

MA1451: Autodesk® Configurator 360™

Making It Easy to Create Web and Mobile Catalogs of Configurable Products

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Class summary

Autodesk Configurator 360, a new software as a service (SaaS) offering, makes it **absurdly easy** to publish configurable models to an online catalog. Your sales teams, distributors, and customers can then configure, visualize, and request a quote for a product through a web browser or a mobile device. This class provides an overview of the steps required to publish catalogs and illustrates the process with some examples.

Key learning objectives

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

Put configurable models on the web!

- Create appropriate content for a catalog
- Use Configurator 360 to create the catalog
- Use Configurator 360 to connect sales and engineering
- Describe other workflows supported by Configurator 360

Today's Schedule

- Really quick overview of Configurator 360 functionality
- Why Configurator 360 is **absurdly easy**
 - The “one-minute demo”
 - Overview of Configurator 360 functionality
- Comparison of configuration technologies:
 - iParts/iAssembly (simple test box)
 - iLogic (brewing rack, playground structure)
 - ETO (overhead crane and walkway roof)

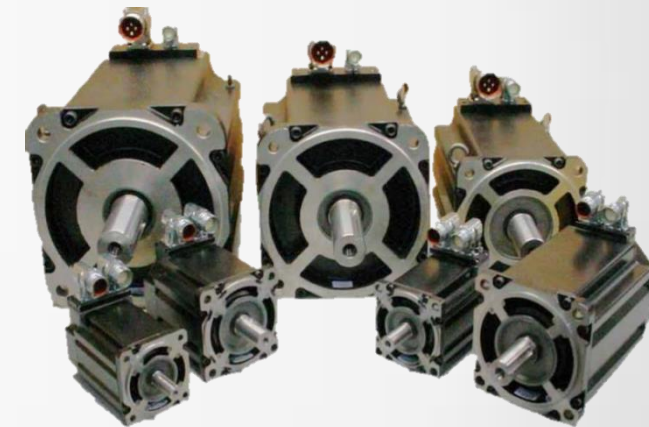
Configurator 360

Really Quick Overview

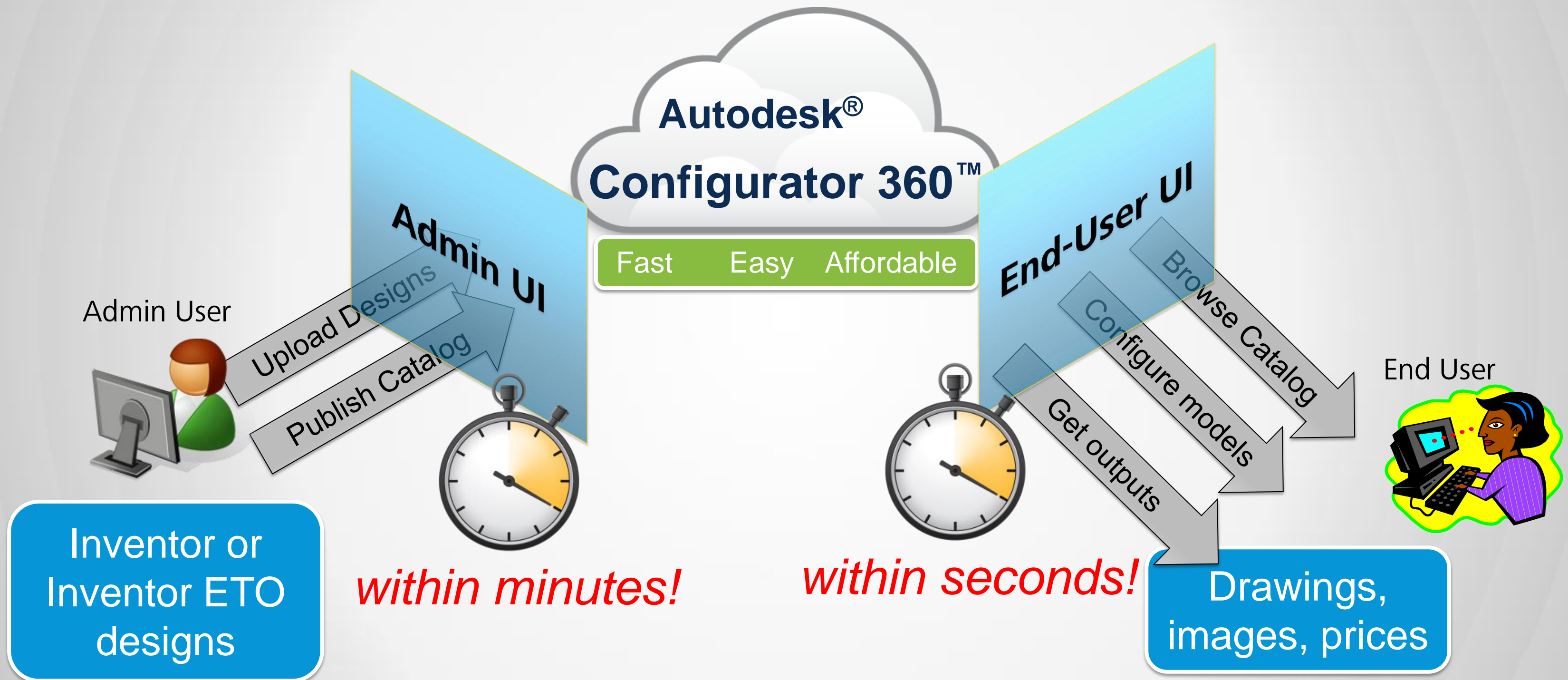
Autodesk® Configurator 360™

Online catalog of configurable products

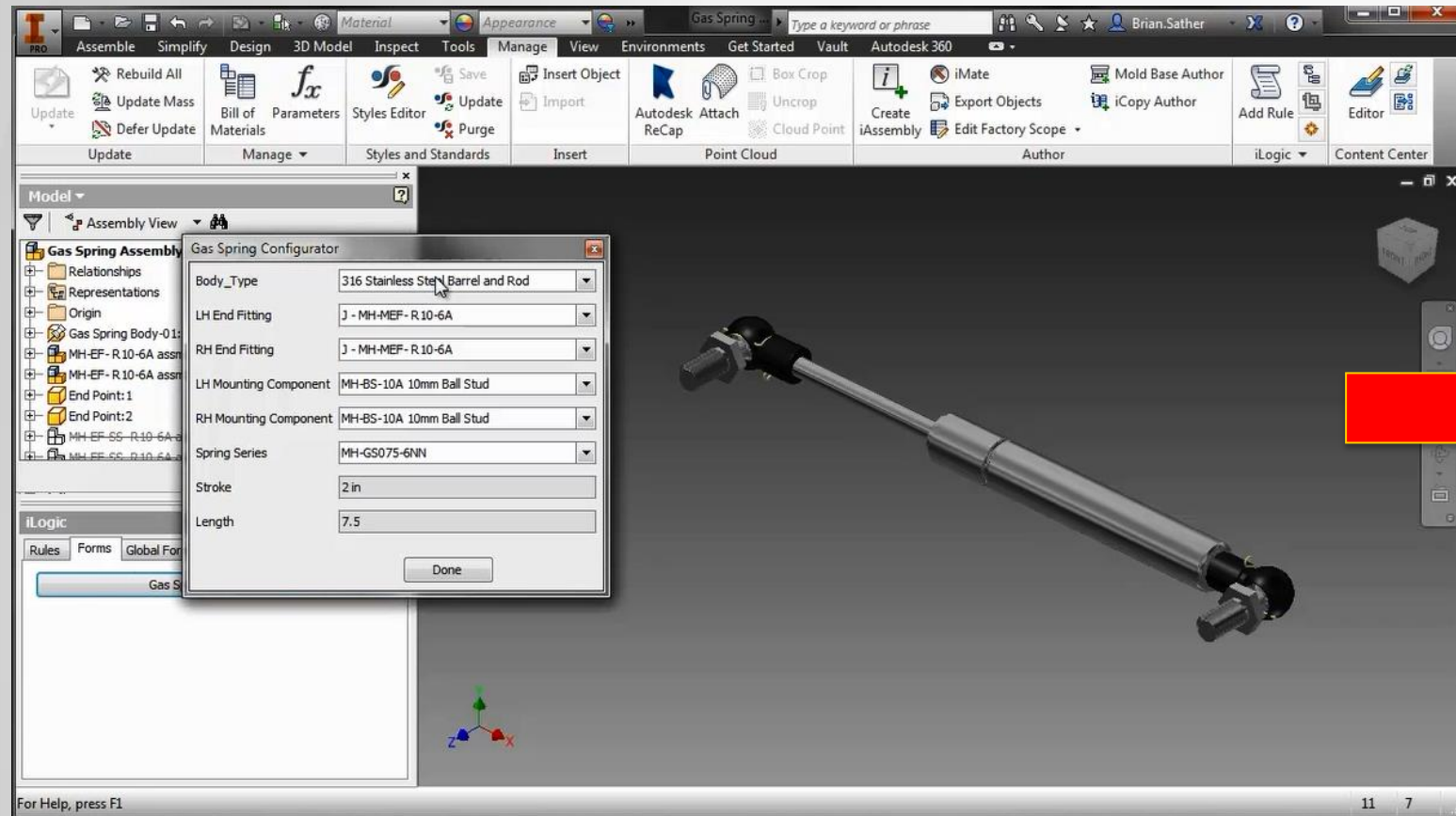
- Publish branded catalogs of customizable products
- Configure products online or through mobile device
- Download configured models or send for quote



