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Avaya Solution & Interoperability Test Lab

Application Notes for TONE Software ReliaTel with Avaya Aura® Communication Manager Using SAT – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for TONE Software ReliaTel to interoperate with Avaya Aura® Communication Manager using System Administrator Terminal (SAT). 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, ReliaTel used the SAT interface from Communication Manager to provide trunk group performance reporting.

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.

TLT; Reviewed:
SPOC 3/14/2011

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ReliaTel-SAT

1. Introduction

These Application Notes describe the configuration steps required for TONE Software ReliaTel to interoperate with Avaya Aura® Communication Manager using SAT. 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, ReliaTel used the SAT interface from Communication Manager to obtain trunk group measurements data on an hourly and daily basis. The obtained data is presented in multiple trunk group performance reports via the ReliaTel web interface.

2. General Test Approach and Test Results

The feature test cases were performed manually. Calls were made across four different trunk groups, to generate hourly and daily data for the different trunk groups.

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 proper collection and reporting of trunk group measurements data for SAT commands including: list measurements trunk-group hourly, list measurements trunk-group summary last-hour, and list measurements trunk-group summary yesterday-peak.

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

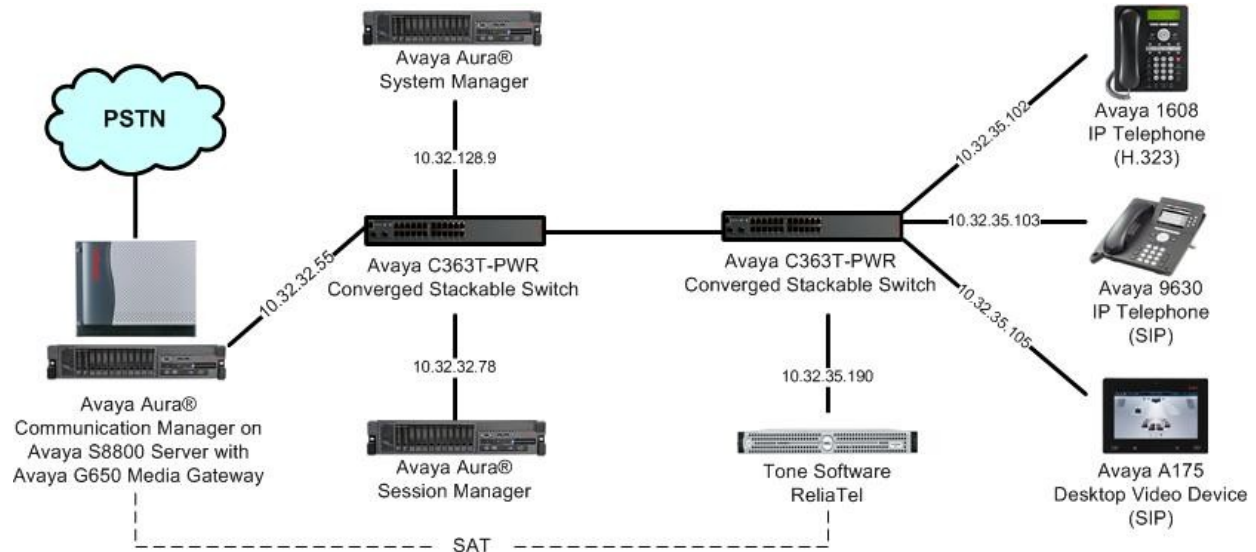## 2.2. Test Results

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/portal2.html

3. Reference Configuration

The configuration used for the compliance testing is shown below. The Avaya Aura® Session Manager was used in the configuration to support the Avaya SIP endpoints.

