



DataSweep

USER MANUAL

DataSweep finds the data your .blend file no longer uses and lets you remove it, one block at a time or all at once. It also finds external files that have gone missing and relinks them from a folder you pick.

This manual covers installing, activating and using DataSweep, plus the Conduit + DataSweep bundle.

Version 1.4.2 · Blender 4.0 or newer · Windows, macOS, Linux

1. What DataSweep does

A .blend file keeps more than what you see in the scene. When you delete an object, swap a material or replace a texture, the old data often stays inside the file. Blender calls a block with nobody using it an orphan. Over months of work, a file can collect hundreds of them: old meshes, test materials, unused images, duplicated node groups, forgotten actions.

DataSweep scans the open file and lists four kinds of blocks:

Status	What it means
Orphan	Nothing uses the block and it has no Fake User. It is a cleanup candidate.
Protected	The block is kept only by its Fake User flag. Someone kept it on purpose, often in asset files.
Missing	The block points to an external file (image, sound, font, volume, cache file, library) that is not on disk and not packed in the .blend.
Linked	The block comes from another .blend file (a linked library). It is read only and DataSweep never removes it.

Blocks that are in normal use do not appear in the list, with one exception: a block whose external file is missing is listed as Missing even when it is still in use, so you can relink it.

From the list you can:

- filter by status, by type, by name and by size, and sort the list
- remove one block, the checked blocks, or everything visible
- protect blocks with a Fake User, or remove the Fake User
- keep blocks out of every scan with the Safe List
- search a folder and its subfolders for missing files and relink them
- export a report as CSV, HTML, JSON or Excel (XLSX)

DataSweep scans these types: meshes, curves, metaballs, volumes, materials, node groups, textures, images, sounds, fonts, armatures, actions, particles, cameras, lights, worlds, collections, objects, lattices, cache files, libraries and Grease Pencil.

2. Requirements

- Blender 4.0 or newer, on Windows, macOS or Linux.
- An internet connection once, to activate your licence key.
- Your licence key, from your order email or your order page.

3. Installing

You receive a zip file, for example `omniviz_datasweep_v1.4.2_licensed.zip`. Do not unzip it: Blender installs the zip as it is.

1. In Blender, open **Edit > Preferences > Add-ons**.
2. Click the small arrow at the top right of the Add-ons page and choose **Install from Disk**.
3. Pick the zip file and confirm.
4. Find **OmniViz DataSweep** in the list and tick it to enable it.

In Blender 4.0 and 4.1 the install button is called Install... and sits at the top of the Add-ons page. The rest is the same.

If your computer unzipped the download by itself, zip the folder again or download the file once more.

4. Activating your licence

The first time, DataSweep shows only its activation panel. Its tools appear once the key is accepted.

1. In the 3D Viewport, press **N** to open the sidebar.
2. Click the **OmniViz** tab.
3. In the panel **OmniViz DataSweep: activation**, paste your key into the **Key** field.
4. Make sure you are online and click **Activate License**.

When the key is accepted, Blender shows "OmniViz DataSweep activated" and the activation panel is replaced by the DataSweep panels.

Good to know:

- Spaces around the key do not matter, and lowercase letters are accepted.
- The activation is saved on your computer. Blender does not need the internet to start DataSweep after that.
- One key works on up to 2 computers. Activate it on each computer the same way.
- If the panel later shows "License expired: please re-enter your key" or "Licence not valid on this computer: please re-enter your key", paste your key again and click **Activate License** while online.

5. Where to find DataSweep

All DataSweep panels are in the 3D Viewport sidebar (press **N**), in the **OmniViz** tab. If you also own OmniViz Conduit, DataSweep sits below it in the same tab.

The main panel is called **OmniViz DataSweep**. Under it are four sub-panels, closed at first. Click a header to open it:

- **Filters**: filter the list by data type.
- **Results**: the list of found blocks, with a name search.
- **Safe List**: blocks you keep out of every scan.
- **Recent Actions**: what you removed during this Blender session.

Keyboard shortcut

Press **Shift+Alt+U** with the mouse over the 3D Viewport to scan the file.

6. Scanning a file

1. Open the .blend file you want to clean.
2. In the **OmniViz DataSweep** panel, click **Scan File** (or press **Shift+Alt+U**).
3. Blender reports how many items it found and across how many types, and warns you if files are missing.

Next to **Scan File** are two small buttons:

- The refresh icon is **Auto-Rescan After Unlink**. When it is on (the default), DataSweep scans again by itself after every removal, so the list stays up to date.
- The gear icon opens DataSweep's preferences (see section 13).

