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It’s Not Too Late to Automate: Using Forge Design Automation for Inventor

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Learning Objectives

Learn about

- the benefits of automating common, repetitive tasks
- how fellow customers are moving automation from the desktop to the cloud
- how to get started creating your own Forge-based automations

Description

Forge Design Automation API for Inventor enables you to automate design tasks at scale in the cloud—freeing your team members from drudgery so they can spend more time being creative. Whether you’re automating processes such as standardized drawing creation or BOM extraction, or speeding up the sales process with a configurator, Forge helps you increase productivity and efficiency and gain a competitive advantage. Learn about two Forge customers’ solutions based on Design Automation API for Inventor: a flexible pipe end-fitting configurator project by TechnipFMC and Codeo’s latest kiosk configurator.

Speaker(s)

Natalia Polikarpova is a Senior Manager at Autodesk Developer Advocacy and Support team for Forge and Autodesk Developer Network (ADN). She has been with Autodesk since 2007, taking care of software development companies – third parties who customize, complement, and extend Autodesk desktop and web technologies. Natalia is in Boston area, Massachusetts, USA, and is originally from Russia where she joined Autodesk as an ADN Program Manager for Russia, CIS, and Eastern Europe. Prior to Autodesk, she worked in marketing and sales for a startup software development company in Moscow and state universities in Russia. She received her MBA with a concentration in management from Framingham State University, MA, USA.

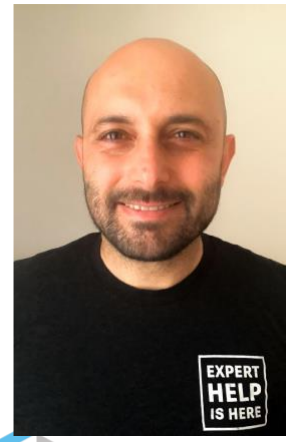
Sam Taoum is a numerical simulation development engineer in TechnipFMC group, Flexi France. He has PHD in Applied Mathematics and Numerical Simulation. Sam's mission is to develop and improve numerical solutions and software.

Kivanc Kizildemir is a Mechanical Engineer, CAD&CAE Specialist, Design Automation Visionary, 3D Configurator Developer, and Autodesk Expert Elite. Kivanc has a bachelor's degree from Izmir Dokuz Eylul University, Turkey. He has work experience in designing underground mining loaders, military vehicles, weighing automation systems, powder transfer systems, and powder coating technologies as CAD&CAE Engineer and Project&Design Manager. Kivanc has several AU experiences as a speaker. Now, he leads 3D configurator development projects and CAD&CAE engineering services at Codeo as Founding Partner. He is enthusiastic when it comes to building 3D configurators for both sales and manufacturing purposes in Forge and Inventor/Inventor OEM environments.

