Exercise 1 - Managing a Power Plan.

Windows 11 comes with a choice of power plans that may be customized to make the most of a computer's energy. The Power plans improve system performance by optimizing power management. The Control Panel and the Settings window can be used to customize the settings.

You may change display brightness, pick when a computer sleeps, and switch off the display using the power plan options.

Windows 11 uses the "Balanced" power plan by default. There are other plans, namely:

- Power saver: this saves energy by reducing your computer's performance.
- High performance: this favors performance but may use more energy.
- Ultimate performance: this provides ultimate performance on higher-end PCs.

> **Note**: Ultimate performance plan is available only on Windows 11 Spring Creators Update version 1803 build 17101 onwards.

In this exercise,

1. Practice using some of the common power and sleep settings.
2. Create a custom power plan.

Topology
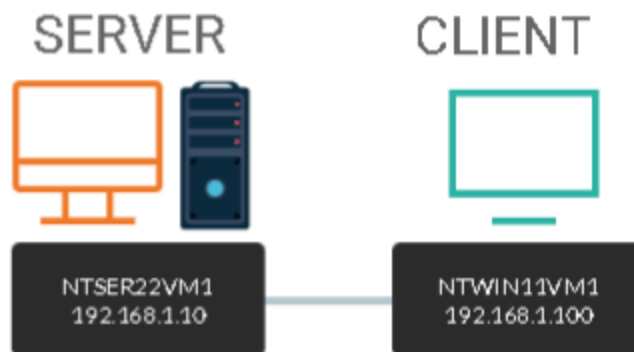
DOMAIN = networktute.com

NTSER22VM1 = Windows Server 2022 – Domain Controller

NTWIN11VM1 = Windows 11 – Domain Member

Prerequisite

- *VMware Workstation 16 Pro*
  - When making this tutorial, we used the "Windows Server 2019" VM Template and "Windows 10 & later" VM Template. Since VMware didn't have the updated templates.
- *Microsoft Windows Server 2022*
- *Microsoft Windows 11*

Task 1: Create a Custom Power Plan

Windows sets a computer's power strategy to Balance by default. A machine can be configured to run the Power Saver or High-Performance plans. Furthermore, Windows gives you the option of creating your own custom power plan as needed.

In this task, you will create and implement a custom power plan on NTWIN11VM1.

Step 1:

Ensure your **Server auto login** feature is **enabled** under the **Settings and customization** tab.

Please see our **help and support** > **Personal Settings** > **Settings Tabs** section for more information on how to do this.

Ensure you have powered on the required devices and connect to **NTWIN11VM1**.

