

# **Configuring Dying Gasp**

This document describes the Dying Gasp feature which is used to send dying gasp messsages through SNMP, syslog, or Ethernet Operation, Administration, and Maintenance (OAM) to report the abrupt loss of power to the host platform.

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## **Restrictions for Configuring Dying Gasp**

- This feature is only supported on standalone switches with Gigabit Ethernet downlink ports.
- Ethernet Operation, Administration, and Maintenance (OAM) is not supported on Catalyst 1000 Series Switches.

## **Information About Configuring Dying Gasp**

The following section provide information about dying gasp.

### **Dying Gasp Overview**

Dying Gasp is a signal/alert generated when the device is about to go down due to a reset or power failure. The system holds enough residual power to send out dying gasp messages after a power failure, notifying the administrator or user. The networking devices rely on a temporary back-up power supply on a capacitor, that allows for a graceful shutdown and the generation of the dying gasp messages. This temporary power supply is designed to last from 10 to 20 milliseconds to perform these tasks.

Dying gasp packets are created when you configure the host by using the **dying-gasp** configuration command. The **show dying-gasp packets** command displays the detailed information about the created packets.

The SNMP server for the SNMP dying gasp message is specified through the **snmp-server host** command. The syslog server sending the syslog dying gasp message is specified using the **logging host** *hostname/ipv6address* **transport udp** command.

Dying gasp packets can be sent to a maximum number of 5 servers for each notification type.

## How to Configure Dying Gasp

The following section provide information on how to configure dying gasp.

### **Configuring Dying Gasp**

To enable dying gasp notifications, perform this procedure.

#### Procedure

	Command or Action	Purpose
Step 1	enable	Enables privileged EXEC mode.
	Example:	Enter your password if prompted.
	Device> <b>enable</b>	
Step 2	configure terminal	Enters global configuration mode.
	Example:	
	Device# configure terminal	
Step 3	<pre>dying-gasp primary {ethernet-oam   snmp-trap   syslog} secondary {ethernet-oam   snmp-trap   syslog} Example: Device (config) # dying-gasp primary syslog secondary snmp-trap</pre>	<ul> <li>Enables dying gasp primary notifications.</li> <li>ethernet-oam: Enables Ethernet-OAM notifications.</li> <li>Note This keyword is not supported on Catalyst 1000 Series Switches.</li> <li>snmp-trap: Enables trap notifications sent to SNMP server.</li> <li>syslog: Enables system logger.</li> <li>secondary: Enables dying gasp secondary notifications.</li> </ul>
Step 4	exit Example:	Exits global configuration mode and returns to privileged EXEC mode.
	Example.	

	Command or Action	Purpose
	Device(config)# <b>exit</b>	
Step 5	show dying-gasp status Example:	(Optional) Displays the dying gasp configuration.
	Device# show dying-gasp status	

## **Configuration Examples for Dying Gasp**

The following section provide examples on how to configure dying gasp.

### **Example: Configuring Dying Gasp**

The following example shows how to configure SNMP traps as primary notification and syslog as secondary notification:

```
Device> enable
Device# configure terminal
Device(config)# dying-gasp primary snmp-traps secondary syslog
```

The following is a sample output of the **show dying-gasp status** command:

Device# show dying-gasp status

Dying Gasp Configuration SNMP Trap Enabled Syslog Enabled Ethernet OAM Disabled

The following is a sample output of the **show dying-gasp packets snmp-trap** command:

Device# show dying-gasp packets snmp-trap

SNMP Trap packet for server 10.1.1.2, link type IP Interface, via GigabitEthernet1/0/0, local IP address 10.2.2.9 Encap type is ARPA, local hardware address 0022.bdd4.2f48 Next hop IP address 10.2.2.8, next hop hardware address 0000.0c07.ac09 SNMP Trap packet for server 10.1.1.4, link type IP Interface, via GigabitEthernet1/0/1, local IP address 10.2.2.7 Encap type is ARPA, local hardware address 0012.001a.2f08 Next hop IP address 10.2.2.8, next hop hardware address 0cd0.0c02.ac10

# **Additional References for Dying Gasp**

#### **Related Documents**

Related Topic	Document Title
For complete syntax and usage information for	Consolidated Platform Command Reference, Cisco IOS
the commands used in this chapter.	Release 15.2(7)Ex (Catalyst 1000 Switches)
the commands used in this chapter.	Release 15.2(7)Ex (Catalyst 1000 Switches)

# **Feature History for Dying Gasp**

This table provides release and related information for features explained in this module.

These features are available on all releases subsequent to the one they were introduced in, unless noted otherwise.

Release	Feature	Feature Information
Cisco IOS Release 15.2(7)E2	Dying Gasp	Dying Gasp is a signal/alert generated when the device is about to go down due to a reset or power failure.

Use Cisco Feature Navigator to find information about platform and software image support. To access Cisco Feature Navigator, go to http://www.cisco.com/go/cfn.