



MergeSight

Review & Merge Unity Assets

USER GUIDE

Understand Unity changes. Resolve conflicts with context. Preview before you apply.

Version 1.0 | Unity 2022 LTS, Unity 2023 LTS, Unity 6

BEFORE YOU BEGIN MergeSight is an Editor-only tool. Unity assets must use text serialization (Force Text).

Built by 7 Wolves Studio

NAVIGATION

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FAST PATH If you only need to resolve a current conflict, start with 3-way Merge Quick Start on page 9.

What MergeSight Does

MergeSight turns text-serialized Unity assets into a Unity-aware review and merge model.

Two focused workflows

Mode	Use it when	What you see
Review	You need to understand changes between revisions.	Objects, components, properties, hierarchy and references with Before/After values.
3-way Merge	A scene, prefab or other supported asset has conflicting versions.	BASE, OURS and THEIRS choices in semantic context, plus a composed result.

Supported content

- Primary asset types: .unity, .prefab, .asset and .mat.
- Unity versions: Unity 2022 LTS, Unity 2023 LTS and Unity 6.
- Version control: Git, Unity Version Control / Plastic SCM, Perforce and SVN.
- MergeSight runs in the Unity Editor and does not add runtime components to your game.

TERMINOLOGY BASE is the common ancestor. OURS is your side. THEIRS is the incoming side. Review the semantic context before choosing a result.

Installation and First Launch

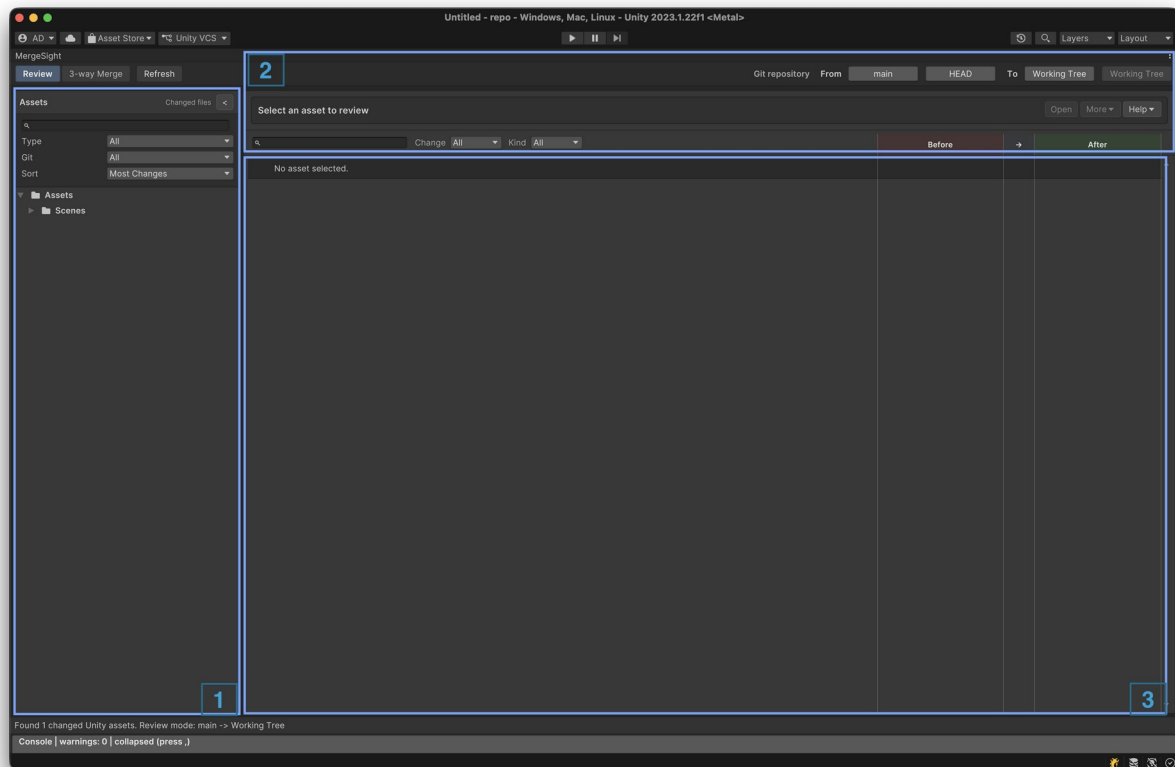
1. Import the Asset Store package into your Unity project.
2. Set Edit > Project Settings > Editor > Asset Serialization > Mode to Force Text.
3. Open Tools > MergeSight > New Window.
4. Start in Review for comparison work, or switch to 3-way Merge for an active conflict.
5. If MergeSight offers VCS startup detection, enable it only for providers you want the Editor to check automatically.

