Learn how to Simplify Network Management and Reduce Operations Costs with Cisco Prime for Enterprise

A CIN Technology Workshop

June 21, 2011
Agenda

• Network Management Challenges
• Cisco Prime for Enterprise
  • Overview
  • Service-Centric Foundation
  • Common Operational Attributes
  • Benefits
• Cisco Prime for Enterprise Product Portfolio
• Cisco Prime for Enterprise Use Cases
• For More Information
Network Management Challenges

- Complex
- Manual
- Error Prone

Siloed non-integrated management products and processes

In-efficient infrastructure-focused management approach

Inadequate tools to rapidly deploy devices and services
Cisco Prime for Enterprise
Addressing Management Challenges

- Simplified
- Automated
- Integrated Best Practices

Efficient management with optimized user experience
Integrated workflows and best practices speed operations
Improved delivery and predictability of services
Cisco Prime for Enterprise

Service-Centric Foundation

IT TEAMS

Service-Centric Foundation

Moving to Service Management

Services

Network

Common Operational Attributes

- Simplified
- Automated
- Efficient
- Predictable

Innovative Product Portfolio
An end user is experiencing issues with the video display.

The problem is traced through the service.

The source of the video problem is located on the infrastructure device.

Service/Network Operator
View across all network layers

Users
Performance
Network
Cisco Prime for Enterprise
Common Operational Attributes

Simple and Efficient Management Across Architectures, Networks, and Services
Cisco Prime for Enterprise
Common Operational Attributes

Optimized Operations Experience
- Common user interface
- Intuitive user experience
- Optimized operator workflows

Integrated Cisco Best Practices
- Guided deployment of Cisco-validated best practices
- Automated troubleshooting and diagnostics

Complete Lifecycle Management
- End-to-end lifecycle
- ITIL-aligned operations
- Northbound integration to customer back office

Day-One Device Support
- Support for new devices and technologies upon shipment
- Non-disruptive support upgrades

Smart Interactions
- Context-based help tool
- Real-time access to Cisco support community
- Automated Cisco TAC case creation and management

Physical and/or Virtual Appliance
- Two delivery options
- Both options fully self-contained
- Includes operating system, software application, database, and CLI

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Cisco Prime for Enterprise Product Portfolio

- Cisco Prime Network Control System (NCS)
- Cisco Prime LAN Management Solution (LMS)
- Cisco Prime Collaboration Manager (CM)
- Cisco Prime Network Analysis Module (NAM)

Simple and Efficient Management Across Architectures, Networks, and Services
Improved Operational Efficiency
Cisco Prime for Enterprise Common User Experience

- Common look and feel across all products simplifies usability and reduces training costs
- User centric workflows provide step-by-step guides for quick error free deployment and fast troubleshooting
- Simplified design is based on Cisco best practices and the way network operators do their jobs

Cisco Prime for Enterprise Product Portfolio

- Simplified management with optimized user experience
- Integrated workflows and best practices speed operations
# Cisco Prime for Enterprise Product Feature Summary

<table>
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<tr>
<th>Cisco Prime for Enterprise Product Features</th>
<th>NCS 1.0</th>
<th>LMS 4.1</th>
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<td><strong>Cisco Prime for Enterprise Features</strong></td>
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<td>• Service-centric foundation</td>
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<td>• Integrated Cisco best practices</td>
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<td>• Complete lifecycle management</td>
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<td>• Day-one device support</td>
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<td>• Smart interactions</td>
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<td>• Physical and/or virtual appliance</td>
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<td><strong>Product Positioning Guidance</strong></td>
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<td>• Converged wired/wireless user access monitoring and troubleshooting</td>
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<td>• Complete wireless lifecycle management</td>
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<td>• Complete wired lifecycle management</td>
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<td>• Borderless Networks services: TrustSec, Medianet, EnergyWise</td>
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<td>• Video session/TelePresence monitoring and troubleshooting</td>
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1. Day-one support for selected products only
2. Includes sub-set of Cisco smart interactions features
3. In conjunction with Cisco Identity Services Engine (ISE)
Cisco Prime for Enterprise Benefits

**Improved Operational Efficiencies**
- Reduce network errors
- Speed troubleshooting
- Improve delivery of services

**Reduced Operating Expenses**
- Speed deployments
- Minimize IT staffing
- Reduce training costs

**Lowered Capital Expenses**
- Maximize the value of existing network investments
- Integrate with existing operations and processes
Cisco Prime for Enterprise
Use Cases
**USE CASE:** Corporate IT wants to deploy EnergyWise to save power and lower overall network costs.

1. Define the policy
2. Prepare the network
3. Configure the network
4. Apply the policy
5. Monitor the savings

**USE CASE:** Corporate IT wants to deploy EnergyWise to save power and lower overall network costs.

- Speed service deployment from days to hours
- Reduce errors and gain immediate ROI
Automate Lifecycle Processes
Troubleshooting Video with Cisco Prime Collaboration Manager

**USE CASE:** Users are experiencing intermittent video problems during TelePresence sessions between HQ and the branch office, operations must isolate and fix the problem.

