Avaya Solution & Interoperability Test Lab

Application Notes for TONE Software ReliaTel with Avaya IP Office 8.0 – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for TONE Software ReliaTel to interoperate with Avaya IP Office 8.0 using SNMP.

TONE Software ReliaTel is a monitoring and management solution that can monitor and maintain groups of telephone switches, PBX systems, and other devices from a single control point. In the compliance testing, TONE Software ReliaTel used the SNMP interface from Avaya IP Office to provide alarm monitoring.

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.

©2012 Avaya Inc. All Rights Reserved.

1. Introduction

These Application Notes describe the configuration steps required for TONE Software ReliaTel to interoperate with Avaya IP Office 8.0 using SNMP.

TONE Software ReliaTel is a monitoring and management solution that can monitor and maintain groups of telephone switches, PBX systems, and other devices from a single control point. In the compliance testing, TONE Software ReliaTel used the SNMP interface from Avaya IP Office to provide alarm monitoring.

Upon detection of a failure, Avaya IP Office raises an alarm and sends a SNMP trap to TONE Software ReliaTel. TONE Software ReliaTel collects and stores the alarm information from the Avaya IP Office SNMP trap, and presents the alarm on the monitoring screen. The integration uses SNMP version 2c.

2. General Test Approach and Test Results

The feature test cases were performed manually. Different SNMP traps were generated on IP Office and verified on the ReliaTel web-based alarm monitoring screen. The verification also included the use of a protocol analyzer to view the SNMP traps sent from IP Office.

The serviceability test cases were performed manually by disconnecting/reconnecting the Ethernet cable to the ReliaTel server.

2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing.

The feature testing focused on verifying the handling and displaying of received SNMP traps by ReliaTel for scenarios including IP Office reboot, H.323 and SIP telephone registration/un-registration, Voicemail Pro connect/disconnect, and connect/disconnect of digital telephone.

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

2.2. Test Results

All test cases were executed and passed.

2.3. Support

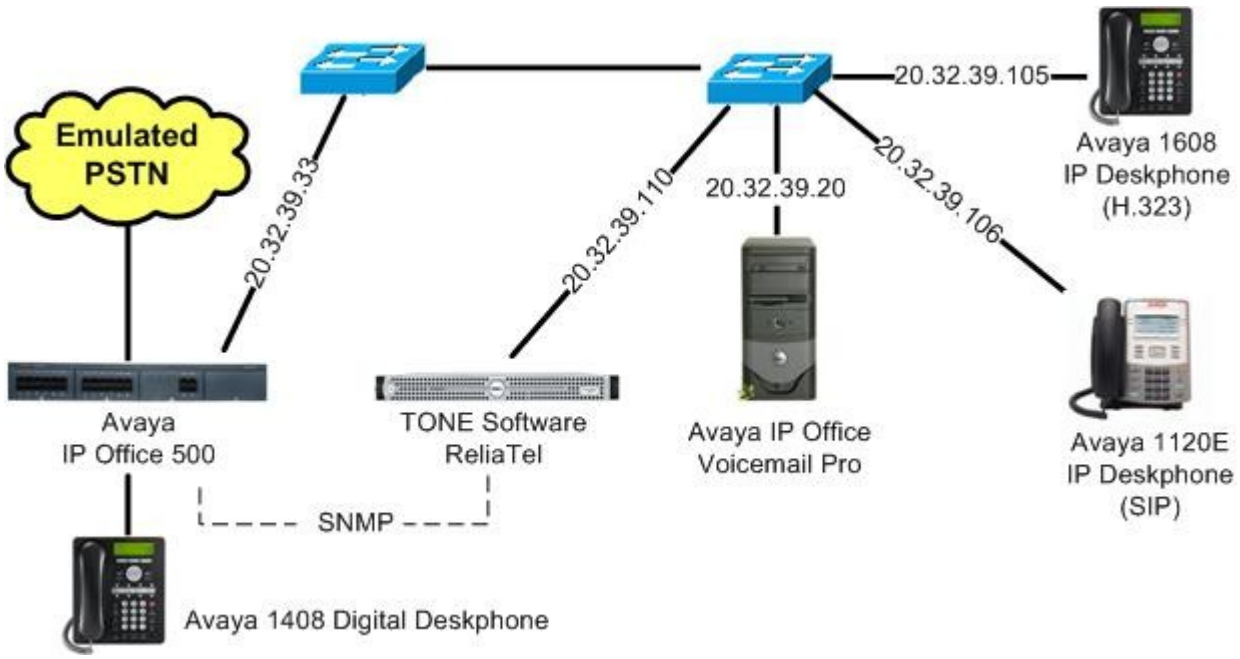
Technical support on ReliaTel can be obtained through the following:

- **Phone:** (800) 833-8663
- **Email:** info@tonesoft.com
- **Web:** http://www.tonesoft.com/Support_and_Services

©2012 Avaya Inc. All Rights Reserved.

3. Reference Configuration

The configuration used for the compliance testing is shown below.



4. Equipment and Software Validated

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

Equipment	Software
Avaya IP Office 500 • Digital Station 8 Card	8.0 (16)
Avaya IP Office Voicemail Pro	8.0 (29)
Avaya 1608 IP Deskphone (H.323)	1.300B
Avaya 1120E IP Deskphone (SIP)	04.03.09.00
Avaya 1408 Digital Deskphone	NA
TONE Software ReliaTel	3.1.0.145

©2012 Avaya Inc. All Rights Reserved.

5. Configure Avaya IP Office

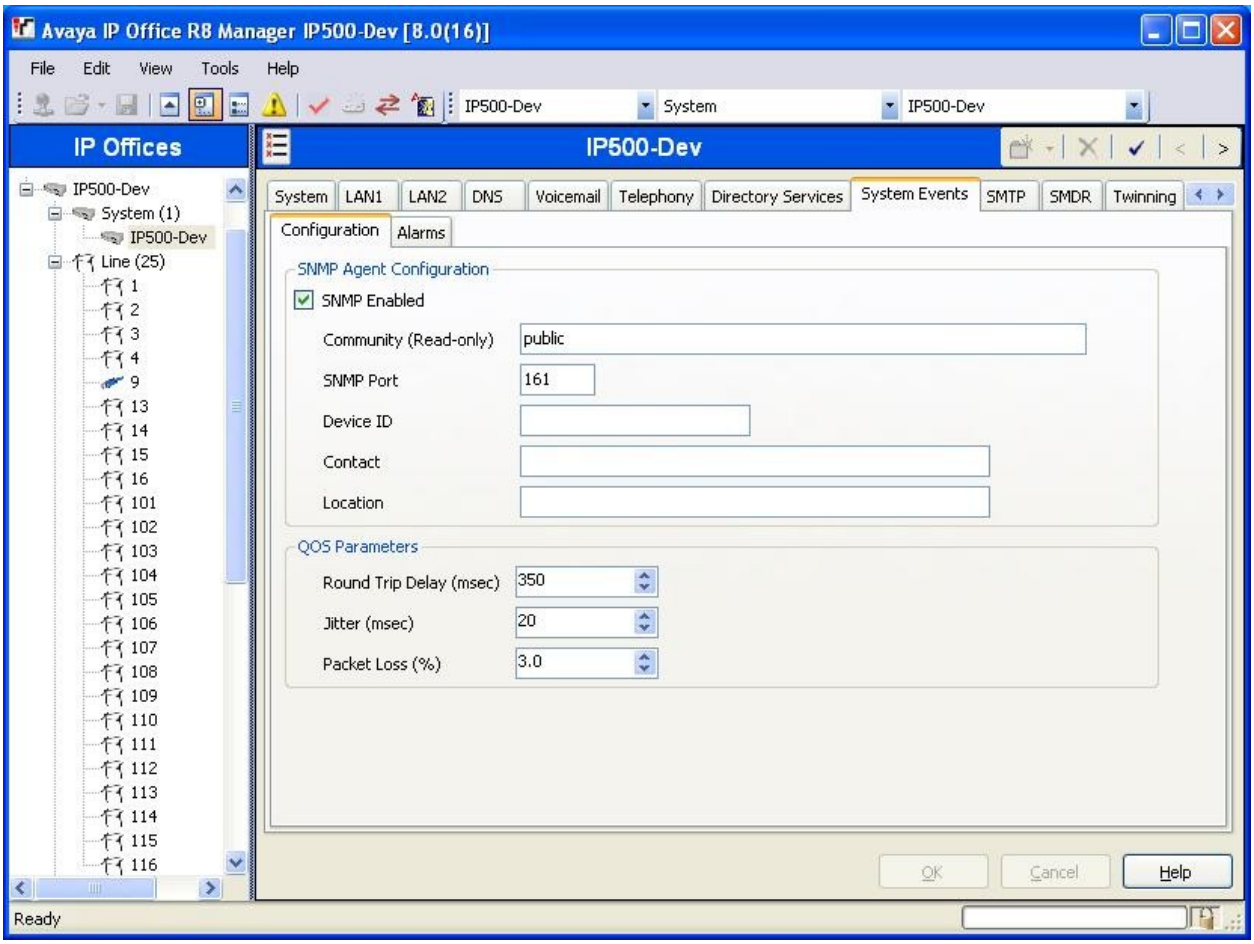
This section provides the procedures for configuring IP Office. The procedures include the following areas:

- Administer SNMP
- Administer alarms

5.1. Administer SNMP

From a PC running the IP Office Manager application, select **Start > Programs > IP Office > Manager** to launch the application. Select the proper IP Office system, and log in using the appropriate credentials.

The **Avaya IP Office R8 Manager** screen is displayed. From the configuration tree in the left pane, select **System** to display the **IP500-Dev** screen in the right pane. Select the **System Events** tab, followed by the **Configuration** sub-tab. Check the **SNMP Enabled** field, and retain the default values in the remaining fields.

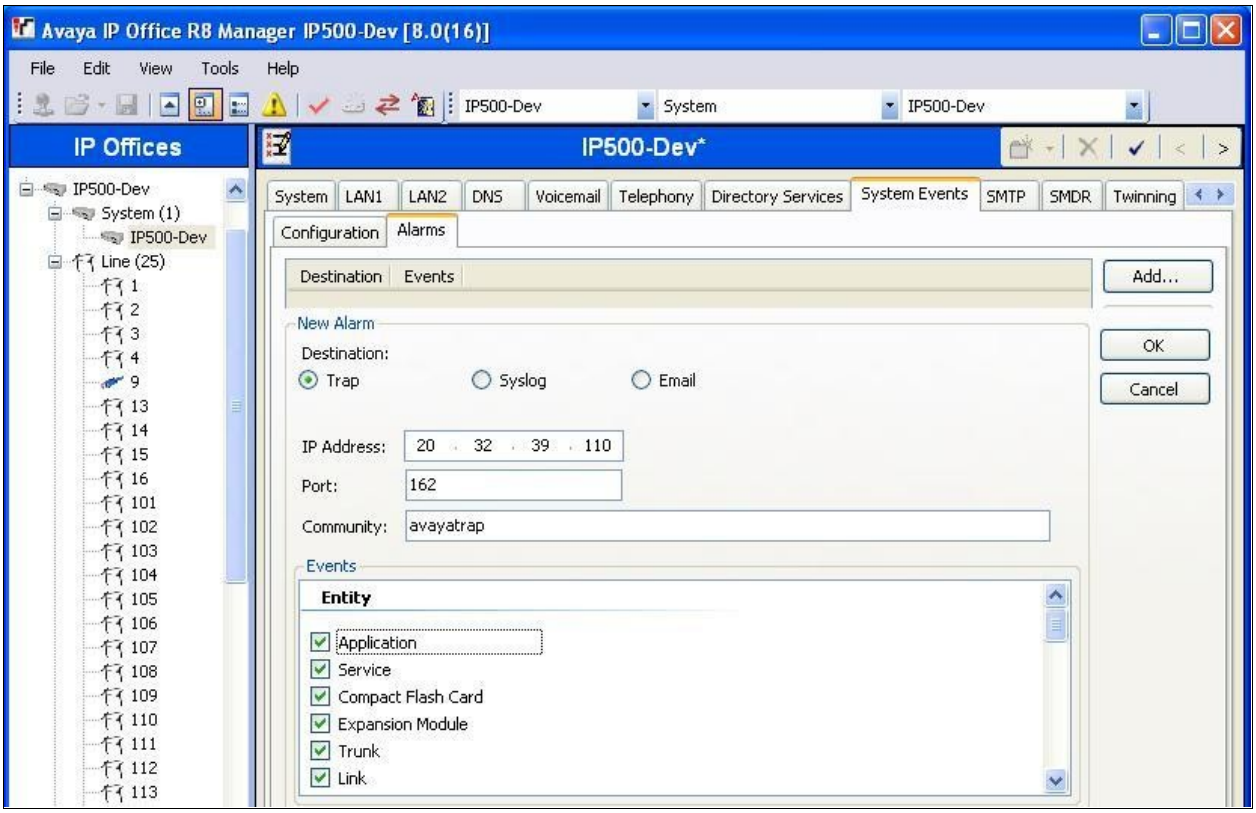


©2012 Avaya Inc. All Rights Reserved.

