

Autodesk 云平台解决方案

杜长宇 **Daniel Du**
Senior Developer Consultant



我的名片

- 杜长宇
- 18600503761
- LinkedIn
 - 搜索Daniel Du Autodesk



我们讨论的无非就是...
Web服务 和 客户端

针对...
设计师和工程师

还有...
与他们一起工作的人

The Autodesk 360 Platform





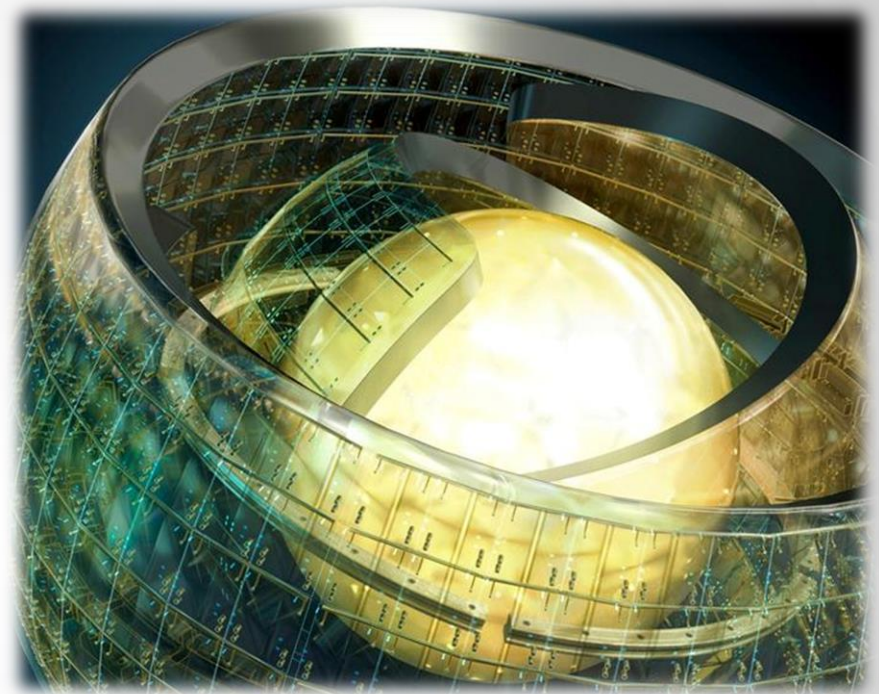
Cloud Platform API 现状

现在可用*

- BIM 360 Field
- BIM 360 Glue
- PLM 360
- Infraworks 360
- ReCap Photo

