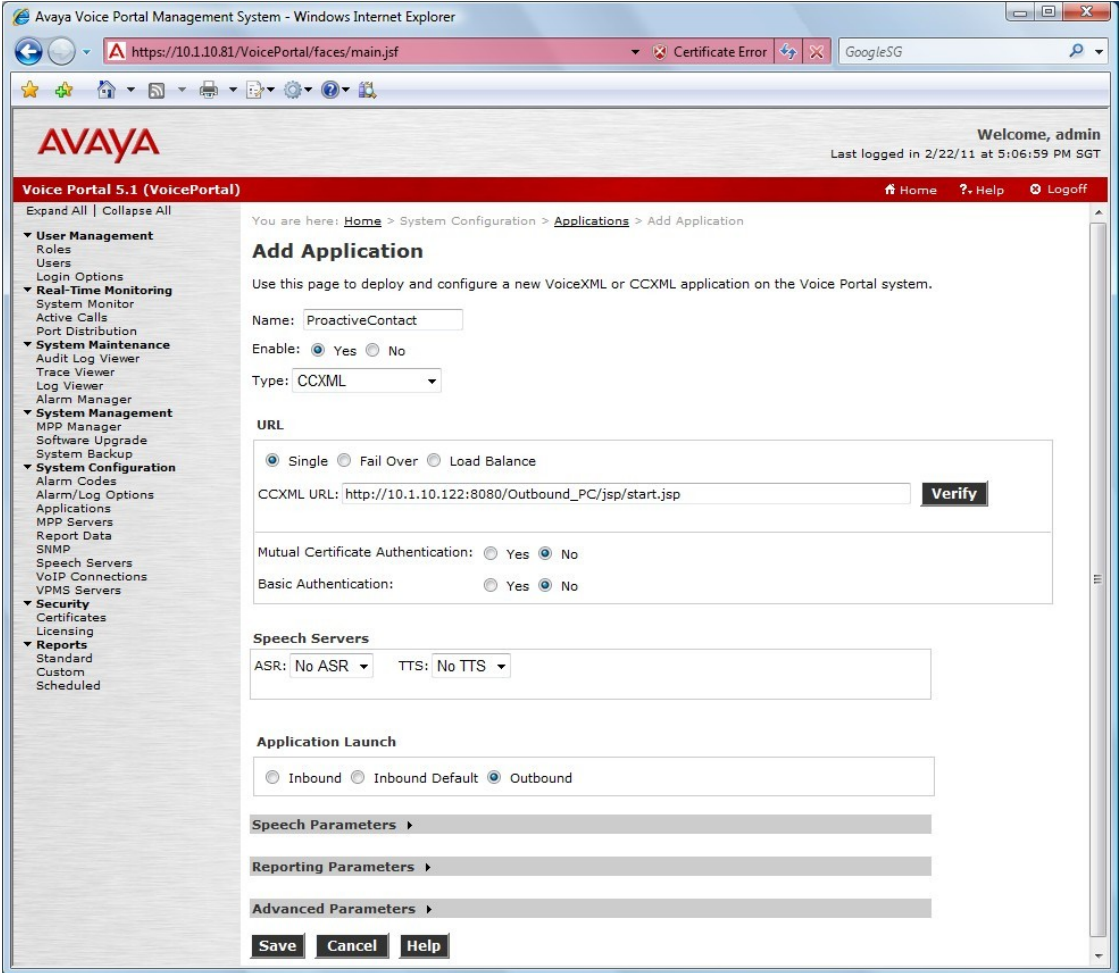
## 7.2. Add Inbound Applications

Step	Description
1.	<p>Navigate to <b>System Configuration &gt; Applications</b> and click <b>Add</b> (not shown). On the Add Application page, set the <b>Name</b> for the application to <b>CBM_Register</b>, set the <b>Type</b> field to <b>VoiceXML</b>, and set the <b>VoiceXML URL</b> field to a URL provided by AGC Networks that will point to the callback application hosted on the VoiceNet server. In this testing, the VoiceXML URL is set to <b>http://10.1.10.122:8080/CBM_Register/Start</b>.</p> 

Step	Description
	<p>Voice Portal launched an application based on the called number. Scroll down to the Application Launch section, and select <b>Inbound</b>. In the <b>Called Number</b> field, enter the incoming VDN that queues the calls to the agents, as shown in <b>Section 5.4.3</b> and click <b>Add</b>. Click <b>Save</b>.</p> <p>Note: If there are other VDNs used in the call center, add them to the list of <b>Called Number</b>.</p> 



