Avaya Solution & Interoperability Test Lab

Application Notes for Configuring Avaya Communication Server 1000E R7.5 with ESTOS ECSTA 3.0.1 - Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Avaya Communication Server 1000E R7.5 with ESTOS ECSTA 3.0. 1

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 to integrate Avaya Communication Server 1000E with ESTOS ECSTA. ESTOS ECSTA offers a Telephony Service Provider for Microsoft Telephony Application Programming Interface 2.1 (also 2.2 and 3.0). This Telephony Application Programming Interface driver implements a central communication between a Personal Computer and the Avaya Communication Server 1000E. ESTOS ECSTA uses the Computer-telephony Integration feature of Communication Server 1000E Node. Digital, Analog and UniStim IP endpoints are hosted on Communication Server 1000E

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 (CS1000E) as implemented on a customer's premises. 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.

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

Feature functionality testing included

- Acquire a variety of Avaya Desk Phones
- Redirect calls
- Internal/External calls to TAPI clients
- Conference calls
- Transfers - Blind/Consult
- Hold/Unhold

2.2. Test Results

All testcases were executed and passed successfully.

2.3. Support

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 Avaya solution consists of a CS1000E. The CTI feature is enabled on the CS1000E Node. ESTOS ECSTA clients are running on a Windows 2008 R2 64bit server in a VM Ware environment. Avaya 1140 series IP, Avaya Digital 3904 and Avaya 500 Anolog sets were configured on the CS1000E server and were acquired by the ESTOS TAPI clients. During compliance testing ESTOS Ephones were used to as TAPI clients in conjunction with Microsoft TAPI to control the Avaya Deskphones. An Avaya SIP phone which was configured on the CS1000E was also used to make and receive calls on the TAPI clients. Inbound and outbound calls to the PSDN were made using a simulated PSTN.
Note: All voice was handled by the Avaya Deskphones.

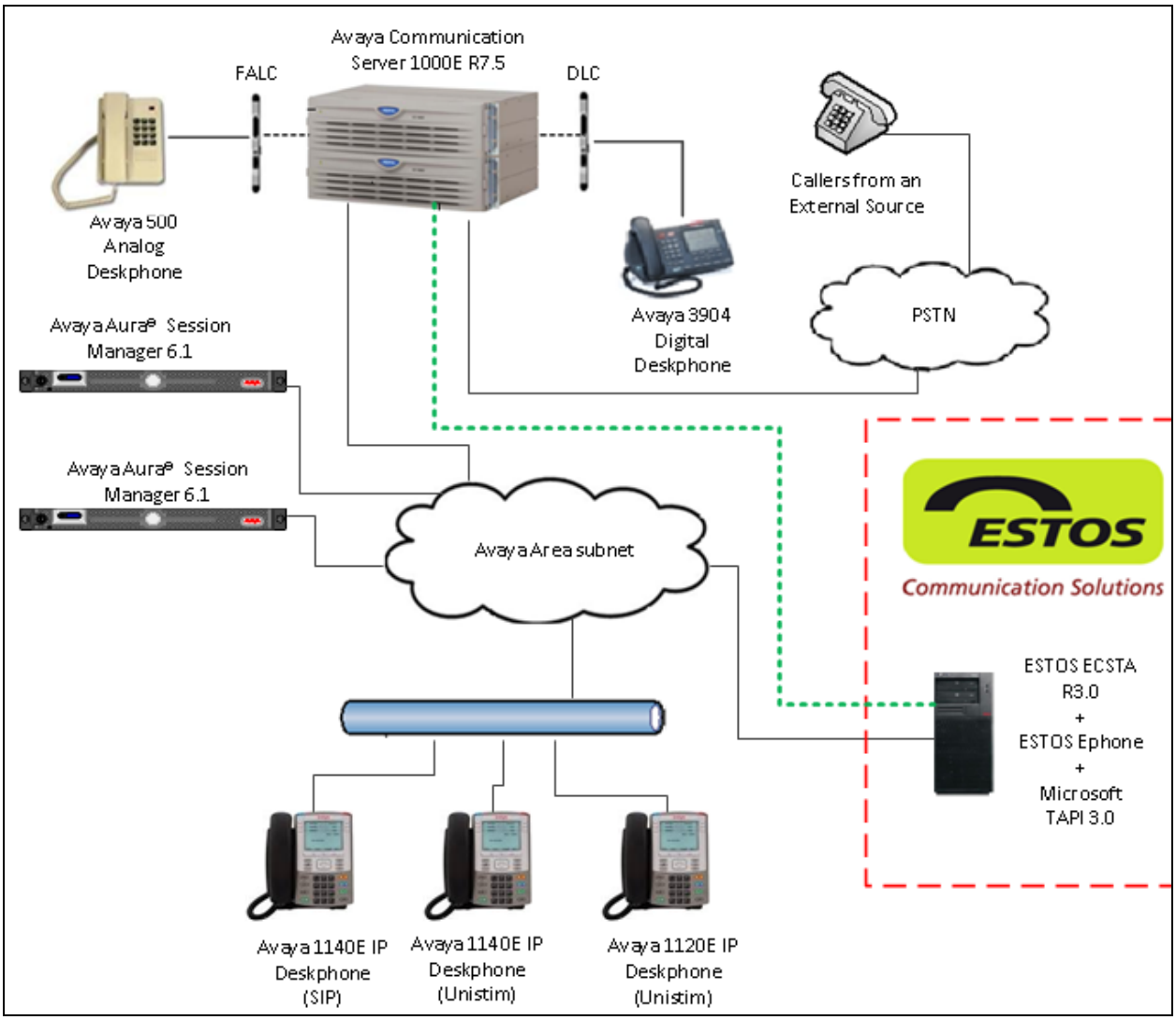


Figure 1: Avaya Communication Server 1000E and ESTOS ECSTA Reference Configuration

4. Equipment and Software Validated

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

Avaya Equipment	**Software / Firmware Version**
Call Processor Pentium Mobile (CPPM) Avaya Media Gateway NTDW60	Avaya Communication Server 1000E R7.5 FPGA AA18
Avaya S8800 Server running Avaya Aura® System Manager	Avaya Aura® System Manager R6.1 Build 6.1.0023
Avaya S8800 Server running Avaya Aura® Session Manager	Avaya Aura® Session Manager R6.1 Build 6.1.0012
Avaya Flexible Analog Line Card	NT5K02QC
Avaya Digital Line Card	NT8D02
Avaya 1100 series IP Telephones • 1140e	0625C8A (UniStim 5.0) SIP FW 04.00.04.00.bin
Avaya 3904 Digital set	F/W 2.4
Avaya Analog set	NT2N73AA
ESTOS Equipment	**Software / Firmware Version**
IBM System x3250 M2 server running Windows 2008 Server R2	ESTOS ECSTA Version 3.0.1.209
Microsoft TAPI	Version 3.0

5. Configure Avaya Communication Server 1000E

The configuration operations illustrated in this section were performed using terminal access to the CS1000E over a telnet session. It is implied a working system is already in place. For all other provisioning information such as Installation and Configuration, please refer to the product documentation in **Section 9**. **Appendix A** has a list of all CS1000E patches, deplist and service packs loaded on the system. The configuration operations described in this section can be summarized as follows:

- Verify Licence
- Configure ELAN
- Configure Value Added Service (VAS)
- Configure Deskphones to be acquired by CTI clients
- Configure Node

Note: In the telnet screenshots below only the unique prompt inputs are shown. To accept default values carriage return at all other prompts.

5.1. Verify Licence

A SIP CTI Licence 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 Licences please contact your Avaya representative.

LD22

```
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
```

```
MPH DSL                  100    LEFT   100    USED     0
DATA PORTS              2000    LEFT  2000    USED     0
PHANTOM PORTS           2000    LEFT  1996    USED     4
TRADITIONAL TRUNKS      2000    LEFT  1965    USED    35
ELC ACCESS PORTS        2000    LEFT  2000    USED     0
DCH                      255    LEFT   252    USED     3
```

5.2. Configure ELAN

Use the **CHG** command in **LD17** to configure an ELAN to communicate to the ESTOS ECSTA server.

LD17

```
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
```

5.3. Configure Value Added Service (VAS)

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 in **Section 5.2**.

