Avaya Solution & Interoperability Test Lab

Application Notes for configuring Fonolo In-Call Rescue with Avaya Communication Server 1000 and Avaya Aura® Session Manager using SIP Trunks – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Fonolo In-Call Rescue application to interoperate with Avaya Communication Server 1000 and Avaya Aura® Session Manager using SIP trunks.

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.

©2018 Avaya Inc. All Rights Reserved.

1. Introduction

These Application Notes describe the configuration steps required for Fonolo In-Call Rescue (ICR) to interoperate with Avaya Communication Server 1000 (Communication Server 1000) via Avaya Aura® Session Manager (Session Manager) using SIP trunks. ICR provides functionality to replace hold-time with a call-back and during this compliance tesing was hosted on the cloud by Fonolo. The solution communicates via SIP/RTP. The ICR functionality was compliance tested utilizing SIP trunks to Session Manager. The configuration allowed Communication Server 1000 to use SIP trunking for calls to and from the ICR application. The ICR is a call center solution where instead of a caller staying in the queue when agents are all busy, can request to get a call back when an agent becomes available.

When a caller encounters a scenario where no agents are available in a call center environment and Communication Server 1000 is part of that environment, the caller is presented with options by the call center to either continue waiting in the queue or receive a call back from the call center. If the caller chose the latter, then the call center directs the caller to ICR via Session Manager SIP trunks where ICR then provides a message to the caller to leave a call back number, so that ICR can call back the caller when an agent becomes available. Once ICR receives the confirmed call back number from the caller, ICR uses SIP trunks with Session Manager to call back into the call center and wait in the queue until an agent becomes available. When an agent becomes available, ICR informs the agent that there is a call waiting and if the agent would like to get connected to the caller. If the agent accepts to connect to the caller, ICR then calls the caller via SIP trunks to Communication Server 1000 and connects the caller with the available agent. When ICR makes an outbound call to the caller and agent via Session Manager, it makes two SIP INVITE requests. One to the available agent and one to the caller and then mixes the audio within the ICR server.

For security purposes public and lab IP addresses have been altered in this document.

2. General Test Approach and Test Results

The interoperability compliance testing focused on verifying inbound and outbound calls flows between Communication Server 1000 and ICR. The feature test cases were performed manually. Calls were placed manually from users on the PSTN to a call center Control Directory Number (CDN). During compliance testing Avaya Aura® Contact Center (Contact Center) was used to eumulate a call center. Assumption was made during compliance testing in the Contact Center script to direct callers to ICR when no agents are available. When caller connected with ICR, ICR read the call back number of the caller or asked caller to input a new call back number. ICR recognized the Dual Tone Multi Frequency (DTMF) input provided by the caller confirming the call back number. For compliance testing purposes, agents were made available after the above call between caller and ICR is completed. ICR then called into the call center CDN and connected with an available agent. ICR provided a recording informing the agent of a call in waiting and if the agent wants to get connected to the PSTN caller. Agent accepted the call by using DTMF input. ICR then made the second outbound call to the PSTN caller via Communicaton Server 1000 and if the PSTN caller answered the call they then get connected with the agent.

©2018 Avaya Inc. All Rights Reserved.

The serviceability test cases were performed manually by disconnecting and reconnecting the SIP trunk connection to ICR.

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 Fonolo did not include use of any specific encryption features as requested by Fonolo.

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.

©2018 Avaya Inc. All Rights Reserved.

2.1. Interoperability Compliance Testing

The ICR application is hosted in a cloud environment by Fonolo. SIP trunks were used to connect the ICR application with Communication Server 1000 via Session Manager. The following features and functionality were covered during compliance testing:

- Establishment of SIP trunks connectivity between ICR and Session Manager including session refresh.
- Testing of G.711MU codec.
- Incoming calls to a CDN of Contact Center via Communication Server 1000 can be redirected to the ICR application via the SIP trunks based on Contact Center scripting. Outgoing calls from ICR to the CDN via Communication Server 1000 when callers decide on Call back. During this compliance testing Contact Center was used to simulate a call center environment and is not the scope of these Application Notes.
- The ICR application can make outbound call to the caller via Communication Server 1000 who had selected the call back option and merge the call between the caller and available agents. The outbound call is made from Communication Server 1000 via Session Manager and using SIP INVITE.
- DTMF transmission to ensure that options selected by the caller and agent is accepted correctly by ICR.

Serviceability testing focused on verifying the ability of ICR to recover from adverse conditions, such as the SIP trunks going down (disable command) and reboot of Session Manager.

©2018 Avaya Inc. All Rights Reserved.

2.2. Test Results

All test cases were executed and passed with the following exceptions/observations:

- ICR only supports G.711u codec.
- ICR only supports RFC2833 for DTMF transmission.

2.3. Support

Technical support on Fonolo ICR can be obtained through the following:

- **Phone:** 1-855-366-2500 (USA Toll-free)
- **Web:** https://fonolo.com/contact/
- **Email:** support@fonolo.com

©2018 Avaya Inc. All Rights Reserved.

3. Reference Configuration

A simulated enterprise site consisting of Communication Server 1000, Session Manager and System Manager were used during compliance testing. As shown in **Figure 1**, SIP trunks were used to connect Fonolo ICR with Communication Server 1000 via Session Manager. Communication Server 1000 is connected to an emulated PSTN using SIP trunks. A skillset queue is configured on Communication Server 1000 with two agents belonging to this queue. The configuration allowed the enterprise site to use SIP trunking for calls to and from ICR via the Session Manager.

During compliance testing inbound calls to Fonolo were sent to two of Fonolo's specific servers and outbound calls from Fonolo came from four of Fonolo's other servers. This architecture was implemented by Fonolo due to some PBX vendors cannot support inbound and outbound calls on the same SIP trunk. Due to this design intent of Fonolo, inbound and outbound calls to and from Fonolo were handled by different servers. All these servers were hosted on the cloud by Fonolo.

The following values were configured during compliance testing:

- CDN: 54900
- Skillset: 1
- Agent Login ID: 1005, 1006

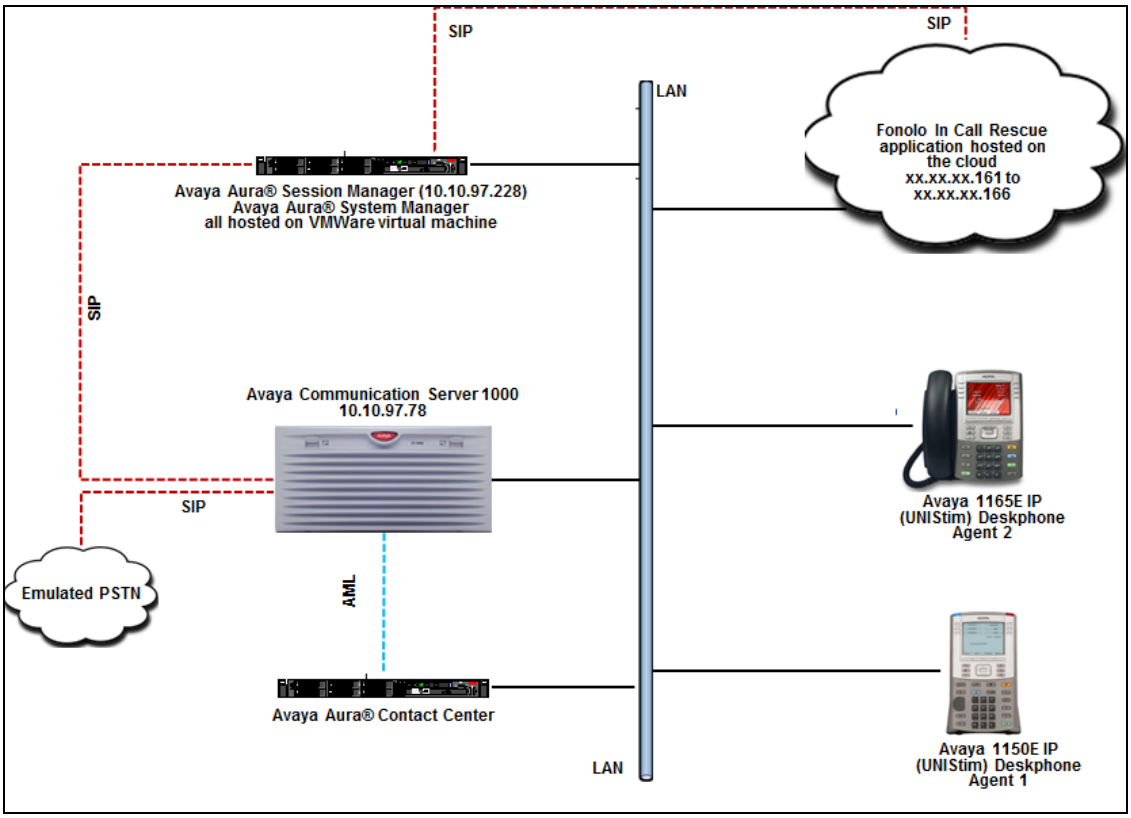


Figure 1: Reference Configuration

©2018 Avaya Inc. All Rights Reserved.

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Communication Server 1000	7.65.16 SP9
Avaya Aura® System Manager running on virtual server	8.0.0.0.931077
Avaya Aura® Session Manager running on virtual server	8.0.0.0.800035
Avaya Aura® Contact Center	7.0.3.0 (FP3)
Avaya IP Deskphones: 1150E (UNIStim) 1165E (UNIStim)	 0627C94 0626C94
Fonolo In-Call Rescue hosted on a cloud	Version 3.2

©2018 Avaya Inc. All Rights Reserved.

5. Configure Avaya Communication Server 1000

The configuration operations illustrated in this section were performed using terminal access to the Communication Server 1000 over an "SSH" session using "PuTTY". The information provided in this section describes the configuration of the Communication Server 1000 for this solution. For all other provisioning information such as initial installation and configuration, please refer to the product documentation in **Section 11**.

Note:

- During compliance test, route number (**ROUT**) and route list index (**RLI**) is **6** to Session Manager, this information is needed in **Section 5.2** to configure route to ICR dialing plan of 30xxx. A full printout of the D-Channel, Route and Trunk information for the SIP Signalling Gateway used for the compliance testing is included in the **Appendix B** of these Application Notes.
- Not all prompts need a response. The prompts outlined below are mandatory for a basic configuration. Accept the default responses for all other prompts by pressing the return key.

5.1. Verify Licences

To ensure that Communication Server 1000 is licensed for SIP Trunks, use **LD 22** and type **SLT** at the **REQ** prompt. Check for **SIP ACCESS PORTS** as shown below.

```
>ld 22

PT2000
REQ  slt
System type is - Communication Server 1000E/CPPM Linux
CPPM - Pentium M 1.4 GHz
IPMGs Registered:               1
IPMGs Unregistered:             0
IPMGs Configured/unregistered:  0
TRADITIONAL TELEPHONES 32767    LEFT 32767    USED     0
DECT USERS             32767    LEFT 32767    USED     0
IP USERS               32767    LEFT 32682    USED    85
BASIC IP USERS         32767    LEFT 32764    USED     3
TEMPORARY IP USERS     32767    LEFT 32765    USED     2
DECT VISITOR USER      10000    LEFT 10000    USED     0
ACD AGENTS             32767    LEFT 32739    USED    28
MOBILE EXTENSIONS      32767    LEFT 32761    USED     6
TELEPHONY SERVICES     32767    LEFT 32767    USED     0
CONVERGED MOBILE USERS 32767    LEFT 32767    USED     0
AVAYA SIP LINES        32767    LEFT 32755    USED    12
THIRD PARTY SIP LINES  32767    LEFT 32740    USED    27

PCA                    32767    LEFT 32764    USED     3
ITG ISDN TRUNKS        32767    LEFT 32767    USED     0
H.323 ACCESS PORTS     32767    LEFT 32767    USED     0
AST                    32767    LEFT 32717    USED    50
SIP CONVERGED DESKTOPS 32767    LEFT 32767    USED     0
SIP CTI TR87           32767    LEFT 32733    USED    34
SIP ACCESS PORTS       32767    LEFT 32703    USED    64
```


©2018 Avaya Inc. All Rights Reserved.

5.2. Configure Coordinated Dialing Plan

This section shows steps on how to create Coordinated Dialing Plan (CDP) to route the call from Communication Server 1000 to ICR via Session Manager.

Use the **NEW** command in **LD 87** to create a **CDP** entry for ICR. In the example below, the **DSC** is "30", **FLEN** is "5" and the **RLI** is "6".

```
>ld 87

REQ  new
CUST 0
FEAT cdp
TYPE dsc
DSC  30       → Distant Steering Code to dial ICR
FLEN 5        → Length of the Distant Steering Code
DSP  LSC
RRPA NO
RLI  6        → Route List Index
CCBA NO
NPA
NXX
```

5.3. Saving Avaya Communication Server 1000 Configuration

Type **LD 43** at the > prompt to save any newly configured parameters like CDP as mentioned in the above section, upon entering the overlay type **edd** at the "**.**" prompt as shown below.

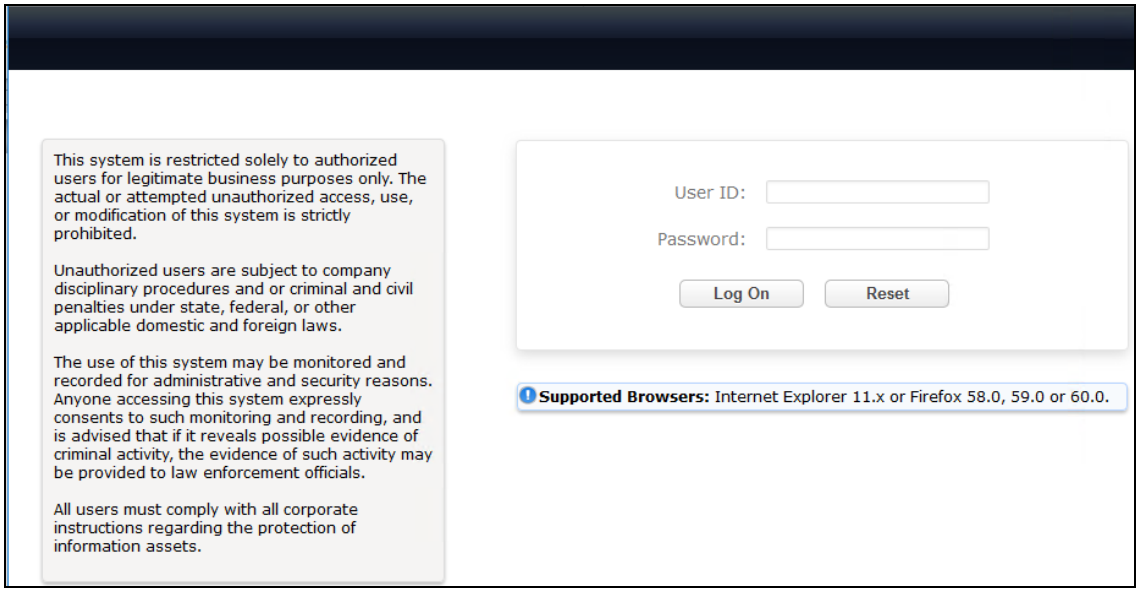
```
ld 43
EDD000


.edd
```


©2018 Avaya Inc. All Rights Reserved.

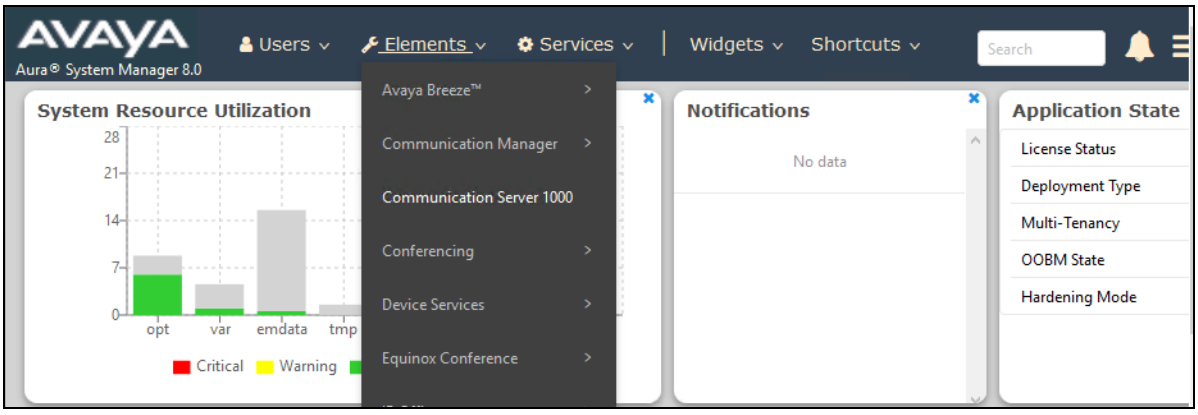
5.4. Configure Avaya Communication Server 1000 SIP Signaling Gateway

The SIP Signalling Gateway is an application installed on the Avaya Communication Server 1000 Signalling Server. In this example this Signalling Server is a co-resident installation with the Avaya Communication Server 1000 Call Server.

The SIP Signalling Gateway is configured at the Communication Server 1000 IP Telephony Node. Changes on the Communication Server 1000 Node are performed using Element Manager which is accessible through the System Manager. To make changes in Element Manager, access the System Manager web interface by using the URL "https://ip-address" in an Internet browser window, where "ip-address" is the IP address of System Manager. Log in using the appropriate credentials in the screen shown below.

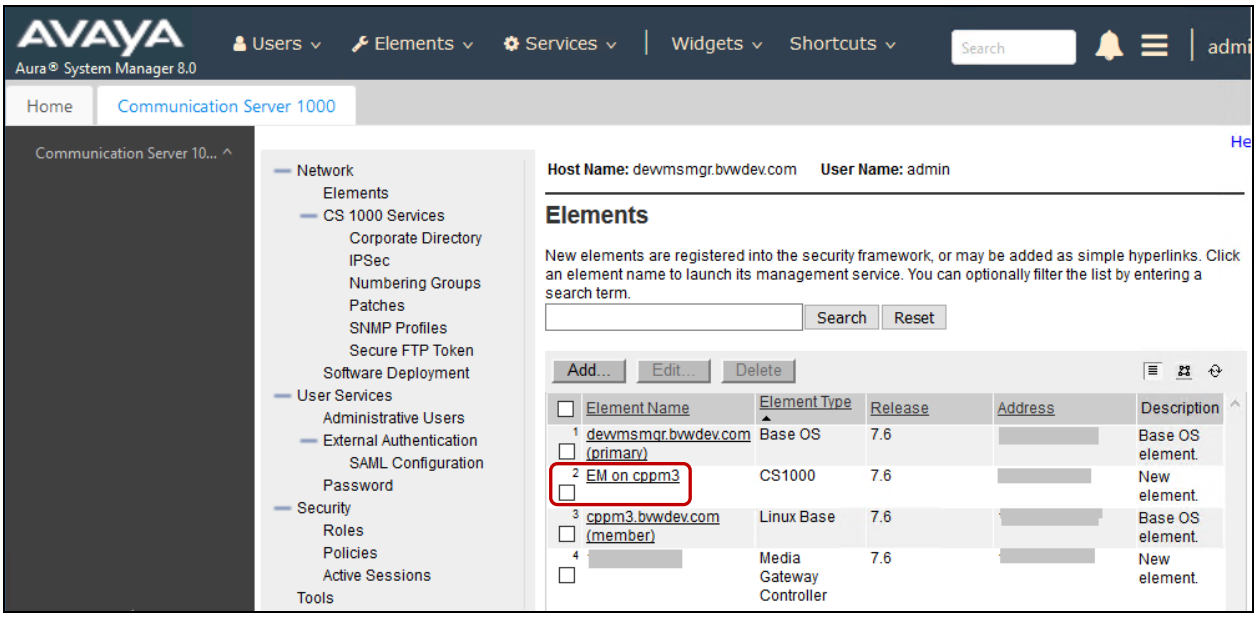


From the main screen of System Manager shown below, navigate to **Elements → Communication Server 1000**.

