



Network Monitoring and Management Update

How Cisco IT Uses Cisco Remote Management Services to Enhance Network Operations



A Cisco on Cisco Case Study: Inside Cisco IT

Overview

- Challenge

 - Enable Cisco IT to focus on core competencies while improving network management

- Solution

 - Out-task selected activities for network management and monitoring to Cisco Remote Management Services

- Results

 - Reduced network outages, more strategic use of Cisco IT resources, and new services for Cisco customers

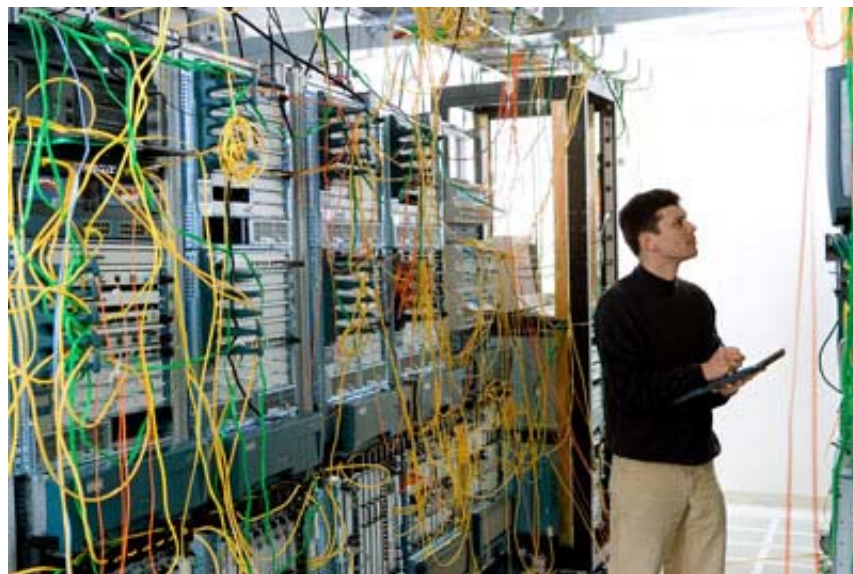
- Next Steps

 - Continue to expand the out-tasking relationship

Challenge

Enable Cisco IT to Focus on Core Competencies

- Monitoring and managing Cisco LANs and WAN is time consuming
 - More than 10,000 devices
- Cisco IT staff previously managed all activities
 - Core activities: strategic IT programs and new technology
 - Contextual activities: repeatable, consistent, day-to-day tasks
- Cisco IT staff took turns being on call 24 hours a day to respond to events such as circuit outages
 - Diminished productivity
 - Sometimes resulted in poor change management



Solution

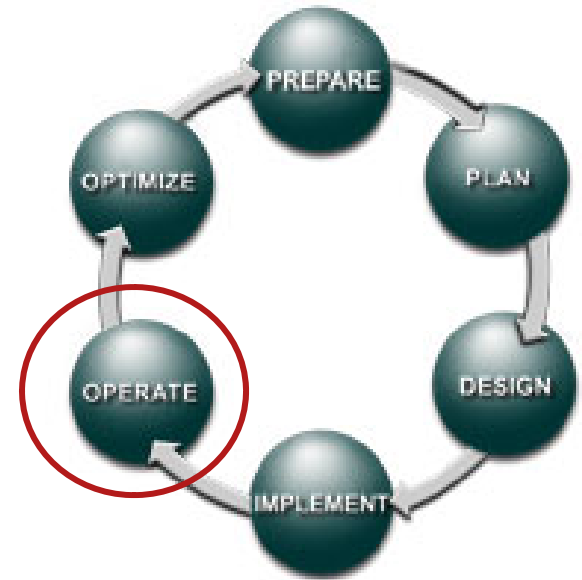
Cisco Remote Management Services (Cisco RMS)

- Out-task selected network monitoring and management activities to Cisco RMS

Core competency for Cisco RMS is network operations phase of the Cisco network lifecycle

Core competency for Cisco IT is developing and supporting new technologies for strategic advantage

- Remote monitoring services delivered by a global team of experienced engineers, who follow standard industry practices



