



Application Notes for configuring Ascom IP-DECT Base Station and Ascom IP-DECT Handsets with Avaya Communication Server 1000 – Issue 1.0

Abstract

These Application Notes describe a solution comprised of an Avaya Communication Server 1000, Ascom DECT Handsets and an Ascom IP-DECT Base Station. The Ascom DECT Handsets registered as SIP client endpoints with Communication Server 1000 SIP Line Gateway. The Ascom DECT Handsets via the Ascom IP-DECT Base Station placed and received calls from Communication Server 1000 non-SIP and SIP Line telephones. The compliance testing focused on basic telephone features.

Readers should pay attention to **Section 2**, in particular the scope of testing as outlined in **Section 2.1** as well as any 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 provide detailed configurations of Avaya Communication Server 1000 (CS1000) and the Ascom DECT Handsets and Ascom IP-DECT Base Station (DECT system) used during the compliance testing. The Ascom DECT handsets registered with the SIP Line Gateway (SLG) application on the CS1000.

Note: The Ascom IP-DECT Base Stations may also be described as Access Points.

2. General Test Approach and Test Results

The general test approach was to have the Ascom DECT handsets register to the CS1000. Calls were then placed from other CS1000 Deskphones to and from the Ascom DECT handset. Other telephony features such as busy, hold, DTMF, MWI and codec negotiation were also verified.

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's formal testing and Declaration of Conformity is provided only on the headsets/Smartphones that carry the Avaya brand or logo. Avaya may conduct testing of non-Avaya headset/handset to determine interoperability with Avaya phones. However, Avaya does not conduct the testing of non-Avaya headsets/Smartphones for: Acoustic Pressure, Safety, Hearing Aid Compliance, EMC regulations, or any other tests to ensure conformity with safety, audio quality, long-term reliability or any regulation requirements. As a result, Avaya makes no representations whether a particular non-Avaya headset will work with Avaya's telephones or with a different generation of the same Avaya telephone.

Since there is no industry standard for handset interfaces, different manufacturers utilize different handset/headset interfaces with their telephones. Therefore, any claim made by a headset vendor that its product is compatible with Avaya telephones does not equate to a guarantee that the headset will provide adequate safety protection or audio quality.

2.1. Interoperability Compliance Testing

The focus of this testing was to verify that the Ascom DECT system was able to interoperate with the CS1000. The following areas were tested:

- Registration of the Ascom DECT handsets to the CS1000.
- Call establishment of Ascom DECT handsets with CS1000 Deskphones.
- Telephony features tested included:
 - Basic calls
 - Conference (Avaya telephones host the conference)
 - Attended, Semi-Attended and Blind transfer
 - DTMF transmission
 - Voicemail with Message Waiting Indication (MWI) notification
 - Busy, hold, speed dial, call waiting, call park/pickup, Group Hunt
 - Call forward on Busy, No answer and All Calls
- PSTN calls over PRI trunk.
- Codec negotiation (G.711, G.729, G.722.2, G.723).

2.2. Test Results

Tests were performed to verify interoperability between Ascom DECT Handsets and Ascom IP-DECT Base Stations with CS1000. The tests were all functional in nature and performance testing was not included. All test cases passed successfully. The following observations/limitations were seen during compliance testing:

- When an Ascom set is forwarded “all” or “busy” to an internal number and then called to from another Ascom set the CLID on the calling number is in format %22CFWD% or %22Busy%22. This behaves according to RFC’s 3261, 3325. Avaya is aware of this and investigating the same.
- Local Call Waiting and Call Forward Busy are not supported due to the CS1000 SIP line gateway and will always return 486 Busy Here.
- In a scenario where DECT_A calls DECT_B, DECT_B parks the call. DECT_C un parks the call. DECT_C sees its own DN in display. DECT_A sees DECT_B DN in its display. This behavior is in line with current design of SIP Line Gateway.
- In a scenario where DECT_A calls DECT_B, DECT_C answers (Group Call Pickup feature) the call for DECT_B. DECT_A shows DECT_C info in display whereas DECT_C sees its own info in display. This behavior is in line with current design of SIP Line Gateway.

2.3. Support

Technical support for the Ascom DECT handsets can be obtained through a local Ascom supplier or Ascom global technical support:

- Email: support@ascom.com
- Help desk: +46 31 559450

3. Reference Configuration

Figure 1 illustrates the test configuration used during the compliance testing between the Avaya CS1000 and the Ascom DECT system. The CS1000 runs on the Common Processor Pentium Mobile (CPPM) server as a co-resident configuration. The SIP Line Gateway (SLG) application on the signaling server co-resides as on the CPPM. Unified Communications Management (UCM) is used to configure the SLG. A UNISTim and SIP Avaya Deskphones were configured. Session Manager and System Manager are shown as it was needed to configure Messaging. The Ascom Master Access point was connected to the IP Network which the IP-DECT Handsets register to. The Roaming Access point allows radio communication between the IP-DECT Handsets which in turn communicates with the CS1000. A simulated PSTN was configured to enable incoming and outgoing trunk calls.

During compliance testing the DECT base stations were configured by accessing it via a web interface using a laptop.

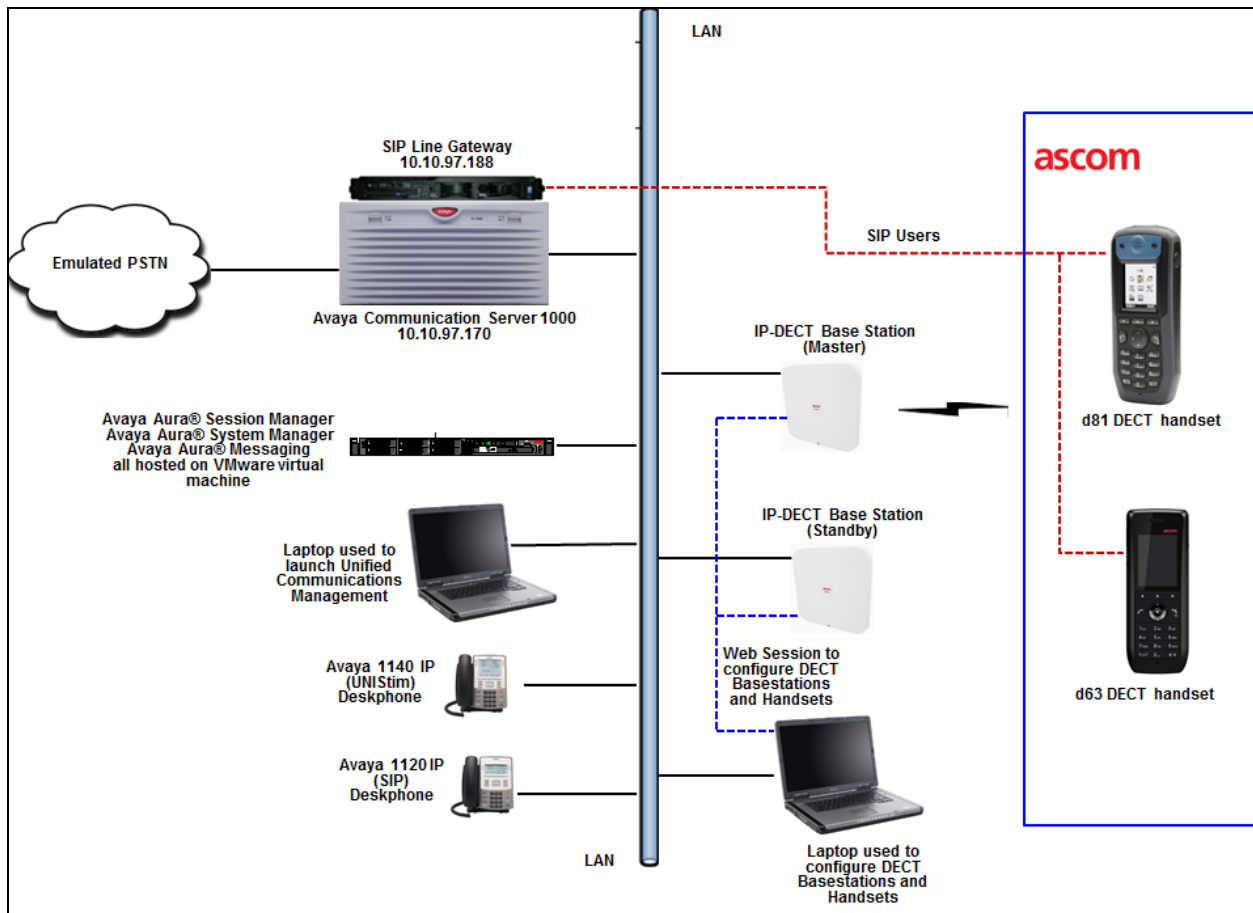


Figure 1: Avaya Communication Server 1000 and Ascom Reference Configuration

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Communication Server 1000	7.65 SP9
Avaya Unified Communications Management	02.30.0114.00(6752)
Avaya SIP Line Gateway	7.65 SP9
Avaya Aura® Messaging running on Virtual Server	07.0.0.0.441
Avaya Aura® Session Manager running on Virtual Server	7.1.2.0.712004
Avaya Aura® System Manager running on Virtual Server	7.1.2.0 (Feature Pack 2)
Avaya 1120E Deskphone (SIP) Avaya 1140E Deskphone (UNISim)	4.04.28.00 0625C95
Ascom DECT Master Base Station Ascom DECT Standby Base Station	IPBS2 10.1.4 (update 1)
Ascom DECT Handsets : <ul style="list-style-type: none">• d81• d63	4.6.2 2.2.2

5. Configure Avaya Communication Server 1000

The configuration operations illustrated in this section were performed using terminal access to the CS1000 over a telnet session. It is implied a working system is already in place, including a Node (NDID2005) and D-Channel. For all other provisioning information such as Installation and Configuration, please refer to the product documentation in **Section 10. Appendix A** has a list of all CS1000 patches, deplist and service packs loaded on the system.

Note: Only the unique prompts as shown in the screen captures below, all other inputs can be left at default.

Note: A full printout of the D-Channel, Route and Trunk information for the SIP Line Gateway used for the compliance testing is included in the **Appendix B** of these Application Notes.

5.1. Verify Licenses

To ensure the CS1000 is licensed for SIP use **LD 22** and type **SLT** at the **REQ** prompt. Check for **THIRD PARTY SIP LINES** 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 32761 USED 6
DECT USERS              32767 LEFT 32767 USED 0
IP USERS                32767 LEFT 32727 USED 40
BASIC IP USERS          32767 LEFT 32764 USED 3
TEMPORARY IP USERS      32767 LEFT 32767 USED 0
DECT VISITOR USER      10000 LEFT 10000 USED 0
ACD AGENTS              32767 LEFT 32753 USED 14
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 32759 USED 8
THIRD PARTY SIP LINES 32767 LEFT 32757 USED 10
```

5.2. Configuring Data block: SLS (SIP Line Services)

If not already configured a SLS Data block needs to be created using the **CHG** command in **LD15**. The **UAPR** is required when configuring the UEXT for DECT Handset as explained in **Section 5.3**.

```
>ld 15
PT1000

REQ: chg
TYPE SLS_DATA
CUST 1

TYPE SLS_DATA
CUST 01
SIPL_ON YES
UAPR 111
NMME NO
```

5.3. Adding a Third-Party SIP User on the Avaya Communication Server 1000

Ascom DECT users are configured as **3rd Party SIP** users with type **UEXT** on the CS1000. Type **LD 20** at the > prompt to enter overlay 20. The main prompts below are highlighted. The example below shows the UEXT for DECT Handset 5913. The Class of Service (CLS) used during compliance testing is also highlighted.

