



Avaya Solution & Interoperability Test Lab

Application Notes for WEBTEXT SMS Gateway Service 3.0 with Avaya Proactive Outreach Manager 3.0.1 and Avaya Aura® Experience Portal 7.0.2 - Issue 1.0

Abstract

These application notes describe the configuration steps required for WEBTEXT SMS Gateway Service 3.0 with Avaya Proactive Outreach Manager 3.0.1 and Avaya Aura® Experience Portal 7.0.2. The Service allows Proactive Outreach Manager Campaigns to send and receive Short Message Service (SMS) messages.

Readers should pay attention to **Section 2**, in particular the scope of testing as outlined in Section 2.1 as well as any observations noted in **Section 2.2**, to ensure that their own use cases are adequately covered by this scope and results.

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

1. Introduction

These application notes describe the configuration steps required for WEBTEXT SMS Gateway Service (SMS Gateway Service) 3.0 with Avaya Proactive Outreach Manager (POM) 3.0.1 and Avaya Aura® Experience Portal (Experience Portal) 7.0.2. The Service allows Proactive Outreach Manager Campaigns to send and receive SMS messages.

2. General Test Approach and Test Results

The general test approach was to configure the SMS Gateway Service as Short Message Peer-to-Peer (SMPP) connection in Experience Portal as implemented on a customer's premises. See **Figure 1** for a network diagram. The interoperability compliance testing included feature and serviceability testing. The feature testing verified the ability of the SMS Gateway Service to route SMS messages to mobile telephone. Responses were prompt and accurate. The serviceability testing introduced failure scenarios to see if SMS Gateway service can resume after a failure.

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 testing included:

- Verification of connectivity between SMS Gateway Service and Experience Portal.
- Verification that (outbound) SMS Messages route promptly to the correct recipient via the SMS Gateway Service.
- Verification that (inbound) SMS Messages route promptly to Experience Portal/POM platform from recipients via the SMS Gateway Service.
- Link Failure\Recovery was also tested to ensure successful reconnection after link failure.
- Scenarios included.
 - Sending long, short, blank messages
 - Receiving inbound messages
 - Sending non alphanumeric characters messages
 - Recovery from disconnect of service

2.2. Test Results

Tests were performed to ensure full interoperability between SMS Gateway Service and Experience Portal. The tests were all functional in nature and performance testing was not included. All the test cases passed successfully.

2.3. Support

For technical support for WEBTEXT, please use the following:

TOLL FREE (USA/CA) + 1.855.247.3232

TEL (UK) +44 (0)203 3285053

TEL (IRL) +353 (0)1 247 9000

Email: support@webtext.com

Web: www.webtext.com

3. Reference Configuration

Figure 1 illustrates the network topology used during compliance testing. The Avaya solution consists of Experience Portal and POM. The Experience Portal is configured to connect to SMS Gateway Service via SMPP.

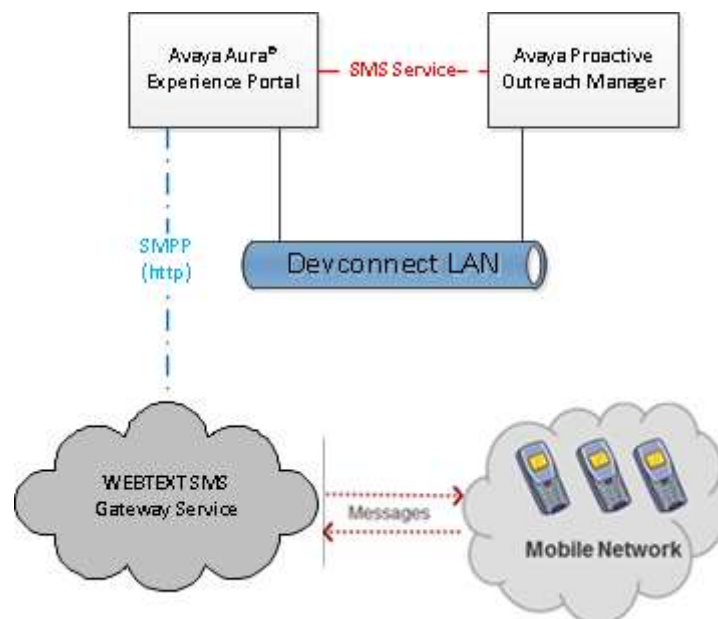


Figure 1: Avaya Aura® Experience Portal, Proactive Outreach Manager and WEBTEXT SMS Gateway Service Reference Configuration

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® Experience Portal running on a virtual server	7.0.2.0.0304
Avaya Proactive Outreach Manager running on a virtual server	POM.03.00.01.00.150
Webtext SMS Gateway Service	v3.0

5. Configure Avaya Aura® Experience Portal

Configuration and verification operations on the Experience Portal illustrated in this section were all performed using either the Experience Portal Management web interface or SSH connection to the server . The information provided in this section describes the configuration of the Experience Portal for this solution. It is implied a working system is already in place, including Media Processing Platform, Apache Tomcat application Server. Installation of POM applications is also out with the scope of this document. For all other provisioning information such as initial installation and configuration, please refer to the product documentation in **Section 9**. The configuration operations described in this section can be summarized as follows:

- Add SMS Processor
- Add SMPP Connection
- Edit AvayaPOMSMS application attributes

5.1. Add an SMS Processor

To allow Proactive Outreach Manager to run an SMS Campaign Experience Portal requires an SMS processor.

Log in to the Experience Portal Manager web interface using appropriate credentials.



The image shows the login interface for the Avaya Aura Experience Portal 7.0.2. It features the Avaya logo at the top, followed by the text "Avaya Aura® Experience Portal 7.0.2 (ExperiencePortal)". Below this is a "User Name:" label and a text input field. A "Submit" button is positioned below the input field. At the bottom left, there is a link for "Change Password". The footer contains the copyright notice "© 2015 Avaya Inc. All Rights Reserved."

