

#### Avaya Solution & Interoperability Test Lab

# Application Notes for Avaya GlobalConnect SurveyByFone with Avaya Voice Portal - Issue 1.0

#### **Abstract**

These Application Notes describe the configuration steps required for Avaya GlobalConnect SurveyByFone (SBF) to interoperate with Avaya Voice Portal. Avaya GlobalConnect SBF is an application designed and developed to quickly conduct surveys over the phone by an automated system. The application allows the survey administrator the ability to dynamically create feedback/survey campaigns.

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

Avaya GlobalConnect SurveyByFone is an application designed and developed to quickly conduct surveys over the phone by an automated system. The application allows the survey administrator the ability to dynamically create feedback/survey campaigns. The administrator can create such call flows with absolutely no knowledge of Interactive Voice Response (IVR). The extensive feedback repository allows management to perform a detailed analysis of the survey.

Avaya GlobalConnect SBF handles the call flow designed by SurveyByFone Administrator which is a GUI based application. SurveyByFone Archival Server is used to archive the voice recording files as well as to host the reporting web application. The SurveyByFone Reporter application allows viewing the detailed survey responses for a campaign. The report can be opened in an Internet browser window.

During compliance testing, calls were placed to Avaya Communication Manager and delivered to Avaya Voice Portal administered as phantom IP stations with type "7434ND" on Avaya Communication Manager. The Avaya GlobalConnect SBF runs on a dedicated application server, running Windows 2003 Server. Avaya Voice Portal ran the Avaya GlobalConnect SBF application from an Apache Tomcat Server. A campaign is executed on phantom IP stations which are configured through the SurveyByFone Administrator GUI.

#### 1.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing. Feature testing focused on verifying that Avaya GlobalConnect SBF successfully executed the campaign as per the call flow designed by the SurveyByFone Administrator GUI. Serviceability testing verified that Avaya GlobalConnect SBF recovered from adverse conditions, such as rebooting Avaya GlobalConnect SBF server and disconnecting the ethernet cable to the Avaya GlobalConnect SBF server.

### 1.2. Support

Technical support on Avaya GlobalConnect SBF can be obtained through the following:

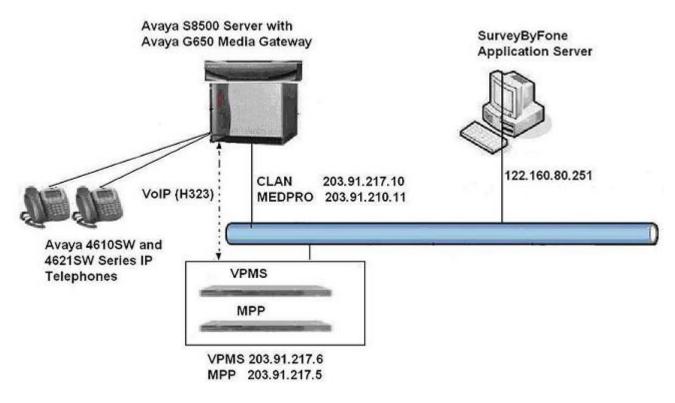
• Web: http://www.avayaglobalconnect.com

• **Phone:** +91-124-4093433

• **Email:** mehool.panchal@avayaglobalconnect.com

## 2. Reference Configuration

**Figure 1** illustrates the test configuration used to verify the Avaya GlobalConnect SBF solution, installed on a Microsoft Windows 2003 Server. The VoiceXML application is deployed on a Tomcat application server, installed on the Windows Server. Avaya Voice Portal is connected to Avaya Communication Manager running on the Avaya S8500 Server and G650 Media Gateway using H.323 VoIP Connections. Avaya IP telephones were used to place calls to Avaya Voice Portal, which would run the VoiceXML application. The application would play the campaign as per the call flow. Each node in the call flow is associated with a phrase which is a .wav file in the CCITT mu-law, 8 KHz, 8-bit Mono format.



**Figure 1: Compliance Test Configuration** 

# 3. Equipment and Software Validated

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

| Equipment   | Software            |  |  |
|---|---------------------|--|--|
| Avaya S8500 Server with Avaya G650 Media Gateway          | Avaya Communication |  |  |
|   | Manager 5.1,        |  |  |
|   | R015x.01.0.414.3    |  |  |
| Avaya Voice Portal  |                     |  |  |
| <ul> <li>Voice Portal Management System (VPMS)</li> </ul> | RHE4.0.AV12.2VP2    |  |  |
| <ul> <li>Media Processing Platform (MPP)</li> </ul>       | RHE4.0.AV12.2VP2    |  |  |
| Avaya 4600 Series H.323 IP Telephones                     |                     |  |  |
| ■ 4610SW  | 2.2                 |  |  |
| ■ 4621SW  | 2.2                 |  |  |
| SurveyByFone (Dialog Designer Application)                | 2.0                 |  |  |
| SurveyByFone Administrator                                | 2.1                 |  |  |
| SurveyByFone Archival                                     | 2.1                 |  |  |
| SurveyByFone Reporter                                     | 2.0                 |  |  |

