Avaya Solution & Interoperability Test Lab

Application Notes for Configuring Avaya Communication Server 1000E R7.6 and Avaya Aura® Session Manager R6.3 to interoperate with Presence Technology OpenGate R10.0 – Issue 1.0

Abstract

These Application Notes describe the configuration steps for provisioning Presence Technology OpenGate to successfully interoperate with Avaya Communication Server 1000E and Avaya Aura® Session Manager. Presence Technology OpenGate provides ACD and CTI capabilities to companies that do not have any existing CTI or ACD capabilities on their PBX. Presence Technology OpenGate integrates with the Avaya solution using SIP trunks and digit manipulation.

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

1. Introduction

These Application Notes describe the configuration used to verify Presence Technology OpenGate R10.0 can successfully interoperate with Avaya Communication Server 1000E R7.6 (CS1000E) and Avaya Aura® Session Manager R6.3. Presence Technology OpenGate is a telephony gateway that is fully integrated with Presence Technology's Contact Center Suite called Presence Suite. Presence Technology OpenGate allows the Presence Suite to integrate with the CS1000E PBX via a SIP connection to Session Manager.

2. General Test Approach and Test Results

Testing was performed manually by dialling numbers that were configured to route to OpenGate and receive ACD treatment. Testing included validation of correct operation of typical contact centre functions including, inbound voice call being delivered on an agent skill level basis and call queuing. Functionality testing included basic telephony operations such as answer, hold/retrieve, transfer, and conference. The serviceability test cases were performed manually by busying out and releasing the SIP trunk and by disconnecting and reconnecting the LAN cables. Link Failure\Recovery was tested to ensure successful reconnection on link failure.

DevConnect Compliance Testing is conducted jointly by Avaya and DevConnect members. The jointly-defined test plan focuses on exercising APIs and/or standards-based interfaces pertinent to the interoperability of the tested products and their functionalities. DevConnect Compliance Testing is not intended to substitute full product performance or feature testing performed by DevConnect members, nor is it to be construed as an endorsement by Avaya of the suitability or completeness of a DevConnect member's solution

2.1 Interoperability Compliance Testing

The focus of the interoperability test is the ACD functionality offered by OpenGate. All calls received from the PSTN by the CS1000E are routed via a SIP Trunk to Session Manager. Session Manager is then responsible for routing the calls to OpenGate to receive ACD treatment. OpenGate can route calls to Presence agents using Avaya 1140E endpoints. Presence OpenGate allows the Presence Suite to integrate with the CS1000E. The Presence Suite includes the Presence Server, Presence Mail Interactions Server, Presence Web Interactions Server, Presence Administrator, Presence Supervisor, and Presence Agent. The setup of Presence Suite is outside the scope of these Application Notes; please refer to **Section 10** in order to find information for the configuration of Presence Server.

These Application Notes assume that the installation and configuration relating to Presence Suite has already been completed and is not discussed. OpenGate specifies where to route each call and hence how to handle the calls, based on agent status information that the Presence Suite tracks from the Agent software, as well as the SIP trunk messaging for the calls it has routed.

In the sample configuration described in these Application Notes, calls are accepted from the PSTN and routed to OpenGate on digits 43xxxx. All calls that are destined for OpenGate are sent by dialling or routing PSTN calls to 43xxxx on the CS1000E which then routes the calls to Session Manager. OpenGate then maps these digits to an internal number which represents the ACD service queue and then routes the call to an available agent by dialling that agent's extension. OpenGate will have internal routing setup to route calls to the correct agent.

The interoperability compliance test included both feature functionality and serviceability testing. The feature functionality testing focused on verifying OpenGate was capable of receiving calls from the CS1000E and providing ACD treatment to route those calls to available agents. The serviceability testing focused on verifying the ability of OpenGate to recover from adverse conditions, such as disconnecting the Ethernet cable from the OpenGate Server.

2.2 Test Results

All test cases passed successfully.

2.3 Support

Technical support can be obtained from Presence Technology OpenGate as follows:

- Email: support@presenceco.com
- Website: www.presenceco.com
- Phone: +34 93 10 10 300

3. Reference Configuration

Figure 1 shows the network topology in place during compliance testing. An Avaya Communication Server 1000E (CS1000E) was used as the hosting PBX. SIP trunks were configured between Session Manager and OpenGate. Presence Suite includes the Presence Agent desktop and the Presence OpenGate Server.

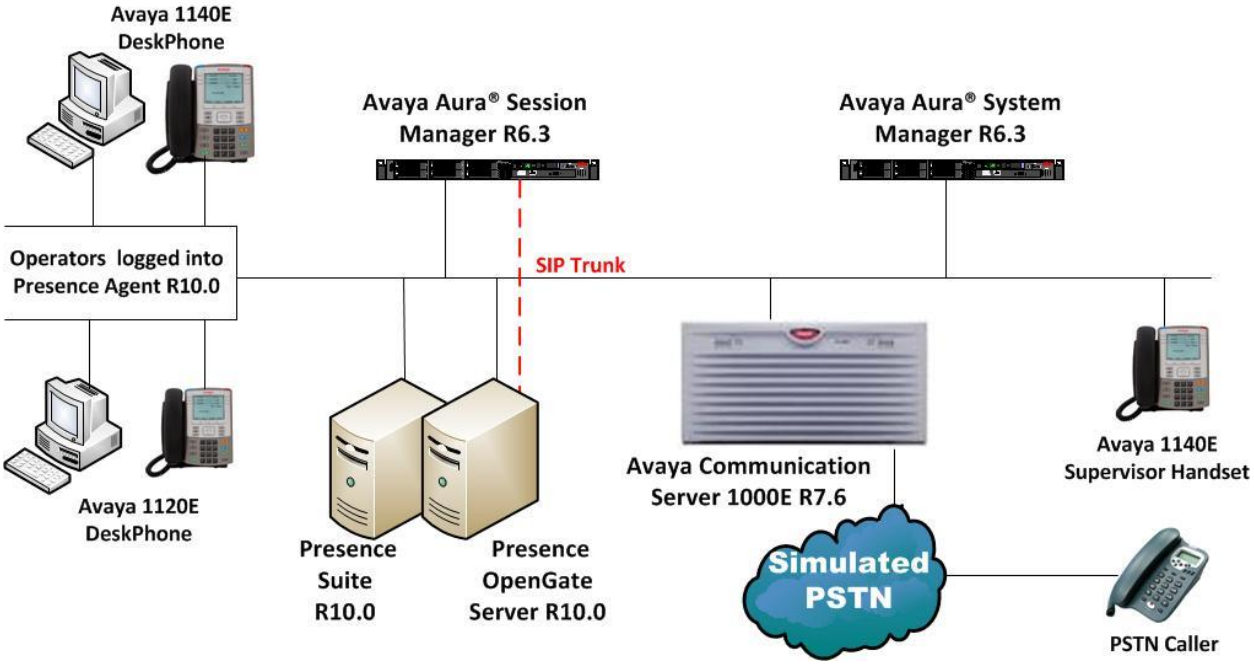


Figure 1: Network Topology used to test Presence Technology OpenGate

4. Equipment and Software Validated

All the hardware and associated software used in the compliance testing is listed below.

Equipment/Software	Release/Version
Avaya Aura® System Manager running on Avaya S8800 Server	R6.3 SP3 Build 6.3.0.8.5682-6.3.8.1814 Software Update Revision 6.3.3.5.1719
Avaya Aura® Session Manager running on an Avaya S8800 Server	R6.3 SP3 6.3.3.0.633004
Avaya CPPM running Avaya Communication Server 1000E	R7.6 (See Appendix A for Call Server and Signalling Server Patches)
Avaya 1140 Series Deskphone	UNIStim 0625C8Q
Avaya 1120 Series Deskphone	UNIStim 0624C8Q
Presence Server running on Windows Server 2008 SP2 containing: • Presence Suite Server • Presence OpenGate Server	 R10.0 R10.0
Presence Client running on Windows XP SP3 and Windows Server 2008 SP2	R10.0

Table 1: Hardware and Software Version Numbers

5. Configure Avaya Communication Server 1000E

The configuration and verification operations illustrated in this section were all performed using the PUTTY program. The information provided in this section describes the configuration of CS1000E for this solution. For all other provisioning information such as initial installation and configuration, please refer to the product documentation in **Section 10**.

Note: It is assumed that the CS1000E has already been configured for SIP and a connection is in place to Session Manager.

5.1 Create a Route for SIP calls

The following sections illustrate the setup of a new route and Coordinated Dial Plan (CDP) in order to send calls to OpenGate via Session Manager. To create a new route on the CS1000E overlay 16 is used. Use the **new** command in overlay 16 to create a new SIP route**.** Type **LD 16** at the > prompt to enter overlay 16. The route created is a **TIE** route in order to connect to Presence OpenGate via Session Manager. Subsets of these commands are listed below.

LD 16

```
Prompt              Response            Description
>                   LD 16               Enter Overlay 16
REQ                 new                 Create new
TYPE                RDB                 Route Data block
CUST                0                   Customer Number as defined in LD15
ROUT                20                  Route Number
TKTP                TIE                 Route Type
VTRK                YES                 Virtual Route
ZONE                1                   Zone number associated with the route
PCID                SIP                 Protocol for the route
```

5.2 Configure a Coordinated Dial Plan

A Coordinated Dial Plan is added to place calls across the SIP trunk to the OpenGate application. Add a Route List Block (RLB) to place calls over the SIP route created in **Section 5.1** above. Enter overlay 86 to configure a new RLB by typing **LD 86** at the > prompt. As shown below a new Route List Index (**RLI**) is added with a ROUT equal to that of the SIP Route created in **Section 5.1**.

LD 86

```
Prompt        Response      Description
>             LD 86         Enter Overlay 86
REQ           new           new/add
CUST          0             Customer number (default is 0)
FEAT          rlb           Route List Block
RLI           20            Route List index Number (any unused number)
ENTR          0             First Entry (0-2
ROUT          20            Route Number configured in Section 5.1
DMI           0             Digit Manipulation Table (default is 0)
Return to end
```

Once the RLB is added the Coordinated Dial Plan (CDP) is added in the form of a Distance Steering Code (**DSC**). Note that in the example below **43xxxx** is the **DSC** as this is the number used to route calls to the OpenGate application during the compliance testing. Enter overlay 87 to add a new **CDP** by typing **LD 87** at the > prompt.

LD 87

```
Prompt        Response      Description
>             LD 87         Enter Overlay 87
REQ           new           new/add
CUST          0             Customer number (default is 0)
FEAT          cdp           Coordinated Dial Plan
TYPE          dsc           Distance Steering Code
DSC           43            Extension number of the TENS Application
FLEN          6             Ext Length
DSP           LSC           DSP Type (Least Cost Routing)
RLI           20            Which RLB to use (Enter the RLB setup above)
Return to end
```

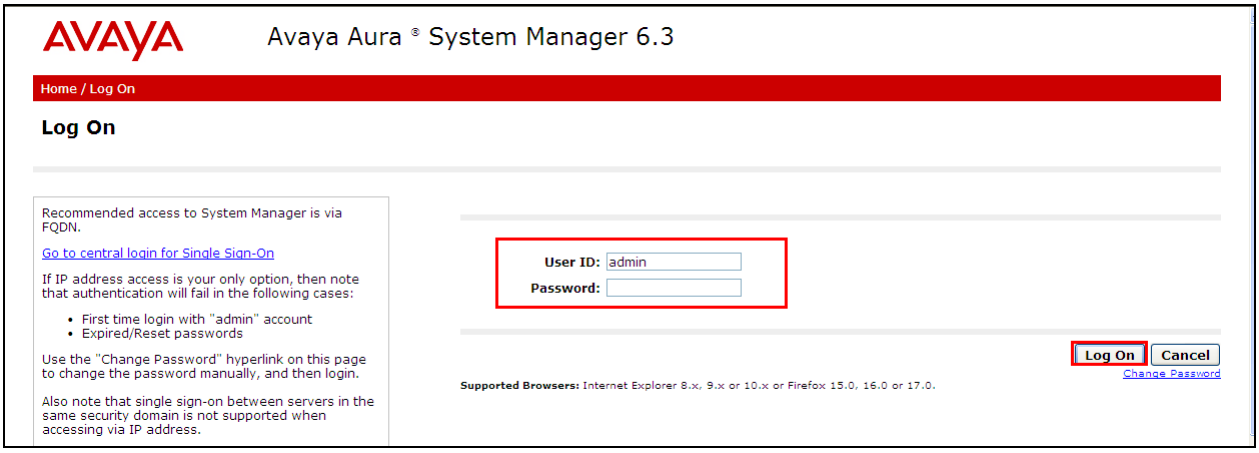
6. Configuring Avaya Aura® Session Manager

This section provides the procedures for configuring Session Manager. Session Manager is configured via System Manager. The procedures include the following areas:

- Log in to Avaya Aura® Session Manager
- Administer SIP Domain
- Administer Location
- Administer SIP Entities
- Administer Routing Policies
- Administer Dial Patterns

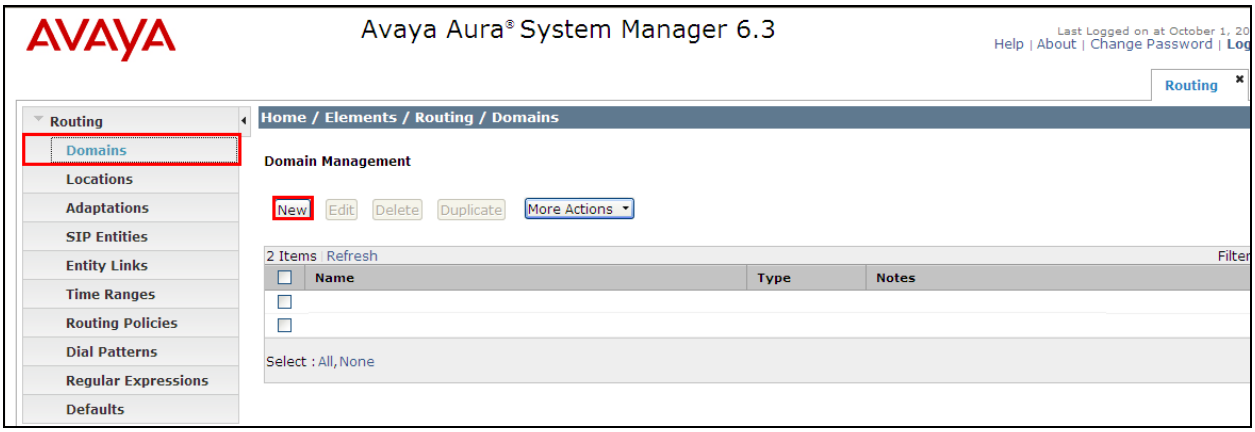
6.1 Log in to Avaya Aura® System Manager

Access the System Manager using a Web Browser by entering **http://<FQDN >/SMGR**, where **<FQDN>** is the fully qualified domain name of System Manager or **http://<IP Adddress >/SMGR**. Log in using appropriate credentials.