From the left hand menu go to **Multi-Media Configuration** → **SMS**. On the **SMS Processors** tab click on **Add**.



The image displays the "SMS" configuration page within the Avaya Aura Experience Portal 7.0.2. The left-hand menu is expanded, showing categories like "User Management", "Real-time Monitoring", "System Maintenance", "System Management", and "System Configuration". The main content area shows the breadcrumb "You are here: Home > Multi-Media Configuration > SMS" and the title "SMS". Below the title, a message states: "This page displays the list of Short Message Service (SMS) processors, :". There are three tabs: "SMS Processors" (selected), "SMPP Connections", and "HTTP Connections". Under the "SMS Processors" tab, there is a table with columns: "Name", "Enable", "Host Address", and "Trace Option". Below the table are buttons for "Add" and "Delete". At the bottom, there are buttons for "SMS Settings", "Browser Settings", and "Help".

Select the Primary Experience Portal from the **Name** drop down and click on **Save** to commit the changes.

The screenshot displays the Avaya Aura Experience Portal 7.0.2 (ExperiencePortal) web interface. On the left is a navigation menu with categories: 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), and System Management (Application Server, EPM Manager, MPP Manager). The main content area shows the breadcrumb 'You are here: Home > Multi-Media Configuration > SMS > Change SMS Processor' and the title 'Change SMS Processor'. Below the title is the instruction 'Use this page to change the configuration of an SMS processor.' The configuration fields include 'Name' set to 'EPM', 'Enable' with 'Yes' selected (radio buttons), and 'Host Address' set to 'AAEP71620'. A section titled 'Categories and Trace Levels' is partially visible. At the bottom are four buttons: 'Save', 'Apply', 'Cancel', and 'Help'.

5.2. Add SMPP Connection.

Click on the **SMPP Connections** tab and click on **Add**.

Avaya Aura® Experience Portal 7.0.2 (ExperiencePortal)

Expand All | Collapse All

You are here: [Home](#) > Multi-Media Configuration > SMS

SMS

This page displays the list of Short Message Service (SMS) processors, SMPP connections and HTTP connections.

SMS Processors SMPP Connections HTTP Connections

	Name	Enable	Host Address	SMS Processor	Port	Bind Mode	Short Code / Long Number
--	------	--------	--------------	---------------	------	-----------	--------------------------

Add Delete Help

Connection details for the SMS Gateway Service will be provided by WEBTEXT and used here to establish the connection. Give the SMPP Connection a **Name**. Enter the **Host Address**, **Port**, **User Name** and **Password** of the SMS Gateway Service. Select the **SMS Processor** added above and **Set From field to:** to **Short Code**. Enter the number provided by WEBTEXT under **Short Code/ LongNumber** Click on **Save** to commit changes.

Avaya Aura® Experience Portal 7.0.2 (ExperiencePortal)

Expand All | Collapse All

You are here: [Home](#) > Multi-Media Configuration > [SMS](#) > Add SMPP Connection

Add SMPP Connection

Use this page to add the configuration of an SMPP Connection.

Name:

Enable: ☒ Yes ☐ No

Host Address:

Shared: ☐ Yes ☒ No

SMS Processor:

Port:

Bind Mode:

User Name:

Password:

Address Range:

Set From Field to:

Short Code / Long Number
<input type="text" value="Number Provided"/>

Remove

[Additional Entry](#)

Advanced Parameters ▶

Save Cancel Help

5.3. Configure Application Settings.

The Short Code number above must now be entered in the AvayaPOMSMS application that will have been added as part of POM installation. From the left hand menu select **System Configuration → Application**. Click on the **AvayaPOMSMS** application.

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

Applications

This page displays the applications that are currently deployed on the Experience Portal system.

<input type="checkbox"/>	Name	Enable	Type	URI	Launch	ASR	TTS	Requested SIP Calls	Apply
<input type="checkbox"/>	AvayaPOMAgent	Yes	POM:Application	https://10.10.16.20:7443/AvayaPOMAgent/Start	Outbound	No ASR	No TTS	None	
<input type="checkbox"/>	AvayaPOMAnnouncement	Yes	POM:Application	https://10.10.16.20:7443/AvayaPOMAnnouncement/Start	Outbound	No ASR	No TTS	None	
<input type="checkbox"/>	AvayaPOMEmail	Yes	Email	https://10.10.16.20:7443/AvayaPOMEmail/Start	Outbound	No ASR	No TTS	None	
<input type="checkbox"/>	AvayaPOMNotifier	Yes	POM:Application	http://10.10.16.20:7080/AvayaPOMNotifier/Start	Outbound	No ASR	No TTS	None	
<input type="checkbox"/>	AvayaPOMSMS	Yes	SMS	https://10.10.16.20:7443/AvayaPOMSMS/Start	353861800085	No ASR	No TTS	None	
<input type="checkbox"/>	Nailer	Yes	POM:Nailer	https://10.10.16.20:7443/Nailer/cxml/start.jsp	Outbound	No ASR	No TTS	None	
<input type="checkbox"/>	PomDriverApp	Yes	POM:Driver	https://10.10.16.20:7443/PomDriverApp/cxml/start.jsp	Outbound	No ASR	English(USA) an-US Jennifer F	None	
<input type="checkbox"/>	PostLookup	Yes	SMS	http://10.10.16.20:7080/PostLookup/Start	2200502	No ASR	No TTS	None	

[Add](#) [Delete](#) [Clear MPP Cache](#) [Help](#)

In the **Application Launch** section set the application to **Inbound**, **Number** and enter the number used for Short Code in the SMPP configuration in the **Short Code / Long Number** box and click on **Add** to move it to the numbers that can be used. Click on **Save** to commit changes (not shown).

