# **LoUPE Manual**

Release 2020

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Welcome to the docs for LoUPE, Tangent Labs' cloud-based production management system.

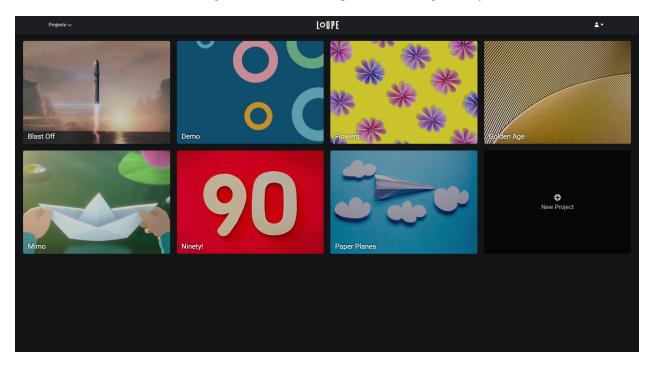


Fig. 1: The LoUPE project overview page.

About 1

2 About

# CHAPTER 1

**Tangent Studios** 

# 1.1 Our Story

Let's start with who we are. Tangent Studios is the parent company of four collaborative business units, with offices in Winnipeg, Manitoba and Toronto, Ontario, Canada.

With decades of combined experience, the founders of Tangent Studios were determined to set Tangent Animation on a course that broke new ground. After watching the Open Source 3D software Blender's progress over the years, in 2015 Tangent created a 3 minute short entirely in Blender, with the aim of assessing its production-readiness. While pleased by how mature several modules had become, the areas requiring additional work were quickly identified and a plan was developed. Using funds that would otherwise have been earmarked for commercial Digital Content Creation software licenses, we instead entered into Sponsorship of the Blender Foundation and hired a strong staff of Software Engineers and Technical Directors at Tangent focused on making Blender entirely production-ready; work that was subsequently submitted back to Blender and made available to the entire Community.

In 2016 Tangent Animation produced *Ozzy*, and went on to produce *NextGen* in 2018 with our partners at Baozou Media. *NextGen* premiered on Netflix in September 2018, and we're currently working on two additional high-profile projects. Tangent Animation currently employs 200+ artists and continues to grow.

In 2018 Tangent Labs was created with the goal of commercializing LoUPE, the cloud-based pipeline created during the making of *NextGen*. More on Tangent Labs and LoUPE in the following section.

2019 saw the birth of Tangent Interactive — our Games/Online development company. With an incredible team of creatives and technologists, Tangent Interactive leverages the knowledge and experience of Tangent Studios in creating innovative, forward-thinking solutions. Tangent Interactive is currently working on optimized branching narrative tools that empower artists by allowing them to construct stories in a visual editor shot by shot. With a slick extensible interface that can provide custom game functionality to any shot, designers can control characters, camera, localized dialogue ... anything they can think of. Our newest company is Tangent Creates — the IP development branch of Tangent Studios where new projects and technology are incubated.

Tangent Studios has been a proud supporter and sponsor of Open Source software development and innovation at the Blender Institute, and has developed key industry partnerships including: Netflix, Blender, AWS, Teradici, ISE, and Intel.

**Tangent Labs** 

# 2.1 The LoUPE Story

With 2016's low-budget feature *Ozzy* effectively serving as a Proof of Concept, work began at Tangent Animation on the Asset Manager — the core component of LoUPE — and preparation for the higher budgeted *NextGen*. With Tangent Labs CEO Jeff Bell's relentless drive to build efficient systems and challenge the status quo he set out to actualize a plan he'd long ago conceived, namely to create a single pipeline tool that was designed with user experience at the forefront, and enough flexibility to run right out of the box or be as extensible as user resources and know-how allow. In short, he was tired of reinventing the wheel and building yet another asset manager and knew others were too.

While many were scratching their heads at the potentially loopy mavericks over at Tangent Animation setting out to make a feature entirely in Blender, the sale of *NextGen* to Netflix at Cannes in May 2018 and its subsequent launch on Netflix in September 2018 put an end to the skeptics. LoUPE was born of a desire to capitalize on modern UI and cloud technologies, so a like-minded team with decades of experience in building production pipeline tools was formed. Augmented by a diverse team of front-end Engineers, Business Development, Sales, and Marketing professionals, Tangent Labs was born in 2018 with the goal of commercializing LoUPE for use by the community. A modern front-end Task Management system tightly integrated with both Asset Management and a built-in webbased Review & Collaboration tool was created, with an oData connection for live reporting and analytics and Virtual Workstation capable.

With an extraordinarily tight timeline on *NextGen* due to the sale to Netflix, Tangent Animation was quickly thrown into cloud rendering in order to supplement on-premise resources to produce the large number of frames required. This experience clearly demonstrated the pain points of a studio's path to the cloud, so LoUPE was designed to package up our hard-won lessons in order to assist a studio to continue to wring value out of their existing on-premise resources and augment with the cloud on an as-needed basis to provide an efficient transition path over the months or years that on-prem resources still hold value.

Blender is the 3D package of choice for Tangent Studios and we believe that it's the future, and we're encouraged by the number of artists and studios that are interested in, experimenting with, and starting to incorporate Blender into their pipelines. While LoUPE was originally designed specifically with Blender in mind and it will always be our first tool among many, we've listened to the community who loudly voiced a need to ease into Blender in much the same way that they'll ease into cloud rendering. With that valuable feedback in mind, LoUPE includes native plug-ins for the major packages and ever-increasing USD support.

LoUPE is Storytelling Simplified, allowing an artist with a great idea to tell their story. LoUPE is By Artists, For Artists and allows you to focus on putting your energies into what shows up on the screen and leave the boring technical bits to us.

# CHAPTER 3

Overview

LoUPE combines all key components of a digital production pipeline into one powerful tool for the first time. Offering more flexibility and software integrations for users, LoUPE empowers animators and studios to work more collaboratively and efficiently on creative productions. That means more time creating.

LoUPE has five key components:

- 1. Asset Management
- 2. Project Management
- 3. Review & Collaboration
- 4. Render Management (On-Prem & Cloud)
- 5. Real-time Reporting

# 3.1 Asset Management

Comprehensive versioning of all animation production assets is now at your fingertips. Using cloud-based technology and our LoUPE Transit Manager teams can easily track all versions of their digital media assets across multiple locations. You can also create custom views and filters to manage, sort, and view all of your media assets.

Whether you're working on-premises or remotely, you can count on the Asset Manager to handle version control and file transfer automatically and intelligently, and get data to and from the cloud securely and as efficiently as possible.

Integrations are provided for *Blender* and Autodesk's *Maya* so that all of your managed data is available without ever having to leave your DCC.

# 3.2 Project Management

From one central place, you will have total and secure control of all production task tracking and data sets.

Take advantage of a new way to manage your work with LoUPE's "three-dimensional" Kanban board. This unique approach to the popular Kanban methodology lets you visualize the processes at every stage of a CG production at any level of detail. LoUPE's Summary Statuses and Detail Statuses further extend Kanban to help track progress, spot bottlenecks, and unify reporting across multiple projects.

For when you need a different perspective, List Views provide intuitive controls to sort, filter, and group the same data.

Get going with one our built-in project templates, or use the advanced Types and Template editors to define your own enttiies and project structures.

#### 3.3 Review & Collaboration

Hold real-time media review sessions with collaborators in different locations all over the world.

Easily create playlists by dragging and dropping media from anywhere in LoUPE, then watch media, draw annotations, and write notes together with other users in real-time. Create tasks from any note without leaving the Review to make sure no feedback goes unaddressed.

## 3.4 Render Management

Integrate in-house rendering with powerful cloud-based capabilities.

AWS Thinkbox Deadline's hassle-free hybrid render management tool ships with LoUPE. It allows for faster render times, increased reliability, hyper-scale capabilities, and enhanced efficiency for your animation productions.

## 3.5 Real-time Reporting

LoUPE comes with an *OData* connection that's ready to use with almost zero configuration, right out of the box. By connecting your reports to your production data via this live link, you'll never have to export a CSV, or manually update a report again. *OData* support is built into many popular productivity packages, including Microsoft *Excel* and *Power BI*.

Create real-time reports including heat maps, dashboards and health status metrics to gain insight on project progress. Empower your staff with easily customizable at-a-glance and strategic analytics.

#### **3.6 APIs**

LoUPE ships with Python and REST APIs, empowering developers to build their own integrations, or extend the built-in asset management capabilities to fit their existing processes and pipelines.

# CHAPTER 4

Setup

This section will cover the steps required to set up your own instance of LoUPE through AWS Marketplace.

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# 4.1 Getting Connected to AWS

#### 4.1.1 AWS Landing Page

To access the LoUPE product page and become a subscriber, you must first be logged in to your AWS account. See the AWS Market Place login page here: https://aws.amazon.com/marketplace/ and follow the AWS login in link.

#### 4.1.2 AWS Login Page

You will be taken to the AWS Login page.

Login as a Root user.

#### 4.1.3 LoUPE Product Page

Use the following link to navigate to the LoUPE product page in the AWS Marketplace: https://aws.amazon.com/marketplace/pp/B083XBSLV1

#### 4.1.4 Subscribe to LoUPE

Click the **Continue to Subscribe** button to begin your subscription process.

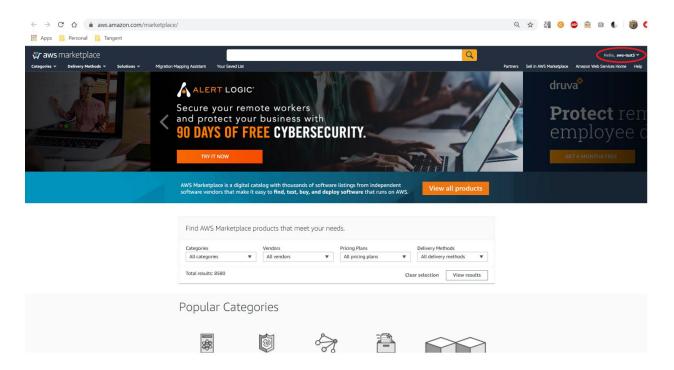


Fig. 1: AWS Landing Page

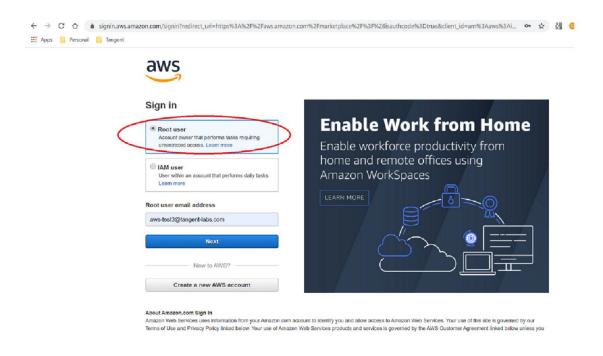
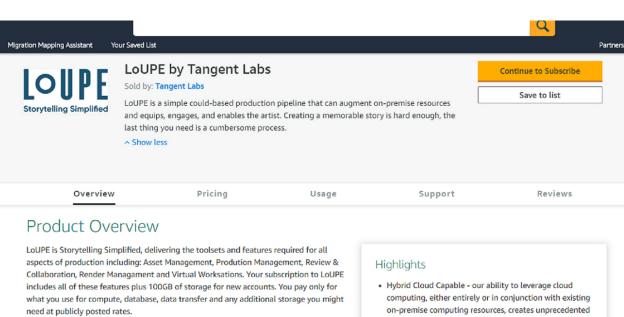


Fig. 2: AWS Login Page



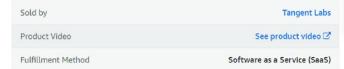
powerful cloud-based capabilities. Collaborate across offices and around the world with virtual workstations. How good is that?

control of all production task tracking and data sets. Hold global real-time review sessions,

Comprehensive versioning and tracking of production assets at your fingertips. Secure

while sharing markups, notes, and task creation. Integrate in-house rendering with

Try LouPE free for 14 days! For custom pricing, EULA, or a private contract, please contact labs-sales@tangent-labs.com for a private offer.

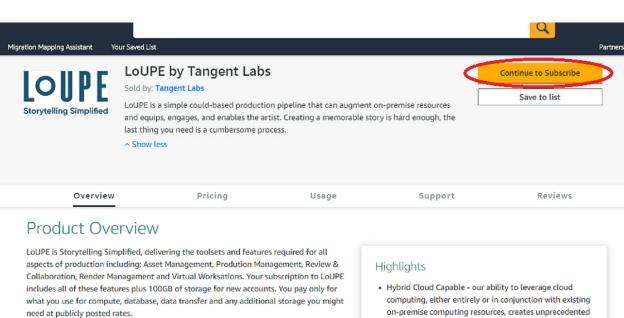


- geographical collaboration, financial flexibility and creative freedom.
- · Open Source Initiative utilizing Blender as a DCC tool, LoUPE enables the democratization of the production process and suppports the open source development community. Upcoming USD support will allow API connections to other DCC products
- · Production Visibility seamlessly view, review and revise product data at any point in the pipeline, from any geographical locale

## **Pricing Information**

Below are the total costs for these different subscription durations. Additional taxes or fees may apply. LoUPE by Tangent Labs

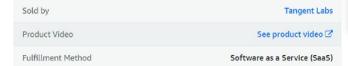
Fig. 3: LoUPE Product Page



control of all production task tracking and data sets. Hold global real-time review sessions, while sharing markups, notes, and task creation. Integrate in-house rendering with powerful cloud-based capabilities. Collaborate across offices and around the world with virtual workstations. How good is that?

Comprehensive versioning and tracking of production assets at your fingertips. Secure

Try LouPE free for 14 days! For custom pricing, EULA, or a private contract, please contact labs-sales@tangent-labs.com for a private offer.



- on-premise computing resources, creates unprecedented geographical collaboration, financial flexibility and creative freedom.
- · Open Source Initiative utilizing Blender as a DCC tool, LoUPE enables the democratization of the production process and suppports the open source development community. Upcoming USD support will allow API connections to other DCC products
- · Production Visibility seamlessly view, review and revise product data at any point in the pipeline, from any geographical locale

## **Pricing Information**

Below are the total costs for these different subscription durations. Additional taxes or fees may apply. LoUPE by Tangent Labs

Fig. 4: Click "Continue to Subscribe"

#### 4.1.5 Configure Your LoUPE Contract

You will be directed to the LoUPE contract page. Fill out the details of your request.

Please select 1 unit of the free Monthly Subscription option. This will include the following:

Users	S3	EC2	Data Transfer	RDS	MediaConvert	API Requests
1-5	25GB		10GB	10MB	60 mins	

Please select "yes" to auto-renew. You'll be reminded before your renewal date and may cancel at any time.
 Selecting auto-renew during sign-up will streamline the process of transitioning to a subscription if you choose to.

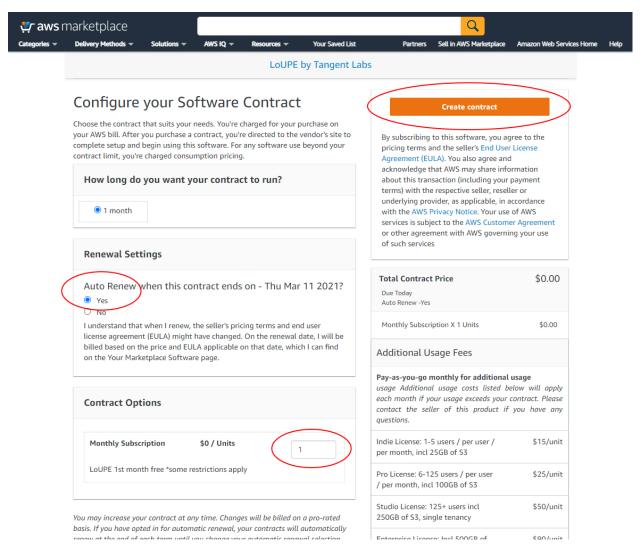


Fig. 5: Configure your LoUPE contract.

Note: Terms will be re-visited when your free trial concludes, and you move to a full subscription.

Then click, Create contract.

#### 4.1.6 Contract Confirmation

You will get a confirmation dialog with the details of your contract to be purchased.

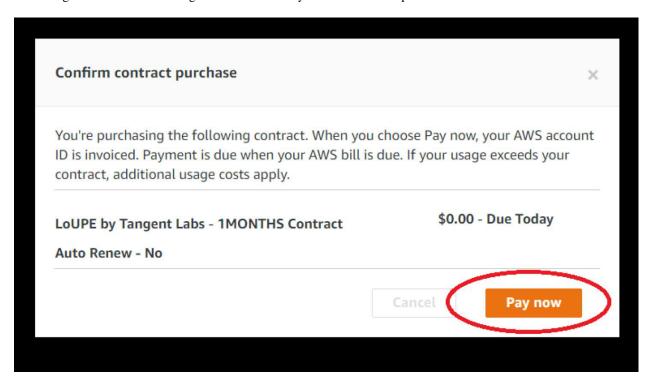


Fig. 6: Confirm your LoUPE contract.

Click the Pay now button to confirm your contract.

#### 4.1.7 Configure LoUPE Account

Click the Setup your account button to complete your registration.

#### 4.1.8 LouPE Registration Details

You will be taken to the registration page. Fill in your details. Fields marked with an asterisk are required fields. Fill in any other optional data as you prefer. If you do not have a Company name, please use "n/a".

Then click the **Complete Registration** button.

#### 4.1.9 Completed Registration

Once you have completed entering your details, you will see the LoUPE registration completed dialog.

#### 4.1.10 LoUPE Confirmation Email

Shortly after completion you'll receive a confirmation email to the address you've specified. Be sure to check your junk/spam folder if it doesn't appear in your inbox.

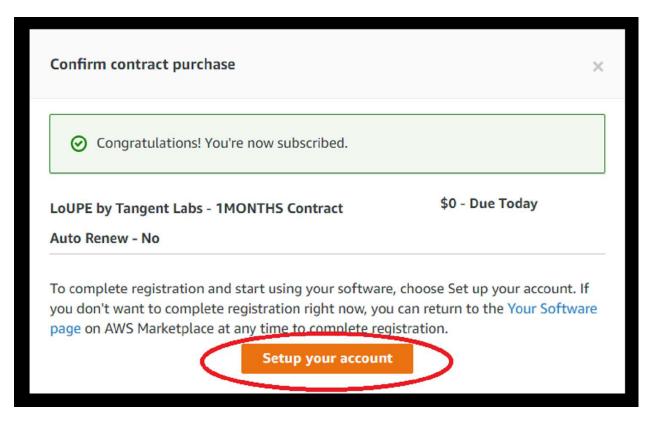


Fig. 7: Configure your LoUPE account.



# Congratulations! Congratulations! You have now purchased LoUPE via the AWS Marketplace portal. But the process is not yet complete. Please complete this form, required to activate your subscription to LoUPE. Your subscription may be cancelled at any time. THE SOFTWARE WILL NOT BE DELIVERED UNTIL THIS FORM IS SUBMITTED. Only \* fields are required. If no company, please enter n/a. Please fill in this registration form and our team will provision your LoUPE by Tangent Labs subscription within one business day and contact you when it is ready. You will not be able to use LoUPE by Tangent Labs until this is complete. If you have any questions please contact us at orders@tangent-labs.com.

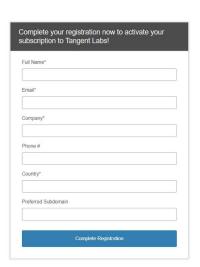


Fig. 8: Fill in your registration details.



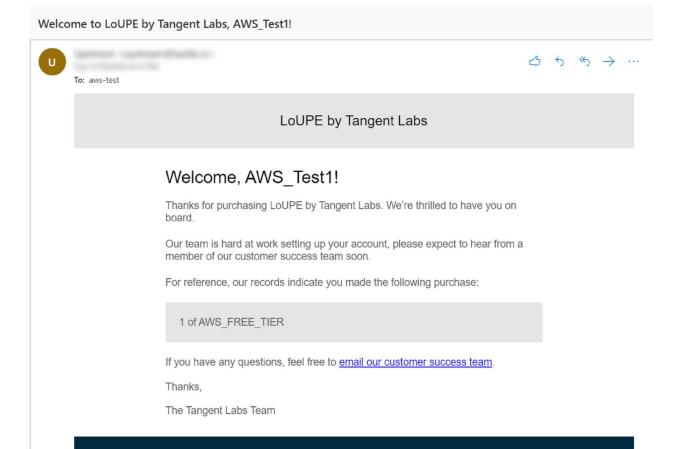
# **Registration Complete!**



You've purchased an enterprise product that requires some additional setup. We will contact you within one business day with your account information so you can get started. Please contact us at orders@tangent-labs.com if you have any questions.



