

# **Release Notes for Cisco LocalDirector** Version 4.2.1

#### April 6, 2001



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# Introduction

These release notes are to be used in conjunction with the *Cisco LocalDirector Configuration and Command Reference Guide, Version 4.2.* This guide includes new features in LocalDirector Version 4.2.1. It also includes all information previously documented in the *Release Notes for Cisco LocalDirector Version 4.1.1*.



# **System Requirements**

### Hardware Supported

LocalDirector Version 4.2.1 is supported on the following LocalDirector platforms: 410, 415, 416, 417, 417G, 420, and 430.

For LocalDirector installation instructions and information, refer to the hardware installation guide that was shipped with your LocalDirector.

# **New and Changed Information**

This section describes new features in LocalDirector Version 4.2.1.

### New Software Features in LocalDirector Version 4.2.1

- LocalDirector Support for the Simple Network Time Protocol, page 2
- LocalDirector as a Boomerang Content Routing Agent, page 2
- LocalDirector Support for the Hypertext Transfer Protocol Probe Feature, page 3

#### LocalDirector Support for the Simple Network Time Protocol

The Simple Network Time Protocol (SNTP), which LocalDirector now supports, provides synchronized timekeeping between a set of distributed clients and servers. Support for SNTP allows LocalDirector to receive periodic updates to its internal time from time servers, thus letting LocalDirector send, receive, and process SNTP packets as an SNTP client.

New commands for LocalDirector SNTP feature are:

- sntp broadcast client
- sntp poll
- sntp server
- show sntp

#### LocalDirector as a Boomerang Content Routing Agent

Content routing routes user requests to the replicated-content site (typically a mirror site) that can serve them most quickly and efficiently. A Content Router, such as the Cisco Content Router 4400, routes a content routing agent (also known as a client) to the "closest" (best) replicated-content site, based on network delay using a software process called boomerang. In LocalDirector Version 4.2.1, you can set up LocalDirector to be a content routing agent using boomerang software.



LocalDirector Version 4.2.1 supports boomerang software Version 1.0 only. It does *not* support boomerang software Version 1.1.

New commands for LocalDirector Boomerang Content Routing Agent feature are:

- clear dns-boomerang counters
- dns-boomerang client
- dns-boomerang enable
- show dns-boomerang client
- show dns-boomerang counters
- show dns-boomerang enable

#### LocalDirector Support for the Hypertext Transfer Protocol Probe Feature

LocalDirector can now validate the activity of web servers (Hypertext Transfer Protocol [HTTP] services) running within a LocalDirector server farm.Although a machine may still be enabled and running, an HTTP service on a particular server or port may be disabled for some reason. LocalDirector can determine the activity of web servers or HTTP services by inspecting specific information returned by the server to the client that is initiating a request for a web page or service. By looking or probing for specific information, LocalDirector can determine whether the application is still running, and take appropriate action if it is not.

New commands for the LocalDirector HTTP Probe feature are:

- probe
- probeconfig
- probehttp
- show probe
- show probeconfig
- show probehttp

## Caveats

Caveats describe unexpected behavior in Cisco LocalDirector software releases. This section lists the open and resolved caveats for LocalDirector software, Version 4.21.

### **Open Caveats - LocalDirector Software Version 4.2.1**

This section describes possibly unexpected behavior by LocalDirector software, Version 4.2.1

• CSCdp06649

Long-term connections are not preserved in stateful failover.

• CSCdt09272

The Address Resolution Protocol (ARP) timeout value causes LocalDirector to report incorrect values at boundaries and then automatically reboot.

• CSCdt14979

When you invoke the **configure network** command, LocalDirector unexpectedly reboots if the configuration file contains virtual and real servers.

CSCds73709

During failover, a failed LocalDirector will only go from WAITING state to NORMAL state if the interface changes state.

• CSCdt57233

LocalDirector may unexpectedly reboot when you invoke the failover reset command.

• CSCds76551

If a real server is bound to a virtual that has Dispatch Assisted redirection and the static service applied between the real server and the virtual, then network address translation (NAT) will not work for traffic originating from the real server.

CSCds00504

LocalDirector unexpectedly reboots under a heavy load of User Datagram Protocol (UDP) fragmented traffic.

• CSCdt05288

If SNMPwalk is performed on LocalDirector with two defined virtual servers that differ only by a content rule, then LocalDirector will continuously report the virtual server to the SNMP software.

• CSCdt41375

SNMP queries to LocalDirector using SNMP version 1 will receive SNMP version 2c responses from LocalDirector.

• CSCdt51495

Local dispatch with a UDP virtual server does not work properly.

• CSCdt77761

HTTP probes do not bring a port-bound real machine in the EFAILED state back into IN SERVICE state.

CSCdt84841

Post requests do not work if HTTP redirection is defined for other virtual servers.

• CSCdt86277

LocalDirector unexpectedly reboots when a request goes to a virtual server defined with a bindid other than 0.

