



Alcatel-Lucent 5620

SERVICE AWARE MANAGER | RELEASE 8.0 R5
INTEGRATION GUIDE

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- 8.10 This Agreement shall be governed by and construed in accordance with the laws of the Province of Ontario. The application of the United Nations Convention on Contracts for the International Sale of Goods is hereby expressly excluded.

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	
<i>5620 SAM 5650 CPAM Installation and Upgrade Guide</i>	<p>The <i>5620 SAM 5650 CPAM Installation and Upgrade Guide</i> provides OS considerations, configuration information, and procedures for the following:</p> <ul style="list-style-type: none">• 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

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Guide	Description
<i>5620 SAM User Guide</i>	<p>The <i>5620 SAM User Guide</i> provides information about using the 5620 SAM to manage the service-aware IP/MPLS network, including GUI basics, commissioning, service configuration, and policy management.</p> <p>The <i>5620 SAM User Guide</i> uses a task-based format. Each chapter contains:</p> <ul style="list-style-type: none"> a workflow that describes the steps for configuring and using the functionality detailed procedures that list the configurable parameters on the associated forms <p>5620 SAM management information specific to LTE network elements is covered in the <i>5620 SAM LTE ePC User Guide</i> and <i>5620 SAM LTE RAN User Guide</i>.</p>
<i>5620 SAM Parameter Guide</i>	<p>The <i>5620 SAM Parameter Guide</i> provides:</p> <ul style="list-style-type: none"> 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 <p>There are dynamic links between the procedures in the <i>5620 SAM User Guide</i> and the parameter descriptions in the <i>5620 SAM Parameter Guide</i>. See Procedure 2 for more information.</p> <p>Parameters specific to LTE network elements are covered in the <i>5620 SAM LTE Parameter Reference</i>.</p>
<i>5620 SAM Statistics Management Guide</i>	<p>The <i>5620 SAM Statistics Management Guide</i> provides information about how to configure performance and accounting statistics collection and how to view counters using the 5620 SAM. Network examples are included.</p>
<i>5620 SAM Scripts and Templates Developer Guide</i>	<p>The <i>5620 SAM Scripts and Templates Developer Guide</i> 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:</p> <ul style="list-style-type: none"> CLI scripting, XML, and the Velocity engine basic scripting or programming 5620 SAM functions
<i>5620 SAM Troubleshooting Guide</i>	<p>The <i>5620 SAM Troubleshooting Guide</i> provides task-based procedures and user documentation to:</p> <ul style="list-style-type: none"> help resolve issues in the managed and management networks identify the root cause and plan corrective action for: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> network management LANs PC and Sun platforms, and operating systems 5620 SAM client GUIs and client OSS applications 5620 SAM servers 5620 SAM databases
<i>5620 SAM Maintenance Guide</i>	<p>The <i>5620 SAM Maintenance Guide</i> provides procedures for:</p> <ul style="list-style-type: none"> generating baseline information for 5620 SAM applications performing daily, weekly, monthly, and as-required maintenance activities for 5620 SAM-managed networks
<i>5620 SAM Integration Guide</i>	<p>The <i>5620 SAM Integration Guide</i> provides procedures to allow the 5620 SAM to integrate with additional components.</p>
<i>5620 SAM System Architecture Guide</i>	<p>The <i>5620 SAM System Architecture Guide</i> 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.</p>

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Guide	Description
<i>5620 SAM Planning Guide</i>	The <i>5620 SAM Planning Guide</i> provides information about 5620 SAM scalability and recommended hardware configurations.
<i>5620 SAM NE Compatibility Guide</i>	The <i>5620 SAM NE Compatibility Guide</i> provides release-specific information about the compatibility of managed device features in 5620 SAM releases.
<i>5620 SAM Release Description</i>	The <i>5620 SAM Release Description</i> provides information about the new features associated with a 5620 SAM software release.
<i>5620 SAM Glossary</i>	The <i>5620 SAM Glossary</i> defines terms and acronyms used in all of the 5620 SAM documentation, including 5620 SAM LTE documentation.
<i>5620 SAM-O OSS Interface Developer Guide</i>	<p>The <i>5620 SAM-O OSS Interface Developer Guide</i> provides information that allows you to:</p> <ul style="list-style-type: none"> • use the 5620 SAM-O 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	
<i>5620 SAM LTE ePC User Guide</i>	<p>The <i>5620 SAM LTE ePC User Guide</i> 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.</p> <p>Alcatel-Lucent recommends that you review the entire <i>5620 SAM LTE User ePC Guide</i> before you attempt to use the 5620 SAM in your LTE network.</p>
<i>5620 SAM LTE RAN User Guide</i>	<p>The <i>5620 SAM LTE RAN User Guide</i> 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.</p> <p>Alcatel-Lucent recommends that you review the entire <i>5620 SAM LTE RAN User Guide</i> before you attempt to use the 5620 SAM in your LTE network.</p>
<i>5620 SAM LTE Parameter Reference</i>	The <i>5620 SAM LTE Parameter Reference</i> provides a list of all LTE ePC and LTE RAN parameters supported in the 5620 SAM.
<i>5620 SAM-O 3GPP OSS Interface Developer Guide</i>	The <i>5620 SAM-O 3GPP OSS Interface Developer Guide</i> 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.
<i>5620 SAM LTE Alarm Reference</i>	The <i>5620 SAM LTE Alarm Reference</i> provides a list of LTE ePC and LTE RAN 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	<i>hostname</i>
Key+Key	Type the appropriate consecutive keystroke sequence	CTRL+G
Key-Key	Type the appropriate simultaneous keystroke sequence	CTRL-G
*	An asterick 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