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
```

5.4. Configure Deskphones to be acquired by CTI clients

Each Deskphone to be acquired by the CTI clients need the following configured: **CLS** = **T87A**, **AST** = **0**, **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 a digital Deskphone. For Anolog and IP UniStim Deskphone the same procedure is used.

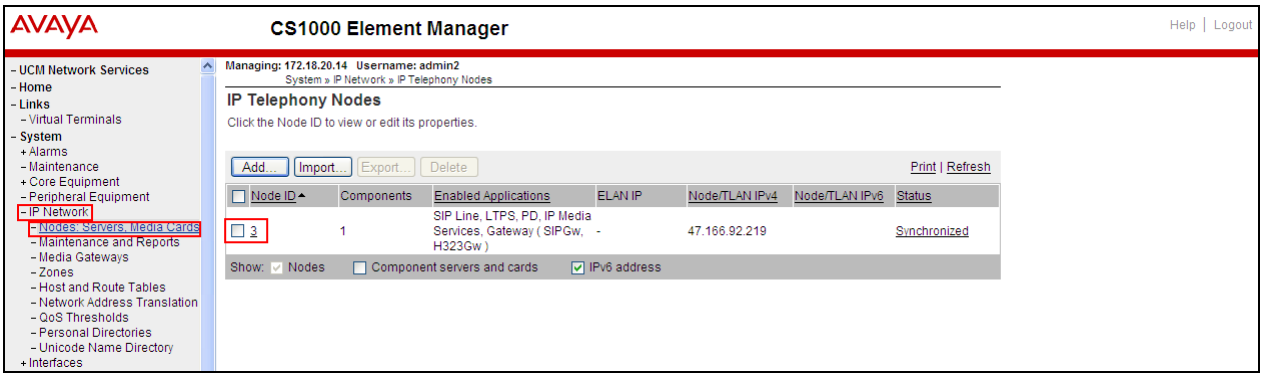
LD 20

Prompt	Response	Description
>	LD 20	Enter Overlay 20
REQ	chg	Change Data
TYPE	3904	3904 Telephone set type
TN	4 0 9 0	Terminal number
CUST	0	Customer Number
CLS	T87A	Class of Service
AST	0	Key Assignments of Telephone set
IAPG	1	Event Group for UCM Message

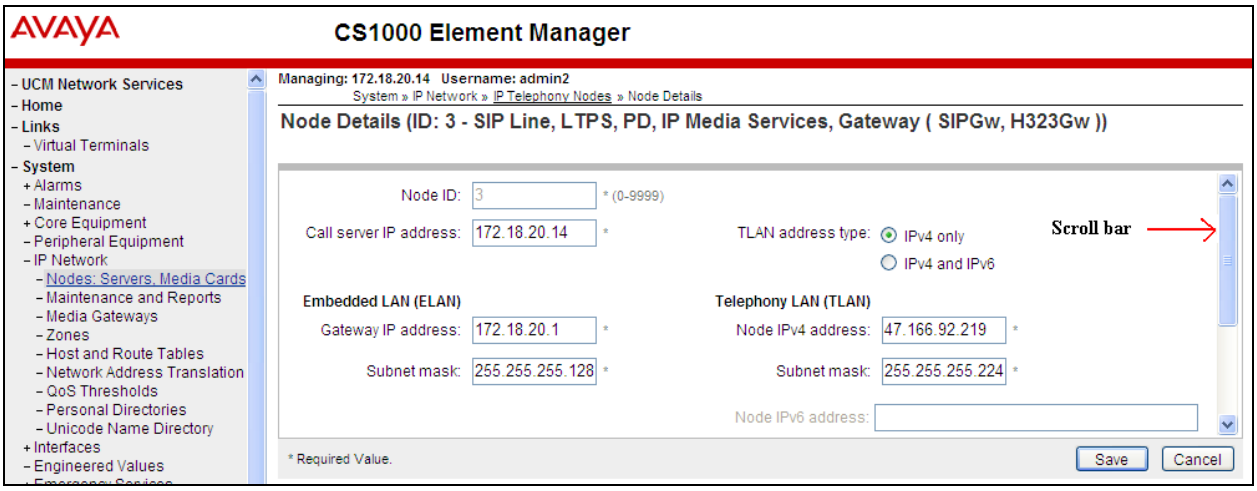
5.5. Configure Node

The Node configuration is implemented using Element Manger. Open the Element manager Web page and log on using the appropriate credentials (not shown). Once the main Element Manager page is open select **IP Network → Nodes: Servers, Media Cards.** Double click the Node to configure, (During compliance testing **Node 3** was used).

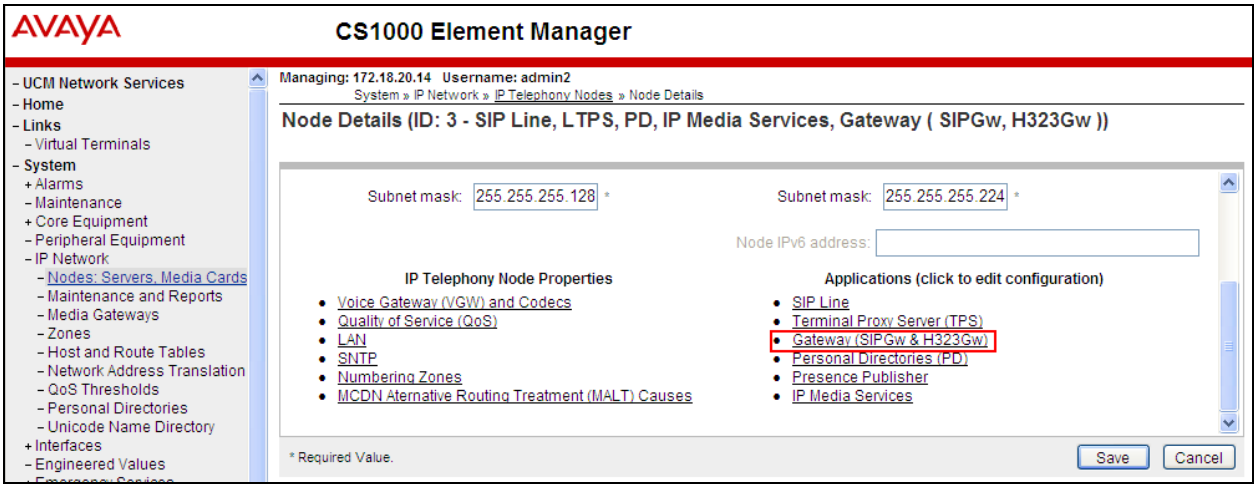
Note: the **Node IP Address** used during compliance testing was **47.166.92.219**.



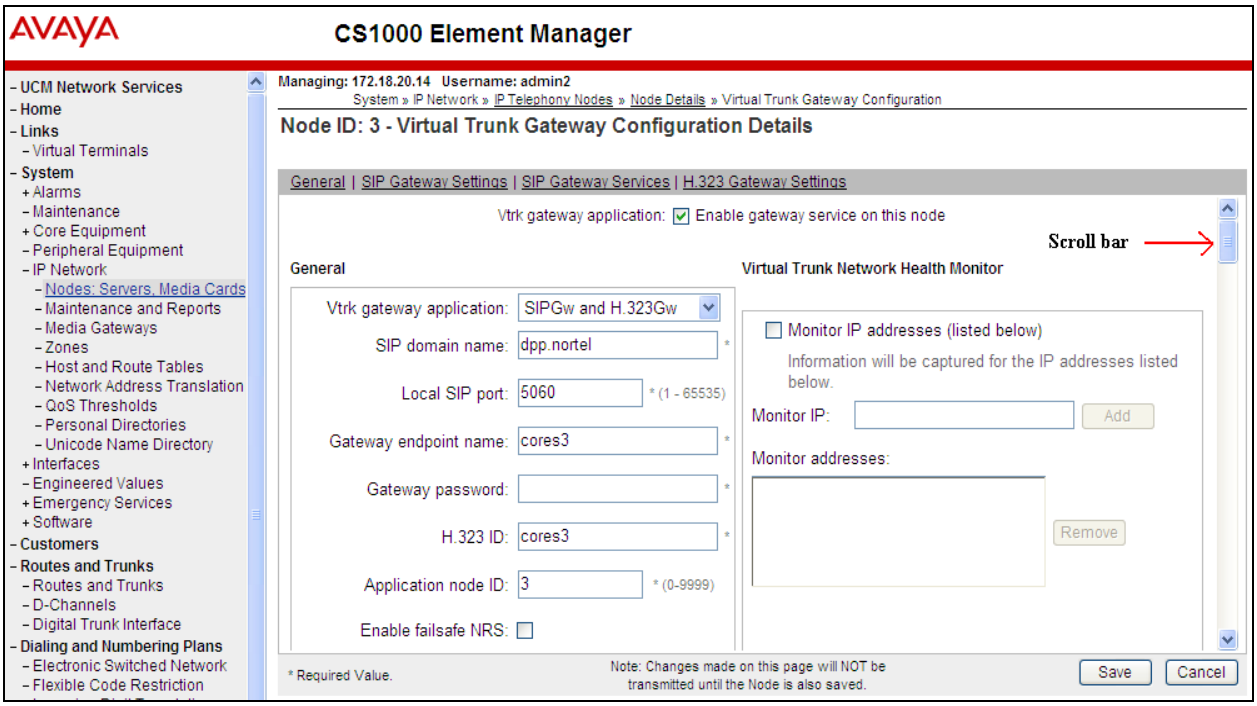
Once the **Node Details** page opens scroll down using the scroll bar on the left of the page to **applications** (Not shown)



At **Applications** select **Gateway (SIPGw & H323Gw)**.

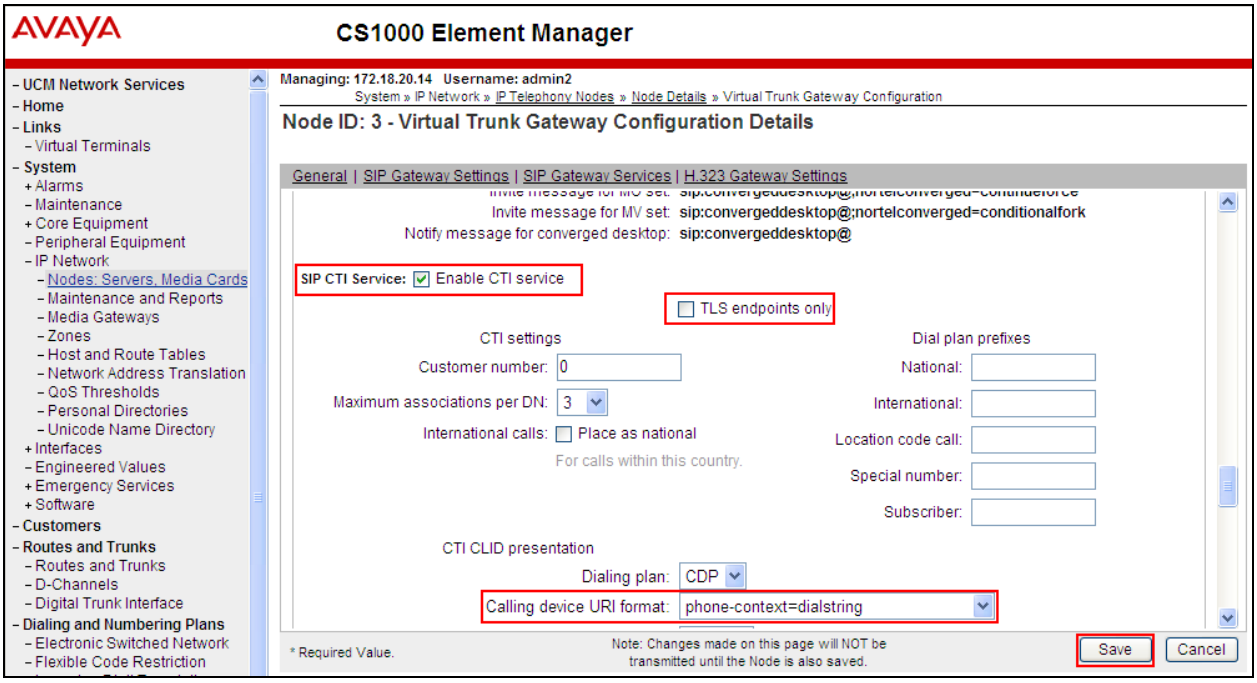


Once the Node ID Virtual Trunk Gateway Configuration Details page opens scroll down using the scroll bar on the left of the page to **SIP CTI Services** (Not shown).

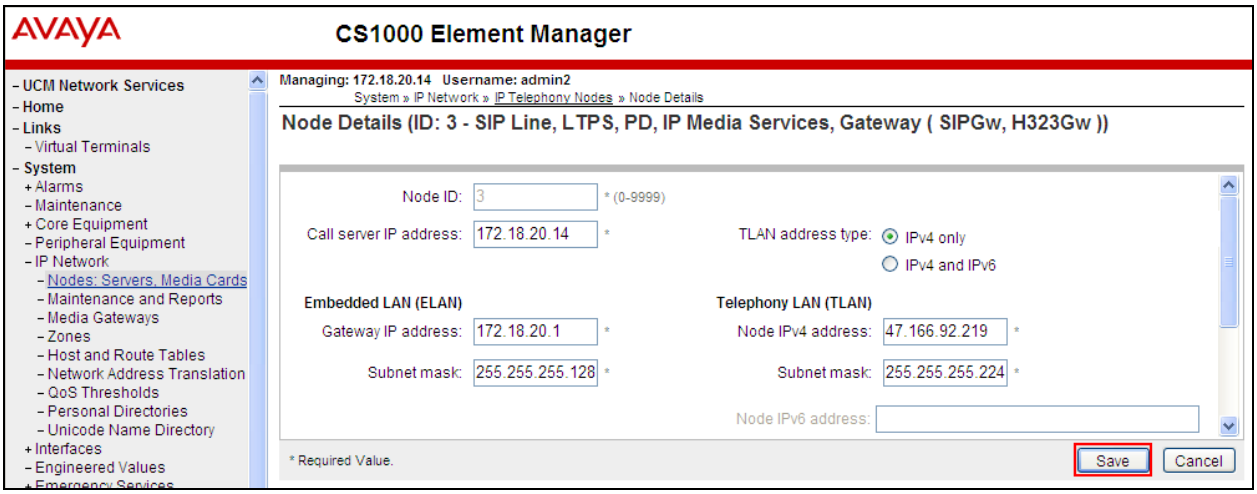