很快发布

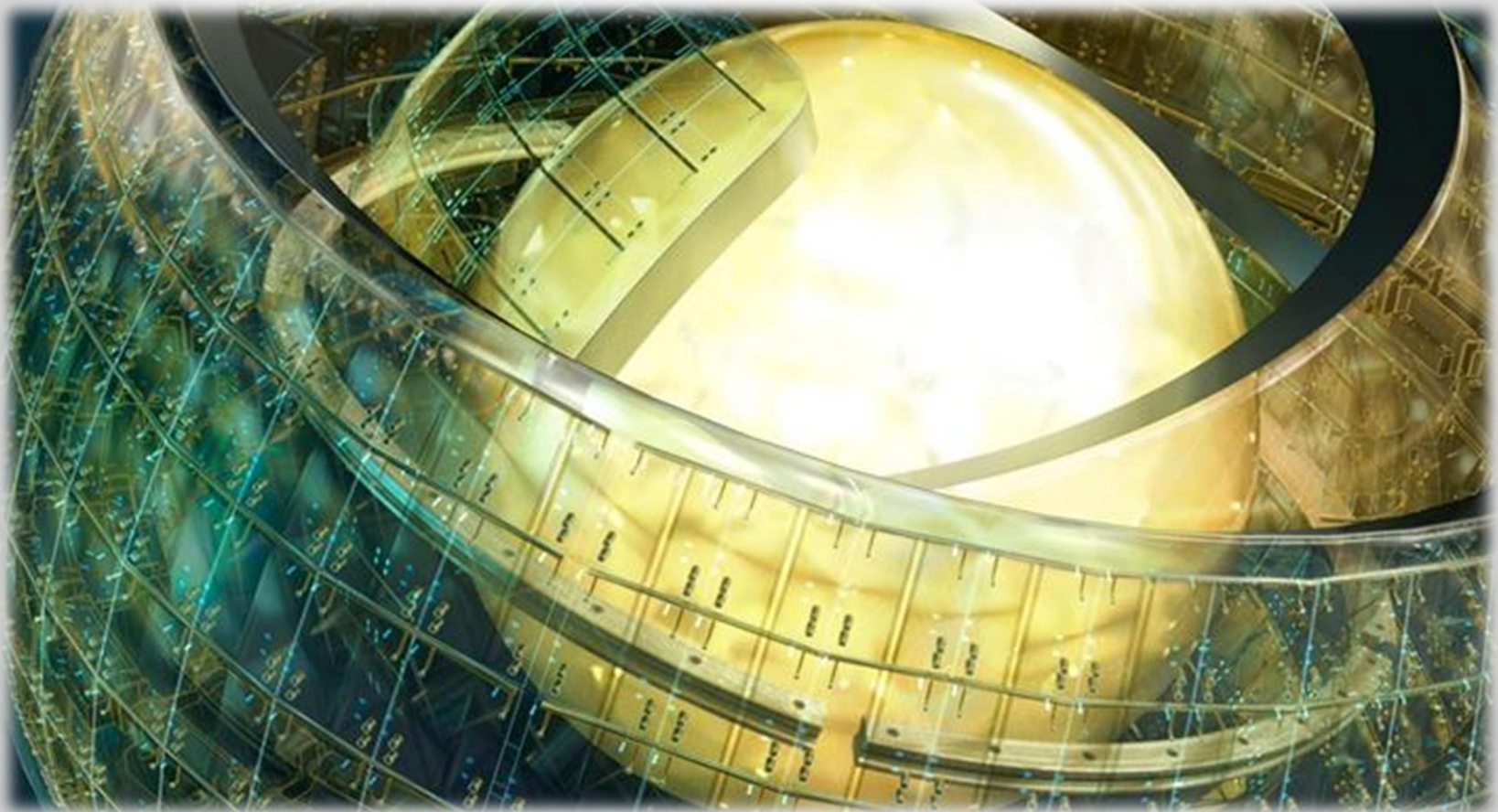
- Large Model Viewer
- AutoCAD/Autodesk 360 Mobile SDK
- AutoCAD Core Engine Service
- Fusion 360



*In production or as a 'pilot'

Cloud Platform API 现状

还有很多我们现在还不方便说的 ...



BIM 360 Field

REST 风格的 API
可以访问

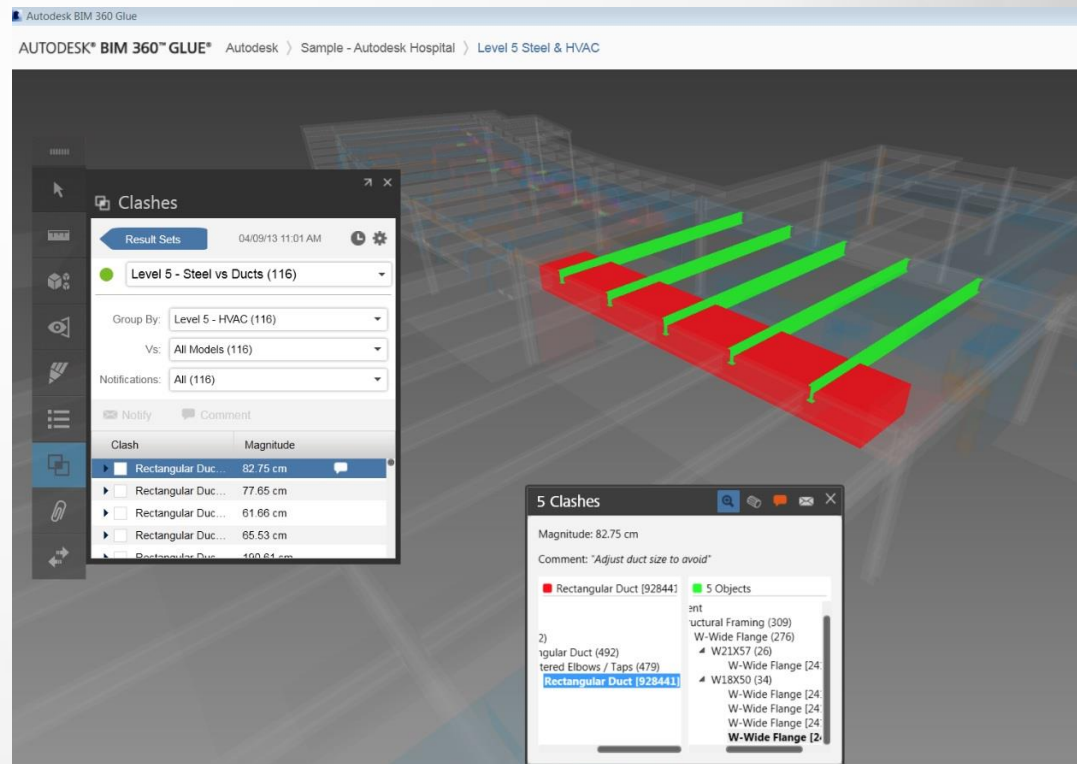
- Library
- Issues
- Checklists
- Equipment
- Tasks



