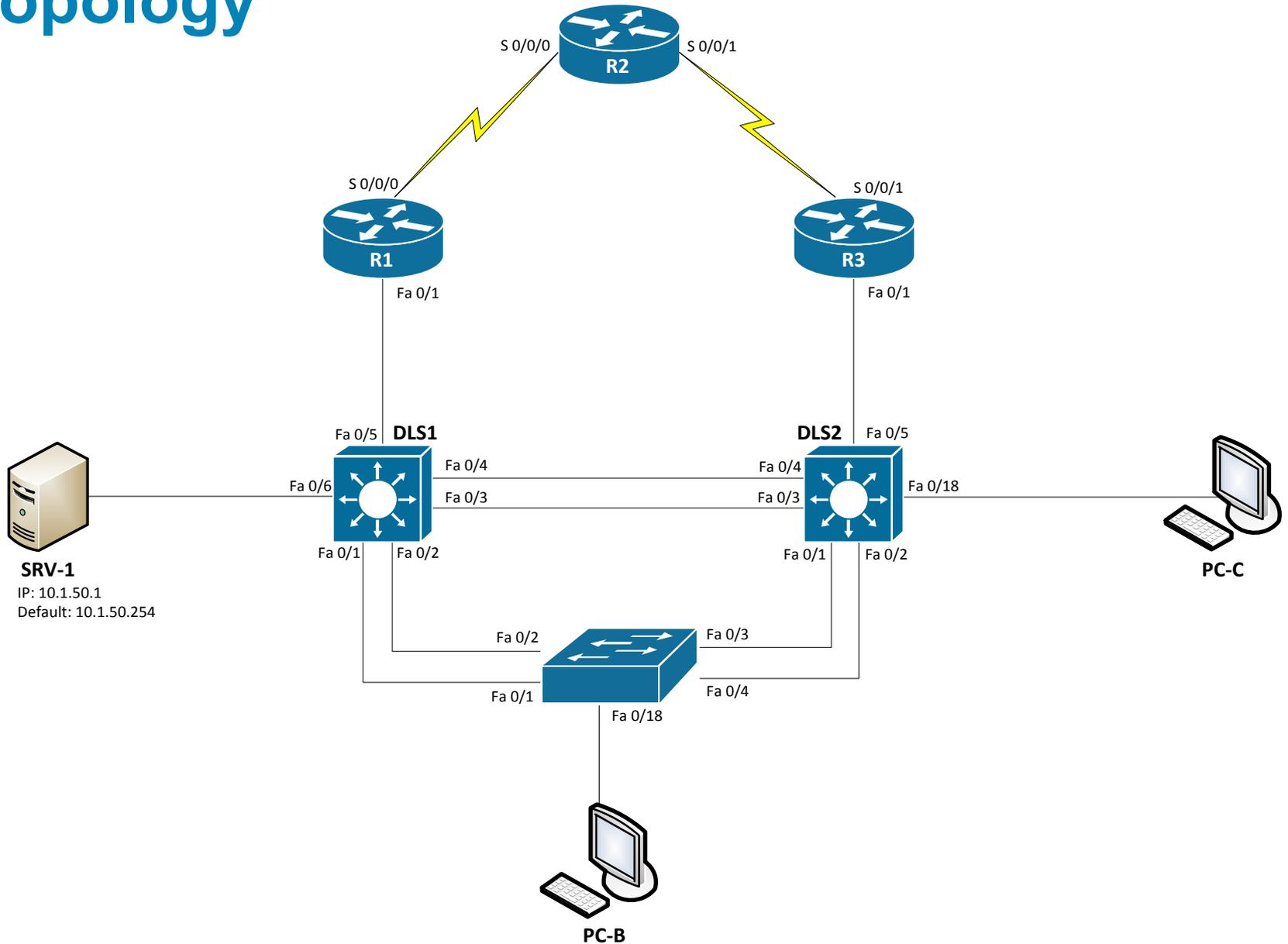




LAB: Module 6

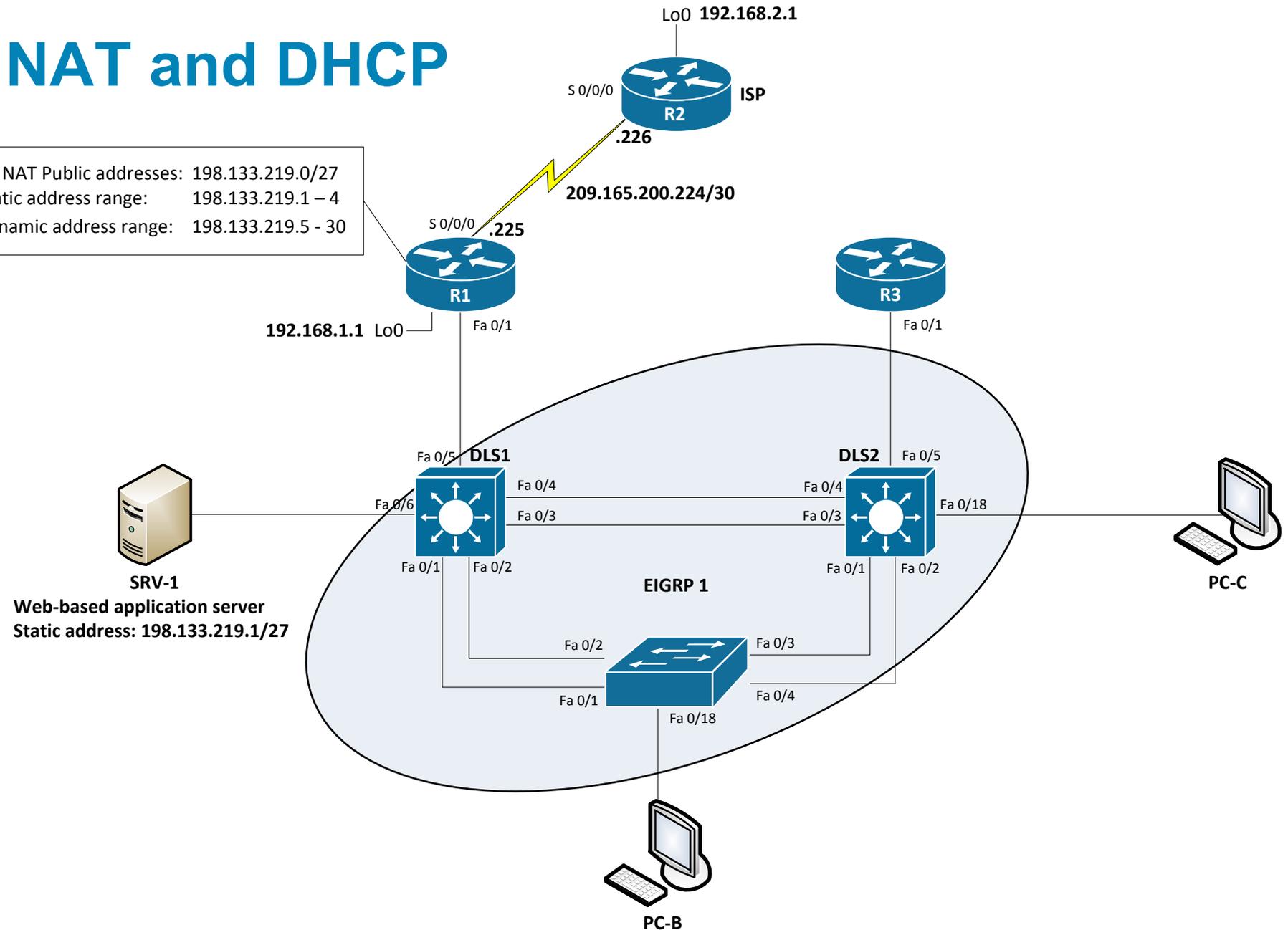


Topology



NAT and DHCP

R1 NAT Public addresses: 198.133.219.0/27
 Static address range: 198.133.219.1 - 4
 Dynamic address range: 198.133.219.5 - 30



Tasks

- **Prepare topology**
- **Start TFTP server on SRV-1 with config files**
- **Troubleshoot L3 problems**

Trouble ticket Lab 6-1 TT-A

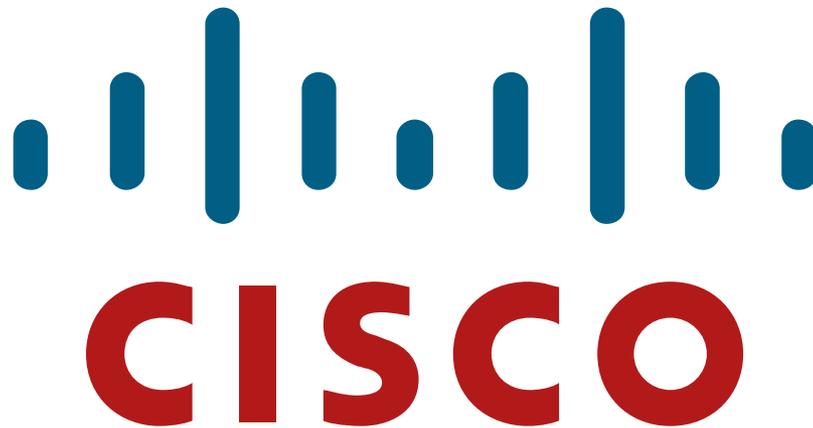
- Load appropriate config files: Lab61-%H-61-TT-A-Cfg
 - %H: hostname e.g. R1
- Your colleague has configured NAT on the edge router (R1), and the external users (simulated by R2 Lo0) can access the test server on the internal private network. However, host PC-B on the internal network cannot access the Internet.
- Your task is to diagnose the problem and verify that NAT is properly configured. In addition to external users accessing SRV1, internal users must also be able to access the Internet.

Trouble ticket Lab 6-1 TT-B

- Load appropriate config files: Lab61-%H-61-TT-B-Cfg
 - %H: hostname e.g. R1
- The NAT configuration has been corrected, and dynamic NAT is now functioning between internal hosts and the ISP. However, some users have called the help desk stating that Internet access is inconsistent. Sometimes it works, and other times it does not.
- Your task is to diagnose the problem and correct it. At a minimum, propose a possible solution to the problem so that internal users can consistently access the Internet.

Trouble ticket Lab 6-1 TT-C

- Load appropriate config files: Lab61-%H-61-TT-C-Cfg
 - %H: hostname e.g. R1
- The company is expanding and opening a new branch office LAN that will be connected to router R3. It has been decided that switch DLS2 will provide DHCP services to this remote office. The branch office is represented by test host PC-C, which will be configured as a DHCP client. Your colleague says he has configured DHCP on DLS2 with a corresponding subnet and DHCP pool. However, test client PC-C has not been able to access server SRV1. The first address in the pool should be excluded because it is reserved for the R3 default gateway Fa0/0.
- Your task is to verify VLAN configuration and DHCP services and that PC-C can access internal server SRV1.



Lab created by Vladimír Veselý and Matěj Grégr for C3P

Last update: 2014-02-23