



Welcome

Tech Updates FY09

**Network
Management Update**



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Today's Agenda

- 1. Introduction - 5 min
- 2. Monitor Manager & netManager Introduction – 20 mins
- 3. CiscoWorks LAN Management Solution - 1 h 30 min
- 4. Break – 15 min
- 5. MDE Overview - 25 min
- 6. Network Compliance Manager, Configuration, Change Management - 25 min
- 7. Q&A - 5 min



Network Management - Cisco's strategy and vision



Stuart Parham

Agenda

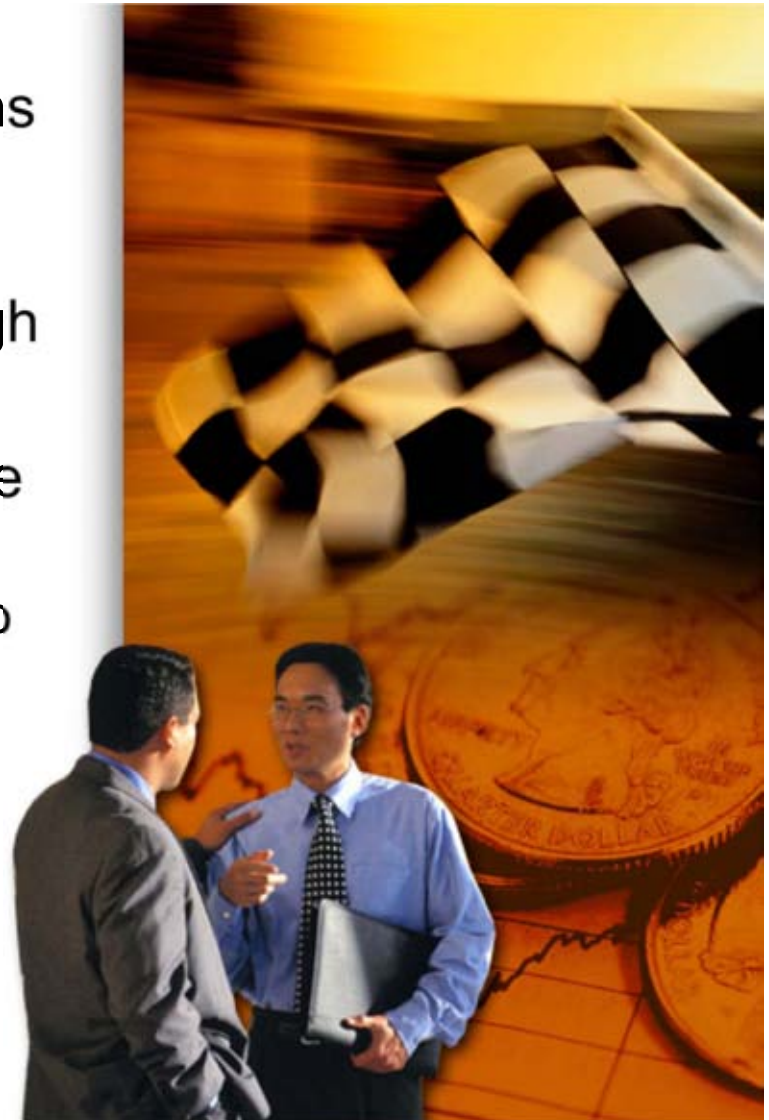
- Strategy & Vision
- 4 Main Initiatives to deliver Strategy
- Questions

Network Management Vision

- Deliver leadership management solutions across commercial, enterprise, and service provider segments
- Accelerate new Cisco technology through automation & improved ROI
- Increase customer satisfaction & positive experience

Engineers who manage and deploy Cisco technology

End user customers who depend on services using Cisco technology



Network Management Strategy

Vision	Strategy
Deliver leadership management solutions across all market segments	<ul style="list-style-type: none">• Go to market around solutions vs. individual products in all market segments
Accelerate new Cisco technology through automation & improved ROI	<ul style="list-style-type: none">• Help to ensure success in Unified communication, IP Video, Commercial & Emerging markets
Increase customer satisfaction & positive experience	<ul style="list-style-type: none">• Scalable & integrated platform• Multi-vendor support• Common GUI, standard API SDK

Four Big Initiatives

1

Solutions Focus

Addressing specific customer requirements

2

Software Backend Infrastructure

Maximize selling opportunity and successful delivery

3

Management Sales Specialists

Account teams accountable for selling management solutions

4

Embedded Network Services Framework

SONA infrastructure

Summary



We do plan to lead the network management industry



Customers demand solution oriented approaches and we will deliver them



We will build software models that are simple, flexible, and build gradually over time



Our investments now will drive service-oriented networking advancements in the future

