CoProc2

Eclipse/DataPower CoProcessor

Contents

1 Overview

CoProc2 is a DataPower service together with an Eclipse plug-in. The plug-in submits a stylesheet together with its input to the CoProc2 service for processing and returns its results to the Eclipse console. In the following example, the stylesheet report.xsl processes the XML file report.xml. To submit these to the CoProc2 service, follow these steps.

1. open the Run Configurations view as shown below.
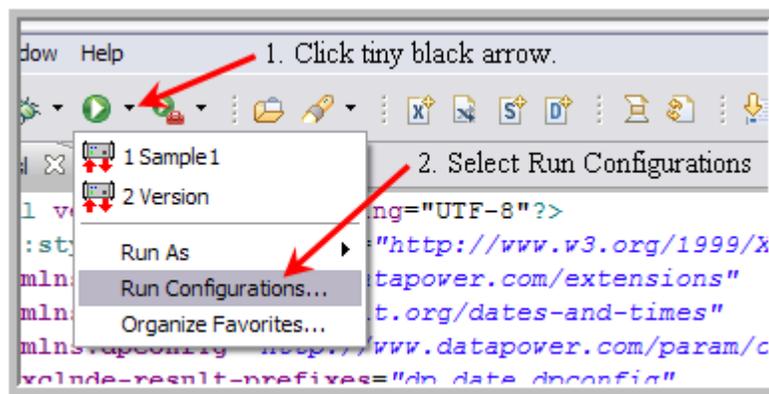
2. Right-click the **CoProc2** type and select **New**.
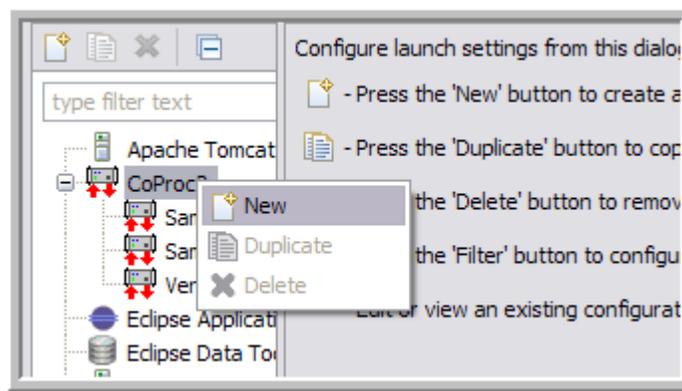
3. Name the configuration "Report."

4. Click **Test Connection** to ensure we can reach the CoProc2 service on the DataPower device.

5. Enter the stylesheet information through the **Browse** button.

6. Uncheck **Set Input Context to NULL** since we have input.

7. Enter the input XML file through the **Browse** button.

8. Click **Apply**.

9. Click **Run**.
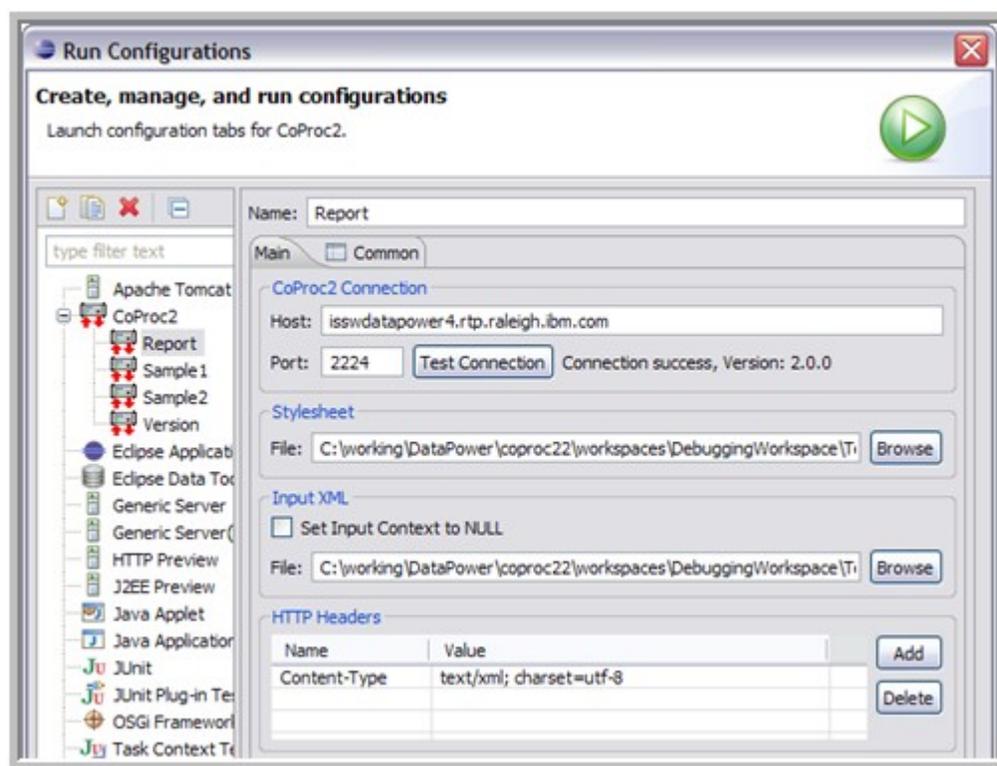
The console window contains the output from the transform. Running the configuration creates a Run short-cut that may be used for subsequent runs. First click the tiny black down-arrow next to the green run icon, then select **Report** from the list. The Run Configuration dialog isn't needed again unless the input or headers need to