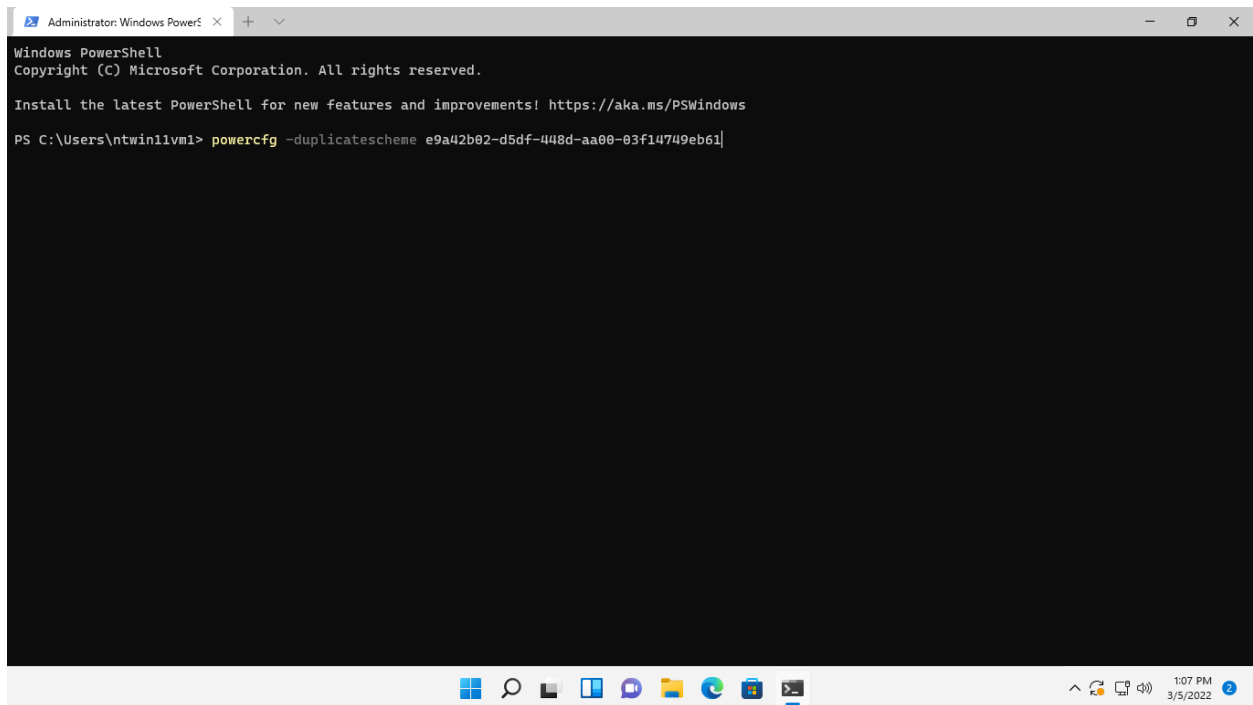Right-click the **Start** icon and select **Windows Terminal (Admin).**
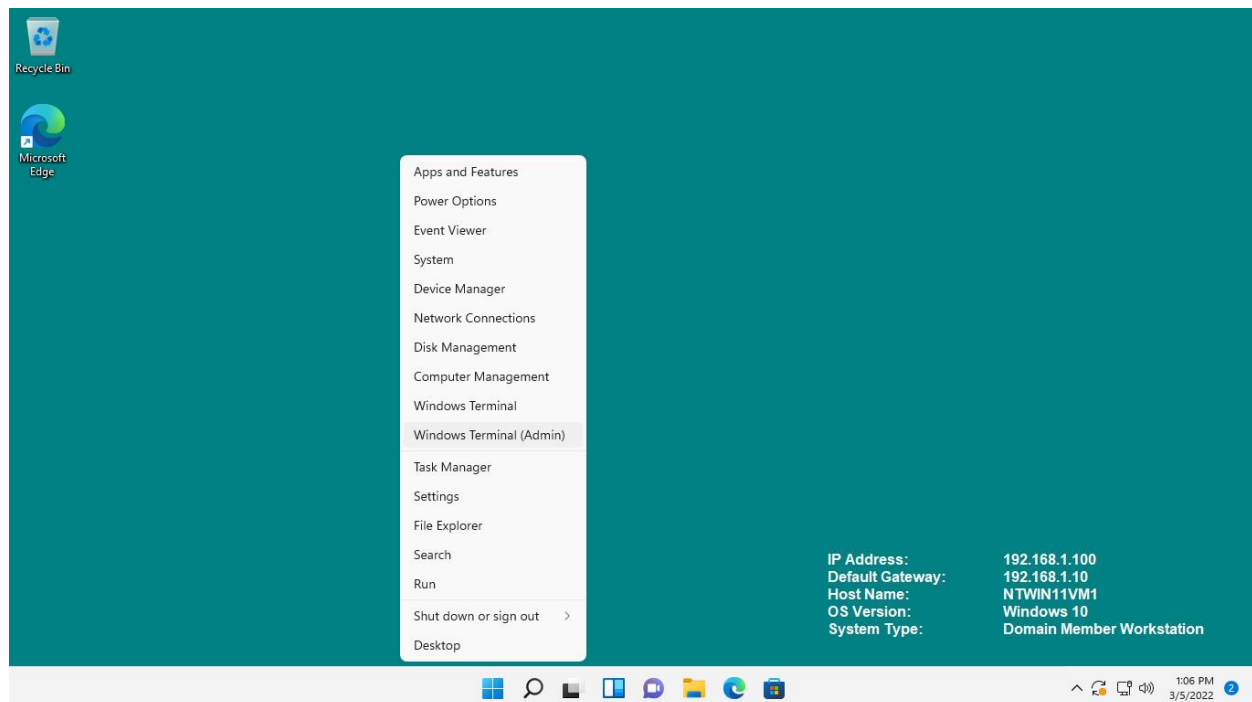
Step 2:

On the **Windows Terminal** prompt, type the following to enable the Ultimate Performance power plan:

> powercfg -duplicatescheme e9a42b02-d5df-448d-aa00-03f14749eb61

Press **Enter**.

Note: Ultimate Performance is a new power plan in Windows 11. As previously stated, the Global Unique Identifier (GUID) is used in this new powerplan. On Windows 11, type powercfg /L to see the current power schemes and associated GUIDs.
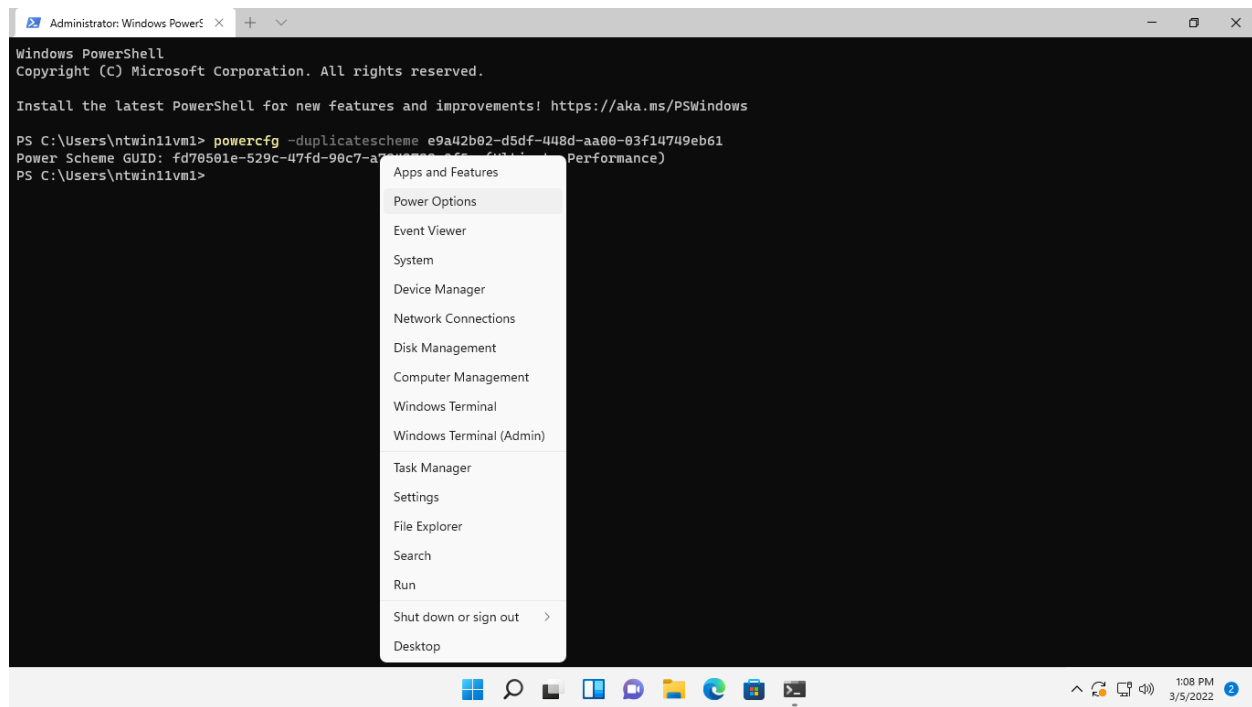

Step 3:

A confirmation appears that Power Scheme GUID has been enabled.

Right-click the **Start** icon and select **Power Options.**

Note: You can also access Power Options through **Control Panel > Power Options** or through **Settings > Power & sleep.**
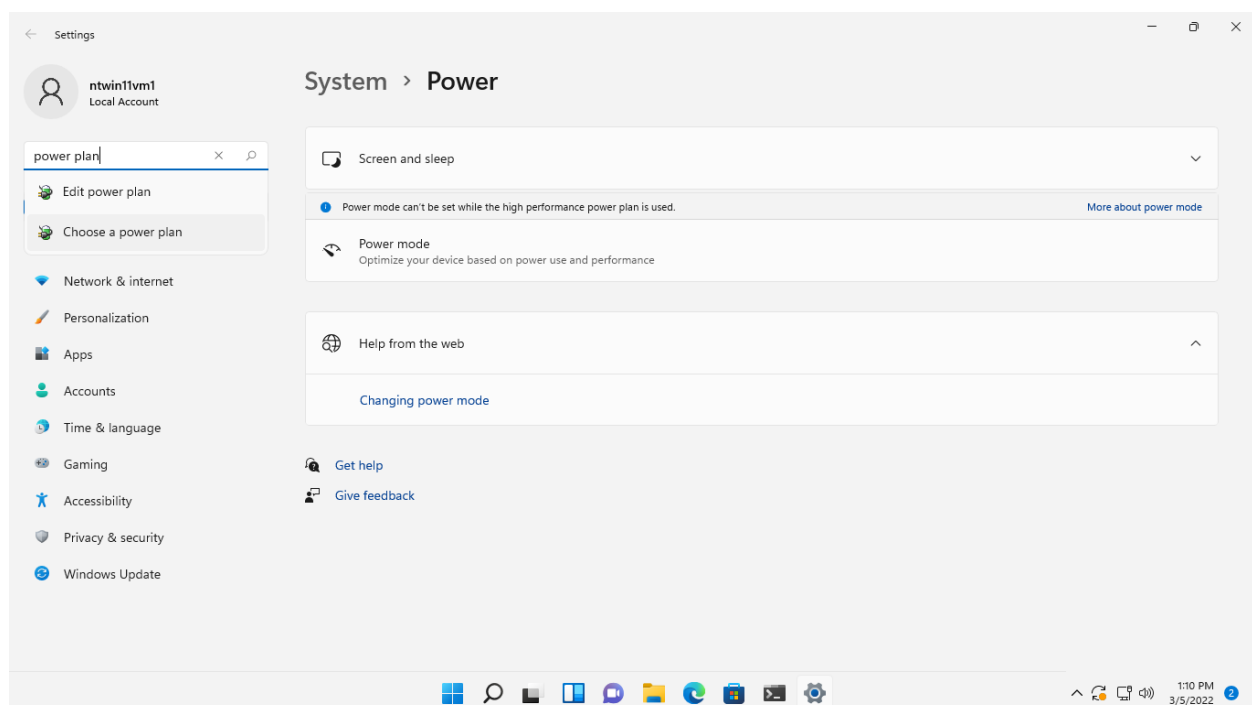
Step 4:

On the **Settings** window, the **Power & sleep** page appears.

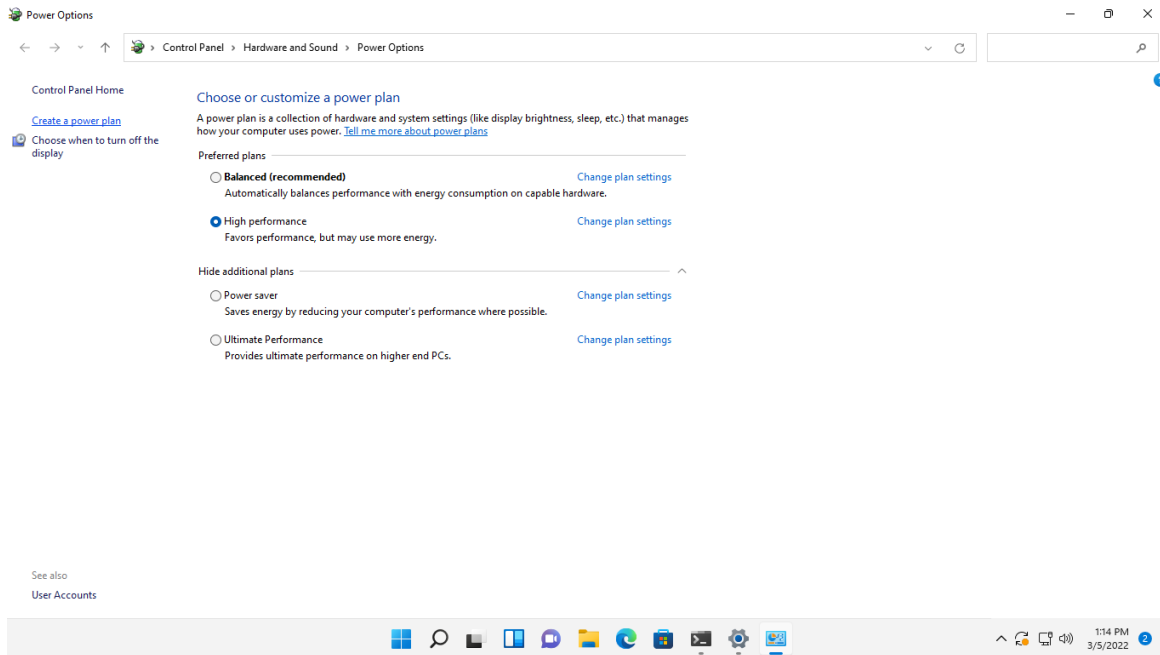> **Note**: Sleep settings are not supported in this lab device.

