



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

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# **Application Notes for Servion iAssist Call Survey Manager with Avaya Voice Portal – Issue 1.0**

### **Abstract**

These Application Notes describe the configuration steps required to integrate the Servion iAssist Call Survey Manager with Avaya Voice Portal. iAssist Call Survey Manager is a performance and quality assurance application that allows customers (or subscribers) to provide feedback about their call center or product experience. iAssist Call Survey Manager is used to create, add, preview, modify, and remove surveys.

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 to integrate the Servion iAssist Call Survey Manager with Avaya Voice Portal. iAssist Call Survey Manager is a performance and quality assurance application that allows customers (or subscribers) to provide feedback about their call center or product experience. iAssist Call Survey Manager is used to create, add, preview, modify, and remove surveys.

iAssist Call Survey Manager (CSM) allows callers to participate in an automated survey on Avaya Voice Portal. Surveys can be created and assigned dynamically and survey reports can be captured and analyzed. This helps the organization improve quality, customer and employee satisfaction.

CSM provides flexibility in questionnaire design, storage of caller responses in a database, and generation of reports for easy analysis of the survey. CSM allows the creation and design of questionnaires with as many questions as desired. The sequencing of the questions may be dynamic based on the caller's previous answer selection. Typical surveys cover caller experience on their interaction with agents and product feedback. Reports can be captured and analyzed.

Another Servion related solution is described in [6], *Application Notes for Servion iAssist Call Back Manager with Avaya Voice Portal*.

## 1.1. Interoperability Compliance Testing

Interoperability compliance testing included feature and serviceability testing. The feature testing focused on the following functionality:

- Routing incoming calls to Avaya Voice Portal and running iAssist CSM.
- The ability of the caller to complete the survey successfully.
- Verifying the correct response to invalid entries by the caller.
- Generating a survey report with the caller's responses.

The serviceability testing focused on verifying the ability of the iAssist Admin server and Voice Portal to recover from adverse conditions, such as power failures and disconnecting cables to the IP network.

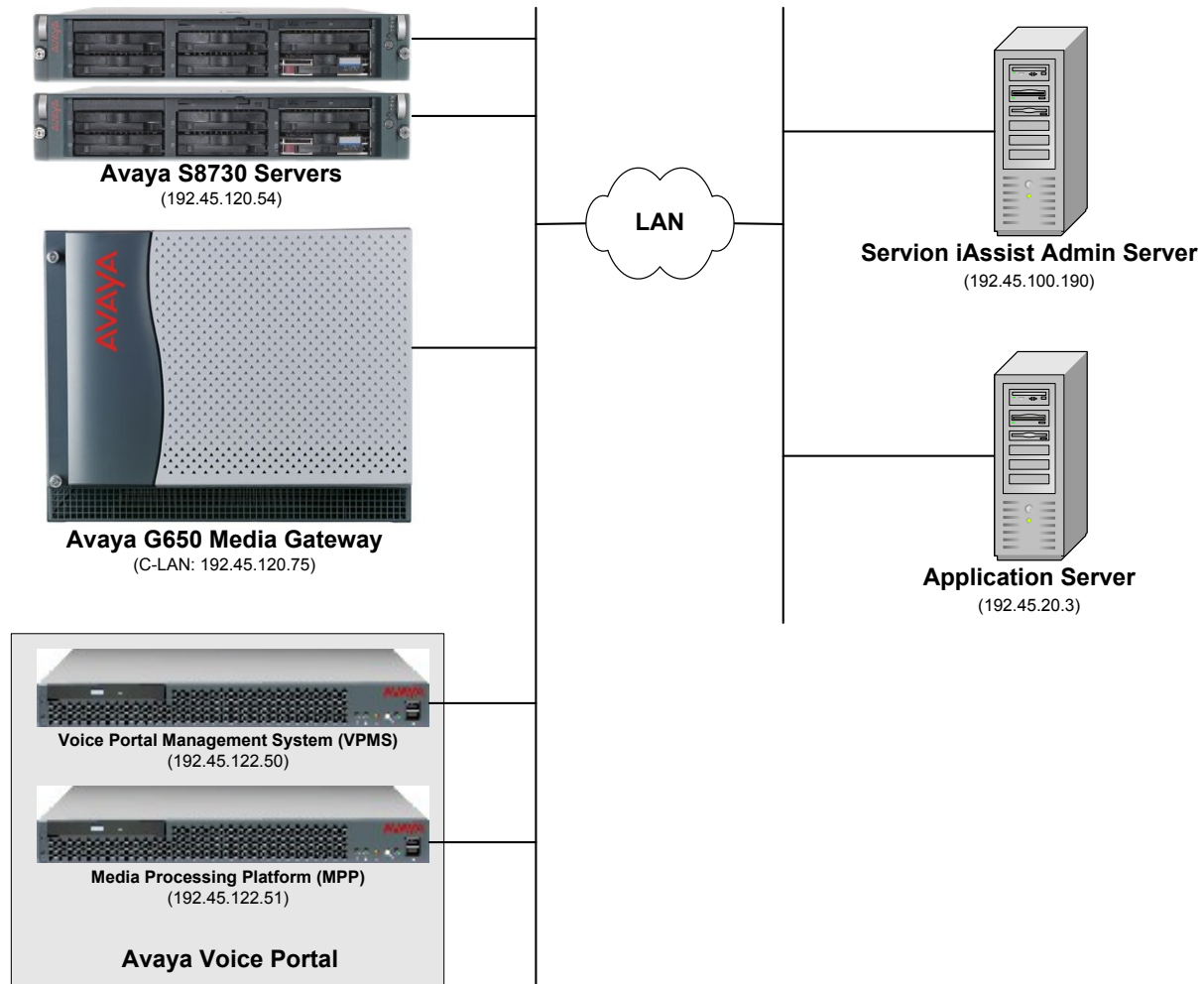
## 1.2. Support

For technical support on the iAssist Call Survey Manager, contact Servion via phone, email, or internet.

