USER DOCUMENTATION

ftrack Houdini Integration

1.1.0 | rev1

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INTRODUCTION

The ftrack houdini integration, by leveraging the pipeline DCC integration framework, enables load and publish of CG assets with your ftrack workspace.

INSTALLING

Requirements:

- Windows, MacOS X or Linux
- Houdini 18.5 (py3 build) +
- ftrack Connect desktop application
    - Download and install the latest version of ftrack Connect.

1. After Downloading Connect:
    - Launch Connect and follow the install steps for the Plugin Manager.
2. Select and install the following integration plugins.
    - **ftrack-connect-pipeline-houdini**
    - **ftrack-application-launcher**
    - **ftrack-connect-pipeline**
    - **ftrack-connect-pipeline-qt**
3. Restart Connect as prompted to do so

Important note:

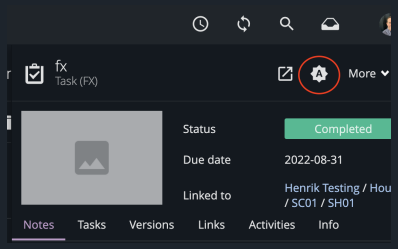
LAUNCHING

Houdini requires it to be launched from a context(Task) within ftrack or Connect in order to make the integration active within DCC.

Important note: you need to have Connect running on your workstation, logged in with the same credentials, in order to have DCC launchers appear.

Launch from ftrack

1. Select a task in ftrack and run Actions - the gear wheel symbol with an A in sidebar.
2. If Connect is running and Houdini installation was detected during launch, the Houdini launch option will appear, choose it to launch Houdini with integration at the selected Task context.



Launch from Connect

Requirements

- ftrack Connect
- Install the Application Launcher plugin in Connect if you do not have it installed.

