



Avaya Solution & Interoperability Test Lab

Application Notes for configuring Capita - Secure Solutions and Services Distinction Media Server R1.0 with Avaya Communication Server 1000 R7.6 and Avaya Aura® Session Manager R7.1 using SIP Trunks - Issue 1.0

Abstract

These Application Notes describe the configuration steps for provisioning Capita - Secure Solutions and Services Distinction Media Server to interoperate with Avaya Communication Server 1000 R7.6 and Avaya Aura® Session Manager R7.1.

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

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

1. Introduction

These Application Notes describe the configuration steps for provisioning the Distinction Media Server from Capita - Secure Solutions and Services to interoperate with Avaya Communication Server 1000 R7.6 using Avaya Aura® Session Manager R7.1 to route SIP calls.

In this type of configuration, the Distinction Media Server has a SIP connection to Avaya Aura® Session Manager. The Distinction Media Server supports basic call control including hold, transfer and conference.

2. General Test Approach and Test Results

The interoperability compliance testing evaluates the ability of the Capita - Secure Solutions and Services (Capita) Distinction Media Server (DMS) to make and receive calls to and from CS1000 endpoints. All calls destined for the DMS both locally and from the PSTN are routed to the DMS over SIP trunks using Session Manager to route the calls.

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 Session Manager and the DMS did not include use of any specific encryption features as requested by Capita.

2.1. Interoperability Compliance Testing

The interoperability compliance testing focuses on various technical testing scenarios to verify the usage of DMS with the Avaya solution. In addition, serviceability tests were also performed to assess the reliability and accuracy of the joint solution. The testing focused on the following types of calls:

- **Calls to CS1000 extensions** – Ensure that calls can be made to CS1000 extensions from the DMS.

- **Calls to DMS extensions**– Ensure that calls can be made to the DMS extensions from CS1000 extensions.
- **Calls to PSTN from DMS extensions** - Ensure that calls can be made from the DMS to PSTN across the SIP trunk through the CS1000.
- **Calls from PSTN into DMS extensions** – Ensure that calls can be made to the DMS from the PSTN by calling into the CS1000 and across the SIP trunk to the DMS.
- **Hold/transfer and conference functionality**– Verify that calls can be placed on hold and transferred and conferenced.
- **Serviceability testing** - Verify the behaviour of DMS application under different simulated LAN failure conditions on the Avaya platform.

2.2. Test Results

All Test Cases passed except for the following reported issues.

1. When a DMS phone has Call Forward No Answer set and either a CS1000 extension or another DMS calls to it a “BYE” is sent out by the DMS when the call is forwarded to its CFNA number. This means that CFNA cannot be supported across the DMS system with the CS1000.
2. Issue with call scenario DMS extension (Set A) calls to a CS1000 extension (Set B) and Set B transfers Set A to another DMS extension (Set C), there is no RTP after the transfer is complete. This issue only occurs on Supervised Transfer. The workaround is for the call initiator (Set A) to place Set C on hold and retrieve the call. Once this is done the RTP is established correctly. Capita are aware of this issue.
3. The CLID is not updated correctly after several transfer scenarios. Capita are aware of these issues.
4. Issue when transferring to a busy or invalid extension where the person transferring the call does not get an indication that the person they are transferring to is busy or invalid. Capita are aware of this issue.

2.3. Support

Support from Avaya is available by visiting the website <http://support.avaya.com> and a list of product documentation can be found in **Section 11** of these Application Notes. Technical support for the Capita DMS product can be obtained as follows.

- Tel: + 44 (0) 8456 041999
- Email: csis.info@capita.co.uk

3. Reference Configuration

Figure 1 shows the setup for compliance testing Capita's DMS with CS1000 and Session Manager using SIP signalling over SIP trunks to pass calls between the CS1000 and the DMS extensions.

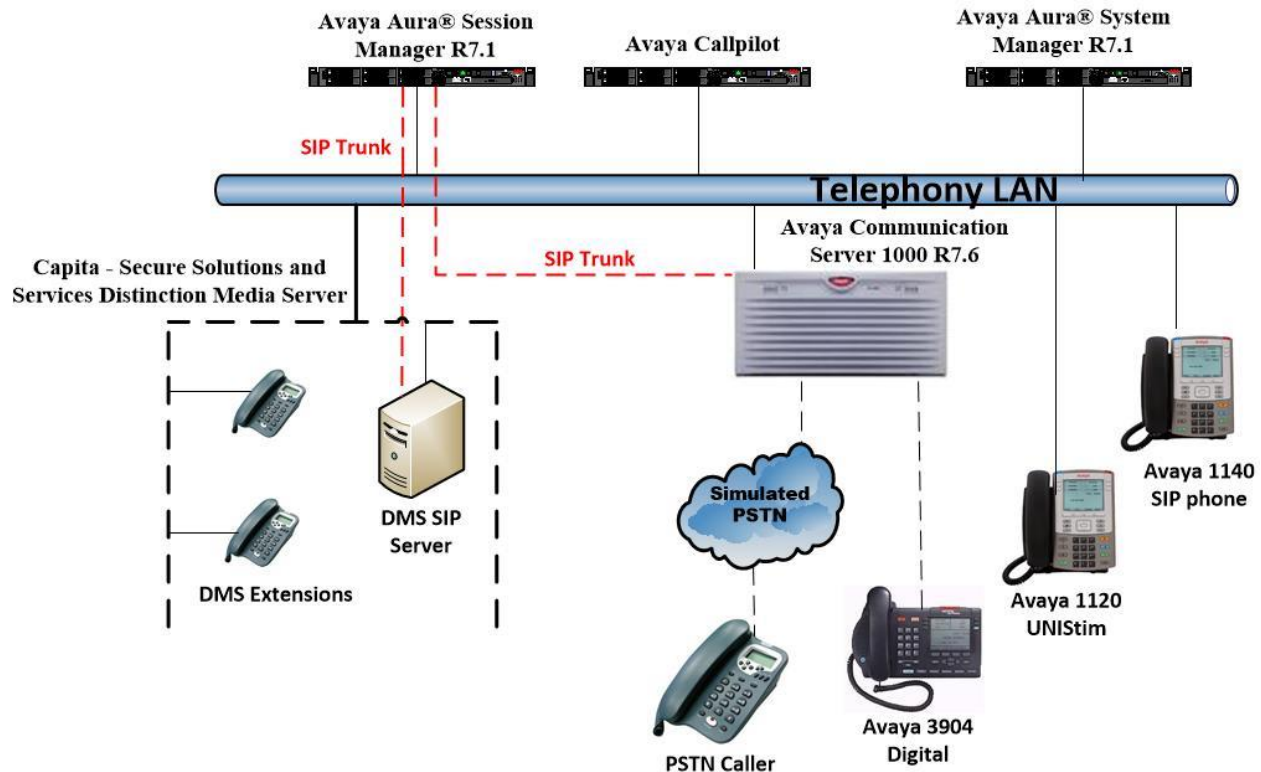


Figure 1: Connection of Capita - Secure Solutions and Services Distinction Media Server with Avaya Communication Server 1000 R7.6 and Avaya Aura® Session Manager R7.1

4. Equipment and Software Validated

The following equipment and software were used for the compliance test.

Avaya Equipment/Software	Release / Firmware Version
Avaya Communication Server 1000 running on CPPM	R7.6 SP10 (See Appendix A for Patch details)
Avaya Aura® System Manager	R7.1.3.0 Build No. 7.1.0.0.1125193 Software Update Version No: 7.1.3.0.037763 Feature Pack 3
Avaya Aura® Session Manager running on a virtual server	Session Manager R7.1 Build No. – 7.1.3.0.713014
Avaya Callpilot running on Avaya Callpilot Server 600r	Release 05.00.41 PEPs installed: CP50041SU08S, CP500S08G09C
Avaya 1120 UNISim	0624C8Q
Avaya 1150 UNISim	0627C8Q
Avaya 1230 UNISim	062AC8Q
Avaya 1140 SIP	04.04.28.00
Avaya 3904 Digital	Core Firmware 024 Flash Firmware 094
Capita Equipment	Software / Firmware Version
Capita Distinction Media Server (DMS)	Release 1.0.0.37

5. Configure Avaya Communication Server 1000

It is assumed that a fully functioning CS1000 is in place with the necessary licensing and with SIP trunks in place to Session Manager. See **Appendix B** for a printout of the SIP route, d-channel, and trunk information. For further information on the configuration of CS1000 please see reference [1] in **Section 11** of these Application Notes. “PuTTY” is used to administer the CS1000. Using PuTTY, open an SSH session to the Node IP address of the CS1000, log in to the CS1000 Linux application using the appropriate credentials and type **cslogin** (not shown) to gain access to the PBX command line.

Note: A simulated PSTN connection was present on the CS1000 in the form of an ISDN connection, the configuration of which is outside the scope of these Application Notes.

5.1. Configure a Dial Plan for Capita DMS

A Coordinated Dial Plan is added to place calls across the SIP trunk to the DMS. Add a Route List Block (**RLB**) to place calls over the SIP route that is already configured on the system. Note that an **RLB** may already be in place but the following procedure shows the addition of a new **RLB**. Enter overlay 86 to configure a new **RLB** by typing **LD 86** at the “>” prompt. A new Route List Index (**RLI**) is added with an **ENTR 0** of that of the SIP route used.

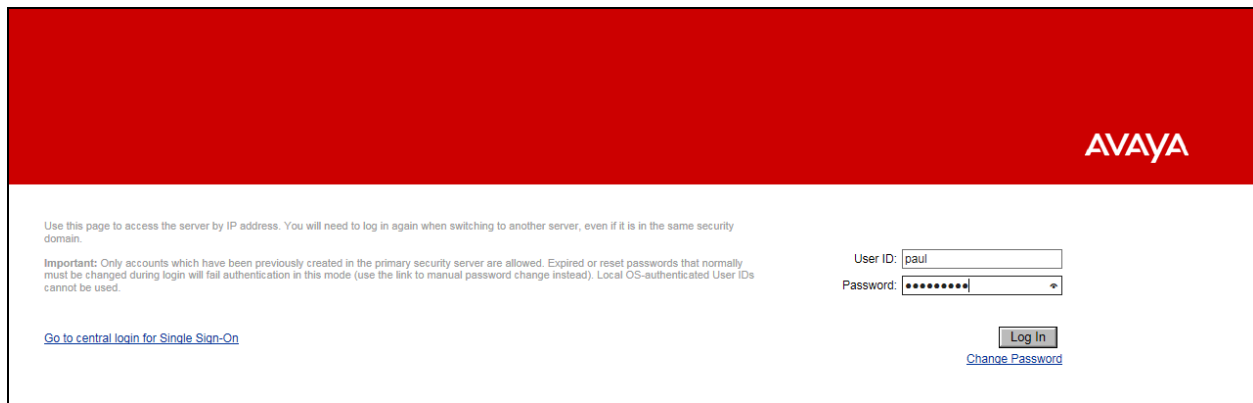
Prompt	Response	Description
>	LD 86	Enter Overlay 86
REQ	new	new/add
CUST	0	Customer number (default is 0)
FEAT	rlb	Route List Block
RLI	10	Route List index Number (any unused number)
ENTR	0	First Entry (0-2)
ROUT	10	Route Number (See Appendix B for info on Route 10)
DMI	0	Digit Manipulation Table (default is 0)
Return to end		

Once the **RLB** is added, the Coordinated Dial Plan (**CDP**) is added in the form of a Distance Steering Code (**DSC**). Note that in the example below, **7080xx** is the **DSC** as this is the extension number used for the DMS during the compliance testing. Enter overlay 87 to add a new **CDP** by typing **LD 87** at the > prompt.

Prompt	Response	Description
>	LD 87	Enter Overlay 87
REQ	new	new/add
CUST	0	Customer number (default is 0)
FEAT	cdp	Coordinated Dial Plan
TYPE	dsc	Distance Steering Code
DSC	7080	Extension number of the DMS Application
FLEN	6	Ext Length
DSP	LSC	DSP Type (Least Cost Routing)
RLI	10	Which RLB to use (Enter the RLB setup above)
Return to end		

6. Configure Avaya Communication Server 1000 Signalling Server

Access to the CS1000 Signalling Server is achieved by logging into System Manager using a Web Browser by entering `http://<FQDN >/SMGR`, or logging directly into the CS1000 Unified Communication Manager (UCM) as is shown below. Log in using appropriate credentials.



The login page features a red header with the Avaya logo. Below the header, there is a login form with fields for 'User ID' (containing 'paul') and 'Password' (masked with dots). A 'Log In' button is positioned to the right of the password field. Below the password field is a 'Change Password' link. To the left of the login fields, there is a block of text providing instructions and important notes about account security. A 'Go to central login for Single Sign-On' link is located at the bottom left of the page.

