CUSTOMER RELEASE NOTES

Alcatel-Lucent 7342 ISAM FTTU

ONT | R04.07.11b

3FE 53636 AEAA DEZZA Edition 01

www.alcatel-lucent.com

THIS PRODUCT COMPLIES WITH D.H.H.S. RADIATION PERFORMANCE STANDARDS 21 CFR, 1040.10, FOR A CLASS 1 LASER PRODUCT.

DANGER

Invisible laser radiation is present when the optic connector is open. AVOID DIRECT EXPOSURE TO BEAM.

WARNING

This equipment has been tested and found to comply with the limits for Class A and B digital devices, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his or her own expense.

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All RMA items and procedures are bounded by the Alcatel-Lucent contract agreement with the customer.

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1 Introduction

1.1 About this document

This document provides an overview of the contents of the 7342 Intelligent Services Access Manager Fiber to the User (7342 ISAM FTTU) ONT software loads, ONT R04.07.11b, including known restrictions.

This Customer Release Notes (CRN) document is intended primarily for the system administrators, installers, managers, lab personnel, engineering personnel, and other operators involved in 7342 ISAM FTTU planning, implementation, and upgrade procedures.

R04.07.11b refers to the ONT R04.07.11b load as released by the engineering team on November 8, 2010.

1.2 How to read this document

Some ONTs included in this CRN are not of interest to all customers. Alcatel-Lucent recommends that each customer reads through the section that addresses the ONTs of interest.

Section 3.2 outlines the ONT part numbers and the ONTs' regional applicability (ETSI, ANSI, or both [ETSI and ANSI]). Common functional behaviors that apply to all the ONT types are documented in section 2.

ONTs not listed in section 3.2 cannot be upgraded or used in this release.

This document should be read together with the accompanying customer documentation.

1.3 Release ONT R04.07.11b

This section lists the features applicable to the ONTs supported in this release.

Purpose for R04.07.11b release

ONT R04.07.11b introduces fixes to existing functionality.

Purpose for R04.07.11a release

ONT R04.07.11a introduces fixes to existing functionality.

Purpose for R04.07.11 release

The ONT R04.07.11 release introduces fixes to existing functionality and the following new features:

> Introduction of two new ANSI XML files for specific SIP line padding behavior

Purpose for R04.07.10a release

The ONT R04.07.10a release introduces fixes to VoIP functionality on the I-241G-B.

Purpose for R04.07.10 release

The R04.07.10 release introduces new functionality:

> **Software:**

- Optimization of ONT reboots

> **Hardware:**

- O-210G-B outdoor Package B ONT
- O-010G-A outdoor Package B ONT

Purpose for R04.07.04 release

The R04.07.04 release introduces new functionality:

> **Software:**

- ONT local HTTP interface enhancements for additional diagnostic and troubleshooting capabilities on all ONTs with an Ethernet interface
- Ability to configure SLID via the Ethernet port when the ONT is connected to the PON.
- Support for port-to-port feature on next generation I-x4xG-B next generation ONT platforms.

> **Hardware:**

- Voice interoperability testing with the following new softswitch versions:
  - Broadsoft Broadworks R16
  - GenBand G6 softswitch ANSI with R10.2.7 and ETSI with R10.2.58

Purpose for R04.07.00a release

The ONT R04.07.00a release introduces fixes to Megaco functionality on the I-241G-B ONT.

Purpose for R04.07.00 release

The ONT R04.07.00 release introduces new functionality:

> **Hardware:**

- I-221M-H suitable for on wall installation or with an installation kit for 'in wall' installation inside a cabinet or enclosure located between wall studs.
- O-211M-H next generation ONT suitable for outdoor installation.
- I-221M-K next generation ONT suitable for sitting on an indoor surface, indoor wall mounting, or on an indoor stand.
- I-011G-A indoor next generation ONT
- I-110G-A indoor next generation ONT
- I-111G-A indoor next generation ONT
- I-240G-B indoor next generation ONT
- I-241G-B indoor next generation ONT
- I-010G-B indoor next generation ONT support when hardware is available
- I-020G-M indoor next generation ONT support when hardware is available
- I-040G-B indoor next generation ONT support when hardware is available

This ONT R04.07.00 release also introduces the following power supplies:

> Delta DUPS-1232V and CyberPower CyberShield MI36A12V3 universal power supplies for the I-211M-K.

> 12V 24W 3-prong AC/DC power adapter for the I-241G-B, I-240G-B, I-111G-A, I-110G-A, and I-011G-A.
12Vdc 12W wall wart power adapter for the I-010G-B, I-020G-M, and the I-040G-B.

> **Software**

> Anti-spoofing enhancement to support vendor-specific MAC filtering.

- Support for configuring RF video service timer for ONTs to set, in hours, the time the ONT will sustain the RF video service after ranging between the ONT and OLT is lost.
- Support for per-VLAN transparent passthrough of L2/L3 protocols, including DHCP and ARP for residential bridge, C-VLAN learning, and cross-connect VLANs.
- Support for generating an ONT ping from an ONT to another piece of network equipment.
- ONT alarm hysteresis to minimize the setting and clearing of ONT alarms to determine an activation and deactivation of alarms threshold.
- Per-service anti-spoofing using only IP addresses that have been leased for a specific service.
- VoIP IOT in R4.7
- Support for ONT SLID provisioning using a computer with an HTTP client and connected to an HTTP server.
- Support for VDSL2 bitswap on VDSL2-capable MDUs.

The ONT R04.07.00 release introduces fixes to the issues found in the prior releases.

Customer trouble reports (CTR) and Alcatel-Lucent self-processed defects (DDTS) that are resolved in this release are documented in section 5.

ONTs supported in this release

See Table 4 for a list of supported ONTs.

1.4 Key features

New UPS and power supply support

- Delta DUPS-1232V
- CyberPower CyberShield MI36A12V3
- 12V 24W 3-prong AC/DC power adapter
- 12Vdc 12W wall wart power adapter

Performance monitoring:

- Voice, PON, Ethernet, VDLS2

Debug:

- Managed PING and TRACEROUTE (except O-24121V, O-24121G and I-020E ONTs)
- ONT remote debug mechanisms (except I-020E ONTs)
- Threshold Crossing Alarms

PON:

- FSAN standards compliant GEM mode transport support
- DBA support (Idle GEM DBA)
- T-CONT type 1, type 2, type 3, type 4, and type 5 support
- Number of T-CONTs supported per ONTs: 38
- Number of GEM port-ids supported per ONT: 39
- AES downstream support
- FEC upstream and downstream support
- 1490 and 1550 nm received power measurement on certain ONTs
- Fragmentation support
- Standard single multicast GEM port-id support
- Management via OMCI

Voice (for voice supporting ONTs):

- Services:
  - Loop emulation service (POTS emulation) with General Bandwidth G6 gateway
  - SIP based softswitch interoperability
  - MEGACO/H.248 based softswitch interoperability
- MEGACO call features: Caller Line Identification Presentation (CLIP), Caller Line Identification Restriction (CLIR), * Calls (e.g. Blocking *67, Repeat *66, Return *69 and Forwarding *72 etc.,), Speed Dial, Call Waiting, Enhanced Alerting Package (H.248.23), Call Progress Tone Generator Package (H.248.E7), Flash-Hook, Call Hold, Call Transfer (Blind/Consultative), Call Forwarding (Unconditional, When busy, No answer), Distinctive Ringing, Enhanced Alerting Package (H.248.23), 3-Way Calling, Message Waiting Indicator (MWI), Tone detection package support, pay phone support.

- With Alcatel 5020 S-12 MGC and Huawei SX3000 NGN softswitch, features supported are:

  3-Party calling, Call Forwarding, Call Transfer, Call Hold, Call Waiting, and Calling Line Identification Presentation (CLIP) - CLIP transmission with FSK signaling.

> SIP call features:

- Thin client mode: Basic call, Distinctive ringing, Caller ID (CLID), Direct connect (Hot Line), Direct connect (Warm Line), Caller Name, CLIR, CLIP, Call waiting, Call transfer, Call hold, Network based 3 way call, Message waiting indicator, E911 support, FAX (G.711 and T.38), RFC2833.
- Thick client: Basic call, Distinctive ringing, Caller ID (CLID), Caller Name, CLIR, CLIP, Call waiting, Call transfer, Call hold, Client based 3 way call, Message waiting indicator, E911 support, FAX (G.711 and T.38), RFC2833, Direct connect (Hot Line), Direct connect (Warm Line), Line registration, per POTS line configuration, Call park, Home Intercom, Bridged lines, Call pick-up with barge-in, 6-way conference calling, Suppressed ringing.

> Testing:

- Metallic Loop Testing (MLT) on RJ-11 ports
- MEGACO pull breakdown (P/B) dial testing
- SIP pull/break dial tone test
- SIP pull break (P/B) dial tone tests
- Up to 32 call statistics support
- RTCP-XR and RTCP counters
- Support for iConfig alarms, SIP communication issues related alarms
- Additional TCAs: SIP message timeout, bearer packet loss, packet jitter

> DHCP options for voice service:

- DHCP option 83 (remote ID) support
- DHCP option 61 (Client ID) support
- DHCP option 90 (authentication header) support
- DHCP option 120 support. DHCP option 120 is supported for SIP. Added configuration parameters to enable DHCP option 120 through configuration file.

> Provisioning:

- SIP voice provisioning is provided through XML based file download
- SIP voice profile provisioning is provided through iConfig server interface
- Denial of ONT software activation while an E911 call is being made
- Added ability to configure dynamic payload type
- Added ability to control the behavior of the ONT with respect to nonce expiration and re-registration

IP video service:

> In-band IP video support

> IGMP snoop support

> Multicast: static configurable multicast

RF video service:

> RF overlay support (on RF supporting ONTs)

Security:

> 802.1x support for Ethernet ports

> DHCP option 90 support

> TLS support for configuration support from iConfig server

> Managed PING and TRACEROUTE (on POTS-supporting ONTs)

> Statically-configurable IP anti-spoofing support

> MAC anti-spoofing support

QoS support:

> Fine-grain packet-based QoS mechanisms

> 802.1p QoS and packet classification

> Up to 8 QoS level (priority queues) per Ethernet interface

> Classification of incoming Ethernet traffic based on EtherType

> VLAN translation support

General:

- NTPv3 on the ONT fully configurable through OMCI: multicast mode
- Hardware watchdog timer
- SLID provisioning via first POTS port (on ONTs supporting POTS)
- SLID provisioning via Ethernet port is available on the I-020E-B and the I-020E-H data-only indoor ONTs. (Ethernet SLID is not supported on outdoor ONTs, indoor ONTs with MoCA, or I-010E-C)
- Dynamic configurability of per UNI DSCP-1p mapping
- Configurable power-down profiles per port type
- Allow users to program overlapping MAC-based multicast addresses with unique IP multicast addresses
- Enhanced PM counters for VDSL2 interfaces
- ONT alarm bounce support to ignore incoming alarms that clear after seconds.
- Autonomous Dying Gasp alarm to indicate a loss of power to the ONT

Interoperability:

- VDSL modem interoperability support:
  - Westell and Netopia using 1.0.8r2c firmware testing with O-24121V-A ANSI using 1.0.8r2 firmware
  - Zyxel Model# Prestige 870M-I1v2 w/ Ikanos V2.10R14 firmware with O-00240V-A, and O-0881V-A
  - CellPipe 7130 using firmware v0.2.5.08-INM (2.1.0r14) with O-00240V-A, and O-0881V-A
- PSE interoperability with I-020G-G PoE
  - Cisco: WS-C3560G-24PS-S
  - H3C: LS-5500-28C-PWR-SI
  - PowerDsine: PD3001G
- Remote Gateway interoperability with MoCA:
  - Actiontec MI424-WR RGW
  - Mototec ECB: Model ECB3001P

> The I-211M-H, I-211M-K and O-211M-H support MoCA v1.0

1.5 Softswitch interoperability

The term "*Completed in ONT x.y.z*" means completion of lab evaluation in Alcatel-Lucent Interoperability Lab in ONT release *x.y.z* and the term "*Completed and certified in ONT x.y.z*" means completion of lab evaluation in Alcatel-Lucent IOT lab and a certificate is obtained from the softswitch vendor in ONT release *x.y.z*.

Note also that there may be features that are country- or customer-specific that may need additional development and testing.

> Voice interoperability:
  - CDEs supported: Refer to section 2.19 for the list of supported CDE files.
  - Loop emulation service (POTS emulation) with General Bandwidth G6 gateway (GR-303, V5.2).

Table 1 lists softswitch interoperability testing for Megaco ONTs.

Softswitch	Interoperability testing with Package A ONTs	Interoperability testing with Package B ONTs
GenBand G6 ANSI GR-303 R10.2.xx and applicable patches	Completed in ONT 4.3.xx	–
GenBand G6 ANSI GR-303 R10.2.6 and applicable patches	Completed in ONT 4.7.00	Completed in ONT 4.7.00
GenBand G6 ANSI GR-303 R10.2.7 and applicable patches	Completed in ONT 4.7.04	Completed in ONT 4.7.04
GenBand G6 ANSI GR-303 R10.6.00 and applicable patches	Completed in ONT 4.7.10	Completed in ONT 4.7.10
GenBand G6 ETSI V5.2 R10.2.xx and applicable patches	Completed in ONT 4.3.xx	–
GenBand G6 ETSI V5.2 R10.2.50 and applicable patches	Completed in ONT 4.7.00	Completed in ONT 4.7.00
GenBand G6 ETSI V5.2 R10.2.58 and applicable patches	Completed in ONT 4.7.04	Completed in ONT 4.7.04
GenBand G6 ETSI V5.2 R10.6.50 and applicable patches	Completed in ONT 4.7.10	Completed in ONT 4.7.10
Alcatel-Lucent 5020 E-10 MGC	Completed in ONT 4.4.13	–
Alcatel-Lucent 5020 S-12 MGC	Completed in ONT 4.4.13	–
Huawei SX3000 NGN softswitch	Completed in ONT 4.4.15 in customer labs	–

Table 1 Megaco ONT softswitch interoperability testing

Table 2 lists the completed softswitch interoperability testing for SIP ONTs.

Softswitch interoperability testing against….	Interoperability testing with Package A ONTs	Interoperability testing with Package B ONTs
GenBand G6 ANSI GR-303 R10.2.xx and applicable patches	Completed in ONT 4.3.xx	—
GenBand G6 ANSI GR-303 R10.2.6 and applicable patches	Completed in ONT 4.7.00	Completed in ONT 4.7.00
Surpass 4200	Completed in ONT 4.6.08	Completed in ONT 4.6.08
Broadsoft R13.0	Completed in ONT 4.4.15	—
Broadsoft R14.0 service pack 3	Completed in ONT 4.4.15	Completed in ONT 4.6.08
Broadsoft R16.0	Completed in ONT 4.7.04	Completed in ONT 4.7.04
Nortel CS2K SN10	Completed in ONT 4.6.01	—
Nortel CS2K SN09U	Completed in ONT 4.4.13	—
Nortel CS2K CVM12	Completed in ONT 4.6.04	Completed in ONT 4.6.08
Nortel CS2K CVM13	Completed in ONT 4.7.10	Completed in ONT 4.7.10
Mitel R8.0	Completed in ONT 4.4.18	—
Mitel R9.0.1.17	Completed in ONT 4.6.04	Completed in ONT 4.6.08
Nextone Session Border Controller (SBC) against Broadsoft R12	Completed in ONT 4.4.13	—
Nextone Session Border Controller (SBC) against Broadsoft R14	Completed in ONT 4.4.13	Completed in ONT 4.7.00
Netcentrix	Completed and certified in ONT 4.4.13	—
Alcatel-Lucent FS 5000 in TISPAN tightly-controlled mode	Completed in ONT 4.4.16	—
Sonus ASX	Completed by customer in their labs in ONT 4.4.13	—
Xener softswitch	Completed by customer in their labs in ONT 4.4.16	—
Metaswitch softswitch	Completed and certified in ONT 4.4.16	—
Metaswitch R6.x softswitch	Completed in ONT 4.7.10	Completed in ONT 4.7.10
Alcatel-Lucent 5020 CSC	Completed in ONT 4.5.07	—
Centile network softswitch 7.5.6.1- RC1	Completed in ONT 4.5.07	Completed in ONT 4.6.08

Table 2 SIP ONT softswitch interoperability testing

1.6 Documentation references

Documentation addendum - SLID provisioning

When using the HTTP interface to configure SLID on the ONT, the following rules apply:

> The ONT does not allow the SLID to be provisioned when the ONT is connected to the PON, ranged, and provisioned

> The ONT does allow SLID to be provisioned when the ONT is:

- not connected to the PON
- connected to the PON and unranged
- connected to the PON, ranged, and unprovisioned

Finding documentation on OLCS

The OnLine Customer Support (OLCS) site gives you access to the latest Alcatel-Lucent customer documentation. To download documentation:

1. Go to www.alcatel-lucent.com and click on MyAccess.

2. Log in to the Alcatel-Lucent Customer and Business Partner Portals with the username and password for your OLCS account. A customized Customer Center page opens. If you do not have an account, contact your Alcatel-Lucent representative.

