



Avaya Solution & Interoperability Test Lab

Application Notes for configuring ESTOS ECSTA R4.0 with Avaya Communication Server 1000E R7.6 using a CTI connection - Issue 1.0

Abstract

These Application Notes describe the configuration steps for provisioning ESTOS ECSTA to interoperate with Avaya Communication Server 1000E R7.6.

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 ESTOS ECSTA to interoperate with Avaya Communication Server 1000E R7.6 (CS1000E). The CS1000E is connected seamlessly via Ethernet through the computer telephony interface (CTI) link to a Windows computer where the ECSTA driver is installed. The middleware communicates with the PBX via the ECMA-standardized Computer Supported Telecommunications Applications (CSTA) protocol.

ECSTA with TAPI for Avaya synchronizes perfectly with the newest generation of Microsoft operating systems, such as Windows Server 2012 R2 and Windows 8.1. It supports the newest standards and characteristics for computer-supported telecommunications applications (CSTA) and captures attention through its simple installation and maintenance. Furthermore, the logically constructed user interface ensures intuitive operation for the administrator.

The driver can handle multiple instances (for Multisite projects) and is available in 32- and 64-Bit Windows operating system compliant versions.

2. General Test Approach and Test Results

The general test approach was to configure the ESTOS ECSTA to communicate with the Avaya Communication Server 1000E using the CTI interface on the CS1000E signalling server. ESTOS EPhones were used as Telephony Application Programming Interface (TAPI) clients in conjunction with Microsoft TAPI to control the Avaya Deskphones. See **Figure 1** for a network diagram. The interoperability compliance test included both feature functionality and serviceability tests.

Note: A client was not used during compliance testing. Instead a test harness called Ephone.exe provided by ESTOS was used to demonstrate call control of the CS1000E endpoints which included 1100 Series IP UNISim phones and an M3904 Digital phone.

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.

2.1. Interoperability Compliance Testing

The interoperability compliance testing focused on various technical testing scenarios to verify the usage of ECSTA with the CS1000E. 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:

- **Acquire existing CS1000E extensions** – ECSTA acquires the Avaya sets that are configured on the ECSTA driver. The sets 3000, 3015 and 3030 were all acquired for compliance testing.
- **Calls to CS1000E extensions**– Ensure that calls can be made to CS1000E extensions and answered using EPhone.
- **Calls from CS1000E extensions**– Ensure that calls can be made from CS1000E extensions using EPhone.
- **Calls to PSTN from CS1000E extensions** - Ensure that calls can be made to the PSTN using EPhone.
- **Calls from PSTN into CS1000E extensions** – Ensure that calls can be made to the CS1000E sets and answered using EPhone.
- **Hold/transfer and conference functionality**– Verify that calls can be placed on hold and transferred and conferenced.
- **Failover testing** - Verify the behaviour of ECSTA when there is a simulated LAN failure.

2.2. Test Results

All test cases passed except for the following issue.

- Using “Dial Digits” with Callpilot in order to send DTMF. The mailbox number was sent correctly however when the password was sent an error “line generate digits (0x0000048) operation failed” was observed and on another occasion the error “Line set call privilege (0x0000018) invalid call handle” was observed.

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 10** of these Application Notes.

Technical Support can be obtained for ESTOS products as follows:

- Online: <http://www.estos.com/contact/online-support-request.html>
- Phone: + 49 (8151) 36856-177

3. Reference Configuration

Figure 1 illustrates the network topology used during compliance testing. The CTI feature is enabled on the CS1000E signaling server. ESTOS ECSTA is running on a Windows 7 64bit PC. Avaya 1140 UNISTim IP, Avaya 1120 UNISTim IP and an Avaya Digital 3904 set were configured on the CS1000E and were acquired by the ESTOS client EPhone. During compliance testing an ESTOS test harness called EPhone.exe was used as a TAPI client in conjunction with Microsoft TAPI to control the Avaya Deskphones. Inbound and outbound calls to the PSTN were made using a simulated PSTN. All voice was handled by the Avaya Deskphones.

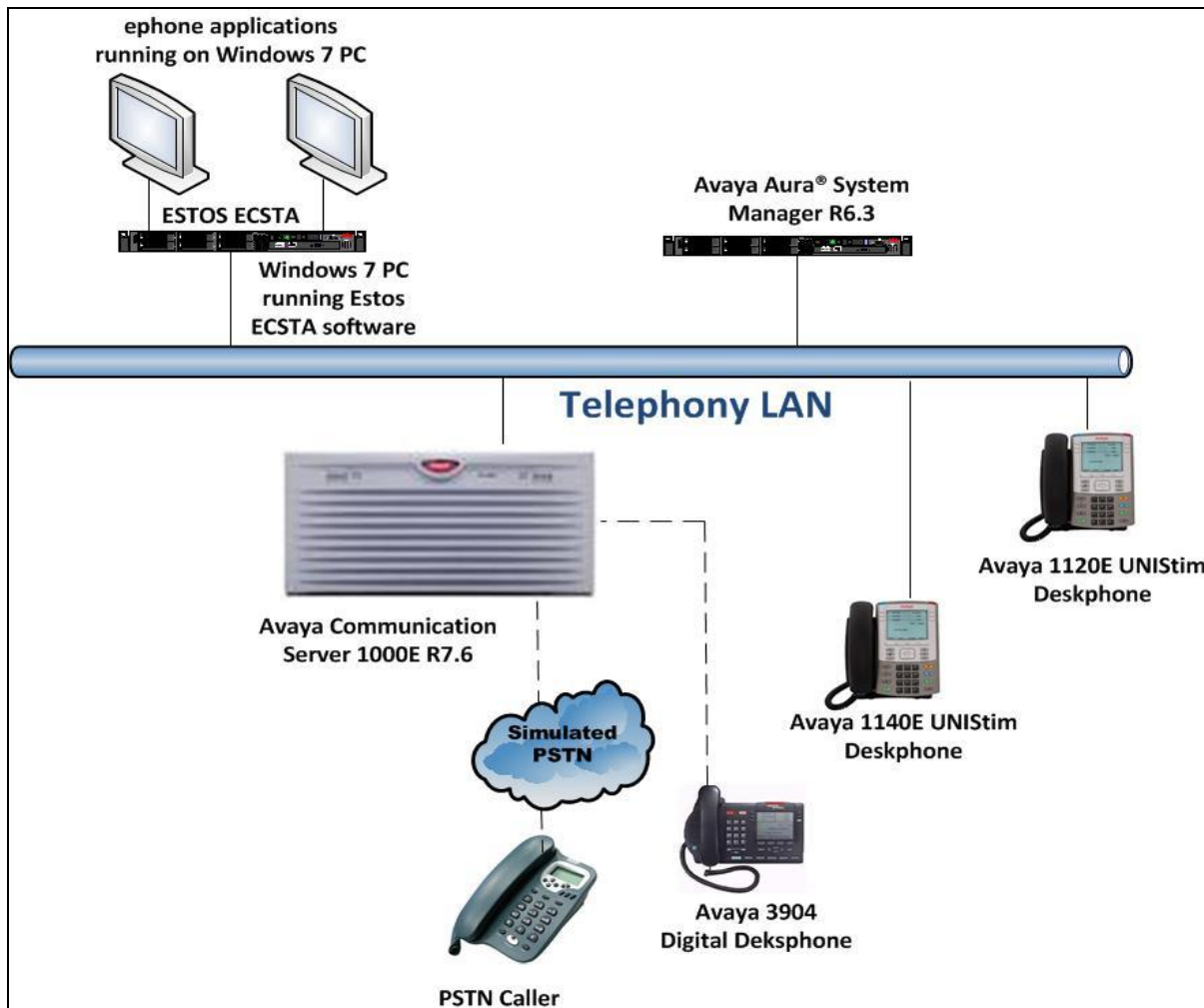


Figure 1: Connection of ESTOS ECSTA with Avaya Communication Server 1000E R7.6

4. Equipment and Software Validated

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

Device Description	Versions Tested
Avaya Communication Server 1000E running on CPPM	R7.6 (See Appendix A for Patch details)
Avaya Aura® System Manager running on Virtual Server	R6.3.10 [Build 6.3.0.8.5682-6.3.8.4514] [SW Update Rev 6.3.10.7.2656]
Avaya Aura® Session Manager running on a Virtual Platform	R6.3 [Build 6.3.9.0.639011]
Avaya 1140 UNISTim Deskphone	UNISTim V0625C8D
Avaya 1120 UNISTim Deskphone	UNISTim V0624C8D
Avaya 3904 Digital set	Core Firmware 024 Flash Firmware 094
Dell Laptop running Windows 7 64bit - Microsoft TAPI driver	ESTOS ECSTA Version 4.0.6.3517 Version 3.1

5. Configure Avaya Communication Server 1000E

It is assumed that a fully functioning CS1000E is in place with the necessary licensing and with Avaya phones already programmed on the CS1000E. See **Appendix B** for a printout of the 1120e extension that was used during compliance testing. For further information on the configuration of CS1000E please see reference [1] in **Section 10** of these Application Notes.

PuTTY is used to administer the CS1000E. Using Putty, open an SSH Session to the Node IP address of the CS1000E, log in to the CS1000E 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 CS1000E in the form of a QSIG ISDN connection, the configuration of which is outside the scope of these Application Notes.

5.1. Verify Licenses on CS1000E for ECSTA

A SIP CTI License is required to allow the ESTOS ECSTA solution to interoperate with the CS1000E. To ensure the CS1000E is licensed for SIP CTI use **LD 22** and type **SLT** at the **REQ** prompt. Check for **SIP CTI TR87** (In bold below). If there are no licenses please contact your Avaya representative.

LD 22

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	2000	LEFT	1992	USED	8
DECT USERS	2000	LEFT	2000	USED	0
IP USERS	4000	LEFT	3982	USED	18
BASIC IP USERS	2000	LEFT	1998	USED	2
TEMPORARY IP USERS	2000	LEFT	2000	USED	0
DECT VISITOR USER	2000	LEFT	2000	USED	0
ACD AGENTS	2000	LEFT	1995	USED	5
MOBILE EXTENSIONS	2000	LEFT	1999	USED	1
TELEPHONY SERVICES	2000	LEFT	2000	USED	0
CONVERGED MOBILE USERS	2000	LEFT	2000	USED	0
AVAYA SIP LINES	2000	LEFT	1997	USED	3
THIRD PARTY SIP LINES	2000	LEFT	1998	USED	2
PCA	2000	LEFT	2000	USED	0
ITG ISDN TRUNKS	2000	LEFT	2000	USED	0
H.323 ACCESS PORTS	2000	LEFT	1990	USED	10
AST	2000	LEFT	1982	USED	18
SIP CONVERGED DESKTOPS	2000	LEFT	2000	USED	0
SIP CTI TR87	2000	LEFT	1993	USED	7
SIP ACCESS PORTS	2000	LEFT	1970	USED	30
RAN CON	2000	LEFT	2000	USED	0

MUS CON	2000	LEFT	2000	USED	0
IP RAN CON	2000	LEFT	2000	USED	0
IP MUS CON	2000	LEFT	2000	USED	0
IP MEDIA SESSIONS	2000	LEFT	1997	USED	3
TNS	10000	LEFT	9812	USED	188
ACDN	24000	LEFT	23979	USED	21
AML	16	LEFT	12	USED	4
IDLE_SET_DISPLAY Cores3 Rls 7.5					
LTID	2000	LEFT	2000	USED	0
RAN RTE	512	LEFT	510	USED	2
ATTENDANT CONSOLES	100	LEFT	99	USED	1
IP ATTENDANT CONSOLES	2000	LEFT	1999	USED	1
BRI DSL	10000	LEFT	10000	USED	0

5.2. Configure the ELAN connection on the CS1000E for ECSTA

Use the **CHG** command in **LD17** to configure an ELAN to communicate to the ESTOS ECSTA server. Follow the commands shown below to create a **new elan 32**. Note that it should be 32 that is entered for the new ELAN.

LD 17

Prompt	Response	Description
>	LD 17	Enter Overlay 17
REQ	chg	Change
TYPE	adan	Change the Action Device and Number
ADAN	new elan 32	Create New ELAN
CTYP	elan	Card type is ELAN
DES	Estos	Description

Use the **CHG** command in **LD17** to configure **VAS** to communicate to the ESTOS ECSTA server. AT the **ELAN** prompt enter **32** as was configured above. Ensure that **SECU** is set to **yes**.