- **Phone:** (609) 987-0044
- **Email:** [usa@servion.com](mailto:usa@servion.com)
- **Web:** <http://www.servion.com>

### 1.3. Reference Configuration

**Figure 1** illustrates the configuration used for testing. In this configuration, Avaya Voice Portal interfaces with Avaya Aura™ Communication Manager via H.323. The application server hosted the iAssist CSM application. The Servion iAssist Admin server contained the Microsoft SQL database and was also used to configure the iAssist CSM application.



**Figure 1:** Configuration with Avaya Voice Portal and Servion iAssist

## 1.4. Equipment and Software Validated

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

Equipment	Software
Avaya Voice Portal	5.0.0.0.4602
Avaya S8730 Servers with a G650 Media Gateway	Avaya Aura <sup>TM</sup> Communication Manager 5.2 (R015x.02.0.947.3) with Service Pack 1 (Patch 17294)
Servion iAssist Call Survey Manager <ul style="list-style-type: none"><li>Microsoft Windows 2003 Server with IIS</li><li>Microsoft .NET Framework 3.5 with Service Pack 1</li><li>Microsoft SQL Server 2005</li></ul>	1.0
Application Server running on Microsoft Windows XP Professional <ul style="list-style-type: none"><li>Apache Tomcat</li><li>Java Development Kit</li><li>Avaya Dialog Designer WebLM License Server</li></ul>	5.5.27 JDK 1.5.0_16 4.1

## 2. Configure Avaya Aura™ Communication Manager

This section provides the procedures for configuring Communication Manager via the System Access Terminal (SAT). The procedures include the following areas:

- Administer H.323 Stations for Avaya Voice Portal
- Administer Hunt Groups for Avaya Voice Portal Ports
- Administer Agent IDs for Avaya Voice Portal Ports
- Administer Call Vectoring to Route Calls to Voice Portal

### 2.1. Administer H.323 Stations for Avaya Voice Portal

This section describes the configuration of H.323 stations for Avaya Voice Portal. This configuration also requires a C-LAN and Media Processor board for IP communication and the administration of a Network Region and IP Codec Set. This configuration is outside the scope of these application notes, but the reader may refer to [1] and [2] for additional information. In addition, special application SA8874 – Call Status Messages for 7434ND IP Softphone is required for this solution.

From the System Access Terminal (SAT), add an H.323 station for Voice Portal. In the station form, set the **Type** to *7434ND*, provide a descriptive **Name**, set the **Security Code**, and set the **IP Softphone** field to 'y'. Repeat this step for each Avaya Voice Portal port. The **duplicate station** command may be used as an alternative to add more stations.

add station 23801		Page 1 of 6
STATION		
Extension: 23801	Lock Messages? n	BCC: 0
<b>Type: 7434ND</b>	<b>Security Code: XXXXX</b>	TN: 1
<b>Port: IP</b>	Coverage Path 1:	COR: 1
<b>Name: VP 192.45.122.50</b>	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	
<b>Display Module? y</b>	Message Lamp Ext: 23801	
Display Language: english	Coverage Module? n	
Survivable COR: internal	Media Complex Ext:	
Survivable Trunk Dest? y	<b>IP SoftPhone? y</b>	
	IP Video Softphone? n	

## 2.2. Administer Hunt Groups

This section provides the Hunt Group configuration for the Avaya Voice Portal ports.

The Voice Portal ports, configured as H.323 stations, will automatically log into Hunt Group 251 configured below. Provide a descriptive name and set the **Group Extension** field to a valid extension. Enable the **ACD**, **Queue**, and **Vector** options. This hunt group will be specified in the **Agent LoginIDs** configured in Section 2.3.

add hunt-group 251		Page 1 of 3
HUNT GROUP		
Group Number: 251	ACD? y	
Group Name: Voice Portal Ports	Queue? y	
Group Extension: 76002	Vector? y	
Group Type: ucd-mia		
TN: 1		
COR: 1	MM Early Answer? n	
Security Code:	Local Agent Preference? n	
ISDN/SIP Caller Display:		
Queue Limit: unlimited		
Calls Warning Threshold:	Port:	
Time Warning Threshold:	Port:	

On Page 2 of the Hunt Group form, enable the **Skill** and **AAS** options. The **AAS** option will allow the Voice Portal ports to automatically log into the hunt group via the **Agent LoginIDs**.

add hunt-group 251		Page 2 of 3
HUNT GROUP		
Skill? y	Expected Call Handling Time (sec): 180	
AAS? y	Service Level Target (% in sec): 80 in 20	
Measured: internal	Service Objective (sec): 20	
Supervisor Extension:	Service Level Supervisor? n	
Controlling Adjunct: none		
VuStats Objective:		
Timed ACW Interval (sec):	Dynamic Queue Position? n	
Multiple Call Handling: none		
Interruptible Aux Threshold: none		
Redirect on No Answer (rings):		
Redirect to VDN:		
Forced Entry of Stroke Counts or Call Work Codes? n		

## 2.3. Administer Agent IDs

This section provides the Agent Login IDs for the Avaya Voice Portal ports.

Add an **Agent LoginID** for each Voice Portal port. The **AAS** option is enabled and the **Port Extension** is set to the extension of the H.323 stations corresponding to each Voice Portal port. Repeat this configuration for each H.323 station corresponding to a Voice Portal port. In this configuration, agent login IDs 73801 to 73808 were created.

add agent-loginID 73801		Page 1 of 2
AGENT LOGINID		
Login ID: 73801	<b>AAS? y</b>	
<b>Name: VP Port 1</b>	AUDIX? n	
TN: 1	LWC Reception: spe	
COR: 1	LWC Log External Calls? n	
Coverage Path:	AUDIX Name for Messaging:	
Security Code:	LoginID for ISDN/SIP Display? n	
<b>Port Extension: 23801</b>		
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		

On Page 2 of the **Agent LoginID** form, set the skill number (SN) to hunt group 251, which is the hunt group (skill) that the Voice Portal ports will log into.

add agent-loginID 73801		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	SN RL SL
1: 251 1	16:	31:
2:	17:	32:
3:	18:	33:
4:	19:	34:
5:	20:	35:
6:	21:	36:
7:	22:	37:
8:	23:	38:
9:	24:	39:
10:	25:	40:
11:	26:	41:
12:	27:	42:
13:	28:	43:
14:	29:	44:
15:	30:	45:
		46:
		47:
		48:
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		52:
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		58:
		59:
		60:



## 2.4. Administer Call Vectoring

This section describes the procedures for configuring call vectoring so that incoming calls will be routed to Avaya Voice Portal, which in turn will run the iAssist CSM application.

