Exercise 1 - Updating Windows.

Network administrators must actively close any breaches in their computer systems as the number of security threats and vulnerabilities in software products grows. Windows updates are one feature that can assist in plugging any open vulnerabilities.

By default, the Windows Update Service is turned on. This service downloads and installs critical updates to Windows in order to keep it secure and offer new features. Furthermore, the service handles this action without the need for user input.

Beginning with Windows 11, the Servicing Model, formerly known as Windows Branching, is how Microsoft distributes operating system upgrades.

In this exercise,

1. Configure properties of Windows Update
2. Explore on how the updates can be automated in Windows.

Topology
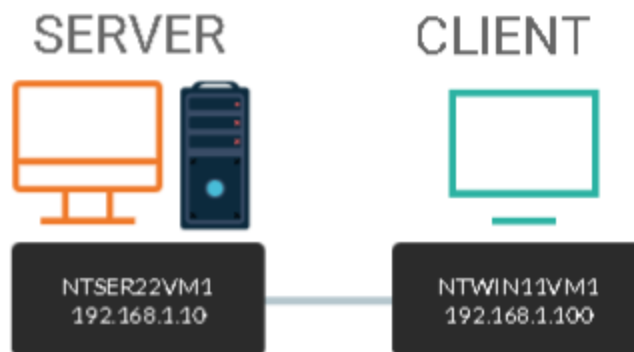
DOMAIN = networktute.com

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: Manage Windows Update Service

The Windows Update Service is available in two modes: automatic and manual. The Windows Update Services checks for any updates published on the Internet in automatic mode.
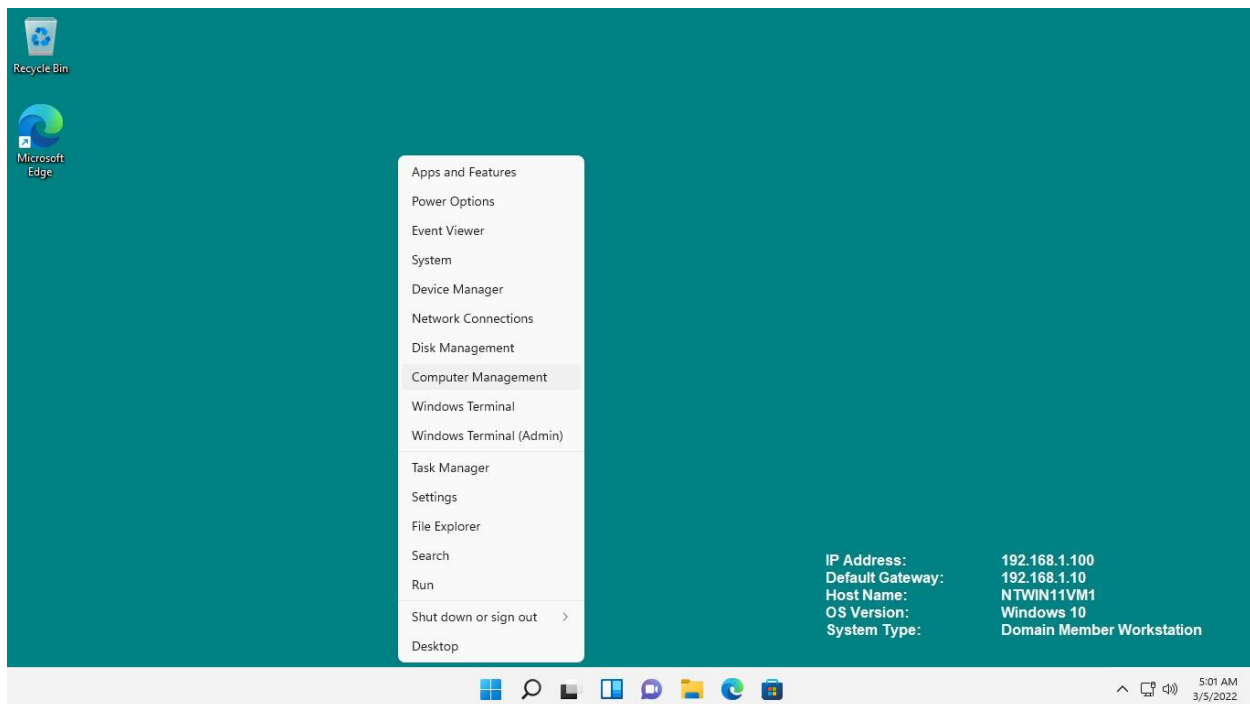
When the system connects to the Internet, even in manual mode, the Windows Update Service retrieves the other updates required for Windows 11.

Now let's, view the startup settings of the Windows Update Service.

Step 1:

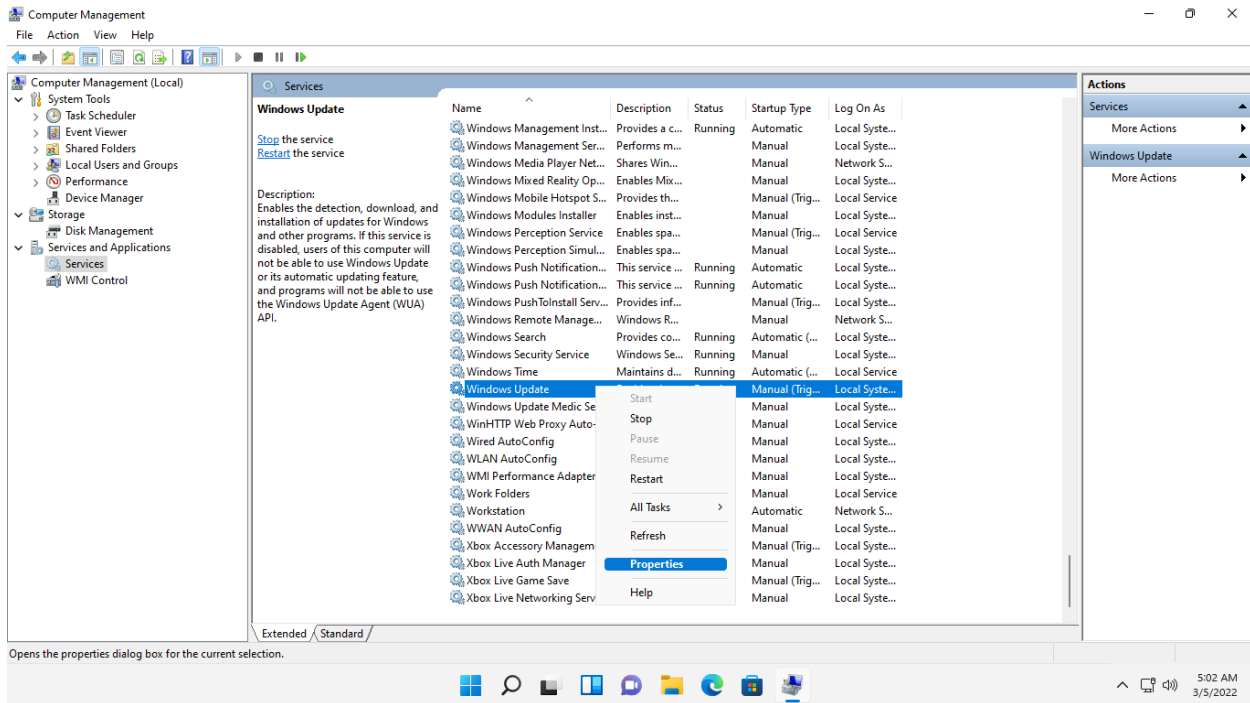Ensure you have powered on the required devices and connect to **NTWIN11VM1**.

Right-click the **Start** icon and select **Computer Management.**

Step 2:

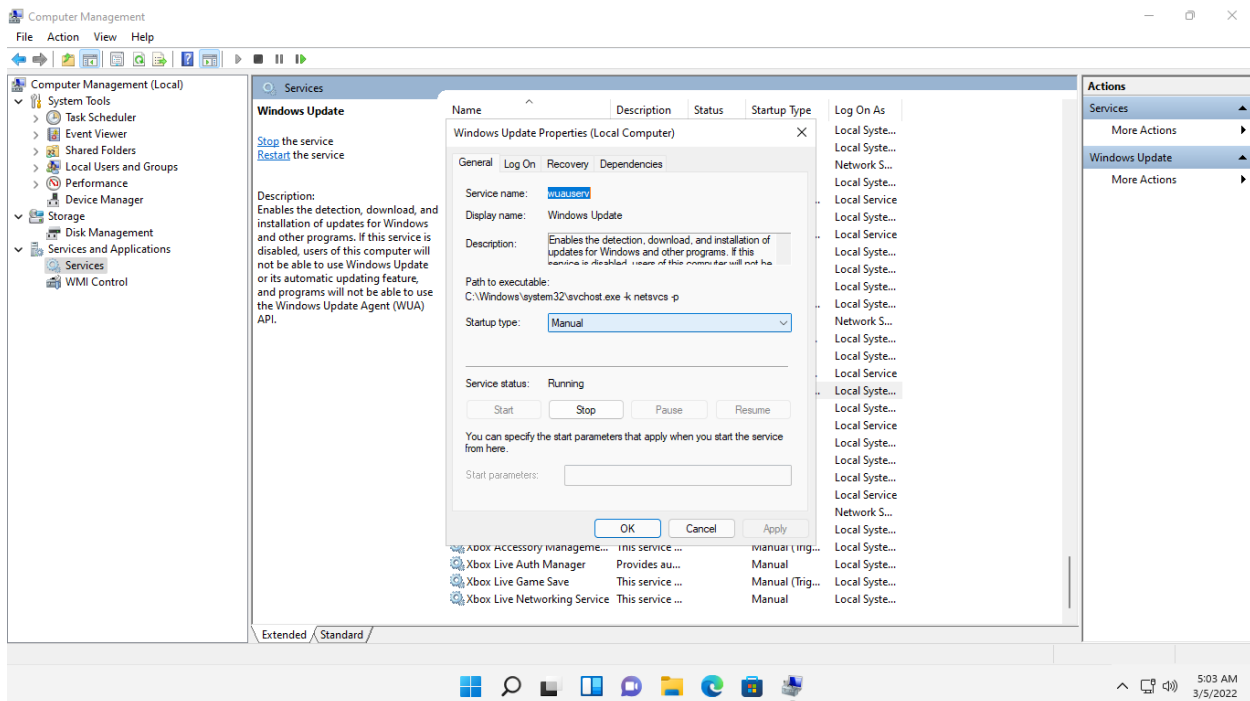On the **Computer Management** console, expand **Services and Application** and select **Services**.

