### Tech Note 1005
# Accessing InBatch Recipes Inside of System Platform Using Recipe Automation Server (Object Hosted to Remote Node)

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Topic#: 002836
Created: January 2014

## Introduction

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

The key is to register the COM object and also specify where the Recipe Automation Server is running. In this scenario, object containing script for accessing InBatch Recipe Data is hosted on a remote platform and the InBatch Server is running on a separate node.

Other functionality of reading/writing to InBatch Recipe Database is documented in InBatch COM Guide, Chapter 5.

### Application Versions

- InBatch 9.x & 10.x

- Wonderware Application Server 2012 R2 (for prior versions, you have to manually built the object)

### Prerequisites

- InBatch Development Client software installed on a remote computer.

- A Platform deployed to the InBatch Development Client node where the Object is hosted to access InBatch Recipe Data.

## Procedure

1. From the Archestra IDE menu, click **Galaxy\Import\Script Function Library** and import the **RecipeEdit.exe** file. Browse to **C:\Program files(x86)\Wonderware\inBatch\Bin** on the InBatch Server Node.

2. Download and import the **InBatchRecipeDBAccess2** template **aaPkg** file to the IDE. Create an instance of this object and host it to the Platform\AppEngine\Area that is running on remote node where Batch Development Client Software is installed. Set DCOM configuration settings pointing to InBatch Server Node per InBatch COM users guide, Chapter 5.

**Note:** It is important to note that if you are using 64 bit operating system on remote node, in this case you have to launch DCOMCnfg console using following command. This command sets for 32-bit: **C:\Windows\SysWOW64>mmc comexp.msc /32**

3. Double-click the **$InBatchRecipeDBAccess2** object in the IDE.

4. Click the **Scripts** tab in the Object editor and set **me.BatchServerHostName** to the name of the Batch Server. In Figure 1 (below) it is **"SMInBatch10"**.

   The entire script example follows Figure 1.

5. Deploy the newly-created instance object and set the trigger attribute (me.Trigger) in ObjectViewer for this object.

6. Review the messages in the Archestra Logger for successful connectivity, query of recipes and release of the recipe object.