# 4. Configure Avaya Communication Manager

This section provides the procedure for configuring Avaya Communication Manager. Avaya System Access Terminal (SAT) is used to issue the commands. The procedure includes the following areas:

- Display available license.
- Administer system parameters features.
- Administer IP codec set.
- Administer stations.

| Step | Description   |                           |      |               |  |  |  |  |
|------|---|---------------------------|------|---------------|--|--|--|--|
| 1.   | Use the <b>display system-parameters customer-options command</b> . On Page 10, verify that the <b>Limit</b> field for <b>IP_API_A</b> has a value greater than or equal to the number of channels configured on Avaya Voice Portal in <b>Section 5 Step 2</b> . In this configuration, seven Voice Portal ports were configured for testing. |                           |      |               |  |  |  |  |
|      |   | rameters customer-options |      | Page 10 of 11 |  |  |  |  |
|      | Product ID  | Rel. Limit                | Used |               |  |  |  |  |
|      | AgentSC   | : 2400                    | 0    |               |  |  |  |  |
|      | IP_API_A  | : 2400                    | 7    |               |  |  |  |  |
|      | IP_API_B  | : 10                      | 0    |               |  |  |  |  |
|      | IP_API_C  | : 10                      | 0    |               |  |  |  |  |
|      | IP_Agent  | : 2400                    | 0    |               |  |  |  |  |
|      | IP_IR_A   | : 10                      | 0    |               |  |  |  |  |
|      | IP_Phone  | : 2400                    | 1    |               |  |  |  |  |
|      | IP_RoMax  | : 2400                    | 0    |               |  |  |  |  |
|      | IP_Soft   | : 2400                    | 0    |               |  |  |  |  |
|      | IP_eCons  | : 28                      | 0    |               |  |  |  |  |
|      | OneX_Comm   | : 2400                    | 0    |               |  |  |  |  |

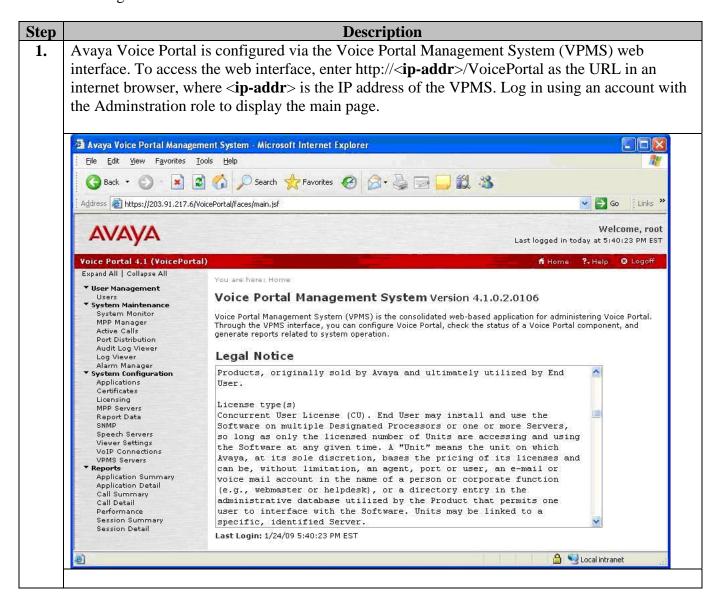
| Step |  |                                   | Desc         | ription     |          |                        |  |  |  |
|------|--|-----------------------------------|--------------|-------------|----------|------------------------|--|--|--|
| 2.   | Use the <b>change system-parameters features</b> command. On Page 6, set <b>7434ND</b> to <b>y</b> .   |                                   |              |             |          |                        |  |  |  |
|      | change system-param  | Page 6 of 17                      |              |             |          |                        |  |  |  |
|      | FEATURE-RELATED SYS  |                                   |              |             |          |                        |  |  |  |
|      | Public Netw  | Auto Start? n                     |              |             |          |                        |  |  |  |
|      | Conference Parti Conference Parties  | Auto Hold? n<br>Attendant Tone? y |              |             |          |                        |  |  |  |
|      | Night Servi  | Bridging Tone? n                  |              |             |          |                        |  |  |  |
|      |  | ort Interdigit                    |              |             |          | Conference Tone? n     |  |  |  |
|      |  | ered DID Call                     |              |             |          | Intrusion Tone? n      |  |  |  |
|      |  | ntercept Tone                     |              |             |          | Mode Code Interface? n |  |  |  |
|      | 20.  | Reset Shift                       |              |             |          |                        |  |  |  |
|      | Station Call Tr  | ansfer Recall                     | l Timer (s   | seconds):   | 0        | Recall from VDN? n     |  |  |  |
|      |  | DI                                | ID Busy Tr   | reatment:   | tone     |                        |  |  |  |
|      | Allow  | AAR/ARS Acce                      | ess from I   | DID/DIOD?   | N        |                        |  |  |  |
|      |  | ow ANI Restri                     |              | ,           |          |                        |  |  |  |
|      | Use Trunk COR  | for Outgoing 05ND Numeric         |              |             |          | 7434ND? y              |  |  |  |
|      |  |                                   | Terminar     | Display:    | 11       | /434ND: Y              |  |  |  |
|      | DISTINCTIVE AUDIBLE ALERTING  Internal: 1 External: 2 Priority: 3  |                                   |              |             |          |                        |  |  |  |
|      |  | Attendant                         | Originate    | ed Calls:   | external |                        |  |  |  |
| 3.   | Enter the <b>change ip-codec-set m</b> command where <b>m</b> is a valid IP codec-set associated wit the IP network region of the Avaya Voice Portal ports. Set Audio Code to an appropriate value supported by Avaya Voice Portal. In this configuration, the <b>G.711MU</b> codec was us |                                   |              |             |          |                        |  |  |  |
|      | change ip-codec-set  | : 1                               | IP Code      | a Set       |          | Page 1 of 2            |  |  |  |
|      |  |                                   | IF COUC      | c bcc       |          |                        |  |  |  |
|      | Codec Set: 1   |                                   |              |             |          |                        |  |  |  |
|      | Audio  | Silence                           | Frames       | Packet      |          |                        |  |  |  |
|      | Codec<br>1: <b>G.711MU</b>   | Suppression <b>n</b>              | Per Pkt<br>2 | Size(ms) 20 |          |                        |  |  |  |
|      | 2: G.729   | n                                 | 2            | 20          |          |                        |  |  |  |
|      | 3: G.729A  | n                                 | 2            | 20          |          |                        |  |  |  |
|      | 4: G.729AB   | n                                 | 2            | 20          |          |                        |  |  |  |
|      | 5:<br>6:   |                                   |              |             |          |                        |  |  |  |
|      | 7:   |                                   |              |             |          |                        |  |  |  |
|      |  |                                   |              |             |          |                        |  |  |  |

