CUSTOMER RELEASE NOTES

Alcatel-Lucent 7342 ISAM FTTU

ONT | R04.06.04

3FE 52124 AGAA 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.

NOTICE

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Technical Support Telephone Number

Alcatel-Lucent provides technical assistance telephone numbers. For technical assistance 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 www1.alcatel-lucent.com/comps/pages/carrier_support.jhtml.
All RMA items and procedures are bounded by the Alcatel-Lucent contract agreement with the customer.

Contents

List of tables

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 R04.06.04, including known restrictions.

This Customer Release Notes (CRN) document is prepared for system administrators, installers, and other operators of the 7342 ISAM FTTU.

R04.06.04 refers to the ONT R04.06.04 load as released by the engineering team on June 5, 2009.

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 R04.06.04

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

Purpose for R04.06.04 release

This ONT R04.06.04 release is to introduce fixes to existing functionality and the following features:

> Introduction of the B-0404-A business ONT

> VoIP configuration and functionality changes for SIP:

- Support additional method of putting calls on hold by using 'inactive' as a method configuration parameter

- Support configuration that keep the field "SDP a=sendrecv" as mandatory for normal call invitation.
- Added the codec 121 support during DTMF set up.
- Dead-tone generation enhancement for additional scenarios.

> Germany XML file

Purpose for R04.06.02 release

This ONT R04.06.02 release is to introduce fixes to existing functionality and the following features:

> Changes to CVLAN provisioning on I-241G-A and I-240G-A ONTs

Purpose for R04.06.01 release

This ONT R04.06.01 release is to introduce fixes to existing functionality.

Purpose for R04.06.00 release

This ONT R04.06.00 release is to introduce new functionality:

> Business service support on ONTs and MDUs

> O-0881V-A MDU for the ETSI market

> ONT flat file provided on release CD-ROMs

> Megaco enhancements:
- XDD package
- IND package
- Support for large digit map

> Support for SIP FTP server user name and password security

> Additional VDSL bandplan profile support for ETSI MDUs

> MAC scalability improvements

> AES disable warning alarm

The ONT R04.06.00 release also 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 0.

ONTs supported in this release

See Table 2 for a list of supported ONTs.

1.4 Key features

Performance monitoring:

> Voice, PON, Ethernet

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

> 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

> 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 (Note: This is not yet supported via 5526 AMS).
  - Added ability to control the behavior of the ONT with respect to nonce expiration and re-registration (Note: This is not yet supported via 5526 AMS).

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
- ONT support for an 5526 AMS initiated mechanism that commands the ONT to store data into flash to enable NRR optimization
- 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

1.5 Softswitch interoperability

In the following section, 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 2.16 for the list of supported CDE files.
  - Loop emulation service (POTS emulation) with General Bandwidth G6 gateway (GR-303, V5.2).
  - MEGACO-based softswitch interoperability:
    - Against Alcatel-Lucent 5020 E-10 MGC, Alcatel-Lucent 5020 S-12 MGC - *Completed in ONT 4.4.13*
    - Against Huawei SX3000 NGN softswitch - *Completed in ONT 4.4.15* in customer labs
  - SIP-based softswitch interoperability:
    - Against Broadsoft R13.0, Broadsoft R14.0 - Completed in ONT 4.4.15
    - Against Nortel CS2K SN10 – Completed in ONT 4.6.01
    - Against Nortel CS2K SN09U - Completed in ONT 4.4.13
    - Against Mitel R8.0 – Completed in ONT 4.4.18
    - Against Mitel R9.0.1.17 – Completed in ONT 4.6.04
    - Against Nextone Session Border Controller (SBC) against Broadsoft R12 - Completed in ONT 4.4.13
    - Against Netcentrix - Completed and certified in ONT 4.4.13
    - Against Alcatel-Lucent FS 5000 in TISPAN tightly-controlled mode – Completed in ONT 4.4.16

- Against Sonus ASX – Completed by customer in their labs in ONT 4.4.13
- Against Xener softswitch – Completed by customer in their labs in ONT 4.4.16
- Against Metaswitch softswitch – Completed and certified in ONT 4.4.16
- Against Alcatel-Lucent 5020 CSC – Completed in ONT 4.5.07
- Against Centile network softswitch– Completed in ONT 4.5.07

1.6 Documentation references

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 user name 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. Choose Documentation from the Customer support tab.
4. From the alphabetical listing of products, click on the 7000-7999 link.
5. Click on the 7342 ISAM FTTU (Fiber to the User) link.
6. In the Documentation and downloads section, 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. 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.
7. 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.
8. Click on the PDF link for the document you want.

