



Avaya Solution & Interoperability Test Lab

Application Notes for Virtual Hold Concierge™ with Avaya Voice Portal – Issue 1.0

Abstract

These Application Notes describe the configuration steps required to integrate Virtual Hold Concierge™ with Avaya Voice Portal.

Virtual Hold Concierge™ is a contact center solution that calculates the expected wait time and maintains the caller position in a virtual queue. Virtual Hold Concierge™ can call the user back and connect to an agent when the caller's turn comes up. This is achieved by their Virtual Hold VXML Interaction Server, which runs the Avaya Voice Portal supported VXML application. Virtual Hold Concierge™ consists of Virtual Hold VXML Interaction Server and Virtual Hold Queue Manager. The integration with Avaya Aura® Communication Manager is achieved through the Avaya Aura® Application Enablement Service (AES) TSAPI service for events. Calls to Virtual Hold Concierge™ are routed using H.323 connection from Avaya Aura® Communication Manager and using SIP connection from Avaya Aura® Communication Manager via Avaya Aura® Session Manager.

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.

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1. Introduction

Virtual Hold Concierge™ is a contact center solution that calculates the expected wait time and maintains the caller position in a virtual queue. Virtual Hold Concierge™ can call the user back and connect to an agent when the caller's turn comes up. Virtual Hold Concierge™ consists of Virtual Hold VXML Interaction Server and Virtual Hold Queue Manager. The integration with Avaya Aura® Communication Manager is achieved through the Avaya Aura® Application Enablement Service (AES) TSAPI service.

Virtual Hold Concierge™ is installed over the existing voice framework to add intelligent queue management. As calls come into the contact center, Virtual Hold monitors the Estimated Wait Time (EWT) and determines how calls are treated. If EWT is less than the turn-on threshold, the calls are routed to queue, as normal, to be answered by an agent. If EWT is more than the turn-on threshold, the calls are routed to the Virtual Hold IVR for the Virtual Hold options. Virtual Hold offers to save the callers' places in line and call them back when it is their turn. If a caller declines the option, the caller is routed to queue to wait being answered by an agent. If a caller accepts the Virtual Hold option, he enters his callback phone number, records his name, and then hangs up. When it is nearly the caller's turn in queue, Virtual Hold calls him back, verifies he is on the line, and transfers him to queue at high priority, which makes him the next call that is answered by an agent.

Virtual Hold Queue Manager uses the Avaya Aura® AES TSAPI service to query and monitor the agent states and service speed, and uses the provided CTI event reports to calculate the expected wait time. Incoming calls are routed to Virtual Hold Concierge™ via Avaya Voice Portal, where Virtual Hold Concierge™ can play the expected wait time to the caller and provide the caller with option to be called back when the caller's turn comes up or at a future designated time. Virtual Hold VXML Interaction Server uses the Application Interface Web Service provided by Avaya Voice Portal to launch VXML application and send callback requests.

Call routing to and from Avaya Voice portal is performed using H.323 connection from Avaya Aura® Communication Manager and using SIP connection from Avaya Aura® Communication Manager via Avaya Aura® Session Manager.

2. General Test Approach and Test Results

DevConnect Compliance Testing is conducted jointly by Avaya and DevConnect members. The jointly-defined test plan focuses on exercising APIs and/or standards-based interfaces pertinent to the interoperability of the tested products and their functionalities. DevConnect Compliance Testing is not intended to substitute full product performance or feature testing performed by DevConnect members, nor is it to be construed as an endorsement by Avaya of the suitability or completeness of a DevConnect member's solution.

2.1. Interoperability Compliance Testing

The purpose of this compliance testing was to interoperate Avaya Voice Portal with Virtual Hold Concierge™.

Compliance testing was performed on two separate configurations.

1. Trunks to Avaya Voice Portal using H.323
2. Trunks to Avaya Voice Portal using SIP via Avaya Aura® Session Manager

The interoperability compliance test included events, feature and serviceability testing. Feature testing entailed placing calls manually to Voice Portal and verifying that Virtual Hold VXML application was launched. Testing was performed with Virtual Hold applications running on a virtual machine with Windows Server 2008 SP2.

Serviceability testing focused on verifying the ability of Voice Portal and Virtual Hold to recover after a network or application outage.

The interoperability compliance test included feature and serviceability testing. Feature testing focused on verifying the following features and functionality:

- Voice Portal configuration for Virtual Hold VXML applications.
- Voice Portal using SIP and H.323 as VoIP Connections.
- Voice Portal Call Detail Records and Alarms generation.
- TSAPI tests for various events
- Feature tests for Virtual Hold to play Estimated Wait Time (EWT)
- Various scenarios for Virtual Hold to perform callbacks.

2.2. Test Results

All test cases were passed.

2.3. Support

To obtain technical support for Virtual Hold:

- **Web:** www.virtualhold.com
- **Email:** support@virtualhold.com
- **Phone:** (866) 670 - 2223

3. Reference Configuration

The diagram below illustrates the test configuration.

For this test effort, two different configurations were tested:

1. H.323 to Avaya Voice Portal
2. SIP to Avaya Voice Portal via Session Manager

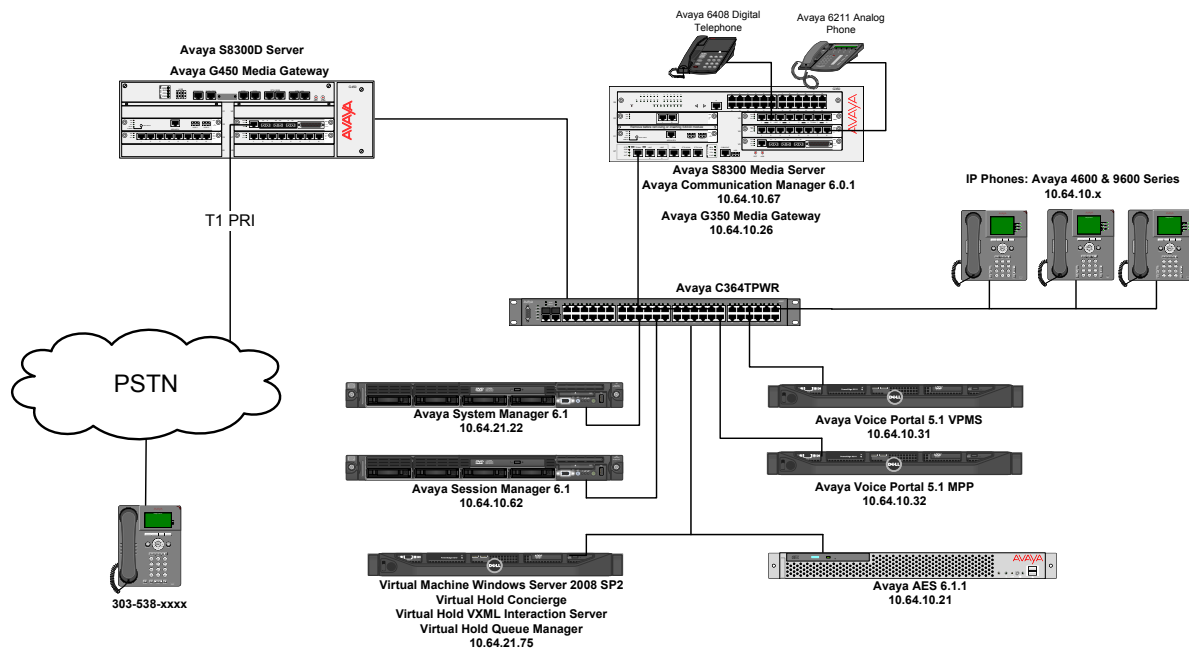


Figure 1: Test Configuration

3.1. Equipment and Software Validated

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

Equipment	Software
Avaya Voice Portal	5.1 (5.1.0.0.4201)
Avaya S8300 Server running Avaya Aura [®] Communication Manager	6.0.1 SP 00.1.510.1-19528
Avaya Aura [®] Session Manager	6.1.6.0.616008
Avaya Aura [®] System Manager	6.1 SP 6.1.0.0.7345-6.1.5.606
Avaya Aura [®] Application Enablement Services	6.1.1 6-1-1-30-0
Virtual Hold Concierge [™]	7.3
Virtual Hold VIS	1.0

4. Configure Avaya Aura® Communication Manager

This section describes the Communication Manager configuration for both H.323 and SIP trunks to Avaya Voice Portal.

The configuration of Communication Manager was performed using the System Access Terminal (SAT). After the completion of the configuration, perform a **save translation** command to make the changes permanent.

Though required, please note that Administration required for setting up H.323 and SIP trunk groups and signaling groups is out of scope for document.

Step	Description																														
1.	<p>Communication Manager - Licenses</p> <p>Verify that the Communication Manager license has proper permissions for features illustrated in these Application Notes. Use the display system-parameters customer-options command to verify that the Computer Telephony Adjunct Links customer option is set to y on Page 3. If this option is not set to y, then contact the Avaya sales team or business partner for a proper license file.</p> <div><p>OPTIONAL FEATURES</p><table><tbody><tr><td>Abbreviated Dialing Enhanced List? y</td><td>Audible Message Waiting? y</td></tr><tr><td>Access Security Gateway (ASG)? n</td><td>Authorization Codes? y</td></tr><tr><td>Analog Trunk Incoming Call ID? y</td><td>CAS Branch? n</td></tr><tr><td>A/D Grp/Sys List Dialing Start at 01? y</td><td>CAS Main? n</td></tr><tr><td>Answer Supervision by Call Classifier? y</td><td>Change COR by FAC? n</td></tr><tr><td>ARS? y</td><td>Computer Telephony Adjunct Links? y</td></tr><tr><td>ARS/AAR Partitioning? y</td><td>Cvg Of Calls Redirected Off-net? y</td></tr><tr><td>ARS/AAR Dialing without FAC? y</td><td>DCS (Basic)? y</td></tr><tr><td>ASAI Link Core Capabilities? n</td><td>DCS Call Coverage? y</td></tr><tr><td>ASAI Link Plus Capabilities? n</td><td>DCS with Rerouting? y</td></tr><tr><td>Async. Transfer Mode (ATM) PNC? n</td><td>Digital Loss Plan Modification? y</td></tr><tr><td>Async. Transfer Mode (ATM) Trunking? n</td><td>DS1 MSP? y</td></tr><tr><td>ATM WAN Spare Processor? n</td><td>DS1 Echo Cancellation? y</td></tr><tr><td>ATMS? y</td><td></td></tr><tr><td>Attendant Vectoring? y</td><td></td></tr></tbody></table><p>(NOTE: You must logoff & login to effect the permission changes.)</p></div>	Abbreviated Dialing Enhanced List? y	Audible Message Waiting? y	Access Security Gateway (ASG)? n	Authorization Codes? y	Analog Trunk Incoming Call ID? y	CAS Branch? n	A/D Grp/Sys List Dialing Start at 01? y	CAS Main? n	Answer Supervision by Call Classifier? y	Change COR by FAC? n	ARS? y	Computer Telephony Adjunct Links? y	ARS/AAR Partitioning? y	Cvg Of Calls Redirected Off-net? y	ARS/AAR Dialing without FAC? y	DCS (Basic)? y	ASAI Link Core Capabilities? n	DCS Call Coverage? y	ASAI Link Plus Capabilities? n	DCS with Rerouting? y	Async. Transfer Mode (ATM) PNC? n	Digital Loss Plan Modification? y	Async. Transfer Mode (ATM) Trunking? n	DS1 MSP? y	ATM WAN Spare Processor? n	DS1 Echo Cancellation? y	ATMS? y		Attendant Vectoring? y	
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Step	Description
2.	<p>Communication Manager – Licenses - Continued Navigate to Page 6, and verify that the Vectoring (Basic) customer option is set to y.</p> <div> display system-parameters customer-options Page 6 of 11 CALL CENTER OPTIONAL FEATURES Call Center Release: 6.0 ACD? y Reason Codes? y BCMS (Basic)? y Service Level Maximizer? n BCMS/VuStats Service Level? y Service Observing (Basic)? y BSR Local Treatment for IP & ISDN? y Service Observing (Remote/By FAC)? y Business Advocate? n Service Observing (VDNs)? y Call Work Codes? y Timed ACW? y DTMF Feedback Signals For VRU? y Vectoring (Basic)? y Dynamic Advocate? n Vectoring (Prompting)? y Expert Agent Selection (EAS)? y Vectoring (G3V4 Enhanced)? y EAS-PHD? y Vectoring (3.0 Enhanced)? y Forced ACD Calls? n Vectoring (ANI/II-Digits Routing)? y Least Occupied Agent? y Vectoring (G3V4 Advanced Routing)? y Lookahead Interflow (LAI)? y Vectoring (CINFO)? y Multiple Call Handling (On Request)? y Vectoring (Best Service Routing)? y Multiple Call Handling (Forced)? y Vectoring (Holidays)? y PASTE (Display PBX Data on Phone)? y Vectoring (Variables)? y (NOTE: You must logoff & login to effect the permission changes.) </div>
3.	<p>Add Cti-link Add a CTI link using the add cti-link n command, where n is an available CTI link number. Enter an available extension number in the Extension field. Note that the CTI link number and extension number may vary. Enter ADJ-IP in the Type field, and a descriptive name in the Name field. Default values may be used in the remaining fields.</p> <div> change cti-link 1 Page 1 of 3 CTI LINK CTI Link: 1 Extension: 6201 Type: ADJ-IP Name: to AES-10.64.10.21 COR: 1 </div>

Step	Description
4.	<p>Create Hunt-Group for H.323 Configuration</p> <p>Administer a hunt group to be used for routing of calls to Voice Portal. Use the add hunt-group n command, where n is an available hunt group number.</p> <p>On Page 1:</p> <ul style="list-style-type: none"> Type in Group Name. Type in an available Group Extension. Set ACD, Queue and Vector to y. <div> <pre> add hunt-group 55 Page 1 of 4 HUNT GROUP Group Number: 55 ACD? y Group Name: Voice Portal Queue? y Group Extension: 61055 Vector? y Group Type: ucd-mia TN: 1 COR: 1 Security Code: MM Early Answer? n ISDN/SIP Caller Display: Local Agent Preference? n Queue Limit: unlimited Calls Warning Threshold: Port: Time Warning Threshold: Port: </pre> </div> <p>On Page 2:</p> <ul style="list-style-type: none"> Set Skill and AAS to y. <div> <pre> add hunt-group 55 Page 2 of 4 HUNT GROUP Skill? y Expected Call Handling Time (sec): 180 AAS? y Measured: none Supervisor Extension: Controlling Adjunct: none Multiple Call Handling: none </pre> </div> <p>Administer another hunt group to be used for Call Center Agents. Use the add hunt-group n command, where n is an available hunt group number.</p> <p>Configuration for this hunt group will be same as the one created early on in this step</p>

Step	Description
5.	<p>Create Hunt-Group for SIP configuration Administer another hunt group to be used for Call Center Agents. Use the add hunt-group n command, where n is an available hunt group number.</p> <p>On Page 1:</p> <ul style="list-style-type: none"> Type in Group Name. Type in an available Group Extension. Set ACD, Queue and Vector to y. <div data-bbox="316 567 1401 966"> <pre> add hunt-group 51 Page 1 of 4 HUNT GROUP Group Number: 51 ACD? y Group Name: Skill 51 Queue? y Group Extension: 61051 Vector? y Group Type: ucd-mia TN: 1 COR: 1 Security Code: MM Early Answer? n ISDN/SIP Caller Display: Local Agent Preference? n Queue Limit: unlimited Calls Warning Threshold: Port: Time Warning Threshold: Port: </pre> </div> <p>On Page 2:</p> <ul style="list-style-type: none"> Set Skill and AAS to y. <div data-bbox="316 1117 1401 1551"> <pre> add hunt-group 55 Page 2 of 4 HUNT GROUP Skill? y Expected Call Handling Time (sec): 180 AAS? y Measured: none Supervisor Extension: Controlling Adjunct: none Multiple Call Handling: none </pre> </div>

Step	Description
6.	<p>VDNs and Vectors for H.323 connection</p> <p>Administer a set of vectors and Vector Directory Numbers (VDNs) for the following purposes:</p> <p>Entry/Hold: To provide converse route and failure coverage and to queue incoming calls to the skill group at medium priority.</p> <p>Callback: To queue callback calls to the skill group at high priority.</p> <p>Entry/Hold VDN and Vector</p> <p>Modify an available vector using the change vector n command, where n is an existing vector number.</p> <p>Following configuration was used during compliance testing and may vary.</p> <div data-bbox="316 705 1417 1138" data-label="Text"> <pre> change vector 100 Page 1 of 6 CALL VECTOR Number: 100 Name: Entry Multimedia? n Attendant Vectoring? n 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 0 secs hearing silence 02 converse-on skill 55 pri h passing none and none 03 collect 10 digits after announcement 61011 for none 04 goto step 5 if digits = 1 05 queue-to skill 51 pri m 06 wait-time 999 secs hearing music 07 disconnect after announcement none 08 stop 09 </pre> </div> <p>Add a VDN using the add vdn n command, where n is an available extension number. Enter a descriptive Name, and the vector number from above for Vector Number. Retain the default values for all remaining fields.</p> <div data-bbox="316 1323 1417 1642" data-label="Text"> <pre> add vdn 61000 Page 1 of 3 VECTOR DIRECTORY NUMBER Extension: 61000 Name*: Entry for H.323 Destination: Vector Number 100 Attendant Vectoring? n Meet-me Conferencing? n Allow VDN Override? n COR: 1 TN*: 1 Measured: none </pre> </div> <p>Callback VDN and Vector</p> <p>Modify an available vector using the change vector n command, where n is an existing vector number.</p> <p>Continued on next page</p>
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Step	Description
	<p data-bbox="318 233 1276 264">Following configuration was used during compliance testing and may vary.</p> <div data-bbox="347 302 1401 879"> <pre> change vector 101 Page 1 of 6 CALL VECTOR Number: 101 Name: Callback Multimedia? n Attendant Vectoring? n 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 2 secs hearing silence 02 announcement 61011 03 queue-to skill 51 pri h 04 wait-time 30 secs hearing ringback 05 goto step 4 if unconditionally 06 disconnect after announcement none 07 stop 08 09 10 11 12 Press 'Esc f 6' for Vector Editing </pre> </div> <p data-bbox="318 919 1422 1024">Add a VDN using the add vdn n command, where n is an available extension number. Enter a descriptive Name, and the vector number from above for Vector Number. Retain the default values for all remaining fields.</p> <div data-bbox="318 1062 1369 1520"> <pre> change vdn 61025 Page 1 of 3 VECTOR DIRECTORY NUMBER Extension: 61025 Name*: Callback Destination: Vector Number 102 Attendant Vectoring? n Meet-me Conferencing? n Allow VDN Override? n COR: 1 TN*: 1 Measured: none VDN of Origin Annc. Extension*: 1st Skill*: 2nd Skill*: 3rd Skill*: </pre> </div>

