Alcatel-Lucent OmniAccess 4x50 Series Mobility Controllers

Service Multi-tenant Network Management

The Alcatel-Lucent OmniAccess® 4x50 Series Mobility Controller is a next generation networking platform optimized to ensure the best mobile application delivery and experience over Wi-Fi.

With a new central processor that employs up to twenty cores with four threads each, it's like having a total of 80 virtual CPUs. As a result, the OmniAccess 4x50 series supports up to 32,768 mobile devices and performs stateful firewall policy enforcement at 100 Gb/s – plenty of capacity and speed for BYOD and 802.11 ac devices.

New levels of visibility are provided by unique AppRF technology, which runs on OmniAccess 4x50 series Mobility Controllers. With AppRF, IT can see applications by user, including top web-based applications like Facebook and Box.

The OmniAccess 4x50 series also manages authentication, encryption, VPN connections, IPv4 and IPv6 Layer 3 services, the policy enforcement firewall, adaptive radio management, and RFProtect spectrum analysis and wireless intrusion protection.

Clustering and centralized management enable the deployment of large networks with hundreds of OmniAccess 4x50 Series Mobility Controllers with minimal staff. A master mobility controller manages local controllers, while Alcatel-Lucent OmniVista® 3600 Network Management System provides enterprise-wide clarity and control through real-time monitoring, historical reporting and troubleshooting.

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Architected for high availability

The OmniAccess 4x50 series includes many features that make it ideal for deployment in customer locations that require maximum availability:

- Hot-swappable redundant power supplies: The OmniAccess 4550/4650/4750/4750XM/4850 supports dual, field replaceable redundant power supplies to maintain uninterrupted network operations.
- Hot swappable fan tray with multiple fans: The OmniAccess 4550/4650/4750/4750XM/4850 includes field-replaceable fan trays, providing sufficient cooling and rapid time to repair.
- The OmniAccess 4550/4650/4750/4750XM have four 10 GBase-X (SFP+) port connections for high availability.
- The OmniAccess 4850 supports two 40 GbE ports and eight 10 GbE ports for high performance and availability.

Performance and capacity

Features	4450	4550	4650	4750/4750XM	4850
Maximum APs (licenses)	256	512	1,024	2,048	2,048
Maximum RAPs	256	512	1,024	2,048	2,048
Maximum concurrent devices	8,192	16,384	24,576	32,768	32,768
VLANs	4,096	4,094	4,094	4,094	4,094
Concurrent GRE Tunnels (System BSSIDs)	4,096	8,192	16,384	32,768	32,768
Concurrent Tunneled Ports	4,096	8,192	12,288	16,384	16,384
Concurrent IPsec sessions	8,192	16,384	24,576	32,768	32,768
Concurrent SSL fallback sessions	4,096	8,192	8,192	8,192	8,192
Active Firewall Sessions (Concurrent sessions)	1,000,000	2,015,291	2,015,291	2,015,291	2,015,291
Wired Throughput (large packets)	12 Gb/s	20 Gb/s	40 Gb/s	40 Gb/s	100 Gb/s

Specifications

Interfaces and indicators

- OmniAccess 4850 has eight 10 GBase-X (SFP+) and two 40 G QSFP+ ports
- Storage temperature range: -40° C to 70° C
- Storage humidity: 10% to 95%, non-condensing
- Operating altitude: 10,000 feet
- OmniAccess 4550/4650/4750/4750XM has four 10 GBase-X (SFP+) ports
- Acoustic noise (with AC power supply)
- OmniAccess 4450 has two 10 GBase-X and four dual-media (1000 Base-X or 10/100/1000 Base-T) ports
- One USB 2.0 (two on the OmniAccess 4450)
- Console (RS-232) RJ-45 or mini-USB (micro-USB on OmniAccess 4450/4850)
- LINK/ACT and status LEDs
- Management/status LEDs
- LCD panel and navigation buttons
- Expansion slot (reserved for future use)

Dimensions

- OmniAccess 4850:
  - ¬ (H) 4.4 cm x (W) 44.2 cm x (D) 40.1 cm (1.73" x 17.40" x 15.79")
  - ¬ Weight: 7.9 kg (17.41 lbs)
- OmniAccess 4550, 4650, 4750, 4750XM:
  - ¬ (H) 4.4 cm x (W) 44.5 cm x (D) 44.5 cm (1.75" x 17.5" x 17.5")
  - ¬ Weight (with one AC power supply installed) 7.45 kg (16.43 lbs)
- OmniAccess 4450:
  - ¬ (H) 4.4 cm x (W) 44.2 cm x (D) 33.4 cm (1.75" x 17.38" x 13.13")
  - ¬ Weight: 4.95 kg (10.19 lbs)