## 7.3. Add Outbound Applications

Step	Description
1.	<p>Add a new outbound application to be used by VoiceNet's proactive contact functionality. From the <b>System Configuration &gt; Applications</b> page, click <b>Add</b> (not shown). On the Add Application page, set the <b>Name</b> for the application to ProactiveContact, set the <b>Type</b> field to <b>CCXML</b>, and set the <b>CCXML URL</b> field to a URL provided by AGC Networks that will point to the proactive contact application hosted on the VoiceNet server. In this testing, the CCXML URL is set to <b>http://10.1.10.122:8080/Outbound_PC/jsp/start.jsp</b>. In the Application Launch section, select <b>Outbound</b> and click <b>Save</b>.</p>  <p>The screenshot displays the 'Add Application' page in the Avaya Voice Portal Management System. The left sidebar contains a navigation menu with categories like User Management, Real-Time Monitoring, System Maintenance, System Management, System Configuration, Security, and Reports. The main content area shows the 'Add Application' form. The 'Name' field is set to 'ProactiveContact', 'Enable' is set to 'Yes', and 'Type' is set to 'CCXML'. The 'URL' field contains 'http://10.1.10.122:8080/Outbound_PC/jsp/start.jsp'. Below the URL field, there are radio buttons for 'Single', 'Fail Over', and 'Load Balance'. The 'Mutual Certificate Authentication' and 'Basic Authentication' sections both have 'No' selected. The 'Speech Servers' section shows 'ASR: No ASR' and 'TTS: No TTS'. The 'Application Launch' section has 'Outbound' selected. At the bottom, there are expandable sections for 'Speech Parameters', 'Reporting Parameters', and 'Advanced Parameters', followed by 'Save', 'Cancel', and 'Help' buttons.</p>

Step	Description
2.	<p>Add another outbound application to be used by VoiceNet to interact with the customer. The ProactiveContact application configured in <b>Step 1</b> calls this application when the customer answers the call. In this testing, a simple application called VoiceNet is used to play an announcement to the customer. From the <b>System Configuration &gt; Applications</b> page, click <b>Add</b> (not shown). On the Add Application page, set the <b>Name</b> for the application to VoiceNet, set the <b>Type</b> field to <b>VoiceXML</b>, and set the <b>VoiceXML URL</b> field to a URL provided by AGC Networks that will point to the application hosted on the VoiceNet server. In this testing, the VoiceXML URL is set to <b>http://10.1.10.122:8080/VoiceNet/Start</b>. In the Application Launch section, select <b>Outbound</b> and click <b>Save</b>.</p>

Avaya Voice Portal Management System - Windows Internet Explorer

https://10.1.10.81/VoicePortal/faces/main.jsf

Welcome, admin  
Last logged in 2/22/11 at 5:06:59 PM SGT

**AVAYA**

Voice Portal 5.1 (VoicePortal)

You are here: [Home](#) > [System Configuration](#) > [Applications](#) > Add Application

### Add Application

Use this page to deploy and configure a new VoiceXML or CCXML application on the Voice Portal system.

Name:

Enable: ☒ Yes ☐ No

Type:

URL

☒ Single ☐ Fail Over ☐ Load Balance

VoiceXML URL:

Mutual Certificate Authentication: ☐ Yes ☒ No

Basic Authentication: ☐ Yes ☒ No

Speech Servers

ASR:  TTS:

Application Launch

☐ Inbound ☐ Inbound Default ☒ Outbound

Speech Parameters

Reporting Parameters

Advanced Parameters

Step	Description
2.	<p>Add another outbound application to be used by VoiceNet to callback the customers that have left their requests. From the <b>System Configuration &gt; Applications</b> page, click <b>Add</b> (not shown). On the Add Application page, set the <b>Name</b> for the application to ProactiveContact, set the <b>Type</b> field to <b>CCXML</b>, and set the <b>CCXML URL</b> field to a URL provided by AGC Networks that will point to the application hosted on the VoiceNet server. In this testing, the CCXML URL is set to <b>http://10.1.10.122:8080/Outbound_CBM/jsp/start.jsp</b>. In the Application Launch section, select <b>Outbound</b> and click <b>Save</b>.</p>

Avaya Voice Portal Management System - Windows Internet Explorer

https://10.1.10.81/VoicePortal/faces/main.jsf

Welcome, admin  
Last logged in 2/22/11 at 5:06:59 PM SGT

**AVAYA**

Voice Portal 5.1 (VoicePortal)

Expand All | Collapse All

- User Management
  - Roles
  - Users
  - Login Options
- Real-Time Monitoring
  - System Monitor
  - Active Calls
  - Port Distribution
- System Maintenance
  - Audit Log Viewer
  - Trace Viewer
  - Log Viewer
  - Alarm Manager
- System Management
  - MPP Manager
  - Software Upgrade
  - System Backup
- System Configuration
  - Alarm Codes
  - Alarm/Log Options
  - Applications
  - MPP Servers
  - Report Data
  - SNMP
  - Speech Servers
  - VoIP Connections
  - VPMS Servers
- Security
  - Certificates
  - Licensing
- Reports
  - Standard
  - Custom
  - Scheduled

You are here: [Home](#) > [System Configuration](#) > [Applications](#) > Add Application

### Add Application

Use this page to deploy and configure a new VoiceXML or CCXML application on the Voice Portal system.

Name:

Enable: ☒ Yes ☐ No

Type:

URL

☒ Single ☐ Fail Over ☐ Load Balance

CCXML URL:

Mutual Certificate Authentication: ☐ Yes ☒ No

Basic Authentication: ☐ Yes ☒ No

Speech Servers

ASR:  TTS:

Application Launch

☐ Inbound ☐ Inbound Default ☒ Outbound

Speech Parameters

Reporting Parameters

Advanced Parameters



## 7.4. Configure Web Service Authentication

Navigate to **System Configuration > VPMS Servers** and click **VPMS Settings** (not shown). On the VPMS Settings page, scroll down to the Web Service Authentication section. For **Outcall**, specify a **User Name** and **Password** for VoiceNet to instruct Voice Portal to make outbound calls. Click **Save**.

