Alcatel-Lucent

IP MULTIMEDIA SUBSYSTEM RELEASE 09.00.00
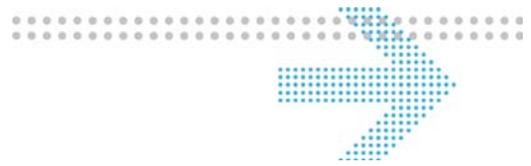
SOLUTION EXTERNAL RELEASE NOTES

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Contents

About this document

Purpose

The purpose of this document is to provide a general overview of the IP Multimedia Subsystem (IMS) Release 09.00.00 including a list of the network element load versions, IMS network level test results, and known issues to assist service providers with field deployments of IMS Release 09.00.00.

Reason for revision

This is the first issue of the IMS Release 09.00.00 Release Notes document.

Intended audience

The intended audience for this document includes all personnel who need information about the IMS 09.00.00 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 09.00.00.

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).

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1   Release components

Overview

Purpose

This chapter describes the software loads that comprise Release 09.00.00 and the documentation deliverables included in this release.

Software deliverables

Table 1-1 lists the loads that comprise Release 09.00.00. New or changed load names are shown in bold-face type.

Table 1-1 Software release identification

Network Element/Application	Load Name in IMS 08.03.01	Load Name in IMS 09.00.00	Load Changed Since IMS 08.03.01?
1300 Cross Management Center (XMC)	R7.0.0.4 + IAP04	**R7.0.0.4 Plus R7.0.0.4 IAP C01**	**Yes**
1310 Operations and Maintenance Center – Plus (OMC-P)	OMC-P14_01_02_00	**OMC-P_14_03_00**	**Yes**
1357 Unified Lawful Intercept Suite (ULIS) Lawful Interception Gateway (LIG)	R12.4.2	**R12.5.1 ed. 2**	**Yes**
1440 Unified Subscriber Data Server (USDS) (Includes MAS/AHE)	R7.3 SPA: hlr7.3.n04.upd72.01 MAS: ltmasr27-p0207 Then upgrade to: 1440 USDS R7.3 P01 MAS R27 SU2 Patch (ltmasr27-p0214)	**1440_USDS_R8.0_RTS MAS: MAS R28 SU1 Patch (ltmasR28-p0105)**	**Yes**
1540 Litespan	R3.2.50	R3.2.50	No
5020 Media Gateway Controller – 8 (MGC-8)	LGP7-0-0-3 SP6	**LGP7-1-0-0 LGP-7-1-0-1**	**Yes**
5100 Converged Messaging System (CMS)	CMS-10SU4 (must be a minimum of build 1000.40.0.38)	**CMS-10SU4 build 4 (1000.40.1.4)**	**Yes**
5420 Converged Telephony Server (CTS)	R18.28.01.00 Plus Patch: R18.28.01.02	**R20.17.01.00 R20.17.01.02**	**Yes**
5420 Personal Communication Manager (PCM)	Not Applicable	**PCM_7.0.0_GA_Build 130**	**New**
5450 Access Gateway Control Function (AGCF)	AGCF5_1_2R1S2 + AGCF5_1_2R1S2P1	**AGCF5_1_3R1**	**Yes**
5450 IP Session Control (ISC)/ IP Resource Controller (IRC) (includes iAGCF)	R18.28.01.00 Plus Patch: R18.28.01.02	**R20.17.01.00 R20.17.01.02**	**Yes**
5750 Subscriber Services Controller (SSC)	SSC 3.1R5 and SAC/CLF 3.1R5	SSC 3.1R5 and SAC/CLF 3.1R5	No

