



Avaya Solution & Interoperability Test Lab

Application Notes for Configuring Rauland Responder Enterprise with Avaya Communication Server 1000 and Avaya Aura® Session Manager – Issue 1.0

Abstract

These Application Notes describe a compliance-tested configuration consisting of the Rauland Responder Enterprise solution, Avaya Communication Server 1000 and Avaya Aura® Session Manager.

The Rauland Responder Enterprise solution is a complete nurse call system with associated Staff Management applications ensuring calls for assistance from patient rooms are immediately routed to the proper staff for response.

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.

1. Introduction

These Application Notes describe a compliance-tested configuration consisting of the Rauland Responder Enterprise (hereafter known as Responder) solution, Avaya Communication Server 1000 (hereafter known as Communication Server 1000) and Avaya Aura® Session Manager (hereafter known as Session Manager).

The Responder solution is a complete nurse call system with associated Staff Management applications ensuring calls for assistance from patient rooms are immediately routed to the proper staff for response.

Responder Enterprise solution consists of Responder SIP Server, Responder Application Server and several Responder call point devices. The Responder SIP Server connects to Communication Server 1000 using SIP trunks via the Session Manager. Calls from a patient room could be initiated by a patient (pain, assistance needed, etc.), or hospital staff (room cleaning, linens, etc.) with the push of a button. Staff using Avaya phones can be incorporated into the system so that calls to talk to a nurse for example would route through Session Manager to Communication Server 1000, and to be able to call the patient room in return. This adds the benefit of staff having access to other resources in the hospital using Avaya endpoints.

Hospital staff members who are responsible for direct communication with patient rooms generally roam using wireless phones. During compliance testing, only Avaya Desk phones were used.

2. General Test Approach and Test Results

The compliance test focused on the ability for Rauland Responder endpoints to initiate and receive calls to and from Avaya Communication Server 1000 via Avaya Aura® Session Manager.

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

2.1. Interoperability Compliance Testing

The compliance test validated the ability of Responder to route calls to and from patient rooms to Avaya endpoints. Additionally, testing validated the ability for the Responder solution to recover from common outages such as network outages and server reboots.

Responder endpoints are designed with limited functionality. Responder endpoints are not designed for multi-line functions like Hold, Conference and Transfer.

2.2. Test Results

The objectives described in **Section 2.1** were verified with the following observation.

- Responder only supports G.711MU codec.

2.3. Support

Information, Documentation and Technical support for Rauland products can be obtained at:

- Phone: +1 800 752 7725 (toll free) / +1 847 590 7100 (from outside the US)
- Web: <http://www.rauland.com/>

3. Reference Configuration

Figure 1 illustrates the compliance test configuration consisting of:

- Avaya Communication Server 1000
- Avaya Aura® Session Manager
- Avaya Aura® System Manager
- Various UNISim and SIP endpoints
- Responder SIP Server
- Responder Application Server
- Responder Communication Endpoints

Calls routed to and from the Communication Server 1000 used SIP trunks between the Responder SIP server and Session Manager, and in turn SIP trunks between Session Manager and Communication Server 1000.

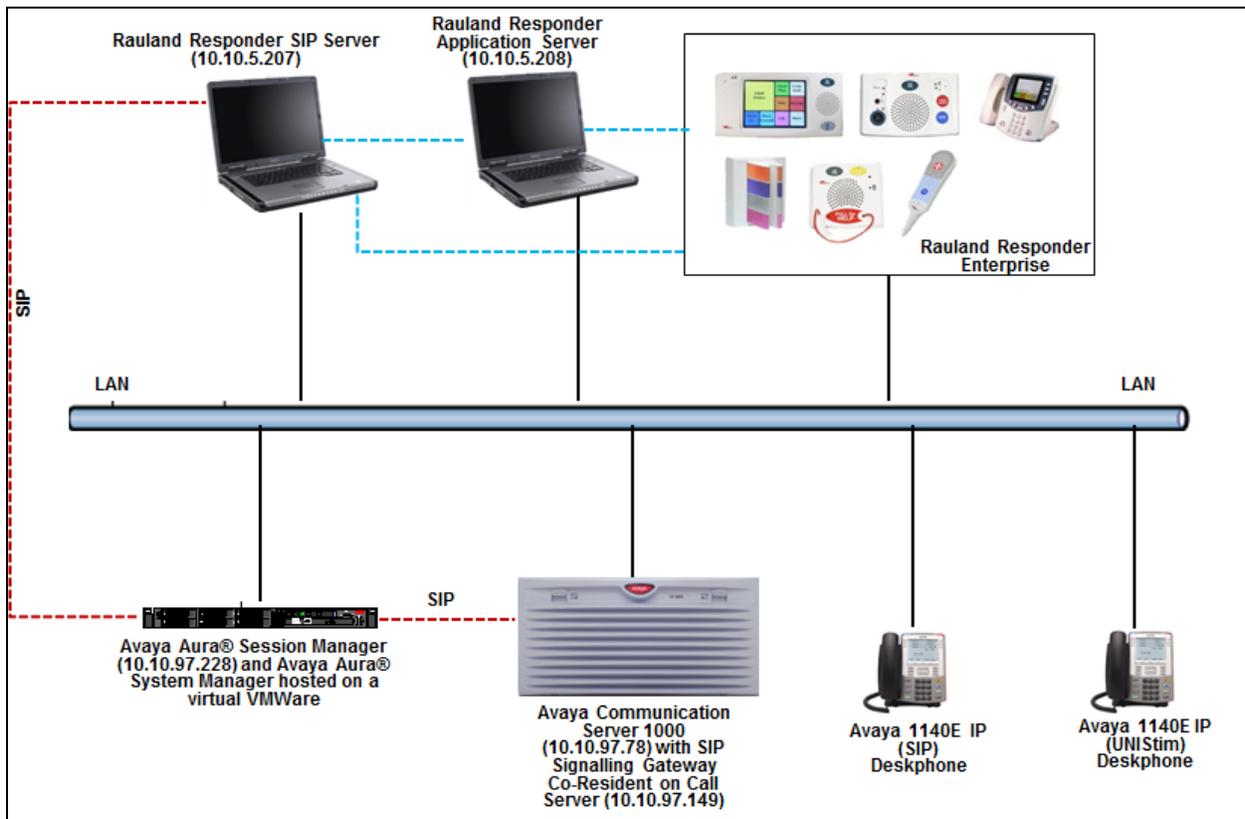


Figure 1 – Rauland Responder Enterprise Compliance Test Configuration

4. Equipment and Software Validated

The following equipment and version were used in the reference configuration described above:

| 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 IP Deskphones: 1140E (UNISTim) 1140E (SIP) | C9 04.04.26.00 |
| Rauland Nurse Call | Enterprise SR1 SP1 |
| Rauland Application Server running on Windows 2012 R2 OS | Enterprise SR1 SP1 |
| Rauland Apps | Enterprise SR1 SP1 |
| Rauland DB | Enterprise SR1 SP1 |
| Responder SIP Server running on Windows 7 Pro OS | 3.8.4.2 |

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 10**.

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 Responder 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
```

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 Responder via Session Manager.

Use the **NEW** command in **LD 87** to create a **CDP** entry for Responder. 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 Responder
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
```

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.

This system is restricted solely to authorized users for legitimate business purposes only. The actual or attempted unauthorized access, use, or modification of this system is strictly prohibited.

Unauthorized users are subject to company disciplinary procedures and or criminal and civil penalties under state, federal, or other applicable domestic and foreign laws.

The use of this system may be monitored and recorded for administrative and security reasons. Anyone accessing this system expressly consents to such monitoring and recording, and is advised that if it reveals possible evidence of criminal activity, the evidence of such activity may be provided to law enforcement officials.

All users must comply with all corporate instructions regarding the protection of information assets.

User ID:

Password:

Log On Reset

Supported Browsers: Internet Explorer 11.x or Firefox 58.0, 59.0 or 60.0.

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

AVAYA Users Elements Services Widgets Shortcuts Search

Aura® System Manager 8.0

System Resource Utilization

| Category | Value |
|----------|-------|
| opt | 7 |
| var | 5 |
| emdata | 14 |
| tmp | 1 |

Notifications

No data

Application State

- License Status
- Deployment Type
- Multi-Tenancy
- OOBM State
- Hardening Mode

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

The screenshot shows the Avaya Aura System Manager 8.0 interface. The left sidebar contains a navigation tree with categories like Network, CS 1000 Services, User Services, and Security. The main content area displays the 'Elements' list for the selected Communication Server 1000. The list includes columns for Element Name, Element Type, Release, Address, and Description. The element 'EM on cppm3' is highlighted with a red box.

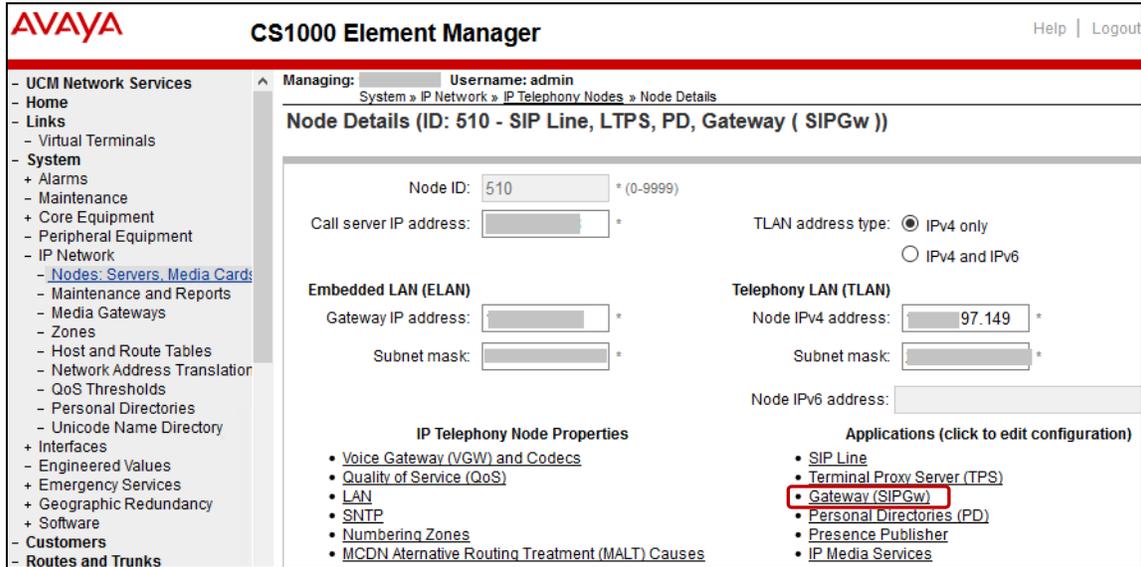
| Element Name | Element Type | Release | Address | Description |
|--------------------------------|--------------------------|---------|---------|------------------|
| 1 dewmsmgr.bwdev.com (primary) | Base OS | 7.6 | | Base OS element. |
| 2 EM on cppm3 | CS1000 | 7.6 | | New element. |
| 3 cppm3.bwdev.com (member) | Linux Base | 7.6 | | Base OS element. |
| 4 [redacted] | Media Gateway Controller | 7.6 | | New element. |

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 6.5.2**.

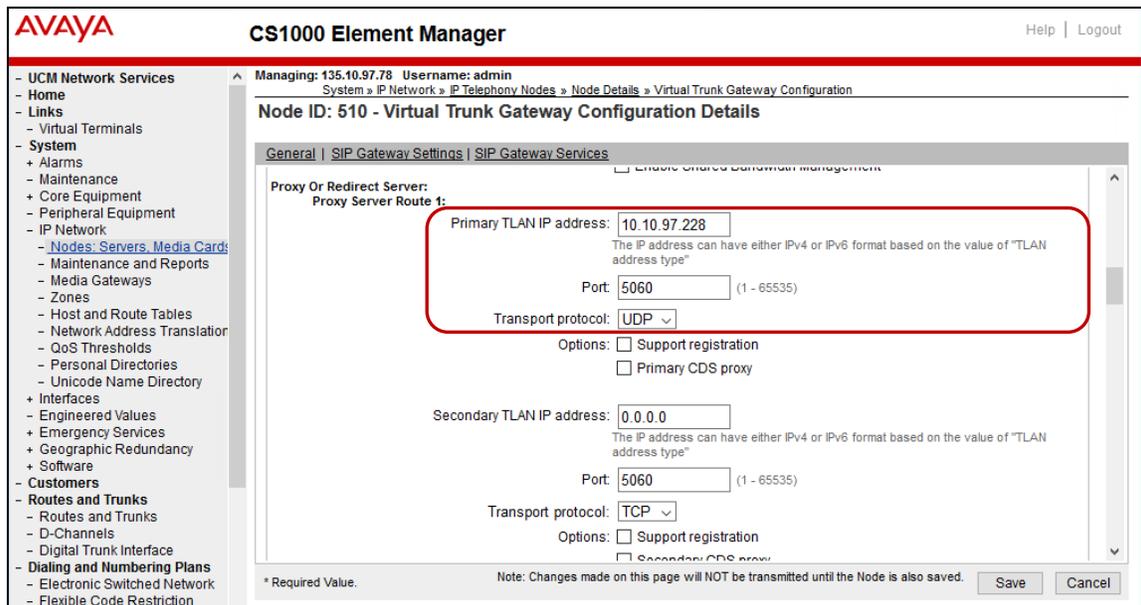
The screenshot shows the CS1000 Element Manager interface. The left sidebar contains a navigation tree with categories like UCM Network Services, Home, Links, System, and IP Network. The main content area displays the 'IP Telephony Nodes' list. The list includes columns for Node ID, Components, Enabled Applications, ELAN IP, Node/TLAN IPv4, Node/TLAN IPv6, and Status. The node '510' is highlighted.

| Node ID | Components | Enabled Applications | ELAN IP | Node/TLAN IPv4 | Node/TLAN IPv6 | Status |
|---------|------------|-------------------------------------|---------|----------------|----------------|--------------|
| 510 | 1 | SIP Line, LTPS, PD, Gateway (SIPGw) | - | 10.10.97.149 | - | Synchronized |

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 6.5.2**. 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.

