Avaya Solution & Interoperability Test Lab

Application Notes for Configuring Avaya Communication Server 1000E with Nu Technologies™ orbi-tel^{xps} using an IP Buffer - Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Avaya Communication Server 1000E 7.5 to interoperate with Nu Technologies orbi-tel^{xps} 4.0.600 using an IP Buffer.

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

Nu Technologies orbi-tel^{XPS} call accounting software runs as a Windows Service and all of its functions, configuration, and call reports are accessible through a standard web browser. Nu Technologies orbi-tel^{XPS} collects Call Detail Records from the Avaya Communication Server 1000E via an IP Buffer. The IP Buffer is configured via a web interface to receive and buffer Call Detail Records from the Avaya Communication Server 1000E which then pushes these reports to the orbi-tel^{xps} at scheduled intervals where they are converted into a common internal format. The IP Buffer is connected to the Avaya Communication Server 1000E using a serial connection. The web interface of the orbi-tel^{XPS} also allows the system to be updated for additional Avaya Communication Server 1000E's and for general maintenance. Users can use this web interface for reporting purposes including a full range of self customisable call list reports and full summarised reports for individuals, departments and a whole organisation.

2. General Test Approach and Test Results

The general test approach was to configure the orbi-tel^{XPS} to communicate with the Avaya Communication Server 1000E (CS100E) as implemented on a customer's premises. Testing focused on verifying that Call Detail Records (CDR) are collected by the IP buffer and received in the format as generated by the CS1000E. The orbi-tel^{XPS} application is able to collect the CDR data using File transfer Protocol from the IP buffer. Various call scenarios were preformed to simulate real call types as would be observed on a customer premises. 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

The testing included:

- Verification of connectivity between orbi-tel^{XPS}/IP buffer and CS1000E using a serial connection.
- Verification that CDR data was collected as output by the CS1000E.
- Link Failure\Recovery was also tested to ensure successful reconnection after link failure.
- CDR data collected included:
  - Local internal call handling
  - Handling of Incoming Network calls over PRI and SIP trunks
  - Handling of External Calls
  - Call Forwarding on busy or No Answer
  - Transfers – Blind and Supervised
  - Call Park and Call Pick Up

Ring again
Account Codes
Authorization codes
Conference Calls

- Daylight Savings
- Handling of calls to and from Avaya IP UniStim, SIP, Digital, and Analog Deskphones
- Handling of calls over SIP and QSIG trunks
- Defence Tests to ensure recovery following LAN interruptions

2.2. Test Results

Tests were performed to insure full interoperability between orbi-tel^{XPS}/IP buffer and CS1000E. The tests were all functional in nature and performance testing was not included. All the test cases passed successfully.

2.3. Support

Technical support from Nu Technologies can be obtained through the following:

Phone: +44 1582 814700
E-mail: support@nut.eu.com.
Web: http://www.nut.eu.com

3. Reference Configuration

Figure 1 illustrates the network topology used during compliance testing. The Avaya solution consists of a CS1000E which is configured to output CDR data to orbi-tel[xps] via an IP buffer. The CS1000E connects to the IP buffer using a serial connection. The CDR data is sent to and stored on the IP Buffer which is retrieved by the orbi-tel[xps] application at defined periods. During compliance testing to test the Multi-Site feature of the orbi-tel[xps] multiple sites were configured on the orbi-tel[xps] server. To ensure that records were collected by the second site the IP address of the IP buffer was changed. The orbi-tel[xps] then collected these records as to simulate a second site. Analog, Digital, UniStim, SIP and Soft phones were configured on the CS1000E to generate intra-switch calls (calls between phones on the same system), and outbound/inbound calls to/from the PSTN. QSIG and SIP trunks were configured to connect to the PSTN. The System Manager was used to configure the SIP Trunks on the Session Manager. The FALC and DLC were used to connect the Analog and Digital Deskphones to the CS1000E.

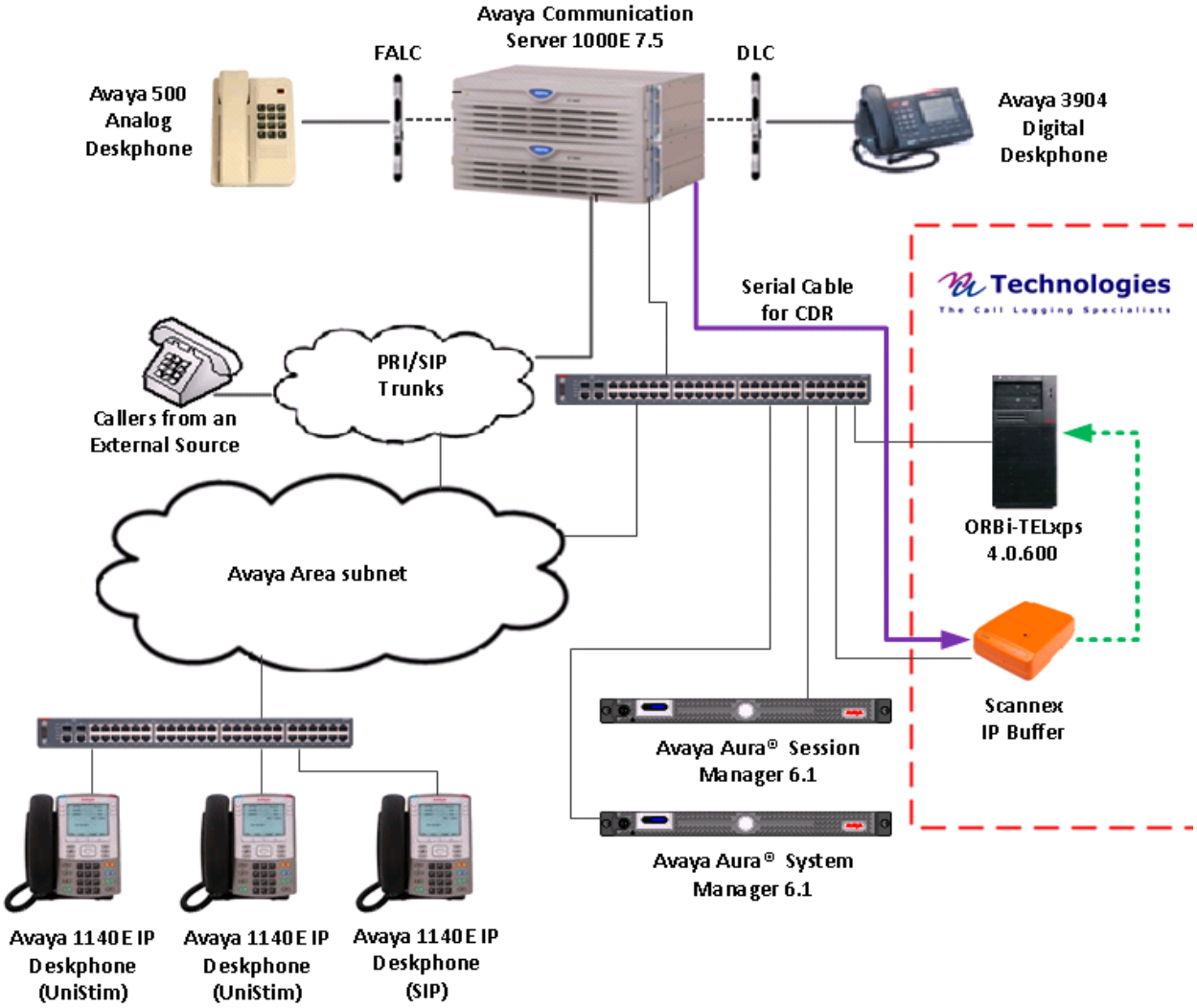


Figure 1: Avaya CS1000E and Nu Technologies orbi-tel[XPS] Reference Configuration

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
Nu Technologies Equipment	**Software / Firmware Version**
Dell Latitude running Windows XP Professional SP3	orbi-tel^{xps} Version 4.0.600
Scannex IP Buffer	Release IPBCF2.75.199 2012-02-09 / i5.0.10

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 10**. **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:

- Configure a TTY port for collecting CDR data
- Configure CDR Data in the Configuration Data Block
- Configure CDR Data in the Customer Data Block
- Configure Route Data Block
- Configure Telephones for CDR options
- Configure CDR in the Authorization Data Block

Note: In the telnet screenshots below only the unique prompt inputs are shown in **BOLD**. To accept default values carriage return at all other prompts.
The configuration of the SIP Trunk is outside the scope of this application Note.

5.1. Configure a TTY port for collecting CDR data

The communication between the Communication Server 1000E and the orbi-tel[xps] uses a RS232 serial port. A TTY port needs to be configured on the Communication Server 1000E to support CDR. The IP Buffer monitors the output on this TTY. **USER** needs to be set to **CTY** (Call Detail Recording on Teletype Terminal). In order to configure a new TTY port **LD 17** is used. Subsets of these commands are illustrated below.

