

SHOTGUN SIGGRAPH 2019



- 9:00 - 9:50AM** Introduction to Shotgun
- 10:00 - 10:50AM** Accelerating Creative Teams with Shotgun Create
- 11:00 - 11:50PM** The Future of Shotgun Platform
- 1:00 - 2:20PM** Developing for Shotgun - An Introduction
- 2:30 - 3:50PM** Developing for Shotgun - Advanced Topics
- 4:00 - 4:50PM** Shotgun Technical Roundtable



github.com/shotgunsoftware/sg-siggraph-2019





Technical Roundtable

Rob Blau





Rob Blau

Ecosystem Product Manager

Rob has been supervising teams building pixel producing pipelines since 2002, first at Dreamworks Animation, then at LAIKA, and then finally at Shotgun Software / Autodesk. He is fascinated by the collaboration and workflow problems that pipelines need to solve and is lucky enough to be senior project manager for a product that addresses those problems for companies all around the world.

Agenda

What we're going to be doing today.



What's New?

A quick recap of the things
we've recently released.



What's Next?

A preview of the things
we're working on now and
thinking of working on
next.



Discussion

Time to chat about
whatever topics you want
to bring up.

Icons

Icons made by Freepik, mayadee, Smashicons, Icongeek26, and Gregor Cresnar from www.flaticon.com.

Safe Harbor

During the course of this presentation, we may make statements regarding future events and/or statements regarding planned or future development efforts for our existing or new products and services.

We wish to caution you that such statements reflect our current expectations, estimates and assumptions based on factors currently known to us and that actual events or results could differ materially. Also, these statements are not intended to be a promise or guarantee of future delivery of products, services or features but merely reflect our current plans, which may change.

Purchasing decisions should not be made based upon reliance on these statements. The statements made in this presentation are being made as of the time and date of its live presentation. We do not assume any obligation to update any statements we make to reflect events that occur or circumstances that exist after the date of this presentation.

Where to get these materials



<https://github.com/shotgunsoftware/sg-siggraph-2019>

Getting ready to chat



www.slido.com

#C543



What's New?



Developer Documentation

We wanted to clean up our documentation, which has grown tangled and hard to navigate over the years.



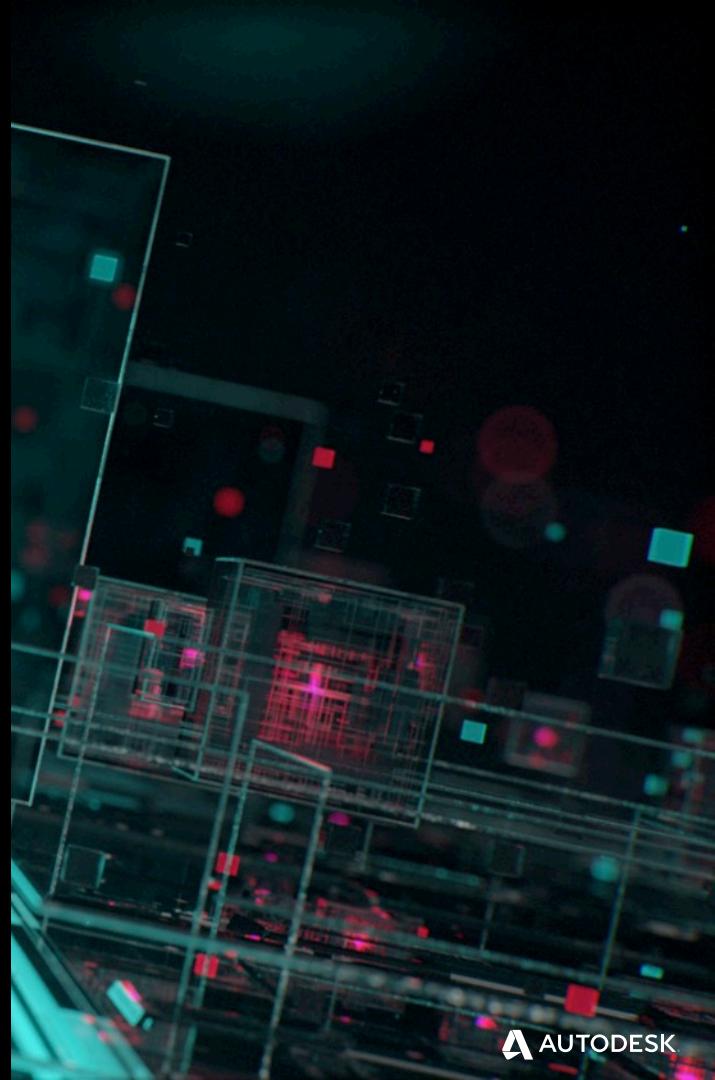
Cleaner, simpler site

- Simple markdown based docs
- Easier to maintain and navigate
- Support for internationalization



Open source model

- Document source available
- Easy to update, internally or from the community



After Effects

We recently released support for After Effects with an eye toward supporting simple media management and review workflows.



Simple AE workflows supported

- Ability to load in media and cameras
- Publish renders
- Submit renders for review



Developed with an eye toward future Adobe support

- tk-framework-adobe
- Has been used for other Adobe apps and other apps with JavaScript based APIs



Jira Bridge

A simple service you can run that is plugin based, like our event daemon.
Making it easier to synchronize any data between Jira and Shotgun.

Workflow based synchronization



- Easy to implement custom business logic
- Support for many field types, and Notes

Following the model of our event daemon



- Python server that you run yourself
- Open source to make modification easy
- Rich plugin system to manage the complex mapping

Shotgun Create

Shotgun Create supports Toolkit based application launching and will bootstrap our integrations when launching a supported app.

New artist experience on the desktop



- New tk-desktop2 engine
- Easy to integrate into existing configurations
- Will eventually replace Shotgun Desktop

Python 3 API

Releasing a version of the Python API that is compatible with both Python 2 and 3 to make the switch mandated by the VFX Reference Platform easier.

Shotgun's Python API



- Compatible with both 2 and 3
- Out now

Toolkit



- In the process of porting
- Looking at Python 3 for Desktop & Create
- Target is the ability to run either Python 2 or 3

Webhooks

Push system that lets you configure Shotgun to call a URL when specific events happen.



