



Avaya Solution & Interoperability Test Lab

Application Notes for WEBTEXT 2-way SMS Connector 3.7 with Avaya Breeze™ 3.8 - Issue 1.0

Abstract

These Application Notes describe the configuration steps required for WEBTEXT 2-way SMS Connector 3.7 with Avaya Breeze 3.8 to successfully interoperate.

Readers should pay particular attention to the scope of testing as outlined in **Section 2.1**, as well as 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 2-way SMS Connector 3.7 with Avaya Breeze® 3.8. The WEBTEXT 2-way SMS Connector allows users to send SMS text messages from Avaya Breeze® Platform (formerly known as Avaya Engagement Development Platform and Avaya Aura® Collaboration Environment) applications, and to receive messages back in through the connector. The testing used Avaya Engagement Designer to create a workflow for testing the WEBTEXT messaging application with the Avaya Breeze® Platform.

The WEBTEXT connector is a dual mode connector allowing customers to leverage WEBTEXT's messaging services in both standard Avaya Breeze and also in Avaya Oceana. This document will explain how to install and configure the WEBTEXT connector in order for it to work with Avaya Breeze.

2. General Test Approach and Test Results

Interoperability testing contained functional tests mentioned in **Section 2.1**. All test cases were performed manually. The serviceability test cases were performed manually by restarting the Breeze system and disconnecting/reconnecting the network to the Breeze system.

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.

Avaya recommends our customers implement Avaya solutions using appropriate security and encryption capabilities enabled by our products. The testing referenced in these DevConnect Application Notes included the enablement of supported encryption capabilities in the Avaya products. Readers should consult the appropriate Avaya product documentation for further information regarding security and encryption capabilities supported by those Avaya products.

Support for these security and encryption capabilities in any non-Avaya solution component is the responsibility of each individual vendor. Readers should consult the appropriate vendor-supplied product documentation for more information regarding those products.

For the testing associated with these Application Notes, the interface between Avaya Breeze and WEBTEXT Gateway used secure HTTPS encryption feature as requested WEBTEXT.

2.1. Interoperability Compliance Testing

The interoperability Compliance test included feature and serviceability testing. Feature testing focused on sending SMS text messages through and retrieving messages with the Webtext Connector.

The serviceability testing focused on verifying the ability of Webtext SMS Connector to recover from adverse conditions, such as disconnecting/reconnecting the network.

2.2. Test Results

All test cases were executed and passed. The compliance test was successful.

2.3. Support

Support for WEBTEXT can be obtained through the following:

- Address: 36E Main St., Suite 201, Norristown, PA 19401 U.S.A
- Tel: +1 (855)247 3232
- Email: support@webtext.com
- Website: <https://www.webtext.com/>

3. Reference Configuration

Figure 1 illustrates a sample configuration that consists of Avaya Products and WEBTEXT 2-way SMS Connector.

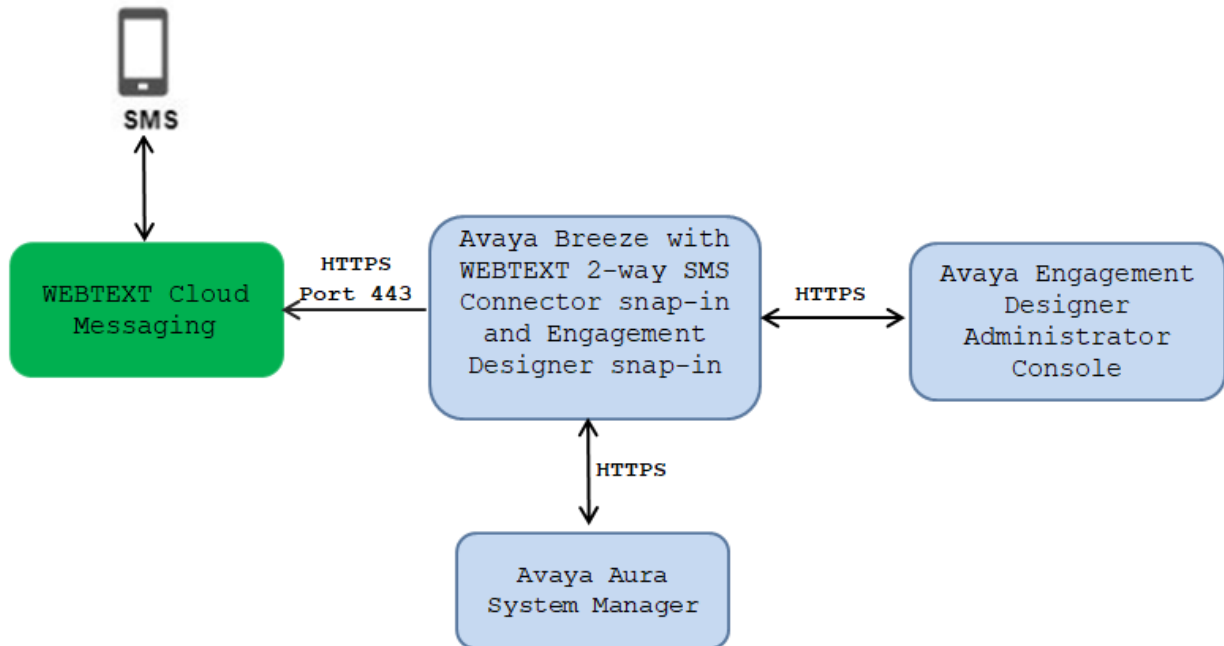


Figure 1: Test Configuration for WEBTEXT 2-way SMS Connector and Avaya Breeze™

4. Equipment and Software Validated

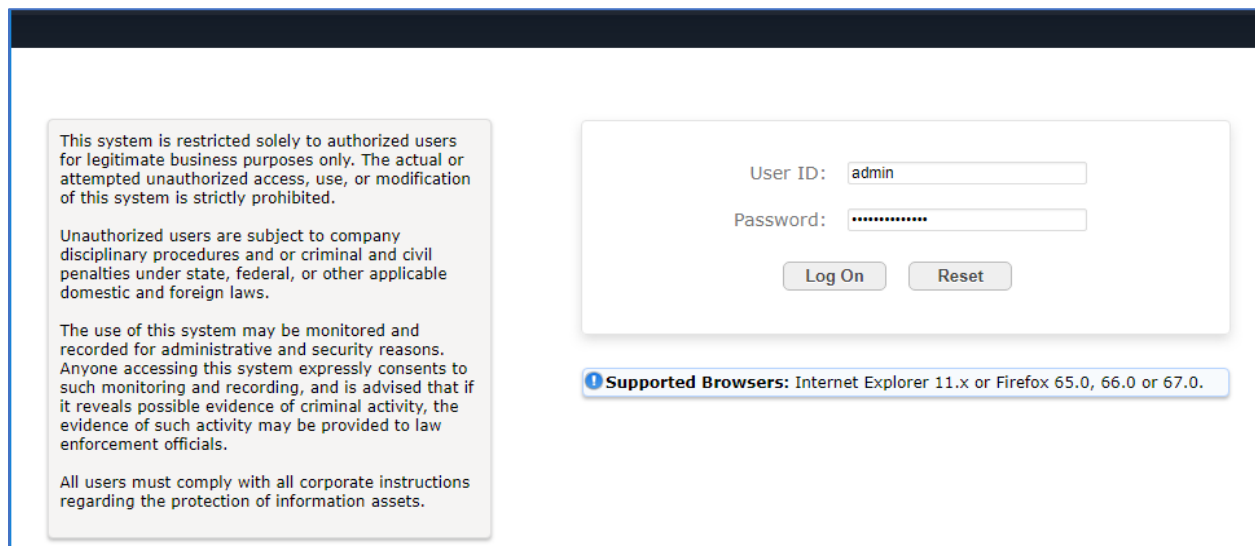
The following equipment and software were used for the sample configuration provided:

Equipment/Software	Release/Version
Avaya Aura® System Manager running in Virtual Environment	System Manager 8.1.3.0 Build No. - 8.1.0.0.733078 Software Update Revision No: 8.1.3.0.1011784 Feature Pack 3
Avaya Breeze™ running in Virtual Environment	Release 3.8.0.0.380018
Avaya Engagement Designer Snap-in	Release 3.8.0.0.100007
WEBTEXT 2-way SMS Connector Snap-in	Release 3.7.0.1.2

5. Configure Avaya Breeze

This section describes the procedure for configuring the Avaya Breeze to work with Avaya Engagement Designer snap-in and WEBTEXT 2-way connector snap-in. It is assumed that the installation and general configuration of the Avaya Breeze has been previously completed and is not discussed here.

Configuration of the Avaya Breeze is performed via System Manager. Access the System Manager Administration web interface by entering <http://<SMGR IP address/FQDN>> where <FQDN> is the FQDN of System Manager. Log in using appropriate credentials.



This system is restricted solely to authorized users for legitimate business purposes only. The actual or attempted unauthorized access, use, or modification of this system is strictly prohibited.

Unauthorized users are subject to company disciplinary procedures and or criminal and civil penalties under state, federal, or other applicable domestic and foreign laws.

The use of this system may be monitored and recorded for administrative and security reasons. Anyone accessing this system expressly consents to such monitoring and recording, and is advised that if it reveals possible evidence of criminal activity, the evidence of such activity may be provided to law enforcement officials.