First-launch checklist

- The project is inside a working copy for a supported VCS.
- The assets to inspect are text-serialized, not binary.
- For Git comparison, the selected branches or commits exist locally.
- Save scenes before opening a generated result preview.

SAFE DEFAULT Git can be detected locally. Startup detection for SVN, Perforce and Plastic/UVCS is opt-in; external-client wrappers remain available when direct detection cannot supply all merge sides.

Review Mode Quick Start

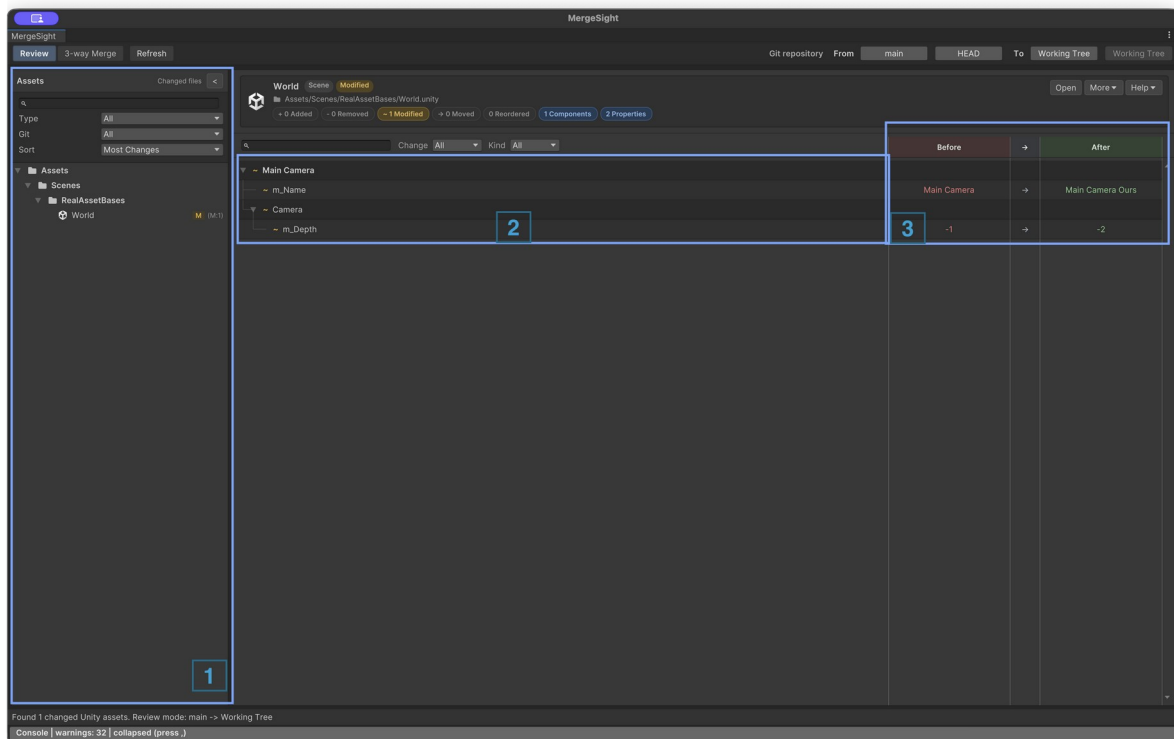


Review Mode overview: 1 asset list, 2 comparison controls, 3 semantic details.

1. Choose Review at the top of the window.
2. Select From and To sources. Git supports branches, commits and the Working Tree.
3. Select an asset in the left panel.
4. Expand the semantic tree to inspect objects, components and properties.

TIP Use a branch or commit on the left and Working Tree on the right to review local Unity changes before committing them.