LD 17

Prompt	Response	Description
>	LD 17	Enter Overlay 17
REQ	chg	Change
TYPE	vas	Value added service
VAS	new	Create new VAS
VSID	32	VAS ID
ELAN	32	ELAN number
SECU	yes	Security

5.3. Configure the existing CS1000E extensions for ECSTA

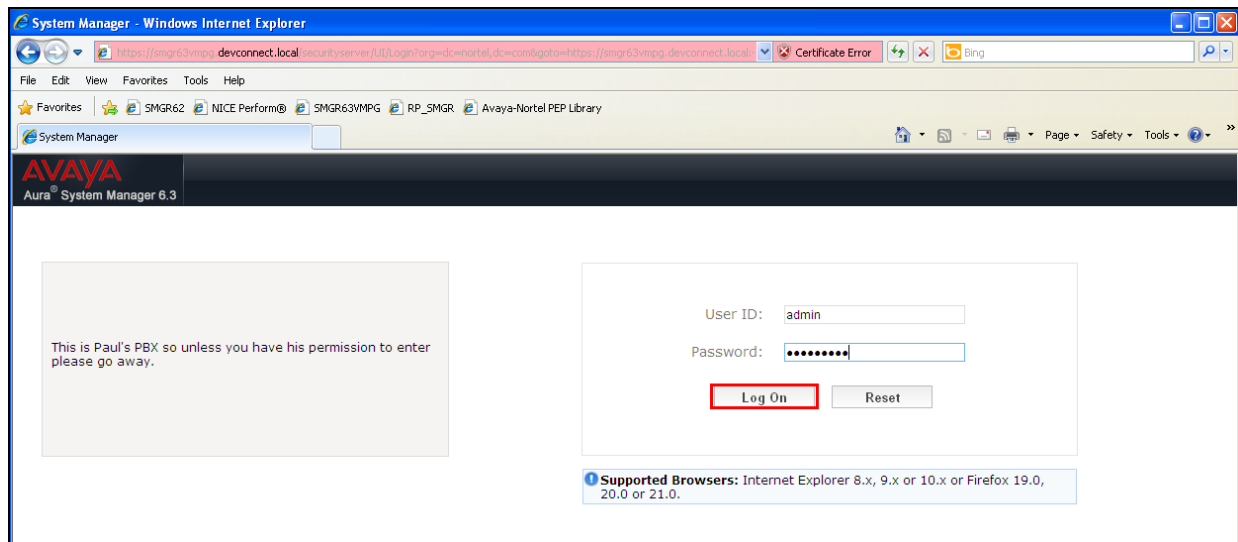
Each Deskphone to be acquired by the CTI clients need the following configured: **CLS = T87A**, **AST = 00**, **IPGI = 1**. Use the **CHG** command in **LD 20** to change the values if the deskphone is already configured. If adding the deskphone for the first time use the **NEW** command also in **LD 20**. The example below shows how to change the configuration for an 1120 IP deskphone. This procedure is the same for other types of sets.

LD 20

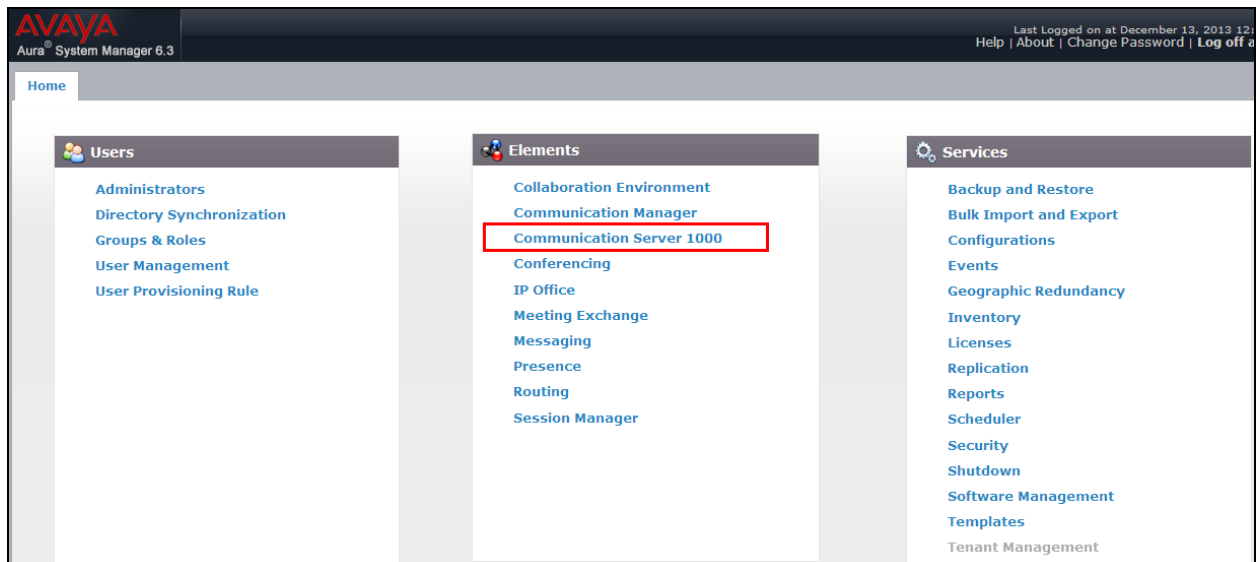
Prompt	Response	Description
>	LD 20	Enter Overlay 20
REQ	chg	Change Data
TYPE	1120	3904 TelePhone set type
TN	100 0 0 0	Terminal number
CUST	0	Customer Number
CLS	T87A	Class of Service
AST	00	Key Assignments of TelePhone set
IAPG	1	Event Group for UCM Message

6. Configure Avaya Communication Server 1000E Signalling Server

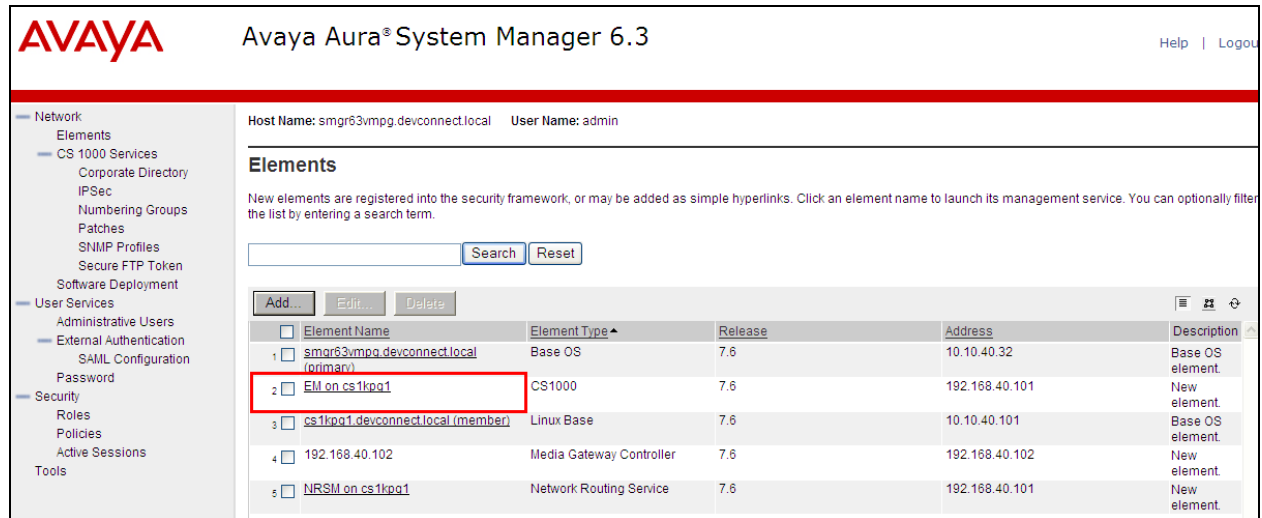
Access to the CS1000E Signalling Server is achieved by logging into System Manager using a Web Browser by entering **http://<FQDN>/SMGR**, where <FQDN> is the fully qualified domain name of System Manager or **http://<IP Address>/SMGR**. Log in using appropriate credentials.



Once logged in, click on **Communication Server 1000** as highlighted.



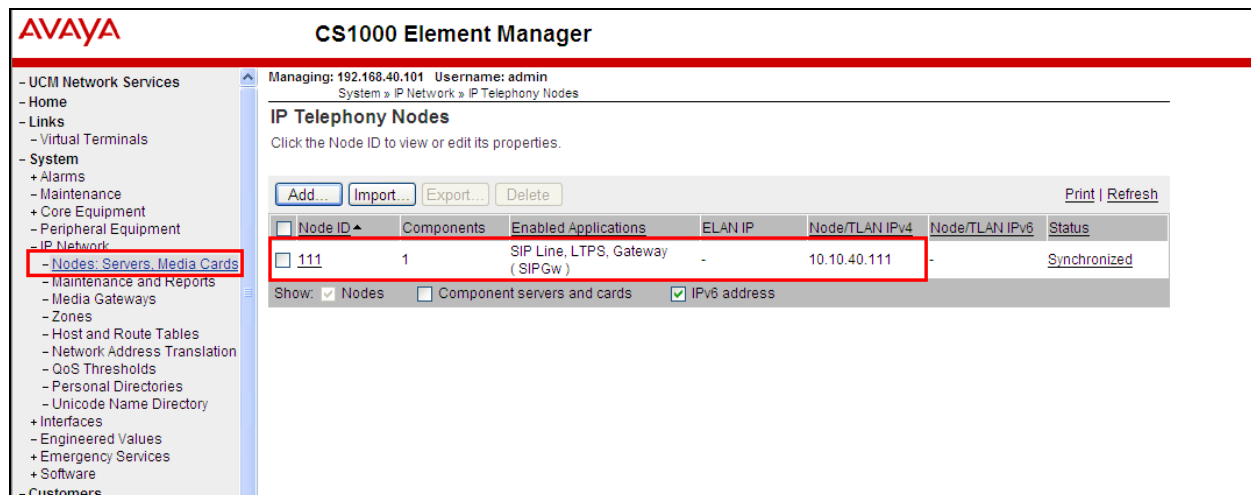
The following screen appears showing the various **Elements**, select **EM on cs1kpg1** (note this name may appear different depending on the system).



The screenshot shows the Avaya Aura System Manager 6.3 interface. The left sidebar contains a navigation tree with categories like Network, User Services, Security, and Tools. The main area is titled 'Elements' and displays a table of registered elements. The element 'EM on cs1kpg1' is highlighted with a red box.

Element Name	Element Type	Release	Address	Description
smgr63vmpg.devconnect.local (primary)	Base OS	7.6	10.10.40.32	Base OS element.
EM on cs1kpg1	CS1000	7.6	192.168.40.101	New element.
cs1kpg1.devconnect.local (member)	Linux Base	7.6	10.10.40.101	Base OS element.
192.168.40.102	Media Gateway Controller	7.6	192.168.40.102	New element.
NRSM 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 CS1000E. In the example below this **Node ID** is **111**. Open this node by clicking on **111** highlighted below.



The screenshot shows the CS1000 Element Manager interface. The left sidebar has a navigation tree with categories like UCM Network Services, Home, Links, System, and Customers. The main area is titled 'IP Telephony Nodes' and displays a table of nodes. The node with ID '111' is highlighted with a red box.

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

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 * 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

Note the correct **SIP domain name**, **port** and the **Gateway endpoint name**; 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.

* Required Value.

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

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

Scroll down to **SIP CTI Services** check the **Enable CTI service** check box, uncheck the **TLS endpoints only** check box, and select **phone-context=dialstring** from the **Calling device URI format** dropdown box. Click the **Save** button to save the configurations. Once the **Save** button is clicked the **Node Details** page will open.

Note: Changes made on this page will **NOT** be transmitted until the Node is also saved. Click on **Save** at the bottom right of the screen.

AVAYA CS1000 Element Manager

Managing: 172.18.20.14 Username: admin2
System » IP Network » IP Telephony Nodes » Node Details » Virtual Trunk Gateway Configuration

Node ID: 3 - Virtual Trunk Gateway Configuration Details

General | SIP Gateway Settings | SIP Gateway Services | H.323 Gateway Settings

Invite message for MV set: sip:convergeddesktop@nortelconverged-com:conditio
Notify message for converged desktop: sip:convergeddesktop@

SIP CTI Service: ☒ Enable CTI service ☐ TLS endpoints only

CTI settings
Customer number: 0
Maximum associations per DN: 3
International calls: ☐ Place as national
For calls within this country.

Dial plan prefixes
National:
International:
Location code call:
Special number:
Subscriber:

CTI CLID presentation
Dialing plan: CDP
Calling device URI format: phone-context=dialstring

* 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.

