CONTROL PANEL

Part -3

Topics Covered

ADMINISTRATIVE TOOLS.
CONFIGURING DEFAULT
PROGRAMS

POWER MANAGEMENT TOOLS.

SYSTEM APPLET

References

- Microsoft Windows Operating System Essentials-Tom Carpenter

- https://docs.microsoft.com/en-us/windows/client-management/administrative-tools-in-windows-10

Windows PowerShell Modules

◦ It simply runs a PowerShell session with all available modules loaded automatically.

◦ In the PowerShell interface if we execute the Get-Module cmdlet we get a list of loaded modules.

◦ When executed with no parameters, Get-Module lists only the loaded modules.

◦ We can use the Get-Command cmdlet with the -Module parameter to view the commands available for a specific module.

◦ We may observe that some modules may not load, because of the script execution policy.
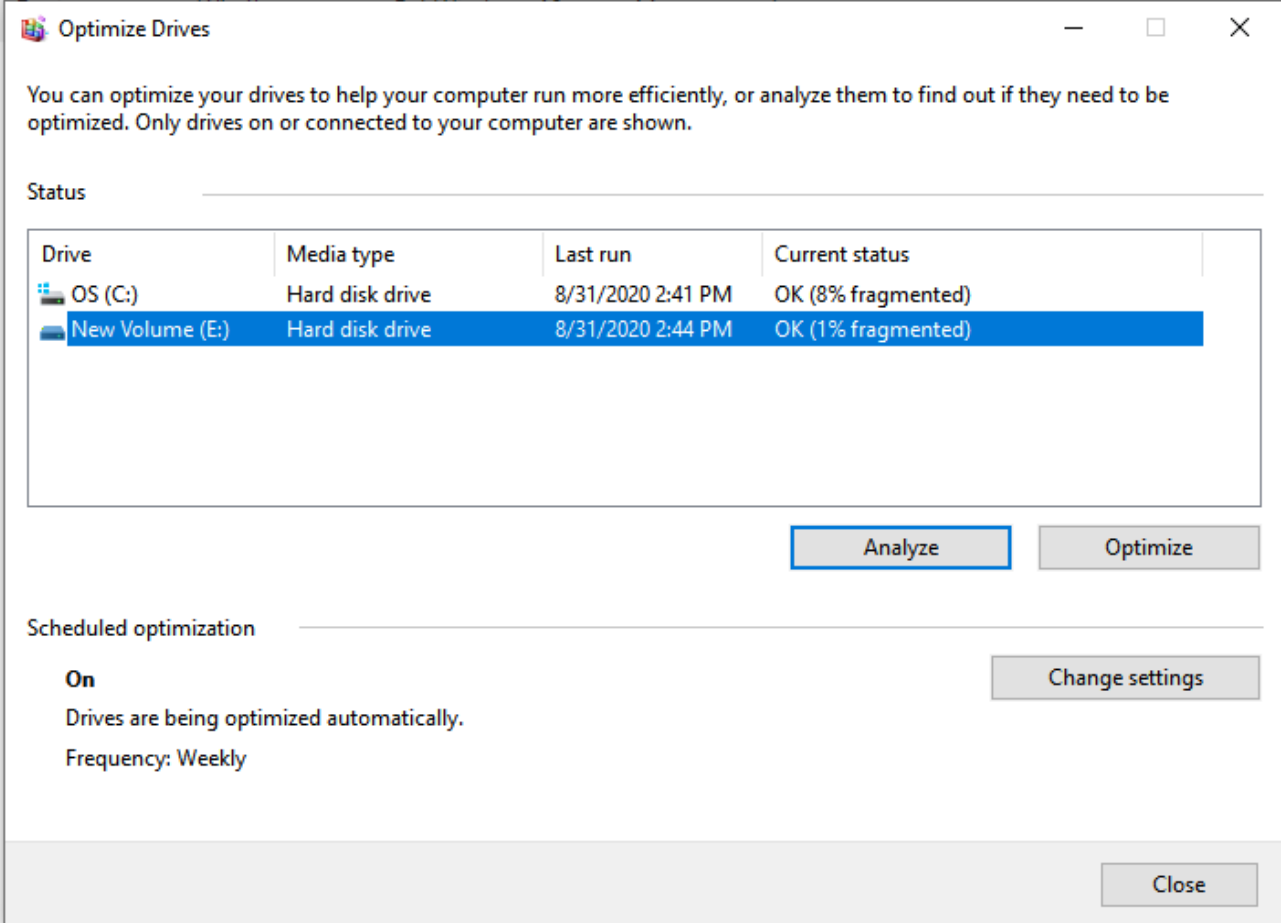
Defragment and Optimize Drive
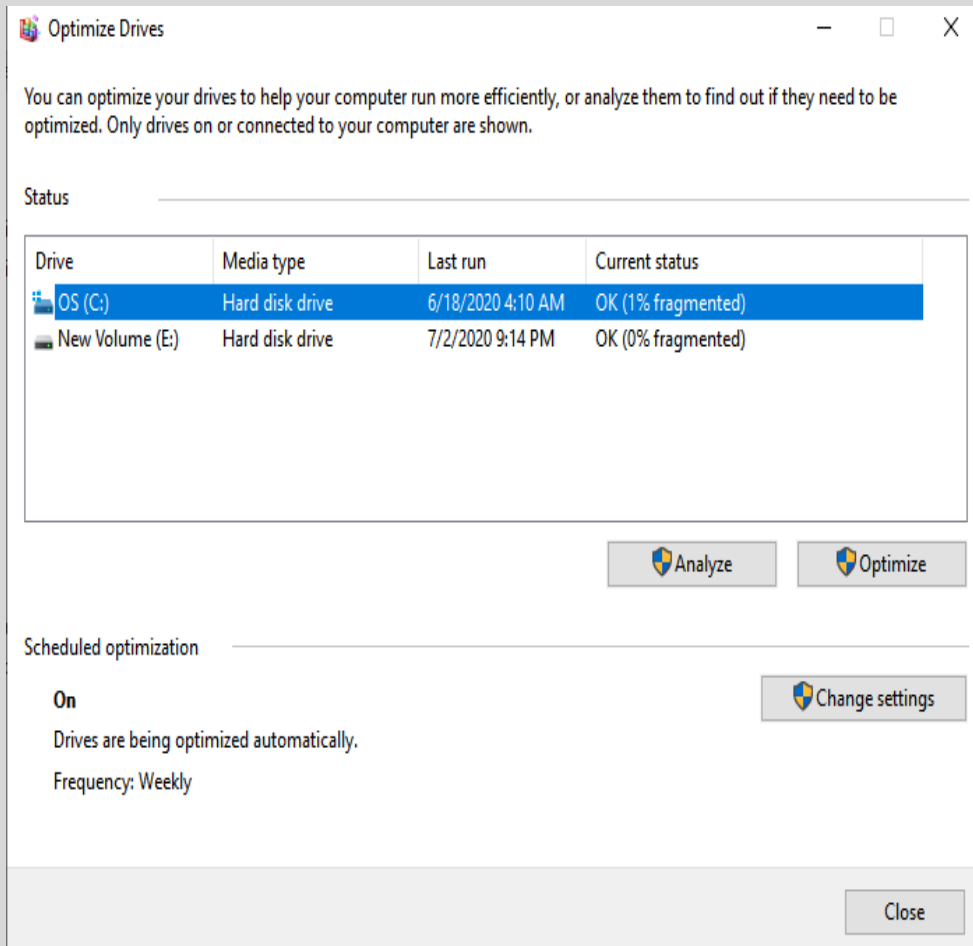
- Fragmentation makes your hard disk do extra work ,that can slow down your computer.
- Disk Defragmenter in Windows rearranges fragmented data so your disks and drives can work more efficiently.
- Disk Defragmenter runs on a schedule, but one can analyze and defragment the disks and drives manually.
- Steps to defragment your hard disk
  - Open Disk Defragmenter by clicking the Start button.
  - Under Current status, select the disk you want to defragment.
  - To determine if the disk needs to be defragmented or not, click Analyze disk. You will be prompted to provide Administrator password.

Once Windows finishes analyzing the disk, check the percentage of fragmentation on the disk in the Last Run column. If the number is above 10%, you should defragment the disk.

Click Defragment disk. Administrator permission will be required to perform the task.

Disk Defragmenter might take from several minutes to a few hours to finish, depending on the size and degree of fragmentation of your hard disk. You can still use your computer during the defragmentation process.

Disk Cleanup

- To delete temporary files
- Select the drive you want to clean up, and then select **OK**.
- Under **Files to delete**, select the file types to delete.
- To get a description of the file type, select it.
- Select **OK**.

- To free up more space, you can also delete system files.
- In Disk Cleanup, select **Clean up system files**.
- Select the file types to get rid of. To get a description of the file type, select it.
- Select **OK**.

Configuring Default Programs
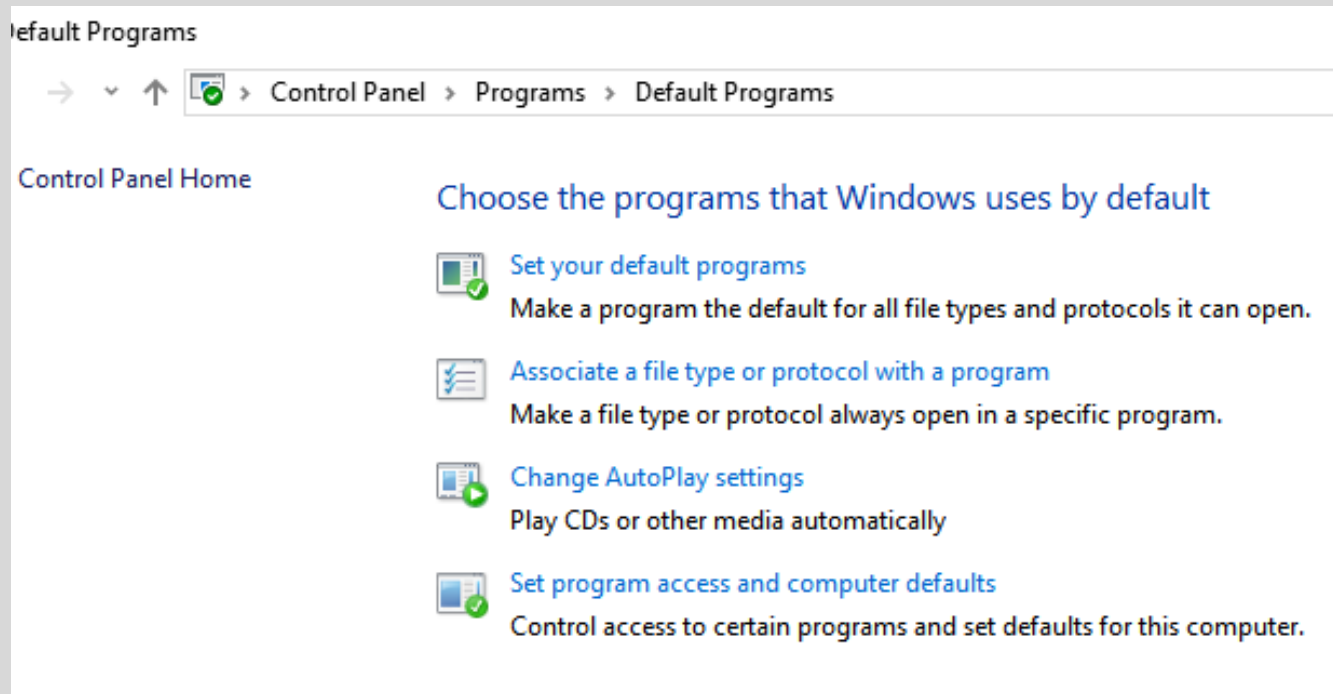
This applet brings are used to set aspects of program management:
- ❑ Set Your Default Programs
- ❑ Associate A File Type Or Protocol With A Program
- ❑ Change AutoPlay Settings
- ❑ Set Program Access And Computer Defaults

Default apps

Home

Find a setting

Apps

- Apps & features
- **Default apps**
- Offline maps
- Apps for websites
- Video playback
- Startup