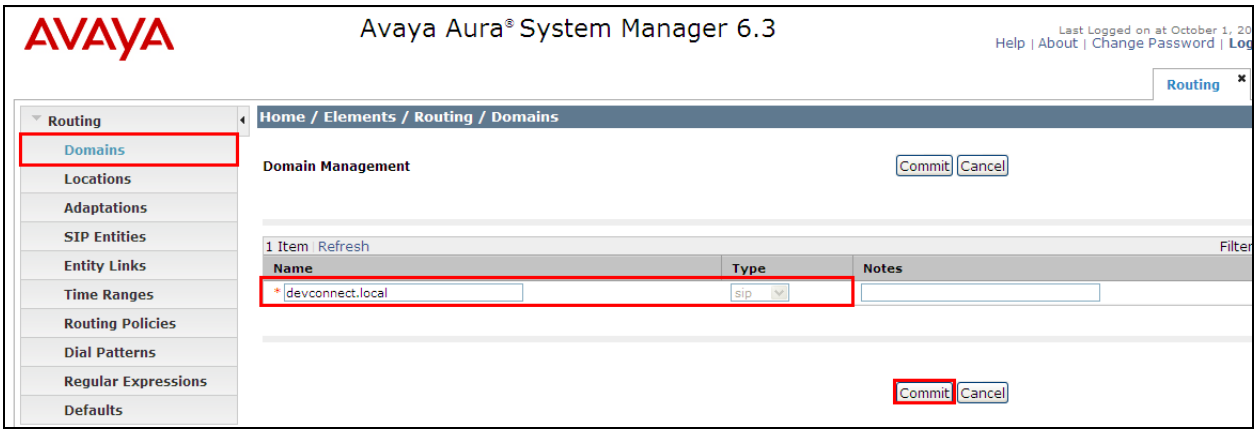


6.2 Administer SIP Domain

Click on **Routing → Domains** in the left window. If there is not a domain already configured click on **New** highlighted below.

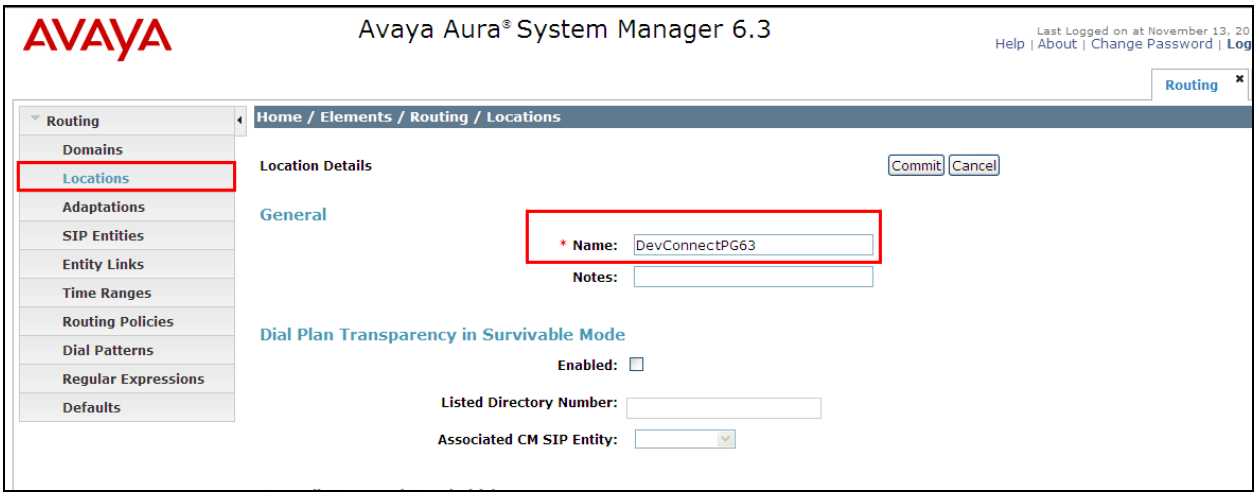


Note the domain **Name** used in the compliance testing was **devconnect.local**. Note this domain is also referenced on the CS1000E Signalling Server the setup of which is outside the scope of these Application Notes. For more information on the Signalling Server setup please refer to **Section 10** document *Element Manager System Reference –Administration Avaya Communication Server 1000*. Once the domain name is entered click on **Commit** to save this.

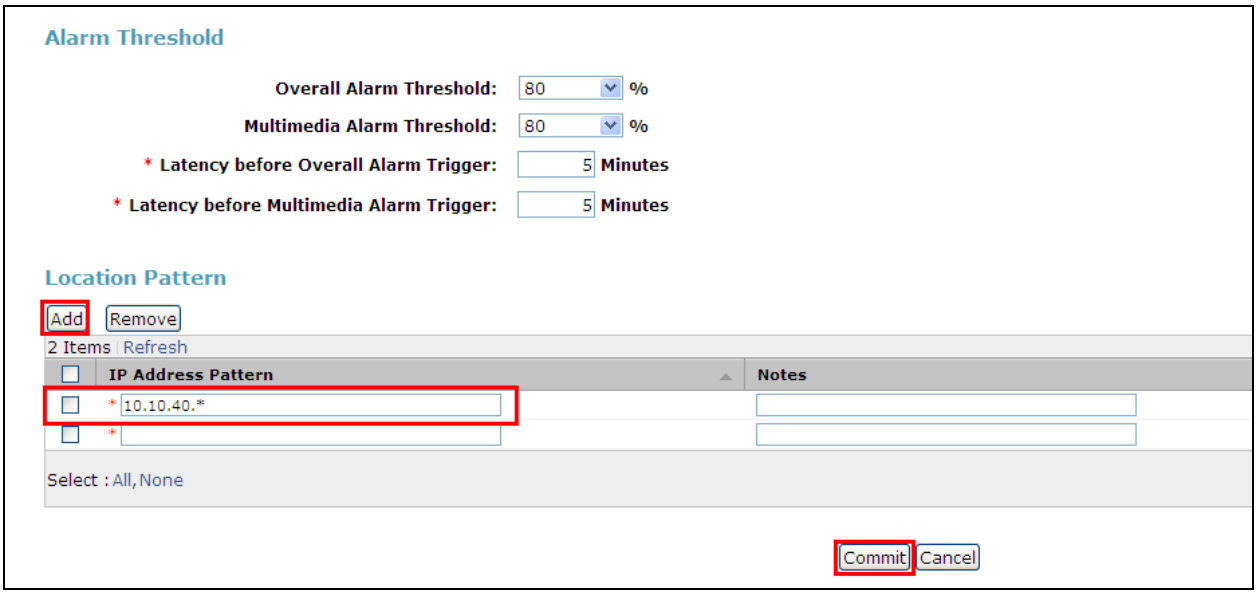


6.3 Administer Location

Session Manager uses the origination location to determine which dial patterns to look at when routing a call. In this example, one Location has been created which will reference both the Session Manager location and the OpenGate location. Navigate to **Home → Elements → Routing → Locations → New** enter an identifying **Name**, as shown below.



At the bottom of the same page the **Location Pattern** is defined. Click **Add** and enter the IP address range used to logically identify the location. In this case the **IP Address Pattern** is **10.10.40.*** as shown below. Click **Commit** when done.

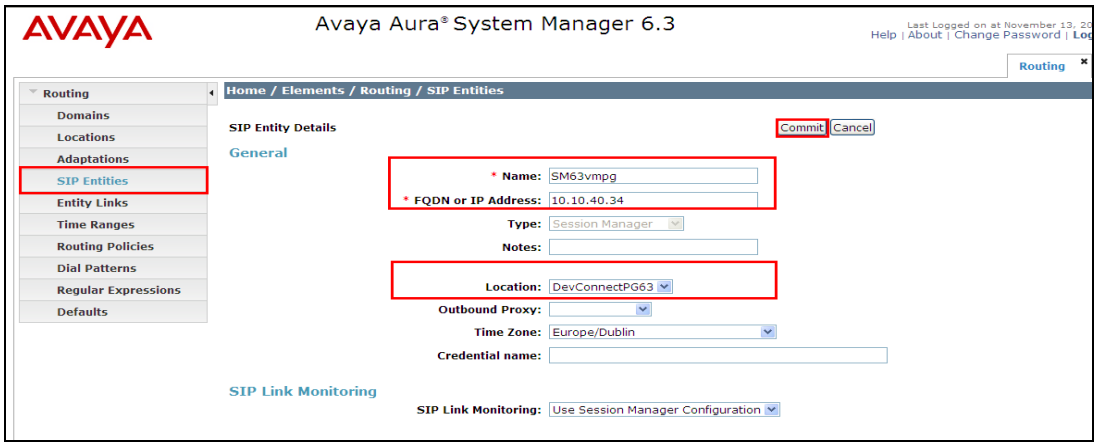


6.4 Administer SIP Entities

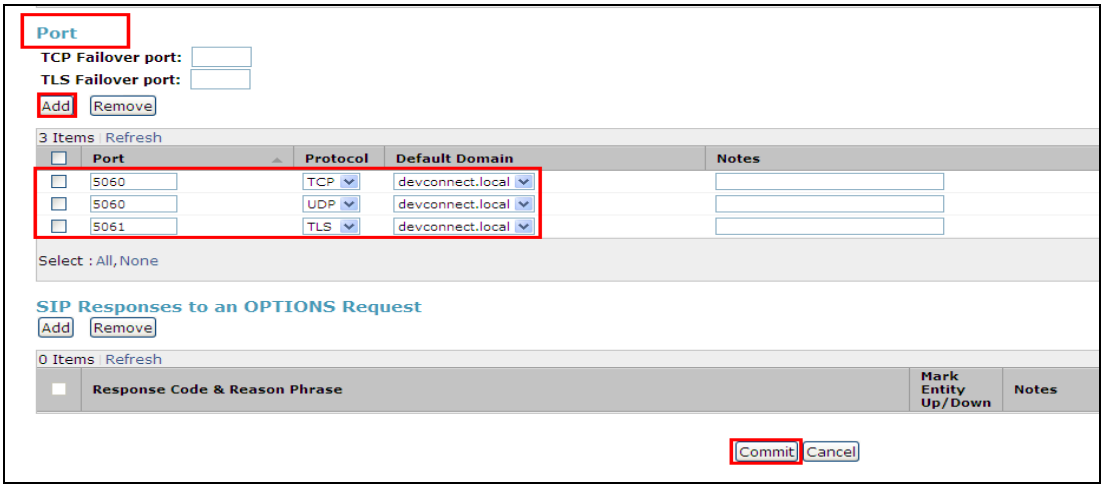
Each SIP device (other than Avaya SIP Phones) that communicates with Session Manager requires a SIP Entity configuration. This section details the steps to create SIP Entities for Session Manager SIP Signalling Interface, CS1000E and OpenGate Solution respectively.

6.4.1 Configure Session Manager SIP Signalling Interface Entity

Click **Home → Elements → Routing → SIP Entities → New** assign an identifying **Name**, the **FQDN or IP Address** for Session Manager Security Module Interface, set the **Type** to **Session Manager** and the **Location** to the Location configured in **Section 6.3** and scroll down to configure the ports..

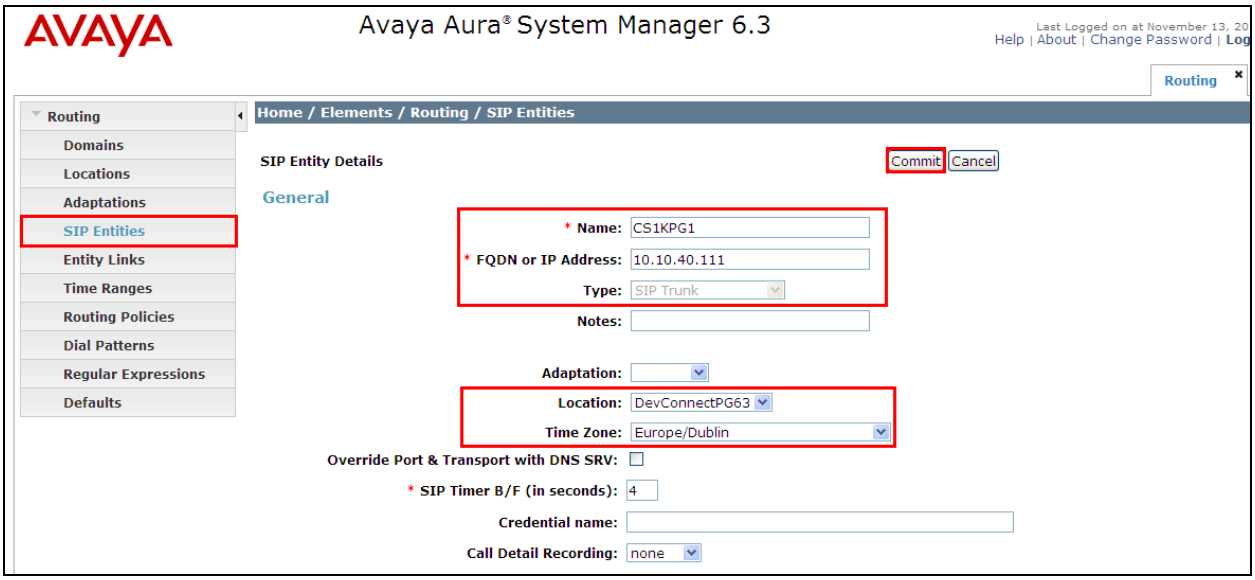


Select the box next to the entity that was just created and click **Edit** (not shown)**.** Scroll down the page until the **Port** section is displayed, click **Add** and configure the **Port** as **5060** the **Protocol TCP** and the **Default Domain** as the domain configured in **Section 6.2.** Repeat this for the **UDP** connection which will be established to the OpenGate server, as shown below TLS is shown below but was not used in the connection to the OpenGate server. Click **Commit** when done.



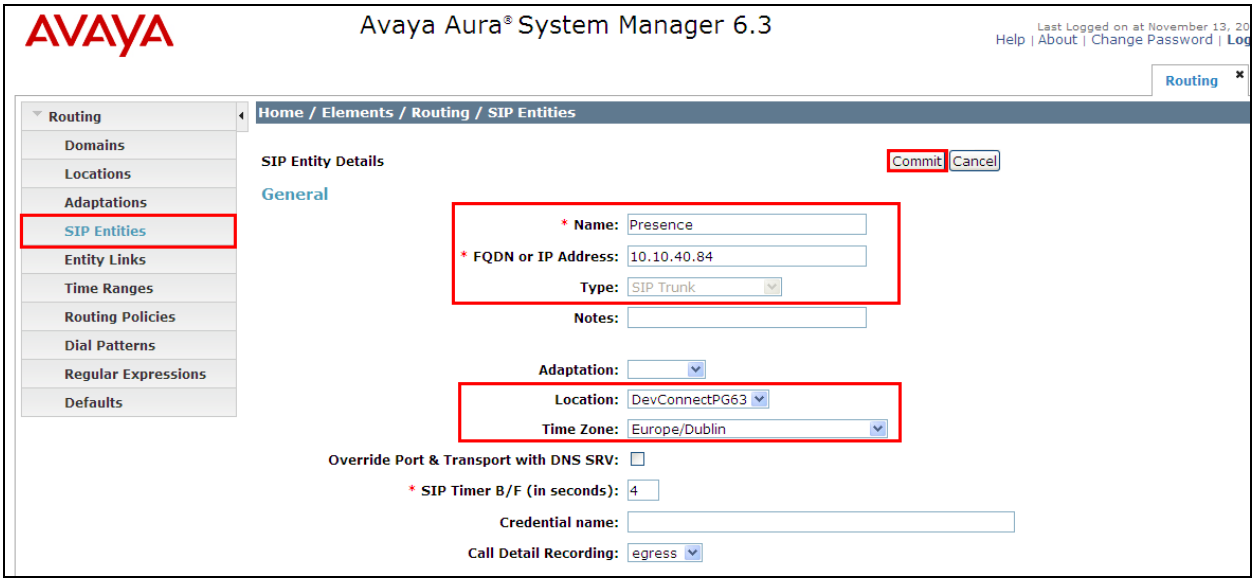
6.4.2 Configure Avaya Communication Server 1000E SIP Entity

Click **Home → Elements → Routing → SIP Entities → New** assign an identifying **Name**, the **FQDN or IP Address** for the CS1000E Node IP Address which can be obtained from the Signalling Server, set the **Type** to **SIP Trunk** and the **Location** to the Location configured in **Section 6.3** and click on **Commit**.



6.4.3 Configure Presence Technology OpenGate Entity

Click **Home → Elements → Routing → SIP Entities → New** assign an identifying **Name**, the **FQDN or IP Address** for the OpenGate server, set the **Type** to **SIP Trunk**, leave all other settings default and click **Commit**.

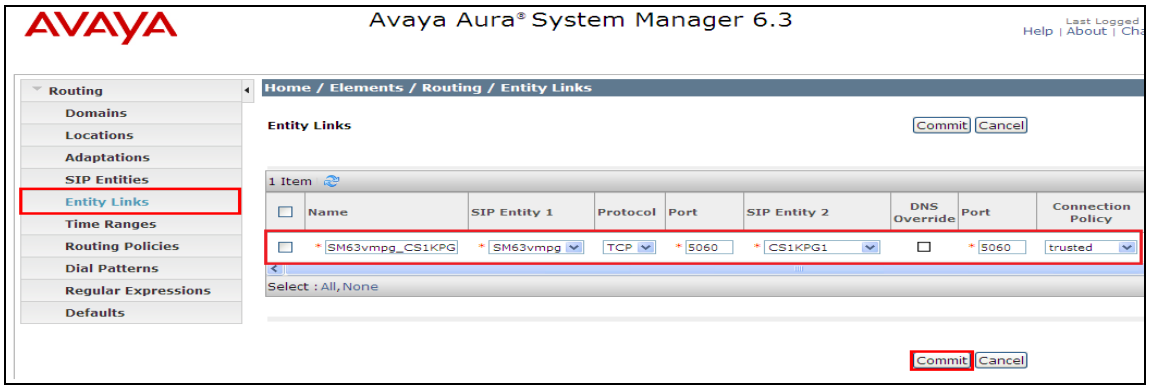


6.5 Administer SIP Entity Link

A SIP Trunk between a Session Manager and a telephony system is described by an Entity Link. An entity link needs to be created between Session Manager and both theCS1000E and OpenGate.

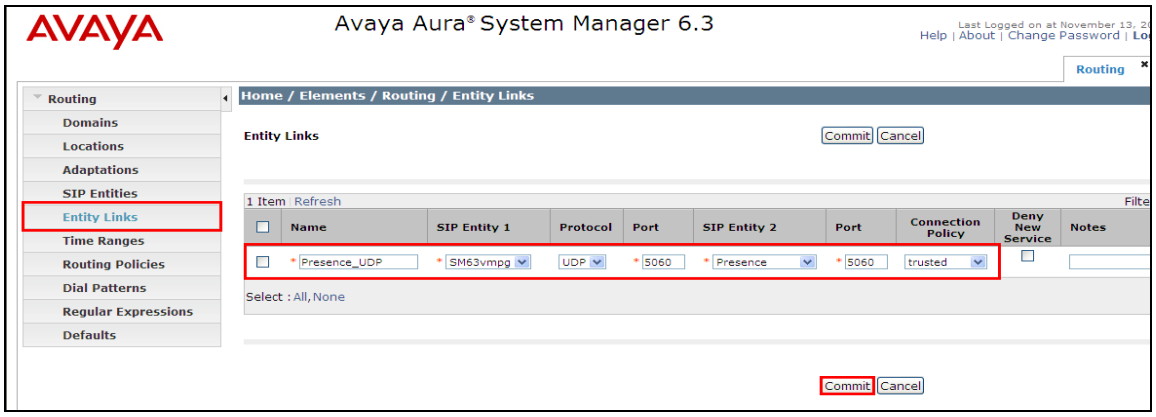
6.5.1 Administer SIP Entity Link from Avaya Aura® Session Manager to Avaya Communication Server 1000E

Click on **Home → Elements → Routing → Entity Links → New** assign an identifying **Name** choose the entity assigned to the Session Manager SIP Signaling Interface as **SIP Entity 1**, set the **Protocol** as **TCP**, enter **5060** for the **Port**, choose the CS1000E entity as **SIP Entity 2** and set the **Port** to **5060**, place an arrow in the **Trusted** box. Click **Commit** when done.



6.5.2 Administer SIP Entity Link from Avaya Aura® Session Manager to OpenGate

Click on **Home → Elements → Routing → Entity Links → New** assign an identifying **Name** choose the entity assigned to the Session Manager SIP Signaling Interface as **SIP Entity 1**, set the **Protocol** as **UDP**, enter **5060** for the **Port**, choose the OpenGate entity as **SIP Entity 2** and set the **Port** to **5060**, select **Trusted** from the **Connection Policy** drop-down list. Click **Commit** when done. This establishes the Session Manager end of the SIP Trunk to OpenGate.

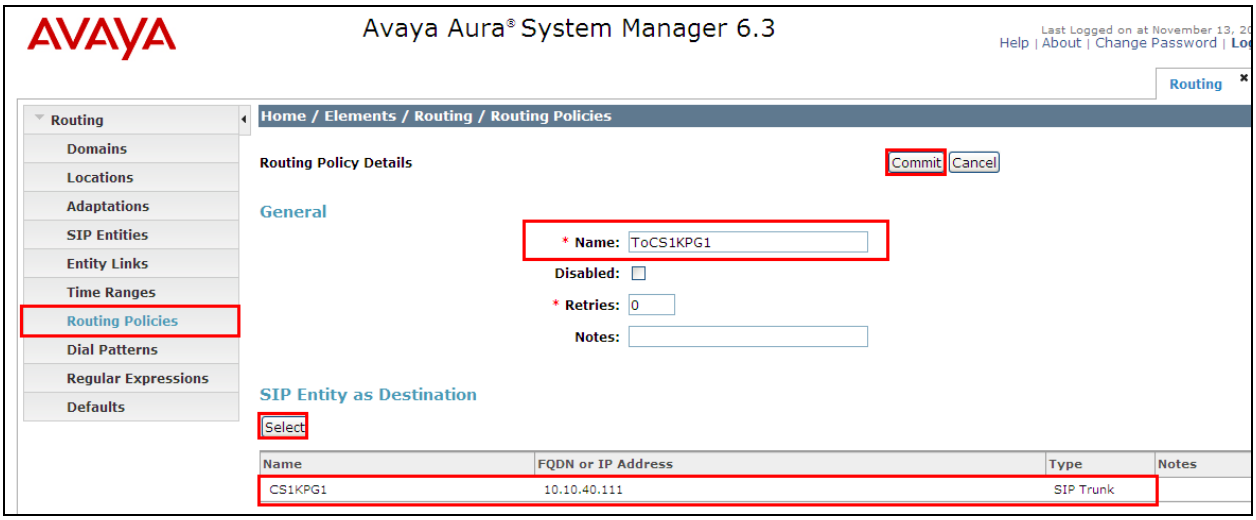


6.6 Administer Routing Policies

To complete the routing configuration, a Routing Policy is created. Routing policies direct how calls will be routed to an attached system. Two routing policies must be created, one for the Communications Manager and the second for OpenGate. These will be associated with the Dial Patterns created in **Section 6.7**.

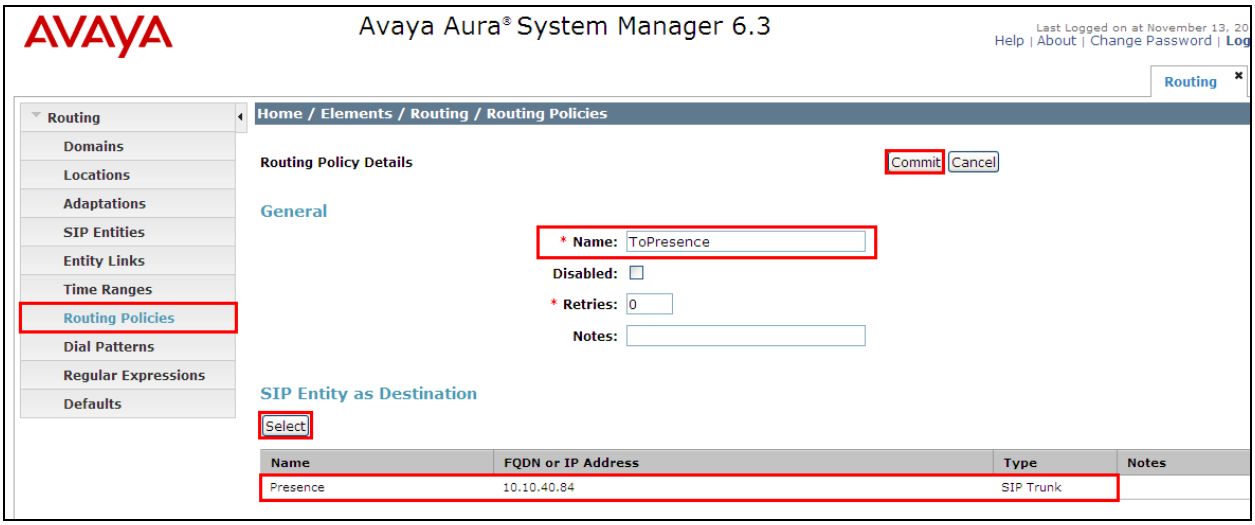
6.6.1 Create Routing Policy to Avaya Communication Server 1000E

Click **Home → Elements → Routing → Routing Polices →New** assign an identifying **Name** for the route. Under the **SIP Entity as Destination** section, click on **Select** and choose the CS1000E SIP Entity and click **Select** (not shown). Click **Commit** when done.



6.6.2 Create Routing Policy to Presence Technology OpenGate

Click **Home → Elements → Routing → Routing Polices →New** assign an identifying **Name** for the route. Under the **SIP Entity as Destination** section, click on **Select** and choose the OpenGate SIP Entity and click **Select** (not shown). Click **Commit** when done.

