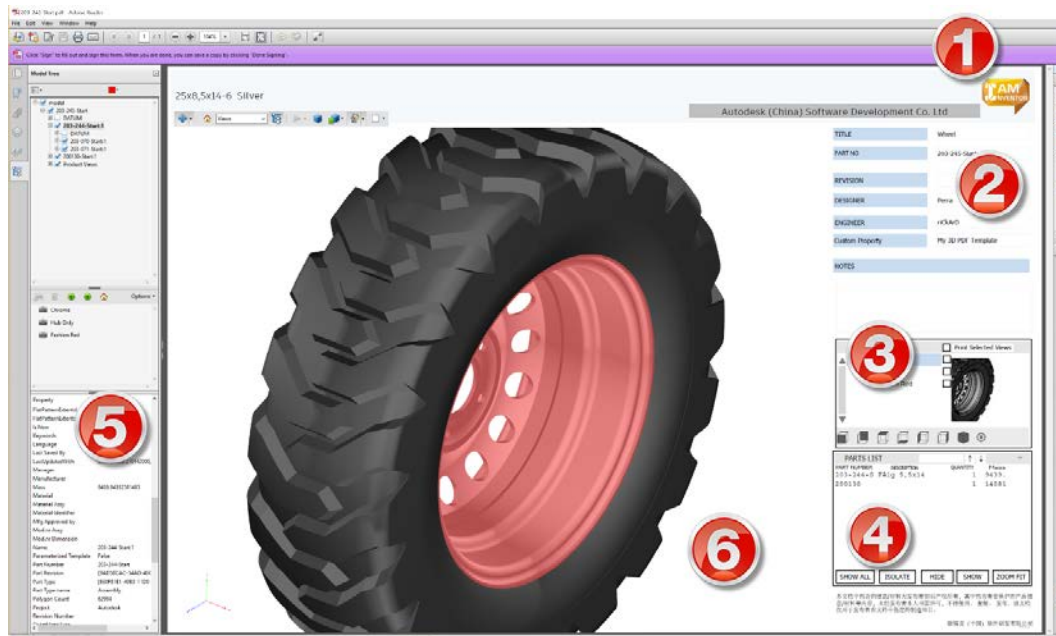


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## CUSTOMIZE A 3D PDF TEMPLATE (INV2017)

Inventor 2017 added the highly requested ability to export 3D models as a 3D PDF. The exported 3D PDF can include the following:

1. Text and 2D Graphics including logos
2. Individual fields mapped to Inventor properties
3. Model View Representations thumbnails / selection
4. List boxes such as Parts List and revision history
5. Interactive BOM using JavaScript to relate a list box to the CAD model in a 3D View
6. 3D View that can be sized according to customer preference.



After installation, Inventor provides sample PDF templates in the templates folder.

(<Drive>:\Users\Public\Documents\Autodesk\Inventor 2017\Templates\)

### TEMPLATE CUSTOMIZATION

Customers can edit the provided templates to create their own 3D PDF template.

Following are some tips on how to customize a 3D PDF template.