```
>ld 20
REQ: new
TYPE UEXT
TN 96 0 0 13
DES ASCOM
CUST 1
UXTY SIPL → SIP Line
MCCL YES
SIPN 0
SIP3 1 → Third party SIP phone
FMCL 0
TLSV 0
SIPU 5913 → Required for Ascom DECT USER ID
NDID 2005 → Node ID taken from Section 6
SUPR NO
UXID
NUID
NHTN
ZONE 11 → This is the Bandwidth Zone assigned for IP Sets
MRT
ERL
ECL 0
VSIT NO
FDN 3000 → Forward DN used during compliance testing
TGAR 1
LDN NO
NCOS 0
SGRP 0
```

```

RNPG 1
SCI 0
SSU
XLST
SCPW 1234 → Required for Ascom DECT USER Password in Section 7.5
SFLT NO
CAC_MFC 0
CLS CTD FBA WTA LPR PUA MTD FNA HTA TDD HFA CRPD
MWA LMPN RMMD SMWD AAD IMD XHD IRD NID OLD VCE DRG1
POD SLKD CCSD SWA LND CNDA
CFTD SFD MRD DDV CNIA CDCA MSID DAPA BFED RCBF
ICDD CDMD LLCN MCTD CLBD AUTU
GPUD DPUD DNDA CFXA ARHD CLTD ASCD
CPFA CPTA ABDD CFHD FICD NAID BUZZ AGRD MOAD
UDI RCC HBTB AHA IPND DDGA NAMA MIND PRSD NRWD NRCD NROD
DRDD EXR0
USMD USRD ULAD CCBF RTDD RBDD RBHD PGND OCBF FLXD FTTC DNDY DNO3 MCBN
FDSB NOVD VOLA VOUD CDMR PRED RECD MCDD T87D SBMD ELMD
MSNV FRA PKCH MWTD DVLB CROD ELCD VMSA
CPND_LANG ENG
RCO 0
HUNT 3000 → Hunt DN used during compliance testing
PLEV 02
PUID
UPWD
DANI NO
AST
IAPG 0
AACS NO
ITNA NO
DGRP
MLWU_LANG 0
MLNG ENG
DNDR 0
KEY 00 SCR 5913 0 MARP
CPND
CPND_LANG ROMAN
NAME Ascom 5913
XPLN 13
DISPLAY_FMT FIRST, LAST
01 HOT U 1115913 MARP 0 → The HOT U number is derived from the UAPR as configured
in the SLS_DATA in Section 5.2 plus the Key 00 extension
02 CWT → Call Waiting Key

```

5.4. Saving Avaya Communication Server 1000 Configuration

Type **LD 43** at the > prompt to save the newly configured SIP users. Upon entering overlay 43 type **edd** at the . prompt.