Step	Description
7.	<p>VDNs and Vectors for SIP Connection</p> <p>Administer a set of vectors and Vector Directory Numbers (VDNs) for the following purposes:</p> <p>Entry: To provide adjunct route and failure coverage</p> <p>Hold: To queue incoming calls to the skill group at medium priority.</p> <p>Callback: To queue callback calls to the skill group at high priority.</p> <p>Entry VDN and Vector</p> <p>Modify an available vector using the change vector n command, where n is an existing vector number.</p> <p>Following configuration was used during compliance testing and may vary.</p> <div data-bbox="349 705 1398 1136" data-label="Text"> <pre> change vector 104 Page 1 of 6 CALL VECTOR Number: 104 Name: SIP Virtual Hol Multimedia? n Attendant Vectoring? n 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 0 secs hearing silence 02 route-to number 61175 with cov n if unconditionally 03 wait-time 10 secs hearing ringback 04 queue-to skill 51 pri m 05 wait-time 30 secs hearing ringback 06 goto step 4 if unconditionally 07 disconnect after announcement none 08 stop 09 </pre> </div> <p>Add a VDN using the add vdn n command, where n is an available extension number. Enter a descriptive Name, and the vector number from above for Vector Number.</p> <p>Retain the default values for all remaining fields.</p> <div data-bbox="316 1356 1365 1829" data-label="Text"> <pre> change vdn 61027 Page 1 of 3 VECTOR DIRECTORY NUMBER Extension: 61027 Name*: SIP VDN for Virtual Hold Destination: Vector Number 104 Attendant Vectoring? n Meet-me Conferencing? n Allow VDN Override? n COR: 1 TN*: 1 Measured: none VDN of Origin Annc. Extension*: 1st Skill*: 2nd Skill*: 3rd Skill*: </pre> </div> <p>Continued on next page</p>
KJA; Reviewed: SPOC 5/9/2012	<p>Solution & Interoperability Test Lab Application Notes</p> <p>©2012 Avaya Inc. All Rights Reserved.</p> <p>13 of 61 VHTAVP51</p>

Step	Description
	<p>Hold VDN and Vector</p> <p>Modify an available vector using the change vector n command, where n is an existing vector number.</p> <p>Following configuration was used during compliance testing and may vary.</p> <div data-bbox="318 489 1365 867" style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <pre> change vector 105 CALL VECTOR Page 1 of 6 Number: 105 Name: Hold Multimedia? n Attendant Vectoring? n 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 0 secs hearing silence 02 announcement 61011 03 queue-to skill 55 pri m 04 wait-time 30 secs hearing ringback 05 goto step 4 if unconditionally 06 disconnect after announcement none 07 stop </pre> </div> <p>Add a VDN using the add vdn n command, where n is an available extension number. Enter a descriptive Name, and the vector number from above for Vector Number. Retain the default values for all remaining fields.</p> <div data-bbox="318 1052 1365 1524" style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <pre> change vdn 61028 VECTOR DIRECTORY NUMBER Page 1 of 3 Extension: 61028 Name*: Hold Destination: Vector Number 105 Attendant Vectoring? n Meet-me Conferencing? n Allow VDN Override? n COR: 1 TN*: 1 Measured: none VDN of Origin Annc. Extension*: 1st Skill*: 2nd Skill*: 3rd Skill*: </pre> </div> <p>Callback VDN and Vector</p> <p>VDN and Vector used for H.323 were re-used for SIP connection</p>

Step	Description
8.	<p>Automatic Alternate Routing (AAR)</p> <p>For compliance test, AAR was used to route calls to Voice Portal via SM. Use change aar analysis command to add an entry to AAR table.</p> <p>For compliance test, all calls with dialed digits of 611xx were route to SM.</p> <pre> change aar analysis 611 Page 1 of 2 AAR DIGIT ANALYSIS TABLE Location: all Percent Full: 1 Dialed Total Route Call Node ANI String Min Max Pattern Type Num Req'd 611 5 5 50 aar Num n </pre> <p>Route Pattern 50 used trunk group 50, which was configured for SM. This trunk group was used for routing SIP calls to SM.</p>
9.	<p>Route Patterns</p> <p>Use the change route pattern <i>n</i> command, where <i>n</i> is an unused route pattern.</p> <pre> change route-pattern 50 Page 1 of 3 Pattern Number: 50 Pattern Name: 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: 50 0 2: 3: 4: 5: 6: n user n user n user n user n user 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 </pre>

Step	Description
10.	<p>H.323 Stations – Voice Portal</p> <p>Use the add station n command, where n is a valid unused station number, for example 58881. The station numbers correspond to the stations assigned to the Voice Portal ports and will be used later for Voice Portal H.323 VoIP Connection configuration. On Page 1, enter the following values:</p> <ul style="list-style-type: none"> • Set Type to 7434ND. • Set Port to IP. • Enter a descriptive name in Name field • Enter a Security Code, which will later be used by Voice Portal. • Set IP Softphone to y. <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <pre> add station 58881 Page 1 of 5 STATION Extension: 58881 Lock Messages? n BCC: 0 Type: 7434ND Security Code: 123456 TN: 1 Port: S00134 Coverage Path 1: COR: 1 Name: 1 Coverage Path 2: COS: 1 Hunt-to Station: STATION OPTIONS Loss Group: 2 Time of Day Lock Table: Data Module? n Personalized Ringing Pattern: 1 Display Module? n Message Lamp Ext: 58881 Coverage Module? n Survivable COR: internal Media Complex Ext: Survivable Trunk Dest? y IP SoftPhone? y Remote Office Phone? n IP Video Softphone? n Short/Prefixed Registration Allowed: default </pre> </div> <p>On Page 2, set Multimedia Mode to enhanced.</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <pre> add station 58881 Page 2 of 5 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: enabled Multimedia Mode: enhanced Audible Message Waiting? n MWI Served User Type: Display Client Redirection? n AUDIX Name: Select Last Used Appearance? n Coverage After Forwarding? s </pre> </div> <p>Repeat this step to add more stations.</p>

Step	Description
11.	<p>Agents – Voice Portal</p> <p>For each H.323 station for Voice Portal, add an Auto Answer agent using add agent-loginID n, where n is an available agent ID. For compliance test, agent 5881 was created and station 58881 was used as Port Extension. On Page 1,</p> <ul style="list-style-type: none"> • Set AAS to y. • Set a Security Code. • Set Port Extension to station created in step 10. • Set Auto Answer to station. <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <pre> add agent-loginID 5881 Page 1 of 2 AGENT LOGINID Login ID: 5881 AAS? y Name: VHT AVP Agent 1 AUDIX? n TN: 1 LWC Reception: spe COR: 1 LWC Log External Calls? n Coverage Path: AUDIX Name for Messaging: Security Code: 1234 Port Extension: 58881 LoginID for ISDN/SIP Display? n Auto Answer: station MIA Across Skills: system ACW Agent Considered Idle: system Aux Work Reason Code Type: system Logout Reason Code Type: system Maximum time agent in ACW before logout (sec): system Forced Agent Logout Time: WARNING: Agent must log in again before changes take effect </pre> </div> <p>On Page 2, for line 1, set SN to the hunt group created for routing calls to Voice Portal in step 4. Set SL to 1.</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <pre> add agent-loginID 5881 Page 2 of 2 AGENT LOGINID Direct Agent Skill: Service Objective? n Call Handling Preference: skill-level Local Call Preference? n SN RL SL SN RL SL 1: 55 1 16: </pre> </div> <p>Repeat this step to add more stations.</p>

Step	Description
12.	<p>H.323 Stations – Call Center Agents</p> <p>Use the add station n command, where n is a valid unused station number, for example 61020. The station numbers in this step correspond to the stations that will be used by Call Center Agents to answer calls H.323 VoIP Connection configuration. On Page 1, enter the following values:</p> <ul style="list-style-type: none"> • Set Type to the type of station. • Enter a descriptive name in Name field • Enter a Security Code, which will later be used by Voice Portal. <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <pre> add station 61020 Page 1 of 5 STATION Extension: 61020 Lock Messages? n BCC: 0 Type: 9630 Security Code: 123456 TN: 1 Port: S00113 Coverage Path 1: COR: 1 Name: Virtual Hold Sta Coverage Path 2: COS: 1 Hunt-to Station: STATION OPTIONS Time of Day Lock Table: Personalized Ringing Pattern: 1 Message Lamp Ext: 61020 Mute Button Enabled? y Button Modules: 0 Display Language: english Speakerphone: 2-way Survivable GK Node Name: Survivable COR: internal Survivable Trunk Dest? y Media Complex Ext: IP SoftPhone? n IP Video? n Short/Prefixed Registration Allowed: default Customizable Labels? y </pre> </div> <p>On Page 2, set Multimedia Mode to enhanced.</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <pre> add station 61020 Page 2 of 5 STATION FEATURE OPTIONS LWC Reception: spe LWC Activation? y LWC Log External Calls? n CDR Privacy? n Redirect Notification? y Per Button Ring Control? n Bridged Call Alerting? n Active Station Ringing: single Auto Select Any Idle Appearance? n Coverage Msg Retrieval? y Auto Answer: none Data Restriction? n Idle Appearance Preference? n Bridged Idle Line Preference? n Restrict Last Appearance? y H.320 Conversion? n Service Link Mode: as-needed Per Station CPN - Send Calling Number? EC500 State: enabled Audible Message Waiting? n Display Client Redirection? n Select Last Used Appearance? n Coverage After Forwarding? s MWI Served User Type: AUDIX Name: Multimedia Mode: enhanced </pre> </div> <p>Repeat this step to add more stations.</p>

Step	Description
13.	<p>Agents – Call Center Agents</p> <p>For each station added for Call Center Agents, add an Auto Answer agent using add agent-loginID n, where n is an available agent ID. For compliance test, agent 1020 was created and station 60120 was used as Port Extension. On Page 1,</p> <ul style="list-style-type: none"> • Set AAS to y. • Set a Security Code. • Set Port Extension to station created in step 12. • Set Auto Answer to station. <div> <pre> add agent-loginID 5881 Page 1 of 2 AGENT LOGINID Login ID: 5881 Name: VHT AVP Agent 1 TN: 1 COR: 1 Coverage Path: Security Code: 1234 Port Extension: 58881 AAS? y AUDIX? n LWC Reception: spe LWC Log External Calls? n AUDIX Name for Messaging: LoginID for ISDN/SIP Display? n Auto Answer: station MIA Across Skills: system ACW Agent Considered Idle: system Aux Work Reason Code Type: system Logout Reason Code Type: system Maximum time agent in ACW before logout (sec): system Forced Agent Logout Time: WARNING: Agent must log in again before changes take effect </pre> </div> <p>On Page 2, for line 1, set SN to the hunt group created for routing calls to Call Center Agents in step 6. Set SL to 1.</p> <div> <pre> add agent-loginID 5881 Page 2 of 2 AGENT LOGINID Direct Agent Skill: Call Handling Preference: skill-level SN RL SL SN RL SL 1: 51 1 16: Service Objective? n Local Call Preference? n </pre> </div> <p>Repeat this step to add more stations.</p>

5. Configure Avaya Aura® Application Enablement Services

All administration for Avaya Aura® Application Enablement Services (AES) is performed by web browser. Initially, users land on the Welcome to OAM page shown below. Note that all navigation is performed by clicking links in the Navigation Panel on the left side of the screen, context panels will then appear on the right side of the screen.

The procedures fall into the following areas:

- Configure Virtual Hold User
- Enable Unrestricted Access
- Note the TLink Information

1.

Configure Virtual Hold user

In the Navigation Panel, select **User Management → User Admin → Add User**. The **Add User** panel will display as shown below, enter an appropriate **User Id**, **Common Name**, **Surname**, **User Password**, and **Confirm Password**.

Click **Apply** at the bottom of the pages to save the entries.

Add User

Fields marked with * can not be empty.

* User Id	<input type="text" value="vhtaes"/>
* Common Name	<input type="text" value="vhtaes"/>
* Surname	<input type="text" value="vhtaes"/>
User Password	<input type="text"/>
Confirm Password	<input type="text"/>
Admin Note	<input type="text"/>
Avaya Role	<input type="text" value="None"/>
Business Category	<input type="text"/>
Car License	<input type="text"/>
CM Home	<input type="text"/>
Css Home	<input type="text"/>
CT User	<input type="text" value="Yes"/>
Department Number	<input type="text"/>
Display Name	<input type="text"/>
Employee Number	<input type="text"/>
Employee Type	<input type="text"/>
Enterprise Handle	<input type="text"/>
Given Name	<input type="text"/>
Home Phone	<input type="text"/>
Home Postal Address	<input type="text"/>
Initials	<input type="text"/>
Labeled URI	<input type="text"/>
Mail	<input type="text"/>
MM Home	<input type="text"/>
Mobile	<input type="text"/>
Organization	<input type="text"/>
Pager	<input type="text"/>
Preferred Language	<input type="text" value="English"/>
Room Number	<input type="text"/>
Telephone Number	<input type="text"/>

2.

Enable Unrestricted Access

If the Security Database (SDB) is enabled on Application Enablement Services, set the vhtaes user account to Unrestricted Access to enable any device to be used implicitly.

Navigate to **Security → Security Database → CTI Users → List All Users** and select the **vhtaes** user and click **Edit**.

On the **Edit CTI User** panel, check the **Unrestricted Access** box and click the **Apply Changes** button.

Click **Apply** when asked to confirm the change on the **Apply Changes to CTI User Properties** dialog.

Edit CTI User

User Profile:	User ID	vhtaes
	Common Name	vhtaes
	Worktop Name	NONE ▼
	Unrestricted Access	<input checked="" type="checkbox"/>

Call and Device Control:	Call Origination/Termination and Device Status	None ▼
--------------------------	--	--------

Call and Device Monitoring:	Device Monitoring	None ▼
	Calls On A Device Monitoring	None ▼
	Call Monitoring	<input type="checkbox"/>

Routing Control:	Allow Routing on Listed Devices	None ▼
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3.

Note the TLink Information

Navigate to **AE Services > TSAPI > TSAPI Links**. Edit the **TSAP Link** and click on **Advanced Settings**; note the **TLinks Configured**. This information will be used by Virtual Hold to capture events.

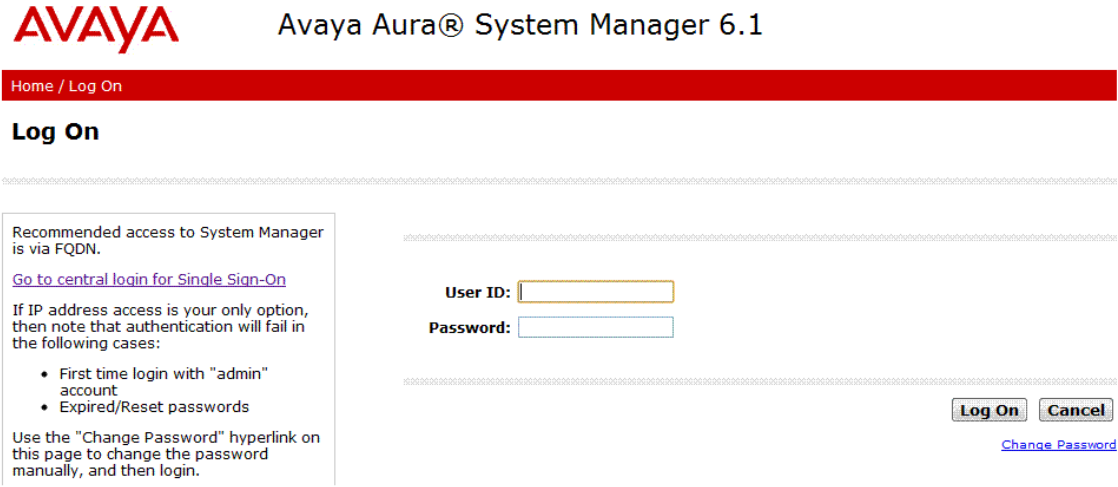
Please note that TSAPI links were pre-configured for this test and configuration is out of scope for this document.

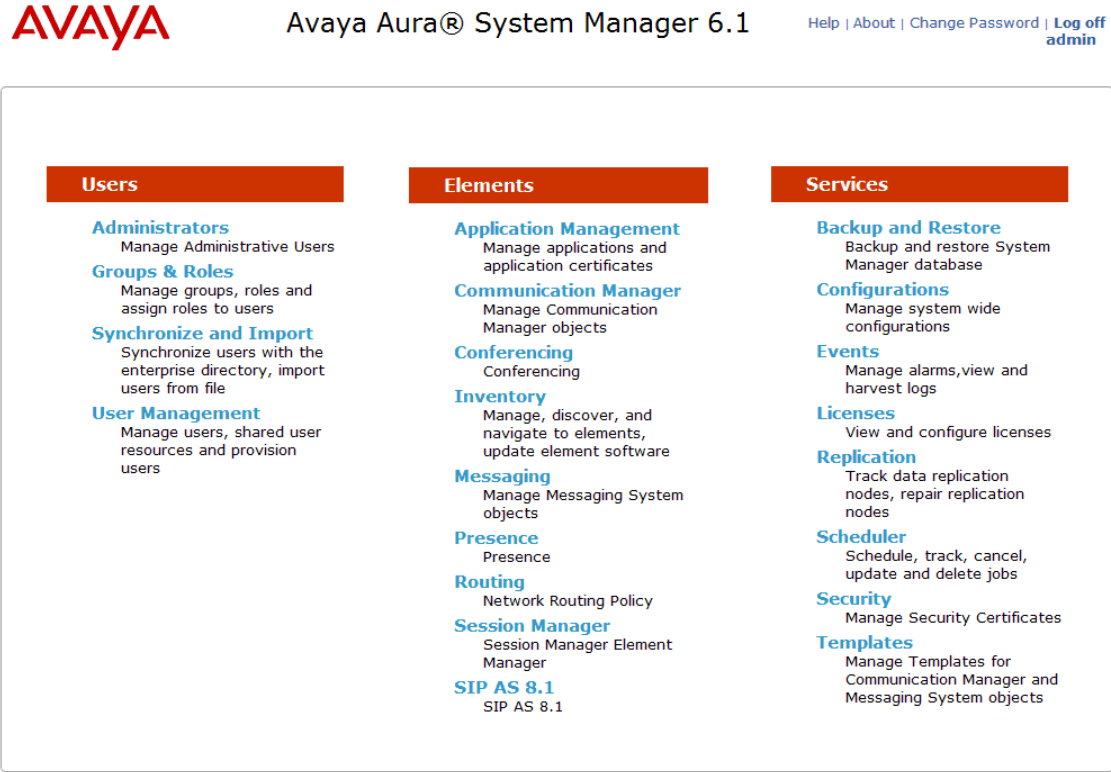
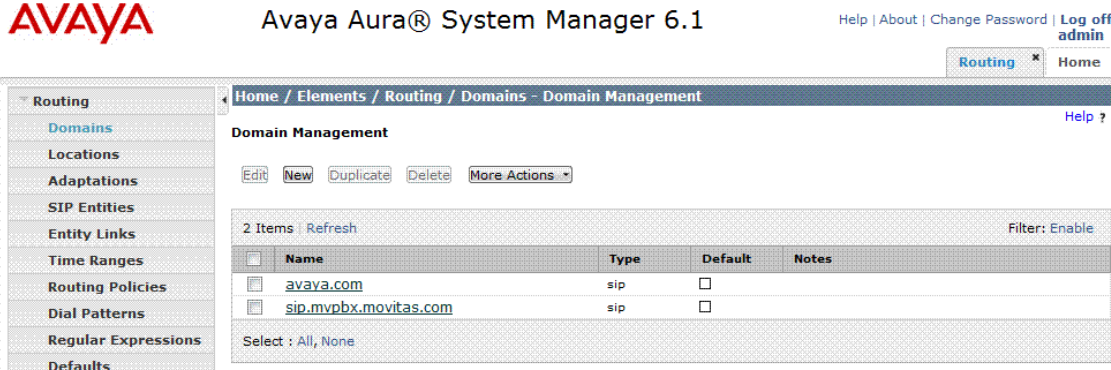
TSAPI Link - Advanced Settings

