

Controllers VCn Command Reference

This chapter describes the commands to configure the VCn controller.

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controller (vc)

To configure a VCn controller, use the **controller** command in the config mode. To delete a VCn controller, use the **no** form of this command.

controller vc*n R/S/I/P*

no controller vc*n R/S/I/P*

Syntax Description

vcn	Configures a VCn controller. The range of n is 4-16c, 4-64c.
R/S/I/P	Displays the Rack/Slot/Instance/Port of the controller.

Command Default

None

send: (2)

expected: (2)

receive: (2)

Command Modes

Config mode

Command History

Release	Modification
Release 5.2.4	This command was introduced.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operation
sonet-sdh	write

Example

This example shows how to access the interface instance of a vc4-64c controller on port10:

```
RP/0/RP0:hostname(config)# controller vc4-64c 0/0/0/10
```

overhead j1

To configure overhead value on a VCn controller, use the **overhead j1** command in the config mode. To delete the overhead value from a VCn controller, use the **no** form of this command.

overhead j1 {**send** | **expected**} [**16Bytes** | **64Bytes**] *value*

no overhead j1 {**send** | **expected**} [**16Bytes** | **64Bytes**] *value*

Syntax Description

send	Configures the transmitted trace identifier of the VCn controller.
expected	Configures the expected trace identifier of the VCn controller.
16 Bytes	Configures the 16 bytes path trace for the VCn controller.
64 Bytes	Configures the 64 bytes path trace for the VCn controller.
value	Enters the ASCII text for the VCn controller.

Command Default

2 stands 64 byte mode

Command Modes

Config mode

Command History

Release	Modification
Release 5.2.4	This command was introduced.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operation
sonet-sdh	write

Example

This example shows how to configure the overhead j1 value on the vc4-64c controller:

```
RP/0/RP0:hostname(config)# controller vc4-64c 0/0/0/10
RP/0/RP0:hostname(config-vc4-64c)# overhead j1 send 64Bytes abc
```

pm (vc)

To configure the pm parameters of an VCn controller, use the **pm** command in the config mode. To delete the pm parameters of an VCn controller, use the **no** form of this command.

pm [**15-min** | **24-hour**] {**vc**} [**report** *status* | **threshold** *value*]

no pm [**15-min** | **24-hour**] {**vc**} [**report** *status* | **threshold** *value*]

Syntax Description

15 min	Configures the 15 minute time interval for the PM parameters.
24-hour	Configures the 24 hour time interval for the PM parameters.
vc	Displays the name of the layer.
report	Configures the TCA reporting status of the controller.
reporting status	Configures the reporting status of the controller.
threshold	Configures threshold on the controller.
threshold value	Configures the threshold value on the controller.

Command Default

Enable

Command Modes

Config mode

Command History

Release	Modification
Release 5.2.4	This command was introduced.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operation
sonet-sdh	write

The following example shows how to specify the 15 min PM interval for the VC controller and set threshold value for the layer:

```
RP/0/RP0:hostname(config)# controller vc4-64c 0/0/0/10
RP/0/RP0:hostname(config-vc4-64c)# pm 15-min ho-vc threshold eb-p 20
```

show controllers

To display all the details of an VCn controller, use the **show controllers** command in the exec or config mode.

show controllers VC*n R/S/I/P*

Syntax Description

vcn	Displays the name of the VCn controller.
R/S/I/P	Displays the Rack/Slot/Instance/Port of the controller.

Command Modes

Exec mode

Command History

Release	Modification
Release 5.2.4	This command was introduced.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operation
sonet-sdh	read

Example

This example shows how to display the details of the vc4-16c controller:

```
RP/0/RP0:hostname # show controllers vc4-16c 0/0/0/8
```

```
PATH
  FEBE   = 6000       BIP(B3) = 6000
  NEWPTR = 0          PSE    = 0          NSE  = 0
Detected Alarms: AU-LOP AU-AIS HP-RDI HP-TIM HP-PLM HP-UNEQ

Mask for Detected->Asserted:AU-LOP AU-AIS HP-RDI HP-TIM HP-PLM HP-UNEQ

Detected Alerts:B3-TCA
Mask for Detected->Reported: None
Payload Scrambling: Disabled
C2 State: Unstable   C2_rx = 0x0 (0)   C2_tx = 0x0 (0) / Scrambling Derived
B3 = 10e-6
Overhead J1
Transmit             : (0)
Received             : (0)
Expected             : (16)
```



Note Run *do show controller vcn R/S/I/P* when command is executed in config mode.

threshold

To configure threshold for B3 bit error rate (BER) threshold crossing alert (TCA) on a VCn controller, use the **threshold** command in the config mode. To delete the threshold for B3 BER TCA from a VCn controller, use the **no** form of this command.

threshold [**b3-tca** *value*]

no threshold [**b3-tca** *value*]

Syntax Description

b3-tca	Configures B3 BER threshold for the TCA on the VCn controller.
value	Configures the BER value. The valid range of BER is from 3 to 9. The default value is 6.

Command Default

None

Command Modes

Config mode

Command History

Release	Modification
Release 5.2.4	This command was introduced.

Usage Guidelines

To use this command, you must be in a user group associated with a task group that includes appropriate task IDs. If the user group assignment is preventing you from using a command, contact your AAA administrator for assistance.

Task ID

Task ID	Operation
sonet-sdh	write

Example

This example shows how to configure the threshold for B3 BER TCA on the vc4-64c controller:

```
RP/0/RP0:hostname(config)# controller vc4-64c 0/0/0/10
RP/0/RP0:hostname(config-vc4-64c)# threshold b3-tca 7
```