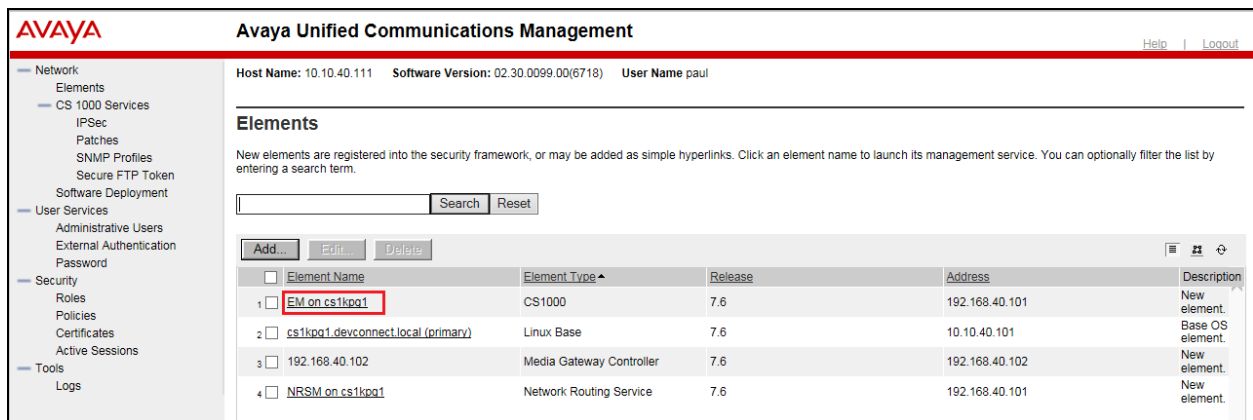
Use this page to access the server by IP address. You will need to log in again when switching to another server, even if it is in the same security domain.

Important: Only accounts which have been previously created in the primary security server are allowed. Expired or reset passwords that normally must be changed during login will fail authentication in this mode (use the link to manual password change instead). Local OS-authenticated User IDs cannot be used.

[Go to central login for Single Sign-On](#)

User ID: paul
Password: [masked]
Log In
[Change Password](#)

The following screen appears showing the various **Elements**, select **EM on cs1kpg** (note this name may appear different depending on the system).



The screenshot shows the 'Avaya Unified Communications Management' interface. The left sidebar contains a navigation menu with categories like Network, CS 1000 Services, User Services, Security, and Tools. The main content area is titled 'Elements' and displays a table of registered elements. The first element, 'EM on cs1kpg1', is highlighted with a red box. The table includes columns for Element Name, Element Type, Release, Address, and Description.

Avaya Unified Communications Management

Host Name: 10.10.40.111 Software Version: 02.30.0099.00(6718) User Name paul

Elements

New elements are registered into the security framework, or may be added as simple hyperlinks. Click an element name to launch its management service. You can optionally filter the list by entering a search term.

Search Reset

	Element Name	Element Type	Release	Address	Description
1	EM on cs1kpg1	CS1000	7.6	192.168.40.101	New element.
2	cs1kpg1.devconnect.local (primary)	Linux Base	7.6	10.10.40.101	Base OS element.
3	192.168.40.102	Media Gateway Controller	7.6	192.168.40.102	New element.
4	NRSRM on cs1kpg1	Network Routing Service	7.6	192.168.40.101	New element.

Navigate to **IP Network → Nodes Servers and Media Cards** in the left window and select the Node associated with the CS1000. In the example below this **Node ID** is **111**. Open this node by clicking on **111** highlighted below.

AVAYA CS1000 Element Manager

Managing: 192.168.40.101 Username: admin
System » IP Network » IP Telephony Nodes

IP Telephony Nodes
Click the Node ID to view or edit its properties.

Buttons: Add... Import... Export... Delete Print Refresh

Node ID	Components	Enabled Applications	ELAN IP	Node/TLAN IPv4	Node/TLAN IPv6	Status
111	1	SIP Line, LTPS, Gateway (SIPGw)	-	10.10.40.111	-	Synchronized

Show: ☒ Nodes ☐ Component servers and cards ☒ IPv6 address

Select **Gateway (SIPGw)** highlighted.

AVAYA CS1000 Element Manager

Managing: 192.168.40.101 Username: admin
System » IP Network » IP Telephony Nodes » Node Details

Node Details (ID: 111 - SIP Line, LTPS, Gateway (SIPGw))

Subnet mask: 255.255.255.0 * Node IPv6 address:

IP Telephony Node Properties

- Voice Gateway (VGW) and Codecs
- Quality of Service (QoS)
- LAN
- SNTP
- Numbering Zones
- MCDN Alternative Routing Treatment (MALT) Causes

Applications (click to edit configuration)

- SIP Line
- Terminal Proxy Server (TPS)
- Gateway (SIPGw)**
- Personal Directories (PD)
- Presence Publisher
- IP Media Services

* Required Value. Save Cancel

Associated Signaling Servers & Cards

Select to add Add Remove Make Leader Print Refresh

Hostname	Type	Deployed Applications	ELAN IP	TLAN IPv4	Role
cs1kpg1	Signaling_Server	SIP Line, LTPS, Gateway (SIP/H323), PD, Presence Publisher, IP Media Services	192.168.40.101	10.10.40.101	Leader

Show: ☐ IPv6 address

Enter the correct **SIP domain name** note this will be referenced again in **Section 7.1**.

AVAYA CS1000 Element Manager

Managing: 192.168.40.101 Username: admin
System » IP Network » IP Telephony Nodes » Node Details » Virtual Trunk Gateway Configuration

Node ID: 111 - Virtual Trunk Gateway Configuration Details

General | SIP Gateway Settings | SIP Gateway Services

Vtrk gateway application: ☒ Enable gateway service on this node

General

Vtrk gateway application: SIP Gateway (SIPGw) *

SIP domain name: devconnect.local *

Local SIP port: 5060 * (1 - 65535)

Gateway endpoint name: CS1KPG1 *

Gateway password: *

Application node ID: 111 * (0-9999)

Enable failsafe NRS: ☐

Note: FailSafe NRS cannot be enabled, if all servers in the node have NRS application deployed.

Virtual Trunk Network Health Monitor

☐ Monitor IP addresses (listed below)
Information will be captured for the IP addresses listed below.

Monitor IP: Add

Monitor addresses: Remove

* Required Value. Note: Changes made on this page will NOT be transmitted until the Node is also saved.

Save Cancel

Scroll down to **Proxy Or Redirect Server: Proxy Server Route 1** and enter the IP Address of the Session Manager for the **Primary TLAN IP address**. Ensure the **Port** number is set to **5060** and the **Transport protocol** is set to **TCP**, everything else can be left as default.

Node ID: 111 - Virtual Trunk Gateway Configuration Details

General | SIP Gateway Settings | SIP Gateway Services

Proxy Or Redirect Server:

Proxy Server Route 1:

Primary TLAN IP address:
The IP address can have either IPv4 or IPv6 format based on the value of "TLAN address type"

Port: (1 - 65535)

Transport protocol: ▼

Options: ☐ Support registration
☐ Primary CDS proxy

Secondary TLAN IP address:
The IP address can have either IPv4 or IPv6 format based on the value of "TLAN address type"

Port: (1 - 65535)

Transport protocol: ▼

Options: ☐ Support registration

Proxy Server Route 2 was setup for UDP as a backup to the TCP connection. Click on **Save** at the bottom right of the screen.

Proxy Server Route 2:

Primary TLAN IP address:
The IP address can have either IPv4 or IPv6 format based on the value of "TLAN address type"

Port: (1 - 65535)

Transport protocol: ▼

Options: ☐ Registration not supported
☐ Primary CDS proxy

CLID Presentation:

Country code (CCC):

Area code: NPA in North America

Number translation: Strip: Prefix: CLID display format:

Subscriber (SN):

* Required Value.

Note: Changes made on this page will NOT be transmitted until the Node is also saved.

Save **Cancel**

Click on **Save** again as highlighted below.

Node Details (ID: 111 - SIP Line, LTPS, Gateway (SIPGw))

Node ID: * (0-9999)

Call server IP address: *

TLAN address type: ☒ IPv4 only
☐ IPv4 and IPv6

Embedded LAN (ELAN)

Gateway IP address: *

Subnet mask: *

Telephony LAN (TLAN)

Node IPv4 address: *

Subnet mask: *

Node IPv6 address:

IP Telephony Node Properties

- [Voice Gateway \(VGW\) and Codecs](#)
- [Quality of Service \(QoS\)](#)
- [LAN](#)
- [SNTP](#)
- [Numbering Zones](#)
- [MCDN Alternative Routing Treatment \(MALT\)](#)
- [Causes](#)

Applications (click to edit configuration)

- [SIP Line](#)
- [Terminal Proxy Server \(TPS\)](#)
- [Gateway \(SIPGw\)](#)
- [Personal Directories \(PD\)](#)
- [Presence Publisher](#)
- [IP Media Services](#)

* Required Value.

Save **Cancel**

Associated Signaling Servers & Cards

Select to add [Print](#) | [Refresh](#)

<input type="checkbox"/> Hostname ^	Type	Deployed Applications	ELAN IP	TLAN IPv4	Role
<input type="checkbox"/> cs1kpg1	Signaling_Server	SIP Line, LTPS, Gateway (SIP/H323), PD, Presence Publisher, IP Media Services	192.168.40.101	10.10.40.101	Leader

Show: ☐ IPv6 address

Select **Transfer Now** as shown below.

AVAYA CS1000 Element Manager

Managing: 192.168.40.101 Username: admin
System » IP Network » IP Telephony Nodes » Node Saved

Node Saved

Node ID: 111 has been saved on the call server.

The new configuration must also be transferred to associated servers and media cards.

Transfer Now... You will be given an option to select individual servers, or transfer to all.

Show Nodes You may initiate a transfer manually at a later time.

The following screen is displayed requiring that synchronization is performed followed by a restart of the Applications. Ensure the **Hostname** is ticked and click on **Start Sync**.

AVAYA CS1000 Element Manager

Managing: 192.168.40.101 Username: admin
System » IP Network » IP Telephony Nodes » Synchronize Configuration Files

Synchronize Configuration Files (Node ID <111>)

Note: Select components to synchronize their configuration files with call server data. This process transfers server INI files to selected components, and requires a restart* of applications on affected server(s) when complete.

Start Sync **Cancel** **Restart Applications** [Print](#) [Refresh](#)

Hostname	Type	Applications	Synchronization Status
<input checked="" type="checkbox"/> cs1kpg1	Signaling_Server	SIP Line, LTPS, Gateway (SIP/H323), PD, Presence Publisher, IP Media Services	Sync required

* Application restart is only required for initial system configuration or if changes have been made to general LAN configurations, SNTP settings, SIP and H323 Gateway settings, network connectivity related parameters like ports and IP address, enabling or disabling services, or adding or removing application servers.

The following screen shows the **Sync in progress**.

AVAYA CS1000 Element Manager

Managing: 192.168.40.101 Username: admin
System » IP Network » IP Telephony Nodes » Synchronize Configuration Files

Synchronize Configuration Files (Node ID <111>)

Synchronization in progress. Status will be updated automatically.
(You may also navigate away from this page and return to the IP Telephony Nodes list to verify completion.)

Start Sync **Cancel** [Print](#) [Refresh](#)

Hostname	Type	Applications	Synchronization Status
cs1kpg1	Signaling_Server	SIP Line, LTPS, Gateway (SIP/H323), PD, Presence Publisher, IP Media Services	Sync in progress

Once the Sync is completed select the **Hostname** again and click on **Restart Applications**. This will complete the Signalling Server configuration for Session Manager routing.

AVAYA CS1000 Element Manager

Managing: 192.168.40.101 Username: admin
System » IP Network » IP Telephony Nodes » Synchronize Configuration Files

Synchronize Configuration Files (Node ID <111>)

Note: Select components to synchronize their configuration files with call server data. This process transfers server INI files to selected components, and requires a restart* of applications on affected server(s) when complete.

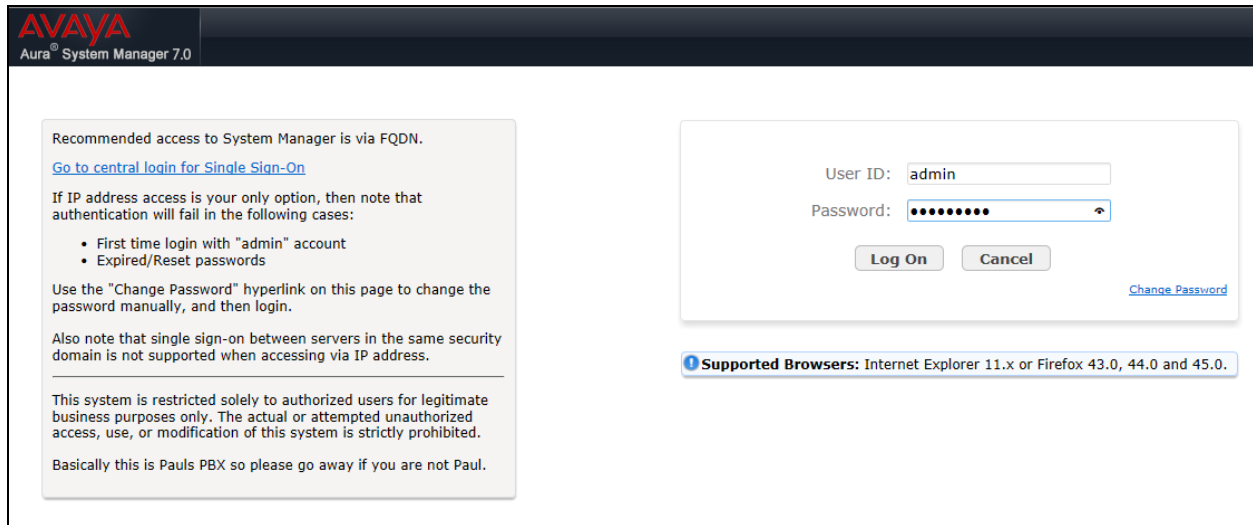
Start Sync **Cancel** **Restart Applications** [Print](#) [Refresh](#)

Hostname	Type	Applications	Synchronization Status
<input checked="" type="checkbox"/> cs1kpg1	Signaling_Server	SIP Line, LTPS, Gateway (SIP/H323), PD, Presence Publisher, IP Media Services	Sync required

* Application restart is only required for initial system configuration or if changes have been made to general LAN configurations, SNTP settings, SIP and H323 Gateway settings, network connectivity related parameters like ports and IP address, enabling or disabling services, or adding or removing application servers.