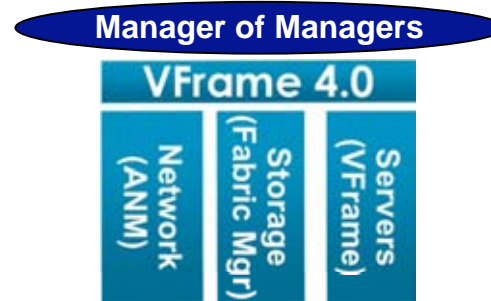


Enterprise – Management Focus

Infrastructure Enablement



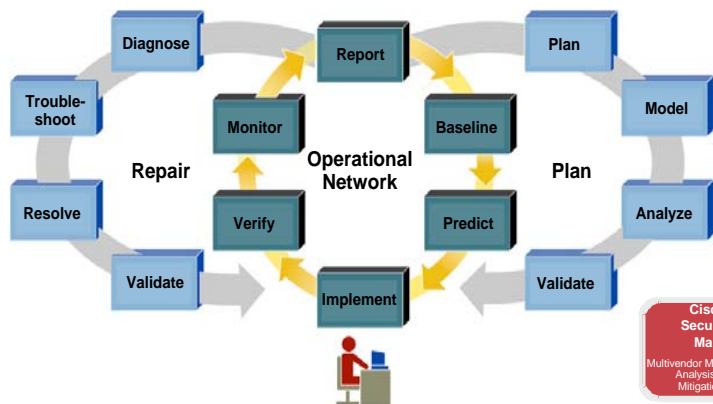
Data Center Management



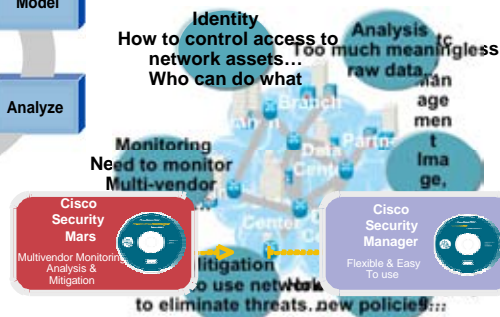
Unified Communications Management



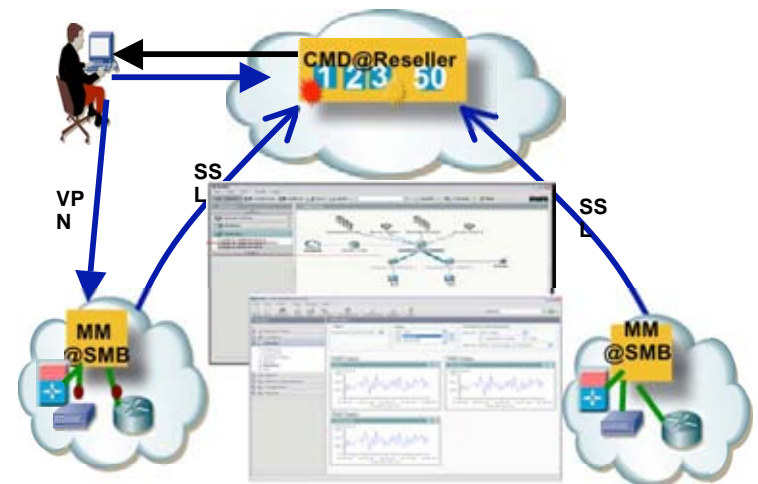
Network & Application Performance Management



