

Dying Gasp Support on Ethernet or GigEthernet and SFP Port

- Overview, on page 1
- Dying Gasp Support, on page 1
- Dying Gasp Configuration Command, on page 1
- Configure Dying Gasp, on page 2
- Configuration Example for Dying Gasp, on page 2
- Verify Dying Gasp Packet Generation, on page 3

Overview

This chapter provides information about the Dying Gasp feature, which enables a router to send alerts to connected devices as it shuts down due to a power failure.

Dying Gasp Support

Dying Gasp is a signal or an alert generated when the router is about to shut down due to a power failure. The router sends dying gasp alerts to connected devices as packets through configured Fast Ethernet and Gigabit Ethernet ports. You can configure dying gasp packets for SNMP, Syslog, or Ethernet OAM protocols by specifying the primary and secondary destination protocols.

Note The router creates dying gasp packets based on the selected destination protocol.

Dying Gasp Configuration Command

To enable dying gasp notification through Syslog, SNMP, or Ethernet OAM, use the dying gasp command:

Table 1: Dying Gasp Configuration Command

Command	Description
dying-gasp primary {syslog | snmp-trap | ethernet-oam} secondary {syslog | snmp-trap | ethernet-oam} dying-gasp	• primary—Dying Gasp primary notification • secondary—Dying Gasp secondary notification • ethernet-oam—Enable Ethernet OAM notification • snmp-trap—Enable trap notification sent to SNMP server • syslog—Enable system logger

Configure Dying Gasp

Procedure

Step 1 Enter the privileged EXEC mode.

```
router# enable
```

Step 2 Enter the configuration mode.

```
router# configure terminal
```

Step 3 Enable dying gasp notification through Syslog or SNMP or Ethernet OAM.

```
router(config)# dying-gasp primary {ethernet-oam|snmp-trap|syslog} secondary
{ethernet-oam|snmp-trap|syslog}
```

Example:

```
router(config)# dying-gasp primary ethernet-oam secondary snmp-trap
```

Step 4 Exit the global configuration mode and return to privileged EXEC mode.

```
router(config)# exit
```

Configuration Example for Dying Gasp

The example shows how to configure Ethernet OAM as primary destination and SNMP as secondary destination:

```
Router> enable
Router# configure terminal
Router# (config)#int gi0/0/0
Router(config-if)# ethernet-oam
Router(config-if)# exit
Router(config)# int fa0/0/2
Router(config-if)# ethernet-oam
Router(config-if)# exit
```

```
Router(config)# snmp-server host 192.168.10.20 ver 2c xyz
Router(config)# dying-gasp primary ethernet-oam secondary snmp-trap
```

Verify Dying Gasp Packet Generation

Use the **show** command as given in the example to verify primary and secondary destination protocols.

```
Router#show dying-gasp status
Dying Gasp Configuration
Ethernet OAM Enabled
SNMP Trap Enabled
Syslog Disabled
```

Use the **show** command as given in the example to verify the dying gasp packets.

```
Router# show dying-gasp packets
SNMP Trap packet for server 192.168.10.20,
link type IP interface, via GigabitEthernet0/0/0,
local IP address 192.168.10.30 encap type is ARPA,
local hardware address 90eb.5027.7800 next hop IP address 192.168.10.20,
next hop hardware address 90eb.5027.de80
Ethernet OAM packet for interface GigabitEthernet0/0/0,
link type LINK_ETHER_OAM encap type is ARPA,
local hardware address 90eb.5027.7800 remote hardware address 0180.c200.0002 Ethernet OAM
packet for interface FastEthernet0/0/2,
link type LINK_ETHER_OAM encap type is ARPA,
local hardware address 90eb.5027.7802 remote hardware address 0180.c200.0002
Ethernet OAM packet for interface FastEthernet0/0/2,
link type LINK_ETHER_OAM encap type is ARPA,
local hardware address 90eb.5027.7802 remote hardware address 0180.c200.0002
```