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 — Overview

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1.1 Introduction

A 5620 SAM system can integrate with additional components to provide additional functionality and increased ease of use. Integration is achieved in a variety of ways depending on the components involved and a user's specific configuration.

The *5620 SAM Integration Guide* describes horizontal integration between the 5620 SAM and various third-party systems.

1.2 Integration overview

The *5620 SAM Integration Guide* contains information about the following integration components:

- SSO
- CFMA

SSO

Single Sign On (SSO) technology enables a user to access all resources within a given domain after having entered their credentials just one time.

See [chapter 2](#) for more information.

CFMA

The SAM-CFMA adapter for CFMA 2.1 translates 5620 SAM alarms into alarms for CFMA. Using CFMA as a fault manager, the adapter is used to aggregate SAM alarms within another NM.

The adapter connects to 5620 SAM using SAM-O and JMS. The adapter software can be found in the integration/samcfmadapter directory of the 5620 SAM installation DVD.

See [chapter 3](#) for more information.

2 — *Single Sign On*

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2.1 SSO integration

Single Sign On (SSO) technology enables a user to access all resources within a given domain after having entered their credentials just one time. SSO uses centralized authentication servers to ensure that users do not actively have to enter their credentials more than once. Security is provided on all levels without the inconvenience of re-prompting users.

It is recommended that the user navigate to Tools→Internet Options→Advanced within their Internet Explorer browser and de-select the Do not save encrypted pages to disk option under the Security heading when configuring SSO.

SSO functionality is limited to integration with the SANE portal and 1350 OMS.

2.2 SSO integration procedures

Use the following procedures to enable SSO functionality for 5620 SAM.

Procedure 2-1 Configuring 5620 SAM server for use with LSM portal

Use this procedure to configure the 5620 SAM Server for interworking with the LSM Portal. The LSM Portal is a component used for integration with 1350 OMS. Ensure that the 5620 SAM Server is stopped before you begin. Perform the following steps as root user, or a user with root equivalent permissions.

The following steps assume that the 5620 SAM server is installed at /opt/5620sam/server. Modify paths accordingly if your 5620 SAM server is installed to a different location.

The following steps assume that the 5620 SAM administrator account is samadmin with group sam. Modify accordingly if your 5620 SAM administrator account is different.

- 1 Deploy the csa_v2_proxy_spi.sar file.

```
/opt/5620sam/server/nms/jboss/server/default/deploy/csa_v2_proxy_spi.sar

# cp -i
/opt/5620sam/server/nms/jboss/sso/csa/csa_v2_proxy_spi.sar
/opt/5620sam/server/nms/jboss/server/default/deploy/csa_v2_proxy_spi.sar

# chown samadmin:sam
/opt/5620sam/server/nms/jboss/server/default/deploy/csa_v2_proxy_spi.sar
```

- 2 Modify the following fields within /opt/5620sam/sever/nms/config/sso/csa_proxy_config_service.xml:
 - i Set the ipaddress parameter to the IP address of the LSM Portal. Contact your LSM Portal administator to obtain.
 - ii Set the port parameter to the port number of the LSM Portal. Contact your LSM Portal administrator to obtain.

