



X.25 Annex G Session Status Change Reporting

This feature module describes the X.25 Annex G Session Status Change Reporting feature and includes the following sections:

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Feature Overview

The X.25 Annex G Session Status Change Reporting feature introduces the **logging event frame-relay x25** interface configuration command, which provides console or system log notification of X.25 Annex G session status changes when an X.25 Annex G session changes state. Before this feature was introduced, there was no notification.

This feature detects changes in X.25 Annex G session status using an X.25 Link Access Procedure, Balanced (LAPB) N2 counter. The LAPB N2 counter records the number of unsuccessful transmit attempts that are made before the link is declared down. If the N2 consecutive polled commands have not been answered, a notification is generated, indicating that the X.25 profile or context associated with the data-link connection identifier (DLCI) that is running across the failed link has gone down. A message is generated to the console or system log when the link goes down. A message is also generated to the console or system log when the link comes back up. The notification response time is contingent on the values assigned to the LAPB N2 counter and the LAPB the retransmission timer in milliseconds (T1) timer.

Benefits

For X.25 Annex G sessions, if Local Management Interface (LMI) keepalives are disabled, Frame Relay (FR) DLCI status changes can be detected using the **logging event frame-relay x25** interface configuration command

Restrictions

The following restrictions apply to the X.25 Annex G Session Status Change Reporting feature:

- Notification is displayed for the UP or DOWN event only if traffic is initiated when an X.25 Annex G session is active.
- The notification response time is contingent on the values assigned to the LAPB N2 counter and the LAPB T1 timer.
- The PVCs continue to be reported as UP unless the serial link directly connected to the router goes down.

Related Documents

- *Cisco IOS Wide-Area Networking Configuration Guide*, Release 12.2
- *Cisco IOS Wide-Area Networking Command Reference*, Release 12.2

Supported Platforms

- Cisco 1600 series
- Cisco 2500
- Cisco 2600
- Cisco 3640
- Cisco 3660
- Cisco 4000
- Cisco 4500
- Cisco 7000 series
- Cisco 7200 series
- Cisco 7500 series

Supported Standards, MIBs, and RFCs

Standards

No new or modified standards are supported by this feature.

MIBs

No new or modified MIBs are supported by this feature.

To obtain lists of supported MIBs by platform and Cisco IOS release, and to download MIB modules, go to the Cisco MIB website on Cisco.com at <http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml>.

RFCs

No new or modified RFCs are supported by this feature.

Prerequisites

The **logging event frame-relay x25** interface configuration command is available for all interfaces that have Frame Relay encapsulation.

Configuration Tasks

See the following sections for configuration tasks for the X.25 Annex G Session Status Change Reporting feature. Each task in the list is identified as either required or optional.

- Enabling X.25 Annex G Session Status Change Reporting (required)
- Verifying X.25 Annex G Session Status Change Reporting (optional)

Enabling X.25 Annex G Session Status Change Reporting

Command	Purpose
<code>Router(config-if)# logging event frame-relay x25</code>	Enables notification of X.25 Annex G session status changes to be displayed on a console or system log.

Verifying X.25 Annex G Session Status Change Reporting

Command	Purpose
<code>Router(config-if)# show run logging event frame-relay x25</code>	Shows whether the command is enabled.

Configuration Examples

This section provides the following configuration example:

X.25 Annex G Session Status Change Reporting Configuration Example

The following configuration example shows how to enable notification of X.25 Annex G session status changes to be displayed on a console or system log using the **logging event frame-relay x25** interface configuration command:

```
router(config-if)# logging event frame-relay x25
```

The following is an example of the Annex G session status change notifications:

```
%X25-5-UPDOWN: Interface <interface> - DLCI <dlci number> X.25 packet layer changed state to DOWN
```

```
%X25-5-UPDOWN: Interface <interface> - DLCI <dlci number> X25 packet layer changed state to UP
```

Command Reference

This section documents the new command that configures the X.25 Annex G Session Status Change Reporting feature:

- **logging event frame-relay x25**

logging event frame-relay x25

To enable notification of X.25 Annex G session status changes to be displayed on a console or system log, use the **logging event frame-relay x25** command in interface configuration mode. To disable notification, use the **no** form of this command.

logging event frame-relay x25

no logging event frame-relay x25

Syntax Description This command has no arguments or keywords.

Defaults Disabled.

Command Modes Interface configuration

Command History	Release	Modification
	12.2(2)T	This command was introduced.

Examples The following example shows how to enable notification of X.25 Annex G session status changes to be displayed on a console or system log using the **logging event frame-relay x25** interface configuration command:

```
router(config-if)# logging event frame-relay x25
```

The following is an example of the Annex G status change notifications:

```
%X25-5-UPDOWN: Interface <interface> - DLCI <dlci number> X.25 packet layer changed state
to DOWN
%X25-5-UPDOWN: Interface <interface> - DLCI <dlci number> X25 packet layer changed state
to UP
```