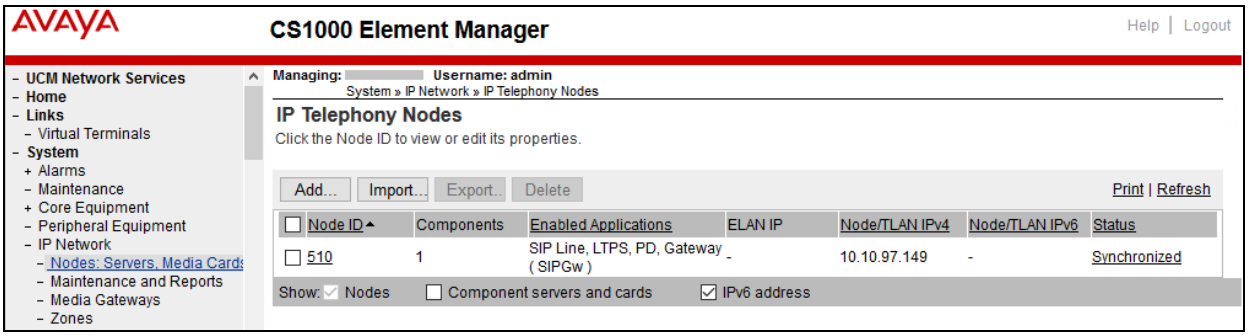


©2018 Avaya Inc. All Rights Reserved.

Once **Communication Server 1000** is selected the following screen appears, click on the Element Manager link, in this case it is **EM on cppm3**.

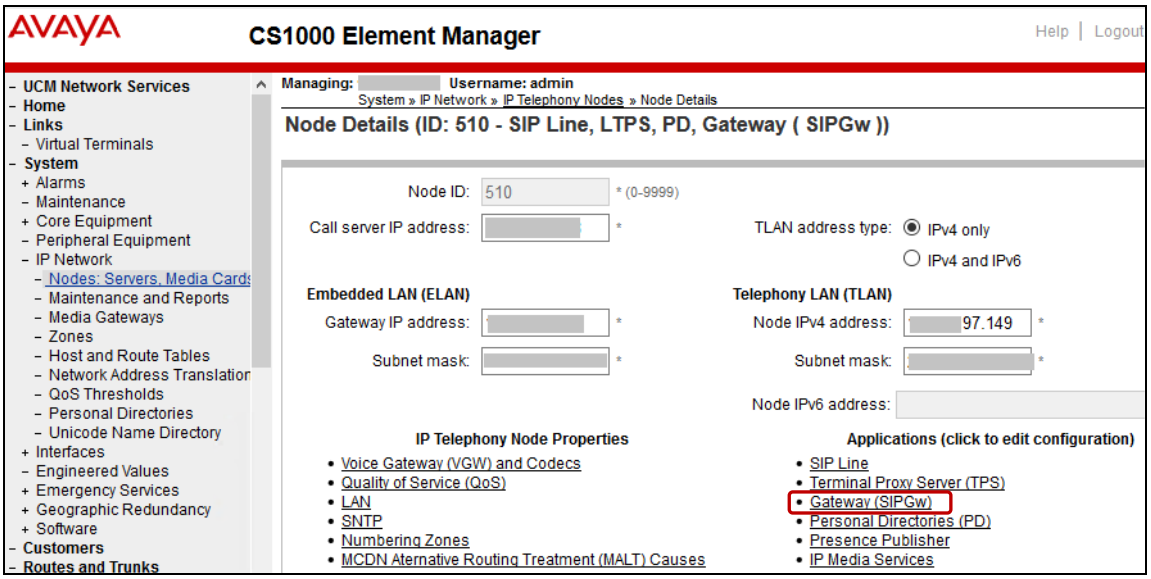


Click on **IP Network → Nodes: Servers, Media Cards** in the left window. Click on the **Node ID** displayed in the right window, during compliance test Node **510** is configured to connect to Session Manager. Note the IP address of this node as it used while configuring Communication Server 1000 as SIP Entity endpoint on Session Manager in **Section 7.5.2**.

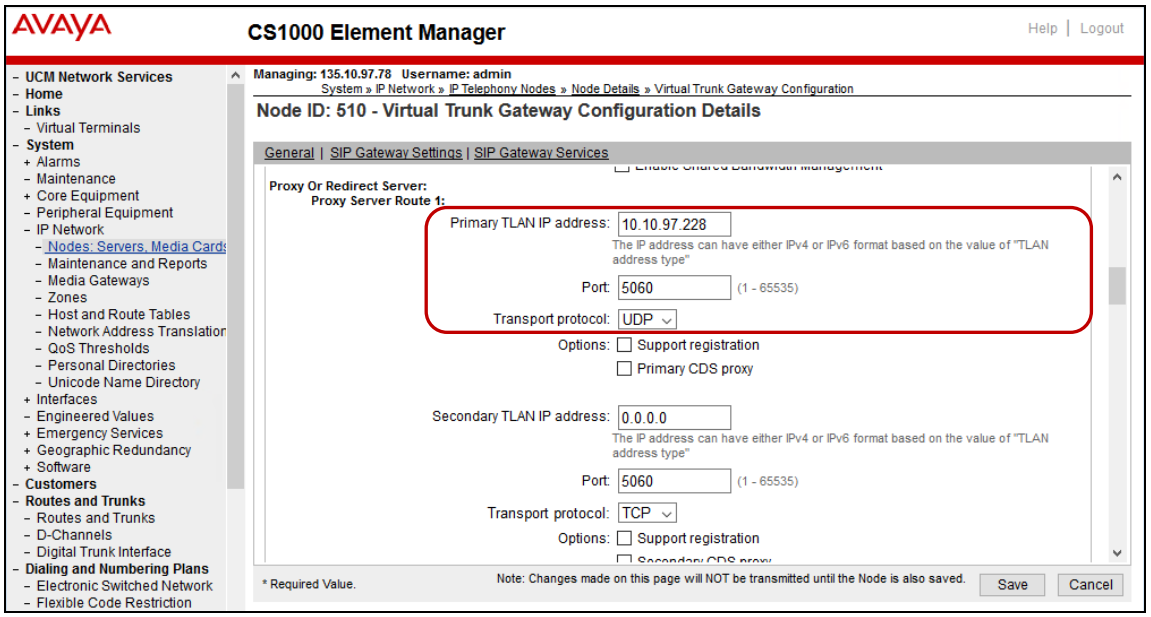


©2018 Avaya Inc. All Rights Reserved.

The **Node Details** page is launched when the **Node ID 510** is clicked as shown below. Click on the link **Gateway (SIPGw)** to launch the SIP Gateway Services page.



From the **SIP Gateway Services** page, scroll down to enter the IP address of the Session Manager in the **Primary TLAN IP address** field. Enter **Port** as "5060" and select the **Transport protocol** as "UDP", this port and transport protocol will be used when configuring Communication Server 1000 SIP entity in Session Manager in **Section 7.5.2**. Click on **Save** once finished.



Save and **Transmit** (not shown) these Node properties to complete the SIPGw configuration. Once the components are synchronized the Signaling Gateway will require a restart.

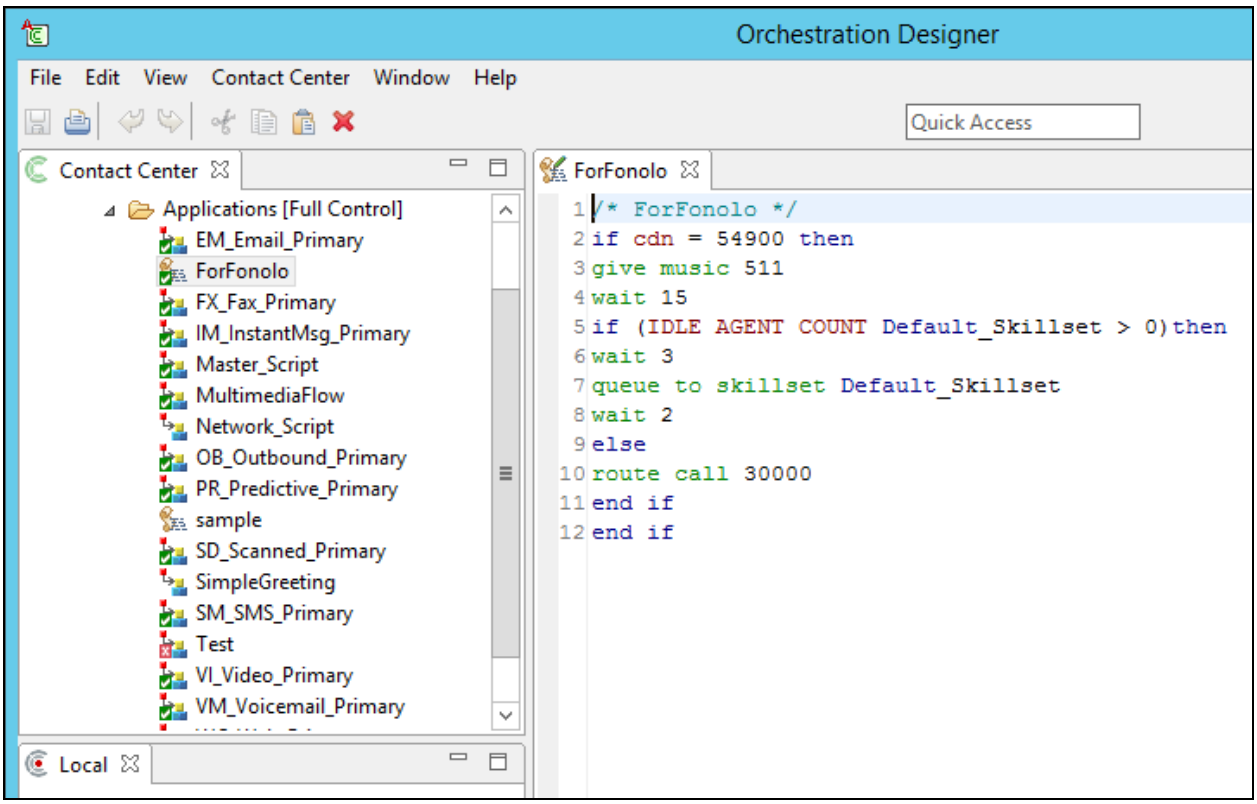
©2018 Avaya Inc. All Rights Reserved.

6. Configure Avaya Aura® Contact Center

The administration of the routing and basic connectivity between Communication Server 1000 and Contact Center or the setting up of Skillset, CDN, Scripts, Agents for a contact center type environment are not the focus of these Application Notes; however, some details are provided only for informational purposes and completeness.

This section provides a sample script that was used during the compliance testing. When a call is directed to this script, caller is connected to ICR if there are no agents available in the Skillset.

From Contact Center Select Launchpad, navigate to **Scripting → Orchestration Designer → Launch Orchestration Designer** (not shown) to open the **Orchestration Designer** window as shown below. A basic script is configured in the example below. When a call reaches the CDN **54900** that was configured during compliance testing and if agents are not available, then the call is routed to **30000** which is the distant steering code that was configured in **Section 5.2** to reach ICR.



©2018 Avaya Inc. All Rights Reserved.

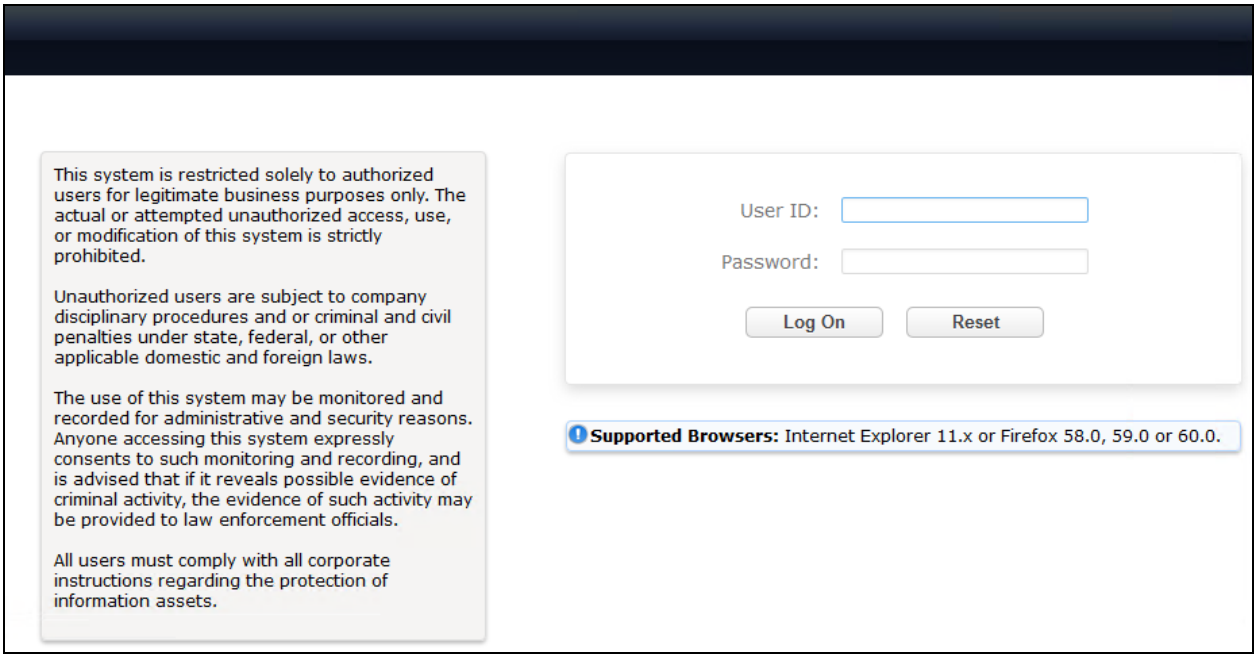
7. Configure Avaya Aura® Session Manager

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

- Launch System Manager
- Administer Domain
- Administer Locations
- Administer Adaptation
- Administer SIP Entities
- Administer Routing Policies
- Administer Dial Patterns

7.1. Launch System Manager

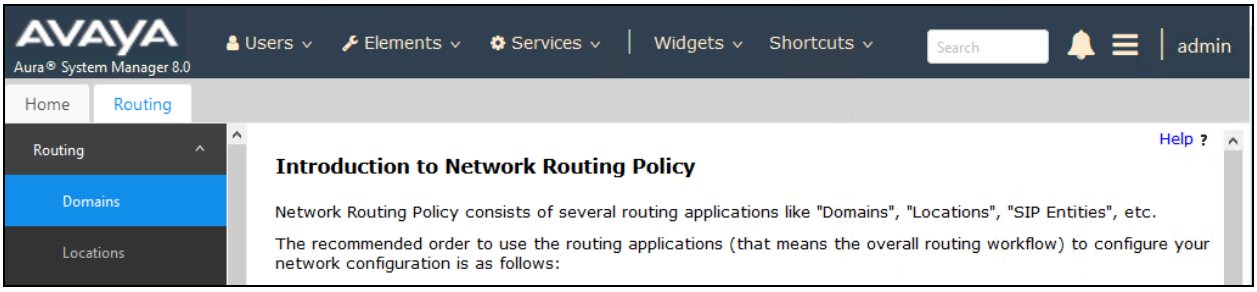
Access the System Manager web interface by using the URL "https://ip-address" in an Internet browser window, where "ip-address" is the IP address of System Manager. Log in using the appropriate credentials.



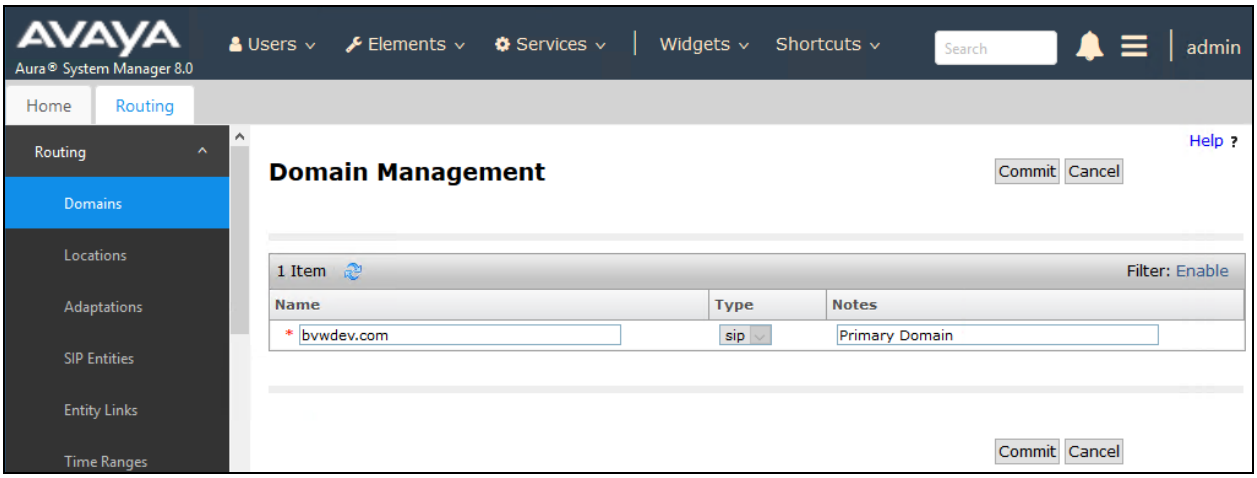
©2018 Avaya Inc. All Rights Reserved.

7.2. Administer Domain

In the subsequent screen (not shown), select **Elements → Routing** to display the **Introduction to Network Routing Policy** screen below. Select **Routing → Domains** from the left pane and click **New** in the subsequent screen (not shown) to add a new domain.



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



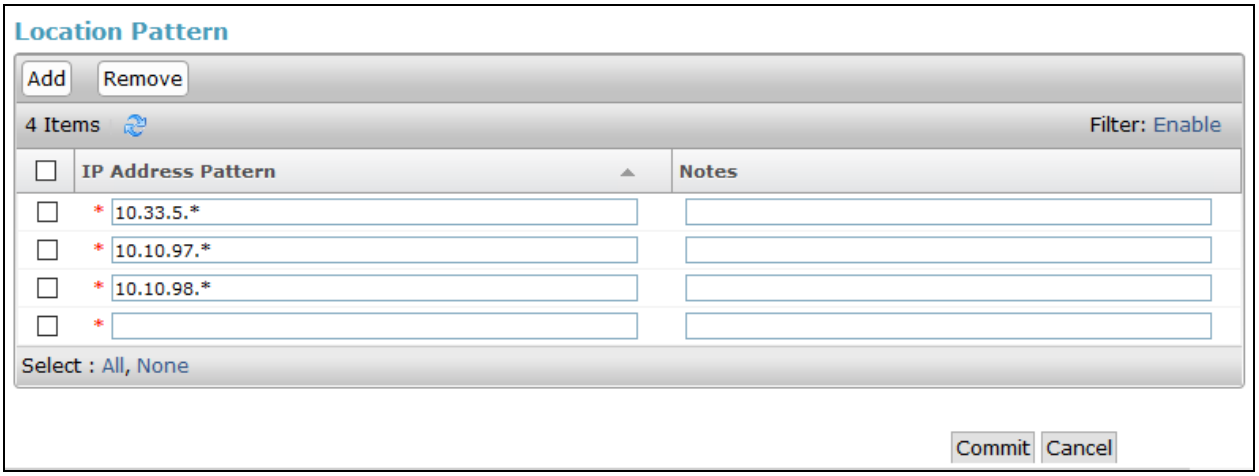
©2018 Avaya Inc. All Rights Reserved.

7.3. Administer Locations

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

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

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



©2018 Avaya Inc. All Rights Reserved.

7.4. Administer Adaptation

During compliance test, to make the call from and to Communication Server 1000 via Session Manager, an Adaptation to remove the phone-context in the SIP Message body from Communication Server 1000 was used.

Below are the steps that were used during compliance testing to create the needed Adaptation. Select **Adaptations** on the left panel menu and then click on the **New** button in the main window (not shown).

Enter the following for the Communication Server 1000 Adaptation.