```

ld 43
EDD000

.edd

```


6. Configure Avaya Communication Server 1000 SIP Line Gateway

Although it is assumed that a SIP Line Gateway is already setup, configured and operational it is also essential that this is checked and that the Node IP address is obtained in order to complete the configuration in **Section 7.4**. Note that the SIP Line Gateway is an application installed on the Avaya Communication Server 1000 Signaling Server. In this example this Signaling Server is a co-resident installation with the Avaya Communication Server 1000 Call Server.

Access to the CS1000 SIP Line Gateway requires access to the Avaya Communication Server 1000 Signaling Server (Signaling Server). This is achieved by logging into either the System Manager or UCM. During compliance testing UCM was used. Launch a Web Browser and enter **http://<FQDN > or <IP Address>/**, where **<FQDN>** is the fully qualified domain name of UCM. Log in using appropriate credentials.

AVAYA

This computer system and network is PRIVATE and PROPRIETARY of [company name] and may only be accessed by authorized users. Unauthorized use of this computer system or network is strictly prohibited and may be subject to criminal prosecution, employee discipline up to and including discharge, or the termination of the vendor/service contracts. The owner, or its agents, may monitor any activity or communication on the computer system or network.

User ID:

Password:

Log In

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The following screen appears showing the various **Elements**, select **EM on car2-mas** (this is the element used during compliance testing).

AVAYA Avaya Unified Communications Management Help | Logout

Host Name: car2-mas.bwwdev.com Software Version: 02.30.0114.00(6752) User

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.

<input type="checkbox"/>	Element Name	Element Type	Release	Address	Description
<input type="checkbox"/>	1 EM on car2-sipl	CS1000	7.6	10.10.97.90	New element.
<input type="checkbox"/>	2 EM on car2-mas	CS1000	7.6	10.10.97.90	New element.
<input type="checkbox"/>	3 car2-cores.bwwdev.com (member)	Linux Base	7.6	[REDACTED]	Base OS element.

Navigate to **IP Network** → **Nodes: Servers, Media Cards** in the left window and select the Node associated with the CS1000, in the example below this **Node ID** is **2005**. Open this node by clicking on **2005** highlighted below. Note also the IP address of the Node is **10.10.97.188** which will be required in **Section 7.4**.

AVAYA CS1000 Element Manager Help | Logout

Managing: [REDACTED] Username: admin
System » IP Network » IP Telephony Nodes

IP Telephony Nodes

Click the Node ID to view or edit its properties.

<input type="checkbox"/>	Node ID	Components	Enabled Applications	ELAN IP	Node/TLAN IPv4	Node/TLAN IPv6	Status
<input type="checkbox"/>	2005	1	SIP Line	-	10.10.97.188	-	Synchronized

Show: Nodes Component servers and cards IPv6 address

To check that the SIP Line Gateway is operational click on **SIP Line** in the main window highlighted below.

AVAYA CS1000 Element Manager

Managing: [redacted] Username: admin
System » IP Network » IP Telephony Nodes » Node Details

Node Details (ID: 2005 - SIP Line)

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)

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

The **SIP Line Gateway Application** should be ticked as shown below and the information about the site entered into the **General** section as shown in the example below. Note the **SLG Local Sip port** is set to **5070** and this information as well as the **SIP domain name** will be required in **Section 7.4**.

AVAYA CS1000 Element Manager Help | Logout

Managing: [redacted] Username: admin
System » IP Network » IP Telephony Nodes » Node Details » SIP Line Configuration

Node ID: 2005 - SIP Line Configuration Details

General | SIP Line Gateway Settings | SIP Line Gateway Service

SIP Line Gateway Application: Enable gateway service on this node

General	Virtual Trunk Network Health I
SIP domain name: <input type="text" value="avaya.com"/> *	<input type="checkbox"/> Monitor IP addresses (I Information will be capti below.
SLG endpoint name: <input type="text"/>	Monitor IP: <input type="text"/>
SLG Group ID: <input type="text"/>	Monitor addresses: <input type="text"/>
SLG Local Sip port: <input type="text" value="5070"/> (1 - 65535)	
SLG Local Tls port: <input type="text" value="5071"/> (1 - 65535)	

If changes are required then click **Save** (not shown) before leaving the page and follow the next steps shown in **Section 6.1**.

6.1. Saving Changes on the Avaya Communication Server 1000 SIP Line Gateway

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

The screenshot shows the Avaya CS1000 Element Manager interface. The left sidebar contains a navigation tree with categories like UCM Network Services, Home, Links, System, Alarms, Maintenance, Core Equipment, Peripheral Equipment, IP Network, and Interfaces. The main content area is titled 'Node Details (ID: 2005 - SIP Line)'. It contains several configuration fields: Node ID (2005), Call server IP address, Embedded LAN (ELAN) Gateway IP address and Subnet mask, and Telephony LAN (TLAN) Node IPv4 address (10.10.97.188) and Subnet mask. There are also radio buttons for TLAN address type (IPv4 only selected) and a Node IPv6 address field. Below the fields are two sections: 'IP Telephony Node Properties' with links for Voice Gateway (VGW) and Codecs, Quality of Service (QoS), LAN, SNTP, Numbering Zones, and MCDN Alternative Routing Treatment (MALT) Causes; and 'Applications (click to edit configuration)' with links for SIP Line, Terminal Proxy Server (TPS), Gateway, Personal Directories (PD), Presence Publisher, and IP Media Services. At the bottom right, there are 'Save' and 'Cancel' buttons, with the 'Save' button highlighted by a red box.

Select **Transfer Now** as shown below.

The screenshot shows the Avaya CS1000 Element Manager interface after saving changes. The left sidebar is the same as in the previous screenshot. The main content area is titled 'Node Saved'. It contains a message: 'Node ID: 2005 has been saved on the call server. The new configuration must also be transferred to associated servers and media cards.' Below the message are two buttons: 'Transfer Now...' and 'Show Nodes'. The 'Transfer Now...' button is highlighted with a red box. To the right of the 'Transfer Now...' button, there is a text box that says: 'You will be given an option to select individual servers, or transfer to all.' To the right of the 'Show Nodes' button, there is a text box that says: '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 as shown in the example below where the hostname is **car2-sipl** and click on **Start Sync**.

AVAYA CS1000 Element Manager Help | Logout

Managing: [redacted] Username: admin
System » IP Network » IP Telephony Nodes » Synchronize Configuration Files

Synchronize Configuration Files (Node ID <2005>)

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

Start Sync Cancel Restart Applications

<input checked="" type="checkbox"/>	Hostname	Type	Applications	Synchronization Status
<input checked="" type="checkbox"/>	car2-sipl	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.

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

AVAYA CS1000 Element Manager Help | Logout

Managing: [redacted] Username: admin
System » IP Network » IP Telephony Nodes » Synchronize Configuration Files

Synchronize Configuration Files (Node ID <2005>)

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

Hostname	Type	Applications	Synchronization Status
car2-sipl	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 Signaling Server configuration for SIP Line Gateway.

AVAYA CS1000 Element Manager Help | Logout

Managing: [redacted] Username: admin
System » IP Network » IP Telephony Nodes » Synchronize Configuration Files

Synchronize Configuration Files (Node ID <2005>)

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

Start Sync Cancel Restart Applications

<input checked="" type="checkbox"/>	Hostname	Type	Applications	Synchronization Status
<input checked="" type="checkbox"/>	car2-sipl	Signaling_Server	SIP Line, LTPS, Gateway (SIP/H323), PD, Presence Publisher, IP Media Services	Synchronized

7. Configure Ascom DECT System

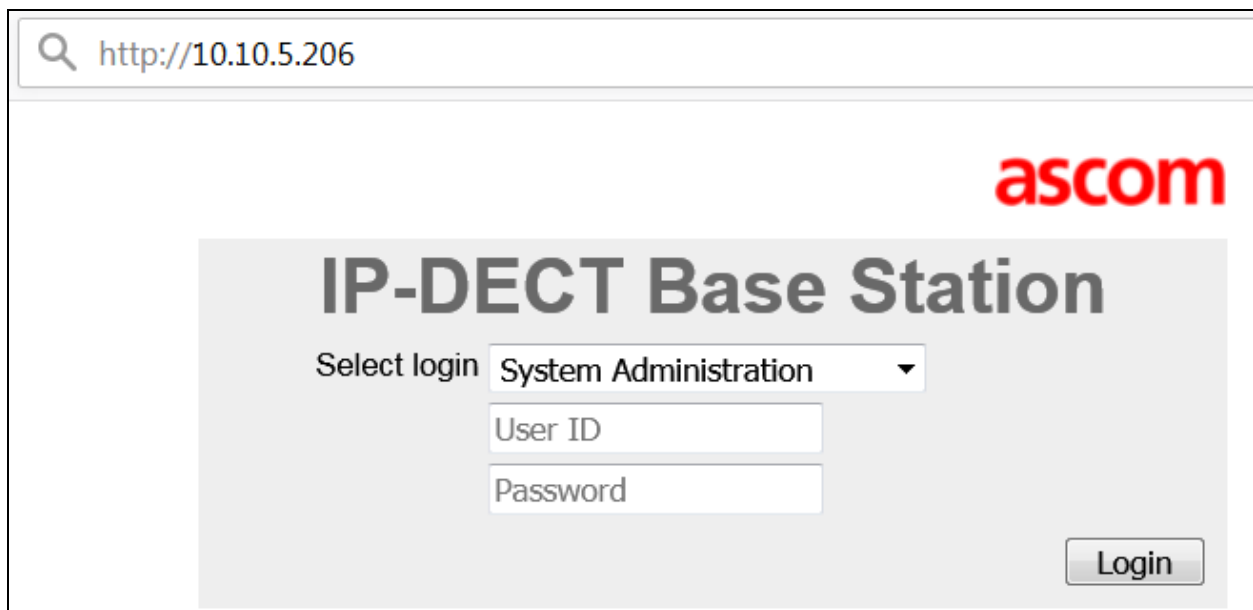
This section describes how to access and configure the Ascom DECT solution. The Ascom wireless IP-DECT Base Stations can be configured in a Master/Standby scenario to provide redundancy or to extend the radius of coverage (roaming). The following configuration steps detail the configuration process used to configure an Ascom wireless IP-DECT Base Station in Master mode only.

Roaming between multiple Ascom Wireless IP-DECT Base Stations as shown in **Figure 1** was tested but the configuration setup will not be shown in this document. Refer to the Ascom document in **Section 10** for information on how to configure roaming.

7.1. Configure the IP-DECT Base Station

The configuration of the DECT base station and the DECT handsets are both achieved through an http session to the web interface of the DECT base station acting as Master. Open a web session to the IP address of the DECT base station and select **System administration** as shown below.

Then enter the proper credentials for **User ID** and **Password** and click on **Login** to log in.



The screenshot shows a web browser window with the address bar containing "http://10.10.5.206". The page features the "ascom" logo in red in the top right corner. The main content area is a light gray box titled "IP-DECT Base Station". Inside this box, there is a "Select login" dropdown menu currently set to "System Administration". Below the dropdown are two input fields: "User ID" and "Password". A "Login" button is located in the bottom right corner of the gray box.

7.2. Configure DECT Base Station IP address

In order to change the IP Address of the DECT Base Station to connect to the local LAN, select **LAN** in the left column and click on the **IP4** tab. Enter the **IP Address**, **Network Mask**, **Default Gateway** and **DNS Server** information of the DECT Base Station and click on **OK**. Ensure also that DHCP mode is set to disabled under the **DHCP4** tab (not shown).

The screenshot displays the 'IP-DECT Base Station' configuration window. On the left is a 'Configuration' sidebar with a tree view including: General, LAN (selected), IP4, IP6, LDAP, DECT, VoIP, Unite, Services, Administration, Users, Device Overview, and DECT Sync. The main area has tabs for DHCP4, IP4 (selected), DHCP6, IP6, VLAN, Link, 802.1X, Statistics, and LLDP. The IP4 tab shows 'Active Settings' with the following values: IP Address (10.10.5.206), Network Mask (255.255.255.0), Default Gateway (10.10.5.1), and DNS Server (10.10.98.60). There is an empty field for 'Alt. DNS Server' and a 'Check ARP' checkbox which is unchecked. Below this is a 'Static IP Routes' section with a table header: Network Destination, Network Mask, and Gateway. Three empty input fields are provided for these fields. At the bottom are 'OK' and 'Cancel' buttons.

Please refer to Ascom's documentation listed in **Section 10** of these Application Notes for further information about DECT configuration. The following sections cover specific settings concerning SIP and the connection to SIP Line Gateway.

7.3. Configure IP-DECT Base Station System Information

Select **DECT** in the left column and click on the **System** tab in the main window. Ensure that **Subscriptions** is set to **With System AC** and enter an appropriate **Authentication Code** (this is used in **Section 7.4** to subscribe the DECT handset to the base station). Note that the password seen here is not the password for the SIP users on SIP Line Gateway. Select the appropriate country for **Tones**, note for these compliance tests **US** was selected. Select **1920-1930 MHz (North America)** for the **Frequency** and ensure that **Local R-Key Handling** box is checked. For **Coder** select **G722.2/G711u** from the drop-down box. Click on **OK** to save the changes.

Configuration	System	Suppl. Serv.	Master	Crypto Master	Mobility Master	Radio	Radio config		
General	System Name	DECT3							
LAN	Password	••••••••							
IP4	Confirm Password	••••••••							
IP6	Subscriptions	With System AC ▾							
LDAP	Authentication Code	9999							
DECT	Tones	US ▾							
VoIP	Default Language	English ▾							
Unite	Frequency	1920-1930 MHz (North America) ▾							
Services	Enabled Carriers	23 24 25 26 27 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>							
Administration	Local R-Key Handling	<input checked="" type="checkbox"/>							
Users	No Transfer on Hangup	<input checked="" type="checkbox"/>							
Device Overview	No On-Hold Display	<input type="checkbox"/>							
DECT Sync	Display Original Called	<input type="checkbox"/>							
Traffic	Early Encryption	<input type="checkbox"/>							
Gateway	RFP Location	<input type="checkbox"/>							
Backup	Disable ICE	<input checked="" type="checkbox"/>							
Update	Coder	G722.2/G711u ▾				Frame (ms)	20	Exclusive <input type="checkbox"/>	SC <input type="checkbox"/>
Diagnostics	Secure RTP Key Exchange	No encryption ▾							
Reset	<input type="button" value="OK"/> <input type="button" value="Cancel"/>								

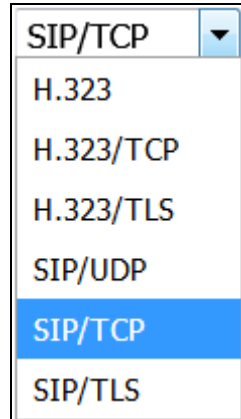
7.4. Configure SIP Line Gateway Information

Select **DECT** in the left column and select the **Master** tab. Ensure the **Protocol** is set to **SIP/TCP** if TCP is the chosen transport protocol and **SIP/UDP** if UDP is the chosen transport protocol. Enter the SIP Line Gateway IP address for **Proxy** and **Domain** information as configured in **Section 6**. Enter the length of digits used for internal numbers. Note, for compliance testing **Enbloc Dialing** and **Allow DTMF through RTP** boxes were checked but these settings will depend on the customer site and how the CS1000 is configured. All other values can be accepted as default.

The screenshot displays the configuration interface for an IP-DECT Base Station, specifically the **Master** tab. The interface includes a left-hand navigation menu and a main configuration area. The **DECT** tab is selected in the menu. The main configuration area is divided into several sections: **Mode** (set to Mirror), **Mirror Master** (10.10.5.205), **Mirror Status** (Active, Connected to 10.10.5.205), **Multi-Master** (Master ID: 0, Enable PARI Function: checked, Region Code: empty), **IP-PBX** (Protocol: SIP/TCP, Proxy: 10.10.97.188:5070, Alt. Proxy: empty), **Domain** (avaya.com), **Max. Internal Number Length** (4), **International CPN Prefix** (empty), **Registration with system password** (unchecked), **Enbloc Dialing** (checked), **Enable Enbloc Send-Key** (unchecked), **Send Inband DTMF** (unchecked), and **Allow DTMF Through RTP** (checked). Red boxes highlight the Protocol, Proxy, Domain, Max. Internal Number Length, Enbloc Dialing, and Allow DTMF Through RTP settings.

Configuration	System	Suppl. Serv.	Master	Crypto Master	Mo
General					
LAN					
IP4					
IP6					
LDAP					
DECT					
VoIP					
Unite					
Services					
Administration					
Users					
Device Overview					
DECT Sync					
Traffic					
Gateway					
Backup					
Update					
Diagnostics					
Reset					

Note that these are the choices available to set for **Protocol** above.



Scroll down and click on **OK** (not shown) to save the above new configuration.

Click on the **Suppl. Serv.** tab and ensure that **Enable Supplementary Services** box is checked. Take note of the activation and deactivation codes for services such as **Call Forwarding**, **Call Waiting** and **Do Not Disturb**. Click on **OK** when finished. These codes are unique to the Ascom DECT system.

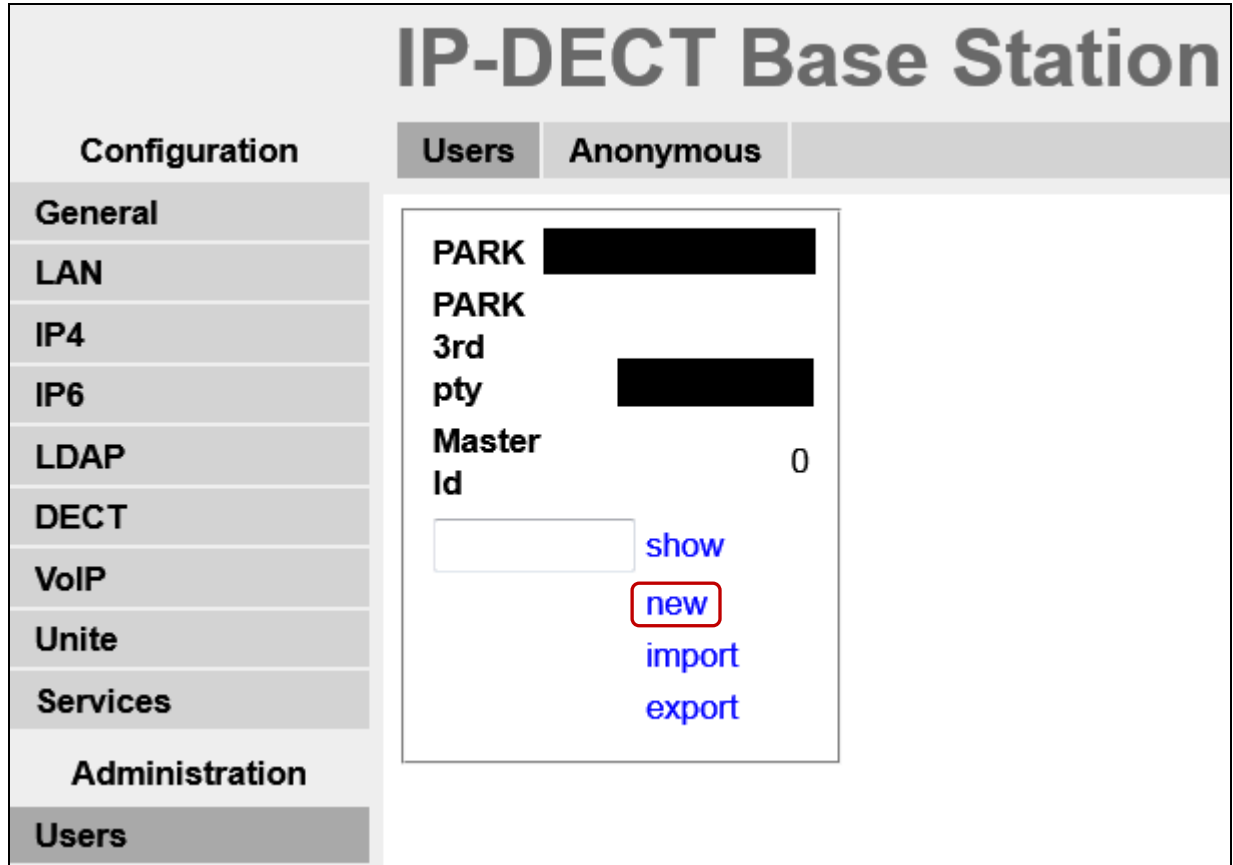
Note that **MWI Mode** is set to **User dependent interrogate number** and the **MWI Notify Number** is set to the messaging voicemail number for the solution which is **3333**.

IP-DECT Base Station

Configuration	System	Suppl. Serv.	Master	Crypto Master	Mobility Master	Radio	Rad
General	<input checked="" type="checkbox"/> Enable Supplementary Services						
LAN							
IP4							
IP6							
LDAP							
DECT							
VoIP							
Unite							
Services							
Administration							
Users							
Device Overview							
DECT Sync							
Traffic							
Gateway							
Backup							
Update							
Diagnostics							
Reset							
		Activate	Deactivate				Disable
	Call Forwarding Unconditional	*21*\$#	#21#				<input type="checkbox"/>
	Call Forwarding Busy	*67*\$#	#67#				<input type="checkbox"/>
	Call Forwarding No Reply	*61*\$#	#61#				<input type="checkbox"/>
	Do Not Disturb	*42#	#42#				<input type="checkbox"/>
	Call Waiting	*43#	#43#				<input type="checkbox"/>
	Call Completion	.	.				<input checked="" type="checkbox"/>
	Call Park	.	.				<input checked="" type="checkbox"/>
	Interception	.	.				<input checked="" type="checkbox"/>
	Call Service URI	.					<input checked="" type="checkbox"/>
	Call Service URI (Argument)	.					<input checked="" type="checkbox"/>
	Soft key	.					<input checked="" type="checkbox"/>
	Logout User	#11*\$#					<input type="checkbox"/>
	Clear Local Setting	*00#					<input type="checkbox"/>
	MWI Mode	User dependent interrogate number					<input type="checkbox"/>
	MWI Notify Number	3333					<input type="checkbox"/>
	Local Clear of MWI	.					<input type="checkbox"/>
	External Idle Display						<input checked="" type="checkbox"/>
	<input type="button" value="OK"/> <input type="button" value="Cancel"/>						

7.5. Adding DECT Users

Click on **Users** in the left column and under the **Users** tab seen on right column, click **new** to add a new DECT user.



The screenshot displays the 'IP-DECT Base Station' configuration interface. On the left, a 'Configuration' sidebar lists various settings: General, LAN, IP4, IP6, LDAP, DECT, VoIP, Unite, Services, Administration, and Users. The 'Users' tab is selected. The main content area shows a list of users with the following details: 'PARK' (name), a redacted phone number, 'PARK' (extension), '3rd' (line), 'pty' (party), a redacted extension, and 'Master Id' (0). Below the list are buttons for 'show', 'new' (highlighted with a red box), 'import', and 'export'.

Enter the appropriate information for the new DECT user and once all the information has been correctly filled in click on the **OK** button. The Handset is registered with the DECT system, according to Ascom's documentation. The Password entered should be the same as that configured in **Section 5.3**.

IP-DECT Base Station

Configuration

- General
- LAN
- IP4
- IP6
- LDAP
- DECT
- VoIP
- Unite
- Services
- Administration**
- Users**
- Device Overview
- DECT Sync
- Traffic
- Gateway
- Backup
- Update
- Diagnostics
- Reset

UsersAnonymous

10.10.5.206/GW-DECT/mod_cmd_login.xml?cmd=show

User type

User

User Administrator

Long Name

Display Name

Name

Number

Auth. Name (SIP only)

Password

Confirm Password

IPEI / IPDI

Idle Display

Auth. Code

Feature Status

Call Waiting On

OKApplyDeleteUnsubs.Cancel

At this point the handset is **Subscribed** to the DECT base station; please refer to the DECT Handset user guide (see **Section 10**) in order to correctly subscribe to the base station. Note that every handset may be slightly different to setup but typically navigate to **Menu → Settings → System → Subscribe**. The **PARK** number must be entered correctly and the **Authentication Code** configured in **Section 7.3** is required for the handset to subscribe to the DECT system.

IP-DECT Base Station

Configuration: **Users** | Anonymous

General

LAN

IP4

IP6

LDAP

DECT

VoIP

Unite

Services

Administration

Users

User Administrators

Long Name Name

User Administrators: 0

Users

Long Name	Name	No	Fty	Display	IPEI / IPDI	AC	Prod	SW	EE	Registration
d81 5913	5913	5913	+	d81 5913	002020772294		d81-Protector	4.6.2		Subscribed
d63 5914	5914	5914	+	d63 5914	110550389613		d63-Talker	2.2.2		Subscribed
d63 5915	5915	5915	+	d63 5915	110550389538		d63-Talker	2.2.2		Subscribed
d81 5916	5916	5916	+	d81 5916	002020909369		d81-Messenger	4.6.2		Subscribed

Users: 4, Registrations: 0

To change features such as **Call Waiting** or **Do not Disturb** click on the + icon under **Fty** as highlighted below. This opens a new window where these services can be selected or deselected. Click on **OK** once the appropriate services are selected.

IP-DECT Base Station

Configuration: **Users** | Anonymous

General

LAN

IP4

IP6

LDAP

DECT

VoIP

Unite

Services

Administration

Users

Device Overview

DECT Sync

Mozilla Firefox

10.10.5.206/GW-DECT/mod_

CFU

CFB

CFNR

Do not Disturb Int.

Do not Disturb Ext.

Call Waiting

OK Cancel

No	Fty	Display
1128	+	d81 11128
913	+	d81 5913
914	+	d63 5914
915	+	d63 5915
916	+	d81 5916
916	+	d81 9916
922	+	d62 9922
923	+	d41 9923

Telephony features, such as Call Waiting and Call Forwarding, can be programmed by entering feature codes on the handset. Please refer to the **Suppl. Serv.** tab in **Section 7.4**.

As a final step confirm that DECT handsets have registered successfully with the Avaya SIP Line Gateway, note the IP addresses under **Registration**.

IP-DECT Base Station

Configuration

Users **Anonymous**

General

LAN

IP4

IP6

LDAP

DECT

VoIP

Unite

Services

Administration

Users

Device Overview

DECT Sync

Traffic

PARK [redacted]

PARK

3rd

pty [redacted]

Master Id 0

[show](#)

[new](#)

[import](#)

[export](#)

User Administrators

[Long Name](#) [Name](#)

User Administrators: 0

Users

Long Name	Name	No	Fty	Display	IPEI / IPDI	AC	Prod	SW	EE	Registration
d81 11128	11128	11128	+	d81 11128	002020909367					Subscribed
d81 5913	5913	5913	+	d81 5913	002020772294	d81-Protector	4.6.2			Subscribed
d63 5914	5914	5914	+	d63 5914	110550389613	d63-Talker	2.2.2			10.10.97.188
d63 5915	5915	5915	+	d63 5915	110550389538	d63-Talker	2.2.2			10.10.97.188
d81 5916	5916	5916	+	d81 5916	002020909369	d81-Messenger	4.6.2			Subscribed
d81 9916	9916	9916	+	d81 9916	002020909371					Subscribed
d62 9922	9922	9922	+	d62 9922	036470363716					Subscribed
d41 9923	9923	9923	+	d41 9923	085870140743					Subscribed

Users: 8, Registrations: 2

8. Verification Steps

This section provides the tests that can be performed to verify correct configuration of the Avaya and Ascom solution.

8.1. Verify Ascom IP-DECT base station is registered with Avaya Communication Server 1000

Verify that the Ascom IP-DECT base station registers successfully with the CS1000 SIP Line Gateway server and Call Server by using the CS 1000 Linux command line and CS 1000 Call Server overlay LD 32.

Log in to the SIP Line server as an administrator by using Avaya account.
Issue command **slgSetShowAll** to see all the registered SIP users.