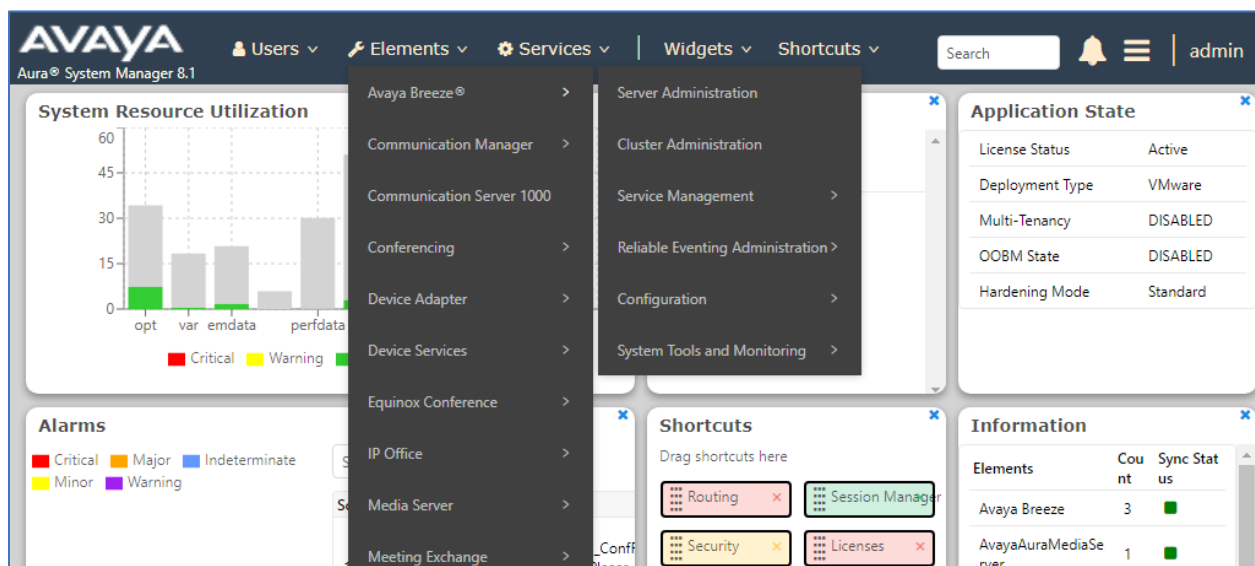
All users must comply with all corporate instructions regarding the protection of information assets.

User ID:

Password:

Supported Browsers: Internet Explorer 11.x or Firefox 65.0, 66.0 or 67.0.

The home screen of System Manager displays below; navigate to **Elements** → **Avaya Breeze®** → **Server Administration**.



AVAYA Aura® System Manager 8.1

Users ▾ Elements ▾ Services ▾ Widgets ▾ Shortcuts ▾ Search 🔍 admin

System Resource Utilization

Category	Value
opt	35
var	15
emdata	15
perfdats	30

Alarms

Severity	Count
Critical	0
Major	0
Indeterminate	0
Minor	0
Warning	0

Elements

- Avaya Breeze® >
- Communication Manager >
- Communication Server 1000 >
- Conferencing >
- Device Adapter >
- Device Services >
- Equinox Conference >
- IP Office >
- Media Server >
- Meeting Exchange >

Server Administration

- Cluster Administration
- Service Management >
- Reliable Eventing Administration >
- Configuration >
- System Tools and Monitoring >

Application State

Property	Value
License Status	Active
Deployment Type	VMware
Multi-Tenancy	DISABLED
OoBM State	DISABLED
Hardening Mode	Standard

Shortcuts

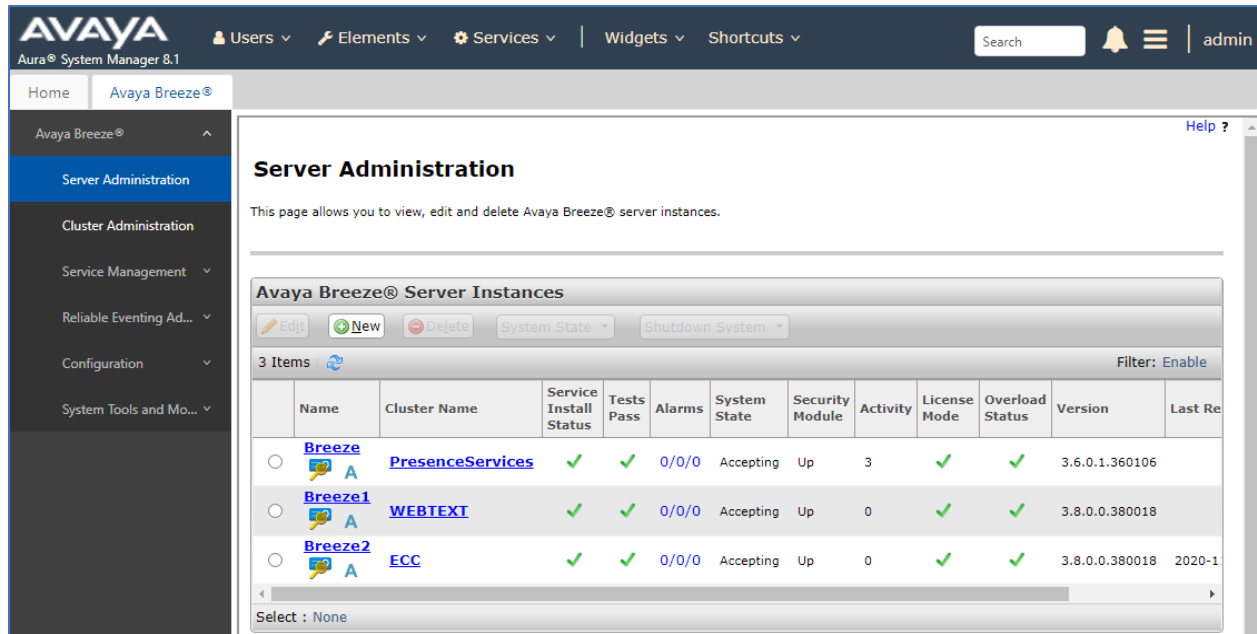
Drag shortcuts here

- Routing
- Session Manager
- Security
- Licenses

Information

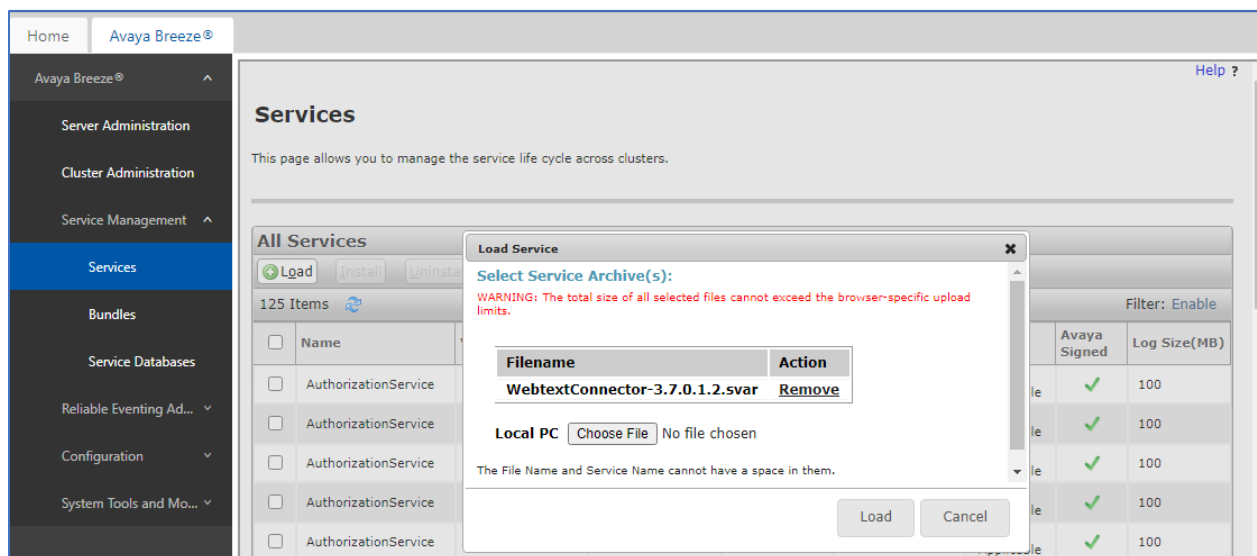
Elements	Count	Sync Status
Avaya Breeze	3	Green
Avaya Aura Media Server	1	Green

The **Server Administration** page is displayed in the right side of the page. The Engagement Designer snap-in and the WEBTEXT SMS connector snap-in will be loaded and installed on the **Breeze1** system and the cluster name **WEBTEXT**.

