

Controllers OCn Command Reference

This chapter describes the commands to configure the OCn controller.

- loopback, on page 2
- overhead j0, on page 3
- pm (oc), on page 4
- show controller (oc), on page 5
- threshold (oc), on page 7

loopback

To configure loopback on an OCn controller, use the **loopback** command in the config mode. To delete the loopback, use the **no** form of this command.

loopback [**internal** | **line**]
no loopback [**internal** | **line**]

Syntax Description

internal	Configures a terminal loopback on an OCn controller
line	Configures a line loopback on an OCn controller

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 loopback on the ocn port:

```
RP/0/RP0:hostname (config)# controller oc48 0/0/0/1
RP/0/RP0:hostname (config-oc48)# loopback internal
```

overhead j0

To configure overhead value on an OCn controller, use the **overhead j0** command in the config mode. To delete the overhead value from a OCn controller, use the **no** form of this command.

overhead j0 {**expected** | **send**} [**16Bytes** | **1Byte**] *string*

no overhead j0 {**expected** | **send**} [**16Bytes** | **1Byte**] *string*

Syntax Description

OCn	Name of the controller. Following are the valid value of n: • OC48 • OC192
expected	Configures the expected trace identifier of the OCn controller.
send	Configures the transmit trace identifier of the OCn controller.
16Bytes	Configures the 16 bytes path trace for the OCn controller.
1Byte	Configures the 1 byte path trace for the OCn controller.
string	Enters the ACSII text for the OCn controller.

Command Default

0 stands byte mode

BER thresholds : SF=10e-3 SD=10e-6

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 j0 value on the OC48 controller:

```
RP/0/RP0:hostname(config)# controller oc48 0/0/0/2
RP/0/RP0:hostname(config-oc48)# overhead j0 expected 1Byte 5
```

pm (oc)

To configure the pm parameters for OC controller, use the **pm ocn** command in the config mode. To delete the pm parameters, use the **no** form of this command.

pm [**15-min** | **24-hour**] { **ocn**} [**report** | **threshold**]

no pm [**15-min** | **24-hour**] { **ocn**} [**report** | **threshold**]

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.
ocn	Displays the name of the layer.
report	Configures TCA reporting status of the controller.
threshold	Configures threshold 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 OC controller and set threshold value for the layer:

```
RP/0/RP0:hostname(config)# controller ocn12 0/2/0/0
RP/0/RP0:hostname(config-ocn12)# pm 15-min ocn threshold cv-s 30
```

show controller (oc)

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

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

Syntax Description

ocn	Displays the name of the ocn 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 oc192 controller:

```
RP/0/RP0:hostname # show controllers oc192 0/11/0/0
```

```
Tue Mar 17 23:57:59.773 UTC

Port OC192 0/11/0/0:

Status:
Primary State: Down

Sec admin State: Normal

Derived State: In Service

Loopback: None

SECTION
  LOF = 1          LOS    = 1                            BIP(B1) = 0
Overhead
J0 Transmit:    (0)
J0 Receive:     (0)
J0 Expected:    (0)

LINE
```

```
  AIS = 0          RDI    = 0          FEBE = 0          BIP(B2) = 0

Last clearing of "show controllers SONET" counters never

Detected Alarms: SLOF
Masked Alarms: None
Detected Alerts: None
Masked Alerts: None

Framing: SONET
BER thresholds:  SF = 10e-3  SD = 10e-6
TCA thresholds:  B1 = 10e-6  B2 = 10e-6
  Clock source: internal (actual) line (configured)
```



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

threshold (oc)

To configure threshold for B1 BER threshold crossing alert (TCA) on an OCn controller, use the **threshold** command in the config mode. To delete the threshold for B1 BER TCA from an OCn controller, use the **no** form of this command.

threshold [**b1-tca** *value*]

no threshold [**b1-tca** | **b2-tca** | **sf-ber** | **sd-ber** *value*]

Syntax Description

b1-tca	Configures B1 BER threshold for the threshold crossing alert (tca) on the OCn controller. Name of the controller. Following are the valid value of n: • OC48 • OC192
value	Configures the bit error rate value. The valid range of bit error rate is from 3 to 9. The default value is 6.

Command Default

TCA thresholds : B1=10e-6 B2=10e-6

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 B1 BER TCA on the OC48 controller:

```
RP/0/RP0:hostname(config)# controller oc48 0/0/0/1
RP/0/RP0:hostname(config-oc48)# threshold b1-tca 7
```