Avaya Solution & Interoperability Test Lab

Application Notes for configuring eCallOrchestration SnapIn from Engelbart Software GmbH with Avaya Breeze™ 3.3.1 - Issue 1.0

Abstract

These Application Notes describe the configuration steps required for eCallOrchestration SnapIn from Engelbart Software GmbH to interoperate with and Avaya Breeze™. eCallOrchestration SnapIn is designed to route identified emergency calls to an Emergency Call Server which extracts the Minimum set of data (MSD) and then re-route the same call to an Operator and provide the MSD to Operator Software through a Web Service. A callback to the initial caller and a re-send MSD data function is integrated as well.

Readers should pay attention to **Section 2**, in particular the scope of testing as outlined in **Section 2.1** as well as the 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.

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1. Introduction

These Application Notes describe the configuration steps required for eCallOrchestration SnapIn from Engelbart Software GmbH and to interoperate with and Avaya Breeze™. eCallOrchestration SnapIn is designed to route identified emergency calls to an Emergency Call Server which extracts the Minimum set of data (MSD) and then re-route the same call to an Operator and provide the MSD to Operator Software through a Web Service. A callback to IVS and re-send MSD data function is integrated as well. All eCalls are sent over a SIP trunk to the Orchestration SnapIn and these are routed onto the Emergency Call Server so that the MSD can be extracted and the eCall routed correctly.

2. General Test Approach and Test Results

The general test approach was to validate successful deployment and configuration of the eCallOrchestration SnapIn on the Avaya Breeze Platform and routing of emergency calls correctly.

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 systems and the eCallOrchestration SnapIn did not include use of any specific encryption features as requested by Engelbart Software GmbH].

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2.1. Interoperability Compliance Testing

The testing focuses on the following areas:

- **Loading of eCallOrchestration SnapIn** – Load is Successful.
- **Install eCallOrchestration SnapIn** – Install as part of a core platform Cluster.
- **Administer eCallOrchestration SnapIn Attributes** – Attributes can be configured for Profile, Cluster or Global configurations.
- **Verify Call to Emergency Call Server** – Call is presented to Server and MSD inband information are played as tones.
- **Verify Call is Routed Correctly** – The MSD information is received and the call is routed to the expected destination

2.2. Test Results

All test cases passed successfully.

2.3. Support

Support for Engelbart Software GmbH products can be obtained as follows:

Engelbart Software GmbH
Goetheplatz 2
D-88214 Ravensburg
Tel.: +49 (751) 76 424 300
www.engelbart-software.de

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3. Reference Configuration

The configuration in **Figure 1** was used to compliance test eCallOrchestration Snap-In and Avaya Breeze™.

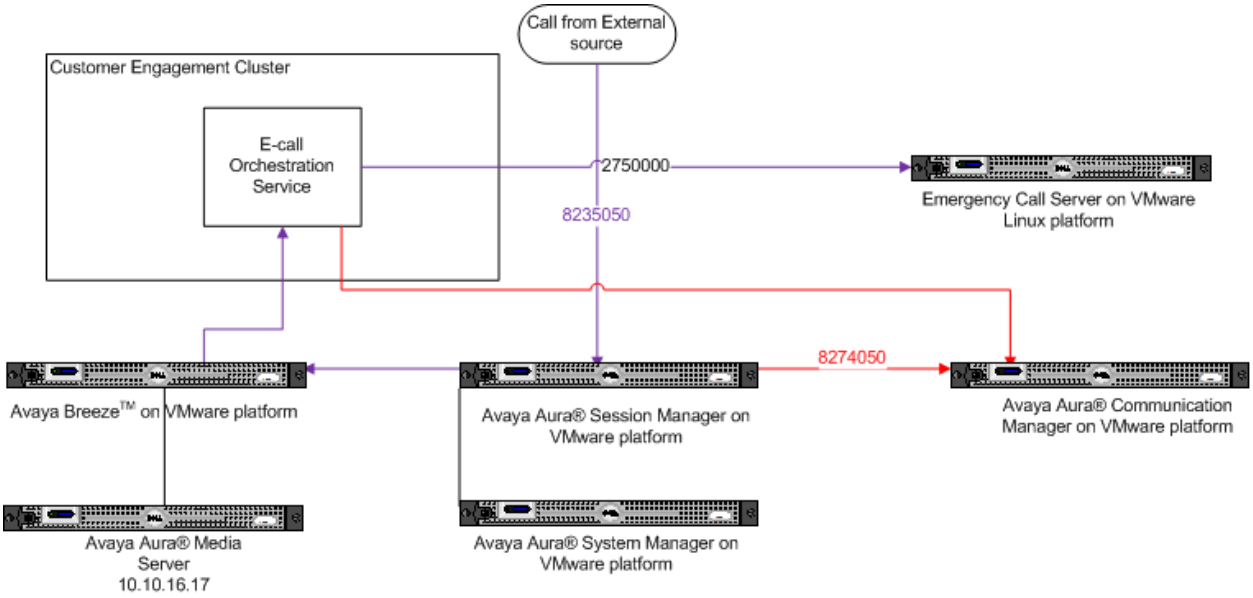

Figure 1: Connection of eCallOrchestration SnapIn with Avaya Breeze™.

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4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® Communication Manager	R7.1 Build R017x.01.0.532.0
Avaya Aura® Session Manager	R7.1.0.0.710028
Avaya Aura® System Manager	R7.1.0.0 Build 7.1.0.0.1125193 Update 7.1.0.0.126816
Avaya Aura® Media Server	v.7.8.0.309
Avaya Breeze™	R3.3.1 Build 3.3.1.0.09331008
Avaya G430 Gateway	38.18.0
Avaya 9611G Series Deskphone	96x1 H323 Release 6.6229
Avaya 9641G Series Deskphone	96x1 SIP Release 7.1.0.1.1
Avaya 9404 Digital Deskphone	N/A
eCallOrchestration SnapIn	3.1.1.0.1

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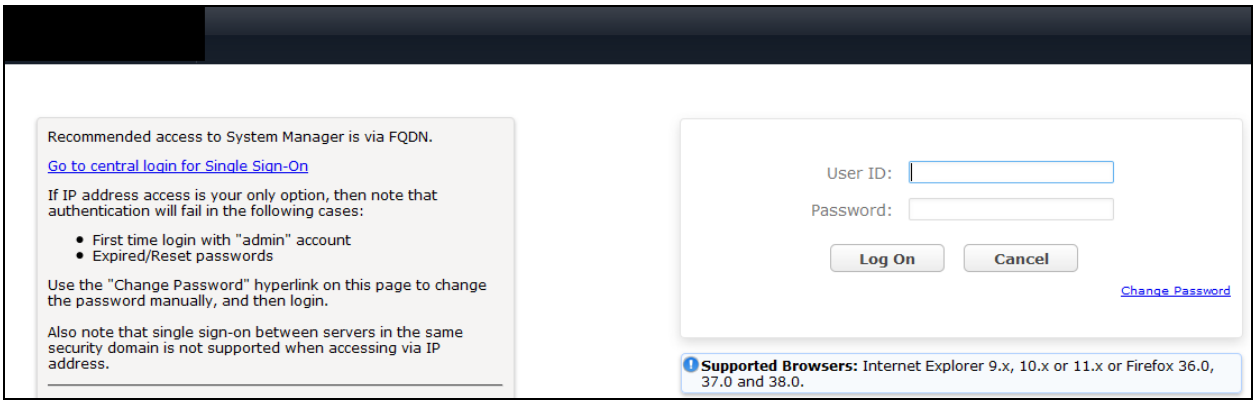
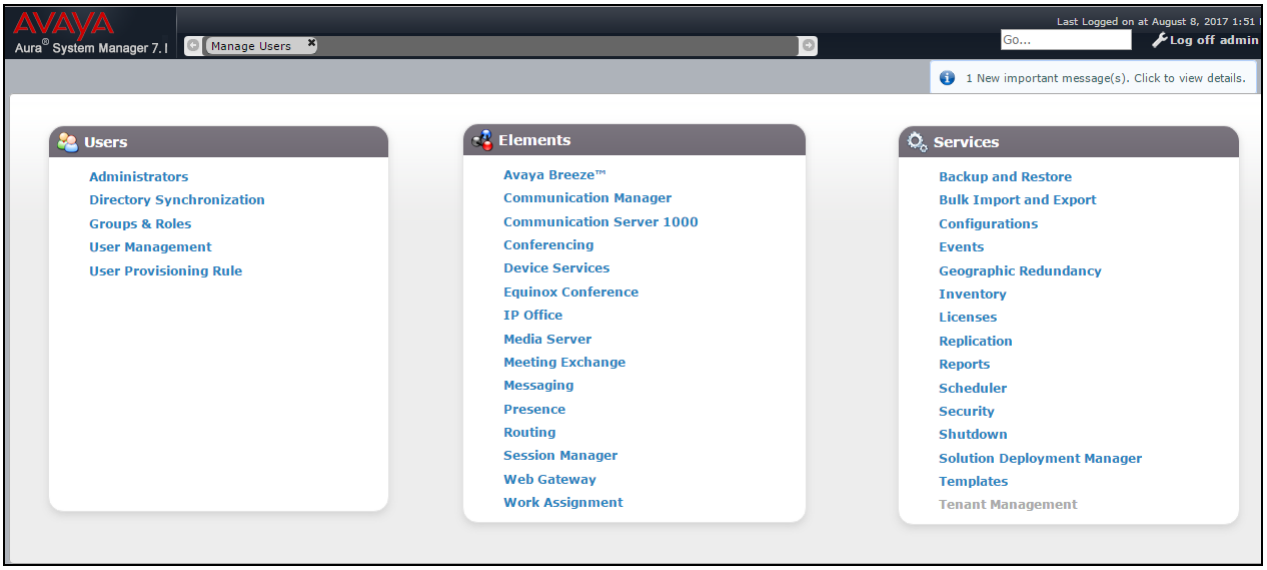
5. Check Avaya Breeze™ Server Status

This section describes the steps required to check that the Avaya Breeze server is installed and ready. It is assumed that the Avaya Breeze Server has been installed and is out with the scope of this document.

Log in to System Manager using the appropriate credentials.



From the home screen select Elements → Avaya Breeze™



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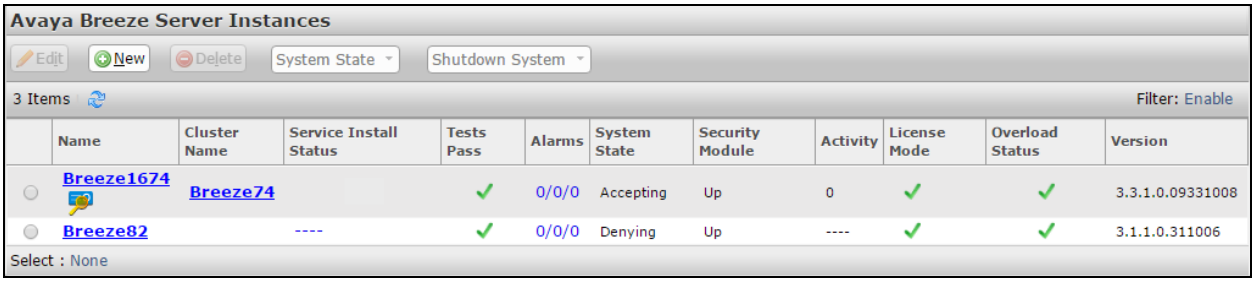
Select Server Administration and check that the server is in the state shown below.



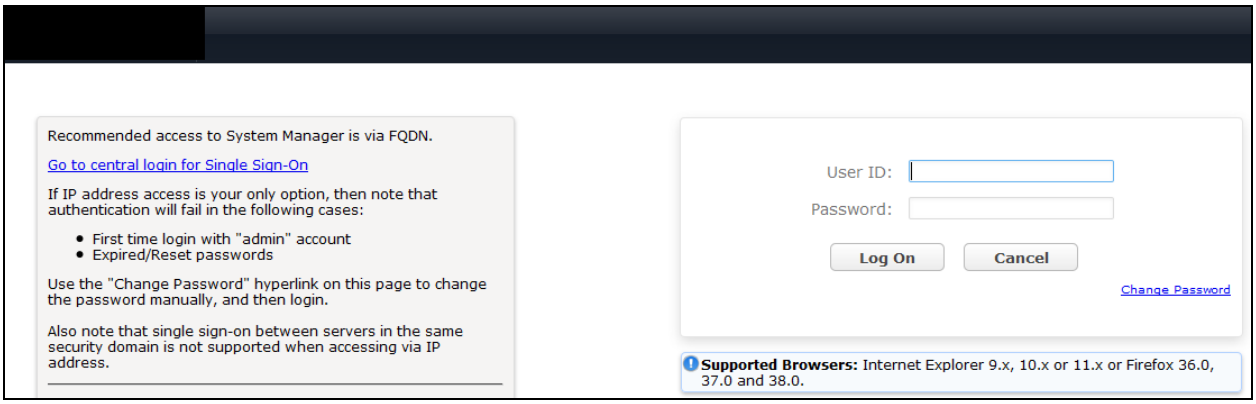
6. Configure Avaya Aura® Session Manager

This document assumes that the Avaya Aura® Session Manager has been installed and configured prior to the deployment of the eCallOrchestration SnapIn.

