

# Longvinter Server Docs

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None

*Uuvana Studios*

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# 1. Longvinter

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Project documentation with Markdown.

## 2. Linux Guide

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### 2.1 Vanilla Setup

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If you have any trouble following the guide. Please send us a message in [Discord](#) we are more than happy to help you out!

#### 2.1.1 Requirements and Pre-requisites

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- GIT installed in your system
- GIT LFS installed in your system
- SteamCMD installed in your system
- Broadband internet connection
- Router with the ability to port forward
- Min. 2 GB RAM

#### 2.1.2 System Setup

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##### Installing GIT and GIT Large file system

.pak files are large and we need to install Git Lfs in order to download them

Run the following commands according to your chosen system:

##### Ubuntu/Debian:

- `$ apt update`
- `$ apt install git git-lfs`

##### Arch-Linux:

- `$ pacman -Sy`
- `$ pacman -S git git-lfs`

##### Fedora:

- `$ yum update`
- `$ yum install git git-lfs`

##### Creating a dedicated user

- `$ useradd -m -d /home/steam steamcmd`
- `$ passwd steamcmd` (Choose a strong secure password)
- `$ usermod -aG sudo steamcmd`
- `$ su steamcmd`

### Installing Steam SDK

The Steam server browser needs steamsdk and for this we need to install SteamCMD, we will do this under the steamcmd user:

- `cd ~/` Makes sure we are in the home directory
- `mkdir steamcmd` Makes SteamCMD directory
- `cd steamcmd` Goes to the SteamCMD directory
- `apt install lib32stdc++6` Install lib32std
- `wget https://steamcdn-a.akamaihd.net/client/installer/steamcmd_linux.tar.gz` Downloads SteamCMD Tar File.
- `tar -xvzf steamcmd_linux.tar.gz` Extracts SteamCMD
- `./steamcmd.sh +force_install_dir . +login anonymous +app_update 1007 +quit` Runs SteamCMD to login, install a app update and quit upon completion.

Steam CMD will install updates automatically and login to install 64-bit SDK.

### Copying Steam SDK to right place

We still need to move the sdk to default location where the server tries to:

- `cd ~/.steam` Go to the steam folder
- `mkdir sdk64` Create folder for the sdk
- `cp ~/steamcmd/linux64/steamclient.so ~/.steam/sdk64/` Copy the steamclient.so from SteamCmd to .steam/sdk64 folder

## 2.1.3 Installing the server

After this we want to make sure we are in home directory:

- `cd ~/`

Then we can clone the Linux repository:

- `git clone https://github.com/Uuvana-Studios/longvinter-linux-server.git`

Then we want to give permission for this folder to execute commands with:

- `sudo chmod -R ugo+rx longvinter-linux-server/`

After this we can open the required ports by executing the following commands:

- `sudo iptables -I INPUT -p udp --dport 7777 -j ACCEPT`
- `sudo iptables -I INPUT -p tcp --dport 7777 --syn -j ACCEPT`
- `sudo iptables -I INPUT -p udp --dport 27016 -j ACCEPT`
- `sudo iptables -I INPUT -p tcp --dport 27016 --syn -j ACCEPT`
- `sudo iptables -I INPUT -p udp --dport 27015 -j ACCEPT`
- `sudo iptables -I INPUT -p tcp --dport 27015 --syn -j ACCEPT`

## 2.1.4 Customizing the server

Server values can be customized with Game.ini

Create the file for edit with:

```
nano ~/longvinter-linux-server/Longvinter/Saved/Config/LinuxServer/Game.ini
```

Add the following content there:

```
[/Game/Blueprints/Server/GI_AdvancedSessions.GI_AdvancedSessions_C]
ServerName=Unnamed Island
```

```
MaxPlayers=32
ServerMOTD=Welcome to Longvinter Island!
Password=
CommunityWebsite=www.longvinter.com

[/Game/Blueprints/Server/GM_Longvinter.GM_Longvinter_C]
AdminSteamID=76561198965966997
```

- **ServerName:** Name that shows up in the server browser. Please don't call your server with OFFICIAL name. We want players to clearly know if they are joining a server that is hosted by other players.
- **ServerMOTD:** Server message that is on a signs around the island.
- **MaxPlayer:** Maximum allowed players that can connect at any given time.
- **CommunityWebsite:** Allows you to promote a website on a same place where the server message is shown. This link can be opened in-game.
- **Password:** Add you password here. Use only number and letters. If left empty there is no password on the server.
- **AdminSteamID:** Here you can add all the admins that you want to have in the server. **If you want to add multiple** separate id's with single space.
- AdminSteamID=76561198965966997 11859676569976596

## 2.1.5 Running the server

### Start the server manually with shell script

- `shell sh /home/steam/longvinter-linux-server/LongvinterServer.sh`

### Start the server automatically with Systemd (Recommended)

- `$ cp /home/steam/longvinter-linux-server/longvinter.service /etc/systemd/system/longvinter.service`
- `$ systemctl daemon-reload`

Now, how to use it:

- `$ systemctl start longvinter.service` (Starts the server)
- `$ systemctl stop longvinter.service` (Stops the server)
- `$ systemctl restart longvinter.service` (Restart the server, for example, if you made a change to Game.ini)
- `$ systemctl enable longvinter.service` (Everytime you reboot the machine it starts on boot)
- `$ systemctl status longvinter.service` (Checks the latest 20 lines on the server console)

If the console shows these lines at the bottom after startup your server has started corretly.

```
[2022.02.22-12.51.34:514][ 13]LogOnline: Verbose: STEAM: FOnlineAsyncEventSteamServerConnectedGS ServerId: Server[0x*****]
[2022.02.22-12.51.34:782][ 21]LogOnline: Verbose: STEAM: FOnlineAsyncEventSteamServerPolicyResponseGS Secure: 1
[2022.02.22-12.51.34:849][ 23]LogOnline: Verbose: OSS: Async task 'FOnlineAsyncTaskSteamCreateServer bWasSuccessful: 1' succeeded in 2.828243 seconds
[2022.02.22-12.51.34:849][ 23]LogOnlineSession: Warning: STEAM: Server setting ,TOTPLAYING_s:0 overflows Steam SetGameTags call
[2022.02.22-12.51.34:849][ 23]LogOnlineSession: Warning: STEAM: Server setting ,ServerName_s:[EU] Uuvana 1 overflows Steam SetGameTags call
```

## 2.1.6 Server Maintenance

### Updating the server

We have created an automated script that you can run to automatically update and restart a server.

- `bash /home/steam/longvinter-linux-server/LongvinterUpdate.sh`

### Backing up your saves

We have created an automated script that you can run to automatically backup and restart a server, for now it has to be run manually and it requires user input.

- `bash /home/steam/longvinter-linux-server/LongvinterBackup.sh`

## 2.2 Docker Setup

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If you have any trouble following the guide. Please send us a message in [Discord](#) we are more than happy to help you out!

### 2.2.1 Requirements and Pre-requisites

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- GIT installed in your system
- GIT LFS installed in your system
- Docker installed in your system
- Docker Compose installed in your system
- Broadband internet connection
- Router with the ability to port forward
- Min. 2 GB RAM

### 2.2.2 System Setup

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#### Installing GIT and GIT Large file system

.pak files are large and we need to install Git Lfs in order to download them

Run the following commands according to your chosen system:

##### Ubuntu/Debian:

- `$ apt update`
- `$ apt install git git-lfs`

##### Arch-Linux:

- `$ pacman -Sy`
- `$ pacman -S git git-lfs`

##### Fedora:

- `$ yum update`
- `$ yum install git git-lfs`

#### Installing Docker

##### Ubuntu/Debian:

- `curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o /usr/share/keyrings/docker-archive-keyring.gpg`

### 2.2.3 Setting up the container

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#### Downloading the container

Downloading the container can be done by either using git (recommended), or by clicking the green Code button on this page and using the Download ZIP option on the [Docker Image Github](#). To download the container configuration using git, use the command below `git clone https://github.com/tvandoorn/longvinter-docker-server.git`

### Creating the data directory

In order to keep game progress between container restarts a data directory needs to be created. Create this directory in the same directory as the `docker-compose.yaml` file. Use the following commands to create the directory and set the appropriate rights.

```
mkdir data
chown -R 1200:1200 data/
```

### Configuring the server settings

The server settings can be changed by opening the `docker-compose.yaml` file. Settings that may be changed are shown below:

Setting name	Used for	Default value
CFG_SERVER_NAME	Setting the server name that is displayed in the server list.	Unnamed Island
CFG_MAX_PLAYERS	The maximum amount of players the server will allow at the same time.	32
CFG_SERVER_MOTD	A Message Of The Day that will be displayed to the player.	Welcome to Longvinter Island!
CFG_PASSWORD	Use this setting to require a password to join the server.	(empty)
CFG_COMMUNITY_WEBSITE	When the server or community has a website, enter it here to display it to the player.	www.longvinter.com
CFG_ADMIN_STEAM_ID	Add the SteamID64 values for the players that have admin rights to this setting. When there are multiple admins, add the SteamID64 values to this setting separated by a space.	(empty)
CFG_ENABLE_PVP	When this setting is set to "true", PvP will be enabled on the server. Set to "false" to disable PvP.	true
CFG_GAME_PORT	This setting is used to change the game port when multiple servers are running on the same (public) IP address. When changing this setting, make sure to also change the port number under the ports section of the <code>docker-compose.yaml</code> file.	7777
CFG_QUERY_PORT	This setting is used to change the query port when multiple servers are running on the same (public) IP address. When changing this setting, make sure to also change the port number under the ports section of the <code>docker-compose.yaml</code> file.	27016

With the default values above, the environment part of the `docker-compose.yaml` file should look like this:

```
environment:
  CFG_SERVER_NAME: "Unnamed Island"
  CFG_MAX_PLAYERS: "32"
  CFG_SERVER_MOTD: "Welcome to Longvinter Island!"
  CFG_PASSWORD: ""
  CFG_COMMUNITY_WEBSITE: "www.longvinter.com"
  CFG_ADMIN_STEAM_ID: ""
  CFG_ENABLE_PVP: "true"
  CFG_GAME_PORT: "7777"
  CFG_QUERY_PORT: "27016"
```

### Changing the port numbers

In order to run the server with different port numbers than the default ports `7777` and `27016`, the new port numbers have to be edited in two places in the `docker-compose.yaml` file.



```
ports:
  - "7777:7777"
  - "27016:27016"
```

```
environment:
  CFG_GAME_PORT: "7777"
  CFG_QUERY_PORT: "27016"
```

**NOTE: Even though changing the ports is possible, it is currently not supported by the game!**

## 2.2.4 Starting the container

When the setup and configuration is done, the container is ready to be started. Open the command line and navigate to the directory (using the `cd` command) that contains the `Dockerfile`, `docker-compose.yaml` and `run.sh` files.

Start the container using the following command:

```
docker-compose up -d
```

This command will do the following:

1. Build the container image (if not present)
2. Create the container
3. Start the container
4. Run the included startup script ( `run.sh` ) inside the container
5. Clone or update the longvinter-linux-server repository
6. Create or update the Game.ini file with the settings provided in the `docker-compose.yaml` file
7. Start the Longvinter server

## 2.2.5 Stopping the container

To stop the container, run the command below. Note that this removes the container from Docker, but the save data will be saved in the `data` directory and will be loaded when the server is started again next time.

```
docker-compose down
```

## 2.2.6 Updating the container

When a new version of the container is released, make sure to update the files using `git pull`, or manually update the files by downloading the code as ZIP from Github. Run the command below to build the new container image and restart the container.

```
docker-compose up -d --build
```

Note that these commands have to be run from the same directory as the `Dockerfile`, `docker-compose.yaml` and `run.sh` files.

## 2.2.7 Updating the Longvinter server

Updating the Longvinter server is as easy as restarting the container:

```
docker-compose restart
```

## 2.2.8 Running multiple Longvinter containers on one Docker server

Running multiple Longvinter containers on one Docker server is very easy. Follow the *Setting up the container* steps again, but this time set up the server to use a different directory for the new server.

```
git clone https://github.com/tvandoorn/longvinter-docker-server.git new-name-here
```

The command above will download the container files in a directory named `new-name-here`. Make sure to change the server ports using the *Changing the port numbers* step.

**NOTE: Even though changing the ports is possible, it is currently not supported by the game!**

## 2.2.9 Portforwarding and firewalls

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When running the container it might be necessary to do port forwarding or open ports in your firewall. For port forwarding instructions, please refer to the information/documentation provided by your ISP or router/modem manufacturer. For opening ports in your software firewall use the `Windows Firewall with Advanced Security` tool for Windows systems. For Linux based systems you can use the `ufw` or `iptables` tools. Please refer to their official documentation for instructions.

## 3. Windows Guide

### 3.1 Vanilla Setup

If you have any trouble following the guide. Please send us a message in [Discord](#) we are more than happy to help you out!

#### 3.1.1 Requirements and prerequisites

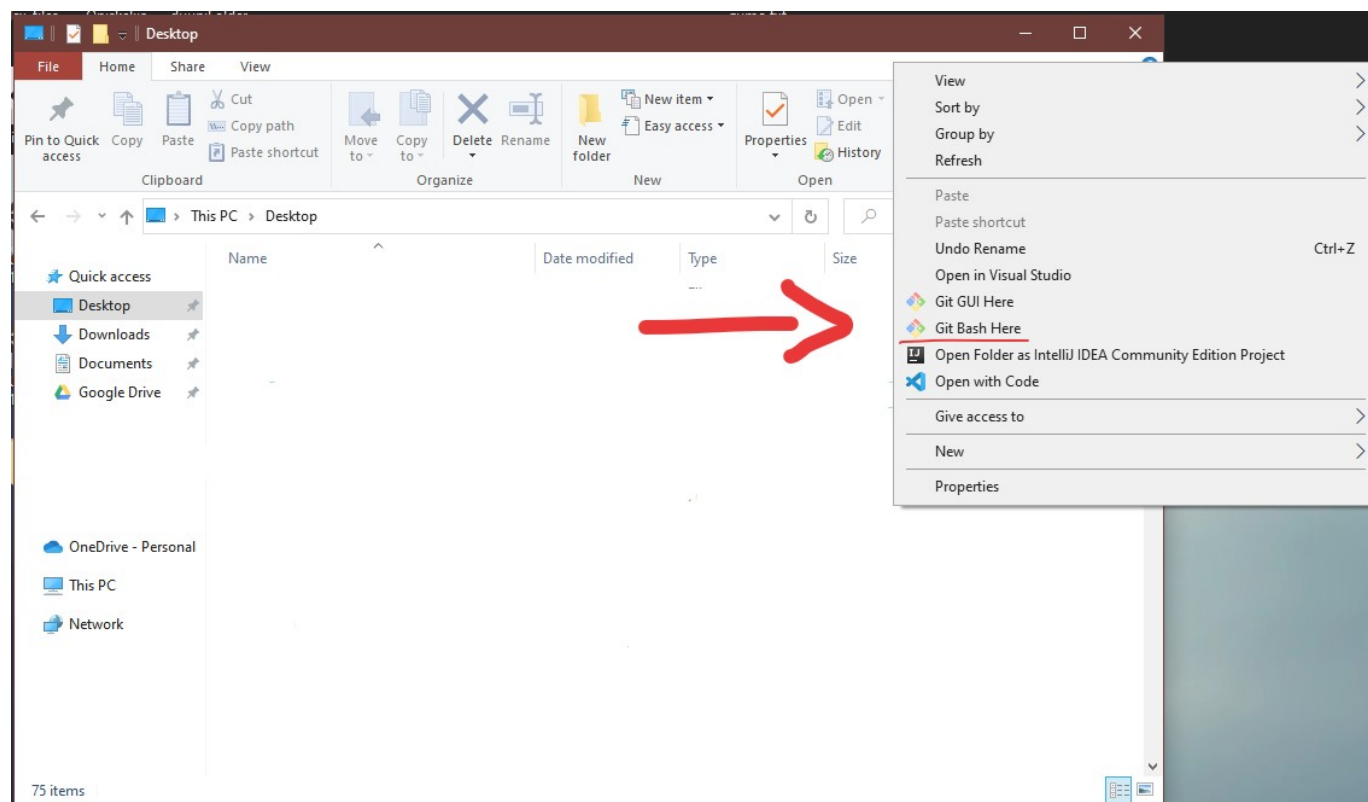
- [GIT](#) installed in your system
- [GIT LFS](#) installed in your system
- [Steam](#) installed in your system.
- Broadband internet connection
- Router with the ability to port forward
- Min. 3 GB RAM
- Min. 64-bit Windows 10 Operating System

#### 3.1.2 Open Ports

You also need to open ports on your home router to allow traffic go through. This process is greatly different from what type of router you have.

For Steam open: 27015 & 27016 For Unreal Engine open: 7777

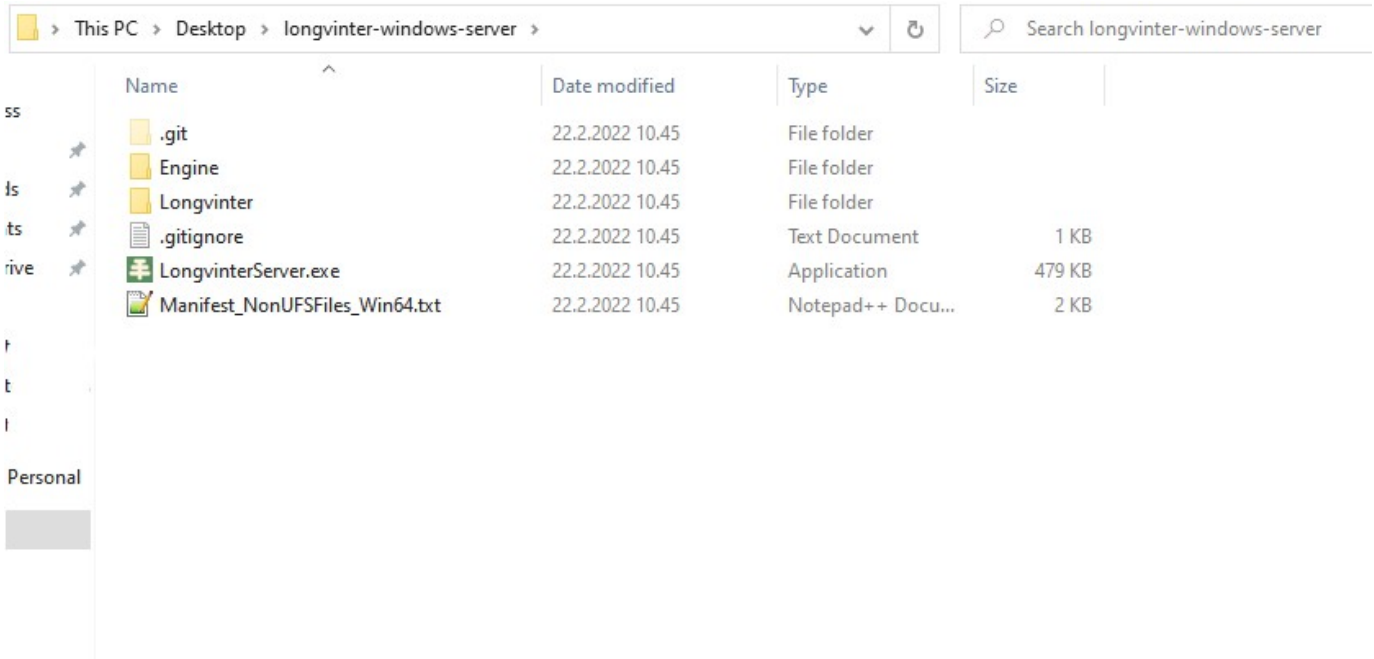
The easiest way to install them is to right-click and git bash to the folder where you want to install the server files. You can also use CMD if you installed just GIT and not the GIT BASH.



Enter the following command to clone the GitHub repository to your wanted folder: NOTE: cloning creates a new folder for the files so no need to make a folder for the repository beforehand.

```
git clone https://github.com/Uuvana-Studios/longvinter-windows-server.git
```

Once the cloning is done you should see the following files inside the folder command created.



You now have installed the server!

### 3.1.3 Customizing The Server

You can customize some server parameters by editing the Game.ini config file

Go to server folder and navigate to Longvinter -> Saved -> Config -> WindowsServer

Here you should *create a new file* and name it Game.ini

The screenshot shows a Windows Explorer window with the address bar displaying the path: < < Longvinter > Saved > Config > WindowsServer. The search bar at the top right contains the text 'Search WindowsServer'. The main pane displays a list of files in the 'Config' folder, including 'AutoSettings.ini', 'Compat.ini', 'DeviceProfiles.ini', 'Engine.ini', 'Game.ini', 'GameplayTags.ini', 'GameUserSettings.ini', 'Hardware.ini', 'Input.ini', 'Niagara.ini', 'Paper2D.ini', 'RuntimeOptions.ini', 'Scalability.ini', 'Synthesis.ini', 'VaRest.ini', and 'VariantManagerContent.ini'. The 'Game.ini' file is highlighted with a red arrow, indicating it is the target of the tutorial.

Open it for edit. You can use any text editor you want. Add the following content inside this file.

```
[/game/blueprints/server/gi_advancedsessions.gi_advancedsessions_c]
ServerName=Unnamed Island
MaxPlayers=32
ServerMOTD=Welcome to Longvinter Island!
Password=
CommunityWebsite=www.longvinter.com

[/game/blueprints/server/gm_longvinter.gm_longvinter_c]
AdminSteamID=97615967659669298
```

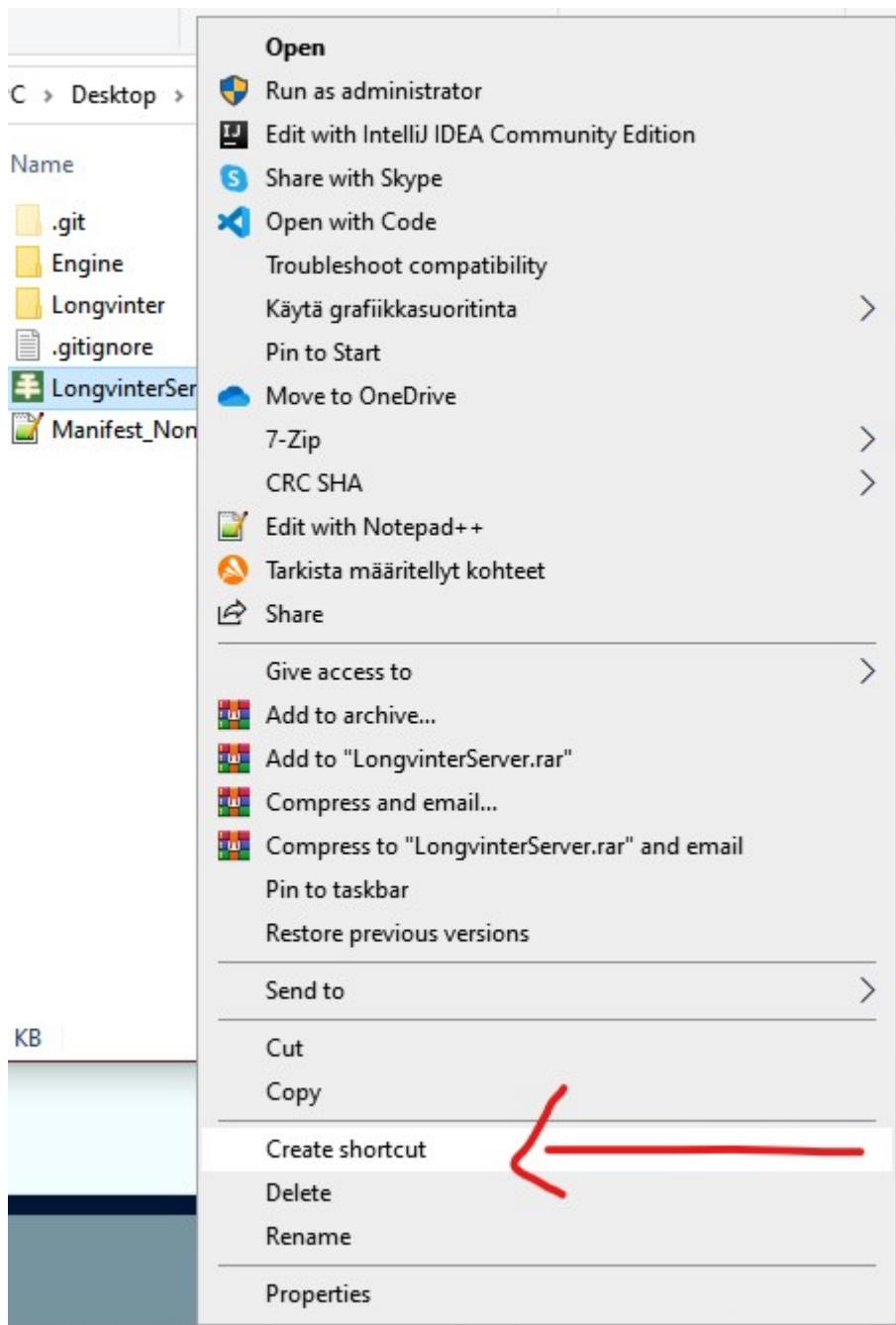
### 3.1.4 What do different params do?

- **ServerName:** Name that shows up in the server browser. Please don't call your server with an OFFICIAL name. We want players to clearly know if they are joining a server that is hosted by other players!
- **ServerMOTD:** Server message that is on signs around the island.
- **MaxPlayer:** Maximum allowed players that can connect at any given time.
- **CommunityWebsite:** This allows you to promote a website in the same place where the server message is shown. This link can be opened in-game.
- **Password:** Add your password here. Use only numbers and letters. If left empty there is no password on the server.

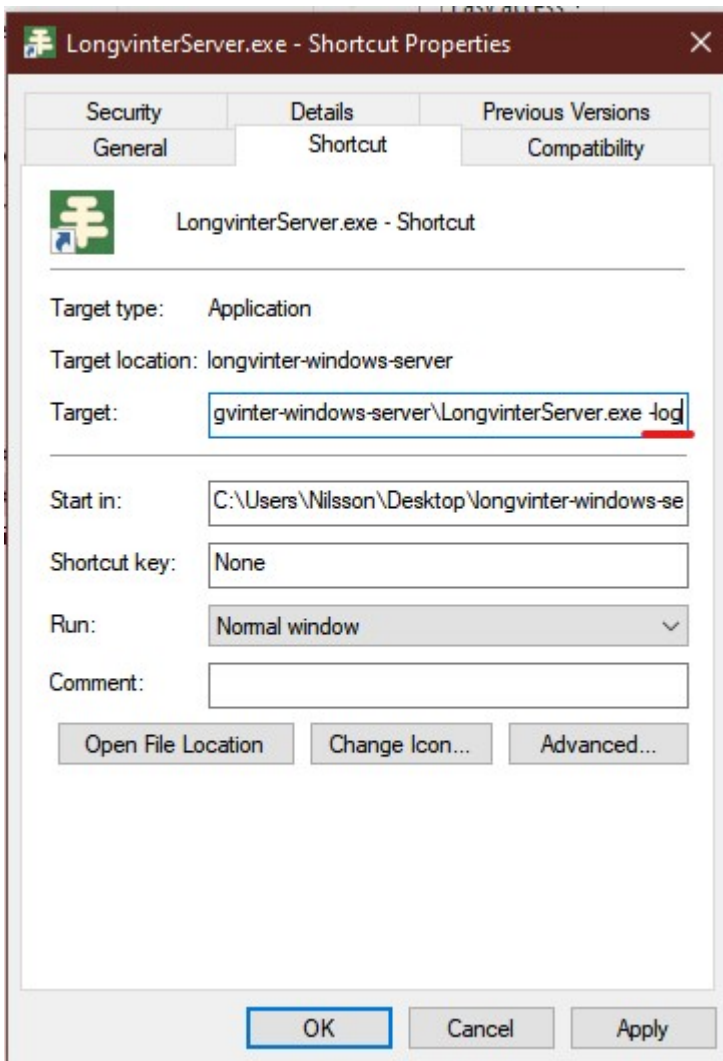
### 3.1.5 Starting The Server

For easy starting and closing, I recommend creating a shortcut for LongvinterServer.exe

Right-click the file and press create a shortcut.



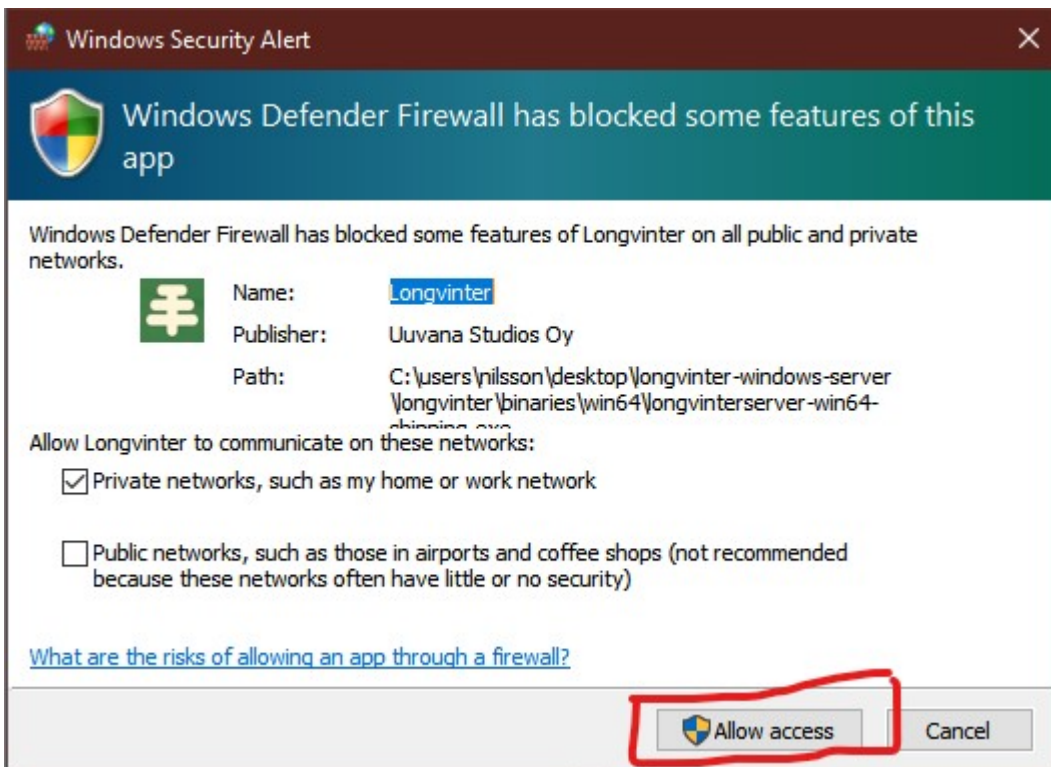
Then right-click the shortcut and open the Properties panel, here you need to edit the Target field in the shortcut tab.



Add the -log to the right side of the path. This is telling the program that we want to open a command panel for the server program. This helps us verify that the server starts correctly

After edit just Press "OK" to save the edit.

Then you can start the server with the shortcut. If the console is not opened you need to close the server using Task Manager.



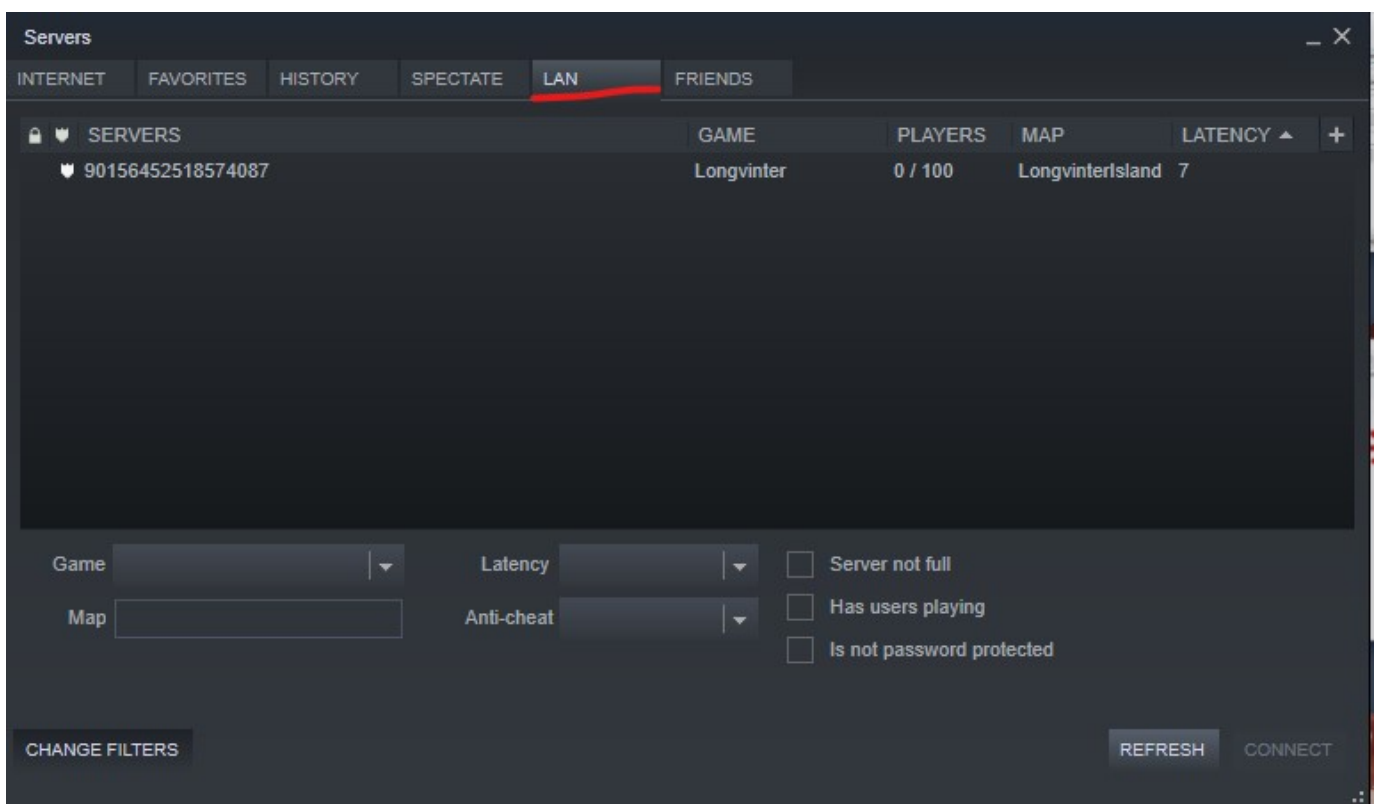
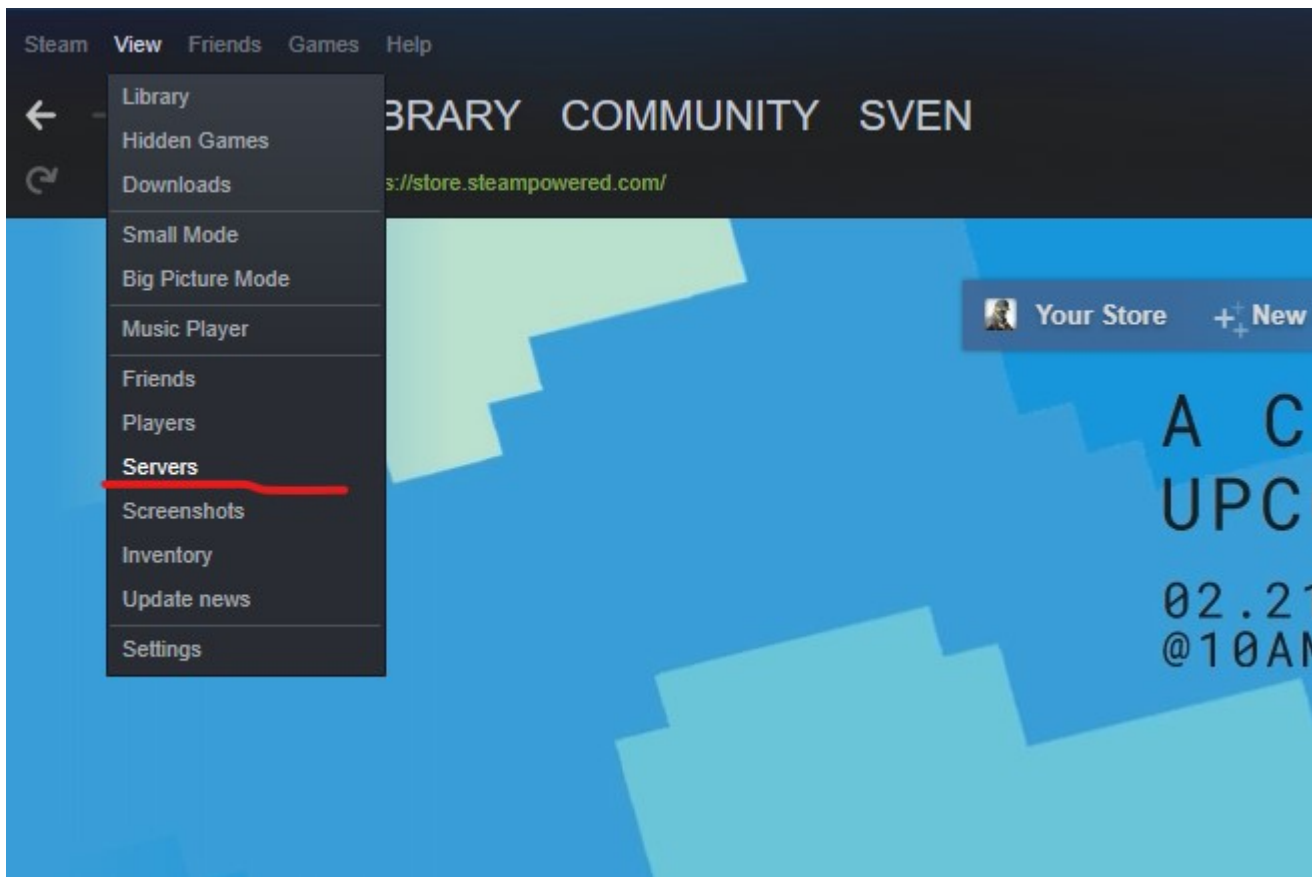
To verify that server started correctly look for these 3 lines in the console window.

```
[2022.02.22-09.47.17:893][ 1]LogNavigationDirtyArea: Warning: Skipping dirty area creation because of empty bounds (object: StaticMeshComponent /Game/Maps/LongvinterIsland.LongvinterIsland.PersistentLevel.A_Chest_Common4_2.SM_Chest)
[2022.02.22-09.47.17:894][ 1]LogNavigationDirtyArea: Warning: Skipping dirty area creation because of empty bounds (object: StaticMeshComponent /Game/Maps/LongvinterIsland.LongvinterIsland.PersistentLevel.A_Chest_Common5_5.SM_Chest)
[2022.02.22-09.47.17:896][ 1]LogNavigationDirtyArea: Warning: Skipping dirty area creation because of empty bounds (object: StaticMeshComponent /Game/Maps/LongvinterIsland.LongvinterIsland.PersistentLevel.A_Chest_Common6_8.SM_Chest)
[2022.02.22-09.47.17:897][ 1]LogNavigationDirtyArea: Warning: Skipping dirty area creation because of empty bounds (object: StaticMeshComponent /Game/Maps/LongvinterIsland.LongvinterIsland.PersistentLevel.A_Chest_Common7_2.SM_Chest)
[2022.02.22-09.47.17:898][ 1]LogNavigationDirtyArea: Warning: Skipping dirty area creation because of empty bounds (object: StaticMeshComponent /Game/Maps/LongvinterIsland.LongvinterIsland.PersistentLevel.A_Chest_Common8_17.SM_Chest)
[2022.02.22-09.47.17:899][ 1]LogNavigationDirtyArea: Warning: Skipping dirty area creation because of empty bounds (object: StaticMeshComponent /Game/Maps/LongvinterIsland.LongvinterIsland.PersistentLevel.A_Chest_Common9_5.SM_Chest)
[2022.02.22-09.47.18:715][ 25]LogOnline: Verbose: STEAM: FOnlineAsyncEventSteamServerConnectedGS ServerId: Server[0x1404CD0DE943807]
[2022.02.22-09.47.19:019][ 34]LogOnline: Verbose: STEAM: FOnlineAsyncEventSteamServerPolicyResponseGS Secure: 1
[2022.02.22-09.47.19:052][ 35]LogOnline: Verbose: OSS: Async task 'FOnlineAsyncTaskSteamCreateServer bWasSuccessful: 1' succeeded in 2.546568 seconds
```

If these lines are not present look further up the command line for any error or other warnings that are Steam related.

You can also use the Steam server tool to see if your server is visible in the LAN space.





If your server shows up on the LAN tab but not in the game's server browser. This indicates that there is either firewall problem with your windows or the ports of the router are not configured correctly.

### 3.1.6 Updating To Latest build

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I suggest you update the server every time you start it. The best rule of thumb is that if your game has updated in steam. This means you also have to update the server.

Updating is done by opening the server folder in GIT BASH or in CMD as I showed earlier. The difference is that you now have to be inside the folder and not where it is located.

First, verify that you are in the folder by typing:

```
git status
```

If console prints:

```
fatal: not a git repository (or any of the parent directories): .git
```

This means you are in the wrong folder and you cannot pull the update from here.

Updating is simple. Just execute these two lines separately

```
git restore .  
git pull
```