

# Dying Gasp


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# Dying Gasp

The dying gasp feature provides a warning when the power to a network device fails, enabling a temporary power supply. When the host network detects a complete power failure or the removal of a power supply cable, it sends a messsage or signal to the network management system (NMS) through an SNMP trap.

Network devices rely on a temporary backup power supply on a capacitor, which allows for a graceful shutdown and the generation of the dying-gasp message. This temporary power supply is designed to last from 5 to 10 milliseconds to perform these tasks.

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

You configure dying gasp using the following CLI commands:

- **dying-gasp**: Configures the host to create and send dying-gasp packets.
- **show dying-gasp packets**: Displays detailed information about the created packets.
- **snmp-server host**: Specifies the SNMP server for the dying-gasp message.
- **logging host hostname-or-ipaddress transport udp**: Specifies the syslog server sending the syslog dying gasp message.

For further information about dying gasp configuration commands, see the remaining sections of this chapter.

# Configuring Dying Gasp

## dying-gasp

To enable dying-gasp notification through syslog, SNMP trap, or Ethernet OAM, use the dying-gasp command:

| Command Syntax | Description |
|---|---|
| **dying-gasp primary {syslog \| snmp-trap \| ethernet-oam} secondary {syslog \| snmp-trap \| ethernet-oam}** | • **dying-gasp**: Dying-gasp configuration command<br>• **primary**: Dying-gasp primary notification<br>• **secondary**: Dying-gasp secondary notification<br>• **ethernet-oam**: Enable Ethernet-OAM notification command<br>• **snmp-trap**: Send trap notification to SNMP server command<br>• **syslog**: Enable system logger |

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

```
switch(config)# dying-gasp primary snmp-trap secondary syslog
```

# show dying-gasp

This section provides descriptions of the **show dying-gasp** command keywords:

| Command Syntax | Description |
|---|---|
| **show dying-gasp {status \| packets [snmp-trap \| syslog \| ethernet-oam]}** | • **dying-gasp**: Dying-Gasp information<br>• **status**: Dying-Gasp configuration status<br>• **packets**: Detailed information about the created packets<br>• **snmp-trap**: Dying-gasp SNMP trap information<br>• **syslog**: Dying-gasp syslog message information<br>• **ethernet-oam**: Dying-gasp Ethernet OAM message information |

### show dying-gasp Output Examples

The following text is an example of the **dying gasp packets** command and its output:

```
Switch# show dying-gasp packets
SNMP Trap packet for server 192.168.0.2, link type IP
  interface, via GigabitEthernet1/1, local IP address 12.1.1.40
  encap type is ARPA, local hardware address 6c03.09e7.23c0
  next hop IP address 12.1.1.200, next hop hardware address 6c03.09e7.23c0
Syslog errmsg packet for server 192.168.0.2, link type IP
  interface, via GigabitEthernet1/1, local IP address 12.1.1.40
  encap type is ARPA, local hardware address 6c03.09e7.23c0
  next hop IP address 12.1.1.200, next hop hardware address 6c03.09e7.23c0
```

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

```
Switch# show dying-gasp status
Dying Gasp Configuration
        SNMP Trap             Enabled (secondary)
        Syslog                Enabled (primary)
```

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

```
Switch# show dying-gasp packets snmp-trap
SNMP Trap packet for server 192.168.0.2, link type IP
  interface, via GigabitEthernet1/1, local IP address 12.1.1.40
  encap type is ARPA, local hardware address 6c03.09e7.23c0
  next hop IP address 12.1.1.200, next hop hardware address 6c03.09e7.23c0
```

The following is sample output for the **show dying-gasp packets syslog** command:

```
Switch# show dying-gasp packets syslog
Syslog errmsg packet for server 192.168.0.2, link type IP
  interface, via GigabitEthernet1/1, local IP address 12.1.1.40
  encap type is ARPA, local hardware address 6c03.09e7.23c0
  next hop IP address 12.1.1.200, next hop hardware address 6c03.09e7.23c0
```