| Step | Description   |                               |        |        |   |  |  |  |  |
|------|---|-------------------------------|--------|--------|---|--|--|--|--|
| 4.   | Enter the <b>add station n</b> command where <b>n</b> is a valid extension, to configure the stations to be used by Avaya Voice Portal. |                               |        |        |   |  |  |  |  |
|      | <ul> <li>Type: Enter station type 7434ND.</li> <li>Name: Enter a descriptive name.</li> </ul>   |                               |        |        |   |  |  |  |  |
|      | • Security Code: Enter a desired station security code.   |                               |        |        |   |  |  |  |  |
|      | add station 2000  |                               | Page   | 1 of   | 6 |  |  |  |  |
|      | ST  | ATION                         |        |        |   |  |  |  |  |
|      | Extension: 2000   | Lock Messages? N              |        | BCC: 0 |   |  |  |  |  |
|      | Type: 7434ND  | Security Code: 12345          |        | TN: 1  |   |  |  |  |  |
|      | Port: S00067  | Coverage Path 1:              |        | COR: 1 |   |  |  |  |  |
|      | Name: Voice Portal Station 1  |                               | cos: 1 |        |   |  |  |  |  |
|      |   | Hunt-to Station:              |        |        |   |  |  |  |  |
|      | STATION OPTIONS   |                               |        |        |   |  |  |  |  |
|      |   | Time of Day Lock Table:       |        |        |   |  |  |  |  |
|      | Loss Group: 2   | Personalized Ringing Pattern: | 1      |        |   |  |  |  |  |
|      | Data Module? n  | Message Lamp Ext:             | 2000   |        |   |  |  |  |  |
|      | Display Module? n   |                               |        |        |   |  |  |  |  |
|      | Display Language: English   | Coverage Module?              | N      |        |   |  |  |  |  |
|      | Survivable COR: internal  | Media Complex Ext:            |        |        |   |  |  |  |  |
|      | Survivable Trunk Dest? y  | IP SoftPhone?                 | n      |        |   |  |  |  |  |
|      |   | IP Video Softphone?           | N      |        |   |  |  |  |  |
|      |   |                               |        |        |   |  |  |  |  |