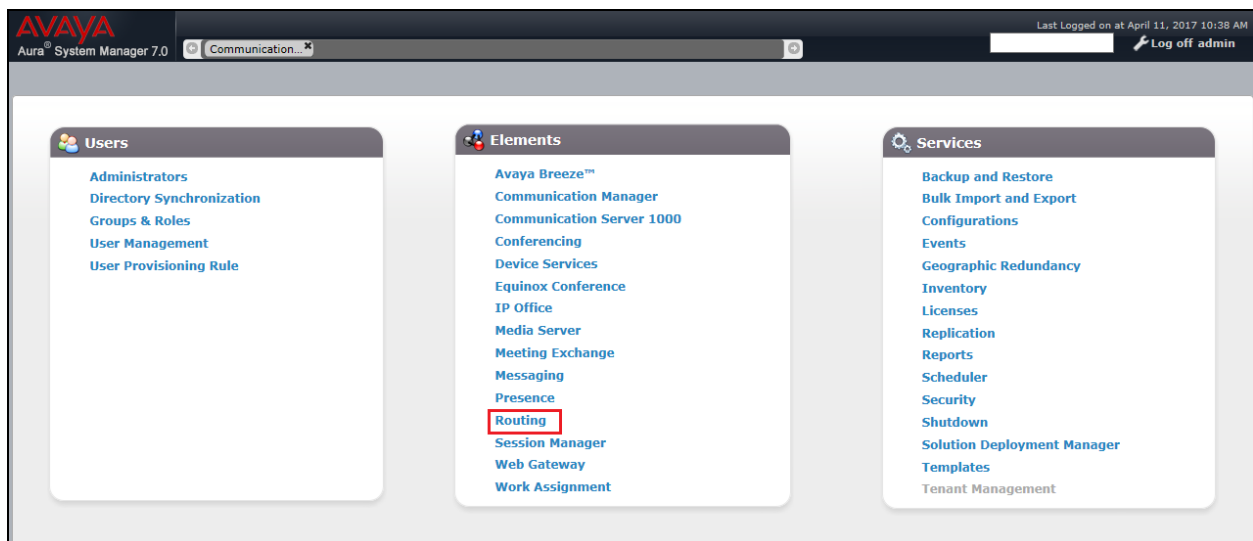
7. Configure Avaya Aura® Session Manager

In order to make changes in Session Manager a web session is established to System Manager. Log into System Manager by opening a web browser and navigating to <http://<System Manager FQDN>/SMGR>. Enter the appropriate credentials for the **User ID** and **Password** and click on **Log On** highlighted below.



The screenshot shows the Avaya Aura System Manager 7.0 login interface. On the left, a text box provides instructions: "Recommended access to System Manager is via FQDN. Go to central login for Single Sign-On. If IP address access is your only option, then note that authentication will fail in the following cases: • First time login with 'admin' account • Expired/Reset passwords. Use the 'Change Password' hyperlink on this page to change the password manually, and then login. Also note that single sign-on between servers in the same security domain is not supported when accessing via IP address. 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. Basically this is Pauls PBX so please go away if you are not Paul." On the right, a login form contains fields for "User ID" (with "admin" entered) and "Password" (masked with dots). Below these fields are "Log On" and "Cancel" buttons, and a "Change Password" link. At the bottom, a blue banner states: "Supported Browsers: Internet Explorer 11.x or Firefox 43.0, 44.0 and 45.0."

Once logged in click on **Routing** highlighted below.

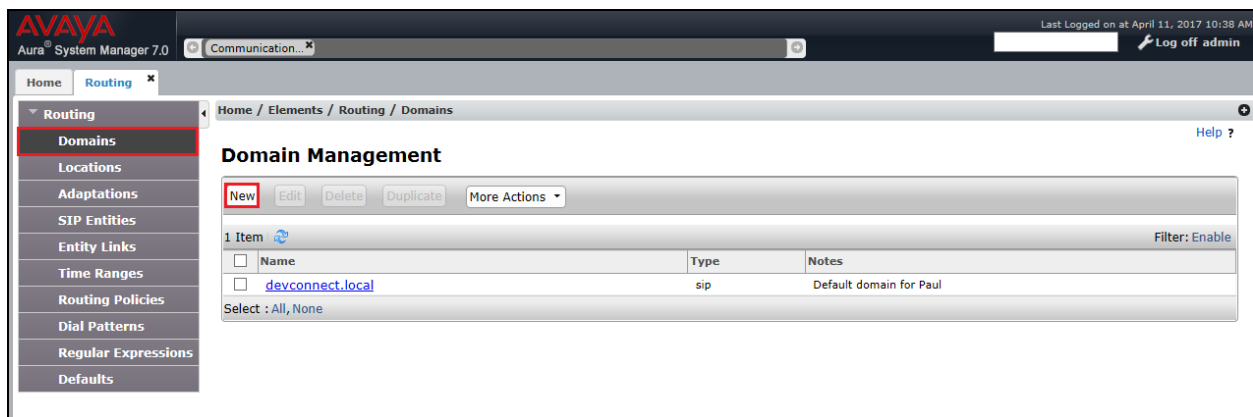


7.1. Domains and Locations

Note: It is assumed that a domain and a location have already been configured, therefore a quick overview of the domain and location that was used in compliance testing is only provided here.

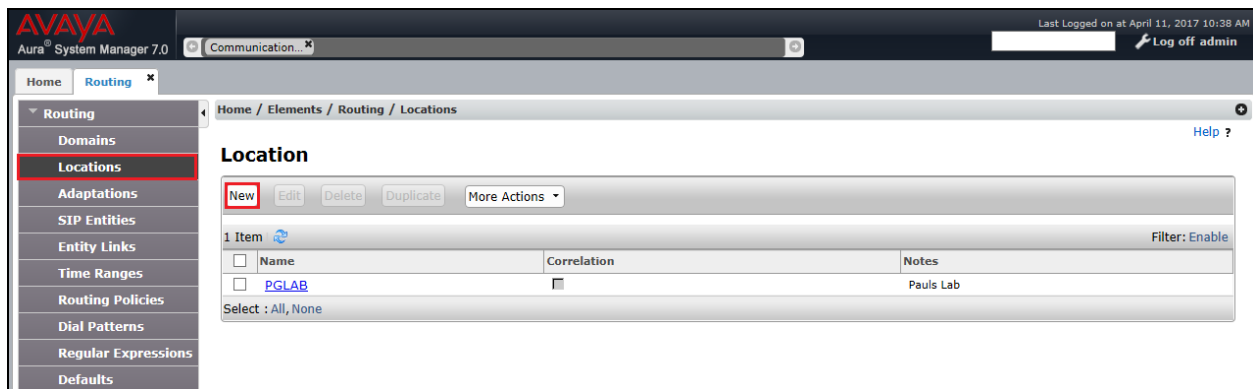
7.1.1. Display the Domain

Select Domains from the left window. This will display the domain configured on Session Manager. For compliance testing this domain was **devconnect.local** as shown below. If a domain is not already in place, then click on **New** as is highlighted below.



7.1.2. Display the Location

Select Locations from the left window and this will display the location setup. The example below shows the location PGLAB which was used for compliance testing. If a location is not already in place, then one must be added to include the IP address range of the Avaya solution. Click on **New** as is highlighted below to add a new location.



7.2. Adding the Distinction Media Server as a SIP Entity

Click on **SIP Entities** in the left column and select **New** in the right window.

The screenshot shows the Avaya Aura System Manager 7.0 interface. The left sidebar has a menu with 'SIP Entities' highlighted. The main area displays the 'SIP Entities' page with a table of 19 items. The table has columns for Name, FQDN or IP Address, Type, and Notes. A 'New' button is visible at the top of the table.

Name	FQDN or IP Address	Type	Notes
aacc64SIPvmg	10.10.40.55	SIP Trunk	
AACC70vmg	10.10.40.80	SIP Trunk	AACC70vmg
ASBCE_PG	10.10.40.151	SIP Trunk	Session Boarder Controller
Capita	10.253.160.206	SIP Trunk	Capita
cm63vmg	10.10.40.31	CM	R6.3 CM
CM70Redundancy	10.10.40.165	CM	
cm70vmg	10.10.40.13	CM	
CPE	10.10.40.251	SIP Trunk	For Stephen Wilson
CS1000E	10.10.40.111	Other	CS1KPG1

Enter a suitable **Name** for the new SIP Entity and the **IP Address** of the DMS. Enter the correct **Time Zone** and **Location**. The Entity Link can be added from this page by scrolling down.

The screenshot shows the 'SIP Entity Details' form. The form is titled 'SIP Entity Details' and has 'Commit' and 'Cancel' buttons. It is divided into 'General' and 'Loop Detection' sections. The General section contains fields for Name, FQDN or IP Address, Type, Notes, Adaptation, Location, Time Zone, SIP Timer B/F (in seconds), Minimum TLS Version, Credential name, Securable, and Call Detail Recording. The Loop Detection section contains fields for Loop Detection Mode, Loop Count Threshold, and Loop Detection Interval (in msec).

SIP Entity Details [Commit] [Cancel]

General

* Name:

* FQDN or IP Address:

Type:

Notes:

Adaptation:

Location:

Time Zone:

* SIP Timer B/F (in seconds):

Minimum TLS Version:

Credential name:

Securable: ☐

Call Detail Recording:

Loop Detection

Loop Detection Mode:

Loop Count Threshold:

Loop Detection Interval (in msec):

7.3. Adding the Distinction Media Server Entity Link


An Entity link can be added from the SIP Entities page. Using the page from the previous page scroll down to Entity Links.

A UDP Entity link was chosen for the DMS. Enter a suitable **Name** for the Entity Link and select the **Session Manager** SIP Entity for **SIP Entity 1** and the newly created DMS SIP Entity for **SIP Entity 2**. Ensure that **UDP** is selected for the **Protocol** and that **Port 5060** is used. Click on **Commit** once finished to save the new Entity Link.

Monitoring
SIP Link Monitoring: Use Session Manager Configuration ▾
CRLF Keep Alive Monitoring: Use Session Manager Configuration ▾
Supports Call Admission Control: ☐
Shared Bandwidth Manager: ☐
Primary Session Manager Bandwidth Association: ▾
Backup Session Manager Bandwidth Association: ▾

Entity Links
Override Port & Transport with DNS SRV: ☐

Add Remove

1 Item 


Filter: Enable

<input type="checkbox"/>	Name	SIP Entity 1	Protocol	Port	SIP Entity 2	Port	Connection Policy	Deny New Service
<input type="checkbox"/>	* SM_Capita-DMS	SM71vmg ▾	UDP ▾	* 5060	CAPITA DMS ▾	* 5060	trusted ▾	<input type="checkbox"/>

Select : All, None

SIP Responses to an OPTIONS Request

Add Remove

0 Items 

Filter: Enable

<input type="checkbox"/>	Response Code & Reason Phrase	Mark Entity Up/Down	Notes
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Commit Cancel

7.4. Adding the Distinction Media Server Routing Policy

Click on **Routing Policies** in the left window and select **New** in the main window.

Avaya Aura System Manager 7.0

Home / Elements / Routing / Routing Policies

Routing Policies

New Edit Delete Duplicate More Actions

15 Items Filter: Enable

<input type="checkbox"/>	Name	Disabled	Retries	Destination	Notes
<input type="checkbox"/>	To_aacc64SIPvmg	<input type="checkbox"/>	0	aacc64SIPvmg	aacc64SIPvmg
<input type="checkbox"/>	To_AACC70vmg	<input type="checkbox"/>	0	AACC70vmg	To_AACC70vmg
<input type="checkbox"/>	To ASBCE	<input type="checkbox"/>	0	ASBCE_PG	Calls to ASBCE
<input type="checkbox"/>	To Capita	<input type="checkbox"/>	0	Capita	To Capita
<input type="checkbox"/>	To_cm63vmg	<input type="checkbox"/>	0	cm63vmg	Routing to CM63
<input type="checkbox"/>	To CM70 Redundancy	<input type="checkbox"/>	0	CM70Redundancy	To CM70 Redundancy
<input type="checkbox"/>	To_cm70vmg	<input type="checkbox"/>	0	cm70vmg	
<input type="checkbox"/>	To_CPE	<input type="checkbox"/>	0	CPE	For Stephen
<input type="checkbox"/>	To_CS1000E	<input type="checkbox"/>	0	CS1000E	Routing to CS1KPG1

Enter a suitable **Name** for the Routing Policy and click on **Select** under **SIP Entity as Destination**.

