ASSET INVENTORY

GUIDE - VERSION 1.3.0

ASSET
INVENTORY

INTRODUCTION

The Asset Inventory is your ultimate asset companion: a lightning-fast search for assets outside your current project. Find content in assets you purchased or downloaded without importing and bring them in with a single click.

Eliminate the time-consuming task of finding a sound file, a texture or a model you know you purchased but which is hidden inside one of your many Asset Store purchases. The Asset Inventory provides a **complete list of all assets you own**, including their content.

FEATURES

The Asset Inventory aims to provide what you always wanted the Asset Store & Package Manager to be. Find assets effectively. Search inside your purchases. Include third-party packages. Manage everything through tags. Perform bulk operations. Identify used assets inside your projects. Search using asset-specific criteria.

Powerful Search

Browse & find anything inside your purchased Asset Store packages without importing. Quickly preview audio files. Narrow your search using asset type, tags, image dimensions, audio length and more. Exclude items you don't want to see. Save and recall searches.

Easy Setup

Works immediately out of the box. Lots of optional view & configuration options. Hassle-free indexing. Start, stop & resume at any time. Works with Unity 2019.4 and higher. Windows, Mac & Linux. Lightning-fast indexing and search.

Intelligent Import

Import only what you need instead of a whole package. Automatically determines asset dependencies to import complex prefabs and materials. Save space & reduce clutter in your project. Import multiple packages at once. Automatically store assets in a specific sub-folder and keep the Assets root clean.

Many Sources

Your complete asset library: Automatically indexes Asset Store purchases. Add custom folders to search through Unity packages downloaded from other locations. And index folders containing arbitrary media files like 3D models, audio libraries, textures and more. Automatically generates previews.

Organize

Automatically imports labels from the Asset Store. Use additional tags to group assets effectively. Assign colors and group by tags. Perform bulk operations.

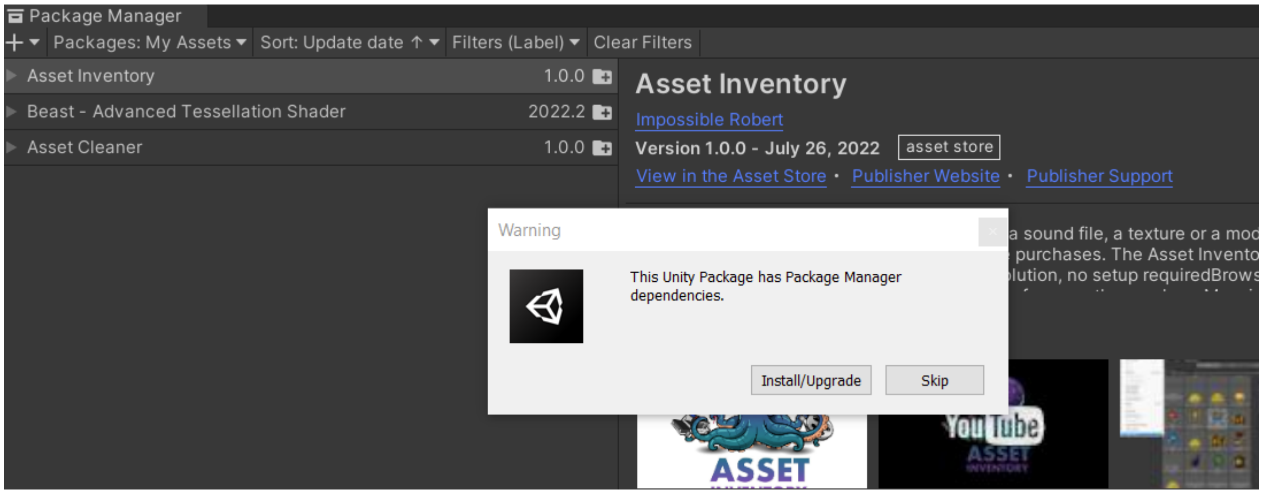
Reverse Lookup

Quickly identify used assets in your project.

INSTALLATION

It is strongly recommended that any old version of the Asset Inventory is removed before installing a new version. The best way to do so is to delete the full Asset Inventory folder before starting Unity sometimes some libraries cannot be removed if Unity is active.

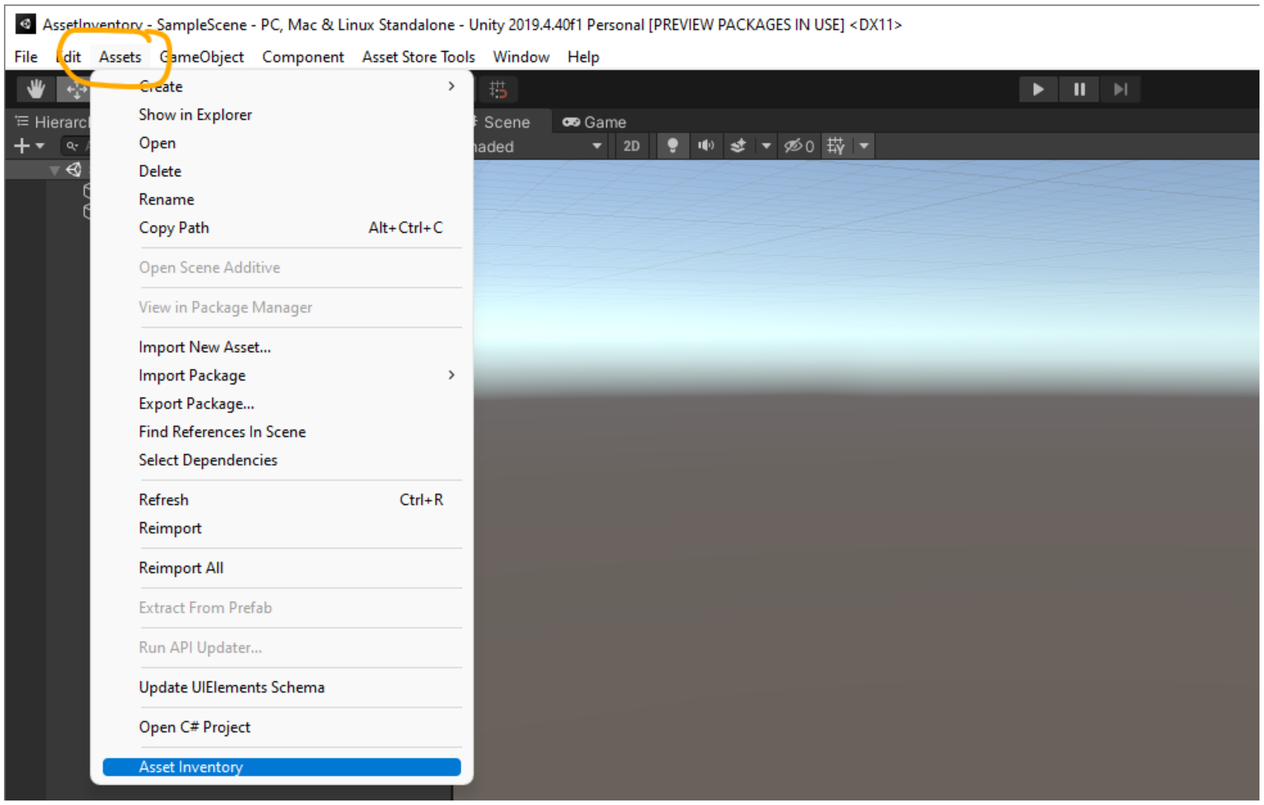
Install the package through the Unity Package Manager. When asked if to install additional dependencies, select **Install/Upgrade**, otherwise the asset will not work.