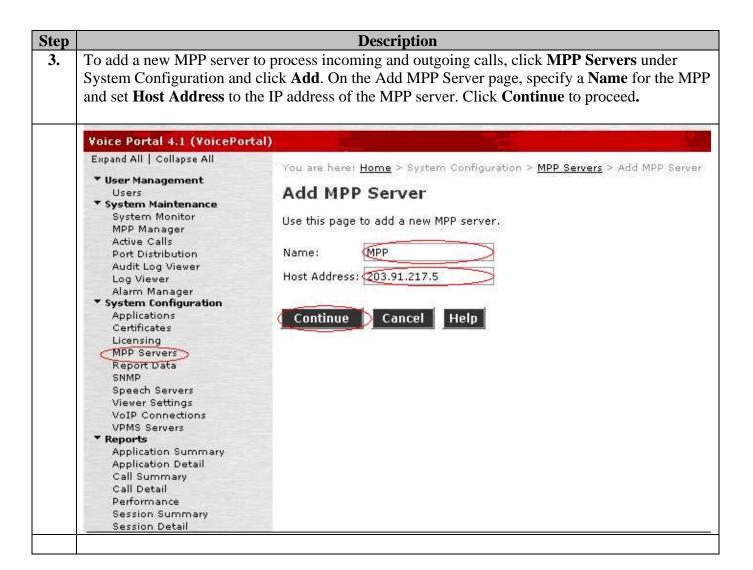
## 5. Configure Avaya Voice Portal

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

- Configuring an H.323 VoIP connection.
- Adding an MPP server.
- Adding applications.
- Starting the MPP server.







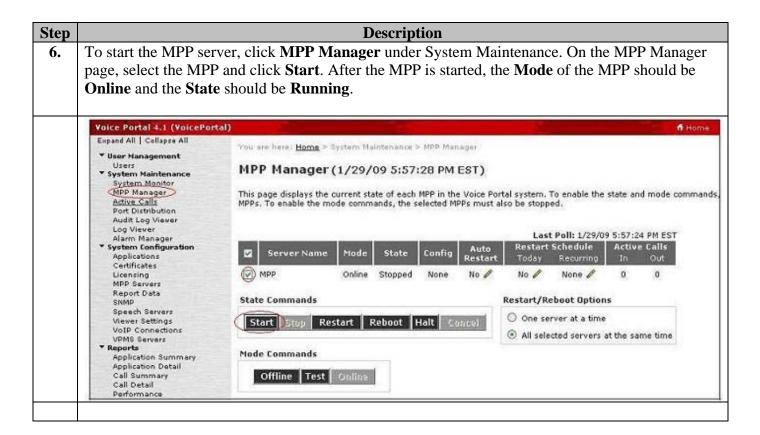
**Description** Step On the Add MPP Server configuration page, specify the **Host Address** of each MPP server. Also, 4. specify the Maximum Simultaneous Calls supported by each MPP server. Check Trust this certificate and click Save. You are here: Home > System Configuration > MPP Servers > Add MPP Server Add MPP Server Use this page to change the configuration of an MPP. Take care when changing the MPP Trace Logging Thresholds. Do not set Trace Levels to Finest if your Voice Portal system has heavy call traffic. The system might experience performance issues if Trace Levels are set to Finest. Set Trace Levels to Finest only when you are troubleshooting the system. 203.91.217.5 Host Address: <Default> Network Address (VoIP): Network Address (MRCP): <Default> Maximum Simultaneous Calls: (7 Restart Automatically: O Yes @ No MPP Certificate The following certificate was sent by the MPP for verification. The displayed certificate should be identical to the certificate established during the installation of the target MPP. Acceptance of the certificate will allow the MPP access to privileged services on the VPMS. If the certificate does not match, ensure that the host address has been entered correctly. Owner: CN=MPP, O=Avaya, OU=MPP Issuer: CN-MPP, 0-Avaya, 0U-MPP Serial Number: b8967919285ed14e Valid from: Tue Jan 13 06:15:17 EST 2009 until: Fri Jan 11 06:15:17 EST 2019 Certificate fingerprints MD5: 8a:b8:c6:a9:5c:c0:f9:a2:e1:9d:4b:91:91:14:63:ea SHA: aa:4d:4b:52:ad:bc:24:4c:5a:c6:74:71:82:8f:57:27:64:da:d5:f1 Trust this certificate Categories and Trace Levels > Save Cancel Help

**Description** Step To add an Avaya Voice Portal application, click **Applications** under System Configuration and 5. then click **Add** on the **Applications** page. This configuration assigns a VoiceXML application SurveyByFone deployed on the Apache Tomcat Server to the Voice Portal station from 2000 to 2006. Set MIME Type to VoiceXML and set VoiceXML URL to http://<IP address of Apache Tomcat server>:Port/SBF/Start. Use Number Range option to assign the application to multiple Voice Portal stations in a single step. Click **Save**. Voice Portal 4.1 (VoicePortal) Expand All | Collapse All You are here: Home > System Configuration > Applications > Add Application \* User Management Add Application Users \* System Maintenance System Monitor Use this page to deploy and configure a new VoiceXML or CCXML application on the Voice Portal system. MPP Manager Active Calls Name: SurveyByFone Port Distribution Audit Log Viewer Enable: @ Yes O No Log Viewer Alarm Manager MIME Type: VoiceXML System Configuration Applications VoiceXML URL:: http://122.160.80.251:8080/SBF/Start Verify Certificates Licensing MPP Servers Report Data Speech Servers SNMP ASR: No ASR TTS: No TTS Speech Servers Viewer Settings **VoIP** Connections VPMS Servers \* Reports
Application Summary Application Launch Application Detail Type: 