The screenshot shows the Avaya Voice Portal Management System interface in a Windows Internet Explorer browser. The address bar displays `https://10.1.10.81/VoicePortal/faces/main.jsf`. The page title is "Avaya Voice Portal Management System - Windows Internet Explorer". The main header includes the Avaya logo and a welcome message for "admin" who last logged in on 2/22/11 at 5:06:59 PM SGT. The navigation menu on the left lists various system management options, including User Management, Real-Time Monitoring, System Maintenance, System Management, System Configuration, Security, and Reports. The "System Configuration" section is expanded, showing "VPMS Servers" as the current selection. The main content area displays the "VPMS Settings" page, which includes a breadcrumb trail: "You are here: Home > System Configuration > VPMS Servers > VPMS Settings". The page contains several configuration sections: "Voice Portal Name" (set to "VoicePortal"), "Number of Application Server Failover Logs" (set to 10), and "Commands to Retain in MPP Configuration History" (set to 50). Below these are "Resource Alerting Thresholds (%)" for "High Water" (90) and "Low Water" (80). The "Web Service Authentication" section is expanded, showing "Application Reporting" and "Outcall" settings. The "Outcall" section has fields for "User Name" (set to "outcall"), "Password" (masked with dots), and "Verify Password" (masked with dots). At the bottom of the page are buttons for "Save", "Apply", "Cancel", and "Help".

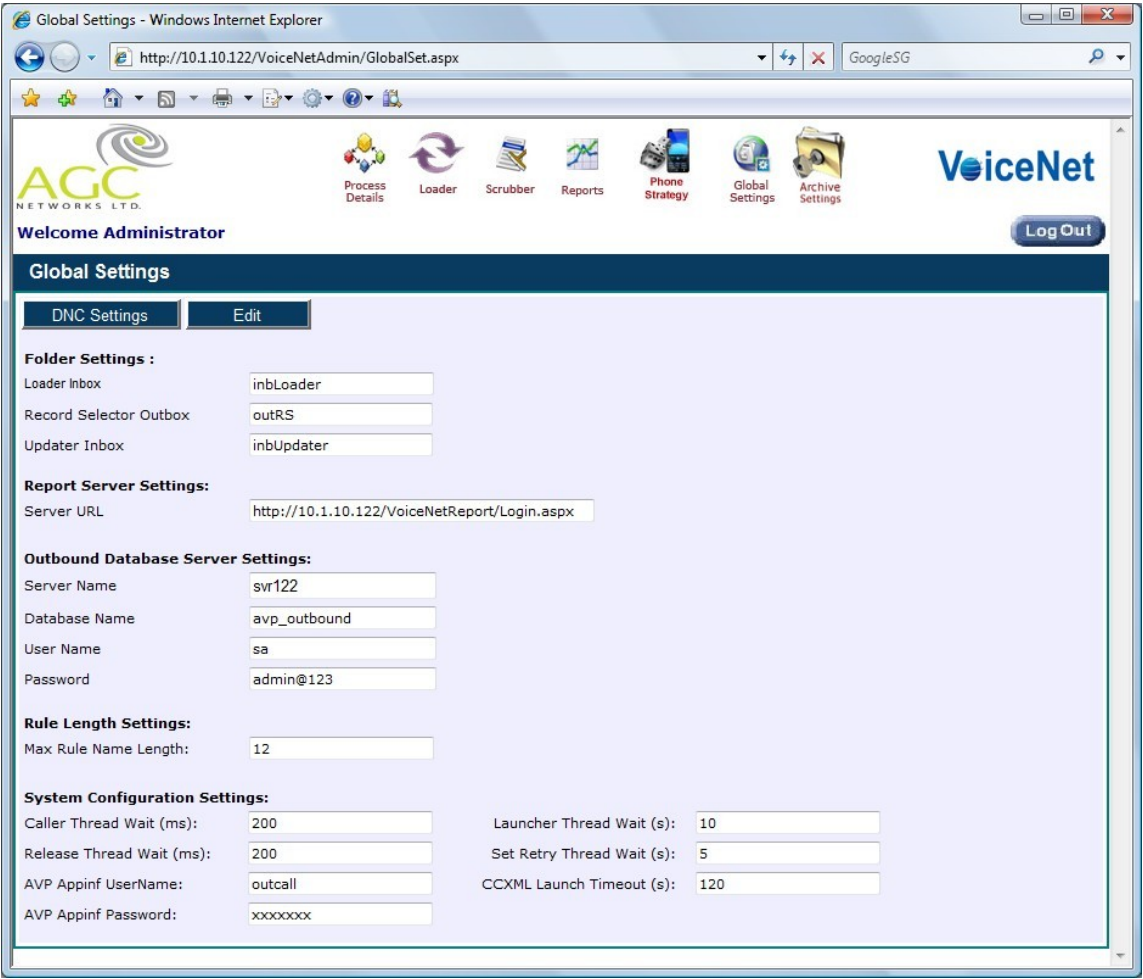
## 8. Configure AGC Networks VoiceNet

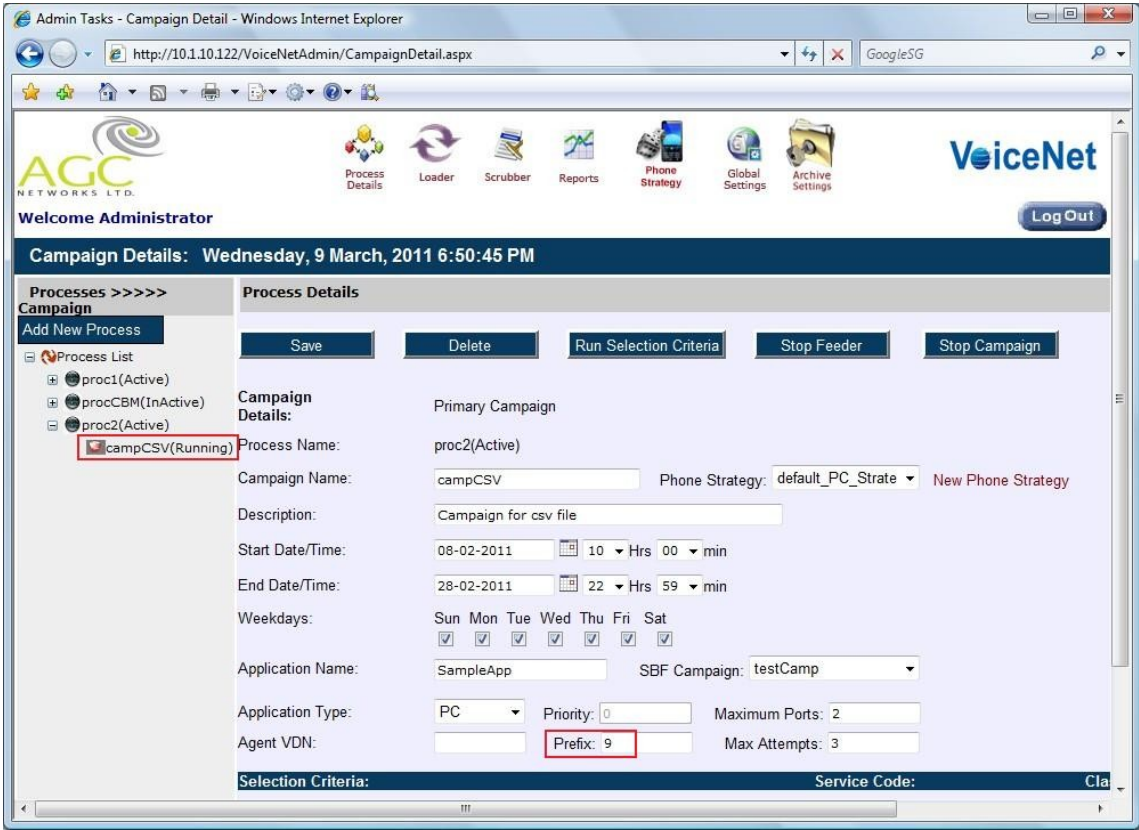
This section provides the procedures to configure AGC Networks VoiceNet. The configuration of the VoiceNet Campaigns and Phone Strategies are beyond the scope of this document and will not be covered. Refer to Reference [8] for details. The procedures fall into the following areas:

- Configure VoiceNet Settings
- Configure Dialog Designer CTI Connector


### 8.1. Configure VoiceNet Settings

Step	Description
1.	<p>Launch a web browser and enter <b>https://&lt;ip-addr&gt;/VoiceNetAdmin</b>, where <b>ip-addr</b> is the IP address of VoiceNet server, to access the VoiceNet Administrator web interface. Log in using an administrative login and password (not shown) and the following screen will be displayed.</p>

Step	Description
2.	<p>Select <b>Global Settings</b> from the top menu. In the fields <b>AVP Appinf UserName</b> and <b>AVP Appinf Password</b>, enter the <b>Outcall User Name</b> and <b>Password</b> configured in Avaya Voice Portal in <b>Section 7.4</b>.</p>  <p>The screenshot shows the 'Global Settings' page in a web browser. The page has a header with the AGC Networks Ltd. logo, a navigation menu, and the VoiceNet logo. The main content area is titled 'Global Settings' and contains several sections of settings:</p> <ul style="list-style-type: none"> <li><b>Folder Settings :</b> <ul style="list-style-type: none"> <li>Loader Inbox: inbLoader</li> <li>Record Selector Outbox: outRS</li> <li>Updater Inbox: inbUpdater</li> </ul> </li> <li><b>Report Server Settings:</b> <ul style="list-style-type: none"> <li>Server URL: http://10.1.10.122/VoiceNetReport/Login.aspx</li> </ul> </li> <li><b>Outbound Database Server Settings:</b> <ul style="list-style-type: none"> <li>Server Name: svr122</li> <li>Database Name: avp_outbound</li> <li>User Name: sa</li> <li>Password: admin@123</li> </ul> </li> <li><b>Rule Length Settings:</b> <ul style="list-style-type: none"> <li>Max Rule Name Length: 12</li> </ul> </li> <li><b>System Configuration Settings:</b> <ul style="list-style-type: none"> <li>Caller Thread Wait (ms): 200</li> <li>Release Thread Wait (ms): 200</li> <li>AVP Appinf UserName: outcall</li> <li>AVP Appinf Password: xxxxxxxx</li> <li>Launcher Thread Wait (s): 10</li> <li>Set Retry Thread Wait (s): 5</li> <li>CCXML Launch Timeout (s): 120</li> </ul> </li> </ul>