Default apps

Email
Google Chrome

Maps
Maps

Music player
Groove Music

Photo viewer
Photos

Video player
Movies & TV

Web browser
Google Chrome

Choose default apps by file type

.3ga
VLC media file (.3ga) — VLC media player

.3gp
3GP File — Movies & TV

.3gp2
3GP2 File — Movies & TV

.3gpp
3GPP File — Movies & TV

.3mf
3D Object — Print 3D

.669
VLC media file (.669) — VLC media player

.7Z
WinZip File — WinZip

.8ba
8BA File — Adobe Photoshop CS5

.8bc
8BC File — Adobe Photoshop CS5

.8bc — Adobe Photoshop CS5

Using the Power Management Tools

- Windows provide support for and configuration of power management settings through the Power Options applet.
- Tool named POWERCFG.EXE is available at the Command Prompt for power management.
- Steps to access the Power Options applet: Click Start -> Control Panel. Select System and Security and then Power Options.
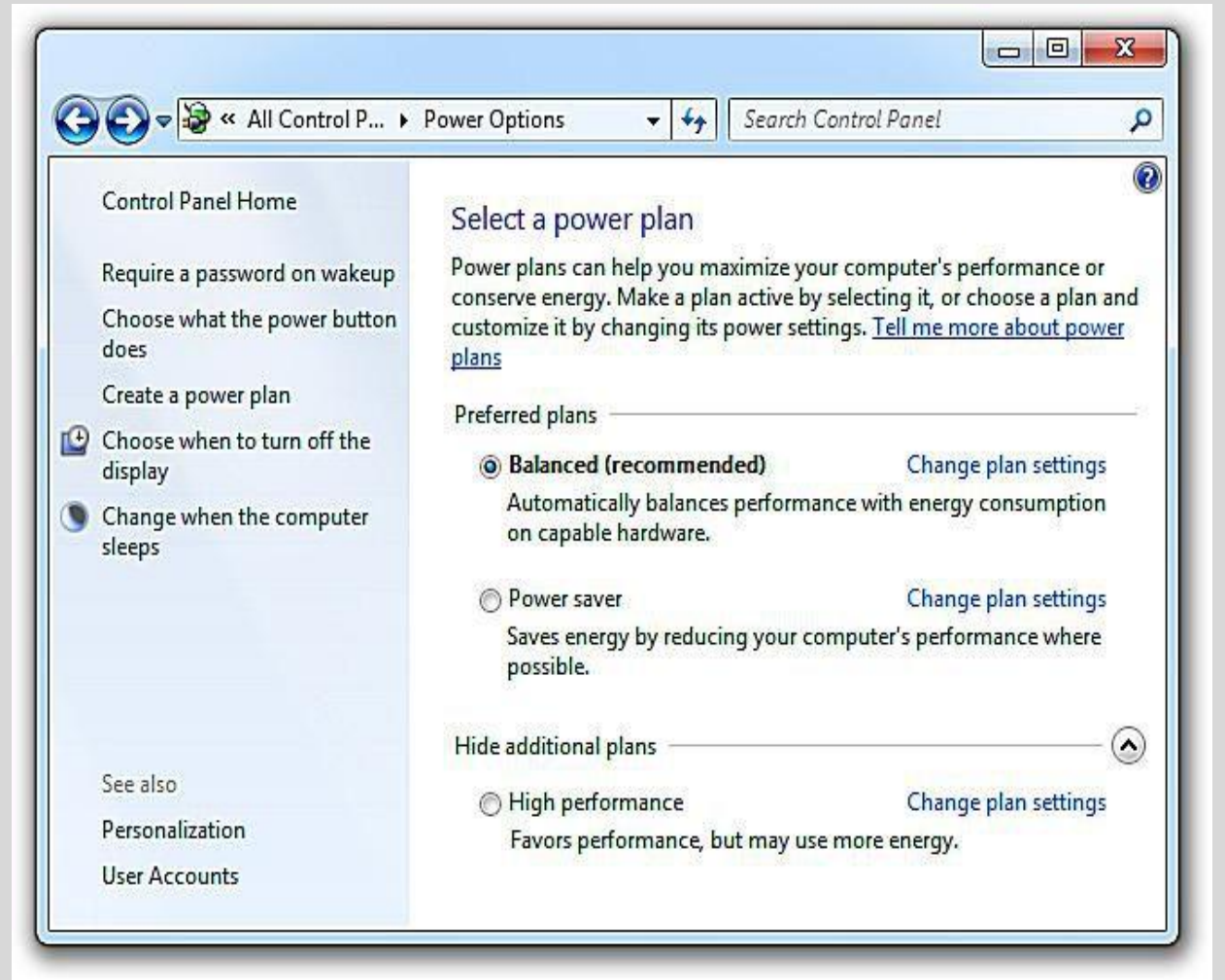
Windows 7 computers have the Balanced, High Performance, and Power Saver plans:

Balanced -is configured to turn off the display after 10 minutes and put the computer to sleep after 30 minutes. It turns off the hard disks after 20 minutes.