1. Identify and select the session (HQ to Branch)
2. View the session status
3. Drill down to visualize the media path
4. Quickly isolate the root cause of the problem
5. Fix the problem

Quickly isolate and troubleshoot service related problems
Improve service quality and end-user experience
Troubleshoot Wired and Wireless Access Using Cisco Prime NCS for Converged Client Devices

**USE CASE:** User calls in to help center because they cannot get access to financial data on the network. IT determines if they are authorized to access this area.

1. Search on user name
2. Identify wired and wireless devices associated with the user
3. Display associated and disassociated devices
4. Use automated client troubleshooting workflow to resolve the issue
5. Issue resolved

Cisco Prime Network Control System (NCS)

Troubleshoot user and access issues based on identity

Speed resolution with intuitive guided workflows
**USE CASE:** End users are complaining about slow application response times and unresponsive applications.

1. Identify the application with high response times
2. Analyze the application’s performance over time
3. Zoom in to investigate specific performance issues
4. Identify the Top N clients affected by the degradation and isolate the servers with high response times
5. Drill-down to analyze server activity and resolve the problem

**Understand how network traffic is performing and being used**

**Optimize and troubleshoot network and application performance**
For More Information

- Cisco Prime
  http://www.cisco.com/go/prime

- Cisco Prime for Enterprise Overview At-A-Glance

- Cisco Prime for Enterprise Product Portfolio At-A-Glance

Cisco Prime for Enterprise Products – Cisco.com

- Cisco Prime Network Control System (NCS)
  http://www.cisco.com/go/ncs

- Cisco Prime LAN Management Solution (LMS)
  http://www.cisco.com/go/lms

- Cisco Prime Collaboration Manager (CM)
  http://www.cisco.com/go/cpcm

- Cisco Prime Network Analysis Module (NAM)
  http://www.cisco.com/nam
Cisco Prime for Enterprise Product Portfolio
Backup Slides
Cisco Prime Network Control System (NCS) 1.0
User and Access Management with WLAN Lifecycle Management

**IT Challenges**

- Provide access from anywhere with any device
- Time wasted aligning data from multiple tools
- Deliver consistent and reliable wireless access
- Optimize wireless services from a single location

**IT Requirements**

- Access visibility regardless of network, location, device
- Unified view of wired, wireless and policy data
- Plan, design and manage optimal RF environments
- View RF interference, threats and location information

**Cisco Prime NCS 1.0 Advantage**

- Converged user and access management for wired and wireless networks
- Integrates with Cisco Identify Services Engine (ISE) for security policy information
- Comprehensive wireless LAN lifecycle management
- Supports leading Cisco wireless technologies: CleanAir, aWIPS, Context-aware
Cisco Prime LAN Management Solution (LMS) 4.1
Simplified Management of Borderless Networks Platforms

**IT Challenges**
- Minimal IT staffing for network operations
- Using CLI or multiple management products
- Manual troubleshooting
- Overwhelmed by new technology and services
- Limited time for training

**IT Requirements**
- Lifecycle management
- Simplified operations
- Troubleshooting tools
- Easily add new services and technologies
- Reduce costs for operations and equipment

**Cisco Prime LMS 4.1 Advantage**
- Complete wired network lifecycle management
- Intuitive workflow user-oriented experience
- Day-one support for 600+ devices and platforms
- Borderless Networks services work centers
- Automated and self-help troubleshooting tools
- Smart Business Architecture (SBA) validated templates
Cisco Prime Collaboration Manager (CM) 1.0
Manage and Troubleshoot Video Collaboration Services

IT Challenges
- Problems during TelePresence sessions
- Poor TelePresence user experience
- Trouble finding source of video session problems
- Reduce problems by preventatively fixing video session issues

IT Requirements
- Visibility of current and past TelePresence video sessions
- Isolate and resolve video session problems
- Visualize the video media path and flow
- Inventory TelePresence assets

Cisco Prime CM 1.0 Advantage
- End-to-end visibility and isolation of video sessions, endpoints, and network issues
- Analysis of media path, fault, and performance statistics
- Comprehensive inventory, health, and status of end points and infrastructure
- Reports on usage and problem history
Cisco Prime Network Analysis Module (NAM) 5.1
Consistent Performance Visibility Across Borderless Networks

**IT Challenges**
- End users complaining about slow response times
- Limited visibility of network and WAN problems
- Poor voice and video quality
- Applications monopolizing network resources

**IT Requirements**
- Monitor network traffic usage and performance
- Troubleshoot network performance
- Understand which applications are consuming what resources
- Optimize network and WAN performance

**Cisco Prime NAM 5.1 Advantage**
- End-to-end application and network performance visibility
- Rapid network problem isolation
- Granular traffic analysis, voice analysis, performance metrics, and deep insightful packet captures
- Enable control and optimization techniques such as QoS, Cisco WAAS
- Cost-effective form factors
Thank you.