LD 17

Prompt	Response	Description
>	**LD 17**	Enter Overlay 17
REQ	CHG	Change Data
TYPE	ADAN	Action Device and Number
ADAN	NEW TTY 12	New I/O device and number
CTYP	MGC	Card type
IPMG	4 0	loop and Card
PORT	2	Port number
DNUM	13	Device number for I/O ports
DES	ORBITEL	Designator
BPS	9600	Bits per Second
BITL	8	Data Bit Length
STOP	1	Number of Stop bits
PARY	NONE	Parity type
FLOW	NO	Flow Control
USER	**CTY**	Output message type

5.2. Configure CDR Data in the Configuration Data Block

The Format for Call Detail Recording (**FCDR**) needs to be changed in the CDR Data Block to **NEW.** This is the format that orbi-tel[xps] uses when collecting CDR data**.** Calling Line Identification (**CLID**) also needs to be changed to **YES**. In order to change the CDR data **LD 17** is used. Subsets of these commands are illustrated below.

LD 17

Prompt	**Response**	**Description**
>	**LD 16**	Enter Overlay 16
REQ	CHG	Change Data
TYPE	PARM	System Parameters
CUST	0	Customer Number
FCDR	**NEW**	Format Type
CLID	**YES**	Calling Line Identification

5.3. Configure CDR Data in the Customer Data Block

CDR needs to be enabled and assigned to the TTY port that was configured in **Section 5.1**. During compliance testing port **12** was used. The Aux Identification (**AXID**) and Output in CDR record (**CDR**) needs to be set to **YES**. In order to change the CDR data **LD 15** is used. Subsets of these commands are illustrated below.

LD 15

Prompt	Response	Description
>	**LD 15**	Enter Overlay 15
REQ	CHG	Change Data
TYPE	**CDR**	Call Detailed Reporting
CUST	0	Customer Number
CDR	**YES**	Call Detailed Reporting
AXID	**YES**	Aux Identification
PORT	**12**	Port Number assigned to CDR

5.4. Configure Route Data Block

CDR has to be activated on the trunk route to the PSTN and any other routes to other PBX's. During compliance testing route **42** was configured to route calls to and from the PSTN using QSIG In order to change the Route data **LD 16** is used. Subsets of these commands are illustrated below.

LD 16

Prompt	Response	Description
>**LD**	**16**	Enter Overlay 16
REQ	CHG	Change Data
TYPE	**RDB**	Route Data Block
CUST	0	Customer Number
ROUT	**42**	Route Number
CDR	**YES**	Call Detail Recording
INC	**YES**	CDR records for incoming calls
LAST	**YES**	CDR records for redirected calls
TTA	**YES**	Time To Answer output in CDR
ABAN	**YES**	Abandoned call records for this route
CDRB	**YES**	Abandoned call on busy tone records
QREC	**NO**	CDR ACD Q initial connection
OAL	**YES**	CDR on outgoing calls
AIA	**YES**	Answered call Identification Allowed
OAN	**YES**	CDR On Answer of outgoing calls
OPD	**YES**	Outpulsed Digits in CDR

5.5. Configure Telephones for additional CDR options

Abandoned Call-Time to Answer and Internal CDR record options can be activated on a per set basis by modifying the Class of Service (CLS). Abandoned call record and Time to Answer (**ABD**) and Internal Call Detail Recording (**ICD**) needs to be set to Allowed. If Charge codes are to be used Key 25 must be used if the phone type is IP. During compliance testing a number of telephone types were used, in the example below an Avaya 1140 IP Deskphone was used using TN 96-0-0-1. In order to add CDR options for the phone type 1140 **LD 11** is used. Subsets of these commands are illustrated below.

LD 11

Prompt	Response	Description
>	LD 11	Enter Overlay 11
REQ	**CHG**	Change Data
TYPE	**1140**	Phone Type
TN	96 0 0 1	Terminal Number
CUST	**0**	Customer Number
CLS	**ABDA ICDA**	Class of Service
KEY	**25 CHG**	Charge Account key

5.6. Configure CDR in the Authorization Data Block

During compliance testing Authorization Codes were used. The Activate CDR for Authcodes (**ACDR**) option must be set to yes. In order to configure the authorization Data Block **LD 88** is used. Subsets of these commands are illustrated below.

Note: It is implied that the Secure Data Password are already configured

LD 88

Prompt	Response	Description
>	LD 88	Enter Overlay 88
REQ	CHG	Change Data
TYPE	**AUB**	Authcode Data Block
CUST	**0**	Customer Number
SPWD	********	Secure Data Password
ALEN	**4**	Authcode Length
ACDR	**YES**	Activate CDR for Authcode
AUTO	**NO**	Automatically generate Authcodes

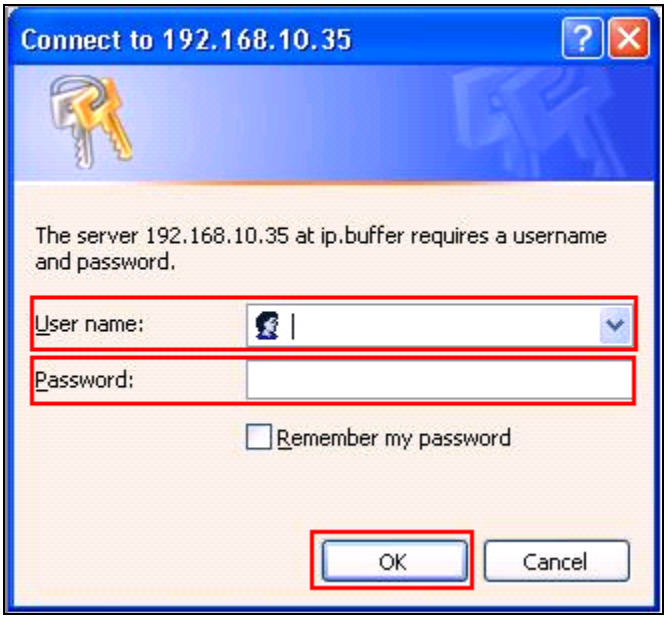
6. Configuration of Scannex IP buffer

This section provides the procedures to configure the Scannex IP buffer. It is implied that the Scannex IP buffer is already in place and configured with an IP address on the same subnet as the CS1000E. For all other provisioning information such as initial installation and configuration, please refer to the product documentation in **Section 9**. The configuration operations described in this section can be summarized as follows:

- Logging into the Scannex IP Buffer
- Configure Channel 1

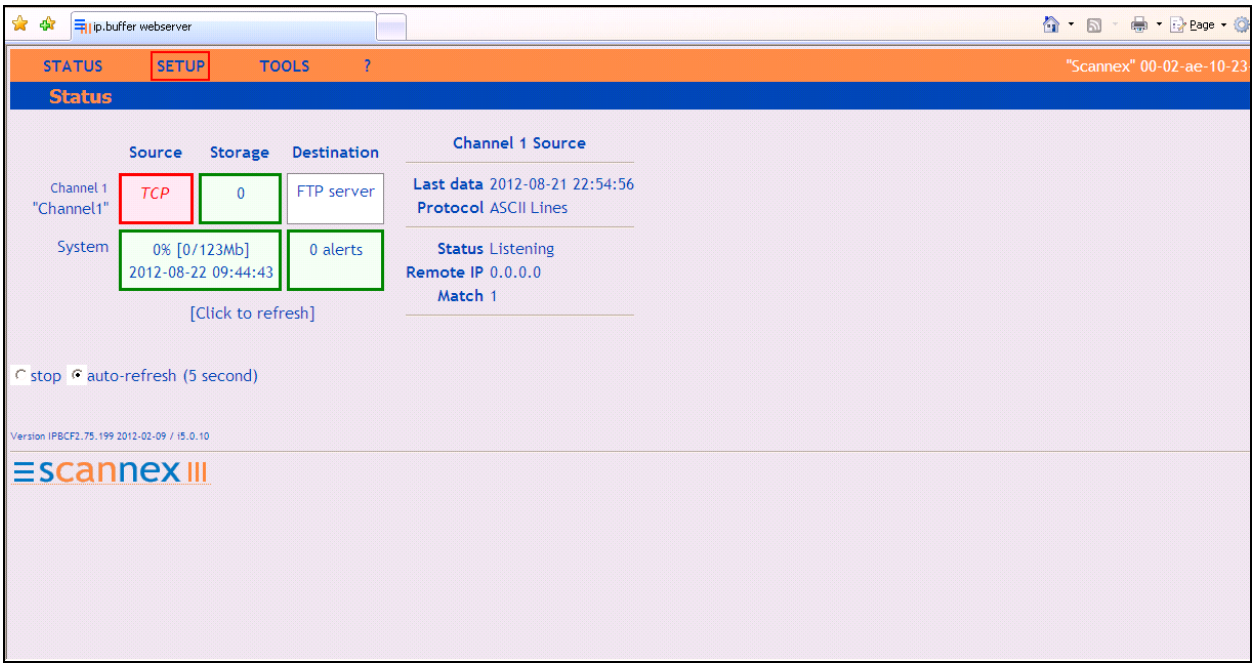
6.1. Logging into the Scannex IP Buffer

To access the web-based interface of the Scannex IP Buffer use the URL **http://x.x.x.x,** where **x. x. x. x** is the selected IP address of the IP Buffer. In the windows login box that appears, enter the default username and password and click on the **OK** button.

