Alcatel-Lucent

IP MULTIMEDIA SUBSYSTEM RELEASE 08.04.03

SOLUTION EXTERNAL RELEASE NOTES

Legal Notice

Contents

About this document

Purpose

The purpose of this document is to provide a general overview of the IP Multimedia Subsystem (IMS) Release 08.04.03, including a list of the network element load versions, IMS network level test (NLT) results, and known issues to assist service providers with field deployments of IMS Release 08.04.03.

IMS Release 08.04.03 is a maintenance release for IMS Releases 08.03.01 and 08.04.01.

Reason for revision

This is the first issue of the IMS Release 08.04.03 Release Notes document.

Intended audience

The intended audience for this document includes all personnel who need information about the IMS 08.04.03 release, its functions, and network elements.

This document can be used by the following audiences:

- Planning and design personnel
- Maintenance personnel
- Management personnel
- System installation and integration personnel

Supported systems

See Chapter 7, System Requirements, for information on systems supported in Release 08.04.03.

Conventions used

There are no special typographical conventions used in this document.

Technical support

For technical support, contact your local Alcatel-Lucent customer support team. See the Alcatel-Lucent Support web site (http://alcatel-lucent.com/support/) for contact information.

How to order

This document is available on the Online Customer Support Site (OLCS). To order this document and other Alcatel-Lucent documents, contact your local sales representative or use the OLCS web site (https://support.alcatel-lucent.com).

How to comment

To comment on this document, go to the Online Comment Form (http://infodoc.alcatel-lucent.com/comments) or e-mail your comments to the Comments Hotline (comments@alcatel-lucent.com).

1 Release components

Overview

Purpose

This chapter describes the software loads that comprise Release 08.04.03 and the documentation deliverables included in this release.

Software deliverables

Table 1-1 lists the loads that comprise Release 08.04.03. New or changed load names are shown in bold-face type.

Table 1-1 Software release identification

Network Element/Application	Load Name in IMS 08.04.01	Load Name in IMS 08.04.03	Load Changed Since IMS 08.04.01?
1300 Cross Management Center (XMC)	R7.0.0.4 + IAP04+N13	**R7.0.5.3**	**Yes**
1310 Operations and Maintenance Center – Plus (OMC-P)	OMC-P14_01_02_00	**OMC-P14_03_02_01**	**Yes**
1357 Unified Lawful Intercept Suite (ULIS) Lawful Interception Gateway (LIG)	R12.4.2	**12.5.2_ed03**	**Yes**
5020 Media Gateway Controller – 8 (MGC-8)	LGP7-0-0-3 SP6	**7.0.0.9sp2**	**Yes**
5100 Converged Messaging System (CMS)	CMS-10SU4 (must be a minimum of build 1000.40.038)	CMS-10SU4 (must be a minimum of build 1000.40.038)	No
5410 Presence Server/XML Document Management Services (PS/XDMS)	5.0 SP3 Hp 5350 IAS 3.4 SP3.4 Hp	**5.0 SP3.1 Hp** **5350 ASR 3.4 SP3.5 Hp**	**Yes**
5420 Converged Telephony Server (CTS)	R18.28.01.00 Plus patch: R18.28.01.08	**R18.28.01.00 Plus patch: R18.28.01.15**	**Yes**
5430 Multimedia Instant Messaging (MMIM)	5.0 Q4.04	**5.0 SP2 ASR 3.4 SP3.5 Hp** **XDMS 5.0 SP3.1**	**Yes**
5450 IP Session Control (ISC)	R18.28.01.00 Plus patch: R18.28.01.08	**R18.28.01.00 Plus patch: R18.28.01.15**	**Yes**
5750 Subscriber Services Controller (SSC)	SSC 3.1R5 and SAC/CLF 3.1R5	**R3.1R11-p05**	**Yes**
5900 Media Resource Function (MRF)	MRF7.0.2	**MRF7.0.8.2**	**Yes**
7510 Media Gateway (MGW)	R3.2.2B01c	**R3.2.2 B02b (A7510_R322_08_02_ 2010_B02B)**	**Yes**
7520 Media Gateway (MGW)	LGP7-0-0-3 SP6	**7.0.0.9sp2**	**Yes**
7750 Service Router	7750_R6.0_R9	**7750_R7.0_R6**	**Yes**