Configure the **Vector Directory Number (VDN)** that will handle incoming customer calls. This VDN invokes a vector that will route the call to the iAssist CSM application on Avaya Voice Portal. In this example, VDN 70001 and vector 71 were used.

```
add vdn 70001                                     Page 1 of 3
                                         VECTOR DIRECTORY NUMBER
                                         Extension: 70001
                                         Name*: iAssist CSM
                                         Destination: Vector Number 71
Attendant Vectoring? n
Meet-me Conferencing? n
Allow VDN Override? n
COR: 1
TN*: 1
Measured: both
Acceptable Service Level (sec): 20
Service Objective (sec): 20
VDN of Origin Annc. Extension*:
1st Skill*:
2nd Skill*:
3rd Skill*:
* Follows VDN Override Rules
```

Vector 71 configured below routes the call to Voice Portal (i.e., hunt group 251).

```
change vector 71                                     Page 1 of 6
                                         CALL VECTOR
Number: 70                                         Name: iAssist CSM
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? n
Variables? y      3.0 Enhanced? y
01 wait-time      2 secs hearing ringback
02 queue-to      skill 251 pri m
03 stop
04
```

### 3. Configure Avaya Voice Portal

This section covers the administration of Avaya Voice Portal. The following Voice Portal configuration steps will be covered:

- Configuring an H.323 VoIP Connection
- Configuring iAssist CSM Application
- Starting the MPP server

Avaya Voice Portal is configured via the Voice Portal Management System (VPMS) web interface. To access the web interface, enter `http://<ip-addr>/VoicePortal` as the URL in an internet browser, where `<ip-addr>` is the IP address of the VPMS. Log in using the Administrator user role. The screen shown below is displayed.

**Note:** All of the screens in this section are shown after the Voice Portal had been configured. Save the screen parameters as you configure Avaya Voice Portal.

**AVAYA** Welcome, admin  
Last logged in today at 3:20:02 PM EDT

**Voice Portal 5.0 (VoicePortal)** Home ? Help Logoff

Expand All | Collapse All

You are here: Home

**Voice Portal Management System Version 5.0.0.0.4602**

Voice Portal Management System (VPMS) is the consolidated web-based application for administering Voice Portal. Through the VPMS interface, you can configure Voice Portal, check the status of a Voice Portal component, and generate reports related to system operation.

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**Last Login:** 8/27/09 3:20:02 PM EDT

**Navigation Menu:**

- ▼ **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

### 3.1. Configure an H.323 VoIP Connection

To configure an H.323 connection, navigate to the **VoIP Connections** page and then click on the **H.323** tab. In the H.323 tab shown below, set the **Gatekeeper Address** to the IP address of the C-LAN in the G650 Media Gateway and the **Gatekeeper Port** to *1719*. Next, configure the stations for Voice Portal, which map to the 7434ND stations configured in Communication Manager. In addition, set the **Password** for the stations and set the **Station Type** to *Inbound and Outbound*.

The screenshot shows the Avaya Voice Portal 5.0 (VoicePortal) interface. The top navigation bar includes the Avaya logo, a welcome message for 'admin', and links for Home, Help, and Logoff. The left sidebar contains a tree view of system management options, with 'System Configuration' expanded to show 'VoIP Connections'. The main content area is titled 'Change H.323 Connection' and provides fields for configuring a connection. The 'Name' field is set to 'devcon13'. The 'Enable' field has radio buttons for 'Yes' (selected) and 'No'. The 'Gatekeeper Address' field is set to '192.45.120.75'. The 'Alternative Gatekeeper Address' field is empty. The 'Gatekeeper Port' field is set to '1719'. The 'Media Encryption' field has radio buttons for 'Yes' (selected) and 'No'. Below these fields is a section for 'New Stations' with a table for 'From' and 'To' station numbers, a 'Password' field, and radio buttons for 'Same Password' (selected) and 'Use sequential passwords'. The 'Station Type' dropdown menu is set to 'Inbound and Outbound'. An 'Add' button is present. Below the 'New Stations' section is a 'Configured Stations (M for Maintenance, I for Inbound Only)' section with a text box containing '23801 - 23808' and a 'Remove' button. At the bottom are 'Save', 'Apply', 'Cancel', and 'Help' buttons.

**AVAYA** Welcome, admin  
Last logged in today at 3:20:02 PM EDT

**Voice Portal 5.0 (VoicePortal)** Home ? Help Logoff

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](#) > [VoIP Connections](#) > [Change H.323 Connection](#)

### Change H.323 Connection

Use this page to change the configuration of an H.323 connection.

Name: devcon13

Enable: ☒ Yes ☐ No

Gatekeeper Address: 192.45.120.75

Alternative Gatekeeper Address:

Gatekeeper Port: 1719

Media Encryption: ☒ Yes ☐ No

#### New Stations

From	To
Station:	

Password:

☒ Same Password  
☐ Use sequential passwords

Station Type: **Inbound and Outbound**  
Inbound Only  
Maintenance

**Add**

#### Configured Stations (M for Maintenance, I for Inbound Only)

23801 - 23808

**Remove**

**Save Apply Cancel Help**

## 3.2. Configure the iAssist CSM Application

In the **Applications** page, add a Voice Portal application that runs the iAssist CSM application. Configure the application as shown below.

**AVAYA** Welcome, admin  
Last logged in today at 3:20:02 PM EDT

**Voice Portal 5.0 (VoicePortal)** Home ? Help Logoff

Expand All | Collapse All

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

### Change Application

Use this page to change the configuration of a VoiceXML or CCXML application.