- **Adaptation Name**: An informative name.
- **Module Name**: Select **CS1000Adapter**.
- **Module Parameter Type**: Select **Name-Value Parameter**.

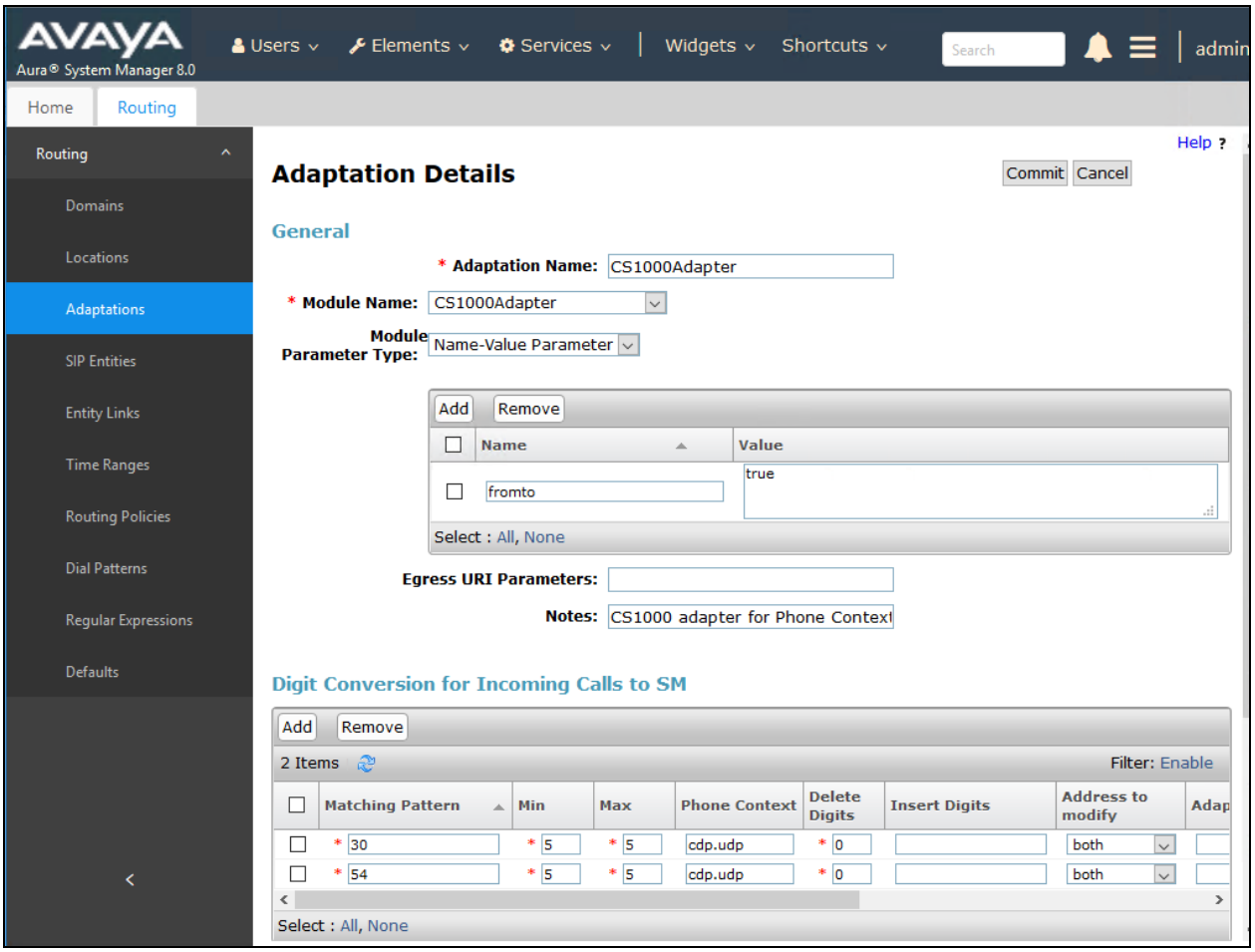
Click **Add** to add a new row for the following values as shown below table:

Name	**Value**
fromto	true

In the **Digit Conversion for Incoming Calls to SM**, add the **Matching Pattern**, which corresponds to the dialing plan used during this compliance testing along with the **Min** and **Max** length of the numbers being dialed and the **Phone Context**. During compliance testing, "30xxx" was the dialing plan for ICR and "54xxx" was the dialing plan for Communication Server 1000 with the min and max length of "5" and "cdp.udp" being the phone context. See dialing plan details in **Section 7.7**.

©2018 Avaya Inc. All Rights Reserved.

Once the correct information is entered click the **Commit** button. Below is the screenshot showing the Adaptation created for Communication Server 1000.



©2018 Avaya Inc. All Rights Reserved.

7.5. Administer SIP Entities

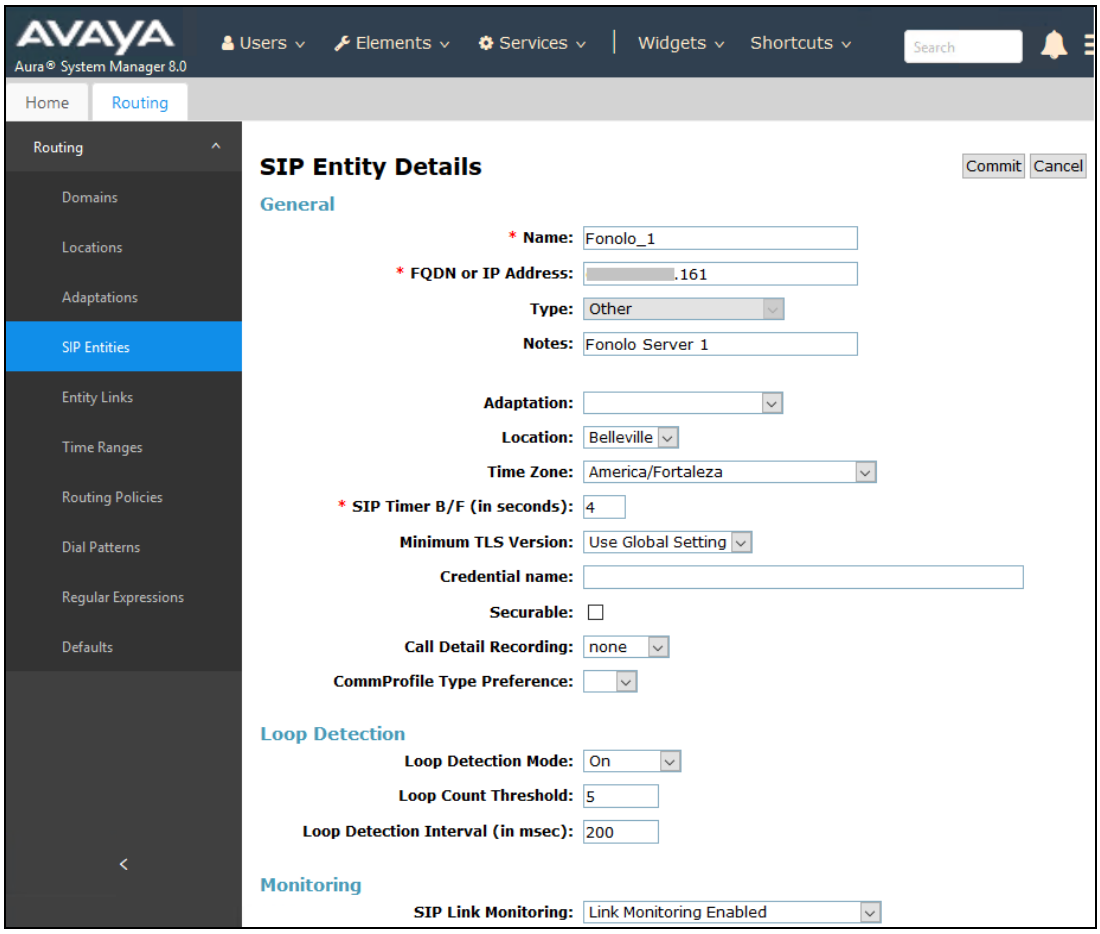
Add seven new SIP entities, six for ICR and one for the new SIP trunks with Communication Server 1000.

7.5.1. SIP Entity for Fonolo ICR

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

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

- **Name:** A descriptive name.
- **FQDN or IP Address:** The IP address of ICR SIP Server.
- **Type:** "Other".
- **Notes:** Any desired notes.
- **Location:** Select the ICR location name from **Section 7.3**.
- **Time Zone:** Select the applicable time zone.
- **SIP Link Monitoring:** Select "Link Monitoring Enabled".

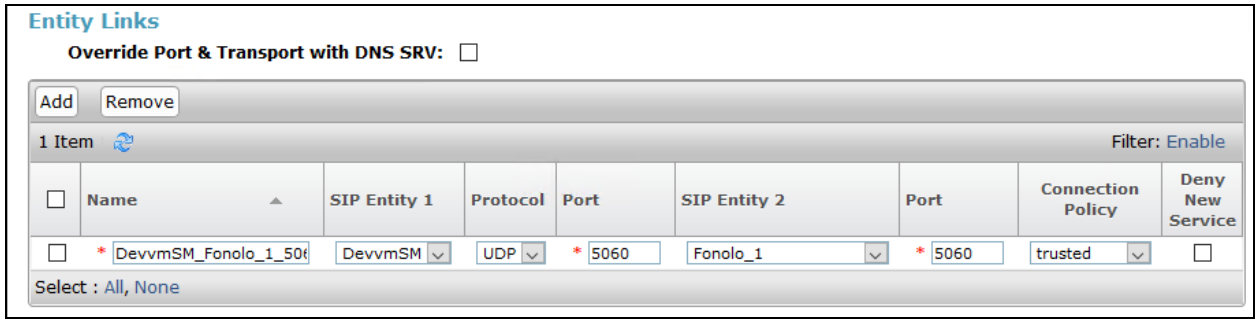


©2018 Avaya Inc. All Rights Reserved.

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

- **Name:** A descriptive name.
- **SIP Entity 1:** The Session Manager entity name, in this case “DevvmSM”.
- **Protocol:** “UDP”.
- **Port:** “5060”.
- **SIP Entity 2:** The ICR entity name from this section.
- **Port:** “5060”.
- **Connection Policy:** “trusted”.

Note that only UDP protocol was tested.



Repeat the above to configure a total of six SIP entities for ICR, since during the compliance testing two were used for outgoing calls from Communication Server 1000 to ICR and four were used for incoming calls from ICR to Communication Server 1000.

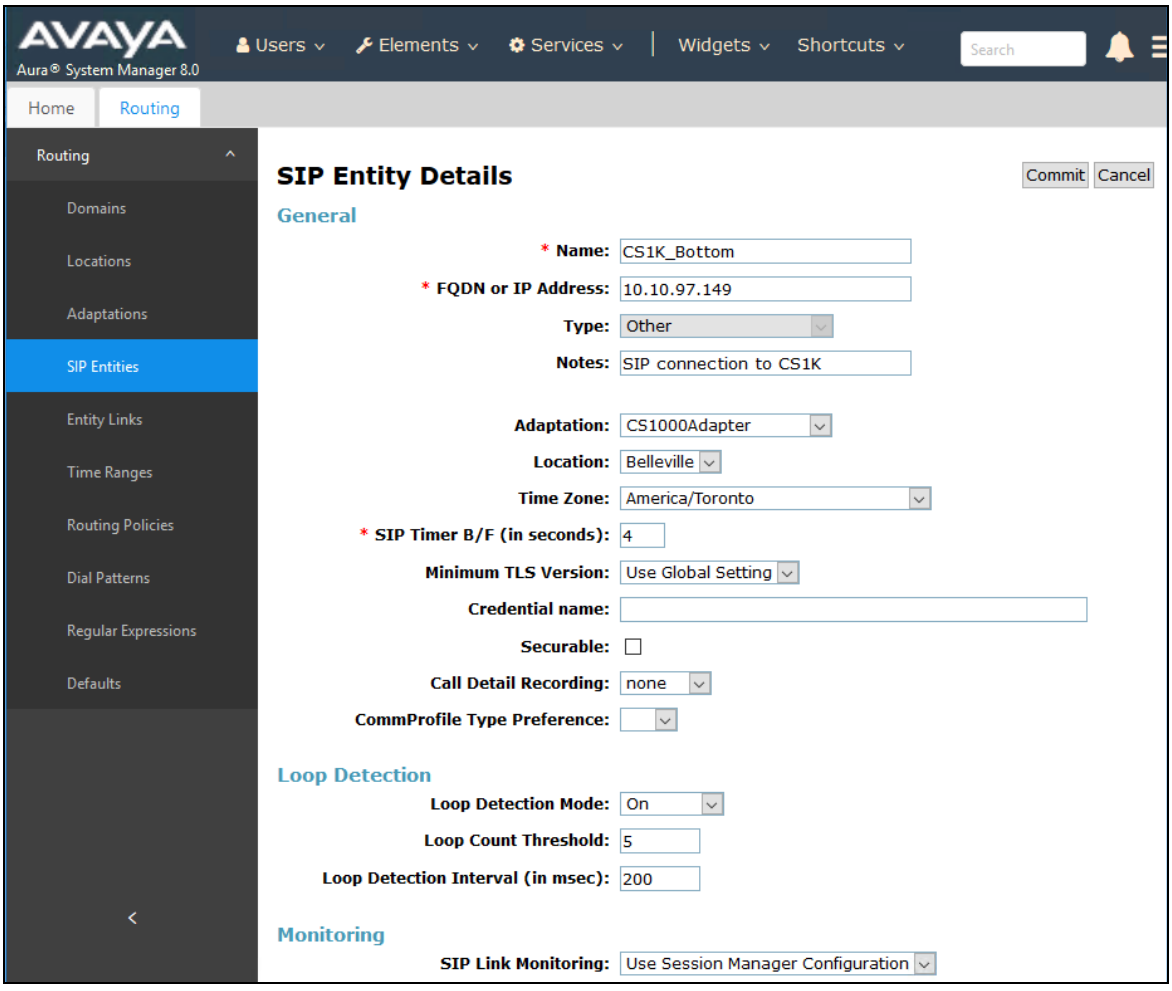
©2018 Avaya Inc. All Rights Reserved.

7.5.2. SIP Entity for Communication Server 1000

Select **Routing → SIP Entities** from the left pane and click **New** in the subsequent screen (not shown) to add a new SIP entity for Communication Server 1000. Note that this SIP entity is used for integration with ICR.

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

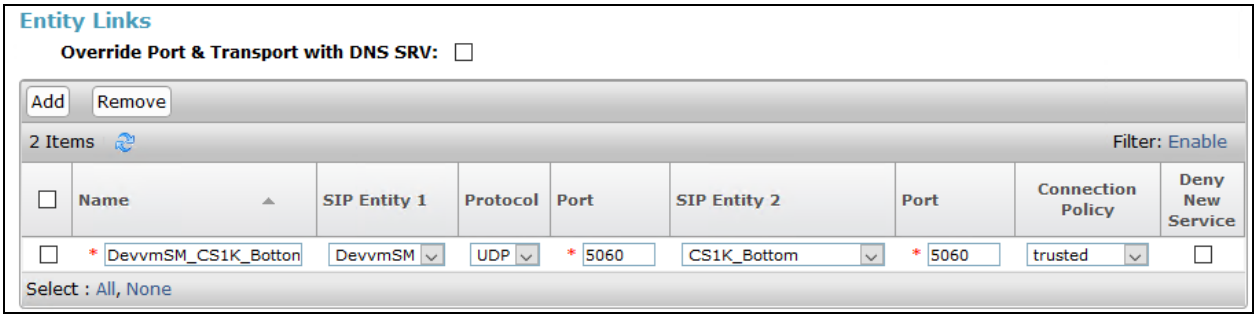
- **Name:** A descriptive name.
- **FQDN or IP Address:** The IP address of an existing Communication Server 1000 node IP.
- **Type:** "Other".
- **Notes:** Any desired notes.
- **Adaptation:** Select the adaptation configured in **Section 7.4**.
- **Location:** Select the applicable location for Communication Server 1000.
- **Time Zone:** Select the applicable time zone.



©2018 Avaya Inc. All Rights Reserved.

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

- **Name:** A descriptive name.
- **SIP Entity 1:** The Session Manager entity name, in this case "DevvmSM".
- **Protocol:** The signaling group transport (UDP) method from **Section 5.4**.
- **Port:** The signaling group listen port (5060) number from **Section 5.4**.
- **SIP Entity 2:** The Communication Server 1000 entity name from this section.
- **Port:** The signaling group listen port (5060) number from **Section 5.4**.
- **Connection Policy:** "trusted".



©2018 Avaya Inc. All Rights Reserved.

7.6. Administer Routing Policies

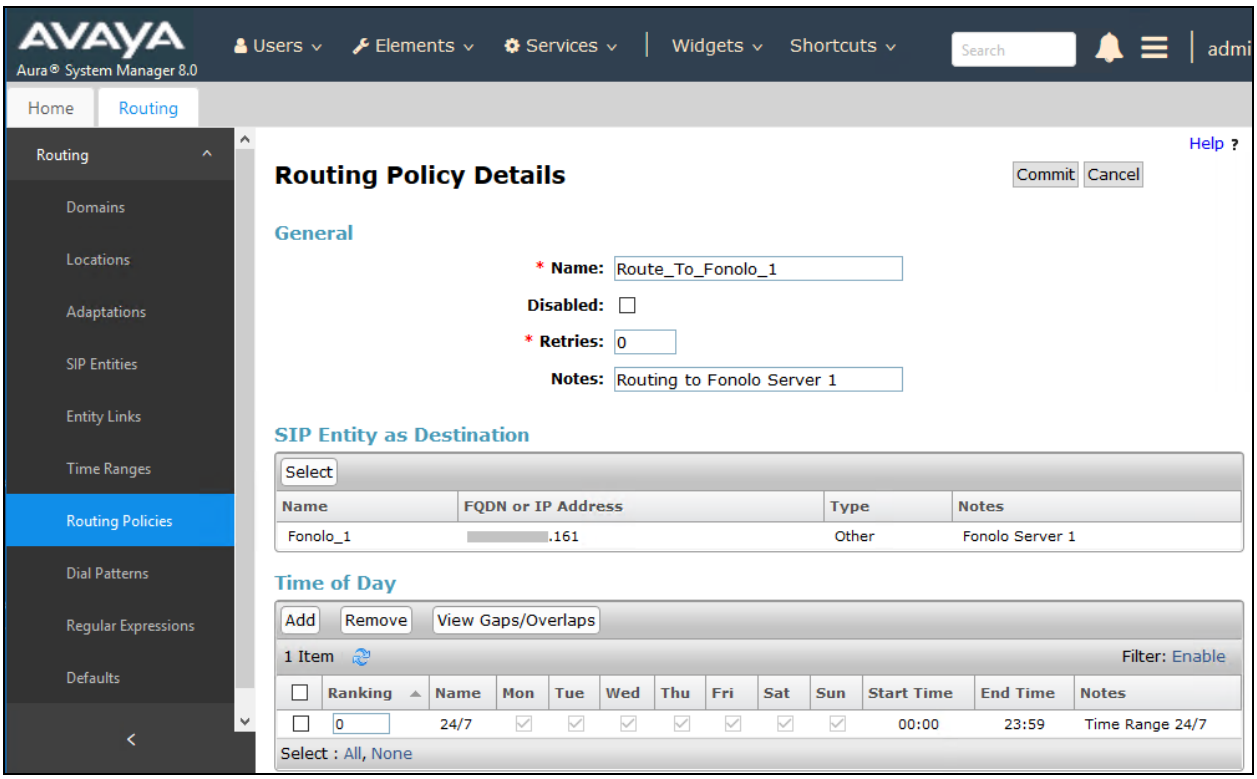
Add two new routing policies, one for ICR and one for the new SIP trunks with Communication Server 1000.

7.6.1. Routing Policy for Fonolo ICR

Select **Routing → Routing Policies** from the left pane and click **New** in the subsequent screen (not shown) to add a new routing policy for ICR.

