

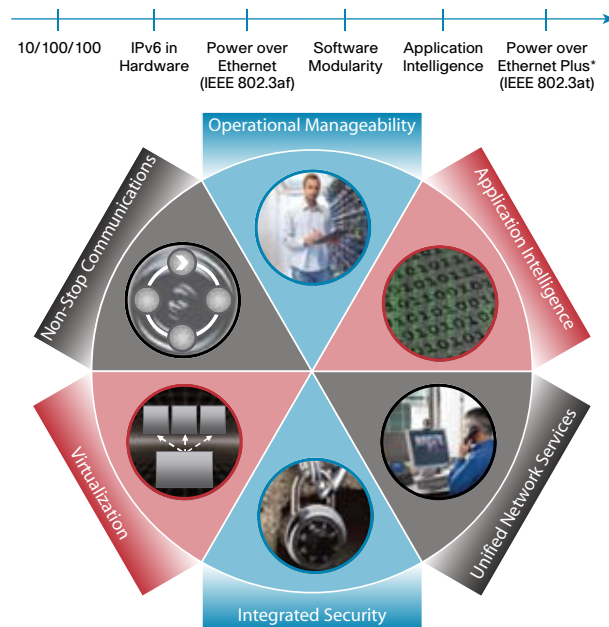


# Cisco Catalyst 6500 Series: Optimized for Wiring Closet Deployments

At-A-Glance

The Cisco® Catalyst® 6500 Series Switches offer an extremely high level of manageability, security, scalability, and investment protection, resulting in lower total cost of ownership (TCO) for wiring closet deployments. Leading industry transitions in the wiring closet, the Cisco Catalyst 6500 Series switching platform will be the basis for the Cisco Campus Communications Fabric (CCF) going forward.

## Timeline of Cisco Catalyst 6500 Series Industry Leading Innovation



## Operational Manageability

The Cisco Catalyst 6500 Series offers tools to help you easily monitor and manage your network:

- Easy configuration: Cisco Smartports, Cisco IOS® Software AutoQoS, and Cisco AutoSecure for simplified autoprovisioning
- Embedded Event Manager (EEM) and Smart Call Home for automatic management and service notifications

## Right Size Solution at the Right Price

The Cisco Catalyst 6500 Series leads innovation:

- Pioneering multigigabit Deep Packet Inspection in hardware for security and compliance
- Performance optimized for next-generation applications such as video and Telepresence
- Deployment flexibility and backward compatibility
- Rich baseline offering with manageability, security, and scalability

The Cisco Catalyst 6500 Series protects your investment:

- Price optimized for typical deployments of 96 or more ports
- Minimal incremental costs to enable features over base offering

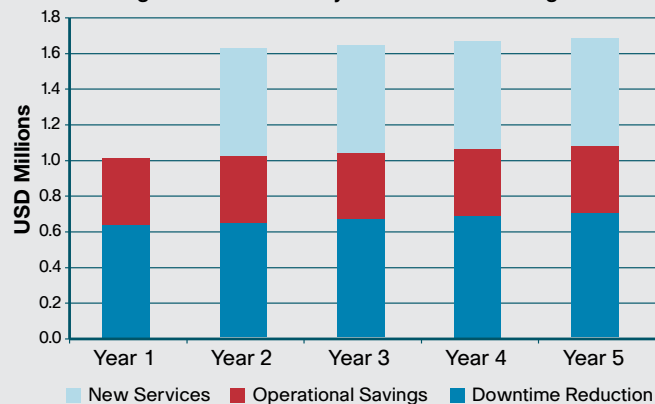


- Low operational expenses, and improved productivity with automanagement and new services
- Long lifecycle, resulting in low price per port per year

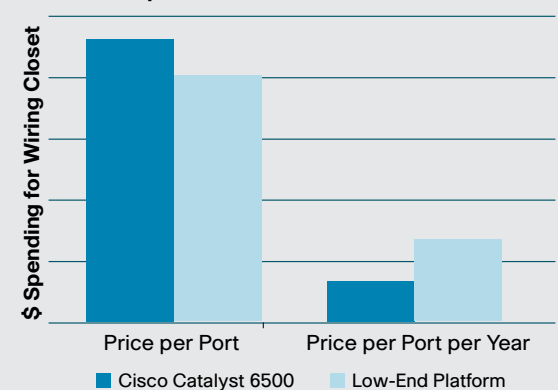
Bundles are optimized for the wiring closet:

- Discounts of up to 28 percent on bundles
- Discounts of up to 60 percent on Cisco SMARTnet® service contracts for bundles

## Savings with Cisco Catalyst 6500 in the Wiring Closet



## Price Comparison at Purchase and over Lifetime



For more details, visit: <http://www.cisco.com/en/US/products/hw/switches/ps708/index.html>.