Name: Inbound CSM

Enable: ☒ Yes ☐ No

MIME Type:

VoiceXML URL:  **Verify**

#### Speech Servers

ASR:  TTS:

#### Application Launch

Type: ☒ Inbound ☐ Inbound Default ☐ Outbound

☒ Number ☐ Number Range ☐ URI

Called Number:  **Add**

**Remove**

#### Speech Parameters

**Reporting Parameters**

#### Advanced Parameters

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

### 3.3. Start the MPP Server

Start the MPP server from the **MPP Manager** page shown below. Select the MPP and then click the **Start** button. After the MPP is started, the **Mode** of the MPP should be *Online* and the **State** should be *Running*.

**AVAYA**

Welcome, admin  
Last logged in today at 3:20:02 PM EDT

**Voice Portal 5.0 (VoicePortal)**

Home Help Logoff

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 Management > MPP Manager

## MPP Manager (8/27/09 6:04:56 PM EDT)

Refresh

This page displays the current state of each MPP in the Voice Portal system. To enable the state and mode commands, select one or more MPPs. To enable the mode commands, the selected MPPs must also be stopped.

Last Poll: 8/27/09 6:04:55 PM EDT

<input checked="" type="checkbox"/>	Server Name	Mode	State	Config	Auto Restart	Restart Schedule		Active Calls	
						Today	Recurring	In	Out
<input checked="" type="checkbox"/>	mpp	Online	Stopped	Need ports	No	No	None	0	0

**State Commands**

Start Stop Restart Reboot Halt Cancel

**Restart/Reboot Options**

☐ One server at a time

☒ All selected servers at the same time

**Mode Commands**

Offline Test Online

Help

JAO; Reviewed:  
SPOC 9/28/2009

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iAssist-CSM-VP

## 4. Configure Application Server

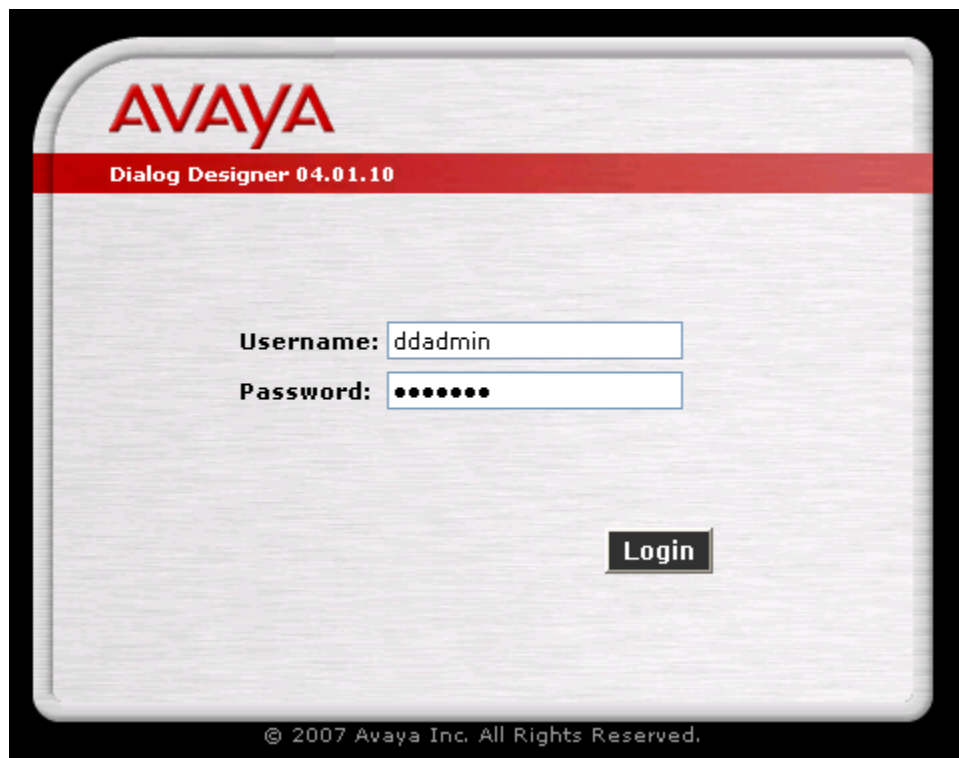
This section describes the configuration required on the application server for iAssist Call Survey Manager. It is assumed that all of the required software listed in Section 1.4 has already been installed. Refer to [7] for more information on configuring the application server. The following configuration steps on the application server will be covered:

- Configure WebLM Licensing
- Deploy the iAssist CSM Application in Apache Tomcat

### 4.1. Configure WebLM Licensing

Since the application server will run Dialog Designer applications, it requires support files to be installed as described in [5], *Avaya Dialog Designer Developer's Guide Release 4.1*. These support files include Jars.zip, runtimeconfig.war, and weblm.jar, the client library for license management. A valid license is required to run Dialog Designer applications on Avaya Voice Portal. A license may be installed by accessing the following web page via a web browser: <http://192.45.20.3:8080/WebLM/LicenseServer>.

To access the Dialog Designer Admin Console (often referred to as ddadmin) via a web browser, enter the following URL: <http://192.45.20.3:8080/runtimeconfig> and log in using “ddadmin” account.



In the **Licensing Server** page, enter the URL of the WebLM license server, which is running on the application server itself. In this example, the **License URL** field is set to <http://192.45.20.3:8080>. Click **Update**.

The screenshot shows the Avaya Dialog Designer 04.01.10 interface. At the top, the Avaya logo is on the left, and the user 'ddadmin' is logged in, with the last login time 'Thu Aug 27 18:45:30 EDT 2009'. Below the header, a red bar displays 'Dialog Designer 04.01.10' and a 'Logoff' button. The main content area is titled 'Licensing Server' and includes a breadcrumb 'You are here: Home > License Server'. On the left, a sidebar lists navigation options: 'License Server', 'Proxy Settings', 'CTI', 'IR Channel Map', 'IC', and 'Users'. The main area contains instructions: 'Enter the URL to the license server host. For example http://myhost:8080/'. Below this, the 'License URL' field is populated with 'http://192.45.20.3:8080'. To the right of the field is a 'Verify' button, and below the field is an 'Update' button.

