Avaya Solution & Interoperability Test Lab

Application Notes for Resource Software International Cloud Call Accounting 2.1 with Avaya IP Office 8.1 – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Resource Software International (RSI) Cloud Call Accounting 2.1 to interoperate with Avaya IP Office 8.1. Resource Software International Cloud Call Accounting is a remote cloud based telephone reporting solution that uses the Station Message Detail Recording records from Avaya IP Office to track phone calls and produce detailed reports.

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 Resource Software International Cloud Call Accounting 2.1 to interoperate with Avaya IP Office 8.1. Resource Software International (RSI) Cloud Call Accounting is a remote cloud based telephone reporting solution that uses the Station Message Detail Recording records from Avaya IP Office to track phone calls and produce detailed reports.

These Application Notes will focus on the configuration of Avaya IP Office and the RSI Data Storage Buffer to enable RSI Cloud Call Accounting to interoperate successfully with Avaya IP Office. Detailed administration of other aspects of Avaya IP Office and the RSI Data Storage Buffer will not be described. For more information on these other administration actions, see the appropriate documentation listed in **Section 9.**

For security purposes public IP addresses and phone numbers have been masked out or altered in this document.

2. General Test Approach and Test Results

The feature test cases were performed manually. Different types of calls were made, along with different actions initiated from the user telephones, to verify proper parsing and displaying of received SMDR data from Avaya IP Office by RSI Cloud Call Accounting.

The serviceability test cases were performed manually by disconnecting and reconnecting the Ethernet cable on the RSI Data Buffer.

DevConnect Compliance Testing is conducted jointly by Avaya and DevConnect members. The jointly-defined test plan focuses on exercising APIs and/or standards-based interfaces pertinent to the interoperability of the tested products and their functionalities. DevConnect Compliance Testing is not intended to substitute full product performance or feature testing performed by DevConnect members, nor is it to be construed as an endorsement by Avaya of the suitability or completeness of a DevConnect member's solution.

2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing. The feature testing focused on verifying the proper parsing and displaying of SMDR data received from Avaya IP Office by RSI Cloud Call Accounting through the RSI Data Storage Buffer.

The following is a list of Interoperability tests that were performed:

- Internal calls
- Voicemail
- Inbound PSTN calls
- Outbound PSTN calls
- account codes
- authorization codes
- serviceability

The serviceability testing focused on verifying the ability of RSI Cloud Call Accounting to recover from adverse conditions, such as disconnecting/reconnecting the Ethernet cable on the RSI Data Storage Buffer.

The verification also included a sanity check on the RSI Cloud Call Accounting reports that can be viewed on the secure website.

2.2. Test Results

All applicable test cases were executed and passed.

2.3. Support

Technical support on RSI Cloud Call Accounting can be obtained through the following:

- Phone: 905-576-4575
- Email: support@telecost.com
- Web: www.hostedcallaccounting.com

3. Reference Configuration

The configuration used for the compliance testing is shown below.