Environmental

- Operating temperature range: 0° C to 40° C
- Operating humidity: 10% to 90% non-condensing
  - ¬ OmniAccess 4850: 47.1 dBA
  - ¬ OmniAccess 4750/4750XM: 52.9 dBA
  - ¬ OmniAccess 4650: 52.9 dBA
  - ¬ OmniAccess 4550: 52.9 dBA
  - ¬ OmniAccess 4450: 49.0 dBA

*Sound power per ETSI 300 753 in accordance with ISO 7779

Power supply

- 550-watt AC power supply (OmniAccess 4850 Only)
  - ¬ AC input voltage: 100 VAC to 240 VAC
  - ¬ AC input current: 7.1 - 3.4A
  - ¬ AC input frequency: 50-60 Hz
  - ¬ Weight: 0.87 kg (1.9 lbs)
- 350-watt AC power supply (OmniAccess 4550/4650/4750/4750XM)
  - ¬ AC input voltage: 100 VAC to 240 VAC
  - ¬ AC input current: 5-2.5A
  - ¬ AC input frequency: 50-60 Hz
  - ¬ Weight: 1.3 kg (2.8 lbs)
- Maximum power consumption
  - ¬ OmniAccess 4850: 240 watts
  - ¬ OmniAccess 4750/4750XM: 165 watts
  - ¬ OmniAccess 4650: 125 watts
  - ¬ OmniAccess 4550: 110 watts
  - ¬ OmniAccess 4450: 75.2 watts

Regulatory and Safety Compliance

- FCC Part 15 Class A CE
- Industry Canada Class A
- VCCI Class A (Japan)
- EN 55022 Class A (CISPR 22 Class A), EN 61000-3,
- EN 61000-4-2, EN 61000-4-3, EN 61000-4-4,
- EN 61000-4-5, EN 61000-4-6, EN 61000-4-8,
- EN 61000-4-11, EN 55024, AS/NZS 3548
- UL 60950, EN60950
- CAN/CSA 22.2 #60950
- CE mark, cTUVus, CB, C-tick, Anatel, NOM, MIC

Regulatory SKU Information

- OmniAccess 4850: ARCN7280
- OmniAccess 4750/4750XM: ARCN0102
- OmniAccess 4650: ARCN0101
- OmniAccess 4550: ARCN0100
- OmniAccess 4450: ARCN4450

Minimum AOS Release

- OmniAccess 4850: 6.5.4
- OmniAccess 4750: 6.2.0.0
- OmniAccess 4750XM: 6.4.4.0
- OmniAccess 4650: 6.2.0.0
- OmniAccess 4550: 6.2.0.0
- OmniAccess 4450: 6.4.3.0