AVAYA

Welcome, ddadmin  
Last logged in Thu Aug 27 18:45:30 EDT 2009

Dialog Designer 04.01.10 Logoff

You are here: [Home](#) > License Server

### Licensing Server

Enter the URL to the license server host. For example http://myhost:8080/

License URL:  **Verify**

**Update**

**License Server**  
**Proxy Settings**  
**CTI**  
**IR Channel Map**  
**IC**  
**Users**

## 4.2. Deploy iAssist Call Survey Manager Application

This section describes the steps to deploy and configure the iAssist Call Survey Manager in Apache Tomcat on the application server. The following configuration steps are required:

1. The iAssist CSM application is deployed in Apache Tomcat running on the application server. The following CSM application files need to be ported to the <tomcat\_home>/webapps/ directory.
  - **Inbound\_CSM.war** – This war file contains the inbound module of CSM application. This module collects the caller's responses for the survey and logs the details to the database.
  - **Phrases\_CSM.zip** – This file contains the phrases used by the inbound CSM application.
2. After deploying the application files in Apache Tomcat, create a new folder called C:\CSMConfig and copy the **inboundcsmconfig.properties** file to this folder. The content of the properties file is shown below.

```
#iAssist - CSM - Inbound IVR Flow Parameters

#Below parameters are used for License Web Service Web Service Calls
ApplicationID=2
SurveyType=I

Language=en-us

AgentIDMinLength=5
AgentIDMaxLength=5
AgentIDNoMatchTries=2
AgentIDNoInputTries=2

CustomerIDMinLength=3
CustomerIDMaxLength=3
CustomerIDNoMatchTries=3
CustomerIDNoInputTries=3

SecondaryCustomerIDMinLength=4
SecondaryCustomerIDMaxLength=4
SecondaryCustomerIDNoMatchTries=3
SecondaryCustomerIDNoInputTries=3

NoMatchTries=3
NoInputTries=3

SurveyQuestionNoMatchTries=2
SurveyQuestionNoInputTries=2
```

3. Start Apache Tomcat.



4. Open the web.xml file located in the <tomcat\_home>/webapps/Inbound\_CSM/WEB-INF directory and modify the file as follows:

- Set the following parameters as shown below.

```

<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
<!DOCTYPE web-app (View Source for full doctype...)>
- <web-app id="WebApp_ID">
- <context-param>
- <param-name>RecordedPhrasePath</param-name>
- <param-value>C:\\CSMAudio\\</param-value>
- <description>Path of the confirmation recorded phrases</description>
- </context-param>
- <context-param>
- <param-name>DefaultRecordedPath</param-name>
- <param-value>C:\\Program Files\\Apache Software Foundation\\Tomcat
  5.5\\webapps\\Inbound_CSM\\data\\temp\\</param-value>
- <description>Path where the recorded files would reside by
  default</description>
- </context-param>
- <context-param>
- <param-name>ConfigurationFilePath</param-name>
- <param-value>C:\\CSMConfig\\inboundcsmconfig.properties</param-value>
- <description>Path of the Inbound CSM Configuration Parameters</description>
- </context-param>
- <context-param>
- <param-name>DynamicAudioFilePath</param-name>
- <param-
  value>http://192.45.20.3:8080/Inbound_CSM_Phrases/english/custom</param-
  value>
- <description>Path of the Inbound CSM Dynamic Audio Files</description>
- </context-param>
- <context-param>
- <param-name>ReleaseLicenseFile</param-name>
- <param-value>C:\\CSM\\CSM_ReleaseLicense_Inbound.txt</param-value>
- <description>Path of the File , that has the license count to be released(DUE
  to License Web Service failure)</description>
- </context-param>
- <context-param>
- <param-name>FailOverDataFile</param-name>
- <param-value>C:\\CSM\\CSM_Inbound.txt</param-value>
- <description>Path of the Inbound CSM Caller Responses are stored(DUE to CSM
  Web Service failure)</description>
- </context-param>

```

- Search for “Inbound\_CSM\_Phrases” and provide the host and port details where the phrases are installed. In this configuration, the phrases are installed on the application server so the host and port details are 192.45.20.3:8080. For example, the entries should appear as follows:

```

- <context-param>
- <param-name>english.phraseset.InboundCSM_Phraseset.urlbase</param-name>
- <param-
  value>http://192.45.20.3:8080/Inbound_CSM_Phrases/english/custom/</param-
  value>
- </context-param>

```

- Update the IP address in the URL for the **iAssist License Web Service**. In this configuration, the IP address should be 192.45.100.190, the IP address of the iAssist Admin server. For example, the entry should appear as follows:

```
- <context-param>
  <param-name>LicenseServer_1248870928532_WS_ENDPOINT</param-name>
  <param-
    value>http://192.45.100.190/iAssistLicenseServer/LicenseServer.svc</param-
    value>
  <description>Web Service end point for LicenseServer</description>
</context-param>
```

- Update the IP address in the URL for the **iAssist CSM Web Service**. In this configuration, the IP address should be 192.45.100.190, the IP address of the iAssist Admin server. For example, the entries should appear as follows:

```
- <context-param>
  <param-name>Service_1249468708288_WS_ENDPOINT</param-name>
  <param-value>http://192.45.100.190/CSMService/Service.svc</param-value>
  <description>Web Service end point for Service</description>
</context-param>
```

## 5. Restart Apache Tomcat.

## 5. Configure Servion iAssist Call Survey Manager

This section provides the steps for configuring the iAssist CSM application via the iAssist Admin application. It is assumed that the iAssist Admin application has already been installed. Refer to [7] for information on installing the iAssist Admin application.

To configure iAssist Call Survey Manager, access the iAssist Admin application by opening a web browser and entering `http://<ip addr>/iAssist`, where `<ip addr>` is the IP address of the iAssist Admin server. Log in using the appropriate credentials. The login screen is displayed below.

**iAssist**  
Ver 1.0

**AVAYA**

### Callback Manager

Reaching callers at their convenience

Offers queue management capabilities by providing Call / Contact Centers with the ability to offer queued callers the option to continue to wait in queue, request a call back when an agent of a particular skill set is available or schedule a call back for a later caller specified date and time.

The capability to also log web callback provides a powerful callback management capability over voice and web.

