



Avaya Solution & Interoperability Test Lab

Application Notes for Configuring Avotus Enhanced Usage Reporting for Unified Communications with Avaya Aura® Presence Services Snap-in running on Avaya Breeze® Platform – Issue 1.0

Abstract

These Application Notes describe the configuration procedures required to allow Avotus Enhanced Usage Reporting for Unified Communications to collect Instant Message records from Avaya Aura® Presence Services snap-in over an IP network connection. Avotus Enhanced Usage Reporting for Unified Communications collects, stores and processes these Instant Message records to provide usage analysis, oversight and retention capabilities.

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 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 describes a compliance-tested collection of Instant Messages records (IM) solution comprised of Avaya Breeze®, Avaya Aura® Presence Services snap-in and Avotus Enhanced Usage Reporting for Unified Communications (Avotus EUR). Avotus EUR is a usage reporting software application that uses collected IM and call records to provide reporting capabilities to business and IT managers, for the purpose of tracking and managing communications usage and telecom expenses.

Avotus EUR is a usage reporting package that utilizes the IM records output from Avaya Aura® Presence Services. Avotus EUR collects, stores, and processes the IM records to provide usage analysis, oversight and retention. An Avaya softphone can be configured to have Presence and Instant Messaging capabilities. The IM records can be archived by Presence Services and transferred to a server that has Secure File transfer Protocol (SFTP) capabilities. Avotus EUR connects to this server over the local or wide area network using SFTP to access these IM archived records and downloads XML files to the local Avotus EUR server for reports.

The assumption is made that the installation and configuration of the Avaya Breeze® server with Avaya Aura® Session Manager is already in place. For additional documentation, refer to **Section 10**.

2. General Test Approach and Test Results

The general test approach was to generate IM using Avaya softphones (during compliance testing Avaya one-X® Communicator was used) and ensure that Presence Services is able to archive these messages and transfer it to a server of user's choice using SFTP. Avotus EUR will then connect to this server also using SFTP and collect the archived files and delete the files once the collection is completed. For serviceability testing LAN failures and restart of Avotus EUR server were simulated.

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 this DevConnect Application Note 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.

2.1. Interoperability Compliance Testing

The interoperability compliance testing included feature and serviceability testing. The feature testing evaluated the ability of Avotus EUR to collect and process IM. The source, destination and message body of each IM was verified on the Avotus EUR application. The interoperability compliance testing includes the following cases.

- IM between two Avaya softphones.
- IM between two Avaya softphones and inviting another Avaya softphone to the chat.
- IM and Voice calls simultaneously.
- IM and transfer of files using chat window.

The serviceability testing introduced failure scenarios to see if Avotus EUR could resume IM records collection after failure recovery.

2.2. Test Results

All feature and serviceability tests passed.

2.3. Support

Technical support for the Avotus EUR solution can be obtained by contacting Avotus:

- URL – http://www.avotus.com/contact_support.asp
- Phone – (800) 840-2580

3. Reference Configuration

Figure 1 illustrates a sample configuration with an Avaya network that includes the following Avaya products:

- Avaya Aura® Presence Services Snap-in running on Avaya Breeze® Platform.
- Avaya Aura® System Manager used to configure Avaya Breeze® Platform.
- Avaya Aura® Session Manager registered by the one-X® Communicator soft client.
- Avaya Aura® Communication Manager provided the telephony features for the one-X® Communicator soft client
- Avaya Aura® Media Server and Avaya G450 Media Gateway provided the digital signal processor (DSP) and dial tone for the H323 endpoints.

For IM chat window, Avaya one-X® Communicator soft clients in SIP mode were used.

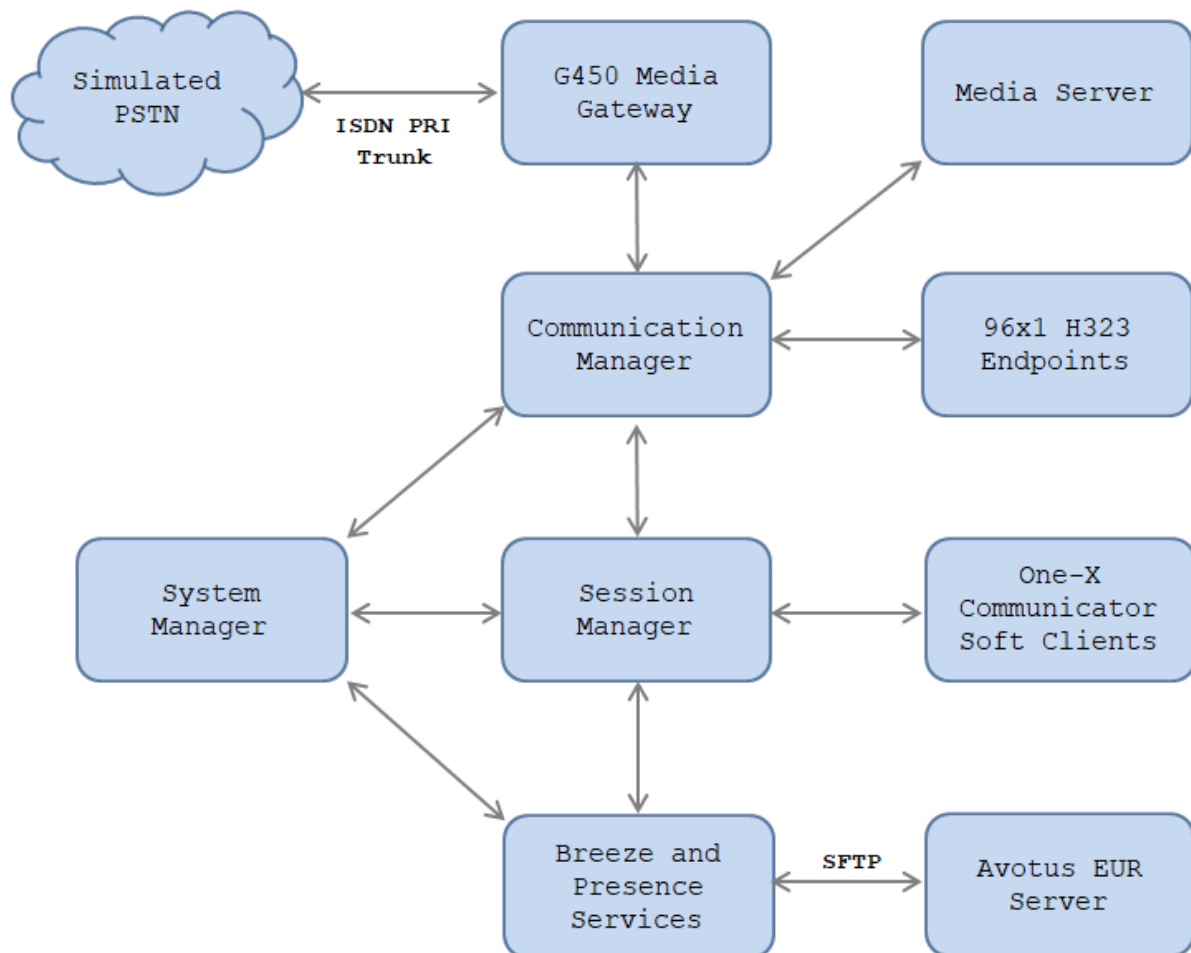


Figure 1: Test configuration for Avotus EUR Compliance Test

The following table indicates the IP addresses that were assigned to the systems in the test configuration diagram:

Description	IP Address
System Manager	10.33.1.10
Session Manager Signaling	10.33.1.12
Breeze Signaling	10.33.1.16
Communication Manager	10.33.1.6
Media Server	10.33.1.30
G450 Media Gateway	10.33.1.40
One-X Communicator soft clients	10.10.98.86, 10.10.98.88
Avotus EUR Server	10.10.98.143

4. Equipment and Software Validated

The following equipment and software/firmware were used for the test configuration.