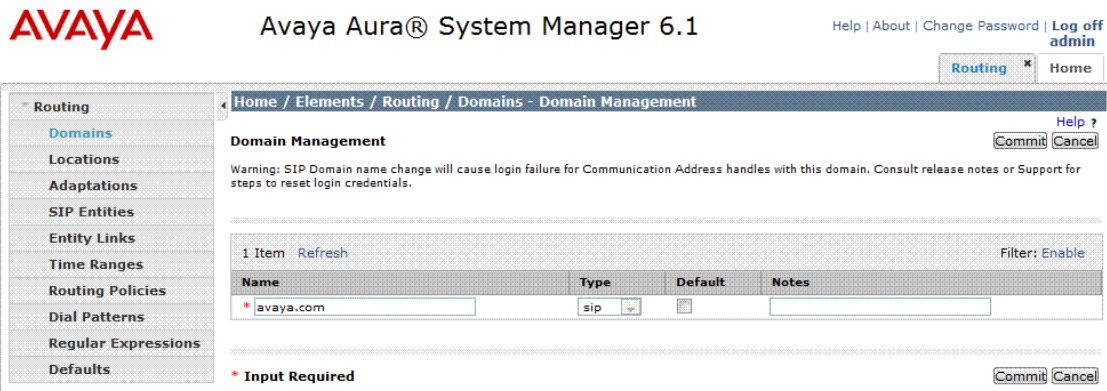
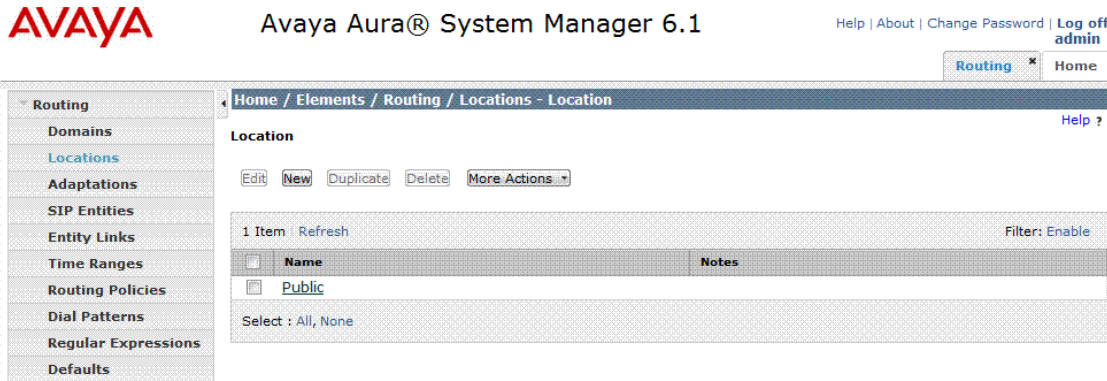
Tlinks Configured	<input type="text" value="AVAYA#TR18300#CSTA-S#AES6_TR1"/>
	<input type="text" value="AVAYA#TR18300#CSTA#AES6_TR1"/>
Max Flow Allowed	<input type="text" value="800"/>
TSDI Size	<input type="text" value="2097152"/>
TSDI High Water Mark	<input type="text" value="1677721"/>
<input type="button" value="Apply Changes"/> <input type="button" value="Cancel Changes"/> <input type="button" value="Restore Defaults"/>	

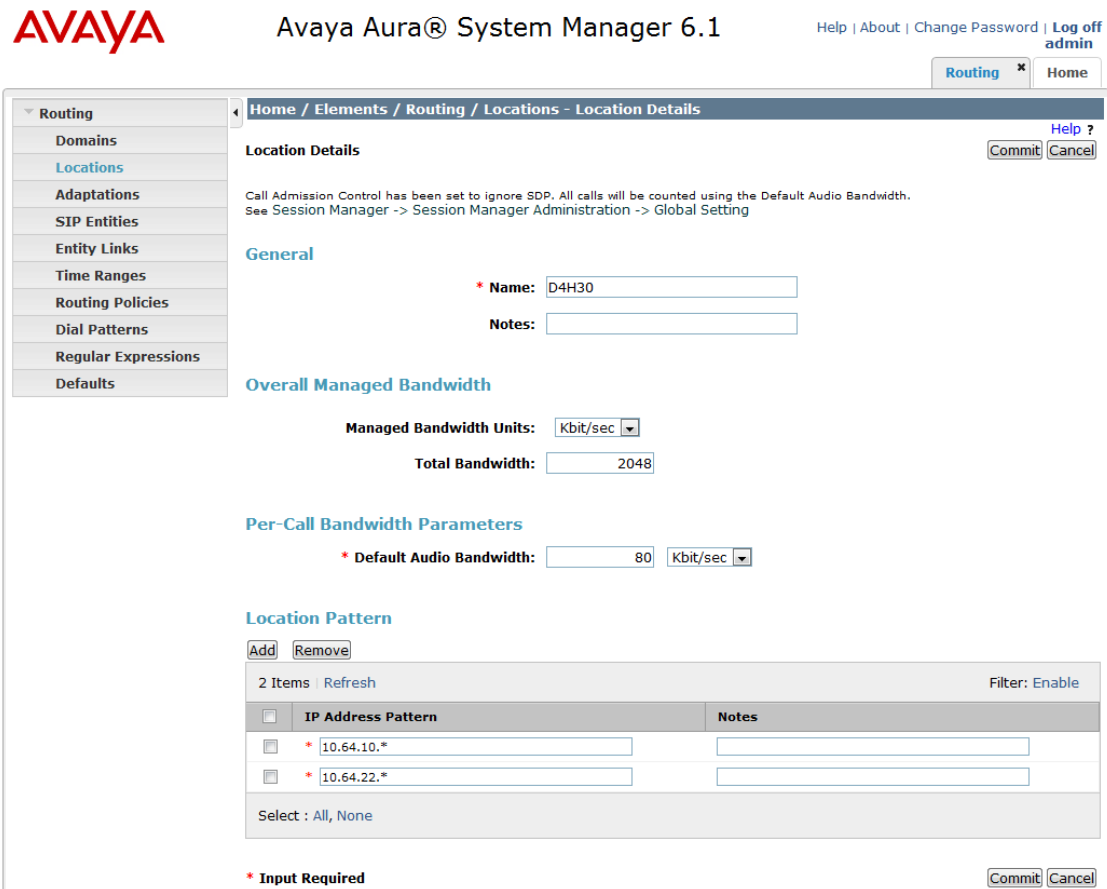
6. Configure Avaya Aura® Session Manager

This section provides the steps for configuring Session Manager to route calls to Voice Portal.

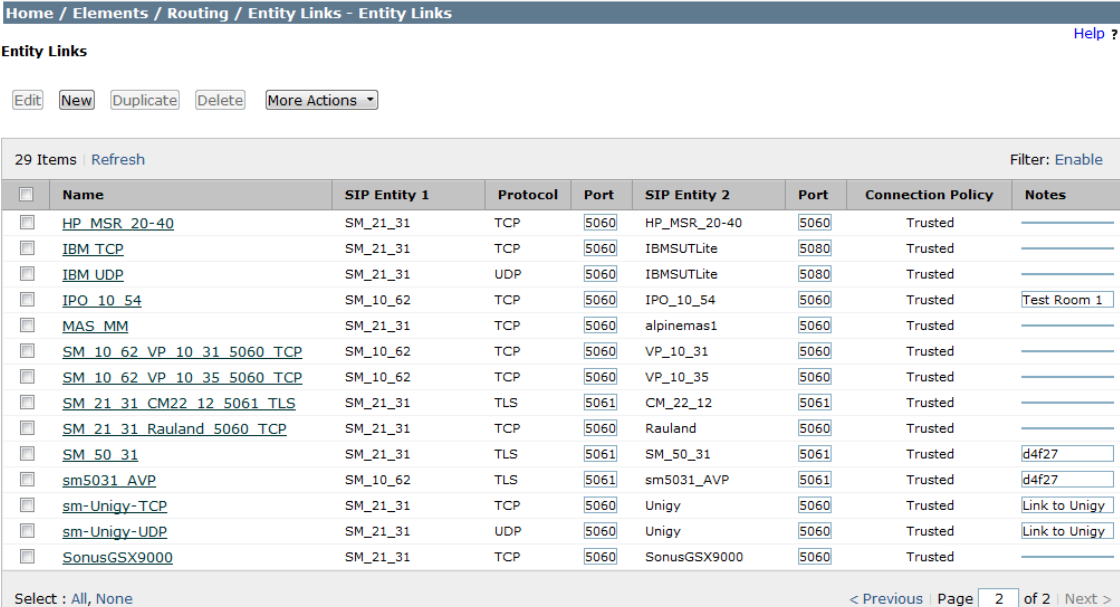
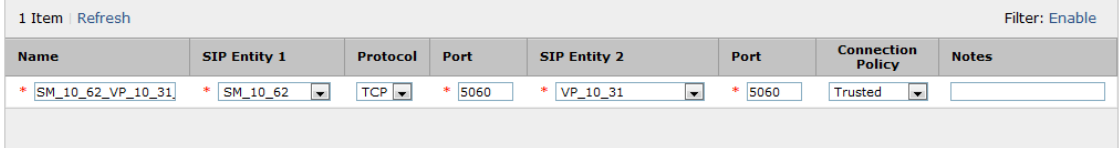
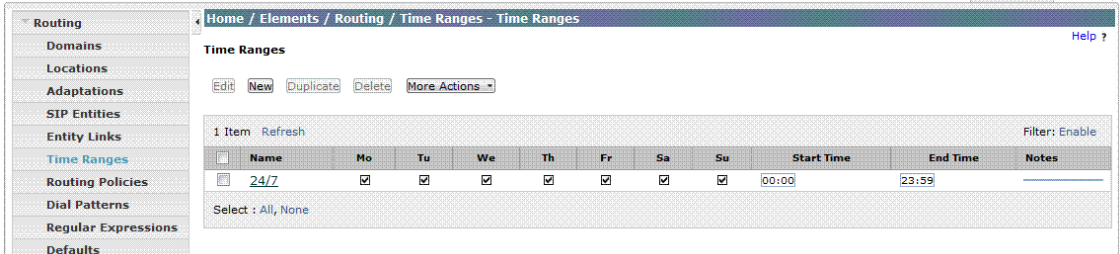
Step	Description
1.	<p>Session Manager is configured using browser access to System Manager. Enter the URL of System Manager such as <a href="https://<ip-addr>/network-login/SMGR">https://<ip-addr>/network-login/SMGR where <ip-addr> is the IP address or qualified domain name of the System Manager. Login using appropriate credentials.</p> 

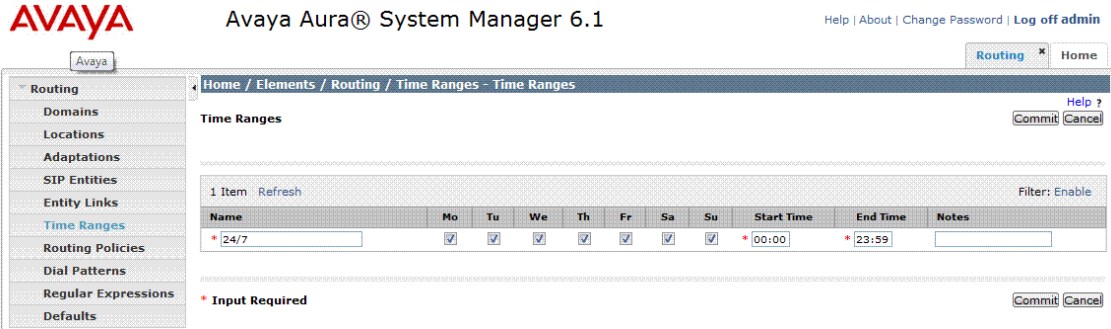
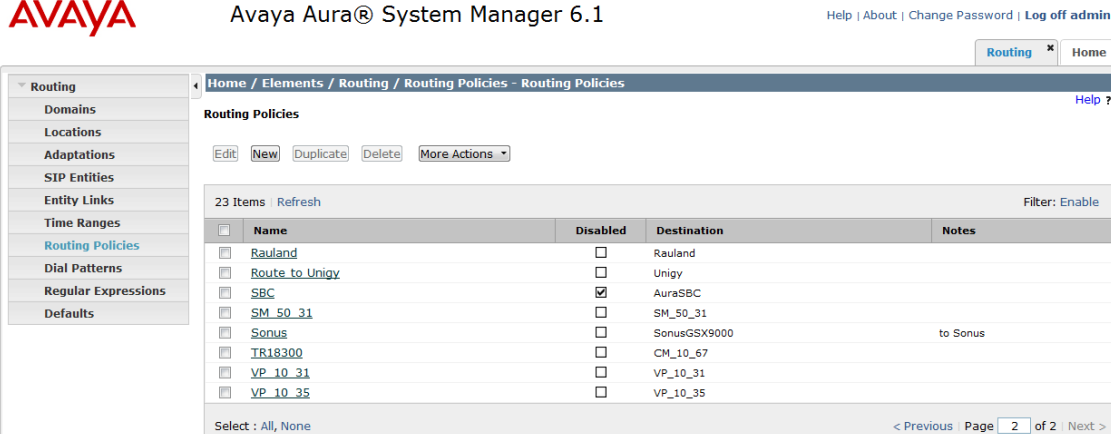
Step	Description
2.	<p>The home page is a navigation screen as shown below. Each of these links will open a new tab from which to navigate to the details of the managed environment. Click on Routing.</p> 
3.	<p>One the left pane, click on Domains</p> 

Step	Description
4.	<p>Add a Domain</p> <p>On the Domains page, click on New.</p> <ul style="list-style-type: none"> For the Name field, type in the domain Set Type to sip <p>For Compliance testing, avaya.com sip domain was used.</p> 
5.	<p>On the left pane, click on Locations</p> 

Step	Description
6.	<p>Add a Location</p> <p>On the Location page, click on New.</p> <ul style="list-style-type: none"> Enter the Name of the location Add a Location Pattern <p>For Compliance testing the following information was used.</p> 

Step	Description																																																																						
7.	<p>On the left pane, click on SIP Entities.</p> <div><div><div>AVAYA</div><div>Avaya Aura® System Manager 6.1</div><div>Help About Change Password Log off admin</div></div><div><div>Routing</div><div>Home</div></div><div><div><div><div>Routing</div><div>Domains</div><div>Locations</div><div>Adaptations</div><div>SIP Entities</div><div>Entity Links</div><div>Time Ranges</div><div>Routing Policies</div><div>Dial Patterns</div><div>Regular Expressions</div><div>Defaults</div></div><div><div>Home / Elements / Routing / SIP Entities - SIP Entities</div><div>SIP Entities</div><div><div>Edit</div><div>New</div><div>Duplicate</div><div>Delete</div><div>More Actions</div></div><div><div>28 Items</div><div>Refresh</div><div>Filter: Enable</div></div><table><thead><tr><th></th><th>Name</th><th>FQDN or IP Address</th><th>Type</th><th>Notes</th></tr></thead><tbody><tr><td><input type="checkbox"/></td><td>FT_21_211</td><td>10.64.21.211</td><td>Other</td><td>Foundation Toolkit</td></tr><tr><td><input type="checkbox"/></td><td>HP_MSR_20-40</td><td>10.64.20.35</td><td>SIP Trunk</td><td></td></tr><tr><td><input type="checkbox"/></td><td>IBMSUTLite</td><td>10.64.22.184</td><td>SIP Trunk</td><td></td></tr><tr><td><input type="checkbox"/></td><td>IPO_10_54</td><td>10.64.10.54</td><td>SIP Trunk</td><td></td></tr><tr><td><input type="checkbox"/></td><td>Rauland</td><td>192.168.27.225</td><td>Other</td><td>Brekeke SIP Server</td></tr><tr><td><input type="checkbox"/></td><td>SM_10_62</td><td>10.64.10.62</td><td>Session Manager</td><td></td></tr><tr><td><input type="checkbox"/></td><td>SM_21_31</td><td>10.64.21.31</td><td>Session Manager</td><td>local SM (subnet 21)</td></tr><tr><td><input type="checkbox"/></td><td>SM_50_31</td><td>10.64.50.31</td><td>Session Manager</td><td>d4f27</td></tr><tr><td><input type="checkbox"/></td><td>sm5031_AVP</td><td>10.64.50.31</td><td>Session Manager</td><td>d4f27</td></tr><tr><td><input type="checkbox"/></td><td>SonusGSX9000</td><td>10.64.21.26</td><td>SIP Trunk</td><td></td></tr><tr><td><input type="checkbox"/></td><td>Unigy</td><td>10.64.10.109</td><td>Other</td><td>Unigy system from IPC</td></tr><tr><td><input type="checkbox"/></td><td>VP_10_31</td><td>10.64.10.32</td><td>Voice Portal</td><td>Voice Portal - Test Room 1</td></tr><tr><td><input type="checkbox"/></td><td>VP_10_35</td><td>10.64.21.61</td><td>Voice Portal</td><td>Experience Portal - Test Room 1</td></tr></tbody></table><div><div>Select : All, None</div><div>< Previous Page 2 of Next ></div></div></div></div></div></div>		Name	FQDN or IP Address	Type	Notes	<input type="checkbox"/>	FT_21_211	10.64.21.211	Other	Foundation Toolkit	<input type="checkbox"/>	HP_MSR_20-40	10.64.20.35	SIP Trunk		<input type="checkbox"/>	IBMSUTLite	10.64.22.184	SIP Trunk		<input type="checkbox"/>	IPO_10_54	10.64.10.54	SIP Trunk		<input type="checkbox"/>	Rauland	192.168.27.225	Other	Brekeke SIP Server	<input type="checkbox"/>	SM_10_62	10.64.10.62	Session Manager		<input type="checkbox"/>	SM_21_31	10.64.21.31	Session Manager	local SM (subnet 21)	<input type="checkbox"/>	SM_50_31	10.64.50.31	Session Manager	d4f27	<input type="checkbox"/>	sm5031_AVP	10.64.50.31	Session Manager	d4f27	<input type="checkbox"/>	SonusGSX9000	10.64.21.26	SIP Trunk		<input type="checkbox"/>	Unigy	10.64.10.109	Other	Unigy system from IPC	<input type="checkbox"/>	VP_10_31	10.64.10.32	Voice Portal	Voice Portal - Test Room 1	<input type="checkbox"/>	VP_10_35	10.64.21.61	Voice Portal	Experience Portal - Test Room 1
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8.	<p>Add a SIP Entity for Voice Portal</p> <p>On the SIP Entity page, click on New.</p> <ul style="list-style-type: none">Enter the Name and FQDN or IP Address <p>For Compliance testing the following information was used.</p> <div><div><div>Routing</div><div>Domains</div><div>Locations</div><div>Adaptations</div><div>SIP Entities</div><div>Entity Links</div><div>Time Ranges</div><div>Routing Policies</div><div>Dial Patterns</div><div>Regular Expressions</div><div>Defaults</div></div><div><div>Home / Elements / Routing / SIP Entities - SIP Entity Details</div><div>SIP Entity Details</div><div>Commit</div><div>Cancel</div><div>Help ?</div></div><div><div>General</div><div><div>* Name:</div><div>VP_10_31</div></div><div><div>* FQDN or IP Address:</div><div>10.64.10.32</div></div><div><div>Type:</div><div>Voice Portal</div></div><div><div>Notes:</div><div>Voice Portal - Test Room 1</div></div><div><div>Adaptation:</div><div></div></div><div><div>Location:</div><div>D4H30</div></div><div><div>Time Zone:</div><div>America/Denver</div></div><div><div>Override Port & Transport with DNS SRV:</div><div><input type="checkbox"/></div></div><div><div>* SIP Timer B/F (in seconds):</div><div>4</div></div><div><div>Credential name:</div><div></div></div><div><div>Call Detail Recording:</div><div>none</div></div><div><div>SIP Link Monitoring</div><div><div>SIP Link Monitoring:</div><div>Link Monitoring Enabled</div></div><div><div>* Proactive Monitoring Interval (in seconds):</div><div>60</div></div><div><div>* Reactive Monitoring Interval (in seconds):</div><div>60</div></div><div><div>* Number of Retries:</div><div>1</div></div></div></div></div>																																																																						

Step	Description
9.	<p>On the left pane, click on Entity Links</p> 
10.	<p>Add an Entity Link</p> <p>On the Entity Link page, click on New</p> <ul style="list-style-type: none"> • Add a Name • Set SIP Entity 1 as SM_10_62. • Set the Protocol Type and type in Port • Set SIP Entity 2 as added in Step 8 and set the Port • Set the connection Policy to be Trusted <p>For Compliance testing the following information was used.</p> 
11.	<p>On the left pane, Click on Time Ranges</p> 

Step	Description
12.	<p>Add a Time Range</p> <p>On the Time Range page, click on New</p> <ul style="list-style-type: none"> Type in the Name of the time range Select the Days and Start Time and End Time used for all days <p>For Compliance testing the following information was used.</p> 
13.	<p>On the left pane, click on Routing Policy</p> 

Step

Description

14.

