



CHAPTER 3

Support Information for Alcatel-Lucent Devices

This chapter contains support information for Virtual Network Elements (VNEs) that manage Alcatel-Lucent devices in Cisco ANA 3.6.5, and contains the following topics:

- [Alcatel-Lucent 7450 Ethernet Service Switch, page 3-1](#)
- [Alcatel-Lucent Intelligent Services Access Manager, page 3-4](#)
- [Alcatel-Lucent Riverstone, page 3-7](#)
- [Alcatel-Lucent CBX, GX, B-STDx Switches, page 3-9](#)
- [Supported Technologies on Alcatel-Lucent Devices, page 3-15](#)



Note

For more information about the objects and attributes described in this chapter, see the [Cisco Active Network Abstraction 3.6.5 Technology Support and Information Model Reference Manual](#).

Alcatel-Lucent 7450 Ethernet Service Switch

This section includes the following information about Alcatel-Lucent 7450 ESS devices:

- [Alcatel-Lucent 7450 ESS—Supported Software Versions, page 3-2](#)
- [Alcatel-Lucent 7450 ESS—Supported Topologies, page 3-2](#)
- [Alcatel-Lucent 7450 ESS—Supported Modules, page 3-2](#)
- [Alcatel-Lucent 7450 ESS—Supported Technologies, page 3-3](#)
- [Alcatel-Lucent 7450 ESS—Supported Service Events, page 3-3](#)



Note

For information about which NE types are supported in Cisco ANA 3.6.5, see [Alcatel-Lucent 7450 Ethernet Service Switch](#).

Alcatel-Lucent 7450 ESS—Supported Software Versions

Table 3-1 Supported Software Versions for Alcatel-Lucent 7450 ESS—Cisco ANA 3.6.5

Version Name	ANA Version	Certification Level
3.0.R1	3.5.2	V
3.0.R7	3.5.2	V
4.0.R5	3.5.2	V



Note

Software versions marked with an asterisk (representing a wildcard) are supported by Cisco ANA 3.6.5. Specific software versions that have been tested and verified are listed individually and marked as V.

Alcatel-Lucent 7450 ESS—Supported Topologies

Table 3-2 Supported Topologies for Alcatel-Lucent 7450 ESS—Cisco ANA 3.6.5

Topology Type	Link Type	ANA Version
Ethernet	Ethernet	3.6.0

Alcatel-Lucent 7450 ESS—Supported Modules

Table 3-3 Supported Modules for Alcatel-Lucent 7450 ESS—Cisco ANA 3.6.5

Module Name	ANA Version	Module Description	Certification Level
M10-1GB-SFP	3.5.2	MDA 10 Ports 1-Gigabit Ethernet SFP	V
M16-OC12/3-SFP	3.5.2	MDA 16 Ports OC12/OC3 SFP	V
M8-OC12/3-SFP	3.5.2	MDA 8 Ports OC12/OC3 SFP	V
M16-OC3-SFP	3.5.2	MDA 16 Ports OC3 SFP	V
M4-OC48-SFP	3.5.2	MDA 4 Ports OC48 SFP	V
M1-10GB	3.5.2	MDA 1 Port 10 GigabitP	V
M2-OC48-SFP	3.5.2	MDA 2 Ports OC48 SFP	V
20-100ETH-SFP	3.5.2	MDA 20 Port 100FX	V
M20-1GB-TX	3.5.2	MDA 20 Ports 10/100/1000 Ethernet TX	V
M2-10GB-XFP	3.5.2	MDA 2 Ports 10Gig Ethernet XFP	V
M20-1GB-SFP	3.5.2	MDA 20 Ports 10/100/1000 Ethernet SFP	V
VSM-CCA	3.5.2	VSM Cross Connect	V
M5-1GB-SFP-B	3.5.2	MDA 5 Ports 10/100/1000 Ethernet SFP	V

Table 3-3 Supported Modules for Alcatel-Lucent 7450 ESS—Cisco ANA 3.6.5 (Continued)

Module Name	ANA Version	Module Description	Certification Level
M10-1GB-SFP-B	3.5.2	MDA 10 Ports 10/100/1000 Ethernet SFP	V
SFM-200G	3.5.2	200g CPM/SF module	V
SFM-100G	3.5.2	100g CPM/SF module	V
SFM2-200G	3.5.2	200g CPM/SF module	V
IOM-20G	3.5.2	2 x 10-Gig MDA IOM Card	V
M60-10/100ETH-TX	3.5.2	MDA 60 Ports 10/100 Ethernet TX	V
M60-10/100ET-TX	3.5.2	MDA 60 Ports 10/100 Ethernet TX	V
IOM-20G-B	3.5.2	2 x 10-Gig MDA IOM Card, B	V

Alcatel-Lucent 7450 ESS—Supported Technologies

The following technologies are supported by the Alcatel-Lucent 7450 ESS in Cisco ANA 3.6.5:

- [IP](#), page 3-15
- [Ethernet \(IEEE 802.3\)](#), page 3-18
- [Physical Equipment](#), page 3-28
- [Base Logical Components](#), page 3-29
- [Common](#), page 3-30

Alcatel-Lucent 7450 ESS—Supported Service Events

Table 3-4 Supported Service Events for Alcatel-Lucent 7450 ESS—Cisco ANA 3.6.5

Event Name	ANA Version	Expedited
Card In/Out	3.6.0	Y
Link Down/Up	3.6.0	Y
Device Unreachable	3.6.0	N
CPU Over Utilized	3.6.0	N
Device Unsupported	3.6.0	N
Module Unsupported	3.6.0	N
Port Flapping	3.6.0	N
Port Down	3.6.0	Y
Card Up/Down	3.6.0	Y

Alcatel-Lucent Intelligent Services Access Manager

This section includes the following information about Alcatel-Lucent ISAM devices:

- [Alcatel-Lucent ISAM—Supported Software Versions, page 3-4](#)
- [Alcatel-Lucent ISAM—Supported Topologies, page 3-4](#)
- [Alcatel-Lucent ISAM—Supported Modules, page 3-5](#)
- [Alcatel-Lucent ISAM—Supported Technologies, page 3-6](#)
- [Alcatel-Lucent ISAM—Supported Service Events, page 3-7](#)



Note

For information about which NE types are supported in Cisco ANA 3.6.5, see [Alcatel-Lucent Intelligent Services Access Manager](#).