5.2. Administer Alarms

Select the **Alarms** sub-tab, and click **Add**.

The screen is updated with new parameters, as shown below. Select the radio button for **Trap**, and enter the IP address of the ReliaTel server in the **IP Address** field. Retain the default **Port** value, and enter a desired string for **Community**. Note that the community string is not used by ReliaTel, but still needs to be configured on IP Office. In the **Events** section, scroll down the pane as necessary to check all desired events to be collected and sent.



©2012 Avaya Inc. All Rights Reserved.

6. Configure TONE Software ReliaTel

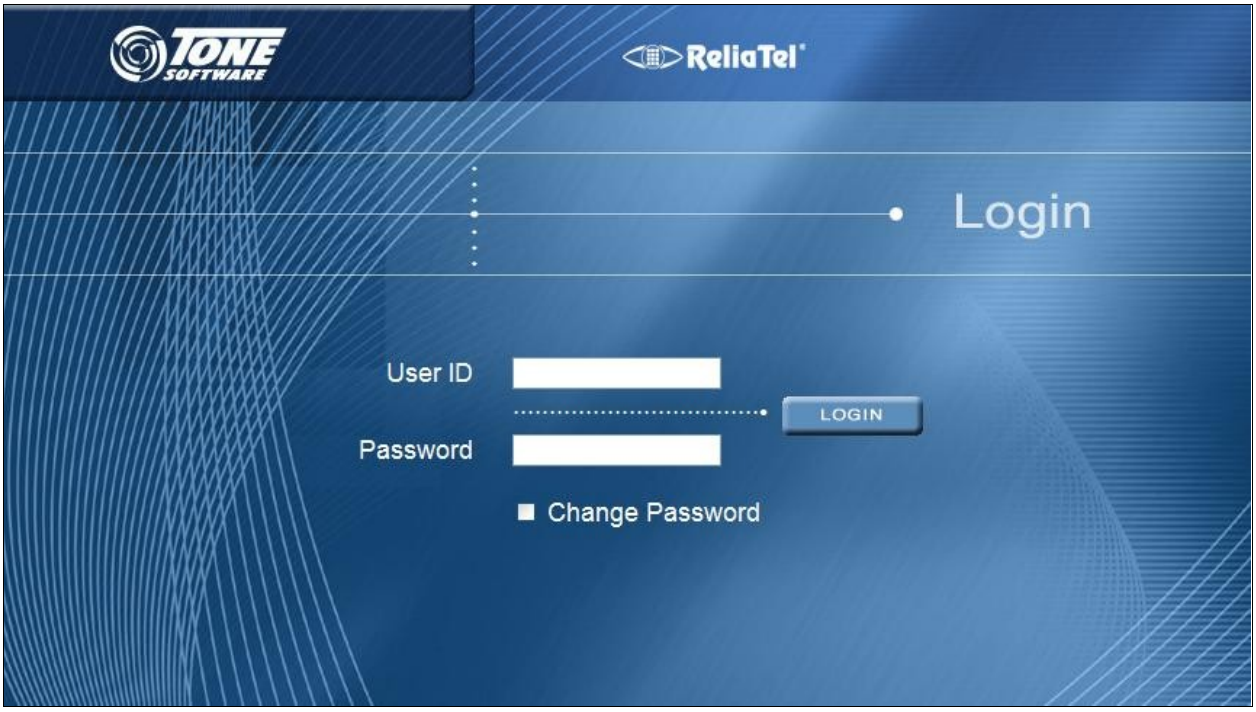
This section provides the procedures for configuring ReliaTel. The procedures include the following areas:

- Launch web interface
- Administer DAPs
- Administer entities

The configuration of ReliaTel is typically performed by TONE Software technicians. The procedural steps are presented in these Application Notes for informational purposes.

