



## **Application Notes for Virsae Service Management for Unified Communications with Avaya Session Border Controller for Enterprise - Issue 1.0**

### **Abstract**

These Application Notes describe the procedures for configuring Virsae Service Management for Unified Communications to interoperate with Avaya Session Border Controller for Enterprise.

Virsae Service Management provides real-time monitoring and management solutions for IP telephony networks. Virsae Service Management provides visibility of Avaya and other vendor's IP Telephony solutions from a single console and enables a reduction in complexity when managing complex IP telephony environments.

Virsae Service Management integrates directly to Avaya Session Border Controller for Enterprise using Secure Shell (SSH) to query Avaya Session Border Controller for Enterprise and receives Simple Network Management Protocol (SNMP) traps from Avaya Session Border Controller for Enterprise.

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

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

# 1. Introduction

These Application Notes describe the compliance tested configuration used to validate Virsae Service Management for Unified Communications (herein after referred to as VSM) with Avaya Session Border Controller for Enterprise (herein after referred to as Avaya SBCE). VSM is a cloud-based service management platform that brings visibility, service transparency and cost savings to Unified Communications environments over the short, medium and long term.

VSM uses SNMP and Linux shell access integration method to monitor Avaya SBCE.

- SNMP collection –Virsae uses SNMP traps to collect alarm and status information from Avaya SBCE.
- SSH – Virsae establishes a Linux Shell connection to run the “sar” command and obtain system information. This command typically collects, reports and saves CPU, Memory, I/O usage in the Linux operating system.

## 2. General Test Approach and Test Results

The general test approach was to verify VSM using SNMP and SSH connection to monitor and display system status from Avaya SBCE.

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 VSM utilized capabilities of SSH and SNMPv3 as requested by Virsae.

This test was conducted in a lab environment simulating a basic customer enterprise network environment. The testing focused on the standards-based interface between the Avaya solution and the third-party solution. The results of testing are therefore considered to be applicable to either a premise-based deployment or to a hosted or cloud deployment where some elements of the third-party solution may reside beyond the boundaries of the enterprise network, or at a different physical location from the Avaya components.

Readers should be aware that network behaviors (e.g. jitter, packet loss, delay, speed, etc.) can vary significantly from one location to another and may affect the reliability or performance of the overall solution. Different network elements (e.g. session border controllers, soft switches, firewalls, NAT appliances, etc.) can also affect how the solution performs.

If a customer is considering implementation of this solution in a cloud environment, the customer should evaluate and discuss the network characteristics with their cloud service provider and network organizations and evaluate if the solution is viable to be deployed in the cloud.

The network characteristics required to support this solution are outside the scope of these Application Notes. Readers should consult the appropriate Avaya and third-party documentation for the product network requirements. Avaya makes no guarantee that this solution will work in all potential deployment configurations.

This solution uses the System Access Terminal (SAT) interface to interact with Avaya Aura® Communication Manager or the Telnet/SSH interface to interact with other Avaya products. While this solution has successfully completed Compliance Testing for the specific release levels as described in these Application Notes, Avaya does not generally recommend use of these interfaces as a programmatic approach to integration of 3rd party applications. Avaya may make changes or enhancements to the interfaces in any subsequent release, feature pack, service pack, or patch that may impact the interoperability of 3rd party applications using these interfaces. Using these interfaces in a programmatic manner may also result in a variety of operational issues, including performance impacts to the Avaya solution. If there are no other programmatic options available to obtain the required data or functionality, Avaya recommends that 3rd party applications only be executed during low call volume periods, and that real-time delays be inserted between each command execution. NOTE: The scope of the compliance testing activities reflected in these Application Notes explicitly did not include load or performance evaluation criteria, and no guarantees or assurances are made by Avaya that the 3rd party application has implemented these recommendations. The vendor of the 3rd party application using this interface remains solely responsible for verifying interoperability with all later Avaya Product Releases, including feature packs, service packs, and patches as issued by Avaya. For additional details see Avaya Product Support Notices PSN002884u, PSN005085u, and PSN020295u, available at [www.avaya.com/support](http://www.avaya.com/support).

## **2.1. Interoperability Compliance Testing**

For feature testing, VSM dashboard was used to view the configurations of Avaya SBCE such as the memory and CPU utilizations, disk usage and status from data collected via SSH and alarms via SNMPv3.

For serviceability testing, reboots were applied to the VSM and Avaya SBCEs to simulate system unavailability. Loss of network connectivity to both VSM and Avaya SBCE were also performed during testing.

## **2.2. Test Results**

All test cases passed.

## **2.3. Support**

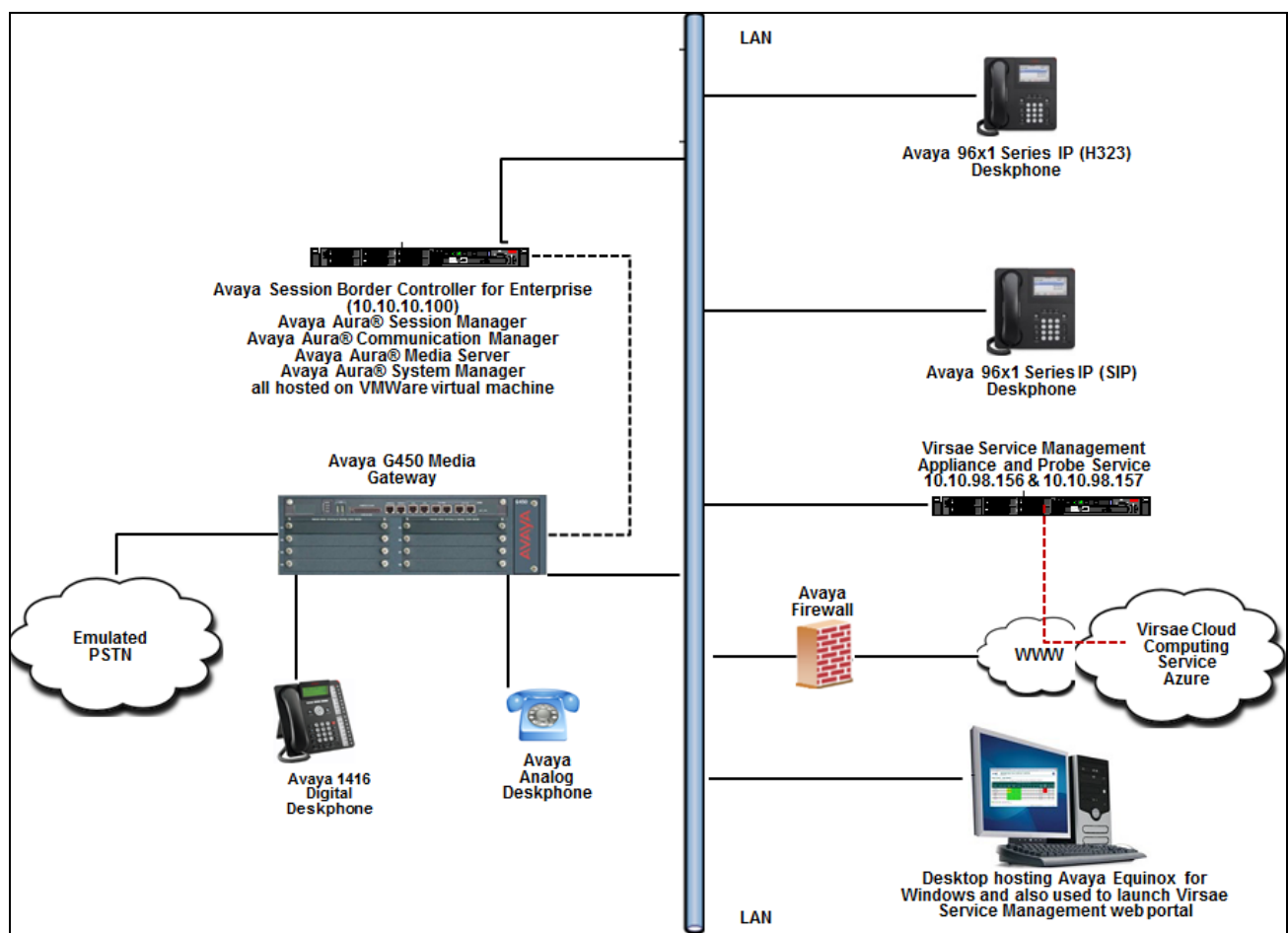
For technical support on Virsae Service Management, contact the Virsae Support Team at:

- Tel: +1 800 248 7080 (Americas)  
+44 0808 234 2729 (UK and Europe)  
+64 9 477 0696 (Asia Pacific)
- Email: support@virsae.com

### 3. Reference Configuration

**Figure 1** illustrates the test configuration used to verify VSM interoperability with Avaya SBCE. The configuration consists of an Avaya SBCE along with Communication Manager system with an Avaya G450 Media Gateway. The system has Avaya H323, SIP, Equinox for Windows, digital and analog endpoints configured for making and receiving calls. Avaya Aura® System Manager and Avaya Aura® Session Manager provided SIP support to the Avaya SIP endpoints. VSM was installed on a server running Microsoft Windows Server 2012 R2 with Service Pack 1. Architecturally the VSM Service relies on an appliance being placed on a corporate LAN and being configured to connect to a Unified Communication platform as well as the Microsoft Azure cloud via the internet. The VSM appliance acts as a collector and compresses, encrypts then forwards data from all sources to the Virsae cloud computing service. A PC/Laptop is used to access the Virsae portal to manage VSM services, add additional users and view reporting data on the equipment being managed.

Also note that for security purposes, any public IP addresses used during the compliance test have been masked or altered in this document.



**Figure 1: Test Configuration**

## 4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Session Border Controller for Enterprise running on virtual server	7.2.2.0-11-15522
Avaya Aura® System Manager running on virtual server	7.1.3.0
Avaya Aura® Session Manager running on virtual server	7.1.3.0.713014
Avaya Aura® Media Server running on virtual server	7.8.0.384
Avaya Aura® Communication Manager running on virtual server	7.1.3.0.0-FP3
Avaya G450 Media Gateway	39 .12 .0 /1
Avaya 96x1 Series IP Deskphones: - 9611G (H.323) - 9641GS (SIP)	6.6401 7.0.1.2.9
Avaya Equinox for Windows	3.3.2.20
Avaya 9404 Digital Deskphone	18.0
Avaya 500 Analog Deskphone	N/A
Virsa Service Management for Unified Communications running on Windows 2012 R2 SP1	88.2.2.182

## 5. Configure Avaya Session Border Controller for Enterprise

This section describes the steps needed to configure Avaya SBCE to interoperate with VSM. This includes creating a login account for VSM to access Avaya SBCE and enabling SNMP.

### 5.1. Configure Login Group

Create an Administrator account on Avaya SBCE since the VSM Probe requires access to Avaya SBCE with Administrative rights. Add an account that when used provides access to the Linux bash prompt.

At the command prompt, type `su root`. When prompted, enter the '**root**' user password.

Use the command `useradd NAME`; where NAME is the account name to create and hit enter.

Use the command `passwd NAME`; where NAME is the account name created above and hit enter. Enter the password then hit enter (need to do this twice).

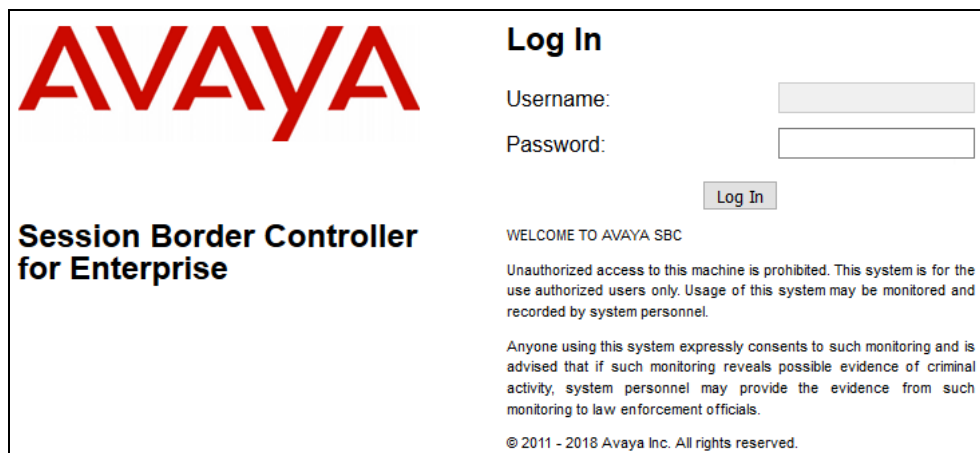
Enter the command `chage -M 99999 NAME`; where NAME is the account created above and hit enter to set the Avaya SBCE account password to not expire.

If administrator does not have the required privileges to create a new account, then the "ipcs" account will also work. During compliance testing, "ipcs" account was used.

### 5.2. Configure SNMP

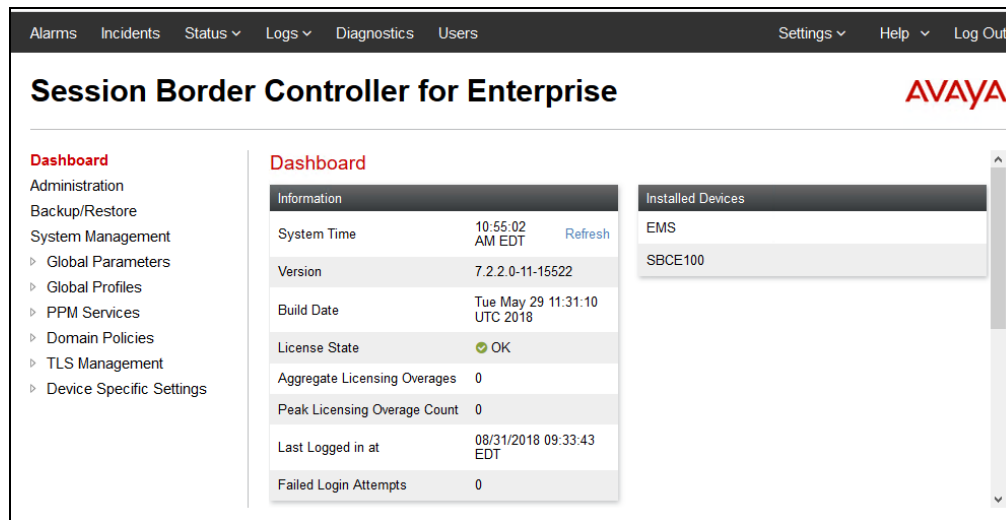
SNMP is used to capture alarms raised by Avaya SBCE. All configurations are done via Avaya SBCE.

Using a web browser, enter `https://<IP address of Avaya SBCE>` to connect to the Avaya SBCE server and log in using appropriate credentials as shown below.

