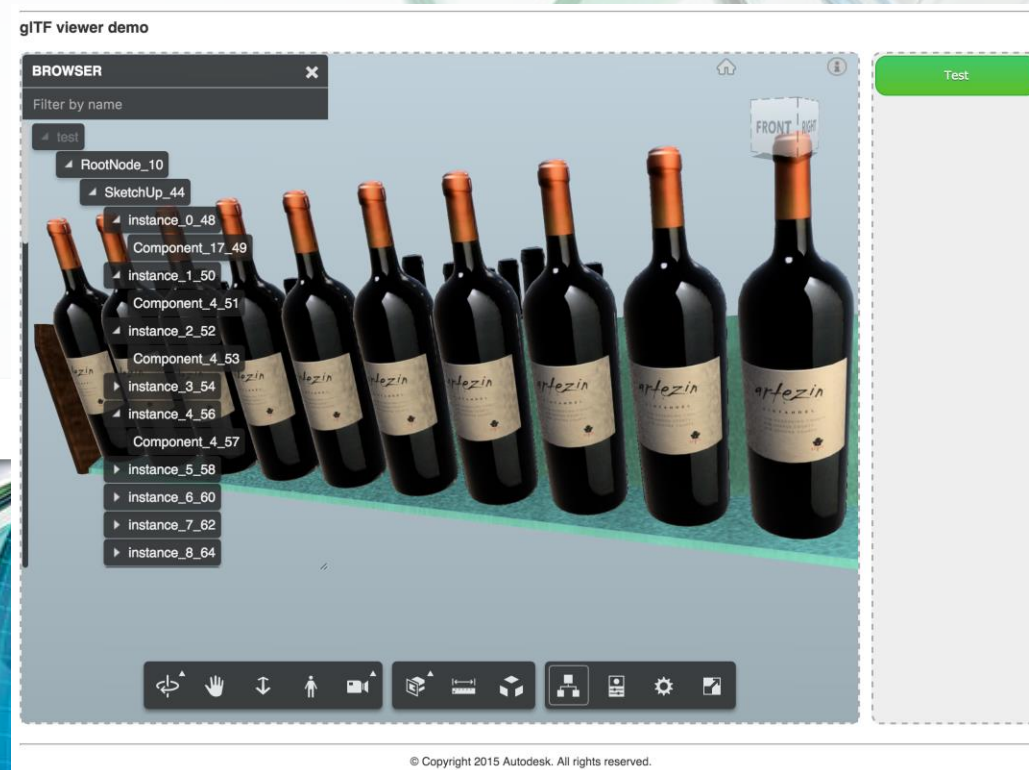


## FBX to/from glTF

Cyrille Fauvel

Sr. Program Manager – ADN / Forge

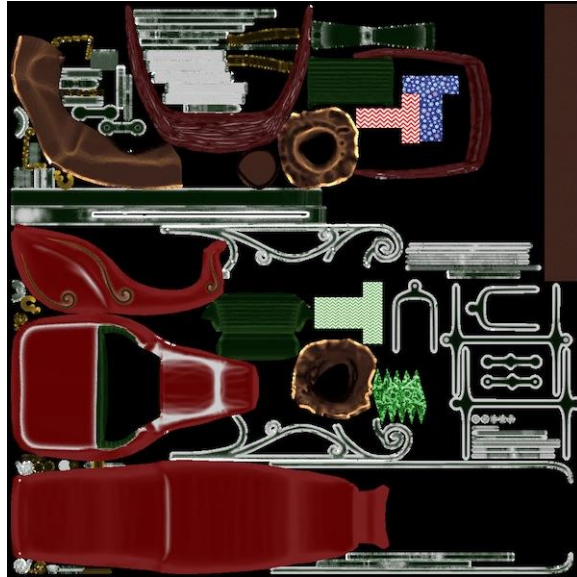


# Beyond graphics APIs, we need a runtime 3D Model Format

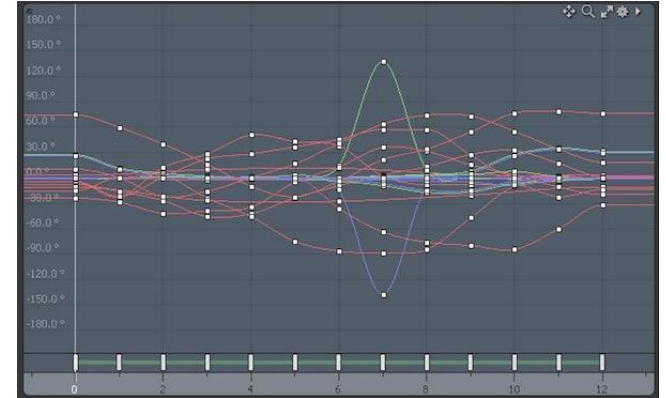
# What's in a 3D model?