Alcatel-Lucent ISAM—Supported Software Versions

Table 3-5 *Supported Software Versions for Alcatel-Lucent ISAM—Cisco ANA 3.6.5*

Version Name	ANA Version	Certification Level
2.0.0.16	3.5.2	V
2.3.1.15	3.5.2	V
2.4.2.4	3.5.2	V



Note

Software versions marked with an asterisk (representing a wildcard) are supported by Cisco ANA 3.6.5. Specific software versions that have been tested and verified are listed individually and marked as V.

Alcatel-Lucent ISAM—Supported Topologies

Table 3-6 *Supported Topologies for Alcatel-Lucent ISAM—Cisco ANA 3.6.5*

Topology Type	Link Type	ANA Version
ATM	ATM	3.5.2
Ethernet	Ethernet	3.5.2
Physical Layer	Physical Layer	3.5.2

Alcatel-Lucent ISAM—Supported Modules

Table 3-7 *Supported Modules for Alcatel-Lucent ISAM—Cisco ANA 3.6.5*

Module Name	Module Description	ANA Version	Certification Level
AACU-A	ADSL Alarm Control Unit version A (R3 equipment)	3.6.0	V
AACU-C	ADSL Alarm Control Unit version C (R4 equipment)	3.6.0	V
ABLT-D	MultiDSL POTS UD BVB LT standard version D	3.6.0	V
ABLT-E	Multi-DSL POTS Line Termination version E	3.6.0	V
ADLT-C	ADSL Line termination version C (4 lines)	3.6.0	V
ADLT-E	ADSL Line termination version E (4 lines)	3.6.0	V
ADLT-F	ADSL (Euro) Line termination version F (ISDN support, 4 lines)	3.6.0	V
ADLT-J	ADSL Line termination version J (12 lines)	3.6.0	V
ADLT-K	ADSL Line termination version K (12 lines)	3.6.0	V
ADLT-L	ADSL Line termination version L (24 lines)	3.6.0	V
ADLT-M	ADSL Line termination version M (12 lines)	3.6.0	V
ADLT-S	ADSL Line Termination version S - BVB enabled	3.6.0	V
ADLT-W	ADSL Line Termination version W - POTS/BVB ready	3.6.0	V
ADSE-A	ADSL Serial Extender version A	3.6.0	V
ADSE-B	ADSL Serial Extender version B	3.6.0	V
ADSE-C	ADSL Serial Extender version C	3.6.0	V
AICC-A	IMA ATM E1-NT 2 Mits Controller Card	3.6.0	V
ANY_BOARD	ANY_BOARD	3.6.0	V
ASCC-P	ASCC-P	3.6.0	V
ASCC-PE	PDH E3 Interface Controller Card	3.6.0	V
ASCC-S1	STM-1 Interface Controller Card	3.6.0	V
BSEC-A	Broad Band Shelf Extender Card	3.6.0	V
D1LT-A	DS1 Line termination version A	3.6.0	V
D1LT-B	4 T1 ports Using IMA Group	3.6.0	V
D3LT-A	DS3 Line termination version A	3.6.0	V
D3NT-A	DS3 Network Termination version A	3.6.0	V
D3NT-C	DS3 Network Termination version C	3.6.0	V
E1LT-A	E1 (IMA) Line Termination version A (4 lines)	3.6.0	V
E1NT-A	(Quad) E1 (IMA) Network Termination version A	3.6.0	V
E1NT-C	GANT-B motherboard and E1PL-B daughterboard (PLIM)	3.6.0	V
EBLT-A	ADSL2+ POTS Line Termination version A	3.6.0	V
EBLT-C	ADSL2+ POTS Line Termination version C	3.6.0	V
ECNT-A	7302 ISAM Combined network termination version A	3.6.0	V

Table 3-7 **Supported Modules for Alcatel-Lucent ISAM—Cisco ANA 3.6.5 (Continued)**

Module Name	Module Description	ANA Version	Certification Level
LTAC-C	Line Terminal ADSL Combiner Card	3.6.0	V
LTAC-D	Line Terminal ADSL Combiner Card	3.6.0	V
LTSC-A	Line Termination SHDSL Card	3.6.0	V
MACU-A	MiniRAM ACU version A	3.6.0	V
NBLC-A	Narrowband Line Card	3.6.0	V
SALT-A	1 Port OC3 Card	3.6.0	V
SALT-C	STM-1/OC3c (HCL based) Line Termination Unit version C	3.6.0	V
SANT-D	Synchronous (STM1) ATM Network Termination version D	3.6.0	V
SANT-E	GANT-A motherboard and SONI-A daughterboard (PLIM)	3.6.0	V
SANT-F	GANT-B motherboard and SONI-A daughterboard (PLIM)	3.6.0	V
SANT-G	Synchronous (STM1) ATM Network Termination version G	3.6.0	V
SHLT-B	SHDSL Line termination versioin B (12 lines)	3.6.0	V
SMLT-A	SHDSL Line termination version A (24 lines with IMA)	3.6.0	V
SMLT-B	SHDSL Line Termination Unit Version B(12 lines, with IMA)	3.6.0	V