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))

Node ID: 111 * (0-9999)
Call server IP address: 192.168.40.101 * TLAN address type: ☒ IPv4 only ☐ IPv4 and IPv6
Embedded LAN (ELAN) Gateway IP address: 192.168.40.1 * Subnet mask: 255.255.255.0 *
Telephony LAN (TLAN) Node IPv4 address: 10.10.40.111 * Subnet mask: 255.255.255.0 *
Node IPv6 address:

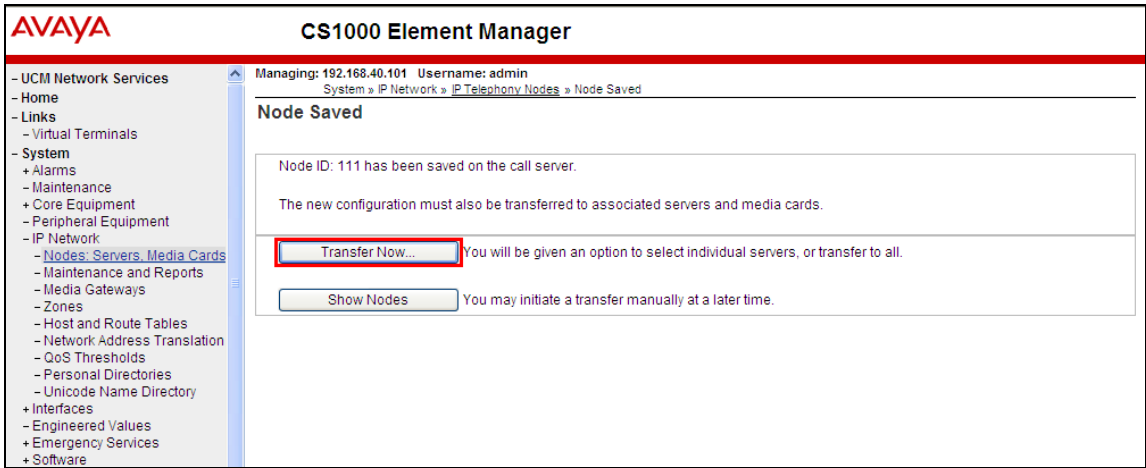
* Required Value. **Save** Cancel

Associated Signaling Servers & Cards

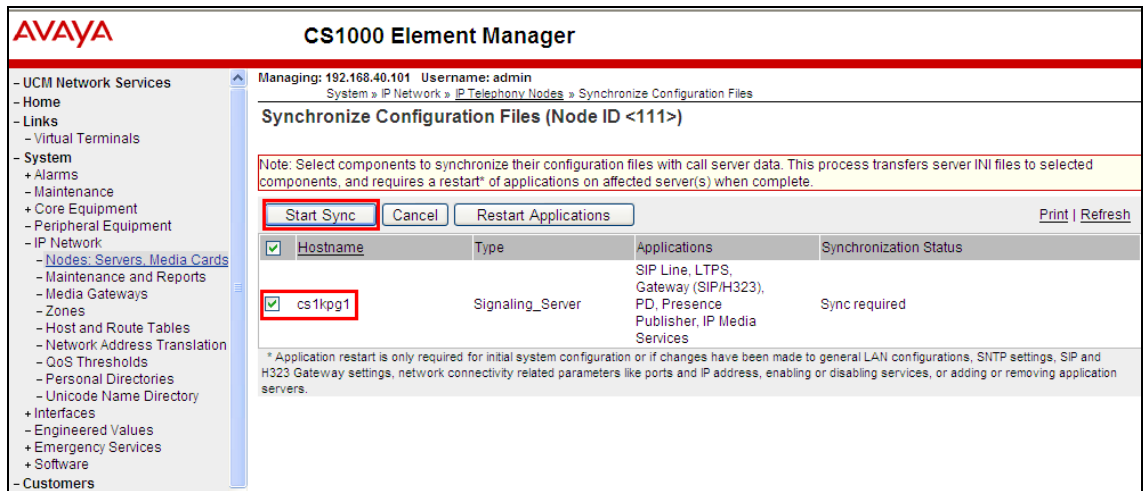
Select to add Add Remove Make Leader Print Refresh

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

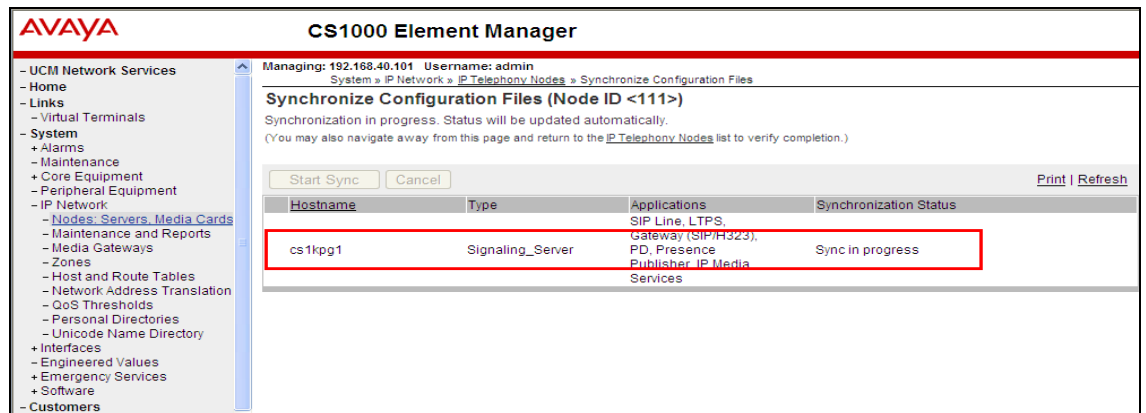
Select **Transfer Now** as shown below.



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**.



The following screen shows the **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

<input checked="" type="checkbox"/>	Hostname	Type	Applications	Synchronization Status
<input checked="" type="checkbox"/>	cs1kpg1	Signalling_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.

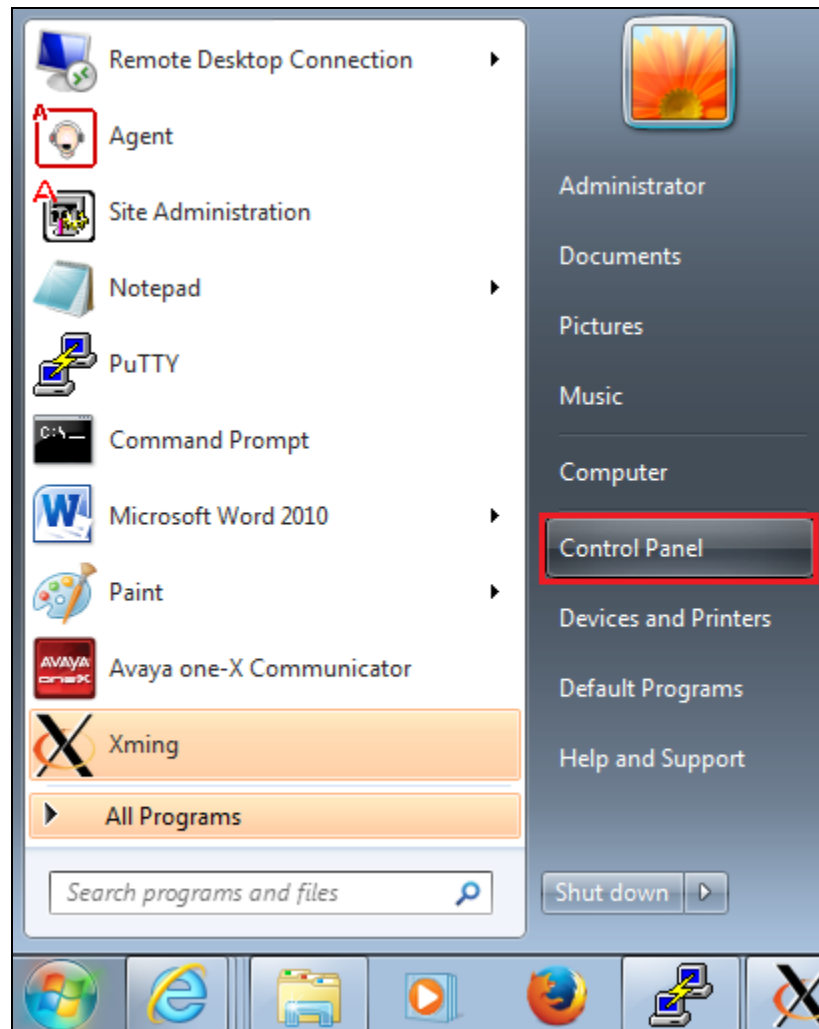
7. Configure ESTOS ECSTA

This section describes the steps required to configure the ESTOS ECSTA application in order to connect successfully with the CS1000E. It is implied that the ECSTA is already installed. For all other provisioning information such as initial installation, please refer to the product documentation in **Section 10**.

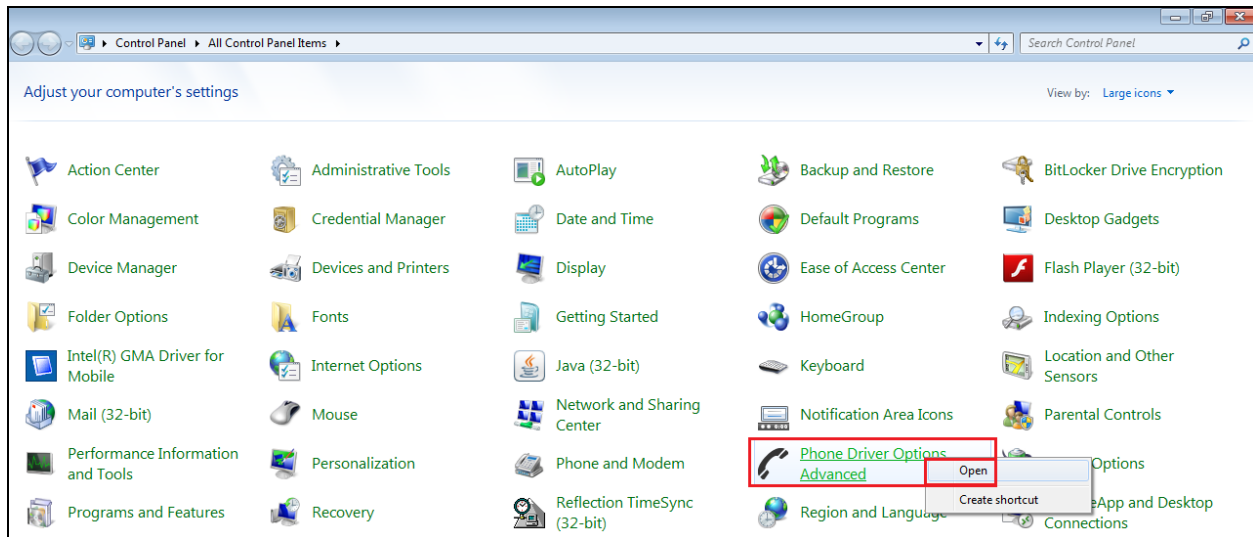
Note: ESTOS EPhone which was used as the TAPI client during compliance testing and its installation is outside the scope of this document.

7.1. Configure Phone Driver Options

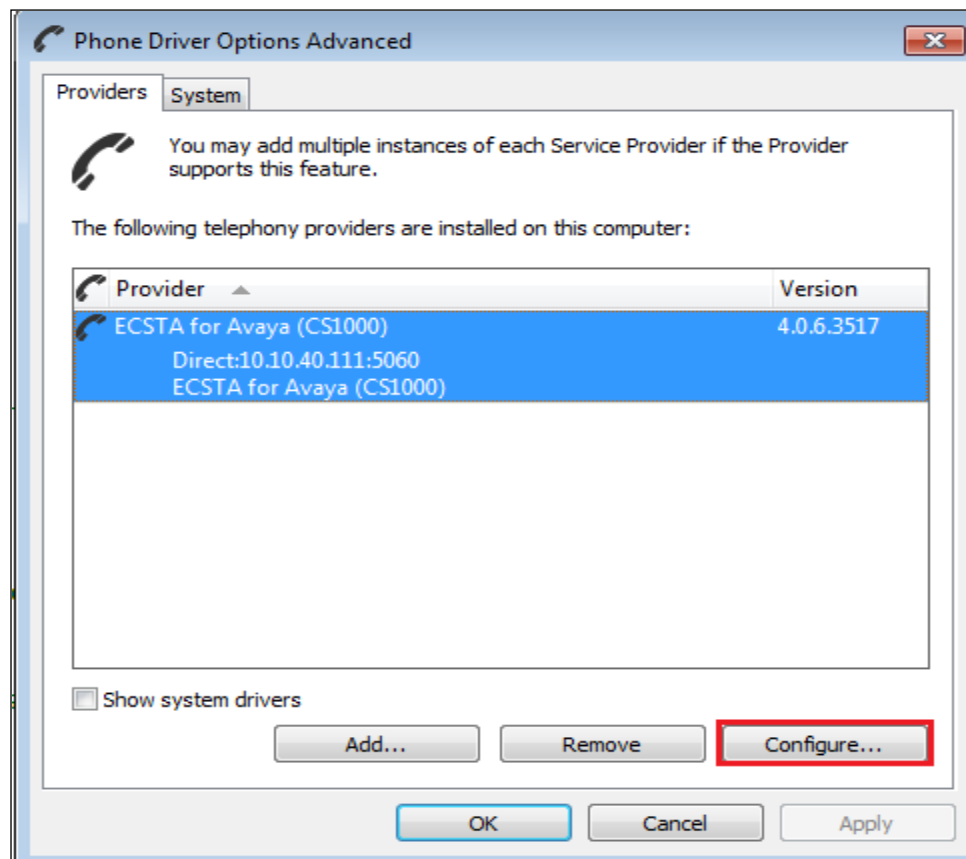
The configuration of the ESTOS ECSTA is configured using the Phone Driver Options Advanced. From the PC or server where the ECSTA is installed, open **Control Panel**.