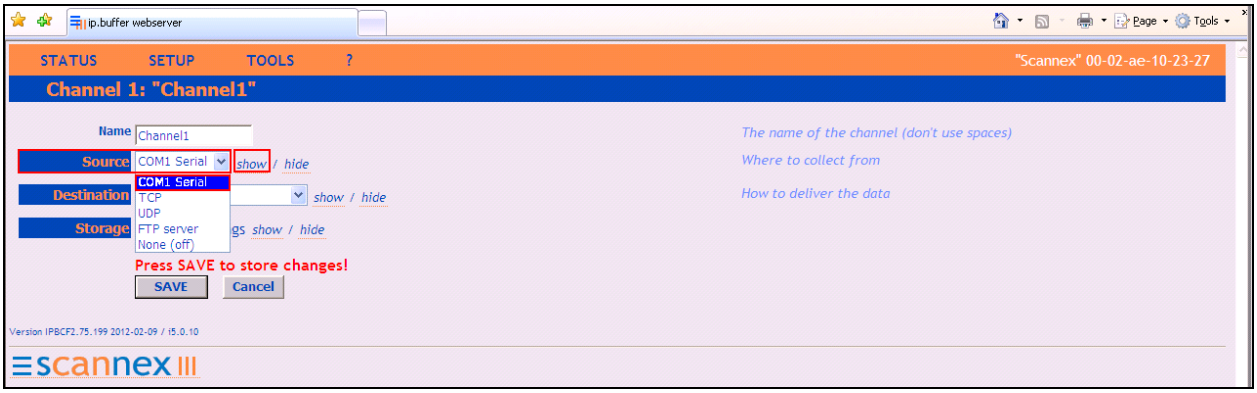


6.2. Setup Scannex IP Buffer

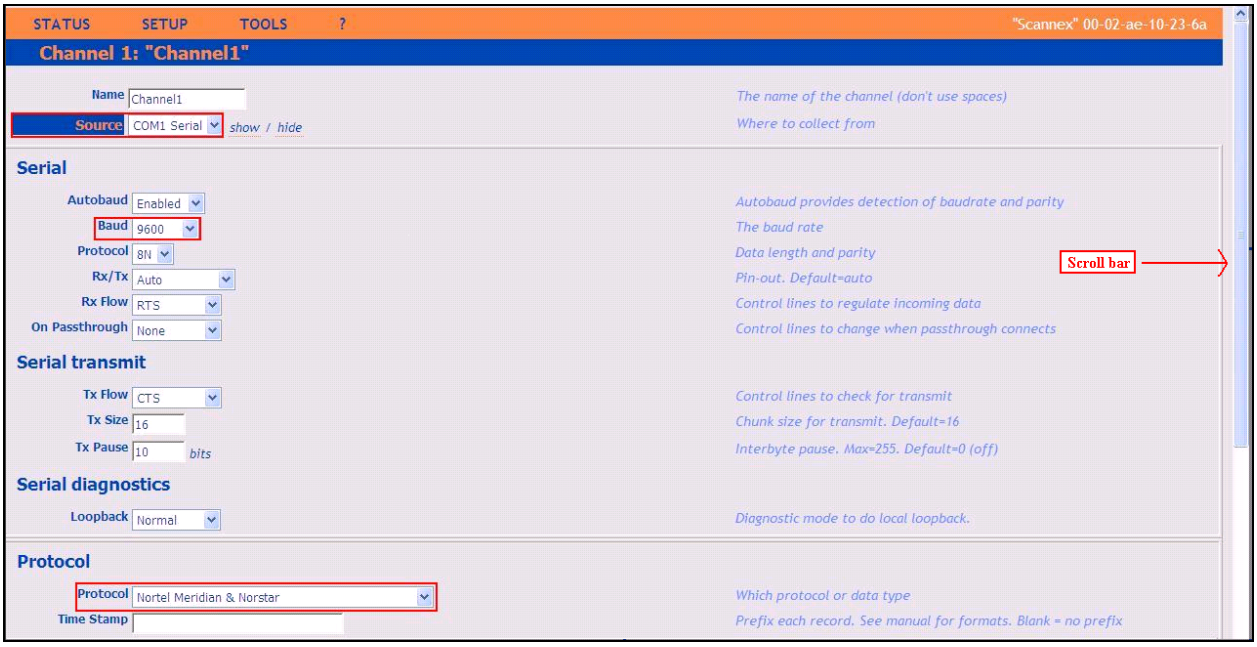
After logging in the **Management Main page** is displayed. Select **SETUP** followed by **Channel 1** (Not shown)**.**



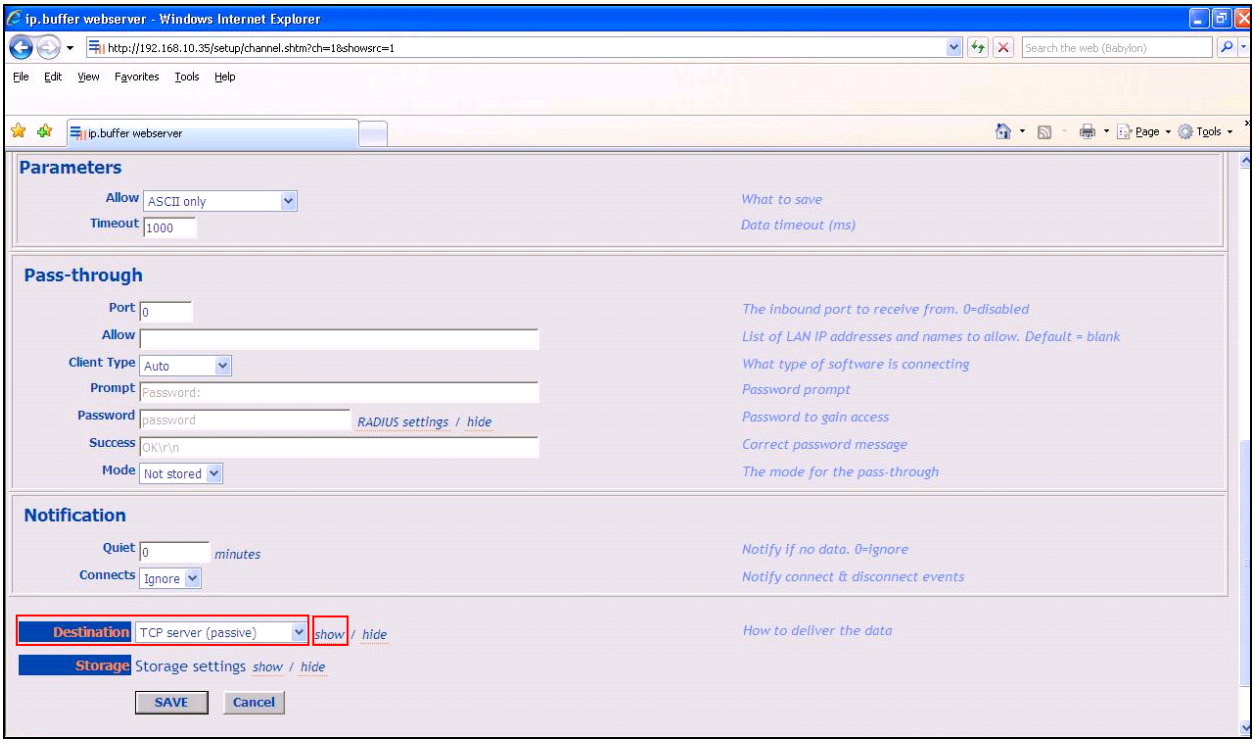
Once the **Channel 1** page is opened select **COM1 Serial** from the **Source** dropdown box, then select **show.**



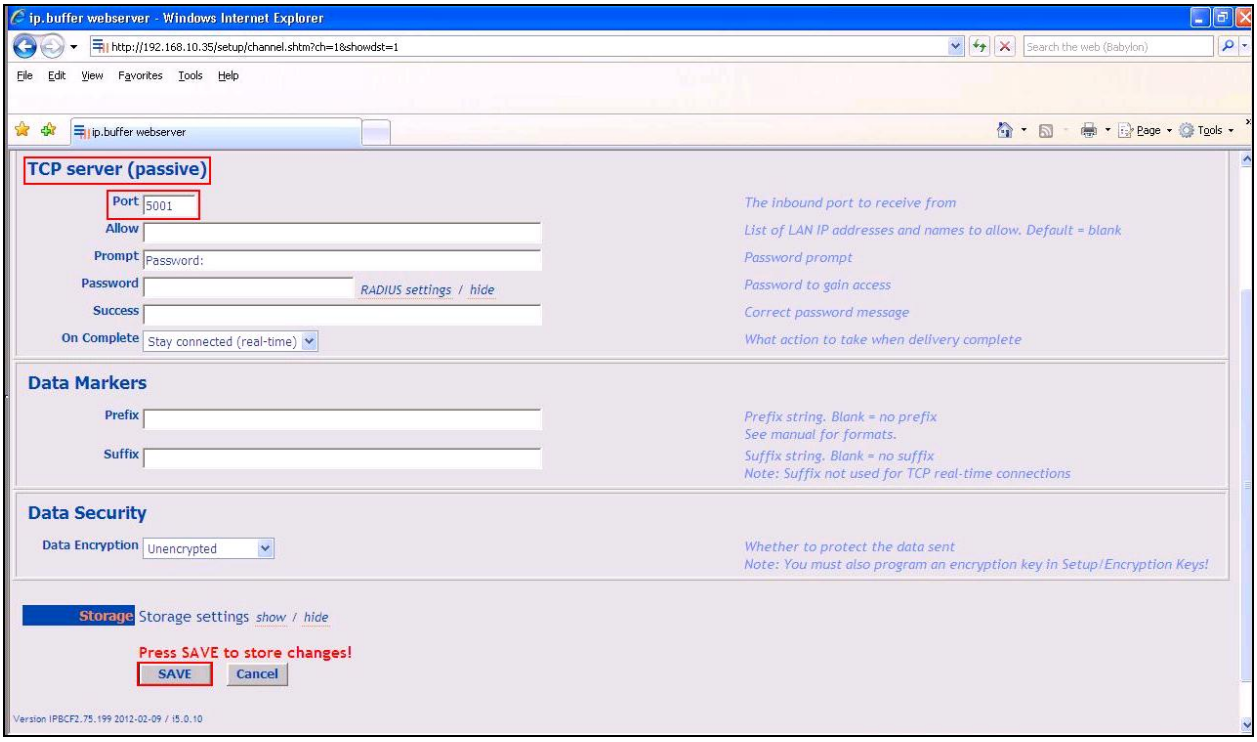
Once the next page opens select **9600** from the Baud dropdown box. The **Baud** should match **BPS** as configured on the CS1000E in **Section 5.1**. From the **Protocol** drop down box enter **Nortel Meridian & Norstar**. Use the scroll bar on the right side of the page and scroll to **Destination**.



