Avaya Solution & Interoperability Test Lab

Application Notes for Resource Software International Shadow CMS with Avaya IP Office – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Resource Software International Shadow CMS to interoperate with Avaya IP Office. Resource Software International Shadow CMS is a 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.

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1. Introduction

These Application Notes describe the configuration steps required for Resource Software International (RSI) Shadow CMS to interoperate with Avaya IP Office. RSI Shadow CMS is a telephone reporting solution that uses the Station Message Detail Recording (SMDR) records from Avaya IP Office to track phone calls and produce detailed reports.

1.1. 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 Shadow CMS for call scenarios including internal, voicemail, inbound PSTN, outbound PSTN, hold, reconnect, transfer, conference, park, account codes, and authorization codes. The verification also included a sanity check on the report that can be generated from the received SMDR data.

The serviceability testing focused on verifying the ability of RSI Shadow CMS to recover from adverse conditions, such as disconnecting/reconnecting the Ethernet cable on the RSI Shadow CMS server.

1.2. Support

Technical support on RSI Shadow CMS can be obtained through the following:

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

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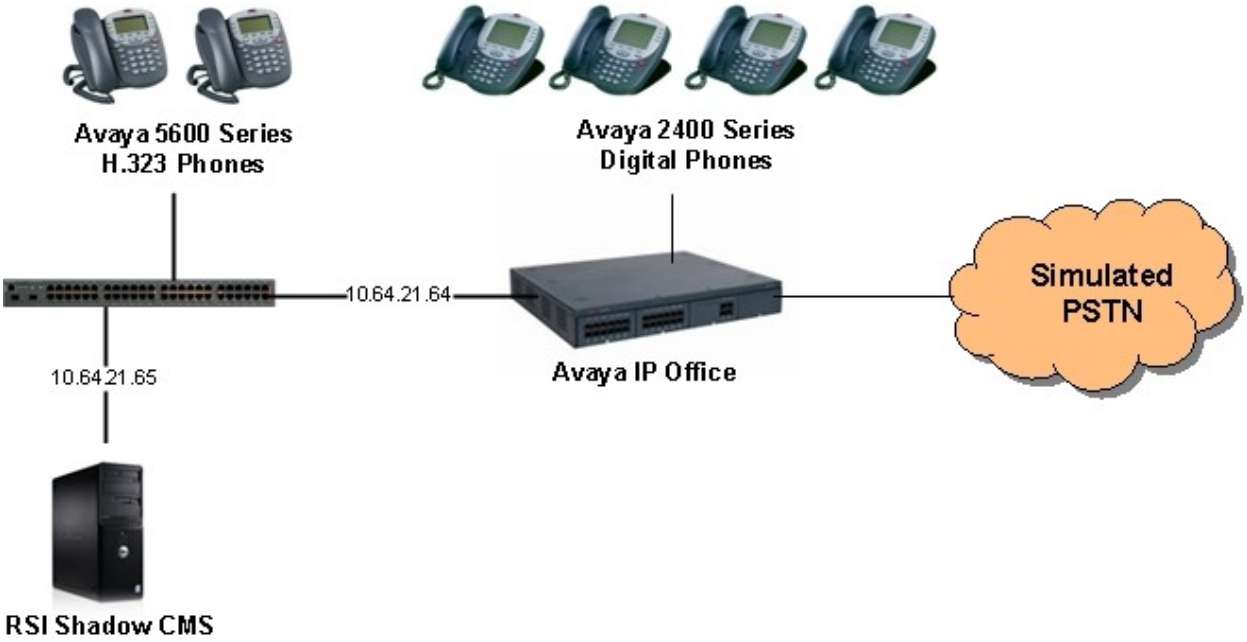
2. Reference Configuration

The configuration used for the compliance testing is shown below.



3. Equipment and Software Validated

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

Equipment	Software
Avaya IP Office 500	6.1 (5)
Avaya 2400 Series Digital Telephones	Release 6
Avaya 5600 Series IP Telephones (H.323)	2.9.1
RSI Shadow CMS	4.2.0.008

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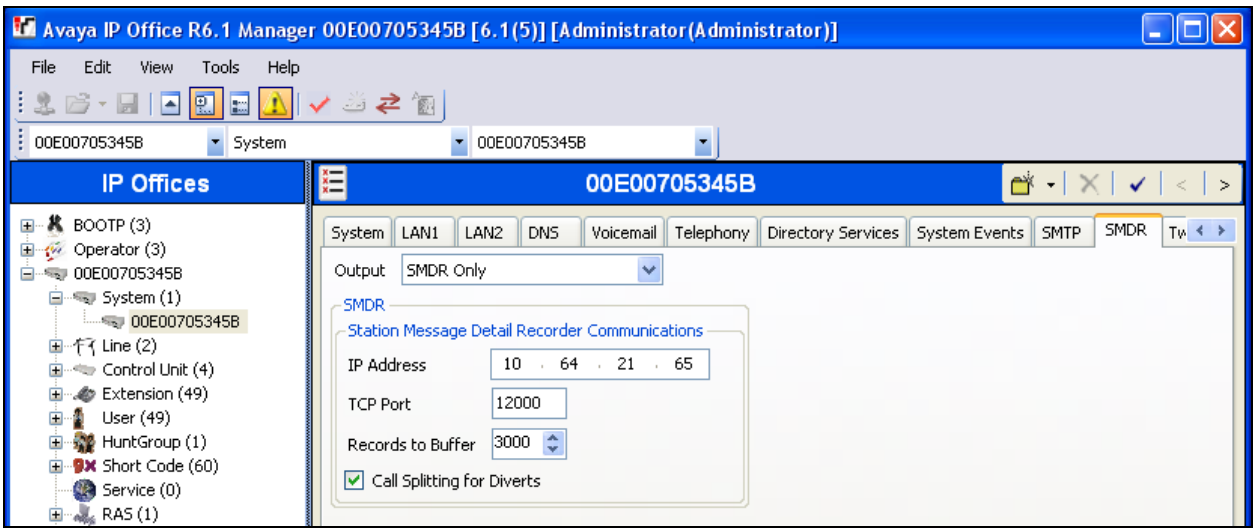
4. Configure Avaya IP Office

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.