Routing Policy Details Commit Cancel

General

* Name:

Disabled: ☐

* Retries:

Notes:

SIP Entity as Destination

Select


Name	FQDN or IP Address	Type	Notes

Select the **CAPITA DMS** SIP Entity as shown below and click on **Select**.

SIP Entities

Select Cancel

SIP Entities

19 Items 

Filter: Enable

	Name	FQDN or IP Address	Type	Notes
<input type="radio"/>	AACC71vmpg	10.10.40.80	SIP Trunk	AACC R7.1
<input type="radio"/>	AAMessagingR633	10.10.40.22	SIP Trunk	AAMessagingR633
<input type="radio"/>	AAMessagingR7	10.10.40.23	SIP Trunk	AAMessaging
<input type="radio"/>	AMSBreezeCluster	10.10.40.139	Media Server	
<input type="radio"/>	Breeze1SIP	10.10.40.137	Avaya Breeze	Avaya Breeze 1
<input type="radio"/>	Breeze2SIP	10.10.40.142	Avaya Breeze	Avaya Breeze 2
<input type="radio"/>	Breeze3SIP	10.10.40.149	Avaya Breeze	Breeze3SIP
<input checked="" type="radio"/>	CAPITA DMS	10.10.40.122	SIP Trunk	CAPITA DMS
<input type="radio"/>	cm70vmpg	10.10.40.13	CM	cm70vmpg
<input type="radio"/>	CM71vmpg	10.10.40.47	CM	CM71vmpg
<input type="radio"/>	CM80VMPG	10.10.40.59	CM	CM80VMPG
<input type="radio"/>	CS1000 MAS	10.10.40.104	SIP Trunk	CS1000 MAS
<input type="radio"/>	CS1KPG1	10.10.40.111	SIP Trunk	CS1000 PG
<input type="radio"/>	CS1KPG2	10.10.40.115	SIP Trunk	CS1KPG2
<input type="radio"/>	EPPOMvmpg	10.10.40.135	Voice Portal	EPPOMvmpg

Select : None

Page 1 of 2

The selected destination is now shown, click on **Commit** to save this.

Routing Policy Details

Commit Cancel

General

* Name:

To Capita - DMS

Disabled:

☐

* Retries:

0

Notes:

To Capita - DMS

SIP Entity as Destination

Select

Name	FQDN or IP Address	Type	Notes
CAPITA DMS	10.10.40.122	SIP Trunk	CAPITA DMS

7.5. Adding a Dial Pattern for the Distinction Media Server

Select **Dial Patterns** in the left window and select **New** in the main window.

Avaya Aura System Manager 7.0

Home / Elements / Routing / Dial Patterns

Dial Patterns

New Edit Delete Duplicate More Actions

17 Items Filter: Enable

Pattern	Min	Max	Emergency Call	Emergency Type	Emergency Priority	SIP Domain	Notes
10	4	4	<input type="checkbox"/>			devconnect.local	Ext 10xx on CM63vmpg
2016	4	4	<input type="checkbox"/>			devconnect.local	SIP Trunk to CM63
3	4	4	<input type="checkbox"/>			devconnect.local	To CS1000E
40	4	4	<input type="checkbox"/>			devconnect.local	Calls to SIP exts in CS1000
450	4	4	<input type="checkbox"/>			devconnect.local	To Capita
49	4	4	<input type="checkbox"/>			devconnect.local	To NovaLink 10.10.40.44
51	4	4	<input type="checkbox"/>			devconnect.local	To Etrali
52	4	4	<input type="checkbox"/>			devconnect.local	Was goign to IP Office 500 V2 Now CM70vmpg
5999	4	4	<input type="checkbox"/>			devconnect.local	Messaging (Voicemail)

Enter the required digits for the Pattern, in the example below 7080xx is used, which means that 708000 – 708099 will use the Routing Policy that will be selected. **7080** is entered as the **Pattern** and the **Min** and **Max** digit length of **6** is used thus giving 7080xx. Ensure that the correct domain is entered for **SIP Domain** in this example the domain created in **Section 7.1.1** is added. Click on **Add** under **Originating Locations and Routing Policies** to select the Routing Policy.

Dial Pattern Details Commit Cancel

General

* Pattern: 7080

* Min: 6

* Max: 6

Emergency Call: ☐

Emergency Priority: 1

Emergency Type:

SIP Domain: devconnect.local

Notes: To Capita DMS

Originating Locations and Routing Policies

Add Remove

1 Item Filter: Enable

Originating Location Name	Originating Location Notes	Routing Policy Name	Rank	Routing Policy Disabled	Routing Policy Destination	Routing Policy Notes

Select : All, None

Select the **Originating Location**, this will be the location added in **Section 7.1.2** select the newly created routing policy for the DMS.

Originating Location
Select Cancel

Originating Location

☐ Apply The Selected Routing Policies to All Originating Locations

1 Item
Filter: Enable

<input checked="" type="checkbox"/>	Name	Notes
<input checked="" type="checkbox"/>	DevConnect_Lab_PG	DevConnect_Lab_PG

Select : All, None

Routing Policies

13 Items
Filter: Enable

<input type="checkbox"/>	Name	Disabled	Destination	Notes
<input type="checkbox"/>	To AACC71vmppg	<input type="checkbox"/>	AACC71vmppg	To AACC71vmppg
<input type="checkbox"/>	To_AAMessaging	<input type="checkbox"/>	AAMessagingR7	To_AAMessaging
<input type="checkbox"/>	To AA Messaging R633	<input type="checkbox"/>	AAMessagingR633	To AA Messaging R633
<input type="checkbox"/>	To AMSBreeze	<input type="checkbox"/>	AMSBreezeCluster	To AMSBreeze
<input checked="" type="checkbox"/>	To Capita - DMS	<input type="checkbox"/>	CAPITA DMS	To Capita - DMS
<input type="checkbox"/>	To_cm70vmppg	<input type="checkbox"/>	cm70vmppg	To_cm70vmppg
<input type="checkbox"/>	To_CM71vmppg	<input type="checkbox"/>	CM71vmppg	To_CM71vmppg
<input type="checkbox"/>	To CM80vmppg	<input type="checkbox"/>	CM80VMPPG	To CM80vmppg
<input type="checkbox"/>	To CS1000 MAS	<input type="checkbox"/>	CS1000 MAS	To CS1000 MAS
<input type="checkbox"/>	To_CS1KPG1	<input type="checkbox"/>	CS1KPG1	To_CS1KPG1
<input type="checkbox"/>	To CS1KPG2	<input type="checkbox"/>	CS1KPG2	To CS1KPG2
<input type="checkbox"/>	To_MitelACS	<input type="checkbox"/>	MitelACS	To Mitel ACS
<input type="checkbox"/>	To_PresenceOG	<input type="checkbox"/>	PresenceOpenGate	To_PresenceOG

Select : All, None

With the Routing Policy selected click on **Commit** to finish adding the **Dial Pattern**.

Dial Pattern Details
Commit Cancel

General

* Pattern: 7080

* Min: 6

* Max: 6

Emergency Call: ☐

Emergency Priority: 1

Emergency Type:

SIP Domain: devconnect.local

Notes: To Capita DMS

Originating Locations and Routing Policies

Add Remove

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"/>	DevConnect_Lab_PG	DevConnect_Lab_PG	To Capita - DMS	0	<input type="checkbox"/>	CAPITA DMS	To Capita - DMS

Select : All, None

8. Configure Capita - Secure Solutions and Services Distinction Media Server

The installation and configuration of the DMS is carried out by an engineer with sufficient training from Capita as it was for compliance testing. An in-depth knowledge of the DMS is required in order to make configuration changes and such changes should only be made by an engineer with this capability, therefore the setup and configuration of the Capita Distinction Media Server is outside the scope of these Application Notes. For information on the setup and configuration of the DMS, please contact Capita as per **Section 2.3**.

9. Verification Steps

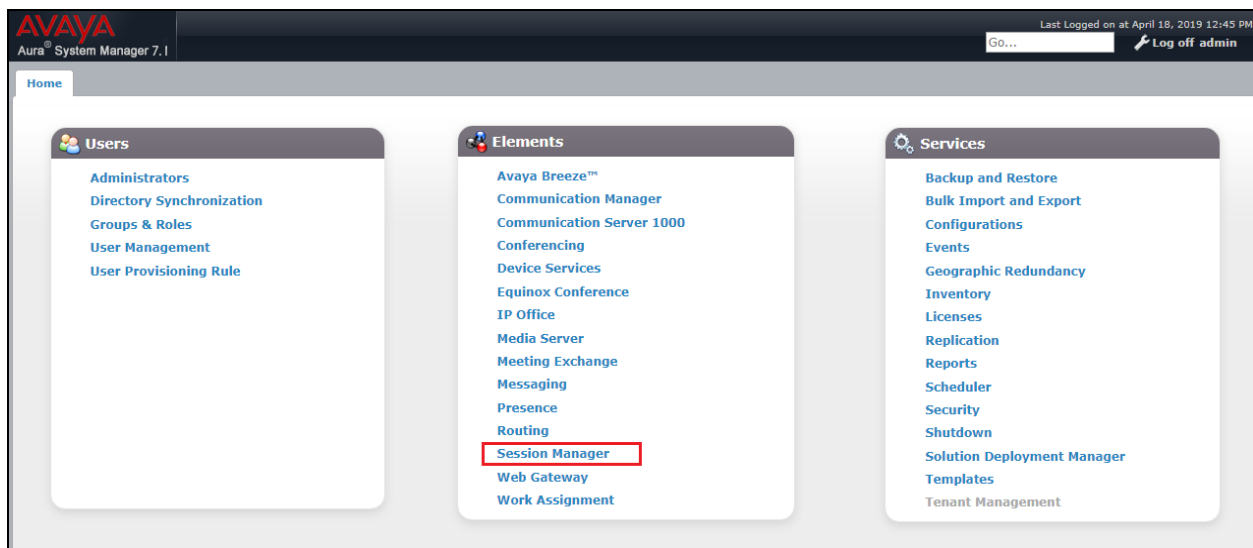
The following steps can be taken to ensure that all connections between Capita's DMS and the Avaya solution are configured correctly.

9.1. Verify that calls can be made to and from the Distinction Media Server

From an Avaya extension make a call to a DMS extension and ensure that the call remains active for more than 40 seconds. From a DMS extension make a call to the Avaya extension and again keep the call active for more than 40 seconds.

9.2. Verify the SIP Entity on Avaya Aura® System Manager

Log into System Manager as per **Section 7**. Under **Elements** click on **Session Manager**.



9.2.1. Verify the CS1000 SIP Entity

Navigate to **SIP Entity Monitoring** in the left window. **All Monitored SIP Entities** are listed in the main window. Click on the CS1000 SIP Entity to check its status.

SIP Entity Link Monitoring Status Summary

This page provides a summary of Session Manager SIP entity link monitoring status.

SIP Entities Status for All Monitoring Session Manager Instances

Run Monitor

1 Item Filter: Enable

Session Manager	Type	Monitored Entities					Deny	Total
		Down	Partially Up	Up	Not Monitored			
SM71vmpg	Core	14	0	5	0	0	19	

Select : All, None

All Monitored SIP Entities

Run Monitor

19 Items Filter: Enable

SIP Entity Name
AAMessagingR7
CM80VMPG
CAPITA DMS
CS1KPG1

Select : All, None

Page 2 of 2

The CS1000 has both a **UDP** and **TCP** connection to Session Manager and both are showing **UP** in the example below.

SIP Entity, Entity Link Connection Status

This page displays detailed connection status for all entity links from all Session Manager instances to a single SIP entity.

Status Details for the selected Session Manager:

All Entity Links to SIP Entity: CS1KPG1

Summary View

2 Items Filter: Enable

Session Manager Name	IP Address Family	SIP Entity Resolved IP	Port	Proto.	Deny	Conn. Status	Reason Code	Link Status
SM71vmpg	IPv4	10.10.40.111	5060	TCP	FALSE	UP	200 OK	UP
SM71vmpg	IPv4	10.10.40.111	5060	UDP	FALSE	UP	200 OK	UP

Select : None

9.2.2. Verify the Distinction Media Server SIP Entity

Navigate to **SIP Entity Monitoring** in the left window. **All Monitored SIP Entities** are listed in the main window. Click on the **CAPITA DMS** SIP Entity to check its status.

The screenshot shows the 'SIP Entity Link Monitoring Status Summary' page in the Session Manager interface. The left sidebar has 'SIP Entity Monitoring' highlighted. The main content area shows a summary of SIP entities and a list of monitored entities.

SIP Entity Link Monitoring Status Summary
This page provides a summary of Session Manager SIP entity link monitoring status.

