File Browser PRO

Native file browser for standalone



Documentation

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Thank you for buying our asset "File Browser PRO"!

If you have any questions about this asset, send an email to fb@crosstales.com.

Please don't forget to rate it or write a little review – it would be very much appreciated.

1. Overview

File Browser is a wrapper for native file dialogs on Windows, macOS, Linux and UWP (WSA).

It also supports custom file browsers which allows it to be used on any platform!

2. Features

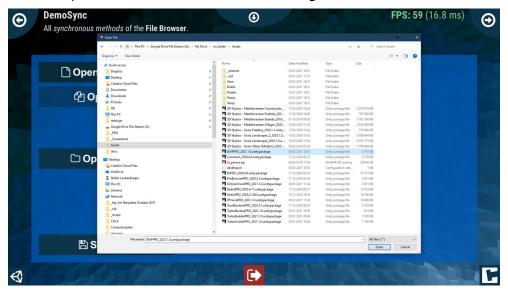
- Works with Windows, macOS, Linux and UWP (WSA) in editor and runtime
- Expand it via custom file browsers
- Full **IL2CPP-support**
- Open file/folder, save file dialogs supported
- Multiple file selection
- Multiple folder selection on macOS and Linux
- Synchronous and asynchronous (non-blocking) methods
- File extension filters
- Powerful API for maximum control!
- Detailed demo scenes!
- Comprehensive <u>documentation</u> and support!
- Compatible with Unity 2018.4 2021.1
- C# delegates and Unity events!
- Full C# source code!
- Support for most platforms via <u>Runtime File Browser</u>
- Support for WebGL via WebGL Native File Browser
- PlayMaker actions!

3. Demonstration

The asset comes with two demo scenes to show the main usage.

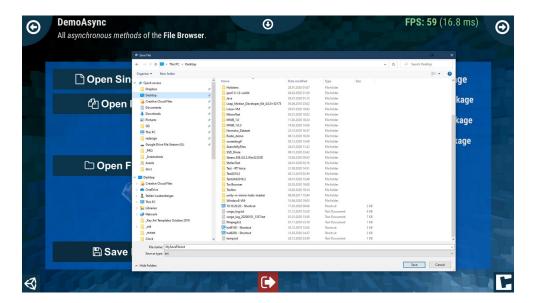
3.1. DemoSync

This scene shows open files/folders and a save dialogues.



3.2. DemoAsync

This scene shows asynchronous open files/folders and a save dialogues.



4. API

}

The asset contains various classes and methods. The most important ones are explained here.

Make sure to **include** the **name space** in the relevant source files:

```
using Crosstales.FB;
```

4.1. FileBrowser

The "FileBrowser.cs" is a singleton and contains the following important methods.

```
4.1.1. Open single file
```

```
public void openSingleFile() {
    string path = FileBrowser.Instance.OpenSingleFile("txt");

    Debug.Log("Selected file: " + path);
}

4.1.2. Open multiple files
public void OpenFiles() {
    string extensions = "";

    string[] paths = FileBrowser.Instance.OpenFiles("txt");

    foreach (string path in paths)
    {
        Debug.Log("Selected file: " + path);
    }
}

4.1.3. Open single folder
public void OpenSingleFolder() {
        string path = FileBrowser.Instance.OpenSingleFolder();
```

Debug.Log("Selected folder: " + path);

4.1.4. Open multiple folders

```
public void OpenFolders() {
    string[] paths = FileBrowser.Instance.OpenFolders();

    foreach (string path in paths)
    {
        Debug.Log("Selected folder: " + path);
    }
}
```

Note: this works does not work under Windows

4.1.5. Save file

```
public void SaveFile() {
    string path = FileBrowser.Instance.SaveFile("MyFile", "txt");
    Debug.Log("Save file: " + path);
}
```

4.2. Callbacks

There are various callbacks available. Subscribe them in the "Start"-method and unsubscribe in "OnDestroy".