Alcatel-Lucent ISAM—Supported Technologies

The following technologies are supported by the Alcatel-Lucent ISAM in Cisco ANA 3.6.5:

- [IP, page 3-15](#)
- [Ethernet \(IEEE 802.3\), page 3-18](#)
- [ATM, page 3-21](#)
- [Point to Point, page 3-25](#)
- [DSL, page 3-26](#)
- [Physical Technologies, page 3-27](#)
- [Physical Equipment, page 3-28](#)
- [Base Logical Components, page 3-29](#)
- [Common, page 3-30](#)
- [Additional Technologies, page 3-32](#)

Alcatel-Lucent ISAM—Supported Service Events

Table 3-8 *Supported Service Events for Alcatel-Lucent ISAM—Cisco ANA 3.6.5*

Event Name	ANA Version	Expedited
Card In/Out	3.6.0	N
Link Down/Up	3.6.0	N
Device Unreachable	3.6.0	N
CPU Over Utilized	3.6.0	N
Memory Over Utilized	3.6.0	N
Device Unsupported	3.6.0	N
Module Unsupported	3.6.0	N
Port Flapping	3.6.0	N
Port Down	3.6.0	N
Card Up/Down	3.6.0	N

Alcatel-Lucent Riverstone

This section includes the following information about Riverstone devices:

- [Riverstone—Supported Software Versions, page 3-8](#)
- [Riverstone—Supported Topologies, page 3-8](#)
- [Riverstone—Supported Modules, page 3-8](#)
- [Riverstone—Supported Technologies, page 3-9](#)
- [Riverstone—Supported Service Events, page 3-9](#)



Note

For information about which NE types are supported in Cisco ANA 3.6.5, see [Alcatel-Lucent Riverstone](#).

Riverstone—Supported Software Versions

Table 3-9 *Supported Software Versions for Riverstone—Cisco ANA 3.6.5*

Version Name	ANA Version	Certification Level
9.3.0.2	3.6.2	S
9.4.0.0	3.6.2	S
9.4.0.1	3.6.2	S
9.4.0.2	3.6.2	S



Note

Software versions marked with an asterisk (representing a wildcard) are supported by Cisco ANA 3.6.5. Specific software versions that have been tested and verified are listed individually and marked as V.

Riverstone—Supported Topologies

Table 3-10 *Supported Topologies for Riverstone—Cisco ANA 3.6.5*

Topology Type	Link Type	ANA Version
Ethernet	Ethernet	3.6.2
Physical Layer ¹	Physical Layer	3.6.2

¹Only static

Riverstone—Supported Modules

Table 3-11 *Supported Modules for Riverstone—Cisco ANA 3.6.5*

Module Name	Module Description	ANA Version	Certification Level
CM	Control Module, Rev. 0	3.6.2	V
G3M-HTXB2-16	RS 3000 16-Port 10/100 TX Module via RJ-45 Rev. 4.0/0.1	3.6.2	V
G3M-GBCFM-02	2 port MPLS enabled GbE base module; requires GBICs Rev. 5.1	3.6.2	V
FLASH CARD	16/32Mb Flash card	3.6.4	S ¹

¹Support is for all flash card sizes

Riverstone—Supported Technologies

The following technologies are supported by the Riverstone in Cisco ANA 3.6.5:

- [IP](#), page 3-15
- [Ethernet \(IEEE 802.3\)](#), page 3-18
- [Physical Equipment](#), page 3-28
- [Base Logical Components](#), page 3-29
- [Common](#), page 3-30

Riverstone—Supported Service Events

Table 3-12 *Supported Service Events for Riverstone—Cisco ANA 3.6.5*

Event Name	ANA Version	Expedited
Link Down/Up	3.6.2	N
Device Unreachable	3.6.2	N
CPU Over Utilized	3.6.2	N
Memory Over Utilized	3.6.2	N
Device Unsupported	3.6.2	N
Module Unsupported	3.6.2	N
Port Flapping	3.6.2	N
Port Down	3.6.2	N
Cloud Problem	3.6.2	N

Alcatel-Lucent CBX, GX, B-STDx Switches

This section includes the following information about Alcatel-Lucent CBX, GX, B-STDx Switches devices:

- [Alcatel-Lucent CBX, GX, B-STDx Switches—Supported Software Versions](#), page 3-10
- [Alcatel-Lucent CBX, GX, B-STDx Switches—Supported Topologies](#), page 3-10
- [Alcatel-Lucent CBX, GX, B-STDx Switches—Supported Modules](#), page 3-10
- [Alcatel-Lucent CBX, GX, B-STDx Switches—Supported Technologies](#), page 3-14
- [Alcatel-Lucent CBX, GX, B-STDx Switches—Supported Service Events](#), page 3-14



Note

For information about which NE types are supported in Cisco ANA 3.6.5, see [Alcatel-Lucent CBX, GX, B-STDx Switches](#).

Alcatel-Lucent CBX, GX, B-STDx Switches—Supported Software Versions

Table 3-13 *Supported Software Versions for Alcatel-Lucent CBX, GX, B-STDx Switches—Cisco ANA 3.6.5*

Version Name	ANA Version	Certification Level
07.02.02.08	3.6.0	S
07.02.04.19	3.6.0	S
07.03.01.14	3.6.0	S
08.00.03.11	3.6.0	S
08.00.03.11	3.6.0	S
08.00.03.07	3.6.0	S
08.00.03.11	3.6.0	S
08.00.03.22	3.6.0	S
09.01.01.04	3.6.0	S
09.01.01.13	3.6.0	S



Note

Software versions marked with an asterisk (representing a wildcard) are supported by Cisco ANA 3.6.5. Specific software versions that have been tested and verified are listed individually and marked as V.