6.1. Set Implicit User Applications

The Session manager needs to be set to Enable Implicit Users Applications for SIP users.

Log in to System Manager using the appropriate credentials.



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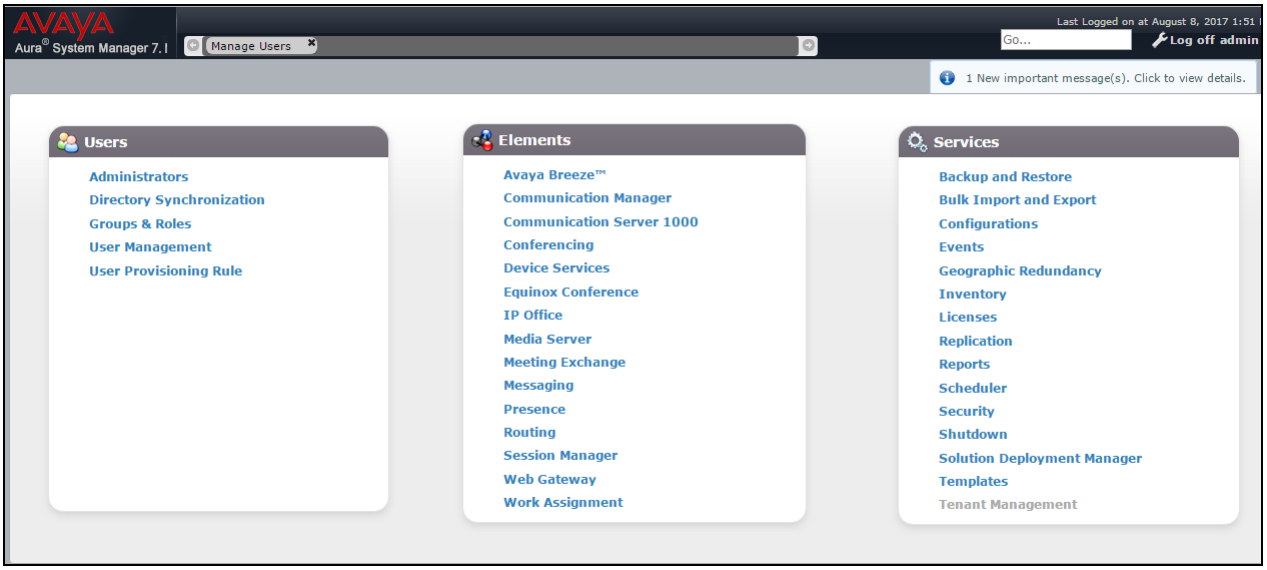
From the home screen select **Elements → Session Manager.**



Select **Session Manager Administration** and click on the **Enable Implicit Users Applications for SIP users** radio button.

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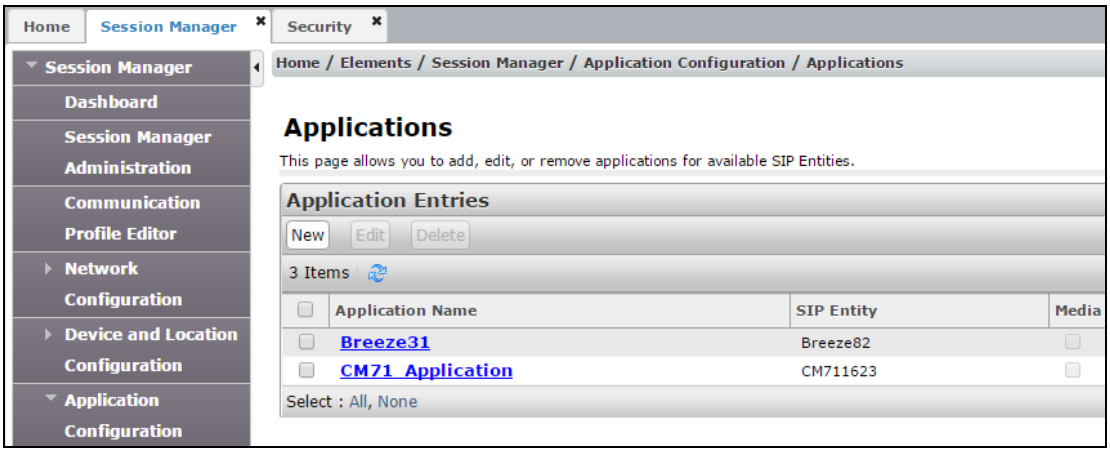
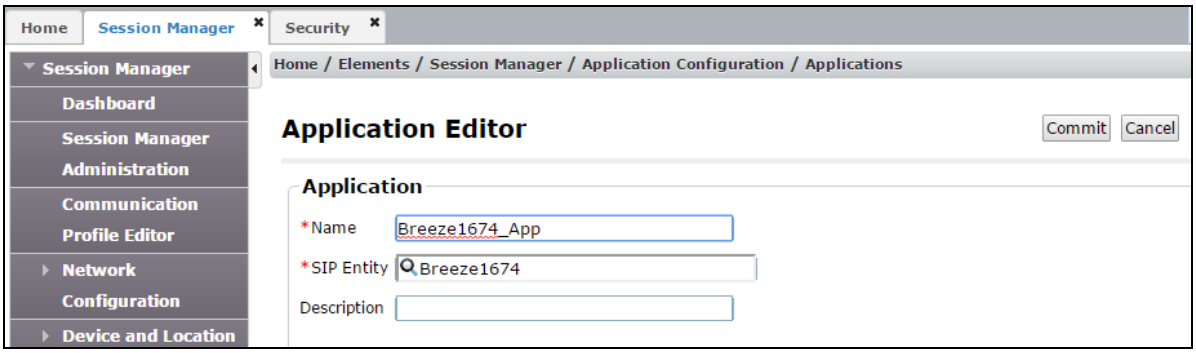
6.2. Configure Session Manager Application Sequence

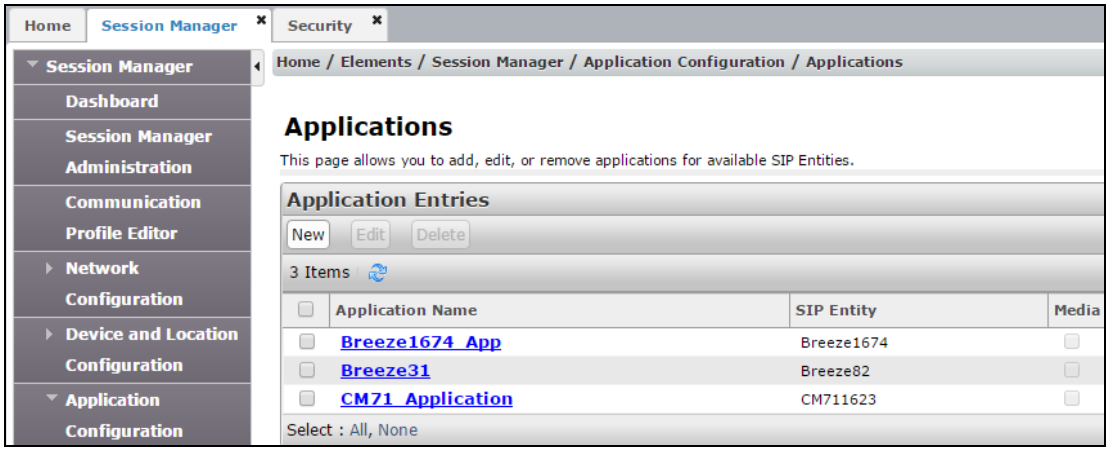
Select **Application Configuration** from the left hand menu and on the Applications screen click on **New**.



On the Application Editor screen, enter Application **Name** and select the Avaya Breeze **SIP Entity** to be used for the eCallOrchestration SnapIn. Click on **Commit** to save changes.



The resultant screen shows the new Application.



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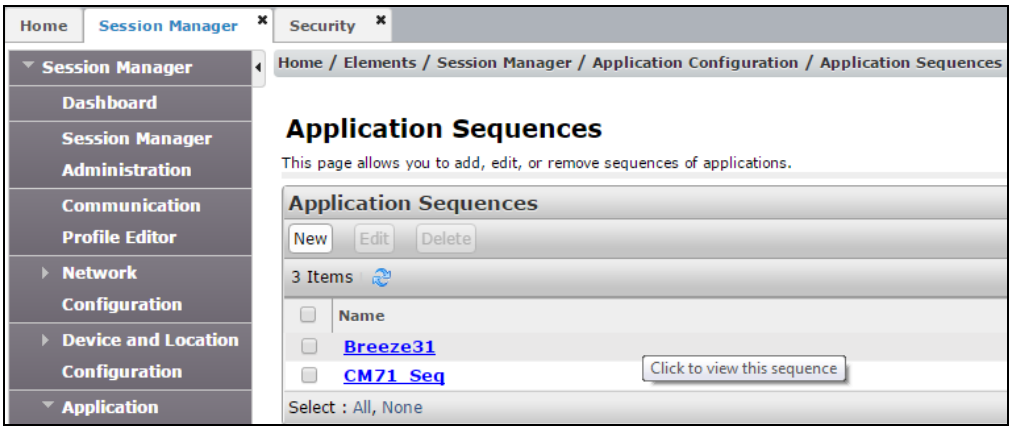
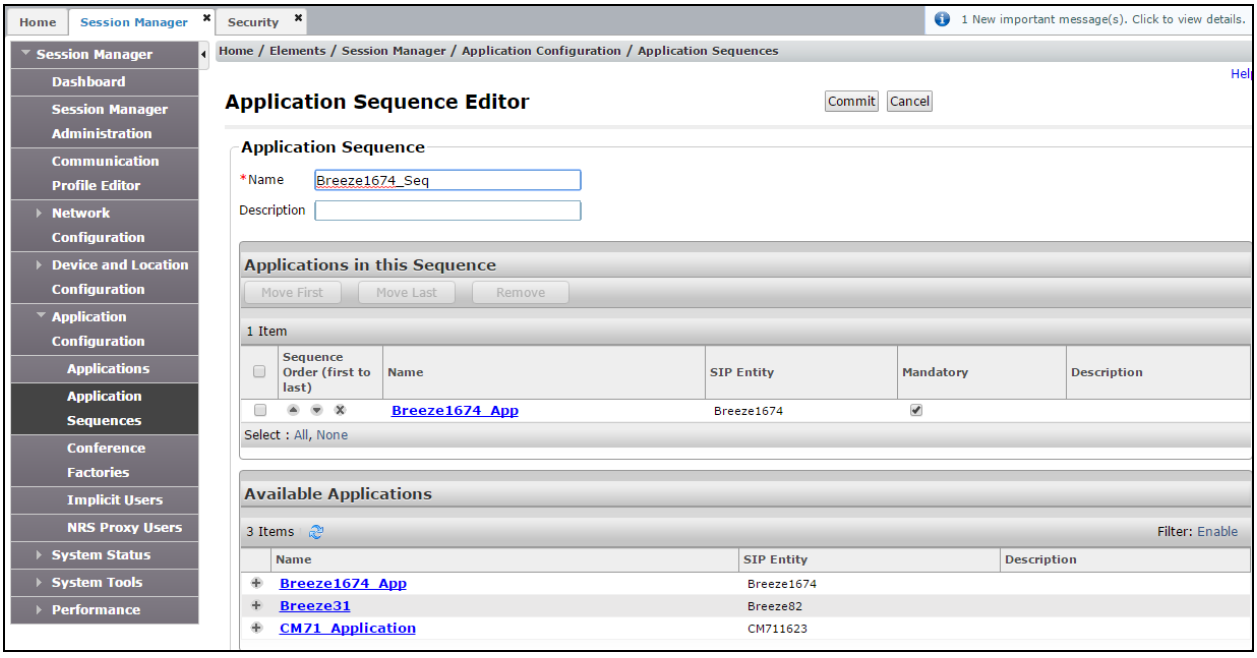
Next, select **Application Sequences** from the left hand menu (not shown) and from the **Application Sequences** screen click on **New**.



On the **Application Sequences Editor** enter a **Name** and from the **Available Applications** list select the Application added above. This will add the Application to the **Applications in this Sequence** list as shown.