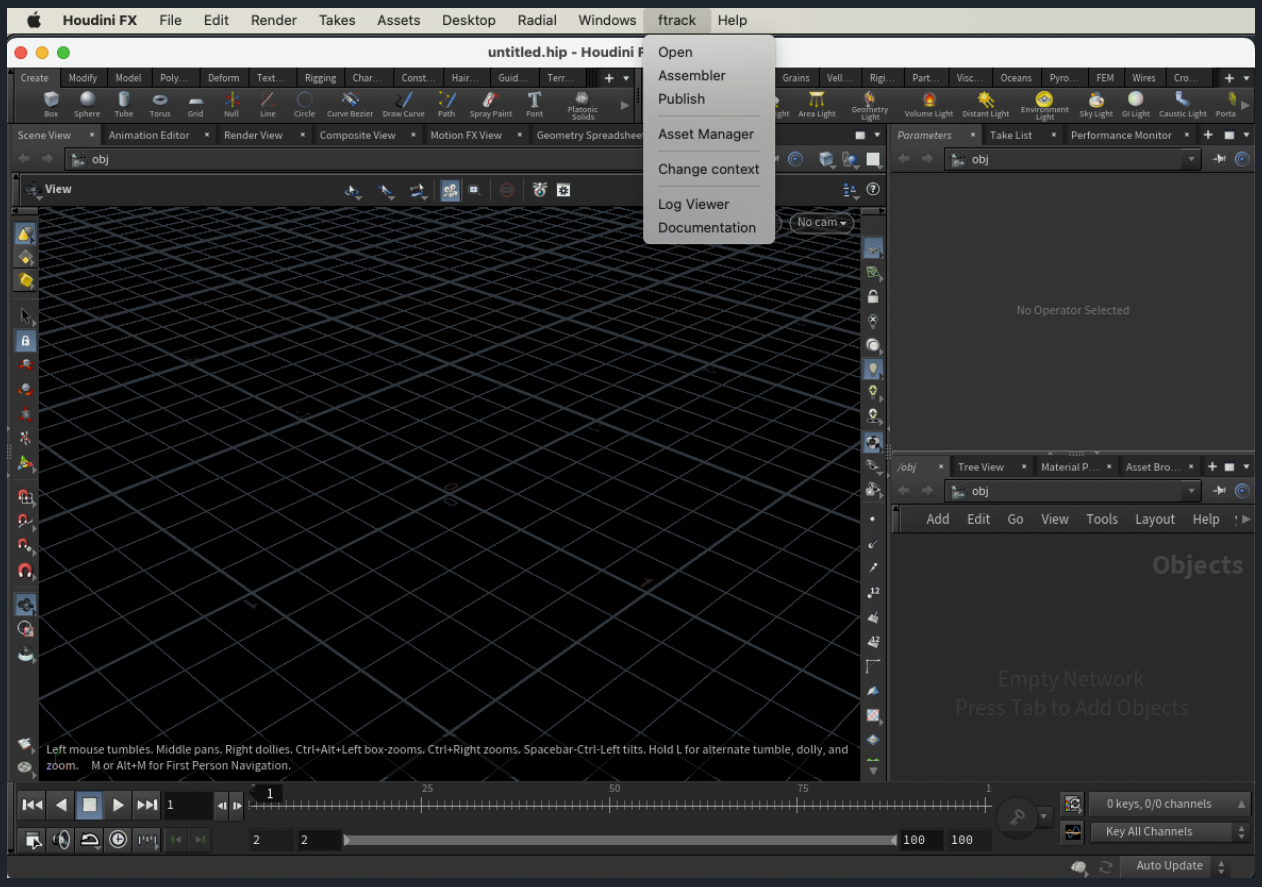
Launch task with Houdini integration

1. Select task context from the pulldown list or click the BROWSE button to choose Task.
2. If Houdini was detected during launch of Connect, the launch option will appear, choose it to launch Houdini with integration at the selected Task context.

Note: if no launcher appears, make sure you have installed a supported Houdini version (13+, py3) in the default location on your hard drive. To customise the paths, look into reconfiguring the ftrack-application-launcher plugin.

OVERVIEW

In Houdini you should find the “ftrack”integration menu:



Open

- Open a previous Houdini scene worked on, also known as the “snapshot” component.

Asset manager

- List current imported ftrack assets in your scene.
- Update asset(s) to latest version.
- Change version of asset(s)
- Unload and load assets

Assembler

- Import one or more pipeline assets published in another DCC into Houdini.
- Remove tracked assets from Houdini.

Publisher

- Publish a new asset to ftrack.

Change context

- Change the current Task context working on.

Log viewer

- View pipeline plugin log events - output from running load, publish and asset manager operations within Houdini.
- View file logs on disk.

Documentation

- Open the Houdini user documentation in your web browser.

IMPORTING ASSETS

Overview

Importing assets published within other DCC:s is a cornerstone feature of the ftrack Houdini integration.

The following asset types and formats are supported (component name in parentheses):

