

Using Cognos Report Studio to update a database

Cognos Report Studio is very useful in scenarios where updating a database is required. Follow the 5 detailed illustrated steps below to write to a database using the power of the Cognos reporting tool - Cognos Report Studio.

1. Create a simple table in SQL Server.
2. Create a SQL Procedure to update a particular column per the user request.
3. Import the SQL Server table and procedure into framework and publish the package.
4. Create 2 reports – a base report and a drill through report.
5. Display the updated column in the report. 10.2.2 has been available for just over a year now, having been launched in October 2014. Cognos 10.2.2 offers many features to improve the user experience especially around ease of use, greater efficiency, and quicker and easier deployment which enables a faster time to value for the business.

1. Create a simple table in SQL Server

```
create table dbo.ProductBlog
(
    ProductID int not null PRIMARY KEY,
    Comments varchar(255) null
)
```

Insert rows into the above table as shown below :

	ProductID	Comments
1	100	NULL
2	200	NULL
3	300	NULL
4	400	NULL
5	500	NULL

2. Create a SQL Procedure to update a column per the user request

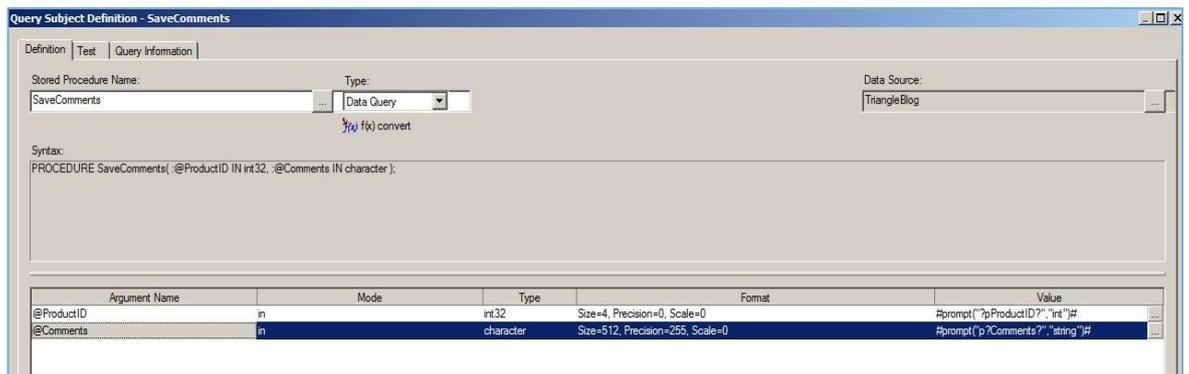
```
create procedure [dbo].[SaveComments]
    @ProductID int,
    @Comments varchar(255)

as
begin
    if
        ((
            select
                count(*)
            from
                dbo.ProductBlog
            where
                ProductID=@ProductID
            )=0
        )
        insert into dbo.ProductBlog VALUES (@ProductID,@Comments)
    else
        update
            dbo.ProductBlog
        set
            Comments=@Comments
        where
            ProductID=@ProductID
    end

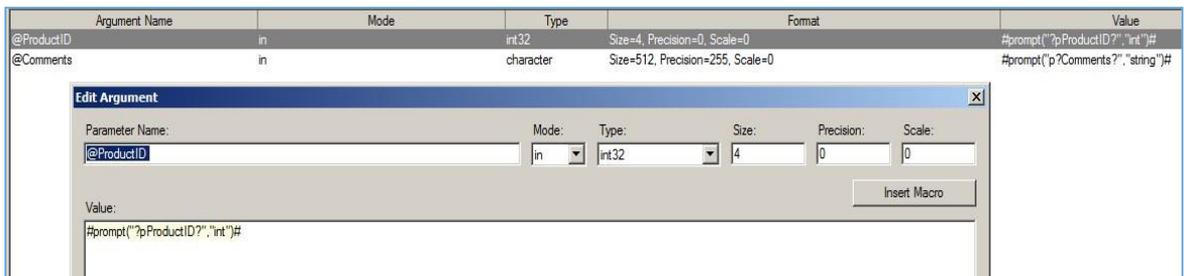
    --This statements returns a resultset to FM
    select
        ProductID, Comments
    from
        dbo.ProductBlog
```

