



Enhanced cablelength CLI

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This feature provides a configuration option to fine-tune the E1 receiver sensitivity for Cisco AS5300, Cisco AS5350, and Cisco AS5400 platforms.

Finding Feature Information in This Module

Your Cisco IOS software release may not support all of the features documented in this module. To reach links to specific feature documentation in this module and to see a list of the releases in which each feature is supported, use the [“Feature Information for Enhanced cablelength CLI”](#) section on page 5.

Finding Support Information for Platforms and Cisco IOS and Catalyst OS Software Images

Use Cisco Feature Navigator to find information about platform support and Cisco IOS and Catalyst OS software image support. To access Cisco Feature Navigator, go to <http://www.cisco.com/go/cfn>. An account on Cisco.com is not required.

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How to Fine-Tune the Pulse of a Signal at the Receiver for an E1 Cable

This section contains the following procedure:

- [Configuring the cablelength \(E1 controller\) Command, page 2](#) (required)



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Configuring the cablelength (E1 controller) Command

To configure the **cablelength** (E1 controller) command, perform the following steps.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **controller e1 slot/port**
4. **cablelength { custom gain-value [squelch-on] | long [squelch-on] | medium [squelch-on] | short [squelch-on] }**

DETAILED STEPS

| | Command or Action | Purpose |
|--------|--|--|
| Step 1 | enable Example: Router> enable | Enables privileged EXEC mode. <ul style="list-style-type: none"> • Enter your password if prompted. |
| Step 2 | configure terminal Example: Router# configure terminal | Enters global configuration mode. |
| Step 3 | controller e1 slot/port Example: Router(config)# controller e1 0/0 | Configures an E1 controller and enters controller configuration mode. |
| Step 4 | cablelength { custom gain-value [squelch-on] long [squelch-on] medium [squelch-on] short [squelch-on] } Example: Router(config-controller)# cablelength long squelch-on | Fine-tunes the pulse of a signal at the receiver for an E1 cable on a Cisco AS5300 or Cisco AS5400. |

Configuration Examples for the cablelength (E1 controller) Command

This section provides the following configuration example:

- [Configuring the cablelength \(E1 controller\) Command: Example, page 3](#)

Configuring the cablelength (E1 controller) Command: Example

The following example shows how to configure the **cablelength** (E1 controller) command for use with an E1 cable to support a medium-haul application:

```
controller e1 0/0
cablelength medium
```

Additional References

The following sections provide references related to the enhanced **cablelength** (E1 controller) command.

Related Documents

| Related Topic | Document Title |
|--|--|
| Interface and hardware component commands | <i>Cisco IOS Interface and Hardware Component Command Reference</i> , Release 12.4 |
| Interface and hardware component configuration | <i>Cisco IOS Interface and Hardware Component Configuration Guide</i> , Release 12.4 |

MIBs

| MIB | MIBs Link |
|------|--|
| None | To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL: http://www.cisco.com/go/mibs |

Technical Assistance

| Description | Link |
|---|---|
| The Cisco Technical Support & Documentation website contains thousands of pages of searchable technical content, including links to products, technologies, solutions, technical tips, and tools. Registered Cisco.com users can log in from this page to access even more content. | http://www.cisco.com/techsupport |

Command Reference

This section documents the new **cablelength** (E1 controller) command.

cablelength (E1 controller)

To fine-tune the pulse of a signal at the receiver for an E1 cable on a Cisco AS5300, Cisco AS5350, or Cisco AS5400, use the **cablelength** command in controller configuration mode. To restore the default receiver sensitivity, use the **no** form of this command.

```
cablelength { custom gain-value [sqelch-on] | long [sqelch-on] | medium [sqelch-on] |
short [sqelch-on] }
```

```
no cablelength
```

Syntax Description

| | |
|-------------------|--|
| custom | Fine-tunes the receiver sensitivity for long-haul, medium-haul, and short-haul applications. |
| <i>gain-value</i> | Custom gain value for the receiver in the range of 0x1 to 0x3F. These settings are mapped to values in the range of 0 to -45 dB. |
| long | Fine-tunes the receiver sensitivity for long-haul applications. |
| medium | Fine-tunes the receiver sensitivity for medium-haul applications. |
| short | Fine-tunes the receiver sensitivity for short-haul applications. |
| sqelch-on | (Optional) Enables squelch to improve the signal-to-noise ratio. |

Command Default

Default receiver sensitivity for E1 cables is applied.

Command Modes

Controller configuration

Command History

| Release | Modification |
|----------|------------------------------|
| 12.3(17) | This command was introduced. |

Usage Guidelines

This command is supported on E1 controllers only.



Note

The cable line pulse gain values are not dependent upon the E1 line being configured in balanced (120-ohm) mode or unbalanced (75-ohm) mode.

Examples

The following example shows how to fine-tune the receiver sensitivity for an E1 cable on a Cisco AS5300 to support a long-haul configuration:

```
Router(config-controller)# cablelength long sqelch-on
```

Feature Information for Enhanced cablelength CLI

Table 1 lists the release history for this feature.

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Note

Table 1 lists only the Cisco IOS software release that introduced support for a given feature in a given Cisco IOS software release train. Unless noted otherwise, subsequent releases of that Cisco IOS software release train also support that feature.

Table 1 Feature Information for Enhanced cablelength CLI

| Feature Name | Releases | Feature Information |
|--------------------------|----------------------|---|
| Enhanced cablelength CLI | 12.3(17), 12.4(4) | This feature provides a configuration option to fine-tune the E1 receiver sensitivity for Cisco AS5300, Cisco AS5350, and Cisco AS5400 platforms. |

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