```
[admin@car2-sipl ~]$ slgSetShowAll

=== VTRK ===
UserID          AuthId          TN          Clients  Calls
SetHandle      Pos ID         SIPL Type
-----
-----
----- IPV4 Endpoints -----
0x8c792c8      4686          4686      108-00-00-10      1      0
              SIP Lines
0xb550c790     5914          5914      096-00-00-14      1      1
              SIP Lines
0xb5533190     5913          5913      096-00-00-13      1      1
              SIP Lines
0xb5539140     5916          5916      096-00-00-16      1      1
              SIP Lines
0xb5540ae0     5915          5915      096-00-00-15      1      1
              SIP Lines

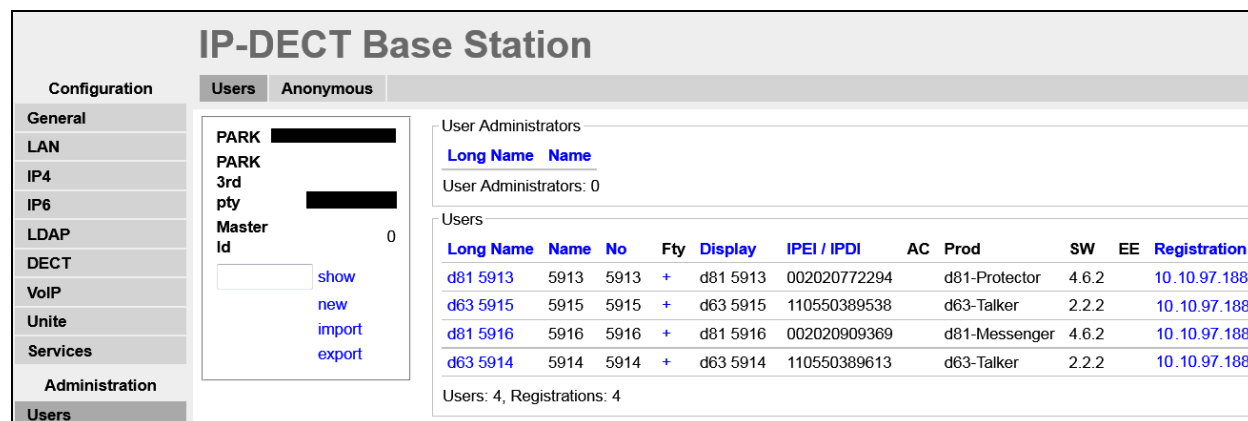
Total User Registered = 5   V4 Registered = 5   V6 Registered = 0
```

Log in to the call server using the admin account. Load overlay 32 and then issue command **stat [TN]** where TN is the SIP Line user's TN being checked.