6.1. Launch Web Interface

Access the ReliaTel web interface by using the URL "http://ip-address:8080/ems/app" in an Internet browser window, where "ip-address" is the IP address of the ReliaTel server. Log in using the appropriate credentials.

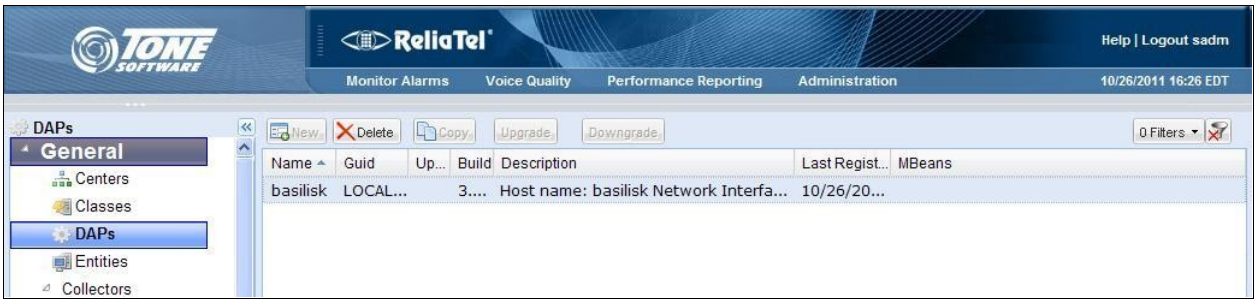


©2012 Avaya Inc. All Rights Reserved.

The **ReliaTel** screen is displayed. Select **Administration > General Administration** from the top menu.

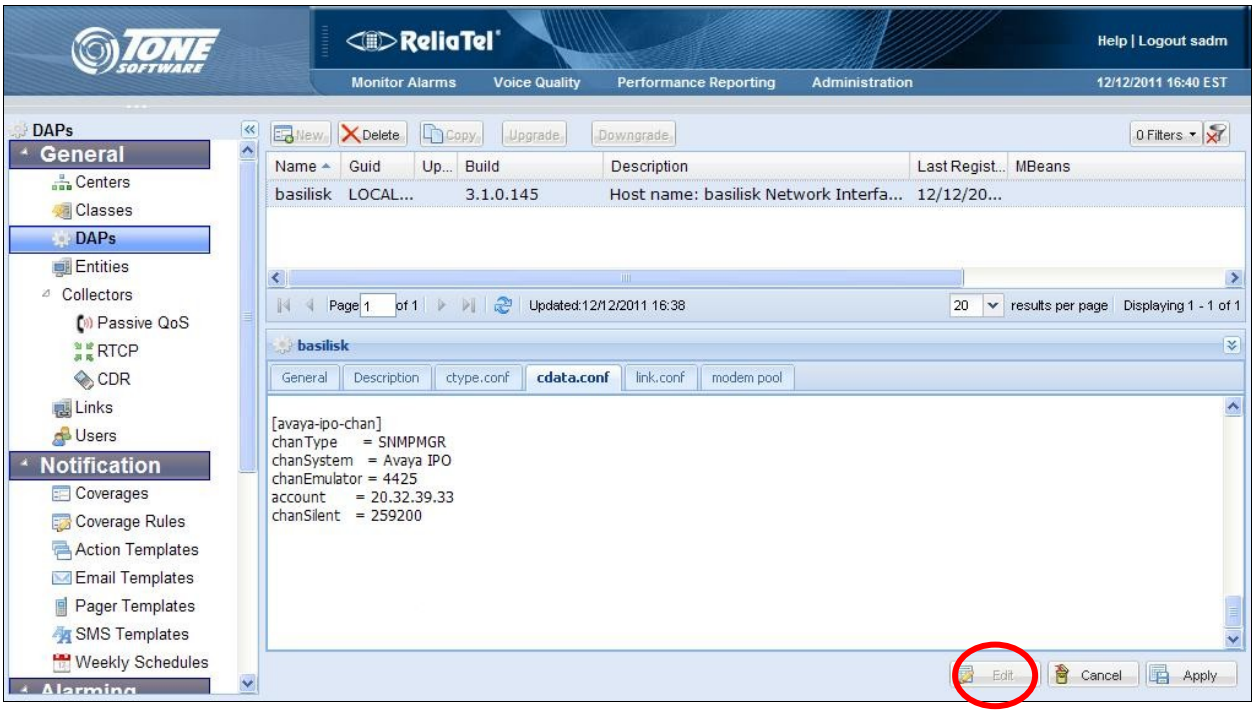
6.2. Administer DAPs

Select **General > DAPs** from the left pane to display the screen below. Select the displayed entry in the right pane.