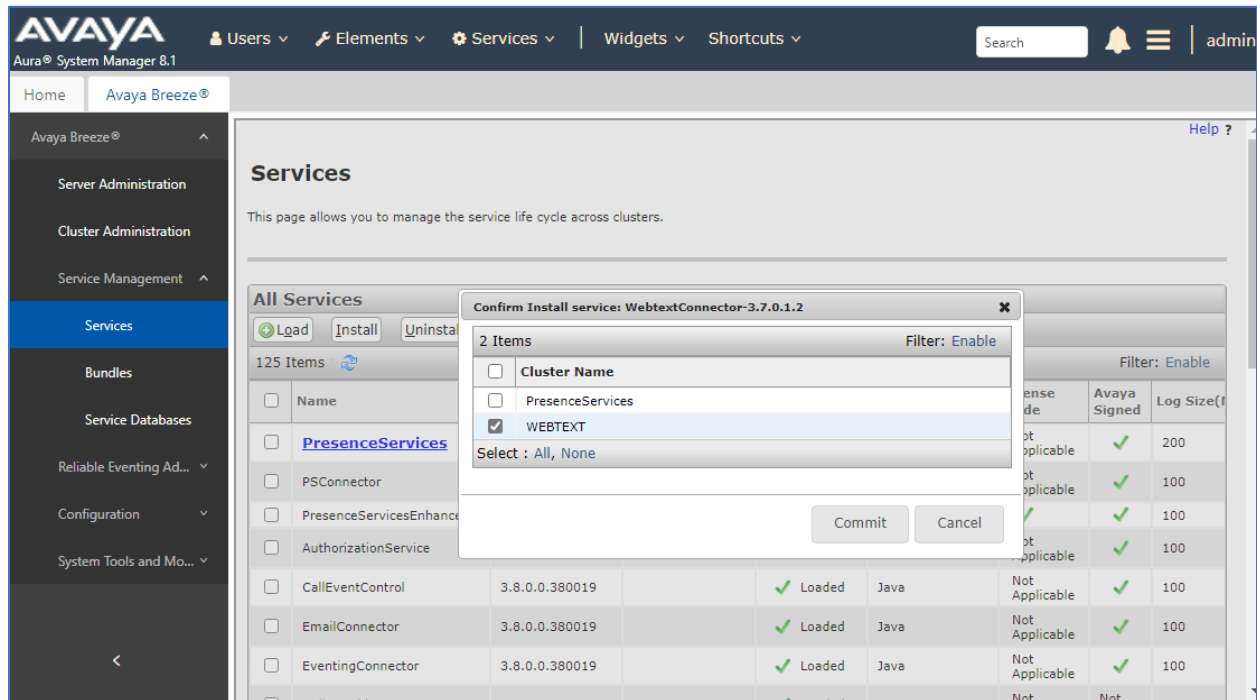


5.1. Configure WEBTEXT SMS Connector

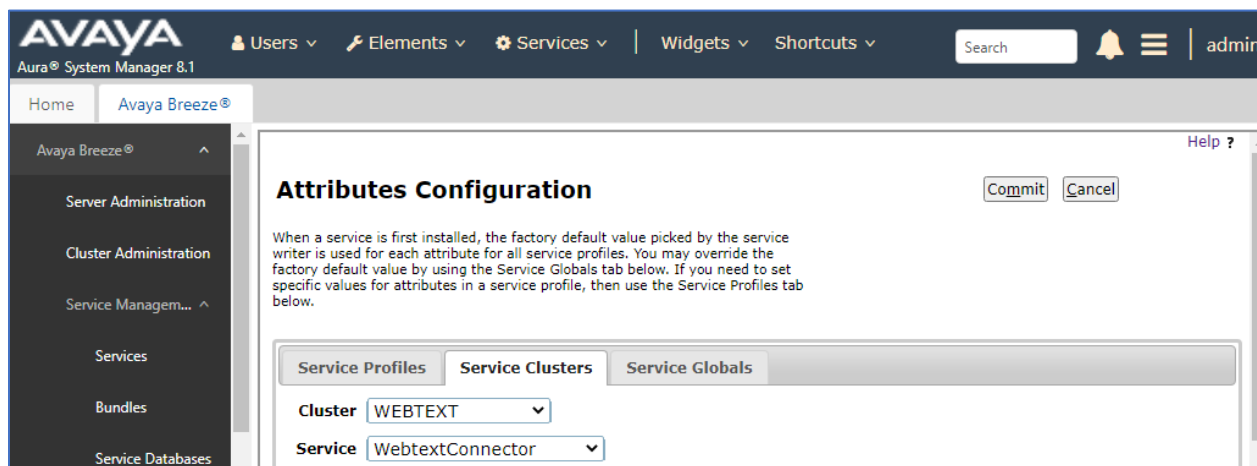
From the **Avaya Breeze®** menu in the left pane, navigate to the **Service Management** → **Services**. The **Services** page is display in the right side, select **Load** button. The **Load Service** window is displayed, select **Choose File** button to upload to the **WebtextConnector-3.7.0.1.2** snap-in from the local computer and select **Load** button.



As the **WebtextConnector-3.7.0.1.2** snap-in is successfully loaded to the System Manager, check the snap-in and select **Install** button. The **Confirm Install service** window is displayed, check the cluster name that the snap-in will be installed on; in this case the cluster name is **WEBTEXT**. Select **Commit** button to confirm.



To configure attributes for the **WEBTEXT** snap-in, navigate to **Configuration → Attributes**. The **Attributes Configuration** displays in the right side, select **Service Clusters** tab, and in the **Cluster** and **Services** dropdown fields, select the cluster name **WEBTEXT** and **WebtextConnector** snap-in as shown below.



Enter the following parameters for the WebtextConnector snap-in:

- **API id:** check the **Override Default** checkbox and enter the ID for the Webtext account, this account is provided by WEBTEXT.
- **API password:** check the **Override Default** checkbox and enter the password for the Webtext account, this password is also provided by WEBTEXT.
- **Inbound Message Channel:** check the **Override Default** checkbox and enter the string “WebtextReply”.
- **OCEANA_MODE:** check the **Override Default** checkbox and enter the value “false”.
- **Polling interval:** check the **Override Default** checkbox and enter the value 20 in the **Effective Value** box.

Click **Commit** (not shown) button to save the changes.

▼ DEFAULT_GROUP

12 Items

Name	Override Default	Effective Value	Description
API id	<input checked="" type="checkbox"/>	yjhxq54X	Unique to your Webtext account. Not the same as your Webtext username.
API password	<input checked="" type="checkbox"/>	*****	
DEBUG_MODE	<input type="checkbox"/>	False	(Use to expand log all raw data being passed through connector. Only set to True temporarily)
Inbound Message Channel	<input checked="" type="checkbox"/>	WebtextReply	CE Channel to send inbound polled messages to.
OCEANA_APPLICATION_KEY	<input type="checkbox"/>	webtext	(NEEDED FOR OCEANA)
OCEANA_MAINTENANCE_MODE	<input type="checkbox"/>	False	(NEEDED FOR OCEANA)Only set to TRUE for Cluster Maintenance. Changed at Service Cluster level
OCEANA_MODE	<input checked="" type="checkbox"/>	false	True if using Oceana, false otherwise
OCEANA_SNAPIN_IP	<input type="checkbox"/>	10.134.46.201	(NEEDED FOR OCEANA)
OCEANA_SNAPIN_NAME	<input type="checkbox"/>	SMSService	(NEEDED FOR OCEANA)
Polling interval	<input checked="" type="checkbox"/>	20	How often to check Webtext inbox for replies (seconds). Omit to disable polling.

In order for the WebtextConnector snap-in to connect to the WEBTEXT gateway, the HTTPS connection between the Breeze system and the WEBTEXT gateway need to be established. In the compliance test, WEBTEXT provides three certificates for a secure HTTPS connection to install on the Breeze system.

Select **Cluster Administration** from the **Avaya Breeze** menu. The **Cluster Administration** displays in the right side, check on the **WEBTEXT** cluster and select **Certificate Management** dropdown menu and then select **Install Trust Certificate (ALL Avaya Breeze® Instances)** link from the list.

Cluster Administration

This page allows you to view, edit and delete Avaya Breeze® clusters.

Avaya Breeze® Clusters

3 Item

	Details	Cluster Name	Cluster Group	Cluster IP	Cluster IPv6	Cluster FQDN	Cluster Profile	Cluster State	Alarms	Acti
<input type="checkbox"/>	Show	ECC		10.33.1.47			General Purpose	Accepting [1/1]	0/0/0	0
<input type="checkbox"/>	Show	PresenceServices		10.33.1.17			Core Platform	Accepting [1/1]	0/0/0	3
<input checked="" type="checkbox"/>	Show	WEBTEXT		10.33.1.37			General Purpose	Accepting [1/1]	0/0/0	0

Select : All, None

The **Install Trusted Certificate** page displays, select **Choose File** button to upload the certificate file and then select **Retrieve Certificate** button.

AVAYA
Aura® System Manager 8.1

Users ▾ Elements ▾ Services ▾ | Widgets ▾ Shortcuts ▾ Search 🔍 🔔 ⌵ | admin

Home Avaya Breeze®

Install Trusted Certificate

Bulk install trust certificate on all Avaya Breeze® instances

Select Store Type to install trusted certificate All ▾

*Please select a file **Choose File** DigiCertGlobalRootCA.pem

You must click the Retrieve certificate button and review the certificate details before you can continue. **Retrieve Certificate**

The detail certificate is displayed, select **Commit** button to install the certificate. Repeat the procedure above to install another two certificates.