```
>ld 32
NPR000
.stat 96 0 0 13
IDLE REGISTERED 00
```

8.2. Ascom wireless DECT Handset Registration Verification

To verify that Ascom DECT Handsets are registered to the Ascom Base Station correctly, click on **Users** in the left column and select the **Users** tab in the displayed window. Select **show**, this displays the DECT handsets that are registered. In the example below, four extensions **5913** to **5916** are registered correctly.



The screenshot shows the 'IP-DECT Base Station' configuration window. The 'Users' tab is selected, displaying a list of registered handsets. The left sidebar shows navigation options like 'Configuration', 'General', 'LAN', 'IP4', 'IP6', 'LDAP', 'DECT', 'VoIP', 'Unite', 'Services', 'Administration', and 'Users'. The main area shows 'User Administrators' (0) and a table of 'Users'.

Long Name	Name	No	Fty	Display	IPEI / IPDI	AC	Prod	SW	EE	Registration
d81 5913	5913	5913	+	d81 5913	002020772294	d81-Protector	4.6.2			10.10.97.188
d63 5915	5915	5915	+	d63 5915	110550389538	d63-Talker	2.2.2			10.10.97.188
d81 5916	5916	5916	+	d81 5916	002020909369	d81-Messenger	4.6.2			10.10.97.188
d63 5914	5914	5914	+	d63 5914	110550389613	d63-Talker	2.2.2			10.10.97.188

Users: 4, Registrations: 4

9. Conclusion

These Application Notes describe the configuration steps required for Ascom's DECT IP Base Station and DECT Handsets to successfully interoperate with Avaya Communication Server 1000 and Avaya SIP Line Gateway by registering the Ascom Handsets with SIP Line Gateway as third-party SIP phones. Please refer to **Section 2.2** for test results and observations.

10. 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. *Communication Server 1000E Installation and Commissioning Avaya Communication Server 1000 Release 7.6*, NN43041-310, 06.04, June 2016
2. *Avaya Communication Server 1000 Linux Platform Base and Applications Installation and Commissioning*, Release 7.6, NN43001-315, Issue 06.08, June 2016
3. *Avaya Communication Server 1000 Co-resident Call Server and Signaling Server Fundamentals*, Release 7.6, NN43001-509, Issue 04.04, June 2016
4. *Avaya Communication Server 1000 SIP Line Fundamentals*, Release 7.6, N43001-508, Issue 04.04, December 2016
5. *Avaya Communication Server 1000 Software Input Output Reference — Administration*, Release 7.6, NN43001-611, Issue 06.05, September 2015

Product Documentation for Ascom Products can be obtained from Ascom or may be requested at <https://www.ascom-ws.com/AscomPartnerWeb/Templates/WebLogin.aspx> (login required).

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
37	p31484_1	Yes	05/12/16	NO	FRU	cs1000-shared-general-7.65.16-00.i386
38	p33125_1	Yes	05/12/16	NO	FRU	cs1000-OS-1.00.00.00-00.noarch
39	p33274_1	Yes	05/12/16	YES	FRU	initscripts-8.45.25-1.el5.i386
40	p33384_1	Yes	05/12/16	NO	FRU	cs1000-OS-1.00.00.00-00.noarch
41	p33493_1	Yes	05/12/16	NO	FRU	cs1000-OS-1.00.00.00-00.noarch
42	p33557_1	Yes	05/12/16	YES	FRU	cs1000-OS-1.00.00.00-00.noarch
43	p33584_1	Yes	05/12/16	YES	FRU	cs1000-OS-1.00.00.00-00.noarch
44	p33673_1	Yes	05/12/16	NO	FRU	net-snmp-5.3.2.2-5.el5.i386
59	p33774_1	Yes	28/11/17	YES	FRU	cs1000-OS-1.00.00.00-00.noarch
In System service updates: 40						
PATCH#	IN_SERVICE	DATE	SPECINS	REMOVABLE	NAME	
0	Yes	11/11/17	NO	YES	cs1000-Jboss-Quantum-7.65.16.23-12.i386.000	
1	Yes	28/11/17	YES	YES	cs1000-dbcom-7.65.16.23-1.i386.000	
2	Yes	04/12/16	YES	YES	cs1000-patchWeb-7.65.16.23-2.i386.000	
3	Yes	05/12/16	YES	YES	cs1000-dmWeb-7.65.16.23-5.i386.000	
6	Yes	05/12/16	NO	YES	cs1000-shared-carrdtct-7.65.16.21-	
01.i386.000						
8	Yes	05/12/16	NO	YES	cs1000-snmp-7.65.16.21-00.i686.000	
9	Yes	05/12/16	NO	YES	cs1000-shared-omm-7.65.16.21-2.i386.000	
10	Yes	05/12/16	YES	YES	cs1000-ipsec-7.65.16.22-1.i386.000	
11	Yes	05/12/16	YES	YES	cs1000-csoneksvrmgr-7.65.16.22-5.i386.000	
12	Yes	05/12/16	YES	YES	cs1000-baseWeb-7.65.16.22-4.i386.000	
14	Yes	05/12/16	NO	YES	cs1000-gk-7.65.16.22-1.i386.000	
15	Yes	05/12/16	YES	YES	cs1000-shared-xmsg-7.65.16.22-1.i386.000	
16	Yes	05/12/16	NO	YES	cs1000-sps-7.65.16.23-1.i386.000	
17	Yes	05/12/16	YES	YES	cs1000-cs-7.65.P.100-03.i386.000	
18	Yes	05/12/16	NO	YES	bash-3.2-33.el5_11.4.i386.000	
19	Yes	05/12/16	NO	YES	libxml2-2.6.26-2.1.25.el5_11.i386.000	
20	Yes	05/12/16	NO	YES	libxml2-python-2.6.26-	
2.1.25.el5_11.i386.000						
21	Yes	05/12/16	NO	YES	freetype-2.2.1-32.el5_9.1.i386.000	
22	Yes	05/12/16	NO	YES	cs1000-cppmUtil-7.65.16.23-4.i686.000	
24	Yes	05/12/16	NO	YES	cs1000-shared-tpselect-7.65.16.23-	
1.i386.000						
25	Yes	05/12/16	YES	YES	cs1000-csv-7.65.16.23-4.i386.000	
27	Yes	05/12/16	YES	YES	cs1000-mscAnnc-7.65.16.23-1.i386.000	
28	Yes	05/12/16	YES	YES	cs1000-mscConf-7.65.16.23-1.i386.000	
29	Yes	05/12/16	YES	YES	cs1000-mscMusc-7.65.16.23-1.i386.000	
30	Yes	05/12/16	YES	YES	cs1000-mscTone-7.65.16.23-1.i386.000	
32	Yes	05/12/16	YES	YES	avaya-cs1000-cnd-4.0.48-1.el5.i386.000	
33	Yes	05/12/16	NO	YES	libssh2-1.4.2-2.el5_7.1.i386.000	
46	Yes	11/11/17	YES	YES	cs1000-linuxbase-7.65.16.23-35.i386.000	
47	Yes	28/11/17	YES	YES	cs1000-mscAttn-7.65.16.23-15.i386.000	
48	Yes	28/11/17	YES	YES	cs1000-oam-logging-7.65.16.23-1.i386.000	
49	Yes	28/11/17	NO	YES	cs1000-pd-7.65.16.23-1.i386.000	
50	Yes	28/11/17	YES	YES	cs1000-shared-pbx-7.65.16.23-3.i386.000	
51	Yes	28/11/17	YES	YES	cs1000-tps-7.65.16.23-21.i386.000	
52	Yes	28/11/17	YES	YES	cs1000-vtrk-7.65.16.23-123.i386.000	
53	Yes	28/11/17	YES	YES	jdk-1.6.0_151-fcs.i586.000	
54	Yes	28/11/17	YES	YES	kernel-2.6.18-419.el5.i686.000	
55	Yes	28/11/17	YES	YES	openssl-0.9.8e-40.el5_11.i386.000	
56	Yes	28/11/17	NO	YES	pass_ Harden-7.65.16.23-2.i386.000	
57	Yes	28/11/17	NO	YES	pcap-7.65.16.23-1.i386.000	
58	Yes	28/11/17	NO	yes	tzdata-2016g-2.el5.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	CS1000-6546	ISS1:1OF1	p33597_1	12/03/2018	p33597_1.cpl	NO
0001	wi01075353	ISS1:1OF1	p32613_1	12/03/2018	p32613_1.cpl	NO
0002	wi01094727	ISS1:1OF1	p32848_1	12/03/2018	p32848_1.cpl	NO
0003	wi01127138	ISS1:1OF1	p33304_1	12/03/2018	p33304_1.cpl	NO
0004	wi01070585	ISS1:1OF1	p32383_1	12/03/2018	p32383_1.cpl	NO
0005	wi01106658	ISS1:1OF1	p32812_1	12/03/2018	p32812_1.cpl	NO
0006	WI0110261	ISS1:1OF1	p32758_1	12/03/2018	p32758_1.cpl	NO
0007	wi01088775	ISS1:1OF1	p32659_1	12/03/2018	p32659_1.cpl	NO
0008	wi01125238	ISS1:1OF1	p32971_1	12/03/2018	p32971_1.cpl	NO
0009	wi01102296	ISS1:1OF1	p32780_1	12/03/2018	p32780_1.cpl	NO
0010	CS1000-6789	ISS1:1OF1	p33508_1	12/03/2018	p33508_1.cpl	NO
0011	wi01058378	ISS1:1OF1	p32344_1	12/03/2018	p32344_1.cpl	NO
0012	CS1000-7208	ISS1:1OF1	p33648_1	12/03/2018	p33648_1.cpl	NO
0013	wi01078721	ISS1:1OF1	p32553_1	12/03/2018	p32553_1.cpl	NO
0014	wi01132599	ISS1:1OF1	p33025_1	12/03/2018	p33025_1.cpl	NO
0015	wi01088797	ISS1:1OF1	p32844_1	12/03/2018	p32844_1.cpl	NO
0016	wi01150846	ISS1:1OF1	p33157_1	12/03/2018	p33157_1.cpl	NO
0017	wi01035976	ISS1:1OF1	p32173_1	12/03/2018	p32173_1.cpl	NO
0018	wi01065248	ISS1:1OF1	p32412_1	12/03/2018	p32412_1.cpl	NO
0019	wi01053920	ISS1:1OF1	p32303_1	12/03/2018	p32303_1.cpl	NO
0020	CS1000-7339	ISS1:1OF1	p33708_1	12/03/2018	p33708_1.cpl	NO
0021	wi01111194	ISS1:1OF1	p32821_1	12/03/2018	p32821_1.cpl	NO
0022	wi01169714	ISS1:1OF1	p33335_1	12/03/2018	p33335_1.cpl	NO
0023	wi01068669	ISS1:1OF1	p32333_1	12/03/2018	p32333_1.cpl	NO
0024	wi01180594	ISS1:1OF1	p33312_1	12/03/2018	p33312_1.cpl	NO
0025	cs1000-7160	ISS1:1OF1	p33621_1	12/03/2018	p33621_1.cpl	NO
0026	CS1000-7301	ISS1:1OF1	p33691_1	12/03/2018	p33691_1.cpl	NO
0027	wi01210497	ISS1:1OF1	p33468_1	12/03/2018	p33468_1.cpl	YES
0028	wi01129098	ISS1:1OF1	p32951_1	12/03/2018	p32951_1.cpl	NO
0029	wi01123389	ISS1:1OF1	p33045_1	12/03/2018	p33045_1.cpl	NONO
0030	CS1000-7231	ISS1:1OF1	p33652_1	12/03/2018	p33652_1.cpl	NO
0031	CS1000-7607	ISS1:1OF1	p33783_1	12/03/2018	p33783_1.cpl	YES
0032	CS1000-6852	ISS1:1OF1	p33517_1	12/03/2018	p33517_1.cpl	NO
0033	wi01099606	iss1:1of1	p32713_1	12/03/2018	p32713_1.cpl	NO
0034	wi01189247	ISS1:1OF1	p33382_1	12/03/2018	p33382_1.cpl	YES
0035	wi01093071	ISS1:1OF1	p32701_1	12/03/2018	p32701_1.cpl	NO
0036	wi01190506	ISS1:1OF1	p33361_1	12/03/2018	p33361_1.cpl	NO
0037	wi01202917	ISS1:1OF1	p33434_1	12/03/2018	p33434_1.cpl	NO
0038	wi01159931	ISS1:1OF1	p33231_1	12/03/2018	p33231_1.cpl	YES
0039	wi01198794	ISS1:1OF1	p33408_1	12/03/2018	p33408_1.cpl	NO
0040	CS1000-6872	ISS1:1OF1	p33520_1	12/03/2018	p33520_1.cpl	NO
0041	CS1000-7265	ISS1:1OF1	p33666_1	12/03/2018	p33666_1.cpl	NO
0042	wi01201045	ISS1:1OF1	p33424_1	12/03/2018	p33424_1.cpl	YES
0043	wi01185441	ISS1:1OF1	p33341_1	12/03/2018	p33341_1.cpl	NO
0044	wi01093118	ISS1:1OF1	p32496_1	12/03/2018	p32496_1.cpl	NO
0045	wi01130836	ISS1:1OF1	p33008_1	12/03/2018	p33008_1.cpl	YES
0046	wi01062607	ISS1:1OF1	p32503_1	12/03/2018	p32503_1.cpl	NO
0047	wi01113712	ISS1:1OF1	p32877_1	12/03/2018	p32877_1.cpl	NO
0048	CS1000-7461	ISS1:1OF1	p33736_1	12/03/2018	p33736_1.cpl	NO
0049	wi01182880	ISS1:1OF1	p33328_1	12/03/2018	p33328_1.cpl	NO
0050	wi01126552	ISS1:1OF1	p32975_1	12/03/2018	p32975_1.cpl	NO
0051	wi01068011	ISS1:1OF1	p33182_1	12/03/2018	p33182_1.cpl	NO

0052	wi01070465	iss1:lof1	p32562_1	12/03/2018	p32562_1.cpl	NO
0053	wi01104473	ISS1:1OF1	p32818_1	12/03/2018	p32818_1.cpl	NO
0054	wi01128512	ISS1:1OF1	p32997_1	12/03/2018	p32997_1.cpl	NO
0055	wi01149384	ISS1:1OF1	p33147_1	12/03/2018	p33147_1.cpl	NO
0056	CS1000-7052	ISS1:1OF1	p33573_1	12/03/2018	p33573_1.cpl	NO
0057	wi01178476	ISS1:1OF1	p33305_1	12/03/2018	p33305_1.cpl	NO
0058	wi01135146	ISS1:1OF1	p33033_1	12/03/2018	p33033_1.cpl	NO
0059	wi01142100	ISS1:1OF1	p33090_1	12/03/2018	p33090_1.cpl	NO
0060	wi01070279	ISS1:1OF1	p32262_1	12/03/2018	p32262_1.cpl	NO
0061	wi01166065	ISS1:1OF1	p33241_1	12/03/2018	p33241_1.cpl	NO
