



Corporate Flow



Illustration



Image Editing



Automation



Web



Text Effects

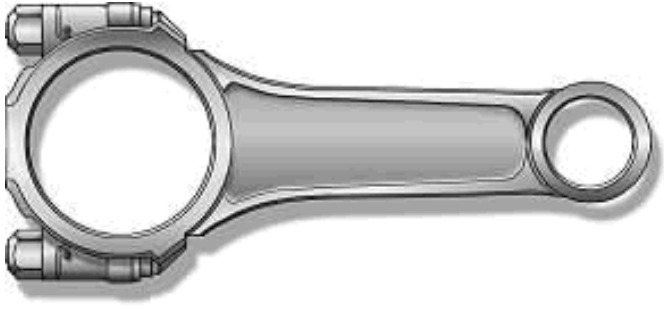
Canvas Tips and Techniques



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Creative Department**

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Canvas 8 Object Properties



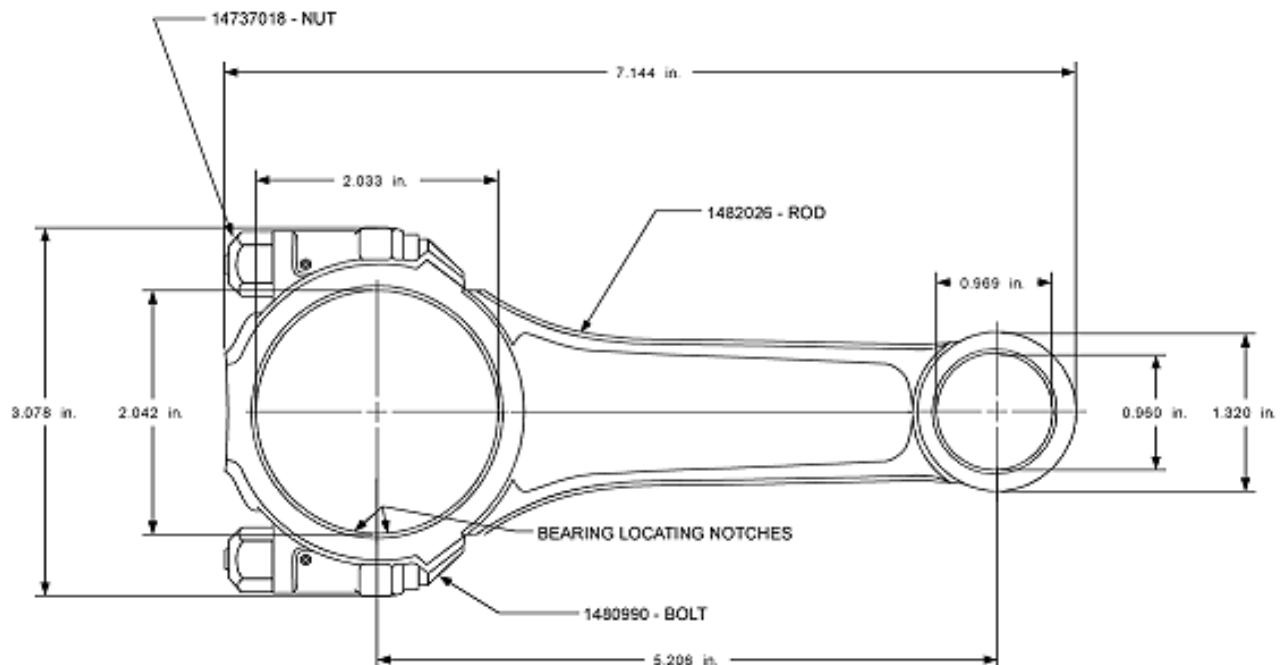
As a standard for technical illustration, Canvas is used worldwide by professional engineers and designers for schematics, blueprints, and other types of drawing endeavors. Now the latest release of Canvas comes with a new feature called Object Properties - which transforms your design work into practical information that can be put to a multitude of different uses.

Maximizing workflow with Canvas 8's Object Properties function

When creating complex technical illustrations, it sometimes becomes necessary to attach specified data to various components. That's where the Object Properties function of Canvas 8 comes in. You can assign actual properties to different parts that make up an object. This includes currency amounts, part names, and other kinds of input values. The way Object Properties works is easy. Simply define the kind of properties you will be using and then assign values to them.

