

Tech Note 1003

Accessing InBatch Recipes In System Platform Using Recipe Automation Server (Object Hosted on Batch Server Node)

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Introduction

This *Tech Note* demonstrates the syntax used for the Recipe Object creation/release in a .NET Framework environment.

In this scenario, a Platform is deployed to an InBatch Server Node and the object containing script for accessing InBatch Recipes is hosted to this platform. The other functionality on reading/writing to the InBatch Recipe Database is documented in InBatch COM Guide.

Application Versions

- InBatch 9.x & 10.x
- System Platform 2012 R2 (for prior versions, you have to manually build the object)

Prerequisites

A platform must be deployed to the InBatch Server Node.

Procedure

1. From the Archestra IDE menu, select Galaxy\Import\Script Function Library and import the file RecipeEdit.exe located at **C:\Program files(x86)\Wonderware\inBatch\Bin** on InBatch Server Node.
2. Import the \$InBatchRecipeDBAccess template aaPkg to the IDE.
3. Create an instance of this object and host it to the Platform\AppEngine\Area that is running on InBatch Server Node.
4. Deploy the new object instance and set the trigger attribute (**me.Trigger**) in ObjectViewer for this object.

See the messages in the Archestra Logger for successful connectivity, query of recipes and release of the recipeDB object.

The following graphics show the Template Object Editor, with the text in the script body (Figure 1 below), and the messages in Archestra Logger (Figure 2 below).



Archestra IDE

Galaxy Edit View Object InBatch Window Help

Field Attributes Object Information Scripts UDAs Extensions Graphics

Script name: QueryRecipes [Configure execution order](#)

Aliases:

Declarations:

```

DIM oRecipeDB AS RecipeEditLib.IRecipe;
DIM aRecipes AS System.Array;
DIM iConnected AS Integer;
DIM i AS Integer;
    
```

Scripts: Execution type: **Execute**

Basics

Expression:

Trigger type: Quality changes

Trigger period:

Deadband:

Runs asynchronously

Timeout limit: ms

Report alarm on execution error

Priority:

Historize script state

```

'object globals
me.Trigger = false;
iConnected = 0;
i = 1;

-----
'Recipe Automation Server - localhost
-----
LogMessage("***Recipe Automation Server*** [localhost]");

'Creating and allocating memory to RecipeDB Object
oRecipeDB = NEW RecipeEditLib.wvRecipe();

'Object creation test
IF oRecipeDB == NULL THEN
    LogMessage("oRecipeDB create failed");
    
```

Inherited scripts:

Name	St	On	Ex	Of	Sh

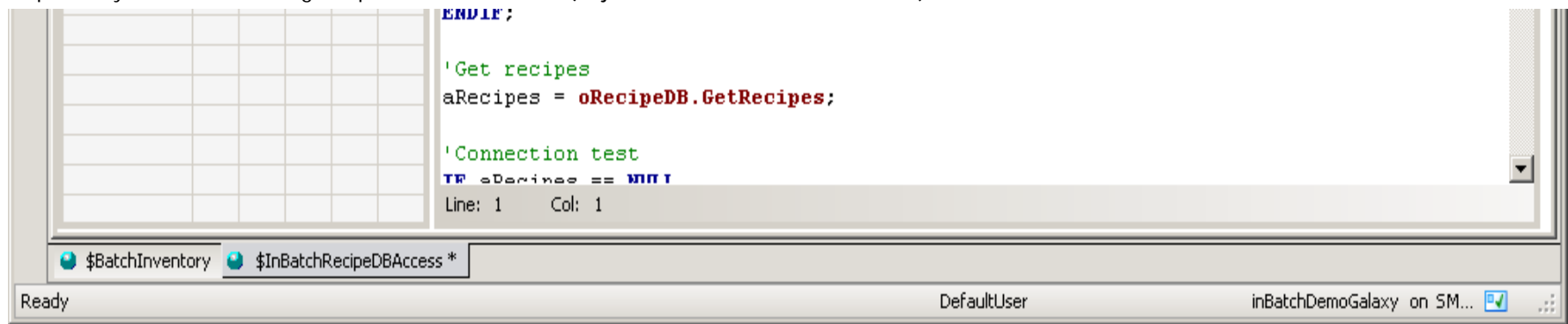


FIGURE1: ENSURE THE SCRIPT RUNS ASYNCHRONOUSLY

The following section contains the script (if you using a prior version of System Platform 2012 R2, copy the following text and paste it to your object, then declare variables in the declaration section as shown in Figure 1 (above).

```

'script globals and Trigger is a Boolean UDA
me.Trigger = false;
iConnected = 0;
i = 1;
'-----
'Recipe Automation Server - localhost
'-----
LogMessage("***Recipe Automation Server*** [localhost]");

'Creating and allocating memory to RecipeDB Object
oRecipeDB = NEW RecipeEditLib.wvRecipe();

'Object creation test
IF oRecipeDB == NULL THEN
LogMessage("oRecipeDB create failed");
ENDIF;

'Get recipes
aRecipes = oRecipeDB.GetRecipes;

'Connection test
IF aRecipes == NULL
THEN iConnected = 0;
LogMessage("oRecipeDB connection state: Not connected " + iConnected);
ELSE iConnected = 1;
LogMessage("oRecipeDB connection state: Connected " + iConnected);
ENDIF;
FOR i = aRecipes.GetLowerBound(0) to aRecipes.GetUpperBound(0)
LogMessage(" Recipe[" + i + "]: " + aRecipes.GetValue(i));
NEXT;

'note - to prevent multiple copies, shutdown recipe server
LogMessage("***Recipe Automation Server*** release");
IF oRecipeDB <> NULL
THEN System.Runtime.InteropServices.Marshal.ReleaseComObject( oRecipeDB );
oRecipeDB = NULL;
ENDIF;
'-----

```

No.	Date	Time	Process ID	Thread ID	Log Flag	Component	Message
813585	12/9/2013	10:18:17 AM	9412	12032	Info	ScriptRuntime	InBatchRecipeDBAccess_002.QueryRecipes: ***Recipe Automation Server*** [localhost]
813586	12/9/2013	10:18:17 AM	5844	6576	Info	RecipeEdit	Startup - Version 10.0.000
813587	12/9/2013	10:18:17 AM	5844	13136	Info	RecipeEdit	License feature 'INBATCH_SERVER' of version 10.000 has been acquired, expiration date =
813588	12/9/2013	10:18:18 AM	9412	12032	Info	ScriptRuntime	InBatchRecipeDBAccess_002.QueryRecipes: oRecipeDB connection state: Connected 1
813589	12/9/2013	10:18:18 AM	9412	12032	Info	ScriptRuntime	InBatchRecipeDBAccess_002.QueryRecipes: Recipe[1]: CB1000 Hold
813590	12/9/2013	10:18:18 AM	9412	12032	Info	ScriptRuntime	InBatchRecipeDBAccess_002.QueryRecipes: Recipe[2]: CB1000 Mix
813591	12/9/2013	10:18:18 AM	9412	12032	Info	ScriptRuntime	InBatchRecipeDBAccess_002.QueryRecipes: ***Recipe Automation Server*** release
813592	12/9/2013	10:18:19 AM	5844	6576	Info	RecipeEdit	Shutdown

FIGURE 2: LOGGER MESSAGES

S. Mariyala

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