SIP Entities Status for All Monitoring Session Manager Instances

Run Monitor

1 Item Filter: Enable

Session Manager	Type	Monitored Entities					Deny	Total
		Down	Partially Up	Up	Not Monitored			
SM71vmppg	Core	14	0	5	0	0	19	

Select : All, None

All Monitored SIP Entities

Run Monitor

19 Items Filter: Enable

SIP Entity Name
AAMessagingR7
CM80VMPG
CAPITA DMS
CS1KPG1

Select : All, None

Page 2 of 2

The DMS has both a **UDP** connection to Session Manager and this is showing **UP** in the example below.

The screenshot shows the 'SIP Entity, Entity Link Connection Status' page. It displays detailed connection status for all entity links from all Session Manager instances to a single SIP entity.

SIP Entity, Entity Link Connection Status
This page displays detailed connection status for all entity links from all Session Manager instances to a single SIP entity.

Status Details for the selected Session Manager:

All Entity Links to SIP Entity: CAPITA DMS

Summary View

1 Item Filter: Enable

Session Manager Name	IP Address Family	SIP Entity Resolved IP	Port	Proto.	Deny	Conn. Status	Reason Code	Link Status
SM71vmppg	IPv4	10.10.40.122	5060	UDP	FALSE	UP	200 OK	UP

Select : None

10. Conclusion

These Application Notes describe the configuration steps required for the Distinction Media Server from Capita - Secure Solutions and Services to successfully interoperate with Avaya Communication Server 1000 R7.6 and Avaya Aura® Session Manager R7.1. Please refer to **Section 2.2** for test results and observations.

11. Additional References

This section references documentation relevant to these Application Notes. The Avaya product documentation is available at <http://support.avaya.com>, where the following documents can be obtained.

- [1] *Software Input Reference Administration Avaya Communication Server 1000, Release 7.6*; Document No. NN43001-611_05.02
- [2] *Administering Avaya Aura® Session Manager*, Doc # 03603324, Issue 1 Release 7.1
- [3] *Unified Communications Management Common Services Fundamentals Avaya Communication Server 1000*, Doc # NN43001-116, 05.08
- [4] *Element Manager System Reference –Administration Avaya Communication Server 1000* Doc # NN43001-632, 05.04

Product documentation for DMS can be requested from Capita or may be downloaded from <http://www.capitasecureinformationsolutions.co.uk>

Appendix A

Avaya CS1000 R7.6 - Linux Patches

Product Release: 7.65.16.00

In system patches: 12

PATCH#	NAME	IN_SERVICE	DATE	SPECINS	TYPE	RPM
48	p31484_1	Yes	10/10/17	NO	FRU	cs1000-shared-general-7.65.16-00.i386
49	p33125_1	Yes	10/10/17	NO	FRU	cs1000-OS-1.00.00.00-00.noarch
50	p33274_1	Yes	10/10/17	YES	FRU	initscripts-8.45.25-1.el5.i386
51	p33384_1	Yes	10/10/17	NO	FRU	cs1000-OS-1.00.00.00-00.noarch
52	p33493_1	Yes	10/10/17	NO	FRU	cs1000-OS-1.00.00.00-00.noarch
55	p33673_1	Yes	10/10/17	NO	FRU	net-snmp-5.3.2.2-5.el5.i386
74	p33830_1	Yes	05/04/19	YES	FRU	cs1000-OS-1.00.00.00-00.noarch
75	p33833_1	Yes	05/04/19	YES	FRU	cs1000-OS-1.00.00.00-00.noarch
76	p33837_1	Yes	05/04/19	NO	FRU	cs1000-OS-1.00.00.00-00.noarch
77	p33870_1	Yes	05/04/19	YES	FRU	cs1000-OS-1.00.00.00-00.noarch
78	p33886_1	Yes	05/04/19	YES	FRU	cs1000-OS-1.00.00.00-00.noarch
79	p33895_1	Yes	05/04/19	YES	FRU	cs1000-OS-1.00.00.00-00.noarch

In System service updates: 49

PATCH#	IN_SERVICE	DATE	SPECINS	REMOVABLE	NAME
0	Yes	04/04/19	YES	YES	cs1000-Jboss-Quantum-7.65.16.23-16.i386.000
1	Yes	04/04/19	YES	YES	cs1000-patchWeb-7.65.16.23-4.i386.000
2	Yes	04/04/19	YES	YES	cs1000-linuxbase-7.65.16.23-41.i386.000
3	Yes	10/10/17	YES	YES	cs1000-dmWeb-7.65.16.23-5.i386.000
5	Yes	10/10/17	NO	YES	bash-3.2-33.el5_11.4.i386.000
6	Yes	10/10/17	YES	YES	cs1000-baseWeb-7.65.16.22-4.i386.000
7	Yes	10/10/17	YES	YES	cs1000-bcc-7.65.16.23-19.i386.000
9	Yes	10/10/17	YES	YES	cs1000-cs-7.65.P.100-03.i386.000
10	Yes	10/10/17	NO	YES	cs1000-cs1000WebService_6-0-7.65.16.23-6.i386.000
11	Yes	10/10/17	YES	YES	cs1000-csmWeb-7.65.16.23-2.i386.000
12	Yes	10/10/17	YES	YES	cs1000-csoneksvrmgr-7.65.16.22-5.i386.000
13	Yes	10/10/17	YES	YES	cs1000-csv-7.65.16.23-4.i386.000
14	Yes	10/10/17	YES	YES	cs1000-dbcom-7.65.16.23-1.i386.000
17	Yes	10/10/17	YES	YES	cs1000-ftrpkg-7.65.16.23-1.i386.000
18	Yes	10/10/17	NO	YES	cs1000-gk-7.65.16.22-1.i386.000
19	Yes	10/10/17	YES	YES	cs1000-ipsec-7.65.16.22-1.i386.000
25	Yes	10/10/17	YES	YES	cs1000-nrsm-7.65.16.23-1.i386.000
26	Yes	10/10/17	YES	YES	cs1000-oam-logging-7.65.16.23-1.i386.000
28	Yes	10/10/17	NO	YES	cs1000-shared-carardtct-7.65.16.21-01.i386.000
29	Yes	10/10/17	NO	YES	cs1000-shared-omm-7.65.16.21-2.i386.000
30	Yes	10/10/17	YES	YES	cs1000-shared-pbx-7.65.16.23-3.i386.000
31	Yes	10/10/17	NO	YES	cs1000-shared-tpselect-7.65.16.23-1.i386.000
32	Yes	10/10/17	YES	YES	cs1000-shared-xmsg-7.65.16.22-1.i386.000
33	Yes	10/10/17	NO	YES	cs1000-snmp-7.65.16.21-00.i686.000
37	Yes	10/10/17	NO	YES	freetype-2.2.1-32.el5_9.1.i386.000
40	Yes	10/10/17	NO	YES	libssh2-1.4.2-2.el5_7.1.i386.000
41	Yes	10/10/17	NO	YES	libxml2-2.6.26-2.1.25.el5_11.i386.000
42	Yes	10/10/17	NO	YES	libxml2-python-2.6.26-2.1.25.el5_11.i386.000
43	Yes	10/10/17	NO	YES	openldap-2.3.43-29.el5_11.i386.000
44	Yes	10/10/17	YES	YES	openssl-0.9.8e-40.el5_11.i386.000
45	Yes	10/10/17	NO	YES	pass_harden-7.65.16.23-2.i386.000
46	Yes	10/10/17	NO	YES	pcap-7.65.16.23-1.i386.000
57	Yes	05/04/19	YES	YES	avaya-cs1000-cnd-4.0.51-1.el5.i386.000
58	Yes	05/04/19	YES	YES	cs1000-auth-7.65.16.23-1.i386.000
59	Yes	05/04/19	NO	YES	cs1000-cppmUtil-7.65.16.23-7.i686.000
60	Yes	05/04/19	YES	YES	cs1000-emWebLocal_6-0-7.65.16.23-1.i386.000
61	Yes	05/04/19	YES	YES	cs1000-emWeb_6-0-7.65.16.23-10.i386.000
62	Yes	05/04/19	YES	YES	cs1000-mscAnnc-7.65.16.23-2.i386.000
63	Yes	05/04/19	YES	YES	cs1000-mscAttn-7.65.16.23-16.i386.000
64	Yes	05/04/19	YES	YES	cs1000-mscConf-7.65.16.23-2.i386.000
65	Yes	05/04/19	YES	YES	cs1000-mscMusc-7.65.16.23-2.i386.000
66	Yes	05/04/19	YES	YES	cs1000-mscTone-7.65.16.23-2.i386.000
67	Yes	05/04/19	YES	YES	cs1000-pd-7.65.16.23-2.i386.000
68	Yes	05/04/19	YES	YES	cs1000-sps-7.65.16.23-5.i386.000
69	Yes	05/04/19	YES	YES	cs1000-tps-7.65.16.23-23.i386.000
70	Yes	05/04/19	YES	YES	cs1000-vtrk-7.65.16.23-140.i386.000
71	Yes	05/04/19	YES	YES	jdk-1.6.0_201-fcs.i586.000
72	Yes	05/04/19	YES	YES	kernel-2.6.18-434.el5.i686.000
73	Yes	05/04/19	NO	YES	tzdata-2018e-3.el5.i386.000

Avaya CS1000 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	wi01199336	ISS1:1OF1	p33410_1	10/10/2017	p33410_1.cpl	NO
0001	wi01088055	ISS1:1OF1	p32607_1	10/10/2017	p32607_1.cpl	NO
0002	wi01098433	ISS1:1OF1	p32736_1	10/10/2017	p32736_1.cpl	NO
0003	wi01199608	ISS1:1OF1	p33414_1	10/10/2017	p33414_1.cpl	NO
0004	wi01146254	ISS1:1OF1	p33127_1	10/10/2017	p33127_1.cpl	NO
0005	wi01075149	ISS1:1OF1	p32475_1	10/10/2017	p32475_1.cpl	NO
0006	wi01070585	ISS1:1OF1	p32383_1	10/10/2017	p32383_1.cpl	NO
0007	wi01128512	ISS1:1OF1	p32997_1	10/10/2017	p32997_1.cpl	NO
0008	wi01098783	ISS1:1OF1	p32748_1	10/10/2017	p32748_1.cpl	NO
0009	wi01133960	ISS1:1OF1	p33034_1	10/10/2017	p33034_1.cpl	NO
0010	wi01137694	ISS1:1OF1	p33081_1	10/10/2017	p33081_1.cpl	NO
0011	wi01068011	ISS1:1OF1	p33182_1	10/10/2017	p33182_1.cpl	NO
0012	wi01153896	ISS1:1OF1	p33185_1	10/10/2017	p33185_1.cpl	NO
0013	wi01115369	ISS1:1OF1	p32889_1	10/10/2017	p32889_1.cpl	NO
0014	wi01171418	ISS1:1OF1	p33278_1	10/10/2017	p33278_1.cpl	NO
0015	CS1000-7113	ISS1:1OF1	p33623_1	10/10/2017	p33623_1.cpl	NO
0016	wi01201882	ISS1:1OF1	p33427_1	10/10/2017	p33427_1.cpl	NO
0017	wi01079444	ISS1:1OF1	p32564_1	10/10/2017	p32564_1.cpl	NO
0018	wi01089519	ISS1:1OF1	p32665_1	10/10/2017	p32665_1.cpl	NO
0019	wi01065248	ISS1:1OF1	p32412_1	10/10/2017	p32412_1.cpl	NO
0020	wi01052968	ISS1:1OF1	p32540_1	10/10/2017	p32540_1.cpl	NO
0021	wi01144609	ISS1:1OF1	p33119_1	10/10/2017	p33119_1.cpl	NO
0022	wi01132244	ISS1:1OF1	p33041_1	10/10/2017	p33041_1.cpl	NO
0023	wi01045058	ISS1:1OF1	p32214_1	10/10/2017	p32214_1.cpl	NO
0024	wi01053920	ISS1:1OF1	p32303_1	10/10/2017	p32303_1.cpl	NO
0025	wi01169714	ISS1:1OF1	p33335_1	10/10/2017	p33335_1.cpl	NO
0026	wi01151870	ISS1:1OF1	p33162_1	10/10/2017	p33162_1.cpl	YES
0027	wi01099300	iss1:1of1	p32704_1	10/10/2017	p32704_1.cpl	NO
0028	wi01171467	ISS1:1OF1	p33270_1	10/10/2017	p33270_1.cpl	NO
0029	wi01207693	ISS1:1OF1	p33452_1	10/10/2017	p33452_1.cpl	NO
0030	wi01120705	ISS1:1OF1	p32930_1	10/10/2017	p32930_1.cpl	NO
0031	wi00959458	ISS1:1OF1	p31551_1	10/10/2017	p31551_1.cpl	NO
0032	wi01197054	ISS1:1OF1	p33397_1	10/10/2017	p33397_1.cpl	NO
0033	wi01065118	ISS1:1OF1	p32397_1	10/10/2017	p32397_1.cpl	NO
0034	wi01181174	ISS1:1OF1	p33316_1	10/10/2017	p33316_1.cpl	NO
0035	wi01053597	ISS1:1OF1	p32304_1	10/10/2017	p32304_1.cpl	NO
0036	wi01071996	ISS1:1OF1	p32461_1	10/10/2017	p32461_1.cpl	NO
0037	wi01127527	ISS1:1OF1	p32988_1	10/10/2017	p32988_1.cpl	YES
0038	wi01008182	ISS1:1OF1	p33277_1	10/10/2017	p33277_1.cpl	NO
0039	wi01096842	ISS1:1OF1	p32731_1	10/10/2017	p32731_1.cpl	NO
0040	wi01068922	ISS1:1OF1	p32454_1	10/10/2017	p32454_1.cpl	NO
0041	wi01182880	ISS1:1OF1	p33328_1	10/10/2017	p33328_1.cpl	NO
0042	wi01138136	ISS1:1OF1	p33191_1	10/10/2017	p33191_1.cpl	NO
0043	CS1000-6738	ISS1:1OF1	p33495_1	10/10/2017	p33495_1.cpl	NO
0044	wi01156086	ISS1:1OF1	p33269_1	10/10/2017	p33269_1.cpl	NO
0045	wi01045144	ISS1:1OF1	p33202_1	10/10/2017	p33202_1.cpl	NO
0046	wi01120458	ISS1:1OF1	p32929_1	10/10/2017	p32929_1.cpl	NO
0047	wi01078721	ISS1:1OF1	p32553_1	10/10/2017	p32553_1.cpl	NO
0048	CS1000-7208	ISS1:1OF1	p33648_1	10/10/2017	p33648_1.cpl	NO
0049	wi01059388	iss1:1of1	p32628_1	10/10/2017	p32628_1.cpl	NO
0050	wi01065922	ISS1:1OF1	p32516_1	10/10/2017	p32516_1.cpl	NO
0051	wi01205975	ISS1:1OF1	p33447_1	10/10/2017	p33447_1.cpl	NO