Right click on **Phone Driver Options Advanced** and select **Open**.



The **ECSTA for Avaya (CS1000)** driver should be present from the installation of ECSTA. Select this driver and click on **Configure**.



Select the Connection tab at the top left and enter the following information.

- **Provide** IP Address of the CS1000E node.
- **CS1000 Node sip URI** CS1000E Gateway Endpoint Name@SIP Domain Name (see **Section 6**).
- **Bind to IP Interface** set this to **all available** and set the port to **5060**.

Click on **Apply**.

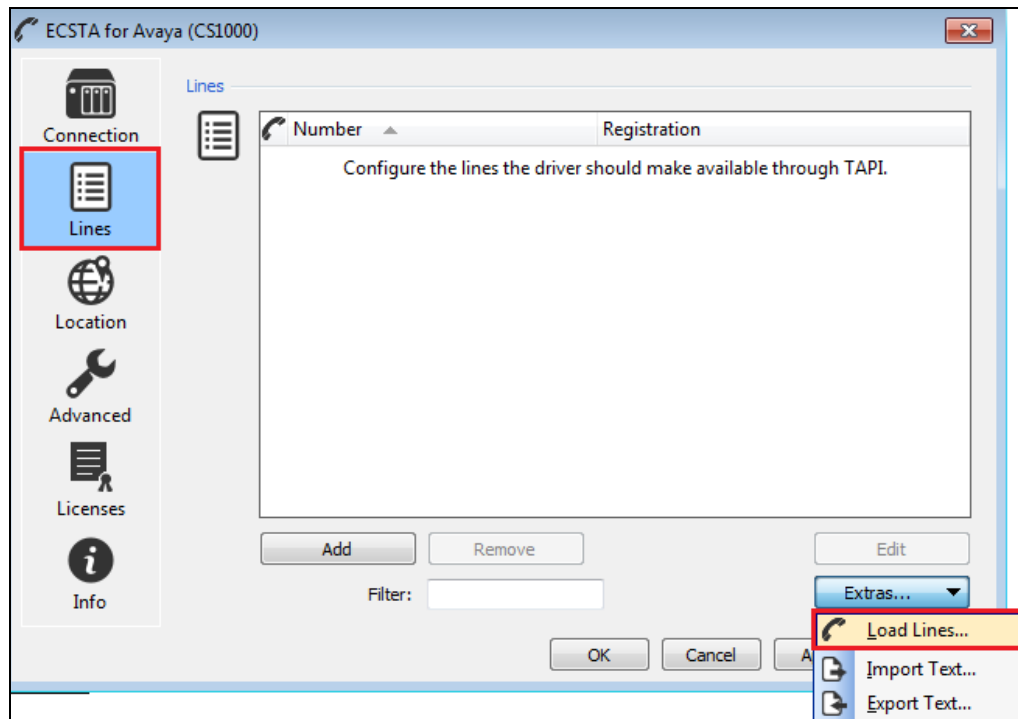
Note: The **CS1000 Node sip URI** is made up of the **Gateway Endpoint name** and **SIP domain name** found in **Section 6**.

The screenshot shows the 'ECSTA for Avaya (CS1000)' configuration window. The 'Connection' tab is selected in the left sidebar. The main area is titled 'Connection' and contains the following fields:

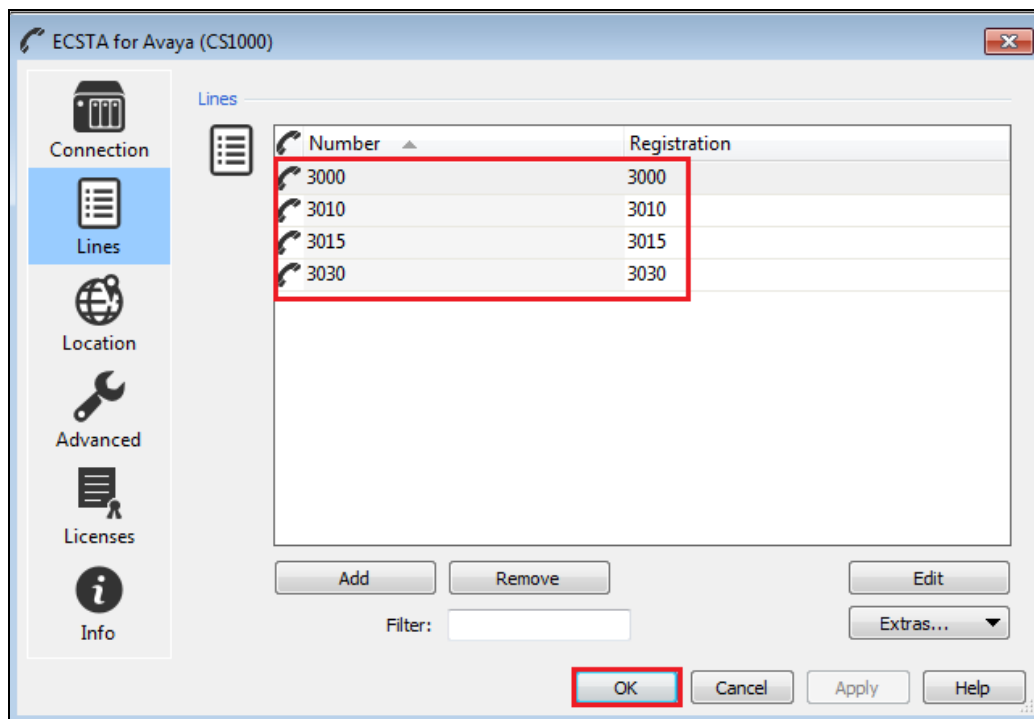
- Provide** (selected radio button)
- Open diagnostic to:** 10 . 10 . 40 . 111
- Licenses** (unselected radio button)
- Primary** and **Secondary** IP address fields (both empty)
- ECSTA Gateway sip URI**: sip:ecsta@mydomain
- CS1000 Node sip URI**: sip:CS1KPG1@devconnect.local
- Bind to IP Interface / TCP port**: all available (dropdown menu) and 5060 (text field)
- Comments for this connection:** (empty text area)

At the bottom of the window are buttons for **OK**, **Cancel**, **Apply**, and **Help**.

Click on the **lines** tab and select **Load Lines** from the **Extras..** dropdown box as is highlighted below.



The lines configured on the CS1000E for ECSTA should now be visible as shown below.



Click on the **Location** tab. Fill in the correct extension range, in the **First Extension (Phone Number)** and **Last Extension (Phone Number)** boxes enter the first and last deskphone number to be acquired. In the **phone-context=** box enter **dialstring**. Click on **Apply**.

ECSTA for Avaya (CS1000)

Location

☐ Use Location

Country Code 1 for USA

Area Code 212 NY City

Local Office Code 1234 for Company

Phone Number Range

First Extension (Phone Number) e.g. 10

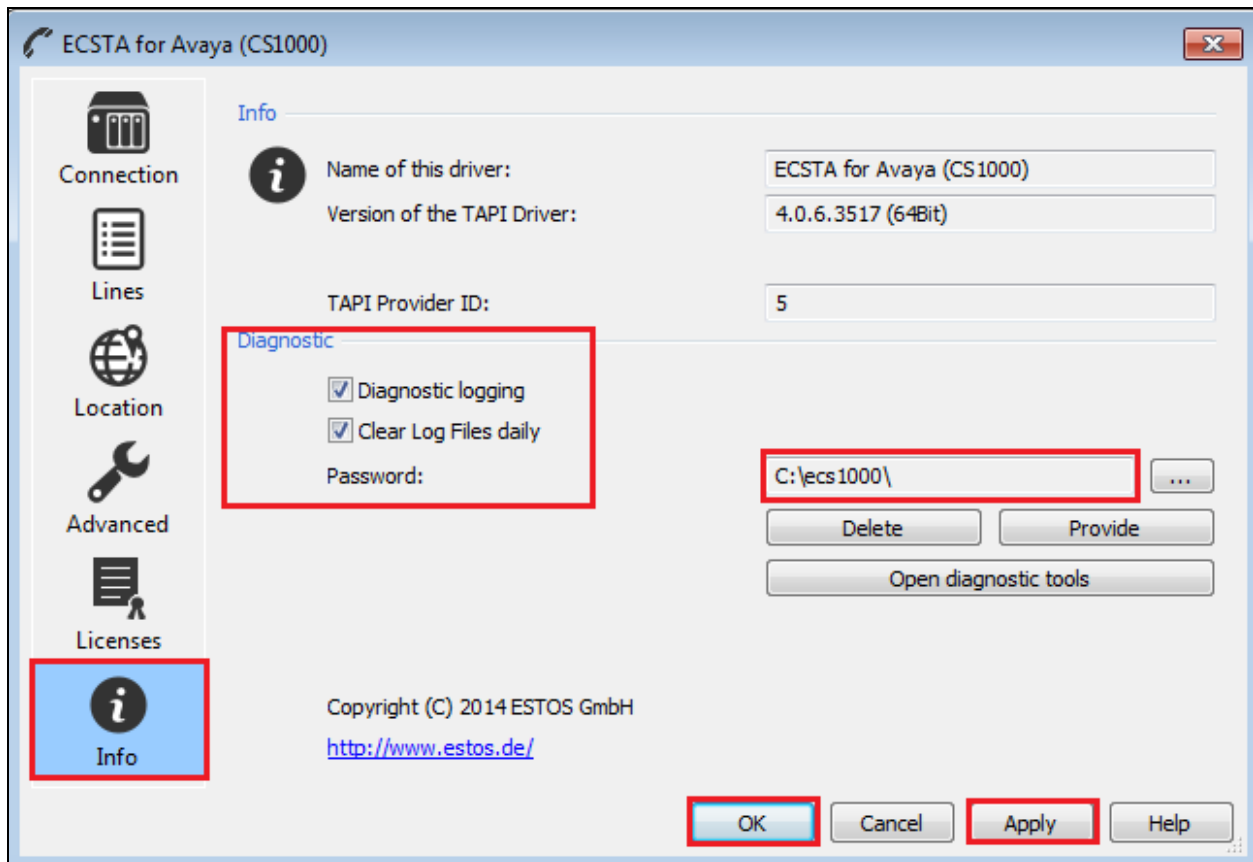
Last Extension (Phone Number) e.g. 350

phone-context= Domain or 'dialstring'

Phone Number Format

You may apply rules for the formatting of phone numbers.

If logs are to be taken then click on the info tab and ensure that the two options **Diagnostic logging** and **Clear Log Files daily** are ticked. Click on **Apply** and then **OK** to save the changes.



8. Verification Steps

The following step can be taken to ensure that the connection between ESTOS ECSTA and the CS1000E is configured correctly. Verify that the CS1000E phones are acquired by ECSTA and verify that the calls can be made to and from these phones using EPhone from ESTOS.

8.1. Verify Avaya Communication Server 1000E deskphones are acquired

The following step will show the status of the CS1000E deskphones and if they are acquired by the ECSTA. Using the Terminal number (TN) of the deskphone acquired, use the **PRT** command in LD 20 to verify it is acquired correctly. At the **TYPE** prompt enter **TNB** and at the **TN** prompt enter the TN of the deskphone (i.e. **100 0 0 0**). Press Enter until the complete configuration of the deskphone is output. At the **AACS**, **ACQ**, **ASID**, **SFNB**, **SFRB**, **USFB**, **CALB**, and **FCTB** prompts something similar as shown in the extract below should be seen.

Note: A full printout of this deskphone can be found in **Appendix B** of these Application Notes.