4.2.1. Open Files

```
OpenFilesStart();
```

OpenFilesStart OnOpenFilesStart;

Triggered whenever "OpenFiles" is started.

OpenFilesComplete(bool selected, string singleFile, string[] files); OpenFilesComplete OnOpenFilesComplete;

Triggered whenever "OpenFiles" is completed.

4.2.2. Open Folder

OpenFoldersStart();

OpenFoldersStart OnOpenFoldersStart;

Triggered whenever "OpenFolders" is started.

OpenFoldersComplete(bool selected, string singleFolder, string[] folders); OpenFoldersComplete OnOpenFoldersComplete;

Triggered whenever "OpenFolders" is completed.

4.2.3. Save File

```
SaveFileStart();
```

SaveFileStart OnSaveFileStart;

Triggered whenever "SaveFile" is started.

SaveFileComplete(bool selected, string file);

SaveFileComplete OnSaveFileComplete;

Triggered whenever "SaveFile" is completed.

4.3. UWP (WSA)

We designed File Browser to behave the same on all platforms.

Unfortunately, UWP (WSA) is very restrictive and the returned paths won't help to read or save any files, since access is only granted via StorageFile or StorageFolder.

Therefore, File Browser offers additional fields to use the selected files and folders, which are accessible via *FileBrowserWSAImpl*:

4.3.1. Settings

- **CurrentLocation**: path location for the file browser (default: <u>PickerLocationId</u>.ComputerFolder)
- CurrentViewMode: style of the file browser (default: PickerViewMode.List)

4.3.2. Files and folders

- LastOpenFile: Last file from the "OpenFiles"-dialog (StorageFile)
- LastOpenFiles: Last files from the "OpenFiles"-dialog (List<StorageFile>)
- LastOpenFolder: Last folder from the "OpenSingleFolder"-dialog (StorageFolder)
- LastSaveFile: Last file from the "SaveFile"-dialog (StorageFile)

4.3.3. Search files and folders

- LastGetFiles: Last files from the "GetFiles"-method (List<StorageFile>)
- LastGetDirectories: Last folders from the "GetDirectories"-method (List<StorageFolder>)
- LastGetDrives: Last drives from the "GetDrives"-method (List<StorageFolder>)

4.3.4. Example

```
#if (UNITY_WSA && !UNITY_EDITOR) && ENABLE_WINMD_SUPPORT
public async void ReadFile()
{
    FileBrowserWSAImpl.CurrentLocation = PickerLocationId.DocumentsLibrary;
    FileBrowserWSAImpl.CurrentViewMode = PickerViewMode.Thumbnail;

    FileBrowser.Instance.OpenSingleFile("txt");

    var file = FileBrowserWSAImpl.LastOpenFile;
    var lines = await FileIO.ReadLinesAsync(file);

    //do something with the content
}
#endif
```

4.3.5. Reading and writing files

Please follow this link to learn more about how-to read and save files under UWP: https://docs.microsoft.com/en-us/windows/uwp/files/quickstart-reading-and-writing-files

4.4. More details

All methods can be found in "Example.cs" located under "Assets/Plugins/crosstales/FileBrowser/Demos"

4.5. Complete API

Please read the FileBrowser-api.pdf for more details.

5. Third-party support (PlayMaker etc.)

"File Browser" supports various assets from other publishers. Please import the desired packages from "Assets/Plugins/crosstales/FileBrowser/3rd party".

6. Verify installation

Check if File Browser is installed:

7. Upgrade to new version

Follow this steps to upgrade the version of "File Browser":

- 1. Update "File Browser" to the latest version from the "Unity AssetStore"
- 2. Delete the "Assets/Plugins/crosstales/FileBrowser" folder from the Project-view
- Import the latest version downloaded from the "Unity AssetStore"

8. Important notes

8.1. Windows

Windows allows setting the path for any application just once (for every dialog type). As soon as a user chooses a file or folder, it "remembers" the last destination and ignores any further attempts to change the path via code.

