

Enterasys Solutions for VoIP

Enable and Optimize Voice over IP in *Any* Network

Deploying Voice over IP (VoIP) can greatly enhance an organization's collaboration options. Enterprises worldwide want to ensure the same reliability, quality, manageability, mobility and security of the traditional PBX with new VoIP and unified communications solutions. Network administrators must enable and optimize voice in the converged network in order to ensure service quality and reliability. Enterasys recommends a simple, yet highly effective integrated approach to enable, optimize and secure wired and wireless voice communications.

Enterasys enables IP Telephony solutions from any vendor, using a flexible combination of support for industry standards and unique policy templates. The Enterasys solution for VoIP delivers an easy and effective way to optimize voice communications through automatic VoIP traffic prioritization. In addition, the Enterasys solution will sense and automatically respond to security threats against the IP telephony system, enforce network access control policies, and comply with regulations for monitoring and safety. You can learn more about our open-architecture, standards-based approach to supporting any convergence application from any vendor by reading our [whitepaper](#).

The Enterasys Solution

The Enterasys architecture is a unique approach to networking that integrates intelligent switching, routing and wireless products; network configuration and management software applications; and intrusion prevention and Network Access Control.

With these three fully integrated components, Enterasys delivers important capabilities required to enable and optimize a VoIP solution.

Choice

Enterasys maintains a long-standing commitment to standards-based technologies and open-architected systems. Leveraging this commitment, Enterasys offers a solution that will support any VoIP application from any vendor. An Enterasys solution can identify and control any voice application running on the network and ensure it is prioritized and secured based on the business requirements. The open architecture approach gives organizations the choice necessary to deploy the right business application at the right time, for the right reasons. There is no dependency in the network architecture restricting the converged applications that can be deployed.

Reliability

An Enterasys solution assures customers of the ability to meet capacity and Power over Ethernet (PoE) requirements to support IP phones connecting to the converged network. A single Enterasys S-Series switch can accommodate over 500 PoE ports with fault-tolerant power management to keep voice services working to every connected endpoint. Enterasys products support all of the standard technologies necessary to ensure full redundancy and communications resiliency (technologies such as 802.1w, 802.1s, 802.3ad, OSPF, VRRP). Beyond the standard technology features, Enterasys embeds innovative broadcast flooding protection and communication flow overrun protection in switches to ensure that dangerous network traffic patterns do not result in communication failures for critical voice services.

Solution Benefits

Business Alignment

- Enabling and supporting convergence of business critical applications including voice, video and data
- Guaranteed service quality for voice communications with policy-enabled Enterasys switches

Operational Efficiency

- Reduce communication cost while improving business process through simple yet effective network management for VoIP
- Global VoIP policy configuration with industry-leading Enterasys policy management

Security

- Complete security of the voice services, endpoints, and traffic ensuring voice service availability
- Voice specific threat management with Enterasys intrusion detection, source location and dynamic mitigation

Support and Service

- Industry-leading customer satisfaction and first call resolution rates
- Personalized services

**There is nothing more important
than our customers.**

Quality

An Enterasys solution can discover and classify an IP phone the moment it connects to the network. Once the IP phone is detected, the Enterasys solution can enforce appropriate security and communication policies in the network to ensure the quality of the voice service. Convergence End Point (CEP) detection methods include LLDP-MED, destination IP address and Layer 4 Port, SIP, H.323, H.245, Siemens CoreNet and Cisco Discovery Protocol. Enterasys switches also support multi-user, multi-method authentication to identify and classify more than one device on a single Ethernet connection. Once an IP phone is detected, Enterasys switches will automatically enforce VoIP communication policy rules for prioritization, rate shaping and security of voice traffic.

Manageability

An Enterasys solution provides centralized visibility and control of specific network features important to voice communications in a converged network environment. IP phones can be quickly and easily located, voice communication policy rules are centrally established and globally distributed, and responsive action to security threats is automated. Management software provides IT administrators with a single central location for establishing communication and security policy rules for voice services, and an easy distribution method for getting the policy rules out to the entire network infrastructure.

Mobility

An Enterasys solution can provide wireless communications with performance levels sufficient to accommodate the low-latency requirements of VoIP. Enterasys Wireless Controllers and Access Points support innovative Direct Path Forwarding which allows forwarding of traffic to occur at the AP and not through the controller. This is an important capability for VoIP because the WLAN controller can introduce latency into the communication path.

Security

An Enterasys solution includes the ability to centrally manage a set of communication policy rules which can restrict the type and amount of network traffic directed at specific voice related servers. Also, policy rules can be enforced to ensure that critical services are not “spoofed” causing disruption or theft of critical communications. In addition to proactive security of VoIP resources, events occurring on the network that can compromise the voice service can be detected, and ultimately mitigated in order to preserve the voice system continuity. Security applications have the ability to detect specific threats against voice communications by using a strong set of VoIP attack signatures – including decoders for H.323, H.245, SIP and MGCP. Once threats against voice services are detected, automated services can be used to locate the exact source of the threat and take appropriate action to eliminate the threat.

Solution Capability	Enterasys Products
Choice	<ul style="list-style-type: none">• VoIP products from any vendor• Enterasys switches with high capacity, standards-based PoE capability
Reliability	<ul style="list-style-type: none">• Enterasys switches, routers and wireless with device and device-to-device redundancy and resiliency features
Quality	<ul style="list-style-type: none">• Enterasys switches with policy enforcement for voice service-level requirements
Manageability	<ul style="list-style-type: none">• Enterasys Network Management Suite (NMS) software with centralized visibility and control of voice communication policies, security and endpoint location<ul style="list-style-type: none">– Console: Device and network resiliency configuration– Policy Manager: Establish VoIP service-level and security policies– NAC Manager: Endpoint location and compliance reporting– Automated Security Manager: Automation for threat mitigation– Inventory Manager: Capacity planning for CEP deployment
Mobility	<ul style="list-style-type: none">• Enterasys WLAN Controllers and Access Points with Direct Path Forwarding
Security	<ul style="list-style-type: none">• Enterasys switches with policy enforcement for VoIP security• Enterasys Intrusion Prevention System (IPS) with specific VoIP threat signatures

Contact Us

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