SIMPLIFY DELIVERY OF A NEXT-GENERATION COMMUNICATION EXPERIENCE
ALCATEL-LUCENT OPENTOUCH SUITE FOR MID-SIZED AND LARGE ENTERPRISES: BLUEPRINT
APPLICATION NOTE
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ABSTRACT

Forget the old, simplistic notions of desktop-centric unified communications. Join what Alcatel-Lucent calls the conversation.¹

By extending UC across devices and media with Alcatel-Lucent conversations, enterprises can create business-centric communities of innovation that engage in collaborative sessions and drive value to employees, partners and customers. These communities can raise the enterprise to a position of industry leadership and lead to a competitive advantage.

Conversations are enabled by the Alcatel-Lucent OpenTouch™ Suite for Mid-sized and Large Enterprises, a converged SIP software suite. The suite consists of a simple, cloud-ready layered architecture and modular software components sharing converging technology directions.

The suite simplifies the delivery of a next-generation communication experience that provides outstanding quality of experience, reduces IT technology transformation costs and optimizes infrastructure while unifying management, for improved total cost of ownership.

OVERVIEW OF THE OPENTOUCH SUITE ARCHITECTURE

The architecture of the Alcatel-Lucent OpenTouch Suite for Mid-sized and Large Enterprises (MLE), shown in Figure 1, has four layers:

Customer and business applications

Customer and business applications deliver Alcatel-Lucent real-time communications expertise to employees and can also be extended to support partners and customers. The applications provide:

• Collaboration capabilities enabled by Alcatel-Lucent telephony and mobility expertise
• Blended customer/employee interactions
• An ecosystem for business practices

Conversations

Conversations provide a multi-party, multimedia and multi-device unified experience with:

• Support for desk phones, smartphones, tablets and PCs
• Capability to switch between devices at any time
• Capability to enrich a simple text or voice session easily with video and document sharing
• Easy, multi-party scheduling and ad-hoc sessions

¹ Collaborative Conversations: The new paradigm of enterprise communications http://enterprise.alcatel-lucent.com/docs/?id=17383
SIP
An open SIP infrastructure for all-in-one simplicity provided through:
• Endpoints and trunks for off-net conversations
• Support for voice and video sessions
• Software media resources

Any infrastructure
Support for any infrastructure provides flexibility through:
• Use of an appliance, blade or virtual machine
• Distributed or centralized architecture
• SIP, IP, digital or analog endpoints
• SIP, IP or digital off-net trunks
• Use of any LAN, WAN or WLAN

As shown in Figure 2, the OpenTouch Suite for MLE is based on a modular architecture:
• Market-leading IP telephony software that provides business telephony features to wired and wireless enterprise phones
• Unified SIP control, router and media software that controls multimedia, multi-party and multi-device SIP sessions; the IP telephony and SIP elements share networking, bandwidth control and high-availability policies
• Federation services software that aggregates centralized networks of multi-vendor SIP PBXs
• Session border controller software that defends the suite against SIP-based denial-of-service (DoS) attacks from untrusted networks
• An instant communication application server that provides:
  - Messaging, mobile UC and conferencing services to enterprise phones
  - Multi-party, multimedia, multi-device (Multi3) conversation services that blend messaging, mobile UC and conferencing features and deliver all of these to application-powered devices through the SIP software
  - An edge services web-based portal for inviting guests to conversation sessions
• A unified management application to simplify the management of suite elements
• A video store to record, store and share multimedia videos with business communities: employees, partners and customers

The modularity of the suite brings additional flexibility to organizations in the rollout of conversation applications.

Figure 2. Functional architecture of the Alcatel-Lucent OpenTouch Suite for MLE
OPENTOUCH SUITE PRODUCTS

Organizations that move to next-generation communication services will benefit from flexible transformation paths and instant opportunities by leveraging the OpenTouch Suite for MLE products shown in Figure 3.

**Figure 3. Alcatel-Lucent OpenTouch for MLE products**

**Conversation SIP platforms**

**Alcatel-Lucent OpenTouch™ Business Edition:** An integrated and simplified appliance that delivers collaborative conversation services, IP telephony services, management services and contact center services.

**Alcatel-Lucent OpenTouch™ Multimedia Services:** This companion software to the Alcatel-Lucent OmniPCX™ Enterprise Communication Server delivers collaborative conversation services (conversation and SIP). OpenTouch Multimedia Services is the flexible solution when integrations with other applications are needed.

**Alcatel-Lucent OmniTouch™ 8400 Instant Communications Suite (ICS):** Provides unified communication services to OmniPCX Enterprise endpoints. The OmniTouch 8400 ICS tailors, controls and manages calls, messages, directories, collaboration tools and information from any location, using any device and any interface.

**Alcatel-Lucent OmniTouch™ 8660 Advanced Communication Server (ACS):** A SIP-based multimedia conferencing solution that brings people together for virtual meetings and events. This software is either a stand-alone product or is embedded in OpenTouch Business Edition and OpenTouch Multimedia Services.

Additional Alcatel-Lucent OmniTouch™ 8660 My Teamwork™ Conferencing and Collaboration servers can also be federated with OpenTouch servers to increase scalability.
Alcatel-Lucent OmniPCX™ Enterprise Communication Server: A communications platform that delivers world-class business IP telephony features for medium, large and very large companies through centralized or decentralized IP telephony solutions. This software is embedded in OpenTouch Business Edition and delivers IP telephony infrastructure services for OpenTouch Multimedia Services.

Alcatel-Lucent OpenTouch™ Federation Services: A SIP software product that performs SIP dial-plan federation for large PBX networks.

Alcatel-Lucent OpenTouch™ Session Border Controller: A SIP appliance that performs SIP perimeter security for SIP trunking, OpenTouch remote workers and OpenTouch software clients.

User-facing applications

Alcatel-Lucent OpenTouch™ Conversation for iPad: An iPad application that delivers intuitive unified access to OpenTouch features: voice, video, instant messaging (IM), presence, presentation sharing.

Alcatel-Lucent OmniTouch™ 8600 My Instant Communicator
Desktop: PC-based client that delivers wideband audio, IM, content sharing and HD video conversation services.

Mobile: Software clients that deliver access to OpenTouch directory, IM/presence, routing policy and call history on Android and RIM® Blackberry® smartphones. A subset of features is supported on the Apple® iPhone®.


Alcatel-Lucent OpenTouch™ Video Store: A cloud-based enterprise video sharing service.

Alcatel-Lucent Digital Signage Solution: Uses and adapts digital visual content to provide an unprecedented HD broadcast TV-like experience to an enterprise’s customers and employees, improved communications with employees, and control and security of the information employees share.

User-facing applications also include customer interaction applications.

Alcatel-Lucent OmniTouch™ Contact Center Standard Edition: The solution for companies of all sizes with contact centers that are driven by mainly voice interactions. OmniTouch Contact Center supervision and distribution features are embedded in OmniPCX Enterprise.

Genesys® Compact Edition: An all-in-one contact center solution that is built on the latest edition of the market-leading Genesys Suite and enables businesses of any size to implement a best-in-class customer experience with minimal time and investment.
Management applications

Alcatel-Lucent OmniVista™ 8770 Network Management System: A single point of management for the OpenTouch communication network. This product comprises unified user management, proactive performance monitoring, and centralized deployment and management for telephony and conversation services. This software is embedded in the Alcatel-Lucent OpenTouch Business Edition and is the management operations suite for OpenTouch Multimedia Services and the OmniPCX Enterprise Communication Server.

Alcatel-Lucent VitalSuite™ Performance Management Software: A Web 2.0-based performance management system that provides IPv4/IPv6 network administrators with end-to-end, web-based visibility into geographically dispersed, multi-vendor and multi-technology converged infrastructures. This software is either a stand-alone component or is embedded in the OmniVista 8770 NMS, where it provides real-time performance management of VoIP.

VitalQIP™ DNS/DHCP IP Management Software: A market-leading solution for automating IP address management services across networks in large organizations.

Devices

Alcatel-Lucent OmniTouch™ 8082 My Instant Communicator Phone: A smart deskphone that delivers high-quality wideband audio capacity and a capacitive haptic touch screen with rich conversation services and open web applications.


Alcatel-Lucent OmniTouch™ 4135 IP Conferencing Module: A SIP-based high-quality audio conferencing phone.

LifeSize® Passport, Passport Connect and LG Executive: Easy-to-use conferencing systems for executives and remote workers. OpenTouch users can use a video endpoint as one of their devices.

LifeSize® Team 220, LifeSize® Conference 220, LifeSize® Room 220 and LifeSize® Express 220: Deliver the ultimate in HD quality and flexibility plus the lowest TCO. This exceptional HD video conferencing experience can be extended to OpenTouch users on their PC or iPad.

Alcatel-Lucent Interactive Whiteboard Solution: Interactive boardroom equipment with OpenTouch multimedia conferencing integration to view the other participants and to collaborate.
OPENTOUCH DIRECTIONS

The Alcatel-Lucent OpenTouch Suite for MLE shares common directions for the evolution of conversation applications, SIP and infrastructure services.

Conversation applications: A shift to new experiences

All Alcatel-Lucent communication applications will evolve toward a true conversation experience across devices that deliver outstanding quality of experience and improve employees’ productivity.