8.2. macOS

- Notarization and Mac App Store; to get an app through the Apples signing process, you may have to do one of the following things:
- 1) Add the following key to the entitlement-file: <key>com.apple.security.cs.disable-library-validation</key><true/>
- 2) Sign the library after building:

```
codesign --deep --force --verify --verbose --timestamp --sign "Developer ID Application : YourCompanyName (0123456789)"
"YourApp.app/Contents/Plugins/FileBrowser.bundle"
```

8.3. Linux

The library is tested under Ubuntu 18.04 with GTK3+.

Since there are so many different Linux distributions and configurations, we simply can't test and support them all.

Therefore, we included the whole source code; please follow the README in the "Linux-Source.zip".

9. Problems, improvements etc.

If you encounter any problems with this asset, just <u>send us an email</u> with a problem description and we will try to solve it.

We will try and make a version for all platforms as well, please bear with us.

10. Release notes

See "VERSIONS.txt" under "Assets/Plugins/crosstales/FileBrowser/Documentation" or online:

https://crosstales.com/media/data/assets/FileBrowser/VERSIONS.txt

11. Credits

The icons are based on Font Awesome.

Code partially based on:

https://github.com/gkngkc/UnityStandaloneFileBrowser

Improvements for the Linux version:

Yinon Oshrat (Intel)

Help fixing the Apple Silicion version:

Yuli Levtov (Volta)

12. Contact and further information

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Email: <u>fb@crosstales.com</u>

AssetStore: https://assetstore.unity.com/lists/crosstales-42213

Forum: https://forum.unity.com/threads/file-browser-native-file-browser-for-

windows-and-macos.510403/

Documentation: https://www.crosstales.com/media/data/assets/FileBrowser/

FileBrowser-doc.pdf

API: https://www.crosstales.com/media/data/assets/FileBrowser/api/

Windows-Demo: https://drive.google.com/file/d/1sE-

6uhp2nk_5B85jvoiMWdk__HqUPSek/view?usp=sharing

Mac-Demo: https://drive.google.com/file/d/1sAB953F-

fpRmTSks9f2ZM0sMV7CEyyUA/view?usp=sharing

Linux-Demo: https://drive.google.com/file/d/

1LAm9v8Mu9jvF_8ZU0X3UU8nLKCdobzrj/view?usp=sharing

Android-Demo: https://drive.google.com/file/d/139vmuauhc-

prs_U868_W90x68cSyY1vj/view?usp=sharing

13. Our other assets

| 3D Skybox PRO 3D Skybox | Those beautiful packages contain professional 8k, HDR, stereoscopic 360° real-world skyboxes for your projects. |
|--------------------------|---|
| Bad Word Filter | The "Bad Word Filter" (aka profanity or obscenity filter) is exactly what the title suggests: a tool to filter swearwords and other "bad sentences". |
| DJ | DJ is a player for external music-files. It allows a user to play his own sound inside any Unity-app. It can also read ID3-tags. |
| Online Check | You need a reliable solution to check for Internet availability? Here it is! |
| Radio | Radio allows implementing free music from Internet radio stations into your project |
| RT-Voice | RT-Voice uses the computer's (already implemented) TTS (text-to-speech) voices to turn the written lines into speech and dialogue at run-time! Therefore, all text in your game/app can be spoken out loud to the player. |
| True Random | True Random can generate "true random" numbers for you and your application. The randomness comes from atmospheric noise, which for many purposes is better than the pseudo-random number algorithms typically used in computer programs. |
| Turbo Backup | Turbo Backup is the fastest and safest way to backup your Unity project. It only stores the difference between the last backup, this makes it incredible fast. |
| Turbo Builder | Turbo Builder creates builds for multiple platforms in one click. It works together with <u>Turbo Switch</u> to offer an incredible fast build pipeline. |



Turbo Switch is a Unity editor extension to reduce the time for assets to import during platform switches. We measured speed improvements up to 100x faster than the built-in switch in Unity.