On the details pane at right, scroll down. Then right-click **Windows Update** and select **Properties**.

Step 3:

On the **Windows Update Properties (Local Computer)** dialog box, ensure that the **Startup type** is set to **Manual**.

Click **OK.**

Task 2: Download Windows Updates

While Windows is running, the Windows Update Service downloads the updates in the background.

Because this will take some time because the lab equipment has only recently been turned on, you will instead undertake a manual update installation.

RSAT (Remote Server Administration Tools) is a Microsoft update that may be downloaded from the company's website. You'll download RSAT from the Tools and Resources intranet and install it on **NTWIN11VM1** in this assignment.

Step 1:

Ensure you are connected to **NTWIN11VM1**.

Click **Microsoft Edge** on the **Taskbar**.
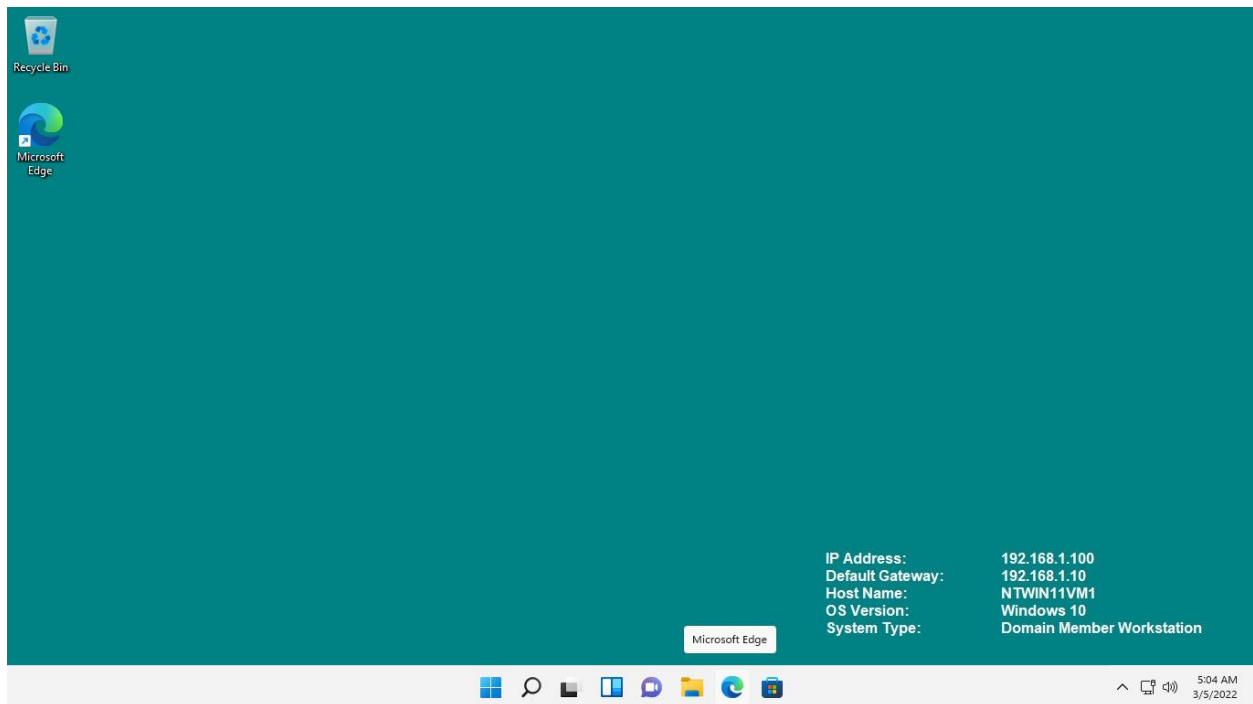
Step 2:

In the official [Microsoft Download](#) page for **RSAT for windows 11**, click **Download.**
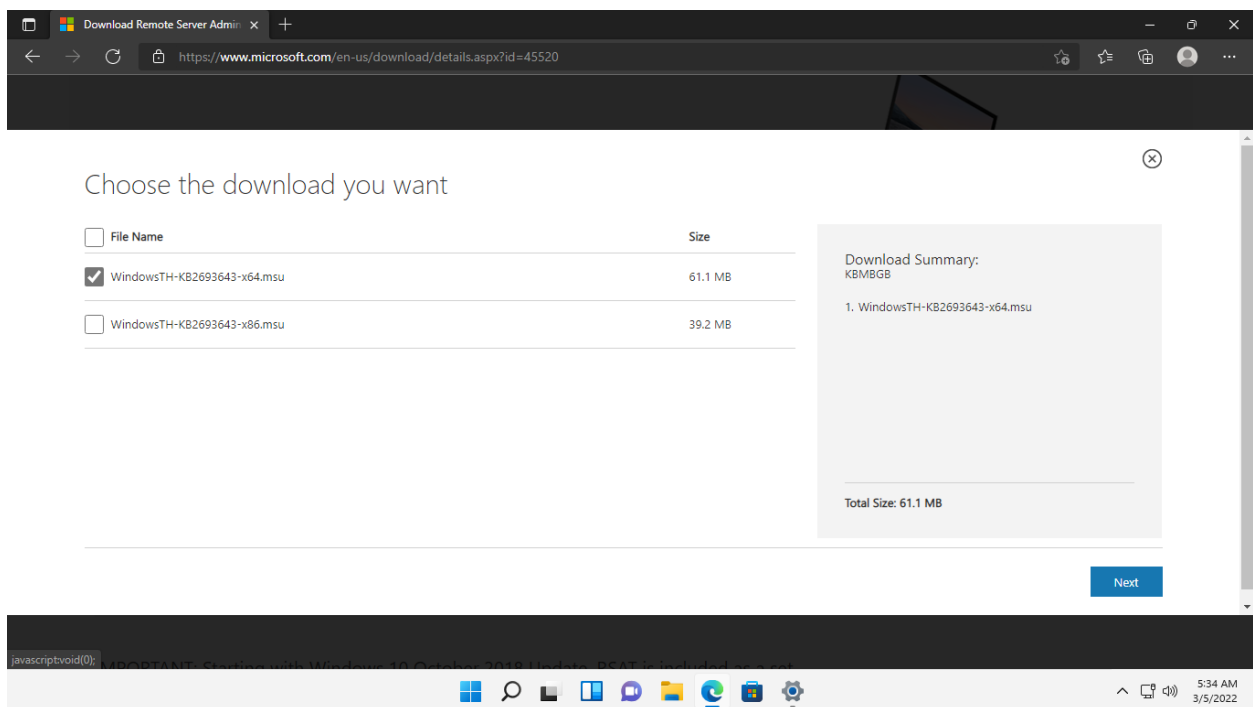
We are going with the **Windows 11 RSAT** since Microsoft didn't have the windows 11 version
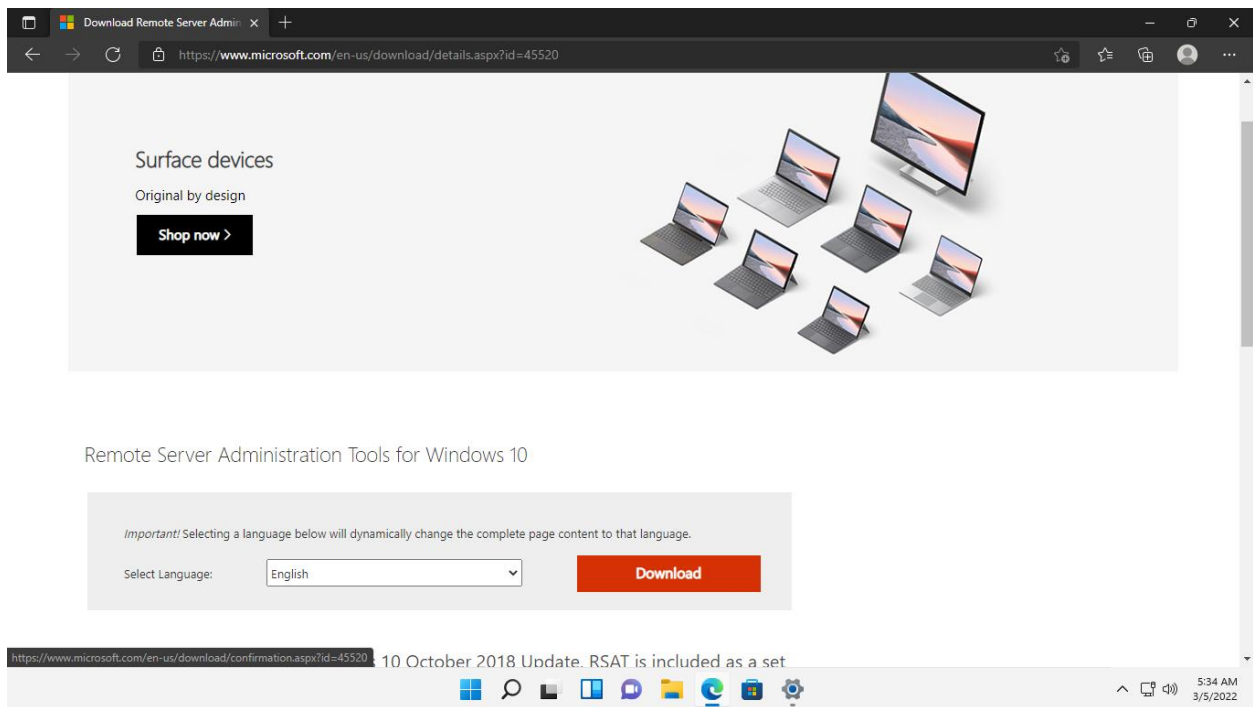
Step 3:

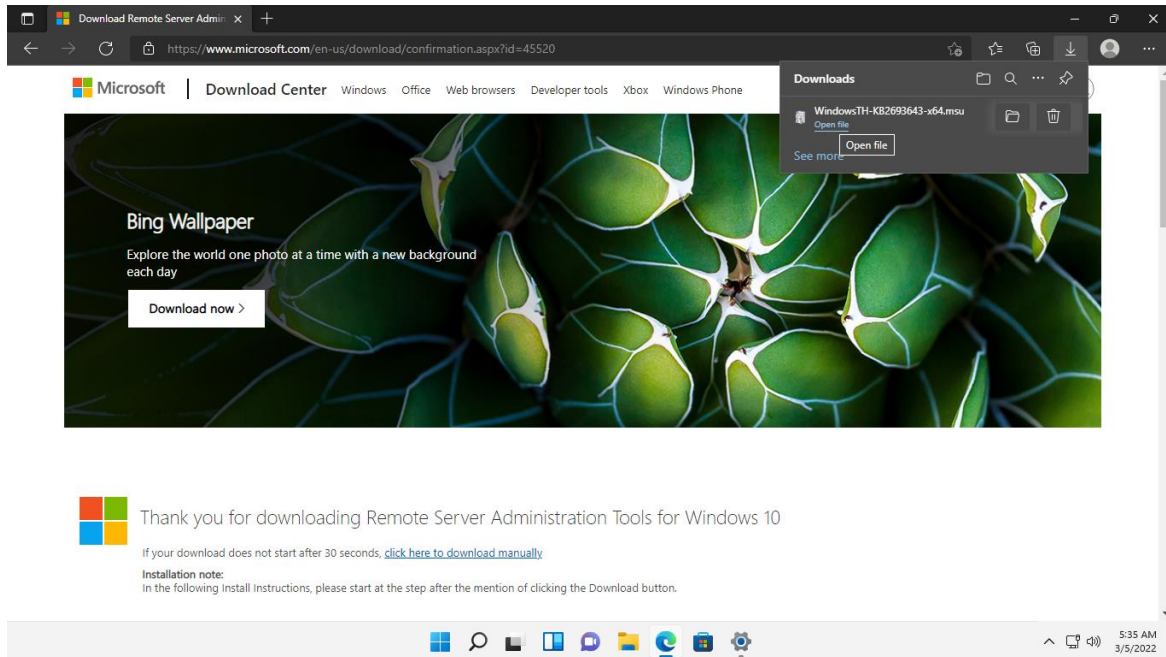On the **Choose the download you want.** Select the 64bit

Click **Next.**

Step 4:

On the Microsoft Download page, click **Download page** and wait for the file to download.
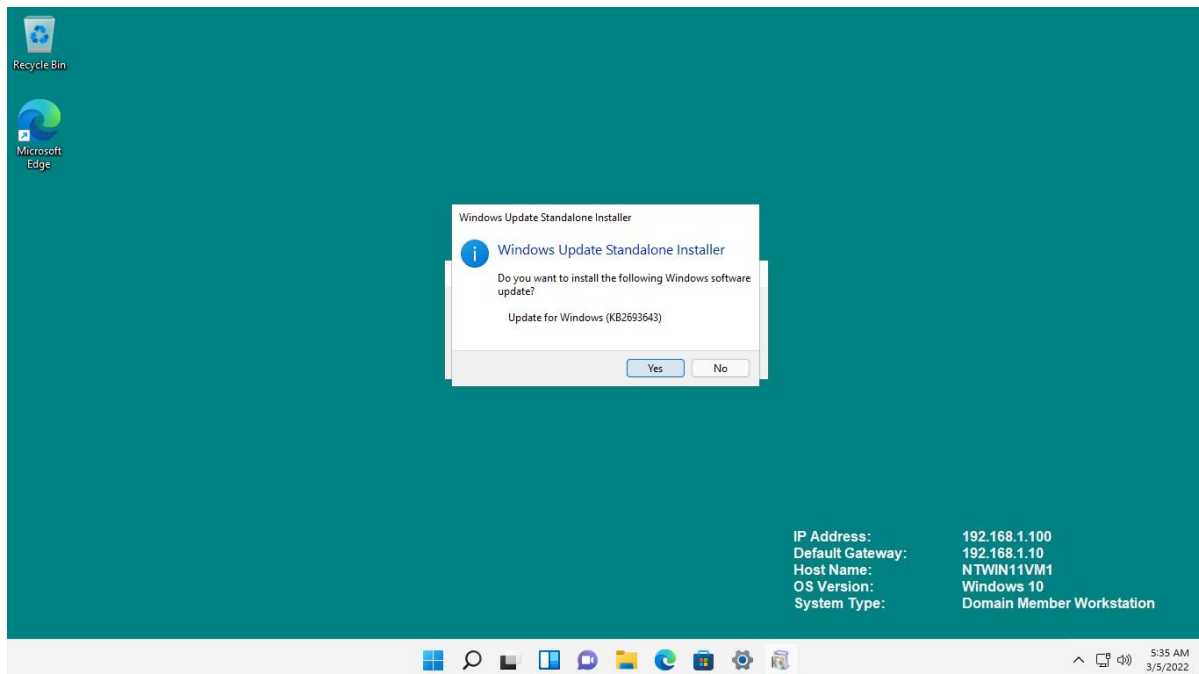
When the file download is complete, click **Open file.**

Step 5:

Please wait while a search is being done on the computer about installed updates.
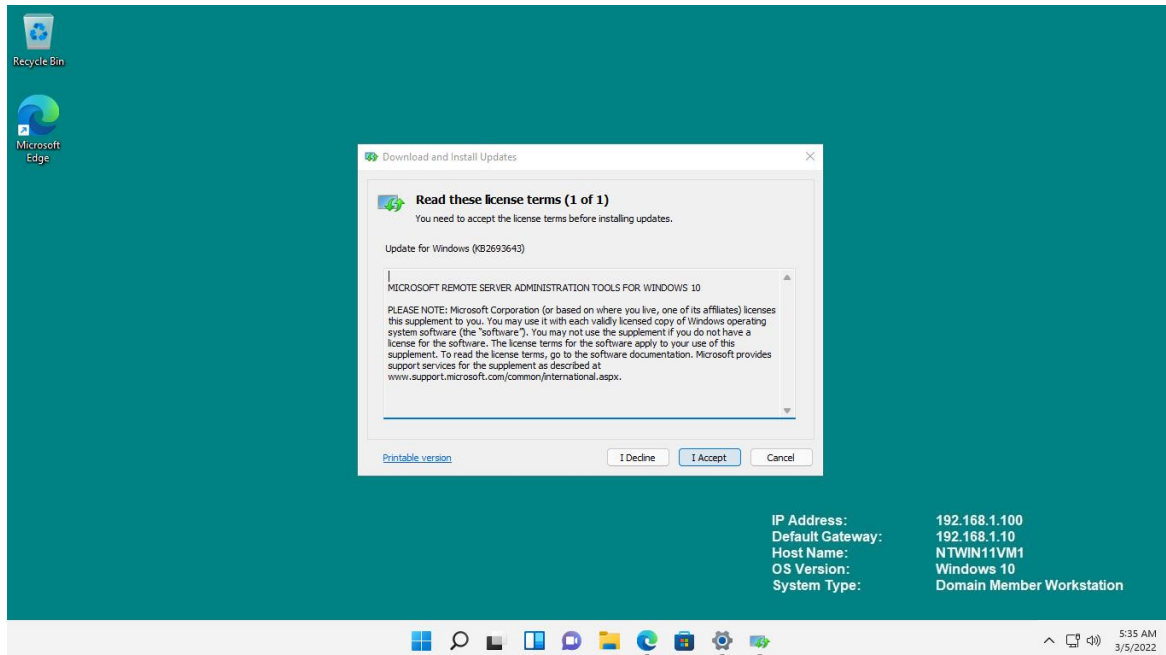
On the **Windows Update Standalone Installer** message box, click **Yes.**

Step 6:

Please wait while the files are being downloaded and copied.
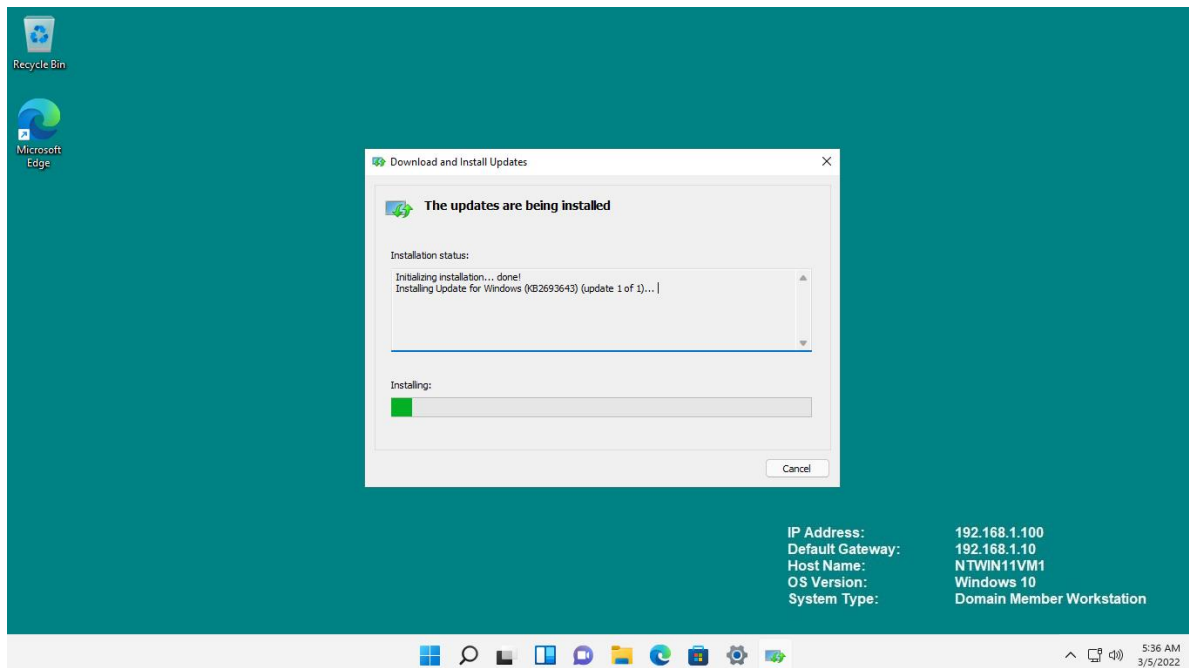
On the **Download and Install Updates - Read these license terms (1 of 1)** click **I Accept**.
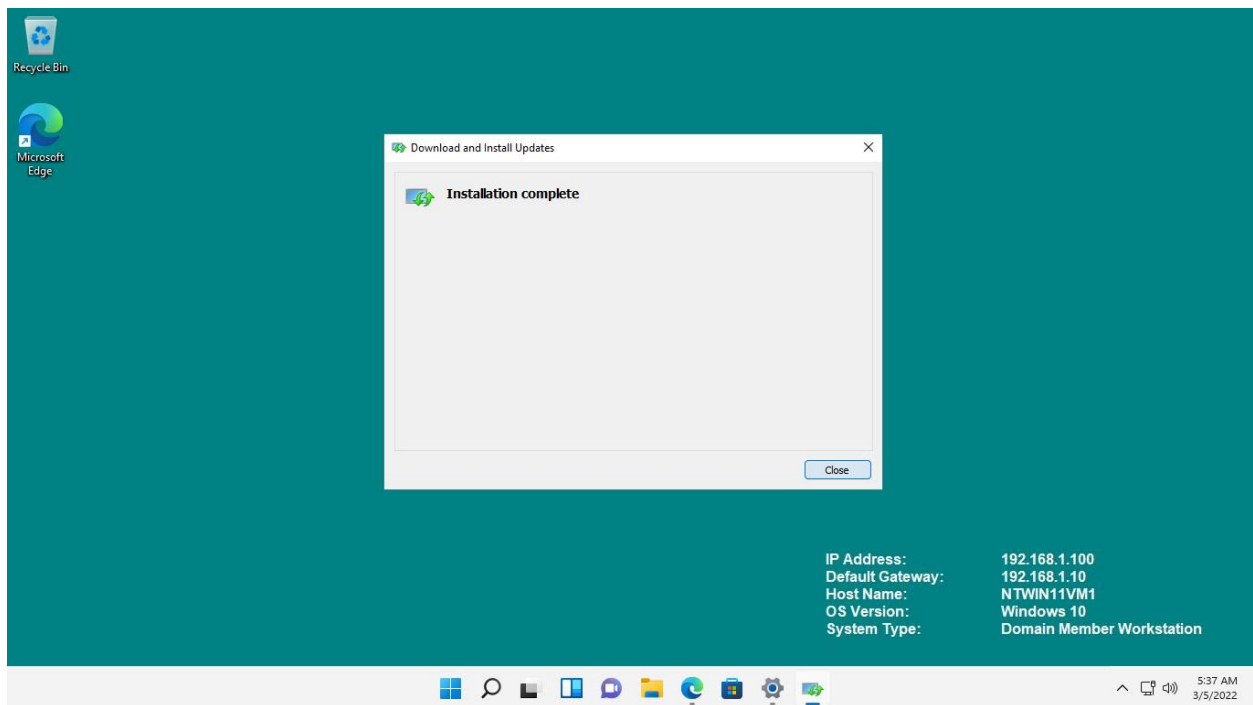