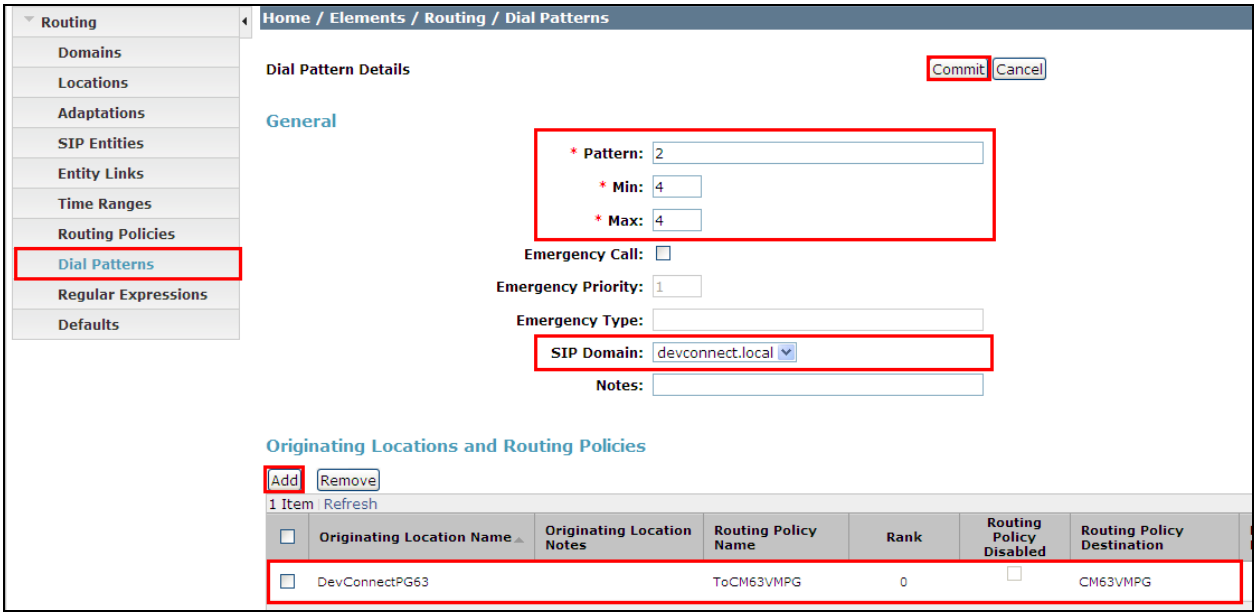


6.7 Administer Dial Patterns

As one of its main functions, Session Manager routes SIP traffic between connected devices. Dial Patterns are created as part of the configuration to manage SIP traffic routing, which will direct calls based on the number dialled to the appropriate system.

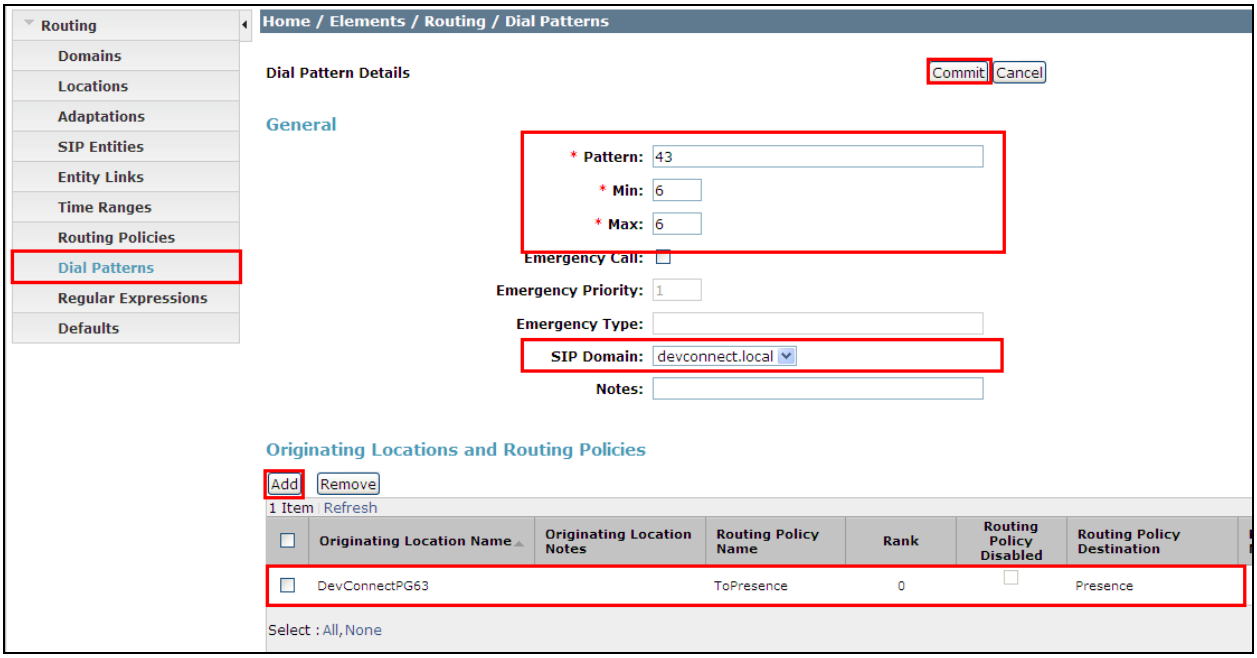
6.7.1 Create Dial Pattern to Avaya Communication Server 1000E

A dial pattern must be created on Session Manager to route incoming calls from OpenGate to CS1000E Extensions 2xxx. To create a Dial Pattern to route 2xxx from Session Manager to the CS1000E, click **Home → Elements → Routing → Dial Patterns →New.** Under **Pattern** enter the numbers presented to Session Manager by OpenGate destined for the CS1000E, in the **Patterns** box. Set **Min** and **Max** digit string length, and set **SIP Domain** to that which was created in **Section 6.2**. In the **Originating Locations and Routing Policies** section of the web page, click **Add.** This bring up a new window (not shown) in this **window** under the **Origination Section,** click **All**, in the **Routing Policies** section click the routing policy created for the CS1000E. Click **Select** when done (not shown). Click **Commit** once finished.



6.7.2 Create Dial Pattern to OpenGate

In **Section 5.2** the CS1000E is configured to route the dialled numbers beginning **43**xxxx to Session Manager. To create a Dial Pattern to route **43**xxxx from Session Manager to OpenGate click **Home → Elements → Routing → Dial Patterns →New.** Under **Pattern** enter the numbers presented to Session Manager by CS1000E destined for OpenGate, in the **Patterns** box. Set **Min** and **Max** digit string length, and set **SIP Domain** to that created in **Section 6.2**. In the **Originating Locations and Routing Policies** section of the web page, click **Add. .** This bring up a new window (not shown) in this **window** under the **Origination Location** section click **All**, in the **Routing Policies** section click the routing policy created for OpenGate. Click **Select** when done (not shown). Click **Commit** when complete.



7. Configure the Presence Technology OpenGate

OpenGate is part of Presence Suite and is administered via Presence Administrator which resides on the Presence Server. A number of items are set up within Presence Administrator to configure the OpenGate ACD. This section will cover the following areas:

- Login to Presence Administrator
- Administer SIP trunk to Avaya Aura® Session Manager
- OpenGate Skill Configuration
- OpenGate Agent Login Configuration
- OpenGate Station Configuration
- OpenGate Service Configuration
- Outbound Routes
- Inbound Routes
- Logging in to OpenGate

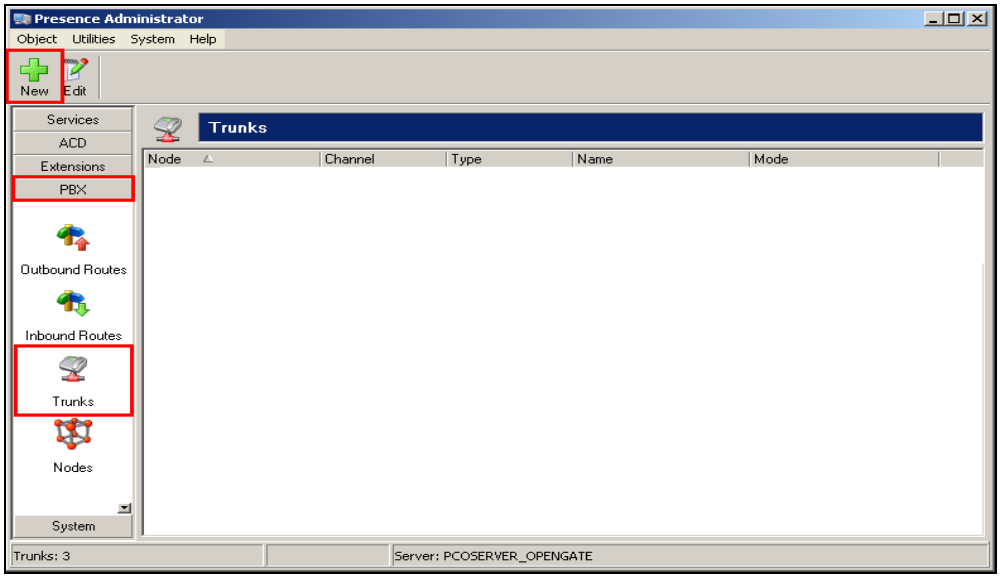
Note: The following configuration details for Agent Login and Skillsets are all a part of the Presence OpenGate internal Call Centre and are not referenced anywhere else in these Application Notes.

7.1 Login to Presence Administrator

Launch the Presence Administrator application by double clicking the **pcoadmin.exe** icon located in the Presence folder (not shown). The username and password that appear in the **User** and **Password** fields are created during the Presence Server installation.

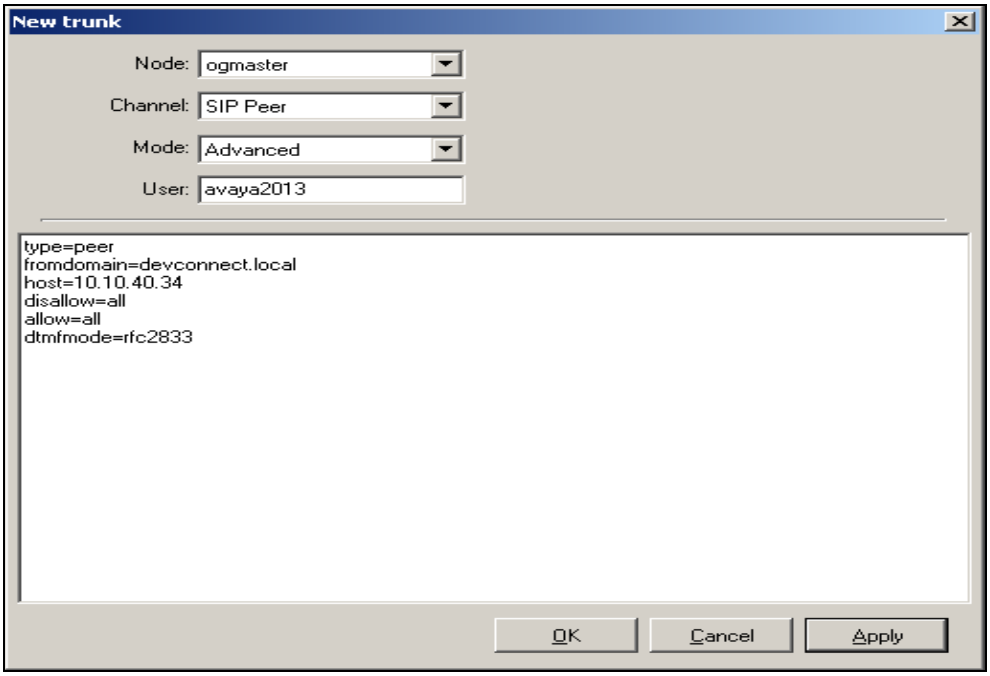
7.2 Administer SIP Trunk to Avaya Aura® Session Manager

In the left window navigate to **PBX→Trunks**. Click on the **New** icon at the top left of the page.



