webMethods
Integration Workshop – BPM

Introduction

- This course will help participants to understand the basics about BPM
- Participants will get hands on basic creation of Business process in Designer.
- This course will help in building the basic knowledge and hands on Configuring Designer and process.

Objectives

- How to configure the Designer
- Get hands on experience on creation on business process.
- Get knowledge on process and activity
- How to handle error

Software versions

- This class focuses on the webMethods suite

Software AG Designer

webMethods Integration Server

webMethods Support for BPM

- Client
  - Designer Workstation
- Server
  - Integration Server
    - Process Engine
  - Broker/UM
  - MWS
    - Task Engine
  - Optimize Servers

Business process management (BPM)

BPM is managing the business processes within your corporation. A business process is a series of inter-related business tasks that are performed:

- ✓ In a specific order
- ✓ By multiple systems, people, and partners

Example:

To prepare for a new employee, this business process might include business tasks such as assigning office space for the new employee, enrolling the employee in the internal Human Resources (HR) system, notifying the external partner that handles payroll, and obtaining the necessary office equipment (e.g., computer, phone). Without a defined business process and without using business process management, some of the business tasks might be forgotten or not completed in a timely manner.

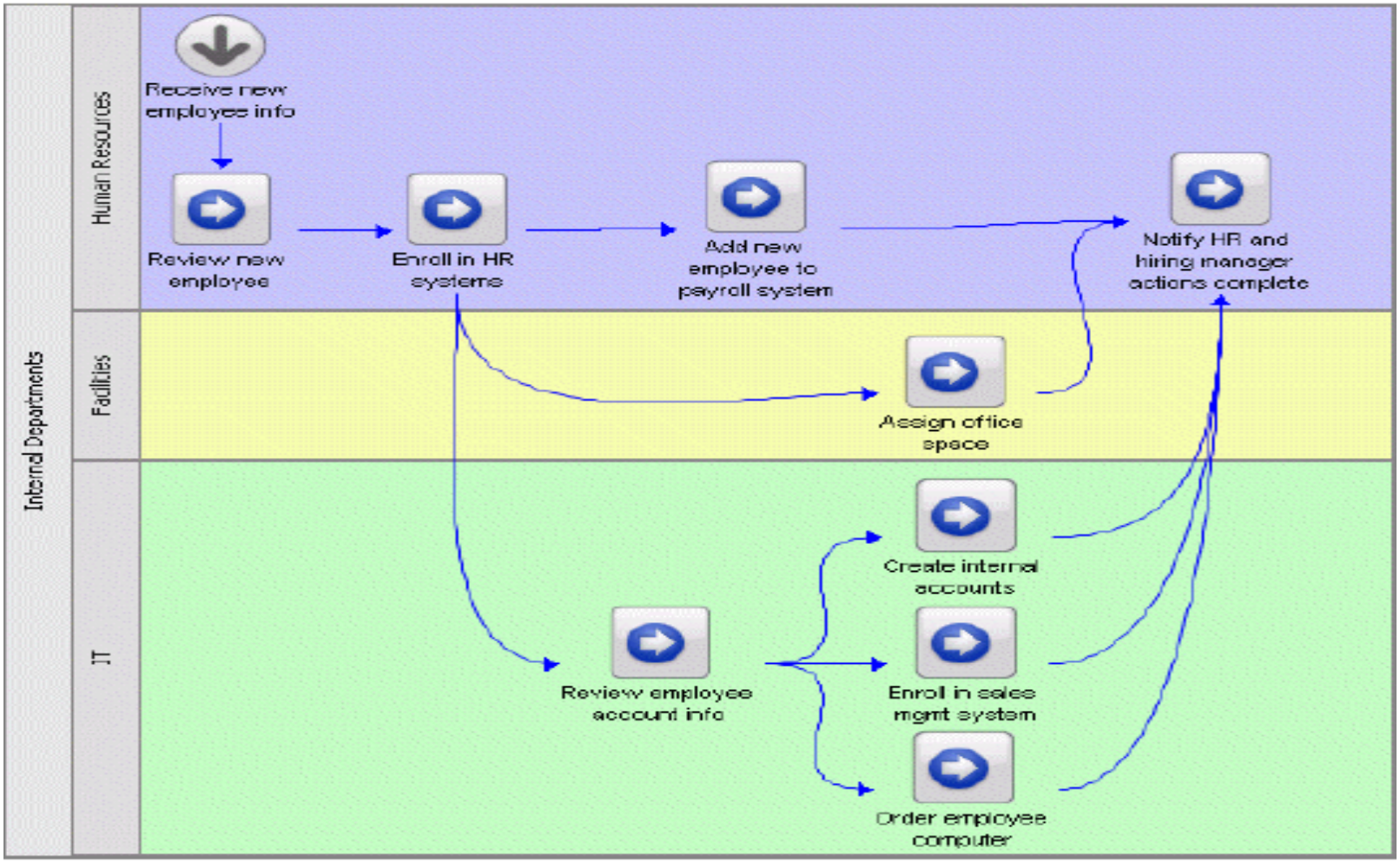
Benefits of BPM

- Better understanding and visibility of the entire business process
- Better error and exception handling
- Saves time.
- Reduces costs
- Improves employee efficiency
- Increases the effectiveness of your business
- Allows to improve your business processes

Implement BPM - Steps

- Business Analyst researches and create the diagram of process
- The technical staff continues to research the business process information provided by the analyst
- The technical staff implements the business process / model.

Sample – Business Process



Important Terms in BPM

Process Projects:

Process projects serve as the parent structures for Designer processes and their assets. A single process project can contain one or more processes

Process:

A process is the top-level asset in a process project. It contains steps and logic, and it is the asset that is ultimately built and executed in the Process Engine, and uploaded to the Process Audit Database for analysis

Pools:

Pools are constructs that help organize your process project. You can create pools that represent different organizations, or different parts of a single organization, such as departments. A Designer process can have one internal pool and unlimited external pools

Important Terms in BPM (Continued…)

SwinLanes:

Swimlanes are subdivisions of pools. Where a pool typically represents a single process, swimlanes typically serve to further subdivide a process, such as by department.

Steps:

You create steps onto the Process Development canvas and connect them to create a process. Steps are categorized by what they do, specified in their properties

Activity Steps:

An activity step can invoke something, such as an Integration: Server service, a Web service, a task, ; or it can be empty, and not invoke anything.

Important Terms in BPM (Continued…)

Activity Steps Type:

- Empty
- IS Service
- Task
- Web Service

Receive Steps:

A receive step receives a Integration Server subscription document or Trading Networks document

Important Terms in BPM (Continued…)

Terminate Steps:

A terminate step signifies the end of a process. A process may end prior to reaching the terminate step, based on other logic in the process, but if that is not the case, the process ends when it reaches the terminate step. The terminate step has three status indicators from which you can select: Canceled, Completed, and Failed. The default is Canceled, which webMethods Monitor shows as "stopped." Completed shows as "completed," and Failed shows as "failed."

Different Steps – Buttons:

Button	Description
	Activity step
	Subprocess
	Receive step
	Reply step
	Publish step
	Terminate step

Important Terms in BPM (Continued…)

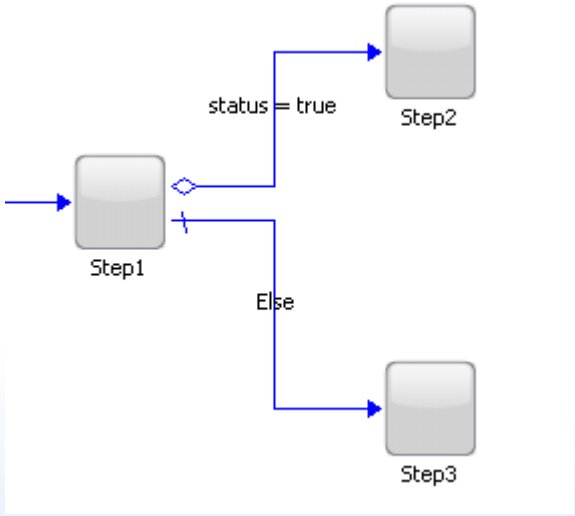
SubProcess:

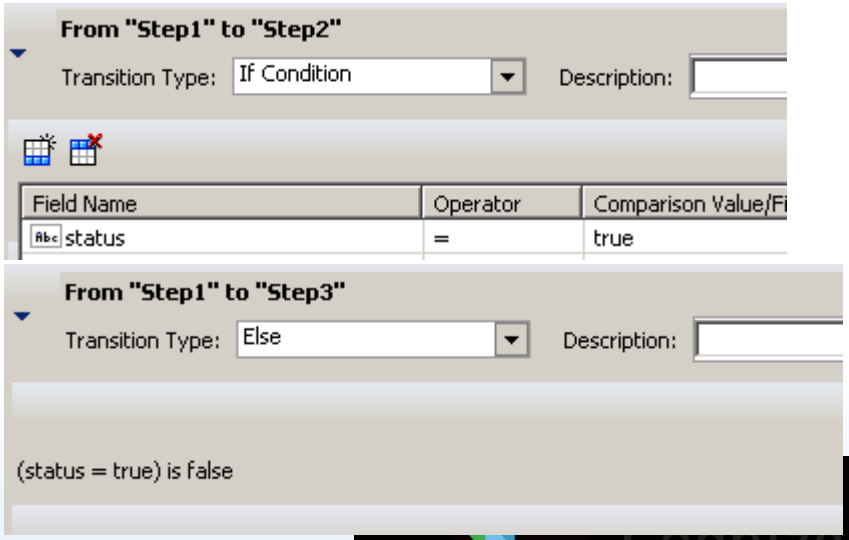
A subprocess is not a self-contained process. It can only exist inside its parent process. A receive step in a subprocess cannot start a new process instance. A subprocess is a group of steps in a container, and is treated as a step in the process

Step Transitions

- Transition denotes the flow of control from one step to another
- Following are the two major types of transitions:
  - Unconditional transition