Equipment/Software	Release/Version
Avaya Aura® System Manager running on virtualized environment	8.0.1.0 8.0.1.0.038826
Avaya Aura® Session Manager running on virtualized environment	8.0.1.0 8.0.1.0.801007
Avaya Aura® Communication Manager running on virtualized environment	8.0.1.0
Avaya Aura® Presence Services Snap-in	8.0.1.0.859
Avaya Breeze™ Platform	3.6.0.0.360009
Avaya one-X® Communicator (SIP)	6.2.12.23-SP12 Patch 13
Avotus Enhanced Usage Reporting for Unified Communications running on Windows Server 2008 R2 Standard SP1	9.10.0001

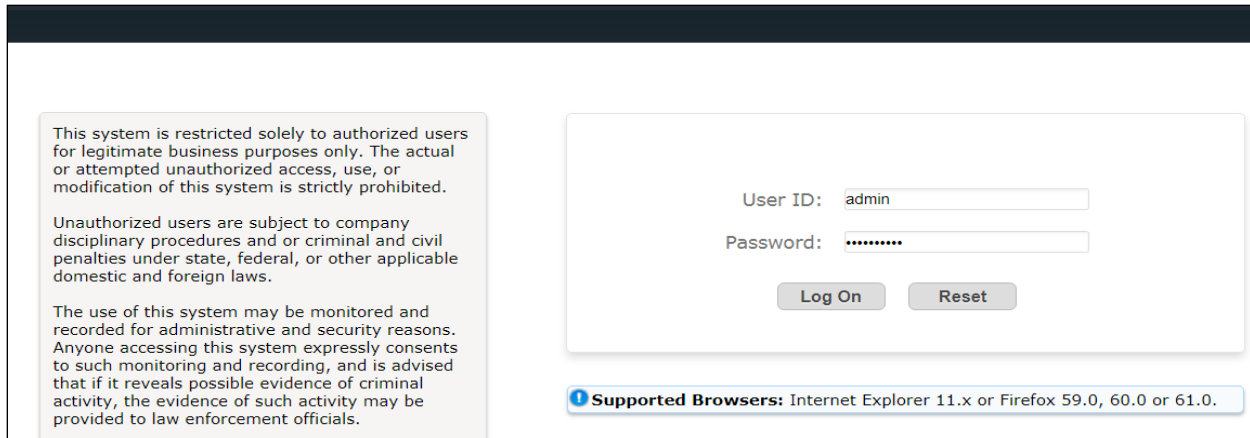
5. Configure Avaya Aura® Session Manager for Presence Services

This section provides the procedures for configuring Session Manager for Presence Services. The procedures include the following areas:

- Launch Avaya Aura® System Manager
- Administer Domain
- Administer locations
- Administer SIP entities

5.1. Launch Avaya Aura® System Manager

Access the System Manager web interface by using the URL “https://ip-address” in an Internet browser window, where “ip-address” is the IP address of System Manager. Log in using the 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.

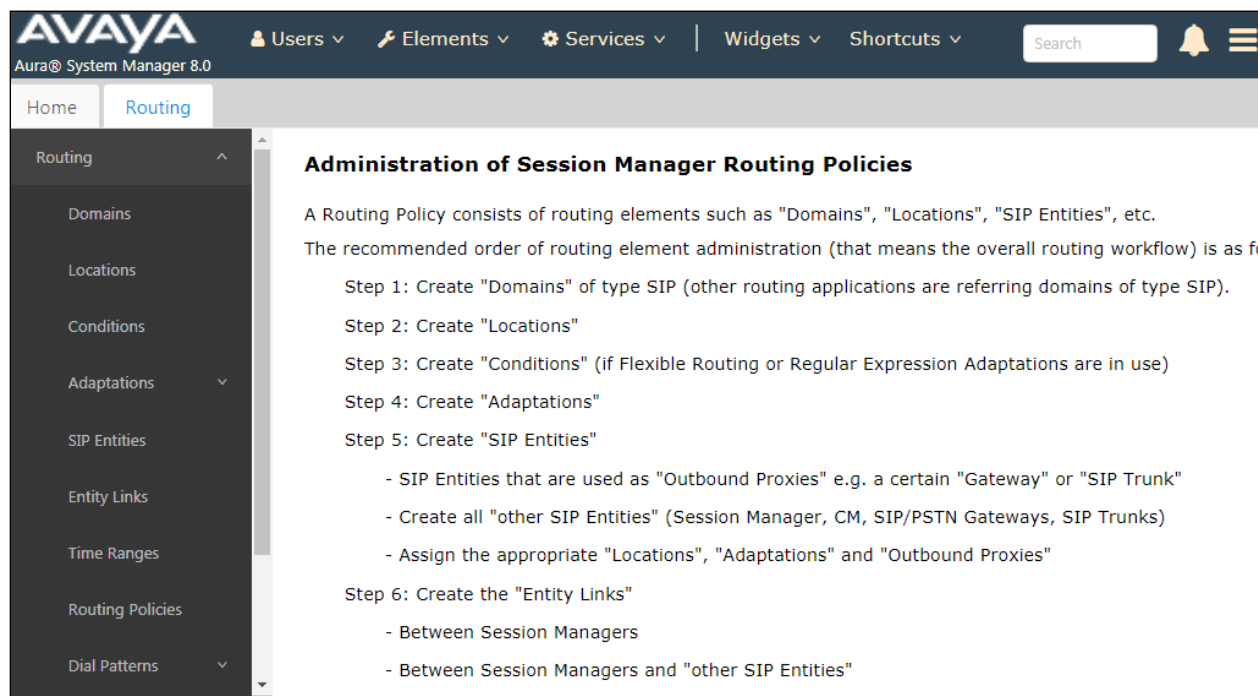
User ID:

Password:

Supported Browsers: Internet Explorer 11.x or Firefox 59.0, 60.0 or 61.0.

5.2. Administer Domain

In the subsequent screen (not shown), select **Elements** → **Routing** to display the **Administration of Session Manager Routing Policies** screen below. Select **Routing** → **Domains** from the left pane, and click **New** in the subsequent screen (not shown) to add a new domain.



AVAYA
Aura® System Manager 8.0

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

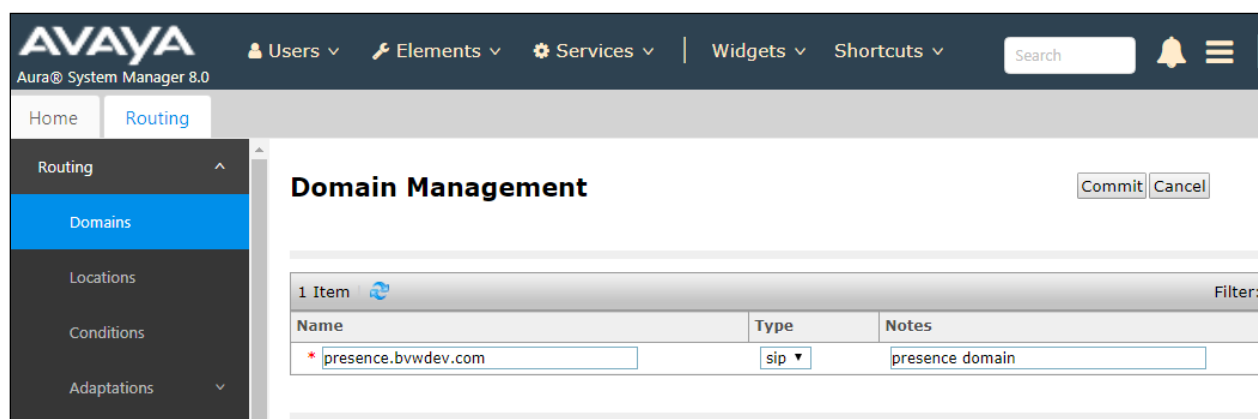
Home Routing

Administration of Session Manager Routing Policies

A Routing Policy consists of routing elements such as "Domains", "Locations", "SIP Entities", etc.
The recommended order of routing element administration (that means the overall routing workflow) is as follows:

- Step 1: Create "Domains" of type SIP (other routing applications are referring domains of type SIP).
- Step 2: Create "Locations"
- Step 3: Create "Conditions" (if Flexible Routing or Regular Expression Adaptations are in use)
- Step 4: Create "Adaptations"
- Step 5: Create "SIP Entities"
 - SIP Entities that are used as "Outbound Proxies" e.g. a certain "Gateway" or "SIP Trunk"
 - Create all "other SIP Entities" (Session Manager, CM, SIP/PSTN Gateways, SIP Trunks)
 - Assign the appropriate "Locations", "Adaptations" and "Outbound Proxies"
- Step 6: Create the "Entity Links"
 - Between Session Managers
 - Between Session Managers and "other SIP Entities"

The **Domain Management** screen is displayed. In the **Name** field enter the domain name, select **sip** from the **Type** drop down menu and provide any optional **Notes**.



AVAYA
Aura® System Manager 8.0

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

Home Routing

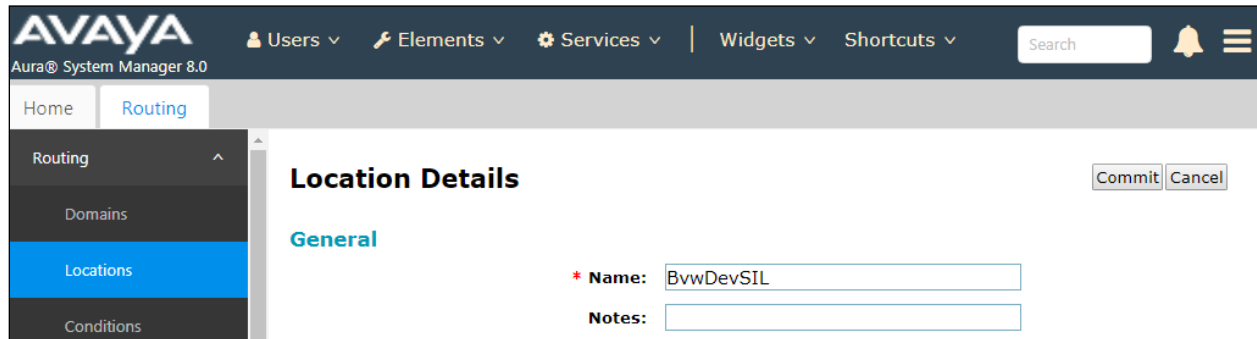
Domain Management Commit Cancel

Name	Type	Notes
* presence.bvwddev.com	sip ▾	presence domain

5.3. Administer Locations

Select **Routing** → **Locations** from the left pane, and click **New** in the subsequent screen (not shown) to add a new location.

The **Location Details** screen is displayed. In the **General** sub-section, enter a descriptive **Name** and optional **Notes**. Retain the default values in the remaining fields.



AVAYA
Aura® System Manager 8.0

Users ▾ Elements ▾ Services ▾ | Widgets ▾ Shortcuts ▾ Search 🔍 🔔 ☰

Home Routing

Routing Domains Locations Conditions

Location Details

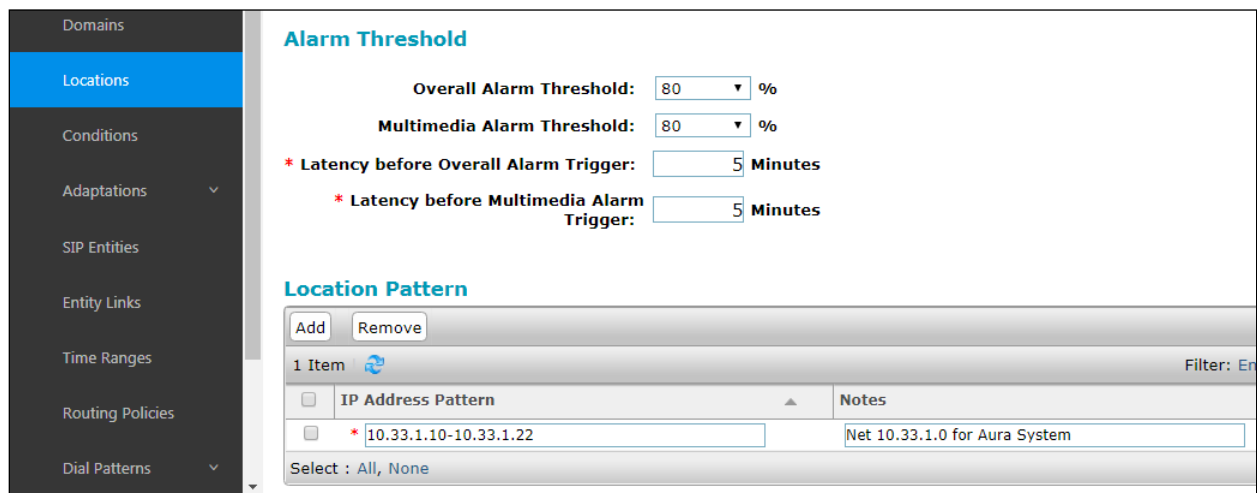
Commit Cancel

General

* Name: BvwDevSIL

Notes:

Scroll down to the **Location Pattern** sub-section, click **Add** and enter the IP address of all devices involved in the compliance testing in **IP Address Pattern**, as shown below. Retain the default values in the remaining fields.



Domains Locations Conditions Adaptations ▾ SIP Entities Entity Links Time Ranges Routing Policies Dial Patterns ▾

Alarm Threshold

Overall Alarm Threshold: 80 %

Multimedia Alarm Threshold: 80 %

* Latency before Overall Alarm Trigger: 5 Minutes

* Latency before Multimedia Alarm Trigger: 5 Minutes

Location Pattern

Add Remove

1 Item Filter: En

IP Address Pattern	Notes
* 10.33.1.10-10.33.1.22	Net 10.33.1.0 for Aura System

Select : All, None

5.4. Administer SIP Entity

This section explains the adding of a SIP entity for the Presence Server.

Select **Routing** → **SIP Entities** from the left pane, and click **New** in the subsequent screen (not shown) to add a new SIP entity for Presence Services.

The **SIP Entity Details** screen is displayed. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Name:** A descriptive name.
- **FQDN or IP Address:** The FQDN of Presence Server.
- **Type:** Select *Presence Services* from the drop down menu.
- **Notes:** Any desired notes.
- **Location:** Select the location name configured in **Section 5.3**.
- **Time Zone:** Select the applicable time zone.

The screenshot displays the Avaya Aura System Manager 8.0 web interface. The top navigation bar includes the Avaya logo, a search bar, and links for Users, Elements, Services, Widgets, and Shortcuts. The left sidebar shows a menu with 'Routing' selected, and 'SIP Entities' highlighted. The main content area is titled 'SIP Entity Details' and contains a 'General' tab. The form fields are as follows:

- Name:** Presence70
- FQDN or IP Address:** presence70.bvwdev.com
- Type:** Presence Services (dropdown)
- Notes:** (empty text area)
- Adaptation:** (empty dropdown)
- Location:** BvwDevSIL (dropdown)
- Time Zone:** America/Toronto (dropdown)
- SIP Timer B/F (in seconds):** 4
- Minimum TLS Version:** Use Global Setting (dropdown)
- Credential name:** (empty text area)
- Securable:** (checkbox, unchecked)
- Call Detail Recording:** none (dropdown)

Buttons for 'Commit' and 'Cancel' are located at the top right of the form area.

Scroll down to the **Entity Links** sub-section, and click **Add** to add an entity link. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Name:** A descriptive name.
- **SIP Entity 1:** The Session Manager entity name, in this case *ASM70A*.
- **Protocol:** *TLS*
- **Port:** *5062*
- **SIP Entity 2:** The Presence Server entity name from this section.
- **Port:** *5061*
- **Connection Policy:** *trusted*

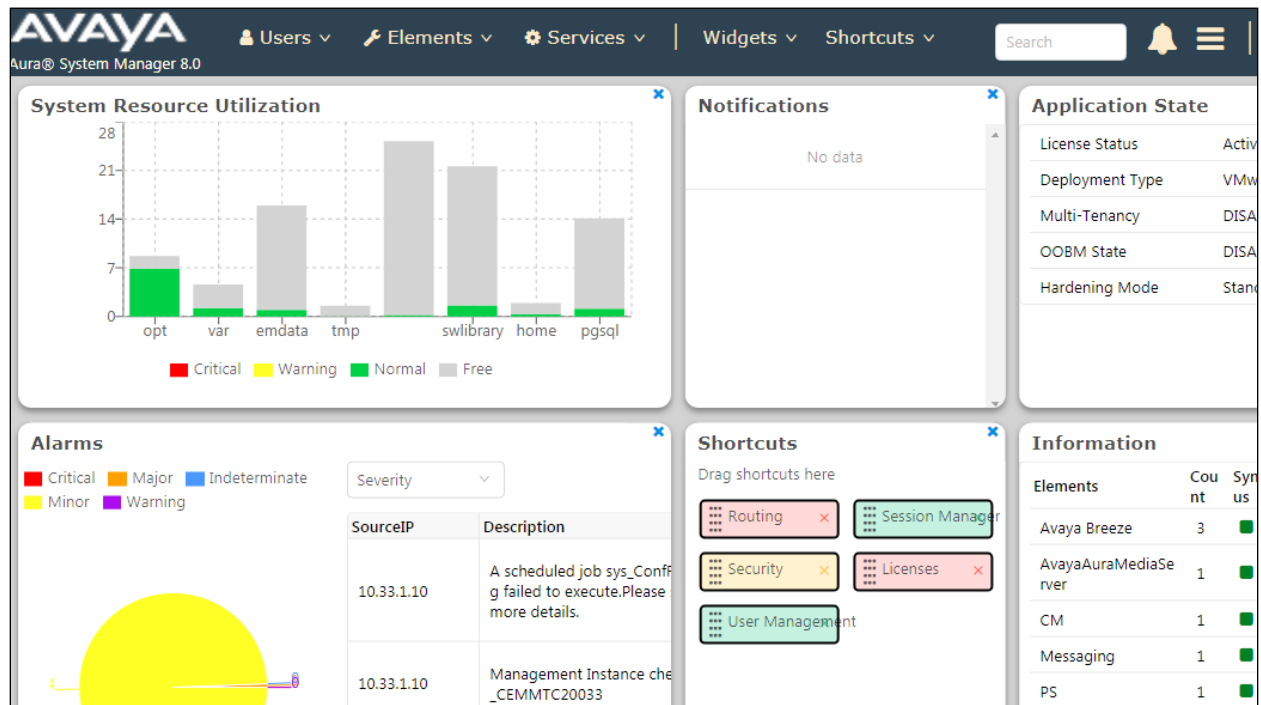
The screenshot shows a web interface with a sidebar on the left containing navigation links: Home, Routing, Domains, Locations, Conditions, Adaptations, and SIP Entities (highlighted in blue). The main content area is titled 'Entity Links' and includes a sub-section 'Override Port & Transport with DNS' with an 'SRV' checkbox. Below this, there are 'Add' and 'Remove' buttons. A table displays one entity link with the following details:

Name	SIP Entity 1	Protocol	Port	SIP Entity 2	Port	Connection Policy
* ASM70_Presence70_50	ASM70A	TLS	* 5062	Presence70	* 5061	trusted

At the bottom of the table, there is a 'Select' dropdown menu with options 'All' and 'None'.

6. Configure Avaya Aura® Presence Services Snap-in, Instant Messaging and Presence for SIP Users

Configuration for Presence Services is accomplished by accessing the browser-based GUI of System Manager using the URL “https://<ip-address>/SMGR”, where <ip-address> is the IP address of System Manager. Log in with the appropriate credentials. The initial screen is displayed as shown below. The configuration in this section will be performed under **Avaya Breeze™** and **User Management** listed within the **Elements** and **Users** section.