• CSCds89599

When under a heavy load, SSL sticky occasionally sends client requests to incorrect servers.

### **Resolved Caveats - LocalDirector Software Version 4.2.1**

All caveats listed in this section are resolved in LocalDirector software, Version 4.2.1.

• CSCdt01487

The LocalDirector proxy service does not properly complete a TCP half-close for the client side of the connection.

• CSCdt54182

LocalDirector unexpectedly reboots when you invoke the rip version command.

• CSCdk27807

LocalDirector now generates timestamp information when you invoke the syslog command.

• CSCdk85409

The front portion of a syslog message generated by LocalDirector is not encoded as an ASCII string.

CSCdk53908

You can now encrypt a Telnet password.

CSCdm80075

Private network clients should not be able to access public network.

• CSCdt36185

When HTTP Redirection is used, a request to the main virtual server using the a POST method returns a TCP RST (reset). Local Director should return the status code 301 or 302 and the new URL location regardless of method type.

• CSCdt69908

Internet Control Message Protocol (ICMP) fragmented messages have incorrect MAC addresses on the server side.

CSCdt38311

When multiple Telnet sessions are initiated to LocalDirector but not completed because incorrect passwords, LocalDirector does not appear to close these Telnet sessions. This failure to close sessions prevents any legitimate Telnet sessions from being established.

## **Documentation Updates**

#### Changes

The *Cisco LocalDirector Configuration and Command Reference Guide, Version 4.2* now includes all information previously documented in the *Release Notes for Cisco LocalDirector Version 4.1.1*. The main features of LocalDirector Version 4.1.1 are:

- HTTP Redirection
- Content Load Balancing
- Integrated Probe for DNS

#### Omissions

The following information was *not* included in the *Cisco LocalDirector Configuration and Command Reference Guide, Version 4.2.* 

• arp timeout command

Description: To set the timeout for LocalDirector ARP cache entries, use the arp timeout command.

Syntax: arp timeout seconds

Syntax Description: The *seconds* value is the length of time (30–2,000,000 seconds) that LocalDirector will retain an ARP entry.

Defaults: The default arp timeout value is 30 seconds.

Command Modes: Privileged, configuration

Usage Guidelines: The **arp timeout** command is used to set the time (in seconds) that the LocalDirector retains entries in its ARP cache table.

Examples:

LocalDirector# arp timeout 100 LocalDirector# show arp timeout arp timeout 100 LocalDirector#

Related Commands: arp, clear arp, show arp, show arp timeout

### Errors

The following information lists corrections to the *Cisco LocalDirector Configuration and Command Reference Guide, Version 4.2.* 

- Page 5-73: Change the syntax description for the hostname command to "New host name for the LocalDirector prompt. This name can be up to 17 alphanumeric characters and is not case sensitive. The LocalDirector does *not* convert the host name to all lowercase."
- Page 5-83: Change the definition of the **mtu** command to "To specify the maximum transmission unit (MTU) value for the specified network interface, use the **mtu** command. This setting only affects packets sourced by LocalDirector or destined for LocalDirector's own IP address. This setting does not affect bridged traffic or traffic going to virtual servers running proxy services. It does, however, affect traffic going to virtual servers running proxy services such as cookie-sticky."

## **Related Documentation**

The following documents provide additional information and should be used in conjunction with these release notes:

- Cisco LocalDirector Configuration and Command Reference Guide, Version 4.2
- Cisco LocalDirector Hardware Installation Guide
- Cisco LocalDirector 417 Hardware Installation Guide
- Release Notes for Cisco LocalDirector 417G
- Regulatory Compliance and Safety Information for Cisco LocalDirector
- Cisco Content Router 4400 User Guide

## **Obtaining Documentation**

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### World Wide Web

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- http://www.cisco.com
- http://www-china.cisco.com
- http://www-europe.cisco.com

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http://www.cisco.com

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#### Contacting TAC by Using the Cisco TAC Website

If you have a priority level 3 (P3) or priority level 4 (P4) problem, contact TAC by going to the TAC website:

http://www.cisco.com/tac

P3 and P4 level problems are defined as follows:

- P3—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- P4—You need information or assistance on Cisco product capabilities, product installation, or basic product configuration.

In each of the above cases, use the Cisco TAC website to quickly find answers to your questions.

To register for Cisco.com, go to the following website:

http://www.cisco.com/register/

If you cannot resolve your technical issue by using the TAC online resources, Cisco.com registered users can open a case online by using the TAC Case Open tool at the following website:

http://www.cisco.com/tac/caseopen

#### Contacting TAC by Telephone

If you have a priority level 1(P1) or priority level 2 (P2) problem, contact TAC by telephone and immediately open a case. To obtain a directory of toll-free numbers for your country, go to the following website:

http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml

P1 and P2 level problems are defined as follows:

- P1—Your production network is down, causing a critical impact to business operations if service is not restored quickly. No workaround is available.
- P2—Your production network is severely degraded, affecting significant aspects of your business operations. No workaround is available.

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