6. 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

6.1. 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.

This system is restricted solely to authorized users for legitimate business purposes only. The actual or attempted unauthorized access, use, or modification of this system is strictly prohibited.

Unauthorized users are subject to company disciplinary procedures and or criminal and civil penalties under state, federal, or other applicable domestic and foreign laws.

The use of this system may be monitored and recorded for administrative and security reasons. Anyone accessing this system expressly consents to such monitoring and recording, and is advised that if it reveals possible evidence of criminal activity, the evidence of such activity may be provided to law enforcement officials.

All users must comply with all corporate instructions regarding the protection of information assets.

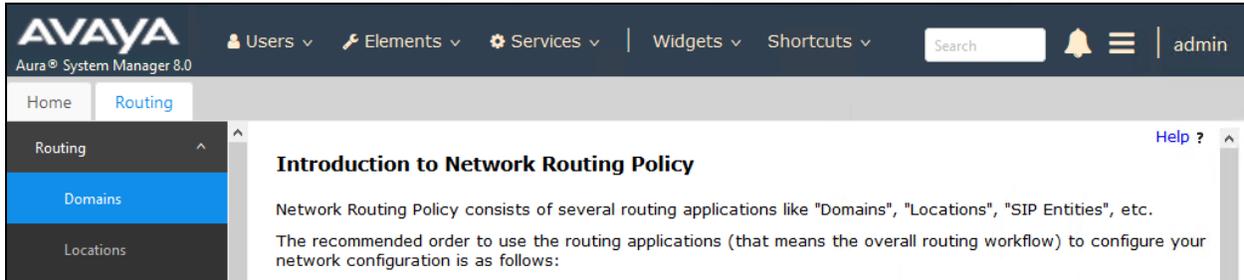
User ID:

Password:

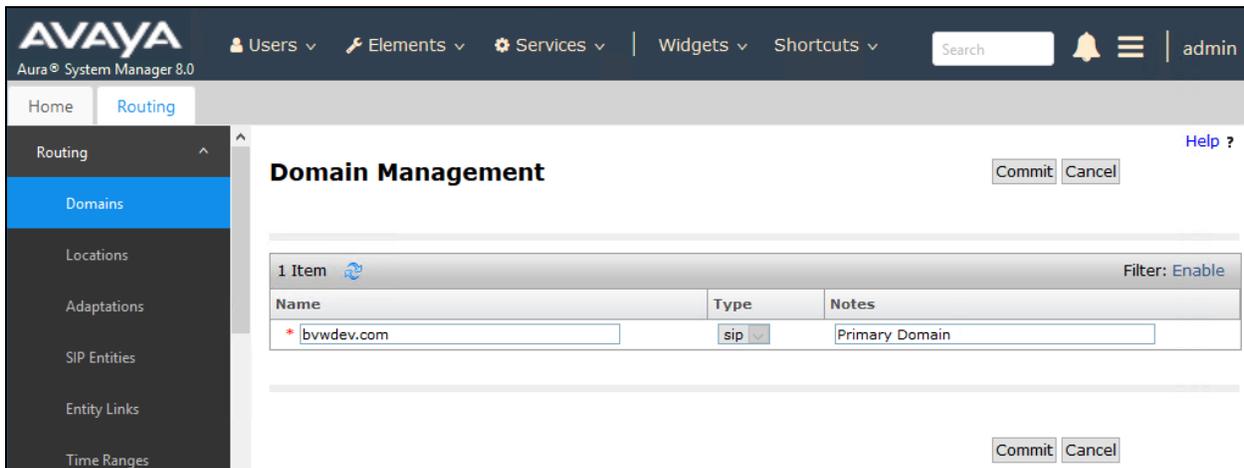
Supported Browsers: Internet Explorer 11.x or Firefox 58.0, 59.0 or 60.0.

6.2. Administer Domain

In the subsequent screen (not shown), select **Elements** → **Routing** to display the **Introduction to Network Routing Policy** screen below. Select **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**.



6.3. Administer Locations

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

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.

The screenshot shows the Avaya Aura System Manager 8.0 interface. The top navigation bar includes 'Users', 'Elements', 'Services', 'Widgets', and 'Shortcuts'. The left sidebar has 'Routing', 'Domains', 'Locations', and 'Adaptations'. The main content area is titled 'Location Details' and has a 'General' sub-section. The 'Name' field is filled with 'Belleville' and the 'Notes' field is filled with 'Belleville DevConnect Lab'. There are 'Commit' and 'Cancel' buttons in the top right corner.

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.

The screenshot shows the 'Location Pattern' sub-section. It has 'Add' and 'Remove' buttons at the top left. Below them is a table with 4 items. The first item is 'IP Address Pattern' with a dropdown arrow. The second, third, and fourth items are IP address patterns: '10.33.5.*', '10.10.97.*', and '10.10.98.*'. Each row has a checkbox and a 'Notes' field. At the bottom left, there is a 'Select : All, None' option. At the bottom right, there are 'Commit' and 'Cancel' buttons.

6.4. Administer Adaptation

During compliance test, to make the call from and to Communication Server 1000 via Session Manager, Adaptation to translate IP address into domain name is used for Responder SIP entity. Also, another Adaptation to remove the phone-context in the SIP Message body from Communication Server 1000 was used.

6.4.1. Adaptation for Responder Enterprise

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).

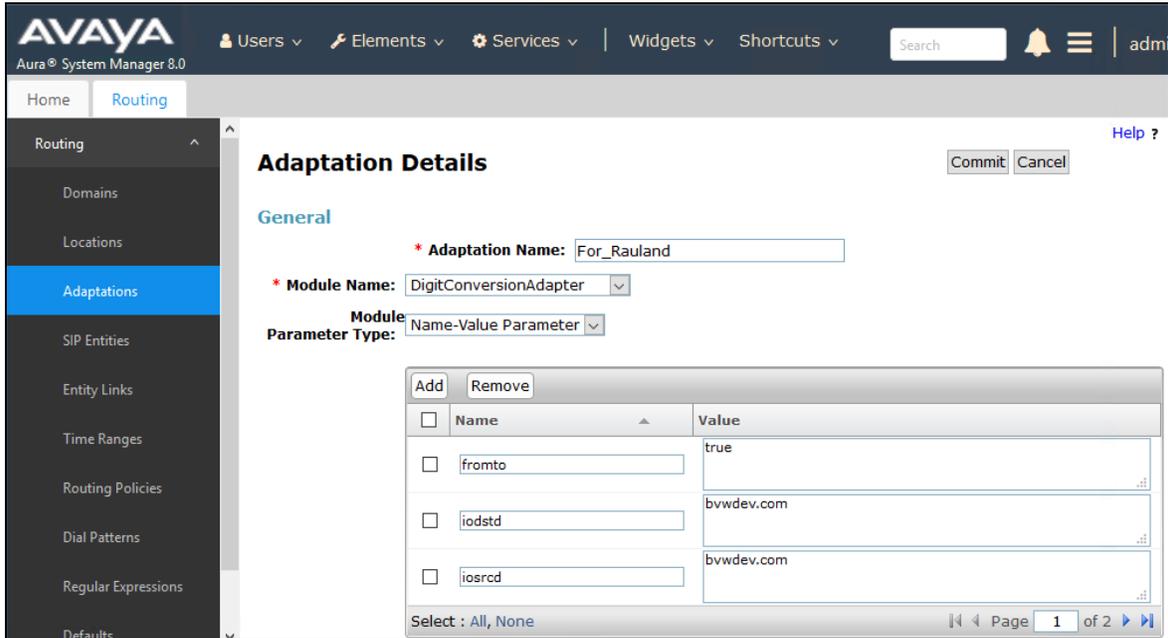
Enter the following for the Responder Adaptation.

- **Adaptation Name:** An informative name (e.g., **change IP to Domain Responder**).
- **Module Name:** Select **DigitConversionAdapter**.
- **Module Parameter Type:** Select **Name-Value Parameter**.

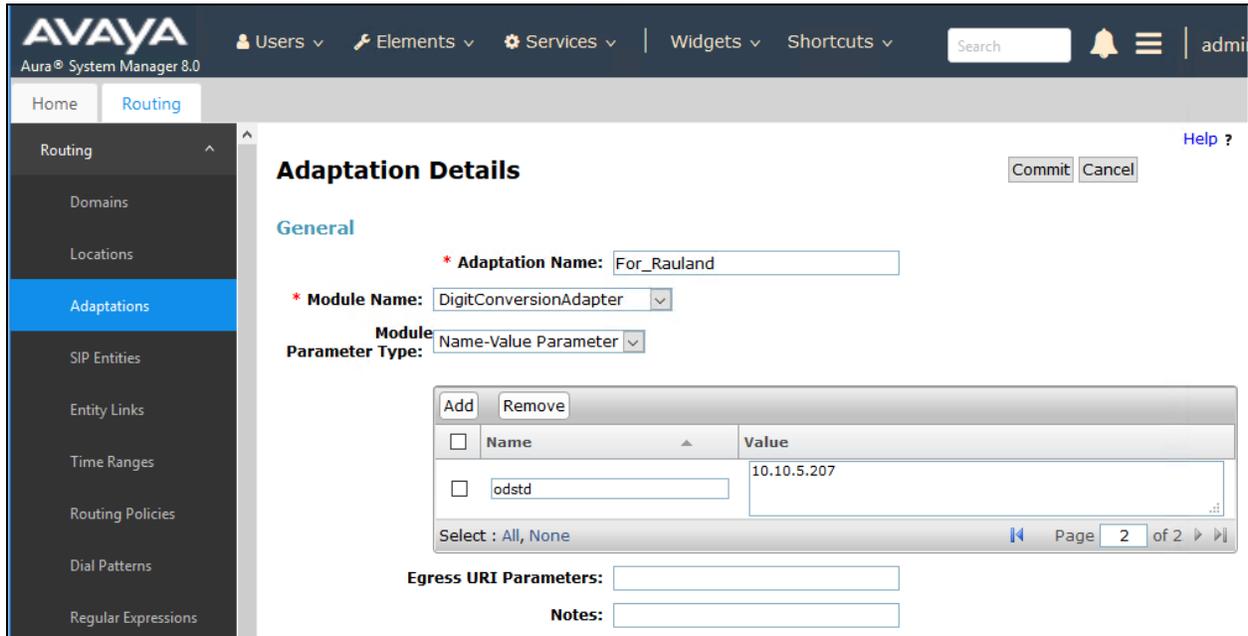
Click **Add** to add a new row for the following values as shown below table:

| Name | Value |
|-------------|--|
| fromto | true |
| iodstd | Enter the domain name of system, ex: bvwdev.com |
| iosrcd | Enter the domain name of system, ex: bvwdev.com |
| odstd | Enter IP address of Responder SIP Server, ex: 10.10.5.207 |

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



The screenshot showing the continuation of the Adaptation values configured for Responder:



6.4.2. Adaptation for Communication Server 1000

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 Responder 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 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 Responder 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 6.7**.

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

The screenshot displays the Avaya Aura System Manager 8.0 interface. The left sidebar shows the navigation menu with 'Adaptations' selected. The main content area is titled 'Adaptation Details' and includes a 'Commit' button and a 'Cancel' button. The 'General' section contains the following fields:

- * Adaptation Name:** CS1000Adapter
- * Module Name:** CS1000Adapter
- Module Parameter Type:** Name-Value Parameter

Below these fields is a table for defining parameters:

| <input type="checkbox"/> | Name | Value |
|--------------------------|--------|-------|
| <input type="checkbox"/> | fromto | true |

Additional fields include 'Egress URI Parameters' (empty) and 'Notes' (CS1000 adapter for Phone Context). The 'Digit Conversion for Incoming Calls to SM' section contains a table with 2 items:

| <input type="checkbox"/> | Matching Pattern | Min | Max | Phone Context | Delete Digits | Insert Digits | Address to modify | Adap |
|--------------------------|------------------|-----|-----|---------------|---------------|---------------|-------------------|------|
| <input type="checkbox"/> | *30 | *5 | *5 | cdp.udp | *0 | | both | |
| <input type="checkbox"/> | *54 | *5 | *5 | cdp.udp | *0 | | both | |

6.5. Administer SIP Entities

Add two new SIP entities, one for Responder and one for the new SIP trunks with Communication Server 1000.

6.5.1. SIP Entity for Responder Enterprise

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

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 Responder SIP Server.
- **Type:** “Other”
- **Notes:** Any desired notes.
- **Adaptation:** Select the adaptation configured in **Section 6.4.1**
- **Location:** Select the Responder location name from **Section 6.3**.
- **Time Zone:** Select the applicable time zone.
- **SIP Link Monitoring:** Select “Link Monitoring Disabled”.

The screenshot shows the Avaya Aura System Manager 8.0 interface. The top navigation bar includes 'Users', 'Elements', 'Services', 'Widgets', and 'Shortcuts'. The left sidebar shows a tree view with 'SIP Entities' selected. The main content area is titled 'SIP Entity Details' and has 'Commit' and 'Cancel' buttons. The 'General' section contains the following fields:

- Name:** Rauland
- FQDN or IP Address:** 10.10.5.207
- Type:** Other
- Notes:** SIP entity for a partner testing
- Adaptation:** For_Rauland
- Location:** Belleville
- Time Zone:** America/Fortaleza
- SIP Timer B/F (in seconds):** 4
- Minimum TLS Version:** Use Global Setting
- Credential name:** (empty)
- Securable:**
- Call Detail Recording:** none
- CommProfile Type Preference:** (empty)

The 'Loop Detection' section contains:

- Loop Detection Mode:** On
- Loop Count Threshold:** 5
- Loop Detection Interval (in msec):** 200

The 'Monitoring' section contains:

- SIP Link Monitoring:** Link Monitoring Disabled

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 Responder entity name from this section.
- **Port:** “5060”.
- **Connection Policy:** “trusted”.

