Alcatel-Lucent 5620

SERVICE AWARE MANAGER | RELEASE 9.0 R2

SUPERVISION MODULE USER GUIDE

3HE 06514 AAAB TQZZA Edition 01

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Preface

The Preface provides general information about the 5620 Service Aware Manager documentation suite.

Note — You can use the Search function of Acrobat Reader (File→Search) to find a term in a PDF of this document. To refine your search, use appropriate search options (for example, search for whole words only or enable case-sensitive searching). You can also search for a term in multiple PDFs at once. For more information, see the Help for Acrobat Reader.

5620 SAM documentation suite

The 5620 SAM documentation suite describes the 5620 SAM and the associated network management of its supported devices. Contact your Alcatel-Lucent support representative for information about specific network or facility considerations.

Table 1 lists the documents in the 5620 SAM documentation suite.

Table 1 5620 SAM customer documentation suite

Guide	Description
5620 SAM core documentation	
5620 SAM Planning Guide	The *5620 SAM Planning Guide* provides information about 5620 SAM scalability and recommended hardware configurations.

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Guide	Description
5620 SAM | 5650 CPAM Installation and Upgrade Guide	The *5620 SAM | 5650 CPAM Installation and Upgrade Guide* provides OS considerations, configuration information, and procedures for the following: • installing, upgrading, and uninstalling 5620 SAM and 5650 CPAM software in standalone and redundant deployments • 5620 SAM system migration to a different system • conversion from a standalone to a redundant 5620 SAM system
5620 SAM User Guide	The *5620 SAM User Guide* provides information about using the 5620 SAM to manage the service-aware IP/MPLS network, including GUI basics, commissioning, service configuration, and policy management. The *5620 SAM User Guide* uses a task-based format. Each chapter contains: • a workflow that describes the steps for configuring and using the functionality • detailed procedures that list the configurable parameters on the associated forms 5620 SAM management information specific to LTE network elements is covered in the *5620 SAM LTE ePC User Guide* and *5620 SAM LTE RAN User Guide*. 5620 SAM management information specific to 1830 PSS network elements is covered in the *5620 SAM Optical User Guide*.
5620 SAM Parameter Guide	The *5620 SAM Parameter Guide* provides: • parameter descriptions that include value ranges and default values • parameter options and option descriptions • parameter and option dependencies • parameter mappings to the 5620 SAM-O XML equivalent property names There are dynamic links between the procedures in the *5620 SAM User Guide* and the parameter descriptions in the *5620 SAM Parameter Guide*. See Procedure 2 for more information. Parameters specific to LTE network elements are covered in the *5620 SAM LTE Parameter Reference*. Parameters specific to 1830 PSS network elements are covered in the *5620 SAM Optical Parameter Reference*.
5620 SAM Statistics Management Guide	The *5620 SAM Statistics Management Guide* provides information about how to configure performance and accounting statistics collection and how to view counters using the 5620 SAM. Network examples are included.
5620 SAM Scripts and Templates Developer Guide	The *5620 SAM Scripts and Templates Developer Guide* provides information that allows you to develop, manage, and execute CLI-based or XML-based scripts or templates. The guide is intended for developers, skilled administrators, and operators who are expected to be familiar with the following: • CLI scripting, XML, and the Velocity engine • basic scripting or programming • 5620 SAM functions

5620 SAM Troubleshooting Guide	The *5620 SAM Troubleshooting Guide* provides task-based procedures and user documentation to:
	• help resolve issues in the managed and management networks
	• identify the root cause and plan corrective action for:
	  • alarm conditions on a network object or customer service
	  • problems on customer services with no associated alarms
	• list problem scenarios, possible solutions, and tools to help check:
	  • network management LANs
	  • network management platforms and operating systems
	  • 5620 SAM client GUIs and client OSS applications
	  • 5620 SAM servers
	  • 5620 SAM databases