From targeting production costs to enhancing inventory control, the applications of Object Properties are very wide indeed. Parts manufacturers can better manage production processes by being able to better track their inventories. Project managers can record information concerning availability and cost of individual items for a device. And the list goes on and on.

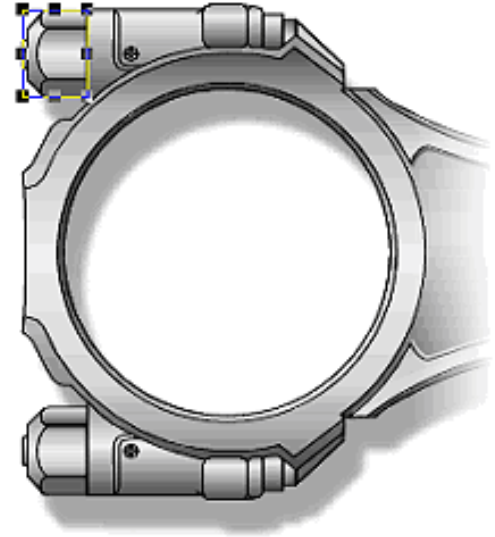
In this tutorial, we'll show you how to put the new Object Properties function to use in your own workflow.



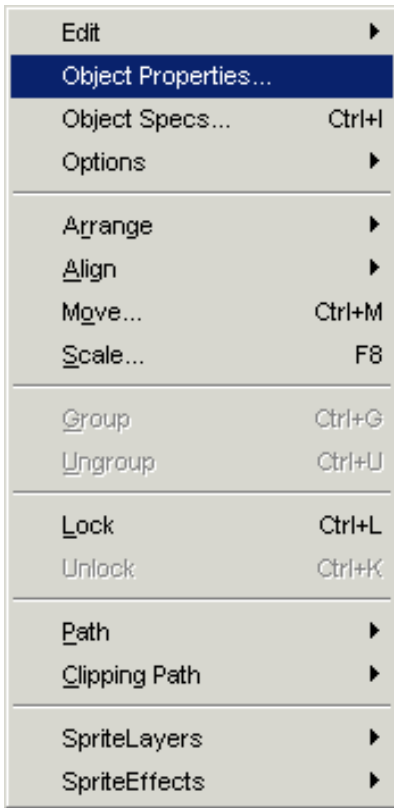
Canvas 8 Object Properties (Continued)

Step 1

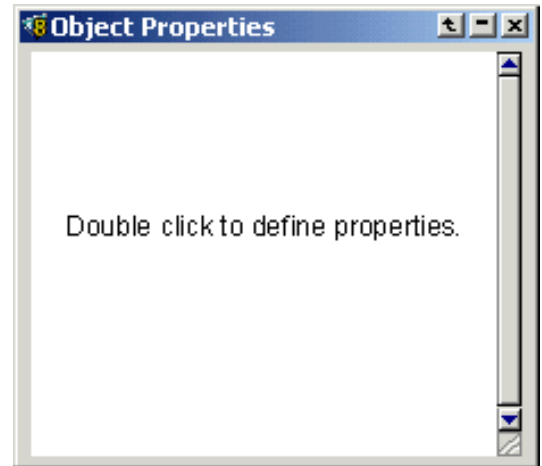
The Object Properties function is ideal for targeting production costs and expenditures for many items. For this exercise, we will use the above technical illustration of a connecting rod - a car component that transmits motion from a reciprocating shaft to a rotating wheel.



Select the desired component to be assigned properties.



Object Menu



Object Properties palette

The Object Properties palette is found within the Object menu. Select Object > Object Properties to bring up the Object Properties palette. Now select a component in your document to assign properties to - which in this case will be the nut on the top part of the connecting rod.

Next, double-click on the Object Properties palette to bring up the Define Properties dialog box.