Alcatel-Lucent CBX, GX, B-STDx Switches—Supported Topologies

Table 3-14 *Supported Topologies for Alcatel-Lucent CBX, GX, B-STDx Switches—Cisco ANA 3.6.5*

Topology Type	Link Type	ANA Version
ATM	ATM	3.6.0
Framerelay	Framerelay	3.6.0

Alcatel-Lucent CBX, GX, B-STDx Switches—Supported Modules

Table 3-15 *Supported Modules for Alcatel-Lucent CBX, GX, B-STDx Switches—Cisco ANA 3.6.5*

Module Name	Module Description	ANA Version	Certification Level
V35-6	6-port V.35 i/o card	3.6.0	S
FE3-1	1-port Fractional E3 i/o card	3.6.0	S
PON-ETHER-2	PON R2.0 Ethernet UNI sub-card 2 port	3.6.0	S

Table 3-15 **Supported Modules for Alcatel-Lucent CBX, GX, B-STDx Switches—Cisco ANA 3.6.5 (Continued)**

Module Name	Module Description	ANA Version	Certification Level
BIO4-CH	Scorpion channelized BIO	3.6.0	S
BIO4-CH-OC12-1	Scorpion channelized OC12 PHY 1 port	3.6.0	S
BIO4-CH-STM1-2	Scorpion channelized stm-1 PHY 2 port	3.6.0	S
BIO4-CH-OC12-2	Scorpion channelized OC12 PHY 2 port	3.6.0	S
BIO4-CH-DS3-12	Scorpion channelized DS3 12 port	3.6.0	S
IOM6-CH-DS3-T3-6	Positron channelized DS3 6 port	3.6.0	S
IOM5-OC3-4	Positron OC3 ATM/POS card	3.6.0	S
IOM5-OC12-1	Positron OC12 ATM/POS card	3.6.0	S
IOM5-IP-SERVER	Positron IP Server card	3.6.0	S
HSSI-2	HSSI i/o card	3.6.0	S
NP-2	NP2	3.6.0	S
BIO4-CH-OC3-2	Scorpion channelized OC3 PHY 2 port	3.6.0	S
BIO4-CH-DS3-10	Scorpion channelized DS3 PHY 10 port	3.6.0	S
DSX1-10	10-port DSX-1 card	3.6.0	S
RS232-18	18-port X.21/V.24 I/O card, for STDx 3000/6000 only	3.6.0	S
RS232-8	8-port X.21/V.24 I/O card, for STDx 3000/6000 only	3.6.0	S
UT1-4-24	4-port 24-channel Un-Channelized T1	3.6.0	S
UE1-4-30	4-port 30-channel Un-Channelized E1	3.6.0	S
ATMDS3-1	1-port ATM DS3 UNI I/O card	3.6.0	S
ATME3-1	1-port ATM E3 UNI I/O card	3.6.0	S
PRI-4	4-port ISDN PRI I/O card	3.6.0	S
FT1-1-24	1-port 24-channel Fractional T1	3.6.0	S
E1-PRI-4	4-port E1 PRI I/O card	3.6.0	S
SFT1-4-24	4-port short haul 24-channel Fractional T1 card	3.6.0	S
SUT1-4-24	4-port short haul 24-channel Un-Channelized T1 card	3.6.0	S
ST1-PRI-4	4-port short haul PRI I/O card	3.6.0	S
T1-ATM	T1 ATM	3.6.0	S
E1-ATM	E1 ATM	3.6.0	S
ADS3-T3	ATM DS3 T3 (topaz)	3.6.0	S
ADS3-E3	ATM DS3 E3 (topaz)	3.6.0	S
CBR-DS1-S-4	4-port CBR T1 structured card	3.6.0	S
CBR-DS1-US-4	4-port CE T1 card	3.6.0	S
FE1-1-30	1-port 30-channel Fractional E1	3.6.0	S
CBR-E1-S-4	4-port CBR E1 structured card	3.6.0	S
CBR-E1-US-4	4-port CE E1 card	3.6.0	S

Table 3-15 **Supported Modules for Alcatel-Lucent CBX, GX, B-STDx Switches—Cisco ANA 3.6.5 (Continued)**