The **Routing Policy Details** screen is displayed. In the **General** sub-section, enter a descriptive **Name**, and retain the default values in the remaining fields.

In the **SIP Entity as Destination** sub-section, click **Select** and select the ICR entity name from **Section 7.5.1**. In the **Time of Day** sub-section, enter "0" for **Ranking**. Ranking option is only configured for the two outgoing routing policies of ICR so that calls can be load balanced. The screen below shows the result of the selection.



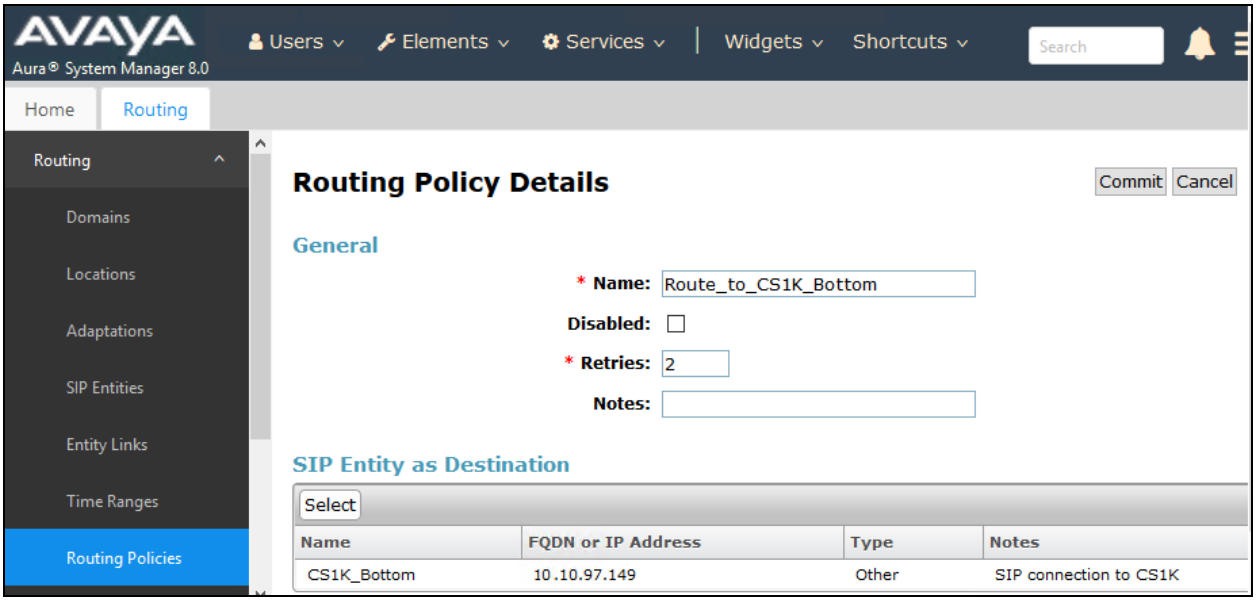
©2018 Avaya Inc. All Rights Reserved.

7.6.2. Routing Policy for Communication Server 1000

Select **Routing → Routing Policies** from the left pane and click **New** in the subsequent screen (not shown) to add a new routing policy for Communication Server 1000.

The **Routing Policy Details** screen is displayed. In the **General** sub-section, enter a descriptive **Name**, and retain the default values in the remaining fields.

In the **SIP Entity as Destination** sub-section, click **Select** and select the Communication Server 1000 entity name from **Section 7.5.2**. The screen below shows the result of the selection.



©2018 Avaya Inc. All Rights Reserved.

7.7. Administer Dial Patterns

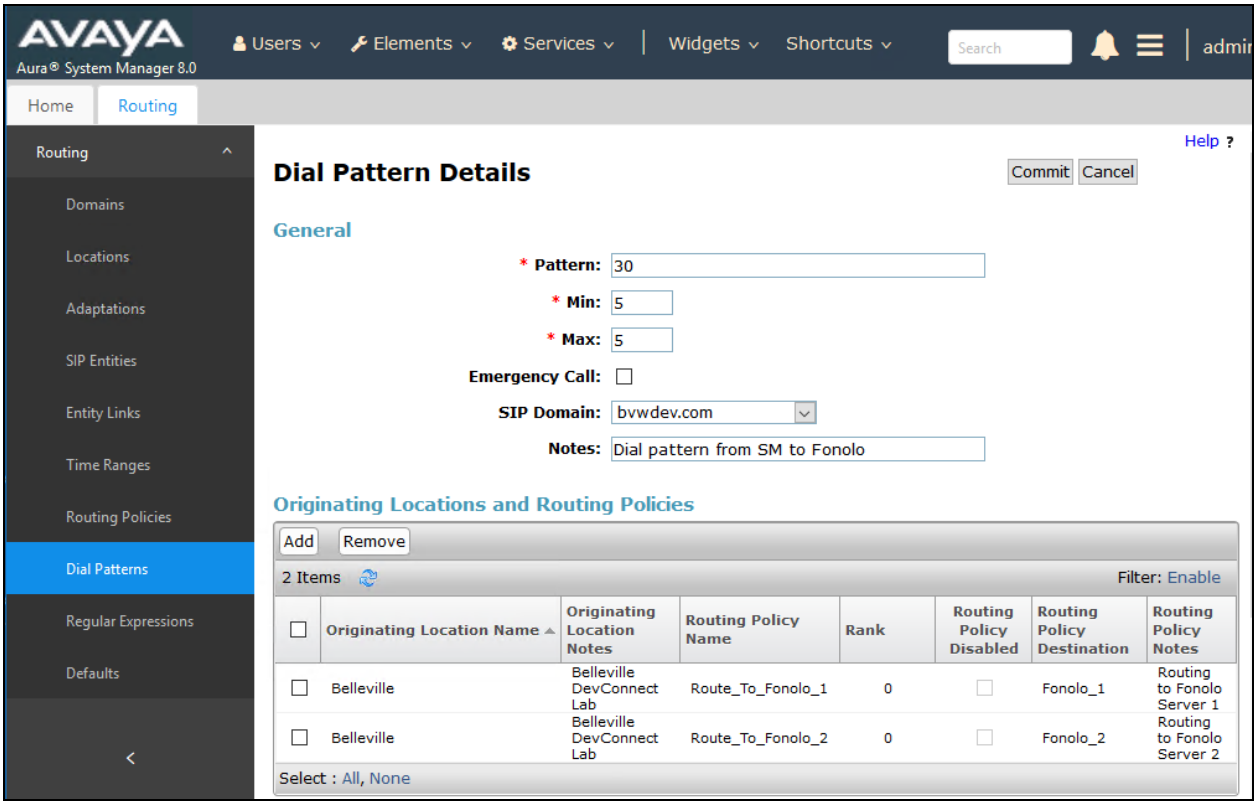
Add a new dial pattern for ICR and Communication Server 1000.

7.7.1. Dial Pattern for Fonolo ICR

Select **Routing → Dial Patterns** from the left pane and click **New** in the subsequent screen (not shown) to add a new dial pattern to reach ICR. The **Dial Pattern Details** screen is displayed. In the **General** sub-section, enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Pattern:** A dial pattern to match, in this case "30".
- **Min:** The minimum number of digits to match.
- **Max:** The maximum number of digits to match.
- **SIP Domain:** The signaling group domain name from **Section 7.2**.

In the **Originating Locations and Routing Policies** sub-section, click **Add** and create an entry for reaching ICR. In the compliance testing, the entry allowed for call originations from all Communication Server 1000 endpoints in locations "Belleville". The ICR routing policy from **Section 7.6.1** was selected as shown below. Note that two routing policies are selected since during this compliance testing, two outgoing routing policies were configured for calls made from Communication Server 1000 to ICR.



©2018 Avaya Inc. All Rights Reserved.

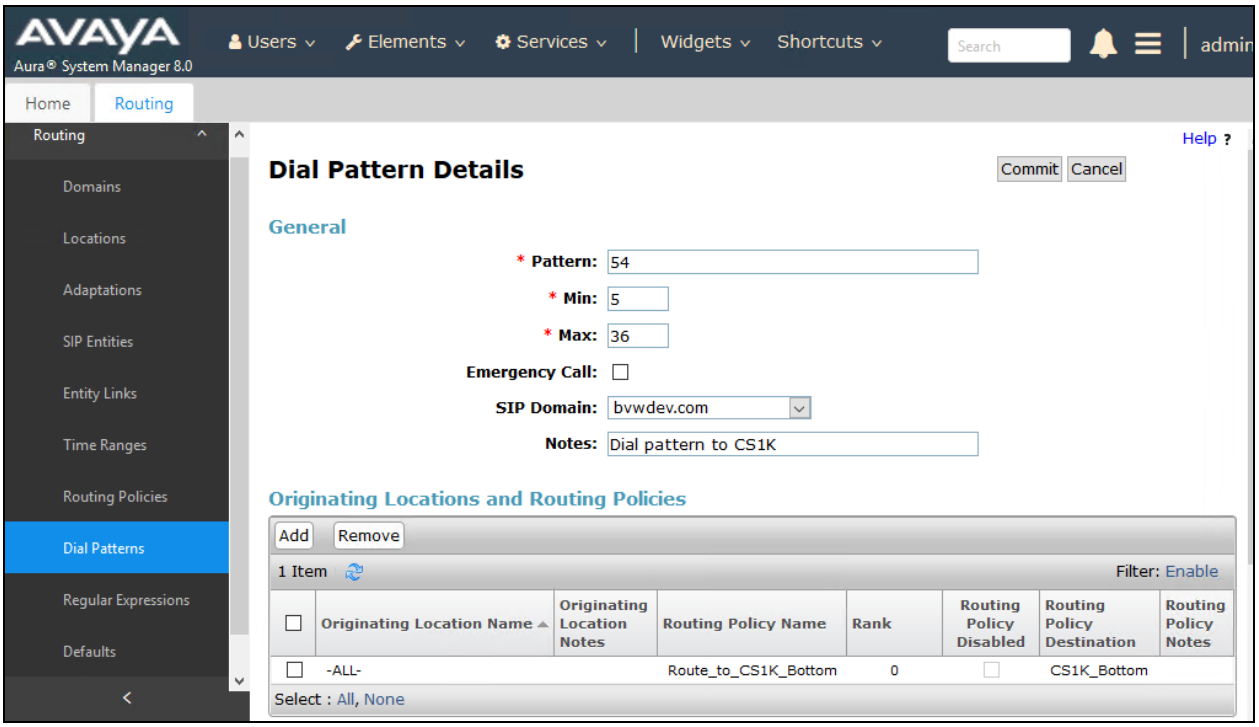
7.7.2. Dial Pattern for Communication Server 1000

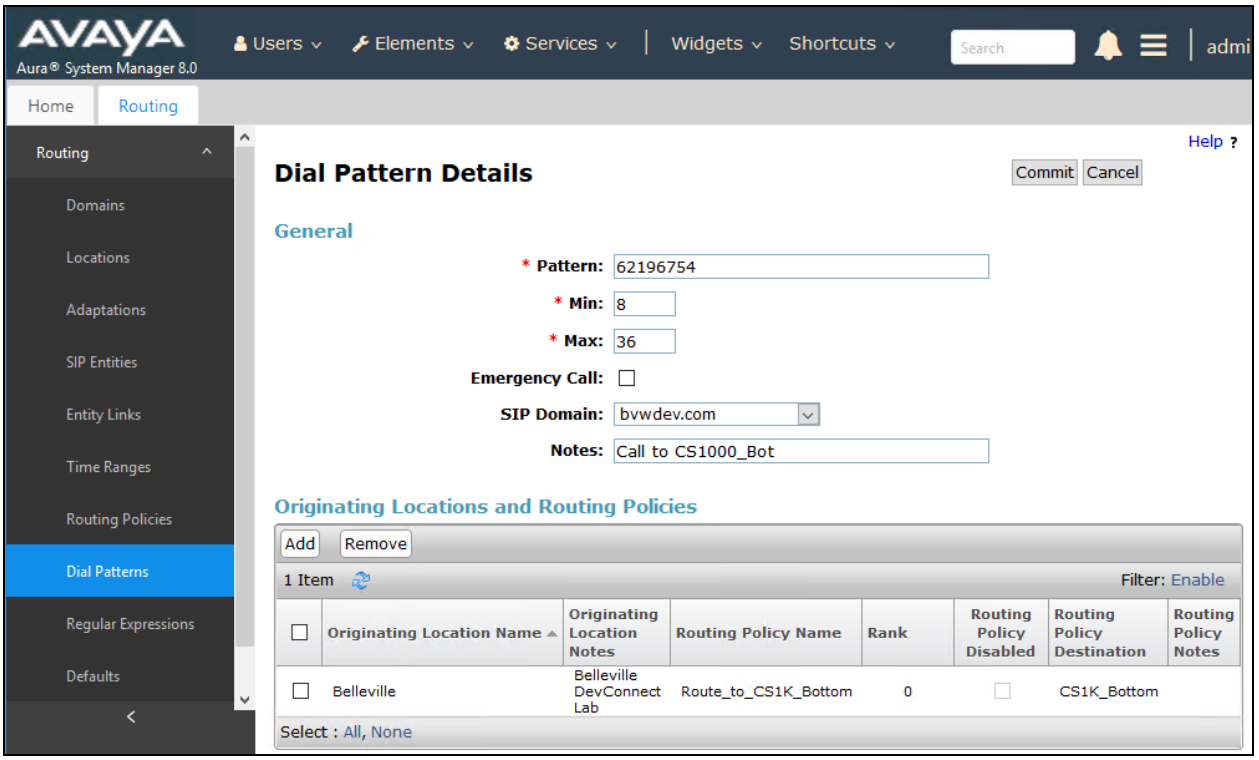
Select **Routing → Dial Patterns** from the left pane and click **New** in the subsequent screen (not shown) to add a new dial pattern to reach Communication Server 1000. The **Dial Pattern Details** screen is displayed. In the **General** sub-section, enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Pattern:** A dial pattern to match, in this case "54" and "62196754".
- **Min:** The minimum number of digits to match.
- **Max:** The maximum number of digits to match.
- **SIP Domain:** The signaling group domain name from **Section 7.2**.

©2018 Avaya Inc. All Rights Reserved.

In the **Originating Locations and Routing Policies** sub-section, click **Add** and create an entry for reaching Communication Server 1000. In the compliance testing, the entry allowed for call originations from all ICR endpoints in locations "-ALL-" or "Belleville". The Communication Server 1000 routing policy from **Section 7.6.2** was selected as shown below.





©2018 Avaya Inc. All Rights Reserved.

8. Configure Fonolo In-Call Rescue

This section provides a "snapshot" of ICR configuration used during compliance testing. ICR is typically configured for customers by Fonolo. The screen shots and partial configuration shown below, supplied by Fonolo, are provided only for reference. These represent only an example of the configuration GUI of ICR, available through the Fonolo Customer Portal at https://portal.fonolo.com/. Other configurations are possible. Contact Fonolo for details on how to configure ICR. The configuration operations described in this section can be summarized as follows:

- Add a New SIP Trunk Group
- Adding the Agent Call-Back Endpoint
- Adding a New Call-Back Profile

8.1. Add a New SIP Trunk Group

Navigate to **Telco → SIP Trunks** and click the **Add New SIP Trunk Group** button (not shown) at the top of the page. Define a new label to identify this SIP trunk group. During compliance testing **Avaya SM- CS1000** was used as the label. Then select **Add New SIP Trunk** (not shown).

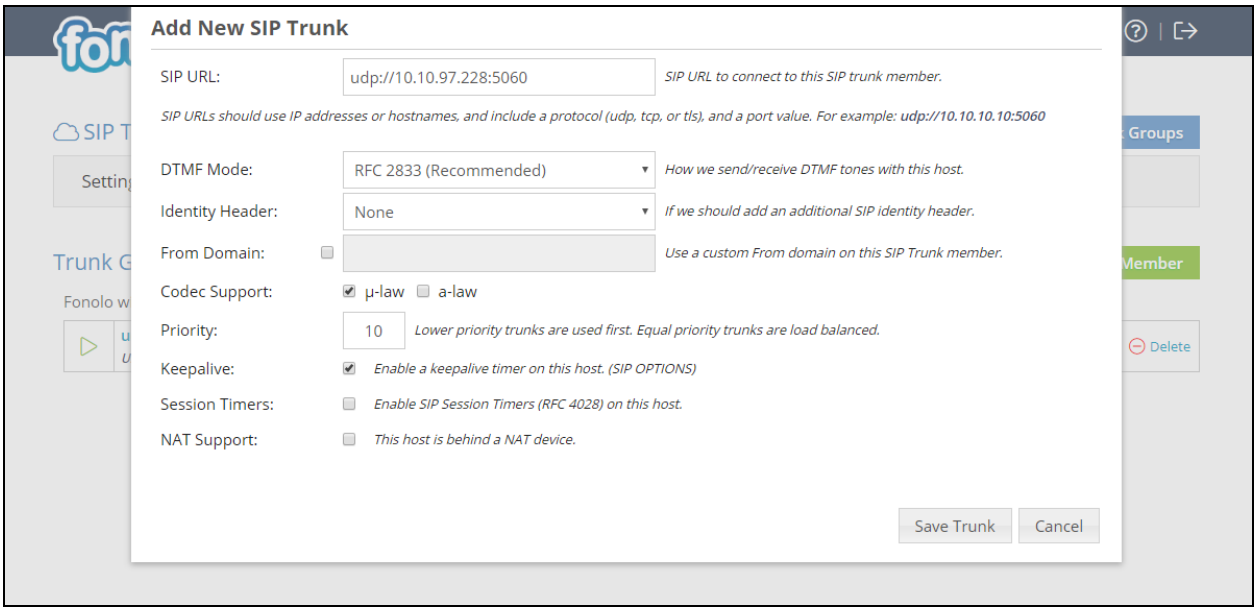
Under the **Members** tab in this new SIP trunk group, click the **Add New Member** button (not shown), and the **Add New SIP Trunk** dialog will appear as shown below.

Under **Add New SIP Trunk**:

- **SIP URL**: The IP address of Session Manager formatted as a fully qualified URL, defining the protocol and SIP port.
- **DTMF Mode**: The mode to use for sending DTMF tones. Default is RFC 2833.
- **Identity Header**: Whether to include an identity header (either Remote-Party-ID or P-Asserted-Identity). Default is none.
- **Codec Support**: The list of audio codecs to use. Default is μ-law.
- **Priority**: A numeric value that can be used to determine failover or load balance groups when more than one SIP trunk group member is defined. Members with lower priority values are used first; members with an equal priority values are load balanced.
- **Keepalive**: This instructs the Fonolo platform to perform regular keep-alive using SIP OPTIONS requests, based on the number of seconds defined. Default is disabled.
- **Session Timers**: If Fonolo should enable SIP Session Timers (RFC 4028). Default is disabled.
- **NAT Support**: If the SIP trunk group member specified is located behind a NAT (Network Address Translation) device. Fonolo can compensate for the un-reachable RTP data specified in the SDP body of the INVITE request, using symmetric RTP.

©2018 Avaya Inc. All Rights Reserved.

Add the IP address of Session Manager, formatted as a fully qualified URL, defining the protocol and SIP port, then click the **Save Trunk** button. During compliance testing, the protocol **UDP** and port **5060** is used for the SIP service with Session Manager, and the default values for the remaining SIP trunk group member settings.