Canvas 8 Object Properties (Continued)

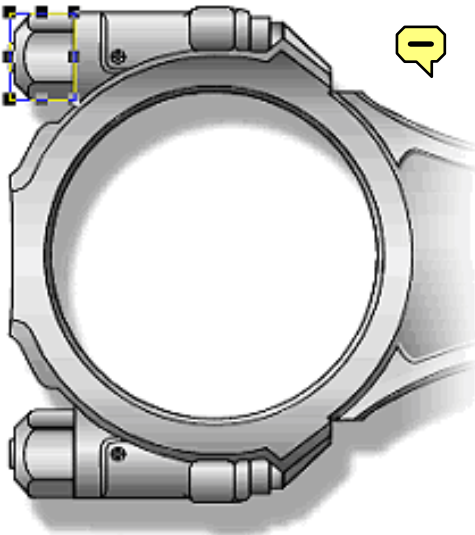
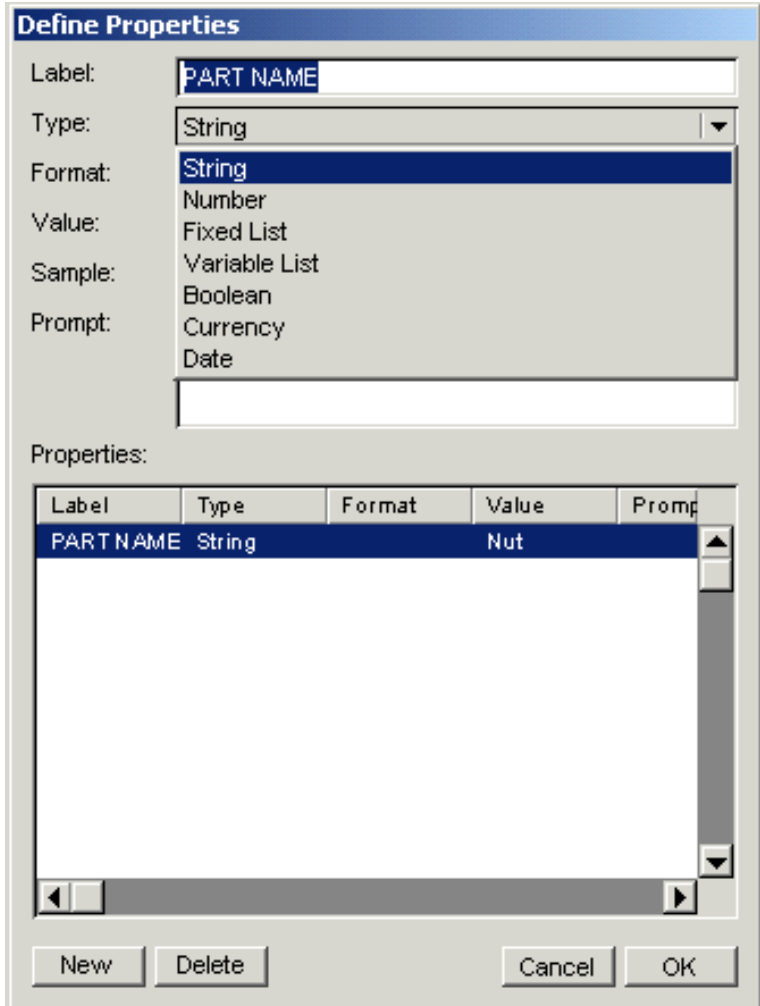
Step 2

Assign a String format

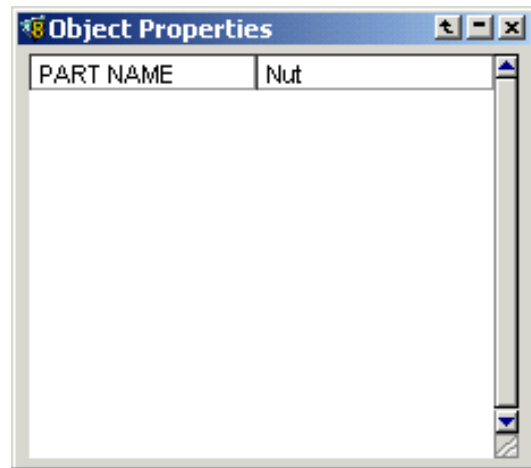
After the Define Properties dialog box comes up, it is time to assign the first of seven available property types: String. You can place just about anything in the Value field when String is chosen.

Click on the New button to define a new property. For this example, our first actual property to be assigned is a part name. To do this, we will use 'PART NAME' as the Label, String as the Type, and 'Nut' as the Value.

