Introducing the Infraworks 360 API

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Class summary

This class will guide you through the new, exciting, cloud-based API for InfraWorks 360 software.

We will cover how to get started and extract data from the model, how to generate report from the extracted information, and how to integrate with other providers—all by reading InfraWorks 360 software models using the REST API.

Previous programming knowledge is required (C#) and knowledge of REST.

Key learning objectives

At the end of this class, you will be able to:

- Understand the InfraWorks 360 software API architecture
- Learn how to authenticate using Autodesk account
- Read InfraWorks 360 software model data
- Learn how to invoke cloud APIs using REST, the JavaScript API, and C#

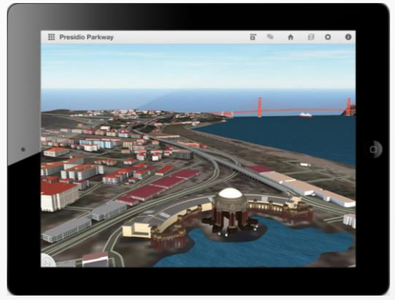
About the presenter

- Member of DevTech team since 2008 based at São Paulo office. Specialists in AutoCAD, Civil3D, Plant 3D and Revit APIs.
- Before join Autodesk, worked on CAD-related developments for civil engineering and web commerce.
- Graduated in Civil Engineering with a Master in Computer Engineer and a MBA in Marketing

Infraworks 360 REST API

INFRAWORKS Server

Desktop



iPad - mobile

REST API

Requirements

- Infraworks 360 Rolling Sandbox required
  - See more at http://beta.autodesk.com
- Key/secret required to access server
  - OAuth authentication (Autodesk login)
  - By invitation (contact augusto.goncalves@autodesk.com)

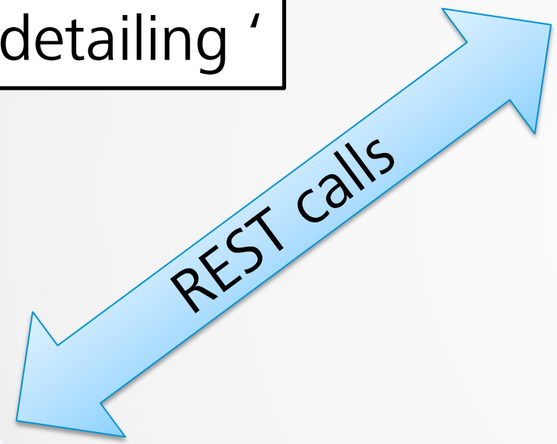
API Overview

- API works directly with the Infraworks 360 Server
  - No access to desktop or iPad/mobile clients
- Use REST/JSON approach
  - Independent of programming language
- Can make read-only calls
  - GET method

Preparing the Sample

Overview

Sample application:
Read model data and bring information to Civil 3D for detailing ‘



INFRAWORKS
Server

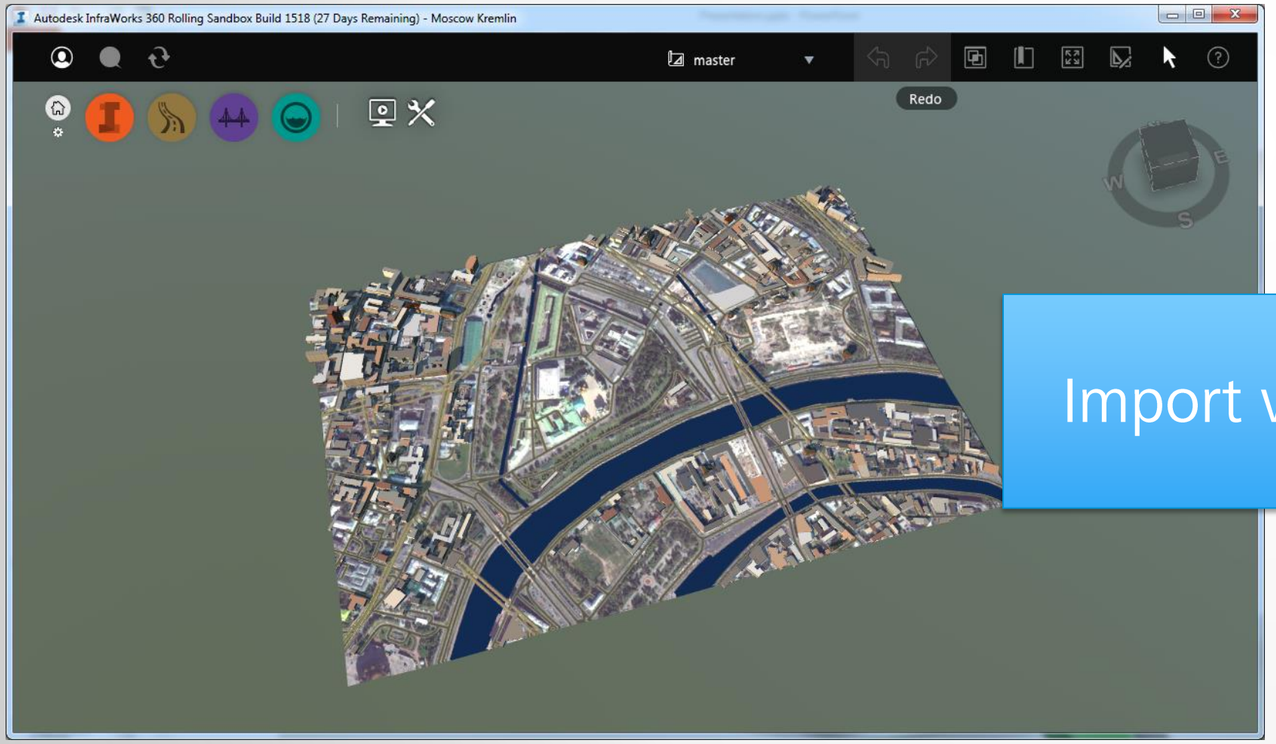
- Server based
- Read-only
- REST calls
- Model data

C3D

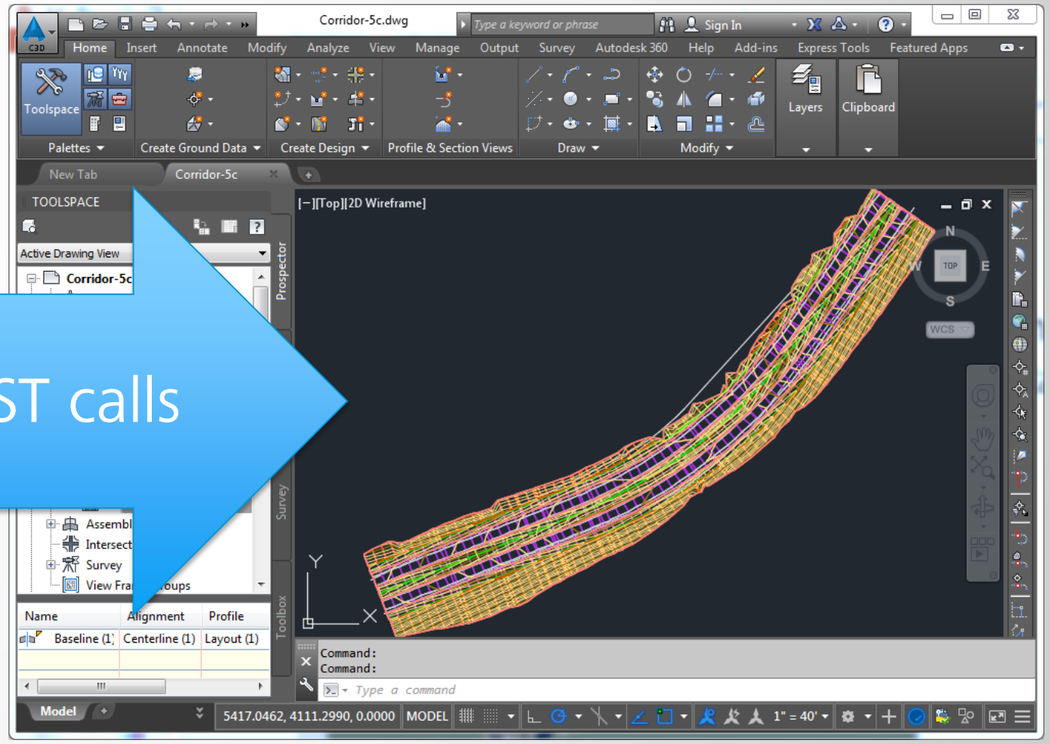
- Desktop based
- Read-write
- .NET (C#, VB.NET)

Sample application

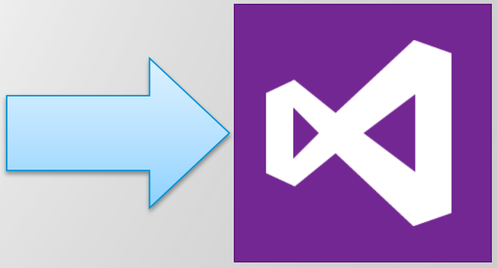
Goal: Bring a road designed on Infraworks 360 into Civil 3D for detailing



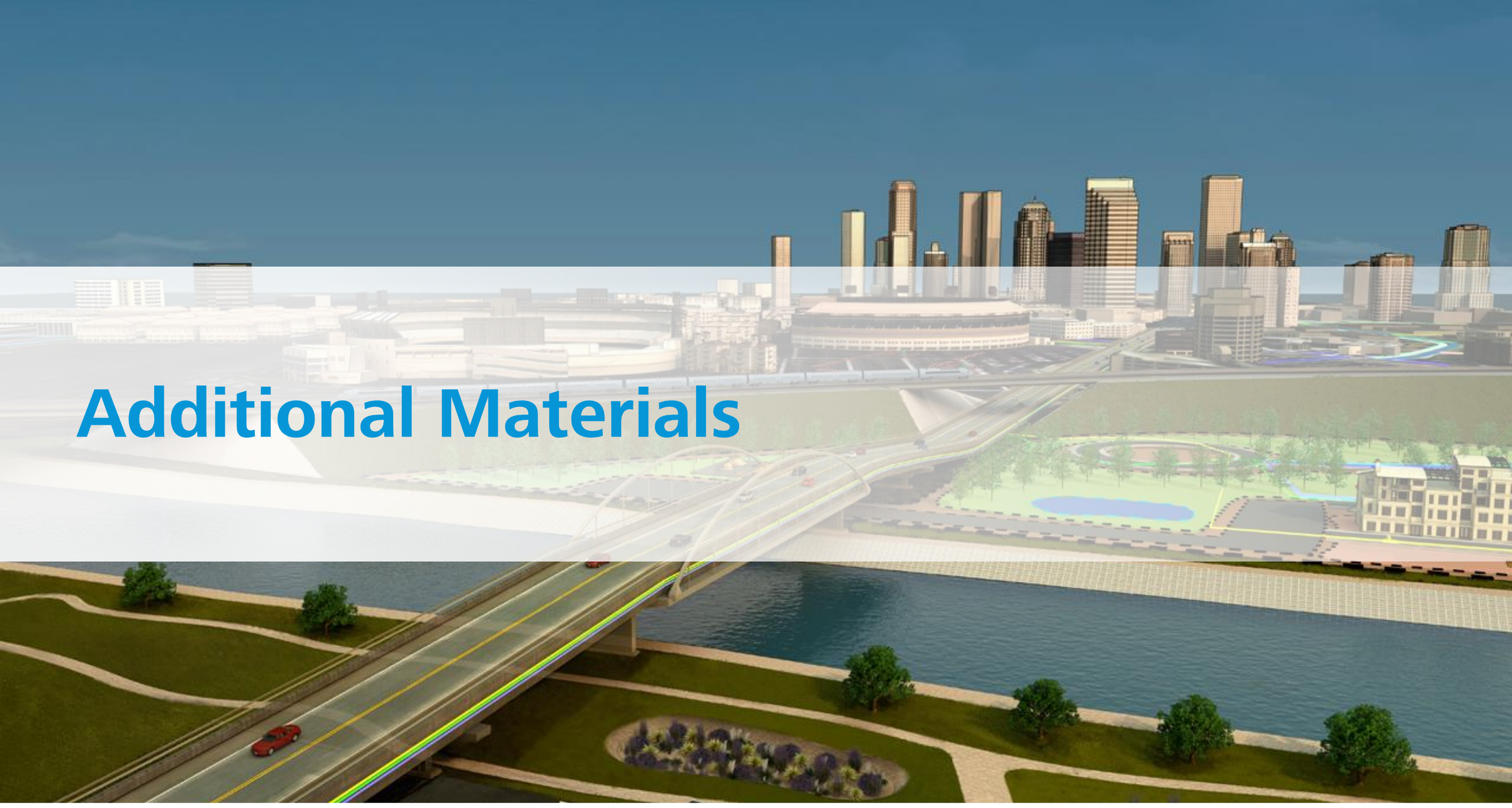
Import via REST calls



Hands on Demonstration



Additional Materials



Additional Materials

- Civil 3D Developer Center
  http://www.autodesk.com/developcivil
- Infraworks 360 Documentation
  http://api-devprod-docs.infraworks.autodesk.com
- ADN DevBlog blog – Civil 3D & Infraworks 360
  http://adndevblog.typepad.com/infrastructure

Thank you!

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