

# Alcatel-Lucent 5620 SAM

## SERVICE-AWARE MANAGER | RELEASE 9.0 TECHNICAL SPECIFICATIONS

### Operating environment

The Alcatel-Lucent 5620 SAM, Release 9.0 operates on the following:

Main, database, auxiliary servers and clients:

- x86 or Intel-based platforms (HP® or Oracle® Sun® Servers only)
- Oracle® Solaris™ 10 Operating System

Databases:

- Oracle® Database 11g

Additional clients:

- Microsoft® Windows® 2000 / 2003 / XP® Professional / Vista™ Business and Ultimate (32-bit)
- Microsoft Windows 7 Professional (32-bit and 64-bit editions)

Note that hardware recommendations may vary depending on scale of deployment. Contact your Alcatel-Lucent representative for the 5620 SAM Planning Guide for hardware requirements and platform sizing recommendations.

### Minimum hardware requirements for Alcatel-Lucent 5620 SAM, Release 9.0 running on a Oracle Solaris 10 platform

APPLICATION	X86 HP® OR ORACLE® SUN	ULTRASPARC III Cu & IIIi, IV, OR IV+
5620 SAM main server: <ul style="list-style-type: none"><li>• It is recommended that the 5620 SAM server be installed on a workstation separate from that of the 5620 SAM database for large-scale deployments</li></ul>	<ul style="list-style-type: none"><li>• 2 dual-core or 1 quad core CPUs</li><li>• 12 GB RAM</li><li>• 2 disk drives, minimum 73 GB each</li></ul>	<ul style="list-style-type: none"><li>• 2 dual-core or 4 mono core CPUs</li><li>• 12 GB RAM</li><li>• 2 disk drives, minimum 73 GB each</li></ul>
5620 SAM 3GPP Interface <ul style="list-style-type: none"><li>• North-bound Interface for mobile networks</li><li>• Optional on main server</li></ul>	<ul style="list-style-type: none"><li>• 16 GB RAM</li></ul> (24 GB RAM required if 5620 SAM main server & database on same workstation)	N/A
5620 SAM database (Oracle® Database 11g): <ul style="list-style-type: none"><li>• Stores network objects and configuration</li><li>• 5620 SAM server can be installed on a workstation separate from that of the 5620 SAM database for large-scale deployments</li><li>• RAID 0 and 1 technologies are supported</li><li>• SAN storage is supported with 4GB or faster optical connections with dedicated Fiber Channel connection between hosts and storage arrays</li></ul>	<ul style="list-style-type: none"><li>• 2 dual-core or 1 quad core CPUs</li><li>• 8 GB RAM</li><li>• 4 disk drives recommended, minimum 73 GB each (2 drives minimum)</li></ul>	<ul style="list-style-type: none"><li>• 2 dual-core or 4 mono core CPUs, 1 GHz or higher</li><li>• 8 GB RAM</li><li>• 4 disk drives recommended, minimum 73 GB each (2 drives minimum)</li></ul>
5620 SAM auxiliary statistics collector server: <ul style="list-style-type: none"><li>• For 5620 SAM logToFile statistics</li><li>• Dedicated server only required for large-scale deployments</li></ul>	<ul style="list-style-type: none"><li>• 2 dual-core or 1 quad core CPUs</li><li>• 8 GB RAM</li><li>• 4 disk drives, minimum 73 GB each</li></ul>	<ul style="list-style-type: none"><li>• 4 CPUs, 1.5 GHz or higher</li><li>• 8 GB RAM</li><li>• 4 disk drives, minimum 73 GB each</li></ul>
5620 SAM auxiliary call trace collector server: <ul style="list-style-type: none"><li>• For call trace and debug trace statistics</li><li>• Dedicated server only required for large-scale deployments</li></ul>	<ul style="list-style-type: none"><li>• 2 dual-core or 1 quad core CPUs</li><li>• 24 GB RAM</li><li>• 8 disk drives, minimum 146 GB each</li></ul>	N/A