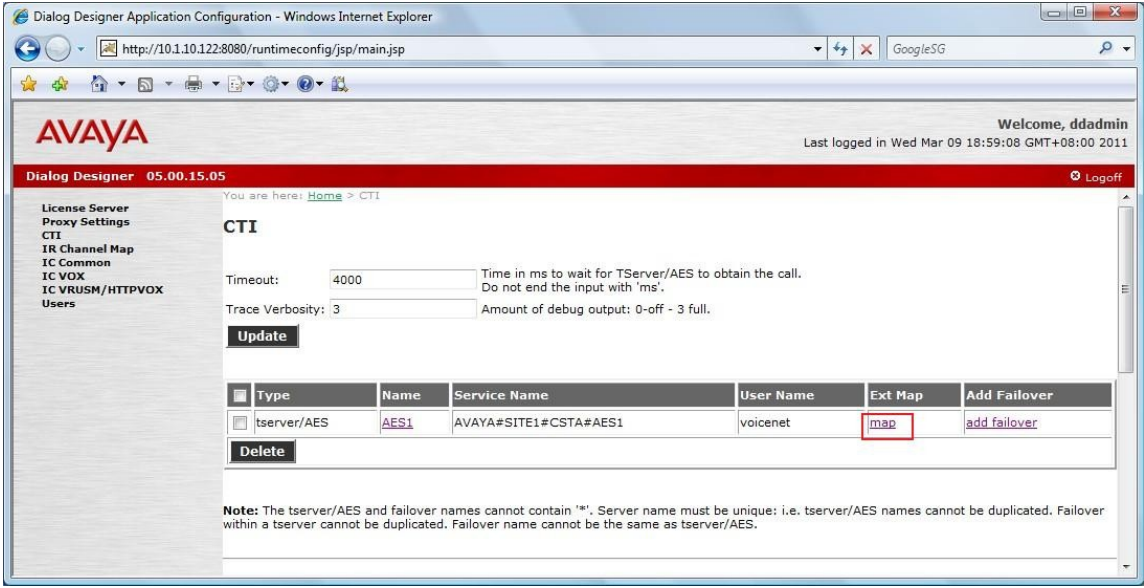
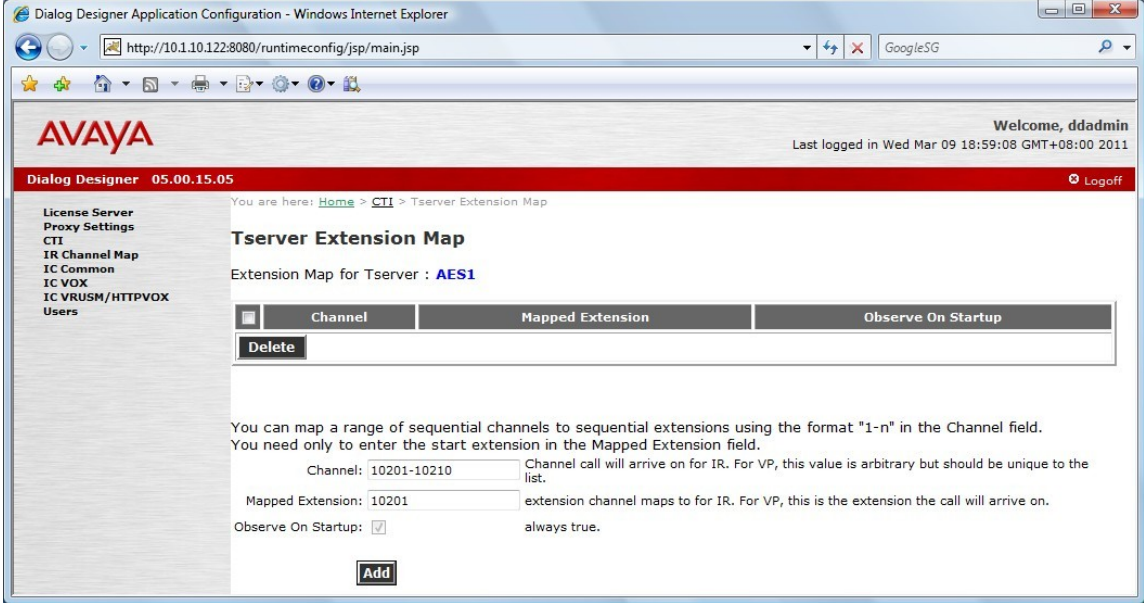
Step	Description
3.	<p>Select <b>Process Details</b> from the top menu. Click on the respective campaign from the left pane (e.g. <b>campCSV</b> in this case). In the field <b>Prefix</b>, enter the ARS Access Code configured in Communication Manager in <b>Section 5.6</b>. Repeat for all campaigns configured in VoiceNet.</p> 