5.2. Configure Avaya Engagement Designer

Repeat the procedure above to upload the Engagement Designer snap-in to the System Manager system and install it on the same Breeze system with the Webtext connector snap-in. The screens below displays the EngagementDesignerTasks-3.8.0.0.100005.svar file uploaded to the System Manger.

And the screen below shows the EngagementDesigner snap-in is successfully installed on the Breeze system. All attributes configuration of Engagement Designer leave at the default value at the Attributes Configuration page (not shown).

The screenshot shows the Avaya Aura System Manager 8.1 interface. The left sidebar contains navigation links: Home, Avaya Breeze®, Server Administration, Cluster Administration, Service Management, Services (selected), Bundles, Service Databases, Reliable Eventing Ad..., Configuration, and System Tools and Mo... The main content area displays the 'All Services' page with a table of installed services. The 'EngagementDesigner' service is highlighted with a checkmark in the 'State' column, indicating it is installed.

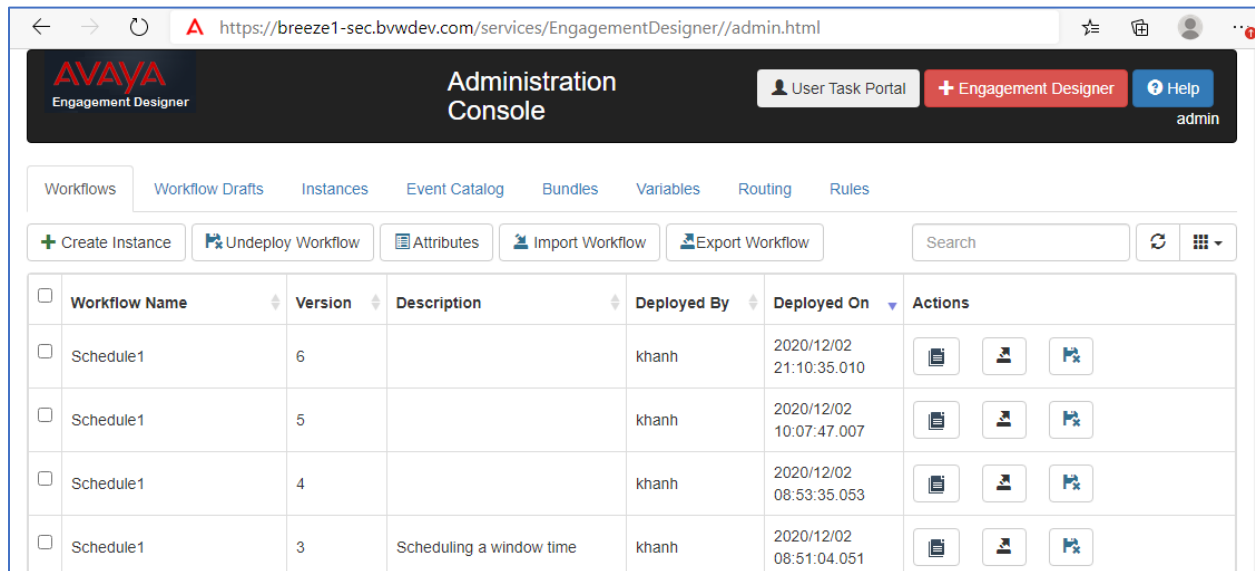
Name	Version	Preferred Version	State	Deployment Type	License Mode	Avaya Signed	Log Size(M)
PresenceServices	8.0.1.0.859		✓ Installed	Java	Not Applicable	✓	200
PSConnector	8.0.1.0.765		✓ Loaded	Java	Not Applicable	✓	100
PresenceServicesEnhanced	8.0.1.0.2		✓ Loaded	Java	✓	✓	100
AuthorizationService	3.8.0.0.380019		✓ Loaded	Java	Not Applicable	✓	100
CallEventControl	3.8.0.0.380019		✓ Loaded	Java	Not Applicable	✓	100
EmailConnector	3.8.0.0.380019		✓ Loaded	Java	Not Applicable	✓	100
EventingConnector	3.8.0.0.380019		✓ Loaded	Java	Not Applicable	✓	100
HelloWorld	3.8.0.0.380019		✓ Loaded	Java	Not Applicable	Not Signed	100
ScopiaConnector	3.8.0.0.380019		✓ Loaded	Java	Not Applicable	✓	100
EngagementDesigner	3.8.0.0.100007		✓ Installed	Java	✓	✓	100

The use of Engagement Designer requires license, the screen below shows the license for the Engagement Designer installed on the web license manager in the System Manger.

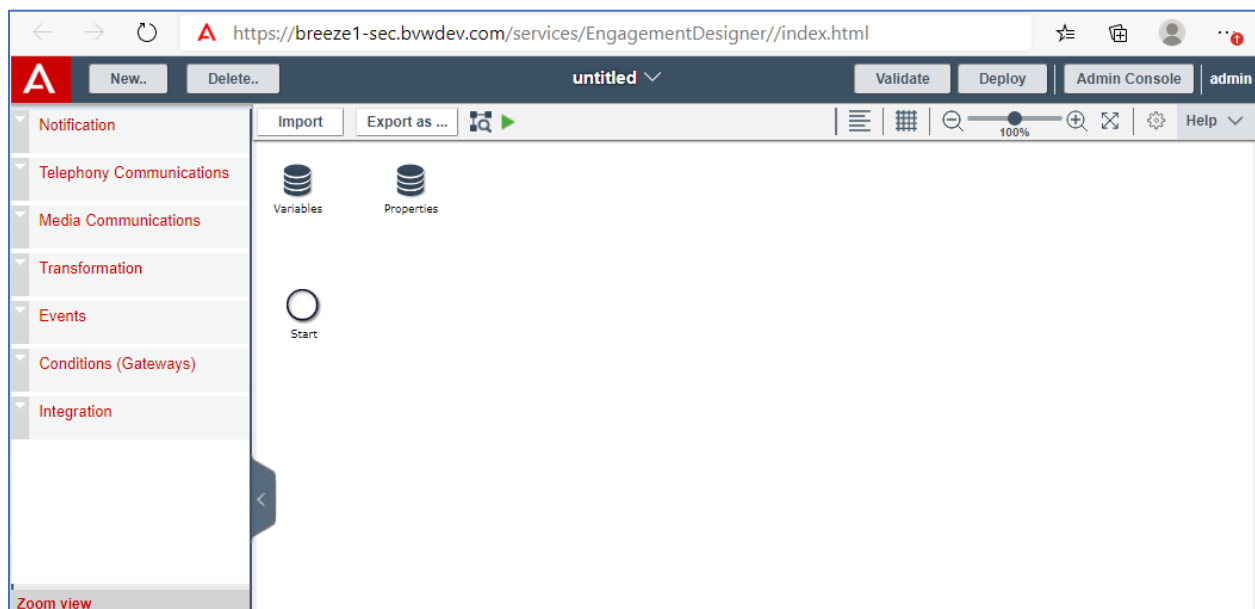
The screenshot shows the 'Collaboration Designer - Release: 3 - SID: 30400000' license page. The page displays the license installed on November 5, 2020, at 6:39:38 AM -07:00. The license file host ID is VB-9D-A4-5E-8C-77-01. The 'Licensed Features' section shows three items: IVR task feature, Maximum Collaboration Designer Developers, and Maximum Collaboration Designer Base. The 'Acquired Licenses' section is also visible.

Feature (License Keyword)	Expiration date	Licensed capacity	Currently Used
IVR task feature VALUE_CD_IVR_TASK	permanent	100	100
Maximum Collaboration Designer Developers VALUE_CD_DEVELOPER	permanent	100	100
Maximum Collaboration Designer Base VALUE_CD_BASE	permanent	100	100