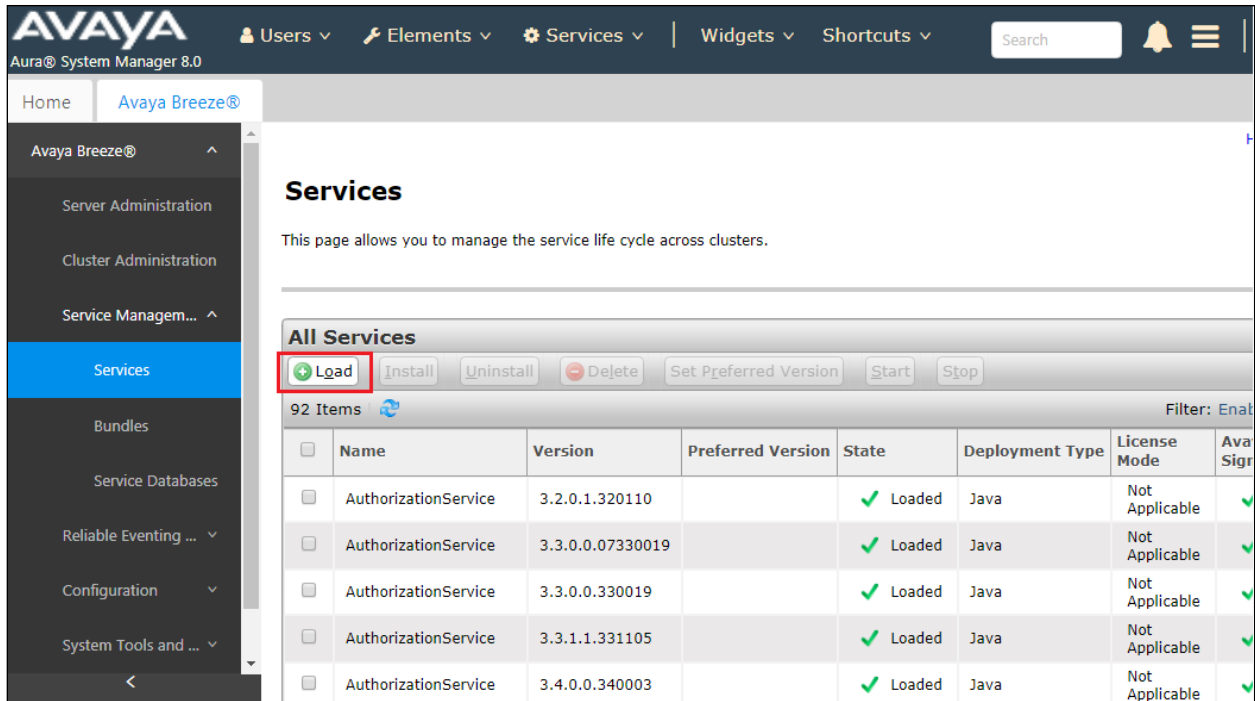


6.1. Install Avaya Aura® Presence Services Snap-in

It is assumed that the Avaya Breeze® Platform has already been installed and configured. For additional information, see the documentation under **References** in **Section 10**.

Navigate to **Home → Elements → Avaya Breeze®**

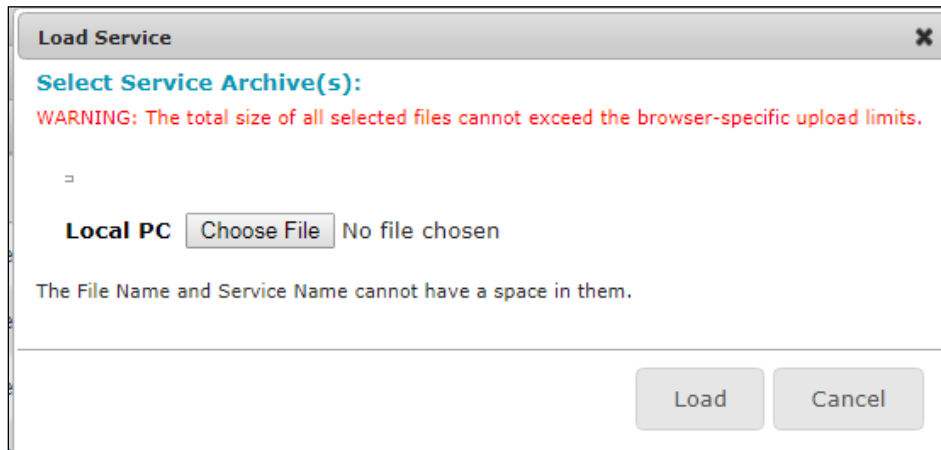
To install the Presence Services Snap-in, navigate to **Avaya Breeze® → Service Management → Services** as shown in the screen below.



The screenshot shows the Avaya Aura System Manager 8.0 interface. The top navigation bar includes 'Users', 'Elements', 'Services', 'Widgets', and 'Shortcuts'. The left sidebar shows the 'Avaya Breeze®' menu with 'Services' selected. The main content area is titled 'Services' and contains a table of 'All Services'. The 'Load' button is highlighted with a red box.

Name	Version	Preferred Version	State	Deployment Type	License Mode	Ava Sigr
AuthorizationService	3.2.0.1.320110		✓ Loaded	Java	Not Applicable	✓
AuthorizationService	3.3.0.0.07330019		✓ Loaded	Java	Not Applicable	✓
AuthorizationService	3.3.0.0.330019		✓ Loaded	Java	Not Applicable	✓
AuthorizationService	3.3.1.1.331105		✓ Loaded	Java	Not Applicable	✓
AuthorizationService	3.4.0.0.340003		✓ Loaded	Java	Not Applicable	✓

Select **Load** (see above screen) to upload the Presence Services Snap-in, click **Browse** and select the Presence Services Snap-in. Click **Load** to continue.



The 'Load Service' dialog box is shown. It contains a warning: 'WARNING: The total size of all selected files cannot exceed the browser-specific upload limits.' Below the warning, there is a section for 'Local PC' with a 'Choose File' button and the text 'No file chosen'. At the bottom, there are 'Load' and 'Cancel' buttons.

Follow the steps and ensure that the **PresenceServices** snap-in now has a state of **Loaded** (not shown).

To install the snap-in, check the box for **PresenceServices** and select **Install** and follow the installation steps. Screen below shows the snap-in after the installation is complete.

Services

This page allows you to manage the service life cycle across clusters.

All Services

92 Items Filter: Ena

<input type="checkbox"/>	Name	Version	Preferred Version	State	Deployment Type	License Mode
<input type="checkbox"/>	CallEventControl	3.3.1.1.331105		✖ Error	Java	Not Applica
<input type="checkbox"/>	CSCService	3.3.0.0.70501		✖ Error	Java	Not Applica
<input type="checkbox"/>	EventingConnector	3.3.1.1.331105		✖ Error	Java	Not Applica
<input type="checkbox"/>	UCMSERVICE	3.3.0.0.70501		✖ Error	Java	Not Applica
<input type="checkbox"/>	WebCallController	3.2.0.1.320119		✖ Error	Java	Not Applica
<input type="checkbox"/>	EngagementCallControl	3.3.0.0.330007		✔ Installed	Java	Not Applica
<input type="checkbox"/>	PresenceServices	8.0.1.0.859		✔ Installed	Java	Not Applica
<input type="checkbox"/>	UCASnapService	3.3.0.0.70501		✔ Installed	Java	Not

6.2. Configure Instant Message Archiving

This section shows the configuration required in Presence Services to archive IM records. Navigate to **Avaya Breeze® → Configuration → Attributes** as shown in the screen below. From the **Service Clusters** tab, select *PresenceServices* from the drop down menu for both **Cluster** and **Service** fields.