This Unity Package has Package Manager dependencies.

GETTING STARTED

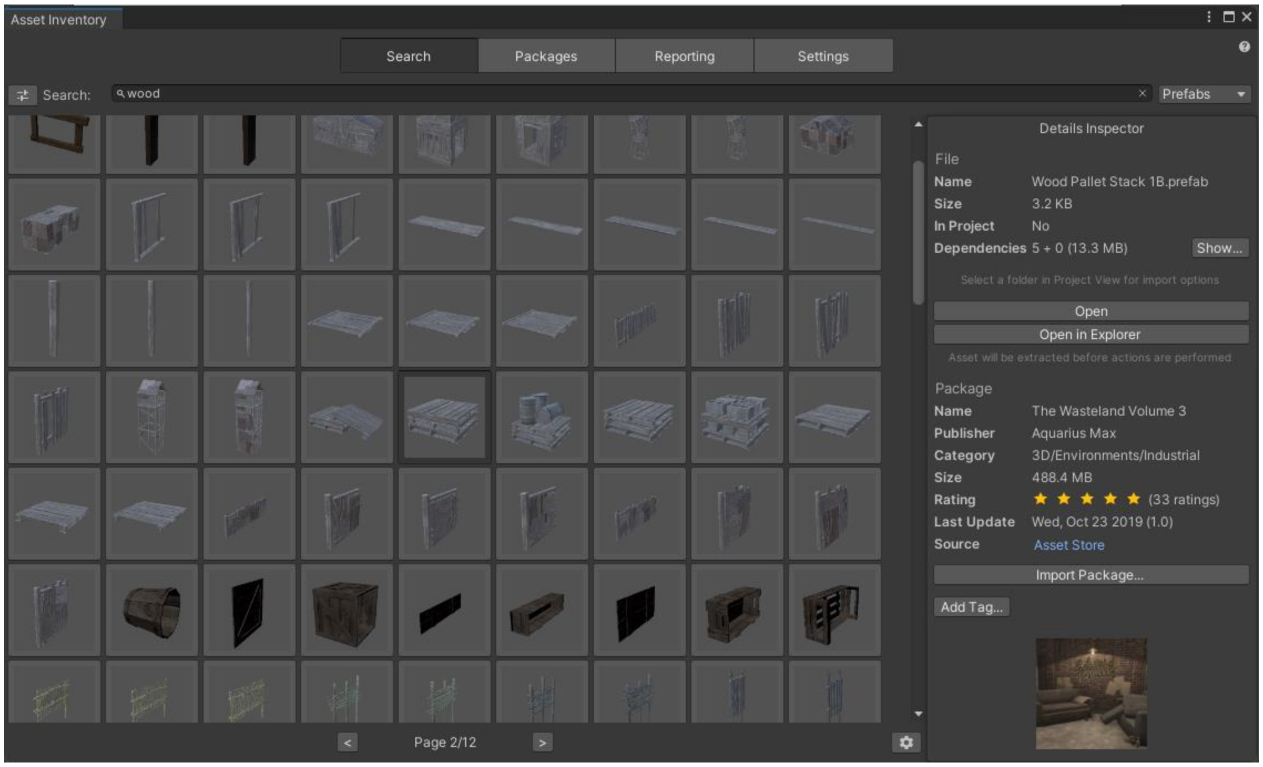
You can open the Asset Inventory through the **Assets menu**.



There is **no manual setup** needed. The only requirement is a fair amount of disk space for storing preview images and temporary files during extraction and browsing.

SEARCH TAB

Once an asset is indexed, it can be found in the search. Searching will automatically start when typing. Additional filters can be selected to narrow down the results further. Once an asset is selected, details are shown on the right-hand side about the file and the package the file is contained in.



Details Inspector

File

Name	Wood Pallet Stack 1B.prefab
Size	3.2 KB
In Project	No
Dependencies	5 + 0 (13.3 MB)

Select a folder in Project View for import options

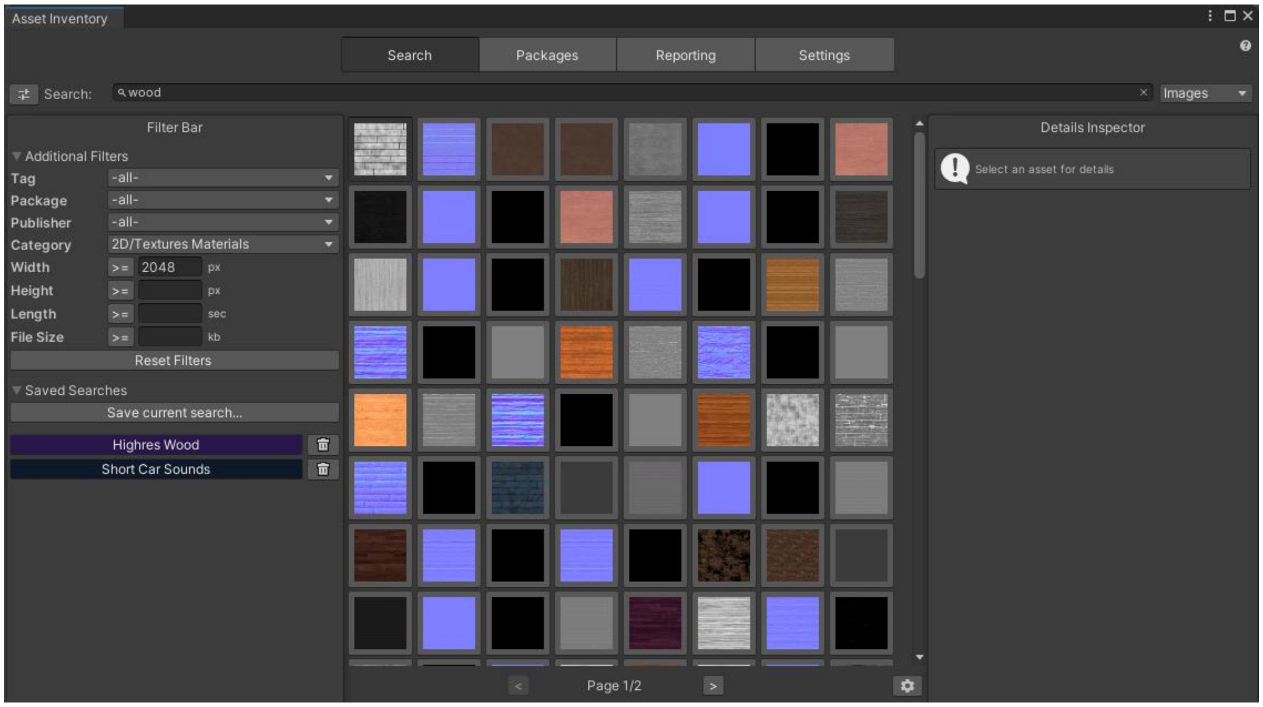
Asset will be extracted before actions are performed

Package

Name	The Wasteland Volume 3
Publisher	Aquarius Max
Category	3D/Environments/Industrial
Size	488.4 MB
Rating	★ ★ ★ ★ ★ (33 ratings)
Last Update	Wed, Oct 23 2019 (1.0)
Source	Asset Store

Selecting an audio file will **automatically play** it. This way it is easy to quickly preview audio files.