Note that only UDP protocol was tested.

The screenshot shows the 'Entity Links' configuration page. At the top, there is a checkbox for 'Override Port & Transport with DNS SRV:'. Below this is a table with columns: Name, SIP Entity 1, Protocol, Port, SIP Entity 2, Port, and Connection Policy. The table contains one entry with the following values: Name: * DevvmSM_Rauland_506, SIP Entity 1: DevvmSM, Protocol: UDP, Port: * 5060, SIP Entity 2: Rauland, Port: * 5060, and Connection Policy: trusted. There are 'Add' and 'Remove' buttons at the top left of the table area. A 'Filter: Enable' link is at the top right. At the bottom, there is a 'Select : All, None' dropdown.

| <input type="checkbox"/> | Name | SIP Entity 1 | Protocol | Port | SIP Entity 2 | Port | Connection Policy |
|--------------------------|-----------------------|--------------|----------|--------|--------------|--------|-------------------|
| <input type="checkbox"/> | * DevvmSM_Rauland_506 | DevvmSM | UDP | * 5060 | Rauland | * 5060 | trusted |

6.5.2. SIP Entity for Communication Server 1000

Select **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 Responder.

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 6.4.2**
- **Location:** Select the applicable location for Communication Server 1000.
- **Time Zone:** Select the applicable time zone.

The screenshot shows the Avaya Aura System Manager 8.0 interface. The top navigation bar includes 'Users', 'Elements', 'Services', 'Widgets', and 'Shortcuts'. The left sidebar shows the 'Routing' menu with 'SIP Entities' selected. The main content area is titled 'SIP Entity Details' and contains the following configuration fields:

- Name:** CS1K_Bottom
- FQDN or IP Address:** 10.10.97.149
- Type:** Other
- Notes:** SIP connection to CS1K
- Adaptation:** CS1000Adapter
- Location:** Belleville
- Time Zone:** America/Toronto
- SIP Timer B/F (in seconds):** 4
- Minimum TLS Version:** Use Global Setting
- Credential name:** (empty field)
- Securable:**
- Call Detail Recording:** none
- CommProfile Type Preference:** (empty dropdown)
- Loop Detection Mode:** On
- Loop Count Threshold:** 5
- Loop Detection Interval (in msec):** 200
- SIP Link Monitoring:** Use Session Manager Configuration

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”

Entity Links

Override Port & Transport with DNS SRV:

Add Remove

2 Items Filter: Enable

| | Name | SIP Entity 1 | Protocol | Port | SIP Entity 2 | Port | Connection Policy | Deny New Service |
|--------------------------|-----------------------|--------------|----------|--------|--------------|--------|-------------------|--------------------------|
| <input type="checkbox"/> | * DevvmSM_CS1K_Botton | DevvmSM | UDP | * 5060 | CS1K_Bottom | * 5060 | trusted | <input type="checkbox"/> |

Select : All, None

6.6. Administer Routing Policies

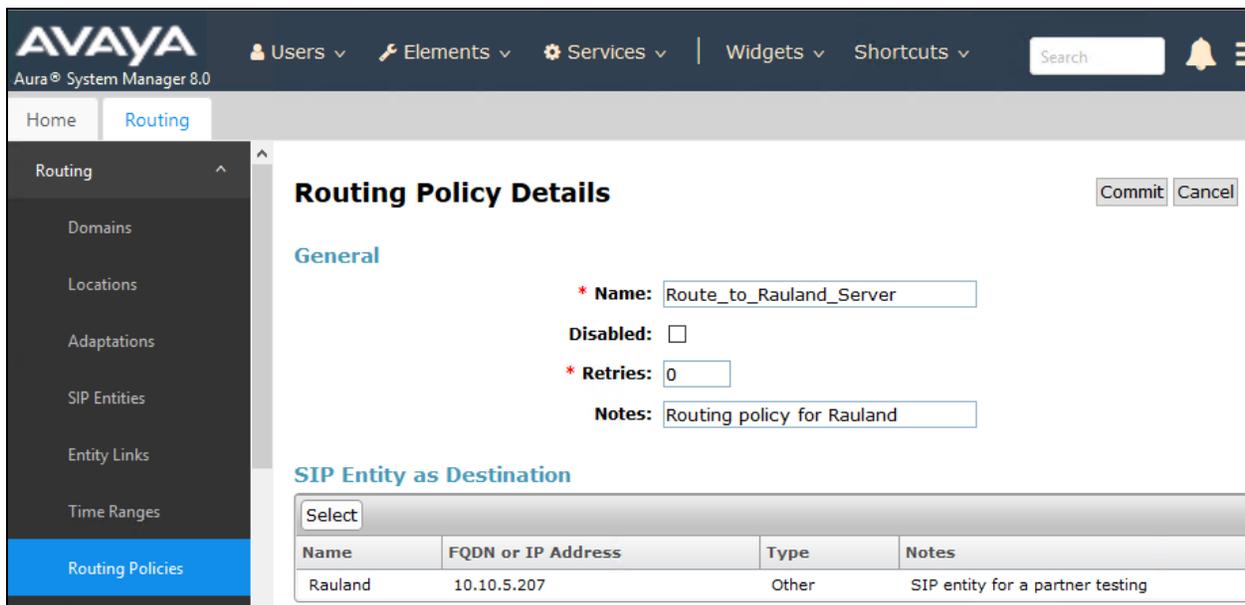
Add two new routing policies, one for Responder and one for the new SIP trunks with Communication Server 1000.

6.6.1. Routing Policy for Responder Enterprise

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

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 Responder entity name from **Section 6.5.1**. The screen below shows the result of the selection.



The screenshot shows the Avaya Aura System Manager 8.0 interface. The top navigation bar includes the Avaya logo, user information, and various menu items like Users, Elements, Services, Widgets, and Shortcuts. The main content area is titled "Routing Policy Details" and is divided into two sections: "General" and "SIP Entity as Destination".

General

- * Name: Route_to_Rauland_Server
- Disabled:
- * Retries: 0
- Notes: Routing policy for Rauland

SIP Entity as Destination

Select

| Name | FQDN or IP Address | Type | Notes |
|---------|--------------------|-------|----------------------------------|
| Rauland | 10.10.5.207 | Other | SIP entity for a partner testing |

6.6.2. Routing Policy for Communication Server 1000

Select **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 6.5.2**. The screen below shows the result of the selection.

Routing Policy Details [Commit] [Cancel]

General

* Name:

Disabled:

* Retries:

Notes:

SIP Entity as Destination

Select

| Name | FQDN or IP Address | Type | Notes |
|-------------|--------------------|-------|------------------------|
| CS1K_Bottom | 10.10.97.149 | Other | SIP connection to CS1K |

6.7. Administer Dial Patterns

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

6.7.1. Dial Pattern for Responder Enterprise

Select **Dial Patterns** from the left pane and click **New** in the subsequent screen (not shown) to add a new dial pattern to reach Responder. 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 6.2**.

In the **Originating Locations and Routing Policies** sub-section, click **Add** and create an entry for reaching Responder. In the compliance testing, the entry allowed for call originations from all Communication Server 1000 endpoints in locations “Belleville”. The Responder routing policy from **Section 6.6.1** was selected as shown below.

The screenshot displays the Avaya Aura System Manager 8.0 interface. The left navigation pane is open to 'Routing' > 'Dial Patterns'. The main content area shows the 'Dial Pattern Details' configuration screen. The 'General' section contains the following fields:

- * Pattern:** 30
- * Min:** 5
- * Max:** 5
- Emergency Call:**
- SIP Domain:** bvwddev.com
- Notes:** Dial pattern for Rauland

The 'Originating Locations and Routing Policies' section shows a table with one entry:

| Originating Location Name | Originating Location Notes | Routing Policy Name | Rank | Routing Policy Disabled | Routing Policy Destination | Routing Policy Notes |
|-------------------------------------|----------------------------|-------------------------|------|--------------------------|----------------------------|----------------------------|
| <input type="checkbox"/> Belleville | Belleville DevConnect Lab | Route_to_Rauland_Server | 0 | <input type="checkbox"/> | Rauland | Routing policy for Rauland |

6.7.2. Dial Pattern for Communication Server 1000

Select **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”.
- **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 6.2**.

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 Responder endpoints in locations “-ALL-”. The Communication Server 1000 routing policy from **Section 6.6.2** was selected as shown below.

The screenshot displays the Avaya Aura System Manager 8.0 interface. The left navigation pane shows 'Dial Patterns' selected. The main content area is titled 'Dial Pattern Details' and contains the following configuration:

General

- * **Pattern:** 54
- * **Min:** 5
- * **Max:** 36
- Emergency Call:**
- SIP Domain:** bvwddev.com
- Notes:** Dial pattern to CS1K

Originating Locations and Routing Policies

1 Item Filter: Enable

| <input type="checkbox"/> | Originating Location Name | Originating Location Notes | Routing Policy Name | Rank | Routing Policy Disabled | Routing Policy Destination | Routing Policy Notes |
|--------------------------|---------------------------|----------------------------|----------------------|------|--------------------------|----------------------------|----------------------|
| <input type="checkbox"/> | -ALL- | | Route_to_CS1K_Bottom | 0 | <input type="checkbox"/> | CS1K_Bottom | |

Select : All, None

7. Configure Rauland Responder Enterprise

The Responder solution is typically implemented by Rauland engineers or their resale partners. When integrated with a third-party SIP PBX, it is always deployed with a Rauland SIP Server which serves two purposes. First, Rauland SIP Server is commonly deployed with a variety of SIP capable PBX solutions giving the Responder equipment a common and predictable SIP interface that is adaptable to many environments. Second, the Rauland SIP Server can provide registrar services without requiring provisioning for each Responder endpoint thus significantly reducing the implementation and ongoing administration of the solution.

The Responder equipment will be provisioned completely by Rauland engineers based on site requirements and will be configured to use the Rauland SIP server for all calls destined to endpoints outside of the Responder endpoints.

The focus of this section will be on administration of the Responder applications, and configuration of the Rauland SIP Server to properly route SIP calls and RTP.

7.1. Rauland Responder Enterprise Configuration Details

Administration for the solution required the following steps:

- Configure Endpoints
- Assign Endpoints to User
- User Login and Device Assignment
- Assign Staff to Patient Rooms

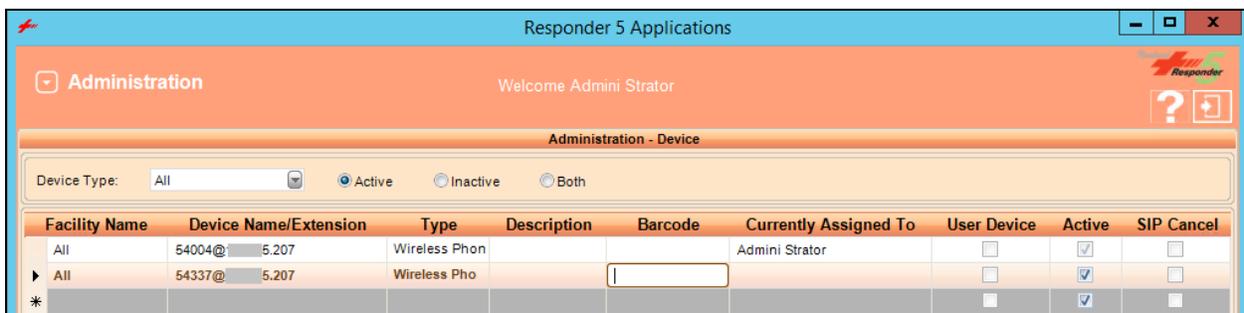
7.1.1. Configure Endpoints

Typically, hospital staff use wireless phones to enable instant communications with staff and patient rooms. During this compliance testing, a variety of UNISTim and SIP deskphones which were previously configured on Communication Server 1000 were administered in the Responder applications to associate the endpoints with the hospital staff.

The Responder applications are accessed from the Windows PC used by a staff administrator and/or at nurse stations throughout the hospital. These PCs are used by staff to clock in and manage patient room assignments. The applications are launched from **Start → All Programs → Responder 5 Applications**.

In the top left corner is a drop-down list that navigates to the various applications. Each requires an appropriate login (not shown). Select **Administration → Devices** in the upper left drop-down list (not shown) to add or modify phones. Enter the appropriate **Device Name/Extension, Type**, and a **Description**. The illustration below shows several devices used in the test environment, extensions “54xxx” were UNISTim and SIP devices administered on Communication Server 1000.

Click **OK** at the bottom of the screen (not shown) to complete edits on this screen.



7.1.2. Assign Endpoints to User

Select **Administration** → **Devices** in the upper left drop-down list (not shown) to add or modify users and to assign devices to the users. This task is only necessary for statically assigned device assignments. Users who share devices can enter the device they are using for a shift when they login as described in **Section 7.1.3**.

Users can be created or modified on the **User** → **Creation** tab (user creation is beyond the scope of these application notes, see Responder documentation for details of this task). Devices (phones) are created on the **User - Device** tab as shown below.

Click **OK** (not shown) to complete edits on this screen.