The Object Properties palette will now show Nut as the part name whenever the nut is selected as shown below.



Note: You can impose parameters on characters to be entered into the Value field when String is chosen by specifying so in the Format field. Each "X" will indicate a character and "#" will indicate a number.



Object Properties palette while the nut component is selected

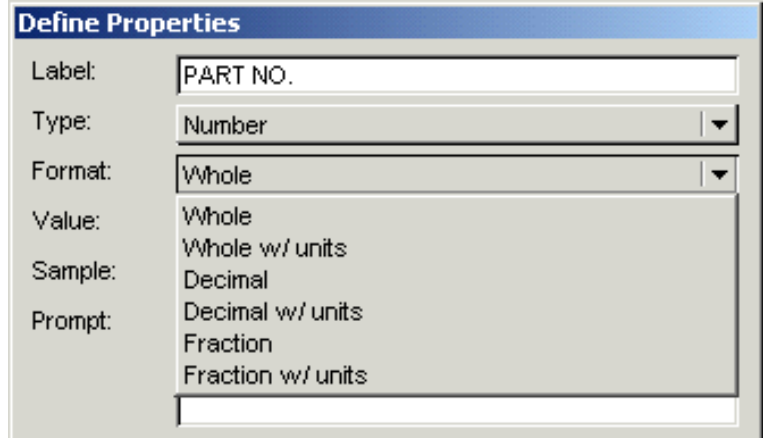
Canvas 8 Object Properties (Continued)

Step 3

Determine a Number format

The Number option from the Type drop-down menu allows you to enter a numerical value for an object. The choice formats include whole numbers, decimals, and fractions with an option to include a unit of measurement for each one.

For this example, we will use "PART NO." as the Label and assign a Whole value of "198985" as the actual part number.



The screenshot shows the 'Define Properties' dialog box. The 'Label' field contains 'PART NO.'. The 'Type' dropdown menu is set to 'Number'. The 'Format' dropdown menu is set to 'Whole'. The 'Value' field contains 'Whole'. The 'Sample' field contains 'Whole w/ units'. The 'Prompt' field contains 'Decimal w/ units', 'Fraction', and 'Fraction w/ units'.

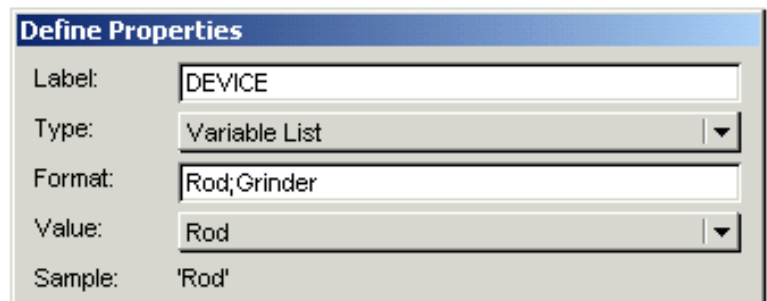
Number drop-down menu of the Define Properties palette

Step 4

List Properties

The Define Properties palette has options to define both fixed and variable lists for keywords. Fixed List lets you assign a keyword or keywords that can be used as values for the property. Simply enter each keyword separated by a semicolon in the Format field for this option. Variable List is the same as Fixed List except that you can enter new values for the list using the Object Properties palette.

The purpose of the Variable List will be to track which devices can actually use the nut as a component - which are a rod and a grinder in this case. Accordingly, we enter "DEVICE" in the Label field, select Variable List in the Type drop-down menu, and then input "Rod;Grinder" in the Format field.



The screenshot shows the 'Define Properties' dialog box. The 'Label' field contains 'DEVICE'. The 'Type' dropdown menu is set to 'Variable List'. The 'Format' field contains 'Rod;Grinder'. The 'Value' dropdown menu is set to 'Rod'. The 'Sample' field contains 'Rod'.