Fig. 9: Congrats! You are now registered for LoUPE on AWS!



# 4.1.11 Post Registration

After you have completed your subscription contract, Tangent Labs will begin to provision your LoUPE instance. Generally, you should expect to hear back from Tangent Labs that your product is ready for use within 1 business day.

# CHAPTER 5

# **Quick Start Guide**

This guide covers some of the first steps you'll want to take with your new LoUPE instance. For documentation on specific features, consult the *User Manual* section.

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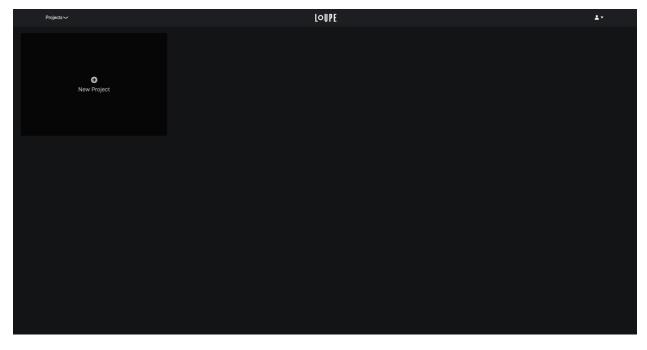
# 5.1 Logging In

You will have already been provided the URL to your LoUPE instance and administrator login credentials. Navigate to the URL with your browser and log in. Any browser that's Chromium based should work.

**Tip:** We recommend using Google's *Chrome* or Microsoft's Chromium-based *Edge* browser. Apple's *Safari* browser is currently unsupported.



After logging in, you will be on the LoUPE Projects page.



#### 5.1.1 Forgotten password

If you forget your LoUPE password, click on the *Forgot your password?* link at the bottom of the sign-in form. Enter the email address associated with your LoUPE account, and click *Email Link*.

# 5.2 Adding Users

You can add users to LoUPE from within the web application itself.

**Note:** Although it's possible to modify your AWS Marketplace order to add additional licenses, the recommended way to add users is to do so through the web application. Our metering will automatically calculate usage and adjust your billing accordingly.

To add user accounts to LoUPE, click on the User menu icon in the upper right corner of the LoUPE web interface, and then click *Company* in the drop-down list.



Fig. 1: Click *Company* in the User menu dropdown list.

On the Company Page, click on the *People* tab, then on the *Add user* icon.

Input the new user's details. Then click on the + icon at the right to create the user. Note that when you do this, the new user will receive an email that directs them to LoUPE and asks them to set their password.

# **5.3 Creating Projects**

Projects can be created from the LoUPE landing page, or from the Company page.

#### 5.3.1 From the Landing Page

The landing page can be accessed from the Global Navigation bar along the top of the interface by clicking on the first entry in the project switcher on the left, or by clicking on the LoUPE logo in the center.

The last entry in the projects list is always the *New Project* creator. Click on it to open the project creation modal.

5.2. Adding Users 21

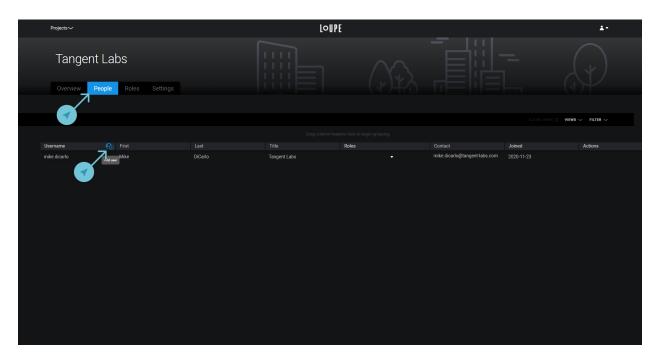


Fig. 2: On the *People* tab click the *Add User* icon.



Fig. 3: Fill in the required fields and click the + icon.

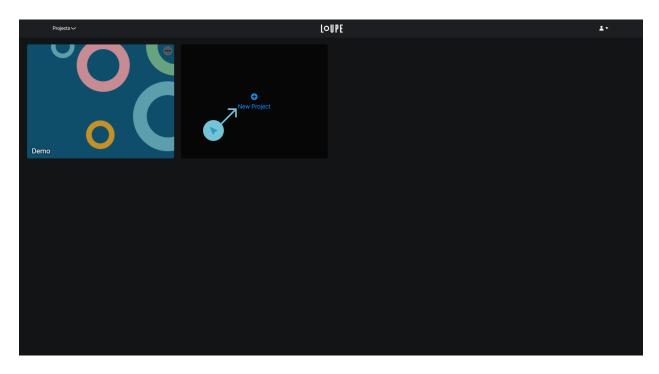


Fig. 4: The LoUPE Landing Page with New Project button.

#### 5.3.2 From the Company Page

The company page is accessed from the User Menu in the top right of the Global Navigation bar along the top of the interface.

Click on the + button in the Name column of the Projects table to open the project creation modal.

#### 5.3.3 Project Creation Modal

In the project creation modal you'll need to supply your project's name and a short code, determine whether you want demonstration data created (use this if you're just trying LoUPE out), and specify if you'll be working with Blender or Maya.

You'll also need to select a project template from the list along the left of the modal window. Project templates determine which entities can be created and what their relationships to eachother are. Project template customoization is covered in the Administration section of this guide, but below is a quick overview of the templates that come predefined with LoUPE.

Template	Description		
Feature Film	A typical feature film structure, using the Sequence > Shot paradigm. Also allows for		
	creating Assets, processes, and tasks.		
Episodic	Similar to Feature Film but introduces the <i>Episode</i> entity to the shots path, Episode >		
	Sequence > Shot. Also allows for creating Assets, processes, and tasks.		
VFX	A typical VFX structure, using the Sequence > Shot paradigm. Also allows for creat-		
	ing Assets, processes, and tasks.		
Minimal	A basic template to build upon. This should be selected only if you need to support a unique		
	or specialized workflow. For most cases, it is advised to start from one of the complete		
	templates.		

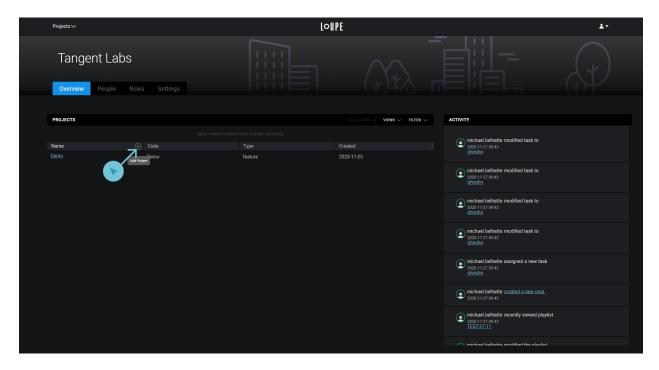


Fig. 5: The LoUPE Company Page with New Project button.

**Warning:** Making changes to a project template once you've begun production can be difficult or impossible, depending on the change. Consult the Administration section for more information.

# **5.4 Creating Entities**

Entities can be created from the Action Menu on the right side of the interface, or from the bottom of swimlanes on the Kanban Board.

#### 5.4.1 From the Action Menu

Click on the Create New icon in the Action Menu.

In the drawer that opens select where in the project heirarchy to create this entity, and which Type of entity to create by expanding the Location tree, and picking from the available Types for that location.

**Note:** Configuring which types are allowed at each level is covered in the *Administration* section.

Fill in the Name, and Code fields (in default configurations, a Code will be suggested for you), and click "Create".

Your asset will appear in the Kanban board where you specified it to be created in the heirarchy, and in the Asset Manager, ready for use.

#### 5.4.2 From the Kanban Board

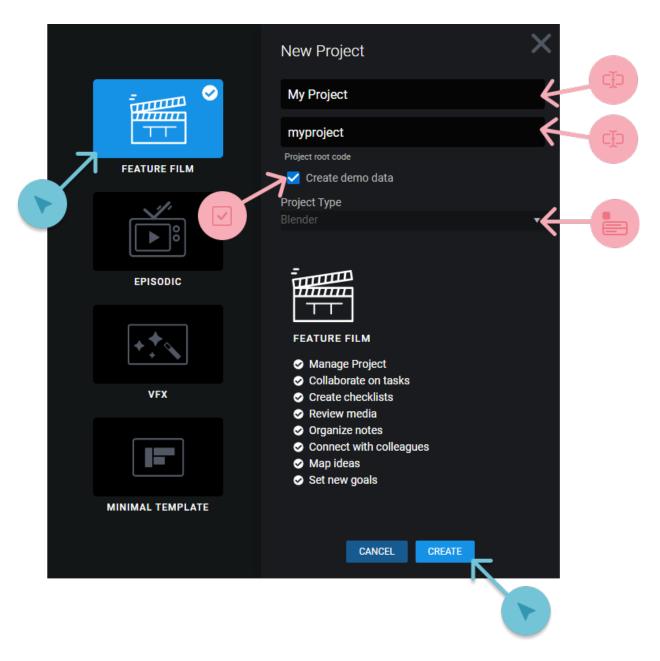


Fig. 6: The project creation modal.

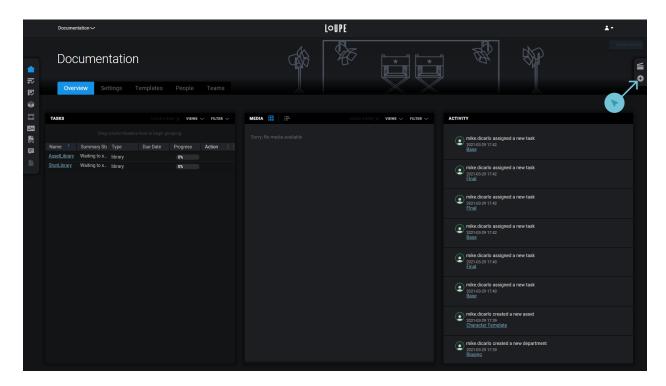


Fig. 7: Click on the *Create New* icon in the Action Menu.

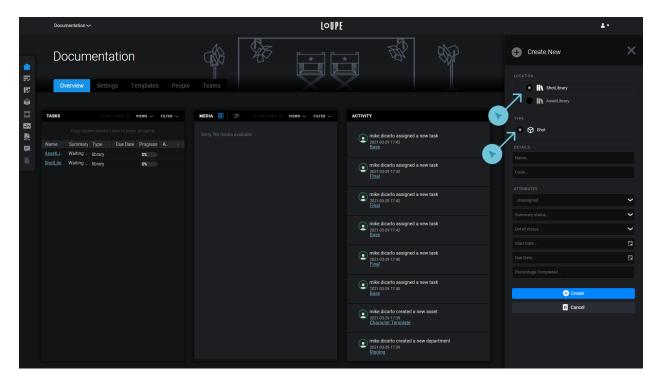


Fig. 8: Select where to create the asset from the path modal.

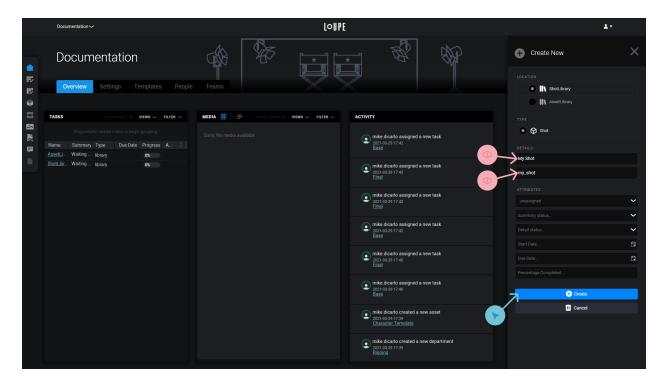


Fig. 9: Fill in the required fields, and click Save.

**Note:** In projects using custom Templates asset creation may be restricted to certain levels of the Kanban board. This is covered in the *Administration* section.

Navigate to the Kanban Board from the Project Views menu on the left and switch to the *Asset Library* from the first entry in the Breadcrumb trail, if you're not already there.

From the bottom of a swimlane, click Add New.

Select an entity from the dropdown in the top left, supply a name and code, and click the Add button.

Your new entity will appear in the swimlane and is ready for use.

#### See also:

For information on how to use the Kanban Board for project management, visit the Kanban Board section of the *User Manual*.

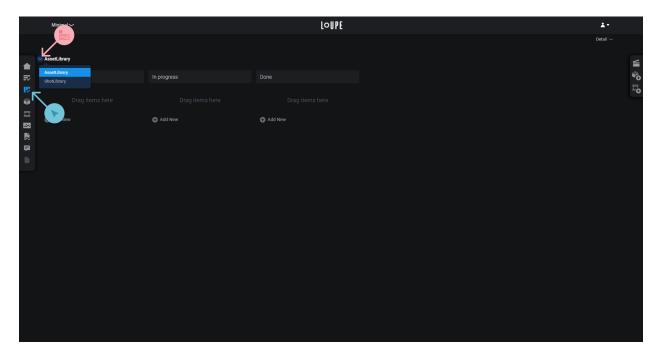


Fig. 10: On the Kanban Board, switch to the Asset Library from the Breadcrumbs dropdown.

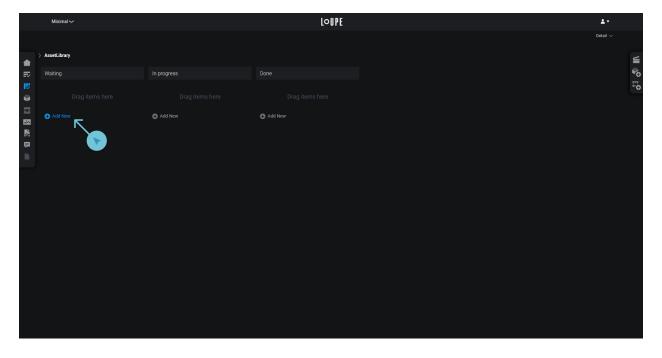


Fig. 11: From the bottom of a swimlane, click Add New.

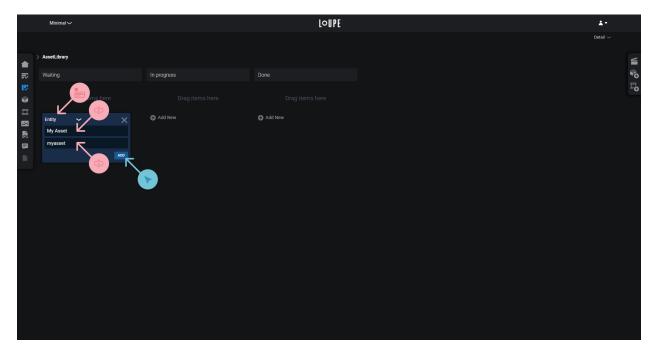
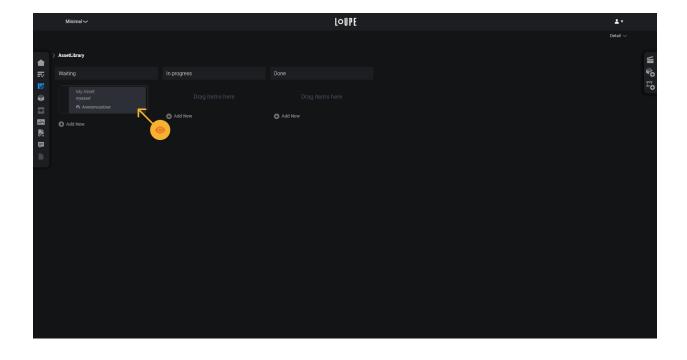


Fig. 12: Select *Entity* for the type, and provide a name and code.



**User Manual** 

This manual covers specific features and functionality of LoUPE. For basic setup and your first few steps, visit the Quick Start Guide.

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## 6.1 Navigation

LoUPE's navigation components are divided into three groups based on the functions they perform, and positioned along the top, left, and right sides of the interface.

The Product Navigation contains pages and functions at the application level (ie. that are not specific to any project), and is always available. The Project Data Navigation Menu is the central hub for all pages within a project, and the Project Action Menu is a convenient place to perform frequently used actions without leaving your having to navigate away from the page you're viewing.

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#### **6.1.1 Product Navigation**

The Product Navigation bar is always visible along the top of the LoUPE interface. It contains pages and functions at the application level (ie. that are not specific to any project), using three different components.

#### **Project Switcher**

This widget is located on the left side of the Product Navigation bar. It contains a dropdown menu which lists all projects accessible by the logged-in user. Clicking on an entry will take you to that project's landing page. The first entry in the list is always a link to the Projects landing page.

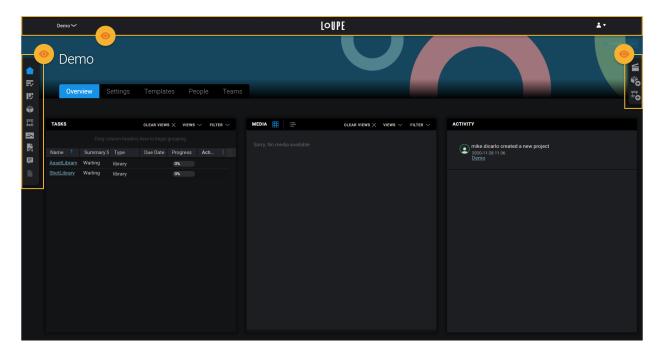


Fig. 1: LoUPE's three main navigational components.

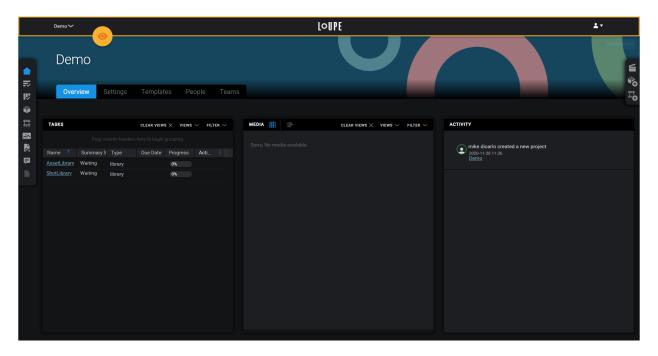


Fig. 2: The product navigation bar along the top of the LoUPE interface.

## **LoUPE Logo**

The LoUPE logo is located in the center of the Product Navigation bar. Clicking on it will take you to the Projects landing page.

#### **User Menu**

This widget is located on the right side of the Product Navigation bar. It contains a dropdown menu which lists pages and actions specific to the logged-in user.

Name	Description
My account	A link to the Account page for the logged-in user.
Company	A link to the Company page for this LoUPE instance.
Help	A link to the Help page.
Log out	Will log the current user out and return to the Log In page.

## 6.1.2 Project Data Navigation Menu

The Project Action Menu is a project-specific navigation widget, accessible along the left side of the interface when within a project. It contains links to each of the eight data views of a LoUPE project.

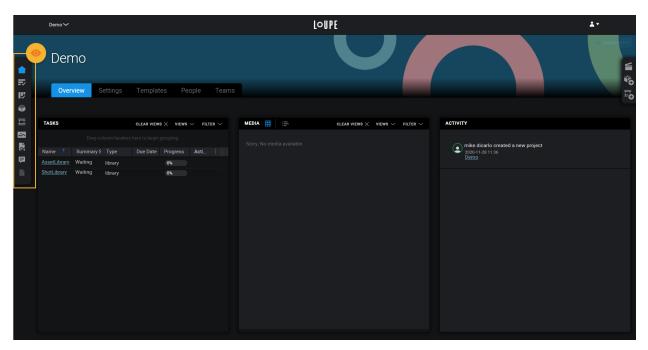


Fig. 3: The Project Data Navigation Menu along the left side of the interface.

6.1. Navigation 33

Icon	Name	Description
	Home	A landing page containing a project overview, and project-specific settings.
₹	Tasks List	A List View of all tasks on the project.
Iî.	Tasks Kanban	LoUPE's three-dimensional Kanban board of all tasks on the project.
	Assets	A List View of all Assets on the project.
#	Shots	A List View of all Shots on the project.
<b>☆</b>	Media	A List View of all Media on the project.
<b>€</b> ⇒	Transit Status	A List View of all data going to or from the cloud for the project.
Þ	Notes	A List View of all notes on the project.
	Reporting	Currently disabled and reserved for reports in a future version of LoUPE.

## 6.1.3 Project Action Menu

The Project Action Menu is a project-specific navigation widget, accessible along the right side of the interface when within a project. It conveniently exposes two common tasks: playlist creation, and entity creation.

All Project actions will open in a drawer from the right side of the interface, allowing you to perform the action without interrupting your current task, or leaving your current place in the application.