4. Equipment and Software Validated

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

Equipment	Software
Avaya Aura® Communication Manager on Avaya S8800 Server	6.0 (R016x.00.0.345.0-18246)
Avaya G650 Media Gateway • TN799DP C-LAN Circuit Pack • TN2302AP IP Media Processor	HW01 FW038 HW20 FW121
Avaya Aura® System Manager	6.0 (6.0.0.0.556-3.0.6.1)
Avaya Aura® Session Manager	6.0.1 (6.0.1.0.601016)
Avaya 1600 Series IP Telephones (H.323)	1.3
Avaya 9630 IP Telephone (SIP)	2.6.2
Avaya A175 Desktop Video Device	1.0.0
TONE Software ReliaTel	3.1.0

5. Configure Avaya Aura® Communication Manager

This section provides the procedures for configuring Avaya Aura® Communication Manager. The procedures include the following areas:

- Obtain product ID
- Administer measurement selection trunk groups

5.1. Obtain Product ID

From the Linux shell interface of Communication Manager, enter the command "productid". Make a note of the **Product ID**, which will be used later to configure ReliaTel.

```
xxxxx@S8800-CM> productid

Product ID: "1000000000"
```

5.2. Administer Measurement Selection Trunk Groups

From the SAT interface of Communication Manager, enter the command "change meas-selection trunk-group". Enter the desired trunk groups to be measured, as shown below.

```
change meas-selection trunk-group                          Page   1 of   1

                    TRUNK GROUP MEASUREMENT SELECTION

                        Trunk Group Numbers

          1: 5      16:      31:      46:      61:
          2: 10     17:      32:      47:      62:
          3: 63     18:      33:      48:      63:
          4: 500    19:      34:      49:      64:
          5:        20:      35:      50:      65:
          6:        21:      36:      51:      66:
          7:        22:      37:      52:      67:
          8:        23:      38:      53:      68:
          9:        24:      39:      54:      69:
         10:        25:      40:      55:      70:
         11:        26:      41:      56:      71:
         12:        27:      42:      57:      72:
         13:        28:      43:      58:      73:
         14:        29:      44:      59:      74:
         15:        30:      45:      60:      75:
```

6. Configure TONE Software ReliaTel

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

- Launch web interface
- Administer centers
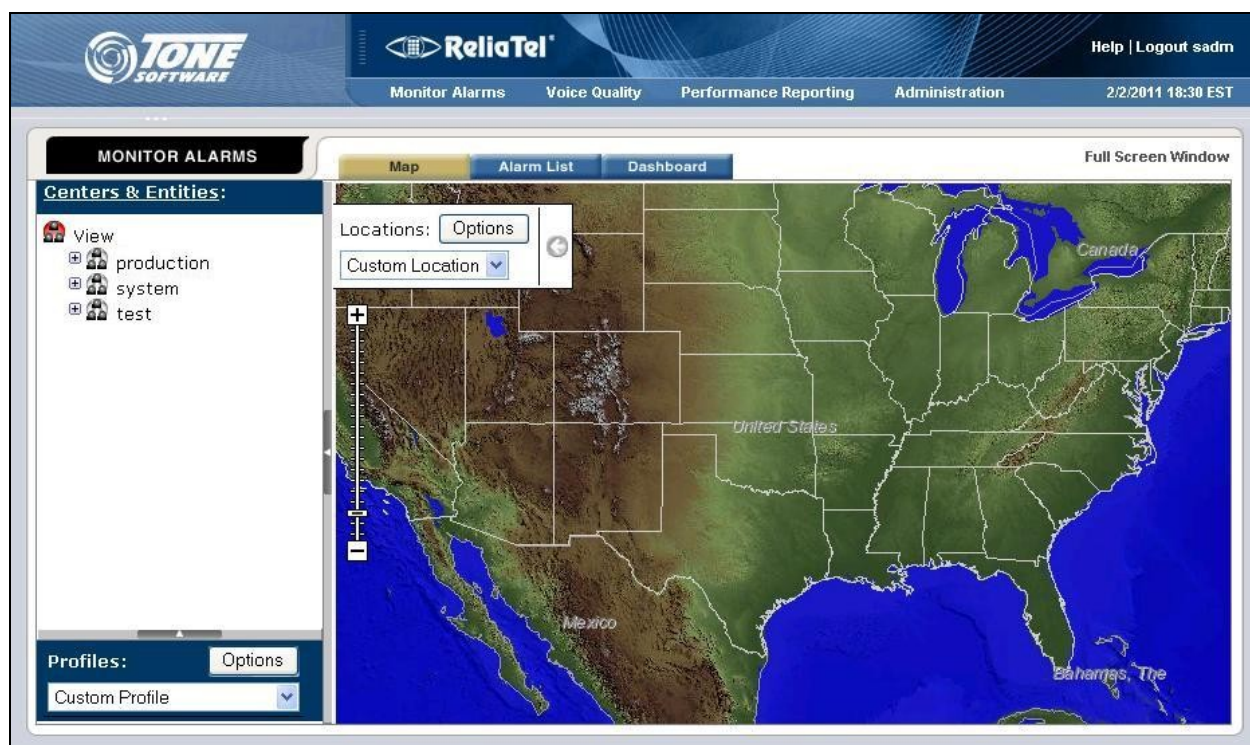- Administer DAPs
- Administer entities

