AVAYA

Avaya Solution & Interoperability Test Lab

Application Notes for Configuring LightNet Complex IPO Play! Statistics with Avaya IP Office - Issue 1.0

Abstract

These Application Notes describe the configuration steps required for LightNet Complex IPO Play! Statistics to successfully interoperate with Avaya IP Office. IPO Play! Statistics collects statistical information of all calls in an Avaya IP Office and accumulates the information in a database, which can then be viewed using a Web browser.

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 required for LightNet Complex IPO Play! Statistics to work with Avaya IP Office. IPO Play! Statistics collects statistics through the Call Detail Recording (CDR) feature of Avaya IP Office, keeps them in a database and allows the information to be viewed using a Web browser.

Figure 1 illustrates the network configuration used to verify IPO Play! Statistics with Avaya IP Office. The configuration at the Main Site consists of: an Avaya IP Office 500 with an Avaya 2420 digital telephone, an Avaya 2500 analog telephone, Avaya 4621SW IP telephones, an Avaya IP Office Manager / Voicemail Pro server, and a LightNet Complex IPO Play! Statistics server. The Avaya IP Office 500 has ISDN-PRI and analog trunks to the PSTN. The network configuration at Branch Site A consists of an Avaya IP Office 412 with Avaya IP400 Phone Expansion Module and was only used to generate CDR records for IP trunk calls. The Avaya C364T-PWR Converged Stackable Switch provides Ethernet connectivity to the servers and IP telephones and Layer 3 IP routing between the two sites.
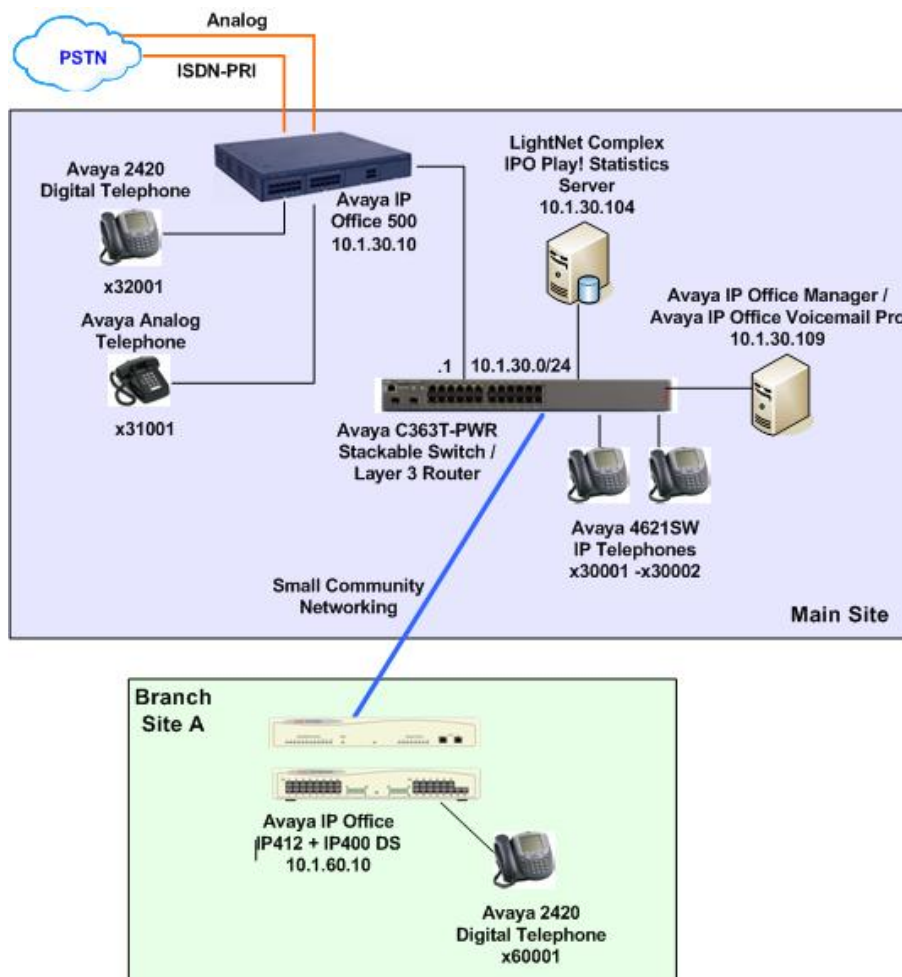

