About This Manual

This preface discusses the objectives, audience, organization, and conventions of the *MultiNode* Load Balancing Feature Set for LocalDirector User Guide. It also discusses how to obtain documentation on Cisco Connection On-line (CCO) and the Documentation CD-ROM

Documentation Objectives

The MultiNode Load Balancing Feature Set for LocalDirector User Guide describes the tasks and commands necessary to configure and maintain the MultiNode Load Balancing (MNLB) Feature Set for LocalDirector, Cisco's IP server load balancing solution for high-end Web and IBM Parallel Sysplex sites.

Documentation Organization

Chapter 1, "Overview: Load Balancing with the MNLB Feature Set for LocalDirector," provides a conceptual overview of load balancing and introduces the MNLB Feature Set for LocalDirector. The chapter also includes a glossary of terms and acronyms.

Chapter 2, "Configuring the MNLB Services Manager," describes how to configure a LocalDirector as a Service Manager to operate in conjunction with routers serving as Forwarding Agents.

Chapter 3, "Configuring the MNLB Forwarding Agent," describes how to configure a Cisco router as a Forwarding Agent to operate in conjunction with an MNLB Service Manager.

Chapter 4, "MNLB Feature Set for LD: Command Reference," is an alphabetically ordered command reference.

Supporting Documents

The following documents support the MultiNode Load Balancing Feature Set for LocalDirector User Guide:

- Cisco IOS Release 12.0 Configuration Guides and Command References
- Cisco LocalDirector Installation and Configuration Guide, Version 3.1.1

Document Conventions

The Cisco IOS documentation set uses the following conventions:

Convention	Description
^ or Ctrl	Represents the Control key. For example, when you read ^D or Ctrl-D, you should hold down the Control key while you press the D key. Keys are indicated in capital letters but are not case sensitive.
string	A string is defined as a nonquoted set of characters. For example, when setting an SNMP community string to public, do not use quotation marks around the string; otherwise, the string will include the quotation marks.

Examples use the following conventions:

Convention	Description
screen	Shows an example of information displayed on the screen.
boldface screen	Shows an example of information that you must enter.
< >	Nonprinting characters, such as passwords, appear in angled brackets.
!	Exclamation points at the beginning of a line indicate a comment line. They are also displayed by the Cisco IOS software for certain processes.
[]	Default responses to system prompts appear in square brackets.

The following conventions are used to attract the reader's attention:



Caution Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

Note Means *reader take note*. Notes contain helpful suggestions or references to materials not contained in this manual.



Timesaver Means the *described action saves time*. You can save time by performing the action described in the paragraph.

Within the Cisco IOS software documentation, the term *router* is used to refer to both access servers and routers. When a feature is supported on the access server only, the term *access server* is used.

Within examples, routers and access servers are alternately shown. These products are used only for example purposes; that is, an example that shows one product does not indicate that the other product is not supported.

Command Syntax Conventions

Command descriptions use the following conventions:

Convention	Description
boldface	Indicates commands and keywords that are entered literally as shown.
italics	Indicates arguments for which you supply values; in contexts that do not allow italics, arguments are enclosed in angle brackets (< >).
[x]	Keywords or arguments that appear within square brackets are optional.
$\{\mathbf{x} \mid \mathbf{y} \mid \mathbf{z}\}$	A choice of required keywords (represented by \mathbf{x} , \mathbf{y} , and \mathbf{z}) appears in braces separated by vertical bars. You must select one.
$[\mathbf{x} \{ \mathbf{y} \mid \mathbf{z} \}]$	Braces and vertical bars within square brackets indicate a required choice within an optional element. You do not need to select one. If you do, you have some required choices.

Cisco Connection Online

Cisco Connection Online (CCO) is Cisco Systems' primary, real-time support channel. Maintenance customers and partners can self-register on CCO to obtain additional information and services.

Available 24 hours a day, 7 days a week, CCO provides a wealth of standard and value-added services to Cisco's customers and business partners. CCO services include product information, product documentation, software updates, release notes, technical tips, the Bug Navigator, configuration notes, brochures, descriptions of service offerings, and download access to public and authorized files.

CCO serves a wide variety of users through two interfaces that are updated and enhanced simultaneously: a character-based version and a multimedia version that resides on the World Wide Web (WWW). The character-based CCO supports Zmodem, Kermit, Xmodem, FTP, and Internet e-mail, and it is excellent for quick access to information over lower bandwidths. The WWW version of CCO provides richly formatted documents with photographs, figures, graphics, and video, as well as hyperlinks to related information.

You can access CCO in the following ways:

- WWW: http://www.cisco.com
- WWW: http://www-europe.cisco.com
- WWW: http://www-china.cisco.com
- Telnet: cco.cisco.com
- Modem: From North America, 408 526-8070; from Europe, 33 1 64 46 40 82. Use the following terminal settings: VT100 emulation; databits: 8; parity: none; stop bits: 1; and connection rates up to 28.8 kbps.

For a copy of CCO's Frequently Asked Questions (FAQ), contact cco-help@cisco.com. For additional information, contact cco-team@cisco.com.

Note If you are a network administrator and need personal technical assistance with a Cisco product that is under warranty or covered by a maintenance contract, contact Cisco's Technical Assistance Center (TAC) at 800 553-2447, 408 526-7209, or tac@cisco.com. To obtain general information about Cisco Systems, Cisco products, or upgrades, contact 800 553-6387, 408 526-7208, or cs-rep@cisco.com.

Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM, a member of the Cisco Connection Family, is updated monthly. Therefore, it might be more current than printed documentation. To order additional copies of the Documentation CD-ROM, contact your local sales representative or call customer service. The CD-ROM package is available as a single package or as an annual subscription. You can also access Cisco documentation on the World Wide Web at http://www.cisco.com, http://www-china.cisco.com, or http://www-europe.cisco.com.

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