ABOUT THE SPEAKERS

FORGE





Codeo

TechnipFMC

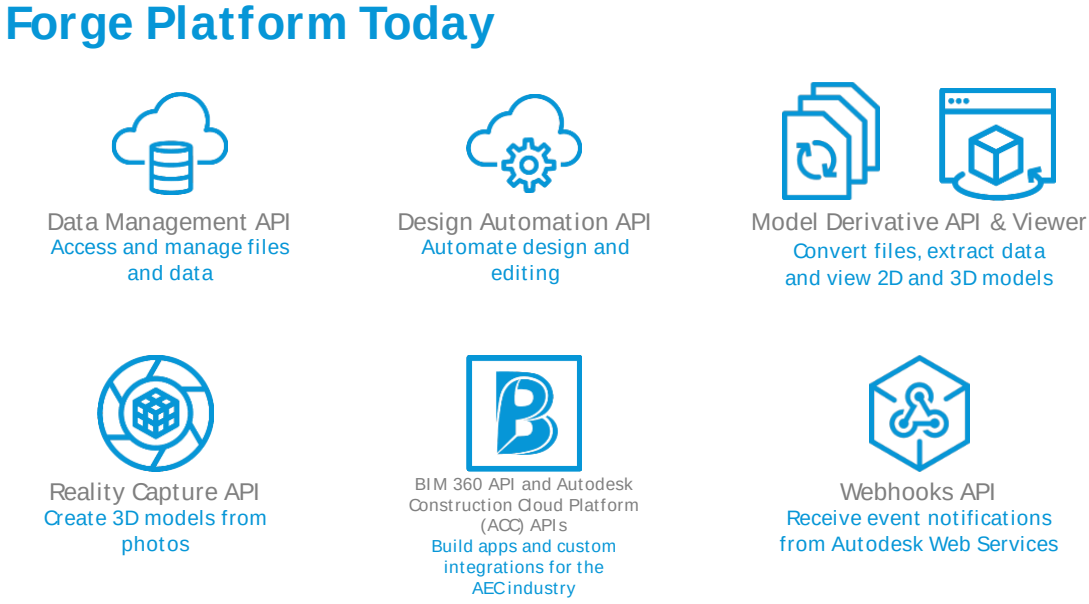


The benefits of automation

Automation is critical these days: we need to automate tasks, processes, design standards, creation of design documentation, manufacturing data, sales proposals, and more. You can do any of that with Autodesk Forge Design Automation API for Inventor and there's a team at Autodesk that can help you build these automations. You can find different ways to connect with Developer Support team at Autodesk on page 6 of this handout. In this class we are presenting two Forge customers' solutions based on Design Automation API for Inventor and how they benefit from automation.

Autodesk Forge

If you are new to Design Automation and Autodesk Forge, you should know that Design Automation is part of Autodesk Forge that is Autodesk cloud-based developer platform. You can find more information about Autodesk Forge https://forge.autodesk.com/



Design Automation API

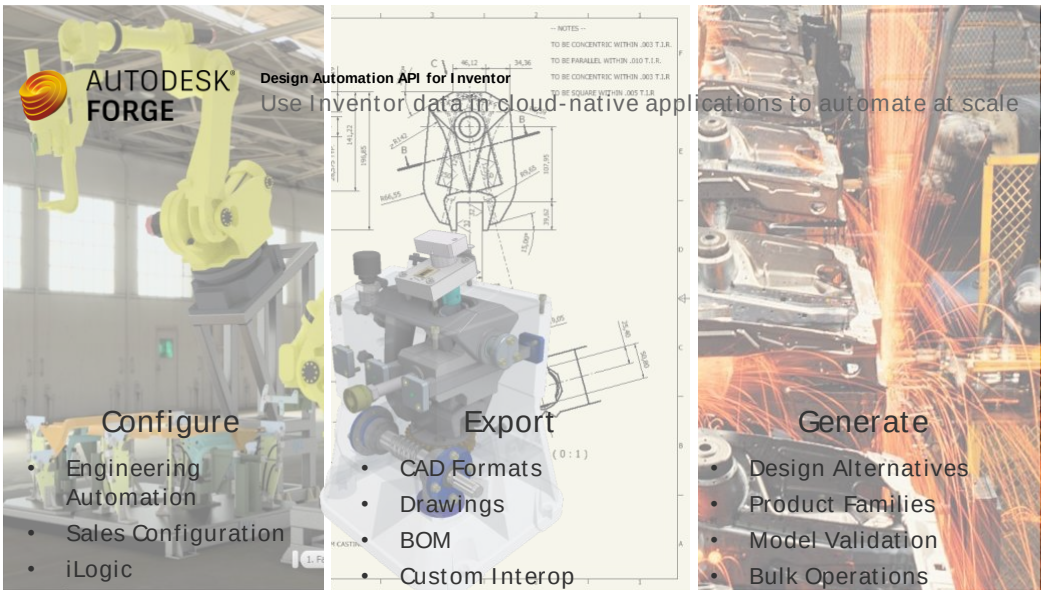
The Design Automation API allows you to access the automation capabilities of Autodesk's core products, Inventor, AutoCAD, Revit, 3ds Max and Civil 3D, as cloud services. Almost any task you can automate on your desktop application can now be automated at scale using the Design Automation API. You can get work done quicker and more reliably. What's more, because the Design Automation API is a web service, you can connect these tools with your business systems to provide complete workflows that can accelerate work processes, improve business flexibility, and generate new business opportunities.



Design Automation API for Inventor

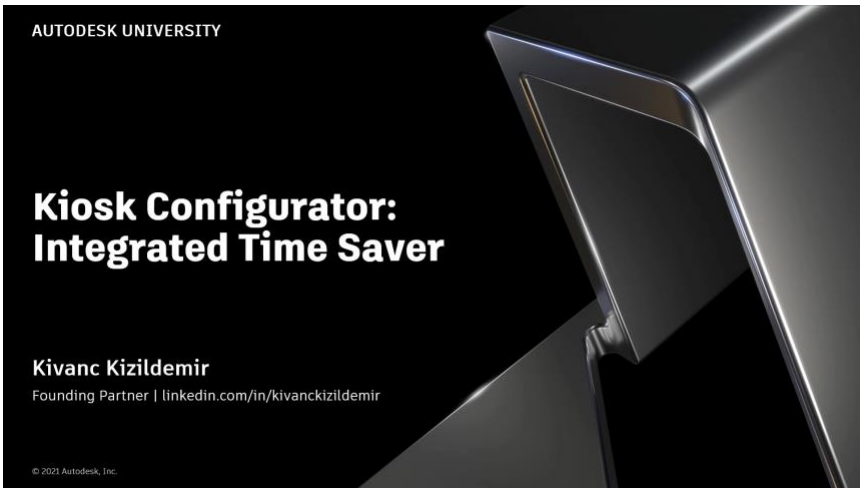
Run add-ins and iLogic to process or create IAM/IPT/IDW files

The Design Automation API for Inventor allows you to access Inventor Server running in the cloud as a Forge service, creating a scalable platform for you to load custom add-ins and run iLogic rules. From routine automations such as design checking (for compliance with CAD standards), generating drawings, or exporting BOMs (for integrating with pricing data or overlaying with materials), to bulk operations such as mass migration of thousands of files, your automation jobs can now be offloaded from your desktop to the cloud. See the Inventor Tutorial https://forge.autodesk.com/en/docs/design-automation/v3/tutorials/inventor/



How fellow customers are moving automation from the desktop to the cloud

Codeo



TechnipFMC



How to get started creating you own Forge-based automations

Getting started tutorial and documentation

- Individually - https://learnforge.autodesk.io/#/, ask questions (see technical support options).
- With Forge engineers – join online trainings. Check our Forge blog posts for the next training https://forge.autodesk.com/blog
- Documentation - https://forge.autodesk.com/en/docs/design-automation/v3/developers_guide/overview/

Build Forge applications with Forge experts

- Join our Accelerators which is a week-long opportunity for developers to work intensively on a chosen project with help and support directly from Autodesk's Forge team. Attend an Accelerator to network with industry experts and peers, exchange ideas, and build your proof of concept.
- Partner with Forge System Integrators - https://forge.autodesk.com/systemsintegrators

Technical Support

- Stackoverflow is our standard support option, we have already answered thousands of questions publicly, there is a good chance your answer is already there.
- Email us with private questions forge.help@autodesk.com
- Schedule zoom calls with Forge engineers
- Join our bi-weekly Coffee breaks with Augusto to catch up and share Forge projects ideas

Other useful links

https://forge.autodesk.com/pricing
https://forge-calculator.autodesk.io/
Optimize DA process
Faster Configuration results
What is Forge in 7 videos
Forge POCs with code samples

