Alcatel-Lucent
OXO Connect Evolution

Communication Server for SMBs
Scalable. Customer-focused.
Reliable and Cost-effective.

Alcatel-Lucent OXO Connect Evolution is a scalable phone system based on a robust, connected and converged communication platform for businesses with up to 300 users. OXO Connect Evolution offers built-in access to the cloud-based, Alcatel-Lucent Rainbow™ collaboration service.

Together, OXO Connect Evolution and Rainbow offer customer-focused business communications and video collaboration services to all employees, wherever they may be. SMB professionals work together to respond to the customer requests and can share information faster and more accurately with guests, business partners and customers.

Enjoy high reliability with ALE technology that is tested and validated from phone-to-cloud.

OXO Connect Evolution is optimized for cost-effective operations: Unified Communications and remote management are offered through an external cloud service connection.

Features	Benefits
Scalable hybrid cloud communications	Extend your business communications as you grow, with additional users and new cloud-based, collaboration services including one number routing for mobile users and secure video meetings
Advanced business phones and enterprise-grade collaboration services	Offer an outstanding customer experience by improving first call resolution and decision-making: Calls are routed to relevant experts and virtual meetings make help information flow faster
100% IP Connectivity	Reduce costs and simplify operations by leveraging a single IP network for voice and data
Reliable solution including on-premise LAN, WLAN, phones and appliance connected to a cloud service	Protect your investment with a 100% Alcatel-Lucent lab-tested and validated SMB solution from ground phone-to-cloud that is easy to upgrade from the cloud

Datasheet
Alcatel-Lucent OXO Connect Evolution

Business services

Business communication services

Communication experience

- Multiline telephony
- Directory search and call by name
- Visual voicemail and call log
- Message waiting indication
- Presence
- Computer Telephony Integration (CTI)
- Phones with color screen, touch screen, customized display
- ALE-DeskPhones available in 4 colors: Neptune, Azur, Factory and Ruby
  - Navigation by touch screen and keyboard
  - Hands-free, super-wideband, high quality audio
  - Phone models with Bluetooth handset
  - Add on modules
  - Wi-Fi module

Conversation service

- Mobility services: Nomadic mode
  - Routing to multiple devices: Business phone, DECT or WLAN handset, PC, smartphone
  - One number service
  - User-defined routing rules
- Hot-desking/desk sharing
- Business communications services
  - Call option, speed dial
  - Call back, call queuing
  - Call pickup, barge-in
  - Call diversion
  - Dynamic routing: No answer, busy
  - Call recording
  - Paging
  - DISA
- Team and group
  - Workgroup and key system
  - Groupware supervision
  - Audio notifications
  - Group: Broadcast, parallel, cyclical, sequential modes
  - Manager assistant services
- Conference
  - 3-party conference
  - Alcatel-Lucent 8135s IP Conference Phone (5 legs)
  - Conference on SIP devices (3 legs)
- Emergency number
  - Virtual number: Location, PSAP
  - Local notification service

Supported phones

- Analog 2 wires
  - FXS SIP gateway 2 ports

- Wireline business phones (NOE)
  - ALE-DeskPhones Essential: ALE-20, ALE-20h, ALE-30h models
  - ALE-DeskPhones Enterprise: ALE-300, ALE-400, ALE-500 models
  - Alcatel-Lucent 8088 V3 Smart DeskPhone
  - Alcatel-Lucent 8008G, 8008 DeskPhone models
- Mobile business handsets
  - Alcatel-Lucent 8212 DECT Handset, Alcatel-Lucent DECT Intercom: GAP
  - Alcatel-Lucent 8234, 8244, 8254, 8262, 8262EX DECT Handset models: Alcatel-Lucent AGAP
  - Alcatel-Lucent 8158s, 8168s WLAN Handset models
- Alcatel-Lucent IP Desktop Softphone: NOE/IP
  - Platforms: Microsoft Windows, Android
- SIP phones
  - ALE-2, ALE-3 DeskPhones
  - VTech hospitality models
- Alcatel-Lucent Rainbow: VoIP softphone
- Conference Modules
  - Alcatel-Lucent 8135s IP Conference Phone
- Third party phones (DSPP)
  - DECT (GAP), SIP (Open and Basic)

PIMphony

Telephony and Unified Communication services (CTI)

- Platform: Microsoft Windows (desktop mode)
- VoIP softphone
- Multisite supervision
- Assistant mode (operator)

Rainbow Unified Communication Services

Hybrid Cloud service between OXO Connect Evolution phones and Rainbow applications

- UC services
  - Contact management, presence, calendar sharing, chat, audio/video call, screen and file sharing
  - Persistent group chat with audio/video/screen sharing conference capabilities
  - Audio conference up to 100 participants
- Hybrid cloud integration with OXO Connect
  - Mobility services
  - Business phone CTI: Call control, visual voicemail, call log, telephony presence, group calls, attendant
  - WebRTC VoIP over the Internet: smartphone, PC, MAC, Web

