Introduction to Git

What is Git?

Git is a powerful repository that was created by Linus Torvalds (the guy who created Linux) in 2005.

It's a version control system that allows developers to track coding changes made by you or your colleagues. It also has version control which allows you to recover old versions of your files. Microsoft 365 and Google Docs also offer this feature which is incredibly helpful.

In the past, we would need to save documents like this:

- File v1
- File v1.1
- File v1.2
- File v2

Version control allows you to see the history of changes you have made inside your file and allows you to recover those changes by looking at snapshots.

This is not the only thing that Git offers. Git also allows you to use Branch.

What is Branch?

A Branch is a copy of the original source and allows a user to work on a new feature of a project without changing the original source.

Once you have finished working on a branch (and you want to integrate what you have worked on) you can use the Merge feature. Merge will allow you to synchronise your branches back into the original code.

What is GitHub

It is a cloud-based service where developers can upload their code and share it with others. It allows developers to work together and manage projects and tasks.

To use GitHub you will need to create an account.

For this course, please use your student email to register an account. You will be using this account for many courses throughout your RMIT journey.

To create a new account, head to https://github.com/

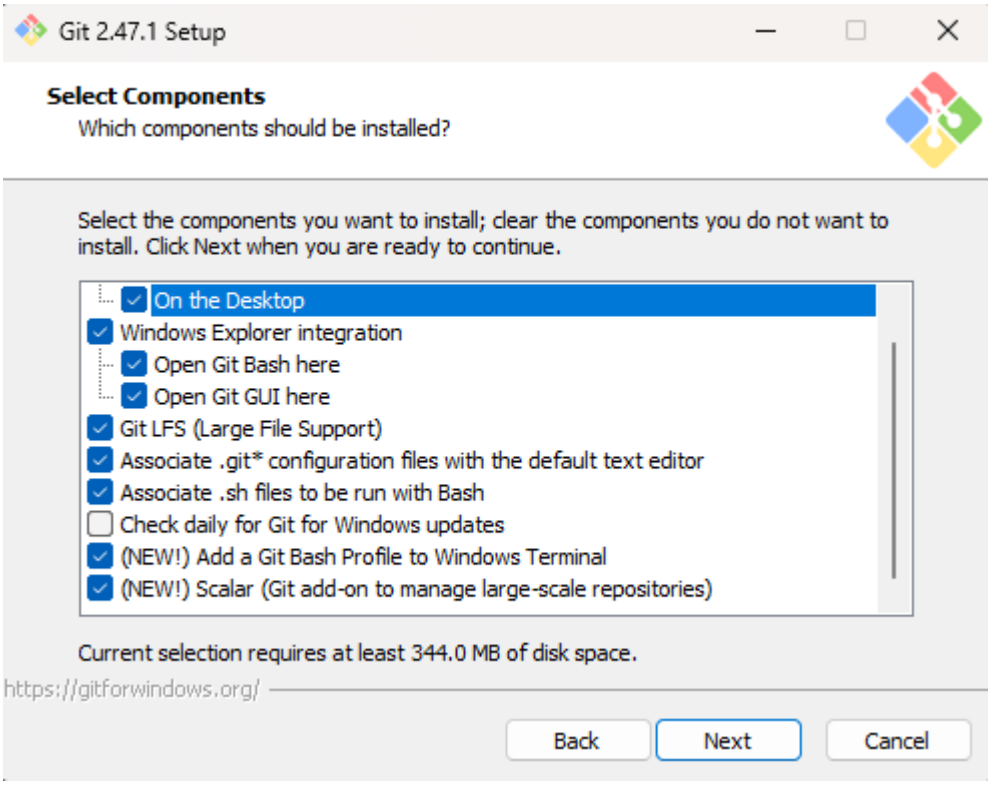
Once you have created a new account, you will need to install Git to your machine.

