

Description: Guide to configure and run a simple Data Manipulators with parameters.

OS Requirement: Win 2000 Pro/Server, XP Pro, Server 2003

General Requirement: Genesis 32 installed.

Introduction

Data manipulator objects are designed to manipulate data and structure in a database using stored procedures or simple SQL commands when the database engine does not support Stored Procedures. In comparison with data sources, it should not return any cursor variables (row sets). Data manipulation actions are executed on the user request only (there is no polling mechanism). For more information, please refer to Data Mining Configurator help, Data Manipulator ActiveX help, and Genesis32 Data Mining Quick Start application note. This document shows how to configure Data Manipulator based on INSERT command and MS Access database.

Data Manipulator

- Open the Data Mining Configurator from Start →Programs → ICONICS Tools
- Create a new connection to your database. (You may want to create a new table – see application note entitled *Data Mining - Data Manipulators Creating a Custom Table*)
- Create a new Data Manipulator. Select the SQL command and click the “Edit” button. Write Down your SQL command. Use “?” in the place, where you want to use parameters:

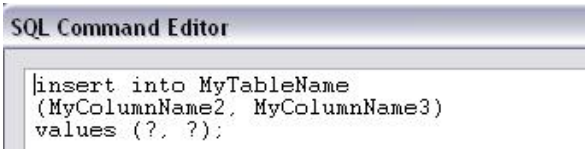


Figure 1 - SQL Command with Parameters

- Define your parameters in the “SQL Command Parameters” section. The parameters will be used in the order they appear in the SQL command. Click Apply.

Note: In the case you want to use database stored procedure with parameters, just select “Stored Procedure” and browse for the procedure name.

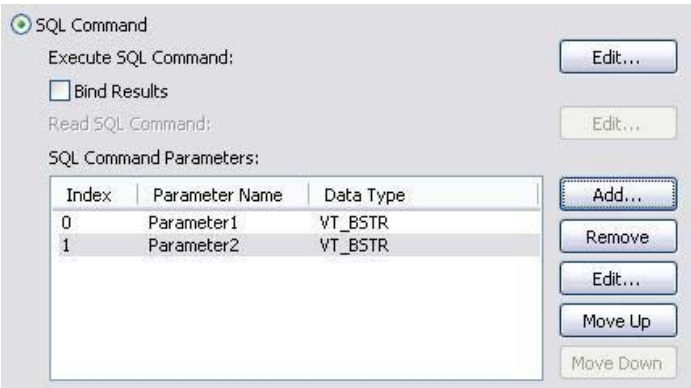


Figure 2 - Definition of SQL Command Parameters

Running the Data Manipulator

- Open GraphWorX by going to Start → Programs → ICONICS GENESIS32 → GraphWorX32 → GraphWorX32.
- Insert the ICONICS DBOPCManipulator ActiveX by going to Edit → Insert New Object or by clicking on  in the ActiveX Tool bar and selecting the DBOPCManipulator in the list as shown in Figure 3.



Figure 3 - Inserting DBOPCManipulator ActiveX

- Right click the ActiveX and select “Application Property Inspector”. Write DBMANIPULATOR to the “Object Name” field. Click OK.



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4. Double click the ActiveX. In its properties, browse for the Data Manipulator that you have just created in the DBOPC Server Configurator. Select @@Execute on the right hand side then Click OK until you are out of the Properties dialog



Figure 4 - Connection String to the Data Manipulator

5. Insert a button to the display. In its properties, select “Run Script” on the Pick table and create a new VBA script. Insert following code to the button’s sub:

```
Dim Proc As DBOPCManipulatorActiveX
Dim out As Variant

Set Proc =
ThisDisplay.GetVisibleObjectFromName("DBMANIPU
LATOR").GetOLEObject()

Dim par1 As String
Dim par2 As String

par1 = "My String"
par2 = "Hello!"

out = Proc.Execute(Array(par1, par2))
```

Seeing the Results

To see our Data Manipulator working, you can click the button in Runtime and then open the database to check for the update. Alternatively, you can see the update in the ICONICS Data Mining Control

1. In the Data Mining Configurator, add a Data source.
2. Select the table that you were using to insert data and check “Enable Multi-rows Dataset”.
3. Add a Data Item to this Data Source and select the “Complete Rowset (Return as an Array)” radio button. Then click Apply.
4. Click on the  in your ActiveX Toolbar and click anywhere in your working area. You should see the Data Mining Grid.
5. Double-click on the grid to bring up the properties inspector.
6. In the Data Source Type, select Data Mining and click on the “Connection Parameters...” button.
7. In the popup dialog box, select “Add Tags...” button, and add the Data Item you have created in step 3. Click Ok until you are out of the properties inspector.
8. Go into runtime, you should see the table show up in the Data Mining Control. Now, click on the button to see the record added to this table.