

## traceoptions

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**Syntax** traceoptions {  
    file *name* <replace> <size *size*> <files *number*> <no-stamp>  
        <(world-readable | no-world-readable)>;  
    flag *flag* <flag-modifier> <disable>;  
}

**Hierarchy Level** [edit protocols mstp],  
[edit protocols rstp],  
[edit protocols stp],  
[edit protocols vstp vlan *vlan-id*]

**Release Information** Statement introduced in JUNOS Release 9.0 for EX-series switches.  
Statement updated in JUNOS Release 9.4 for EX-series switches to add VSTP support.

**Description** Set STP protocol-level tracing options.

**Default** Traceoptions is disabled.

**Options** disable—(Optional) Disable the tracing operation. One use of this option is to disable a single operation when you have defined a broad group of tracing operations, such as *all*.

file *name* —Name of the file to receive the output of the tracing operation. Enclose the name in quotation marks. We recommend that you place STP tracing output in the file */var/log/stp-log*.

files *number* —(Optional) Maximum number of trace files. When a trace file named *trace-file* reaches its maximum size, it is renamed *trace-file .0*, then *trace-file .1*, and so on, until the maximum number of trace files is reached. Then, the oldest trace file is overwritten.

If you specify a maximum number of files, you must also specify a maximum file size with the *size* option.

**Range:** 2 through 1000 files

**Default:** 1 trace file only

*flag*—Tracing operation to perform. To specify more than one tracing operation, include multiple *flag* statements. These are the STP-specific tracing options:

- *all* —Trace all operations.
- *all-failures*—Trace all failure conditions.
- *bpdu* —Trace BPDU reception and transmission.
- *bridge-detection-state-machine* —Trace the bridge detection state machine.
- *events* —Trace events of the protocol state machine.

- `port-information-state-machine` —Trace the port information state machine.
- `port-migration-state-machine` —Trace the port migration state machine.
- `port-receive-state-machine` —Trace the port receive state machine.
- `port-role-select-state-machine` —Trace the port role selection state machine.
- `port-role-transit-state-machine` —Trace the port role transit state machine.
- `port-transmit-state-machine` —Trace the port transmit state machine
- `port-state-transit-state-machine` —Trace the port state transit state machine.
- `ppmd` —Trace the state and events for the ppm process
- `state-machine-variables` —Trace when the state machine variables change
- `timers` —Trace protocol timers
- `topology-change-state-machine` —Trace the topology change state machine.

The following are the global tracing options:

- `all`—All tracing operations
- `config-internal`—Trace configuration internals.
- `general`—Trace general events.
- `normal`—All normal events.  
**Default:** If you do not specify this option, only unusual or abnormal operations are traced.
- `parse`—Trace configuration parsing.
- `policy`—Trace policy operations and actions.
- `regex-parse`—Trace regular-expression parsing.
- `route`—Trace routing table changes.
- `state`—Trace state transitions.
- `task`—Trace protocol task processing.
- `timer`—Trace protocol task timer processing.

`no-stamp`—(Optional) Do not place timestamp information at the beginning of each line in the trace file.

**Default:** If you omit this option, timestamp information is placed at the beginning of each line of the tracing output.

**no-world-readable**—(Optional) Prevent any user from reading the log file.

**replace**—(Optional) Replace an existing trace file if there is one.

**Default:** If you do not include this option, tracing output is appended to an existing trace file.

**size** *size* —(Optional) Maximum size of each trace file, in kilobytes (KB) or megabytes (MB). When a trace file named *trace-file* reaches this size, it is renamed *trace-file .0*. When the *trace-file* again reaches its maximum size, *trace-file .0* is renamed *trace-file .1* and *trace-file* is renamed *trace-file .0*. This renaming scheme continues until the maximum number of trace files is reached. Then the oldest trace file is overwritten.

If you specify a maximum file size, you must also specify a maximum number of trace files with the **files** option.

**Syntax:** *xk* to specify KB, *xm* to specify MB, or *xg* to specify GB

**Range:** 10 KB through the maximum file size supported on your system

**Default:** 1 MB

**world-readable**—(Optional) Allow any user to read the log file.

**Required Privilege Level**

routing—To view this statement in the configuration.

routing-control—To add this statement to the configuration.

**Related Topics**

- show spanning-tree bridge
- show spanning-tree interface
- Example: Configuring Network Regions for VLANs with MSTP on EX-series Switches
- Example: Configuring Faster Convergence and Improving Network Stability with RSTP on EX-series Switches
- Understanding MSTP for EX-series Switches
- Understanding RSTP for EX-series Switches
- Understanding STP for EX-series Switches
- Understanding VSTP for EX-series Switches