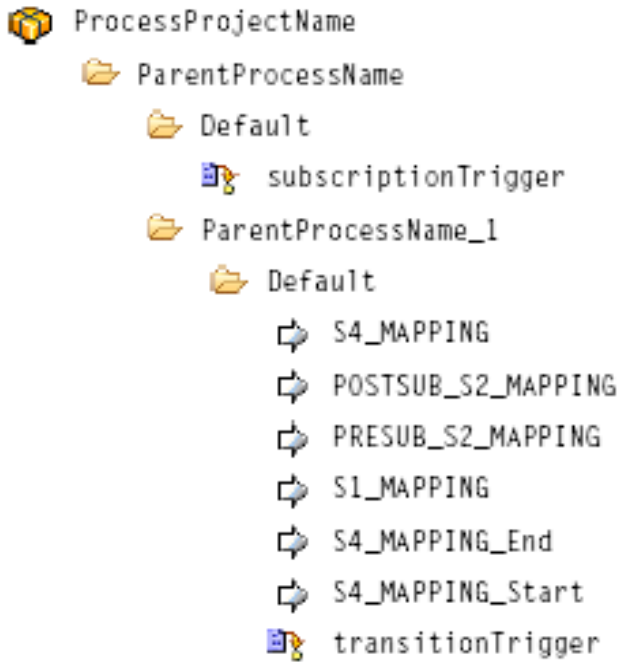
  - Conditional transition





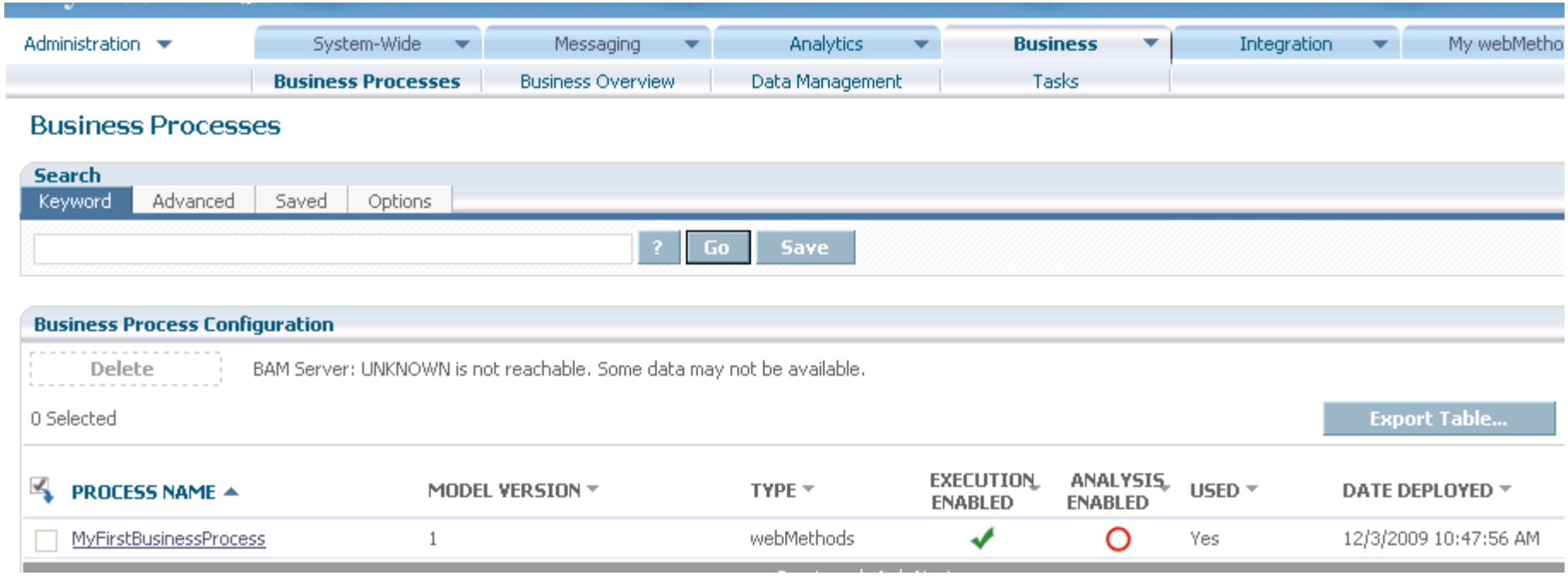
Process Building and Uploading

When you build a process, Designer creates the elements that execute at run time based on the information in your process, such as steps, subscription filters, transitions, and conditions. Designer then places these generated run-time elements on the Integration Server and uploads information about the process to the Process Audit Database.

