Web services – Day 8

Recap – Day 7

Learnt So Far (Recap & assessment)

- Flat File

- Flat File Schemas

- Flat File Dictionaries

- Record parsers

- Processing Flat files inbound / outbound

- FTP

Introduction

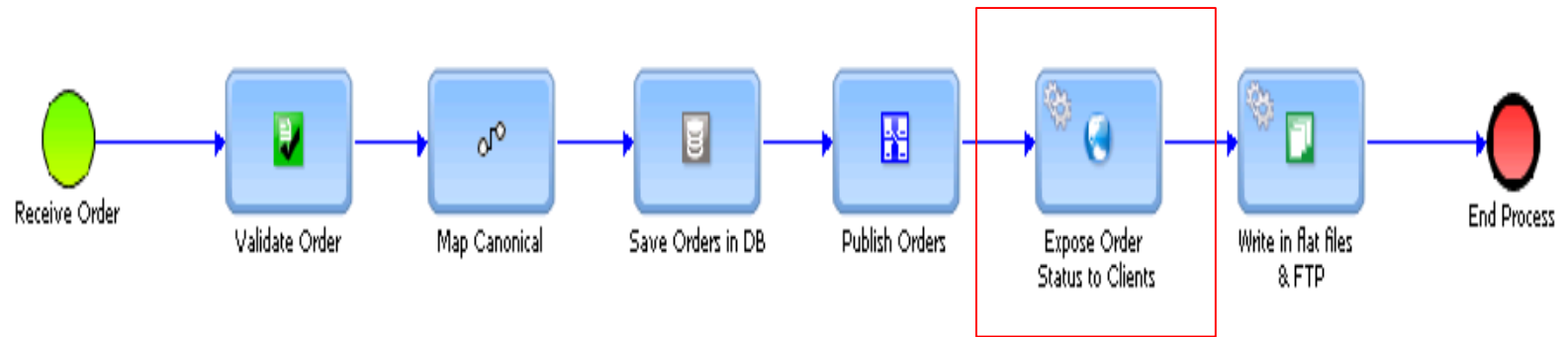❿ This course will help participants to understand the basics about

Web services.

❿ Trainees would be able to develop Web service descriptors (Provider &

consumer

Objectives

At the end of this course you will be able to

⑩ Create Web service provider nodes.

⑩ User web service consumer nodes

webMethods Pilot Project Progress

Receive Order → Validate Order → Map Canonical → Save Orders in DB → Publish Orders → Expose Order Status to Clients → Write in flat files & FTP → End Process

Outcome of this course :

Trainees should be able to create web service provider &

consumer nodes to expose/consume a web service as part

of the Practical session

Software versions

⑩ This class focuses on the webMethods suite

webMethods Integration Server

Software AG Designer

Chapters

Web Services

Web Service Standards

Web Services Descriptor Overview

Creating Web Service Nodes

Web Service Alias

Testing Web Services

Web Services

What is a Web Service

- Web services are building blocks for creating open, distributed systems. A Web service is a collection of functions that are packaged as a single unit and published to a network for use by other software programs.