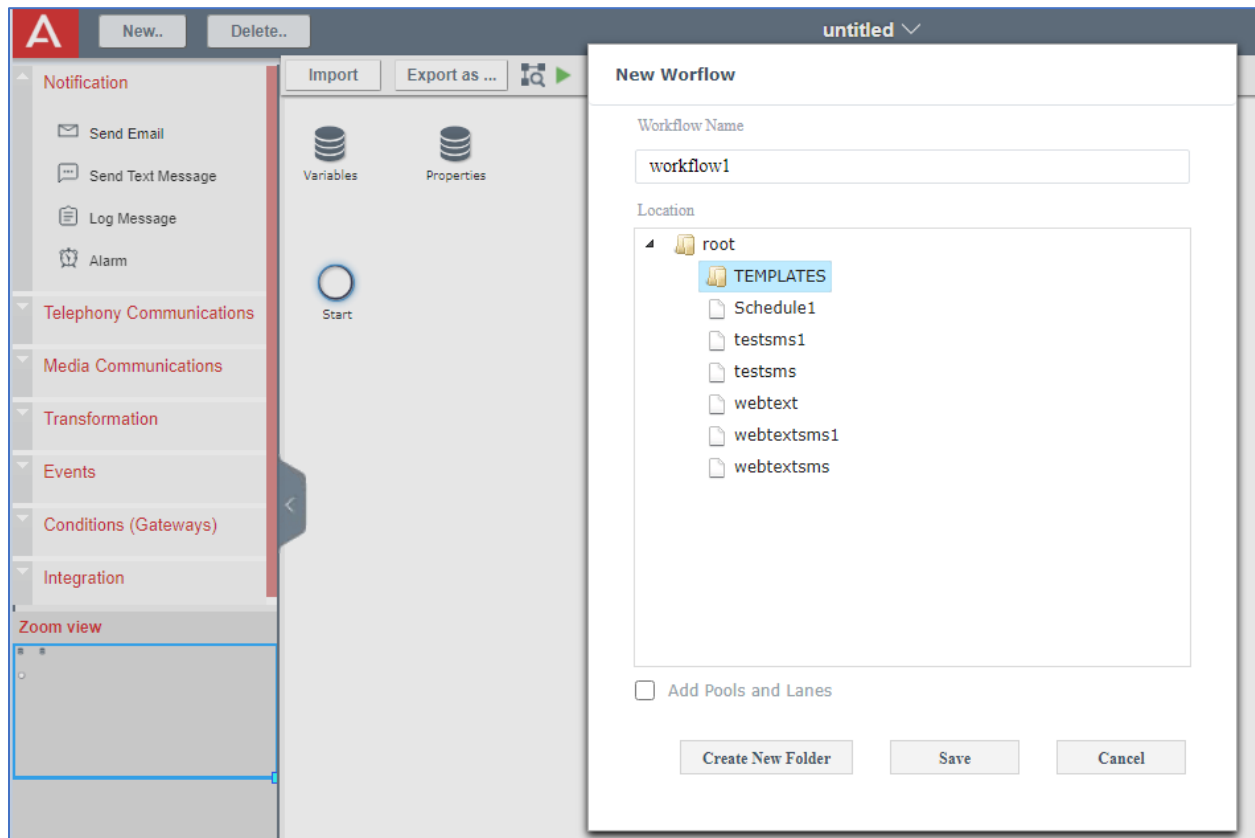
To access the Engagement Designer Administration Console web interface (aka Admin Console), the full qualified domain name (FQDN) needs to be resolved to the security module of the Breeze system (not the management IP address), this can be done by either adding in local host file of the client computer where launches the ED Admin Console or through DNS server. Here is the sample of the link: <https://breeze1-sec.bvwdev.com/services/EngagementDesigner//admin.html>



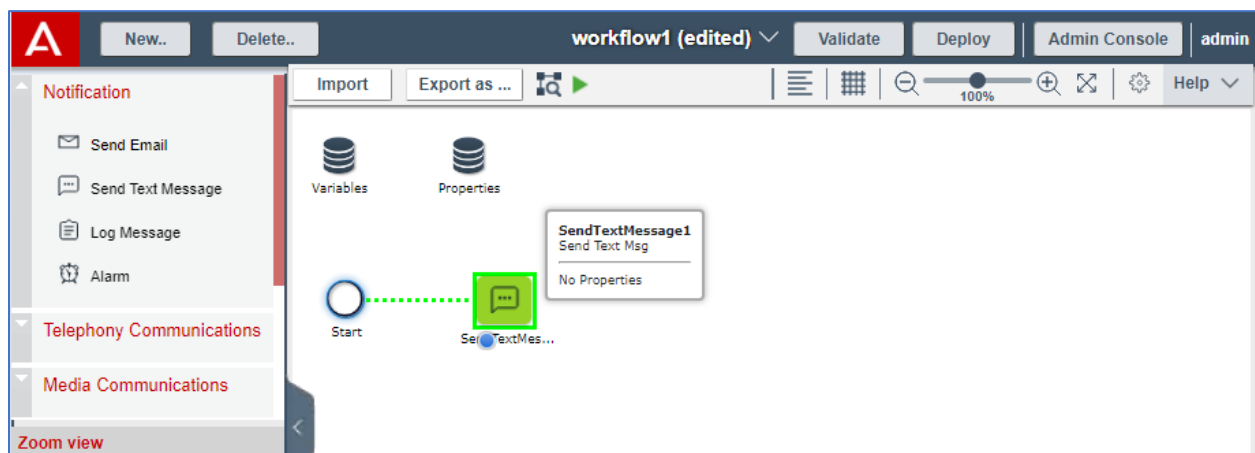
From the Admin Console, click on the **+ Engagement Designer** button to access to the Engagement Designer Console (aka Designer Console) web interface as shown below. The Designer Console is used to create a workflow.



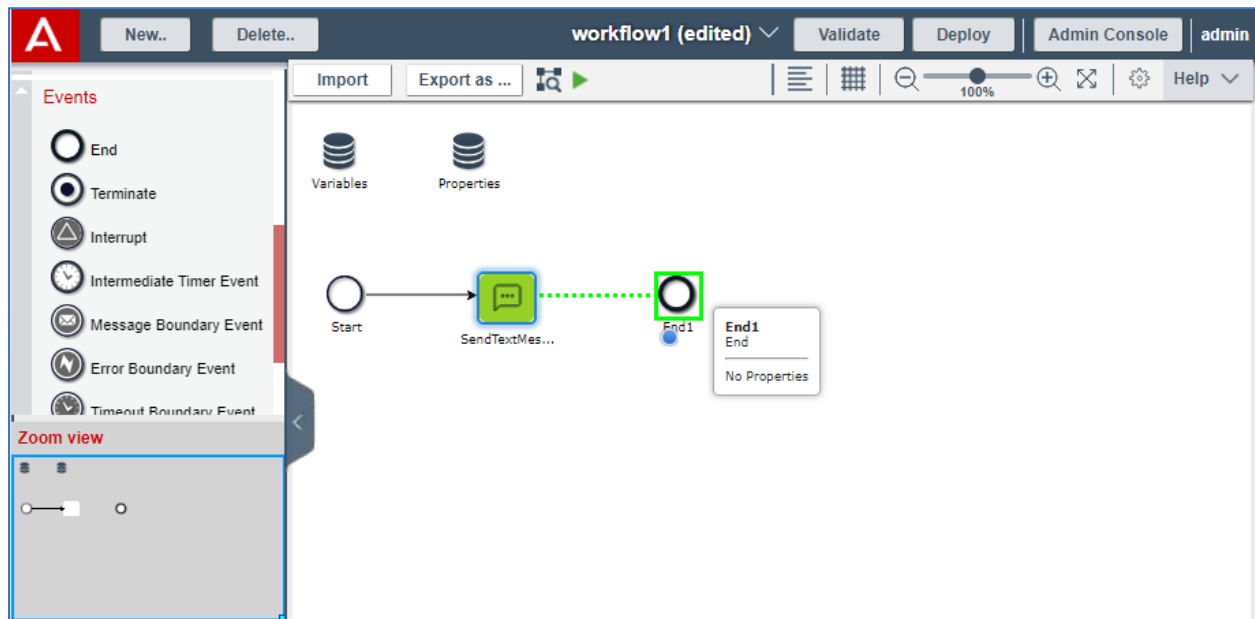
To create a new workflow definition, from the Designer Console, select **New** button. The **New Workflow** window is displayed, enter a workflow name in the **Workflow Name** box, for example *workflow1* and click **Save** button.



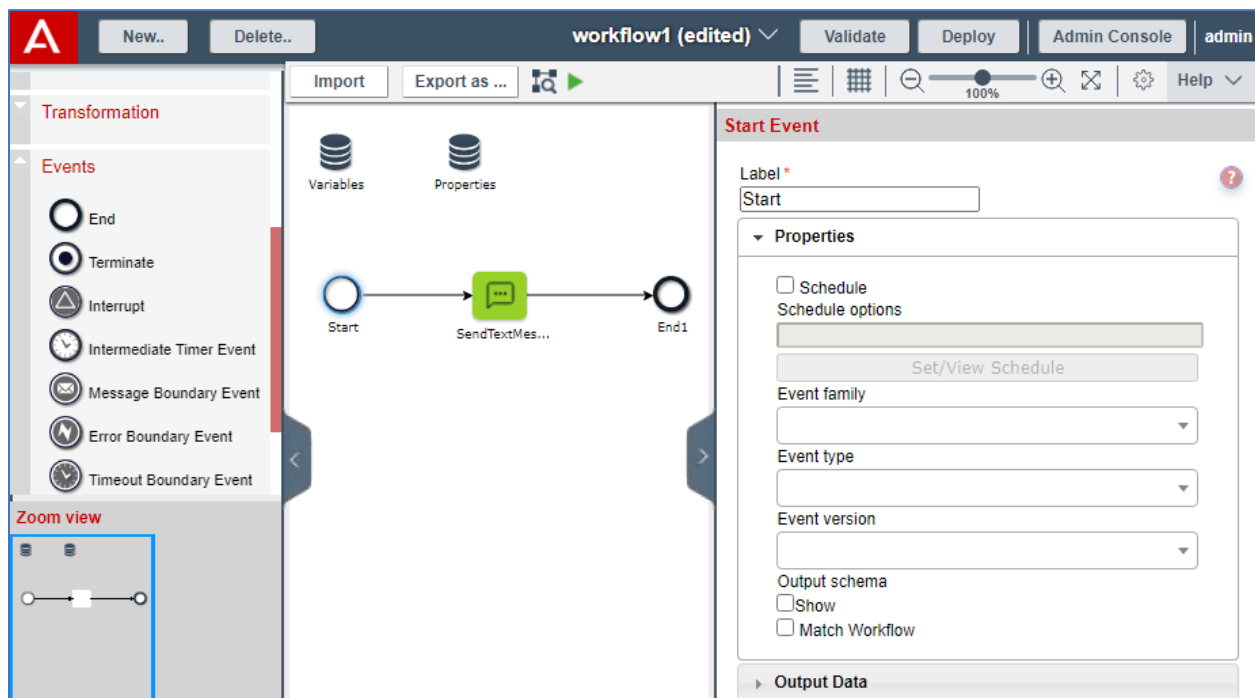
From the left menu pane, expand the **Notification** menu and drag the **Send Text Message** icon into the workspace area in the right side and then make a connection from the **Start** event icon to the **SendTextMessage1** icon.