The screenshot shows the Avaya Aura System Manager 8.0 interface. The left sidebar contains a navigation menu with the following items: Home, Avaya Breeze®, Server Administration, Cluster Administration, Service Management..., Reliable Eventing..., Configuration, Service Profiles, Attributes (highlighted in blue), Logging, Avaya Aura® M..., and Authorization. The main content area is titled 'Attributes Configuration' and includes 'Commit' and 'Cancel' buttons. Below the title is a text block explaining that factory default values are used for each attribute unless overridden. The interface has three tabs: 'Service Profiles', 'Service Clusters' (selected), and 'Service Globals'. Under the 'Service Clusters' tab, there are two dropdown menus, both set to 'PresenceServices'. Below these is an 'Access Control' section with a table containing one item:

Name	Override Default	Effective Value	Description
Access Control Policy	<input type="checkbox"/>	Allow	Access control policy for

Scroll down to the **Instant Messaging** section and configure the following values,

- **Message Archiving Enabled:** Check the box in **Override Default** column and enter *True* under **Effective Value** column
- **Message Archiving Remote Server Address:** Check the box in **Override Default** column and enter the IP address of the remote SFTP server where the archived IM will be uploaded.
- **Message Archiving Remote User:** Check the box in **Override Default** column and enter the user name of the remote SFTP server where the archived IM will be uploaded.
- **Message Archiving Remote Password:** Check the box in **Override Default** column and enter the password of the remote SFTP server where the archived IM will be uploaded.
- **Message Archiving Remote Path:** Check the box in **Override Default** column and enter the folder name where the archived IM will be uploaded to in the SFTP server.
- **Message Archiving Remote Upload Frequency:** Check the box in **Override Default** column and enter the duration in hour for the archived IM upload frequency to the SFTP server

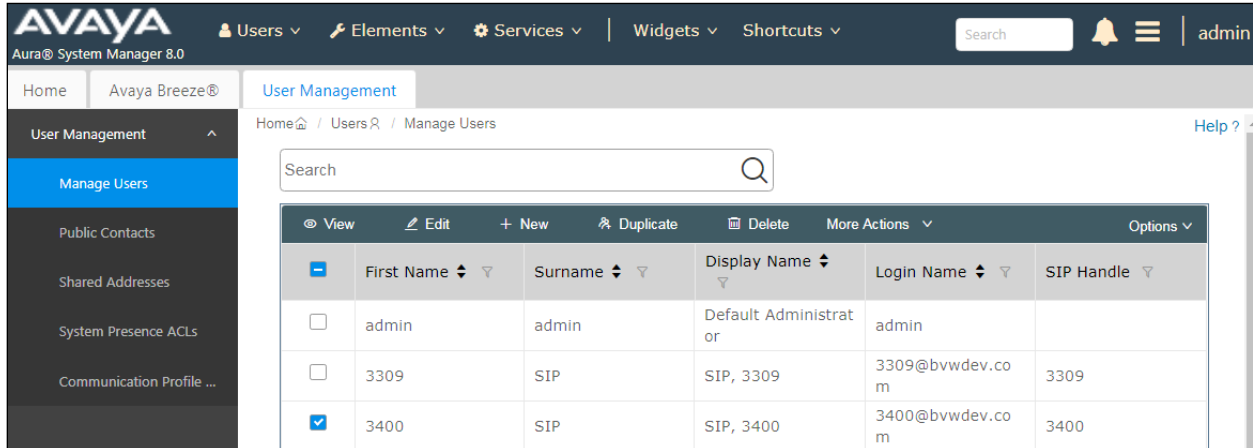
Retain default values for all other fields and click on the **Commit** button (not shown) to save the configuration.

 Message Archiving

7 Items			
Name	Override Default	Effective Value	Description
Message Archiving Enabled	<input checked="" type="checkbox"/>	True ▾	Enable message archiving for IM
Message Archiving Remote Server Address	<input checked="" type="checkbox"/>	10.33.1.15	Server address of the remote SFTP site to upload archived IM's
Message Archiving Remote User	<input checked="" type="checkbox"/>	cust	Login name of the remote SFTP site to upload archived IM's
Message Archiving Remote Password	<input checked="" type="checkbox"/>	Password of the remote SFTP site to upload archived IM's
Message Archiving Remote Path	<input checked="" type="checkbox"/>	backup2	Remote directory name under user's home to upload archived IM's (optional)
Message Archiving Remote Upload Frequency	<input checked="" type="checkbox"/>	1	Frequency (1-24 hours) to upload archived IM's
Message Archiving Remote Upload Failures Threshold	<input type="checkbox"/>	5	The number of days (1-15) of consecutive remote upload failures before

6.3. Add Presence Users

This section only shows the adding of Presence to an already configured SIP User. Navigate to **Users → User Management → Manager Users**. Select an already configured SIP user. The screen below shows user **3400** selected. Click on the **Edit** button.



The screenshot shows the Avaya Aura System Manager 8.0 interface. The top navigation bar includes 'Users', 'Elements', 'Services', 'Widgets', and 'Shortcuts'. The left sidebar shows 'User Management' with 'Manage Users' selected. The main content area displays a table of users with columns: First Name, Surname, Display Name, Login Name, and SIP Handle. The user '3400' is selected, and the 'Edit' button is visible.

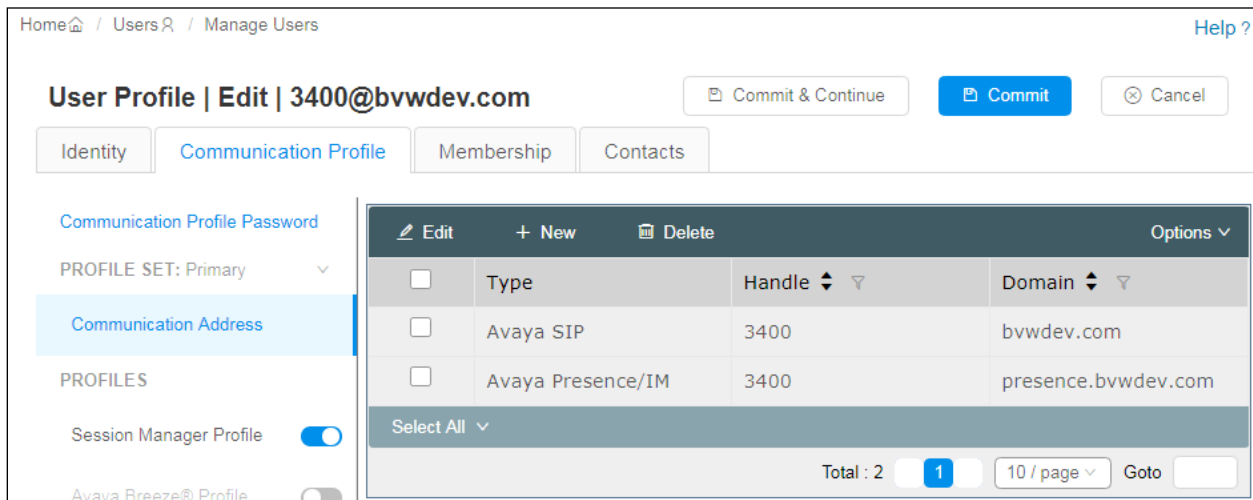
	First Name	Surname	Display Name	Login Name	SIP Handle
<input type="checkbox"/>	admin	admin	Default Administrator	admin	
<input type="checkbox"/>	3309	SIP	SIP, 3309	3309@bvwdev.com	3309
<input checked="" type="checkbox"/>	3400	SIP	SIP, 3400	3400@bvwdev.com	3400

Under the **Communication Profile** tab:

Select **New** in the **Communication Address** section:

- Select **Avaya Presence/IM** from the **Type** drop down menu.
- For the **Fully Qualified Address**, type in the extension number that will be used by the SIP user to log in. For the domain, select the domain created (**Section 5.2**) for the Presence Services from the drop-down menu.

Once done, select **Add**.



The screenshot shows the 'User Profile | Edit | 3400@bvwdev.com' interface. The 'Communication Profile' tab is active, and the 'Communication Address' section is selected. A table of communication addresses is displayed with columns: Type, Handle, and Domain. Two addresses are listed: 'Avaya SIP' and 'Avaya Presence/IM'. The 'Add' button is visible at the bottom right.

	Type	Handle	Domain
<input type="checkbox"/>	Avaya SIP	3400	bvwdev.com
<input type="checkbox"/>	Avaya Presence/IM	3400	presence.bvwdev.com

Continuing from above, scroll down and enable the check box for **Presence Profile**. For the **System** and **IM Gateway SIP Entity (Section 5.4)** drop down menu, select the **Presence70** and then click on the **Commit** button to add the user.

Identity	Communication Profile	Membership	Contacts
Communication Profile Password			
PROFILE SET: Primary ▾		* System: Presence70 ▾	
Communication Address			
PROFILES			
Session Manager Profile <input checked="" type="checkbox"/>		SIP Entity Name: <input type="text"/>	
Avaya Breeze® Profile <input type="checkbox"/>		IM Gateway SIP Entity: Presence70 ▾	
CM Endpoint Profile <input checked="" type="checkbox"/>		Publish Presen... with AES Collecto... System Default ▾	
CS 1000 Endpoint Profile <input type="checkbox"/>			
Messaging Profile <input type="checkbox"/>			
CallPilot Messaging Profile <input type="checkbox"/>			
Presence Profile <input checked="" type="checkbox"/>			

7. Configure Avotus Enhanced Usage Reporting for Unified Communications

This section describes the configuration of Avotus EUR. Avotus installs, configures, and customizes the EUR application for the end customers. Thus, this section only describes the interface configuration, so that Avotus EUR can collect IM archived data from a SFTP server. The procedure covers the following areas:

- Login to Avotus EUR.
- Configure a site.
- Configure script and collection
- Start collection.

7.1. Login to Avotus EUR

To configure Avotus EUR, double click on the Avotus EUR icon from the desktop as shown below.