Warranty

- Hardware: One year parts/labor*
- Software: 90 days*

* Extended with support contract

Part number	Description
OmniAccess 4x50 series WLAN controllers	
OAW-4450-RW	Alcatel-Lucent OmniAccess 4450, two 10 GBase-X (SFP+), one 350 W AC power supply, unrestricted regulatory domain. These products are considered rest-of-world products and must not be deployed in the United States or Israel.
OAW-4450-US	Alcatel-Lucent OmniAccess 4750, two 10 GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain – US.
OAW-4450-IL	Alcatel-Lucent OmniAccess 4450, two 10 GBase-X (SFP+), one 350 W AC power supply, unrestricted regulatory domain. restricted regulatory domain - IL.
OAW-4450-JP	Alcatel-Lucent OmniAccess 4450, four 10 GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain - JP.
OAW-4550-JP	Alcatel-Lucent OmniAccess 4550, four 10 GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain - JP.
OAW-4650-JP	Alcatel-Lucent OmniAccess 4650, four 10 GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain - JP.
OAW-4750-JP	Alcatel-Lucent OmniAccess 4450, four 10 GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain - JP.
OAW-4550	Alcatel-Lucent OmniAccess 4550, four 10 GBase-X (SFP+), one 350 W AC power supply, unrestricted regulatory domain. These products are considered rest-of-world products and must not be deployed in the United States or Israel.
OAW-4550-IL	Alcatel-Lucent OmniAccess 4550, four 10 GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain - IL
OAW4550-US	Alcatel-Lucent OmniAccess 4550, four 10 GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain - US
OAW-4650	Alcatel-Lucent OmniAccess 4650, four 10 GBase-X (SFP+), one 350 W AC power supply, unrestricted regulatory domain. These products are considered rest-of-world products and must not be deployed in the United States or Israel.
OAW-4650-IL	Alcatel-Lucent OmniAccess 4650, four 10 GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain - IL.
OAW-4650-US	Alcatel-Lucent OmniAccess 4650, four 10 GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain – US.
OAW-4750	Alcatel-Lucent OmniAccess 4750, four 10 GBase-X (SFP+), one 350 W AC power supply, unrestricted regulatory domain. These products are considered rest-of-world products and must not be deployed in the United States or Israel.
OAW-4750-IL	Alcatel-Lucent OmniAccess 4750, four 10 GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain - IL.
OAW-4750-US	Alcatel-Lucent OmniAccess 4750, four 10 GBase-X (SFP+), one 350 W AC power supply, restricted regulatory domain – US.
OAW-4850-EG	OmniAccess 4850 (EG) 2x40 GbE and 8x10 GBASE-X (SFP) Controller
OAW-4850-IS	OmniAccess 4850 (IS) 2x40 GbE and 8x10 GBASE-X (SFP) Controller
OAW-4850-JP	OmniAccess 4850 (JP) 2x40 GbE and 8x10 GBASE-X (SFP) Controller
OAW-4850-RW	OmniAccess 4850 (RW) 2x40 GbE and 8x10 GBASE-X (SFP) Controller
OAW-4850-US	OmniAccess 4850 (US) 2x40 GbE and 8x10 GBASE-X (SFP) Controller
OmniAccess 4x50 series WLAN controller accessories	
PSU-350-AC	OmniAccess field-replaceable power supply - 350 W for OAW 4x50*
HW-4x50-FT	Field-replaceable fan tray for OAW 4x50*
PSU-550-AC	PSU-550-AC Field Replaceable 550 Watt AC Spare Power Supply
OAW-4850-FT	OmniAccess 4850-FT Fan Tray for OmniAccess W-4850 Controller
SPR-ESBLNK	Expansion slot blank panel for OAW 4x50*
PSU-350-DC	OmniAccess 350W DC (-48V DC) Power Supply. May be used as a redundant power supply or field-replaceable spare for 4x50* Series Mobility Controllers.
OAW-SFP-LX	OmniAccess 1000 Base -LX SFP; 1310nm pluggable GbE optic; LC connector; up to 10,000 meters over single-mode fiber
OAW-SFP-SX	OmniAccess 1000 BASE-SX SFP; 850nm pluggable GbE optic; LC connector; up to 270 meters over multi-mode fiber (Type FDDI/OM1) and up to 550 meters over multi-mode fiber (Type OM2)

*Not applicable for OAW-4450

Part number	Description
OAW-SFP-TX	OmniAccess 1000 Base-T SFP; copper GbE pluggable; RJ45 connector; up to 100 meters over Category-5, 5e, 6 and 6a unshielded twisted pair cable
DAC-SFP-10GE50CM	OmniAccess 50 cm length, 10 GbE SFP+ direct attach cable (DAC); copper twinax connectors on both ends for interconnect between devices. For use with 4x50 10 GbE ports only
DAC-SFP-10GE-3M	OmniAccess 3 m length, 10 GbE SFP+ direct attach cable (DAC); copper twinax connectors on both ends for interconnect between devices. For use with 4x50 10 GbE ports only
DAC-SFP-10GE-5M	OmniAccess 5 m length, 10 GbE SFP+ direct attach cable (DAC); copper twinax connectors on both ends for interconnect between devices. For use with OmniAccess 4x50 10 GbE ports only
DAC-SFP-10GE-7M	OmniAccess 7 m length, 10 GbE SFP+ direct attach cable (DAC); copper twinax connectors on both ends for interconnect between devices. For use with OmniAccess 4x50 10 GbE ports only
PSU-PWBLNK	Blank face plate for unpopulated power supply intake for OAW 4x50
SPR-RK-MNT	Rack mount kit for OAW 4x50
SPR-4RK-MNT	Four corner rack mount for OAW 4x50
SPR-WL-MNT	Wall mount kit for OAW 4x50 Series WLAN Controller
DAC-SFP10GE-50C	50 cm Direct Attach cable; 10 G SFP+ (stacking and passive optics) for OAW 4x50
DAC-SFP10GE-xM	"X" m Direct Attach cable; 10 G SFP+ (stacking and passive optics) for OAW 4x50
SFP-10GE-SR	OmniAccess SFP+ 10 GBase-SR 850 nm serial pluggable SPF+ optic (LC), target range 300 m over MMF, LC Connector for OAW 4x50
SFP-10GE-LR	OmniAccess SFP+ 10 GBase-LR 1310 nm serial pluggable SFP+ optic (LC) for up to 10 km over SMF, LC Connector for OAW 4x50
SFP-10GE-LRM	OmniAccess SFP+ 10 Base-LRM 1310 nm serial pluggable SFP+ optic (LC) target range 300 m over MMF, LC Connector for OAW 4x50

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