The stats box

After a scan, a box at the top shows a summary: how many blocks were found, how many types, the count for each status, and the approximate memory (RAM) and disk space involved. You can pick another layout for this box in the preferences.

RAM sizes are estimates from the amount of data in each block (vertices, nodes, keyframes and so on). Disk sizes are the real size of the external file. Use them to spot the heavy items, not as exact figures.

7. Reading and filtering the results

Status filters

Under **Show:** in the main panel are four toggle buttons, each with its count: **Orphan**, **Protected**, **Missing** and **Linked**. Click one to hide or show that status in the list.

Size and sort

Below them are two menus:

- Size: **All sizes**, **> 1 MB**, **> 10 MB**, **> 50 MB** or **> 100 MB**. Smaller blocks are hidden.
- Sort: **Name A→Z**, **Name Z→A**, **Size (largest)** (the default), **Type** or **Status**.

Type filters

Open the **Filters** sub-panel. Under **Type:** are toggle buttons for **Meshes**, **Materials**, **Images**, **Node Groups**, **Actions**, **Sounds**, **Fonts**, **Curves**, **Armatures** and **Other**. **Other** covers every remaining type, such as cameras, lights, worlds, textures, objects and collections.

Search by name

Open the **Results** sub-panel and type in the search field at the top. The list narrows as you type. The search ignores upper and lower case.

The results list

Each row shows:

- a checkbox, to check the block for an action
- a status icon: hover it for a quick summary, click it for the Block Details window
- the block name and its size (RAM for blocks inside the file, DISK for external files)
- an **X** button to remove this block, or a lock icon for Linked blocks, which cannot be removed

Above the list, **Select All** checks every block that is visible with the current filters. **Deselect** unchecks everything and shows how many blocks are checked, for example **Deselect (12)**.

Block Details

Click the status icon of a row to open **Block Details**. It shows the type, status, number of users, size and, for external files, the full path. Depending on the block, it also offers:

- **Open Containing Folder:** opens the file's folder in your file manager. On Windows and macOS the file is selected. If the file is missing, the folder it used to be in opens, if that folder still exists.
- **Show in Blender:** shows an image in an Image Editor. If none is open, an Outliner or Properties area is turned into an Image Editor; right-click its header to switch it back. For other types, the Outliner switches to its Orphan Data view.
- **Relink to New Folder:** for Missing blocks, see section 10.
- **Remove This Block:** removes the block, like the **X** button.

8. Removing data

There are three ways to remove blocks. All of them skip Linked blocks.

One block

1. Click the **X** at the end of its row, or **Remove This Block** in Block Details.
2. Confirm in the dialog.

A Protected block always asks first: "'name' has a Fake User flag and was intentionally preserved. Remove anyway?". For other blocks, the confirmation can be turned off with **Confirm Single Unlink** in the preferences.

The checked blocks

1. Check the blocks you want to remove in the **Results** list.
2. In the main panel, click **Selected (N)**. This button appears only when something is checked.
3. Confirm. The dialog shows how many blocks will go and roughly how many MB.

Everything visible

1. Set the filters so that the list shows only what you want to remove.
2. Click **All (N)**. N is the number of blocks the list shows right now.
3. Confirm.

All (N) removes every visible block that is not Linked, including Protected and Missing ones. If you want to keep your Fake User blocks, turn off the **Protected** toggle before you click it.

Selected (N) removes every checked block, even a checked block that the current filters hide. Look at the count on **Deselect** if you are unsure.

New orphans after a cleanup

Removing one block can leave others without users. For example, after you remove an orphan mesh, its material may become an orphan too. When that happens, DataSweep shows a notice such as "3 new orphan(s) appeared after cleanup. Rescan to update." Click **Scan File** and clean again until no new orphans appear. Click the **X** on the notice to close it.

If **Auto-Rescan After Unlink** is off, the notice reads "Items removed. Rescan to update results." Click **Scan File** to refresh the list.

Recent Actions

The **Recent Actions** sub-panel lists the last 20 blocks you removed in this Blender session, with the time, the name, the type and the size. It is emptied when you restart Blender.

9. Protecting blocks and the Safe List

Protect and Unprotect

A Fake User is Blender's own way to say "keep this block even if nothing uses it".

- **Protect**: check one or more blocks in the list, then click **Protect**. DataSweep gives them a Fake User and they show as Protected.
- **Unprotect**: check one or more Protected blocks, then click **Unprotect**. DataSweep removes their Fake User and they become ordinary orphans that you can remove.

Each button is greyed out until you have checked a block it can act on.

