Advantages of Cisco services - let's prevent a disaster

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Cisco Services.

Making Networks Work.
Better Together.

Agenda

- Relevance of **Cisco Services**

- Investment protection with **Technical Services**

  - Delivery Components

  - Smart Services

  - Focused Technical Support Services

- Defining, engineering and optimizing solutions with **Advanced Services**

  - Advanced Services Capabilities

  - Examples of AS Deliverables

- Q&A

What do our Customers tell us?

- **Talk my language**
- **Be there when I need you**
- **Sell me a solution not a box**

- **Give me the right EXPERIENCE!**

- **Lower TCO**
- **Increase Network Availability**
- **Improve business agility**

Business Concerns
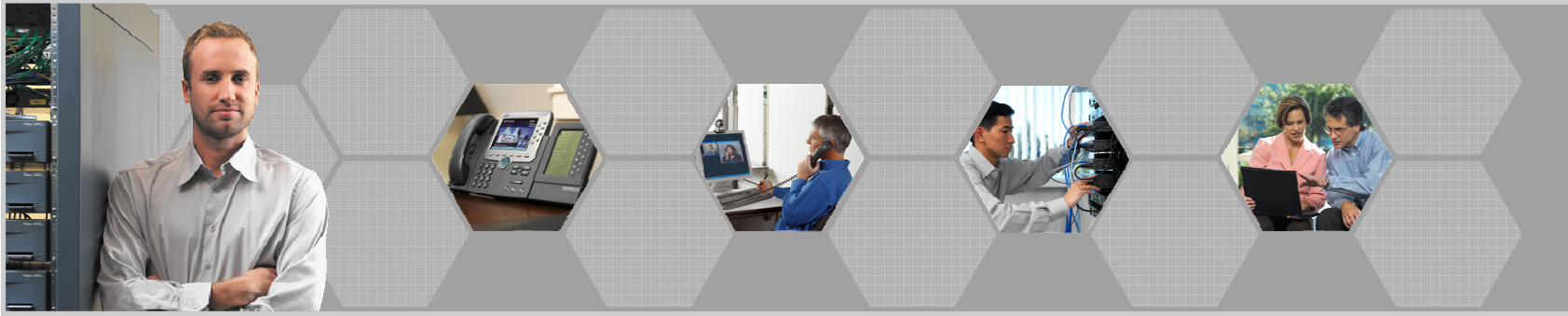
Is my network ready for voice?

Is my network ready for video?

Is my network secure?

Is the technology ready?

Are my people ready for this "new technology"

Can I bridge the gap between technology architectures and my business needs?

Achieve the Best Results by putting Cisco expertise to work for you

Lower Total Cost of Network Ownership

Increase Network Availability
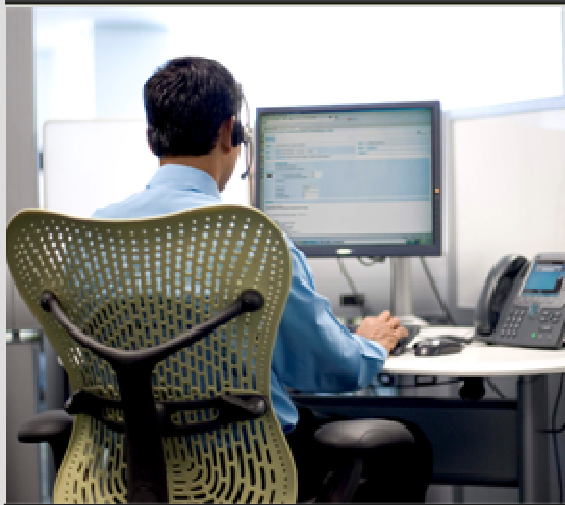
Improve Business Agility