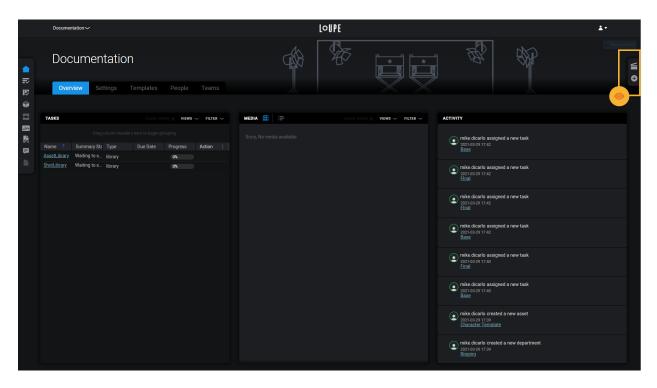
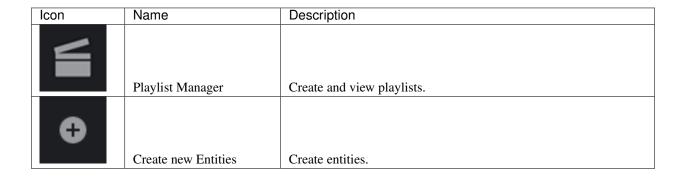


Fig. 4: The Project Action Menu along the right side of the interface.



## **6.2 Product Pages**

Product pages are application-level pages that aren't associated with a specific project. They're accessible from the Product Navigation bar.

#### **Table of Contents**

## 6.2.1 Projects

The Projects page lists all projets in the system that are visible to the logged-in user.

6.2. Product Pages 35

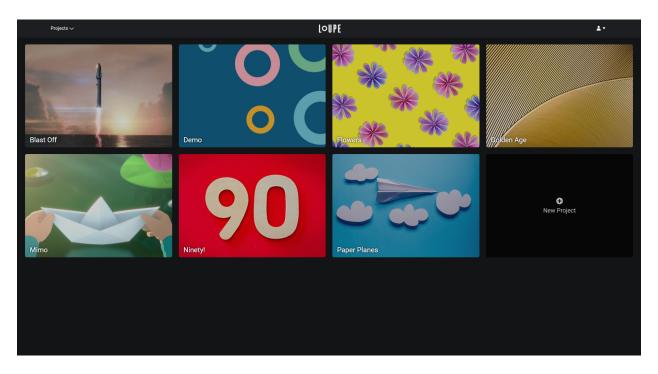


Fig. 5: The LoUPE Projects page, with seven projects and the New Project button.

## Creating a project

The last link in the list of projects is always a button to open the Projet Creation modal. The projet creation process is documented in the Creating Projects section of the Quickstart Guide.

#### Setting a thumbnail

From the "more" actions menu represented by three dots in the top corner of a Project's card, click on the *Upload Thumbnail* item. From your filesystem, choose a jpg or png file to upload.

**Tip:** The recommended resolution for a project thumbnail is at least 450×315px (an aspect ratio of 1.43.)

## 6.2.2 Company

The Company page acts a central hub for actions, settings, and data in LoUPE that aren't associated with a specific project. There are four views to the Company page, represented by tabs along the bottom of the banner.

It is accessed from the User Menu in the Product Navigation bar.

#### Overview

The Overview view contains a List View of all projects visible to the logged-in user on the left, and a List View showing all recent activity on those projects on the right.

## **People**

The People view contains a List View of all users in the system. From this table you can add, remove, and edit users. For more information on adding and removing users, see Adding Users in the Quickstart Guide.

#### **Roles**

The Roles view contains a List View of all roles in the system. Roles determine what is and is not visible to users. For more information on applying roles, see Permissions in the Administration section.

## **Settings**

The Settings view contains a system-wide settings editor for Summary Statuses. For more information on using Summary Statuses, see Statuses in the Administration section.

## 6.2.3 My Account

The My Account page acts a central hub for actions, settings, and data in LoUPE that are associated with the logged-in user. There are three views to the My Account page, represented by tabs along the bottom of the banner.

#### **Profile**

#### Info

Personal information associated with the logged-in user.

**Note:** You may not be able to edit this information without the appropriate permissions role(s).

#### **Password**

A password change form.

#### **Projects**

The projects that the logged-in user is assigned to.

#### **Activity**

A list of the logged-in user's recent activity.

#### Task List

A List View of tasks assigned to the logged-in user.

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#### **Task Board**

A Kanban board of tasks assigned to the logged-in user.

## 6.3 Project Pages

This section covers pages, and common types of pages, that are available from within a Project, from the Data Views Menu on the left side of the interface.

#### **Table of Contents**

#### 6.3.1 Overview

#### **Settings**

The Settings tab contains an editor for project-specific settings.

## **Templates**

The Templates tab contains an editor for project-specific Template options. Please see the Administration guide for more details on custom Templates.

#### **People**

The People tab contains a list of users associated with this project. Users can be added to and removed from the project on this tab.

#### **Teams**

The Teams tab contains a list of project-specific teams (groups of users). Teams can be added or removed on this tab.

#### 6.3.2 List Views

List Views are table-style views with a common set of interactions and controls regardless of the data they are presenting, or where in the product they appear.

All projects have four List Views, Tasks, Assets, Shots, and Transit Status.

#### **Hiding & Showing Columns**

From the "more" menu of the rightmost column (the *Actions* column), columns can be added or removed from the list view by toggling them in this dropdown menu.

#### **Action Column**

All List Views contain an action column which contain icons for actions related to the entity that the row represents.

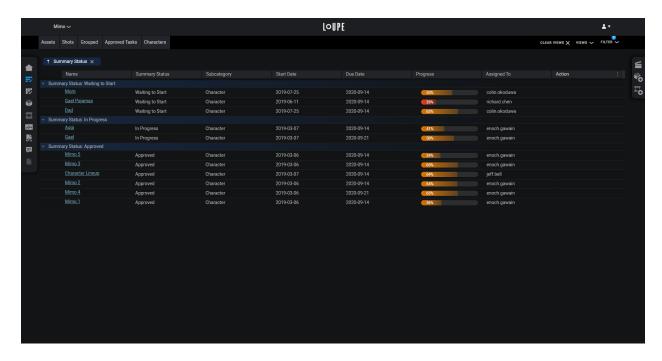


Fig. 6: A Tasks List view with grouped columns, active filters, and saved views.

### Grouping

Data in all List Views be grouped by dragging a column header into the space above the List View.

## **Sorting**

Columns can be sorted by clicking the column header. Clicking on the same colum header again will reverse the sort direction.

### **Filtering**

All list views can be filtered with the Filter Builder from the top right of the header.

#### **Building a Filter**

- 1. Open the Filter menu.
- 2. In the "Field" dropdown, select a field to filter on.
- 3. In the "Action" dropdown, select a filter operator.
- 4. In the "Value" input, provide a value to supply to the operator.

To filter on multiple criteria click "Add rule", and select "And" or "Or" depending on whether all, or either rule must match to return a result.

6.3. Project Pages 39

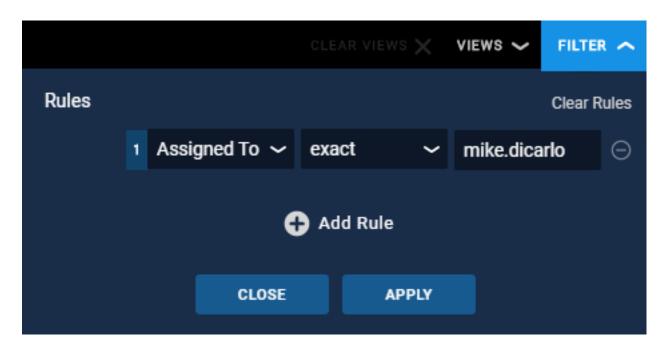


Fig. 7: Building a filter.

#### **Saved Views**

All list views support saving configurations from the View menu in the top right of the header. Views can be saved for yourself (User) and system-wide (System). Saved views will appear along the top of the list view as tabs.

## **Loading Records**

List Views will automatically load more records when you scroll to their bottom.

#### 6.3.3 Detail Views

Detail views present all information associated with an Entity, Task, or Process. They open in modal windows (on top of wherever you access them from) so that you can access them without navigating away from your current place in the application.

You can open a detail view by clicking on a task's name from a List View, or on the Kanban Board.

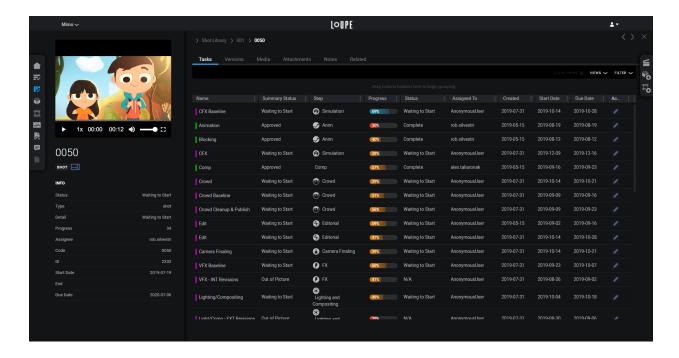
The media view is divided into two components. On the left side you will find the name of the task, and the same information that is presented on the back of the card in the Kanban view. If Media, or a thumbnail is associated with this task the latest Media will appear above the task name.

On the right side are tabs for the items associated with this task.

#### **Tabs**

#### **Tasks**

A list view of all Task entities that are children of this task.



#### **Versions**

A list view of all versions that are associated with this task. Versions are created by "Saving" files in the Asset Manager, or via the API.

#### Media

Media is the images or videos associated with this task. Media is added from the back of the card, or via the API.

#### **Attachments**

Attachments are arbitrary files that can be added to the this task.

#### **Notes**

Notes is a list view of Notes associated with this task. Notes can be added from the back of the card, or from a Review.

### Related

Related is a list view of other entities associated with this task. For example, if you're viewing a Shot, Related may include assets that are used in this shot.

Entities can be linked to eachother from this tab, by searching for them by their code in the available input.

6.3. Project Pages 41

## 6.3.4 Kanban

The Kanban board offers a visual system for managing all of the processes involved a production of any scale. You can view the entire workflow, as well as the individual units of work that pass through it. With Kanban you'll be able to track progress, identify bottlenecks, and minimize waste.



Fig. 8: LoUPE's Kanban board.

#### What is Kanban?

Kanban is a project management technique that aims to manage work from start to finish while avoiding bottlenecks. Typically the Kanban process is visualized on a Kanban board, where work is represented by cards, and steps in a process represented by columns (called swimlanes.) As work progresses, the cards are moved from one column to the next, providing a visual representation of progress.

#### **Kanban Terminology**

Kanban introduces some unique terminology which is helpful to understand when reading this documentation.

Term	Definition
Swimlane	A column on the Kanban board.
Status	A step in the process, represented by swimlane.
Card	Any item on the Kanban board. Represents a unit of work.

#### 3D Kanban

Unique to LoUPE is the concept of a "three-dimensional" Kanban board, which is our term for having a series of nested Kanban boards.

Clicking on a card that indicates thre-dimenisionality will take you one level deeper on the Kanban board, to a new board where all cards associated with the parent will be displayed with their own set of status. For example clicking on a Shot card will take you to a Kanban board containing the processes associated with that shot (say, Animation, Layout, and Compositing), which will be displayed with their own set of statuses (say Waiting to Start, In Progress, Pending Review, and Complete). Clicking on any of those processes will take you one level deeper, to a new board displaying all of the individual tasks associated with that process.

In this way, smaller units of work (like Shots, or Assets), or smaller teams (like a Rigging, or Animation department) can manage their own separate processes within larger projects and productions.

#### Libraries

Libraries are organizational constructs which contain the entities, processes, and tasks associated with Shots and Assets. Every project has an associated shots library, and assets library created automatically. The Kanban board reflects the project heirarchy, so you will find the libraries at the root.

#### **Entities, Processes, Tasks**

Entities, Processes, and Tasks are the three elements at the core of project management in LoUPE, which are represented by cards on the Kanban board. Collectively, these are often referred to simply as "tasks".

#### **Cards**

The icon on the left side of a card indicates its type. Or, if the card has media uploaded to it, that media will be displayed as a thumbnail on the left side of the card, and the card's type icon will appear in the lower right.

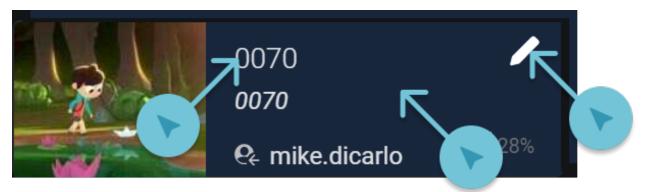


Fig. 9: A hovered card with 3 "hitpoints" indicated.

Cards have three hitpoints (places to click):

- 1. Clicking on the pencil icon in the top right (visible when a card is hovered) opens the back of the card.
- 2. Clicking on the card's name opens the Detail View for the task.
- 3. Clicking in the middle of a card that has subtasks (indicated by a three-dimensional backdrop) will drill down to the board for the subtasks.

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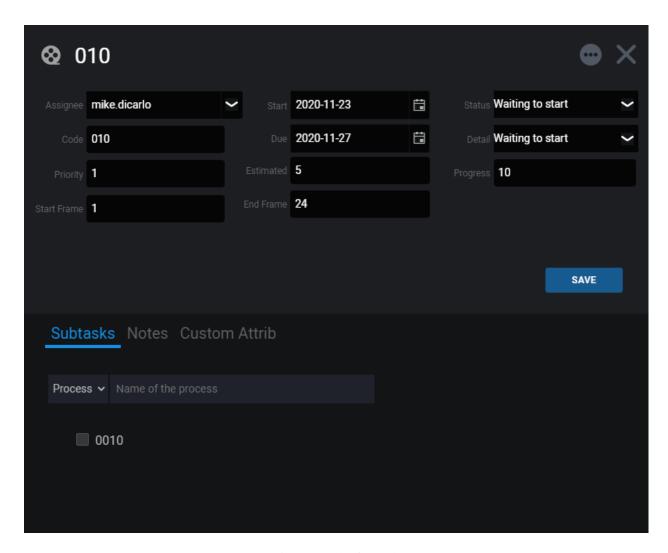


Fig. 10: Back of a card.

#### **Back of the Card**

If you think of the cards on the Kanban as physical cards on a board, their "backs" are a place to keep important information close at hand. Clicking on the pencil icon will open a modal window with additional information about the Entity, Process, or Task.

Field	Description
Asignee	The user assigned to this work.
Code	The unique shortcode for this Entity, Process, or Task.
Priority	An integer representing the priority of this task.
Start Frame	The first frame to work on if this is a Shot.
Start	The date that this task is scheduled to being.
Due	The date that this task is scheduled to complete.
Estimated	The estimated number of days for this task to be completed.
End Frame	The last frame to work on if this is a Shot.
Status	The Summary Status for this task.
Detail Status	The Detail Status for this task.
Progress	An integer representing the percent of completion for this task.

In the lower part of the card back are 3 additional tabs.

#### **Subtasks**

If this task has subtasks they are displayed here. You can also add subtasks using the available input.

#### **Notes**

If this task has any Notes made on it they are displayed here. You can also add Notes using the available input.

#### **Custom Attrib**

If this Entity, Process, or Task has any custom attributes associated with it, they are displayed here. You can edit them with the available inputs.

In the top right of the card back, there is an "Actions" menu represented by three dots. From this menu you can Upload Media for the task, access the task's Detail page, and delete the task.

#### **Entities**

Entities typically reflect deliverable work products, such as shots or assets, or collections of these products, such as episodes, which may contain many sequences, and sequences, which may contain many shots.

#### **Processes**

Processes are groups of tasks, representing a series of steps to be taken to complete a given stage of production. An example process might be "Modelling", and contain the tasks "Low-Res Model" and "High-Res Model", or "

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#### **Tasks**

Tasks are the smallest atomic unit of the Kanban board, reflecting specific work to be completed.

#### See also:

The project templates that LoUPE provides come with these models predefined. To customize the types of entities, and/or to create templates of entities, processes, or tasks, consult the Administration setion.

#### Statuses & Swimlanes

Each swimlane represents the status of the entity, process, or task. They are typically arranged from least complete on the left, to most complete on the right.

#### **Detail & Summary Statuses**

LoUPE introduces the concept of Detail Statuses and Summary Statuses to help companies simplify reporting across many productions, each of which may have different processes.

A Detail Status must always map to a Summary Status, and many Detail Statuses may map to the same Summary Status. For example, a production that uses Detail Statuses of "Bidding" and "Waiting to Start" may map both to the Summary Status "Waiting to Start". In Company-level reporting, shots in either status will be considered "Waiting to Start". In this way complex processes with many steps can be visualized as simplified, standardized processes when a higher-level view is required.

#### **Detail Statuses**

Detail Statuses are defined at the project level, on the Project Overview page's Settings tab.

#### **Summary Statuses**

Summary Stauses are defined at the company level, on the Company page's Settings tab.

#### **Updating Statuses**

Stauses are updated by dragging and dropping cards from one swimlane to another, or by picking from the "Summary Status" and "Detail Status" dropdowns on the back of a card.

When you move cards between swimlanes, their Detail Statuses will be updated to that of the swimlane, and their Summary Statuses will be updated based on the mapping established between the Detail Status and a Summary Status.

You can switch between Detail Status and Summary Status swimlanes with the Status Switcher in the top right of the Kanban Board interface.

#### 6.3.5 Media

LoUPE's Media page is similar to a *List View* and suports much of the same functionality, including filters, and saving views.

LoUPE supports still images, and videos, and indicates the media type with an icon in the lower right of the Media card. Video media can be previewed by moving the mouse backwards and forwards over the thumbnail.

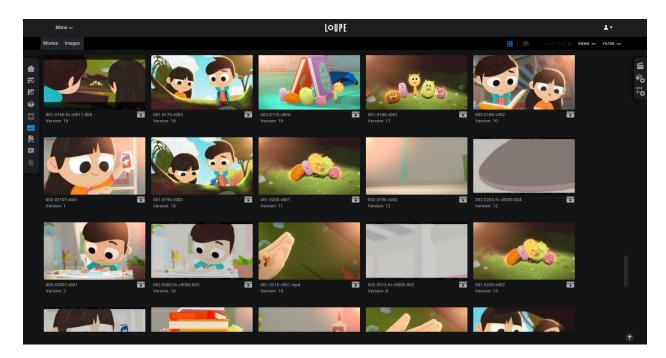


Fig. 11: LoUPE's Media page.

Clicking on the Media thumbnail will open its Detail View.

#### **Media Detail View**

Media also has a detail view similar to the Detail Views for tasks. Clicking on a Media thumbnail will open a modal window (on top of your current place in the application).

On the left of the Detail View is a player which loads the latest version of the media by default, along with information about the Media itself. On the right are two tabs, one containing a list of all versions of this media, and one containing a list of all Notes made on this media.

#### **6.3.6 Notes**

LoUPE's Notes page is similar to a *List View* and suports much of the same functionality, including sorting and grouping.

The Notes list adds the ability to expand a note by clicking on the chevron to the left of the author's name to see all of its replies (indicated by an icon at the end of the "Text" field), and an action to create new notes directly from the list view by clicking on the "+" icon in the "Text" column's header.

#### 6.4 Reviews

LoUPE's Real-time Review tool allows users to watch media synchronously and collaborate with eachother in real-time.

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Fig. 12: A Media Detail View.

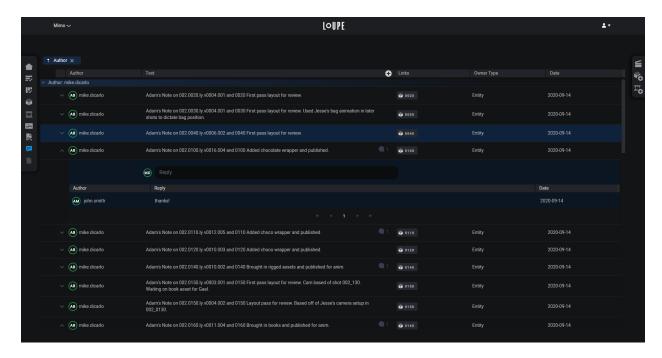


Fig. 13: LoUPE's Notes Page, grouped by author, and showing an expanded reply.

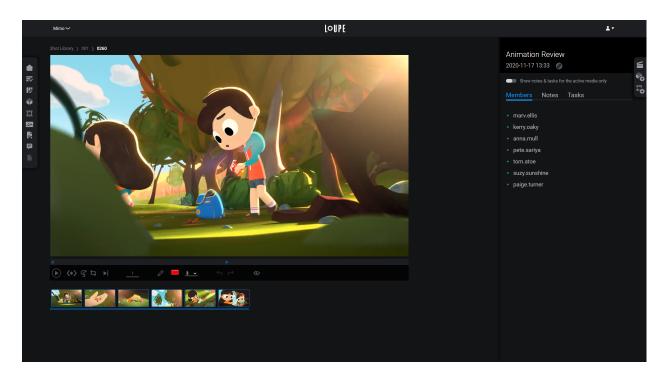


Fig. 14: LoUPE's review tool with the Members tab active.