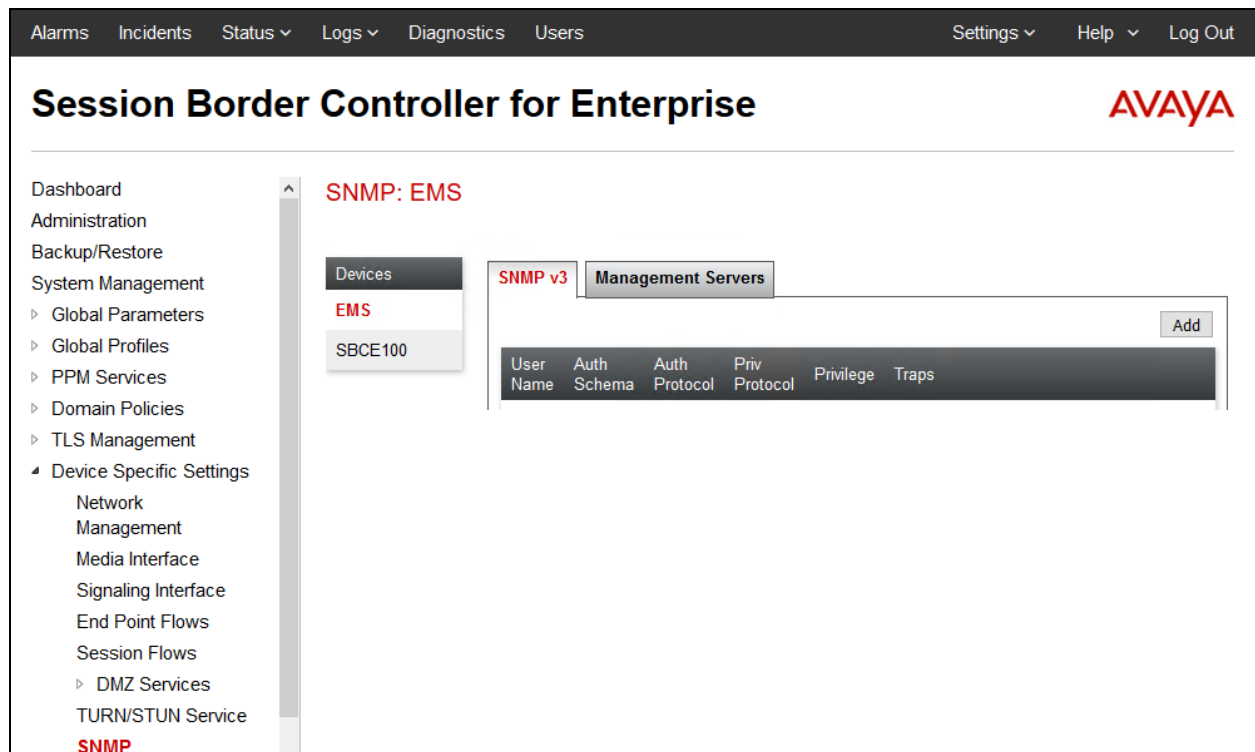


The screenshot shows the Avaya Session Border Controller for Enterprise login interface. On the left, the Avaya logo is displayed in red, with the text "Session Border Controller for Enterprise" below it. On the right, the "Log In" section contains fields for "Username:" and "Password:", each followed by a text input box. Below these fields is a "Log In" button. At the bottom of the login section, there is a "WELCOME TO AVAYA SBC" message, a disclaimer about unauthorized access, a consent statement, and a copyright notice: "© 2011 - 2018 Avaya Inc. All rights reserved."

Once logged in, a dashboard is presented with a menu on the left-hand side. The menu is used as a starting point for all configuration of the Avaya SBCE.



Navigate to **Device Specific Settings** → **SNMP** from the above shown dashboard. The **SNMP:EMS** page is seen as shown below. Under **Devices**, **EMS** and **SBCE100** are seen. Select **EMS** and then select **SNMP v3** tab. Click on the **Add** button.





In the **Add User** window shown below, configure the following.

- **User Name:** A descriptive name.
- **Authentication Scheme:** Select the radio button for **authPriv**.
- Enter a password for **AuthPassPhrase** and confirm the same in **Confirm AuthPassPhrase**.
- **Authentication Protocol:** Select the radio button for **SHA**.
- Enter a password for **PrivPassPhrase** and confirm the same in **Confirm PrivPassPhrase**.
- **Privacy Protocol:** Select **DES** radio button.
- **Privilege:** Select **Read** radio button.
- **Trap IP Address:** Enter the IP Address of the VSM probe.

Retain default values for all other fields and click on the **Finish** button.

The screenshot shows the 'Add User' window with the following configuration:

- User Name:** virsae
- Authentication Scheme:** ☐ noAuthNoPriv ☐ authNoPriv ☒ authPriv
- AuthPassPhrase:** [Masked]
- Confirm AuthPassPhrase:** [Masked]
- Authentication Protocol:** ☒ SHA
- PrivPassPhrase:** [Masked]
- Confirm PrivPassPhrase:** [Masked]
- Privacy Protocol:** ☐ AES ☒ DES
- Privilege:** ☒ Read ☐ Read/Write

Buttons: Add, Finish

Trap IP Address	Port	Trap Profile	
10.10.98.157	Use Default: 162	default	Delete

Screen below shows the SNMP v3 configured for EMS device. Now select the **Management Servers** tab and click on the **Add** button.

The screenshot shows the Avaya Session Border Controller for Enterprise web interface. The left sidebar contains navigation links: Dashboard, Administration, Backup/Restore, System Management (with sub-links for Global Parameters, Global Profiles, PPM Services, Domain Policies, and TLS Management), and Device Specific Settings. The main content area is titled 'SNMP: EMS' and features two tabs: 'SNMP v3' and 'Management Servers'. The 'Management Servers' tab is selected, displaying a table with the following data:

User Name	Auth Schema	Auth Protocol	Priv Protocol	Privilege	Traps	
virsae	authPriv	SHA	DES	READ	10.10.98.157:162 [default]	Clone Edit Delete

An 'Add' button is located in the top right corner of the table area.

In the **Add IP Address** window shown below, configure the VSM probe IP Address and click the **Finish** button.

The 'Add IP Address' dialog box is shown. It has a title bar with 'Add IP Address' and a close button. The main area contains a text input field with the IP address '10.10.98.157' entered. Below the input field is a 'Finish' button. To the left of the input field, the text 'IP Address(es)' and 'Separate entries with commas' is displayed.

Screen below shows the Management Servers configured for EMS device.

The screenshot shows the Avaya Session Border Controller for Enterprise web interface. The left sidebar contains navigation links: Dashboard, Administration, Backup/Restore, System Management (with sub-links for Global Parameters, Global Profiles, PPM Services, Domain Policies, and TLS Management), and Device Specific Settings. The main content area is titled 'SNMP: EMS' and features two tabs: 'SNMP v3' and 'Management Servers'. The 'Management Servers' tab is selected, displaying a table with the following data:

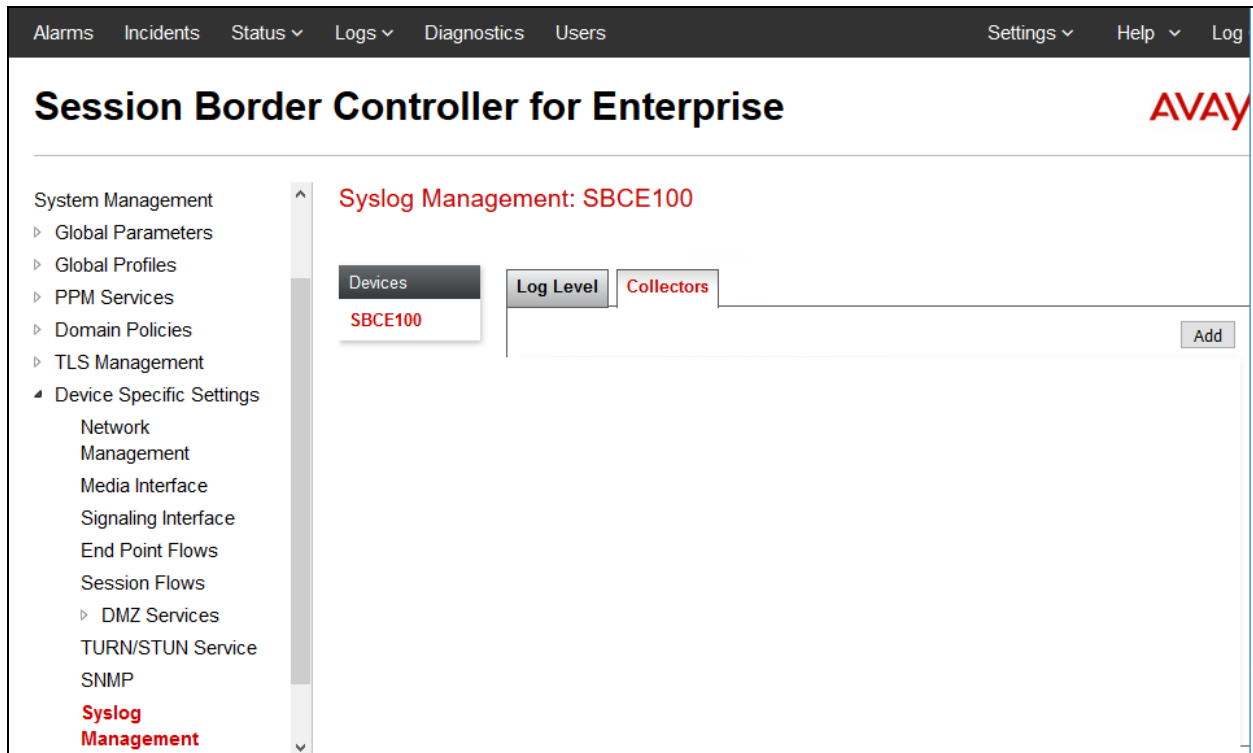
User Name	Auth Schema	Auth Protocol	Priv Protocol	Privilege	Traps	
virsae	authPriv	SHA	DES	READ	10.10.98.157:162 [default]	Clone Edit Delete

An 'Add' button is located in the top right corner of the table area.

Repeat all the above steps for **SBCE100** under **Devices** too.

### 5.3. Configure Syslog Management

To setup syslog output from Avaya SBCE to VSM, navigate to **Device Specific Settings** → **Syslog Management** from the dashboard shown below. The **Syslog Management: SBCE100** page is seen. Under **Devices**, **SBCE100** is seen. Select **SBCE100** and then select **Collectors** tab. Click on the **Add** button.



In the **Add User** window shown below, configure the following.

- **Facility:** A collector suffix that is not being used is selected. During compliance testing **LOG\_LOCAL2** was selected.
- **Collector Type:** Select the **Remote Syslog** radio button.
- **Protocol:** Select **UDP**.
- **Address:** Select the **(ip:port)** radio button and enter the IP Address of VSM probe and the port as **514**.

Click on the **Finish** button.

**Add Collector Profile**

LOG\_LOCAL5 and LOG\_LOCAL6 are reserved for audit logging.

**Collector Settings**

Facility: LOG\_LOCAL2

Collector Type: ☐ File ☒ Remote Syslog

**Remote Syslog Settings**

Protocol: ☐ TCP ☒ UDP ☐ TLS

TLS Profile: None

Address: ☐ EMS ☒ (ip:port) 10.10.98.157:514

Finish

Screen below shows the Collectors configured for SBCE100 device. Now select the **Log Level** tab.

Alarms Incidents Status Logs Diagnostics Users Settings Help Log Out

**Session Border Controller for Enterprise** AVAYA

Syslog Management: SBCE100

Administration  
Backup/Restore  
System Management  
‣ Global Parameters  
‣ Global Profiles  
‣ PPM Services  
‣ Domain Policies  
‣ TLS Management

Devices: SBCE100

Log Level Collectors

Add

Facility	Destination Location
LOG_LOCAL2	UDP:10.10.98.157:514

Edit Delete

In the **Log Level** tab screen shown below, select the **Facility** configured above for the **Class Platform, Trace, Security, Protocol and Registrations**. During compliance testing, **All** levels of logs were selected. Click on the **Save** button.

Alarms
Incidents
Status
Logs
Diagnostics
Users
Settings
Help
Log Out

# Session Border Controller for Enterprise

Backup/Restore
System Management
Global Parameters
Global Profiles
PPM Services
Domain Policies
TLS Management
Device Specific Settings
Network Management
Media Interface
Signaling Interface
End Point Flows
Session Flows
DMZ Services
TURN/STUN Service
SNMP
Syslog Management

## Syslog Management: SBCE100

Devices
SBCE100

Log Level
Collectors

Class	Facility	All	Info	Notice	Warning	Error	Critical	Alert	Emergency
Platform	LOG_LOCAL2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Trace	LOG_LOCAL2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Security	LOG_LOCAL2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Protocol	LOG_LOCAL2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Registrations	LOG_LOCAL2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Audit	LOG_LOCAL6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Save

## 6. Configure Virsae Service Management

This section describes the configuration of VSM required to interoperate with Avaya SBCE.

This section provides a “snapshot” of VSM configuration used during compliance testing. Virsae creates the business partner portal in the cloud environment and is beyond the scope of this Application Notes. The screen shots and partial configuration shown below, supplied by Virsae, are provided only for reference. These represent only an example of the configuration GUI of VSM, available through the web Portal. Contact Virsae for details on how to configure VSM. The configuration operations described in this section can be summarized as follows:

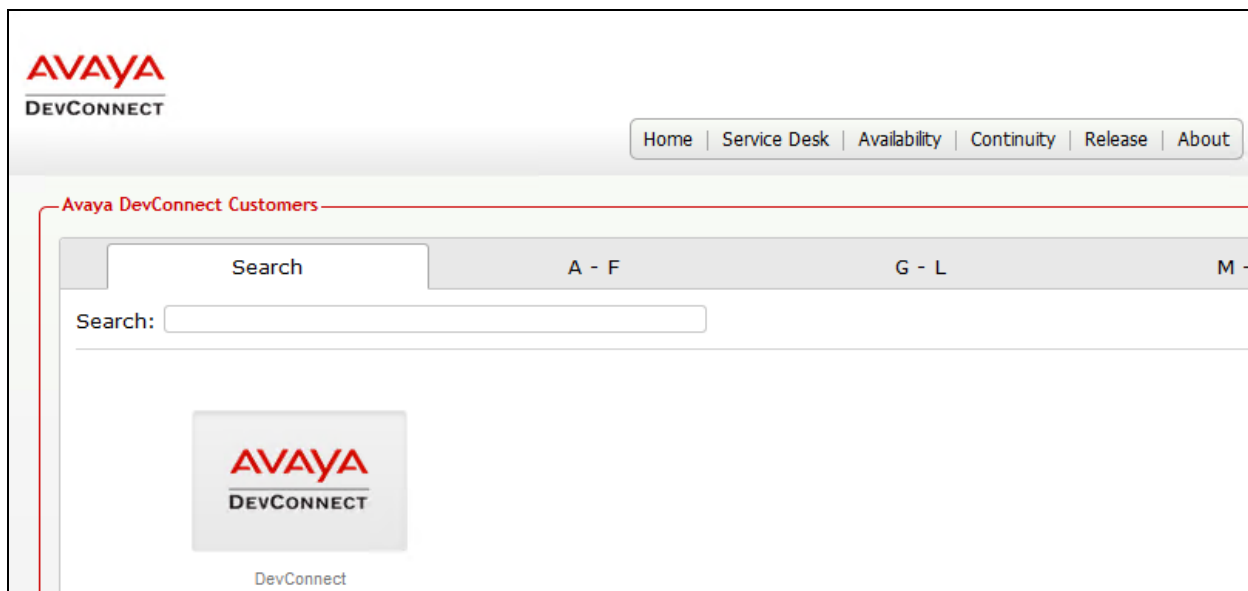
- Login to the Web Portal
- Configuring Avaya Session Border Controller for Enterprise
- Configure Dashboard

