

Description: Guide to using Web services in BridgeWorX.
OS Requirement: Win XP/Server 2003/ Server 2008/Vista/Windows 7
General Requirement: BridgeWorX installed with knowledge of BridgeWorX.

Introduction

BridgeWorX V9.x has enhanced support for :

- Better browsing of Web services description files (WSDL)
- Better support for Web services data types and custom classes
- Support for SOAP headers
- Simple nested array structures

In general, BridgeWorX will interface to Web services that

- Include a Web service description section in their WSDL files
- Do not return raw XML as return values. Configuring a Web Service Task

Configure a Web Service connection

1. Create a transaction and its corresponding transaction diagram.
2. Launch the Transaction Diagram Designer
3. Select a Web Service transaction block.
4. Double click on the block to open its properties as shown in **Figure 1**.
5. Click on the “Browse Web Service” button to invoke the Web Service Configuration Wizard.

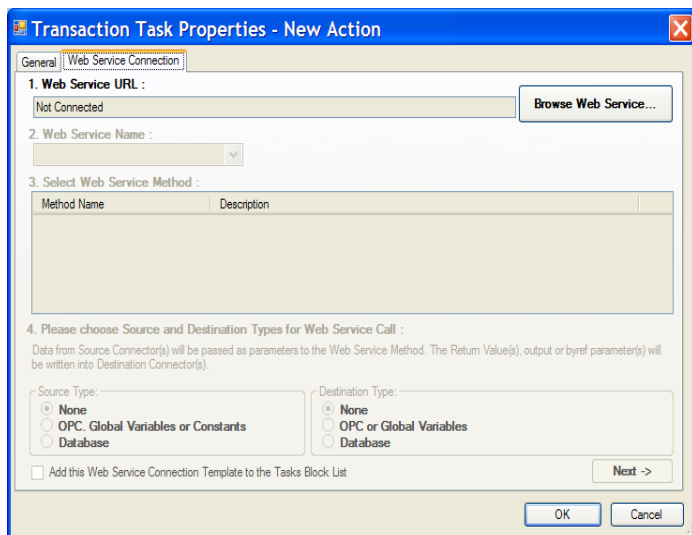


Figure 1 - Configuring a web service block

6. In the Web Service Configuration Wizard, click on the Browse button to display the Web services browser dialog, as shown in **Figure 2**.

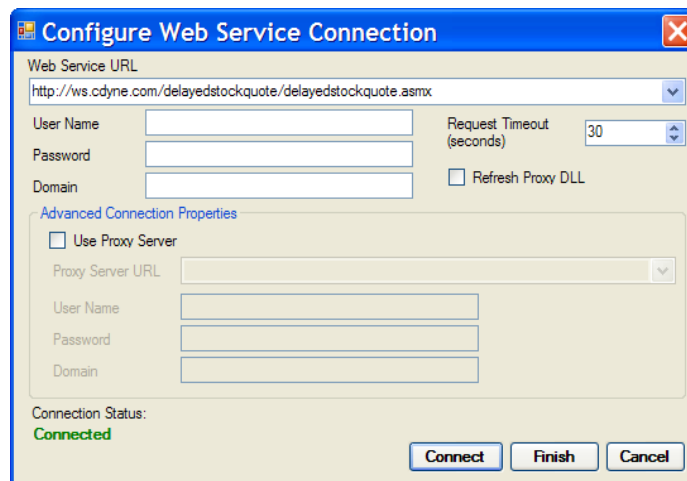


Figure 2 - Browsing for a web service data source

7. A sample Web service used for this application note is:

<http://ws.cdyne.com/delayedstockquote/delayedstockquote.asmx>

This is a publicly available financial Web service for displaying delayed stock quote information.

8. The user can specify additional information such as Web service request timeout, preference for a proxy server to be used for connecting to the Web service, password, etc.
9. Once the connection has been established, the user can click on the Finish button to return to the Web Service Configuration Wizard.

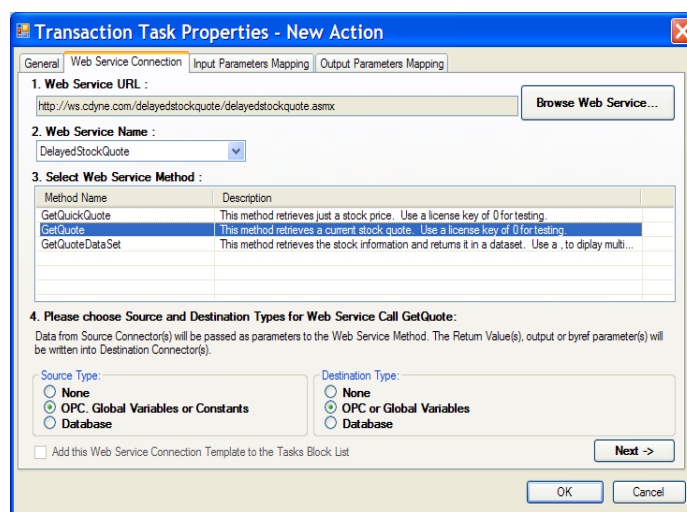


Figure 3 - Web service block configuration wizard

10. Once BridgeWorX connects to the Web service, it will browse for all supported Web service methods and display them in a list box so the user can select the desired method. In addition, a description of each Web service method will be displayed.
11. You will now need to configure the parameters for the selected method. For the purpose of this application note we will use constants as inputs to the method call.
12. For our example, we can configure two parameters of string type with the following default values as shown in **Figure 4**:

StockSymbol:

MSFT

LicenseKey:

0

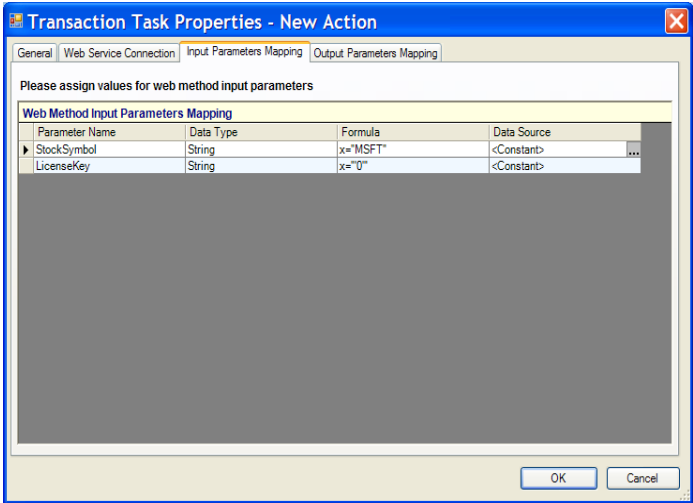


Figure 4 - Configuring web service method parameters

NOTE: Those are some sample values to use the methods for this demonstration Web service. Feel free to insert your own stock symbol in the first parameter instead. The LicenseKey of 0 allows you to call the Web service for free a certain number of times per hour.

Configuring data mapping

Once data is successfully obtained from a web service, BridgeWorX will analyze the return type of the Web service method and adjust the data mapping tools in the Transaction Block dialog accordingly.

1. If the return type is a typed dataset, the entire dataset will be available.
2. If the return type is an un-typed dataset, it will prompt the user to manually add columns in the result set mapping.
3. If the result is a complex class, as in this specific example, the Output mapping tab of the Web service task will be populated with all the fields of the complex return class from the Web service method. In this example, we will bind the elements of the return class to a string array of Global Variable elements as shown in **Figure 5**.

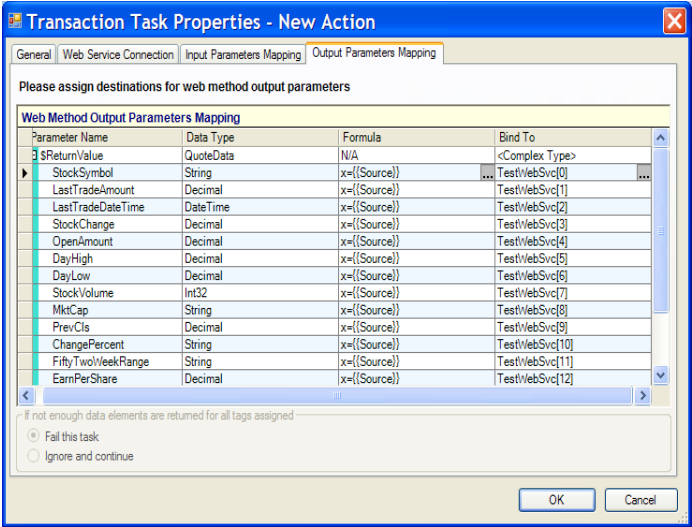


Figure 5 - Mapping return fields

The user can view the values of the Global Variables containing all of the Web service method return elements by clicking on the “Reset/Modify” button for the Global Variable array used in the Web service task.

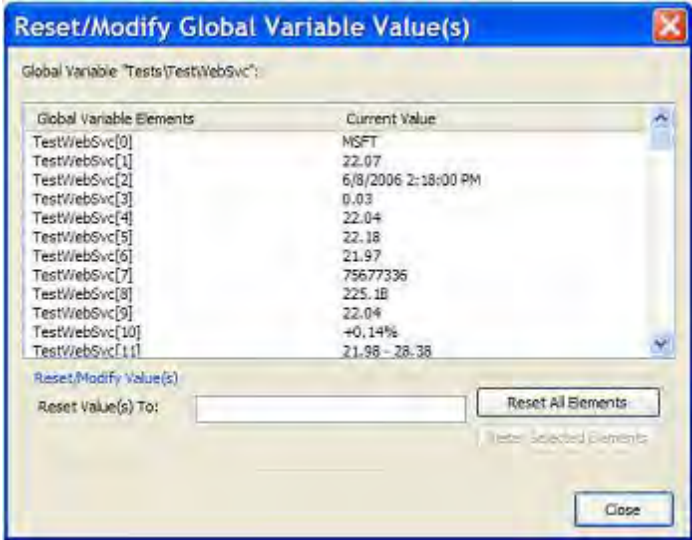


Figure 6 – Viewing Results of the Web Service Method Call

Now all we need to do is to create a Transaction and associate to it the Transaction Diagram that we just created.