## 6.4.1 Creating & Managing playlists

From within a project the Playlist Manager is always accesible from the Project Actions Menu. The Playlist Manager will list all Playlists by default, but which playlists are displayed can be customized using the *List View* filter functionality.

#### Creating a Playlist

Click on the Create a playlist button at the bottom of the view to start a new playlist.

The drawer will switch from the List View to a form where you'll name your playlist, provide an optional description, and add media.

#### **Adding Media**

Media is added by dragging and dropping it to the designated area in the form from anywhere in the application. This could be on the Media page, the Media card of the Overview page, the Media tab of a detail page, or the back of a card.

## 6.4.2 Starting a review

Start a review of a new playlist by clicking on the *Save & Play* button at the bottom of the Edit Playlist form, or by clicking on the large *Play* icon in the playlist's entry in the Playlist Manager list.

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## 6.4.3 Adding members to a review

Once you've started a review, you can click the *Share link* button and a link to your live review session will be copied to your clipboard. You can share this with team members to navigate directly to your review.

Team members can also join a review from the playlist manager in the same way as starting a review.

## 6.4.4 Playback controls

#### 6.4.5 Annotations

To make annotations activate the pen tool in the video player's toolbar. You can change the colour and size to suit your needs, and beging drawing on the current frame. Other members of the review will see your annotations in real-time.

To remove an annotation, use the undo and redo buttons in the video player's toolbar.

#### **Finding Annotations**

To jump to the next or previous annotation, click on the *Next annotation* or *Previous annotation* button in the video player's toolbar.

## 6.4.6 Making Notes

Create Notes from the Notes tab at the right of the Review interface. You can reply to an existing note with the "Reply" button. Notes appear in realt-time for all users.

Notes support mentioning people, and teams, with the "@" symbol. Enter it into a note body and an autocomplete list will appear, and filter as you type.

## 6.4.7 Creating Tasks from review notes

To create a task directly from a note in a review click on the *Create task* icon in the toolbar at the bottom of a note.

All Tasks created from this review are visible on the Tasks tab.

## 6.5 Administration

This section covers advanced settings, tools, and concepts for the LoUPE administrator.

## 6.5.1 User Management

#### **Adding Users**

To add user accounts to LoUPE, click on the User menu icon in the upper right corner of the LoUPE web interface, and then click *Company* in the drop-down list.

On the Company Page, click on the *People* tab, then on the *Add user* icon.

Input the new user's details. Then click on the + icon at the right to create the user. Note that when you do this, the new user will receive an email that directs them to LoUPE and asks them to set their password.



Fig. 15: Click Company in the User menu dropdown list.

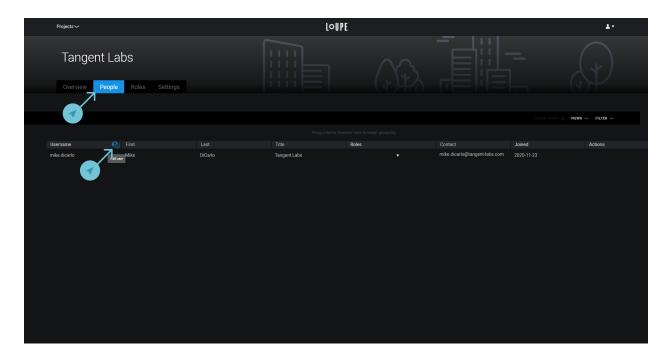


Fig. 16: On the *People* tab click the *Add User* icon.

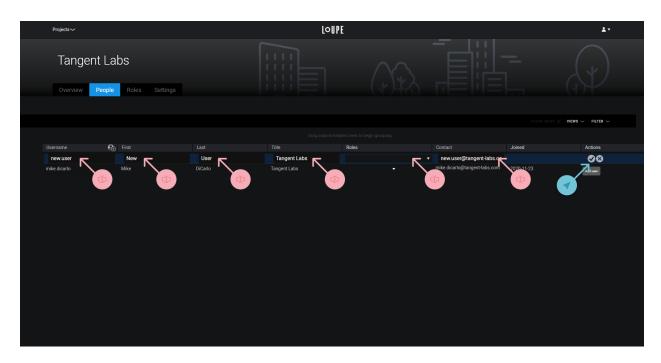


Fig. 17: Fill in the required fields and click the + icon.

## 6.5.2 Custom Templates

Custom Templates allow you to define the structure of your project. This allows the creation of your own pipeline, specific to a department or show. You can also create your own statuses and map them to a workflow.

**Warning:** Custom Templates is an advanced feature of LoUPE. Your custom templates should be thoroughly tested before using them in production.

#### Video

In this video we recreate the built-in Episodic template from scratch using the type and template features added in version 1.1.

#### Walkthrough

In this example, we'll create an Entity called "Character", allow it to be created in the Asset Library, and give it a template so that anytime we make a Character, it has a Rigging process, and a Modelling process, both with a Base and Final task. The structure will look like this:

```
Character (Entity)
Rigging (Process)
Base (Task)
Final (Task)
Modelling (Process)
Base (Task)
Final (Task)
```

Our Character will function just like the Asset entity, except by creating this custom Type we'll be able to define a custom template specific to our Character-building workflow.

#### **Steps**

#### **Create a New Project**

When working with custom templates, the easiest way to start is by creating a new project, and selecting the "Minimal Template".

This template makes the fewest assumptions about the data in your project, but still includes some pieces that LoUPE currently requires to function, like entities for Shots and Assets.

#### Go to the Templates Tab

On the overview page for your new project, go to the templates tab, by default you should be on the Types view, but if not, switch to it, where you'll see a list of existing Types grouped by what they represent.

LoUPE has several base Types which you can extend to customize your projects:

Li-	Currently read-only containers for Shots and Assets, although you can edit their allowed children.	
brary		
En-	Anything on the project that has child entities, processes, or tasks that go into completing it. For example,	
tity	a Shot (has child processes or tasks), or a Sequence (has child Shots).	
Pro-	A team, department, or step that goes intro creating an entity. Processes will have sandbox and publish	
cess	areas for asset management. Can also be a container for other processes and tasks.	
Task	Any specific unit of work. Tasks are for project management only, and do not have a representation on	
	disk.	

#### **Create a New Type**

In the "Entities" group, click the "Create New" button. An editor will open on the right side of the interface.

To create a type you'll need to supply a Name, Category, and Type (code).

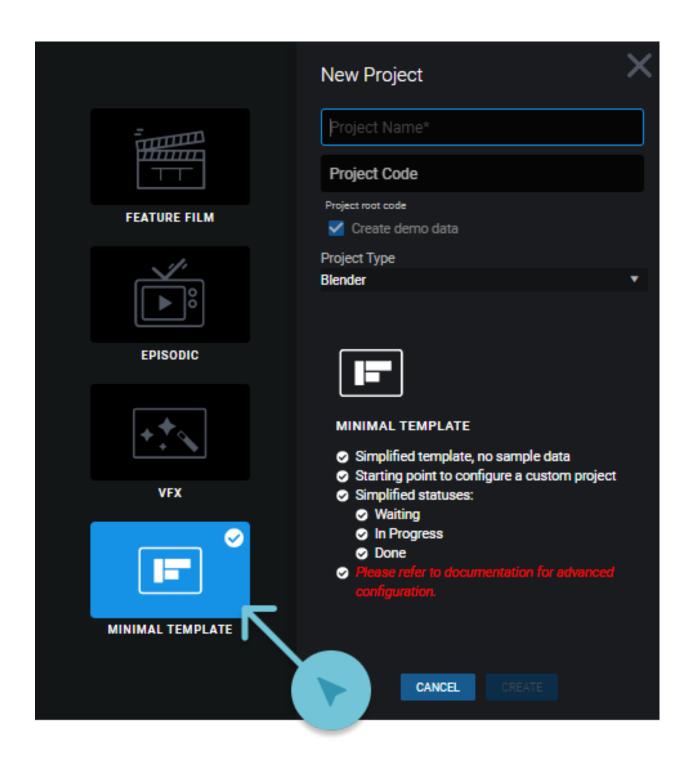
Name	Name How this entity will be referred to (in the UI).	
Category	Whether this asset should be associated with shots or assets for project management purposes.	
Type	How this entity will be referred to on disk and via the API.	

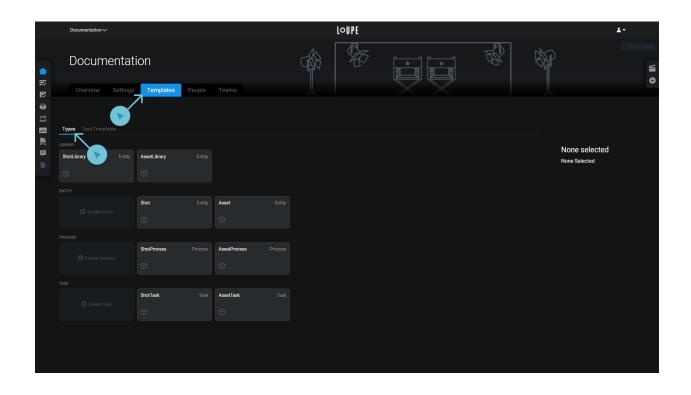
Also scroll down to the Allowed Types section in the editor, and enable "Asset Process" so that we're able to create Asset Processes (LoUPE created these as part of the Minimal Template) as children of Characters.

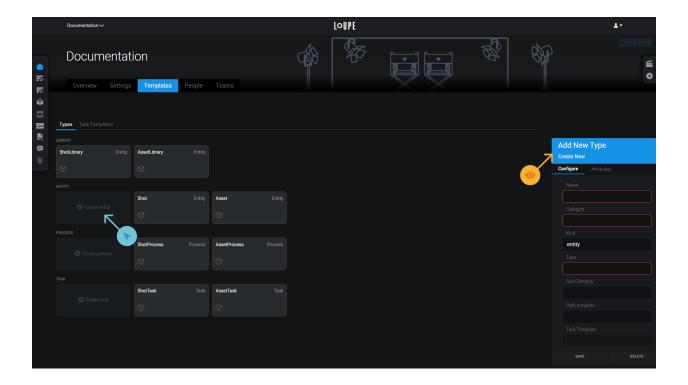
#### Add Type to Asset Library

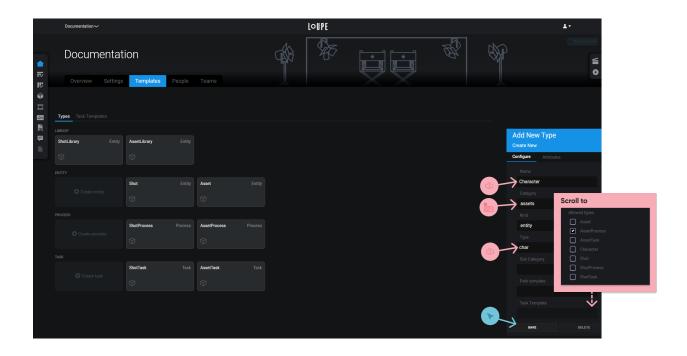
Now you have a new type, but until you allow it as the child of another Type, it can't be created anywhere. Select the Asset Library, and scroll down to its Allowed Types in the editor.

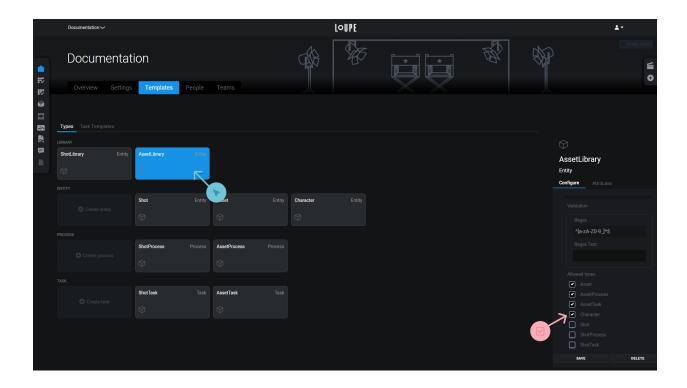
Enable Character and click Save. Now we can create Characters in the Asset Library. (You can test this by opening the entity creation drawer from the Action Menu.)









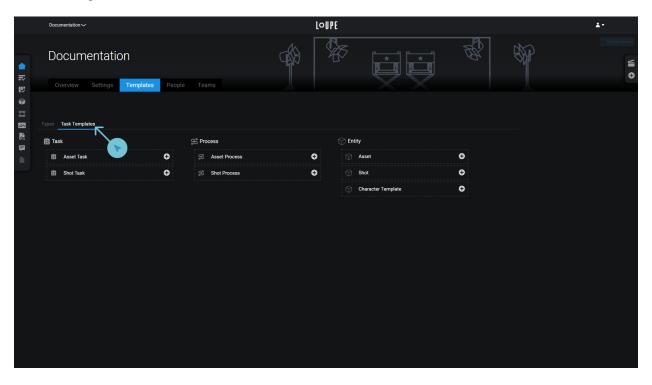


At this point, you can start creating Characters, but we'll also add a template so that when we do create a Character, we get some Processes and Tasks set up for us automatically.

### Set up a Template

In order to have LoUPE automatically create processes and tasks for us when we make a new instance of a type, we need to define a template.

Switch to the "Task Templates" tab. You'll see one template for each Type, including the Character Type that we created in the previous section.



Click the "Add Child" button on the Character template, and an editor will open on the right side of the interface. Fill in the Name (we'll call this process "Rigging", Code ("rig"), and Type (because we only AssetProcesses when we defined the type, this is all we can pick form here).

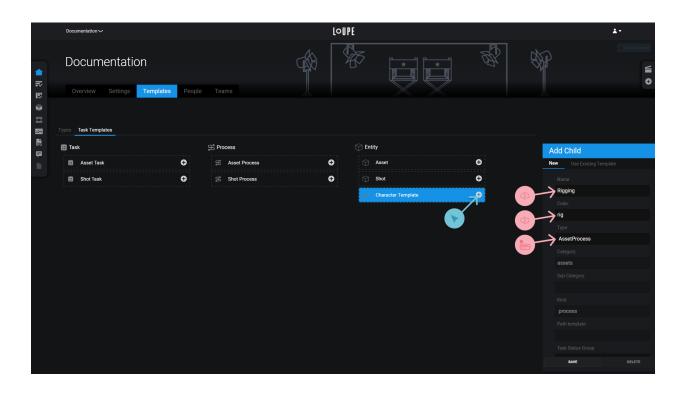
Name	How this process will be named.
Code	A short code that will be used to refer to this process on disk.
Type	What Type of child we want to create.

Repeat this process to add two child AssetTasks to the Rigging process.

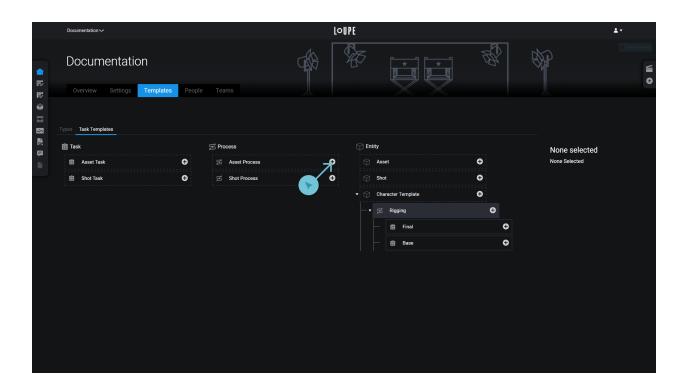
#### **Nested Templates**

Instead of adding these child tasks to each process that we template manually, let's add them to the AssetProcess template itself. This will create them automatically when we include an AssetProcess in another template.

Click the Add Child button on the Asset Process and repeat the previous steps.

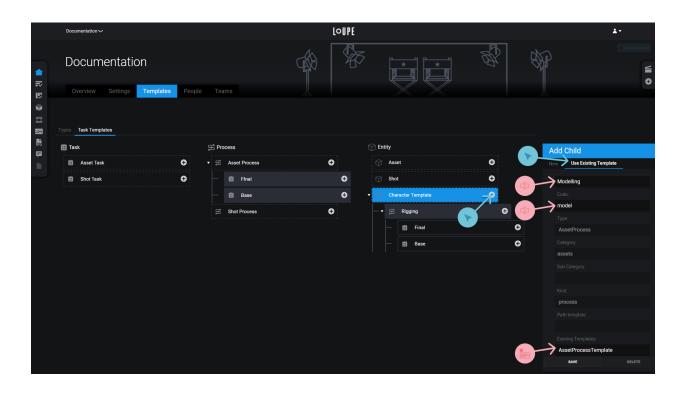


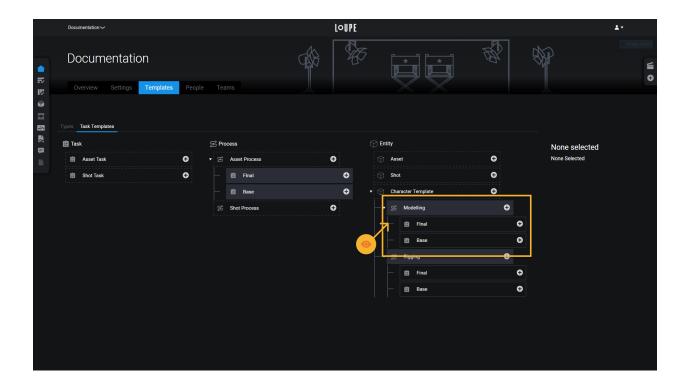




Then, click Add Child on the Character Template again, and switch the editor to "Use Existing Template". Fill out the Name ("Modelling"), and Code ("model") as before, then choose "Asset Process Template" from the "Existing Templates" dropdown.

This will add a child AssetProcess along with the tasks from its template.





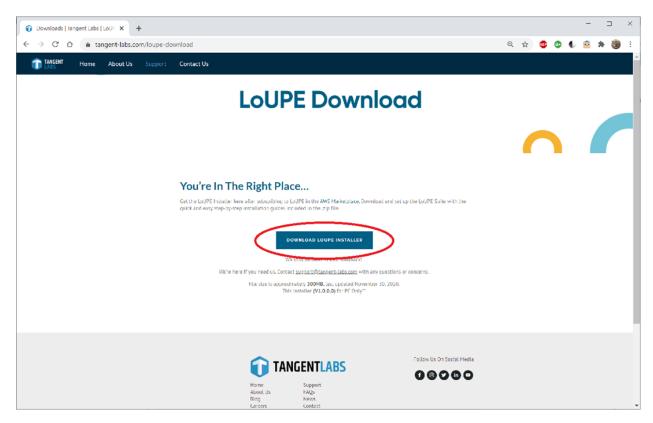
# $\mathsf{CHAPTER}\ 7$

LoUPE Suite

The *LoUPE Suite* is a software package which includes the Blender Asset Manager, Maya Asset Manager, Thinkbox Deadline, and the LoUPE Client API.

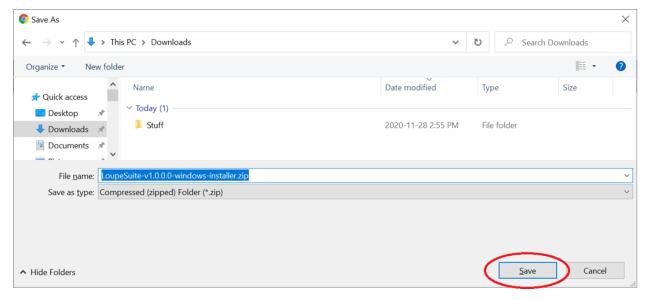
## 7.1 Download the LoUPE Suite Installer

To get the desktop LoUPE Suite installer, visit the Tangent Labs downloads page here: https://www.tangent-labs.com/loupe-download

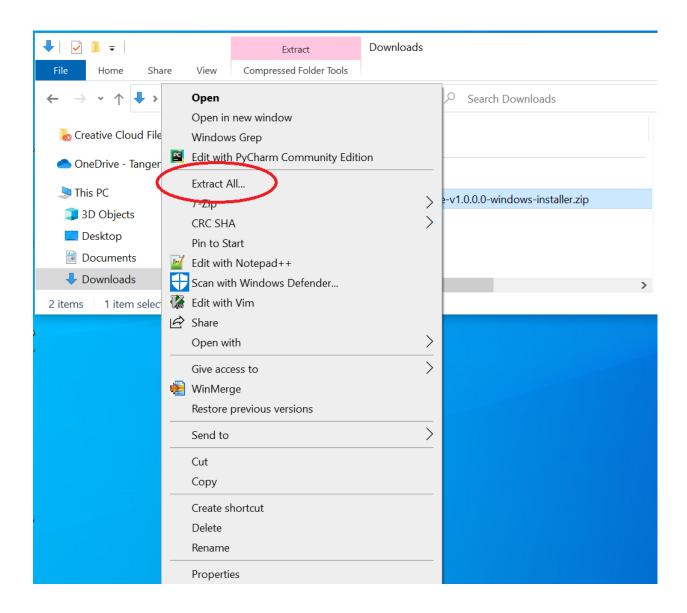


#### Click "DOWNLOAD LOUPE INSTALLER".

An Explorer dialog will open so you can save the file to your local storage. Browse to the location where you wish to put it and click the Save button.