0052	wi01142100	ISS1:1OF1	p33090_1	10/10/2017	p33090_1.cpl	NO
0053	wi01153039	ISS1:1OF1	p17588_1	10/10/2017	p17588_1.cpl	NO
0054	WI01077073	ISS1:1OF1	p32534_1	10/10/2017	p32534_1.cpl	NO
0055	wi01215810	ISS1:1OF1	p33494_1	10/10/2017	p33494_1.cpl	NO
0056	wi01066991	ISS1:1OF1	p32449_1	10/10/2017	p32449_1.cpl	NO
0057	wi01106658	ISS1:1OF1	p32812_1	10/10/2017	p32812_1.cpl	NO
0058	wi01068851	ISS1:1OF1	p32439_1	10/10/2017	p32439_1.cpl	NO
0059	wi01053314	ISS1:1OF1	p32555_1	10/10/2017	p32555_1.cpl	NO
0060	wi01123389	ISS1:1OF1	p33045_1	10/10/2017	p33045_1.cpl	NO
0061	CS1000-7174	ISS1:1OF1	p33655_1	10/10/2017	p33655_1.cpl	NO
0062	wi01165881	ISS1:1OF1	p33239_1	10/10/2017	p33239_1.cpl	NO
0063	wi01065125	ISS1:1OF1	p32416_1	10/10/2017	p32416_1.cpl	NO
0064	wi01119086	ISS1:1OF1	p32917_1	10/10/2017	p32917_1.cpl	NO
0065	wi01109251	ISS1:1OF1	p32827_1	10/10/2017	p32827_1.cpl	NO
0066	wi01173768	ISS1:1OF1	p33288_1	10/10/2017	p33288_1.cpl	NO
0067	wi01180594	ISS1:1OF1	p33312_1	10/10/2017	p33312_1.cpl	NO
0068	wi01126552	ISS1:1OF1	p32975_1	10/10/2017	p32975_1.cpl	NO
0069	CS1000-7171	ISS1:1OF1	p33626_1	10/10/2017	p33626_1.cpl	NO
0070	wi01204623	ISS1:1OF1	p33444_1	10/10/2017	p33444_1.cpl	NO
0071	wi01099724	ISS1:1OF1	p32742_1	10/10/2017	p32742_1.cpl	YES
0072	wi01118819	ISS1:1OF1	p32954_1	10/10/2017	p32954_1.cpl	NO
0073	wi01094305	ISS1:1OF1	p32640_1	10/10/2017	p32640_1.cpl	NO
0074	wi01188722	ISS1:1OF1	p33365_1	10/10/2017	p33365_1.cpl	NO
0075	CS1000-7435	ISS1:1OF1	p33745_1	11/10/2017	p33745_1.cpl	NO
0076	wi01101876	ISS1:1OF1	p32858_1	10/10/2017	p32858_1.cpl	NO
0077	wi01142792	ISS1:1OF1	p33099_1	10/10/2017	p33099_1.cpl	NO
0078	CS1000-7276	ISS1:1OF1	p33675_1	10/10/2017	p33675_1.cpl	YES
0079	CS1000-6789	ISS1:1OF1	p33508_1	10/10/2017	p33508_1.cpl	NO
0080	wi01164281	ISS1:1OF1	p33232_1	10/10/2017	p33232_1.cpl	NO
0081	wi01133985	ISS1:1OF1	p33049_1	10/10/2017	p33049_1.cpl	NO
0082	wi01149017	ISS1:1OF1	p33145_1	10/10/2017	p33145_1.cpl	NO
0083	wi01186846	ISS1:1OF1	p33332_1	10/10/2017	p33332_1.cpl	NO
0084	wi01188972	ISS1:1OF1	p33352_1	10/10/2017	p33352_1.cpl	NO
0085	cs1000-7217	ISS1:1OF1	p33643_1	10/10/2017	p33643_1.cpl	NO
0086	CS1000-6712	ISS1:1OF1	p33752_1	11/10/2017	p33752_1.cpl	NO
0087	wi01111194	ISS1:1OF1	p32821_1	10/10/2017	p32821_1.cpl	NO
0088	wi01189247	ISS1:1OF1	p33382_1	10/10/2017	p33382_1.cpl	YES
0089	wi01099606	iss1:1of1	p32713_1	10/10/2017	p32713_1.cpl	NO
0090	wi01088775	ISS1:1OF1	p32659_1	10/10/2017	p32659_1.cpl	NO
0091	wi01148697	ISS1:1OF1	p33187_1	10/10/2017	p33187_1.cpl	NO
0092	wi01130348	ISS1:1OF1	p33014_1	10/10/2017	p33014_1.cpl	NO
0093	CS1000-6844	ISS1:1OF1	p33507_1	10/10/2017	p33507_1.cpl	NO
0094	wi01134756	ISS1:1OF1	p33453_1	10/10/2017	p33453_1.cpl	NO
0095	wi01184588	ISS1:1OF1	p33338_1	10/10/2017	p33338_1.cpl	NO
0096	wi01147091	ISS1:1OF1	p33137_1	10/10/2017	p33137_1.cpl	NO
0097	CS1000-7286	ISS1:1OF1	p33686_1	10/10/2017	p33686_1.cpl	NO
0098	wi01087543	ISS1:1OF1	p32662_1	10/10/2017	p32662_1.cpl	NO
0099	wi01166011	ISS1:1OF1	p33235_1	10/10/2017	p33235_1.cpl	NO
0100	wi01035976	ISS1:1OF1	p32173_1	10/10/2017	p32173_1.cpl	NO
0101	wi01146804	ISS1:1OF1	p33132_1	10/10/2017	p33132_1.cpl	NO
0102	wi01153104	ISS1:1OF1	p33174_1	10/10/2017	p33174_1.cpl	NO
0103	wi01092443	ISS1:1OF1	p32676_1	10/10/2017	p32676_1.cpl	NO
0104	CS1000-7469	ISS1:1OF1	p33739_1	11/10/2017	p33739_1.cpl	NO
0105	wi01113712	ISS1:1OF1	p32877_1	10/10/2017	p32877_1.cpl	NO
0106	wi01150846	ISS1:1OF1	p33157_1	10/10/2017	p33157_1.cpl	NO
0107	CS1000-7052	ISS1:1OF1	p33573_1	10/10/2017	p33573_1.cpl	NO
0108	wi01153844	ISS1:1OF1	p33172_1	10/10/2017	p33172_1.cpl	NO
0109	wi01093071	ISS1:1OF1	p32701_1	10/10/2017	p32701_1.cpl	NO
0110	CS1000-7151	ISS1:1OF1	p33617_1	10/10/2017	p33617_1.cpl	NO
0111	wi01190506	ISS1:1OF1	p33361_1	10/10/2017	p33361_1.cpl	NO
0112	wi01118714	ISS2:1OF1	p32952_2	10/10/2017	p32952_2.cpl	NO
0113	wi01075538	ISS1:1OF1	p32469_1	10/10/2017	p32469_1.cpl	NO

0114	wi01091447	ISS1:1OF1	p32675_1	10/10/2017	p32675_1.cpl	NO
0115	wi01159931	ISS1:1OF1	p33231_1	10/10/2017	p33231_1.cpl	YES
0116	WI01108562	ISS1:1OF1	p32832_1	10/10/2017	p32832_1.cpl	NO
0117	wi01099810	ISS1:1OF1	p32796_1	10/10/2017	p32796_1.cpl	NO
0118	CS1000-7003	ISS1:1OF1	p33561_1	10/10/2017	p33561_1.cpl	NO
0119	wi01128596	ISS1:1OF1	p33000_1	10/10/2017	p33000_1.cpl	NO
0120	wi01185642	ISS1:1OF1	p33342_1	10/10/2017	p33342_1.cpl	NO
0121	wi01193201	ISS1:1OF1	p33381_1	10/10/2017	p33381_1.cpl	YES
0122	cs1000-6998	ISS1:1OF1	p33555_1	10/10/2017	p33555_1.cpl	NO
0123	CS1000-6791	ISS1:1OF1	p33501_1	10/10/2017	p33501_1.cpl	YES
0124	wi01191767	ISS1:1OF1	p33368_1	10/10/2017	p33368_1.cpl	NO
0125	wi01144354	ISS1:1OF1	p33117_1	10/10/2017	p33117_1.cpl	NO
0126	wi01121374	ISS1:1OF1	p31107_1	10/10/2017	p31107_1.cpl	NO
0127	wi01185751	ISS1:1OF1	p33409_1	10/10/2017	p33409_1.cpl	YES
0128	WI01169289	ISS1:1OF1	p33257_1	10/10/2017	p33257_1.cpl	NO
0129	wi01100508	ISS1:1OF1	p32761_1	10/10/2017	p32761_1.cpl	NO
0130	wi01189516	ISS1:1OF1	p33373_1	10/10/2017	p33373_1.cpl	NO
0131	wi01101969	ISS1:1OF1	p32726_1	10/10/2017	p32726_1.cpl	NO
0132	wi01102296	ISS1:1OF1	p32780_1	10/10/2017	p32780_1.cpl	NO
0133	cs1000-7162	ISS1:1OF1	p33625_1	10/10/2017	p33625_1.cpl	NO
0134	wi01097598	ISS1:1OF1	p32797_1	10/10/2017	p32797_1.cpl	NO
0135	wi01132215	ISS1:1OF1	p33084_1	10/10/2017	p33084_1.cpl	NO
0136	wi01094832	iss1:1of1	p32718_1	10/10/2017	p32718_1.cpl	NO
0137	wi01197246	ISS1:1OF1	p33400_1	10/10/2017	p33400_1.cpl	NO
0138	CS1000-6872	ISS1:1OF1	p33520_1	10/10/2017	p33520_1.cpl	NO
0139	wi01147983	ISS1:1OF1	p33141_1	10/10/2017	p33141_1.cpl	NO
0140	wi01060826	ISS1:1OF1	p32379_1	10/10/2017	p32379_1.cpl	NO
0141	wi01077639	ISS1:1OF1	p32883_1	10/10/2017	p32883_1.cpl	NO
0142	wi01085855	ISS1:1OF1	p32658_1	10/10/2017	p32658_1.cpl	NO
0143	wi01053195	ISS1:1OF1	p32297_1	10/10/2017	p32297_1.cpl	NO
0144	wi01174116	ISS1:1OF1	p33287_1	10/10/2017	p33287_1.cpl	NO
0145	wi01095255	ISS1:1OF1	p33027_1	10/10/2017	p33027_1.cpl	NO
0146	wi01203516	ISS1:1OF1	p33438_1	10/10/2017	p33438_1.cpl	NO
0147	wi01094727	ISS1:1OF1	p32848_1	10/10/2017	p32848_1.cpl	NO
0148	wi01151898	ISS1:1OF1	p33175_1	10/10/2017	p33175_1.cpl	NO
0149	CS1000-7103	ISS1:1OF1	p33596_1	10/10/2017	p33596_1.cpl	NO
0150	wi01080753	ISS1:1OF1	p32518_1	10/10/2017	p32518_1.cpl	NO
0151	wi01125238	ISS1:1OF1	p32971_1	10/10/2017	p32971_1.cpl	NO
0152	wi01110593	ISS1:1OF1	p32849_1	10/10/2017	p32849_1.cpl	NO
0153	wi01119100	ISS1:1OF1	p32925_1	10/10/2017	p32925_1.cpl	NO
0154	CS1000-6978	ISS1:1OF1	p33551_1	10/10/2017	p33551_1.cpl	YES
0155	wi01156999	ISS1:1OF1	p33180_1	10/10/2017	p33180_1.cpl	NO
0156	wi01141625	ISS1:1OF1	p33324_1	10/10/2017	p33324_1.cpl	NO
0157	wi01102093	ISS1:1OF1	p32760_1	10/10/2017	p32760_1.cpl	NO
0158	wi01132883	ISS1:1OF1	p33030_1	10/10/2017	p33030_1.cpl	NO
0159	wi01070279	ISS1:1OF1	p32262_1	10/10/2017	p32262_1.cpl	NO
0160	wi01102475	ISS1:1OF1	p32782_1	10/10/2017	p32782_1.cpl	YES
0161	cs1000-6924	ISS1:1OF1	p33523_1	10/10/2017	p33523_1.cpl	NO
0162	wi01181423	ISS1:1OF1	p33318_1	10/10/2017	p33318_1.cpl	NO
0163	wi01150083	ISS1:1OF1	p33152_1	10/10/2017	p33152_1.cpl	NO
0164	CS1000-7534	ISS1:1OF1	p33759_1	11/10/2017	p33759_1.cpl	NO
0165	wi00897254	ISS1:1OF1	p31127_1	10/10/2017	p31127_1.cpl	NO
0166	wi01083036	ISS1:1OF1	p32571_1	10/10/2017	p32571_1.cpl	NO
0167	wi01070468	iss1:1of1	p32418_1	10/10/2017	p32418_1.cpl	NO
0168	wi01181197	ISS1:1OF1	p33317_1	10/10/2017	p33317_1.cpl	NO
0169	wi01063864	ISS1:1OF1	p32410_1	10/10/2017	p32410_1.cpl	YES
0170	wi01075355	ISS1:1OF1	p32594_1	10/10/2017	p32594_1.cpl	NO
0171	wi01127447	ISS1:1OF1	p32990_1	10/10/2017	p32990_1.cpl	NO
0172	wi01133106	ISS1:1OF1	p33032_1	10/10/2017	p33032_1.cpl	NO
0173	wi01212017	ISS1:1OF1	p33482_1	10/10/2017	p33482_1.cpl	YES
0174	wi01099292	ISS1:1OF1	p32886_1	10/10/2017	p32886_1.cpl	NO
0175	wi01167427	ISS1:1OF1	p33264_1	10/10/2017	p33264_1.cpl	NO