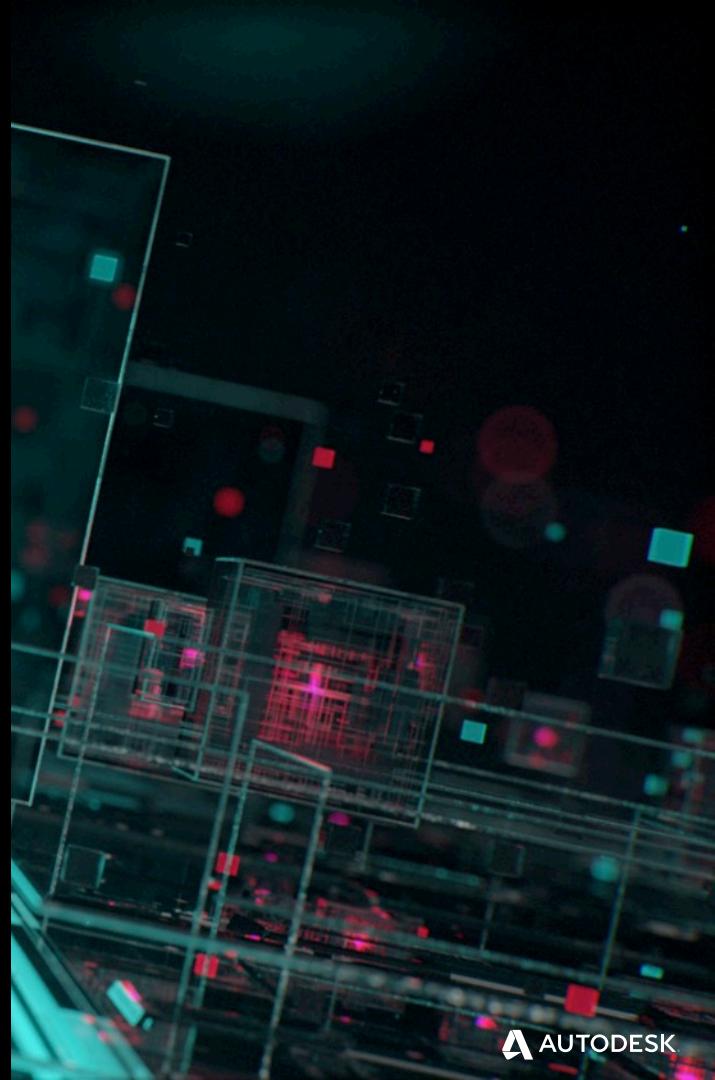
New integration point for an easier way to react to changes in Shotgun

- Standard webhook interface
- Full REST API



Going into beta soon!

- Already used internally for email delivery





webhooks-beta@shotgunsoftware.com



What's Next?



We did a pipeline survey



130 Studios

1,894 TDs & Engineers

21,113 Artists

\$27,218,024 USD/year pipeline spend

Things we heard

Very often a whole lot of work has to be done over and over again since small productions often "throws everything away" .

Small studios don't tend to invest enough in pipeline development.

We've been able to compete with larger studios pretty successfully by paying attention to tools and workflow.

Hate reinventing the wheel.

We build things that we should be buying.

Asset & Scene Management

We are taking a serious look at what it would mean for Toolkit to go from file based tracking to asset based tracking.



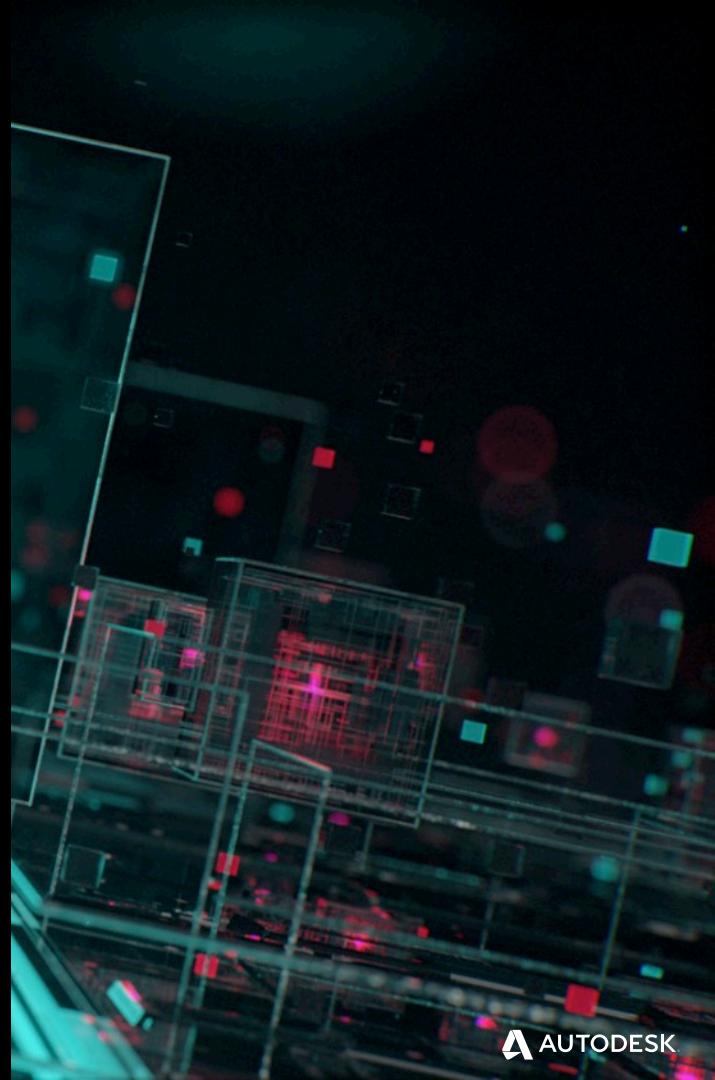
New Asset API & data model

- Currently in early stages of exploration
- Going from files to assets with subscriptions
- Experimenting with USD



New Scene Manager

- First artist tool to expose the power of the asset API
- See the status of the assets in your scene
- Evolution of the Loader and the Breakdown tools



Asset Management

Working in a model where workspaces subscribe to assets made out of components.

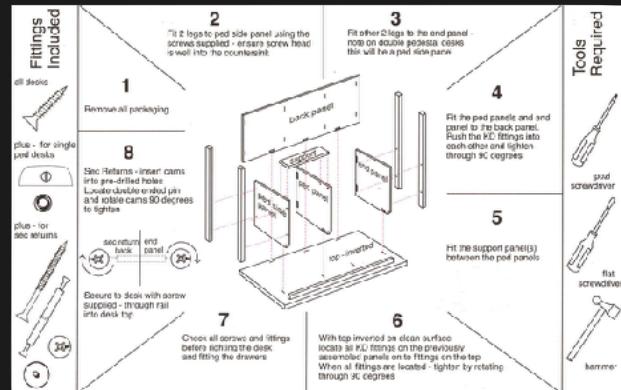
Built on a scalable infrastructure with standard tooling



Standard Asset Representation



Standard Asset Representation



Standardized Operations

Scene Management

New application that lets artists more easily manage the contents of their scene and keep it up to date.

Currently doing design iterations.



The screenshot shows a dark-themed application window titled "Scene Manager Design". At the top, there's a header bar with a user profile icon, a search bar, and several menu items. Below the header, a main content area is divided into sections:

- My scene**: Shows a thumbnail of a building labeled "Bank" and its file path "Bank03.abc high". It includes a status indicator ("IP") and a version number ("v7"). A comment from "Sarah Jones" is visible: "Please add an extra window on first floor."
- To do**: A section for tasks.
- Activity**: A section for recent activity.
- Environment**: A section for managing environment assets, showing thumbnails for "House" and "Fence (20)" with their respective file paths and versions.
- Characters**: A section for managing character assets.
- Camera**: A section for managing camera assets.