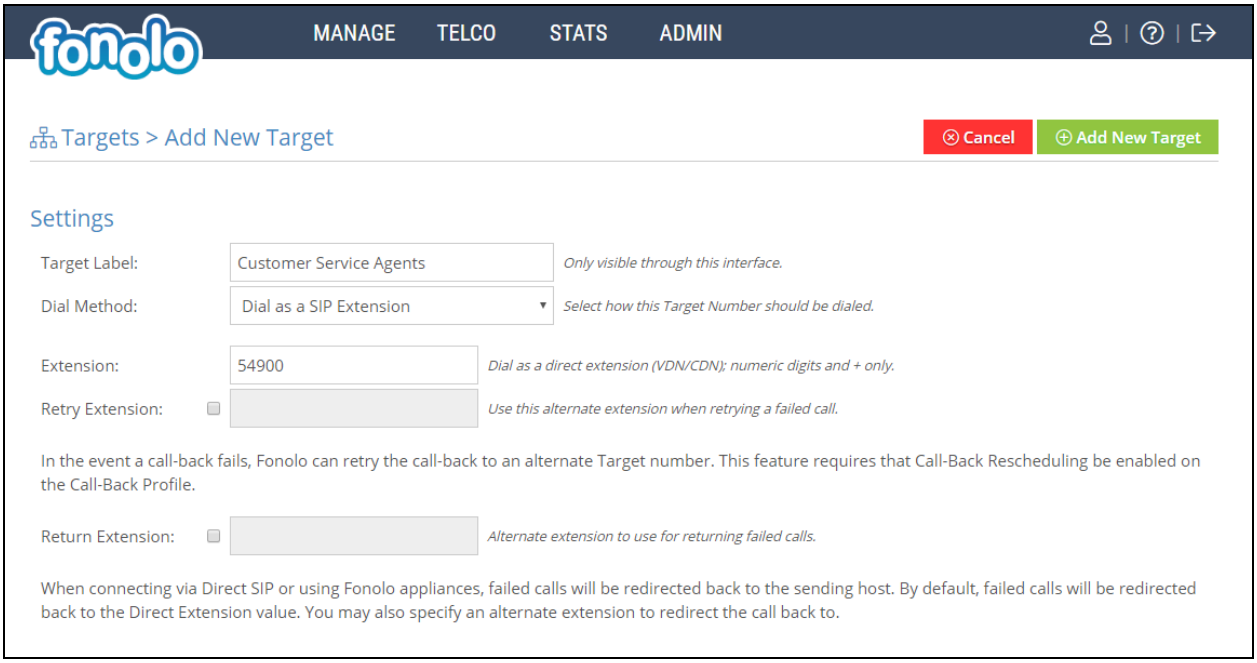


©2018 Avaya Inc. All Rights Reserved.

8.2. Adding the Agent Call-Back Endpoint

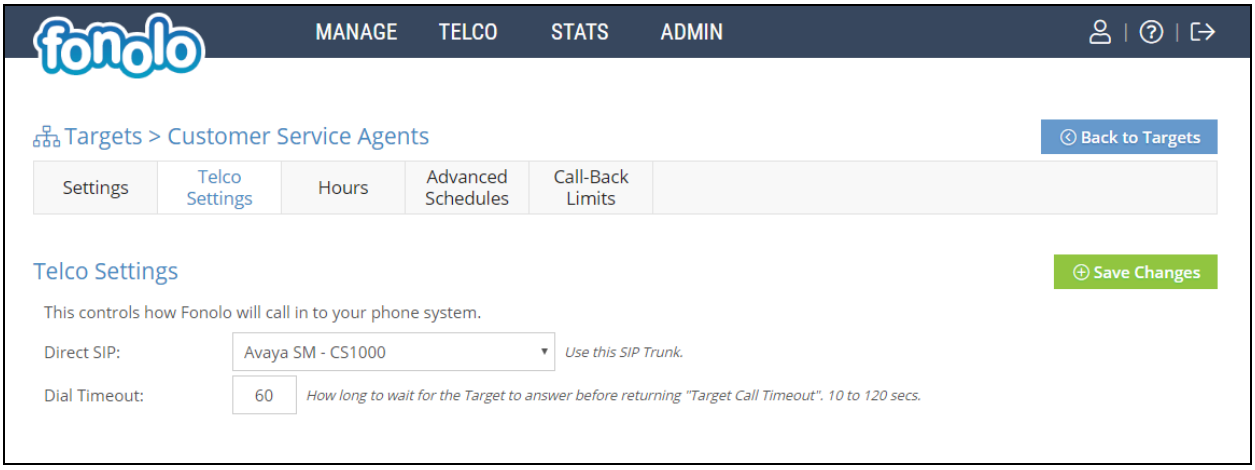
Navigate to **Manage → Targets** and click the **Add New Target** button (not shown). Define a new label to identify this new Target. During compliance testing **Customer Service Agents** was used as the **Target Label**. Select the **Dial as SIP Extension** option (shown below) for **Dial Method** and enter the CDN to reach the pertinent skillset via Session Manager in the **Extension** field.

During compliance testing, CDN 54900 was pre-configured on Communication Server 1000 which was accessible via Session Manager. Then click on the **Add New Target** button to save this Target.



©2018 Avaya Inc. All Rights Reserved.

From the **Telco Settings** section of the newly added Target, select the SIP trunk to use for this Target, from the **Direct SIP** drop down menu shown below. Select the **Avaya SM – CS1000** SIP trunk, added in **Section 8.1**, and then click the **Save Changes** button.



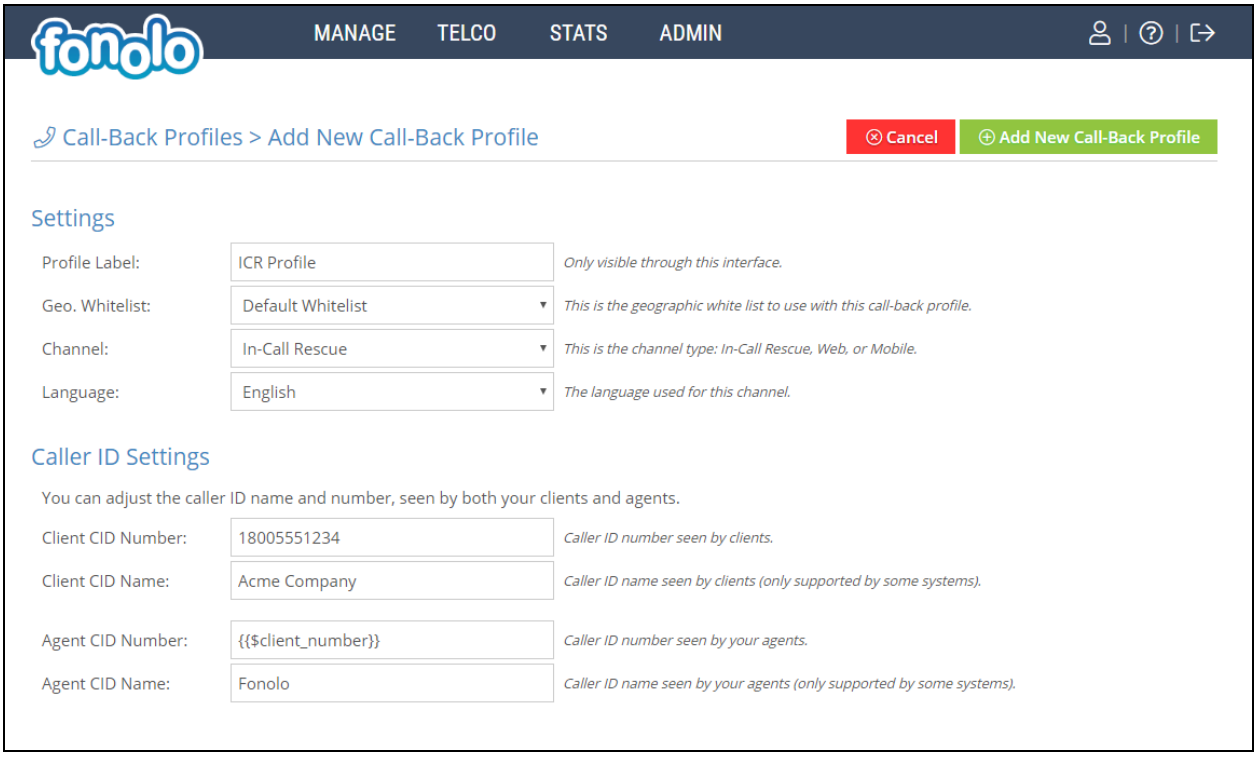
©2018 Avaya Inc. All Rights Reserved.

8.3. Adding a New Call-Back Profile

Navigate to **Manage → Call-Back Profiles** and click on the **Add New Profile** button (not shown), and configure the new profile:

- **Profile Label:** A label to identify this new profile.
- **Geo Whitelist:** A geographic whitelist to use for this new profile.
- **Channel:** Select "In-Call Rescue".
- **Language:** Select the appropriate language for this skill set queue.
- **Client CID Number:** The Caller-ID number the customer will see.
- **Client CID Name:** The Caller-ID name the customer will see.
- **Agent CID Number:** The Caller-ID number the agent will see.
- **Agent CID Name:** The Caller-ID name the agent will see.

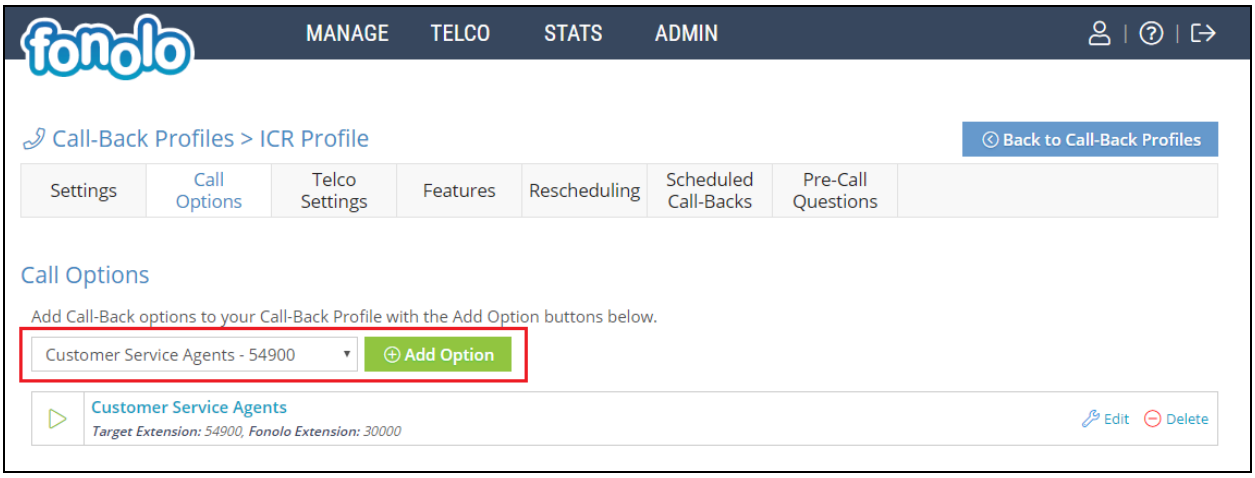
Click the **Add New Call-Back Profile** button to add this new profile.



©2018 Avaya Inc. All Rights Reserved.

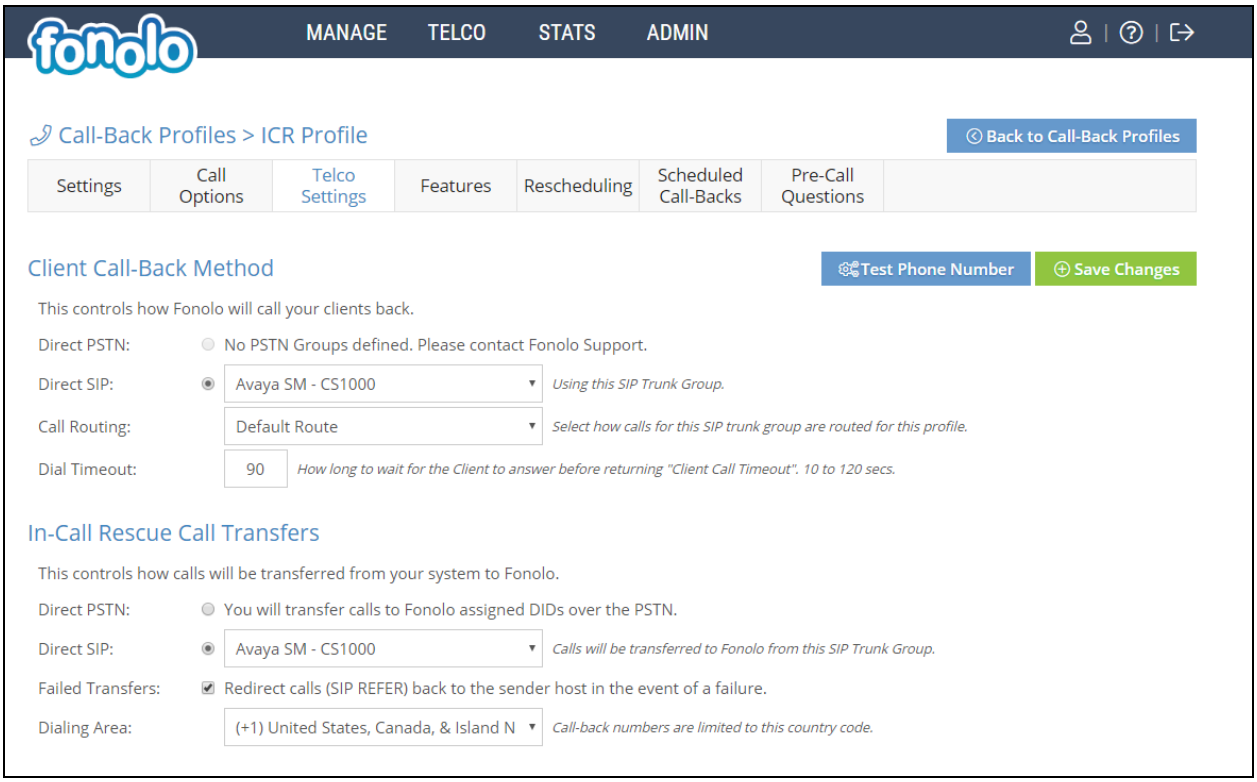
From the **Call Options** section of the new **Call-Back Profile**, select the Target added in **Section 8.2** (from the drop-down menu highlighted below), and click the **Add Option** link to add the CDN value to the section on the left, as shown below, then click the **Save Changes** (not shown) button.

This associates the Target CDN with this new **Call-Back Profile**. Multiple call options can be associated with a single **Call-Back Profile**, one for each skill call-backs are being offered on.

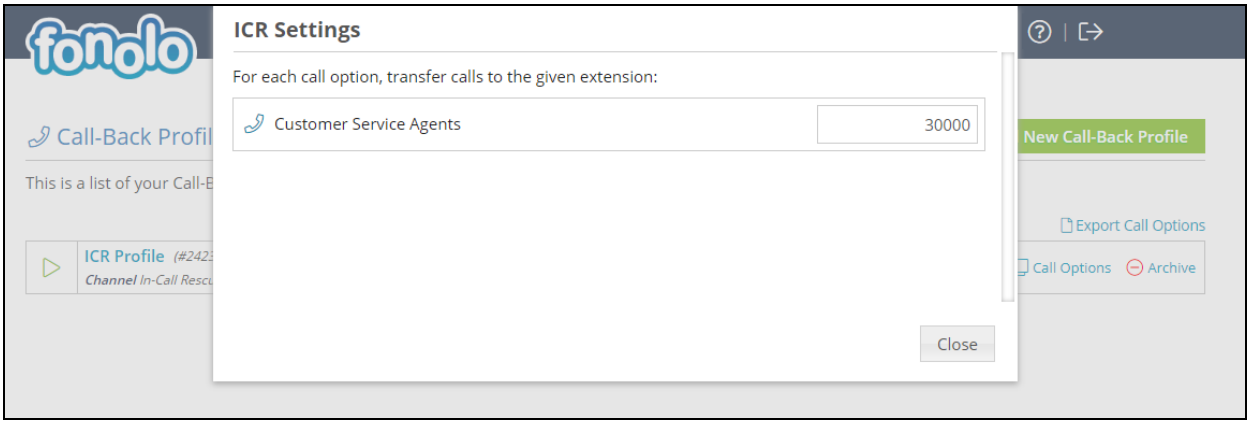


©2018 Avaya Inc. All Rights Reserved.

From the **Telco Settings** section of the new **Call-Back Profile**, select the **Avaya SM – CS1000** SIP trunk group created in **Section 8.1** as the **Direct SIP** value under both the **Client Call-Back Method** and the **In-Call Rescue Call Transfers** section, as shown below, then click the **Save Changes** button.



Navigate to **Manage → Call-Back Profiles** and click on the **Call Options** link on the newly created **Call-Back Profile** (not shown). The **ICR Settings** dialog will appear (shown below) and include the inbound extensions to use for CDN. These are the extensions to transfer calls to, on the ICR system, when a call opts-in for a call-back. During compliance testing, the extension 30000 is configured on the Fonolo system.



©2018 Avaya Inc. All Rights Reserved.

9. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Communication Server 1000, Session Manager and Fonolo ICR.

9.1. Verify Avaya Communication Server 1000

On Communication Server, verify the status of the SIP route by using **LD 32** and typing "stat vtrm [cust no] [route no]", in this case which is **stat vtrm 0 6**, where "0" is the customer number and "6" is the SIP route configured (refer to **Appendix B**).

```
>ld 32
.stat vtrm 0 6

*********************************
STATUS OF VRTL IP TRK ROUTE AND MBRS
*********************************

================================
CUST ROUTE PROTOCOL  CALL_DIRCTN
0    6     SIP       IN AND OUT

DCH 5  SSRC TOTAL 4096  SSRC USED 128  SSRC AVAILABLE 3968

MBR STATUS

IDLE UNREGISTERED 0
IDLE REGISTERED 64
BUSY 0
MBSY 0
DSBL UNREGISTERED 0
DSBL REGISTERED 0
LCKO 0
```

Verify the status of the local SIP trunk group by using the "trac [customer no] [ACOD of route]" command in **LD 80**. In this case **trac 0 8006**, where "0" is the customer number and "8006" is the ACOD for route 6 configued (refer to **Appendix B**). Verify that the trunks are in **IDLE** state as shown below.

```
>ld 80
.trac 0 8006

ROUT 6  IPTI NTRK 64
5   100 0 03 04  V PHYSICAL TN 000 0 00 00   IDLE
 4   100 0 03 03  V PHYSICAL TN 000 0 00 00   IDLE
 3   100 0 03 02  V PHYSICAL TN 000 0 00 00   IDLE
 2   100 0 03 01  V PHYSICAL TN 000 0 00 00   IDLE
 1   100 0 03 00  V PHYSICAL TN 000 0 00 00   IDLE
```


©2018 Avaya Inc. All Rights Reserved.

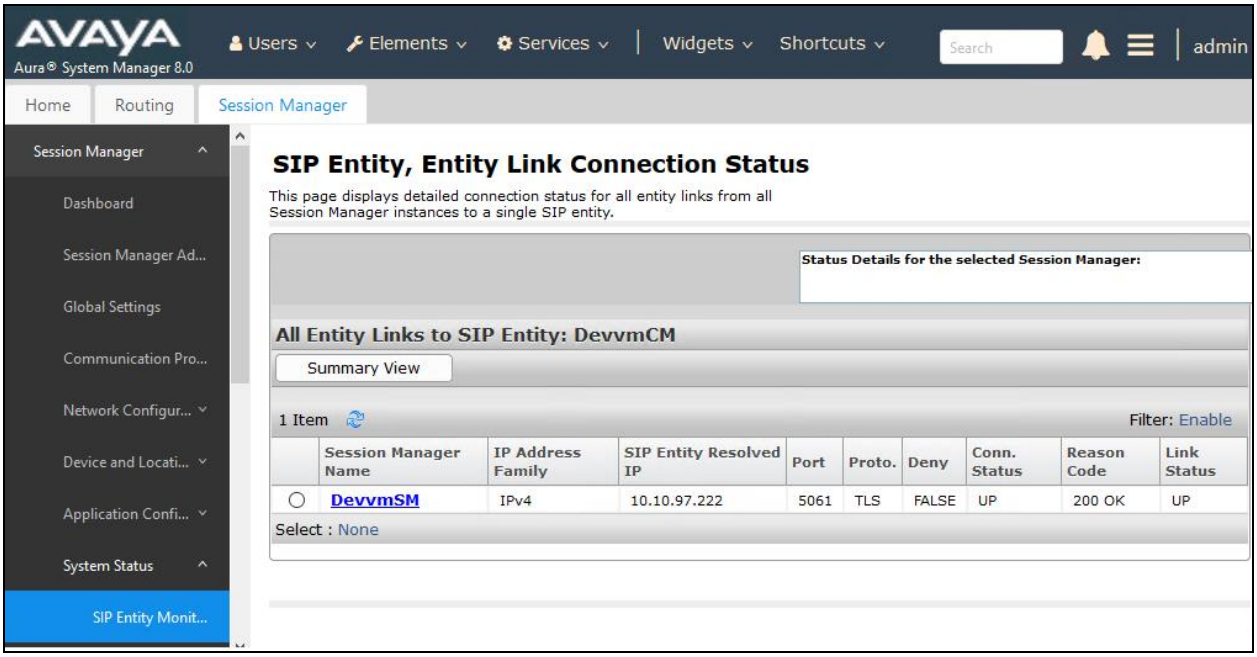
The following tests were also performed to verify proper configuration of ICR with Communication Server 1000.

