

# Cisco LocalDirector User Interface Version 2.x Release Notes

#### February, 1999

This document describes the Cisco LocalDirector User Interface for all releases up to Release 2.2.

The following sections are included:

- "System Requirements," page 1
- "Installation and Use," page 2
- "Supported Commands," page 6
- "Unsupported Commands," page 6
- "Troubleshooting Connection Problems," page 7
- "LocalDirector User Interface Online Help," page 7
- "Changes for Release 2.2(a)," page 7
- "Changes for Release 2.2," page 8
- "Changes for Release 2.1," page 9
- "Cisco Connection Online," page 11
- "CD-ROM Documentation," page 11

### **System Requirements**

Install the LocalDirector User Interface on a PC with the following minimum system requirements:

- 80486 processor or higher
- RAM
  - Windows NT 40 MB recommended
  - Windows 95 32 MB recommended
- Hard disk space 2 MB for program files
- Operating system Windows NT 4.0 or Windows 95 OEM Service Release 2 (OSR2)

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Copyright © 1998 Cisco Systems, Inc. All rights reserved. Note To check the version of Windows 95 on your PC, open a command prompt window (DOS window), then enter the **ver** command. If the version displayed is 4.00.1111, then the system is running W95 OSR2.

### Installation and Use

This section describes the following:

- Connecting the LocalDirector Hardware to the PC
- Installing and Starting the LocalDirector User Interface
- Initial Configuration
- Server Farm Configuration
- Configuring Telnet

### Connecting the LocalDirector Hardware to the PC

- Step 1 Connect the power cord to LocalDirector and plug it in.
- Step 2 Connect one end of the null modem serial cable to the LocalDirector DB-9 console port, and connect the other end to an available COM port on your PC.

Note Initial configuration must be done through the COM port.

In a failover configuration, do not connect to the standby unit. Always use the LocalDirector User Interface with the active LocalDirector.

- Step 3 Connect one end of the network cable from the hub or switch containing the physical servers to one of the network interface connections on the back of the LocalDirector, and connect the other end of the cable to the network interface that connects to the outside network.
- Step 4 Turn on the LocalDirector power switch.

### Installing and Starting the LocalDirector User Interface

The LocalDirector User Interface is shipped on a 3.5" diskette, or it can be downloaded from CCO as a self-extracting file. Install the user interface program as follows:

Installing from the LocalDirector Program Diskette

- **Step 1** Insert the program diskette into the diskette drive on the PC.
- Step 2 Run the LocalDirector User Interface setup program. In Release 2.2(a), the program is named *Lui22a\_setup.exe*. In previous releases, the file is named *lui21x.exe*, where x is 1 for Release 2.1.1, 2 for Release 2.1.2, and so forth.
- Step 3 Follow the screen installation instructions. After the installation completes, from the Start menu, click Programs, and then Cisco LocalDirector User Interface. Click the LocalDirector User Interface icon, and the main window displays.

#### Download from CCO

- Step 1 Copy the self-extracting executable file onto the hard drive of the PC.
- Step 2 Run the LocalDirector User Interface setup program. In Release 2.2(a), the program is named *Lui22a\_setup.exe*. In previous releases, the file is named *lui21x.exe*, where x is 1 for Release 2.1.1, 2 for Release 2.1.2, and so forth.
- Step 3 Follow the screen installation instructions. After the installation completes, from the Start menu, click Programs, and then Cisco LocalDirector User Interface. Click the LocalDirector User Interface icon, and the main window displays

Note The LocalDirector User Interface installer performs an operating system version check in the beginning of setup. The LocalDirector User Interface and LocalDirector software must be at the same version level.

The LocalDirector User Interface provides a graphical editor for managing LocalDirector configurations. The main window is divided into three areas as shown in Figure 1.



#### Figure 1 LocalDirector User Interface Main Window

- Tree View used to add, delete, and bind virtual and real servers.
- List View used to set, copy, and paste properties of virtual and real servers.
- Map View provides a graphical representation of the information that displays in the List View.

**Note** The Map View is optional and can be permanently hidden by dragging the splitter bar that divides the List View from the Map View to the bottom of the Main window.

### Initial Configuration

The LocalDirector User Interface is most useful for managing large server farm configurations. Additionally, it can isolate you from the LocalDirector command line interface when you use the Primary Configuration function. The Primary Configuration allows you to set the system IP address, passwords, SNMP parameters, and other potions of the configuration that are not expected to change often in most installations.