Installation of Git

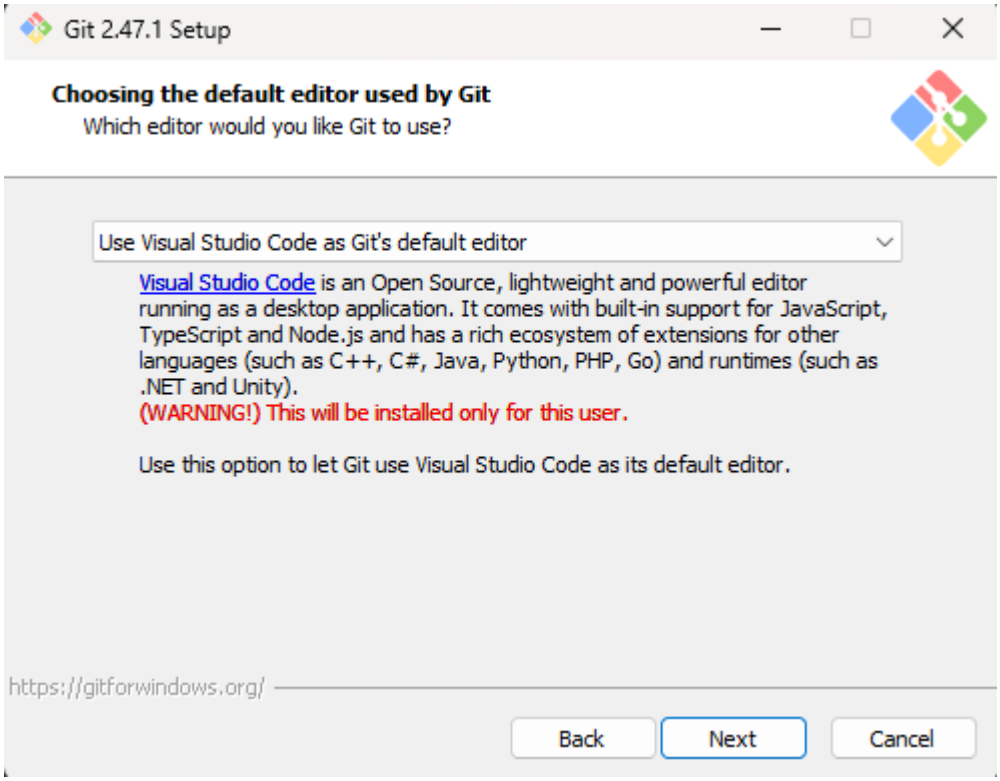
- Download git from https://git-scm.com/
- Download the Standalone Installer.

Once you run the installer, use the following settings:

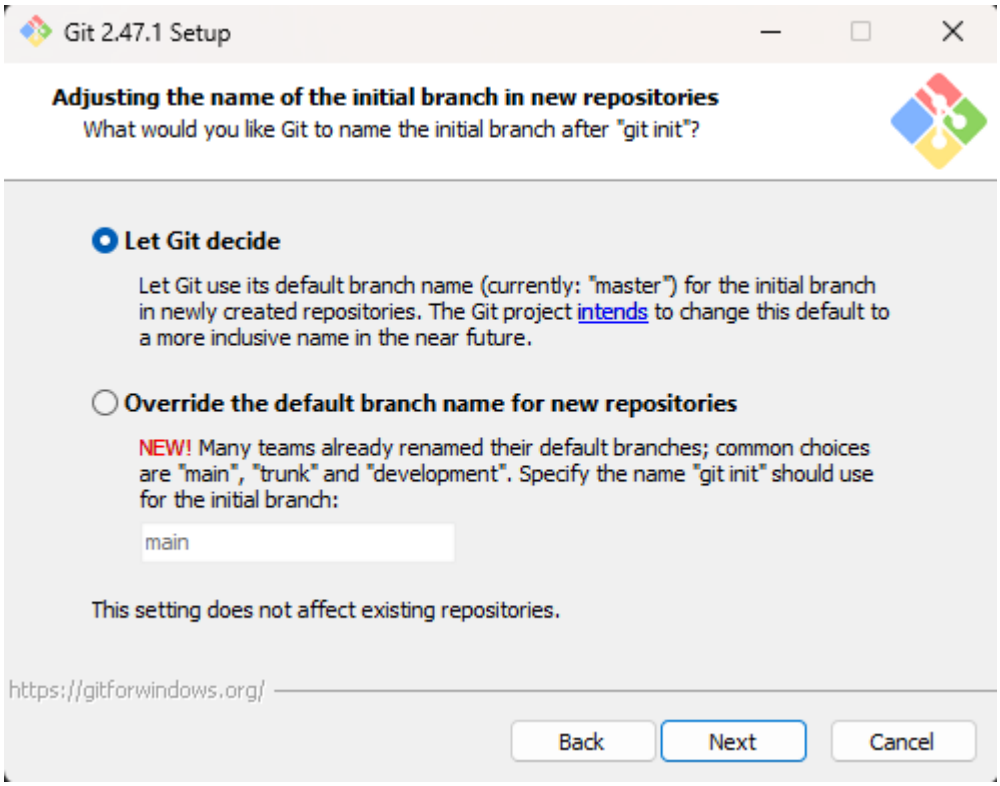
When installing, you should tick Add a Git Bash to the Windows Terminal.