At **SIP CTI Services** check the **Enable CTI service** check box, uncheck the **TLS endpoints only** check box, and select **phone-context=dialstring** from the **Calling device URI format** dropdown box. Click the **Save** button to save the configurations. Once the **Save** button is clicked the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

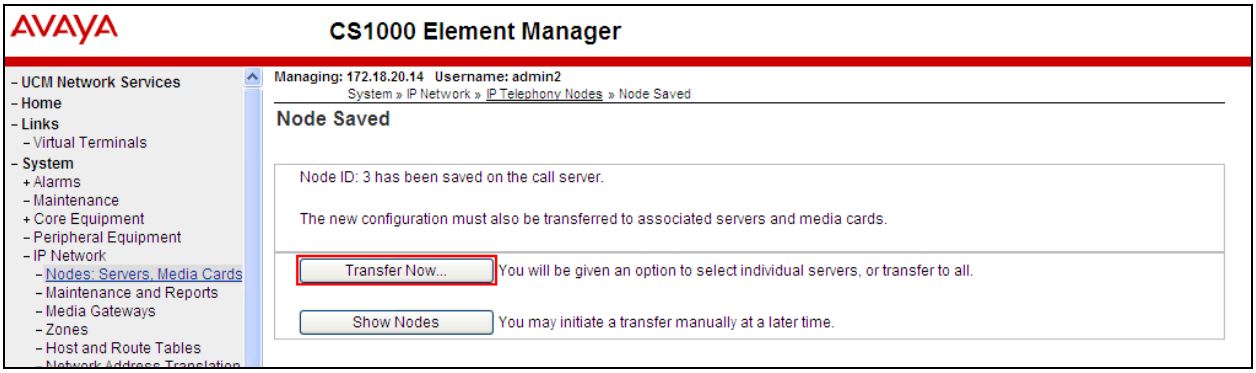
Note: Changes made on this page will **NOT** be transmitted until the Node is also saved.



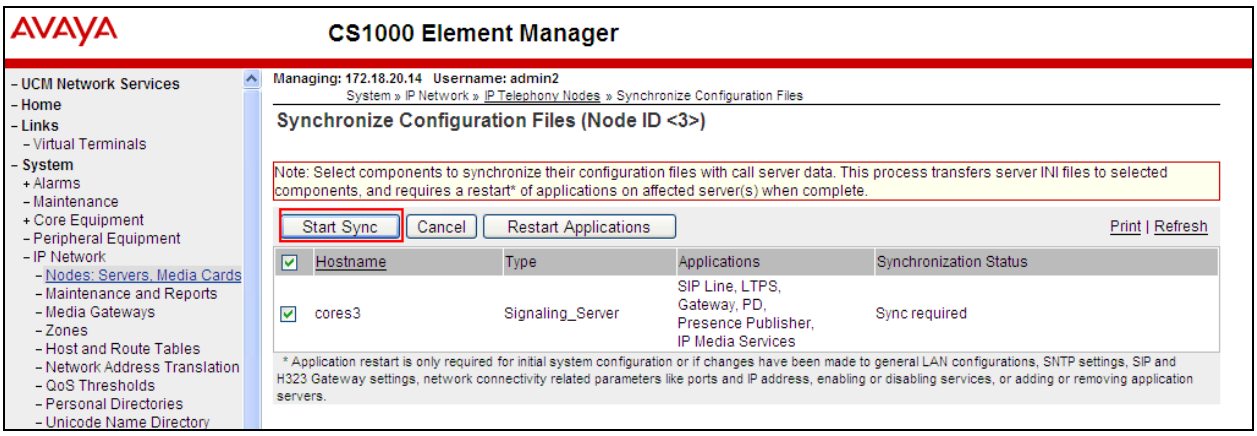
Once the **Node Details** page opens click the **Save** button.



Once the **Node Saved** page opens click on the **Transfer button**.

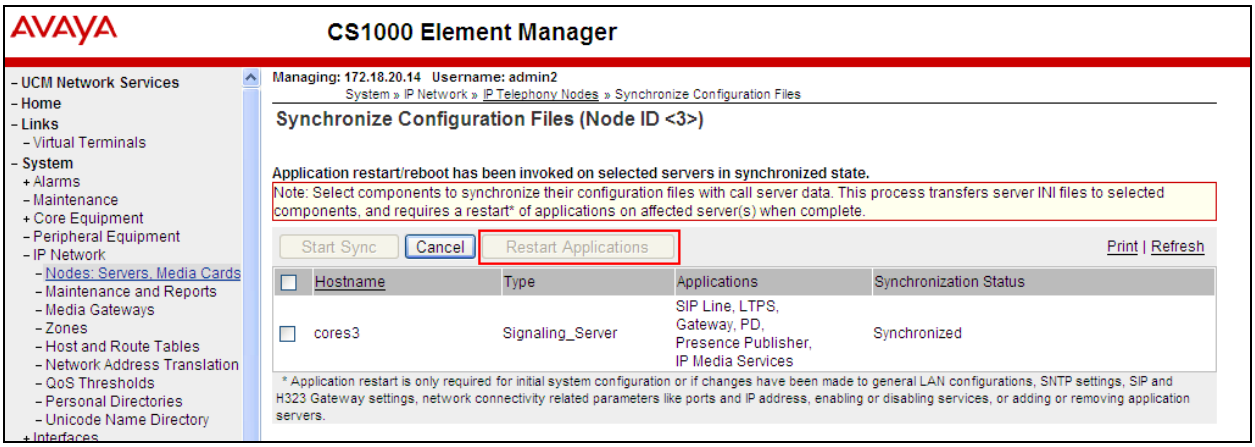


When the **Synchronize Configuration Files** page opens click on the **Start Sync** button.



Once the Synchronization Status changes to Synchronized, click on the **Restart Applications** button.

Note: After clicking the **Restart Applications** button all applications will restart including IP Deskphones. This may take up to 5 minutes.



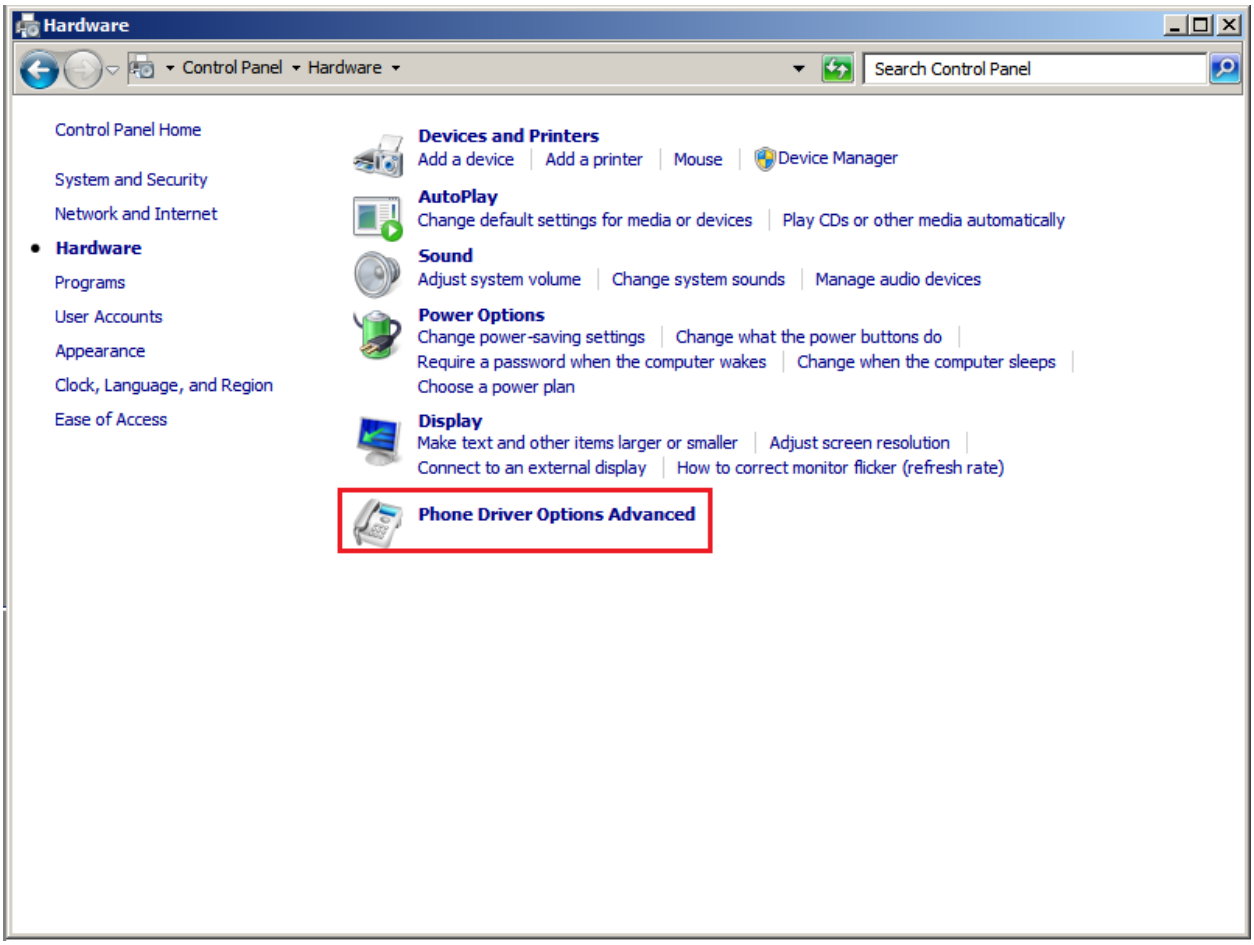
6. Configuration of ESTOS ECSTA

This section provides the procedures to configure ESTOS ECSTA. It is implied that the ECSTA is already in installed. It is also assumed that the Microsoft TAPI is installed. For all other provisioning information such as initial installation, please refer to the product documentation in **Section 9**.

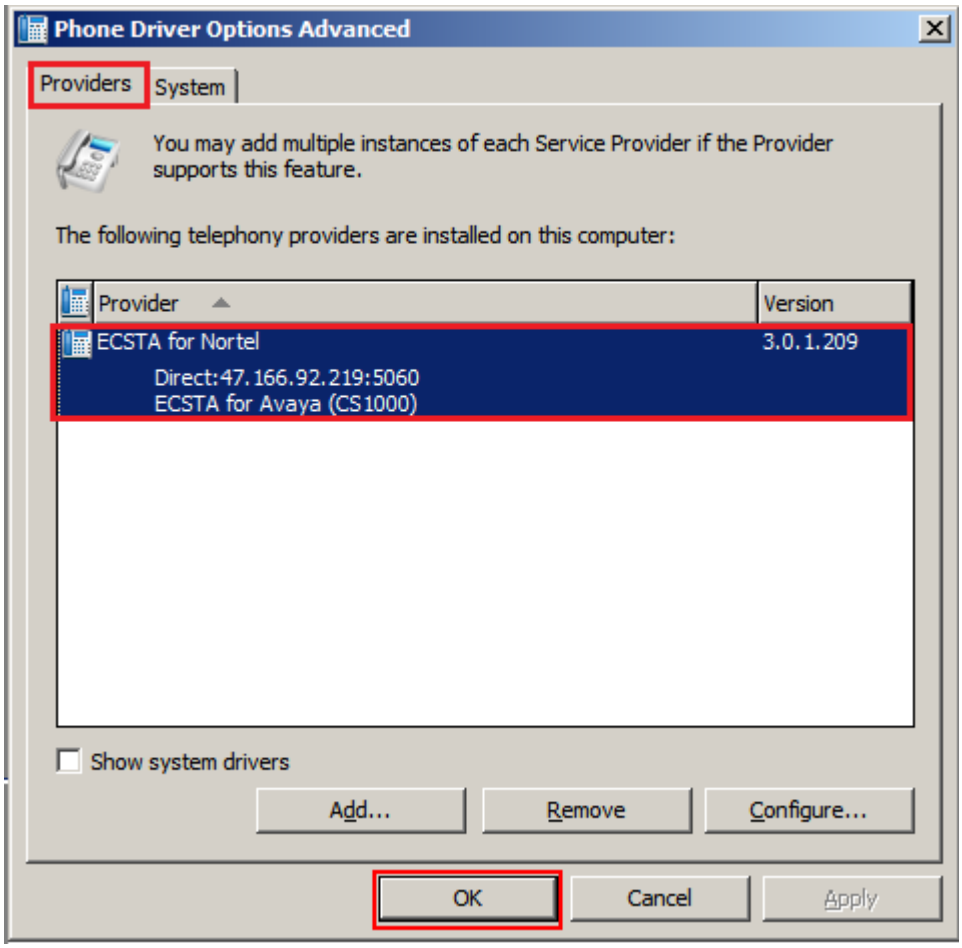
Note: The installation and configuration of the ESTOS Ephone which was used as the TAPI client during compliance testing is outside the scope of this document.

6.1. Configure Phone Driver Options

The configuration of the ESTOS ECSTA is configured using the **Phone drivers Options Advanced** found in **Start → Control Panel → Hardware** (not shown), double click on **Phone drivers Options Advanced**.

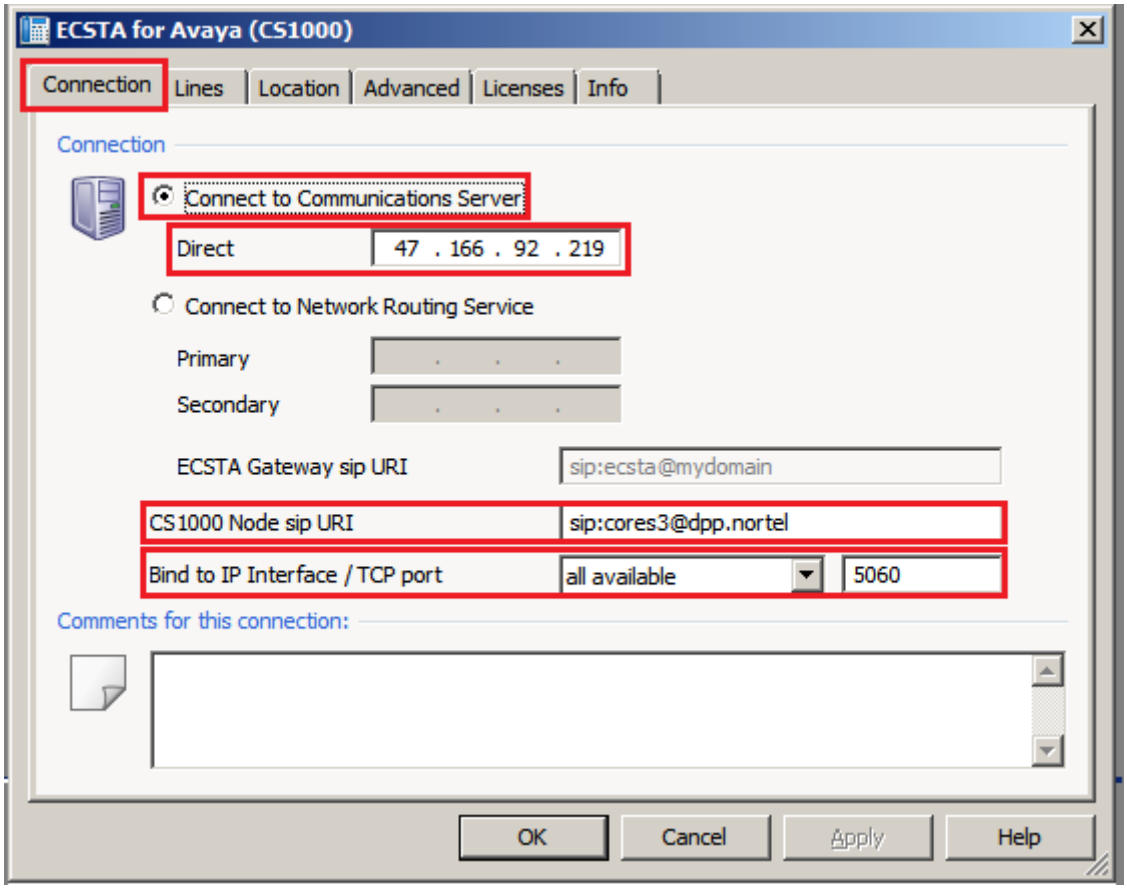


