How to fix Windows

Some technicians may not know how to repair a Windows installation, but instead just choose to wipe the system and reinstall windows. They could care less about your data (documents and pictures).

Microsoft has a good selection of tools and procedures to repair a broken Windows installation.

One of these tools is the System File Checker.

SFC /SCANNOW

Just running SFC may not fix anything as there are some things you have to consider first.

SFC checks the integrity of Windows System Files. If it finds any corrupted files it replaces them. Where does it find these files?

Windows keeps a cache copy of all its system files in a system image.

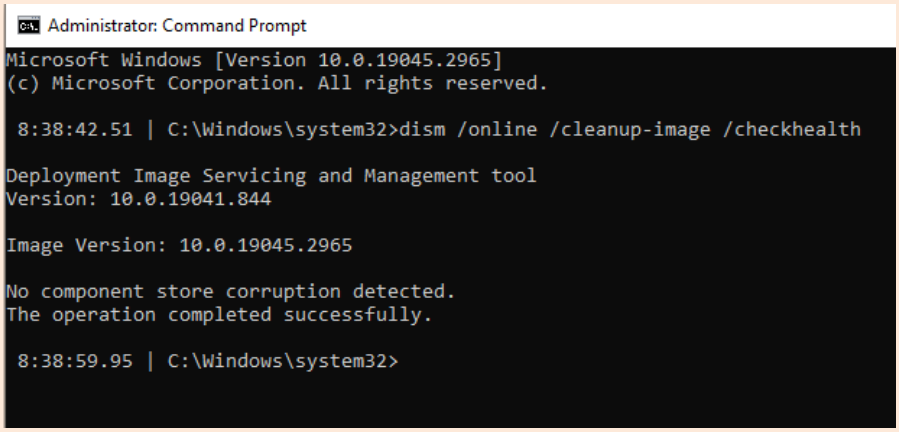
This system image may not be up to date or the cache copies may themselves be corrupted.

You need to check the cache system files first, making sure they are up to date by using the DISM Command.

Open the Command Prompt as Administrator and run the following command:

Dism /online /cleanup-image /checkhealth

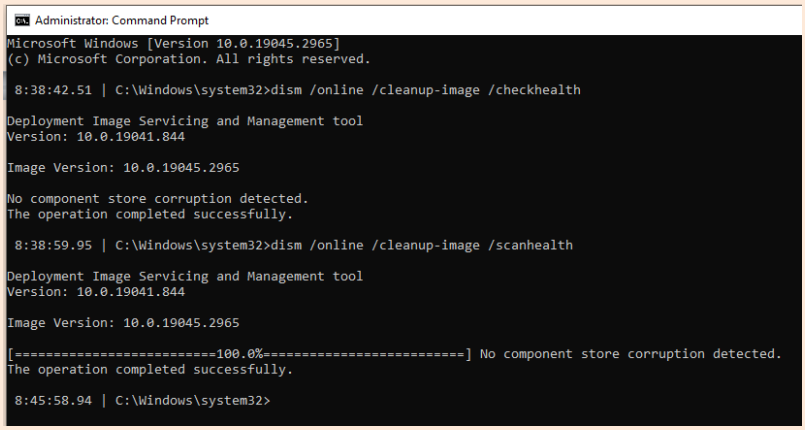
Results:



Another command to run that checks deeper:

Dism /online /cleanup-image /scanhealth

This takes a little longer but does a more thorough job of checking the files. Results of /scanhealth:

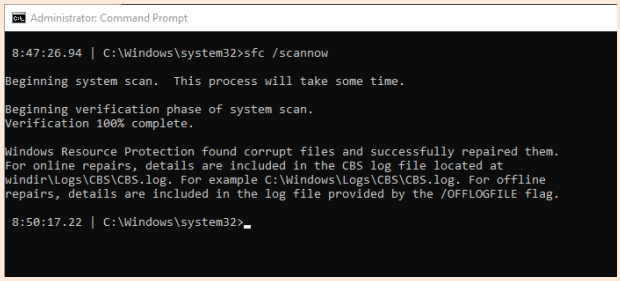


If it does find something then you need to run the command switch Restore Health:

Dism /online /cleanup-image /restorehealth

If /scanhealth comes back with no errors then you can run scf /scannow.

Results:



Reboot your PC if SFC finds and fixes a problem.

More advanced options:

If for whatever reason DISM /restorehealth can’t fix the problem you need to tell DISM where to look for a good clean copy of the system files.

You have to download the Windows ISO using the Media Creation Tool.

Once you downloaded the ISO, click on it to mount it. This will create a Virtual Drive. Open this drive and go to the Sources Folder and notice the install.esd file or install.wsm file.

Now open the Command Prompt again and type this command:

Dism /online /cleanup-image /restorehealth /source:d:\sources\install.ese /limitaccess

This is assuming your virtual drive is the d: drive. Replace the drive letter to the correct drive in the DISM command.

\limitaccess keeps dism command from accessing windows update online.

After this is competed run the SFC /Scannow command.