At the bottom of the window, the Autodesk logo is visible.



Working with partners.
If interested, get in touch.
[\(support@shotgunsoftware.com\)](mailto:support@shotgunsoftware.com)

Unity Integration

We are looking more and more at real-time workflows and use cases from the games industry. We are happy to be working with Unity to develop an official integration with Unity Engine.



Over to Unity to talk about this integration





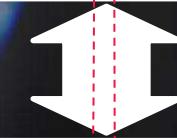
Shotgun for Unity

David Lassonde, Lead Developer, Imaginary Spaces
Mathieu Muller, Technical Product Manager M&E, Unity



SG

PRODUCTION
PIPELINE



Python





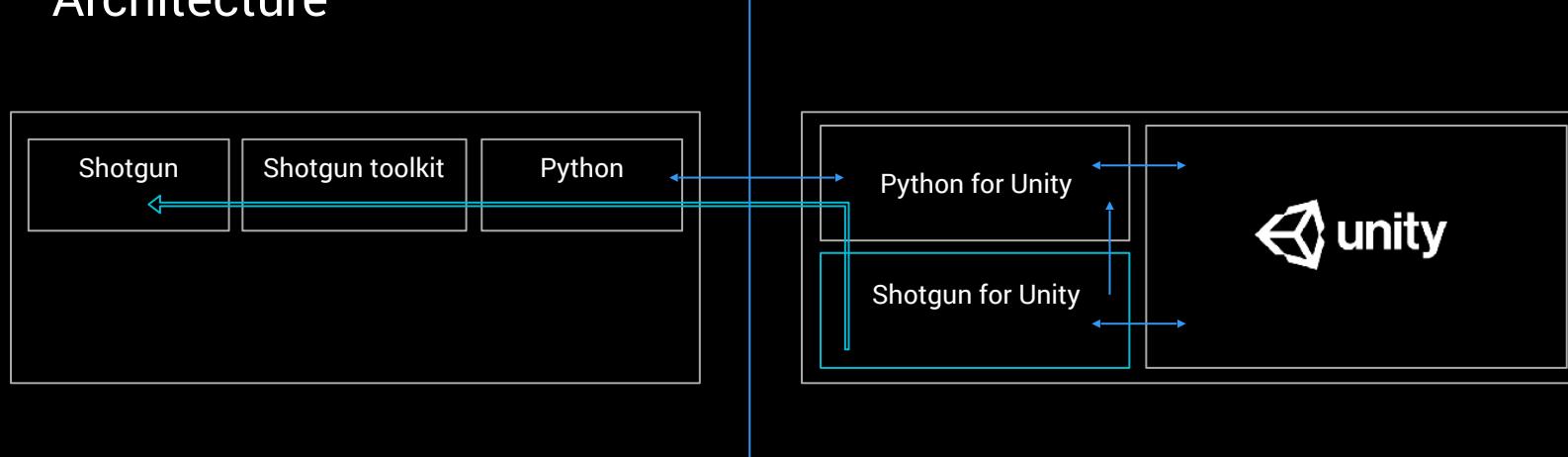
Shotgun for Unity

Professional production tracking

Architecture



Architecture



Interface between Shotgun and Unity:

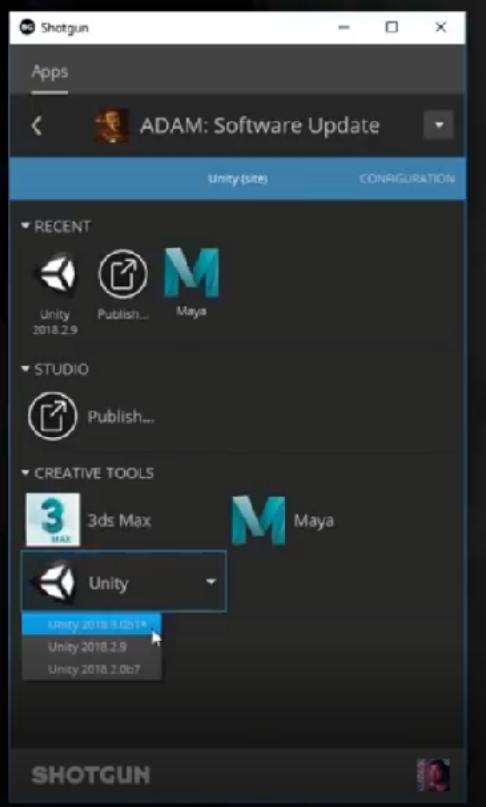
- Python to access Shotgun
- Launch tk-apps from C# menus, using a Python helper class
- C# or Python to call into Unity from toolkit