Understanding Semantic Changes

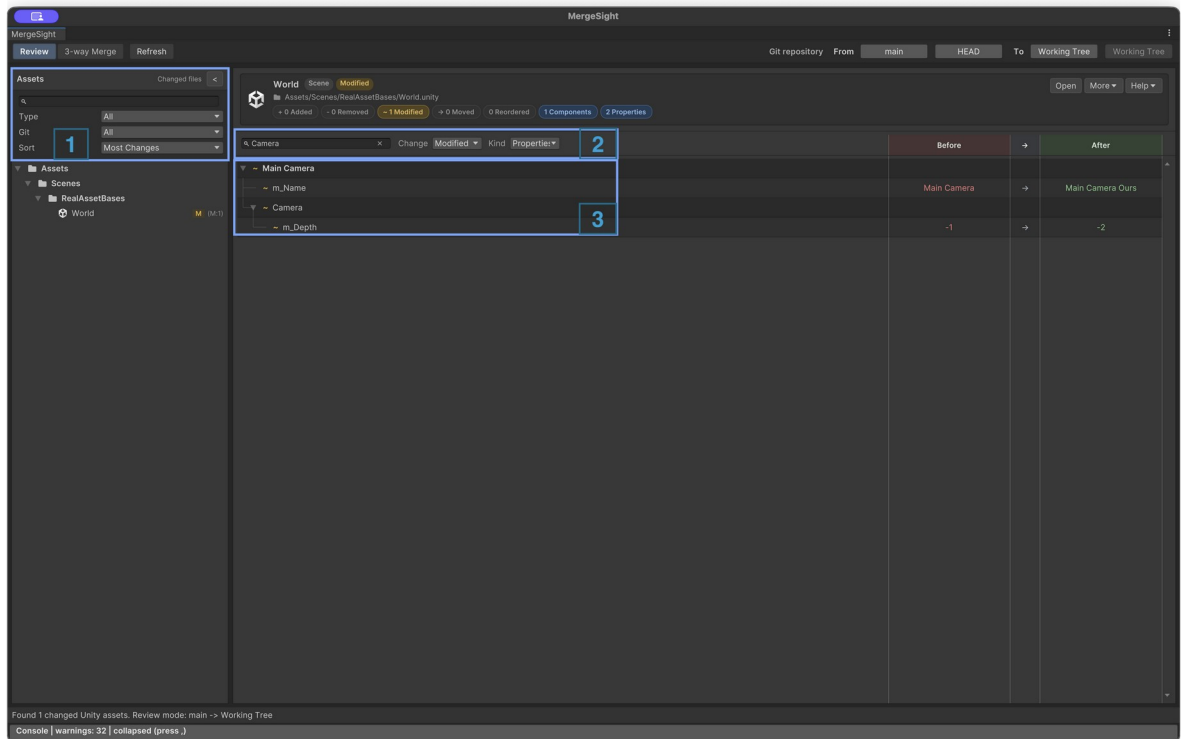


Reading a change: 1 changed asset, 2 semantic hierarchy, 3 Before/After values.

- Object rows describe GameObjects or serialized Unity objects.
- Component rows group fields that belong to the same component.
- Property rows show the changed serialized value.
- Removed values use red; added or resulting values use green.
- Reference rows identify linked assets or local Unity objects instead of presenting an opaque YAML token.

READ TOP TO BOTTOM Start with the object name, expand the changed component, then confirm the exact Before/After property value.

