



| FDL2BPEL Conversion

WebSphere Integration Developer v6.2: Conversion of a WebSphere MQ Workflow Process Model into a WebSphere Process Server Model

Dr. Andreas Wickenhaeuser (wic@de.ibm.com)

SOA on your terms and our expertise

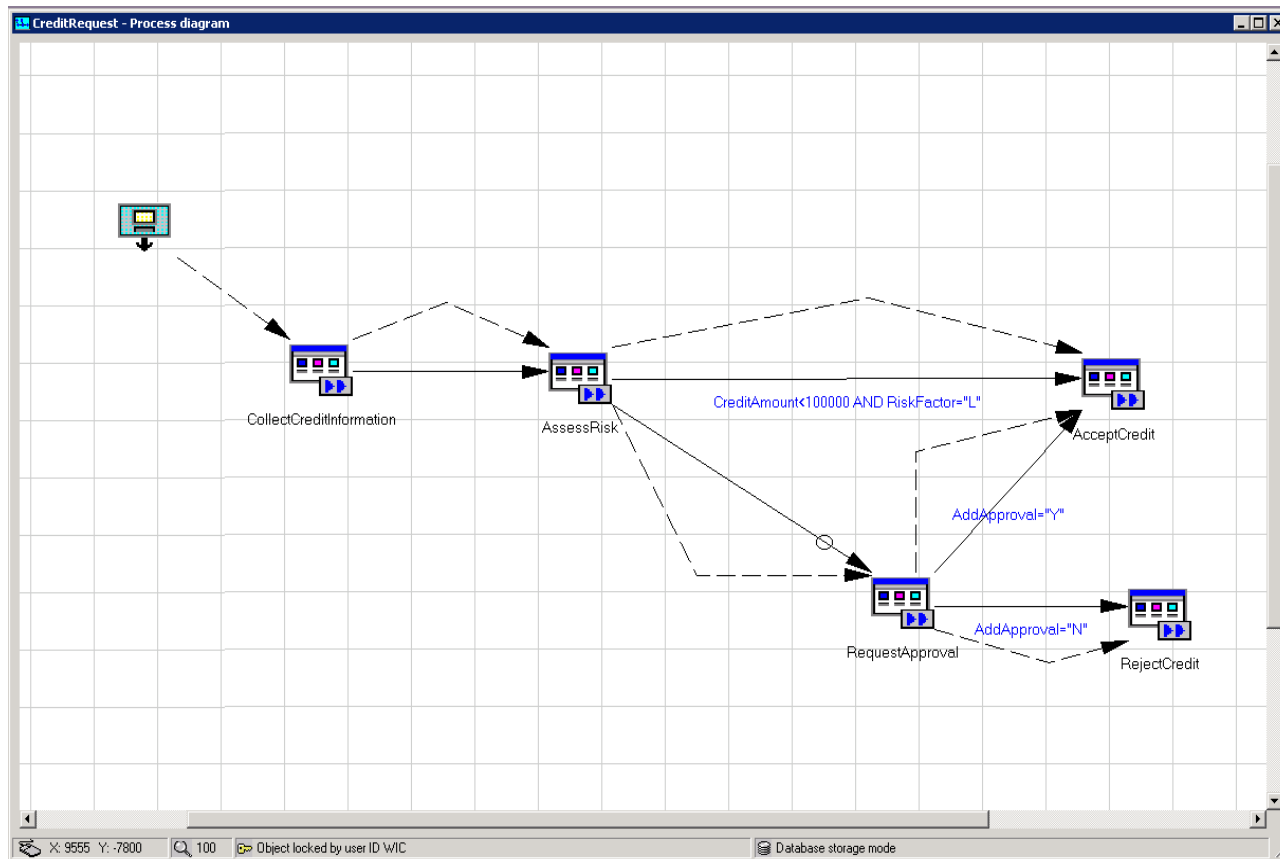


Scope

- We show how to migrate a fairly simple Process, the Credit Request sample of WebSphere MQ Workflow.
- The FDL (WebSphere MQ Workflow flow definition language) file can be directly imported into WebSphere Integration Developer v6.2.
- We concentrate here on the process itself, we do not demonstrate the migration of activity implementations, topology and staff.
- The converted process is then tested with the BPC Explorer.