High Performance -turns off the display after 15 minutes and never put the computer to sleep. It also turns off the hard disks after 20 minutes.

Power Saver The Power Saver power plan is configured to turn off the display after 5 minutes and put the computer to sleep after 15 minutes. Additionally, it turns off the hard disks after 20 minutes.
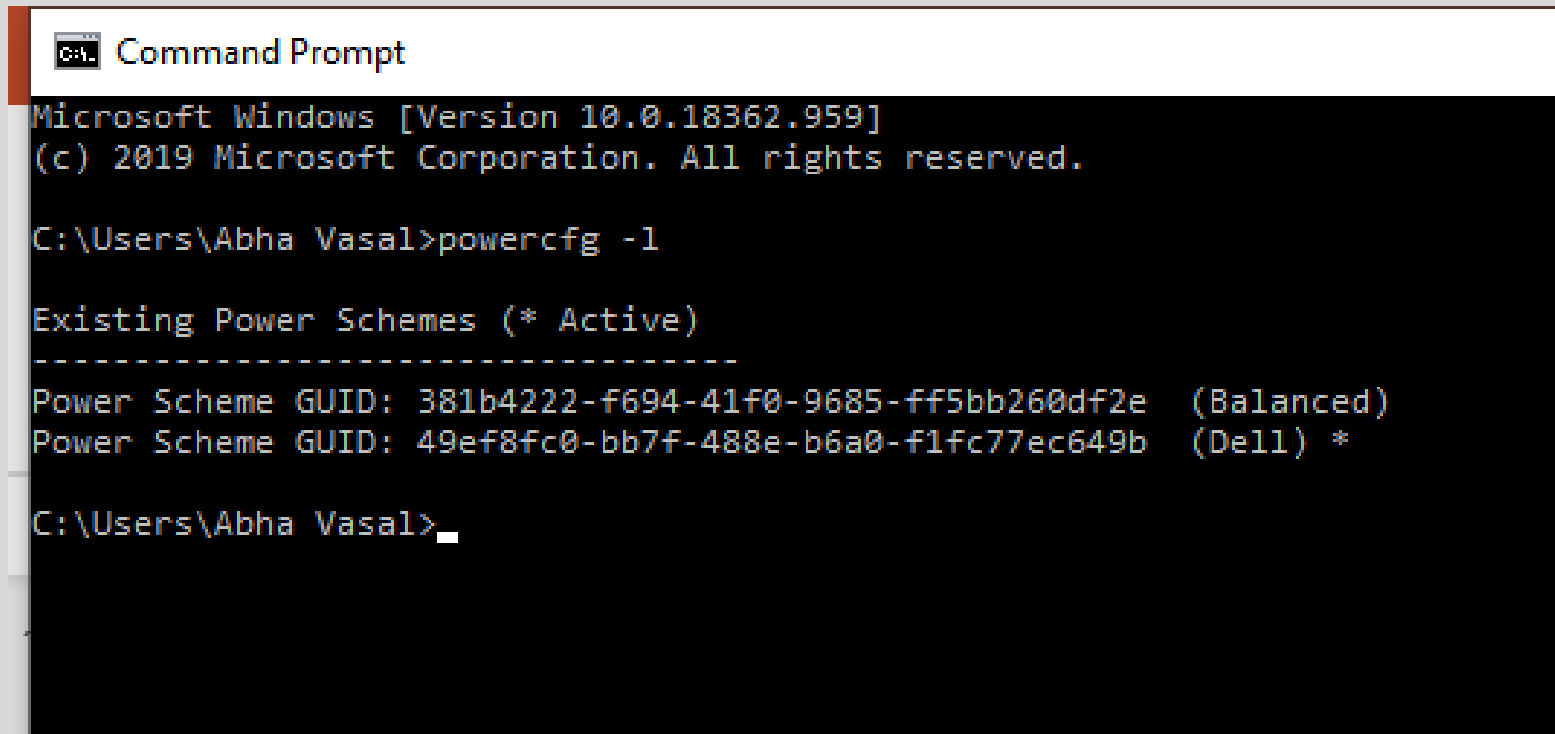
A power plan can contain settings for the following options:
- Hard disk
- Desktop background settings
- Wireless adapter settings
- Sleep
- USB settings
- Power buttons and lid
- PCI Express
- Processor power management
- Display
- Multimedia settings

Computer vendors create their own power plans that are preinstalled with the OS.
Laptops, have dual options for each option—one setting for when the computer is running on battery and another for when it is plugged in.
A power plan can be backed up to a file using the Command Prompt's powercfg command.
powercfg -export balanced.pwr 381b4222-f694-41f0-9685-ff5bb260df2e

You can use the **powercfg -l** command to view the GUIDs for the different installed power plans.


```
Command Prompt

Microsoft Windows [Version 10.0.18362.959]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\Abha Vasal>powercfg -l

Existing Power Schemes (* Active)
-----------------------------------------------------
Power Scheme GUID: 381b4222-f694-41f0-9685-ff5bb260df2e  (Balanced)
Power Scheme GUID: 49ef8fc0-bb7f-488e-b6a0-f1fc77ec649b  (Dell) *

C:\Users\Abha Vasal>_
```

From the Power Options applet, we can perform any of the following actions:
- Require A Password On Wakeup
- Choose What The Power Button Does
- Choose What Closing The Lid Does (for laptops)
- Create A Power Plan
- Choose When To Turn Off The Display
- Change When The Computer Sleeps
- Select A Power Plan

Control Panel > Hardware and Sound > Power Options > System Settings

Define power buttons and turn on password protection

Choose the power settings that you want for your computer. The changes you make to the settings on this page apply to all of your power plans.

🛡 Change settings that are currently unavailable

Power and sleep buttons and lid settings

		🔋 On battery	🔌 Plugged in
⏻	When I press the power button:	Sleep	Sleep
◑	When I press the sleep button:	Sleep	Sleep
📂	When I close the lid:	Sleep	Sleep

Shutdown settings

☑ **Turn on fast startup (recommended)**
This helps start your PC faster after shutdown. Restart isn't affected. Learn More

☑ **Sleep**
Show in Power menu.

☐ **Hibernate**
Show in Power menu.

☑ **Lock**
Show in account picture menu.

Change settings for the plan: Dell

Choose the sleep and display settings that you want your computer to use.

	🔋 On battery	🔌 Plugged in
🕑 Turn off the display:	5 minutes ⌄	10 minutes ⌄
🌘 Put the computer to sleep:	15 minutes ⌄	30 minutes ⌄

Change advanced power settings

Restore default settings for this plan

Save changes   Cancel

Windows 10 Power Options

Understanding the System Applet

The System applet, is used to view and manage information that is global to the system. Accessible in the Control Panel from the System and Security category.

The System applet is used for the following tasks:

- View basic information about your computer
- Access the Device Manager
- Configure remote settings
- Configure system protection
- Access advanced system settings

The System applet displays the Windows Experience Index (WEI), which is a rating based on the lowest-performing factor in your system.

The factors considered for the WEI are

- Processor
- Memory (RAM)
- Graphics
- Gaming Graphics
- Primary Hard Disk

The following process generates a Windows Experience Index (in windows 10) then exports it to an XML file.

1.Type **command** in your Start Menu search bar, right-click the Best Match and select **Run as Administrator**.

2.When the Command Prompt opens, input the following command: **winsat formal**

3.Wait for the process to complete. When it finishes, you can find the XML file in C:\Windows\Performance\WinSAT\DataStore.

4.Look for a set of files containing the date you are running the test on. Open the XML file that looks like "[date of test] Formal.Assessment (Recent).WinSAT.xml".

5.When prompted, select your internet browser to view the XML file. Your browser will make the XML data readable.