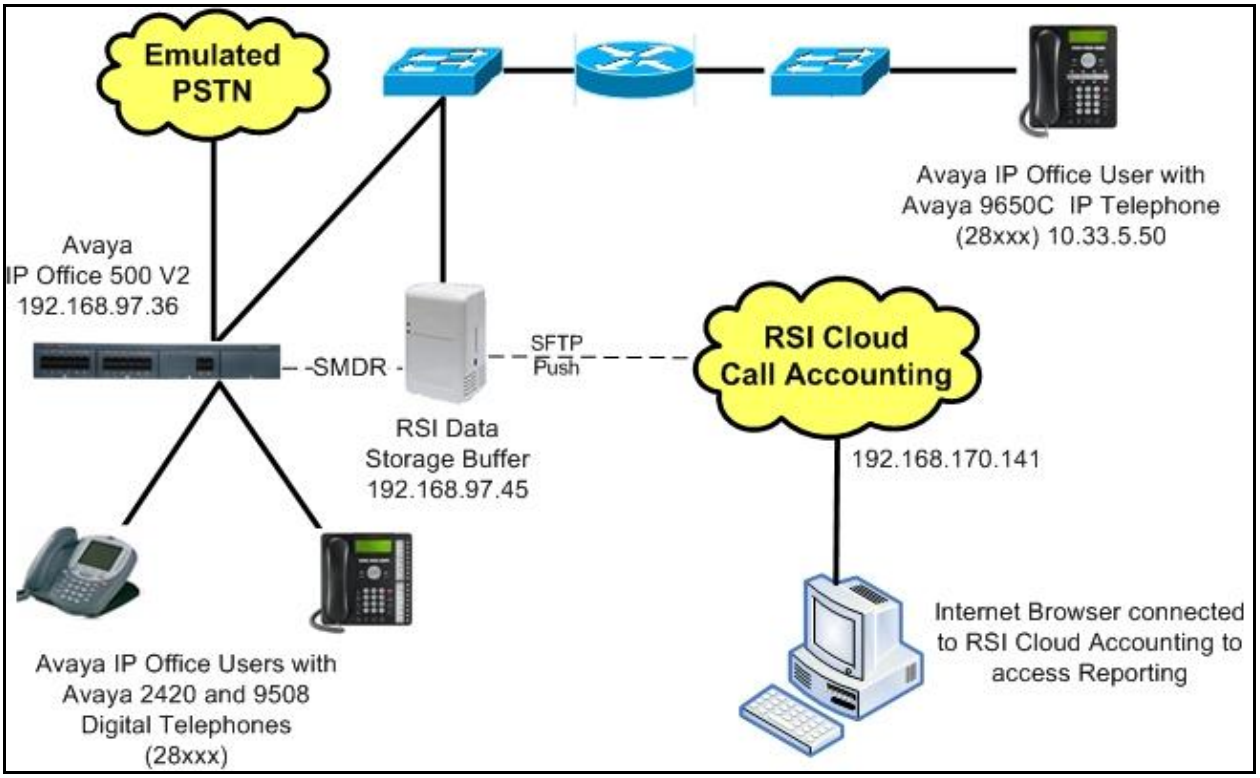


Figure 1: Sample Configuration of RSI Cloud Call Accounting and Avaya IP Office

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya IP Office 500 V2	8.1
Avaya 9650C IP Telephone (H.323)	3.104S
Avaya 2420 and 9508 Digital Telephones	N/A
RSI Cloud Call Accounting	2.1
RSI Data Storage Buffer	Build 2012-05-23 10:05:11