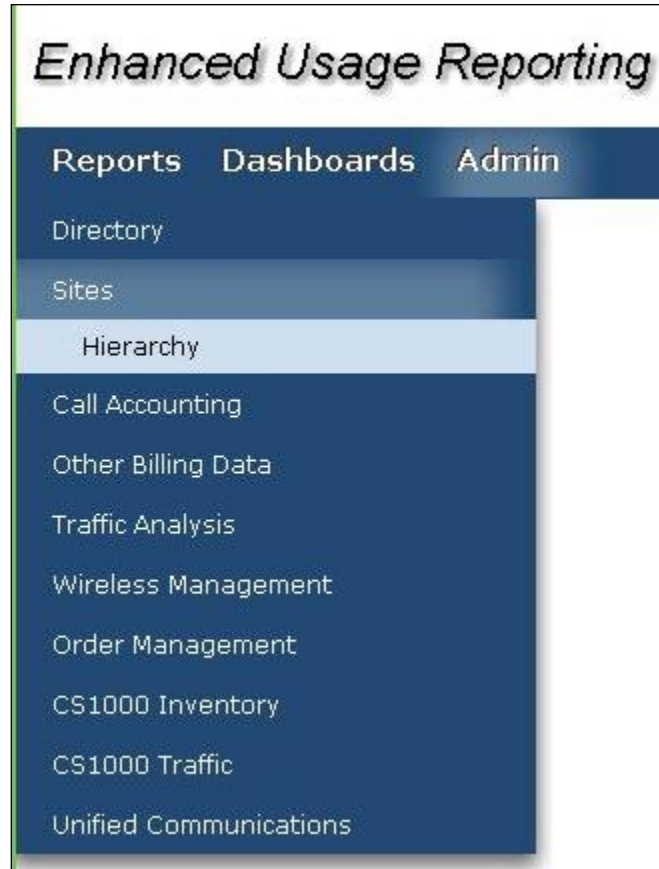


Provide credentials to gain access into Avotus EUR in the Sign In window shown below.

A screenshot of the Avotus EUR Sign In window. At the top, it says 'Powered By' followed by the Avotus logo and the text 'AVOTUS® Intelligent Communications Management'. Below this is a white rectangular box with a subtle drop shadow containing the login fields. The fields are labeled 'Login:', 'Password:', and 'Language:'. The 'Language:' field is a dropdown menu currently showing 'English'. Below the fields is a blue button with the text 'SIGN IN'. At the bottom of the box, there is a line of small, yellow-green text that reads 'Access to this service is restricted to authorized users.'

7.2. Configure a Site

From the **Enhanced Usage Reporting** screen shown below, navigate to **Admin** → **Sites** → **Hierarchy** to configure a site.



In the screen shown below, **Corporation 1** is created by default. Click on the top right **Add Site** icon highlighted below to add a site.

Enhanced Usage Reporting

Reports **Dashboards** **Admin**

Sites

Hierarchy

Avotus

Avotus

Options

- Contact Information
- Calendar Configuration
- Time Zone

Properties

Name	Avotus
Creator	
Creation Date	11/29/2018 03:47:25
Node Type	corporation
Last Updated	11/29/2018 03:47:25

In the **Add Site** window shown below, enter an appropriate name for **Site Name** field and click on the **OK** icon highlighted below.

Enhanced Usage Reporting

Reports **Dashboards** **Admin**

Sites

Hierarchy

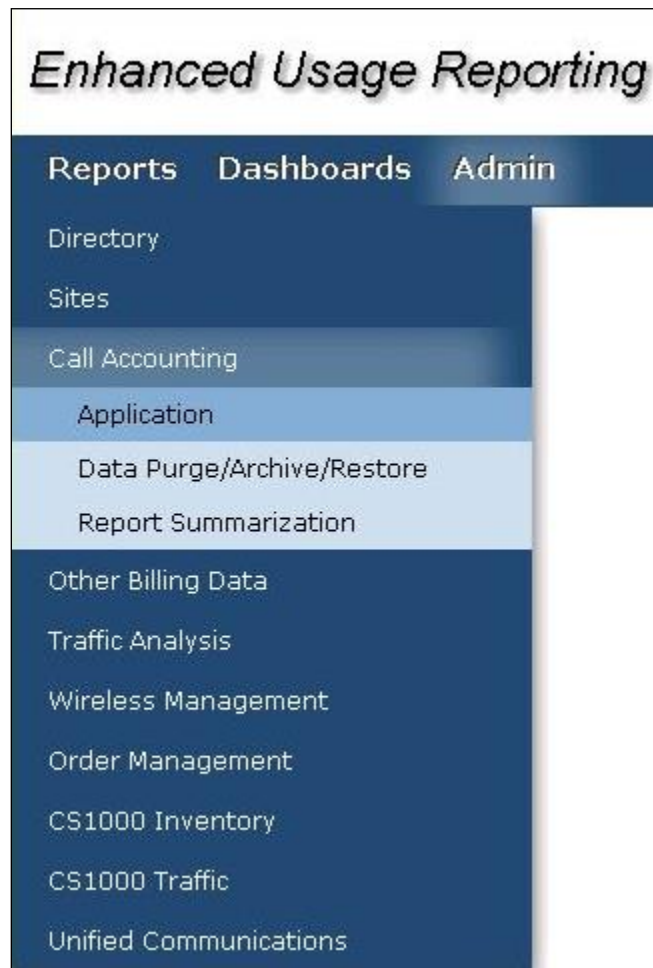
Avotus

Add Site

Site Name

Avaya IM

To assign the site created above for collection of data; navigate to **Admin** → **Call Accounting** → **Application** as shown in the screen below.



In the **Application** section, start the configuration by clicking on the **Configure** icon as highlighted in the screen below.



In the **Site Assignments** window seen below, select the server name from the drop down menu to assign it to the site. In the example below, “WIN-IB7NT8C7NJP” is the Windows server name and “Avaya IM” is the site created earlier in this section.

Enhanced Usage Reporting

Reports Dashboards Admin

Call Accounting

Application

Avotus

LSP

RnD

Collection Services

Configuration

Process

Site Assignments

Avotus

WIN-IB7NT8C7NJP Avaya IM

Select an Application Server LSP

Select an Application Server RnD

Select an Application Server Test

✓ ✕

Screen below shows the successful assigning of the site for collection.

Enhanced Usage Reporting

AVOTUS
Intelligent Communications Management

Reports Dashboards Admin

Call Accounting

Application

Avotus

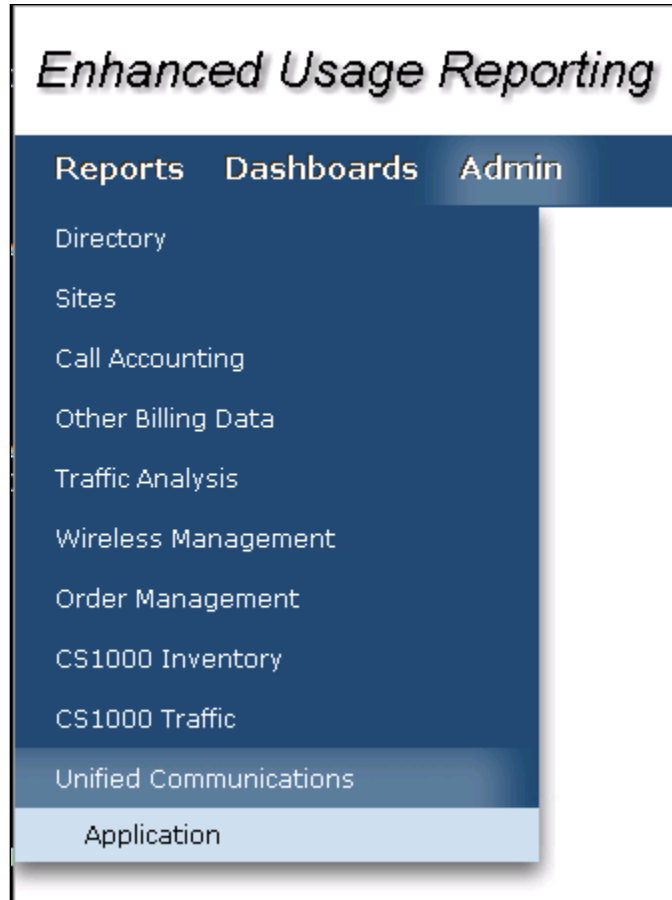
Avaya IM

Call Accounting Site Installation Status: Completed

Site	Status
Avaya IM	Successfully Installed

7.3. Configure Collection

To configure the collection for data, navigate to **Admin** → **Unified Communications** → **Application** as shown in the screen below.



From the left navigation menu, click on **Avaya Collection** and from the right hand window of **Avaya IM Data Collection** click on **Add Configuration Setting** and configure the following values,

- **Site:** Select the site configured in **Section 7.2**.
- **Configuration Name:** Type a descriptive name.
- **Collection For:** Select “Avaya IM” from the drop down menu.
- **Extension length:** During compliance testing default value was retained.
- **File Protocol:** Ensure “SFTP” is selected from the drop down menu.
- **Host Name:** IP Address of an SFTP server as mentioned in **Section 6.2**.
- **Port Number:** During compliance testing default value was retained.
- **User Name:** The user name of the SFTP server as mentioned in **Section 6.2**.
- **Password:** The password configured for the SFTP server as mentioned in **Section 6.2**.

Complete the configuration by clicking on the **Save** button.

