Device	Interface	IP Address	Subnet Mask	Default Gateway
RT1	G0/0	192.168.1.1	255.255.255.0	N/A
	G0/1	1.1.1.1	255.255.255.252	N/A
	S0/0/0	209.165.122.1	255.255.255.252	N/A
RT2	G0/0	192.168.2.1	255.255.255.0	N/A
	S0/0/0	209.165.122.2	255.255.255.252	N/A
PCA	NIC	192.168.2.2	255.255.255.0	192.168.2.1
PCB	NIC	192.168.2.3	255.255.255.0	192.168.2.1
PCC	NIC	216.78.35.214	255.255.255.252	216.78.35.213
DNS	NIC	192.168.1.2	255.255.255.0	192.168.1.1
Web	NIC	192.168.1.3	255.255.255.0	192.168.1.1
FTP	NIC	192.168.1.4	255.255.255.0	192.168.1.1

Lab 10 WAN Technologies Revision Lab

Important General Instructions:

- **Devices have been partially configured and you only need to configure them as instructed below. Please read all instructions carefully**
- **For all configuration tasks, be sure to use the exact names as specified**
- **ACLs must include all specified rules and in the same order they were specified to get the marks going for the ACL. There are no marks for "partially" correct ACLs**
- **Each part includes suggestions at the end to help verify configuration. Students are encouraged to use these to help check their work**

IMPORTANT: Before proceeding, open the "Lab 10 - Revision Lab QUESTIONS (2025)" quiz on the WAN Technologies Brightspace page.

Leave the quiz open while you complete the rest of the lab sheet.

Part 1: Configure Static NAT (24 marks)

1. On **RT1**, create static NAT mappings for each of the three servers to inside global addresses as follows:
   - DNS → 161.214.152.25
   - Web → 161.214.152.26
   - FTP → 161.214.152.27

15 marks

2. Configure the NAT interfaces on RT1.
   Note: The servers should be reachable from hosts in the Branch Office LAN and also hosts connected to the Internet using their inside global addresses.

9 marks

3. To help verify completion of this section, attempt to ping to the inside global address of each of the servers from PCA and PCC. They should all be successful.

0 marks

Part 2: Configure PAT (31 marks)

1. On **RT2**, create a single statement ACL 20 to identify the addresses in the Branch Office LAN as the inside local addresses to be translated. TIP: remember for wildcard mask: 0.0.0.255

6 marks

2. Configure RT2 with a NAT pool called **BRPOOL** that uses the first three useable addresses in the 114.239.83.0/26 address space.

15 marks

3. Associate the ACL with the NAT pool, enabling the use of port address translation.

6 marks

4. Configure the NAT interfaces.

4 marks

5. To help verify completion of this section, attempt to ping from PCA and PCB to any of the servers. They should be successful.

0 marks

Part 3: Create Standard ACLs (15 marks)

1. On **RT1**, create an ACL numbered 10 with the following rules:
   - Access list should start with the following comment: **ACL_FOR_REMOTE_USER**
   - Allow PCC access

8 marks

2. Apply the access list 10 to interface G0/1 on RT1 in the **inbound** direction.

7 marks

3. ACLs operation can be verified by doing the following:
   - Ping from PCA to PCC. Should succeed

0 marks

Part 4: ACL for remote SSH access (30 marks)

1. On RT1, create an ACL numbered 105 with the following rules:
   - Access list should start with the following comment: **ACL_FOR_REMOTE_VTY**
   - Allow PCC to connect to any destination via SSH

   (Tip: use the host keyword in your syntax for source address and use the any keyword for destination host.)

20 marks

2. Apply the access list 105 to **ALL** VTY lines on RT1 only.

10 marks