IT Essentials II – Network Operating Systems
Skills-Based Assessment - Instructor Guide

Objective
Upon completion, the participant will be able to demonstrate the concepts/skills taught in the IT Essentials II course. Students will work in pairs to complete the tasks on a Windows 2000 system and a Linux system.

Instructions
As a team, the students will work to accomplish all the parts of the assessment. The instructor will provide all additional information required to successfully complete this exam. Notify the instructor after each task is complete.

To pass this assessment, **the instructor must check all** "□ **Completed**" **boxes and sign the instructor line on the student copy**.

Instructor Guide: Emphasize that students should **not** check the completed box at the end of each part. This is for the Instructor to check off or initial as work is completed. The test is pass/fail, so each student must complete all parts in order to pass.

This assessment should take approximately 100 minutes.

Prior to the Assessment

- Lab setup requires two computers that are close enough for a team to work on. (The computers can be side by side or in different rooms)

- One computer will have Linux installed and one will have Windows 2000 installed. (The time allotted for this assessment is based on a lab with Windows 2000 and Linux already installed. Adjust the assessment time if you plan to include the installation of the operating systems in the assessment tasks.)

- Setup and configure a Windows 2000 system and Linux a system.

- Setup the Administrator account in Windows 2000 and in Linux.

- It is recommended that students work in pairs to setup the two computers and communicate with each other.

- Design a simple IP scheme and provide it to each team.

- Provide to each team an Ethernet crossover cable or switch that will allow the two computers to communicate.

- At the instructor's discretion, students may be allowed to use their engineering notebook for this test.

Part 1: Network

Instructors:
Provide the IP, Subnet Mask, and Default Gateway addresses that will allow the students to communicate with each other. For example:

	Windows 2000	Linux
IP Address	192.168.1.2	192.168.1.3
Subnet Mask	255.255.255.0	255.255.255.0
Default Gateway	192.168.1.1	192.168.1.1

Using the instructor's IP scheme, the student team will configure the following NOS services. Notify your instructor when each task is complete.

Tasks:
1. Configure the following static network addresses for Windows 2000 and Linux:
   - ❏ IP Address
   - ❏ Subnet Mask
   - ❏ Default Gateway

Approximate time to complete: 10 minutes
   - ❏ Completed

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Part 2: Linux/Windows 2000 Installation and Configuration
Notify your instructor when the task is complete.
Tasks:
1. Create the following student accounts:
   - On the Windows 2000 system:
     Username: Lstudent
     Password: Lstudent
   - On the Linux system:
     Username: Wstudent
     Password: Wstudent

2. On both Windows 2000 and Linux, enable the following services using the default settings:
   - Telnet
   - FTP
   - HTTP (Linux only)

Approximate time to complete: 30 minutes
   - ❏ Completed

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Part 3: Verify Network Services

> **Instructors:**
>
> - Test web services from the Windows 2000 system to the Linux system (HTTP)
>
> - Set the NTLM Telnet Server Administrator to zero to allow the non-Windows computer to telnet to Windows.
>
> - Make sure the check box that requires the user to change their password is unchecked. It is checked by default in Windows 2000.
>
> - Create a group called "Telnet Clients". Add the Lstudent to this group.

Notify your instructor when each task is complete.

Tasks:

1. Use an Ethernet crossover cable or switch to connect the two computers together.

    ❑ Ping to the other computer.

    ❑ Telnet to the other computer

    ❑ FTP to the other computer

Approximate time to complete: 25 minutes

    ❑ Completed

Part 4: Monitor CPU and Disk Usage and Backup a Directory

Notify your instructor when each task is complete.

Tasks:

    ❑ In Windows 2000, display the graph showing CPU usage.

    ❑ Display hard drive space available in Windows 2000.

    ❑ Run the command to start the Backup Wizard in Windows 2000.

    ❑ Display the CPU usage in Linux.

What command was used in Linux to display CPU usage? _____

    ❑ Display hard drive space available in Linux.

What was the command used to display hard drive space in Linux? _____

    ❑ Run the command to backup your home directory to the Root's home directory.

Approximate time to complete: 35 minutes

    ❑ Completed