Variable List drop-down menu

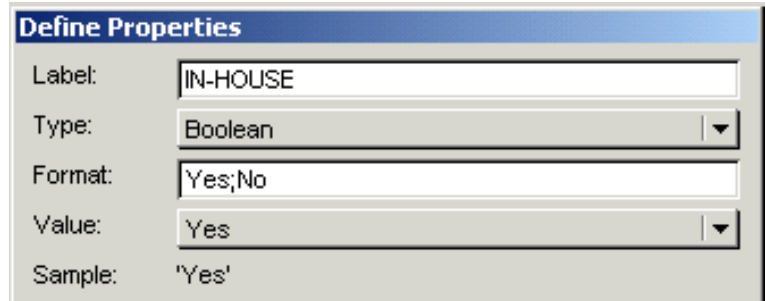
Canvas 8 Object Properties (Continued)

Step 5

Boolean Values

This option is used when the value will be Yes or No. You can also change the value to True or False, Positive or Negative, 0 or 1, and so forth.

We will use "IN-HOUSE" in the Label field as the category that will tell us whether or not the part is manufactured internally or externally. In this case, assign a value of Yes.



The 'Define Properties' dialog box shows the following configuration for a Boolean property:

Label:	IN-HOUSE
Type:	Boolean
Format:	Yes;No
Value:	Yes
Sample:	'Yes'

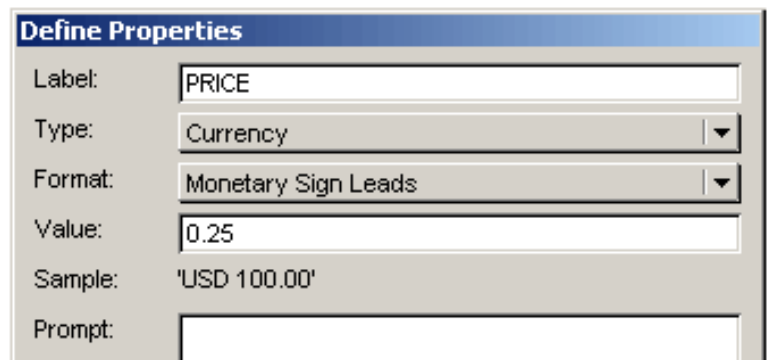
Boolean drop-down menu

Step 6

Creating a Currency format

There are two format types for the currency property. They are Monetary Sign Leads (ex: USD 100.00) and Monetary Sign Follows (ex: 100.00 USD). The default setting for the currency property is Monetary Sign Leads.

At this point, we enter "PRICE" in the Label field and then choose Monetary Sign Follows from the Currency type field. Next, use "0.25 USD" as the cost of the nut.



The 'Define Properties' dialog box shows the following configuration for a Currency property:

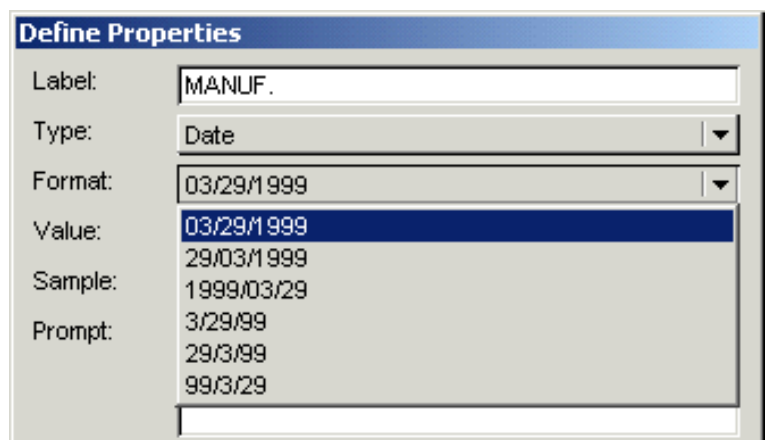
Label:	PRICE
Type:	Currency
Format:	Monetary Sign Leads
Value:	0.25
Sample:	'USD 100.00'
Prompt:	

Date drop-down menu

Step 7

Assigning a Date format

The Date field can be set to any of six different formats. There are two general format types. Full Date formats force you to set a date which consists of a two-number day, two-number month, and four-number year. Short Date formats consist of either a one-number or two-number day and a one-number or two-number month.