On the **Routing Policy** page, click on **New**

Type in the **Name** for Routing Policy

Select **SIP Entity as a destination**

Select SIP Entity configure in **Step 8**

Select a **Time Range** added in **Step 12**

For Compliance testing the following information was used.

Home / Elements / Routing / Routing Policies - Routing Policy Details

Routing Policy Details

Help ?

CommitCancel

General

* Name:

VP_10_31

Disabled:

Notes:

SIP Entity as Destination

Select

Name	FQDN or IP Address	Type	Notes
VP_10_31	10.64.10.32	Voice Portal	Voice Portal - Test Room 1

Time of Day

AddRemoveView Gaps/Overlaps

1 ItemRefresh

Filter: Enable

	Ranking	1 ▲	Name	2 ▲	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Start Time	End Time	Notes
	0		24/7									00:00	23:59	Time Range 24/7

Select : All, None

Dial Patterns

AddRemove

2 ItemsRefresh

Filter: Enable

	Pattern	▲	Min	Max	Emergency Call	SIP Domain	Originating Location	Notes
	611		5	5		-ALL-	D4H30	
	69		5	5		avaya.com	D4H30	

Select : All, None

Step	Description																																																																																																																
15.	<div>On the left pane, click on Dial Patterns</div> <div><div>Home / Elements / Routing / Dial Patterns - Dial Patterns</div><div>Help ?</div><div>Dial Patterns</div><div><div>Edit</div><div>New</div><div>Duplicate</div><div>Delete</div><div>More Actions</div></div><div><div>42 Items</div><div>Refresh</div><div>Filter: Enable</div></div><table><tr><th><input type="checkbox"/></th><th>Pattern</th><th>Min</th><th>Max</th><th>Emergency Call</th><th>SIP Domain</th><th>Notes</th></tr><tr><td><input type="checkbox"/></td><td>*0</td><td>3</td><td>3</td><td><input type="checkbox"/></td><td>-ALL-</td><td></td></tr><tr><td><input type="checkbox"/></td><td>1303</td><td>11</td><td>11</td><td><input type="checkbox"/></td><td>avaya.com</td><td></td></tr><tr><td><input type="checkbox"/></td><td>130322</td><td>11</td><td>11</td><td><input type="checkbox"/></td><td>-ALL-</td><td></td></tr><tr><td><input type="checkbox"/></td><td>1719</td><td>11</td><td>11</td><td><input type="checkbox"/></td><td>-ALL-</td><td></td></tr><tr><td><input type="checkbox"/></td><td>20</td><td>5</td><td>5</td><td><input type="checkbox"/></td><td>avaya.com</td><td></td></tr><tr><td><input type="checkbox"/></td><td>20000</td><td>5</td><td>5</td><td><input type="checkbox"/></td><td>avaya.com</td><td></td></tr><tr><td><input type="checkbox"/></td><td>220</td><td>5</td><td>5</td><td><input type="checkbox"/></td><td>avaya.com</td><td>extensions 0n S8720</td></tr><tr><td><input type="checkbox"/></td><td>23</td><td>5</td><td>5</td><td><input type="checkbox"/></td><td>avaya.com</td><td></td></tr><tr><td><input type="checkbox"/></td><td>270</td><td>5</td><td>5</td><td><input type="checkbox"/></td><td>avaya.com</td><td></td></tr><tr><td><input type="checkbox"/></td><td>2800</td><td>5</td><td>5</td><td><input type="checkbox"/></td><td>avaya.com</td><td></td></tr><tr><td><input type="checkbox"/></td><td>29</td><td>2</td><td>2</td><td><input type="checkbox"/></td><td>-ALL-</td><td></td></tr><tr><td><input type="checkbox"/></td><td>3</td><td>5</td><td>5</td><td><input type="checkbox"/></td><td>avaya.com</td><td>extensions on CM_20_72</td></tr><tr><td><input type="checkbox"/></td><td>30353</td><td>10</td><td>10</td><td><input type="checkbox"/></td><td>avaya.com</td><td>Thrupoint DID</td></tr><tr><td><input type="checkbox"/></td><td>333</td><td>5</td><td>5</td><td><input type="checkbox"/></td><td>avaya.com</td><td>IPC system</td></tr><tr><td><input type="checkbox"/></td><td>40</td><td>5</td><td>5</td><td><input type="checkbox"/></td><td>avaya.com</td><td></td></tr></table><div><div>Select : All, None</div><div>< Previous Page 1 of 3 Next ></div></div></div>	<input type="checkbox"/>	Pattern	Min	Max	Emergency Call	SIP Domain	Notes	<input type="checkbox"/>	*0	3	3	<input type="checkbox"/>	-ALL-		<input type="checkbox"/>	1303	11	11	<input type="checkbox"/>	avaya.com		<input type="checkbox"/>	130322	11	11	<input type="checkbox"/>	-ALL-		<input type="checkbox"/>	1719	11	11	<input type="checkbox"/>	-ALL-		<input type="checkbox"/>	20	5	5	<input type="checkbox"/>	avaya.com		<input type="checkbox"/>	20000	5	5	<input type="checkbox"/>	avaya.com		<input type="checkbox"/>	220	5	5	<input type="checkbox"/>	avaya.com	extensions 0n S8720	<input type="checkbox"/>	23	5	5	<input type="checkbox"/>	avaya.com		<input type="checkbox"/>	270	5	5	<input type="checkbox"/>	avaya.com		<input type="checkbox"/>	2800	5	5	<input type="checkbox"/>	avaya.com		<input type="checkbox"/>	29	2	2	<input type="checkbox"/>	-ALL-		<input type="checkbox"/>	3	5	5	<input type="checkbox"/>	avaya.com	extensions on CM_20_72	<input type="checkbox"/>	30353	10	10	<input type="checkbox"/>	avaya.com	Thrupoint DID	<input type="checkbox"/>	333	5	5	<input type="checkbox"/>	avaya.com	IPC system	<input type="checkbox"/>	40	5	5	<input type="checkbox"/>	avaya.com	
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Step	Description
16.	<p>On Dial Patterns page, click on New</p> <p>For compliance testing the following pattern was used. All calls dialed with 5 digits and starts with 611 will route to Avaya Voice Portal.</p> <ul style="list-style-type: none">• Set Pattern to 611• Set Min and Max to 5• Set SIP Domain to the domain configured in Step 4• Add Originating Locations and Routing Policies<ul style="list-style-type: none">○ Select location configured in Step 6○ Select Routing Policy configured in Step 14

Home / Elements / Routing / Dial Patterns - Dial Pattern Details

Dial Pattern Details

Help ?

CommitCancel

General

* Pattern:

611

* Min:

5

* Max:

5

Emergency Call:

☐

SIP Domain:

-ALL-

Notes:

Originating Locations and Routing Policies

AddRemove

1 ItemRefresh

Filter: Enable

<input type="checkbox"/>	Originating Location Name 1 ▲	Originating Location Notes	Routing Policy Name	Rank 2 ▲	Routing Policy Disabled	Routing Policy Destination	Routing Policy Notes
<input type="checkbox"/>	D4H30		VP_10_31	0	<input type="checkbox"/>	VP_10_31	

Select : All, None

Denied Originating Locations

AddRemove

0 ItemsRefresh

Filter: Enable

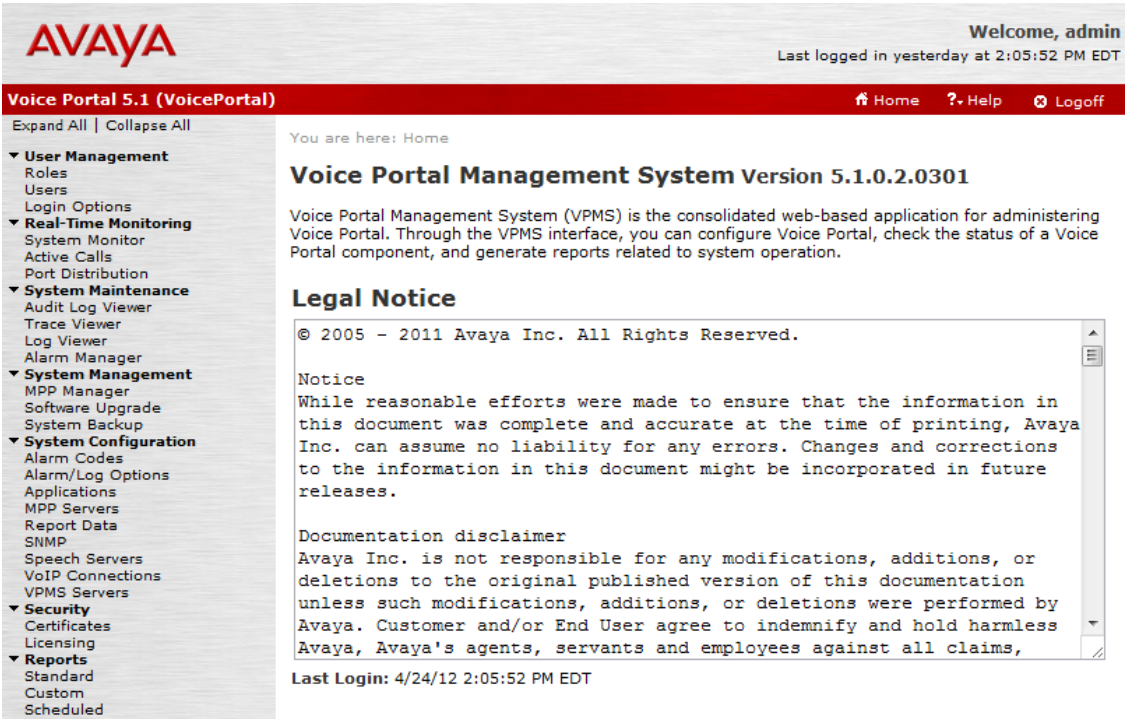
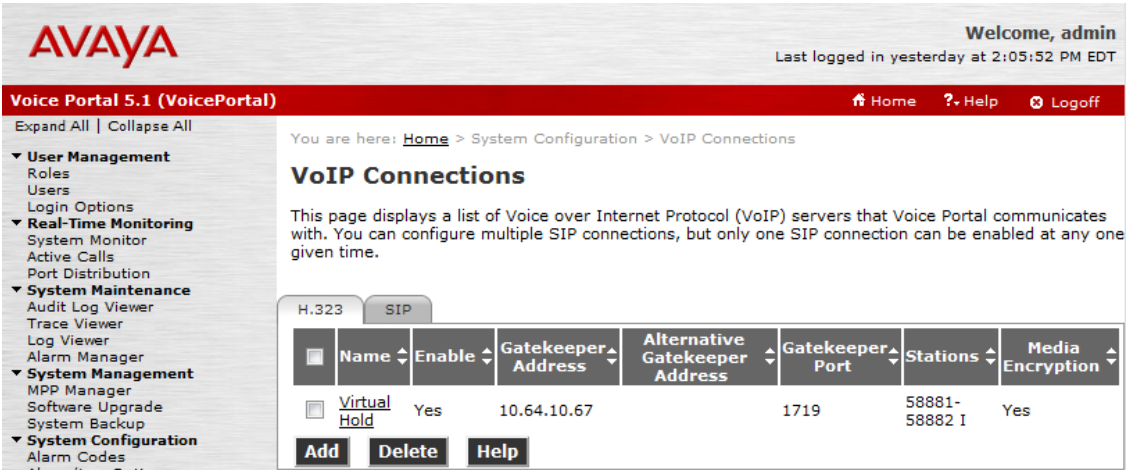
<input type="checkbox"/>	Originating Location	Notes
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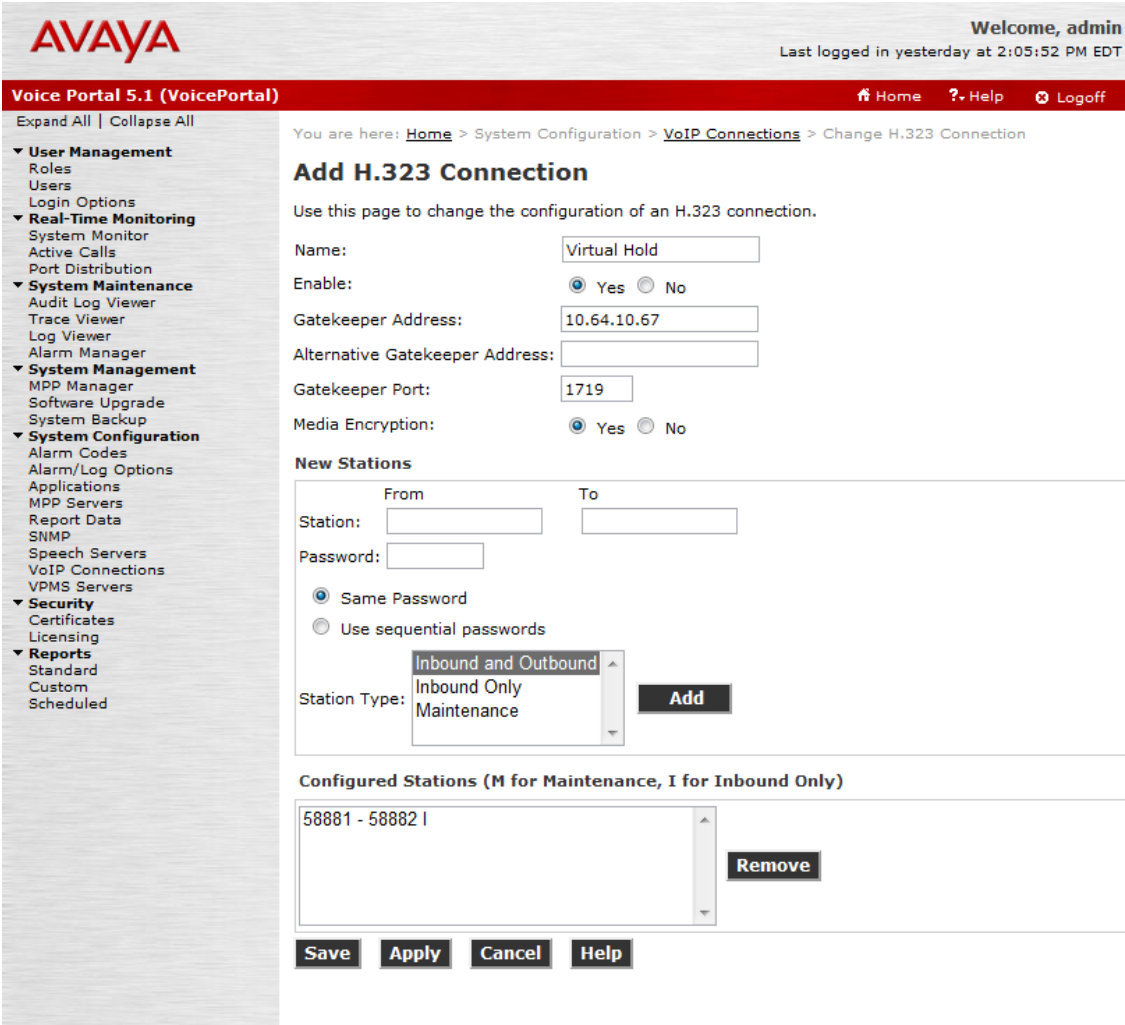
* Input Required

CommitCancel

7. Configure Avaya Voice Portal

Voice Portal Management System (VPMS) web interface is used to configure Voice Portal.

Step	Description
1.	<p>To access the web interface, type in <code>http://<ip-addr>/</code> as the URL in a web browser; <code><ip-addr></code> is the IP address of the VPMS. Log in using the Administrator user role.</p>  <p>The screenshot shows the Avaya Voice Portal 5.1 (VoicePortal) web interface. The top header includes the Avaya logo and a welcome message for 'admin', stating 'Last logged in yesterday at 2:05:52 PM EDT'. Below the header is a red navigation bar with links for Home, Help, and Logoff. 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 displays 'Voice Portal Management System Version 5.1.0.2.0301' and a 'Legal Notice' section with a disclaimer.</p>
2.	<p>On the left pane, click on VoIP Connections.</p>  <p>The screenshot shows the 'VoIP Connections' configuration page in the Avaya Voice Portal 5.1 (VoicePortal) web interface. The page displays a table of VoIP connections with columns for Name, Enable, Gatekeeper Address, Alternative Gatekeeper Address, Gatekeeper Port, Stations, and Media Encryption. The 'Virtual Hold' connection is listed with a Gatekeeper Address of 10.64.10.67 and a Gatekeeper Port of 1719. The page also includes 'Add', 'Delete', and 'Help' buttons.</p>

Step	Description
3.	<p>To add a H.323 Connection, click on H.323 tab and click Add</p> <ul style="list-style-type: none"> • Type in Name • Fill in Gatekeeper Address. Gatekeeper address is the IP address of CM • Fill in Station From and To, and Password. This information will be used from configuration performed on CM for adding stations for Inbound and Outbound and Inbound Only. • The rest of the values are left at Default. • Click on Save 

Step	Description
4.	<p>To add a SIP Connection, click on SIP tab on VoIP Connections page.</p> <ul style="list-style-type: none"> • Fill in Name. • In the Address and Port boxes, fill the the IP address and Port of SM. • In SIP Domain, type in the domain. Please note that the domain should be the domain used in configuration steps for SM. • Type in Maximum Simultaneous Calls. • The rest of the values are left at Default. • Click on Save

AVAYA Welcome, admin
Last logged in yesterday at 2:05:52 PM EDT

Voice Portal 5.1 (VoicePortal) Home Help Logoff

Expand All | Collapse All

You are here: [Home](#) > [System Configuration](#) > [VoIP Connections](#) > Add SIP Connection

Add SIP Connection

Use this page to change the configuration of a SIP connection.