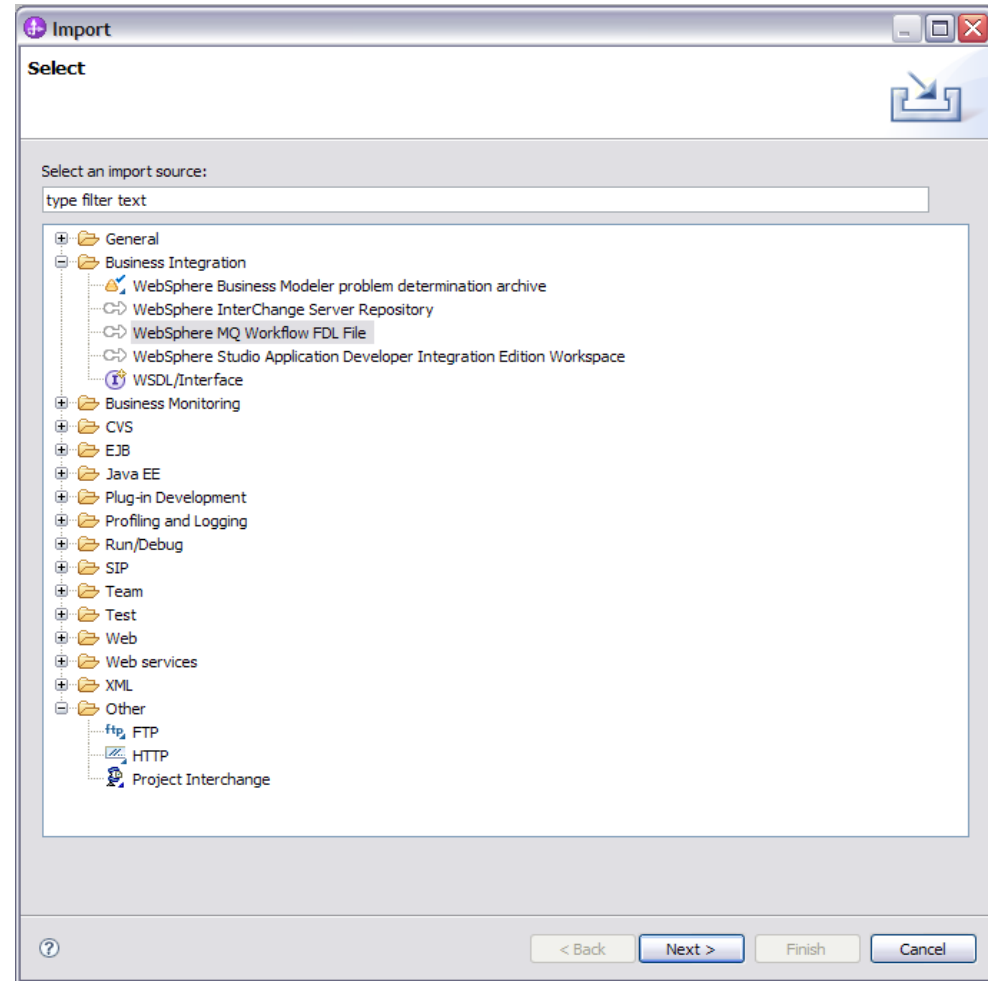
The Credit Request Process

- A process to collect data and approve or reject the request for a credit.
- A WebSphere MQ Workflow Buildtime screenshot of the process:



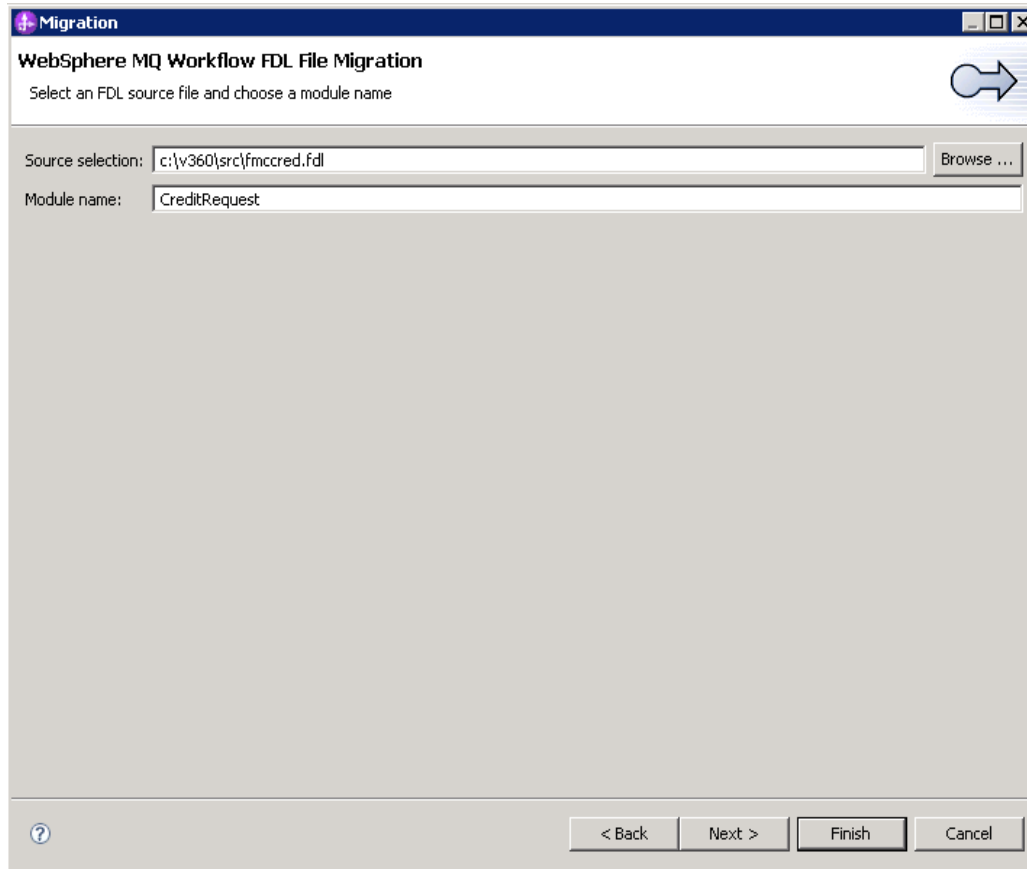
Importing the FDL process 1

- In the *Business Integration perspective* of WebSphere Integration Developer, from the drop-down menus you select:
 - File
 - Import
 - Business Integration
 - WebSphere MQ Workflow FDL File



Importing the FDL process 2

- Then, the first panel of the wizard appears:



Importing the FDL process 3

- In the next panel, we deselect *Create predefined data members*, which are not needed here and leave the other default values:

Migration
WebSphere MQ Workflow Migration Options
Artifact creation settings

Treat name conflicts as errors
Hint: Because there are different syntax rules, migration might change FDL names, possibly causing the new names to conflict with existing FDL names. If you do not select this box, name conflicts are automatically resolved. If you prefer to resolve name conflicts yourself, select this box. Then the name conflicts will be identified as error messages on the Migration Result page, and you will see the Migration Result page after you click Finish.

Create predefined data members
Hint: In WebSphere MQ Workflow, predefined data members exist for all data containers. These data members can be used in the process model and in this case they need to be created. If you do not want to use this predefined data in the process model, you can avoid unnecessary overhead by clearing this box.

Initialize predefined data members
Hint: If you select this box, extra nodes are added to the process to initialize the predefined data members `_ACTIVITY`, `_PROCESS` and `_PROCESS_MODEL`.

Target namespaces:

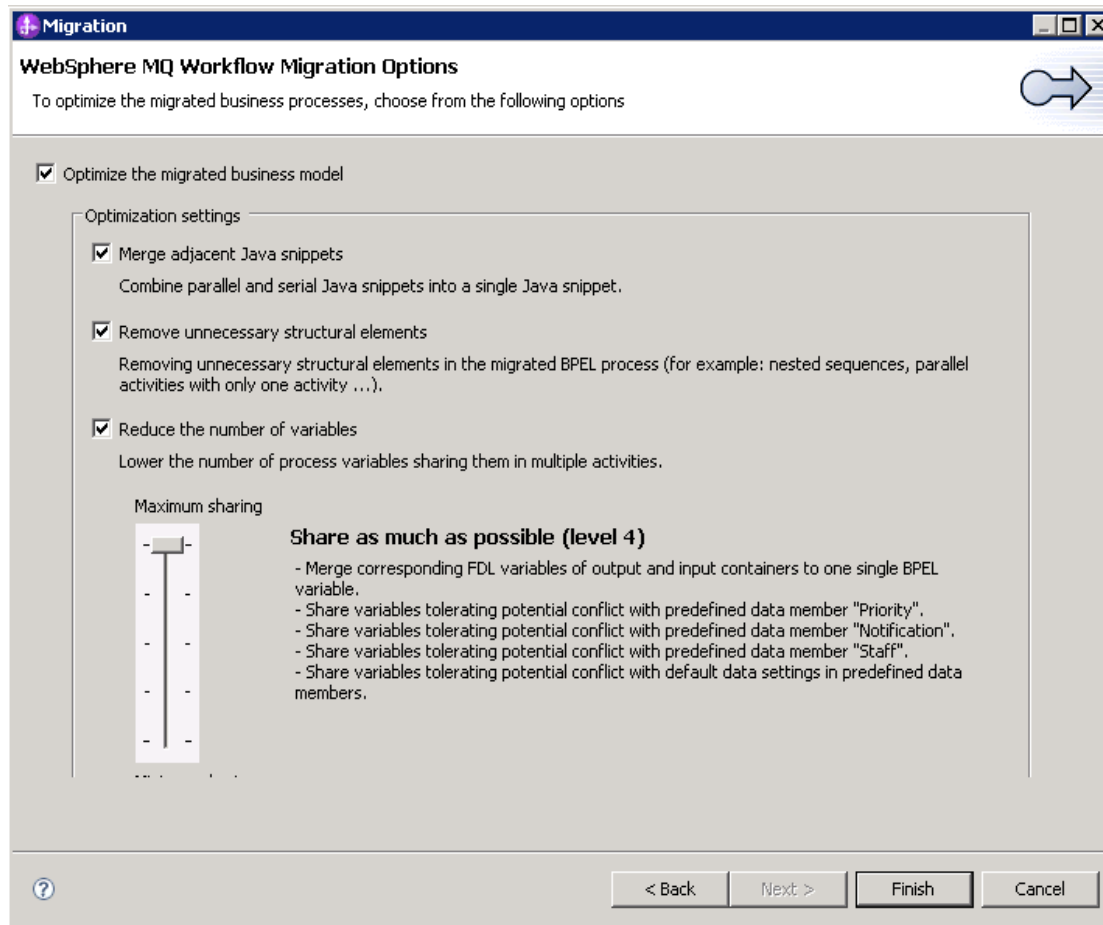
XML schema namespace:

WSDL namespace:

BPEL namespace:

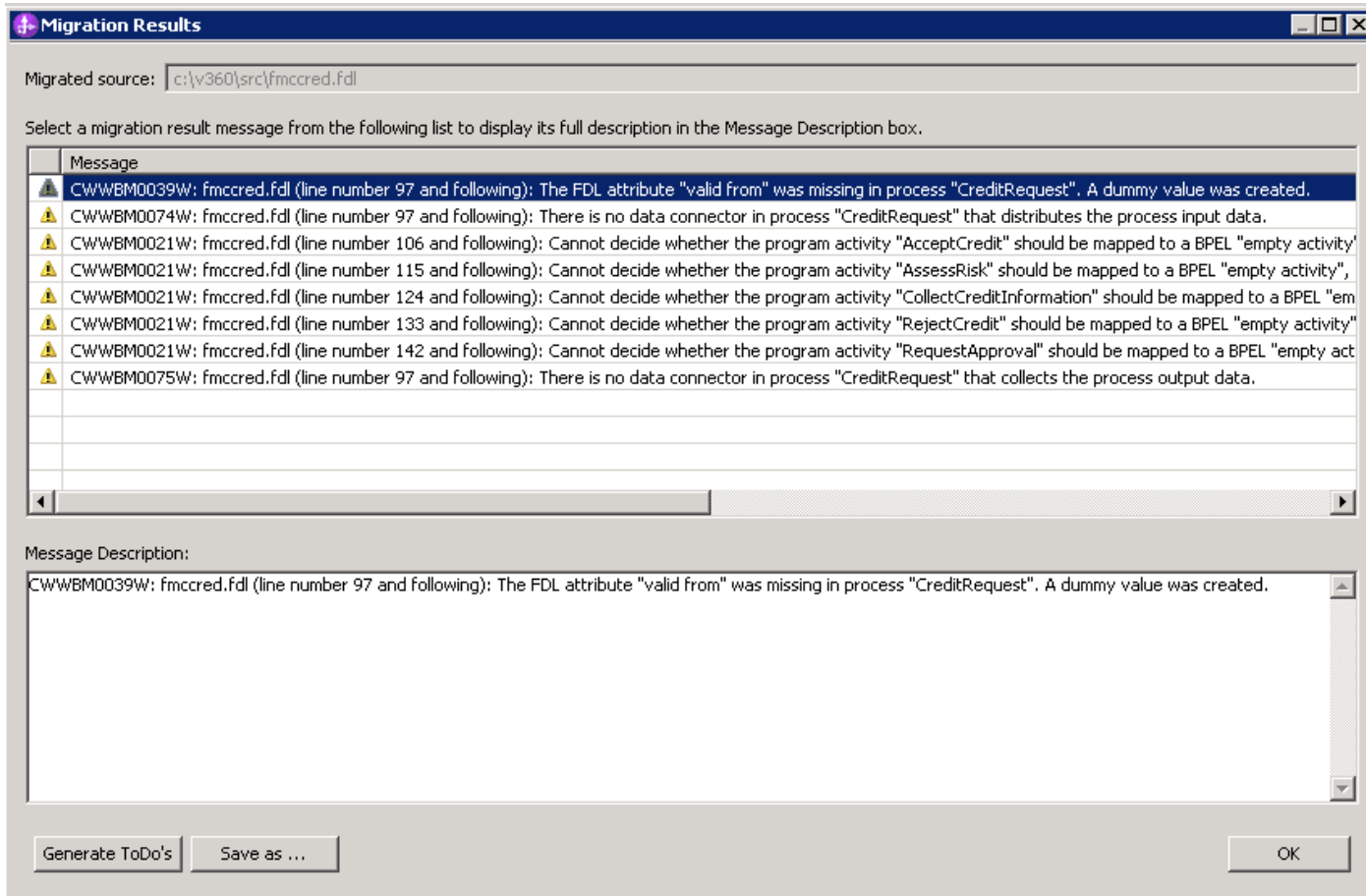
Importing the FDL process 4

- In the next panel we choose maximum optimization:



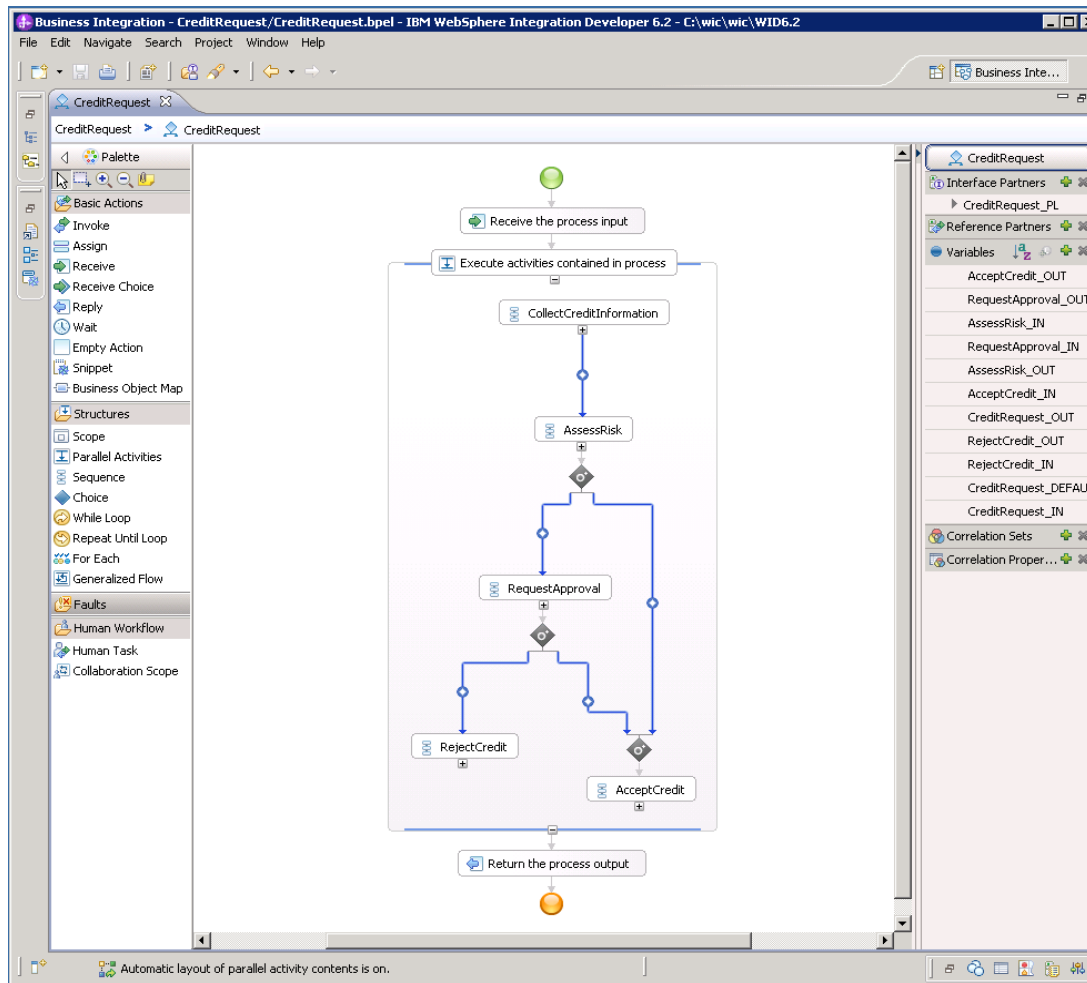
Importing the FDL process 5

- The import wizard returns with some messages:



The BPEL process

- The result is the converted process:



Testing the process 1

- Once deployed, the process can be tested with the BPC Explorer:

The screenshot displays the Business Process Choreographer Explorer (BPC Explorer) interface in a Mozilla Firefox browser window. The browser address bar shows the URL: `http://localhost:9080/bpc/faces/pages/layouts/views/ProcessTemplateListView.jsp`. The application title is "Business Process Choreographer Explorer - Process Templates".