Once the **Phone drivers Options Advanced** window opens select **ECSTA for Nortel** and click on the **OK** button.

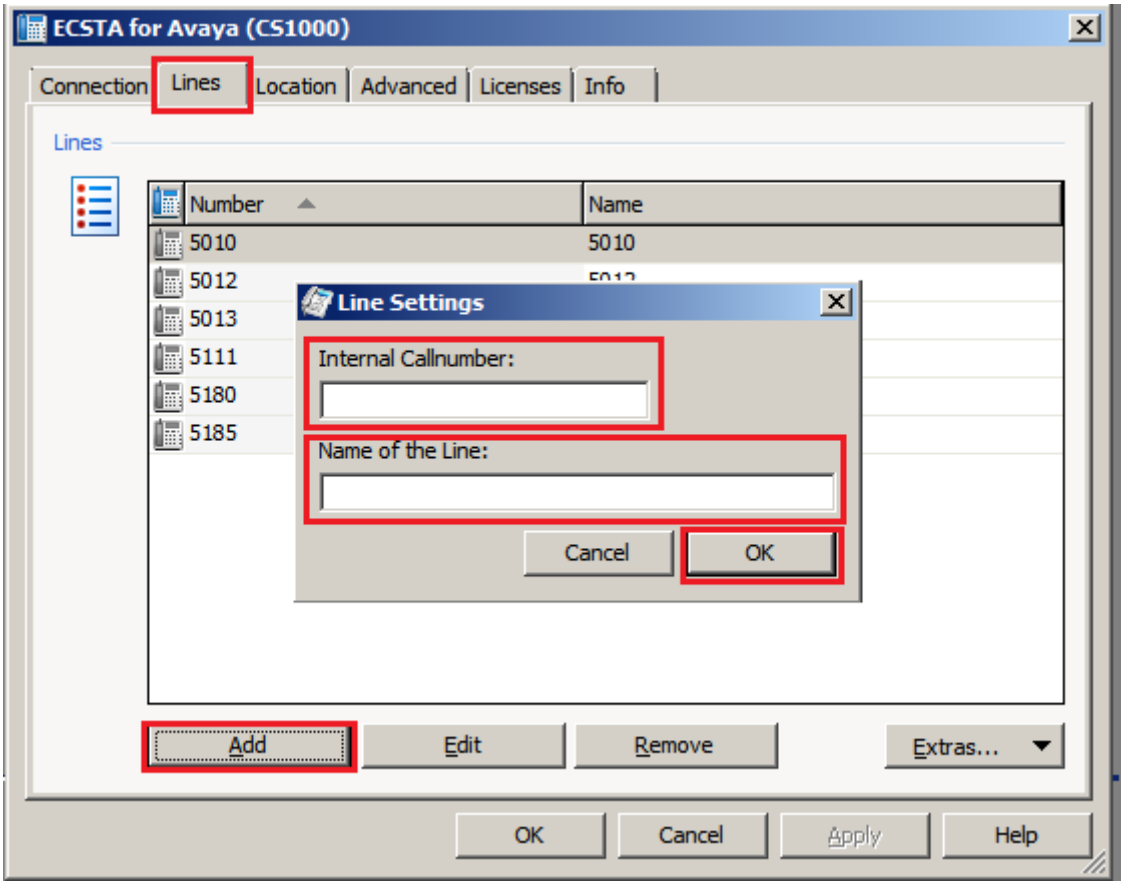


Once the **ECSTA for Avaya (CS1000)** window opens select the **Connection** tab, click on the **Connect to Communication server** Radio button. In the **Direct** window enter the **Node IP Address** found in **Section 5.5**. In the **CS1000 Node sip URI** window enter **sip:cores3@dpp.nortel**. From the **Bind to IP Interface / TCP port** window select **all available from the dropdown box** and enter port **5060.**

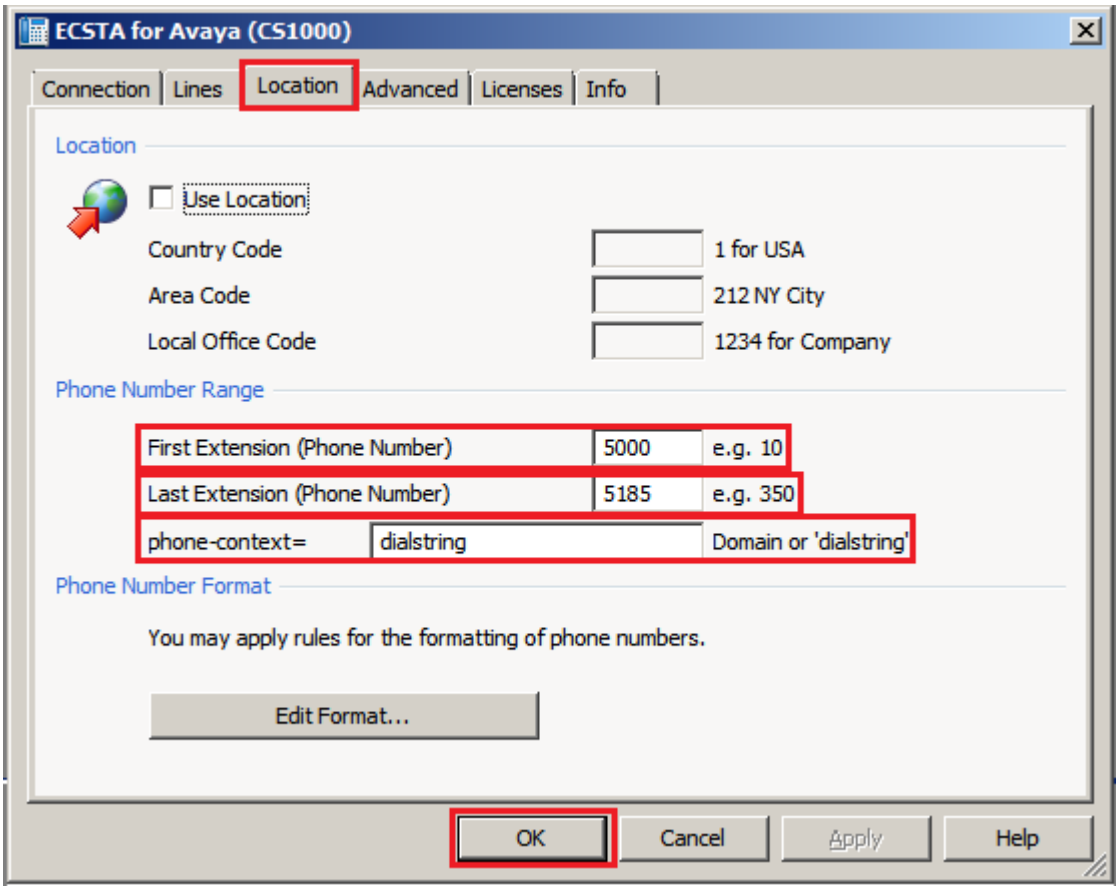
Note: The **CS1000 Node sip URI** is made up of the **Gateway Endpoint** name and **SIP domain name** found in **Section 5.5**.



Once the **Connection** details are filled in, click on the **Lines** tab. The Deskphones to be acquired by the ECSTA need to be entered here. Click on the **Add** button. When the **Line Settings** window opens enter the Deskphone number in the **Internal Callnumber** box, also enter the name of the Deskphone in the **Name of the Line** box. Click on the **OK** button to save the Line settings. Click on the **Add** button to enter any subsequent Line Settings.



Once the **Lines** details are filled in, click on the **Location** tab. The Phone Number Range to be acquired by the ECSTA is entered in this tab. 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 the **OK** button to save all the configuration changes.



7. Verification Steps

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

7.1. Verify Avaya Communication Server 1000E Deskphones are acquired.

The following step can ensure that the CS1000E Deskphones 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. **4 0 9 0**). Press Enter 4 times 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.

LD 20

