

PoE+ Series Switches PDP Configuration Guide

Models: S3150-8T2FP
S3260-8T2FP
S3260-16T4FP
S3400-24T4FP
S3400-48T4SP

Contents

1. PDP Overview.....	1
1.1 Overview.....	1
1.2 PDP Configuration Task.....	1
1.2.1 Default PDP Configuration.....	1
1.2.2 Setting the PDP Clock and Information Storage.....	1
1.2.3 Setting the PDP Version.....	1
1.2.4 Starting PDP on a Switch.....	1
1.2.5 Starting PDP on a Port.....	2
1.2.6 PDP Monitoring and Management.....	2
1.3 PDP Configuration Example.....	2

1. PDP Overview

1.1 Overview

PDP is specially used to discover network equipment, that is, it is used to find all neighbors of a known device. Through PDP, the network management program can use SNMP to query neighboring devices to acquire network topology.

Our company's switches can discover the neighboring devices but they do not accept SNMP queries. Therefore, switches only run at the edge of network, or they cannot acquire a complete network topology.

PDP can be set on all SNAPs (e.g. Ethernet).

1.2 PDP Configuration Task

- Default PDP Configuration
- Setting the PDP Clock and Information Storage
- Setting the PDP Version
- Starting PDP on a Switch
- Starting PDP on a Port
- PDP Monitoring and Management

1.2.1 Default PDP Configuration

Purpose	Default Settings
Global configuration mode	This function is not enabled by default.
Interface configuration mode	Enable
PDP clock (packet transmission frequency)	60 seconds
PDP information storage	180 seconds
PDP version	2

1.2.2 Setting the PDP Clock and Information Storage

Setting the PDP Clock and Information Storage

Command	Purpose
pdp timer seconds	Sets the transmission frequency of the PDP packets.
pdp holdtime seconds	Sets the PDP information storage time.

1.2.3 Setting the PDP Version

To set the PDP version, you can run the following command in global configuration mode.

Command	Purpose
pdp version {1 2}	Setts the PDP version.

1.2.4 Starting PDP on a Switch

To enable PDP, you can run the following commands in global configuration mode.

Command	Purpose
pdp run	Starts PDP on a switch.

1.2.5 Starting PDP on a Port

To enable PDP on a port by default, you can run the following command in port configuration mode.

Command	Purpose
pdp run	Starts PDP on a switch.

1.2.6 PDP Monitoring and Management

To monitor the PDP, run the following commands in EXEC mode:

Command	Purpose
show pdp traffic	Displays the counts of received and transmitted PDP packets.
show pdp neighbor [detail]	Displays neighbors that PDP discovers.

1.3 PDP Configuration Example

Example 1: Starting PDP

```
Switch_config# pdp run
Switch_config# int g0/1
Switch_config_g0/1#pdp enable
```

Example 2: Setting the PDP clock and information storage

```
Switch_config#pdp timer 30
Switch_config#pdp holdtime 90
```

Example 3: Setting the PDP version

```
Switch_config#pdp version 1
```

Example 4: Monitoring PDP

```
Switch_config#show pdp neighbor
Capability Codes: R - Router, T - Trans Bridge, B - Source Route Bridge
                  S - Switch, H - Host, I - IGMP, r - Repeater
```

Device-ID	Local-Intf	Hldtme	Port-ID	Platform	Capability
Switch	Gig0/1	169	Gig0/1	COM, RISC	RS