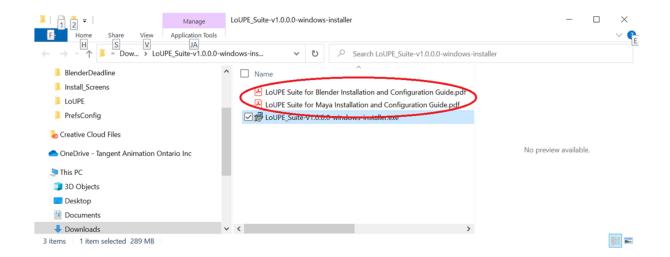
This will download the zip file to your local storage. Once the download is completed, navigate to your local storage location containing the installer zip file.



## 7.2 Select an Installation and Configuration Guide

The extraction will create a sub-directory with the same name as the zip file without the extension. Note that the sub-directory will contain Installation and Configuration guides. Select the guide that is appropriate for you to continue with your LoUPE Suite installation and configuration.

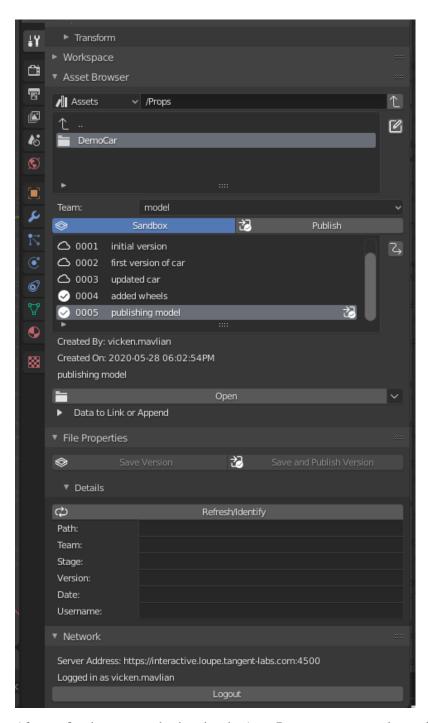
#### LoUPE Manual, Release 2020



# CHAPTER 8

## Blender Asset Manager

LoUPE's *Blender* Asset Manager allows you to work with all of your asset files that are part of your LoUPE project. It's the primary Blender interface for creating, opening, saving and publishing asset files. Asset files are automatically versioned and will download/upload necessary files from the cloud when needed.

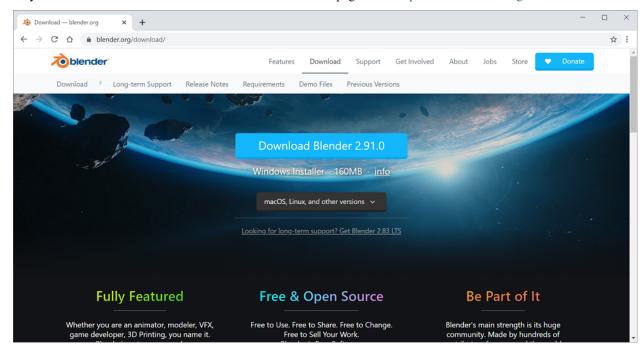


After configuring, you can begin using the Asset Browser to create, select and open asset files.

## 8.1 Installation

## 8.1.1 Prerequisites

Prior to installing the *LoUPE Suite* for Blender, you must have a certified version of Blender installed from one of the Blender Foundation's msi installers. If you do not have it installed, you must do so first. We support v2.81 and higher



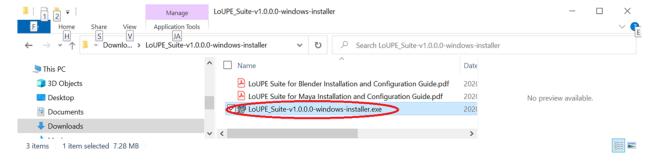
only. Installers can be found on the Foundation's downloads page here: https://www.blender.org/download/

Please download and run the installer if required.

#### 8.1.2 LoUPE Suite Installation

#### Run the Installer

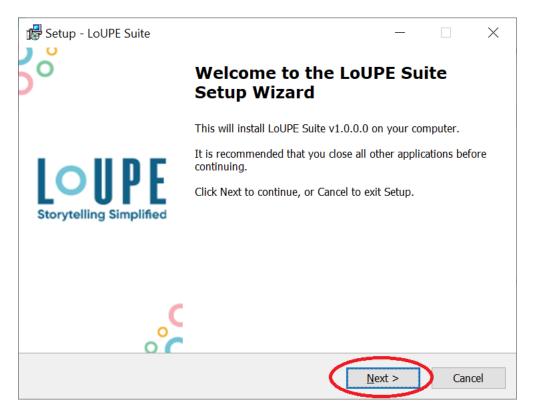
Navigate to the location where you have extracted the *LoUPE Suite*. zip file. Double click on the installer .exe file to run it. If you do not have permission to do so, you may require assistance from your network administrator.



#### **Initiate Installation**

Click **Yes** on the system dialog that appears, to allow the installer to proceed. You will see the LoUPE Suite install welcome dialog.

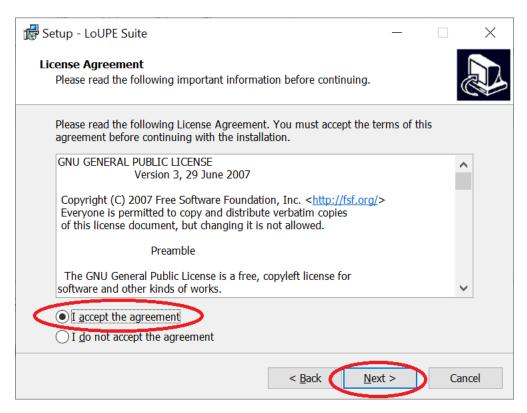
8.1. Installation 67



Click on the "Next >" button to proceed.

## **Licensing Agreement**

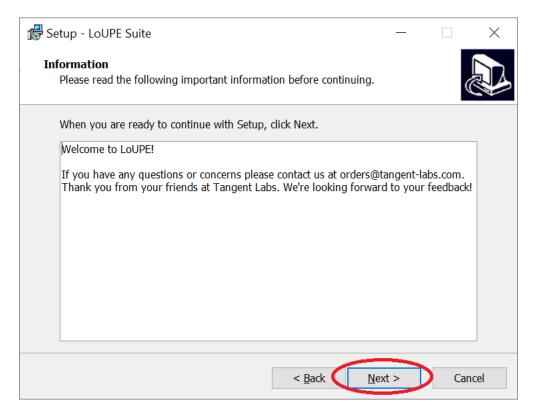
You will see the license agreement dialog.



Click "I accept the agreement" and the "Next >" button.

#### **LoUPE Suite Information**

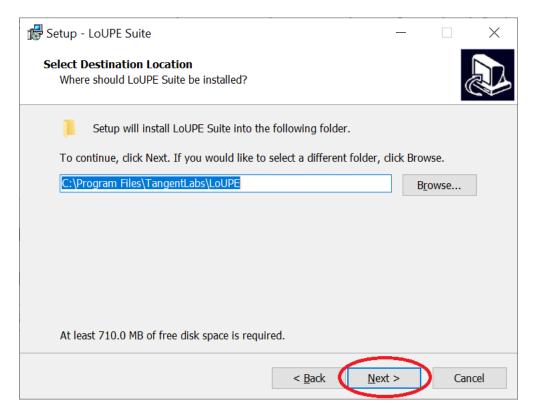
You will see the LoUPE Suite information dialog.



Click on the "Next >" button to proceed.

#### **Install Location**

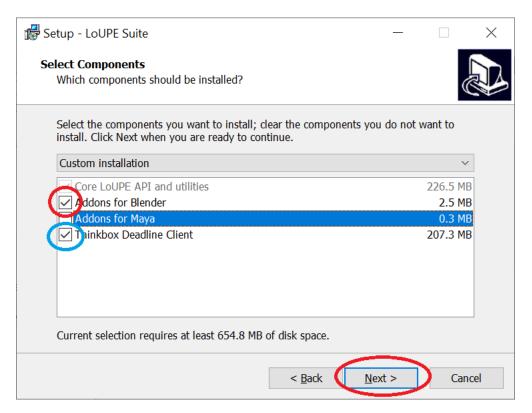
You will get a dialog to set the install folder location. You can use the "Browse..." button to change from the default if required.



Click the "Next >" button to proceed.

#### **Component Installation List**

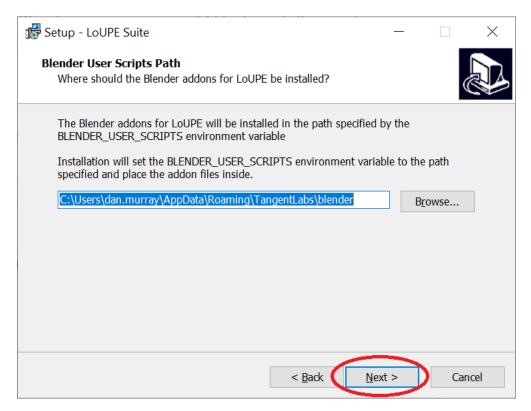
You will see a dialog showing the components selected to be installed and disk space requirements. If installing for Blender only, de-select Addons for Maya. The Thinkbox Deadline Client is optional and required only for rendering.



Click the "Next >" button to proceed.

#### **Blender Install Location**

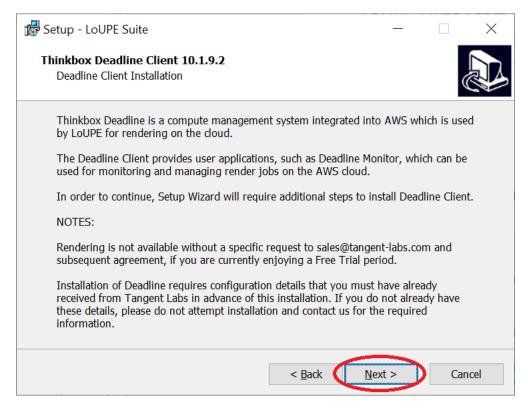
You will be presented a dialog to browse to the location to install the LoUPE addons.



You can use the "Browse..." button to change from the default and browse to another directory if required. Click the "Next >" button to proceed.

#### Thinkbox Deadline (optional)

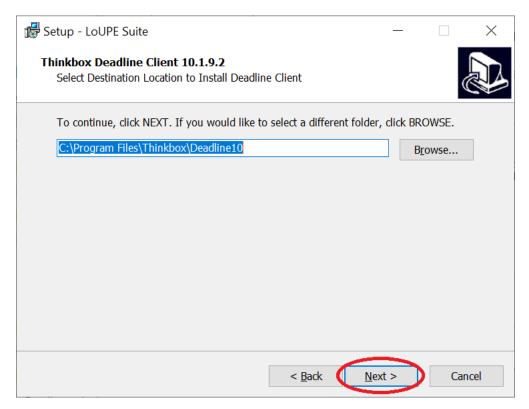
You will see an informational screen with Deadline installation details.



Click the "Next >" button to proceed.

#### **Deadline Install Location (optional)**

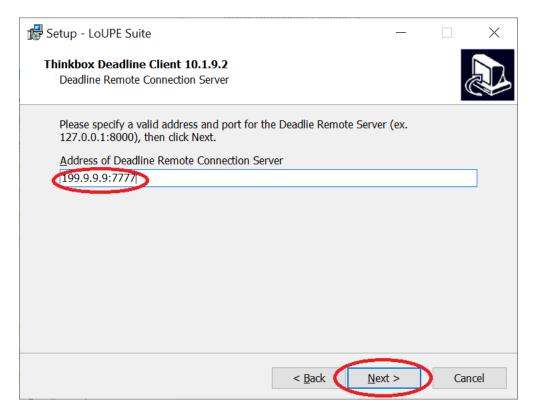
You will be presented a dialog to browse to the location to install Deadline.



You can use the "Browse..." button to change from the default and browse to another directory if required. Click the "Next >" button to proceed.

#### **Deadline Server Address**

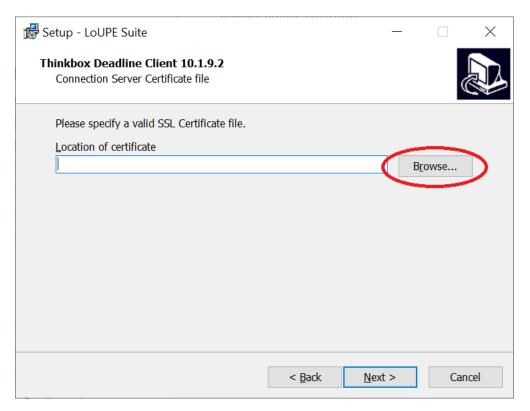
You will be presented a dialog to enter the Deadline server Id and port number. This will have been sent to you via email from Tangent Labs. Please copy and paste the details from your email.



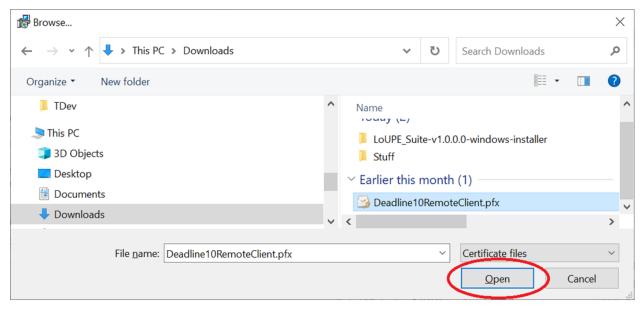
Click the "Next >" button to proceed.

#### **Deadline SSL Certificate**

You will be presented a dialog to provide the Deadline SSL certificate. The certificate will have been emailed to you. Be sure to download the file to a location you can browse to and update here.

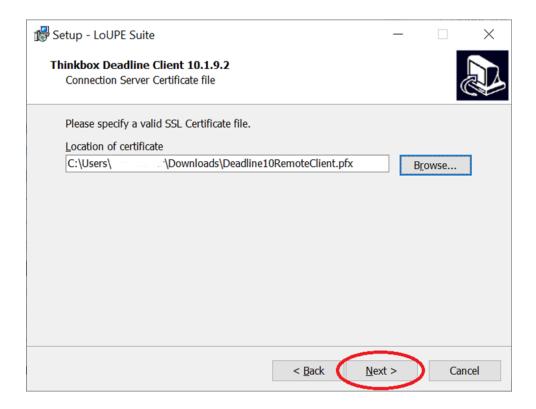


Click "Browse" to open an Explorer window.



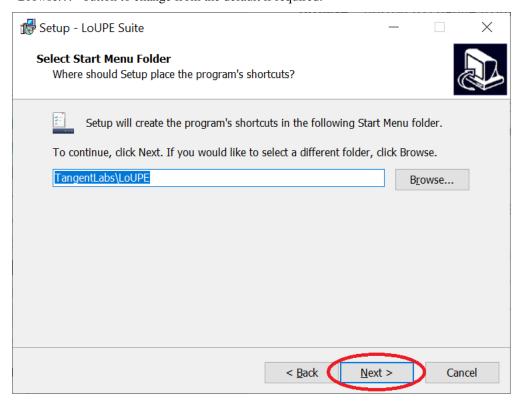
Click "Open" after selecting the appropriate file.

Click "Next >" in the certificate dialog to proceed.



#### LoUPE Suite Start Menu

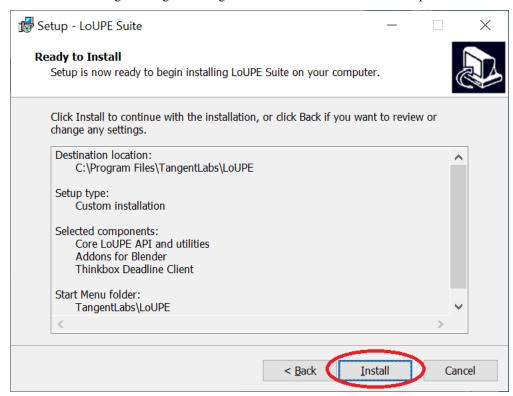
You will be presented the dialog to configure where the LoUPE Suite start menu folder should be. You can use the "Browse..." button to change from the default if required.



Click the "Next >" button to proceed.

## **Installation Configuration**

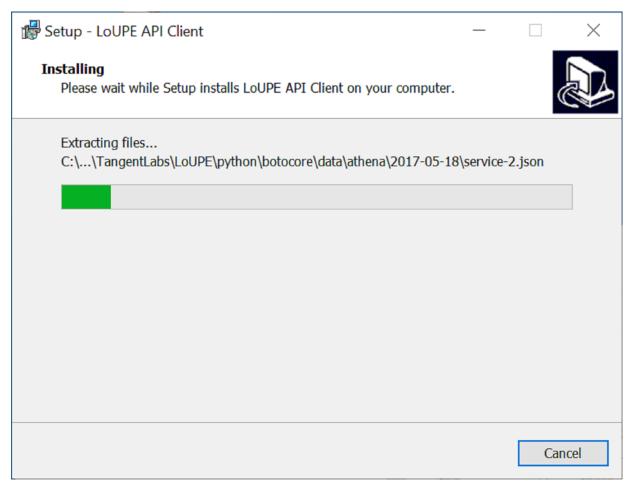
You will see a dialog showing the configuration for the install that's about to proceed.



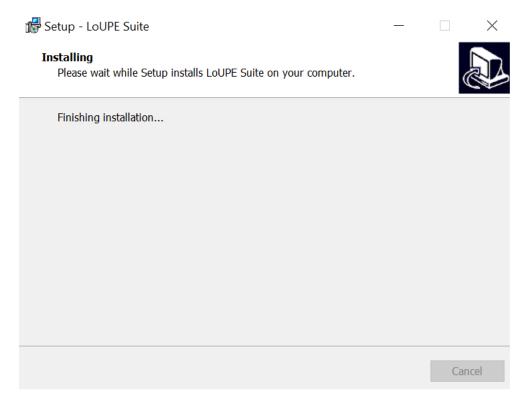
Click the "Install" button to proceed.

#### Installation

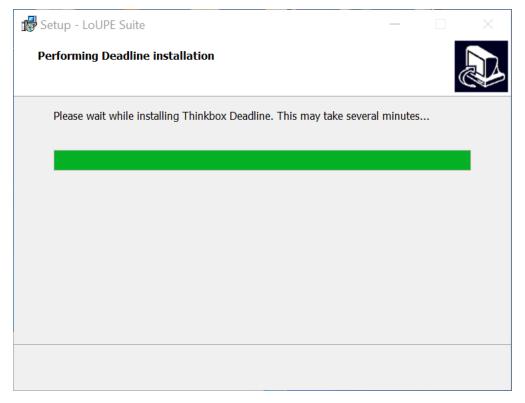
The installation will commence, and you will see its progress.



You will get a dialog indicating finishing of the Blender addons.



Then you will get a dialog informing you of the Deadline install.



Finally, you will see the last dialog of the installation process.



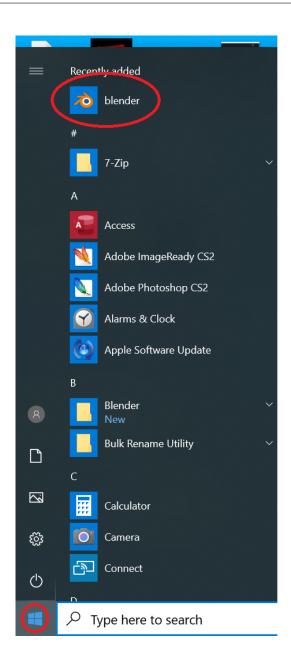
Click the "Finish" button to complete the installation.

You can now proceed to the *Configuration* section to get started with the *Blender* Asset Manager.