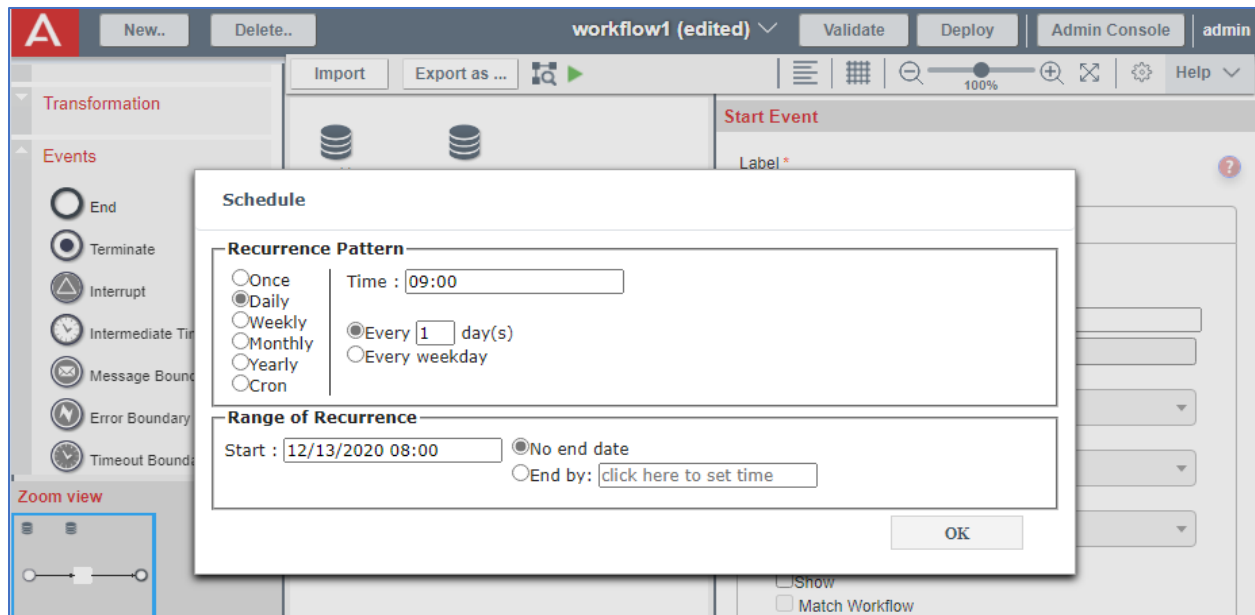
Continue to expand the **Events** menu and drag the **End** event icon into the workspace. Make a connection from the **SendTextMessage1** icon to the **End1** icon by holding a small blue circle on the SendTextMessage1 icon and move it toward the **End1** icon.



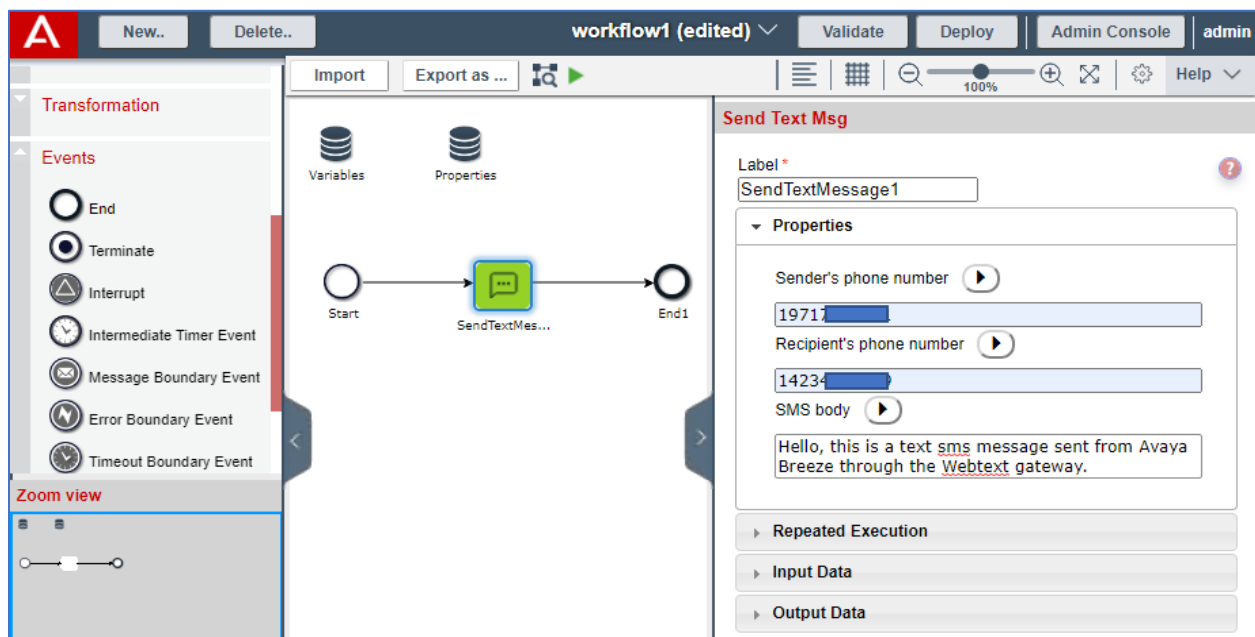
The screen below shows the workflow with the path from the Start event to the End event. Double click on the Start event to configure. The **Start Event** window displays in the right side of the Designer Console window.



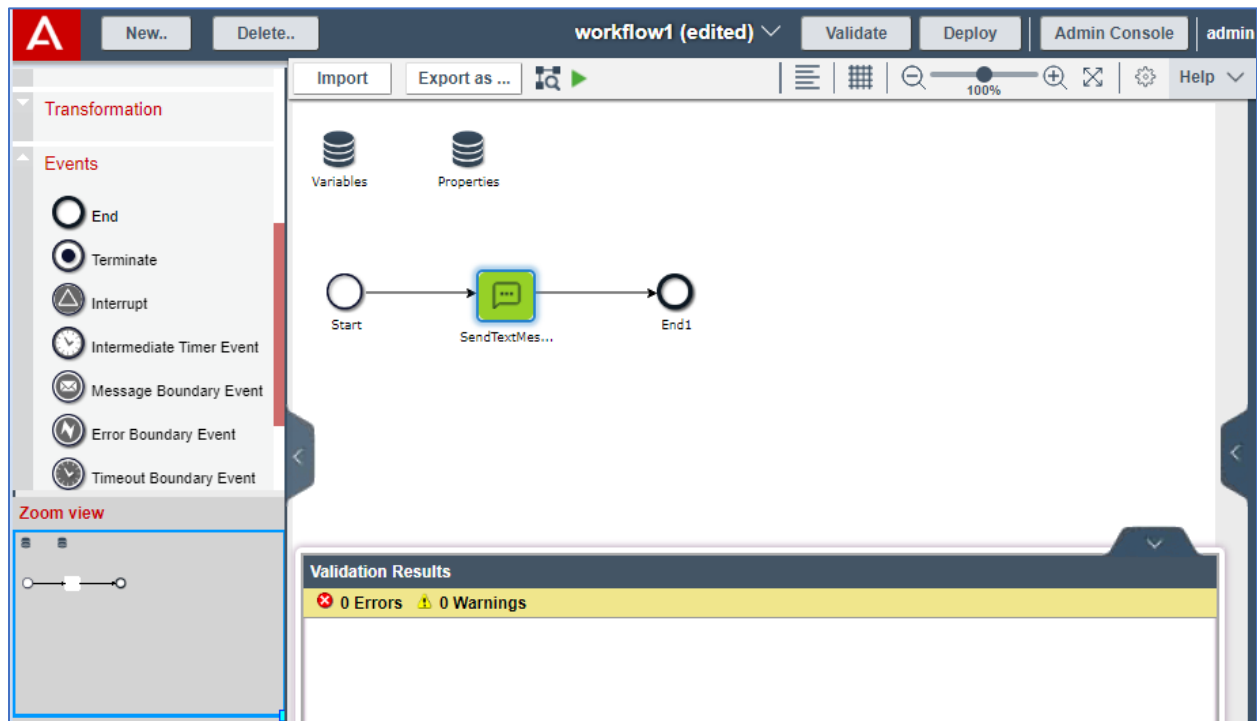
In the **Start Event** window, expand the **Properties** section and check on the **Schedule** box. The **Schedule** window is popped up. Select **Daily** radio button in the **Recurrence Pattern** section, set a time in the **Time** box and configure a start time in the **Start** box of the **Range of Recurrence** section as shown in the figure below. Click **OK** button to save the change.