From the **Destination** dropdown box select **TCP server (passive)** and then select **show**.



Once the **TCP server (passive)** window opens enter **5001** in the **Port** field. Click on the **Save** button to save changes.



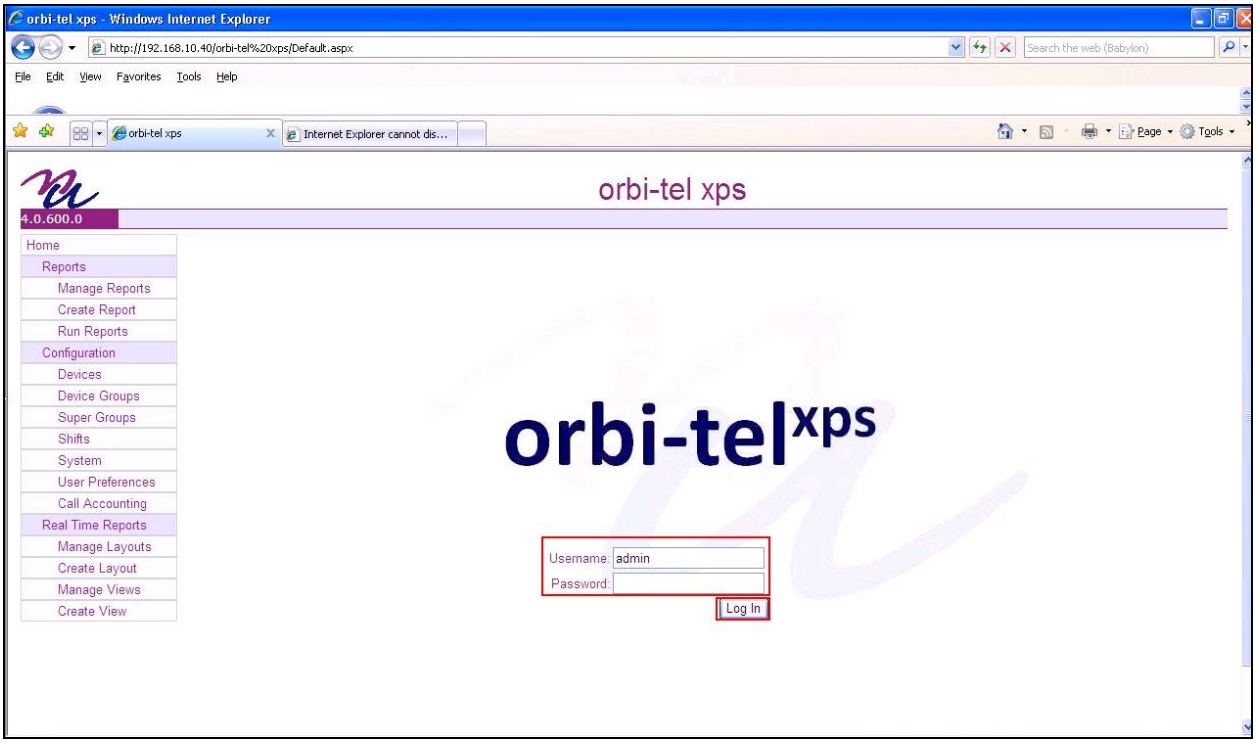
7. Configure orbi-tel[xps] Server

This section describes the steps preformed to configure the orbi-tel[xps] Server. It is implied that the orbi-tel[xps] Server software is already installed. For all other provisioning information such as initial installation and configuration, please refer to the product documentation in **Section 10.** These configurations can be summarised as follows:

- Login to orbi-tel[xps] Server
- Add a new switch to manage
- Configure Call Accounting
- Restart orbi-tel[xps]

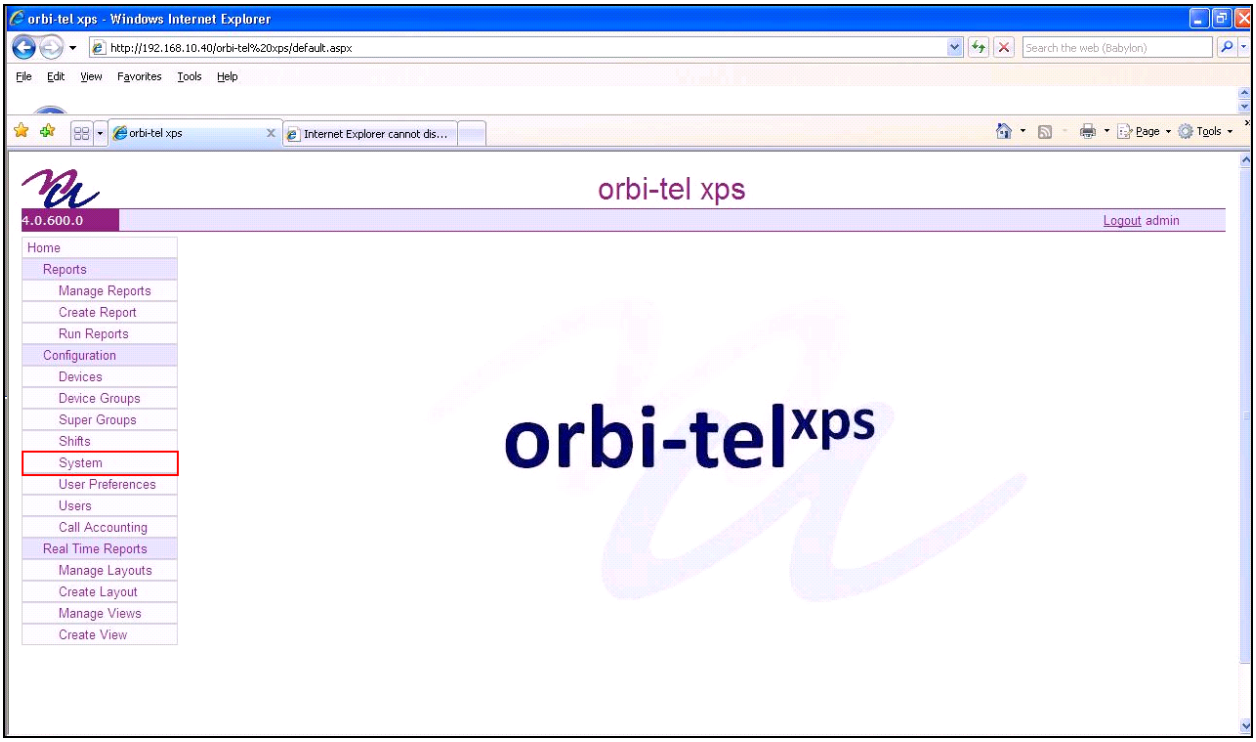
7.1. Login to orbi-tel[xps] Server

To access the web-based interface of the orbi-tel[xps] server, use the URL **http://x.x.x.x,** where **x.x.x.x** is the selected IP address of the orbi-tel[xps] server. Enter the appropriate Login and Password credentials and then click on the **Log In** button.



7.2. Add a new switch to manage

Once the orbi-tel^{xps} is opened select **System**.