0176	wi01075540	ISS1:1OF1	p32492_1	10/10/2017	p32492_1.cpl	NO
0177	wi01072027	ISS1:1OF1	p32689_1	10/10/2017	p32689_1.cpl	NO
0178	wi01114038	ISS1:1OF1	p32869_1	10/10/2017	p32869_1.cpl	NO
0179	CS1000-6933	ISS1:1OF1	p33529_1	10/10/2017	p33529_1.cpl	NO
0180	wi01212527	ISS1:1OF1	p33481_1	10/10/2017	p33481_1.cpl	YES
0181	wi01181578	ISS1:1OF1	p33321_1	10/10/2017	p33321_1.cpl	NO
0182	CS1000-7106	ISS1:1OF1	p33598_1	10/10/2017	p33598_1.cpl	NO
0183	wi01063263	ISS1:1OF1	p32573_1	10/10/2017	p32573_1.cpl	NO
0184	wi01102091	ISS1:1OF1	p32744_1	10/10/2017	p32744_1.cpl	YES
0185	wi01104473	ISS1:1OF1	p32818_1	10/10/2017	p32818_1.cpl	NO
0186	wi01053950	ISS1:1OF1	p32654_1	10/10/2017	p32654_1.cpl	YES
0187	wi01139981	ISS1:1OF1	p33083_1	10/10/2017	p33083_1.cpl	NO
0188	wi01058378	ISS1:1OF1	p32344_1	10/10/2017	p32344_1.cpl	NO
0189	wi01070580	ISS1:1OF1	p32380_1	10/10/2017	p32380_1.cpl	NO
0190	wi01187059	ISS1:1OF1	p33346_1	10/10/2017	p33346_1.cpl	NO
0191	wi01043367	ISS1:1OF1	p32232_1	10/10/2017	p32232_1.cpl	NO
0192	wi01145002	ISS1:1OF1	p33186_1	10/10/2017	p33186_1.cpl	NO
0193	wi01175294	ISS1:1OF1	p33290_1	10/10/2017	p33290_1.cpl	NO
0194	wi01041453	ISS1:1OF1	p32587_1	10/10/2017	p32587_1.cpl	NO
0195	wi01185441	ISS1:1OF1	p33341_1	10/10/2017	p33341_1.cpl	NO
0196	wi01130815	ISS1:1OF1	p33017_1	10/10/2017	p33017_1.cpl	NO
0197	wi01214452	ISS1:1OF1	p33488_1	10/10/2017	p33488_1.cpl	NO
0198	wi01089807	ISS1:1OF1	p32957_1	10/10/2017	p32957_1.cpl	NO
0199	CS1000-7023	ISS1:1OF1	p33526_1	10/10/2017	p33526_1.cpl	NO
0200	wi01149384	ISS1:1OF1	p33147_1	10/10/2017	p33147_1.cpl	NO
0201	WI01121737	ISS1:1OF1	p32939_1	10/10/2017	p32939_1.cpl	NO
0202	CS1000-6794	ISS1:1OF1	p33539_1	10/10/2017	p33539_1.cpl	NO
0203	CS1000-7500	ISS1:1OF1	p33754_1	11/10/2017	p33754_1.cpl	YES
0204	wi01083896	ISS1:1OF1	p32937_1	10/10/2017	p32937_1.cpl	NO
0205	wi01210497	ISS1:1OF1	p33468_1	10/10/2017	p33468_1.cpl	YES
0206	wi01178476	ISS1:1OF1	p33305_1	10/10/2017	p33305_1.cpl	NO
0207	wi01039280	ISS1:1OF1	p32423_1	10/10/2017	p32423_1.cpl	NO
0208	wi01081510	ISS1:1OF1	p32582_1	10/10/2017	p32582_1.cpl	NO
0209	wi01088797	ISS1:1OF1	p32844_1	10/10/2017	p32844_1.cpl	NO
0210	wi01098905	ISS1:1OF1	p32556_1	10/10/2017	p32556_1.cpl	NO
0211	wi01146766	ISS1:1OF1	p33131_1	10/10/2017	p33131_1.cpl	NO
0212	wi00937672	ISS1:1OF1	p31276_1	10/10/2017	p31276_1.cpl	NO
0213	wi01170583	ISS1:1OF1	p33261_1	10/10/2017	p33261_1.cpl	NO
0214	wi01057403	ISS1:1OF1	p32591_1	10/10/2017	p32591_1.cpl	NO
0215	wi01132204	ISS1:1OF1	p32501_1	10/10/2017	p32501_1.cpl	NO
0216	CS1000-7176	ISS1:1OF1	p33744_1	11/10/2017	p33744_1.cpl	NO
0217	CS1000-7277	ISS1:1OF1	p33763_1	11/10/2017	p33763_1.cpl	NO
0218	wi01201045	ISS1:1OF1	p33424_1	10/10/2017	p33424_1.cpl	YES
0219	CS1000-7248	ISS1:1OF1	p32811_1	10/10/2017	p32811_1.cpl	NO
0220	wi01185138	ISS1:1OF1	p33411_1	10/10/2017	p33411_1.cpl	NO
0221	wi01025156	ISS1:1OF1	p32136_1	10/10/2017	p32136_1.cpl	NO
0222	wi01127138	ISS1:1OF1	p33304_1	10/10/2017	p33304_1.cpl	NO
0223	wi01070756	ISS1:1OF1	p32444_1	10/10/2017	p32444_1.cpl	NO
0224	wi01132599	ISS1:1OF1	p33025_1	10/10/2017	p33025_1.cpl	NO
0225	wi01056633	ISS1:1OF1	p32322_1	10/10/2017	p32322_1.cpl	NO
0226	wi01060241	ISS1:1OF1	p32381_1	10/10/2017	p32381_1.cpl	NO
0227	wi01134952	ISS1:1OF1	p33039_1	10/10/2017	p33039_1.cpl	NO
0228	wi01132902	ISS1:1OF1	p33028_1	10/10/2017	p33028_1.cpl	NO
0229	wi01201986	ISS1:1OF1	p33433_1	10/10/2017	p33433_1.cpl	NO
0230	wi01071379	ISS1:1OF1	p32522_1	10/10/2017	p32522_1.cpl	NO
0231	cs1000-6845	ISS1:1OF1	p33509_1	10/10/2017	p33509_1.cpl	NO
0232	wi01069441	ISS1:1OF1	p32097_1	10/10/2017	p32097_1.cpl	NO
0233	WI11032038	ISS1:1OF1	p33022_1	10/10/2017	p33022_1.cpl	NO
0234	CS1000-7451	ISS1:1OF1	p33749_1	11/10/2017	p33749_1.cpl	NO
0235	wi01134354	ISS1:1OF1	p33031_1	10/10/2017	p33031_1.cpl	NO
0236	CS1000-6946	ISS1:1OF1	p33543_1	10/10/2017	p33543_1.cpl	NO
0237	wi01096910	ISS1:1OF1	p32734_1	10/10/2017	p32734_1.cpl	NO

0238	wi01076948	ISS1:1OF1	p32526_1	10/10/2017	p32526_1.cpl	YES
0239	wi01093118	ISS1:1OF1	p32496_1	10/10/2017	p32496_1.cpl	NO
0240	wi01202917	ISS1:1OF1	p33434_1	10/10/2017	p33434_1.cpl	NO
0241	wi01198794	ISS1:1OF1	p33408_1	10/10/2017	p33408_1.cpl	NO
0242	wi01160967	ISS1:1OF1	p33213_1	10/10/2017	p33213_1.cpl	NO
0243	wi01104867	ISS1:1OF1	p32828_1	10/10/2017	p32828_1.cpl	NO
0244	wi01154485	ISS1:1OF1	p33194_1	10/10/2017	p33194_1.cpl	NO
0245	wi01146705	ISS1:1OF1	p33129_1	10/10/2017	p33129_1.cpl	NO
0246	wi01096712	ISS1:1OF1	p32708_1	10/10/2017	p32708_1.cpl	NO
0247	wi01061481	ISS1:1OF1	p32382_1	10/10/2017	p32382_1.cpl	NO
0248	wi01070465	iss1:1of1	p32562_1	10/10/2017	p32562_1.cpl	NO
0249	CS1000-7301	ISS1:1OF1	p33691_1	10/10/2017	p33691_1.cpl	NO
0250	wi01187443	ISS1:1OF1	p33359_1	10/10/2017	p33359_1.cpl	NO
0251	wi01034307	ISS1:1OF1	p32615_1	10/10/2017	p32615_1.cpl	NO
0252	CS1000-6964	ISS1:1OF1	p33541_1	10/10/2017	p33541_1.cpl	NO
0253	wi01135146	ISS1:1OF1	p33033_1	10/10/2017	p33033_1.cpl	NO
0254	CS1000-6852	ISS1:1OF1	p33517_1	10/10/2017	p33517_1.cpl	NO
0255	wi01195975	ISS1:1OF1	p33394_1	10/10/2017	p33394_1.cpl	NO
0256	wi01108262	ISS1:1OF1	p32865_1	10/10/2017	p32865_1.cpl	YES
0257	wi01104627	ISS1:1OF1	p32819_1	10/10/2017	p32819_1.cpl	NO
0258	wi01204274	ISS1:1OF1	p33451_1	10/10/2017	p33451_1.cpl	NO
0259	CS1000-7022	ISS1:1OF1	p33560_1	10/10/2017	p33560_1.cpl	NO
0260	CS1000-7472	ISS1:1OF1	p33778_1	11/10/2017	p33778_1.cpl	NO
0261	wi01096967	ISS1:1OF1	p32735_1	10/10/2017	p32735_1.cpl	NO
0262	CS1000-7564	ISS1:1OF1	p33772_1	11/10/2017	p33772_1.cpl	NO
0263	wi01060611	ISS1:1OF1	p32809_1	10/10/2017	p32809_1.cpl	NO
0264	wi01163826	ISS1:1OF1	p33229_1	10/10/2017	p33229_1.cpl	NO
0265	wi01182523	ISS1:1OF1	p33327_1	10/10/2017	p33327_1.cpl	NO
0266	CS1000-7267	ISS1:1OF1	p33669_1	10/10/2017	p33669_1.cpl	NO
0267	wi01090535	ISS1:1OF1	p32519_1	10/10/2017	p32519_1.cpl	NO
0268	wi01124074	ISS1:1OF1	p32989_1	10/10/2017	p32989_1.cpl	NO
0269	wi01034961	ISS1:1OF1	p32144_1	10/10/2017	p32144_1.cpl	NO
0270	wi01127874	ISS1:1OF1	p25747_1	10/10/2017	p25747_1.cpl	NO
0271	wi01062607	ISS1:1OF1	p32503_1	10/10/2017	p32503_1.cpl	NO
0272	CS1000-6910	ISS1:1OF1	p33528_1	10/10/2017	p33528_1.cpl	NO
0273	wi01060382	iss1:1of1	p32623_1	10/10/2017	p32623_1.cpl	YES
0274	wi01215563	ISS1:1OF1	p33412_1	10/10/2017	p33412_1.cpl	NO
0275	CS1000-7147	ISS1:1OF1	p33616_1	10/10/2017	p33616_1.cpl	NO
0276	wi01075359	ISS1:1OF1	p32671_1	10/10/2017	p32671_1.cpl	NO
0277	wi01120406	ISS1:1OF1	p32956_1	10/10/2017	p32956_1.cpl	NO
0278	wi01095462	ISS1:1OF1	p32723_1	10/10/2017	p32723_1.cpl	NO
0279	wi01213334	ISS1:1OF1	p33485_1	10/10/2017	p33485_1.cpl	NO
0280	wi01070473	ISS1:1OF1	p32413_1	10/10/2017	p32413_1.cpl	NO
0281	wi01114695	ISS1:1OF1	p32885_1	10/10/2017	p32885_1.cpl	NO
0282	wi01129098	ISS1:1OF1	p32951_1	10/10/2017	p32951_1.cpl	NO
0283	wi01134799	ISS1:1OF1	p33069_1	10/10/2017	p33069_1.cpl	NO
0284	wi01163048	ISS1:1OF1	p33223_1	10/10/2017	p33223_1.cpl	YES
0285	wi01096718	ISS1:1OF1	p33138_1	10/10/2017	p33138_1.cpl	YES
0286	CS1000-7293	ISS1:1OF1	p33679_1	10/10/2017	p33679_1.cpl	NO
0287	wi01166065	ISS1:1OF1	p33241_1	10/10/2017	p33241_1.cpl	NO
0288	wi01130836	ISS1:1OF1	p33008_1	10/10/2017	p33008_1.cpl	YES
0289	wi01109345	ISS1:1OF1	p32830_1	10/10/2017	p32830_1.cpl	NO
0290	wi01104410	ISS1:1OF1	p32801_1	10/10/2017	p32801_1.cpl	NO
0291	wi01183783	ISS1:1OF1	p33333_1	10/10/2017	p33333_1.cpl	NO
0292	wi01064599	iss1:1of1	p32580_1	10/10/2017	p32580_1.cpl	NO
0293	wi01124477	ISS1:1OF1	p32963_1	10/10/2017	p32963_1.cpl	NO
0294	wi01072062	ISS1:1OF1	p32776_1	10/10/2017	p32776_1.cpl	NO
0295	wi01118320	ISS1:1OF1	p32753_1	10/10/2017	p32753_1.cpl	NO
0296	wi01126454	ISS1:1OF1	p32973_1	10/10/2017	p32973_1.cpl	NO
0297	wi01154253	ISS1:1OF1	p33206_1	10/10/2017	p33206_1.cpl	NO
0298	CS1000-7086	ISS1:1OF1	p33587_1	10/10/2017	p33587_1.cpl	NO
0299	wi01021522	ISS1:1OF1	p32863_1	10/10/2017	p32863_1.cpl	NO