The interface includes a navigation menu with links: "Welcome wswf", "Logout", "My Substitutes", "Define Substitutes", "Define Views", "Customize", "Help", and "About". The main content area is titled "Process Templates" and contains the following elements:

- A sidebar with "Views" and "Reports" tabs. Under "Views", there are sections for:
 - Process Templates (Process Templates)
 - Process Instances (Started By Me, Administered By Me, Critical Processes, Terminated Processes, Failed Compensations)
 - Activity Instances (Failed Activities)
 - Task Templates (My Task Templates)
 - Task Instances (My To-dos, All Tasks, Initiated By Me, Administered By Me, My Escalations)
- Main content area with a heading "Process Templates" and a sub-heading "Use this page to view process templates on which you can work".
- Buttons: "Start Instance", "Instances", "View Structure", and "Refresh".
- A table listing process templates:

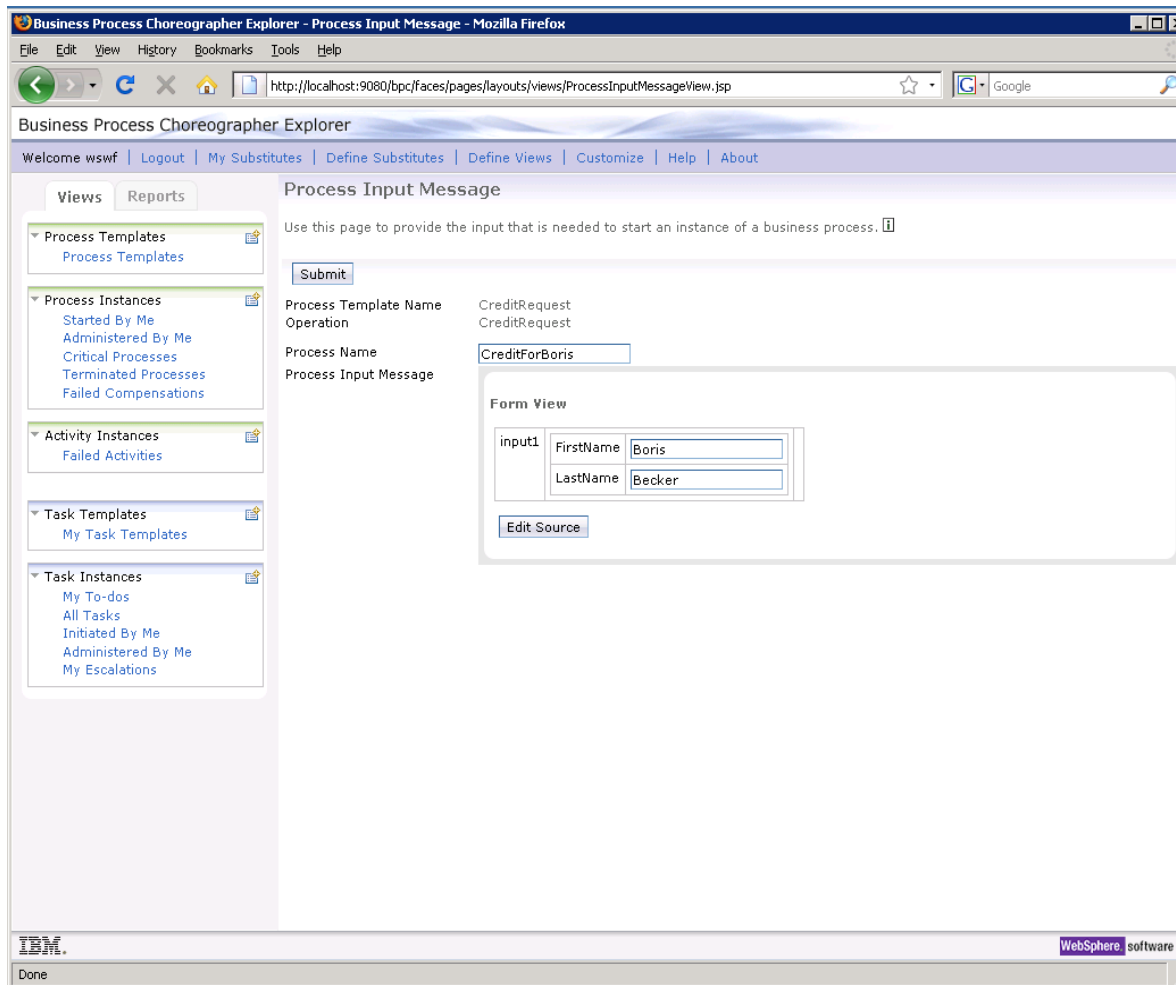
| <input type="checkbox"/> | Process Template Name | Valid From | Long Running | State | Description |
|-------------------------------------|-----------------------|-------------------|--------------|---------|----------------|
| <input checked="" type="checkbox"/> | CreditRequest | 1/1/00 1:00:00 AM | yes | Started | Credit request |

