

Java Servlets 3.0

Lesson 02: Working with WildFly
8.x

Lesson Objectives



Configuring the Server with Eclipse Luna (4.4.x)
Understanding the Directory Structure
Deploying the Web Application on Wildfly





Steps for installing WildFly

Steps for installing WildFly

- Require JDK 7 or Higher
- Set the JAVA_HOME environment variable to the location of JDK 7 or higher or this could be done by setting the path variable.

Identify the drive/location on the system for installing WildFly



WildFly installable

Download WildFly

- Latest version can be downloaded from <http://wildfly.org/downloads>
- The zip version can be downloaded from here

Basic installation : Extracting the contents of the archive to an appropriate location identified

Follow below steps for Wildfly Eclipse Plugin:













- Select "Help->Eclipse Marketplace..." from the Eclipse menu bar. Choose "Eclipse Marketplace" if prompted for a marketplace catalog.
- Search for "JBoss Tools" and install JBoss Tools (Luna), version 4.2.x.
- Wait until "Calculating requirements..." has finished and make sure that all features are checked, then confirm.
- Accept the license agreements and click "Finish".



2.2: Understanding the Directory Structure

WildFly Directory Structure

WildFly server directory structure

Name	Date modified	Type	Size
 .installation	5/30/2014 9:54 PM	File folder	
 appclient	2/24/2015 4:26 PM	File folder	
 bin	2/24/2015 4:26 PM	File folder	
 docs	2/24/2015 4:26 PM	File folder	
 domain	2/24/2015 4:26 PM	File folder	
 modules	2/24/2015 4:26 PM	File folder	
 standalone	2/24/2015 4:28 PM	File folder	
 welcome-content	2/24/2015 4:26 PM	File folder	
 copyright.txt	5/30/2014 9:54 PM	TXT File	3 KB
 jboss-modules.jar	5/30/2014 9:54 PM	Executable Jar File	347 KB
 LICENSE.txt	5/30/2014 9:54 PM	TXT File	26 KB
 README.txt	5/30/2014 9:54 PM	TXT File	3 KB



2.2: Understanding the Directory Structure

WildFly Directory Structure

Standalone Directory Structure

In "*standalone*" mode each WildFly 8 server instance is an independent process. The configuration files, deployment content and writable areas used by the single standalone server run from a WildFly installation.