Network Element/Application	Load Name in IMS 08.03.01	Load Name in IMS 09.00.00	Load Changed Since IMS 08.03.01?
5900 Media Resource Function (MRF)	MRF7.0.2	MRF7.0.2	No
7302 Intelligent Services Access Manager (ISAM) -V	ISAM-V-R40 R 40.129 Plus R 4.0.0.a (load 40.132)	ISAM-V-R40 R 40.129 Plus R 4.0.0.a (load 40.132)	No
7510 Media Gateway (MGW)	7510 R32_10_23_2009_B01 (for IPv6) A7510_R31N_10_09_2 009_B08 (for IPv4)	**7510_R322_01_13_2010_B 01**	**Yes**
7515 SIP-MGW	7515R31S B0110	7515R31S B0110	No
7520 Media Gateway (MGW)	LGP7-0-0-3 SP6	**LGP7-1-0-0 LGP-7-1-0-1**	**Yes**
7750 Service Router	7750_R6.0_R9	**7750_R7.0_R6**	**Yes**
8610 Instant Convergent Charging (ICC)	ICCR462MD02	ICCR462MD02	No
8615 Instant enhanced Charging Collection Function (IeCCF)	N440 and T2000 IeCCF 276 Mapdata script (not NLT tested) + IeCCF 27.6 hotslide0101	**N440 IeCCF 27.6 :: MAS R27SU6 patch0601** **IeCCF 27.6 + MAS R27SU6 patch0601** **IeCCF 27.6 hotslide0101** **T2000, 5440 IeCCF r28.0 :: MAS R28SU1 patch0105** **Note: no SU to r28.0, must be a new install**	**Yes**
8650 Subscriber Data Manager (SDM) (HSS on ATCA)	**8650 SDM R2.1 SU1 IAP001**	**8650 SDM R2.1 SU1 IAP002**	**Yes**
enhanced Service Manager (eSM)	eSM R26 SU9	**eSM R27 SU4_PA (R27SU4 P4.1**	**Yes**
Fortinet Fortigate Firewall	v3.0.MR5.8108	**FGT_5005FA2-v300-build8143-mr5**	**Yes**
Gateway Platform **Includes:** **- 5020 MGC-8** **- 7520 MGW**	LGP7-0-0-3 SP6	**LGP-7-1-0-0** **LGP-7-1-0-1**	**Yes**
OXE OmniPCX Enterprise	R9.0-h1.301-28-b-us-c80s1	**R9.1 version l1.605.13**	**Yes**
Billing and Traffic System (BTS)	BTS_7.0.0.0.14	**BTS_7.1.0.0.19**	**Yes**

Network Element/Application	Load Name in IMS 08.03.01	Load Name in IMS 09.00.00	Load Changed Since IMS 08.03.01?
VitalQIP	VitalQIP R7.2 DNS R4.1 Build 11 ENUM R1.3	**VitalQIP R7.2 PR1** **DNS R4.2 (BIND 9.5.1-P3)** **ENUM R1.3**	**Yes**

How to obtain software

Please contact your Alcatel-Lucent representative to obtain software.

Document deliverables

Table 1-2 shows the solution documentation available for IMS Release 09.00.00.

Table 1-2 IMS 09.00.00 solution documentation

Title	Ordering number
IMS Release 09.00.00 Solution Technical Description	275-100-000R09.00.00
IMS Release 09.00.00 Solution Operations, Administration, & Maintenance	275-100-001R09.00.00
IMS Release 09.00.00 Solution Release Notes	275-100-004R09.00.00
IMS Release 09.00.00 Software Upgrade	275-100-035R09.00.00
IMS Release 09.00.00 Interface Changes Specifications	275-100-050R09.00.00
IMS Release 09.00.00 Solution System Parameters	275-100-057R09.00.00
IMS Release 09.00.00 Solution Ports and Protocols	275-100-058R09.00.00
IMS Release 09.00.00 Solution Growth	275-100-059R09.00.00
IMS Release 09.00.00 Solution Provisioning	275-100-060R09.00.00

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:

1. Go to (https://services.support.alcatel-lucent.com/services/ims/).
2. 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 09.00.