Module Name	Module Description	ANA Version	Certification Level
ATMIWU-1	1-port ATM-IWU STM-1/STS-3c card	3.6.0	S
TOC3-ATM-4	4-port Topaz OC3c/STM1 ATM card	3.6.0	S
TSTM1-ATM-4	4-port Topaz STM1 ATM card (OBSOLETE code)	3.6.0	S
SP-4	4x4 switching processor (new terminology is "sp-10")	3.6.0	S
SP-8	8x8 switching processor (new terminology is "sp-20")	3.6.0	S
ATMCS-1	1-port ATM-CS card (siemens)	3.6.0	S
TOC12-ATM-1	1-port Topaz OC12c/STM4 ATM card	3.6.0	S
TSTM4-ATM-1	1-port Topaz STM4 ATM card (OBSOLETE code)	3.6.0	S
UIO-6	6-port universal i/o card	3.6.0	S
ADS1-T1	Topaz 8 port T1 ATM	3.6.0	S
ADS1-E1	Topaz 8 port E1 ATM	3.6.0	S
ADS1-J2	Topaz 8 port J2 ATM	3.6.0	S
E1-12	12-port E1 i/o card	3.6.0	S
BIO1416	Garnet BIO1 4 PHY sub-cards 16 ports	3.6.0	S
BIO1OC34	Garnet BIO1 OC3 PHY sub-card 4 ports	3.6.0	S
BIO1OC121	Garnet BIO1 OC12 PHY sub-card 1 port	3.6.0	S
BIO1OC12X4	Garnet BIO1 OC12x4 PHY sub-card 1 port 4 channels	3.6.0	S
BIO1OC481	Garnet BIO1 OC48 PHY sub-card 1 port	3.6.0	S
NP1	Garnet Node Processor card	3.6.0	S
CP1	Control Processor	3.6.0	S
SF1	Garnet Switch Fabric card	3.6.0	S
TM1	Garnet Timing Module card	3.6.0	S
TFDS3-T3-6	6-port Topaz DS3 T3 Ultracore card	3.6.0	S
TFDS3-E3-6	6-port Topaz DS3 E3 Ultracore card	3.6.0	S
TFAS-ETHER-4	4-port Topaz Fast Ethernet Ultracore card	3.6.0	S
FAST-ETHER-2	2-port BSTDX Fast Ethernet Ultracore card	3.6.0	S
LS-OC3-1	1-port BSTDX OC3c/STM-1 Ultracore card	3.6.0	S
TCFDS3-T3-6	6-port Topaz Cell Frame Cell DS3 T3 Ultracore card	3.6.0	S
TCFDS3-E3-6	6-port Topaz Cell Frame Cell DS3 E3 Ultracore card	3.6.0	S
TOC3-CFC-2	2-port Topaz Cell Frame Cell OC3c/STM-1 Ultracore card	3.6.0	S
UIO-8	8-port V.35 i/o card	3.6.0	S
ATMCS-E3-1	1-port ATM-CS-E3 card (siemens)	3.6.0	S
BE1-ATM-12	12-port BSTDX E1 ATM card	3.6.0	S
BT1-ATM-12	12-port BSTDX T1 ATM card	3.6.0	S
BDS3-1-0	1 port BSTDX Channelized 3/1/0	3.6.0	S

Table 3-15 **Supported Modules for Alcatel-Lucent CBX, GX, B-STDX Switches—Cisco ANA 3.6.5 (Continued)**

Module Name	Module Description	ANA Version	Certification Level
GFETHER-4	Granite Topaz Fast Ethernet UC card	3.6.0	S
GFDS3-T3-6	Granite Topaz Frame DS3 UC card	3.6.0	S
GFDS3-E3-6	Granite Topaz Frame E3 UC card	3.6.0	S
GCHN-DS3-4	Granite Topaz Channalized DS3 card	3.6.0	S
G-SERVER	Granite Topaz Server card	3.6.0	S
FT1-4-24	4-port 24-channel Fractional T1	3.6.0	S
SP-30	8x8 sp with new PTS	3.6.0	S
SP-40	8x8 sp with new PTS and more memory	3.6.0	S
BIO3	Piranha GX550 Frame card	3.6.0	S
GENET-1	Piranha Gigabit Ethernet PHY	3.6.0	S
BIO1-DOWNLINK-1	GARNET DOWNLINK PHY card for shelf communications attachment	3.6.0	S
SHELF-UPLINK-1	1-port Shelf (fc) UPLINK card	3.6.0	S
SHELF-DS3-4	4-port Shelf DS3 transport card	3.6.0	S
SHELF-RED-DS3-4	4-port Shelf Redundant DS3 transport card	3.6.0	S
BRVX	BSTDV RXX Card	3.6.0	S
BCH-DS1-E1-12	12-port 9000 Channelized T1/E1 Card	3.6.0	S
FE1-4-30	4-port 30-channel Fractional E1	3.6.0	S
CBX-SUB-DS3	CBX Subrate DS3 Card	3.6.0	S
BIO1-DS3-4	Garnet BIO1 DS3 PHY sub-card 4 Ports	3.6.0	S
BIO1-E3-4	Garnet BIO1 DS3 PHY sub-card 4 Ports	3.6.0	S
ADS3-IMA-T3-3-28	TOPAZ Tsunami 3Port T3 IMA	3.6.0	S
ADS3-IMA-E3-3-30	TOPAZ Tsunami 3Port E3 IMA	3.6.0	S
BIO2-4-16	Garnet BIO2 4 PHY sub-cards 16 ports	3.6.0	S
SHELF-DS3-1-0-2	2 port GX250 DS3-1-0 Transport Card	3.6.0	S
SHELF-OC12-1	1 port GX250 OC12-OC3-DS3 Transport Card	3.6.0	S
BIO3-OC3-4	BIO3 OC3 ATM/POS PHY	3.6.0	S
BIO3-OC12-1	BIO3 OC12 ATM/POS PHY	3.6.0	S
FT3-1	1-port Fractional T3 i/o card	3.6.0	S
BIO3-IP-SERVER	BIO3 IP Server PHY	3.6.0	S
BIO3-OC12X4	BIO3 OC48 channelized PHY	3.6.0	S
BIO3-OC48-1	BIO3 OC48c PHY	3.6.0	S
GCHN-E1T1-32	Granite Topaz Channalized E1/T1 card	3.6.0	S
BIO-OSU-1	BIO OSU PHY sub-card 1 port	3.6.0	S
BIO-OSU-4	BIO OSU PHY sub-card 4 port	3.6.0	S
PON-DS1-4	PON DS1 UNI sub-card 4 port	3.6.0	S

Table 3-15 Supported Modules for Alcatel-Lucent CBX, GX, B-STDx Switches—Cisco ANA 3.6.5 (Continued)

Module Name	Module Description	ANA Version	Certification Level
PON-DS1-8	PON DS1 UNI sub-card 8 port	3.6.0	S
PON-R1ETHER-1	PON R1.0 Ethernet UNI sub-card 1 port	3.6.0	S
PON-R2ETHER-1	PON R2.0 Ethernet UNI sub-card 1 port	3.6.0	S

