Alcatel-Lucent 5620

SERVICE AWARE MANAGER

8950 AAA GNE Driver Version 1.0.0 Guide

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Alcatel·Lucent *A*

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Contents

About this document

Purpose

The *5620 SAM 8950 AAA GNE Driver Version 1.0.0 Guide* provides information about the AAA GNE driver version 1.0.0, including:

- driver capabilities
- known issues
- discovery and management instructions

The 8950 AAA GNE driver extends 5620 SAM management of 8950 AAA GNE devices as described in "AAA driver capabilities" (p. 1).

You can find more information for the 8950 AAA GNE driver in the following guides:

- *5620 SAM GNE Driver Installation Guide*
- *5620 SAM GNE Driver Compatibility Guide*

The driver documents are available on OLCS.

Document support

Customer documentation and product support URLs:

Customer documentation welcome page

- https://infoproducts.alcatel-lucent.com/cgi-bin/doc_welc.pl

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AAA driver description

AAA driver capabilities

The AAA driver extends the 5620 SAM fault management support to 8950 AAA devices so that alarms related to the 8950 AAA can be viewed in the 5620 SAM GUI. The AAA GNE driver version 1.0.0 allows the 5620 SAM to perform fault management for 8950 AAA servers.

8950 AAA in the Small Cell network

The 8950 AAA server provides authentication, authorization, and accounting services for wired, wireless, and converged networks. The 8950 AAA supports the RADIUS protocol for authentication services. In the Small Cell network, the 8950 AAA supports EAP Authentication and Key Agreement (EAP-AKA), the proprietary EAP-DS2460, and Femto-Authorize-Only authentication methods. The 8950 AAA interfaces with external databases, Lightweight Directory Access Protocol (LDAP) servers, and others to authenticate and authorize Small Cell access points. These external servers store authentication details about users, authorization profiles, and blacklisted user data.

The 8950 AAA is used for the initial authentication of SC APs before the IPSec tunnel is established.

5620 SAM management

The 5620 SAM supports the following management operations for the 8950 AAA:

- Discovery

  The 5620 SAM supports the discovery of the 8950 AAA.

- Link management

  The 5620 SAM monitors the link to the 8950 AAA, raises an alarm when the link fails and retries automatically for link recovery. When the link is recovered, the 5620 SAM clears the alarm

- Fault management

The 5620 SAM normalizes fault events from the 8950 AAA and shows them in the context of the 8950 AAA in the SAM GUI. See the AAAAlarmDictionary.xml file for details.

- Reach-through to the 8950 AAA from the 5620 SAM GUI

The 5620 SAM GUI provides an option to launch an SSH session with the 8950 AAA.

Restrictions, limitations, issues

Closed issues

This is version 1.0.0 of the AAA GNE driver, and there are no closed issues to report.

Outstanding issues

This section describes problems that customers need to be aware of before deploying the AAA driver in a live network or lab environment. This is version 1.0.0 of the AAA GNE driver, and there are no outstanding issues to report.

Limitations

The 5620 SAM support for the 8950 AAA in the Small Cell network does not include the following functions:

- Configuration management
- Performance management
- Upgrade management
- Inventory management
- Software management
- NE administration and security management
- Auto-discovery

Restrictions

The following restrictions apply to the 5620 SAM support of the 8950 AAA:

- The 8950 AAA does not have a mechanism to determine the sequence of faults or a way to identify missing inform messages. As a result, the 5620 SAM does not support these features for the 8950 AAA.
- The 8950 AAA does not have a mechanism to provide the list of active alarms and, therefore, does not support alarm synchronization. As a result, the 5620 SAM does not support the AlarmSync function for the 8950 AAA.

Discovery and management

Post-installation configuration

This section describes how to discover and use the 8950 AAA GNE in the 5620 SAM after the driver was installed. See the *5620 SAM GNE Driver Installation Guide* for information about installing a GNE driver.

The following instructions are specific to the 8950 AAA device configuration and discovery. See the *5620 SAM User Guide* chapter "Device commissioning and management" for full procedural details.

Configuring a generic NE profile for the 8950 AAA device

Perform the following steps:

1. Choose Administration→Generic NE Manager from the 5620 SAM main menu. The Generic NE Manager form opens.

2. Click Create, and choose Create Generic NE Profile. The Generic NE Profile (Create) form opens.

3. Configure the required parameters. The following table list the parameters that need to have specific values for the 8950 AAA GNE. Leave blank the values of the parameters that are not listed in the table.

Parameter	Value
Auto-Assign ID	Selected
Generic NE Type	AAA
Generic NE Category	GNE SmallCell
Sys Object ID	.1.3.6.1.4.1.831.1.1
Description	AAA Server
CLI Supported	Selected

4. Import the E1 interface type.

   a. Click on the Interface Types tab.

   b. Click Add. The Select Generic NE Interface Type form opens.

   c. Choose the E1 interface type and click OK.

5. Click on the General tab.

6. Associate the AAA driver with the NE profile.

   a. In the Driver Module panel, click Select. The Select Driver Module — Generic NE Profile form opens.

   b. Choose the AAA driver that was installed on the 5620 SAM server and click OK.

7. Save your changes and close the forms.

Configuring an SNMP v2c mediation policy for the 8950 AAA device

Perform the following steps:

1. Choose Administration→Mediation from the 5620 SAM main menu.

2. Click on the Mediation Security tab.

3. Click Create. The Mediation Policy (Create) form opens.

4. Configure all the required SNMP parameters.

   • For Displayed Name, enter AAA.

   • Set the Timeout parameter to 40000 milliseconds for the successful discovery of the 8950 AAA.

   The mediation policy needs to be configured according to the NE configuration. The Security Model, Port and Community String parameter values must match the values of the same parameters configured on the 8950 AAA NE.

5. Save your changes and close the forms.

Configuring a discovery rule for the 8950 AAA device

Perform the following steps:

1. Choose Administration→Discovery Manager from the 5620 SAM main menu. The Discovery Manager form opens.

2. Click Create. The Create Discovery Rule form opens.

3. On the Specify General Attributes page, enter AAA in the Description box and click Next.

4. On the Add Rule Elements page, click Create and assign an IP address for the 8950 AAA, and then click Next.

5. On the Configure Mediation Security page, choose the SNMP v2c mediation policy that you configured, and click Finish.

After configuring the discovery rule, the 8950 AAA device appears as a GNE in the Equipment and Small Cells views.

Alarms

After performing the AAA driver post-installation configuration, the AAA GNE alarms appear in the 5620 SAM Alarm Window. For details about the GNE alarms, see the *5620 SAM Alarm Reference*.

You can view details about each GNE alarm in the Alarm Info form. You can also view GNE historical alarm information in the Historical Alarms form.

Note: The 5620 SAM does not support the manual alarm clearing for the 8950 AAA GNE.