K Commands

The commands shown in this chapter apply to the Catalyst 8540 MSR, Catalyst 8510 MSR, and LightStream 1010 ATM switch routers. Where an entire command or certain attributes of a command have values specific to a particular switch or switch router, an exception is indicated by the following callouts:

- · Catalyst 8540 MSR
- Catalyst 8510 MSR and LightStream 1010



Commands that are identical to those documented in the Cisco IOS software documentation have been removed from this chapter.



Commands that no longer function as expected in ATM environments have also been removed from this chapter.

Refer to Appendix D of this command reference for a detailed list of commands that have been removed, changed or replaced.

keepalive

To set the keepalive timer for a specific interface, use the **keepalive** interface configuration command. To turn off keepalives entirely, use the **no** form of this command.

keepalive [seconds]

no keepalive [seconds]

Syntax Description

seconds	Number of seconds, from 0 to 32767, that defines the keepalive interval.
	The default is 10 seconds.

Defaults

10 seconds

Command Modes

Interface configuration

Command History

Release	Modification
11.1(4)	New command

Usage Guidelines

This command does not apply to ATM interfaces. Refer to the **atm ilmi-keepalive** command for configuration of keepalives on ATM interfaces.

You can configure the keepalive interval, which is the frequency at which the switch sends messages to itself (Ethernet) or to the other end (auxiliary), to ensure a network interface is alive. The interval is adjustable in one-second increments down to one second. An interface is declared down after three update intervals pass without receiving a keepalive packet.

You must set the interval as a positive integer that is less than the interval set on the neighboring switch. Setting the keepalive timer to a low value is useful for detecting Ethernet interface failures (transceiver cable disconnecting, cable unterminated, and so on). On a Frame Relay interface, the interval that you enter must be a positive integer that is less than the interval set on the ATM switch router. Refer to the **frame-relay lmi-n392dte** interface configuration command description.

A typical serial line failure involves losing CD. Since this sort of failure is typically noticed within a few milliseconds, adjusting the keepalive timer for faster routing recovery is generally not useful.

When adjusting the keepalive timer for a low bandwidth auxiliary interface, datagrams can delay the smaller keepalive packets long enough to cause the line protocol to go down. You might need to experiment to determine the best value.

Examples

The following example shows how to set the keepalive interval to 3 seconds.

Switch(config)# interface ethernet 0
Switch(config-if)# keepalive 3

Related Commands

Command	Description
atm ilmi-keepalive	Enables or disables ILMI connectivity procedures and to change the ILMI keepalive poll interval.
frame-relay lmi-n392dte	Sets the error threshold on DTE or NNI interfaces.

keepalive