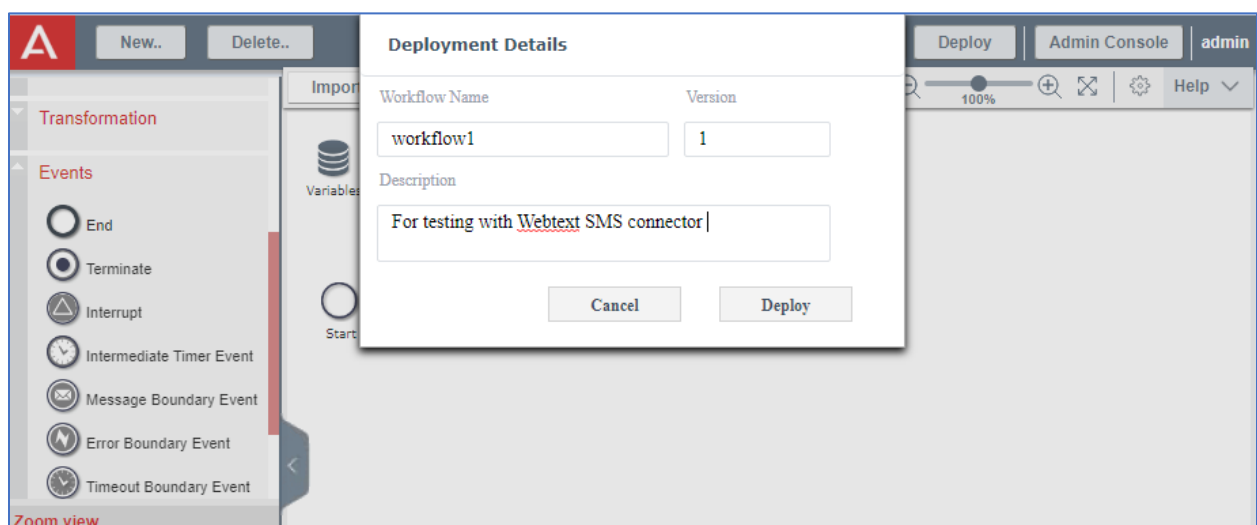
Double click on the **SendTextMessage** icon, the **Send Text Msg** window displays in the right side. In the **Properties** section, enter a provided phone number from Webtext in the **Sender's phone number** box, enter a mobile phone number in the **Recipient's phone number** box and type text message in the **SMS body** text box.



Click on **Validate** button to validate the workflow, the Validation Results section will display any error if it has in the workflow. The workflow is now good for deploying.



Select the **Deploy** button, the **Deployment Details** window is popped up. Enter a version number in the **Version** box and a description in the **Description** box. Select **Deploy** button to start deploying the workflow.



The newly created workflow name “workflow1” now is displayed in the **Workflows** tab in the **Admin Console** window.

	Workflow Name	Version	Description	Deployed By	Deployed On	Actions
<input type="checkbox"/>	workflow1	1	For testing with Webtext SMS connector	admin	2020/12/13 10:29:51.029	
<input type="checkbox"/>	Schedule1	6		khanh	2020/12/02 21:10:35.010	
<input type="checkbox"/>	Schedule1	5		khanh	2020/12/02 10:07:47.007	
<input type="checkbox"/>	Schedule1	4		khanh	2020/12/02 08:53:35.053	

6. Configure WEBTEXT

WEBTEXT is responsible for the configuration of SMS messaging service in their portal. They will provide the customer the necessary information to configure the WEBTEXT SMS connector from the enterprise site to their network, including:

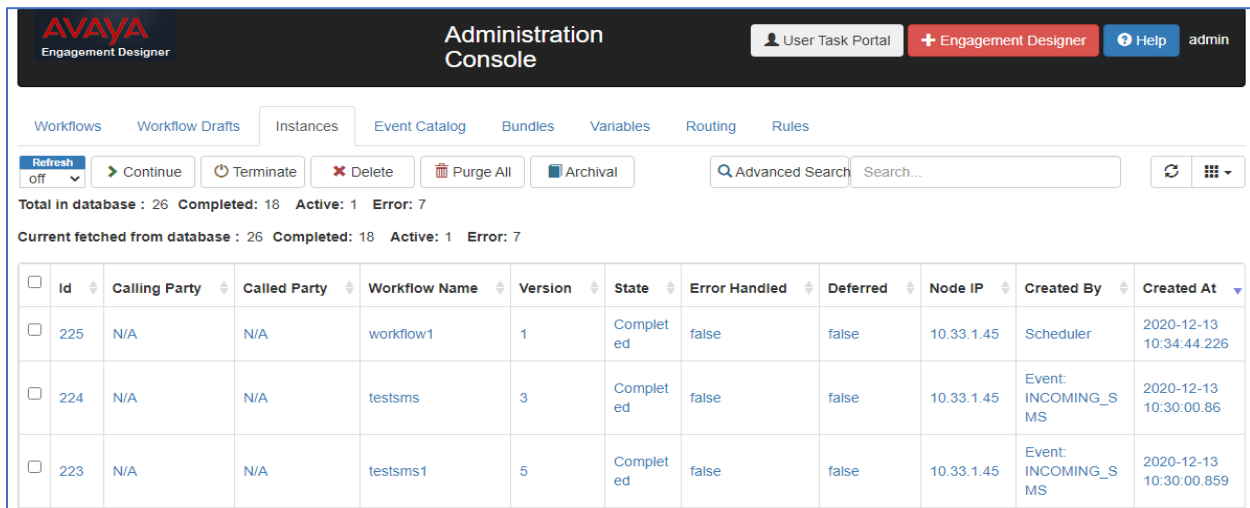
- WEBTEXT will provide an LOA (Letter of Authority) document that will need to include the phone numbers to be enabled for messaging and signed prior to any accounts being created. The LOA gives WEBTEXT permission to enable your toll or toll free numbers with SMS/MMS. Note the Voice service on these numbers that are enabled will not be affected in anyway.
- Upon completion of the LOA, WEBTEXT will create the account and services required. The account details will be provided to you via a “Account Credentials” document. Included in this document will be your snapin connection details.
- Trusted certificates need to be installed according to the Avaya Breeze.

7. Verification and Troubleshooting

This section provides verification steps that may be performed in the field to verify that the solution is configured properly. This section also provides a list of commands that can be used to troubleshoot the solution.

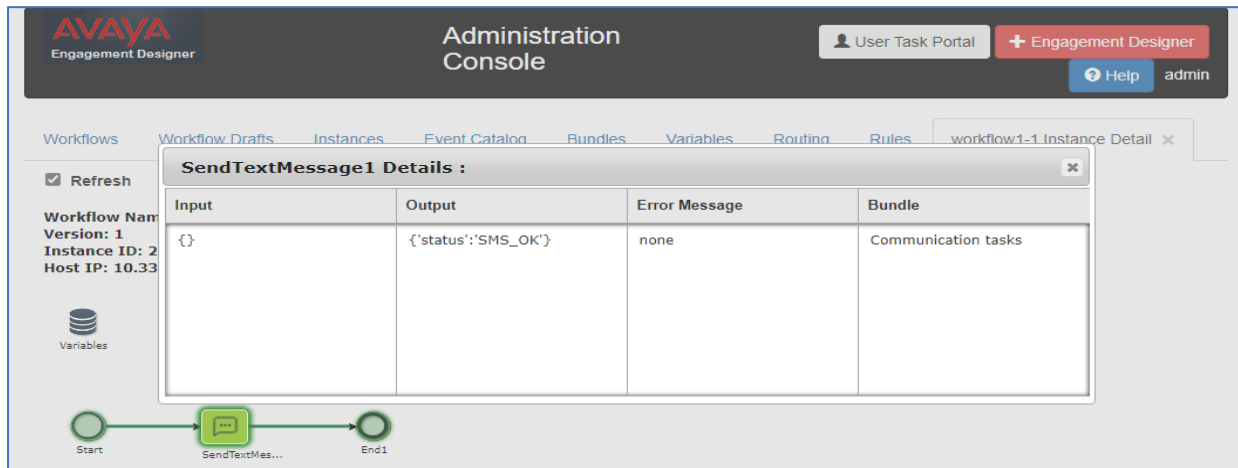
7.1. General Verification

To verify the SMS message is sent successfully to the recipient number through the WEBTEXT gateway, from the **Admin Console** window select **Instances** tab. The **Instances** tab displays the all instances that are created each time the workflow executed by triggering event. The first instance in the screenshot below shows the instance created by **Scheduler** with the workflow name *workflow1* as created in **Section 5.2**.