3. From the Technical Content for drop-down menu, choose 7342 ISAM FTTU (Fiber to the User).

4. Choose one of the following:

   a. Click on the Manuals and Guides link for a list of user documents.

   b. Click on the Release Information link for a list of release notices.

   c. Click on the Product Alerts link to view Product Discontinuation Bulletins and Technical Bulletins.

   d. Click on the Technical Notes link to view Product Information Bulletins.

   e. From the Jump to Content Page drop-down menu, click on the Alerts link to view Technical Alerts. Choose 7342 ISAM FTTU (Fiber to the User) from the Browse Alerts by Product: drop-down menu and click on the Go button.

5. Use the Release and Model/Subgroup drop-down menus to filter the listed documents. Alternately, use your browser to search for the document release and title.

6. Click on the PDF link for the document you want.

Table 3 lists the documents relevant to the 7342 ISAM FTTU ONT R04.07.11b release.

Title	Orderable part number	Description
ONT Software Installation Procedures	3FE 53636 AAAA RJZZA	Provides the instructions for installing the 7342 ISAM FTTU ONT software. **Note:** This document is located on the ONT Software CD.
ONT Customer Release Notes (this document)	3FE 53636 AEAA DEZZA	Provides application notes, open and closed issues, and software load names for the 7342 ISAM FTTU ONT. **Note:** This document is located on the ONT Software CD.
7342 ISAM FTTU P-OLT R04.07.10 Customer Documentation CD ISO image (ETSI)	3FE 53635 AAAB PMZZA	Provides user manuals for the 7342 ISAM FTTU ETSI market, except for the *P-OLT Software Installation Procedures* and the *OLT Customer Release Notes*.
7342 ISAM FTTU P-OLT R04.07.10 Customer Documentation compressed archive file (ETSI)	3FE 53635 AAAC PMZZA	
7342 ISAM FTTU P-OLT R04.07.10 Customer Documentation CD ISO image (ANSI)	3FE 53634 AAAB PMZZA	Provides user manuals for the 7342 ISAM FTTU ETSI market, except for *the P-OLT Software Installation Procedures* and the *OLT Customer Release Notes*.
7342 ISAM FTTU P-OLT R04.07.10 Customer Documentation compressed archive file (ANSI)	3FE 53634 AAAC PMZZA	
7342 ISAM FTTU ONT R04.07.10 Customer Documentation CD ISO image	3FE 53633 AAAB PMZZA	Provides ONT manuals for all current ONT releases, except for *the ONT Software Installation Procedures* and the *ONT Customer Release Notes*.
7342 ISAM FTTU ONT R04.07.10 Customer Documentation compressed archive file	3FE 53633 AAAC PMZZA	

Table 3 Customer documentation

1.7 Release notation

This software package includes the operational software and release notes for the 7342 ISAM FTTU ONT R04.07.11b release as described in Table 4.

Product	Package part number	Megaco or SIP
ONT R04.07.11b software kit (software ISO format) ONT R04.07.11b software kit (software TAR format)	3FE 53636 AEAB 3FE 53636 AEAC	N/A
Files: ONT flat file that provides details of the release mapping for network management: **ONT_Release_Mapping.txt**		
MEGACO-based ONTs and MDUs (VoIP XML file version 4.2)		
ONT or MDU Product	**Package part number or name**	**Megaco or SIP**
B-8102-A	FE51138AHCA17	Megaco XML v4.2
B-8112-A	FE51138AHCA17	Megaco XML v4.2
I-011G-A	FE52257AHCA21	Megaco XML v4.2
I-110G-A	FE52257AHCA21	Megaco XML v4.2
I-111G-A	FE52257AHCA21	Megaco XML v4.2
I-220E-A	FE50853AHCA20	Megaco XML v4.2
I-221E-A	FE50853AHCA20	Megaco XML v4.2
I-211M-D	FE50853DHCA17	Megaco XML v4.2
I-211M-E	FE50853DHCA17	Megaco XML v4.2
I-211M-G	FE50853EHCA17	Megaco XML v4.2
I-211M-H	FE52257AHCA21	Megaco XML v4.2
I-211M-K	FE52257AHCA21	Megaco XML v4.2
I-240G-A	FE51559AHCA18	Megaco XML v4.2
I-240G-B	FE52257AHCA21	Megaco XML v4.2
I-241G-A	FE51559AHCA18	Megaco XML v4.2
I-241G-B	FE52257AHCA21	Megaco XML v4.2
M-300A-A	FE50646AHCA17	Megaco XML v4.2
O-210E-B	FE50853AHCA20	Megaco XML v4.2
O-211E-B	FE50853AHCA20	Megaco XML v4.2
O-211M-E	FE50853DHCA17	Megaco XML v4.2
O-211M-G	FE50853EHCA17	Megaco XML v4.2
O-211M-H	FE52257AHCA20	Megaco XML v4.2
O-211M-R	FE50853EHCA17	Megaco XML v4.2
O-420E-B	FE50853AHCA20	Megaco XML v4.2
O-421E-B	FE50853AHCA20	Megaco XML v4.2

Product	Package part number	Megaco or SIP
O-24121G-A	FE51408AHCA17	Megaco XML v4.2
O-24120G-A	FE51408AHCA17	Megaco XML v4.2
O-24121V-A	FE51175AHCA18	Megaco XML v4.2
O-24120V-A	FE51175AHCA18	Megaco XML v4.2
O-820G-D	FE51136AHCA17	Megaco XML v4.2
O-821G-D	FE51136AHCA17	Megaco XML v4.2
O-821M-E	FE51136CHCA17	Megaco XML v4.2
SIP-based ONTs and MDUs (VoIP XML file version 4.2)		
ONT or MDU Product	**Package part number or name**	**Megaco or SIP**
B-8102-A	FE51139AHCA18	SIP XML v4.2
B-8112-A	FE51139AHCA18	SIP XML v4.2
I-011G-A	FE52258AHCA22	SIP XML v4.2
I-110G-A	FE52258AHCA22	SIP XML v4.2
I-111G-A	FE52258AHCA22	SIP XML v4.2
I-220E-A	FE50854AHCA21	SIP XML v4.2
I-221E-A	FE50854AHCA21	SIP XML v4.2
I-211M-D	FE50854DHCA18	SIP XML v4.2
I-211M-E	FE50854DHCA18	SIP XML v4.2
I-211M-G	FE50854EHCA18	SIP XML v4.2
I-211M-H	FE52258AHCA22	SIP XML v4.2
I-211M-K	FE52258AHCA22	SIP XML v4.2
I-240G-A	FE51560AHCA20	SIP XML v4.2
I-240G-B	FE52258AHCA22	SIP XML v4.2
I-241G-A	FE51560AHCA20	SIP XML v4.2
I-241G-B	FE52258AHCA22	SIP XML v4.2
O-210E-B	FE50854AHCA21	SIP XML v4.2
O-211E-B	FE50854AHCA21	SIP XML v4.2
O-211M-E	FE50854DHCA18	SIP XML v4.2
O-211M-G	FE50854EHCA18	SIP XML v4.2
O-211M-H	FE52258AHCA22	SIP XML v4.2
O-211M-R	FE50854EHCA18	SIP XML v4.2
O-420E-B	FE50854AHCA21	SIP XML v4.2
O-421E-B	FE50854AHCA21	SIP XML v4.2

