

Dagger's Asset Cleanup Tool – By Pol Gomez

Overview

Dagger's Asset Cleanup Tool is a Unity Editor extension that identifies and removes unused assets from your project based on folder and scene references.

It offers fine-grained control over what gets scanned and deleted, includes powerful filtering options, and features a safe **dry run mode** with detailed reports.




IMPORTANT WARNING

This tool permanently deletes assets. Use with caution.

YOU ARE SOLELY RESPONSIBLE FOR ANY DATA LOSS.

The Asset Cleanup Tool is powerful, but it can delete assets you didn't intend to remove if configured incorrectly.

Before using this tool:

-  Make a **full backup** of your project (via Git, .zip, or cloud)
-  Use **Dry Run Mode** to simulate deletions before committing
-  Never assume the tool catches everything — code-based references and dynamic loads are not guaranteed to be detected

By using this tool, you acknowledge that the author assumes **no responsibility** for data loss, broken scenes, or project issues. Use at your own risk.

Accessing the Tool

Unity Editor Menu:

Tools > Asset Cleanup Tool

Feature Breakdown

Folders to Scan

- Specify which folders the tool will check for unused assets.
 - Only files inside these folders (and their subfolders) will be considered for deletion.
 - **Button:** **Add Folder** — Adds a new folder slot
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Scenes to Include in Reference Check

- Add scenes where asset references will be searched.
 - Assets referenced in these scenes are marked as "used."
 - **Button:** **Add Scene** — Add individual scene
 - **Button:** **Auto Add Build Scenes** — Adds all enabled scenes from Build Settings
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Scan for Unused Assets

- Starts the scan based on your selected scenes and folders
 - Compares all assets found in the target folders against:
 - Scene references
 - **Resources/** folder contents
 - Ignores **.cs**, **.unity**, and **.dll** files by default
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Search & Filters

- **Search Bar:** Filter results by asset filename
- **Filters Foldout:** Show/hide certain types:

- Textures (.png, .jpg, .tga)
 - Models (.fbx, .obj)
 - Audio (.mp3, .wav)
 - Materials (.mat)
 - Shaders (.shader, .compute)
 - Prefabs (.prefab)
 - Other types
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Asset List View

- Displays a scrollable list of filtered unused assets
 - Each row shows:
 - Checkbox to select/unselect asset
 - Filename
 - Full file path
 - File size
 - Sortable columns: **Filename**, **Path**, **Size**
 - Assets are grouped by type (Textures, Models, etc.), and each group is collapsible
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Selection Controls

- **Select All:** Toggles all visible assets in the current view
- **Selected Assets:** Count of currently selected assets
- **Total Size:** Estimated combined disk space of selected assets

Dry Run Mode (Simulate Deletion)

- When enabled, the deletion is simulated
- Opens a **Simulated Deletion Report** window showing:
 - Grouped assets by type
 - Filename, path, and file size
 - Sortable table view
 - Total estimated size and count
- Allows a safe preview before committing real deletion

Delete Selected Assets

- When dry run mode is **disabled**, this button deletes all selected assets
- The tool automatically:
 - Deletes the selected assets
 - Recursively removes any **empty folders**
- **There is no report window after real deletion**

Tips & Best Practices

Recommended

- Use Dry Run Mode to preview deletions
- Start small: test with one or two folders first
- Version control your project before use

Not Recommended

- Do NOT add the full **Assets/** folder to the scan list.
 - May cause Unity internal folders and essential files to be scanned and removed
 - Can lead to project corruption or unexpected behavior
 - Always specify only content folders you manage (e.g., **Assets/Art**, **Assets/Levels**, etc.)
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Example Usage

Goal: Remove unused textures and models from a level prototype.

1. Open **Tools > Asset Cleanup Tool**
 2. Add **Assets/Art** and **Assets/Models** as folders to scan
 3. Add **Assets/Scenes/Level01.unity** as the scene to reference
 4. Click **Scan for Unused Assets**
 5. Use filters to hide Audio, Shaders, etc.
 6. Review the results and enable **Simulate Deletion**
 7. Click **Simulate Deletion** to open a grouped report
 8. Confirm what will be deleted
 9. Disable **Simulate Deletion**
 10. Click **Delete Selected Assets**
 11. Unused files are deleted and empty folders are cleaned up automatically
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Technical Notes

- Only assets in selected folders are considered for deletion
 - Assets used via `Resources.Load()` are protected
 - Empty folders are **always** deleted (this cannot be toggled)
 - The tool avoids deleting `.cs`, `.unity`, `.dll` files
 - Scene saving is prompted before scans
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Integration

- Namespace: `Dagger.AssetCleanupTool`
- Compatible with: Unity 2021.3+
- Editor-only: does not affect runtime builds