Clicking the **Filter icon** in front of the search will bring up the **filter bar**. It contains additional filters and media-specific properties to filter for specific image dimensions or audio length. Using the buttons in-front of each value toggles if results match that are bigger or smaller than entered. The filter dropdowns will only show values if respective assets are available.

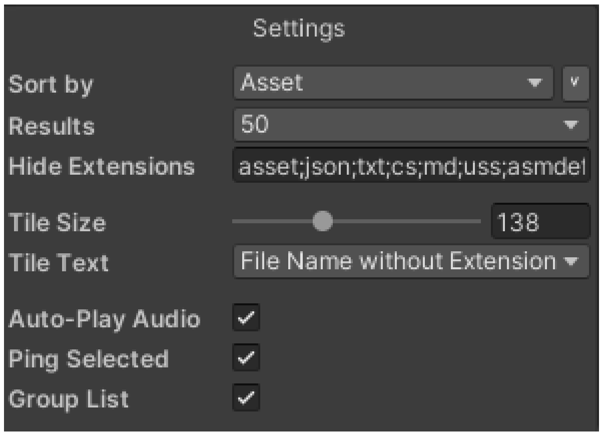


Search: wood

Tag	-all-
Package	-all-
Publisher	-all-
Category	2D/Textures Materials
Width	>= 2048 px
Height	>= px
Length	>= sec
File Size	>= kb

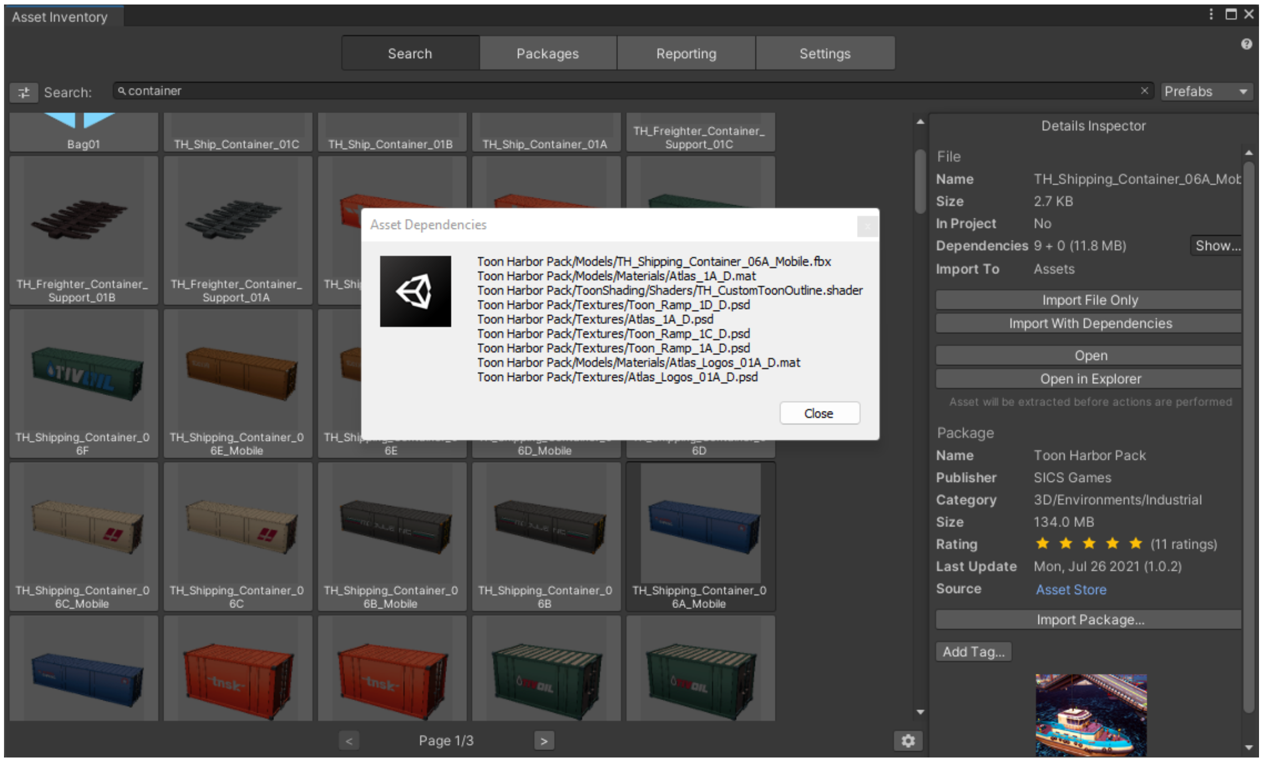
The filter bar also contains the section for **Saved Searches**. This allows to persist the current search filters and later recall these easily. The results are not persisted but instead live from the database.

Using the **settings icon** in the lower right corner will open additional view settings. Specify the tile size, which text to display on the tiles and if assets should be pinged automatically upon selection.



Sort by	Asset
Results	50
Hide Extensions	asset;json;txt;cs;md;uss;asmdef
Tile Size	138
Tile Text	File Name without Extension
Auto-Play Audio	✓
Ping Selected	✓
Group List	✓

Selecting a folder in the Unity **Project View** will bring up **import** options when selecting an asset in the search. Assets can be imported individually or with all detected dependencies. The latter will automatically create a sub-folder with the asset name and store all files in there.


Asset Inventory
Search
Packages
Reporting
Settings
Search:
container
Prefabs
Bag01
TH_Ship_Container_01C
TH_Ship_Container_01B
TH_Ship_Container_01A
TH_Freighter_Container_Support_01C
TH_Freighter_Container_Support_01B
TH_Freighter_Container_Support_01A
TH_Shipping_Container_06F
TH_Shipping_Container_06E_Mobile
6E
6D_Mobile
6D
TH_Shipping_Container_06C_Mobile
TH_Shipping_Container_06C
TH_Shipping_Container_06B_Mobile
TH_Shipping_Container_06B
TH_Shipping_Container_06A_Mobile
Page 1/3
Asset Dependencies
Close
Details Inspector
Show...
Import File Only
Import With Dependencies
Open
Open in Explorer
Import Package...
Add Tag...