Step 7:

The installation of the update will take a few minutes to complete.

Please while until the installation is complete.

Step 8:

When the **Installation complete** message appears, click **Close**.


Step 9:

Close Microsoft Edge.

Task 3: Manually Install Windows Update

By default, all versions of Windows are set to obtain updates from Microsoft. This option keeps your computer up to date with the latest patches, which helps protect your system from vulnerabilities and threats.

Now let's, manually initiate Windows Update to connect to Microsoft and verify if updates are available for download.
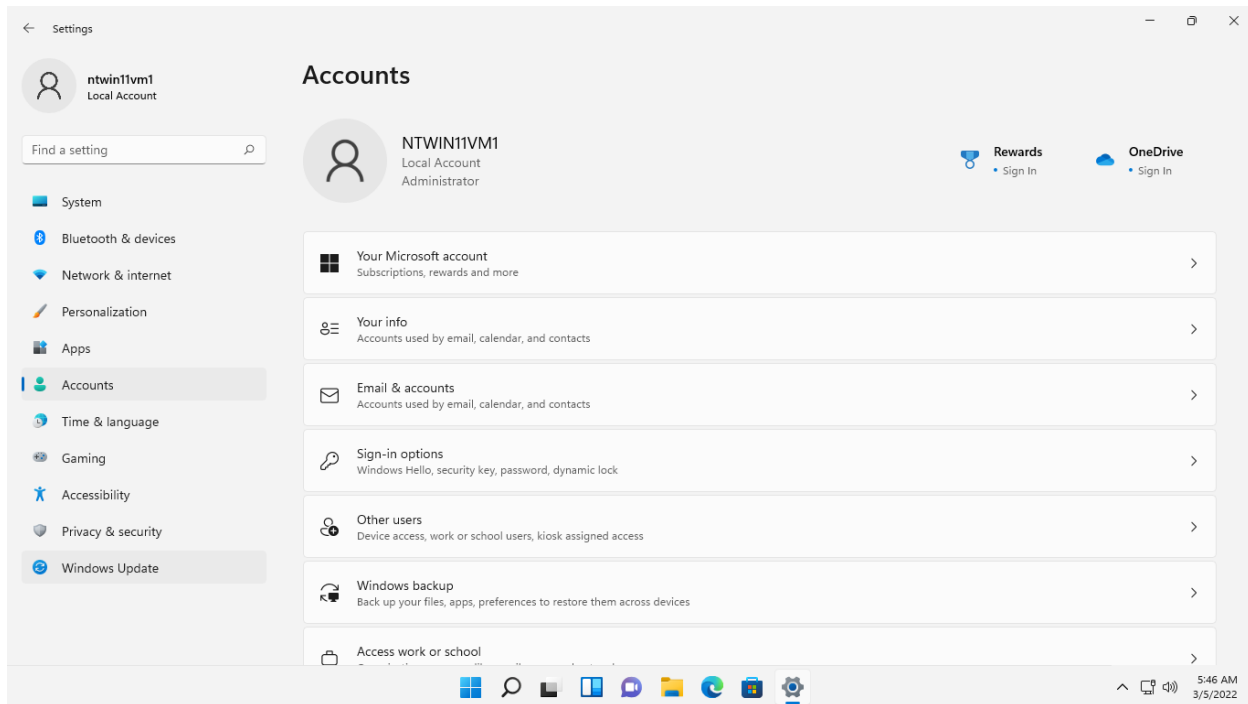
Step 1:

On **NTWIN11VM1**, click the **Start** icon and select **Settings** (cogwheel) icon.
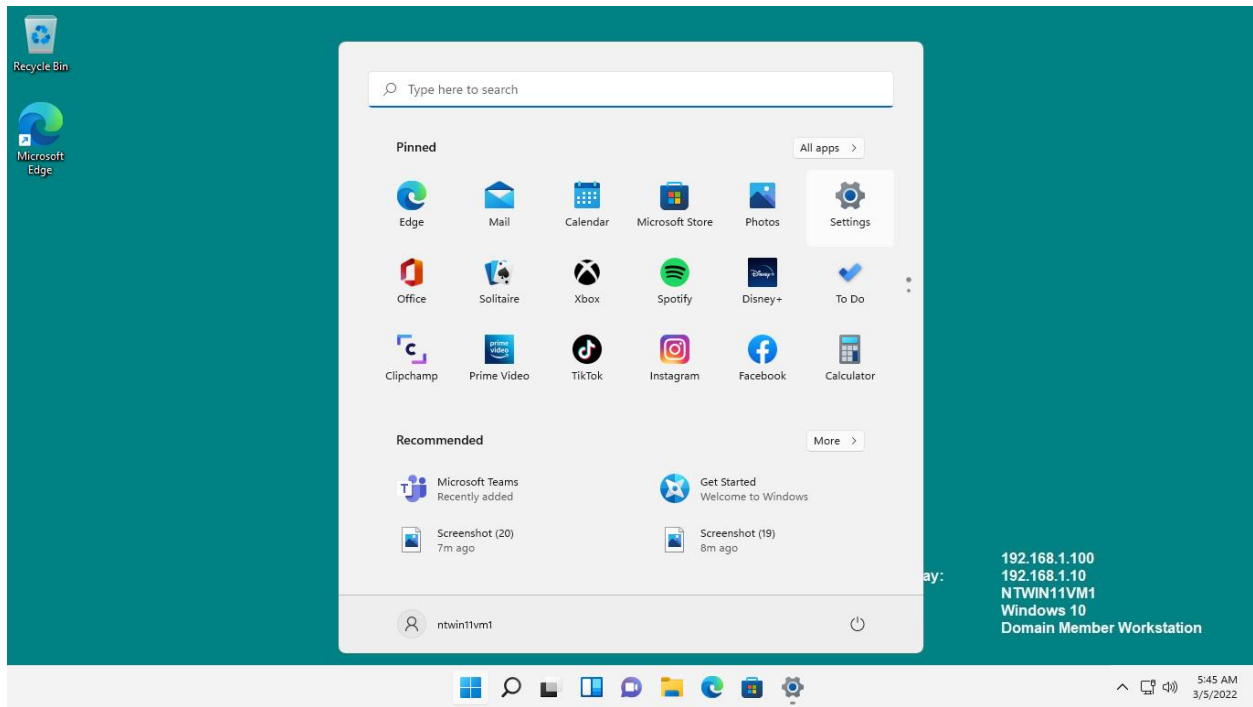
Step 2:

On the **Windows Settings** window, click **Windows Update**

Step 3:

The **Settings - Windows Update** window is displayed.

> **Note**: If the Retry link is present, Windows Update may have started downloading some updates. To continue downloading updates, click the Retry button.