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Guide	Description
5620 SAM Maintenance Guide	The *5620 SAM Maintenance Guide* provides procedures for: • generating baseline information for 5620 SAM applications • performing daily, weekly, monthly, and as-required maintenance activities for 5620 SAM-managed networks
5620 SAM Integration Guide	The *5620 SAM Integration Guide* provides procedures to allow the 5620 SAM to integrate with additional components.
5620 SAM System Architecture Guide	The *5620 SAM System Architecture Guide* is intended for technology officers and network planners to increase their knowledge of the 5620 SAM software structure and components. It describes the system structure, software components, and interfaces of the 5620 SAM. In addition, 5620 SAM fault tolerance, security, and network management capabilities are discussed from an architectural perspective.
5620 SAM Supervision Module User Guide	The *5620 SAM Supervision Module User Guide* This guide provides information about how to configure and use the web-based 5620 SAM Supervision Module for fault management and at-a-glance network element monitoring.
5620 SAM Network Element Compatibility Guide	The *5620 SAM Network Element Compatibility Guide* provides release-specific information about the compatibility of managed device features in 5620 SAM releases.
5620 SAM Release Description	The *5620 SAM Release Description* provides information about the new features associated with a 5620 SAM software release.
5620 SAM Glossary	The *5620 SAM Glossary* defines terms and acronyms used in all of the 5620 SAM documentation, including 5620 SAM LTE documentation.
5620 SAM XML OSS Interface Developer Guide	The *5620 SAM XML OSS Interface Developer Guide* provides information that allows you to: • use the 5620 SAM XML OSS interface to access network management information • learn about the information model associated with the managed network • develop OSS applications using the packaged methods, classes, data types, and objects necessary to manage 5620 SAM functions
5620 SAM LTE documentation	
5620 SAM LTE ePC User Guide	The *5620 SAM LTE ePC User Guide* describes how to discover, configure, and manage LTE ePC devices using the 5620 SAM. The guide is intended for LTE ePC network planners, administrators, and operators. Alcatel-Lucent recommends that you review the entire *5620 SAM LTE ePC User Guide* before you attempt to use the 5620 SAM in your LTE network.
5620 SAM LTE RAN User Guide	The *5620 SAM LTE RAN User Guide* describes how to discover, configure, and manage the eNodeB using the 5620 SAM. The guide is intended for LTE RAN network planners, administrators, and operators. Alcatel-Lucent recommends that you review the entire *5620 SAM LTE RAN User Guide* before you attempt to use the 5620 SAM in your LTE network.
5620 SAM LTE Parameter Reference	The *5620 SAM LTE Parameter Reference* provides a list of all LTE ePC and LTE RAN parameters supported in the 5620 SAM.
5620 SAM LTE Alarm Reference	The *5620 SAM LTE Alarm Reference* provides a list of LTE ePC and LTE RAN alarms that can be reported in the 5620 SAM GUI.
5620 SAM 3GPP OSS Interface Developer Guide	The *5620 SAM 3GPP OSS Interface Developer Guide* describes the components and architecture of the 3GPP OSS interface to the 5620 SAM. It includes procedures and samples to assist OSS application developers to use the 3GPP interface to manage LTE devices.
5620 SAM 3GPP OSS Interface Compliance Statements	The *5620 SAM 3GPP OSS Interface Compliance Statements* document describes the compliance of the 5620 SAM 3GPP OSS interface with the 3GPP standard.
5620 SAM LTE RAN Release Description	The *5620 SAM LTE RAN Release Description* provides information about the LTE RAN features associated with the release.

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Guide	Description
5620 SAM optical documentation	
5620 SAM Optical User Guide	The *5620 SAM Optical User Guide* describes how to discover, configure, and manage optical devices using the 5620 SAM. The guide is intended for optical network planners, administrators, and operators. Alcatel-Lucent recommends that you review the entire *5620 SAM Optical User Guide* before you attempt to use the 5620 SAM in your network.
5620 SAM Optical Parameter Reference	The *5620 SAM Optical Parameter Reference* provides a list of all optical device parameters supported in the 5620 SAM.
5620 SAM Optical Alarm Reference	The *5620 SAM Optical Alarm Reference* provides a list of optical device alarms that can be reported in the 5620 SAM GUI.