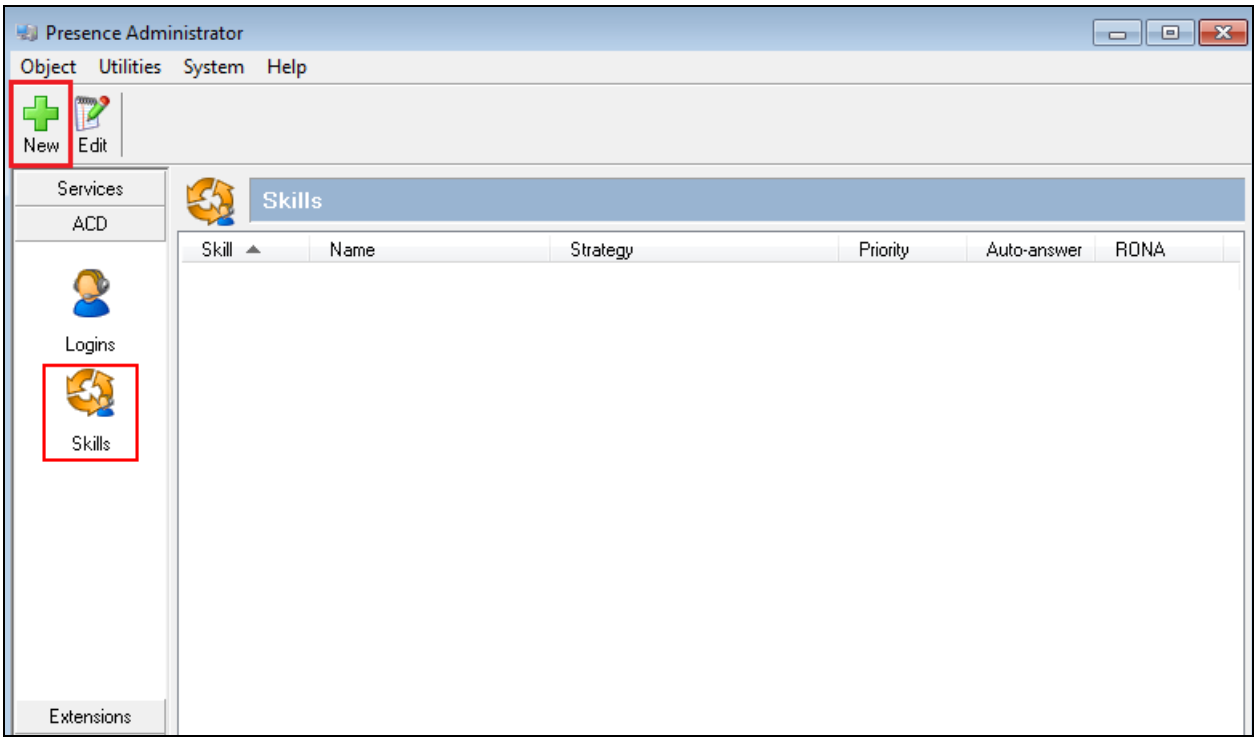
Fill in the information as shown below. Please note that the **Node ogmaster** has already been established during the install of Presence OpenGate. Select **SIP Peer** as the **Channel** and **Advanced** as the **Mode**. Enter a suitable name for the **User**. Note the following entries shown in the main window. Click on OK once finished.

- **Fromdomain** = the domain that is referenced in **Sections 6.2**
- **Host** = IP address of Session Manager

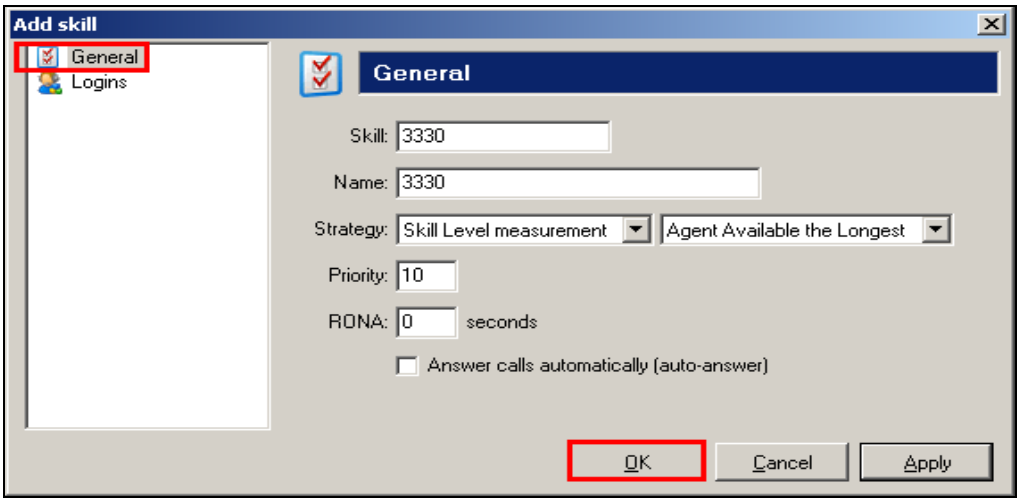


7.3 OpenGate Skill Configuration

To configure a skill, from the left hand side select **ACD → Skills** from the Presence Administrator main menu. Click the **New** button.

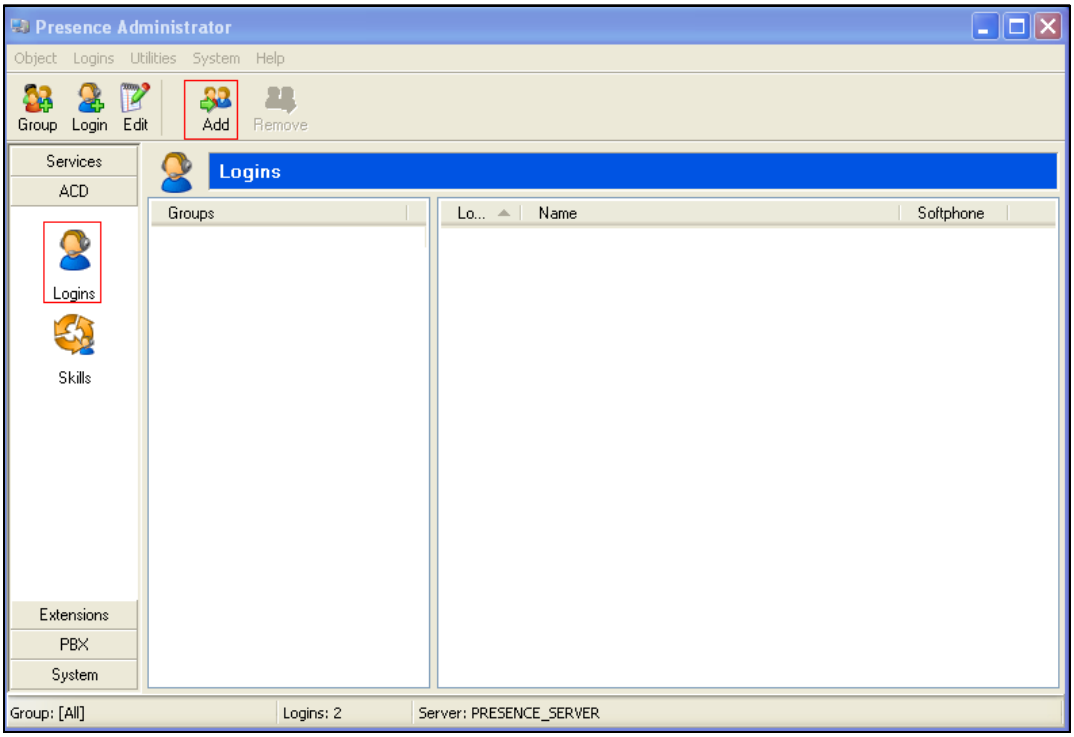


In the resulting screen define a **Skill** number and enter a **Name** to identify the skill. In the **Strategy** field use the two drop down menus to define the selection strategy that will be used by the skill. Set a **Priority** for the skill. All remaining fields can be left with default values. Click **OK** to save the configuration.

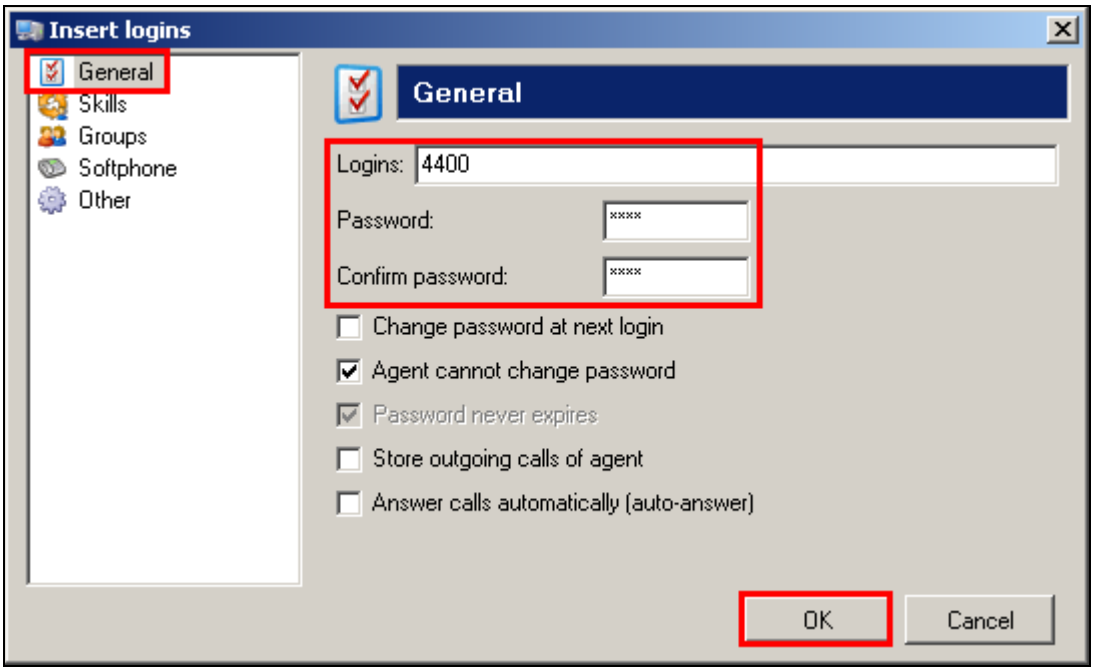


7.4 OpenGate Agent Login Configuration

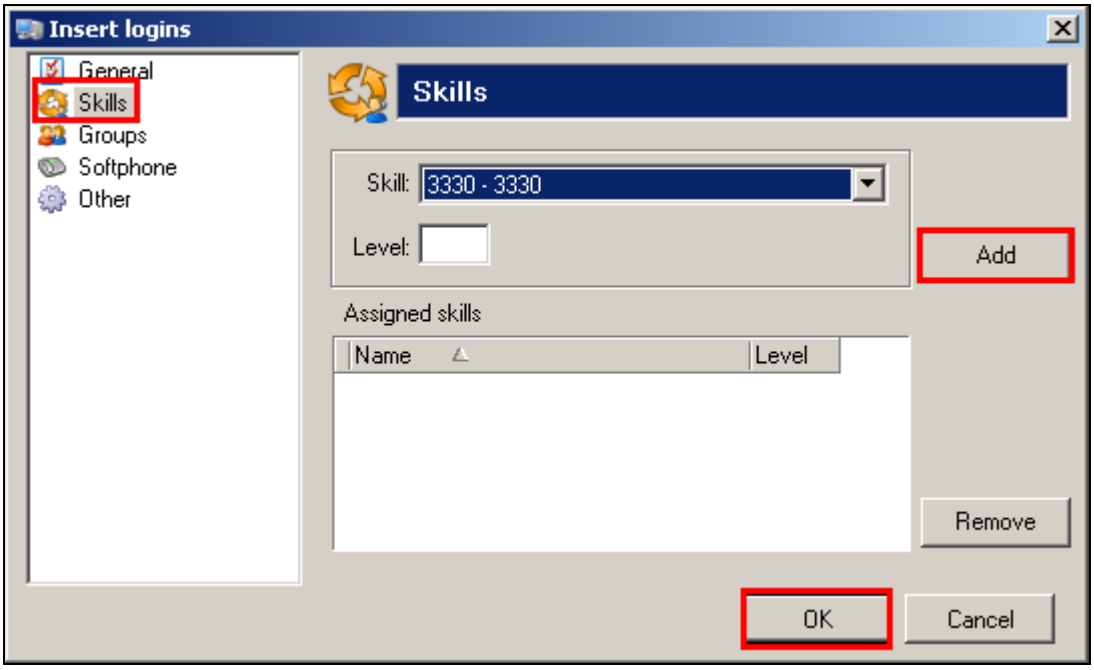
The login configured here will be used by the agent to login to OpenGate. The Agents will connect to OpenGate via the Presence Suite Agent application. To configure an ACD agent login, from the left hand side select **ACD → Logins** from the Presence Administrator main menu. Click the **Add** button.



From the menu on the left side of the screen select **General,** enter a numerical ID in the **Logins** field. Define a **Password** for the agent login and repeat in the **Confirm Password** field.

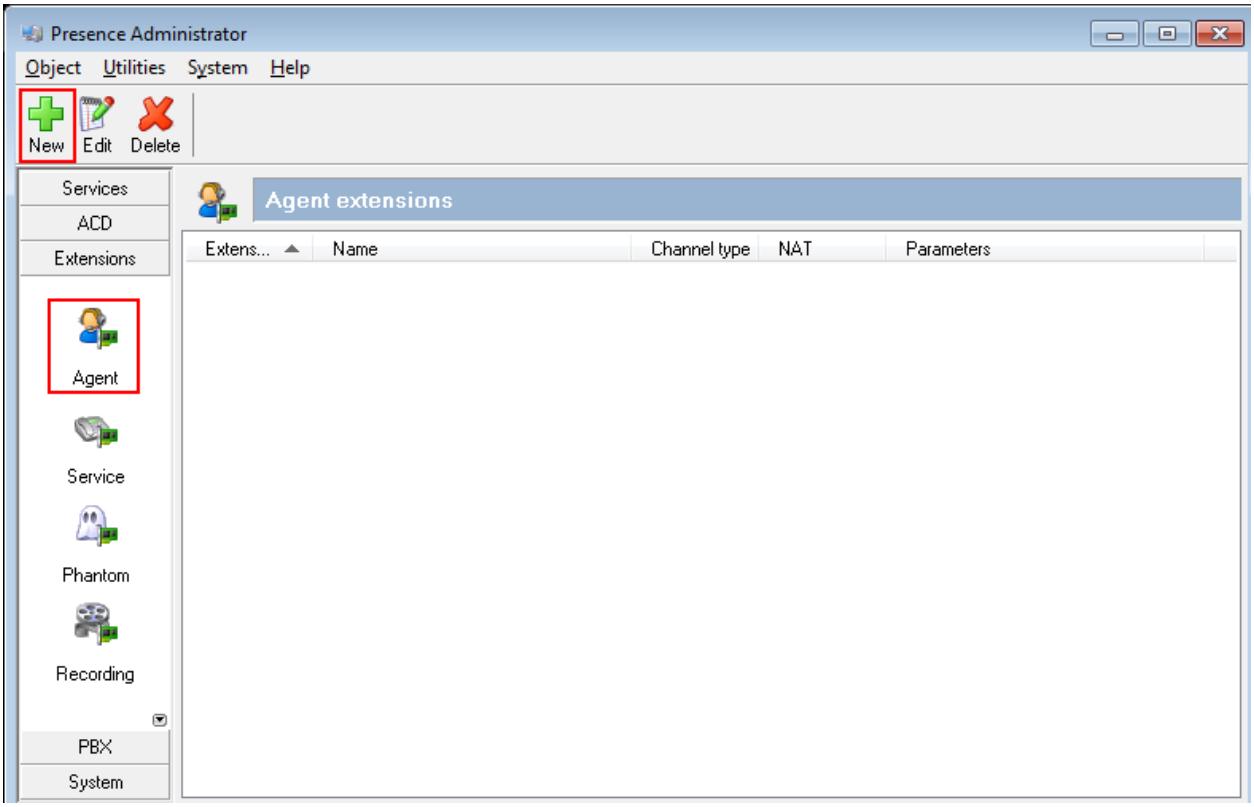


From the menu on the left side of the screen select **Skills,** use the drop down menu to select the **Skill** configured in **Section 7.3** and specify a **Level** for the skill to be applied against this agent login. Click the **Add** button and the skill should appear under **Assigned skills** (not shown here**)**. Click **OK** to save the login configuration.