Security Management



Commercial / SMB Management



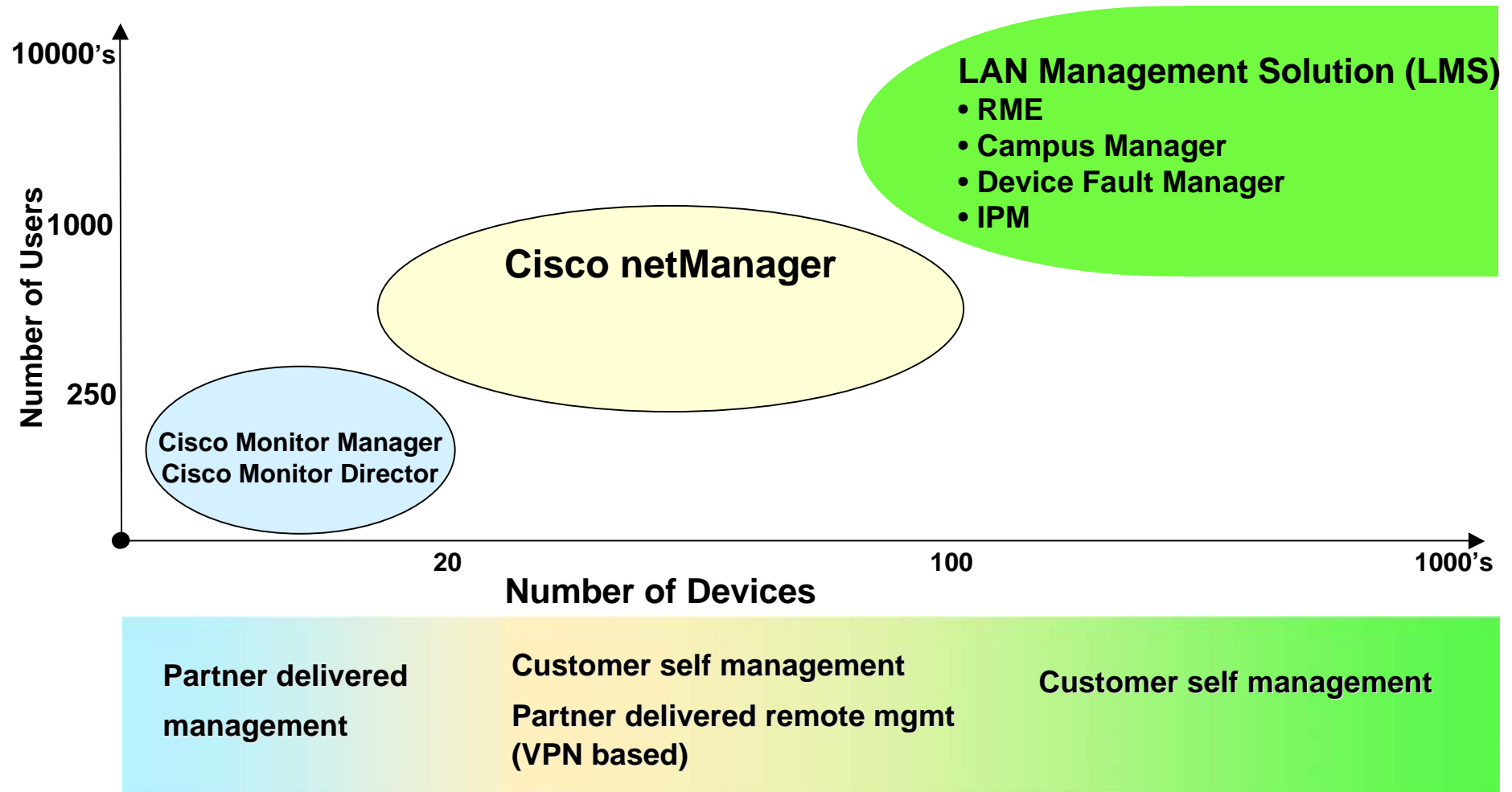


Cisco Infrastructure Management Update

Cisco Monitor Manager
Cisco netManager
CiscoWorks LMS



NMS positioning



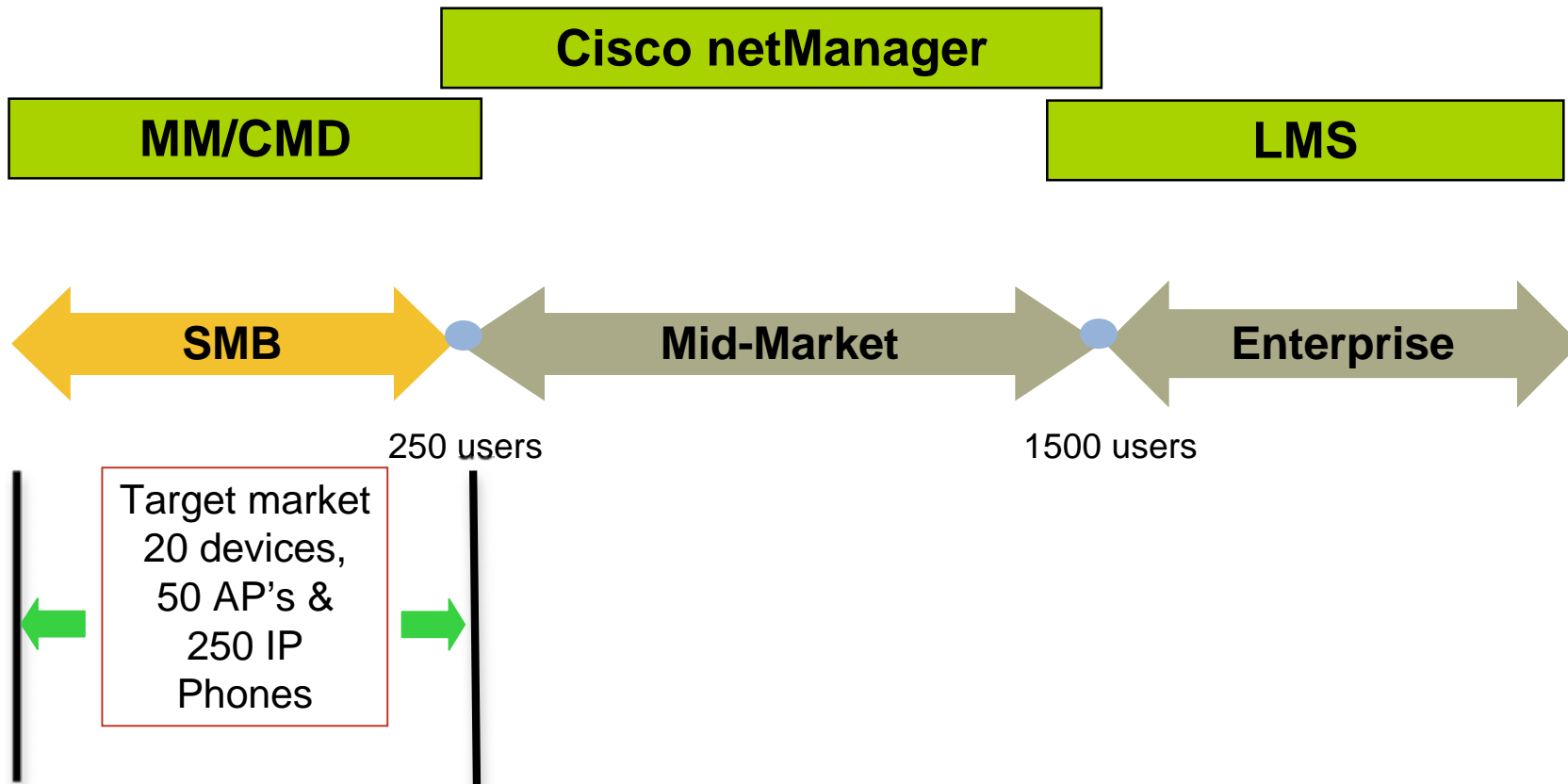
Cisco Small Business Network Management

Cisco Monitor Manager & Cisco Monitor Director



Cisco Monitor Manager Product Positioning

- Software based solution (Win 2003 or Win-XP) to monitor data and voice elements of Small Business class deployments



Cisco Monitor Manager - Overview

- Cisco® Monitor Manager is a purpose-built management application designed solely for the Small Business market.
- Integrated network-wide network management solution that constantly monitors and configures (24 x 7) key device parameters on Cisco's Small Business class Unified Communications and data systems across customer sites
- Comprehensive real-time monitoring, alerting and reporting

Cisco Monitor Manager – Dual Deployment

- **Self Managed** - Cisco Monitor Manager is a stand-alone application that can be used by Small and Medium Businesses in order to self-manage their corporate and remote offices.
- **Cisco Reseller Managed** - Cisco Monitor Manager is also a key component of the VAR Managed Service Provider Solution providing distributed intelligence and comprehensive alerts and reports to the Cisco Monitor Director that resides at the partner's location.

Cisco Monitor Director – Key Feature & Benefits

- Central dashboard
- SMB network topology visibility to the Cisco PNM for comprehensive network view