Figure 1: Network Configuration

2. Equipment and Software Validated

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

| Equipment	Software
Avaya IP Office 500	4.0 (10)
Avaya IP Office 412	4.0 (10)
Avaya IP400 Phone Expansion Module	6.0 (10)
Avaya 2420 Digital Telephone	5.0
Avaya 2500 Analog Telephone	-
Avaya 4621SW IP Telephones	2.8.3 (H.323)
Avaya IP Office Manager	6.0 (10)
Avaya IP Office Voicemail Pro	4.0 (18)
Avaya C363T-PWR Converged Stackable Switch	4.5.18
LightNet Complex IPO Play! Statistics	1.1

3. Configure Avaya IP Office

This section provides the procedures for configuring the Call Detail Record (CDR) settings in Avaya IP Office. For all other configuration information, please refer to the Avaya IP Office product documentation referenced in **Section 9**. All configuration changes in Avaya IP Office are performed through the Avaya IP Office Manager.

With the Avaya IP Office Manager activated, expand **System** on the left navigation menu. Click the **CDR** tab on the right panel and configure the settings as follows:

- **Enable CDRs**: Checked
- **Enable intra-switch CDRs**: Checked
- **Record Format**: Unformatted
- **Record Options**: Enhanced
- **Date Format**: Select the format which corresponds to your region
- **IP Address**: IP address of the server running IPO Play! Statistics
- **IP Port**: 2500
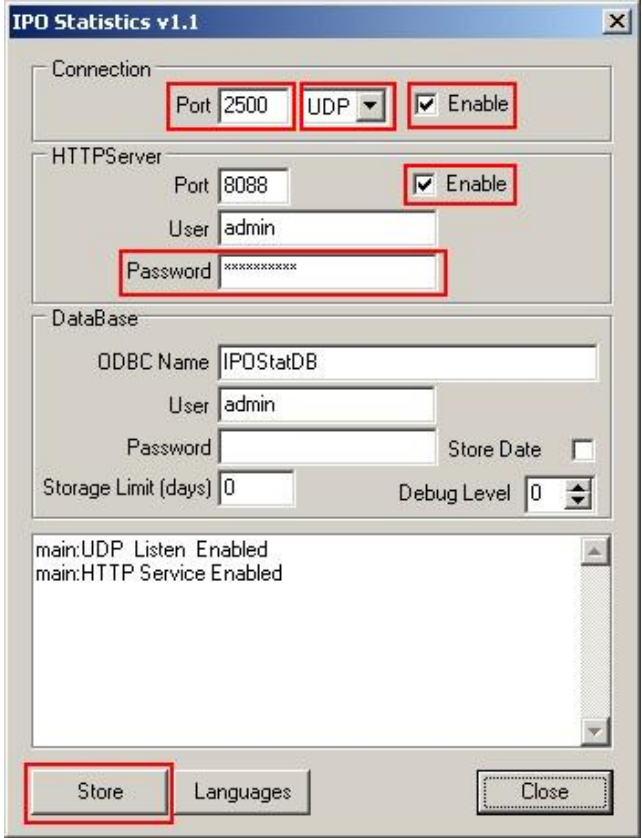- **Max CDRs**: 500
- **Use UDP**: Checked

