



Interfaces disabled due to detection of error

Teldat-Dm 794-I

Copyright© Version 11.02 Teldat SA

Legal Notice

Warranty

This publication is subject to change.

Teldat offers no warranty whatsoever for information contained in this manual.

Teldat is not liable for any direct, indirect, collateral, consequential or any other damage connected to the delivery, supply or use of this manual.

Table of Contents

Chapter 1	Introduction	1
1.1	Introduction	1
Chapter 2	Configuration	2
2.1	Accessing the configuration	2
2.2	Configuration Commands	2
2.2.1	? (HELP)	2
2.2.2	NO	2
2.2.3	RECOVERY	2
2.2.4	EXIT	3
Chapter 3	Monitoring.	4
3.1	Accessing the monitoring	4
3.2	Monitoring Commands	4
3.2.1	? (HELP)	4
3.2.2	SHOW ERR-DISABLED.	4
3.2.3	SHOW RECOVERY	4
3.2.4	EXIT	5

Chapter 1 Introduction

1.1 Introduction

Occasionally, an interface is disabled when an error is detected while a protocol is running. This is the case, for example, when the BPDU Guard feature is configured in a switch port and a BPDU frame is received.

The configuration of parameters related to the recovery of a link that has been disabled due to a protocol error is carried out from the **err-disable** feature.

Chapter 2 Configuration

2.1 Accessing the configuration

To access the configuration menu for the **err-disable** feature, use the **FEATURE ERR-DISABLE** command found at the global configuration menu.

Example:

```
*config
Config>feature err-disable
-- Error Disable user configuration --
errdisable config>
```

2.2 Configuration Commands

The following table summarizes the configuration commands available. These commands are further explained in the following sections.

Command	Function
? (HELP)	Displays the configuration commands or their options.
NO	Configures the parameters with their default values.
RECOVERY	Configures the error recovery parameters.
EXIT	Exits the configuration menu.

2.2.1 ? (HELP)

Displays the available commands and their options.

2.2.2 NO

Configures the parameters with their default values or deletes the configuration.

Syntax:

```
errdisable config>no ?
  recovery      Error disable recovery
errdisable config>
```

Example:

Disables the recovery of an interface disabled due to errors detected through the BPDU Guard mechanism.

```
errdisable config>no recovery cause bpdu-guard
```

2.2.3 RECOVERY

Configures parameters linked to the recovery of an interface disabled due to errors detected while a protocol is running.

Syntax:

```
errdisable config>recovery
  cause          Enable error disable recovery for application
  interval       Error disable recovery timer value
```

RECOVERY CAUSE

Configures the causes so that the automatic recovery of an interface can take place. If an interface is disabled due to an error being detected and the recovery associated to the error that caused this is enabled, the interface will recover after a specified interval has timed out through the RECOVERY INTERVAL command.

In cases where the recovery associated to the cause of the error is disabled, the interface will only recover if the user disables the interface and enables it again (**SHUTDOWN** and **NO SHUTDOWN** commands found on the interface

configuration menu).

Syntax:

```
errdisable config>recovery cause ?
  bpdu-guard          Enable timer to recover from BPDU Guard error disable
                      state
  bpdu-inconsistency  Enable timer to recover from BPDU inconsistency error
                      disable state
```

The error causes that can disable an interface are as follows:

- **BPDU Guard:** a BPDU frame is received in an interface that has the BPDU Guard feature enabled.
- **BPDU Inconsistency:** a BPDU Inconsistency frame is received. This happens when this is executing PVSTP (Per VLAN Spanning Tree Protocol) and a BPDU is received where there is no coincidence between the VLAN where the packet was classified on entry and the VLAN that is internally indicated in the BPDU.

Default value: automatic recovery is disabled for all potential error causes by default.

Example:

The automatic recovery of an interface happens when an inconsistency is detected in the PVSTP protocol.

```
errdisable config>recovery cause bpdu-inconsistency
```

RECOVERY INTERVAL

Configures the interval the interface must be disabled for before trying to proceed to automatic recovery. This interval only applies to causes that have been configured for the automatic recovery of the interface.

Syntax:

```
errdisable config>recovery interval <30s..86400s>
```

Default value: **the recovery interval is 300 seconds by default.**

Example:

Configuration for an automatic recovery interval of 60 seconds.

```
errdisable config>recovery interval 60
```

2.2.4 EXIT

Exits the configuration menu.

Syntax:

```
Errdisable config>exit
```

Chapter 3 Monitoring

3.1 Accessing the monitoring

To access the monitoring menu for the **err-disable** feature, use the **FEATURE ERR-DISABLE** command from the global monitoring menu.

Example:

```
*monitor
Console Operator
+feature err-disable
-- Error Disable user console --
errdisable+
```

3.2 Monitoring Commands

The following table summarizes all the monitoring commands available. These commands are further explained in the following sections.

Command	Function
? (HELP)	Displays the monitoring commands or their options.
SHOW	Displays diverse information.
EXIT	Exits the monitoring menu.

3.2.1 ? (HELP)

Displays the available commands and their options.

3.2.2 SHOW ERR-DISABLED

Displays the interfaces disabled due to an error being detected when a protocol is running.

Example:

```
errdisable+show err-disabled
```

Interface	Port	VID	Errdisable reason	Time left (sec)	Recovery
ethernet0/0	2	1	BPDU Guard	245	Enabled

The following information is displayed:

<i>Interface</i>	Interface disabled due to error detection.
<i>Port</i>	Port for the interface disabled due to error detection.
<i>VID</i>	VLAN identifier associated to the Spanning Tree instance.
<i>Errdisable reason</i>	Feature that has provoked the disabling of the interface.
<i>Time left</i>	Time left before attempting to recover the interface.
<i>Recovery</i>	Indicates if the automatic recovery is enabled or not.

Command history:

Release	Modification
11.01.09	The <i>Instance</i> parameter is no longer shown as of version 11.01.09.

3.2.3 SHOW RECOVERY

Displays the configuration for the recovery of interfaces disabled due to error detection when a protocol is running.

Example:

```
errdisable+show recovery
```

```

ErrDisable Reason      Timer Status
-----
BPDU Guard             Enabled
BPDU Inconsistency     Disabled

Timer interval: 300 seconds

Interfaces that will be enabled at the next timeout:

  Interface      Port  VID      Errdisable reason      Time left(sec)
-----
ethernet0/0      2     30       BPDU Guard              201

```

This displays the possible reasons that provoked an interface to disable and if the automatic recovery is enabled or not for each one of these reasons.

Additionally this displays the disabled interface that recovers automatically when the associated timer times out.

Command history:

Release	Modification
11.01.09	The <i>Instance</i> parameter is no longer shown as of version 11.01.09.

3.2.4 EXIT

Exits the monitoring menu.

Syntax:

```
errdisable+exit
```