### 6.1. Login to the Web Portal

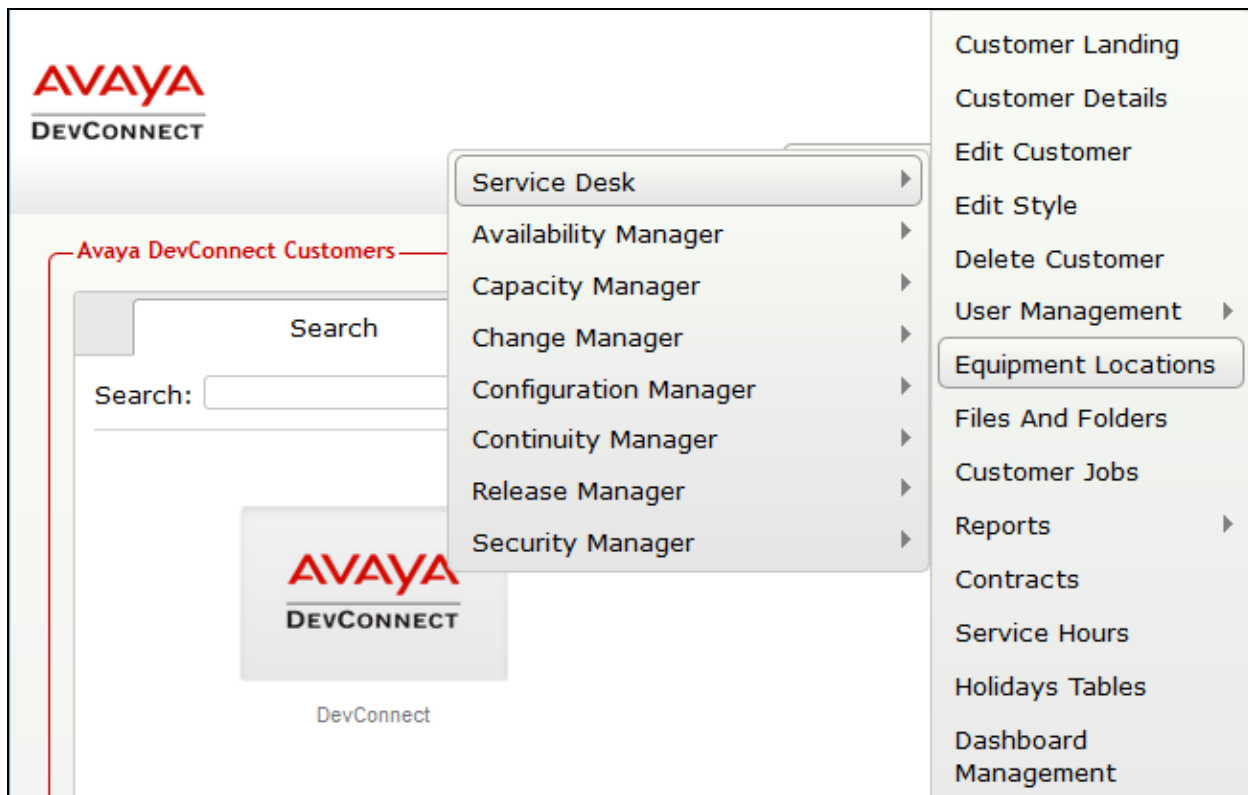
A portal for the business partner will be created by Virsae on the cloud and can be accessed by the business partner by typing the URL *<business partner name>.virsae.com* in a web browser. During compliance testing the URL used was *devconnect.virsae.com*. The Login screen is shown as below. Enter the **Email** and **Password** and click on the **Log In** button.



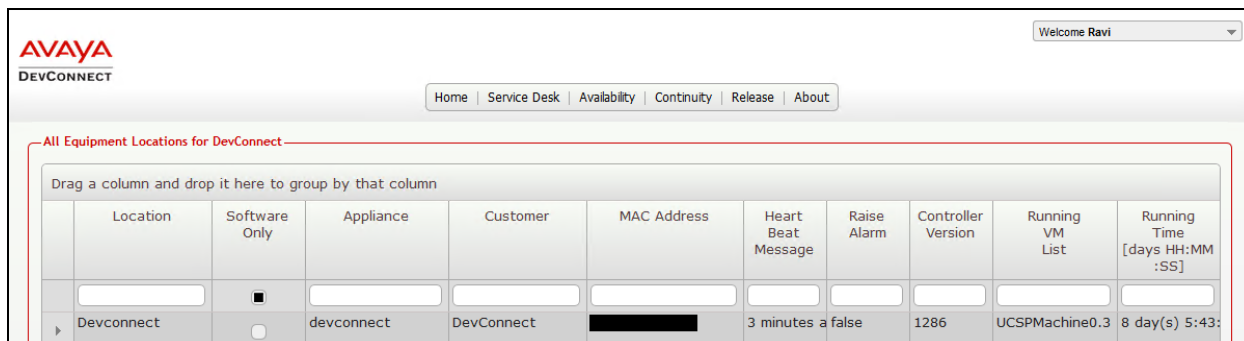
The customers belonging to a business partner screen is shown. During compliance testing, the customer created by Virsae is **DevConnect** which belongs to the business **Avaya DevConnect Customers**.



Click on the customer icon and navigate to **Service Desk → Equipment Locations** as shown below.



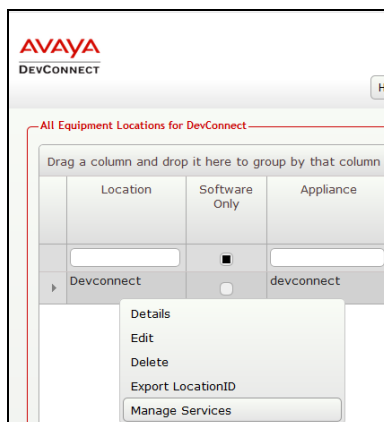
A **Location** called **Devconnect** is already configured as shown below.



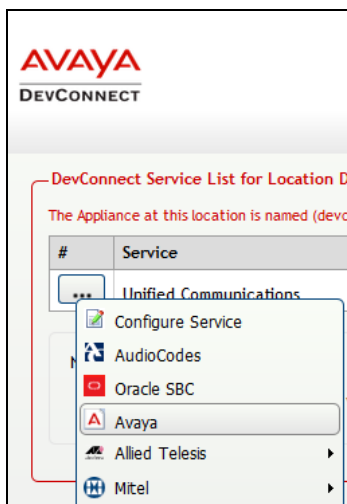
Location	Software Only	Appliance	Customer	MAC Address	Heart Beat Message	Raise Alarm	Controller Version	Running VM List	Running Time [days HH:MM:SS]
Devconnect	<input type="checkbox"/>	devconnect	DevConnect		3 minutes	false	1286	UCSPMachine0.3	8 day(s) 5:43:

## 6.2. Configuring Avaya Session Border Controller for Enterprise

To add an Avaya SBCE to the Location created in **Section 6.1**, right click on the location **Devconnect** and select **Manage Services** as shown below.