0062	wi01080753	ISS1:1OF1	p32518_1	12/03/2018	p32518_1.cpl	NO
0063	wi01104410	ISS1:1OF1	p32801_1	12/03/2018	p32801_1.cpl	NO
0064	wi01045144	ISS1:1OF1	p33202_1	12/03/2018	p33202_1.cpl	NO
0065	wi01096718	ISS1:1OF1	p33138_1	12/03/2018	p33138_1.cpl	YES
0066	CS1000-6910	ISS1:1OF1	p33528_1	12/03/2018	p33528_1.cpl	NO
0067	wi01181174	ISS1:1OF1	p33316_1	12/03/2018	p33316_1.cpl	NO
0068	wi01133960	ISS1:1OF1	p33034_1	12/03/2018	p33034_1.cpl	NO
0069	wi01195975	ISS1:1OF1	p33394_1	12/03/2018	p33394_1.cpl	NO
0070	wi01132204	ISS1:1OF1	p32501_1	12/03/2018	p32501_1.cpl	NO
0071	wi01199336	ISS1:1OF1	p33410_1	12/03/2018	p33410_1.cpl	NO
0072	CS1000-7113	ISS1:1OF1	p33623_1	12/03/2018	p33623_1.cpl	NO
0073	wi01099300	iss1:lof1	p32704_1	12/03/2018	p32704_1.cpl	NO
0074	wi01163521	ISS1:1OF1	p33226_1	12/03/2018	p33226_1.cpl	NO
0075	CS1000-7323	ISS1:1OF1	p33688_1	12/03/2018	p33688_1.cpl	NO
0076	CS1000-6794	ISS1:1OF1	p33539_1	12/03/2018	p33539_1.cpl	NO
0077	wi01138136	ISS1:1OF1	p33191_1	12/03/2018	p33191_1.cpl	NO
0078	CS1000-7534	ISS1:1OF1	p33759_1	12/03/2018	p33759_1.cpl	NO
0079	CS1000-7462	ISS1:1OF1	p33737_1	12/03/2018	p33737_1.cpl	NO
0080	wi01203516	ISS1:1OF1	p33438_1	12/03/2018	p33438_1.cpl	NO
0081	wi01025156	ISS1:1OF1	p32136_1	12/03/2018	p32136_1.cpl	NO
0082	wi01187443	ISS1:1OF1	p33359_1	12/03/2018	p33359_1.cpl	NO
0083	wi01183783	ISS1:1OF1	p33333_1	12/03/2018	p33333_1.cpl	NO
0084	CS1000-7103	ISS1:1OF1	p33596_1	12/03/2018	p33596_1.cpl	NO
0085	wi01060826	ISS1:1OF1	p32379_1	12/03/2018	p32379_1.cpl	NO
0086	wi01072062	ISS1:1OF1	p32776_1	12/03/2018	p32776_1.cpl	NO
0087	CS1000-7253	ISS1:1OF1	p33662_1	12/03/2018	p33662_1.cpl	NO
0088	wi01101876	ISS1:1OF1	p32858_1	12/03/2018	p32858_1.cpl	NO
0089	wi01102475	ISS1:1OF1	p32782_1	12/03/2018	p32782_1.cpl	YES
0090	wi01149017	ISS1:1OF1	p33145_1	12/03/2018	p33145_1.cpl	NO
0091	wi01181578	ISS1:1OF1	p33321_1	12/03/2018	p33321_1.cpl	NO
0092	CS1000-7296	ISS1:1OF1	p33681_1	12/03/2018	p33681_1.cpl	NO
0093	wi01151870	ISS1:1OF1	p33162_1	12/03/2018	p33162_1.cpl	YES
0094	CS1000-7236	ISS1:1OF1	p33753_1	12/03/2018	p33753_1.cpl	NO
0095	wi01089807	ISS1:1OF1	p32957_1	12/03/2018	p32957_1.cpl	NO
0096	wi01128596	ISS1:1OF1	p33000_1	12/03/2018	p33000_1.cpl	NO
0097	wi01039280	ISS1:1OF1	p32423_1	12/03/2018	p32423_1.cpl	NO
0098	wi01065118	ISS1:1OF1	p32397_1	12/03/2018	p32397_1.cpl	NO
0099	CS1000-7081	ISS1:1OF1	p33585_1	12/03/2018	p33585_1.cpl	NO
0100	CS1000-6752	ISS1:1OF1	p33540_1	12/03/2018	p33540_1.cpl	NO
0101	wi01077639	ISS1:1OF1	p32883_1	12/03/2018	p32883_1.cpl	NO
0102	wi01156999	ISS1:1OF1	p33180_1	12/03/2018	p33180_1.cpl	NO
0103	wi01134354	ISS1:1OF1	p33031_1	12/03/2018	p33031_1.cpl	NO
0104	wi01165461	ISS1:1OF1	p33237_1	12/03/2018	p33237_1.cpl	NO
0105	wi01104627	ISS1:1OF1	p32819_1	12/03/2018	p32819_1.cpl	NO
0106	wi01045058	ISS1:1OF1	p32214_1	12/03/2018	p32214_1.cpl	NO
0107	wi01193201	ISS1:1OF1	p33381_1	12/03/2018	p33381_1.cpl	YES
0108	wi01008182	ISS1:1OF1	p33277_1	12/03/2018	p33277_1.cpl	NO
0109	wi01053314	ISS1:1OF1	p32555_1	12/03/2018	p32555_1.cpl	NO
0110	wi01069441	ISS1:1OF1	p32097_1	12/03/2018	p32097_1.cpl	NO
0111	CS1000-7015	ISS1:1OF1	p33606_1	12/03/2018	p33606_1.cpl	NO
0112	CS1000-7101	ISS1:1OF1	p33641_1	12/03/2018	p33641_1.cpl	NO
0113	CS1000-7062	ISS1:1OF1	p33579_1	12/03/2018	p33579_1.cpl	NO

0114	CS1000-7176	ISS1:1OF1	p33744_1	12/03/2018	p33744_1.cpl	NO
0115	wi01091447	ISS1:1OF1	p32675_1	12/03/2018	p32675_1.cpl	NO
0116	wi01109251	ISS1:1OF1	p32827_1	12/03/2018	p32827_1.cpl	NO
0117	wi01207693	ISS1:1OF1	p33452_1	12/03/2018	p33452_1.cpl	NO
0118	CS1000-7277	ISS1:1OF1	p33763_1	12/03/2018	p33763_1.cpl	NO
0119	wi01130348	ISS1:1OF1	p33014_1	12/03/2018	p33014_1.cpl	NO
0120	CS1000-7147	ISS1:1OF1	p33616_1	12/03/2018	p33616_1.cpl	NO
0121	wi01021522	ISS1:1OF1	p32863_1	12/03/2018	p32863_1.cpl	NO
0122	wi01204623	ISS1:1OF1	p33444_1	12/03/2018	p33444_1.cpl	NO
0123	CS1000-7423	ISS1:1OF1	p33720_1	12/03/2018	p33720_1.cpl	NO
0124	CS1000-6712	ISS1:1OF1	p33752_1	12/03/2018	p33752_1.cpl	NO
0125	wi01146766	ISS1:1OF1	p33131_1	12/03/2018	p33131_1.cpl	NO
0126	wi01034961	ISS1:1OF1	p32144_1	12/03/2018	p32144_1.cpl	NO
0127	wi01134799	ISS1:1OF1	p33069_1	12/03/2018	p33069_1.cpl	NO
0128	wi01153104	ISS1:1OF1	p33174_1	12/03/2018	p33174_1.cpl	NO
0129	CS1000-7406	ISS1:1OF1	p33715_1	12/03/2018	p33715_1.cpl	NO
0130	wi01188722	ISS1:1OF1	p33365_1	12/03/2018	p33365_1.cpl	NO
0131	wi01185642	ISS1:1OF1	p33342_1	12/03/2018	p33342_1.cpl	NO
0132	wi01177614	ISS1:1OF1	p33303_1	12/03/2018	p33303_1.cpl	NO
0133	wi01071296	ISS1:1OF1	p32836_1	12/03/2018	p32836_1.cpl	NO
0134	CS1000-7326	ISS1:1OF1	p33699_1	12/03/2018	p33699_1.cpl	NO
0135	cs1000-7580	ISS1:1OF1	p33776_1	12/03/2018	p33776_1.cpl	NO
0136	wi01096967	ISS1:1OF1	p32735_1	12/03/2018	p32735_1.cpl	NO
0137	cs1000-7217	ISS1:1OF1	p33643_1	12/03/2018	p33643_1.cpl	NO
0138	wi01070468	iss1:1of1	p32418_1	12/03/2018	p32418_1.cpl	NO
0139	wi01191767	ISS1:1OF1	p33368_1	12/03/2018	p33368_1.cpl	NO
0140	wi01186846	ISS1:1OF1	p33332_1	12/03/2018	p33332_1.cpl	NO
0141	CS1000-7286	ISS1:1OF1	p33686_1	12/03/2018	p33686_1.cpl	NO
0142	CS1000-7624	ISS1:1OF1	p33794_1	12/03/2018	p33794_1.cpl	NO
0143	cs1000-6924	ISS1:1OF1	p33523_1	12/03/2018	p33523_1.cpl	NO
0144	CS1000-6933	ISS1:1OF1	p33529_1	12/03/2018	p33529_1.cpl	NO
0145	CS1000-7140	ISS1:1OF1	p33624_1	12/03/2018	p33624_1.cpl	NO
0146	wi01147091	ISS1:1OF1	p33137_1	12/03/2018	p33137_1.cpl	NO
0147	wi01115369	ISS1:1OF1	p32889_1	12/03/2018	p32889_1.cpl	NO
0148	CS1000-7003	ISS1:1OF1	p33561_1	12/03/2018	p33561_1.cpl	NO
0149	wi01102091	ISS1:1OF1	p32744_1	12/03/2018	p32744_1.cpl	YES
0150	wi01146804	ISS1:1OF1	p33132_1	12/03/2018	p33132_1.cpl	NO
0151	wi01214452	ISS1:1OF1	p33488_1	12/03/2018	p33488_1.cpl	NO
0152	wi01212017	ISS1:1OF1	p33482_1	12/03/2018	p33482_1.cpl	YES
0153	wi01071996	ISS1:1OF1	p32461_1	12/03/2018	p32461_1.cpl	NO
0154	wi01163048	ISS1:1OF1	p33223_1	12/03/2018	p33223_1.cpl	YES
0155	CS1000-7337	ISS1:1OF1	p33696_1	12/03/2018	p33696_1.cpl	NO
0156	CS1000-7248	ISS1:1OF1	p32811_1	12/03/2018	p32811_1.cpl	NO
0157	wi01118714	ISS2:1OF1	p32952_2	12/03/2018	p32952_2.cpl	NO
0158	wi01133106	ISS1:1OF1	p33032_1	12/03/2018	p33032_1.cpl	NO
0159	wi01059388	iss1:1of1	p32628_1	12/03/2018	p32628_1.cpl	NO
0160	wi01118320	ISS1:1OF1	p32753_1	12/03/2018	p32753_1.cpl	NO
0161	wi01118819	ISS1:1OF1	p32954_1	12/03/2018	p32954_1.cpl	NO
0162	wi01134952	ISS1:1OF1	p33039_1	12/03/2018	p33039_1.cpl	NO
0163	cs1000-7162	ISS1:1OF1	p33625_1	12/03/2018	p33625_1.cpl	NO
0164	wi01148697	ISS1:1OF1	p33187_1	12/03/2018	p33187_1.cpl	NO
0165	wi01063864	ISS1:1OF1	p32410_1	12/03/2018	p32410_1.cpl	YES
0166	wi00897254	ISS1:1OF1	p31127_1	12/03/2018	p31127_1.cpl	NO
0167	wi01098433	ISS1:1OF1	p32736_1	12/03/2018	p32736_1.cpl	NO
0168	wi01160967	ISS1:1OF1	p33213_1	12/03/2018	p33213_1.cpl	NO
0169	CS1000-6786	ISS1:1OF1	p33497_1	12/03/2018	p33497_1.cpl	NO
0170	CS1000-6980	ISS1:1OF1	p33586_1	12/03/2018	p33586_1.cpl	NO
0171	wi01144609	ISS1:1OF1	p33119_1	12/03/2018	p33119_1.cpl	NO
0172	wi01100508	ISS1:1OF1	p32761_1	12/03/2018	p32761_1.cpl	NO
0173	CS1000-7451	ISS1:1OF1	p33749_1	12/03/2018	p33749_1.cpl	NO
0174	wi01075149	ISS1:1OF1	p32475_1	12/03/2018	p32475_1.cpl	NO
0175	wi01133985	ISS1:1OF1	p33049_1	12/03/2018	p33049_1.cpl	NO

0176	CS1000-7154	ISS1:1OF1	p33619_1	12/03/2018	p33619_1.cpl	NO
0177	CS1000-7448	ISS1:1OF1	p33729_1	12/03/2018	p33729_1.cpl	NO
0178	wi01109345	ISS1:1OF1	p32830_1	12/03/2018	p32830_1.cpl	NO
0179	wi01188972	ISS1:1OF1	p33352_1	12/03/2018	p33352_1.cpl	NO
0180	wi01095462	ISS1:1OF1	p32723_1	12/03/2018	p32723_1.cpl	NO
0181	wi01120406	ISS1:1OF1	p32956_1	12/03/2018	p32956_1.cpl	NO
0182	wi01181197	ISS1:1OF1	p33317_1	12/03/2018	p33317_1.cpl	NO
0183	wi01144354	ISS1:1OF1	p33117_1	12/03/2018	p33117_1.cpl	NO
0184	CS1000-7366	ISS1:1OF1	p33702_1	12/03/2018	p33702_1.cpl	NO
0185	CS1000-7151	ISS1:1OF1	p33617_1	12/03/2018	p33617_1.cpl	NO
0186	CS1000-7622	ISS1:1OF1	p33787_1	12/03/2018	p33787_1.cpl	YES
0187	wi01119086	ISS1:1OF1	p32917_1	12/03/2018	p32917_1.cpl	NO
0188	wi01132222	ISS1:1OF1	p33023_1	12/03/2018	p33023_1.cpl	NO
0189	wi01102093	ISS1:1OF1	p32760_1	12/03/2018	p32760_1.cpl	NO
0190	wi01141625	ISS1:1OF1	p33324_1	12/03/2018	p33324_1.cpl	NO
0191	wi00959458	ISS1:1OF1	p31551_1	12/03/2018	p31551_1.cpl	NO
0192	wi01139981	ISS1:1OF1	p33083_1	12/03/2018	p33083_1.cpl	NO
0193	wi01197246	ISS1:1OF1	p33400_1	12/03/2018	p33400_1.cpl	NO
0194	wi01075355	ISS1:1OF1	p32594_1	12/03/2018	p32594_1.cpl	NO
0195	wi01185138	ISS1:1OF1	p33411_1	12/03/2018	p33411_1.cpl	NO
0196	wi01163826	ISS1:1OF1	p33229_1	12/03/2018	p33229_1.cpl	NO
0197	wi01095255	ISS1:1OF1	p33027_1	12/03/2018	p33027_1.cpl	NO
0198	CS1000-7267	ISS1:1OF1	p33669_1	12/03/2018	p33669_1.cpl	NO
0199	wi01184588	ISS1:1OF1	p33338_1	12/03/2018	p33338_1.cpl	NO
0200	wi01068751	ISS1:1OF1	p32445_1	12/03/2018	p32445_1.cpl	NO
0201	wi01104867	ISS1:1OF1	p32828_1	12/03/2018	p32828_1.cpl	NO
0202	wi01199608	ISS1:1OF1	p33414_1	12/03/2018	p33414_1.cpl	NO
0203	CS1000-6964	ISS1:1OF1	p33541_1	12/03/2018	p33541_1.cpl	NO
0204	CS1000-7590	ISS1:1OF1	p33780_1	12/03/2018	p33780_1.cpl	NO
0205	wi01099724	ISS1:1OF1	p32742_1	12/03/2018	p32742_1.cpl	YES
0206	CS1000-7469	ISS1:1OF1	p33739_1	12/03/2018	p33739_1.cpl	NO
0207	wi01083896	ISS1:1OF1	p32937_1	12/03/2018	p32937_1.cpl	NO
0208	CS1000-7460	ISS1:1OF1	p33735_1	12/03/2018	p33735_1.cpl	NO
0209	wi01150771	ISS1:1OF1	p33210_1	12/03/2018	p33210_1.cpl	NO
0210	cs1000-6998	ISS1:1OF1	p33555_1	12/03/2018	p33555_1.cpl	NO
0211	wi01085855	ISS1:1OF1	p32658_1	12/03/2018	p32658_1.cpl	NO
0212	wi01150083	ISS1:1OF1	p33152_1	12/03/2018	p33152_1.cpl	NO
0213	CS1000-7472	ISS1:1OF1	p33778_1	12/03/2018	p33778_1.cpl	NO
0214	wi01110593	ISS1:1OF1	p32849_1	12/03/2018	p32849_1.cpl	NO
0215	wi01052968	ISS1:1OF1	p32540_1	12/03/2018	p32540_1.cpl	NO