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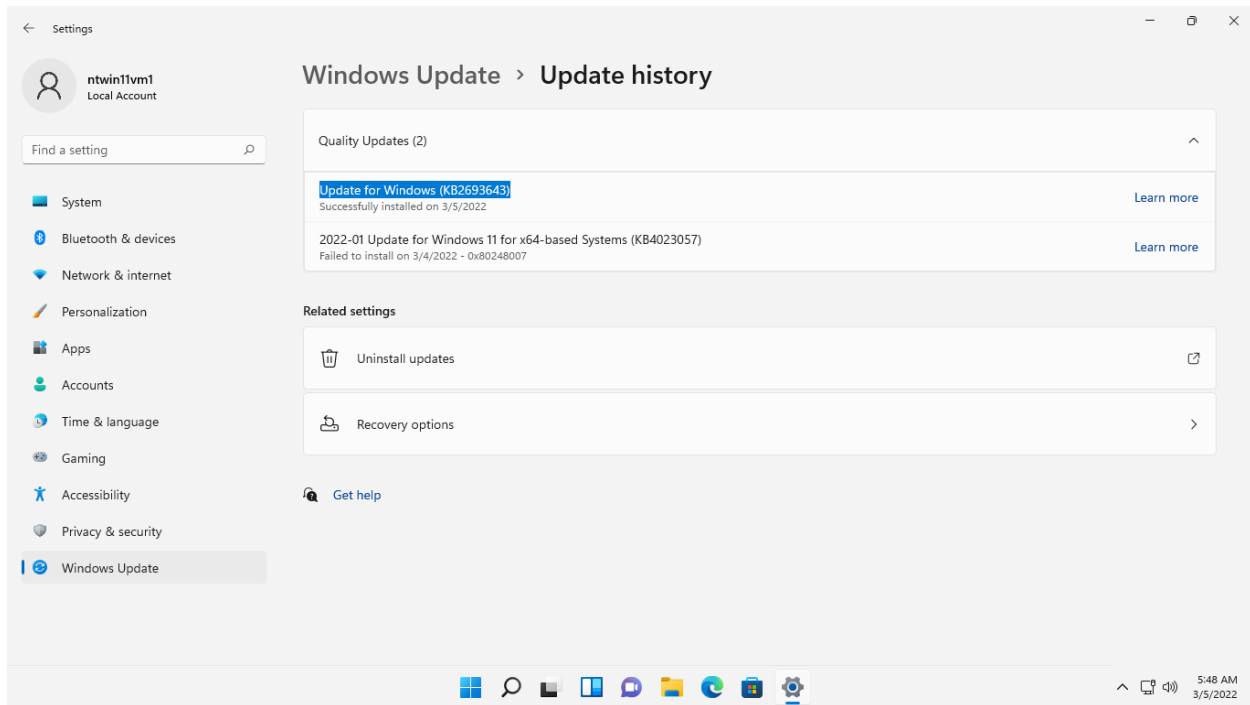In the meantime, click **Update history.**
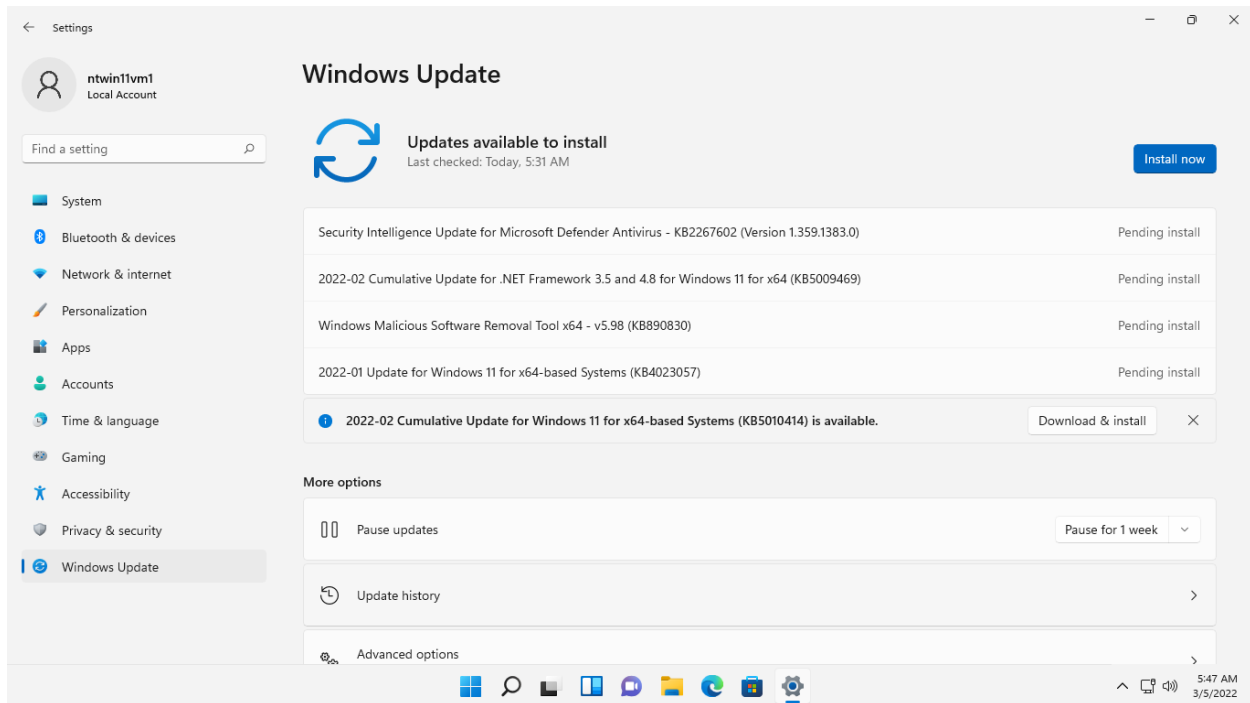
Step 4:

The **View update history** page lists the installed updates on the computer.

Under **Quality Updates** section, notice the **Update for Windows (KB 2693643)** that was installed today while working on this lab.

This is the update for **RSAT**.

Click the arrow next to the **Settings** title bar to navigate back to the **Windows Update** page.

# Task 4: Use Command Line to Run the Defrag Tool

Specifying the downloading mode, the download time, and other advanced parameters are all part of configuring the Windows Update Service.

Now let's, examine some of the common update options that affect how patches or updates are downloaded and installed.
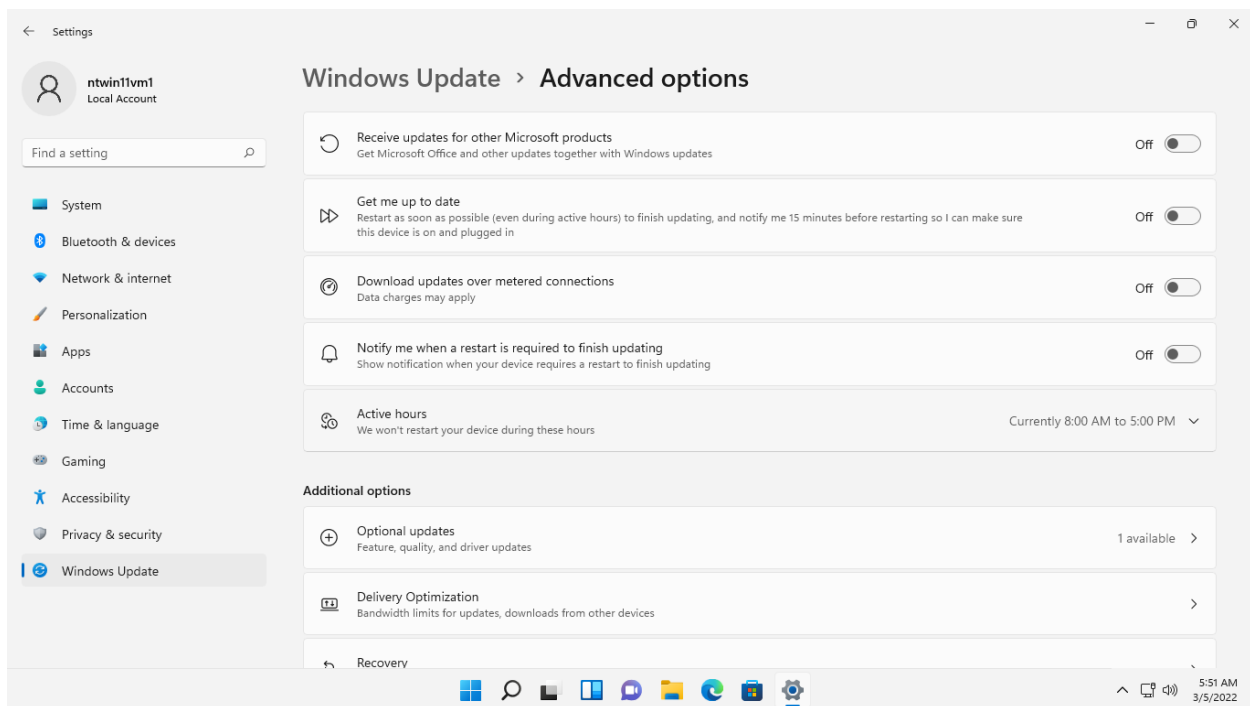
Step 1:

Ensure you are connected to **NTWIN11VM1** and the **Settings - Windows Update** window is open.
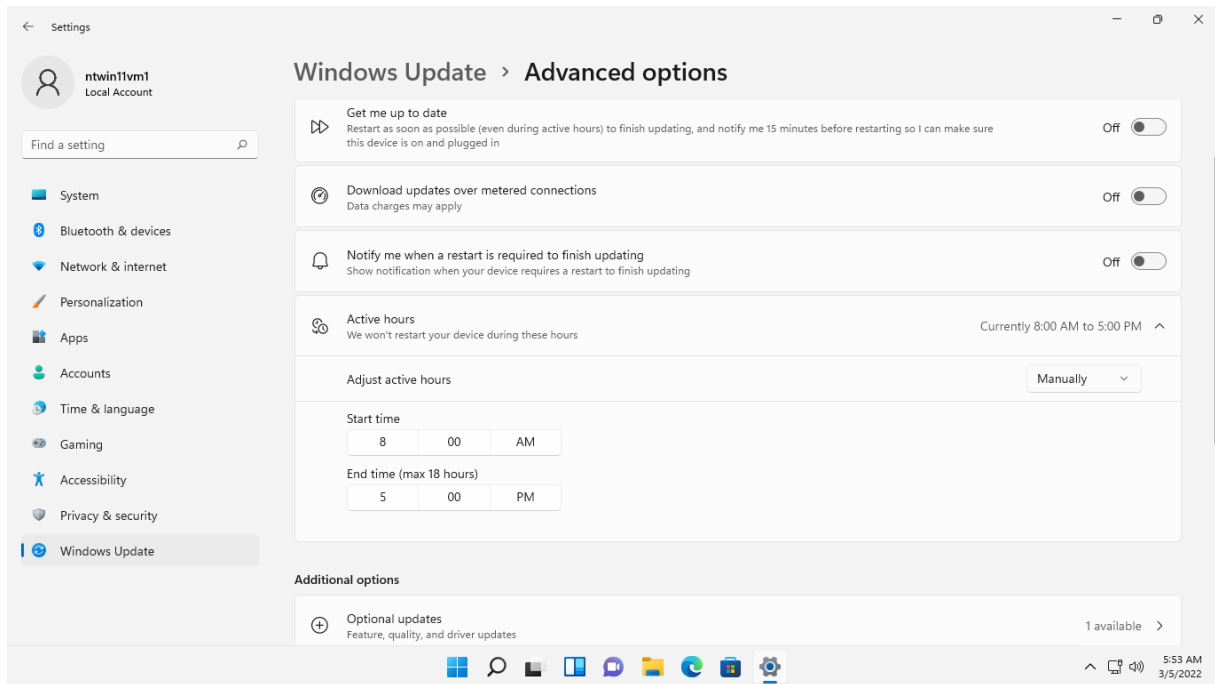
Click the **Advanced Options**.
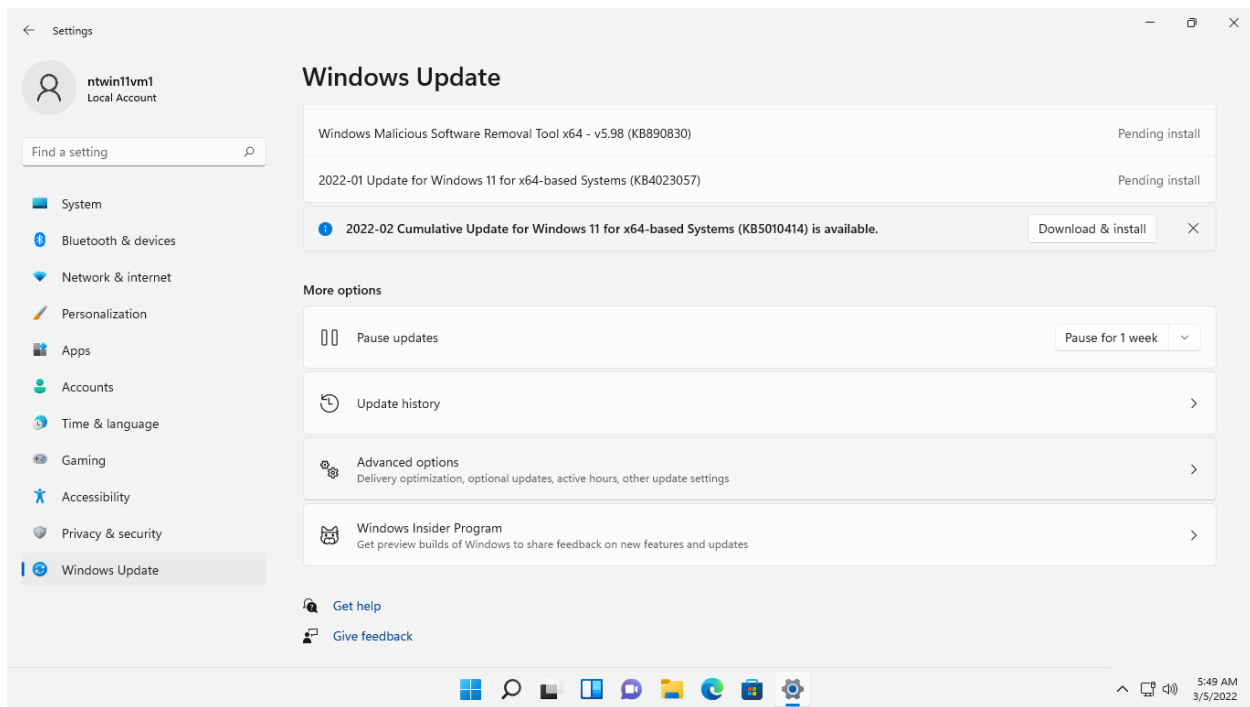
On **Windows Update** > **Advanced Options**. Click the **Active hours**.

