

VPN Service Configuration

Essentials: Customer, Service, SAP, SDP

Agenda

- SBA: Date for **Lab Exam: Sat April 14**
 - groups to be assigned and posted to Blackboard by Mar 30
- Term Test #2: **Wed March 14 @ 4pm, room T302**
 - covers all lecture & lab material up to and including Wed Mar 7
 - skip Module 5 slides 93-140 (details of Bandwidth constraints)
- Review: Service basics
- Complete SA Module 1: (slides 49-85); NRS-II Ch 17
- Coming next: Module 3 – VPLS, sections 1-2 (slides 1-34)

Assignments and Lab work

- Read: SA Module 1 by Mon Mar 5
- Read NRS-II book: Chapter 17 by Mon Mar 5
- Lab 7: IPv6 over MPLS (NRS-II Lab 13.4)
- Lab 7 post-lab: due by 11:59pm Thu/Sat for Fri/Mon lab sections.
- Lab #8: SA Lab 2: basic Epipe / VPWS service

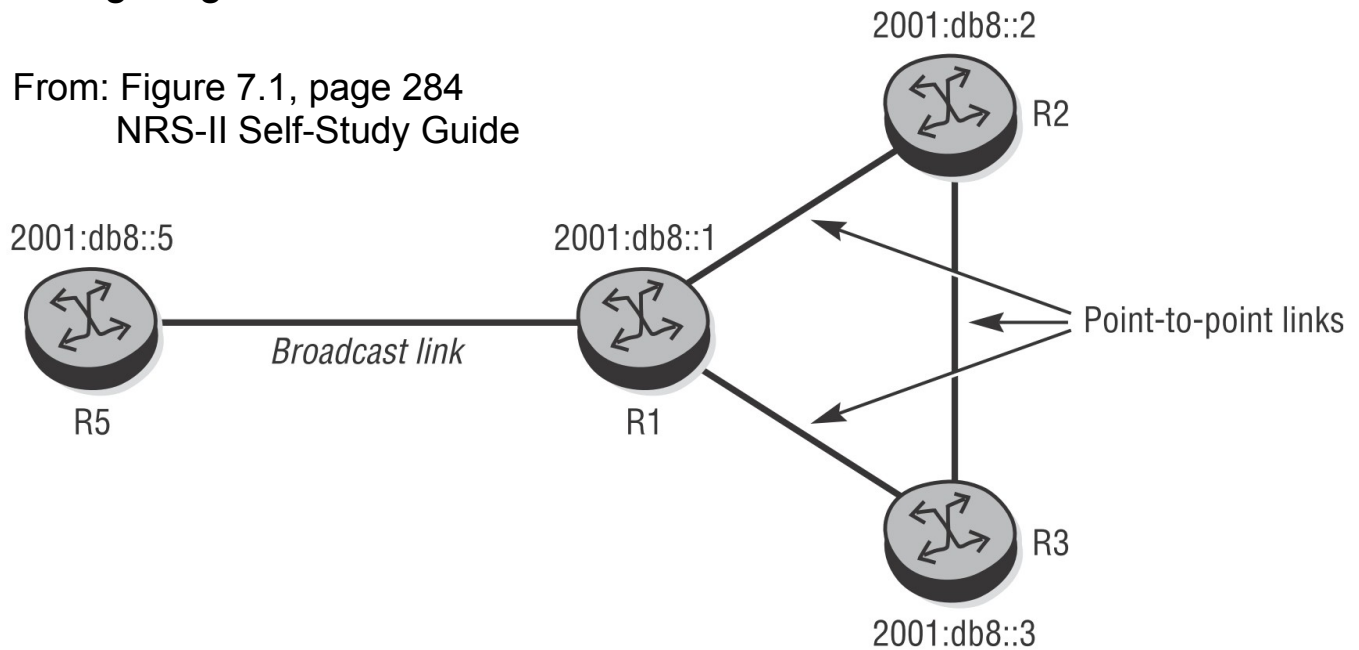
MPLS VPN Service Configuration

Be sure to notice the characteristics:

- All VPN services have at least two (2) SAPs (somewhere); x-pipes always have exactly two; VPLS and VPRN often have more than 2.
- Ports must first be configured in access mode with an encapsulation type (possibly left at the default *null* encapsulation)
- SAP definition requires both a port number as well as a Qtag value (though the value is implicitly *null* for *null* encapsulation).
- Local services only exist (i.e. configured) on a single router; the service only connects to SAPs
- Distributed services exist (i.e. configured) on two or more routers; the service connects to at least one SAP and at least one SDP per router.

Configuring IPv6 on Nokia SR OS

From: Figure 7.1, page 284
NRS-II Self-Study Guide



Listing 7.1 Configuring the IPv6 interfaces on R1

```
*A:R1# configure router
*A:R1>config>router# info
#-----
echo "IP Configuration"
#-----

    interface "system"
        ipv6
        address 2001:DB8::1/128
    exit
exit
interface "toR2"
    port 1/1/1
    ipv6
    exit
exit
interface "toR3"
    port 1/1/4
    ipv6
    exit
exit
interface "toR5"
    port 1/1/3
    ipv6
    exit
exit
```