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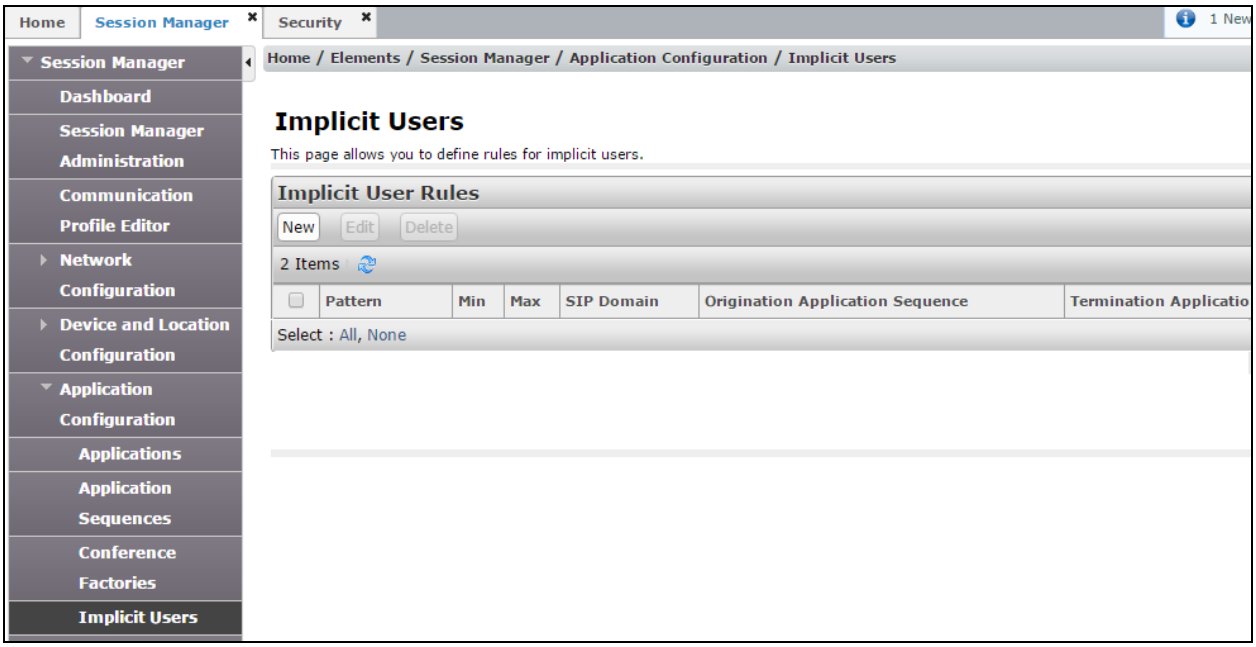
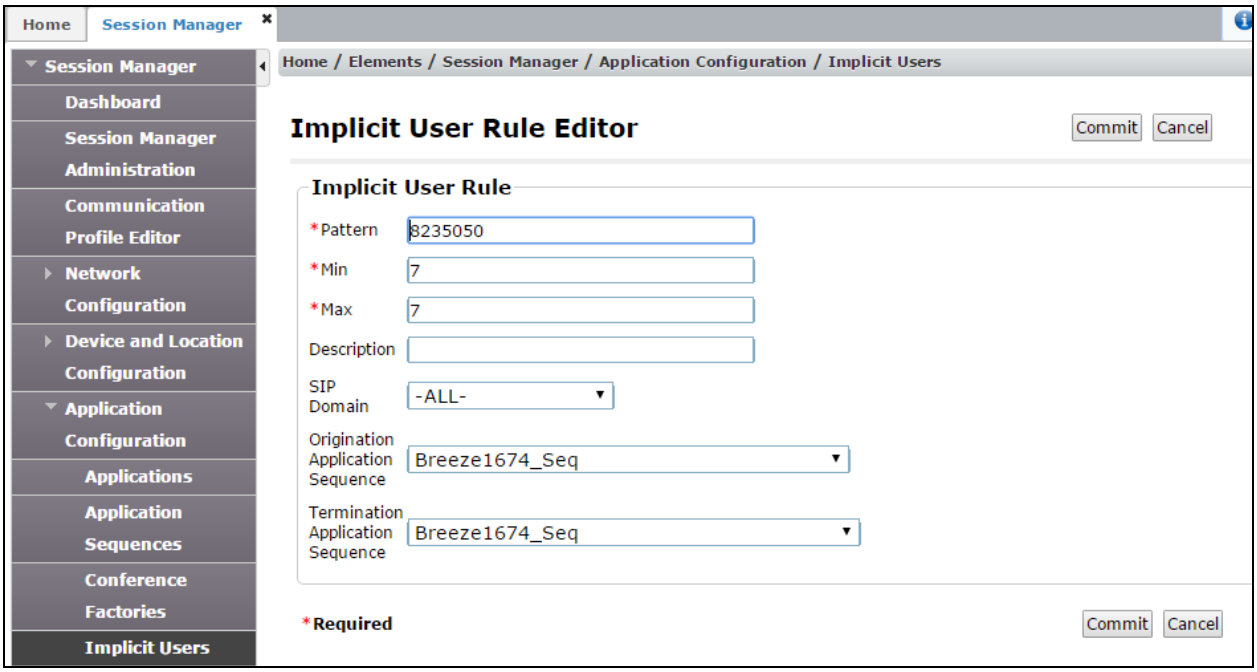
Select **Implicit Users** under **Application Configuration** from the left hand menu and click on **New**.



On the **Implicit User Rule Editor** screen enter the dial **Pattern** that routes calls to eCallOrchestration and a **Min** and **Max** digits to dial. Select the Application sequence created above under **Originating and Termination Application Sequence** drop downs. Click on **Commit** to save changes.



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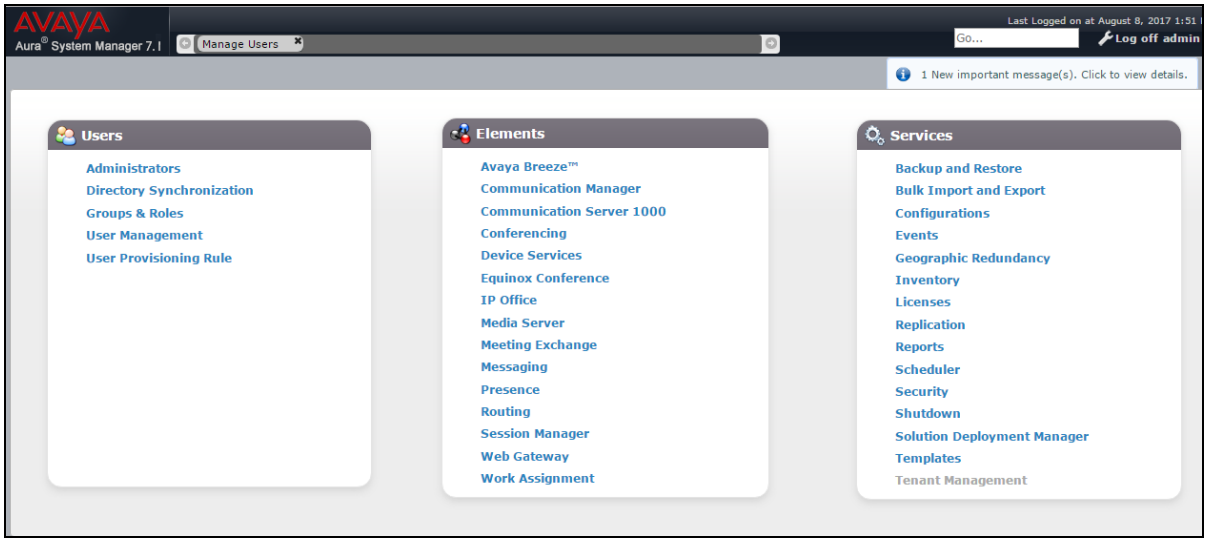
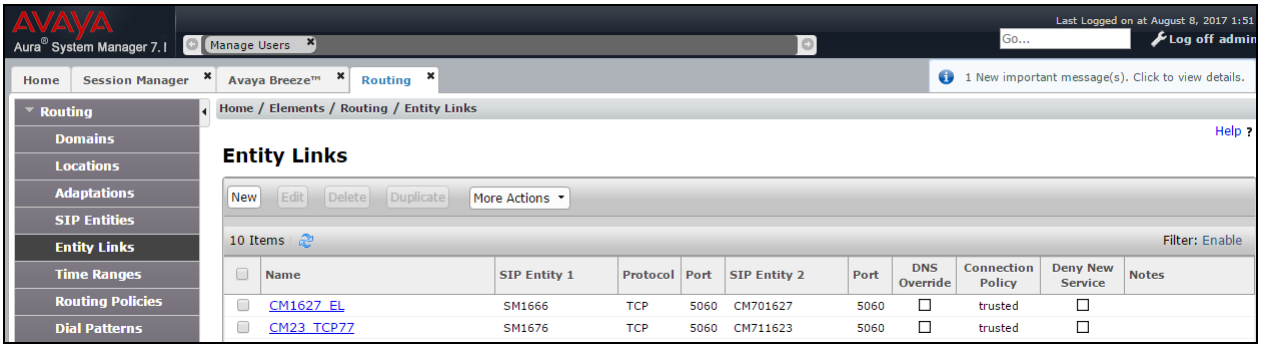
6.3. Configure Avaya Breeze™ Entity link

To allow a call to be routed to eCallOrchestration there has to be an entity link between Session Manager and the Avaya Breeze Server.

From the Welcome Screen in System Manager select **Routing** from **Elements**



Select **Entity Links** from the left hand menu and click on **New**.



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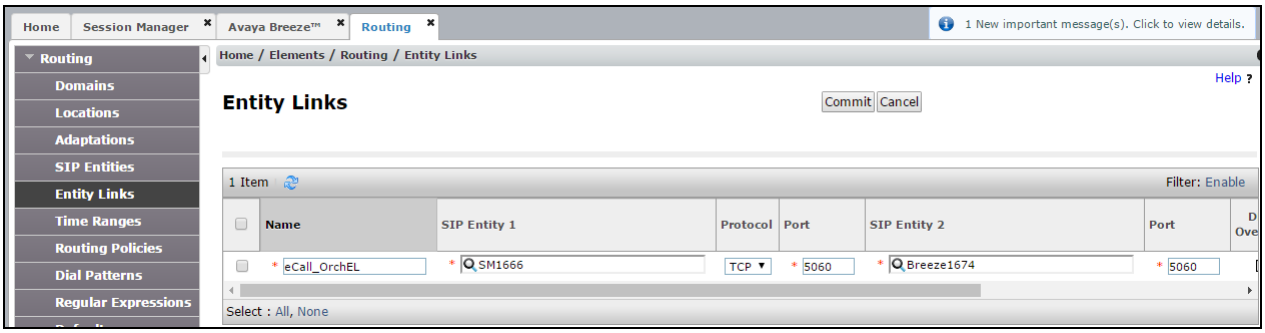
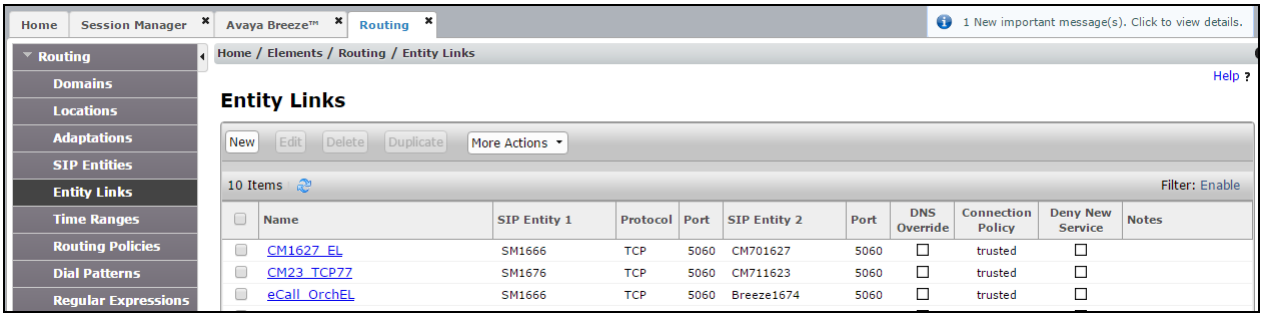
Enter a **Name** and select the Session Manager used to route calls to Breeze as **SIP Entity 1**. Select the Avaya Breeze Server Entity to be used in the eCallOrchestration SnapIn cluster as **SIP Entity 2** and set the **Protocol** as required (the port will set automatically to 5060 for UDP and TCP and 5061 for TLS). Click on **Commit** to save the changes.



The resultant screen shows the Entity Link added.