### Login

User Name:

Password:

Callback Manager

Survey Manager

Store Locator

Order Status

Site best viewed in Internet Explorer 6+ at a screen resolution of 1024 x 768 pixels | © Servion<sup>†</sup> Global Solutions

After successfully logging in, the main screen is displayed.

iAssist Ver 1.0

AVAYA

Home Manage Site Business Group CBM CSM

Welcome admin | [Logout](#)

**Change Password**

Password:

New Password:

Confirm Password:

[Change Password](#) [Cancel](#)

Site best viewed in Internet Explorer 6+ at a screen resolution of 1024 x 768 pixels | © Servion<sup>1</sup> Global Solutions

From the iAssist Admin menu, click on **Site** to add a new site. A site defines the location where the CSM application will run. Provide a **Site Name** and specify the IP address of the application server in the **Site IP Address(es)** field as shown below. Click **Create Site** to save the changes.

iAssist Ver 1.0

AVAYA

Home Manage Site Business Group CBM CSM

Welcome admin | [Logout](#)

**Site Management**

Site Name \*

Site IP Address(es) \*  Press enter key to type multiple IP addresses.

[Create Site](#)

**Defined Sites**

Site best viewed in Internet Explorer 6+ at a screen resolution of 1024 x 768 pixels | © Servion<sup>1</sup> Global Solutions

Select the **Business Group** option in the menu to create a business group. In the following screen, provide a **Business Group Name** such as “BG2”, set the **Incoming Number** to the VDN which routes calls to Voice Portal (e.g., 70001), choose the **Site** configured above and select the appropriate **Language**. Click **Create Business Group** to save the changes.

**iAssist Ver 1.0** **AVAYA**

Home Manage Site Business Group CBM CSM Welcome admin | [Logout](#)

### Business Group Management

Business Group Name *	BG2
Incoming Number *	70001
Site	Avaya1 ▼
Language	ENG ▼

[Create Business Group](#)

### Defined Business Group(s)

Business Group	Edit	Delete
BG1		

Site best viewed in Internet Explorer 6+ at a screen resolution of 1024 x 768 pixels | © Servion Global Solutions

The next step is to start creating a new survey for the iAssist CSM application by navigating to **CSM→Survey** as shown below.

**iAssist Ver 1.0** **AVAYA**

Home Manage Site Business Group CBM CSM Welcome admin | [Logout](#)

Survey  
Survey Question  
Map Questions  
Reports

### Business Group Management

Business Group Name *	BG2
Incoming Number *	70001
Site	Avaya1 ▼
Language	ENG ▼

[Update Business Group](#) [Cancel](#)

### Defined Business Group(s)

Business Group	Edit	Delete
BG1		
BG2		

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In the **Create New Survey** screen, provide a descriptive **Survey Name** and select the appropriate **Survey Type** and **Business Group Name**. Lastly, specify the timeframe in which this survey should be active. Click **Create Survey** to save the changes.

**iAssist**  
Ver 1.0

**AVAYA**

Home Manage Site Business Group CBM CSM Welcome admin | [Logout](#)

### Create New Survey

SurveyName *	AvayaTest
SurveyType *	IVRSurvey ▼
BusinessGroupName *	BG2 ▼
Active Start Time * (MM/DD/YYYY HH:MM:SS)	08/31/2009 12:00:00 AM
Active End Time * (MM/DD/YYYY HH:MM:SS)	08/31/2009 11:59:59 PM

[Create Survey](#)

### Defined Survey

Site best viewed in Internet Explorer 6+ at a screen resolution of 1024 x 768 pixels | © Servion<sup>†</sup> Global Solutions

From iAssist Admin, navigate to **CSM→Survey Question** as shown below. The following screen will allow the user to create the survey questions.

The screenshot displays the iAssist Admin interface. At the top, there is a blue header with the 'iAssist Ver 1.0' logo on the left and the 'AVAYA' logo on the right. Below the header is a navigation bar with links: Home, Manage, Site, Business Group, CBM, and CSM. On the right side of the navigation bar, it says 'Welcome admin | Logout'.

The main content area is divided into two sections. On the left is the 'Create New Survey' form, and on the right is the 'Defined Survey' table.

**Create New Survey Form:**

- SurveyName \***: Text input field containing 'AvayaTest'.
- SurveyType \***: Dropdown menu showing 'IVRSurvey'.
- BusinessGroupName \***: Dropdown menu showing 'BG2'.
- Active Start Time \***: Text input field containing '08/31/2009 12:00:00 AM'. Below the field is the format '(MM/DD/YYYY HH:MM:SS)'.
- Active End Time \***: Text input field containing '08/31/2009 11:59:59 PM'. Below the field is the format '(MM/DD/YYYY HH:MM:SS)'.
- Buttons: 'Update Survey' and 'Cancel'.

**Defined Survey Table:**

Survey	Edit	Delete
AvayaTest		

At the bottom of the page, a blue footer bar contains the text: 'Site best viewed in Internet Explorer 6+ at a screen resolution of 1024 x 768 pixels | © Servion<sup>1</sup> Global Solutions'.

In the **Create Survey Questions** screen, configure each individual survey question. In the **Question** field, enter a descriptive question name or the question in text format. The **Question File Name** provides a voice file that plays the question to the caller. The **Question Type** field specifies the response type expected for the question, such as Yes/No, number within a particular range, etc. Click **Create Survey Question** to save the changes. Repeat this step for each survey question.

**iAssist**  
Ver 1.0

Home Manage Site Business Group CBM CSM

Welcome admin | [Logout](#)

### Create Survey Questions

Question *	<input type="text" value="question1"/>
Question File Name *	<input type="text" value="question1.wav"/>
Question Type *	YesNo ▼

[Create Survey Question](#)

### Bulk Upload

Question File	<input type="text"/>	<a href="#">Browse...</a>
---------------	----------------------	---------------------------

[Upload](#)

### Defined Survey Questions





The following screen lists 10 questions created for the survey in the left pane.