Solution

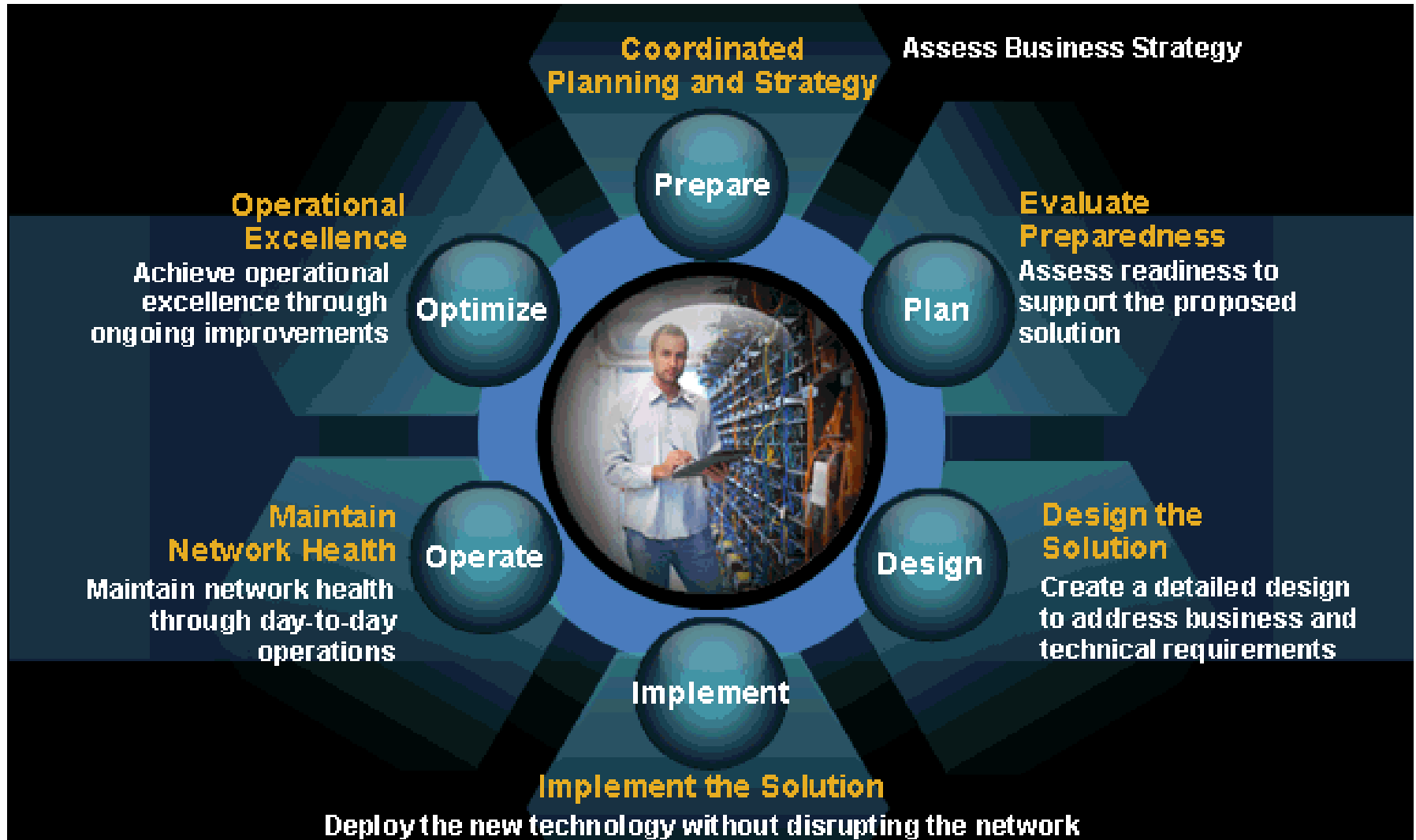
Cisco RMS Coverage

- Network foundation technology: routing and switching infrastructure
- Wireless LANs
- Cisco Unified Communications
- Network security
- Cisco TelePresence systems



Solution

Network Support



Solution

Cisco RMS Responsibilities for Cisco IT

Scope

WAN Management, including global backbone

LAN Management

Wireless LAN Management

Uninterruptible Power Supply (UPS) monitoring

IP Telephony Management (voice circuits and change management for Cisco Unified Communications Manager software)

IP Telephony full operational management

Cisco Telepresence management

Solution

Example of Monthly Issue Management Data

(Note: Priority 1 = High priority issue; Priority 4 = Low priority issue; MTTR= Mean Time to Repair)