Toon Harbor Pack/Models/TH_Shipping_Container_06A_Mobile.fbx
Toon Harbor Pack/Models/Materials/Atlas_1A_D.mat
Toon Harbor Pack/ToonShading/Shaders/TH_CustomToonOutline.shader
Toon Harbor Pack/Textures/Toon_Ramp_1D_D.psd
Toon Harbor Pack/Textures/Atlas_1A_D.psd
Toon Harbor Pack/Textures/Toon_Ramp_1C_D.psd
Toon Harbor Pack/Textures/Toon_Ramp_1A_D.psd
Toon Harbor Pack/Models/Materials/Atlas_Logos_01A_D.mat
Toon Harbor Pack/Textures/Atlas_Logos_01A_D.psd

File

Name	TH_Shipping_Container_06A_Mob
Size	2.7 KB
In Project	No
Dependencies	9 + 0 (11.8 MB)
Import To	Assets

Asset will be extracted before actions are performed

Package

Name	Toon Harbor Pack
Publisher	SICS Games
Category	3D/Environments/Industrial
Size	134.0 MB
Rating	★★★★★ (11 ratings)
Last Update	Mon, Jul 26 2021 (1.0.2)
Source	Asset Store

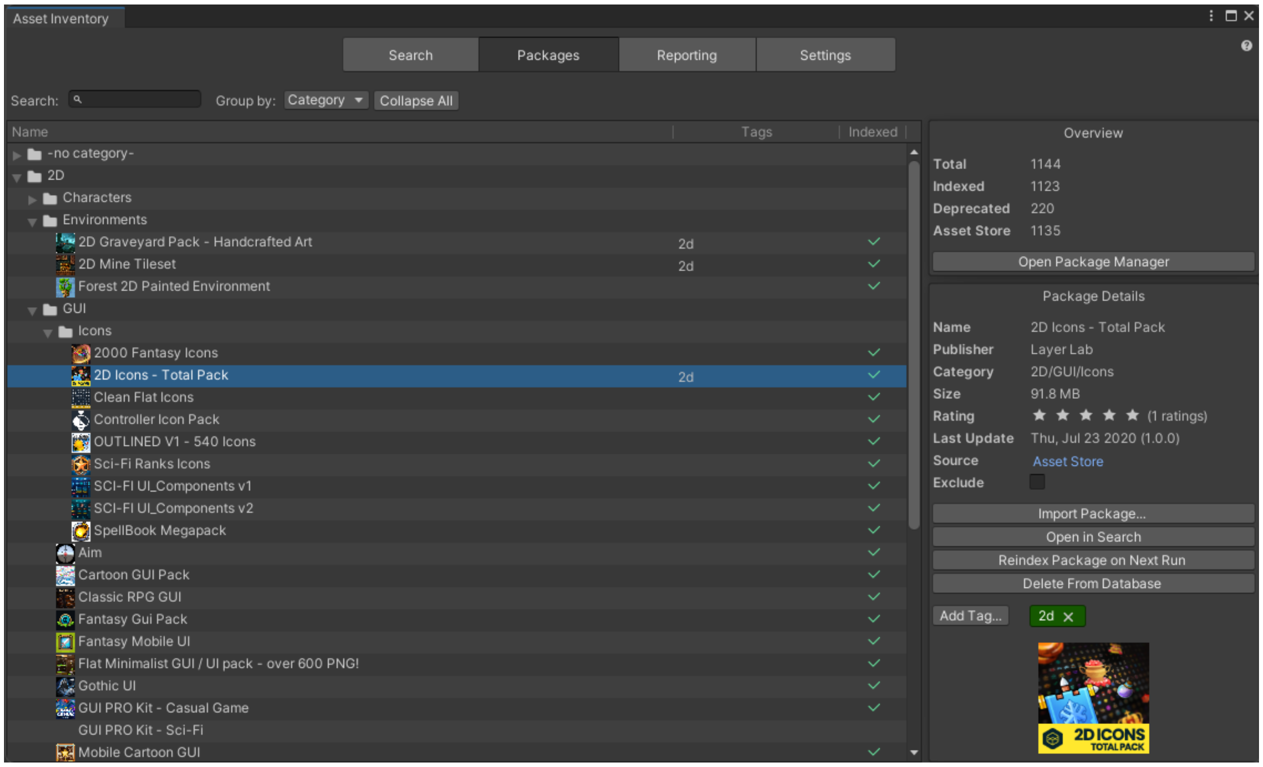
In case there are **script dependencies** these can also be imported. Due to unforeseen dependencies in scripts, that will typically only work for scripts that are self-contained. Otherwise, there might be compilation errors.

PACKAGES TAB

The packages overview will show a list of all found packages. These can come from multiple sources:

- The list of Asset Store purchases is retrieved automatically
- The local Unity asset cache is scanned
- If specified, additional folders will also be scanned

The list will indicate which of these were already indexed. To index more packages, download the remaining ones through the *Package Manager / My Assets* view. Display is possible as a plain list or grouped by categories or tags.



Name	Tags	Indexed
-no category-		
2D		
Characters		
Environments		
2D Graveyard Pack - Handcrafted Art	2d	✓
2D Mine Tileset	2d	✓
Forest 2D Painted Environment		✓
GUI		
Icons		
2000 Fantasy Icons		✓
2D Icons - Total Pack	2d	✓
Clean Flat Icons		✓
Controller Icon Pack		✓
OUTLINED V1 - 540 Icons		✓
Sci-Fi Ranks Icons		✓
SCI-FI UI_Components v1		✓
SCI-FI UI_Components v2		✓
SpellBook Megapack		✓
Aim		✓
Cartoon GUI Pack		✓
Classic RPG GUI		✓
Fantasy Gui Pack		✓
Fantasy Mobile UI		✓
Flat Minimalist GUI / UI pack - over 600 PNG!		✓
Gothic UI		✓
GUI PRO Kit - Casual Game		✓
GUI PRO Kit - Sci-Fi		
Mobile Cartoon GUI		✓

