Building A Continuuity Reactor Application

Module Objectives

In this module, you will learn how to:

- Use the Continuuity Reactor `maven` archetype
- Build a Continuuity Reactor Application
- Deploy and run the application

Using the Reactor Maven Archetype

This Maven archetype generates a Reactor application Java project with the proper dependencies and sample code as a base to start writing your own Big Data application

To generate a new project, execute the following command:

```
$ mvn archetype:generate \
  -DarchetypeCatalog=http://tinyurl.com/ndoa5l2 \
  -DarchetypeGroupId=com.continuuity \
  -DarchetypeArtifactId=reactor-app-archetype \
  -DarchetypeVersion=2.1.0
```

This can take a moment or two to start downloading...

Specifying the Maven Properties

- In the interactive shell that appears, specify basic properties for the new project
- After entering the *groupId* and the *artifactId*, accept the defaults for the other properties
- *groupId* could be `com.example`
- *artifactId* (the project name) could be `BigDataApp`
- Enter `Y` or press `Enter` to accept the default or results

Specifying the Maven Properties

Entering *groupId* as `com.example` and *artifactId* as `BigDataApp`:

```
Define value for property 'groupId': : com.example
Define value for property 'artifactId': : BigDataApp
Define value for property 'version': 1.0-SNAPSHOT: :
Define value for property 'package': com.example: :
Confirm properties configuration:
groupId: com.example
artifactId: BigDataApp
version: 1.0-SNAPSHOT
package: com.example
Y: : Y
```

Building the Project

- After you confirm the settings, the directory `BigDataApp` is created under the current directory
- To build the project:

```
$ cd BigDataApp
$ mvn clean package
```

- Creates `BigDataApp-1.0-SNAPSHOT.jar` in the target directory
- This JAR file is a skeleton Reactor application that is ready to be edited
- When finished and compiled, deploy it by dragging and dropping it on the Reactor Dashboard

Now, what to put in that JAR file…

Opening in IntelliJ

- You can open the resulting project in IntelliJ
- From within IntelliJ, `File > Open` and navigate to the `pom.xml` file within `BigDataApp` directory
- IntelliJ will then open the maven project
- The source code will be in `src > main > java > com.example > WordCountApp`

Module Summary

You should now be able to:

- Use the Continuuity Reactor `maven` archetype
- Create a simple Continuuity Reactor Application
- Open it in an IDE
- Deploy and run it in the Reactor

Module Completed

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