<table>
<thead>
<tr>
<th>Conversation</th>
<th>Direction</th>
</tr>
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<tbody>
<tr>
<td>On any device</td>
<td>The OpenTouch Conversations experience will be ported to all types of devices: Android-based smartphones and tablets, Apple smartphones, tablets and desktops, Microsoft Windows, PCs, and so on.</td>
</tr>
<tr>
<td>On multi-vendor systems</td>
<td>These enable enterprises to leverage their existing equipment by delivering some OpenTouch services to legacy devices and platforms through SIP applications federation technology.</td>
</tr>
<tr>
<td>Context integration</td>
<td>Deeper integration with external applications such as calendars (professional or private). Automatic roaming, network capabilities detection and sensors will allow applications to adapt sessions to the context.</td>
</tr>
<tr>
<td>Immersive visual interactions</td>
<td>These simplify content that is shared visually by displaying only what is of interest (removing backgrounds) in order to improve efficiency and save on bandwidth utilization. Tags with contextual information will be added to visual streams. Hand waving and gesture control will make the experience more intuitive.</td>
</tr>
<tr>
<td>Social media integration</td>
<td>Integration with broadcasting platforms and enterprise-grade community collaboration platforms will offer new ways to post, share, comment, and “like” or vote on interactive content.</td>
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</tbody>
</table>
SIP infrastructure: A shift to the cloud

Alcatel-Lucent communications platforms will evolve toward cloud technology for increased operational agility and simplicity, enabling the distribution of the conversation experience over managed and unmanaged networks and other vendors’ networks with no compromise on quality and security.

<table>
<thead>
<tr>
<th>SIP INFRASTRUCTURE</th>
<th>DIRECTION</th>
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<tbody>
<tr>
<td>SIP infrastructure</td>
<td>Shared open SIP infrastructure for instant communications and multimedia conferencing to simplify the rollout of conversation applications.</td>
</tr>
<tr>
<td>SIP pods</td>
<td>SIP infrastructure evolution toward multiple instances with a single image to increase conversation services scalability and high availability.</td>
</tr>
<tr>
<td>Software media</td>
<td>Shared media software for instant communications and multimedia conferencing. Software conferencing will be enriched with HD audio and video continuous presence.</td>
</tr>
<tr>
<td>Server virtualization</td>
<td>Virtualization of the conversation suite on any hardware for better agility and reduced operations and maintenance costs.</td>
</tr>
<tr>
<td>Virtual cloud</td>
<td>SIP and dedicated networking between IP telephony servers and the conversation infrastructure for better architecture flexibility across on-premises and cloud-based components. Modularity between software media servers and conversation applications will meet the bandwidth and security constraints of large enterprises.</td>
</tr>
<tr>
<td>IP address management</td>
<td>Increased automation of the Alcatel-Lucent VitalQIP market-leading solution for reducing the TCO of IPv6 and cloud transition.</td>
</tr>
<tr>
<td>Unified management and self-service provisioning</td>
<td>Enrich and make available to other applications (including self-service portals) OmniVista unified user management for IP telephony and OpenTouch conversation services.</td>
</tr>
<tr>
<td>Performance management</td>
<td>Extend OmniVista and VitalSuite real-time monitoring capabilities to new use cases, including video, wireless IP and conversation-based contact centers.</td>
</tr>
<tr>
<td>Security</td>
<td>Secures real-time and stored multimedia conversations against multimedia DoS attacks and confidentiality breach attempts on clouds.</td>
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CONCLUSION

The Alcatel-Lucent OpenTouch Suite for Mid-sized and Large Enterprises is a modular and cloud-ready solution that provides innovative and collaborative conversation services to organizations looking for:

- Simplicity in the technology transformation
- The highest quality of experience with multi-party, multimedia, multi-device conversations
- Optimized infrastructure and unified management to improve TCO

ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>DoS</td>
<td>denial of service</td>
</tr>
<tr>
<td>IM</td>
<td>instant messaging</td>
</tr>
<tr>
<td>IP</td>
<td>Internet Protocol</td>
</tr>
<tr>
<td>LAN</td>
<td>local area network</td>
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<tr>
<td>PBX</td>
<td>private branch exchange</td>
</tr>
<tr>
<td>SIP</td>
<td>Session Initiation Protocol</td>
</tr>
<tr>
<td>TCO</td>
<td>total cost of ownership</td>
</tr>
<tr>
<td>UC</td>
<td>unified communications</td>
</tr>
<tr>
<td>WAN</td>
<td>wide area network</td>
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<tr>
<td>WLAN</td>
<td>wireless local area network</td>
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