5620 SAM client:	<ul style="list-style-type: none"> <li>• 1 CPU, 1 GHz or higher</li> <li>• 1 GB dedicated RAM</li> <li>• 1 GB available disk space</li> <li>• 1280 × 1024 display resolution</li> </ul>	<ul style="list-style-type: none"> <li>• 1 CPU, 1 GHz or higher</li> <li>• 1 GB dedicated RAM</li> <li>• 1 GB available disk space</li> <li>• 1280 × 1024 display resolution</li> </ul>
5620 SAM client delegate and third- party remote display server:	<ul style="list-style-type: none"> <li>• 4 CPU cores</li> <li>• 16 GB dedicated RAM</li> <li>• 1 GB available disk space</li> </ul> <p>For a maximum of 15 concurrent GUIs. Increased hardware specifications are required as number of concurrent GUIs increases.</p>	<ul style="list-style-type: none"> <li>• 4 CPU cores</li> <li>• 16 GB dedicated RAM</li> <li>• 1 GB available disk space</li> </ul> <p>For a maximum of 15 concurrent GUIs. Increased hardware specifications are required as number of concurrent GUIs increases.</p>

## Scalability

Item description	Release 9.0 R5 Scalability Numbers
Network Elements (NE), with up to 3000* managed Generic Network Elements (GNE)	18,000
GNE, with up to 3000 managed NE	18,000*
NE and GNE	21,000*
Media Dependent Adapter (MDA)	25,000
Services	2 Million
Service Access Point (SAP)	6 Million
LSPs	50,000
Simultaneous operational 5620 SAM GUI clients	150
Simultaneous operational 5620 SAM OSS clients (HTTP, JMS)	30
Outstanding alarm-list entries	50,000
Alarm History Duration (assuming Outstanding alarms limit reached each day)	1 month
Concurrent Standard or Light-weight OAM tests (per 10 minutes)	6,000
Concurrent Accounting-based OAM tests (per 10 min.)	50,000 (To Database) 200,000 (To File)
Combined Accounting and Performance statistics (per 15 minutes)	10 Million (Accounting) 1 Million (Performance)

\* Assuming 10 interfaces per GNE.

**Note:** To achieve the scalability numbers above, consult your Alcatel-Lucent representative for required hardware specifications. 5620 SAM Release 9.0 scalability numbers are planned to increase in the Release 10.0 R-load release cycle. Check the Alcatel-Lucent 5620 SAM product page to download the latest version of this document for the most up-to-date Release 9.0 scalability numbers.

**Note:** Please refer to the Alcatel-Lucent 5620 SAM Release Description (RD) for additional scalability limits for specific NEs, associated MDAs, and limitations with respect to items that can be maximized concurrently.