Change Application

Use this page to change the configuration of an application.

Name: AvayaPOMSMS

Enable: ☒ Yes ☐ No

Type: SMS

Message Type: Regular

URI

☒ Single ☐ Fail Over ☐ Load Balance

URL: https://10.10.16.20:7443/AvayaPOMSMS/Start [Verify](#)

Mutual Certification Authentication: ☐ Yes ☒ No

Basic authentication: ☐ Yes ☒ No

Notification Enabled: ☐ Yes ☒ No

Application Launch

☒ Inbound ☐ Inbound Default ☐ Outbound

☒ Number ☐ Number Range ☐ Expression

Short Code / Long Number: [Add](#)

[Remove](#)

Note: When using multiple SMS Campaigns, multiple numbers can be used by this application to allow Proactive Outreach Manager to route SMS message replies depending on reply number. These numbers must be activated by WEBTEXT.

When returned to the **Applications** page click on the AvayaPOMSMS application **Configurable Application Variables** (little Pencil Icon). These variables are used to route calls back to the POM Campaign when a reply is made. Enter an **Attribute Name**, the **Campaign Name** configured in **Section 6.X**, the **Completion Code** sent to the POM Campaign and the **Web Service IP Address** (IP address of the server running POM). Click **Save** to commit the changes.

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

Change AvayaPOMSMS Configurable Application Variables

Use this page to change the values of the configurable application variables, defined in the applications that are deployed on the Experience Portal system.

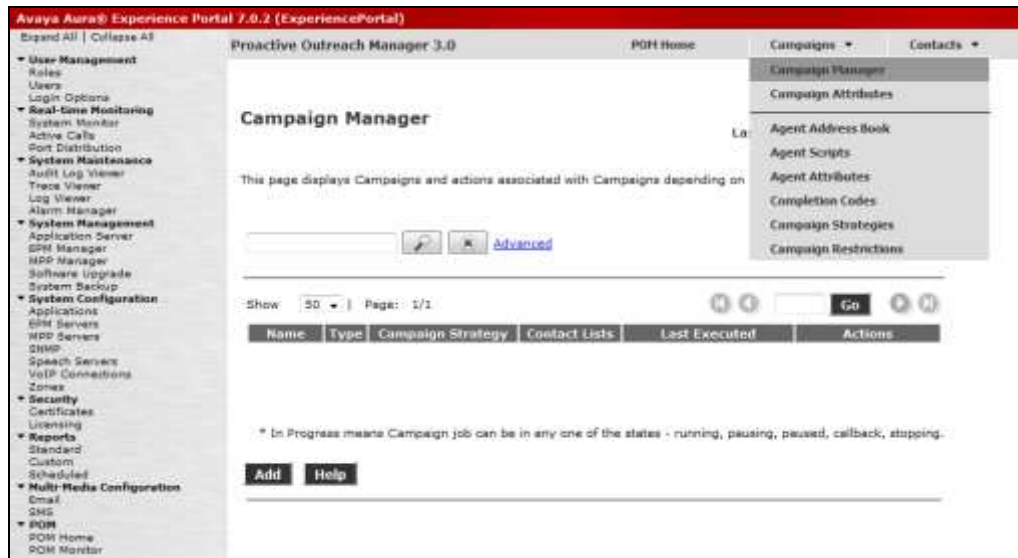
[Reset All to Default](#)

Attribute Name:	<input type="text" value="SMSContents"/>
Campaign Name:	<input type="text" value="Webtext2"/>
Completion Code:	<input type="text" value="SMS Reply"/>
Web Service IP Address:	<input type="text" value="10.10.16.20"/>

6. Configure Proactive Outreach Manager campaign

This section will describe the steps required to create a basic campaign for sending SMS Messages using the SMS Gateway Service.

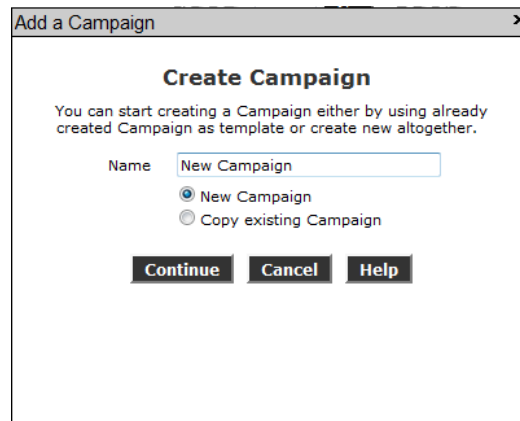
From the left hand menu select **POM → POM Home**. Under **Campaigns** select **Campaign Manager**.



