

Asset Manager

Rémi Arnaud David Gaya Maxime Helen



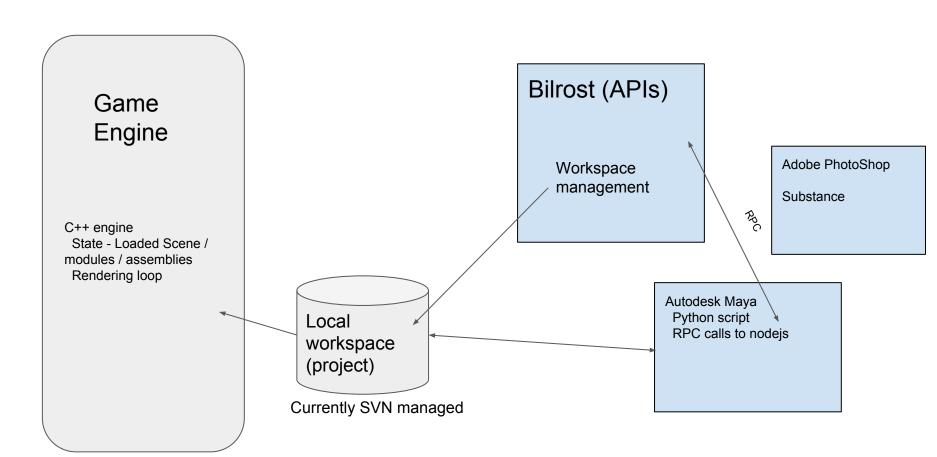
Asset Manager

- 1 Introduction
- 2 What we are trying to solve

What is Bilrost

- Bilröst is "a rainbow bridge that reaches between Midgard (Human Earth) and Asgard (where Valhalla is)." It's not car rust.
- It is a local nodejs server
- It was part of fl4re-ui
- It is a framework for different API:
 - Asset Manager/Content Browsing
 - Documentation Wiki
 - Plug-in module for Tools
 - Authentication
 - Others

Bilrost in context



What is Asset Manager

- It is a set of REST APIs that run on Bilrost
- It is an interface for maintaining and controlling the in-game content and source files used to create the project
- It has a Content Browser

Bilrost Asset Manager API Examples

CB API

LOGIN

	-				
ΛDI		OC	CIL	nti	OF
API	$\boldsymbol{\omega}$	CO	UI I	NI	U

GET /assetmanager Asset Manager's API description +

WORKSPACES

POST /assetmanager/workspaces Add a Workspace +

DELETE /assetmanager/workspaces/{workspace_guid||workspace_name} Forget a Workspace +

STATUSES

GET /assetmanager/workspaces/{workspace_guid||workspace_name}/status Workspace's Statuses +

GET /assetmanager/workspaces/{workspace_guid||workspace_name}/statuses Workspace's Highest Priority Status +

ASSETS

PUT /assetmanager/workspaces/{workspace_guid||workspace_name}{asset_ref} Create and update an Asset +

POST /assetmanager/workspaces/{workspace_guid||workspace_name}{asset_ref}/rename Rename an Asset +

DELETE /assetmanager/workspaces/{workspace_guid||workspace_name}{asset_ref}

Delete an Asset +

Concepts of Asset and Resource

(What are assets in the context of the Asset Manager)

- Assets are a list of dependencies
- Assets do not contain actual resources
- In fact Assets are a unified way of expressing dependencies

(What are resources in the context of the Asset Manager)

- Resources have two folds:
 - * metadata containers with a SHA pointer
 - * actual binary content that is stored in the cloud



Asset Manager

- 1 Introduction
- 2 What we are trying to solve
- 3 Status
- 4 Roadmap

What we are trying to solve

- In 5 years Starbreeze will become a huge content provider
- Business model based in frequent DLC releases
- For the long term view refer to Remi's presentations (https://github.com/fl4re/open_bilrost/blob/master/docs/Asset%20Manager%20background%20Concepts.pdf)

What we are trying to solve

Dependencies management

- Start using AM's Assets. That means having a unified representation of dependencies
- why we create an indirection level if dependencies are already in resource files (for example in *.mb files)?
- Because, given a maya file, it is easy to know its dependencies. But given a
 .tga it is difficult to know what Maya files depend on it.
- This problem makes breaking dependencies very easy. Therefore, dependent files are rarely renamed or moved.

What we are trying to solve

Size of repos and location of resources

- Move actual files (resources) from SVN and put them up in the cloud
- Local cache
- Duplicated resources share same SHA1