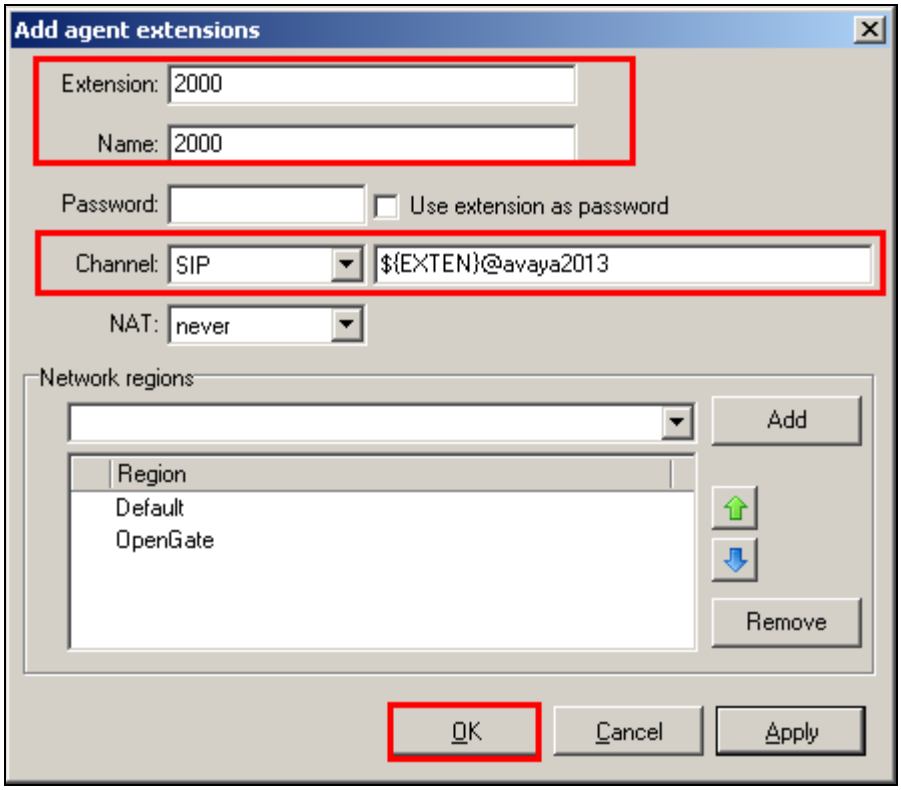


7.5 Presence Technology OpenGate Station Configuration

Each telephone/endpoint that OpenGate could route calls to must be defined within Presence Administrator as an Agent extension. To define an Agent extension from the left hand side navigate to **Extensions → Agents** and click the **New** button.

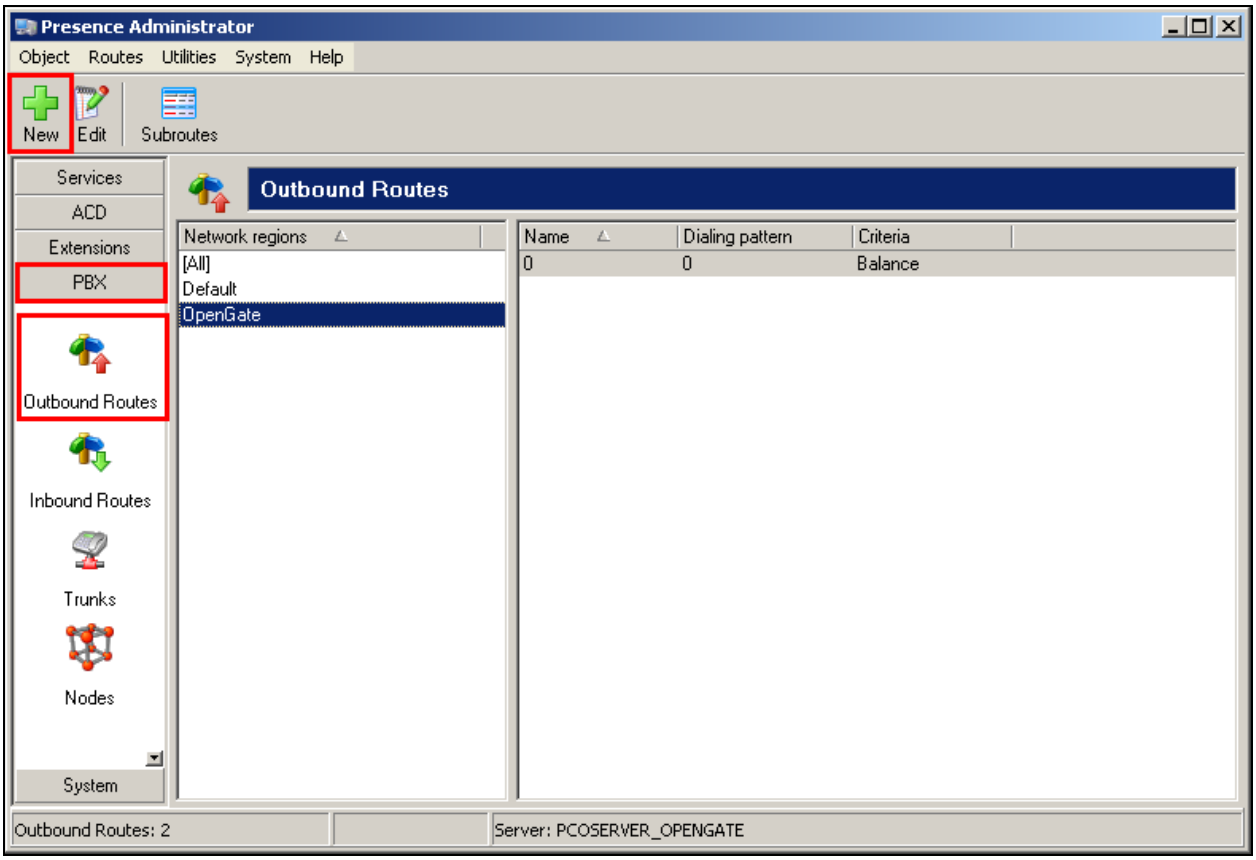


In the resulting screen specify an **Extension** number that will be used by the Presence Agent application **(Section 7.8.1)**. Note this any existing extension number on the CS1000E. Set a **Name** that the Agent extension will be known as. The password is not required in this case. In the **Channel** field use the drop down arrow to select **SIP.** In the following field define the number that will be dialled and the route used to reach the station, which should be expressed in the form of a URI. The user part is set to the number to be dialled and the host part is set to the name of the sip trunk defined **Section 7.2**. In this example **${EXTEN}@avaya2013** is configured which means any number that is dialled will use trunk "avaya2013", note **avaya 2013** is the SIP Trunk configured in **Section 7.2** above**,** so the URI is formatted as **${EXTEN}@avaya2013**. Click **OK** to save.

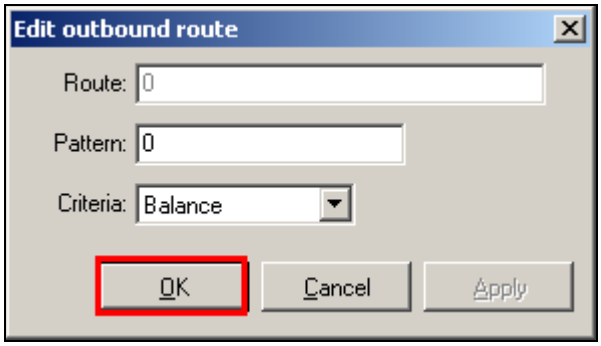


7.6 Outbound Routes

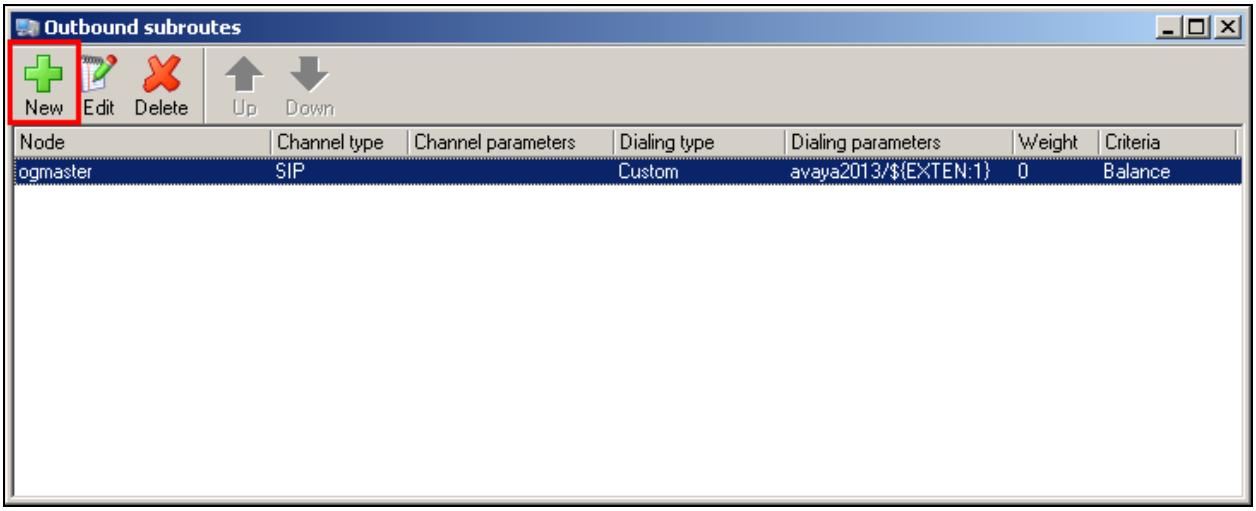
To define an outbound route, from the left hand side navigate to **PBX → Outbound Routes** and click the **New** button.



In the resulting screen enter a descriptive name in the **Route** field and in the **Pattern** field define any prefix required by outbound calls. This setup is only used for internal working of OpenGate and is not related to routing on the CS1000E. For **Criteria** use the drop-down menu to select the method that will be used to distribute calls among the subroutes configured in the next step. **Balance** allows an even distribution of calls across the subroutes. Click **OK** to save the **outbound route**. Click **OK** to save.



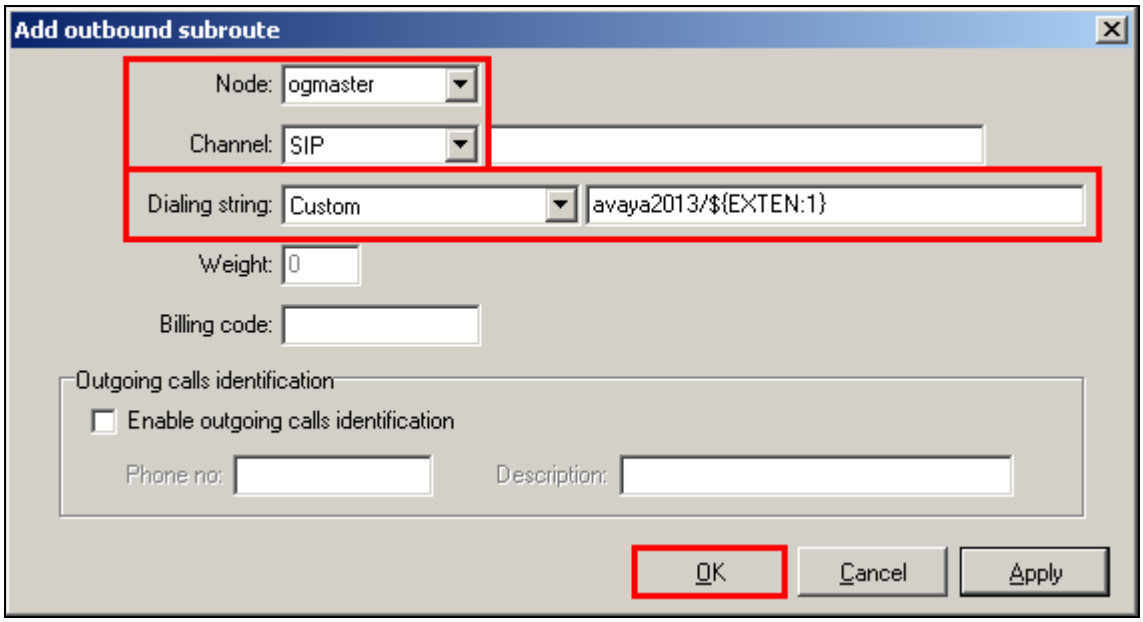
To add an outbound subroute, from the outbound routes main page shown above, highlight the outbound route that was added in the previous step and click the subroutes button at the top of the screen (not shown). The **Outbound subroutes** window is then displayed as shown below, Click **New**.