Cisco Expertise

Professionals
You Can Rely On

Information You
Can Trust

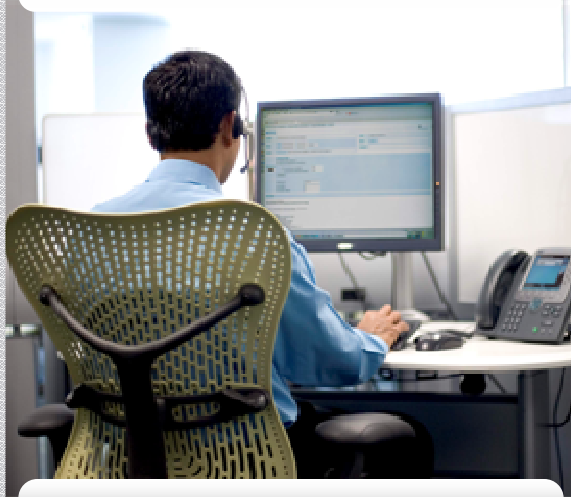**Knowledge** You Can
Use

Professionals You Can Rely On

Professionals
You Can Rely On

- Certified experts with industry- leading technical training

- In-depth experience in applying technology solutions to business problems

- Specialists to help you plan,
run and optimize secure voice, video and data networks

Information You Can Trust

Information You Can Trust

- Mitigate risks by adhering to best practices

- Gain experience-based knowledge and mentoring tools

- Leverage industry-proven design, configuration and troubleshooting guides

- Review case studies and solution guides

Knowledge You Can Use

Knowledge You Can Use

- Put knowledge in the hands of your staff

- Give them tools to efficiently run day-to-day operations

- Offer continuous-learning opportunities

- Help strengthen in-house expertise

What Are Cisco Services

A comprehensive family of IT services offered by Cisco and our partners to help you continually meet the needs of your business

Advanced Services

Technical Services

Remote Management Services

Cisco Technical Services
Protect Your Investment

Technical Services

Network Support Services that offer traditional maintenance support plus proactive diagnostic capabilities to help you gain **greater network availability, lower operational costs and reduce risk**

Advanced Services

Technical Services

Remote Management Services

Prepare	Plan	Design	Implement	Operate	Optimize

Standard limited warranty Cisco

1.	Essence	▪ Replacement of the disabled equipment (not advance)
2.	Guarantee period	▪ 90 days, 1 year, 5 years depending on type of the equipment from the moment of shipment from Cisco
3.	The recipient	▪ The customer
4.	Who renders	▪ Cisco
5.	Features of logistics	▪ The equipment on replacement departs on a guarantee warehouse abroad and is imported from abroad ▪ Duties, taxes and tax collections are paid by the partner and-or the client

The client contract on technical support

1. Essence
   - Access to the Center of technical support Cisco (TAC) + additional services and resources (including advance replacement of the equipment)
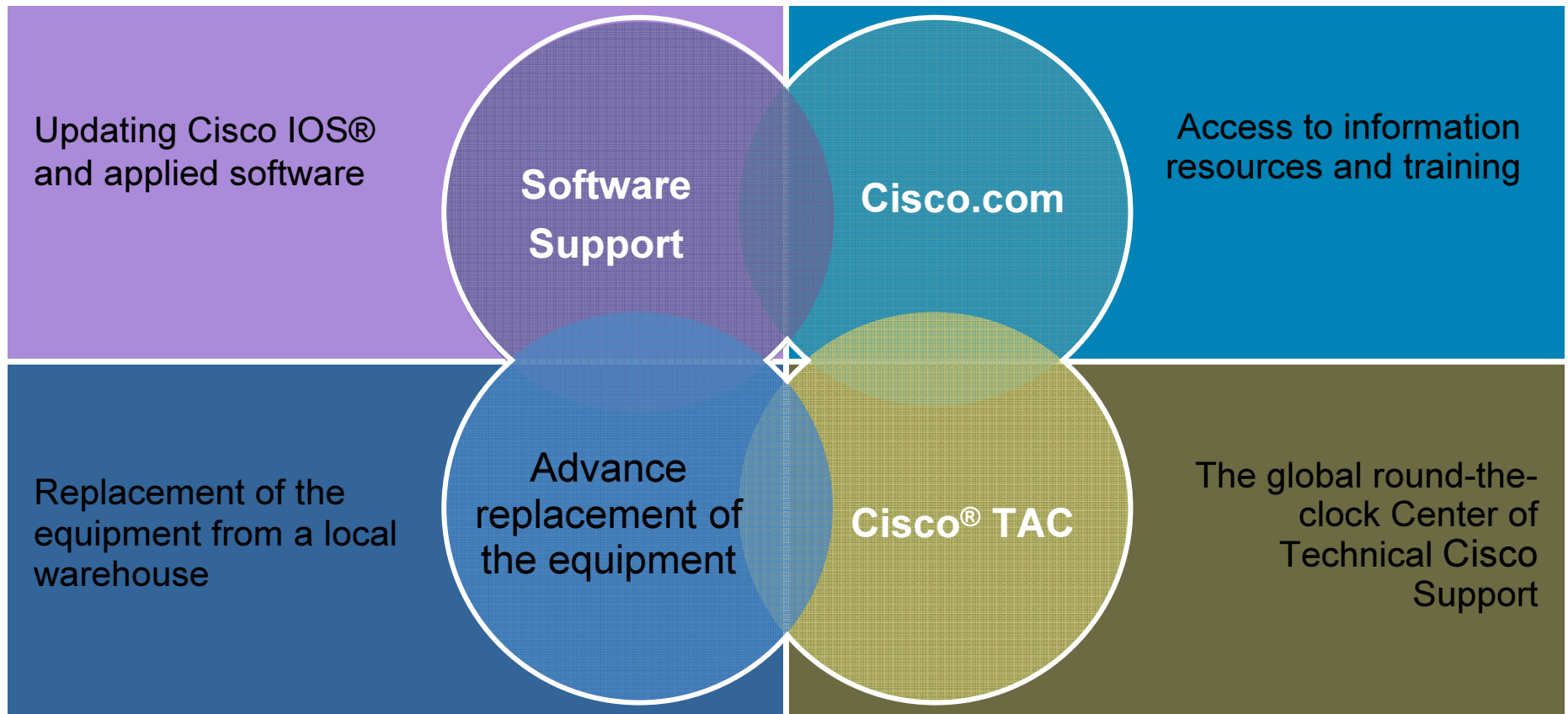
2. Contract term
   - To usually multiply 1 year

3. The recipient
   - The customer

4. Who renders
   - Cisco

5. Features of logistics
   - Other services and resources are granted Cisco (TAC engineer)
   - Possibility of a choice of level of the support for equipment
   - Replacement is made in Cisco Systems contractual terms from local warehouse, without additional payment from the client

Client service contracts: structure

Updating Cisco IOS® and applied software

Software Support

Cisco.com

Access to information resources and training

Replacement of the equipment from a local warehouse

Advance replacement of the equipment

Cisco® TAC

The global round-the-clock Center of Technical Cisco Support

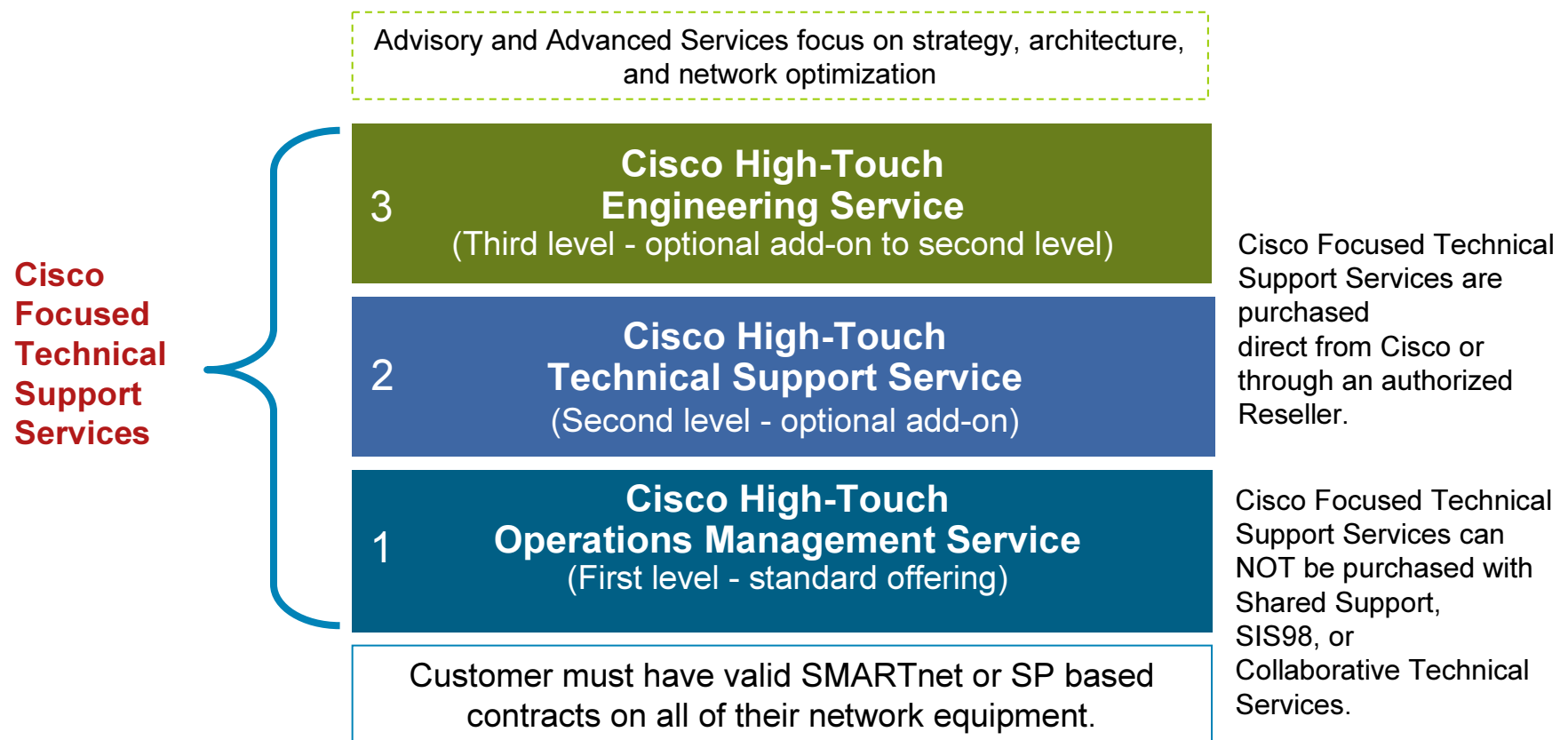# Cisco Focused Technical Support Services

Cisco Focused Technical Support Services expedite issue resolution and help improve operational efficiency with personalized priority network support services

Maintain Network Health
Manage, Resolve, Repair, Replace

Three Levels of Service

Resolving network-level issues quickly is critical for system reliability. Cisco builds on device-level technical support services by offering three levels of focused technical support for large or complex networks

Advisory and Advanced Services focus on strategy, architecture, and network optimization

Cisco Focused Technical Support Services

3 **Cisco High-Touch Engineering Service**
(Third level - optional add-on to second level)

2 **Cisco High-Touch Technical Support Service**
(Second level - optional add-on)

1 **Cisco High-Touch Operations Management Service**
(First level - standard offering)

Customer must have valid SMARTnet or SP based contracts on all of their network equipment.

Cisco Focused Technical Support Services are purchased direct from Cisco or through an authorized Reseller.

Cisco Focused Technical Support Services can NOT be purchased with Shared Support, SIS98, or Collaborative Technical Services.

Cisco High-Touch Operations Management Service

Personalized Operations Management

A designed Cisco Operations Manager virtually joins your team to make sure every network operations recommendation or issue is handled smoothly and efficiently from detection through resolution

- Your Operations Manager is familiar with your business, operational processes and technical support history

- For high-severity issues, your Operations Manager facilitates the escalation process to expedite resolution

- Available **8 hours a day, 5 days a week**

Cisco High-Touch Technical Support Service

Troubleshooting by Experts Familiar with Your Network

Cisco engineers expedite issue resolution and make recommendations to improve network operations

- Specialized engineers who understand your business, operations, and network history, and are exceptionally skilled at responding to your critical business needs

- Available **24 hours a day, seven days a week**

- Service requests are reviewed at a network level instead of from a device level perspective

Cisco High-Touch Engineering Service

Personalized Support to Address Complex Network-Wide Problems

A designated Cisco network engineer focuses on reactive measures including diagnostics and analysis, as well as recommendations for preventive measures

- Designated expertise matches the needs of your unique network infrastructure

- Shortens time to resolution during complex and critical network-level situations

- Problem root-cause analysis at the network infrastructure level and recommendation report