From the configuration tree in the left pane, select the appropriate **System** to display the system screen tabs 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 of RSI Shadow CMS. For **TCP Port**, enter a desired port, in this case "12000". Modify **Records to Buffer** if desired, 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 RSI Shadow CMS.



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5. Configure RSI Shadow CMS

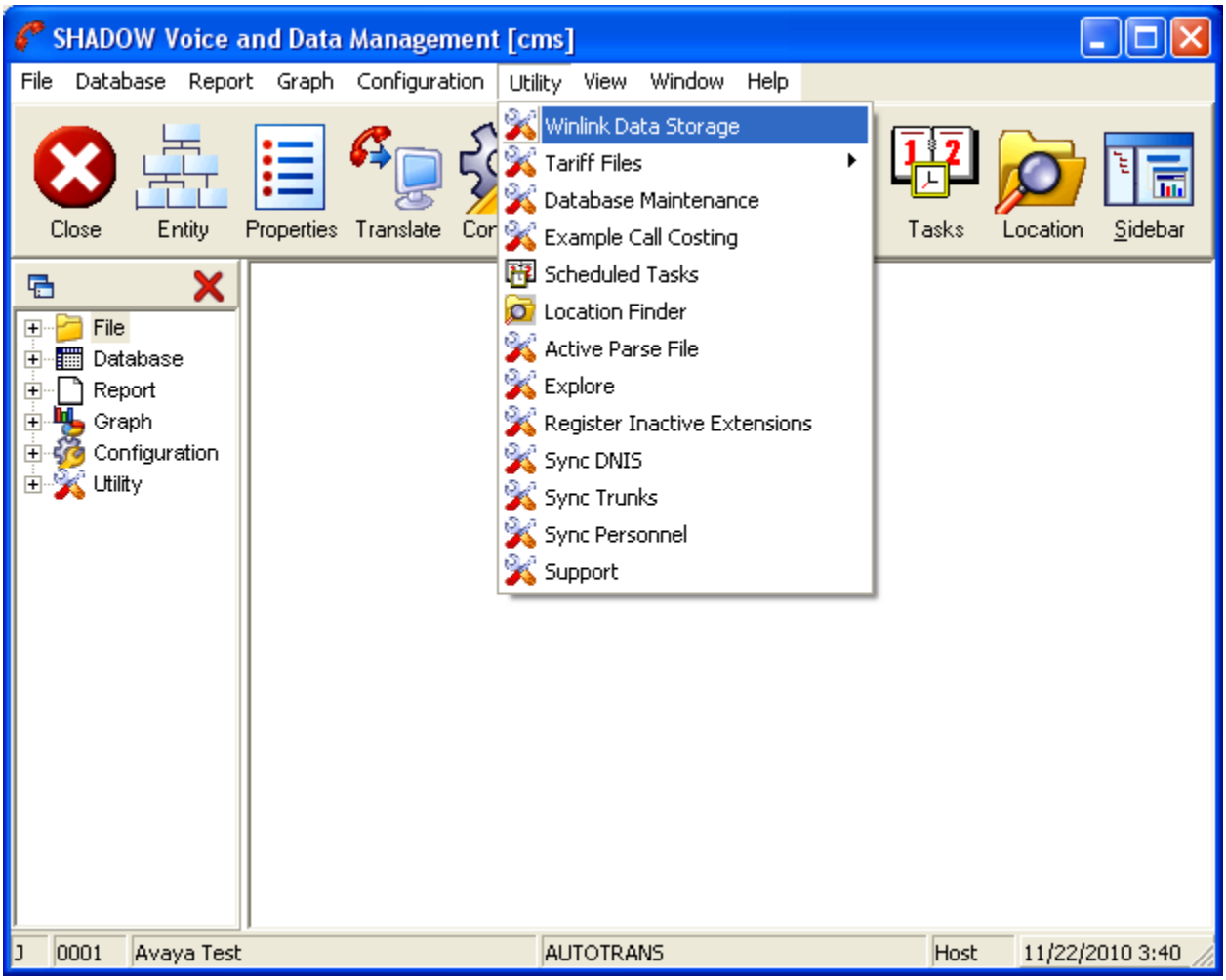
This section provides the procedures for configuring RSI Shadow CMS. The procedures include the following areas:

- Launch application
- Administer data source
- Administer socket settings

5.1. Launch Application

From the Shadow CMS server, select **Start > All Programs > RSI > CMS > CMS** to display the **SHADOW Voice and Data Management** screen.

Select **Utility > Winlink Data Storage** from the top menu.