LD 20

Prompt	Response	Description
>	LD 20	Enter Overlay 20
REQ	PRT	Print Data
TYPE	TNB	Terminal number
TN	100 0 0 0	Terminal number
(Return)		
(Return)		
AST 00		
IAPG 1		
AACS YES		
ACQ AS: AST-DN		
ASID 32		
SFNB 1 2 3 5 6 7 8 9 10 11 12 13 15 16 17 18 19 20 21 22 23 24		
25 32 33 34 35 36 37 38 39		
SFRB 32 33 34 35 36 37 38 39		
USFB 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15		
CALB 0 1 2 3 4 5 6 7 8 9 10 11		
FCTB		
ITNA NO		

8.2. Verify ESTOS ECSTA connection to Avaya Communication Server 1000E Node

Navigate to the ESTOS log files contained in **c:\ecstaCS1000** and open **general5_0.txt** (not shown). Verify connectivity with the CS1000E Node (**10.10.40.111**) on port **5060** by the Ephone test tool controlling extension **3000** via ECSTA, as shown in the log extract below. **LineOpen** confirms successful connection.

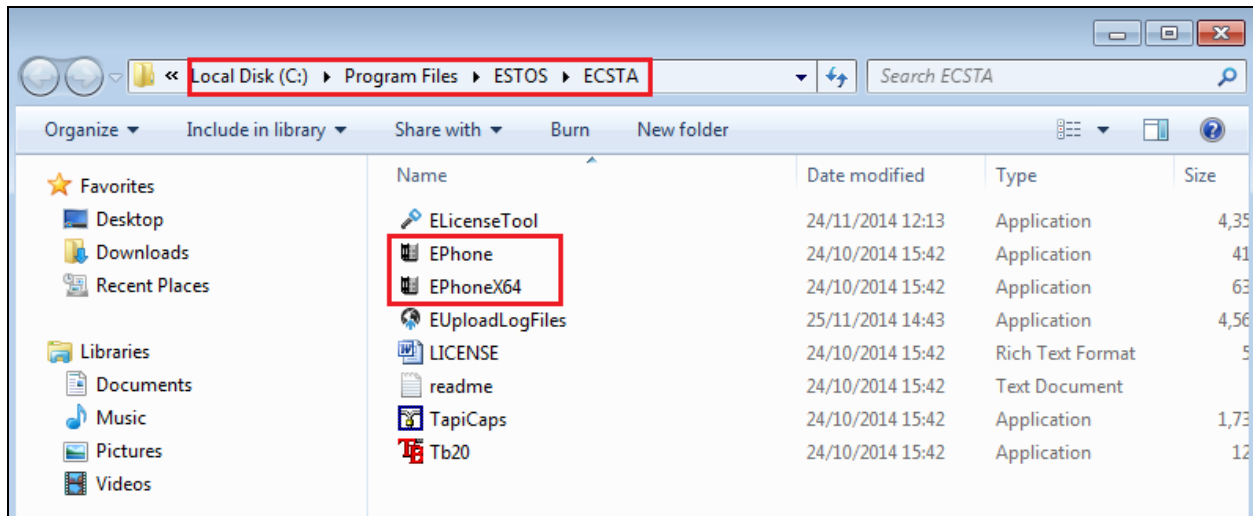
```
10.12.2014 16:24:54:597;32;3000;TSPI_lineGetAddressCaps
10.12.2014 16:24:57:920;32;3000;TSPI_lineGetAddressCaps
10.12.2014 16:25:12:381;32;3015;TSPI_lineGetAddressCaps
10.12.2014 16:25:15:688;32;3000;TSPI_lineOpen begin
10.12.2014 16:25:15:688;32;3000;TSPI_lineOpen success
10.12.2014 16:25:15:688;32;TSPI_lineSetDefaultMediaDetection;3000 MediaModes 00000004

10.12.2014 16:25:15:688;32;ETspBase::ConnectionWatchFunction;PBX Connect is required
10.12.2014 16:25:15:688;32;ETspBase::Connect;SIP: Host 10.10.40.111, Port 5060
10.12.2014 16:25:15:719;32;ETspBase::ConnectionWatchFunction;Connect result: 00000000
10.12.2014 16:25:15:829;32;3000;LineOpen 00000000
10.12.2014 16:25:15:860;32;3000;TSPI_lineGetDevConfig: 80000048
10.12.2014 16:25:52:161;32;3015;TSPI_lineOpen begin
10.12.2014 16:25:52:161;32;3015;TSPI_lineOpen success
10.12.2014 16:25:52:161;32;TSPI_lineSetDefaultMediaDetection;3015 MediaModes 00000004

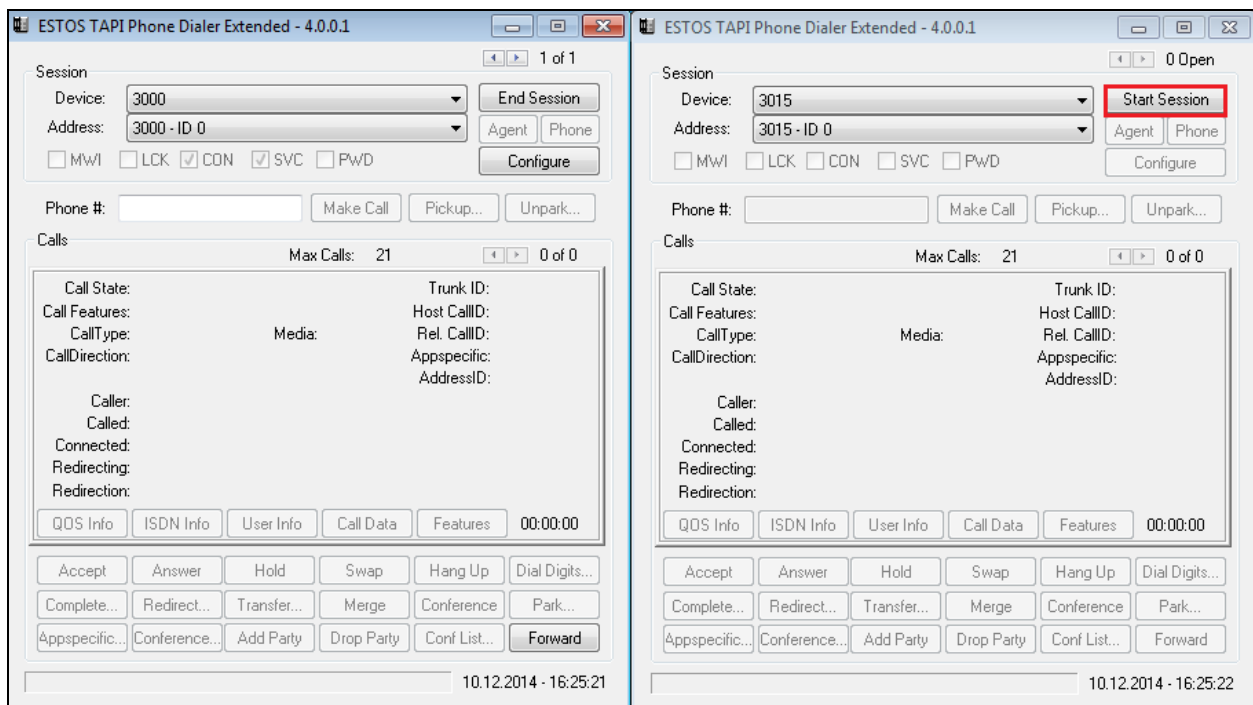
10.12.2014 16:25:52:223;32;3015;LineOpen 00000000
10.12.2014 16:25:52:255;32;3015;TSPI_lineGetDevConfig: 80000048
10.12.2014 16:25:59:883;32;3000;TSPI_lineMakeCall
10.12.2014 16:25:59:883;32;ECSTACall::ECSTACall;3000 ---Call New---
10.12.2014 16:25:59:883;32;ECSTACall::SetNewConnectionID;3000 ECSTACall -
SetNewConnectionID
DeviceString: tel:3000;phone-context=dialstring - CallID: FF FF FF FF
10.12.2014 16:25:59:914;32;ECSTACall::SetNewConnectionID;3000 ECSTACall -
SetNewConnectionID
DeviceString: tel:3000;phone-context=dialstring - CallID: 32 36 33 38 30 33 34 31
10.12.2014 16:25:59:914;32;3000;LINE_CALLSTATE sent LINECALLSTATE_DIALTONE
10.12.2014 16:25:59:914;32;ETspBasePhase3XML::GetSafeLineForEventReport;CSTAEvent:
Line '3015'
10.12.2014 16:25:59:914;32;ECSTALinePhase3XML::On_deliveredEvent;3015 Enter
10.12.2014 16:25:59:914;32;ECSTACall::ECSTACall;3015 ---Call New---
10.12.2014 16:25:59:914;32;ECSTACall::SetNewConnectionID;3015 ECSTACall -
SetNewConnectionID
DeviceString: tel:3015;phone-context=dialstring - CallID: 32 36 33 38 30 33 34 31
10.12.2014 16:25:59:914;32;ECSTACallPhase3XML::On_deliveredEvent;3015 DeviceString:
tel:3015;phone-context=dialstring - CallID: 32 36 33 38 30 33 34 31 Enter
10.12.2014 16:25:59:914;4;ECSTACallPhase3XML::On_deliveredEvent;alertingDevice: 3015
callingDevice: 3000
calledDevice: 3015
lastRedirectionDevice:
```

8.3. Verify ESTOS ECSTA Ephone.exe can be used to make and receive calls

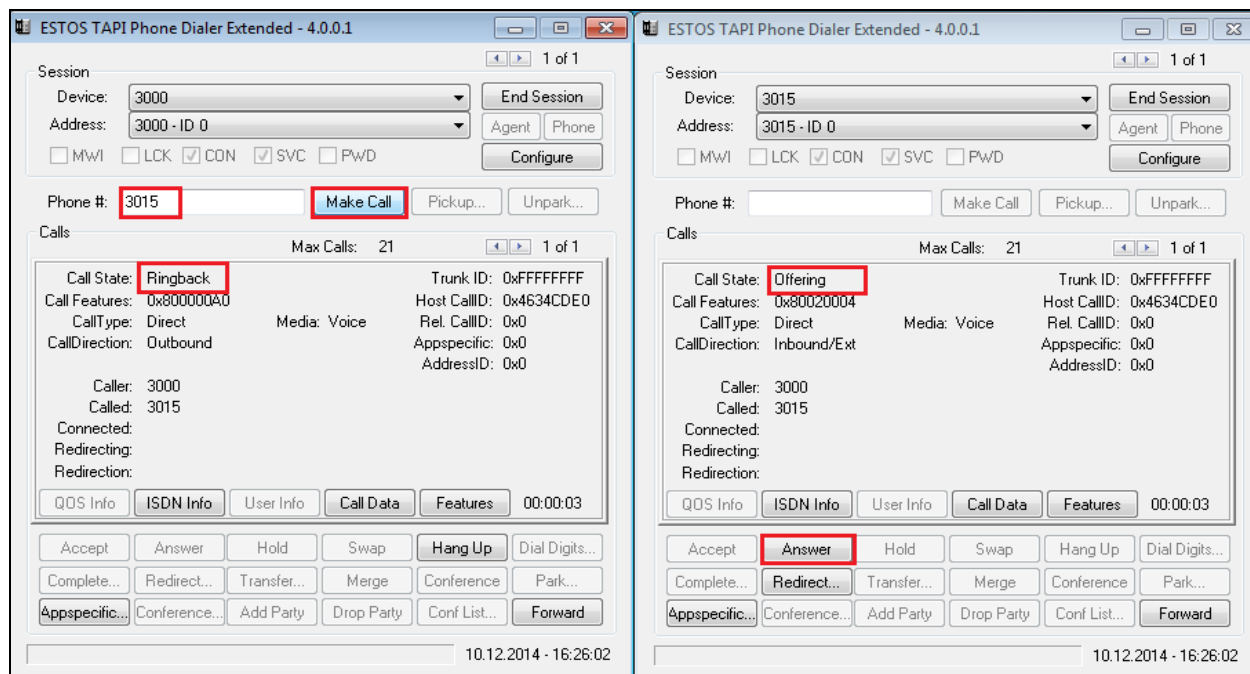
Navigate to the ECSTA folder which is typically found in **C:\Program Files\ESTOS\ECSTA**. From this location open either **EPhone** or **EPhoneX64** as shown below.