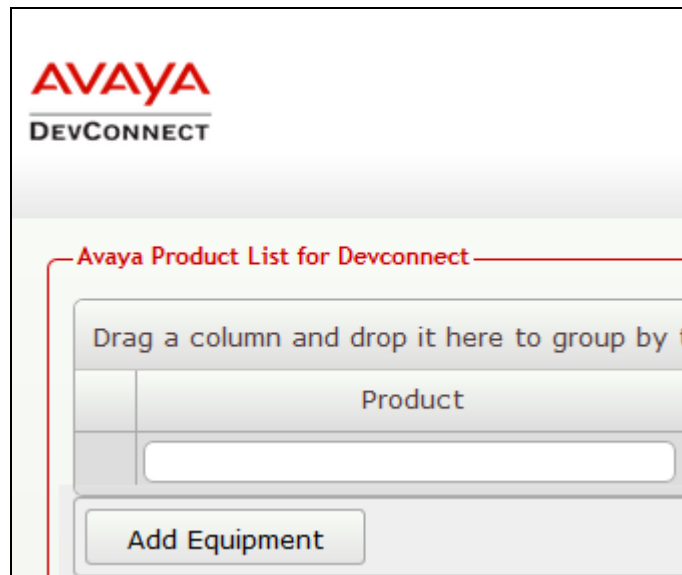


From the **Unified Communications Service**, select **Avaya**.

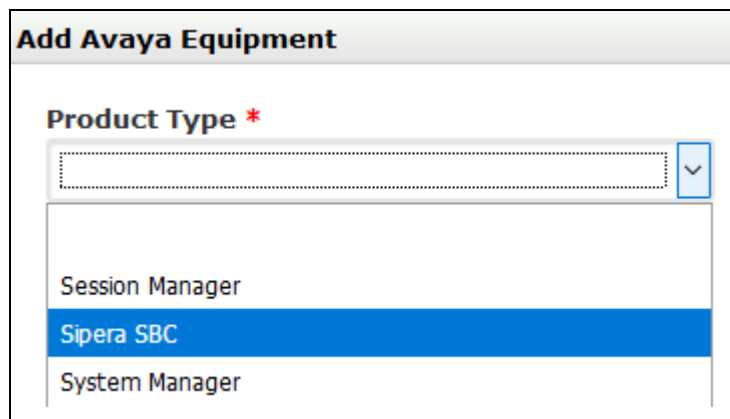




The product list for the configured location is shown as seen below. Click on the **Add Equipment** button.



From the **Add Avaya Equipment** window, select **Sipera SBC** from the **Product Type** drop-down menu.



In the **Configure Equipment** tab, configure the following values.

- **Equipment Name:** A descriptive name.
- **Username:** The account name mentioned in **Section 5.1**.
- **Password:** The password for the above account user.
- Check the **Use SSH** box
- **IP Address/Host Name:** IP address of Avaya SBCE.
- **Default Site:** A descriptive site name
- **Command Set:** Select **Avaya SBC** from the drop-down menu.

**Add Avaya Equipment**

**Product Type \***  
Sipera SBC

Configure Equipment

Configure SNMP

**Equipment Name \***  
DevConnect SBCE

**IP Address/Host Name \***  
10.10.10.100

**Username \***  
ipcs

**Default Site**  
Belleville

**Password \***  
••••••••

**Command Set \***  
Avaya SBC

☒ **Use SSH**

In the **Configure SNMP** tab, select the **SNMP Version** as **V3** from the drop-down menu and populate all other fields based on the configuration described in **Section 5.2**.

Click on the **Add** (not shown) button to complete the configuration.

The screenshot shows the 'Add Avaya Equipment' form with the 'Configure SNMP' tab selected. The form contains the following fields:

- Product Type \***: A dropdown menu with 'Sipera SBC' selected.
- SNMP Version**: A dropdown menu with 'V3' selected.
- SNMP Username \***: A text input field containing 'virsae'.
- Authentication Protocol \***: A dropdown menu with 'SHA' selected.
- Authentication Password \***: A password input field with 10 dots.
- Privacy Protocol \***: A dropdown menu with 'DES' selected.
- Privacy Password \***: A password input field with 10 dots.

The screen below shows the added Avaya SBCE equipment.

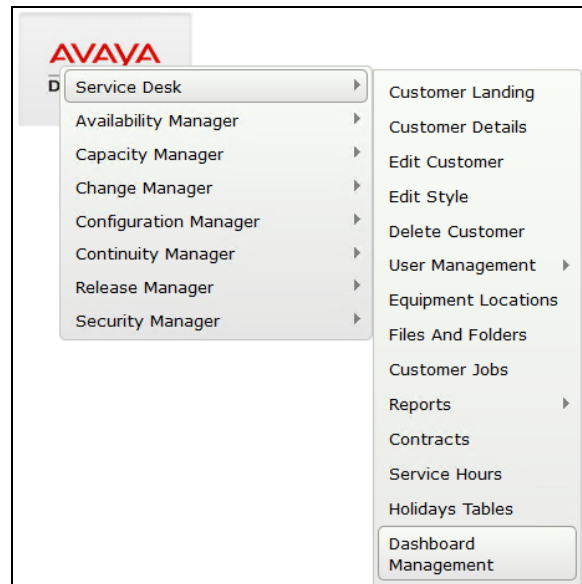
The screenshot shows the Avaya DevConnect interface. At the top, there is a navigation bar with links: Home | Service Desk | Availability | Continuity | Release | About. Below this is a section titled 'Avaya Product List for Devconnect'. It contains a table with the following data:

	Product	Name	IP Address/Host Name	User Name	Command Set
▶	Sipera SBC	DevConnect SBCE	10.10.10.100	ipcs	Avaya SBC

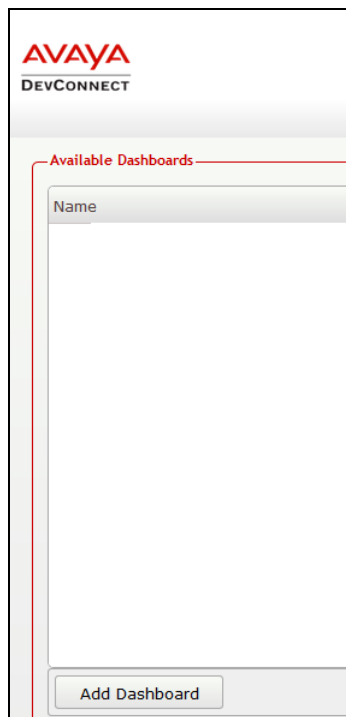
### 6.3. Configure Dashboard

This section shows the steps to configure Communication Manager on the dashboard.

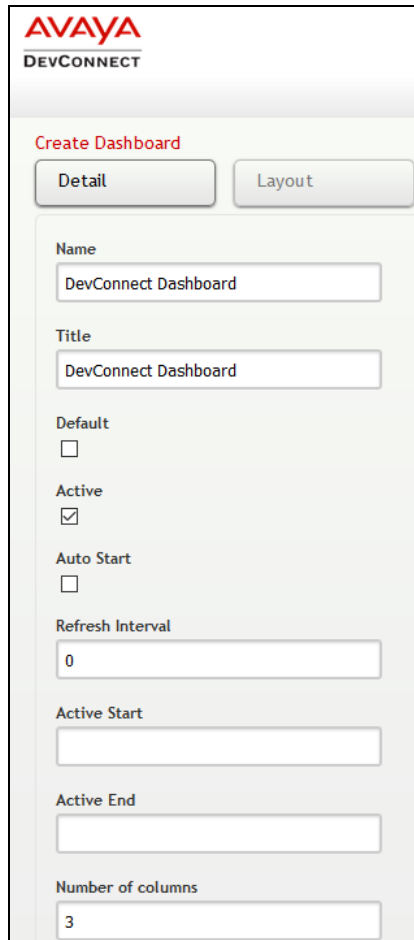
From the customer icon, navigate to **Service Desk → Dashboard Management** as shown below.



From the **Available Dashboards** window, click on the **Add Dashboard** button.



In the **Create Dashboard** window, type a descriptive name for **Name** and **Title** fields as shown below. Retain default values for all other fields. Click on **Layout** button and then click on **Submit** (not shown) button.



**AVAYA**  
DEVCONNECT

Create Dashboard

Detail Layout

Name  
DevConnect Dashboard

Title  
DevConnect Dashboard

Default  
☐

Active  
☒

Auto Start  
☐

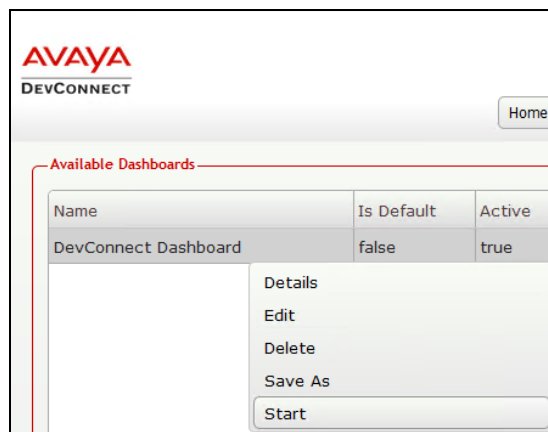
Refresh Interval  
0

Active Start

Active End

Number of columns  
3

Screen below shows the above created Dashboard. Right click on it and select **Start**.



**AVAYA**  
DEVCONNECT

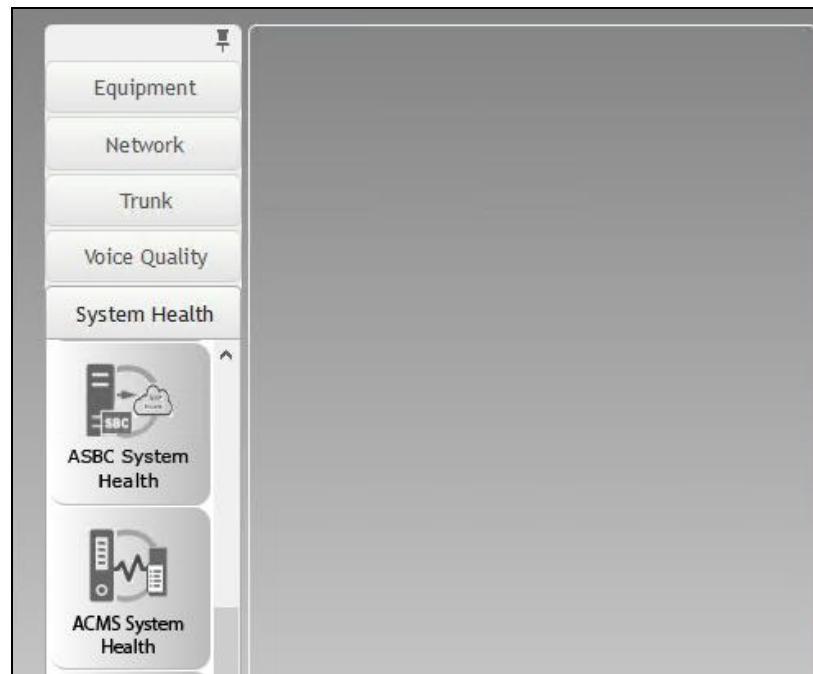
Home

Available Dashboards

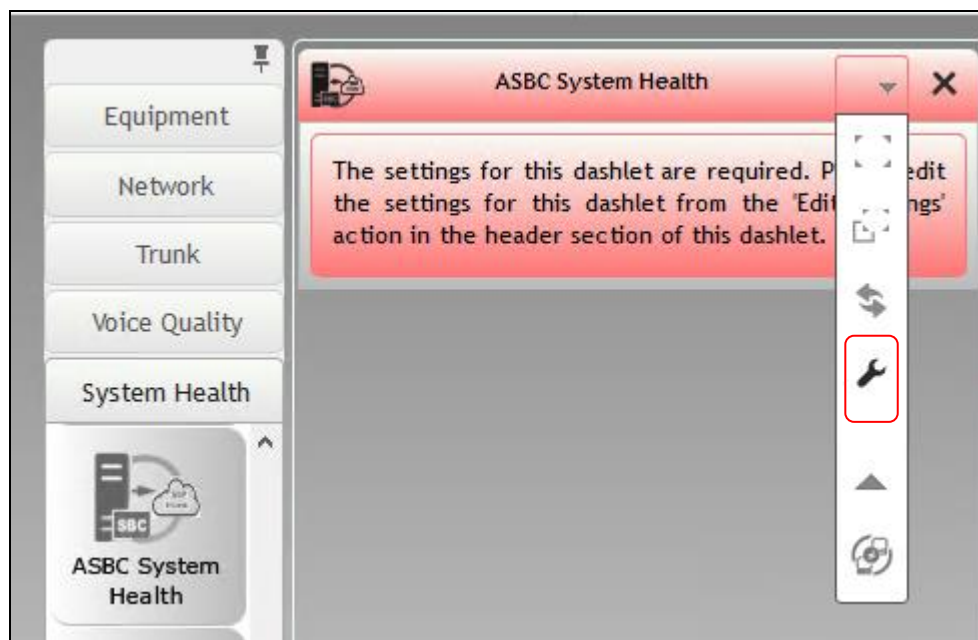
Name	Is Default	Active
DevConnect Dashboard	false	true

Details  
Edit  
Delete  
Save As  
Start

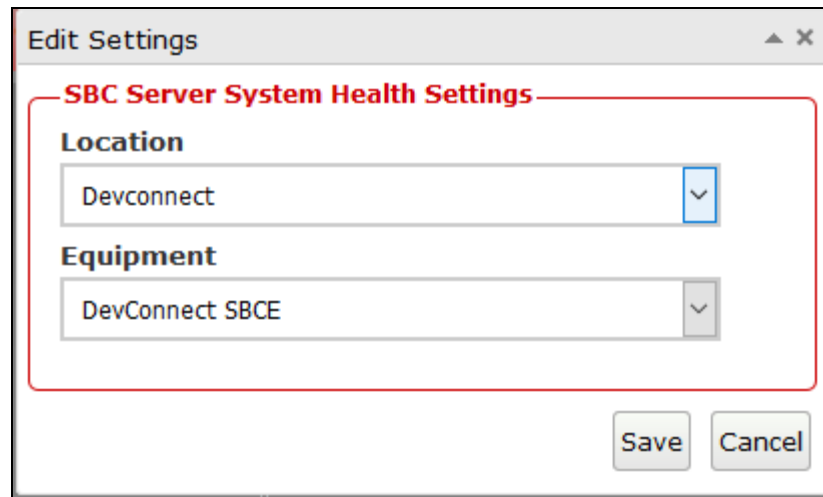
In the dashboard window shown below, click on **System Health** and drag the **ASBC System Health** icon from the left to the right column.



From the drop-down menu for **ASBC System Health** window, select the **Edit Settings** button as shown below.



In the **Edit Settings** window shown below, select the required **Location** and **Equipment** from the drop-down menu and click on the **Save** button.



