# PDP Configuration

# Table of Contents

# Chapter 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 Tasks

- 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 enable | Starts PDP on a port of 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 | R S |