In the resulting window select the relevant **Node** (this was created during the OpenGate install), and under **Channel** select **SIP**. For **Dialing string** use the drop down menu to select **Custom** and in the secondary field enter a matching pattern using a regular expression. In the example below the expression used is **${EXTEN:1}@avaya2013**. The expression performs the following:

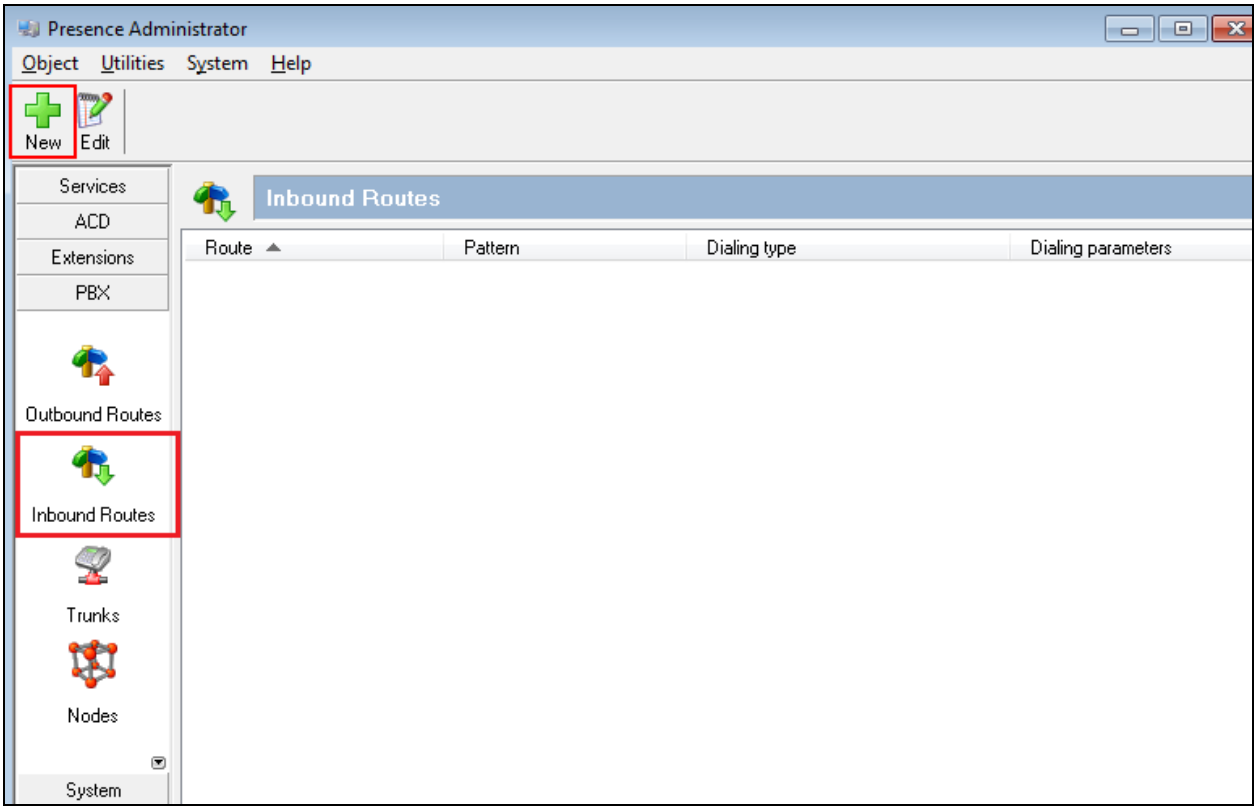
- **EXTEN** is an internal variable which represents the called number, therefore this pattern will match any called number beginning with a 0(2000)
- Remove the leading character (leaving 2000)
- Route it via the **avaya2013** trunk defined in **Section 7.2**.

This is done in order to use the same numbers that may be used on the Avaya PBX. Using 0 to make outgoing calls and then stripping the 0 before the call reaches the Session Manager and the CS1000E. Click **OK** to save.

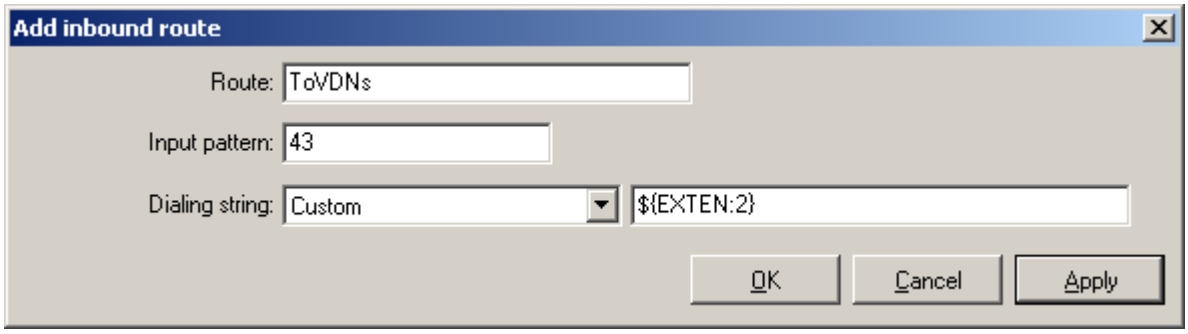


7.7 Inbound Routes

Inbound routes are used to map dialed numbers received to internal extensions within OpenGate. To define an inbound route, from the left hand side navigate to **PBX →Inbound Routes** and click the **New** button.



In the resulting window enter a descriptive name for **Route**. In the **Input pattern** field enter a numerical pattern that the inbound route will use to match incoming digits. Use the drop down menu in the **Dialing string** field to specify the digit manipulation to be performed. In the example below, incoming digits **43** will be replaced with **${EXTEN:2)**. This will remove two digits from the incoming call (i.e., the 43) from the incoming call leaving 3300, which is the internal Service Extension used within OpenGate.



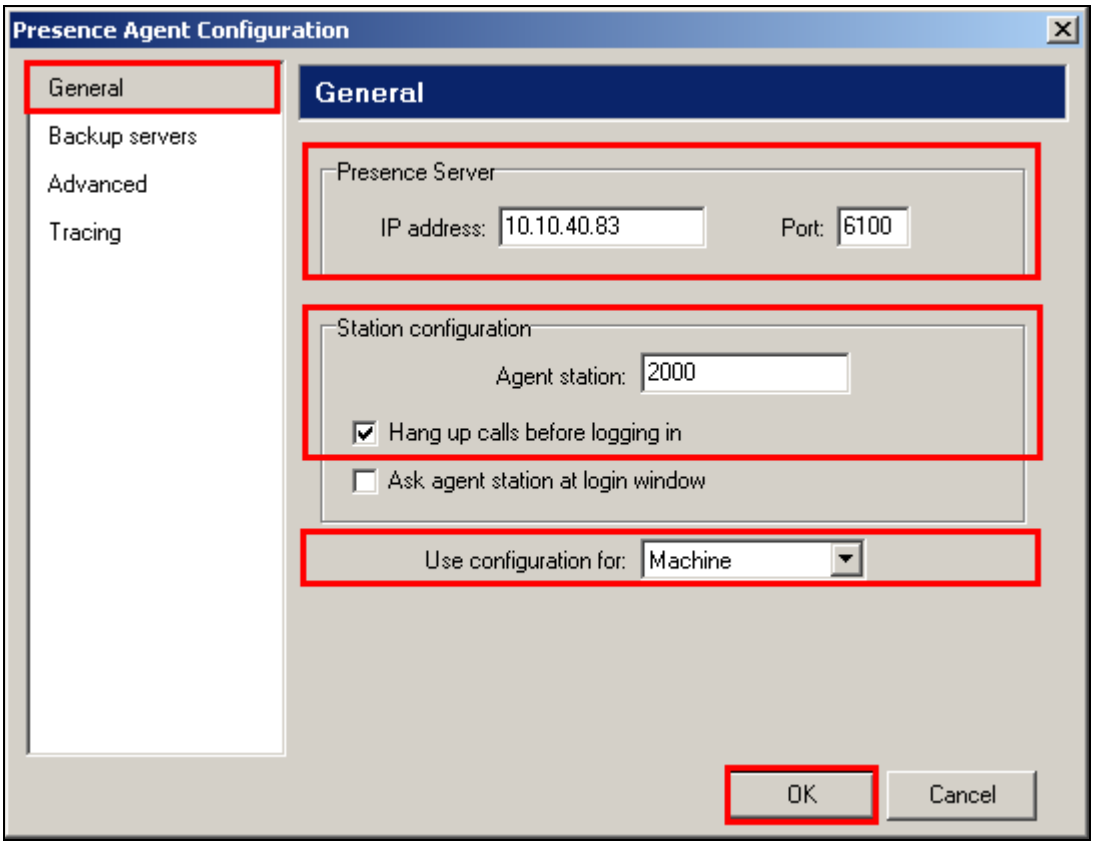
7.8 Logging into OpenGate

In order to receive calls from Open Gate, users must log in to the system via the Presence Agent application. This section describes the steps required to connect to OpenGate as an agent to receive ACD calls.

7.8.1 Presence Agent Configuration

The following steps are carried out on the Presence Agent PC. Prior to installing the Presence agent, ensure that the DBExpress driver (dpexpoda.dll) is located in the C:\Windows\System32 directory, if not contact Presence Technology support outlined in **Section 2.3** of these Application Notes. The DBExpress driver allows the agent application to communicate with the Presence Suite/OpenGate database.

Launch the **Presence Agent Configuration** application by double clicking the **pcoagentcfg.exe** located in the C: \Presence folder (not shown). Enter the **Presence Server IP address** as **10.10.40.83**. The **Presence Server port** can be left as the default value of **6100**. Enter the extension of the station that will be used with this workstation in the **Agent station** field. Check the **Hang up calls before logging in** check box. In the field **Use configuration for** choose **Machine** from the drop down menu. Click **OK**. This step is needed for each agent configured; only the agent station field will vary.



7.8.2 Logging in Presence Agent

Launch the Presence agent configuration application by double clicking the pcoagent.exe located in the Presence folder. Enter the agent **Login** and **Password** configured in **Section 7.4** and click on **OK**.

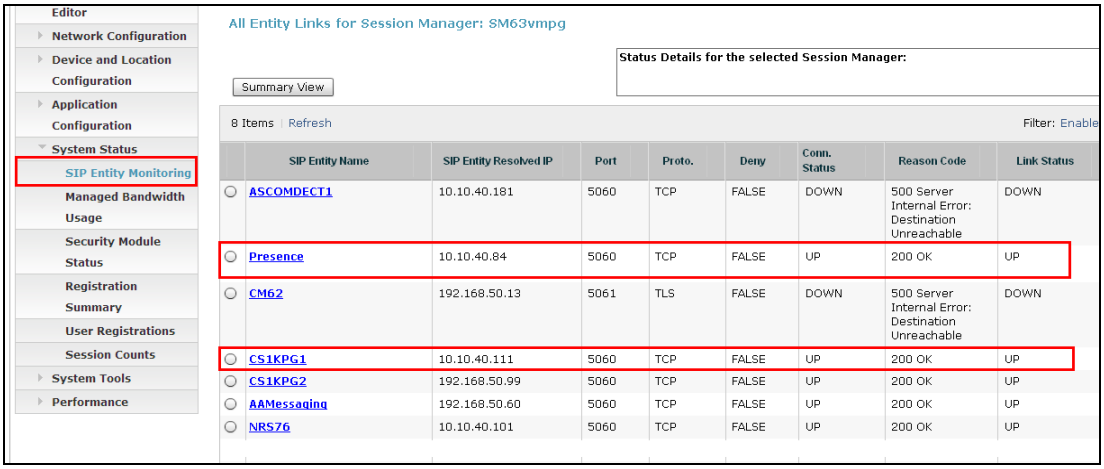
A task bar is present at the top of the Agent PC. Click on the green arrow to put the agent into an available state.

The information status on the task bar goes to **Available** indicating the agent is ready to receive calls.

8. Verification Steps

This section provides steps that may be performed to verify that the solution is configured correctly.

1. From System Manager Home Tab click on Session Manager and navigate to **Session Manager → System Status → SIP Entity Monitoring**. Select the relevant SIP Entity from the list and observe if the **Conn Status** and **Link Status** are showing as **Up**.



SIP Entity Name	SIP Entity Resolved IP	Port	Proto.	Deny	Conn. Status	Reason Code	Link Status
ASCOMDECT1	10.10.40.181	5060	TCP	FALSE	DOWN	500 Server Internal Error: Destination Unreachable	DOWN
Presence	10.10.40.84	5060	TCP	FALSE	UP	200 OK	UP
CM62	192.168.50.13	5061	TLS	FALSE	DOWN	500 Server Internal Error: Destination Unreachable	DOWN
CS1KPG1	10.10.40.111	5060	TCP	FALSE	UP	200 OK	UP
CS1KPG2	192.168.50.99	5060	TCP	FALSE	UP	200 OK	UP
AAMessaging	192.168.50.60	5060	TCP	FALSE	UP	200 OK	UP
NRS76	10.10.40.101	5060	TCP	FALSE	UP	200 OK	UP

2. Manually verify that calls can be placed to OpenGate and routed to Agents.

9. Conclusion

These Application Notes describe the configuration steps required for Presence Technology OpenGate R10.0 to successfully interoperate with Avaya Communication Server 1000E R7.6 and Avaya Aura® Session Manager R6.3. All functionality and serviceability test cases were completed successfully.

