WebSphere Education

Importing from Microsoft Visio and existing business service objects

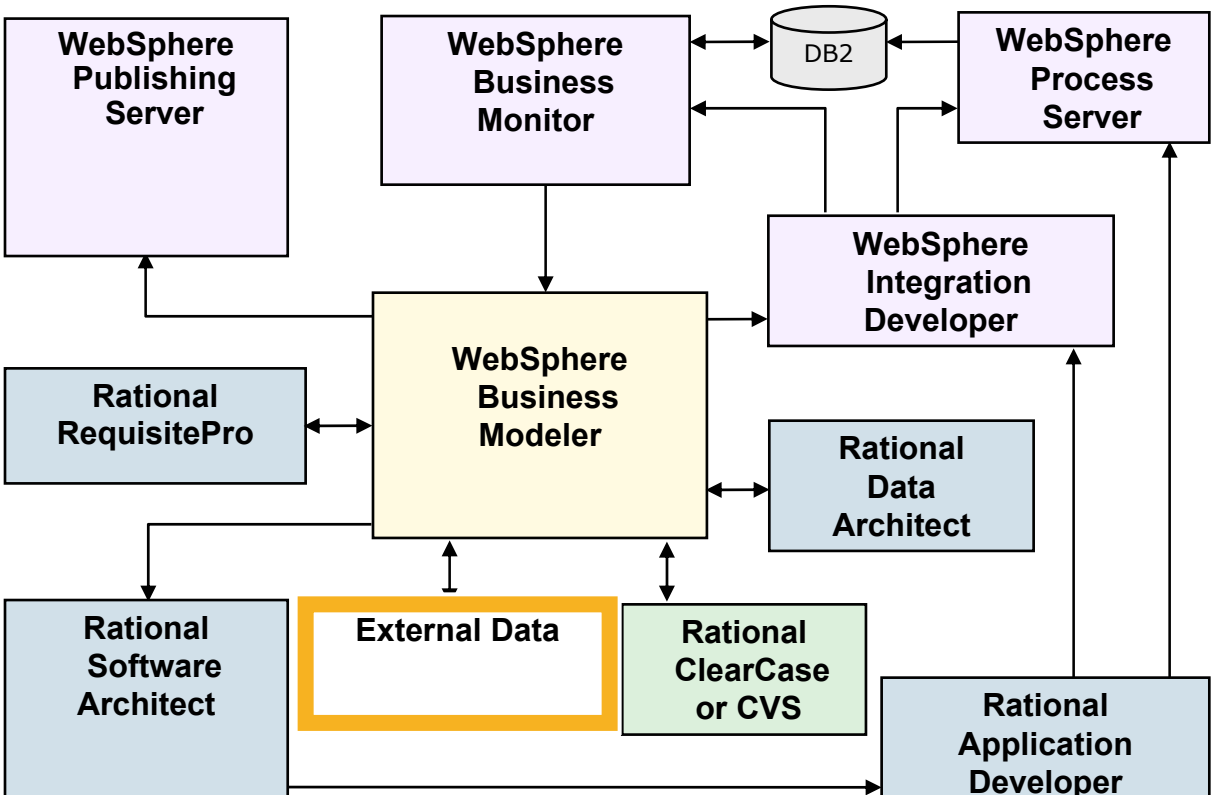
Unit 15

Unit objectives

After completing this unit, you should be able to:

- Import a model from Microsoft Visio
- Import Business Services and Business Service Objects
- Import delimited text into the modeler

Importing existing data into Modeler



Importing from Microsoft Visio

- Import shapes from Microsoft Visio files from Microsoft Visio 2002 or newer.
- These shapes can be used to create elements such as tasks and business items in Business Modeler.
- Predefined mappings include all shapes from the Basic Flowchart stencil, IDEF0 stencil, and SDL Diagram stencil.
- Customize your own mappings.

Visio import restrictions

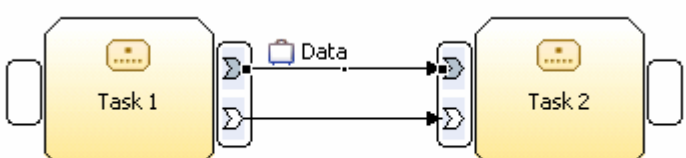
- While anything can be drawn in Visio without any constraints, Modeler is a modeling tool that creates valid processes.