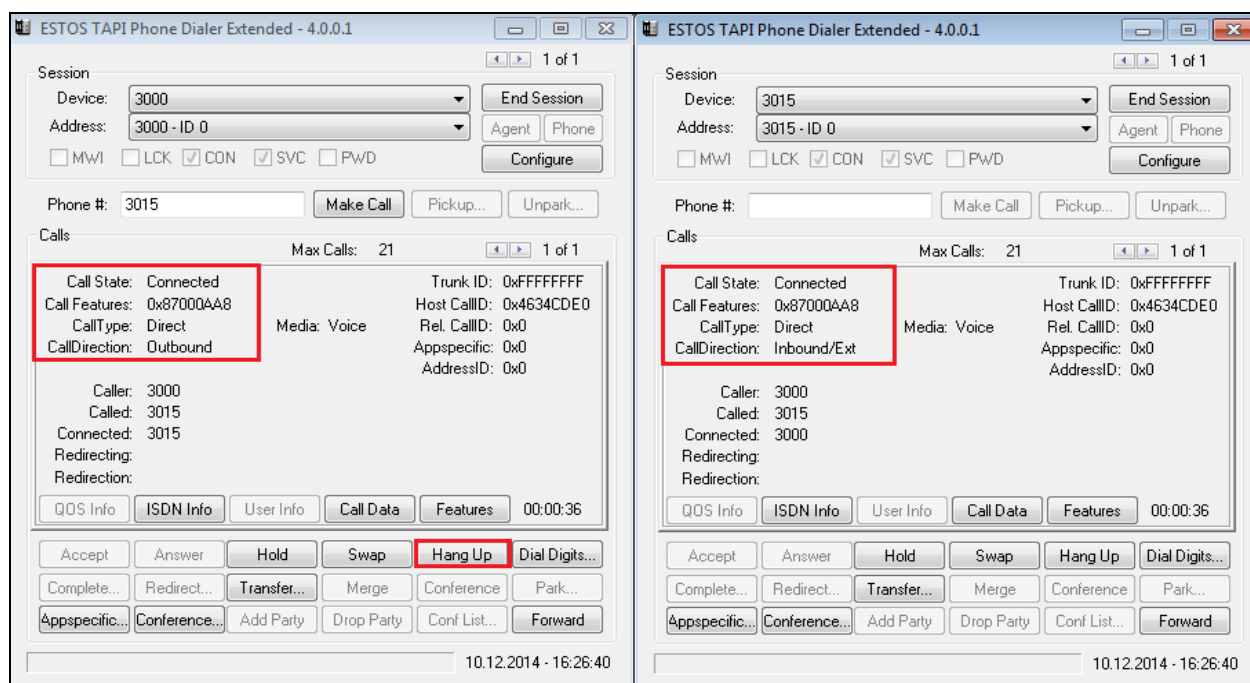
Two EPhone sessions were opened for extensions **3000** and **3015**. Click on **Start Session** on each EPhone to begin.



A call is made from ext 3000 to ext 3015 by typing **3015** into the **Phone#** box on the EPhone for 3000 and clicking on **Make Call**. When this is pressed, as is shown below, the **Call State** will show **Ringback** for ext 3000 and the **Call State** will show **Offering** on ext 3015. To answer the call, click on **Answer** on ext 3015.



Once the call is answered the Call State for both phones should show Connected. To hang up the call, click on **Hang Up** on either phone.



9. Conclusion

These Application Notes describe the configuration steps required for ESTOS ECSTA to successfully interoperate with Avaya Communication Server 1000E R7.6. 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] *Software Input Reference Administration Avaya Communication Server 1000, Release 7.6*; Document No. NN43001-611_05.02
- [2] *Unified Communications Management Common Services Fundamentals Avaya Communication Server 1000*, Doc # NN43001-116, 05.08
- [3] *Element Manager System Reference –Administration Avaya Communication Server 1000* Doc # NN43001-632, 05.04
- [4] *Application Notes for Configuring Avaya Communication Server 1000E R7.5 with ESTOS ECSTA 3.0.1*

Product documentation for ESTOS products can be found at <http://www.estos.de>

Appendix A

Linux Patches on Avaya Communication Server 1000E R7.6

Product Release: 7.65.16.00

In system patches: 0

In System service updates: 26

PATCH#	IN_SERVICE	DATE	SPECINS	REMOVABLE	NAME
2	Yes	27/08/13	NO	YES	cs1000-dmWeb-7.65.16.21-01.i386.000
3	Yes	28/08/13	NO	yes	cs1000-snmp-7.65.16.00-01.i686.000
4	Yes	28/08/13	NO	YES	cs1000-nrsm-7.65.16.00-03.i386.000
5	Yes	28/08/13	NO	YES	cs1000-oam-logging-7.65.16.01-01.i386.000
6	Yes	28/08/13	NO	yes	cs1000-cs1000WebService_6-0-7.65.16.21-00.i386.000
7	Yes	28/08/13	NO	YES	cs1000-sps-7.65.16.21-01.i386.000
8	Yes	28/08/13	NO	YES	cs1000-pd-7.65.16.21-00.i386.000
9	Yes	28/08/13	NO	YES	cs1000-shared-carrdtct-7.65.16.21-01.i386.000
10	Yes	28/08/13	NO	YES	cs1000-shared-tpselect-7.65.16.21-01.i386.000
11	Yes	28/08/13	NO	YES	cs1000-emWebLocal_6-0-7.65.16.21-01.i386.000
12	Yes	28/08/13	NO	yes	cs1000-dbcom-7.65.16.21-00.i386.000
13	Yes	28/08/13	NO	YES	cs1000-csmWeb-7.65.16.21-05.i386.000
14	Yes	28/08/13	NO	YES	cs1000-shared-xmsg-7.65.16.21-00.i386.000
15	Yes	28/08/13	NO	YES	cs1000-vtrk-7.65.16.21-29.i386.000
16	Yes	28/08/13	NO	YES	cs1000-tps-7.65.16.21-05.i386.000
17	Yes	28/08/13	NO	YES	cs1000-mscAnnc-7.65.16.21-02.i386.001
18	Yes	28/08/13	NO	YES	cs1000-mscAttn-7.65.16.21-04.i386.001
19	Yes	28/08/13	NO	YES	cs1000-mscConf-7.65.16.21-02.i386.001
20	Yes	28/08/13	NO	YES	cs1000-mscMusc-7.65.16.21-02.i386.001
21	Yes	28/08/13	NO	YES	cs1000-mscTone-7.65.16.21-03.i386.001
22	Yes	28/08/13	NO	YES	cs1000-bcc-7.65.16.21-21.i386.000
23	Yes	28/08/13	NO	YES	cs1000-Jboss-Quantum-7.65.16.21-3.i386.000
24	Yes	28/08/13	NO	YES	cs1000-emWeb_6-0-7.65.16.21-06.i386.000
25	Yes	10/12/13	NO	yes	cs1000-cs-7.65.P.100-01.i386.001
26	Yes	10/12/13	YES	yes	cs1000-linuxbase-7.65.16.21-08.i386.000
27	Yes	10/12/13	NO	YES	cs1000-patchWeb-7.65.16.21-06.i386.000

[paul@cs1kpg1 ~]\$

Call Server Patches on Avaya Communication Server 1000E R7.6

VERSION 4121
RELEASE 7
ISSUE 65 P +
DepList 1: core Issue: 01 (created: 2014-06-24 04:38:41 (est))

IN-SERVICE PEPS

PAT#	CR #	PATCH REF #	NAME	DATE	FILENAME	SPECINS
000	wi01052968	ISS1:1OF1	p32540_1	18/08/2014	p32540_1.cpl	NO
001	wi01045058	ISS1:1OF1	p32214_1	18/08/2014	p32214_1.cpl	NO
002	wi01085855	ISS1:1OF1	p32658_1	18/08/2014	p32658_1.cpl	NO
003	wi01053314	ISS1:1OF1	p32555_1	18/08/2014	p32555_1.cpl	NO
004	wi01060382	iss1:1of1	p32623_1	18/08/2014	p32623_1.cpl	YES
005	wi01070580	ISS1:1OF1	p32380_1	18/08/2014	p32380_1.cpl	NO
006	wi01101876	ISS1:1OF1	p32858_1	18/08/2014	p32858_1.cpl	NO
007	wi01061481	ISS1:1OF1	p32382_1	18/08/2014	p32382_1.cpl	NO
008	wi01124074	ISS1:1OF1	p32989_1	18/08/2014	p32989_1.cpl	NO
009	wi01099300	iss1:1of1	p32704_1	18/08/2014	p32704_1.cpl	NO
010	wi01035976	ISS1:1OF1	p32173_1	18/08/2014	p32173_1.cpl	NO
011	wi01065922	ISS1:1OF1	p32516_1	18/08/2014	p32516_1.cpl	NO
012	WI01121737	ISS1:1OF1	p32939_1	21/08/2014	p32939_1.cpl	NO
013	wi01041453	ISS1:1OF1	p32587_1	18/08/2014	p32587_1.cpl	NO
014	wi01096842	ISS1:1OF1	p32731_1	18/08/2014	p32731_1.cpl	NO
015	WI0110261	ISS1:1OF1	p32758_1	18/08/2014	p32758_1.cpl	NO
016	wi01064599	iss1:1of1	p32580_1	18/08/2014	p32580_1.cpl	NO
017	wi01098783	ISS1:1OF1	p32748_1	18/08/2014	p32748_1.cpl	NO
018	wi01072027	ISS1:1OF1	p32689_1	18/08/2014	p32689_1.cpl	NO
019	wi01059388	iss1:1of1	p32628_1	18/08/2014	p32628_1.cpl	NO
020	wi01104410	ISS1:1OF1	p32801_1	18/08/2014	p32801_1.cpl	NO
021	wi00933195	ISS1:1OF1	p32491_1	18/08/2014	p32491_1.cpl	NO
022	wi01150771	ISS1:1OF1	p33210_1	21/08/2014	p33210_1.cpl	NO
023	wi01065118	ISS1:1OF1	p32397_1	18/08/2014	p32397_1.cpl	NO
024	wi01063864	ISS1:1OF1	p32410_1	18/08/2014	p32410_1.cpl	YES
025	wi01096712	ISS1:1OF1	p32708_1	18/08/2014	p32708_1.cpl	NO
026	wi01075359	ISS1:1OF1	p32671_1	18/08/2014	p32671_1.cpl	NO
027	wi01080753	ISS1:1OF1	p32518_1	18/08/2014	p32518_1.cpl	NO
028	wi01070473	ISS1:1OF1	p32413_1	18/08/2014	p32413_1.cpl	NO
029	wi01075355	ISS1:1OF1	p32594_1	18/08/2014	p32594_1.cpl	NO
030	wi01071379	ISS1:1OF1	p32522_1	18/08/2014	p32522_1.cpl	NO
031	wi01070756	ISS1:1OF1	p32444_1	18/08/2014	p32444_1.cpl	NO
032	wi01075353	ISS1:1OF1	p32613_1	18/08/2014	p32613_1.cpl	NO
033	wi01062607	ISS1:1OF1	p32503_1	18/08/2014	p32503_1.cpl	NO
034	wi01068851	ISS1:1OF1	p32439_1	18/08/2014	p32439_1.cpl	NO
035	wi01144354	ISS1:1OF1	p33117_1	21/08/2014	p33117_1.cpl	NO
036	wi01092300	ISS1:1OF1	p32692_1	18/08/2014	p32692_1.cpl	NO
037	wi01063263	ISS1:1OF1	p32573_1	18/08/2014	p32573_1.cpl	NO
038	wi01087528	ISS1:1OF1	p32700_1	18/08/2014	p32700_1.cpl	NO
039	wi01150846	ISS1:1OF1	p33157_1	21/08/2014	p33157_1.cpl	NO
040	wi01039280	ISS1:1OF1	p32423_1	18/08/2014	p32423_1.cpl	NO
041	wi01068669	ISS1:1OF1	p32333_1	18/08/2014	p32333_1.cpl	NO
042	wi01069441	ISS1:1OF1	p32097_1	18/08/2014	p32097_1.cpl	NO
043	wi01058621	ISS1:1OF1	p32339_1	18/08/2014	p32339_1.cpl	NO
044	wi01146804	ISS1:1OF1	p33132_1	21/08/2014	p33132_1.cpl	NO
045	wi01070465	iss1:1of1	p32562_1	18/08/2014	p32562_1.cpl	NO
046	wi01053920	ISS1:1OF1	p32303_1	18/08/2014	p32303_1.cpl	NO
047	wi00897254	ISS1:1OF1	p31127_1	18/08/2014	p31127_1.cpl	NO
048	wi01057403	ISS1:1OF1	p32591_1	18/08/2014	p32591_1.cpl	NO
049	wi01066991	ISS1:1OF1	p32449_1	18/08/2014	p32449_1.cpl	NO
050	wi01094305	ISS1:1OF1	p32640_1	18/08/2014	p32640_1.cpl	NO