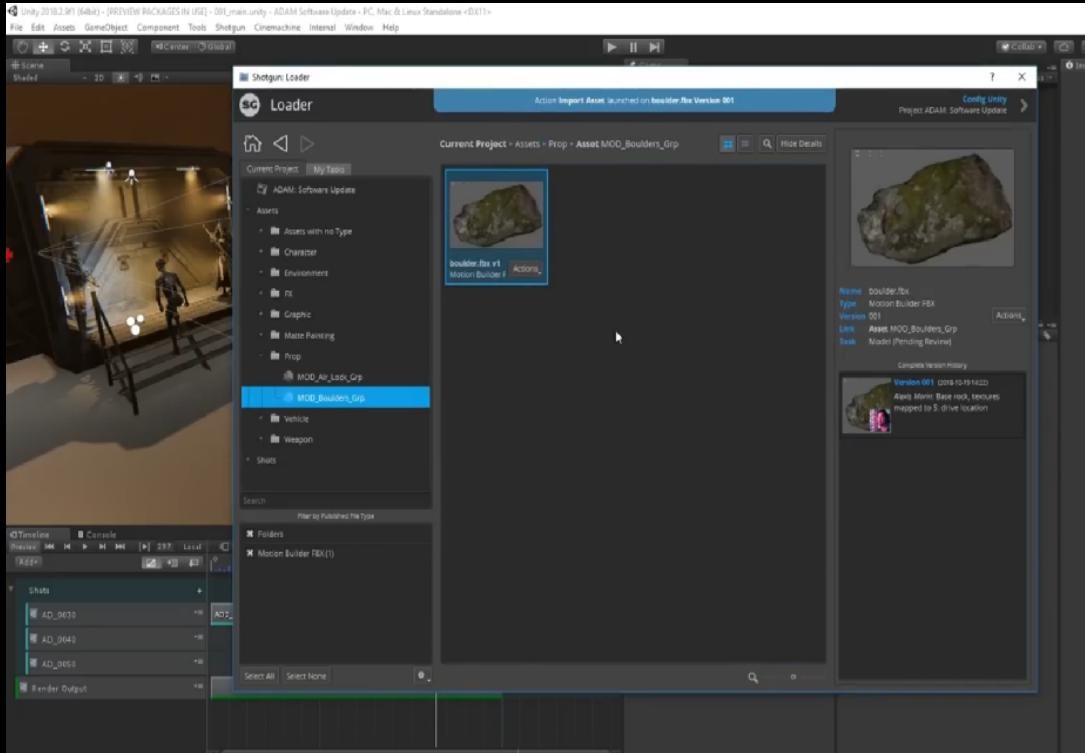
Features



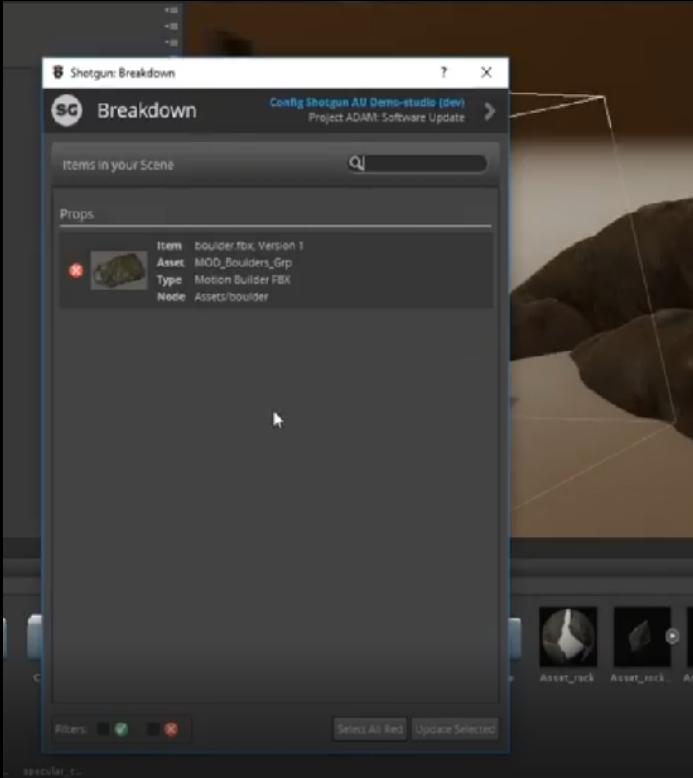
Launching Unity



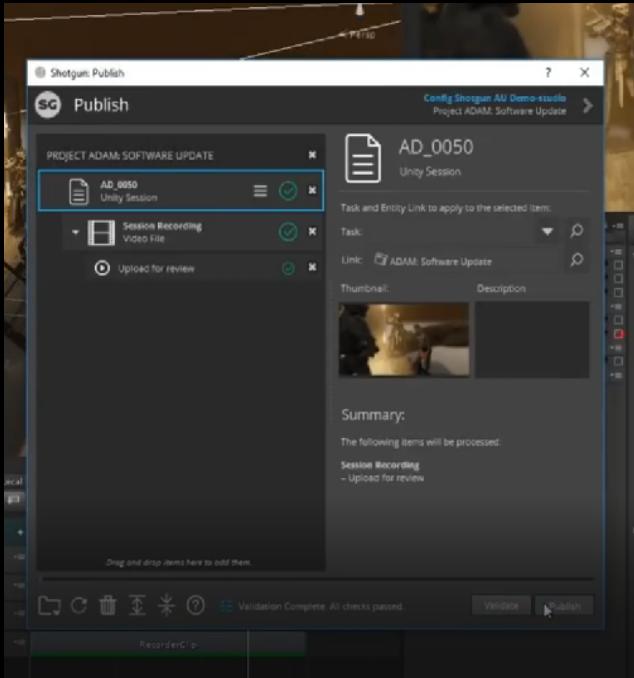
Loading Assets (tk-multi-loader2)



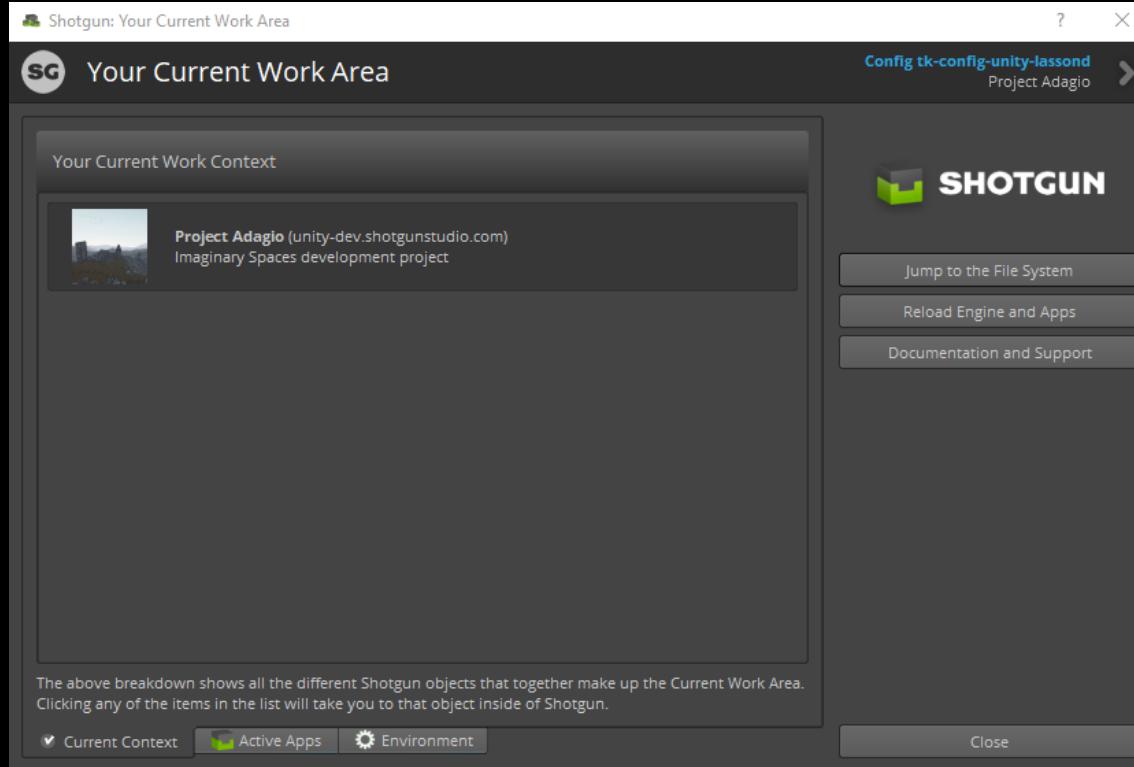
Updating Assets (tk-multi-breakdown)



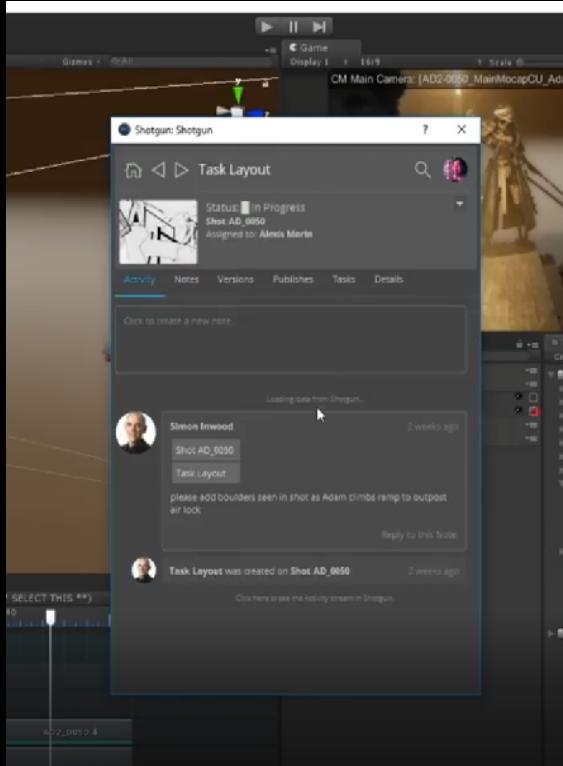
Publishing Versions with Unity Recorder integration (tk-multi-publish2)



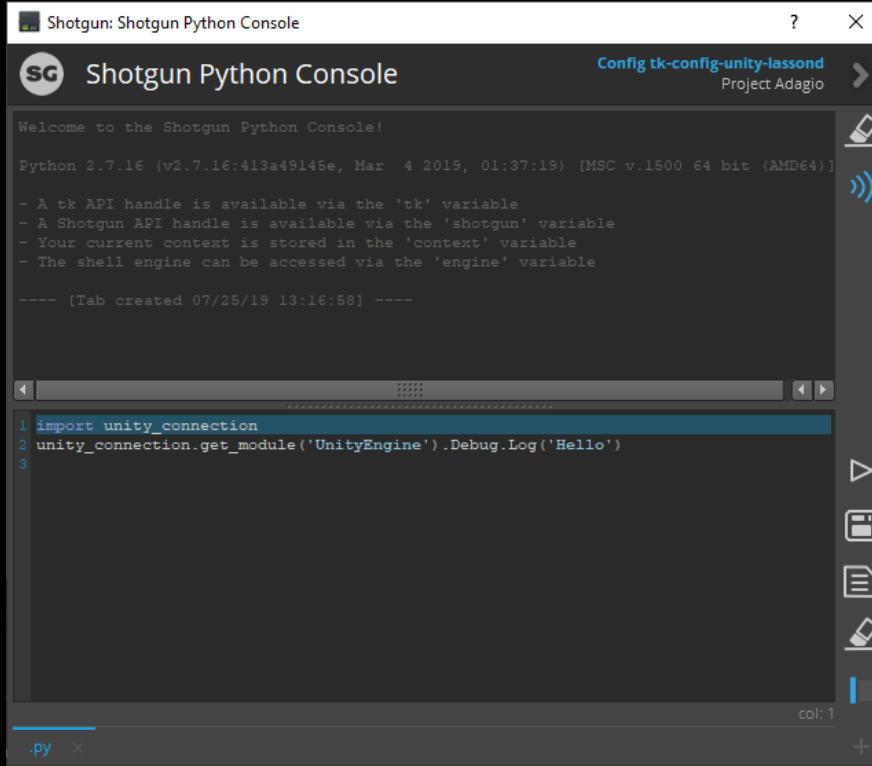
Work Area Info (tk-multi-about)



Task Management (tk-multi-shotgunpanel)



Rapid Prototyping (tk-multi-pythonconsole)



post_init_hook

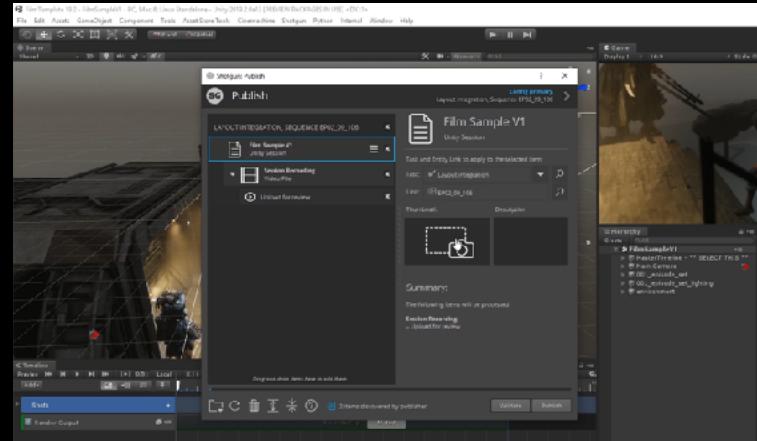
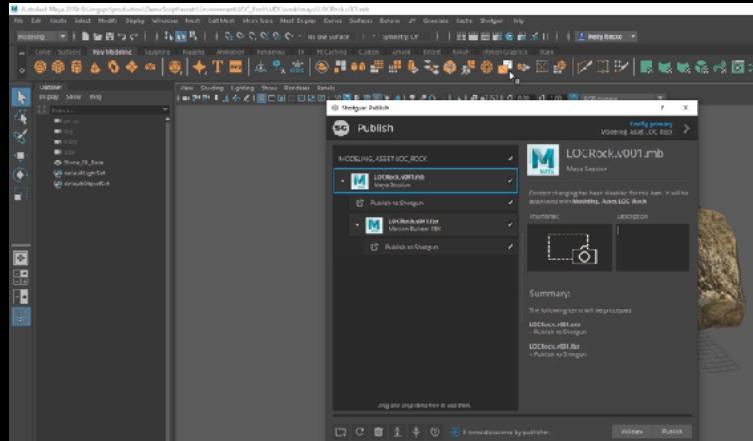
Useful callback to start populating the Unity Editor

```
settings.tk-unity.all:  
  ...apps:  
    ...tk-multi-about:  
      ...location: "@apps.tk-multi-about.location"  
      ...tk-multi-breakdown: "@settings.tk-multi-breakdown.unity"  
      ...tk-multi-publish2: "@settings.tk-multi-publish2.unity"  
      ...tk-multi-loader2: "@settings.tk-multi-loader2.unity"  
      ...tk-multi-shotgunpanel: "@settings.tk-multi-shotgunpanel"  
  
    ...tk-multi-pythonconsole:  
      ...location: "@apps.tk-multi-pythonconsole.location"  
      ...location: "@engines.tk-unity.location"  
      ...menuFavorites:  
        ...{app_instance: tk-multi-loader2, name: Load...}  
      ...launch_builtin_plugins: [basic]  
      ...automatic_context_switch: false  
      post_init_hook: "{self}/bootstrap/post_init.py:{config}/tk-unity/bootstrap/apply_metadata.py"
```

Workflows



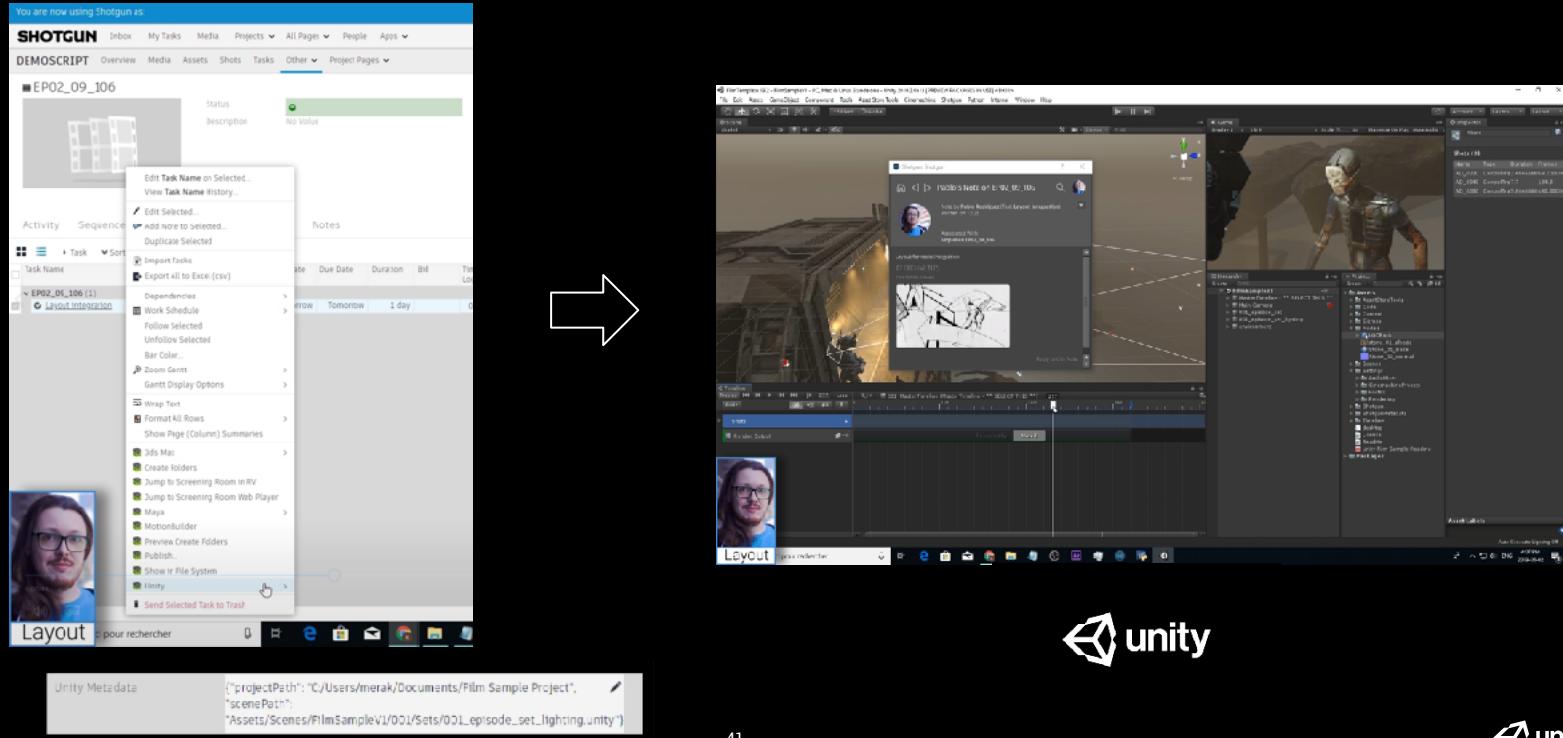
Seamless experience for artists between DCCs and Unity



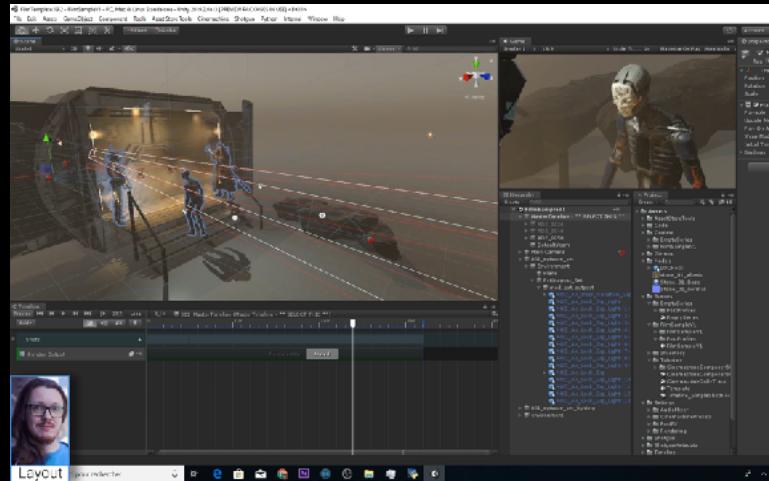
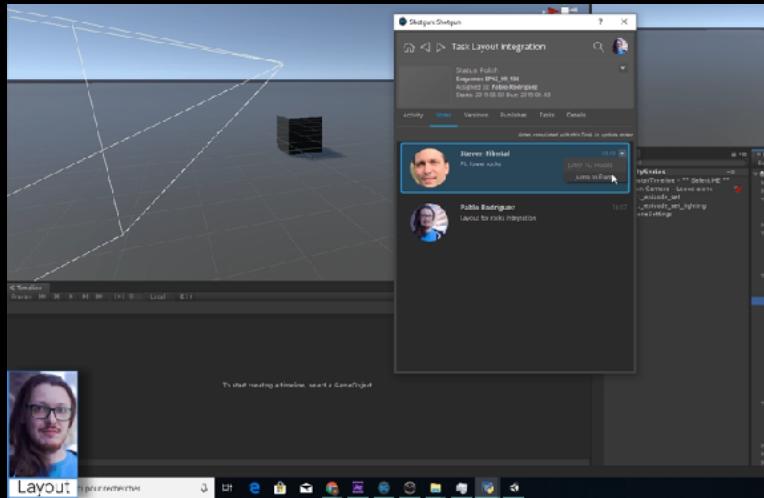
DCC (e.g.: Maya, 3dsMax, Mobu, ...)



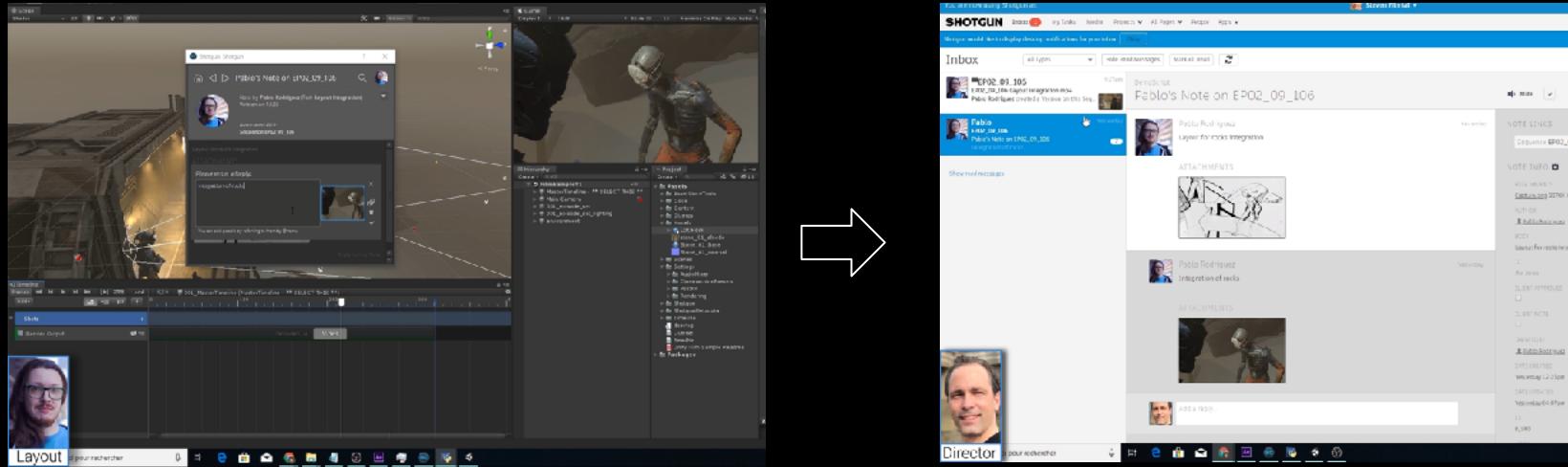
Open Unity from a Shotgun task



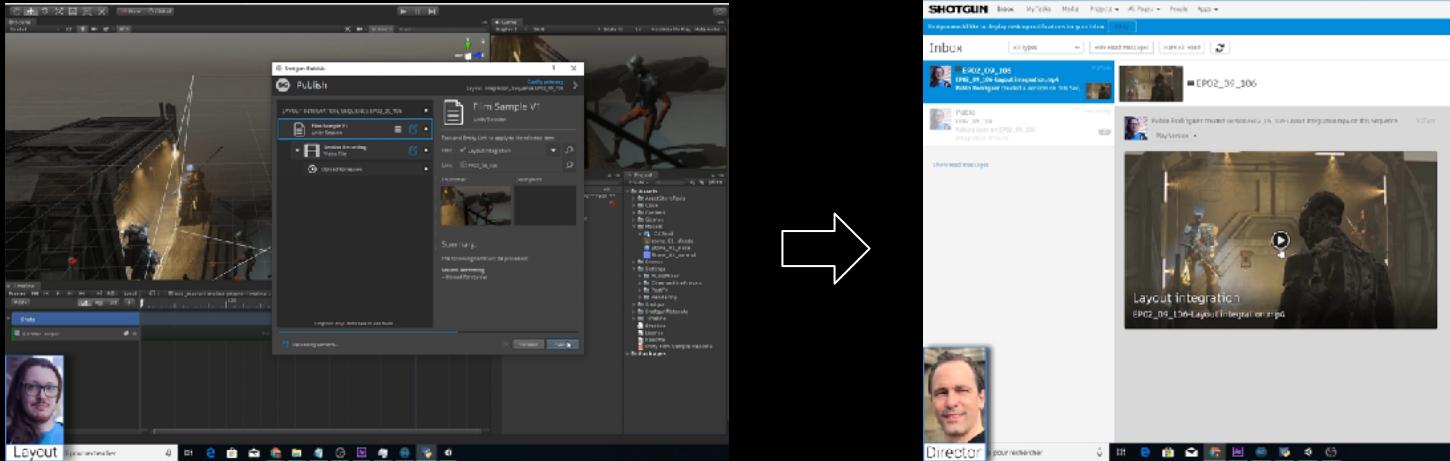
Jump to the right frame in Unity from a Note



