



IBM Software Group

## WebSphere® Message Broker Toolkit V6.0.2

### *Toolkit scenario part 1: Introduction*



@business on demand.

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This series of modules presents a scenario to illustrate the enhancements made to WebSphere Message Broker Toolkit V6.0.2.

## Agenda

- Part 1 Scenario introduction
- Scenario solution
  - ▶ Part 2 Quick start wizard
  - ▶ Part 3 Message flow generation
  - ▶ Part 4 Filter node
  - ▶ Part 5 Mapping, compute, MQOutput nodes
  - ▶ Part 6 Web services
- Part 7 Scenario testing
- Summary



The first module provides a description of the application, while modules two through six provide the scenario solution, using WebSphere Message Broker Toolkit V6.0.2. The seventh module illustrates testing the scenario and provides a summary.

## Section

# ***Scenario introduction***

This scenario is designed to highlight to enhancements made to the WebSphere Message Broker Toolkit introduced in V6.0.2.

## Scenario: Order processing

- Expose a Web service (SOAP/HTTP) for placing purchase order
- Check for sufficient inventory
  - ▶ Insufficient stock for order
    - Place order for more inventory from supplier using WebSphere MQ message to CICS
    - Negative response to caller
  - ▶ Sufficient stock for order
    - Invoke Web service to place shipping order
    - Positive response to caller

The order processing scenario will:

Expose a Web Service SOAP/HTTP for placing a purchase

Check for sufficient inventory

and

Provide capability for handling both sufficient and insufficient inventory

## Scenario technical challenges

- Creating message set from WSDL and XSD files
  - ▶ WSDL for the Web service purchase order operation to be exposed
  - ▶ WSDL for the Web service shipping operation to be invoked
- Configuring and using HTTP nodes
  - ▶ Input and reply for the Web service purchase order operation to be exposed
  - ▶ Request for the Web service shipping operation to be invoked
- Dealing with the SOAP messages
  - ▶ Body extracted from SOAP envelope so it can be easily mapped and manipulated
- Dealing with mixed protocols
  - ▶ Body of message placed in a SOAP envelope to invoke Web service
  - ▶ WebSphere MQ headers created to use the MQOutput node
- Finding and choosing the appropriate nodes to use for each task
- Testing
  - ▶ Send a SOAP message to HTTPInput node and see the reply from the HTTPReply node

The technical challenges addressed in this scenario include:

Creating message sets from WSDL and XSD files

Configuring and using HTTP nodes

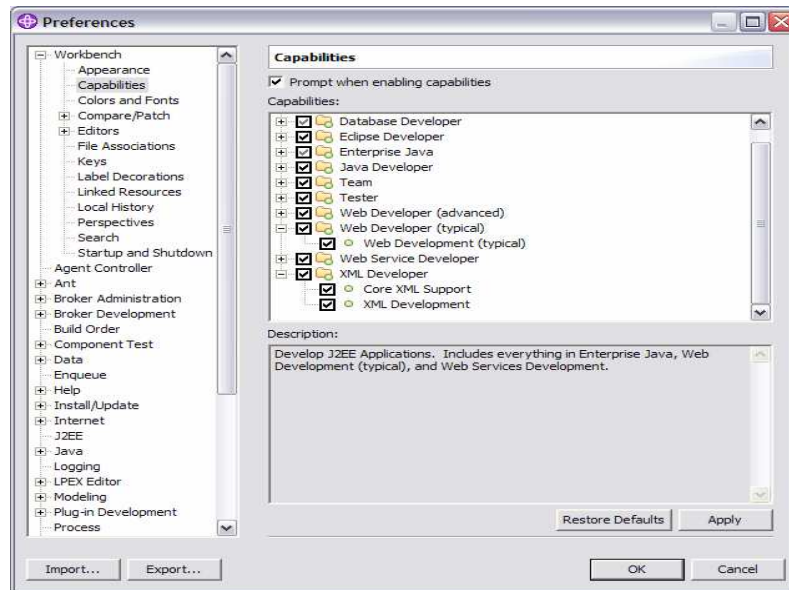
Handling SOAP messages and mixed protocols