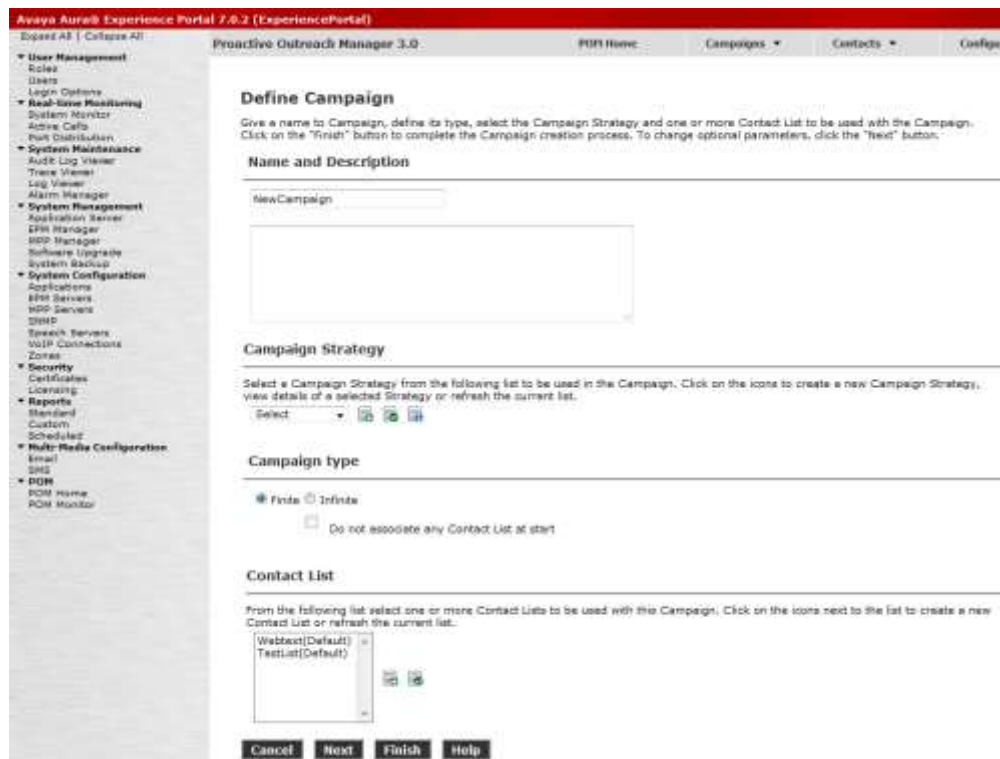
On the **Campaign Manager** page, click on **Add** to create a new campaign.



On The **Add a Campaign** screen type in a **Name** and click on **Continue**.



The Campaign must now be defined and a **Campaign Strategy** and **Contact List** must be created.



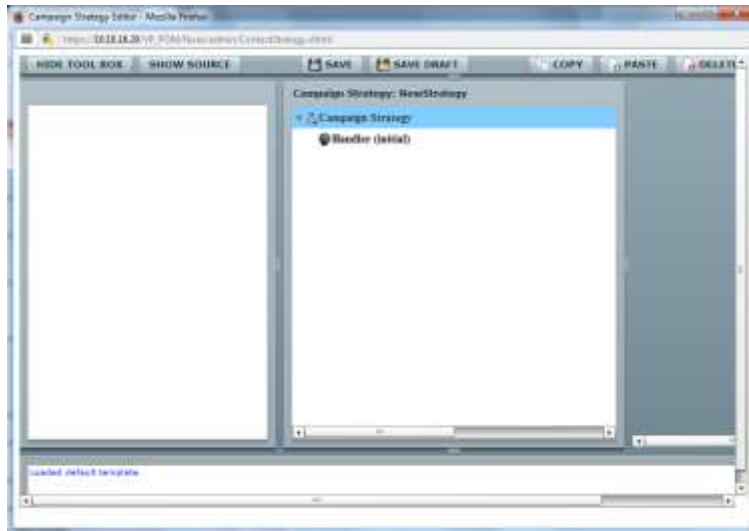
6.1. Create Campaign Strategy

First, under **Campaign Strategy** click on the add icon to bring up the **Campaign Strategy Editor**.

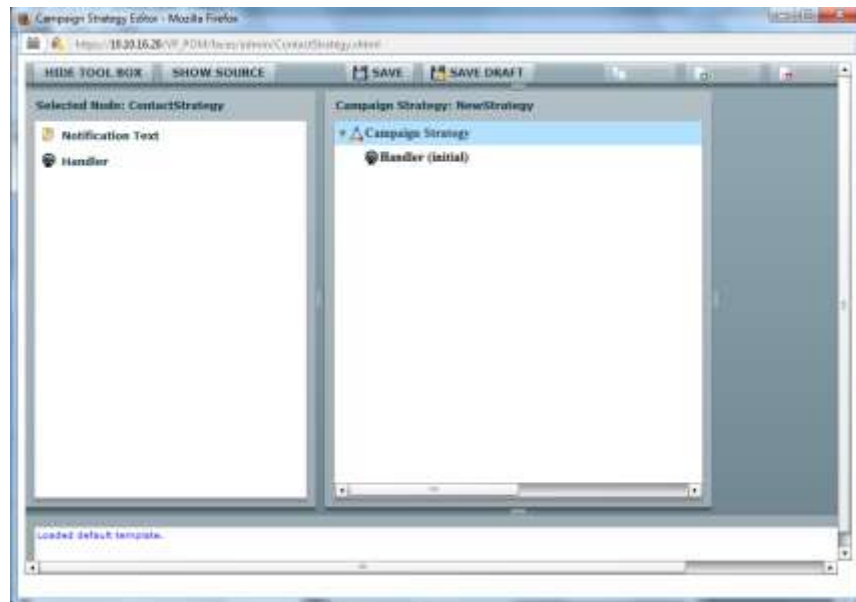
Campaign Strategy

Select a Campaign Strategy from the following list to be used in the Campaign. Click on the icons to create a new Campaign Strategy, view details of a selected Strategy or refresh the current list.

Select ▼   



Move the **Notification Text** icon from the **Selected Node** box across to the **Campaign Strategy** box using drag and drop.



