Lab 1: Windows Administration Setup

CNIT24200-LabSection006

Group 22

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# Procedures

This procedure phase is separated by the list of tasks shown chronologically in the check off sheet for server one. The tasks are labeled bold, text entered are italicized, buttons are underlined, and menu tree navigation are formatted | in between menus.

**Windows Server 2016 is installed on appropriate machines**

1. Turned on the machine with given USB while pressing F12
2. Selected UEFI: Verbat imSTORE N GO 1100
3. Selected Language, time, currency format, and keyboard input to install
4. Selected Install Now
5. Selected I don’t have a product key
6. Selected Windows Server 2016 Standard Desktop Experience
7. Accepted the license terms
8. Selected Install Windows only (Custom)
9. Deleted all partitions
10. Create a new partition
11. Set Password to: *Group12!*

**Windows advanced startup**

1. Started advanced startup by holding shift when restarting PC
2. Selected Troubleshooting | Startup Settings | Restart | Disable Driver Signature Enforcement

**Network is properly configured**

1. Opened Device manager after booting
2. Right clicked on the Ethernet controller
3. Updated the driver by browsing PROWinx64 on the USB drive and select install anyway
4. Went to Control Panel | Network and Internet | Network Sharing Center
5. Opened Ethernet Status | Properties | IPv4, and typed in:
   1. IP address: *10.18.22.8*
   2. Subnet mask: *255.255.255.0*
   3. Default gateway: *10.18.22.1*
   4. DNS server: *10.2.1.11, 10.2.1.12*

**Active Directory Domain Services installed**

1. Went to Server Manager | Add Roles and Features Wizard | Role based setup
2. Checked .NET Framework 3.5, DNS Server, Active Directory Domain Services to install

**Active Directory DC setup with appropriate domain per lab instructions**

1. Went to Deployment Configuration
2. Selected Add a new forest
3. Typed in *group22.c24200.cit.lcl*
4. Set Forest and domain functional level to Windows Server 2016
5. Checked DNS Server
6. Selected Server Delegation
7. Typed in password: *Group12!*

**Computer name configured according to policy manual**

1. Went to Server Manager
2. Clicked on Computer Name
3. Changed computer name to *G22SRV01*

**Machine is updated**

1. Went to Update & Security
2. Selected Check for updates
3. Clicked on Install updates
4. Rebooted PC

**Remote Desktop was enabled**

1. Went to System Properties/Remote
2. Selected Allow remote connections to this computer
3. Selected Allow connections only from computers running Remote Desktop with Network Level Authentication

**NTP server set to synchronize time**

1. Went to PowerShell
2. Typed in:
   1. *w32tm /config /manualpeerlist:tock.cit.lcl /syncfromflags:MANUAL*
   2. *Stop-Service w32time*
   3. *Start-Service w32time*
   4. *w32tm /resync*
   5. *w32tm /query /status*

# Results

The lab objectives were done in chronological order according to the lab check off list. In the lab, the installation of Windows server 2016 was successful on server number one. After the installation, the network configuration was also structured properly according to the given IP configuration information. Then, the active directory domain services were installed properly, and the active directory DC setup was also configured with the guidance of the lab instructions and the help of TA. The name of server one was adjusted to G22SRV01 which followed the lab policy manual, and the machine was updated and restarted after essential windows installations. The generic passwords were tested and checked off by the TA and the remote desktop setting was enabled. Lastly, the NTP server of the machine was set through PowerShell of Windows by typing in commands. After the objectives were completed, the child machines, server two and workstation could join the forest machine, server one. The machines now share the same DNS which is the forest server’s IP address where a full client server environment is structured. The username of server one is G22SRV01 and password is “Group12!” when logging in.

A screenshot of a cell phone

Description automatically generated

Figure 1 Physical Diagram

A picture containing screenshot

Description automatically generated

Figure 2 Logical Diagram

# Conclusions and Recommendations

In conclusion, the lab was successfully accomplished and matched all the check off list requirements when following through the procedure in order and showing the outcome in the results section.

## Recommendations

Recommendation 1: When redoing this lab, people would want to know if the systematic error made by the machines are normal or not because the time and the unpredicted error occurring during labs might be an obstacle for groups.

Recommendation 2: If the group wanted to restart the lab, members should check the ethernet connections of the lab because in lab sessions, ethernet ports and connections cannot function properly which can give trouble when completing labs.

Recommendation 3: To prepare for future lab sessions, it would have been better to have a more robust passwords in order to secure the users and a login policy for the second lab.

# 

# Bibliography

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# APPENDIX A: Problem Solving

**Problem 1**

**Problem Description:** There was a problem where there was not a creation of a new partition in the NTFS file while installing windows. Due to this, internet connection was unable to reach. **Problem Solutions:** The solution to the problem was to restart the whole Windows installation or to create a new partition on the disk management tool on Windows.

**Solutions Attempted:** The solution attempted was to restart the whole Windows installation process because the error occurred during the installation.

**Final Solution:** The final solution to this was to adjust the issue by reinstalling Windows again because the previously non-existent partition was created in the reinstallation.

**Problem 2**

**Problem Description:** There was problems trying to find the IP address of server one.  **Problem Solutions:** The solutions to this problem was to try looking at the IP configuration document again and to ask the lab instructor for any issues going on with the IP address and to search on the internet for more options.

**Solutions Attempted:** The solutions attempted was to try to search for the right IP address on the provided IP configuration pdf and to inquire the lab instructor about it.

**Final Solution:** The final solution was to ask the lab instructor about this issue because he typed in another number instead of what was written on the given IP configuration document which worked perfectly.