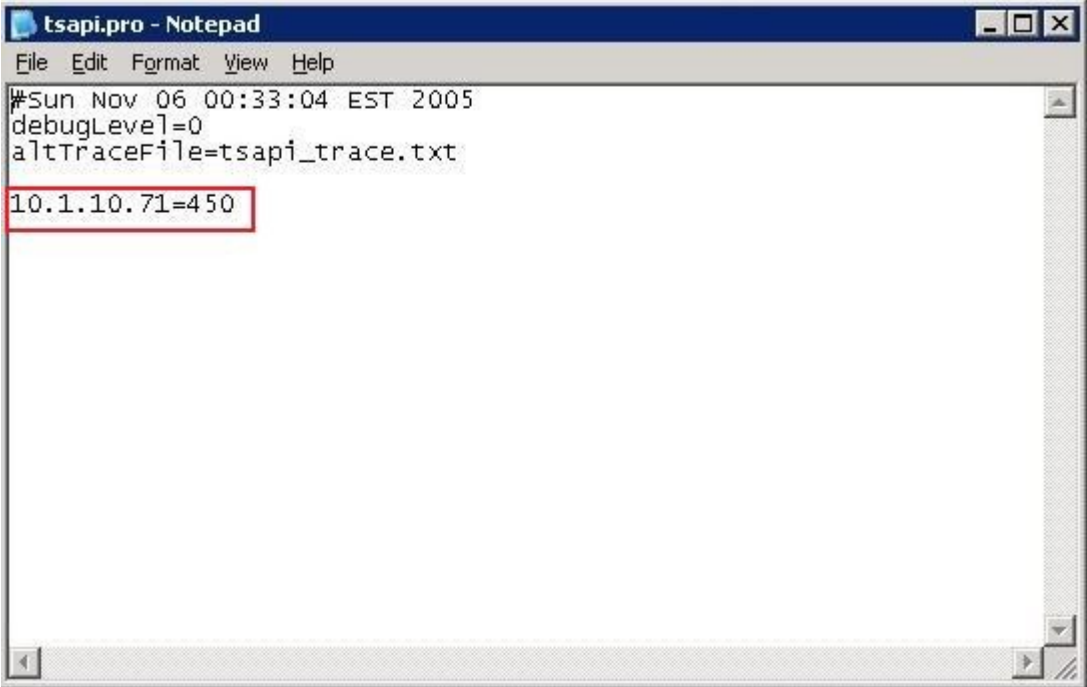
## 8.2. Configure Dialog Designer CTI Connector

Step	Description
1.	<p>Launch a web browser and enter <b>http://&lt;ip-addr&gt;:8080/runtimeconfig</b>, where <b>ip-addr</b> is the IP address of VoiceNet server which host the Dialog Designer Admin Console. Log in using an administrative login and password (not shown) and the following screen will be displayed.</p> 



Step	Description
2.	<p>Select CTI from the left menu. Configure a new tserver/AES entry as follows:</p> <ul style="list-style-type: none"> <li>• <b>Name:</b> Enter a descriptive name, e.g. AES1.</li> <li>• <b>Service Name:</b> Enter the <b>Tlink Name</b> shown in <b>Section 6.4 Step 4</b>.</li> <li>• <b>User Name:</b> Enter the <b>User Id</b> configured in <b>Section 6.2</b>.</li> <li>• <b>Password:</b> Enter the <b>User Password</b> configured in <b>Section 6.2</b>.</li> </ul> <p>Click <b>Add TServer/AES</b>.</p> '