**Edit Settings**

**SBC Server System Health Settings**

**Location**

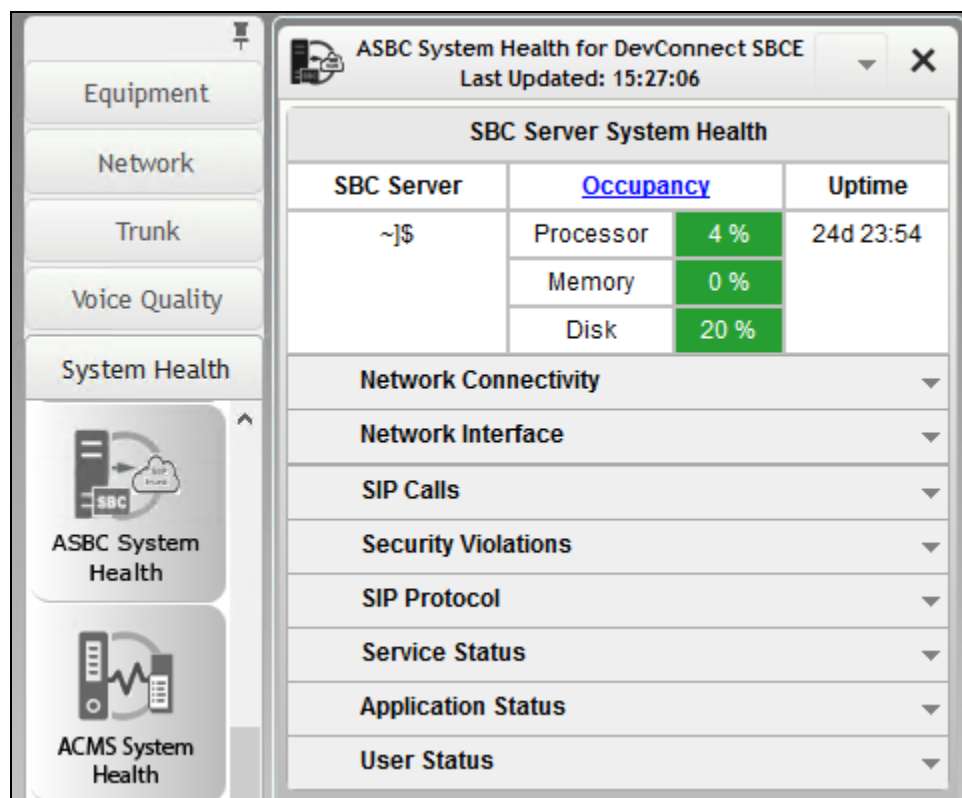
Devconnect

**Equipment**

DevConnect SBCE

Save Cancel

The dashboard with the configured equipment is shown below. The above steps can be repeated to configure other equipment or/and dashboard parameters.



**ASBC System Health for DevConnect SBCE**  
Last Updated: 15:27:06

**SBC Server System Health**

SBC Server	Occupancy	Uptime
~j\$	Processor 4 %	24d 23:54
	Memory 0 %	
	Disk 20 %	

**Network Connectivity**

**Network Interface**

**SIP Calls**

**Security Violations**

**SIP Protocol**

**Service Status**

**Application Status**

**User Status**

## 7. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Avaya SBCE and VSM. The following steps are done by accessing the VSM web portal for the business partner.

After logging into the web portal, navigate to **Service Desk → Dashboard Management** (not shown). Start the dashboard and the screen below shows the System Health of the already configured Avaya SBCE for various parameters.

ASBC System Health for DevConnect SBCE  
Last Updated: 15:37:26

**SBC Server System Health**

SBC Server	Occupancy	Uptime
~j\$	Processor	7 %
	Memory	0 %
	Disk	20 %

**Network Connectivity** ▼

**Network Interface** ▼

**SIP Calls** ▼

**Security Violations** ▼

**SIP Protocol** ▼

**Service Status** ▲

**ss**

Ssyndi	OK	LogSvr	OK
OAMPSvr	OK	TurnContro	OK

**Application Status** ▼

**User Status** ▲

Logged in Users	4
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To view alarms via historical reporting, navigate to **Availability Manager → Manage Alarms** (not shown). A list of all unresolved alarms for equipment's are shown. Screen below shows an alarm for Avaya SBCE equipment.

**AVAYA**  
DEVCONNECT

Home | Service Desk | Availability | Continuity | Release | About

Unresolved Alarms for DevConnect [Dates shown are 'Canada/Eastern' time zone]

Alarm List Filter

Drag a column and drop it here to group by that column

Alarm	Description	Activate Date	Administered Id	Repeats	Equipment	Vendor	Severity
ipcsNetworkFailureNotificat...	Network failure alarm	2018-09-26 16:43:07	DROP:SBCE100:CRITICAL:Li...	0	DevConnect SBCE	Avaya	4
ipcsNetworkFailureNotificati...	Network failure alarm	2018-09-25 23:07:12	RAISE:SBCE100:CRITICAL:L...	0	DevConnect SB...	Avaya	4
ipcsNetworkFailureNotificati...	Network failure alarm	2018-09-25 23:07:12	RAISE:SBCE100:CRITICAL:L...	0	DevConnect SB...	Avaya	4
ipcsIncidenceNotification	Description	2018-09-25 23:05:37	ipcsNOTIFYMsgOutOfDialog...	124	DevConnect SB...	Avaya	4
ipcsIncidenceNotification	Description	2018-09-25 23:02:27	ipcsMessageDropped:No Su...	1585	DevConnect SB...	Avaya	4

To view Syslogs via historical reporting, navigate to **Availability Manager → Syslog → Browse Syslog Files** (not shown). A list of all files for all equipments are shown. Screen below shows a snapshot of the same.

**AVAYA**  
DEVCONNECT

Home | Service Desk | Availability | Continuity | Release | About

Welcome [User]

Files for Customer DevConnect

System Log

Page 1 of 67 (729 items) [1] 2 3 4 5 6 7 ... 65 66 67

Drag a column header here to group by that column

#	Name	Ext	Size	Date Created (EDT)	Created By
...	20180907165539077.txt	zip	1.91MB	2018-09-07 14:57	Virsa, Virsae Master
...	20180907145651055.txt	zip	1.91MB	2018-09-07 12:55	Virsa, Virsae Master

## 8. Conclusion

These Application Notes describe the procedures for configuring the Virsae Service Management to interoperate with Avaya Session Border Controller for Enterprise. During compliance testing, all test cases were completed successfully with observations if any noted in **Section 2.2**.

## 9. 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. *Deploying Avaya Aura® Session Manager*, Release 7.1.3. Issue 5. May 2018.
2. *Administering Avaya Aura® Session Manager*, Release 7.1.3. Issue 5. May 2018.
3. *Deploying Avaya Aura® System Manager*, 7.1.3. Issue 8. July 2018.
4. *Administering Avaya Aura® System Manager for Release 7.1.3*, Release 7.1.3. Issue 15. July 2018.
5. *Deploying Avaya Aura® Communication Manager*, Release 7.1.3. Issue 5. May 2018.
6. *Administering Avaya Aura® Communication Manager*, Release 7.1.3. Issue 7. May 2018.
7. *Avaya Aura® Communication Manager Feature Description and Implementation*, Release 7.1.3. Issue 6. May 2018.
8. *Deploying Avaya Session Border Controller in Virtualized Environment*, Release 7.2.2. Issue 7. July 2018.
9. *Administering Avaya Session Border Controller for Enterprise*, Release 7.2.2. Issue 10. June 2018.

Product documentation for Virsae products can be obtained directly from Virsae.

1. *Virsae Service Management - Implementation Guide*
2. *Virsae Service Management – Technical Requirements*

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