Table 1 lists the documents relevant to the 7342 ISAM FTTU ONT R04.06.04 release.

Title	Orderable part number	Description
ONT Software Installation Procedures	3FE 52124 AGAA 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 52124 AGAA 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 04.06.04 Customer Documentation CD (ANSI)	3FE 52567 AAAA	Provides user manuals for the 7342 ISAM FTTU ANSI market, except for the P-OLT Software Installation Procedures and the OLT Customer Release Notes.
7342 ISAM FTTU P-OLT 04.06.04 Customer Documentation CD (ETSI)	3FE 52570 AAAA	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 ONT R04.06.04 Customer Documentation CD	3FE 52581 AAAA	Provides ONT manuals for all current ONT releases, except for *the ONT Software Installation Procedures* and the *ONT Customer Release Notes*.

Table 1 Customer documentation

1.7 Release notation

This software package includes the operational software and release notes for the 7342 ISAM FTTU ONT R04.06.04 release as described in Table 2.

Product	Package part number or name	Part number (media only)	Related WAM NE Package
ONT R04.06.04 software kit (CD-ROM) ONT R04.06.04 software kit (software download)	3FE 52124 AGAA 3FE 52124 AGAB	–	–
The master CD contains:	–	3FE 52124 AGAA PMZZA	–
Files:			
ONT flat file that provides details of the release mapping for network management: ONT_Release_Mapping.txt			
Software:			

Product	Package part number or name	Part number (media only)		Related WAM NE Package
MEGACO-based ONTs (VoIP XML file version 4.1)				
B-8102-A	–	FE51138AFVA11	Megaco s/w loads	WAMR07.04.00_ONT4.6.04_pkg.tbc
B-8112-A	–	FE51138AFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
I-220E-A	–	FE50853AFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
I-221E-A	–	FE50853AFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
I-211M-D	–	FE50853DFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
I-211M-E	–	FE50853DFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
I-211M-G	–	FE50853EFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
I-240G-A	–	FE51559AFVA09		WAMR07.04.00_ONT4.6.04_pkg.tbc
I-241G-A	–	FE51559AFVA09		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-210E-B	–	FE50853AFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-211E-B	–	FE50853AFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-211M-E	–	FE50853DFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-211M-G	–	FE50853EFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-211M-R	–	FE50853EFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-420E-B	–	FE50853AFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-421E-B	–	FE50853AFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-24121G-A	–	FE51408AFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-24120G-A	–	FE51408AFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-24121V-A	–	FE51175AFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-24120V-A	–	FE51175AFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-821G-D	–	FE51136AFVA10		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-820G-D	–	FE51136AFVA10		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-821M-E	–	FE51136CFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
Alcatel-Lucent FPGA-based ONTs MEGACO				
M-300-A	-	FE50646AFVA12	Megaco SW load	WAMR07.04_ONT4.6.04_pkg.tbc
SIP-based ONTs (VoIP XML file version 4.1)				
B-8102-A	-	FE51139AFVA11	SIP s/w loads	WAMR07.04.00_ONT4.6.04_pkg.tbc
B-8112-A	-	FE51139AFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
I-220E-A	–	FE50854AFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
I-221E-A	–	FE50854AFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
I-211M-D		FE50854DFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
I-211M-E	–	FE50854DFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
I-211M-G	–	FE50854EFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
I-240G-A	–	FE51560AFVA08		WAMR07.04.00_ONT4.6.04_pkg.tbc
I-241G-A	–	FE51560AFVA08		WAMR07.04.00_ONT4.6.04_pkg.tbc