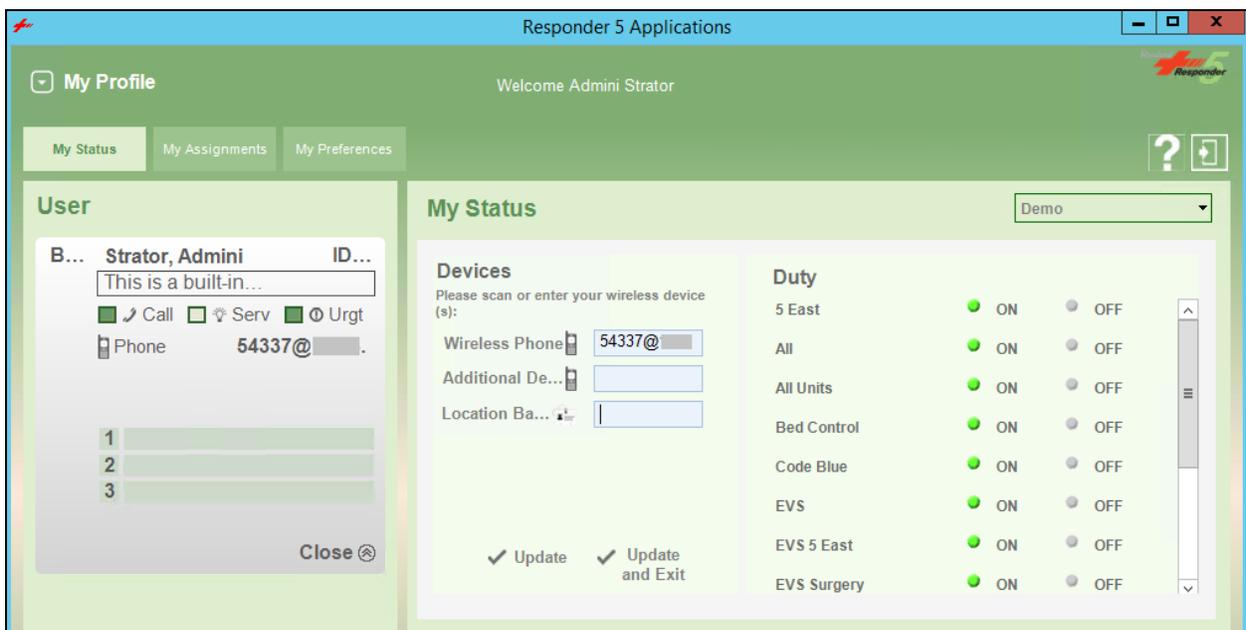


7.1.3. User Login and Device Assignment

At the beginning of a shift, or return to duty from breaks, users will scan their Hospital ID badge bar code with a scanner connected to the PC which will automatically log them in to the **My Profile** screen.

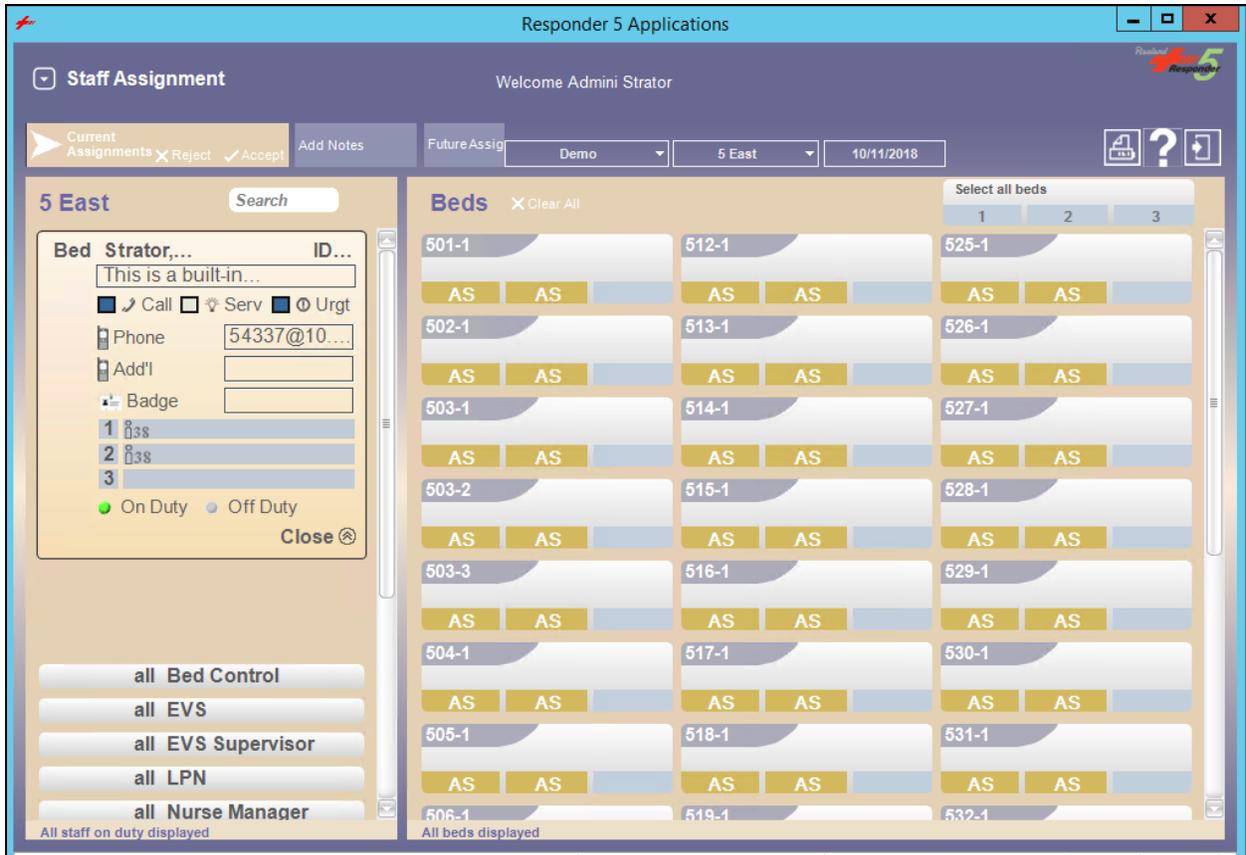
From this screen, a **Wireless Phone** and/or **Pager** number can be entered; duty status updated, and break status entered. The **My Assignments** and **My Preferences** tabs are available for staff to review the patient rooms they are assigned to and modify user preferences. The details of these tasks are beyond the scope of these Application Notes.

Click **Update** or **Update and Exit** (not shown) to commit the changes.



7.1.4. Assign Staff to Patient Rooms

This task is typically performed by shift supervisors. Staff can be assigned to patient rooms on the **Staff Assignment** screen which is accessed from the drop-down menu at the upper left of the Responder 5 Applications. In the illustration below, “54337” is assigned to a room “501-1” by clicking on the Staff name in the left column, then clicking on the assignment space below the patient name. The staff member’s initials will appear as below when the staff member has been successfully assigned to a patient.



7.2. Configure Responder SIP Registrar

All administration is performed via web browser by navigating to the hostname or IP Address of the Rauland SIP Server. Administration for the solution required the following steps:

- Login to SIP Server System
- Configure SIP Server System Tab
- Configure SIP Server SIP Tab
- Configure SIP Server RTP Tab
- Configure Dial Plan Routing Rules

7.2.1. Login to SIP Server System

Launch the SIP Server Sign in page by opening a web browser and typing the following in the URL <http://<IP Address>:18080/sip/>, where IP Address is the address of the SIP Server. Enter a valid **User** and **Password** and click on the **SIGN IN** button.

The screenshot shows the login interface for the Rauland Responder SIP Server. At the top left is the Rauland Responder logo. To its right is a blue header bar with the text "SIP Server". Below the header, the text "Sign in" is displayed in green. A warning message in a brown-bordered box reads: "This is a LAB use license. This license is issued to be used only for internal LAB use by the organization to whom it has been issued, and not for any other purposes." Below the warning are two input fields: "User" and "Password". Under the "Password" field is a checkbox labeled "REMEMBER ME". At the bottom is a green button with the text "SIGN IN".

7.2.2. Configure SIP Server System Tab

The following **System** properties were pre-configured for the test environment.

The screenshot displays the Raoulnd Responder web interface. The top navigation bar includes the Raoulnd Responder logo, a settings gear icon, and tabs for System, SIP, RTP, Database/Radius, and Advanced. The left sidebar menu is expanded to show the 'SYSTEM' section, which includes options like Registered Clients, Active Sessions, User Authentication, Dial Plan, Aliases, Logs, CDR, Push Notification, Domains, Configuration, and Maintenance. The main content area is titled 'System' and contains a red-bordered warning box stating 'This is a LAB use license.' Below this, the 'General' section has three input fields: 'Server Name' (value: your-sip-sv), 'Server Description' (value: your SIP Server), and 'Server Location' (value: your-place). The 'Network' section follows, featuring five pairs of input fields for 'Interface address' and 'Remote Address Pattern' (1-5). The 'Auto interface discovery' option is a radio button set with 'off' selected. The 'External IP address pattern' and 'Internal IP address pattern' fields are also present.

| System | SIP | RTP | Database/Radius | Advanced |
|--|---|-----|-----------------|----------|
| System | | | | |
| <div style="border: 1px solid red; padding: 2px;">This is a LAB use license.</div> | | | | |
| General | | | | |
| Server Name | <input type="text" value="your-sip-sv"/> | | | |
| Server Description | <input type="text" value="your SIP Server"/> | | | |
| Server Location | <input type="text" value="your-place"/> | | | |
| Network | | | | |
| Interface address 1 | <input type="text"/> | | | |
| Remote Address Pattern 1 | <input type="text"/> | | | |
| Interface address 2 | <input type="text"/> | | | |
| Remote Address Pattern 2 | <input type="text"/> | | | |
| Interface address 3 | <input type="text"/> | | | |
| Remote Address Pattern 3 | <input type="text"/> | | | |
| Interface address 4 | <input type="text"/> | | | |
| Remote Address Pattern 4 | <input type="text"/> | | | |
| Interface address 5 | <input type="text"/> | | | |
| Remote Address Pattern 5 | <input type="text"/> | | | |
| Auto interface discovery | <input type="radio"/> on <input checked="" type="radio"/> off | | | |
| External IP address pattern | <input type="text"/> | | | |
| Internal IP address pattern | <input type="text"/> | | | |

IPv6

IPv6 on off

RFC3484's policy table for Address Selection on off

DNS

DNS SRV on off

DNS AAAA on off

DNS Server

DNS SRV Failover on off

Caching period for resolved name (sec)

Caching period for unknown name (sec)

Caching period for error (sec)

UPnP

Enable/Disable enable disable

Default router IP address

Cache size

Cache period (sec,0=disable)

Refresh Interval (sec,0=disable)

Java

Java VM arguments

Save Your changes will be in effect after restart.

← MENU

7.2.3. Configure SIP Server SIP Tab

The following SIP properties were pre-configured for the test environment.

SIP Server

RAULAND

SIP-TAP
Settings

SIP SERVER

Registered Clients
Active Sessions
User Authentication
Dial Plan
Aliases
Logs
CDR
Push Notification
Domains
Configuration

SYSTEM +

MAINTENANCE -

Start/Shutdown
Software Maintenance

SIP

This is a LAB use license.

SIP exchanger

Session Limit (-1=unlimited)

Local Port

B2B-UA mode on off

Check Maximum UDP packet size on off

Maximum UDP packet size

NAT traversal

Keep address/port mapping on off

Interval (ms)

Method Blank packet OPTIONS

Add 'rport' parameter (Send) on off

Add 'rport' parameter (Receive) on off

Authentication

REGISTER on off

INVITE on off

MESSAGE on off

SUBSCRIBE on off

Realm (ex: domain name)

Auth-user=user in "To:" (Register) yes no

Auth-user=user in "From:" yes no

Terminating character for user-info

FQDN only yes no

Nonce Expires (seconds)

Registration

Adjusted Expires

| | |
|--|--|
| Upper Registration | |
| On/Off | <input type="radio"/> on <input checked="" type="radio"/> off |
| Register Server | <input type="text"/> |
| Protocol | <input checked="" type="radio"/> UDP <input type="radio"/> TCP <input type="radio"/> TLS |
| Thru Registration | |
| On/Off | <input checked="" type="radio"/> on <input type="radio"/> off |
| Timeout (0=unlimited) | |
| Ringing Timeout (ms) | <input type="text" value="240000"/> |
| Talking Timeout (ms) | <input type="text" value="259200000"/> |
| Upper/Thru Timeout(ms) | <input type="text" value="40000"/> |
| Dial Plan | |
| Maximum history records | <input type="text" value="50"/> |
| Miscellaneous | |
| 100 Trying | <input type="radio"/> any requests <input checked="" type="radio"/> only for initial |
| Check Request-URI's validity | <input type="radio"/> yes <input checked="" type="radio"/> no |
| Server/User-Agent | <input type="text"/> |
| TCP | |
| TCP-handling | <input checked="" type="radio"/> on <input type="radio"/> off |
| Queue Size | <input type="text" value="50"/> |
| Maximum Active Connections (0=unlimited) | <input type="text" value="0"/> |
| TLS | |
| TLS-handling | <input type="radio"/> on <input checked="" type="radio"/> off |
| Queue Size | <input type="text" value="50"/> |
| Maximum Active Connections (0=unlimited) | <input type="text" value="0"/> |
| Enable TLS 1.0 or older | <input checked="" type="radio"/> enable <input type="radio"/> disable |
| Request Client Certificate | <input type="radio"/> on <input checked="" type="radio"/> off |

WS (WebSocket)

WS-handling on off

Listen port

Queue Size

Maximum Active Connections (0=unlimited)

WSS (WebSocket over TLS)

WSS-handling on off

Listen port

Queue Size

Maximum Active Connections (0=unlimited)

Key and Certificate

Peer Certification Validation on off

File Type Certificate (.pem .der .cer .crt .ce

Private Key File No File No

Certificate File No File No

Performance Optimization (Proxy)

Initial threads

Maximum Sessions per thread

Performance Optimization (Registrar)

Initial threads

Maximum Sessions per thread

Performance Optimization (Dispatcher)

Multiple Dispatcher yes no

Number of Dispatchers

Save

Your changes will be in effect after restart.

