



What Do Customers Care About in Terms of a Unified Communications Solution?

- Controlling costs, protecting investment in existing equipment, and lowering total cost of ownership (TCO)
- Reliability and redundancy of branch or small office
- Enabling more effective, efficient communication and collaboration
- Security
- Ease of administration, effective use of limited staff resources
- Scalability and growth

What Are the Strengths of Cisco Unified Communications?

Cisco® Unified Communications offers a new way to communicate. This comprehensive IP communications system of voice, video, data, and mobility products and applications enables more effective, more secure, and more personal communications that directly affect both sales and profitability. It is part of an integrated solution that includes network infrastructure, security, mobility, network management products, lifecycle services, flexible deployment and outsourced management options, end-user and partner financing packages, and third-party communications applications.

Cisco Unified Communications helps businesses improve efficiency, strengthen security, enhance customer relationships, control costs, maintain profitability, and respond to a rapidly changing business environment. Cisco Unified Communications is a critical component of the Cisco Smart Business Roadmap, which is specifically designed to provide small and medium-sized businesses (SMBs) with a structured, planned evolution path to help them take advantage of today's business opportunities and maximize the long-term potential of their technology investments.

Cisco Unified Communications can scale to support up to 240 Cisco Unified IP, SIP, or Wireless IP Phones. It allows migration from a distributed call-processing model to centralized call processing with Cisco Unified Communications Manager at the headquarters and Cisco Unified Survivable Remote Site Telephony (SRST) at the branch office. Businesses can convert Cisco Unified Communications Manager Express licenses to SRST licenses at no extra charge. IP phones, branch office routers, and switches can be reused in a centralized deployment.

Because Cisco Unified Communications Manager Express builds on Cisco IOS® Software, a wide range of Cisco IOS Software features can be used, including security services, quality of service (QoS), and robust routing protocols.

Cisco Unified IP, SIP, and Wireless IP phones obtain voice VLAN information directly from Cisco Catalyst® Express 500 Series Switches or from switching modules integrated into Cisco integrated services routers. Administrative overhead is reduced, and moves, adds, and changes become less cumbersome.

The Cisco Advantage for Business Decision Makers

Cisco Unified Communications improves business productivity and enables more effective, more secure, more mobile, and more personal communications. More than just a telephony solution, it's a strategic investment that integrates voice, data, video, security, and mobility into a single, smart solution that works with customers' existing business applications to make their organization more competitive.

It lets companies transform their business into one that is more agile with advanced messaging; virtual contact centers; integrated voice, video and Web conferencing; mobile IP soft phones; voicemail; Cisco TelePresence, which uses the network to create unique, in-person experiences between people, places, and events in their work and personal lives; and more.

Companies can communicate the way they want and when they want—from one integrated, easy-to-use interface. The solution makes it easier for employees to access information and experts for faster task completion and issue resolution. A lifecycle services approach helps businesses align deployment with business needs. Cisco Unified Communications saves time and helps control costs such as phone expenses and network management, while helping employees accomplish more.

Cisco Unified Communications offers:

- **Improved collaboration, mobility, and productivity**—Cisco Unified Communications provides structure and intelligence to business collaboration, enabling organizations to streamline and integrate their communications more closely with business processes, ultimately connecting people to people instead of devices to devices.
- **Competitive advantage**—Cisco Unified Communications helps businesses differentiate their offerings and services to deliver a true competitive advantage. With a more effective, agile communications solution in place, businesses can benefit from better, more natural collaboration, quicker decision making, reduced communications bottlenecks, and improved overall efficiency.



- **Ease of deployment**—The Cisco Unified Communications solution can integrate smoothly with a customer's existing private branch exchange (PBX) and voicemail systems, allowing them to replace components according to their own schedule and budget. Customers can choose the pace of installation that works best for their operation, knowing that both systems will interoperate smoothly during the interim. A single, converged network is highly reliable; that's why so many SMBs have made the smart move to Cisco Unified Communications.

Alcatel Traps and Cisco Rebuttal Strategies

Cisco Question: What are the benefits of running the Cisco Business Communications Solution on top of a Cisco data infrastructure?

Response: There are several, including the availability of Cisco Discovery Protocol for IP phone power management, automatic discovery of VLAN configuration, location information for emergency responders, and CiscoWorks monitoring capabilities; AutoQoS, which automatically configures QoS parameters for voice over IP (VoIP); AutoSecure for simplified security policy administration; and SmartPorts, which run macros on switch ports and configure them for voice or other applications.

Cisco Question: A Cisco Unified Communications Manager cluster can scale up to 30,000 IP phones. How many IP phones can the Alcatel OmniPCX Enterprise node support?