Alcatel-Lucent CBX, GX, B-STDx Switches—Supported Technologies

The following technologies are supported by the Alcatel-Lucent CBX, GX, B-STDx Switches in Cisco ANA 3.6.5:

- [IP, page 3-15](#)
- [ATM, page 3-21](#)
- [Frame Relay, page 3-24](#)
- [Point to Point, page 3-25](#)
- [Physical Technologies, page 3-27](#)
- [Physical Equipment, page 3-28](#)
- [Base Logical Components, page 3-29](#)
- [Common, page 3-30](#)
- [Additional Technologies, page 3-32](#)

Alcatel-Lucent CBX, GX, B-STDx Switches—Supported Service Events

Table 3-16 Supported Service Events for Alcatel-Lucent CBX, GX, B-STDx Switches—Cisco ANA 3.6.5

Event Name	ANA Version	Expedited
Interface Status Down/Up	3.6.0	N
Card In/Out	3.6.0	Y
Link Down/Up	3.6.0	Y
Device Unreachable	3.6.0	N
CPU Over Utilized	3.6.0	N
Memory Over Utilized	3.6.0	N
Device Unsupported	3.6.0	N
Module Unsupported	3.6.0	N
Port Down	3.6.0	Y
Rx Over Utilized	3.6.0	N

Table 3-16 *Supported Service Events for Alcatel-Lucent CBX, GX, B-STDx Switches—Cisco ANA 3.6.5 (Continued)*

Event Name	ANA Version	Expedited
Tx Over Utilized	3.6.0	N
Card Up/Down	3.6.0	Y

Supported Technologies on Alcatel-Lucent Devices

The following sections list the objects and attributes that are supported on Alcatel-Lucent devices in Cisco ANA 3.6.5 per technology:

- [IP, page 3-15](#)
- [Ethernet \(IEEE 802.3\), page 3-18](#)
- [ATM, page 3-21](#)
- [Frame Relay, page 3-24](#)
- [Point to Point, page 3-25](#)
- [DSL, page 3-26](#)
- [Physical Technologies, page 3-27](#)
- [Physical Equipment, page 3-28](#)
- [Base Logical Components, page 3-29](#)
- [Common, page 3-30](#)
- [Additional Technologies, page 3-32](#)

IP

Table 3-17 *IP Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5*

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDx
IMO Name—IPIInterface				
IP Address	Y	Y	Y	Y
Subnetwork Mask	Y	Y	Y	Y
IP Interface Addresses Array	Y	Y		Y
Interface Name	Y	Y	Y	Y
Interface Description				Y
IP Interface State	Y	Y	Y	Y

Table 3-17 IP Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5 (Continued)

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDx
OSPF Interface Cost				
Broadcast Address				
MTU				
Lookup Method				
Address Resolution Type			Y	
ARP Timeout				
Secured ARP				
ICMP Mask Reply				
IGMP Proxy				
HSRP Groups				
IP Multiplexing Table				
IANA Type			Y	
Containing CTPs				
Contained CTPs				
IMO Name—IIPMuxEntry				
Termination Point				
Destination IP Subnet				
IMO Name—IRoutingEntity				
Routing Table	Y	Y	Y	Y
ARP Entity		Y	Y	Y
Routing Table Changes			Y	
Name	Y	Y		Y
Logical Sons	Y	Y	Y	Y
IMO Name—IRoutingEntry				
Destination IP Subnet	Y	Y	Y	Y
Next Hop IP Address	Y	Y	Y	Y
Type	Y	Y	Y	Y
Routing Protocol Type	Y	Y	Y	Y
Outgoing Interface Name	Y	Y	Y	Y
IMO Name—IARPEntity				
ARP Table		Y	Y	
IMO Name—IARPEntity				
IP Address		Y	Y	

Table 3-17 IP Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5 (Continued)

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDx
MAC Address		Y	Y	
Port		Y	Y	
Entry Type		Y	Y	
IMO Name—IIPPool				
IP Address Pool Entries				
Name				
Index				
IMO Name—IIPRangeBasedIPPoolEntry				
Start IP Address				
End IP Address				
Unused Addresses				
Used Addresses				
Reserved Addresses				
IMO Name—IIPSubnetBasedIPPoolEntry				
IP Subnet				
Unused Addresses				
Used Addresses				
Reserved Addresses				
IMO Name—HSRPGroupEntry				
Group Number				
Port Description				
Priority				
Coupled Router				
State				
Tracking Interfaces				
Virtual IP Address				
Virtual MAC Address				
IMO Name—ITunnelGRE				
Name				
Tunnel Destination and Source				
IP Address				
IP Interface State				
IANA Type				

Table 3-17 IP Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5 (Continued)

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDx
Containing CTPs				
Contained CTPs				

Ethernet (IEEE 802.3)

Table 3-18 Ethernet (IEEE 802.3) Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDx
IMO Name—I LagPortEntry				
Actor and Partner Admin Keys				
Actor and Partner Oper Keys				
Selected and Attached Aggregation Identification				
Actor Port				
Actor Port Priority				
Partner Admin and Oper Port				
Partner Admin and Oper Port Priority				
Actor and Partner Admin States				
Actor and Partner Oper States				
IMO Name—I Ethernet				
MAC Address	Y	Y	Y	
Duplex Mode				
Output Flow Control				
Input Flow Control				
IANA Type		Y	Y ¹	
Containing CTPs				
Contained CTPs				
IMO Name—I VlanInterface				
Mode				