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.

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

6.2. **Administer Centers**

The **ReliaTel** screen is updated as shown below. Select **General > Centers** in the left pane to display a list of centers in the right pane. Click **New** to add a new center.
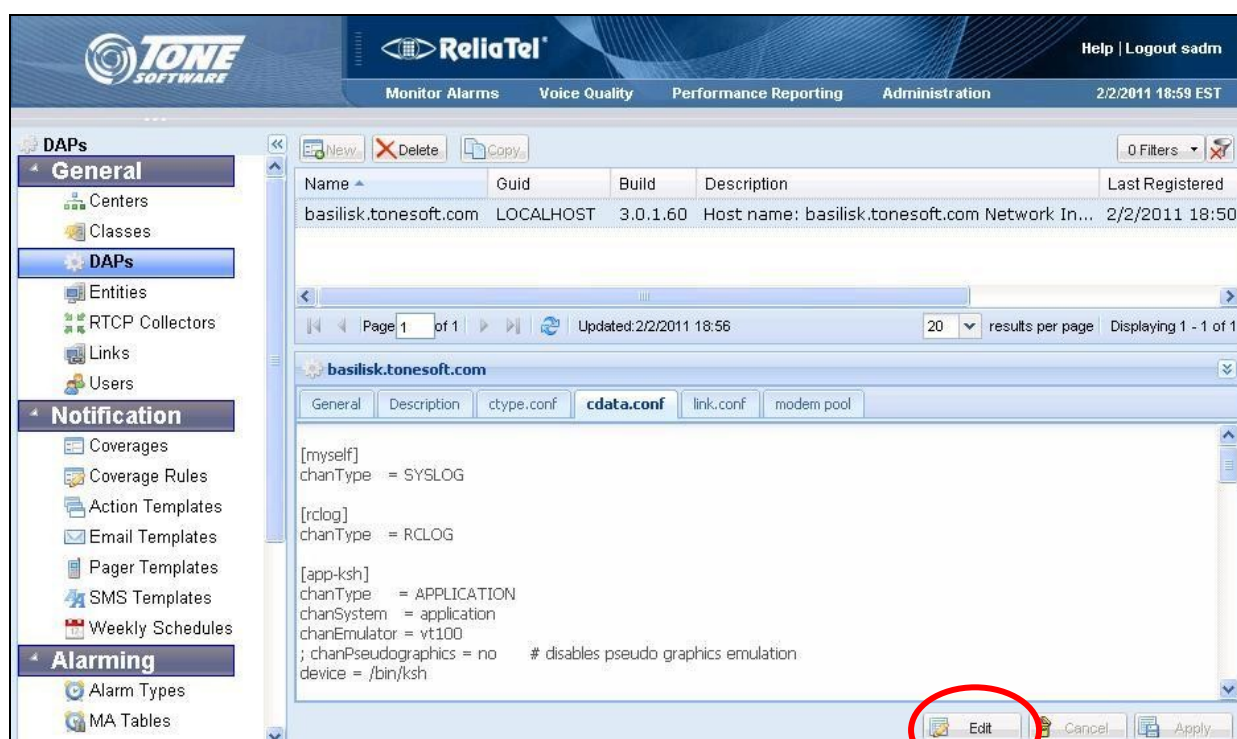
In the lower portion of the screen, select the **General** tab. Enter a descriptive **Name**, and retain the default values in the remaining fields.
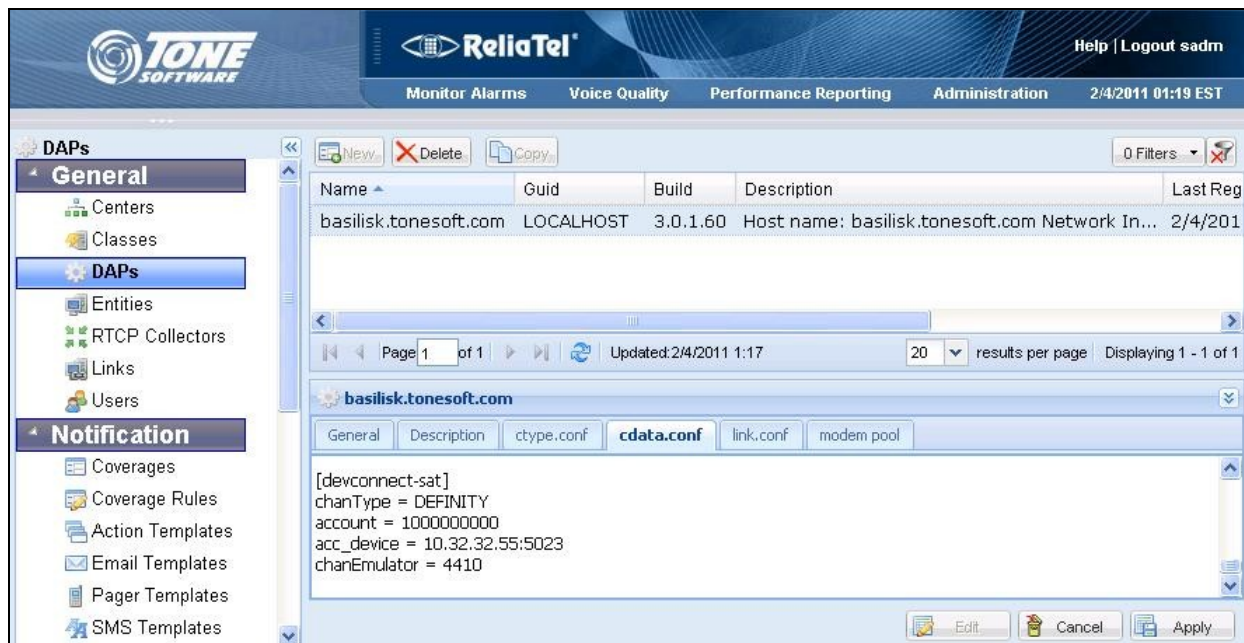