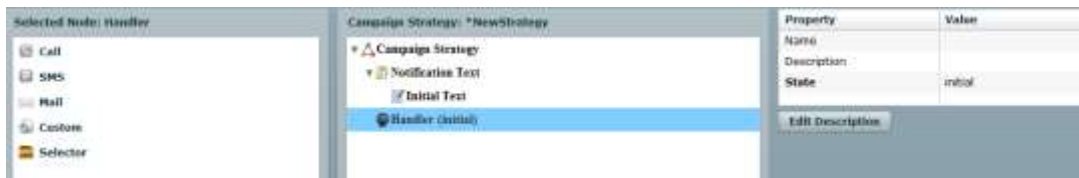
Click on the **Notification Text** icon in the right hand box. A variables box will appear to the right hand side. Enter a valid **ID** for this Notification Text



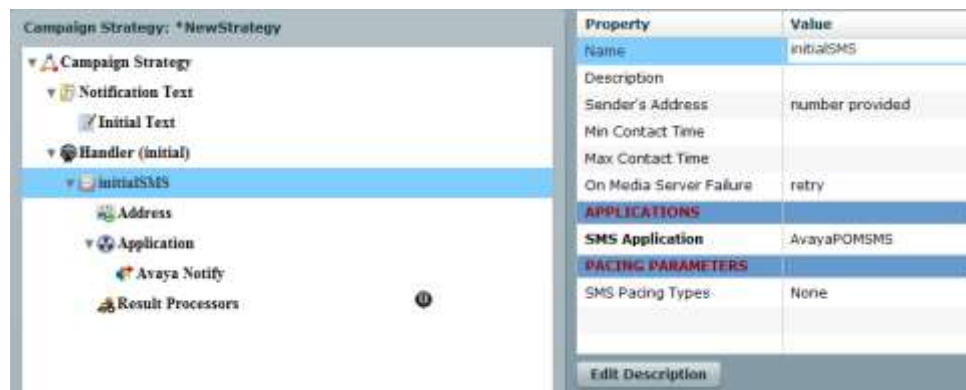
Click on the **Text Item** icon. A variables box will appear on the right hand side. On entering a **Name** the icon changes to this entry (**Initial Text**). Enter a **Subject** and **Text** that will be sent out in the SMS messages



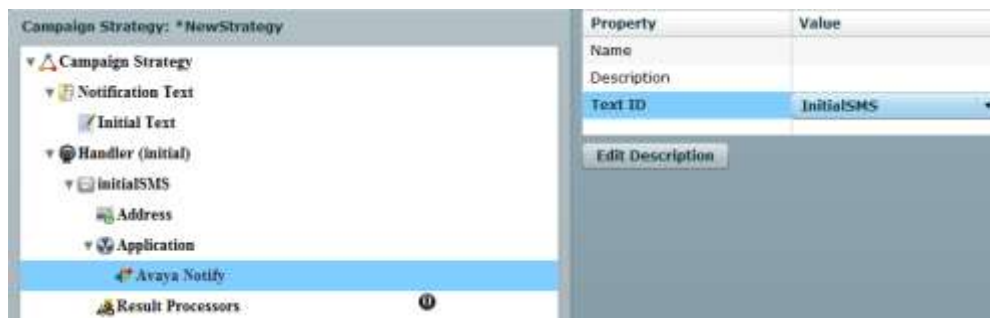
Now click on **Handler** and from the **Selected Node** box drag the **SMS** icon across to the Campaign Strategy box.



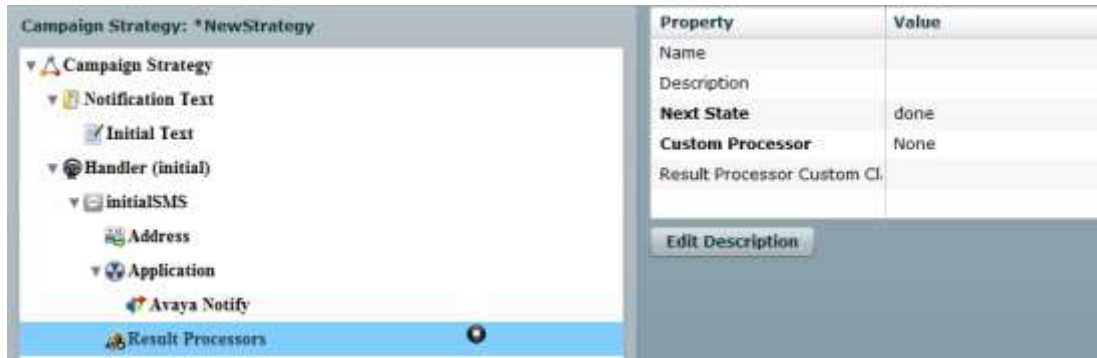
Click on **SMS** (shown as **initialSMS**). In the Variable box enter the **Senders Address** as the number provided for Short Code in **Section 5.2**. Under APPLICATIONS select the **AvayaPOMSMS** application from the drop down.



Next click on the **Avaya Notify** icon and Select the Notification **Text ID** added above in the right hand Variable box.



Next, click on the **Result Processors** icon and in the Variable box set **Next State** to **done** using the drop down menu.



Click on **SAVE** and close the windows to return to the New Campaign creation screen.



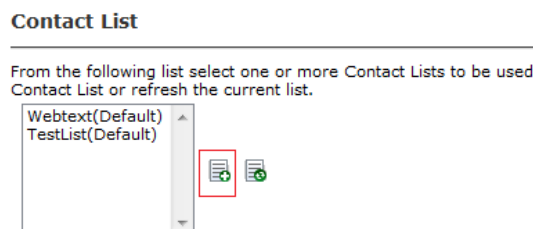
Note: An example of a reply strategy is shown in Appendix 1.