Product	Package part number	Megaco or SIP
O-24121G-A	FE51409AHCA18	SIP XML v4.2
O-24120G-A	FE51409AHCA18	SIP XML v4.2
O-24121V-A	FE51176AHCA19	SIP XML v4.2
O-24120V-A	FE51176AHCA19	SIP XML v4.2
O-820G-D	FE51137AHCA18	SIP XML v4.2
O-821G-D	FE51137AHCA18	SIP XML v4.2
O-821M-E	FE51137CHCA18	SIP XML v4.2
Alcatel-Lucent SoC-based data only ONTs		
Product	**Package part number or name**	**Megaco or SIP**
B-0404-A	FE51968AHCA17	N/A
I-010G-A	FE50782BHCA16	N/A
I-010G-B	FE52259AHCA18	N/A
I-020E-B	FE50782BHCA16	N/A
I-020E-H	FE50782BHCA16	N/A
I-020G-F	FE50782BHCA16	N/A
I-020G-G	FE51815AHCA16	N/A
I-020G-M	FE52259AHCA18	N/A
I-040G-A	FE51559AHCA19 FE51560AHCA20	N/A
I-040G-B	FE52259AHCA18	N/A
Alcatel-Lucent data-only MDUs		
Product	**Package part number or name**	**Megaco or SIP**
O-0881V-A	FE51980AHCA18	N/A
O-00240V-A	FE51564AHCA17	N/A
Documentation		
ONT Software Installation Procedures	3FE 53636 AAAA RJZZA	N/A
ONT Customer Release Notes (this document)	3FE 53636 AEAA DEZZA	N/A

Table 4 7342 ISAM FTTU ONT software kit

Table 5 lists the ONT and MDU RTU software licenses and part numbers.

Description	Part number
R4.7.x ONT RTU	3FE 50976 BAAA

Description	Part number
R4.7.x MDU RTU	3FE 51850 AAAA

Table 5 7342 ISAM FTTU ONT RTU software licences

For ordering information, contact your sales representative. For technical assistance with the software within North America, call +1 613-784-6100 or 1-888-252-2832. In Europe and the rest of the world, check for technical assistance telephone numbers at http://www.alcatel-lucent.com/support.

2 Application notes

This section lists important considerations and assumptions for operational behavior associated with Alcatel-Lucent 7342 ISAM FTTU ONT R04.07.11b. Please also note that section 4 should be referred to for a list of known issues.

2.1 ONT hardware and general considerations and limitations

- The I-120G-P, I-240G-P, I-241G-P, I-440G-P, I-241W-P, I-240W-P, I-16160E-P, I-24240E-P, and O-221H-P are documented in the 7342 ISAM FTTU ONT user documentation, but are not yet supported.
- Outdoor ONTs are supported in temperature conditions of –40°C to +46°C with solar loading or -40°C to +60°C without solar loading.
- For ONTs supporting gigabit Ethernet, half duplex is not supported.
- The *7342 ISAM FTTU P-OLT R04.07.00 Operations and Maintenance using TL1 and CLI* guide indicates an IP address to use for SLID configuration via HTTP. It indicates to use default IP address of 192.168.4.254. That IP address can be used, as can addresses on the subnet in the range of 192.168.4.x/24. Customers cannot use 192.168.1.x/24 subnets.

2.2 Voice (SIP and MEGACO) considerations and limitations

- H.248 interoperability with G6 voice gateway: Voice Activity Detection (VAD) is disabled in MEGACO interoperability with the G6 voice gateway.
- The malta.xml and singapore.xml configuration files are not validated with customer phones.
- The OutboundURIPrefix="tel:" is not the default value. The default value is "sip:". If necessary, change the configuration of the value to "tel:"

2.3 Nortel CS2000 related considerations and limitations

> When two subscribers, engaged in a 2-way call, both use flash-hook at the same time, the call is terminated.

2.4 iConfig server related considerations and limitations

> The iConfig server will autonomously enter an out of service state and will indicate "503 service temporarily unavailable" for any SUBSCRIBE requests. The server must be restarted to get it out of this state.

2.5 Nextone SBC related considerations and limitations

> When the ONT sends a SUBSCRIBE request for Call Forwarding Status indications, the 200 OK response is expected to contain an Expires header. During testing with the SBC it was found that the Expires header was sent by the CS2K 200 OK response, but stripped out of the message by the SBC. The missing Expires header means that the SUBSCRIBE refreshes sent by the ONT will not be sent at the agreed upon interval.

2.6 Metaswitch 5.2 related considerations and limitations

> SUBSCRIBE message for call forwarding status indications must be disabled.

> The endpoint on the softswitch should be configured as “untrusted” and ensure that the privacy, P_Asserted_Identify, and remote-party ID headers are not included.

> The shared line appearances feature is not supported on Alcatel-Lucent ONTs.

2.7 ONT services considerations and limitations

> ONTs delivered prior to the general availability have a pre-release SW. When upgrading to the general availability SW load, the ONTs may need to be reset.

> The ONT HW supports upstream FEC encoding.

> During interoperability testing with several MoCA CPEs, it was discovered that some CPEs do not support Ethernet packet length greater than 1518 bytes. This is due to driver limitation in those CPEs. This limitation does not apply to the ONT.

> PM_ONTENET counters for SQE, IMTE, and CSE performance monitoring are not supported.

> LOSTFRAGS and TXFRAG counters for PONONTTC are not supported on outdoor and indoor SFU ONTs.

> The single collision frame counters on SoC-based ONTs are not supported.

> When VLAN translation feature is activated at the ONT and a service that uses the VLAN translation feature is associated with multiple pbits, the following is observed:

- The pbits are maintained in the upstream direction.
- In the downstream direction, the pbits are maintained from OLT to ONT. However, the pbit sent to the user from the ONT is always the highest pbit associated with that service.

> The VoIP client uses ports 1024 and 1026 to generate DNS queries. If port 1026 is blocked for security reasons, the VoIP client will not be able to resolve the host to IP address.

> Raman reduction applicability for ONTs is listed in Table 8.

> Automatic download and activation of ONT software will not be performed if the planned ONT software is already present in either the Active or Passive ONT software memory banks.

> After loss of network connectivity, for example an LT reset, dial-tone will be restored after the G6 voice gateway and the ONT VoIP client re-establish a connection.

> If network connectivity to the G6 is lost, and the following conditions are both true, POTS service may be lost until the next keep alive message (typically 10 to 12 minutes). Condition 1: an incoming call is made to the ONT from the G6. Condition 2: The ONT misses one keep-alive message from the G6 during the network outage.

> During voice calls, there is a possibility that in-band tones may be attenuated by the echo canceller. This can affect results from some common telephony test equipment that uses simple tones and tone detectors to confirm the presence of a voice path. Test equipment configured to use actual voice signals instead of tones for path confirmation show higher script completion rates. This issue has not been seen to affect normal voice calls nor has it been seen to affect fax or modem pass through.

> The Ethernet port in the SWRD should not be used for LAN purposes. LAN traffic should directly go from the Ethernet port from the ONT to the home devices.

> The O-821G, O-821M, and B-81xx-A ONTs do not support more than 6 lines going on-hook simultaneously (within 1 millisecond).

> ONT multicast filters support up to 1024 streams.

> In order for RIP packets to be passed properly, the ONTENET port needs to have multicast enabled. On SOC based ONTs, only one port can be provisioned for multicast so the port that will transport RIP packets must be provisioned for multicast.

2.8 ONT OAM and statistics considerations and limitations

> Ethernet OAM loopback is not supported for p-bits 0-3 on the first Ethernet port or for p-bit 1-6 for VOIP service.

> When interoperating in voice gateway mode with G6, the AVGMOS statistic is not supported. When using the TL1 *#REPT-OPSTAT-ONTCALLHIST* command output reports 43.

> The LP MDU receives and transmit octet counters are implemented based on IEEE 802.3 Clause 30.3 management packages (aOctetsReceivedOK) /aOctetsTransmittedOK). This means the RX and TX counters only include the Payload and padding octets of non-errored frames (i.e. the header, VLAN tags, and FCS are not included in octet counts).

> DGN-ONT TL1 self-tests are not supported in this release. This does not affect the fully functional DGN-ONTPOTS metallic loop test TL1 tests.

2.9 I-010G-B, I-020G-M, I-040G-B ONT considerations and limitations

> (All) The ONTs pad fames in the downstream direction less than 100 bytes to exactly 100 bytes.

2.10 I-011G-A, I-110G-A, I-111G-A ONT considerations and limitations

> The ONTs support 32 GEM ports (30 for services, with two reserved for multicast and debugging), which affects the number of configurable priority queues per service.

> The ac and dc foreign voltage function of Metallic Loop Tests (MLT) are not supported for these ONTs.

> (I-011G-A only) The ONT drops packets in the upstream direction for lower-value p-bits when multiple p-bit values are used in multiple queues.

2.11 I-211M-H, I-211M-K, and O-211M-H considerations and limitations

> IGMP tag mode supersedes individually provisioned UNI tag mode.

2.12 I-241G-B, I-240G-B ONT considerations and limitations

> (All) The ONTs pad fames in the downstream direction less than 100 bytes to exactly 100 bytes.

> The ONTs support 32 GEM ports (30 for services, with two reserved for multicast and debugging), which affects the number of configurable priority queues per service.

> The ac and dc foreign voltage function of Metallic Loop Tests (MLT) are not supported for these ONTs.

> If more than one Ethernet port is in VLAN Translation Mode or in Flex Mode with IGMP channels created but the USERSIDE VLAN IDs of those services are different, then all downstream multicast packets will be tagged on the UNI port with VLAN ID of 4094.

> If more than one Ethernet port is configured and one port is set as Tag-thru mode and another port is in Tag-strip mode, then all downstream multicast packets will be tagged on the UNI port with VLAN ID of 4094.

2.13 M-300-A considerations and limitations

> During a bulk call scenario, the reset of the M-300-A unit can cause an up to 7 minute voice call service blockage.

> IGMP message rate limiting is not based on number of messages but on related control traffic rate based on assumptions on message size (assumed to be 64 bytes with a single VLAN tag added).

> The DGN-ONTPOTS TL-1 command may pass all MLT when only a VDSL modem (no phone) is connected to the splitter.

> Starting with R04.05.05 and later, the M-300-A no longer supports VDSL1 TL1 provisioning commands. All VDSL1 and VDSL2 lines must be provisioned using VDSL2 TL1 commands.

> For customers planning to deploy 2-Wire 3800HGV-B modems with the M-300-A:

- (for VDSL1 and VDSL2 modems) Avoid very high impulse noise protection (for example, do not set MININPDN=16.0 or MININPUP=16.0)
- (for VDSL1 modems) Do not provision BNDSPUSAGE=EXC_ADSL2PLUS
- (for VDSL1 modems) When using MAXDELDN=1, MACDELUP=1, MININPDN=0.0, and MININPUP=0.0, set the BNDSPUSAGE=EXC_ ADSL2

> The MDU reports an XLOS alarm when a Tip/Ring between an MDU and a modem is broken.

2.14 LP MDU (O-2412xG-Aand O-2412xV-A) considerations and limitations

> (O-24120G-A, O-24121V-A, O-24121G-A , and O-24120V-A) The LP MDUs, by default, anticipates an RF video signal to be present during initial installation power on and turn up. If no RF video signal is present the video fail indication LED may be active. If RF video is not supported, provision the LP MDU video out of service to clear the video fail indication.

> (O-24120G-A, O-24121V-A, O-24121G-A , and O-24120V-A) The LP MDUs are characterized to operate in a bulk call scenario with a call completion rate of 99.99%. Setup: 24 lines set to 45 second call-to-call delay (30 second call length, 10 second call interval, 5 second start to start).

> (O-24121V-A, O-24120V-A) If VDSL lines power down due to power shedding, they will report an XLOL alarm.

> (O-24121V-A, O-24120V-A) The MDU reports an XLOS alarm when a Tip/Ring between an MDU and a modem is broken.

> (O-24121V-A, O-24120V-A) The MDU does not support 802.1x authentication.

2.15 B-8102-A, B-8112-A and B-0404-A ONT (Business ONT) service considerations and limitations

> The business ONT E1 interface supports a standard 120 Ohm termination via an RJ-48C. Customers who require a 75 Ohm termination will need an external adapter.

> Line loopbacks are not supported.

2.16 I-240G-A and I-241G-A ONT considerations and limitations

> When an UNSTACKED cross-connect VLAN is provisioned across a I-240G-A, I-241G-A , or B-0404-A UNI, downstream multicast traffic will be dropped by the ONT. It is recommended to use residential bridge or C-VLAN learning mode.

> When you are configuring an I-24xG-A or I-04xG-A ONT in flexmode for Ethernet services, before you configure the ENT-QOS-MARKPROF parameter to FLEXMODE, you must ensure that port-to-port communication is enabled by setting the ED/ENT-ONT p2penable parameter to ENABLE.

> The Elpac 16 W power converter cannot be used with the I-241G-A and I-240G-A ONTs. Earlier releases of the *7342 ISAM FTTU ONT Product Information Manual*

indicate that this is a supported configuration. This configuration is not supported. The current version of the *7342 ISAM FTTU ONT Product Information Manual* is correct.

2.17 MoCA SOHO (O-821M-E) considerations and limitations

> The O-821M-E is factory default configured with 2 POTS, 1 GigE and 1 MoCA interface. When switching between HSI service delivery over both GigE ports to one GigE port and one MoCA port or vice versa, perform the following using TL1 or an EMS:

- If the MoCA interface will be provisioned, the second GigE port must be deactivated and deleted, and the MoCA interface provisioned and activated.
- If the second GigE port will be provisioned, the MoCA interface must be deactivated and deleted, and the second GigE port must be provisioned and activated.
- In both cases, the O-821M-E must be rebooted for the provisioning change to take effect.
- In both cases, no service mismatch alarm is raised.

2.18 O-00240V-A considerations and limitations

> In the event of a fan failure, VDSL ports may shut down prior to receiving the over-temperature alarm when the fan unit has failed. This is to prevent damage to the MDU.

> After performing a TL1 INIT-SYS of the OLT system with database removed, the ONT may not have the correct provisioning. Reset the ONT using the TL1 INIT-SYS command to update the provisioning.

2.19 Provisioning service recommendations

POTS voice support for Megaco

To ensure high quality delivery of Megaco-based VoIP services, Alcatel-Lucent recommends the following values for the bandwidth profile for each POTS line:

- Committed Information Rate (CIR) = 150 Kb/s
- Excess Information Rate (EIR) = 150 Kb/s
- Delay Tolerance (DT) = 8.

For multiple POTS lines providing Megaco-based VoIP service, use a multiple of the recommended per-line EIR and CIR values. For example, with 4 POTS lines, use CIR=600 Kb/s, EIR=600 Kb/s, and DT=8.

POTS voice support for SIP

To ensure high quality delivery of SIP-based VoIP services, Alcatel-Lucent recommends the following values for the bandwidth profile for each POTS line:

- Committed Information Rate (CIR) = 250 Kb/s
- Excess Information Rate (EIR) = 250 Kb/s
- Delay Tolerance (DT) = 8.

For multiple POTS lines providing SIP-based VoIP service, use a multiple of the recommended per-line EIR and CIR values. For example, with 4 POTS lines, use CIR=1000 Kb/s, EIR=1000 Kb/s, and DT=8.

Specific country adaptations for the POTS interface are contained in embedded configuration files, listed in Table 6. During provisioning, the filenames are used to configure the ONT for the correct application. These files are included in the release software and are not downloaded from a remote fileserver.

Current generation ONT XML file	Next generation ONT XML file	Description of ONT XML file
ansi.xml ansi_6_8.xml ansi_0_0.xml	ansi.xml ansi_6_8.xml ansi_0_0.xml	for use in North American applications. Additional ANSI files specify SIP line padding values
ansi_nohookf.xml	ansi_nohookf.xml	For use in North American applications
poland.xml	poland.xml	for use in Polish applications
portugal.xml	portugal.xml	for use in Portugal applications
chile.xml	chile.xml	for use in Chile applications
tde_sip.xml	tde_sip.xml	for use in Telefonica applications
russia.xml	russia.xml	for use in Russian applications
iceland.xml	iceland.xml	for use in Iceland and Brazil applications
danish.xml	danish.xml	for use in Denmark applications
singaporeTel.xml	singaporeTel.xml	for use in Singapore applications
korea.xml	korea.xml	for use in Korean applications
malta.xml	malta.xml	for use in Maltese applications
china.xml	china.xml	for use in Chinese applications
saudi.xml	saudi.xml	for use in Saudi Arabia applications
france.xml	france.xml	for use in French applications

Current generation ONT XML file	Next generation ONT XML file	Description of ONT XML file
spain.xml	spain.xml	for use in Spain applications
uae.xml (* note)	uae.xml (* note)	for use in UAE applications
germany.xml	germany.xml	for use in Germany applications
telstra.xml	telstra.xml	for use in Australia/Telstra applications
n/a	malaysia.xml	for use in Malaysian applications
n/a	uk.xml	for use in UK applications
ireland.xml (* note)	ireland.xml (* note)	for use in Ireland applications
kuwait.xml (* note)	kuwait.xml (* note)	for use in Kuwait applications

Table 6 Country-specific XML files

* **Note**: <*Name*>.xml file supports multiple maximum flash-hook detection values: 1.1 seconds, 250 ms, 500 ms, and 75 ms. The flash hook value is the time the ONT takes to disconnect the call.

HSI considerations and recommendations

Alcatel-Lucent recommends using DT = 8 for all HSI service configurations for optimal QoS performance.

Multicast support considerations and recommendations

> The current release only supports customer-configured multicast streams. IGMP reports sent for unconfigured multicast streams increment the counter that indicates the maximum number of multicast streams allowed in ONT. IGMP reports for unconfigured streams must be quiescent for the default 260 seconds before the counter is decremented.

> All ONTs that support two Ethernet interfaces can support IPTV on both the interfaces. However, IPTV is not supported on both the Ethernet interfaces simultaneously. For IPTV provisioning, the operator is required to choose one of the interfaces which will support IPTV.

2.20 ONT issue notes and common functionalities for this release

WARNING: If software that is not intended for use on the ONT is downloaded and activated, the ONT will not operate normally. (For example, downloading and activating outdoor ONT software on a modular ONT.) Functionality of this device may be terminated, requiring unit replacement.

- Due to a file naming restriction in the NT file system, only 13-character file names can be accommodated, even though 14-character software version names are supported by the outdoor ONT as per G.983.2. All valid ONT software version names are 14 characters, beginning with the character “3”. When provisioning a software version for an ONT using TL1, it is necessary to add the character “3” to the beginning of the ONT software file name.
- The REPT-OPSTAT-ONTANI Tl1 command, used to determine the received optical power of the ONT, only works for RSSI-enabled ONTs.
- Before doing a rollback of the 7342 ISAM FTTU P-OLT, you must plan the ONT software version to its base release software version. Performing a roll back on the P-OLT will then activate the base release ONT software and when the system comes up with the rolled-back P-OLT base release, the ONT will be in an IS state.
- The INACT alarm is reported against the ONT for many conditions such LOS, LOA, LCD, PEE, SUF, SD, ONTDISABLED, MEM, INACT, LOF, SF, DF, LOAM, DOW, RDI, and LOKS. All these conditions trigger the same INACT alarm. The TL1 command REPT-OPSTAT-ONT can help the operator figure out exactly the particular alarm that triggered the INACT alarm. Refer to the *TL1 Commands and Messages Manual* for syntax of the REPT-OPSTAT-ONT command.
- For H.248 /GR303 service, the dial tone is absent if one of the following occurs:

  1. An ONT is locked.
  2. A POTS card is locked.
  3. A POTS port is locked.
  4. The VoIP client is locked.

  For SIP VoIP service, the dial tone is present for 10 minutes longer, per design, if the VoIP client is locked, but no calls can be originated and terminated during this time.

3 Hardware and software compatibility

3.1 Software compatibility

Table 7 lists the software that is compatible with ONT 04.07.11b.

P-OLT software	R04.07.11
ONT software	R04.07.11b

5529 LRM	R2.00.03
ODMT	R02.01.01
5520 AMS	R9.0.3 with an 7342 ISAM FTTU R4.7 NE plug-in
GenBand ANSI G6 voice gateway	R10.2.7 and applicable patches R10.6.00 and applicable patches
GenBand ETSI G6 voice gateway	R10.6.50 and applicable patches

Table 7 Software compatibility

3.2 Hardware ONT mnemonics, part numbers, and regional applicability

Table 8 lists the ONT hardware that is compatible with the current system. The regional applicability is ANSI (for ANSI applicable HW), ETSI (for ETSI applicable HW), and both (for HW applicable to both ANSI and ETSI).

Hardware mnemonic	ANSI, ETSI, or both	Hardware part number	Current or next generation?	Raman reduction support?
B-0404-A	Both	3FE61618AA	Current	Yes
B-8112-A	Both	3FE50774AE	Current	Yes
B-8102-A	Both	3FE50774AF	Current	Yes
I-010G-A	ETSI	3FE51912AA	Current	N/A
I-010G-B	Both	3FE51881AC	Next	Yes
I-011G-A	Both	3FE51880AE	Next	N/A
I-110G-A	Both	3FE51880AD	Next	N/A
I-111G-A	Both	3FE51880AC	Next	N/A
I-020E-B	ETSI	3FE28683AB	Current	N/A
I-020E-H	ETSI	3FE28683AC	Current	N/A
I-020E-H	ETSI	3FE28683AD	Current	N/A
I-020G-F	Both	3FE29528AA	Current	N/A
I-020G-G	ETSI	3FE60723AA	Current	N/A
I-020G-M	Both	3FE51881AB	Next	N/A
I-040G-A	ETSI	3FE61515AA	Current	N/A
I-040G-B	Both	3FE51881AA	Next	N/A
I-220E-A	Both	3FE50754AB	Current	N/A
I-220E-A	Both	3FE50754AE	Current	Yes
I-220E-A	Both	3FE50754AF	Current	Yes
I-221E-A	Both	3FE50754AA	Current	No
I-221E-A	Both	3FE50754AD	Current	Yes
I-211M-D	ANSI	3FE51307AA	Current	Yes
I-211M-D	ANSI	3FE51307BA	Current	Yes

Hardware mnemonic	ANSI, ETSI, or both	Hardware part number	Current or next generation?	Raman reduction support?
I-211M-E	Both	3FE51296AA	Current	Yes
I-211M-G	ANSI	3FE51406AB	Current	Yes
I-211M-G	Both	3FE51406BB	Current	Yes
I-211M-H	ANSI	3FE 51852 AA	Next	Yes
I-211M-K	ANSI	3FE 52343 AA	Next	Yes
I-240G-A	ETSI	3FE60344AB	Current	N/A
I-240G-A	ETSI	3FE60344AD	Current	N/A
I-240G-B	Both	3FE51880AB	Next	N/A
I-241G-A	ETSI	3FE60344AA	Current	No
I-241G-B	Both	3FE51880AA	Next	N/A
M-300-A	ANSI	3FE 50533AA	Current	N/A
M-300-A	ANSI	3FE 50533AB	Current	N/A
O-0881V-A	ETSI	3FE51905AA	Current	N/A
O-00240V-A	ETSI	3FE51469AA	Current	N/A
O-210E-B	Both	3FE50683AP	Current	N/A
O-210E-B	ANSI	3FE50683AK	Current	N/A
O-210E-B	Both	3FE50683AS	Current	N/A
O-210E-B	Both	3FE50683AU	Current	N/A
O-210G-B	Both	3FE53082AA	Package B	N/A
O-210G-B	Both	3FE53082AB	Package B	N/A
O-211E-B	Both	3FE50683AC	Current	No
O-211E-B	Both	3FE50683AG	Current	No
O-211E-B	Both	3FE50683AL	Current	Yes
O-211E-B	Both	3FE50683AR	Current	Yes
O-211M-E	ANSI	3FE50762AC	Current	Yes
O-211M-E	ANSI	3FE50762BB	Current	Yes
O-211M-G	Both	3FE50762AE	Current	Yes
O-211M-G	Both	3FE50762BE	Current	Yes
O-211M-H	ANSI	3FE 51851 AA	Next	Yes
O-211M-R	Both	3FE51886AA	Current	Yes
O-420E-B	Both	3FE50683AM	Current	N/A
O-420E-B	Both	3FE50683AT	Current	N/A
O-421E-B	Both	3FE50683AE	Current	Yes
O-421E-B	Both	3FE50683AJ	Current	Yes
O-24121V-A	Both	3FE51063AA	Current	Yes
O-24121V-A	Both	3FE51063BA	Current	Yes
O-24120V-A	Both	3FE51063AB	Current	N/A