Finding and choosing appropriate nodes to use for each task

and

Testing

## Workbench preferences



6

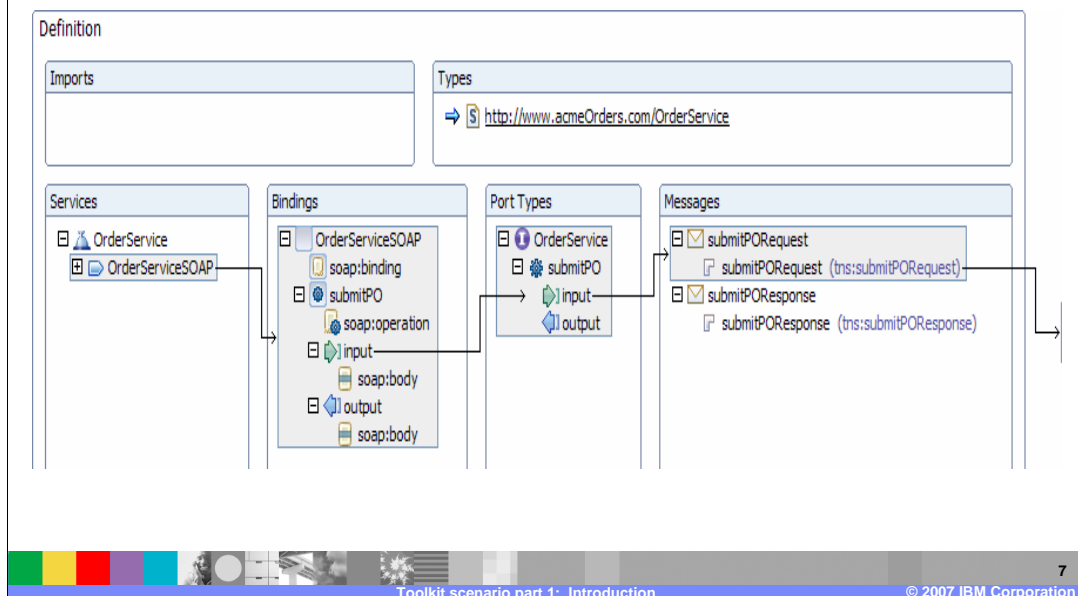
Toolkit scenario part 1: Introduction

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In Preferences for Workbench Capabilities, selecting the Web Developer and XML Developer capabilities causes the WSDL editor to be invoked when you double click on a WSDL file. The following slides show the WSDLs used in this scenario using the WSDL editor.

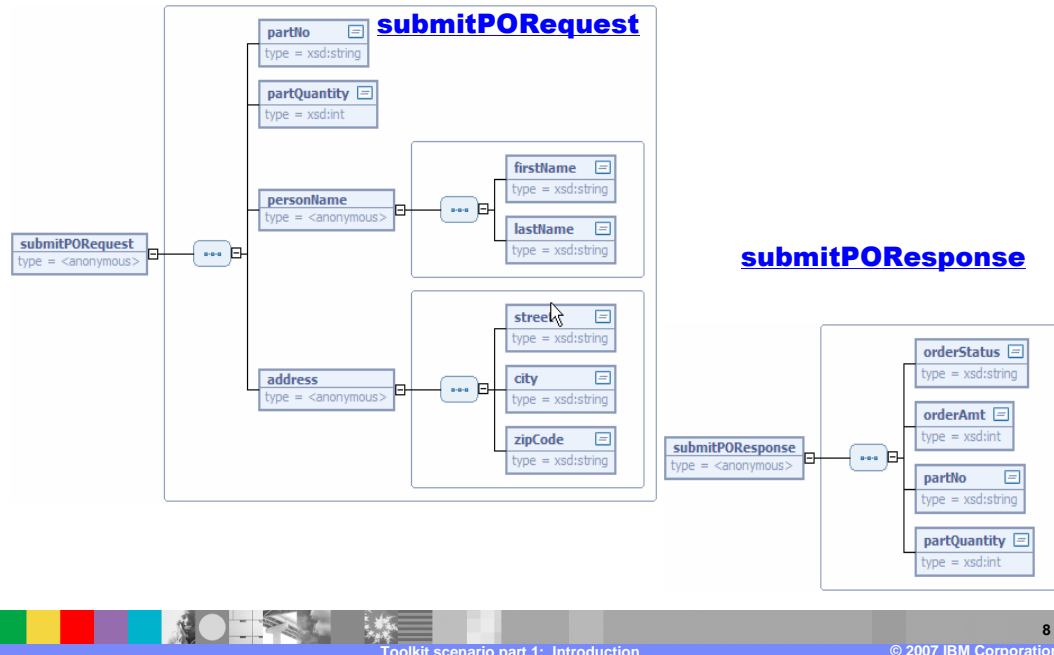
# WSDL for purchase order

## OrderService.wsdl



This is the outline you see for the OrderService.wsdl in the toolkit WSDL editor. This section shows the services, bindings, port types, and messages. The screen capture is continued on the next slide.