0216	wi01204274	ISS1:1OF1	p33451_1	12/03/2018	p33451_1.cpl	YES
0217	wi01096910	ISS1:1OF1	p32734_1	12/03/2018	p32734_1.cpl	NO
0218	wi01164281	ISS1:1OF1	p33232_1	12/03/2018	p33232_1.cpl	NO
0219	wi01097598	ISS1:1OF1	p32797_1	12/03/2018	p32797_1.cpl	NO
0220	wi01060611	ISS1:1OF1	p32809_1	12/03/2018	p32809_1.cpl	NO
0221	wi01137003	ISS1:1OF1	p33053_1	12/03/2018	p33053_1.cpl	NO
0222	CS1000-7022	ISS1:1OF1	p33560_1	12/03/2018	p33560_1.cpl	NO
0223	CS1000-7202	ISS1:1OF1	p33646_1	12/03/2018	p33646_1.cpl	NO
0224	wi01096842	ISS1:1OF1	p32731_1	12/03/2018	p32731_1.cpl	NO
0225	wi01132244	ISS1:1OF1	p33041_1	12/03/2018	p33041_1.cpl	NO
0226	wi01114038	ISS1:1OF1	p32869_1	12/03/2018	p32869_1.cpl	NO
0227	wi01153896	ISS1:1OF1	p33185_1	12/03/2018	p33185_1.cpl	NO
0228	CS1000-7053	ISS1:1OF1	p33574_1	12/03/2018	p33574_1.cpl	NO
0229	CS1000-7023	ISS1:1OF1	p33526_1	12/03/2018	p33526_1.cpl	NO
0230	wi01137694	ISS1:1OF1	p33081_1	12/03/2018	p33081_1.cpl	NO
0231	cs1000-7029	ISS1:1OF1	p33563_1	12/03/2018	p33563_1.cpl	NO
0232	CS1000-7313	ISS1:1OF1	p33692_1	12/03/2018	p33692_1.cpl	NO
0233	CS1000-7293	ISS1:1OF1	p33679_1	12/03/2018	p33679_1.cpl	NO
0234	CS1000-7340	ISS1:1OF1	p33694_1	12/03/2018	p33694_1.cpl	NO
0235	CS1000-6946	ISS1:1OF1	p33543_1	12/03/2018	p33543_1.cpl	NO
0236	wi01098905	ISS1:1OF1	p32556_1	12/03/2018	p32556_1.cpl	NO
0237	wi01041453	ISS1:1OF1	p32587_1	12/03/2018	p32587_1.cpl	NO

0238	wi01166011	ISS1:1OF1	p33235_1	12/03/2018	p33235_1.cpl	NO
0239	wi01174116	ISS1:1OF1	p33287_1	12/03/2018	p33287_1.cpl	NO
0240	wi01083036	ISS1:1OF1	p32571_1	12/03/2018	p32571_1.cpl	NO
0241	CS1000-6738	ISS1:1OF1	p33495_1	12/03/2018	p33495_1.cpl	NO
0242	wi01043367	ISS1:1OF1	p32232_1	12/03/2018	p32232_1.cpl	NO
0243	wi01197054	ISS1:1OF1	p33397_1	12/03/2018	p33397_1.cpl	NO
0244	wi01154253	ISS1:1OF1	p33206_1	12/03/2018	p33206_1.cpl	NO
0245	wi01068851	ISS1:1OF1	p32439_1	12/03/2018	p32439_1.cpl	NO
0246	wi01132215	ISS1:1OF1	p33084_1	12/03/2018	p33084_1.cpl	NO
0247	wi01108262	ISS1:1OF1	p32865_1	12/03/2018	p32865_1.cpl	YES
0248	wi01215810	ISS1:1OF1	p33494_1	12/03/2018	p33494_1.cpl	NO
0249	wi01098783	ISS1:1OF1	p32748_1	12/03/2018	p32748_1.cpl	NO
0250	wi01089519	ISS1:1OF1	p32665_1	12/03/2018	p32665_1.cpl	NO
0251	WI11032038	ISS1:1OF1	p33022_1	12/03/2018	p33022_1.cpl	NO
0252	CS1000-7500	ISS1:1OF1	p33754_1	12/03/2018	p33754_1.cpl	YES
0253	cs1000-6845	ISS1:1OF1	p33509_1	12/03/2018	p33509_1.cpl	NO
0254	WI01121737	ISS1:1OF1	p32939_1	12/03/2018	p32939_1.cpl	NO
0255	wi01075538	ISS1:1OF1	p32469_1	12/03/2018	p32469_1.cpl	NO
0256	wi01153039	ISS1:1OF1	p17588_1	12/03/2018	p17588_1.cpl	NO
0257	wi01068922	ISS1:1OF1	p32454_1	12/03/2018	p32454_1.cpl	NO
0258	CS1000-7435	ISS1:1OF1	p33745_1	12/03/2018	p33745_1.cpl	NO
0259	wi01034307	ISS1:1OF1	p32615_1	12/03/2018	p32615_1.cpl	NO
0260	wi01108828	ISS1:1OF1	p32831_1	12/03/2018	p32831_1.cpl	NO
0261	wi01185751	ISS1:1OF1	p33409_1	12/03/2018	p33409_1.cpl	YES
0262	wi01092443	ISS1:1OF1	p32676_1	12/03/2018	p32676_1.cpl	NO
0263	wi01187059	ISS1:1OF1	p33346_1	12/03/2018	p33346_1.cpl	NO
0264	wi01120458	ISS1:1OF1	p32929_1	12/03/2018	p32929_1.cpl	NO
0265	wi01146289	ISS1:1OF1	p33146_1	12/03/2018	p33146_1.cpl	NO
0266	wi01063263	ISS1:1OF1	p32573_1	12/03/2018	p32573_1.cpl	NO
0267	wi01076948	ISS1:1OF1	p32526_1	12/03/2018	p32526_1.cpl	YES
0268	wi01184272	ISS1:1OF1	p33336_1	12/03/2018	p33336_1.cpl	NO
0269	wi01118928	ISS1:1OF1	p32922_1	12/03/2018	p32922_1.cpl	NO
0270	wi01053195	ISS1:1OF1	p32297_1	12/03/2018	p32297_1.cpl	NO
0271	CS1000-7106	ISS1:1OF1	p33598_1	12/03/2018	p33598_1.cpl	NO
0272	CS1000-7453	ISS1:1OF1	p33793_1	12/03/2018	p33793_1.cpl	NO
0273	wi01079444	ISS1:1OF1	p32564_1	12/03/2018	p32564_1.cpl	NO
0274	wi01057403	ISS1:1OF1	p32591_1	12/03/2018	p32591_1.cpl	NO
0275	wi01127874	ISS1:1OF1	p25747_1	12/03/2018	p25747_1.cpl	NO
0276	wi01056633	ISS1:1OF1	p32322_1	12/03/2018	p32322_1.cpl	NO
0277	wi01171418	ISS1:1OF1	p33278_1	12/03/2018	p33278_1.cpl	NO
0278	wi01061481	ISS1:1OF1	p32382_1	12/03/2018	p32382_1.cpl	NO
0279	wi01081510	ISS1:1OF1	p32582_1	12/03/2018	p32582_1.cpl	NO
0280	wi01071379	ISS1:1OF1	p32522_1	12/03/2018	p32522_1.cpl	NO
0281	wi01151898	ISS1:1OF1	p33175_1	12/03/2018	p33175_1.cpl	NO
0282	wi01134756	ISS1:1OF1	p33453_1	12/03/2018	p33453_1.cpl	NO
0283	WI01077073	ISS1:1OF1	p32534_1	12/03/2018	p32534_1.cpl	NO
0284	WI01108562	ISS1:1OF1	p32832_1	12/03/2018	p32832_1.cpl	NO
0285	wi01201986	ISS1:1OF1	p33433_1	12/03/2018	p33433_1.cpl	NO
0286	wi01124074	ISS1:1OF1	p32989_1	12/03/2018	p32989_1.cpl	NO
0287	wi01064599	issl:1of1	p32580_1	12/03/2018	p32580_1.cpl	NO
0288	wi01145002	ISS1:1OF1	p33186_1	12/03/2018	p33186_1.cpl	NO
0289	wi01132883	ISS1:1OF1	p33030_1	12/03/2018	p33030_1.cpl	NO
0290	wi01205975	ISS1:1OF1	p33447_1	12/03/2018	p33447_1.cpl	NO
0291	wi01090535	ISS1:1OF1	p32519_1	12/03/2018	p32519_1.cpl	NO
0292	wi01189516	ISS1:1OF1	p33373_1	12/03/2018	p33373_1.cpl	NO
0293	wi01175294	ISS1:1OF1	p33290_1	12/03/2018	p33290_1.cpl	NO
0294	wi01070580	ISS1:1OF1	p32380_1	12/03/2018	p32380_1.cpl	NO
0295	wi01096712	ISS1:1OF1	p32708_1	12/03/2018	p32708_1.cpl	NO
0296	wi01126454	ISS1:1OF1	p32973_1	12/03/2018	p32973_1.cpl	NO
0297	wi01065922	ISS1:1OF1	p32516_1	12/03/2018	p32516_1.cpl	NO
0298	CS1000-7143	ISS1:1OF1	p33614_1	12/03/2018	p33614_1.cpl	NO
0299	wi01099810	ISS1:1OF1	p32796_1	12/03/2018	p32796_1.cpl	NO

0300	wi01182523	ISS1:1OF1	p33327_1	12/03/2018	p33327_1.cpl	NO
0301	wi01170583	ISS1:1OF1	p33261_1	12/03/2018	p33261_1.cpl	NO
0302	wi01072027	ISS1:1OF1	p32689_1	12/03/2018	p32689_1.cpl	NO
0303	wi01066991	ISS1:1OF1	p32449_1	12/03/2018	p32449_1.cpl	NO
0304	CS1000-7357	ISS1:1OF1	p33698_1	12/03/2018	p33698_1.cpl	NO
0305	wi01053597	ISS1:1OF1	p32304_1	12/03/2018	p32304_1.cpl	NO
0306	wi01022598	ISS1:1OF1	p32066_1	12/03/2018	p32066_1.cpl	NO
0307	CS1000-7514	ISS1:1OF1	p33764_1	12/03/2018	p33764_1.cpl	YES
0308	wi01075359	ISS1:1OF1	p32671_1	12/03/2018	p32671_1.cpl	NO
0309	wi01146705	ISS1:1OF1	p33129_1	12/03/2018	p33129_1.cpl	NO
0310	CS1000-7174	ISS1:1OF1	p33655_1	12/03/2018	p33655_1.cpl	NO
0311	wi01070473	ISS1:1OF1	p32413_1	12/03/2018	p32413_1.cpl	NO
0312	wi01173768	ISS1:1OF1	p33288_1	12/03/2018	p33288_1.cpl	NO
0313	wi01167427	ISS1:1OF1	p33264_1	12/03/2018	p33264_1.cpl	NO
0314	CS1000-7637	ISS1:1OF1	p33791_1	12/03/2018	p33791_1.cpl	YES
0315	CS1000-7276	ISS1:1OF1	p33675_1	12/03/2018	p33675_1.cpl	YES
0316	wi01201882	ISS1:1OF1	p33427_1	12/03/2018	p33427_1.cpl	NO
0317	CS1000-7489	ISS1:1OF1	p33747_1	12/03/2018	p33747_1.cpl	NO
0318	wi01094832	iss1:1of1	p32718_1	12/03/2018	p32718_1.cpl	NO
0319	wi01060382	iss1:1of1	p32623_1	12/03/2018	p32623_1.cpl	YES
0320	CS1000-7587	ISS1:1OF1	p33779_1	12/03/2018	p33779_1.cpl	NO
0321	wi01146254	ISS1:1OF1	p33127_1	12/03/2018	p33127_1.cpl	NO
0322	wi01120705	ISS1:1OF1	p32930_1	12/03/2018	p32930_1.cpl	NO
0323	CS1000-7171	ISS1:1OF1	p33626_1	12/03/2018	p33626_1.cpl	NO
0324	wi01208515	ISS1:1OF1	p33455_1	12/03/2018	p33455_1.cpl	NO
0325	wi01088055	ISS1:1OF1	p32607_1	12/03/2018	p32607_1.cpl	NO
0326	wi01114695	ISS1:1OF1	p32885_1	12/03/2018	p32885_1.cpl	NO
0327	wi01070756	ISS1:1OF1	p32444_1	12/03/2018	p32444_1.cpl	NO
0328	wi01124477	ISS1:1OF1	p32963_1	12/03/2018	p32963_1.cpl	NO
0329	wi01154485	ISS1:1OF1	p33194_1	12/03/2018	p33194_1.cpl	NO
0330	wi01181423	ISS1:1OF1	p33318_1	12/03/2018	p33318_1.cpl	NO
0331	wi01156086	ISS1:1OF1	p33269_1	12/03/2018	p33269_1.cpl	NO
0332	wi01165881	ISS1:1OF1	p33239_1	12/03/2018	p33239_1.cpl	NO
0333	wi01142792	ISS1:1OF1	p33099_1	12/03/2018	p33099_1.cpl	NO
0334	wi01212527	ISS1:1OF1	p33481_1	12/03/2018	p33481_1.cpl	YES
0335	wi01101969	ISS1:1OF1	p32726_1	12/03/2018	p32726_1.cpl	NO
0336	wi01065125	ISS1:1OF1	p32416_1	12/03/2018	p32416_1.cpl	NO
0337	wi01099292	ISS1:1OF1	p32886_1	12/03/2018	p32886_1.cpl	NO
0338	wi01127527	ISS1:1OF1	p32988_1	12/03/2018	p32988_1.cpl	YES
0339	wi01165870	ISS1:1OF1	p33238_1	12/03/2018	p33238_1.cpl	NO
0340	CS1000-7564	ISS1:1OF1	p33772_1	12/03/2018	p33772_1.cpl	NO
0341	CS1000-7549	ISS1:1OF1	p33767_1	12/03/2018	p33767_1.cpl	YES
0342	wi01213334	ISS1:1OF1	p33485_1	12/03/2018	p33485_1.cpl	NO
0343	wi01119100	ISS1:1OF1	p32925_1	12/03/2018	p32925_1.cpl	NO
0344	wi01053950	ISS1:1OF1	p32654_1	12/03/2018	p32654_1.cpl	YES
0345	wi01147983	ISS1:1OF1	p33141_1	12/03/2018	p33141_1.cpl	NO
0346	CS1000-6791	ISS1:1OF1	p33501_1	12/03/2018	p33501_1.cpl	YES
0347	WI01169289	ISS1:1OF1	p33257_1	12/03/2018	p33257_1.cpl	NO
0348	wi01130815	ISS1:1OF1	p33017_1	12/03/2018	p33017_1.cpl	NO
0349	CS1000-7086	ISS1:1OF1	p33587_1	12/03/2018	p33587_1.cpl	NO
0350	cs1000-7223	ISS1:1OF1	p33647_1	12/03/2018	p33647_1.cpl	YES
0351	wi01215563	ISS1:1OF1	p33412_1	12/03/2018	p33412_1.cpl	NO
0352	cs1000-7269	ISS1:1OF1	p33670_1	12/03/2018	p33670_1.cpl	NO
0353	wi01132902	ISS1:1OF1	p33028_1	12/03/2018	p33028_1.cpl	NO
0354	wi01127447	ISS1:1OF1	p32990_1	12/03/2018	p32990_1.cpl	NO
0355	CS1000-6978	ISS1:1OF1	p33551_1	12/03/2018	p33551_1.cpl	YES
0356	wi01121374	ISS1:1OF1	p31107_1	12/03/2018	p31107_1.cpl	NO
0357	wi01060241	ISS1:1OF1	p32381_1	12/03/2018	p32381_1.cpl	NO
0358	wi01082456	ISS1:1OF1	p32596_1	12/03/2018	p32596_1.cpl	NO
0359	wi01094305	ISS1:1OF1	p32640_1	12/03/2018	p32640_1.cpl	NO
0360	wi01136194	ISS:1OF1	p33051_1	12/03/2018	p33051_1.cpl	NO
0361	wi01087543	ISS1:1OF1	p32662_1	12/03/2018	p32662_1.cpl	NO

0362	CS1000-6844	ISS1:1OF1	p33507_1	12/03/2018	p33507_1.cpl	NO
0363	wi01153844	ISS1:1OF1	p33172_1	12/03/2018	p33172_1.cpl	NO
0364	wi01171467	ISS1:1OF1	p33270_1	12/03/2018	p33270_1.cpl	NO
0365	wi00937672	ISS1:1OF1	p31276_1	12/03/2018	p31276_1.cpl	NO
0366	wi01075540	ISS1:1OF1	p32492_1	12/03/2018	p32492_1.cpl	NO
MDP>LAST SUCCESSFUL MDP REFRESH :2018-01-25 09:31:00(Local Time)						
MDP>USING DEPLIST ZIP FILE DOWNLOADED :2017-06-30 15:52:25(est)						

Appendix B

Avaya Communication Server 1000 Route for SIP Line Gateway