- The following restrictions apply to importing Visio shapes:
  - Connections in Visio that are not attached to connection points on Visio shapes are not mapped to Modeler.
  - Be sure to use the "Glue to Connection Point" option in Visio.
    - Visio import always creates a single process without subprocesses.
  - In Modeler, each node must have a unique name.
    - If one or more shapes have the same name in Visio, the names will be differentiated by the addition of a number.

Mapping to business items (1 of 4)

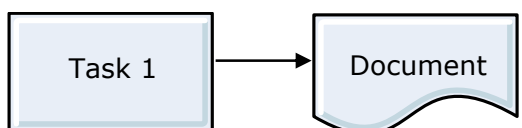
- One incoming and one outgoing connection
- The following shape to be mapped to a business item has both an incoming and an outgoing connection:

- If the Visio connection shape is mapped to a connection without data, the following is the result in Business Integration Modeler:

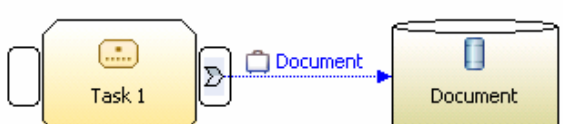


Mapping to business items (2 of 4)

- One connection (either incoming or outgoing)
- The following shape to be mapped to a business item has only an outgoing connection:

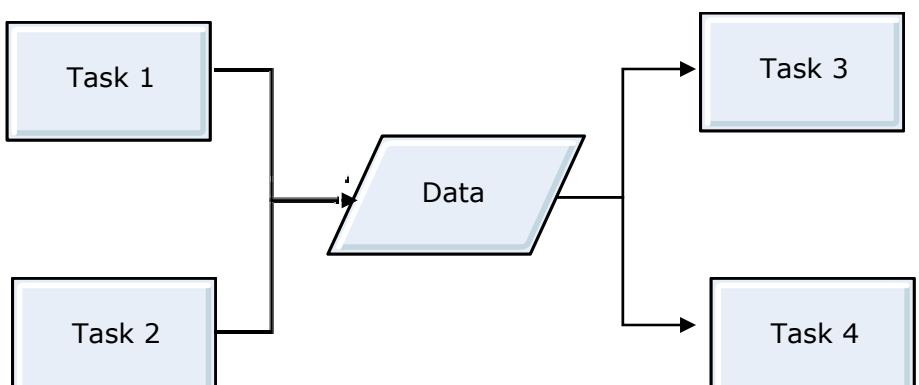


- The following diagram shows the result in Modeler:



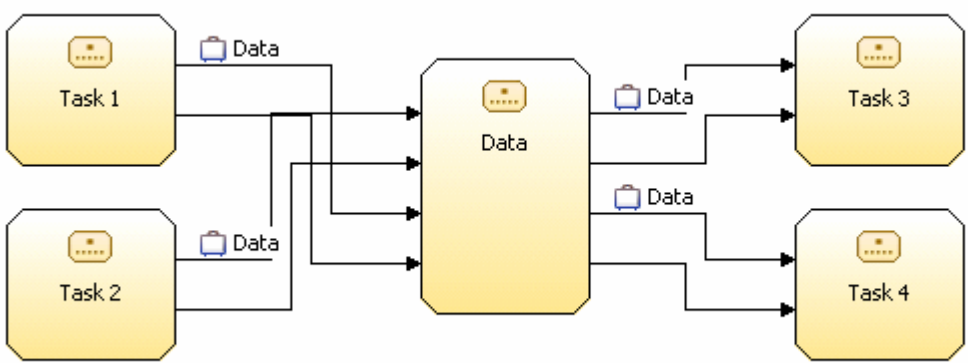
Mapping to business items (3 of 4)

- Complex connections
- There are two connections into the shape and two connections out of the shape that is to be mapped to a business item:



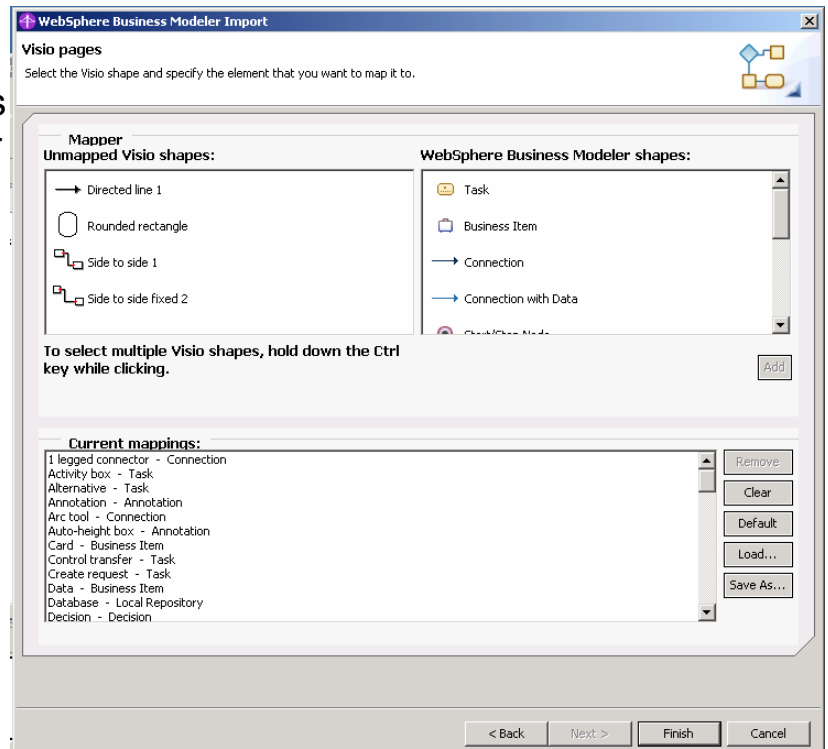
Mapping to business items (4 of 4)

- Complex connections
- The following diagram shows that an intermediate task is created in Modeler:



XML file format

- XML file that contains the mapping between Microsoft Visio shapes and Business Modeler elements.
- The mapping file is in XML format and can be edited directly.
- To create the first mapping file, start the import wizard, select **Visio**, and on the mapping page, click **Save As** to store the current mappings in an XML file.



XML file format examples (1 of 2)

- Map a Visio shape called "Process" to "Task" element:

```
<map>
        <modelerShape>Task</modelerShape>
        <visioShape>Process</visioShape>
</map>
```

- More than one Visio shape maps to the same Modeler element, add the additional shapes to the same block:

```
<map>
        <modelerShape>Task</modelerShape>
        <visioShape>Process</visioShape>
        <visioShape>Predefined process</visioShape>
        <visioShape>Manual operation</visioShape>
        <visioShape>Loop limit</visioShape>
</map>
```

- All the blocks are contained within the top level `<mapper>` and `</mapper>` tags.

XML file format examples (2 of 2)

- If no mapping should be defined for a particular Visio shape, specify the mapping of this Visio shape to “Nothing”:

```
<map>
     <modelerShape>Nothing</modelerShape>
     <visioShape>Title Block/visioShape>
</map>
```

- Any particular block of mapping in the mapping file will be ignored during import if any of the following applies:
  - More than one modelerShape is defined within **<map>** and **</map>**
  - No visioShape or no modelerShape is defined within **<map>** and **</map>**
  - The format is invalid.