< MENU

7.2.4. Configure SIP Server RTP Tab

On the **RTP** screen, set **RTP Relay** to “on”, **RTP relay (UA on this machine)** to “auto” and **RTP relay even with ICE** to “no” and click **Save** to complete entries. Note, the **Minimum** and **Maximum Port** range settings should be sufficient to handle the maximum number of concurrent RTP sessions between systems.

The screenshot displays the Rauland Responder web interface for configuring the SIP Server RTP tab. The interface includes a navigation menu on the left and a main configuration area on the right.

Navigation Menu:

- SIP Server
 - RAULAND -
 - SIP-TAP Settings
 - SIP SERVER**
 - Registered Clients
 - Active Sessions
 - User Authentication
 - Dial Plan
 - Aliases
 - Logs
 - CDR
 - Push Notification
 - Domains
 - Configuration
- SYSTEM +
- MAINTENANCE -
 - Start/Shutdown
 - Software Maintenance

Main Configuration Area:

RTP

This is a LAB use license.

RTP exchanger

- RTP relay: on auto
- RTP relay (UA on this machine): auto off
- RTP relay even with ICE: yes no auto
- Minimum Port: 5000 RTP sessions available with these port settings.
- Maximum Port:
- Minimum Port (Video): 0 RTP sessions (Video) available with these port settings.
- Maximum Port (Video):
- Port mapping: sdp source port
- Send UA's remote address: yes no auto
- Send before receiving (behind NAT): yes no

Timeout (0=unlimited)

- RTP Session Timeout (ms):

Identify Media Streams

- Label Attribute (RFC4574): on off
- Content Attribute (RFC4796): on off
- Order of the 'm' line: on off

Save Your changes will be in effect after restart.

7.2.5. Configure Dial Plan Routing Rules

Dial Plan rules that was used is illustrated below. For calls routing from Session Manager, the **DELETE Inbound Call** rule was used. For calls routing to Communication Server 1000, the **To CS1000** rule was used.

The screenshot displays the 'Rules' configuration page in the Avaya Responder interface. The left sidebar shows the navigation menu with 'SIP SERVER' expanded. The main area shows a table of rules with the following data:

| Pri | Name | Matching Patterns | Deploy Patterns |
|-----|---------------------|--|--|
| 2 | Inbound Call | \$request = ^INVITE To = sip:30(d+)*(d+)*(d+)*@ | To = sip:a%1*r%2*b%3@50f13e83-94b7-e811-8114-0800273baef6.r5demo-srv-dev-r5ead.net \$target = [redacted] \$b2bua = true \$session = sdp &net.sip.replacesdp.multipart = true &sdp.audio.a.1 = ptim:20 Accept-Language Alert-Info P-Location P-AV-Message-Id P-Asserted-Identity P-Charging-Vector AV-Global-Session-ID x-nt-corr-id History-Info Max-Breadth Endpoint-View User-to-User |
| 3 | DELETE Inbound Call | \$request = ^INVITE To = sip:(301.+)*@ | To = sip:a5*r501*b1@50f13e83-94b7-e811-8114-0800273baef6.r5demo-srv-dev-r5ead.net \$target = 10.10.5.208 \$b2bua = true \$session = sdp &net.sip.replacesdp.multipart = true &sdp.audio.a.1 = ptim:20 Accept-Language Alert-Info P-Location P-AV-Message-Id P-Asserted-Identity P-Charging-Vector AV-Global-Session-ID x-nt-corr-id History-Info Max-Breadth Endpoint-View User-to-User |
| 16 | To CS1000 | \$request = ^INVITE To = sip:(54.+)*@ | To = sip:%1@10.10.97.228 |

Additional UI elements include a 'New Rule' button, a 'Hide Disabled Rules' checkbox, and a warning message: 'This is a LAB use license.'

8. Verification Steps

Calls were placed to and from Responder endpoints, and two-way audio was confirmed. The nature of these devices is simple, one-way communications with Hospital staff; complex calls like hold, transfer and conference are not supported on the patient room devices.

On the Rauland SIP Server, the **Registered Clients** screen will confirm if Responder endpoints are successfully registered as shown below.

Registered Clients

This is a LAB use license.

Show Filter

Unregister

| User | Contact URI (Source IP Address) | Details |
|---|--|--|
| <input type="checkbox"/> 30505@... 207 | sip:30505@... 207:60219 (... 207:60219) | Expires : 3600 Priority User Agent : X-Lite release 5.3 Transport : UDP Time Update : Thu Oct 11 13:0 |
| <input type="checkbox"/> a5*r501*b1@50f13e83-94b7-e811-8114-0800273baef6.r5demo-srv.dev-r5ead.net | sip:a5*r501*b1@r5demo-srv.dev-r5ead.net:5060 (... 208:5060) | Expires : 3600 Priority User Agent : R5E.Agent Transport : UDP Time Update : Thu Oct 11 13:3 |
| <input type="checkbox"/> a5*r501*b101@50f13e83-94b7-e811-8114-0800273baef6.r5demo-srv.dev-r5ead.net | sip:a5*r501*b101@r5demo-srv.dev-r5ead.net:5060 (... 208:5060) | Expires : 3600 Priority User Agent : R5E.Agent Transport : UDP Time Update : Thu Oct 11 13:3 |
| <input type="checkbox"/> a5*r501*b102@50f13e83-94b7-e811-8114-0800273baef6.r5demo-srv.dev-r5ead.net | sip:a5*r501*b102@r5demo-srv.dev-r5ead.net:5060 (... 208:5060) | Expires : 3600 Priority User Agent : R5E.Agent Transport : UDP Time Update : Thu Oct 11 13:3 |
| <input type="checkbox"/> a5*r503*b1@50f13e83-94b7-e811-8114-0800273baef6.r5demo-srv.dev-r5ead.net | sip:a5*r503*b1@r5demo-srv.dev-r5ead.net:5060 (... 208:5060) | Expires : 3600 Priority User Agent : R5E.Agent Transport : UDP Time Update : Thu Oct 11 13:3 |
| <input type="checkbox"/> a5*r503*b2@50f13e83-94b7-e811-8114-0800273baef6.r5demo-srv.dev-r5ead.net | sip:a5*r503*b2@r5demo-srv.dev-r5ead.net:5060 (... 208:5060) | Expires : 3600 Priority User Agent : R5E.Agent Transport : UDP Time Update : Thu Oct 11 13:3 |

9. Conclusion

These Application Notes describe the procedures required to configure Rauland Responder Enterprise to interoperate with endpoints registered to Avaya Communication Server 1000 via Avaya Aura® Session Manager using a Responder SIP Server as a SIP registrar and Proxy for the Responder side of the solution.

All feature functionality test cases described in **Section 2.1** were passed with the observations pointed in **Section 2.2**.

10. 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.

Product information for Rauland products can be found at <http://www.rauland.com/>.

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-dbcorn-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 |

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 | ISS1:10F1 | p33342_1 | 21/09/2018 | p33342_1.cpl | NO |
| 0001 | wi01171467 | ISS1:10F1 | p33270_1 | 21/09/2018 | p33270_1.cpl | NO |
| 0002 | wi01080753 | ISS1:10F1 | p32518_1 | 21/09/2018 | p32518_1.cpl | NO |
| 0003 | wi01101969 | ISS1:10F1 | p32726_1 | 21/09/2018 | p32726_1.cpl | NO |
| 0004 | wi01127527 | ISS1:10F1 | p32988_1 | 21/09/2018 | p32988_1.cpl | YES |
| 0005 | wi01096910 | ISS1:10F1 | p32734_1 | 21/09/2018 | p32734_1.cpl | NO |
| 0006 | wi01156086 | ISS1:10F1 | p33269_1 | 21/09/2018 | p33269_1.cpl | NO |
| 0007 | wi01025156 | ISS1:10F1 | p32136_1 | 21/09/2018 | p32136_1.cpl | NO |
| 0008 | wi01146705 | ISS1:10F1 | p33129_1 | 21/09/2018 | p33129_1.cpl | NO |
| 0009 | wi01138136 | ISS1:10F1 | p33191_1 | 21/09/2018 | p33191_1.cpl | NO |
| 0010 | wi01099810 | ISS1:10F1 | p32796_1 | 21/09/2018 | p32796_1.cpl | NO |
| 0011 | wi01085855 | ISS1:10F1 | p32658_1 | 21/09/2018 | p32658_1.cpl | NO |
| 0012 | wi01163826 | ISS1:10F1 | p33229_1 | 21/09/2018 | p33229_1.cpl | NO |
| 0013 | wi01113712 | ISS1:10F1 | p32877_1 | 21/09/2018 | p32877_1.cpl | NO |
| 0014 | wi01060826 | ISS1:10F1 | p32379_1 | 21/09/2018 | p32379_1.cpl | NO |
| 0015 | wi01199608 | ISS1:10F1 | p33414_1 | 21/09/2018 | p33414_1.cpl | NO |
| 0016 | wi01181174 | ISS1:10F1 | p33316_1 | 21/09/2018 | p33316_1.cpl | NO |
| 0017 | wi01118819 | ISS1:10F1 | p32954_1 | 21/09/2018 | p32954_1.cpl | NO |
| 0018 | CS1000-6964 | ISS1:10F1 | p33541_1 | 21/09/2018 | p33541_1.cpl | NO |
| 0019 | wi01120406 | ISS1:10F1 | p32956_1 | 21/09/2018 | p32956_1.cpl | NO |
| 0020 | cs1000-7160 | ISS1:10F1 | p33621_1 | 21/09/2018 | p33621_1.cpl | NO |
| 0021 | wi01129098 | ISS1:10F1 | p32951_1 | 21/09/2018 | p32951_1.cpl | NO |
| 0022 | wi01110593 | ISS1:10F1 | p32849_1 | 21/09/2018 | p32849_1.cpl | NO |
| 0023 | wi01077639 | ISS1:10F1 | p32883_1 | 21/09/2018 | p32883_1.cpl | NO |
| 0024 | CS1000-7607 | ISS1:10F1 | p33783_1 | 21/09/2018 | p33783_1.cpl | YES |
| 0025 | CS1000-6789 | ISS1:10F1 | p33508_1 | 21/09/2018 | p33508_1.cpl | NO |
| 0026 | wi01156999 | ISS1:10F1 | p33180_1 | 21/09/2018 | p33180_1.cpl | NO |
| 0027 | wi01167427 | ISS1:10F1 | p33264_1 | 21/09/2018 | p33264_1.cpl | NO |
| 0028 | wi01123389 | ISS1:10F1 | p33045_1 | 21/09/2018 | p33045_1.cpl | NO |
| 0029 | wi01212527 | ISS1:10F1 | p33481_1 | 21/09/2018 | p33481_1.cpl | YES |
| 0030 | wi01075359 | ISS1:10F1 | p32671_1 | 21/09/2018 | p32671_1.cpl | NO |
| 0031 | wi01148697 | ISS1:10F1 | p33187_1 | 21/09/2018 | p33187_1.cpl | NO |
| 0032 | wi01114695 | ISS1:10F1 | p32885_1 | 21/09/2018 | p32885_1.cpl | NO |
| 0033 | wi01199336 | ISS1:10F1 | p33410_1 | 21/09/2018 | p33410_1.cpl | NO |
| 0034 | wi01132902 | ISS1:10F1 | p33028_1 | 21/09/2018 | p33028_1.cpl | NO |
| 0035 | wi01063864 | ISS1:10F1 | p32410_1 | 21/09/2018 | p32410_1.cpl | YES |
| 0036 | wi01076948 | ISS1:10F1 | p32526_1 | 21/09/2018 | p32526_1.cpl | YES |
| 0037 | wi01215810 | ISS1:10F1 | p33494_1 | 21/09/2018 | p33494_1.cpl | NO |
| 0038 | wi01094832 | iss1:10f1 | p32718_1 | 21/09/2018 | p32718_1.cpl | NO |
| 0039 | wi01127138 | ISS1:10F1 | p33304_1 | 21/09/2018 | p33304_1.cpl | NO |
| 0040 | wi01095255 | ISS1:10F1 | p33027_1 | 21/09/2018 | p33027_1.cpl | NO |
| 0041 | cs1000-6998 | ISS1:10F1 | p33555_1 | 21/09/2018 | p33555_1.cpl | NO |
| 0042 | wi01094727 | ISS1:10F1 | p32848_1 | 21/09/2018 | p32848_1.cpl | NO |
| 0043 | wi01090535 | ISS1:10F1 | p32519_1 | 21/09/2018 | p32519_1.cpl | NO |
| 0044 | wi01151898 | ISS1:10F1 | p33175_1 | 21/09/2018 | p33175_1.cpl | NO |
| 0045 | CS1000-7624 | ISS1:10F1 | p33794_1 | 21/09/2018 | p33794_1.cpl | NO |
| 0046 | wi01062607 | ISS1:10F1 | p32503_1 | 21/09/2018 | p32503_1.cpl | NO |
| 0047 | wi01147983 | ISS1:10F1 | p33141_1 | 21/09/2018 | p33141_1.cpl | NO |
| 0048 | wi01151870 | ISS1:10F1 | p33162_1 | 21/09/2018 | p33162_1.cpl | YES |
| 0049 | wi01190506 | ISS1:10F1 | p33361_1 | 21/09/2018 | p33361_1.cpl | NO |
| 0050 | CS1000-7406 | ISS1:10F1 | p33715_1 | 21/09/2018 | p33715_1.cpl | NO |
| 0051 | wi01132222 | ISS1:10F1 | p33023_1 | 21/09/2018 | p33023_1.cpl | NO |
| 0052 | wi01070585 | ISS1:10F1 | p32383_1 | 21/09/2018 | p32383_1.cpl | NO |
| 0053 | wi01153844 | ISS1:10F1 | p33172_1 | 21/09/2018 | p33172_1.cpl | NO |
| 0054 | wi01142792 | ISS1:10F1 | p33099_1 | 21/09/2018 | p33099_1.cpl | NO |
| 0055 | WI01077073 | ISS1:10F1 | p32534_1 | 21/09/2018 | p32534_1.cpl | NO |
| 0056 | wi01186846 | ISS1:10F1 | p33332_1 | 21/09/2018 | p33332_1.cpl | NO |
| 0057 | wi01159931 | ISS1:10F1 | p33231_1 | 21/09/2018 | p33231_1.cpl | YES |
| 0058 | wi01053597 | ISS1:10F1 | p32304_1 | 21/09/2018 | p32304_1.cpl | NO |
| 0059 | CS1000-7590 | ISS1:10F1 | p33780_1 | 21/09/2018 | p33780_1.cpl | NO |

