

# Cisco MPLS Tunnel Builder, Version 1.0

## ...a light at the end of the (MPLS) Tunnel

### A Quick Review of MPLS

Cisco Multiprotocol Label Switching (MPLS) is the ideal solution to meet the challenges posed by rapidly expanding new world networks. MPLS fuses the intelligence of routing with the performance of switching. Applying labels to packets at the network edge, MPLS allows network core devices to reduce processor-intensive analysis, classification, and filtering. Adding Cisco's MPLS Traffic Engineering (TE) capabilities, network designers can also significantly enhance services, provide guaranteed bandwidth and quality of service (QoS), increase security, and deliver greater network reliability.

With MPLS technology, networks can handle more traffic, users, media-rich data, and bandwidth-intensive applications.

### The Cisco MPLS Tunnel Builder Solution

*Cisco MPLS Tunnel Builder—the Web-based graphical application for visualizing, configuring, and managing MPLS tunnels in an MPLS TE-enabled network.*

Before Tunnel Builder, the management of traffic engineered tunnels was a time-consuming process using a command line interface. Show commands were the only

way of knowing the number of label switched paths (LSPs) that existed on any given router. Network information had to be manually recorded, and MPLS TE had to be configured from the command line with knowledge of the specific destination addresses and explicit paths.

Cisco MPLS Tunnel Builder changes all this. Now network designers and administrators can view the entire network topology and configure MPLS TE by using a straightforward point-and-click interface.

### It's Easy to Install and Use

Follow simple installation instructions, and you're ready to go!

How does it work? The information that you want is just a click away. After installing Tunnel Builder and fetching your network data, there will be a network topology map on the right side of the browser window, and tabs for various functions on the left side.





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Tunnel Builder uses a client-server architecture—the same operating model you use every day when browsing the Web. Tunnel Builder runs as a Java applet in a Netscape Navigator or Microsoft Internet Explorer Web browser. The Tunnel Builder Java applet communicates with Tunnel Builder server software that queries your network topology and returns the gathered information to the Tunnel Builder client. The Tunnel Builder server uses Cisco IOS to configure routers.

#### Features of Cisco MPLS Tunnel Builder

- Network map
- Tunnel-related link and node management
- Tunnel management
- Performance statistics
- Online help

#### Network Map Provides Valuable Information

A network map provides MPLS topology, Cisco Discovery Protocol (CDP), TE, and device configuration information.

Tunnel Builder provides on-demand updates. Fetch information from the network, and you're assured of obtaining the latest information.

#### Obtaining Information About Links and Nodes is a Click Away

At the setup pane, all you have to do is click on one of the Fetch buttons and you'll have the latest information from the network or the server. The results—a topology map will appear.

#### Link Management Allows You to Manage the TE Resources on Your Links

You can view information about the interfaces for each link in the network map. Determine the

- Maximum bandwidth
- Maximum reservable global pool bandwidth
- Maximum reservable subpool bandwidth
- Bandwidth allocated and reservable per priority
- Attribute bit settings

And learn if links are up or down.

#### Node Management

Find out information about nodes on your network, including:

- MPLS TE ID
- Cisco IOS version
- Interfaces on the nodes

You can also create or delete static routes and configure autobandwidth.