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Procedure 1 To find the 5620 SAM user documentation

The user documentation is available from the following sources:

- the User_Documentation directory on the product DVD-ROM
- Help→5620 SAM User Documentation in the 5620 SAM client GUI main menu

Note — Users of Mozilla browsers may receive an error message when using the User Documentation Index page (index.html) to open the PDF files in the 5620 SAM documentation suite. The offline storage and default cache values used by the browsers are the cause of the error message.

Alcatel-Lucent recommends changing the offline storage (Mozilla Firefox) or cache (Mozilla 1.7) values to 100 Mbytes to eliminate the error message.

Procedure 2 To view parameter descriptions from the *5620 SAM User Guide*

You can click on a parameter name in a *5620 SAM User Guide* procedure to open the matching parameter description in the *5620 SAM Parameter Guide*. Ensure the following conditions are true beforehand:

- the *5620 SAM Parameter Guide* and *5620 SAM User Guide* are located in the same directory
- Adobe Reader Release 5.0 or later is installed

1 To view a parameter description when both the *5620 SAM User Guide* and the *5620 SAM Parameter Guide* are open in Adobe Acrobat, click on the parameter name in the *5620 SAM User Guide*.

The parameter description is displayed in the *5620 SAM Parameter Guide*.

2 To view a parameter description when only the *5620 SAM User Guide* is open in Adobe Acrobat:

i Click on a parameter name in a procedure in the *5620 SAM User Guide*. The *5620 SAM User Guide* closes and the *5620 SAM Parameter Guide* opens to display the parameter description.

ii Double-click on the Previous View button in Adobe Acrobat (or press Alt + ←) to re-open the *5620 SAM User Guide*. The *5620 SAM User Guide* opens and displays the parameter from step i.

Prerequisites

Readers of the 5620 SAM documentation suite are assumed to be familiar with the following:

- 5620 SAM software structure and components
- 5620 SAM GUI operations and tools
- typical 5620 SAM management tasks and procedures
- device and network management concepts

Conventions

Table 2 lists the conventions that are used throughout the documentation.

Table 2 Documentation conventions

Convention	Description	Example
Key name	Press a keyboard key	Delete
Italics	Identifies a variable	*hostname*

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Convention	Description	Example
Key+Key	Type the appropriate consecutive keystroke sequence	CTRL+G
Key–Key	Type the appropriate simultaneous keystroke sequence	CTRL–G
*	An asterisk is a wildcard character, which means “any character” in a search argument.	log_file*.txt
↵	Press the Return key	↵
—	An em dash indicates there is no information.	—
→	Indicates that a cascading submenu results from selecting a menu item	Policies→Alarm Policies

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Procedures with options or substeps

When there are options in a procedure, they are identified by letters. When there are substeps in a procedure, they are identified by Roman numerals.

Example of options in a procedure

At step 1, you can choose option a or b. At step 2, you must do what the step indicates.

1 This step offers two options. You must choose one of the following.

- **a** This is one option.
- **b** This is another option.

2 You must perform this step.

Example of substeps in a procedure

At step 1, you must perform a series of substeps within a step. At step 2, you must do what the step indicates.

1 This step has a series of substeps that you must perform to complete the step. You must perform the following substeps.

- **i** This is the first substep.
- **ii** This is the second substep.
- **iii** This is the third substep.

2 You must perform this step.

Measurement conventions

Measurements in this document are expressed in metric units and follow the Système international d’unités (SI) standard for abbreviation of metric units. If imperial measurements are included, they appear in brackets following the metric unit.

Table 3 lists the measurement symbols used in this document.

Table 3 Bits and bytes conventions

Measurement	Symbol
bit	b
byte	byte
kilobits per second	kb/s

Important information

The following conventions are used to indicate important information:

Warning — Warning indicates that the described activity or situation may, or will, cause equipment damage or serious performance problems.

