



Avaya Solution & Interoperability Test Lab

Application Notes for Eastcom Telephone Call Accounting & Audit Package 8.22 with Avaya IP Office Server Edition 10.0 - Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Eastcom Systems Telephone Call Accounting & Audit Package (TelCAAP) 8.22 to interoperate with Avaya IP Office Server Edition 10.0.

Eastcom TelCAAP is an enterprise software solution that provides customers with detailed analysis of IP Office communication usage. Eastcom TelCAAP used Station Message Details Recording from Avaya IP Office Server Edition to collection of call detail records (CDR).

Readers should pay attention to **Section** Error! Reference source not found., in particular the scope of testing as outlined in **Section** Error! Reference source not found. as well as any observations noted in **Section** Error! Reference source not found., 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

The objective of this interoperability compliance testing is to verify that Eastcom Systems Telephone Call Accounting & Audit Package 8.22 (TelCAAP) can interoperate with Avaya IP Office Server Edition 10.0. Eastcom TelCAAP used Station Message Details Recording from Avaya IP Office Server Edition to collection of call detail records (CDR).

During the compliance testing, CDR collection was verified for IP Office systems included: one IP Office Server Edition Primary server (Linux-based) and one IP500V2 system configured as an expansion system.

2. General Test Approach and Test Results

The general test approach was to manually place intra-switch calls, inter-switch Small Community Network (SCN) Trunk calls, inbound and outbound SIP PSTN trunk calls to and from telephones on Avaya IP Office Server Edition systems, and verify that Eastcom TelCAAP collects the CDR records and reports the correct attributes of the call.

2.1. Interoperability Compliance Testing

The interoperability compliance testing included feature and serviceability testing.

For feature testing, the ability of Eastcom TelCAAP to collect and process CDR records for intra-switch calls, inter-switch calls, inbound and outbound PSTN trunk calls to and from telephones on both IP Office Primary Server (Linux-base) and IP500V2 were evaluated.

For serviceability testing, the following were performed:

- Disconnect and reconnect Local Area Network connection to the Eastcom TelCAAP server.
- Rebooted the Eastcom TelCAAP server and IP Office Server.

2.2. Test Results

All test cases described in **Section 2.1** were successfully completed and passed.

2.3. Support

Technical support for Eastcom TelCAAP can be obtained by contacting Eastcom in the following ways:

- Telephone: +65 63232822
- Email: support@eastcom-systems.com
- Web: <http://www.eastcom-systems.com/>

3. Reference Configuration

Figure 1 illustrates the network configuration used to verify the Eastcom TelCAAP solution. Primary Server has connections to the following: Avaya 9621 H323 IP Deskphone and 9630 H323 IP Deskphone. Expansion IP500 V2 has connections to Avaya 9611 H323 IP Deskphone, Avaya 1608-I H323 IP Deskphone, Avaya 6221 Analog Telephone and 1408 Digital Telephone. A Small Community Network (SCN) connects Primary and 500 V2 Expansion for the users to call between the two sites. Eastcom TelCAAP is installed on a VM server running Microsoft Windows Server 2012 R2 Standard.