6.2. Create Contacts list

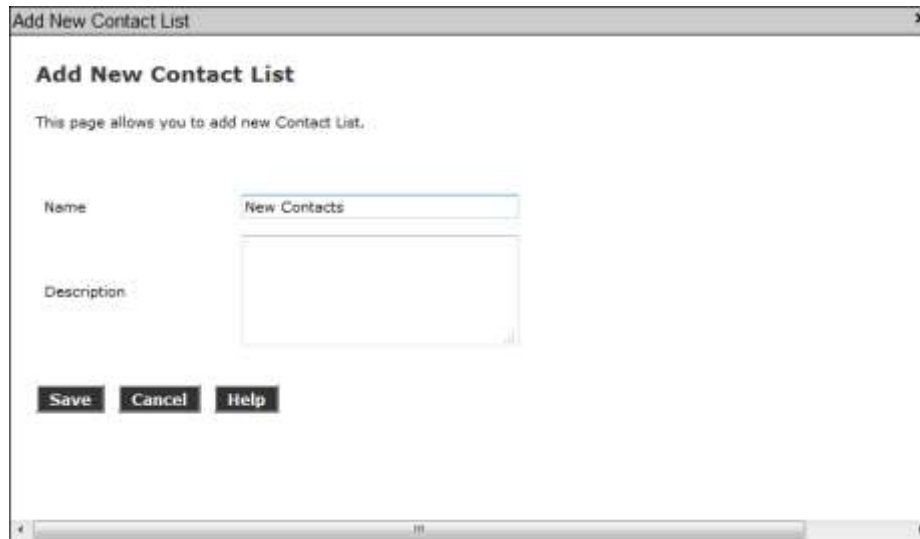
Before creating the Contacts list for the campaign a list of contact must be created as a comma delimited .csv file in the following format. For simple SMS messages no further information is required.

```
id,firstname,lastname,phonenumber2,phonenumber1,email
1,Contact,One, 12125550100, 12125550100,contact1@avaya.com
2,Mobile,One, 12125550101, 12125550101,mobile1@webtext.com
3,Bob,Dylan, 12125550102, 12125550102,bobby@hotmail.com
4,SMS,One, 12125550103, 12125550103,SMS@avaya.com
```

From the Define Campaign (not shown) screen under **Contact List** click on the add icon

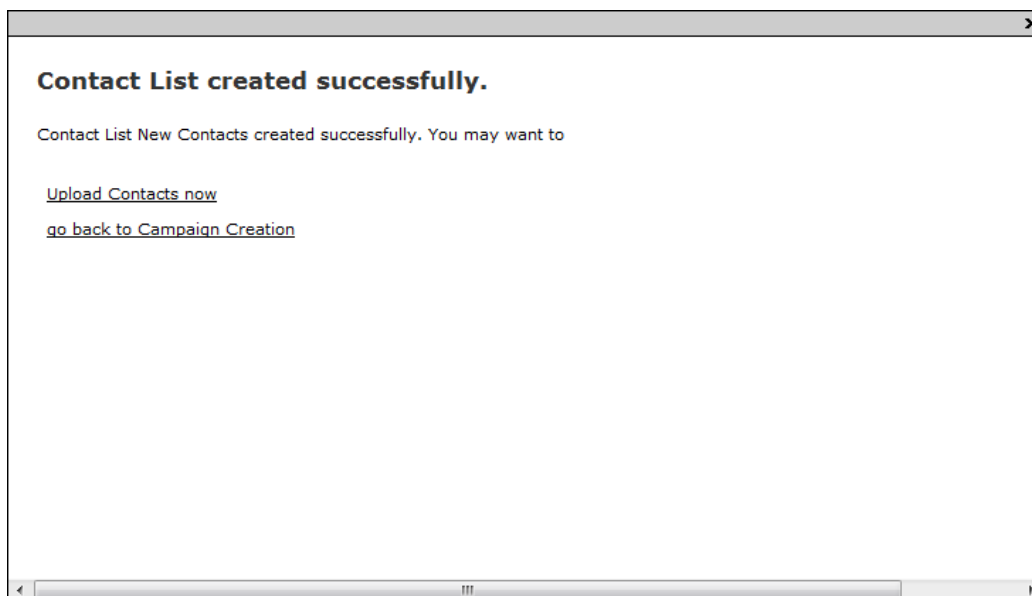


Give the Contacts list a **Name** and click on **Save**.



The screenshot shows a web browser window titled "Add New Contact List". Inside the window, there is a heading "Add New Contact List" followed by a sub-heading "This page allows you to add new Contact List.". Below this, there are two input fields: "Name" and "Description". The "Name" field contains the text "New Contacts". Below the "Description" field, there are three buttons: "Save", "Cancel", and "Help".

Now upload the contacts in the .csv file created. Click on **Upload Contacts now**



The screenshot shows a web browser window titled "Contact List created successfully.". Inside the window, there is a heading "Contact List created successfully." followed by a sub-heading "Contact List New Contacts created successfully. You may want to". Below this, there are two links: "Upload Contacts now" and "go back to Campaign Creation".

Click on **File to upload** and select the .csv file created and select **Automatically update time zone for phone numbers**. Click on **Continue** to upload the contacts and go back to the Define Campaign screen.

Upload Contacts

Select the file that contains the Contacts you wish to upload. You can upload any comma delimited file. Contacts from the file will be imported into the selected Contact List.

File to upload: No file selected.

Advanced Options

Empty Contact List before import ☐

Automatically update time zone for phone numbers ☒

Check phone numbers for reject patterns ☐

Check phone numbers for phone formats rule ☐

Check phone numbers/E-Mails for DNC ☐

On duplicate record found

6.3. Complete the Campaign Creation

In this section the campaign creation is completed. Only screens where changes need to be made are mentioned and otherwise just clicking **Next** to move to the next screen is sufficient.

On the **Media Servers and Media Specific Parameters** screen, check that the **EPM** Zone Name is selected and click **Next**.

Proactive Outreach Manager 3.0 POM Home Campaigns ▼ Contacts ▼ Configur

Media Servers and Media Specific Parameters (optional)

Select the media servers to be used for this Campaign and perform media specific configurations. Media used by a Campaign is determined by the Campaign Strategy selected in the earlier step.