## Device Support

Device Name	Device Release(s) supported from specified 5620 SAM Release 9.0 R-load onward			
	9.0 R1 (available)	9.0 R3 (available)	9.0 R5 (available)	9.0 R7 (plan of intent)
1830 Photonic Service Switch (PSS)	PSS-1: AHP 1.0, GBEH 2.5, MD4H 1.5; PSS-16/32: 2.5, 2.5.1	<b>PSS-1: GBEH 2.7, MD4H 1.7</b> <b>PSS-4: 1.5</b> <b>PSS-16/32: 3.5, 3.5.1, 3.5.2, 3.5.3</b>		
5780 Dynamic Services Controller (DSC)	2.0, <b>3.0</b>	<b>4.0</b>		
7210 Service Access Switch (SAS) –E	1.0, 1.1, 2.0, <b>3.0 R2/R3/R4</b>		<b>3.0 R5, 4.0 R1</b>	<b>3.0 R6/R7/R8, 4.0 R1</b>
<b>7210 Service Access Switch (SAS) –D</b>	<b>3.0 R2/R3/R4</b>		<b>3.0 R5, 4.0 R1</b>	<b>3.0 R6/R7/R8, 4.0 R1</b>
7210 Service Access Switch (SAS) –M	1.1, 2.0, <b>3.0 R2/R3/R4</b>		<b>3.0 R5, 4.0 R1</b>	<b>3.0 R6/R7/R8, 4.0 R1</b>
7210 Service Access Switch (SAS) –X	2.0, <b>3.0 R2/R3/R4</b>		<b>3.0 R5, 4.0 R1</b>	<b>3.0 R6/R7/R8, 4.0 R1</b>
7250 Service Access Switch (SAS) ES and ESA	3.0			
7250 Service Access Switch (SAS) STD	2.0			
7450 Ethernet Service Switch (ESS)	6.0, 6.1, 7.0, 8.0, <b>9.0 R1</b>	<b>9.0 R3</b>	<b>9.0 R4</b>	
7701 Control Plane Assurance Appliance (CPAA)	<b>5.0 R1</b>			<b>5.0 R7</b>
7705 Service Aggregation Router (SAR)	2.0, 2.1, 3.0, <b>4.0 R1</b>	<b>4.0 R2/R3/R4</b>		<b>5.0 R1/R2</b>
<b>7705 Service Aggregation Router (SAR) -18/-8/-F</b>	<b>4.0 R1</b>	<b>4.0 R2/R3/R4</b>		<b>5.0 R1/R2</b>
<b>7705 Service Aggregation Router (SAR) -M</b>			<b>4.0 R4</b>	<b>5.0 R1/R2 + Fanless</b>
7710 Service Router (SR)	6.0, 6.1, 7.0, 8.0, <b>9.0 R1</b>	<b>9.0 R3</b>	<b>9.0 R4</b>	
7750 Mobile Gateway (MG)	1.0, 2.0, <b>3.0 R1</b>	<b>3.0 R4</b>	<b>3.0 R5, 3.1 R1</b>	
7750 Service Router (SR)	6.0, 6.1, 7.0, 8.0, <b>9.0 R1</b>	<b>9.0 R3</b>	<b>9.0 R4</b>	
<b>9400 AWY (NG digital PDH family)</b>	<b>2.01.04*, 2.01.05*, 2.01.06*</b>			
9412 eNodeB (for FDD)	LA 2.0, 3.0		<b>LA 4.0</b>	
9471 Wireless Mobility Manager (WMM)*	LM 2.0, 3.0	<b>LM 4.0.1</b>	<b>LM 4.0.0, 4.0.2</b>	
9500 Microwave Packet Radio (MPR)	<b>3.00.00</b> ETSI-only: 1.03.01, 1.04.00, 2.01.01 ANSI-only: 1.02.00, 2.02.00, 2.02.01		<b>3.01.00, 3.02.00</b>	
<b>9500 Microwave Packet Radio e (MPR-e)</b>	<b>3.00.00*</b>		<b>3.01.00*, 3.02.00*</b>	
<b>9500 Microwave Services Switch (MSS)</b>	<b>MSS-1c: 3.00.00*</b> <b>MSS-4/-8: 3.00.00</b>		<b>MSS-1c: 3.01.00*</b> <b>MSS-4/-8: 3.01.00, 3.02.00</b>	
<b>9926 eNodeB (for TDD)</b>	TLA 2.1, <b>3.0</b>		<b>TLA 4.0</b>	

OmniSwitch 6250	6.6.2			
OmniSwitch 6400	6.3.4, 6.4.2, 6.4.3, <b>6.4.4 R01</b>			
OmniSwitch 6850 / 6850E	<b>6.4.4 R01</b> 6850 ANSI-only: 6.3.1, 6.4.2, 6.4.3			
OmniSwitch 6855	6.3.1, 6.3.4, 6.4.2, 6.4.3, <b>6.4.4 R01</b>			
OmniSwitch 6855 U24-X	6.4.3, <b>6.4.4 R01</b>		<b>7.2.1 R01</b>	<b>7.2.1 R02</b>
<b>OmniSwitch 6900</b>			<b>7.2.1 R01</b>	<b>7.2.1 R02</b>
OmniSwitch 9000 / 9000E	6.4.2, 6.4.3, <b>6.4.4 R01</b> ANSI-only: 6.3.1, 6.3.4		<b>7.1.1 R01</b>	<b>7.2.1 R02</b>
<b>OmniSwitch 10K</b>			<b>7.1.1 R01</b>	<b>7.2.1 R02</b>
Telco T5C 24G, 24GT, 24T, 24F and 48T variants	BiNOS 6.3.13, 6.5.2, 6.5.5			
Other Devices via Generic Network Elements (GNE)	SNMP v1 (discovery only), v2c and v3			

\* Supported as GNE

\*\* Supported for use as 3GPP MME

**Note:** Please contact your Alcatel-Lucent representative for the latest 5620 SAM Release 9.0 Release Description (RD) for final supported device releases, including minor release loads and specific features supported, as well as information on which specific 5620 SAM Release 9.0 R-loads device releases will be supported in. Information labeled as “plan of intent” or “pre-commit” or “pre-DR0” or “pre-DR1” are subject to change.