Tech Note: Configuring H.323 IP trunk between Cisco Call Manager and Avaya S8700/G600

Introduction

The objective of this document is to provide the Cisco field engineers or Cisco partners with exact steps to configure H.323 IP trunks between the Cisco Call Manager and the Avaya S8700/G600. This is particularly important for situations where interoperability is required. It is recommended to use the Avaya Site Administration (ASA) tool for configuration tasks on the Avaya S8700/G600. This interoperability document is intended for external use as well. There is no Cisco Confidential information within this document.

Procedure on Avaya S8700/G600

1. The first step is to check whether the Avaya system is capable of supporting IP trunks. Unlike the Cisco Call Manager, this is a licensed feature. This can be obtained by running the "display system-parameters customer" command from the ASA tool. The screenshot on the next page shows the output captured from our lab setup.
2. The next step is to configure a trunk group. Type “add trunk-group #” where # is the desired trunk group.
3. Then add the IP address of the remote end (which in this case is the Call Manager) by typing the “change node-names ip” command. Create a signaling group, specify the remote end and then associate it with the trunk group previously created.

```
3. Then add the IP address of the remote end (which in this case is the Call Manager) by typing the “change node-names ip” command. Create a signaling group, specify the remote end and then associate it with the trunk group previously created.
```

4. Now that the trunk and signaling groups have been successfully created, the next step is to take care of the routing patterns. In this lab setup, the Avaya IP phones are in the extension range 2XXX while the Call Manager IP phones are in the extension range 4XXX. So we need to create a dialplan to route to 4XXX from the Avaya system. For the purposes of our lab setup, we are inserting digits 443 while dialing the 4 digit extension and then stripping them out (Note: This is not necessary. You can also have a simple setup which does not require any digit manipulation). Check the uniform dial plan table by typing “change uniform #” where # is the matching pattern.

```
4. Now that the trunk and signaling groups have been successfully created, the next step is to take care of the routing patterns. In this lab setup, the Avaya IP phones are in the extension range 2XXX while the Call Manager IP phones are in the extension range 4XXX. So we need to create a dialplan to route to 4XXX from the Avaya system. For the purposes of our lab setup, we are inserting digits 443 while dialing the 4 digit extension and then stripping them out (Note: This is not necessary. You can also have a simple setup which does not require any digit manipulation). Check the uniform dial plan table by typing “change uniform #” where # is the matching pattern.
```

---

3. Then add the IP address of the remote end (which in this case is the Call Manager) by typing the “change node-names ip” command. Create a signaling group, specify the remote end and then associate it with the trunk group previously created.

```
3. Then add the IP address of the remote end (which in this case is the Call Manager) by typing the “change node-names ip” command. Create a signaling group, specify the remote end and then associate it with the trunk group previously created.
```

4. Now that the trunk and signaling groups have been successfully created, the next step is to take care of the routing patterns. In this lab setup, the Avaya IP phones are in the extension range 2XXX while the Call Manager IP phones are in the extension range 4XXX. So we need to create a dialplan to route to 4XXX from the Avaya system. For the purposes of our lab setup, we are inserting digits 443 while dialing the 4 digit extension and then stripping them out (Note: This is not necessary. You can also have a simple setup which does not require any digit manipulation). Check the uniform dial plan table by typing “change uniform #” where # is the matching pattern.

```
4. Now that the trunk and signaling groups have been successfully created, the next step is to take care of the routing patterns. In this lab setup, the Avaya IP phones are in the extension range 2XXX while the Call Manager IP phones are in the extension range 4XXX. So we need to create a dialplan to route to 4XXX from the Avaya system. For the purposes of our lab setup, we are inserting digits 443 while dialing the 4 digit extension and then stripping them out (Note: This is not necessary. You can also have a simple setup which does not require any digit manipulation). Check the uniform dial plan table by typing “change uniform #” where # is the matching pattern.
```

---

3. Then add the IP address of the remote end (which in this case is the Call Manager) by typing the “change node-names ip” command. Create a signaling group, specify the remote end and then associate it with the trunk group previously created.

```
3. Then add the IP address of the remote end (which in this case is the Call Manager) by typing the “change node-names ip” command. Create a signaling group, specify the remote end and then associate it with the trunk group previously created.
```

4. Now that the trunk and signaling groups have been successfully created, the next step is to take care of the routing patterns. In this lab setup, the Avaya IP phones are in the extension range 2XXX while the Call Manager IP phones are in the extension range 4XXX. So we need to create a dialplan to route to 4XXX from the Avaya system. For the purposes of our lab setup, we are inserting digits 443 while dialing the 4 digit extension and then stripping them out (Note: This is not necessary. You can also have a simple setup which does not require any digit manipulation). Check the uniform dial plan table by typing “change uniform #” where # is the matching pattern.

```
4. Now that the trunk and signaling groups have been successfully created, the next step is to take care of the routing patterns. In this lab setup, the Avaya IP phones are in the extension range 2XXX while the Call Manager IP phones are in the extension range 4XXX. So we need to create a dialplan to route to 4XXX from the Avaya system. For the purposes of our lab setup, we are inserting digits 443 while dialing the 4 digit extension and then stripping them out (Note: This is not necessary. You can also have a simple setup which does not require any digit manipulation). Check the uniform dial plan table by typing “change uniform #” where # is the matching pattern.
```

---

3. Then add the IP address of the remote end (which in this case is the Call Manager) by typing the “change node-names ip” command. Create a signaling group, specify the remote end and then associate it with the trunk group previously created.

```
3. Then add the IP address of the remote end (which in this case is the Call Manager) by typing the “change node-names ip” command. Create a signaling group, specify the remote end and then associate it with the trunk group previously created.
```

4. Now that the trunk and signaling groups have been successfully created, the next step is to take care of the routing patterns. In this lab setup, the Avaya IP phones are in the extension range 2XXX while the Call Manager IP phones are in the extension range 4XXX. So we need to create a dialplan to route to 4XXX from the Avaya system. For the purposes of our lab setup, we are inserting digits 443 while dialing the 4 digit extension and then stripping them out (Note: This is not necessary. You can also have a simple setup which does not require any digit manipulation). Check the uniform dial plan table by typing “change uniform #” where # is the matching pattern.

```
4. Now that the trunk and signaling groups have been successfully created, the next step is to take care of the routing patterns. In this lab setup, the Avaya IP phones are in the extension range 2XXX while the Call Manager IP phones are in the extension range 4XXX. So we need to create a dialplan to route to 4XXX from the Avaya system. For the purposes of our lab setup, we are inserting digits 443 while dialing the 4 digit extension and then stripping them out (Note: This is not necessary. You can also have a simple setup which does not require any digit manipulation). Check the uniform dial plan table by typing “change uniform #” where # is the matching pattern.
```
5. Now check the corresponding AAR table. The AAR table can be checked by typing “change aar analysis #” where # is the matching pattern.

6. Finally check the corresponding route pattern. In the example above, the route pattern that corresponds to dialed string 4, is Route pattern #1. Type “change route-pattern #”
Procedure on Call Manager

1. In Cisco Call Manager, specify the Avaya’s CLAN addresses as H.323 devices (Click on Device – Add a new Device – Gateway)
2. Next, add the CLAN addresses to a route group, and associate the route group to a route list.

3. Next step is to point the route pattern 2XXX to the route list created.

Pattern Definition

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route Pattern/Hunt Pilot*</td>
<td>2XXX</td>
</tr>
<tr>
<td>Partition</td>
<td>&lt; None &gt;</td>
</tr>
<tr>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>Numbering Plan*</td>
<td>North American Numbering Plan</td>
</tr>
<tr>
<td>Route Filter</td>
<td>&lt; None &gt;</td>
</tr>
<tr>
<td>MLPP Precedence</td>
<td>Default</td>
</tr>
<tr>
<td>Gateway or Route/Hunt List*</td>
<td>S8700 Avaya Xeta</td>
</tr>
</tbody>
</table>

4. For supplementary services features such as conference calls, enable Media Termination Point (MTP) resources.
5. To allow Caller ID and Caller Name Display, enable Display IE Delivery.
Features Tested

The following are the lists of features tested between the Cisco Call Manager 4.0 and Avaya S8700/G600 Communication Manager 1.3:

Name and Number Display (Bi-directional)

Call Transfer

Conference Call between the two systems

Call Park