Name:

Enable: ☒ Yes ☐ No

Proxy Transport:

☒ Proxy Servers ☐ DNS SRV Domain

Address	Port	Priority	Weight	
10.64.10.62	5060	0	0	Remove

[Additional Proxy Server](#)

Listener Port:

SIP Domain:

P-Asserted-Identity:

Maximum Redirection Attempts:

Consultative Transfer: ☒ INVITE with REPLACES ☐ REFER

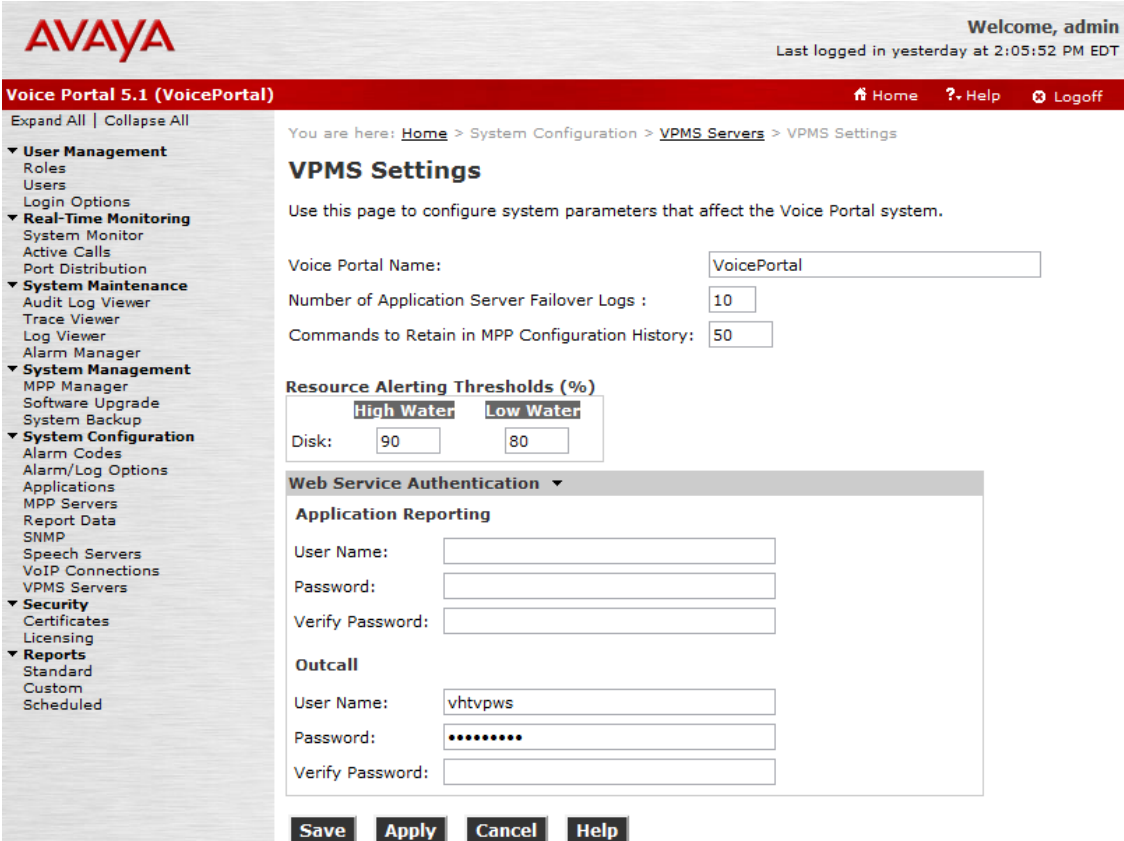
Call Capacity

Maximum Simultaneous Calls:

☒ All Calls can be either inbound or outbound

☐ Configure number of inbound and outbound calls allowed

Save **Apply** **Cancel** **Help**

Step	Description
5.	<p>On the left pane, click on VPMS Servers, under System Configuration. Click on VPMS Settings.</p> <ul style="list-style-type: none"> Under Web Service Administration section, for Outcall, type in Username, Password and Verify Password. This information will be used by Virtual Hold to initiate an outbound call. Click on Save. 

Step	Description
6.	<p>On the left pane, click on Applications, under System Configuration. Click on Add. There needs to be two applications configured; one for inbound and one for outbound. Following steps need to be performed for both applications.</p> <ul style="list-style-type: none"> • Fill in Name. • For Type, select VoiceXML from the drop down menu. • Fill in VoiceXML URL. <ul style="list-style-type: none"> ○ Inbound: http://10.64.21.75:8080/VXMLIVR_1.0.2.1975/PlatformSupport_AVP/Begin/?Tenant=VHTAVP&ScriptID=1&MODE=AVP ○ Outbound: http://10.64.21.75:8080/VXMLIVR_1.0.2.1975/PlatformSupport_AVP/Outbound/?Tenant=VHTAVP&ScriptID=1&MODE=AVP&Segment=61000 ○ 10.64.21.75 and 8080 is the IP Address and Port of Virtual Hold Server running Virtual Hold VXML Interaction Server • Add Called Number as configured in CM. <p>Continued in next step</p>

AVAYA Welcome, admin
Last logged in yesterday at 2:05:52 PM EDT

Voice Portal 5.1 (VoicePortal) Home Help Logoff

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: **Verify**

Mutual Certificate Authentication: ☐ Yes ☒ No

Basic Authentication: ☐ Yes ☒ No

Speech Servers

ASR: TTS:

Application Launch

☒ Inbound ☐ Inbound Default ☐ Outbound

☒ Number ☐ Number Range ☐ URI

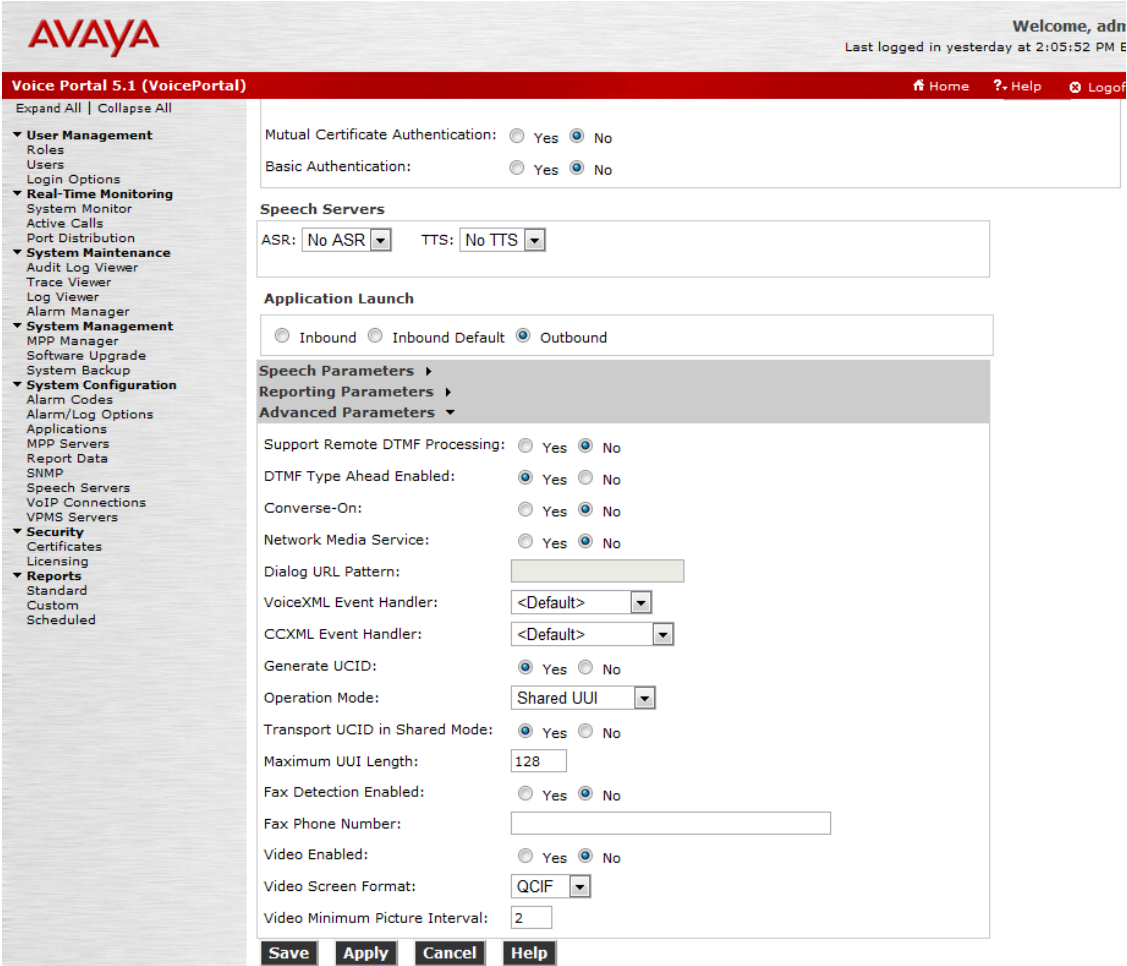
Called Number: **Add**

61175
58881
61000

Configured Called Numbers or Called URIs

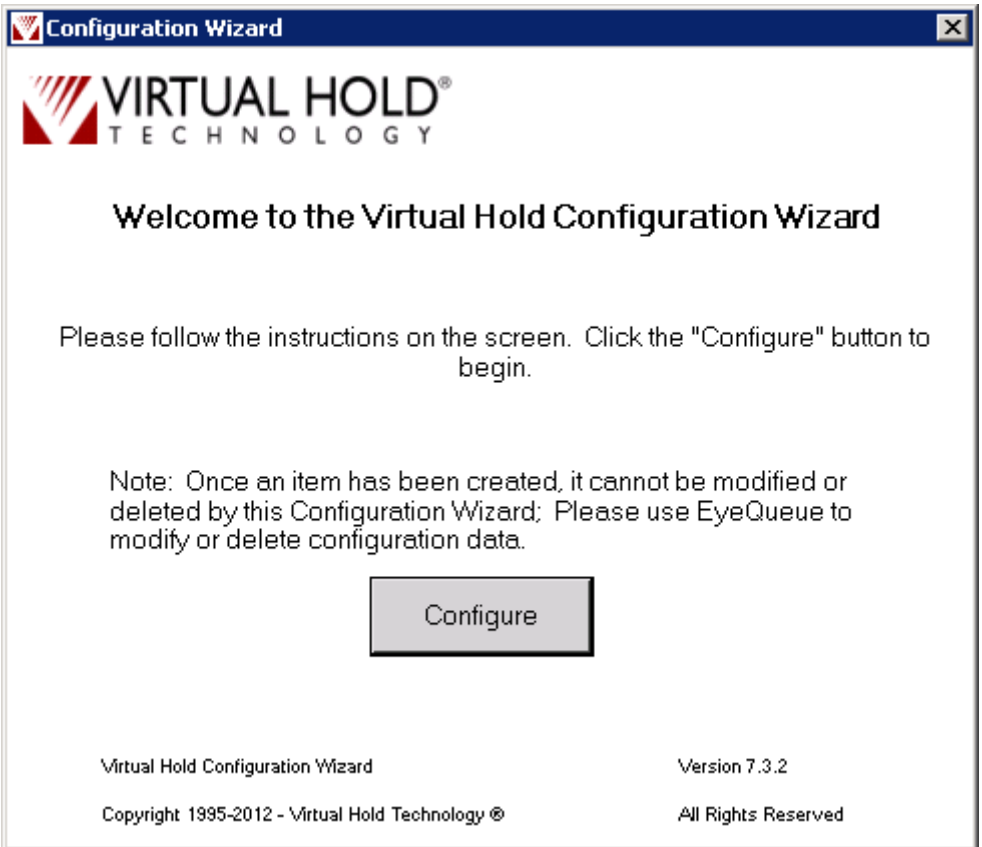
Speech Parameters ▶
Reporting Parameters ▶
Advanced Parameters ▶

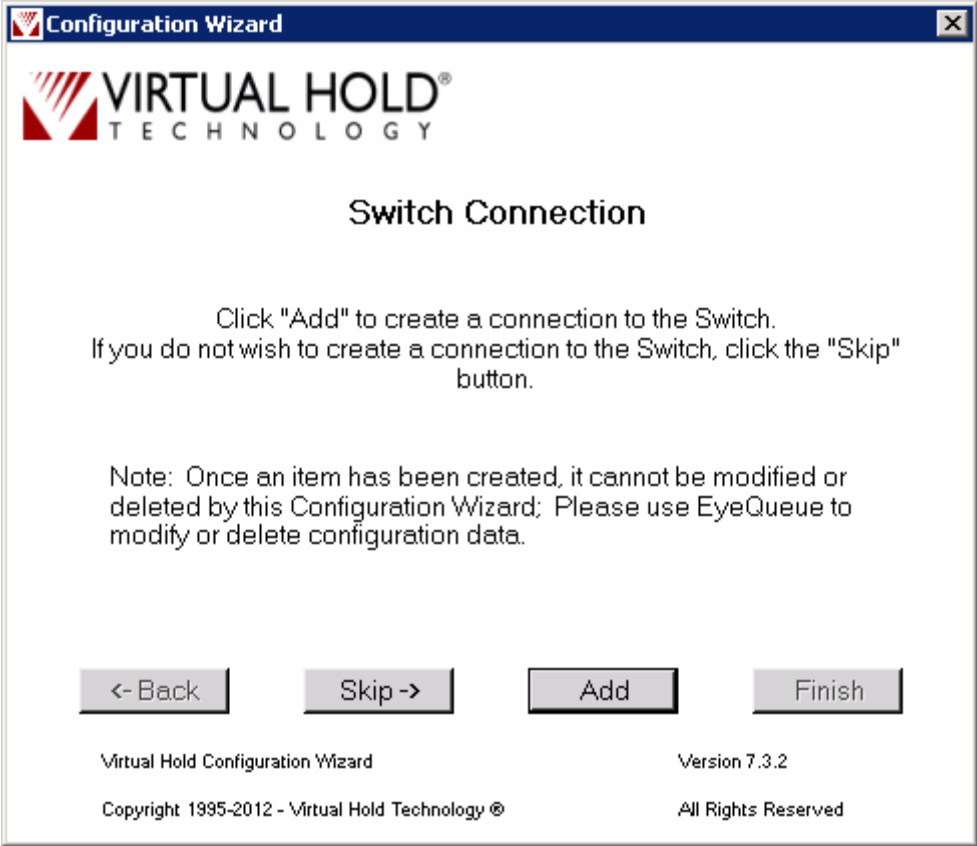
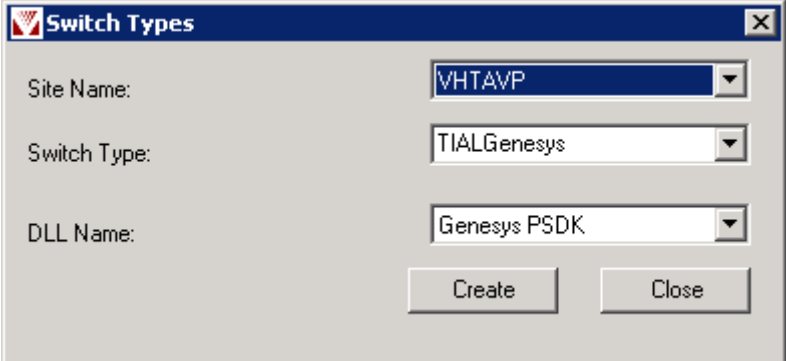
Save Apply Cancel Help

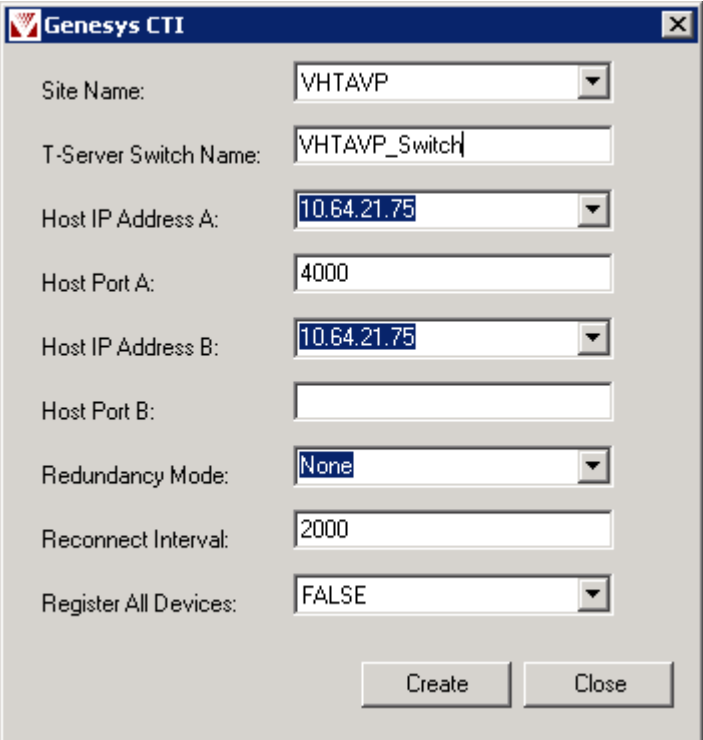
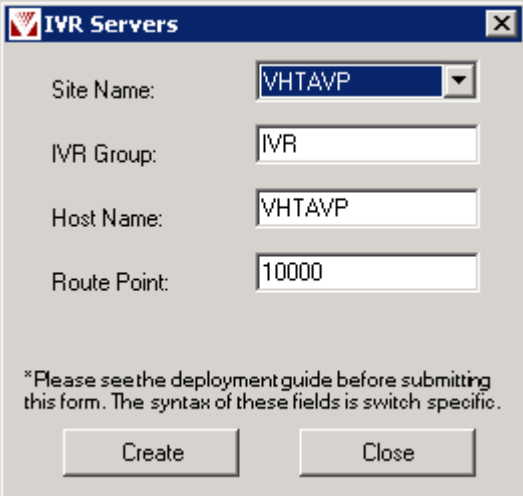
Step	Description
	<p>Click on Advanced Parameters.</p> <ul style="list-style-type: none"> • Set Generate UCID to Yes. • Set Operation Mode to Shared UUI. • Set Transport UCID to Yes. • Click Save. 