### PREREQUISITES

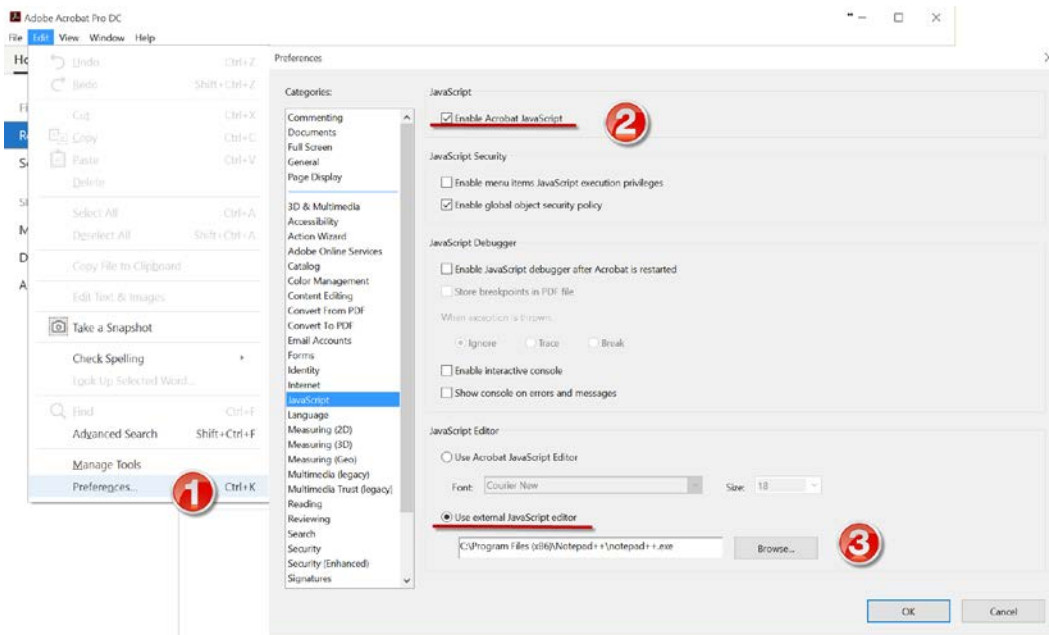
- Use either Adobe Acrobat Pro (XI or DC) to edit the PDF template. Adobe LiveCycle Designer is also capable.

- A code aware text editor such as Notepad++ or VisualStudio.

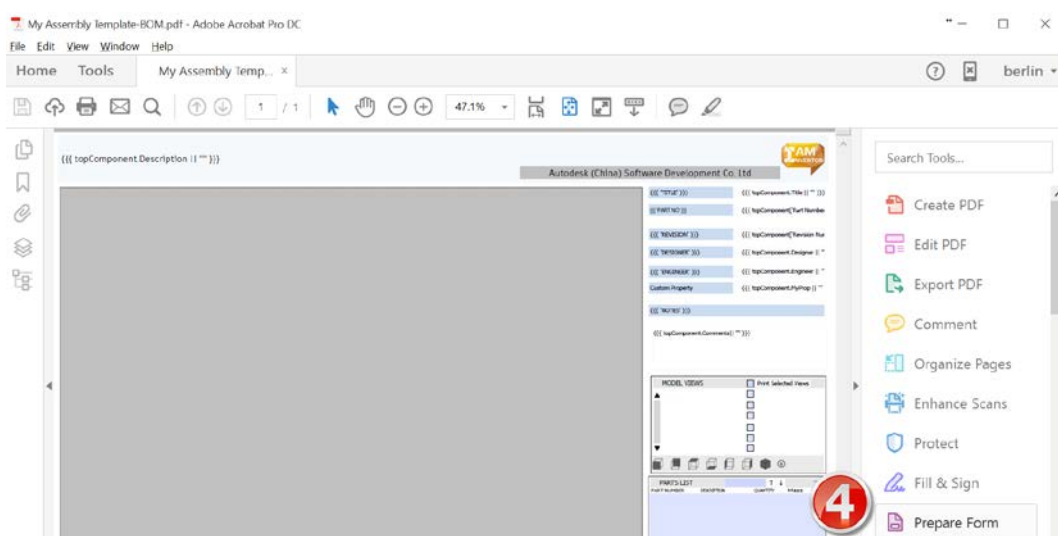
Adobe Acrobat Pro DC is used in the following example.

To begin, do the following:

1. Click Preferences
2. Enable Acrobat JavaScript
3. Specify the external JavaScript editor such as Notepad++.



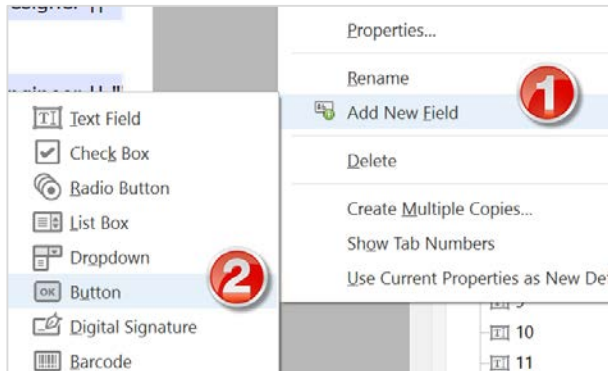
4. Enter the editing environment and run *Prepare Form* from the Tool Panel as shown in the following image.



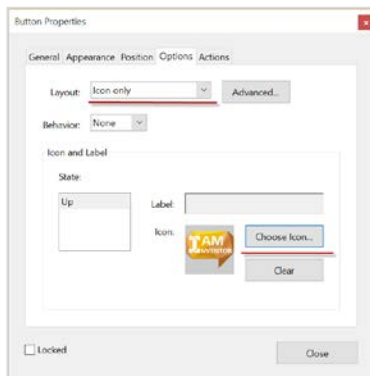
## ADD CUSTOM LOGO IN THE TEMPLATE

1. Right-click a blank area, and then select *Add New Field* from the context menu.

2. Select *Button* from the sub-menu.



3. In the Options tab, select *Icon only* from the Layout drop-list, and then click *Choose Icon*.  
Select the desired icon and attach it to the template.



## SHOW INVENTOR PROPERTIES IN THE TEMPLATE

Notice that the sample template contains Inventor properties such as Part Number and Description. You can reuse the provided properties or edit them to reassign the property. To reassign a property, overwrite the name of the Inventor property being referenced.

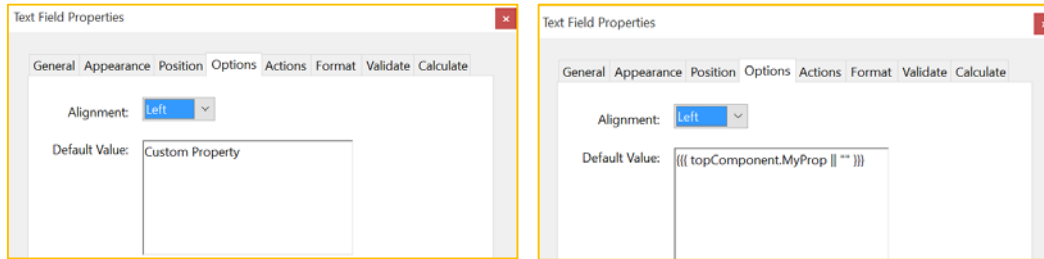
Adding new properties is similar to the process of using Button to add a custom logo. Right-click, select *Add New Field*, and then select *Text Field* in the list.

To make the template more intuitive, we add two Text Field values. One is used for the prompt with a default value set in the Options tab. The other is used to show the value of the custom property.

When there are multiple Text Fields, be sure to edit the *Name* value to make sure that the names are different.

Set the value as an expression ( `{{ topComponent.MyProp || "" }}` ) .

**MyProp** is the name of the custom property defined in Inventor.

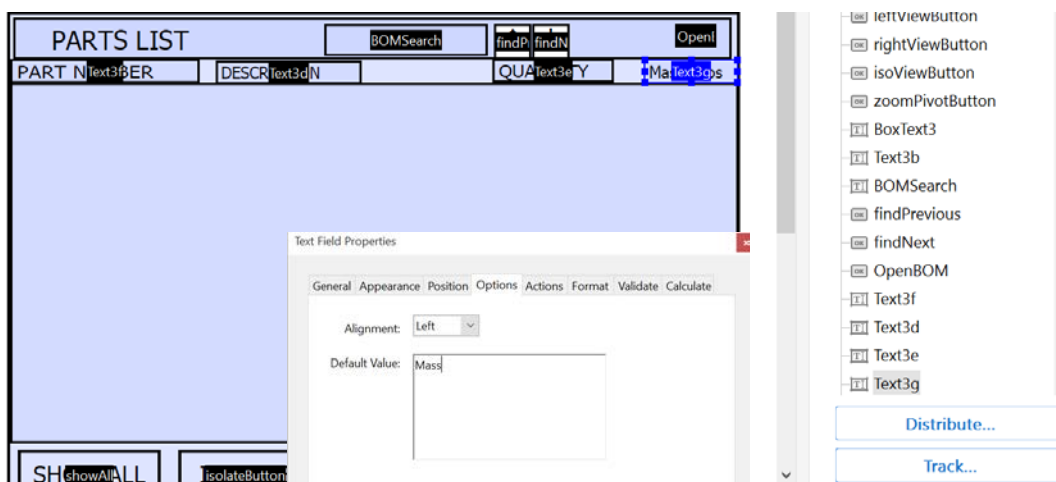


## ADD A COLUMN IN THE PART LIST

The sample template contains three columns in the Part List which are assigned to Part Number, Description and Quantity. The next example shows you how to add a *Mass* column to the part list.