Top left corner in **Find a setting** section, type: Power Plan
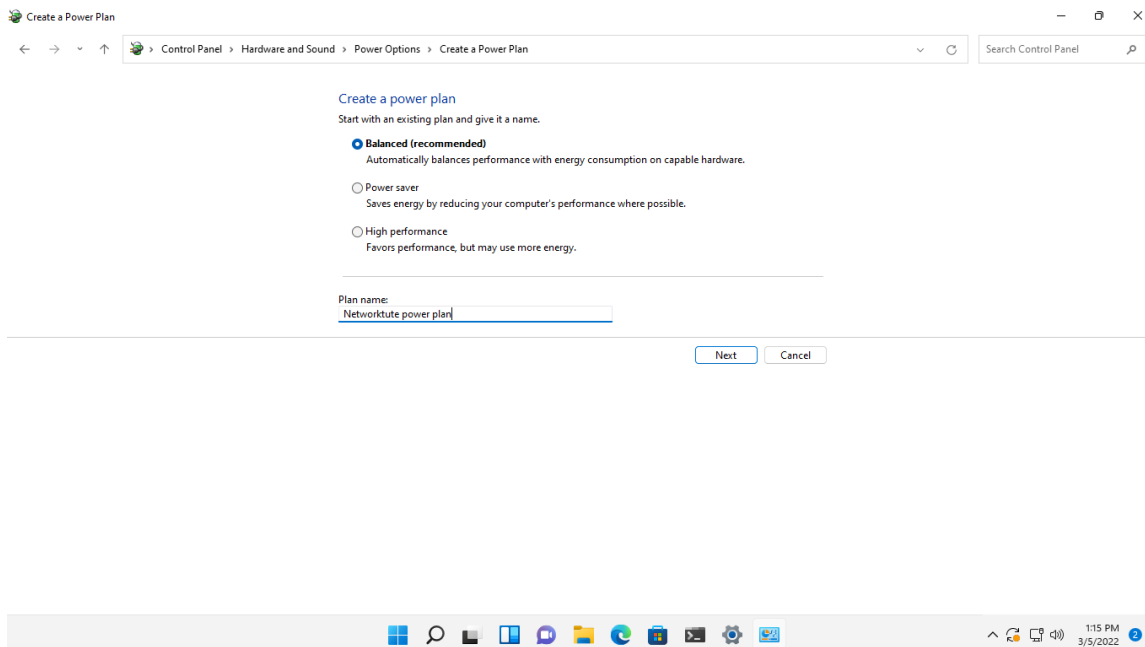
Select **Choose a Power Plan.**

Step 5:

On the left navigation pane of the **Choose or customize a power plan** page, click the **Create a power plan** weblink

Step 6:

From the Create a power plan page, click into the Plan name textbox and type-over the entry with the following: *Networktute power plan*
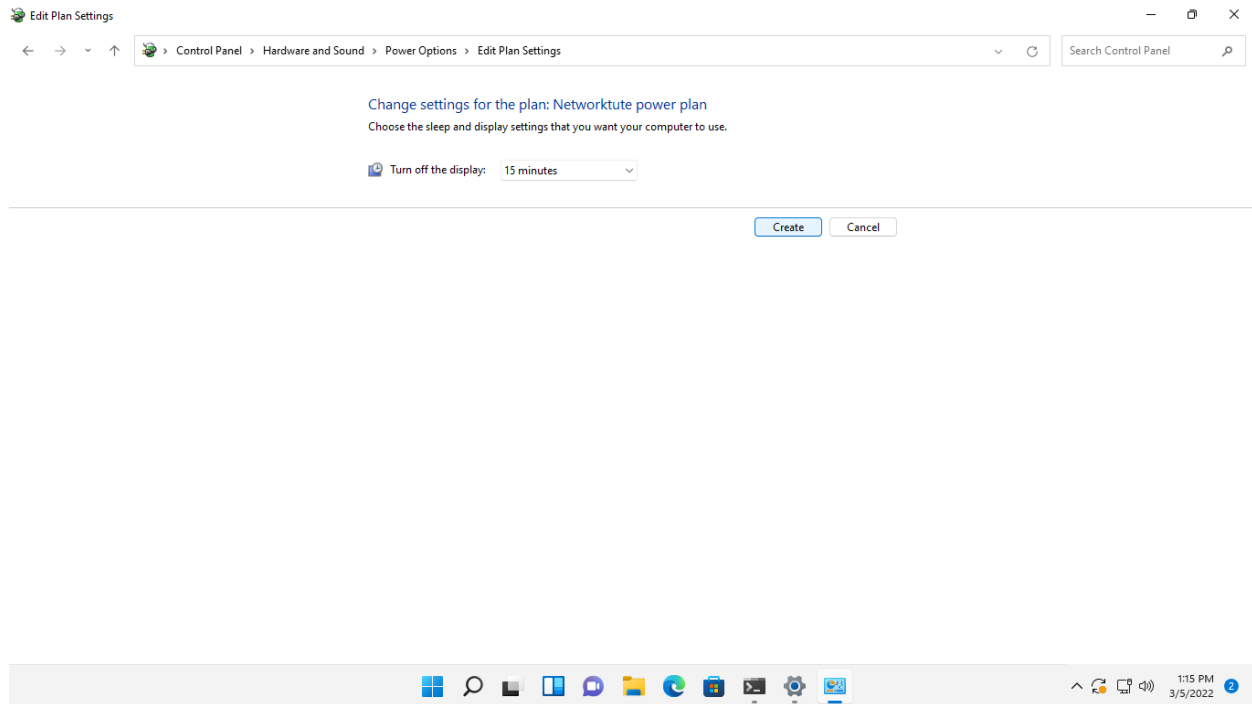
Then click **Next**.