**Note** If you choose to set these parameters using the LocalDirector command line interface, skip to "Server Farm Configuration, page 5." You must still, however, add a connection configuration, as described in step 3, or alternatively in the section "Configuring Telnet, page 5."

Step 1Make sure that you are connected to the LocalDirector via the COM port. See"Connecting the LocalDirector Hardware to the PC."

Note Initial configuration must be done through the COM port.

- Step 2From the LocalDirector User Interface main menu, select LocalDirector, then Load<br/>Primary Configuration. The Select Current LocalDirector screen displays.
- Step 3 Click Add to define the connection configuration. Choose the appropriate COM port based on the serial cable connection. A password is not required until you define one using the Passwords tab option (see Figure 2). Click OK to define the new connection, and OK again to load the configuration. The Primary Configuration property sheets display, as shown in Figure 2.

Figure 2 Primary Configuration Property Sheets

		1		
Primary Configuration of	LocalDirector Lu	cky (Com1)		×
ARP Failover Interfac	ces System Passv	vords Routes	SNMP   SYSLOG	Telnet
IP Address 192 Subnet Mask 255	. 150. 50. 0 .255. 255. 0			
Passive <u>B</u> IP Enabled				
Software Version: 2.1.(	).			
		OK	Cancel	Help

Name of current connection

Step 4Define the LocalDirector IP address and subnet mask. Use the tabs on the Primary<br/>Configuration property sheets to configure LocalDirector ARP, Failover, Interfaces,<br/>Passwords, Routes, SNMP, SYSLOG, and Telnet settings.

### Server Farm Configuration

From the **Servers** menu, define real and virtual servers and their bind associations. An existing server configuration can be imported by selecting **Load Server Farm Configuration** from the **LocalDirector** menu.

### **Configuring Telnet**

To configure Telnet access to the LocalDirector, complete the following steps:

- Step 1From the LocalDirector main menu, select LocalDirector and Load Primary<br/>Configuration to connect to the LocalDirector via the COM port.
- Step 2 From the Primary Configuration property sheets, click the **Passwords** and **Telnet** tabs to define authorized Telnet hosts and set the Telnet password.

Note If you want to access the LocalDirector via a network connection, the IP address of the PC that is running the LocalDirector User Interface program must be added to the list of authorized Telnet hosts.

When Telnet access is configured, you can define the current LocalDirector as a network connection, as shown in Figure 3.

#### Figure 3 Network Connection Configuration

Connection Configu	ıration	×	I	
Name of this <u>C</u> onfigur Network LocalDirector <u>P</u> rivileg	ration ed Mode Password	OK Cancel <u>H</u> elp		
Connect to LocalDi	rector Using			
С СОМ <u>1</u>	Network <		Click Netwo	rk
С СОМ <u>2</u>	LocalDirector <u>I</u> P Ad	dress	to connect vi	а
○ СОМ <u>З</u>	192.168.1.1		Ielnet	
○ СОМ <u>4</u>	LocalDirector <u>T</u> elne	et Password		
	*****		955	
Connect to LocalDi C COM1 C COM2 C COM2 C COM3 C COM4	rector Using © Network ← LocalDirector IP Ac 192.168.1.1 LocalDirector Ielnu sessess	Help	Click <b>Netwo</b> to connect vi Telnet	j

# **Supported Commands**

The following commands are supported by the LocalDirector User Interface:

• Real server commands

autounfail	name	retry
data	out-of-service	threshold
in-service	real	timeout
maxconns	reassign	weight

#### • Virtual server commands

assign	in-service	sticky
bind	out-of-service	synguard
delay	predictor	virtual
name	replicate	

#### • System commands

arp	ip address	route	telnet	
enable password	mtu	secure		
failover	password	shutdown		
failover IP address	ping-allow	snmp-server		
interface	rip	syslog		

## **Unsupported Commands**

The following commands are not supported by the LocalDirector User Interface:

backup	kill	restart
channel	multiring	static
configure	pager	tftp
failover active	ping	who
hostname	reload	write

### **Troubleshooting Connection Problems**

The following provides troubleshooting information for the LocalDirector User Interface connection:

- If you receive one of the following error messages, "Unable to connect to LocalDirector at <IP>" or "login failed," verify that
  - You can Telnet to this LocalDirector and can enter into configuration mode from the workstation that you are using.
  - You can ping the LocalDirector IP from the workstation that you are using.
  - There is a LocalDirector configured with the IP address that you are trying to use.
  - There is a Telnet entry for the workstation that you are using in the current LocalDirector's configuration.
  - You have used the valid LocalDirector passwords for Telnet and privileged mode access.
- If you receive one of the following error messages, "Unable to connect to LocalDirector via COM <#>" or "login failed," verify that:
  - This COM port is not being used by another application such as HyperTerminal.
  - You have used the valid LocalDirector password for privileged mode access.
  - You can open a LocalDirector console session (HyperTerminal) from the workstation that you are using on this COM port.
  - Check that the workstation that you are using is physically connected to the LocalDirector via a null modem serial cable.
  - Verify that the COM port is properly set up for 9600 baud rate, no parity, 8 data bits, 1 stop bit, and no flow control as follows:

In the Windows 95 Control Panel, click the System icon and then the Ports (COM & LPT) icon. Expand the tree to view a list of COM ports. Select the port that is connected to the LocalDirector and click the **Properties** button and then the **Port Settings** tab.

In the Windows NT Control Panel, click the Ports icon to view a list of COM ports that are already set up. Select the one that is connected to the LocalDirector and click the **Settings** button.

### LocalDirector User Interface Online Help

The LocalDirector User Interface includes online help that can be accessed by clicking the Help buttons on the screen. In addition, press the F1 key when a menu item is highlighted to display popup help for that menu item.

### Changes for Release 2.2(a)

Cisco LocalDirector User Interface Release 2.2(a) includes the following bug fix.

 LUI 2.2, when used with LocalDirector software version 2.2.1 incorrectly reports the "shutdown" (or "enabled") state of interfaces (in the Primary Configuration property dialogs).

### **Changes for Release 2.2**

Cisco LocalDirector User Interface Release 2.2 includes the following changes.

- Known Bug
- Notes and Caveats

### Known Bug

The following is the known bug:

• When loading or sending a configuration to or from a LocalDirector, the mouse cursor becomes an hour-glass but the screen is not refreshed. Sometimes you may find the cursor is immediately restored to an arrow, but the LocalDirector User Interface does not seem to respond to any mouse click or keyboard input. This can happen when the LocalDirector User Interface is unable to connect to the specified LocalDirector and is waiting for the connect() function call to timeout.

The mouse cursor turns to an hour-glass to indicate that the system is currently busy. It is quite common to find that applications do not respond to mouse clicks and keyboard input when the mouse cursor turns to an hour-glass. [CSCdk24208]

### Notes and Caveats

- The retail version of Windows95 (otherwise known as Win95A) ships with a system file that is than that required by the LocalDirector User Interface. This system file is automatically upgraded as part of the Microsoft Internet Explorer 3.02 or higher installation, so most Win95A systems already use this system file. If you receive a warning message during installation of the LocalDirector User Interface that notifies you that the version of the system file cannot be determined, or that the system file by installing the latest version of the Microsoft Internet Explorer, or use the LocalDirector User Interface as is. The behavior of the list view (upper right corner) will be much like the Windows Explorer system application, in that rows in the list only respond to mouse clicks in the far left column. Aso, you need to double right-click instead of single right-click to view the context menu for rows in that list view.
- The LocalDirector User Interface no longer checks for the point release in the LocalDirector version number (the *x* in 2.2.*x*). For example, LocalDirector User Interface Release 2.2 works with LocalDirector 2.2.1 and 2.2.2, but does not work with LocalDirector 2.1.*x*.
- The Load Server Farm State menu item has been removed. This same functionality is (and always has been) available by setting the server properties and sending the configuration. Alternatively, you can toggle the current service state of the individual virtual or real servers between "in service" and "out of service" by holding the <ALT> key and double-clicking the desired machine. This can be done in either the list or map view. The resulting configuration can then be sent to the LocalDirector.
- The current filename is no longer overwritten with the filename "LocalDirector *connection.name*" when a configuration is loaded or saved.
- The current LocalDirector connection configuration now displays in the lower right "tray" in the main window.
- You can now use the keyboard to make multiple selections while in the Tree View. (Previously this functionality was only available by using the mouse.)