- For example, you could create a Web service that checks a customer's credit or tracks delivery of a package.
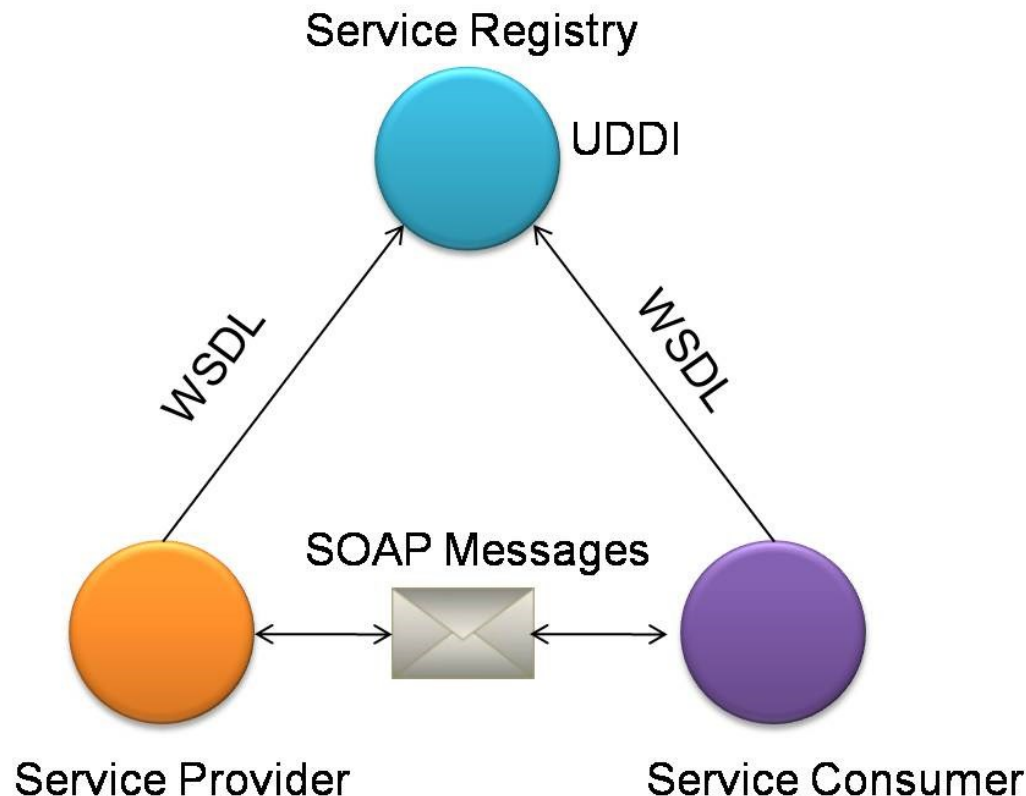
Web Service Standards

The "Web Service" uses vendor-independent, multiplatform standard formats and protocols.

⑩ The core Web Service specifications standards used in the Integration Server are:

- Web Service Description Language (WSDL)
- Simple Object Access Protocol (SOAP) 1.1 and 1.2
- Universal Description, Discovery and Integration (UDDI) v3

⑩ Integration Server also supports:

- WS-Security 1.0
- WS-I Basic Profile 1.1
- WS-I Simple SOAP Binding Profile 1.0

Web Service Descriptor Overview

What is a Web Service Descriptor

- A Web service descriptor (WSD) is an element on Integration Server that defines a Web service in IS terms. The WSD encapsulates all the information required by the provider or the consumer (requester) of a Web service

- **A provider Web service descriptor** defines a Web service that is hosted on the Integration Server, that is, a service "provided" to external users

- **A consumer Web service descriptor** defines an external Web service, allowing Integration Server to create a Web service connector (WSC) for each operation in the Web service are sequences of fields and/or composites

Web Service Descriptor Overview

- ⑩ WSD Provider node
  - ▪ Used to expose an IS service or set of IS services as web services

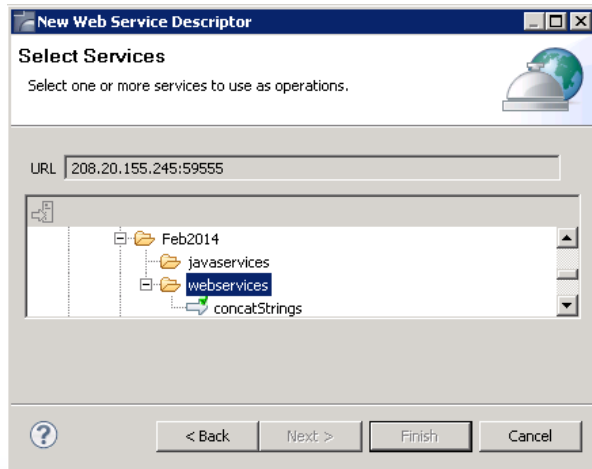- ⑩ WSD Consumer node
  - ▪ Used to consume a web service
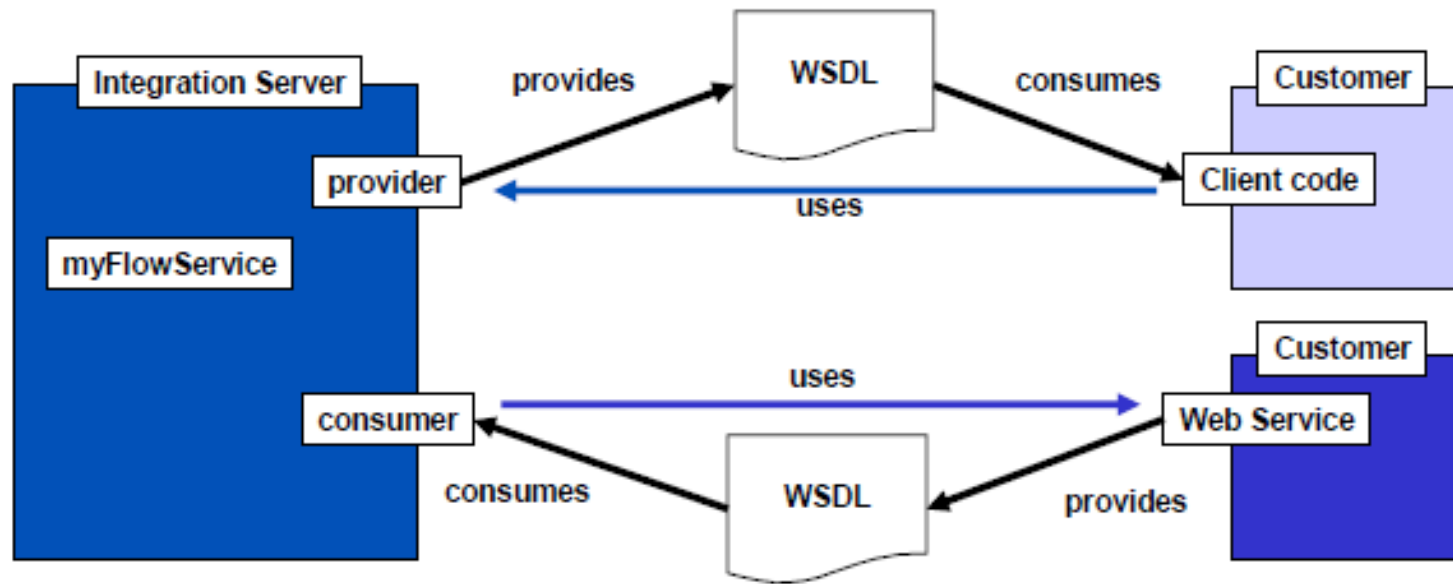
Web Service Provider Node

- A *provider Web service descriptor (WSD) is created from one or more IS services or from a* single WSDL document, and is designed to allow the IS services to be invoked as Web services over a network. The provider Web service descriptor contains all the data required to create a WSDL document for the IS Web service, as well as the data needed at run time to process the request and response

- Provider nodes can be created from:

  - – Existing IS services

  - – WSDL file

  - – WSDL from UDDI registry

Create Web Service Provider Node

❿ Steps to create a WS Provider Node
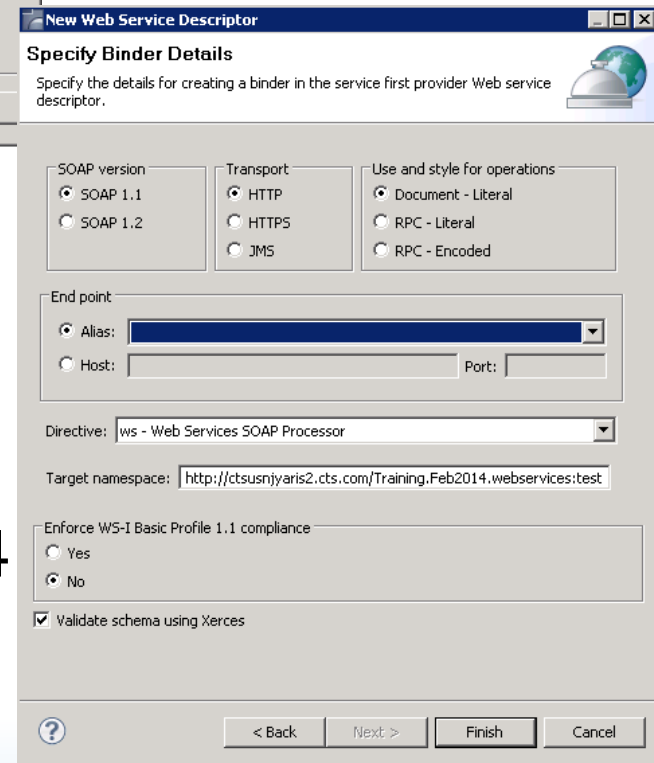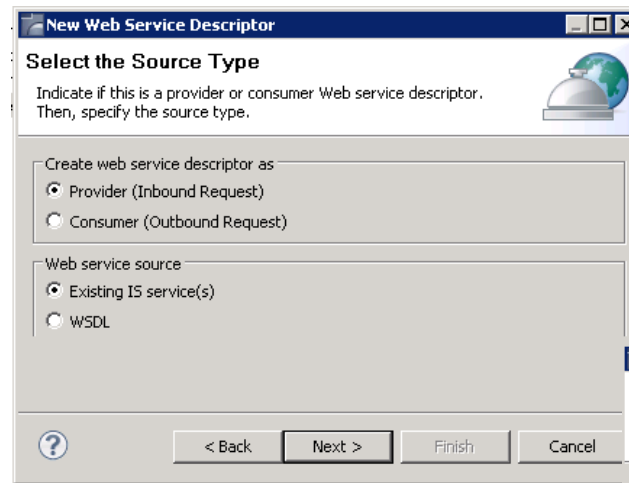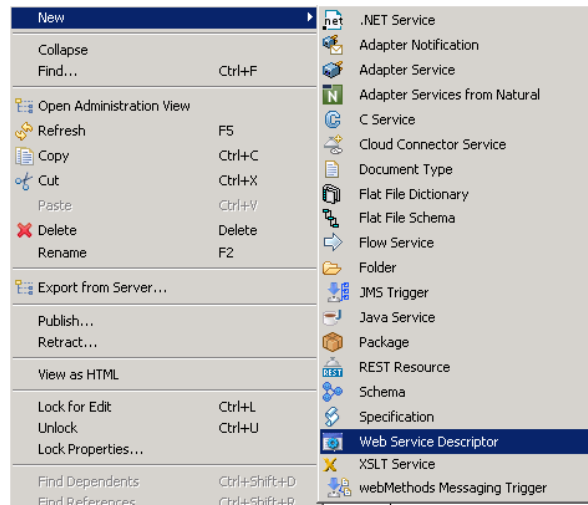
Web Service Consumer Node

- A consumer Web service descriptor (WSD) defines an external Web service. It contains all the data from the WSDL document that defines the Web service, as well as data needed for certain Integration Server run-time properties. Integration Server creates a Web service connector (WSC) for each operation in the Web service.

- A Web service connector contains the information and logic needed to invoke an operation defined in the WSDL document used to create the consumer Web service descriptor

- Consumer nodes can be created from:

  - – WSDL file (local or URL)

