

# **BGP VPLS Auto Discovery Support on Route Reflector**

BGP Route Reflector was enhanced to be able to reflect BGP VPLS prefixes without having VPLS explicitly configured on the route reflector.

- Finding Feature Information, on page 1
- Information About BGP VPLS Auto Discovery Support on Route Reflector, on page 1
- Configuration Example for BGP VPLS Auto Discovery Support on Route Reflector, on page 2
- Additional References, on page 2
- Feature Information for BGP VPLS Auto Discovery Support on Route Reflector, on page 3

### Finding Feature Information

Your software release may not support all the features documented in this module. For the latest caveats and feature information, see Bug Search Tool and the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the feature information table at the end of this module.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to <a href="https://www.cisco.com/go/cfn">www.cisco.com/go/cfn</a>. An account on Cisco.com is not required.

## Information About BGP VPLS Auto Discovery Support on Route Reflector

### **BGP VPLS Autodiscovery Support on Route Reflector**

In Cisco IOS Release 12.2(33)SRE, BGP VPLS Autodiscovery Support on Route Reflector was introduced. On the Cisco 7600 and Cisco 7200 series routers, BGP Route Reflector was enhanced to be able to reflect BGP VPLS prefixes without having VPLS explicitly configured on the route reflector. The route reflector reflects the VPLS prefixes to other provider edge (PE) routers so that the PEs do not need to have a full mesh of BGP sessions. The network administrator configures only the BGP VPLS address family on the route reflector

For an example of a route reflector configuration that can reflect VPLS prefixes, see the "Example: BGP VPLS Autodiscovery Support on Route Reflector" section. For more information about VPLS Autodiscovery, see the "VPLS Autodiscovery BGP Based" module in the MPLS Layer 2 VPNs Configuration Guide.

### **Restrictions for BGP VPLS Auto Discovery Support on Route Reflector**

 VPLS BGP Auto Discovery with BGP Signaling in inter-AS Option C is not supported in IOS XE for route reflector.

## Configuration Example for BGP VPLS Auto Discovery Support on Route Reflector

### **Example: BGP VPLS Autodiscovery Support on Route Reflector**

In the following example, a host named PE-RR (indicating Provider Edge Route Reflector) is configured as a route reflector capable of reflecting VPLS prefixes. The VPLS address family is configured by **address-family 12vpn vpls** command.

```
hostname PE-RR
router bgp 1
bgp router-id 1.1.1.3
no bop default route-target filter
bgp log-neighbor-changes
neighbor iBGP_PEERS peer-group
neighbor iBGP_PEERS remote-as 1
neighbor iBGP_PEERS update-source Loopback1
neighbor 1.1.1.1 peer-group iBGP PEERS
neighbor 1.1.1.2 peer-group iBGP PEERS
address-family 12vpn vpls
  neighbor iBGP PEERS send-community extended
  neighbor iBGP PEERS route-reflector-client
 neighbor 1.1.1.1 peer-group iBGP_PEERS
 neighbor 1.1.1.2 peer-group iBGP PEERS
exit-address-family
```

## **Additional References**

#### **Related Documents**

Related Topic	Document Title	
Cisco IOS commands	Cisco IOS Master Command List, All Releases	
BGP commands	Cisco IOS IP Routing: BGP Command Reference	

#### Standards and RFCs

Standard/RFC	Title
RFC 2918	Route Refresh Capability for BGP-4

#### **Technical Assistance**

Description	Link
The Cisco Support and Documentation website provides online resources to download documentation, software, and tools. Use these resources to install and configure the software and to troubleshoot and resolve technical issues with Cisco products and technologies. Access to most tools on the Cisco Support and Documentation website requires a Cisco.com user ID and password.	

# Feature Information for BGP VPLS Auto Discovery Support on Route Reflector

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to <a href="http://www.cisco.com/go/cfn">http://www.cisco.com/go/cfn</a>. An account on Cisco.com is not required.

Table 1: Feature Information for BGP VPLS Auto Discovery Support on Route Reflector

Feature Name	Releases	Feature Information
BGP VPLS Auto Discovery Support on Route Reflector	12.2(33)SRE Cisco IOS XE Release 2.5	BGP Route Reflector was enhanced to be able to reflect BGP VPLS prefixes without having VPLS explicitly configured on the route reflector.  This feature was introduced on the Cisco 7600 and Cisco 7200 series routers.

Feature Information for BGP VPLS Auto Discovery Support on Route Reflector