WebSphere® Message Broker Toolkit V6.0.2

Enhancements part 3: WSDL and SOAP

This module is the third of five presenting the enhancements made to WebSphere Message Broker Toolkit V6.0.2.

Agenda

- Broker application development
  - ▸ WSDL and SOAP
  - ▸ Message flows

This presentation covers enhancements to WSDL and SOAP handling and using message flows in the Broker Application Development Perspective.

Section

WSDL and SOAP

There are enhancements to the broker development tools involving WSDL and SOAP.

The new SOAP nodes

SOAPExtract and SOAPEnvelope nodes

▶ available on the Web as a category 3 SupportPac™ IA9O

▶ See

http://www-1.ibm.com/support/docview.wss?rs=171&uid=swg27007197

IA9O: WebSphere Message Broker – SOAPEnvelope and SOAPExtract nodes

Downloadable files

Abstract
This SupportPac includes two new nodes, the SOAPExtract node and the SOAPEnvelope node. They can be used to simplify the processing of SOAP messages in WebSphere Message Broker

Download Description
The SOAPExtract node removes the envelope from a SOAP message and places it in a configurable location. The SOAP body becomes the body of the message. The SOAPEnvelope node reconstructs a SOAP message using the previously stored SOAP envelope.
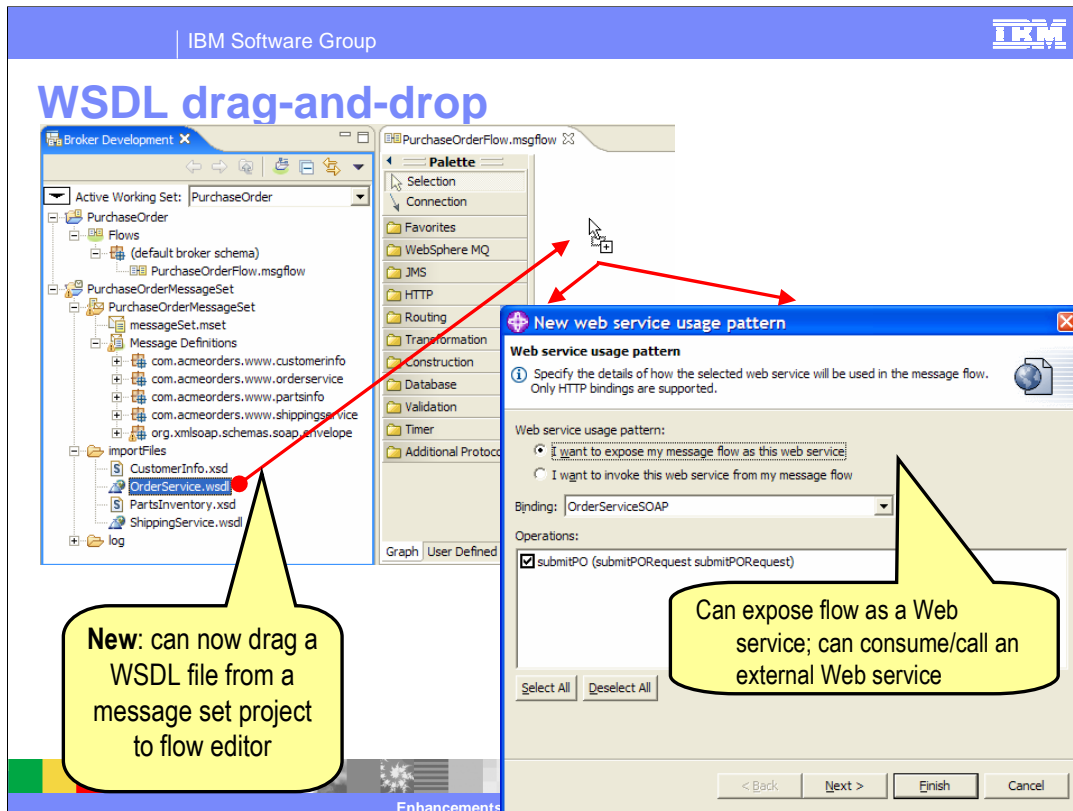
POSSIBLE USES
It is intended that these nodes are used as a pair to simplify the processing of SOAP messages within a message flow. The SOAPExtract node is used after an input node to split the body from the envelope. The SOAPEnvelope node is used before an output terminal to reconstruct a SOAP message.

