PC Pro (V7)
Competency Assessment Objectives

Hardware

Select and install PC components

- Install and connect a power supply

- Install and connect a motherboard

- Install a CPU and CPU fan

- Install memory modules

- Select and install expansion cards

Configure hardware components

- Configure boot options

- Configure BIOS/UEFI settings

- Implement firmware updates

Install and configure storage

- Install internal and external storage devices

- Configure and manage storage

- Implement a RAID solution

- Perform disk maintenance

Install and configure a printer

- Select and install a printer

- Configure printer properties

- Configure network printing

- Manage printing

Configure networking devices

- Install and configure wired and wireless network adapters and cables
- Install and configure Internet connection devices

Manage mobile devices

- Install basic hardware components on laptop computers
- Configure mobile device connectivity
- Use common mobile device features

Software

Install, update, and configure an operating system

- Install, update, and configure Windows
- Install, update, and configure macOS
- Install, update, and configure Linux
- Manage device drivers
- Configure and optimize video adapter settings
- Manage audio device settings
- Configure local users and groups

Use operating system features and utilities

- Use Windows features and command line utilities
- Use core macOS or iOS features
- 'Use common Linux command line utilities
- Manage applications and processes
- Configure power options and settings

Manage file systems

- Manage files and folders
- Configure file access permissions
- Share and secure files and folders

Configure PC networking

- Configure client IP addressing, DNS, and DHCP

- Configure Windows workgroup or domain settings

- Configure wired and wireless networking for a SOHO

- Use network utilities

- Configure network drive mappings

Implement disaster prevention and recovery methods

- Implement image-level backup and recovery

- Implement file-level backup and recovery

- Install surge protection and a UPS

Implement remote access

- Configure Remote Desktop Connection

- Configure a VPN connection

Configure virtualization

- Enable hardware virtualization in BIOS/UEFI

- Install and configure a hypervisor

- Install and configure a virtual machine

- Create and add virtual hard disks

Security

Implement tools to detect, remove, and prevent malware

- Install and configure anti-virus and anti-malware utilities

- Restore a PC or mobile device

- Recover files corrupted by malware

- Configure operating system updates

Implement mobile device security

- Implement access control and authentication

- Implement device encryption

- Implement device location

- Implement remote wipe capabilities

Implement security best practices

- Enforce password settings

- Require a screen saver password

- Manage Linux passwords

- Implement drive encryption

- Configure a firewall

- Use a proxy server

- Configure BIOS/UEFI security settings

Troubleshooting

Troubleshoot hardware components

- Troubleshoot system startup

- Troubleshoot system power

- Troubleshoot CPU installation

- Troubleshoot system memory

- Troubleshoot storage devices

- Troubleshoot malfunctioning systems

- Troubleshoot mobile devices

- Troubleshoot printer issues

Troubleshoot software components

- Troubleshoot common issues

- Apply common solutions

Troubleshoot networking

- Troubleshoot a network connection

- Use networking utilities to view, test, and troubleshoot network configuration, communication, and connectivity issues

Configure ticketing system settings

- Create a help ticket

- Close a help ticket

- Configure ticketing system settings