Caution — Caution indicates that the described activity or situation may, or will, cause service interruption.

Note — Notes provide information that is, or may be, of special interest.

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1 — Supervision management

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1.1 Overview: Supervision management

The 5620 SAM Supervision Module is a web-based application that provides a summarized, at-a-glance view of NEs and objects in the 5620 SAM network. The Supervision module can be used to group and monitor network resources that are natively managed by the 5620 SAM or by a subtending network management system that is interfaced with the 5620 SAM for supervision purposes.

In order to use the 5620 SAM Supervision Module, certain configurations must be performed on the 5620 SAM client GUI from which it is launched. This chapter describes these configurations.

KPI timers

KPI timers determine the amount of historical data that will be visible for KPIs within the 5620 SAM Supervision Module. Data is collected at specified intervals for a specified duration. This information is displayed in the form of a Summary Graph within the 5620 SAM Supervision Module.

Supervision groups

A supervision group is logical set of NEs that is specified by user-defined filters and spans of control. These NEs must belong to one of three categories: access, transport, or core. Supervision groups can be used to partition large quantities of network elements into distinct categories for inclusion in summary views. For example, you can create supervision groups that organize network elements by topological partition. There is no limit to the number of supervision groups that an NE can belong to.

The state of these supervision groups is monitored via a dashboard view, and any member resource of any group can be examined individually. You can navigate from the Supervision Module to the network management system GUI of any monitored network resource.

Summary views

A summary view is a collection of one or more supervision groups that provides a summarized, high-level view of a group of network objects. For example, you can create a summary view that contains the network elements of several cities. There is no limit to the number of summary views that a supervision group can belong to.

1.2 Supervision management workflow

1. Configure KPI history timers.
2. Configure supervision groups.
3. Configure summary views that include supervision groups.

1.3 Supervision management procedures

Perform the following procedures to configure network supervision parameters and objects for the Supervision Module.

Procedure 1-1 To configure KPI history timers

1 Choose Administration→Supervision Settings from the 5620 SAM main menu. The Supervision Settings (Edit) form opens with the General tab displayed.

2 Configure the KPI History Interval (minutes) and KPI History Duration (hours) parameters.

Caution — Any change in the configuration of KPI timers will be immediately reflected in the Summary Graph window on the 5620 SAM Supervision Module and could result in loss of data.

3 Click on the OK button. A dialog box appears.

4 Click on the Yes button. The Supervision Settings (Edit) form closes.

Procedure 1-2 To configure a supervision group

Supervision groups include NEs based on an inclusion filter, a span of control, or both. See the *5620 SAM User Guide* for more information about configuring filters and spans of control.

1 Choose Administration→Supervision Settings from the 5620 SAM main menu. The Supervision Settings (Edit) form opens with the General tab displayed.

2 Click on the Supervision Groups tab button.

3 Click on the Create button. The Supervision Group (Create) form opens with the General tab displayed.

4 Configure the parameters:

- Displayed Name
- Description
- Category
- Supervise Objects Belonging To

5 Click on the Inclusion Filters tab button.

6 Perform one of the following:

a To create an inclusion filter, go to step 7.

b To apply an existing inclusion filter, go to step 18.

7 Perform one of the following:

a Click on the Add button. The Select form opens. Go to step 8.

b Click on the Inclusion Filter Creation button. Go to step 10.

8 Click on the Add button. The Inclusion Filter Creation form opens.

9 Perform one of the following:

a Choose an object type from the drop-down menu at the top left of the form.

b Use the Filter for Object Type button to choose an object:

i Click on the Filter for Object Type button. The Select - Object Type form opens.

ii Configure the filter criteria, if required, and click on the Search button to display a list of objects.

iii Choose an object from the list and click on the OK button. The Select - Object Type form closes.

10 Click on the Filter button at the top of the form. The filter form opens.

11 Configure the filter properties.

i Choose an item from the Attribute drop-down menu.