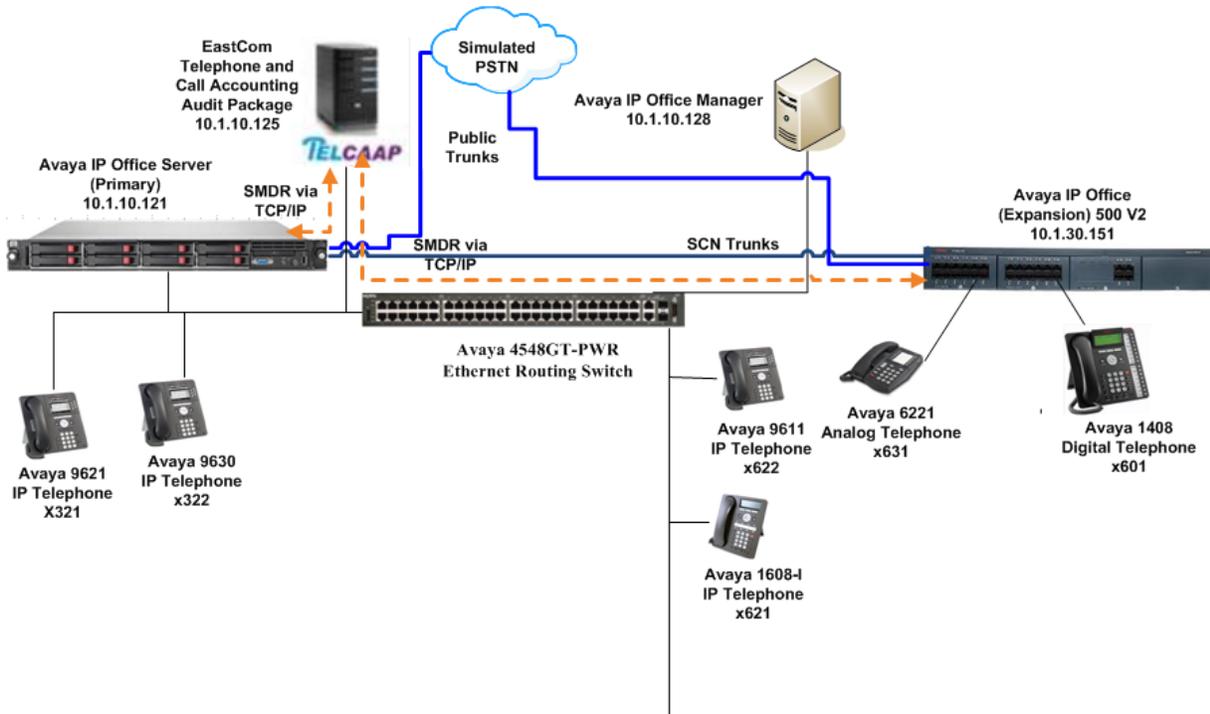


Figure 1: Test configuration for Eastcom TelCAAP Solution

4. Equipment and Software Validated

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

Equipment	Software
Avaya IP Office Server Edition Primary Linux Server running on a VM server	10.0.0.1.0 Build 53
IP500v2 IP Office Expansion	10.0.0.1.0 Build 53
Avaya 9600 Series H.323 IP Telephones <ul style="list-style-type: none">• 9621• 9611• 9630	6.6401 6.6401 3.270B
Avaya 1600 Series H.323 IP Deskphone - 1608-I	1.3100
Avaya 1408 Digital Telephone	R4 SP7
Avaya Analog 6221	-
Eastcom TelCAAP	8.22

Note: Compliance Testing is applicable when the tested solution is deployed with a standalone IP Office 500 V2 and also when deployed with IP Office Server Edition in all configurations.

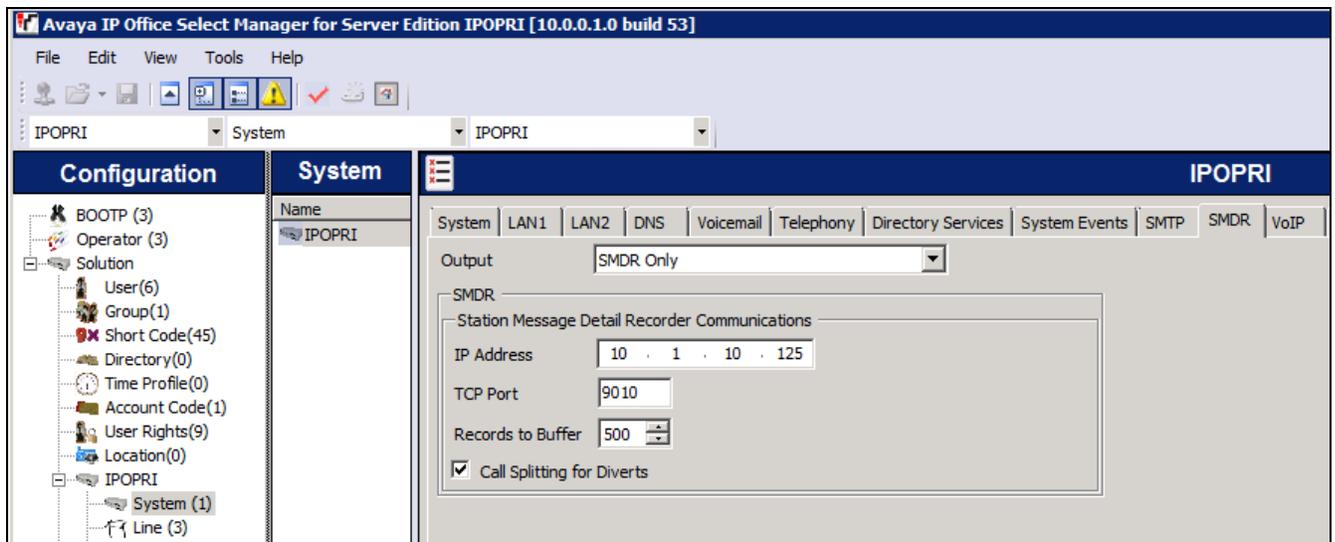
5. Configure Avaya IP Office Server Edition

