



Alcatel-Lucent

INTERNET PROTOCOL MULTIMEDIA SUBSYSTEM (IMS) SOLUTION
06.01.15B

EXTERNAL RELEASE NOTES

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About this document



Purpose

The purpose of this document is to provide a general overview of the IP Multimedia Subsystem (IMS) Release 06.01.15b, 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 06.01.15b.

Reason for reissue

This is the first issue of the IMS Release 06.01.15b Release Notes.

Intended audience

The intended audience for this document includes all personnel who need information about the IMS 06.01.15b 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

IMS Release 06.01.15b is a maintenance release update for IMS Release 06.01. NLT solution testing for this release was performed on the IMS CVoIP application.

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.

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1 Release components

Overview

Purpose

This chapter describes the loads that comprise Release 06.01.15b and the documentation deliverables included in this release.

Software deliverables

Table 1-1 lists the Network Elements and loads that comprise Release 06.01.15b. New or changed load names are shown in bold-face type.

Table 1-1 Software release identification

Network Element/Application	Load Name in IMS 06.01.15a	Load Name in IMS 06.01.15b	Load Changed Since IMS 06.01.15a?
2Wire RBGWs ¹	5.29.135.29	5.29.135.29	No
1300 Cross Management Center (XMC)	R6.2.0.3	R6.2.0.3	No
1440 USDS (Includes MAS/AHE)	USDS-04.03.71.18 MAS-R26SU6-p0617 SPA HCF710 SPAHDF710	USDS-04.03.71.18 MAS-R26SU6-p0617 SPA HCF710 SPAHDF710	No
5020 MGC-8 (was Lucent Network Controller (LNC), Lucent Signaling Gateway)	6.3.0.4.SP14	6-3-0.4.SP14	No
5020 MGC-12	R2.2.7.13	R2.2.7.13	No
5100 CMS (AnyPath)	AnyPath-R8.2-SU4	AnyPath-R8.2-SU4	No
5350 IMS Application Server (IAS) (Presence, XDMS)	R4.0 SP3.2 + Patches	R4.0 SP3.2 + Patches	No
5440 IMS-PC Client	IMS-PC-Client-R1.3.4-Mtce-v1713	IMS-PC-Client-R1.3.4-Mtce-v1713	No
5450 AGCF	AGCF5_0_0R1S3	AGCF5_0_0R1S3	No
5420 Voice Call Continuity Server (VCC)	SCR 3.1 0R1S1A16 (1.1.1.28)	SCR 3.1 0R1S1A16 (1.1.1.28)	No
5430 Session Resource Broker (SRB)	3.1.1R1P5	3.1.1R1P5	No

¹ Please contact 2Wire for software and documentation. Alcatel-Lucent does not warranty this product.

Network Element/Application	Load Name in IMS 06.01.15a	Load Name in IMS 06.01.15b	Load Changed Since IMS 06.01.15a?
5750 Subscriber Services Controller (SSC)	SSCR3.0R1	SSCR3.0R1	No
5900 MRF	6.3.1 Required Patches:5990, 6245, 6299, 6360, 6430, 6968, 6976, 7034, 7041, 7591, 7622, 7637, 7881 Previous patches made obsolete by above patches: 6441, 7270 Annlab 4.4.13 MCDP Rel 1.2_Patch12	6.3.1² Required Patches: 5990, 6245, 6299, 6360, 6430, 6968, 6976, 7034, 7041, 7591, 7622, 7637, 7881, 9292, 9405 Previous patches made obsolete by above patches: 6441, 7270 Annlab 4.4.13 MCDP Rel 1.2_Patch12	Yes
7302 ISAM-V	R3.4.01	R3.4.01	No
7302 ISAM-V for Manx ³	ISAM3.3.02c	ISAM3.3.02c	No
7510 MGW	R2.6	R2.6	No
7520 MGW (was Lucent Network Gateway)	6.3.0.4.SP14	6.3.0.4.SP14	No
7720 Access Border Node (ABN)	R33_04_001-B Reefpoint IQ : IMS 1.2.2.2-QA 29	R33_04_001-B Reefpoint IQ : IMS 1.2.2.2-QA 29	No
8640 Corporate Mobility Manager (CMM)	CMMGEN50-02/05	CMMGEN50-02/05	No
8615 leCCF (was Surepay CCF)	N440 – eCCF R26SU5-hotslide0103 leCCF R26SU5-esm-service-hotslide0101 spa ECCF265 MAS R26SU7-p0709 (ltmasr26-p0709) T2000 – leCCF R27SU3 (Base) leCCF R27SU3-hotslide0101 spa ECCF268 MAS R27SU2-p0209 (ltmasr27-p0209)	N440 – eCCF R26SU5-hotslide0103 leCCF R26SU5-esm-service-hotslide0101 spa ECCF265 MAS R26SU7-p0709 (ltmasr26-p0709) T2000 – leCCF R27SU3 (Base) leCCF R27SU3-hotslide0101 spa ECCF268 MAS R27SU2-p0209 (ltmasr27-p0209)	No
8670 GUP (was 1390 GUP)	UPP4.3.1.R1S1P1 ENSUPP4.3.1.R1S1P1	UPP4.3.1.R1S1P1 ENSUPP4.3.1.R1S1P1	No
8680 Video voice Mail Box	3.0.04 patch012	3.0.04 patch012	No