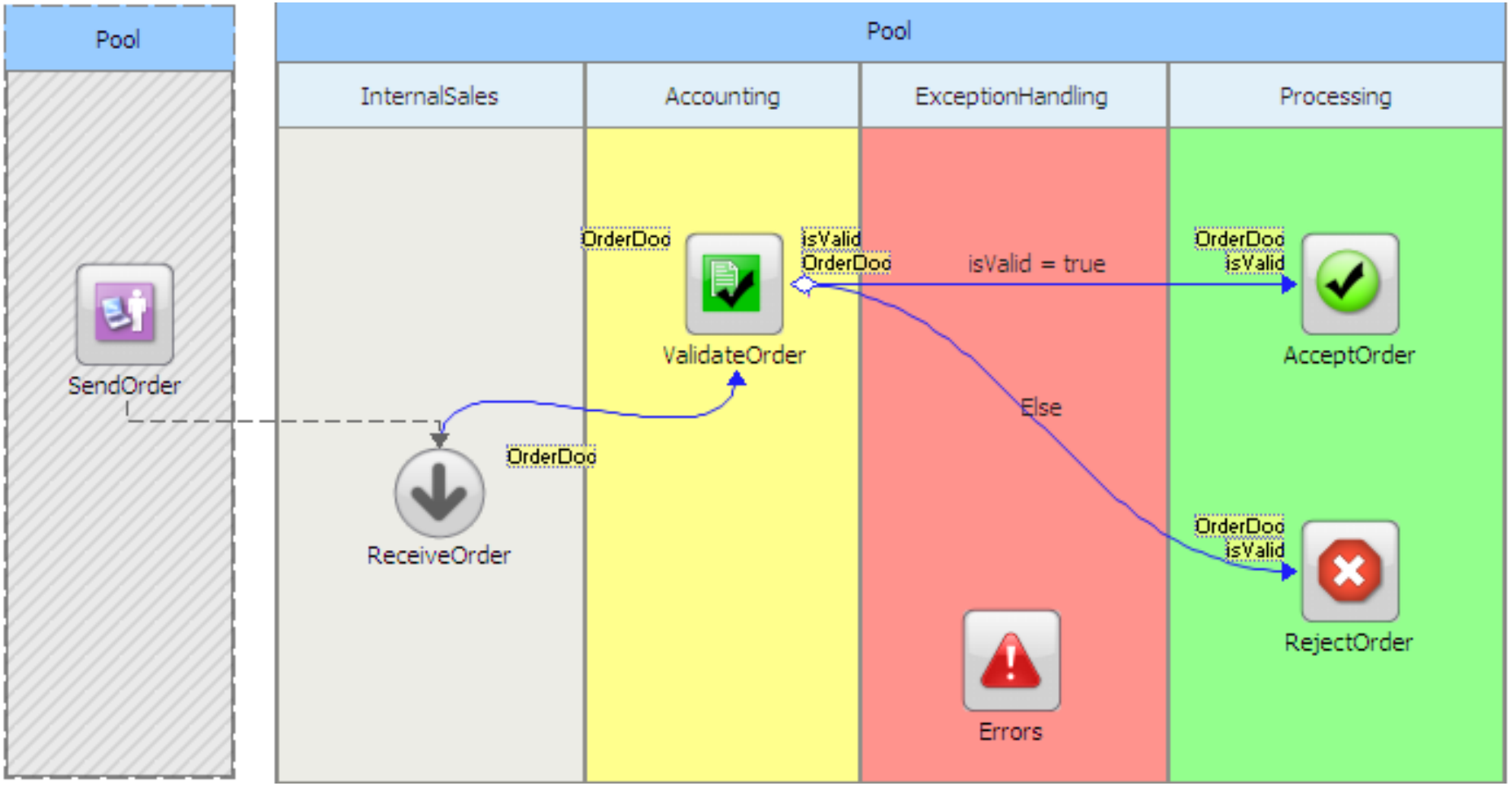


Enable Process for monitoring

- Open the MWS
- Goto Administration → Business → Business Process
- Enable the process model.

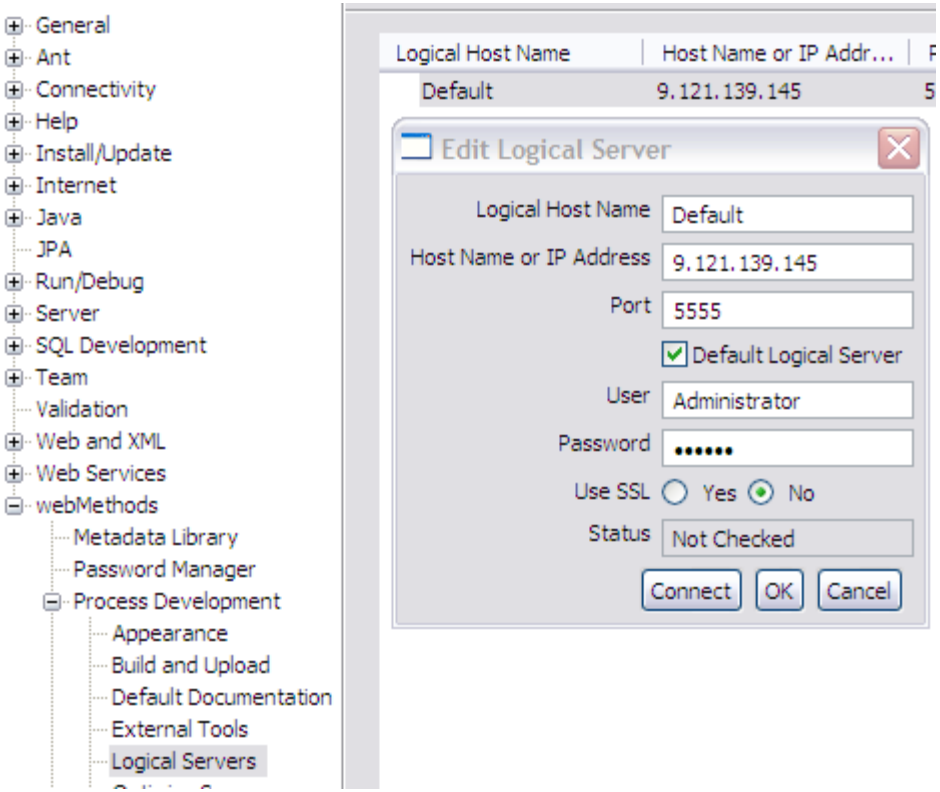


Demo - Process



Designer – Configuration & Hands on…

1) Install the Designer in your machine
2) Go to→ Windows→ Preferences→ webMethods →Logical Server (Configure the IS Credentials) and Click connect.



Designer – Configuration & Hands on…

3) Goto→Windows→Preferences→ webMethods → Process Audit Log Database

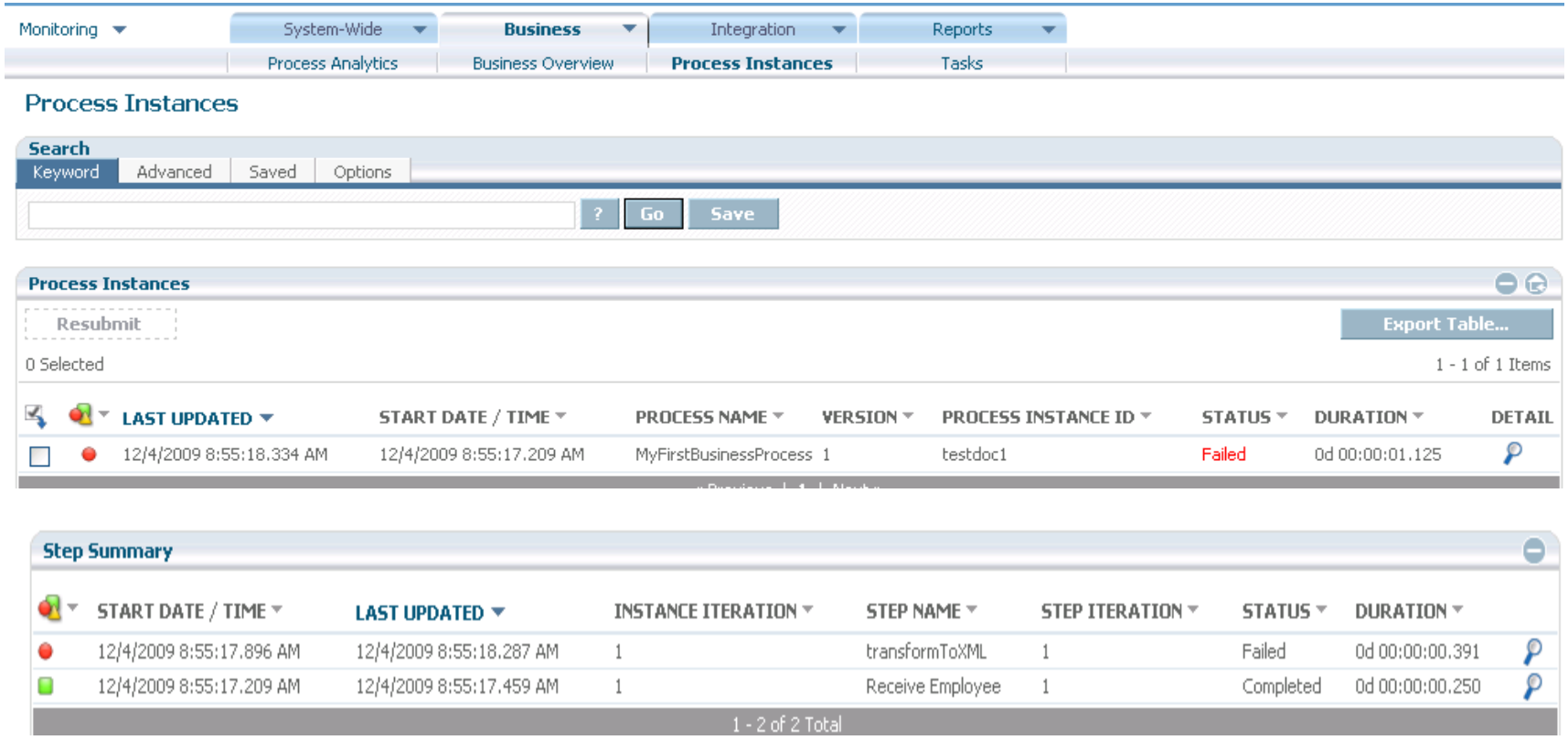
- Select the option use integration server JDBC pools.
- Select the Logical server in the pull down and do Test connection.

4) Create a Process model which subscribes employee document from the broker and send the same to trading networks.

  - Create a receive step and subscribe employee document from Broker.
  - Create send step to send document to TN
  - Add transition between receive step and send (activity) step.

Designer – Configuration & Hands on…

5) Process model after Execution:



Process Engine

The Process Engine controls the run-time execution of business processes. The Process Engine is a webMethods Integration Server package that you install on every Integration Server that is used to run steps in a business process designed in webMethods Designer.

Process Engine Services:

WmPRT\pub folder

Two types of Approach

- Top down
- Bottom up

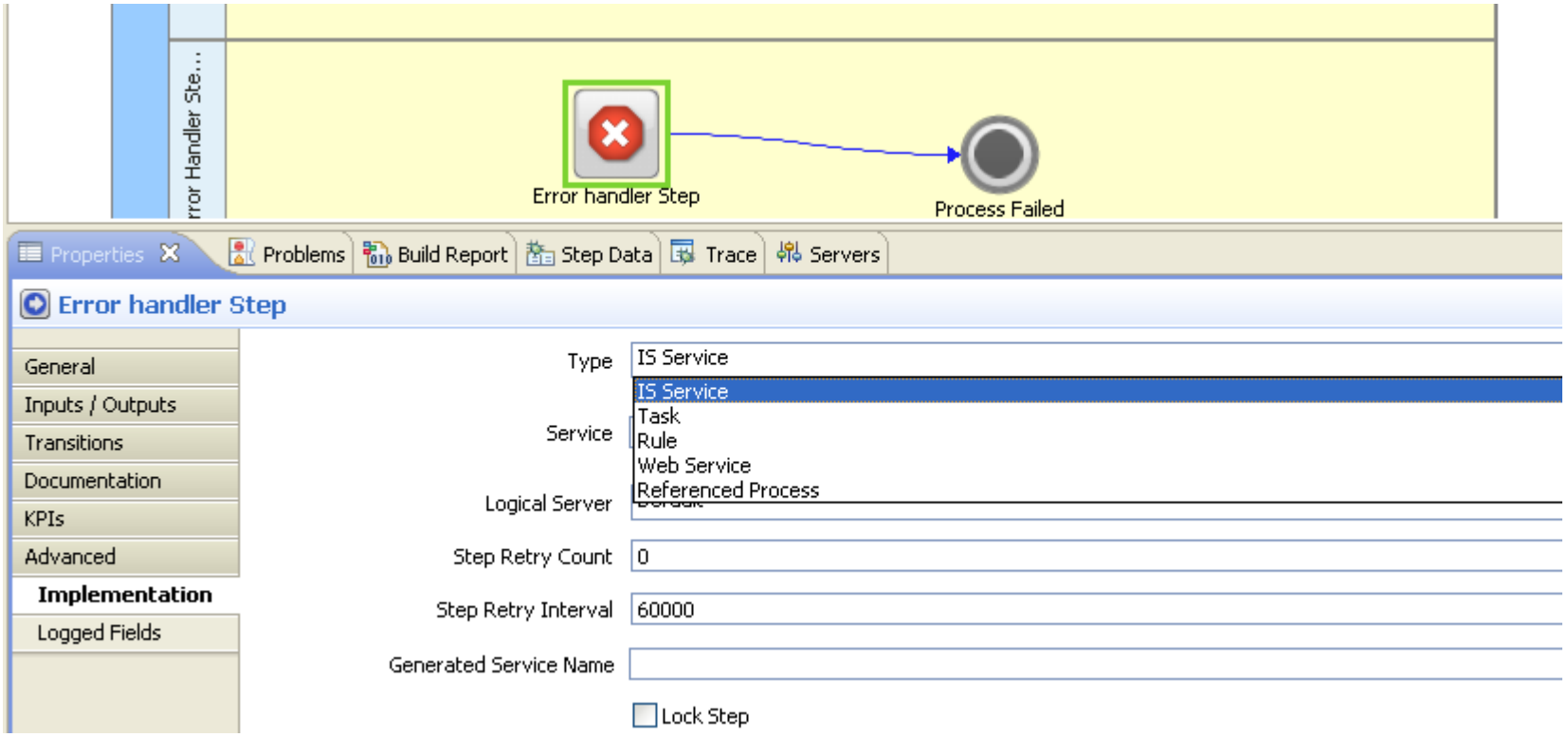
Continued…

- Top down
  - Design then Code
- Bottom up
  - Code then design

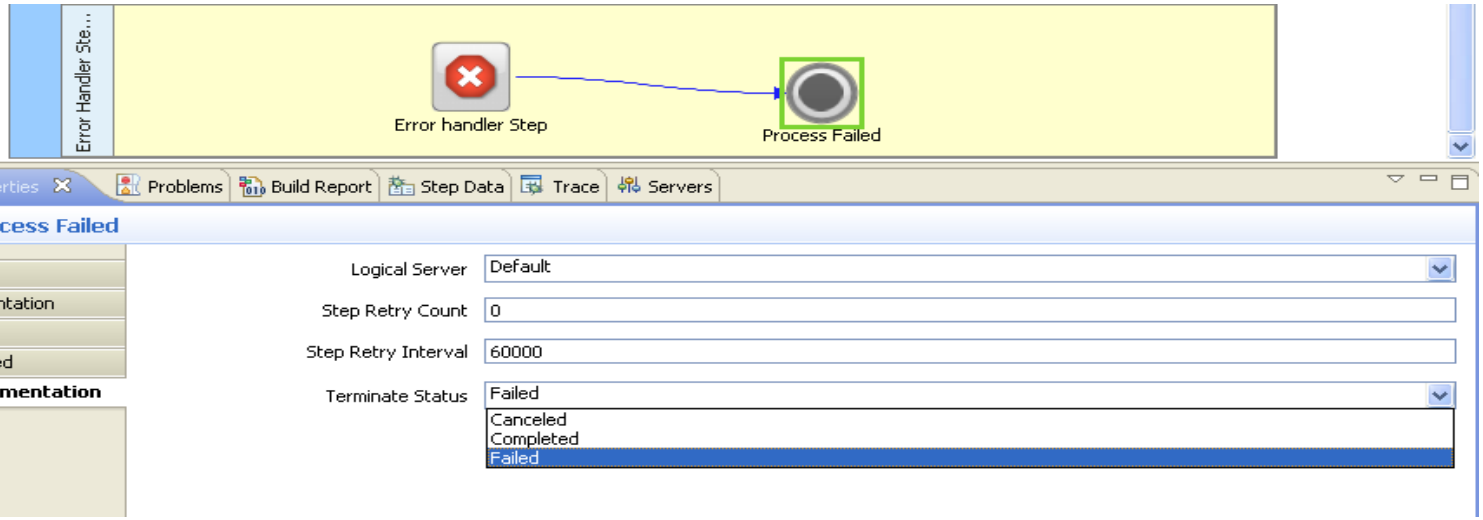
Process Run time properties

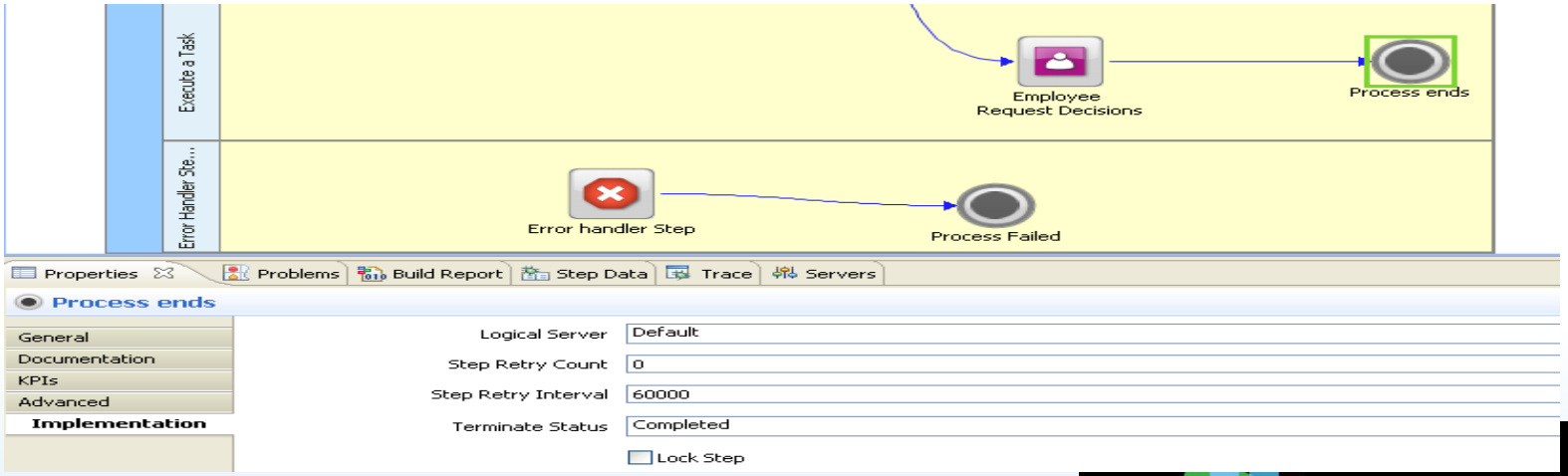
- Optimize locally → Executes adjacent steps in same IS without publishing transition documents.
- Express Pipeline → When adjacent steps are on different servers, send only partial data between those servers.
- Volatile Transition → Send process transition documents in volatile mode
- Volatile tracking → Stores process tracking information in memory.
- Minimum Logging level the → Sets the minimum logging threshold for process at run time.

Process wide error handler



Terminate steps





Error Handler service

- Don’t give any inputs to the Error Handler service.
- Go to the business process package generated in the developer after building and uploading the process.
- You can use this to get the exception and log it.

Summary

What have we learnt today ?

- BPM
- Designer
- Designer Configuration
- Creation of process
- Ending process
- Exception Handling

Q & A

Thank you