- Self-care services (for company admin)
  - Call server Common directory synchronization with Rainbow business directory
  - Greeting voice message management
- Platforms
  - Desktop, Web, IOS, Android
  - Microsoft Outlook add-in, Microsoft Azure Active Directory, Microsoft Teams

Customer Welcome Services

ACD

OXO Connect Evolution built-in features

- Compatible with Alcatel-Lucent business phones, DECT and WLAN handsets, SIP phones, third-party analog devices
- ACD and business calls can be handled simultaneously on business phone
- Applications
  - Agent menus from phone and PC application
  - Supervisor PC application for real time ACD activity monitoring of agents and group call queuing
  - Statistic services with predefined reports
- Services
  - Group selection: Longest idle time, rotating, priority, fixed priority
  - Group overflow and priority levels between groups
  - Group Queue and Voice guidance
  - Customer code
  - Screen pop/CRM

Smart call routing SCR

Service allowing call routing based on multiple criteria

- Up to 10,000 routes
- Routing by criteria: Customer code, CLI, DDI, defined planning
- Routing destinations: ACD, MLAA, any destination

Welcome greeting

- Personal assistant
- Attendant services
  - Attendant group, call queuing, call overflow
  - Time range: Daily, weekly, bank holidays, restrict mode control
  - Alarm indicator
  - PBX and end user management
- Greetings
  - Company greetings
  - Night greetings
  - Music on hold
- Automated attendant (2 levels)
- Multiple Language Automated Attendant (MLAA)

- ¬ 5 trees with 3 levels per tree
- ¬ 5 languages per tree
- ¬ Time range
- Multiple company welcome: Up to 4 companies

Verticals services

Hospitality
- Guest rooms and administrative sets: Up to 300 sets
- Integrated application: Up to 120 rooms
- Alcatel-Lucent OXO Connect Hospitality link (OHL): Up to 300 rooms

Metering
- Metering counters and traffic counters
- Accounting link
- Printout facilities
- Local call metering: XML/HTTP
- Account code
- Duration-based forced disconnect
- Duration base call accounting (3 levels)

Messaging
- Voicemail: Up to 500 mailboxes, 200 hours
- Instant Messaging (IM)
- Text messaging (exclusive of IM)
- Voicemail in email
- Call log in email

Directory services
- Dial by name: Auto and unified modes
- Universal Directory Access: External LDAP /LDAPS server
- Integrated Directory
- Common and personal directories
- Rainbow Company Directory

Application and interfaces
- Alcatel-Lucent OmniVista 8770 NMS: Accounting and VoIP ticket collection, call detail record
- Alcatel-Lucent Enterprise Developer and Solutions Partner Program (DSPP)
- SIP trunk, Open SIP
- Rainbow CPaaS
- SNMP
- CSTA, TAPI 2.0, TAPI 2.1
- Alcatel-Lucent Hospitality
  - ¬ OLD: Office Link Driver

- ¬ OHL: Hotel Link
- Call accounting: Web Services and OHL
- Local Call Metering Application (LCMA)
- REST API to manage MOH (Music on Hold)
- Isolated Working Protection (IWP)
  - ¬ Alarm server (SIP trunk)

Networking and topology
- Multi-sites
  - ¬ Up to 5 sites
  - ¬ Directory synchronization via management console
- Networking
  - ¬ Private SIP trunks, multiple SIP trunks
  - ¬ SIP trunk over Internet (SIP TLS SRTP)
  - ¬ Automatic Route Selection (ARS): 3000 entries, time range, Least Cost Routing
- Branch office
  - ¬ Remote business phone: IPSEC VPN
  - ¬ Alcatel-Lucent 8378 DECT IP x-BS, Alcatel-Lucent 8318 SIP-DECT Single Base Station

Operation and serviceability
- OXO Management Console (OMC) on PC
- Rainbow Admin & Self-care (Web Based)
- Alcatel-Lucent OmniVista 8770 NMS
- Alcatel-Lucent Cloud Connect, Fleet Dashboard for OXO Connect Evolution
- Plug and play zero-touch services:
  - ¬ Rainbow UC services
  - ¬ Alcatel-Lucent business phones and mobile handsets (SUOTA), DECT base stations, OmniSwitch, OmniAccess Stellar, Rainbow WebRTC Gateway (Intel® NUC)
  - ¬ Third party device deployment
- Backup/restore: Local, external, SD card
- Network Time protocol (NTP), SNMP

Technical specifications
Architecture

Software
- OS: Linux
- Software suite: Alcatel-Lucent OXO

System architecture
- All-in-one chassis
- CPU: ARM 2 cores
- Full IP solution
- Hybrid cloud UC solution
  - ¬ Rainbow Agent
  - ¬ Rainbow VOIP WebRTC Gateway
    - – Integrated (max 20 channels)
    - – Intel® NUC (max 50 channels)

Capacity
- 300 users (max devices)
- BHCA 1500
- Capacity limits (overview)
  - ¬ IP, SIP devices: 300
  - ¬ SIP trunks: 120