# 8.2 Configuration

## 8.2.1 Finding and Launching Blender

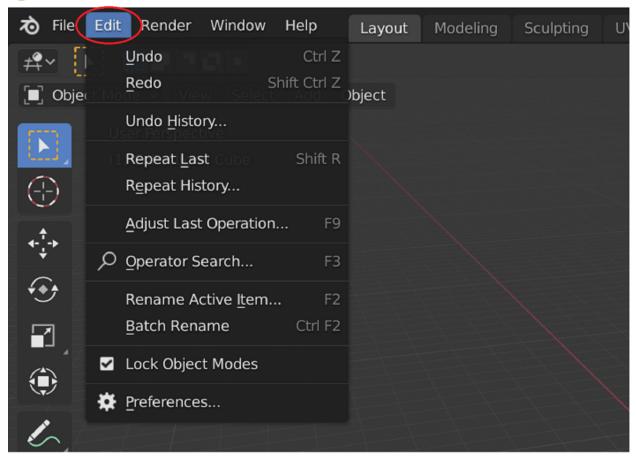
Depending on how you have installed Blender, you may see a shortcut on your desktop. Additionally, if you have just completed its installation, you should find it at the top of the dialog under "Recently added", when you click on the Microsoft Start Window icon in the lower left corner of your desktop. Click the Blender icon to launch it.



## 8.2.2 Go to Preferences

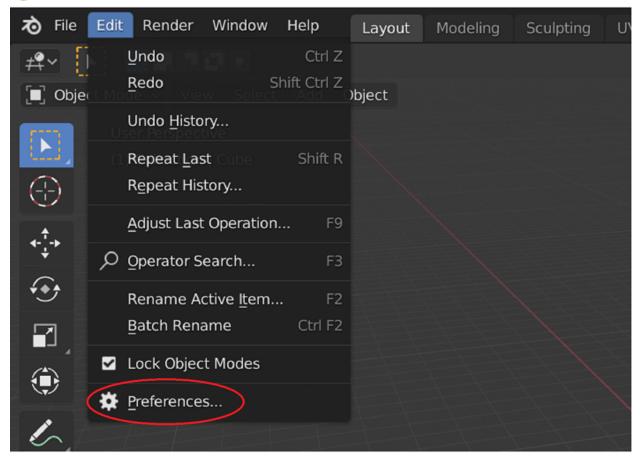
Click on the "Edit" menu to show its menu selections.

## **₹** Blender

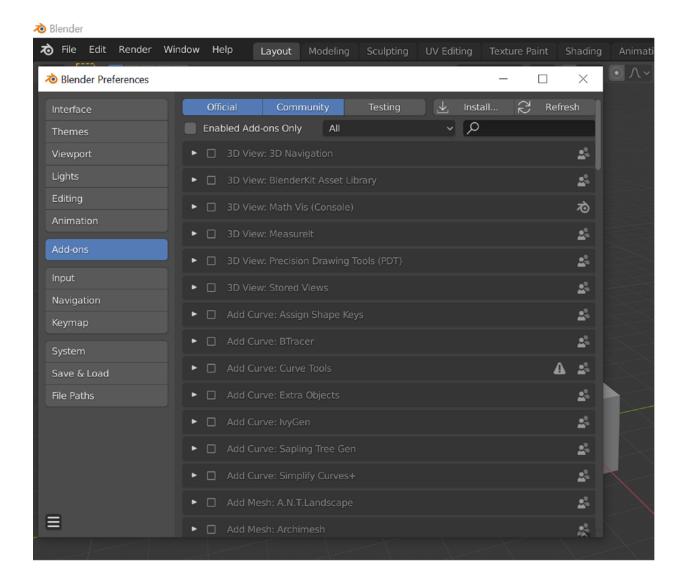


Click on "Preferences..."

## **₹** Blender

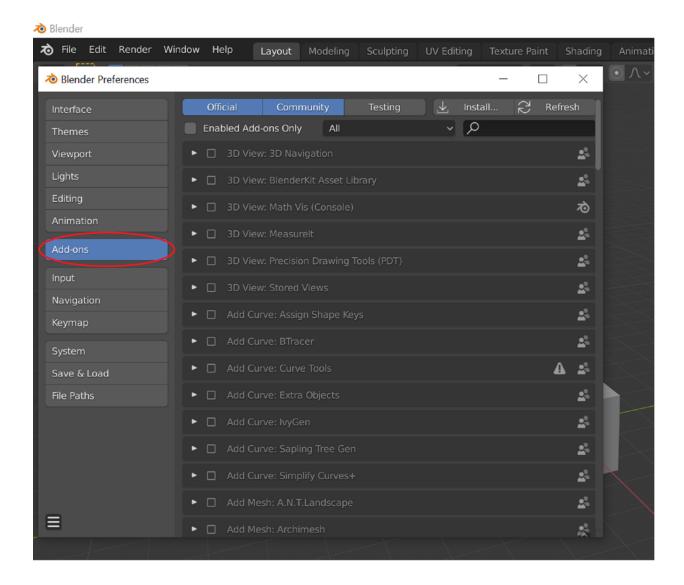


This will open the Preferences dialog.



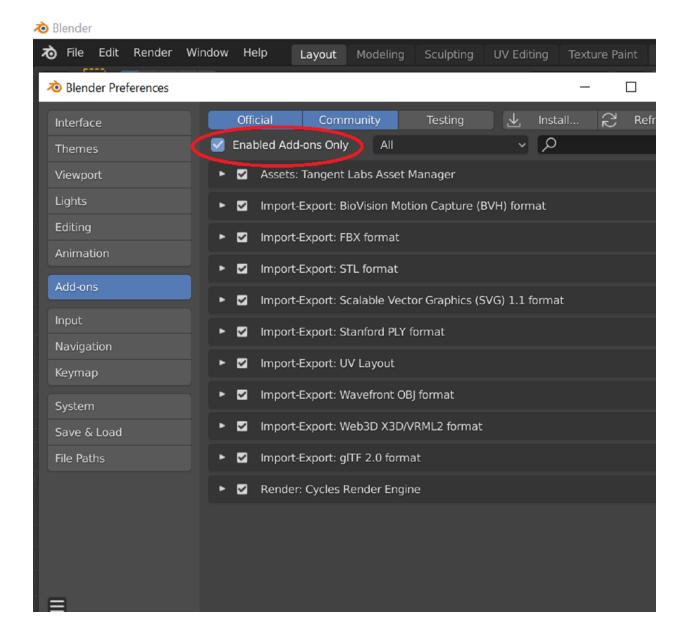
#### 8.2.3 Add-ons Tab

Click on the Add-ons tab if it is not already selected.



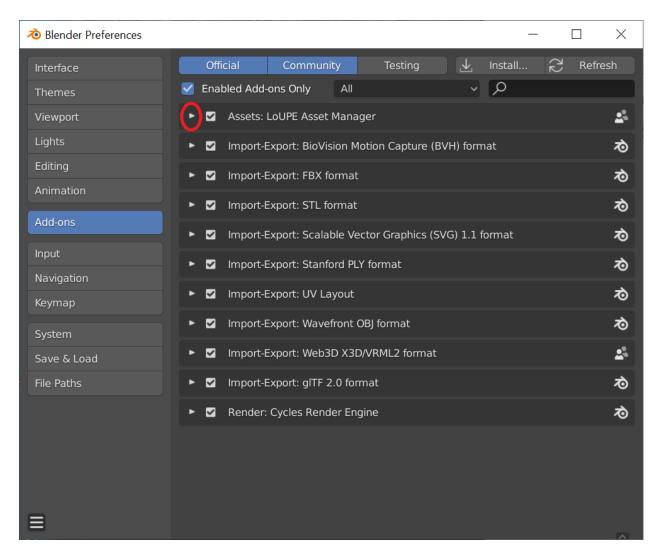
#### 8.2.4 Filter to Enabled Add-ons

Check the "Enabled Add-ons Only" box to limit what is shown. You will likely see "Assets:Tangent Labs Asset Manager" in the list of entries. If not, you can use the search field to find it.

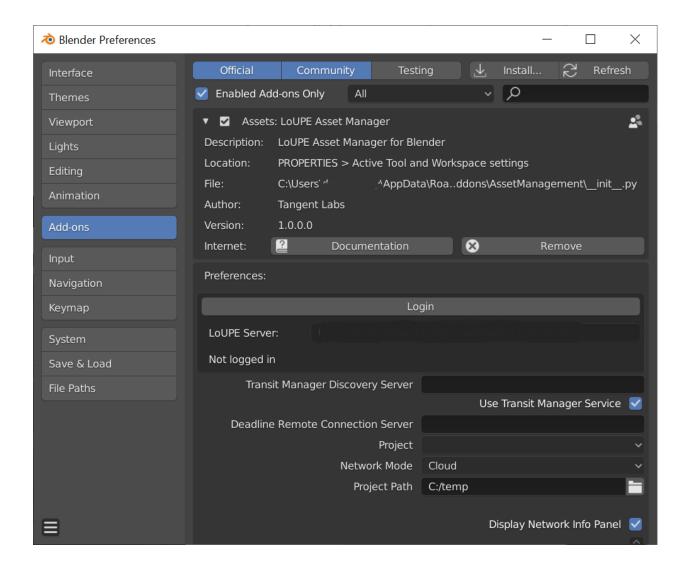


## 8.2.5 Expose Asset Manager Preferences

Click the Add-on expansion widget in the left column of the "Assets: LoUPE Asset Manager" entry.

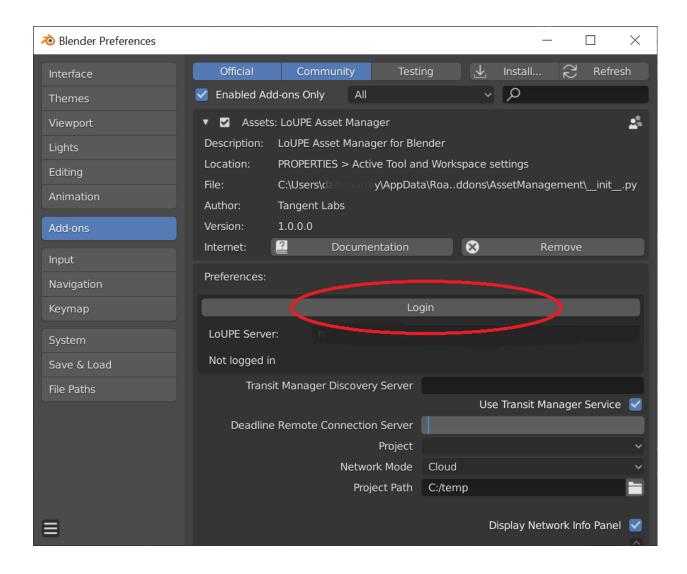


The detail fields of the Add-on will be shown.



## 8.2.6 Open the Login Dialog

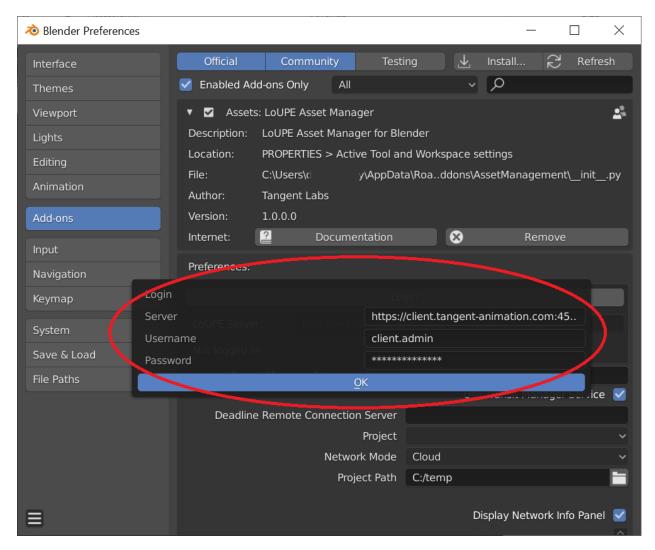
Click on the Login button to open the Login dialog.



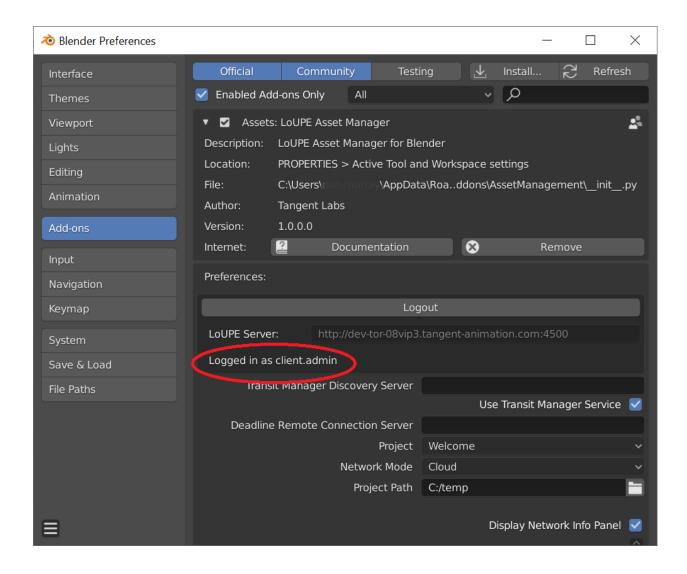
#### 8.2.7 Enter Server Address and Login Credentials

You should have been sent your LoUPE instance address (URL) and Admin login account details from Tangent Labs. Copy the text for your instance URL and paste it into the "Server" input field. Enter your login credentials in the "Username" and "Password" fields, then click "OK".

The server URL must be followed by a port number - : 4500. That is, if your URL is https://client.loupe.tangent-labs.com, the server field should be populated with https://client.loupe.tangent-labs.com: 4500.

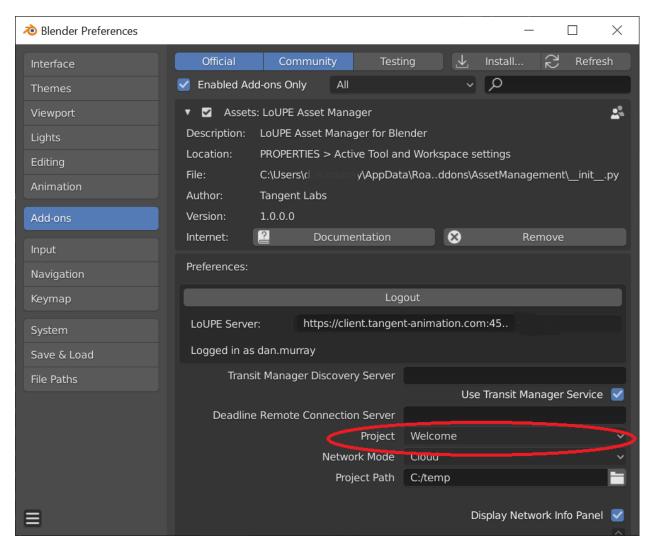


The Add-on preferences page will update to show that you are logged in.



## 8.2.8 Select a Project

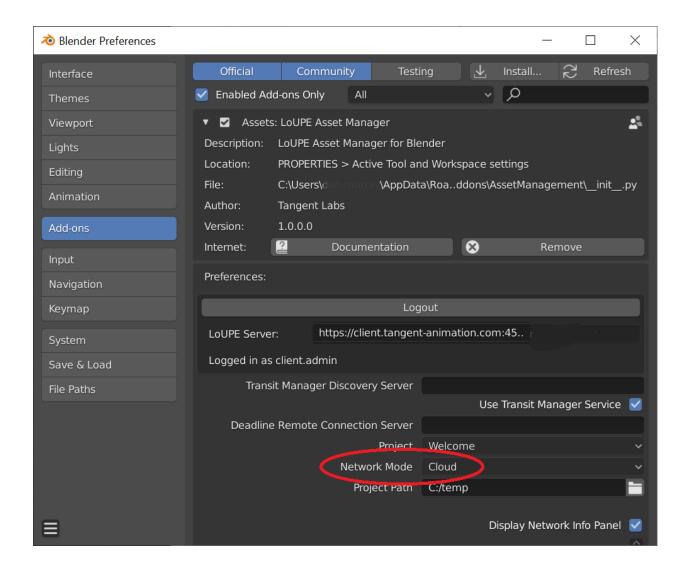
You will now see that the Project list is populated. There will be at least one project in the list.



Select a Project that you want to work with.

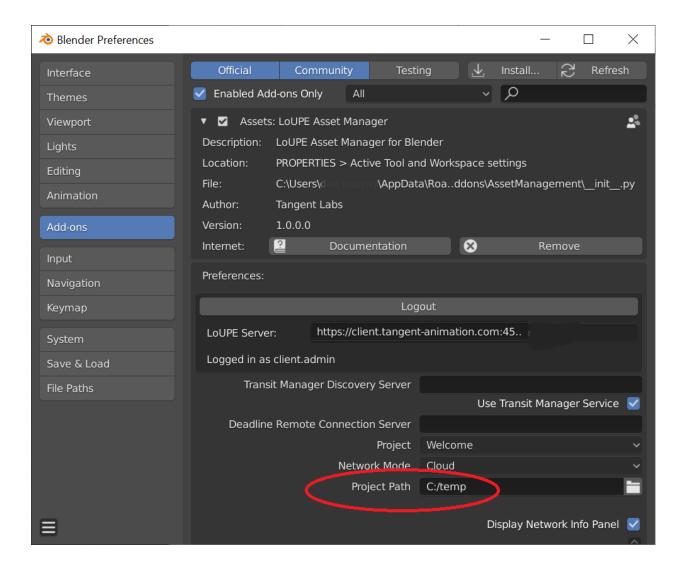
#### 8.2.9 Network Mode

Set your "Network Mode" to Cloud. (Local Network Cache mode is described in greater detail in separate documentation under Advanced Settings.)



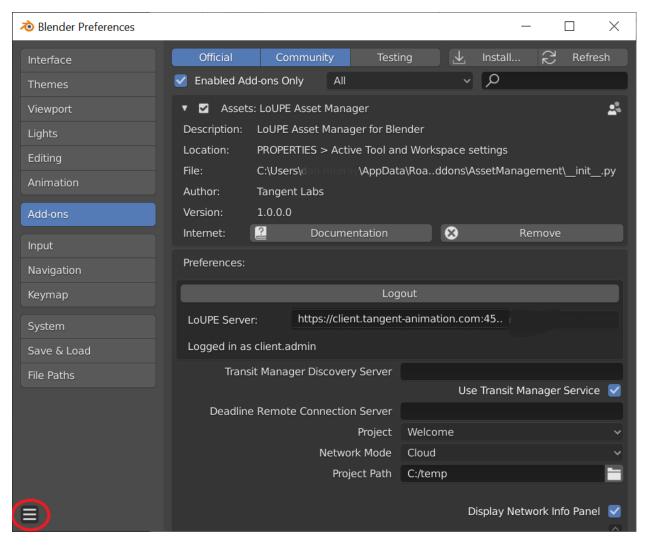
## 8.2.10 Project Path

Set the "Project Path" to configure the target directory for your local workspace. This is the root directory where all downloaded cloud data will be synched.

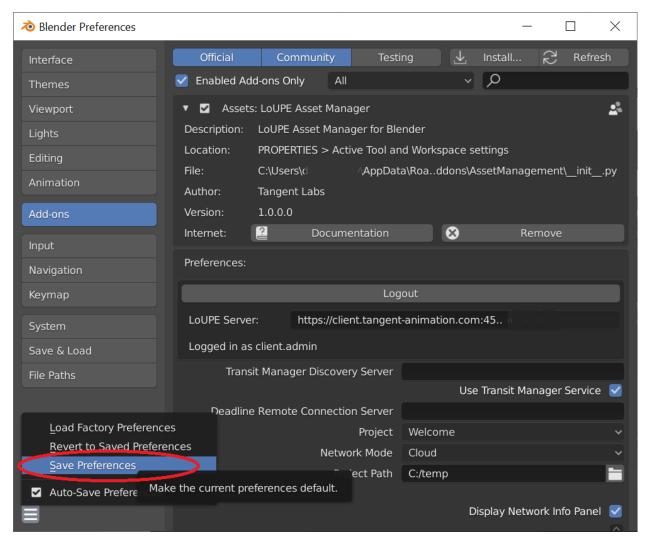


## 8.2.11 Save Preferences

Click the menu in the lower left corner of the Preferences dialog.



Click on "Save Preferences" to ensure that the configuration you have just completed is preserved for future Blender use. Note that you will be prompted for your login details to the LoUPE Asset Manager for Blender each time.



Also see the LoUPE Asset Manager for Blender User Manual for more details on its usage.

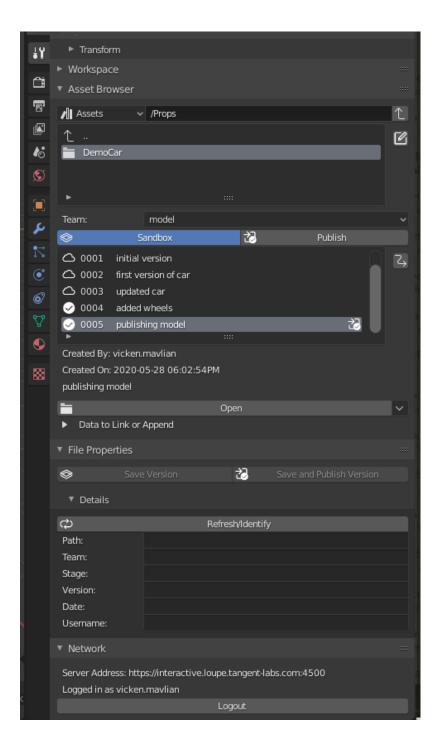
## 8.3 User Manual

This manual covers specific features and functionality of LoUPE's Blender Asset Manager. Please consult the separate guides for *Installation* and *Configuration* of the add-on.