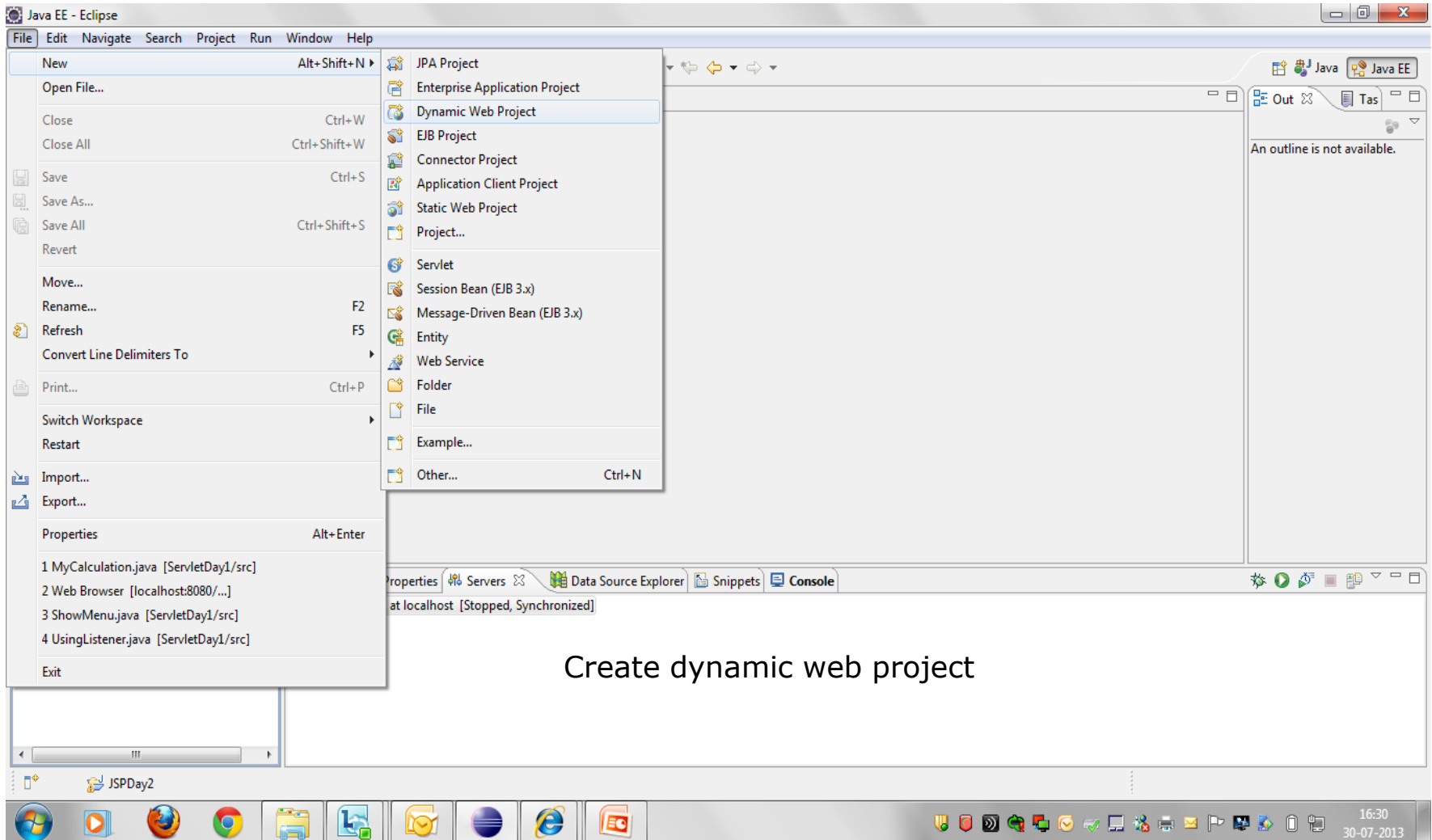
WildFly Configurations

Standalone Server Configurations

- standalone.xml (default)
 - Java Enterprise Edition 7 web profile certified configuration with the required technologies
- standalone-ha.xml
 - Java Enterprise Edition 7 web profile certified configuration with high availability
- standalone-full.xml
 - Java Enterprise Edition 7 full profile certified configuration including all the required EE 7 technologies
- standalone-full-ha.xml
 - Java Enterprise Edition 7 full profile certified configuration with high availability

