

# CellBlender Installation Guide

CellBlender version 3.5.1

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## Table of Contents

<b>1 CellBlender Installation and Starting</b>	<b>2</b>
1.1 MacOS	2
1.1.1 Setting-up CellBlender On MacOS	2
1.1.1.1 MacOS Mojave and Older	2
1.1.1.2 MacOS Catalina	2
1.1.2 Running blender	4
1.2 Linux	5
1.2.1 Unpacking the CellBlender Archive	5
1.2.2 Running blender	5
1.3 Windows	5
1.3.1 Installing Strawberry Perl	5
1.3.2 Unpacking the CellBlender Archive	5
1.3.3 Running blender	6
<b>2 Common Troubleshooting</b>	<b>6</b>
2.1 Loading Factory Settings	6
2.2 MacOS: When saving settings "cannot open file /private/var/.../blender.app/Contents/Resources/...".	7
2.3 MacOS: Remove "application downloaded from internet" attribute	7

# 1 CellBlender Installation and Starting

## 1.1 MacOS

### 1.1.1 Setting-up CellBlender On MacOS

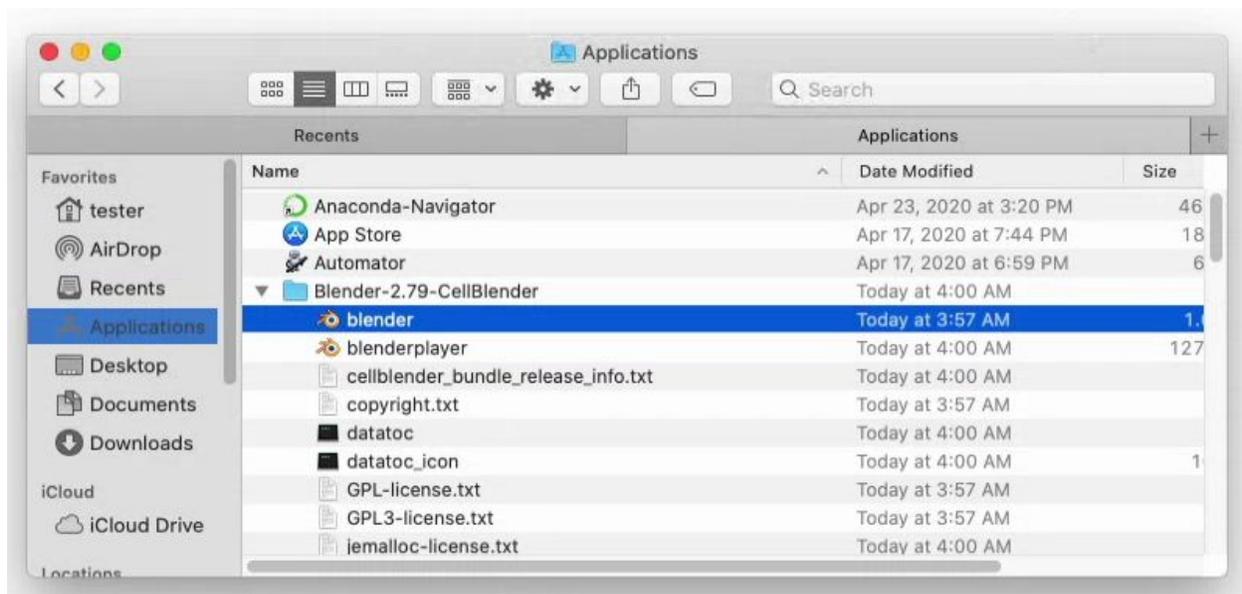
After downloading, the zip file will be automatically extracted to your downloads directory. Move the `Blender-2.79-CellBlender` directory to Applications (i.e. to the directory `/Applications`). The CellBlender bundle won't work correctly in any other directory.

#### 1.1.1.1 MacOS Mojave and Older

If you have an older version of MacOS than the latest Catalina, please go now skip to the following section 1.1.2 because the following setup is not needed and the only thing required is that the unpacked bundle is under the directory `/Applications`.