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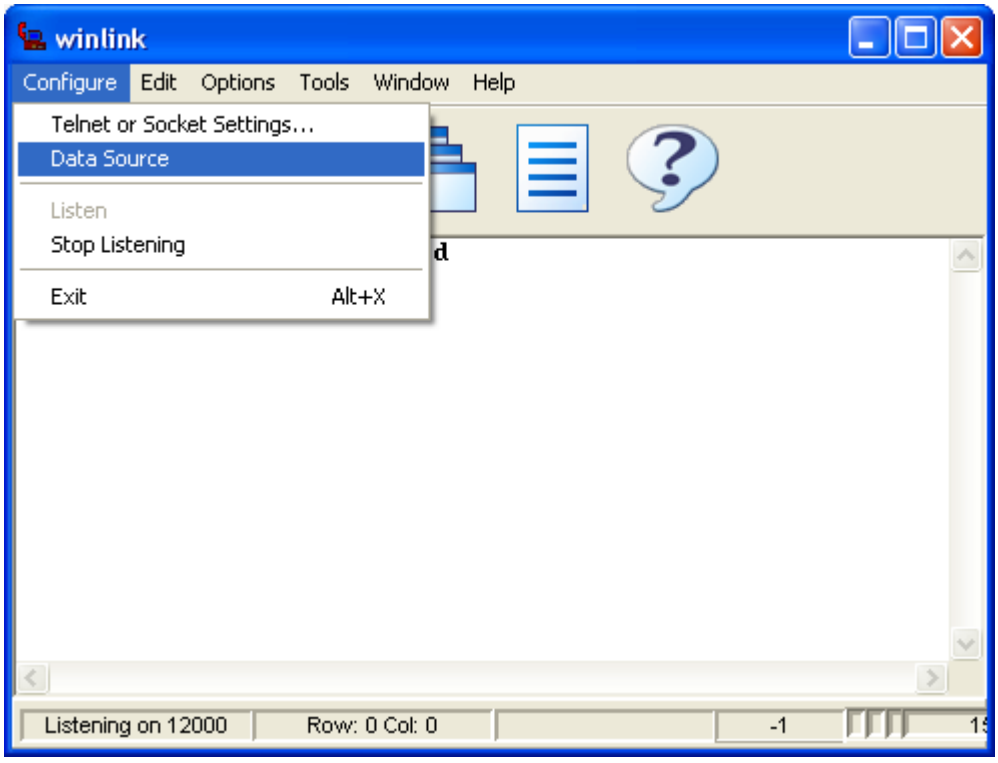
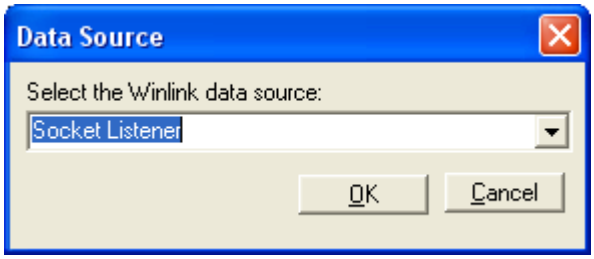
5.2. Administer Data Source

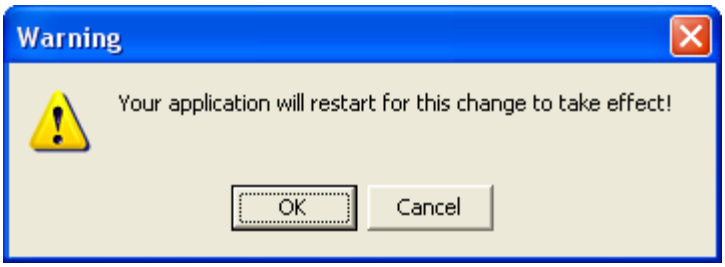
The **winlink** screen is displayed. Select **Configure > Data Source** from the top menu.



The **Data Source** screen is displayed next. Select "Socket Listener" from the drop-down list, as shown below.



The **Warning** screen is displayed. Select **OK** to restart the application.



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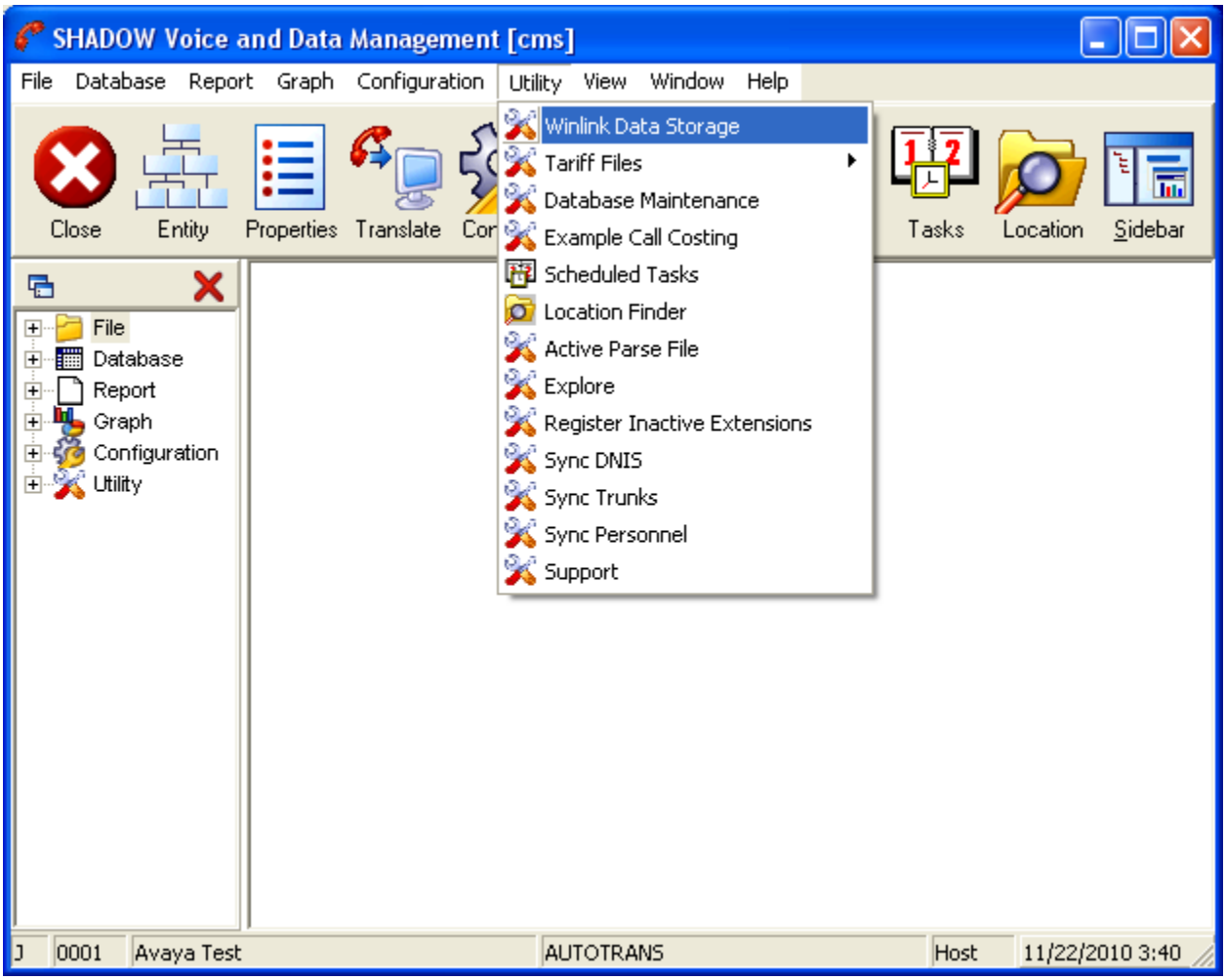
5.3. Administer Socket Settings