©2012 Avaya Inc. All Rights Reserved.

The screen is updated with details in the bottom right pane. Select the **cdata.conf** tab and click **Edit**. Scroll down the bottom right pane, and add a set of entry lines shown below for IP Office, using a descriptive channel name within the brackets, a descriptive **chanSystem**, and the IP address of IP Office for **account**. Enter all other entry lines exactly as shown.



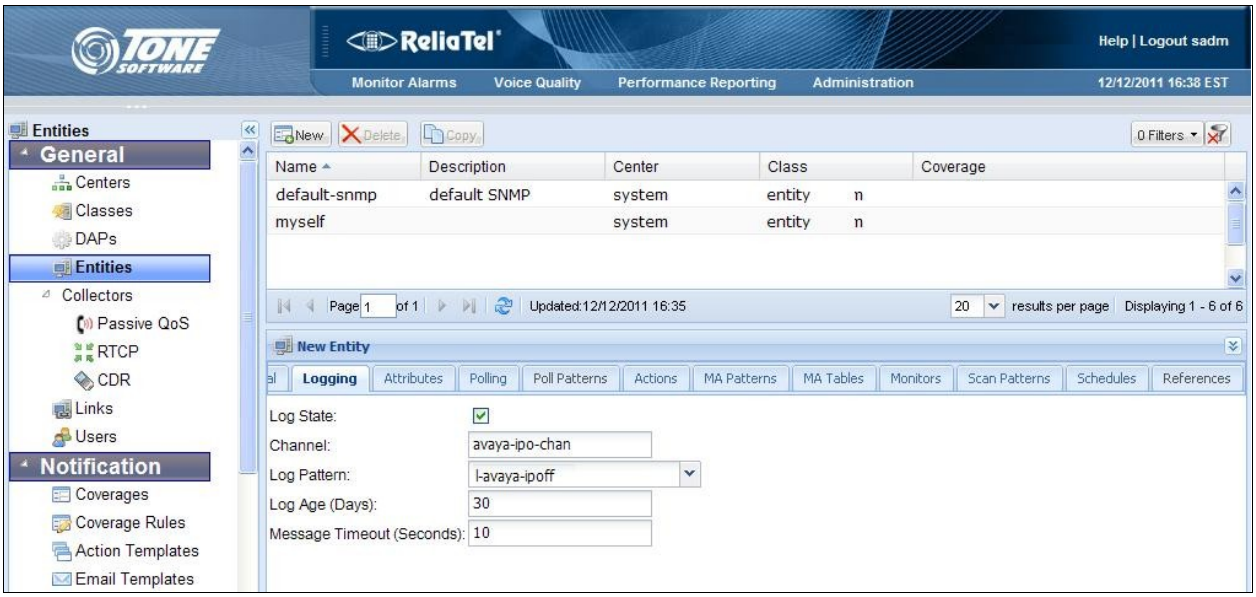
6.3. Administer Entities

Select **General > Entities** from the left pane to display a list of entities in the right pane. Click **New** to add a new entity.

©2012 Avaya Inc. All Rights Reserved.

In the lower portion of the screen, select the **General** tab. Enter a descriptive **Name** and a desired **Description**. Select the appropriate pre-configured **Center** from the drop-down list, in this case "production". For **Class**, select "cl-avaya-ipoff".

Select the **Logging** tab. Check the **Log State** field. For **Channel**, enter the channel name from **Section 6.2**. For **Log Pattern**, select "l-avaya-ipoffice" from the drop-down list. Retain the default values in the remaining fields.