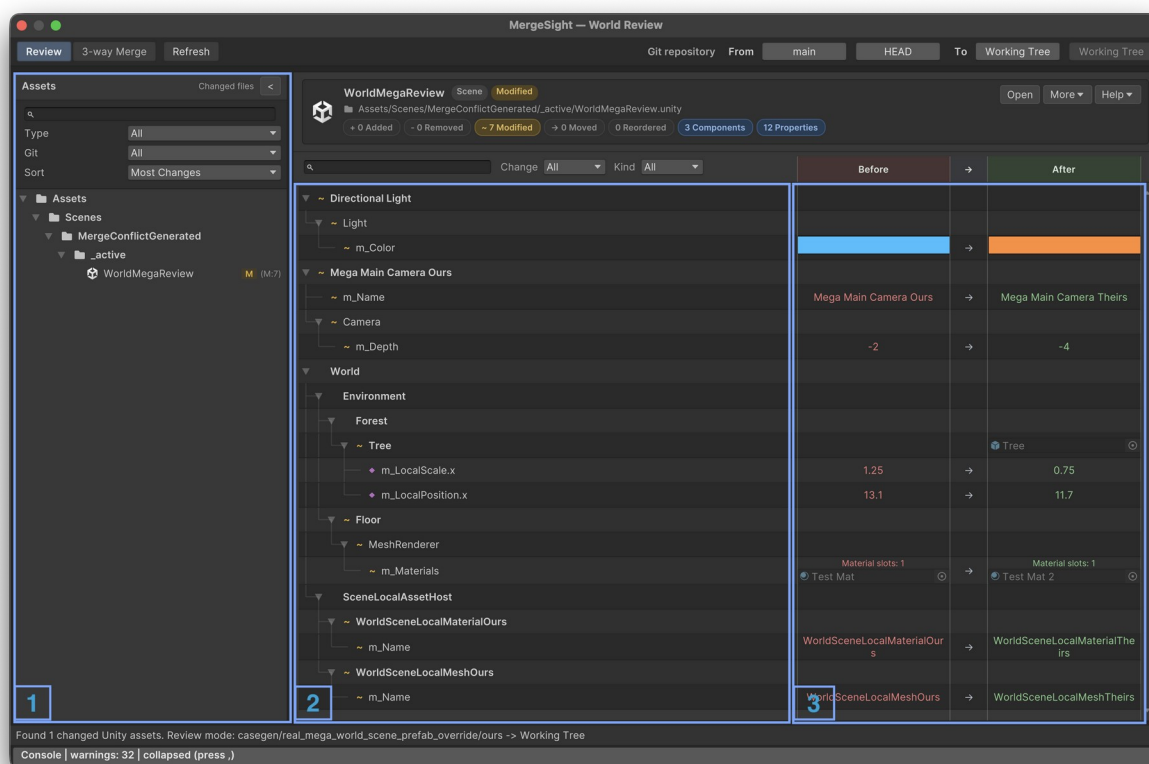
Search and Filters



Narrow a review: 1 asset filters, 2 semantic search and change filters, 3 filtered result.

1. Filter the asset list by name, path, type or VCS status.
2. Use semantic search to find an object, component or property by name.
3. Use Change to focus on added, removed or modified entries.
4. Use Kind to focus on objects, components, properties or references.
5. Clear filters before assuming an asset or change is missing.

Complex Assets and References



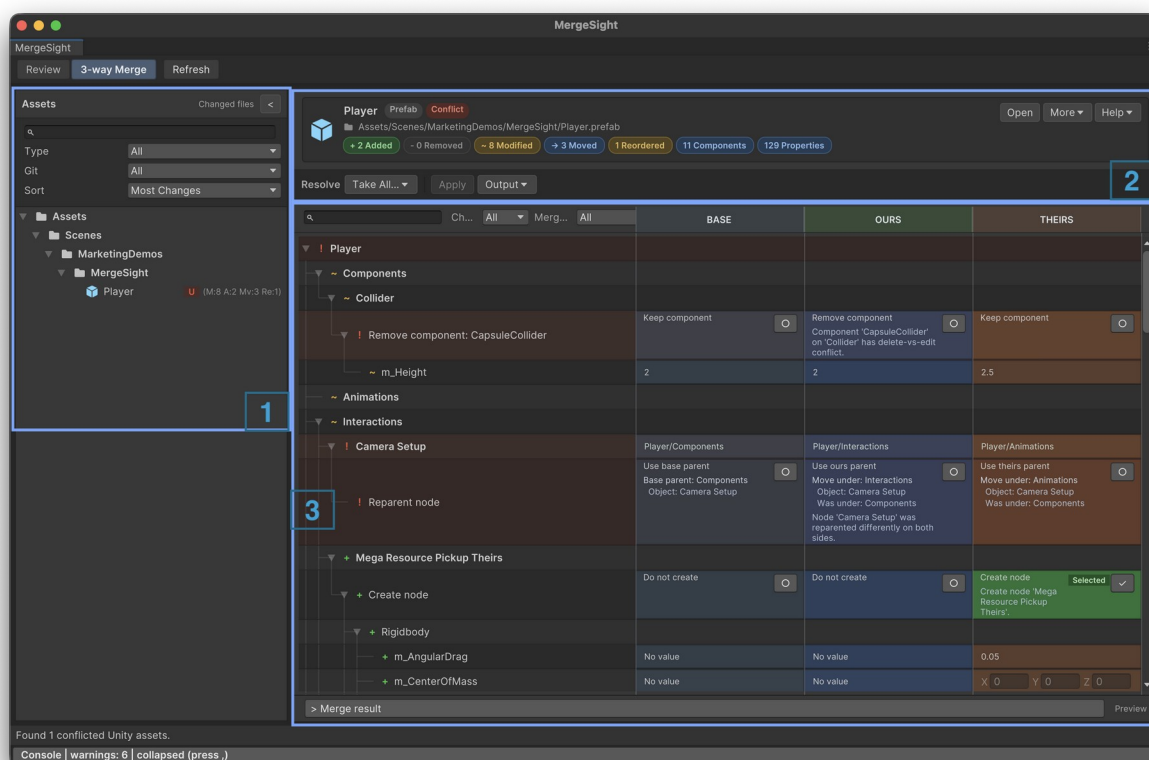
A larger scene: 1 changed assets, 2 Unity hierarchy, 3 aligned Before/After data.

Large scenes can contain hierarchy moves, component edits, prefab overrides and references in the same review. MergeSight keeps those changes under their Unity owners so related rows remain together.

- Expand only the changed branch you need; use filters before opening the full tree.
- Treat GUID-based asset links and local fileID links as different reference types.
- Read diagnostics when a serialized structure is ambiguous or unsupported.

FAIL-SAFE BEHAVIOR If MergeSight cannot prove a safe interpretation, it reports the limitation instead of silently inventing a result.