#### 1.1.1.2 MacOS Catalina

Start Blender by double-clicking the blender application file.



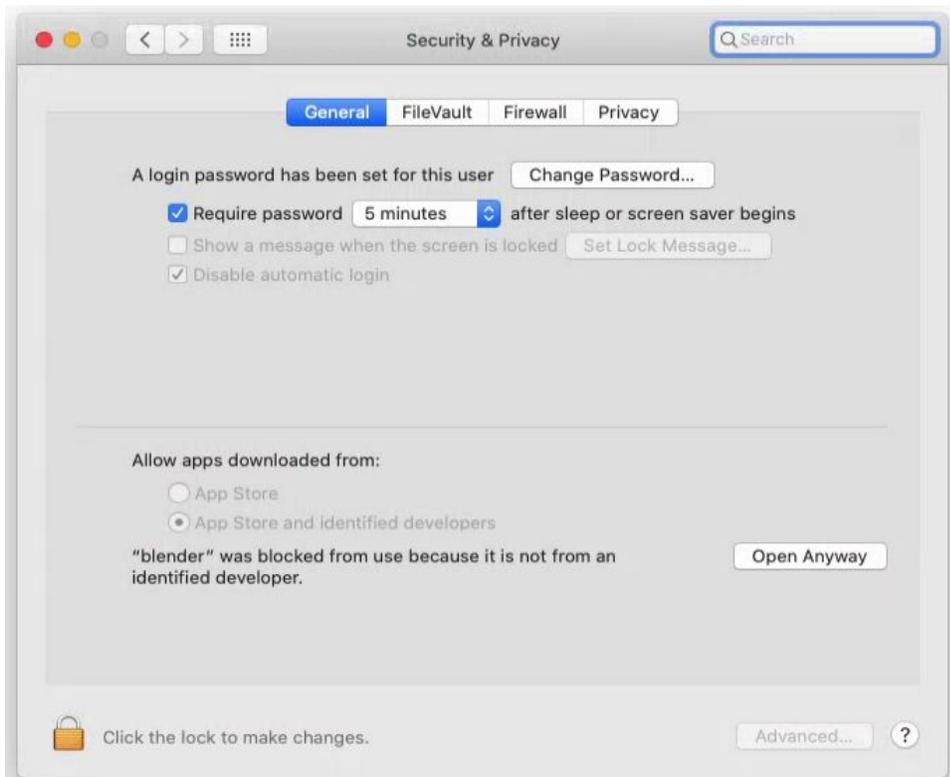
Although the package is digitally signed, some newer MacOS versions require extra approvals from Apple, for now, you will most probably get one of the following warnings.



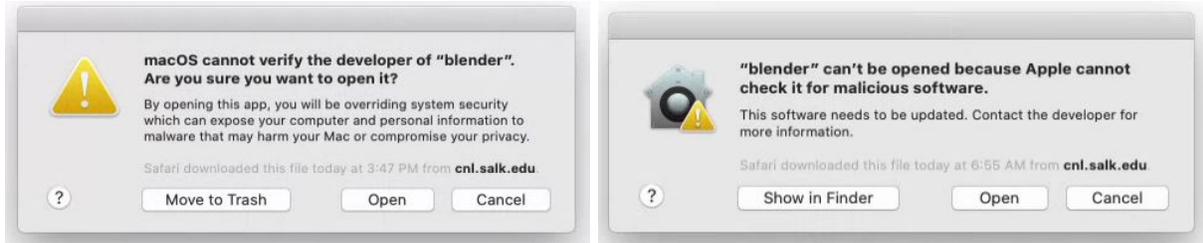
Click on **Cancel** or on **OK** and then open System Preferences (through the Apple menu in the top left). There select **Security and Privacy**.



In the Security & Privacy settings click on **Open Anyway**.



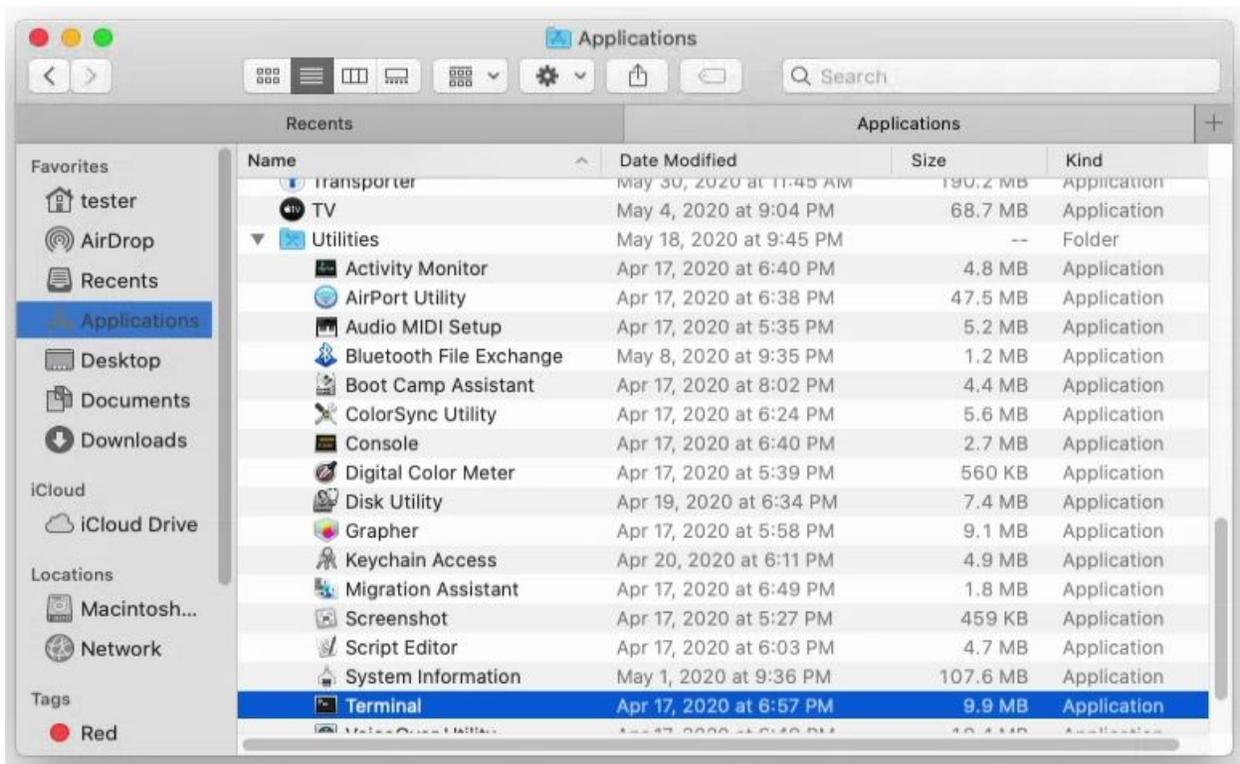
One more warning appears, select **Open** there.



Now quit Blender and start it from the terminal as shown in the following section. This will allow you to see additional messages printed by cellblender. It also allows one to overcome a settings saving issue on MacOS Catalina (described in section 2.2).

### 1.1.2 Running blender

Open a terminal window, the terminal can be found under Applications and Utilities.



Run the following commands from the terminal:

```
cd /  
/Applications/Blender-2.79-CellBlender/my_blender
```

By now, all should be up and running, however, if you get a message that the application is damaged, please see section 2.3.