- Cisco IP Telephony Monitoring
- Secure, and reliable communication between Partner & SMB customers
- Real time alerts and notifications through Email and Pager
- Configurable Email and Pager addresses based on time-of-the day setting
- Integration with trouble ticketing applications.
- Scheduled HTML-based automated email reports that include network alert summary, device availability analysis, Top-N performance reports ,network topology, IP Phone report and Trunk Utilization report.
- Network-wide license monitoring and reports
- Voice Inventory report that include CME, CUE, DSP and IP Phones report
- End of Life/ End of Sales notifications and reports

The image displays three overlapping screenshots of the Cisco Proactive Network Manager (PNM) interface. The top screenshot shows the 'Customer Network Status' window with a table of network devices. The middle screenshot shows the 'Network Summary Report' window, which includes a network topology diagram and an inventory table. The bottom screenshot shows an email report titled 'Cisco Proactive Network Manager Report - Microsoft In...' with an alert distribution chart.

Customer	Contact	Service	ENM-EN...	Service...	Active	Unacknowledged Alerts			
Valley H...	Matt	Gold	Enabled	0	64	0	0	0	0
Sonoma...	Sam	Silver	Enabled	2	42	0	5	7	
EDW La...	Kevin	Gold	Enabled	0	0	0	0	0	

Device	IP Address	Serial No...	Software	Hardware...	Status	Uptime
Herbie-AP...	172.20.10...	12345	12.3(7)3A3		1	11473078...
S/W-2790	172.20.10...	12345	12.2(2)5S...	WS-C29T...	1	11453800...
S/W-3560	172.20.10...	12345	12.2(2)5S...	WS-C356...	1	11453800...