Product	Package part number or name	Part number (media only)		Related WAM NE Package
O-210E-B	–	FE50854AFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-211E-B	–	FE50854AFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-211M-E	–	FE50854DFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-211M-G	–	FE50854EFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-211M-R	–	FE50854EFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-420E-B	–	FE50854AFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-421E-B	–	FE50854AFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-24121G-A	–	FE51409AFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-24120G-A	–	FE51409AFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-24121V-A	–	FE51176AFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-24120V-A	–	FE51176AFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-821G-D	–	FE51137AFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-820G-D	–	FE51137AFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
O-821M-E	–	FE51137CFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
Alcatel-Lucent SoC-based data only ONTs				
B-0404-A	–	3FE51968AFVA06	N/A	WAMR07.04.00_ONT4.6.04_pkg.tbc
I-010G-A	–	3FE50782BFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
I-020E-B	–	3FE50782BFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
I-020E-H	–	3FE50782BFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
I-020G-F	–	3FE50782BFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
I-040G-A	–	3FE51559AFVA09		WAMR07.04.00_ONT4.6.04_pkg.tbc
I-020G-G	–	3FE51815AFVA12		WAMR07.04.00_ONT4.6.04_pkg.tbc
Alcatel-Lucent data-only MDUs				
O-0881V-A	–	FE51980AFVA12	N/A	WAMR07.04.00_ONT4.6.04_pkg.tbc
O-00240V-A	–	FE51564AFVA11		WAMR07.04.00_ONT4.6.04_pkg.tbc
Documentation:				
ONT Software Installation Procedures	–	3FE 52124 AGAA RJZZA		–
ONT Customer Release Notes	–	3FE 52124 AGAA DEZZA		–

Table 2 7342 ISAM FTTU ONT software kit

Table 3 lists the ONT and MDU RTU software licenses and part numbers.

Description	Part number
ONT R4.x ONT RTU, PFO	3FE 50976 BAAA
MDU R4.x RTU, PFO	3FE 51850 AAAA

Table 3 7342 ISAM FTTU ONT RTU PFO 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 www1.alcatel-lucent.com/comps/pages/carrier_support.jhtml.

2 Application notes

This section lists important considerations and assumptions for operational behavior associated with Alcatel-Lucent 7342 ISAM FTTU ONT R04.06.04. Please also note that section 4 should be referred to for a list of known issues.

2.1 ONT hardware considerations and limitations

- 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 I-211M-H, O-211M-H, and I-211M-K ONTs are documented in the 7342 ISAM FTTU ONT user documentation, but are not yet supported.
- The Delta DUPS-1232V and CyberPower CyberShield MI36A12V3 UPSs for the I-211M-K are documented in the 7342 ISAM FTTU ONT user documentation, but are not yet supported.

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.

> 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 5.
- 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

- For PM_ONTENET: the IMTE, CSE, and SQE performance monitoring counters are not supported.
- The single collision frame counters on SoC-based ONTs are not incremented.
- 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 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.

2.10 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.

2.11 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.

> Ethernet OAM features are not supported on business ONT CES VLANs.

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

> When an UNSTACKED cross-connect VLAN is provisioned across a I-240G-A or I-241G-A UNI, downstream multicast traffic that is single tagged will be dropped by the ONT.

> When port-to-port communication is enabled, you must specify a different default C-VLAN ID for each of its four ONT UNI ports, meaning 4 unique VLAN IDs are required. When port-to-port communication is disabled, then the C-VLAN needs to be unique between port 1 and 2, and between port 3 and 4 (only 2 unique VLAN IDs are required).

> The Elpac 16 W power converter cannot be used with the I-241G-A and I-240G-A ONTs. The *7342 ISAM FTTU ONT Product Information Manual* indicates that this is a supported configuration. This configuration is not supported.

2.13 I-240G-A ONT using remote gateway software issues and restrictions

> The I-240G-A using remote gateway software is documented in the *7342 ISAM FTTU ONT Product Information Manual*, but it is not supported.

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

> Under high traffic packet conditions on two GigE ports simultaneously, traffic loss may be experienced during an ONT software download.

> 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.

2.15 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 Init-Sys command to update the provisioning.

2.16 Provisioning recommendations

POTS Voice support:

To ensure high quality delivery of 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, 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.

Specific country adaptations for the POTS interface are contained in these embedded configuration files:

> ansi.xml - for use in North American applications

During provisioning, the above 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.

Specific country adaptations for the POTS interface are contained in these embedded configuration files:

> ansi.xml - for use in North American applications

> poland.xml – for use in Polish applications

> portugal.xml – for use in Portugal applications

> chile.xml – for use in Chile applications

> tde_sip.xml – for use in Telefonica applications

> russia.xml – for use in Russian applications

> iceland.xml – for use in Iceland applications

> danish.xml – for use in Denmark applications

> singapore.xml – for use in Singapore applications

> korea.xml – for use in Korean applications

> malta.xml – for use in Maltese applications

> china.xml – for use in Chinese applications

> saudi.xml -- for use in Saudi Arabia applications

> france.xml – for use in French applications

> spain.xml – for use in Spain applications

> uae.xml – for use in UAE applications

> germany.xml – for use in Germany applications

> telstra.xml – for use in Australia/Telstra applications

> Ireland specific country adaptations for the POTS interface are contained in these embedded configuration file:

- There are four profiles to vary the maximum flash-hook detection value for Ireland. This is the time the ONT takes to disconnect the call.

  ireland.xml – for use in Ireland applications (1.1s)

  ireland250.xml – for use in Ireland applications (250 ms)

  ireland500.xml – for use in Ireland applications (500 ms)

  ireland750.xml – for use in Ireland applications (750 ms)

> Kuwait specific country adaptations for the POTS interface are contained in these embedded configuration file:

- There are four profiles to vary the maximum flash-hook detection value. This is the time the ONT takes to disconnect the call. During provisioning, the above 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.

kuwait.xml – for use in Kuwait applications (1.1s)

kuwait250.xml – for use in Kuwait applications (250ms)

kuwait500.xml – for use in Kuwait applications (500ms)

kuwait750.xml – for use in Kuwait applications (750ms)

During provisioning, the above 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.

HSI:

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

Multicast support:

> 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 s 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.

2.17 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 intent, 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 4 lists the software that is compatible with ONT 04.06.04.

P-OLT software	R04.06.04
ONT software	R04.06.04
5520 AMS	R8.4.1 with an NE plug-in
5526 AMS-M	R7.4.1 and applicable patches
5528 WAM	Release 07.04.00 using WAMR07.04.00_ONT4.6.04_pkg.tbc
GenBand ANSI G6 voice gateway	R10.2.4 p1 and applicable patches R10.2.3 p1 and applicable patches R10.2.3 p2 and applicable patches

	R9.1.2 p2 and applicable patches
GenBand ETSI G6 voice gateway	10.2.52 and applicable patches

Table 4 Software compatibility

3.2 Hardware ONT mnemonics, part numbers, and regional applicability

Table 5 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	Raman reduction support?
B-0404-A	Both	3FE61618AA	Yes
B-8112-A	Both	3FE50774AE	Yes
B-8102-A	Both	3FE50774AF	Yes
I-010G-A	ETSI	3FE51912AA	N/A
I-020E-B	ETSI	3FE28683AB	N/A
I-020E-H	ETSI	3FE28683AC	N/A
I-020E-H	ETSI	3FE28683AD	N/A
I-020G-F	Both	3FE29528AA	N/A
I-020G-G	ETSI	3FE60723AA	N/A
I-040G-A	ETSI	3FE61515AA	N/A
I-220E-A	Both	3FE50754AB	N/A
I-220E-A	Both	3FE50754AE	Yes
I-220E-A	Both	3FE50754AF	Yes
I-221E-A	Both	3FE50754AA	No
I-221E-A	Both	3FE50754AD	Yes
I-211M-D	ANSI	3FE51307AA	Yes
I-211M-D	ANSI	3FE51307BA	Yes
I-211M-E	Both	3FE51296AA	Yes
I-211M-G	ANSI	3FE51406AB	Yes
I-211M-G	Both	3FE51406BB	Yes
I-240G-A	ETSI	3FE60344AB	N/A
I-240G-A	ETSI	3FE60344AD	N/A
I-241G-A	ETSI	3FE60344AA	No
M-300-A	ANSI	3FE 50533AA	N/A
M-300-A	ANSI	3FE 50533AB	N/A
O-0881V-A	ETSI	3FE51905AA	N/A
O-00240V-A	ETSI	3FE51469AA	N/A
O-210E-B	Both	3FE50683AP	N/A

Hardware mnemonic	ANSI, ETSI, or both	Hardware part number	Raman reduction support?
O-210E-B	ANSI	3FE50683AK	N/A
O-210E-B	Both	3FE50683AS	N/A
O-210E-B	Both	3FE50683AU	N/A
O-211E-B	Both	3FE50683AC	No
O-211E-B	Both	3FE50683AG	No
O-211E-B	Both	3FE50683AL	Yes
O-211E-B	Both	3FE50683AR	Yes
O-211M-E	ANSI	3FE50762AC	Yes
O-211M-E	ANSI	3FE50762BB	Yes
O-211M-G	Both	3FE50762AE	Yes
O-211M-G	Both	3FE50762BE	Yes
O-211M-R	Both	3FE51886AA	Yes
O-420E-B	Both	3FE50683AM	N/A
O-420E-B	Both	3FE50683AT	N/A
O-421E-B	Both	3FE50683AE	Yes
O-421E-B	Both	3FE50683AJ	Yes
O-24121V-A	Both	3FE51063AA	Yes
O-24121V-A	Both	3FE51063BA	Yes
O-24120V-A	Both	3FE51063AB	N/A
O-24121G-A	ANSI	3FE51185AA	Yes
O-24121G-A	ANSI	3FE51185BA	Yes
O-24120G-A	ANSI	3FE51185AB	N/A
O-820G-D	Both	3FE50774AG	N/A
O-821G-D	Both	3FE50774AH	Yes
O-821G-D	Both	3FE50774AJ	Yes
O-821M-E	ANSI	3FE51369AA	Yes
O-821M-E	ANSI	3FE51369AB	Yes
O-821M-E	ANSI	3FE51369AC	Yes

