



QDABRA QRULES v2.2

How to use the InsertPi command

INTRODUCTION

The InsertPi and RemovePi commands were introduced in qRules v2.2. Both commands allow the forms developer to manipulate a form's Processing Instructions (PI). InsertPi inserts the specified PI into the DOM, while RemovePi command removes the specified PI from the DOM, if present.

InsertPi

- **Arguments:**
 - **name:** Name of the processing-instruction to insert.
 - **data:** Data content of the processing-instruction.
 - **update:** (optional) Update the processing-instruction if it already exists (yes | no*).
 - **dsname:** (optional) Data source to insert the processing instruction.
- **Examples:**
 - `InsertPi /name=Test /data=dev="false"`
 - `InsertPi /name=Test /data=dev="false" /dsname=QdabraRules`
 - `InsertPi /name=Test /data=dev="false" /dsname=QdabraRules /update=yes`
 - `concat("InsertPi /name=", name, " /data=", data, " /dsname=", dsname, " /update=true")`

RemovePi

- **Arguments:**
 - **name:** Name of the processing-instruction to remove.
- **Examples:**
 - `RemovePi /name=Test`

PRE-REQUISITES

This tutorial assumes that qRules v2.2 is already installed on your machine. For details on this, please see the User Guide included with the installer.

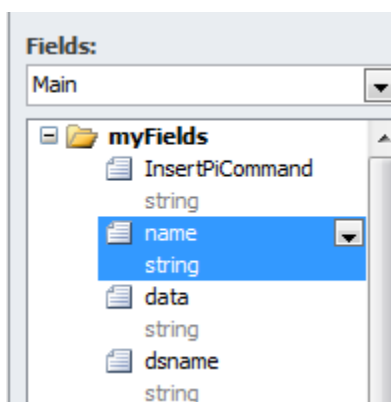
- 1) **Create a new InfoPath form:** In InfoPath, design a new, blank form. Select **File > Save As** and save the XSN to your local drive. Close the form.
- 2) **Inject qRules:** Launch the qRules v2.2 Injector, browse to select the XSN you created and click Inject. Close the qRules Injector and open the form in Design mode.

For more information on the steps above, refer to the User Guide.

EXECUTION STEPS

Design your form template based on the following steps:

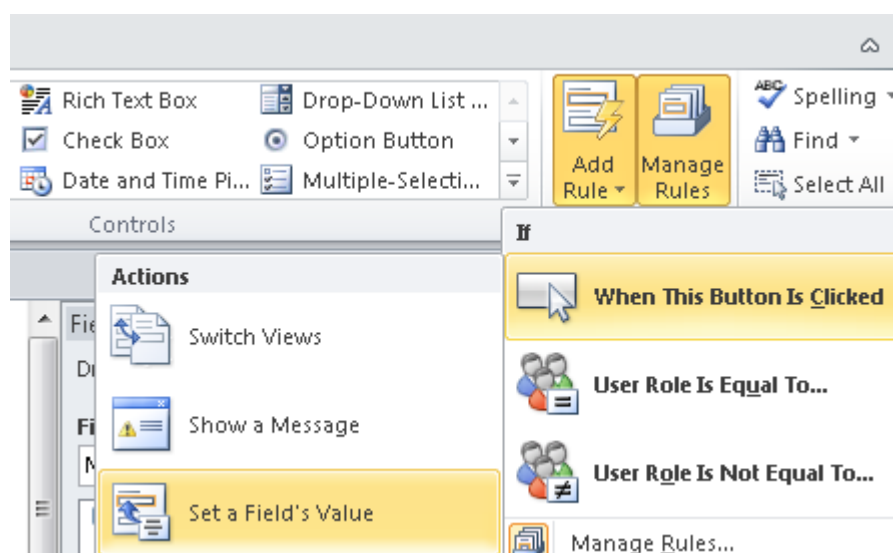
- 1) Your main data source should be similar to the below one:



- 2) Drag and drop the above created controls onto your canvas. You will have a layout similar to the following on your canvas:

Name:	
Data:	
Dsname:	
InsertPi Command:	
<input type="button" value="InsertPi"/>	<input type="button" value="RemovePi"/>

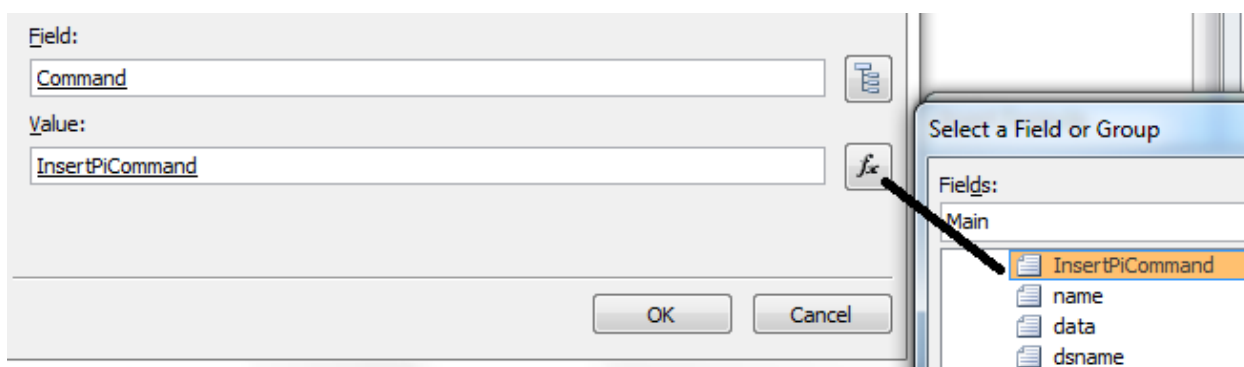
- 3) Click on the **InsertPi** button, and then from **Home > Add Rule > When This Button is Clicked > Set a Field's Value**:



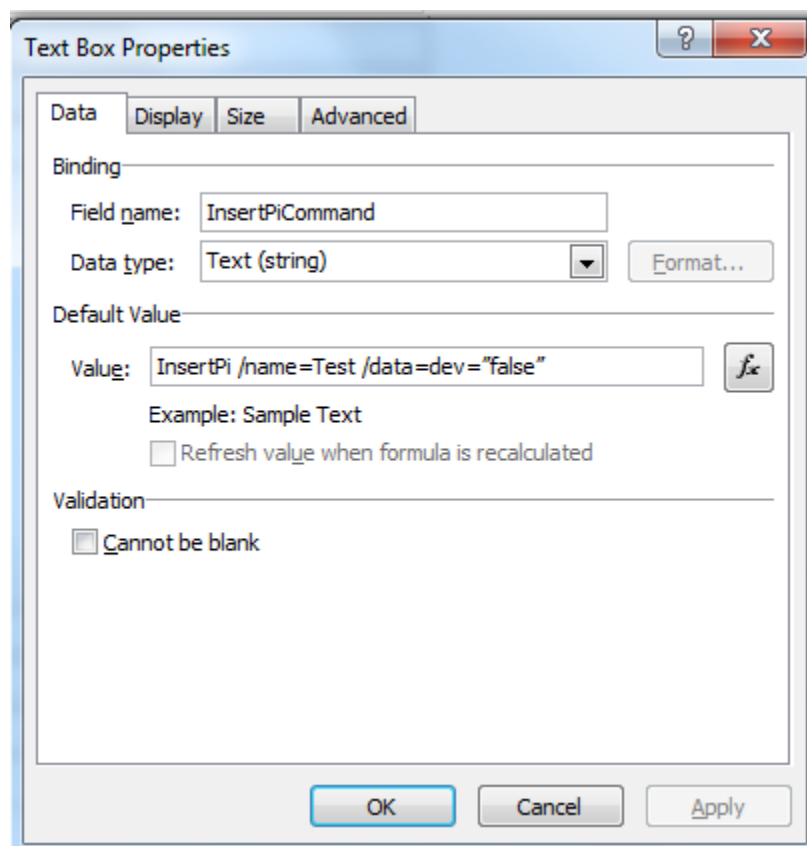
- 4) Now set the **Field** value to point to the **QdabraRules (Secondary) Command** field.