The screenshot shows the iAssist Ver 1.0 interface. The top navigation bar includes links for Home, Manage, Site, Business Group, CBM, and CSM. The user is logged in as 'admin'. The main content area is divided into two panes. The left pane, titled 'Create Survey Questions', contains a form with fields for 'Question \*', 'Question File Name \*', and 'Question Type \*' (with a dropdown menu set to 'YesNo'). Below the form is a 'Create Survey Question' button. The right pane, titled 'Defined Survey Questions', displays a table of 10 questions (question1 through question10) with 'Edit' and 'Delete' icons for each. The bottom section of the left pane is titled 'Bulk Upload' and includes a 'Question File' field, a 'Browse...' button, and an 'Upload' button.

Next, navigate to **CSM→Map Questions** to select the questions that comprise the survey and to specify the order in which the questions are answered.

The screenshot shows the iAssist Ver 1.0 interface. The top navigation bar includes links for Home, Manage, Site, Business Group, CBM, and CSM. The user is logged in as 'admin'. The main content area is divided into two panes. The left pane, titled 'Business Group Management', contains a form with fields for 'Business Group Name \*', 'Incoming Number \*', 'Site' (with a dropdown menu set to 'Avaya1'), and 'Language' (with a dropdown menu set to 'ENG'). Below the form is a 'Create Business Group' button. The right pane, titled 'Defined Business Group(s)', displays a table of 2 business groups (BG1 and BG2) with 'Edit' and 'Delete' icons for each. A dropdown menu is open over the 'Map Questions' link in the top navigation bar, showing options for Survey, Survey Question, Map Questions, and Reports.

In the **Map survey questions** screen, select the questions to include in the survey identified in the **Select Survey** field and specify the flow or sequence of the questions. In addition, the next question can be selected dynamically based on the response to the current question. Click **Map Questions** to save the changes.

[Home](#)
[Manage](#)
[Site](#)
[Business Group](#)
[CBM](#)
[CSM](#)
Welcome admin | [Logout](#)

### Map survey questions

Select Survey \*
AvayaTest ▼

Select	Question No	Flow Order	Question	Question Type	Next Question1	Next Question2	Next Question3	Next Question4	Next Question5	Allow record
<input checked="" type="checkbox"/>	1	<input type="text" value="1"/>	question1	Yes/No	<input type="text" value="2"/> ▼	<input type="text" value="2"/> ▼				<input type="checkbox"/>
<input type="checkbox"/>	10	<input type="text"/>	question10	Number	<input type="text" value="End"/> ▼					<input type="checkbox"/>
<input checked="" type="checkbox"/>	2	<input type="text" value="2"/>	question2	Yes/No	<input type="text" value="3"/> ▼	<input type="text" value="3"/> ▼				<input type="checkbox"/>
<input checked="" type="checkbox"/>	3	<input type="text" value="3"/>	question3	Yes/No	<input type="text" value="End"/> ▼	<input type="text" value="End"/> ▼				<input type="checkbox"/>
<input type="checkbox"/>	4	<input type="text"/>	question4	Yes/No	<input type="text" value="End"/> ▼	<input type="text" value="End"/> ▼				<input type="checkbox"/>
<input type="checkbox"/>	5	<input type="text"/>	question5	Yes/No	<input type="text" value="End"/> ▼	<input type="text" value="End"/> ▼				<input type="checkbox"/>

Map Questions

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## 6. General Test Approach and Test Results

This section describes the interoperability compliance testing used to verify the iAssist CSM applications with Avaya Voice Portal.

The interoperability compliance test included feature and serviceability testing. The feature testing focused on routing calls to Voice Portal and running the iAssist CSM application to allow the caller to provide agent or product feedback. After the survey was completed, a survey report was generated to review the survey responses. In addition, it was verified that the CSM application handled error conditions, such as entering an invalid response, properly.

The serviceability testing focused on verifying the ability of iAssist Admin server and Avaya Voice Portal to recover from adverse conditions, such as power failures and disconnecting cables to the IP network.

All test cases passed. Avaya Voice Portal was successful in running the iAssist CSM application.

## 7. Verification Steps

This section provides the verification steps that may be performed to verify that Voice Portal can run the iAssist CSM application.

1. From the VPMS web interface, verify that the MPP server is online and running in the **System Monitor** page shown below.

**AVAYA** Welcome, admin  
Last logged in today at 3:30:54 PM EDT

**Voice Portal 5.0 (VoicePortal)** Home Help Logoff

Expand All | Collapse All

You are here: [Home](#) > System Management > MPP Manager

### MPP Manager (8/5/09 4:51:56 PM EDT)

[Refresh](#)

This page displays the current state of each MPP in the Voice Portal system. To enable the state and mode commands, select one or more MPPs. To enable the mode commands, the selected MPPs must also be stopped.

Last Poll: 8/5/09 4:51:37 PM EDT

	Server Name	Mode	State	Config	Auto Restart	Restart Schedule		Active Calls	
						Today	Recurring	In	Out
<input type="checkbox"/>	mpp1	Online	Running	OK	No	No	None	0	0

**State Commands**

[Start](#) [Stop](#) [Restart](#) [Reboot](#) [Halt](#) [Cancel](#)

**Mode Commands**

[Offline](#) [Test](#) [Online](#)