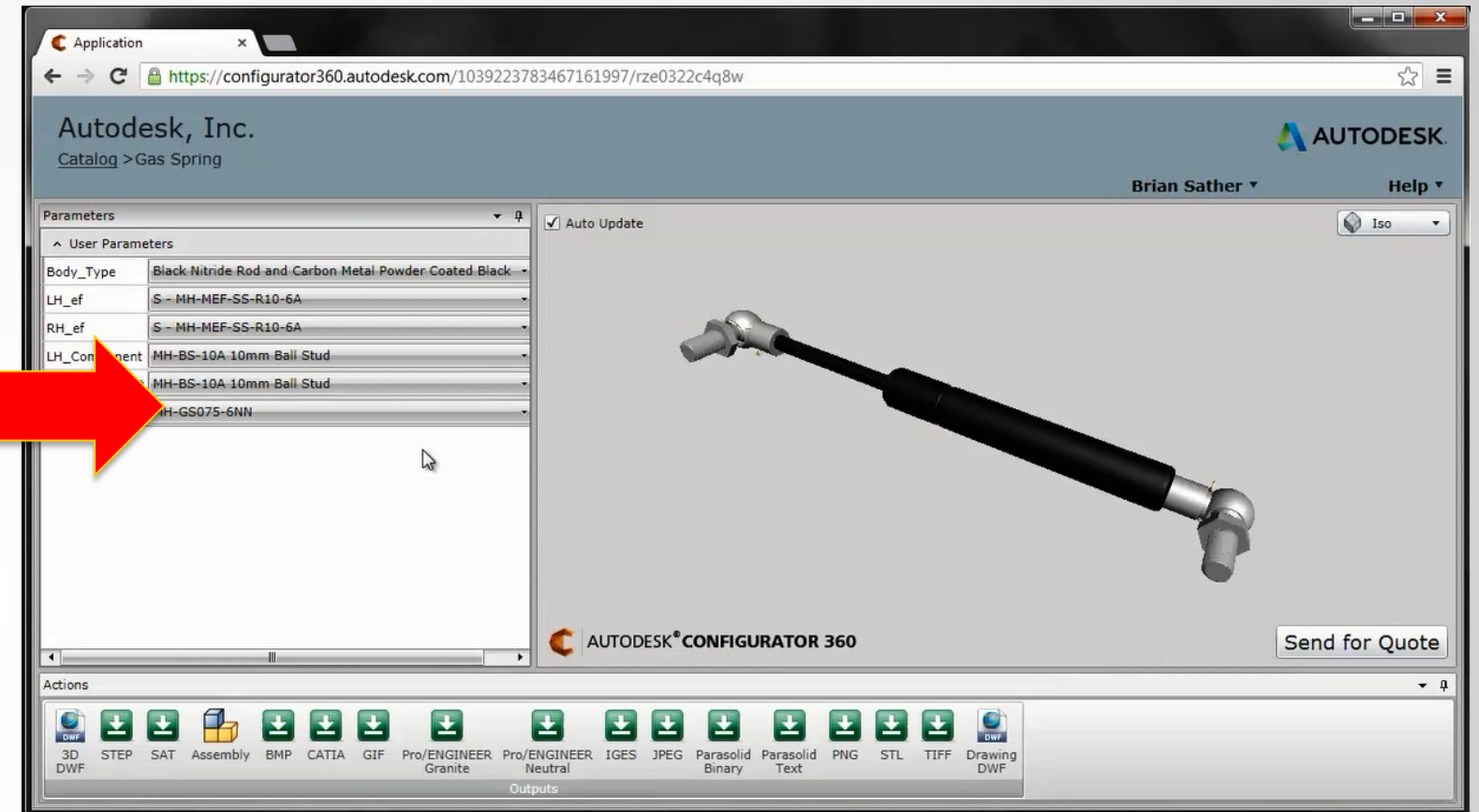
Online Configurator Made Easy



From Desktop to Web/Mobile in Minutes



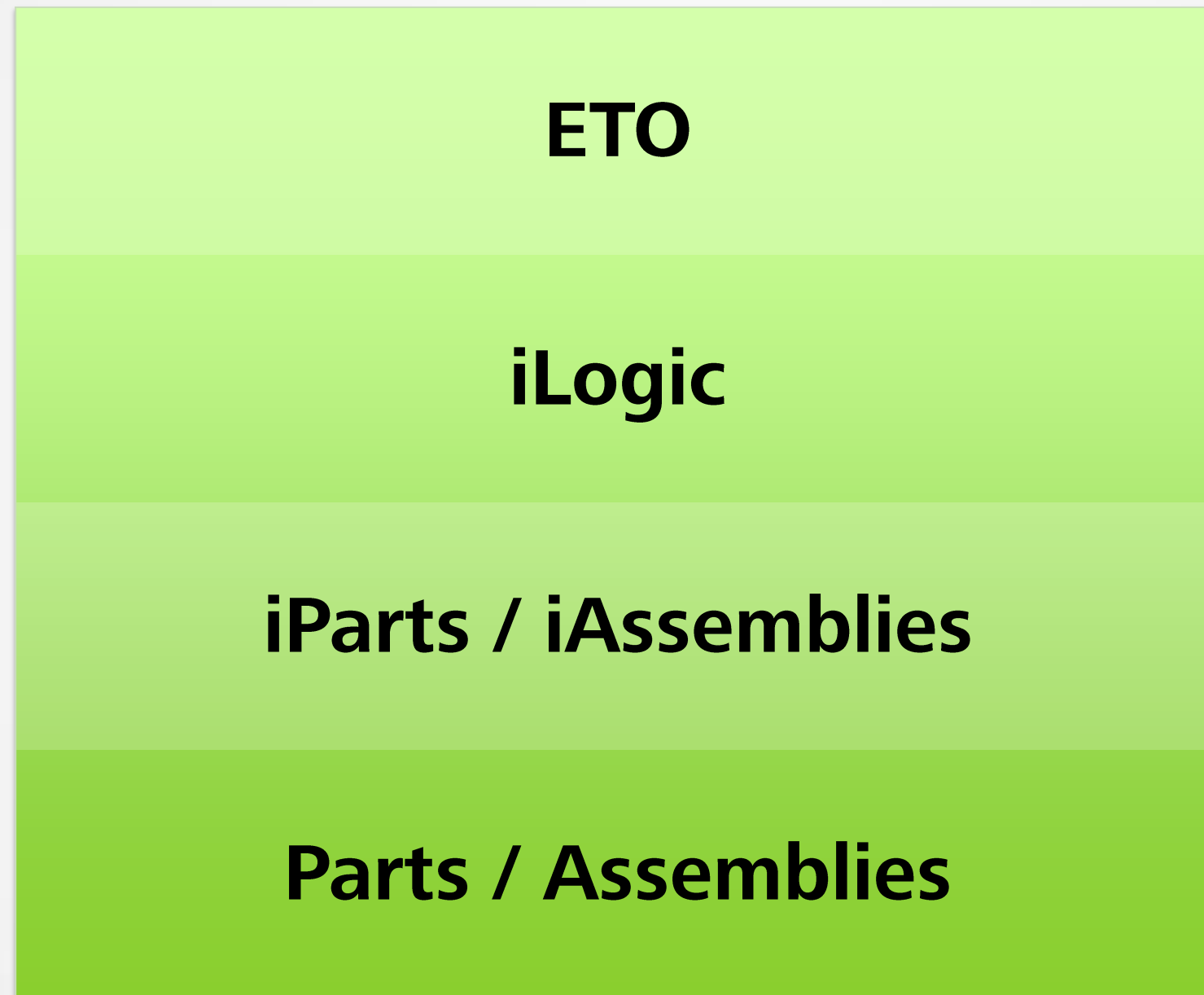
Inventor / Inventor ETO



Configurator 360