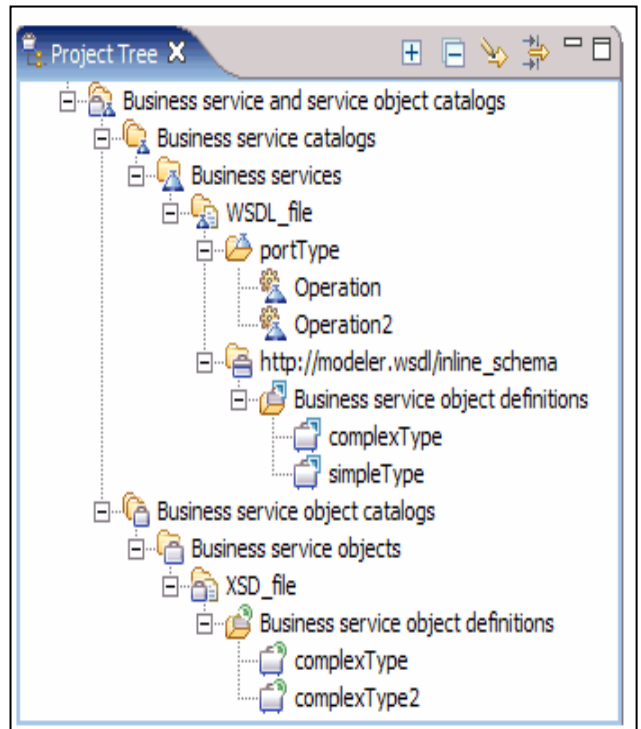
- Any Visio shape not defined in the mapping file is mapped to the Business Integration Modeler “task” element during import.

Business services and business service objects

- Business services are model element representations of WSDL (Web Services Definition Language) files.
  - A collection of business service definitions that can include business service objects.
  - A specific set of business service operations that are used to perform related business functionality.
- Business service objects are model element representations of XSD (XML Schema Definition) files.
  - A collection of business service object definitions and business service object templates.
  - Business service object definition is similar to a business item and is used to define the business data that is required when a business service operation is invoked.
  - Business service object templates similar to a business item template and abstractly defines the business data that is required when a business service operation is invoked.
- Business services and business objects should have already been implemented.
- Modeler can import both types of files to add information related to the process model.

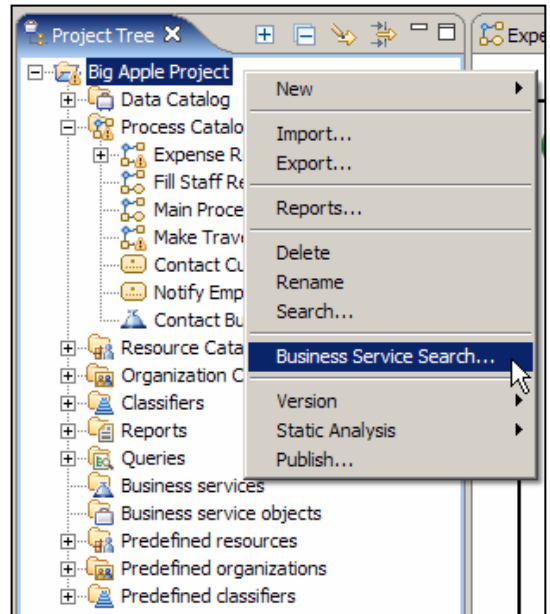
Importing from WSDL and XSD files

- Business services and business service objects, which are defined in WebSphere Service Registry and Repository (WSRR) server, can be imported into Modeler.
- Once imported, the business services and business service objects can be used to model processes.
- Business service or business service object including their contents cannot be copied and pasted from one catalog to another.
- To move a business service or business service object, delete it from its current catalog in the Project Tree and then re-import it into the destination catalog.
- The business services and business service objects are visible only if the business services and business service objects filter is disabled.



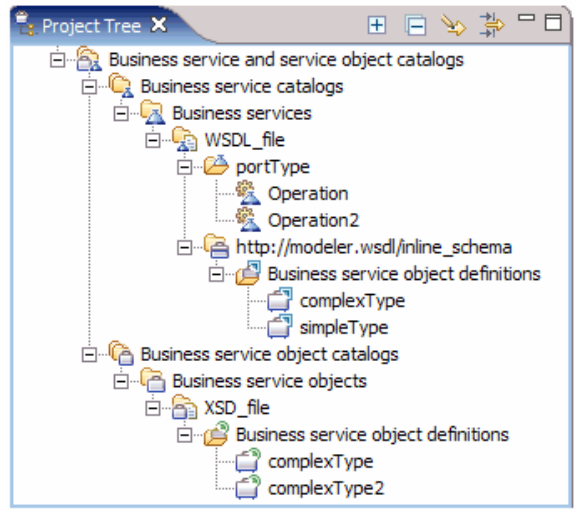
Business service search

- Search for business services and business service objects in a WSRR location and import them into Modeler.
- Specify whether searching for business services defined in WSDL files or business service objects defined in XSD files.
- For business services (WSDL files), the search checks the name of the file and the names and descriptions of the portTypes and operations defined in the file.
- For business service objects (XSD files), the search checks the name of the file and the names and descriptions of the simpleTypes and complexTypes defined in the file.