² Software 6.3.1 with patches was tested by NLT, but it is recommended that customers wait until 6.3.3 software is available before applying software updates.

³ Not part of the generic reference architecture.

Network Element/Application	Load Name in IMS 06.01.15a	Load Name in IMS 06.01.15b	Load Changed Since IMS 06.01.15a?
8950 Vital AAA ⁴	VitalAAA-5.2.2	VitalAAA-5.2.2	No
Acme Packet Net-Net EMS	EMS 6.0.0p3	EMS 6.0.0p3	No
Acme Packet Session Director (4250)	C5.0.0p24	C5.0.0p24	No
Acme Packet Session Director (9200)	D5.1.0p3	D5.1.0p3	No
Audiocodes – IPM2K	Audio-Codes-IPM1610_SIP_F5.00A.03 2.003 Audio-Codes for Compact IMS – 5.20A.015.004	Audio-Codes-IPM1610_SIP_F5.00A.03 2.003 Audio-Codes for Compact IMS – 5.20A.015.004	No
Audiocodes – IPM5K ⁵	Audio-Codes-AC_IPM5K_R5.0.50-1.1a	Audio-Codes-AC_IPM5K_R5.0.50-1.1a	No
Dorado ⁶	5.3.8.1	5.3.8.1	No
eMRS ⁷	eMRS-R25SU9-b0915 (ltcsnr25-b0915) IPMS-255 IPMS-253to255-SPAFU CALEA-251 CALEA-250to251-SPAFU	eMRS-R25SU9-b0915 (ltcsnr25-b0915) IPMS-255 IPMS-253to255-SPAFU CALEA-251 CALEA-250to251-SPAFU	No
eSM	PA-RISC-eSM eSM-01.26.06 P9 Itanium - eSM ⁸ : eSM-01.26.06 P9	PA-RISC-eSM eSM-01.26.06 P9 Itanium - eSM ⁹ : eSM-01.26.06 P9	No
5400 Intelligent Services Gateway (ISG)	ISG-08.00.00.05 svc-ISGD-800 svc-FW-800 svc-FWD-800 svc-CDBMON-800 svc-CCSIP-800 svc-ISG-800 MAS-R26SU4-p0423 (ltmasnr26-0423)	ISG-08.00.00.06 svc-ISGD-800 svc-FW-800 svc-FWD-800 svc-CDBMON-800 svc-CCSIP-800 svc-ISG-800 MAS-R26SU4-p0423 (ltmasnr26-0423)	No
Intelliviv Client	Intelliviv 1.2.0.3000	Intelliviv 1.2.0.3000	No

⁴ 8950 Vital AAA was part of the WiMAX BU lab environment but not specifically tested by IMS 06.01.15 NLT.

⁵ Audiocodes – IPM5K was integration tested with CTS and ISC, but it was not tested by NLT in IMS 06.01.15.

⁶ Not part of the generic reference architecture.

⁷ Not part of the generic reference architecture. It will only be used in certain existing customer configurations.

⁸ Itanium version of eSM is not tested by NLT.

⁹ Itanium version of eSM is not tested by NLT.

Network Element/Application	Load Name in IMS 06.01.15a	Load Name in IMS 06.01.15b	Load Changed Since IMS 06.01.15a?
Lucent Control Platform (LCP) Includes: - 5420 CTS (was Lucent Feature Server 5000) - Lucent Feature Server 2500 - 5450 ISC (was Lucent Session Manager, LSM)	R14.28.00.06	R14.28.00.06	No
Lucent Communication Manager (LCM)	6.3.5_GA Red Hat Linux Version 3 update 8	6.3.5_23 Red Hat Linux Version 3 update 8	Yes
Lucent Network Gateway for solutions with a Lucent Control Platform-based MGCF	Plexus_WAG-6131.C133.0.0	Plexus_WAG-6131.C133.0.0	No
Lucent Security Management Software (LSMS)	9.1.308	9.1.308	No
Lucent VPN Firewall (LVF)	9.1.308	9.1.308	No
OMC-CN	R3.0 SU5	R3.0 SU5	No
OMC-H	R07.05.01.06.16	R07.05.01.06.16	No
OMC-P	13.0.2.02	13.0.2.02	No
Plexus BTS	6.3.1.0.9 TCA 2.0.0.116	6.3.1.0.9 TCA 2.0.0.116	No
PCTel ¹⁰	PCTel-V2.00.23	PCTel-V2.00.23	No
Riverstone (Lucent Ethernet Router)	For 15100, 200 series R1.5.1.2-N -For 15800 series: R1.5.0.7-SA01 or R1.5.0.8-SA01 -For 3100 series: V9.4.1.6 (for support of trials only)	For 15100, 200 series R1.5.1.2-N -For 15800 series: R1.5.0.7-SA01 or R1.5.0.8-SA01 -For 3100 series: V9.4.1.6 (for support of trials only)	No
SS8 WDDF (Lawful Intercept Gateway)	3.7.1 SU03 3.7.1 SU04	3.7.1 SU03 3.7.1 SU04	No
VCC Light CAMEL Gateway (LCGW)	OSP platform: R2.4.2 + LCGW 1.0	OSP platform: R2.4.2 + LCGW 1.0	No
VitalQIP	VitalQIP R7.1 DNS R4.0 Build 25 ENUM R1.2 VQIP eSM ISR: USDS-04.01.70.06 (only VQIP200 file) Solaris 9 kernel 122300-26 (05/08)	VitalQIP R7.1 DNS R4.0 Build 25 ENUM R1.2 VQIP eSM ISR: USDS-04.01.70.06 (only VQIP200 file) Solaris 9 kernel 122300-26 (05/08)	No

¹⁰ Trial only

Network Element/Application	Load Name in IMS 06.01.15a	Load Name in IMS 06.01.15b	Load Changed Since IMS 06.01.15a?
VitalSuite® Services Activation Manager (SAM)	R15.0	R15.0	No
VitalSuite® Voice Activation Manager (VAM) ¹¹	R13.0, Nov. Patch	R13.0, Nov. Patch	No
Westell TriLink™ Gateway Model 427V A99-427V30a-00	Westell_RBGW-01.00.12.01, sw2.0053.25.01	Westell_RBGW-01.00.12.01, sw2.0053.25.01	No
Windows Mobile Client	WM-Client-PPC-R4.1-V8.0.4.5	WM-Client-PPC-R4.1-V8.0.4.5	No
Zyxel	ZyXEL CPE Rev2 Mother Board MAX210M1_360AKG0b1 6_20080417 RUNCOM 206.70.24.26 for 3.5ghz or ZyXEL CPE Rev2 Mother Board MAX200M1_360AKG0b1 6_20080417 RUNCOM 206.70.24.26 for 2.5ghz	ZyXEL CPE Rev2 Mother Board MAX210M1_360AKG0b1 6_20080417 RUNCOM 206.70.24.26 for 3.5ghz or ZyXEL CPE Rev2 Mother Board MAX200M1_360AKG0b1 6_20080417 RUNCOM 206.70.24.26 for 2.5ghz	No
Zyxel PCMCIA card (used in PC client)	ZyXEL PCMCIA MAX100_1.0.4.4	ZyXEL PCMCIA MAX100_1.0.4.4	No

¹¹ Not part of the generic reference architecture.

NE to Solution mapping

Not applicable for this release. Only the IMS CVoIP application was tested by NLT in IMS Release 06.01.15b.

How to obtain software

Please contact your Alcatel-Lucent representative to obtain software.

Document deliverables

For the latest solution documents, please use the Release 06.01.09 versions.

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 navigate OLCS, do the following:

1. Go to (<https://support.lucent.com/portal/productIndexByCat.do>).
2. After a successful login, select **Services Collaboration** from the list on the left side of the page.
3. Select **IMS Solutions** from the list in the middle of the page.

From here, you can access the documentation through either the **IMS Solution Level Documentation** section or by selecting a network element from the **Links to network elements in the IMS Solution** section.

2 New features



Overview

Purpose

This chapter lists the features included in Release 06.01.15b.

New features

The following features are included in this release.

Table 2-1 New features

FID Number	FID Title
33333.117	LCM 6.3.5 on x2100 m2 hardware for CVOIP
33333.131	End to End provisioning performance testing for multiple LCM clusters and multiple FS5k clusters

Functionality

Support for the following functionality was verified in IMS 06.01.15b:

- Multiple LCM with Multiple FS5K

See the specific NE documentation for configuration information.

Enhancements

There are no non-feature enhancements in this release.

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 06.01.15b solution test program.

Table 3-1 NLT test results

Solution	Progress Rate	Quality (Pass Rate)	Exit Criteria Status (Reached/Not Reached)
<i>Regression</i>	100%	97.5%	Reached
<i>Multiple LCM w/Multiple FS5K</i>	100%	91.5%	Not Reached*
<i>Total</i>	100%	95%	Reached

* See Table 6-1 for exceptions.

Performance test results

The following tables show the results of the IMS 6.1.15b End-to-End Provisioning throughput test program with NLT mixed hardware test environment. These results are presented for this release only.

Table 3-2 OMC-P northbound transactions measurements test results

(OMCP 13.0.2.2, LCM 6.3.5_21, FS5K 14.28.00.06)

E2E Run Description	# of Subs on OMCP	# of Subs on LCM	NBI XML - OMCP Order/HR	NBI XML - OMCP Trans/HR	Lowest LCM CPU Idle	Call Log Base
2 LCM, 4 pri-FS5K (SIP-SIP background call load)	1.31M	1-672K 2-642K	8492	17036	77% (x2100m2) root master Dnode	61.4M

Table 3-3 OMC-P southbound LCM transactions measurement test results

E2E Run Description	# of Subs on LCMs	OMCP-LCM Trans/HR	LCM Add Ave Resp	LCM Mod Ave Resp	LCM Del Ave Resp
2 LCM, 4 pri-FS5K (SIP-SIP background call load)	1-672K 2-642K	1 - 3162 2 - 5360	1 - 0.27s 2 - 0.13s	0.13s	0.10s

Table 3-4 OMC-P southbound FS5K transactions measurement test results

E2E Run Description	# of Subs on FS5K	OMCP-FS5Ks Trans/HR	FS5Ks Add Ave Resp	FS5K Mod Ave Resp	FS5K Del Ave Resp
2 LCM, 4 pri-FS5K (SIP-SIP background call load)	1 - 375K 2 - 303K 3 - 395K 4 - 248K	4668	0.57s	0.24s	0.15s

The following tables show the results of the IMS 6.1.15b End-to-End OMC-P Up-Sync Enhancements with LCM & 5420 CTS Network Elements. OMC-P 13.0.2 provides Up-Sync enhancements for LCM and 5420 CTS sync while LCM 6.3.5 Sync with OMC-P was re-architected to use bulk file transfers. These results are presented for this release only. The NLT environment for which these results were produced included:

- OMC-P ~1.3 million subscribers
- LCM system 1 (mixed HW system) ~678K subscribers
 - CTS-a ~375K subscribers
 - CTS-b ~303K subscribers
- LCM system 2 (X2100M2 HW system) ~646K subscribers
 - CTS-c ~396K subscribers
 - CTS-d ~250K subscribers

Table 3-5 OMC-P sync with LCM measurements results

LCM SW	OMC-P SW	# of Subs	Network Delay	Sync Duration	Subs/HR Subs/Min
6.3.5_21 X2100M2 LCM system (with SIP-SIP background load)	13.0.2.2	640K	50ms	7:23 min	5M+ subs/hr 87K+ subs/min

Table 3-6 OMC-P sync with CTS measurements results

5420 CTS SW	OMCP SW	# of Subs	Network Delay	Sync Duration	Subs/HR
14.28.00.06 (netwk delay, SIP-SIP backgrnd load)	13.0.2.2	395K	50ms	1:34 hr	250K subs/hr

During the IMS 6.1.15 NLT test interval, the NLT team completed basic IMS solution level performance testing. Table 3-7 presents the results observed during this testing. The call set-up parameters used to produce these results include:

- Number of Subscribers: 400,000 (1.50 BHCA)
- Call Rate: 167 cps (600,000 BHCA)
- Call Hold Time: 180 sec (30,000 sessions)
- Test Duration: 18 hours

Table 3-7 IMS Solution level performance results

	Acme 9200	ISC
Number of Subscribers :	180,000 (1.50 BHCA)	400,000 (1.50 BHCA)
Call Rate :	75 cps (270,000 BHCA)	167 cps (600,000 BHCA)
Call Hold Time :	180 sec (13,500 sessions)	180 sec (30,000 sessions)
Max CPU Load :	69.8%	54.40%
Min Memory Free :	65%	300 Mb

During the NLT 6.1.15b testing, it was discovered that the LCM migration rate was slow due to a quarantine that was in progress. The exception is documented in Table 6-1. Table 3-8 shows the migration rate observed during the testing.

Table 3-8 - LCM migration rate is slow due to quarantine

LCM System and Scenario	LCM SW	# of Subs	# Anodes available	Conversion Duration	Subs/HR	Observed Rate Anode/Hr	Observed Rate Subs/Min/Anode
LCM1 quarantine (mixed HW system)	6.3.5_23	672K	23	1:45 hr	383K	16,700	278
LCM1 unquarantine (mixed HW system)	6.3.5_23	672K	29	4:31 hr	148K	5,100	86
LCM2 quarantine (X2100M2 HW system)	6.3.5_23	394K	6	0:38 hr	621K	103,500	1726
		248K	6	0:18 hr	827K	137,800	2297
LCM2 unquarantine (X2100M2 HW system)	6.3.5_23	642K	12	1:30 hr	427K	35,600	594

During the NLT 6.1.15b testing, it was discovered that the OMC-P down sync rate to the CTS 5420 was slow. Table 3-9 documents the down sync rate that was observed during the NLT testing.

Table 3-9 - OMC-P down sync rate to FS5K is slow

OMCP SW	FS5K SW	# of Subs	Network Delay	Conversion Duration	Subs/HR
13.0.2.2	14.28.00.06	396K	50 ms	20:21 hr	19.4K



4 Changes to interfaces, alarms, and messages

Overview

Purpose

This chapter describes changes to interfaces, alarms, and messages in this release.

Interface changes

Changes to Northbound Interfaces

There are no Northbound Interface changes in this release.

Changes to Southbound Interfaces

There are no Southbound Interface changes in this release.

Alarm changes

There are no alarm changes in this release.

Message changes

There are no new messages or changes to messages in this release.



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 NLT-reported problems and software-related customer-reported ARS escalated to NLT, that are resolved in IMS Release 06.01.15b.

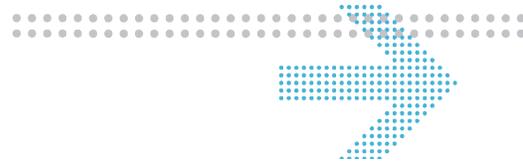
Table 5-1 NLT-reported problems resolved in IMS release 06.01.15b

NE	Abstract	Resolution
LCM	LCM addUser transactions become slower for a mixed LCM V20Z/X2100M2 system as number of subscribers grow.	SW fix provided in LCM 6.3.5_GA
LCM	When Pri-FS5K is in quarantine - no LCM service for subs from OMCP Add/Mod trans	SW fix provided in LCM 6.3.5. 21
LCM	During quarantine, No service nor GUI connections accepted on site failure & quarantine	SW fix provided in LCM 6.3.5. 23
LCM	Pri-FS5K quarantine - no LCM service for subs from OMCP Add/Mod trans	SW fix provided in LCM 6.3.5. 21
LCM	OMC-P LCM sync failure after 492, 838 successful getUsers	OMCP 13.0 and LCM 6.3.5 Sync Enhancements resolve issue
OMC-P	Slow LCM prov transaction times with 600K subscriber base	SW fixed verified in Rel 13.0.2.

Table 5-2 Customer-reported ARs resolved in IMS release 06.01.15b

AR	NE	Sev	Short Description
1935772	LSM	2	Virtual machine did not recover automatically during R14.25.00.15 upgrade on LSM
2084537	FS5K	2	bkupSys failed and exited with chk_hostclocks error

6 Known issues



Overview

Purpose

This chapter describes NLT- and customer-reported issues that remain open in IMS Release 06.01.15b.

Known issues and workarounds

This release has no severity 1 issues that were not resolved in the loads that are part of this release.

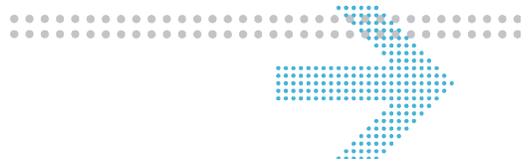
Table 6-1 lists the severity 2 issues that were not resolved in the loads that are part of this release.

Table 6-1 NLT-reported severity 2 open issues

NE	Abstract	Impact Statement / Workaround
5420 CTS	After Geo-red test -fail back primary site, LCM failed to connect to TAS blade due to missing dns entry for fsmsgroup after lock/unlock of TAS blade.	Work around: stop and restart the dns_actuator process on FS5K CNFG server.
5420 CTS	During End-to-End provisioning throughput testing, FSDB connection went down spontaneously	Work around: Switch over 5420 CTS FSDB blades.
5420 CTS	During recovery of Geo-Red site failure, FSDB switchover failures experienced during start of Static Sync (unquarantine procedure)	Work around added to quarantine/unquarantine procedures document. SW fix targeted for IMS 6.1.18
5420 CTS	During a Geo-Red site failure test, dbgw error seen during FSDB Dynamic Sync	If the alarm for this issue is observed, then the FSDB Dynamic Sync should be re-executed. SW fix targeted for IMS 6.1.18
5420 CTS	If the 5420 CTS peer to peer connection is lost during the FSDB Dynamic Sync, the CTS incorrectly indicates "STATIC_RESYNC_DONE" at end of Dynamic Sync	If this occurs, then the FSDB Dynamic Sync should be re-executed. SW fix targeted for IMS 6.1.18
5900 MRF	MRF 5900 has no mechanism to track patches installed on a server	SW fix targeted for MRF 6.3.3
5900 MRF	When restoring system from a Mondo backup, the rescue fails.	MRF 5900 application backup and restore is not impacted. SW fix targeted for MRF 6.3.3
5900 MRF	During upgrade of MRF5900 from 6.3.1 to 6.3.2, several issues encountered.	SW fix targeted for MRF 6.3.3
5900 MRF	MRFCs become active on both sides. cannot sync Sequoia DB	Work around: If this occurs, the MRFC servers need to be restarted. The MRF services will be provided by an alternative MRF during this restart.
LCM	LCM user migration due to quarantine is slower than expected	Table 3-8 in these release notes documents the observed rate during NLT's testing. Migration rate is influenced by type of LCM system and type of failure.
LCM	If more then 8 LCM A-nodes are isolated on single site, the remaining A-nodes JBOSS process is restarted every 18 minutes.	SW Fix targeted for 6.3.5.24.
LCM	During quarantine, the quarantine process does not resume after JBOSS process bounces.	A SW fix targeted for 6.3.5.24 as an NE direct delivery will address the provisioning A-Node JBOSS bounce issue. If this occurs, a work around procedure is available to restart the quarantine process.
LSM	During Geo-red site failure testing, it was discovered, IMS blades only support 10 CTS TAS blade entries on quarantine list	SW fix targeted for 14.28.00.08.

Table 6-2 Customer-reported severity 1 and 2 ARs remaining open and targeted in IMS 06.01.18

AR	NE	Sev	Short Description	Target NE Load
2104414	Acme 9200	2	CALEA call fails to anchor in the SD; therefore CALEA calls fails due to no voice re-play.	D6.0.0
2110568	Acme 9200	2	Unable to connect to the XACCT server due to no session ID	D6.0.0
2113842	Acme 9200	2	No Voice path for RG behind NAT'ed Address.	D6.0.0
2117526	Acme 9200	2	ACME9200 power supply failure did not produce expected traps	D6.0.0
2122198	Acme 9200	2	After the SPU crash RG's were not able to register.	D6.0.0
2104414	Acme 9200	2	CALEA call fails to anchor in the SD; therefore CALEA calls fails due to no voice re-play.	D6.0.0
1789074	BTS	2	Unable to locate BTS admin guide to creating/managing new users	Solaris 10
2097426	FS5K	2	New FS5K unable to establish diameter connection.	14.28.01
2086583	LCM	2	Tcpdump was somehow running on 01LCA, ran / out of space	6.3.6
1927166	MAS HSS	2	Call failures on migrated subscriber while FS5K1 is in quarantine	ltmasr26-p0619.
1952672	MAS HSS	2	HCF2 won't transfer Diameter PPR msg to HCF1 via Diameter Cluster capability	ltmasr26-p0619.
2066511	MRF	2	Attempt to reboot MRF-C1 but shutdown never takes place	6.3.3
2080048	MRF	2	System job is not deleting performance report files after the specified 7 days	6.3.3
2099187	MRF	2	MRF GUI no longer displayed alarms for omc -d stop or omc -d start.	6.3.3
2115444	MRF	2	5900 MRFC /var file system lacks overload protection	6.3.3
1945993	OMC-P	2	OMC-P GUI Passwords displayed as plain text	13.0.3
2008791	OMC-P	2	GR Install does not accept all ssh keys for added aliases in /etc/hosts	13.0.3.1
2119871	Riverstone	1	Core experiencing call issues various network elements, showing alarms	1.5.0.7.SA03
2122228	Riverstone	2	Network connectivity issues in core	1.5.0.7.SA03
2056948	Riverstone	2	RS-B cannot ping ENA-8 ports 3 & 4	1.5.0.7.SA02
2129200	Riverstone	2	FS5K1 Switch showing disconnected from OMC-P	1.5.0.7.SA03



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

Acme Packet Net-Net EMS	Java 1.5.0_14
OMC-H client	Java 1.5.0_15
OMC-CN client	Java 1.4.2_17
LCM Admin GUI	Java 1.5.0_15
LCP MI GUI	Java 1.5.0_15
XMC GUI	Java 1.5.0_7 and Java 1.4.2_13
5900 MRF MCDP Alarm GUI	Java 1.5.0_16

The 5900 MRF Anmlab GUI version 4.4.13 should be installed on a separate PC with Java Web Start version 1.3 and Java 1.5.0_16.

Table 7-2 shows IMS GUIs with no Java installation dependencies.

Table 7-2 IMS GUIs with no Java installation dependencies

OMC-P client	embedded in OMC-P SW load (Java 1.5.0_07)
eSM	uses existing PC Java plug-ins (Java 1.4.x or 1.5.x)
LSMS	uses existing PC Java plug-ins (Java 1.4.x or 1.5.x)
VitalQIP	not applicable

SUN Operating System Patch Level for Non-Integrated Components

Table 7-3 shows the SUN OS patch level for non-integrated components.

Table 7-3 SUN OS system patch level for non-integrated components

Network Element	OS Level
LSMS	Solaris 9 Kernel 122300-26 (0508)
Dorado	Solaris 9 Kernel 122300-26 (0508)
Acme EMS	Solaris 9 Kernel 122300-26 (0508)
VitalQIP Enterprise	Solaris 9 Kernel 122300-26 (0508)
VitalQIP DNS	Solaris 9 Kernel 122300-26 (0508)
OMC-P	Solaris 9 Kernel 122300-26 (0508)
BTS	Solaris 9 Kernel 122300-26 (0508)

Hardware requirements

There are no specific hardware requirements for this release.

Compatibility restrictions

Backward compatibility is supported for the IMS solution software upgrade sequence from IMS 06.01.15a to IMS 06.01.15b. See the *IMS Solution Release 06.01 Solution Software Upgrade* document, 275-100-035R06.1, 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/paths

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

- *IMS Solution Release 06.01 Solution Software Upgrade 275-100-035R06.01*

When upgrading the LCM, the following notes need to be reviewed regarding the LCM Call Log Data Migration procedures.