- Available **8 hours a day, 5 days a week**
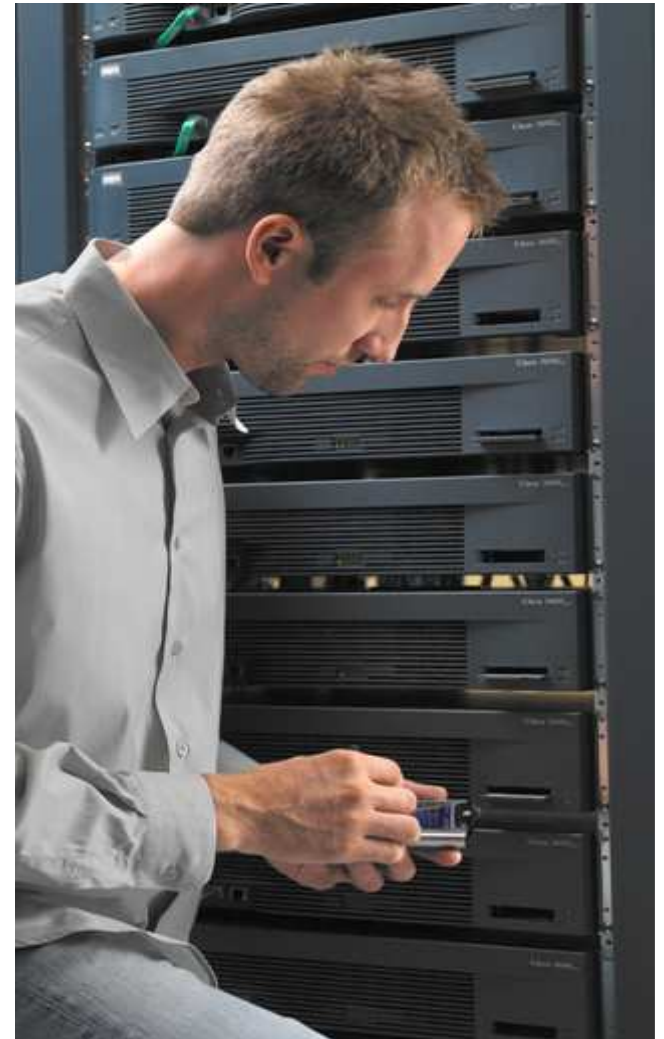
Cisco Provides Superior, Globally Consistent Services to Its Customers

Legend:
- ⦿ Global Center
- ⦿ Satellite Center
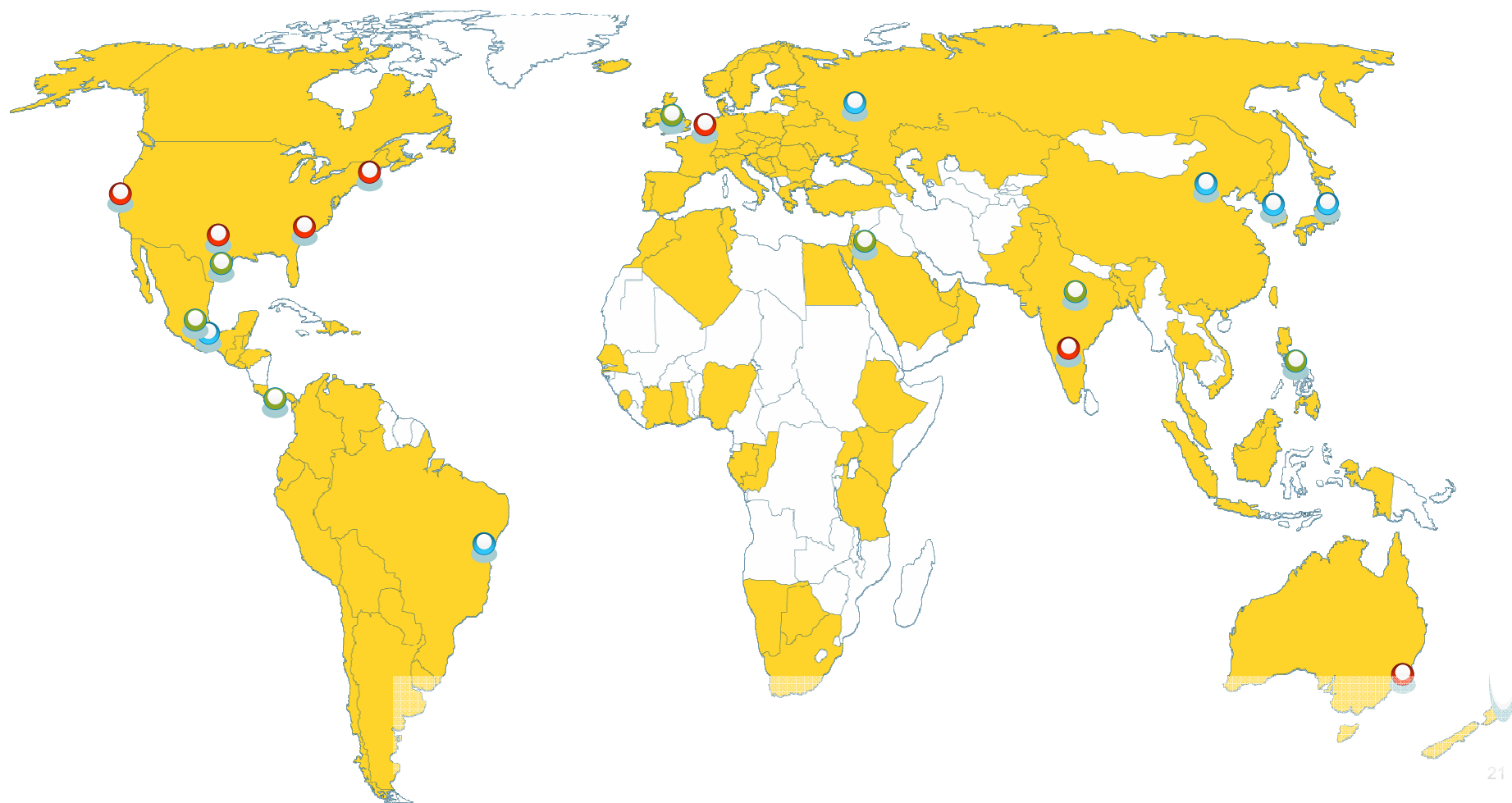- ⦿ Regional Center
- ▢ 24-Hour Hardware Replacement coverage

Cisco.com	Software Support	Cisco TAC	Advance Hardware Replacement	Remote Management	Proactive Alerts

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Cisco Advanced Services
Defining, Engineering and Optimizing solutions

Advanced Services

Services that help you **define, engineer and optimize network** and network-related solutions to enable and accelerate your business success

Advanced Services

Technical Services

Remote Management Services

Prepare	Plan	Design	Implement	Operate	Optimize

Services Based on Your Requirements

Services Designed for Different Business Models and Segments

Services Designed for Different Technologies and Solutions

Services Designed for Different Phases of the Lifecycle

Services Designed to Address Different Business Needs

Services Designed for Technology Solutions

- Application Networking

- Broadband Cable

- Data Center

- Emerging Technologies

- Interoperability Systems

- Metro Ethernet

- Network Management

- Optical

- Routing and Switching

- Security

- Server Networking

- Storage Networking

- TelePresence

- Unified Communications

- Video

- Virtualization

- Voice

- Wireless

Cisco SPA – Security Posture Assessment

Internet SPA

Assessment Description:
- Conducted from Cisco SOC
- Identify Internet-visible vulnerabilities

Value Proposition:
- Comprehensive methodology
- Proprietary tools
- Industry-leading expertise

Impact:
- Protect intellectual capital
- Harden Internet perimeter

Internal SPA

Assessment Description:
- On-site assessment
- Trusted insider perspective

Value Proposition:
- Comprehensive methodology
- Proprietary tools
- Industry-leading expertise

Impact:
- Protect intellectual capital
- Meet compliance requirements
- Mergers and acquisitions

Wireless SPA

Assessment Description:
- Locate rogue access points
- Review 802.11 security

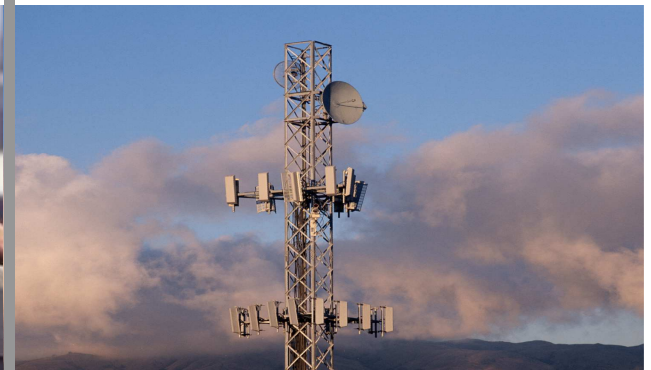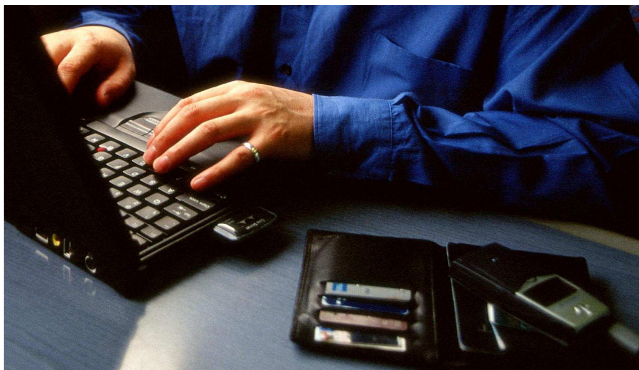**Value Proposition:**
- Joint NAR offering with WWWP
- Proprietary tools
- Industry-leading expertise

Impact:
- Protect intellectual capital
- Locate and disable backdoors

"We only need to be lucky once.
 You need to be lucky every time"

Irish Republican Army in a statement to Margaret Thatcher after a *failed assassination attempt*

Prepare

Plan

Design

Design the Solution

Create a detailed design to address business and technical requirements

Cisco Systems Advanced Services

DK0023 - ACME Service Provider MPLS/VPN (Frame) Project

Deployment Kit -Low Level Design

Version 1.0

DK0023 – ACME Service Provider MPLS/VPN (Frame) Project   **3**

Contents

Prepare

Plan

Design

Implement

Operate

Optimize

Implement the Solution

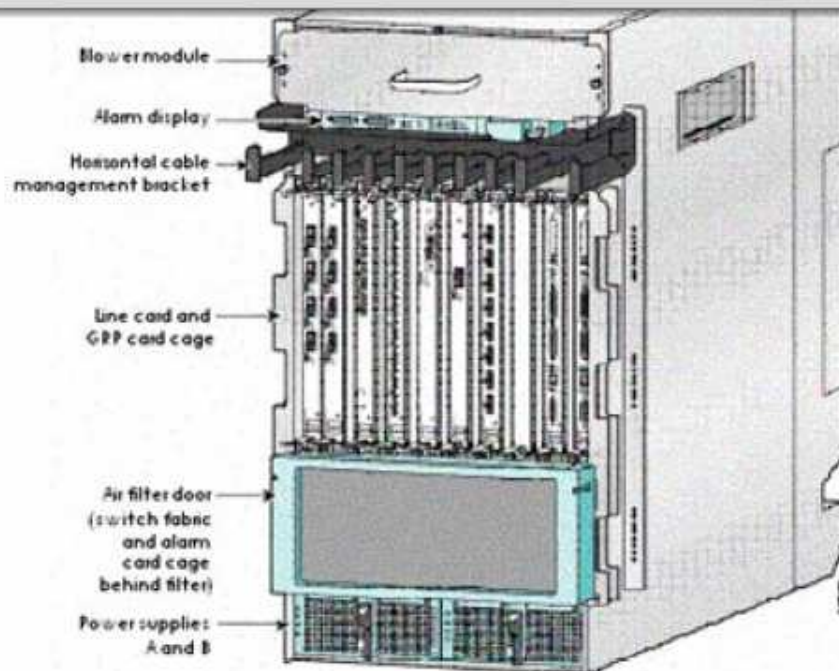**Deploy the new technology without disrupting the network - STAGING**

Cisco Systems Advanced Services

DK0023 – ACME Service Provider MPLS/VPN (Frame) Project

Deployment Kit - Network Implementation Plan

Version 1.0

Blower module

Alarm display

Horizontal cable
management bracket

Line card and
GRP card cage

Air filter door
(switch fabric
and alarm
card cage
behind filter)

Power supplies
A and B

Cisco 12410 Slot Allocations

Table 29   Chassis Layout and Serial Numbers (Mad-Del-access-1)

Mad-Del-access-1		Slot	Serial Number
GSR10/200-DC	Cisco 12410 200 Gbps; 1GRP, 2 CSC, 5 SFC, 2 Alarm, 2 DC	-	TBA061XXXXX
3GE-GBIC-SC	GSR12000 three-port GE line card	0	SAD060XXXXX
4OC3/ATM-IR-SC	4 port OC3/STM1 ATM Line Card intermediate reach	1	SAD062XXXXX
2CHOC3/STM1-IR-SC	Channelized OC3/STM1 -> DS1/E1, 2 ports Intermediate Reach	3	SAD062XXXXX

Procedure

Step 1.   **Establish PC to Router Connectivity**

- plug in console cable to console port on active GRP (LED display PRI RP)
- start VT 100 emulator (9600, 8N2)
- verify router prompt (*Router>*)
- move to priviliged EXEC mode type *Router>enable*
- move to global configuration mode type *Router#conf t*
- move to interface configuration mode type *Router(config)#int eth 0*
- configure IP address type *Router (config-if)#ip addr 10.0.0.1 255.0.0.0*
- enable interface type *Router (config-if)#no shut*
- leave configuration mode type *Ctrl-Z*
- safe configuration type *Router#wr mem*
- plug in crossed RJ45 cable to Ethernet port on active GRP
- set-up PC ethernet interface (IP address 10.0.0.2)
- verify IP connectivity by pinging 10.0.0.1
- start TFTP server

Step 2.   **Format PCMCIA Flash Cards**

At this stage the flash card in slot0 with the IOS image remains untouched to ensure that a valid IOS image is available for the case that something went wrong during formatting and upgrading the other flash cards.

Final Equipment Configuration

Mad-Del-core-1

```
Mad-Del-core-1#sh run
Building configuration...

Current configuration : 11025 bytes
!
! Last configuration change at 13:33:56 UTC Tue Aug 16 2002 by j32
! NVRAM config last updated at 16:27:53 UTC Wed Aug 17 2002 by j32
!
version 12.0
service nagle
no service pad
service tcp-keepalives-in
service timestamps debug datetime msec localtime
service timestamps log datetime msec localtime
service password-encryption
!
hostname Mad-Del-core-1
!
aaa new-model
aaa authentication login default local
enable secret 5 $1$iAA7$/dJ1gCIRJRrzKuv9XXXXX.
!
username j32 password 8 131G560A
spd headroom 1000
!
!
!
ip subnet-zero
no ip source-route
ip cef linecard ipc memory 10000
no ip finger
ip tcp path-mtu-discovery
```

Operational Excellence

Achieve operational excellence through ongoing improvements

Prepare

Plan

Design

Implement

Operate

Optimize

Cisco Optimization Services

Annual Assessments	Network Assessment – ASS! Operational Assessment Security Architecture Assessment Curriculum Planning Assessment
Network Health Checks	Network Audits and Reports Syslog Analysis and Reports Configuration Analysis & Best Practices Reports Proactive Advisory Reports
Network Support	Network Design Support Implementation Plan Support Network Change Support Software Support Network Improvement Plan
Continuous Learning	Knowledge Transfer & Mentoring Technical Knowledge Library Formal Training

Network Health Checks → Network Audits

What is it & what does it deliver?

An Audit **collects and analyzes data** from the network over a specified timeframe and looks for issues in the areas of **Fault, Performance, Capacity, and Configuration Management** which are directly related to network stability and availability:

- Inventory – HW and SW versions, HW, Ports, Cards, microcodes, etc
- Memory – size installed, free, used and fragmented.
- CPU usage – averages and peaks
- Environment conditions– power supply, temperature
- HW Summary – card types, microcode, part number, serial #'s, board revs,
- Interface stability – port status, buffers, drops , CRC errors, collisions
- Interface Performance – bandwidth utilization by direction
- Faults related to CPU, Memory, and traffic.
- Routing protocol analysis
- Protocol CPU analysis

Topics in these reports include:
- Detailed findings and exceptions
- Summary tables
- Recommendations to address problems

Benefit from the Cisco Services Experience

Questions?