10. Additional References

This section references the Avaya and Presence Suite product documentation that are relevant to these Application Notes.

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

[1] Software Input Reference Administration Avaya Communication Server 1000, Release 7.6; Document No. NN43001-611_05.02

[2] *Administering Avaya Aura® Session Manager*

[3] *Element Manager System Reference –Administration Avaya Communication Server 1000* Release 6.3, Release 7.6 NN43001-632, 05.04

The following documentation is available on request from Presence Technology OpenGate: www.presenceco.com

[1] *ACD Sys Presence Administrator Manual Presence Suite*, V10.0

[2] *Presence Installation Guides Presence Software*, V10.0

[3] *PBX/ACD Requirements Presence Software*, V10.0

Appendix A

Avaya Communication Server 1000E R7.6 - Linux Patches

```
Product Release: 7.65.16.00
In system patches: 0

In System service updates: 26
PATCH#  IN_SERVICE DATE       SPECINS REMOVABLE   NAME
2       Yes        27/08/13   NO      YES         cs1000-dmWeb-7.65.16.21-01.i386.000
3       Yes        28/08/13   NO      yes         cs1000-snmp-7.65.16.00-01.i686.000
4       Yes        28/08/13   NO      YES         cs1000-nrsm-7.65.16.00-03.i386.000
5       Yes        28/08/13   NO      YES         cs1000-oam-logging-7.65.16.01-01.i386.000
6       Yes        28/08/13   NO      yes         cs1000-cs1000WebService 6-0-7.65.16.21-
                                                   00.i386.000
7       Yes        28/08/13   NO      YES         cs1000-sps-7.65.16.21-01.i386.000
8       Yes        28/08/13   NO      YES         cs1000-pd-7.65.16.21-00.i386.000
9       Yes        28/08/13   NO      YES         cs1000-shared-carrdtct-7.65.16.21-01.i386.000
10      Yes        28/08/13   NO      YES         cs1000-shared-tpselect-7.65.16.21-01.i386.000
11      Yes        28/08/13   NO      YES         cs1000-emWebLocal 6-0-7.65.16.21-01.i386.000
12      Yes        28/08/13   NO      yes         cs1000-dbcom-7.65.16.21-00.i386.000
13      Yes        28/08/13   NO      YES         cs1000-csmWeb-7.65.16.21-05.i386.000
14      Yes        28/08/13   NO      YES         cs1000-shared-xmsg-7.65.16.21-00.i386.000
15      Yes        28/08/13   NO      YES         cs1000-vtrk-7.65.16.21-29.i386.000
16      Yes        28/08/13   NO      YES         cs1000-tps-7.65.16.21-05.i386.000
17      Yes        28/08/13   NO      YES         cs1000-mscAnnc-7.65.16.21-02.i386.001
18      Yes        28/08/13   NO      YES         cs1000-mscAttn-7.65.16.21-04.i386.001
19      Yes        28/08/13   NO      YES         cs1000-mscConf-7.65.16.21-02.i386.001
20      Yes        28/08/13   NO      YES         cs1000-mscMusc-7.65.16.21-02.i386.001
21      Yes        28/08/13   NO      YES         cs1000-mscTone-7.65.16.21-03.i386.001
22      Yes        28/08/13   NO      YES         cs1000-bcc-7.65.16.21-21.i386.000
23      Yes        28/08/13   NO      YES         cs1000-Jboss-Quantum-7.65.16.21-3.i386.000
24      Yes        28/08/13   NO      YES         cs1000-emWeb 6-0-7.65.16.21-06.i386.000
25      Yes        10/12/13   NO      yes         cs1000-cs-7.65.P.100-01.i386.001
26      Yes        10/12/13   YES     yes         cs1000-linuxbase-7.65.16.21-08.i386.000
27      Yes        10/12/13   NO      YES         cs1000-patchWeb-7.65.16.21-06.i386.0
```

Avaya Communication Server 1000E R7.6 - Call Server Patches

```
VERSION 4121
RELEASE 7
ISSUE 65 P +
DepList 1: core Issue: 01 (created: 2013-06-14 03:54:33 (est))

IN-SERVICE PEPS
PAT# CR #            PATCH REF #     NAME      DATE        FILENAME       SPECINS
000  wi01052968      ISS1:1OF1       p32540_1  11/12/2013  p32540_1.cpl   NO
001  wi01045058      ISS1:1OF1       p32214_1  11/12/2013  p32214_1.cpl   NO
002  wi01085855      ISS1:1OF1       p32658_1  11/12/2013  p32658_1.cpl   NO
003  wi01053314      ISS1:1OF1       p32555_1  11/12/2013  p32555_1.cpl   NO
004  wi01060382      iss1:1of1       p32623_1  11/12/2013  p32623_1.cpl   YES
005  wi01070580      ISS1:1OF1       p32380_1  11/12/2013  p32380_1.cpl   NO
006  wi01067822      ISS1:1OF1       p32466_1  11/12/2013  p32466_1.cpl   YES
007  wi01061481      ISS1:1OF1       p32382_1  11/12/2013  p32382_1.cpl   NO
008  wi01072032      ISS1:1OF1       p32448_1  11/12/2013  p32448_1.cpl   NO
009  wi01022599      ISS1:1OF1       p32080_1  11/12/2013  p32080_1.cpl   NO
010  wi01035976      ISS1:1OF1       p32173_1  11/12/2013  p32173_1.cpl   NO
011  wi01065922      ISS1:1OF1       p32516_1  11/12/2013  p32516_1.cpl   NO
012  wi01055480      ISS1:1OF1       p32712_1  11/12/2013  p32712_1.cpl   NO
013  wi01041453      ISS1:1OF1       p32587_1  11/12/2013  p32587_1.cpl   NO
014  wi01078723      ISS1:1OF1       p32532_1  11/12/2013  p32532_1.cpl   NO
015  WI0110261       ISS1:1OF1       p32758_1  11/12/2013  p32758_1.cpl   NO
016  wi01064599      iss1:1of1       p32580_1  11/12/2013  p32580_1.cpl   NO
017  wi01048457      ISS1:1OF1       p32581_1  11/12/2013  p32581_1.cpl   NO
018  wi01072027      ISS1:1OF1       p32689_1  11/12/2013  p32689_1.cpl   NO
019  wi01059388      iss1:1of1       p32628_1  11/12/2013  p32628_1.cpl   NO
020  wi01074003      ISS1:1OF1       p32421_1  11/12/2013  p32421_1.cpl   NO
021  wi00933195      ISS1:1OF1       p32491_1  11/12/2013  p32491_1.cpl   NO
022  wi00996734      ISS1:1OF1       p32550_1  11/12/2013  p32550_1.cpl   NO
023  wi01065118      ISS1:1OF1       p32397_1  11/12/2013  p32397_1.cpl   NO
024  wi01063864      ISS1:1OF1       p32410_1  11/12/2013  p32410_1.cpl   YES
025  wi01072023      ISS1:1OF1       p32130_1  11/12/2013  p32130_1.cpl   YES
026  wi01075359      ISS1:1OF1       p32671_1  11/12/2013  p32671_1.cpl   NO
027  wi01080753      ISS1:1OF1       p32518_1  11/12/2013  p32518_1.cpl   NO
028  wi01070473      ISS1:1OF1       p32413_1  11/12/2013  p32413_1.cpl   NO
029  wi01075355      ISS1:1OF1       p32594_1  11/12/2013  p32594_1.cpl   NO
030  wi01071379      ISS1:1OF1       p32522_1  11/12/2013  p32522_1.cpl   NO
031  wi01070756      ISS1:1OF1       p32444_1  11/12/2013  p32444_1.cpl   NO
032  wi01075353      ISS1:1OF1       p32613_1  11/12/2013  p32613_1.cpl   NO
033  wi01062607      ISS1:1OF1       p32503_1  11/12/2013  p32503_1.cpl   NO
034  wi01068851      ISS1:1OF1       p32439_1  11/12/2013  p32439_1.cpl   NO
035  wi01075352      ISS1:1OF1       p32603_1  11/12/2013  p32603_1.cpl   NO
036  wi01092300      ISS1:1OF1       p32692_1  11/12/2013  p32692_1.cpl   NO
037  wi01063263      ISS1:1OF1       p32573_1  11/12/2013  p32573_1.cpl   NO
038  wi01087528      ISS1:1OF1       p32700_1  11/12/2013  p32700_1.cpl   NO
039  wi01055300      ISS1:1OF1       p32543_1  11/12/2013  p32543_1.cpl   NO
040  wi01039280      ISS1:1OF1       p32423_1  11/12/2013  p32423_1.cpl   NO
041  wi01068669      ISS1:1OF1       p32333_1  11/12/2013  p32333_1.cpl   NO
042  wi01069441      ISS1:1OF1       p32097_1  11/12/2013  p32097_1.cpl   NO
043  wi01058621      ISS1:1OF1       p32339_1  11/12/2013  p32339_1.cpl   NO
044  wi01032756      ISS1:1OF1       p32673_1  11/12/2013  p32673_1.cpl   NO
045  wi01070465      iss1:1of1       p32562_1  11/12/2013  p32562_1.cpl   NO
046  wi01053920      ISS1:1OF1       p32303_1  11/12/2013  p32303_1.cpl   NO
047  wi00897254      ISS1:1OF1       p31127_1  11/12/2013  p31127_1.cpl   NO
048  wi01057403      ISS1:1OF1       p32591_1  11/12/2013  p32591_1.cpl   NO
049  wi01066991      ISS1:1OF1       p32449_1  11/12/2013  p32449_1.cpl   NO
050  wi01094305      ISS1:1OF1       p32640_1  11/12/2013  p32640_1.cpl   NO
051  wi01058359      ISS1:1OF1       p32331_1  11/12/2013  p32331_1.cpl   NO
052  wi01047890      ISS1:1OF1       p32697_1  11/12/2013  p32697_1.cpl   NO
```

```
053  wi01060241      ISS1:1OF1       p32381_1  11/12/2013  p32381_1.cpl   NO
054  wi01034307      ISS1:1OF1       p32615_1  11/12/2013  p32615_1.cpl   NO
055  wi01052428      ISS1:1OF1       p32606_1  11/12/2013  p32606_1.cpl   NO
056  wi00884716      ISS1:1OF1       p32517_1  11/12/2013  p32517_1.cpl   NO
057  wi01070468      iss1:1of1       p32418_1  11/12/2013  p32418_1.cpl   NO
058  wi01091447      ISS1:1OF1       p32675_1  11/12/2013  p32675_1.cpl   NO
059  wi01068042      ISS1:1OF1       p32669_1  11/12/2013  p32669_1.cpl   NO
060  wi01061483      ISS1:1OF1       p32359_1  11/12/2013  p32359_1.cpl   NO
061  wi01065125      ISS1:1OF1       p32416_1  11/12/2013  p32416_1.cpl   NO
062  wi01056633      ISS1:1OF1       p32322_1  11/12/2013  p32322_1.cpl   NO
063  wi01070474      iss1:1of1       p32407_1  11/12/2013  p32407_1.cpl   NO
064  wi01053597      ISS1:1OF1       p32304_1  11/12/2013  p32304_1.cpl   NO
065  wi01070471      ISS1:1OF1       p32415_1  11/12/2013  p32415_1.cpl   NO
066  wi01025156      ISS1:1OF1       p32136_1  11/12/2013  p32136_1.cpl   NO
067  wi01088775      ISS1:1OF1       p32659_1  11/12/2013  p32659_1.cpl   NO
068  wi01083584      ISS1:1OF1       p32619_1  11/12/2013  p32619_1.cpl   NO
069  wi01075360      iss1:1of1       p32602_1  11/12/2013  p32602_1.cpl   NO
070  wi01053195      ISS1:1OF1       p32297_1  11/12/2013  p32297_1.cpl   NO
071  wi01043367      ISS1:1OF1       p32232_1  11/12/2013  p32232_1.cpl   NO
072  wi01082456      ISS1:1OF1       p32596_1  11/12/2013  p32596_1.cpl   NO
073  wi01089519      ISS1:1OF1       p32665_1  11/12/2013  p32665_1.cpl   NO
074  wi01065842      ISS1:1OF1       p32478_1  11/12/2013  p32478_1.cpl   NO
075  wi01088585      ISS1:1OF1       p32656_1  11/12/2013  p32656_1.cpl   NO
076  wi01035980      ISS1:1OF1       p32558_1  11/12/2013  p32558_1.cpl   NO
077  wi01087543      ISS1:1OF1       p32662_1  11/12/2013  p32662_1.cpl   NO
078  wi01060826      ISS1:1OF1       p32379_1  11/12/2013  p32379_1.cpl   NO
079  wi01061484      ISS1:1OF1       p32576_1  11/12/2013  p32576_1.cpl   NO
080  wi01034961      ISS1:1OF1       p32144_1  11/12/2013  p32144_1.cpl   NO
081  wi01056067      ISS1:1OF1       p32457_1  11/12/2013  p32457_1.cpl   NO
082  WI01077073      ISS1:1OF1       p32534_1  11/12/2013  p32534_1.cpl   NO
083  wi01073100      ISS1:1OF1       p32599_1  11/12/2013  p32599_1.cpl   NO
084  wi01060341      ISS1:1OF1       p32578_1  11/12/2013  p32578_1.cpl   NO
MDP>LAST SUCCESSFUL MDP REFRESH :2013-08-27 14:24:01(Local Time)
MDP>USING DEPLIST ZIP FILE DOWNLOADED :2013-08-27 09:21:58(est)
```

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.