```
Prompt              Response          Description
>                   LD 20             Enter Overlay 20
REQ                 PRT               Print Data
TYPE                TNB               Terminal number
TN                  4 0 9 0           Terminal number
(Return)
(Return)
(Return)
(Return)

AACS YES
ACQ  AS: TN
ASID 16
SFNB  2  5  6  7  8  9  10  11  12  13  15  16  17  18  19  21  23
SFRB  1  2  15
USFB  1  3  4  5  6  7  9  10  12  13  14  15
CALB  1  3  4  5  6  8  9  10  11  12
FCTB  0  1
```

7.2. 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**. Verify connectivity with the CS1000E Node (**47.166.92.219)** on port **5060** by the Ephone test tool controlling extension **5013** via ECSTA, as shown in the log extract below. **LineOpen** confirms successful connection.

```
connection.09.07.2012 15:21:35:124;32;5013;TSPI_lineOpen begin
09.07.2012 15:21:35:124;32;5013;TSPI_lineOpen success
09.07.2012 15:21:35:124;32;TSPI_lineSetDefaultMediaDetection;5013 MediaModes
00000004
09.07.2012 15:21:35:124;32;ETspBase::ConnectionWatchFunction;PBX Connect is
required
09.07.2012 15:21:35:124;32;ETspBase::Connect;SIP: Host 47.166.92.219, Port
5060
09.07.2012 15:21:35:186;32;ETspBase::ConnectionWatchFunction;Connect result:
00000000
09.07.2012 15:21:35:280;32;5013;LineOpen 00000000
```

8. Conclusion

A full and comprehensive set of feature functional test cases were preformed during Compliance testing. ESTOS ECSTA 3.0.1.209 is considered compliant with Avaya Communication Server 1000E R7.5 All test cases have passed and met the objectives outlined in **Section 2**.

9. Additional References

These documents form part of the Avaya official technical reference documentation suite. Further information may be had from *http://support.avaya.com* or from your Avaya representative.

[1] Software Input Output Reference — Administration Avaya Communication Server 1000 7.5, NN43001-611, 05.09 September 2011

[2] Element Manager System Reference – Administration Avaya Communication Server 1000 7.5, NN43001-632, 05.13 November 2011

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

Appendix A: Avaya Communication Server 1000E Software