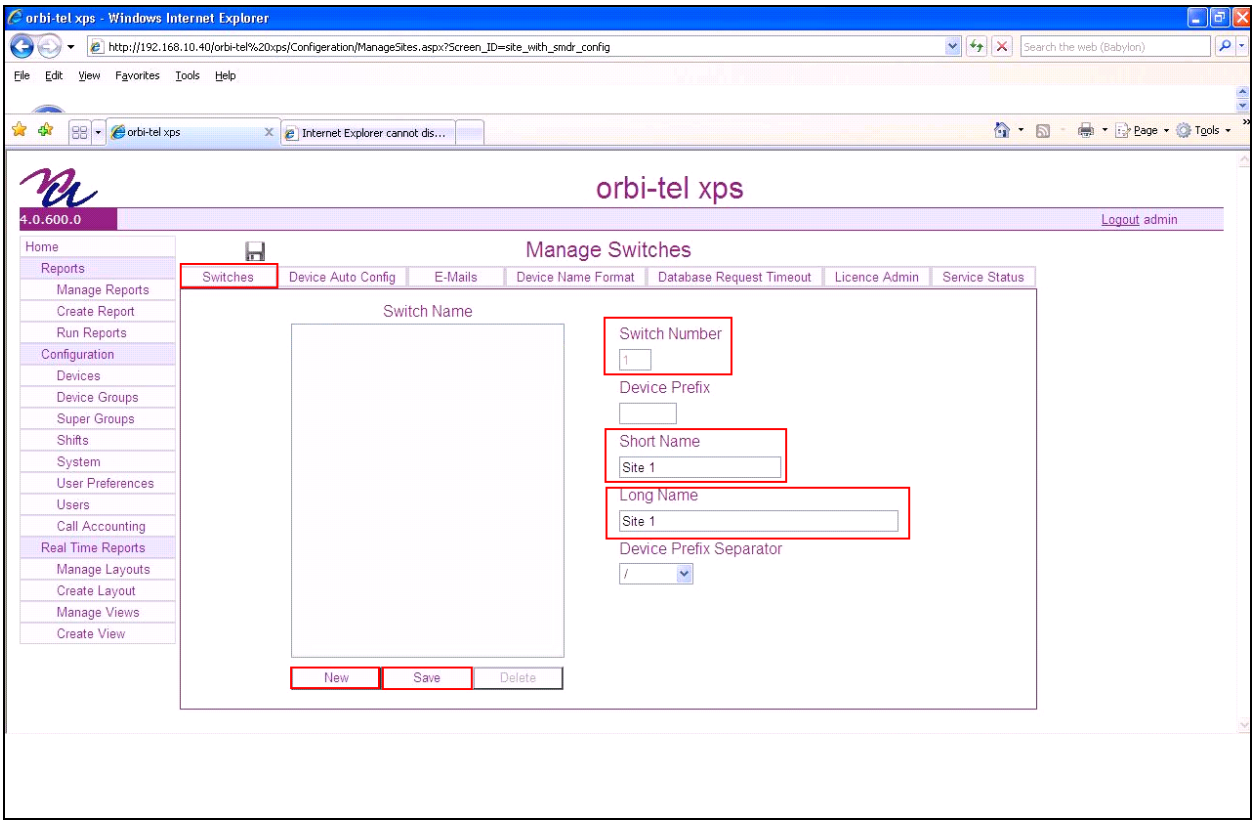


Once the new window opens select the **Switches** tab and click on the **New** button and enter the following:

- Enter a **Switch Number**
- Enter a **Short Name Name** for the switch
- Enter a **Long Name** for the switch.

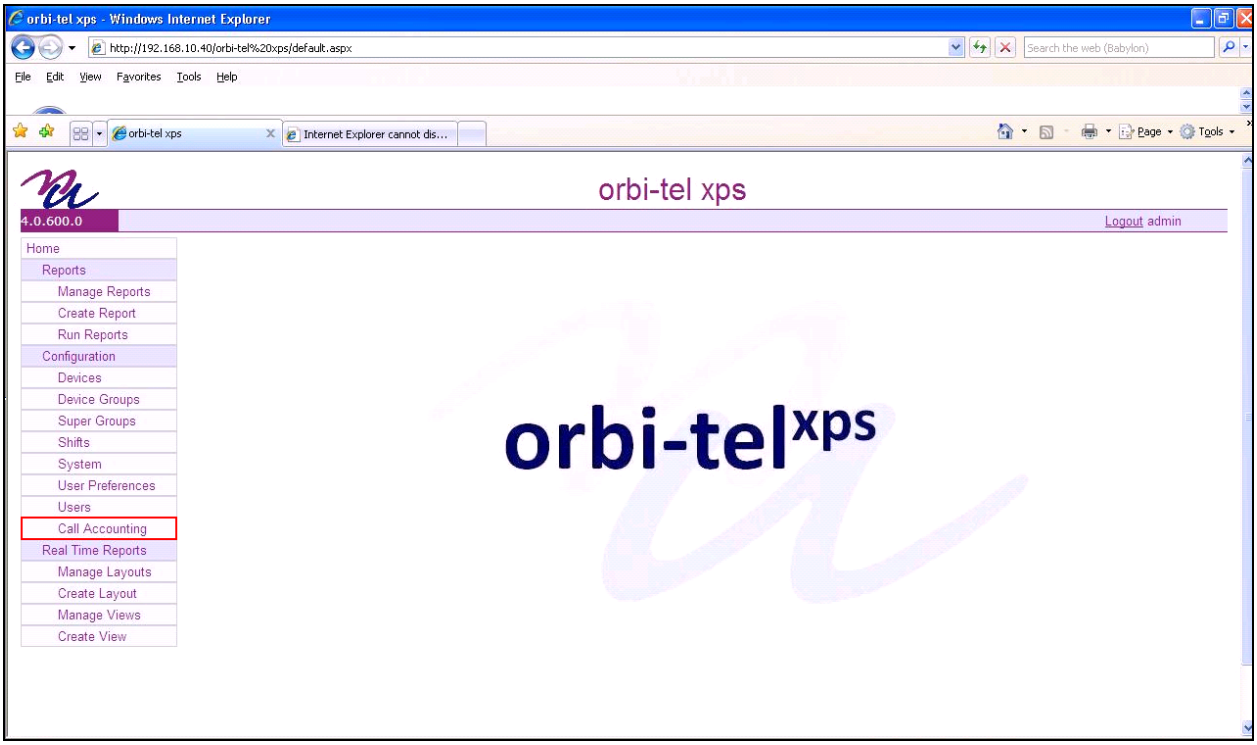
Click on the **Save** button.

The screen shot below shows what was used during compliance testing.



7.3. Configure Call Accounting

Select **Call Accounting**.

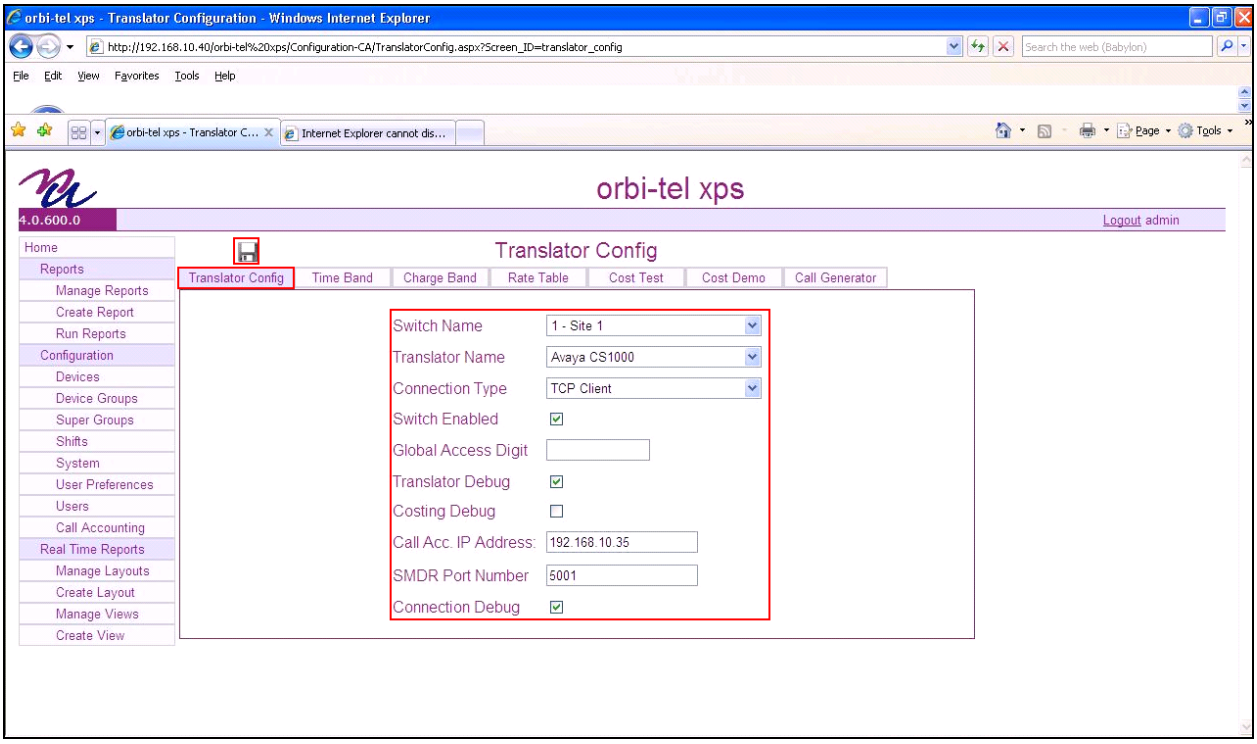


Once the new window opens select the **Translator Config** tab and enter the following:

- Select **Site 1** from the **Switch Name** drop down box. This is the site configured in **Section 7.2.**
- Select **Avaya CS1000** from the **Translator Name** drop down box
- Select **TCP Client** from the **Connection Type**
- Check the **Switch Enabled** check box
- Check the **Translator Debug** check box
- Enter the IP address of the **IP Buffer** in the **Call Acc IP Address** box
- Enter **5001** in the **SMDR Port Number** box. This is the port number as configured in **Section 6.2**
- Check the **Connection Debug** check box

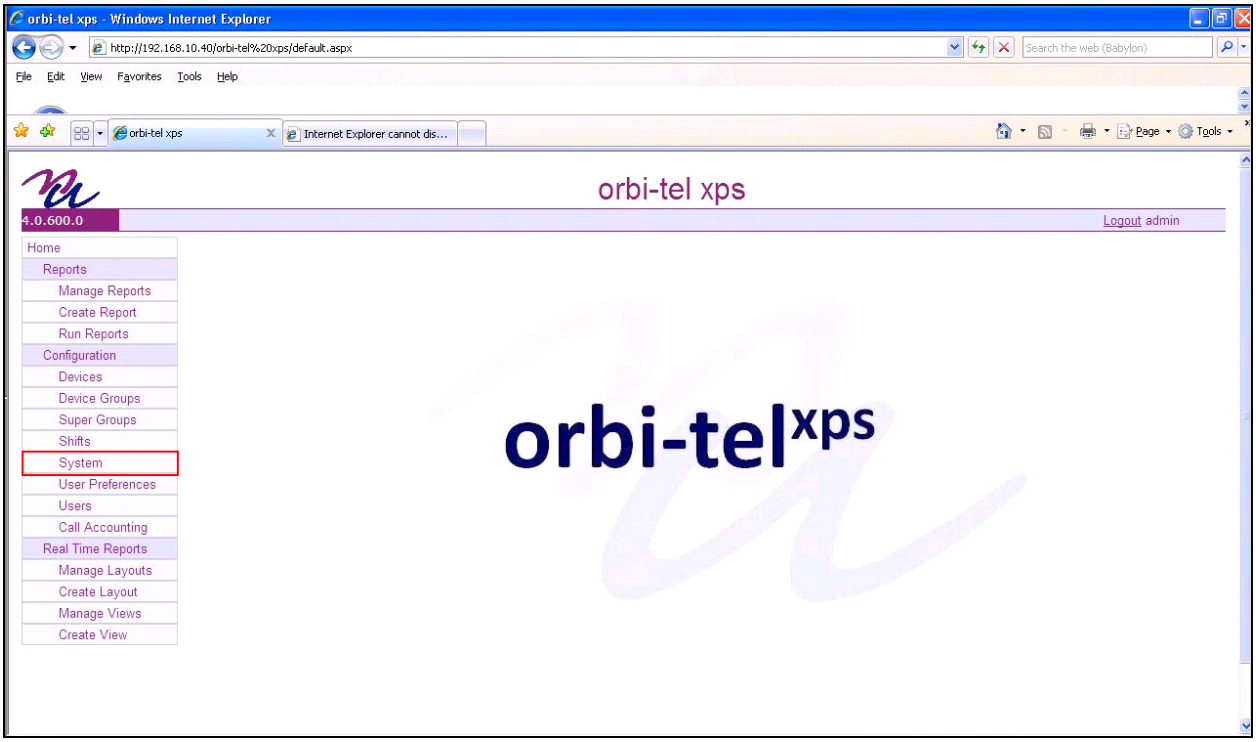
Click on the **Save** Icon to save the configuration.

The screen shot below shows what was used during compliance testing.

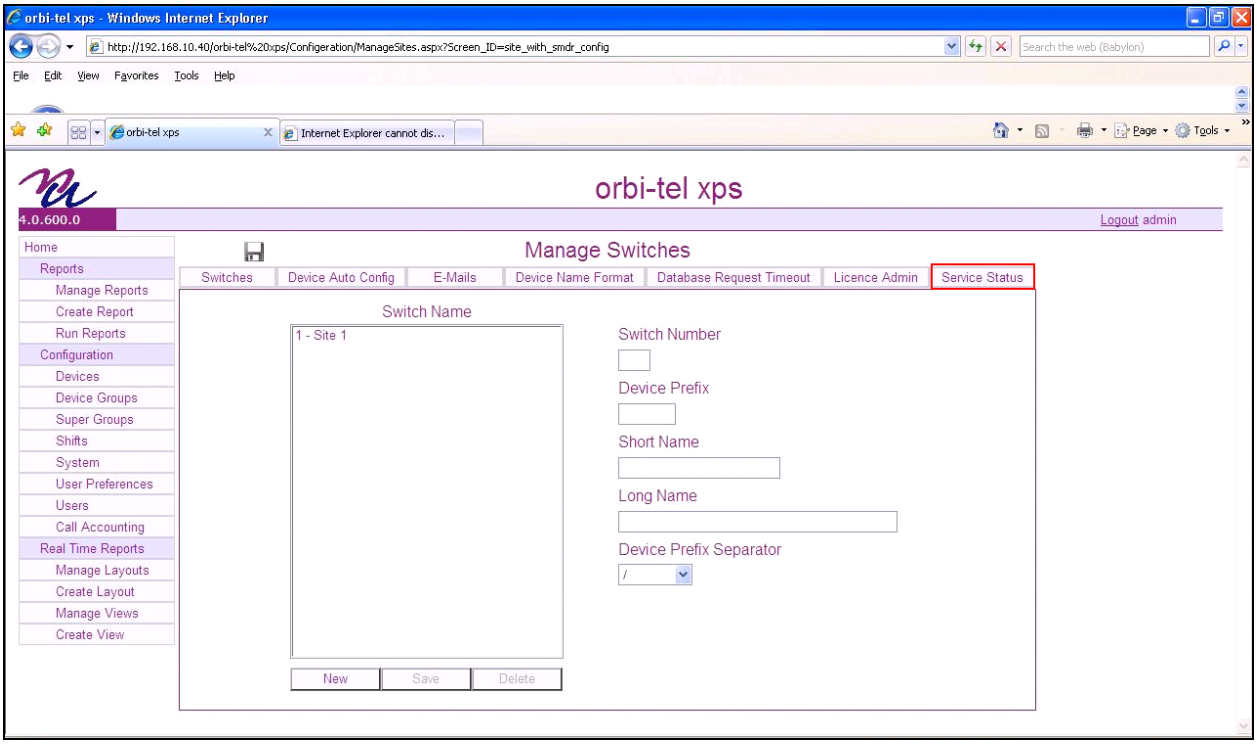


7.4. Restart orbi-tel^{xps}

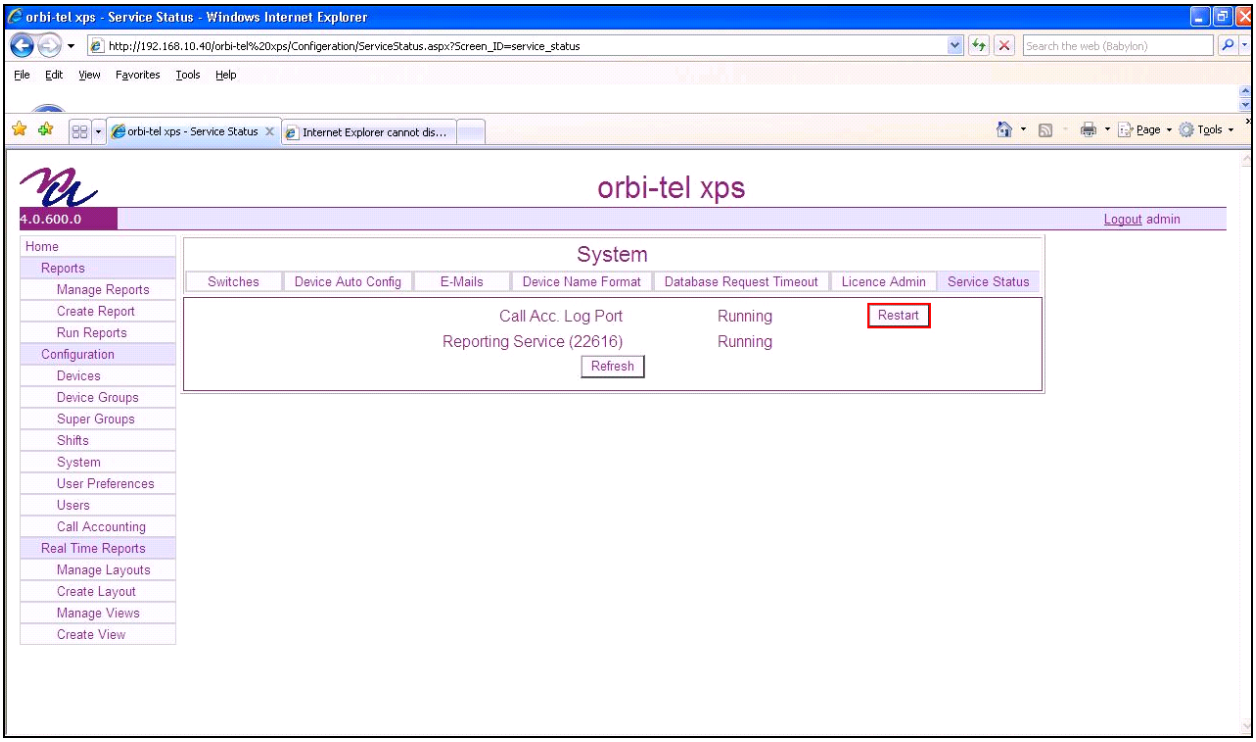
Select **System**.