Alert Severity	Count
P1 Alerts	25
P2 Alerts	50
P3 Alerts	30
P4 Alerts	25

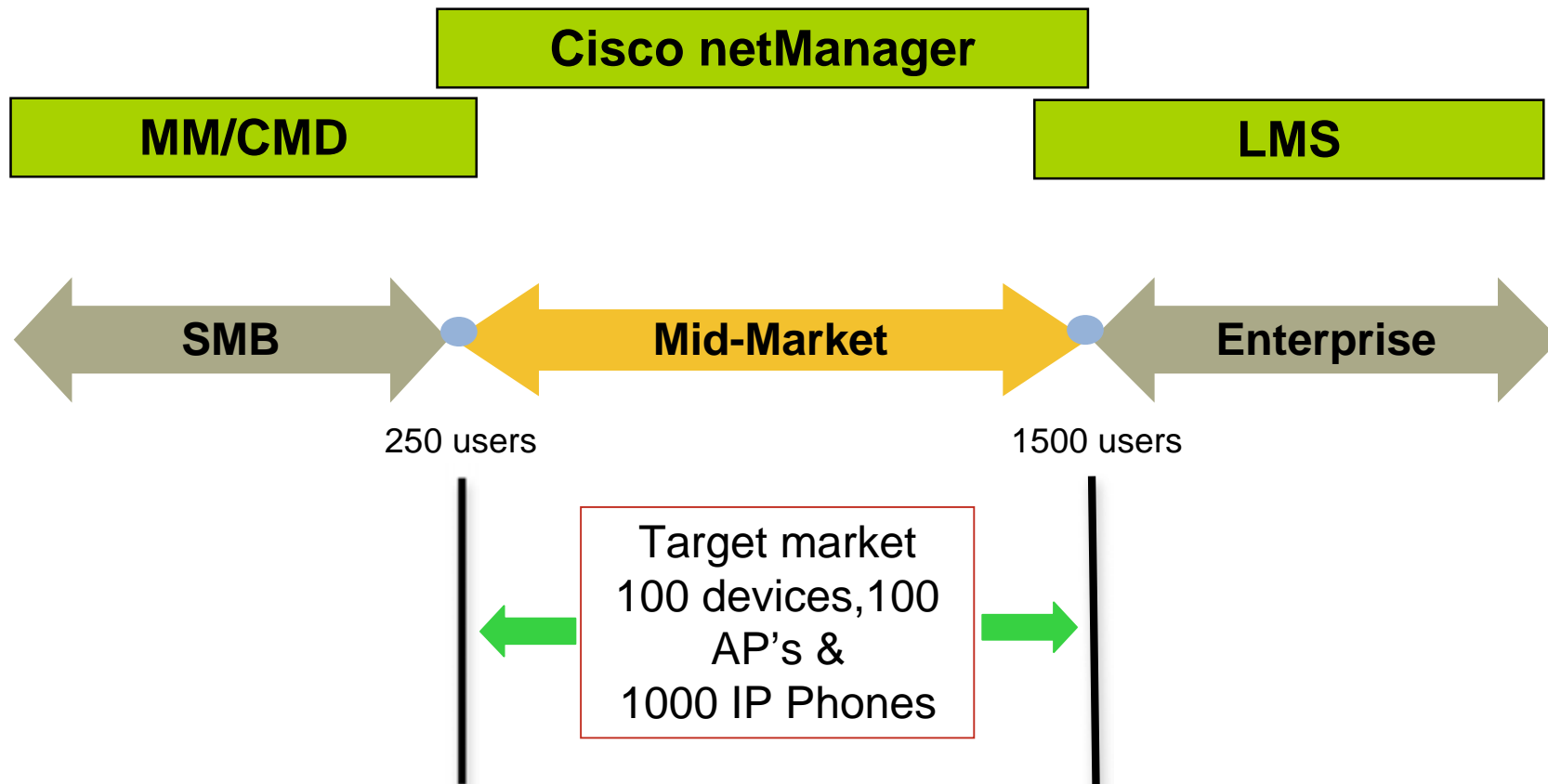
Cisco Medium Business Network Management

Cisco netManager - IP



CNM-IP Product Positioning

- Software based solution (Win 2003 or Win-XP) to monitor data and (optionally) voice elements of commercial class deployments



Cisco netManager Solution

- Solution provides end to end network management capability for *Data, Voice, Wireless and Security*
- Tightly integrated approach to network management
- Customers can mix and match technologies in solution
- Currently two products in Cisco netManager solution

Cisco netManager – IP Infrastructure (Manage Data Networks)