First, we need to add a *Text Field* in the title.

Retrieving the Mass information from the Inventor data and showing it in the table requires editing the AnarkCoreScript. Anark is the background engine used to transform Inventor Data into PDF.

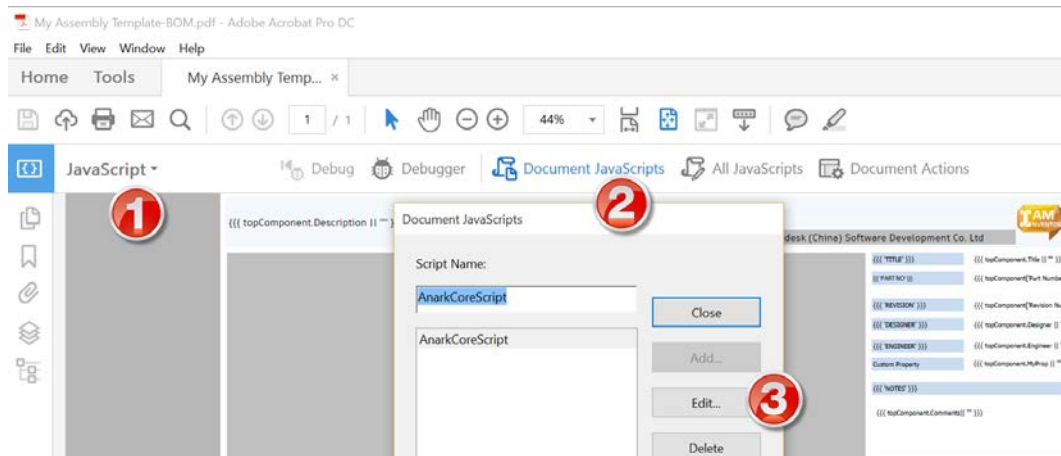


It also requires some programming skills to compile the JavaScript.

Please refer to the [STATIC PDF TEMPLATE REFERENCE FOR INVENTOR](#) for more details.

To modify the script:

1. Select *JavaScript* from the tool panel
2. Enter *AnarkCoreScript* in *Document JavaScripts*
3. Click *Edit*



Acrobat starts the Script editor specified in Preferences and displays the JavaScript.

In the following example, the string (*this.rpad(comp.Attributes["Mass"],6)*) is used to output the Mass value in the string of rowText.

```

this.populateDOMlist = function(document) {
    var i, compId, comp, rowText;
    var dirty = document.dirty;
    if (!document.notify3DAnnotPageOpen) {
        document.notify3DAnnotPageOpen = function() {
            document.akBom.createSelectionLookups(document);
            setInitialView(document);
        };
    }

    this.buildTopLevelComponents(document);
    var listBoxItems = [];
    for (i = 0; i < this.bomListOccurrences.length; i++) {
        var occId = this.bomListOccurrences[i][1];
        compId = document.anarkCoreData.getEntityById(occId).componentId;
        comp = document.anarkCoreData.getEntityById(compId);
        var quantity = this.getRowQuantityString(document, i);
        rowText = this.rpad(comp.Attributes["Part Number"], 9) + " " + this.rpad(comp.Attributes["Description"], 18) + " " + this.rpad(comp.Attributes["Mass"], 6) + " " + this.lpad(quantity, 4);
        rowText = this.avoidCollisions(rowText, listBoxItems);
        var itemPair = {};
        itemPair.push(rowText);
        itemPair.push(i.toString());
        listBoxItems.push(itemPair);
    }
}

```

Using Acrobat, you can adjust the layout of the template, size of 3D graphic view, list box and so on.

When you are finished, save the PDF file to the template folder. The template using your format is available when you publish a 3D PDF.