Summit® 300 Series

Summit 300 is a 24- or 48-port 10/100 Power over Ethernet (PoE) switch delivering secured Unified Access for IP Telephony and wireless applications.

Features

- Voice-class availability with PoE at the edge of the network
- High-performance with Quality of Service (QoS) for converged applications
- Layer 3 intelligence and comprehensive security at the edge of the network

Target Applications

- Unified Access connectivity for integrated wired, wireless and IP Telephony deployments
- Comprehensive security to protect networks where they are being attacked—at the edge
- Layer 3 intelligence—with routing to increase efficiency of sub-network edge traffic

The Summit 300 series sets a new standard for edge connectivity in today's most demanding converged networks. Building on a solid foundation of performance, security, availability, and management capabilities, it also offers PoE on every port. Additionally, the Summit 300 series provides "universal" access, with every port enabling high-performance data to the desktop, PoE, and wireless LAN. With its integrated PoE, the Summit 300 series can power devices such as Voice-over-IP phones, surveillance cameras, and badge readers. AccessAdapt™ technology from Extreme Networks® allows wireless Access Points (APs) to be seamlessly and securely deployed and managed throughout a facility for any number of wireless data or voice applications.

Based on the award-winning ExtremeWare® Layer 3 software, the Summit 300 series delivers a vast array of ExtremeWare Layer 3 and Layer 2 features, ranging from OSPF routing and advanced QoS classification to the latest advancements in security. Years of development based on the requirements of thousands of customers enables ExtremeWare to deliver the most comprehensive Layer 3 advanced software solution set at the edge while allowing easy expansion and addition of services without major upgrades.

Voice-Class Availability at the Edge of the Network

Redundant copper and fiber gigabit uplinks, dual-homed configurations, and sub-second EAPS failover provide mission-critical resiliency. The Summit 300 delivers advanced high availability features traditionally reserved for carrier networks. Ethernet Automatic Protection Switching (EAPS, RFC 3619) delivers sub-second (less than 50ms recovery) protection switching to interconnected switches in an Ethernet ring topology. Similar to the Spanning Tree Protocol (STP), EAPS offers the advantage of converging in significantly less time than STP or even Rapid Spanning Tree (802.1w) when a link breaks in the ring. Extreme Standby Routing Protocol™ (ESRP) can be implemented at both Layers 2 and 3 and extends the Virtual Router Redundancy Protocol's (VRRP) capabilities, adding Layer 2 resiliency and loop prevention and Layer 3 default router redundancy. It can be used as a STP substitute and can be scaled to protect thousands of VLANs. Multiple instances of ESRP in the same VLAN allow direct host attachment to standby switches.

High-Performance with QoS for Converged Applications

The Summit 300 series offers a number of features that improve the performance of the network, such as RIP, OSPF, Network Address Translation, QoS classification, dynamic VLANs, and Access Control Lists. For converged applications involving voice or rich media, the switch provides multicast, re-writing 802.1p tag prioritization, or prioritization using Layers 2 – 4. Four hardware queues per 10/100 port provide granularity and guarantee low latency and low jitter for time-sensitive voice and multi-media applications. These applications also benefit from features such as DiffServ and 802.1p which deliver varied levels of service and ensure efficient bandwidth usage.

Layer 3 Intelligence and Comprehensive Security at the Edge of the Network

Enterprise networks need both Layer 2 and Layer 3 intelligent services at the edge to ensure maximum network efficiency. Intelligence supports critical functionality such as security to prevent unauthorized access, high availability to ensure network uptime, and common management to reduce expenses.

Security is a paramount concern in today's converged networks. ExtremeWare supports multiple authentication options including 802.1x, web-based login with SSL, and MAC address. With IEEE 802.1x login, network managers can always control who is accessing and connected to the network. Web-based Network Login offers the freedom of authenticating through any HTTP-compliant web browser. MAC address security prevents unauthorized port abuse from rogue wireless APs or hubs/switches on edge ports. Port abuse can be reduced using lockdown on a per port basis and/or limiting of the number of MAC addresses learned by a port. Limiting the number of MAC addresses learned on a port also allows enforcement of service level agreements in tenant or service provider environments. MAC address security can also be used in conjunction with a RADIUS server to allow devices such as bar code readers that do not support 802.1x to enter the network based on their MAC address.

AccessAdapt technology provides centralized configuration and software delivery to Altitude 300 wireless ports. Altitude 300 APs receive their personality from the switch. This simplifies management and enables secure moves or changes to APs.

Features	Summit 300
Voice-Class Availability at the Network Edge	
Dual homed Gigabit Ethernet uplinks	Yes
Dynamically route around network problems	Yes
Redundant uplinks	Yes
Sub-second failover on every port	Yes (EAPS)
ESRP, VRRP redundancy	Yes
High-Performance with QoS for Converged Applications	
Wireless LAN uses integrated security and management approach	Yes
Priority queues	4
802.1p priority marking	Yes
802.3af compliant PoE support on all ports	Yes
Security	
Network Login	Yes
802.1x	Yes
Web-based Network Login	Yes
SSH2	Yes
ACLs	Yes, Layer 2 - Layer 4
Intelligence at the Edge	
Prioritize using Layer 2 - Layer 4 information	Yes
OSPF	Yes
Multicast	Yes
Network address translation	Yes