

Inference in Excel QuickStart 3

Use an Inference DataFrame in Inference in Excel

Inference in Excel QuickStart 3 shows you how to:

- Import a DataFrame into an Inference in Excel document.
- Use that data in your code to perform some useful tasks.

Note: Before beginning this QuickStart, please complete **Inference DataFrames QuickStart 1: Assemble data to access from R code**.

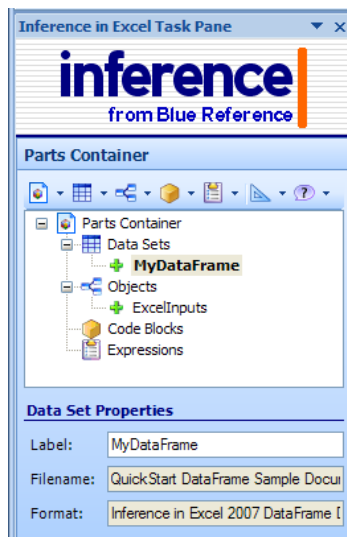
1. Add a Parts Container

1. Create or open an Excel document.
2. Select **Inference > Add Parts Container**.

2. Import a DataFrame

To import the DataFrame created in the Inference in Excel DataFrame QuickStart 1:

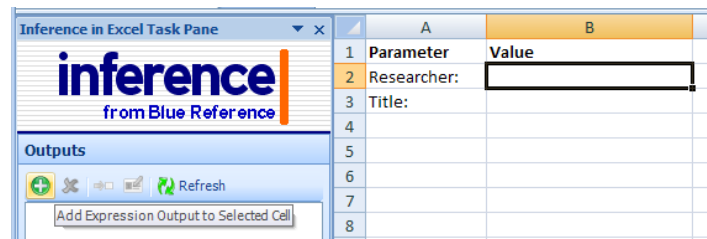
1. From the **Parts Container** toolbar, select **Data Set > Import Data Set**, then select **Existing Inference in Excel 2003 DataFrame Document** (if you are using Office 2003) or **Existing Inference in Excel 2007 DataFrame Document** (if you are using Office 2007).
2. Navigate to the file containing the DataFrame. Select it and click **Open**.
3. In the **Parts Container** tree, select the name of the imported Data Set.
4. In the **Data Set Properties** section at the bottom of the Inference Task Pane, change the label from the file name to **MyDataFrame**. Note that the label is case sensitive.
5. Compare your results to the following:



3. Access DataFrame Attributes

To display the attributes of a DataFrame in your results document:

1. At the bottom of the Inference Task Pane, click **Outputs**. The Outputs worksheet will be displayed.
2. In cell A1, type **Parameter**. In cell B1, type **Value**.
3. Under **Parameter**, type **Researcher:** in cell A2 and **Title:** in cell A3.
4. Insert a expressions into cells B2 and B3:
 - a. Click in the table cell.
 - b. On the Task Pane, click the '+' icon (Add **Expression Output to Selected Cell**).



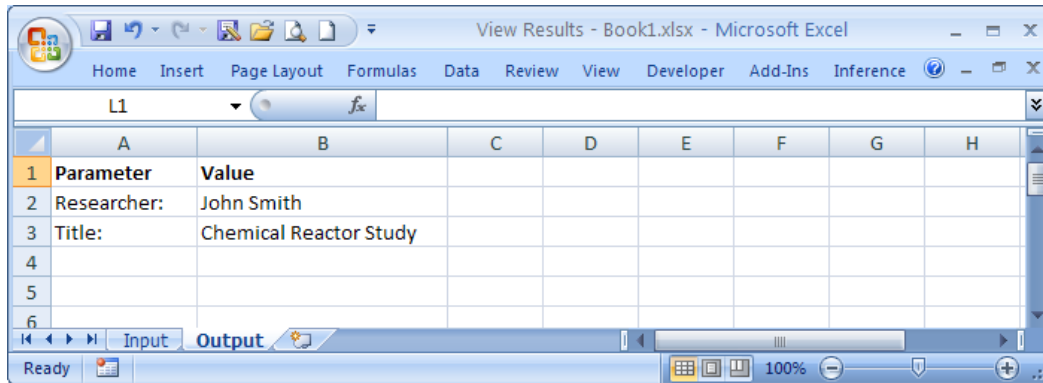
- c. In the Enter Output Name dialog box, enter output names such as 'ExampleOutput1' and 'ExampleOutput2.'
5. Edit the expressions with the following instructions for Researcher and Title, respectively:
 - `infOutput.print(attr(MyDataFrame, "Researcher"))`
 - `infOutput.print(attr(MyDataFrame, "Title"))`

4. View the Results

To view the results of the accessing the attributes of **MyDataFrame**:

1. Save the document.
2. In Excel 2007: Click the **Inference** tab on the Excel Ribbon.
In Excel 2003: Click the **Execute Document** button at the bottom of the Inference in Excel Task Pane.

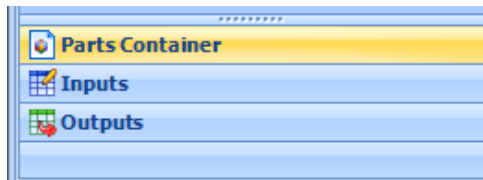
- To view the results as a Microsoft Excel document, select **To Results Document View > Microsoft Excel View**.



5. Access DataFrame Contents using R Code

The following example illustrates how to access the data vectors and the corresponding attributes in the DataFrame:

- At the bottom of the Inference in Excel Task Pane, select **Parts Container**.



- Under Parts Container Properties, click the Add (+) **References** and then select the **lattice R package**
- In the Parts Container tree, right-click **Code Blocks**, and then select **Insert and Edit New Code Block**.
- Add the following code, which you can copy and paste:

```
attach(MyDataFrame)

TempLabel <- attr(Temp, "Label")
TempUnits <- attr(Temp, "Units")
xLabel <- paste(TempLabel, " [", TempUnits, "]")

YieldLabel <- attr(Yield, "Label")
YieldUnits <- attr(Yield, "Units")
yLabel <- paste(YieldLabel, " [", YieldUnits, "]")

xyplot(
  Yield ~ Temp | Conc * Cat,
  cex=3,
  type="b",
  lwd=5,
  xlab=xLabel,
  ylab=yLabel
)
```

6. View the Final Results Document

To view the results of executing this code, do the following:

1. In Excel 2007: Click the **Inference** tab on the Excel Ribbon.
In Excel 2003: Click the **Execute Document** button at the bottom of the Inference in Excel Task Pane.
2. To view the results as a Microsoft Excel document, select **To Results Document View > Microsoft Excel View**.
3. In addition to the results on the Output tab (which you already viewed), the results document displays the Data Vectors from DataFrame in an xyplot containing the Data Vector attributes in the x and y labels:

