

Inference in Word QuickStart 1

Assemble an Inference in Word Document

Inference in Word QuickStart 1 shows you how to:

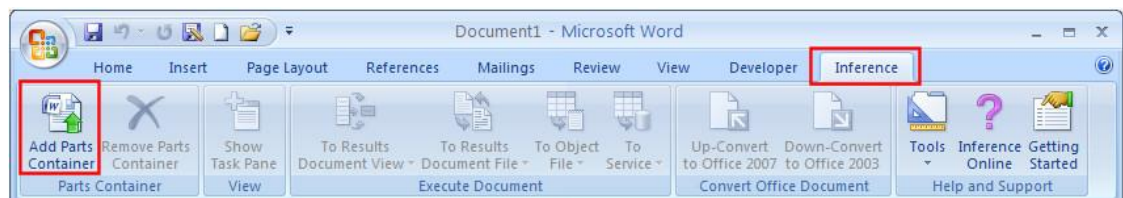
- Add R code to an Inference in Word document.
- Generate a results document that combines your text and the output from your R code.

1. Add a Parts Container to a Word Document

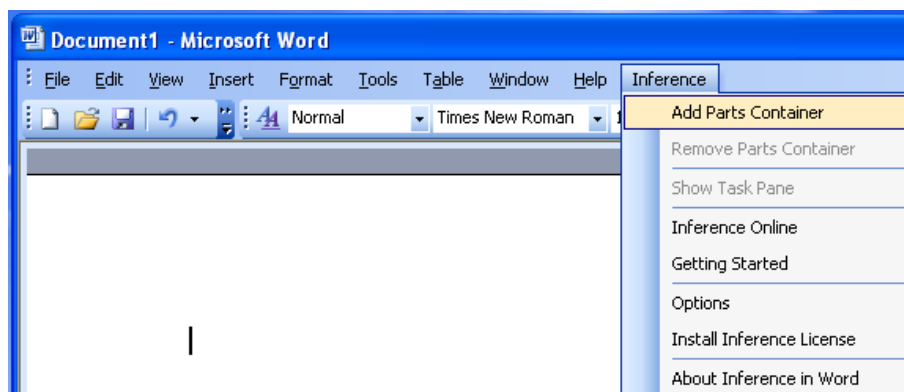
Inference in Word documents are regular Microsoft Office Word documents plus an Inference **Parts Container**. The Parts Container holds your data sets as well as software objects, code blocks and expression statements.

To add an Inference Parts Container to an ordinary Word document:

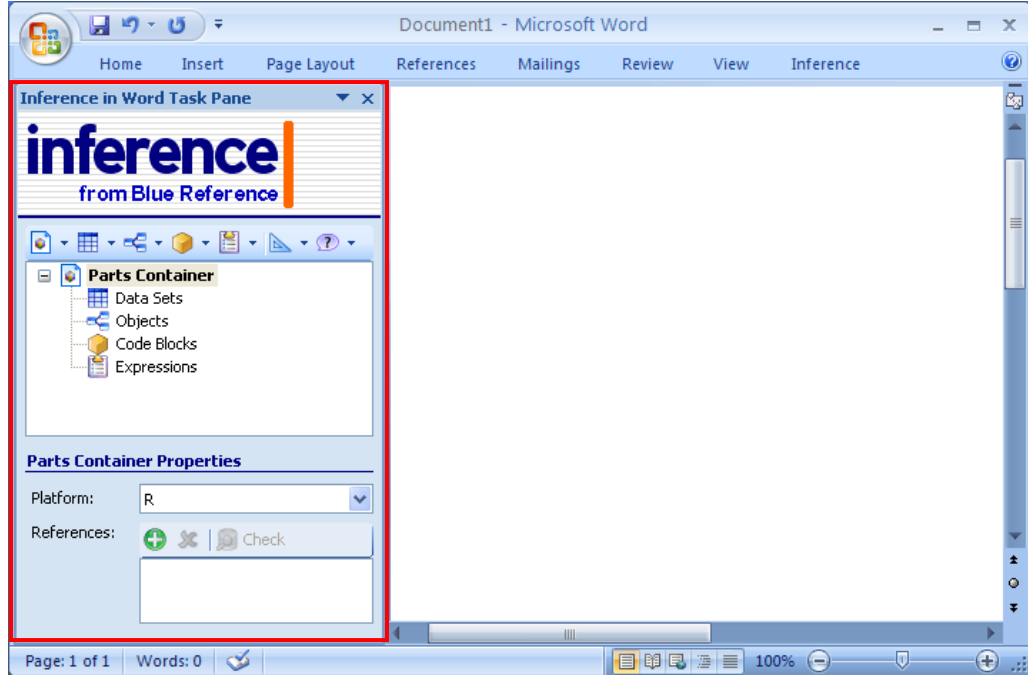
1. Create or open a Word document.
2. In Word 2007: Click the **Inference** tab on the Word Ribbon. Then, click **Add Parts Container**.