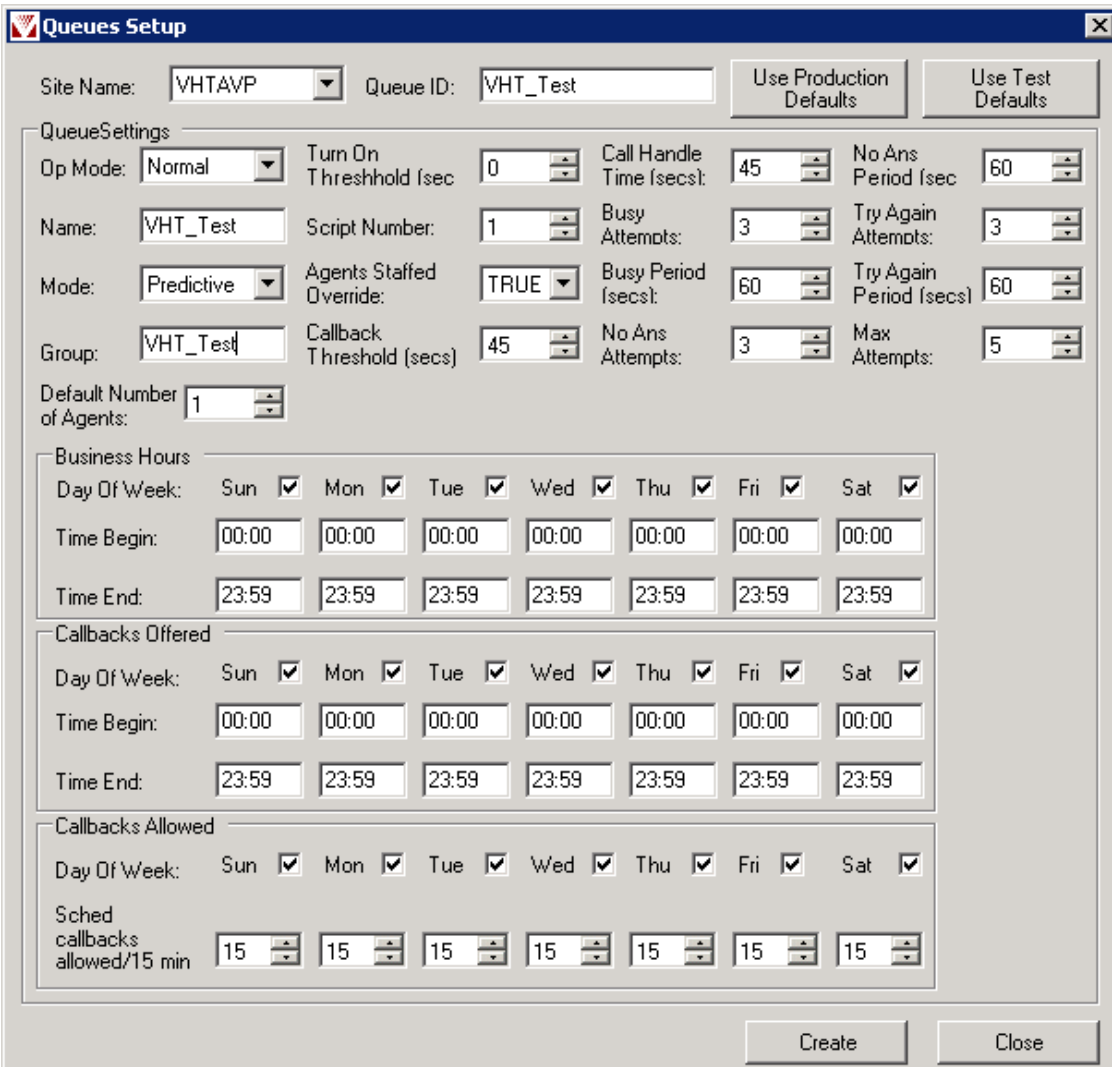
8. Configure Virtual Hold Concierge™

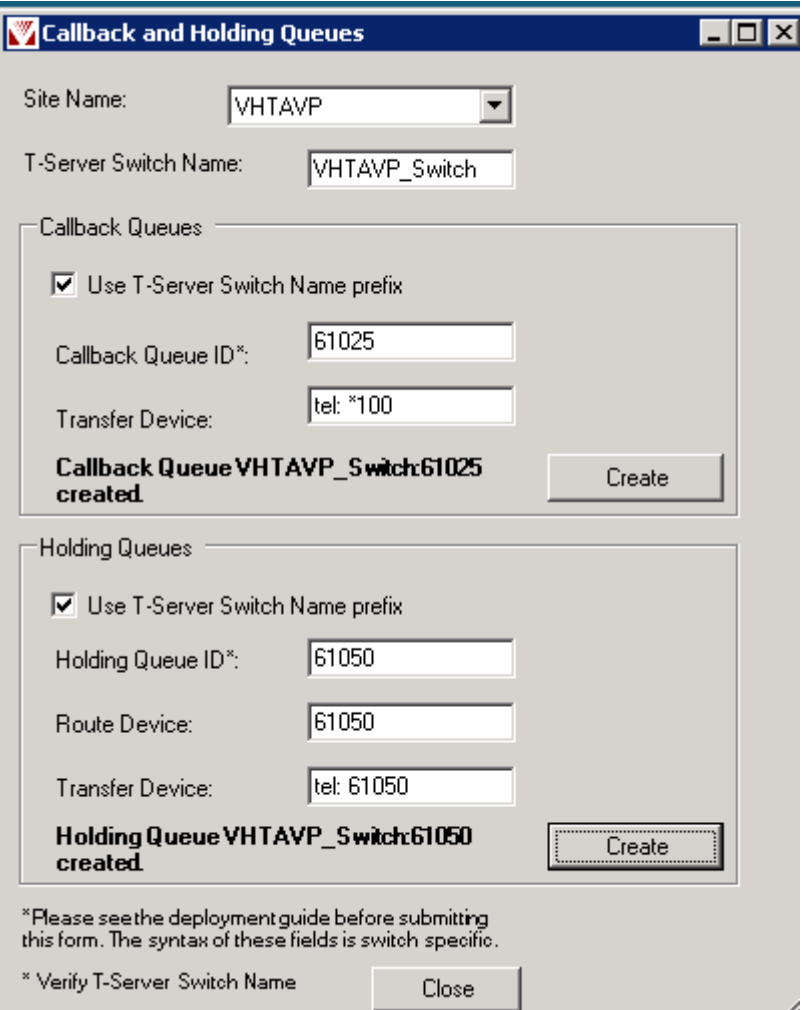
Login to the Windows 2008 server that has Virtual Hold Concierge™ installed.

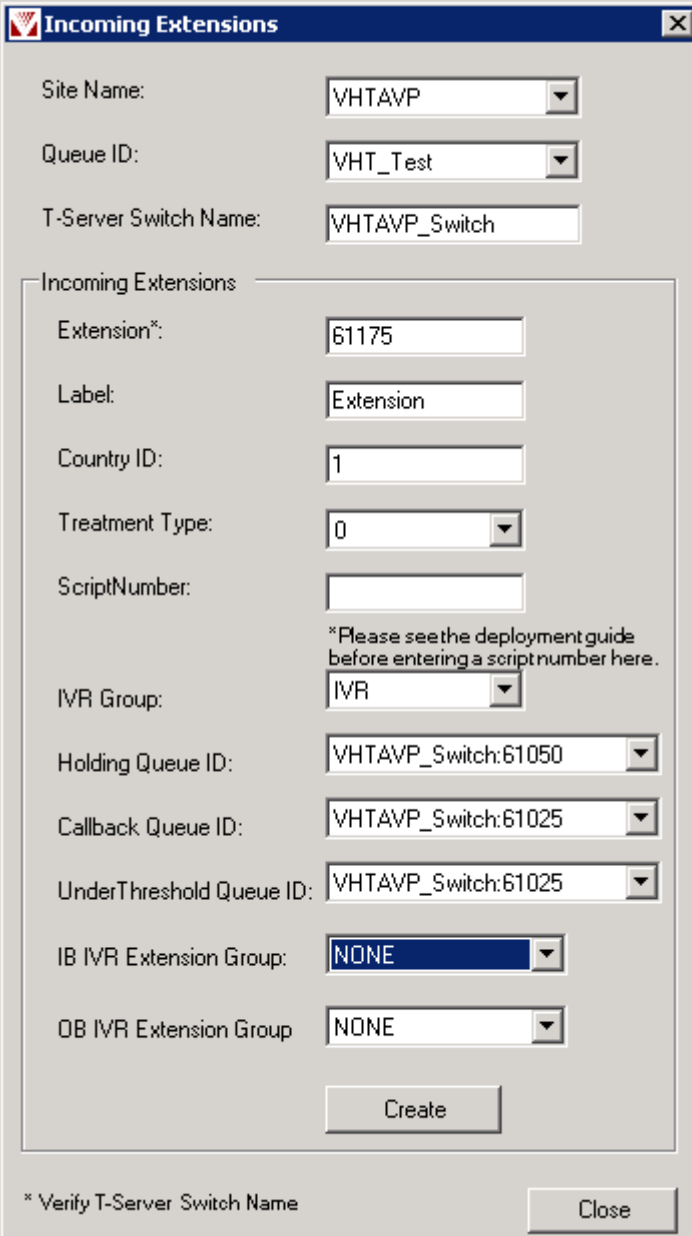
Step	Description
1.	Once Virtual Hold Concierge™ is installed, open VHT Configuration Wizard . A shortcut to VHT Configuration Wizard should have been created on the desktop of the server. Double click the shortcut to open VHT Configuration Wizard . Please note that this configuration as show here was for SIP configuration. Same steps will need to be performed for H.323 configuration with different VDNs and Extensions.
2.	<p>Click on Configure.</p> 

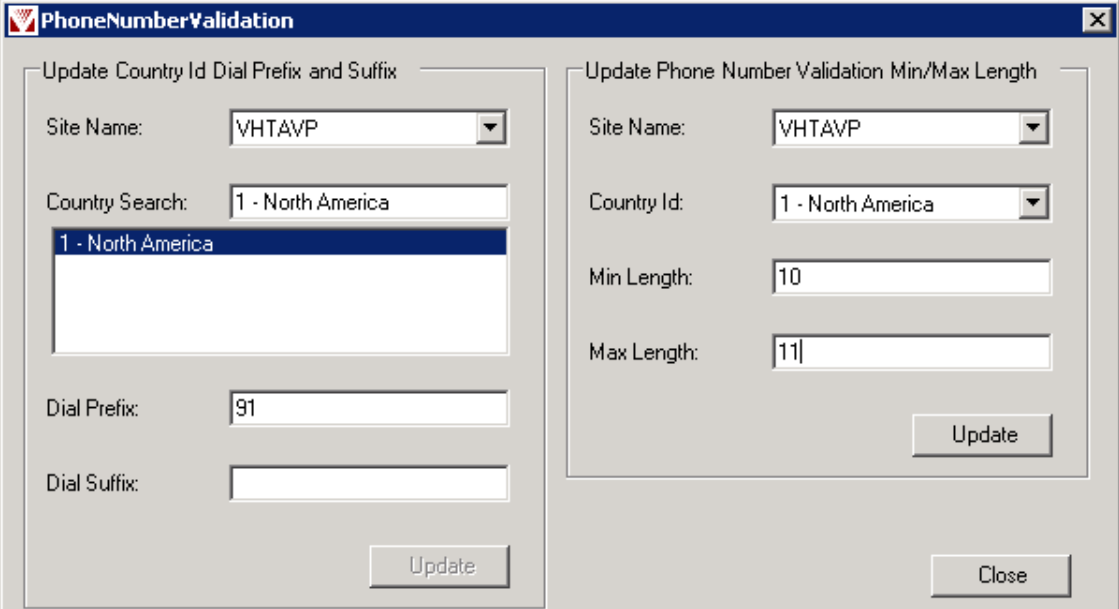
Step	Description
3.	<p>On the Switch Connection page, click on Add</p> 
4.	<p>Configure Switch as follows, and click Create:</p> 

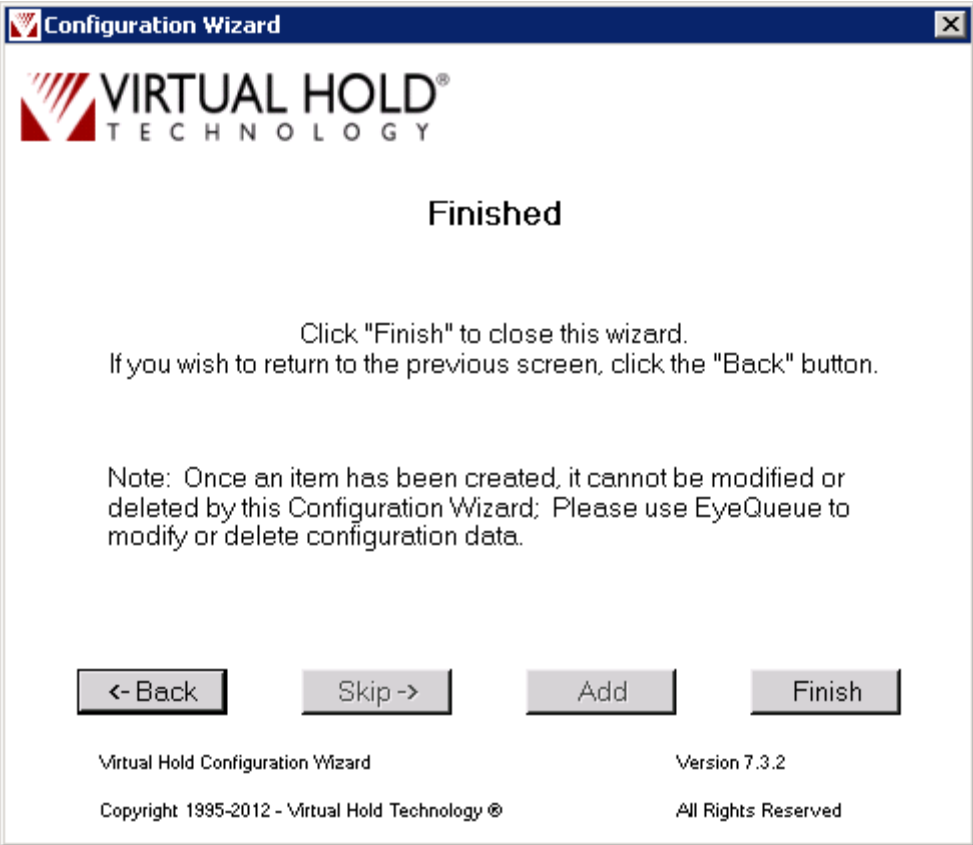
Step	Description
5.	<p>On the Genesys CTI T-Server Connection page, click on Add. Fill-in the information as follows:</p> <p>Host IP Address is the IP Address of the Virtual Hold Concierge™ server.</p> 
6.	<p>Skip Agent Groups and Agents page. On the IVR Servers page click on Add.</p> <p>Fill in the information as shown in the screenshot below.</p> 

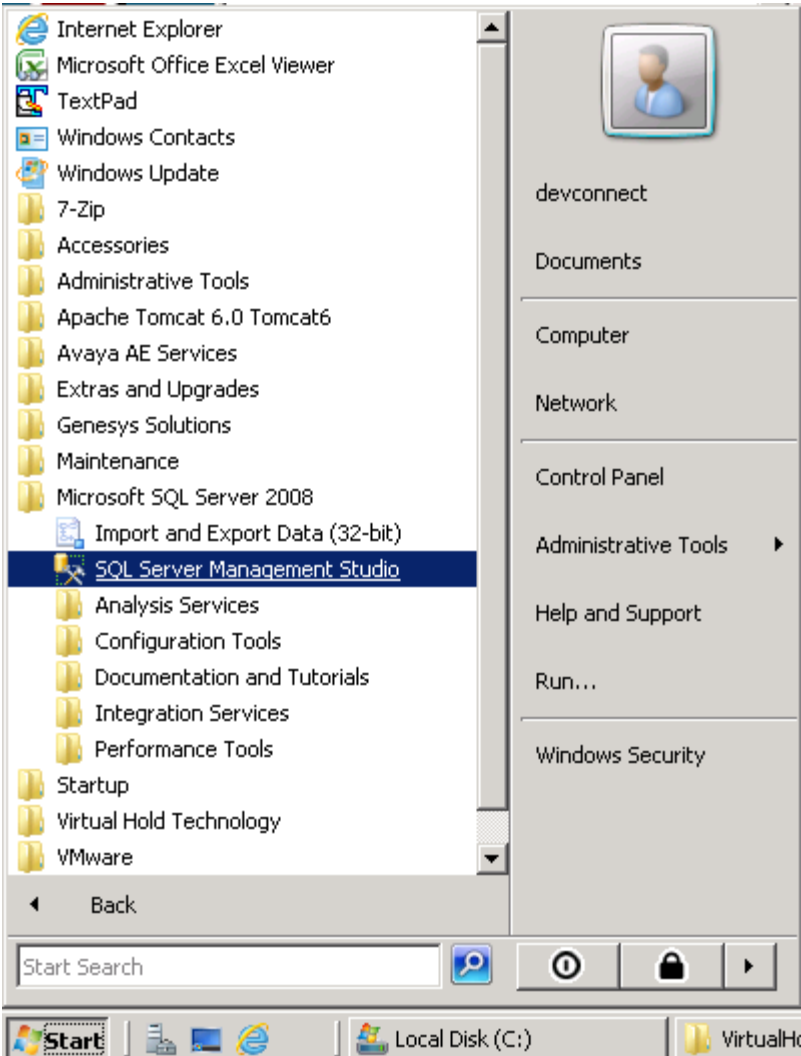
Step	Description
7.	<p>Skip IVR Extensions page and click Add on Queues page. Accept the defaults values and click Create.</p>  <p>Queues Setup</p> <p>Site Name: <input type="text" value="VHTAVP"/> Queue ID: <input type="text" value="VHT_Test"/> <input type="button" value="Use Production Defaults"/> <input type="button" value="Use Test Defaults"/></p> <p>QueueSettings</p> <p>Op Mode: <input type="text" value="Normal"/> Turn On Threshold (sec): <input type="text" value="0"/> Call Handle Time (secs): <input type="text" value="45"/> No Ans Period (sec): <input type="text" value="60"/></p> <p>Name: <input type="text" value="VHT_Test"/> Script Number: <input type="text" value="1"/> Busy Attempts: <input type="text" value="3"/> Try Again Attempts: <input type="text" value="3"/></p> <p>Mode: <input type="text" value="Predictive"/> Agents Staffed Override: <input type="text" value="TRUE"/> Busy Period (secs): <input type="text" value="60"/> Try Again Period (secs): <input type="text" value="60"/></p> <p>Group: <input type="text" value="VHT_Test"/> Callback Threshold (secs): <input type="text" value="45"/> No Ans Attempts: <input type="text" value="3"/> Max Attempts: <input type="text" value="5"/></p> <p>Default Number of Agents: <input type="text" value="1"/></p> <p>Business Hours</p> <p>Day Of Week: Sun <input checked="" type="checkbox"/> Mon <input checked="" type="checkbox"/> Tue <input checked="" type="checkbox"/> Wed <input checked="" type="checkbox"/> Thu <input checked="" type="checkbox"/> Fri <input checked="" type="checkbox"/> Sat <input checked="" type="checkbox"/></p> <p>Time Begin: <input type="text" value="00:00"/> <input type="text" value="00:00"/> <input type="text" value="00:00"/> <input type="text" value="00:00"/> <input type="text" value="00:00"/> <input type="text" value="00:00"/> <input type="text" value="00:00"/></p> <p>Time End: <input type="text" value="23:59"/> <input type="text" value="23:59"/> <input type="text" value="23:59"/> <input type="text" value="23:59"/> <input type="text" value="23:59"/> <input type="text" value="23:59"/> <input type="text" value="23:59"/></p> <p>Callbacks Offered</p> <p>Day Of Week: Sun <input checked="" type="checkbox"/> Mon <input checked="" type="checkbox"/> Tue <input checked="" type="checkbox"/> Wed <input checked="" type="checkbox"/> Thu <input checked="" type="checkbox"/> Fri <input checked="" type="checkbox"/> Sat <input checked="" type="checkbox"/></p> <p>Time Begin: <input type="text" value="00:00"/> <input type="text" value="00:00"/> <input type="text" value="00:00"/> <input type="text" value="00:00"/> <input type="text" value="00:00"/> <input type="text" value="00:00"/> <input type="text" value="00:00"/></p> <p>Time End: <input type="text" value="23:59"/> <input type="text" value="23:59"/> <input type="text" value="23:59"/> <input type="text" value="23:59"/> <input type="text" value="23:59"/> <input type="text" value="23:59"/> <input type="text" value="23:59"/></p> <p>Callbacks Allowed</p> <p>Day Of Week: Sun <input checked="" type="checkbox"/> Mon <input checked="" type="checkbox"/> Tue <input checked="" type="checkbox"/> Wed <input checked="" type="checkbox"/> Thu <input checked="" type="checkbox"/> Fri <input checked="" type="checkbox"/> Sat <input checked="" type="checkbox"/></p> <p>Sched callbacks allowed/15 min: <input type="text" value="15"/> <input type="text" value="15"/> <input type="text" value="15"/> <input type="text" value="15"/> <input type="text" value="15"/> <input type="text" value="15"/> <input type="text" value="15"/></p> <p><input type="button" value="Create"/> <input type="button" value="Close"/></p>