Carrier Incident Management					
Priority	Volume Closed	% Tickets w/in Notify SLO	% Tickets w/in Isolate SLO	Avg. MTTR Hrs.	% Tickets w/in Restore Goal
1	1	100.00 %	100.00 %	0.39	100.00 %
2	8	100.00 %	100.00 %	2.51	87.50 %
3	20	100.00 %	100.00 %	2.16	95.00 %
4	322	97.83 %	99.69 %	3.66	99.38 %
Total	351	98.0 %	99.7 %	2.18	98.9 %

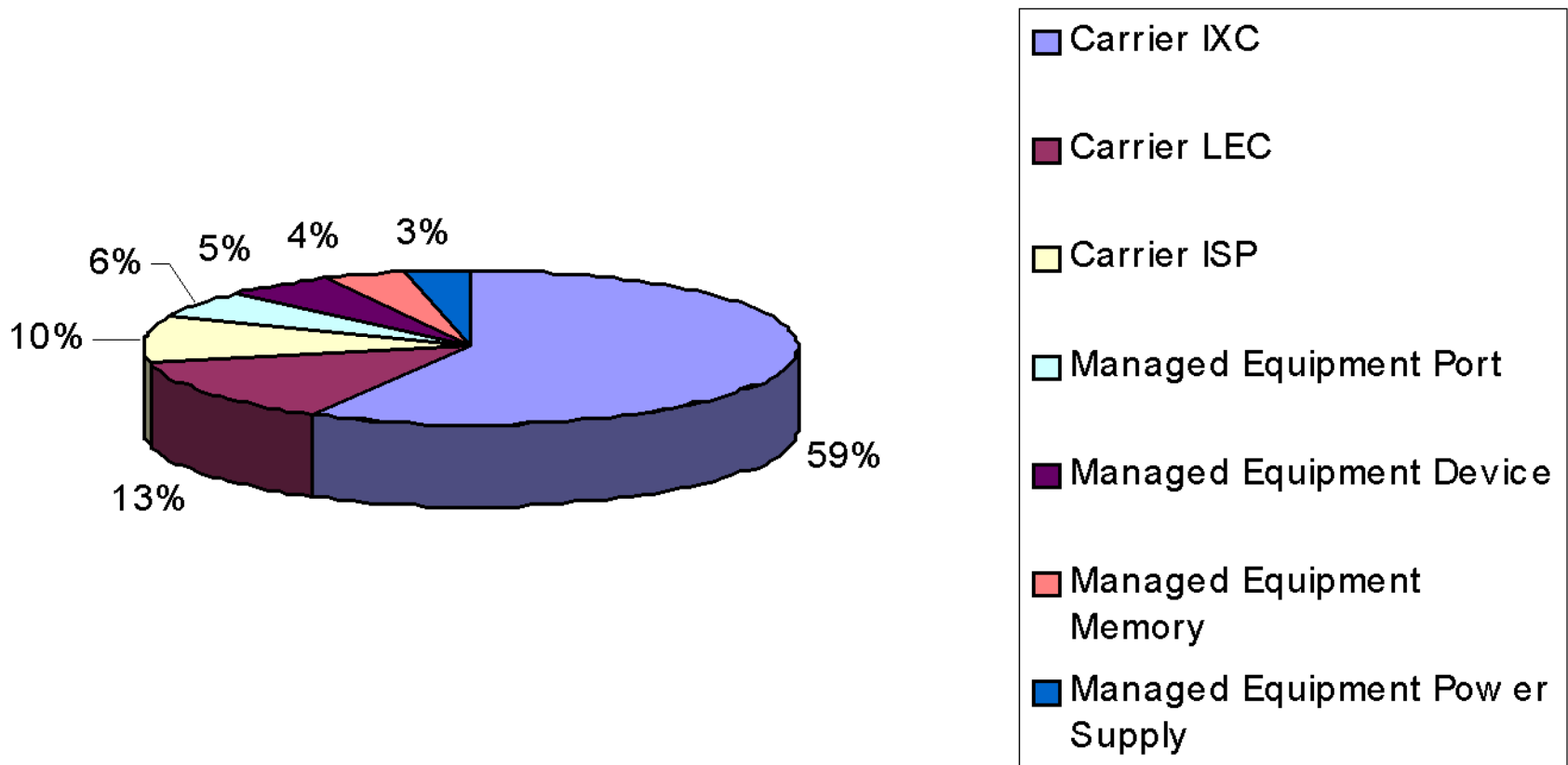
Managed Equipment Incident Management					
Priority	Volume Closed	% Tickets w/in Notify SLO	% Tickets w/in Isolate SLO	Avg. MTTR Hrs.	% Tickets w/in Restore Goal
1	0	0.00 %	0.00 %	0.00	0.00 %
2	4	75.00 %	100.00 %	5.50	50.00 %
3	3	100.00 %	100.00 %	37.48	66.67 %
4	114	96.49 %	100.00 %	4.88	98.25 %
Total	121	95.9 %	100.0 %	15.95	95.9 %

Solution

Example Data for Top Trouble Categories

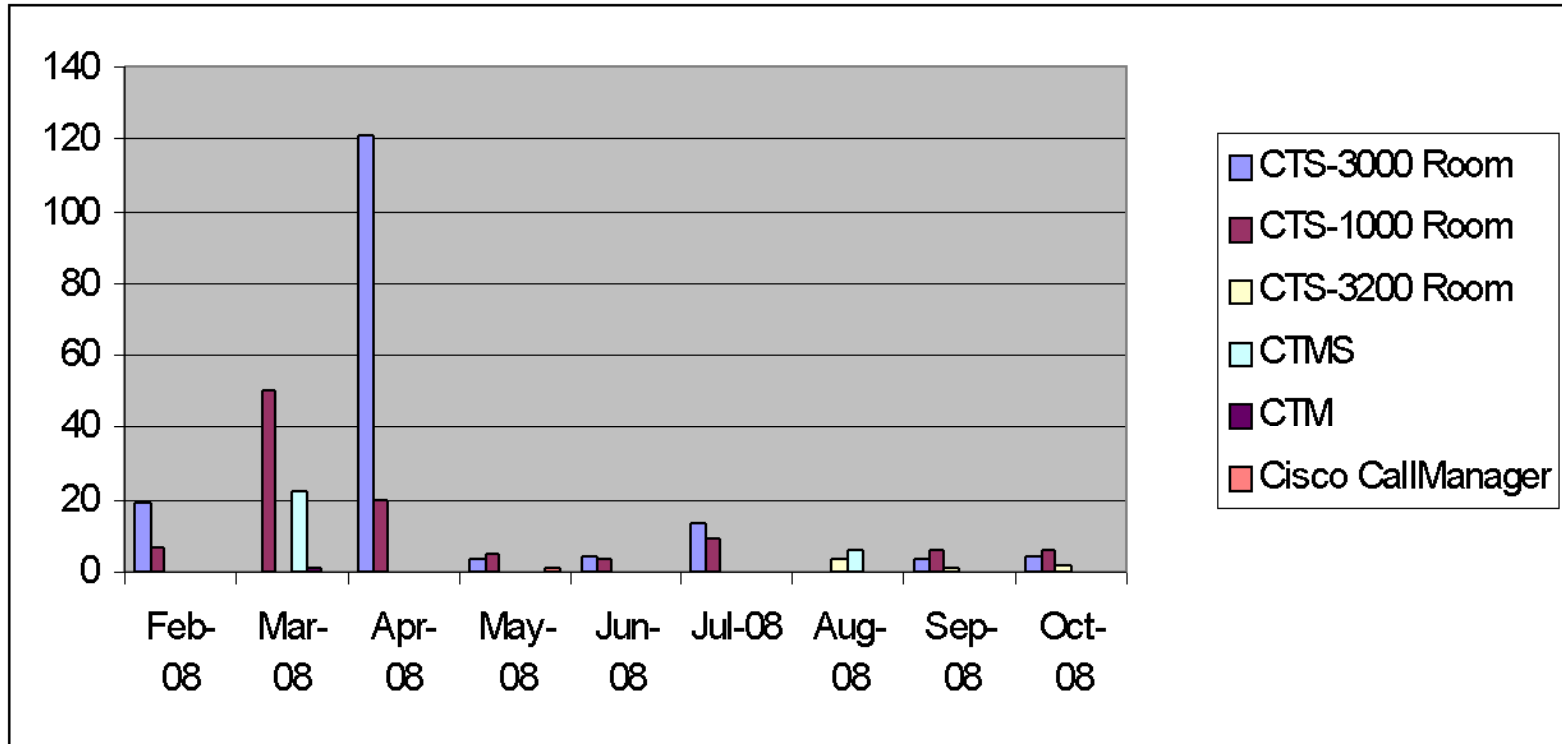
(Note: IXC=Interexchange Carrier, LEC=Local Exchange Carrier, ISP=Internet Service Provider)

Top 90% Resolution Codes - November 2008



Solution (Telepresence)