051	wi01060611	ISS1:1OF1	p32809_1	18/08/2014	p32809_1.cpl	NO
052	wi01137694	ISS1:1OF1	p33081_1	21/08/2014	p33081_1.cpl	NO
053	wi01060241	ISS1:1OF1	p32381_1	18/08/2014	p32381_1.cpl	NO
054	wi01034307	ISS1:1OF1	p32615_1	18/08/2014	p32615_1.cpl	NO
055	wi01052428	ISS1:1OF1	p32606_1	18/08/2014	p32606_1.cpl	NO
056	wi00884716	ISS1:1OF1	p32517_1	18/08/2014	p32517_1.cpl	NO
057	wi01070468	iss1:1of1	p32418_1	18/08/2014	p32418_1.cpl	NO
058	wi01091447	ISS1:1OF1	p32675_1	18/08/2014	p32675_1.cpl	NO
059	wi01156999	ISS1:1OF1	p33180_1	21/08/2014	p33180_1.cpl	NO
060	wi01132599	ISS1:1OF1	p33025_1	18/08/2014	p33025_1.cpl	NO
061	wi01065125	ISS1:1OF1	p32416_1	18/08/2014	p32416_1.cpl	NO
062	wi01056633	ISS1:1OF1	p32322_1	18/08/2014	p32322_1.cpl	NO
063	wi01078721	ISS1:1OF1	p32553_1	18/08/2014	p32553_1.cpl	NO
064	wi01053597	ISS1:1OF1	p32304_1	18/08/2014	p32304_1.cpl	NO
065	wi01132883	ISS1:1OF1	p33030_1	18/08/2014	p33030_1.cpl	NO
066	wi01025156	ISS1:1OF1	p32136_1	18/08/2014	p32136_1.cpl	NO
067	wi01088775	ISS1:1OF1	p32659_1	18/08/2014	p32659_1.cpl	NO
068	wi01114038	ISS1:1OF1	p32869_1	18/08/2014	p32869_1.cpl	NO
069	wi01075360	iss1:1of1	p32602_1	18/08/2014	p32602_1.cpl	NO
070	wi01053195	ISS1:1OF1	p32297_1	18/08/2014	p32297_1.cpl	NO
071	wi01043367	ISS1:1OF1	p32232_1	18/08/2014	p32232_1.cpl	NO
072	wi01082456	ISS1:1OF1	p32596_1	18/08/2014	p32596_1.cpl	NO
073	wi01089519	ISS1:1OF1	p32665_1	18/08/2014	p32665_1.cpl	NO
074	wi01105888	ISS1:1OF1	p32794_1	18/08/2014	p32794_1.cpl	NO
075	wi01132215	ISS1:1OF1	p33084_1	21/08/2014	p33084_1.cpl	NO
076	wi01035980	ISS1:1OF1	p32558_1	18/08/2014	p32558_1.cpl	NO
077	wi01087543	ISS1:1OF1	p32662_1	18/08/2014	p32662_1.cpl	NO
078	wi01060826	ISS1:1OF1	p32379_1	18/08/2014	p32379_1.cpl	NO
079	wi01167427	ISS1:1OF1	p33264_1	21/08/2014	p33264_1.cpl	NO
080	wi01034961	ISS1:1OF1	p32144_1	18/08/2014	p32144_1.cpl	NO
081	wi01142525	ISS1:1OF1	p33096_1	21/08/2014	p33096_1.cpl	NO
082	WI01077073	ISS1:1OF1	p32534_1	18/08/2014	p32534_1.cpl	NO
083	wi01133985	ISS1:1OF1	p33049_1	18/08/2014	p33049_1.cpl	NO
084	wi01138714	ISS2:1OF1	p33065_2	21/08/2014	p33065_2.cpl	NO
085	wi01130836	ISS1:1OF1	p33008_1	18/08/2014	p33008_1.cpl	YES
086	wi01118928	ISS1:1OF1	p32922_1	18/08/2014	p32922_1.cpl	NO
087	wi01070585	ISS1:1OF1	p32383_1	18/08/2014	p32383_1.cpl	NO
088	wi01071296	ISS1:1OF1	p32836_1	18/08/2014	p32836_1.cpl	NO
089	wi01089355	ISS1:1OF1	p32674_1	18/08/2014	p32674_1.cpl	YES
090	wi01119312	ISS1:1OF1	p32919_1	18/08/2014	p32919_1.cpl	NO
091	wi01134952	ISS1:1OF1	p33039_1	18/08/2014	p33039_1.cpl	NO
092	wi01124477	ISS1:1OF1	p32963_1	18/08/2014	p32963_1.cpl	NO
093	wi01156086	ISS1:1OF1	p33269_1	21/08/2014	p33269_1.cpl	NO
094	wi01115894	ISS1:1OF1	p32910_1	18/08/2014	p32910_1.cpl	NO
095	wi01101385	ISS1:1OF1	p32773_1	18/08/2014	p32773_1.cpl	YES
096	wi01115450	ISS1:1OF1	p32888_1	18/08/2014	p32888_1.cpl	NO
097	wi01075538	ISS1:1OF1	p32469_1	18/08/2014	p32469_1.cpl	NO
098	wi01159931	ISS1:1OF1	p33231_1	21/08/2014	p33231_1.cpl	YES
099	wi01126552	ISS1:1OF1	p32975_1	18/08/2014	p32975_1.cpl	NO
100	wi01144066	ISS1:1OF1	p33114_1	21/08/2014	p33114_1.cpl	NO
101	wi01129028	ISS1:1OF1	p33016_1	18/08/2014	p33016_1.cpl	NO
102	wi01099724	ISS1:1OF1	p32742_1	18/08/2014	p32742_1.cpl	YES
103	wi01129098	ISS1:1OF1	p32951_1	18/08/2014	p32951_1.cpl	NO
104	wi01146254	ISS1:1OF1	p33127_1	21/08/2014	p33127_1.cpl	NO
105	WI01108562	ISS1:1OF1	p32832_1	18/08/2014	p32832_1.cpl	NO
106	wi01094727	ISS1:1OF1	p32848_1	18/08/2014	p32848_1.cpl	NO
107	wi01096967	ISS1:1OF1	p32735_1	18/08/2014	p32735_1.cpl	NO
108	wi01022598	ISS1:1OF1	p32066_1	18/08/2014	p32066_1.cpl	NO
109	wi01126454	ISS1:1OF1	p32973_1	18/08/2014	p32973_1.cpl	NO
110	wi01051200	ISS1:1OF1	p32290_1	18/08/2014	p32290_1.cpl	NO
111	wi01127640	ISS1:1OF1	p32992_1	18/08/2014	p32992_1.cpl	NO
112	wi01128512	ISS1:1OF1	p32997_1	18/08/2014	p32997_1.cpl	NO

113	wi01122174	ISS1:1OF1	p32936_1	18/08/2014	p32936_1.cpl	NO
114	wi01097598	ISS1:1OF1	p32797_1	18/08/2014	p32797_1.cpl	NO
115	wi01095462	ISS1:1OF1	p32723_1	18/08/2014	p32723_1.cpl	NO
116	wi01108828	ISS1:1OF1	p32831_1	18/08/2014	p32831_1.cpl	NO
117	wi01104473	ISS1:1OF1	p32818_1	18/08/2014	p32818_1.cpl	NO
118	wi01079444	ISS1:1OF1	p32564_1	18/08/2014	p32564_1.cpl	NO
119	wi01109251	ISS1:1OF1	p32827_1	18/08/2014	p32827_1.cpl	NO
120	wi01092443	ISS1:1OF1	p32676_1	18/08/2014	p32676_1.cpl	NO
121	wi01099292	ISS1:1OF1	p32886_1	18/08/2014	p32886_1.cpl	NO
122	wi01104867	ISS1:1OF1	p32828_1	18/08/2014	p32828_1.cpl	NO
123	wi01080963	ISS1:1OF1	p32626_1	18/08/2014	p32626_1.cpl	YES
124	wi01065115	ISS1:1OF1	p32523_1	18/08/2014	p32523_1.cpl	NO
125	wi01081510	ISS1:1OF1	p32582_1	18/08/2014	p32582_1.cpl	NO
126	wi01110593	ISS1:1OF1	p32849_1	18/08/2014	p32849_1.cpl	NO
127	wi01099606	iss1:1of1	p32713_1	18/08/2014	p32713_1.cpl	NO
128	wi01123389	ISS1:1OF1	p33045_1	18/08/2014	p33045_1.cpl	NO
129	wi01072062	ISS1:1OF1	p32776_1	18/08/2014	p32776_1.cpl	NO
130	wi01136194	ISS:1OF1	p33051_1	21/08/2014	p33051_1.cpl	NO
131	wi01045144	ISS1:1OF1	p33202_1	21/08/2014	p33202_1.cpl	NO
132	wi01128596	ISS1:1OF1	p33000_1	18/08/2014	p33000_1.cpl	NO
133	wi01090535	ISS1:1OF1	p32519_1	18/08/2014	p32519_1.cpl	NO
134	wi01127447	ISS1:1OF1	p32990_1	18/08/2014	p32990_1.cpl	NO
135	wi01132244	ISS1:1OF1	p33041_1	18/08/2014	p33041_1.cpl	NO
136	wi01097786	ISS1:1OF1	p33086_1	21/08/2014	p33086_1.cpl	NO
137	wi01093118	ISS1:1OF1	p32496_1	18/08/2014	p32496_1.cpl	NO
138	wi01108262	ISS1:1OF1	p32865_1	18/08/2014	p32865_1.cpl	YES
139	wi01098433	ISS1:1OF1	p32736_1	18/08/2014	p32736_1.cpl	NO
140	wi01115807	ISS1:1OF1	p32895_1	18/08/2014	p32895_1.cpl	YES
141	wi01159009	ISS1:1OF1	p33098_1	21/08/2014	p33098_1.cpl	YES
142	wi01136429	ISS1:1OF1	p33037_1	21/08/2014	p33037_1.cpl	NO
143	wi01119086	ISS1:1OF1	p32917_1	18/08/2014	p32917_1.cpl	NO
144	wi01132204	ISS1:1OF1	p32501_1	18/08/2014	p32501_1.cpl	NO
145	wi01058378	ISS1:1OF1	p32344_1	18/08/2014	p32344_1.cpl	NO
146	wi01088797	ISS1:1OF1	p32844_1	18/08/2014	p32844_1.cpl	NO
147	wi00937672	ISS1:1OF1	p31276_1	18/08/2014	p31276_1.cpl	NO
148	wi01098905	ISS1:1OF1	p32556_1	18/08/2014	p32556_1.cpl	NO
149	wi01120705	ISS1:1OF1	p32930_1	18/08/2014	p32930_1.cpl	NO
150	wi01120406	ISS1:1OF1	p32956_1	18/08/2014	p32956_1.cpl	NO
151	wi01083896	ISS1:1OF1	p32937_1	18/08/2014	p32937_1.cpl	NO
152	wi01130815	ISS1:1OF1	p33017_1	18/08/2014	p33017_1.cpl	NO
153	wi01113374	ISS1:1OF1	p32874_1	18/08/2014	p32874_1.cpl	NO
154	wi01145002	ISS1:1OF1	p33186_1	21/08/2014	p33186_1.cpl	NO
155	wi01104627	ISS1:1OF1	p32819_1	18/08/2014	p32819_1.cpl	NO
156	wi01137003	ISS1:1OF1	p33053_1	18/08/2014	p33053_1.cpl	NO
157	wi01093071	ISS1:1OF1	p32701_1	18/08/2014	p32701_1.cpl	NO
158	wi01068751	ISS1:1OF1	p32445_1	18/08/2014	p32445_1.cpl	NO
159	wi01134602	ISS1:1OF1	p32398_1	18/08/2014	p32398_1.cpl	NO
160	wi01102093	ISS1:1OF1	p32760_1	18/08/2014	p32760_1.cpl	NO
161	wi01101969	ISS1:1OF1	p32726_1	18/08/2014	p32726_1.cpl	NO
162	wi01133106	ISS1:1OF1	p33032_1	18/08/2014	p33032_1.cpl	NO
163	wi01070279	ISS1:1OF1	p32262_1	18/08/2014	p32262_1.cpl	NO
164	wi01107601	ISS1:1OF1	p32970_1	18/08/2014	p32970_1.cpl	NO
165	wi01088915	ISS1:1OF1	p32638_1	18/08/2014	p32638_1.cpl	NO
166	wi01130348	ISS1:1OF1	p33014_1	18/08/2014	p33014_1.cpl	NO
167	wi01077639	ISS1:1OF1	p32883_1	18/08/2014	p32883_1.cpl	NO
168	wi01125238	ISS1:1OF1	p32971_1	18/08/2014	p32971_1.cpl	NO
169	wi01000087	ISS1:1OF1	p32014_1	18/08/2014	p32014_1.cpl	NO
170	wi01119100	ISS1:1OF1	p32925_1	18/08/2014	p32925_1.cpl	NO
171	wi01132902	ISS1:1OF1	p33028_1	18/08/2014	p33028_1.cpl	NO
172	wi01053950	ISS1:1OF1	p32654_1	18/08/2014	p32654_1.cpl	YES
173	wi01082824	ISS1:1OF1	p32467_1	18/08/2014	p32467_1.cpl	NO
174	wi01109345	ISS1:1OF1	p32830_1	18/08/2014	p32830_1.cpl	NO