Note — The items displayed in the Attribute drop-down menu are dependent upon the object type selected in step 9.

ii Choose an item from the Function drop-down menu.

iii Choose an item from the Value drop-down menu.

iv Choose a Boolean Operator from the Operators drop-down menu.

v Click on the Add button.

12 Perform one of the following:

a To filter additional properties, repeat step 11.

b If you are finished filtering properties, go to step 13.

13 Click on the Save button. The Save Filter form opens.

14 Configure the parameters:

- Filter Name
- Description
- Public

15 Click on the Save button. The filter is saved.

16 Close the filter window.

17 Close the Inclusion Filters Creation window.

18 Click on the Add button. The Select form opens.

19 Click on the Search button. A list of inclusion filters is displayed.

20 Choose an inclusion filter in the list and click on the OK button. The Select form closes and the Supervision Group (Create) form refreshes to display the new inclusion filter in the list.

21 Click on the Spans tab button.

22 Click on the Add button. The Select Span form opens.

23 Create an appropriate filter and click on the Search button. A list of spans is displayed.

24 Select a span in the list and click on the OK button. The Select Span form closes and the Supervision Group (Create) form reappears with the new span in the list.

25 Click on the OK button. A dialog box appears.

26 Click on the Yes button. The Supervision Group (Create) form closes.

27 Close the Supervision Settings (Edit) form.

Procedure 1-3 To configure a summary view

1 Choose Administration→Supervision Settings from the 5620 SAM main menu. The Supervision Settings (Edit) form opens with the General tab displayed.

2 Click on the Summary Views tab button.

3 Click on the Create button. The Supervision View (Create) form opens with the General tab displayed.

4 Configure the Displayed Name and Description parameters.

5 Click on the OK button. A dialog box appears.

6 Click on the Yes button. The Supervision View (Create) form closes.

7 Close the Supervision Settings (Edit) form.

2 — Supervision module web server configuration

2.1 Supervision module web server overview *2-2*

2.2 Web server configuration workflow *2-2*

2.3 Web server configuration procedures *2-2*

2.1 Supervision module web server overview

The Supervision module web server is the component of the 5620 SAM server software that controls communication between the 5620 SAM network and the Supervision module web-browser application. The following conditions must be met in order to access the Supervision module configuration forms and web portal:

- The web server application is running on the 5620 SAM main server.
- The Supervision module is enabled in the 5620 SAM client configuration file.
- The 5620 SAM client configuration file contains a valid path to a web browser application that can be used to launch the Supervision web portal.

2.2 Web server configuration workflow

1. Start the Supervision web server on the 5620 SAM main server.
2. Configure the 5620 SAM client application to access the Supervision module configuration forms and web portal

2.3 Web server configuration procedures

Perform the procedures in this section to configure and enable the Supervision module web server.

Server configuration procedures

The Supervision web server is automatically started along with the 5620 SAM main server. Perform the procedure in this section to configure the Supervision web server on the 5620 SAM main server station in failure recovery scenarios.

Procedure 2-1 To start or stop the Supervision web server on the SAM main server

Note — You must have access to the 5620 SAM main server and the samadmin user to perform this procedure.

1. Log in to the 5620 SAM main server station as the samadmin user.
2. Navigate to server binary directory, typically /opt/5620sam/server/nms/bin.
3. Enter the following at the prompt:

   # **./nmsserver.bash webstatus** ↵

   If the web server is stopped, the following message is displayed:

   ```
   SAM Web Server is stopped.
   ```

   If the web server is running, the following message is displayed:

```
SAM Web Server is running.
```

4 Perform one of the following:

a Start the web server by entering the following at the prompt:

```
# ./nmsserver.bash webstart ↵
```

The following text is displayed:

```
Starting 5620 SAM Web Server...
```

b Stop the web server by entering the following at the prompt:

```
# ./nmsserver.bash webstop ↵
```

The following text is displayed:

```
Stopping the 5620 SAM Web Server...
```

Client configuration procedures

Perform the procedure in this section to configure the 5620 SAM client application to access the Supervision module configuration forms in the 5620 SAM GUI and to access the Supervision web portal.