The screenshot displays the Avaya IM Data Collection configuration interface. On the left, a navigation menu under 'Unified Communications' > 'Application' shows 'COLLECTION SERVICES' with 'Avaya Collection' selected. The main content area is titled 'Avaya IM Data Collection' and features a 'Configuration Setting Details' section with an 'Edit Configuration Setting' tab. The configuration form includes the following fields: 'Site' (Avotus/Avaya IM), 'Configuration Name' (Avaya IM), 'Collection For' (Avaya IM Data), 'Extension length' (5), 'File Protocol' (SFTP), 'Host Name' (10.33.1.15), 'Port Number' (22), 'User Name' (cust), and 'Password' (masked with dots). 'Save' and 'Reset' buttons are located at the bottom of the form. Below the form, a 'Schedule Collection Configuration' section is partially visible.

7.4. Start Collection

From the left navigation menu, click on **Avaya Collection** and from the right hand window of **Avaya IM** click on **Schedule Collection Configuration** and configure the following values,

- **Select Options:** Select the collection configured in **Section 7.3**.
- **Job Name:** Type a descriptive job name.
- **Description:** Provide a description for the collection job.
- **Start Date (YYYY/MM/DD):** Provide a start date (not shown).
- **Start Time (HH MM):** Provide a start time (not shown).
- **Interval Type:** Select an interval frequency for the collection (not shown).

Retain default values for all other fields and click on the **Save** button (not shown).

The screenshot shows the 'Enhanced Usage Reporting' interface for Avaya IM. The left navigation pane includes 'Reports', 'Dashboards', and 'Admin'. Under 'Admin', there is a 'Unified Communications' section with an 'Application' sub-section. The 'COLLECTION SERVICES' list includes: CISCO IM Collection, Broadsoft Collection, Vodia Collection, Genband Collection, Skype for Business Collection, and Avaya Collection. The main content area is titled 'Schedule Collection Configuration' and contains a list of collections with checkboxes. 'Avaya IM' is selected. Below the list, there are fields for 'Job Name', 'Priority' (set to 5), 'Wait For Notification' (checked), 'Description', 'Enabled' (checked), and 'Run Late Job' (checked). The top right corner features the AVOT logo and user icons.

Enhanced Usage Reporting

AVOT
Intelligent Communication

Reports Dashboards Admin

Unified Communications

Application

COLLECTION SERVICES

- CISCO IM Collection
- Broadsoft Collection
- Vodia Collection
- Genband Collection
- Skype for Business Collection
- Avaya Collection

Configuration Setting Details

Edit Configuration Setting

Schedule Collection Configuration

1 selected

Check All Uncheck All

SM Collection

Avaya IM

Job Name

Priority 5

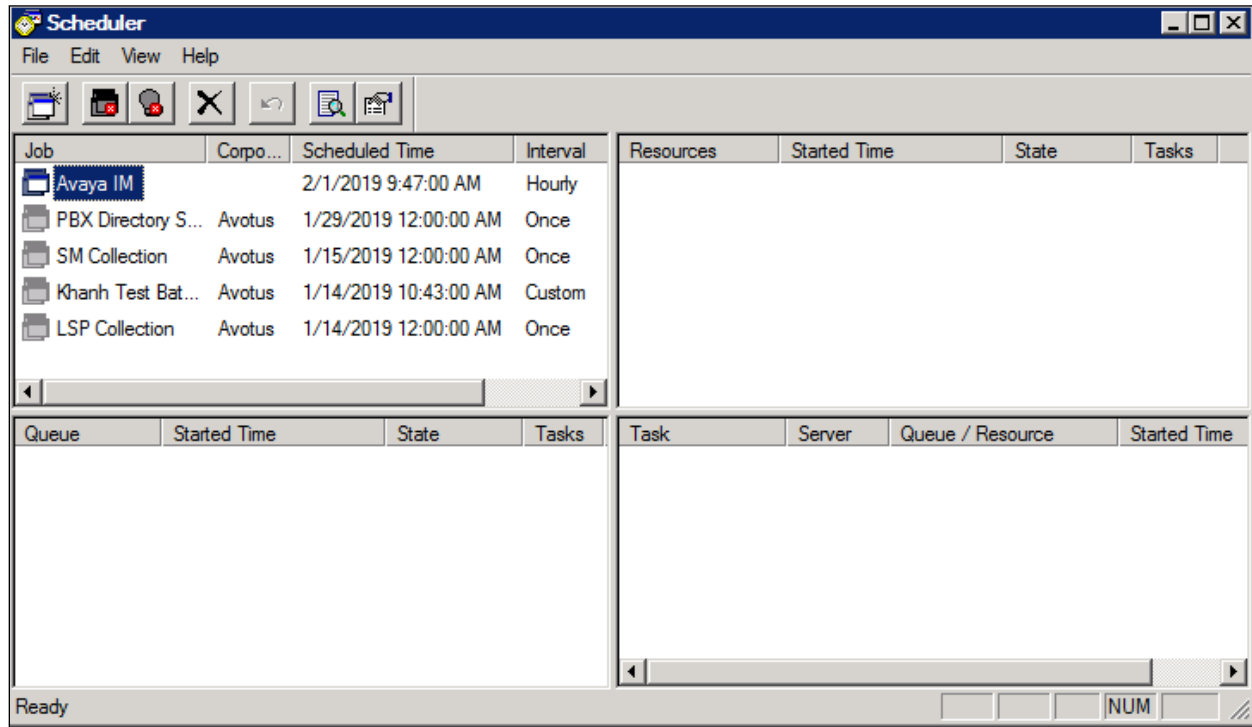
Wait For Notification ☒

Description

Enabled ☒

Run Late Job ☒

The collection job is created in the scheduler as shown below.



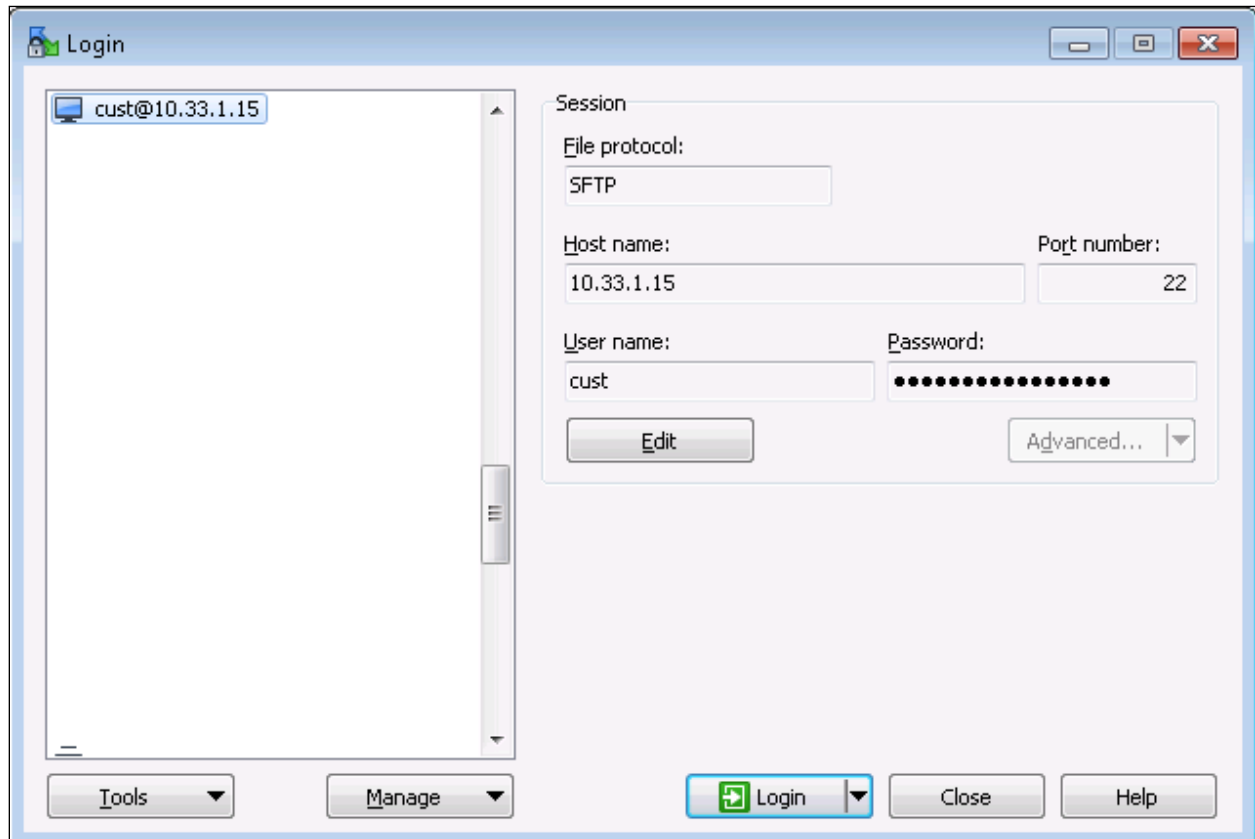
The collected raw IM XML data can be found in the “ProcessedFileBkp” folder, which is under the “\Avotus ICM\Execs\Avotus.UM.Avaya.IMDataCollect\IM_CollectionData” folder.