Table 3-18 Ethernet (IEEE 802.3) Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDx
Native VLAN Identification				
Virtual LAN Table				
IANA Type				
Containing CTPs				
Contained CTPs				
IMO Name—IVlanEncapMux				
IANA Type			Y ²	
Containing CTPs				
Contained CTPs				
IMO Name—IIEEE802				
VLAN Identification	Y	Y	Y	
Binding Information				
Binding Status				
IANA Type		Y	Y	
Containing CTPs				
Contained CTPs				
IMO Name—IStpService				
Protocol Type				
Current and Bridge Max Age				
Current and Bridge Hello Time				
Current and Bridge Forward Delay				
Instance Information Table				
Same as ISystemService				
IMO Name—IMstService				
Protocol Properties				
Same as IStpService				
IMO Name—IMstProperties				
Force Version				
Configuration Format, Region Name and Revision Level				
External Root Cost				
Maximum Instances				

Table 3-18 Ethernet (IEEE 802.3) Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDx
IMO Name—IStpInstanceInfo				
Object Identification				
Identification				
Priority				
Designated Parent and Root Bridges				
Root Cost				
Is Root				
Root Port Identification				
Port Information Table				
IMO Name—IMstInstanceInfo				
Instance Identification				
Same as IStpInstanceInfo				
IMO Name—IPvstpInstanceInfo				
Protocol Type				
Current and Bridg Maximum Age				
Current and Bridge Hello Time				
Current and Bridge Forward Delay				
Same as IStpInstanceInfo				
IMO Name—IRstpInstanceInfo				
Force Version				
Same as IStpInstanceInfo				
IMO Name—IStpPortInfo				
Object Identification				
Priority				
State				
Path Cost				
Is Edge				
Is Point to Point				
Role				

Table 3-18 Ethernet (IEEE 802.3) Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDX
IMO Name—IMstPortInfo				
Hello Time				
Same as IStpPortInfo				
IMO Name—IEthernetChannel				
Group Number	Y			
Bandwidth				
Aggregation Protocol				
IANA Type	Y			
Containing CTPs				
Contained CTPs				

¹We support only dot1q encap

²We support only dot1q encap

ATM

Table 3-19 ATM Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDX
IMO Name—IAtm				
ATM Address				
Interface Type		Y		Y
VP and VC Ranges		Y		Y
VC Table		Y		Y
Cross-Connect Table				Y
IANA Type				Y
Containing CTPs				
Contained CTPs				

Table 3-19 ATM Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5 (Continued)

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDX
IMO Name—IAtmVc				
Virtual Channel Identifier		Y		Y
Virtual Path Identifier		Y		Y
Shaping Profile				
Discarded and Received Input Data Counters		Y		Y
Dropped and Forward Output Data Counters		Y		Y
Ingress Traffic Descriptor		Y		
Egress Traffic Descriptor		Y		
Administrative Status		Y		Y
Operational Status		Y		Y
IANA Type				
Containing CTPs				
Contained CTPs				
IMO Name—IIMAGroup				
Description				
Speed				
Admin Status				
Oper Status				
Oper Status Last Change				
IANA Type				
Containing CTPs				
IMO Name—IAtmTrafficDescriptor				
Traffic Descriptor Type		Y		
Service Category		Y		
Cell Loss Priority		Y		
Cell Delay Variation		Y		
Cell Delay Variation Tolerance		Y		
Maximum High Priority and Aggregate Cell Rates		Y		
Minimum High Priority and Aggregate Cell Rates		Y		

Table 3-19 ATM Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5 (Continued)

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDx
Sustainable High Priority and Aggregate Cell Rates		Y		
Peak High Priority and Aggregate Cell Rates		Y		
Name		Y		
Index		Y		
IMO Name—IAtmTrafficShapingDescriptor				
Maximum Burst Size				
Sustainable and Peak Cell Rates				
Cell Delay Variation				
State				
Buffer Size				
Cell Loss Priority Discarded Size				
Name				
Index				
IMO Name—IAtmTrunk				
Same as IAtm				
IMO Name—IAtmLogicalPort/Trunk				
Resource Management Cell Termination				
Resource Management Cell Generation				
Effective Check Input and Output Capacities				
Admin Status				
Oper Status				
Same as IAtm				
IMO Name—IAtmTrunkVc				
Destination Description				Y
Same as IAtmVc				

Frame Relay

Table 3-20 **Frame Relay Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5**

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDx
IMO Name—Iframerelay/IFrTrunk				
Protocol Type				Y
VC Table				Y
Cross-Connect Table				Y
IANA Type				Y
Containing CTPs				
Contained CTPs				
IMO Name—IFrVc				
Data Link Connection Identifier				
Traffic Descriptor				
Discard and Received Input Data Counters				Y
Dropped and Forward Output Data Counters				Y
Ingress Traffic Descriptor				
Egress Traffic Descriptor				
Administrative Status				Y
Operational Status				Y
IANA Type				
Containing CTPs				
Contained CTPs				
IMO Name—IFRTrafficDescriptor				
Committed Rate				Y
Excess Burst Rate				Y
Name				Y
Index				Y
IMO Name—IFramerelayLogicalPort/Trunk				
Admin Status				
Oper Status				
Same as IFrameRelay				

Table 3-20 *Frame Relay Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5*

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDx
IMO Name—IfrTrunkVc				
Destination Description				Y
Same as IFRvc				
IMO Name—IEncapsulation				
Virtual Connection Interface				Y
Binding Information				

Point to Point

Table 3-21 *Point to Point Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5*

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDx
IMO Name—IvcBasedEncapsulation				
Virtual Connection				
Binding Information				
Binding Status		Y		
IANA Type				
Containing CTPs				
Contained CTPs				
IMO Name—Iencapsulation (HDLC/PPP)				
Virtual Connection				Y
Binding Information				
Binding Status				
IANA Type				
Containing CTPs				
Contained CTPs				