The Safe List

The Safe List is for blocks you never want to see in a scan, for example a material library you keep in the file on purpose. Safe-listed blocks are left out of every scan, so they cannot be removed by accident with **All (N)**.

1. Check the blocks in the **Results** list.
2. In the main panel, click **Safe List**.
3. Click **Scan File**. The blocks no longer appear in the results.

To manage the list, open the **Safe List** sub-panel. It shows how many blocks are excluded from scans, then:

- **Select All** and **Deselect** to check or uncheck entries
- **Make Unsafe (N)** to take the checked entries off the list
- an **X** on each row to take one entry off the list

Scan again afterwards to see those blocks in the results.

The Safe List is saved in the .blend file, with the current scene. Save the file to keep it. Each scene of a file has its own Safe List.

10. Relinking missing files

If you moved a project folder or received a file from someone else, images and other external files may show as Missing. DataSweep can search a folder for them.

Save your .blend file first. Relinking does not run on a file that has never been saved, because the new paths are written relative to the .blend file.

All missing files at once

1. After a scan, click **Find Missing Files (N)** under the stats box. The button is greyed out when nothing is missing.
2. In the file browser, pick a folder, for example your project folder, and confirm.
3. DataSweep searches that folder and all its subfolders, relinks every missing file it finds, then scans again.
4. Blender reports how many files were relinked and how many were not found.

One missing file

1. Click the status icon of a Missing row to open Block Details.

2. Click **Relink to New Folder**.

3. Pick a folder and confirm.

Only that file name is searched for, in the folder and its subfolders. Every block that uses the same file name is relinked.

How the search works:

- File names are matched without regard to upper and lower case, so a file made on Windows still matches on macOS or Linux.
- If the same file name exists in several subfolders, the copy closest to the folder you picked is used.
- Relinking works for images, sounds, fonts, volumes, cache files and libraries.
- The new paths are relative (they start with //), so the project keeps working if you move the whole folder.

11. Exporting a report

A report is useful to show a client or a teammate what is in a file, or to keep a record before a cleanup.

1. Scan the file.
2. In the main panel, choose the format in the menu next to **Export: CSV, HTML, JSON or XLSX**.
3. Click **Export**, choose where to save the file and confirm. The default name is `datasweep_report` with the right extension.

The report always contains the whole last scan, whatever filters are active. It starts with a summary (date and time, file name, total blocks, and the counts of orphans, missing, protected and linked), then one line per block: Name, Type, Status, Users, Size (RAM), Size (Disk) and File Path.

Format	Best for
CSV	Spreadsheets. Open it in Excel, LibreOffice Calc or Google Sheets. In a text editor it looks like plain lines of text, which is normal.
HTML	A styled report with coloured status badges. Opens in any web browser and can be printed to PDF from the browser.
JSON	Scripts and pipeline tools.
XLSX	An Excel workbook with two sheets, Summary and Items, a frozen header row and coloured status cells.

12. Safety

- DataSweep never removes Linked blocks.
- DataSweep never removes a block that is still in use. It skips it, so a removal can report fewer blocks than you asked for, for example "Removed 8 of 10 items."
- DataSweep never deletes files on your disk. Removing a block only changes the open .blend file.
- The removal dialogs say "This cannot be undone". Do not count on Ctrl+Z after a removal.
- Nothing changes on disk until you save the .blend file. If a cleanup went wrong and you have not saved yet, **File > Revert** brings back the last saved version (you lose all changes since that save).

Before a big cleanup, save a copy of the file with **File > Save Copy**. It takes a second and gives you a way back.

13. Preferences

Open them with the gear icon next to **Scan File**, or in **Edit > Preferences > Add-ons > OmniViz DataSweep**.

Setting	What it does
Export Format	The report format: CSV, HTML, JSON or XLSX. It is the same setting as the menu next to Export.
Stats Bar Layout	How the stats box looks: Default (3-row text), Compact Strip (4 cells), Vertical Sections, 2-Column Grid or Horizontal Strip (6 cells). The last one is tight when the sidebar is narrow.
Auto-Scan on File Open	Scans each file as soon as you open it. A box then shows "Auto-scan found N item(s)"; click its X to close it. Off by default.
Confirm Single Unlink	Asks before removing a single block. On by default. Protected blocks always ask.

14. Typical workflows

Make a heavy file lighter before delivery

1. Save the file, then **File > Save Copy** as a backup.
2. Click **Scan File**.
3. Keep the sort on **Size (largest)** to see the heaviest blocks first.
4. Turn off **Protected** and **Linked** under **Show:**.
5. Look through the list. Add anything you want to keep to the **Safe List** and scan again.
6. Click **All (N)** and confirm.
7. If a notice says new orphans appeared, click **Scan File** and repeat until it stays quiet.
8. Save the file.