The 'Define Properties' dialog box shows the following configuration for a Date property:

Label:	MANUF.
Type:	Date
Format:	03/29/1999
Value:	03/29/1999
Sample:	1999/03/29
Prompt:	3/29/99 29/3/99 99/3/29

Date drop-down menu

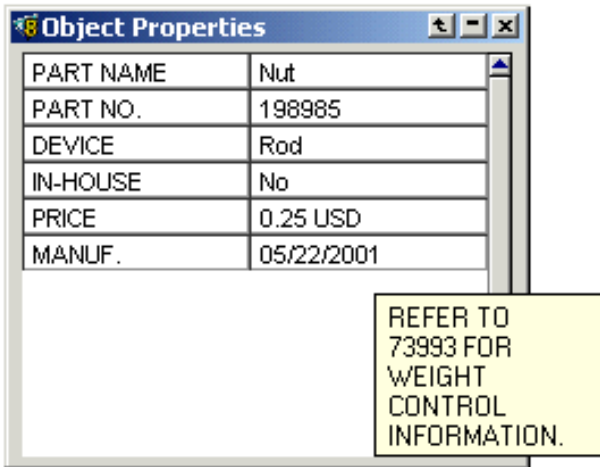
Canvas 8 Object Properties (Continued)

Choose the appropriate text for the Label field, select Date from the Type menu, and then pick a Format. We will name the Label "MANUF." to signify the date of manufacture and then chose 03/29/1999 as the Format type. Next, a date of 05/22/2001 is entered in the Value field to track the nut's date of manufacture.

Step 8

Prompts

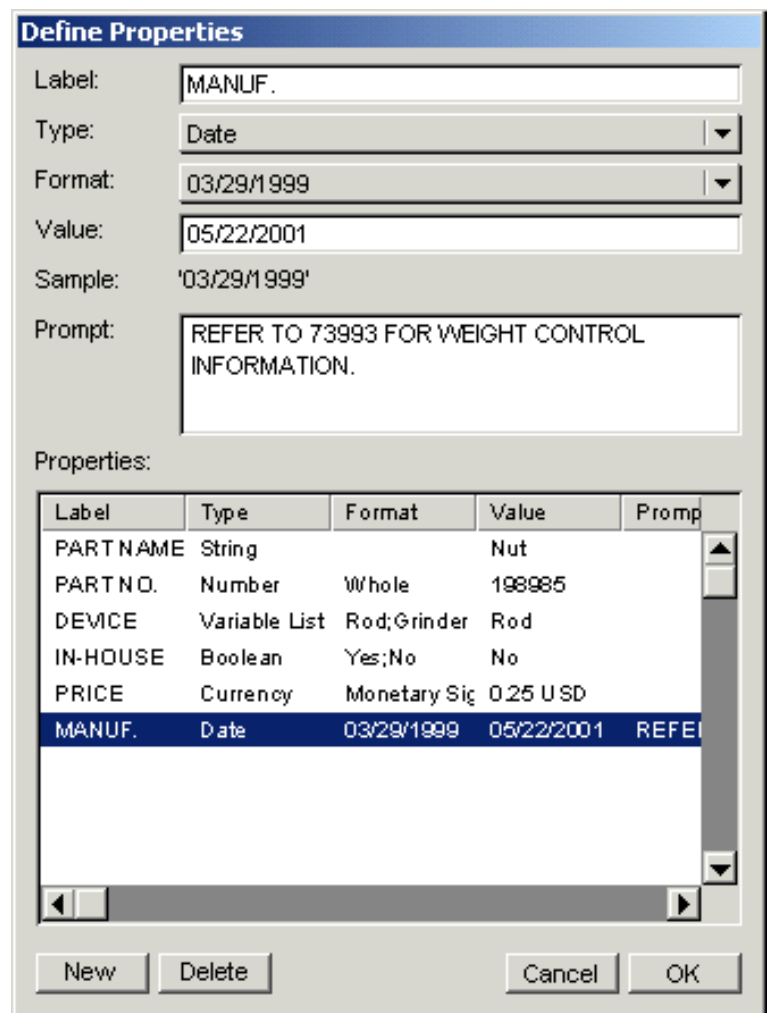
You can enter a message or other data into the Prompt field of the Define Properties dialog box. This notation will be displayed whenever you place the pointer over the property name in the Object Properties dialog box.



Pointer displaying message from Prompt field

For this example, we will enter the following message as a technical instruction note for the nut: REFER TO 73993 FOR WEIGHT CONTROL INFORMATION.