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Enhancements part 3: WSDL and SOAP

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SupportPac IA9O includes two new nodes, the SOAPExtract node and the SOAPEnvelope node. They can be used to simplify the processing of SOAP messages in WebSphere Message Broker.

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It is intended that these nodes are used as a pair to simplify the processing of SOAP messages within a message flow. The SOAPExtract node is used after an input node to split the body from the envelope. The SOAPEnvelope node is used before an output terminal to reconstruct a SOAP message.

WSDL drag-and-drop

New: can now drag a WSDL file from a message set project to flow editor

Can expose flow as a Web service; can consume/call an external Web service

When you drag an imported WSDL file to the Message flow editor, you get a New Web service usage pattern which will define the Web service in this flow. Shown here is exposing the Web service in a flow as a request expecting a response.

Generated message flow

After the WSDL drag-and-drop, the message flow, as seen in this screen print, is been generated. There are nodes to take the SOAP message, HTTPInput node, and a sub-flow to extract and process the message.   There are nodes to return the SOAP reply: a SOAPEnvelope node and a HTTPReply node.

Generated sub-flow

Generates a sub-flow to extract body from SOAP envelope

New SOAPExtract node. Extracts body from SOAP envelope and routes to Label for each operation

One Output node per WSDL operation (selected in wizard)

The generated sub-flow has the SOAPExtract node to process the message and Label and Output nodes to route the message.

Section

Message flows

This section discusses the enhancements made to message flow development.

Drag-and-drop support

- In **602**, you can now drag the following onto the flow editor:
    - WSDL files from message sets
    - XSLT files to create and configure XMLTransformation nodes
    - Java™ classes to create JavaCompute node and configure its class name property
    - ESQL modules to create Compute node and configure its ESQL module name property
    - Sub-flows

WebSphere Message Broker Toolkit V6.0.2 supports drag-and-drop to the message flow editor for:

        WSDL

        XSLT

        Java classes

        ESQL

        Sub-flows.

Node Palette

*PurchaseOrderFlow.msgflow

Palette
- Selection
- Connection
- Favorites
- WebSphere MQ
- JMS
- HTTP
- Routing
- Filter
- Label
- RouteToLabel
- Publication
- AggregateControl
- AggregateReply
- AggregateRequest
- Transformation
- Construction
- Database
- Validation
- Timer
- Additional Protocols

Graph | User Defined Properties

ws__OrderService   ws__OrderService_DeEnvelopeMsgBody

New: categories for the palette!

Filter node routes a message according to message content. You define the route by coding a filter expression in ESQL. See also JavaCompute node

New: tooltip text for the nodes. Also a Details view

ws__OrderService_EnvelopeMsgRespBody ws__OrderService_Reply

Enhancements part 3: WSDL and SOAP

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The Node Palette in V6.0.2 has been organized into node categories. There is also a text box associated with each node which briefly explains the usage of that node.

The name of a node can be edited in place; a double click on the node will open the appropriate editor. There is a new properties view for node which replaces the modal dialogs.

Properties view

In WebSphere Message Broker Toolkit V6.0.2, the Property view for a node, by default, is displayed below the Message flow editor. In V6.0.0 the property categories for a node are displayed by selecting Properties from a menu produced by a right-click of the node.