- Link Layer Discovery Protocol (LLDP): LLDP Media Endpoint Discovery (LLDP-MED) and Cisco Discovery Protocol for intelligent management of media devices
- Integrated NetFlow for localized traffic monitoring and security

- Encapsulated Remote Switched Port Analyzer (ERSPAN) for remote network analysis (such as voice traffic recording and monitoring) and troubleshooting



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## Application Intelligence and Integrated Security

The Cisco Catalyst 6500 Series offers pervasive application intelligence and integrated security on the new Cisco Catalyst 6500 Supervisor Engine 32 PISA, facilitating the following unique capabilities to manage network traffic:

- Web application quality of service (QoS)
- Peer-to-peer application control
- Simple classification of Layer 4 through 7 packets, including rich media applications
- Programmability for customized user-defined application filters
- Full packet length inspection to filter day-zero attacks
- Repository of well-known application and security filters provided by Cisco

## Supervisor Engine 32 PISA with 8x1GE OR 2x10GE Uplinks



"We've always been able to be on the cutting edge of productivity because we have invested wisely in our networking infrastructure ... The Cisco Catalyst 6500-E Switches represent the flagship switching platform for Cisco, where a lot of the innovations begin. And when advancements such as the Cisco Catalyst 6500 Supervisor Engine 32 PISA are introduced, we can upgrade easily and cost-effectively."

– Network architect, Biopharma company testing the Cisco Catalyst 6500 Supervisor Engine 32 PISA

The Cisco Catalyst 6500 Series also offers foundational security features for compliance-demanding environments, including:

- Comprehensive identity-based services and Cisco Network Admission Control (NAC) to enforce access privileges
- Hardware-based control-plane rate limiters and policers, Unicast Reverse Path Forwarding (URPF), and access control

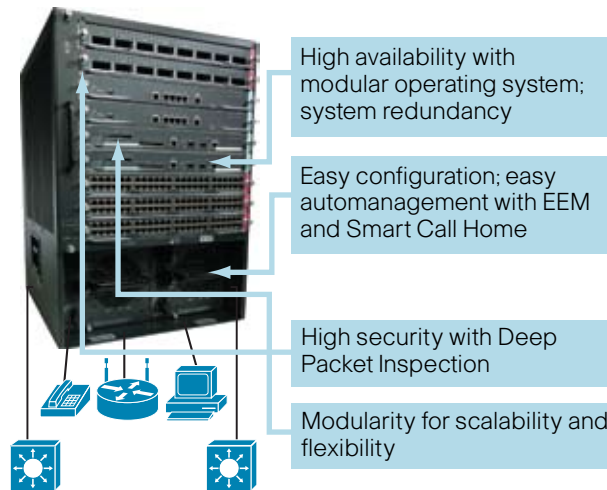
lists (ACLs) with dedicated ternary content addressable memory (TCAM) to protect network infrastructure from security threats

- Cisco Integrated Security Toolkit to mitigate man-in-the-middle attacks

## Nonstop Communications

The Cisco Catalyst 6500 Series offers high-availability and network-resiliency features to maximize uptime, especially because the wiring closet is the first single point of potential failure for business-critical and media applications:

- Maximum redundant components for reduced downtime: Cisco IOS Software Modularity for fault containment
- Nonstop Forwarding/Stateful Switchover (NSF/SSO) for stateful subsecond recovery in Layer 2 and 3 environments
- Integrated Generic Online Diagnostics (GOLD) for automated system monitoring



## Unified Network Access

The Cisco Catalyst 6500 Series platform provides enhanced services to deploy converged networks:

- Consistent services and policies for data, voice, video, and wireless applications
- IPv4, IPv6, and IP Multicast in hardware for performance

- Per-port buffering to support rich media applications such as Cisco TelePresence
- Range of dual-voltage power supplies with multiple independent inputs for scalability
- High Power over Ethernet (PoE) scalability with support for 943 Class 2 or 423 Class 3 IEEE802.3af devices, including IP phones, access points, and security cameras
- Field-upgradable PoE daughter cards (WS-F6K-48-AF) for flexibility
- Power monitoring and limiting for efficient use of power
- Enhanced PoE support for devices such as Cisco Aironet® 1250 Series Access Point (IEEE802.11n access point) on all 10/100/1000 line cards
- System with components that will be compatible with future versions to support next-generation IEEE802.3at PoE (30W per port) devices

"We wanted to have a single network for easier management, control, and economies of scale. At the same time, we needed the ability to set up logical walls so we don't have security concerns. The Cisco solution (Cisco Catalyst 6500 Supervisor Engine 32) lets us do both."

– Rick Haverty, director of information technology at the University of Rochester Medical Center

## Virtualization

The Cisco Catalyst 6500 Series provides virtualization to partition the network into independent, secure environments:

- Access control in the wiring closet to provide a complete virtualization solution in the enterprise
- Application- or user-based classification for flexibility in partitioning
- Generic routing encapsulation (GRE) tunnels, Multi-Virtual Route Forwarding (Multi-VRF), and Multiprotocol Label Switching (MPLS) VPNs to provide path isolation

In summary, the Cisco Catalyst 6500 Series switching platform continues to provide technical innovation with operational manageability, application intelligence, integrated security, nonstop communications, unified network access, and virtualization to support evolving enterprise traffic. Novel features of the platform such as innovation protection and upgradability, long lifecycle, and price optimization for high-port-density configurations make it a compelling value proposition for the wiring closet.