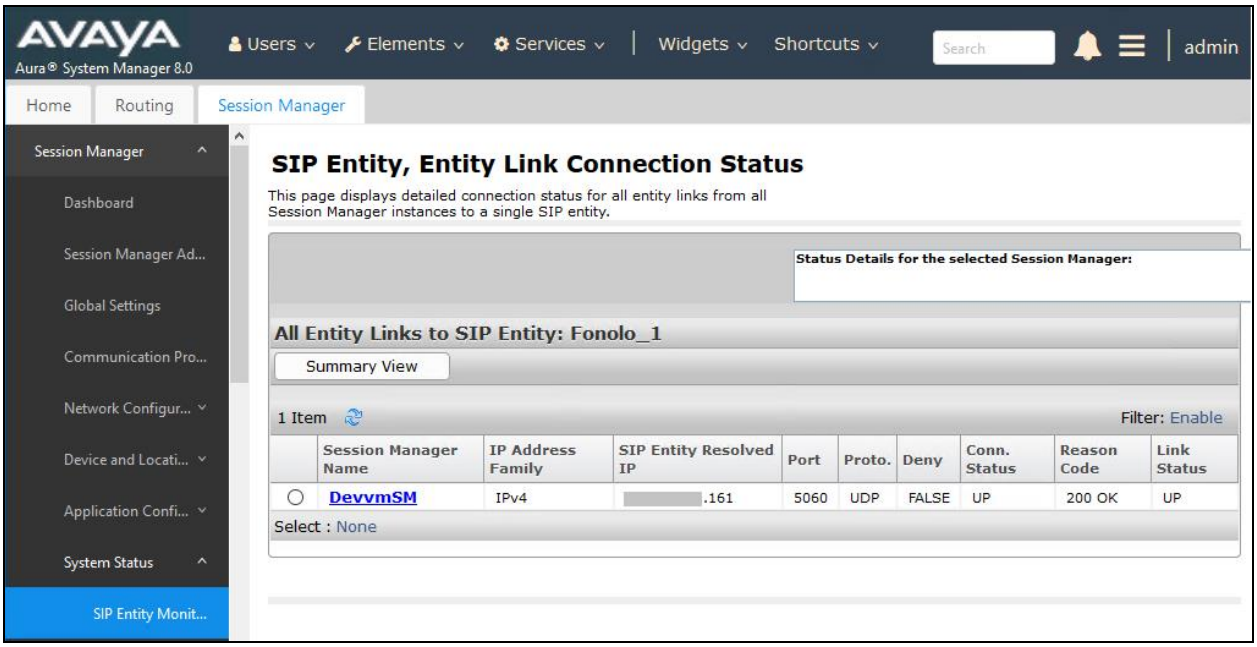
- PSTN caller can select the call back option and get redirected to ICR via Communication Server 1000/Session Manager.
- PSTN caller can hear the ICR menu and make the required choices.
- ICR can recognize the choices made by the PSTN user.
- ICR can call the CDN and wait for an available agent.
- ICR can call out to the PSTN caller and connect them to an available agent.

©2018 Avaya Inc. All Rights Reserved.

9.2. Verify Avaya Aura® Session Manager

Navigate to **Elements → Session Manager → System Status → SIP Entity Monitoring** and select the Communication Server 1000 SIP Entity. Verify the **Link Status** is **Up**. Repeat the same procedure selecting the ICR SIP Entity and verify the **Link Status** is **Up**.

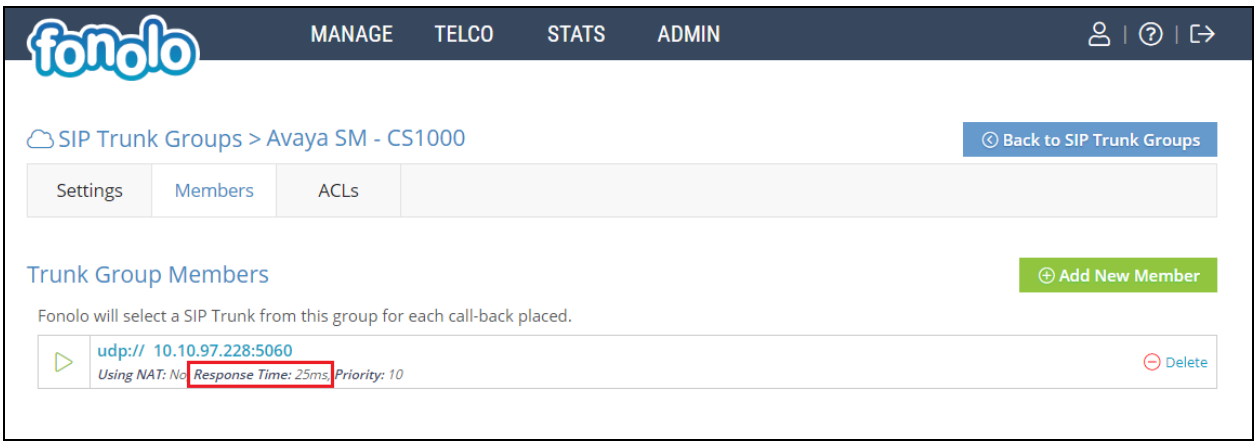




©2018 Avaya Inc. All Rights Reserved.

9.3. Verify Fonolo In-Call Rescue

In the Fonolo web portal, verify the link status of the SIP trunk group to the Session Manager, by navigating to **Telco → SIP Trunks** (not shown). Each SIP trunk group member will have a response time value, indicating the network latency (in milliseconds) between the Fonolo network, and the Session Manager. A positive **Response Time** value indicates a positive link status.



Additional information is available through the **Stats → Graphs** section of the Fonolo web portal (not shown).

10. Conclusion

These Application Notes describe the configuration steps required for Fonolo In Call Rescue to successfully interoperate with Avaya Communication Server 1000 and Avaya Aura® Session Manager. All feature and serviceability test cases were completed and passed with the exceptions/observations noted in **Section 2.2**.

©2018 Avaya Inc. All Rights Reserved.

11. 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. *Communication Server 1000E Installation and Commissioning*, Release 7.6, NN43041-310.
2. *Element Manager System Reference – Administration - Avaya Communication Server 1000*, Release 7.6, NN43001-632.
3. *Avaya Communication Server 1000 Co-resident Call Server and Signaling Server Fundamentals* Release 7.6, *NN43001*-509.
4. *Avaya Communication Server 1000 - Software Input Output Reference — Administration* Release 7.6, NN43001-611.
5. *Deploying Avaya Aura® System Manager in Virtual Appliance*, 8.0. Issue 2. September 2018.
6. *Administering Avaya Aura® System Manager for Release 8.0*, Release 8.0. Issue 3. September 2018.

Fonolo provides their documentation upon delivery of their products/services.

©2018 Avaya Inc. All Rights Reserved.

Appendix A

Avaya Communication Server 1000 R7.6 - Linux Patches

```
Product Release: 7.65.16.00
In system patches: 9
PATCH#  NAME       IN_SERVICE   DATE      SPECINS  TYPE   RPM
17      p33125_1   Yes          19/02/16  NO       FRU    cs1000-OS-1.00.00.00-00.noarch
18      p33274_1   Yes          19/02/16  YES      FRU    initscripts-8.45.25-1.el5.i386
19      p33384_1   Yes          19/02/16  NO       FRU    cs1000-OS-1.00.00.00-00.noarch
21      p33493_1   Yes          19/02/16  NO       FRU    cs1000-OS-1.00.00.00-00.noarch
23      p33557_1   Yes          19/02/16  YES      FRU    cs1000-OS-1.00.00.00-00.noarch
47      p33774_1   Yes          04/07/17  YES      FRU    cs1000-OS-1.00.00.00-00.noarch
48      p31484_1   Yes          19/02/16  NO       FRU    cs1000-shared-general-7.65.16-00.i386
67      p33584_1   Yes          06/07/16  YES      FRU    cs1000-OS-1.00.00.00-00.noarch
68      p33673_1   Yes          06/07/16  NO       FRU    net-snmp-5.3.2.2-5.el5.i386
In System service updates: 46
PATCH#  IN_SERVICE   DATE       SPECINS   REMOVABLE   NAME
0       Yes          04/07/17   YES       YES         cs1000-bcc-7.65.16.23-19.i386.000
1       Yes          05/07/16   YES       YES         cs1000-patchWeb-7.65.16.23-2.i386.000
2       Yes          19/02/16   NO        YES         cs1000-snmp-7.65.16.21-00.i686.000
3       Yes          19/02/16   YES       YES         cs1000-ipsec-7.65.16.22-1.i386.000
4       Yes          19/02/16   YES       YES         cs1000-csoneksvrmgr-7.65.16.22-5.i386.000
5       Yes          19/02/16   YES       YES         cs1000-baseWeb-7.65.16.22-4.i386.000
7       Yes          19/02/16   NO        YES         bash-3.2-33.el5_11.4.i386.000
8       Yes          19/02/16   NO        YES         libxml2-2.6.26-2.1.25.el5_11.i386.000
9       Yes          19/02/16   NO        YES         libxml2-python-2.6.26-
2.1.25.el5_11.i386.000
10      Yes          19/02/16   NO        YES         freetype-2.2.1-32.el5_9.1.i386.000
11      Yes          19/02/16   NO        YES         cs1000-cppmUtil-7.65.16.23-4.i686.000
14      Yes          04/07/17   YES       YES         cs1000-linuxbase-7.65.16.23-35.i386.000
15      Yes          04/07/17   NO        YES         cs1000-Jboss-Quantum-7.65.16.23-12.i386.000
16      Yes          05/07/16   YES       YES         cs1000-dmWeb-7.65.16.23-5.i386.000
20      Yes          04/07/17   NO        YES         cs1000-cs1000WebService_6-0-7.65.16.23-
6.i386.000
22      Yes          04/07/17   YES       YES         cs1000-dbcom-7.65.16.23-1.i386.000
25      Yes          19/02/16   NO        YES         cs1000-shared-carrdtct-7.65.16.21-
01.i386.000
26      Yes          04/07/17   YES       YES         cs1000-emWeb_6-0-7.65.16.23-8.i386.000
28      Yes          19/02/16   NO        YES         cs1000-shared-omm-7.65.16.21-2.i386.000
29      Yes          19/02/16   YES       YES         cs1000-emWebLocal_6-0-7.65.16.22-1.i386.000
30      Yes          04/07/17   YES       YES         cs1000-mscAttn-7.65.16.23-15.i386.000
31      Yes          04/07/17   YES       YES         cs1000-oam-logging-7.65.16.23-1.i386.000
32      Yes          04/07/17   NO        YES         cs1000-pd-7.65.16.23-1.i386.000
33      Yes          04/07/17   YES       YES         cs1000-shared-pbx-7.65.16.23-3.i386.000
34      Yes          04/07/17   YES       YES         cs1000-tps-7.65.16.23-21.i386.000
35      Yes          04/07/17   YES       YES         cs1000-vtrk-7.65.16.23-123.i386.000
36      Yes          04/07/17   YES       YES         jdk-1.6.0_151-fcs.i586.000
37      Yes          19/02/16   NO        YES         cs1000-gk-7.65.16.22-1.i386.000
38      Yes          19/02/16   YES       YES         cs1000-shared-xmsg-7.65.16.22-1.i386.000
39      Yes          19/02/16   NO        YES         cs1000-sps-7.65.16.23-1.i386.000
40      Yes          19/02/16   YES       YES         cs1000-cs-7.65.P.100-03.i386.000
41      Yes          04/07/17   YES       YES         kernel-2.6.18-419.el5.i686.000
42      Yes          04/07/17   YES       YES         openssl-0.9.8e-40.el5_11.i386.000
43      Yes          04/07/17   NO        YES         pass_harden-7.65.16.23-2.i386.000
44      Yes          19/02/16   YES       YES         cs1000-ftrpkg-7.65.16.23-1.i386.000
45      Yes          04/07/17   NO        YES         pcap-7.65.16.23-1.i386.000
46      Yes          04/07/17   NO        yes         tzdata-2016g-2.el5.i386.000
50      Yes          06/07/16   NO        YES         cs1000-shared-tpselect-7.65.16.23-
1.i386.000
51      Yes          06/07/16   YES       YES         cs1000-csmWeb-7.65.16.23-2.i386.000
53      Yes          06/07/16   YES       YES         cs1000-csv-7.65.16.23-4.i386.000
56      Yes          06/07/16   YES       YES         cs1000-mscAnnc-7.65.16.23-1.i386.000
57      Yes          06/07/16   YES       YES         cs1000-mscConf-7.65.16.23-1.i386.000
58      Yes          06/07/16   YES       YES         cs1000-mscMusc-7.65.16.23-1.i386.000
59      Yes          06/07/16   YES       YES         cs1000-mscTone-7.65.16.23-1.i386.000
61      Yes          06/07/16   YES       YES         avaya-cs1000-cnd-4.0.48-1.el5.i386.000
62      Yes          06/07/16   NO        YES         libssh2-1.4.2-2.el5_7.1.i386.000
```


©2018 Avaya Inc. All Rights Reserved.

Avaya Communication Server 1000 R7.6 - Call Server Patches

```
VERSION 4121
RELEASE 7
ISSUE 65 P +
DepList 1: core Issue: 01 (created: 2017-06-30 10:51:38 (est))

IN-SERVICE PEPS
PAT# CR #            PATCH REF #     NAME      DATE        FILENAME       SPECINS
0000 wi01185642      ISS1:1OF1       p33342_1  21/09/2018  p33342_1.cpl   NO
0001 wi01171467      ISS1:1OF1       p33270_1  21/09/2018  p33270_1.cpl   NO
0002 wi01080753      ISS1:1OF1       p32518_1  21/09/2018  p32518_1.cpl   NO
0003 wi01101969      ISS1:1OF1       p32726_1  21/09/2018  p32726_1.cpl   NO
0004 wi01127527      ISS1:1OF1       p32988_1  21/09/2018  p32988_1.cpl   YES
0005 wi01096910      ISS1:1OF1       p32734_1  21/09/2018  p32734_1.cpl   NO
0006 wi01156086      ISS1:1OF1       p33269_1  21/09/2018  p33269_1.cpl   NO
0007 wi01025156      ISS1:1OF1       p32136_1  21/09/2018  p32136_1.cpl   NO
0008 wi01146705      ISS1:1OF1       p33129_1  21/09/2018  p33129_1.cpl   NO
0009 wi01138136      ISS1:1OF1       p33191_1  21/09/2018  p33191_1.cpl   NO
0010 wi01099810      ISS1:1OF1       p32796_1  21/09/2018  p32796_1.cpl   NO
0011 wi01085855      ISS1:1OF1       p32658 1  21/09/2018  p32658 1.cpl   NO
0012 wi01163826      ISS1:1OF1       p33229_1  21/09/2018  p33229_1.cpl   NO
0013 wi01113712      ISS1:1OF1       p32877_1  21/09/2018  p32877_1.cpl   NO
0014 wi01060826      ISS1:1OF1       p32379_1  21/09/2018  p32379_1.cpl   NO
0015 wi01199608      ISS1:1OF1       p33414_1  21/09/2018  p33414_1.cpl   NO
0016 wi01181174      ISS1:1OF1       p33316_1  21/09/2018  p33316_1.cpl   NO
0017 wi01118819      ISS1:1OF1       p32954_1  21/09/2018  p32954_1.cpl   NO
0018 CS1000-6964     ISS1:1OF1       p33541_1  21/09/2018  p33541_1.cpl   NO
0019 wi01120406      ISS1:1OF1       p32956_1  21/09/2018  p32956_1.cpl   NO
0020 cs1000-7160     ISS1:1OF1       p33621_1  21/09/2018  p33621_1.cpl   NO
0021 wi01129098      ISS1:1OF1       p32951_1  21/09/2018  p32951_1.cpl   NO
0022 wi01110593      ISS1:1OF1       p32849_1  21/09/2018  p32849_1.cpl   NO
0023 wi01077639      ISS1:1OF1       p32883_1  21/09/2018  p32883_1.cpl   NO
0024 CS1000-7607     ISS1:1OF1       p33783_1  21/09/2018  p33783_1.cpl   YES
0025 CS1000-6789     ISS1:1OF1       p33508_1  21/09/2018  p33508_1.cpl   NO
0026 wi01156999      ISS1:1OF1       p33180_1  21/09/2018  p33180_1.cpl   NO
0027 wi01167427      ISS1:1OF1       p33264_1  21/09/2018  p33264_1.cpl   NO
0028 wi01123389      ISS1:1OF1       p33045_1  21/09/2018  p33045_1.cpl   NO
0029 wi01212527      ISS1:1OF1       p33481_1  21/09/2018  p33481_1.cpl   YES
0030 wi01075359      ISS1:1OF1       p32671_1  21/09/2018  p32671_1.cpl   NO
0031 wi01148697      ISS1:1OF1       p33187_1  21/09/2018  p33187_1.cpl   NO
0032 wi01114695      ISS1:1OF1       p32885_1  21/09/2018  p32885_1.cpl   NO
0033 wi01199336      ISS1:1OF1       p33410_1  21/09/2018  p33410_1.cpl   NO
0034 wi01132902      ISS1:1OF1       p33028_1  21/09/2018  p33028_1.cpl   NO
0035 wi01063864      ISS1:1OF1       p32410_1  21/09/2018  p32410_1.cpl   YES
0036 wi01076948      ISS1:1OF1       p32526_1  21/09/2018  p32526_1.cpl   YES
0037 wi01215810      ISS1:1OF1       p33494_1  21/09/2018  p33494_1.cpl   NO
0038 wi01094832      iss1:1of1       p32718_1  21/09/2018  p32718_1.cpl   NO
0039 wi01127138      ISS1:1OF1       p33304_1  21/09/2018  p33304_1.cpl   NO
0040 wi01095255      ISS1:1OF1       p33027_1  21/09/2018  p33027_1.cpl   NO
0041 cs1000-6998     ISS1:1OF1       p33555_1  21/09/2018  p33555_1.cpl   NO
0042 wi01094727      ISS1:1OF1       p32848_1  21/09/2018  p32848_1.cpl   NO
0043 wi01090535      ISS1:1OF1       p32519_1  21/09/2018  p32519_1.cpl   NO
0044 wi01151898      ISS1:1OF1       p33175_1  21/09/2018  p33175_1.cpl   NO
0045 CS1000-7624     ISS1:1OF1       p33794_1  21/09/2018  p33794_1.cpl   NO
0046 wi01062607      ISS1:1OF1       p32503_1  21/09/2018  p32503_1.cpl   NO
0047 wi01147983      ISS1:1OF1       p33141_1  21/09/2018  p33141_1.cpl   NO
0048 wi01151870      ISS1:1OF1       p33162_1  21/09/2018  p33162_1.cpl   YES
0049 wi01190506      ISS1:1OF1       p33361_1  21/09/2018  p33361_1.cpl   NO
0050 CS1000-7406     ISS1:1OF1       p33715_1  21/09/2018  p33715_1.cpl   NO
0051 wi01132222      ISS1:1OF1       p33023_1  21/09/2018  p33023_1.cpl   NO
0052 wi01070585      ISS1:1OF1       p32383_1  21/09/2018  p32383_1.cpl   NO
0053 wi01153844      ISS1:1OF1       p33172_1  21/09/2018  p33172_1.cpl   NO
0054 wi01142792      ISS1:1OF1       p33099_1  21/09/2018  p33099_1.cpl   NO
0055 WI01077073      ISS1:1OF1       p32534_1  21/09/2018  p32534_1.cpl   NO
0056 wi01186846      ISS1:1OF1       p33332_1  21/09/2018  p33332_1.cpl   NO
0057 wi01159931      ISS1:1OF1       p33231_1  21/09/2018  p33231_1.cpl   YES
0058 wi01053597      ISS1:1OF1       p32304_1  21/09/2018  p32304_1.cpl   NO
0059 CS1000-7590     ISS1:1OF1       p33780_1  21/09/2018  p33780_1.cpl   NO
```