**Table of Contents** 

#### 8.3.1 Asset Browser

The Asset Browser panel is where you can find all the shots and assets that have been created in your LoUPE project.



#### **Navigation**

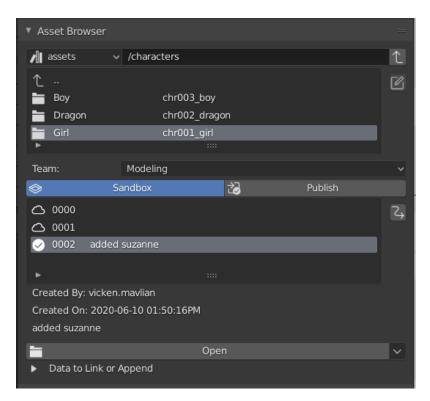
At the top is the *navigation bar*, which allows you to select an *asset library* and path. Below the navigation bar are the list of assets in the current path. Double clicking on one of these items explores it's contents.

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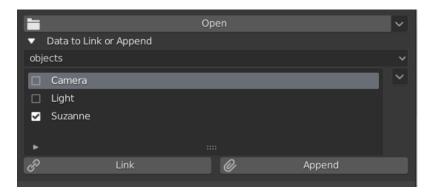
Tip: To explore the contents of an asset, you can double click on the text area or single click on the asset's icon

#### **Opening Asset Versions**



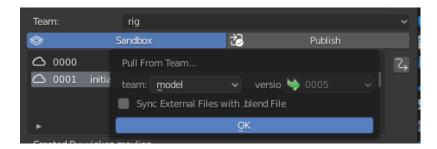
Selecting an asset will also show the versions it has for the selected *team*. Pressing the *open* button will open the current selected asset version. Asset Manager will download all files for the version necessary if you do not have them already in your *project path* (see *Configuration* to find out your current project path).

#### **Link and Append**



You can *Link* or *Append* from the selected asset version into your current Blender scene by expanding the arrow below the *Open* button.

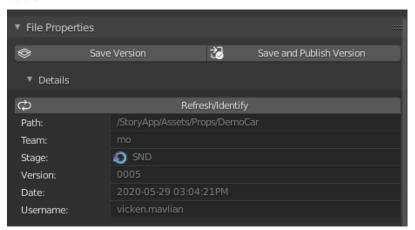
#### **Pull Update**



On the right side controls of the asset *versions* list is the *Pull Update* button. This will create a new version in your *current* team from the latest published of the *source team*, shown in the popup interface.

#### 8.3.2 File Properties

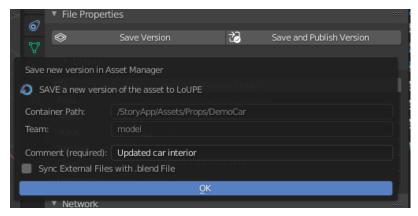
The File Properties panel contains all the data for the current file you have open, as well as buttons for saving a new version



8.3. User Manual

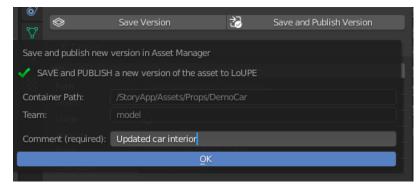
#### **Saving and Publishing New Asset Versions**

To save a new version of the asset, press the *Save New Version* button to being up the interface for saving a new version of the file.



Entering a comment is required. The **Sync Files Data** checkbox will ensure that files external to the .blend asset are uploaded to the cloud.

Publishing an asset is done similarly, by pressing the *Save And Publish New Version* button. Publishing makes the new version of the asset accessible by other departments.

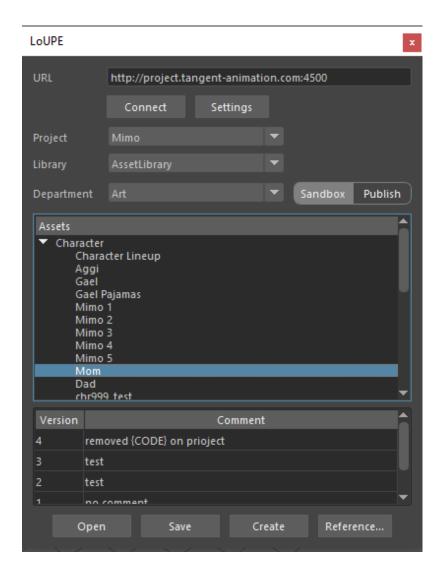


Entering a comment is again required. Save and Publish doesn't have an option for syncing external files, it is always on for publishes.

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# Maya Asset Manager

The Maya Asset Manager allows you to work with all of your asset files that are part of your LoUPE project. It's the primary Maya interface for creating, opening, saving and publishing asset files. Asset files are automatically versioned and will download/upload necessary files from the cloud when needed.



# 9.1 Configuration

## 9.1.1 Finding and Launching Maya

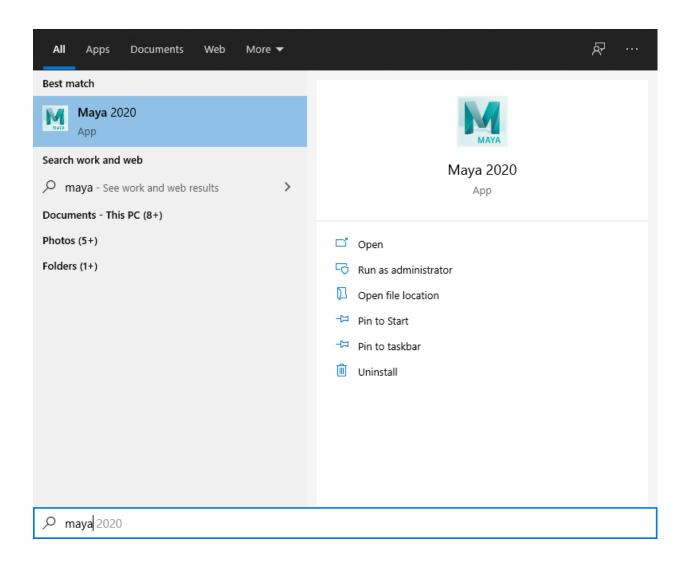
Depending on how you have installed Maya, you may see a shortcut on your desktop. Additionally, if you have just completed its installation, you should find it at the top of the dialog under Recently added, when you click on the Microsoft Start Window icon in the lower left corner of your desktop. Click the Maya icon to launch it.

#### 9.1.2 Go to the LoUPE Shelf

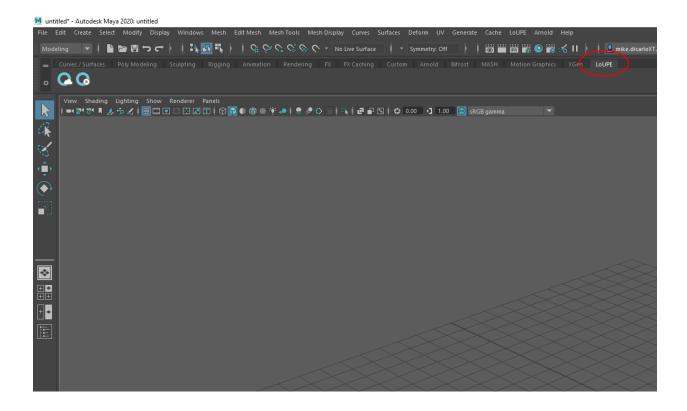
Click on the "LoUPE" shelf.

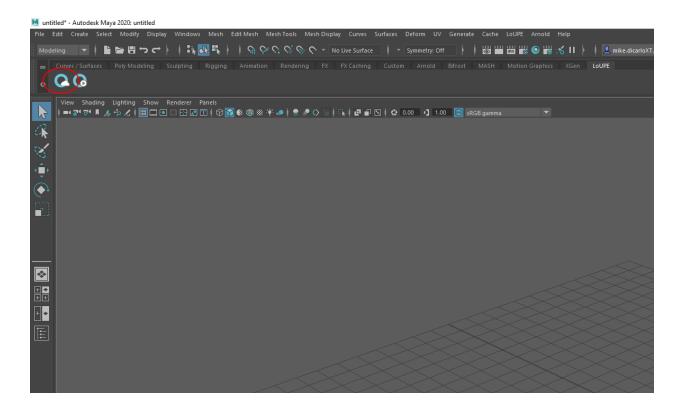
And then click on Asset Manager (the blue circle with cloud icon)

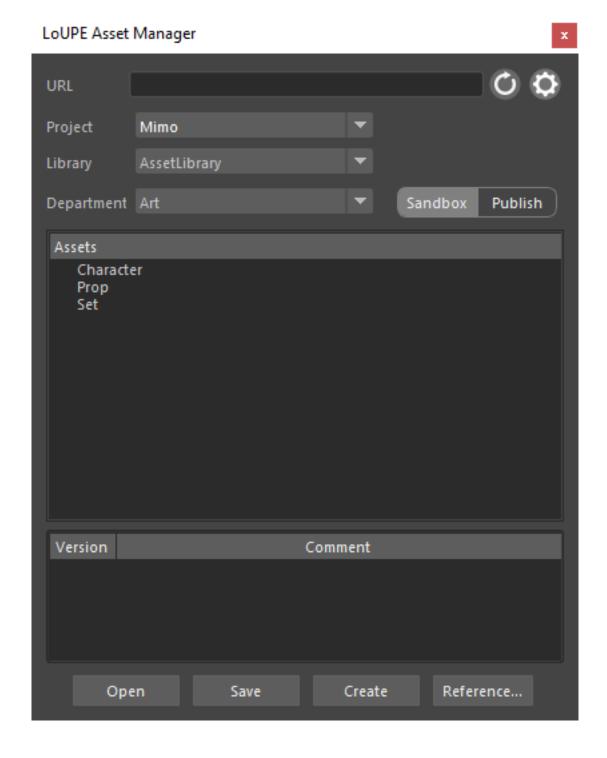
This will open the LoUPE Asset Manager window.



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### 9.1.3 Asset Manager Settings

Click on the Settings gear icon.

This will open the settings window.

### 9.1.4 Enter Server Address and Login Credentials

You should have been sent your LoUPE instance address (URL) and Admin login account details from Tangent Labs. Copy the text for your instance URL and paste it into the Server input field. Enter your login credentials in the Username and Password fields, then click Save.

The server URL must be followed by a port number -: 4500. That is, if your URL is https://client.loupe.tangent-labs.com, the server field should be populated with https://client.loupe.tangent-labs.com: 4500.

Set the Cache Root to configure the target directory for your local workspace. This is the root directory where all downloaded cloud data will be synched.

### 9.1.5 Select a Project

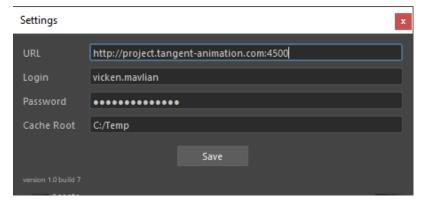
You will now see that the Project list is populated. There will be at least one project in the list.

Select a Project that you want to work with.

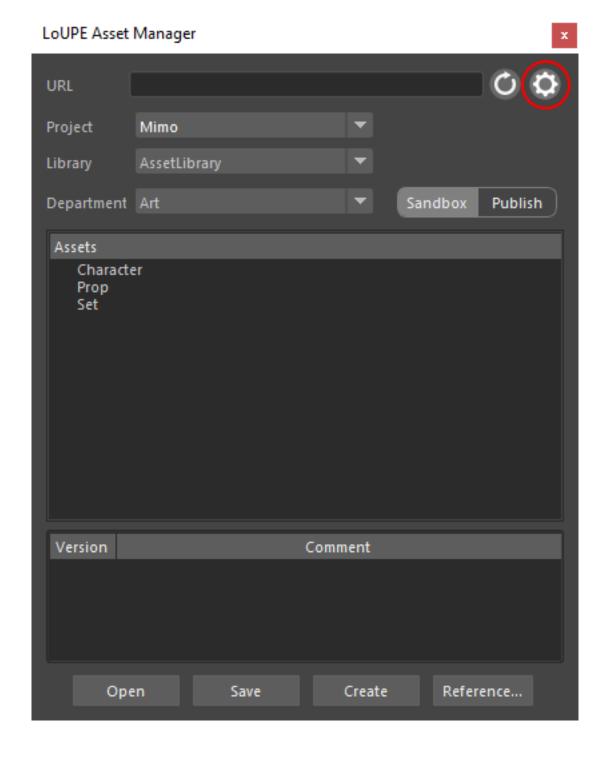
Learn more about working with the Asset Manager for Maya in the User Manual.

The Maya Asset Manager is configured from the settings button on the main interface.

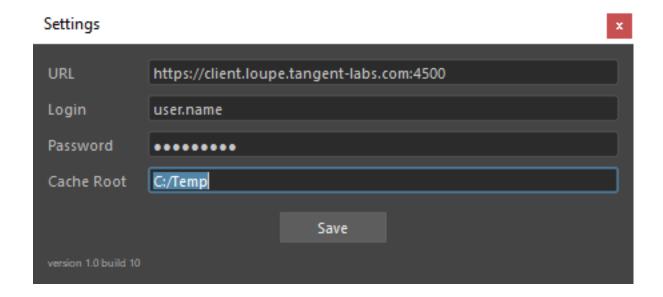
To login, enter in the url address for your server and enter your username and password.

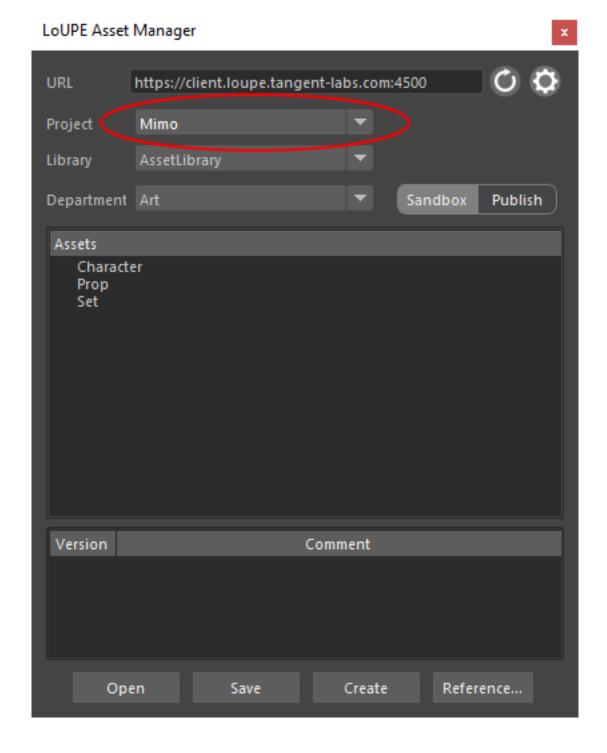


- URL The address of the LoUPE server. Typically ends in :4500
- Login Username for your LoUPE account
- Password Password to your LoUPE account
- Cache Root Where your project files will be stored, only assets within this directory will be managed.



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9.1. Configuration

# CHAPTER 10

## Introduction to OData

Real-time reporting with LoUPE is facilited by a built-in *OData* connection.

*OData* is an open web protocol for querying and updating data. It uses a RESTful approach to return data from resources on the web. That is, you use a URI with query parameters included to get information about a specific resource.

For more information about *OData*, refer to the website for the Open Data Protocol specification. To get started with *OData* in LoUPE, continue with our guide on configuring *OData* in Microsoft Excel.

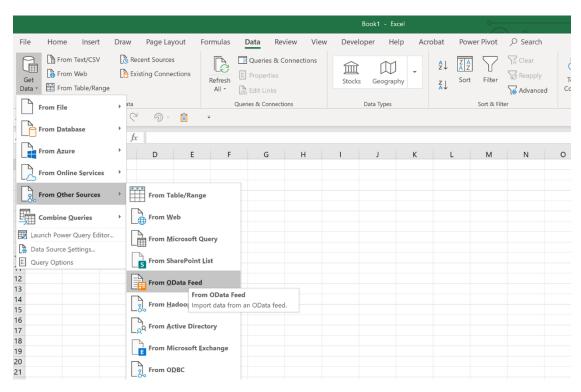
# CHAPTER 11

## Microsoft Excel

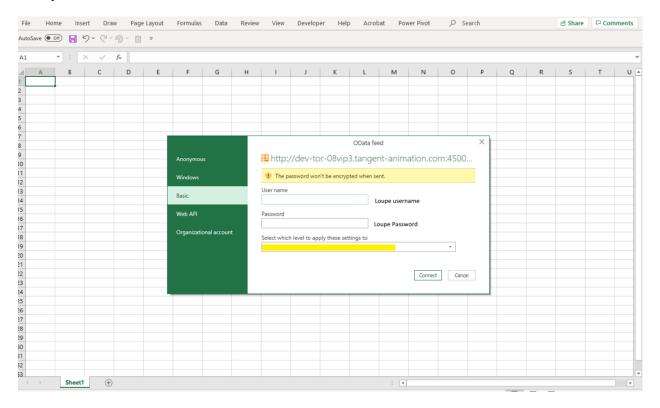
Follow these steps to start working with *OData* and LoUPE in Microsoft *Excel*.

## 11.1 OData Login

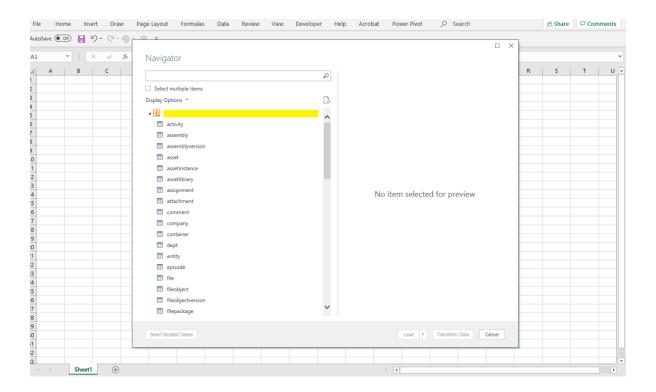
1. Open the *Data* tab (or the *Power Query* tab in *Excel* 2010-2013) and select *Get Data > From Other Sources > From OData Feed*.

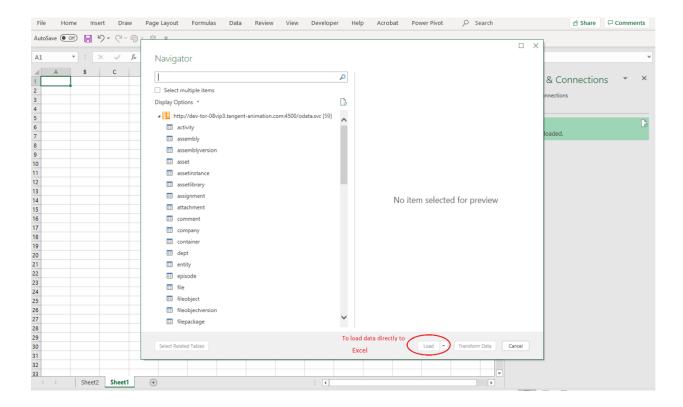


- 2. You will be prompted with a dialog box called *OData Feed* and asked to enter a URL. Choose "Basic" and enter the URL for your LoUPE instance, making sure to specify port: 4500 (the port that the *OData* feed is accessed on), and /odata.svc, the *OData* connector. A valid URL will be look like https://mycompany.loupe.tangent-labs.com: 4500/odata.svc.
- 3. This opens the *OData* Authentication window, where you must choose "Basic" and enter your username and password for LoUPE.



- 4. Click on "Connect" to import data.
- 5. A navigator window opens which displays the database tables of your LoUPE instance. Select tables depending on what data that you want to work with. It is possible to select and load multiple tables into the *Power Pivot* window where the data can be transformed and loaded into sheets.
- 6. If data is to be loaded directly to *Excel*, the "Load" option or "Load to" option can be chosen. If you wish to perform data operations and modify the data, click on "Transform".
- 7. Clicking on "Transform" will launch the *Power Query* editor. It is ideal to optimize the data extraction by performing actions such as removing unwanted columns, merging other tables, changing data types to the required format etc. Initial operations such as data wrangling and data munging can be performed in the *Power Query* editor to get an ideal clean data model that can be utilized for reporting.