3-way Merge Quick Start

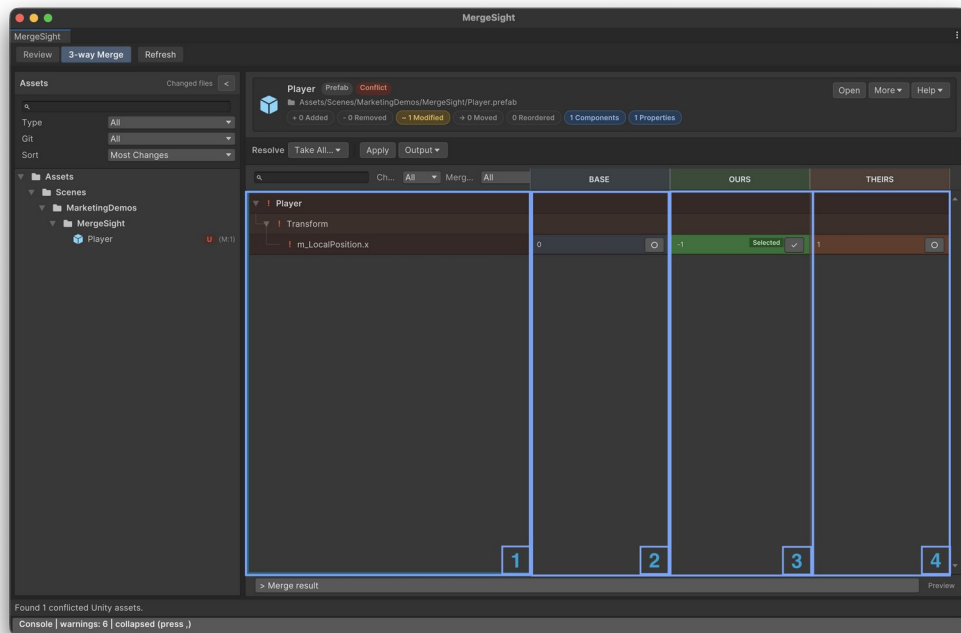


Merge workspace: 1 conflicted asset, 2 merge actions and status, 3 BASE/OURS/THEIRS rows.

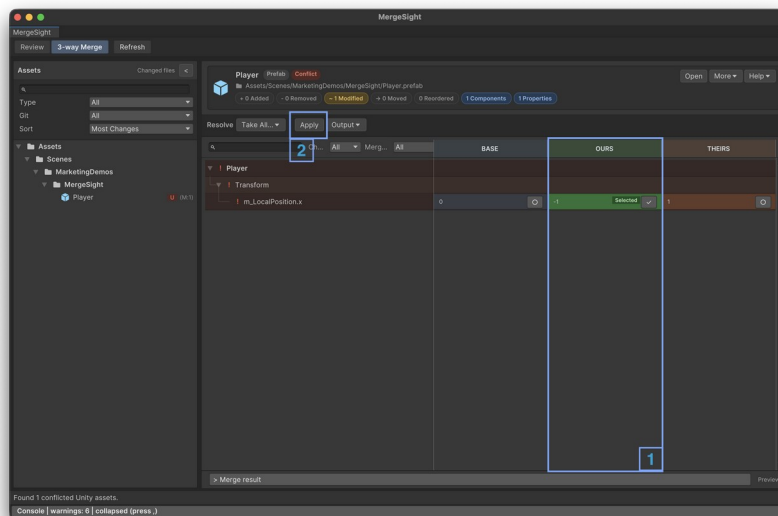
1. Open a conflicted supported asset and switch to 3-way Merge.
2. Expand the conflict rows and read their Unity hierarchy context.
3. Compare BASE, OURS and THEIRS for each unresolved row.
4. Choose a side for each required decision, or use Take All when one side is correct for the complete asset.
5. Inspect the composed result before Apply.

DO NOT GUESS A clean-looking text merge can still break ownership, hierarchy or references. Resolve the semantic decision shown by MergeSight.

Resolve Property Conflicts



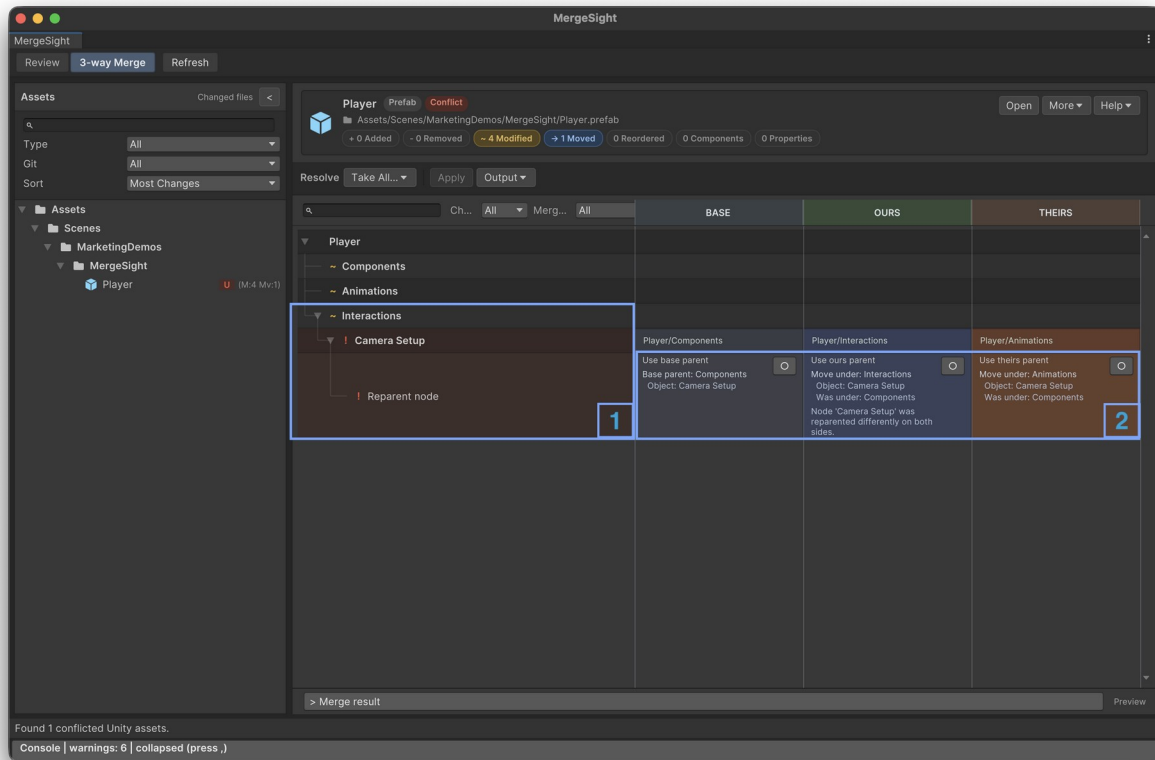
Property decision: 1 context, 2 BASE, 3 OURS, 4 THEIRS.



Resolved state: 1 selected slot is green, 2 Apply becomes available when all required decisions are complete.

DECISION FLOW Read the parent context, use BASE to understand the original value, choose OURS or THEIRS, then confirm the unresolved count decreases.

Structural Conflicts: Reparent

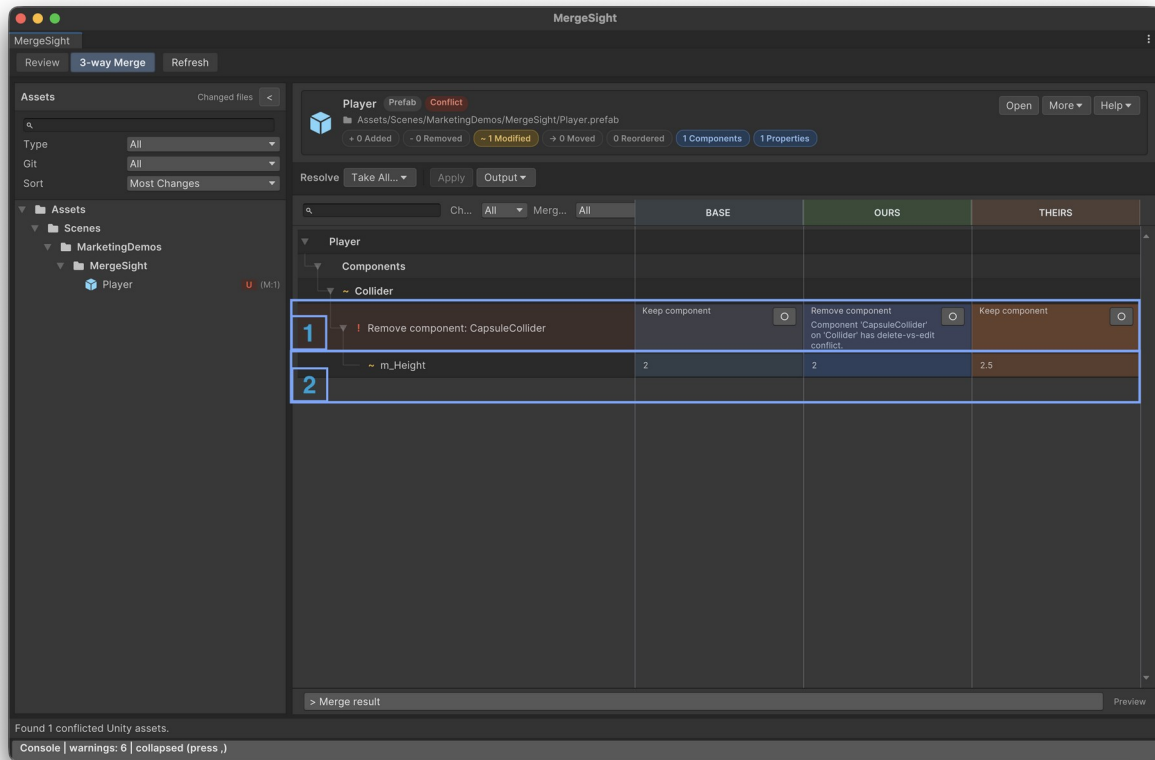


Reparent conflict: 1 competing parent relationships, 2 structural context beneath the affected object.

A reparent operation changes hierarchy ownership, not only a scalar field. Confirm which parent should own the object and check dependent Transform relationships before applying the result.

CHECK THE HIERARCHY After resolving a reparent conflict, use Output > Preview Result Asset and verify the affected object in the Unity Hierarchy.

Structural Conflicts: Delete vs Edit

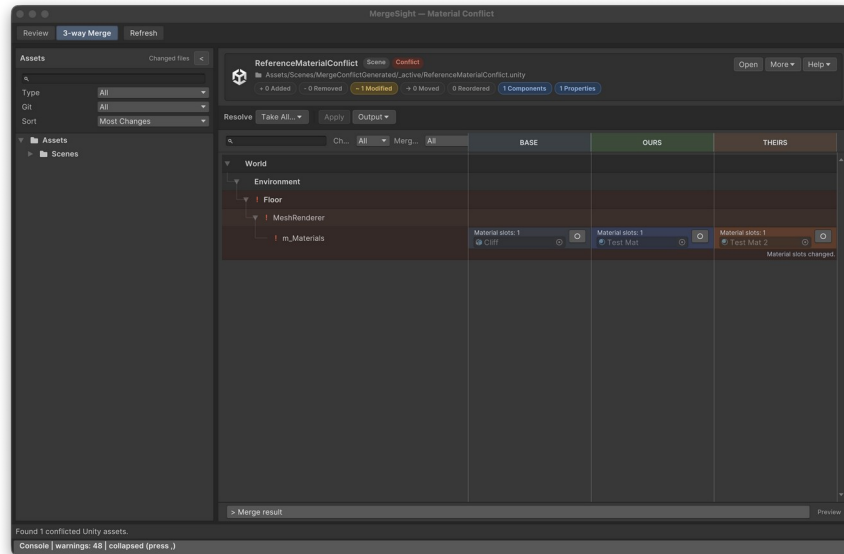


Delete-vs-edit: 1 one side removes the component, 2 the other side edits its serialized data.

Delete-vs-edit needs an explicit intent. Keeping the edited side preserves the component and its change; choosing the deletion removes the component and makes its edited fields irrelevant.

- Inspect dependent components before accepting deletion.
- Do not resolve only a child property if the parent component is removed.
- Preview the result and confirm that required components still exist.