- No product downloads! Sign in online and start creating a catalog for your Inventor or Inventor ETO models

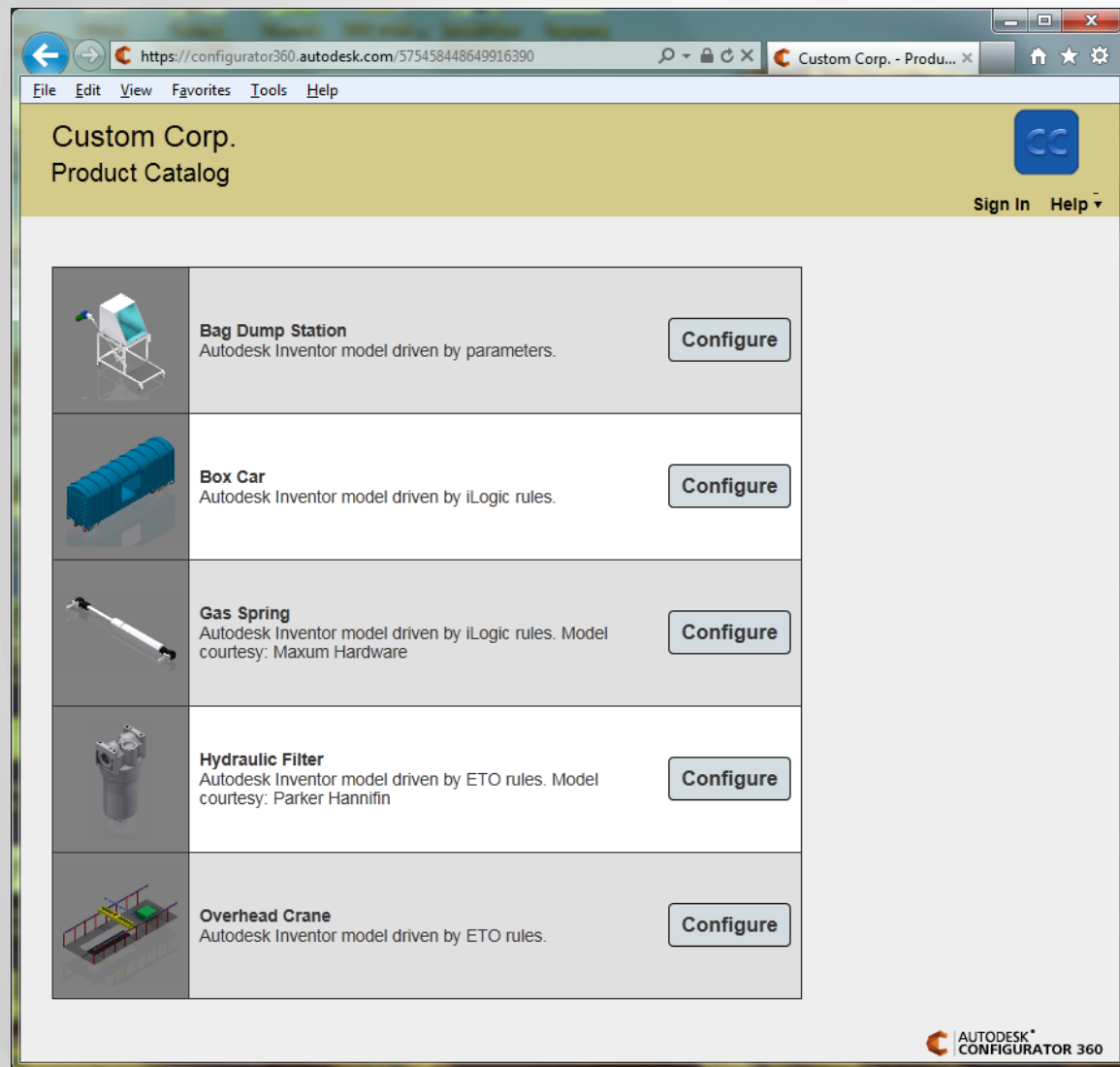
Supported Configurations



A catalog can be a mix of all these!

