Lab Introduction

Migrating Applications from SOA Platform 5 to 6

Lab Objective

The objective of this session is to help existing SOA Platform users understand how a SOA Platform 5 application can be migrated to SOA Platform 6. By the end of the session, you will have experience with:

1. The structure and content of a SOA 6 application.
2. How SOA 5 functionality, configuration, and code maps to SOA 6.
3. Using Windup as a migration tool to help move SOA 5 applications to SOA 6.

Lab Structure

The session consists of six 'mini' labs (lab1 - lab6), which represent a before and after migration from SOA 5 to SOA 6. Each lab has its own guide and the labs can be started in any order you choose, although we recommend you do lab1 first to get your feet wet.

```
/home/lab11
    Downloads
    Servers
    Desktop/
        LabGuides/
            lab1/
            lab2/
            lab3/
            lab4/
            lab5/
            lab6/
```

Lab Key

TODO Lists

TODO

This is a TODO list, which defines tasks which you need to perform during the lab. If you see one of these on a lab slide, make sure you follow each step in the TODO list.

Lab Key

FYI Notes

FYI

This is a note which provides background on a given step in the lab or a particular configuration or code snippet.

Windup

Windup is a tool to simplify Java application migrations. The tool analyzes application artifacts (such as Java code, JSPs and XML) and produces an HTML report highlighting areas that require changes. The analyzer is driven by customizable and extendable rules to provide as much information as required to assist developers in migrating applications.

A comprehensive collection of Windup rules is available on the SOA Migration site and will be used during this lab. Each lab contains a generated report (`lab`*n*`-report.zip`) and a script (`lab`*n*`-windup.sh`) to generate your own report.

Windup Report

Main Page

windup

FYI

Migration advice for XML artifacts can be found at the top of the report. Click on the jboss-esb.xml link for details on migration tasks associated with SOA 5 application configuration.

ARTIFACT	EFFORT	HIGHLIGHTS
build.xml	0 Points	Classification: Apache Ant Configuration
deployment.xml	0 Points	
hornetq-jms.xml	0 Points	
jbm-queue-service.xml	0 Points	
jboss-esb.xml	11 Points	Convert JMS gateway listener to service binding: JMS-Gateway ESB-aware listener is no longer required: helloWorld Migrate action processing pipeline for service: SimpleListener Create component service for: SimpleListener Create composite service for service: SimpleListener Convert action class: org.jboss.soa.esb.samples.quickstart.helloworld.MyJMSListenerAction
jbossesb-properties.xml	0 Points	
log4j.xml	2 Points	Classification: Apache Log4j Configuration

Windup Report
Highlights

FYI

Highlights *provide an overview of migration tasks associated with a SOA 5 application file inventoried by Windup.*

Highlights

- Convert JMS gateway listener to service binding: JMS-Gateway
- ESB-aware listener is no longer required: helloWorld
- Migrate action processing pipeline for service: SimpleListener
- Create component service for: SimpleListener
- Create composite service for service: SimpleListener
- Convert action class: org.jboss.soa.esb.samples.quickstart.helloworld.MyJMSListenerAction

Windup Report

Notification List

FYI

Notifications *provide a task list with context-specific advice for how to migrate your SOA 5 application to SOA 6. Each link will bring you to the appropriate spot in the configuration file with inline migration advice.*

Notification

- Action : service binding configuration in jms-bus: busid="quickstartGwChannel"
- Action : service binding configuration in jms-bus: busid="quickstartEsbChannel"
- Action : composite service required for service: name="SimpleListener"
- Action : composite service binding required for listener: name="JMS-Gateway"
- Action : create component service for action processing pipeline
- Action : convert action class: class="org.jboss.soa.esb.samples.quickstart.helloworld.MyJMSListenerAction"

Windup Report

Notification

FYI

This is an example notification. Note how the notification is provided inline alongside the configuration element that needs to be migrated.

```
08.     <jms-provider name="JBossMQ" connection-factory="ConnectionFactory">
09.         <jms-bus busid="quickstartGwChannel">
```

Action : service binding configuration in jms-bus: busid="quickstartGwChannel"

A jms-bus definition can be converted to a JMS or JCA gateway binding on a composite service in SwitchYard.

If the jms-bus configuration is used for a non-gateway listener, it does not need to be migrated to SOA 6.

For additional information and tips, see the jms-bus migration microsite.