Step 7:

Please note that this lab device has limited system capability and will not display other settings like the **Put the computer to sleep** setting.

Access the **Turn off the display** drop-down list and select **15 minutes**.
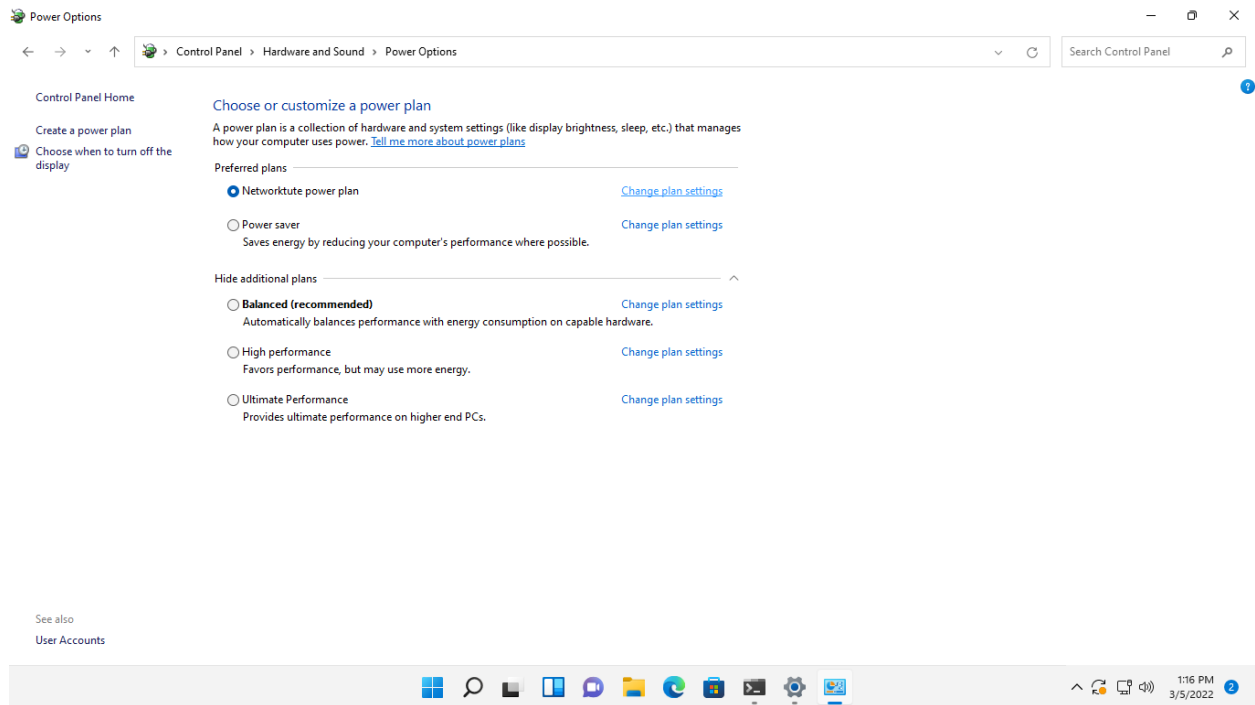
Click **Create.**

Step 8:

Back on the **Choose or customize a power plan** page, notice that **Custom power plan** is selected for this computer.