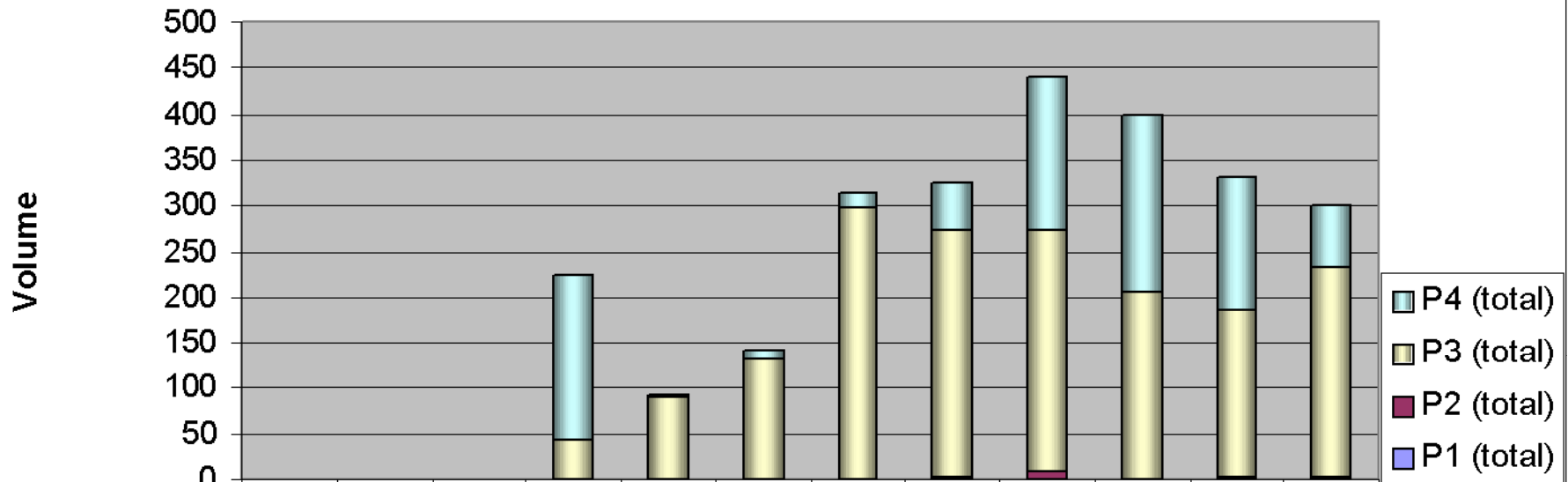
Service Activation History



Cisco on Cisco TelePresence Rooms & Major Components Under Management										
	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Total
CTS-3000 Room	19		121	3	4	13		3	4	167
CTS-1000 Room	7	50	20	5	3	9		6	6	106
CTS-3200 Room							3	1	2	6
CTMS		22					6			28
CTM		1								1
Cisco CallManager				1						1

Solution (Telepresence)

Ticket Volume (Incident Mgmt)



	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08
P4 (total)	0	0	0	179	5	12	18	51	167	196	144	67
P3 (total)	0	0	0	44	89	131	297	270	266	203	184	231
P2 (total)	0	0	0	0	0	0	0	3	7	1	3	2
P1 (total)	0	0	0	0	0	0	0	0	0	0	0	0

Solution

Services Delivered by Cisco CA Under the Expanded Relationship with Cisco IT

Services for Cisco IT	Coverage
Cisco RMS SMARTnet Service and High-Touch Technical Support Service	Support monitoring and management services for the Cisco: <ul style="list-style-type: none">- Network- Data Centers and systems- Applications- Cisco TelePresence systems and rooms
Cisco Network Optimization Support Service	Advanced network assessments and support services
Consulting Services	Network planning and optimization

Results

Trusted Relationship for Network Management

- Enables Cisco IT to maintain ultimate control over the network
- More strategic use of Cisco IT resources
- Contribution to reduced number and duration of network outages
- Faster identification and resolution of infrequent problems
- Improved productivity and quality of life for Cisco IT staff
 - No more nighttime pager duty
- Consistent processes for incident response worldwide
- Increased knowledge sharing that benefits Cisco customers with new products and services



Next Steps

Assign More Responsibilities to Cisco RMS

- Cisco RMS manages advanced technologies as Cisco IT develops best practices
- Continue to evolve the relationship by assigning more responsibilities and adopting additional services



To read the entire case study, or for additional Cisco IT case studies on a variety of business solutions, visit Cisco on Cisco: Inside Cisco IT

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