Procedure 2-2 To configure the 5620 SAM client application to access the Supervision module configuration forms and web portal

Performing this procedure will allow a 5620 SAM client application to access the following items in the 5620 SAM main menu:

- Application→Supervision Portal
- Administration→Supervision Settings

1 Choose Application→User Preferences from the 5620 SAM main menu. The User Preferences form opens with the General tab displayed.

2 Manually specify the Browser Path to be used to access the Supervision module configuration forms and web portal, or click on the Browse... button to specify the path.

3 Click on the OK button.

3 — The Supervision Web portal

3.1 Supervision web portal overview *3-2*

3.2 Workflow for the Supervision web portal *3-4*

3.3 Supervision Web portal procedures *3-4*

3.1 Supervision web portal overview

The 5620 SAM Supervision web portal is a Flash-based GUI that displays NE state and fault management information that is based on configurable object groupings that are configured by using the 5620 SAM GUI. You can access the Supervision web portal via the 5620 SAM client or a web browser.

Supervision web portal views

The Supervision web portal is divided into the following view sections:

- Summary View
- Details
- Alarms

You can undock view sections from their default positions in the Web portal GUI. Each view section can be resized and moved.

Summary View window

The Summary View window displays the supervision groups that are assigned to a summary view. You can switch between summary views by using the drop-down menu. The default behavior for a summary view is to only display supervision groups that have outstanding KPIs. You can configure a summary view to display all supervision groups by using the right-click contextual menu in the summary view window.

The Summary View window displays information in columns. You can display or hide columns by using the right-click contextual menu in the summary view window. The Summary View window can display the following columns:

- Group Name: This column displays supervision group names based on the currently active view settings (active groups or all groups).
- Unacknowledged Alarms: This column displays the number of critical and major alarms that have a status of Unacknowledged for each supervision group.
- Acknowledged Alarms: This column displays the number of critical and major alarms that have a status of Acknowledged for each supervision group.
- Failed Cells: This column displays the number of cells that have an Administrative State of Up and an Operational State of Down for each supervision group.
- Failed Interfaces: This column displays the number of signalling interfaces that have an Administrative State of Up and an Operational State of Down for each supervision group.

Clicking anywhere in a group's row in the Summary View window automatically populates the Details and Alarms windows with information that is specific to that group.

Summary Graph window

The Summary Graph window can be opened from a contextual menu by right-clicking on a KPI in the Summary View window. The Summary Graph window displays the history of the selected KPI based on the configuration of KPI timers on the 5620 SAM client GUI. See Chapter 1 for information about configuring KPI timers.

Details window

The Details window displays information about objects that are included in the currently selected supervision group. The Details window features the following tabs that sort objects as follows:

- Network Elements: This tab displays the NEs that are included in the currently selected supervision group. The Network Elements tab features columns that provide information to assist in identifying and sorting NEs.
- Radio Resources: This tab displays RAN-specific device resources such as cells. The Radio Resources tab features columns that provide information to assist in identifying and sorting RAN objects based on parent object and status. This tab is only visible for access groups.
- Interface Resources: This tab displays device interface and reference point resources. The Interface Resources tab features columns that provide information to assist in identifying and sorting interface objects based on parent object and status. This tab is not visible for transport groups.
- Matrix View: This tab provides an at-a-glance view of network status by displaying the selected supervision group as a graphical matrix of icons that reflect the current fault status of each NE. A list of relevant information can be viewed when you mouse-over an NE icon. This list includes name, status, notes, and a Properties button that can be clicked to open the NE's configuration form within the SAM client application GUI.

Clicking on an object in the Details window automatically populates the Alarms window with fault information that is specific to the selected object.