©2018 Avaya Inc. All Rights Reserved.

```
0060 wi01114038      ISS1:1OF1       p32869_1  21/09/2018  p32869_1.cpl   NO
0061 CS1000-7622     ISS1:1OF1       p33787_1  21/09/2018  p33787_1.cpl   YES
0062 wi01091447      ISS1:1OF1       p32675_1  21/09/2018  p32675_1.cpl   NO
0063 wi01165881      ISS1:1OF1       p33239_1  21/09/2018  p33239_1.cpl   NO
0064 wi01149384      ISS1:1OF1       p33147_1  21/09/2018  p33147_1.cpl   NO
0065 wi01079444      ISS1:1OF1       p32564_1  21/09/2018  p32564_1.cpl   NO
0066 CS1000-6852     ISS1:1OF1       p33517_1  21/09/2018  p33517_1.cpl   NO
0067 wi01146766      ISS1:1OF1       p33131_1  21/09/2018  p33131_1.cpl   NO
0068 wi01150083      ISS1:1OF1       p33152_1  21/09/2018  p33152_1.cpl   NO
0069 wi01163048      ISS1:1OF1       p33223_1  21/09/2018  p33223_1.cpl   YES
0070 wi01189247      ISS1:1OF1       p33382_1  21/09/2018  p33382_1.cpl   YES
0071 wi01070279      ISS1:1OF1       p32262_1  21/09/2018  p32262_1.cpl   NO
0072 wi01075353      ISS1:1OF1       p32613_1  21/09/2018  p32613_1.cpl   NO
0073 wi01108828      ISS1:1OF1       p32831_1  21/09/2018  p32831_1.cpl   NO
0074 wi01197246      ISS1:1OF1       p33400_1  21/09/2018  p33400_1.cpl   NO
0075 wi01213334      ISS1:1OF1       p33485_1  21/09/2018  p33485_1.cpl   NO
0076 wi01208515      ISS1:1OF1       p33455_1  21/09/2018  p33455_1.cpl   NO
0077 CS1000-6946     ISS1:1OF1       p33543_1  21/09/2018  p33543_1.cpl   NO
0078 wi01095462      ISS1:1OF1       p32723_1  21/09/2018  p32723_1.cpl   NO
0079 wi01021522      ISS1:1OF1       p32863_1  21/09/2018  p32863_1.cpl   NO
0080 wi01191767      ISS1:1OF1       p33368_1  21/09/2018  p33368_1.cpl   NO
0081 CS1000-7460     ISS1:1OF1       p33735_1  21/09/2018  p33735_1.cpl   NO
0082 wi01145002      ISS1:1OF1       p33186_1  21/09/2018  p33186_1.cpl   NO
0083 wi01132215      ISS1:1OF1       p33084_1  21/09/2018  p33084_1.cpl   NO
0084 wi01153039      ISS1:1OF1       p17588_1  21/09/2018  p17588_1.cpl   NO
0085 wi01053950      ISS1:1OF1       p32654_1  21/09/2018  p32654_1.cpl   YES
0086 wi01089807      ISS1:1OF1       p32957_1  21/09/2018  p32957_1.cpl   NO
0087 wi01089519      ISS1:1OF1       p32665_1  21/09/2018  p32665_1.cpl   NO
0088 CS1000-6844     ISS1:1OF1       p33507_1  21/09/2018  p33507_1.cpl   NO
0089 wi01083896      ISS1:1OF1       p32937_1  21/09/2018  p32937_1.cpl   NO
0090 CS1000-7176     ISS1:1OF1       p33744_1  21/09/2018  p33744_1.cpl   NO
0091 wi01215563      ISS1:1OF1       p33412_1  21/09/2018  p33412_1.cpl   NO
0092 cs1000-6924     ISS1:1OF1       p33523_1  21/09/2018  p33523_1.cpl   NO
0093 CS1000-7022     ISS1:1OF1       p33560_1  21/09/2018  p33560_1.cpl   NO
0094 wi01182880      ISS1:1OF1       p33328_1  21/09/2018  p33328_1.cpl   NO
0095 wi01144354      ISS1:1OF1       p33117_1  21/09/2018  p33117_1.cpl   NO
0096 wi01102091      ISS1:1OF1       p32744_1  21/09/2018  p32744_1.cpl   YES
0097 wi01132244      ISS1:1OF1       p33041_1  21/09/2018  p33041_1.cpl   NO
0098 wi01185751      ISS1:1OF1       p33409_1  21/09/2018  p33409_1.cpl   YES
0099 wi01136194      ISS:1OF1        p33051_1  21/09/2018  p33051_1.cpl   NO
0100 wi01068669      ISS1:1OF1       p32333_1  21/09/2018  p32333_1.cpl   NO
0101 wi01153104      ISS1:1OF1       p33174_1  21/09/2018  p33174_1.cpl   NO
0102 WI01169289      ISS1:1OF1       p33257_1  21/09/2018  p33257_1.cpl   NO
0103 wi01059388      iss1:1of1       p32628_1  21/09/2018  p32628_1.cpl   NO
0104 wi01092443      ISS1:1OF1       p32676_1  21/09/2018  p32676_1.cpl   NO
0105 CS1000-7151     ISS1:1OF1       p33617_1  21/09/2018  p33617_1.cpl   NO
0106 wi01133106      ISS1:1OF1       p33032_1  21/09/2018  p33032_1.cpl   NO
0107 wi01108262      ISS1:1OF1       p32865_1  21/09/2018  p32865_1.cpl   YES
0108 wi01099724      ISS1:1OF1       p32742_1  21/09/2018  p32742_1.cpl   YES
0109 wi01177614      ISS1:1OF1       p33303_1  21/09/2018  p33303_1.cpl   NO
0110 wi01184588      ISS1:1OF1       p33338_1  21/09/2018  p33338_1.cpl   NO
0111 CS1000-6738     ISS1:1OF1       p33495_1  21/09/2018  p33495_1.cpl   NO
0112 wi01137694      ISS1:1OF1       p33081_1  21/09/2018  p33081_1.cpl   NO
0113 wi01188972      ISS1:1OF1       p33352_1  21/09/2018  p33352_1.cpl   NO
0114 wi01072027      ISS1:1OF1       p32689_1  21/09/2018  p32689_1.cpl   NO
0115 CS1000-6933     ISS1:1OF1       p33529_1  21/09/2018  p33529_1.cpl   NO
0116 wi01075149      ISS1:1OF1       p32475_1  21/09/2018  p32475_1.cpl   NO
0117 WI11032038      ISS1:1OF1       p33022_1  21/09/2018  p33022_1.cpl   NO
0118 wi01109251      ISS1:1OF1       p32827_1  21/09/2018  p32827_1.cpl   NO
0119 wi01146254      ISS1:1OF1       p33127_1  21/09/2018  p33127_1.cpl   NO
0120 wi01118714      ISS2:1OF1       p32952_2  21/09/2018  p32952_2.cpl   NO
0121 wi01139981      ISS1:1OF1       p33083_1  21/09/2018  p33083_1.cpl   NO
0122 cs1000-7269     ISS1:1OF1       p33670_1  21/09/2018  p33670_1.cpl   NO
0123 wi01134952      ISS1:1OF1       p33039_1  21/09/2018  p33039_1.cpl   NO
0124 wi01071996      ISS1:1OF1       p32461_1  21/09/2018  p32461_1.cpl   NO
0125 wi01181423      ISS1:1OF1       p33318_1  21/09/2018  p33318_1.cpl   NO
0126 wi01065125      ISS1:1OF1       p32416_1  21/09/2018  p32416_1.cpl   NO
0127 wi01075538      ISS1:1OF1       p32469_1  21/09/2018  p32469_1.cpl   NO
0128 wi01093071      ISS1:1OF1       p32701_1  21/09/2018  p32701_1.cpl   NO
0129 wi01115369      ISS1:1OF1       p32889_1  21/09/2018  p32889_1.cpl   NO
```


©2018 Avaya Inc. All Rights Reserved.

```
0130 wi01154253      ISS1:1OF1       p33206_1  21/09/2018  p33206_1.cpl   NO
0131 wi01081510      ISS1:1OF1       p32582_1  21/09/2018  p32582_1.cpl   NO
0132 wi01060611      ISS1:1OF1       p32809_1  21/09/2018  p32809_1.cpl   NO
0133 CS1000-6910     ISS1:1OF1       p33528_1  21/09/2018  p33528_1.cpl   NO
0134 wi01207693      ISS1:1OF1       p33452_1  21/09/2018  p33452_1.cpl   NO
0135 wi01198794      ISS1:1OF1       p33408_1  21/09/2018  p33408_1.cpl   NO
0136 wi01065922      ISS1:1OF1       p32516_1  21/09/2018  p32516_1.cpl   NO
0137 wi01170583      ISS1:1OF1       p33261_1  21/09/2018  p33261_1.cpl   NO
0138 wi01202917      ISS1:1OF1       p33434_1  21/09/2018  p33434_1.cpl   NO
0139 wi01182523      ISS1:1OF1       p33327_1  21/09/2018  p33327_1.cpl   NO
0140 WI0110261       ISS1:1OF1       p32758_1  21/09/2018  p32758_1.cpl   NO
0141 wi01195975      ISS1:1OF1       p33394_1  21/09/2018  p33394_1.cpl   NO
0142 wi01118320      ISS1:1OF1       p32753_1  21/09/2018  p32753_1.cpl   NO
0143 wi01083036      ISS1:1OF1       p32571_1  21/09/2018  p32571_1.cpl   NO
0144 wi01098905      ISS1:1OF1       p32556_1  21/09/2018  p32556_1.cpl   NO
0145 CS1000-6786     ISS1:1OF1       p33497_1  21/09/2018  p33497_1.cpl   NO
0146 CS1000-7277     ISS1:1OF1       p33763_1  21/09/2018  p33763_1.cpl   NO
0147 wi01130836      ISS1:1OF1       p33008_1  21/09/2018  p33008_1.cpl   YES
0148 wi01119086      ISS1:1OF1       p32917_1  21/09/2018  p32917_1.cpl   NO
0149 WI01121737      ISS1:1OF1       p32939_1  21/09/2018  p32939_1.cpl   NO
0150 wi01128596      ISS1:1OF1       p33000_1  21/09/2018  p33000_1.cpl   NO
0151 wi01137003      ISS1:1OF1       p33053_1  21/09/2018  p33053_1.cpl   NO
0152 wi01169714      ISS1:1OF1       p33335_1  21/09/2018  p33335_1.cpl   NO
0153 wi01205975      ISS1:1OF1       p33447_1  21/09/2018  p33447_1.cpl   NO
0154 wi01098783      ISS1:1OF1       p32748_1  21/09/2018  p32748_1.cpl   NO
0155 wi01197054      ISS1:1OF1       p33397_1  21/09/2018  p33397_1.cpl   NO
0156 wi01087543      ISS1:1OF1       p32662_1  21/09/2018  p32662_1.cpl   NO
0157 wi01174116      ISS1:1OF1       p33287_1  21/09/2018  p33287_1.cpl   NO
0158 wi01072062      ISS1:1OF1       p32776_1  21/09/2018  p32776_1.cpl   NO
0159 wi01070473      ISS1:1OF1       p32413_1  21/09/2018  p32413_1.cpl   NO
0160 CS1000-7276     ISS1:1OF1       p33675_1  21/09/2018  p33675_1.cpl   YES
0161 wi01126552      ISS1:1OF1       p32975_1  21/09/2018  p32975_1.cpl   NO
0162 CS1000-7174     ISS1:1OF1       p33655_1  21/09/2018  p33655_1.cpl   NO
0163 wi00959458      ISS1:1OF1       p31551_1  21/09/2018  p31551_1.cpl   NO
0164 wi01160967      ISS1:1OF1       p33213_1  21/09/2018  p33213_1.cpl   NO
0165 wi01166011      ISS1:1OF1       p33235_1  21/09/2018  p33235_1.cpl   NO
0166 wi01063263      ISS1:1OF1       p32573_1  21/09/2018  p32573_1.cpl   NO
0167 CS1000-7113     ISS1:1OF1       p33623_1  21/09/2018  p33623_1.cpl   NO
0168 wi01034307      ISS1:1OF1       p32615_1  21/09/2018  p32615_1.cpl   NO
0169 wi01180594      ISS1:1OF1       p33312_1  21/09/2018  p33312_1.cpl   NO
0170 wi01204623      ISS1:1OF1       p33444_1  21/09/2018  p33444_1.cpl   NO
0171 CS1000-7435     ISS1:1OF1       p33745_1  21/09/2018  p33745_1.cpl   NO
0172 wi01104473      ISS1:1OF1       p32818_1  21/09/2018  p32818_1.cpl   NO
0173 CS1000-6978     ISS1:1OF1       p33551_1  21/09/2018  p33551_1.cpl   YES
0174 wi01204274      ISS1:1OF1       p33451_1  21/09/2018  p33451_1.cpl   NO
0175 wi01150771      ISS1:1OF1       p33210_1  21/09/2018  p33210_1.cpl   NO
0176 wi01071296      ISS1:1OF1       p32836_1  21/09/2018  p32836_1.cpl   NO
0177 wi01125238      ISS1:1OF1       p32971_1  21/09/2018  p32971_1.cpl   NO
0178 wi01149017      ISS1:1OF1       p33145_1  21/09/2018  p33145_1.cpl   NO
0179 wi01210497      ISS1:1OF1       p33468_1  21/09/2018  p33468_1.cpl   YES
0180 CS1000-7265     ISS1:1OF1       p33666_1  21/09/2018  p33666_1.cpl   NO
0181 wi01101876      ISS1:1OF1       p32858_1  21/09/2018  p32858_1.cpl   NO
0182 wi01164281      ISS1:1OF1       p33232_1  21/09/2018  p33232_1.cpl   NO
0183 wi01119100      ISS1:1OF1       p32925_1  21/09/2018  p32925_1.cpl   NO
0184 wi01066991      ISS1:1OF1       p32449_1  21/09/2018  p32449_1.cpl   NO
0185 wi01102296      ISS1:1OF1       p32780_1  21/09/2018  p32780_1.cpl   NO
0186 wi01188722      ISS1:1OF1       p33365_1  21/09/2018  p33365_1.cpl   NO
0187 CS1000-7451     ISS1:1OF1       p33749_1  21/09/2018  p33749_1.cpl   NO
0188 CS1000-7301     ISS1:1OF1       p33691_1  21/09/2018  p33691_1.cpl   NO
0189 wi01045144      ISS1:1OF1       p33202_1  21/09/2018  p33202_1.cpl   NO
0190 wi01061481      ISS1:1OF1       p32382_1  21/09/2018  p32382_1.cpl   NO
0191 CS1000-7053     ISS1:1OF1       p33574_1  21/09/2018  p33574_1.cpl   NO
0192 wi01039280      ISS1:1OF1       p32423_1  21/09/2018  p32423_1.cpl   NO
0193 wi01128512      ISS1:1OF1       p32997_1  21/09/2018  p32997_1.cpl   NO
0194 wi01127447      ISS1:1OF1       p32990_1  21/09/2018  p32990_1.cpl   NO
0195 wi01068851      ISS1:1OF1       p32439_1  21/09/2018  p32439_1.cpl   NO
0196 CS1000-7357     ISS1:1OF1       p33698_1  21/09/2018  p33698_1.cpl   NO
0197 wi01120458      ISS1:1OF1       p32929_1  21/09/2018  p32929_1.cpl   NO
0198 wi01187443      ISS1:1OF1       p33359_1  21/09/2018  p33359_1.cpl   NO
0199 wi01183783      ISS1:1OF1       p33333_1  21/09/2018  p33333_1.cpl   NO
```