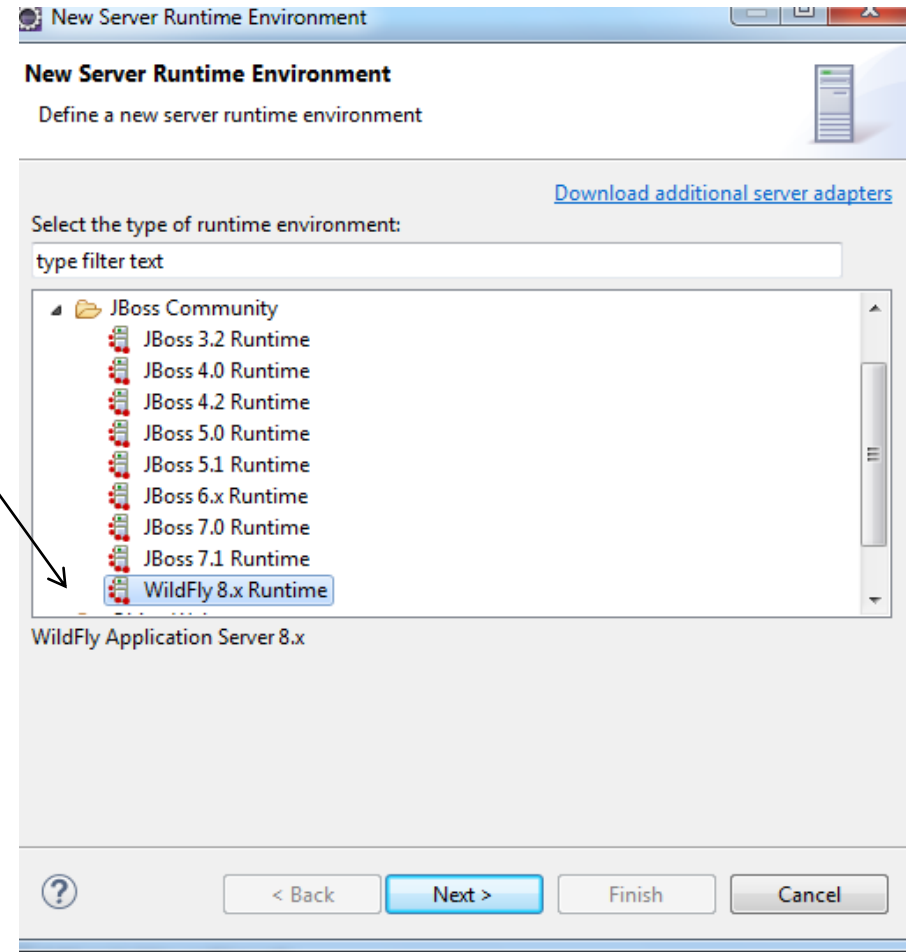
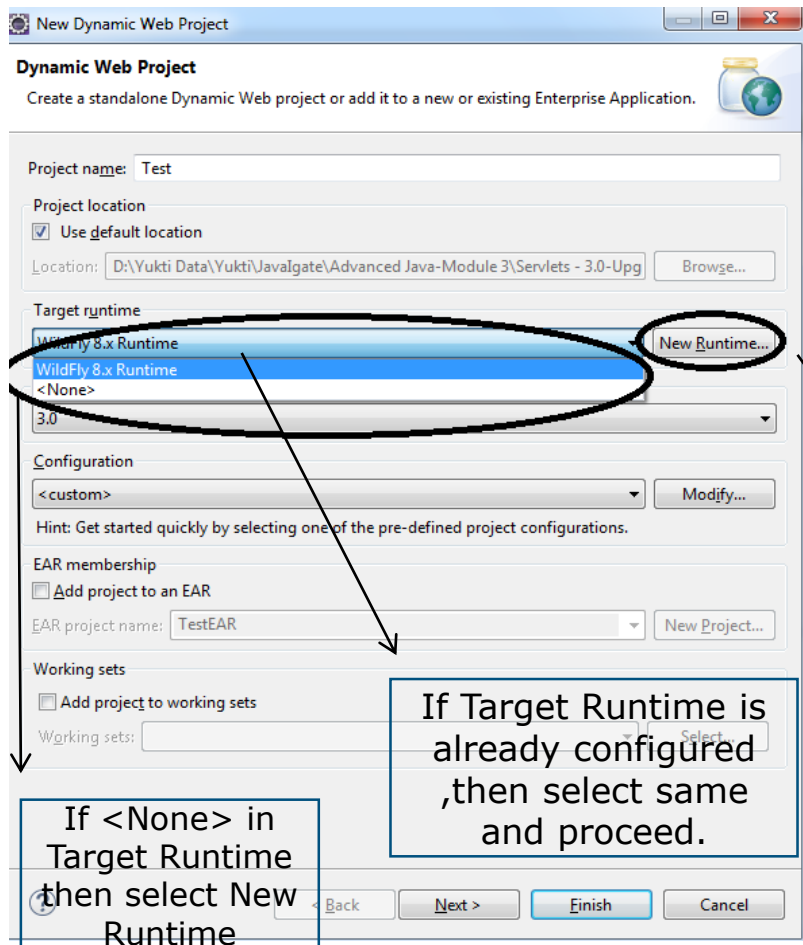


2.3: Deploying the Web Application on Wildfly Using WildFly in Eclipse environment





2.3: Deploying the Web Application on Wildfly Using WildFly in Eclipse environment





2.3: Deploying the Web Application on Wildfly

Using WildFly in Eclipse environment

Select WildFly folder

New Server Runtime Environment

JBoss Runtime

This runtime type requires a JDK. The current default VM for this server's execution environment is not recognized as a JDK.

