

Chapter 7

Tracing Interface Operations

You can trace the operations of individual routing platform interfaces and those of the interface process (dcd). For a general discussion of tracing and of the precedence of multiple tracing operations, see the *JUNOS System Basics Configuration Guide*.

This chapter discusses the following interface trace operation configuration tasks:

- Tracing Operations of an Individual Router Interface on page 203
- Tracing Operations of the Interface Process on page 204

For information about the operations of Virtual Router Resolution Protocol (VRRP)-enabled interfaces, see “Tracing VRRP Operations” on page 478.

Tracing Operations of an Individual Router Interface

To trace the operations of individual routing platform interfaces, include the `traceoptions` statement at the `[edit interfaces interface-name]` hierarchy level:

```
[edit interfaces interface-name]  
traceoptions {  
  flag flag <disable>;  
  file filename <files number> <size size>  
    <world-readable | no-world-readable> <match regexp>;  
  flag flag <disable>;  
}
```

You can specify the following interface tracing flags:

- `all`—Trace all interface operations.
- `event`—Trace all interface events.
- `ipc`—Trace all interface interprocess communication (IPC) messages.
- `media`—Trace all interface media changes.

The interfaces `traceoptions` statement does not support a trace file. The logging is done by the kernel, so the tracing information is placed in the system `syslog` files.

Tracing Operations of the Interface Process

To trace the operations of the routing platform's interface process, `dcd`, include the `traceoptions` statement at the `[edit interfaces]` hierarchy level:

```
[edit interfaces]
traceoptions {
  file filename <files number> <size size>
    <world-readable | no-world-readable> <match regex>;
  flag flag <disable>;
}
```

By default, interface process operations are placed in the file named `dcd` and three 1-MB files of tracing information are maintained.

You can specify the following flags in the `interfaces traceoptions` statement:

- `change-events`—Log changes that produce configuration events.
- `config-states`—Log the configuration state machine changes.
- `kernel`—Log configuration IPC messages to kernel.
- `kernel-detail`—Log details of configuration messages to kernel.

For general information about tracing, see the tracing and logging information in the *JUNOS System Basics Configuration Guide*.