```
LD 21
REQ PRT
TYPE: rdb
CUST 1
ROUT 111

TYPE RDB
CUST 01
ROUT 111
DES SIPL
TKTP TIE
M911P NO
ESN NO
RPA NO
CNVT NO
SAT NO
RCLS EXT
VTRK YES
ZONE 00255
PCID SIPL
CRID NO
NODE 2005
DTRK NO
ISDN YES
    MODE ISLD
    DCH 105
    IFC SL1
    PNI 00211
    NCNA YES
    NCRD YES
    TRO NO
    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 8111
TCPP NO
PII NO
AUXP NO
TARG 01
CLEN 10
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
TIMR ICF 512

PAGE 002
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
PECL NO
DCTI 0

PAGE 003
TIDY 8111 111
ATTR NO
TRRL NO
SGRP 0
CCBA NO
ARDN NO
CTBL 0
AACR NO
```

Avaya Communication Server 1000 D-Channel for SIP line Gateway

```
LD 22
REQ prt
ADAN DCH 211
CTYP DCIP
DES SIPL
USR ISLD
ISLM 4000
SSRC 3700
OTBF 32
NASA NO
IFC SL1
CNEG 1
RLS ID 25
RCAP ND2 MWI
MBGA NO
H323
OVLN NO
OVLS NO
```

Avaya Communication Server 1000 Trunk Channel for SIP line Gateway

LD 20

```
DES  SIPL1
TN   104 0 03 00  VIRTUAL
TYPE IPTI
CDEN 8D
CUST 1
XTRK VTRK
ZONE 00255
LDOP BOP
TIMP 600
BIMP 600
AUTO_BIMP NO
NMUS NO
TRK  ANLG
NCOS 0
RTMB 111 1
CHID 33
TGAR 1
STRI/STRO IMM IMM
SUPN YES
AST  NO
IAPG 0
CLS  UNR DIP CND ECD WTA LPR APN THFD XREP SPCD MSNV
      P10 NTC MID
TKID
AACR NO
DATE 2 JAN 2018
```

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