Cisco Router Logging Options

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As with any other network device, logging allows you to analyze and understand your router's operation. It's the history of its operation and performance. Cisco routers provide many logging options including logging to an internal buffer, logging to Telnet or Aux lines, and logging to a Linux or Unix syslog server. There's even a free tool that allows Linux/Unix-style logging on a computer running the Windows operating system.

Logging Messages to an Internal Buffer

The default logging device is the console; all messages are displayed on the console unless otherwise specified. To log messages to an internal buffer, use the logging buffered router configuration command. The full syntax of this command follows:
`logging buffered`

The global configuration command `logging buffered` enables logging to an internal buffer. To see the logged messages, use the Privileged EXEC command `show logging`. To turn logging off, use the global configuration command `no logging buffered`.

Using "logging buffered" sends logging messages to an internal buffer instead of to the console. The buffer stores messages on a FIFO (first-in, first-out) basis, so newer messages overwrite older ones. You can view the messages that are logged in the buffer by using the privileged EXEC command `show logging`. The first message displayed is the oldest message in the buffer. Cancel logging to the buffer with the privileged EXEC command `no logging buffered`.

Viewing logging in a Telnet session

Logging is disabled by default to Telnet sessions, but can be enabled with the privileged EXEC command `logging monitor`. Disable it with the privileged EXEC command `no logging monitor`.

Limiting logging

You can limit the level of messages logged by specifying logging levels. The levels are 0 through 7 with 0 being the least amount of logging information and 7 being the most logging. To set the logging level to the console, use the privileged EXEC command `logging console` . To set the logging level to the terminal lines (Telnet), use the

logging monitor router configuration command in privileged EXEC mode: `logging monitor` and to disable it, use the privileged EXEC command **`no logging monitor`**.

Using Kiwi Syslog

Kiwi Software has created a tool called KiwiSyslog that provides Windows users wtih a Unix syslogd-like tool for centralizing logging output. You can download KiwiSyslog from http://www.kiwisyslog.com/. It comes in both free and paid versions. To use it with your Cisco network device, use the global configuration mode command: **`logging 1.2.3.4`** (where 1.2.3.4 is the address of your computer running KiwiSyslog or, alternatively, you could enter the hostname of your KiwiSyslog computer if you have names resolution enabled).

Another logging server that also provides TFTP, DHCP, and other services is tftpd32, available for download from http://tftpd32.jounin.net/

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