Overview

Total	1144
Indexed	1123
Deprecated	220
Asset Store	1135

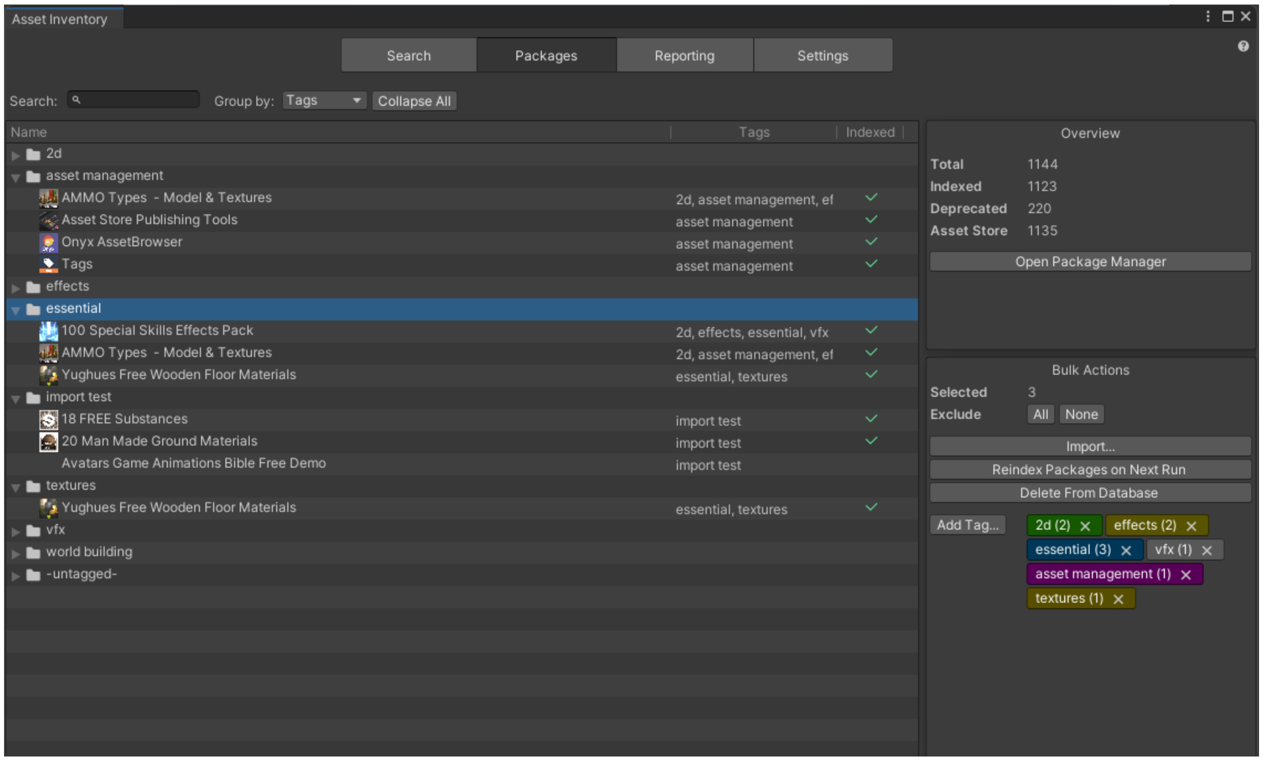
Package Details

Name	2D Icons - Total Pack
Publisher	Layer Lab
Category	2D/GUI/Icons
Size	91.8 MB
Rating	★ ★ ★ ★ ★ (1 ratings)
Last Update	Thu, Jul 23 2020 (1.0.0)
Source	Asset Store
Exclude	☐

After selecting a package, multiple options will appear. It is possible to import it. Alternatively, it can also be removed from the index to trigger a reindexing on the next run. This can be useful for incorrectly indexed files. Packages can also be completely removed from the database which can be useful after cleaning up outdated assets from the local cache.

Double-clicking any package will show the contents in the search.

Tags will be imported from the Asset Store in case any are set there. In addition, local tags can be added and removed here as well (they are not synchronized back to the Asset Store yet). Bulk editing of tags is possible when selecting multiple items in the tree.


Asset Inventory

Search | Packages | Reporting | Settings

Search: Group by: Tags Collapse All

Name	Tags	Indexed
▶ 2d		
▼ asset management		
AMMO Types - Model & Textures	2d, asset management, ef	✓
Asset Store Publishing Tools	asset management	✓
Onyx AssetBrowser	asset management	✓
Tags	asset management	✓
▶ effects		
▼ essential		
100 Special Skills Effects Pack	2d, effects, essential, vfx	✓
AMMO Types - Model & Textures	2d, asset management, ef	✓
Yughues Free Wooden Floor Materials	essential, textures	✓
▼ import test		
18 FREE Substances	import test	✓
20 Man Made Ground Materials	import test	✓
Avatars Game Animations Bible Free Demo	import test	
▼ textures		
Yughues Free Wooden Floor Materials	essential, textures	✓
▶ vfx		
▶ world building		
▶ -untagged-		

Overview

Total	1144
Indexed	1123
Deprecated	220
Asset Store	1135

Open Package Manager

Bulk Actions

Selected	3
Exclude	All None

Import...

Reindex Packages on Next Run

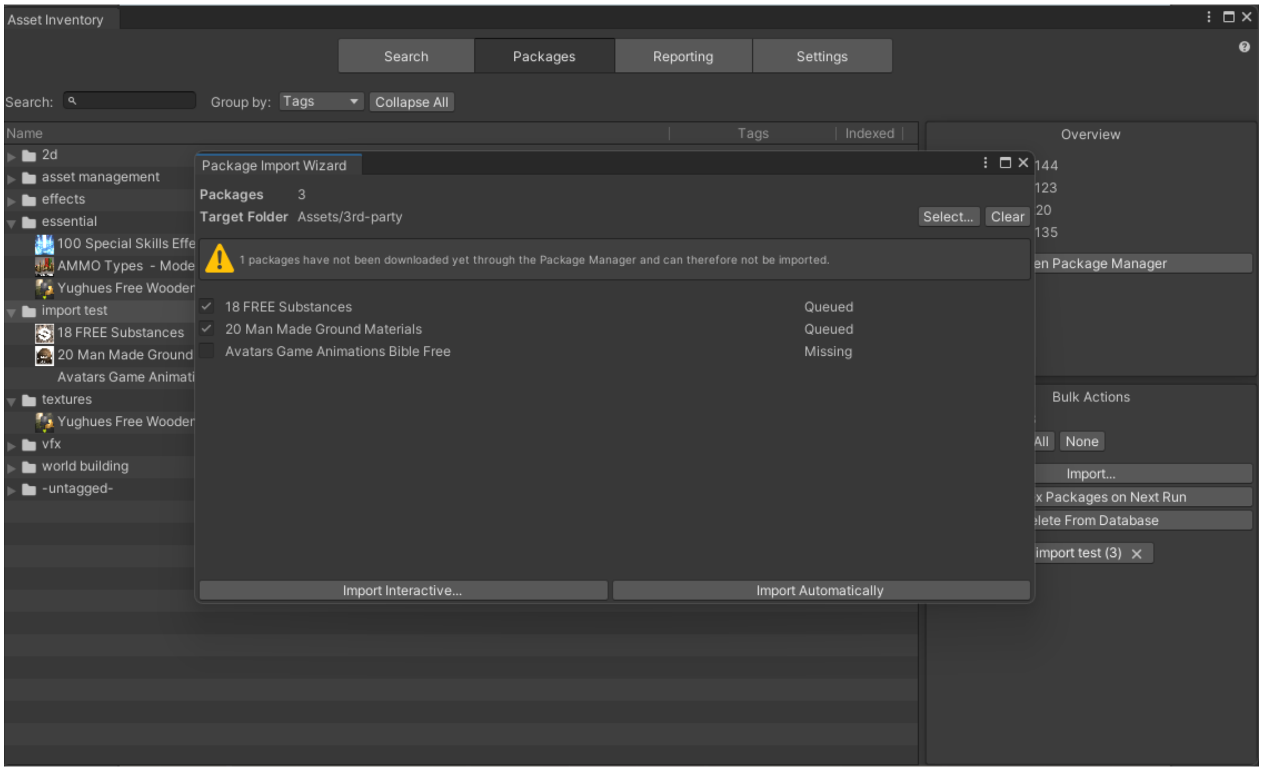
Delete From Database

Add Tag... 2d (2) ✕ effects (2) ✕ essential (3) ✕ vfx (1) ✕ asset management (1) ✕ textures (1) ✕

When adding tags, the **Tag Management** window can be opened through the small cog wheel. There, tags can be created, colored, renamed and deleted.

In case packages should not appear in the search results and not be indexed, the **Exclude** toggle can be used in the package details.

Importing packages can happen one-by-one and also while multiple are selected. Both interactive and automatic mode is available. In addition, a **custom root folder** under which assets should be imported can be selected. This is especially helpful if the */Assets* root should be kept clean and organized.