## 1.2 Linux

### 1.2.1 Unpacking the CellBlender Archive

Start a terminal window and run the following command where `<path_to_bundle.tar.gz>` is a path where you downloaded the CellBlender bundle and `<target_directory>` is the desired installation directory:

```
tar -xf <path_to_bundle.tar.gz> -C <target_directory>
```

### 1.2.2 Running blender

From a terminal run the following command:

```
<target_directory>/Blender-2.79-CellBlender/my_blender
```

## 1.3 Windows

### 1.3.1 Installing Strawberry Perl

Required interpreter of the Perl programming language is not usually present on Windows so one needs to install it before using CellBlender.

From <http://strawberryperl.com/>, download the 64-bit variant (strawberry-perl-5.30.2.1-64bit.msi) and install it.

If you will have any troubles installing it, please follow the parts related to Strawberry Perl here: [https://mcell.org/downloads/windows/install\\_2019\\_05/index.html](https://mcell.org/downloads/windows/install_2019_05/index.html).

### 1.3.2 Unpacking the CellBlender Archive

One of the tools that unpacks tar.gz files is 7-Zip. It can be downloaded here: <https://www.7-zip.org/>

After installation of 7-Zip, find the file

Blender-2.79-CellBlender-`<version>`-Windows-`<date>`.tar.gz in Explorer, right-click and select **7-Zip -> extract here**. A .tar file Blender-2.79-CellBlender-`<version>`-Windows-`<date>`.tar is extracted. Right-click on the new file and and select again **7-Zip -> extract here**.

### 1.3.3 Running blender

Start Windows terminal (click on **Start**, then type cmd, then enter). Then run the following command where <target\_directory> is the directory to which you unpacked CellBlender:

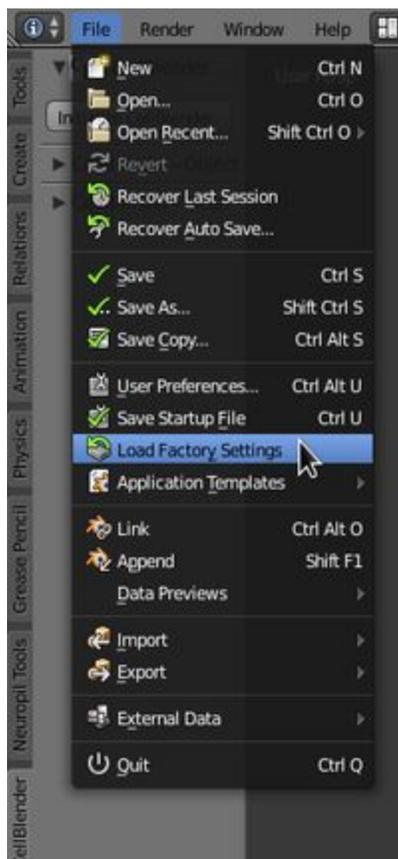
```
<target_directory>\Blender-2.79-CellBlender\blender.exe
```

## 2 Common Troubleshooting

### 2.1 Loading Factory Settings

Blender keeps setting in a user directory, so settings from a previous installation might be loaded and cause various incompatibility issues.

If you would encounter any issues with cellblender, the first recommended step is to reset settings. It is done through Blender menu **File -> Load Factory Settings**.



## 2.2 MacOS: When saving settings "cannot open file /private/var/.../blender.app/Contents/Resources/..."

On MacOS Catalina, the area where Blender stores its settings is protected.

First step is to try to run Blender from a terminal as shown in section 1.1.2, i.e. by running this script:

```
/Applications/Blender-2.79-CellBlender/my_blender
```

If that won't help, continue with setting permissions for terminal to access all folders as shown here:

<https://osxdaily.com/2018/10/09/fix-operation-not-permitted-terminal-error-macos/>

## 2.3 MacOS: Remove "application downloaded from internet" attribute

This step might be useful for releases older than 3.5.0 on MacOS Catalina.

The `xattr` command can be used to remove the 'application downloaded from the internet' error message. This can for instance be an issue on MacOS Catalina where the checking is more strict. To fix this, run:

```
xattr -cr /Applications/Blender-2.79-CellBlender/blender.app
```