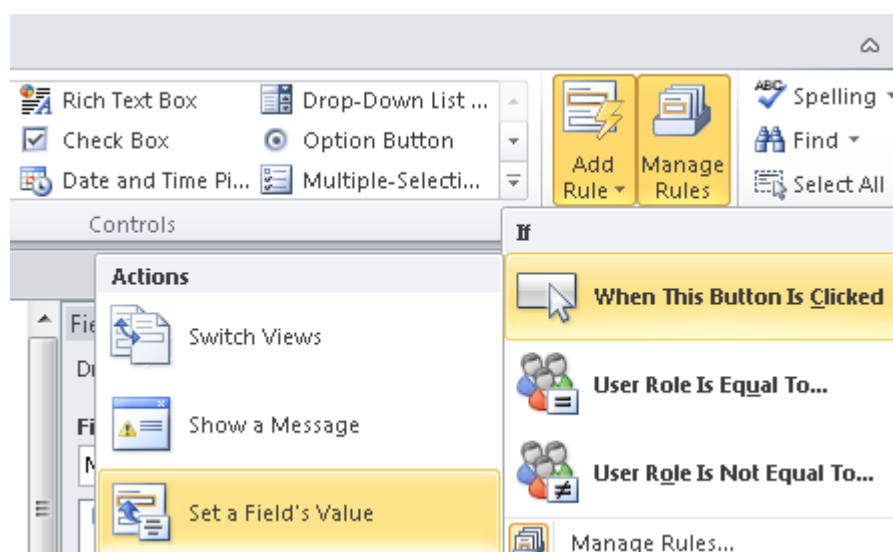
- 5) Set the **Value** to point to the **InsertPiCommand** field from the main data source. Click **OK**.



- 6) Right click on the **InsertPiCommand**, and select **Text Box Properties...** and enter the value:
InsertPi /name=Test /data=dev="false"



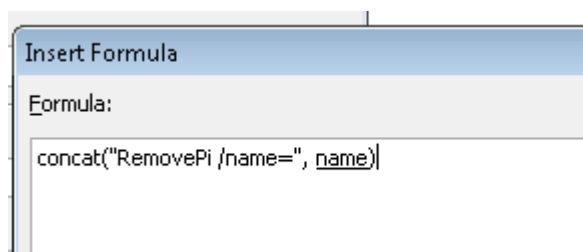
- 7) Click **OK**.
- 8) Click on the **RemovePi** button, and then from **Home > Add Rule > When This Button is Clicked > Set a Field's Value**:



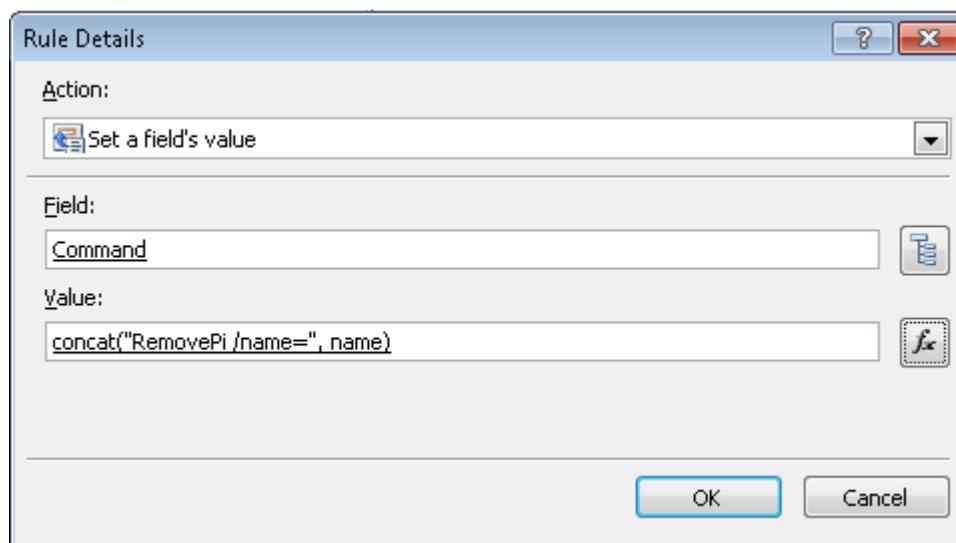
- 9) Now set the **Field** value to point to the **QdabraRules (Secondary) Command** field.