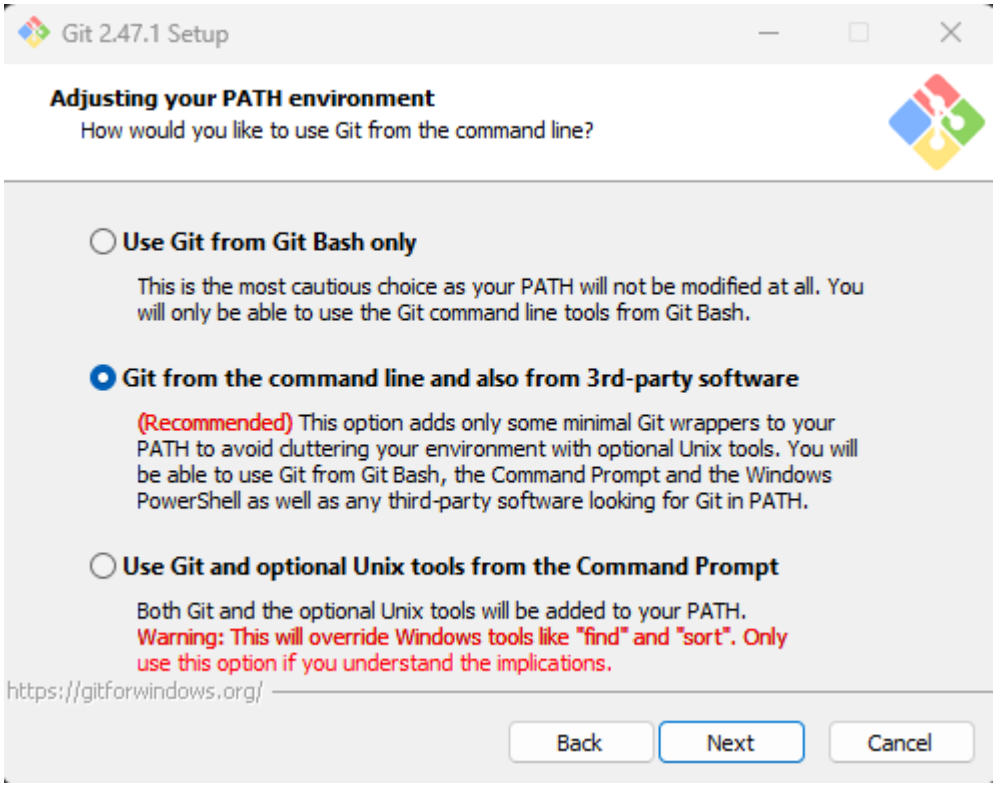
You will also have an option to select a default editor. For this course, we will be using Eclipse as Git's default editor, but please feel free to use the IDE that best suits your needs.