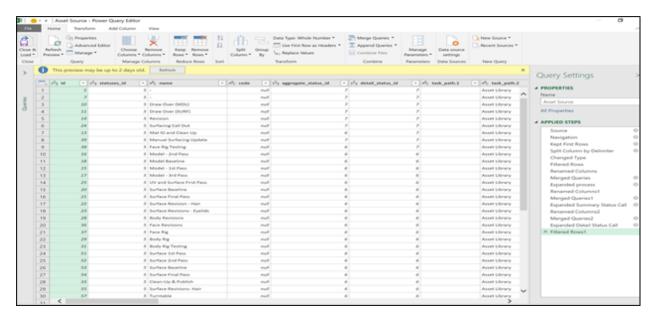




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## 11.2 Power Query Editor

### 11.2.1 Power Query Operations



Operations that can be performed using the Power query editor include but aren't limited to:

- Adding and removing n number of rows.
- Merging and appending queries based on foreign key relationships.
- Adding a new column by invoking a custom function.
- Transposing data sets.
- Group by a specific column.
- Extracting values from a list.
- Changing datatypes of columns, renaming columns, sorting, filtering etc.
- Creating a data model.

Microsoft provides a list of power queries that could be used to retrieve data in a specific format.

#### 11.2.2 View Tab

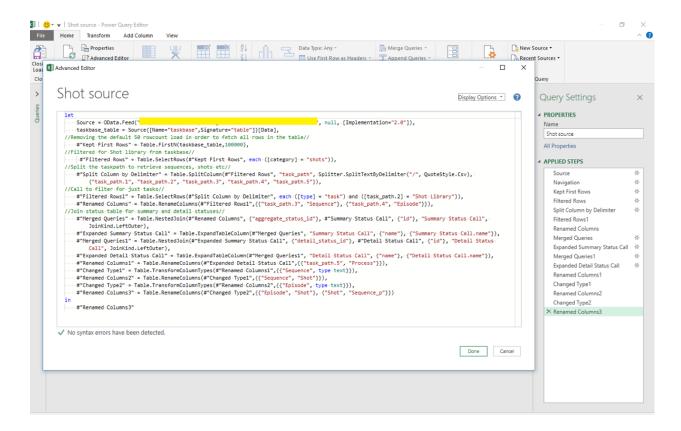
When there are multiple queries, the dependencies can be viewed, to further refine the data model before being loaded to excel.

Query dependencies show all the queries and underlying relationships.

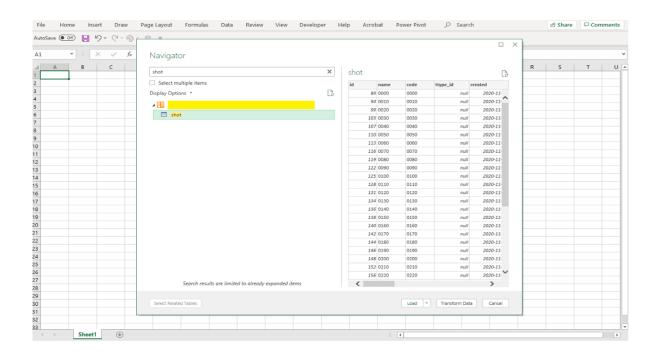
Advanced editor provides the entire text for the selected query in Power query M format.

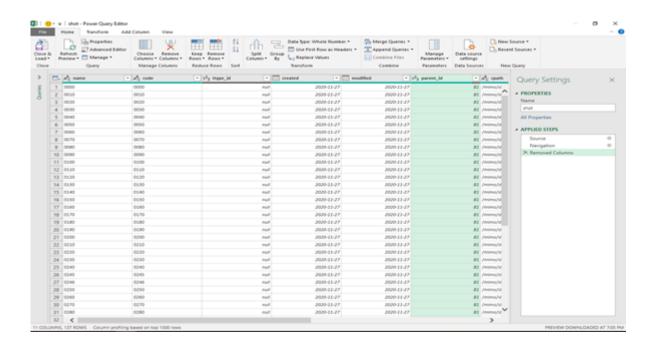
## 11.3 Example: Creating a Shot Report

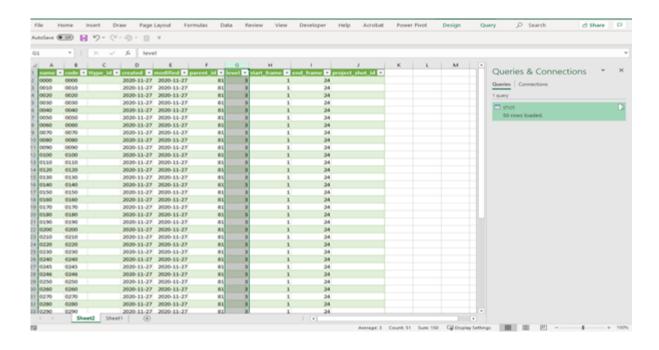
1. Connect to *OData* by performing steps 1-4 from the OData Login instructions.



- 2. Choose the shot table.
- 3. Click on Transform data to launch the *Power Query* editor. Here, you can remove unwanted columns, keep your desired number of rows, etc.
- 4. Click on "Close and Load" at the top left corner and your data will be loaded into an Excel worksheet.







## **Troubleshooting Guide**

If these steps don't address your issue, you can always reach us at labs-support@tangent-labs.com.

## 12.1 Web Application

#### 12.1.1 Doesn't Load

If the web application isn't loading in full or in part, or is loading unusually slowly, try following these steps.

- 1. Use a Chromium-based browser.
  - **Why?** LoUPE supports Chromium-based browsers like Chrome, Chromium, and Edge. Although the application may appear to work in other browsers, its functionality is only fully tested with browsers that are based on Chromium.
- 2. Try accessing the application from an Incognito Window.
  - How? From your browser's menu, click "New Incognito Window" or press Ctrl + Shift + N.
  - **Why?** Incognito Mode will make sure that a cached version of the application isn't being used, and that browser extensions (like ad-blockers) aren't interfering. If you have enabled any browser extensions in Incognito Mode and are still experiencing issues, try disabling them temporarily.
- 3. Disable VPNs or Proxies.
  - **Why?** VPNs or Proxies can have unintended consequences on your connection to LoUPE. If you're experiencing issues, try accessing the application without them.
- 4. Check your internet connection speed. Latencies above 200ms could cause issues with the stability of the application.
  - **How?** You can use this free tool to test your connection to our data center.
  - **Why?** LoUPE is hosted on AWS in North America (us-east-1) and high latencies from other parts of the world or unreliable internet connections can cause extremely slow page loads, or requests to timeout.

**Note:** We are working to make LoUPE available for hosting in more regions.

### 12.1.2 Can't Login

If you can't log in to the web application, try following these steps:

- 1. Make sure that you're using your loupe *username* and not your email address.
- 2. Try resetting your password using the "Forgot Password" link on the login page.

## 12.2 Asset Manager

## 12.2.1 Can't Login

1. If the Asset Manager in Blender or Maya is saying that it's "Unable to login with the given credentials", ensure that you're using the complete URL to your LoUPE instance including https:// at the start, and specifying the port by adding: 4500 at the end. A complete URL will look like: https://your-loupe-instance.loupe.tangent-labs.com: 4500.

Why? The Asset Managers require an encrypted connection for data transfer (https://), and are built with the open-source Client API which makes calls to port 4500.

# CHAPTER 13

LoUPE Client API

## 13.1 LoUPE Client API

The LoUPE CLient API is a set of tools to interact and manage data for your LoUPE projects

## 13.2 Example Usage

## 13.2.1 Creating an authenticated connection

```
from loupe_client.api.client import DatabaseConnector

conn = DatabaseConnector('http://loupe-prod.tangent-animation.com')
status = conn.login(username='vicken.mavlian', password='vicken.mavlian')
if status:
    print('Login successful')
else:
    print('Login unsuccessful. Check address or credentials')
```

## 13.2.2 Querying data

Every Asset class has a fetch() method to query objects of that type.

```
# Getting all items. fetch() always returns a list.
projects = conn.Project.fetch()
print('Number of projects:', len(projects))
print()

# Filtering can be done with keyword parameters on fetch().
project = conn.Project.fetch(code='0063_mimo')[0]
```

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```
print('Asset type:', project.ttype.type_name)
print('Asset name:', project.name)
print('Asset code:', project.code)
print()

# fetch() can filter on all attributes available on the model.
project = conn.Project.fetch(name='Mimo')[0]
print('Asset type:', project.ttype.type_name)
print('Asset name:', project.name)
print('Asset code:', project.code)
print()
```

#### 13.2.3 Asset Hierarchies

Exploring the children of an Asset model can be done with the children attribute

```
print('Number of children for Project', project.code, 'is:', len(project.children))
for idx, child in enumerate(project.children):
    print(' Child', idx)
    print(' Child type:', child.ttype.type_name)
    print(' Child name:', child.name)
    print(' Child code:', child.code)
    print()
```

All Asset models have cpath attribute that is unique to it. Making fetch() queries on the cpath is a handy way to get exactly the item you want

```
# Getting a particular sequence by fetching with cpath
sequence = conn.Sequence.fetch(cpath='/0063_mimo/shots/01/020')[0]
print('Sequence cpath:', sequence.cpath)
print()
```

Sometimes you may not know the Asset's type. Because Asset models are polymorphic, you can use the parent Container model to query with. The below example demonstrates fetching the same object but through different models.

```
# Getting a shot
shot = conn.Shot.fetch(cpath='/0063_mimo/shots/01/020/0010')[0]
print('Asset type:', shot.ttype.type_name)
print('Asset code:', shot.code)
print('Asset start frame:', shot.start_frame)
print('Asset end frame:', shot.end_frame)
print()

# Fetching the same asset
# Using the parent Container model queries across all the Asset model types
asset = conn.Container.fetch(cpath='/0063_mimo/shots/01/020/0010')[0]
print('Asset type:', asset.ttype.type_name)
print('Asset code:', asset.code)
print('Asset start frame:', asset.start_frame)
print('Asset end frame:', asset.end_frame)
print()
```

#### 13.2.4 Asset Files

A TrackableItem represents a versioned resource file for an Asset. Most commonly, a .blend file. An Asset can have one more TrackableItems associated with it for each department.

```
# Get the first trackable item for the 'model' department
trackable = container.trackable_items(dept__code='model')[0]
```

To get the versions of a TrackableItem call versions()

```
# Get only the 'sandbox' versions of this trackable
versions = trackable.versions(stage='SND')

latest = versions[-1]
print('Version number:', latest.version_num)
print('Created by:', latest.created_by)
print('Created on:', latest.created)
print('Comment:', latest.comment)
print('File path:', latest.path)
print()
```

### 13.2.5 Creating Assets

To create data, use the constructor of the model to instantiate an object. The save() method of the instance will then add the new item to the database.

Below we'll create a "Characters" container and add a character named "hero" to it.

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```
hero.save()
assetlibrary = conn.AssetLibrary.fetch(code='Assets')[0]
hero = conn.Container.fetch(code='001_hero')[0]
```

The hero character doesn't have a "trackable" .blend files on it yet, so let's set that up.

#### Note:

- TrackableItems need to be associated with a Department.
- A Container can have many Trackables for each Department.

```
# get the 'modeling' department with code 'model'.
department = conn.Dept.fetch(code='model')[0]

trackable_type = conn.TypeDescriptor.fetch(type_name='TrackableItem')[0]

# get the current trackable items on the hero asset, for the modeling department
trackable_items = hero.trackable_items(code='model', dept__code=department.code)

if trackable_items:
    trackable = trackable_items[0]
else:
    print('No .blend versions exist for the modeling department yet. Creating...')
    trackable = conn.TrackableItem(code='model', ttype=trackable_type,__
    dept=department, asset_lib=assetlibrary.url, containers=[hero])
    trackable.save()
```

To version up, set the version\_up attribute to True and save() the Trackable

```
trackable.version_up = True
trackable.save()
```

## 13.3 Transit Manager

The Transit Manager allows you to transfer files between your location and users in other sites that share your project. The Transit Manager uses callbacks to provide progress on the transfers.

```
from loupe_client.api.client import DatabaseConnector
from loupe_client.transitmanager import transitmanager
from loupe_client.utils import network

# Callback for individual files
class FileProgressCallback(object):
    def __call__(self, transit_file):
        print 'File', transit_file.code, transit_file.percent_complete

# Callback for the transit package as a whole
class PackageProgressCallback(object):
    def __call__(self, transit_pkg):
        print 'Package', transit_pkg.percent_complete
```

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```
project = conn.Project.fetch(code='mimo')[0]
filesystem = [fs for fs in network.get_working_filesystems(conn=conn,_
→ipaddress=network.get_local_ipaddress()) \
    if fs.project.code == project.code][0]
mount = [mount for mount in filesystem.mounts if mount.os_type=='WIN'][0]
root_folder = 'c:/temp/' + mount.root
container = conn.Container.fetch(cpath='/mimo/assets/Character/chr020_robot')[0]
trackable = container.trackable_items(dept__code='model')[-1]
files = [trackable.path] # the list of files we want to transfer
# Make sure output folders exist
for f in files:
   new_dir = os.path.dirname(os.path.join(root_folder, f))
   if not os.path.isdir(new_dir):
       os.makedirs(new_dir)
transit_manager = transitmanager.TransitManager(conn)
local = transit_manager.local_filesystem_and_mount(root_folder=root_folder)
remotes = list(transit_manager.remote_filesystems_and_mounts(relative=local,...
→project=project.code))
package_code = container.cpath
future = transit_manager.checkout(local=local, remotes=remotes, files=files, package_

→code=package_code,

            transit_callback=FileProgressCallback(), package_
→callback=PackageProgressCallback())
```

performing a checkin is identical to a checkout, just replace with the checkin() function call

The Transit Manager transfer will happen asynchronously, that is they won't block execution of your Python script. Since this may not always be desired, you can wait for the transits to complete by calling result() on the return value of checkin() and checkout()

#### 13.3.1 API Classes

#### **Module contents**

Used by autodoc\_mock\_imports.

#### Client

Used by autodoc\_mock\_imports.

#### **DatabaseConnector**

The DatabaseConnector object is the primary class for connecting to the Loupe database.

loupe\_client.api.client.DatabaseConnector

#### 13.3.2 Model Classes

#### **Module contents**

Used by autodoc\_mock\_imports.

### 13.3.3 transitmanager package

#### **Submodules**

#### transitmanager.callbacks module

Used by autodoc\_mock\_imports.

#### transitmanager.constants module

Used by autodoc\_mock\_imports.

#### transitmanager.exceptions module

Used by autodoc\_mock\_imports.

#### transitmanager.optionsconfig module

Used by autodoc\_mock\_imports.

### transitmanager.transit module

Used by autodoc\_mock\_imports.

#### transitmanager.transitfile module

Used by autodoc\_mock\_imports.

#### transitmanager.transitmanager module

Used by autodoc\_mock\_imports.

### transitmanager.transitmanagerconfig module

Used by autodoc\_mock\_imports.

#### transitmanager.transitpackage module

Used by autodoc\_mock\_imports.

#### transitmanager.transitqueue module

Used by autodoc\_mock\_imports.

#### **Module contents**

Used by autodoc\_mock\_imports.

### 13.3.4 utils package

These are general purpose functions for common operations on DatabaseConnector models for convenience.

#### **Submodules**

#### utils.container module

Used by autodoc\_mock\_imports.

#### utils.containerpath module

Used by autodoc\_mock\_imports.

#### utils.network module

Used by autodoc\_mock\_imports.

#### utils.transitstatus module

Used by autodoc\_mock\_imports.

#### **Module contents**

Used by autodoc\_mock\_imports.

## 13.4 Indices and tables

- genindex
- modindex
- search

# CHAPTER 14

Release Notes

## 14.1 Version 1.1

### 14.1.1 Features

## Summary Status View on the user landing page

A new view is introduced in the task board of the My Accounts page – This can be considered as a "Go to" place for artists to have a bird's eye view of the tasks assigned to them from different projects.

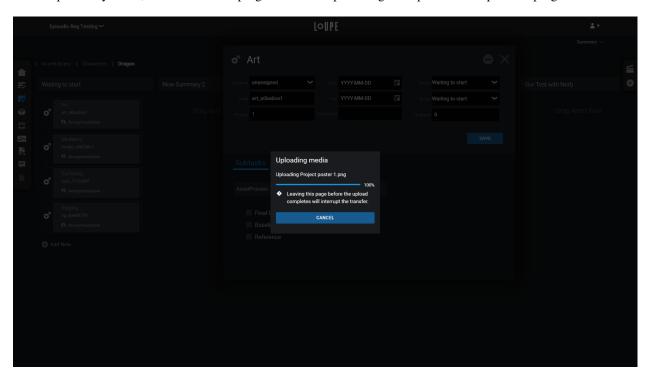


#### Media Review supports webm format

This makes it possible for users to playblast a version in a web format, and then integrate to Loupe to be reviewed in our Media review tool.

#### Media upload progress

Media upload anywhere, will now show a progress bar with percentage complete of the upload in progress.



#### **New and Improved Templates**

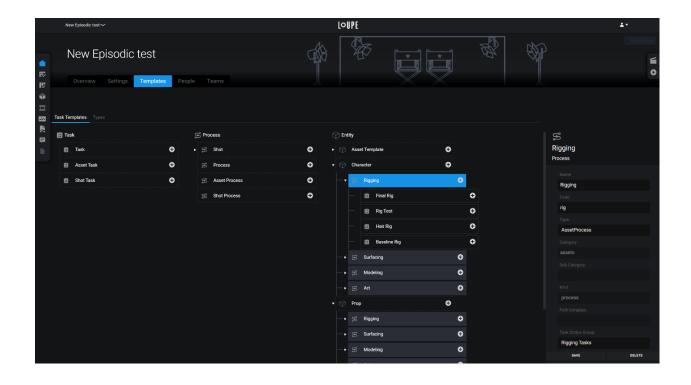
New and improved UI for task templates that allows you to create underlying tasks for entities, processes, and tasks. You no longer need to attach a template to a type. There is added functionality to clone templates and use a process template inside other templates.

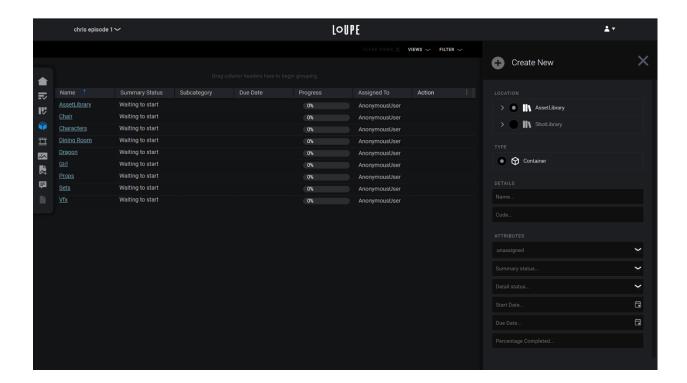
#### **Shot and Asset creation bar improvements**

Shots and assets can be created using the same + icon now. As you create entities, the kanban board and list views refresh, to reflect the latest assets or shots created.

## 14.1.2 Improvements

- Breadcrumb trail is saved in cache so that you can get back to the same place on the Kanban board and avoid navigation within the breadcrumb trail / file paths.
- Cloning of templates Functionality to clone an existing template to save a template structure with a different name.
- Delete template and types As long as the template or types are not being used anywhere, you can delete them!





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- · A LoUPE favicon has been added now.
- Improved company wide reporting through summary statuses You can create summary statuses to be used across the company, and map detail statuses to these summary statuses.
- If you do not have a detail status mapped to a summary status, the lanes will be blocked on the Kanban board.

#### 14.1.3 Fixes

- Better error handling for user addition to LoUPE.
- Summary statuses showing up for all projects fixed to be company centric
- Backend errors for types and templates handled.
- Column sorting using date timestamps are better.
- Detail page for entities does not respect the project code fixed.
- Entity link from Notes page messes up the detail page fixed.
- · Validation for existing roles, email addresses while adding users.
- Blocking operations added for user additions, role edits and media upload.

#### 14.1.4 Patches

#### 1.1.1

This is a bugfix release addressing several issues with the new template system introduced in v1.1.0 and includes other minor improvements.

#### **Task Templates**

- Process created by cloning of existing templates do not show up in the Asset Manager.
- Process templates not creating child types on Kanban asset creation.
- Icons were not showing up for tasks.
- Better handling of node deletion in task templates.

#### **Other Fixes**

- Media review widget refresh issue as you update the list view.
- Minimal template project renders an empty Kanban board without any lanes.
- Action bar missing when detail page is opened.
- Asset creation from action bar throws multiple busy states / refreshes instead of just one.
- Filters do not show value selection for summary statuses.
- Projects show up even if it has been marked as deleted.
- · Improved error handling and reporting.

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