```
            Avaya Communication Server 1000E call server deplists

VERSION 4121
RELEASE 7
ISSUE 50 Q +
DepList 1: core Issue: 01 (created: 2012-03-14 13:55:18 (est))

IN-SERVICE PEPS
PAT# CR #            PATCH REF #     NAME      DATE        FILENAME   SPECINS
000  wi00969890      ISS1:1OF1       p31664_1  20/08/2012  p31664_1.cpl   YES
001  wi00974635      ISS1:1OF1       p31695_1  20/08/2012  p31695_1.cpl   YES
002  wi00958776      ISS1:1OF1       p31542_1  20/08/2012  p31542_1.cpl   YES
003  wi00925218      ISS1:1OF1       p30675_1  20/08/2012  p30675_1.cpl   NO
004  wi00881777      ISS1:1OF1       p25747_1  20/08/2012  p25747_1.cpl   NO
005  wi00862574      iss1:1of1       p30870_1  20/08/2012  p30870_1.cpl   NO
006  wi00879322      ISS1:1OF1       p30954_1  20/08/2012  p30954_1.cpl   NO
007  wi00976209      ISS1:1OF1       p31717_1  20/08/2012  p31717_1.cpl   YES
008  wi00984178      ISS1:1OF1       p31786_1  20/08/2012  p31786_1.cpl   NO
009  wi00959284      ISS1:1OF1       p31531_1  20/08/2012  p31531_1.cpl   NO
010  wi00905660      ISS1:1OF1       p27968_1  20/08/2012  p27968_1.cpl   NO
011  wi00897082      ISS1:1OF1       p31124_1  20/08/2012  p31124_1.cpl   NO
012  wi00897096      ISS1:1OF1       p30676_1  20/08/2012  p30676_1.cpl   NO
013  wi00855423      ISS1:1OF1       p31328_1  20/08/2012  p31328_1.cpl   YES
014  wi00896680      ISS1:1OF1       p30357_1  20/08/2012  p30357_1.cpl   NO
015  wi00937672      ISS1:1OF1       p31276_1  20/08/2012  p31276_1.cpl   NO
016  wi00859123      ISS1:1OF1       p30648_1  20/08/2012  p30648_1.cpl   NO
017  wi00949273      ISS1:1OF1       p31411_1  20/08/2012  p31411_1.cpl   NO
018  wi00840590      ISS1:1OF1       p30767_1  20/08/2012  p30767_1.cpl   NO
019  wi00978007      ISS1:1OF1       p31737_1  20/08/2012  p31737_1.cpl   NO
020  wi00865477      ISS1:1OF1       p30897_1  20/08/2012  p30897_1.cpl   YES
021  wi00900668      ISS1:1OF1       p30456_1  20/08/2012  p30456_1.cpl   NO
022  wi00906163      ISS1:1OF1       p31205_1  20/08/2012  p31205_1.cpl   NO
023  wi00949627      ISS1:1OF1       p31462_1  20/08/2012  p31462_1.cpl   NO
024  wi00875701      ISS1:1OF1       p30942_1  20/08/2012  p30942_1.cpl   NO
025  wi00937114      ISS1:1OF1       p31310_1  20/08/2012  p31310_1.cpl   NO
026  wi00858335      ISS1:1OF1       p30819_1  20/08/2012  p30819_1.cpl   NO
027  wi00869243      ISS1:1OF1       p30848_1  20/08/2012  p30848_1.cpl   NO
028  wi00896394      ISS1:1OF1       p30807_1  20/08/2012  p30807_1.cpl   NO
029  wi00925208      ISS1:1OF1       p30986_1  20/08/2012  p30986_1.cpl   NO
030  wi00835294      ISS1:1OF1       p30565_1  20/08/2012  p30565_1.cpl   NO
031  wi00962211      ISS1:1OF1       p31580_1  20/08/2012  p31580_1.cpl   NO
032  wi00945997      ISS1:1OF1       p31641_1  20/08/2012  p31641_1.cpl   NO
033  wi00907697      ISS1:1OF1       p31227_1  20/08/2012  p31227_1.cpl   NO
034  wi00886321      ISS1:1OF1       p31009_1  20/08/2012  p31009_1.cpl   NO
035  wi00854130      ISS1:1OF1       p30443_1  20/08/2012  p30443_1.cpl   NO
036  wi00873382      ISS1:1OF1       p30832_1  20/08/2012  p30832_1.cpl   NO
037  WI00927300      ISS1:1OF1       p30999_1  20/08/2012  p30999_1.cpl   NO
038  wi00982243      ISS1:1OF1       p31797_1  20/08/2012  p31797_1.cpl   NO
039  wi00898327      ISS1:1OF1       p31136_1  20/08/2012  p31136_1.cpl   NO
040  wi00832106      ISS1:1OF1       p30550_1  20/08/2012  p30550_1.cpl   NO
041  wi00900096      ISS1:1OF1       p31006_1  20/08/2012  p31006_1.cpl   NO
042  wi00959820      ISS1:1OF1       p31562_1  20/08/2012  p31562_1.cpl   NO
```

043	wi00895090	ISS1:1OF1	p31105_1	20/08/2012	p31105_1.cpl	NO
044	wi00967509	ISS1:1OF1	p31294_1	20/08/2012	p31294_1.cpl	NO
045	wi00890475	p30952	p31048_1	20/08/2012	p31048_1.cpl	NO
046	wi00852365	ISS1:1OF1	p30707_1	20/08/2012	p30707_1.cpl	NO
047	wi00957252	ISS1:1OF1	p31530_1	20/08/2012	p31530_1.cpl	NO
048	wi00887744	ISS2:1OF1	p31026_2	20/08/2012	p31026_2.cpl	NO
049	WI00853473	ISS1:1OF1	p30625_1	20/08/2012	p30625_1.cpl	NO
050	wi00905600	ISS1:1OF1	p31201_1	20/08/2012	p31201_1.cpl	NO
051	WI00889786	ISS1:1OF1	p30750_1	20/08/2012	p30750_1.cpl	NO
052	wi00827950	ISS2:1OF1	p30471_2	20/08/2012	p30471_2.cpl	NO
053	wi00843623	ISS1:1OF1	p30731_1	20/08/2012	p30731_1.cpl	YES
054	wi00960809	ISS1:1OF1	p31564_1	20/08/2012	p31564_1.cpl	NO
055	wi00898200	ISS1:1of1	p31274_1	20/08/2012	p31274_1.cpl	NO
056	wi00938555	ISS1:1OF1	p30881_1	20/08/2012	p30881_1.cpl	YES
057	wi00964006	ISS1:1OF1	p31595_1	20/08/2012	p31595_1.cpl	YES
058	wi00865477	ISS1:1OF1	p30898_1	20/08/2012	p30898_1.cpl	YES
059	wi00905297	ISS1:1OF1	p31195_1	20/08/2012	p31195_1.cpl	NO
060	wi00839255	ISS1:1OF1	p30591_1	20/08/2012	p30591_1.cpl	NO
061	wi00960133	ISS2:1OF1	p31557_2	20/08/2012	p31557_2.cpl	NO
062	wi00967754	ISS1:1OF1	p31653_1	20/08/2012	p31653_1.cpl	YES
063	wi00943172	ISS1:1OF1	p31402_1	20/08/2012	p31402_1.cpl	NO
064	wi00877367	ISS1:1OF1	p30534_1	20/08/2012	p30534_1.cpl	NO
065	wi00857566	ISS1:1OF1	p30766_1	20/08/2012	p30766_1.cpl	NO
066	wi00948274	ISS1:1OF1	p31365_1	20/08/2012	p31365_1.cpl	NO
067	wi00841980	ISS1:1OF1	p30618_1	20/08/2012	p30618_1.cpl	NO
068	wi00897176	ISS1:1OF1	p30418_1	20/08/2012	p30418_1.cpl	NO
069	wi00865477	ISS1:1OF1	p30892_1	20/08/2012	p30892_1.cpl	YES
070	wi00931028	ISS1:1OF1	p31354_1	20/08/2012	p31354_1.cpl	YES
071	wi00875425	ISS1:1OF1	p30943_1	20/08/2012	p30943_1.cpl	NO
072	wi00968531	ISS1:1OF1	p31645_1	20/08/2012	p31645_1.cpl	NO
073	wi00895181	ISS1:1OF1	p31106_1	20/08/2012	p31106_1.cpl	NO
074	wi00973241	ISS1:1OF1	p31715_1	20/08/2012	p31715_1.cpl	NO
075	wi00948931	ISS1:1OF1	p31407_1	20/08/2012	p31407_1.cpl	NO
076	wi00968157	ISS1:1OF1	p31637_1	20/08/2012	p31637_1.cpl	NO
077	wi00871969	ISS1:1OF1	p30768_1	20/08/2012	p30768_1.cpl	NO
078	wi00967510	ISS1:1OF1	p31147_1	20/08/2012	p31147_1.cpl	NO
079	wi00891626	ISS1:1OF1	p31051_1	20/08/2012	p31051_1.cpl	YES
080	wi00946558	ISS1:1OF1	p31358_1	20/08/2012	p31358_1.cpl	NO
081	wi00839821	ISS1:1OF1	p30619_1	20/08/2012	p30619_1.cpl	NO
082	WI00839794	ISS1:1OF1	p28647_1	20/08/2012	p28647_1.cpl	NO
083	WI00843571	ISS1:1OF1	p30627_1	20/08/2012	p30627_1.cpl	NO
084	wi00856991	ISS1:1OF1	p17588_1	20/08/2012	p17588_1.cpl	NO
085	wi00842409	ISS1:1OF1	p30621_1	20/08/2012	p30621_1.cpl	NO
086	wi00927321	ISS1:1OF1	p31286_1	20/08/2012	p31286_1.cpl	YES
087	wi00974272	ISS1:1OF1	p31690_1	20/08/2012	p31690_1.cpl	YES
088	wi00880386	ISS1:1OF1	p30977_1	20/08/2012	p30977_1.cpl	NO
089	wi00865477	ISS1:1OF1	p30896_1	20/08/2012	p30896_1.cpl	YES
090	wi00838073	ISS1:1OF1	p30588_1	20/08/2012	p30588_1.cpl	NO
091	wi00965838	ISS1:1OF1	p31623_1	20/08/2012	p31623_1.cpl	NO
092	wi00879526	ISS1:1OF1	p31007_1	20/08/2012	p31007_1.cpl	NO
093	wi00958682	ISS1:1OF1	p31540_1	20/08/2012	p31540_1.cpl	NO
094	wi00969581	ISS1:1OF1	p31661_1	20/08/2012	p31661_1.cpl	YES
095	wi00973858	ISS1:1OF1	p31691_1	20/08/2012	p31691_1.cpl	NO
096	wi00946282	ISS1:1OF1	p31204_1	20/08/2012	p31204_1.cpl	NO
097	wi00863876	ISS1:1OF1	p30787_1	20/08/2012	p30787_1.cpl	NO

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098  wi00908933      ISS1:1OF1      p31239_1  20/08/2012  p31239_1.cpl   NO