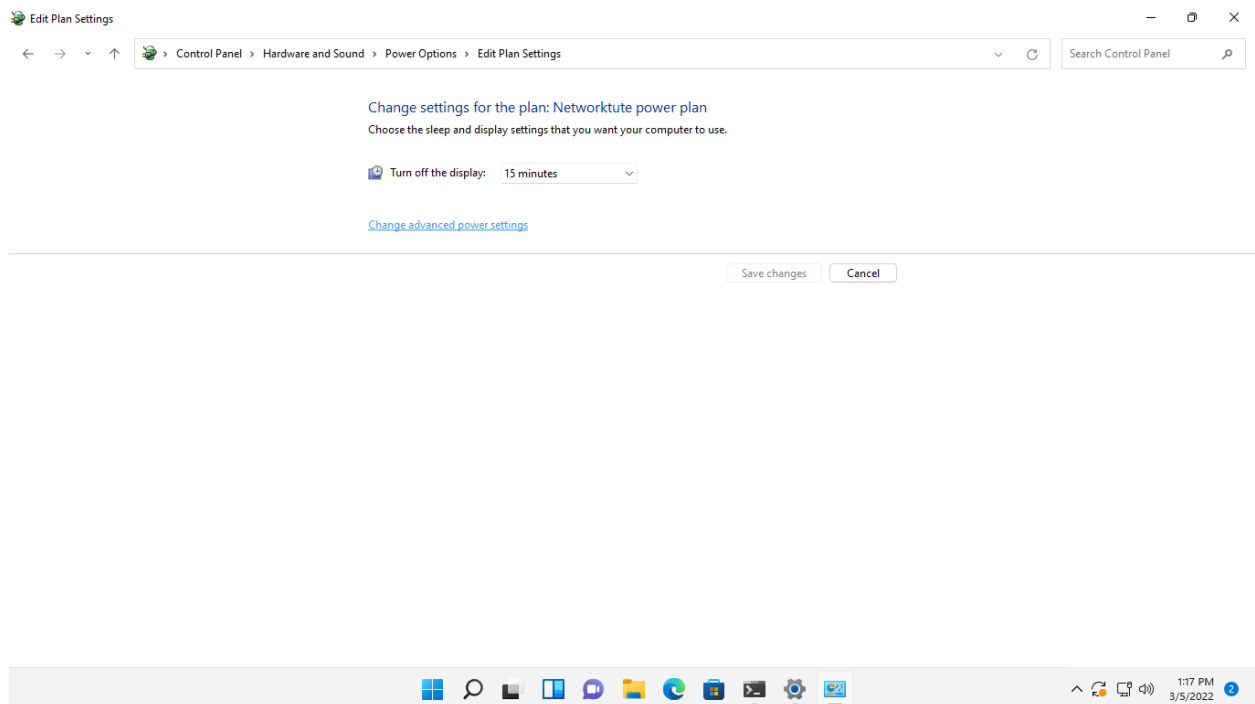Expand the **Show additional** plans if this is hidden.

Observe that the **Ultimate Performance** is available due to running the **powercfg.exe** command in an earlier step.

Next to the **Custom power plan**, click **Change plan settings.**

Step 9:

On the **Change settings for the plan**: **Custom power plan**, click **Change advanced power settings**
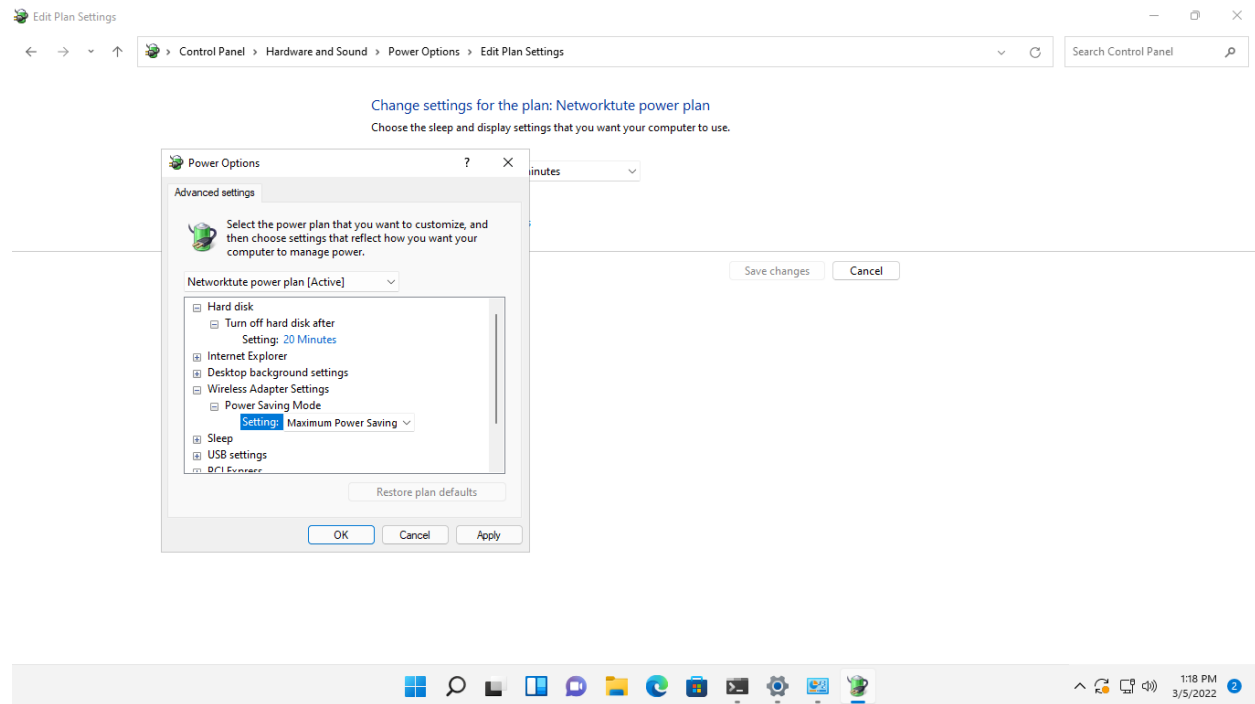
Step 10:

On the **Power Options** dialog box, notice that the **Custom power plan [Active]** is selected as you have selected this plan earlier

Expand **Wireless Adapter Settings > Power Saving Mode**, then click the **Maximum performance** weblink and change it to **Maximum Power Saving**
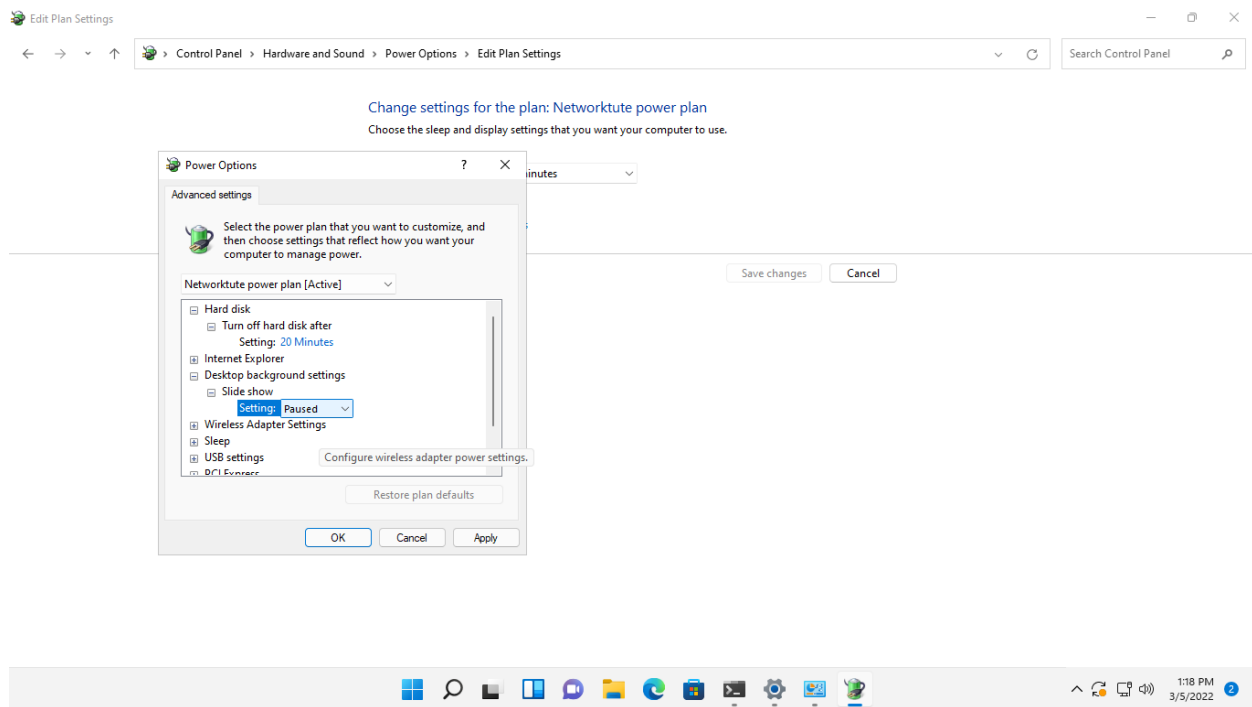
Click **Apply**.

Step 11:

Still in the **Power Options** dialog box, expand **Desktop background settings > Slide show**

Next to **Setting**, click the **Available** weblink, then on the drop-down list, select **Paused**

Step 12:

On **the Power Options** dialog box, click **OK**.

Close the **Edit Plan Settings** window and any other open windows.