Response: An OmniPCX R6.0 call server can support up to 4000 IP phones; if more phones are needed, multiple PCX call servers are required, along with associated media gateways to manage the registration and keep-alive activities. Up to 32 nodes can be added to a single crystal network, but each node needs to be managed.

Alcatel Claim: Alcatel's signaling backup facility allows a remote site to maintain a 100 percent feature set in case the IP WAN fails, providing a much more comprehensive facility than Cisco Unified SRST.

Response: In reality, the Alcatel signaling link backup facility is not comparable to SRST. In Alcatel's solution, the remote media gateway reboots when it loses contact with the call server, and the phones lose all connectivity. The remote media gateway then waits for a call across the public switched telephone network (PSTN) from the local media gateway, across which the call server attempts to reestablish communication. If the call cannot traverse the PSTN, the remote media gateway cannot resume service, and there is no telephony service at the remote site. Because PSTN calls and modes are required, each media gateway at the local site can back up only a single remote media gateway. This requires either a backup of media gateways at the central site or deployment of a call server at each remote site.

Alcatel Claim: Alcatel's approach of "evolution, not revolution" provides a solid investment protection for previous purchases of Alcatel equipment.

Response: Although Alcatel indicates that you can IP-enable a PCX system with the addition of INT-IP cards, building a reliable system requires the deployment of external call servers. Deploying the new 4645 voice mail requires an external call server or dedicated CPU. The signaling link backup feature requires the new "common" media gateways. To make use of the soft phone or any other new features, dedicated servers must be deployed. These examples illustrate the shortcoming of Alcatel's statement that the original equipment can be retained when providing new services.

What Will Alcatel Suggest for IP Communications Deployments?

Existing OmniPCX ACT14 Chassis at Customer Site

- Alcatel promotes the idea of investment protection and an "evolution, not revolution" approach. Alcatel will suggest IP-enabling an existing OmniPCX deployment, which will typically involve adding INT-IP cards to an existing ACT14 crystal.
- The existing CPU embedded in the chassis runs the same Linux operating system and call-server software as an external IBM eSeries call server. However, the embedded CPU has limited processing power and does not offer the spatial redundancy and database redundancy options that standalone servers can offer, so a migration to standalone call servers would be encouraged.
- If remote sites need to be supported, Alcatel will suggest the "common" media gateway. The particular chassis Alcatel will recommend depends on the number of endpoints needed at any given site. Each of these "common" media gateways can contain a call server CPU, or they can be registered to a central call server CPU. In either case, each call server operates as a node in the crystal network on a peer-to-peer basis. Feature transparency is provided through the use of ABC-F links, which are similar to QSIG.

IP Handsets

Initially, Alcatel will suggest IP-enabling existing Reflex handsets, turning them into eReflex handsets. These modules will reach their end of life soon. Alcatel will try to upsell to the new IP touch series of phones, which are comparable to most other IP phones but do not offer the same feature set as the eReflex phones, so some feature adaptation may be required.



Remote Site Support

If a deployment requires remote site support, Alcatel will recommend that the customer deploy “common” media gateways at each site. Alcatel will then have to point out that no remote survivable feature is available in the media gateways and that the customer must implement the backup signaling link feature. However, this requires that each remote media gateway contact the central call server using the PSTN. This is not practical, so Alcatel will always suggest deploying a call server at each site and linking the nodes together into a fully meshed crystal. Alcatel will discount heavily in order to offset the cost of multiple call servers, but this does not compensate for the management overhead of provisioning and maintaining multiple call servers.

Existing LAN Infrastructure

Alcatel does not offer a viable LAN switch for IP communications and so will not attempt to sell OmniSwitches. Alcatel's implementation of 802.1p/Q tagging does not provide for any direct integration with a Layer 2 switch. It depends on communication with the Alcatel call server, so Alcatel will claim that its IP telephony deployment will work on any network.

Greenfield Opportunities

- For any new deployment, Alcatel will not attempt to use the ACT14 chassis or eReflex phones. Alcatel will suggest “common” media gateways throughout and either standalone pairs of call servers with embedded CPU call servers in each remote media gateway or embedded call servers in all media gateways.
- Alcatel will suggest IP touchphones and integrating them with the new IP communications applications that are emerging such as MyPhone, MyAssistant, and My Messaging.
- With the acquisition of eDial, Alcatel will likely suggest greater integration with unified communications and collaboration tools. However, much of this is Session Initiation Protocol (SIP)-based and requires external servers. Alcatel does not offer a SIP endpoint; instead, the company suggests that customers deploy an inexpensive third-party SIP device.