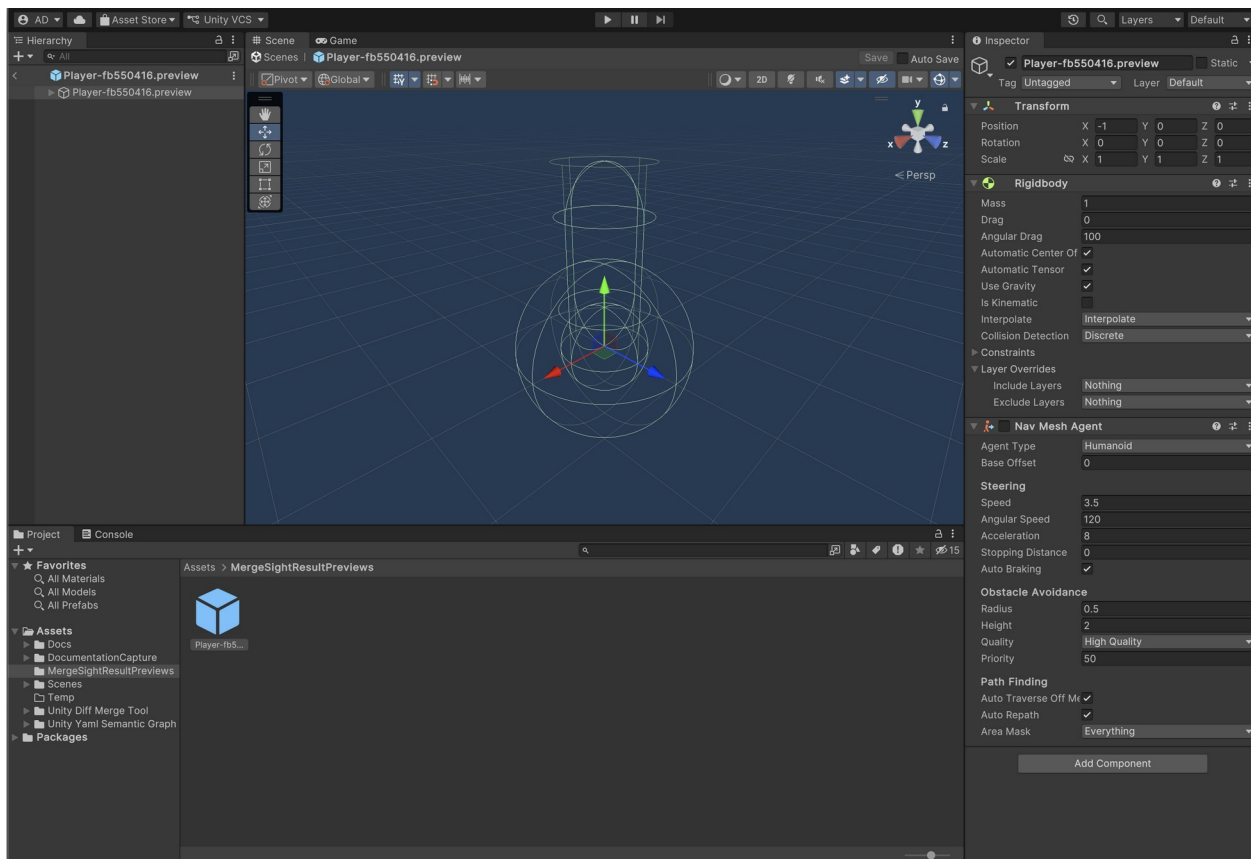
Reference Conflicts



Asset reference conflict

External assets use GUID-based identity. Objects inside the same scene or prefab use local file IDs. Choose the intended object, then preview the result so Unity can confirm that the reference resolves.

Preview and Apply



Result verification

1. Resolve every required merge decision.
2. Open Output > Preview Result Asset to inspect the composed asset without overwriting the original conflict.
3. For scenes, save current work and confirm the scene-opening prompt.
4. Optionally use Output > Result Diff for a final semantic comparison.
5. Return to MergeSight and choose Apply.
6. After Apply, open the real asset in Unity and run the project checks appropriate for the change.

SAFETY Apply is blocked while required decisions remain. MergeSight creates a backup before writing the merged result.

VCS Integration

Provider	Review	Conflict loading	Notes
Git	Branches, commits, Working Tree	Local unmerged stages	Works with standard Git repositories and mergetool workflows.
Unity Version Control / Plastic SCM	Changesets and supported working-copy sources	Wrapper-first when all three sides are not available directly	Use the VCS Integration Setup window for provider instructions.
Perforce	Have revision, working copy and supported changelists	Direct detection where possible; P4V/P4MERGE wrappers supported	The local p4 CLI must be configured for direct operations.
SVN	BASE, Working Copy and supported revisions	Local conflict side files or wrapper	Startup detection is opt-in.

Open integration setup

Use Tools > MergeSight > VCS Integration Setup. The Setup tab contains provider actions; Advanced / Troubleshooting contains wrapper commands, diagnostics and raw paths.

STARTUP DETECTION Git detection is local by default. Enable startup detection explicitly for Plastic/UVCS, Perforce or SVN if you want MergeSight to check those providers after Editor startup.

Troubleshooting and Limitations

Symptom	Check
An asset is missing from Review	Clear filters; confirm the selected sources differ; confirm the file is a supported text-serialized Unity asset.
Apply is disabled	Expand unresolved rows and choose every required BASE/OURS/THEIRS decision.
Only raw conflict markers are available	Git stages or provider side files were not available. Restore a real VCS conflict or fix the markers manually before trusting the result.
A reference is unresolved	Confirm the referenced asset exists, its GUID is stable, and the intended local object still exists in the composed hierarchy.
A provider is not detected	Open VCS Integration Setup, check the provider CLI, credentials/workspace, startup-detection setting and diagnostics.
The result preview opens a scene	Save current scenes first. Scene previews open only after an explicit warning and Unity's save prompt.

Known boundaries

- Binary Unity assets cannot be semantically reviewed or merged.
- Ambiguous or unsupported YAML structures fail closed and require manual review.
- Provider capabilities differ; external merge wrappers may be required to supply BASE, OURS and THEIRS.
- Always validate important merged scenes and prefabs inside Unity before committing.

SUPPORT Include the Unity version, VCS provider, asset type and diagnostic report. Help and questions: [Join the MergeSight Discord community](#)