Launching properties view
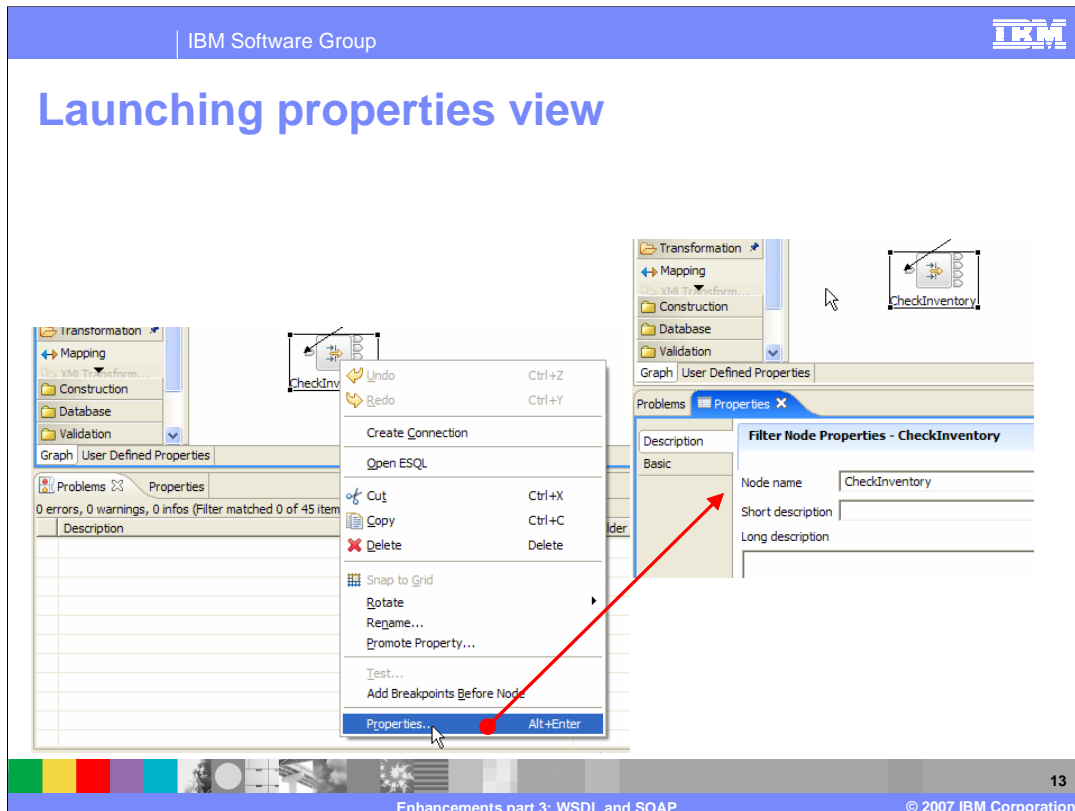
In V6.0.2 using the right-click of the node and selecting Properties action just gives Properties view focus

The node type is displayed at the top of the Properties view. The name of a node can be changed in the Description property tab.
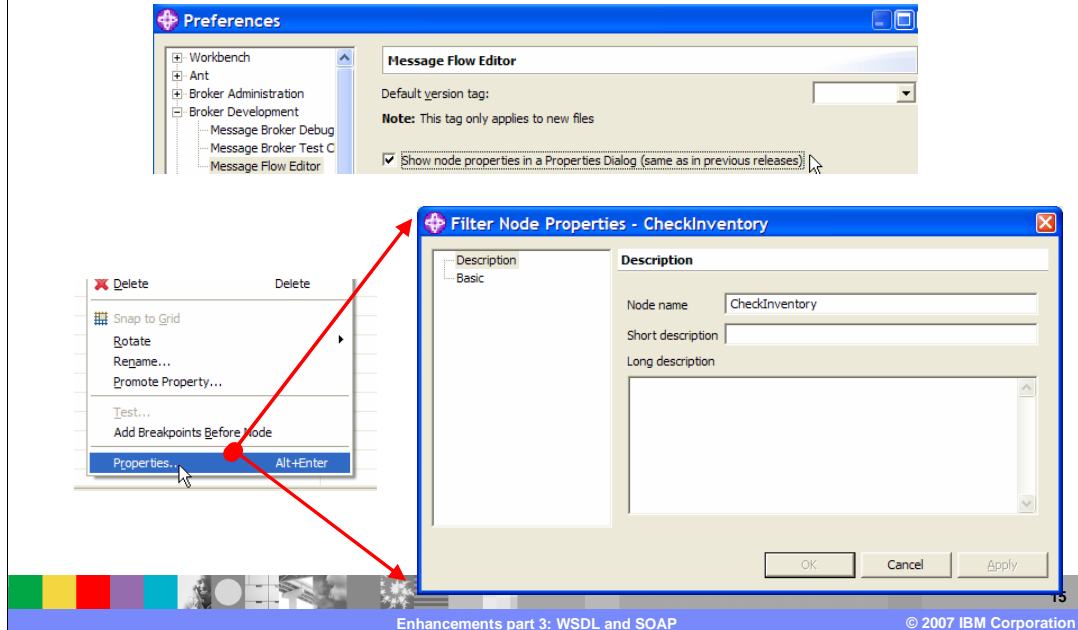
In toolkit preferences, you can change default behavior to launch the Properties dialog if you prefer.