The **SHADOW Voice and Data Management** screen is displayed again. Select **Utility > Winlink Data Storage** from the top menu.



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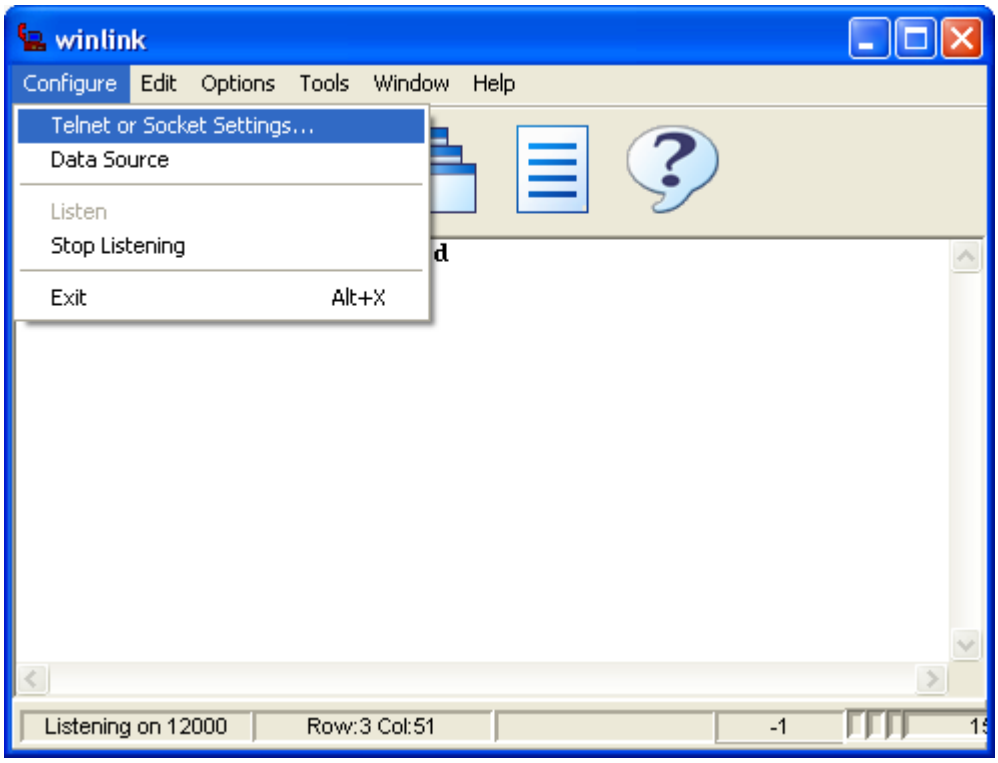
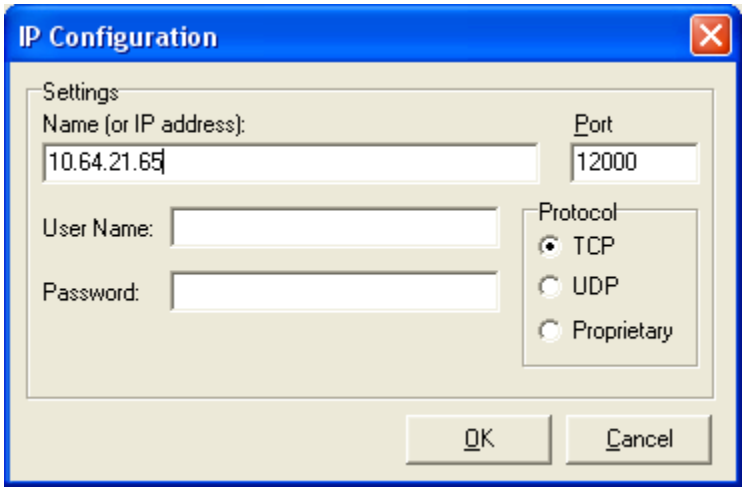
The **winlink** screen is displayed. Select **Configure > Telnet or Socket Settings** from the top menu.



The **IP Configuration** screen is displayed. For **Name (or IP address)**, enter the IP address of the Shadow CMS server. For **Port**, enter the TCP port from **Section 4**. Retain the default values in the remaining fields.