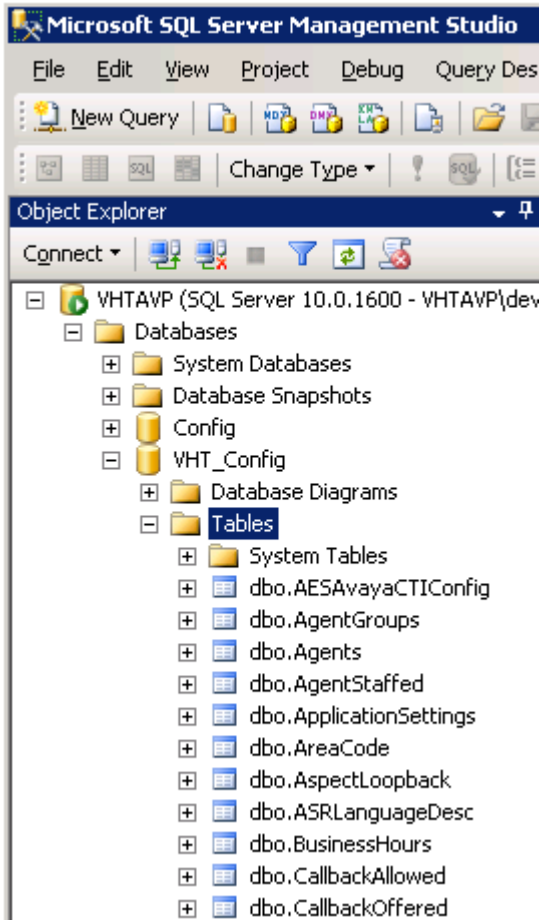
Step	Description
8.	<p data-bbox="318 233 964 268">On the Callback and Holding Queues, click Add.</p> <p data-bbox="318 306 1409 375">Use the information configured in Communication Manager to fill-in Callback Queue ID and Holding Queue ID.</p> <div data-bbox="318 411 1114 1415">  </div>













Step	Description
9.	<p data-bbox="318 233 954 268">On the Incoming Extensions page, click on Add.</p> <p data-bbox="318 306 1398 375">Use the information configured in Communication Manager to configure Extension. Each extension configured in Communication Manager, needs to be created.</p> <div data-bbox="318 411 1005 1640">  </div>

Step	Description
10.	<p>Skip the Incoming Application page and click Add on Phone Number Configuration.</p> <p>Fill in the information as shown in the following screen shot.</p> 

Step	Description
11.	<p>The final page shows that the configuration is finished. Click on Finish.</p> 

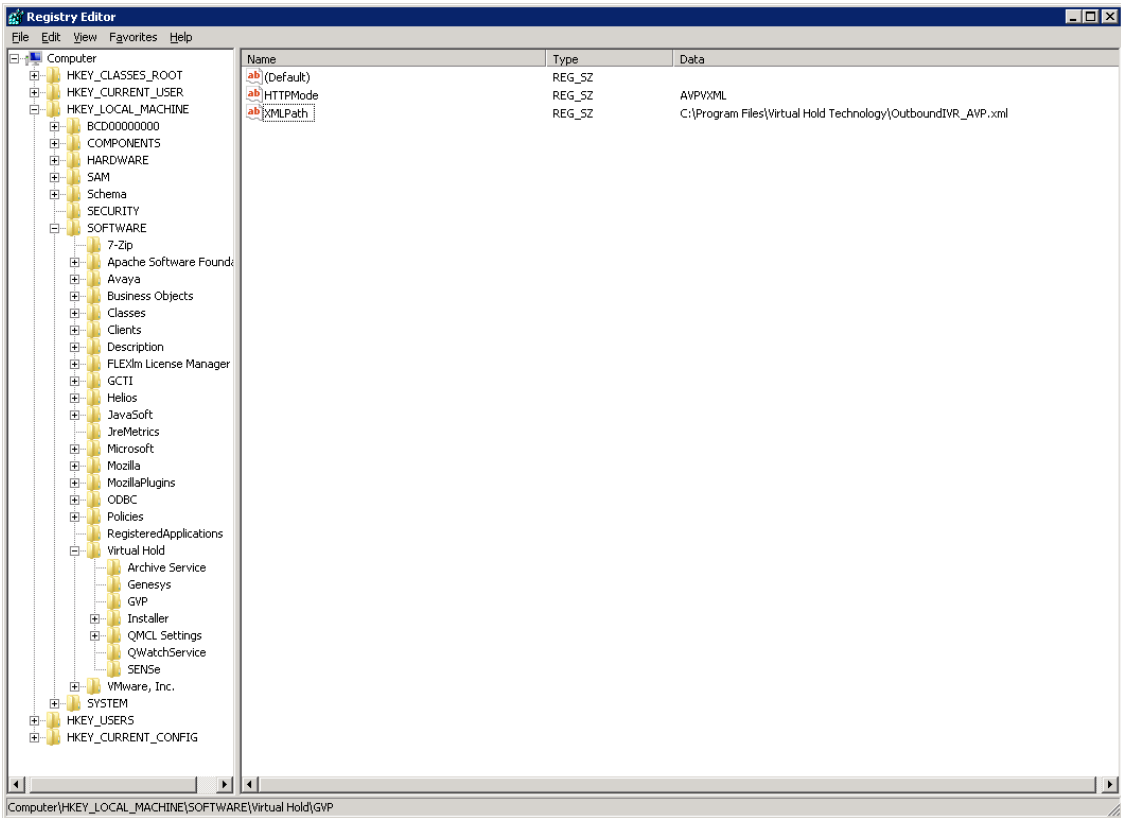
Step	Description
12.	<p>On the Virtual Hold server, open SQL Server Management Studio by navigating to Start → All Programs → Microsoft SQL Server 2008 → SQL Server Management Studio</p>  <p>The screenshot shows a Windows Start menu with a list of programs on the left and a navigation pane on the right. The 'Microsoft SQL Server 2008' folder is expanded, and 'SQL Server Management Studio' is highlighted. The navigation pane on the right shows a user profile icon at the top, followed by links to 'devconnect', 'Documents', 'Computer', 'Network', 'Control Panel', 'Administrative Tools', 'Help and Support', 'Run...', and 'Windows Security'. At the bottom of the Start menu is a search bar labeled 'Start Search' and a taskbar with icons for Start, Local Disk (C:), and Virtual Hold.</p>

Step	Description																																
13.	<p>Once SQL Server Management Studio is opened, in Object Explorer on the left pane, navigate to <Server Hostname>→ Databases → VHT_Config → Tables. <Server Hostname> is the hostname of the server.</p> 																																
14.	<p>Verify the following entry in table, dbo.SwitchType.</p> <table><tr><th colspan="8">VHTAVP.VHT_Co...bo.SwitchType</th></tr><tr><th></th><th>SiteName</th><th>SwitchId</th><th>HostName</th><th>Port</th><th>LogicalId</th><th>DLLName</th><th>SwitchTypeId</th></tr><tr><td>▶</td><td>VHTAVP</td><td>207</td><td>10.64.21.75</td><td>4000</td><td>TIAL_Genesys_...</td><td>TIAL_Genesys_...</td><td>1</td></tr><tr><td>*</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td></tr></table>	VHTAVP.VHT_Co...bo.SwitchType									SiteName	SwitchId	HostName	Port	LogicalId	DLLName	SwitchTypeId	▶	VHTAVP	207	10.64.21.75	4000	TIAL_Genesys_...	TIAL_Genesys_...	1	*	NULL	NULL	NULL	NULL	NULL	NULL	NULL
VHTAVP.VHT_Co...bo.SwitchType																																	
	SiteName	SwitchId	HostName	Port	LogicalId	DLLName	SwitchTypeId																										
▶	VHTAVP	207	10.64.21.75	4000	TIAL_Genesys_...	TIAL_Genesys_...	1																										
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL																										


Step	Description																																																																																																																							
15.	<p>Verify the following entry in table dbo.CallbackQueues.</p> <ul style="list-style-type: none">• SiteName: VHTAVP• CallbackQueueID: VHTAVP_Switch:61050• TrasnferDevice: tel:61050 <p>61025 is the VDN that was used for Callback and configured in configuration steps for Communication Manager in Section 4.</p> <table><tr><th colspan="3">VHTAVP.VHT_Co...allbackQueues</th><th>VHTAVP.VHT_C...Holding</th></tr><tr><th></th><th>SiteName</th><th>CallbackQueueId</th><th>TransferDevice</th></tr><tr><td></td><td>VHTAVP</td><td>VHTAVP_Switch:...</td><td>tel: *100</td></tr><tr><td></td><td>VHTAVP</td><td>VHTAVP_Switch:...</td><td>tel:61025 </td></tr><tr><td>*</td><td>NULL</td><td>NULL</td><td>NULL</td></tr></table>	VHTAVP.VHT_Co...allbackQueues			VHTAVP.VHT_C...Holding		SiteName	CallbackQueueId	TransferDevice		VHTAVP	VHTAVP_Switch:...	tel: *100		VHTAVP	VHTAVP_Switch:...	tel:61025	*	NULL	NULL	NULL																																																																																																			
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	VHTAVP	VHTAVP_Switch:...	tel:61025																																																																																																																					
*	NULL	NULL	NULL																																																																																																																					
16.	<p>Verify the following entries in table dbo.IVRServers as follows:</p> <table><tr><th colspan="6">VHTAVP.VHT_Co...bo.IVRServers</th></tr><tr><th></th><th>SiteName</th><th>IVRGroup</th><th>ServerName</th><th>RoutePoint</th><th>IVRServersTabl...</th></tr><tr><td></td><td>VHTAVP</td><td>IVR</td><td>VHTAVP</td><td>tel:*102</td><td>1</td></tr><tr><td>*</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td></tr></table>	VHTAVP.VHT_Co...bo.IVRServers							SiteName	IVRGroup	ServerName	RoutePoint	IVRServersTabl...		VHTAVP	IVR	VHTAVP	tel:*102	1	*	NULL	NULL	NULL	NULL	NULL																																																																																															
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	SiteName	IVRGroup	ServerName	RoutePoint	IVRServersTabl...																																																																																																																			
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*	NULL	NULL	NULL	NULL	NULL																																																																																																																			
17.	<p>Verify the following entries in table dbo.HoldingQueues using the VDNs configured in CM for Hold.</p> <table><tr><th colspan="5">VHTAVP.VHT_C...HoldingQueues</th></tr><tr><th></th><th>SiteName</th><th>HoldingQueueId</th><th>RouteDevice</th><th>TransferDevice</th></tr><tr><td></td><td>VHTAVP</td><td>VHTAVP_Switch:...</td><td>61050</td><td>tel: 61050</td></tr><tr><td>*</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td></tr></table>	VHTAVP.VHT_C...HoldingQueues						SiteName	HoldingQueueId	RouteDevice	TransferDevice		VHTAVP	VHTAVP_Switch:...	61050	tel: 61050	*	NULL	NULL	NULL	NULL																																																																																																			
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	VHTAVP	VHTAVP_Switch:...	61050	tel: 61050																																																																																																																				
*	NULL	NULL	NULL	NULL																																																																																																																				
18.	<p>Verify the following entry in dbo.IncomingExtensions.</p> <table><tr><th colspan="14">VHTAVP.VHT_Co...ingExtensions</th></tr><tr><th></th><th>SiteN...</th><th>QueueId</th><th>Exten...</th><th>Extensi...</th><th>Cou...</th><th>Treat...</th><th>HoldingQueueId</th><th>CallbackQueueId</th><th>UnderThresholdQueueId</th><th>IVRGroup</th><th>S...</th><th>IBIVRE...</th><th>OBI...</th><th>Incomi...</th></tr><tr><td></td><td>VHTAVP</td><td>VHT_Test</td><td>61000</td><td>Extension</td><td>1</td><td>20</td><td>VHTAVP_Switch:...</td><td>VHTAVP_Switch:...</td><td>VHTAVP_Switch:61000</td><td>IVR</td><td></td><td>NONE</td><td>NONE</td><td>1</td></tr><tr><td></td><td>VHTAVP</td><td>VHT_Test</td><td>61175</td><td>Extension</td><td>1</td><td>20</td><td>VHTAVP_Switch:...</td><td>VHTAVP_Switch:...</td><td>VHTAVP_Switch:61025</td><td>IVR</td><td></td><td>NONE</td><td>NONE</td><td>2</td></tr><tr><td></td><td>VHTAVP</td><td>VHT_Test</td><td>58881</td><td>Extension</td><td>1</td><td>20</td><td>VHTAVP_Switch:...</td><td>VHTAVP_Switch:...</td><td>VHTAVP_Switch:61000</td><td>IVR</td><td></td><td>NONE</td><td>NONE</td><td>4</td></tr><tr><td></td><td>VHTAVP</td><td>VHT_Test</td><td>61027</td><td>Extension</td><td>1</td><td>20</td><td>VHTAVP_Switch:...</td><td>VHTAVP_Switch:...</td><td>VHTAVP_Switch:61025</td><td>IVR</td><td></td><td>NONE</td><td>NONE</td><td>5</td></tr><tr><td></td><td>VHTAVP</td><td>VHT_Test</td><td>VHTAV...</td><td>Extension</td><td>1</td><td>2</td><td>VHTAVP_Switch:...</td><td>VHTAVP_Switch:...</td><td>VHTAVP_Switch:61025</td><td>IVR</td><td></td><td>NONE</td><td>NONE</td><td>6</td></tr><tr><td>*</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td><td></td><td>NULL</td><td>NULL</td><td>NULL</td></tr></table>	VHTAVP.VHT_Co...ingExtensions															SiteN...	QueueId	Exten...	Extensi...	Cou...	Treat...	HoldingQueueId	CallbackQueueId	UnderThresholdQueueId	IVRGroup	S...	IBIVRE...	OBI...	Incomi...		VHTAVP	VHT_Test	61000	Extension	1	20	VHTAVP_Switch:...	VHTAVP_Switch:...	VHTAVP_Switch:61000	IVR		NONE	NONE	1		VHTAVP	VHT_Test	61175	Extension	1	20	VHTAVP_Switch:...	VHTAVP_Switch:...	VHTAVP_Switch:61025	IVR		NONE	NONE	2		VHTAVP	VHT_Test	58881	Extension	1	20	VHTAVP_Switch:...	VHTAVP_Switch:...	VHTAVP_Switch:61000	IVR		NONE	NONE	4		VHTAVP	VHT_Test	61027	Extension	1	20	VHTAVP_Switch:...	VHTAVP_Switch:...	VHTAVP_Switch:61025	IVR		NONE	NONE	5		VHTAVP	VHT_Test	VHTAV...	Extension	1	2	VHTAVP_Switch:...	VHTAVP_Switch:...	VHTAVP_Switch:61025	IVR		NONE	NONE	6	*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL		NULL	NULL	NULL
VHTAVP.VHT_Co...ingExtensions																																																																																																																								
	SiteN...	QueueId	Exten...	Extensi...	Cou...	Treat...	HoldingQueueId	CallbackQueueId	UnderThresholdQueueId	IVRGroup	S...	IBIVRE...	OBI...	Incomi...																																																																																																										
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	VHTAVP	VHT_Test	61175	Extension	1	20	VHTAVP_Switch:...	VHTAVP_Switch:...	VHTAVP_Switch:61025	IVR		NONE	NONE	2																																																																																																										
	VHTAVP	VHT_Test	58881	Extension	1	20	VHTAVP_Switch:...	VHTAVP_Switch:...	VHTAVP_Switch:61000	IVR		NONE	NONE	4																																																																																																										
	VHTAVP	VHT_Test	61027	Extension	1	20	VHTAVP_Switch:...	VHTAVP_Switch:...	VHTAVP_Switch:61025	IVR		NONE	NONE	5																																																																																																										
	VHTAVP	VHT_Test	VHTAV...	Extension	1	2	VHTAVP_Switch:...	VHTAVP_Switch:...	VHTAVP_Switch:61025	IVR		NONE	NONE	6																																																																																																										
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL		NULL	NULL	NULL																																																																																																										

Step	Description																																																						
19.	<p>Verify the following entry in dbo.CountryCode for routing calls to PSTN.</p> <ul style="list-style-type: none">• Set CountryCode and CountryID to 1.• Set CountryName to North America.• Set DialPrefix to 91. <table><tr><th colspan="9">VHTAVP.VHT_C...o.CountryCode</th></tr><tr><th></th><th>SiteName</th><th>CountryCode</th><th>CountryId</th><th>CountryName</th><th>DialPrefix</th><th>DialSuffix</th><th>TimeZone</th><th>DSTDelta</th></tr><tr><td>▶</td><td>VHTAVP</td><td>1</td><td>1</td><td>North America</td><td>91</td><td></td><td>-300</td><td>60</td></tr><tr><td></td><td>VHTAVP</td><td>2</td><td>2</td><td>Jerusalem</td><td>, 9, 0112</td><td></td><td>180</td><td>60</td></tr><tr><td></td><td>VHTAVP</td><td>20</td><td>20</td><td>Egypt</td><td>, 9, 01120</td><td></td><td>120</td><td>60</td></tr><tr><td></td><td>VHTAVP</td><td>212</td><td>212</td><td>Morocco and We...</td><td>, 9, 011212</td><td></td><td>0</td><td>0</td></tr></table>	VHTAVP.VHT_C...o.CountryCode										SiteName	CountryCode	CountryId	CountryName	DialPrefix	DialSuffix	TimeZone	DSTDelta	▶	VHTAVP	1	1	North America	91		-300	60		VHTAVP	2	2	Jerusalem	, 9, 0112		180	60		VHTAVP	20	20	Egypt	, 9, 01120		120	60		VHTAVP	212	212	Morocco and We...	, 9, 011212		0	0
VHTAVP.VHT_C...o.CountryCode																																																							
	SiteName	CountryCode	CountryId	CountryName	DialPrefix	DialSuffix	TimeZone	DSTDelta																																															
▶	VHTAVP	1	1	North America	91		-300	60																																															
	VHTAVP	2	2	Jerusalem	, 9, 0112		180	60																																															
	VHTAVP	20	20	Egypt	, 9, 01120		120	60																																															
	VHTAVP	212	212	Morocco and We...	, 9, 011212		0	0																																															
20.	<p>Verify the following entry in dbo.GenesysCTIConfig for CTI configuration.</p> <table><tr><th colspan="12">VHTAVP.VHT_Co...esysCTIConfig</th></tr><tr><th></th><th>SiteName</th><th>TServerName</th><th>HostNameA</th><th>PortA</th><th>HostNameB</th><th>PortB</th><th>Protocol</th><th>RedundancyMode</th><th>ReconnectInter...</th><th>RegisterAllDevi...</th><th>AcceptOnlyThe...</th><th>GenesysCTICo...</th></tr><tr><td>▶</td><td>VHTAVP</td><td>VHTAVP_Switch</td><td>10.64.21.75</td><td>4000</td><td>10.64.21.75</td><td></td><td>NULL</td><td>2</td><td>2000</td><td>FALSE</td><td>NULL</td><td>1</td></tr><tr><td>▶</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td><td>NULL</td></tr></table>	VHTAVP.VHT_Co...esysCTIConfig													SiteName	TServerName	HostNameA	PortA	HostNameB	PortB	Protocol	RedundancyMode	ReconnectInter...	RegisterAllDevi...	AcceptOnlyThe...	GenesysCTICo...	▶	VHTAVP	VHTAVP_Switch	10.64.21.75	4000	10.64.21.75		NULL	2	2000	FALSE	NULL	1	▶	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL			
VHTAVP.VHT_Co...esysCTIConfig																																																							
	SiteName	TServerName	HostNameA	PortA	HostNameB	PortB	Protocol	RedundancyMode	ReconnectInter...	RegisterAllDevi...	AcceptOnlyThe...	GenesysCTICo...																																											
▶	VHTAVP	VHTAVP_Switch	10.64.21.75	4000	10.64.21.75		NULL	2	2000	FALSE	NULL	1																																											
▶	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL																																											
21.	<p>Open a Windows Explorer window and navigate to C:\Program Files\Virtual Hold Technology. Open OutboundIVR_AVP.xml using notepad.</p> <p>In the <Connection1>, configure information for Avaya Voice Portal. This information must match the configuration in Avaya Voice Portal.</p> <pre><?xml version="1.0" encoding="utf-8"?> <LoadBalancerManager> <DefaultID>NONE</DefaultID> <NumberOfConnectionSets>1</NumberOfConnectionSets> <ConnectionSet1> <Count>1</Count> <Identifier>VHT_Test</Identifier> <FirstConnection>Connection1</FirstConnection> <LastConnection>Connection1</LastConnection> <Connection1> <URI>http://10.64.10.31:8080/axis/services/AppIntfWS</URI> <OutboundANI>8005555555</OutboundANI> <!-- AVP provisioned Virtual Hold outbound application --> <ApplicationName>VH_OB</ApplicationName> <AppInterfaceUsername>vhtvpws</AppInterfaceUsername> <AppInterfacePassword>Virtual123!</AppInterfacePassword> <ConnectTimeout>30</ConnectTimeout> <MaxConcurrentOutboundDialRequests>2</MaxConcurrentOutboundDialRequests> <WebServiceClientTimeoutInMilliseconds>180000 </WebServiceClientTimeoutInMilliseconds> </Connection1> </ConnectionSet1> </LoadBalancerManager> <SessionParameters>enable_call_classification=true;detect_greeting_end=true</SessionParameters> <URLParameters></URLParameters> <TimeToExcludeOnFailure>150000</TimeToExcludeOnFailure> <NextConnectionOnSuccess>Connection1</NextConnectionOnSuccess> <NextConnectionOnFailure>Connection1</NextConnectionOnFailure> </URLParameters></pre>																																																						