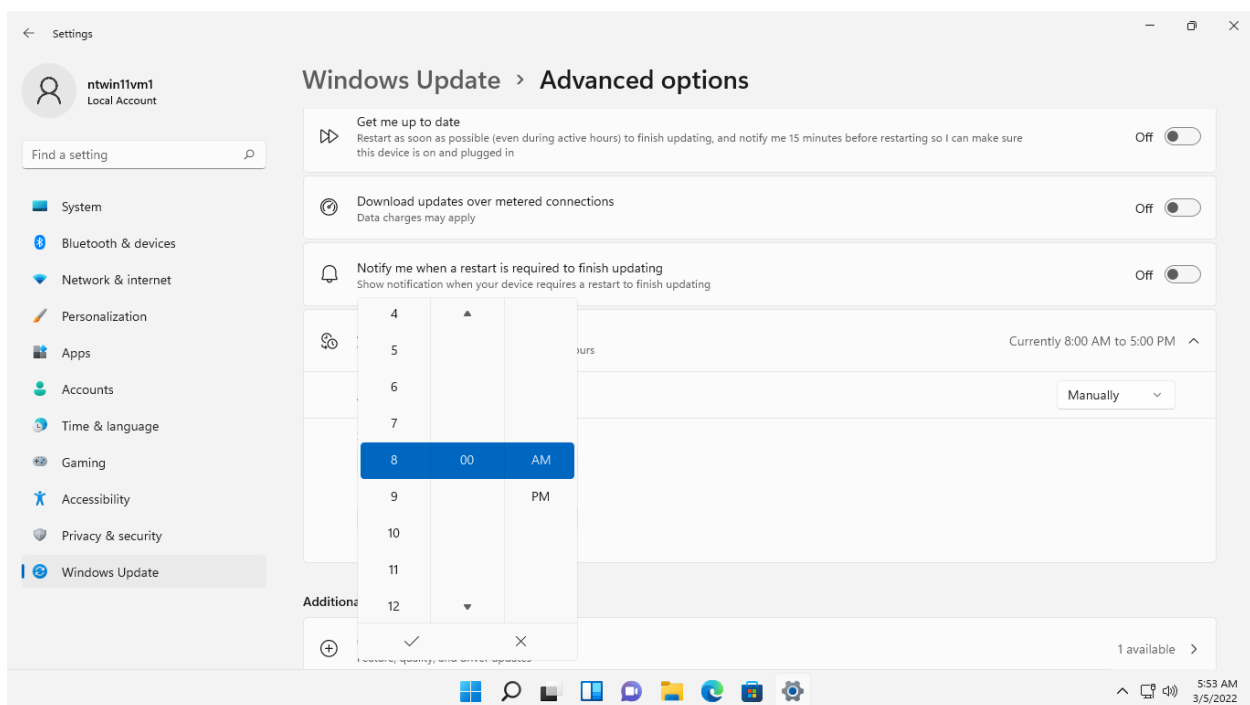And Select **Manual.**

Step 2:

On the **Change Active hours** dialog box, click the **Change** web link.

Step 3:

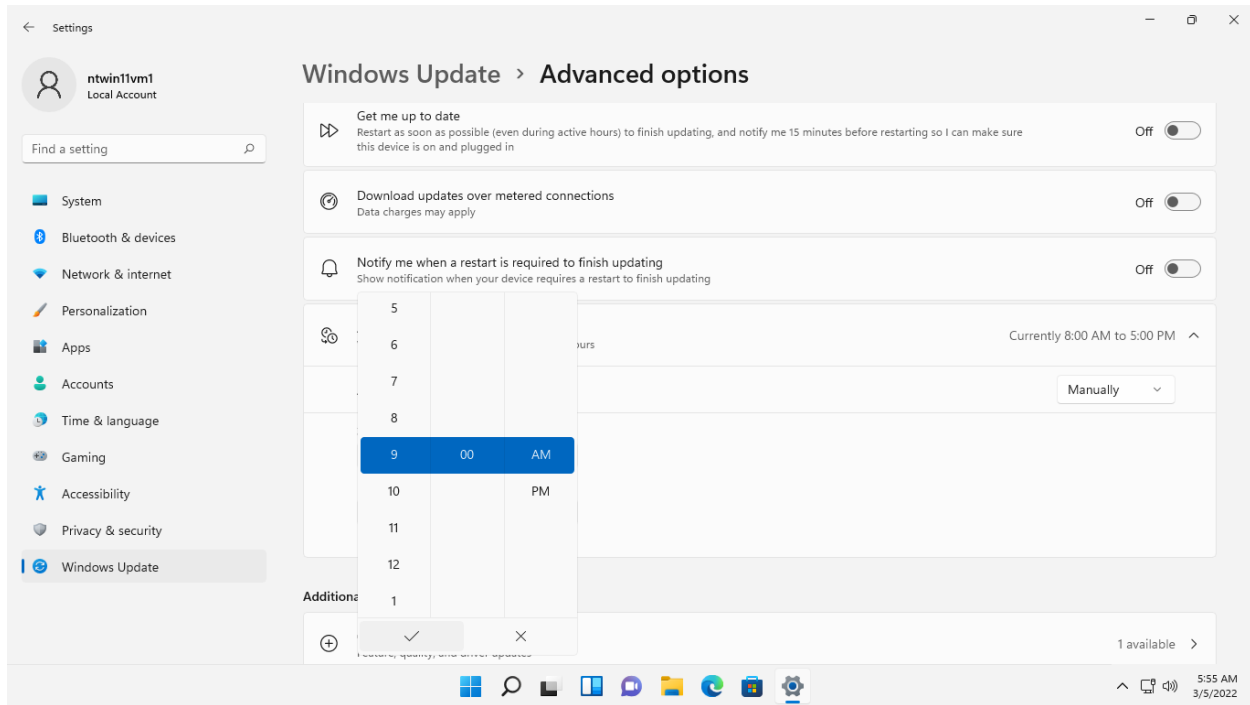On the **Active hours** dialog box, notice the **Start time** is set to **8:00 AM.**

Click on the **8.**

Step 4:

Change the **8** to a **9** to set the start time to **9:00 AM**.
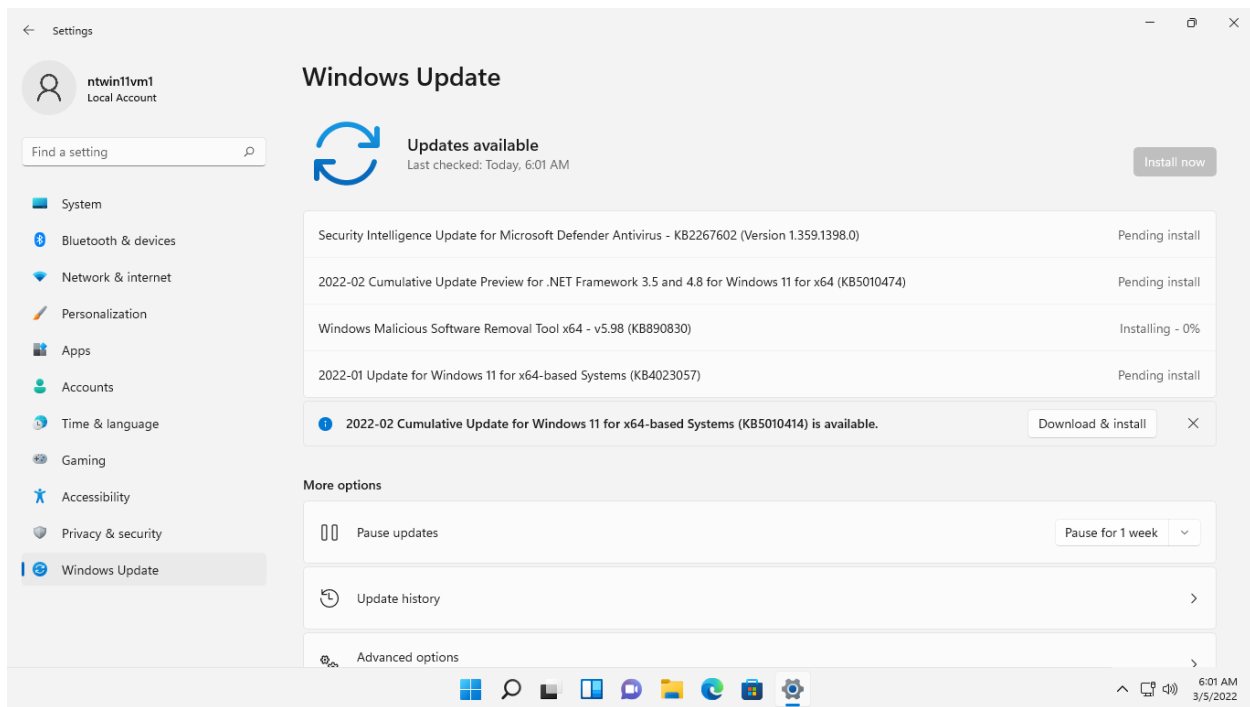
Click the **tick** icon.

