

Windows Device Recovery Lab

Objective:

Learn to use various Windows device recovery features to restore system functionality in the event of crashes, corruption, or misconfigurations.

Task 1: Enable and Use System Restore

Objective: Use System Restore to roll back the system to a previous, stable state.

1. Enable System Restore (if not already enabled):

- Go to Control Panel > System and Security > System.
- Click on System protection on the left.
- In the System Properties window, under the Protection Settings tab, select the system drive (usually C:) and click Configure.
- Select Turn on system protection, set the Max Usage slider to allocate disk space, and click OK.

2. Create a Restore Point:

- Back in the System Properties window, click Create.
- Name the restore point (e.g., "Lab Restore Point"), and click Create.

3. Use System Restore:

- Open System Restore by going to Control Panel > System and Security > System > System protection > System Restore...
- Follow the wizard, selecting the restore point you created, and restore the system.

Practice Questions:

- What types of issues does System Restore resolve?
- How does System Restore affect user files and applications?

Task 2: Boot into Safe Mode

Objective: Access Safe Mode to troubleshoot and fix problems in a limited Windows environment.

1. Boot into Safe Mode:

- Open Settings > Update & Security > Recovery > Advanced startup, then click Restart now.
- After the system restarts, go to Troubleshoot > Advanced options > Startup Settings >

Restart.

- Once the system restarts again, press 4 or F4 to enter Safe Mode.

2. Practice Safe Mode Tasks:

- Use Device Manager to disable a device driver (for example, the display adapter), then restart to see how Safe Mode helps troubleshoot driver-related issues.
- Use Control Panel to uninstall software that may be causing issues, as Safe Mode only loads essential drivers.

Practice Questions:

- When should you use Safe Mode in a troubleshooting scenario?
- What are the differences between Safe Mode, Safe Mode with Networking, and Safe Mode with Command Prompt?

Task 3: Use Startup Repair

Objective: Use Startup Repair to fix issues preventing Windows from starting correctly.

1. Access Startup Repair:

- Go to Settings > Update & Security > Recovery > Advanced startup, then click Restart now.
- After the system restarts, select Troubleshoot > Advanced options > Startup Repair.

2. Run Startup Repair:

- Select your Windows installation and let Startup Repair diagnose and fix boot-related issues.

Practice Questions:

- What types of issues can Startup Repair resolve?
- How does Startup Repair differ from a complete system reinstall?

Task 4: Use System Image Recovery

Objective: Recover the system using a System Image Backup.

1. Create a System Image Backup (Preparation):

- Go to Control Panel > Backup and Restore (Windows 7) > Create a system image.
- Select a location for the backup (e.g., an external drive) and follow the prompts to create the image.

2. Restore Using System Image:

- Restart the computer and go to Settings > Update & Security > Recovery > Advanced

startup > Restart now.

- Select Troubleshoot > Advanced options > System Image Recovery.
- Choose the backup you created and follow the prompts to restore.

Practice Questions:

- What is the difference between System Image Recovery and System Restore?
- When would using System Image Recovery be beneficial over other recovery options?

Task 5: Use “Reset This PC” Feature

Objective: Use Reset This PC to reinstall Windows, while choosing to keep or remove files.

1. Access Reset This PC:

- Go to Settings > Update & Security > Recovery > Reset this PC.
- Click Get started.

2. Choose a Reset Option:

- Select Keep my files to reinstall Windows without deleting personal files, or Remove everything to perform a complete system wipe and fresh installation.
- Follow the prompts to complete the reset.

Practice Questions:

- How does Reset This PC differ from other recovery methods?
- In what scenarios would it be appropriate to use the "Remove everything" option?

Task 6: Explore Additional Advanced Recovery Options

Objective: Familiarize yourself with additional recovery tools available in Advanced Startup.

1. Open Advanced Startup Options:

- Go to Settings > Update & Security > Recovery > Advanced startup > Restart now.

2. Explore Additional Options:

- Command Prompt: Use for advanced troubleshooting, running commands like sfc /scannow or chkdsk to check and repair files.
- Go Back to the Previous Version: Use this if a recent Windows update is causing issues.
- UEFI Firmware Settings: Access BIOS/UEFI settings to change boot options or enable/disable secure boot.

Practice Questions:

- How can the Command Prompt be useful in recovery scenarios?

- What types of issues might prompt you to go back to a previous version?

Final Questions

1. Compare and contrast System Restore and Reset This PC.
2. What precautions should be taken before using System Image Recovery?
3. Describe a scenario where Safe Mode would be more beneficial than using Startup Repair.