be changed.
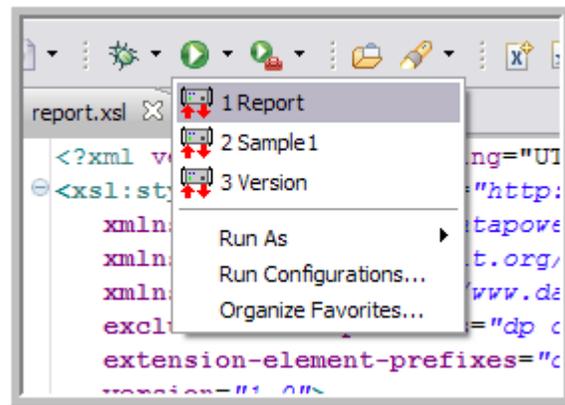
2 Installation

There are two components to install:

- the MPGW service on the DataPower appliance
- the Eclipse plug-in into the Eclipse workspace

It's important that the two components are compatible.

2.1 Service Installation

The service export can be obtained from

http://glezen.org/update/coproc2-2/CoProc22.zip

Import the service to an application domain on your DataPower appliance and make any necessary changes to the **coproc22** HTTP FSH to listen on the desired network interface and port.

It's recommended you **not** listen on 0.0.0.0 like the example above; instead it's safer to choose a particular interface allocated to development traffic. The port number may be any port you like. You may verify the installation with the cURL command as in the following example.

```
C:\>curl --get http://yourhost.xyz.com:2224/coproc/version
Version: 2.0.0
Date: May 21, 2011
C:\>
```

2.2   Plug-in Installation

Currently the plug-in requires Eclipse 3.6 or later. Since the point of the plug-in is to assist with XSLT development, it's best to have the Web Tools Platform (WTP) installed since this provides the Eclipse XSLT support. Start Eclipse and follow these instructions to install the CoProc2 plug-in.

1. Select **Help → Install New Software ...**.

2. Click the **Add** button next to the **Work with** field. This displays the **Add Repository** dialog.

3. Enter "CoProc2" for the **Name** field. For **Location**, enter

    ```
    http://glezen.org/update/coproc2-2
    ```

4. Click **OK** so that the CoProc2-2 update site is chosen. Select the CoProc2 plug-in as shown below.
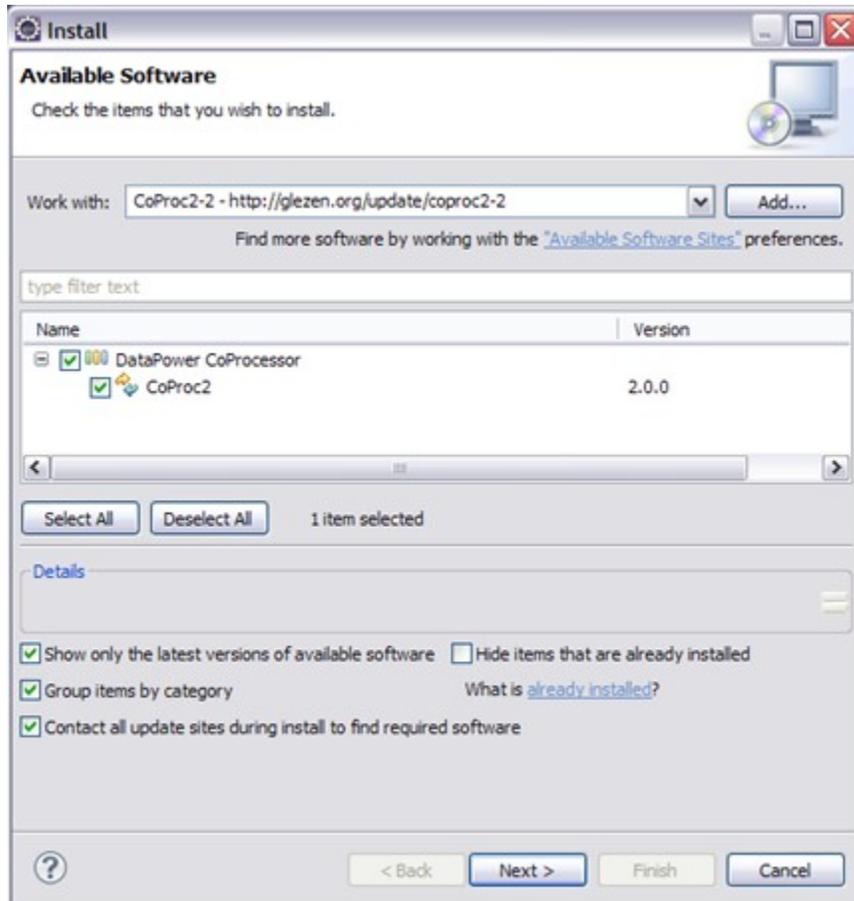
5. Click **Next**.