Easily Accessible

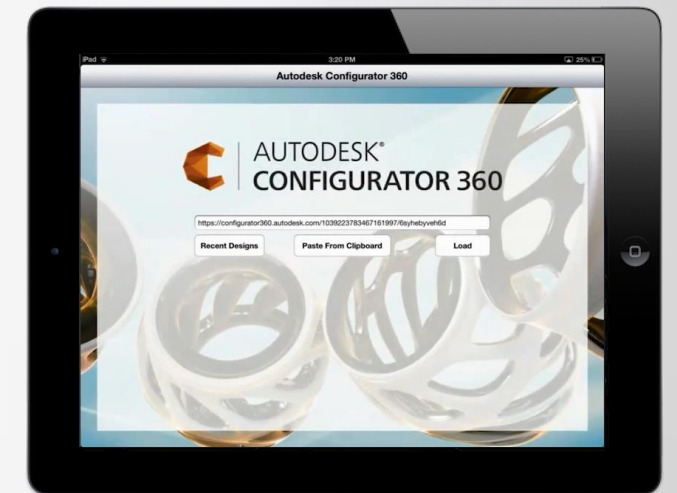
- Create a branded catalog



Catalog URL



Web



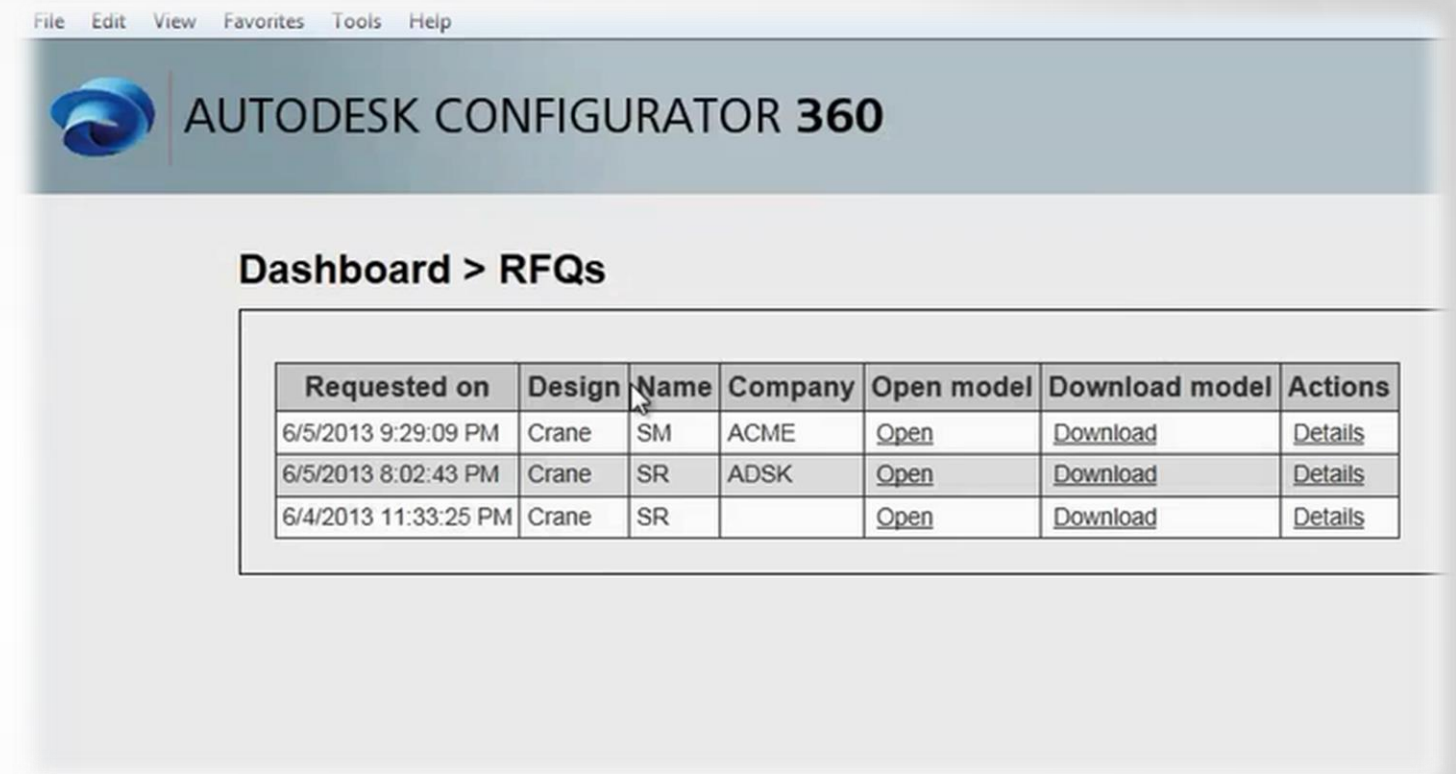
iPad® app

- Easily share the catalog with Sales Reps or DIRECTLY with your customers

Downloads and RFQs

Inventor IGES STEP DWF™
RFA™ CATIA® V5 SAT STL
JT™ Parasolid® Binary/Text
Pro/Engineer® Granite/Neutral
Images(BMP / JPEG / GIF / TIFF)

- Save designs in many CAD formats or as high-resolution images



The screenshot shows the Autodesk Configurator 360 interface. At the top is a menu bar with 'File', 'Edit', 'View', 'Favorites', 'Tools', and 'Help'. Below the menu bar is a header with the Autodesk logo and the text 'AUTODESK CONFIGURATOR 360'. The main content area is titled 'Dashboard > RFQs' and contains a table with three rows of RFQ data. Each row has columns for 'Requested on', 'Design', 'Name', 'Company', 'Open model', 'Download model', and 'Actions'. The 'Open model' and 'Download model' columns contain links labeled 'Open' and 'Download' respectively. The 'Actions' column contains links labeled 'Details'.

Requested on	Design	Name	Company	Open model	Download model	Actions
6/5/2013 9:29:09 PM	Crane	SM	ACME	Open	Download	Details
6/5/2013 8:02:43 PM	Crane	SR	ADSK	Open	Download	Details
6/4/2013 11:33:25 PM	Crane	SR		Open	Download	Details

- Get notifications for RFQs, access them from a Dashboard View

Trials

- 90-day free trial
- Visit either of these links to get started
 - <http://www.autodesk.com/products/autodesk-configurator-360/overview>
 - <https://configurator360.autodesk.com/>
- Zero download, zero install. Just upload Inventor files.

