Windows Server Installation Guide

Article • 06/20/2022 • 12 contributors

In this article

The Windows Subsystem for Linux (WSL) is available for installation on Windows Server 2019 (version 1709) and later. This guide will walk through the steps of enabling WSL on your machine.

Install WSL on Windows Server 2022

Windows Server 2022 now supports a simple WSL installation using the command:

Bash Copy

```
wsl --install
```

You can now install everything you need to run WSL on Windows Server 2022 by entering this command in an **administrator** PowerShell or Windows Command Prompt and then restarting your machine.

This command will enable the required optional components, download the latest Linux kernel, set WSL 2 as your default, and install a Linux distribution for you *(Ubuntu by default)*.

See the standard WSL docs for more information on how to:

- Change the default Linux distribution installed.
- Set up your Linux username and password.
- Check which version of WSL you are running
- Update and upgrade packages.
- Add additional distributions.
- Use Git with WSL.

Install WSL on previous versions of Windows Server

To install WSL on Windows Server 2019 (version 1709+), you can follow the manual install steps below.

Enable the Windows Subsystem for Linux

Before you can run Linux distributions on Windows, you must enable the "Windows Subsystem for Linux" optional feature and reboot.

Open PowerShell **as Administrator** and run:

PowerShell Copy

```
Enable-WindowsOptionalFeature -Online -FeatureName Microsoft-Windows-Subsystem-Linux
```

Download a Linux distribution

See the Downloading distributions section of the manual installation page for instructions and links to download your preferred Linux distribution.

Extract and install a Linux distribution

Now that you've downloaded a Linux distribution, in order to extract its contents and manually install, follow these steps:

1. Extract the `<DistributionName>.appx` package's contents, using PowerShell:

   PowerShell Copy

   ```
   Rename-Item .\Ubuntu.appx .\Ubuntu.zip
   Expand-Archive .\Ubuntu.zip .\Ubuntu
   ```

2. Once the distribution has been downloaded, navigate to the folder containing the download and run the following command in that directory, where `app-name` is the name of the Linux distribution .appx file.

   Powershell Copy

   ```
   Add-AppxPackage .\app_name.appx
   ```

   ⊗ Caution

   Installation failed with error 0x8007007e: If you receive this error, then your system doesn't support WSL. Ensure that you're running Windows build 16215 or later. **Check your build**. Also check to **confirm that WSL is enabled** and your computer was restarted after the feature was enabled.

3. Add your Linux distribution path to the Windows environment PATH (`C:\Users\Administrator\Ubuntu` in this example), using PowerShell:

   PowerShell Copy

   ```
   $userenv = [System.Environment]::GetEnvironmentVariable("Path", "User")
   [System.Environment]::SetEnvironmentVariable("PATH", $userenv + ";C:\Users\Administra
   ```

You can now launch your distribution from any path by typing `<DistributionName>.exe`. For example: `ubuntu.exe`.

Once installation is complete, you can create a user account and password for your new Linux distribution.

Collaborate with us on GitHub

The source for this content can be found on GitHub, where you can also create and review issues and pull requests. For more information, see our contributor guide.

Windows Subsystem for Linux feedback

Windows Subsystem for Linux is an open source project. Select a link to provide feedback:

Open a documentation issue

Provide product feedback

Additional resources

Training

Module

Developing in the Windows Subsystem for Linux with Visual Studio Code - Training

In this module, you learn how to use the Windows Subsystem for Linux (WSL) with Visual Studio Code (VS Code). We explore the installation process and the basics of using WSL. Additionally, we install and utilize the Visual Studio Code WSL extension. Finally, we demonstrate how to debug and run Python code in VS Code within our WSL environment.

Certification

Microsoft Certified: Windows Server Hybrid Administrator Associate - Certifications

As a Windows Server hybrid administrator, you integrate Windows Server environments with Azure services and manage Windows Server in on-premises networks.

Events

Nov 20, 12 AM - Nov 22, 12 AM