175	wi01073725	ISS1:1OF1	p32552_1	18/08/2014	p32552_1.cpl	NO
176	wi01149017	ISS1:1OF1	p33145_1	21/08/2014	p33145_1.cpl	NO
177	wi01099810	ISS1:1OF1	p32796_1	18/08/2014	p32796_1.cpl	NO
178	wi01134354	ISS1:1OF1	p33031_1	18/08/2014	p33031_1.cpl	NO
179	wi01127527	ISS1:1OF1	p32988_1	18/08/2014	p32988_1.cpl	YES
180	wi01095255	ISS1:1OF1	p33027_1	18/08/2014	p33027_1.cpl	NO
181	wi01121374	ISS1:1OF1	p31107_1	18/08/2014	p31107_1.cpl	NO
182	wi01102475	ISS1:1OF1	p32782_1	18/08/2014	p32782_1.cpl	YES
183	wi01120458	ISS1:1OF1	p32929_1	18/08/2014	p32929_1.cpl	NO
184	wi01118320	ISS1:1OF1	p32753_1	18/08/2014	p32753_1.cpl	NO
185	wi01133960	ISS1:1OF1	p33034_1	18/08/2014	p33034_1.cpl	NO
186	wi01075540	ISS1:1OF1	p32492_1	18/08/2014	p32492_1.cpl	NO
187	wi01112655	ISS1:1OF1	p32870_1	18/08/2014	p32870_1.cpl	NO
188	wi01106658	ISS1:1OF1	p32812_1	18/08/2014	p32812_1.cpl	NO
189	wi01021522	ISS1:1OF1	p32863_1	18/08/2014	p32863_1.cpl	NO
190	wi01089807	ISS1:1OF1	p32957_1	18/08/2014	p32957_1.cpl	NO
191	wi01083036	ISS1:1OF1	p32571_1	18/08/2014	p32571_1.cpl	NO
192	wi01102091	ISS1:1OF1	p32744_1	18/08/2014	p32744_1.cpl	YES
193	wi01149384	ISS1:1OF1	p33147_1	21/08/2014	p33147_1.cpl	NO
194	wi01119863	ISS1:1OF1	p32923_1	18/08/2014	p32923_1.cpl	NO
195	wi01071996	ISS1:1OF1	p32461_1	18/08/2014	p32461_1.cpl	NO
196	wi01094832	iss1:1of1	p32718_1	18/08/2014	p32718_1.cpl	NO
197	wi01115369	ISS1:1OF1	p32889_1	18/08/2014	p32889_1.cpl	NO
198	wi01137737	ISS1:1OF1	p33055_1	18/08/2014	p33055_1.cpl	NO
199	wi01163826	ISS1:1OF1	p33229_1	21/08/2014	p33229_1.cpl	NO
200	wi01065248	ISS1:1OF1	p32412_1	18/08/2014	p32412_1.cpl	NO
201	wi01132222	ISS1:1OF1	p33023_1	18/08/2014	p33023_1.cpl	NO
202	wi01127874	ISS1:1OF1	p25747_1	18/08/2014	p25747_1.cpl	NO
203	wi01118819	ISS1:1OF1	p32954_1	18/08/2014	p32954_1.cpl	NO
204	wi01096907	ISS1:1OF1	p32733_1	18/08/2014	p32733_1.cpl	NO
205	wi01111194	ISS1:1OF1	p32821_1	18/08/2014	p32821_1.cpl	NO
206	wi01113712	ISS1:1OF1	p32877_1	18/08/2014	p32877_1.cpl	NO
207	wi01100508	ISS1:1OF1	p32761_1	18/08/2014	p32761_1.cpl	NO
208	wi01096910	ISS1:1OF1	p32734_1	18/08/2014	p32734_1.cpl	NO
209	wi01071659	ISS1:1OF1	p32589_1	18/08/2014	p32589_1.cpl	NO
210	wi01075149	ISS1:1OF1	p32475_1	18/08/2014	p32475_1.cpl	NO
211	wi01144609	ISS1:1OF1	p33119_1	21/08/2014	p33119_1.cpl	NO
212	wi01068922	ISS1:1OF1	p32454_1	18/08/2014	p32454_1.cpl	NO
213	wi01166065	ISS1:1OF1	p33241_1	21/08/2014	p33241_1.cpl	NO
214	wi01102296	ISS1:1OF1	p32780_1	18/08/2014	p32780_1.cpl	NO
215	wi01076948	ISS1:1OF1	p32526_1	18/08/2014	p32526_1.cpl	YES
216	wi01088055	ISS1:1OF1	p32607_1	18/08/2014	p32607_1.cpl	NO
217	wi01114695	ISS1:1OF1	p32885_1	18/08/2014	p32885_1.cpl	NO
218	wi01146766	ISS1:1OF1	p33131_1	21/08/2014	p33131_1.cpl	NO
219	wi01150596	ISS1:1OF1	p33154_1	21/08/2014	p33154_1.cpl	NO
220	wi01139981	ISS1:1OF1	p33083_1	21/08/2014	p33083_1.cpl	NO
221	wi01163362	ISS1:1OF1	p33224_1	21/08/2014	p33224_1.cpl	YES
222	wi01134211	ISS1:1OF1	p33077_1	21/08/2014	p33077_1.cpl	NO
223	wi01153104	ISS1:1OF1	p33174_1	21/08/2014	p33174_1.cpl	NO
224	wi01153896	ISS1:1OF1	p33185_1	21/08/2014	p33185_1.cpl	NO
225	wi01150083	ISS1:1OF1	p33152_1	21/08/2014	p33152_1.cpl	NO
226	wi01151870	ISS1:1OF1	p33162_1	21/08/2014	p33162_1.cpl	YES
227	wi01096718	ISS1:1OF1	p33138_1	21/08/2014	p33138_1.cpl	YES
228	wi01136640	ISS1:1OF1	p33052_1	21/08/2014	p33052_1.cpl	NO
229	wi01164281	ISS1:1OF1	p33232_1	21/08/2014	p33232_1.cpl	NO
230	wi01165461	ISS1:1OF1	p33237_1	21/08/2014	p33237_1.cpl	NO
231	wi01171467	ISS1:1OF1	p33270_1	21/08/2014	p33270_1.cpl	NO
232	wi01142100	ISS1:1OF1	p33090_1	21/08/2014	p33090_1.cpl	NO
233	wi01170424	ISS1:1OF1	p33260_1	21/08/2014	p33260_1.cpl	NO
234	wi01142792	ISS1:1OF1	p33099_1	21/08/2014	p33099_1.cpl	NO
235	wi01155909	ISS1:1OF1	p33192_1	21/08/2014	p33192_1.cpl	NO
236	wi01119736	ISS1:1OF1	p33094_1	21/08/2014	p33094_1.cpl	NO

237	wi01160967	ISS1:1OF1	p33213_1	21/08/2014	p33213_1.cpl	NO
238	wi01165870	ISS1:1OF1	p33238_1	21/08/2014	p33238_1.cpl	NO
239	WI11032038	ISS1:1OF1	p33022_1	21/08/2014	p33022_1.cpl	NO
240	wi01138136	ISS1:1OF1	p33191_1	21/08/2014	p33191_1.cpl	NO
241	wi01163521	ISS1:1OF1	p33226_1	21/08/2014	p33226_1.cpl	NO
242	wi01152195	ISS1:1OF1	p33163_1	21/08/2014	p33163_1.cpl	YES
243	wi01068011	ISS1:1OF1	p33182_1	21/08/2014	p33182_1.cpl	NO
244	wi01147091	ISS1:1OF1	p33137_1	21/08/2014	p33137_1.cpl	NO
245	wi01151898	ISS1:1OF1	p33175_1	21/08/2014	p33175_1.cpl	NO
246	wi01147983	ISS1:1OF1	p33141_1	21/08/2014	p33141_1.cpl	NO
247	wi01163048	ISS1:1OF1	p33223_1	21/08/2014	p33223_1.cpl	YES
248	wi01165881	ISS1:1OF1	p33239_1	21/08/2014	p33239_1.cpl	NO
249	wi01134799	ISS1:1OF1	p33069_1	21/08/2014	p33069_1.cpl	NO
250	wi01146543	ISS1:1OF1	p33097_1	21/08/2014	p33097_1.cpl	NO
251	wi01150802	ISS1:1OF1	p33156_1	21/08/2014	p33156_1.cpl	NO
252	wi01154253	ISS1:1OF1	p33206_1	21/08/2014	p33206_1.cpl	NO
253	wi01143987	ISS1:1OF1	p33134_1	21/08/2014	p33134_1.cpl	NO
254	WI01154952	ISS1:1OF1	p33184_1	21/08/2014	p33184_1.cpl	NO
255	wi01157590	ISS1:1OF1	p33252_1	21/08/2014	p33252_1.cpl	NO
256	wi01146289	ISS1:1OF1	p33146_1	21/08/2014	p33146_1.cpl	NO
257	wi01153039	ISS1:1OF1	p17588_1	21/08/2014	p17588_1.cpl	NO
258	wi01153844	ISS1:1OF1	p33172_1	21/08/2014	p33172_1.cpl	NO
259	wi01135146	ISS1:1OF1	p33033_1	21/08/2014	p33033_1.cpl	NO
260	wi01146705	ISS1:1OF1	p33129_1	21/08/2014	p33129_1.cpl	NO
261	wi01154485	ISS1:1OF1	p33194_1	21/08/2014	p33194_1.cpl	NO
MDP>LAST SUCCESSFUL MDP REFRESH :2014-08-21 08:43:42(Local Time)						
MDP>USING DEPLIST ZIP FILE DOWNLOADED :2014-08-20 11:48:22(est)						

Appendix B

Avaya Communication Server 1000E Extension 3000

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REQ: prt
TYPE: tn
TYPE TNB
TN 100 0 0 0
SPWD
DATE
PAGE
DES

DES 1120
TN 100 0 00 00 VIRTUAL
TYPE 1120
CDEN 8D
CTYP XDLC
CUST 0
NUID
NHTN
CFG_ZONE 00002
CUR_ZONE 00002
MRT
ERL 0
ECL 0
FDN
TGAR 0
LDN NO
NCOS 0
SGRP 0
RNPG 5
SCI 0
SSU
LNRS 16
XLST
SCPW
SFLT NO
CAC_CIS 3
CAC_MFC 0
CLS UNR FBD WTA LPR PUA MTD FND HTD TDD HFA CRPD
MWD LMPN RMMD SMWD AAD IMD XHD IRD NID OLD VCE DRG1
POD SLKD CCSD SWD LNA CNDA
CFTD SFD MRD DDV CNID CDCA MSID DAPA BFED RCBF
ICDA CDMD LLCN MCTD CLBD AUTU
GPUA DPUD DNDA CFXA ARHD FITD CLTD ASCD
CPFA CPTA ABDA CFHD FICD NAID DNAA RDLA BUZZ AGRD MOAD
UDI RCC HBTB AHD IPND DDGA NAMA MIND PRSD NRWD NRCD NROD
DRDD EXR0
USMD USRD ULAD CCBF RTDD RBDD RBHD PGND OCBF FLXD FTTU DNDY DNO3 MCBN
FDSD NOVD VOLA VOUD CDMR PRED RECA MCDD T87A SBMD
KEM3 MSNV FRA PKCH MUTA MWTD DVLD CROD ELCD VMSA
CPND LANG ENG
HUNT 2001
LHK 0
PLEV 02
PUID
UPWD
DANI NO
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AST 00
IAPG 1
AACS YES
ACQ AS: AST-DN
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25 32 33 34 35 36 37 38 39
SFRB 32 33 34 35 36 37 38 39
USFB 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
CALB 0 1 2 3 4 5 6 7 8 9 10 11
FCTB
ITNA NO
DGRP
MLWU_LANG 0
MLNG ENG
DNDR 0
KEY 00 SCR 3000 0 MARP
      CPND
      CPND_LANG ROMAN
      NAME President 3000
      XPLN 27
      DISPLAY_FMT FIRST, LAST
      ANIE 0
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17 TRN
18 AO6
19 CFW 16 50002
20 RGA
21 PRK
22 RNP
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24 PRS
25 CHG
26 CPN
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31
DATE 9 DEC 2014

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