099  wi00856702      ISS1:1OF1      p30573_1  20/08/2012  p30573_1.cpl   NO
100  wi00975133      ISS1:1OF1      p31731_1  20/08/2012  p31731_1.cpl   NO
101  wi00932948      ISS1:1OF1      p31077_1  20/08/2012  p31077_1.cpl   NO
102  wi00969208      ISS1:1OF1      p31656_1  20/08/2012  p31656_1.cpl   NO
103  WI00836292      ISS1:1OF1      p30554_1  20/08/2012  p30554_1.cpl   NO
104  wi00908598      ISS1:1OF1      p31235_1  20/08/2012  p31235_1.cpl   NO
105  wi00880836      ISS1:1OF1      p30976_1  20/08/2012  p30976_1.cpl   NO
106  WI00854150      ISS1:1OF1      p30468_1  20/08/2012  p30468_1.cpl   NO
107  wi00894243      ISS1:1OF1      p31087_1  20/08/2012  p31087_1.cpl   NO
108  wi00877592      ISS1:1OF1      p30880_1  20/08/2012  p30880_1.cpl   NO
109  wi00871739      ISS1:1OF1      p30856_1  20/08/2012  p30856_1.cpl   NO
110  wi00688381      ISS1:1OF1      p30104_1  20/08/2012  p30104_1.cpl   NO
111  wi00955753      ISS1:1OF1      p31733_1  20/08/2012  p31733_1.cpl   NO
112  wi00850521      ISS1:1OF1      p30709_1  20/08/2012  p30709_1.cpl   YES
113  wi00932204      ISS2:1OF1      p31305_2  20/08/2012  p31305_2.cpl   NO
114  wi00906022      ISS1:1OF1      p31202_1  20/08/2012  p31202_1.cpl   NO
115  wi00860279      ISS1:1OF1      p30789_1  20/08/2012  p30789_1.cpl   NO
116  wi00959457      ISS1:1OF1      p31551_1  20/08/2012  p31551_1.cpl   NO
117  wi00852389      ISS1:1OF1      p30641_1  20/08/2012  p30641_1.cpl   NO
118  wi00941500      ISS1:1OF1      p31394_1  20/08/2012  p31394_1.cpl   NO
119  wi00834382      ISS1:1OF1      p30548_1  20/08/2012  p30548_1.cpl   NO
120  wi00883604      ISS1:1OF1      p30973_1  20/08/2012  p30973_1.cpl   NO
121  wi00921295      ISS1:1OF1      p31265_1  20/08/2012  p31265_1.cpl   NO
122  wi00946876      ISS1:1OF1      p31430_1  20/08/2012  p31430_1.cpl   NO
123  wi00909476      ISS1:1OF1      p31340_1  20/08/2012  p31340_1.cpl   NO
124  wi00923899      ISS1:1OF1      p31270_1  20/08/2012  p31270_1.cpl   NO
125  wi00856410      ISS1:1OF1      p30749_1  20/08/2012  p30749_1.cpl   NO
126  wi00859499      ISS1:1OF1      p30694_1  20/08/2012  p30694_1.cpl   NO
127  wi00951837      ISS1:1OF1      p31485_1  20/08/2012  p31485_1.cpl   NO
128  wi00978883      ISS1:1OF1      p31770_1  20/08/2012  p31770_1.cpl   NO
129  wi00950575      ISS1:1OF1      p31724_1  20/08/2012  p31724_1.cpl   NO
130  wi00869695      ISS1:1OF1      p30654_1  20/08/2012  p30654_1.cpl   NO
131  wi00899584      ISS1:1OF1      p30809_1  20/08/2012  p30809_1.cpl   NO
132  wi00891621      ISS1:1OF1      p31037_1  20/08/2012  p31037_1.cpl   NO
133  wi00969039      ISS1:1OF1      p31643_1  20/08/2012  p31643_1.cpl   NO
134  wi00942734      ISS1:1OF1      p31409_1  20/08/2012  p31409_1.cpl   NO
135  wi00865477      ISS1:1OF1      p30893_1  20/08/2012  p30893_1.cpl   YES
136  wi00930649      ISS1:1OF1      p31570_1  20/08/2012  p31570_1.cpl   NO
137  wi00841273      ISS1:1OF1      p30713_1  20/08/2012  p30713_1.cpl   NO
138  wi00826075      ISS1:1OF1      p30452_1  20/08/2012  p30452_1.cpl   NO
139  wi00959463      ISS1:1OF1      p31528_1  20/08/2012  p31528_1.cpl   NO
140  wi00929140      ISS1:1OF1      p31284_1  20/08/2012  p31284_1.cpl   NO
141  wi00824257      ISS1:1OF1      p30447_1  20/08/2012  p30447_1.cpl   NO
142  WI00836334      ISS1:1OF1      p30481_1  20/08/2012  p30481_1.cpl   NO
143  wi00936714      ISS1:1OF1      p31379_1  20/08/2012  p31379_1.cpl   NO
144  wi00903381      ISS1:1OF1      p30421_1  20/08/2012  p30421_1.cpl   NO
145  wi00839134      ISS1:1OF1      p30698_1  20/08/2012  p30698_1.cpl   YES
146  wi00962557      ISS1:1OF1      p31581_1  20/08/2012  p31581_1.cpl   NO
147  wi00853178      ISS1:1OF1      p30719_1  20/08/2012  p30719_1.cpl   NO
148  WI00928455      ISS1:1OF1      p31297_1  20/08/2012  p31297_1.cpl   NO
149  wi00903437      ISS1:1OF1      p31167_1  20/08/2012  p31167_1.cpl   NO
150  wi00884699      ISS1:1OF1      p31000_1  20/08/2012  p31000_1.cpl   YES
151  wi00932958      ISS1:1OF1      p31115_1  20/08/2012  p31115_1.cpl   NO
152  wi00896420      ISS1:1OF1      p30867_1  20/08/2012  p30867_1.cpl   NO
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153  wi00865477      ISS1:1OF1       p30894_1  20/08/2012  p30894_1.cpl   YES
154  wi00925141      ISS1:1OF1       p30802_1  20/08/2012  p30802_1.cpl   NO
155  wi00857362      ISS1:1OF1       p30782_1  20/08/2012  p30782_1.cpl   NO
156  wi00956788      ISS1:1OF1       p31638_1  20/08/2012  p31638_1.cpl   NO
157  wi00924886      ISS1:1OF1       p31062_1  20/08/2012  p31062_1.cpl   YES
158  wi00854415      ISS1:1OF1       p30593_1  20/08/2012  p30593_1.cpl   NO
159  wi00930864      ISS1:1OF1       p31325_1  20/08/2012  p31325_1.cpl   NO
160  wi00968448      ISS1:1OF1       p31648_1  20/08/2012  p31648_1.cpl   YES
161  wi00962955      ISS1:1OF1       p31585_1  20/08/2012  p31585_1.cpl   NO
162  wi00977393      ISS1:1OF1       p31744_1  20/08/2012  p31744_1.cpl   YES
163  wi00868729      ISS1:1OF1       p31163_1  20/08/2012  p31163_1.cpl   NO
164  wi00951427      ISS1:1OF1       p31478_1  20/08/2012  p31478_1.cpl   NO
165  wi00894443      ISS1:1OF1       p31093_1  20/08/2012  p31093_1.cpl   NO
166  wi00956885      ISS1:1OF1       p31489_1  20/08/2012  p31489_1.cpl   NO
167  wi00968353      ISS1:1OF1       p31412_1  20/08/2012  p31412_1.cpl   NO
168  wi00836182      ISS1:1OF1       p30450_1  20/08/2012  p30450_1.cpl   NO
169  wi00961267      ISS1:1OF1       p30288_1  20/08/2012  p30288_1.cpl   NO
170  wi00907707      ISS1:1OF1       p31228_1  20/08/2012  p31228_1.cpl   NO
171  wi00965285      ISS1:1OF1       p31476_1  20/08/2012  p31476_1.cpl   NO
172  wi00903369      ISS1:1OF1       p31165_1  20/08/2012  p31165_1.cpl   NO
173  wi00936935      ISS1:1OF1       p31362_1  20/08/2012  p31362_1.cpl   NO
174  wi00900766      ISS1:1OF1       p31159_1  20/08/2012  p31159_1.cpl   NO
175  wi00943748      ISS1:1OF1       p31516_1  20/08/2012  p31516_1.cpl   NO
176  wi00882293      ISS1:1OF1       p31010_1  20/08/2012  p31010_1.cpl   NO
177  wi00953900      ISS1:1OF1       p31494_1  20/08/2012  p31494_1.cpl   NO
178  wi00949410      ISS1:1OF1       p31248_1  20/08/2012  p31248_1.cpl   NO
179  wi00975659      ISS1:1OF1       p31707_1  20/08/2012  p31707_1.cpl   NO
180  wi00946477      ISS1:1OF1       p31426_1  20/08/2012  p31426_1.cpl   NO
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   Avaya Communication Server 1000E Peripheral Software Version (PSWV) data
PSWV VERSION: PSWV 100
LCRI: VERSION NUMBER: AA02
XNET: VERSION NUMBER: AC23
XPEC: VERSION NUMBER: AC43
FNET: VERSION NUMBER: AA07
FPEC: VERSION NUMBER: AA08
MSDL: VERSION NUMBER: AJ73
SDI:  VERSION NUMBER: AH51
DCH:  VERSION NUMBER: AA72
AML:  VERSION NUMBER: AK81
BRIL: VERSION NUMBER: AK83
BRIT: VERSION NUMBER: AK82
MISP: VERSION NUMBER: AJ71
MPH:  VERSION NUMBER: AH51
BRSC: VERSION NUMBER: AJ71
BBRI: VERSION NUMBER: AH54
PRIE: VERSION NUMBER: AA87
BRIE: VERSION NUMBER: AK89
ISIG: VERSION NUMBER: AA33
SWE1: VERSION NUMBER: BA53
UKG1: VERSION NUMBER: BA51
AUS1: VERSION NUMBER: BA49
DEN1: VERSION NUMBER: BA48
FIN1: VERSION NUMBER: BA49
GER1: VERSION NUMBER: BA54
```

