

Configuring the JCS Management Module

You configure the JCS management module to set Ethernet port access, create user accounts, and specify how Routing Engines on the JCS chassis are mapped to Protected System Domains (PSDs).

You only need to configure the active JCS management module. The JCS management module configuration is automatically synchronized between the active and standby management modules.

Tasks to configure the JCS management module are:

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Restoring the Default JCS Management Module Configuration

Before you configure the JCS management module, we recommend clearing any existing configurations on the JCS management module and restoring the defaults.

Clearing a configuration results in the following changes:

- Sets the JCS management module to its default state.

This is equivalent to pressing the recessed button on the front panel of the JCS management module for more than 5 seconds.

- Initializes the serial port to 9600 baud.
- Initializes the internal SNMP community string.

An SNMP community string is a text string that acts as a password. It is used to authenticate messages that are sent between the management station (the SNMP manager) and the device (the SNMP agent). The community string is included in every packet that is transmitted between the SNMP manager and the SNMP agent.

- Disables web access.

To clear an existing JCS management module configuration:

1. Log in to the JCS management module.

If you are logging on for the first time, use the default username and password:

Username: **USERID**

Password: **PASSWORD**

The 0 in **PASSWORD** is a zero, not the letter O.

2. Use the **env** command to set JCS management module 1 (**mm[1]**) as the configuration target. For example:

```
system> env -T mm[1]
```

3. Use the **clear** command to clear the configuration. For example:

```
system:mm[1]> clear -cnfg
```

This example clears the configuration on **mm[1]** and returns the JCS management module to the factory default settings.

Configuring the JCS Management Module Ethernet Interface

To configure the network interface on the JCS management module:

1. Log in to the JCS management module.
2. Use the **env** command to set JCS management module 1 (**mm[1]**) as the configuration target. For example:

```
system:mm[1]> env -T mm[1]
```

3. Use the **ifconfig** command to configure the interface. For example:

```
system:mm[1]> ifconfig -eth0 -i 192.168.171.96 -g 192.168.171.254 -s  
255.255.252.0 -c static
```

In this example, Ethernet channel 0 is configured for a static IP address of 192.168.171.96 and a gateway address of 192.168.171.254. The subnet mask is 255.255.252.0.



NOTE: You only need to configure the Ethernet interface on the primary management module. The backup management module will use the IP address from the primary if it becomes the primary management module.

Configuring the Switch Module Ethernet Interface

You must configure the Ethernet interface for both JCS switch modules (**switch[1]** and **switch[2]**) on the JCS management module.



NOTE: The IP address for the JCS switch modules must be on the same subnet as the IP address for the JCS management module.

To configure the JCS switch module Ethernet interface on the JCS management module:

1. Log in to the JCS management module.
2. Use the **env** command to set JCS switch module 1 (**switch[1]**) as the configuration target. For example:

```
system> env -T switch[1]
```

3. Use the **ifconfig** command to configure the interface. For example:

```
system:switch[1]> ifconfig -i 192.168.171.98 -g 192.168.171.254 -s  
255.255.252.0 -em enabled -ep enabled
```

In this example, the Ethernet interface for JCS switch module 1 is configured for an IP address of **192.168.171.98** and a gateway address of **192.168.171.254**. The subnet mask is **255.255.252.0**. The external ports (**ep**) of the switch module are enabled.

4. Repeat this procedure for JCS switch module 2. Use the **env** command to set switch module 2 (**switch[2]**) as the configuration target. For example:

```
system> env -T switch[2]
```

5. Use the **ifconfig** command to configure the interface. For example:

```
system:switch[2]> ifconfig -i 192.168.171.99 -g 192.168.171.254 -s  
255.255.252.0 -em enabled -ep enabled
```

In this example, the Ethernet interface for JCS switch module 2 is configured for an IP address of **192.168.171.99** and a gateway address of **192.168.171.254**. The subnet mask is **255.255.252.0**. The external ports (**ep**) of the switch module are enabled.

Configuring User Accounts

You configure user accounts on the JCS management module to control access to the module. The JCS 1200 platform supports the following types of security roles for user accounts:

- Supervisor

This role has full read and write access to the JCS 1200 platform. Users can configure the JCS management module, the JCS switch module, and Routing Engines (blades) on the JCS 1200 platform. You must configure at least one user to have a Supervisor role.

- Operator

This role has read-only access to the JCS. Users can view the configuration of the JCS management module, the JCS switch module, and the JCS Routing Engines. They can monitor JCS operations, but they cannot change the JCS configuration.

You can add up to 12 users to the JCS management module. Each user you add must be assigned a unique number (1 through 12).

To configure user accounts:

1. Log in to the JCS management module.
2. Use the **env** command to set JCS management module 1 (**mm[1]**) as the configuration target. For example:

```
system> env -T mm[1]
```

3. Use the **users** command to configure user accounts. For example:

```
system:mm[1]> users -2 -n chang -p SPASS1 -a super
```

```
system:mm[1]> users -3 -n markham -p OPASS1 -a operator
```

In these examples, User 2 is configured with a username (**chang**) and a password (**SPASS1**). User 2 has **Supervisor** access (full read/write). User 3 is configured with a username (**markham**) and a password (**OPASS1**). User 3 has **Operator** access (read-only).

Configuring the Routing Engine Parameters (Blade Bay Data)

To pass system configuration information to the Routing Engines on the JCS, you must configure the blade bay data. Blade bay data is stored as a 60-byte text string that contains information about how the Routing Engines on the JCS 1200 platform are mapped to PSDs and to the RSD. The blade bay mapping information is passed from the JCS management module to the appropriate Routing Engine, so that it is available when the JUNOS software boots.