Business services in Project Tree

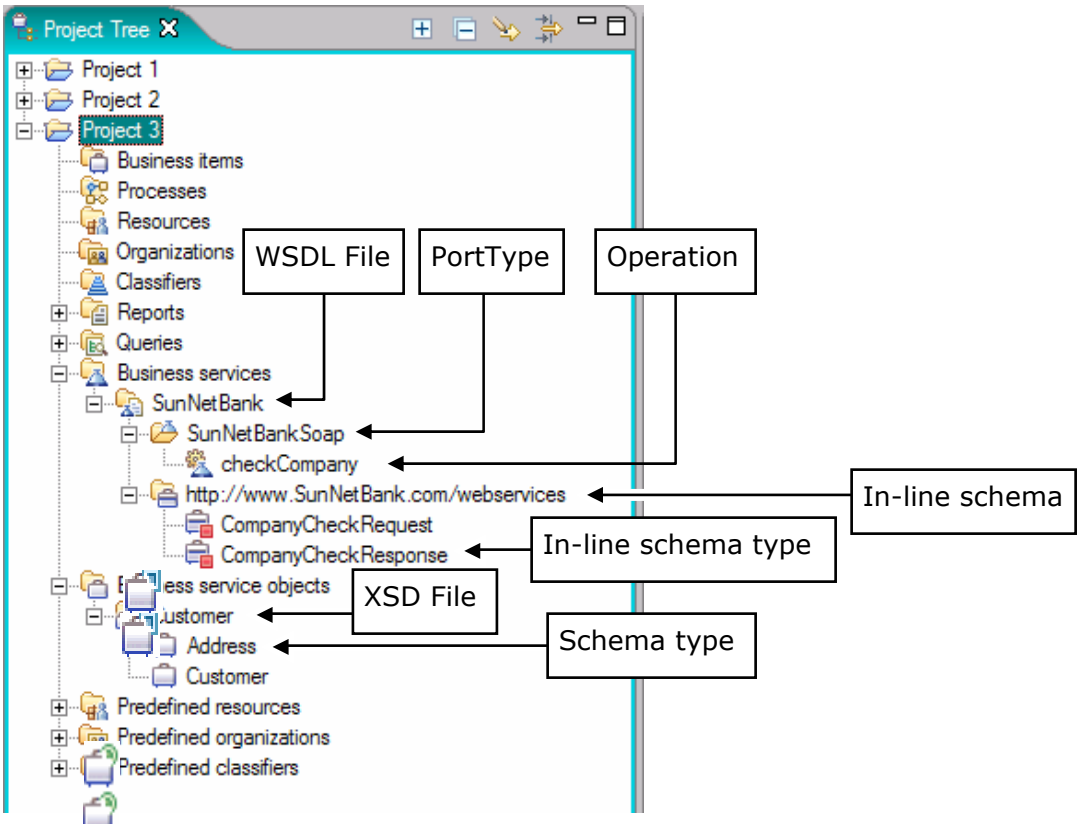
- Once imported, business services and business service objects will be displayed in project tree.
- Apply filters to control how the Project Tree view displays.
  - Business services and business service objects
    - Controls the topmost folder and the catalog folders
  - Business services and business service objects content
    - File names and structures defined in the WSDL and XSD files
  - Inline business service objects
    - Inline schema types for the business services