LCM Call Log Data Migration is required after upgrading to the LCM 6.3.5 release. The procedures for LCM Call Log Data Migration are documented in the *Lucent Communication Manager Release 6.3.5 Release Notes, 275-490-002R6.3.5*. The LCM Call Log Data Migration procedure is very CPU intensive, and should be run in non-peak processing times.

As part of these procedures the following activities are suspended until after the LCM Call Log Data Migration is completed

- provisioning to the LCM system
- LCM client or web portal traffic
- Call logging on the LCM system

The Migration of LCM Call Logs data is performed on the LCM D-nodes. Various steps are performed on each Master D-node Segment. These steps can be run in parallel for multiple Master D-node Segments.

LCM testing of one Master D-Node Segment with 5,000,000 call logs measured approximately 11 minutes for the Call Log Migration step. An additional 11 minutes should be allowed for data to be replicated to the Slave D-node Segment. Estimates for a Master D-node Segment with 10,000,000 call logs is between 20-30 minutes, with an additional 20-30 minutes to allow for replication to the Slave D-node Segment.

Security hardening

There is no specific information for this release.

Acronym List



A

AAA
Authentication, Authorization, Accounting

ABN
Access Border Node

AGCF
Access Gateway Control Function

AGW
Access Gateway

AHE
Application Hosting Environment

AR
Action Register

B

BHCA
Busy Hour Call Attempts

BTS
Billing and Traffic System

C

CALEA
Communications Assistance for Law Enforcement Agency

CCF
Charging Collection Function

CDMA
Code Division Multiple Access

CDR

Call Detail Record

CGF

Charging Gateway Function

CMM

Corporate Mobility Manager

CMS

Change Management System

CPE

Call Processing Equipment

CPS

Calls Per Second

CSCF

Call Session Control Function

CTS

Converged Telephony Server

CVoIP

Consumer Voice over IP

D

DNS

Domain Name System

E

E2E

End to End

eCCF

enhanced Charging Collection Function

EMS

Element Management System

ENUM

Telephone Numbering Mapping

eSM
Enhanced Services Manager

F

FS2500
Feature Server 2500

FS5000
Feature Server 5000 (FS5K) (also known as 5420 CTS)

G

GUI
Graphical User Interface

GUP
Generic User Profile

GPRS
General Packet Radio Service

I

IAS
IMS Application Server

ICC
Instant Convenient Charging

leCCF
Instant enhanced Charging Collection Function

IMS
IP Multimedia System

ISC
IP Session Control

ISAM-V
Intelligent Services Access Manager - V

ISDN
Integrated Service Digital Network

ISG
Intelligent Services Gateway

L

- LCM**
Lucent Communication Manager

- LCP**
Lucent Control Platform

- LIG**
Lawful Intercept Gateway

- LNC**
Lucent Network Controller

- LVF**
Lucent Virtual private network Firewall

- LSM**
Lucent Session Manager

- LSMS**
Lucent Security Management Software

M

- MAS**
MiLife Application Server

- MGC**
Media Gateway Controller

- MGCF**
Media Gateway Control Function

- MGW**
Media Gateway

- MRF**
Media Resource Function

N

- NBI**
North Bound Interface

- NE**
Network Element

NLT
Network Level Test

O

OAM
Operations, Administration, Maintenance

OLCS
OnLine Customer Support

OMC-CN
Operations and Maintenance Center – Core Network

OMC-H
Operations and Maintenance Center – Home Location Register and Home Subscriber Service

OMC-P
Operations and Maintenance Center – Plexus

P

PCM
Personal Communication Manager

PNA
Private Network Access

PS
Presence Server

PSTN
Public Switched Telephony Network

PSI
Public Service Identity

S

SAM
Services Activation Manager

SIP
Session Internet Protocol

SMS
Security Management Server

SOAP

Simple Object Access Protocol

SRB

Session Resource Broker

SSC

Subscriber Services Controller

T

TPH

Transactions Per Hour

U

ULIS

Unified Lawful Interception Suite

UMTS

Universal Mobile Telecommunications System

USDS

Unified Subscriber Data System

V

VCC

Voice Call Continuity

VitalAAA

Vital Authentication Authorization Accounting

VoIP

Voice over Internet Protocol

VPN

Virtual Private Network

W

WDDF

Wireless Data Delivery Function

X

XMC

Cross-domain Management Center

XML
Extensible Markup Language