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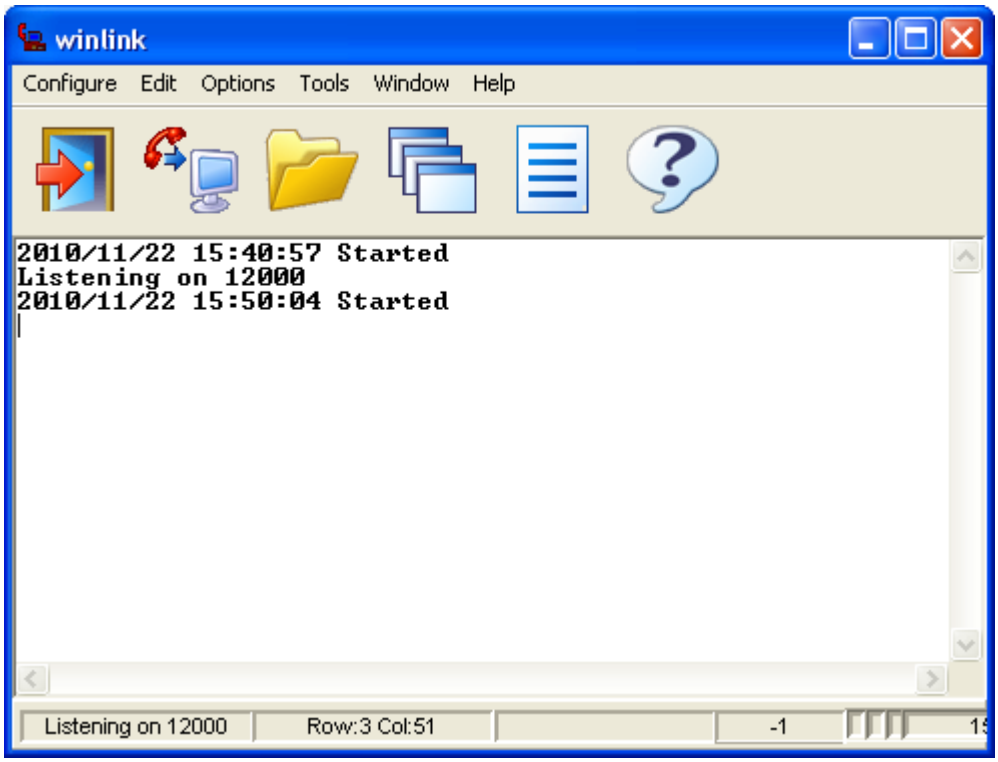
The **WINLINK** screen is displayed next. In the lower left portion of the screen, verify that the application is listening on the proper TCP port, as shown below.



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6. 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 by RSI Shadow CMS.

The serviceability test cases were performed manually by disconnecting/reconnecting the Ethernet cables on the RSI Shadow CMS server.

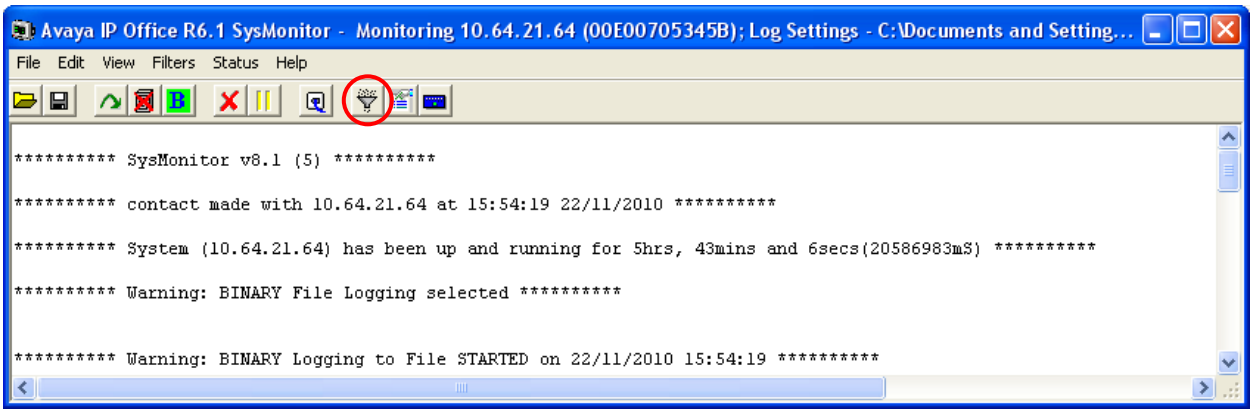
All test cases were executed and passed.

7. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Avaya IP Office and RSI Shadow CMS.

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 R6 .1 SysMonitor** screen is displayed, as shown below. Click on the **Filter** icon.