- 3 To enable debug level logging, add the following lines to /opt/5620sam/server/nms/config/nms-main-log4j.xml:

```
<category name="com.alu.sso.csa">

<priority value="DEBUG"/>

</category>
```

- 4 Go to /opt/5620sam/sever/nms/config/clientDeploy/nms-client.xml and add the following line to the <configuration> section:

```
<integration
properties="/com/alcatel/tmn/nm/lsm/lsmintegration.properties"
lsmproperties="https://<pathToLsmApiProperties>"
applicationid="<applicationIdValue"/>
```



Note 1 — <pathToLsmApiProperties> is the URL of the path to the LSM Portal LSM API properties file. Contact your LSM Portal administrator to obtain.

Note 2 — <applicationIdValue> is the value of the 5620 SAM target binding ID configured in the LSM Portal. Contact your LSM Portal administrator to obtain

- 5 When communication to the LSM Portal is SSL secured, perform the following steps to share the LSM Portal security certificates with the 5620 SAM server and its clients:

i Obtain the public security certificate from the LSM Portal administrator.

ii Import this certificate into the 5620 SAM server trustStore found at /opt/5620sam/server/nms/config/ssl/trustStore/cacerts.trustStore.

iii Go to /opt/5620sam/server/nms/bin/setenv.rc and set the SSL path parameter to the path of the 5620 SAM server trustStore.

iv Go to /opt/5620sam/server/nms/config/clientDeploy/setenv.bat and uncomment the following line:

```
rem set
JVM_OPTIONS_SSL=-Djavax.net.ssl.trustStore=..\config\ssl\trustStore\cacerts.trustStore
```

v Go to /opt/5620sam/server/nms/config/clientDeploy/setenv.rc and uncomment the following line:

```
#JVM_OPTIONS_SSL="-Djavax.net.ssl.trustStore=../config/ssl/trustStore/cacerts.trustStore"
```

vi To deploy the changes, run the following command as samadmin:

```
# /opt/5620sam/server/nms/bin/nmsdeploytool.bash deploy
```

- 6 Restart the 5620 SAM server.
-

Procedure 2-2 Configuring 5620 SAM server for use with SANE portal

Use this procedure to configure the 5620 SAM Server for interworking with the SANE Portal. Ensure that the 5620 SAM Server is stopped before you begin. Perform the following steps as root user, or a user with root equivalent permissions.

The following steps assume that the 5620 SAM server is installed at /opt/5620sam/server. Modify paths accordingly if your 5620 SAM server is installed to a different location. For a redundant SAM setup, the following steps should be performed on both the active and standby servers.

The following steps assume that the 5620 SAM administrator account is samadmin with group sam. Modify accordingly if your 5620 SAM administrator account is different.

- 1 Go to
/opt/5620sam/server/nms/jboss/sso/saml/webSSO.war/config/SAML.properties
and modify these fields as follows:

```
com.alu.cnm.csa.saml.metadata.repository  
=/opt/5620sam/server/nms/config/sso/metadata  
  
com.alu.cnm.csa.saml.sp.validateResponseSignature = true
```

- 2 Go to
/opt/5620sam/server/nms/jboss/sso/saml/webSSO.war/config/SSOAgent.properties
and modify these fields as follows:

```
com.alu.cnm.csa.ssoagent.nav.localDomains =  
<samServerIpAddress>,<samServerHostname>
```



Note — <samServerIpAddress> is the IP address of the 5620 SAM server, and <samServerHostname> is the hostname of the 5620 SAM server.

```
com.alu.cnm.csa.ssoagent.log.log4jConfigFile =  
/opt/5620sam/server/nms/config/webssso-log4j.xml
```

- 3 Perform one of the following:
 - a To deploy the webSSO.war for a standalone SAM setup, run the following commands:

```
# cp -R /opt/5620sam/server/nms/jboss/sso/saml/webSSO.war/
/opt/5620sam/server/nms/jboss/server/default/deploy

# chown -R samadmin:sam
/opt/5620sam/server/nms/jboss/server/default/deploy/webSSO.war/
```
 - b To deploy the webSSO.war for a redundant SAM setup, run the following commands:

```
# cp -R /opt/5620sam/server/nms/jboss/sso/saml/webSSO.war/
/opt/5620sam/server/nms/jboss/server/default/deployAlcatelRedundancy5620SRM/z_z_z

# chown -R
/opt/5620sam/server/nms/jboss/server/default/deployAlcatelRedundancy5620SRM/z_z_z/webSSO.war

# cp -R /opt/5620sam/server/nms/jboss/sso/saml/webSSO.war/
/opt/5620sam/server/nms/jboss/deployAlcatelRedundancy5620SRM/z_z_z

# chown -R
/opt/5620sam/server/nms/jboss/deployAlcatelRedundancy5620SRM/z_z_z/webSSO.war
```
- 4 To setup the integration property to disable LSM, perform the following steps.
 - i Run the following command:

```
# vi
/opt/5620sam/server/nms/config/clientDeploy/nms-client.xml
```
 - ii Modify the following field as follows:

```
<integration
properties="/com/alcatel/tmn/nm/lsm/lsmintegration.properties"
disablelsm="true"/>
```
 - iii Run the following command to deploy the changes:

```
# /opt/5620sam/server/nms/bin/nmsdeploytool.bash deploy
```
- 5 To define the 5620 SAM client installation path, perform the following steps:
 - i Run the following command:

```
# vi
/opt/5620sam/server/nms/jboss/server/jms/deploy/samcommandservlet.war/WEB-INF/sanesamclient.jnlp
```

- ii Change the value of %SAM_WINDOWS_DIR% to the path where the client will be installed for Windows users.
 - iii Change the value of %SAM_UNIX_DIR% to the path where the client will be installed for Solaris users.
- 6 Perform the following steps to enable assertion signature validation.
- i Obtain a copy of the SANE public certificate(s) for assertion signature validation and copy them to
/opt/5620sam/server/nms/config/sso/metadata/idp_signing_certificate.cer.



Note 1 — Each certificate should be given a unique name.

Note 2 — Do not modify the formatting of any certificate as this will cause the signature validation to fail. Modification includes the addition of whitespace to the certificate file.

- ii Run the following command:


```
# chown samadmin:sam  
/opt/5620sam/server/nms/config/sso/metadata/idp_signing_certificate.cer
```
 - iii Run the following command:


```
# vi  
/opt/5620sam/server/nms/config/sso/metadata/1.1/idp_metadata.xml
```
 - iv Modify these fields as follows:


```
certificateFileLocation =  
/opt/5620sam/server/nms/config/sso/metadata/idp_signing_certificate.cer  
  
entityId = Verizon specific issuer ID
```
 - v Create a separate idp_metadata<X>.xml file for each SAM-L responder.
- 7 When communication to the SANE Portal is SSL secured, perform the following steps to share the SANE Portal security certificates with the 5620 SAM Server.
- i Obtain the SANE public security certificate for SAM-L server to 5620 SAM server communication from the SANE Server administrator.
 - ii Import this security certificate into the 5620 SAM Server truststore found at /opt/5620sam/server/nms/config/ssl/trustStore/cacerts.trustStore.
 - iii Go to /opt/5620sam/server/nms/bin/setenv.rc and update the SSL path with the the path of the 5620 SAM server trustStore.
- 8 Restart the 5620 SAM server.
-

3 — *CFMA Integration*

3.1 CFMA integration 3-2

3.2 CFMA integration procedures 3-2

3.1 CFMA integration

The SAM-CFMA adapter for CFMA 2.1 translates 5620 SAM alarms into alarms for CFMA. The adapter connects to 5620 SAM using SAM-O and JMS. The connection parameters will be specified in an XML configuration file that contains the required information to allow the 5620 SAM adapter to connect to SAM-O and JMS. The password provided in the XML file will be MD5 hashed. The adapter software can be found in the integration/samcfmadapter directory of the 5620 SAM installation DVD.

An installed SAM-CFMA adapter must be of the same version as the 5620 SAM server with which it will interface, and these must be compatible with the CFMA version. Both the 5620 SAM server and the CFMA must also have their times synchronized to ensure that the JMS connection behaves properly and that the alarm timestamp matches on both systems. It is recommended that both systems synchronize their time against the same NTP server. Contact your Alcatel-Lucent support representative for more information.

The sam-cfma-adapter.sar file is an archive of files required to support the SAM-CFMA adapter. A CFMA system administrator must extract the contents of this file and deploy them to the correct CFMA directory. Contact your Alcatel-Lucent support representative for more information.

3.2 CFMA integration procedures

Use the following procedures to install the 5620 SAM adapter for CFMA 2.1.

Procedure 3-1 Installing the SAM-CFMA adapter sar file

The paths to the configurations provided in the following procedure are provided as an example only and will vary depending on CFMA installations and versions. Please consult the CFMA documentation for details.

- 1 Run the following command:

```
cd <JBOSS_dir>/alu_cnm_cfma_main/deploy
```

- 2 To create the SAM-CFMA adapter directory, run the following command:

```
mkdir sam-cfma-adapter.sar
```

- 3 To copy the sar file in the created directory, run the following commands:

```
cp <SAR_FILE_LOCATION>/sam-cfma-adapter.sar  
<JBOSS_dir>/alu_cnm_cfma_main/deploy/sam-cfma-adapter.sar/  
cd <JBOSS_dir>/alu_cnm_cfma_main/deploy/sam-cfma-adapter.sar/
```

- 4 To unzip the sar file, run the following command:

```
unzip sam-cfma-adapter.sar
```

- 5 To remove the unzipped sar file, run the following command:

```
rm sam-cfma-adapter.sar
```

Procedure 3-2 Setting CFMA preferences

The paths to the configurations provided in the following procedure are provided as an example only and will vary depending on CFMA installations and versions. Please consult the CFMA documentation for details.

- 1 To set the EVENT_PROCESSING_WITH_DEVICETIME to true for the main and player servers, run the following commands:

```
cnm-preference-modify -c cfma -i main -d ../main/data/output  
"/cfma/server/asset/main/com/alu/cnm/cfma/ngfm/server/fmcommon:EVENT_PROCESSING_WITH_DEVICETIME:true"
```

```
cnm-preference-modify -c cfma -i main -d ../main/data/output  
"/cfma/server/asset/player/com/alu/cnm/cfma/ngfm/server/fmcommon:EVENT_PROCESSING_WITH_DEVICETIME:true"
```

- 2 To set the synchTimeout to 60, run the following command:

```
cnm-preference-modify -c cfma -i main -d ../main/data/output  
"/cfma/server/asset/main/com/alu/cnm/cfma/ngfm/server/fmcollector:synchTimeout:60"
```



Note — An initial discovery taking more than 60 minutes will require increasing the synchTimeout.

Procedure 3-3 Enabling 5620 SAM server communication

Included in the sam-cfma-adapter.sar file is the jboss-service.xml configuration file. Prior to deploying the SAM-CFMA adapter, the following parameters within the jboss-service.xml configuration file must be modified to allow communication with the 5620 SAM server.

- 1 Open the jboss-service.xml configuration file.
- 2 Set the ipAddressOne parameter to the IP address of the primary 5620 SAM server.
- 3 Set the httpPortOne parameter to the HTTP port of the primary 5620 SAM server used for OSS requests.

- 4 Set the jndiPortOne parameter to the JNDI port of the primary 5620 SAM erver.
- 5 Set the ipAddressTwo parameter to the IP address of the redundant 5620 SAM server.
- 6 Set the httpPortTwo parameter to the HTTP port of the redundant 5620 SAM server used for OSS requests.
- 7 Set the jndiPortTwo parameter to the JNDI port of the redundant 5620 SAM server.
- 8 Set the adapterType parameter to either 5620OMS or 5620XMS.



Note — This value is dependent on specific system integration.

- 9 Set the username parameter to the 5620 SAM user used for the OSS/JMS connections.



Note 1 — This user must be configured in the 5620 SAM server and must have have OSS privileges.

Note 2 — In 5620 SAM, this user should be bound to a Span Profile that contains spans defining all alarmable objects for which the CFMA user wishes to receive alarm events.

Note 3 — Do not specify a Span Profile containing blocked spans as this will cause the SAM-CFMA adapter to become out of sync with the 5620 SAM.

- 10 Set the password parameter to the MD5 hashed password required for the 5620 SAM username.

- 11 Set the spanIds to a comma separated list of numeric values corresponding to span numbers configured on the 5620 SAM Server.



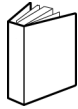
Note 1 — The span numbers specified here must match those belonging to the Span Profile of the 5620 SAM user specified in step 9.

Note 2 — Only alarms raised on objects belonging to the specified spanIds will be shown in CFMA.

Note 3 — Spans used by the SAM-CFMA adapter should not be modified after an interface is established between 5620 SAM and CFMA. Alarmed objects should not be added, removed, or moved from one span to another (i.e. move an NE from one group belonging to a spanId to another group belonging to a different spanId). Doing so will cause the CFMA alarm list to become out of sync with the 5620 SAM alarm list. If the CFMA alarms become out of sync with the 5620 SAM alarms, the 5620 SAM alarms can be synchronized from the CFMA GUI by performing Actions→Synchronize→Alarms and selecting the 5620SAM entry.

- 12 Restart the CFMA.
-

Customer documentation and product support



Customer documentation

<http://www.alcatel-lucent.com/myaccess>

Product manuals and documentation updates are available at [alcatel-lucent.com](http://www.alcatel-lucent.com). If you are a new user and require access to this service, please contact your Alcatel-Lucent sales representative.



Technical Support

<http://support.alcatel-lucent.com>



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