- 10) For **Value**, click on the **fx** button, and add the below formula (Note: **name** points to the name field from the main data source): **concat("RemovePi /name=", name)**.



- 11) Your final action should look similar to the below one:



- 12) Click **OK**.
- 13) Now drag and drop the QdabraRules **Result**, **Success**, and **Error** fields into the view.
- 14) Preview the form.
- 15) Click **InsertPi** button to execute the **InsertPi** command.



Name:

Data:

Dsname:

InsertPi Command:

Result:

Error:

Success

- 16) Save the form locally, and close the form.
- 17) Open it in a text editor to view the inserted processing instruction.
- 18) Now, let's remove the above inserted PI.
- 19) Re-open the form in InfoPath
- 20) Enter an existing PI name in the **Name** field (this tutorial uses **Test**).
- 21) Click the **RemovePi** button to execute the command.

Name:

Data:

Dsname:

InsertPi Command:

Result:

Error:

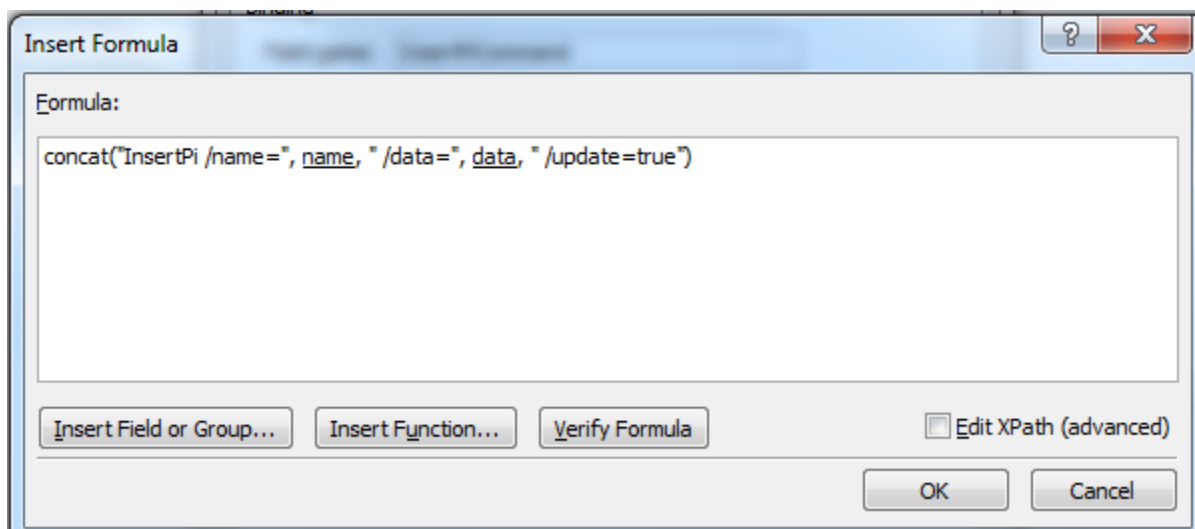
Success

- 22) Save the form locally, and close the form.
- 23) Open it in a text editor to verify that processing instruction was removed. You should see **Test** PI no longer exists.

You can also use a **concat** command if you wish to use specific fields with dynamic values in your InsertPi command parameters. Let's replace **InsertPiCommand** field with a **concat** command.

- 24) In design mode, right click on **InsertPiCommand** field, and select **Text Box Properties...** to set the value to the below concat command (Note: Since **concat** is an InfoPath function, you will have to enter it as a formula, pointing **name**, and **data**, to their respective nodes in the main data source:

concat("InsertPi /name=", name, " /data=", data, " /update=true")



25) Preview your form.

26) Enter **Test** in the **Name** field, and **dev="false"** in the **Data** field.

