Blender's Directory Layout

This page documents the different directories used by Blender.

This can be helpful for troubleshooting, automation and customization.

User Directories

User directories store preferences, startup file, installed extensions, presets and more. By default these use the standard configuration folders for each operating system.

Linux

```
$HOME/.config/blender/4.4/
```

If the `$XDG_CONFIG_HOME` environment variable is set:

```
$XDG_CONFIG_HOME/blender/4.4/
```

macOS

```
/Users/$USER/Library/Application Support/Blender/4.4/
```

Windows

```
%USERPROFILE%\AppData\Roaming\Blender Foundation\Blender\4.4\
```

Portable Installation

When running Blender from a portable drive, it's possible to keep the configuration files on the same drive to take with you.

To enable this, create a folder named `portable` at the following locations:

- Windows: Next to the Blender executable, in the unzipped folder
- Linux: Next to the Blender executable, in the unzipped folder
- macOS: Inside the application bundle at `Blender.app/Contents/Resources`

This folder will then store preferences, startup file, installed extensions and presets.

Environment Variables

The `BLENDER_USER_RESOURCES` environment variable can be set to a custom directory to replace the default user directory.

System Directories

System directories store files that come bundled with Blender and are required for it to function. This includes scripts, presets, essential assets and more.

Linux

Archive downloaded from blender.org:

```
./4.4/
```

Linux distribution packages:

Linux distribution packages:

```
/usr/share/blender/4.4/
```

macOS

```
./Blender.app/Contents/Resources/4.4/
```

Windows

Zip file downloaded from blender.org:

```
./4.4/
```

Installer downloaded from blender.org:

```
%ProgramFiles%\Blender Foundation\Blender\4.4\
```

Microsoft Store installation:

```
%ProgramFiles%\WindowsApps\BlenderFoundation.Blender<HASH>\Blender\4.4\
```

Environment Variables

`BLENDER_SYSTEM_SCRIPTS` and `BLENDER_SYSTEM_EXTENSIONS` environment variables can be used to bundle additional scripts and extensions, that are not part of the regular Blender installation.

Other `BLENDER_SYSTEM` environment variables can override other system paths, though are not commonly used in practice.

Path Layout

`./autosave`

Autosave blend-file location. (Windows only, temp directory used for other systems.)

Located in user directories.

`./config`

User configuration and session info.

Located in user directories.

`./config/startup.blend`

Blend file to load on startup.

`./config/userpref.blend`

User preferences.

`./config/bookmarks.txt`

File Browser bookmarks.

`./config/recent-files.txt`

Recent file menu list.

`./config/{APP_TEMPLATE_ID}/startup.blend`

Startup file for an application template.

`./config/{APP_TEMPLATE_ID}/userpref.blend`

User preferences file for an application template.

./datafiles

Data files loaded at runtime.

Located in both user and system directories. User data files either override or add to system data files.

./datafiles/colormanagement

Default OpenColorIO configuration.

./datafiles/fonts

User interface fonts.

./datafiles/studiolights

Studio light images for 3D viewport.

./extensions

Extension repositories.

Located in both user and system directories. Repositories are loaded from both directories.

./scripts

Add-ons, presets, templates, user interface, startup scripts.

Located in both user and system directories. Scripts are loaded from both directories.

./scripts/addons/*.py

Python add-ons which may be enabled in the Preferences include import/export format support, render engine integration and many handy utilities.

./scripts/addons/modules/*.py

Modules for add-ons to use (added to Python's `sys.path`).

./scripts/addons_core/*.py

The add-ons directory which is used for bundled add-ons.

./scripts/addons_core/modules/*.py

Modules for `addons_core` to use (added to Python's `sys.path` when it found).

./scripts/modules/*.py

Python modules containing our core API and utility functions for other scripts to import (added to Python's `sys.path`).

./scripts/startup/*.py

Scripts which are automatically imported on startup.

./scripts/startup/bl_app_templates_user/{APP_TEMPLATE_ID}

Application templates installed in user directories.

./scripts/startup/bl_app_templates_system/{APP_TEMPLATE_ID}

pplication templates automatically loaded from system directories.

./scripts/presets/{preset}/*.py

Presets used for storing user-defined settings for cloth, render formats, etc.

./scripts/templates_py/*.py

Example scripts which can be accessed from Text Editor ‣ Templates ‣ Python.

./scripts/templates_osl/*.osl

Example OSL shaders which can be accessed from Text Editor ‣ Templates ‣ Open Shading Language.

./python

Bundled Python distribution.

Located in system directories.

Local Cache Directory

Local Cache Directory

The cache directory is used to store persistent caches locally. Currently it is only used for the indexing of [Asset Libraries](#). The operating system is not expected to clear this automatically.

The following path will be used:

- **Linux:**
  `$XDG_CACHE_HOME/blender/` if `$XDG_CACHE_HOME` is set, otherwise `$HOME/.cache/blender/`

- **macOS:**
  `/Library/Caches/Blender/`

- **Windows:**
  `%USERPROFILE%\AppData\Local\Blender Foundation\Blender\Cache\`

Temporary Directory

The temporary directory is used to store various files at run-time (including render layers, physics cache, copy-paste buffer and crash logs).

The temporary directory is selected based on the following priority:

- User Preference (see [File Paths](#)).
- Environment variables (`TEMP` on Windows, `TMP` & `TMP_DIR` on other platforms).
- The `/tmp/` directory.