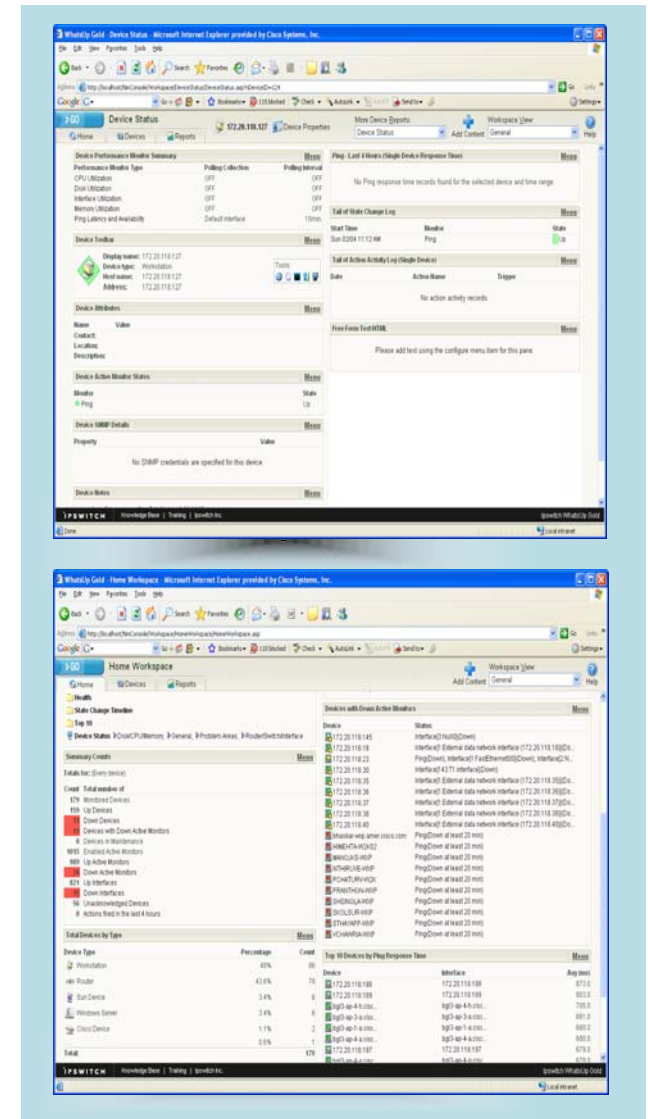
Cisco netManager – Unified Communications (Manage Voice & Data Networks)

Cisco netManager – IP Infrastructure (CNM-IP)



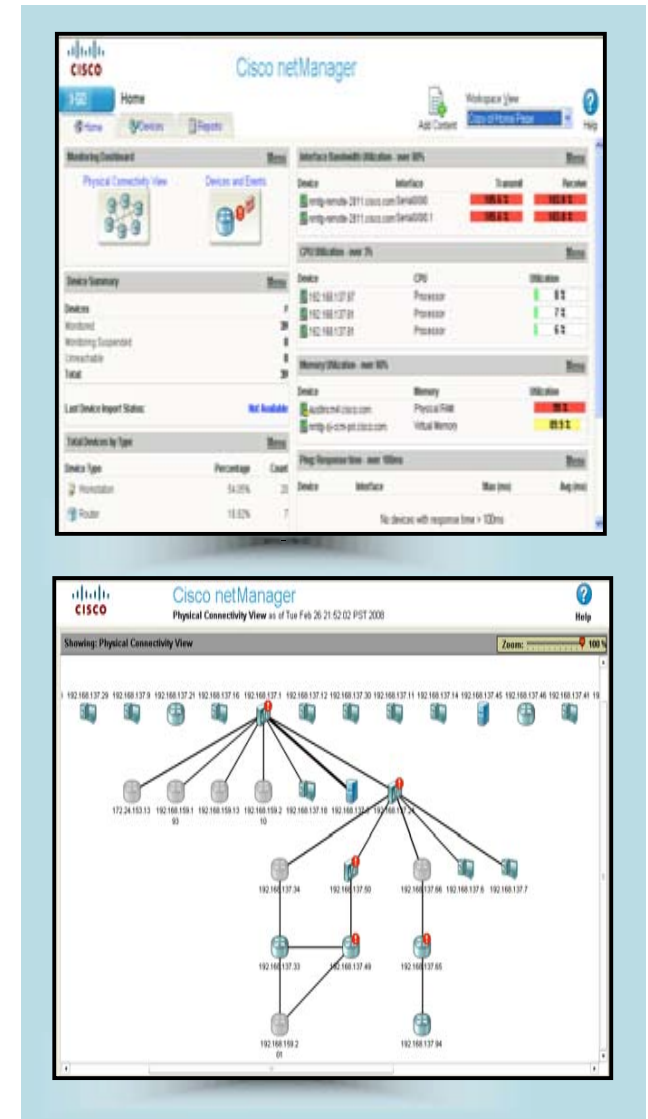
CNM-IP Overview (1/2)

- Software based solution (Win 2003 or Win-XP) to monitor data elements of Medium Business class deployments
- Replacement to CiscoWorks SNMS (Small Network Management Solution)
- Auto discovery of detailed inventory and capability (up to 10 branches)
- Actionable network level views in topology
- Contextual performance monitoring, alerting, reporting and trending
- Notification services: email, SMS and SNMP traps.