Note: We went on to select three more nuts and assign various properties to them using the same steps outlined so far in this tutorial.



Define Properties dialog box after input of properties

Canvas 8 Object Properties (Continued)

Retrieve and analyze your data using a script

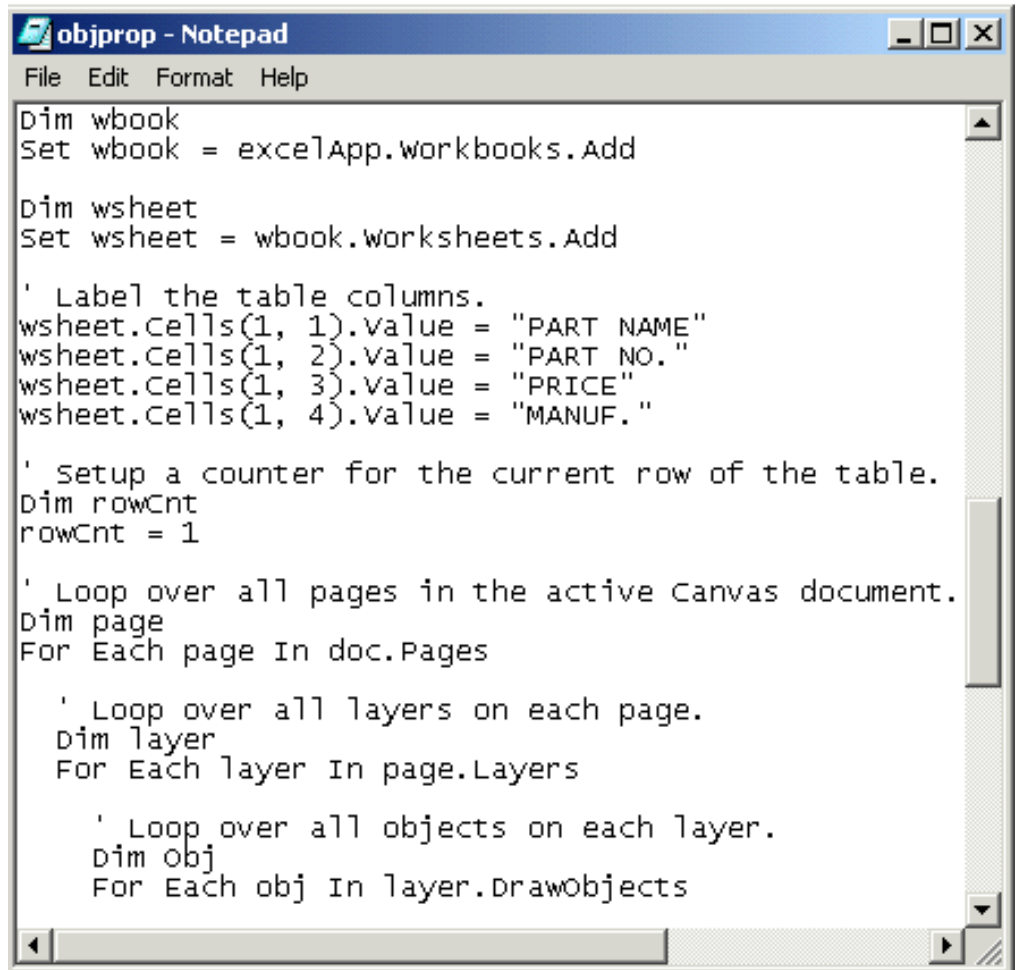
Once inputted into the Define Properties dialog box, your data is always immediately accessible by simply selecting the object. However, it does not stop there. You can write a script that can pull information based on any of the values that were entered. Searches can be done by price, part number, name, Boolean value, number ranges, and so forth - the possibilities are endless.

Step 9

Creating the script

Here, we have created a script in VBScript - a programming language that can be used in a Windows text editor such as Notepad. The script will search for a particular keyword and then return its results organized on a spreadsheet with the following information: part number, part price, and date of part manufacture. You can [click here](#) to get the actual code for our ready-made script.