Click **OK** to confirm the changes. Select **File > Save Configuration** and reboot Avaya **IP Office**.
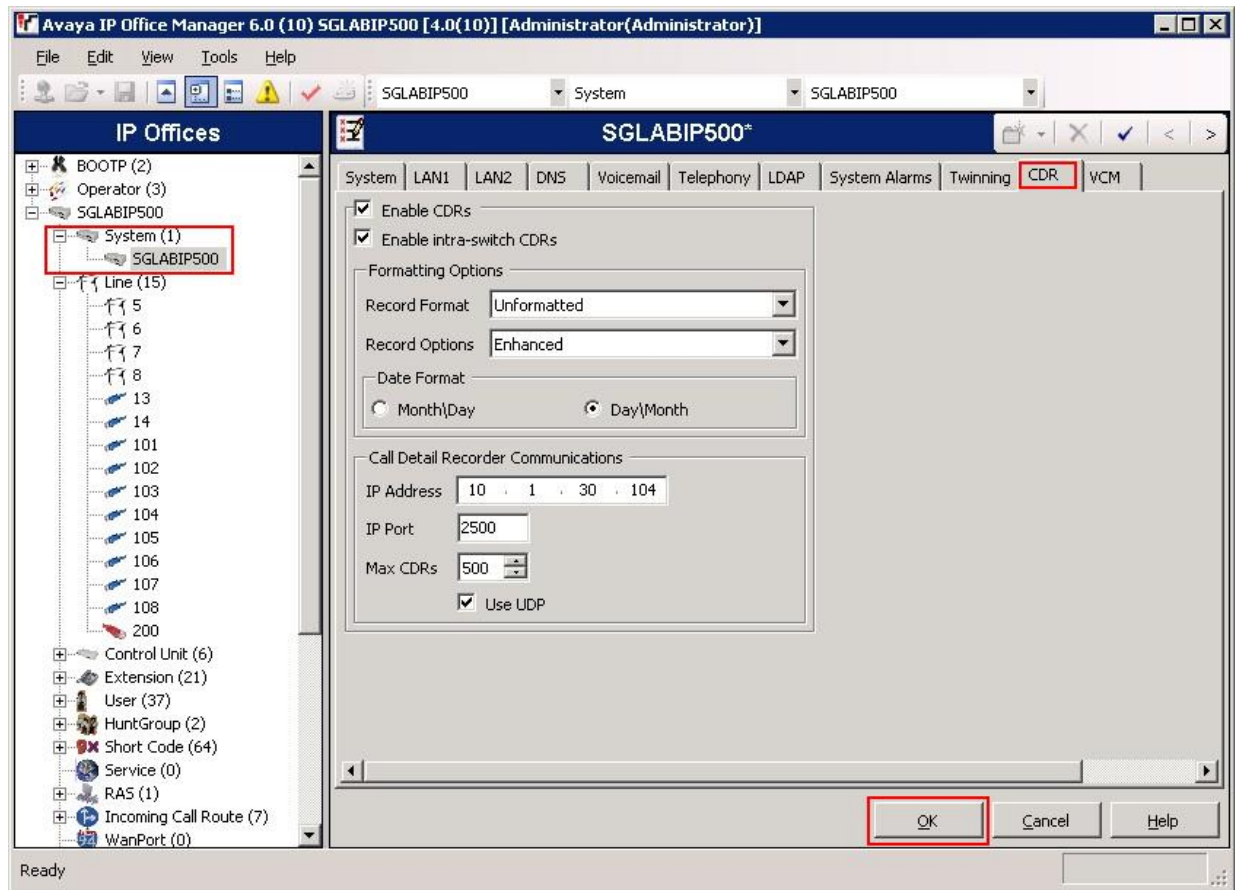
4. Configure LightNet Complex IPO Play! Statistics

The configuration information provided in this section describes the steps required to configure LightNet Complex IPO Play! Statistics to receive CDR records from Avaya IP Office.

Step	Description
1.	IPO Play! Statistics is installed as a Windows Service and is configured to start automatically on the server. To configure the properties, log into the server using an account with administrative privileges, right-click on the IPO Play! Statistics icon in the taskbar area and click **Properties**.