In Word 2003: On the **Inference** menu, click **Add Parts Container**.



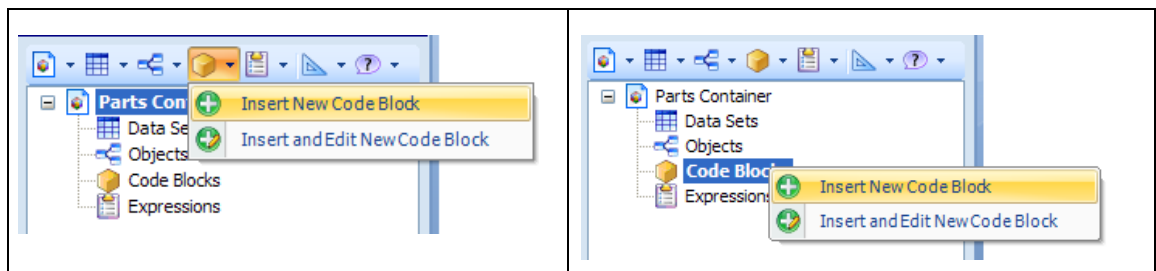
3. The **Inference in Word Task Pane** will appear:



2. Add R Code

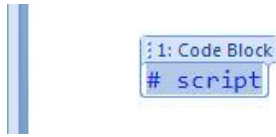
To add R code to your document, create a Code Block:

1. In your Word document, click where you want to insert the code.
2. From the **Parts Container** toolbar, select the **Code Blocks** drop-down menu, then choose **Insert New Code Block**. (Or, you can right-click **Code Blocks** in the **Parts Container** tree.)



3. In Office 2007, a content control appears on the Word canvas. In Office 2003, a set of XML tags appears.

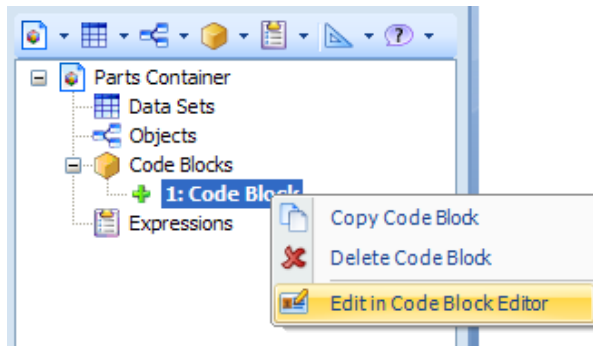
Office 2007:



Office 2003:



4. To edit the contents of the Code Block, either double-click on the contents (that is, on the “# script”) or right-click on the Code Block and select **Edit in Code Block Editor**.



5. In the Code Block Editor, insert the following three lines of code:

```
x <- rnorm (100)
y <- x**2 + rnorm (100)

summary(y)
```

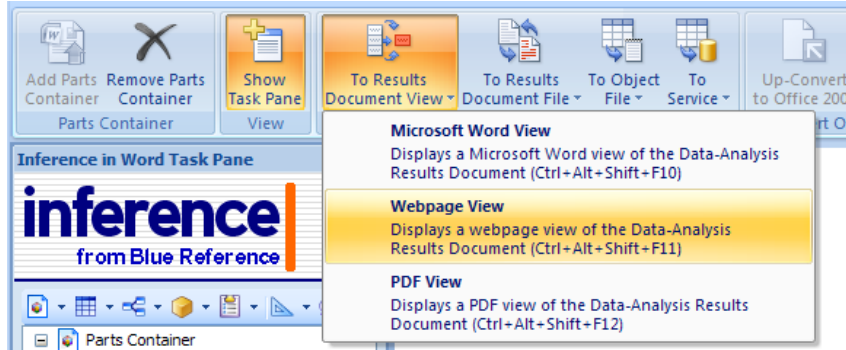
6. Click **Done**.