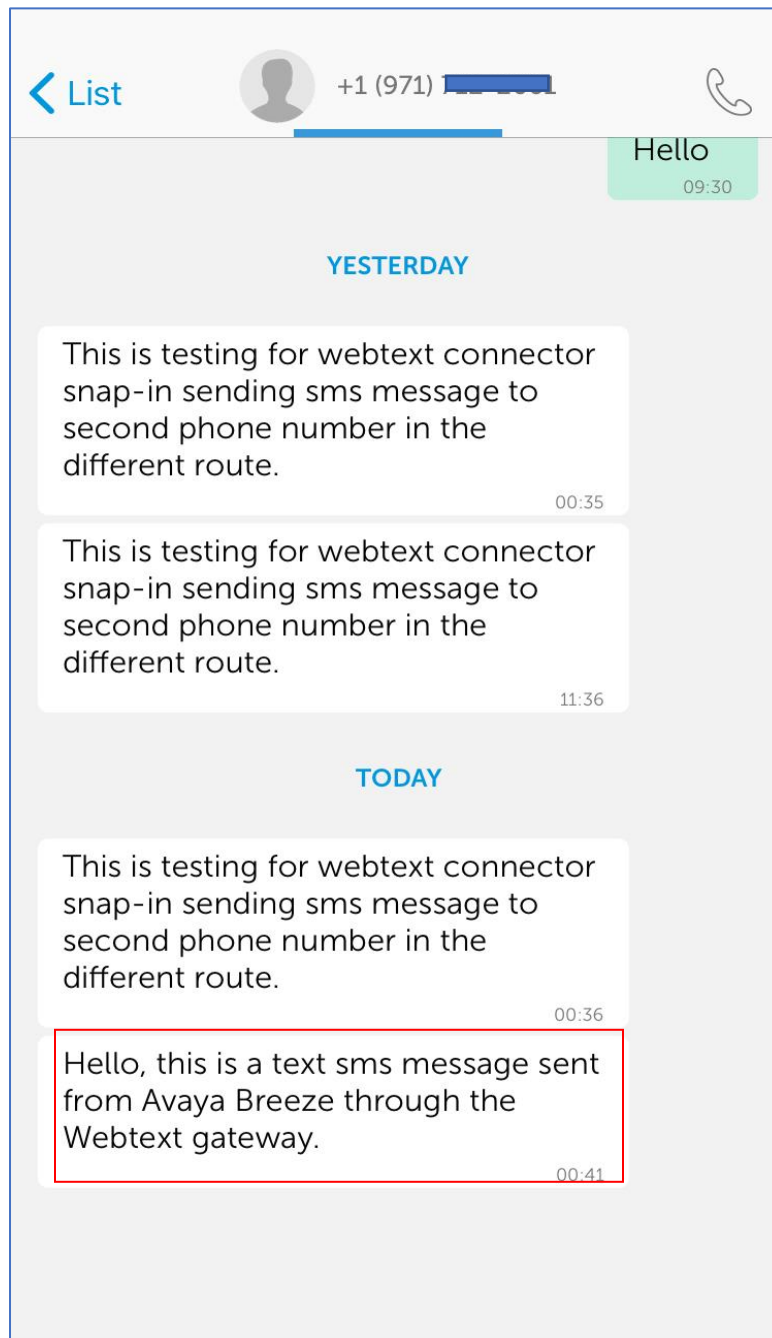
<input type="checkbox"/>	Id	Calling Party	Called Party	Workflow Name	Version	State	Error Handled	Deferred	Node IP	Created By	Created At
<input type="checkbox"/>	225	N/A	N/A	workflow1	1	Completed	false	false	10.33.1.45	Scheduler	2020-12-13 10:34:44.226
<input type="checkbox"/>	224	N/A	N/A	testsms	3	Completed	false	false	10.33.1.45	Event: INCOMING_SMS	2020-12-13 10:30:00.86
<input type="checkbox"/>	223	N/A	N/A	testsms1	5	Completed	false	false	10.33.1.45	Event: INCOMING_SMS	2020-12-13 10:30:00.859

Click on that instance, the **workflow1 Instance Detail** tab is opened with the path from Start event to End1 event highlighted as Green that indicates as completed successfully, select the **SendText Message1** event it displays the Output as {Status:SMS_OK}.



Input	Output	Error Message	Bundle
{}	{'status': 'SMS_OK'}	none	Communication tasks

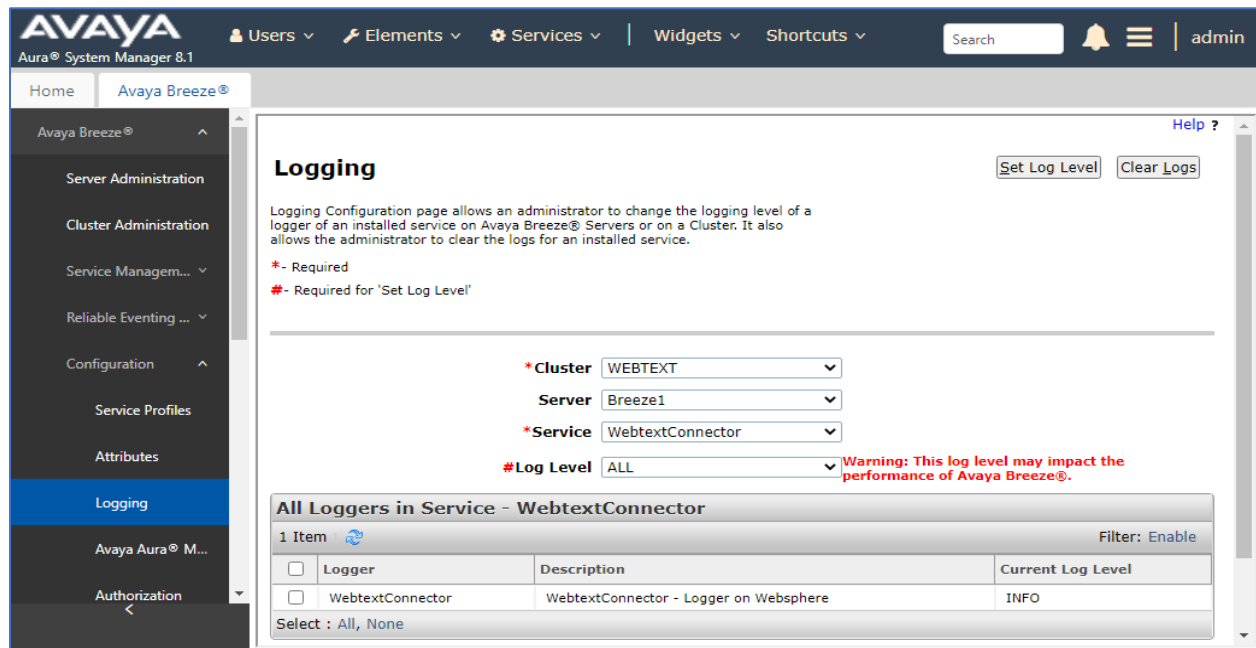
Verify the SMS message is received successfully on the mobile phone number as highlighted in the red box below.



7.2. General Troubleshooting

The following steps will be useful for debugging connector issues.

1. Enable logging on the WEBTEXT connector and Engagement Designer snap-in, from the Elements in System Manager navigate to **Elements → Avaya Breeze® → Configuration → Logging**. The **Logging** window displays in the right side, set the **Log Level** to **All** and click on the **Set Log Level** button. Note that, the log level should be set back to INFO as the troubleshooting is completed to avoid impact the performance of Avaya Breeze.



2. SSH into the Breeze servers management interface where the WebtextConnector is installed. Switch to the folder `"/var/log/Avaya/services/WebtextConnector"`. The `WebtextConnector.log` file can then be accessed for debugging.

```
^C
[cust@breeze1 WebtextConnector]$
[cust@breeze1 WebtextConnector]$
[cust@breeze1 WebtextConnector]$ ls -l
total 107488
-rw-r--r--. 1 wsuser susers 5138005 Dec 14 09:00 WebtextConnector.log
-rw-r--r--. 1 wsuser susers 10485765 Dec 8 20:56 WebtextConnector.log.1
-rw-r--r--. 1 wsuser susers 10485867 Nov 15 20:28 WebtextConnector.log.10
-rw-r--r--. 1 wsuser susers 10485889 Dec 3 18:01 WebtextConnector.log.2
-rw-r--r--. 1 wsuser susers 10485833 Nov 28 15:10 WebtextConnector.log.3
-rw-r--r--. 1 wsuser susers 10485870 Nov 24 02:46 WebtextConnector.log.4
-rw-r--r--. 1 wsuser susers 10485907 Nov 24 02:46 WebtextConnector.log.5
-rw-r--r--. 1 wsuser susers 10485870 Nov 24 02:46 WebtextConnector.log.6
-rw-r--r--. 1 wsuser susers 10485791 Nov 24 02:46 WebtextConnector.log.7
-rw-r--r--. 1 wsuser susers 10485769 Nov 24 02:46 WebtextConnector.log.8
-rw-r--r--. 1 wsuser susers 10485851 Nov 20 23:08 WebtextConnector.log.9
[cust@breeze1 WebtextConnector]$
[cust@breeze1 WebtextConnector]$
```

8. Conclusion

These Application Notes describe the procedures required to configure Avaya Breeze™ to interoperate with WEBTEXT 2-way SMS Connector as shown in **Figure 1**. Interoperability testing of the sample configuration was completed with successful results for all test cases with the observations/limitations described in **Sections 2.1** and **2.2**.

9. Additional References

Documentation related to Avaya can be obtained from <https://support.avaya.com>.

[1] *Administering Avaya Aura® System Manager*, Release 8.1.x, Issue 6, March 2020

[2] *Administering Avaya Aura® Session Manager*, Release 8.1.x, Issue 5, July 2020

[3] *Administering Avaya Breeze® platform*, Release 3.7 Issue 1 December 2019

Documentation related to WEBTEXT can be obtained from <https://www.webtext.com/>
Avaya Breeze or Oceana WEBTEXT Connector Implementation Guide v3.5 January 2019

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