0300	CS1000-6786	ISS1:1OF1	p33497_1	10/10/2017	p33497_1.cpl	NO
0301	wi01108828	ISS1:1OF1	p32831_1	10/10/2017	p32831_1.cpl	NO
0302	wi01150771	ISS1:1OF1	p33210_1	10/10/2017	p33210_1.cpl	NO
0303	wi01022598	ISS1:1OF1	p32066_1	10/10/2017	p32066_1.cpl	NO
0304	wi01146289	ISS1:1OF1	p33146_1	10/10/2017	p33146_1.cpl	NO
0305	wi01184272	ISS1:1OF1	p33336_1	10/10/2017	p33336_1.cpl	NO
0306	CS1000-6752	ISS1:1OF1	p33540_1	10/10/2017	p33540_1.cpl	NO
0307	wi01082456	ISS1:1OF1	p32596_1	10/10/2017	p32596_1.cpl	NO
0308	wi01177614	ISS1:1OF1	p33303_1	10/10/2017	p33303_1.cpl	NO
0309	wi01163521	ISS1:1OF1	p33226_1	10/10/2017	p33226_1.cpl	NO
0310	wi01071296	ISS1:1OF1	p32836_1	10/10/2017	p32836_1.cpl	NO
0311	wi01118928	ISS1:1OF1	p32922_1	10/10/2017	p32922_1.cpl	NO
0312	wi01068669	ISS1:1OF1	p32333_1	10/10/2017	p32333_1.cpl	NO
0313	wi01137003	ISS1:1OF1	p33053_1	10/10/2017	p33053_1.cpl	NO
0314	wi01165870	ISS1:1OF1	p33238_1	10/10/2017	p33238_1.cpl	NO
0315	wi01136194	ISS1:1OF1	p33051_1	10/10/2017	p33051_1.cpl	NO
0316	wi01068751	ISS1:1OF1	p32445_1	10/10/2017	p32445_1.cpl	NO
0317	wi01075353	ISS1:1OF1	p32613_1	10/10/2017	p32613_1.cpl	NO
0318	wi01208515	ISS1:1OF1	p33455_1	10/10/2017	p33455_1.cpl	NO
0319	wi01165461	ISS1:1OF1	p33237_1	10/10/2017	p33237_1.cpl	NO
0320	wi01132222	ISS1:1OF1	p33023_1	10/10/2017	p33023_1.cpl	NO
0321	WI0110261	ISS1:1OF1	p32758_1	10/10/2017	p32758_1.cpl	NO
0322	CS1000-7202	ISS1:1OF1	p33646_1	10/10/2017	p33646_1.cpl	NO
0323	CS1000-7326	ISS1:1OF1	p33699_1	10/10/2017	p33699_1.cpl	NO
0324	CS1000-7357	ISS1:1OF1	p33698_1	10/10/2017	p33698_1.cpl	NO
0325	CS1000-7265	ISS1:1OF1	p33666_1	10/10/2017	p33666_1.cpl	NO
0326	CS1000-7140	ISS1:1OF1	p33624_1	10/10/2017	p33624_1.cpl	NO
0327	CS1000-7062	ISS1:1OF1	p33579_1	10/10/2017	p33579_1.cpl	NO
0328	CS1000-7453	ISS1:1OF1	p33793_1	11/10/2017	p33793_1.cpl	NO
0329	CS1000-6980	ISS1:1OF1	p33586_1	10/10/2017	p33586_1.cpl	NO
0330	CS1000-7406	ISS1:1OF1	p33715_1	11/10/2017	p33715_1.cpl	NO
0331	CS1000-7101	ISS1:1OF1	p33641_1	10/10/2017	p33641_1.cpl	NO
0332	CS1000-6546	ISS1:1OF1	p33597_1	10/10/2017	p33597_1.cpl	NO
0333	CS1000-7231	ISS1:1OF1	p33652_1	10/10/2017	p33652_1.cpl	NO
0334	CS1000-7296	ISS1:1OF1	p33681_1	10/10/2017	p33681_1.cpl	NO
0335	CS1000-7323	ISS1:1OF1	p33688_1	10/10/2017	p33688_1.cpl	NO
0336	CS1000-7460	ISS1:1OF1	p33735_1	11/10/2017	p33735_1.cpl	NO
0337	CS1000-7339	ISS1:1OF1	p33708_1	11/10/2017	p33708_1.cpl	NO
0338	CS1000-7154	ISS1:1OF1	p33619_1	10/10/2017	p33619_1.cpl	NO
0339	CS1000-7081	ISS1:1OF1	p33585_1	10/10/2017	p33585_1.cpl	NO
0340	CS1000-7607	ISS1:1OF1	p33783_1	11/10/2017	p33783_1.cpl	YES
0341	CS1000-7053	ISS1:1OF1	p33574_1	10/10/2017	p33574_1.cpl	NO
0342	CS1000-7461	ISS1:1OF1	p33736_1	10/10/2017	p33736_1.cpl	NO
0343	CS1000-7015	ISS1:1OF1	p33606_1	10/10/2017	p33606_1.cpl	NO
0344	cs1000-7223	ISS1:1OF1	p33647_1	10/10/2017	p33647_1.cpl	YES
0345	CS1000-7143	ISS1:1OF1	p33614_1	10/10/2017	p33614_1.cpl	NO
0346	cs1000-7160	ISS1:1OF1	p33621_1	10/10/2017	p33621_1.cpl	NO
0347	CS1000-7253	ISS1:1OF1	p33662_1	10/10/2017	p33662_1.cpl	NO
0348	CS1000-7337	ISS1:1OF1	p33696_1	10/10/2017	p33696_1.cpl	NO
0349	CS1000-7462	ISS1:1OF1	p33737_1	10/10/2017	p33737_1.cpl	NO
0350	cs1000-7029	ISS1:1OF1	p33563_1	10/10/2017	p33563_1.cpl	NO
0351	CS1000-7366	ISS1:1OF1	p33702_1	10/10/2017	p33702_1.cpl	NO
0352	cs1000-7269	ISS1:1OF1	p33670_1	10/10/2017	p33670_1.cpl	NO
0353	CS1000-7313	ISS1:1OF1	p33692_1	10/10/2017	p33692_1.cpl	NO
0354	CS1000-7624	ISS1:1OF1	p33794_1	11/10/2017	p33794_1.cpl	NO
0355	cs1000-7580	ISS1:1OF1	p33776_1	11/10/2017	p33776_1.cpl	NO
0356	CS1000-7448	ISS1:1OF1	p33729_1	11/10/2017	p33729_1.cpl	NO
0357	CS1000-7423	ISS1:1OF1	p33720_1	11/10/2017	p33720_1.cpl	NO
0358	CS1000-7340	ISS1:1OF1	p33694_1	11/10/2017	p33694_1.cpl	NO
0359	CS1000-7489	ISS1:1OF1	p33747_1	11/10/2017	p33747_1.cpl	NO
0360	CS1000-7514	ISS1:1OF1	p33764_1	11/10/2017	p33764_1.cpl	YES
0361	CS1000-7590	ISS1:1OF1	p33780_1	11/10/2017	p33780_1.cpl	NO

0362	CS1000-7549	ISS1:1OF1	p33767_1	11/10/2017	p33767_1.cpl	YES
0363	CS1000-7637	ISS1:1OF1	p33791_1	11/10/2017	p33791_1.cpl	YES
0364	CS1000-7587	ISS1:1OF1	p33779_1	11/10/2017	p33779_1.cpl	NO
0365	CS1000-7622	ISS1:1OF1	p33787_1	11/10/2017	p33787_1.cpl	YES
0366	CS1000-7236	ISS1:1OF1	p33753_1	11/10/2017	p33753_1.cpl	NO

Appendix B

SIP Route on Avaya Communication Server 1000 R7.6

```
TYPE RDB
CUST 00
ROUT 10
DES SIPTRK
TKTP TIE
M911P NO
ESN NO
RPA NO
CNVT NO
SAT NO
RCLS EXT
VTRK YES
ZONE 00067
PCID SIP
CRID YES
SBWM YES
NODE 111
DTRK NO
ISDN YES
    MODE ISLD
    DCH 1
    IFC SL1
    PNI 00001
    NCNA YES
    NCRD YES
    TRO YES
    FALT YES
    CTYP UKWN
    INAC NO
    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 8010
TCPP NO
PII NO
AUXP NO
TARG 01
CLEN 1
BILN NO
OABS
INST
IDC NO
DCNO 0 *
NDNO 0
```

DEXT NO
 ANTK
 SIGO STD
 STYP SDAT
 MFC NO
 ICIS YES
 OGIS YES
 PTUT 0

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 TIMR ICF 1920
 OGF 1920
 EOD 13952
 LCT 256
 DSI 34944
 NRD 10112
 DDL 70
 ODT 4096
 RGV 640
 GTO 896
 GTI 896
 SFB 3
 PRPS 800
 NBS 2048
 NBL 4096

 IENB 5
 TFD 0
 RTD 12
 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

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ALRM NO
ART 0
PECL NO
DCTI 0
TIDY 8010 10
ATRR NO
TRRL NO
SGRP 0
CCBA NO
ARDN YES
CTBL 0
ANIE 0
CAC_CIS 3
AACR NO

SIP D-channel Avaya Communication Server 1000 R7.6

```
ADAN      DCH 1
CTYP DCIP
DES  SIPL
USR  ISLD
ISLM 4000
SSRC 3700
OTBF 32
NASA YES
IFC  SL1
CNEG 1
RLS  ID  7
RCAP TAT ND3 RLTI
MBGA NO
H323
      OVLN NO
      OVLS NO
```

SIP Trunk on Avaya Communication Server 1000 R7.6

```
DES  VTRK
TN   100 0 03 00  VIRTUAL
TYPE IPTI
CDEN 8D
CUST 0
XTRK VTRK
ZONE 00067
TIMP 600
BIMP 3COM
AUTO_BIMP NO
NMUS NO
TRK  ANLG
NCOS 0
RTMB 10 6
CHID 11
TGAR 0
STRI/STRO IMM IMM
SUPN YES
AST  NO
IAPG 0
CLS  UNR DIP CND ECD WTA LPR APN THFD XREP SPCD MSBT
      P10 NTC MID
TKID
AACR NO
```

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