Network Element/Application	Load Name in IMS 08.04.01	Load Name in IMS 08.04.03	Load Changed Since IMS 08.04.01?
8615 Instant enhanced Charging Collection Function (IeCCF)	IeCCF 276 Mapdata script IeCCF 27.6 hotslide0101 MAS R27SU6+patch0601 N440 Hardware & T2000 Hardware	**R: IeCCF 27.6 hotslide104 MAS R27SU6+patch0601** **N440 Hardware & T2000 Hardware**	**Yes**
8650 Subscriber Data Manager (SDM) (HSS on ATCA)	SDM R2.1 SU1 IAP002	**SDM2.1 SU1 IAP005**	**Yes**
8950 Services Activation Manager (SAM) (Sun/Linux Platform)	R16.0.4.2	R16.0.4.2	No
Acme Packet 4250	4250: C6.1.0	**C6.1.0m7p3**	**Yes**
Acme Packet 9200	9200: D6.0.0m4p1	**D7.0.0m7p1**	**Yes**
Lucent Communication Manager (LCM)	R6.3.6 (bld.201)	**6.3.6_212 EL5.3**	**Yes**
Billing and Traffic System (BTS)	BTS_7.0.0.0.14	**BTS_7.0.0.0.24**	**Yes**
VitalQIP	VitalQIP R7.2 DNS R4.1 Build 11 ENUM R1.3	**VitalQIP R7.2 PR2** **DNS R5.0 (Build 11)** **ENUM R1.3**	**Yes**

How to obtain software

Please contact your Alcatel-Lucent representative to obtain software.

Document deliverables

For Release 08.04.03, this Release Notes document is the only solution document that is being published. For all other solution documents, please use the latest version (Release 08.03.00).

See the next section, "To obtain documentation", for detailed information on how to obtain IMS Solution documentation.

To obtain documentation

IMS Solution and product documentation is available to IMS Solution customers through OnLine Customer Support (OLCS).

To obtain IMS Solution documentation, do the following:

1. Go to (https://services.support.alcatel-lucent.com/services/ims/).

2. After a successful login, select **Solution Level Manuals and Guides** (for manuals and guides) or **Solution Level Release Information** (for release notes and software upgrade documents) under IMS Solution Level Documentation.

To obtain product documentation, do the following:

3. Go to (https://services.support.alcatel-lucent.com/services/ims/).

4. After a successful login, select a network element from the **Links to network elements in the IMS Solution** section or use the pull-down in the upper-right corner and select Documentation to get to the Product Index.

2   New features

Overview

Purpose

This chapter lists the features included in Release 08.04.03.

New features

There are no new features in this release.

Functionality

See the specific NE documentation for configuration information.

Enhancements

There are no non-feature enhancements in this release other than the features.

3   Test results

Overview

Purpose

This chapter provides information on test execution and pass rates.

Test results/exit criteria

The following table shows the results of the IMS 08.04.03 test program. See Table 6-1 for exceptions.

Table 3-1 NLT test results

Solution	Progress Rate	Quality (Pass Rate)	Exit Criteria Status (Reached/Not Reached)
IMS 08.04.03 (includes Upgrades, E2E Regression, AR, IMR Testing)	100%	97%	Reached

4　Changes to fault management, ports, protocols, and parameters

Overview

Purpose

This chapter describes fault management changes (interfaces, alarms, and messages), port and protocol, and system parameter changes in this release.

Interface changes

Changes to Northbound Interfaces

The following document describes the Northbound interface changes for the 1310 OMC-P:

- *Alcatel-Lucent Gateway Platform Software Release Notes,* 255-400-402R14.3.2.1.1 (See Chapter 5)

The following document describes the Northbound interface changes for the 7520 MGW:

- *Alcatel-Lucent Gateway Platform 7.0.0.0.9.SP.2 Release Notes,* 255-400-006R7.0.0.0.9.SP2 (See Chapter 4)

The following document describes the Northbound interface changes for the 8650 SDM:

- *Alcatel-Lucent IAP005 8650 SDM 2.1 SU1 HSS Installation guide (r4.004.2202-20),* 3BL48893005RJZZA (See Section 9)

The following document describes the Northbound interface changes for the BTS:

- *Alcatel-Lucent Gateway Platform Software Release 7.0.0.0.24 Billing and Traffic System (BTS) Release Notes,* 255-400-404R7.0.0.0.24 (See Appendix A)

The following document describes the Northbound interface changes for the Acme 4250:

- *Acme Packet Net-Net 4250 C6.1.0m7p3 Build Notes,* 630-0035-61M7P3 (See pages 51 and 52)

Changes to Southbound Interfaces

Please consult the NE-specific documentation for southbound interface changes in this release.