Environment Prep

- Some things have been done for you:
  - JBDS 6.0.1 pre-installed
  - File-based Maven repository configured in each lab project
  - SOA-P 6 installed and admin/guest users created
- Some things you need to do:
  - Open JBDS
  - Add the SOA-P 6 server as a runtime to JBDS
  - Adjust IDE Preferences

Open up JBDS

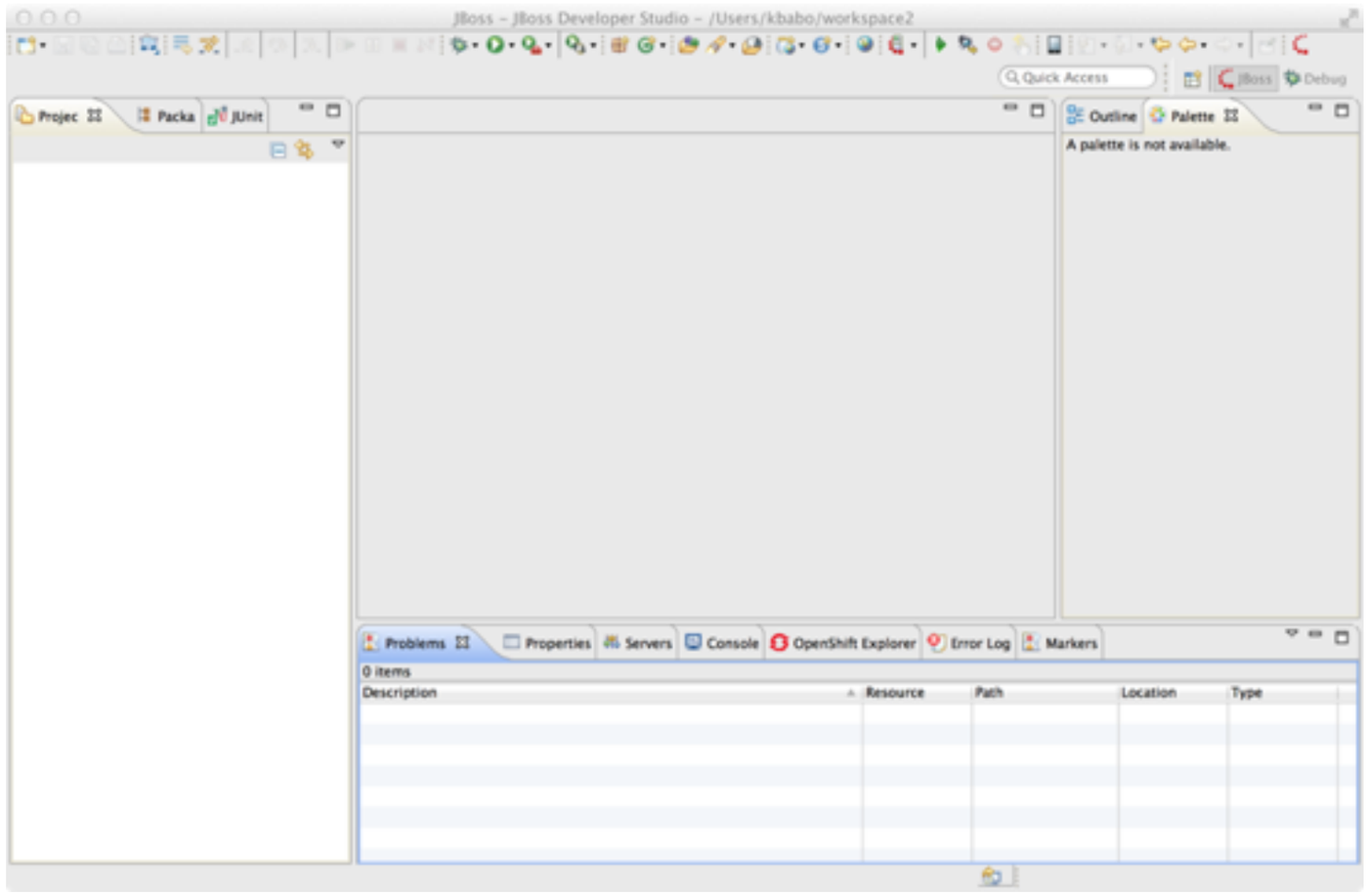
TODO

1. Open JBDS by double-clicking on the JBoss Developer Studio icon on your Desktop.

2. When prompted to select a workspace location, use the following path:

`/home/lab11/workspace`

3. Click OK

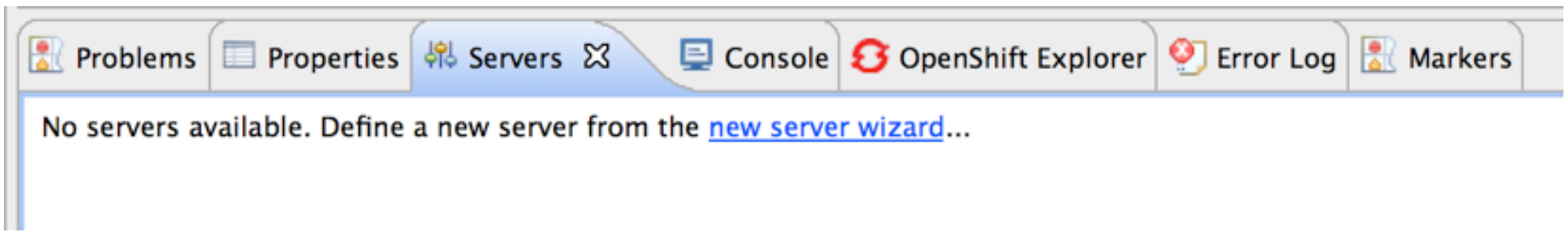


Adding a SOA 6 Server

TODO

1. Select the ‘Servers’ tab in the bottom frame of the workspace.

2. Click on ‘new server wizard ...”

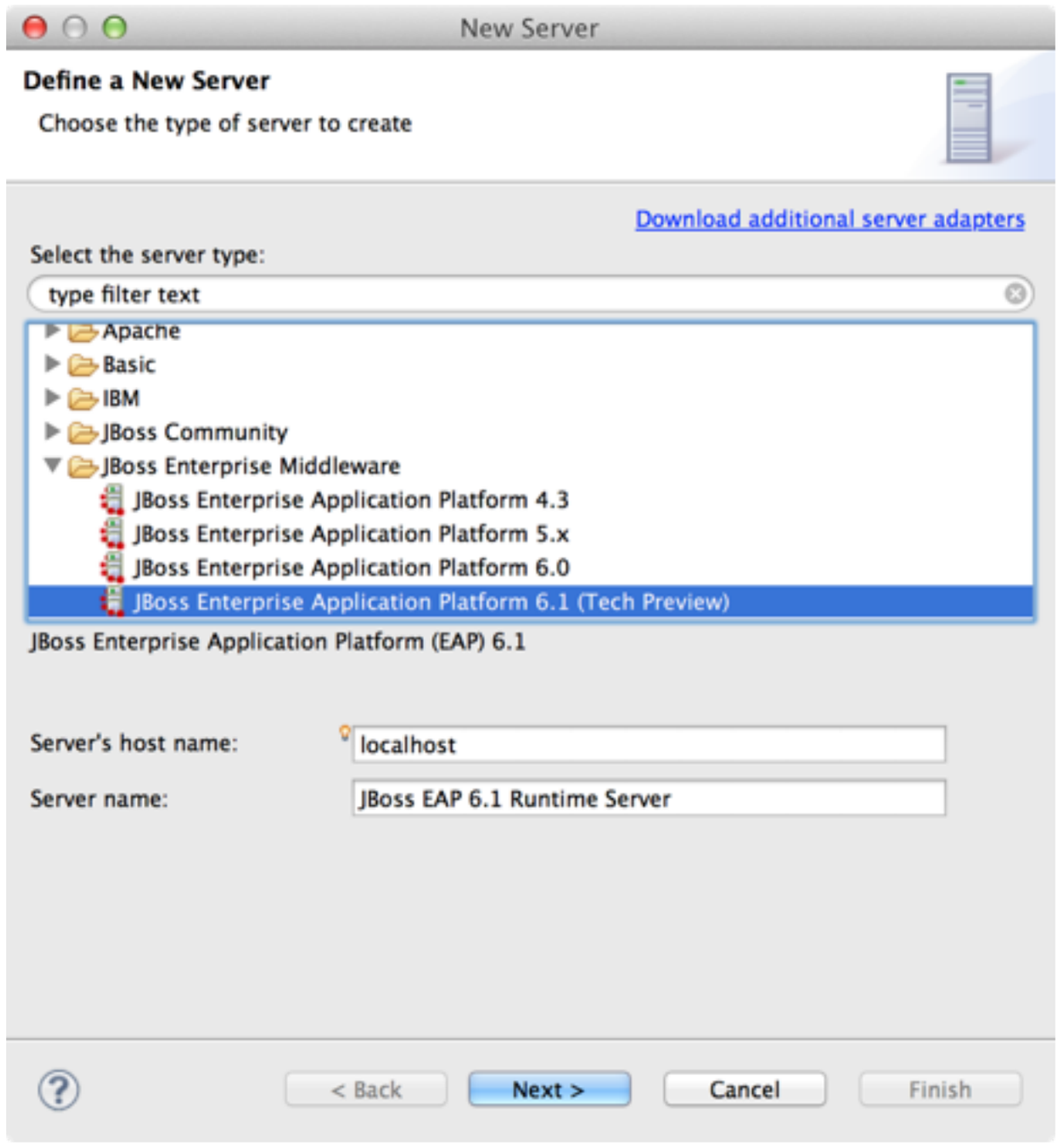


New Server

TODO

1. Select JBoss Enterprise Application Platform **6.1** (Tech Preview)

2. Click Next



New Server

TODO

1. Enter the following for Home Directory

`/home/lab11/Servers/soap-6.0-alpha`

2. Click Finish

It's Go Time

Open `LabGuides/lab1/lab1.pdf` to get started!