Hardware mnemonic	ANSI, ETSI, or both	Hardware part number	Current or next generation?	Raman reduction support?
O-24121G-A	ANSI	3FE51185AA	Current	Yes
O-24121G-A	ANSI	3FE51185BA	Current	Yes
O-24120G-A	ANSI	3FE51185AB	Current	N/A
O-820G-D	Both	3FE50774AG	Current	N/A
O-821G-D	Both	3FE50774AH	Current	Yes
O-821G-D	Both	3FE50774AJ	Current	Yes
O-821M-E	ANSI	3FE51369AA	Current	Yes
O-821M-E	ANSI	3FE51369AB	Current	Yes
O-821M-E	ANSI	3FE51369AC	Current	Yes

Table 8 Hardware compatibility

Additional information can be found in *ONT Product Information Manual.*

4 Open issues

Items identified in this section are known open issues at the time of release of this document. Each open issue is tracked by one or more problem tracking numbers. Problems are tracked by CTR number, if applicable, or by Alcatel-Lucent internal problem report numbers.

4.1 Critical issues

There are no open critical issues.

4.2 Major issues

The major open issues for this release are listed in Table 9.

Problem #	Description	ONT applicability	HW note	SW note
BDFam55434	While in flexmode, if the MDU is configured to drop untagged and priority tagged frames, traffic may flow upstream even if configured to be dropped. **Workaround**: Reboot the MDU.	O-00240V-A O-0881V-A		

Table 9 Major open issues

4.3 Minor issues

The minor open issues for this release are listed in the Table 10.

Problem #	Description	ONT/MDU applicability	HW note	SW note
WPRas11145	Deleting and recreating an HSI service with VLAN Translation enabled and the UNISIDEVLAN=CVLANDEF may result in an inability to pass traffic through the HSI service. **Workaround:** Two primary workarounds exist to correct this issue. 1. Reboot the ONT to re-establish HSI traffic flow. 2. Delete the HSI provisioning. Create and delete the HSI service with no VLAN Translation. Create the original HSI profile with VLAN Translation.	O-0881V-A O-00240V-A		
BDFam54551	When either tip or ring is grounded, DGN-ONTPOTS tip to ground and ring to ground restrictive measurements are simultaneously reported as 0 ohms.	All ONTs and MDUs		
BDFam53484	The PM-ONTL2UNIBYTES COUNT counter values are not correctly incrementing.	O-24120V-A O-24121V-A		
BDFam59899	If the DNS server configuration changes via DHCP, the ONT continues to send queries to the original DNS server, not to the new DNS server.	All except data-only ONTs		
BDFam60626	When deleting flows provisioned with UNISIDEVID = 65535 and p-bit translation enabled, the last flow is not deleted properly. When entering new flows on the same ONT, a FLOWSVCMIS alarm may be raised. **Workaround:** Edit the ONT OOS and then IS.	Package A ONTs		

Table 10 Minor open issues

5 Closed issues

Table 11 addresses issues that have been identified through customer CTRs or Alcatel-Lucent DDTSs and resolved in this release and those that were resolved in past releases.

Problem #	Sev	Description	ONT applicability	HW note	SW note	XML file
ONT R04.07.11b						

Problem #	Sev	Description	ONT applicability	HW note	SW note	XML file
BDFam62375 BDFam62235 AR 1-2992927	MJ	P-bit prioritization in the upstream not working as expected	I-040G-A I-040G-B I-011G-A			
ONT R04.07.11a						
BDFam62245 AR 1-2918772	CR	Software activation issue on ONT	O-21xE-B O-24xE-B			
WPRas11294 AR 1-2561714	MJ	ONT may send packets to incorrect GEM port	I-010G-A I-020E-B I-020E-H I-020G-F			
BDFam62300 AR 1-2868374	MJ	Delayed dialtone from ONT to softswitch	All voice ONTs and MDUs			
BDFam62301 AR 1-2819054	MJ	Change to special dialtone	n/a		uae250.xml, uae500.xml, uae750.xml	uae.xml
BDFam62352 AR 1-2870668	MJ	ONT not registering	I-010G-A I-020E-B I-020E-H I-020G-F I-011G-A I-110G-A I-111G-A I-211M-H I-211M-K I-240G-B I-241G-B O-211M-H			
BDFam62012 AR 1-2894064	MJ	ONT not functioning properly with alarm panel	I-240G-B I-241G-B			
BDFam62082	MN	SLID enhancement with ONT a ranged ONT	All			
ONT R04.07.11						
BDFam61513 AR 1-2772574	CR	VLAN tag missing after disconnecting and then reconnecting fiber	All			
BDFam61651 AR 1-2704906	CR	Update XML file for changes to digit map and registration period	SIP-based ONTs			Tde_sip.xml
BDFam61918	CR	The MWT LED may not correctly represent the	All			

Problem #	Sev	Description	ONT applicability	HW note	SW note	XML file
AR 1-2744953		MWI status on the line.				
BDFam61505 BDFam61945 AR 1-2664668	MJ	Caller Line ID (CLID) is not properly displayed.	All			
BDFam61796 AR 1-2794690	MJ	Upgrading the ONT may result in improper initialization of DSCP bits used for ONT communication and XML file downloads.	All			
BDFam61844 AR 1-2702907	MJ	Receiving an incoming fax call during an in-progress voice call may result in POTS line instability during a flash-hook event or after concluding the in-progress call.	All			
BDFam61875 AR 1-2744396	MJ	Enabling the FWDMCBYCVLAN parameter may result in no Multicast traffic on Ethernet ports 1 and 2.	I-241G-A			
BDFam60535 AR 1-2743447	MJ	During a SIPPING server subscription renewal, a de-register/re-register of the subscriber line from the softswitch may occur. The re-register event does not affect in-progress calls, but may prevent additional call processing until the re-register communication completes.	All			
BDFam55082 AR 1-2377568	MJ	Incomplete OLT provisioning of the ONT may result in an inability to download an XML file.	All			
BDFam61886 AR 1-2794748 AR 1-2750234	MJ	ONTs remain in an ONTMEA condition after being upgraded.	All			
BDFam56446	MN	If a REGISTER is rejected with a Retry-After header response, the ONT uses the locally configured retry timer to retry the REGISTER instead of the interval specified in the	SIP-based ONTs			

Problem #	Sev	Description	ONT applicability	HW note	SW note	XML file
		Retry- After header.				
BDFam60430	MN	Packets not properly forwarded when the antispoofing mode is changed and the CNTRLTYPE= IPDYNAMIC_SRVC.	I-240G-A I-241G-A I-040G-A			
BDFam61572 AR 1-2816453	MN	Long calling name string causes phone to not display anything.	All			
BDFam61763 AR 1-2850995	MN	The ONT aborts a terminating call during the alerting phase after 120 seconds, but call duration should be controlled by the softswitch	All			
BDFam61888	MN	Allow SIP subscribe refresh time to be greater than the current maximum of 86400 seconds	All			
BDF61950 AR 1-2910658	MN	The ONT does not stop ringing after receiving a CANCEL request from the softswitch.	SIP-based ONTs			
ONT R04.07.10a						
BDFam61816 AR 1-2664668	MJ	Caller ID not working	I-241G-B I-111G-A I-110G-A I-211M-H I-211M-K I-240G-B O-211M-H			
BDFam59893 AR 1-2626451	MJ	Ring cadence for the ONT				
ONT R04.07.10						
BDFam54743	MN	FTL performance monitoring counters do not increment.	O-0881V-A			
BDFam61024	MJ	If a configured SIPing server was to become unreachable, the ONT will not failover to an alternative SIPing server.	Voice ONTs			
ONT R04.07.04						

Problem #	Sev	Description	ONT applicability	HW note	SW note	XML file
BDFam55210 AR 1-2426031	CR	Downstream traffic not prioritized based on p-bit	All ONTs and MDUs			
BDFam57501 AR 1-2489754	MJ	ONT will not switch to VBD mode when tty tones are detected	Current generation ONTs and MDUs			
BDFam60530 AR 1-2659879	MJ	The ONT incorrectly responds to 503 retry-after header duration interval	SIP-based ONTs and MDUs			
BDFam56209 BDFam58371 AR 1-2463783	MN	ONT generated call display not showing date and time	Current generation ONTs and MDUs			
WPRas08240 CR 200801010609	MN	Performance counters on ONT side does not show fragments transmitted data	All ONTs and MDUs			
BDFam59091 AR 1-2493420	MJ	Unable to dial toll numbers from second POTS port	All voice ONTs and MDUs			
BDFam60829 AR 1-2542851	MJ	False call waiting tone heard	SIP based ONTs and MDUs			
BDFam54959 AR 1-2377581	MJ	ONT does not process first IGMP join message after an IGMP leave	All ONTs and MDUs			
BDFam56844 AR 1-2491161	MJ	Dial tone not heard on device	I-241G-B			
BDFam57670 AR 1-2525549	MJ	Local ringing tone overrides music ringing service	All voice ONTs and MDUs			
BDFam57721 AR 1-2524016	MJ	TTY protocol not detected on some devices	All ONTs and MDUs			
BDFam58860 AR 1-2522802	MJ	No dial tone available after call waiting	All voice ONTs and MDUs			
BDFam58679 AR 1-2450787 AR 1-2432746	MJ	Call waiting may not work	All voice ONTs and MDUs			
BDFam59362 AR 1-2600582	MJ	Host leaving multicast group and returning affected other multicast streams	All ONTs and MDUs			
BDFam59363 AR 1-2600604	MJ	SLID cannot be set on ONT or MDU using specific browser	All ONTs and MDUs			

Problem #	Sev	Description	ONT applicability	HW note	SW note	XML file
BDFam59501 AR 1-2600607	MJ	Removing PONIGMPCHN configuration from one port disables PONIGMPCHN configuration on other ports.	All ONTs and MDUs			
BDFam59893 AR 1-2626451	MJ	Ring cadence for ONT incorrect	I-241G-B			
BDFam58880 AR 1-2523674	MJ	Megaco DTMF digit collection stops after media stream subtract	All Megaco-based ONTs and MDUs			
BDFam57912	MJ	iConfig subscription changed	All ONTs and MDUs			
BDFam56051 AR 1-2233111	MN	Interoperability issues between ONT and IAD audiocodes MP-124	All voice ONTs and MDUs			
BDFam57098 AR 1-12505951	MN	ONT does not raise the alarm when default CVLAN are configured the same on ONTENET-1 and -2 with P2P disabled.	All ONTs and MDUs			
BDFam59590 AR 1-2597910	MN	Priority of CODEC not working based on customer SIP XML file setting.	All SIP-based ONTs and MDUs			
BDFam59095	MJ	When only two queues with different weights are defined in a PQ profile, the weighting is treated as 50/50. **Workaround**: Define three or more queues.	I-220E I-221E O-420E O-210E O-421E O-211E			
BDFam59096	MJ	Extended periods of 24-line bulk call testing may result in an MDU re-initialization. **Workaround**: None required; system recovers.	O-24121V O-24120V O-24121G O-24120G			
BDFam57499 AR 1-2286605	MN	ONT with two XML files	Voice-based ONTs and MDUs			
BDFam54180	MN	DGN-ONTPOTS tip to ground and ring to ground resistive measurements are not accurate.	All next generation ONTs			
BDFam54181	MN	Three DHCP DISCOVER messages are generated on IP address change after	All next generation ONTs			

Problem #	Sev	Description	ONT applicability	HW note	SW note	XML file
		lease time expires				
BDFam54876	MN	Deferred Transmission (DT) performance monitoring counters do not increment.	O-0881V-A			
WPRas10659	MN	The FCSE performance monitoring counter is not functioning in this release.	O-2412xG-A			
ONT R04.07.00a						
BDFam59893 AR 1-2626451	MJ	Ring cadence issue for the I-241G-B	I-241G-B I-111G-A			
BDFam61021 AR 1- 2664668	MJ	Caller ID issues for I-241G-B	I-110G-A I-211M-H I-211M-K I-240G-B O-211M-H			
ONT R04.07.00						
BDFam54183	MN	Voice communication is established after a few seconds on the first call after the ONT reboots.	I-110G-A I-111G-A I-240G-B I-241G-B			
BDFam52906 AR 1-2300286	MJ	Message-Header warnings with Codenomicon	All			
BDFam50553	MN	When running the DGN-ONTPOTS diagnostic, the presence of a Foreign EMF on a POTS line may also be reported a Hazardous Potential failure.	O-211M-H I-211M-H I-211M-K			
BDFam54830 AR 1-2227071	MJ	Call waiting tone not ok	SIP-based ONTs			
WPRas10479 AR 1-2321140	MJ	MDU inactive during upgrade	M-300-A			
BDFam53052 AR 1-2208685	MJ	Incorrect meter pulse delay	All ONTs			

Table 11 Closed issues

6 TL1 and CLI command changes

For a list of new, deleted, or changed TL1 commands, see "Table 38 New, modified, or removed TL1 commands for FGU 4.7" section of the Alcatel-Lucent 7342 ISAM FTTU TL1 Commands and Messages document. For a list of applicable CLI commands, see the "History" section of the Alcatel-Lucent 7342 ISAM FTTU CLI Commands document.

7 Terms and abbreviations

Table 12 lists the terms and abbreviations used in this Customer Release Notice.

Acronym or term	Expansion or definition
AIS	Alarm Indicator Signal
AMS	Access Management System
ARP	Address Resolution Protocol
BITS	Building Integrated Timing Source
CFR	Code of Federal Regulations
CLI	Command Line Interface
CR or Critical issues	Critical problems that severely affect service, capacity/traffic, billing, and maintenance capabilities.
CRN	Customer Release Notes
D.H.H.S.	Department of Health and Human Services
DHCP	Dynamic Host Control Protocol
DSCP	Differentiated Services Code Point
FCC	Federal Communications Commission
FEC	Forward Error Correction
FTTU	Fiber to the User
GE	Gigabit Ethernet
GLT2	GPON Line Termination card with 2 PONs
IBV	In-band Video
IP	Internet Protocol
ISAM	Intelligent Services Access Manager
LAG	Link Aggregation Group
LT	Line Termination
MAC	Media Access Control
MJ or Major issues	Major problems that cause conditions that seriously affect system operation, maintenance, and administration, etc. The urgency is less than in level 1/critical situations because of a lesser immediate or impending effect in system

Acronym or term	Expansion or definition
	performance, customers, and the customer's operation and revenue.
MLT	Metallic Loop Testing
MN or Minor issues	Minor problems do not significantly impair the functioning of the system and do not significantly affect service to customers.
NE	Network element
NEBS	Network Equipment Building System
NSIT	Network Systems Integration Testing
NT	Network Termination
ODN	Optical Data Network
OLT	Optical Line Termination (also referred to as P-OLT)
OMCI	ONT Management Control Interface
ONT	Optical Network Terminal
ORL	Optical Return Loss
OSWP	Overall Software Package
P-OLT	Packet-Optical Line Termination (also referred to as OLT)
PON	Passive Optical Network
POTS	Plain Old Telephone Service
PQ	Priority queue
PFO	Premium Feature Option
QoS	Quality of Service
RSTP	Rapid Spanning Tree Protocol
RADIUS	Remote Authentication Dial-In User Service
RMA	Return Material Authorization
RSSI	Received Signal Strength Indicator
RTU	Right to use
SFTP	Secure File Transfer Protocol
SHub	Service Hub (also known as LANX)
SNMP	Simple Network Management Protocol
SSH	Secure Shell
STP	Spanning Tree Protocol
SWCAP	Loss of switch over capability
TFTP	Trivial File Transfer Protocol
TL1	Transaction Language 1
UL	Underwriters Laboratories, Inc.
VLAN	Virtual bridged Local Area Network
VoIP	Voice over IP

Table 12 Terms and abbreviations