

Configuring Token Ring Filters

This chapter describes how to configure Token Ring filters on the Catalyst 5000 series switch.

Note For complete syntax and usage information for the commands used in this chapter, refer to the *Command Reference* for your switch.

This chapter consists of these sections:

- Understanding How Token Ring Filters Work on page 47-1
- Configuring Token Ring Filters on page 47-1

Understanding How Token Ring Filters Work

Catalyst 5000 series Token Ring modules provide filtering capabilities to reduce broadcast traffic, block protocols, and provide basic security.

You can filter frames based on the following:

- MAC address (source address or destination address)—Defines a filter that explicitly allows data from the select group of users (based on MAC address) to be sent to that port using MAC filters.
- Protocol (destination service access point [DSAP]/Subnetwork Access Protocol [SNAP])—Creates a filter that blocks all data to a port except data that is explicitly allowed.

You can configure MAC address filters for input ports only, and configure DSAP/SNAP filters for both input and output ports. You can configure up to 16 MAC address or DSAP/SNAP filters for each port on the Token Ring modules.

To filter data based on the MAC address, you must specify an address and indicate whether you want to block or allow frames that contain the address as a source or destination address. To filter data based on a protocol, specify either a DSAP or SNAP, and specify whether to permit or deny frames with that protocol.

Configuring Token Ring Filters

These sections describe how to configure Token Ring filters:

- Adding a MAC Address Filter on page 47-2
- Adding a Protocol Filter on page 47-3
- Clearing Filters on page 47-4

Clearing Filters

To clear a MAC address filter, protocol filter, or all configured filters, perform this task in privileged mode:

Task	Command
Clear a MAC address filter, protocol filter, or all configured filters.	clear port filter [<i>mod_num/port_num</i>] [<i>mac_addr</i> <i>protocol_type</i> all]

This example shows how to clear all filters on a port:

```
Console> (enable) clear port filter all  
All filter MAC addresses and Protocols cleared  
Console> (enable)
```