Port Utilization Thresholds

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Threshold monitoring can be enabled for the port utilization values described in the following table.

Value	Description
Receive port utilization	Enables the generation of alerts or alarms based on the port utilization percentage for data received during the polling interval.
Transmit port utilization	Enables the generation of alerts or alarms based on the port utilization percentage for data transmitted during the polling interval.
High port activity	Enables the generation of alerts or alarms based on the overall port utilization percentage during the polling interval.

Note Ports configured for half-duplex do not differentiate between data received and data transmitted. (The transmitted and received percentages are combined.) Therefore, to avoid redundant alarms, it is recommended that only the receive **or** transmit utilization threshold be configured.

Saving Your Configuration

When you configure thresholds they are not permanent unless you save the changes. When you have completed configuring thresholds, save your configuration to flash memory, an external memory device, and/or a network

location using the Exec mode command **save configuration**. For additional information on how to verify and save configuration files, refer to the *System Administration Guide* and the *Command Line Interface Reference*.

Receive Port Utilization Thresholds

Receive port utilization thresholds generate alerts or alarms based on the utilization percentage of each configured port in relation to data received during the specified polling interval. This threshold is configured on a per-port basis.

Alerts or alarms are triggered for receive port utilization based on the following rules:

- **Enter condition:** Actual percent utilization of a port for received data > or = High Threshold
- **Clear condition:** Actual percent utilization of a port for received data < Low Threshold

If a trigger condition occurs within the polling interval, the alert or alarm will not be generated until the end of the polling interval.

Configuring Receive Port Utilization Thresholds

Use the following example to configure the polling interval over which to measure receive port utilization

```
configure
 threshold poll port-rx-utilization interval <seconds>
 port <port-type> <slot/port>
  threshold rx-utilization <high_thresh_> [ clear <low_thresh_> ]
  threshold monitoring
            end
```

Transmit Port Utilization Thresholds

Transmit port utilization thresholds generate alerts or alarms based on the utilization percentage of each configured port in relation to data transmitted during the specified polling interval. This threshold is configured on a per-port basis.

Alerts or alarms are triggered for transmit port utilization based on the following rules:

- **Enter condition:** Actual percent utilization of a port for transmit data > or = High Threshold
- **Clear condition:** Actual percent utilization of a port for transmit data < Low Threshold

If a trigger condition occurs within the polling interval, the alert or alarm will not be generated until the end of the polling interval.

Configuring Transmit Port Utilization Thresholds

Use the following example to configure the polling interval over which to measure transmit port utilization:

```
configure
 threshold poll port-tx-utilization interval <seconds>
 port <port-type> <slot/port>
```

```
threshold tx-utilization <high_thresh_> [ clear <low_thresh_> ]
threshold monitoring
        end
```

High Port Activity Thresholds

High port activity thresholds generate alerts or alarms based on the peak utilization percentage of each configured port during the specified polling interval. This threshold is configured on a per-port basis.

Alerts or alarms are triggered for high port activity based on the following rules:

- **Enter condition:** Actual percent peak utilization of a port > or = High Threshold

- **Clear condition:** Actual percent peak utilization of a port < Low Threshold

If a trigger condition occurs within the polling interval, the alert or alarm will not be generated until the end of the polling interval.

Configuring High Port Activity Thresholds

Use the following example to configure the polling interval over which to measure for high port activity:

```
configure
 threshold poll port-high-activity interval  <time>
 port  <port-type>  <slot/port>
 threshold high-activity <high_thresh_> [ clear  <low_thresh_> ]
 threshold monitoring
        end
```

Configuring High Port Activity Thresholds