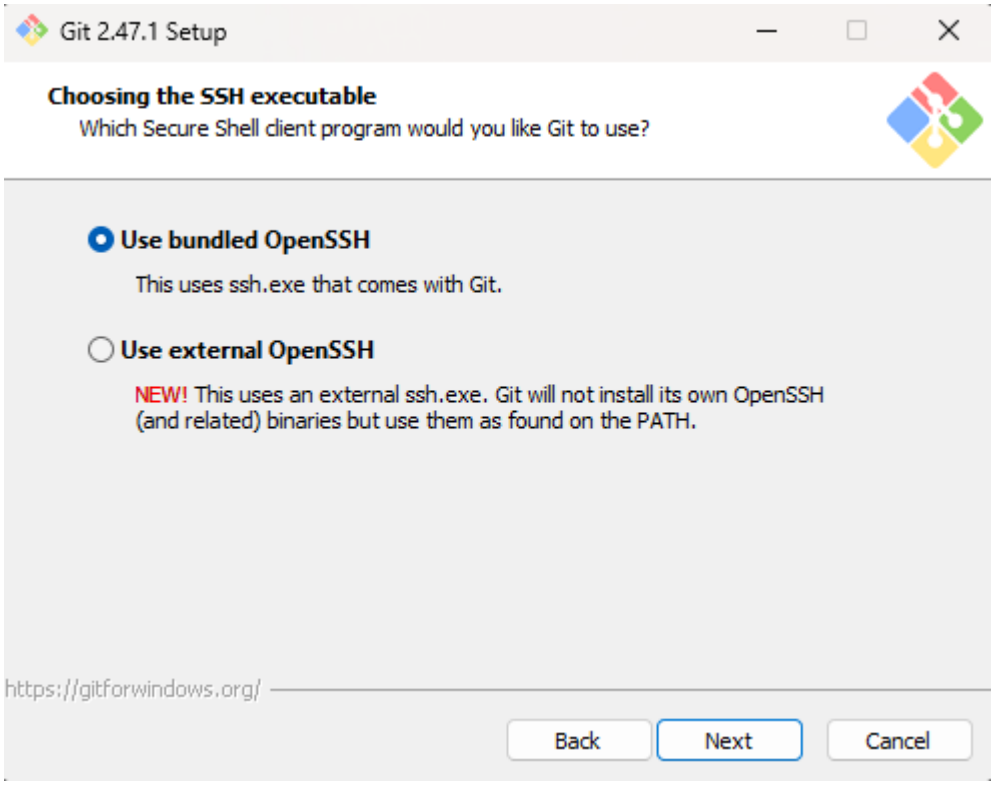
Let Git Decide names for now:



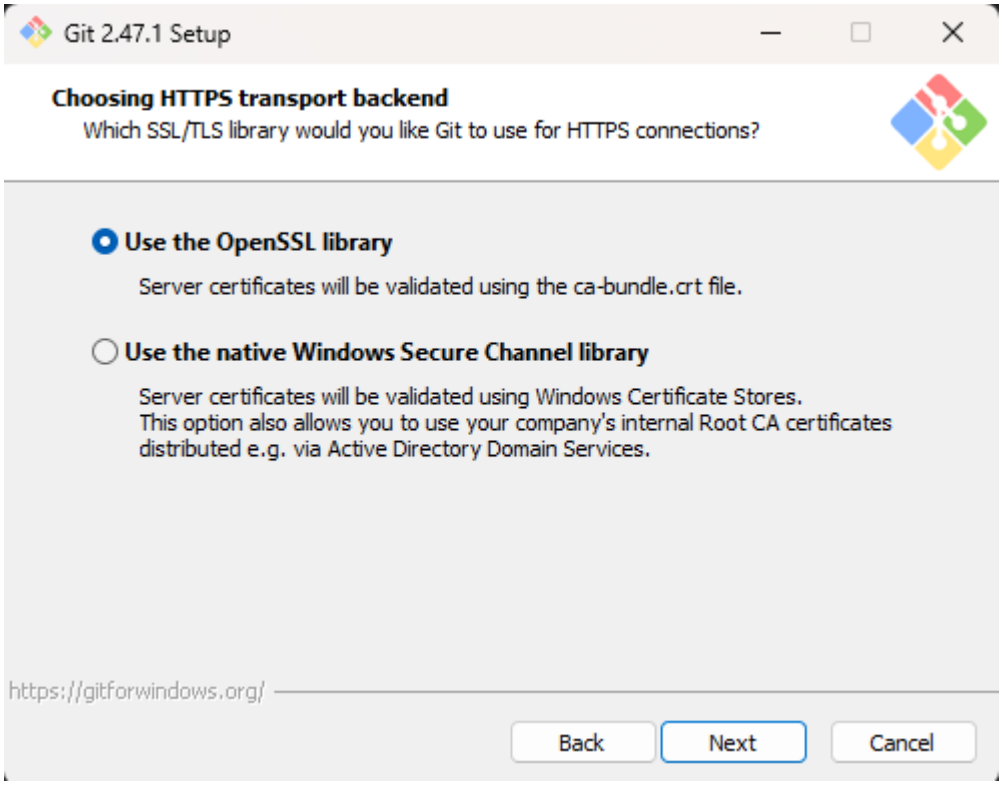
Use Git from the command line and also 3rd Party Software:



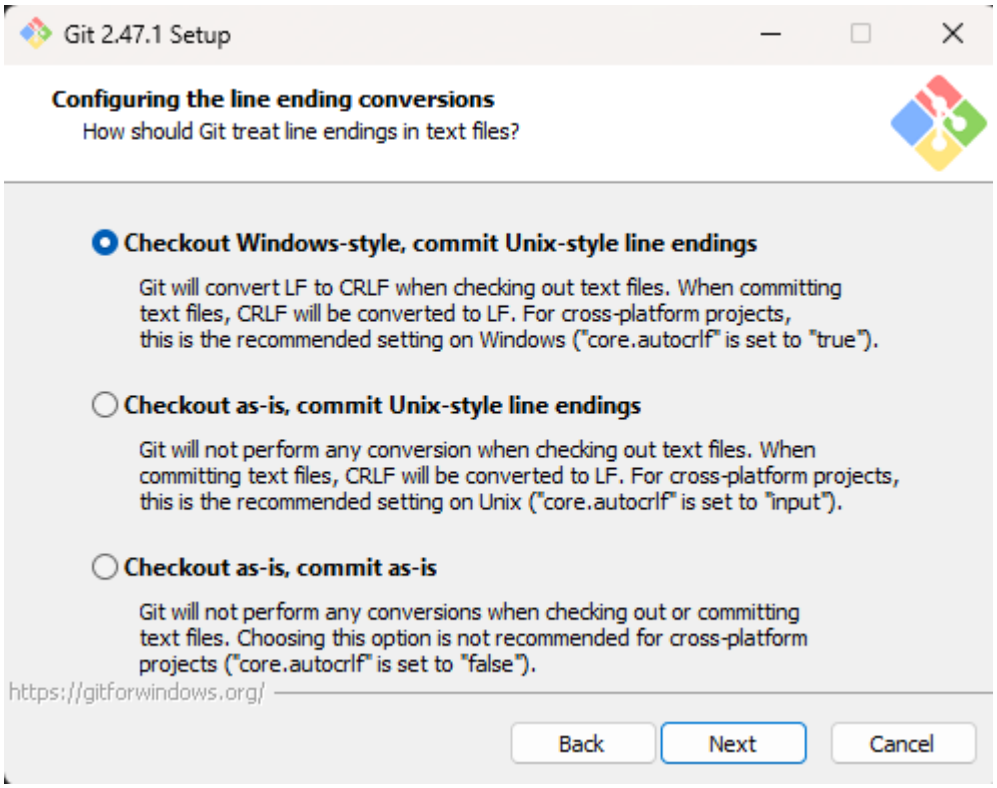
Use the bundled SSH:



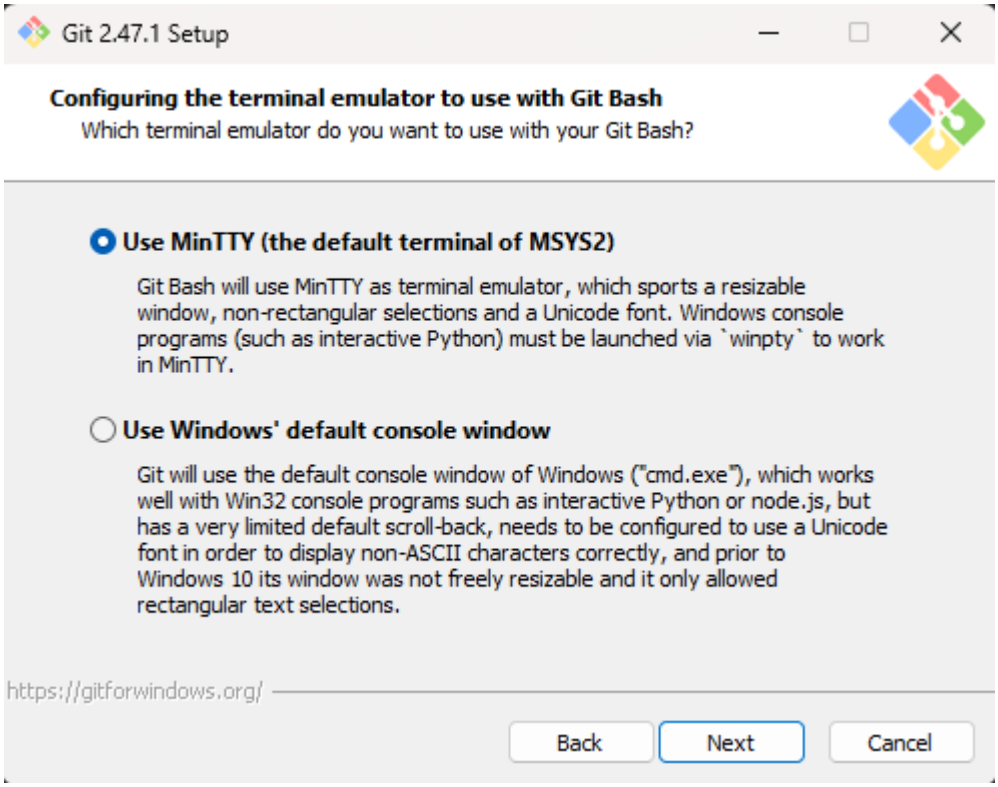
Use the OpenSSL library



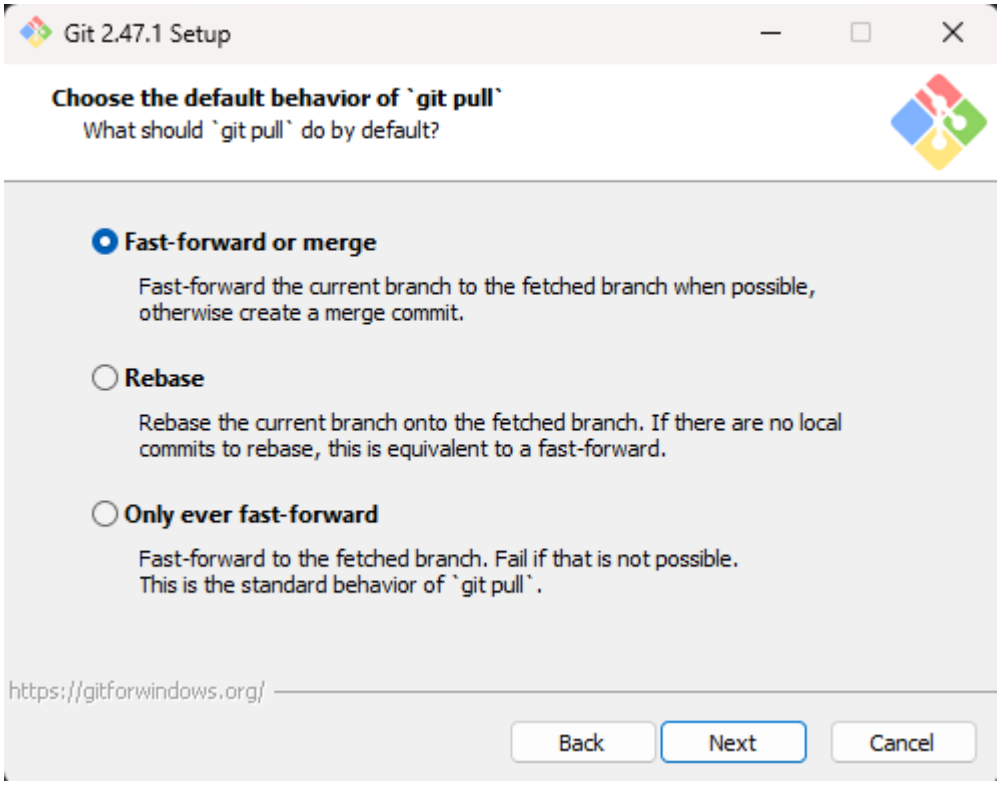
Checkout Windows-style:



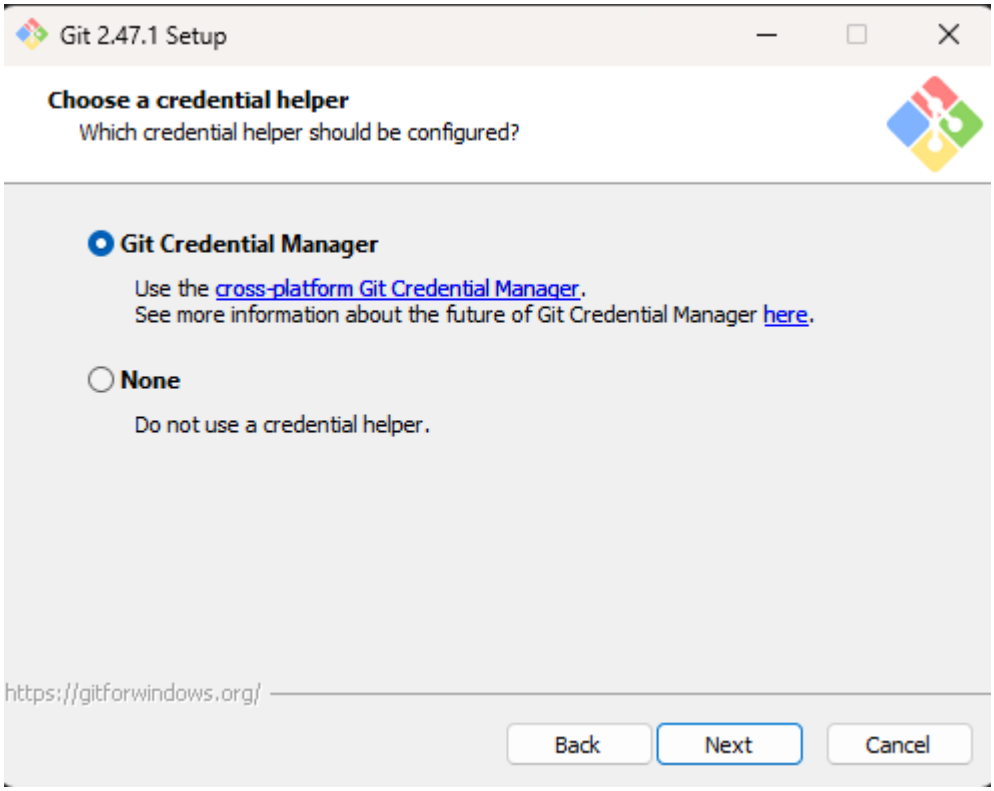
Use MinTTY:



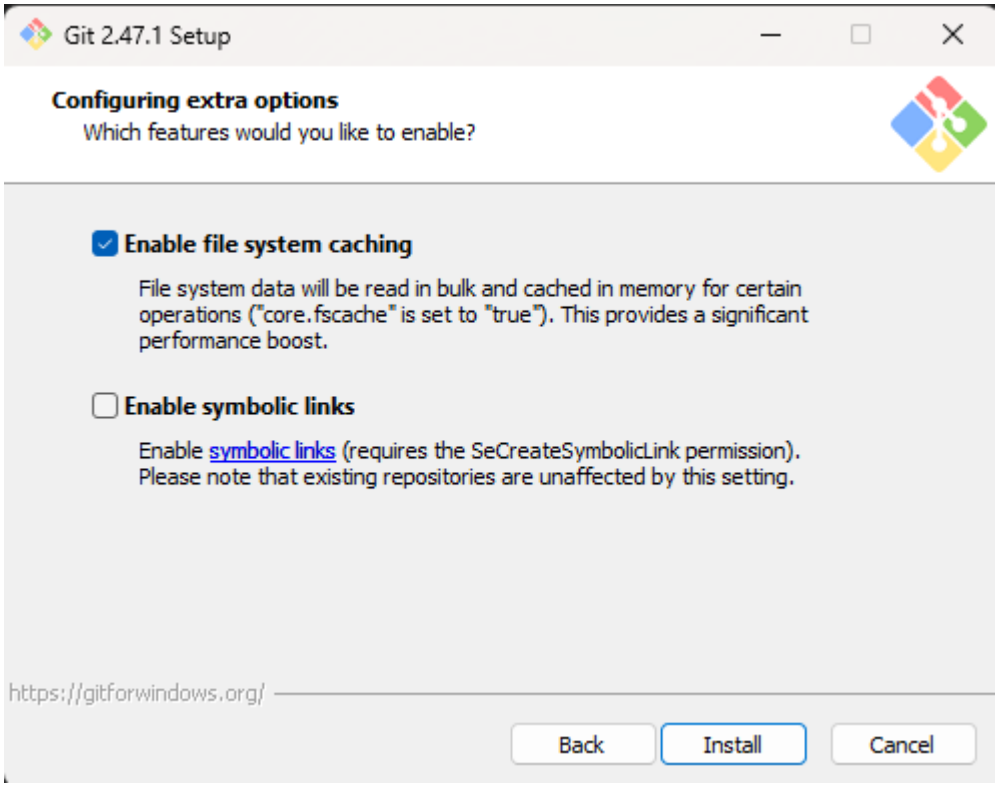
Fast-forward or merge



Git Credential Manger:



Enable fine system caching. Don't worry about symbolic lnks:



Now that we have gone through all of that, we can install Git!