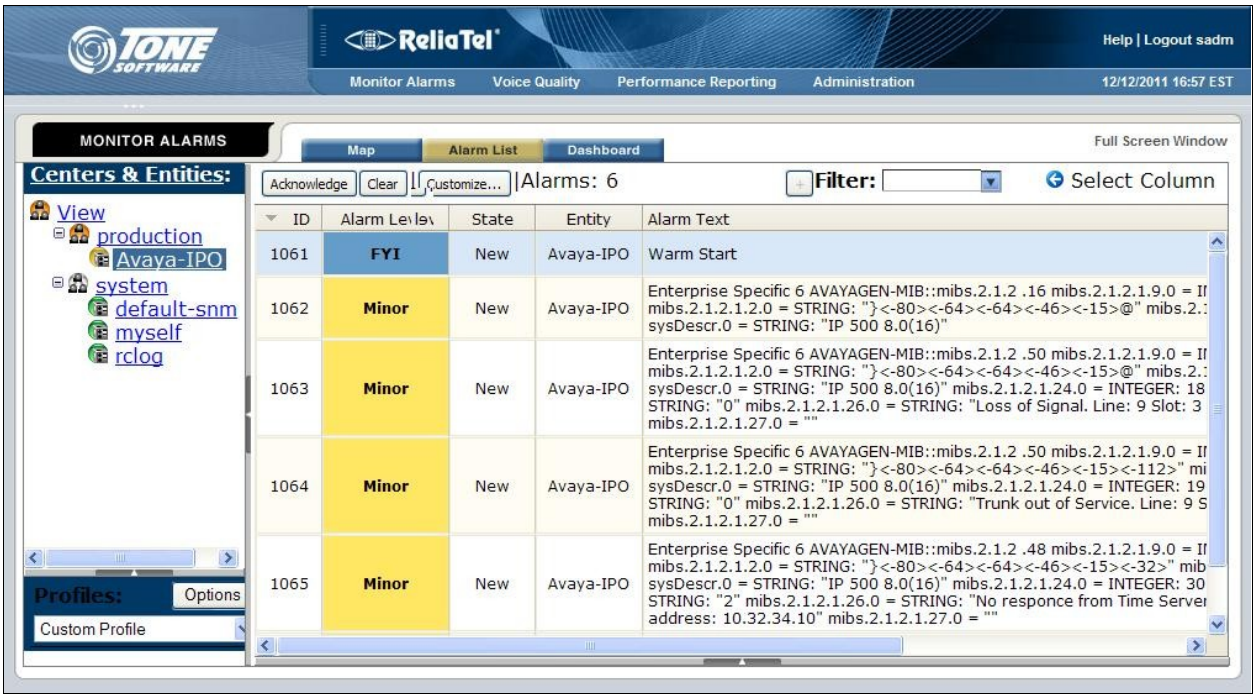
©2012 Avaya Inc. All Rights Reserved.

7. Verification Steps

This section provides the test that can be performed to verify proper configuration of IP Office and ReliaTel.

Generate an alarm on IP Office, such as reboot IP Office. With a protocol analyzer, verify that SNMP traps are sent to ReliaTel.

In the ReliaTel screen, select **Monitor Alarms** from the top menu. Select **View > production > Avaya-IPO** in the left pane, where "production" is the existing center name from **Section 6.3**, and "Avaya-IPO" is the entity name from **Section 6.3**. Verify that the new traps are displayed in the right pane, as shown below.



©2012 Avaya Inc. All Rights Reserved.

8. Conclusion

These Application Notes describe the configuration steps required for TONE Software ReliaTel to successfully interoperate with Avaya IP Office 8.0. 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 8.0 Documentation CD*, November 2011, available at http://support.avaya.com

2. *ReliaTel Monitoring and Management Solution Installation and Configuration Guide*, Version 3 Release 1 Modification 0, contact ReliaTel support at info@tonesoft.com.

3. *ReliaTel Monitoring and Management Solution User's Guide*, Version 3 Release 1 Modification 0, contact ReliaTel support at info@tonesoft.com.

©2012 Avaya Inc. All Rights Reserved.

©2012 Avaya Inc. All Rights Reserved.
Avaya and the Avaya Logo are trademarks of Avaya Inc. All trademarks identified by ® and ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners. The information provided in these Application Notes is subject to change without notice. The configurations, technical data, and recommendations provided in these Application Notes are believed to be accurate and dependable, but are presented without express or implied warranty. Users are responsible for their application of any products specified in these Application Notes.

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.