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|------|-------------|-----------|----------|------------|--------------|-----|
| 0060 | wi01114038 | ISS1:10F1 | p32869_1 | 21/09/2018 | p32869_1.cpl | NO |
| 0061 | CS1000-7622 | ISS1:10F1 | p33787_1 | 21/09/2018 | p33787_1.cpl | YES |
| 0062 | wi01091447 | ISS1:10F1 | p32675_1 | 21/09/2018 | p32675_1.cpl | NO |
| 0063 | wi01165881 | ISS1:10F1 | p33239_1 | 21/09/2018 | p33239_1.cpl | NO |
| 0064 | wi01149384 | ISS1:10F1 | p33147_1 | 21/09/2018 | p33147_1.cpl | NO |
| 0065 | wi01079444 | ISS1:10F1 | p32564_1 | 21/09/2018 | p32564_1.cpl | NO |
| 0066 | CS1000-6852 | ISS1:10F1 | p33517_1 | 21/09/2018 | p33517_1.cpl | NO |
| 0067 | wi01146766 | ISS1:10F1 | p33131_1 | 21/09/2018 | p33131_1.cpl | NO |
| 0068 | wi01150083 | ISS1:10F1 | p33152_1 | 21/09/2018 | p33152_1.cpl | NO |
| 0069 | wi01163048 | ISS1:10F1 | p33223_1 | 21/09/2018 | p33223_1.cpl | YES |
| 0070 | wi01189247 | ISS1:10F1 | p33382_1 | 21/09/2018 | p33382_1.cpl | YES |
| 0071 | wi01070279 | ISS1:10F1 | p32262_1 | 21/09/2018 | p32262_1.cpl | NO |
| 0072 | wi01075353 | ISS1:10F1 | p32613_1 | 21/09/2018 | p32613_1.cpl | NO |
| 0073 | wi01108828 | ISS1:10F1 | p32831_1 | 21/09/2018 | p32831_1.cpl | NO |
| 0074 | wi01197246 | ISS1:10F1 | p33400_1 | 21/09/2018 | p33400_1.cpl | NO |
| 0075 | wi01213334 | ISS1:10F1 | p33485_1 | 21/09/2018 | p33485_1.cpl | NO |
| 0076 | wi01208515 | ISS1:10F1 | p33455_1 | 21/09/2018 | p33455_1.cpl | NO |
| 0077 | CS1000-6946 | ISS1:10F1 | p33543_1 | 21/09/2018 | p33543_1.cpl | NO |
| 0078 | wi01095462 | ISS1:10F1 | p32723_1 | 21/09/2018 | p32723_1.cpl | NO |
| 0079 | wi01021522 | ISS1:10F1 | p32863_1 | 21/09/2018 | p32863_1.cpl | NO |
| 0080 | wi01191767 | ISS1:10F1 | p33368_1 | 21/09/2018 | p33368_1.cpl | NO |
| 0081 | CS1000-7460 | ISS1:10F1 | p33735_1 | 21/09/2018 | p33735_1.cpl | NO |
| 0082 | wi01145002 | ISS1:10F1 | p33186_1 | 21/09/2018 | p33186_1.cpl | NO |
| 0083 | wi01132215 | ISS1:10F1 | p33084_1 | 21/09/2018 | p33084_1.cpl | NO |
| 0084 | wi01153039 | ISS1:10F1 | p17588_1 | 21/09/2018 | p17588_1.cpl | NO |
| 0085 | wi01053950 | ISS1:10F1 | p32654_1 | 21/09/2018 | p32654_1.cpl | YES |
| 0086 | wi01089807 | ISS1:10F1 | p32957_1 | 21/09/2018 | p32957_1.cpl | NO |
| 0087 | wi01089519 | ISS1:10F1 | p32665_1 | 21/09/2018 | p32665_1.cpl | NO |
| 0088 | CS1000-6844 | ISS1:10F1 | p33507_1 | 21/09/2018 | p33507_1.cpl | NO |
| 0089 | wi01083896 | ISS1:10F1 | p32937_1 | 21/09/2018 | p32937_1.cpl | NO |
| 0090 | CS1000-7176 | ISS1:10F1 | p33744_1 | 21/09/2018 | p33744_1.cpl | NO |
| 0091 | wi01215563 | ISS1:10F1 | p33412_1 | 21/09/2018 | p33412_1.cpl | NO |
| 0092 | cs1000-6924 | ISS1:10F1 | p33523_1 | 21/09/2018 | p33523_1.cpl | NO |
| 0093 | CS1000-7022 | ISS1:10F1 | p33560_1 | 21/09/2018 | p33560_1.cpl | NO |
| 0094 | wi01182880 | ISS1:10F1 | p33328_1 | 21/09/2018 | p33328_1.cpl | NO |
| 0095 | wi01144354 | ISS1:10F1 | p33117_1 | 21/09/2018 | p33117_1.cpl | NO |
| 0096 | wi01102091 | ISS1:10F1 | p32744_1 | 21/09/2018 | p32744_1.cpl | YES |
| 0097 | wi01132244 | ISS1:10F1 | p33041_1 | 21/09/2018 | p33041_1.cpl | NO |
| 0098 | wi01185751 | ISS1:10F1 | p33409_1 | 21/09/2018 | p33409_1.cpl | YES |
| 0099 | wi01136194 | ISS1:10F1 | p33051_1 | 21/09/2018 | p33051_1.cpl | NO |
| 0100 | wi01068669 | ISS1:10F1 | p32333_1 | 21/09/2018 | p32333_1.cpl | NO |
| 0101 | wi01153104 | ISS1:10F1 | p33174_1 | 21/09/2018 | p33174_1.cpl | NO |
| 0102 | WI01169289 | ISS1:10F1 | p33257_1 | 21/09/2018 | p33257_1.cpl | NO |
| 0103 | wi01059388 | iss1:10f1 | p32628_1 | 21/09/2018 | p32628_1.cpl | NO |
| 0104 | wi01092443 | ISS1:10F1 | p32676_1 | 21/09/2018 | p32676_1.cpl | NO |
| 0105 | CS1000-7151 | ISS1:10F1 | p33617_1 | 21/09/2018 | p33617_1.cpl | NO |
| 0106 | wi01133106 | ISS1:10F1 | p33032_1 | 21/09/2018 | p33032_1.cpl | NO |
| 0107 | wi01108262 | ISS1:10F1 | p32865_1 | 21/09/2018 | p32865_1.cpl | YES |
| 0108 | wi01099724 | ISS1:10F1 | p32742_1 | 21/09/2018 | p32742_1.cpl | YES |
| 0109 | wi01177614 | ISS1:10F1 | p33303_1 | 21/09/2018 | p33303_1.cpl | NO |
| 0110 | wi01184588 | ISS1:10F1 | p33338_1 | 21/09/2018 | p33338_1.cpl | NO |
| 0111 | CS1000-6738 | ISS1:10F1 | p33495_1 | 21/09/2018 | p33495_1.cpl | NO |
| 0112 | wi01137694 | ISS1:10F1 | p33081_1 | 21/09/2018 | p33081_1.cpl | NO |
| 0113 | wi01188972 | ISS1:10F1 | p33352_1 | 21/09/2018 | p33352_1.cpl | NO |
| 0114 | wi01072027 | ISS1:10F1 | p32689_1 | 21/09/2018 | p32689_1.cpl | NO |
| 0115 | CS1000-6933 | ISS1:10F1 | p33529_1 | 21/09/2018 | p33529_1.cpl | NO |
| 0116 | wi01075149 | ISS1:10F1 | p32475_1 | 21/09/2018 | p32475_1.cpl | NO |
| 0117 | WI11032038 | ISS1:10F1 | p33022_1 | 21/09/2018 | p33022_1.cpl | NO |
| 0118 | wi01109251 | ISS1:10F1 | p32827_1 | 21/09/2018 | p32827_1.cpl | NO |
| 0119 | wi01146254 | ISS1:10F1 | p33127_1 | 21/09/2018 | p33127_1.cpl | NO |
| 0120 | wi01118714 | ISS2:10F1 | p32952_2 | 21/09/2018 | p32952_2.cpl | NO |
| 0121 | wi01139981 | ISS1:10F1 | p33083_1 | 21/09/2018 | p33083_1.cpl | NO |
| 0122 | cs1000-7269 | ISS1:10F1 | p33670_1 | 21/09/2018 | p33670_1.cpl | NO |
| 0123 | wi01134952 | ISS1:10F1 | p33039_1 | 21/09/2018 | p33039_1.cpl | NO |
| 0124 | wi01071996 | ISS1:10F1 | p32461_1 | 21/09/2018 | p32461_1.cpl | NO |
| 0125 | wi01181423 | ISS1:10F1 | p33318_1 | 21/09/2018 | p33318_1.cpl | NO |
| 0126 | wi01065125 | ISS1:10F1 | p32416_1 | 21/09/2018 | p32416_1.cpl | NO |
| 0127 | wi01075538 | ISS1:10F1 | p32469_1 | 21/09/2018 | p32469_1.cpl | NO |