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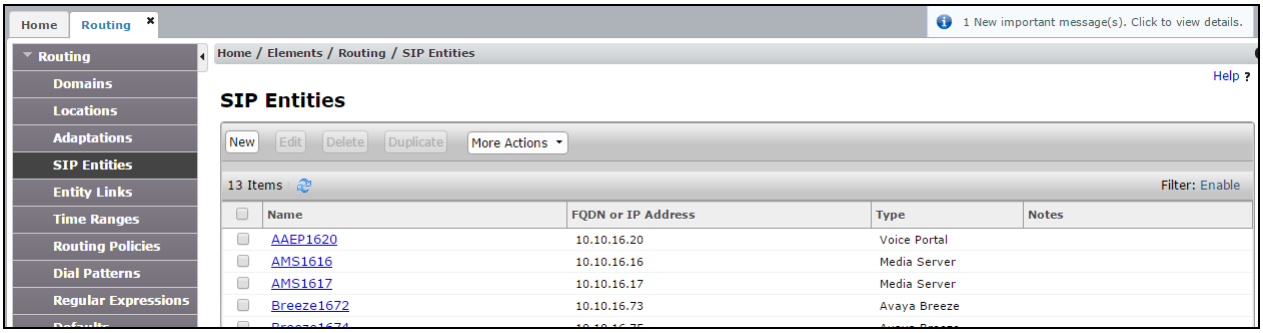
6.4. Configure Emergency Call Server

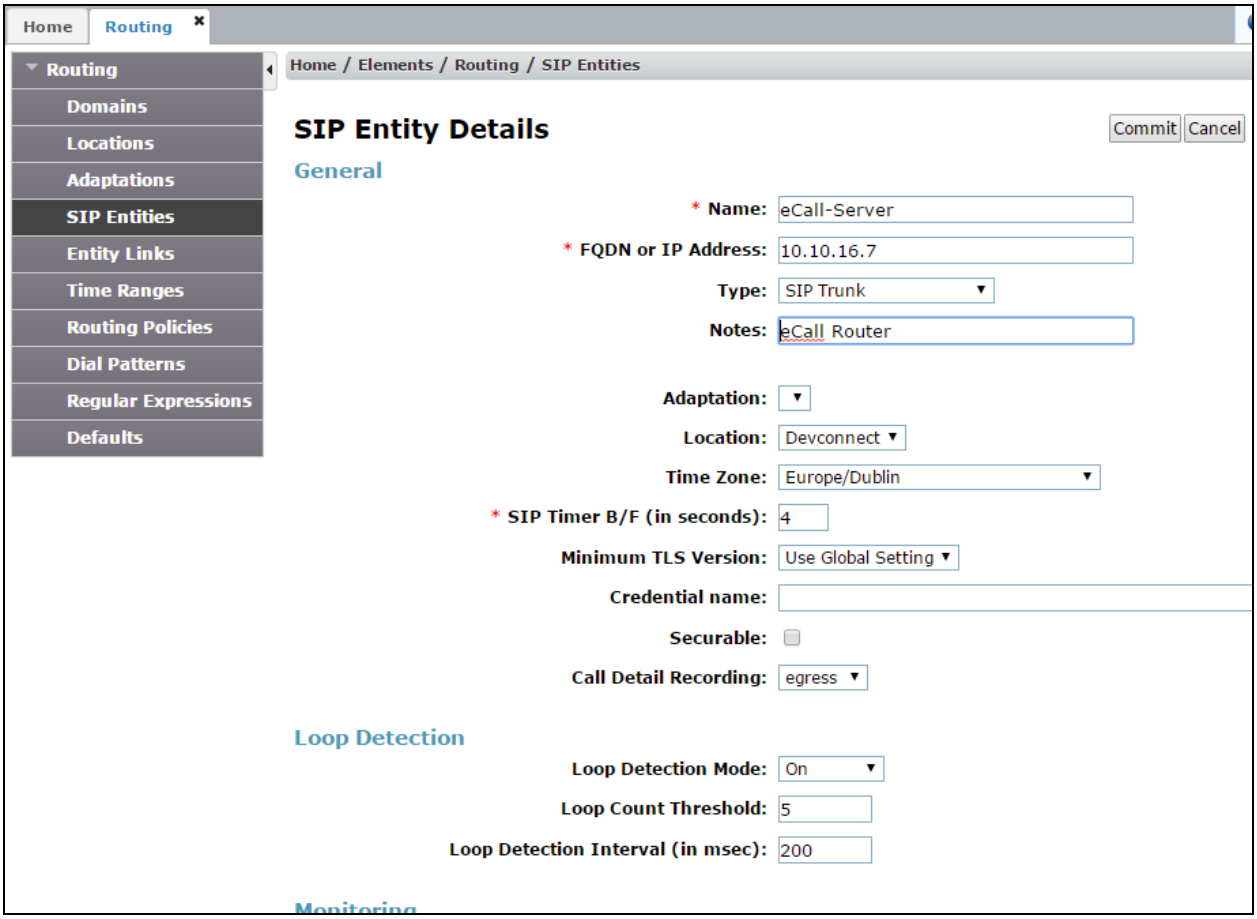
To route calls to the Emergency Call Server an entity needs to be added.

6.4.1. Add Entity

Select **Elements →Routing** from the SMGR dashboard and click on **SIP Entities**. Click on **New**.



Enter a descriptive **Name** and the **FQDN or IP Address** of the Emergency Call Server. Set **Type** to **SIP Trunk**. Click on **Commit** to add the entity.



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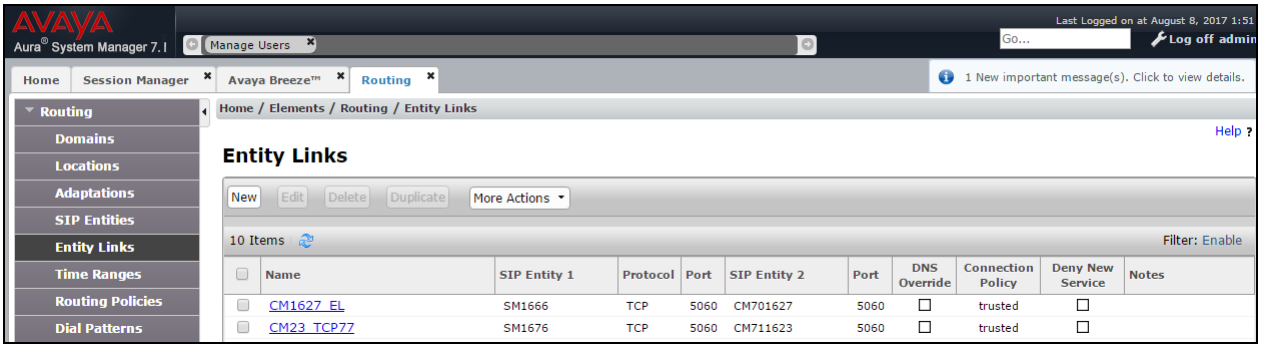
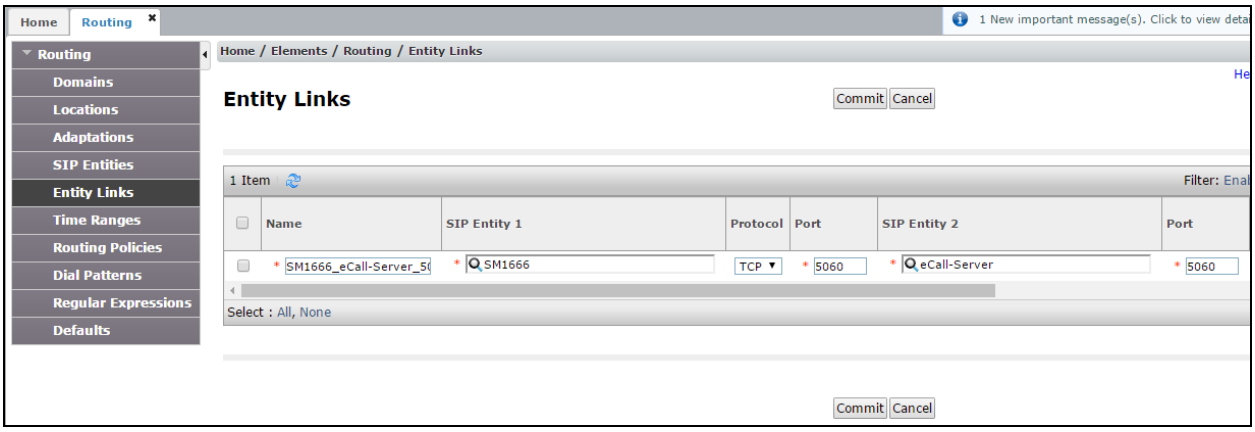
6.4.2. Add the Entity Link

Click on **Entity Links** from the routing menu. Click on **New**.

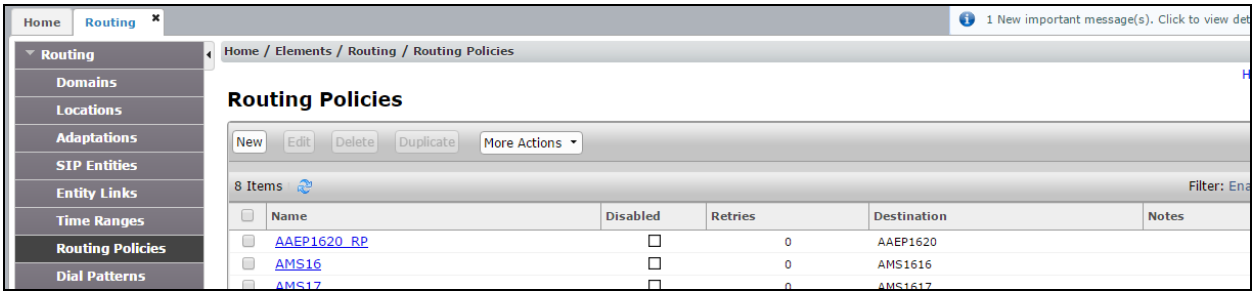


Enter a **Name** and select the Session Manager used to route calls to the Emergency Call Server as **SIP Entity 1**. Select the Emergency Call Server Entity to be used by the eCallOrchestration SnapIn cluster as **SIP Entity 2** and set the **Protocol** as required (the port will set automatically to 5060 for UDP and TCP and 5061 for TLS). Click on **Commit** to save the changes.



6.4.3. Add the Routing Policy

Click on **Routing Policies** from the routing menu. Click on **New**.



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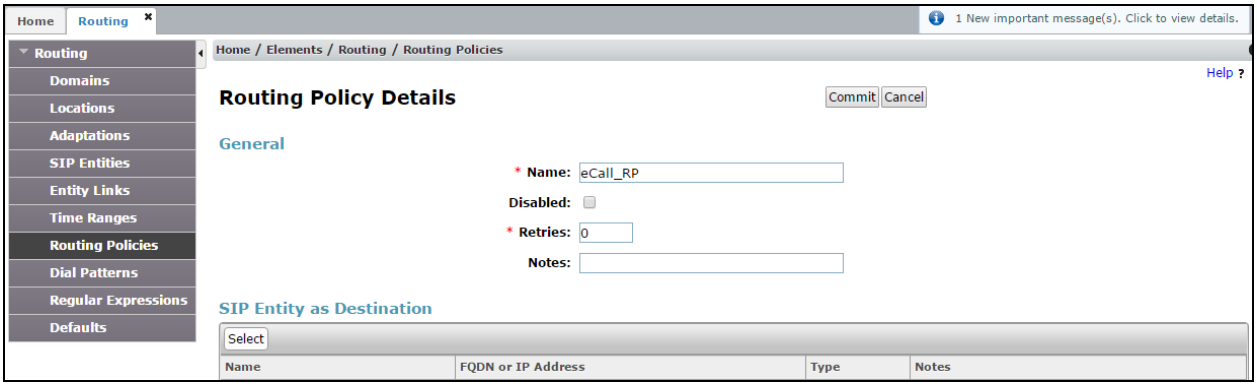
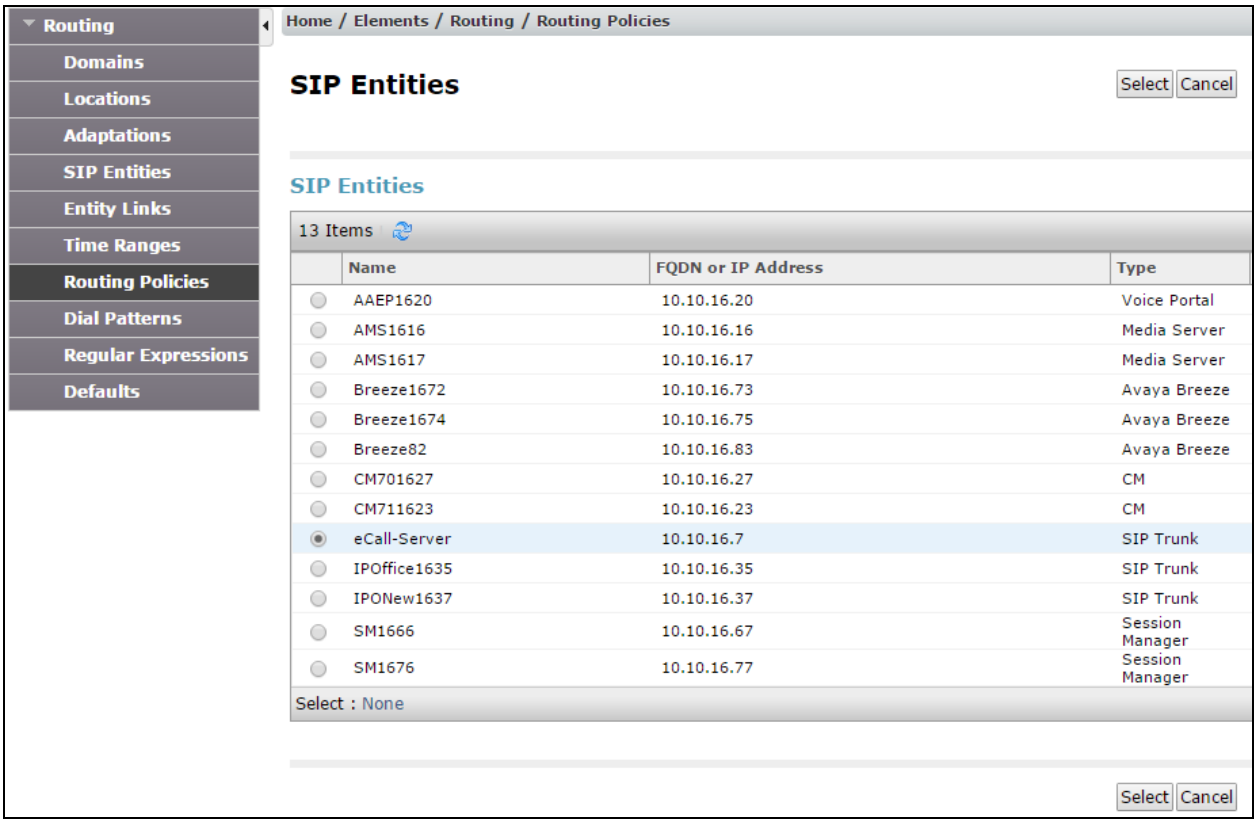
Enter a descriptive **Name** and click on select under **SIP Entity as Destination**.



Select the Emergency Call Server entity added in **Section 6.4.1**. Click on **Select** to add this entry. On the **Routing Policy Details** page click on **Commit**(shown above) to add the entry.



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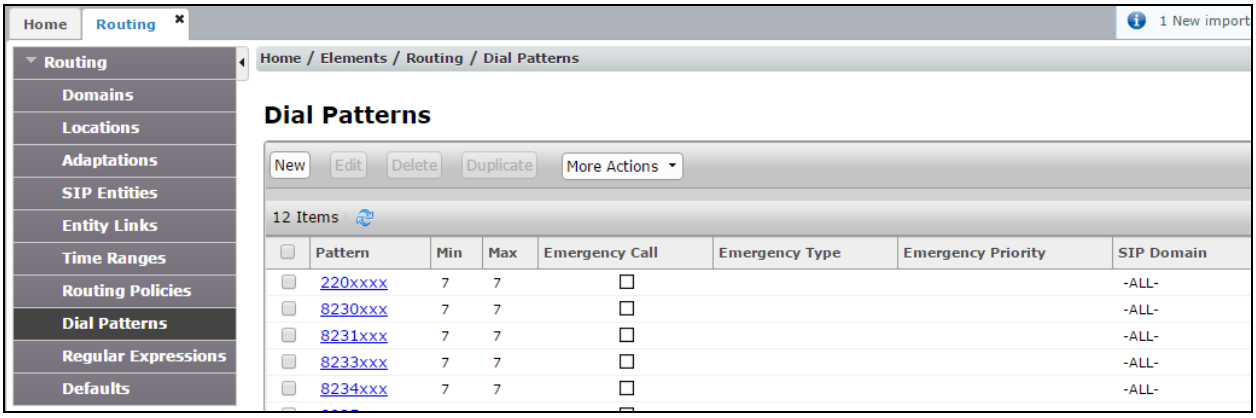
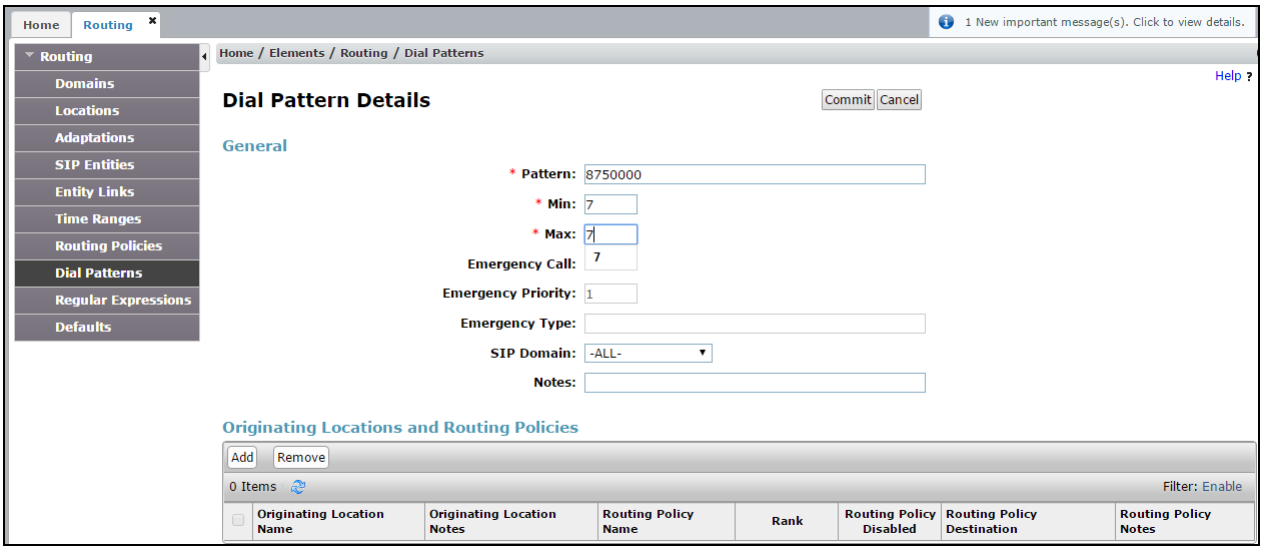
6.4.4. Add Dial Pattern

Click on **Dial Patterns** from the routing menu. Click on **New**.



Enter the number the eCallOrhestration SnapIn dials to route to the Emergency Call Server beside **Pattern** and set the **Min** and **Max** to the number of digits in the **Pattern**. Under **Originating Location and Routing Policies,** click on **Add**.



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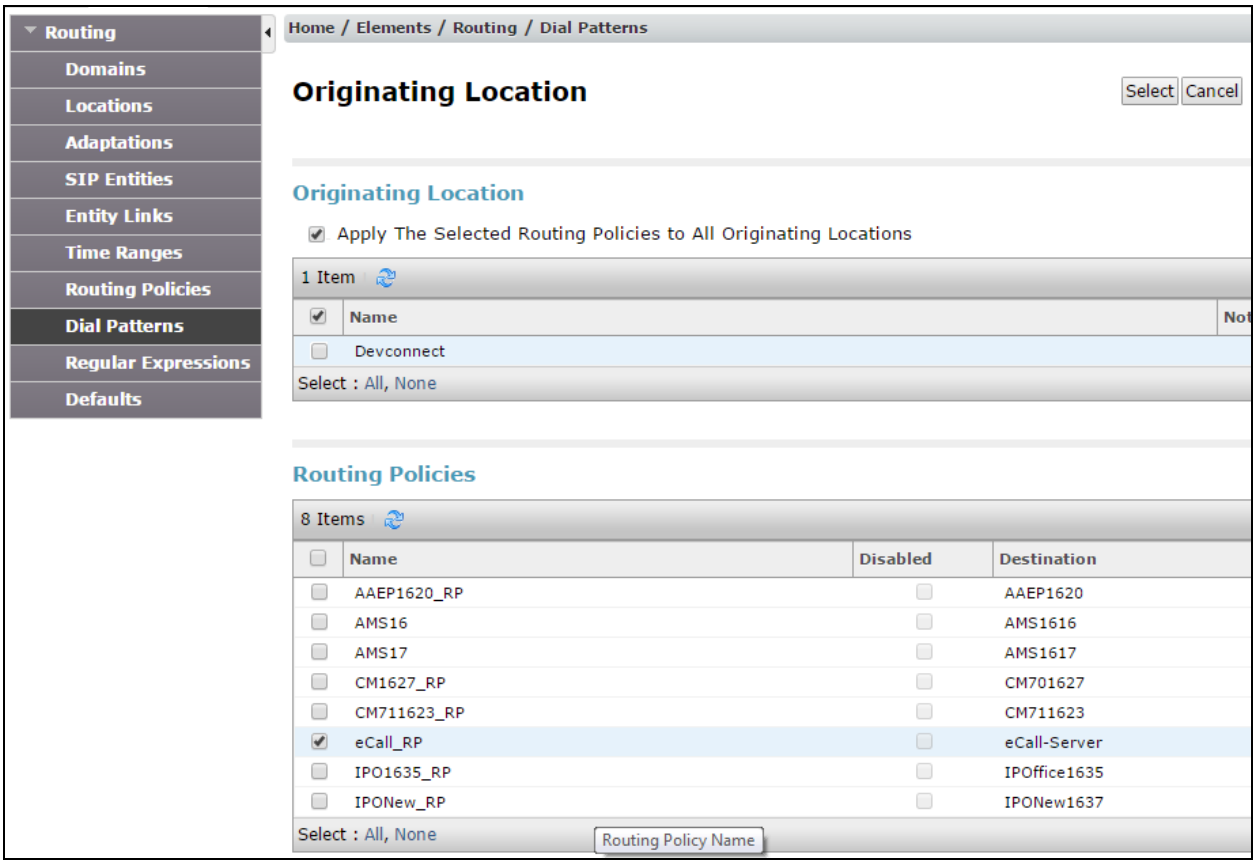
Under **Originating Location** select **Apply the Selected Routing Policy to All Originating Locations** and under **Routing Policies** select the Routing Policy in **Section 6.4.3**. Click on **Select** and when routed back to the **Dial Pattern Details** screen click on **Commit** to add the entry.



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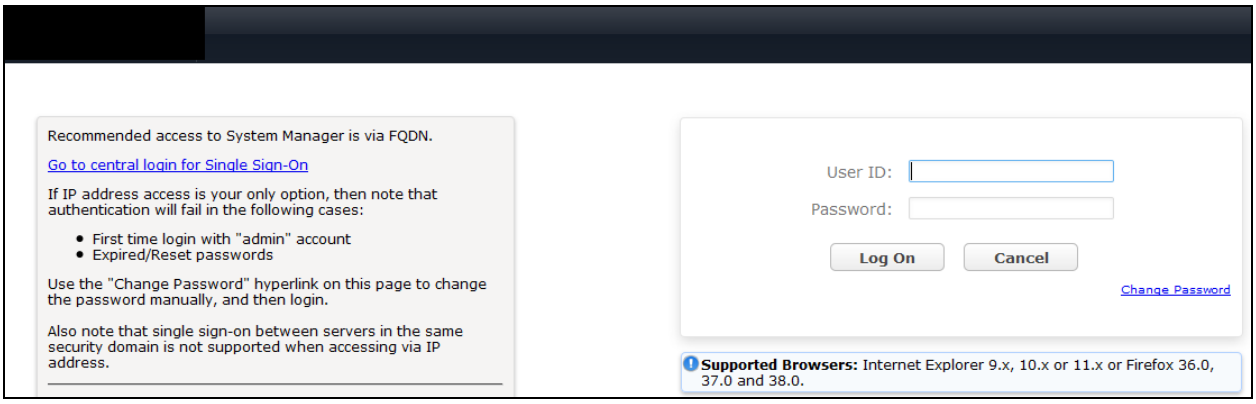
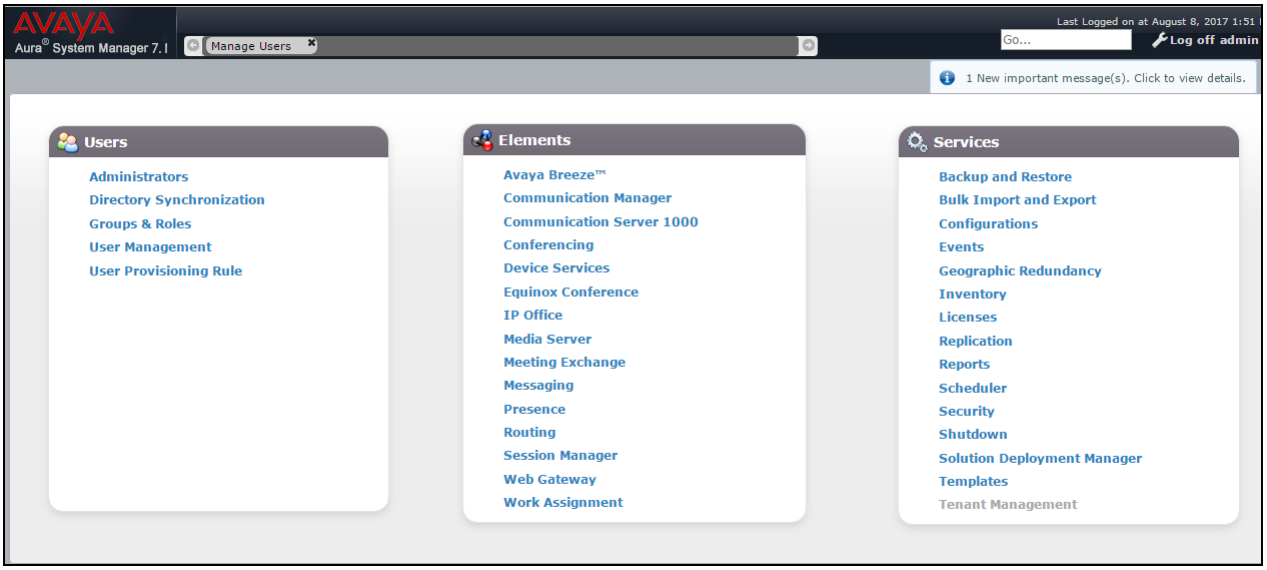
7. Configure eCallOrchestration SnapIn

This section describes the steps required to configure eCallOrchestration SnapIn to interoperate with Avaya Breeze.

Log in to System Manager using the appropriate credentials.



From the home screen select **Elements → Avaya Breeze™**



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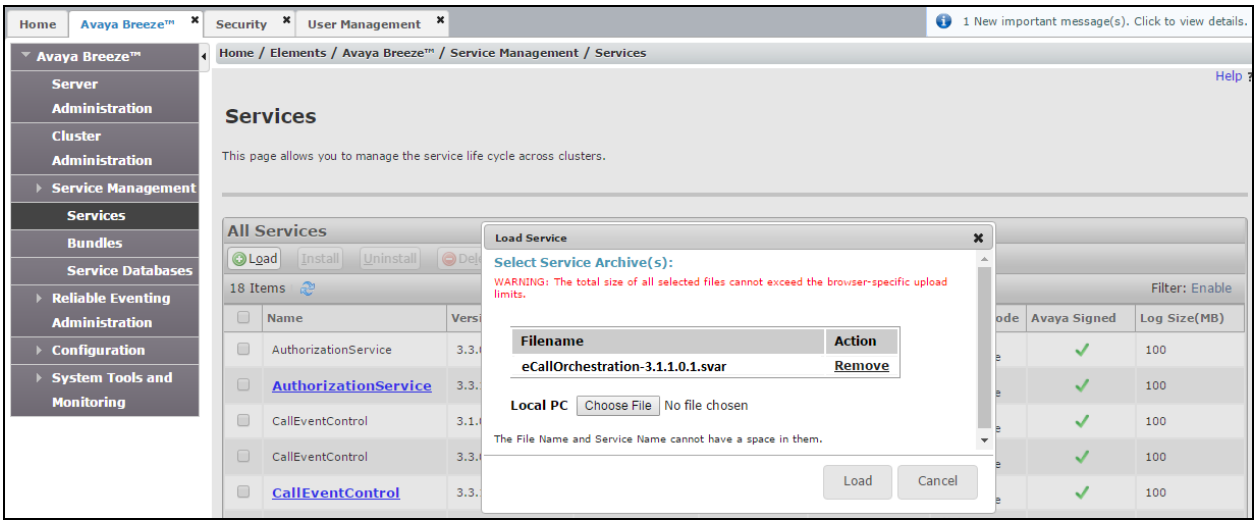
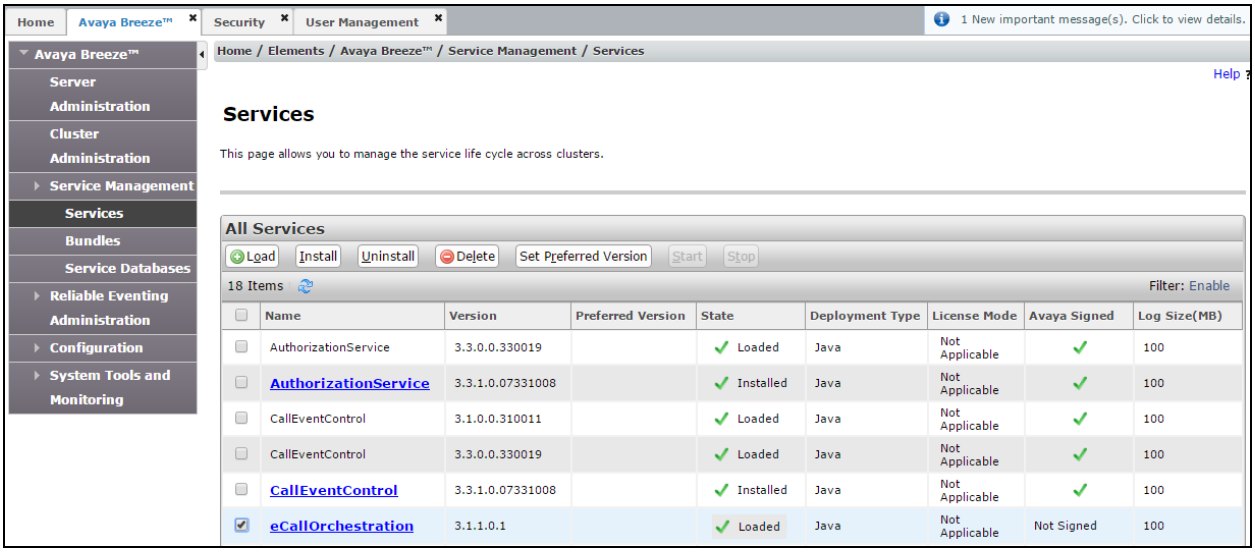
Save the **eCallOrchestration-3.1.1.0.1.svar** file provided by Engelbart software somewhere on the PC used to access System Manager. Select Service Management and click on **Load**. Click on **Choose File** next to **LocalPC** and select the svar file. Click on **Load**.



When returned to the Service Management page the eCallOrchestration SnapIn is displayed as **Loaded**.



Next select **Cluster Administration** from the left hand menu and click on **New.**

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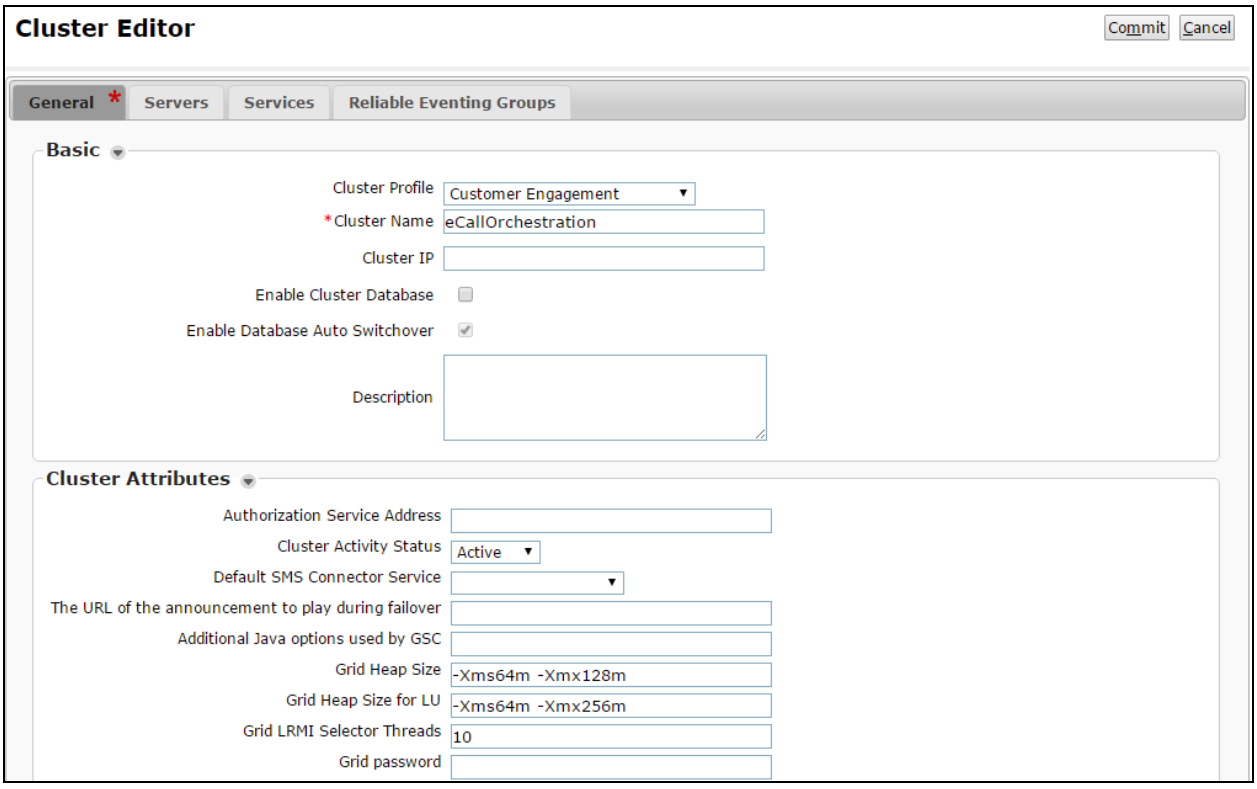
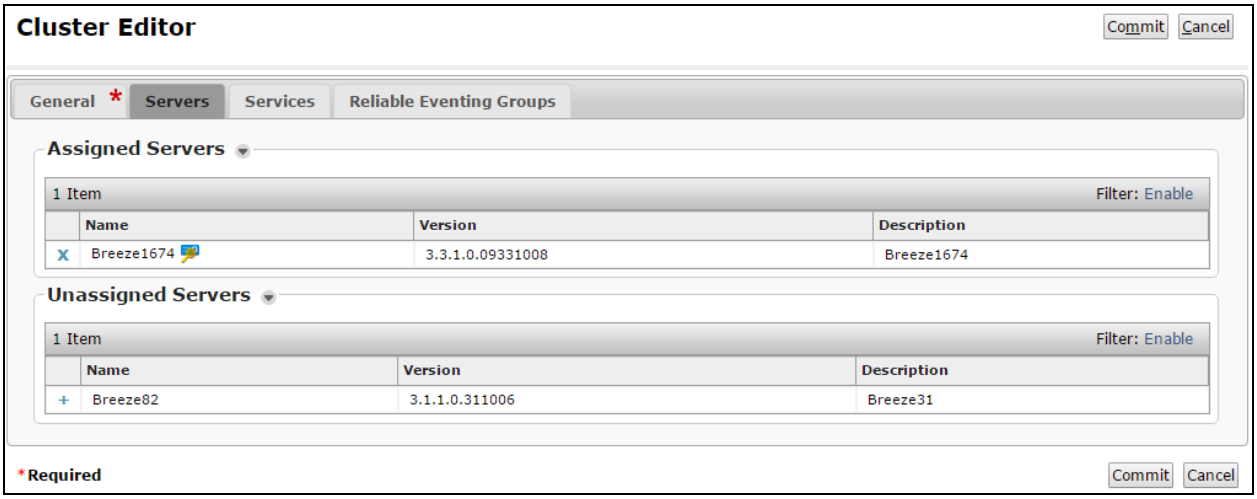
Select the **Customer Engagement Cluster** Profile from the drop down and fill in the **Cluster Name**.



Select the **Servers** tab and add the Avaya Breeze Server verified in **Section 5**. Select the server using the + to the left of the **Unassigned Servers** list (not shown). The Server will move up into the **Assigned Servers** list for this cluster.



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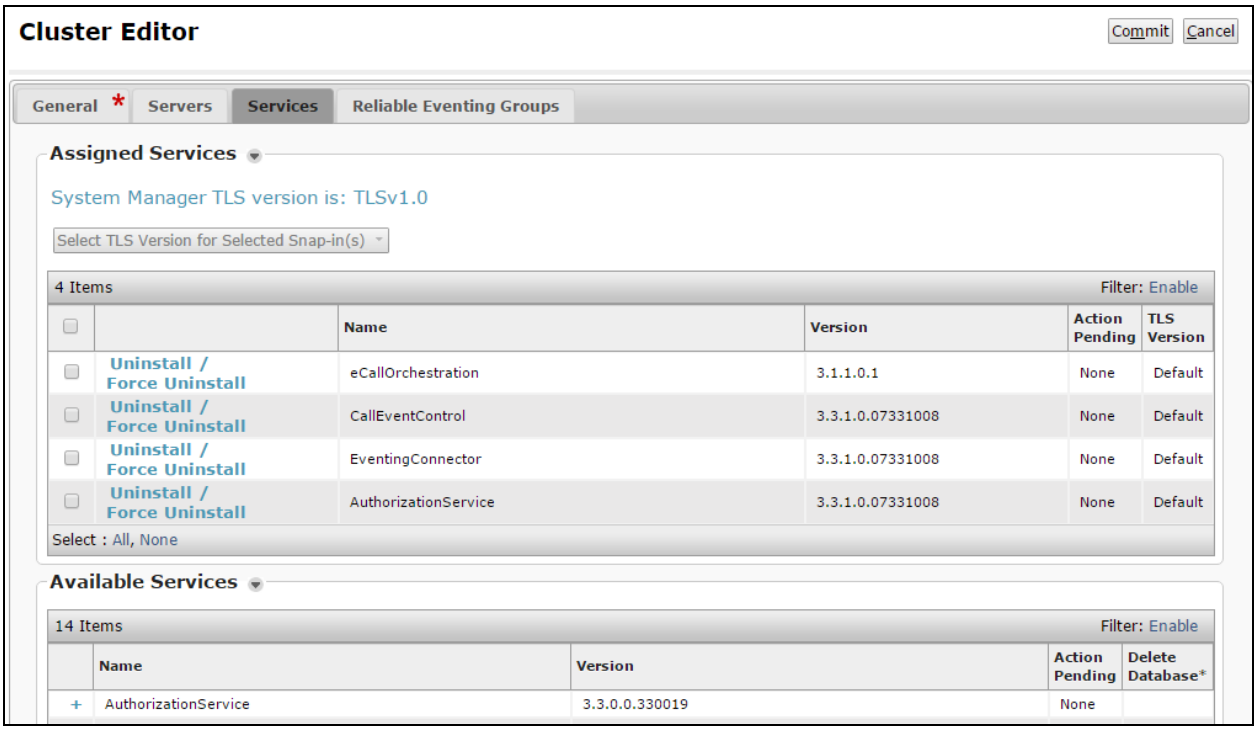
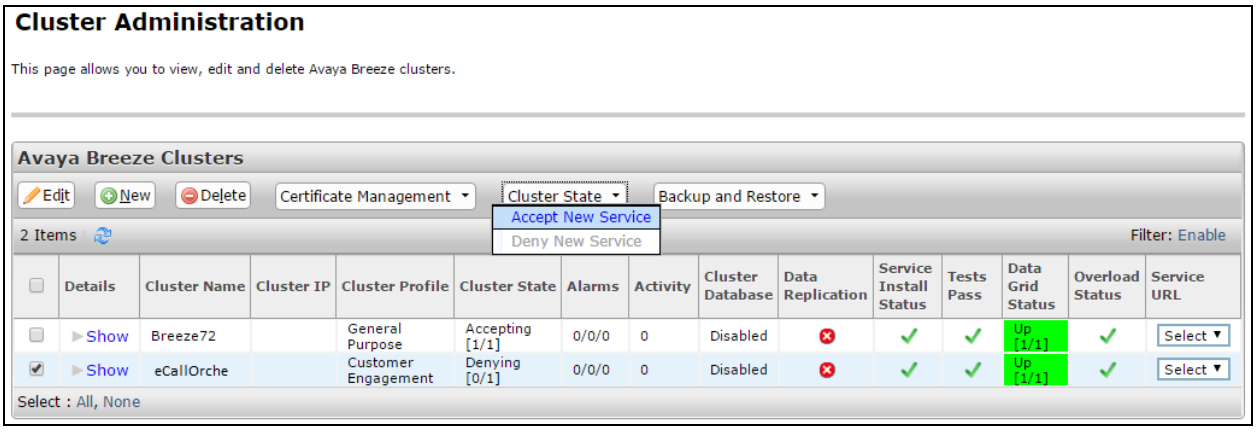
Select the **Services** tab and add the eCallOrchestration SnapIn listed in **Available Services** list using the +. The Service will be moved into the **Assigned Services** list (not shown). Note that the EventingConnector , CallEventControl and AuthorizationService services are already assigned as these are required services for this type of cluster and must be installed. Click on **Commit** to save the cluster and initiate the installation of the **Assigned Services**.



When returned to the Cluster Administration screen the cluster created will be in a **Denying** State. Click on the Cluster State drop down and select **Accept New Service**.



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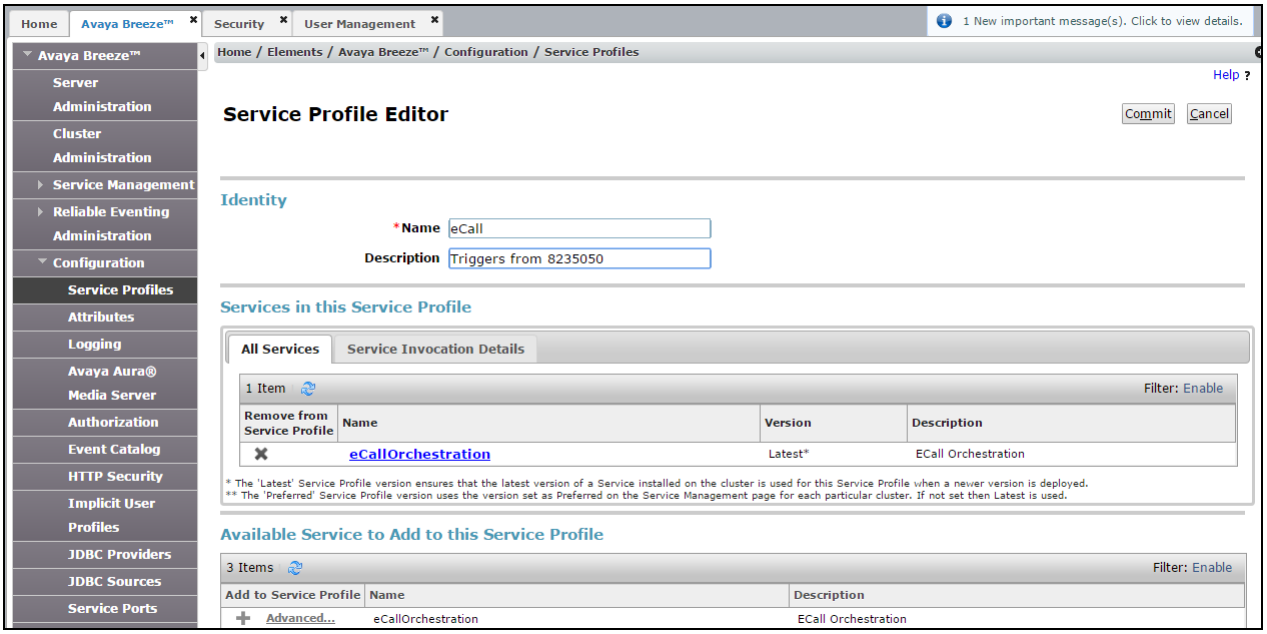
Under **Configuration** select **Service Profiles** and click on **New**.

In The **Service Profile Editor** give the Service Profile a **Name** and select **eCallOrchestration** SnapIn from the **Available Service to Add to this Service Profile** list. This will move the Service into the **Services in this Service Profile** list as shown. Click on **Commit** to save changes.



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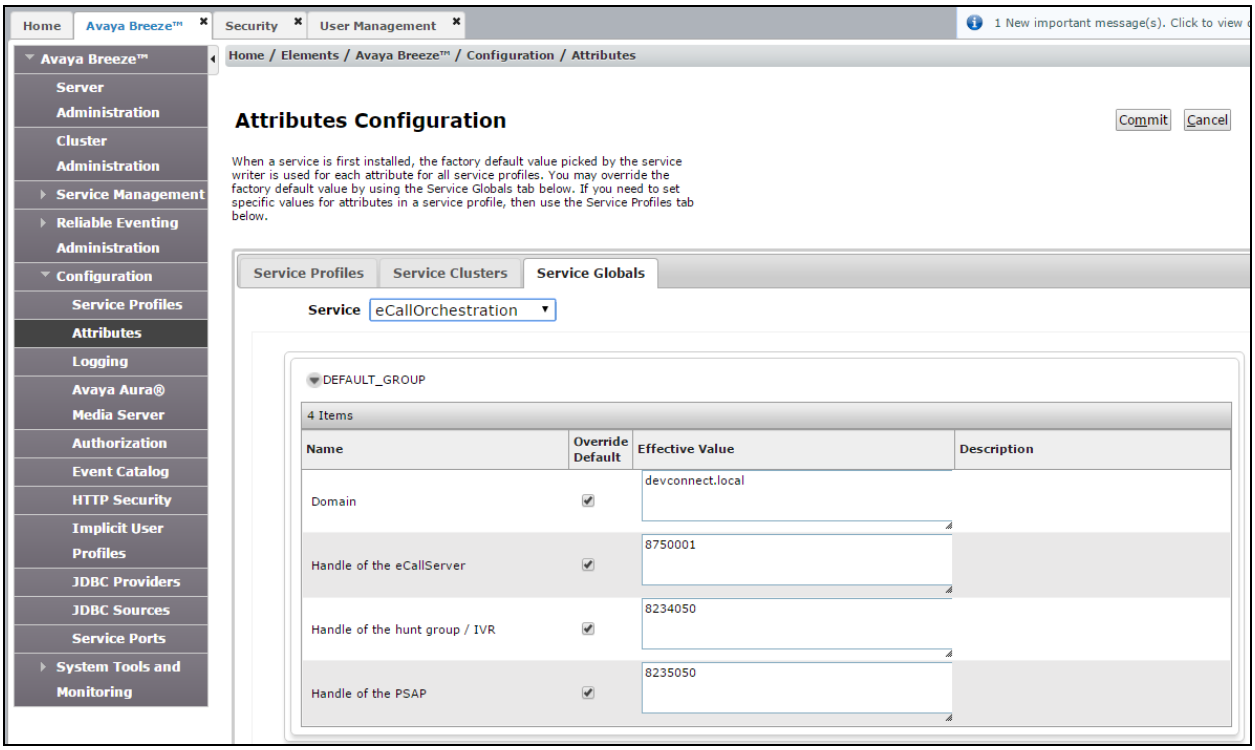
Now select **Attributes** from **Configuration** and on the **Service Globals** tab select the **eCallOrchestration Service** created from the drop down.

- **Domain** is the SIP Domain used to route calls
- **Handle of the eCallServer** is the number the eCallOrchestration will call to Extract the MSD information
- **Handle of the hunt group/ IVR** is a valid VDN on the Communication manager that routes calls to agents
- **Handle of the PSAP** is the number dialled by the caller routed to the eCallOrchestration SnapIn



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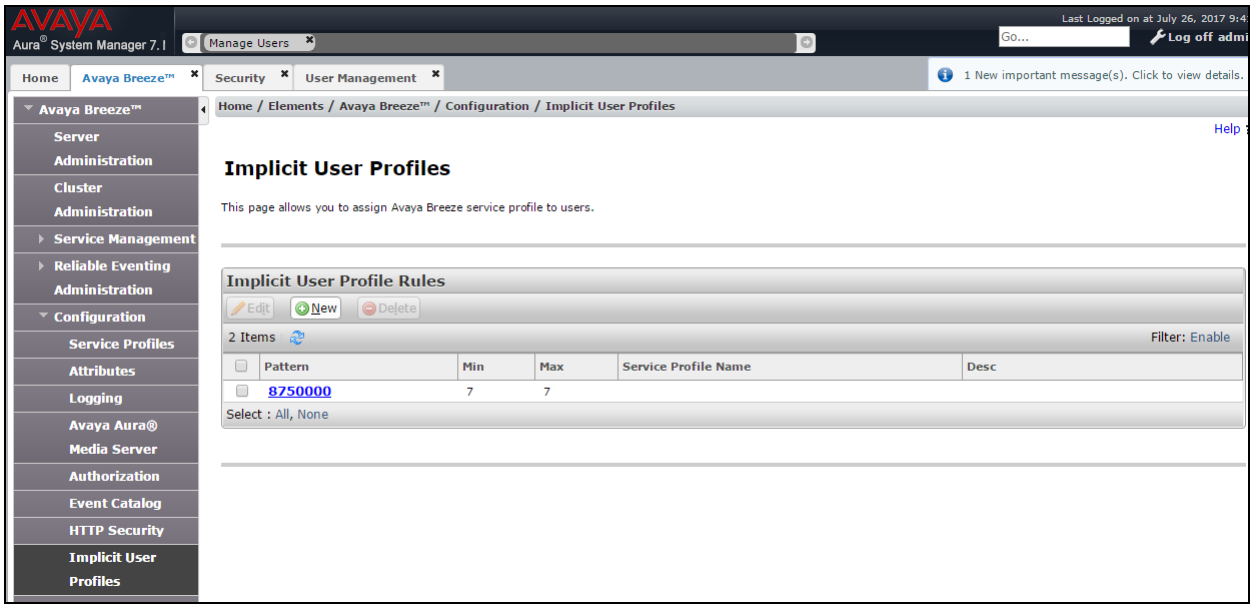
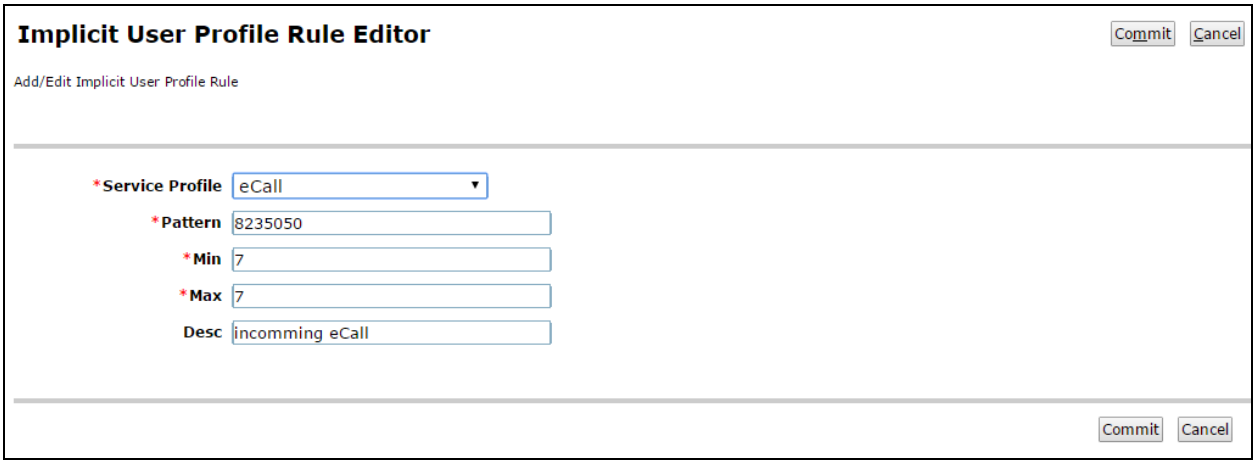
Next select **Implicit User Profiles** from **Configuration**. From the **Implicit User Profile**s screen click on **New**.