Alarms window

The Supervision Module supports the ability to aggregate all alarms from a set of network resources into a single alarm view known as the Alarms window. The Alarms window displays the major and critical alarms that are currently affecting the selected object and child objects. Clicking on an alarm in the Alarms window populates the lower half of the window with information about the selected alarm. The Alarms window displays the following information about the currently selected alarm:

- General information that includes alarm type, affected site, and when the alarm was originally raised.
- Severity information that includes previous and current severity levels.
- Statistics information that includes alarm frequency and occurrences since clearing.
- Acknowledgement information that includes acknowledgement status and users that have acknowledged the alarm.

The Alarms window features an operations form that can be accessed from the right-click contextual menu. You can use the operations form to acknowledge and clear alarms directly from the Supervision web portal.

Note — For displaying alarms, the Supervision web portal uses the system default timezone, while the 5620 SAM client GUI may use a user-configured timezone.

3.2 Workflow for the Supervision web portal

1. Launch the Supervision web portal from the 5620 SAM client application GUI or a web browser.
2. Configure the Supervision web portal GUI, as required.
3. Switch between summary views, as required.
4. Perform the following fault management tasks by using the Supervision web portal, as required:
   - acknowledge alarms
   - clear alarms

3.3 Supervision Web portal procedures

Perform the procedures in this section to access and use the Supervision web portal.

Accessing the Supervision web portal

You can launch the supervision web portal from the 5620 SAM client application or a web browser.

Procedure 3-1 To launch the Supervision web portal from the 5620 SAM client application

Note 1 — The Supervision web portal launches with the browser application that is specified on the User Preferences form.

Note 2 — You cannot launch more than one instance of the Supervision web portal from a single 5620 SAM client IP address.

1. Open the 5620 SAM client application.
2. Choose Application→Supervision Portal from the 5620 SAM main menu. The Supervision web portal launches.

Procedure 3-2 To launch the Supervision web portal from a web browser

Note — To perform this procedure, Single Sign On must be previously configured. See the *5620 SAM Integration Guide* for more information.

1 Open a web browser.

2 Enter the following in the address bar:

`http://ip:port/sam/webclient/Supervision.html`

where
ip is the IP address of the webserver
port is 9400 for a secured connection or 8400 for a non-secured connection

3 Enter your User Name and Password at the prompts and click on the Login button. A warning is displayed.

4 Click on the Continue button. The Supervision web portal launches.

Note 1 — The Supervision web portal will timeout and be cleaned up by SAM Session management after a two minute period of inactivity.

Note 2 — Navigation to monitored objects will not work when the Supervision web portal is launched from a web browser rather than a 5620 SAM client application.

Using the Supervision web portal GUI

Perform the following procedures to use the GUI features of the Supervision web portal.

Procedure 3-3 To hide or show columns in the Summary View

1 Right-click in the Summary View window.

2 Choose Select Columns from the contextual menu. The Select KPIs form displays.

3 Select or deselect the following checkboxes, as required:

- Unacknowledged Alarms
- Acknowledged Alarms
- Failed Cells
- Failed Interfaces

4 Click on the OK button. The Summary View window refreshes with the new column configuration.

Procedure 3-4 To undock and dock a supervision portal view

This procedure assumes that you currently have the Supervision web portal open.

1 Perform the following steps to undock a portal view:

   i Right-click on the title bar for a portal view, such as Summary View or Details.

   ii Choose Undock from the contextual menu. The portal view undocks.

2 Perform the following steps to dock a portal view:

   i Click on the title bar for an undocked window.

   ii Drag the portal view to a valid location in the web portal GUI. The mouse icon displays an arrow for valid locations and a red circle with an X for invalid locations.

Performing fault management with the Supervision web portal

Perform the following procedures to manage network alarms with the Supervision web portal.

Procedure 3-5 To view alarm statistics

1 Select a group from the Summary View in the Supervision Module. The alarm window is populated.

2 Click on the Alarm Statistics tab button in the Alarm window. Acknowledged and unacknowledged alarms associated with the selected network resource are summarized according to severity.