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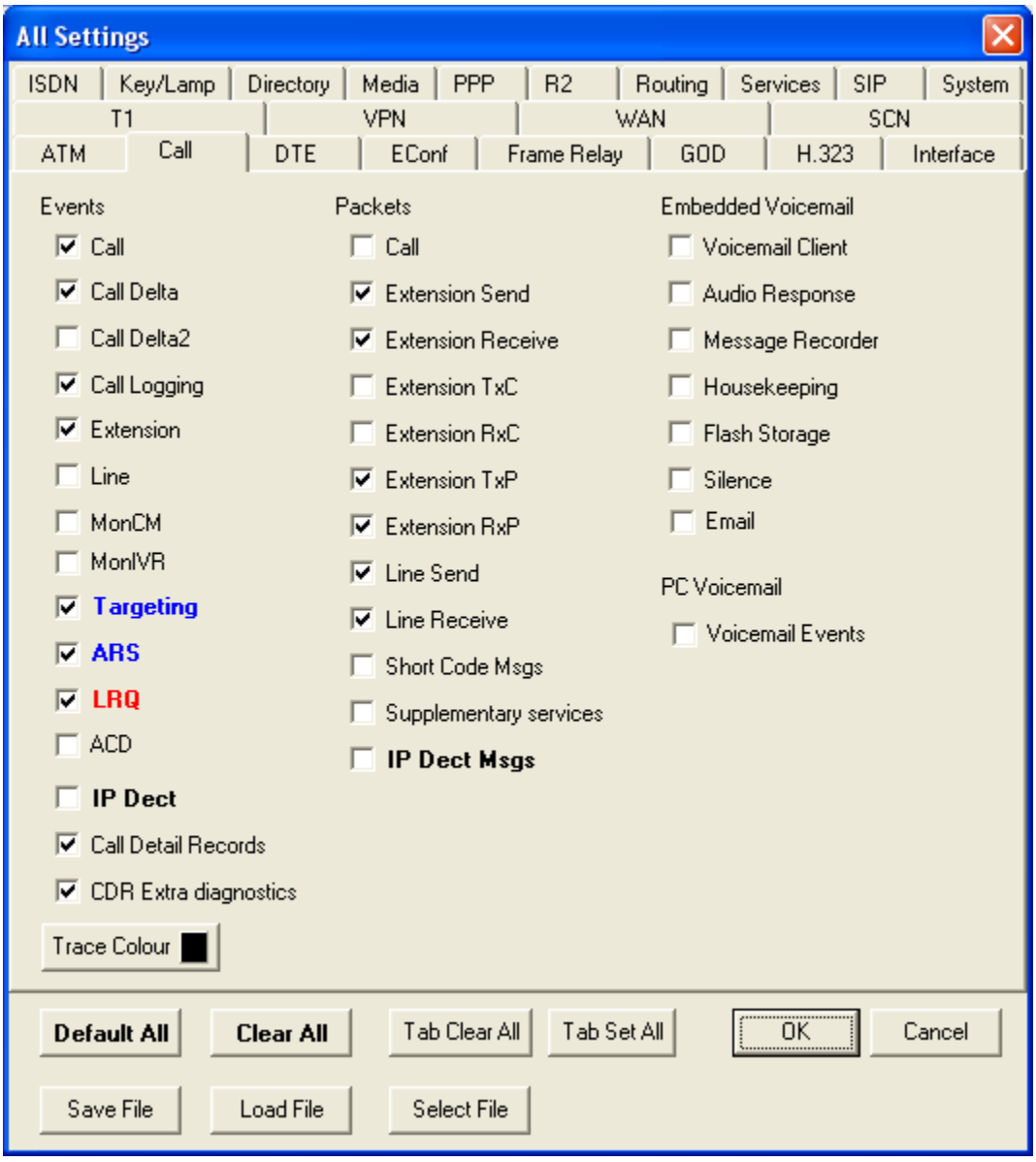
The **All Settings** screen is displayed. Check **Call Detail Records** and **CDR Extra diagnostics**, as shown below.



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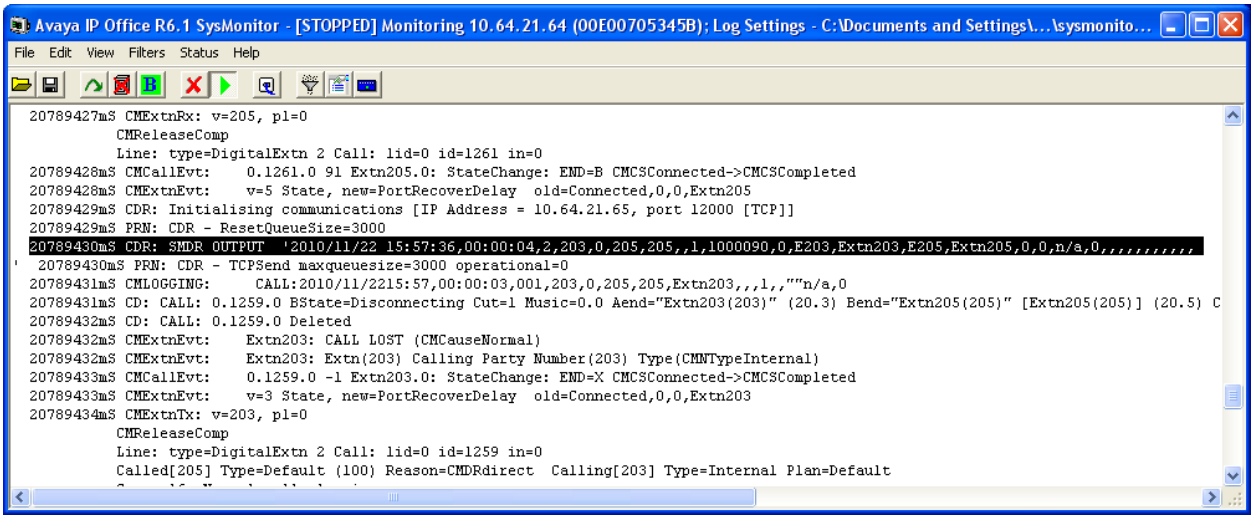
Make and complete a few phone calls, including internal, inbound from the PSTN, and outbound to the PSTN. Verify that raw SMDR data is displayed on the **Avaya IP Office R6.1 SysMonitor** screen, as shown below.