Once the **Manage Switches** window opens select the **Service Status** tab.



Click on the **Restart** button to restart orbi-tel[xps].

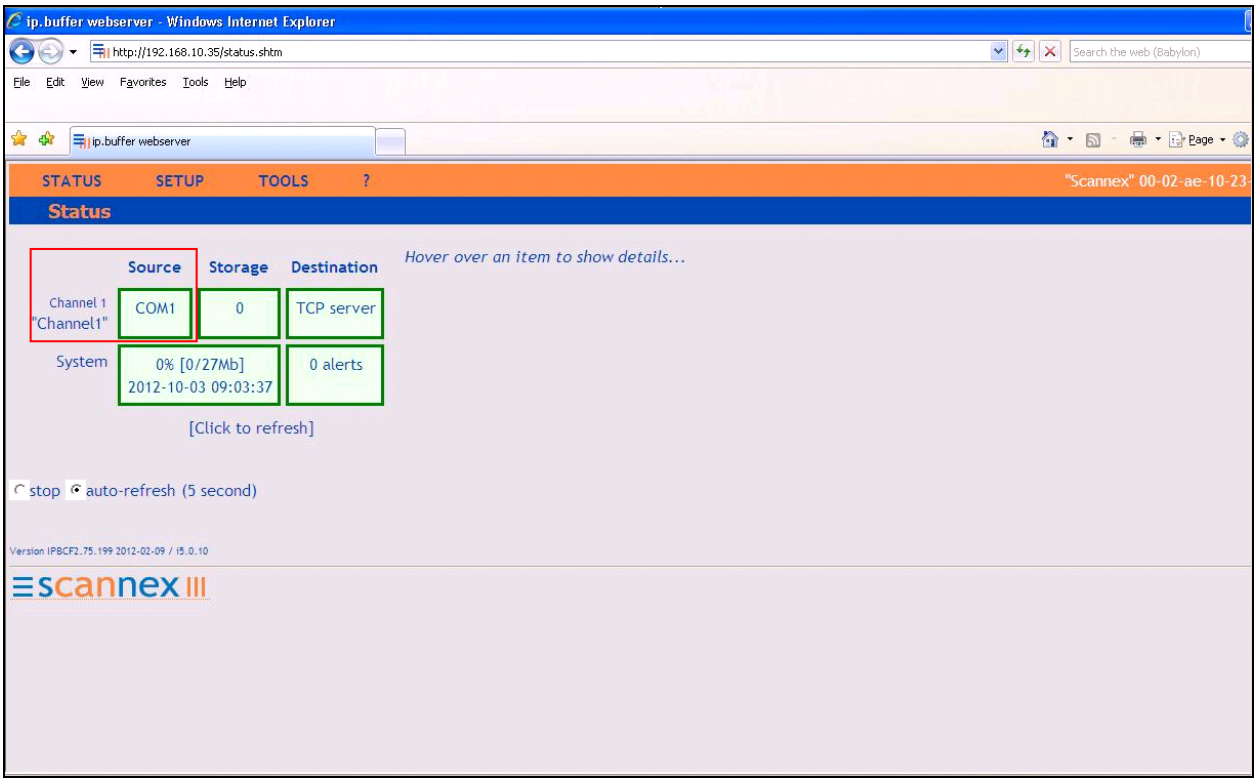


8. Verification Steps

This section provides the tests that can be performed to verify correct configuration of CS1000E and orbi-tel[xps] solution.

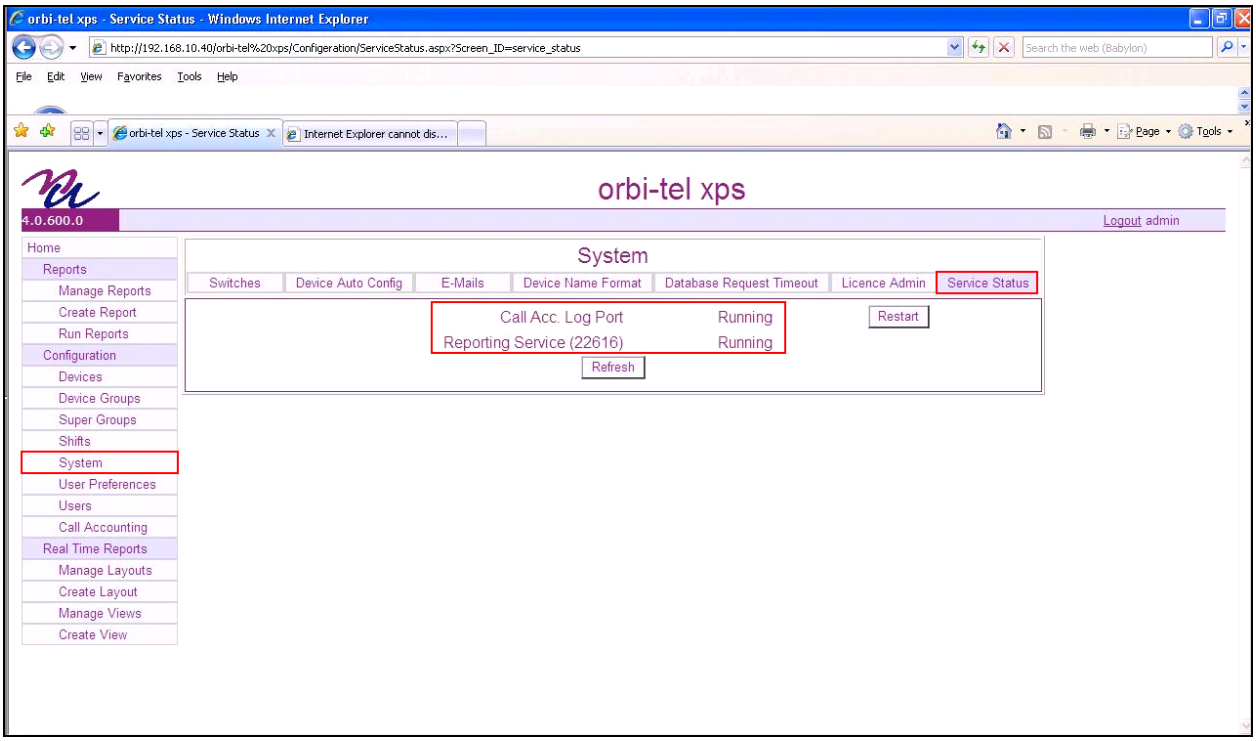
8.1. Verify the Avaya Communication Server 1000E to Scannex IP buffer connection

In order to verify successful connection of the Scannex IP buffer to the CS1000E select **Status.** The **Status** screen is displayed. The **COM1 Source** displays in green indicating that the IP Buffer has successfully connected to the CS1000E.



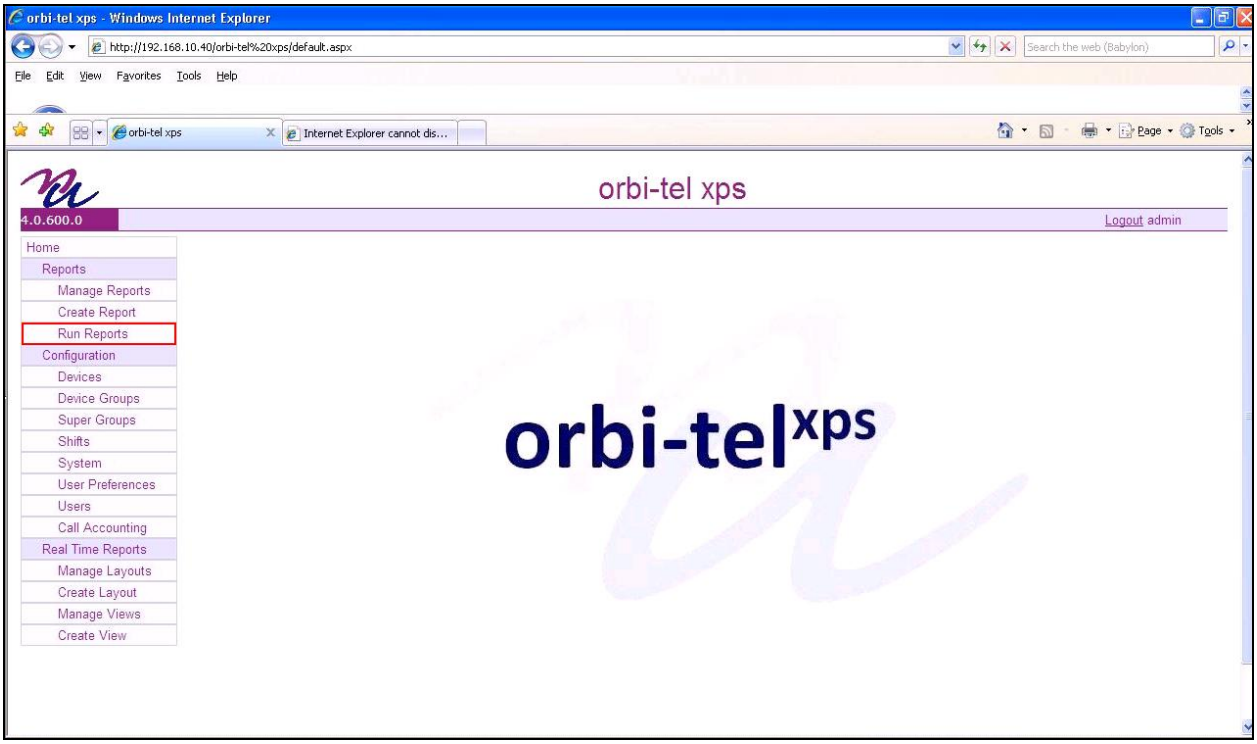
8.2. Verify orbi-tel^{xps} is running

After logging into orbi-tel^{xps} select **System** followed by the **Service Status** tab, verify that **Call Acc Log Port** and **Reporting Service** is Running.