   The following shows the screen snapshots of the template object editor, text in the script body and Archestra Logger Messages. Additionally, the note following Figure 2 (below) describes setting the InBatch Server Host Name accordingly in a batch redundancy environment.
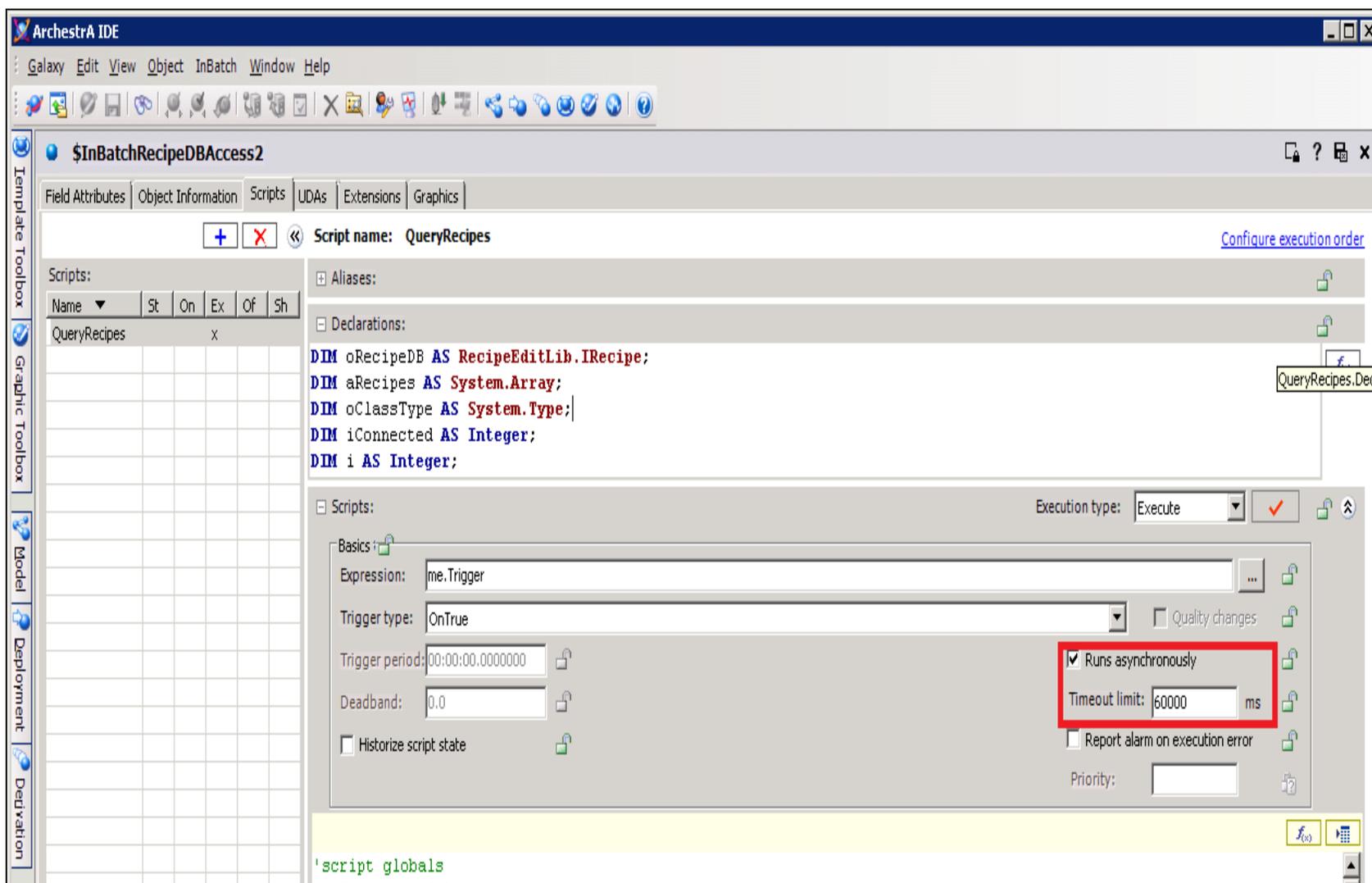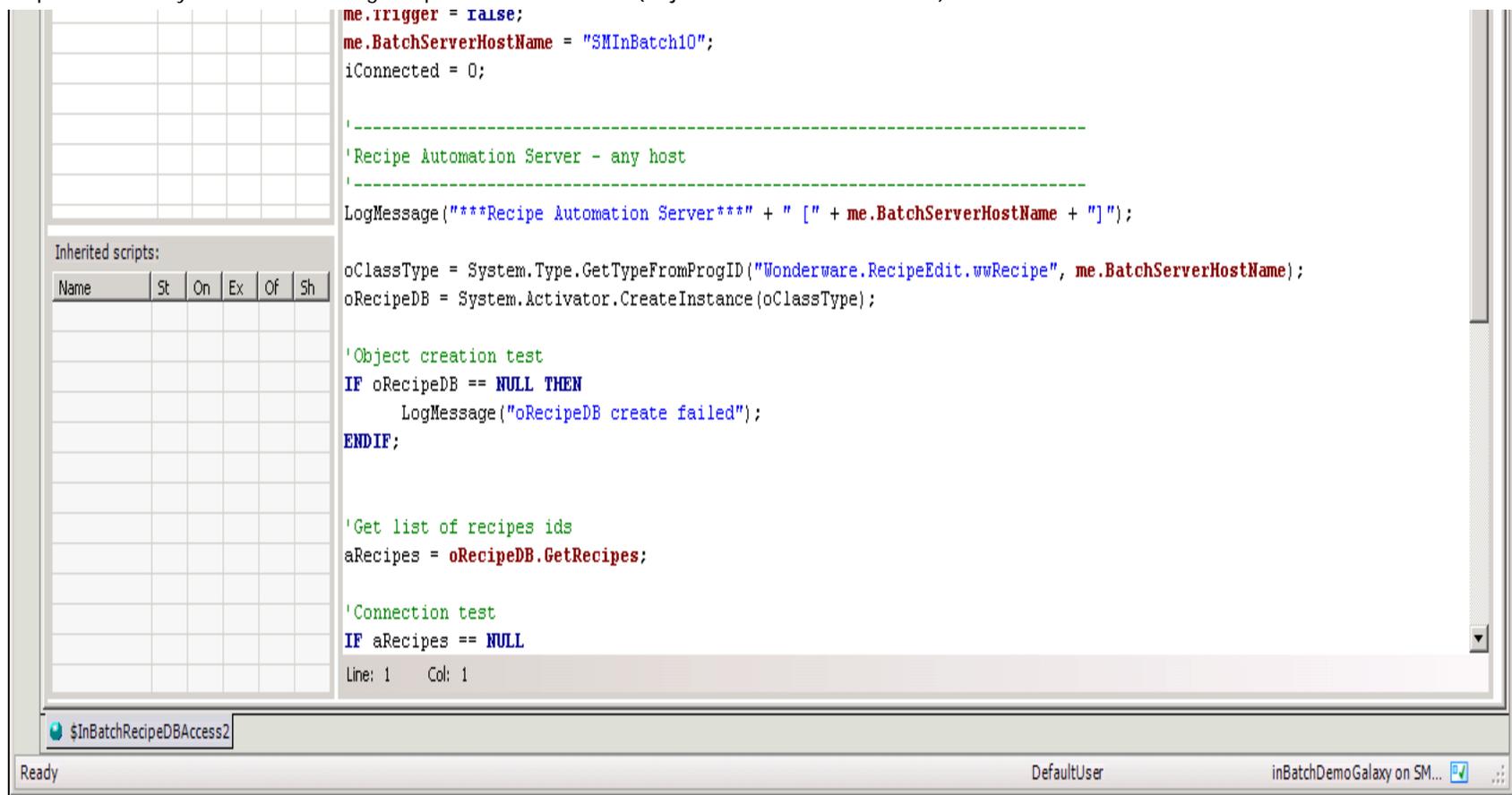
**FIGURE 1 - ENSURE THAT THE SCRIPT RUNS ASYNCHRONOUSLY**