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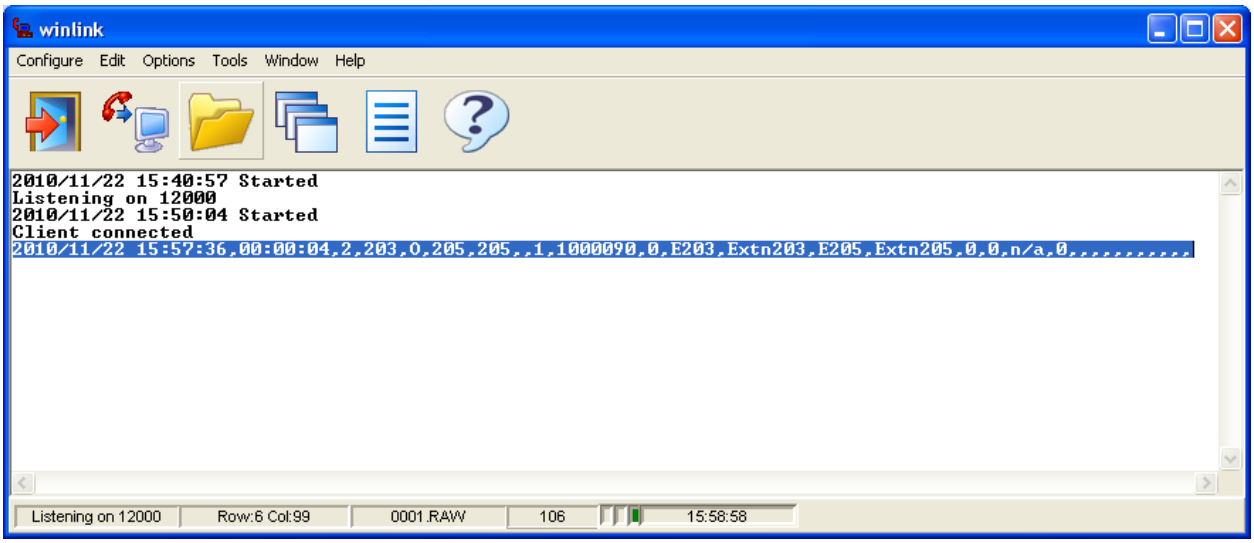
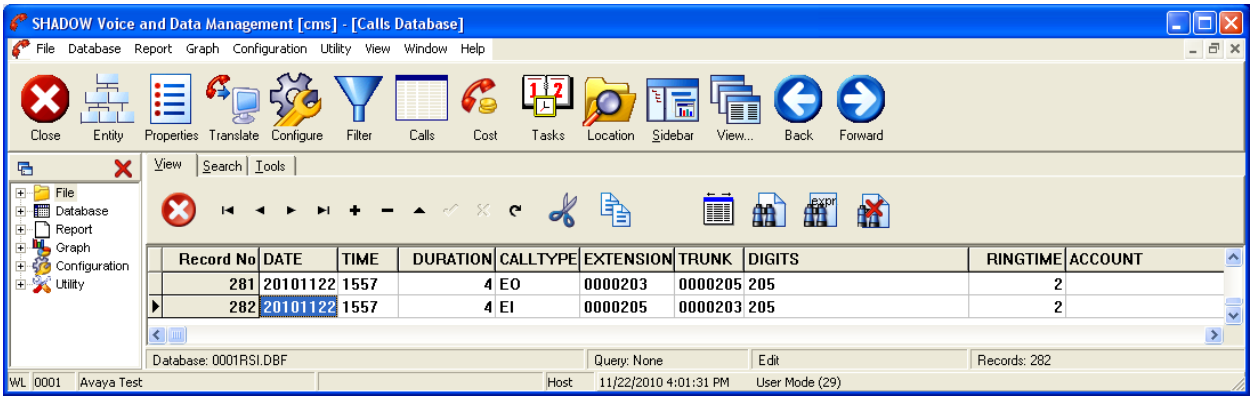
7.2. Verify RSI Shadow CMS

From the RSI Shadow CMS server, follow the navigation in **Section 5.1** to display the **winlink** screen. Verify that an entry is displayed for each SMDR record output from **Section 7.1**.



Follow the navigation in **Section 5.1** to display the **SHADOW Voice and Data Management** screen. Click on the **Calls** icon, followed by **Translate** icon to display the translated SMDR records. Verify that the appropriate number of entries is created for the SMDR records from **Section 7.1**, and note that two translated records are created by Shadow CMS for a call between two internal parties.



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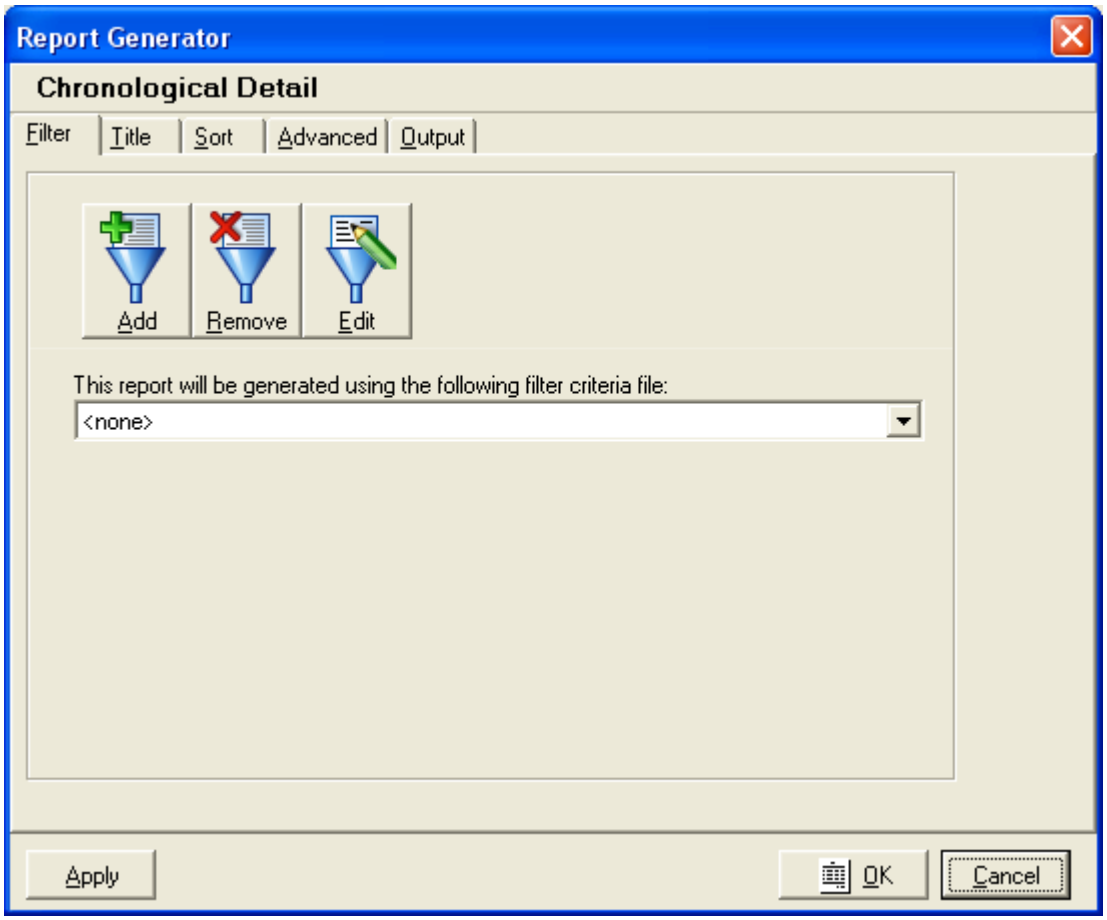
Select **Report > Chronological > Chronological Detail** from the top menu, and click **OK** in the Report Generator screen.



