



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 *vcn R/S/I/P*

no controller *vcn R/S/I/P*

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

Command Default	None
	send: (2)
	expected: (2)
	receive: (2)

Command Modes	Config mode
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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.
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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.
	<i>value</i>	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.
	<i>reporting status</i>	Configures the reporting status of the controller.
	threshold	Configures threshold on the controller.
	<i>threshold value</i>	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 VCn 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.
	<i>value</i>	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
```

threshold