

## Chapter - Integrating Web Services with Tomcat

### Objectives

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- At the end of this chapter you will be able to understand
  - ♦ How to run the Axis server inside Tomcat

## Axis server as a mini-web server

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- Up until now we've been running the Axis server as a separate process listening for SOAP messages in HTTP requests on port 8080. Essentially it is acting as a mini-web server.
- If we're already running a web server such as Tomcat, we probably want to run the Axis server as a web application in Tomcat.

3



## Running the Axis server inside Tomcat

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- Go to <http://ws.apache.org/axis2> to download the "WAR (Web Archive) Distribution" which is a zip file.
- After unzipping it we will get the couple of files.
- The only important file there is the *axis2-1.4.war* file. To install it into Tomcat, copy it into `<CATALINA_HOME>\webapps`.
- Then start Tomcat by running *startup.bat*. we should see:

4



## Running the Axis server inside Tomcat

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```
INFO: Deploying web application archive axis2.war
[INFO] Deploying module: addressing-1.3
[INFO] Deploying module: script-1.3
[INFO] Deploying module: metadataExchange-1.3
[INFO] Deploying module: ping-1.3
[INFO] Deploying module: soapmonitor-1.3
[INFO] script module activated
[INFO] Deploying Web service: version-1.3.aar
Dec 16, 2007 11:50:16 AM org.apache.coyote.http11.Http11Protocol start
INFO: Starting Coyote HTTP/1.1 on http-8080
Dec 16, 2007 11:50:16 AM org.apache.jk.common.ChannelSocket init
INFO: JK: ajp13 listening on /0.0.0.0:8009
Dec 16, 2007 11:50:16 AM org.apache.jk.server.JkMain start
INFO: Jk running ID=0 time=0/32 config=null
Dec 16, 2007 11:50:16 AM org.apache.catalina.startup.Catalina start
INFO: Server startup in 35270 ms
```

5

**seed**  
beyond the obvious

## Running the Axis server inside Tomcat

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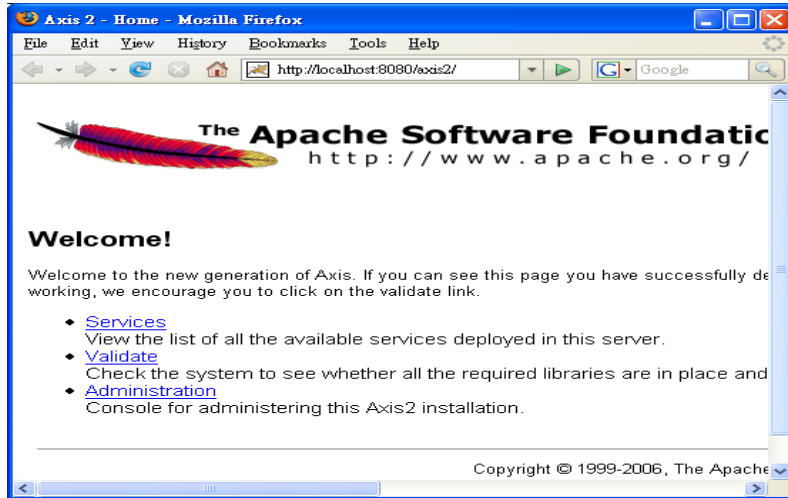
- To further check that the Axis server is running, go to <http://localhost:8080/axis2>
- in a browser. we should see:

6

**seed**  
beyond the obvious

## Running the Axis server inside Tomcat

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7

seed  
beyond the obvious

## Running the Axis server inside Tomcat

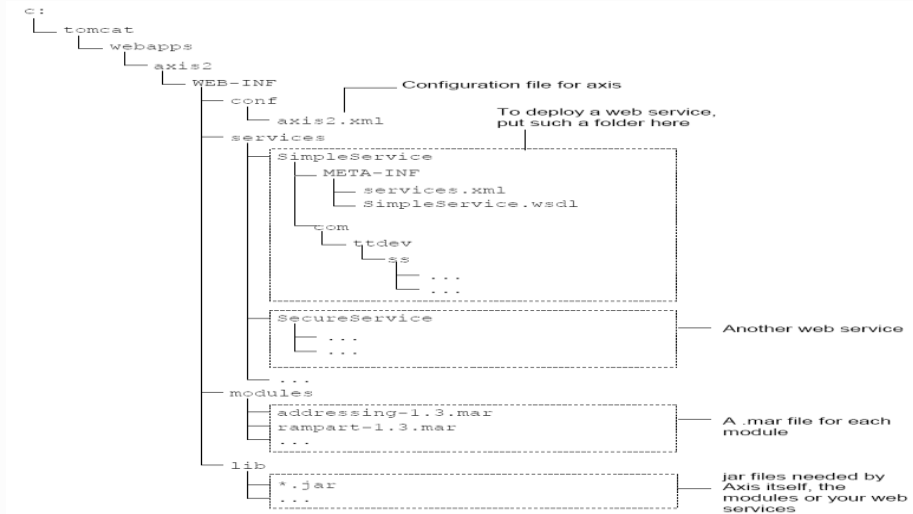
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- Check `<CATALINA_HOME>\webapps`, we should see that there is an `axis2` folder created with the following structure:

8

seed  
beyond the obvious

## Running the Axis server inside Tomcat



9

seed  
beyond the obvious

## Running the Axis server inside Tomcat

- Restart Tomcat for the changes to take effect. Run a client such as the *SimpleClient* and it should continue to work.

10

seed  
beyond the obvious

## Quick Recap . . .

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- The Axis server can be run inside Tomcat as a web application.
- This is most useful when we are already running Tomcat.