6. Continue clicking **Next** through the information panels and license acceptance.

7. Click **Finish** at the end. Since I have not signed this plug-in with a digital signature, you can expect to see a security warning about unsigned content. Click **OK.**

8. Restart Eclipse after the plug-in installation is complete.

This completes the plug-in installation. As a verification, you can select **Help → About Eclipse**. You should see an entry for CoProc2 as shown in the figure below.
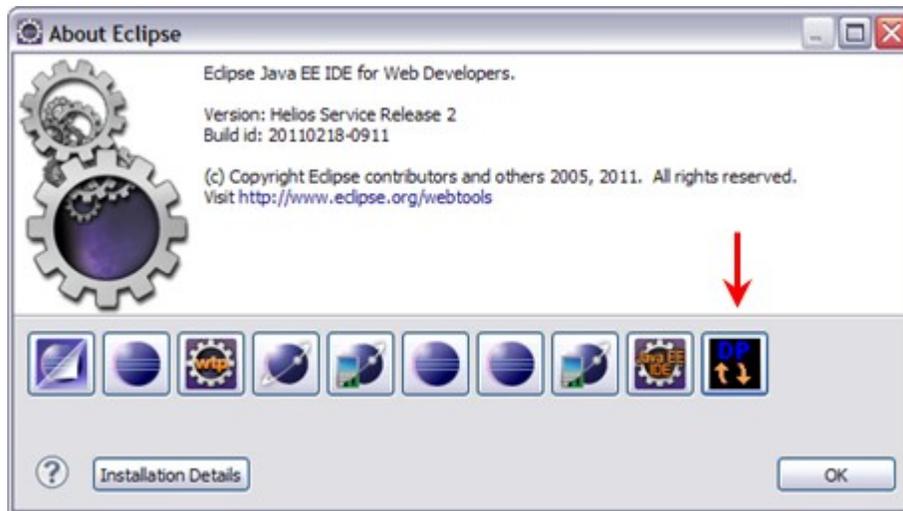
3 Documentation

The plug-in configuration steps are documented in the Eclipse help section.
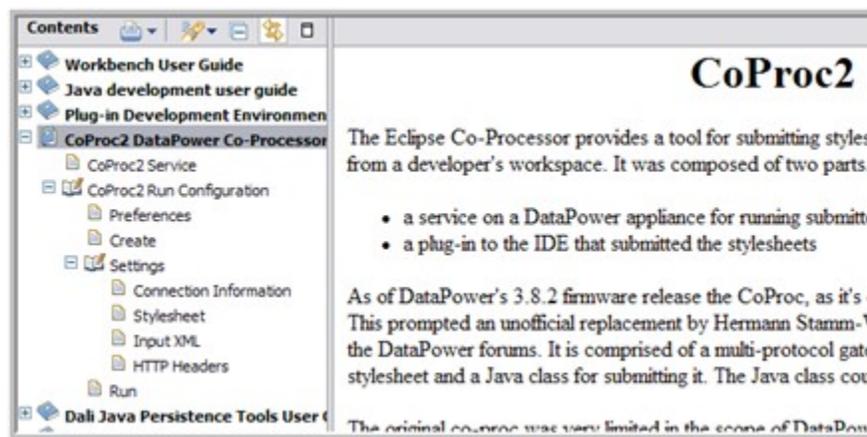
4 Troubleshooting

4.1 Connection Problems

HTTP proxy support has **not yet** been incorporated into the remote execution of the stylesheet. If you are working at a location that requires an outbound proxy configuration, the remote execution will fail. The **Test Connection** button will succeed because it inherits the proxy configuration of the Eclipse workbench (which is configured through the Eclipse preferences under **General → Network Connections**. However the remote invocation of the stylesheet spawns a separate JVM that does not inherit the settings.

4.2 HTTP 500 Returned

If a stylesheet causes an HTTP 500 returned, the only indication in the Eclipse console output is an ugly message

like the following.

In this example, the stylesheets `<reject/>` tag had executed, aborting the transaction (which was actually the desired behavior). Be sure to follow up your remote stylesheet execution by checking the DataPower logs of the application domain in which the CoProc2 service is installed.