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Linux Quick Start

Learn how to download, build, and run UE4 on Linux.

[Unreal Engine 4.24](#)

Beginner

At the end of this tutorial, you'll have Unreal Engine 4 (UE4) running on your Linux machine, having learned how to set up Git (to download UE4 source code), how to fork and clone our source code, build Unreal Engine from source, and how to run Unreal Engine on your Linux machine. Ultimately, the focus of this guide is to show you how to set up the primary workflow needed to get UE4 running on your Linux machine.

1 - Required Setup

Currently, we don't supply a binary installer of UE4 for Linux users. The good news is that you can compile a binary of Unreal Engine from the same source code that we use to develop the engine. If you want to access our source code, you'll have to register for an Epic Games account, sign up for a GitHub account, associate your GitHub username with your Epic Games account, and set up Git on your Linux machine.

Registering for an Epic Games Account

If you want to create games with Unreal Engine or contribute to the future of UE4 on Linux, you'll need to have a valid Epic Games account.

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- 1. Navigate to [UnrealEngine.com](#) .
- 2. Click Get Unreal.

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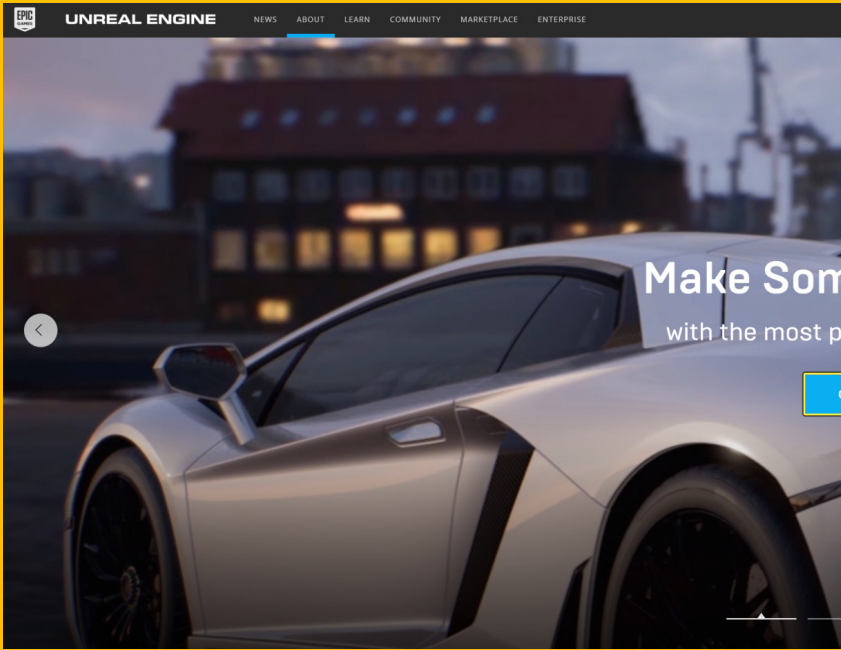
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Click for full image.

- 3. Fill-out our 'Join the Community' form and click Sign Up. Make sure to read through our [terms of service](#) prior to signing up.



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EPIC
GAMES


Create Account












SIGN UP

UNITED STATES

firstName

lastName

displayName



example@example.com

.....

☒ I would like to receive latest news and information on this product.

☒ I have read and agree to the [terms of service](#).

CREATE ACCOUNT

Have an Epic Games account? [Sign In](#)

Click for full image.

4. Read our [Unreal Engine End User License Agreement](#) (EULA) prior to clicking Accept. Refer to our [EULA FAQ](#) if you have additional questions about the EULA's terms and conditions.



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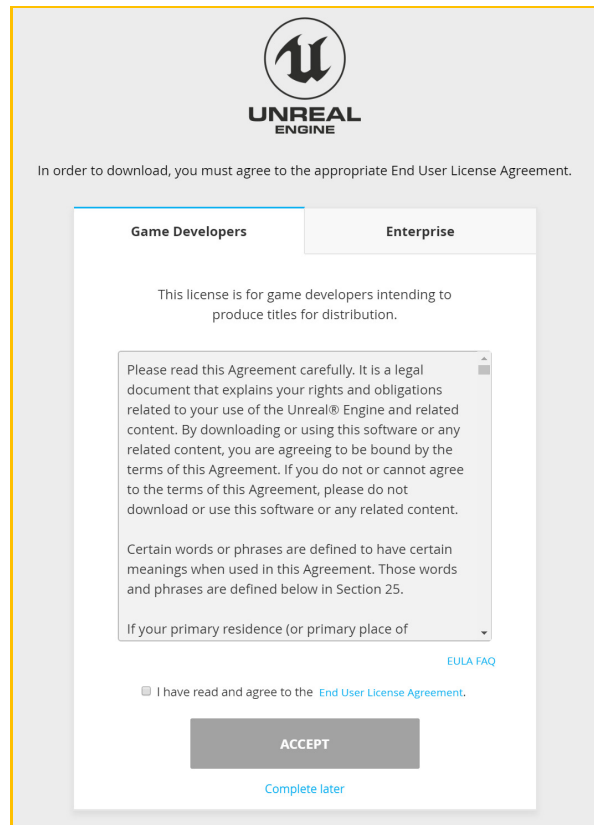
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Click for full image.

