1. Goals

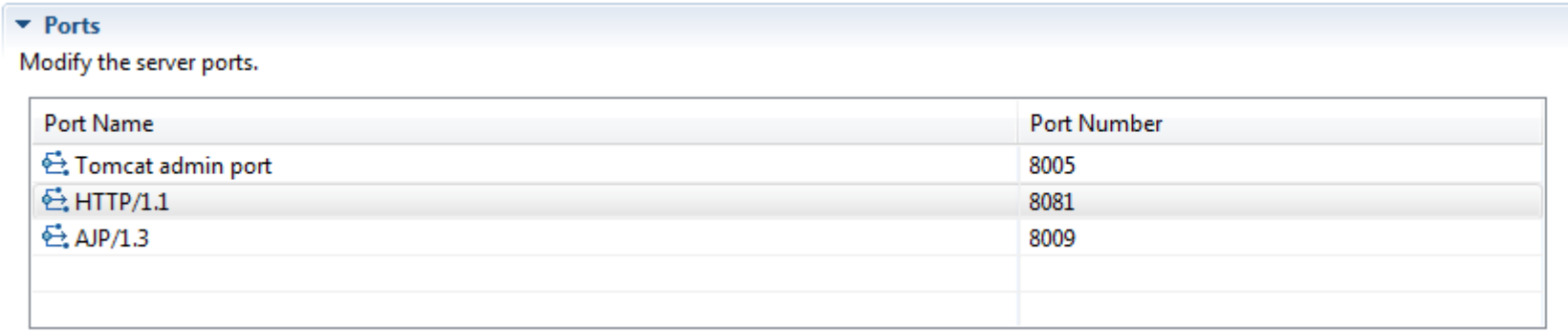
Learn how to run / deploy the application in a wide variety of useful ways

2. Lesson Notes

Deploy via Eclipse into Tomcat

First, we'll download Tomcat 8 (the latest 8.0.x version is recommended) and set it up as a Server in Eclipse.

After defining the server within Eclipse, note that you can also change the default HTTP port - which is 8080 - to, for example 8081 or 8082:



This is of course an optional step - depending on what port you want to use locally.

Keep in mind that, even though this is a Spring Boot enabled app, the port we have configured in *application.properties* isn't used here because we're not running it as a Boot application (see below for how to do that), so we need control the port manually.

To consume the API: http://localhost:8081/um-webapp/api/roles

Deploy Spring Boot App with Maven

- Spring Boot Traditional Deployment

A quick solution to deploy:

```
mvn spring-boot:run
```

We have Boot configured to run on port 8082; so, you can consume the API here:

http://localhost:8082/api/roles

Notice how, as opposed to the Eclipse or Cargo based deployments, **Spring Boot deployes the application at the ROOT level**, so the URL doesn't contain the */um-webapp*

Additionally, if you need to run the executable war from command line, you'll need to add the Spring Boot plugin to your *pom*:

```
<plugin>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-maven-plugin</artifactId>
    <executions>
        <execution>
            <goals>
                <goal>repackage</goal>
            </goals>
        </execution>
    </executions>
</plugin>
```

Deploy via the Maven cargo plugin

- Cargo - the framework

- Cargo - the Maven plugin

Consume the API: http://localhost:8082/um-webapp/api/roles

Deploy the Boot App Directly via the IDE

Eclipse STS has first-class support for Spring Boot, and supports deploying a Boot application directly, with no separate server.

IntelliJ also has solid support for Spring Boot. Note that there's a known issue (and discussion on StackOverflow) related to deploying Boot applications. Actually, the core issue is related to Maven and dependencies marked as *provided* - which we're using here.

Other Deployment possibilities

- the Jetty maven plugin

- the Tomcat maven plugin