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ITA1: VERSION NUMBER: AA54
NOR1: VERSION NUMBER: BA49
POR1: VERSION NUMBER: BA49
DUT1: VERSION NUMBER: BA50
EIR1: VERSION NUMBER: BA49
SWI1: VERSION NUMBER: BA53
BEL1: VERSION NUMBER: BA49
SPA1: VERSION NUMBER: BA51
NET1: VERSION NUMBER: BA48
FRA1: VERSION NUMBER: BA52
CIS1: VERSION NUMBER: BA48
ETSI: VERSION NUMBER: BA48
E403: VERSION NUMBER: BA07
N403: VERSION NUMBER: BA05
JTTC: VERSION NUMBER: AC08
TCNZ: VERSION NUMBER: AA13
AUBR: VERSION NUMBER: AA14
AUPR: VERSION NUMBER: AA04
HKBR: VERSION NUMBER: AA06
HKPR: VERSION NUMBER: AA08
SING: VERSION NUMBER: AA15
THAI: VERSION NUMBER: AA07
NI02: VERSION NUMBER: AA26
T1IS: VERSION NUMBER: AA10
T1ES: VERSION NUMBER: AA09
ESGF: VERSION NUMBER: AC30
ISGF: VERSION NUMBER: AC31
ESGFTI:     VERSION NUMBER: AC29
ISGFTI:     VERSION NUMBER: AC31
INDO: VERSION NUMBER: AA06
JAPN: VERSION NUMBER: AA16
MSIA: VERSION NUMBER: AA04
CHNA: VERSION NUMBER: AA04
INDI: VERSION NUMBER: AA03
PHLP: VERSION NUMBER: AA02
TAIW: VERSION NUMBER: AA03
EAUS: VERSION NUMBER: AA02
EGF4: VERSION NUMBER: AC14
DCH3: VERSION NUMBER: AA10
PUP3: VERSION NUMBER: AA14
T1E1: VERSION NUMBER: AA19
DITI: VERSION NUMBER: AA40
CLKC: VERSION NUMBER: AA20
3902: VERSION NUMBER: AA84
3903: VERSION NUMBER: AA91
3904: VERSION NUMBER: AA94
3905: VERSION NUMBER: AA94
MGC, MGX and MGS:
  CSP  VERSION: MGCC CD01
  MSP  VERSION: MGCM AB01
  APP  VERSION: MGCA BA07
  FPGA VERSION: MGCF AA18
  BOOT VERSION: MGCB BA07
  DSP1 VERSION: DSP1 AB03
  DSP2 VERSION: DSP2 AB03
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DSP3 VERSION: DSP3 AB03
  DSP4 VERSION: DSP4 AB01
  DSP5 VERSION: DSP5 AA01
 UDT VERSION NUMBER: AA42
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Signaling server and Linux Patches

```
In System service updates: 22
PATCH# IN_SERVICE DATE      SPECINS MOVABLE NAME
0      Yes        27/04/12  NO      YES     cs1000-baseWeb-7.50.17.16-1.i386.001
1      Yes        27/04/12  NO      YES     cs1000-patchWeb-7.50.17.16-4.i386.000
2      Yes        30/04/12  NO      YES     cs1000-vtrk-7.50.17.16-46.i386.000
3      Yes        01/05/12  NO      YES     cs1000-kcv-7.50.17.16-1.i386.000
4      Yes        31/03/11  NO      YES     cs1000-dbcom-7.50.17-02.i386.000
5      Yes        02/05/12  NO      YES     ipsec-tools-0.6.5-14.el5.3_avaya_1.i386.000
7      Yes        01/05/12  NO      YES     cs1000-shared-pbx-7.50.17.16-1.i386.000
8      Yes        01/05/12  NO      YES     cs1000-bcc-7.50.17.16-51.i386.000
9      Yes        30/04/12  NO      YES     cs1000-ftrpkg-7.50.17.16-9.i386.000
10     Yes        27/04/12  NO      YES     cs1000-linuxbase-7.50.17.16-07.i386.000
11     Yes        30/04/12  NO      YES     cs1000-sps-7.50.17.16-4.i386.000
12     Yes        30/04/12  NO      YES     cs1000-csmWeb-7.50.17.16-3.i386.000
13     Yes        30/04/12  NO      YES     cs1000-mscAnnc-7.50.17.16-1.i386.000
14     Yes        01/05/12  NO      YES     cs1000-mscTone-7.50.17.16-1.i386.000
15     Yes        01/05/12  NO      YES     cs1000-mscMusc-7.50.17.16-2.i386.000
16     Yes        01/05/12  NO      YES     cs1000-dmWeb-7.50.17.16-2.i386.000
17     Yes        01/05/12  NO      YES     cs1000-ipsec-7.50.17.16-1.i386.000
18     Yes        01/05/12  NO      YES     cs1000-tps-7.50.17.16-13.i386.000
19     Yes        01/05/12  NO      YES     cs1000-emWeb_6-0-7.50.17.16-19.i386.000
20     Yes        02/05/12  NO      YES     spiritAgent-6.1-1.0.0.108.208.i386.000
21     Yes        02/05/12  NO      YES     cs1000-EmCentralLogic-7.50.17.16-1.i386.000
22     Yes        02/05/12  NO      YES     cs1000-Jboss-Quantum-7.50.17.16-16.i386.000

Product Release: 7.50.17.00
Base Applications
   base                         7.50.17     [patched]
   NTAFS                        7.50.17
   sm                           7.50.17
   cs1000-Auth                  7.50.17
   Jboss-Quantum                7.50.17     [patched]
   lhmonitor                    7.50.17
   baseAppUtils                 7.50.17     [patched]
   dfoTools                     7.50.17
   nnnm                         7.50.17
   cppmUtil                     7.50.17
   oam-logging                  7.50.17     [patched]
   dmWeb                        n/a         [patched]
   baseWeb                      n/a         [patched]
   ipsec                        n/a         [patched]
   Snmp-Daemon-TrapLib          7.50.17
   ISECSH                       7.50.17
   patchWeb                     n/a         [patched]
   EmCentralLogic               n/a         [patched]

Application configuration: CS+SS+EM
Packages:
```

```
CS+SS+EM
Configuration version:          7.50.17-00
   cs                           7.50.17
   dbcom                        7.50.17     [patched]
   cslogin                      7.50.17
   sigServerShare               7.50.17     [patched]
   csv                          7.50.17
   tps                          7.50.17.16  [patched]
   vtrk                         7.50.17.16  [patched]
   pd                           7.50.17
   sps                          7.50.17.16  [patched]
   ncs                          7.50.17
   gk                           7.50.17
   EmConfig                     7.50.17
   emWeb_6-0                    7.50.17     [patched]
   emWebLocal_6-0               7.50.17
   csmWeb                       7.50.17     [patched]
   bcc                          7.50.17     [patched]
   ftrpkg                       7.50.17     [patched]
   cs1000WebService_6-0         7.50.17
   managedElementWebService     7.50.17
   mscAnnc                      7.50.17.16  [patched]
   mscAttn                      7.50.17
   mscConf                      7.50.17
   mscMusc                      7.50.17.16  [patched]
   mscTone                      7.50.17.16  [patched]
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Please e-mail any questions or comments pertaining to these Application Notes along with the full title name and filename, located in the lower right corner, directly to the Avaya DevConnect Program at devconnect@avaya.com.