Cisco Catalyst SmartOperations Toolkit
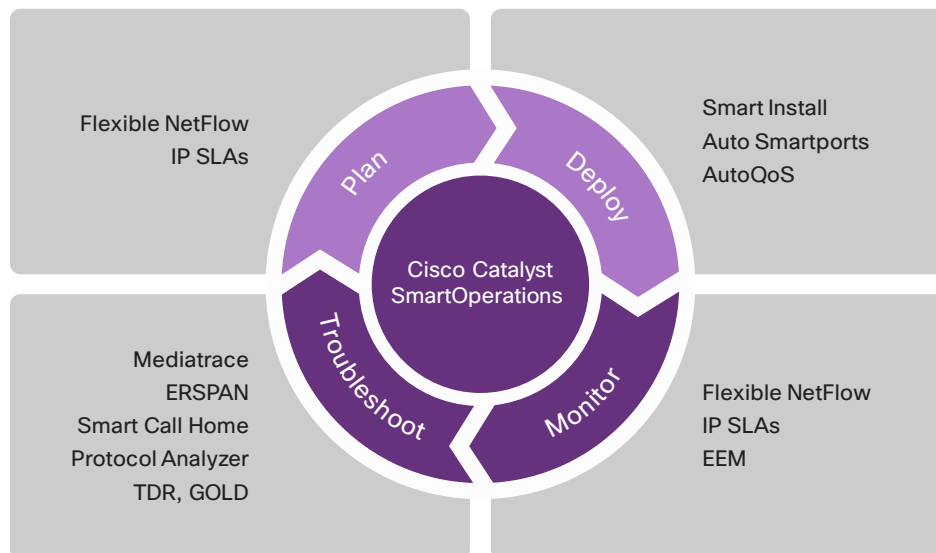
What Is Cisco Catalyst SmartOperations?

Cisco® Catalyst® SmartOperations is a set of technologies and features to simplify network planning, deployment, monitoring, and troubleshooting.

What Are the Benefits of SmartOperations?

SmartOperations improves productivity through streamlined operations, reduced downtime and faster troubleshooting.

The result is increased IT operational efficiency. Forrester Consulting[1] estimates that Cisco Catalyst Access Switching provides up to 14% lower total cost of ownership (TCO) and SmartOperations tools accounts for roughly one quarter of the savings. Most SmartOperations features are available in Cisco LAN Base and IP base feaure sets.

What Technologies and Features Are Included in SmartOperations?

Plan
Flexible NetFlow
IP SLAs

Deploy
Smart Install
Auto Smartports
AutoQoS

Monitor
Flexible NetFlow
IP SLAs
EEM

Troubleshoot
Mediatrace
ERSPAN
Smart Call Home
Protocol Analyzer
TDR, GOLD

Cisco Catalyst SmartOperations

Cisco Flexible NetFlow provides detailed network traffic statistics, allowing administrators to identify anomalies, intelligently manage capacity and plan upgrades.

Cisco IP Service-Level Agreements (SLAs) assess network performance and readiness to deploy new IP services such as voice, video or virtual desktop infrastructure (VDI).

Cisco Smart Install is a zero-touch deployment solution that allows new or replacement switches to be automatically imaged and configured over the network.

Cisco Auto Smartports automatically configures switch ports based on the connected device type, eliminating the need to allocate fixed ranges of switch ports for specific device types or manually reconfiguring ports each time a device is added or removed.

Cisco AutoQoS simplifies generating and applying quality of service configurations across the network, ensuring priority treatment of voice, video and real-time applications.

Cisco Embedded Event Manager (EEM) is a scripting system that can detect network events and automatically take a customized action, for example executing commands or sending an email.

Cisco Smart Call Home communicates network status information to the Cisco Technical Assistance Center (TAC) to enable proactive service interventions.

Cisco Generic Online Diagnostics (GOLD) runs diagnostic tests to detect preliminary warnings of hardware failure, allowing network administrators to prevent potential outages.

Cisco Mediatrace monitors voice, video, and other real-time traffic as it traverses the network allowing administrators to pinpoint bottlenecks that degrade performance.

Cisco Encapsulated Remote SPAN (ERSPAN) captures traffic on switch ports or VLANs and sends it across a layer 3 routed network for remote analysis and diagnostics.

Protocol Analyzer leverages the Wireshark open-source packet capture platform to collect and interpret traffic on an interface, enabling sophisticated protocol analysis and debugging.

Time Domain Reflectometer (TDR) uses switch hardware to test the integrity, length and connectivity of Ethernet cables to enable rapid debugging of wiring issues.

What Are Typical Applications for SmartOperations?

Cisco SmartOperations can be applied to deliver increased efficiencies for:

· Branch office deployment

· Access network installation and upgrades

· Unified communications, including voice and video collaboration

· Virtual desktop infrastructure (VDI)

Which Customers Can Benefit from the SmartOperations Toolkit?

SmartOperations benefits campus and branch networks of all sizes. Customers using the Cisco Catalyst 6000, 4000, 3000, and 2000 Series Switches will find SmartOperations useful for planning, deployment, monitoring and troubleshooting.

Where Can I Learn More?

Visit http://www.cisco.com/go/smartoperations