You enter a blade bay data string for each primary and standby Routing Engine on the JCS chassis.

Blade bay data is entered as a text string with the following format. See Table 1 on page 5 for details.

Vn-JCSn-SDn-PSDn-REPn-REBn-PRDplatform-type

n is a number. *platform-type* is the routing platform type (T1600, T640, or T320).

Table 1: Format Requirements for Blade Bay Data

Item	Description
V	Version number of the blade bay data. The accepted value is 01 .
JCS	JCS identifier. The range of values is 01 through 03 . The value for this parameter must match the value set through the <code>control-system-id</code> statement configured through the JUNOS command-line interface (CLI).
SD	RSD identifier. The range of values is 01 through 03 . The value for this parameter must match the value set through the <code>root-domain-id</code> statement configured through the JUNOS command-line interface (CLI).
PSD	PSD identifier. Each identifier must be unique. The value range is 01-31 . The value for this parameter must match the value set through the <code>protected-system-domains</code> statement configured through the JUNOS command-line interface (CLI).
REP	Slot identifier of the primary Routing Engine. The value range is 01-12 . In the absence of any JUNOS CLI configuration that affects mastership, the Routing Engine in the slot indicated by REP will boot as the master, and the Routing Engine in slot REB will boot as the backup. The value for this parameter must match the value set through the <code>control-slot-numbers</code> statement configured through the JUNOS command-line interface (CLI).
REB	Slot identifier of the backup Routing Engine. Typically, the value range is 01-12 . Use 00 if no backup Routing Engine is installed. In the absence of any JUNOS CLI configuration that affects mastership, the Routing Engine in the slot indicated REB will boot as the backup.
PRD	Routing platform type. The accepted values are T1600 , T640 or T320 .

To enter the blade bay data:

1. Log in to the JCS management module.
2. Use the **baydata** command to configure the blade bay data. For example:

```
baydata -b 1 -data "V01-JCS01-SD01-PSD01-REP01-REB02-PRDT640"
```

```
baydata -b 2 -data "V01-JCS01-SD01-PSD01-REP01-REB02-PRDT640"
```

The bay data slots are Routing Engine slots 1 through 12 on the JCS chassis. In this example, the blade bay data is configured for the Routing Engine in slot 1 and the Routing Engine in slot 2. Blade 1 is the primary Routing Engine of PSD 1. Blade 2 is the backup Routing Engine of PSD 1. PSD 1 is connected to RSD 1, and RSD 1 is a T640 routing node.

3. Repeat this procedure for each Routing Engine on the JCS 1200 platform.

Configuring the NTP Server

To synchronize the JCS 1200 platform with other servers on the network, you must configure a Network Time Protocol (NTP) server.

To configure an NTP server:

1. Log in to the JCS management module.
2. Use the **env** command to set JCS management module 1(mm[1]) as the configuration target. For example:

```
system> env -T mm[1]
```

3. Use the **ntp** command to configure an NTP server. For example:

```
system:mm[1]> ntp -i 172.17.28.5 -f 60 -en enabled
```

In this example, the IP address of the NTP server is 172.17.28.5, the JCS management module clock is updated by the NTP server every 60 minutes, and NTP is enabled.

Configuring the Time Zone

To configure the time zone on the JCS management module:

1. Log in to the JCS management module.
2. Use the **env** command to set JCS management module 1(mm[1]) as the configuration target. For example:

```
system> env -T mm[1]
```

3. Use the `clock` command to configure the time zone. For example:

```
system:mm[1]> clock -g -8 -dst uc
```

In this example, the clock is configured for 8 hours earlier than UTC (GMT) (`-g -8`), and daylight saving time for the USA and Canada (`-dst uc`) is set.

Configuring the System Name and Contact Information

JCS management module configuration should include the system name of the JCS 1200 platform (to identify the JCS 1200 platform on the network), the physical location of the JCS 1200 platform, and a contact person for the JCS 1200 platform. Typically, the contact is someone who has Supervisor access to the JCS 1200 platform.

To configure the system name, location, and contact information for the JCS management module:

1. Log in to the JCS management module.
2. Use the `env` command to set JCS management module 1 (`mm[1]`) as the configuration target. For example:

```
system> env -T mm[1]
```

3. Use the `config` command to configure the system name, location, and contact information for the JCS. For example:

```
system:mm[1]> config -name system5 -contact "George Chang  
email=chang@corp.net phone=x2368" -loc "Software Lab, Main Campus, Building  
12"
```

In this example, the system name is `system5`. This name identifies the JCS on the network, appears in monitoring command output, and so on. The contact information is for George Chang and the location is Software Lab.

Configuring the Routing Engine (Blade) Name

JCS configuration should include a name for each Routing Engine (blade) included with the JCS 1200 platform. This name is used to identify each Routing Engine in CLI command output and so on.

To configure the blade name information:

1. Log in to the JCS management module.
2. Use the `env` command to specify the blade you want to configure. For example:

```
system> env -T blade[1]
```

3. Use the **config** command to configure the blade name. For example:

```
system:blade[1]> config -name BLADE01
```

In this example, the blade name is **BLADE01**. This name identifies the JCS Routing Engine on the network, and it appears in monitoring command output.

- Related Topics**
- Configuring SSH Access
 - Configuring SNMP Traps
 - Configuring the JCS Switch Module
 - baydata
 - clear
 - clock
 - config
 - env
 - ifconfig (JCS Management Module)
 - ifconfig (JCS Switch Module)
 - ntp
 - users