©2018 Avaya Inc. All Rights Reserved.

```
0200 CS1000-6872     ISS1:1OF1       p33520_1  21/09/2018  p33520_1.cpl   NO
0201 wi01096718      ISS1:1OF1       p33138_1  21/09/2018  p33138_1.cpl   YES
0202 wi01189516      ISS1:1OF1       p33373_1  21/09/2018  p33373_1.cpl   NO
0203 wi01201882      ISS1:1OF1       p33427_1  21/09/2018  p33427_1.cpl   NO
0204 wi01134756      ISS1:1OF1       p33453_1  21/09/2018  p33453_1.cpl   NO
0205 wi01096712      ISS1:1OF1       p32708_1  21/09/2018  p32708_1.cpl   NO
0206 wi01163521      ISS1:1OF1       p33226_1  21/09/2018  p33226_1.cpl   NO
0207 wi01104627      ISS1:1OF1       p32819_1  21/09/2018  p32819_1.cpl   NO
0208 wi00937672      ISS1:1OF1       p31276_1  21/09/2018  p31276_1.cpl   NO
0209 wi01150846      ISS1:1OF1       p33157_1  21/09/2018  p33157_1.cpl   NO
0210 wi01057403      ISS1:1OF1       p32591_1  21/09/2018  p32591_1.cpl   NO
0211 wi01121374      ISS1:1OF1       p31107_1  21/09/2018  p31107_1.cpl   NO
0212 wi01109345      ISS1:1OF1       p32830_1  21/09/2018  p32830_1.cpl   NO
0213 wi01070468      iss1:1of1       p32418_1  21/09/2018  p32418_1.cpl   NO
0214 wi01099300      iss1:1of1       p32704_1  21/09/2018  p32704_1.cpl   NO
0215 wi01075355      ISS1:1OF1       p32594_1  21/09/2018  p32594_1.cpl   NO
0216 wi01022598      ISS1:1OF1       p32066_1  21/09/2018  p32066_1.cpl   NO
0217 wi01068751      ISS1:1OF1       p32445_1  21/09/2018  p32445_1.cpl   NO
0218 CS1000-7147     ISS1:1OF1       p33616_1  21/09/2018  p33616_1.cpl   NO
0219 wi01126454      ISS1:1OF1       p32973_1  21/09/2018  p32973_1.cpl   NO
0220 wi01130348      ISS1:1OF1       p33014_1  21/09/2018  p33014_1.cpl   NO
0221 wi01181578      ISS1:1OF1       p33321_1  21/09/2018  p33321_1.cpl   NO
0222 wi01052968      ISS1:1OF1       p32540_1  21/09/2018  p32540_1.cpl   NO
0223 wi01120705      ISS1:1OF1       p32930_1  21/09/2018  p32930_1.cpl   NO
0224 wi01070465      iss1:1of1       p32562_1  21/09/2018  p32562_1.cpl   NO
0225 wi01185138      ISS1:1OF1       p33411_1  21/09/2018  p33411_1.cpl   NO
0226 wi01171418      ISS1:1OF1       p33278_1  21/09/2018  p33278_1.cpl   NO
0227 wi01078721      ISS1:1OF1       p32553_1  21/09/2018  p32553_1.cpl   NO
0228 wi01132204      ISS1:1OF1       p32501_1  21/09/2018  p32501_1.cpl   NO
0229 wi01065248      ISS1:1OF1       p32412_1  21/09/2018  p32412_1.cpl   NO
0230 CS1000-7081     ISS1:1OF1       p33585_1  21/09/2018  p33585_1.cpl   NO
0231 wi01184272      ISS1:1OF1       p33336_1  21/09/2018  p33336_1.cpl   NO
0232 wi01165461      ISS1:1OF1       p33237_1  21/09/2018  p33237_1.cpl   NO
0233 wi01045058      ISS1:1OF1       p32214_1  21/09/2018  p32214_1.cpl   NO
0234 wi01070580      ISS1:1OF1       p32380_1  21/09/2018  p32380_1.cpl   NO
0235 wi01104410      ISS1:1OF1       p32801_1  21/09/2018  p32801_1.cpl   NO
0236 wi01102093      ISS1:1OF1       p32760_1  21/09/2018  p32760_1.cpl   NO
0237 wi01201986      ISS1:1OF1       p33433_1  21/09/2018  p33433_1.cpl   NO
0238 wi01175294      ISS1:1OF1       p33290_1  21/09/2018  p33290_1.cpl   NO
0239 wi01104867      ISS1:1OF1       p32828_1  21/09/2018  p32828_1.cpl   NO
0240 wi01201045      ISS1:1OF1       p33424_1  21/09/2018  p33424_1.cpl   YES
0241 wi01082456      ISS1:1OF1       p32596_1  21/09/2018  p32596_1.cpl   NO
0242 wi01133960      ISS1:1OF1       p33034_1  21/09/2018  p33034_1.cpl   NO
0243 wi01035976      ISS1:1OF1       p32173_1  21/09/2018  p32173_1.cpl   NO
0244 wi01008182      ISS1:1OF1       p33277_1  21/09/2018  p33277_1.cpl   NO
0245 wi01166065      ISS1:1OF1       p33241_1  21/09/2018  p33241_1.cpl   NO
0246 wi01098433      ISS1:1OF1       p32736_1  21/09/2018  p32736_1.cpl   NO
0247 wi01088797      ISS1:1OF1       p32844_1  21/09/2018  p32844_1.cpl   NO
0248 wi01102475      ISS1:1OF1       p32782_1  21/09/2018  p32782_1.cpl   YES
0249 CS1000-7326     ISS1:1OF1       p33699_1  21/09/2018  p33699_1.cpl   NO
0250 wi01134354      ISS1:1OF1       p33031_1  21/09/2018  p33031_1.cpl   NO
0251 wi01056633      ISS1:1OF1       p32322_1  21/09/2018  p32322_1.cpl   NO
0252 CS1000-6794     ISS1:1OF1       p33539_1  21/09/2018  p33539_1.cpl   NO
0253 wi01106658      ISS1:1OF1       p32812_1  21/09/2018  p32812_1.cpl   NO
0254 wi01068011      ISS1:1OF1       p33182_1  21/09/2018  p33182_1.cpl   NO
0255 wi01118928      ISS1:1OF1       p32922_1  21/09/2018  p32922_1.cpl   NO
0256 wi01097598      ISS1:1OF1       p32797_1  21/09/2018  p32797_1.cpl   NO
0257 wi01187059      ISS1:1OF1       p33346_1  21/09/2018  p33346_1.cpl   NO
0258 CS1000-7339     ISS1:1OF1       p33708_1  21/09/2018  p33708_1.cpl   NO
0259 wi01181197      ISS1:1OF1       p33317_1  21/09/2018  p33317_1.cpl   NO
0260 wi01043367      ISS1:1OF1       p32232_1  21/09/2018  p32232_1.cpl   NO
0261 wi01146804      ISS1:1OF1       p33132_1  21/09/2018  p33132_1.cpl   NO
0262 wi01088775      ISS1:1OF1       p32659_1  21/09/2018  p32659_1.cpl   NO
0263 wi01034961      ISS1:1OF1       p32144_1  21/09/2018  p32144_1.cpl   NO
0264 CS1000-6791     ISS1:1OF1       p33501_1  21/09/2018  p33501_1.cpl   YES
0265 wi01093118      ISS1:1OF1       p32496_1  21/09/2018  p32496_1.cpl   NO
0266 wi01068922      ISS1:1OF1       p32454_1  21/09/2018  p32454_1.cpl   NO
0267 wi01214452      ISS1:1OF1       p33488_1  21/09/2018  p33488_1.cpl   NO
0268 cs1000-6845     ISS1:1OF1       p33509_1  21/09/2018  p33509_1.cpl   NO
0269 wi01132883      ISS1:1OF1       p33030_1  21/09/2018  p33030_1.cpl   NO
```


©2018 Avaya Inc. All Rights Reserved.

```
0270 wi01060241      ISS1:1OF1       p32381_1  21/09/2018  p32381_1.cpl   NO
0271 wi01070756      ISS1:1OF1       p32444_1  21/09/2018  p32444_1.cpl   NO
0272 wi01065118      ISS1:1OF1       p32397_1  21/09/2018  p32397_1.cpl   NO
0273 wi01069441      ISS1:1OF1       p32097_1  21/09/2018  p32097_1.cpl   NO
0274 WI01108562      ISS1:1OF1       p32832_1  21/09/2018  p32832_1.cpl   NO
0275 wi01212017      ISS1:1OF1       p33482_1  21/09/2018  p33482_1.cpl   YES
0276 CS1000-7461     ISS1:1OF1       p33736_1  21/09/2018  p33736_1.cpl   NO
0277 CS1000-6752     ISS1:1OF1       p33540_1  21/09/2018  p33540_1.cpl   NO
0278 wi01075540      ISS1:1OF1       p32492_1  21/09/2018  p32492_1.cpl   NO
0279 wi01096842      ISS1:1OF1       p32731_1  21/09/2018  p32731_1.cpl   NO
0280 wi01133985      ISS1:1OF1       p33049_1  21/09/2018  p33049_1.cpl   NO
0281 wi01173768      ISS1:1OF1       p33288_1  21/09/2018  p33288_1.cpl   NO
0282 CS1000-7293     ISS1:1OF1       p33679_1  21/09/2018  p33679_1.cpl   NO
0283 wi01053314      ISS1:1OF1       p32555_1  21/09/2018  p32555_1.cpl   NO
0284 wi01099606      iss1:1of1       p32713_1  21/09/2018  p32713_1.cpl   NO
0285 wi01041453      ISS1:1OF1       p32587_1  21/09/2018  p32587_1.cpl   NO
0286 wi01094305      ISS1:1OF1       p32640_1  21/09/2018  p32640_1.cpl   NO
0287 wi01060382      iss1:1of1       p32623_1  21/09/2018  p32623_1.cpl   YES
0288 wi01142100      ISS1:1OF1       p33090_1  21/09/2018  p33090_1.cpl   NO
0289 wi01165870      ISS1:1OF1       p33238_1  21/09/2018  p33238_1.cpl   NO
0290 wi01135146      ISS1:1OF1       p33033_1  21/09/2018  p33033_1.cpl   NO
0291 wi01178476      ISS1:1OF1       p33305_1  21/09/2018  p33305_1.cpl   NO
0292 CS1000-7549     ISS1:1OF1       p33767_1  21/09/2018  p33767_1.cpl   YES
0293 wi01124074      ISS1:1OF1       p32989_1  21/09/2018  p32989_1.cpl   NO
0294 wi01203516      ISS1:1OF1       p33438_1  21/09/2018  p33438_1.cpl   NO
0295 wi01153896      ISS1:1OF1       p33185_1  21/09/2018  p33185_1.cpl   NO
0296 CS1000-7337     ISS1:1OF1       p33696_1  21/09/2018  p33696_1.cpl   NO
0297 wi01147091      ISS1:1OF1       p33137_1  21/09/2018  p33137_1.cpl   NO
0298 wi01111194      ISS1:1OF1       p32821_1  21/09/2018  p32821_1.cpl   NO
0299 wi01124477      ISS1:1OF1       p32963_1  21/09/2018  p32963_1.cpl   NO
0300 wi01088055      ISS1:1OF1       p32607_1  21/09/2018  p32607_1.cpl   NO
0301 wi01134799      ISS1:1OF1       p33069_1  21/09/2018  p33069_1.cpl   NO
0302 wi01099292      ISS1:1OF1       p32886_1  21/09/2018  p32886_1.cpl   NO
0303 wi01144609      ISS1:1OF1       p33119_1  21/09/2018  p33119_1.cpl   NO
0304 wi01096967      ISS1:1OF1       p32735_1  21/09/2018  p32735_1.cpl   NO
0305 wi01100508      ISS1:1OF1       p32761_1  21/09/2018  p32761_1.cpl   NO
0306 wi01132599      ISS1:1OF1       p33025_1  21/09/2018  p33025_1.cpl   NO
0307 cs1000-7223     ISS1:1OF1       p33647_1  21/09/2018  p33647_1.cpl   YES
0308 wi01141625      ISS1:1OF1       p33324_1  21/09/2018  p33324_1.cpl   NO
0309 wi01127874      ISS1:1OF1       p25747_1  21/09/2018  p25747_1.cpl   NO
0310 wi00897254      ISS1:1OF1       p31127_1  21/09/2018  p31127_1.cpl   NO
0311 wi01130815      ISS1:1OF1       p33017_1  21/09/2018  p33017_1.cpl   NO
0312 wi01071379      ISS1:1OF1       p32522_1  21/09/2018  p32522_1.cpl   NO
0313 wi01064599      iss1:1of1       p32580_1  21/09/2018  p32580_1.cpl   NO
0314 wi01185441      ISS1:1OF1       p33341_1  21/09/2018  p33341_1.cpl   NO
0315 wi01154485      ISS1:1OF1       p33194_1  21/09/2018  p33194_1.cpl   NO
0316 wi01146289      ISS1:1OF1       p33146_1  21/09/2018  p33146_1.cpl   NO
0317 wi01053195      ISS1:1OF1       p32297_1  21/09/2018  p32297_1.cpl   NO
0318 CS1000-7023     ISS1:1OF1       p33526_1  21/09/2018  p33526_1.cpl   NO
0319 wi01053920      ISS1:1OF1       p32303_1  21/09/2018  p32303_1.cpl   NO
0320 wi01058378      ISS1:1OF1       p32344_1  21/09/2018  p32344_1.cpl   NO
0321 wi01193201      ISS1:1OF1       p33381_1  21/09/2018  p33381_1.cpl   YES
0322 CS1000-7248     ISS1:1OF1       p32811_1  21/09/2018  p32811_1.cpl   NO
0323 CS1000-7637     ISS1:1OF1       p33791_1  21/09/2018  p33791_1.cpl   YES
0324 CS1000-7366     ISS1:1OF1       p33702_1  21/09/2018  p33702_1.cpl   NO
0325 CS1000-7143     ISS1:1OF1       p33614_1  21/09/2018  p33614_1.cpl   NO
0326 CS1000-7231     ISS1:1OF1       p33652_1  21/09/2018  p33652_1.cpl   NO
0327 CS1000-7154     ISS1:1OF1       p33619_1  21/09/2018  p33619_1.cpl   NO
0328 CS1000-7448     ISS1:1OF1       p33729_1  21/09/2018  p33729_1.cpl   NO
0329 CS1000-6980     ISS1:1OF1       p33586_1  21/09/2018  p33586_1.cpl   NO
0330 CS1000-7106     ISS1:1OF1       p33598_1  21/09/2018  p33598_1.cpl   NO
0331 CS1000-7052     ISS1:1OF1       p33573_1  21/09/2018  p33573_1.cpl   NO
0332 CS1000-7313     ISS1:1OF1       p33692_1  21/09/2018  p33692_1.cpl   NO
0333 CS1000-7253     ISS1:1OF1       p33662_1  21/09/2018  p33662_1.cpl   NO
0334 CS1000-7101     ISS1:1OF1       p33641_1  21/09/2018  p33641_1.cpl   NO
0335 CS1000-7267     ISS1:1OF1       p33669_1  21/09/2018  p33669_1.cpl   NO
0336 cs1000-7580     ISS1:1OF1       p33776_1  21/09/2018  p33776_1.cpl   NO
0337 CS1000-7171     ISS1:1OF1       p33626_1  21/09/2018  p33626_1.cpl   NO
0338 cs1000-7162     ISS1:1OF1       p33625_1  21/09/2018  p33625_1.cpl   NO
0339 CS1000-7086     ISS1:1OF1       p33587_1  21/09/2018  p33587_1.cpl   NO
```


©2018 Avaya Inc. All Rights Reserved.

```
0340 CS1000-7286     ISS1:1OF1       p33686_1  21/09/2018  p33686_1.cpl   NO
0341 CS1000-7103     ISS1:1OF1       p33596_1  21/09/2018  p33596_1.cpl   NO
0342 CS1000-6546     ISS1:1OF1       p33597_1  21/09/2018  p33597_1.cpl   NO
0343 CS1000-7453     ISS1:1OF1       p33793_1  21/09/2018  p33793_1.cpl   NO
0344 CS1000-7208     ISS1:1OF1       p33648_1  21/09/2018  p33648_1.cpl   NO
0345 CS1000-7015     ISS1:1OF1       p33606_1  21/09/2018  p33606_1.cpl   NO
0346 cs1000-7217     ISS1:1OF1       p33643_1  21/09/2018  p33643_1.cpl   NO
0347 CS1000-7003     ISS1:1OF1       p33561_1  21/09/2018  p33561_1.cpl   NO
0348 CS1000-7489     ISS1:1OF1       p33747_1  21/09/2018  p33747_1.cpl   NO
0349 CS1000-7296     ISS1:1OF1       p33681_1  21/09/2018  p33681_1.cpl   NO
0350 CS1000-7062     ISS1:1OF1       p33579_1  21/09/2018  p33579_1.cpl   NO
0351 CS1000-7140     ISS1:1OF1       p33624_1  21/09/2018  p33624_1.cpl   NO
0352 CS1000-6712     ISS1:1OF1       p33752_1  21/09/2018  p33752_1.cpl   NO
0353 cs1000-7029     ISS1:1OF1       p33563_1  21/09/2018  p33563_1.cpl   NO
0354 CS1000-7202     ISS1:1OF1       p33646_1  21/09/2018  p33646_1.cpl   NO
0355 CS1000-7323     ISS1:1OF1       p33688_1  21/09/2018  p33688_1.cpl   NO
0356 CS1000-7514     ISS1:1OF1       p33764_1  21/09/2018  p33764_1.cpl   YES
0357 CS1000-7587     ISS1:1OF1       p33779_1  21/09/2018  p33779_1.cpl   NO
0358 CS1000-7236     ISS1:1OF1       p33753_1  21/09/2018  p33753_1.cpl   NO
0359 CS1000-7472     ISS1:1OF1       p33778_1  21/09/2018  p33778_1.cpl   NO
0360 CS1000-7534     ISS1:1OF1       p33759_1  21/09/2018  p33759_1.cpl   NO
0361 CS1000-7462     ISS1:1OF1       p33737_1  21/09/2018  p33737_1.cpl   NO
0362 CS1000-7423     ISS1:1OF1       p33720_1  21/09/2018  p33720_1.cpl   NO
0363 CS1000-7340     ISS1:1OF1       p33694_1  21/09/2018  p33694_1.cpl   NO
0364 CS1000-7469     ISS1:1OF1       p33739_1  21/09/2018  p33739_1.cpl   NO
0365 CS1000-7564     ISS1:1OF1       p33772_1  21/09/2018  p33772_1.cpl   NO
0366 CS1000-7500     ISS1:1OF1       p33754_1  21/09/2018  p33754_1.cpl   YES
MDP>LAST SUCCESSFUL MDP REFRESH :2017-07-04 15:18:22(Local Time)
MDP>USING DEPLIST ZIP FILE DOWNLOADED :2017-06-30 15:52:25(est)
```


©2018 Avaya Inc. All Rights Reserved.

Appendix B

Avaya Communication Server 1000 Route for SIP Signalling Gateway

```
ld 21
PT1000

REQ: prt
TYPE: rdb
CUST 0
ROUT 6

TYPE RDB
CUST 00
ROUT 6
DES  SIP_N510
TKTP TIE
M911P NO
ESN  NO
RPA  NO
CNVT NO
SAT  NO
RCLS EXT
VTRK YES
ZONE 00002
PCID SIP
CRID NO
SBWM NO
NODE 510
DTRK NO
ISDN YES
    MODE ISLD
    DCH  5
    IFC  SL1
    PNI  00001
    NCNA YES
    NCRD YES
    TRO  YES
    FALT NO
    CTYP UKWN
    INAC YES
    ISAR NO
    DAPC NO
MBXR NO
MBXOT NPA
MBXT 0
PTYP ATT
CNDP UKWN
AUTO NO
DNIS NO
DCDR NO
ICOG IAO
SRCH LIN
TRMB YES
STEP
ACOD 8006
TCPP NO
PII NO
AUXP NO
TARG 01
CLEN 1
BILN NO
OABS
INST
IDC  YES
DCNO 0
NDNO 0 *
DEXT NO
```


©2018 Avaya Inc. All Rights Reserved.

```
DNAM NO
ANTK
SIGO STD
STYP SDAT
MFC  NO
ICIS YES
OGIS YES


PAGE 002

PTUT 0
TIMR ICF  512
     OGF  512
     EOD  13952
     DSI  34944
     NRD  10112
     DDL  70
     ODT  4096
     RGV  640
     GTO  896
     GTI  896
     SFB  3
     NBS  2048
     NBL  4096

     IENB  5
     TFD  0
     VSS  0
     VGD  6
     EESD  1024
SST  5 0
DTD  NO
SCDT NO
2 DT NO
NEDC ORG
FEDC ORG
CPDC NO
DLTN NO
HOLD 02 02 40
SEIZ 02 02
SVFL 02 02
DRNG NO
CDR  NO
NATL YES
SSL
CFWR NO
IDOP NO
VRAT NO
MUS  NO
PANS YES
RACD NO
MANO NO
FRL  0 0
FRL  1 0
FRL  2 0
FRL  3 0
FRL  4 0
FRL  5 0
FRL  6 0
FRL  7 0
OHQ  NO
OHQT 00
CBQ  NO
AUTH NO
TDET NO
TTBL 0
ATAN NO
OHTD NO
PLEV 2
```


©2018 Avaya Inc. All Rights Reserved.

```
OPR  NO
ALRM NO
ART  0


PAGE 003

PECL NO
DCTI 0
TIDY 8006 6
ATRR NO
TRRL NO
SGRP 0
CCBA NO
ARDN NO
CTBL 0
AACR NO
```

Avaya Communication Server 1000 D-Channel for SIP Signalling Gateway

```
>ld 22
PT2000

REQ  prt
TYPE adan dch 5

ADAN     DCH 5
  CTYP DCIP
  DES  Vtrk_SIP_SIPL
  USR  ISLD
  ISLM 4000
  SSRC 3700
  OTBF 32
  NASA YES
  IFC  SL1
  CNEG 1
  RLS  ID  7
  RCAP ND2 TAT
  MBGA NO
  H323
    OVLR NO
    OVLS NO
```


©2018 Avaya Inc. All Rights Reserved.

```
>ld 20

PT0000
REQ: prt
TYPE TNB
TN   100 0 3 0
DES  SIP_N510
TN   100 0 03 00  VIRTUAL
TYPE IPTI
CDEN 8D
CUST 0
XTRK VTRK
ZONE 00002
LDOP BOP
TIMP 600
BIMP 600
AUTO_BIMP NO
NMUS NO
TRK  ANLG
NCOS 0
RTMB 6 1
CHID 65
TGAR 1
STRI/STRO IMM IMM
SUPN YES
AST  NO
IAPG 0
CLS  UNR DTN CND ECD WTA LPR APN THFD XREP SPCD MSBT
     P10 NTC MID
TKID
AACR NO
```


©2018 Avaya Inc. All Rights Reserved.

©2018 Avaya Inc. All Rights Reserved.
Avaya and the Avaya Logo are trademarks of Avaya Inc. All trademarks identified by ® and ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners. The information provided in these Application Notes is subject to change without notice. The configurations, technical data, and recommendations provided in these Application Notes are believed to be accurate and dependable but are presented without express or implied warranty. Users are responsible for their application of any products specified in these Application Notes.

Please e-mail any questions or comments pertaining to these Application Notes along with the full title name and filename, located in the lower right corner, directly to the Avaya DevConnect Program at devconnect@avaya.com.