



Partner Extranet

How Cisco IT Uses Extranets to
Connect Global Partners to
Cisco



A Cisco on Cisco Case Study: Inside Cisco IT

Overview

- Challenge: Provide secure extranet access to internal Cisco® resources

Cisco needed to focus on core business and outsource manufacturing, engineering, finance, technical support to partners

- Solution: Cisco Extranet Connection

The Cisco Internet Services Group (ISG) deployed extranet connections providing secure, highly available connections to the Cisco intranet for our partners in 1999

Overview (Contd.)

- Results: About 200 extranet connections in Cisco

The extranet has changed the way we do business by providing our partners with real-time data

- Next Steps: VPN growth and improved service

ISG is looking at ways to extend cost savings and improved service to more critical partner activities

Challenge - Extranet Strategy

- Outsourcing partners

Cisco® manufactures in-house for new product introductions only and then engages a manufacturing partner for ongoing work

Partners provide world-leading expertise and economies of scale that keep our cost low and margins higher

- Secure and affordable

Cisco needs secure, affordable connectivity between its network and partners' sites to outsource ongoing functions such as manufacturing, engineering, finance, technical support, and advanced network services

Challenge - Extranet Strategy (Contd.)

- Extranet Strategy – 3 types of connectivity requirements
 1. Partner access to the Cisco network
 2. Cisco access to the customer extranet networks, for remote troubleshooting and support
 3. Reciprocal network access between Cisco and its partners

Solution - Extranet Connections

- Extranet architecture in all regions

In 2000, Cisco® completed the distributed extranet backbone architecture in all regions (Asia and the Pacific; the Americas; and Europe, the Middle East and Africa)

- VPN connectivity

In 2002, Cisco dramatically cut the costs of extranet connectivity by introducing secure VPN connectivity as an alternative to leased-line deployments.

- Managed service

ISG provides extranet connectivity as a managed service, supplying and managing Cisco equipment for the partner site

Solution - Connectivity

- Cisco® ISG deploys one of three types of extranet connection

Leased line - Cisco manages Frame Relay leased-line extranet connections end-to-end, including the equipment at the partner site (with Frame Relay or ISDN backup)

Site-to-site VPN - VPN has been offered recently as an alternative extranet option; the ratio of requests for VPN connectivity compared to leased lines has risen to 5 to 1

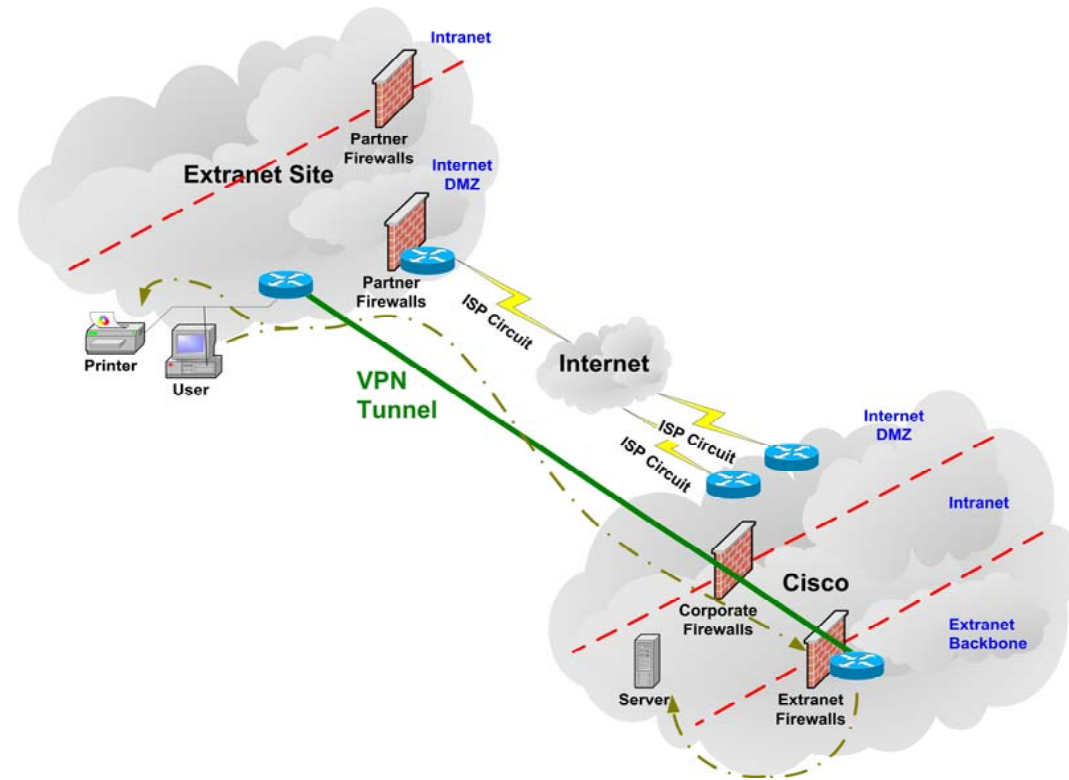
User-based VPN - Currently user-based VPNs are available in the United States and the Asia Pacific region

Solution - Extranet Topologies

■ Remote LAN Model

A remote LAN is an extension of the Cisco® network at the partner site.

