VRF-Aware VPDN Tunnels

The VRF-Aware VPDN Tunnels feature provides support for virtual private dialup network (VPDN) tunnels that terminate on a Virtual Private Network (VPN) routing and forwarding (VRF) instance. This feature allowing you to use IP addresses from a VRF routing table for the endpoints of a VPDN tunnel, rather than specifying IP addresses from the global routing table.

The VRF-Aware VPDN tunnels feature enhances the support of VPDN tunnels by allowing VPDN tunnels to start outside a Multiprotocol Label Switching (MPLS) VPN and terminate within the MPLS VPN. For example, this feature allows you to use a VRF address from a customer VRF as the destination address.

Configuration Information

Configuration information is included in the "Configuring Additional VPDN Features" module of the *Cisco IOS VPDN Configuration Guide*, Release 12.4T, at the following URL:

- http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124tcg/tvpdn_c/vpc6adht.htm

Command Reference

This section documents modified commands.

- **vpn**

vpn

To specify that the source and destination IP addresses of a given virtual private dialup network (VPDN) group belong to a specified Virtual Private Network (VPN) routing and forwarding (VRF) instance, use the **vpn** command in VPDN group or VPDN template configuration mode. To disassociate all IP addresses in a VPDN group from a VRF, use the **no** form of this command.

vpn {**vrf** *vrf-name* | **id** *vpn-id*}

no vpn

Syntax Description

vrf *vrf-name*	Name of the VRF instance to be associated with the IP addresses of the VPDN group.
id *vpn-id*	VPN ID of the VRF to be associated with the IP addresses of the VPDN group.

Command Default

VPDN groups are not associated with a VRF.

Command Modes

VPDN group configuration
VPDN template configuration

Command History

Release	Modification
12.2(15)T	This command was introduced.
12.3(7)XI7	This command was integrated into Cisco IOS Release 12.3(7)XI7 and implemented on the Cisco 10000 series routers.
12.2(28)SB	This command was integrated into Cisco IOS Release 12.2(28)SB.
12.2(31)SB2	Support was added for the Cisco 10000 Series Router PRE3.

Usage Guidelines

Use the **vpn** command to configure the Cisco IOS software to look up a VPDN source or destination IP address in a specific VPN routing table instead of the global routing table.

Before you can issue the **vpn** command, a VRF instance must be created using the **ip vrf** command.

The **vpn** command can be used with both dial-in and dial-out VPDN scenarios.

Examples

The following example associates the IP addresses configured in the VPDN group named group1 with the VRF named vrf-second:

```
vpdn-group group1
 request-dialin
 protocol l2tp
!
 vpn vrf vrf-second
 source-ip 172.16.1.9
 initiate-to ip 172.16.1.1
```

The following example associates the IP addresses configured in the VPDN group named group2 with the VPN ID 11:2222:

```
vpdn-group group2
 request-dialin
 protocol l2tp
!
 vpn id 11:2222
 source-ip 172.16.1.9
 initiate-to ip 172.16.1.1
```

Related Commands

Command	Description
ip vrf	Configures a VRF routing table.
show ip route	Displays all static IP routes, or those installed using the AAA route download function.
show vpdn session	Displays session information about active Layer 2 sessions for a VPDN.
show vpdn tunnel	Displays information about active Layer 2 tunnels for a VPDN.
vpdn-group	Creates a VPDN group and enters VPDN group configuration mode.
vpdn-template	Creates a VPDN template and enters VPDN template configuration mode.