Items found: 1 Items selected: 1 Page 1 of 1 Items per page: 20

The IBM logo is visible in the bottom left corner, and "WebSphere software" is in the bottom right corner. The status bar at the very bottom shows "Done".

Testing the process 2

- During the start, the process name and input variables can be set:



The screenshot displays the Business Process Choreographer Explorer interface in a Mozilla Firefox browser window. The browser address bar shows the URL: `http://localhost:9080/bpc/faces/pages/layouts/views/ProcessInputMessageView.jsp`. The application title is "Business Process Choreographer Explorer".

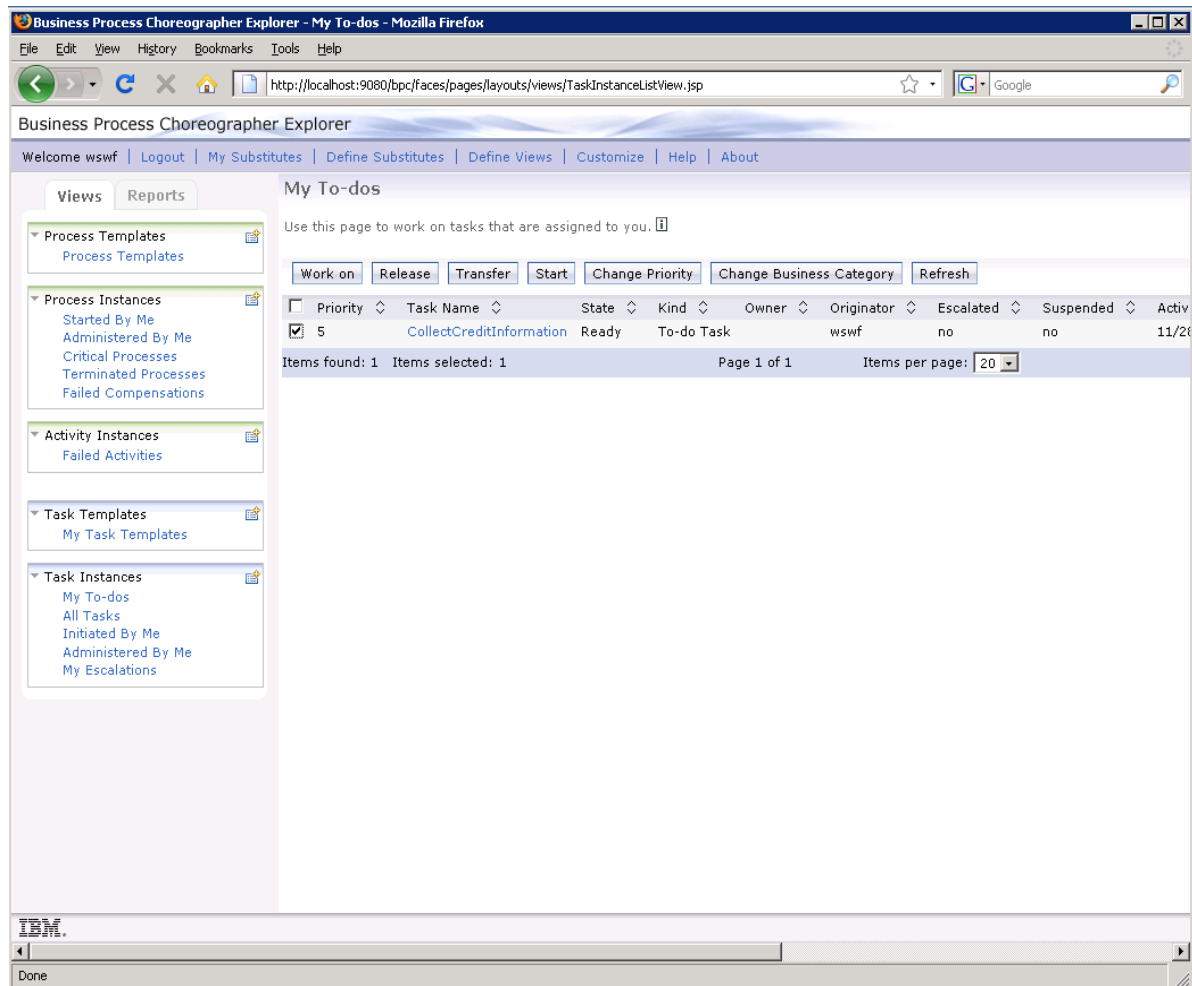
The interface includes a navigation menu on the left with categories: Process Templates, Process Instances, Activity Instances, Task Templates, and Task Instances. The main content area is titled "Process Input Message" and contains the following elements:

- A "Submit" button.
- Fields for "Process Template Name" (CreditRequest) and "Operation" (CreditRequest).
- A "Process Name" field containing the text "CreditForBoris".
- A "Process Input Message" section with a "Form View" containing two input fields: "FirstName" (Boris) and "LastName" (Becker).
- An "Edit Source" button.

The IBM logo is visible in the bottom left corner, and "WebSphere software" is in the bottom right corner. The status bar at the very bottom shows "Done".

Testing the process 3

- Then, the first ToDo task shows up and can be started:



The screenshot shows the Business Process Choreographer Explorer interface in a Mozilla Firefox browser window. The browser address bar shows the URL: `http://localhost:9080/bpc/faces/pages/layouts/views/TaskInstanceListView.jsp`. The application title is "Business Process Choreographer Explorer" and the user is logged in as "wswf".

The main content area is titled "My To-dos" and contains a table of tasks. The table has the following columns: Priority, Task Name, State, Kind, Owner, Originator, Escalated, Suspended, and Active. A single task is listed with a priority of 5, task name "CollectCreditInformation", state "Ready", kind "To-do Task", owner "wswf", and active date "11/28".

| Priority | Task Name | State | Kind | Owner | Originator | Escalated | Suspended | Active |
|----------|--------------------------|-------|------------|-------|------------|-----------|-----------|--------|
| 5 | CollectCreditInformation | Ready | To-do Task | wswf | | no | no | 11/28 |

Below the table, it shows "Items found: 1", "Items selected: 1", "Page 1 of 1", and "Items per page: 20".

Testing the process 4

- After starting the task, input and output variables show up. Note that with the original program implementations in WebSphere MQ Workflow, the input variables are copied to the output variables which is not performed here with the default rendering.

The screenshot displays the Business Process Choreographer Explorer interface in a Mozilla Firefox browser window. The browser address bar shows the URL: `http://localhost:9080/bpc/faces/pages/layouts/views/TaskMessageView.jsp`. The page title is "Business Process Choreographer Explorer".

The interface includes a navigation menu with options: "Welcome wswf", "Logout", "My Substitutes", "Define Substitutes", "Define Views", "Customize", "Help", and "About". There are two tabs: "Views" and "Reports".

The main content area is titled "Task Message" and contains the following elements:

- A message: "Use this page to provide the data required to complete the task." followed by a help icon.
- Buttons: "Complete", "Save", "Release", and "Cancel".
- Task Name: "CollectCreditInformation".
- Task Input Message: A form view with fields for "input1" containing "FirstName" (value: Boris) and "LastName" (value: Becker). A "View Source" button is located below the form.
- Task Output Message: A form view with fields for "output1" containing "CreditRequestor" (with an "Add" button), "Address", "RiskFactor", "AddApproval", and "CreditAmount". An "Edit Source" button is located below the form.

The bottom of the browser window shows the IBM logo and the text "WebSphere software". The status bar at the very bottom indicates "Done".

References

- The actual FDL2BPEL documentation is available at:
<http://www.ibm.com/support/docview.wss?rs=2307&uid=swg27013872>
It contains detailed information about features and limitations of the converter.
- The redbook
WebSphere MQ Workflow Transition to WebSphere Process Server
is available at:
<http://www.redbooks.ibm.com/abstracts/sg247282.html>
In addition to the conversion of processes the redbook covers also the many other aspects of a conversion from WebSphere MQ Workflow to WebSphere Process Server.

Thank You