8. Verification Steps

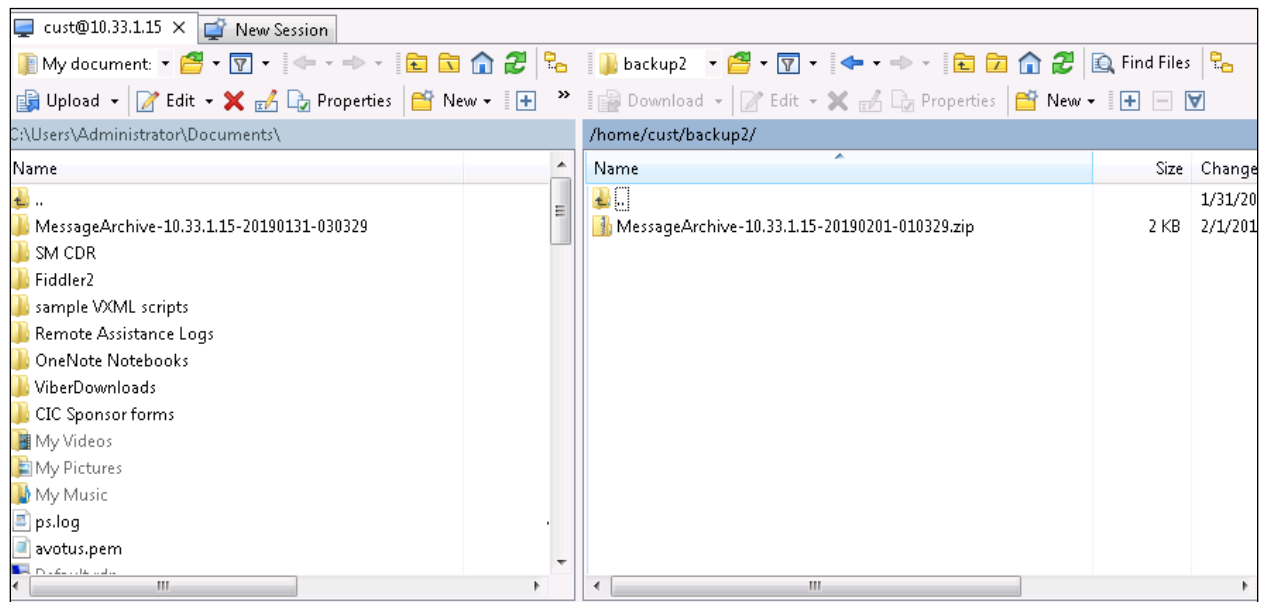
The following steps may be used to verify the configuration.

8.1. Instant Messages information is being collected by an SFTP Server

Use a secure FTP application, e.g., WinSCP to connect to the server where the IM archived data will be uploaded.



Exchange IM between Avaya softphones; wait for the frequency duration as when Presence Service will upload the archived IM data to an user specified folder in the SFTP sever as shown in the screen below.



8.2. Instant Message Data Collected by Avotus Enhanced Usage Reporting for Unified Communications

Generate a few IM data and verify that Avotus EUR can download the archived IM data from the SFTP server. Compare the values of data fields of the IM records with the expected values and verify that the values match. Screen below shows the raw IM data collected by Avotus EUR which was then compared with the IM data archived in the SFTP server.

```
<?xml version="1.0" encoding="UTF-8"?>
<messages>
  <message direction="IN">
    <timestamp>2019-01-31T06:13:26-UTC</timestamp>
    <threadId>74814F90-69C9-433C-F5BF2AC</threadId>
    <sender>3400@presence.bvwdev.com/40cb1a86-4a8c-5569-a4b6-2e07129249e4</sender>
    <recipient>3406@presence.bvwdev.com</recipient>
    <body><![CDATA[I don't know why the IM archive is not uploaded to the SFTP server]]></body>
  </message>
  <message direction="OUT">
    <timestamp>2019-01-31T06:13:26-UTC</timestamp>
    <threadId>74814F90-69C9-433C-F5BF2AC</threadId>
    <sender>3400@presence.bvwdev.com/40cb1a86-4a8c-5569-a4b6-2e07129249e4</sender>
    <recipient>3406@presence.bvwdev.com</recipient>
    <body><![CDATA[I don't know why the IM archive is not uploaded to the SFTP server]]></body>
  </message>
  <message direction="IN">
    <timestamp>2019-01-31T06:13:40-UTC</timestamp>
    <threadId>74814F90-69C9-433C-F5BF2AC</threadId>
    <sender>3400@presence.bvwdev.com/40cb1a86-4a8c-5569-a4b6-2e07129249e4</sender>
    <recipient>3406@presence.bvwdev.com</recipient>
    <body><![CDATA[do you think of any issue it maybe?]]></body>
  </message>
  <message direction="OUT">
    <timestamp>2019-01-31T06:13:40-UTC</timestamp>
    <threadId>74814F90-69C9-433C-F5BF2AC</threadId>
    <sender>3400@presence.bvwdev.com/40cb1a86-4a8c-5569-a4b6-2e07129249e4</sender>
    <recipient>3406@presence.bvwdev.com</recipient>
    <body><![CDATA[do you think of any issue it maybe?]]></body>
  </message>
  <message direction="IN">
    <timestamp>2019-01-31T06:14:20-UTC</timestamp>
```

The screen below shows the report of the Entity IM Detail from the Avotus EUR. The report can be launched by navigating from the main menu **Reports → Unified Communications → Avaya → Entity EM Detail**.

Enhanced Usage Reporting

Reports
Dashboards
Admin

My Reports
Call Accounting
Unified Communications
Generic
Cisco
Genband
Broadsoft
Skype for Business
Avaya
Wireless Management
Traffic Analysis
Total Telecom Spend
Order Management
Other Billing Data
Directory

AVOTUS
Intelligent Communications Management

Entity IM Detail

View Active Filters

Entity IM Detail

Page 1

Sent Date	Entity	Organization	Cost Center	Site	Media Type	IM Sender
2019-Feb-01 04:57:41	Employee / Unassigned Entity	Avotus		Avotus / Avaya SM	CHAT	3410@presence.bvwdev.cc
2019-Feb-01 04:57:53	Employee / Unassigned Entity	Avotus		Avotus / Avaya SM	CHAT	3410@presence.bvwdev.cc
2019-Feb-01 04:58:23	Employee / Unassigned Entity	Avotus		Avotus / Avaya SM	CHAT	3406@presence.bvwdev.cc
2019-Feb-01 04:58:42	Employee / Unassigned Entity	Avotus		Avotus / Avaya SM	CHAT	3406@presence.bvwdev.cc
2019-Feb-01 04:59:11	Employee / Unassigned Entity	Avotus		Avotus / Avaya SM	CHAT	3410@presence.bvwdev.cc
2019-Feb-01 05:55:02	Employee / Unassigned Entity	Avotus		Avotus / Avaya SM	CHAT	3410@presence.bvwdev.cc
2019-Feb-01 05:55:40	Employee / Unassigned Entity	Avotus		Avotus / Avaya SM	CHAT	3406@presence.bvwdev.cc
2019-Feb-01 05:56:19	Employee / Unassigned Entity	Avotus		Avotus / Avaya SM	CHAT	3406@presence.bvwdev.cc
2019-Feb-01 05:56:58	Employee / Unassigned Entity	Avotus		Avotus / Avaya SM	CHAT	3410@presence.bvwdev.cc
2019-Feb-01 05:58:22	Employee / Unassigned Entity	Avotus		Avotus / Avaya SM	CHAT	3406@presence.bvwdev.cc
2019-Feb-01 05:59:22	Employee / Unassigned Entity	Avotus		Avotus / Avaya SM	CHAT	3410@presence.bvwdev.cc
2019-Feb-01 06:00:23	Employee / Unassigned Entity	Avotus		Avotus / Avaya SM	CHAT	3406@presence.bvwdev.cc
2019-Feb-01 06:02:01	Employee / Unassigned Entity	Avotus		Avotus / Avaya SM	CHAT	3410@presence.bvwdev.cc
2019-Feb-01 06:03:17	Employee / Unassigned Entity	Avotus		Avotus / Avaya SM	CHAT	3406@presence.bvwdev.cc

9. Conclusion

These Application Notes describe the steps required to configure Avotus Enhanced Usage Reporting for Unified Communications to interoperate with Avaya Aura® Presence Services snap-in and capturing/processing archived Instant Message records. All feature and serviceability test cases described in **Section 2.1** were passed.

10. Additional References

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

Product documentation for Avaya products may be found at <http://support.avaya.com>.

1. Administering Avaya Aura® Communication Manager, Release 8.0, August 2018, Document Number 03-300509, Issue 1.
2. Avaya Aura® Communication Manager Feature Description and Implementation, Release 8.0, August 2018, Document Number 555-245-205, Issue 1.
3. Administering Avaya Aura® Session Manager, Release 8.0, Issue 1 August 2018
4. Administering Avaya Aura® System Manager, Release 8.0, Issue 1, August, 2018
5. Deploying Avaya Breeze®, Release 3.6, Issue 1 September 2018
6. Administering Avaya Breeze®, Release 3.6, Issue 1 September 2018
7. Avaya Aura® Presence Services Snap-in Reference, Release 8.0, Issue 1 October 2018

Product documentation for Avotus products may be found at,
<http://avotus.com/telecom-enhanced-usage-reporting.asp>

©2019 Avaya Inc. All Rights Reserved.

Avaya and the Avaya Logo are trademarks of Avaya Inc. All trademarks identified by ® and ™ 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 devconnect@avaya.com.