Inbound 

Inbound Default 

Outbound Call Summary Call Detail Performance O Number O Number Range O URI Session Summary Session Detail Called Number: 2000 - 2006 Remove Save ) Apply | Cancel | Help



## 6. Configure Avaya GlobalConnect SBF

This section provides the procedure for configuring Avaya GlobalConnect SBF. This procedure includes the following areas:

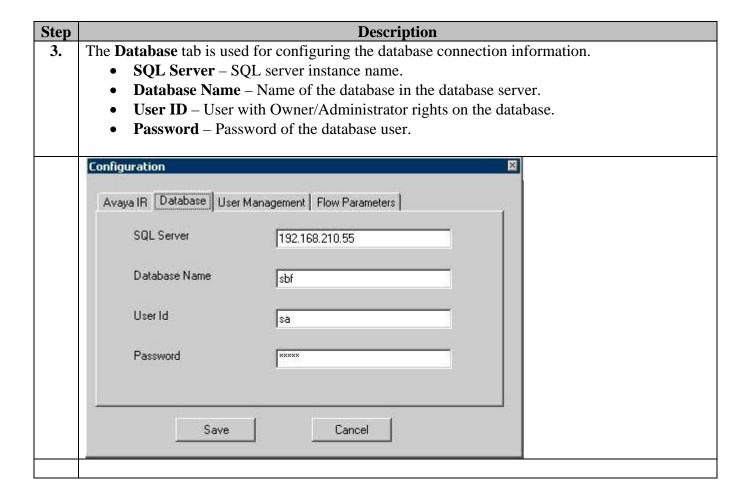
- Administer settings for SBF Administrator.
- Administer settings for SBF Archival.
- Administer settings for SBF Reports.

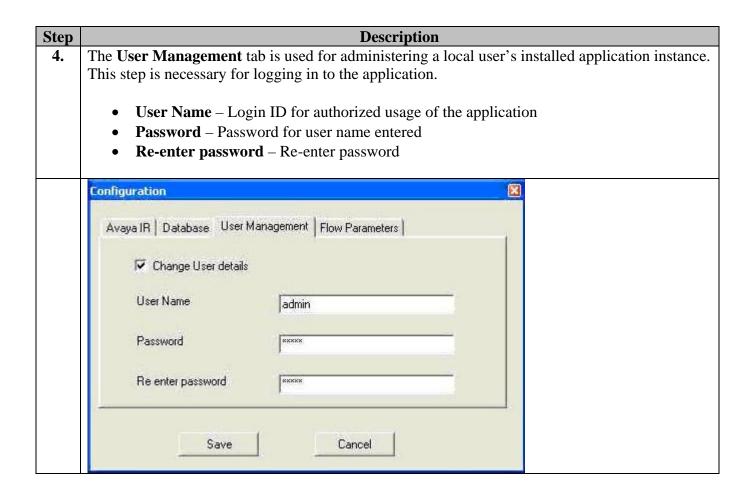
Configuration of Avaya GlobalConnect SBF is typically performed by Avaya GlobalConnect technicians. The procedural steps are presented in these Application Notes for informational purposes.

## 6.1. Administer Settings for SBF Administrator

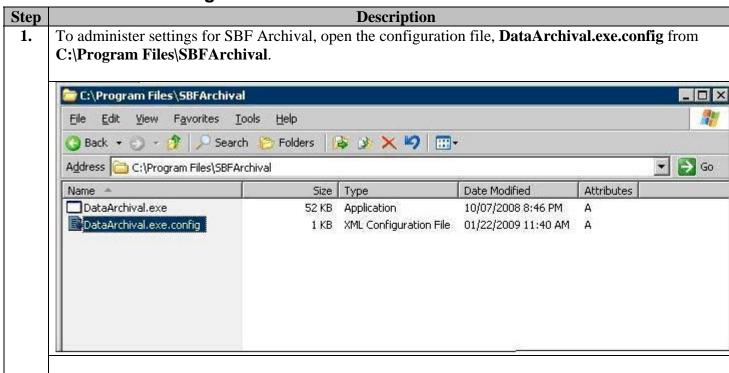
| Step | Description  |  |  |  |  |  |  |  |  |
|------|--|--|--|--|--|--|--|--|--|
| 1.   | To administer settings for SBF Administrator, launch the application by navigating to <b>Start -&gt;</b> |  |  |  |  |  |  |  |  |
|      | <b>Programs -&gt; Survey Admin.</b> On the first execution of the application, a configuration window    |  |  |  |  |  |  |  |  |
|      | appears. The configuration has to be performed only once; however, it has to be updated if any           |  |  |  |  |  |  |  |  |
|      | parameter value is updated.  |  |  |  |  |  |  |  |  |
|      | The configuration window has the following three tabs:   |  |  |  |  |  |  |  |  |
|      |  |  |  |  |  |  |  |  |  |
|      | Avaya IR   |  |  |  |  |  |  |  |  |
|      | • Database   |  |  |  |  |  |  |  |  |
|      | User Management  |  |  |  |  |  |  |  |  |
|      |  |  |  |  |  |  |  |  |  |
|      |  |  |  |  |  |  |  |  |  |