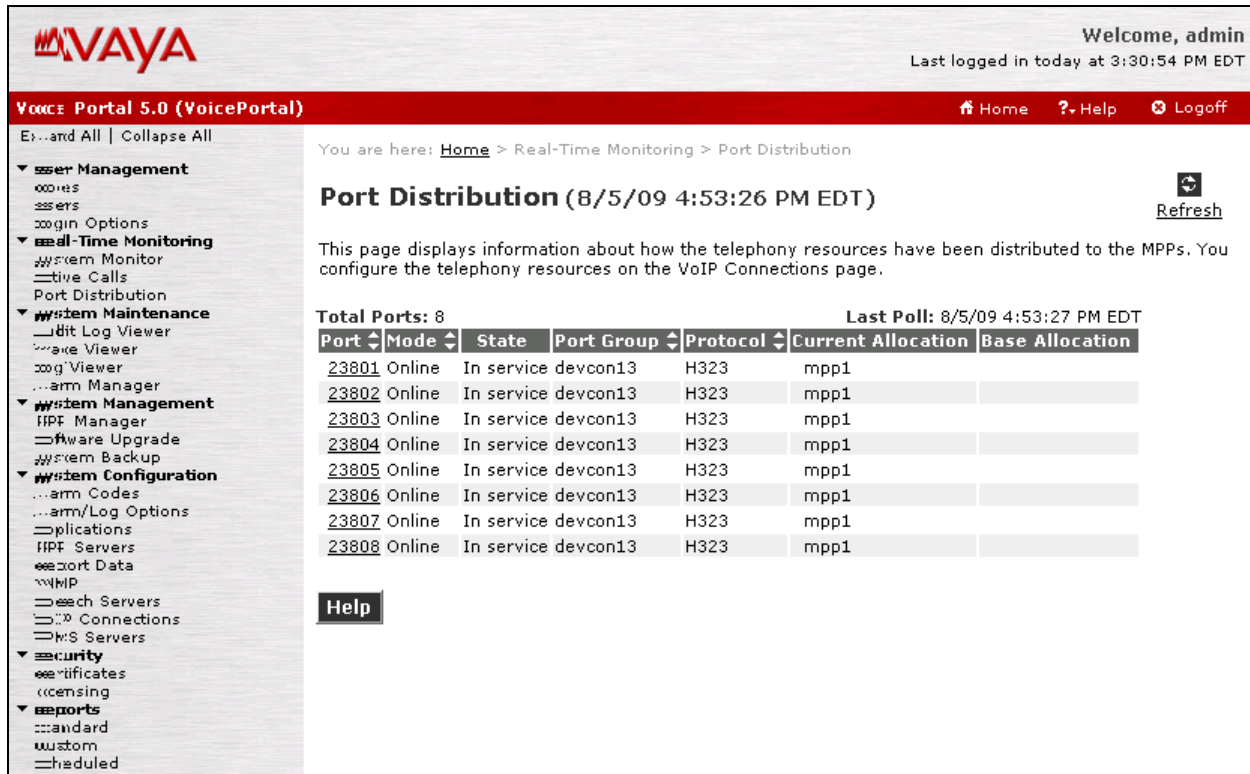
[Help](#)

**Restart/Reboot Options**

☐ One server at a time

☒ All selected servers at the same time

- From the VPMS web interface, verify that the ports on the MPP server are in-service in the **Port Distribution** page shown below.



**VAYA** Welcome, admin  
Last logged in today at 3:30:54 PM EDT

**VOICE Portal 5.0 (VoicePortal)** Home Help Logoff

Expand All | Collapse All

**Port Distribution (8/5/09 4:53:26 PM EDT)** Refresh

This page displays information about how the telephony resources have been distributed to the MPPs. You configure the telephony resources on the VoIP Connections page.

Total Ports: 8 Last Poll: 8/5/09 4:53:27 PM EDT



Port	Mode	State	Port Group	Protocol	Current Allocation	Base Allocation
23801	Online	In service	devcon13	H323	mpp1	
23802	Online	In service	devcon13	H323	mpp1	
23803	Online	In service	devcon13	H323	mpp1	
23804	Online	In service	devcon13	H323	mpp1	
23805	Online	In service	devcon13	H323	mpp1	
23806	Online	In service	devcon13	H323	mpp1	
23807	Online	In service	devcon13	H323	mpp1	
23808	Online	In service	devcon13	H323	mpp1	

Help

**Figure 2: Port Distribution**

- Place a call to the VDN and verify that the call is routed to Voice Portal and the CSM greeting is played to the caller. Enter the customer ID and respond to the questions.

4. Verify that the survey responses were saved to the database. From iAssist Admin, navigate to **CSM→Reports** to display the **Select Report** page. Request a **Survey Response Report** and specify the appropriate values for the other fields. Click **Show Report**.



HomeManageSiteBusiness GroupCBMCSMWelcome admin | [Logout](#)


### Select Report


Report *	Survey Response Report ▼
Site *	Avaya1 ▼
Business Group *	BG2 ▼
Survey *	AvayaTest ▼
From Date/Time (MM/DD/YYYY) *	08/31/2009 12:00:00 AM
To Date/Time (MM/DD/YYYY) *	08/31/2009 11:59:59 PM
Customer ID	321
Secondary Customer ID	
ANI	
Show Recordfile	<input type="checkbox"/>

Show Report

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5. The Survey Response Report is displayed with the caller's survey responses.





[Home](#) [Manage](#) [Site](#) [Business Group](#) [CBM](#) [CSM](#)

Welcome admin | [Logout](#)

      1 / 1   

### Survey Response Report

From Date : 8/31/2009 12:00:00AM	Business Group : BG2	ANI :
To Date : 8/31/2009 11:59:59 PM	SurveyName : AvayaTest	Sec.Customer ID:
Site : Avaya1	Customer ID : 321	

Survey Responses

ANI: 24511

Question: question1

Answer : yes

Question: question2

Answer : yes

Question: question3

Answer : no

## 8. Conclusion

These Application Notes describe the configuration steps required to integrate the Servion iAssist Call Survey Manager application with Avaya Voice Portal. All feature and serviceability test cases were completed successfully.

## 9. Additional References

This section references the product documentation that is relevant to these Application Notes.

- [1] *Administering Avaya Aura<sup>TM</sup> Communication Manager*, Document 03-300509, Issue 5, May 2009, available at <http://support.avaya.com>.
- [2] *Avaya Aura<sup>TM</sup> Communication Manager Feature Description and Implementation*, Document 555-245-205, Issue 7, May 2009, available at <http://support.avaya.com>.
- [3] *Implementing Avaya Voice Portal on multiple servers*, March 2009, available at <http://support.avaya.com>.
- [4] *Administering Avaya Voice Portal*, March 2009, available at <http://support.avaya.com>.
- [5] *Avaya Dialog Designer Developer's Guide Release 4.1*, available at <http://support.avaya.com>.
- [6] *Application Notes for Servion iAssist Call Back Manager with Avaya Voice Portal*, Issue 1.0, available at <http://www.avaya.com>.
- [7] *iAssist CSM Installation Manual*.



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