Try



Autodesk® Configurator 360™

Special offer – free for a limited time.*

- Cloud-based product configurator
- Web and mobile access to product catalog
- Full use of Configurator 360 for 90 days
- No credit card required
- Online support

Available in: English

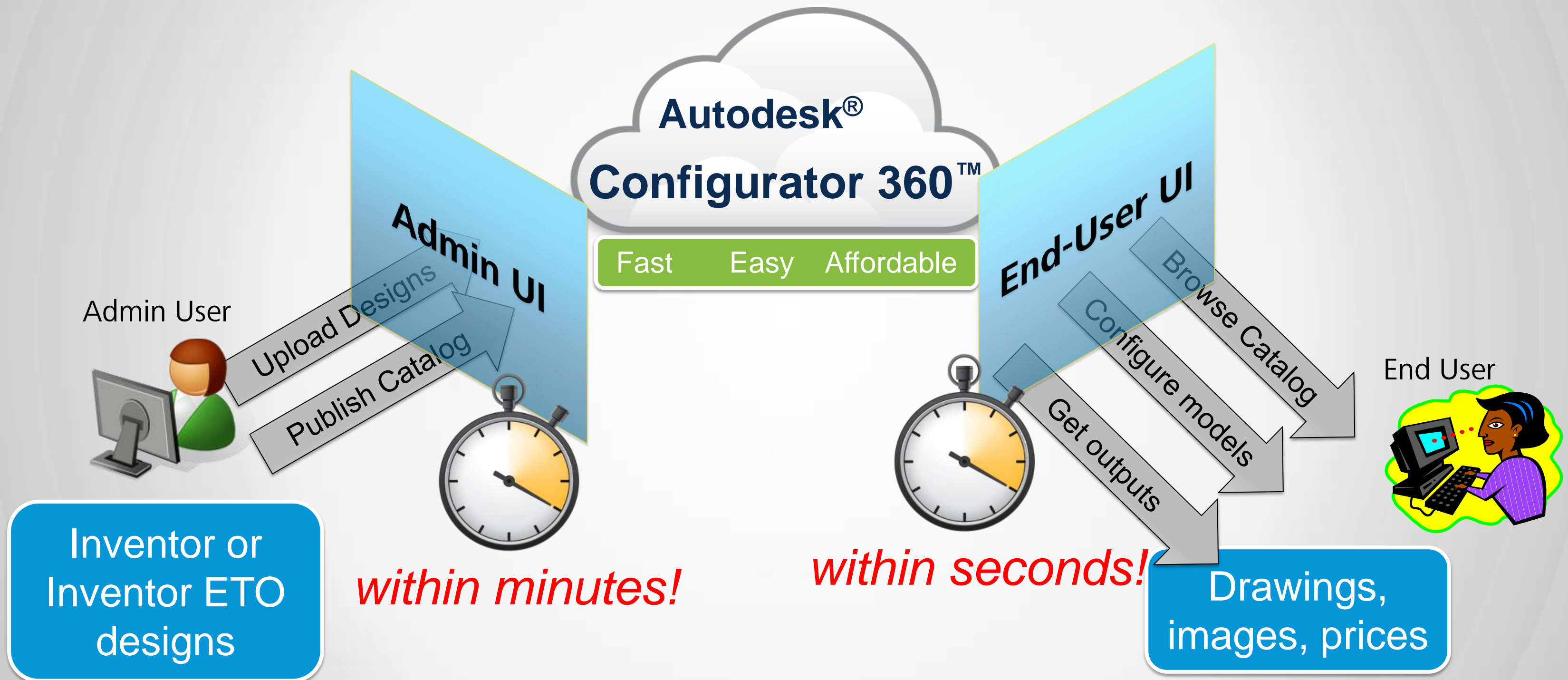
TRY IT NOW



Configurator 360

Publishing a Simple IPT File

Two Personas



The "one-minute demo"

Live or canned?

Anatomy of Configurator 360

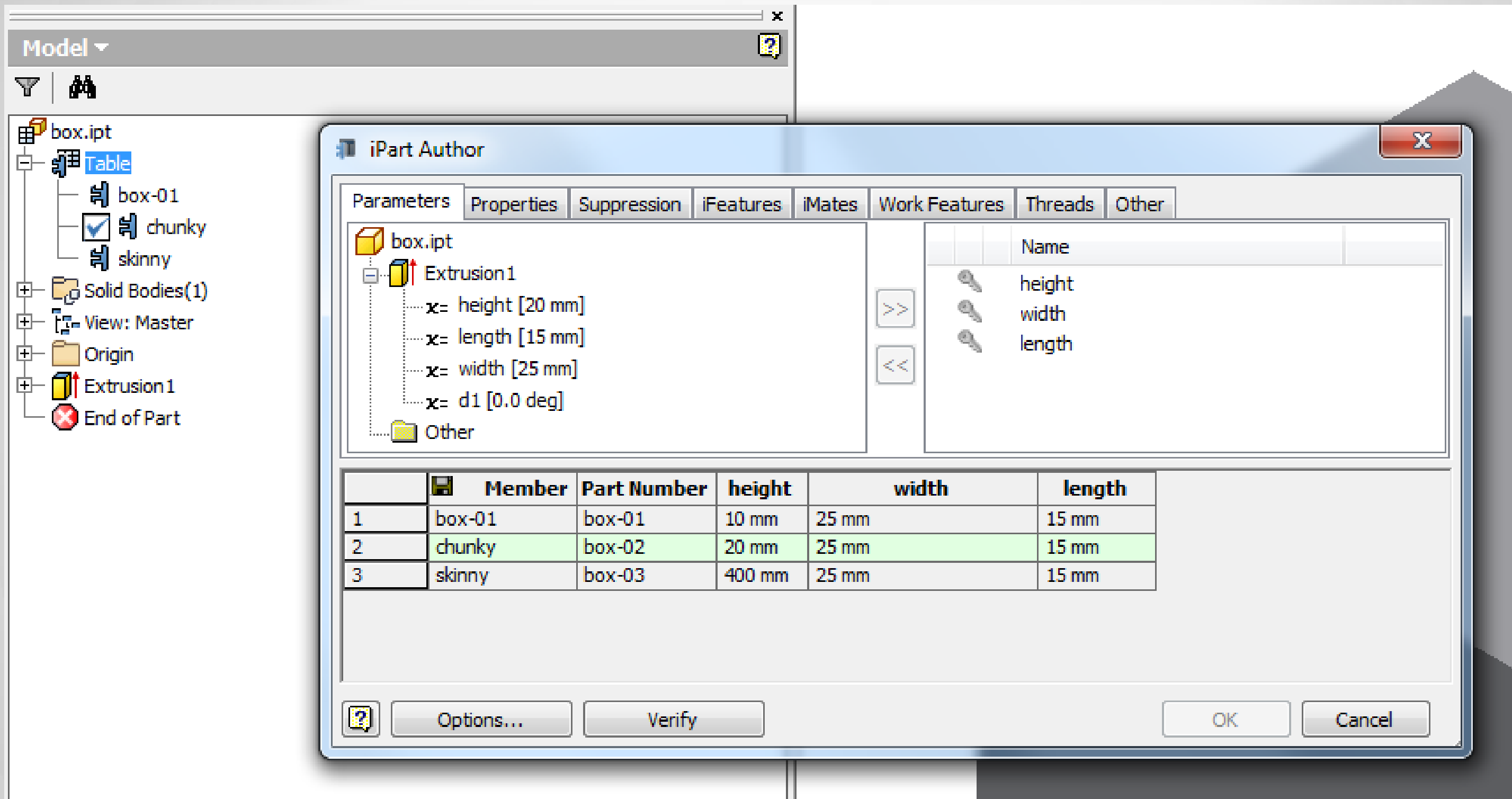
Live or canned?

iParts on Configurator 360 (and iAssemblies)

Typical iPart Characteristics (and iAssemblies)

- Table-driven, no complex rules
- All configurations known in advance (typically)
- Must be wrapped in IAM

Simple iPart Factory



“Wrapper” Assembly

Model ▾

Modeling View

parentAssy.ipt

- Relations
- Representations
- Origin
- TheBox
 - Table
 - Solid Bodies
 - View: Origin
 - box.ipt
 - End of

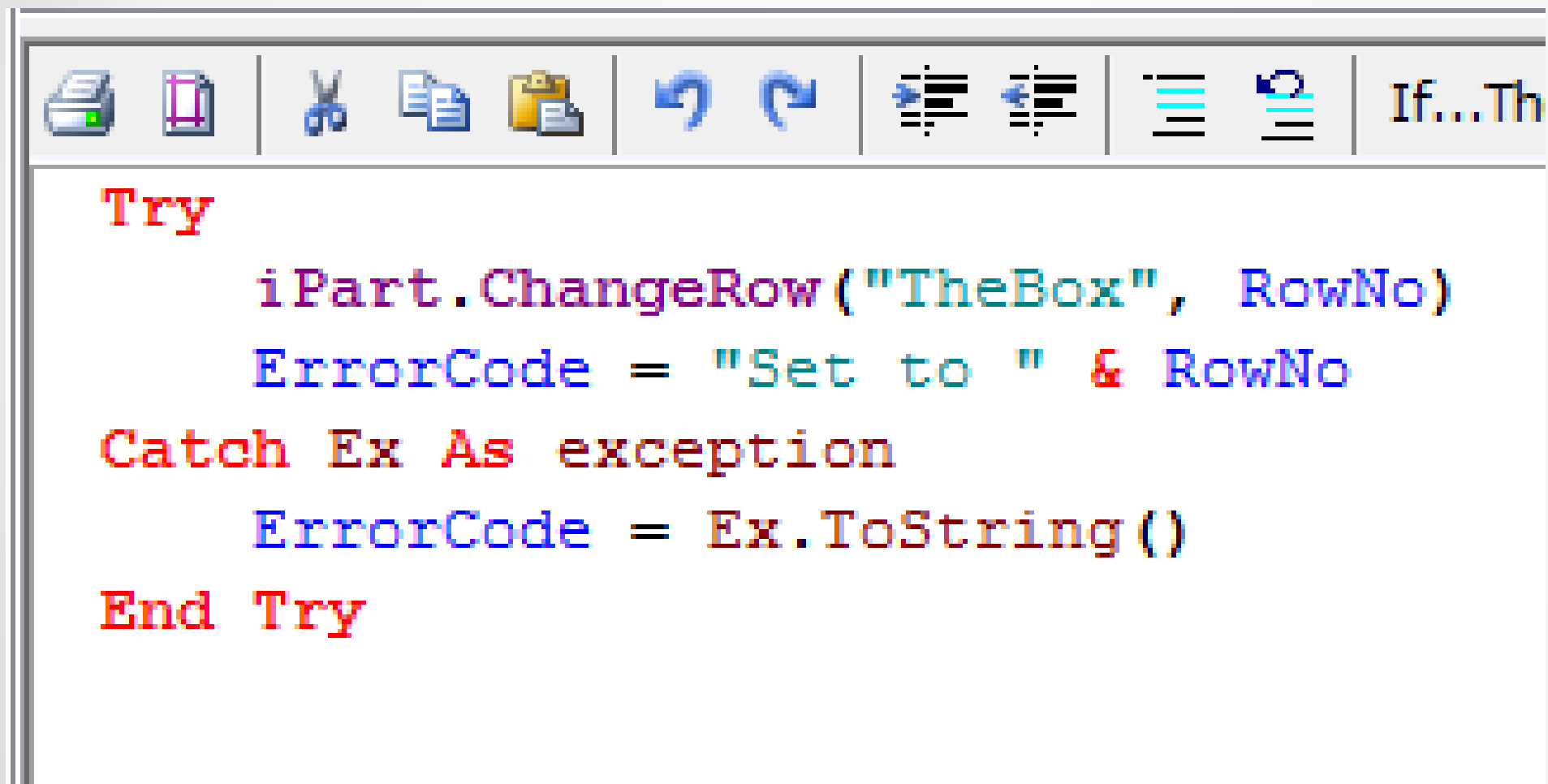
Parameters

Parameter Name	Unit/Type	Equation	Nominal Value
Model Parameters			
User Parameters			
RowNo	ul	2 ul	2.000000
ErrorCode	Text	2 ul	

1
2
3

parentAssy.ipt box.ipt

Simple iLogic “Driver” Rule



The screenshot shows a software interface for creating iLogic rules. At the top is a toolbar with icons for saving, opening, undo, redo, and other editing functions. Below the toolbar, the rule is written in a code editor. The rule is a 'Try-Catch' block designed to handle errors when changing a row in a table. The code is as follows:

```
Try
    iPart.ChangeRow("TheBox", RowNo)
    ErrorCode = "Set to " & RowNo
Catch Ex As exception
    ErrorCode = Ex.ToString()
End Try
```

“Box” demo

Using (More) iLogic

Typical iLogic Characteristics

- Driving more things from parameters
- Higher-level parameters driving lower-level parameters
- Simple drawing automation
- Simple assembly variations

Brewing Rack

Autodesk Inventor 2013 interface showing the assembly of a Brewing Rack. The top ribbon includes tabs for Assemble, Simplify, Design, 3D Model, Inspect, Tools, Manage, View, Environments, Get Started, and Autodesk 360. The left sidebar shows the Model tree with Assembly View selected, listing components like Relationships, Representations, and Origin.

The main workspace displays a 3D model of the Brewing Rack, which consists of a metal frame with three cylindrical tanks mounted on it. The tanks are connected by pipes and valves. The model is shown in an isometric view.

The right sidebar shows a list of components, including a tank labeled "TANK BACK".

Jon's Misc Products
Catalog > _brewing rack

Jon Balgley Info

Parameters

User Parameters	
Tier	1 Tier
Casters	<input checked="" type="checkbox"/>
Pumps	2 Pumps
Pricing	\$650

☒ Auto Update

ISO

AUTODESK CONFIGURATOR 360

Sales Quote

Actions

3D DWF STEP IGES JPEG SAT STL Assembly

Outputs

Brewing Rack

Jon's Misc Products
Catalog > _brewing rack

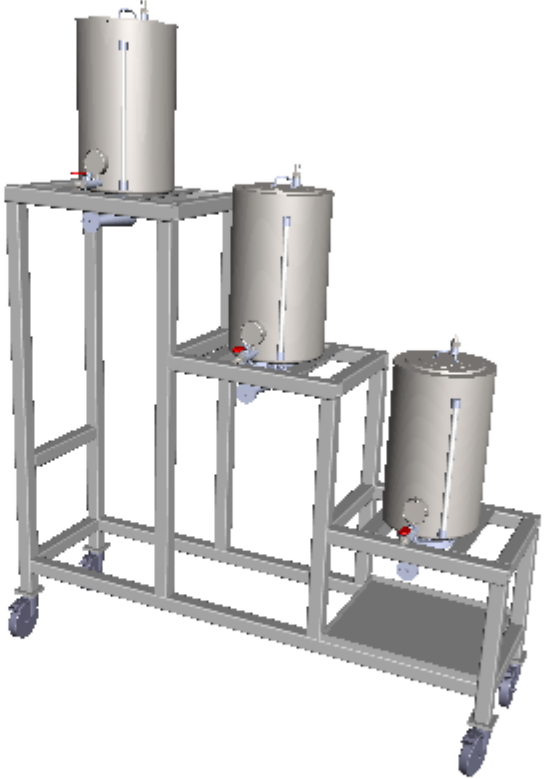
Jon Balgley Info

Parameters

☒ Auto Update

ISO

User Parameters	
Tier	3 Tier
Casters	<input checked="" type="checkbox"/>
Pumps	No Pumps
Pricing	\$500



AUTODESK CONFIGURATOR 360

Sales Quote

Actions

3D DWF STEP IGES JPEG SAT STL Assembly


Outputs

Brewing Frame.i... Type a keyword or phrase Jon.Balgley Autodesk 360

Assemble Simplify Design 3D Model Inspect Tools Manage View Environments Get Started Autodesk 360

Update Rebuild All Update Mass Defer Update Bill of Materials Parameters Styles Editor Save Update Purge Insert Object Import Autodesk Attach ReCap Create iAssembly Add Rule Editor Content Center

Model Assembly View



RIGHT

85 26



Brewing Rack

Jon's Misc Products

Catalog > _brewing rack

Parameters

Auto Update

User Parameters

Tier	3 Tier	
Casters	<input checked="" type="checkbox"/>	
Pumps	2 Pumps	
Pricing	\$800	

Parameters				
	Parameter Name	Unit/Typ	Equation	Nominal V
▶	+ Model Parameters			
	- User Parameters			
	Tier	Text	3 Tier	
	Casters	True/...	True	
	Pumps	Text	No Pumps	
	Pricing	Text	\$500	

Brewing Rack Rules

```
Lower Tube Front - Back:1
Lower Tube Front - Back:2

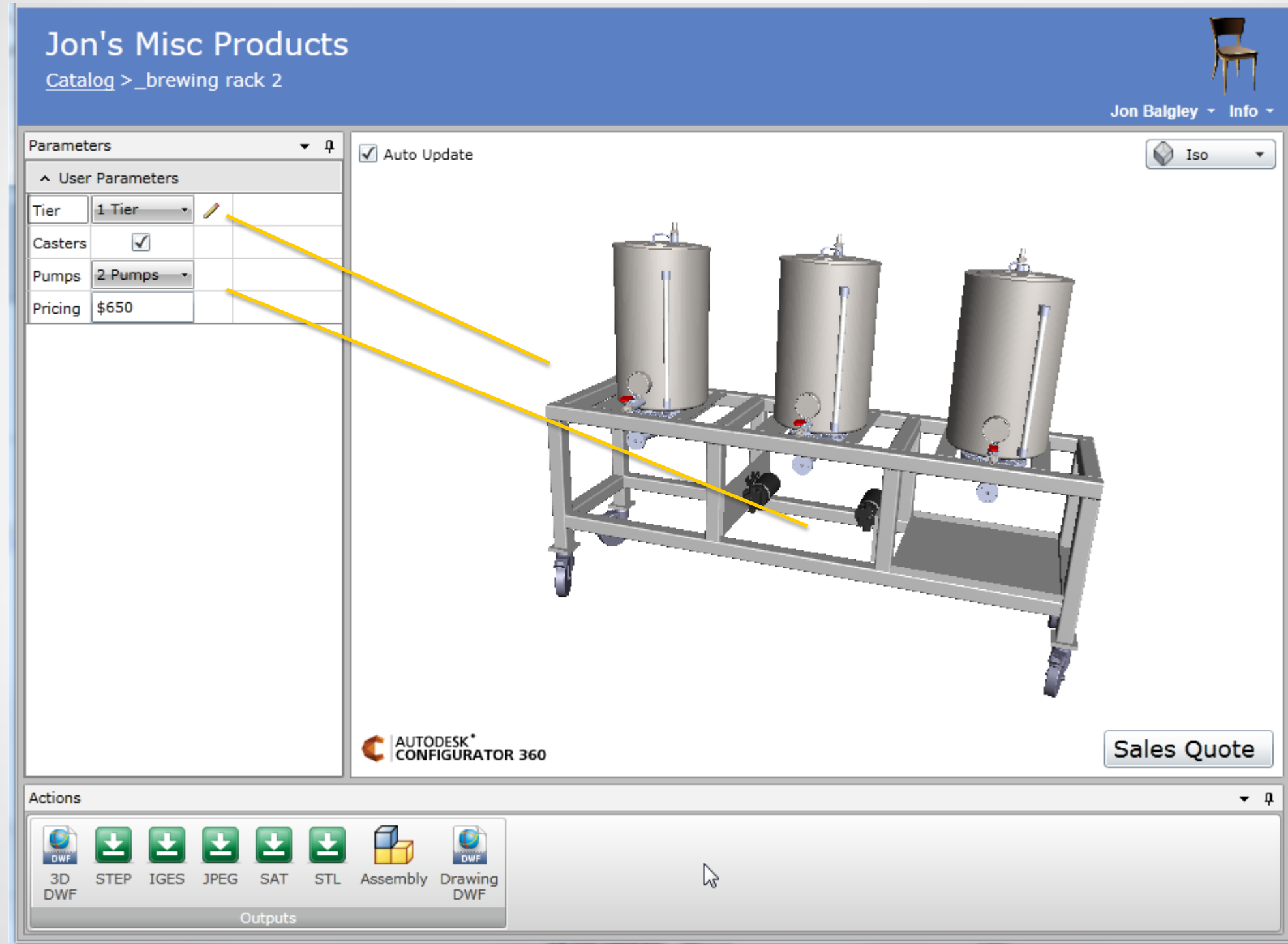
If Tier = "1 Tier" Then
    Parameter("Left Center Tube:1", "LeftCenterTubeLength")=13
    Parameter("Upper Tube Front - Back:1", "UpperTubeLength")=68
    Parameter("Right Center Tube:1", "RightCenterTubeLength")=13
    Parameter("Vertical Left Tube:1", "LeftSideTubeLength")=18
    Component.IsActive("Upper Tube Front - Back:3") = False
    Component.IsActive("Upper Tube Front - Back:4") = False
    Component.IsActive("ThreeTierUpperTube:1") = False
    Component.IsActive("ThreeTierUpperTube:2") = False
    Component.IsActive("Side Tube:8") = False
    Component.IsActive("Side Tube:9") = False
    Component.IsActive("Side Tube:6") = False
    Component.IsActive("Side Tube:7") = True
    d104=-18
    d108=-15
    d110=-18
    d150=-15
    d144=-15
    Pumps = "2 Pumps"

ElseIf Tier = "2 Tier" Then
    Parameter("Left Center Tube:1", "LeftCenterTubeLength")=31
    Parameter("Upper Tube Front - Back:1", "UpperTubeLength")=44
```

```
Lower Tube Front - Back:1
Lower Tube Front - Back:2


If Casters=False Then
    Component.IsActive("Bosch Caster:1") = False
    Component.IsActive("Bosch Caster:2") = False
    Component.IsActive("Bosch Caster:3") = False
    Component.IsActive("Bosch Caster:4") = False
Else
    Component.IsActive("Bosch Caster:1") = True
    Component.IsActive("Bosch Caster:2") = True
    Component.IsActive("Bosch Caster:3") = True
    Component.IsActive("Bosch Caster:4") = True
End If

If Pumps = "No Pumps" Then
    Component.IsActive("March Pump:3") = False
    Component.IsActive("March Pump:4") = False
    Component.IsActive("Pump Plate:1") = False
    Component.IsActive("Pump Plate:2") = False
ElseIf Pumps = "1 Pump" Then
    Component.IsActive("March Pump:3") = True
    Component.IsActive("March Pump:4") = False
    Component.IsActive("Pump Plate:1") = True
    Component.IsActive("Pump Plate:2") = False
ElseIf Pumps = "2 Pumps" Then
```