Step 5:

Click **Save** to save changes in **Active hours** dialog box.

Step 6:

Back on the **Windows Update** page.

Step 7:

Notice the **Pause updates** section gives you have an option to choose a future date to pause any updates until that date.

You will not be able to delay updates in this lab environment because this lab computer had already paused them.

Note: You can pause the updates up to 5 Weeks.

Click the arrow next to the **Settings** title bar to navigate back to the **Windows Update** page.
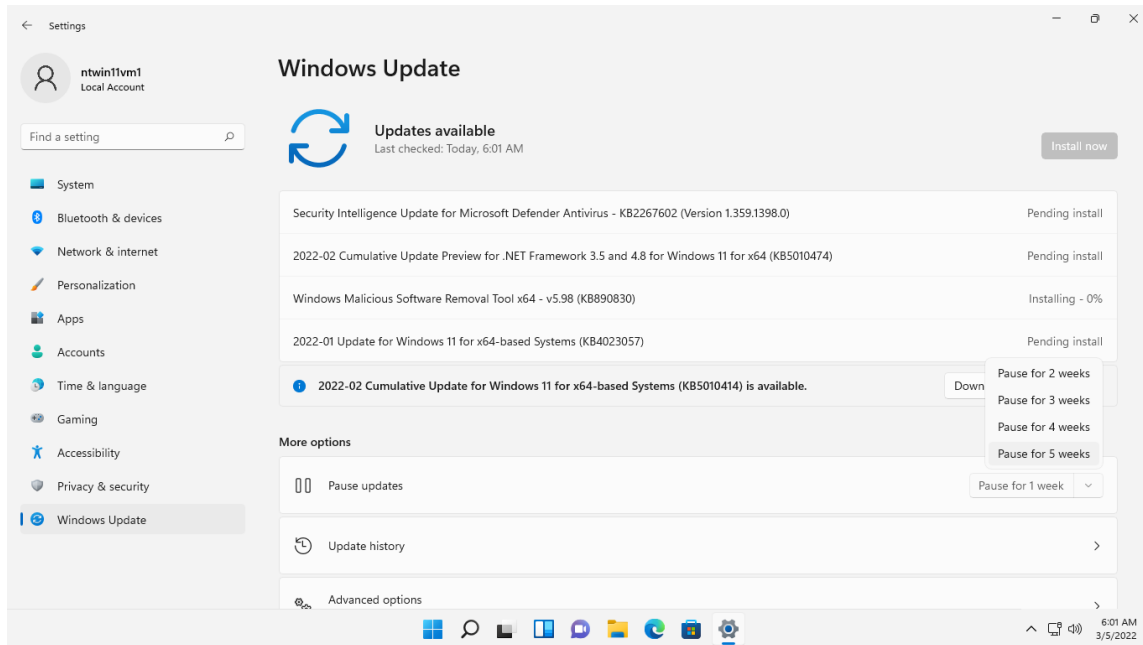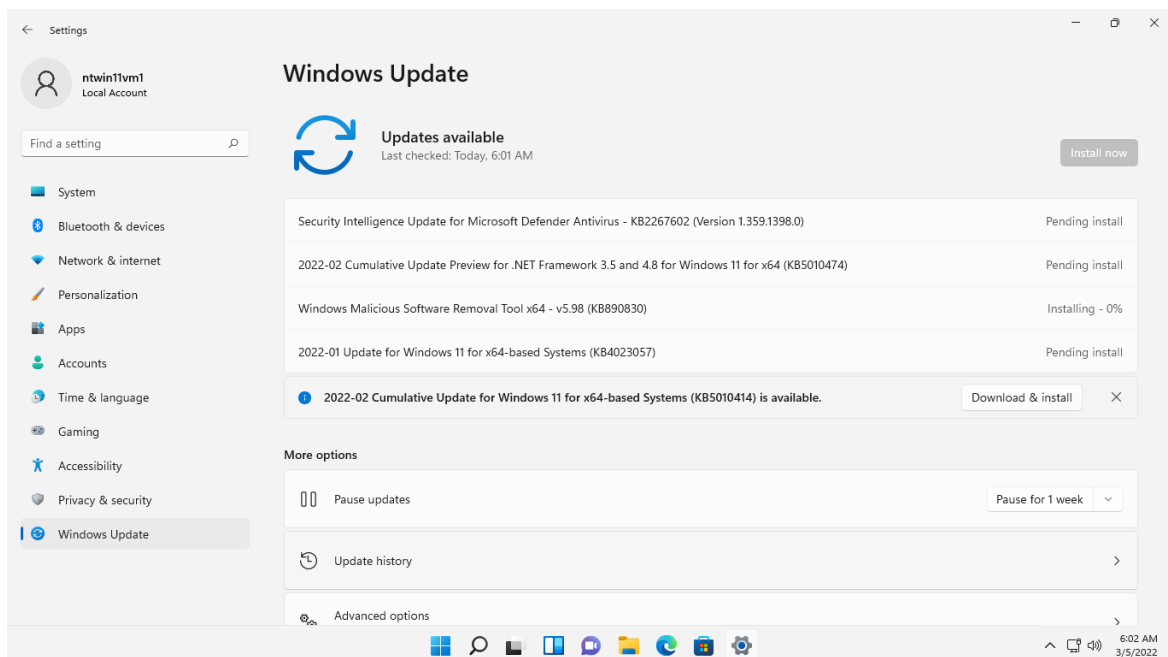
Task 5: Uninstalling an Update

In a previous task, you installed an RSAT update for managing Windows servers in the network.

Now let's, uninstall the update to demonstrate that it is possible to remove an update that was previously installed.
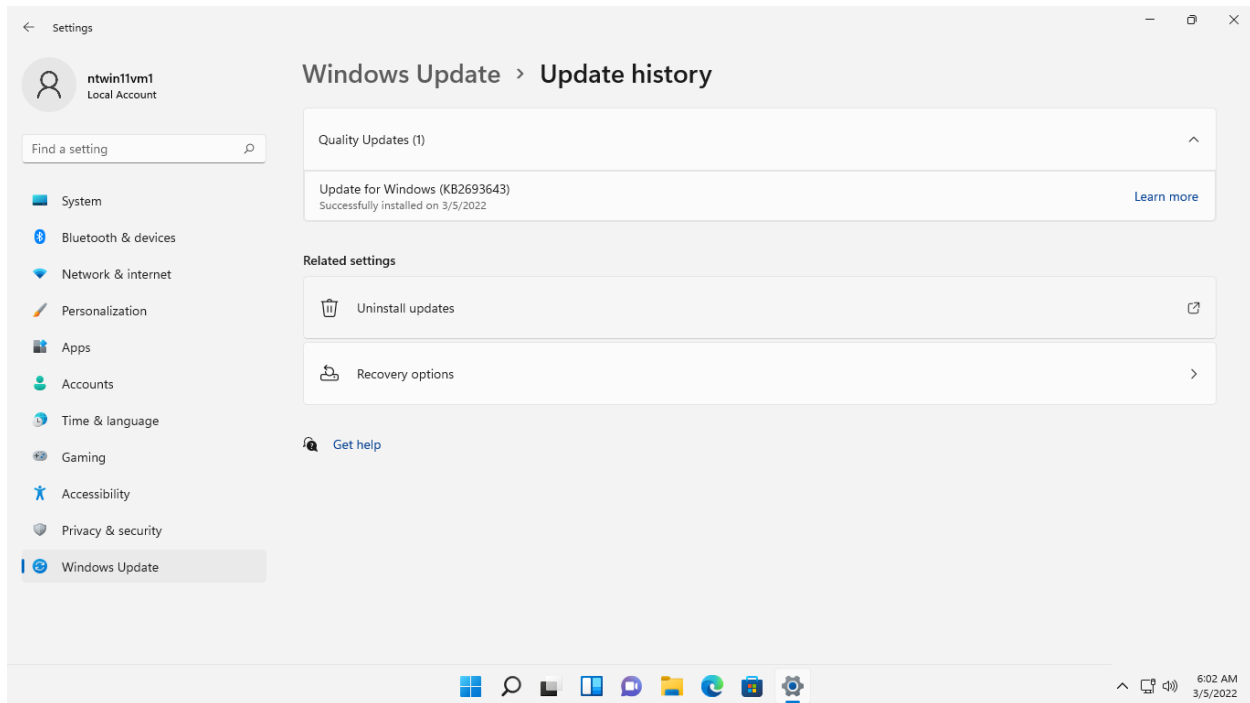
Step 1:

Ensure you are connected to **NTWIN11VM1** and the **Settings - Windows Update** window is open.
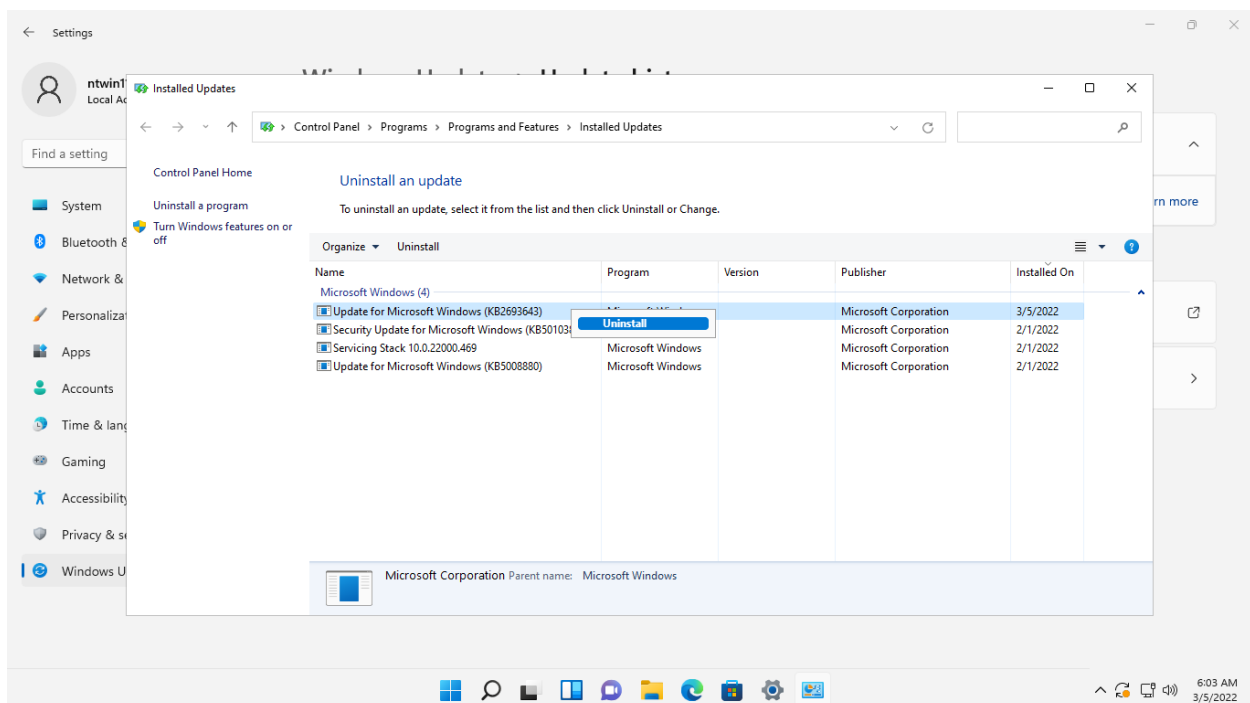
Click **Update history.**

Step 2:

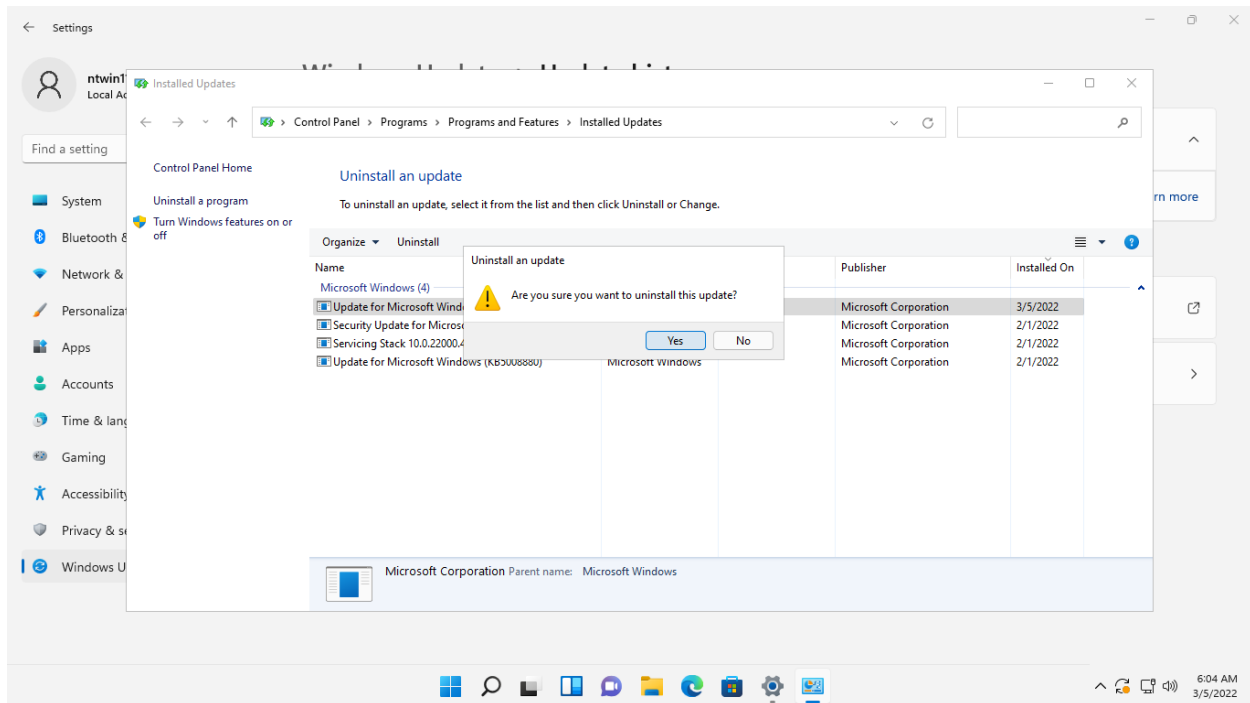On the **Update history** page, click **Uninstall updates**.

Step 3:

On the **Installed Updates** window, under **Uninstall an update** section right-click **Update for Microsoft Windows (KB2693643)** and click **Uninstall.**
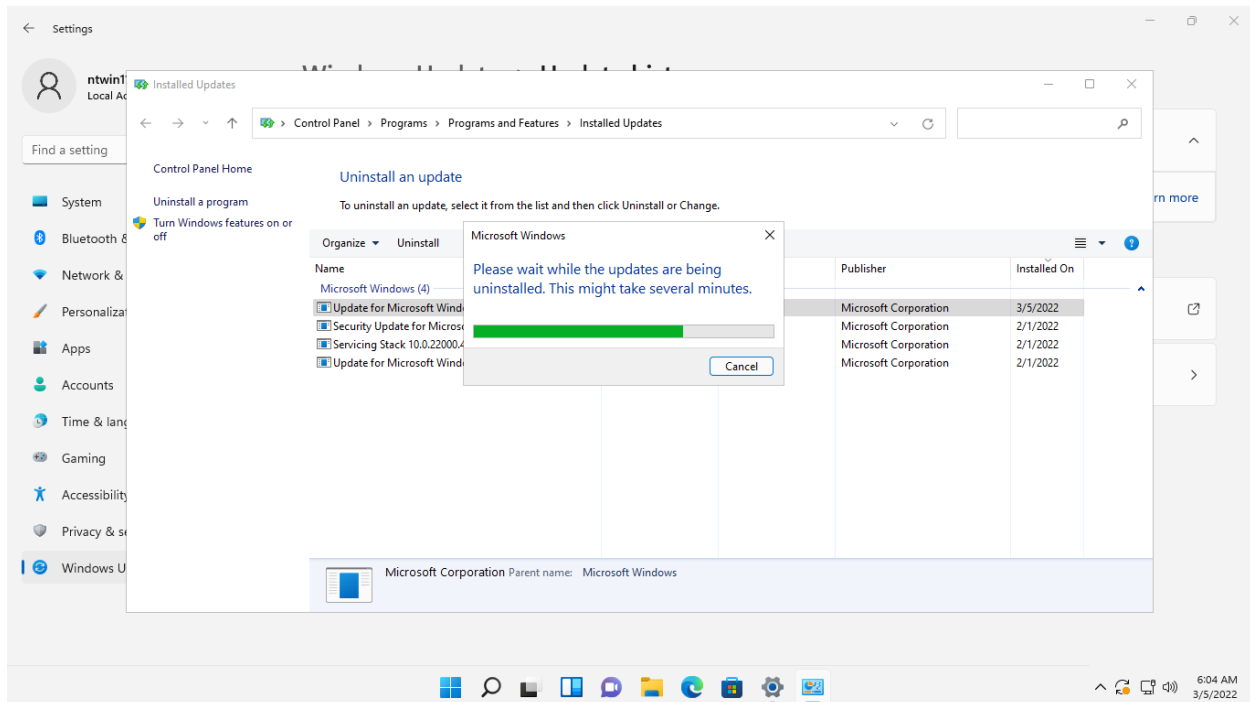
Step 4:

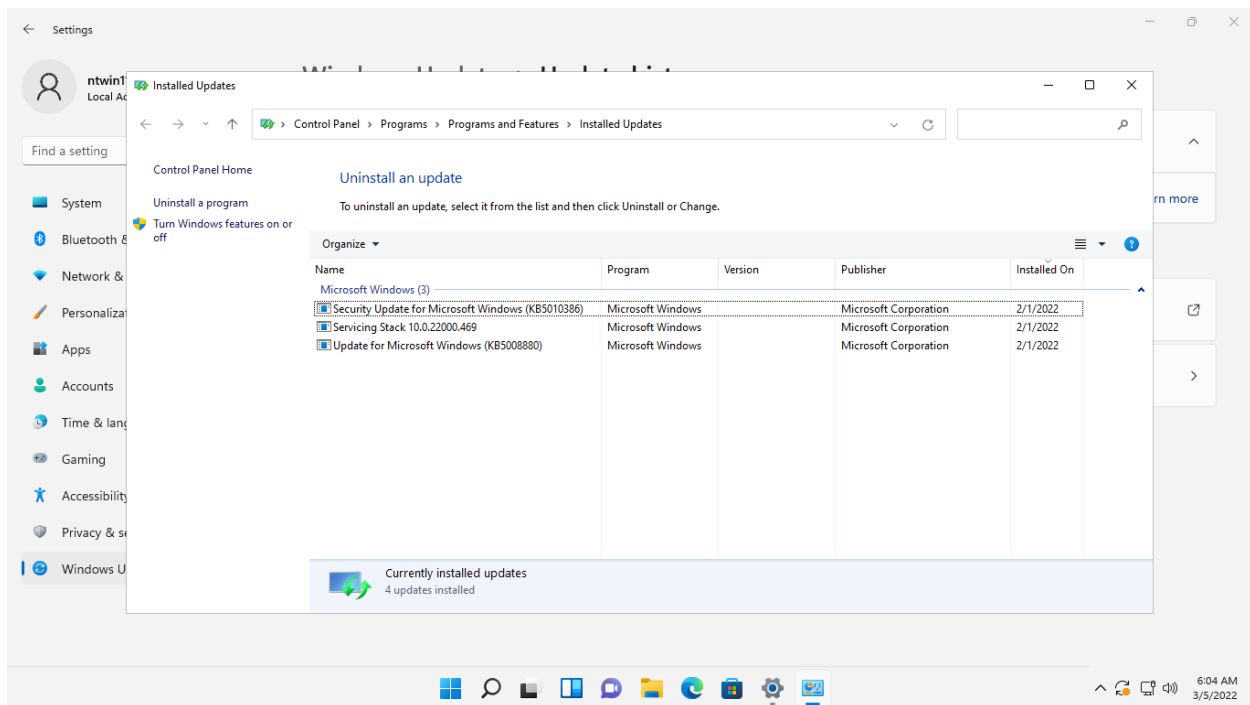On the **Uninstall an update** message box, click **Yes.**

Step 5:

Please wait while the updates are being uninstalled

Step 6:

After a few moments, the **Update for Microsoft Windows (KB2693643)** is no longer listed.

Step 7:

Close the **Installed Updates** window.