Step	Description
3.	<p>The CTI page will be shown with the new TServer entry added. Click <b>map</b>.</p>  <p>The screenshot shows the 'Dialog Designer Application Configuration' window in Internet Explorer. The URL is http://10.1.10.122:8080/runtimeconfig/jsp/main.jsp. The page title is 'AVAYA Dialog Designer 05.00.15.05'. The left sidebar contains a menu with 'License Server', 'Proxy Settings', 'CTI', 'IR Channel Map', 'IC Common', 'IC VOX', 'IC VRUSM/HTTPVOX', and 'Users'. The main content area is titled 'CTI' and shows configuration options for 'Timeout' (4000) and 'Trace Verbosity' (3). Below these is a table with columns: Type, Name, Service Name, User Name, Ext Map, and Add Failover. The table contains one row: tserver/AES, AES1, AVAYA#SITE1#CSTA#AES1, voicenet, map, and add failover. The 'map' link is highlighted with a red box. A 'Delete' button is also visible. A note at the bottom states: 'Note: The tserver/AES and failover names cannot contain "/&gt; </p>
4.	<p>Define the Voice Portal stations configured in <b>Section 5.2</b> so that they will be monitored by the CTI Connector. Enter <b>10201-10210</b> in the <b>Channel</b> field and <b>10201</b> (first extension) in the <b>Mapped Extension</b> field to add all 10 Voice Portal stations. Click <b>Add</b>. The Tserver Extension Map page will be shown again with the mapped extensions.</p>  <p>The screenshot shows the 'Dialog Designer Application Configuration' window in Internet Explorer. The URL is http://10.1.10.122:8080/runtimeconfig/jsp/main.jsp. The page title is 'AVAYA Dialog Designer 05.00.15.05'. The left sidebar contains a menu with 'License Server', 'Proxy Settings', 'CTI', 'IR Channel Map', 'IC Common', 'IC VOX', 'IC VRUSM/HTTPVOX', and 'Users'. The main content area is titled 'Tserver Extension Map' and shows configuration options for 'Channel' (10201-10210) and 'Mapped Extension' (10201). Below these is a table with columns: Channel, Mapped Extension, and Observe On Startup. The table contains one row: Channel, Mapped Extension, and Observe On Startup. The 'Add' button is highlighted with a red box. A note at the bottom states: 'You can map a range of sequential channels to sequential extensions using the format "1-n" in the Channel field. You need only to enter the start extension in the Mapped Extension field. Channel call will arrive on for IR. For VP, this value is arbitrary but should be unique to the list. extension channel maps to for IR. For VP, this is the extension the call will arrive on. Observe On Startup: always true.'</p>

Step	Description
5.	<p>From the VoiceNet server, edit the file <b>tsapi.pro</b> located in the folder &lt;Apache Tomcat Home&gt;\common\lib\ using Notepad. Specify the IP address of the Application Enablement Services Server by inserting the following entry as shown below. Note that <b>450</b> is the default port number of the TSAPI Service running on Application Enablement Services.</p> 



## 9. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Communication Manager, Application Enablement Services, Voice Portal and VoiceNet.

### 9.1. Verify Communication Manager

Verify the status of the administered Voice Portal H.323 stations by using the **status station n** command, where **n** is a H.323 station created in **Section 5.1**. The **Service State** field should display **in-service/on-hook** or **in-service/active**.

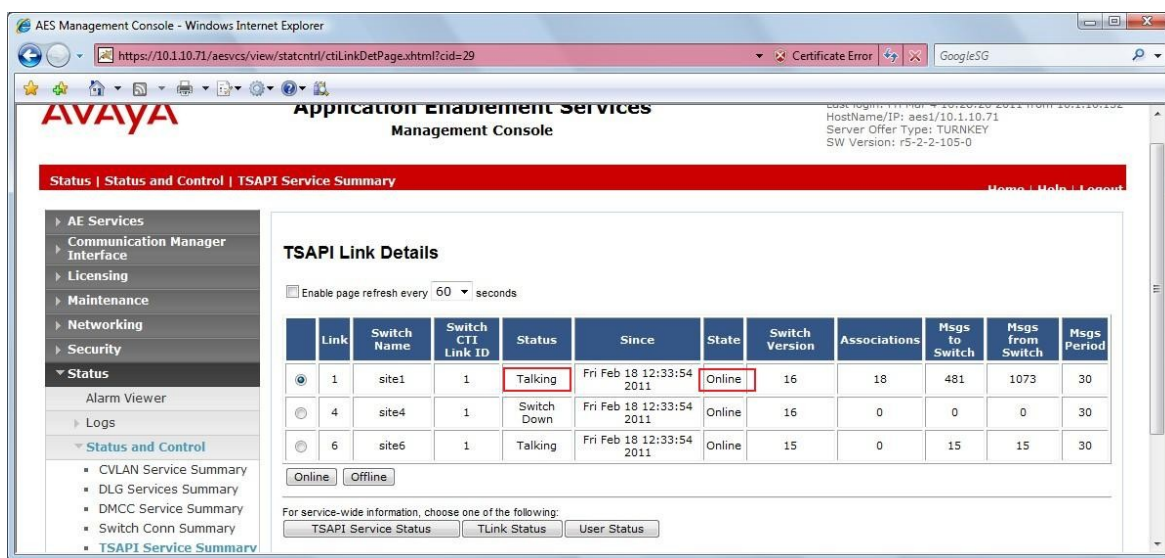
```
status station 10201                                     Page 1 of 7

                                GENERAL STATUS
Administered Type: 7434ND                               Service State: in-service/on-hook
Connected Type: N/A                                     TCP Signal Status: connected
Extension: 10201
Port: S00099                                           Parameter Download: not-applicable
Call Parked? no                                       SAC Activated? no
Ring Cut Off Act? no
Active Coverage Option: 1                             one-X Server Status: N/A
EC500 Status: N/A                                     Off-PBX Service State: N/A
Message Waiting:
Connected Ports:
Limit Incoming Calls? no

User Cntrl Restr: none                                HOSPITALITY STATUS
Group Cntrl Restr: none                               Awaken at:
                                                    User DND: not activated
                                                    Group DND: not activated
                                                    Room Status: occupied
```