Alarm changes

The following documents describe the alarm changes for the 1357 ULIS:

- *Alcatel-Lucent 1357 ULIS IMC Operator Guide,* 3BW93371LGAAPCZZA (See page 157)

- *Alcatel-Lucent 1357 ULIS LIG Operation and Maintenance Guide,* 3BW37718LBAAPCZZA (See page 126)

The following documents describe the alarm changes for the 5450 ISC:

- *Linux Control Platform R18.28.01.15 External Release Notes, 275-900-312R18.28.01.15* (See section 1.5)

The following document describes the alarm changes for the Acme 4250:

- *Acme Packet Net-Net 4250 C6.1.0m7p3 Build Notes,* 630-0035-61M7P3 (See pages 51 and 52)

The following document describes the alarm changes for the Acme 9200:

- *Acme Packet NN9200 D7.0.0 Release Notes,* 400-0080-70 (See page 17)

You can also refer to the following document for additional information about Acme 9200 alarm changes:

- *Acme Packet Net-Net 9200 D7.0 m7p1 Build Notes,* 630-0038-70-M7P1

Message changes

The following document describes the message changes for the 1310 OMC-P:

- *Alcatel-Lucent Gateway Platform Software Release Notes,* 255-400-402R14.3.2.1.1 (See Chapter 5)

Port changes

The following document describes the port changes for the 7510 MGW:

- *Alcatel-Lucent 7510 MGW 3.2.2 B02b Generic Customer Release Note,* 3FZ-04909-AFAA-DFZZA (See Chapter 4)

The following document describes the port changes for the 7520 MGW:

- *Alcatel-Lucent Gateway Platform Release 7.0.0 Maintenance and Diagnostic Procedures Guide,,* 255-400-001R7.0.0 (See Appendix A)

You can also refer to the following solution-level document for additional information about protocol changes for IMS 08.03.00 Network Elements:

- *IP Multimedia Subsystem (IMS) Release 08.03.00 Solution Ports and Protocols,* 275-100-058R08.03.00

Protocol changes

The following document describes the protocol changes for the Acme 4250:

- *Acme Packet Net-Net 4250 C6.1.0m7p3 Build Notes,* 630-0035-61M7P3 (See pages 26, 36, and 50 51)

You can also refer to the following solution-level document for additional information about protocol changes for IMS 08.03.00 Network Elements:

- *IP Multimedia Subsystem (IMS) Release 08.03.00 Solution Ports and Protocols,* 275-100-058R08.03.00

System parameter changes

The following documents describe the system parameter changes for the 5450 ISC:

- *Linux Control Platform R18.28.01.15 External Release Notes, 275-900-312R18.28.01.15* (See section 1.5)

The following document describes the alarm changes for the Acme 9200:

- *Acme Packet NN9200 D7.0.0 Release Notes,* 400-0080-70 (See page 18)

You can also refer to the following document for additional information about Acme 9200 alarm changes:

- *Acme Packet Net-Net 9200 D7.0 m7p1 Build Notes,* 630-0038-70-M7P1

You can also refer to the following solution-level document for additional information about system parameter changes for IMS 08.03.00 Network Elements:

- *IP Multimedia Subsystem (IMS) Release 08.03.00 Solution System Parameters*, 275-100-057R08.03.00

5   Resolved issues

Overview

Purpose

This chapter describes customer-reported ARs and NLT-reported problems resolved in this release.

Resolved issues

This section lists the software related NLT reported problems and customer-reported ARs escalated to NLT, that are resolved in IMS 08.04.03.

Table 5-1 lists the NLT severity 2 issues that were resolved in the loads that are part of this release.

Table 5-1 NLT-Reported severity 2 open issues resolved

NE	Fixed in Load	Abstract	Resolution
ISC	18.28.01.09	S-CSCF de-registers the UE since P-CSCF suppressed UE's re-register	SW fixed in 18.28.01.09, verified with R18.28.01.15
ISC	18.28.01.14	Incorrect relationships between s-cscf pm counts related to subscribe	SW fixed in 18.28.01.14, verified with R18.28.01.15
ISC	18.28.01.14	Expire check not apply to initial register on P-CSCF with reg suppression	SW fixed in 18.28.01.14, verified with R18.28.01.15
ISC	18.28.01.15	ISC/IRC endpoint can't deregister when registration suppression enabled	SW fixed in 18.28.01.15, verified with R18.28.01.15
XMC	7.0.5.1	XMC 7.0.0.4 not aligned with XDMS 5.0 mib: CrossNetw Proxylet counters missing	SW fixed in 7.0.5.1, verified with R7.0.5.3
XMC	7.0.5.2	Not all the performance files for LCP are delivered to XMC	SW fixed in 7.0.5.2, verified with R7.0.5.3
PS/XDMS	XDMS R5.0 SP3.1 ASR 3.4 SP3.5	After crash of agent blade, during restart, 3 minutes of traffic blackout	Verified in IMS 8.4.3

Table 5-2 lists the customer reported software defect ARs that were resolved in the NE loads that are part of this release. While there may be other ARs resolved in the NE loads listed, the table shows only those customer ARs whose fixes dictated particular NE upgrades in IMS 08.04.03.