Connectivity

Connectivity
- IPv4
- HTTP/HTTPs
- VoIP
  - ¬ G.711, G.729, G.722, Super-Wide Band (OPUS), codec pass-through (direct RTP)
  - ¬ QOS: TOS, DiffServ, 802.1 p/Q
  - ¬ Direct RTP, RTP proxy, integrated software media server
  - ¬ DTMF: In-band, RFC 2833
  - ¬ IETF/ RFC standards
- FAX
  - ¬ G.711 transparent fax
  - ¬ T.38: Direct RTP only
- Rainbow WebRTC Gateway provides WebRTC VOIP services over the Internet
  - ¬ Firewall friendly port forwarding and VPN less
  - ¬ Encrypted media, STUN/TURN
- Management: Remote Access
  - ¬ Alcatel-Lucent Cloud Connect: Firewall-friendly HTTPS
  - ¬ Integrated VPN IPsec

SIP
- Public SIP trunk
- Private SIP trunk

- SIP end points (local users)

DECT base stations
- 8378 DECT IP-xBS: GAP and AGAP
- 8318 SIP-DECT Single Base Station: SIP, GAP

WLAN
- Alcatel-Lucent OmniAccess WLAN access points and WLAN Controllers
- Alcatel-Lucent OmniAccess Stellar AP Series

Security

Authentication
- User Authentication
  - Password 6 digits
  - Access locked after repeated authentication errors, notification
  - Normal/restricted modes
  - User right to services
  - Pin for remote access (DISA)
- Certificate
  - Server self-signed
  - Import for public authority
- WAN access: HTTP proxy compliant
- Mutual authentication
  - ALE business phone
  - SIP trunk
- SIP AUTHENTIFICATION: RFC2617

Traffic filtering
- ARP spoofing protection
- SIP perimeter defense
  - Quarantine, blacklist, automated blacklist
  - Connection tracking

Encryption
- HTTPS (TLS 1.2)
- DTLS (TLS 1.2)
  - ALE business phones (signaling only)
- SIP TLS (TLS1.2) /SRTP
  - SIP trunk (private/public)

Physical characteristics

Dimensions/weight
- 1U half 19"" rack
  - Height: 44 mm (1.73 in.)
  - Width: 215.6 mm (8.49 in.)
  - Depth: 107 mm (4.21 in.)
- Weight: 610 g (21.51 oz.)

excluding packing

Chassis
- Chassis: Metallic box with 4 rubber feet, provision for side-binding brackets
- Front
  - 2x 100/1000 half-full duplex Ethernet RJ-45 (3m Cat5e): ETH0 PoE, ETH1
  - 1x RJ-45(Cat3): 3 x Relays
  - USB type A
  - Micro-USB: Console
  - On/Off button
  - 10 x Bicolor-LEDs
- Rear
  - SD card (Edge): Backup/restore
- Right side
  - Hole for Kensington® security cable

Indicator
- PWR: PWR, start mode
- Backup: Backup control
- Zero Touch: Plug and play control
- Alarm
- Connect: Connected to cloud
- ETH0 PoE, ETH1
- R. (Relay status): Not used
- Power Alarm: Relay status
- General Bell: Relay status

Mounting
- 1U half 19" rack
- Wall-mounted
- Desk

Power supply
- PoE on ETH0
- 11W: 802.3at PoE Class 3
- UPS recommended

Environmental
- Operating
  - Fan-less
  - Temperature: 0° C to 45° C (+32° F to 113° F)
  - Humidity: 5% to 95% non-condensing
- Storage and transportation
  - Temperature: -40° C to 70° C (-40° F to 158° F)

Reliability
- MTBF: 70 years

Regulatory and certification

Environment
- ETSI EN 300 019-1-1 Storage - class 1.2
- ETSI EN 300 019-1-2 Transportation - class 2.3
- ETSI EN 300 019-1-3 In use - class 3.2
- IEC 60529 - IP20

EMC immunity
- EN 55024
- IEC-CISPR 24
- IEC 61000-6-1 (residential commercial)
- IEC 61000-6-2 (industrial)
- EN 50121 (railway)

EMC emission
- EN 55032 Class B
- IEC-CISPR 32 Class B
- IEC 61000-6-3 (residential commercial)
- IEC 61000-6-4 (industrial)
- EN 50121-4 (railway)
- US: FCC 47 CFR Part 15 - Class B
- CANADA: ICES 003 Class B

Safety
- EN 60950-1
- EN 62368-1
- IEC/CSA/UL 60950-1

European directives
- 2014/30/EU: EMC
- 2014/35/EU: LVD
- 2011/65/EU: ROHS
- 2012/19/EU: WEEE

Certification marks
- CE (Europe)
- FCC (United States)
- RCM (Australia/New Zealand)
- ANATEL (Brazil)
- BIS (India)
- ICASA (South Africa)
- NOM (Mexico)

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