Voice and Video

By default, Campaign uses all the Experience Portal Management Servers configured to make outbound calls. If you want specific EPM Servers to be used for this Campaign, you can select specific servers from the following list.

Zone Name Default

EPM

SMS prefix

Cancel Previous Next Finish Help

On **The Completion Code Association** screen, move all **Available** Completion Codes to **Selected**. Click on **Next** to continue.

Proactive Outreach Manager 3.0 POM Home Campaigns ▼ Contacts ▼ Configur

Completion Code Association (optional)

This section allows you to associate custom Completion Codes with a Campaign. Completion Codes selected here can be used in subsequent steps of this wizard to define Finish Criteria.

Completion Codes

Available list shows all the Completion Codes defined. Current Completion Codes associated with the Campaign are shown in the selected Completion Codes list. You can move the items between list of available and currently selected Completion Codes by using Move, Move All, Remove and Remove All.

Available Selected

Success
NoReply
SMS Reply

Move
Move All
Remove
Remove All

Cancel Previous Next Finish Help

Finally, on **Processing Parameters** screen, click on **Finish** to save the campaign.

Processing Parameters (optional)

Define actions to be taken after a Campaign is finished or stopped and miscellaneous Campaign processing parameters.

Export Data

Export Contacts on completion ☐

Custom Post Processing

Enter the fully resolved class Name (e.g com.avaya.pom.custom.myPostProcessor) implementing the custom post processing interface.

Campaign post processor class

Miscellaneous

Batch size decides the number of records that Campaign Manager will fetch from database for processing in a single batch.

Batch size

Cancel **Previous** **Finish** **Help**

7. Configuring WEBTEXT SMS Gateway Service

An SMPP Account must be obtained from WEBTEXT. You will need to open port 2775 and provide WEBTEXT with your public facing IP address before attempting to connect to the WEBTEXT SMS Gateway via SMPP or HTTP(s).

8. Verification Steps

This section provides tests that can be performed to verify correct configuration of the Proactive Outreach Manager, Experience Portal and SMS Gateway Service solution

8.1. Verify SMPP Connection is Established

Establish an SSH connection to the Experience Portal server and su to a privileged user.

- use `cd /opt/Avaya/Experience Portal/Support/VP-Tools`
- use `bash TestSMPPConnection SMS Gateway IP 2775 user password`

```
[sroot@AAEP71620 /]# cd /opt/Avaya/Experience Portal/Support/VP-Tools
[sroot@AAEP71620 VP-Tools ]# bash TestSMPPConnection 10.10.10.10 2775 user
password

Fri Dec 18 01:02:51 PST 2015 SmppSession::SmppSession --> host: 10.10.10.10
port: 2775 timeout:30000
Fri Dec 18 01:02:51 PST 2015 SmppSession::SmppSession <-- _session:
com.logica.smpp.Session@140de537
Fri Dec 18 01:02:57 PST 2015 Received event:
com.logica.smpp.pdu.EnquireLinkResp@df20541
Fri Dec 18 01:03:07 PST 2015 Connection is functioning correctly.
Testing Completed.

[sroot@AAEP71620 VP-Tools]#
```

9. Conclusion

These Application Notes describe the compliance tested configuration used to validate WEBTEXT SMS Gateway Service v3.0 with Avaya Aura® Experience Portal Version 7.0.2 and Avaya Proactive Outreach Manager 3.0.1. A set of feature and functional test cases were performed during Compliance testing. All of the test cases passed with any issues and observations outlined in **Section 2.2**.

10. Additional References

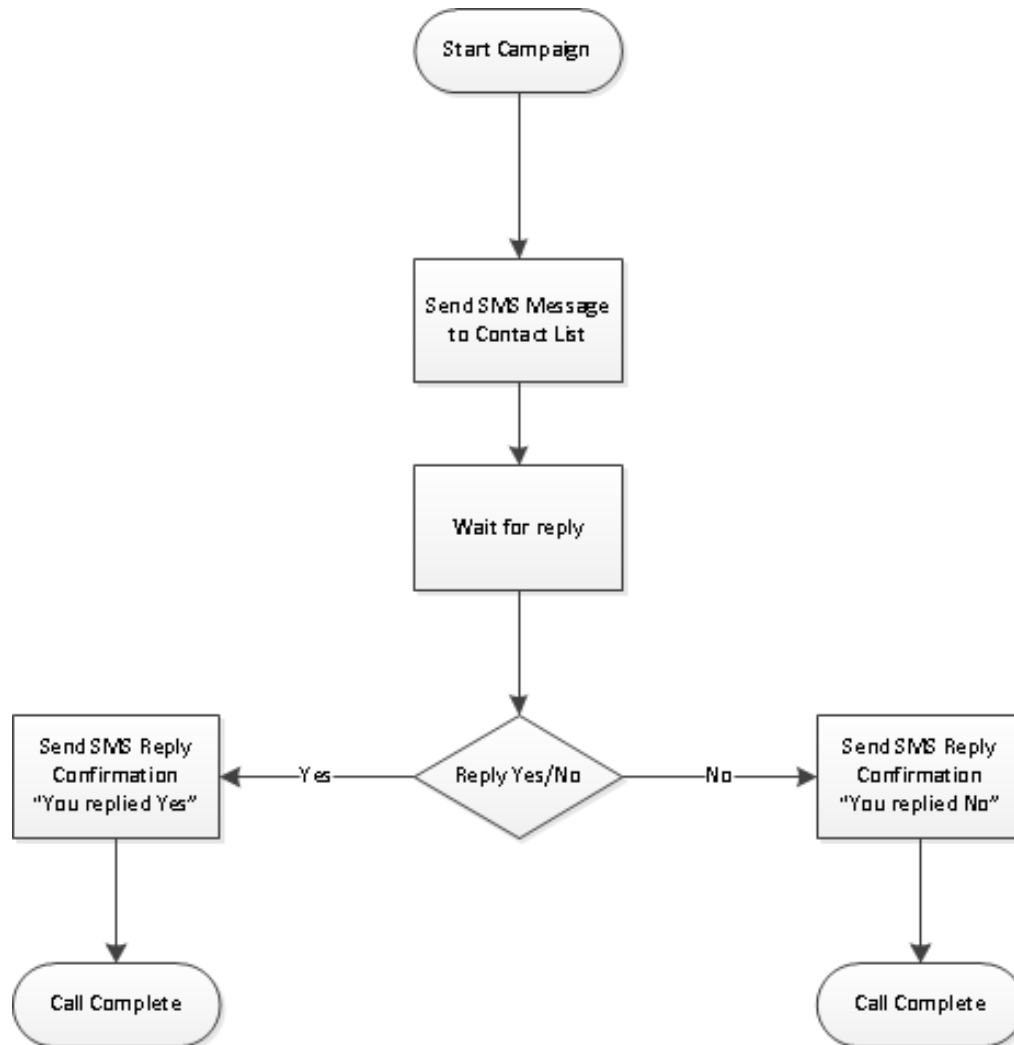
These documents form part of the Avaya official technical reference documentation suite. Further information may be had from <http://support.avaya.com> or from an Avaya representative.

