

Configuring the SAE to Manage JUNOS Routers with the CLI

To set up the SAE to manage JUNOS routers, configure a router driver that specifies a COPS server that can accept COPS connections from the COPS client in JUNOS routers.

Use the following configuration statements to configure the SAE to manage JUNOS routers:

```
shared sae configuration driver junose {
  cops-server-port cops-server-port ;
  backlog backlog ;
  keepalive-interval keepalive-interval ;
  message-timeout message-timeout ;
  cops-message-maximum-length cops-message-maximum-length ;
  cops-message-read-buffer-size cops-message-read-buffer-size ;
  cops-message-write-buffer-size cops-message-write-buffer-size ;
  pending-address-timeout pending-address-timeout ;
  cops-handler-threads cops-handler-threads ;
  cached-driver-expiration cached-driver-expiration ;
  drop-unmanaged-interfaces-xdr-driver;
  track-unmanaged-interfaces-xdr-driver;
}
```

To configure the SAE to manage JUNOS routers:

1. From configuration mode, access the configuration statement that configures the JUNOS router driver. In this sample procedure, the JUNOS driver is configured in the west-region group.

```
user@host# edit shared sae group west-region configuration driver junose
```

2. Configure the port number of the SAE COPS server. The port number must match the configuration of the SRC client in the JUNOS router.

```
[edit shared sae group west-region configuration driver junose]
user@host# set cops-server-port cops-server-port
```

3. Configure the number of outstanding connection attempts before connections are dropped.

```
[edit shared sae group west-region configuration driver junose]
user@host# set backlog backlog
```

4. Configure the interval between keepalive messages sent from the COPS client (the JUNOS router).

```
[edit shared sae group west-region configuration driver junose]
user@host# set keepalive-interval keepalive-interval
```

5. Configure the timeout interval in which the COPS server waits for a response to COPS requests.

```
[edit shared sae group west-region configuration driver junose]
```

```
user@host# set message-timeout message-timeout
```

6. Configure the maximum length of a COPS message.

```
[edit shared sae group west-region configuration driver junose]  
user@host# set cops-message-maximum-length cops-message-maximum-length
```

7. Configure the buffer size for receiving COPS messages from the JUNOS client. We recommend that you use the default setting unless you are instructed to change it by Juniper Networks.

```
[edit shared sae group west-region configuration driver junose]  
user@host# set cops-message-read-buffer-size cops-message-read-buffer-size
```

8. Configure the buffer size for sending COPS messages to the JUNOS client. We recommend that you use the default setting unless you are instructed to change it by Juniper Networks.

```
[edit shared sae group west-region configuration driver junose]  
user@host# set cops-message-write-buffer-size cops-message-read-buffer-size
```

9. Configure the maximum time that a DHCP address request remains pending.

```
[edit shared sae group west-region configuration driver junose]  
user@host# set pending-address-timeout pending-address-timeout
```

10. Configure the size of the thread pool for handling unsolicited messages. These threads are shared among all JUNOS router drivers.

```
[edit shared sae group west-region configuration driver junose]  
user@host# set cops-handler-threads cops-handler-threads
```

11. Configure the minimum amount of time to keep the state of a router driver after its COPS connection has been closed.

```
[edit shared sae group west-region configuration driver junose]  
user@host# set cached-driver-expiration cached-driver-expiration
```

12. (Optional) If you are using COPS-XDR, specify whether or not the JUNOS router driver keeps a record of unmanaged interfaces.

```
[edit shared sae group west-region configuration driver junose]  
user@host# set drop-unmanaged-interfaces-xdr-driver
```

13. (Optional) Enable or disable sending of interface-tracking events for unmanaged interfaces for the XDR router driver.

```
[edit shared sae group west-region configuration driver junose]  
user@host# set track-unmanaged-interfaces-xdr-driver
```

14. (Optional) Verify your configuration.

```
[edit shared sae group west-region configuration driver junose]
user@host# show
cops-server-port 3288;
backlog 50;
keepalive-interval 45;
message-timeout 120000;
cops-message-maximum-length 200000;
cops-message-read-buffer-size 30000;
cops-message-write-buffer-size 30000;
pending-address-timeout 5000;
cops-handler-threads 20;
cached-driver-expiration 600;
drop-unmanaged-interfaces-xdr-driver;
track-unmanaged-interfaces-xdr-driver;
```

- Related Topics**
- Creating Grouped Configurations for the SAE (SRC CLI)
 - Configuring the SAE to Manage JUNOS Routers (C-Web Interface)
 - Monitoring Interactions Between the SAE and the JUNOS Router
 - Troubleshooting Problems with Managing JUNOS Routers
 - Developing Router Initialization Scripts for JUNOS Routers, JUNOS Routing Platforms, and Network Devices

