PDP Configuration

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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

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1.2.1 Default PDP Configuration

Function	Default Settings
Global configuration mode	This function is not enabled by default.
Interface configuration mode	Starts up.
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

To set the PDP packet transmission frequency and the PDP information storage time, you can run the following commands in global configuration mode.

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 f0/1
Switch_config_f0/1#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	Fas0/1	169	Gig0/1	COMPANY, RISC	R S