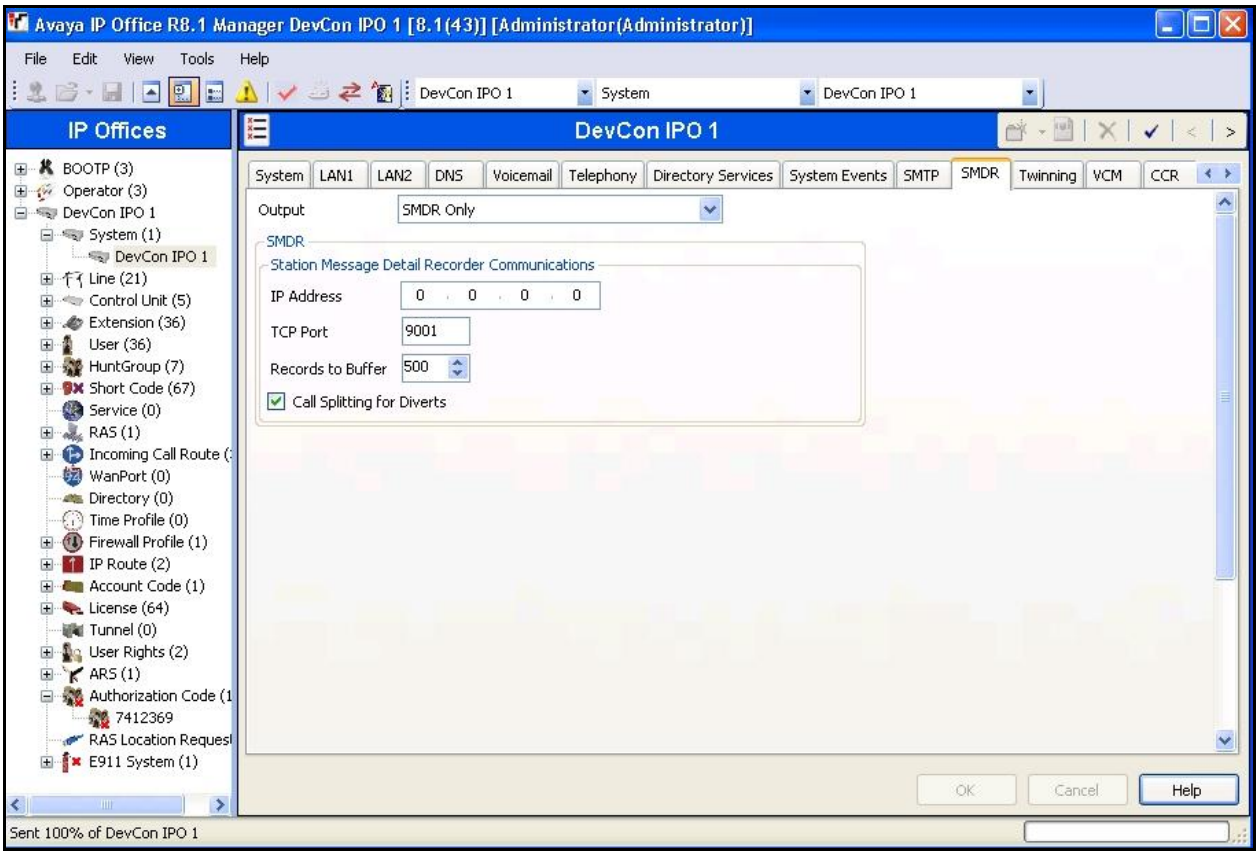
5. Configure Avaya IP Office

This section provides the procedures for configuring Avaya IP Office.

From a PC running the Avaya IP Office Manager application, select **Start > Programs > IP Office > Manager** to launch the Manager application. Select the proper IP Office system, and log in with the appropriate credentials (not shown).

From the configuration tree in the left pane, select **System** to display the IP Office to configure, and then select the system name. In this sample configuration the system name is **DevCon IPO 1**. In the right pane, select the **SMDR** tab. Select "SMDR Only" from the **Output** drop-down list, to display the **SMDR** section.

For **IP Address**, enter the IP address **0.0.0.0**. The address 0.0.0.0 puts the control unit in listen mode on the specified TCP port. For **TCP Port**, enter **9001**. Set **Records to Buffer** to 500, and check **Call Splitting for Diverts**. The record buffer is used by IP Office to cache SMDR records in the case of a communication failure with the RSI Data Buffer. Click **OK** and save the configuration changes.



6. Configure RSI Data Storage Buffer

This section provides the procedures for configuring the RSI Data Storage Buffer to interoperate with Avaya IP Office and RSI Cloud Call Accounting. It is assumed that the RSI Data Storage Buffer has already been connected to the Ethernet network and has a valid IPv4 address.

With a web browser, connect to the IP address of the RSI Data Storage Buffer and log in with the appropriate credentials (not shown).