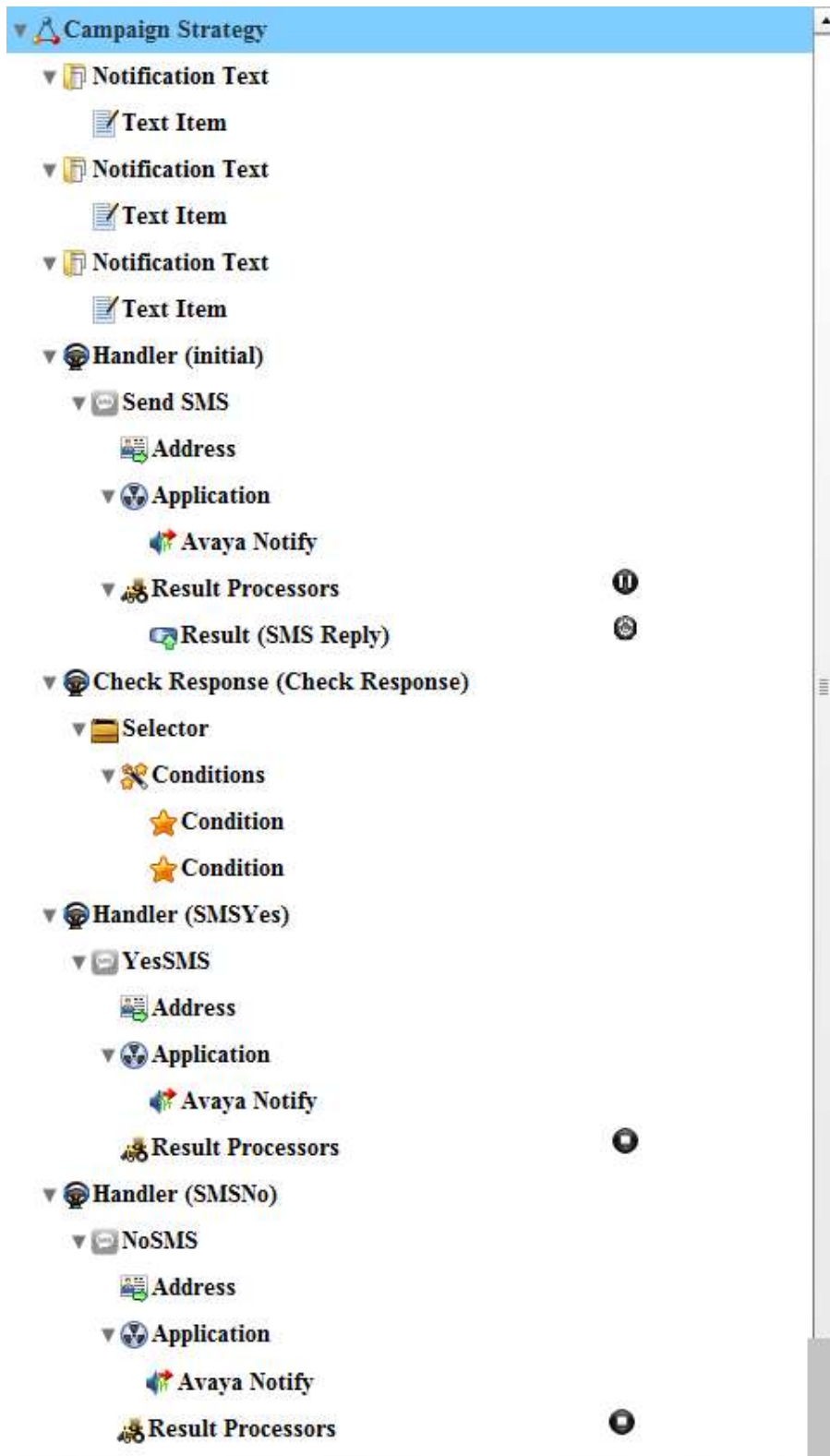
- [1] *Avaya Aura® Experience Portal 7.0.2 Overview and Specification*
- [2] *Deploying Avaya Aura® Experience Portal 7.0.2 in an Avaya Customer Experience Virtualized Environment*
- [3] *Proactive Outreach Manager 3.0.1 Overview and Specification*
- [4] *Implementing Proactive Outreach Manager 3.0.1*

WEBTEXT documentation can be obtained by using the contact details listed in **Section 2.3**.

Appendix 1

This is a flow chart and example of a Proactive Outreach Manager Campaign Strategy.





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