## WSDL for purchase order

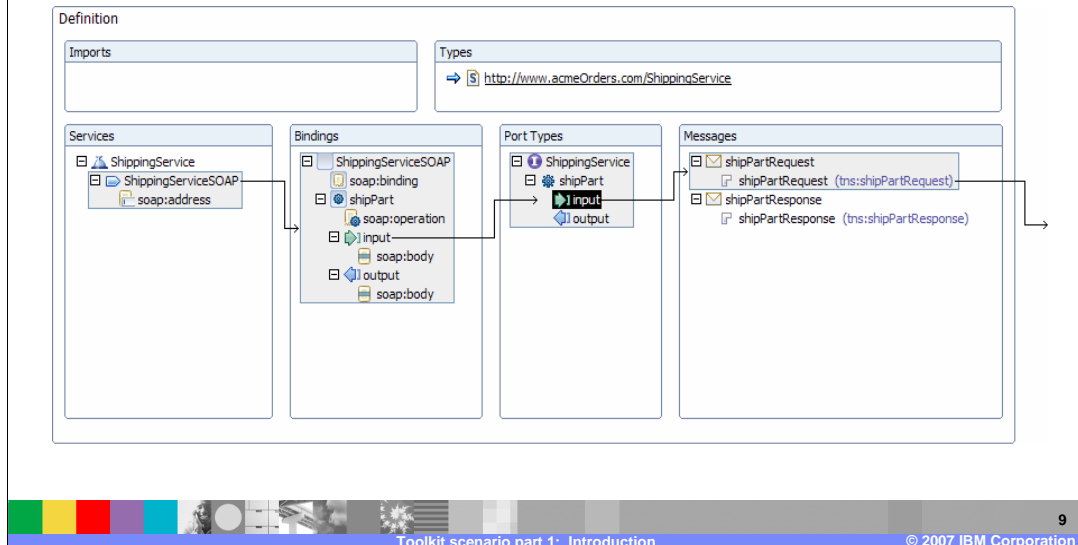


This section of the screen capture shows the submitPORequest and submitPOResponse Web services.



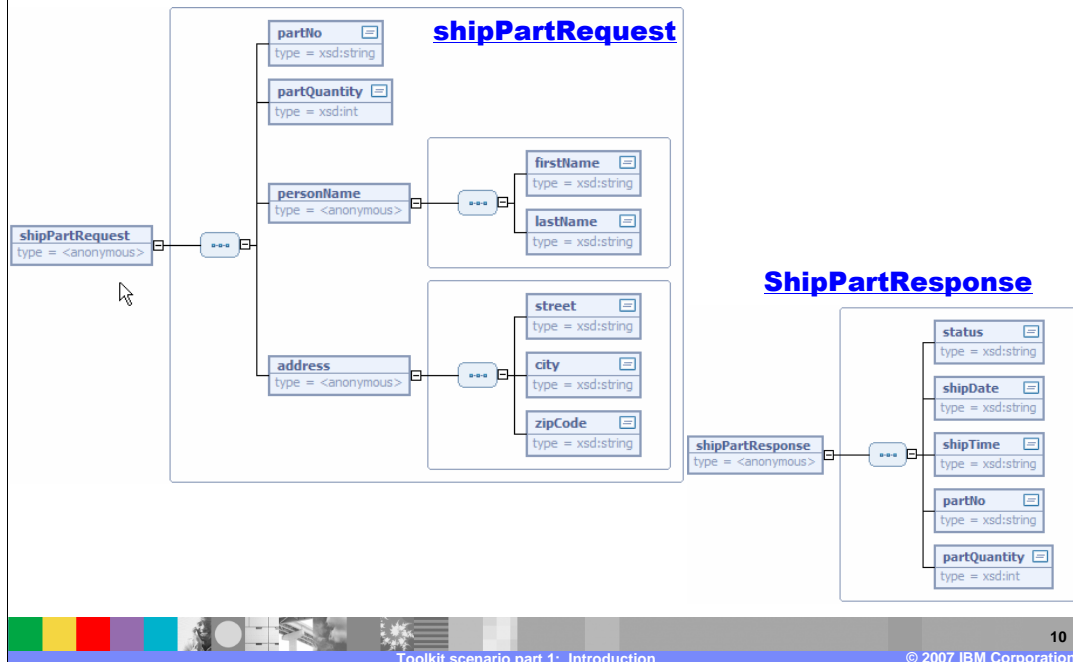
## WSDL for shipping service

### ShippingService.wsdl



This and the following slide is the outline you see for the `ShippingService.wsdl`. Again, this section of the screen capture shows the services, bindings, port types, and messages.

## WSDL for shipping service



Shown here are the shipPartRequest and ShipPartResponse Web services. This concludes part 1 of the WebSphere Message Broker V6.0.2 toolkit scenario.

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