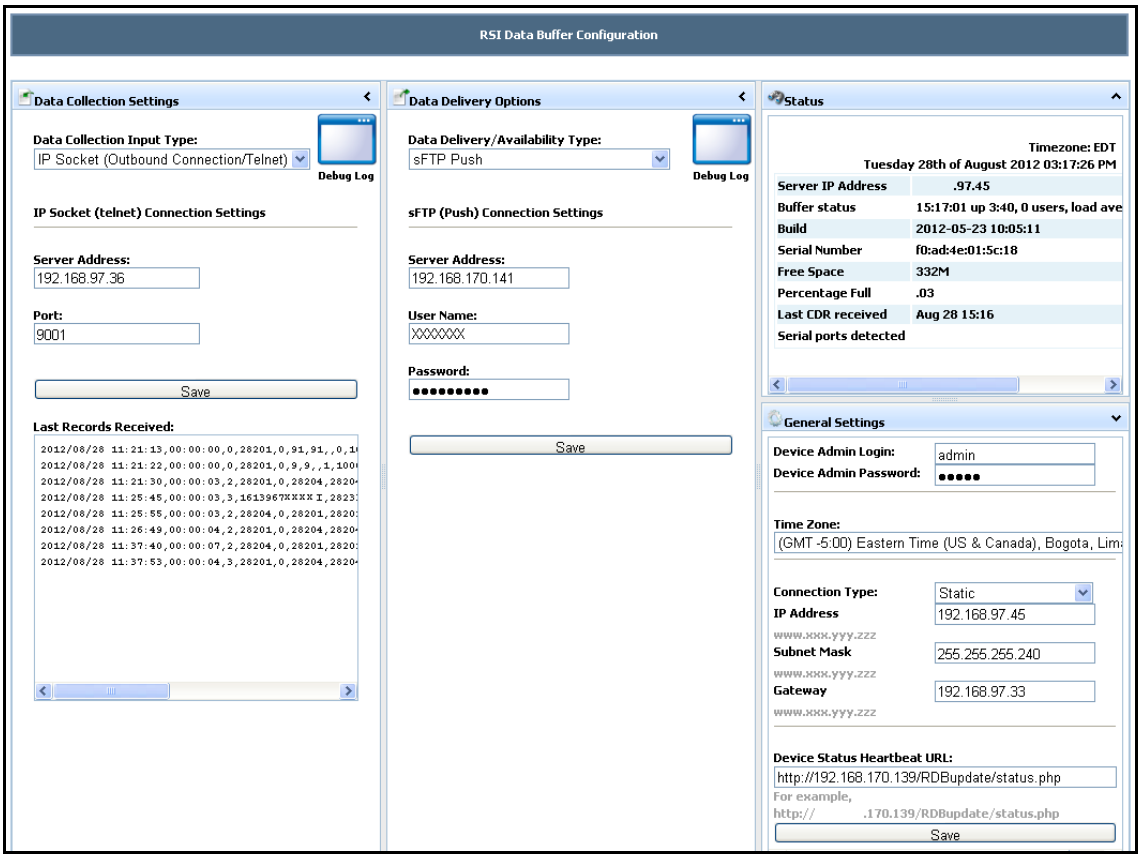
Under **Data Collection Settings**, configure the following:

- **Input type**: IP Socket (Outbound connection / Telnet)
- **Server Address**: IPv4 address assigned to the IP Office
- **Port**: SMDR port (**9001**) as configured in **Section 5**

Under **Data Delivery Options**, configure the following:

- **Data Delivery**: **sFTP Push**
- **Server Address**: Address supplied by RSI
- **User Name**: User Name supplied by RSI
- **Password**: Password supplied by RSI

Press the Save button to store the configuration settings. .



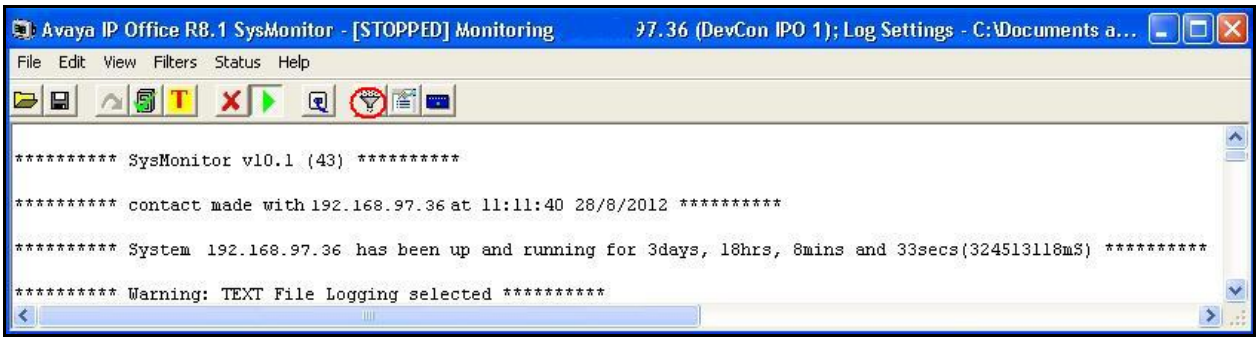
After completing **Section 5** and **6** the required configuration is complete for Interoperability between Avaya IP Office and RSI Cloud Call Accounting. Reports can now be generated and viewed remotely via a web browser by connecting to RSI's hosted Cloud Call Accounting portal.