Table 5 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 critical open issues.

4.2 Major issues

The major open issues for ONT R04.06.04 are listed in Table 6.

Problem #	Description	ONT applicability	HW note	SW note
BDFam42195	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		
BDFam43570 BDFam42491	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		SIP and Megaco loads
BDFam45391 AR 1-2048249	The ONT declares a service affecting alarm when a refresh subscribe is performed, but no Notify message is received from the iConfig server. However, service has not been lost. **Workaround**: None required as the alarm will clear at the next refresh when a Notify is received.	SIP-based ONTs		SIP load with iConfig
BDFam42226	Traffic & OMCI issues pulling PON If a PON failure occurs during LP MDU initial provisioning, service provisioning may be impacted resulting in a service mismatch alarm	O-24121G-A		

Table 6 Major open issues

4.3 Minor issues

The minor open issues for ONT R04.06.04 are listed in the Table 7.

Problem #	Description	ONT applicability	HW note	SW note
BDFam28178	VOIP calls using G.726 ADPCM encoding may exhibit lower voice quality (MOS = 3.8 instead of 4).	All		
BDFam27794	In a LES configuration, the ONT is failing GR-909 requirements for Return Loss. No end user impact is observed. Requirement(s) failed: (GR-909, issue 1): R5-4.	I-220E I-221E O-420E O-210E O-421E O-211E		VoIP in LES mode with G6
BDFam28597	Provisioning single ONTs under extremely heavy traffic loads (in excess of 1G aggregate) with small packet sizes of 64 byte may result in anomalous behavior.	O-211M-E I-211M-E I-211M-D I-211M-G O-821M-E		
BDFam29263	NTP packets received at the ONT are terminated at the ONT. They are not replicated downstream to the CPE devices.	All		
BDFam37668	The following performance monitoring counters are not functioning in this release: CSE, FCSE, TBO, FTL, and LC	O-2412xG-A		
BDFam38118	On ONTs with eight or more voice lines, when the DGN-ONTPOTS diagnostic is performed, incorrect REN values in the lower ranges may be reported.	O-821M-E O-24121G-A O-24121V-A O-821G-D		
BDFam40526	Overdriving the allocated bandwidth above 140 Mbps in half duplex mode may result in blocked downstream traffic on the Ethernet port. There are no issues with full duplex.	All except data-only ONTs		
BDFam41129	In certain conditions, the power-on self-tests are not reported to the OLT. **Workaround**: Trigger a manual self-test using TL1 or the 5526 AMS-M.	I-240G-A I-241G-A		
BDFam41131	The Visual Message Waiting indication format using DTMF tones is not being sent correctly by the ONT.	All except data-only ONTs		SIP loads with Denmark CDE

Problem #	Description	ONT applicability	HW note	SW note
BDFam41132	Some payload types used with G.726 and RFC2833 packets are reserved internally to the ONT and will not be handled correctly in RTP packets received by the ONT. The reserved payload types are 100, 102, and 120. Furthermore 96 can be used for G.726 packets only and 97 for RFC2833 packets only. **Workaround**: The xml parameter, dynamic_codec_payload_map_entry should not be set to one of the conflicting values.	All except data-only ONTs		SIP loads
BDFam41869	Hexadecimal SLID entry may not properly outpulse to the voice LED for verification of SLID entry.	I-220E-A		
BDFam42000	DGN-ONTPOTS tip to ground and ring to ground resistive measurements are not accurate.	All ONTs		
BDFam42266	15-minute time period PM counts stored in the history counters may be stored and reported in the subsequent Time Period. **Workaround**: The time-stamp for each of the 15-minute time period PM counts in the history counters should be read that time-stamp minus 15-minutes.	O-00240V-A O-24121V-A O-24120V-A		
BDFam42269	Changing the system time results in a loss of PM data when the PM counts are move to history. **Workaround**: The History counters will properly reflect PM counters 12 hours after the date/time was modified.	O-00240V-A O-24121V-A O-24120V-A		
BDFam42999	An RTCP alarm (indicating RTCP packets are no longer received) occurs when a call is on Hold for lines configured at the softswitch as Centrex lines.	All ONTS with SIP and 5020 CSC softswitch		
BDFam44922	PLOAM message discard possible	O-24121V O-24120V O-24121G O-24120G		