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

```
'script globals
me.Trigger = false;
me.BatchServerHostName = "<YourInBatchServerNodeName>";
iConnected = 0;
i = 1;
'---------------------------------------------------------------------------
'Recipe Automation Server - any host
'---------------------------------------------------------------------------
LogMessage("***Recipe Automation Server***" + " [" + me.BatchServerHostName + "]");
oClassType = System.Type.GetTypeFromProgID("Wonderware.RecipeEdit.wwRecipe", me.BatchServerHostName); oRecipeDB =
System.Activator.CreateInstance(oClassType);

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

'Get list of recipes ids
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;

        'Query Recipes
        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;
        '--------------------------------------------------------------------------
```

## Archestra Logger Messages



**FIGURE 2: ARCHESTRA LOGGER MESSAGES**

**Note:** If you using InBatch Redundancy, you can set the attribute me.BatchServerHostName accordingly by monitoring the status of a Boolean Tag IBSERV_RED_MASTER. This tag is provided by InBatch Server Application.

The value of IBSERV_RED_MASTER is **True** on the Master Node and **False** on the Backup Node. You can configure two instances of **DDESuiteLink** objects and configure them as shown below and deploy these two instances to the node where the Platform is deployed, and where the InBatch Client Software is installed.

If you monitor the value **DDESuiteLink1.IB_TAGS.IBSERV_RED_MASTER** and **DDESuiteLink2.IB_TAGS.IBSERV_RED_MASTER** in ObjectViewer, you will see the values as **True** and **False**. You can use these two attributes in the same script as shown above in script body or in the template object and set the Batchserver HOSTNAME accordingly to point to InBatch Master node.

This scenario is included here to monitor the InBatch Redundancy Status and was not tested for this *Tech Note*.

| | ServerName | TopicName | Item | NodeName |
|---|---|---|---|---|
| DDESuiteLink1 | IBSERV | IB_TAGS | IBSERV_RED_MASTER | InBatchMaster |

| DDESuiteLink2 IBSERV | IB_TAGS | IBSERV_RED_MASTER | InBatchBackup |
| --- | --- | --- | --- |

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