## Smarter technology for all

## System Performance Issues

Participant Guide



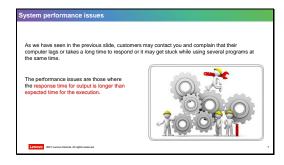
Welcome again!! We all have used laptops. At some times, our system might run into some sort of problem. You as well might have experienced an issue with your laptop or computer that the system might run slow.



In this course, we'll learn how to

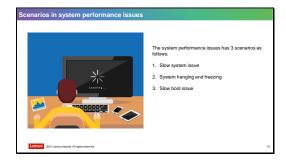
- Explain the system performance issues.
- Identify the scenarios in system performance issues.
- Discuss the factors that affects system performance.
- Determine step-by-step troubleshooting method to resolve the customer issue
- Relate the situation with scenarios

## Let's begin



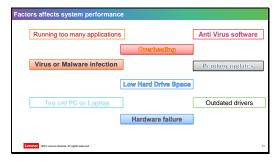
As we have seen in the previous slide, customers may contact you and complain that their computer lags or takes a long time to respond or it may get stuck while using several programs at the same time.

The performance issues are those where the response time for output is longer than expected time for the execution.

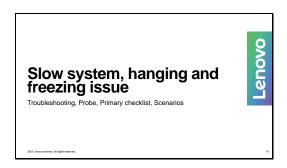


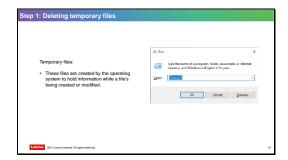
The system performance issues has 3 scenarios as follows:

- 1. Slow system issue
- 2. System hanging and freezing
- 3. Slow boot issue

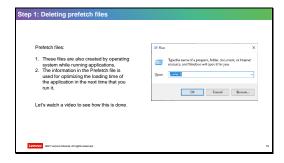


The system performance may be affected due to some factors. The following list are the reasons which impacts your system performance includes computer slow, unresponsive, freezing and crashing.





These files are created by the operating system to hold information while a file's being created or modified



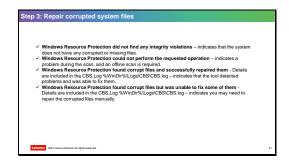
These files are also created by operating system while running applications. The information in the Prefetch file is used for optimizing the loading time of the application in the next time that you run it.



- SysMain marks the applications as "frequently used" and preloads them into RAM.
- The idea is that when you want to start the application, it will start much faster, because it is already loaded into memory.

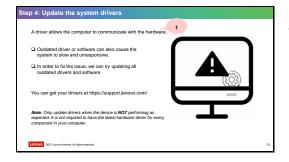


System File Checker (SFC) is a utility in Microsoft Windows that allows users to scan for corrupted files in Windows system files and restore it.



Once you complete the steps, the SFC command-line tool will scan, detect, and fix Windows system file problems.

When the tool detects an issue, it is recommended to run the command around three times to ensure that all the problems have been corrected properly. These are the major system file problems.



For example, a USB flash drive is a physical device that, when plugged into a computer, needs to "talk" with the computer to function.

Drivers in the computer, specifically for the USB, communicate and operate the USB.

- Outdated driver or software can also cause the system to slow and unresponsive.
- ☐ In order to fix the issue, we can try updating all outdated drivers and software

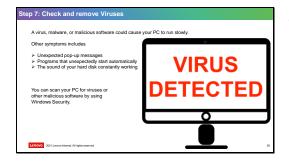


One of the best ways to get the most out of your PC is to make sure you have the latest version of Windows installed. When you check for updates, your PC will also search for the latest device drivers, which can also help improve your PC's performance.



Your drives will be listed in the Storage area. Note the amount of free space and total size for each drive.

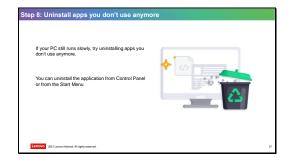
If your PC is not low on space, try the next tip.



A virus, malware, or malicious software could cause your PC to run slowly.

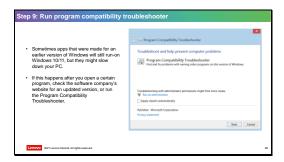
Other symptoms includes

- Unexpected pop-up messages
- > Programs that unexpectedly start automatically
- > The sound of your hard disk constantly working



If your PC still runs slowly, try uninstalling apps you don't use anymore.

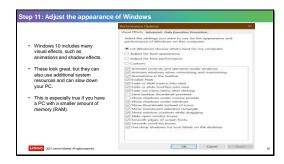
You can uninstall the application from Control Panel or from the Start Menu



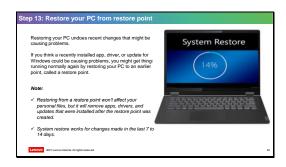
- Sometimes apps that were made for an earlier version of Windows will still run-on Windows 10/11, but they might slow down your PC.
- If this happens after you open a certain program, check the software company's website for an updated version, or run the Program Compatibility Troubleshooter.



As per the diagnostic report if there is hardware issue, dispatch the part accordingly and if there is no hardware issue identified continue with the further troubleshooting steps



- Windows 10 includes many visual effects, such as animations and shadow effects.
- These look great, but they can also use additional system resources and can slow down your PC.
- This is especially true if you have a PC with a smaller amount of memory (RAM).

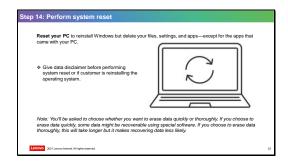


Restoring your PC undoes recent changes that might be causing problems.

If you think a recently installed app, driver, or update for Windows could be causing problems, you might get things running normally again by restoring your PC to an earlier point, called a restore point.

## Note:

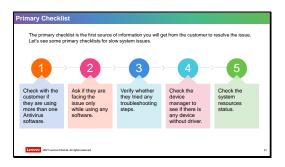
- ✓ Restoring from a restore point won't affect your personal files, but it will remove apps, drivers, and updates that were installed after the restore point was created.
- ✓ System restore works for changes made in the last 7 to 14 days.



**Reset your PC** to reinstall Windows but delete your files, settings, and apps—except for the apps that came with your PC.

Give data disclaimer before performing system reset or if customer is reinstalling the operating system.

Note: You'll be asked to choose whether you want to erase data quickly or thoroughly. If you choose to erase data quickly, some data might be recoverable using special software. If you choose to erase data thoroughly, this will take longer but it makes recovering data less likely.



The primary checklist is the first source of information you will get from the customer to resolve the issue. Let's see some primary checklists for slow system issues.

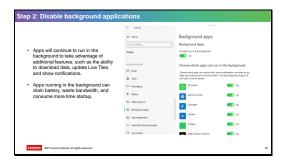




Services of Startup applications/programs usually run in the background during booting process.

You can disable them to not to run during the computer startup.

- The key is to choose the right apps to disable, for example, you want to keep your Antivirus running, but you might want to disable Skype or driver update software from starting with your Windows 10.
- Of course, you can manually start these services at any time if you need them.

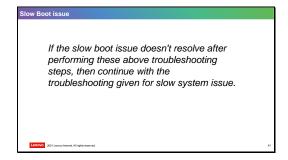


- On Windows 10/11, many apps you download from the Microsoft Store will continue to run in the background to take advantage of additional features, such as the ability to download data, update Live Tiles, and show notifications.
- Although these features can be useful in several scenarios, apps running in the background (even when you didn't start them) can drain battery, waste bandwidth and consume more time startup.

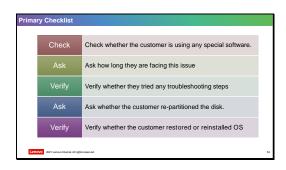


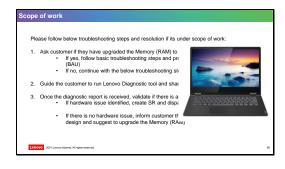
Fast startup reduces startup time by pre-loading some boot information before your PC shuts off. It works in a similar manner as Hibernation.

Once it is enabled, reboot your Windows device and check to see if it boots quickly. If you're still experiencing a slow boot, you can move onto our next method.



Remember, if the slow boot issue doesn't resolve after performing these above troubleshooting steps, then continue with the troubleshooting given for slow system issue.





This information is applicable only to the IdeaPad system which is shipped with 4GB Memory (RAM) and 5400 RPM HDD (i.e. 1TB) and if the customer reported issue is related to slow system, slow boot, performance, hanging and freezing.



Remember!!

Never advise our customers to try all the troubleshooting steps in case one worked!

Computer Doctor is watching you