Step	Description
22.	<p>In the Windows Explorer window, navigate to C:\VirtualHold. Open toolkit.properties.</p> <p>In the example below, 10.64.21.75 is Virtual Hold Concierge's IP address.</p> <ul style="list-style-type: none"> • Modify IP Address as mentioned above • Set <code>com.virtualhold.toolkit.useDnisAsSegment</code> to true, if false • Verify audio path for Name File Configuration • Change <code>com.virtualhold.toolkit.defaultdestination</code> to the VDN for Entry/Hold <pre>#sample configuration file for VHT com.virtualhold.toolkit.loopback=false #URL for the PTK webservices com.virtualhold.toolkit.baseurl=http://10.64.21.75/VHTPlatformWS-v2/ #Name file configuration com.virtualhold.toolkit.audiopath=C:/Program Files/Apache Software Foundation/Tomcat 6.0/webapps/ROOT com.virtualhold.toolkit.webaudiopath=http://10.64.21.75:8080/ #Default transfer destination if destination cannot be retrieved from PTK com.virtualhold.toolkit.defaultdestination=tel:61000 #Set this to true if you want to use the call's DNIS as the incoming PTK segment. com.virtualhold.toolkit.useDnisAsSegment=true # Default transfer mode (use disconnectontransfer = true if your routing engine retains call control after <disconnect />) # Also, this property can be overridden with the URL query string parameter DisconnectOnTransfer com.virtualhold.toolkit.disconnectontransfer=true #Time group ranges - used in day/time selection com.virtualhold.toolkit.earlymorning=(12:00 am 6:00 am) com.virtualhold.toolkit.morning=(6:00 am 12:00 pm) com.virtualhold.toolkit.afternoon=(12:00 pm 5:00 pm) com.virtualhold.toolkit.evening=(5:00 pm 9:00 pm) com.virtualhold.toolkit.night=(9:00 pm 11:59 pm) # com.virtualhold.toolkit.avp.disconnectdtmf=tel:*101</pre>

Step	Description
23.	<p>Open Registry Editor. Start → type in regedit</p> <p>Navigate to GVP folder as shown in the following screen shot.</p> <p>Ensure the string values are as show below. If they are not present, add them.</p> 

9.1. Avaya Voice Portal



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

You are here: [Home](#) > Real-Time Monitoring > Port Distribution

Port Distribution (4/25/12 5:55:40 PM EDT)

This page displays information about how the telephony resources have been distributed to the

Total Ports: 11

Last Poll: 4/25/12 5:55:40 PM EDT

Port ▾	Mode ▾	State	Port Group ▾	Protocol ▾	Current Allocation	Base Allocation
58881	Inbound	In service	Virtual Hold	H323	mpp1	
58882	Inbound	Available	Virtual Hold	H323	<None>	<None>
1	Online	Connected	SM_10_62	SIP_Trunk	mpp1	
2	Online	In service	SM_10_62	SIP_Trunk	mpp1	
3	Online	In service	SM_10_62	SIP_Trunk	mpp1	
4	Online	In service	SM_10_62	SIP_Trunk	mpp1	
5	Online	In service	SM_10_62	SIP_Trunk	mpp1	
6	Online	In service	SM_10_62	SIP_Trunk	mpp1	
7	Online	In service	SM_10_62	SIP_Trunk	mpp1	
8	Online	In service	SM_10_62	SIP_Trunk	mpp1	
9	Online	In service	SM_10_62	SIP_Trunk	mpp1	

Help

9.2. Avaya Aura® Session Manager

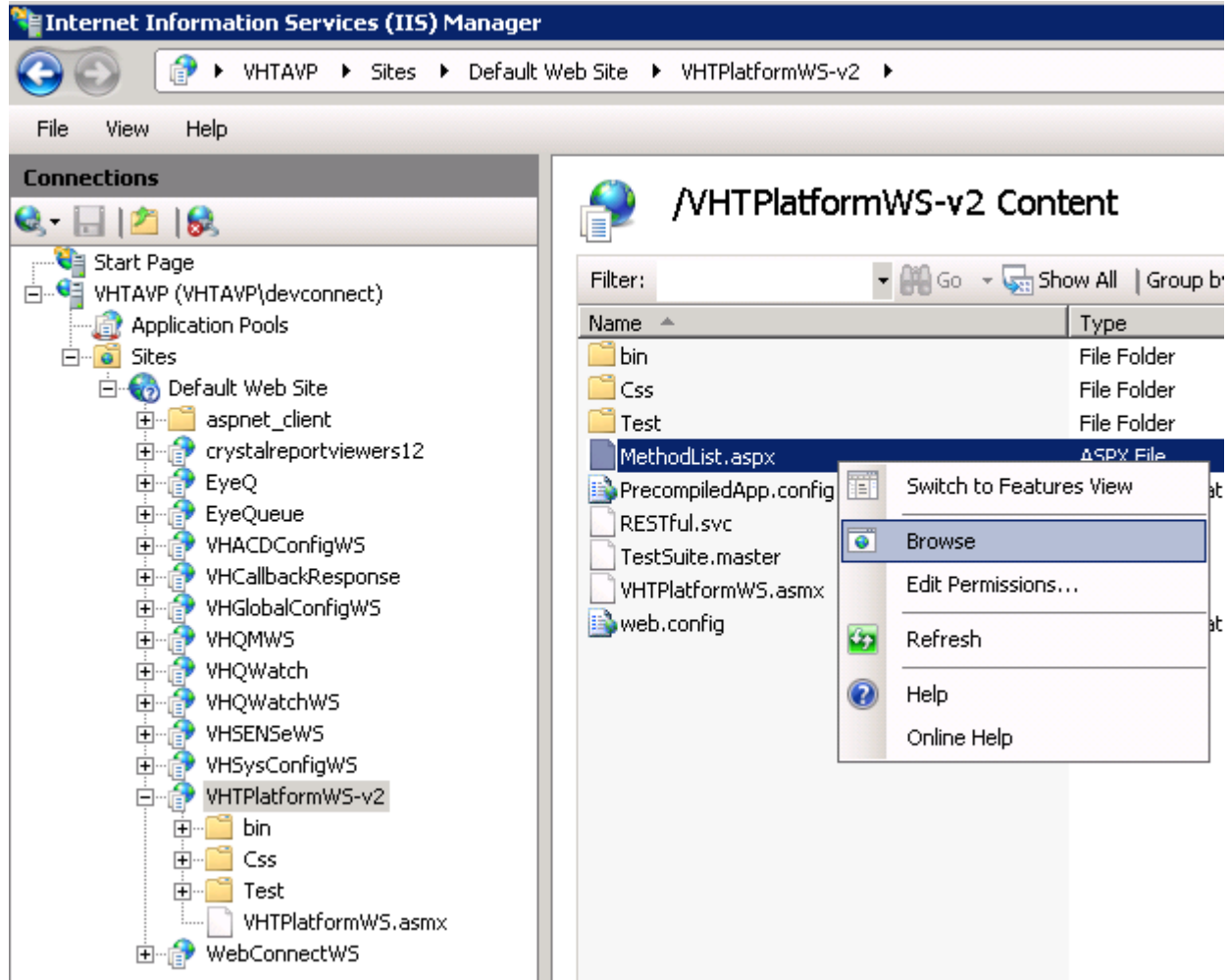
To verify connectivity to Avaya Voice Portal, Click on **Session Manager** on the Home page of Avaya System Manager web interface. Navigate to **Session Manager → System Status → SIP Entity Monitoring**. Locate the SIP Entity added for Avaya Voice Portal under **All Monitored SIP Entities** and Click on it.

1 Item Refresh							Filter: Enable
Details	Session Manager Name	SIP Entity Resolved IP	Port	Proto.	Conn. Status	Reason Code	Link Status
► Show	SM 10 62	10.64.10.32	5060	TCP	Up	200 OK	Up

Connection Status and **Link Status** should be Up.

9.3. Virtual Hold Concierge™

On the Virtual Hold Concierge server, open IIS and navigate to **VHTPlatformWS-vs**. On the right side pane, right click on **MethodList.aspx**, and click on **Browse**.

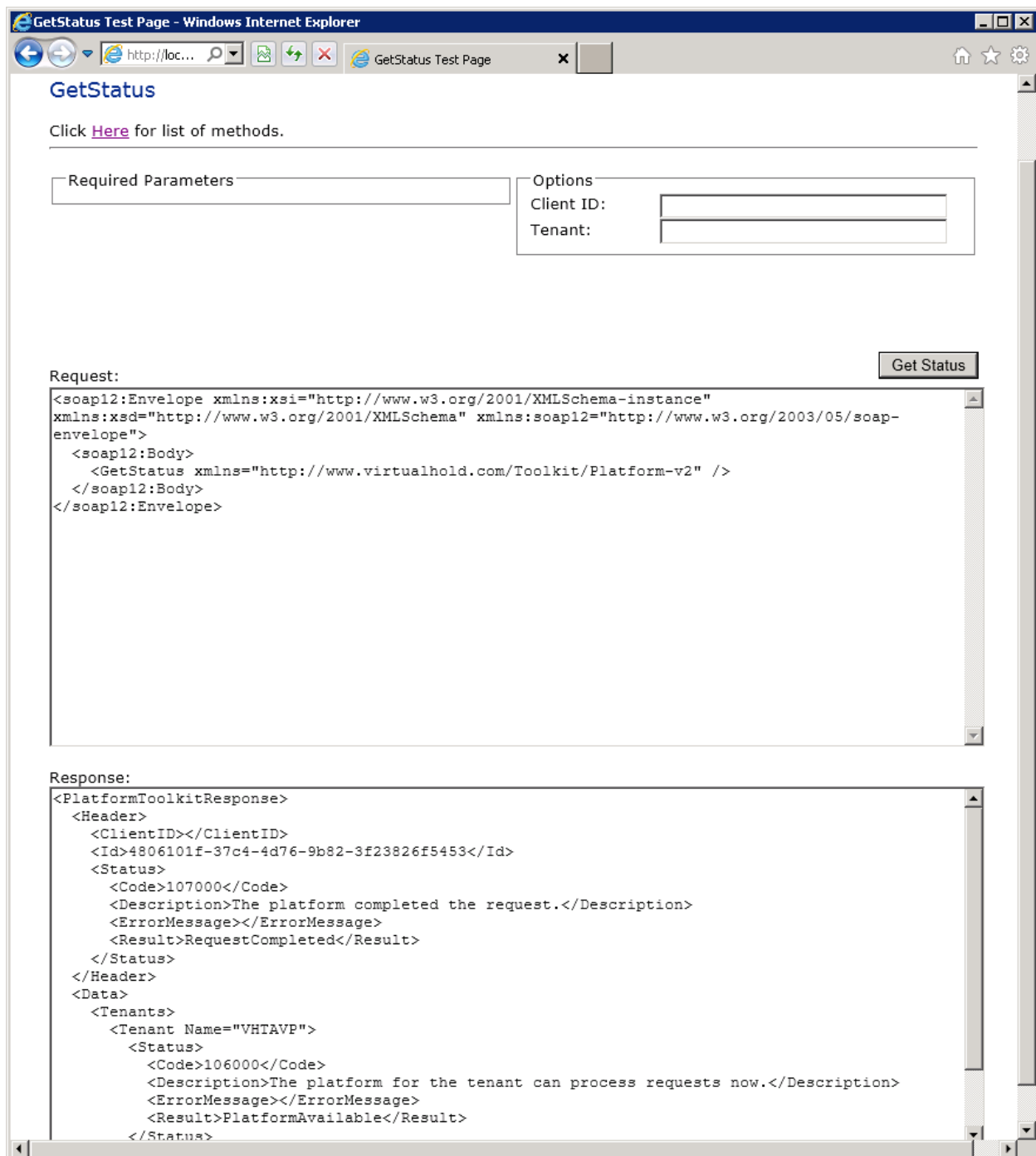


A webpage with **VHPlatform Toolkit** will open as follows:

The following operations are supported:

- [AddInteraction](#)
- [AssociateInteractionWithExternalTrackingId](#)
- [FindInteraction](#)
- [GetInteractionData](#)
- [GetNextAppointmentTime](#)
- [GetSegmentState](#)
- [GetSegments](#)
- [GetSegmentVariables](#)
- [GetStatus](#)
- [GetVersion](#)
- [ModifyInteraction](#)
- [RemoveInteraction](#)
- [ValidateContact](#)

Click on **GetStatus**. On the next page click on **Get Status**.



Line 17 in **Response:** should be **The platform for the tenant can process requests now**. This validates that the Virtual Hold Platform is operational.

Go back to the list of methods and click on **GetSegmentState**.
 Type the name of the Tenant and the Segment, click on **Get Segment State**.

In our test, we used VHTAVP and 61000.

http://localhost/VHTPlatformWS-v2/Test/GetSegmentStateTest.aspx - Windows Internet Explorer

GetSegmentState

Click [Here](#) for list of methods.

Required Parameters		Options
Tenant:	<input type="text" value="VHTAVP"/>	Client ID: <input type="text"/>
Segment:	<input type="text" value="61000"/>	

Request:

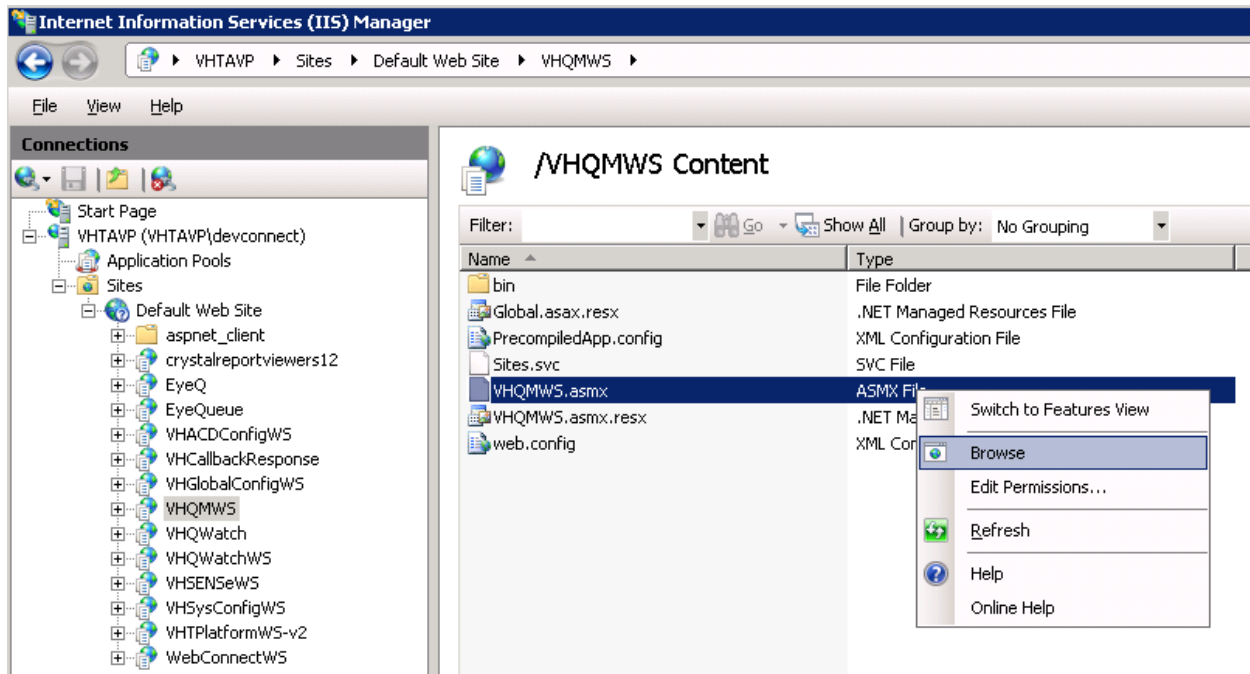
```
<soap12:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:soap12="http://www.w3.org/2003/05/soap-
envelope">
  <soap12:Body>
    <GetSegmentState xmlns="http://www.virtualhold.com/Toolkit/Platform-v2">
      <data>
        <Tenant>VHTAVP</Tenant>
        <Segment>61000</Segment>
      </data>
    </GetSegmentState>
  </soap12:Body>
</soap12:Envelope>
```

Response:

```
<PlatformToolkitResponse>
  <Header>
    <ClientID></ClientID>
    <Id>25e1fcb3-3d0d-4523-88c3-be087021d1c0</Id>
    <Status>
      <Code>107000</Code>
      <Description>The platform completed the request.</Description>
      <ErrorMessage></ErrorMessage>
      <Result>RequestCompleted</Result>
    </Status>
  </Header>
  <Data>
    <Segments>
      <Segment Name="61000" Queue="VHT_Test" Tenant="VHTAVP">
        <StateData>
          <StateData Name="OperationMode" Value="Normal"/>
          <StateData Name="EWT" Value="0"/>
          <StateData Name="OfferTreatment" Value="1"/>
          <StateData Name="ModeStatus" Value=""/>
        </StateData>
      </Segment>
    </Segments>
  </Data>
</PlatformToolkitResponse>
```

The response should return results similar to shown in the screen shots above. This test validates the configuration.

On IIS, navigate to **VHQMWS**. On the right side pane, right click on **VHQMWS.asmx** and click on **Browse**.



A web page with **VHQMWS** as title will open. Locate **GetConnections** and click on it. On the next page, click on **Invoke**.

```
<?xml version="1.0" encoding="utf-8" ?>
<string xmlns="http://virtualhold.com/webservices/VHQMWS">VHWS_OK|VHTAVP
</string>
```

This result should be similar as shown above. This validates connectivity to the database.

10. Conclusion

These Application Notes describe the configuration steps required to integrate Virtual Hold Concierge™ with Avaya Voice Portal for Callbacks via Avaya Aura® Communication Manager and Avaya Aura® Session Manager. All feature and serviceability test cases were completed successfully.

11. Additional References

This section references the Avaya documentation relevant to these Application Notes. The following Avaya product documentation is available at <http://support.avaya.com>.

- [1] *Implementing Voice Portal on multiple servers*, March 2012.
- [2] *Implementing Voice Portal on single servers*, March 2012.
- [3] *Administering Voice Portal*, January 2011.
- [4] *Administering Avaya Aura® Communication Manager*, Doc # 03-603558, Release 6.0.1, Issue 1.3, December 2010.
- [5] *Administering Avaya Aura® Session Manager*, Doc # 03-603324, Release 6.2, February 2012
- [6] *Avaya Aura® Application Enablement Services Administration and Maintenance Guide*, Release 6.1, Issue 2, February 2011.

Please contact Virtual Hold Support, see section 2.3, for the latest version of Virtual Hold Concierge™ and VXML Interaction Server documentation.

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