3. View the Results

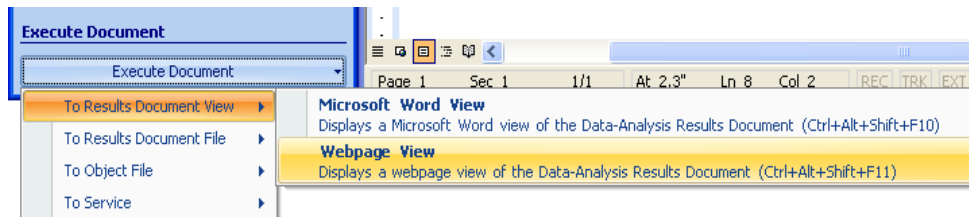
To see the results of executing the code block you just added:

1. Save the document.
2. In Word 2007: Click the **Inference** tab on the Word Ribbon.
In Word 2003: Click the **Execute Document** button at the bottom of the Inference in Word Task Pane.
3. To view the results as a Web page, select **To Results Document View**, then click **Webpage View**.

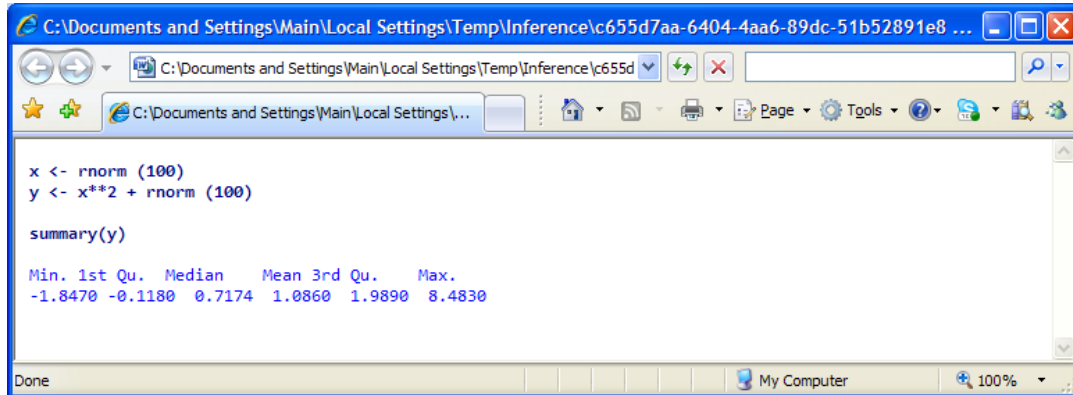
In Office 2007:



In Office 2003:



4. When the **Inference Execute** process is completed, you'll see the following Web page:



4. Add More R Code

Now we will use the x and y data created in the first code block to create a plot in the second code block. Insert a second code block as follows:

1. In your Word document, click where you want the plot to appear. In this example, we'll use the variables x and y created in the first code block, so click below the first code block.

2. From the **Parts Container** toolbar, select the **Code Blocks** dropdown menu, then choose **Insert and Edit New Code Block**. (Or, you can right-click **Code Blocks** in the **Parts Container** tree.)
3. In Code Block Editor, insert the following line of code:

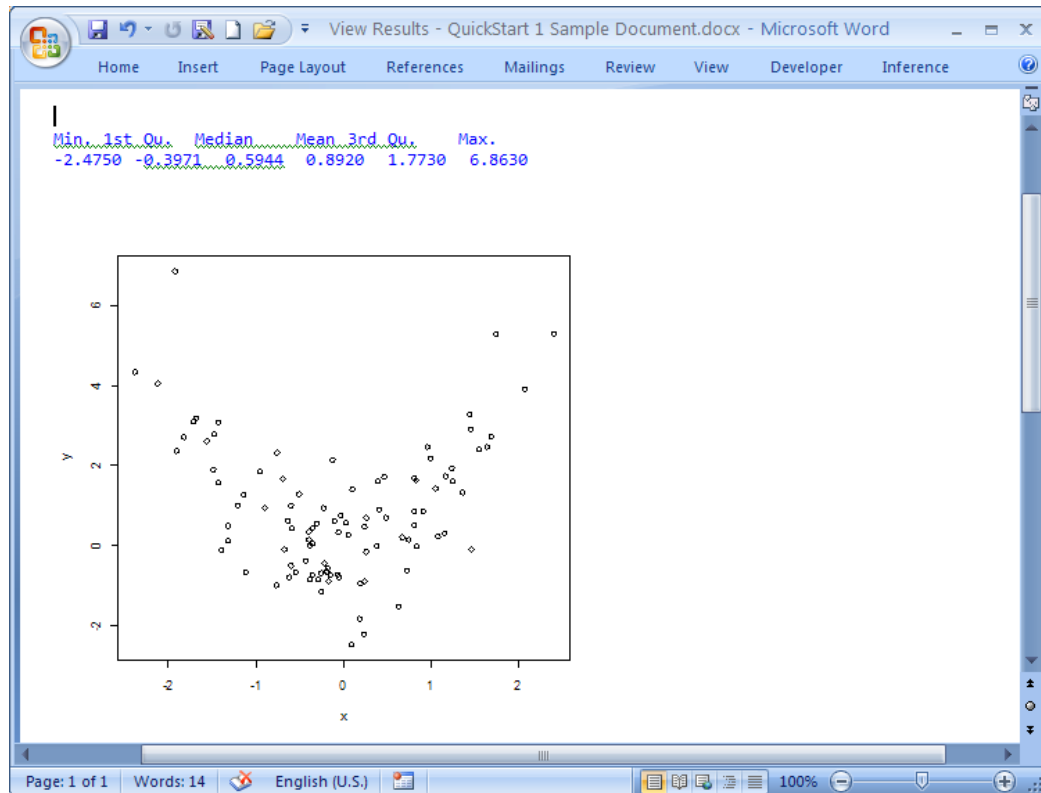
```
plot(y~x)
```
4. For **Output Code**, select **No**. The code will not appear in the results document.
5. Click **Done**.

5. View the Updated Results

To view the outcome of executing both code blocks, execute the document again:

1. In Word 2007: Click the **Inference** tab on the Word Ribbon.
In Word 2003: Click the **Execute Document** button at the bottom of the Inference in Word Task Pane.
2. To view the results as a Microsoft Word document, select **To Results Document View > Microsoft Word View**.

3. The **Inference Execute** process will begin. After it finishes, you will see another Word window containing the results document.



6. Add an Expression

To calculate a value and insert it directly into the text of your results document, create an Expression:

1. Close the results document view and return to the Inference in Word document.
2. Add the text. For example, "The maximum value of x is [] units."
3. Click where you want the calculated value to appear.
4. From the **Parts Container** toolbar, select the **Expressions** dropdown menu, then select **Insert and Edit New Expression**. (Or, you can right-click **Expressions** in the **Parts Container** tree then select **Insert and Edit New Expression**.)
5. Within the Expression Editor, enter "MyExpression" as the label.
6. Select **Yes** for **Alias Code Text**.
7. Insert the following line of code in the **Edit Code Text** box

```
infOutput.print(round(max(x), digits=2))
```

8. Click **Done**. Inference will display the name of the expression (“MyExpression”) in the Inference document.

7. View the Final Results

To view the outcome of executing both code blocks and the expression:

1. In Word 2007: Click the **Inference** tab on the Word Ribbon.
In Word 2003: Click the **Execute Document** button at the bottom of the Inference in Word Task Pane.
2. To view the results as a Microsoft Word document, select **To Results Document View > Microsoft Word View**.
3. The **Inference Execute** process will begin. After it finishes, you will see another Word window containing the new results document. Compare your results to the following:

