

# Autodesk Manufacturing DevCamp Classes

June 13-14 (DevLab June 15) Portland

## Track Color Key

Keynote Speech	
Autodesk Inventor App Development for Beginners	
Autodesk Inventor App Development for Experts	
Autodesk PLM	
Cloud/Mobile Technologies	
Other Autodesk Manufacturing Technologies	
Business	

## Sessions and Presenters as of Match 10th, 2012

Track	Class Number	Session Title	Presenter	Session Description
Keynote Speech	0-1	Autodesk "Emerging" Products and Services for Manufacturing - A Peek Into the Future	Kevin Schneider, Senior Product Line Manager, Autodesk Fusion	
Keynote Speech	0-2	Autodesk Manufacturing: Where we are today and where we are going	Robert "Buzz" Kross, EVP Autodesk Manufacturing Division	
Autodesk Inventor App Development for Beginners	1-1	Autodesk Inventor API Overview and What's New in 2013	Gary Wassell, Autodesk DevTech Manager for Manufacturing	This session will provide an overview of the new features added to the Autodesk Inventor API. Attendees will gain an understanding of recent additions to the product and API with examples illustrating what is now possible. This class is suitable for those new to customizing Autodesk Inventor, or who want to catch up on the latest updates.
Autodesk Inventor App Development for Beginners	1-2	Your first Autodesk Inventor AddIn	Gary Wassell, Autodesk DevTech Manager for Manufacturing	This class introduces Autodesk Inventor customization to those who already work with the product, and want to do more. You'll be guided through a simple project to generate your first AddIn based on VB .NET, often the first hurdle in getting going with any API.
Autodesk Inventor App Development for Beginners	1-3	Digging deeper into the Autodesk Inventor Part document API	Gary Wassell, Autodesk DevTech Manager for Manufacturing	This class discusses the Part Document API within Autodesk Inventor, and illustrates how Parts can be created and manipulated from a VB.Net application.
Autodesk Inventor App Development for Beginners	1-4	Digging deeper into the Autodesk Inventor Assembly document API	Gary Wassell, Autodesk DevTech Manager for Manufacturing	This class discusses the Assembly Document API within Autodesk Inventor, and illustrates how Assemblies can be created, traversed and manipulated from a VB .NET application.
Autodesk Inventor App Development for Beginners	1-5	Digging deeper into the Autodesk Inventor Drawing document API	Gary Wassell, Autodesk DevTech Manager for Manufacturing	This class discusses the Drawing Document API within Autodesk Inventor, and illustrates how Drawings can be created and manipulated from a VB .NET application.
Autodesk Inventor App Development for Beginners	1-6	Seamlessly integrate your AddIn into Autodesk Inventor's Ribbon bar.	Gary Wassell, Autodesk DevTech Manager for Manufacturing	In this session we'll explain how you can add various commands to the Autodesk Inventor Ribbon bar in such a way that it seems your AddIn is a natural part of Autodesk Inventor itself.
Autodesk Inventor App Development for Beginners	1-7	How to submit Autodesk Inventor Apps into the Autodesk Exchange Apps store.	Philippe Leefsma, Autodesk DevTech Consultant	In this class we demonstrate how to generate an AddIn suitable for publishing on the Autodesk Exchange Apps store for Autodesk Inventor, and the steps you need to take to get your App published.
Autodesk Inventor App Development Advanced	2-1	Autodesk Inventor Cameras, Reference Keys and Proxies	Brian Ekins, Autodesk Inventor API Designer	This class focuses on some of the least understood aspects of the Autodesk Inventor API, and demonstrates how these features are necessary and (once you understand them) straight forward to take advantage of.
Autodesk Inventor App Development Advanced	2-2	Design Patterns and the AutodeskInventor API	Philippe Leefsma, Autodesk DevTech Consultant	This class focuses on developing .Net based add-ins for Autodesk Inventor® using the best practices gained from direct hands-on experience of Autodesk software engineers. Design patterns are general, reusable solutions to commonly occurring situations in software design. You will learn how to get the most out of several design patterns specifically studied for the Inventor® API. The class will benefit any programmer developing .Net applications on top of Autodesk Inventor®.
Autodesk Inventor App Development Advanced	2-3	Understanding what Autodesk Inventor Apprentice Can Do for You	Brian Ekins, Autodesk Inventor API Designer	This class highlights how Apprentice server can be used to extract data from Autodesk Inventor files, and some of the useful features provided by this free "Read" library.
Autodesk Inventor App Development Advanced	2-4	Integrating Cloud & Mobile technologies with Autodesk Inventor!	Philippe Leefsma, Autodesk DevTech Consultant	This class discusses a case study where we demonstrate how a mobile device can talk to a cloud based application which distributes views of Autodesk Inventor files.

Autodesk Inventor App Development Advanced	2-5	Add-In Development and Deployment, Including Developing for the Autodesk Exchange Apps store	Brian Ekins, Autodesk Inventor API Designer	This class discusses good practise when developing Autodesk Inventor AddIn applications, deployment techniques, and finishes off discussing how to deploy to the Autodesk Exchange Apps store for Autodesk Inventor.
Autodesk Inventor Advanced	2-6	Autodesk Inventor's Client Graphics	To Be Determined	Here we discuss the Client Graphics API provided with Autodesk Inventor, and outline the overall design and how best to take advantage of the functionality provided.
Autodesk Inventor Advanced	2-7	Autodesk Inventor OEM - The Platform for Specialized Engineering and Manufacturing Solutions	To Be Determined	Learn the basics of developing solutions based on Autodesk Inventor OEM - and the differences from Autodesk Inventor. Also hear about Autodesk Inventor OEM business models and licensing terms.
Autodesk PLM	3-1	Introduction to the Autodesk Vault API	Doug Redmond, Autodesk Senior Software Engineer, Autodesk Vault	Whether you want to jump in and start writing Autodesk Vault apps or just want to know what is possible, this class can be your starting point. This class will cover all the Autodesk Vault API capabilities from a high level and show you how to get started.
Autodesk PLM	3-2	Communicating with the Autodesk Vault Server through the API	Doug Redmond, Autodesk Senior Software Engineer, Autodesk Vault	Autodesk Vault isn't just a place to store files. It's a repository of rich CAD data for your applications to mine through. This class will show you how to use Autodesk Vault's web service API to communicate with the Autodesk Vault Server. Since the server communicates through an open API, the possibilities are endless.
Autodesk PLM	3-3	Custom Objects and the Autodesk Vault API	Doug Redmond, Autodesk Senior Software Engineer, Autodesk Vault	New in Autodesk Vault 2013, Custom Objects! Like the name implies, these objects are defined through customization. No longer do you have to be constricted by the default object types (file, folder, item, and change order). This class will go over the custom object features and how to maximize their use through the API.
Autodesk PLM	3-4	Advanced Vault API Tips and Tricks	Doug Redmond, Autodesk Senior Software Engineer, Autodesk Vault	Back again for the another DevCamp, this class is designed for the advanced Autodesk Vault programmer. No Autodesk Vault topic is too difficult or too obscure. Special attention will be given to the new Autodesk Vault 2013 features. Other topics can be covered based on class interest.
Autodesk PLM	3-5	Introduction to Autodesk PLM 360	Jared Sund, Autodesk PLM 360 Product Manager	This class provides an introduction and overview of Autodesk's new PLM 360 product.
Autodesk PLM	3-6	Customizing Autodesk PLM 360	Jared Sund, Autodesk PLM 360 Product Manager	This class illustrates how flexible Autodesk PLM 360 is, and how to go about customising and tailoring the product to you or your customer's needs.
Cloud/Mobile	4-1	An Overview of Cloud Computing	Gopinath Taget, Autodesk DevTech Consultant	Learn what cloud computing is all about, what kind of applications can be written for and run on the cloud, when it is suitable to use the cloud, when it is not. Learn about the popular commercial cloud service providers including Amazon Web Services (AWS), Microsoft Azure and Google App Engine and how to use them. Learn the similarities and differences between the cloud services they provide, the advantages of using one over the others and the coverage and sophistication of the APIs provided to use their cloud services. The class includes demonstrations and code review of sample cloud applications for Autodesk Revit, AutoCAD Civil 3D, AutoCAD and AutoCAD WS.
Cloud/Mobile	4-2	State of the Art of Autodesk Cloud and Mobile Apps	Gopinath Taget, Autodesk DevTech Consultant	Learn about current Autodesk cloud services, their capabilities and APIs. We will talk about and demonstrate AutoCAD WS, Autodesk 360, and Autodesk Photofly web services in depth. Demonstrations and instruction will be based on Microsoft Windows, Apple's iOS and Google's Android. The class will end on an exploration where these web services are going and - at a high level - where Autodesk's web services are headed.
Cloud/Mobile	4-3	Introduction to Mobile app development - Apple's iOS	Gopinath Taget, Autodesk DevTech Consultant	Learn about programming on iOS devices. Learn where you need to go and what you need to do to start programming on iOS. Learn about the SDKs important for graphics intensive software development including WebGL and OpenGL ES and how to get started working with them. This class includes a detailed "start to finish" look at development of a simple iOS mobile App with a basic user interface.
Cloud/Mobile	4-4	Introduction to Mobile app development - Google's Android	Gopinath Taget, Autodesk DevTech Consultant	Learn about programming on Android devices. Learn where you need to go and what you need to do to start programming on Android. Learn about the SDKs that would be important to a CAD developer like WebGL and OpenGL ES and how to get started on them. This class will also demonstrate creating a simple Android mobile App with simple user interface from start to finish.
Other Autodesk Manufacturing Technologies	5-1	Introduction to the Autodesk Navisworks .NET API	Simon Bee, Autodesk Senior Software Engineer	This session will introduce you to customizing Autodesk Navisworks 2013 using the .NET API. We will cover how to create add-ins that sit inside the product and allow you to integrate with your own programs. We'll also show how to automate the product to perform process-intensive and repetitive tasks, and how to embed the .NET controls in your own application to leverage the power of Navisworks. The session will include introductions to the new clash and timeliner APIs.
Other Autodesk Manufacturing Technologies	5-2	Autodesk Navisworks and Cloud/Mobile	Simon Bee, Autodesk Senior Software Engineer	This session explores ideas around clouds and mobile technology in the context of manufacturing and Autodesk Navisworks. While there is no cloud/mobile specific API for Navisworks at the moment, this does not mean that you cannot take advantage of cloud/mobile technologies when working with Autodesk Navisworks. Based on our development efforts around Digital Prototyping, we will share thoughts on how cloud/mobile technologies can be leveraged within an Autodesk Navisworks workflow, giving you a quick start writing your first cloud/mobile application integrated with Autodesk Navisworks that can deliver great value to field workers on the shop floor or out in the field.