Note — A value of -1 indicates a currently unsupported severity.

Procedure 3-6 To manage alarms using the Alarms window

Perform this procedure to acknowledge alarms, clear alarms, and assign severity to alarms by using the operations form in the Alarms window. Please read the following information about performing actions with the operations form:

- You can display and hide the operations form by using the right-click contextual menu in the Alarms window.
- You must drag and drop an alarm from the Alarms window into the Alarms in Operation panel of the operations form in order to perform an operation on that alarm.
- You can view information such as an alarm's name, severity, and where it is acknowledged when you mouse-over an alarm in the operations form.
- You can remove one or more alarms from the operations form by selecting them and using the right click contextual menu or double-clicking on a single alarm.
- All alarms will automatically be removed from the Alarms in Operation panel once an operation is performed.

1 Choose a supervision group from the Summary View list. The alarm window is populated.

2 If required, choose a network object from the Details window. The Alarms window is populated with alarms that are affecting that object.

3 Choose an alarm from the Alarms window list. The lower half of the Alarms window is populated with information about that alarm.

4 Right-click in the Alarms window and choose Show/Hide Operations from the contextual menu. The operations form opens within the Alarms window.

5 Perform the following steps to acknowledge or clear an alarm.

a To acknowledge an alarm:

i Click and drag the alarm from the Alarms window and drop it into the Alarms in Operation panel of the operations form.

ii If you want to assign an urgency to the alarm, enable the Urgency checkbox and choose an urgency from the drop-down menu.

iii If you want to assign a new severity to the alarm, enable the Severity checkbox and choose a severity from the dropdown menu.

iv Enter any notes regarding the acknowledgement action in the Acknowledgement Text panel.

v Choose Acknowledge from the Operation Type drop-down menu.

vi Click on the Execute button. The alarm is acknowledged in the 5620 SAM network and is updated with any new urgency and severity levels.

b To clear an alarm:

i Click and drag the alarm from the Alarms window and drop it into the Alarms in Operation panel of the operations form.

ii Choose Clear from the Operation Type drop-down menu.

iii Click on the Execute button. The alarm is cleared in the 5620 SAM network.

6 Right-click in the Alarms window and choose Show/Hide Operations from the contextual menu to hide the operations form.

A. Supervision Module parameters

A.1 Supervision Module parameter overview *A-2*

A.2 Supervision management parameters *A-2*

A.3 Supervision group parameters *A-2*

A.1 Supervision Module parameter overview

This appendix provides:

- parameter descriptions that include value ranges and default values
- parameter options
- parameter and option dependencies

A.2 Supervision management parameters

This section describes the parameters on the general tab of the supervision settings form.

KPI History Duration (hours) (kpiHistoryDuration)

The KPI History Duration (hours) parameter specifies the retained KPI history duration in hours. The range is 1 to 48. The default is 36.

KPI History Interval (minutes) (snapshotPeriod)

The KPI History Interval (minutes) parameter specifies the number of minutes that will elapse between snapshots being taken of the supervision state. The range is 10 to 1440. The default is 30.

A.3 Supervision group parameters

This section describes the parameters on the supervision group form.

Category (category)

The Category parameter specifies the category to which objects in the supervision group belong. The options are:

- NE Access
- NE Core
- NE Transport (default)

Description (description)

The Description parameter specifies a user-provided description for the supervision group or summary view. The range is 0 to 80 characters.

Displayed Name (displayedName)

The Displayed Name a unique name for the supervision group or summary view. The range is 1 to 32 characters.

Supervise Objects Belonging To (filtersAndSpans)

The Supervise Objects Belonging To parameter specifies that objects in the supervision group must belong to the assigned spans and pass at least one of the inclusion filters, or that objects in the supervision group can either belong to the assigned spans or pass at least one of the inclusion filters. The options are:

- Inclusion Filters *AND* Spans (default)
- Inclusion Filters *OR* Spans

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