This section provides the procedures for configuring Station Message Detail Records (SMDR) in IP Office. These steps describe the procedure used for the Primary Linux Server. Similar steps are used to configure the IP500V2 Expansion.

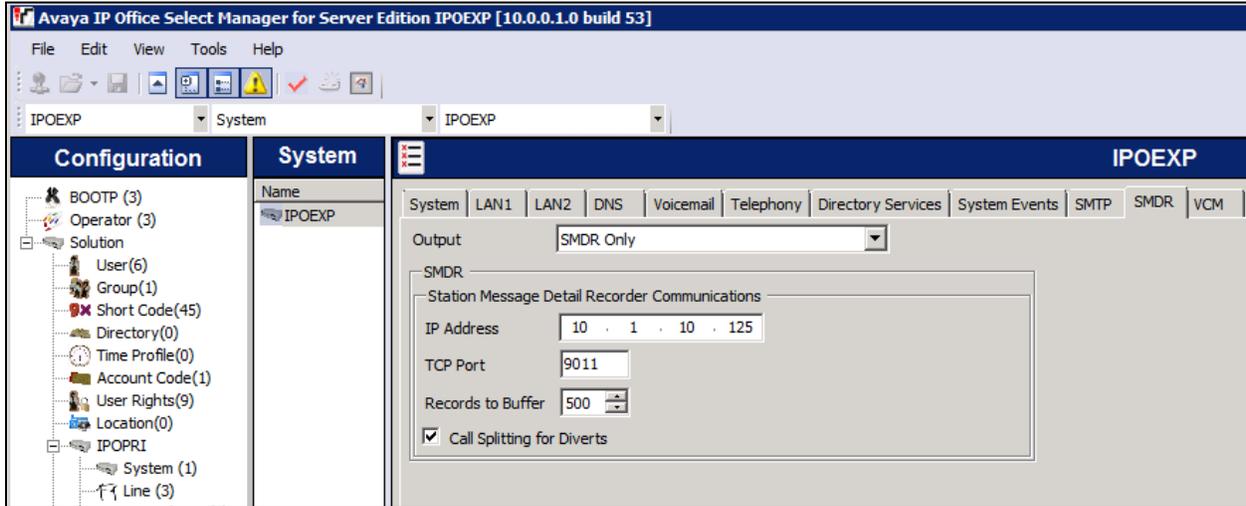
In IP Office Manager, select **System (1)** click on **SMDR** tab, enter the following information:

- **Output:** select **SMDR Only** option from the drop down list.
- **IP Address:** enter IP address that will receive the CDR record, in this case, TelCAAP IP address, **10.1.10.125**.
- **TCP Port:** enter an un-used port on TelCAAP to receive CDR record, example **9010**.
- **Records to Buffer:** use default value, example **500**.
- **Call Splitting for Diverts** is checked.

Click **OK** to save changes.



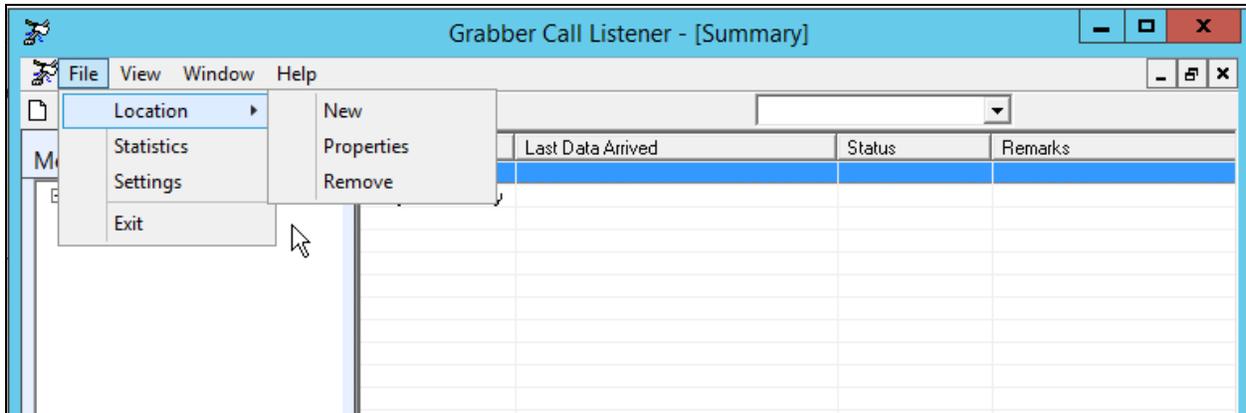
Perform same step on IP500v2 Expansion. Use the same parameter except **TCP Port** is **9011**.



6. Configure Eastcom TelCAAP

This section describes the configuration of Eastcom TelCAAP.

From the Eastcom TelCAAP server, click **Start** → **Run** and launch the TelCAAP Grabber application **Grabber.exe** located in the folder **C:\TelCAAP\Grabber** (not shown). Select **File** → **Location** → **New** to define the settings for a new IP Office Server.



In the Location setting, select **TCP/IP Listener tab**, enter the following information:

- **Location ID:** Enter any descriptive name, example **AVAYAP_IPOS**.
- **Location Name:** Enter any descriptive name, example **Avaya Primary**.
- **Listener Type:** Select **TCP/IP Listener** from the dropdown list.
- **Remote IP Address:** Enter IP address of IP Office Primary Server, example **10.1.10.121**.
- **Local IP Address:** Enter IP address of TelCAAP Server, example **10.1.10.125**.
- **Port:** Enter port configured in Primary Server in Section 5.

Use default value for other fields. Click **OK** to save changes.

Perform similar step for IP500v2 Expansion, enter the following information:

- **Location ID:** Enter any descriptive name, example **AVAYAS_IPV500**.
- **Location Name:** Enter any descriptive name, example **Avaya Secondary**.
- **Listener Type:** Select **TCP/IP Listener** from the dropdown list.
- **Remote IP Address:** Enter IP address of IP Office Expansion Server, example **10.1.30.151**.
- **Local IP Address:** Enter IP address of TelCAAP Server, example **10.1.10.125**.
- **Port:** Enter port configured in Expansion Server in Section 5.

Use default value for other fields. Click **OK** to save changes.

Location Settings

Location ID:

Location Name:

Listener Type:

TCP/IP Polling | Alcatel OXO

BT | PCS | OCS | NexWave | Avaya SCS | Lync

TCP/IP Listener | Serial Port | Cisco3-4 | Get File | MySQL | File Fetch

Remote IP Address:

Local IP Address:

Port:

Login User Name:

Login Password:

Login Prompt:

Command to Execute:

Reliable Protocol:

Path | General

Listening File Path: ...

File Destination Path: ...