3. Import the SQL Server table and procedure into the framework and publish the package

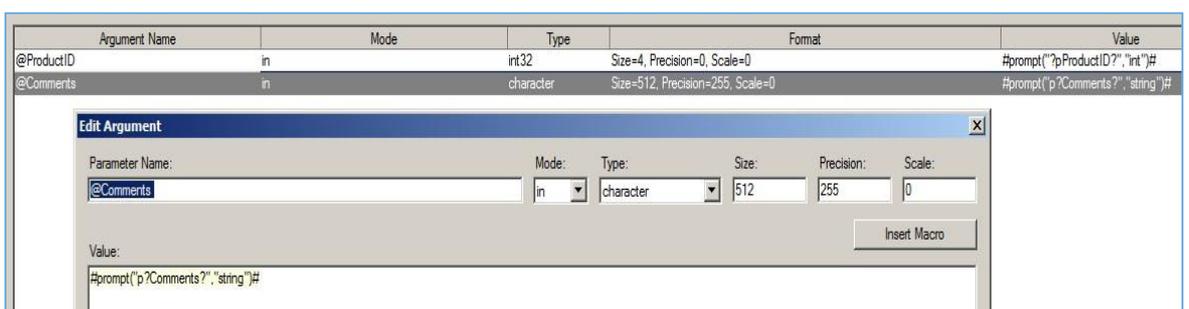
After importing the table and stored procedure, make sure to edit the prompt macro for both the ProductID and Comments variables as shown below :



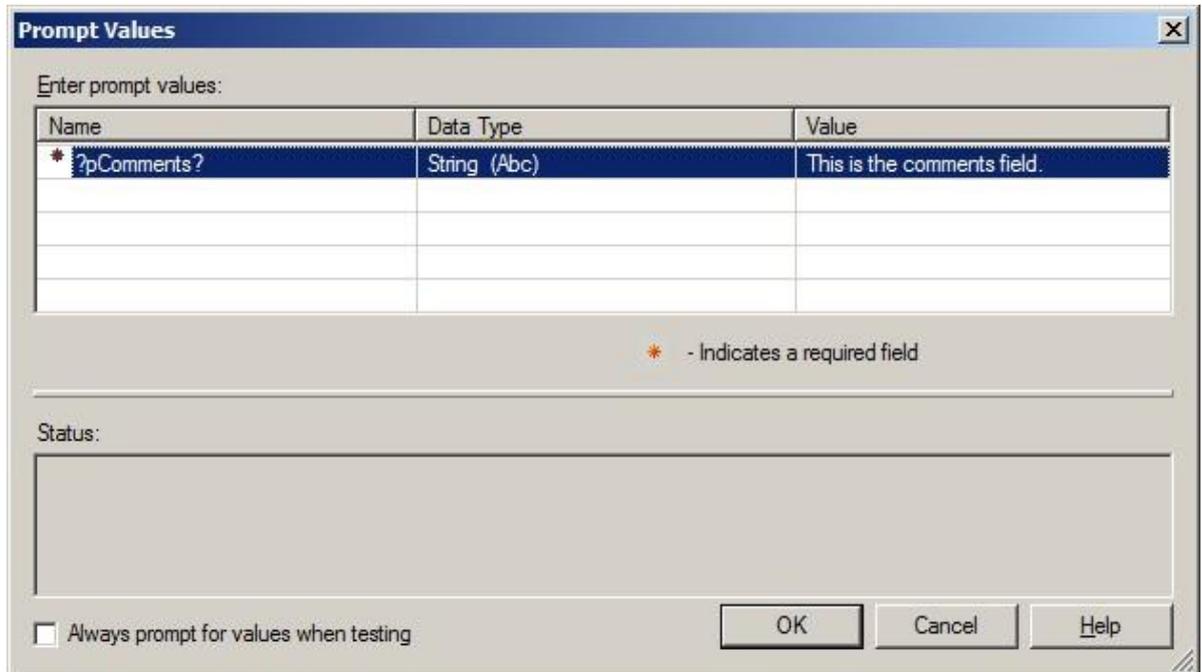
For ProductID create a **?pProductID?** prompt macro as shown below:



For Comments create a **?pComments?** prompt macro as shown below:



Validate the macros by entering the relevant details in the below Prompt Values window:



The screenshot shows a dialog box titled "Prompt Values" with a close button (X) in the top right corner. The main area is labeled "Enter prompt values:" and contains a table with three columns: "Name", "Data Type", and "Value". The first row is highlighted in blue and contains the text: Name: * ?pComments?, Data Type: String (Abc), Value: This is the comments field. Below the table, there is a legend: * - Indicates a required field. At the bottom left, there is a checkbox labeled "Always prompt for values when testing" which is currently unchecked. At the bottom right, there are three buttons: "OK", "Cancel", and "Help".

Name	Data Type	Value
* ?pComments?	String (Abc)	This is the comments field.

