

# iLogic For Everyone: 5 iLogic Rules Everyone Can Use

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# Class Summary

The iLogic component in Inventor is very powerful in helping users automate segments of their design process. However, there are many ways iLogic can be used, even ways that are not specific to one design. This course is intended to show students five ways they can use iLogic that are not specific to any one design. This course will start with an introduction to iLogic. Then, it will address five scenarios that the students could be facing and the iLogic Rules that could be used to resolve the issues. The class will discuss topics such as Sheet Metal Extents, Plot Stamps, iProperties, Saving as PDF, and Exporting Bills of Material.

# Learning Objectives

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

- Create Inventor Templates that Utilize External iLogic Rules
- Understand the concept of External iLogic Rules and how to create them
- Manipulate properties using iLogic Rules and iLogic Forms
- Use the Save As and Export Functions inside iLogic Rules

# What is iLogic?

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- iLogic is a built-in component to Autodesk Inventor that allows users to create rules that will automate segments of the design process.
- These rules are mini computer programs.
- Written in Visual Basic.Net.
- Typically used to manipulate parameters, iProperties, features and components in Inventor.
- Can be used to carry out functions not specific to a particular design.

# Rule #1: Sheet Metal Extents

# Sheet Metal Extents

## Scenario:

To have the Description iProperty contain the thickness, width and length of the flat pattern of a sheet metal part. This value should be automatically updated to avoid errors.

## Setup:

- The part file will need to contain parameters for Length Extents and Width Extents.
- These parameters should be marked for Export and formatted to match the company's standard.
- The rule should be an external rule.
- The file should be saved as a template for reuse.

# Rule #2: IDW Plot Stamp



# IDW Plot Stamp

## Scenario:

Inventor does not have the ability to display a plot stamp when printing IDW's. iLogic can be used to generate the plot stamp when printing IDW's.

## Setup:

- The plot stamp will be generated by populating properties displayed on a drawing border. Therefore, a border needs to be created containing the desired properties.
- This rule should be an external rule.

# Rule #3: iProperty Form

# iProperty Form

## Scenario:

Inventor users typically need to fill in iProperties from various tabs of the iProperty dialog. It would be nice to have one dialog that shows the user the iProperties that are most important to them.

## Setup:

- A form will be created to allow editing of important iProperties. Note: This function is only available in Inventor 2012 and 2013.

## Possible Companion Rules:

- A rule to add Custom iProperties to legacy Inventor files.
- A rule to check to see if iProperties are filled out.

# Rule #4: Save Copy As PDF

# Save Copy As PDF

## Scenario:

Every drawing needs to have a PDF copy for users outside the Engineering Department.

## Setup:

- The rule will be an external rule so it can be run from any file.

## Possible Addition to the Rule:

- A statement to verify if it is a IDW or DWG.

# Rule #5: Export Bill of Material

# Export Bill of Material

## Scenario:

Our system requires that every assembly has a Bill of Material saved in spreadsheet format.

## Setup:

- This rule should be an external rule so it can be run for any assembly.

## Possible Companion Rule:

- A rule that reads information from these spreadsheets

**Please check out Steve's You Tube Channel for videos of these and other Autodesk related videos.**

**<http://www.youtube.com/user/itsacadworld>**