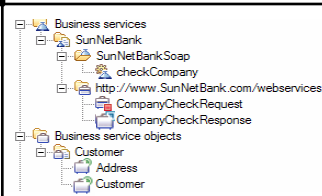
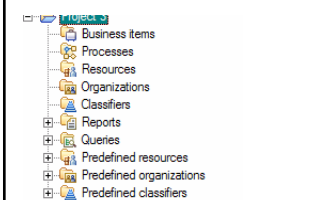
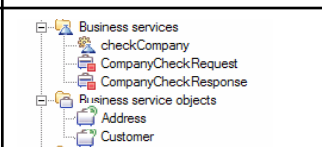
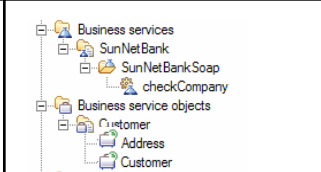
WSDL/XSD import feature

- Import existing WSDL/XSD elements and present them as Business Services and Service Objects.
  - Only the constructs in the WSDL that are relevant to Modeler will be presented, such as WSDL PortType and Operation.
  - Other constructs will not be presented but will be preserved upon export, such as WSDL Services and Bindings.
  - Imported WSDL/XSD is read-only, with limited editing on resource and simulation related attributes.
- Import multiple WSDL/XSD files located in different folders in a single import operation.
- Preserve the contents of the WSDL and XSD upon export to WebSphere Process Server.
  - All original contents will be preserved, except the file reference location (as per import, include, redefine) will be updated according to the target export location.

Business Services and Service Objects structure



Project tree filters

Filter	Description	Example
No filter		
Business services and business service objects	Controls whether the topmost business services and business service objects folder and the catalog folders within it are visible Note: If you apply this filter, the next two filters are irrelevant	
Business services and business service objects content	Controls whether the file names and structures defined within the WSDL and XSD files are visible.	
Inline business service objects	Controls whether the inline schema types are visible within the business services	

XML Schema Definition import

- The following types of elements and attributes can be imported from XML Schema Definition (XSD) files into Modeler:
  - Business item templates
  - Business items
  - Notification templates
  - Notifications
  - Resource definition templates
  - Resource definitions
  - Organization definition templates
  - Organization definitions

Delimited text import

- Expedites process model development
  - Import at one time
- The following elements can be created by importing delimited text files in the correct format:
  - Business item templates
  - Business items
  - Resource definition templates
  - Resource definitions
  - Resources
  - Roles
  - Organization definition templates
  - Organization definitions
  - Organization units
  - Global tasks

Delimited text attributes that are not supported

- The following attributes are not supported:
  - Expressions (used in rules and in default values)
  - Scope dimensions (used in roles)
  - Timetables (used in resources for costs and availability)
  - Preconditions
  - Advanced input logic (constraints and correlations)
  - Advanced output logic
  - Inputs that belong to more than one input criteria
  - Outputs that belong to more than one output criteria
  - Resources assigned to tasks
  - Organizations assigned to tasks

Checkpoint: Importing from Microsoft Visio and existing business service objects

Your instructor will review these questions with you as a group. If time permits, the instructor may provide you time to answer the questions on your own before the group discussion.

1. What are some restrictions when importing Visio shapes into WebSphere Business Modeler?

2. WebSphere Business Modeler supports which version of MS Visio does the Modeler support?

3. What are the differences between Business services and business service objects?

Checkpoint solutions: Importing from Microsoft Visio and existing business service objects

1. Connections in Visio that are not attached to connection points on Visio shapes are not mapped to Modeler. Be sure to use the <glue to connection point> option in Visio. Visio import always creates a single process without subprocesses. In Modeler, each node must have a unique name. If one or more shapes have the same name in Visio, the names will be differentiated by the addition of a number.

2. 2002 or newer.

3. Business services are model element representations of WSDL (Web Services Definition Language) files while Business service objects are model element representations of XSD (XML Schema Definition) files.

Unit summary

Having completed this unit, you should be able to:

- Import a model from Microsoft Visio
- Import Business Services and Business Service Objects
- Import delimited text into the modeler

Exercise overview

In this exercise, you will:

- Import a model from Microsoft Visio
- Map unrecognized Visio objects to Modeler objects
- Update model in Modeler to fix inconsistencies in the conversion of the Visio model