JBoss
by Red Hat

A JBoss Server runtime references a JBoss installation directory. It can be used to set up classpaths for projects which depend on this runtime, as well as by a "server" which will be able to start and stop instances of JBoss.

Name
WildFly 8.x Runtime 1

Home Directory [Download and install runtime...](#)
D:\wildfly-8.1.0.Final

Runtime JRE
☒ Execution Environment: JavaSE-1.8
☐ Alternate JRE: jre1.8.0_20

Configuration base directory: standalone
Configuration file: standalone.xml



2.3: Deploying the Web Application on Wildfly Using WildFly in Eclipse environment

Click Next > Next > on this screen

New Dynamic Web Project

Create a standalone Dynamic Web project or add it to a new or existing Enterprise Application.

Project name:

Project location

☒ Use default location

Location:

Target runtime

Dynamic web module version

2.2
2.3
2.4
2.5
3.0
3.1

EAR membership

☐ Add project to an EAR

EAR project name:

Working sets

☐ Add project to working sets

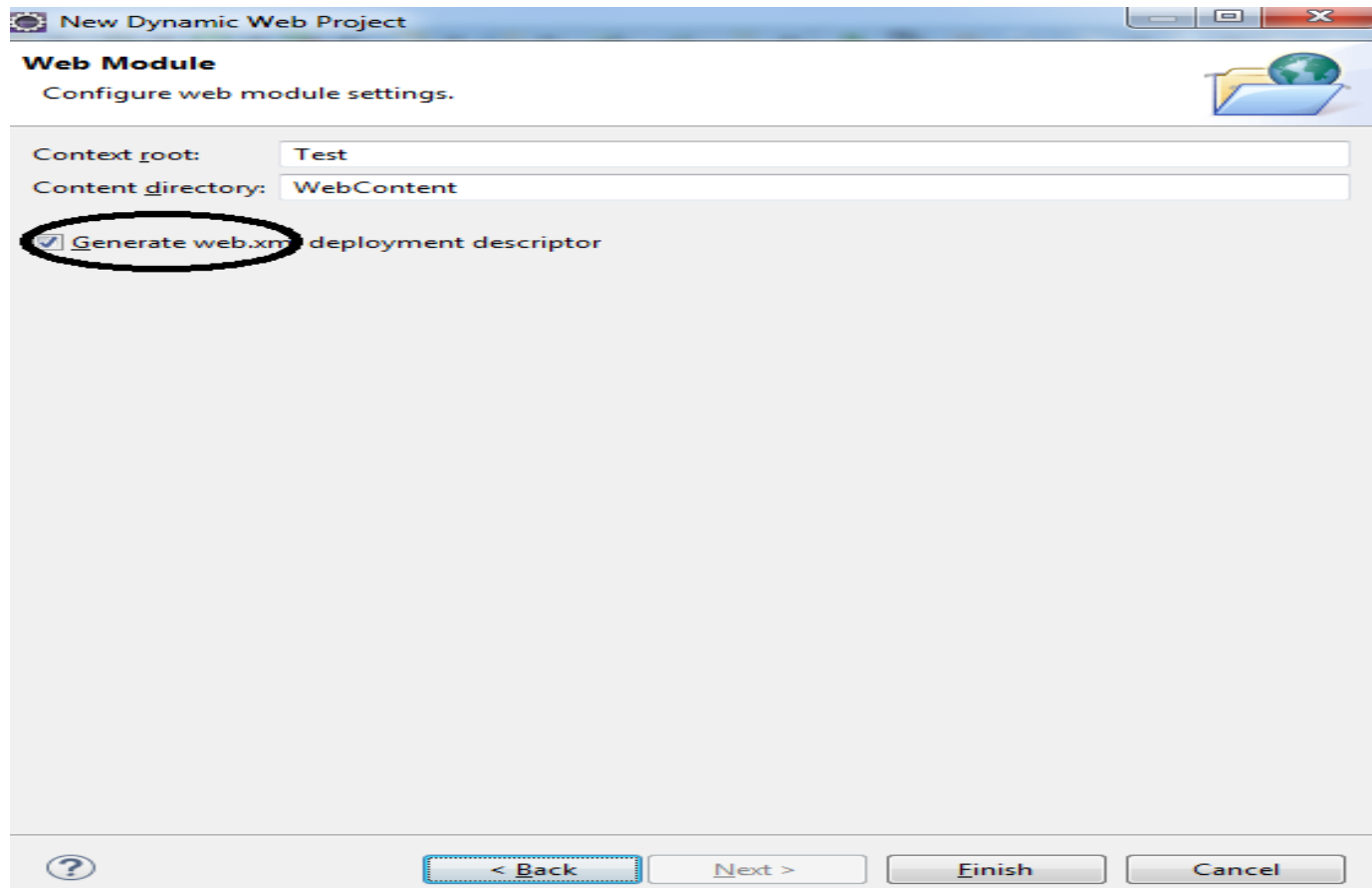
Working sets:



2.3: Deploying the Web Application on Wildfly

Using WildFly in Eclipse environment

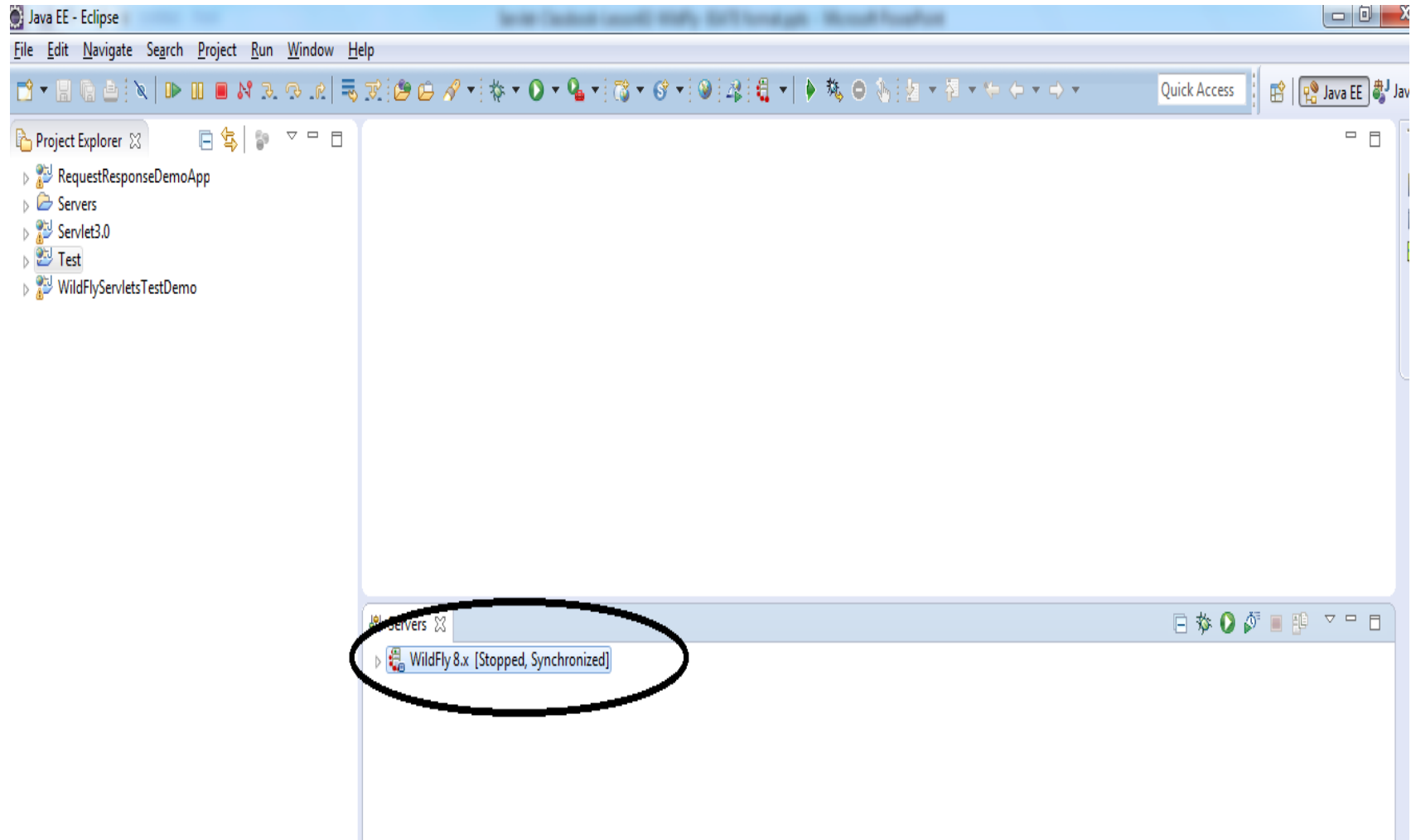
Click on check box for web.xml and then on Finish