Fix missing textures after moving a project

1. Save the .blend file in its new place.
2. Click **Scan File**.
3. Click **Find Missing Files (N)** and pick the project's top folder.
4. Check the message. If some files are still missing, run it again on another folder where they might be.

Clean an asset library file without losing assets

1. Scan the file.
2. Turn off **Protected**, so your Fake User assets stay out of the list.
3. Remove the orphans you do not need.
4. To clear old assets you no longer want, show **Protected** again, check them, click **Unprotect**, and remove them.

Send a client a report

1. Scan the file.
2. Choose **HTML** next to **Export** and click **Export**.

3. Open the report in your browser and print it to PDF if you need one.

15. Troubleshooting

What you see	What to do
No OmniViz tab in the sidebar	Check that OmniViz DataSweep is ticked in Edit > Preferences > Add-ons. Press N with the mouse over the 3D Viewport. If it still does not show, restart Blender.
Only the activation panel shows	DataSweep is not activated yet. See section 4.
"Cannot reach the licence server: check your internet connection"	Check that you are online and that no firewall blocks Blender, then click Activate License again.
"This licence key is not for OmniViz DataSweep"	The key belongs to another product. Check your order email for the DataSweep key or the Conduit + DataSweep key.
"Paste your licence key first"	The Key field is empty. Paste the key and try again.
Shift+Alt+U does nothing	Put the mouse over the 3D Viewport. The shortcut works only once DataSweep is activated.
"Save your .blend file first before relinking external files."	Save the file, then relink.
"'name' not found in that folder or its subfolders."	The file is not under the folder you picked. Try a folder higher up, or another drive.
A block stays in the list after removal, and Blender says it has users and was skipped	The block is still in use, often a missing image used by a material. Relink it, or remove what uses it first.
Blender says a block no longer exists and recommends a rescan	The list is out of date. Click Scan File.
A missing library (type Library) cannot be removed	DataSweep cannot remove library entries. Relink them instead.
A CSV report looks cramped	Open it in a spreadsheet program instead of a text editor, or export as HTML or XLSX.
"XLSX export failed"	Try another folder, check that the file is not open in Excel, or export as CSV.
Unsure which version is running	Look at the version next to OmniViz DataSweep in Edit > Preferences > Add-ons.

16. Updating

Updates within the same major version are free. You get the new zip from your order page.

1. In **Edit > Preferences > Add-ons**, find OmniViz DataSweep and remove it.
2. Quit Blender completely and open it again. Blender keeps the old code in memory until it restarts.
3. Install the new zip with **Install from Disk** and tick it, as in section 3.
4. Check the version number in the Add-ons list.

If the activation panel shows again after an update, paste your key and click **Activate License**.

17. The Conduit + DataSweep bundle

The bundle contains OmniViz Conduit and OmniViz DataSweep in one zip, for example `conduit_v0.5.2_datasweep_v1.4.2_licensed.zip`. Conduit finds and packs the external files your

scene depends on. DataSweep cleans out the data the file no longer uses. Both sit side by side in the **OmniViz** sidebar tab, Conduit above DataSweep. This manual covers DataSweep; Conduit has its own manual.

Installing

1. Install the bundle zip with **Install from Disk**, as in section 3. Do not unzip it.
2. In the Add-ons list, tick both **OmniViz Conduit** and **OmniViz DataSweep**.

Activating

One key unlocks both add-ons.

1. Open the **OmniViz** tab in the 3D Viewport sidebar. You see two activation panels, one for each add-on.
2. Paste your bundle key into either **Key** field and click **Activate License**.
3. The other add-on is activated at the same time. Blender's message ends with "(also OmniViz Conduit)" or "(also OmniViz DataSweep)".

If you enable the second add-on later, its **Key** field is already filled with the key the first one uses. Click **Activate License** once, while online.

18. Licence

- One licence key per purchase.
- Use it on up to 2 computers that you use. For a new computer, write to us.
- Personal and commercial work are both allowed.
- The licence is not transferable. Do not share, resell or publish the add-on or the key.
- Updates within the same major version are free.
- An internet connection is needed once per computer, to activate.

19. Support

Questions, a lost key or a key that will not activate: write to support@omniviz.studio. Please include your Blender version, your system, and the email address you used for the purchase.

Frequently asked questions: <https://omniviz.studio/#faq>