6.3. **Administer DAPs**

Select **General > DAPs** in the left pane to display the pre-configured DAPs. Select the applicable DAP in the upper pane, followed by the **cdata.conf** tab in the lower pane. Click **Edit**.

Scroll the lower pane to the bottom, and add the entries shown below for connectivity to Communication Manager.

In the examples shown below, "devconnect-sat" can be any desired string to denote Communication Manager. Use the values shown below for **chanType** and **chanEmulator**. For **account**, use the product ID from **Section 5.1**. For **acc_device**, use "<ip-address>:5023", where <ip-address> is the IP address of Communication Manager.
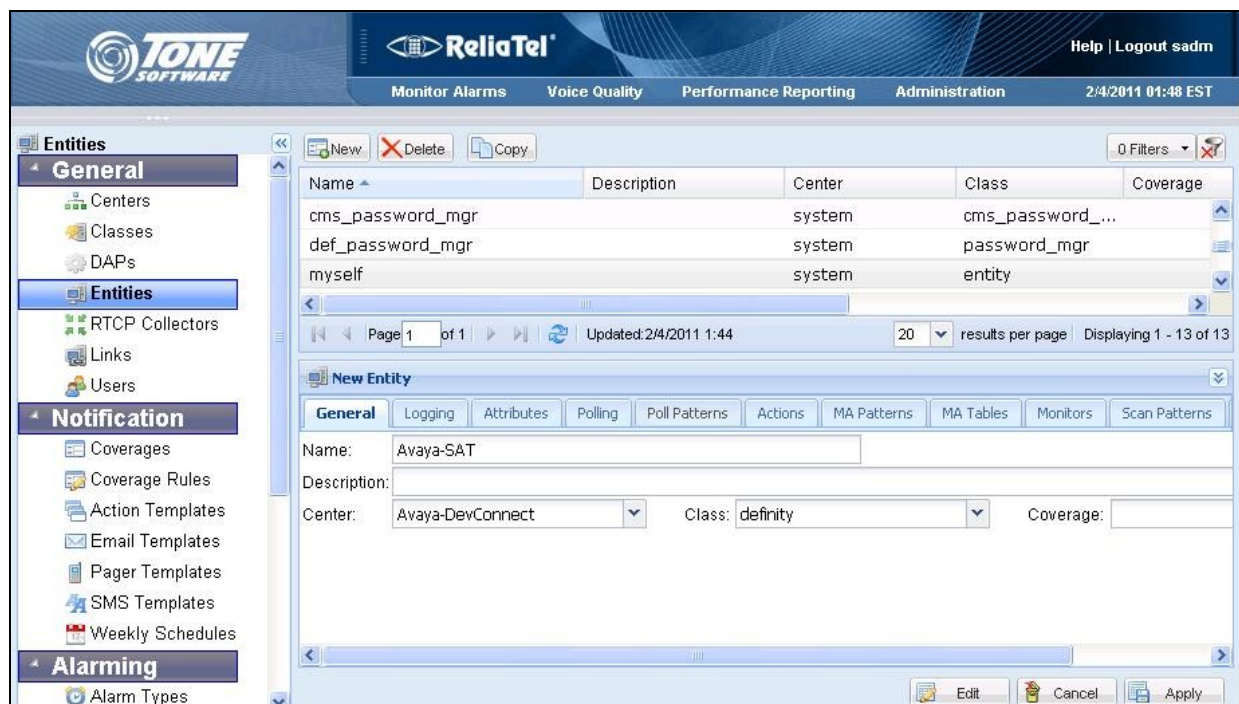
6.4. **Administer Entities**

From the ReliaTel screen, select **General > Entities** in the left pane to display a list of entities in the right pane. Click **New** to add a new entity.

In the lower portion of the screen, select the **General** tab. Enter a descriptive **Name** for Communication Manager. For **Center**, select the center name from **Section 6.2**, in this case "Avaya-DevConnect". For **Class**, select "definity" from the drop-down list, as shown below.

In the lower portion of the screen, select the **Logging** tab. Check **Log State**, enter a descriptive name for **Channel**, and select "l-newline" for **Log Pattern**, as shown below. Retain the default values in the remaining fields.

