

## traceoptions

---

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

**Hierarchy Level** [edit logical-systems *logical-system-name* protocols isis],  
[edit logical-systems *logical-system-name* routing-instances *routing-instance-name* protocols isis],  
[edit protocols isis],  
[edit routing-instances *routing-instance-name* protocols isis]

**Release Information** Statement introduced before JUNOS Release 7.4.  
Statement introduced in JUNOS Release 9.0 for EX Series switches.

**Description** Configure IS-IS protocol-level tracing options. To specify more than one tracing operation, include multiple **flag** statements.

**Default** The default IS-IS protocol-level tracing options are those inherited from the routing protocols **traceoptions** statement included at the [edit **routing-options**] hierarchy level.

**Options** **disable**—(Optional) Disable the tracing operation. You can use this option 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 within quotation marks (“ ”). All files are placed in the directory **/var/log**. We recommend that you place IS-IS tracing output in the file **isis-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 also must specify a maximum file size with the **size** option.

**Range:** 2 through 1000 files

**Default:** 10 files

**flag *flag***—Tracing operation to perform. To specify more than one flag, include multiple **flag** statements.

IS-IS Protocol-Specific Tracing Flags

- **csn**—Complete sequence number PDU (CSNP) packets
- **error**—Errored IS-IS packets

- `graceful-restart`—Graceful restart operation
- `hello`—Hello packets
- `ldp-synchronization`—Synchronization between IS-IS and LDP
- `lsp`—Link-state PDU packets
- `lsp-generation`—Link-state PDU generation packets
- `packets`—All IS-IS protocol packets
- `psn`—Partial sequence number PDU (PSNP) packets
- `spf`—Shortest-path-first calculations

#### Global Tracing Flags

- `all`—All tracing operations
- `general`—A combination of the `normal` and `route` trace operations
- `normal`—All normal operations, including adjacency changes

**Default:** If you do not specify this option, only unusual or abnormal operations are traced.

- `policy`—Policy operations and actions
- `route`—Routing table changes
- `state`—State transitions
- `task`—Routing protocol task processing
- `timer`—Routing protocol timer processing

*flag-modifier*—(Optional) Modifier for the tracing flag. You can specify one or more of these modifiers:

- `detail`—Detailed trace information
- `receive`—Packets being received
- `send`—Packets being transmitted

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

`size size`—(Optional) Maximum size of each trace file, in kilobytes (KB), megabytes (MB), or gigabytes (GB). 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.

Note that if you specify a maximum file size, you also must 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:** 128 KB

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

**Required Privilege Level** routing and trace—To view this statement in the configuration.  
routing-control and trace-control—To add this statement to the configuration.

**Related Topics** ■ Tracing IS-IS Protocol Traffic

---

Published: 2010-04-14