Name:	<input type="text" value="Test"/>
Data:	<input false""="" type="text" value="dev="/>
Dsname:	<input type="text"/>
InsertPi Command:	<input false"="" type="text" update='true"/' value="InsertPi /name=Test /data=dev="/>
	<input type="button" value="InsertPi"/> <input type="button" value="RemovePi"/>
Result:	<input type="text"/>
Error:	<input type="text"/>
Success	<input type="checkbox"/>

27) Click the **InsertPi** button.



Name:

Data:

Dsname:

InsertPi Command:

Result:

Error:

Success

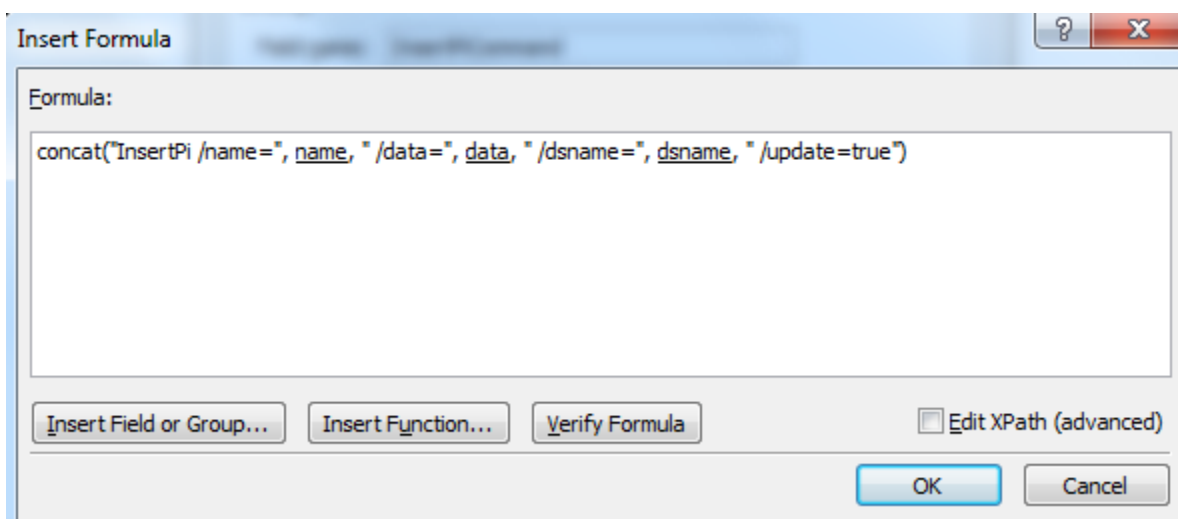
- 28) Now save, and close the form.
- 29) Open the saved form in a text editor to see the inserted processing instruction. You should see a PI similar to the below one.

```
<?Test dev="false"?>
```

You can also insert a processing instruction to a secondary data source using **/dsname** parameter:

- 30) In the design mode, right click on **InsertPiCommand** field, and select **Text Box Properties...** to add a new parameter to the **InsertPi** command. Your command should look similar to the below one:

concat("InsertPi /name=", name, " /data=", data, " /dsname=", dsname, " /update=true")



- 31) Save and preview the form.
- 32) Enter data in the fields as shown below (this tutorial uses **QdabraRules** as a secondary data source).



Name:	Test
Data:	dev="false"
Dsname:	QdabraRules
InsertPi Command:	InsertPi /name=Test /data=dev="false" /dsname=QdabraRules /update=true

Result:	
Error:	
Success	<input type="checkbox"/>

33) Click **InsertPi** button.

Name:	Test
Data:	dev="false"
Dsname:	QdabraRules
InsertPi Command:	InsertPi /name=Test /data=dev="false" /dsname=QdabraRules /update=true

Result:	
Error:	
Success	<input checked="" type="checkbox"/>

34) Now the PI is inserted to **QdabraRules** data source (Note: You can verify that by having an expression box with the following value: `xdXDocument:GetDOM("QdabraRules")/processing-instruction()[local-name(.)="Test"]`)