Node hierarchy and geometry



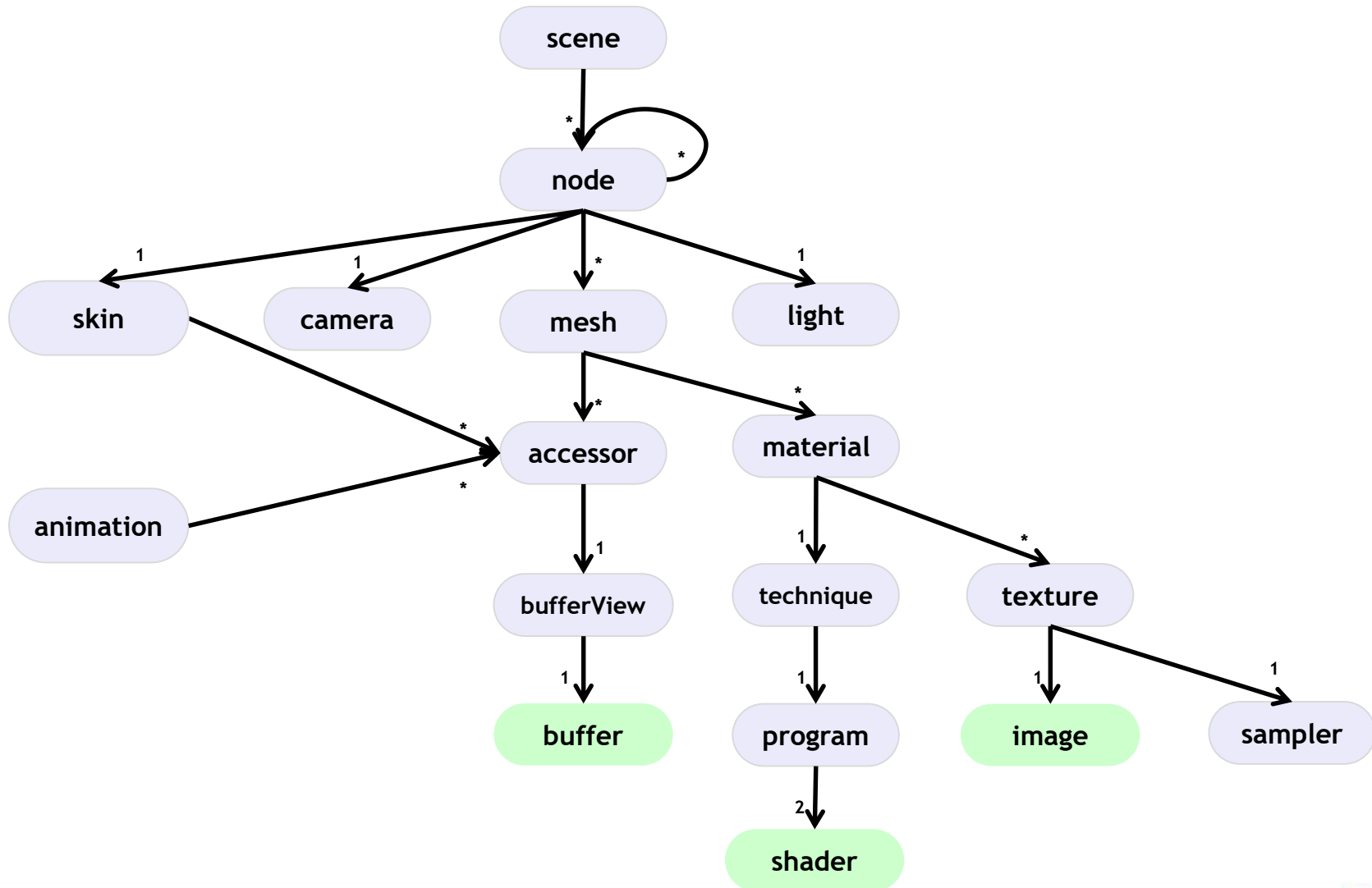
Materials and textures



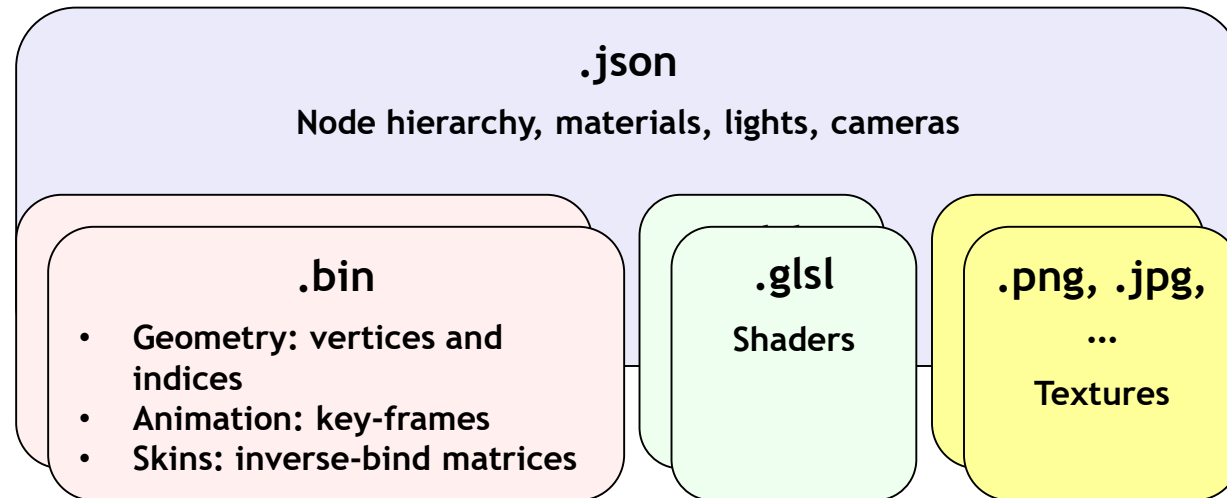
Animations and skins



# glTF Internals



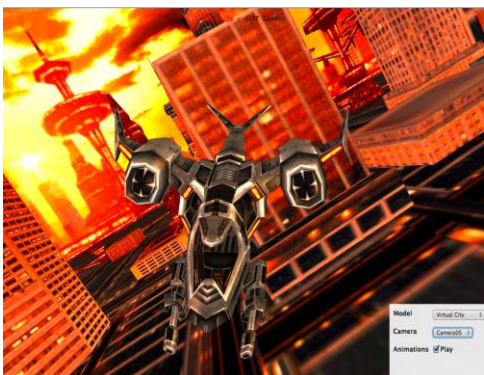
# glTF Internals



# glTF viewers

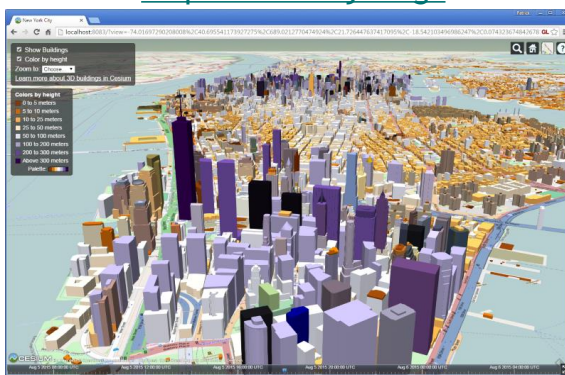
## three.js Loader

<https://github.com/mrdoob/three.js/>



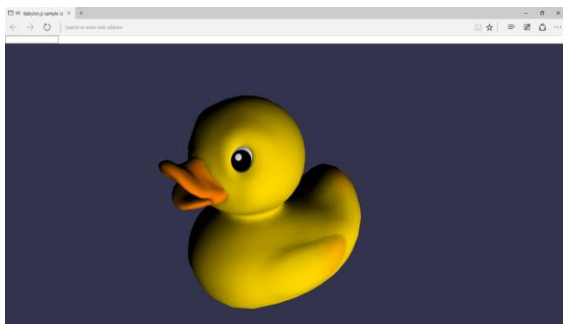
It's the native format!

<http://cesiumjs.org/>



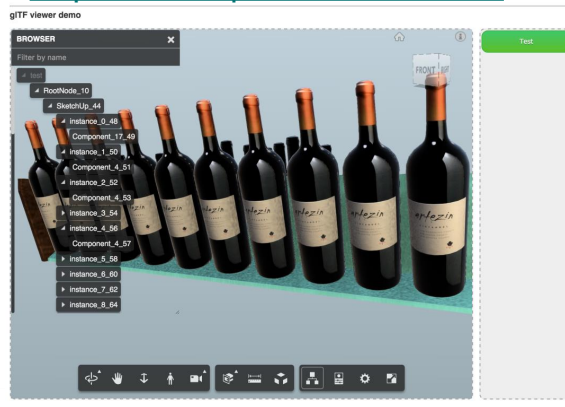
## Babylon.js Loader

<http://www.babylonjs.com/>



## Autodesk View & Data

<http://developer.Autodesk.com/>



## PIPELINE TOOLS

### collada2gltf converter

<https://github.com/KhronosGroup/glTF>

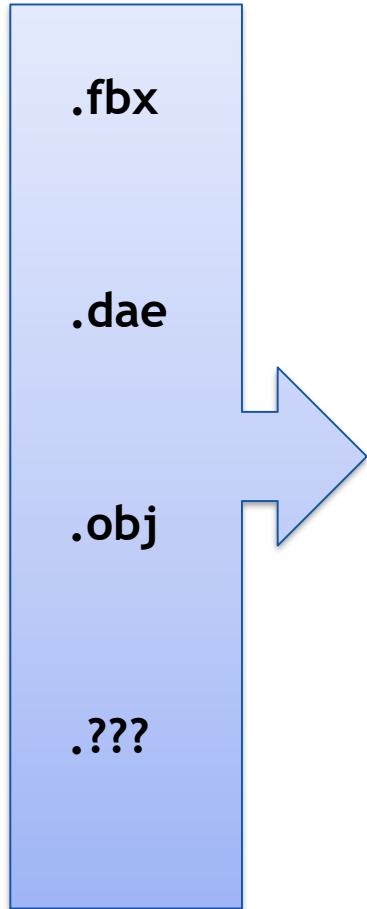
Online drag and drop COLLADA  
to glTF converter

<http://cesiumjs.org/convertmodel.html>

FBX/... to glTF Converter  
(in development)

Online Drag and drop converter coming  
<http://gltf.autodesk.io/>

# More than just FBX



# I/O FBX plug-in DLL

- 2 components
  - Command line tool
    - f/--file - file to convert to glTF [string]
    - o/--output - path of output directory [string]
    - n/--name - override the scene name [string]
    - c/--copy - copy all media to the target directory (cannot be combined with --embed)
    - e/--embed - embed all resources as Data URIs (cannot be combined with --copy)
  - I/O FBX runtime extension
- Supported on the 3 main platforms
  - Windows, osx, linux
  - Actually can work on iOS too, but...



# Engine integration

- Microsoft - Babylon.js
  - Three.js
  - ...
- 
- Autodesk Forge – View & Data API

# FBX-gITF

- <https://github.com/cyrillef/FBX-gITF>
- <http://gltf.autodesk.io>



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