

Lab 8 – MVPN

MVPN

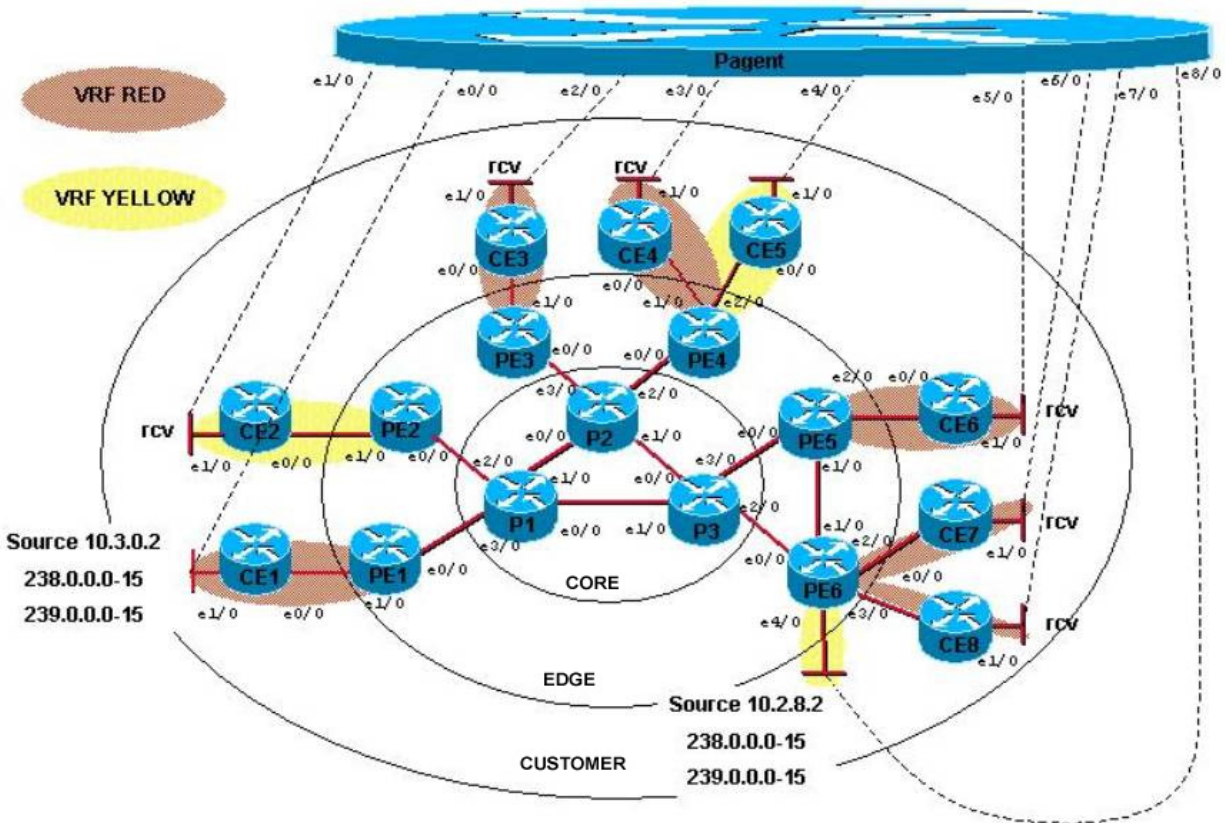


Figure 1 - MVPN Lab Configuration

1. Lab Objectives

Demonstrate how to configure and validate IP Multicast and MVPN configurations.

2. Configuration Issues

The lab is preconfigured for MPLS/VPN (MPLS, BGP, ..) and (only) the IP Multicast and MVPN configuration has to be added and validated as part of the training exercise.

3. Exercises

3.1 VPN Red Configuration

1. Configure VPN RED for PIM SM, using Auto-RP

The following conditions apply to VPN Red

- Two sources are behind CE1
- 1 source sending low-rate traffic to 16 groups
- 1 source sending high-rate traffic to 16 groups
- All CE routers have receivers for those groups
- Configure PE1 such, that data-mdt's are used for the high-rate sources
- CE2/ CE4 are RPs

3.2 VPN Yellow Configuration

1. Configure VPN Yellow for PIM SM, using BSR

The following conditions apply to VPN Red

- Two sources are behind PE6
- 1 source sending low-rate traffic to 16 groups
- 1 source sending high-rate traffic to 16 groups
- Only CE2 has receivers for those groups
- Configure PE6 such, that data-mdt's are used for the high-rate sources
- Verify that PE4 does not receive the high-rate sources
- CE2/ CE4 are RPs

3.3 Core Configuration

1. Configure the core three times, using:

- PIM-SSM for both default and data-mdt
- PIM-BIDIR for default-mdt
- PIM-SM for default and data-mdt.