

Dynamically Determine DB2 Library in Cognos Framework Manager

This document describes an approach to dynamically set the schema property for a Cognos data source in Framework Manager. This is useful when a schema MUST be supplied (such as with DB2 iSeries) and can vary between environments.

Step 1 – Create Data Source Query Subject

Create a data source query subject that queries the database and returns the name of the database server. The example below illustrates a DB2 query. The query will only return one row with a hard coded value “CURRENT_ENVIRONMENT” and the name of the proper library to use. The correct library to use is based on the value of the database server and a case statement to identify the schema name that goes with each.

```
SELECT
'CURRENT_ENVIRONMENT' as CURRENT_ENVIRONMENT,
  case CURRENT SERVER
    when 'AS4DEV' then 'DEVSHEMA'
    when 'AS4PROD' then 'PRODSHEMA'
    else 'DEVSHEMA'
  end as LIBRARY_NAME
FROM SYSIBM.SYSDUMMY1
```

When the data source connection in Cognos Connection is configured for development data, as it would be in the Cognos DEV environment, the query will return:

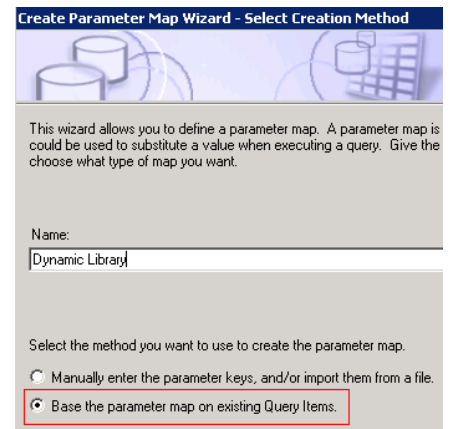
CURRENT_ENVIRONMENT	DEVSHEMA
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When the data source connection in Cognos Connection is configured for production data, as it would be in the Cognos PROD environment, the query will return:

CURRENT_ENVIRONMENT	PRODSHEMA
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Step 2 – Create Parameter Map

Create a parameter map and select the option in the Parameter Map Wizard to base the parameter map on existing query items. Specify the query subject created in Step 1 and specify the key as the CURRENT_ENVIRONMENT column and set the value as the LIBRARY_NAME column.



Create Parameter Map Wizard - Select Creation Method

This wizard allows you to define a parameter map. A parameter map is used to substitute a value when executing a query. Give the choose what type of map you want.

Name:
Dynamic Library

Select the method you want to use to create the parameter map.

☐ Manually enter the parameter keys, and/or import them from a file.

☒ Base the parameter map on existing Query Items.

Step 3 – Define Macro for Schema Property

Change the Schema property for the data source in Cognos connection to a macro that references the parameter map.

```
#[Dynamic Library]{ 'CURRENT_ENVIRONMENT' }#
```

Properties	
Properties	Language
Name	DB2_DATABASE
Query Processing	Limited Local
Rollup Processing	unspecified
Content Manager Data Source	DB2_DATABASE
Catalog	
Cube	
Schema	#[Dynamic Library]{ 'CURRENT_ENVIRONMENT' }#
Type	

Step 4 – Test

Set the connection information in Cognos Connection to DEV environment and test the connection in Cognos Connection to ensure it is set up properly. Use query studio or report studio to query the database using an object known to have different contents from PROD. Verify the accuracy of the content and save the report. Change the connection information in Cognos Connection to point to PROD. Re-run the saved report and the content should now show production data values.