A managed Cisco router at the partner side terminates the transport connectivity from Cisco. Only PCs and printers connected to these LANs can access extranet resources.



Remote LAN Model for Site-Based VPN Extranets

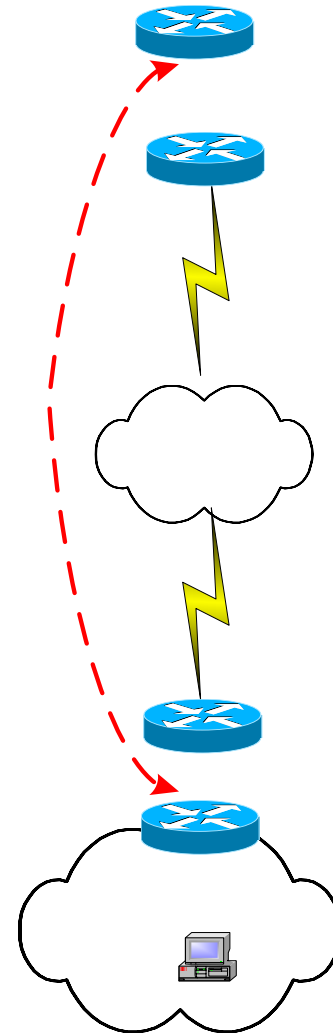
Solution - Extranet Topologies

- Interconnect Model

With the interconnect model, a partner connects through its own corporate LAN, which interconnects with the Cisco LAN.

Firewalls at each side protect each company's respective resources.

Partners can connect from any desktop at their site.



Solution - Security

- The ISG group works closely with the Cisco® Information Security group to ensure the security of extranet connections
- Cisco Information Security Group takes the following approaches to security challenges:
 - Legal Measures** — Extranet partners are required to sign two nondisclosure agreements, one for each individual and the other is a company-wide network connection agreement

Solution – Security (Contd.)

Access Restrictions

- Firewall permissions
- Web proxy
- Sandbox infrastructures
- Authentication and authorization

Enforcement - Cisco enforces extranet security with a combination of intrusion detection systems, occasional physical audits of partner environments, and periodic ACL reviews to ensure that partners still need access to the same hosts and services

Results - Benefits of the Extranet

- ISG supports about 200 extranet connections globally
 - One half in the United States
 - One third used for manufacturing
- The Cisco® extranet frees in-house Technical Assistance Center (TAC) employees to apply their expertise to more challenging cases and pass routine cases to partners

Results - Benefits of the Extranet (Contd.)

- Before taking on a task, the Cisco manufacturing organization considers whether a partner can do it more efficiently, at less cost, or with higher quality, and if so, we give them an extranet connection to the internal resources they need

Next Steps - VPN Growth, Improved Support

- ISG anticipates that an ever-larger portion of extranet connections will be VPN-based
 - Faster installation time (especially when the partner already has internet access)
 - Lower cost connectivity
- Cisco® is looking at ways to provide Platinum-level service using VPN technologies
 - Low-cost VPN connectivity with high-priority support will render a partner's location irrelevant

Managed Extranet Service

- The extranet has made a strong contribution to our ability to manufacture high-quality products at a low cost

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

www.cisco.com/go/ciscoit



CISCO



Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883


Asia Pacific Headquarters

Cisco Systems, Inc.
168 Robinson Road
#28-01 Capital Tower
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

Europe Headquarters

Cisco Systems International BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: +31 0 800 020 0791
Fax: +31 0 20 357 1100

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

 ©2007 Cisco Systems, Inc. All rights reserved. CCVP, the Cisco logo, and the Cisco Square Bridge logo are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn is a service mark of Cisco Systems, Inc.; and Access Registrar, Aironet, BPX, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, LightStream, Linksys, MeetingPlace, MGX, Networking Academy, Network Registrar, Packet, PIX, ProConnect, RateMUX, ScriptShare, SlideCast, SMARTnet, StackWise, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0704R)