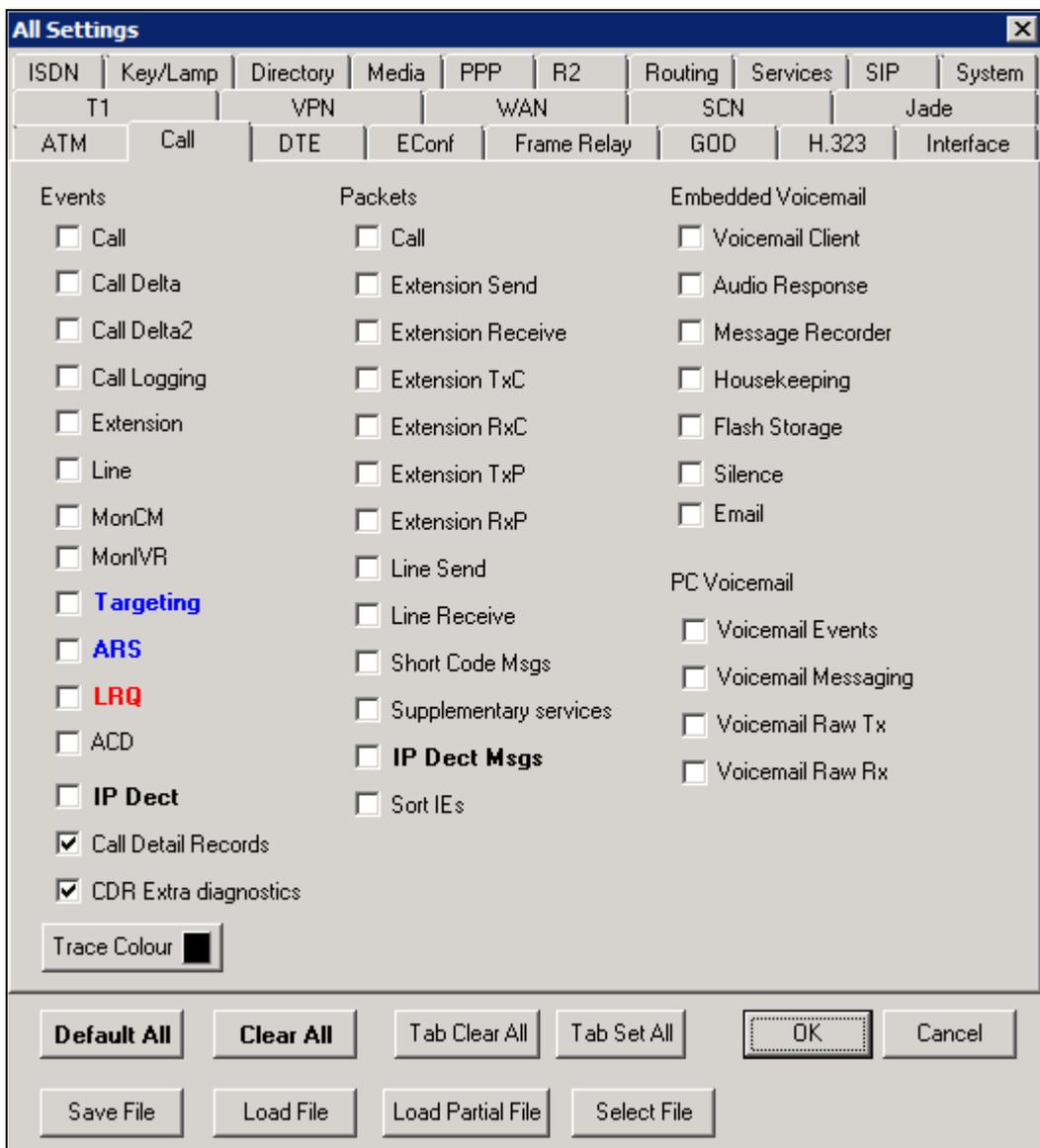
File Transfer Minutes:

File Log Path: ...

7. Verification Steps

The following steps may be used to verify the configuration:

- Use the **ping** utility on the Eastcom TelCAAP server to verify the IP connectivity to the IP Office Server Edition system which includes both the primary and expansion servers.
- Using **IP Office SysMonitor** to verify CDR is send to TelCAAP for each call made using the trace facility. On the top menu, select **Filters** → **Trace Options** (not shown) and the screen below is displayed. Select **Call** tab and check both **Call Detail Records** and **CDR Extra diagnostics**. Click **OK** to save options and click  on the top bar to start the trace if not started.