Add Notes from Unity into Shotgun



Publish Video Recordings from Unity to Shotgun

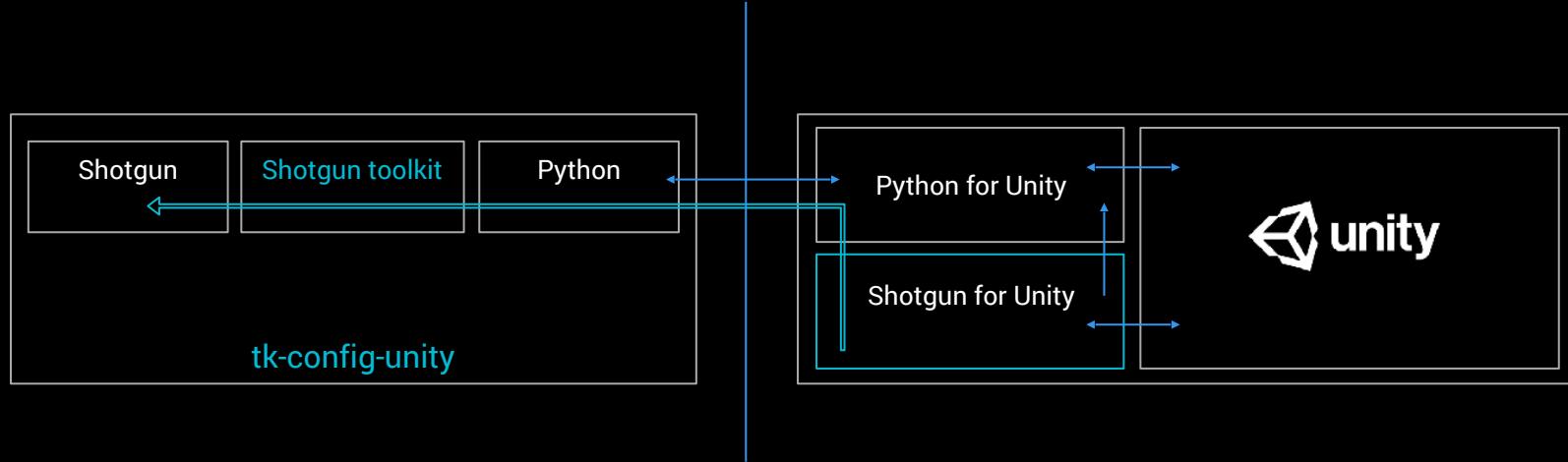


Levels of integration



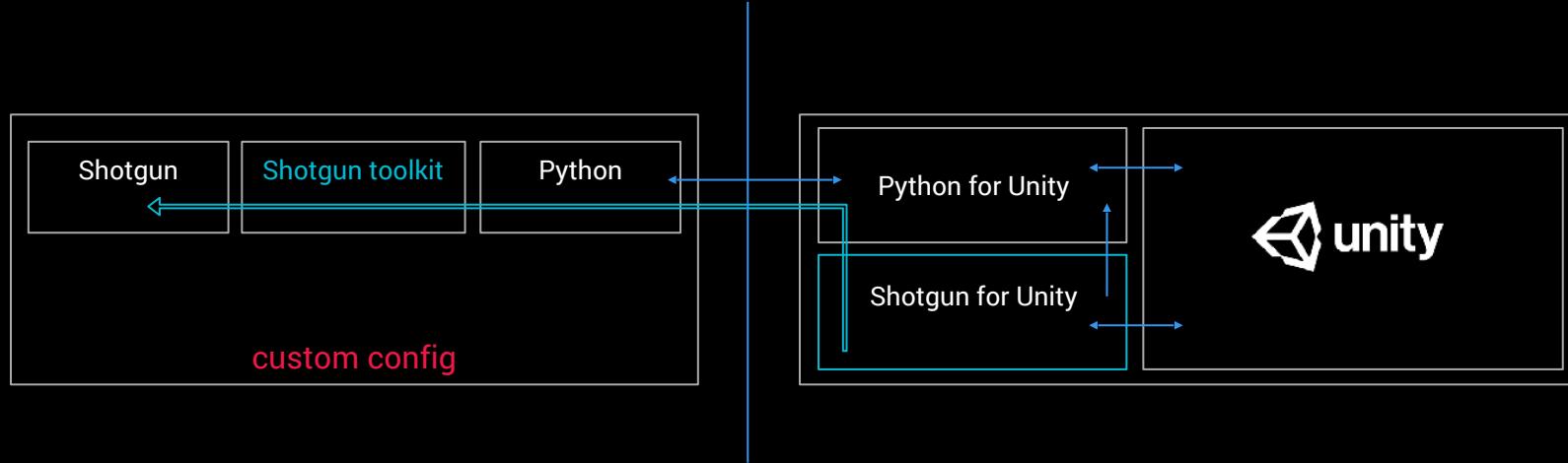
Default Config

- Up-to-date with tk-config-default2: latest fixes and features from the Shotgun team
- Simply add tk-config-unity as a pipeline configuration



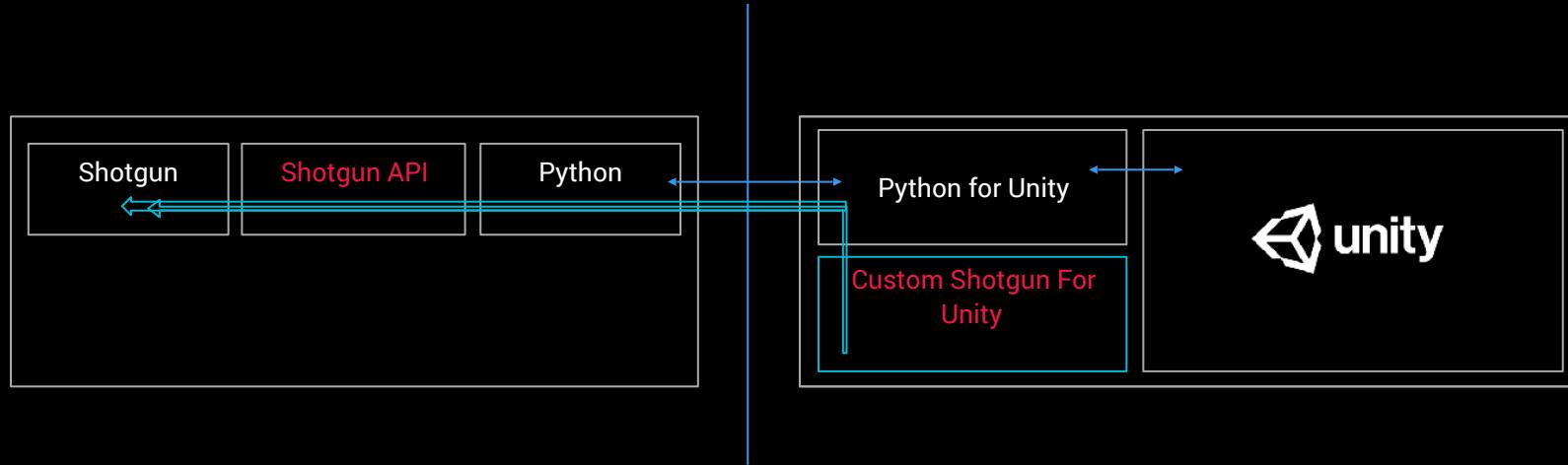
Custom Shotgun Config

- Add the tk-unity engine to your own config
- tk-unity follows standards and is easy to integrate
- Integration steps are documented in the Shotgun for Unity package docs



Shotgun API

- Simply use the Python for Unity package



Roadmap



Roadmap

- Public release 2019.3

2020 TBD:

- Integration with source control (sample)
- Publish from Unity (Camera, Set,... as USD, FBX, Alembic)
- Publish validation (check that only the right assets have been published)
- Turntable sample in Unity

Install Private Alpha



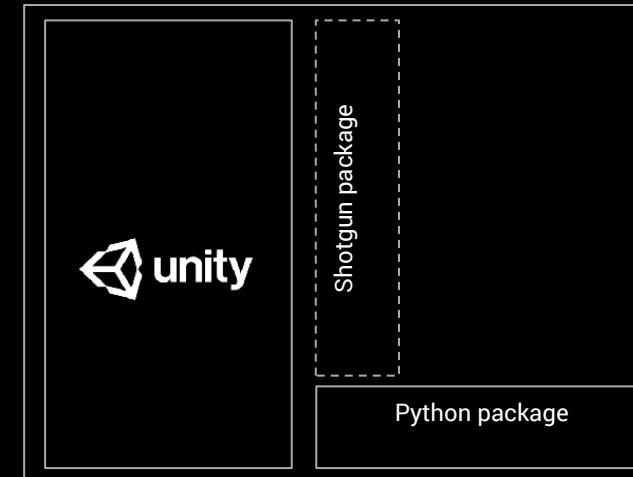
Install



1.

Python Interpreter
(2.7)

2.



3.

4.

SG

tk-config-unity



Questions?

mathieu@unity3d.com

david@imgspc.com

Thank You!

Before switching over to a more freeform discussion, we just wanted to say thanks for sharing your time with us!

Start a Shotgun eval



If you haven't started playing around with Shotgun, but like what you're seeing, take it for a test drive.

Take a look at our roadmap



If you want to know what's cooking or what we are thinking about tackling next, this should be your first stop.

Checkout our new forums



We've just launch a new community forum where you can chat with us and other Shotgun users.



Discussion Time!



www.slido.com

#C543