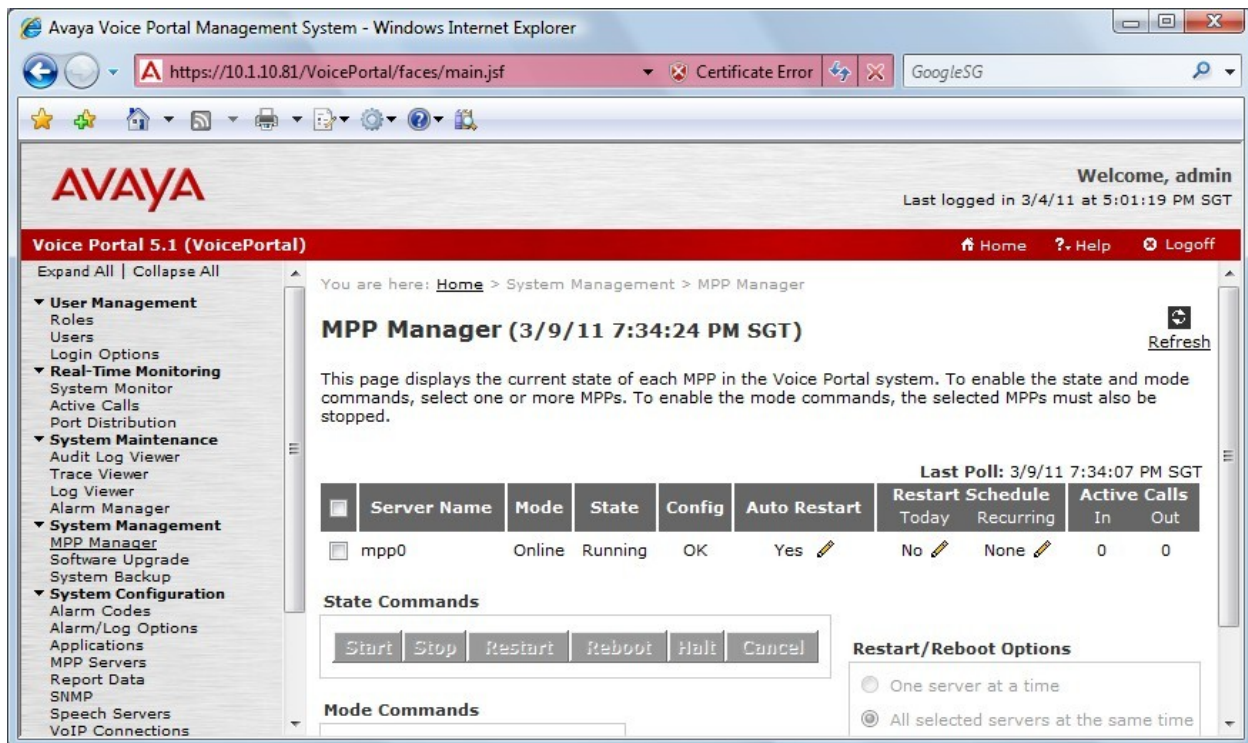
### 9.2. Verify Application Enablement Services

From the Application Enablement Services Management Console, verify the status of the TSAPI Link by selecting **Status > Status and Control > TSAPI Service Summary** from the left menu. The **Status** field for the TSAPI Link should display **Talking** and the **State** field show **Online**.



### 9.3. Verify Voice Portal

From the VPMS web interface, click **System Management > MPP Manager**. On the MPP Manager page, verify that the MPP server is **Online** and **Running**.



### 9.4. Verify AGC Networks VoiceNet

Configure and start a campaign using VoiceNet Administrator web interface. Verify that the proactive contact calls are made to the correct destinations and the desired voice application is played to the customer.

Place a call to the VDN to verify that a callback can be scheduled using the VoiceNet callback voice application running on Voice Portal. Verify that the callback is received at the desired time and phone number.

## 10. Conclusion

These Application Notes describe the configuration steps required for AGC Networks VoiceNet 1.3 to interoperate with Avaya Voice Portal 5.1, Avaya Aura® Application Enablement Services 5.2.2 and Avaya Aura® Communication Manager 6.0. All feature and serviceability test cases were completed successfully.

## 11. Additional References

This section references the Avaya and AGC Networks documentations that are relevant to these Application Notes.

The following Avaya product documentations can be found at <http://support.avaya.com>.

- [1] *Administering Avaya Aura™ Communication Manager*, Release 6.0, Document No. 03-300509, August 2010.
- [2] *Avaya Aura™ Communication Manager Feature Description and Implementation*, Release 6.0, Issue 8.0, June 2010, Document No. 555-245-205.
- [3] *Administering Avaya Aura™ Call Center Features*, Release 6.0, November 2010.
- [4] *Programming Call Vectors in Avaya Aura™ Call Center*, Release 6.0, June 2010.
- [5] *Avaya Aura™ Call Center Feature Reference*, Release 6.0, November 2010.
- [6] *Avaya Aura™ Application Enablement Services Administration and Maintenance Guide*, Release 5.2, Document ID 02-300357, Issue 11, November 2009.
- [7] *Avaya Dialog Designer Developer's Guide*, Release 5.1, June 2010.

The following product documentations are available from AGC Networks upon request.

- [8] *VoiceNet Automatic Dialing System, Installation and Administration Guide*, Release 1.3, October 2010.

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