Select the **Attributes** tab. For **Admin Login Name** and **Current Admin Password**, enter the credentials for the Communication Manager SAT interface.
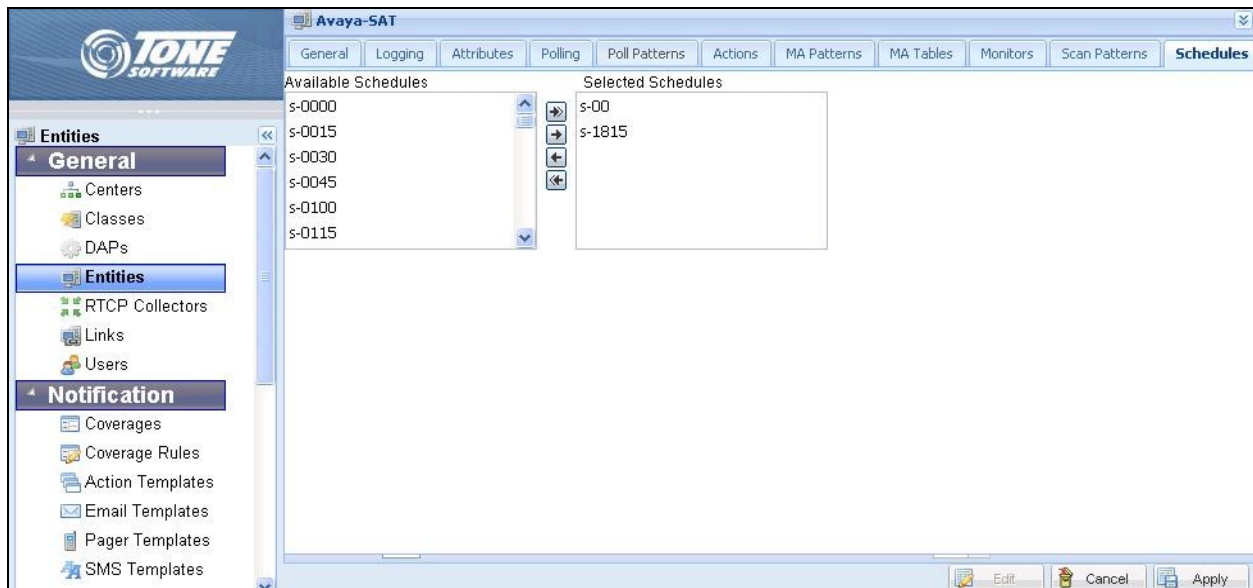
Select the **Schedules** tab. Select the desired schedules from the **Available Schedules** section, and use the arrow icons to move to the **Selected Schedules** section.