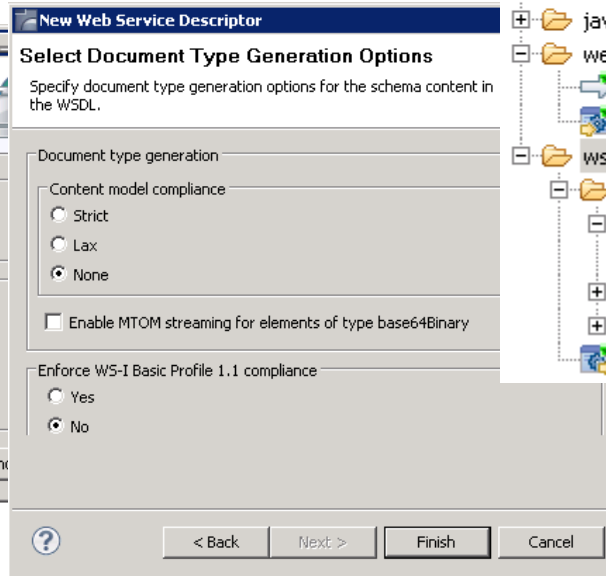 - – WSDL from UDDI registry

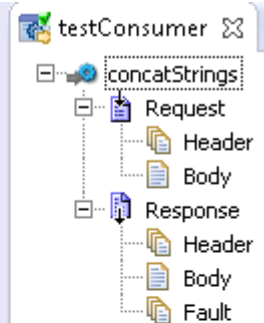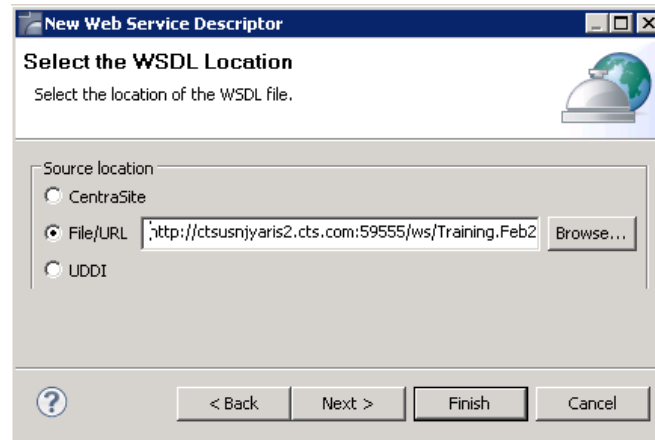# Create Web Service Consumer Node

❿ Steps to create a WS Consumer Node
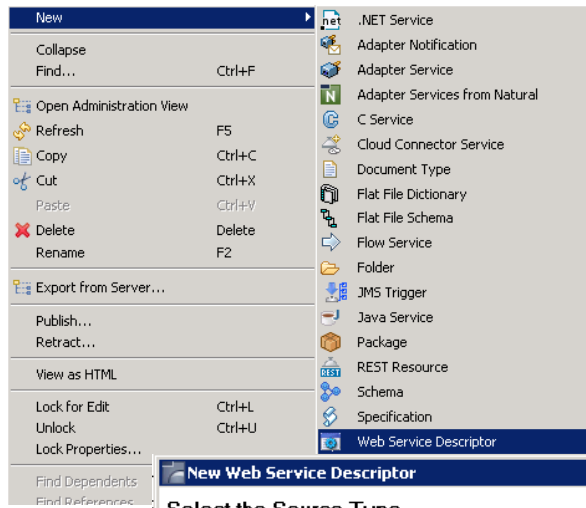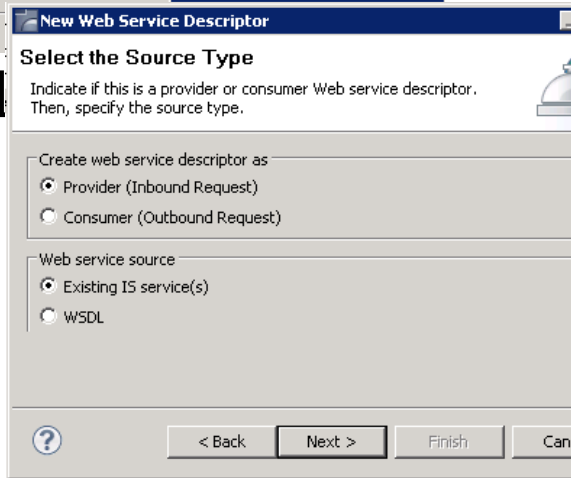
Web Service Alias

- Similar to remote server aliases, but this alias is especially for web services

- Create in IS Administrator console
  - Can then be chosen when creating provider nodes
  - If created after the node, edit the node to assign the alias