### Step **Description** Avaya IR tab is used for configuring IR FTP information. 2. Select – Type of IVR system used. Valid options are AVP and AIR. AVP is entered here for Avaya Voice Portal. **IP Address** – **IP** Address of the IR system. **Login** – AIR user id having FTP rights. **Password** – Password of the ftp user. **Voice Home** – Path on IVR where phrases files will be stored. Configuration Avaya IR Database User Management Flow Parameters AVP $\blacksquare$ Select 192.168.210.55 IP Address Login administrator \*\*\*\*\*\* Password Voice Home /sbf/data/english/phrases Save Cancel



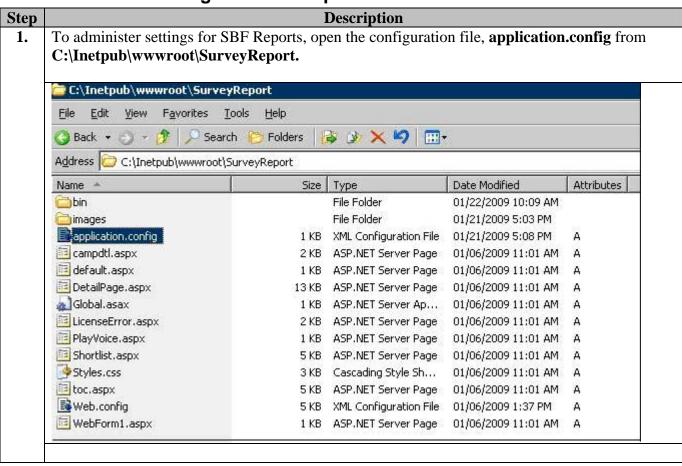


#### 6.2. Administer Settings for SBF Archival



#### Step **Description** Set the parameters for **DataArchival.exe.config file** as under, 2. **SqlConstr** – SQL database connection string. **IRIP** – IP address of the recorded voice files for the customer responses. **FTPUser** – IR user id having ftp rights. **FTPPassword** – Password of the ftp user. **RemoteDirPath** – Path on IR where the recorded voice files are located. **LogPath** – Path on local machine where error log file will be created. • LocalPath – Path on local machine where the recorded voice files will be downloaded from IR. **Type** – Type of the IR system used. C:\Program Files\SBFArchival\DataArchival.exe.config File Edit View Favorites Tools Help 🕣 Back 🕶 🌖 💌 📳 🥻 🔑 Search 🐈 Favorites 🥙 🔝 📞 🔜 🗾 Address C:\Program Files\SBFArchival\DataArchival.exe.config <?xml version="1.0" encoding="utf-8" ?> - <configuration> - <appSettings> <add key="SqlConstr" value="Data Source=192.168.210.55;Initial Catalog=SBF;UID=sa;PWD=admin" /> <add key="IRIP" value="192.168.210.55" /> <add key="FTPUser" value="administrator" /> <add key="FTPPassword" value="voiceresume" /> <add key="RemoteDirPath" value="/sbfrecordings" /> <add key="LogPath" value="C:\ErrorLog" /> <add key="LocalPath" value="C:\Download" /> <add key="Type" value="AVP" /> </appSettings> </configuration>

#### 6.3. Administer Settings for SBF Reports



#### **Description** Step Set the parameters for the **application.config** file as under, 2. **dbConnectionString** – Set the connection string of SBF database. • irAddress – Set the IP address of Avaya IR/AVP machine. IP address of the AVP is used here for Avaya Voice Portal **archiveAddress** – Set the virtual directory address of the archival folder. Note: If the LocalPath property in DataArchival.exe.config file is set to C:\SBFArchive\Voice, then create a virtual directory sufArchive and point it to the above directory. Set the archiveAddress property of the Reporter web application as, http://<Server>/sufArchive/. C:\Inetpub\wwwroot\SurveyReport\application.config File Edit View Favorites Tools Help 🕠 Back 🕶 🔊 🔻 🙎 🐔 🔑 Search , 🕏 Favorites 🥝 😥 🕞 🔜 🛄 Address C:\Inetpub\wwwroot\SurveyReport\application.config <?xml version="1.0" ?> - <configuration> <dbConnectionString>Data Source=192.168.210.55;Initial Catalog=sbf;UID=sa;PWD=admin</dbConnectionString> <irAddress>http://192.168.210.55/sbfrecordings/</irAddress> <archiveAddress>http://192.168.110.175/sufArchive/</archiveAddress> <ResumeLocation>http://192.168.110.178/</ResumeLocation> </configuration>

# 7. General Test Approach and Test Results

The interoperability compliance test included feature and serviceability testing. The feature testing focused on placing calls to Avaya Voice Portal that ran VoiceXML application that executes the campaign as per the call flow designed through SBF Administrator. The general test approach included:

- Verifying campaign execution using different node types.
- Verifying campaign execution with branch structure.
- Verifying campaign execution for UID and Password nodes that authenticates the user.
- Verifying transfer node functionality that transfers the call to the assigned extension.