In the compliance testing, the selection shown below enabled trunk group measurements hourly data to be pulled on the hour, and the trunk group measurements yesterday data to be pulled daily at 18:15.
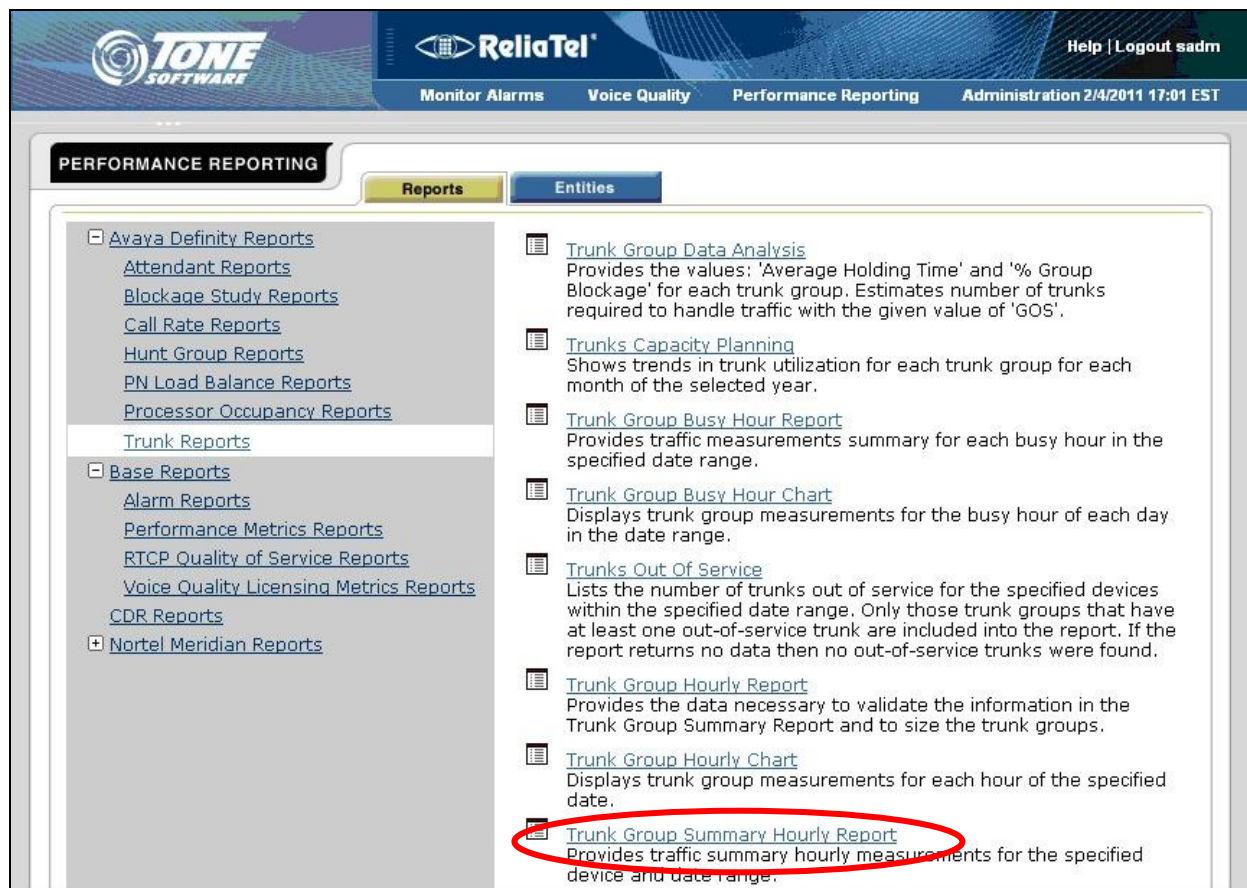
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7. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Avaya Aura® Communication Manager and TONE Software ReliaTel.