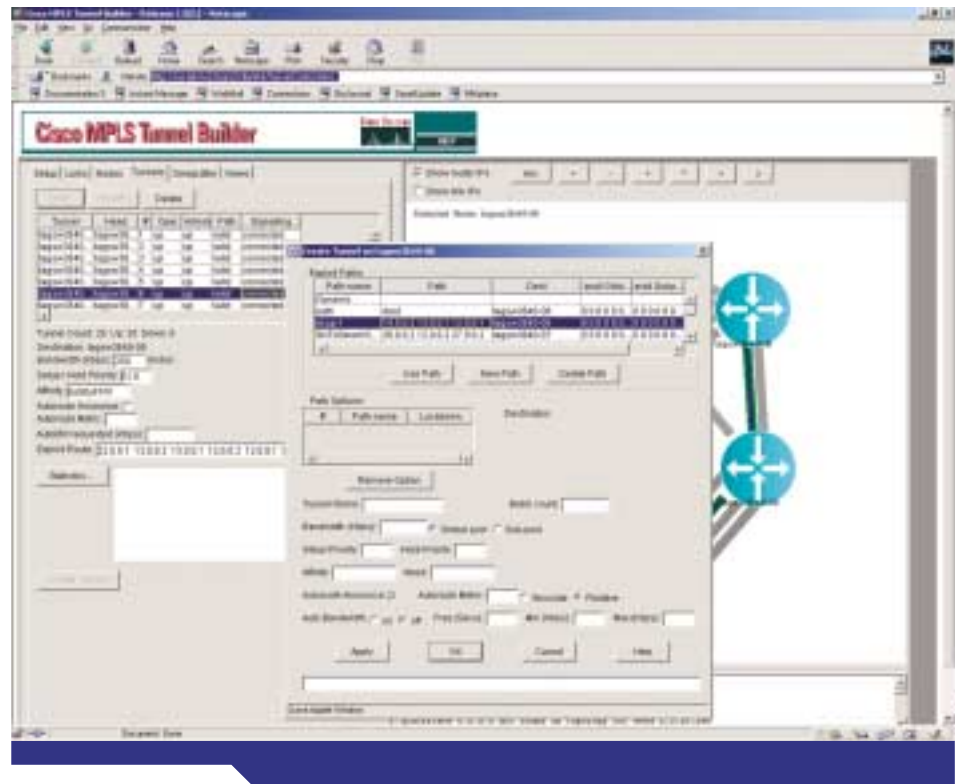
#### Flexible MPLS Tunnel Management

Creating, viewing, modifying, or deleting tunnels—Tunnel Builder makes it easy.

Manipulate tunnels by choosing an existing explicit path or creating a new explicit path. And you can also use a dynamic path.



To modify a tunnel's attributes such as the amount of bandwidth, affinity bits, autobandwidth, and much more, simply enter the desired values or click in the appropriate boxes.



### View Performance Statistics

The Service Assurance Agent (SAA) allows you to view performance statistics on supported Cisco IOS platforms. The SAA uses the source and destination port addresses. What an easy way to measure performance characteristics between devices!

### Online Help is Available

If you have questions while using Tunnel Builder, take advantage of Tunnel Builder's online help system that is available by clicking on the Help button.

### The Cisco MPLS Tunnel Builder Advantage

- Top performance—Designed and engineered by Cisco—a leader in networking.
- The latest TE—The latest MPLS traffic engineering features are tightly meshed with Tunnel Builder.
- Tunnel Builder communicates directly with the routers—There is no need to manually import or export configuration files.

For More Information, go to  
<http://www.cisco.com/go/mpls>

## System Requirements

### Hardware Supported

Cisco routers that support MPLS Traffic Engineering.

### Disk Space Requirements

Only 90 megabytes of free disk space is required.

### Client Operating Systems Supported

- Solaris, Version 2.8
- Microsoft Windows NT
- Microsoft Windows 2000

## Server Operating Systems Supported

- Solaris, Version 2.8
- Microsoft Windows NT
- Microsoft Windows 2000

### Web Browsers Supported

Tunnel Builder requires one of the following Web browsers and the Java Plug-in Version 1.3:

- Internet Explorer, Version 5.0 or later
- Netscape Navigator, Version 4.5 or later

## Ordering Information

| Part Number | Here's What You Get                                                   |
|-------------|-----------------------------------------------------------------------|
| TB-1.0-S    | Cisco MPLS Tunnel Builder 1.0—Small installation (0 to 50 routers)    |
| TB-1.0-M    | Cisco MPLS Tunnel Builder 1.0—Medium installation (51 to 150 routers) |
| TB-1.0-L    | Cisco MPLS Tunnel Builder 1.0—Large installation (150+ routers)       |
| Part Number | Upgrades                                                              |
| TB-1.0-S-M  | Cisco MPLS Tunnel Builder 1.0 Upgrade—Small to medium installation    |
| TB-1.0-M-L  | Cisco MPLS Tunnel Builder 1.0 Upgrade—Medium to large installation    |



#### Corporate 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: 408 526-4100

#### European Headquarters

Cisco Systems Europe  
11 Rue Camille Desmoulins  
92782 Issy-les-Moulineaux  
Cedex 9  
France  
www-europe.cisco.com  
Tel: 33 1 58 04 60 00  
Fax: 33 1 58 04 61 00

#### Americas Headquarters

Cisco Systems, Inc.  
170 West Tasman Drive  
San Jose, CA 95134-1706  
USA  
www.cisco.com  
Tel: 408 526-7660  
Fax: 408 527-0883

#### Asia Pacific Headquarters

Cisco Systems, Inc.  
Capital Tower  
168 Robinson Road  
#22-01 to #29-01  
Singapore 068912  
www.cisco.com  
Tel: +65 317 7777  
Fax: +65 317 7799

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