The serviceability testing focused on verifying the ability of Avaya GlobalConnect SBF application to recover from adverse conditions.

All the test cases passed. Avaya Voice Portal was successful in running the VXML application as per the designed call flow.

# 8. Verification Steps

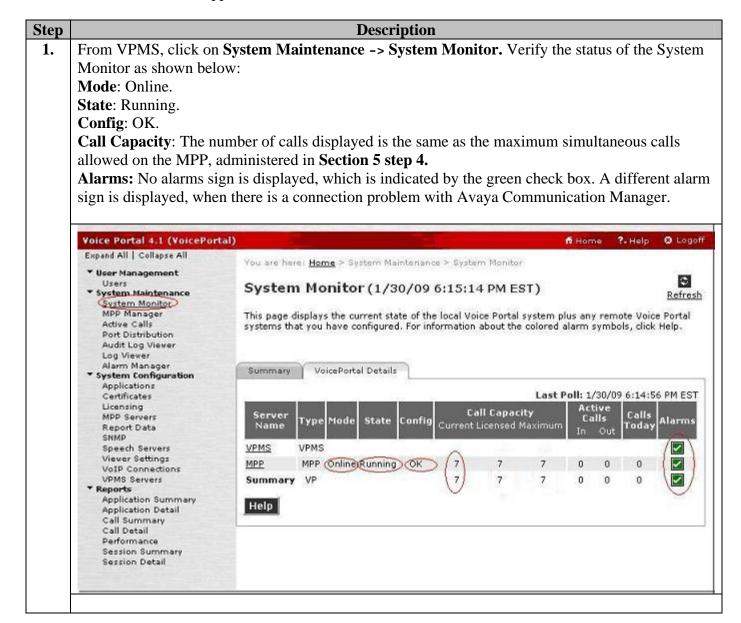
#### 8.1. Verify Avaya Communication Manager

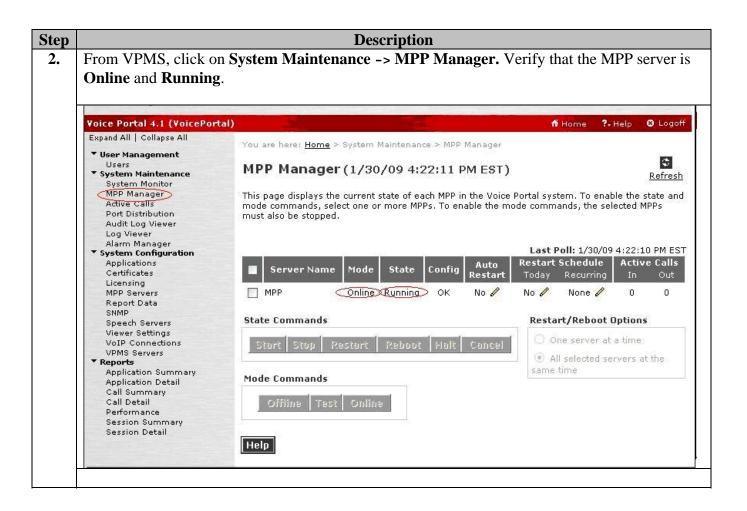
The following steps can be used to verify the communication between Avaya Communication Manager and Avaya Voice Portal.