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| 0128 | wi01093071 | ISS1:10F1 | p32701_1 | 21/09/2018 | p32701_1.cpl | NO |
| 0129 | wi01115369 | ISS1:10F1 | p32889_1 | 21/09/2018 | p32889_1.cpl | NO |
| 0130 | wi01154253 | ISS1:10F1 | p33206_1 | 21/09/2018 | p33206_1.cpl | NO |
| 0131 | wi01081510 | ISS1:10F1 | p32582_1 | 21/09/2018 | p32582_1.cpl | NO |
| 0132 | wi01060611 | ISS1:10F1 | p32809_1 | 21/09/2018 | p32809_1.cpl | NO |
| 0133 | CS1000-6910 | ISS1:10F1 | p33528_1 | 21/09/2018 | p33528_1.cpl | NO |
| 0134 | wi01207693 | ISS1:10F1 | p33452_1 | 21/09/2018 | p33452_1.cpl | NO |
| 0135 | wi01198794 | ISS1:10F1 | p33408_1 | 21/09/2018 | p33408_1.cpl | NO |
| 0136 | wi01065922 | ISS1:10F1 | p32516_1 | 21/09/2018 | p32516_1.cpl | NO |
| 0137 | wi01170583 | ISS1:10F1 | p33261_1 | 21/09/2018 | p33261_1.cpl | NO |
| 0138 | wi01202917 | ISS1:10F1 | p33434_1 | 21/09/2018 | p33434_1.cpl | NO |
| 0139 | wi01182523 | ISS1:10F1 | p33327_1 | 21/09/2018 | p33327_1.cpl | NO |
| 0140 | WI0110261 | ISS1:10F1 | p32758_1 | 21/09/2018 | p32758_1.cpl | NO |
| 0141 | wi01195975 | ISS1:10F1 | p33394_1 | 21/09/2018 | p33394_1.cpl | NO |
| 0142 | wi01118320 | ISS1:10F1 | p32753_1 | 21/09/2018 | p32753_1.cpl | NO |
| 0143 | wi01083036 | ISS1:10F1 | p32571_1 | 21/09/2018 | p32571_1.cpl | NO |
| 0144 | wi01098905 | ISS1:10F1 | p32556_1 | 21/09/2018 | p32556_1.cpl | NO |
| 0145 | CS1000-6786 | ISS1:10F1 | p33497_1 | 21/09/2018 | p33497_1.cpl | NO |
| 0146 | CS1000-7277 | ISS1:10F1 | p33763_1 | 21/09/2018 | p33763_1.cpl | NO |
| 0147 | wi01130836 | ISS1:10F1 | p33008_1 | 21/09/2018 | p33008_1.cpl | YES |
| 0148 | wi01119086 | ISS1:10F1 | p32917_1 | 21/09/2018 | p32917_1.cpl | NO |
| 0149 | WI01121737 | ISS1:10F1 | p32939_1 | 21/09/2018 | p32939_1.cpl | NO |
| 0150 | wi01128596 | ISS1:10F1 | p33000_1 | 21/09/2018 | p33000_1.cpl | NO |
| 0151 | wi01137003 | ISS1:10F1 | p33053_1 | 21/09/2018 | p33053_1.cpl | NO |
| 0152 | wi01169714 | ISS1:10F1 | p33335_1 | 21/09/2018 | p33335_1.cpl | NO |
| 0153 | wi01205975 | ISS1:10F1 | p33447_1 | 21/09/2018 | p33447_1.cpl | NO |
| 0154 | wi01098783 | ISS1:10F1 | p32748_1 | 21/09/2018 | p32748_1.cpl | NO |
| 0155 | wi01197054 | ISS1:10F1 | p33397_1 | 21/09/2018 | p33397_1.cpl | NO |
| 0156 | wi01087543 | ISS1:10F1 | p32662_1 | 21/09/2018 | p32662_1.cpl | NO |
| 0157 | wi01174116 | ISS1:10F1 | p33287_1 | 21/09/2018 | p33287_1.cpl | NO |
| 0158 | wi01072062 | ISS1:10F1 | p32776_1 | 21/09/2018 | p32776_1.cpl | NO |
| 0159 | wi01070473 | ISS1:10F1 | p32413_1 | 21/09/2018 | p32413_1.cpl | NO |
| 0160 | CS1000-7276 | ISS1:10F1 | p33675_1 | 21/09/2018 | p33675_1.cpl | YES |
| 0161 | wi01126552 | ISS1:10F1 | p32975_1 | 21/09/2018 | p32975_1.cpl | NO |
| 0162 | CS1000-7174 | ISS1:10F1 | p33655_1 | 21/09/2018 | p33655_1.cpl | NO |
| 0163 | wi00959458 | ISS1:10F1 | p31551_1 | 21/09/2018 | p31551_1.cpl | NO |
| 0164 | wi01160967 | ISS1:10F1 | p33213_1 | 21/09/2018 | p33213_1.cpl | NO |
| 0165 | wi01166011 | ISS1:10F1 | p33235_1 | 21/09/2018 | p33235_1.cpl | NO |
| 0166 | wi01063263 | ISS1:10F1 | p32573_1 | 21/09/2018 | p32573_1.cpl | NO |
| 0167 | CS1000-7113 | ISS1:10F1 | p33623_1 | 21/09/2018 | p33623_1.cpl | NO |
| 0168 | wi01034307 | ISS1:10F1 | p32615_1 | 21/09/2018 | p32615_1.cpl | NO |
| 0169 | wi01180594 | ISS1:10F1 | p33312_1 | 21/09/2018 | p33312_1.cpl | NO |
| 0170 | wi01204623 | ISS1:10F1 | p33444_1 | 21/09/2018 | p33444_1.cpl | NO |
| 0171 | CS1000-7435 | ISS1:10F1 | p33745_1 | 21/09/2018 | p33745_1.cpl | NO |
| 0172 | wi01104473 | ISS1:10F1 | p32818_1 | 21/09/2018 | p32818_1.cpl | NO |
| 0173 | CS1000-6978 | ISS1:10F1 | p33551_1 | 21/09/2018 | p33551_1.cpl | YES |
| 0174 | wi01204274 | ISS1:10F1 | p33451_1 | 21/09/2018 | p33451_1.cpl | NO |
| 0175 | wi01150771 | ISS1:10F1 | p33210_1 | 21/09/2018 | p33210_1.cpl | NO |
| 0176 | wi01071296 | ISS1:10F1 | p32836_1 | 21/09/2018 | p32836_1.cpl | NO |
| 0177 | wi01125238 | ISS1:10F1 | p32971_1 | 21/09/2018 | p32971_1.cpl | NO |
| 0178 | wi01149017 | ISS1:10F1 | p33145_1 | 21/09/2018 | p33145_1.cpl | NO |
| 0179 | wi01210497 | ISS1:10F1 | p33468_1 | 21/09/2018 | p33468_1.cpl | YES |
| 0180 | CS1000-7265 | ISS1:10F1 | p33666_1 | 21/09/2018 | p33666_1.cpl | NO |
| 0181 | wi01101876 | ISS1:10F1 | p32858_1 | 21/09/2018 | p32858_1.cpl | NO |
| 0182 | wi01164281 | ISS1:10F1 | p33232_1 | 21/09/2018 | p33232_1.cpl | NO |
| 0183 | wi01119100 | ISS1:10F1 | p32925_1 | 21/09/2018 | p32925_1.cpl | NO |
| 0184 | wi01066991 | ISS1:10F1 | p32449_1 | 21/09/2018 | p32449_1.cpl | NO |
| 0185 | wi01102296 | ISS1:10F1 | p32780_1 | 21/09/2018 | p32780_1.cpl | NO |
| 0186 | wi01188722 | ISS1:10F1 | p33365_1 | 21/09/2018 | p33365_1.cpl | NO |
| 0187 | CS1000-7451 | ISS1:10F1 | p33749_1 | 21/09/2018 | p33749_1.cpl | NO |
| 0188 | CS1000-7301 | ISS1:10F1 | p33691_1 | 21/09/2018 | p33691_1.cpl | NO |
| 0189 | wi01045144 | ISS1:10F1 | p33202_1 | 21/09/2018 | p33202_1.cpl | NO |
| 0190 | wi01061481 | ISS1:10F1 | p32382_1 | 21/09/2018 | p32382_1.cpl | NO |
| 0191 | CS1000-7053 | ISS1:10F1 | p33574_1 | 21/09/2018 | p33574_1.cpl | NO |
| 0192 | wi01039280 | ISS1:10F1 | p32423_1 | 21/09/2018 | p32423_1.cpl | NO |
| 0193 | wi01128512 | ISS1:10F1 | p32997_1 | 21/09/2018 | p32997_1.cpl | NO |
| 0194 | wi01127447 | ISS1:10F1 | p32990_1 | 21/09/2018 | p32990_1.cpl | NO |
| 0195 | wi01068851 | ISS1:10F1 | p32439_1 | 21/09/2018 | p32439_1.cpl | NO |

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| 0196 | CS1000-7357 | ISS1:10F1 | p33698_1 | 21/09/2018 | p33698_1.cpl | NO |
| 0197 | wi01120458 | ISS1:10F1 | p32929_1 | 21/09/2018 | p32929_1.cpl | NO |
| 0198 | wi01187443 | ISS1:10F1 | p33359_1 | 21/09/2018 | p33359_1.cpl | NO |
| 0199 | wi01183783 | ISS1:10F1 | p33333_1 | 21/09/2018 | p33333_1.cpl | NO |
| 0200 | CS1000-6872 | ISS1:10F1 | p33520_1 | 21/09/2018 | p33520_1.cpl | NO |
| 0201 | wi01096718 | ISS1:10F1 | p33138_1 | 21/09/2018 | p33138_1.cpl | YES |
| 0202 | wi01189516 | ISS1:10F1 | p33373_1 | 21/09/2018 | p33373_1.cpl | NO |
| 0203 | wi01201882 | ISS1:10F1 | p33427_1 | 21/09/2018 | p33427_1.cpl | NO |
| 0204 | wi01134756 | ISS1:10F1 | p33453_1 | 21/09/2018 | p33453_1.cpl | NO |
| 0205 | wi01096712 | ISS1:10F1 | p32708_1 | 21/09/2018 | p32708_1.cpl | NO |
| 0206 | wi01163521 | ISS1:10F1 | p33226_1 | 21/09/2018 | p33226_1.cpl | NO |
| 0207 | wi01104627 | ISS1:10F1 | p32819_1 | 21/09/2018 | p32819_1.cpl | NO |
| 0208 | wi00937672 | ISS1:10F1 | p31276_1 | 21/09/2018 | p31276_1.cpl | NO |
| 0209 | wi01150846 | ISS1:10F1 | p33157_1 | 21/09/2018 | p33157_1.cpl | NO |
| 0210 | wi01057403 | ISS1:10F1 | p32591_1 | 21/09/2018 | p32591_1.cpl | NO |
| 0211 | wi01121374 | ISS1:10F1 | p31107_1 | 21/09/2018 | p31107_1.cpl | NO |
| 0212 | wi01109345 | ISS1:10F1 | p32830_1 | 21/09/2018 | p32830_1.cpl | NO |
| 0213 | wi01070468 | iss1:10f1 | p32418_1 | 21/09/2018 | p32418_1.cpl | NO |
| 0214 | wi01099300 | iss1:10f1 | p32704_1 | 21/09/2018 | p32704_1.cpl | NO |
| 0215 | wi01075355 | ISS1:10F1 | p32594_1 | 21/09/2018 | p32594_1.cpl | NO |
| 0216 | wi01022598 | ISS1:10F1 | p32066_1 | 21/09/2018 | p32066_1.cpl | NO |
| 0217 | wi01068751 | ISS1:10F1 | p32445_1 | 21/09/2018 | p32445_1.cpl | NO |
| 0218 | CS1000-7147 | ISS1:10F1 | p33616_1 | 21/09/2018 | p33616_1.cpl | NO |
| 0219 | wi01126454 | ISS1:10F1 | p32973_1 | 21/09/2018 | p32973_1.cpl | NO |
| 0220 | wi01130348 | ISS1:10F1 | p33014_1 | 21/09/2018 | p33014_1.cpl | NO |
| 0221 | wi01181578 | ISS1:10F1 | p33321_1 | 21/09/2018 | p33321_1.cpl | NO |
| 0222 | wi01052968 | ISS1:10F1 | p32540_1 | 21/09/2018 | p32540_1.cpl | NO |
| 0223 | wi01120705 | ISS1:10F1 | p32930_1 | 21/09/2018 | p32930_1.cpl | NO |
| 0224 | wi01070465 | iss1:10f1 | p32562_1 | 21/09/2018 | p32562_1.cpl | NO |
| 0225 | wi01185138 | ISS1:10F1 | p33411_1 | 21/09/2018 | p33411_1.cpl | NO |
| 0226 | wi01171418 | ISS1:10F1 | p33278_1 | 21/09/2018 | p33278_1.cpl | NO |
| 0227 | wi01078721 | ISS1:10F1 | p32553_1 | 21/09/2018 | p32553_1.cpl | NO |
| 0228 | wi01132204 | ISS1:10F1 | p32501_1 | 21/09/2018 | p32501_1.cpl | NO |
| 0229 | wi01065248 | ISS1:10F1 | p32412_1 | 21/09/2018 | p32412_1.cpl | NO |
| 0230 | CS1000-7081 | ISS1:10F1 | p33585_1 | 21/09/2018 | p33585_1.cpl | NO |
| 0231 | wi01184272 | ISS1:10F1 | p33336_1 | 21/09/2018 | p33336_1.cpl | NO |
| 0232 | wi01165461 | ISS1:10F1 | p33237_1 | 21/09/2018 | p33237_1.cpl | NO |
| 0233 | wi01045058 | ISS1:10F1 | p32214_1 | 21/09/2018 | p32214_1.cpl | NO |
| 0234 | wi01070580 | ISS1:10F1 | p32380_1 | 21/09/2018 | p32380_1.cpl | NO |
| 0235 | wi01104410 | ISS1:10F1 | p32801_1 | 21/09/2018 | p32801_1.cpl | NO |
| 0236 | wi01102093 | ISS1:10F1 | p32760_1 | 21/09/2018 | p32760_1.cpl | NO |
| 0237 | wi01201986 | ISS1:10F1 | p33433_1 | 21/09/2018 | p33433_1.cpl | NO |
| 0238 | wi01175294 | ISS1:10F1 | p33290_1 | 21/09/2018 | p33290_1.cpl | NO |
| 0239 | wi01104867 | ISS1:10F1 | p32828_1 | 21/09/2018 | p32828_1.cpl | NO |
| 0240 | wi01201045 | ISS1:10F1 | p33424_1 | 21/09/2018 | p33424_1.cpl | YES |
| 0241 | wi01082456 | ISS1:10F1 | p32596_1 | 21/09/2018 | p32596_1.cpl | NO |
| 0242 | wi01133960 | ISS1:10F1 | p33034_1 | 21/09/2018 | p33034_1.cpl | NO |
| 0243 | wi01035976 | ISS1:10F1 | p32173_1 | 21/09/2018 | p32173_1.cpl | NO |
| 0244 | wi01008182 | ISS1:10F1 | p33277_1 | 21/09/2018 | p33277_1.cpl | NO |
| 0245 | wi01166065 | ISS1:10F1 | p33241_1 | 21/09/2018 | p33241_1.cpl | NO |
| 0246 | wi01098433 | ISS1:10F1 | p32736_1 | 21/09/2018 | p32736_1.cpl | NO |
| 0247 | wi01088797 | ISS1:10F1 | p32844_1 | 21/09/2018 | p32844_1.cpl | NO |
| 0248 | wi01102475 | ISS1:10F1 | p32782_1 | 21/09/2018 | p32782_1.cpl | YES |
| 0249 | CS1000-7326 | ISS1:10F1 | p33699_1 | 21/09/2018 | p33699_1.cpl | NO |
| 0250 | wi01134354 | ISS1:10F1 | p33031_1 | 21/09/2018 | p33031_1.cpl | NO |
| 0251 | wi01056633 | ISS1:10F1 | p32322_1 | 21/09/2018 | p32322_1.cpl | NO |
| 0252 | CS1000-6794 | ISS1:10F1 | p33539_1 | 21/09/2018 | p33539_1.cpl | NO |
| 0253 | wi01106658 | ISS1:10F1 | p32812_1 | 21/09/2018 | p32812_1.cpl | NO |
| 0254 | wi01068011 | ISS1:10F1 | p33182_1 | 21/09/2018 | p33182_1.cpl | NO |
| 0255 | wi01118928 | ISS1:10F1 | p32922_1 | 21/09/2018 | p32922_1.cpl | NO |
| 0256 | wi01097598 | ISS1:10F1 | p32797_1 | 21/09/2018 | p32797_1.cpl | NO |
| 0257 | wi01187059 | ISS1:10F1 | p33346_1 | 21/09/2018 | p33346_1.cpl | NO |
| 0258 | CS1000-7339 | ISS1:10F1 | p33708_1 | 21/09/2018 | p33708_1.cpl | NO |
| 0259 | wi01181197 | ISS1:10F1 | p33317_1 | 21/09/2018 | p33317_1.cpl | NO |
| 0260 | wi01043367 | ISS1:10F1 | p32232_1 | 21/09/2018 | p32232_1.cpl | NO |
| 0261 | wi01146804 | ISS1:10F1 | p33132_1 | 21/09/2018 | p33132_1.cpl | NO |
| 0262 | wi01088775 | ISS1:10F1 | p32659_1 | 21/09/2018 | p32659_1.cpl | NO |
| 0263 | wi01034961 | ISS1:10F1 | p32144_1 | 21/09/2018 | p32144_1.cpl | NO |

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| 0264 | CS1000-6791 | ISS1:10F1 | p33501_1 | 21/09/2018 | p33501_1.cpl | YES |
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| 0266 | wi01068922 | ISS1:10F1 | p32454_1 | 21/09/2018 | p32454_1.cpl | NO |
| 0267 | wi01214452 | ISS1:10F1 | p33488_1 | 21/09/2018 | p33488_1.cpl | NO |
| 0268 | cs1000-6845 | ISS1:10F1 | p33509_1 | 21/09/2018 | p33509_1.cpl | NO |
| 0269 | wi01132883 | ISS1:10F1 | p33030_1 | 21/09/2018 | p33030_1.cpl | NO |
| 0270 | wi01060241 | ISS1:10F1 | p32381_1 | 21/09/2018 | p32381_1.cpl | NO |
| 0271 | wi01070756 | ISS1:10F1 | p32444_1 | 21/09/2018 | p32444_1.cpl | NO |
| 0272 | wi01065118 | ISS1:10F1 | p32397_1 | 21/09/2018 | p32397_1.cpl | NO |
| 0273 | wi01069441 | ISS1:10F1 | p32097_1 | 21/09/2018 | p32097_1.cpl | NO |
| 0274 | WI01108562 | ISS1:10F1 | p32832_1 | 21/09/2018 | p32832_1.cpl | NO |
| 0275 | wi01212017 | ISS1:10F1 | p33482_1 | 21/09/2018 | p33482_1.cpl | YES |
| 0276 | CS1000-7461 | ISS1:10F1 | p33736_1 | 21/09/2018 | p33736_1.cpl | NO |
| 0277 | CS1000-6752 | ISS1:10F1 | p33540_1 | 21/09/2018 | p33540_1.cpl | NO |
| 0278 | wi01075540 | ISS1:10F1 | p32492_1 | 21/09/2018 | p32492_1.cpl | NO |
| 0279 | wi01096842 | ISS1:10F1 | p32731_1 | 21/09/2018 | p32731_1.cpl | NO |
| 0280 | wi01133985 | ISS1:10F1 | p33049_1 | 21/09/2018 | p33049_1.cpl | NO |
| 0281 | wi01173768 | ISS1:10F1 | p33288_1 | 21/09/2018 | p33288_1.cpl | NO |
| 0282 | CS1000-7293 | ISS1:10F1 | p33679_1 | 21/09/2018 | p33679_1.cpl | NO |
| 0283 | wi01053314 | ISS1:10F1 | p32555_1 | 21/09/2018 | p32555_1.cpl | NO |
| 0284 | wi01099606 | iss1:10f1 | p32713_1 | 21/09/2018 | p32713_1.cpl | NO |
| 0285 | wi01041453 | ISS1:10F1 | p32587_1 | 21/09/2018 | p32587_1.cpl | NO |
| 0286 | wi01094305 | ISS1:10F1 | p32640_1 | 21/09/2018 | p32640_1.cpl | NO |
| 0287 | wi01060382 | iss1:10f1 | p32623_1 | 21/09/2018 | p32623_1.cpl | YES |
| 0288 | wi01142100 | ISS1:10F1 | p33090_1 | 21/09/2018 | p33090_1.cpl | NO |
| 0289 | wi01165870 | ISS1:10F1 | p33238_1 | 21/09/2018 | p33238_1.cpl | NO |
| 0290 | wi01135146 | ISS1:10F1 | p33033_1 | 21/09/2018 | p33033_1.cpl | NO |
| 0291 | wi01178476 | ISS1:10F1 | p33305_1 | 21/09/2018 | p33305_1.cpl | NO |
| 0292 | CS1000-7549 | ISS1:10F1 | p33767_1 | 21/09/2018 | p33767_1.cpl | YES |
| 0293 | wi01124074 | ISS1:10F1 | p32989_1 | 21/09/2018 | p32989_1.cpl | NO |
| 0294 | wi01203516 | ISS1:10F1 | p33438_1 | 21/09/2018 | p33438_1.cpl | NO |
| 0295 | wi01153896 | ISS1:10F1 | p33185_1 | 21/09/2018 | p33185_1.cpl | NO |
| 0296 | CS1000-7337 | ISS1:10F1 | p33696_1 | 21/09/2018 | p33696_1.cpl | NO |
| 0297 | wi01147091 | ISS1:10F1 | p33137_1 | 21/09/2018 | p33137_1.cpl | NO |
| 0298 | wi01111194 | ISS1:10F1 | p32821_1 | 21/09/2018 | p32821_1.cpl | NO |
| 0299 | wi01124477 | ISS1:10F1 | p32963_1 | 21/09/2018 | p32963_1.cpl | NO |
| 0300 | wi01088055 | ISS1:10F1 | p32607_1 | 21/09/2018 | p32607_1.cpl | NO |
| 0301 | wi01134799 | ISS1:10F1 | p33069_1 | 21/09/2018 | p33069_1.cpl | NO |
| 0302 | wi01099292 | ISS1:10F1 | p32886_1 | 21/09/2018 | p32886_1.cpl | NO |
| 0303 | wi01144609 | ISS1:10F1 | p33119_1 | 21/09/2018 | p33119_1.cpl | NO |
| 0304 | wi01096967 | ISS1:10F1 | p32735_1 | 21/09/2018 | p32735_1.cpl | NO |
| 0305 | wi01100508 | ISS1:10F1 | p32761_1 | 21/09/2018 | p32761_1.cpl | NO |
| 0306 | wi01132599 | ISS1:10F1 | p33025_1 | 21/09/2018 | p33025_1.cpl | NO |
| 0307 | cs1000-7223 | ISS1:10F1 | p33647_1 | 21/09/2018 | p33647_1.cpl | YES |
| 0308 | wi01141625 | ISS1:10F1 | p33324_1 | 21/09/2018 | p33324_1.cpl | NO |
| 0309 | wi01127874 | ISS1:10F1 | p25747_1 | 21/09/2018 | p25747_1.cpl | NO |
| 0310 | wi00897254 | ISS1:10F1 | p31127_1 | 21/09/2018 | p31127_1.cpl | NO |
| 0311 | wi01130815 | ISS1:10F1 | p33017_1 | 21/09/2018 | p33017_1.cpl | NO |
| 0312 | wi01071379 | ISS1:10F1 | p32522_1 | 21/09/2018 | p32522_1.cpl | NO |
| 0313 | wi01064599 | iss1:10f1 | p32580_1 | 21/09/2018 | p32580_1.cpl | NO |
| 0314 | wi01185441 | ISS1:10F1 | p33341_1 | 21/09/2018 | p33341_1.cpl | NO |
| 0315 | wi01154485 | ISS1:10F1 | p33194_1 | 21/09/2018 | p33194_1.cpl | NO |
| 0316 | wi01146289 | ISS1:10F1 | p33146_1 | 21/09/2018 | p33146_1.cpl | NO |
| 0317 | wi01053195 | ISS1:10F1 | p32297_1 | 21/09/2018 | p32297_1.cpl | NO |
| 0318 | CS1000-7023 | ISS1:10F1 | p33526_1 | 21/09/2018 | p33526_1.cpl | NO |
| 0319 | wi01053920 | ISS1:10F1 | p32303_1 | 21/09/2018 | p32303_1.cpl | NO |
| 0320 | wi01058378 | ISS1:10F1 | p32344_1 | 21/09/2018 | p32344_1.cpl | NO |
| 0321 | wi01193201 | ISS1:10F1 | p33381_1 | 21/09/2018 | p33381_1.cpl | YES |
| 0322 | CS1000-7248 | ISS1:10F1 | p32811_1 | 21/09/2018 | p32811_1.cpl | NO |
| 0323 | CS1000-7637 | ISS1:10F1 | p33791_1 | 21/09/2018 | p33791_1.cpl | YES |
| 0324 | CS1000-7366 | ISS1:10F1 | p33702_1 | 21/09/2018 | p33702_1.cpl | NO |
| 0325 | CS1000-7143 | ISS1:10F1 | p33614_1 | 21/09/2018 | p33614_1.cpl | NO |
| 0326 | CS1000-7231 | ISS1:10F1 | p33652_1 | 21/09/2018 | p33652_1.cpl | NO |
| 0327 | CS1000-7154 | ISS1:10F1 | p33619_1 | 21/09/2018 | p33619_1.cpl | NO |
| 0328 | CS1000-7448 | ISS1:10F1 | p33729_1 | 21/09/2018 | p33729_1.cpl | NO |
| 0329 | CS1000-6980 | ISS1:10F1 | p33586_1 | 21/09/2018 | p33586_1.cpl | NO |
| 0330 | CS1000-7106 | ISS1:10F1 | p33598_1 | 21/09/2018 | p33598_1.cpl | NO |
| 0331 | CS1000-7052 | ISS1:10F1 | p33573_1 | 21/09/2018 | p33573_1.cpl | NO |

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| 0333 | CS1000-7253 | ISS1:10F1 | p33662_1 | 21/09/2018 | p33662_1.cpl | NO |
| 0334 | CS1000-7101 | ISS1:10F1 | p33641_1 | 21/09/2018 | p33641_1.cpl | NO |
| 0335 | CS1000-7267 | ISS1:10F1 | p33669_1 | 21/09/2018 | p33669_1.cpl | NO |
| 0336 | cs1000-7580 | ISS1:10F1 | p33776_1 | 21/09/2018 | p33776_1.cpl | NO |
| 0337 | CS1000-7171 | ISS1:10F1 | p33626_1 | 21/09/2018 | p33626_1.cpl | NO |
| 0338 | cs1000-7162 | ISS1:10F1 | p33625_1 | 21/09/2018 | p33625_1.cpl | NO |
| 0339 | CS1000-7086 | ISS1:10F1 | p33587_1 | 21/09/2018 | p33587_1.cpl | NO |
| 0340 | CS1000-7286 | ISS1:10F1 | p33686_1 | 21/09/2018 | p33686_1.cpl | NO |
| 0341 | CS1000-7103 | ISS1:10F1 | p33596_1 | 21/09/2018 | p33596_1.cpl | NO |
| 0342 | CS1000-6546 | ISS1:10F1 | p33597_1 | 21/09/2018 | p33597_1.cpl | NO |
| 0343 | CS1000-7453 | ISS1:10F1 | p33793_1 | 21/09/2018 | p33793_1.cpl | NO |
| 0344 | CS1000-7208 | ISS1:10F1 | p33648_1 | 21/09/2018 | p33648_1.cpl | NO |
| 0345 | CS1000-7015 | ISS1:10F1 | p33606_1 | 21/09/2018 | p33606_1.cpl | NO |
| 0346 | cs1000-7217 | ISS1:10F1 | p33643_1 | 21/09/2018 | p33643_1.cpl | NO |
| 0347 | CS1000-7003 | ISS1:10F1 | p33561_1 | 21/09/2018 | p33561_1.cpl | NO |
| 0348 | CS1000-7489 | ISS1:10F1 | p33747_1 | 21/09/2018 | p33747_1.cpl | NO |
| 0349 | CS1000-7296 | ISS1:10F1 | p33681_1 | 21/09/2018 | p33681_1.cpl | NO |
| 0350 | CS1000-7062 | ISS1:10F1 | p33579_1 | 21/09/2018 | p33579_1.cpl | NO |
| 0351 | CS1000-7140 | ISS1:10F1 | p33624_1 | 21/09/2018 | p33624_1.cpl | NO |
| 0352 | CS1000-6712 | ISS1:10F1 | p33752_1 | 21/09/2018 | p33752_1.cpl | NO |
| 0353 | cs1000-7029 | ISS1:10F1 | p33563_1 | 21/09/2018 | p33563_1.cpl | NO |
| 0354 | CS1000-7202 | ISS1:10F1 | p33646_1 | 21/09/2018 | p33646_1.cpl | NO |
| 0355 | CS1000-7323 | ISS1:10F1 | p33688_1 | 21/09/2018 | p33688_1.cpl | NO |
| 0356 | CS1000-7514 | ISS1:10F1 | p33764_1 | 21/09/2018 | p33764_1.cpl | YES |
| 0357 | CS1000-7587 | ISS1:10F1 | p33779_1 | 21/09/2018 | p33779_1.cpl | NO |
| 0358 | CS1000-7236 | ISS1:10F1 | p33753_1 | 21/09/2018 | p33753_1.cpl | NO |
| 0359 | CS1000-7472 | ISS1:10F1 | p33778_1 | 21/09/2018 | p33778_1.cpl | NO |
| 0360 | CS1000-7534 | ISS1:10F1 | p33759_1 | 21/09/2018 | p33759_1.cpl | NO |
| 0361 | CS1000-7462 | ISS1:10F1 | p33737_1 | 21/09/2018 | p33737_1.cpl | NO |
| 0362 | CS1000-7423 | ISS1:10F1 | p33720_1 | 21/09/2018 | p33720_1.cpl | NO |
| 0363 | CS1000-7340 | ISS1:10F1 | p33694_1 | 21/09/2018 | p33694_1.cpl | NO |
| 0364 | CS1000-7469 | ISS1:10F1 | p33739_1 | 21/09/2018 | p33739_1.cpl | NO |
| 0365 | CS1000-7564 | ISS1:10F1 | p33772_1 | 21/09/2018 | p33772_1.cpl | NO |
| 0366 | CS1000-7500 | ISS1:10F1 | 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)

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
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
OPR NO
ALRM NO
ART 0

PAGE 003

PECL NO
DCTI 0
TIDY 8006 6
ATTR 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
    OVLN NO
    OVLS NO
```

Avaya Communication Server 1000 Trunk Channel for SIP Signalling Gateway

```
>ld 20

PT0000
REQ: prt
TYPE TNB
TN 100 0 3 0
DES SIP_N510
TN 100 0 03 00 VIRTUAL
TYPE IPTI
CDEM 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
```

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