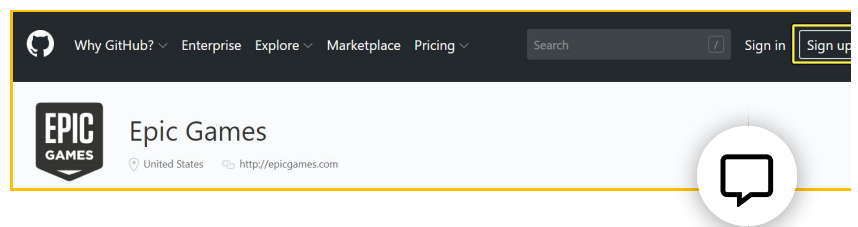
There are many benefits for having an account with us, including (but not limited to) access to the Unreal Engine community, where you'll connect with other UE4 Linux developers, and where you'll be able to keep up with the latest news about Unreal Engine.

Setting up Git

Now that you've registered for an Epic Games account, you're ready to work through the following steps to gain access to the UE4 source code on GitHub.

1. Sign up for a GitHub account at

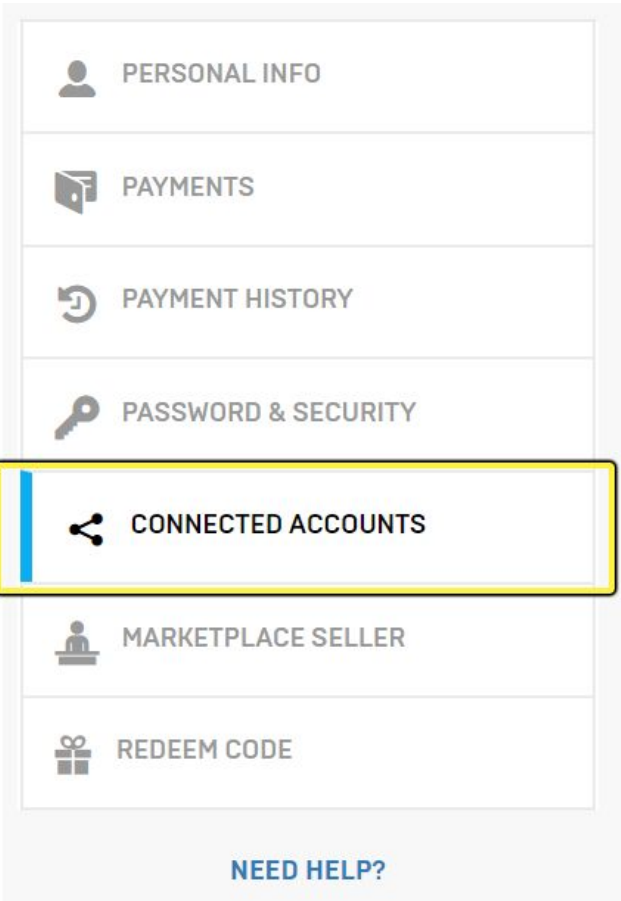
[GitHub.com](https://github.com).



Click for full image.

2. Go to [your Epic Games account](#)

and click Connected Accounts.



3. Link your GitHub username by clicking Connect under the GitHub icon.

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CONNECTED ACCOUNTS

Connect your Epic Games account to other networks for cross-play between game platforms and to create a link to your profile pages on 3rd party sites.



GITHUB

CONNECT



TWITCH

CONNECT



XBOX

CONNECT



PLAYSTATION NETWORK

CONNECT



NINTENDO SWITCH

CONNECT

4. To authorize the connection click

Authorize EpicGames.

Authoriize_Connect.PNG

5. Finally, set up Git before moving
onto the next step.

Section Result

By now, you've registered for an Epic Games account and linked it with your GitHub username. Also, you've installed Git and you're ready for the next step, where you'll fork and clone the UE4 source code from the Unreal Engine GitHub repository.

✓ Finished Step

2 - Downloading UE4 on Linux

Now that you've set up Git on your



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Linux machine, you're ready to download the Unreal Engine source code from our [GitHub site](#). There are a couple of ways to download the UE4 source code, one way is to use the download feature on our GitHub page, and the other way is to clone the Unreal Engine repository with your Git client. We'll cover both ways on this page.

Downloading from GitHub

If don't want to clone the Unreal Engine repository with Git, you can use the Download ZIP button on our [GitHub site](#).

1. First, select the branch you want to download by clicking Branch: on the left side of the page. For more info on branches in the Unreal Engine GitHub repository, please see the Source Branches Reference page.