Select the **Service Profile** created from the drop down. Enter the dial **Pattern** that sends calls to Communication Manager. Set the **Min** and **Max** length of Communication Manager extensions. Click on **Commit** to save changes.



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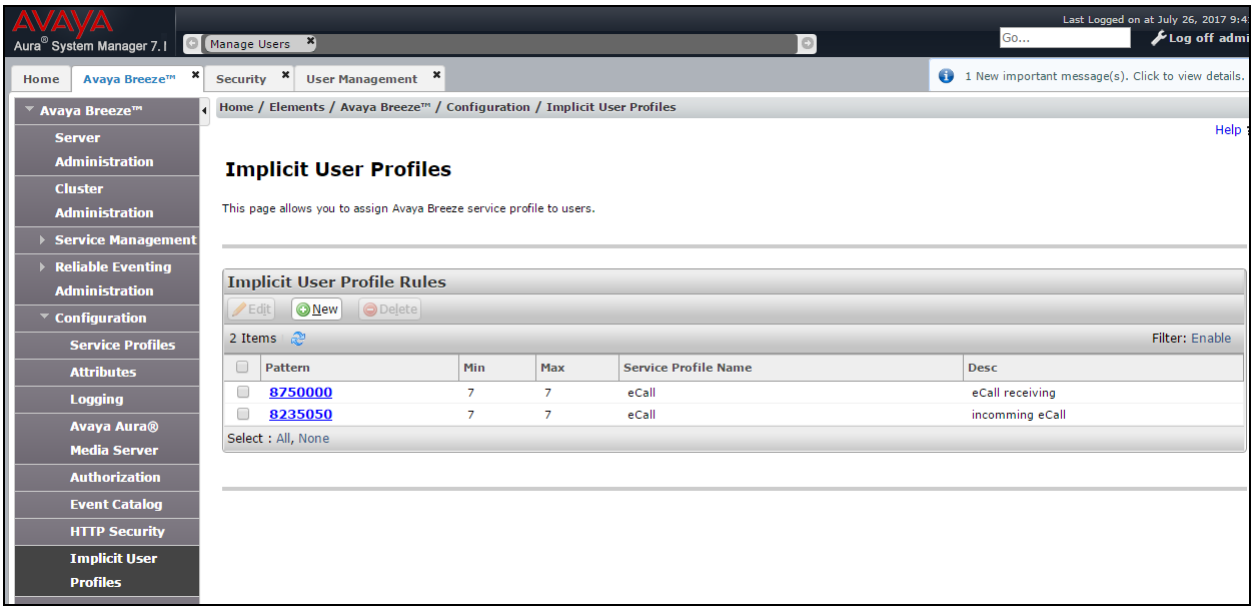
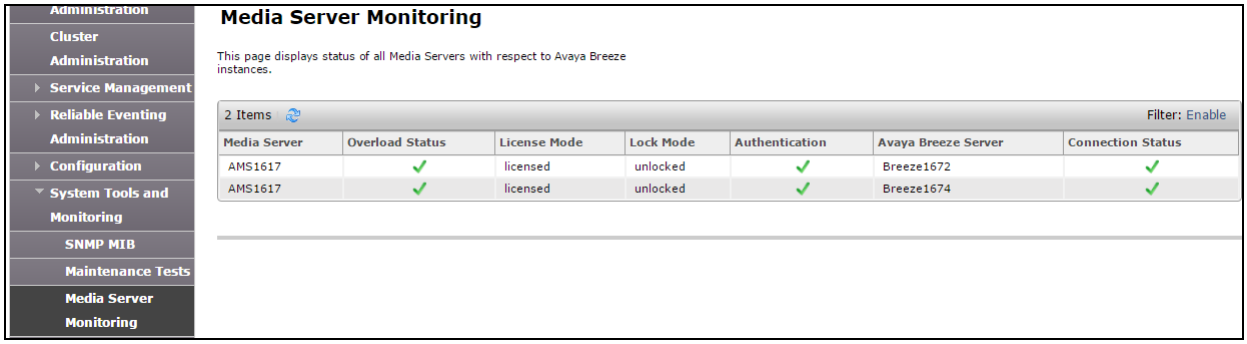
The new Implicit User Profile will now be listed when returned to the **Implicit User Profiles** screen.



7.1. Check Media Server

For the eCall routing to Avaya Breeze and the Emergency Call Server to connect there must be an Avaya Media Server dedicated to Avaya Breeze. This configuration is out with the scope of the document. To check the status of the Avaya Media Server select Media Sever Monitoring from the System Tools and Monitoring menu. The **Connection Status** for the Avaya Breeze server used to install the eCallOrchestration SnapIn should have a ✓.



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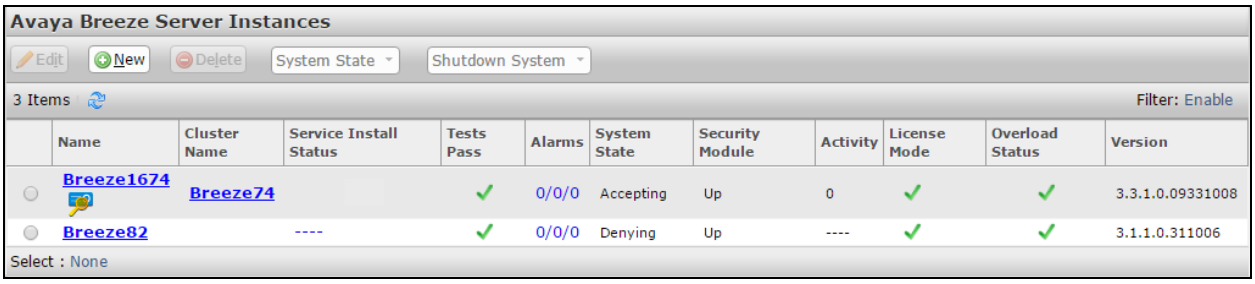
8. Verification Steps

This section provides the verification steps that can be performed to verify proper configurations of both Avaya Breeze and eCallOrchestration SnapIn.

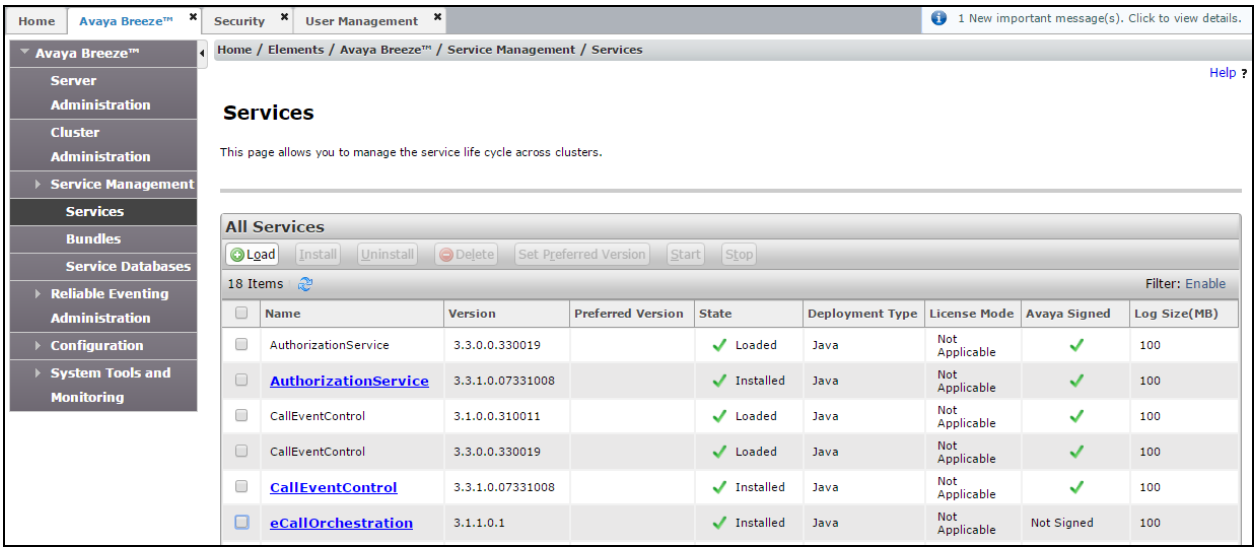
8.1. Verify Status of Avaya Breeze™ Server

From home screen select Session Manager from Elements and under Server administration verify that the Avaya Breeze Server has a green tick under **Tests Pass** and **License Mode**. Verify that the **Security Module** is **Up** and **System State** is **Accepting.**



8.2. Verify eCallOrchestration SnapIn and Cluster

Verify that the eCallOrchestration SnapIn is showing as **Installed**



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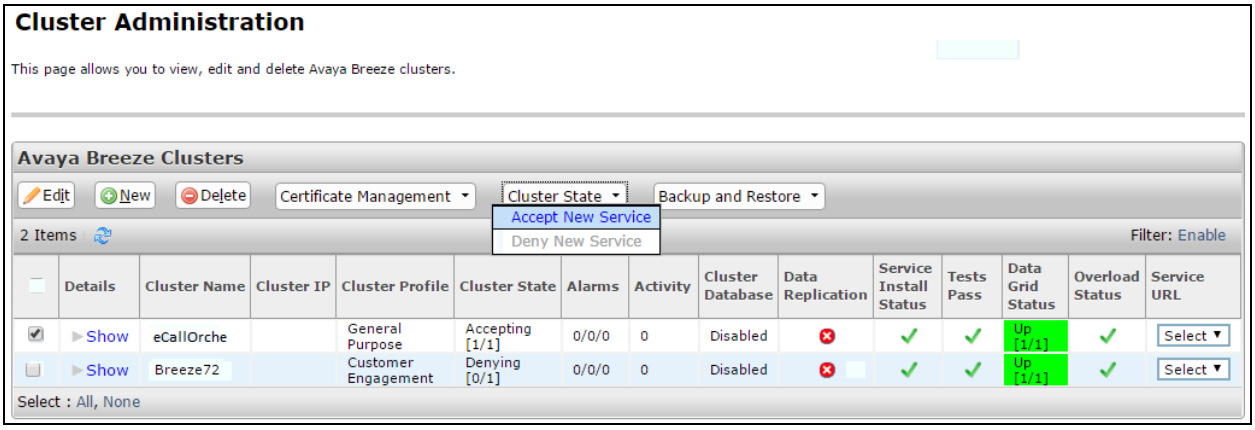
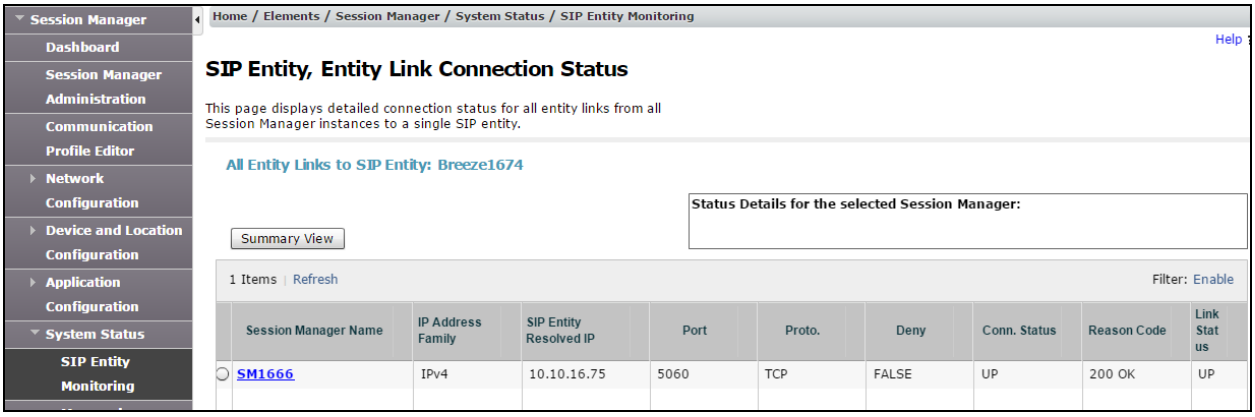
Verify that the Cluster State is **Accepting** and that the **Service Install Status** and **Tests Pass** have green ticks. Verify that **Data Grid Status** is **Up[1/1]**



Verify that the entity link between the Session Manager and Avaya breeze is active. Check **Conn. Status** and **Link Status** are both showing as **UP.**



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9. Conclusion

These Application Notes describe the configuration steps required for eCallOrchestration SnapIn from Engelbart Software GmbH to interoperate with Avaya Breeze™. All feature test cases were completed successfully, with any observations noted in **Section 2.2**.

10. Additional References

This section references the Avaya and Engelbart Software GmbH product documentation that are relevant to these Application Notes.

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

[1] *Administering Avaya Breeze™ 3.3 Issue 2*
[2] *Administering Avaya Aura® System Manager for version 7.1*
[3] *Administering Avaya Aura® Session Manager for version 7.1*
[4] *Implementing and Administering Avaya Aura® Media Server release 7.8*

Technical documentation can be obtained for eCallOrchestration SnapIn by contacting Engelbart Software via info@engelbart-software.com.

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