Note: The Object Properties script for this example requires Excel. This particular script is just one of many kinds that can be created for the Object Properties function of Canvas. For more in-depth information on how to create your own script, please see our [scripting how-to](#) tutorial.



```
objprop - Notepad
File Edit Format Help
Dim wbook
Set wbook = excelApp.workbooks.Add

Dim wsheet
Set wsheet = wbook.worksheets.Add

' Label the table columns.
wsheet.Cells(1, 1).Value = "PART NAME"
wsheet.Cells(1, 2).Value = "PART NO."
wsheet.Cells(1, 3).Value = "PRICE"
wsheet.Cells(1, 4).Value = "MANUF."

' Setup a counter for the current row of the table.
Dim rowCnt
rowCnt = 1

' Loop over all pages in the active Canvas document.
Dim page
For Each page In doc.Pages

    ' Loop over all layers on each page.
    Dim layer
    For Each layer In page.Layers

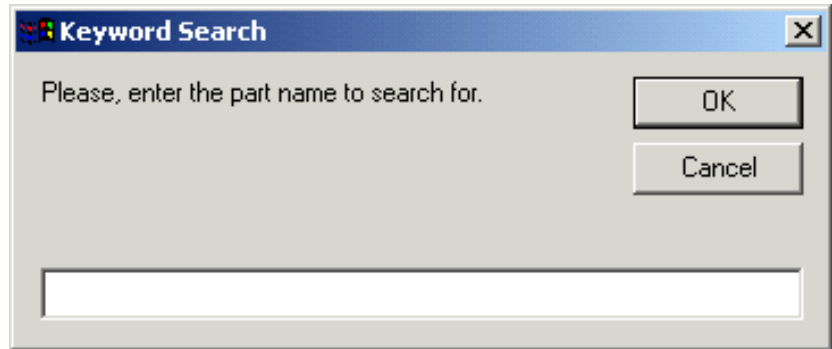
        ' Loop over all objects on each layer.
        Dim Obj
        For Each obj In layer.DrawObjects
```

Object Properties script

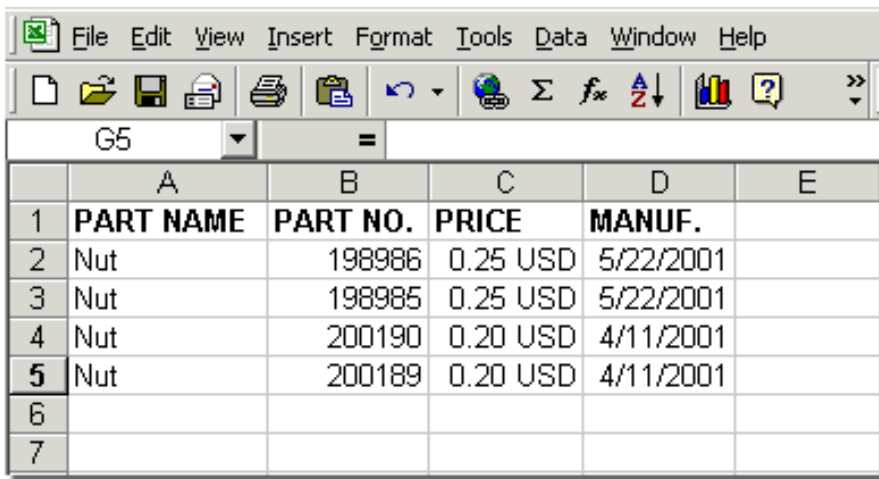
Running the script

To run the script, make sure that the appropriate document in Canvas is active and then double-click on the script file to execute it. This brings up the Keyword Search dialog box.

Next, we will search for information about all of the nuts in our connecting rod by typing "Nut" in the Keyword Search dialog box, which asks for the part name to search for, and then pressing enter.



Keyword Search dialog box generated by the script



	A	B	C	D	E
1	PART NAME	PART NO.	PRICE	MANUF.	
2	Nut	198986	0.25 USD	5/22/2001	
3	Nut	198985	0.25 USD	5/22/2001	
4	Nut	200190	0.20 USD	4/11/2001	
5	Nut	200189	0.20 USD	4/11/2001	
6					
7					

Examining your data

Once we run the script, the data is pulled from Object Properties information stored in the Canvas document and then exported into an Excel spreadsheet for easy examination and analysis. You can use any scriptable spreadsheet application. Just remember to modify the script code accordingly.

Object Properties data exported into a spreadsheet via a script