Testing Web Services

⑩ Testing Consumer Nodes

- Use the connecter in the service at consumer end flow service and set values in Service In and map input and output in Pipeline.
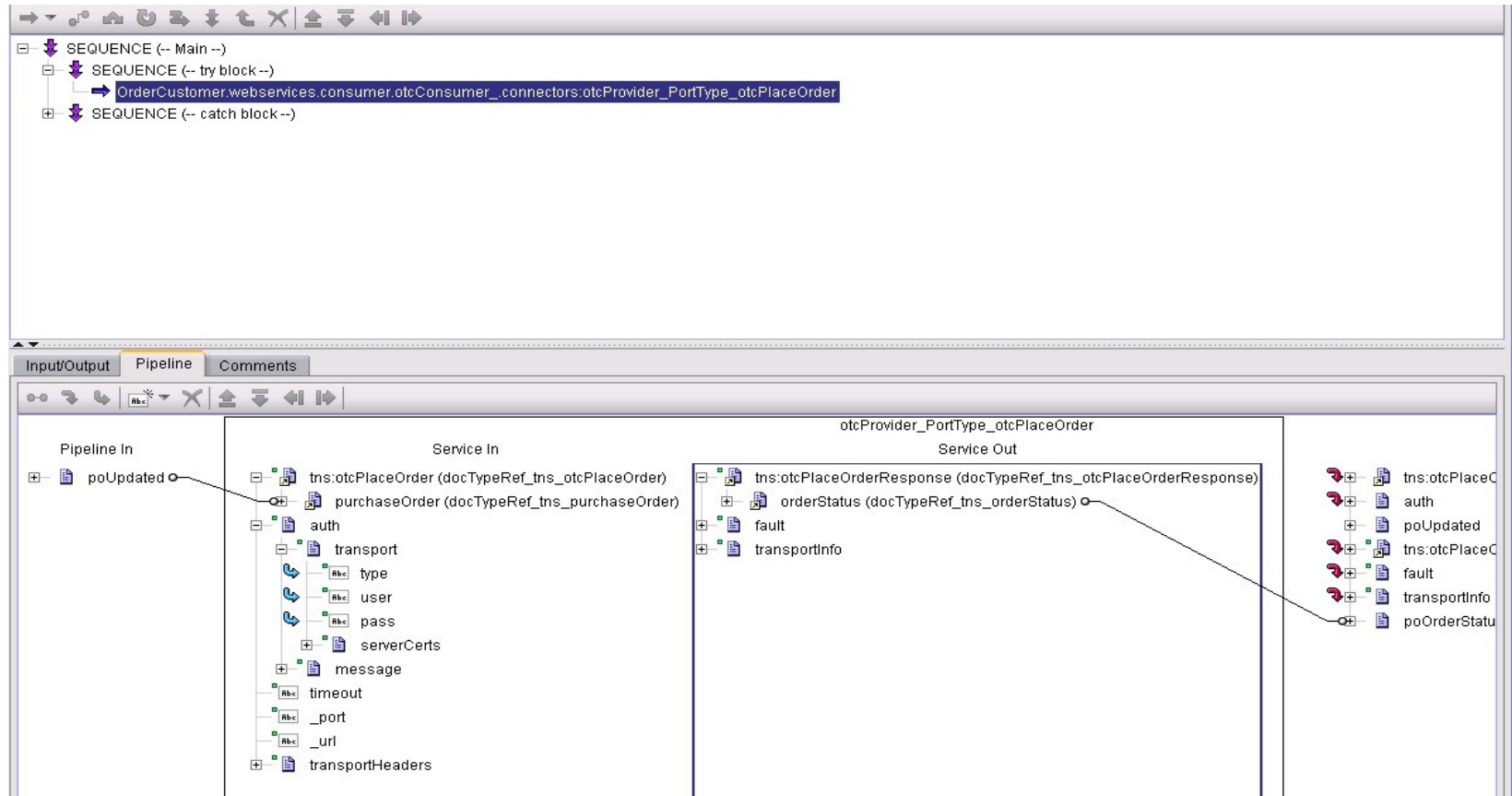
Summary

What have we learnt today ?

- Web Services

- Web Services Standards

- Web Services Descriptor Overview

- Creating Web Service Nodes

- Web Service Nodes

- Web Service Alias

- Testing Web Services

Q & A

- ❖ What is a web service descriptor?

- ❖ What is SOAP?

- ❖ How to create web service Provider ?

- ❖ When you will go and create a web service consumer ?

- ❖ How to configure web service Alias?

- ❖ How to test web service provider WSDL ?

- ❖ What are the third party tools to test the web services ?

Cognizant

Thank you