* - Indicates a required field

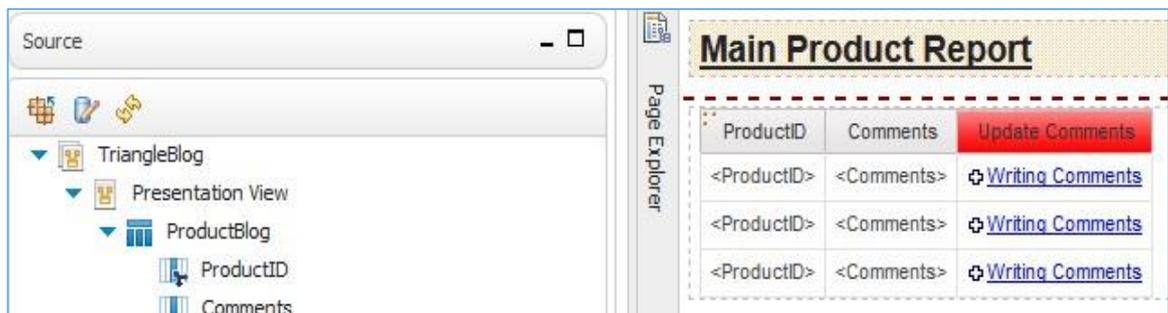
Status:

Always prompt for values when testing

OK Cancel Help

4. Create 2 reports: base report & drill through report

(a) Base Report - Main Product Report



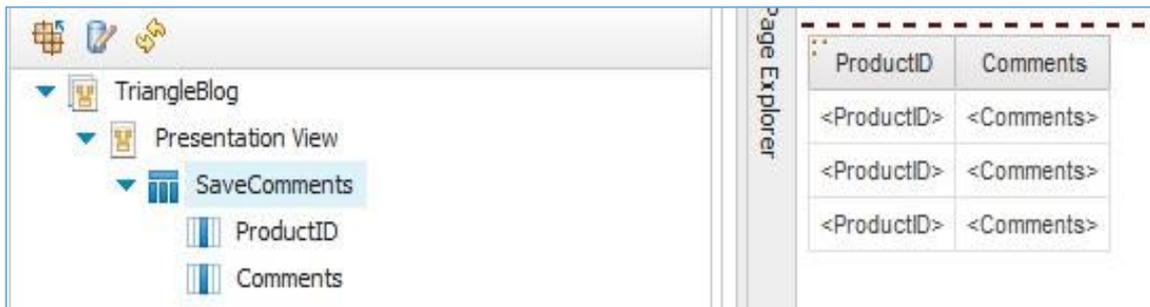
The **Update Comments** column is a text item that will be used for a drill through definition field to another table (*Updated Comments Report*).

When the above report is run the **Comments** column is empty as we have not entered any comments yet. Please note if you entered the values for the comments while validating in Framework Manager it will appear in the column below.

Main Product Report		
ProductID	Comments	Update Comments
100		Writing Comments
200		Writing Comments
300		Writing Comments
400		Writing Comments
500		Writing Comments

(b) Drill Down Report - Updated Comments Report

This data item ProductID and Comments is inserted into the list report from the SaveComments (stored procedure) query subject.

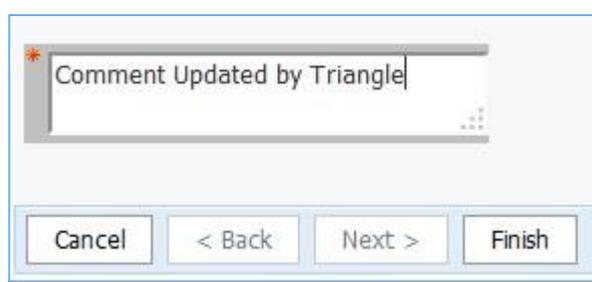


A text box prompt is inserted in the prompt page of the report and is mapped to the *?pComments?* prompt macro in reference to Framework Manager. This will act as a comment box for the user to comment and update the database comment field.



When the base report is run (Main Product Report) select the Writing Comments data item to write the comment to that particular ProductID.

For example, for the ProductID 100 we are going to enter *Comment Updated by Triangle* in the comments field, and click Finish as shown below.



This will take the user to the drill down report displaying the updated comment field.

Updated Comments Report

ProductID	Comments
100	Comment Updated by Triangle
200	
300	
400	
500	

5. Display the updated column in the report

Run the base report again and you will find the updated comment in this report too, as shown below :

Main Product Report

ProductID	Comments	Update Comments
100	Comment Updated by Triangle	Writing Comments
200		Writing Comments
300		Writing Comments
400		Writing Comments
500		Writing Comments

Software used:

- IBM Cognos BI 10.2.2
- IBM Cognos Framework Manager
- Microsoft SQL Server Management Studio 2012
- IBM Cognos Report Studio

If you have any questions or queries on the above guidance, please contact Triangle Information Management (www.triangleinformationmanagement.com) for one of our expert business intelligence consultants to help you.