Problem #	Description	ONT applicability	HW note	SW note
BDFam46168	ONTUNI CNTRLTYPE = IPDYNAMIC_SRVC is only supported only on ports provisioned in VLANTMODE or ETYPEVLANMODE. However, no alarm is raised when provisioning an ONTUNI as CNTRLTYPE=IPDYNAMIC_SRVC when the port in VLANTAG mode, UNTRUSTED mode or ETYPECMODE mode.	O-00240V-A O-0881V-A		
BDFam46169	ONTUNI CNTRLTYPE = IPDYNAMIC_SRVC is not supported on ports provisioned in FLEXMODE. An alarm is raised if the ONTUNI is provisioned this way. The raised alarm does not clear when the CNTRLTYPE is changed to either a supported CNTRLTYPE= or CNTRLTYPE = DISABLE.	O-00240V-A O-0881V-A		
BDFam48054	Support for new digit map. **Workaround**: The digit map must be configured so that after dialing *52 or *41, a directory number can also be dialed. Then, the digit map will function as expected.	SIP-based ONTs		
BDFam48058	The ONT ignores the retry-after header in an error response to a REGISTER or SUBSCRIBE request sent from the ONT.	SIP-based ONTs		
BDFam48863 BDFam48864 BDFam48865 AR 1-2163986	Unique visual message waiting indication FSK transmission issues for country-specific XML file	SIP-based ONTs		tde_sip.xml
BDFam49680	The ONT SIP stack continues to use the old DNS server address although a new DNS server address was indicated at DHCP renewal. Workaround: To force the use of the new DNS server take ONT out of service then put the ONT back in service.	SIP-based ONTs		
BDFam47525 AR 1-2163921	T.38-based fax transmissions may encounter a marginal delay during initial call setup	I-220E-A I-24xG-A		
BDFam50305	PON LOS may cause CES PW services to report incorrect status information	B-0404-A		

Table 7 Minor open issues

5 Closed issues

Table 8 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	Country applicability
ONT R04.06.04						
BDFam49818 AR 1-2224139	MJ	ONT is indicating the phone is off-hook when it is actually on-hook	Megaco-based ONTs			
BDFam47444 AR 1-2166028	CR	CVLANDEF restriction changes in FGU R4.6 causing compatibility issues from R04.05.07	I-240G-A I-241G-A O-00240V-A O-0881V-A			
BDFam47413 AR 1-2142173	MJ	Short tone heard before reception of SIP 183 session progress message	All		SIP	
BDFam47656 AR 1-2121218	MJ	Call is terminated with dial tone instead of busy tone	All		SIP and Megaco	
WPRas09511 BDFam43682 AR 1-1984444	MJ	P-bit value needs to be maintained in both upstream and downstream	All		SIP and Megaco	
BDFam46303 AR 1-1978499	MN	ONT terminates the call on getting a call waiting INFO for the second time	All		SIP and Megaco	
BDFam47523 AR 1-2174028	MN	ONT should not include the Require:timer header in the call hold re-INVITE	All		SIP and Megaco	
BDFam48109 AR 1-2166654	MN	When the ONT refreshes the session with "invite" should not update the SDP version	Voice ONTs		SIP and Megaco	
BDFam48862 AR 1-2163986	MN	Software has incorrect voice message waiting indicator configuration in XML file	All			Tde_sip.xml
BDFam44555 AR 1- 1842416	MN	Regulate the state of HOLD AGC by monitoring the optical power, RF output power calculation, and registers to report a live, continuously updated measurement from the RF detector	Al			
BDFam42338 AR 1-1892472	MJ	INACT alarm on the M-300 MDU	M-300-A			

Problem #	Sev	Description	ONT applicability	HW note	SW note	Country applicability
BDFam45168 AR 1-1910593						
BDFam41890 AR 1-1896053	MJ	Different failure scenarios when the PVSU is incorrectly inserted	M-300-A			
BDFam41754 BDFam46473 AR 1-1936139	MJ	Reboot with Malloc failure error message	M-300-A			
BDFam46370 AR 1-2112858	MJ	Upstream QoS p-bit values not respected, loss of packets on HSI stream	I-020E-A			
BDFam50104 AR 1-2210456	CR	ONT inactivity timer issues with packet loss	VoIP-based ONTs			
BDFam40964 BDFam45067	MJ	Traffic rates transmitted above the negotiated physical port rate may result in packet fragmentation. **Workaround**: Do not send traffic above negotiated rate	O-2412xG-A			
WPRas08619 WPRas08611	MN	The LOS performance monitoring history counters are not functioning in this release.	O-2412xV-A			
BDFam43610 SR 200810003549	MN	Issues with ONT SIP DTMF negotiation in the SDP.	SIP-based ONTs			
BDFam46375 AR 1-2018947	MN	Call drops due to unexpected value in the re-INVITE request from softswitch	SIP-based ONTs		SIP loads	
BDFam46511	MJ	Call forwarding to voice mail issues	SIP-based ONTs		SIP loads	
BDFam46583	MN	After a call transfer, the line that initiated the transfer cannot originate a new call	SIP-based ONTs		SIP loads	
ONT R04.06.02						
BDFam47301 BDFam46502	MJ	POTS line configuration modifications may result in a silent failure condition.	SIP-based ONTs		SIP loads with IConfig	
BDFam47311 BDFam47044 AR 1-2162724	MJ	Long-term calls drop due to incompatible session refresh operation.	SIP-based ONTs	CS 2000	SIP loads	

Problem #	Sev	Description	ONT applicability	HW note	SW note	Country applicability
BDFam47886 AR 1-2190004	CR	Improper response to 491 message causing long duration calls to fail	SIP-based ONTs		SIP loads	
BDFam46512	MN	MDU Data LED does not illuminate with data services active	O-24121G-A O-24120G-A		SIP and Megaco	
BDFam47869 AR 1-2166028	CR	I-24x CVLANDEF restricted with Port-to-Port Disabled	I-240G-A I-241G-A			
ONT R04.06.01						
BDFam43295 AR 1-1754173	MJ	Ethernet downstream throughput testing against O-24121G-A (FG4.4.1) did not meet the benchmark **Workaround**: Provision downstream rate limiting to not exceed the interface rate	O-24121G-A			
BDFam45634	MN	No alarm is raised when the HSI service is in VLANTMODE and the UNISIDEVLAN=0 or the NETWORKSIDEVLAN=0. The HSI service is reported In Service but no packets will pass.	O-00240V-A O-0881V-A			
BDFam45926	MN	No alarm is raised when the Ethernet service flow provisioning fails because too many P-bit translations were using when UNISIDEVLAN =4096 and NETWORKSIDEVLAN!=4096	O-00240V-A O-0881V-A			
BDFam46364 BDFam47309 AR 1-2116966	CR	No alarms POTS line shows IS-NR but dial tone test fails with result "line not configured"	SIP-based ONT		SIP loads with IConfig	
BDFam46002	MJ	Resets seen on MDU with high call rates **Workaround**: None required, MDU recovers automatically	O-24121G-A O-24120G-A			
ONT R04.06.00						
BDFam41954	MJ	Static multicast streams are not sent to all ports in the ETSI MDU. Ports 5 through 8 on ONTCARDs 1 and 2 do not receive static multicast streams. Dynamic multicast is working properly.	O-00240V-A			

Problem #	Sev	Description	ONT applicability	HW note	SW note	Country applicability
BDFam46813 BDFam46815 AR 1-2152024	CR	HSI data traffic stopped on MDU.	O-24121G-A O-24120G-A			
BDFam42988 SR 200808008130	MJ	Abnormal Noise Margin with O-00240V-A	O-00240V-A			
BDFam35709	MN	The DATA LED may not properly illuminate when MOCA is provisioned and connected.	O-211M-E I-211M-E I-211M-G O-211M-G			
BDFam35398	MN	The following performance monitoring counters are not functioning in this release: CSE, FCSE, and AE	O-2412xG-A			
BDFam37145	MN	After terminating a call with active reverse polarity, the dial tone may not be immediately present when taking the phone off-hook.	I-240G-A		Megaco loads only This issue has been fixed in the uae.xml file	
BDFam37983	MN	DGN-ONTPOTS measurements of tip to ground or ring to ground below 37 K-Ohms may be inaccurate.	I-211M-E I-211M-D I-211M-G O-211M-E O-211M-G			
BDFam40555	MN	Changes to the VDSL service profile [xsrvc] may result in LOL alarm.	O-24121G-A O-24120G-A O-24121V-A O-00240V-A			
BDFam42056	MN	MAC_IP anti-spoofing: When using the SET-ONTUNICNTRL command, if the CNTRLTYPE=MAC_IP and there are no valid combinations of MAC and IP addresses provisioned, all MAC/IP combinations are allowed.	O-00240V-A			
BDFam42172		The 0-00240V-A does not support provisioning of the external Ethernet port.	O-00240V-A			
BDFam42510 SR 200808005583	MN	The ONT will improperly set the session refresher to UAS in 200 OK responses to INVITE messages although it is configured to use UAC.	All ONTS with SIP Loads			