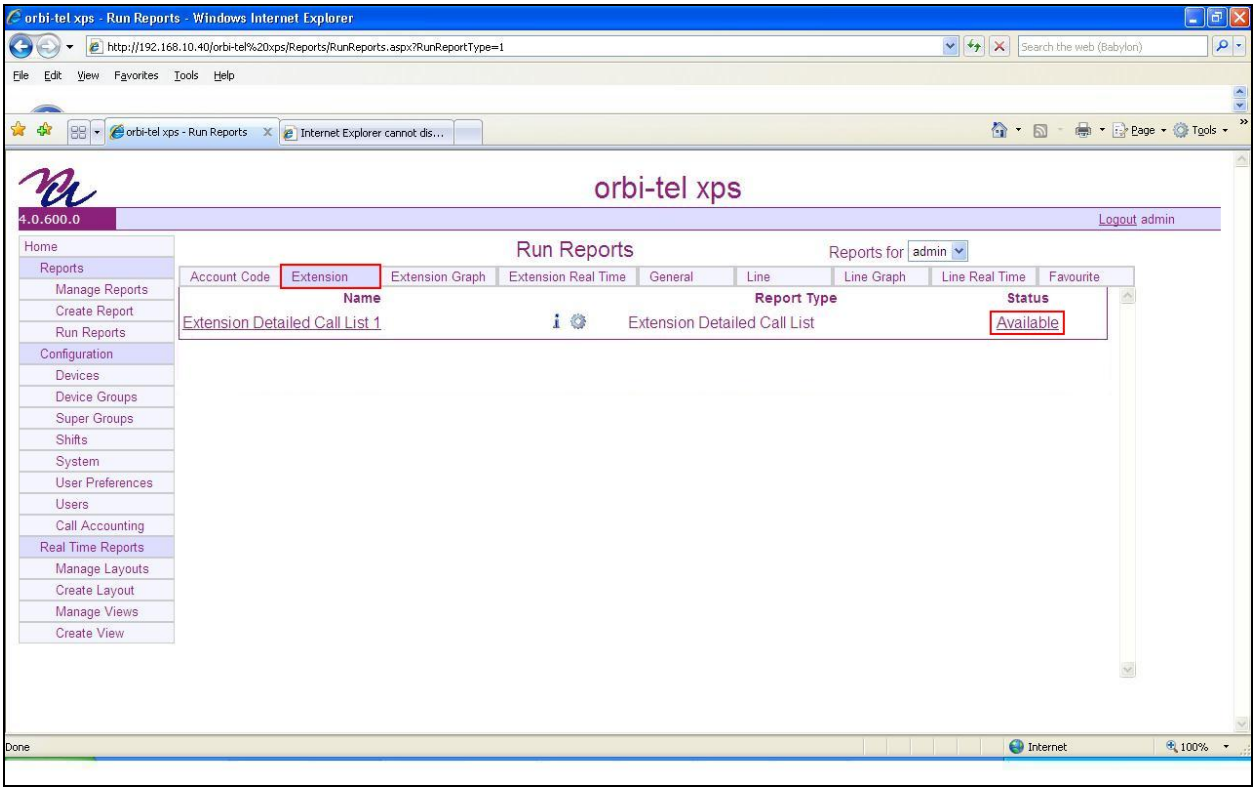


8.3. Verify Reports

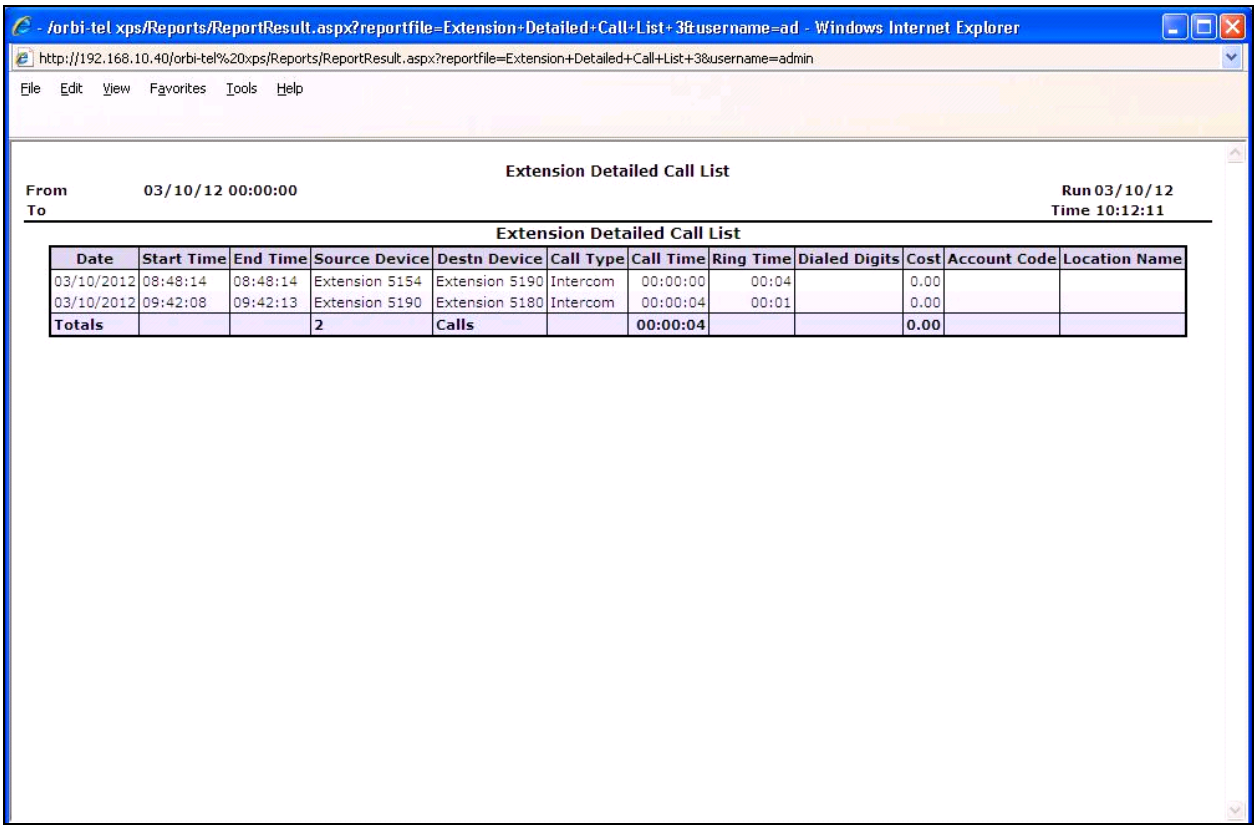
After logging into orbi-tel^{xps} select **Run Reports**.



Once the **Run Reports** window opens select the **Extension** tab and click on **Available**



Once the **Extension Detailed Call List** report opens something similar to the screen shot below should be seen.



9. Conclusion

A full and comprehensive set of feature and functional test cases were preformed during Compliance testing. orbi-tel^{xps} 4.0.600.0 is considered compliant with Avaya Communication Server 1000E 7.5 All test cases have passed and met the objectives outlined in **Section 2.2**

10. 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] System Management Reference, Avaya Communication Server 1000 7.5, NN43001-600, 05.07 August 2011

[3] *Call Detail Recording Fundamentals, Avaya Communication Server 1000 7.5, NN43001-550, 05.03 September 2011*

Product Documentation for orbi-tel^{xps} and Scannex IP Buffer can be obtained from Nu Technologies Ltd. or may be requested at http://www.nut.eu.com/nutech/contactus.html

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
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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
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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
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
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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
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
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FIN1: VERSION NUMBER: BA49
GER1: VERSION NUMBER: BA54
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
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  DSP1 VERSION: DSP1 AB03
  DSP2 VERSION: DSP2 AB03
  DSP3 VERSION: DSP3 AB03
  DSP4 VERSION: DSP4 AB01
  DSP5 VERSION: DSP5 AA01
UDT VERSION NUMBER: AA42
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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.