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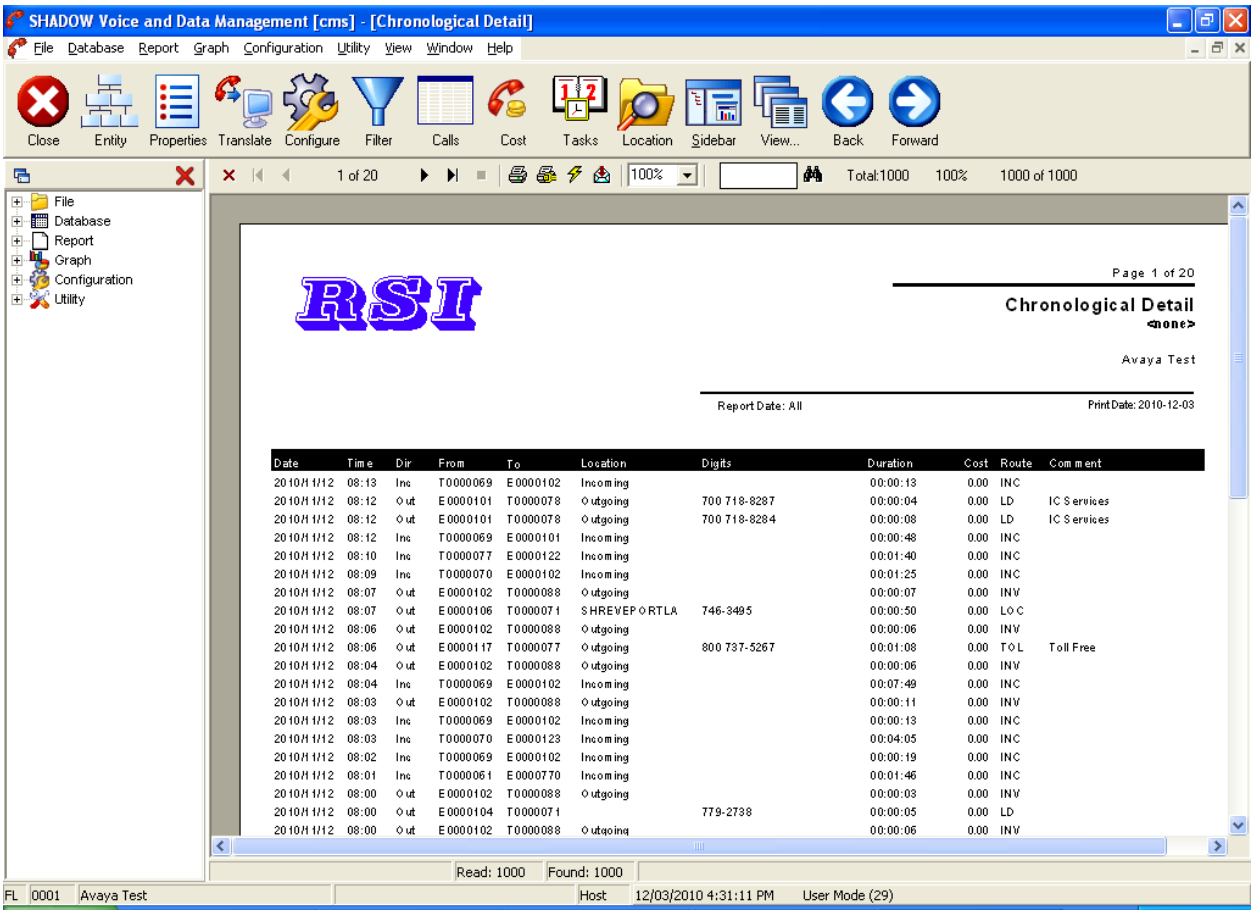
The **Chronological Detail** report is displayed, as shown below. Verify that the report entries match to the entries from **Section 7.1**.



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8. Conclusion

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

9. Additional References

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

1. *IP Office 6.1 Documentation CD*, November 2010, available at http://support.avaya.com.

2. *Resource Software International Ltd. Avaya IP Office RSI CMS Integration Guide*, available from RSI Support.

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