

Controllers STMn Command Reference

This chapter describes the commands to configure the STMn controller.

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controller (stm)

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

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

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

Syntax Description

stmn	Configures an STMn controller. The range of n is 1, 4, 16, 64, 256.
R/S/I/P	Displays the Rack/Slot/Instance/Port of the controller.

Command Default

None

send : (0)

expected : (0)

receive : (0)

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 stm64 controller on port2:

```
RP/0/RP0:hostname(config)# controller stm64 0/0/0/2
```

overhead j0

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

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

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

Syntax Description

1Byte	Configures the 1 byte path trace for the STMn controller.
16Bytes	Configures the 16 bytes path trace for the STMn controller.
send	Configures the transmitted trace identifier of the STMn controller.
expected	Configures the expected trace identifier of the STMn controller.
value	Enters the ASCII text for the STMn controller.

Command Default

0 stand 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 stm64 controller:

```
RP/0/RP0:hostname(config)# controller stm64 0/0/0/2
RP/0/RP0:hostname(config-stm64)# overhead j0 length 1Byte expected 45
```

pm stm

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

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

no pm [**15-min** | **24-hour**] {**stm**} [**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.
stm	Displays the name of the layer.
report	Configures the TCA reporting status of the controller.
report 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 stm controller and set threshold value for the layer:

```
RP/0/RP0:hostname(config)# controller stm4 0/2/0/0
RP/0/RP0:hostname(config-stm4)# pm 15-min stm threshold eb-l-ne 30
```

show controllers (stm)

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

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

Syntax Description

stmn	Displays the name of the STMn 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 stm64 controller:

```
RP/0/RP0:hostname # show controllers stm64 0/2/0/10
```

```
Port STM640/2/0/10:

Status:
 Primary State: Down

Sec admin State: Normal

Derived State: In Service

Loopback: None

REGENERATOR SECTION
  LOF = 0          LOS    = 1                              RS-BIP  = 0
Overhead
J0 Transmit:    (2)
J0 Receive:     (2)
J0 Expected:    (2)

MULTIPLEX SECTION
  AIS = 0          RDI    = 0          FEBE = 0          MS-BIP  = 0

Last clearing of "show controllers SDH" counters never
```

```
Detected Alarms: LOS
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 stmn 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 STMn controller, use the **threshold** command in the config mode. To delete the threshold for B3 BER TCA from a STMn controller, use the **no** form of this command.

threshold {**b1-tca** | **b2-tca** | **sd-ber** | **sf-ber**} *value*

no threshold {**b1-tca** | **b2-tca** | **sd-ber** | **sf-ber**} *value*

Syntax Description

b1-tca	Configures the B1 BER threshold for the TCA on the STMn controller.
b2-tca	Configures the B2 BER threshold for the TCA on the STMn controller.
sd-ber	Configures the signal degrade BER threshold on the STMn controller.
sf-ber	Configures the signal fail BER threshold on the STMn controller.
value	Configures the BER value. The BER value ranges from 3 to 9 and default value is 6 for b1-tca and b2-tca. For sd-ber it ranges from 5 to 9 and default value is 6. BER value for sf-ber ranges from 3 to 5 and default value is 3.

Command Default

TCA threshold : 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 B3 BER TCA on the stm64 controller:

```
RP/0/RP0:hostname(config)# controller stm64 0/0/0/2
RP/0/RP0:hostname(config-stm64)# threshold b2-tca 7
```