7. Verification Steps

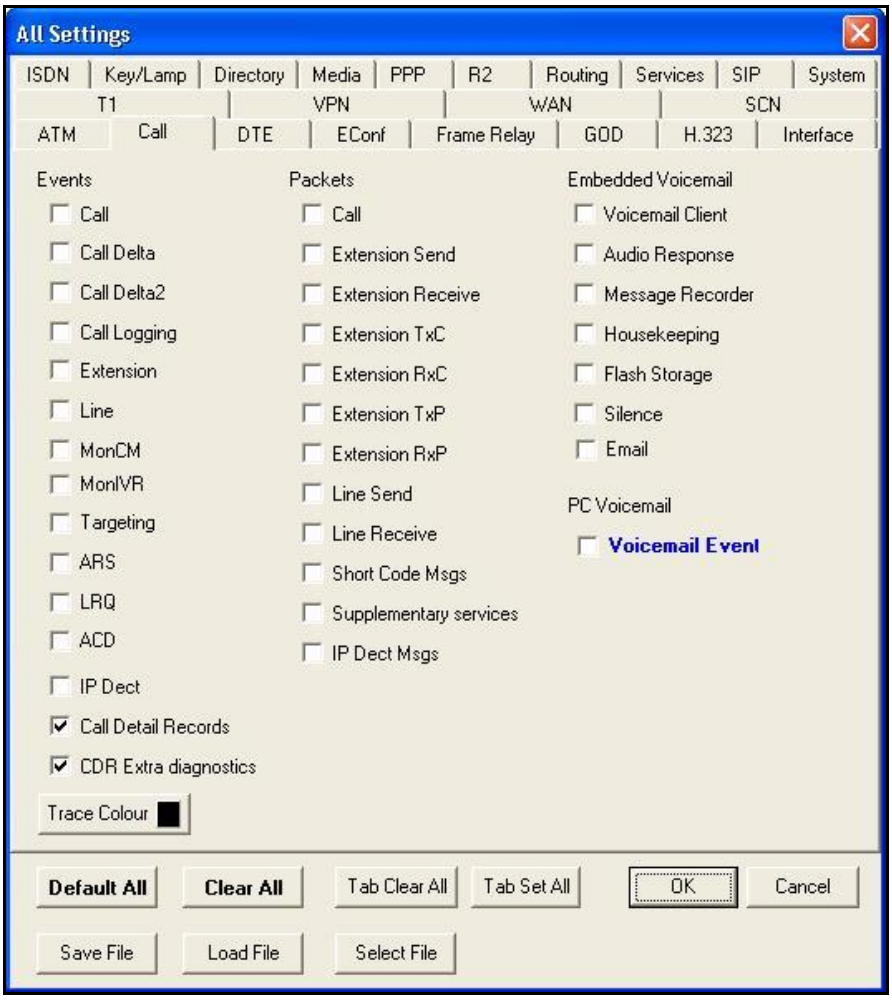
This section provides tests that can be performed to verify proper configuration of Avaya IP Office and RSI Cloud Call Accounting.