Prior to verification, generate trunk traffic on Communication Manager for a couple of hours.

From the **ReliaTel** screen, select **Performance Reporting** from the top menu. Select **Avaya Definity Reports > Trunk Reports** in the left pane, followed by **Trunk Group Summary Hourly Report** in the right pane.

In the subsequent screen, select the switch name from **Section 6.4**, and click **Run Report**.

The **Trunk Group Summary Hourly Report** is displayed, as shown below. Verify that the reported data matches the trunk group measurements hourly data from the Communication Manager SAT interface.

Hour	Grp Type	Grp Size	Dir	Total Usage	Total Seize	Inc Seize	Grp Ovf	Que Size	Calls Qued	Que Ovf	Que Abd	Out Srv	% ATB	% Out Blk
00:00	sip	10	two	0	0	0	0	0	0	0	0	0	0.00	0.00
01:00	sip	10	two	0	0	0	0	0	0	0	0	0	0.00	0.00
02:00	sip	10	two	0	0	0	0	0	0	0	0	0	0.00	0.00
03:00	sip	10	two	0	0	0	0	0	0	0	0	0	0.00	0.00
04:00	sip	10	two	0	0	0	0	0	0	0	0	0	0.00	0.00
05:00	sip	10	two	0	0	0	0	0	0	0	0	0	0.00	0.00
06:00	sip	10	two	0	0	0	0	0	0	0	0	0	0.00	0.00
07:00	sip	10	two	0	0	0	0	0	0	0	0	0	0.00	0.00
08:00	sip	10	two	0	0	0	0	0	0	0	0	0	0.00	0.00
09:00	sip	10	two	0	0	0	0	0	0	0	0	0	0.00	0.00
10:00	sip	10	two	0	0	0	0	0	0	0	0	0	0.00	0.00
11:00	sip	10	two	0	0	0	0	0	0	0	0	0	0.00	0.00
12:00	sip	10	two	0	0	0	0	0	0	0	0	0	0.00	0.00
13:00	sip	10	two	0	2	1	0	0	0	0	0	0	0.00	0.00
14:00	sip	10	two	2	11	5	0	0	0	0	0	0	0.00	0.00
15:00	sip	10	two	0	0	0	0	0	0	0	0	0	0.00	0.00

8. Conclusion

These Application Notes describe the configuration steps required TONE Software ReliaTel to successfully interoperate with Avaya Aura® Communication Manager using SAT.   All feature and serviceability test cases were completed.

9. Additional References

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

1. *Administering Avaya Aura*^{TM} *Communication Manager*, Document 03-300509, Issue 6.0, Release 6.0, June 2010, 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.

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