New features

The following features are included in this release:

Table 2-1 Features released in IMS 09.00.00

Feature Number	Feature Title
33333.141	NLT testing for OMC-P on M4000 Hardware
33333.142	NLT testing for BTS on T5440 Hardware
33333.144	NLT testing for IeCCF on T5440
33333.162	IMS 9.0 Priority 1 Network Assurance Improvements
33333.290	IP Peering Border Enhancements
33333.311	ALU access border solution testing - IMS 9.0
33333.314	Distributed IMS Consumer VoIP (CVoIP)
33333.316	IMS9.0 Solution Support of IPv6
33333.322[1]	IMS Solution: E2E Testing of Common Service Enhancements
33333.323	IMS Solution: Class 5 PSTN Emulation Subsystem Services
33333.324	IMS Solution: E2E Testing of PBX Enhancements
33333.325	IMS Solution: Video Services
33333.334	ALU Media Negotiation Function (Transcoding) Solution
33333.348	IP Architecture IMS 9.0
33333.366	1310 OMC-P FM/PM Coverage of NEs for IMS 7.7 / 9.0
33333.372	Mass Data Migrations Solution testing I:

[1] LNP testing targeted for completion by General Availability

Functionality

See the specific NE documentation for configuration information.

Enhancements

There are no 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 09.00.00 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 09.00.00 Solution Testing	100%	95%	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 between Release 08.03.01 and this release.

Interface changes

Changes to Northbound Interfaces

The following document describes the Northbound interface changes for this release:

- *IMS Release 09.00.00 Interface Changes Specifications,* 275-100-050R09.00.00

Changes to Southbound Interfaces

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

Alarm changes

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

Message changes

Please consult the NE-specific documentation for new messages or changes to messages in this release.

Port changes

The following document describes the port changes for this release:

- *IMS Release 09.00.00 Solution Ports and Protocol,* 275-100-058R09.00.00

Protocol changes

The following document describes the protocol changes for this release:

- *IMS Release 09.00.00 Solution Ports and Protocol,* 275-100-058R09.00.00

System parameter changes

The following document describes the system parameter changes for this release:

- *IMS Release 09.00.00 Solution System Parameters,* 275-100-057R09.00.00

5   Resolved issues

Overview

Purpose

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

Resolved issues

This section lists resolved issues that were previously reported as *Known Issues* in Chapter 6. Since this is the first release for IMS 09.00.00, this chapter does not apply.

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

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

NE to Lead	Resolve Rls	Fixed in Load	Current Status	Solution(s)	Exception Description
None					

6   Known issues

Overview

Purpose

This chapter describes NLT-reported issues that remain open in Release 09.00.00.

Known issues and workarounds

As of April 2010, no customer-reported ARs have been opened against this release.

Table 6-1 lists the severity 2 issues that were not resolved in the network element loads that are part of this release.

Table 6-1 NLT-reported severity 2 open issues from IMS 09.00.00

NE to Lead	Resolve Rls	Fixed in Load	Current Status	Solution(s)	Exception Description	Impact Statement / Workaround
8650 SDM	Under Investigation	Targeted for R2.1SU1 IAP05	Targeted for R2.1SU1 IAP05	Install/upgrade	Diameter Cx Connections bounce with faulty Malban that reboots constantly.	The reset of a MALBAN causes 3 minutes of unavailability. This is a Radware 'load balancer' issue, and will be targeted for a future IAP.
1310 OMC-P	Targeted for IMS9.0.1	OMC-P_14.3.1.1	Fix provided in OMC-P_14.3.1.1	fixed_ngn	TCAs cannot be generated on OMC-P for 486 sip message on MGC-8.	Customer impact: Customer will not receive threshold crossing alarms, via the OMC-P, when the number of 486 sip message on plexus exceeds the threshold.
ISC	Targeted for IMS9.0.1	Targeted for ISC 20.60.01.01	ISC 20.60.01.01	Core	Adding Sip Stack Timer Profile error message on OMC-P is inconsistent with FSGUI.	The customer will not understand the error message displayed on the OMC-P and will need to look at the FSGUI for the correct view.

NE to Lead	Resolve Rls	Fixed in Load	Current Status	Solution(s)	Exception Description	Impact Statement / Workaround
ISC	Targeted for IMS9.0.1	Targeted for ISC 20.60.01.02	ISC 20.60.01.02; to NLT on May 14, 2010	cvoip_xdsl	Diameter stack (client side - PCSCF) failed to routing RAR - IMS9.0 NLT CPRS.	The feature (FID 12511.74) Unique Network Interface Types should not be activated in the ISC in ISM 9.0. The Gq' interface, if using a unique NI type, will cause request messages coming from PDFE/7510 to not be delivered to ALG. An audit then tears down the voicepath of the call.
1310 OMC-P	Targeted for IMS9.0.1	Targeted for OMC-P 14.3.1.1	On track for OMC-P 14.3.1.1	cvoip_xdsl	Cannot modify sip header rule with update string.	Modification of SIP header rule does not follow TL1 convention. Workaround: LT command format needs to be entered using the following format (strings inside single quotes e.g. 'test123'): ED-SIP-HDRRULE::1-2:::updatestring='"test123"'.
ISC (iAGCF)	Under investigation	Under investigation	Under investigation	pstn	Media Negotiation (iAGCF) Transcoding with 3-way call fails.	When Media Negotiation (iAGCF) is activated with a 3-way conference call and transcoding is triggered by the 3rd (C-party), the 2nd (B-party) is dropped from the conference call. A party - pots(iagcf) B party - pots(iagcf) C party - UE/PcClient(G723) In this scenario transcoding is performed by the BGF(7510).

7   System requirements

Overview

Purpose

This chapter describes IMS GUI Java dependencies and compatibility restrictions.

Software requirements

IMS GUIs JAVA Dependency

Table 7-1 shows IMS GUIs with Java installation dependencies (listed in order of installation sequence).

Table 7-1 IMS GUIs with Java installation dependencies

LCP MI GUI	Java installed per link provided during initial start of MI GUI (Java 1.5.0_06)
XMC GUI	Java installed per link provided during initial start of MI GUI (Java 1.5.0_15)

The following NE GUIs do not have Java dependencies: 5420 CTS, 5450 ISC, 1310 OMC-P, 5900 MRF.

SUN Operating System Patch Level for Non-Integrated Components

Table 7-2 shows the SUN OS patch level for non-integrated components.

Table 7-2 SUN OS system patch level for non-integrated components

Network Element	OS Level
VitalQIP Enterprise	Solaris 10 Generic_127111-09
VitalQIP DNS	Solaris 10 Generic_127111-09
1310 OMC-P	Solaris 10 Generic_127111-09
BTS	Solaris 10 Generic_127111-09

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 to IMS 09.00.00. See the *Alcatel-Lucent Internet Protocol Multimedia Subsystem (IMS) Solution 09.00.00 Software Upgrade* document, 275-100-035R09.00.00, 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 09.00.00 Software Upgrade* 275-100-035R09.00.00

Refer to the NE documentation for specific software upgrade information.

Upgrade paths

Upgrade to IMS 09.00.00 is supported from IMS 08.03.01. Network Elements may require multiple transitions to go from IMS 08.03.01 to IMS 09.00.00; refer to the specific NE documentation for further details.

Security hardening

Security hardening procedures and information for IMS Release 08.03 NEs will be on OLCS at General Availability. Go to: https://services.support.lucent.com/services/, click on IMS Solutions, then click on Security Hardening IMS Release 07.07.00/09.00.00. From this page, you can click on each NE for security hardening details.

Feature activation

Feature activation is done at the NE-level. Please consult with your Alcatel-Lucent customer support team for more information.

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

IRC
IP Resource Control

ISAM
Intelligent Services Access Manager

ISC

L

LCM
Lucent Communication Manager

M

MGC
Media Gateway Controller

MGW
Media Gateway

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

PSTN
Public Switched Telephony Network

S

SAM
Services Activation Manager

SCG
Service Continuity Gateway

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

XMC
Cross-domain Management Center