7.1. Verify Avaya IP Office

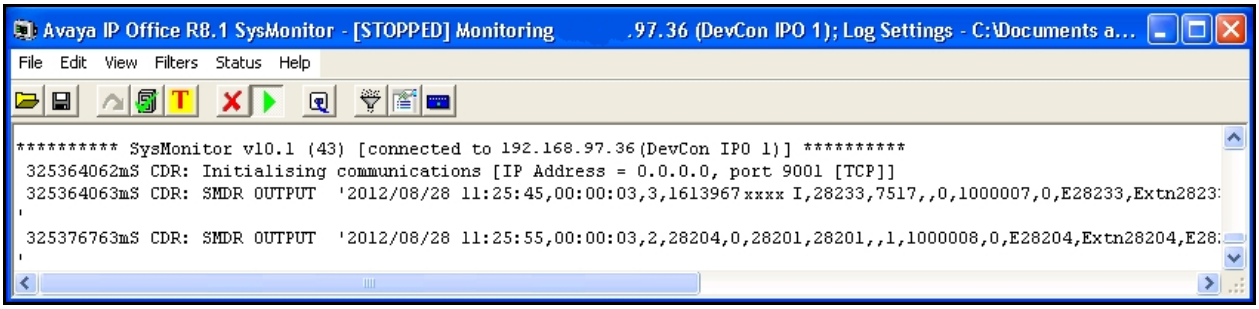
From a PC running the Avaya IP Office Monitor application, select **Start > Programs > IP Office > Monitor** to launch the application. The **Avaya IP Office R8.1 SysMonitor** screen is displayed, as shown below. Click on the **Filter** icon.



The **All Settings** screen is displayed. Check **Call Detail Records** and **CDR Extra diagnostics**, as shown below.

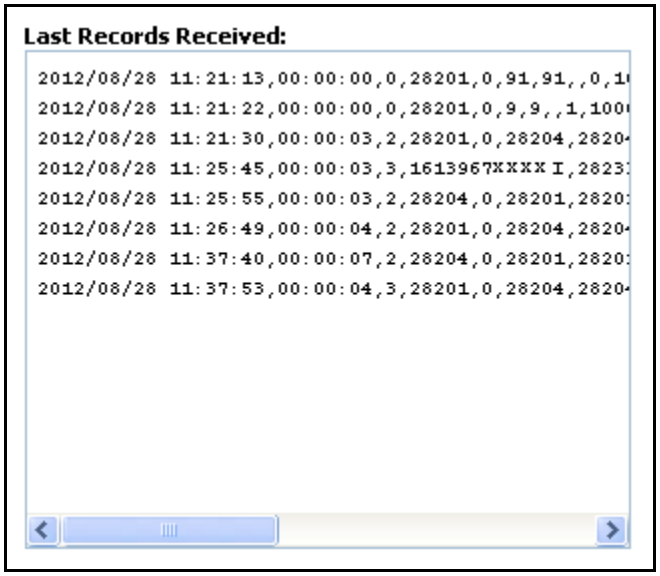


Make and complete a few phone calls, including internal, inbound from the PSTN, and outbound to the PSTN. Verify that raw SMDR data is displayed on the **Avaya IP Office R8.1 SysMonitor** screen, as shown below.



7.2. Verify RSI Cloud Call Accounting

Navigate to the RSI Data Storage Buffer web interface as described in **Section 6.** Make a test call. When the call is completed SMDR data from Avaya IP Office will be captured and displayed in the **Last Records Received** section of the screen as shown below.



8. Conclusion

These Application Notes describe the configuration steps required for RSI Cloud Call Accounting to successfully interoperate with Avaya IP Office. All feature and serviceability test cases were completed successfully.

9. Additional References

This section references the product documentation relevant to these Application Notes.

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

Avaya IP Office

1) Avaya IP Office Basic Edition - Quick Mode 8.1 Manager –Issue 05e, 25 May 2012
2) Avaya IP Office Technical Bulletin, Bulletin no: 145, 16 July 2012

Resource Software International Ltd.

3) RSI Data Storage Buffer Installation & User Guide

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.