DSL

Table 3-22 DSL Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDx
IMO Name—I Dsl / Ildsl / ISdsl / Ishdsl				
Modulation Type				
Customer Identification		Y		
Traffic Descriptor		Y		
Same as IPhysicalLayer				
IMO Name—IADsl				
Maximum Reception and Transmission Bandwidth		Y		
Same as IDsl				
IMO Name—IADsl2				
Spectrum Traffic Descriptor		Y		
Traffic Descriptor		Y		
Same as IADsl		Y		
IMO Name—IADsltraTrafficDescriptor				
Max, Min and Target Transmission and Reception Noise Margins				
Max, Min and Planned Target Transmission and Reception Bit Rates				
Max Transmission Power Spectral Density				
Transmission and Reception Rate Adaption				
Channel type				
Name				
Index				
IMO Name—IADsl2SpectrumTrafficDescriptor				
Max, Min and Target Transmission and Reception Noise Margins		Y		

Table 3-22 DSL Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5 (Continued)

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDx
Max, Min and Planned Target Transmission and Reception Bit Rates				
Name		Y		
Index		Y		
IMO Name—IIsdnLayer2				
Control Administrative Status				
Oper Status				
Channels Table				
IANA Type				
Containing CTPs				
Contained CTPs				
IMO Name—IIsdnChannel				
Control Administrative Status				
Oper Status				
IMO Name—IIsdnLayer1				
Same as IPhysicalLayer				

Physical Technologies

Table 3-23 Physical Technologies Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDx
IMO Name—IsonetSdh				
Specific Type				
Loopback Type		Y		Y
Scrambling Mode				Y
Same as IPhysicalLayer				
IMO Name—IDS0Bundle				
Bundled Time Slots				

Table 3-23 Physical Technologies Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDx
Bundle Location				
IANA Type				
Containing CTPs				
Contained CTPs				
IMO Name—IDS1Pdh / IDS3Pdh				
Framing Type				Y
Cell Mapping Type				Y
Loopback Type				Y
Scrambling Mode				Y
Same as IPhysicalLayer				

Physical Equipment

Table 3-24 Physical Equipment Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDx
IMO Name—IChassis				
Description		Y	Y	Y
Equipment Holder Type		Y		
Contained Equipment Holders				
Contained Equipments				
IMO Name—IShelf				
Description	Y	Y		
Status	Y	Y		
Equipment Holder Type		Y		
Contained Equipment Holders				
Contained Equipments				
IMO Name—IModule				
Module Name	Y	Y	Y	Y

Table 3-24 Physical Equipment Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDx
Module Description	Y	Y	Y	Y
Software Version	Y	Y		Y
Operational Status	Y	Y	Y	Y
Hardware Type + Version	Y	Y	Y	Y
Managed IP Address		Y		Y
Redundant Equipment	Y			Y
Configured Redundancy	Y			Y
Redundancy Status	Y	Y		Y
Operational Status Last Changed	Y	Y		
Supported Physical Termination Points	Y	Y	Y	
Serial Number (soft property)	Y	Y	Y	Y

Base Logical Components

Table 3-25 Base Logical Components Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDx
IMO Name—IManagedElement				
IP Address	Y	Y	Y	Y
Communication State	Y	Y	Y	
Investigation State	Y	Y	Y	
Element Category	Y	Y	Y	Y
Element Type and Key	Y	Y	Y	Y
Device Name	Y	Y	Y	Y
System Name	Y	Y	Y	Y
System Description	Y	Y	Y	Y
Up Time	Y	Y	Y	Y
Software Version	Y	Y	Y	Y

Table 3-25 Base Logical Components Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5 (Continued)

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDx
Vendor Identity	Y	Y	Y	Y
Memory and CPU Usage	Y		Y	Y
IMO Name—IContext				
Name				
Bounded Connections				
IP Address Pools				
Forwarding Components List				
Traffic Descriptors List				
Tunnel Containers List				
Data Link Aggregation Containers List				
IMO Name—ISystemService				
Type				
Status				
Up Time	Y	Y		Y

Common

Table 3-26 Common Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDx
IMO Name—IPhysicalLayer				
Media Type	Y	Y	Y	Y
Clocking Source		Y		Y
Maximum Speed	Y	Y	Y	Y
Is Internal Port	Y			Y
Discarded Bandwidth				
Dropped Bandwidth				
Input Bandwidth				

Table 3-26 Common Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5 (Continued)

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDX
Output Bandwidth				
Discarded and Received Input Data Counters	Y	Y		Y
Dropped and Forward Output Data Counters	Y	Y		Y
Administrative Status	Y	Y	Y	Y
Operational Status	Y	Y	Y	Y
Last Changed	Y	Y	Y	Y
IANA Type	Y	Y	Y	Y
Containing CTPs				
Contained CTPs				
IMO Name—IBridge				
Bridge Table			Y ³	
Type			Y	
MAC Address	Y			
IP Interface	Y			
Name	Y			
Logical Sons	Y		Y	
IMO Name—IBridgeEntry				
Destination MAC	Y	Y	Y	
Outgoing Interface		Y	Y	
IMO Name—IVcSwitchingEntity				
Cross Connect Table				Y
Logical Sons				Y

³1.3.6.1.2.1.17.1.4.1 is mapping between port in the bridge table and ifindex of that port

Additional Technologies

Table 3-27 Additional Technologies Attribute Support on Alcatel-Lucent Devices—Cisco ANA 3.6.5

Attribute	7450 ESS	ISAM	Riverstone	CBX, GX, B-STDX
IMO Name—POS				
POS		Y		Y