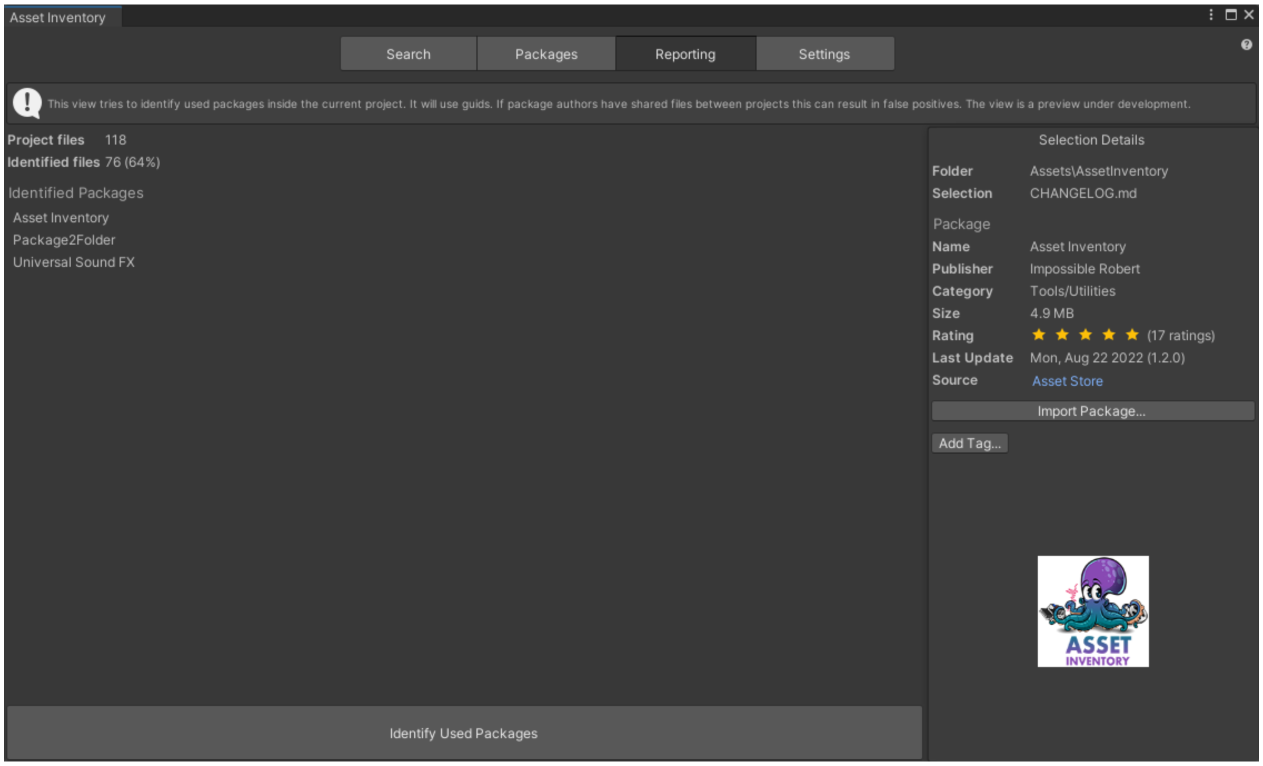
Packages 3
Target Folder Assets/3rd-party

1 packages have not been downloaded yet through the Package Manager and can therefore not be imported.

✓	18 FREE Substances	Queued
✓	20 Man Made Ground Materials	Queued
	Avatars Game Animations Bible Free	Missing

REPORTING TAB

This module will scan the complete project and try to identify packages that were being used. Currently in **preview** this will evolve into a compliance reporting to check if all licenses in the project are accounted for.



Asset Inventory

This view tries to identify used packages inside the current project. It will use guids. If package authors have shared files between projects this can result in false positives. The view is a preview under development.

Project files	118
Identified files	76 (64%)

Identified Packages

- Asset Inventory
- Package2Folder
- Universal Sound FX

Selection Details

Folder	Assets\AssetInventory
Selection	CHANGELOG.md

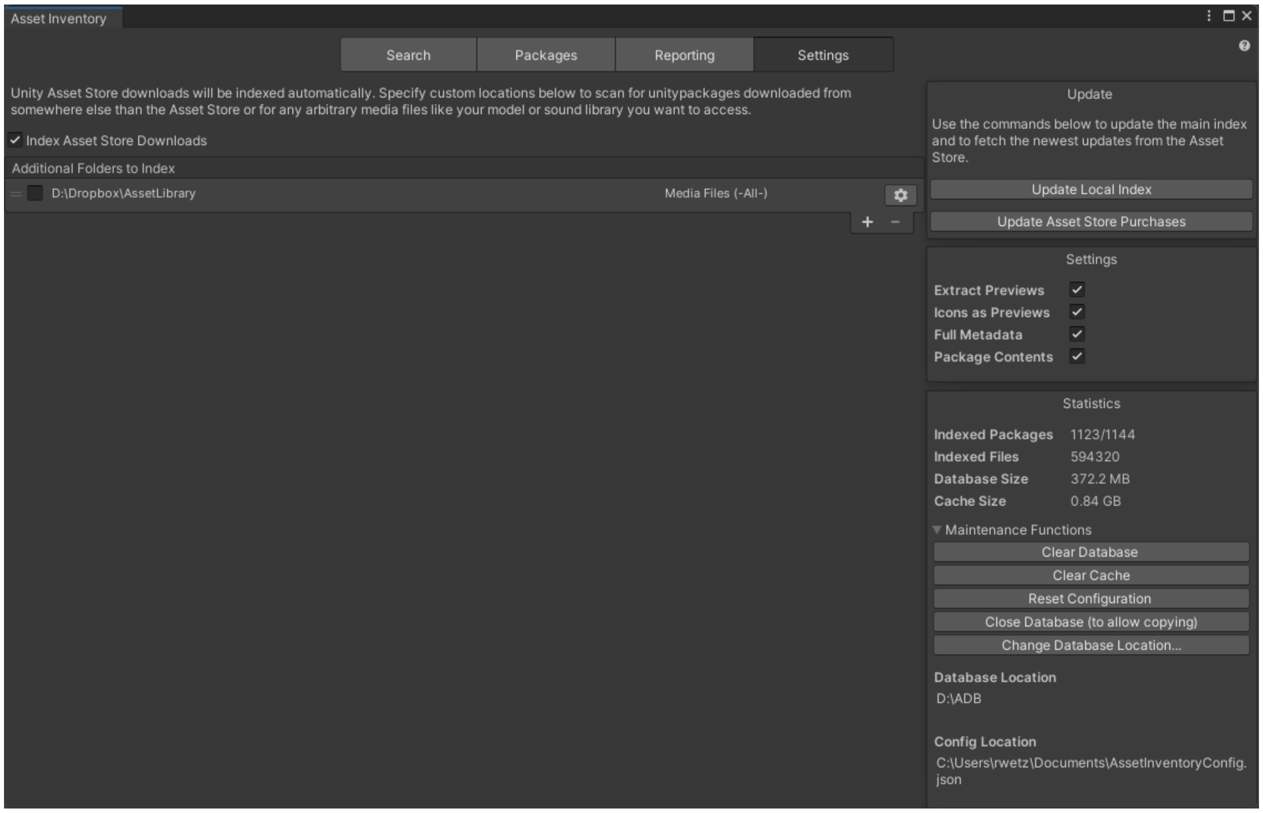
Package

Name	Asset Inventory
Publisher	Impossible Robert
Category	Tools/Utilities
Size	4.9 MB
Rating	★ ★ ★ ★ ★ (17 ratings)
Last Update	Mon, Aug 22 2022 (1.2.0)
Source	Asset Store

When selecting an asset in the Unity Project View the reporting tab will try to identify the associated package.

SETTINGS TAB

Use this section to configure what should be indexed. Indexing can be started and stopped at any time and will pick off again where it last stopped.



Unity Asset Store downloads will be indexed automatically. Specify custom locations below to scan for unitypackages downloaded from somewhere else than the Asset Store or for any arbitrary media files like your model or sound library you want to access.

✓ Index Asset Store Downloads

Additional Folders to Index

D:\Dropbox\AssetLibrary Media Files (-All-)

Update

Use the commands below to update the main index and to fetch the newest updates from the Asset Store.

Settings

Extract Previews	✓
Icons as Previews	✓
Full Metadata	✓
Package Contents	✓

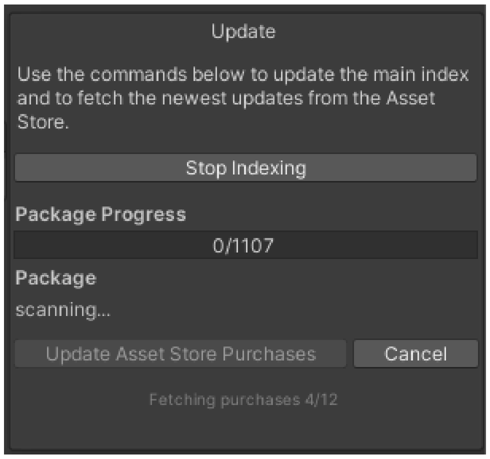
Statistics

Indexed Packages	1123/1144
Indexed Files	594320
Database Size	372.2 MB
Cache Size	0.84 GB

Database Location
D:\ADB

Config Location
C:\Users\rwetz\Documents\AssetInventoryConfig.json

Asset Store downloads are activated by default. That means you only need to click the **Download** button in the **Package Manager** window for each asset you own (without importing them) to make them available for the index.



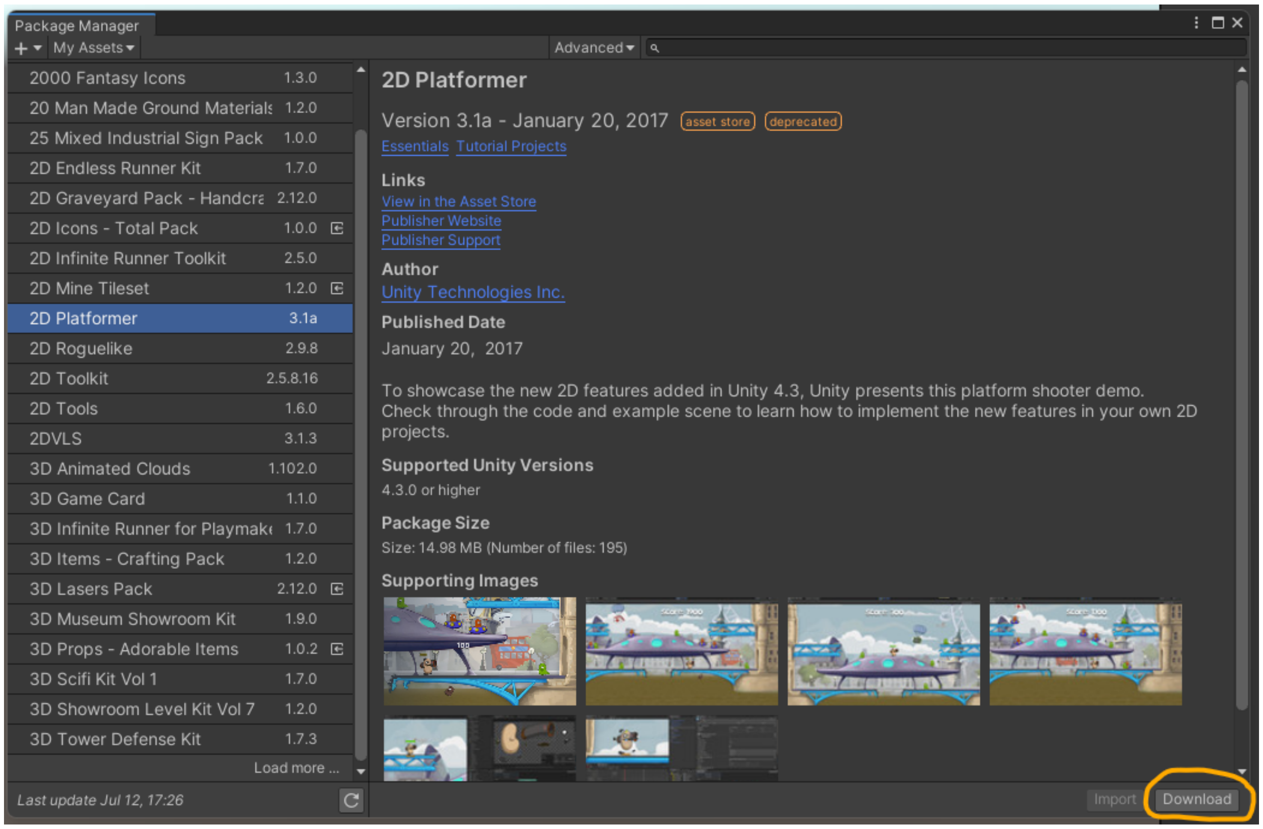
Use the commands below to update the main index and to fetch the newest updates from the Asset Store.

Package Progress
0/1107

Package
scanning...

Fetching purchases 4/12

Tip: Starting from Unity version 2022.1 the Package Manager supports bulk downloading assets. Download all needed assets that way in one go.



2000 Fantasy Icons	1.3.0
20 Man Made Ground Materials	1.2.0
25 Mixed Industrial Sign Pack	1.0.0
2D Endless Runner Kit	1.7.0
2D Graveyard Pack - Handcra	2.12.0
2D Icons - Total Pack	1.0.0
2D Infinite Runner Toolkit	2.5.0
2D Mine Tileset	1.2.0
2D Platformer	3.1a
2D Roguelike	2.9.8
2D Toolkit	2.5.8.16
2D Tools	1.6.0
2DVLS	3.1.3
3D Animated Clouds	1.102.0
3D Game Card	1.1.0
3D Infinite Runner for Playmak	1.7.0
3D Items - Crafting Pack	1.2.0
3D Lasers Pack	2.12.0
3D Museum Showroom Kit	1.9.0
3D Props - Adorable Items	1.0.2
3D Scifi Kit Vol 1	1.7.0
3D Showroom Level Kit Vol 7	1.2.0
3D Tower Defense Kit	1.7.3

Load more ...

Last update Jul 12, 17:26

2D Platformer

Version 3.1a - January 20, 2017 asset store deprecated

Essentials Tutorial Projects

Links

View in the Asset Store
Publisher Website
Publisher Support

Author

Unity Technologies Inc.

Published Date

January 20, 2017

To showcase the new 2D features added in Unity 4.3, Unity presents this platform shooter demo. Check through the code and example scene to learn how to implement the new features in your own 2D projects.