Step	Description
2.	From the IPO Statistics window, in the **Connection** section, set the **Port** field to **2500**, select **UDP** from the drop-down list and check **Enable**. These settings must correspond to the ones configured in Avaya IP Office in **Section 3**. In the **HTTPServer** section, check **Enable** to allow the call statistics to be viewed using a Web browser. To protect the Web interface, enter a password in the **Password** field. Accept the default values for the rest of the fields. Click **Store** to save the settings and then click **Close** to exit the window.

5. Interoperability Compliance Testing

Interoperability compliance testing included feature and serviceability testing. The feature testing evaluated the ability of IPO Play! Statistics to collect and process CDR records for various types of calls. The serviceability testing introduced failure scenarios to verify IPO Play! Statistics could resume CDR collection after failure recovery.

5.1. General Test Approach

The general test approach was to manually place various types of calls (intra-switch calls, inter-switch calls, inbound and outbound PSTN trunk calls) to and from the telephones controlled by Avaya IP Office, and verify that IPO Play! Statistics collected the CDR records and reported information correctly. For serviceability testing, failures such as network disruption to the IPO Play! Statistics server and reset of the server were applied.
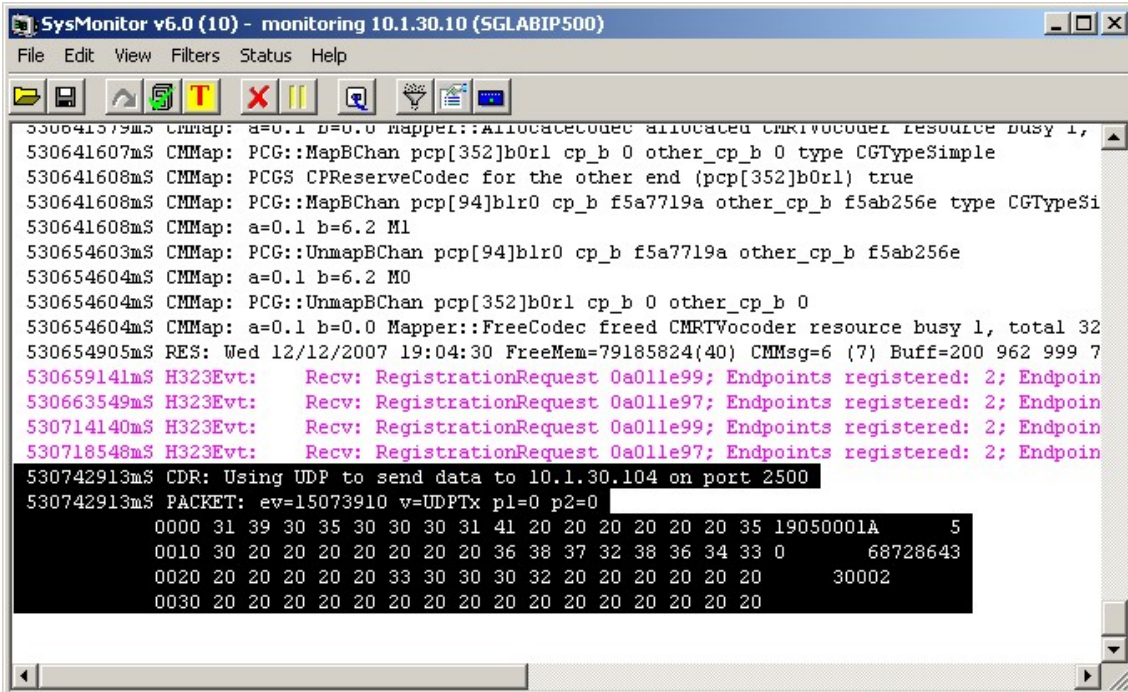
5.2. Test Results

All feature and serviceability tests passed. LightNet Complex IPO Play! Statistics successfully captured and processed CDR records from Avaya IP Office and reported them correctly when viewed using a Web browser. The types of calls generated during the compliance testing included: intra-switch calls, inbound/outbound PSTN trunk calls, inbound/outbound inter-switch IP trunk calls, transferred calls, bridged calls and conferenced calls. For serviceability testing, IPO Play! Statistics successfully resumed CDR collection after restoration of network connectivity to the server and after reset of the server.

6. Verification Steps

The following steps may be used to verify the configuration.

6.1. Verify Avaya IP Office

Using the System Monitor provided by Avaya IP Office, verify that Call Detail Records were generated after call completion and sent to IPO Play! Statistics.
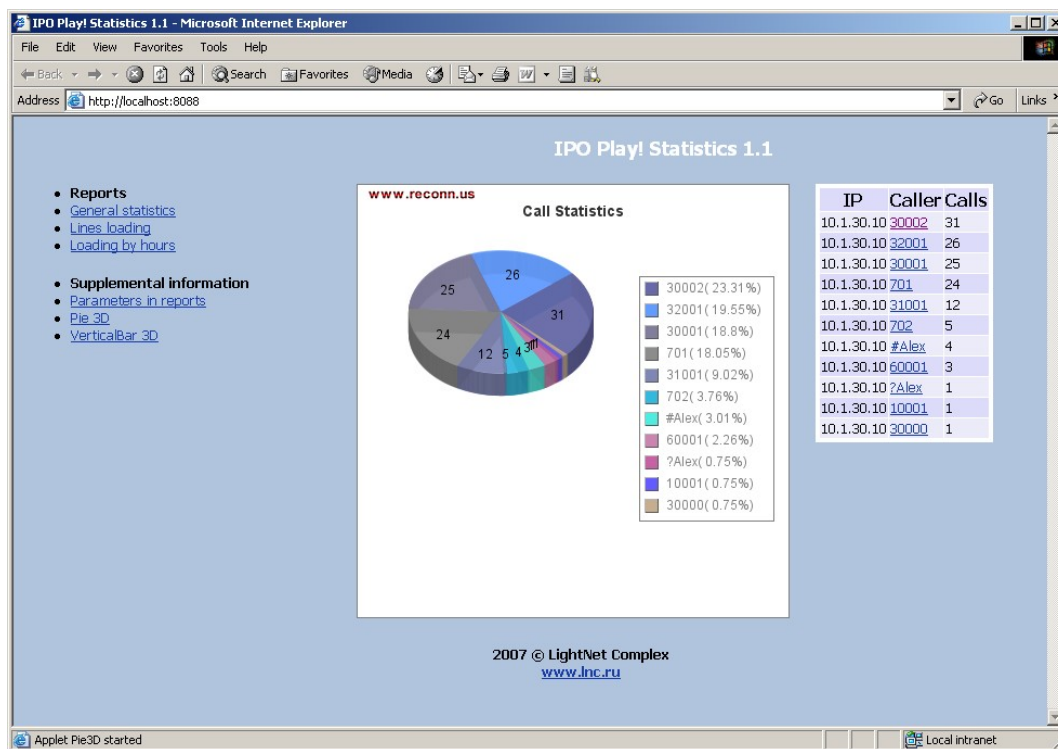
6.2. Verify LightNet Complex IPO Play! Statistics

Make a test call from an extension. Browse to the URL **http://< IP address of IPO Play! Statistics server>:8088/** using a Web browser and log in using the user and password as defined in **Step 2** of **Section 4**. Verify that the call statistics are updated for the extension when the call is hung up.

7. Support

Technical support for IPO Play! Statistics can be obtained by contacting LightNet Complex Support at +7 (495) 2324848 or by sending e-mail to avaya@lnc.ru.

8. Conclusion

These Application Notes describe the procedures for configuring LightNet Complex IPO Play! Statistics to collect Call Detail Records from Avaya IP Office. LightNet Complex IPO Play! Statistics successfully passed the compliance testing.

9. Additional References

Product documentation for Avaya products may be found at http://support.avaya.com.

[1] *Avaya IP Office Release 4.0, Manager: 01, Using Manager*, Issue 19(k), January 2007
[2] *Avaya IP Office Release 4.0, Manager: 02, Configuration Guide*, Issue 19(k), January 2007

Information on IPO Play! Statistics can be obtained from LightNet Complex's website http://avaya.lnc.ru/eng/cti/ips/.

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