• You no longer are required to have the current **telnet** password to change the **telnet** password if the LocalDirector User Interface is connected via the console/serial cable. This makes the administrative rights more like the LocalDirector itself.

### Changes for Release 2.1

Cisco LocalDirector User Interface Release 2.1 includes the following changes.

- Known Bugs
- Notes and Caveats

### Known Bugs

The following are known bugs in Release 2.1:

• If you open a .lui file, edit the server farm configuration, decide to discard the changes, and then reopen the same file by selecting the **File**>**Open** menu option, the LocalDirector User Interface will not reopen the file. There is no problem if you open another file after opening and discarding changes made to a .lui file.

A workaround is to select the **File>New** menu option to clear the screen, and then select **File>Open** to reopen the file. [CSCdk24180]

• If you load a server farm configuration from a LocalDirector over a COM port or over the network, edit the server farm configuration, and then select the File>New or the File>Open menu option to work on a .lui file, the LocalDirector User Interface displays a prompt such as "Save changes to LocalDirector LD1 (COM1)?" or "Save changes to LocalDirector LD2 (10.0.2.27)?". If you click Yes, the Save (File) As dialog box is displayed and you can save the configuration to a file instead of saving the modified configuration to a LocalDirector.

To save the modified configuration to a LocalDirector, do not click the **Yes** button; instead, click **Cancel** and then select the **LocalDirector**>**Save Server Farm Configuration** menu option. [CSCdk24199]

• When loading or sending a configuration to or from a LocalDirector, the mouse cursor becomes an hour-glass but the screen is not refreshed. Sometimes you may find the cursor is immediately restored to an arrow, but the LocalDirector User Interface does not seem to respond to any mouse click or keyboard input. This can happen when the LocalDirector User Interface is unable to connect to the specified LocalDirector and is waiting for the connect() function call to timeout.

The mouse cursor turns to an hour-glass to indicate that the system is currently busy. It is quite common to find that applications do not respond to mouse clicks and keyboard input when the mouse cursor turns to an hour-glass. [CSCdk24208]

• If the primary configuration is loaded from a LocalDirector over a COM port (not over the network) and the Telnet password is changed, when the primary configuration is saved to the LocalDirector the "Re-enter Telnet password" message pops up even if the correct password is provided. This does not happen if LocalDirector User Interface connects to the LocalDirector over the network.

A workaround is to use the command line interface to change the Telnet password. [CSCdk24214]

### Notes and Caveats

• The LocalDirector User Interface includes the following files:

Filename	Contents	
sample.lui	sample server farm configuration file	
lui.hlp	help file	
lui.cnt	help file	
lui.gid	help file	
Uninst.isu	file needed for the uninstallation process	
readme.rtf	release notes	
lui.log	log file	
lui_read.txt	log file	
lui_writ.txt	log file	

- The LocalDirector User Interface generates a file called *lui.dat* that contains a list of user-defined LocalDirector profiles. This information is needed for initiating connection to a LocalDirector unit. The file is not removed when uninstalling the LocalDirector User Interface; therefore, if the LocalDirector User Interface is upgraded, existing profiles do not have to be re-defined.
- If the LocalDirector User Interface is installed on two PCs, and either PC will be used to connect to the *same* set of LocalDirector units, LocalDirector profiles can be defined on one PC and then copied to the other PC. First exit the LocalDirector User Interface program, and then copy the *lui.dat* file from one PC to the other. To connect to a LocalDirector over the network from the other PC, make sure that a Telnet entry is defined for that PC in the LocalDirector configuration.
- The *lui.dat* file must reside in the same directory as *lui.exe*.
- The LocalDirector User Interface allows you to change the LocalDirector system IP address even if you are going to send the modified primary configuration to the LocalDirector over the network because it is the last item sent. No further items need to be sent after the disconnection caused by changing the LocalDirector's IP address.
- Do not include "?" in the LocalDirector command line prompt, otherwise the LocalDirector User Interface responds with the "login failed: invalid Telnet password" or "login failed: invalid privileged mode password" message even if you provide the correct password(s).
- The three log files generated by LUI are not automatically truncated.

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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 ccohelp@cisco.com. For additional information, contact ccoteam@cisco.com.

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### **CD-ROM Documentation**

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 up to date 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-europe.cisco.com.

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This document is to be used in conjunction with the Cisco LocalDirector Installation and Configuration Guide, Version 2.1 publication.

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