*Click for full image.*

2. After selecting the branch you want to download, click Clone or download, which is located on the right side of the page.

*Click for full image.*

3. Click Download ZIP to download the Unreal Engine source code.

*Click for full image.*

4. Finally, decompress UnrealEngine-(branch_name).zip onto your hard disk.



If you're new to cloning with Git, refer to [GitHub's Cloning Guide](#) before executing the following steps.

1. Click the Unreal Engine link to access our [repository](#).

[Git_Repository-1.PNG](#)

Click for full image.

2. Click Clone or download.

[CloneorDownloadButton.png](#)

Click for full image.

3. Click the Copy URL button to copy the clone URL for the repository.

[CopyHTTPS.png](#)

Click for full image.

4. Open Git Bash, type `git clone`, and paste the URL you copied in the previous step.

[GitBashClone.png](#)

Click for full image.

5. Finally, press Enter to create your local clone.

NOTE

If you need a refresher using Git from the command line, refer to [GitHub's documentation](#).

Section Result

[end_result.png](#)

Click for full image.

Whether you downloaded the Unreal Engine source code by using the Download ZIP button on our [GitHub](#)



[site](#) , or by cloning the Unreal Engine repository using Git, you're ready to build UE4 on Linux with the Unreal Engine source code that is now located on your hard disk.

✓ Finished Step

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3 - Building UE4 on Linux

In preparation for this critical step, you downloaded a copy of Unreal Engine's source code onto your hard disk. During this part of the tutorial, you'll get to run several utilities from the terminal to build a binary of UE4 on your Linux machine.

Our development and support teams currently use the latest version of Ubuntu; as a result, we may not be able to provide support for other Linux distributions (including other versions of Ubuntu). Additionally, read about [Hardware and Software Specifications](#) , and make sure your system has at least one hundred (100) gigabytes of disk space before performing the following steps.

1. Inside the root directory, run

Setup.sh from the terminal to setup the files needed to generate the project files.

RunSetupShellScript_Linux.png

2. Now, run

GenerateProjectFiles.sh from the terminal to generate your project files.

RunGenPrjFilesShellScript_Linux.png



3. To build the project, run make

from the terminal.

RunMakeFile_Linux.png

Depending on your system's specifications, it may take anywhere from ten minutes to over an hour to compile the engine. If you want to shorten the time it takes to compile the engine from source, we recommend compiling the source code on a machine that has at least eight (8) gigabytes of RAM, with a multi-core processor having at least eight (8) cores (including hyperthreading).

Section Result

built_engine.png

At this point, you should have a fully built binary of UE4 on your hard disk. The time has come to run the engine on your Linux system!

✓ Finished Step

4 - Running UE4 on Linux

As you worked your way to this final step, you linked your Epic Games account with your GitHub username, you downloaded the Unreal Engine source code from our GitHub site, and you compiled a binary of UE4 on your Linux system. The only remaining task is for you to run the UE4 Editor so that you can start making games for the Linux platform.

1. Navigate to the editor's binary

path by entering cd

Engine/Binaries/Linux/ into the terminal.

2. Run UE4Editor to launch the

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editor.

RunUE4Editor_Linux.png

3. Congratulations! You've
compiled and launched the
engine from source.

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Launching UE4 on Linux

Because you've compiled the engine
from its source code on Linux, the
engine will compile shaders for a few
minutes after launching UE4.

howTo_compilingshaders.png

Creating your First Project

If you haven't already set up an
Integrated Development Environment
(IDE) to work with UE4, we recommend
that you start out by creating a
Blueprint project.

howTo_creatingprjwithoutIDE.png

Section Result

howTo_endResult.png

If you're creating your first game on
Linux, you just learned how to
establish your primary UE4 workflow
on Linux. As you worked your way
through this tutorial, you learned:

- ✓ How to set up Git to download the
source code for Unreal Engine.
- ✓ How to fork and clone Unreal
Engine's source code.
- ✓ How to build Unreal Engine from
source.
- ✓ How to run Unreal Engine on your
Linux machine.

Are you ready to do some exercises on
your own?

✓ Finished Step



5 - On your own!

One way of increasing productivity is to write custom shell scripts that you can run from the terminal. If you know how to write shell scripts in Linux, try writing one that automates the process of setting up and building UE4.

autobuild_onyourown.jpg

If you want to track the latest developments with UE4 on Linux, read [this article](#) and head over to the [Unreal Engine Public Issues Tracker](#) to check out the latest public issues impacting UE4 on Linux.

UE4_publicjira.jpg

Do you see a public issue that you can fix? If you know how [fork and clone](#) our [repository](#) to submit [pull requests](#) with Git, join our growing community of developers and help shape the future of UE4 on Linux.

gitHub_pullrequests.jpg

If you're looking to quickly get started making projects with UE4, check-out the following tutorials:

- [Artist Quick Start](#)
- [Programming Quick Start](#)
- [Level Designer Quick Start](#)

✓ Finished Step

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Select Skin



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Releasing Your Game



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