CNM-IP Overview (2/2)

- Basic diagnostics like ping, trace route, telnet etc
- Support for broad range of Cisco platforms
- Multi-vendor devices and Small Business office devices (workstation, server, printers) monitoring, (optional) Cisco Unified Communication devices
- Licensed as “Data only” or “Data + Voice”
- Built on top of Ipswitch “WhatsUp Gold V11”
- Self-management only. No Reseller interface. Reseller may use for remote management (VPN based).



Cisco netManager Home Page

- Web based real-time (auto refresh) portal
- Default layout out of box: Customizable by user
- High level overview of network operational status

Cisco netManager

> GO Home Home Devices Reports

Add Content Workspace View: Home Page Help

Monitoring Dashboard Menu

Physical Connectivity View Devices and Events

Device Summary Menu

Devices	#
Monitored	7
Monitoring Suspended	0
Unreachable	1
Total:	8

Last Device Import Status: **Not Available**

Total Devices by Type Menu

Device Type	Percentage	Count
Switch	62.5%	5
Router	25%	2
Workstation	12.5%	1
Total:		8

Ping: Availability - under 50% Menu

Device	Interface	Availability
No devices with availability < 50%		

CPU Utilization - over 80% Menu

Device	CPU	Utilization
No devices with cpu utilization > 80%		

Interface Bandwidth Utilization - over 80% Menu

Device	Interface	Transmit	Receive
No devices with interface bandwidth utilization > 80%			

Memory Utilization - over 80% Menu

Device	Memory	Utilization
No devices with memory utilization > 80%		

Ping: Response time - over 500ms Menu

Device	Interface	Max (ms)	Avg (ms)
No devices with response time > 500ms			

CNM-IP Physical Network Level Views

- Actionable, real-time network level view with physical connectivity and link up/down status
- Current operational status of devices
- Context sensitive drill down details and diagnostic tools
- Device search, event summary and scroll window for latest event details

The screenshot displays a network management interface. The main window, titled "Showing: Physical Topology", shows a central hub device (IP: 192.168.140.98) connected to five peripheral devices. A context menu is open over one of the peripheral devices, listing options: TraceRoute, Ping, Lookup, Telnet, CCM Administration, CCM Serviceability, Settings..., and About Me... A secondary window titled "Network Tool: Trace Route" is open, showing the results of a trace route to 192.168.140.98. The window includes input fields for "Address or hostname" (192.168.140.98), "Timeout (milliseconds)" (2000), and "Max hops" (30). The results table shows five hops with success status and RTT values.

Hop	Status	RTT #1	RTT #2	RTT #3	Hostname	IP Address
1	Success	<1ms	<1ms	<1ms	nmtg-mkt-bench-3550.cisco.com	192.168.159.49
2	Success	<1ms	<1ms	<1ms	nmtg-mkt-lab.cisco.com	192.168.159.33
3	Success	<1ms	<1ms	<1ms	nmtg-voice-om-3750.cisco.com	192.168.159.76
4	Success	<1ms	<1ms	<1ms	192.168.140.126	192.168.140.126
5	Success	15ms	16ms	<1ms	192.168.140.98	192.168.140.98

Cisco netManager - UC Home Page

- Web based real-time (auto refresh) portal
- Default layout out of box: Customizable by user
- High level overview of network operational status

The screenshot displays the Cisco netManager UC Home Page interface. At the top, there is a navigation bar with 'GO', 'CNM HomeSpace', and 'Add Content' buttons. A 'Workspace View' dropdown is set to 'Home Page', and a 'Help' icon is visible. The main content area is divided into several sections:

- Topology:** Includes 'Service Level View', 'Physical Topology', and 'Events' widgets.
- Device Management Summary:** A table showing the state and count of devices.

State	Number of Devices
Monitored	13
Monitoring Suspended	0
Unreachable	0
Total:	13
State	Number of Phones
Registered	29
Unregistered	1
Total:	30
- Total Devices by Type:** A table showing the percentage and count of devices by type.