Jon's Misc Products




Catalog > _brewing rack 2




Jon Balgley ▾ Info ▾

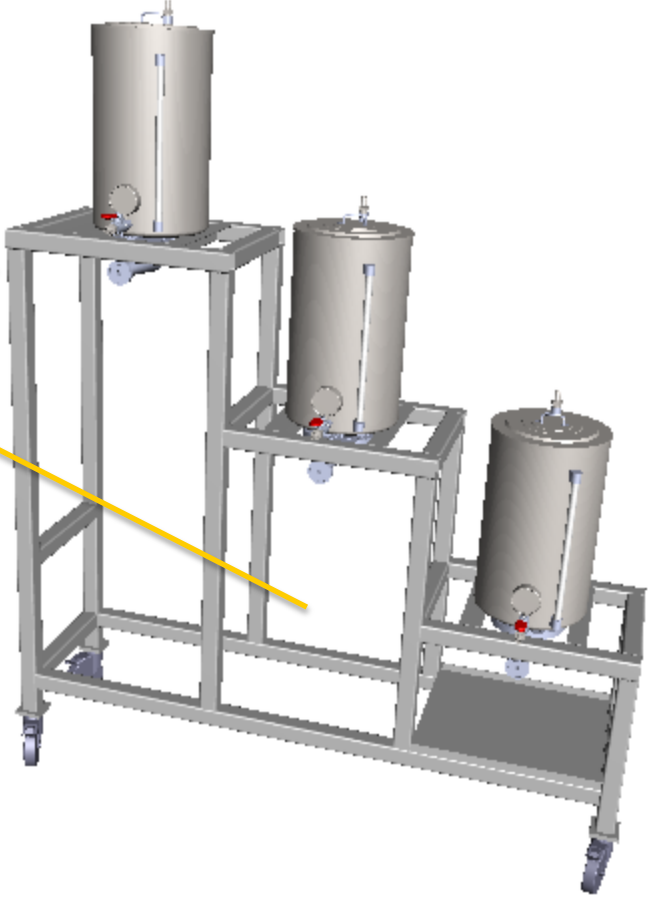
Parameters ▾ 🔔


^ User Parameters

Tier	3 Tier ▾	
Casters	<input checked="" type="checkbox"/>	
Pumps	No Pumps ▾	
Pricing	\$500	

☒ Auto Update


 Iso ▾








Sales Quote


Actions ▾ 🔔



3D
DWF



STEP



IGES


JPEG


SAT



STL













Assembly


Drawing
DWF

Outputs



Catalog:  

	Name	Description	Access	Actions
	<input type="text" value="_brewing rack"/>	<input type="text"/>	<div>Unrestricted viewing ▾ <input type="checkbox"/> Exclude from catalog</div>	   
	<input type="text" value="_brewing rack 2"/>	<input type="text"/>	<div>Admins only ▾ <input type="checkbox"/> Exclude from catalog</div>	    <div>Edit parameters</div>
	<input type="text"/>	<input type="text"/>		



_brewing rack 2

[Back to list of designs](#)

Displayed parameters, drag to reorder

Inventor Name	Display Name	Units	Initial Value	Min	Max	Read only	DoP
Tier	Tier		1 Tier			<input type="checkbox"/>	0
Casters	Casters		true			<input type="checkbox"/>	0
Pricing	Pricing		\$650			<input checked="" type="checkbox"/>	0

Non-displayed parameters

Inventor Name	Initial Value
Pumps	2 Pumps



Jon's Misc Products

Catalog > _brewing rack 2

Jon Balgley ▾ Info ▾


Parameters ▾ 🔔

^ User Parameters

Tier	3 Tier ▾ ✎	
Casters	<input checked="" type="checkbox"/>	
Pricing	\$500	

☒ Auto Update


Iso ▾



AUTODESK[®] CONFIGURATOR 360

Sales Quote

Actions ▾ 🔔

 3D DWF

 STEP


 IGES

 JPEG

 SAT

 STL

 Assembly

 Drawing DWF

Outputs

Playground Structure

- Many parameters and components changed
- Uses a few iParts
- Borderline ETO candidate

Bad Models for Configurator 360

- Too much detail
- Too many components
- Modeling errors
- Restricted features
 - Message Boxes, etc
 - Addins
 - Pathnames
 - Etc

Using Inventor ETO

Characteristics of ETO

- ETO is a separate product
- ETO is for larger-scale and/or more complex automation,
- “Creating new content” (on the fly)
- Proposal documents
- Complex/dynamic drawings
- ETO rules are easier to maintain than iLogic rules
- ETO designs manage Configurator 360 UI
 - Parameters
 - Model pane
 - Error/warning/info messages

Overhead Crane

- Relatively simple model for ETO (borderline iLogic-friendly)
 - [This is a simplified “demo” model – real model would be much more complex ... and appropriate]
- Many more components and relationships compared to brewing frame

Walkway Roof

- Lots of dynamically-created parts
- Many more components and relationships compared to brewing frame and crane

Configurator 360: Summary

- Deploy configurable models
 - On the web
 - On iPad
- Deployment is **absurdly easy**
- 4 configuration technologies (parameters, iParts/iAssy, iLogic, ETO)

configurator360.autodesk.com

Or: **absurdlyeasy.com** !!!