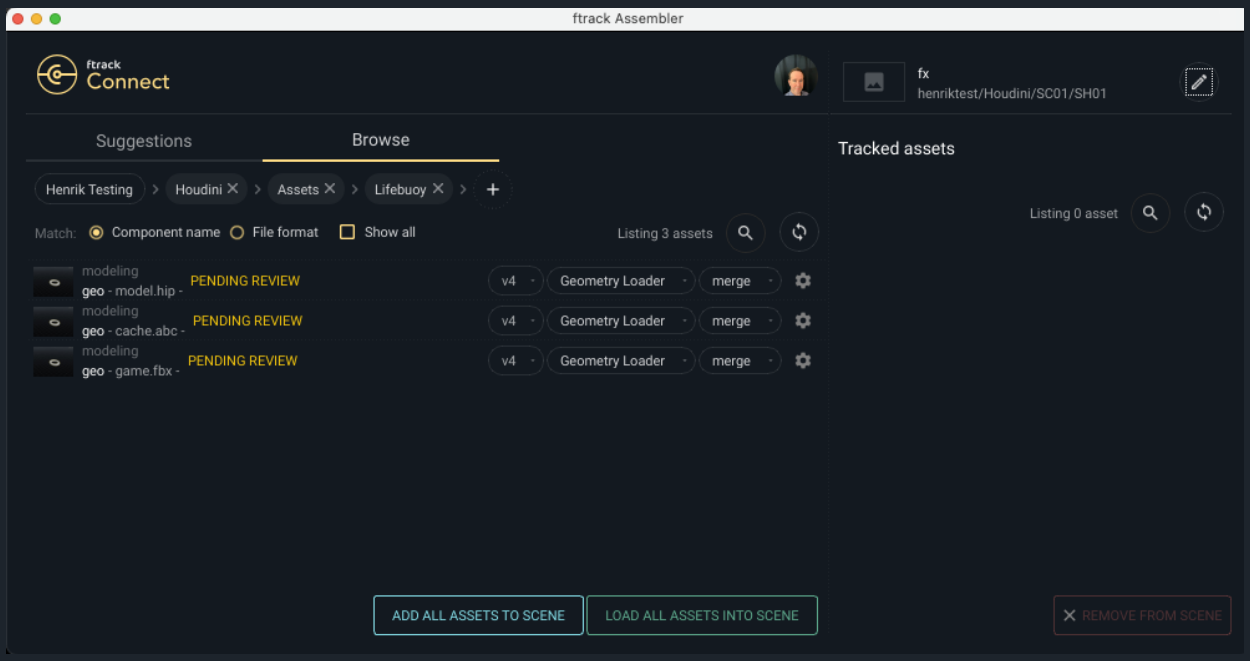
ASSET TYPE	SHORT	Houdini [.hipl.hipnc]	FBX [.fbx] (game)	Alembic [.abc] (cache)
Geometry	geo	✅ (model)	✅	✅
Camera	cam	✅ (camera)	✅	✅

Import an asset using the Assembler

Manually browse for asset

As a preparation, publish image sequence/movie/geometry within DCC such as Maya, 3DS Max or by using the Connect standalone publisher / API. Try to use the preferred component name as stated above when possible.

1. Open the assembler and browse to the Task from which the asset were published, or browse to the asset parent:



2. Click the gear wheel button to bring up load options relevant to the format and the selected loader.
3. The latest version will be pre-selected, select a previous version from the version selection dropdown menu.
4. The first available loader will be listed, if your studio provides multiple loaders, they can be selected through the definition dropdown menu.
5. Select the “merge” (default) or “import” mode, referring to the method to use in Houdini on load.
6. Click LOAD 1 ASSET INTO SCENE to have Houdini import it and create an asset.

You will notice the asset being tracked at the right hand side of the Assembler, which is a docked variant of the Asset manager tool.

Important notes:

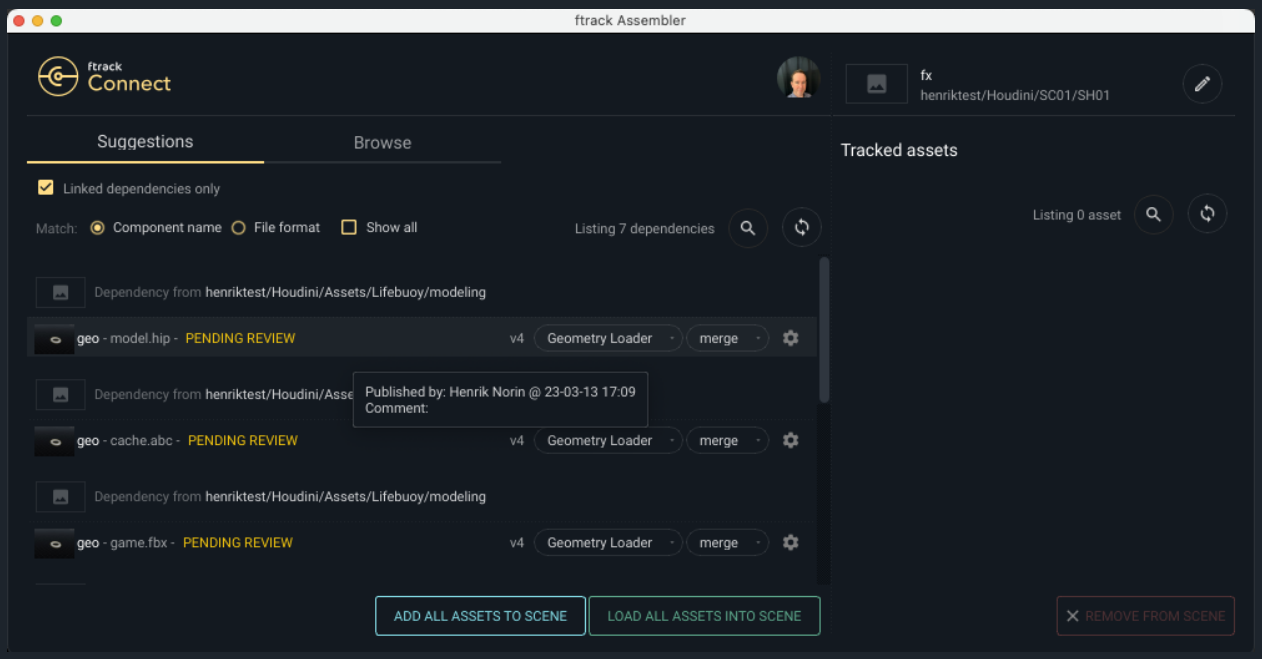
- *If you cannot locate the assets, it might be that the assembler cannot match the component names. Choose to filter by “File format” instead to have it go by expected file extension instead.*
- *Listing parent context can take considerable time, for example if an entire project with thousands of assets present. Try to narrow down the search by choosing context.*
- *Note: the asset data (e.g. the published file) has to be available within your current ftrack location on disk in order for it to be properly loaded. Transfer assets to your location before attempting to change versions in case they are unavailable.*

Using the dependency resolver

The dependency resolver follows the incoming link to the current context (Task).

As a preparation, link for example an asset build task to the current task and publish a compatible asset to the asset build.

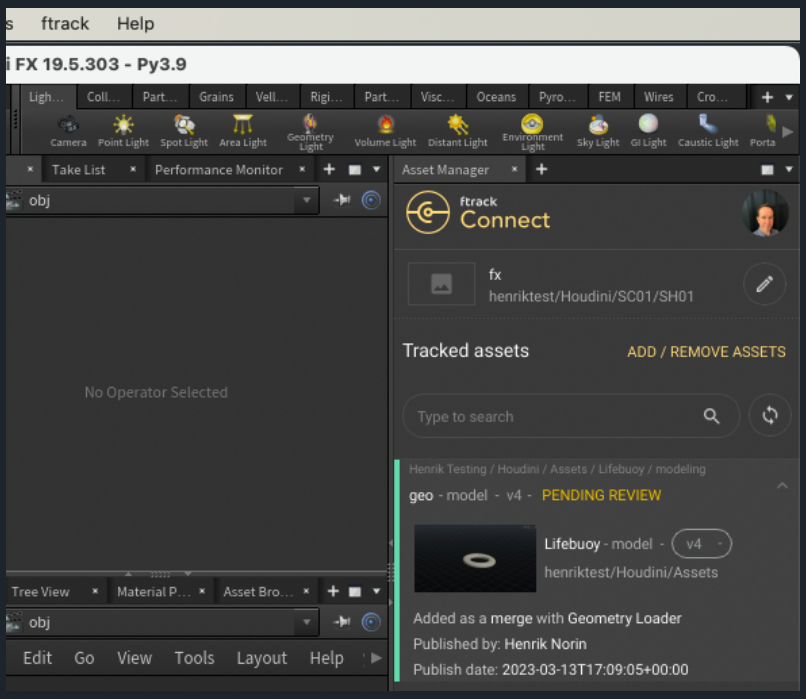
1. Open the assembler and header over to the Suggestions tab:



2. A list of linked assets eligible for loading should appear, choose one or more assets from the list. To have the dependency resolver more relaxed, and follow links on parent context, uncheck “Linked dependencies only”.
3. Click the gear wheel button to bring up load options relevant to the format and the selected loader.
4. The latest version will be pre-selected, select a previous version from the version selection dropdown menu.
5. The first available loader will be listed, if your studio provides multiple loaders, they can be selected through the definition dropdown menu.
6. Select the “merge” (default) or “import” mode, referring to the method to use in Houdini on load.
7. Click LOAD … ASSET INTO SCENE to have Houdini import all dependencies into the scene.

ASSET MANAGER

The asset manager lists ftrack assets within your scene, and enables a subset of asset management operations:



Adding or removing assets

Click the ADD / REMOVE ASSETS button to bring up the Assembler, featuring removal of assets and adding more assets to your scene.

Update to latest version

Outdated assets are highlighted with an orange color tone, right click asset and choose Update > Update to latest in order to have asset replaced with latest version within out scene.

> *Note: the version data (e.g. the file) has to be available within your current ftrack location on disk in order for it to be properly loaded. Transfer assets to your location before attempting to change versions in case they are unavailable.*

Change version

Expand the asset in the list (see screenshot above) and choose a different version from the version pulldown menu. You will be prompted before the version is actually swapped out within your scene.

Select assets

Right click and choose Select > Select asset to have the corresponding asset(s) selected within your scene.

Unloading and loading of assets

Assets can be unloaded, but kept tracked within your scene so you can load it back later. Select one or more assets in the Asset manager and choose Unload > Unload asset. To bring it back again, right click and choose Load > Load asset.

PUBLISH ASSETS

Overview

The ftrack Houdini integration supports publish of a variation of different assets together with a reviewable and a thumbnail.

The following formats are supported (component name in parentheses):

ASSET TYPE	SHORT	Houdini [.hip|.hipnc]	FBX [.fbx] (game)	Alembic [.abc] (cache)
Geometry	geo	✅ (model)	✅	✅
Camera	cam	✅ (camera)	✅	✅
Scene	scene	✅ (snapshot)	N/A	N/A

Notes:

- *A "snapshot" component is always published with the standard pipeline assets, providing the current Houdini script work file.*
- *A thumbnail component is provided, as a snapshot of the current viewport.*

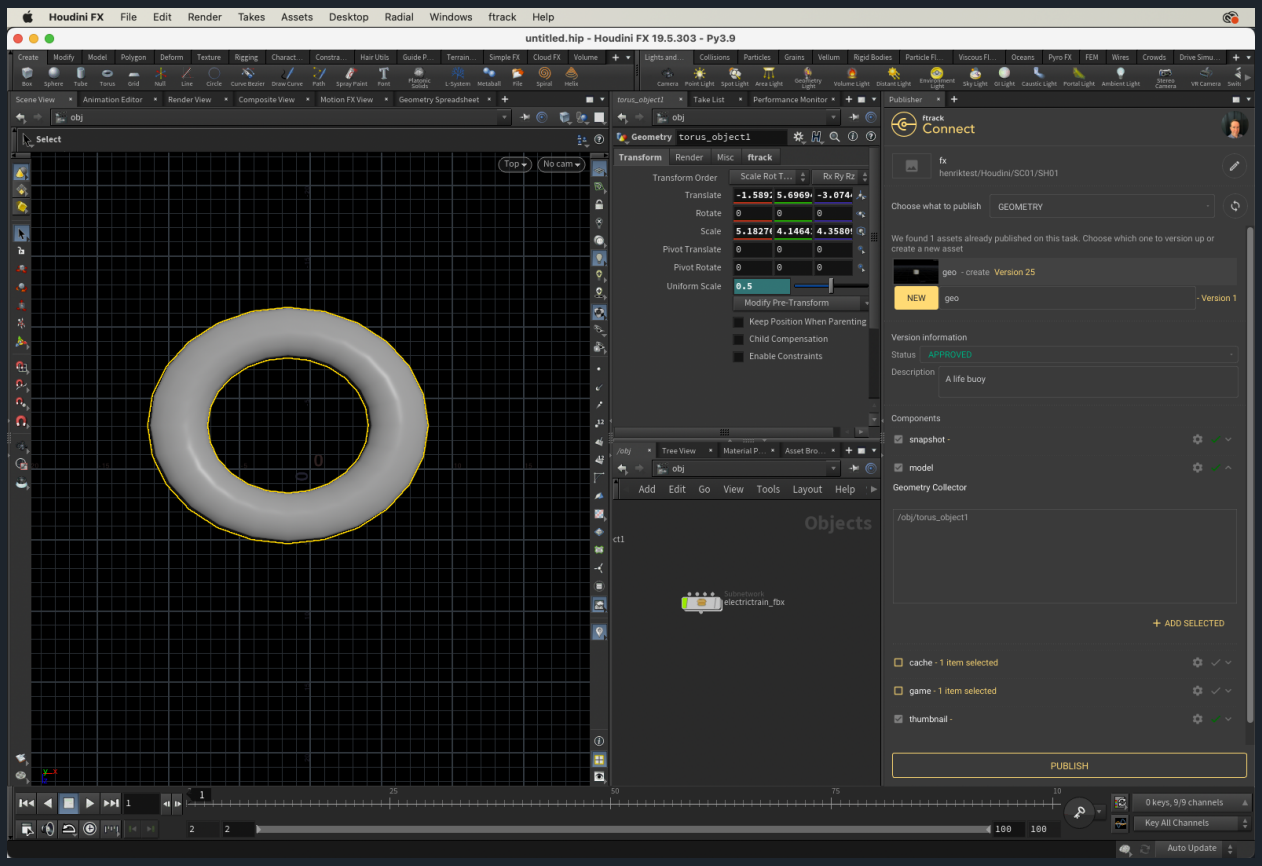
Preparations

Prepare your script with the objects to be exported, and have them selected.

Publish geometry

With this example, we demonstrate how to publish geometry. The similar process applies for publishing all different types of assets within the Houdini integration.

1. Choose "Publisher" from the ftrack menu within DCC:



2. In the drop down menu, choose GEOMETRY.
3. (Optional) Select the status of the version that will be created and add a description.
1. Expand the “model” component to view which scene objects that will get exported, right click the list to modify the selection.
4. Click the gear wheel icon to change the exporter options.
5. (Optional) Enable game(.fbx) and or alembic(.abc) component to include additional formats with the published asset version.
6. Click PUBLISH to have the asset published to ftrack.

RELEASE NOTES

Houdini:

https://ftrackhq.github.io/ftrack-connect-pipeline-houdini/release/release_notes.html

Pipeline core:

https://ftrackhq.github.io/ftrack-connect-pipeline/release/release_notes.html

Pipeline QT components:

https://ftrackhq.github.io/ftrack-connect-pipeline-qt/release/release_notes.html

OTHER RESOURCES

ftrack Connect download:

https://www.ftrack.com/en/connect/download-ftrack-connect

ftrack Connect documentation:

https://ftrack-connect.rtd.ftrack.com/en/latest/

ftrack DCC framework developer documentation:

https://ftrackhq.github.io/ftrack-connect-pipeline/

ftrack Studio:

https://www.ftrack.com/en/studio