Table 5-2 Customer-Reported ARs resolved in IMS 08.04.03

AR	NE	Severity	Fixed in Load	Short Description
1-2502077	XMC	3	7.0.5.1	OAM Backup agent location changed in XMC R7.0
1-2523530	XMC	4	7.0.5.1	Automatic acknowledgment rule does not work in XMC
1-2656354	XMC	2	7.0.5.3	Sporadic loss of the 8650 SDM supervision
1-2720389	XMC	4	R7.0.0 IAP BUGFIX C01	XMC : Link failure between XMC and COR1SDMFE
1-2913830	XMC	2	7.0.0.5	Critical alarm on XMC about directory size (/alcatel)

AR	NE	Severity	Fixed in Load	Short Description
1-2712333	ULIS	3	12.4.2 ed9	Target in IMC remains in Terminating status
1-2527407	ISC	3	18.28.01.03	After upgrade R18.22.0.0 to R18.22.0.5, two IMS Boards slot 6 and 10 remain OOS unreachable
1-2561852	ISC	3	18.28.01.10	SIP-Screening : angle bracket should be added automatically if they are not present when URI-parameter is added
1-2563273	ISC	2	18.28.01.05	BGCF triggers indefinitely the NPDB when calling a mobile ported-out subscriber (with CIC)
1-2599775	ISC	3	18.28.01.06	Req-URI sent by p-cscf for emergency Call is always updated by default "R-URI to Emergency Host" from P Profile
1-2661915	ISC	2	18.28.01.09	Diameter link to SDM Achères platform status PROBING
1-2683245	ISC	3	18.28.01.09	Registration fails after having modified S-CSCF Capability List
1-2733293	ISC	3	18.28.01.10	ACR sent by H248ds has Node-Functionality value incorrect
1-2787865	ISC	3	18.28.01.11	No error message when ISC 5450 dropped UDP packet because size is too big
1-2817814	ISC	3	18.28.01.13	Some Heartbeat OPTIONS sent by BGCF don't use correct source port
1-2870287	ISC	2	18.28.01.13	No UDR sent to CLF after upd to R18.28.01.11
1-2734803	IeCCF	1	R27.6 Hotslide104	ACR H248ds/SPDF : AVP-87 Network-Statistic & AVP-88 RTP-Statistic are not type of OctetString
1-2707866	SDM	2	R2.1SU1 IAP05	Primary SDM DB loop restarts
1-2774285	SDM	2	R2.1SU1 IAP05	Switch over pilot A to B with a core DbSupervisor

6   Known issues

Overview

Purpose

This chapter describes NLT- and customer-reported issues that remain open in Release 08.04.03.

Known issues and workarounds

All severity 1 software issues have been resolved in the loads that are part of this release.

There are no NLT-reported severity 2 open issues from Release 08.04.03.

Table 6-1 lists the severity 2 software issues that may be targeted for resolution in a later IMS Release.

Table 6-1 Customer-reported open severity 2 ARs targeted for later IMS release

AR	NE to Lead	Resolve Rls	Fixed in Load	Abstract	Impact Statement / Workaround
1-2976120	SDM	IMS 10.0	SDM 3.0 IAP003	Password Retrieval Through SOAP	SDM R2.1 SU1 IAP005 patch waivers were delivered to specific customers to address this issue. General solution targeted for SDM 3.0 IAP003.

7 System requirements

Overview

Purpose

This chapter contains software requirements that outline the steps to install Java based IMS GUIs on a single PC. Specific network element hardware requirements and compatibility restrictions for IMS 08.04.03 are also referenced.

Software requirements

IMS GUIs JAVA Dependency

Follow the steps listed below to install multiple Java based GUIs on a single PC:

1. Minimum platform: Windows XP SP2 with 2GB RAM and Internet Explorer 7.

2. Close all internet browser windows.

3. Remove all JREs from the PC.

4. Load Java 1.5.0.21 of the JRE 1.5 family.

5. Load Java 1.6.0.20 of the JRE 1.6 family.

6. Use all default settings for the internet browser and Java control panel.

7. Set the Network Settings on the General Tab of the Java Control Panel to Direct Connection.

8. Verify from the Java Control Panel that both JREs, 1.5 and 1.6, are enabled.

9. If the PC is not using a local DNS, then update the DNS Server with the IP address and server name associated with each GUI.