Other Autodesk Manufacturing Technologies	5-3	Overview of Autodesk Inventor ETO (Engineer-To-Order)	Sanjay Ramaswamy, Autodesk Inventor ETO Product Manager	This class introduces Autodesk's 'Engineer-to-Order' product - Autodesk Inventor ETO. The class provides an overview outlining what the product does, workflows supported, target customers and success stories.
Other Autodesk Manufacturing Technologies	5-4	Getting started developing solutions with Autodesk Inventor ETO	Wayne Brill, Autodesk DevTech Consultant, and Jon Balgley, Autodesk Inventor Software Architect	The class is aimed at getting you up and running using Autodesk Inventor ETO. The various aspects of the product are discussed, along with some class demonstrations illustrating the various steps in the process. An example of what it takes to create an Autodesk Inventor ETO based design configuration solution is discussed.
Other Autodesk Manufacturing Technologies	5-5	Sales automation deployments everywhere - desktop, browser and mobile with Autodesk Inventor ETO	Wayne Brill, Autodesk DevTech Consultant	We discuss the use of AutoCAD Inventor OEM and AutoCAD Inventor Server within the ETO offering to deploy desktop, web and mobile configuration apps anywhere and everywhere.
Other Autodesk Manufacturing Technologies	5-6	Are you right for Autodesk Inventor ETO?	Kriss Ryan, Autodesk Sales Channel Business Development Manager	Learn how you can get involved in the fast growing Autodesk Inventor ETO business
Business	6-1	Cloud/Mobile - Why and When?	Jim Quanci, Autodesk Developer Network Director	You keep hearing how Cloud/Mobile is changing the software industry. Unsure how it applies to your customers? Unsure what is possible? Unsure what questions to ask your customers to understand what your opportunity is with a Cloud/Mobile offering? Unsure what to ask your engineering team to learn and prototype based on Cloud/Mobile technologies? Come to this session to get answers to these and more questions - as well as a chance to expand your view of what is possible by seeing a number of Cloud/Mobile apps from Autodesk and members of the Autodesk Developer Network. Much of this class was originally presented as part of Autodesk DevDays 2011.
Business	6-2	Dancing with the Elephant - Maximizing the Value of Your Relationship with Autodesk	Jim Quanci, Autodesk Developer Network Director	This class is for commercial software developers and independent consultants that want to get maximum leverage from their partnership with Autodesk. Is your business taking advantage of all the resources Autodesk makes available to its software development partners? Does your team know how to work with - and take advantage of - the various teams at Autodesk including engineering, marketing sales and Autodesk Authorized Resellers and Distributors? Do you know the directions your business might take that lets you ride the elephant and those that risk the elephant stepping on you by accident? Come to this class and learn more. This typically small class includes up close and personal needs analysis and consulting.
Business	6-3	Autodesk Mergers & Acquisitions - Opportunity or Danger?	Jim Quanci, Autodesk Developer Network Director	This class is for commercial software developers and independent consultants. Hear some Autodesk M&A history, learn what Autodesk values - and does not, and get tips on how to position your business to benefit - and not lose - from Autodesk M&A activities.