2.3: Deploying the Web Application on Wildfly

Using WildFly in Eclipse environment





2.3: Deploying the Web Application on Wildfly

Using WildFly in Eclipse environment

The screenshot shows the Eclipse IDE with the 'WildFly 8.x' configuration page open. The 'Project Explorer' on the left shows a project named 'RequestResponseDemoApp' with sub-projects 'Servers', 'Servlet3.0', 'Test', and 'WildFlyServletsTestDemo'. The main configuration area is titled 'Overview' and contains several sections:

- General Information**: Specifies the host name and other common settings. Fields include 'Server name' (WildFly 8.x), 'Host name' (localhost), and 'Runtime Environment' (WildFly 8.x Runtime).
- Management Login Credentials**: Set the management login and password for your server. Fields include 'User Name' (admin) and 'Password' (masked).
- Server Behavior**: Includes a 'Behavior Profile' dropdown set to 'Local (Use Management Operations)' and checkboxes for 'Server is externally managed', 'Listen on all interfaces', and 'Expose your management port'.
- Publishing**: Includes 'Timeouts' and 'Deployment Scanners'.
- Application Reload Behavior**: Customizes application reload behavior on changes to project resources. Includes a checkbox for 'Use default pattern' and a text field for the regex pattern.
- Server State Detectors**: Includes 'Startup Poller' and 'Shutdown Poller' dropdowns, both set to 'Management Service'.
- Server Ports**: This section is circled in black. It includes a description: 'The ports entered here are which ports the tools will poll the server on. Changing these fields will not change the ports the server itself listens on.' It also has fields for 'Port Offset' (0) and 'Web' (9090), both with checkboxes for 'Detect from Local Runtime' and 'Configure...' links.

The bottom of the window shows tabs for 'Overview' and 'Deployment'.



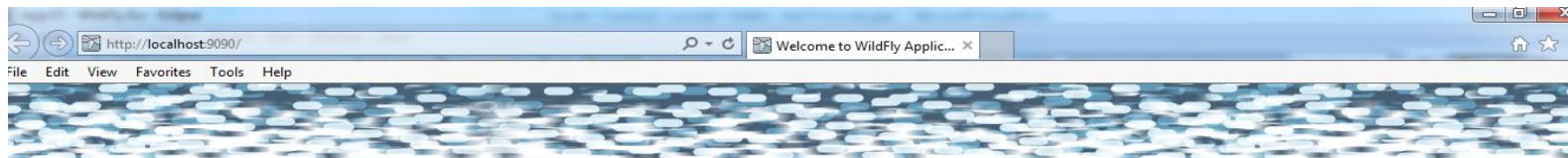
2.3: Deploying the Web Application on Wildfly

WildFly - Home Page

Start the WildFly server

The home page of WildFly can be accessed by specifying the URL <http://localhost:9090/>.

The home page can be seen



Welcome to WildFly 8

Your WildFly 8 is running.

[Documentation](#) | [Quickstarts](#) | [Administration Console](#)

[WildFly Project](#) | [User Forum](#) | [Report an issue](#)



| [JBoss Community](#)

Summary



Installing WildFly
Accessing the WildFly Homepage





Review Questions

Question 1: If an independent instance of WildFly required then which mode should be selected

- Option 1: Basic
- Option 2: Domain
- Option 3: Standalone
- Option 4: None of the above

Question 2: All configuration information for running the server is located here and it is single place for configuration modifications for the standalone server

- Option 1: data
- Option 2: configuration
- Option 3: log
- Option 4: conf