| Step | Description  |        |          |        |              |     |               |     |
|------|--|--------|----------|--------|--------------|-----|---------------|-----|
| 1.   | Verify that the phantom IP stations used by Avaya Voice Portal, administered in <b>Section 4 Step</b>  |        |          |        |              |     |               |     |
|      | 4, are registered to Avaya Communication Manager. Use the list registered-ip-stations command from the Avaya SAT to verify that the phantom IP stations are registered in Net Rgn 1 and the Gatekeeper IP Address (C-LAN) is 203.91.217.10. Also, verify that the Station IP Address is 203.91.217.5, which is the IP address of the MPP server. |        |          |        |              |     |               |     |
|      | list registered-ip-stations  REGISTERED IP STATIONS  |        |          |        |              |     |               |     |
|      | Station Ext/   | Set    | Product  | Prod   | Station      | Net | Gatekeeper    | TCP |
|      | Orig Port  | Type   | ID       | Rel    | IP Address   | Rgn | IP Address    | Skt |
|      | 2000   | 7434ND | IP_API_A | 4.1000 | 203.91.217.5 | 1   | 203.91.217.10 | y   |
|      | 2001   | 7434ND | IP_API_A | 4.1000 | 203.91.217.5 | 1   | 203.91.217.10 | y   |
|      | 2002   | 7434ND | IP_API_A | 4.1000 | 203.91.217.5 | 1   | 203.91.217.10 | Y   |
|      | 2003   | 7434ND | IP_API_A | 4.1000 | 203.91.217.5 | 1   | 203.91.217.10 | y   |
|      | 2004   | 7434ND | IP_API_A | 4.1000 | 203.91.217.5 | 1   | 203.91.217.10 | y   |
|      | 2005   | 7434ND | IP_API_A | 4.1000 | 203.91.217.5 | 1   | 203.91.217.10 | Y   |
|      | 2006   | 7434ND | IP_API_A | 4.1000 | 203.91.217.5 | 1   | 203.91.217.10 | y   |
|      |  |        |          |        |              |     |               |     |

#### 8.2. Verify Avaya Voice Portal

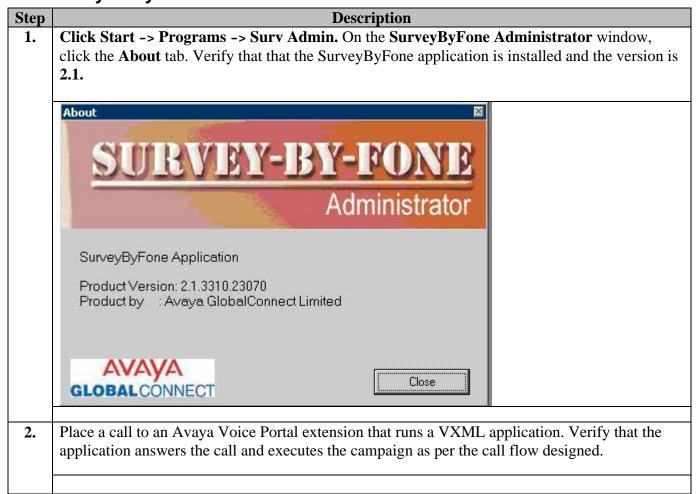
This section provides the verification steps that may be performed to verify that Avaya Voice Portal can run VoiceXML applications.





**Description** Step From VPMS, click on **System Maintenance -> Port Distribution.** On the Port Distribution 3. page, verify that the ports on the MPP server are in service. Voice Portal 4.1 (VoicePortal) ?- Help 2 Logoff Expand All | Collapse All You are here: Home > System Maintenance > Port Distribution \* User Management Users Port Distribution (1/30/09 4:38:17 PM EST) System Maintenance Refresh System Monitor MPP Manager This page displays information about how the telephony resources have been distributed to the Active Calls MPPs. You configure the telephony resources on the VoIP Connections page. Port Distribution > Audit Log Viewer Total Ports: 7 Last Poll: 1/30/09 4:38:18 PM EST Log Viewer Alarm Manager Port C Mode Protocol State **Port Group** System Configuration Allocation Applications Avaya Global Connect -2000 Online In H323 MPP Certificates SBF service Licensing Avaya Global Connect -In MPP Servers MPP 2001 Online service SBF Report Data Avaya Global Connect -SNMP In H323 2002 Online MPP Speech Servers service Viewer Settings Avaya Global Connect -In 2003 Online H323 MPP **VoIP Connections** SBF service VPMS Servers In Avaya Global Connect -2004 Online H323 MPP Reports service Application Summary Avaya Global Connect -Application Detail In H323 MPP 2005 Online Call Summary service 2006 Online In service Call Detail Avaya Global Connect -H323 MPP Performance SBF Session Summary Session Detail Help

#### 8.3. Verify Avaya GlobalConnect SBF Administrator



### 9. Conclusion

These Application Notes describe the compliance-tested configuration used for Avaya GlobalConnect SBF 2.0 to interoperate with Avaya Communication Manager 5.1 and Avaya Voice Portal 4.1. All test cases were completed successfully.

### 10. Additional References

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

• SBF Installation Guide, Revision 3.0, available from http://www.avayaglobalconnect.com

#### ©2009 Avaya Inc. All Rights Reserved.

Avaya and the Avaya Logo are trademarks of Avaya Inc. All trademarks identified by ® and TM are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners. The information provided in these Application Notes is subject to change without notice. The configurations, technical data, and recommendations provided in these Application Notes are believed to be accurate and dependable, but are presented without express or implied warranty. Users are responsible for their application of any products specified in these Application Notes.

Please e-mail any questions or comments pertaining to these Application Notes along with the full title name and filename, located in the lower right corner, directly to the Avaya DevConnect Program at <a href="devconnect@avaya.com">devconnect@avaya.com</a>.