BIM 360 Glue

Rest API + 嵌入式浏览器
暴露了如下服务:

- Security
- Project
- Model
- User
- Actions (records)
- System



PLM 360

REST API (Technical Preview)

- Login / logout
- 获取可见工作空间的信息
- 在工作空间中读取和查询item
- 添加/ 更新/ 删除 item
- 获取item附加的文件
- 检入 / 检出 / 删除 文件



Infraworks 360

REST API

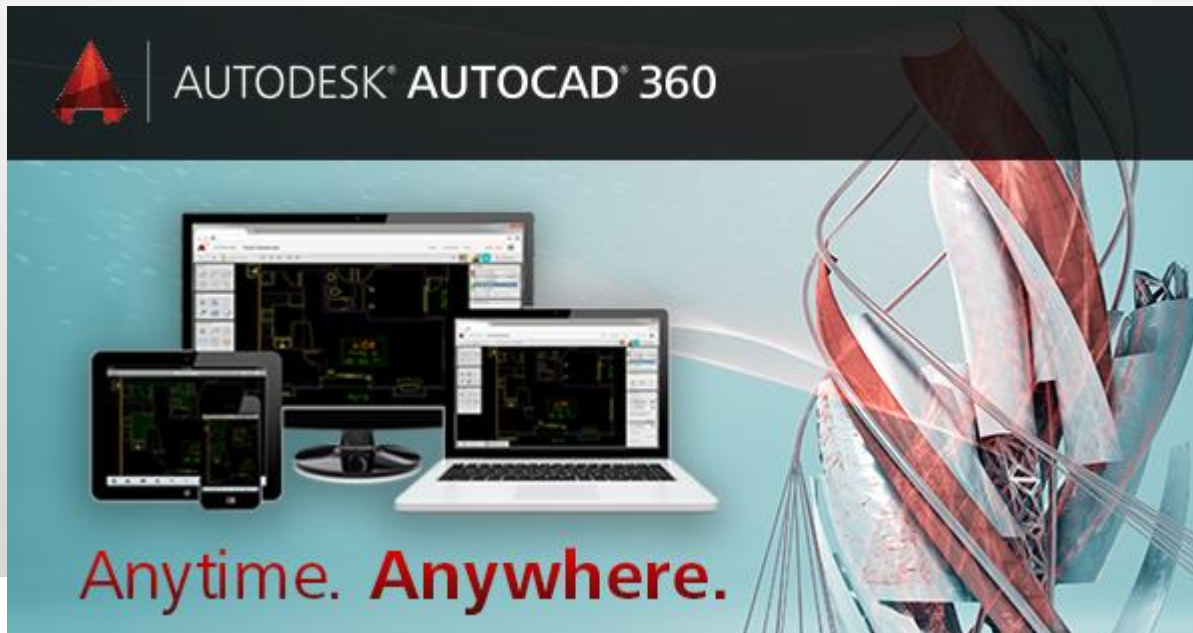
访问整个模型数据库



AutoCAD/Autodesk 360 Mobile SDK

原生 iOS SDK

- Android版很快也会发布
- 构建你自己的移动app
- 访问Autodesk 360数据
 - 浏览/编辑 DWG 文件



AutoCAD Core Engine Service

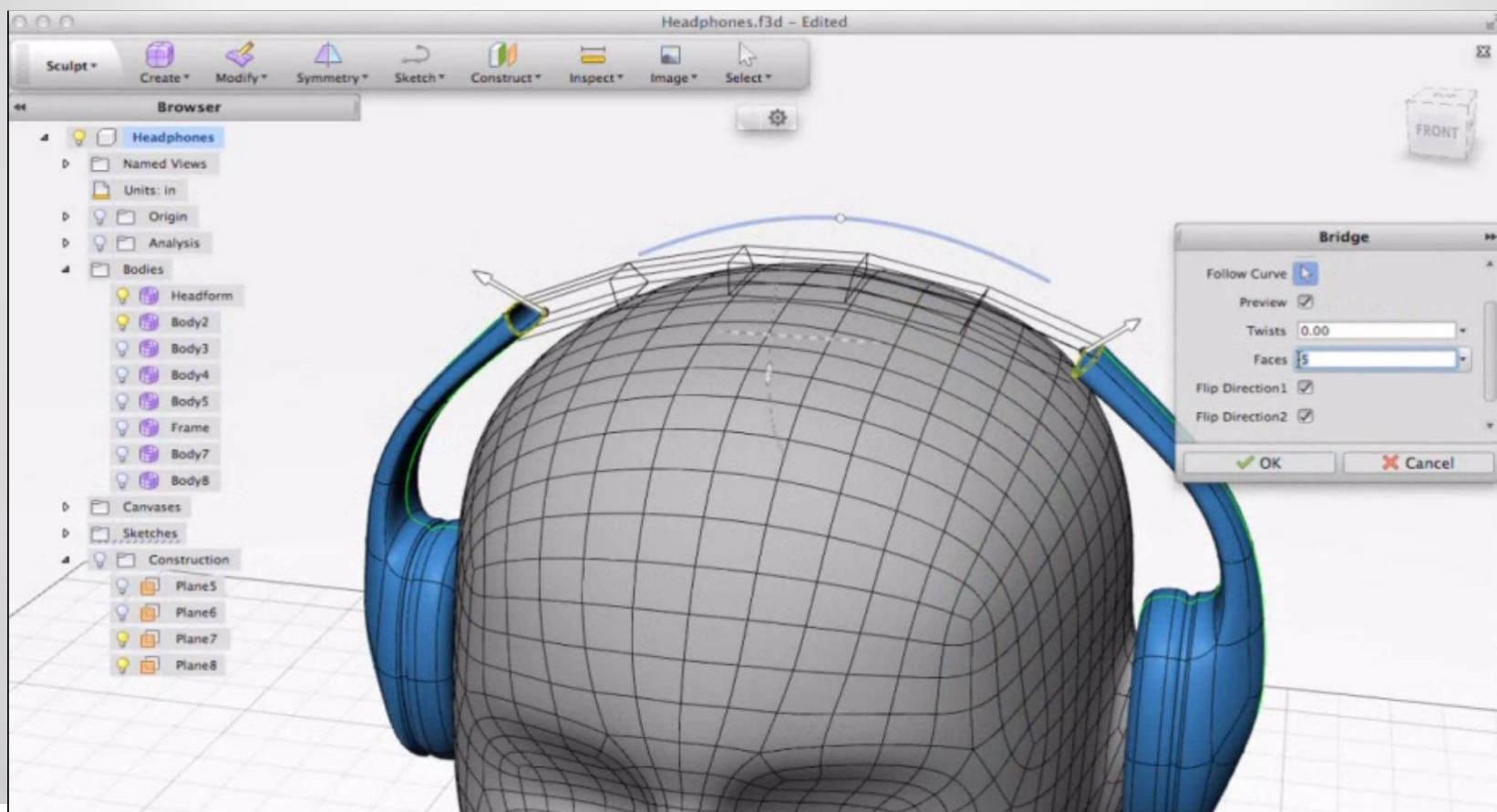
云端的AutoCAD
REST (Odata) API



Fusion 360

JavaScript/Python API

首先推出客户端API，稍后会有服务器端API



Recap Photo API



ReCap Photo API



AUTODESK
RECAP

REST API

创建场景 (photoscene)

上传照片

处理场景

监控进度

下载mesh



Demo

**AUTODESK®
RECAP 360**

Welcome to Autodesk® RECAP™ 360

Autodesk® ReCap™ 360 provides a web-based collaboration and creation environment for several different Autodesk Reality Capture technologies.

videos

tutorials

examples

Use the power of Autodesk cloud processing to share and collaborate on laser scan projects from ReCap Pro, or create high-resolution textured 3D models from photos.

You will need an Autodesk® 360 account to access ReCap 360. Sign up for your free Autodesk® 360 account and gain access to the virtually infinite computing power of cloud-based services and a digital workspace for design and collaboration.

The photo-to-3D service runs best on Google Chrome; however, it only works with browsers that support WebGL (e.g. Firefox, Safari).

sign in

[Do not have an account?](#)

news

Project Memento on Labs

For anyone who needs high quality digital or physical replicas of real life objects, Memento is an end-to-end solution, that converts any type of reality capture data into high quality 3D digital masters for digital publishing or fabrication

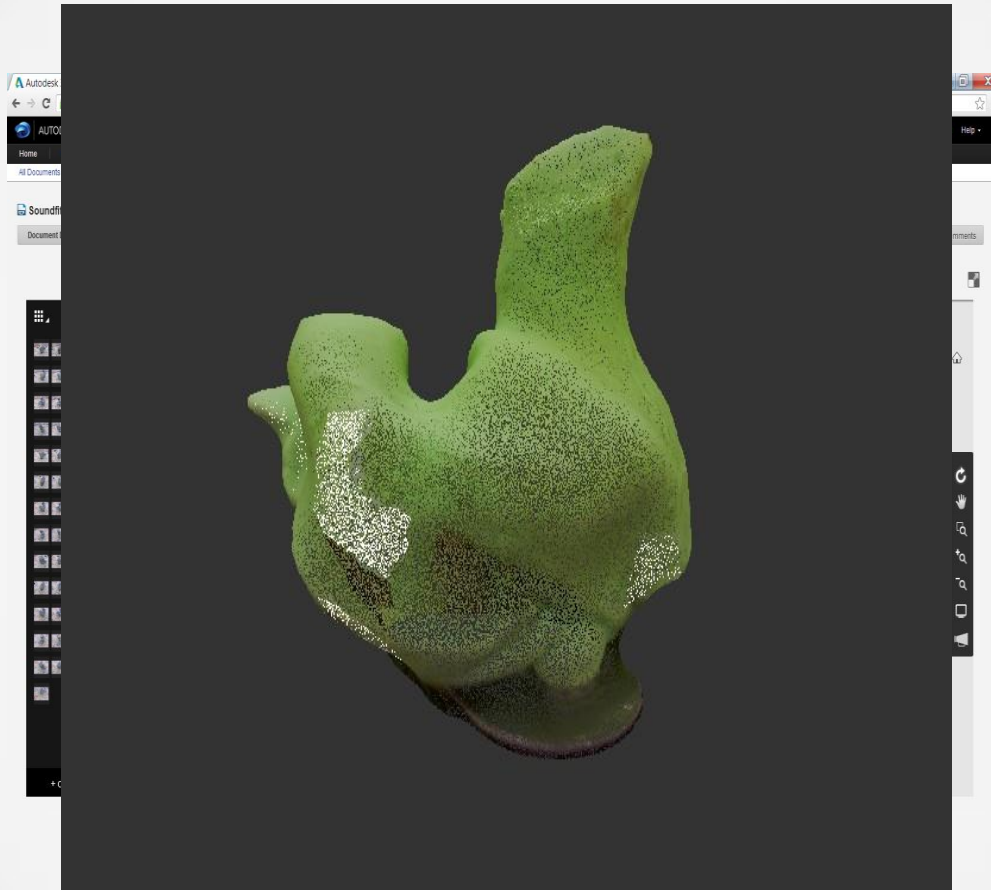
[Download the latest version for free](#)

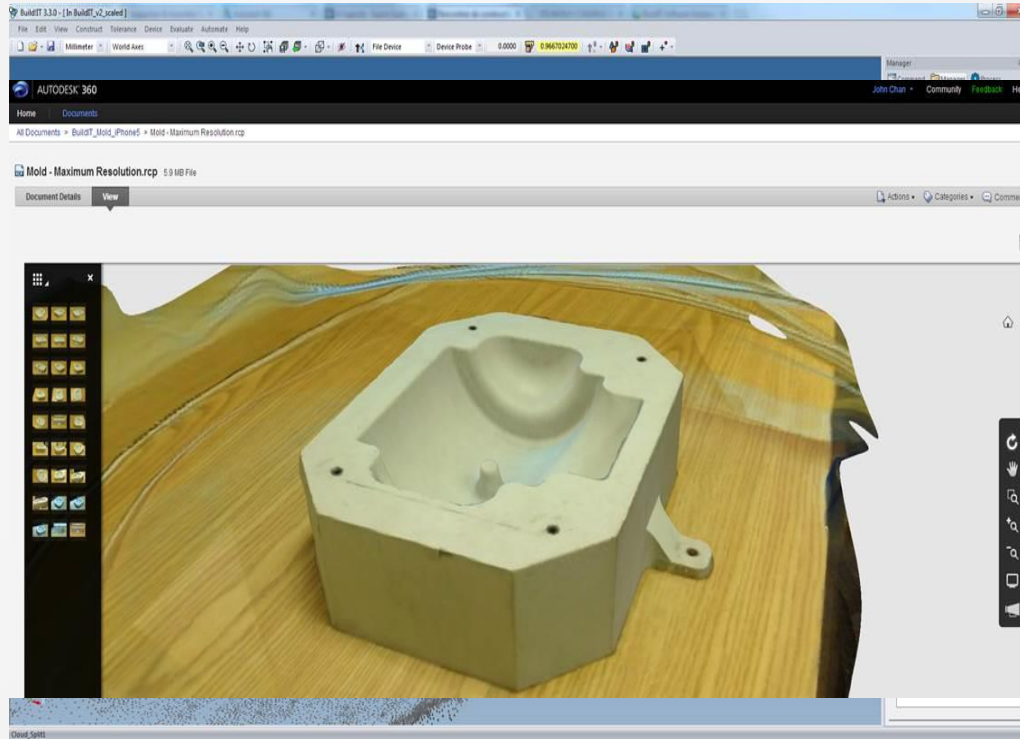
support

[About](#)
[Terms & Conditions](#)

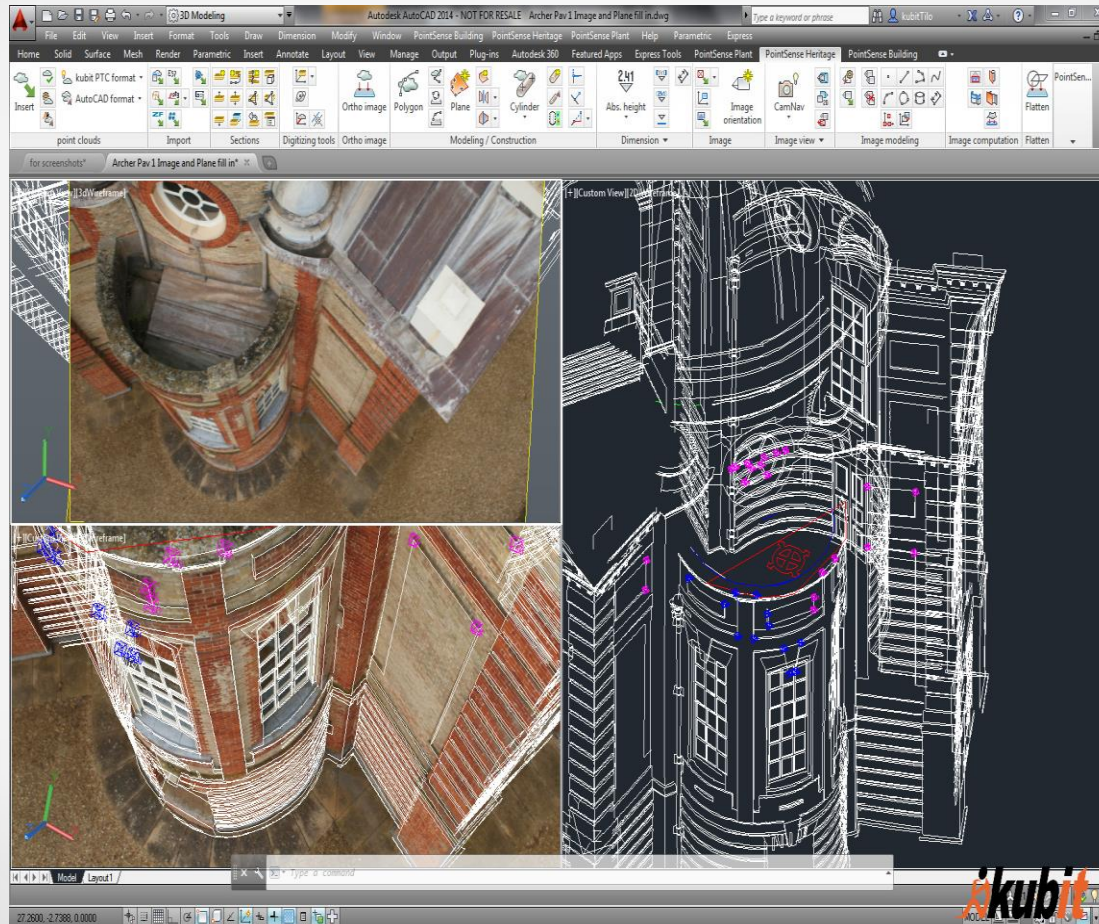
links

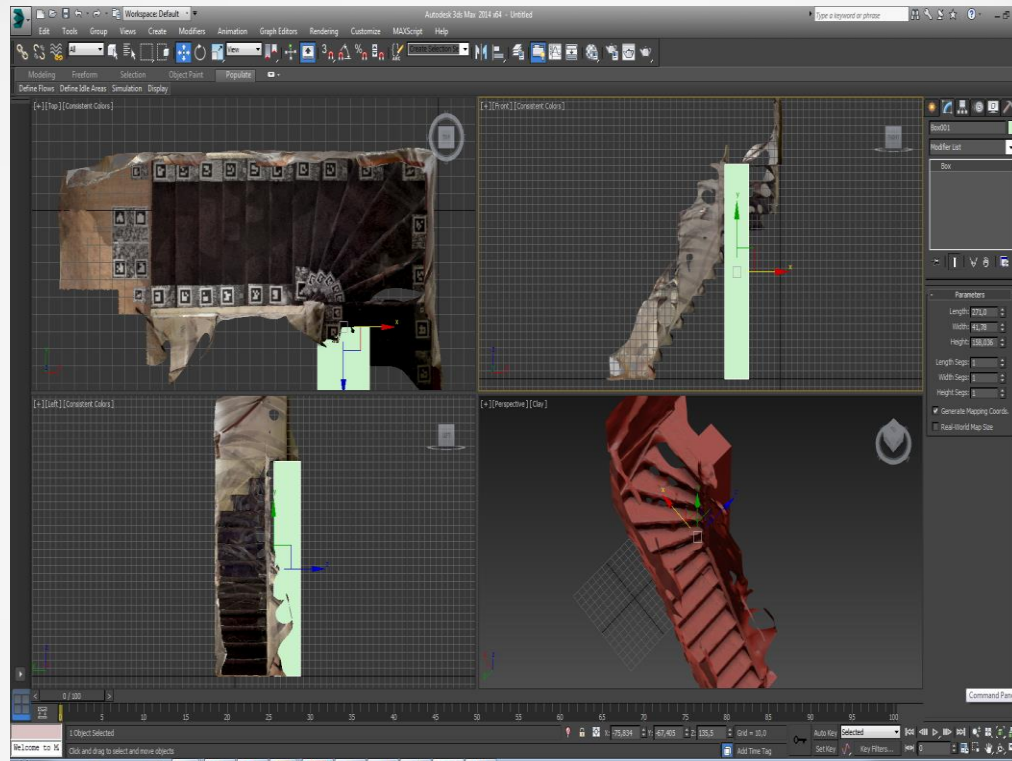
[Autodesk ReCap 360 Forum](#)
[Autodesk 360](#)
[Subscribe to ReCap360](#)





2 - Imported part to the cloud
3 - Recan to model part to inspect
4 - Import part to the cloud





“From intensive testing we have found that the accuracy of ReCap Photo is so good that it can also serve as a measurement tool, with the added benefit that the entire environment is captured”.



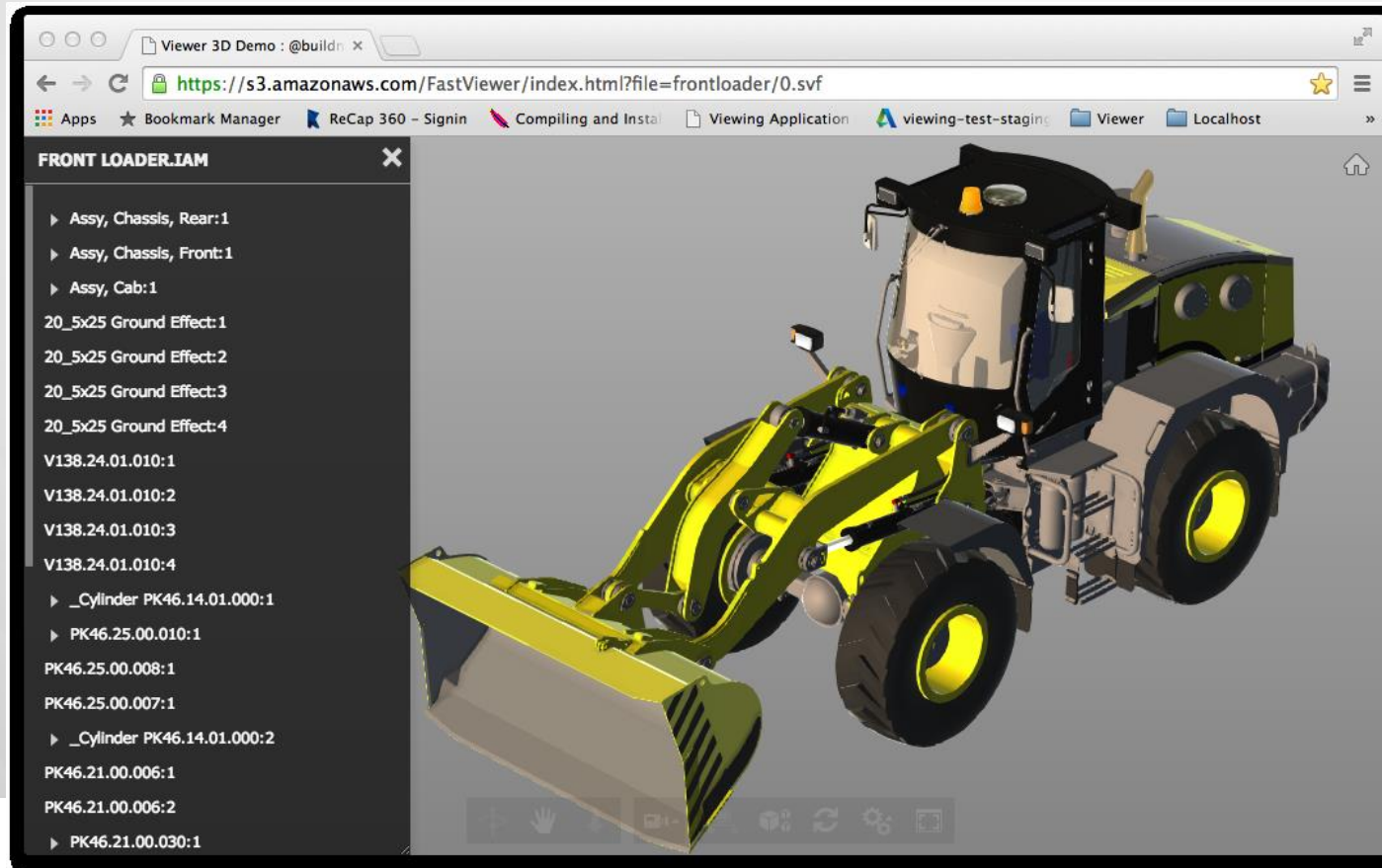
示例

<https://github.com/ADN-DevTech/Autodesk-ReCap-Samples>

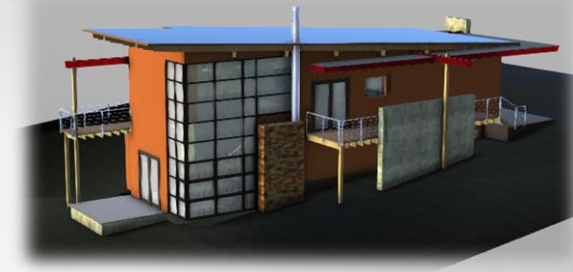
Autodesk Large Model Viewer

Add 3D models to your web application

- REST API – Server-side
- JavaScript API – Client-side



Demos



- Basic viewer
- Simple embedding
- Full workflow demo
- Integrating with custom data sources
- Client-side APIs

workflow



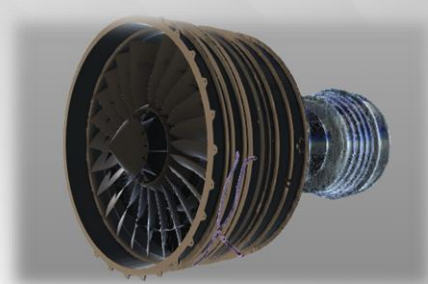
上传文件

开始转换

监控进度

显示模型

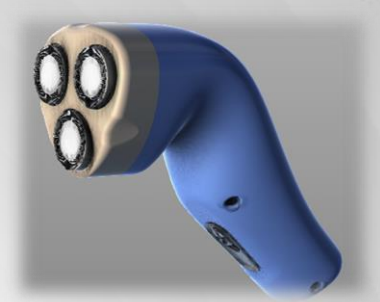
支持的格式



ipt, neu, stla, stl, jt, skp, prt, dwf, sldasm, step, dwg, zip, nwc, model, sim, stp, ste, f3d, iges, dwt, catproduct, igs, sldprt, cgr, 3dm, sab, obj, cam360, exp, wire, ige, rcp, dae, x_b, 3ds, rvt, g, sim360, iam, asm, dlv3, x_t, session, xas, xpr, catpart, stlb, nwd, sat, fbx, smb, smt, dwfx.

后续还有更多 ...

3D first



3D functionality

- 选择, 查看属性, 缩放, 平移, 旋转, 炸开, 聚焦, 高亮
- 访问底层3D模型 (mesh和材质)

2D functionality

- Raster image – zoom and pan only
- Vector graphics soon - select, view properties, zoom, pan, isolate, focus, highlight



AUTODESK®

Autodesk is a registered trademark of Autodesk, Inc., and/or its subsidiaries and/or affiliates in the USA and/or other countries. All other brand names, product names, or trademarks belong to their respective holders. Autodesk reserves the right to alter product and services offerings, and specifications and pricing at any time without notice, and is not responsible for typographical or graphical errors that may appear in this document.

© 2014 Autodesk, Inc. All rights reserved.