Device Type	Percentage	Count
Workstation	30.8%	4
Communications Manager	23.1%	3
Router	15.4%	2
- Ping - Devices with Availability under 50%:** A table with columns 'Device', 'Interface', and 'Percent Available'. It displays 'No Ping performance monitor records.'
- CPU Utilization - Over 80% Utilization:** A table with columns 'Device' and 'CPU'. It displays 'No CPU performance monitor records.'
- Interface - Over 80% Bandwidth Utilization:** A table with columns 'Device', 'Interface', 'Transmit', and 'Receive'. It displays 'No interface performance monitor records.'
- Memory Utilization - Over 80% Utilization:** A table showing memory usage for specific devices.

Device	Memory	Percent Used
blrsd2.cisco.com	Physical RAM	99.5 %
blrsd4.cisco.com	Physical RAM	99.3 %
newmpx.cisco.com	Physical RAM	99.2 %
- Ping - Devices with Response Time over 500msec:** A table with columns 'Device', 'Interface', and 'Response Time'. It displays 'No ping performance monitor records.'

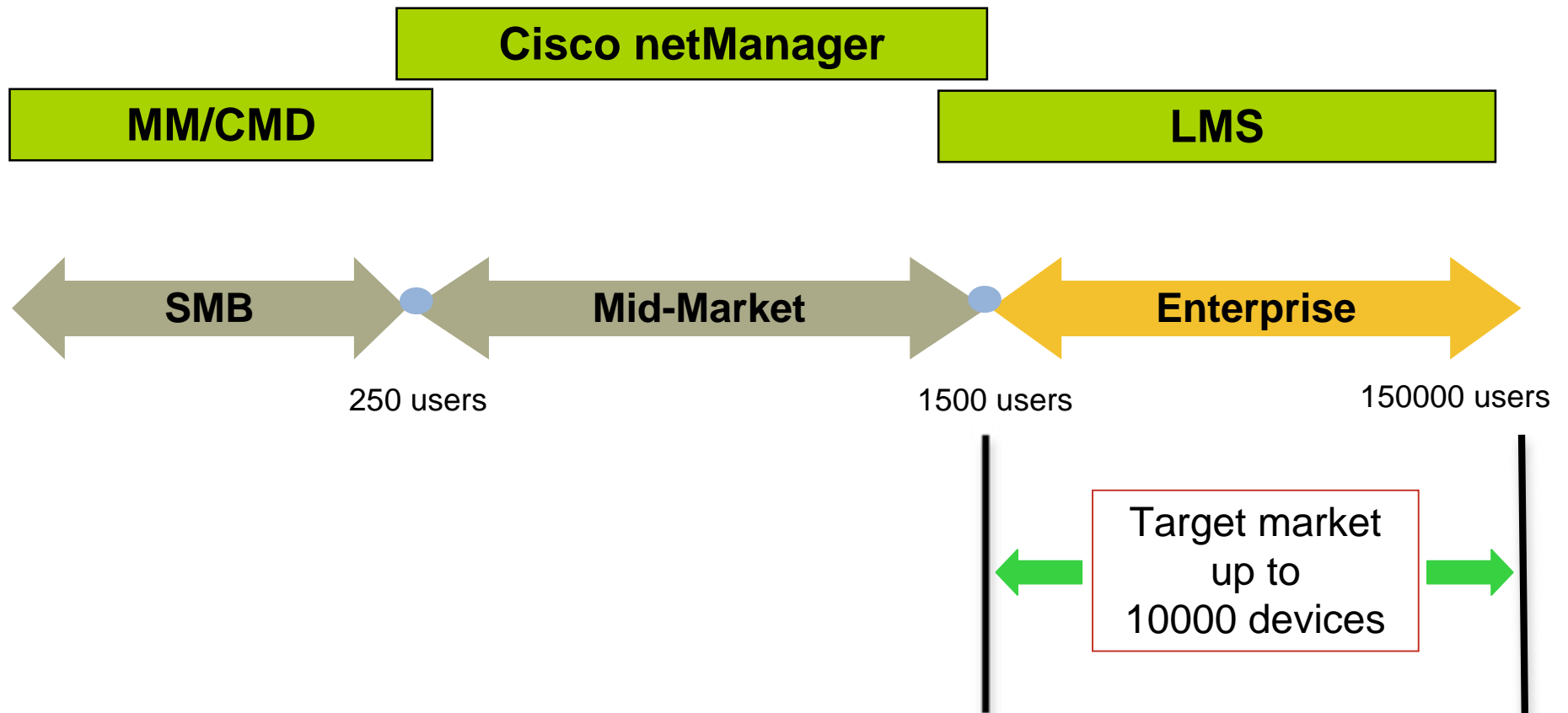
Cisco Large Business Network Management

CiscoWorks LAN Management Solution



CWLMS Product Positioning

- Software based solution (Win 2003 or Solaris) to monitor data elements of Enterprise class deployments



Q and A