   If the PC is not using a local DNS, then update the PC flat file C:\WINDOWS\system32\drivers\etc\hosts with the IP address and server name associated with each GUI.

10. Load the GUIs in any order:

    * 1310 OMC-P GUI
    * 1300 XMC GUI
    * 5420 CTS, 5420 SCG, 5450 ISC – LCP FSGUI and MIGUI
    * 8650 SDM HSS GUI
    * VitalQIP GUI
    * 5900 MRF GUI
    * 5420 PCM GUI (no GUI)

11. For Internet Browser GUIs, start each GUI in a separate Internet Explorer so the appropriate JRE is loaded. When installing the XMC GUI, select <u>Accept</u> for the certificate.

SUN Operating System Patch Level for Non-Integrated Components

Table 7-1 shows the SUN OS patch level for non-integrated components.

Table 7-1 SUN OS system patch level for non-integrated components

Network Element	OS Level
VitalQIP Enterprise	Solaris 10 Generic_142900-13
VitalQIP DNS	Solaris 10 Generic_142900-13
1310 OMC-P	Solaris 10 Generic_142900-13
BTS	Solaris 10 Generic_142900-13

Software licensing keys

This section does not apply to this release. See the specific NE documentation for more information.

Hardware requirements

Specific hardware requirements are addressed by the network element level release notes and documentation.

Compatibility restrictions

Backward compatibility is supported for the IMS solution software upgrade sequence from IMS 08.03.01 and IMS 08.04.01 to IMS 08.04.03. See the *Alcatel-Lucent Internet Protocol Multimedia Subsystem (IMS) Solution 08.03.00 Software Upgrade* document, 275-100-035R08.03.00, and specific NE documentation for more information. The specific upgrade path must be provided by each NE.

8   Installation and upgrade notes

Overview

Purpose

This chapter provides information on installation, upgrade procedures and security hardening.

Performing first-time installation

Contact your Alcatel-Lucent representative for first-time installation assistance.

Performing upgrades

The following solution-level document describes the recommended installation and upgrade sequence for the IMS network elements:

- *Alcatel-Lucent Internet Protocol Multimedia Subsystem (IMS) Solution 08.03.00 Software Upgrade* 275-100-035R08.03.00

Refer to the NE documentation for specific software upgrade information.

Upgrade paths

Upgrade to IMS 08.04.01 or IMS 08.04.03 is supported from IMS 08.03.01. Network Elements may require multiple transitions to go from IMS 08.03.01 to IMS 08.04.01 or IMS 08.04.03; refer to the specific NE documentation for further details.

Security hardening

Security hardening procedures and information for IMS Release 08.03 NEs are on OLCS. Go to: https://services.support.lucent.com/services/, click on IMS Solutions, then click on Security Hardening IMS Release 07.06.00/08.03.00. From this page, you can click on each NE for security hardening details.

Feature activation

There are no features in this release so feature activation is not needed.

Obtaining and installing third-party software

Contact your Alcatel-Lucent customer support team for more information.

Acronym List

A

AGCF
Access Gateway Control Function

ATCA
Advanced Telecommunications Computing Architecture

AR
Action Register

B

BTS
Billing and Traffic System

C

CMS
Change Management System

CTS
Converged Telephony Server

CVoIP
Consumer Voice over IP

D

DNS
Domain Name System

E

eSM
enhanced Service Manager

F

FS
Feature Server

G

GUI
Graphical User Interface

H

HSS
Home Subscriber Server

I

ICC
Instant Convergent Charging

IeCCF
Instant enhanced Charging Collection Function

IMS
IP Multimedia System

ISAM
Intelligent Services Access Manager

ISC
IP Session Control

L

LCM
Lucent Communication Manager

LIG
Lawful Interception Gateway

M

MGC
Media Gateway Controller

MGW
Media Gateway

MMIM
Multimedia Instant Messaging

MRF
Media Resource Function

N

NE
Network Element

NLT
Network Level Test

O

OAM
Operations, Administration, Maintenance

OLCS
OnLine Customer Support

OMC-P
Operations and Maintenance Center – Plus

P

PES
PSTN Emulation Solution

PCM
Personal Communication Manager

PS
Presence Server

PSTN
Public Switched Telephony Network

S

SAM
Services Activation Manager

SDM
Subscriber Data Manager

SQM
Service Quality Manager

SSC
Subscriber Services Controller

U

ULIS
Unified Lawful Intercept Suite

USDS
Unified Subscriber Data Server

V

VoIP
Voice over Internet Protocol

VSG
Voice Signaling Gateway

X

XDMS
XML Document Management Services

XMC
Cross-domain Management Center