As an example, the highlighted record below shows extension **321** make outbound calls to **933210001**.

```

Listening at Port : 9010
2016/11/18 15:40:35,00:00:07,2,622,O,10001,10001,,0,1000052,0,E622,Steven,T9002,Line
2.0,0,0,,,,,,,,,,,,,Line,0a010a7900000020 1.32.1 53 H323Tr,,10.1.30.151,1519,10.1.10.121,1178,20
2016/11/18 15:43:23,00:00:09,3,322,O,10001,933210001#,DEVCON,0,1000053,0,E322,John,T9002,Line
2.0,0,0,,,,,,,,,,,,,U,John,,10.1.10.121,1179,10.1.10.121,1182,2016/11/18 07:43:41
2016/11/18 15:46:31,00:00:00,0,322,O,933210001#ssssss#,933210001
#ssssss#,0,1000054,0,E322,John,Barred,Barred,0,0,,,,,,,,,,,,,10.1.10.121,1183,10.1.10.121,118
07:46:58
2016/11/18 15:48:02,00:00:05,4,321,O,10001,933210001#,0,1000055,0,E321,Jacky,T9002,Line
2.0,0,0,1,n/a,,,,,,,,,,,,,U,Jacky,,10.1.10.121,1187,10.1.10.121,1190,2016/11/18 07:48:19
2016/11/18 15:48:34,00:00:00,0,322,O,933210001#,933210001#,0,1000056,0,E322,John,V8000,U1
0.0,0,0,0,n/a,,,,,,,,,,,,,10.1.10.121,1191,10.1.10.121,1191,2016/11/18 07:48:47
  
```

- Place an outgoing PSTN trunk call and verify that Eastcom TelCAAP receives the CDR record for the call. Login to Eastcom TelCAAP using a browser (shown below) and compare the values of data fields in the CDR record with the expected values and verify that they match.

The screenshot shows the TelCAAP web application interface. The browser address bar displays `http://localhost/telcaap/frmHomePage.aspx`. The page title is "TELCAAP .. a webcentric call accounting solution..". The main content area is titled "Extension Detail" and contains an "Input Criteria" section with buttons for "Preview", "Export To Excel", "Export To PDF", and "Clear". Below this is a table of call records with the following columns: Date, Time, Extn From, Called / Calling Number, Area / Country, Duration (HH:MM:SS), and Charges. The table shows several records for extension 322 and one record for extension 621. A sub-total for extension 321 is also displayed.

Date	Time	Extn From	Called / Calling Number	Area / Country	Duration (HH:MM:SS)	Charges
18/11/2016	16:22		933210003		00:00:06	0.000
18/11/2016	16:29		322		00:00:00	0.000
18/11/2016	16:29		322		00:00:00	0.000
18/11/2016	16:32		322		00:00:03	0.000
18/11/2016	16:44		322		00:00:00	0.000
18/11/2016	16:44		322		00:00:38	0.000
18/11/2016	16:45		322		00:00:08	0.000
18/11/2016	16:46		322		00:00:20	0.000
21/11/2016	17:01		322		00:00:00	0.000
21/11/2016	17:10		322		00:00:00	0.000
22/11/2016	15:32		621		00:00:14	0.000
Sub Total:Intercom					00:03:50	0.000
Sub Total for Extn # : 321 User Name :					00:06:24	0.056

- Place internal, inbound trunk, and outbound trunk calls to and from various telephones, generate an appropriate report in Eastcom TelCAAP and verify the report's accuracy.

8. Conclusion

These Application Notes describe the procedures for configuring Eastcom Systems Telephone Call Accounting & Audit Package (TelCAAP) 8.22 to collect call detail records from Avaya IP Office Server Edition 10.0. Eastcom TelCAAP successfully passed the compliance testing.

9. Additional References

This section references the Avaya documentation that is relevant to these Application Notes.

The following Avaya product documentation can be found at <http://support.avaya.com>.

1. *Administering Avaya IP Office™ Platform with Manager*, Release 10.0, September 2016.
2. *Administering Avaya IP Office™ Platform with Web Manager*, Release 10.0, September 2016.

The following documentation can be obtained from member.

[3] *TelCAAP Web based Call Accounting System User Guide*, Version 8.22.

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