Properties enhancements 1
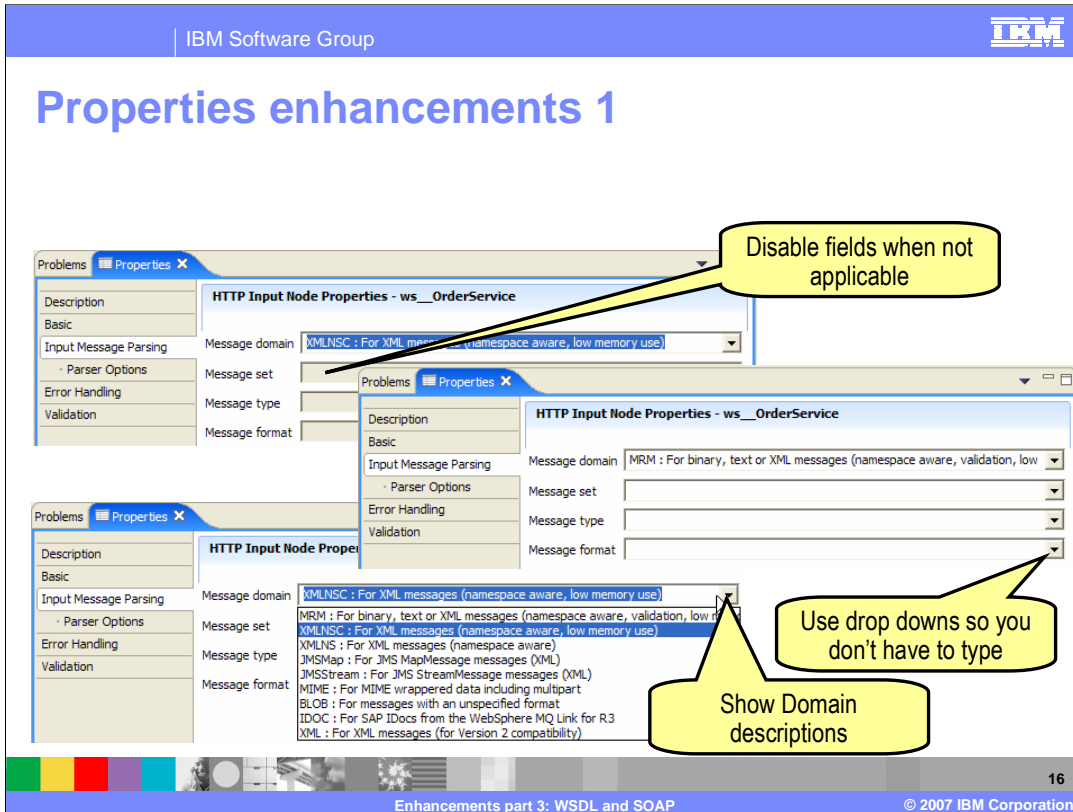
Ease-of-use enhancements have been made to some properties. The "Default" tab has been renamed to "Input Message Parsing" on input nodes. Drop downs are available for selection in the parsing properties; fields that are not applicable to the selected domain are disabled.
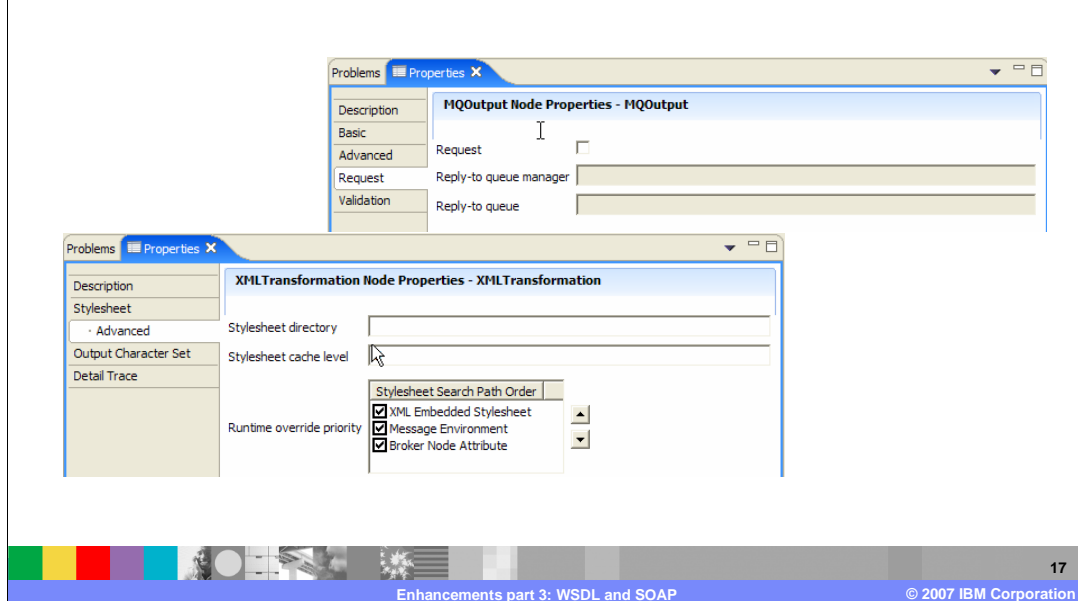
Properties for the following nodes have been re-organized and improved:

       HTTPInput

       HTTPRequest

       JMSOutput

       XMLTransformation

Connecting nodes

new: do not have to be in Connection mode to wire. Just hover over terminal
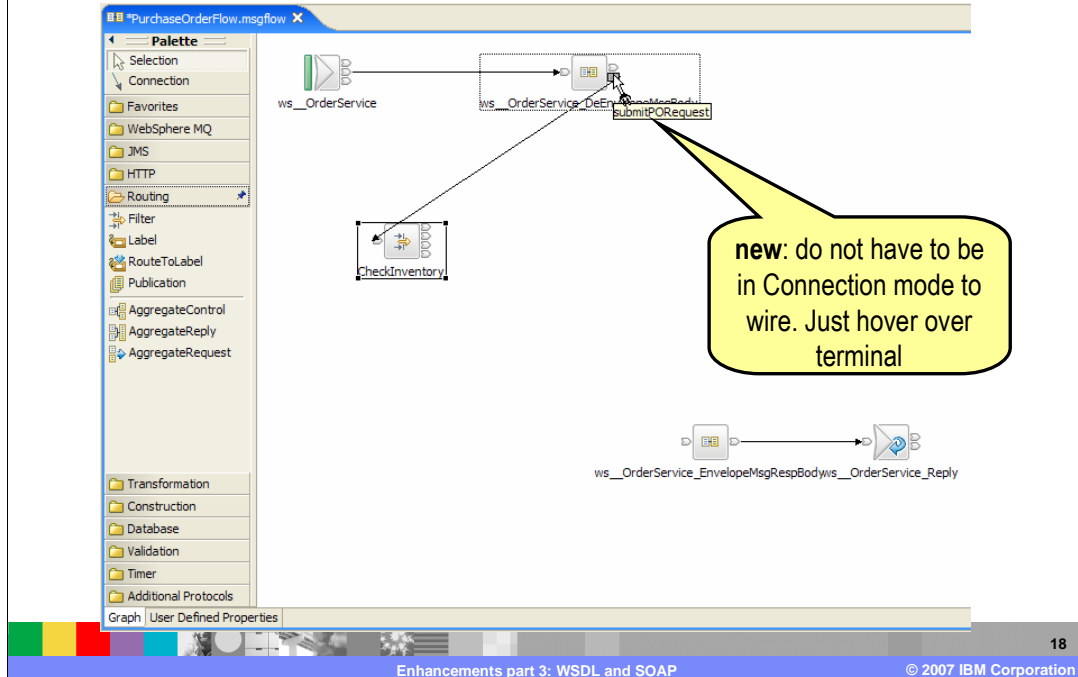
In V6.0.2 you do not have to be in Connection mode to wire nodes; just hover over the terminal and left click.

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