Supported Unity Versions

4.3.0 or higher

Package Size

Size: 14.98 MB (Number of files: 195)

Supporting Images

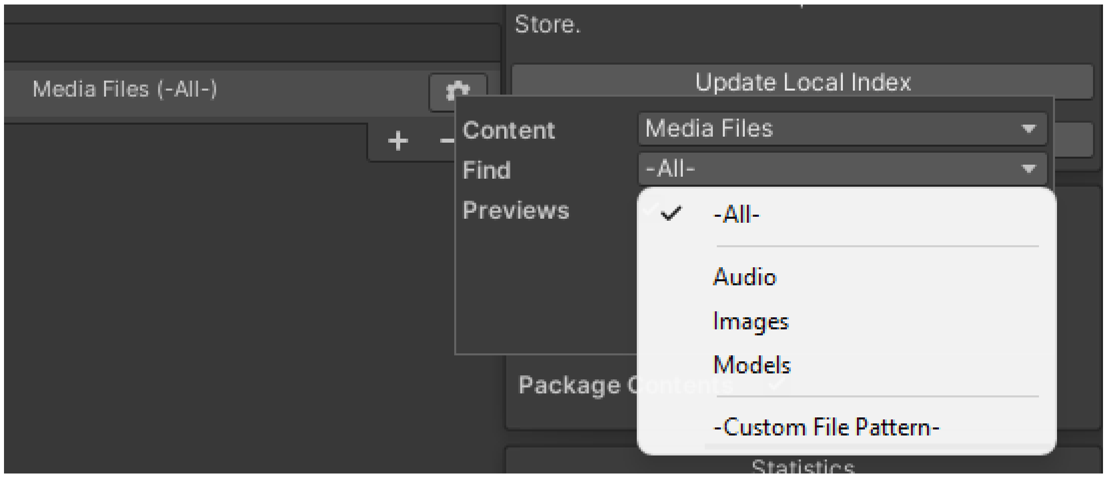
If you want to index unity packages downloaded from **other sources**, simply add the folders to the additional folders list. In case a folder ends with “Asset Store-5.x” it will be assumed to be a Unity compatible structure containing the *publisher/category/asset* layout. This is the best workaround when defining a **custom asset cache directory** in Unity 2022.1 and higher.

When selecting an entry from the list of additional folders, more options can be specified on the right-hand side. This way it is possible to select what types of files should be searched for:

- Unity Packages: finds any *.unitypackage* files in the folder and indexes the content
- Media Files: allows to index all kinds of other, **free-floating** assets, like images, models, audio libraries etc.

Using additional Media folders will let the Asset Inventory act as the go-to place for asset management and quickly finding any available asset on your drives from a single, consistent UI. Media files will have no connected asset but otherwise behave the same. The order in which additional folders are processed can be changed by dragging them up or down in the list. Deactivating an additional folder will not remove it from the index.

Preview file generation will work by temporarily copying each file into your Unity project, letting Unity create a preview and removing it again. This process will take a bit of time but will allow Asset Inventory to show preview images and also additional meta data for more image files than just *png* and *jpg* (e.g. *gif*).



Maintenance functions are also located on the Settings tab:

- ⇨ Clear Database: delete the complete database to start over
- ⇨ Clear Cache: delete the temporary files to save space, can be done without any side-effects
- ⇨ Reset Configuration: set everything to like it was initially
- ⇨ Close Database: allow backing up or copying the file
- ⇨ Change Database Location: set a different location for the database, move the current, use another existing one or create a new one

TECHNICAL DETAILS

The index will be stored in an SQLite database. This database will be automatically created upon first usage. It is in your *Documents/AssetInventory* directory. The size should be rather small but increases with the number of indexed assets. As a rule of thumb assume 15Mb database + 200Mb preview images per 30k files.

Inside the *AssetInventory* directory two additional folders will be created: *Previews*, containing all images for the asset catalog, and *Extracted*, containing temporarily extracted files. You can safely delete the *Extracted* folder at any time if needed.

CONFIGURATION

Settings will be saved automatically in a file called *AssetInventoryConfig.json*. This happened by default in *Documents* folder of the currently logged in user. This way the tool can work independently of the Unity project and the asset search is available in an identical way everywhere.

It is possible to force the tool to use a project-specific configuration. To do so, copy the *AssetInventoryConfig.json* file anywhere into the project and restart Unity. The detected location will be shown on the **Settings tab** under **Maintenance Functions**.

LIMITATIONS

- Dependencies can only be calculated in packages that use *text/yaml* serialization. A few legacy packages still use binary serialization, which is not supported right now.
- Importing scripts is experimental and can produce console errors if the script requires other scripts to run.
- Running the game view maximized on play and having the Asset Inventory window docked will cause it to reinitialize, resetting all search settings

FAQ

SOME PREFABS SHOW NO DEPENDENCIES

This is due to the serialization format. Only assets serialized as text can properly be parsed right now.

SOME AUDIO FILES USE DIFFERENT COLORS IN THE PREVIEW THAN OTHERS

Preview colors depend on which Unity version an asset author used to upload his asset. Unity seems to change colors over time between Unity versions. There could be a feature someday to recreate preview images with the current version of Unity to make them all uniform depending on interest.

CONSOLE SHOWS "ERROR: CANNOT CREATE FMOD::SOUND INSTANCE FOR CLIP "" (FMOD ERROR: UNSUPPORTED FILE OR AUDIO FORMAT.)"

It typically means that an audio clip was saved with the wrong extension, e.g., a wave as an ogg by an asset publisher. Use the **Open** button to start the native file player which will typically play the file correctly then.

CONSOLE SHOWS "TEXTURE HAS OUT OF RANGE WIDTH / HEIGHT"

In that case Unity cannot read the texture dimensions and you will not be able to see the dimensions of the texture or filter for it. Otherwise it does not have any effect.

CONSOLE SHOWS "ARGUMENTEXCEPTION: GETTING CONTROL 4'S POSITION IN A GROUP WITH ONLY 4 CONTROLS WHEN DOING REPAINT"

This can happen if a lot of UI changes are going on while indexing is happening. Can safely be ignored and is without any effect.

CONSOLE SHOWS "CURL ERROR 28: OPERATION TIMED OUT AFTER 30000 MILLISECONDS WITH 0 BYTES RECEIVED"

This can happen if Unity servers did not respond in time and the details for an asset could not be retrieved. This is solved by starting the asset store update process again.

AN ASSET GOT DEPRECATED AND THE CONTENTS IS STILL SHOWN FOR THE OUTDATED VERSION

In this case select the deprecated package in the package list and select "Reindex on next run". Then perform a local update of the index.

INDEXING WILL CONSTANTLY REINDEX THE SAME ASSET AGAIN

This can happen if the publisher's name or the category changed while downloading the asset the last time. The solution is to remove the publisher folder from the asset cache directory and redownload.

SOME PREVIEWS ARE GREY AND DON'T SHOW ANYTHING

This can happen if the Asset Store tooling did not create a correct preview image while uploading an asset. An example is the Danger Zone asset from Unity released for 2021+. Functionality to recreate preview images is under development.

THIRD PARTY

Asset Inventory uses multiple third-party libraries that really make it shine.

- Package2Folder by Code Stage uses an ingenious idea to intercept the Unity package manager and adjust the target folder where to install assets to.
- SQLite is a great way to store data in a single file while providing easy and fast database operations.
- SQLite-Net is an amazing extension to SQLite offering convenient high-level functions when executing SQL queries.
- Editor Audio Utils does a great job to allow playing audio files also while not in play mode.
- Redcode's AwaitExtensions are extremely helpful to move over *IEnumerator* based coroutines to the more modern async paradigm of C# and use both in tandem.

SUPPORT CONTACT

Web:	https://www.wetzold.com/tools
Discord:	https://discord.gg/uzeHzEMM4B
Roadmap:	https://trello.com/b/SOSDzX3s/asset-inventory