Problem #	Sev	Description	ONT applicability	HW note	SW note	Country applicability
BDFam42763 SR 200808014546	MN	CLIP not working	All SIP ONTs (except data-only)			
BDFam42810 SR 200809001531	MN	Flash hook and on hook timers issue	All SIP ONTs (except data-only)			
BDFam42844 SR 200809002230	MN	malta.xml file issues	All SIP ONTs (except data-only)			
WPRas08864	MN	Editing the ONT OOS and then back IS may result in some XDSL lines reporting IS-NR without a modem connected. **Workaround**: Edit the individual XDSL line OOS and back IS.	O-00240V-A O-24121V-A O-24120V-A			
BDFam44160	MN	If the calling party goes on hook just before the first ring cycle is complete at the called party, ringing is not stopped at the called party and continues indefinitely until the called party goes off-hook.	SIP-based ONT loads			
BDFam43606 SR 200810003543	MN	When the ONT receives a call from a videophone it is not possible to establish a voice communication	SIP-based ONT loads			
BDFam44556 SR 200811006963	MN	ONT VoIP LED not off when SIP is unregistered	SIP-based ONT loads			
BDFam44805 SR 200811014289	MN	Dialing digits happens together with dial tone	SIP-based ONT loads			
BDFam45037 SR 200812003453	MN	SIP register refresh rate change to customer XML file	I-220E-A			
BDFam43099 BDFam43824 AR 1-1966178	CR	Cannot get debug file from customer	N/A			
BDFam42263 BDFam42710 AR 1-1921236	MJ	Lock ONTCARD does not clear alarms Alarming and locking issues on SIP ONTs	SIP-based ONTs			
BDFam42448 AR 1-1934520	MN	REPT-OPSTAT-ONTMOCA MAC not reported correctly	N/A			
BDFam39985 AR 1-1810349	MJ	ONT flat file on software CD	N/A			

Problem #	Sev	Description	ONT applicability	HW note	SW note	Country applicability
BDFam43768 SR 200807015192	MN	Errored frames not discarded.	I-020G-F			
WPRas08239 SR 200801010609	MN	Dropped frames not counted in PM counter	I-0X0X-X data ONTs			
BDFam43609 SR 200810003545	MN	In some scenarios the ONT may include a require:timer header in a call hold re-INVITE message that follows after a session refresh re-INVITE has occurred. The require:timer causes the call hold to fail. The next call hold attempt works.	All SIP-based ONTs Broadworks softswitch	Tested with Broadworks softswitch		
BDFam42557 AR 1-1874659	MJ	Multiple iConfig registration fail alarms	SIP-based ONTs	SIP load with iConfig		
BDFam42752 AR 1-1939838	MJ	Time allotted for caller ID insufficient, cannot dial ONT from England	SIP-based ONTs			
BDFam43013 AR 1-1923530	MJ	SIP invite missing numbers	SIP-based ONTs			
BDFam43137 SR 200808006848	MN	Phone output level too high	Megaco-based ONTs			
BDFam43294 1-1976200	MN	VoIP echo occurs after DGN SIPDIALTONE	Megaco-based ONTs			
BDFam43596 AR 1-1983654	MJ	Call not getting disconnected	I-220E I-221E O-420E O-210E O-421E O-211E			
BDFam43969 SR 200809012422	MN	Changes to country-specific XML file for call waiting tone	N/A			
BDFam44087 AR 1-1941658	CR	SWRD FTP download issue on MDU	O-24121G-A O-24120G-A			
BDFam44429 AR 1-1903053	MJ	RF video led not lit	I-221E-A			

Table 8 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 4.6" 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 9 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 performance, customers, and the customer's operation and revenue.

Acronym or term	Expansion or definition
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
WAM	Web-based Access Manager

Table 9 Terms and abbreviations