

Lab 10: Spring Boot Actuators























Create another **Spring Starter Project** and name it `chapter2.bootactuator`. This time, select **Web** and **Actuators** under **Ops**. Similar to the `chapter2.bootrest` project, add a `GreeterController` endpoint with the `greet` method.

Start the application as Spring Boot app.

Point the browser to `localhost:8080/actuator`. This will open the HAL browser.

Then, review the **Links** section.

A number of links are available under the **Links** section. These are automatically exposed by the Spring Boot actuator:

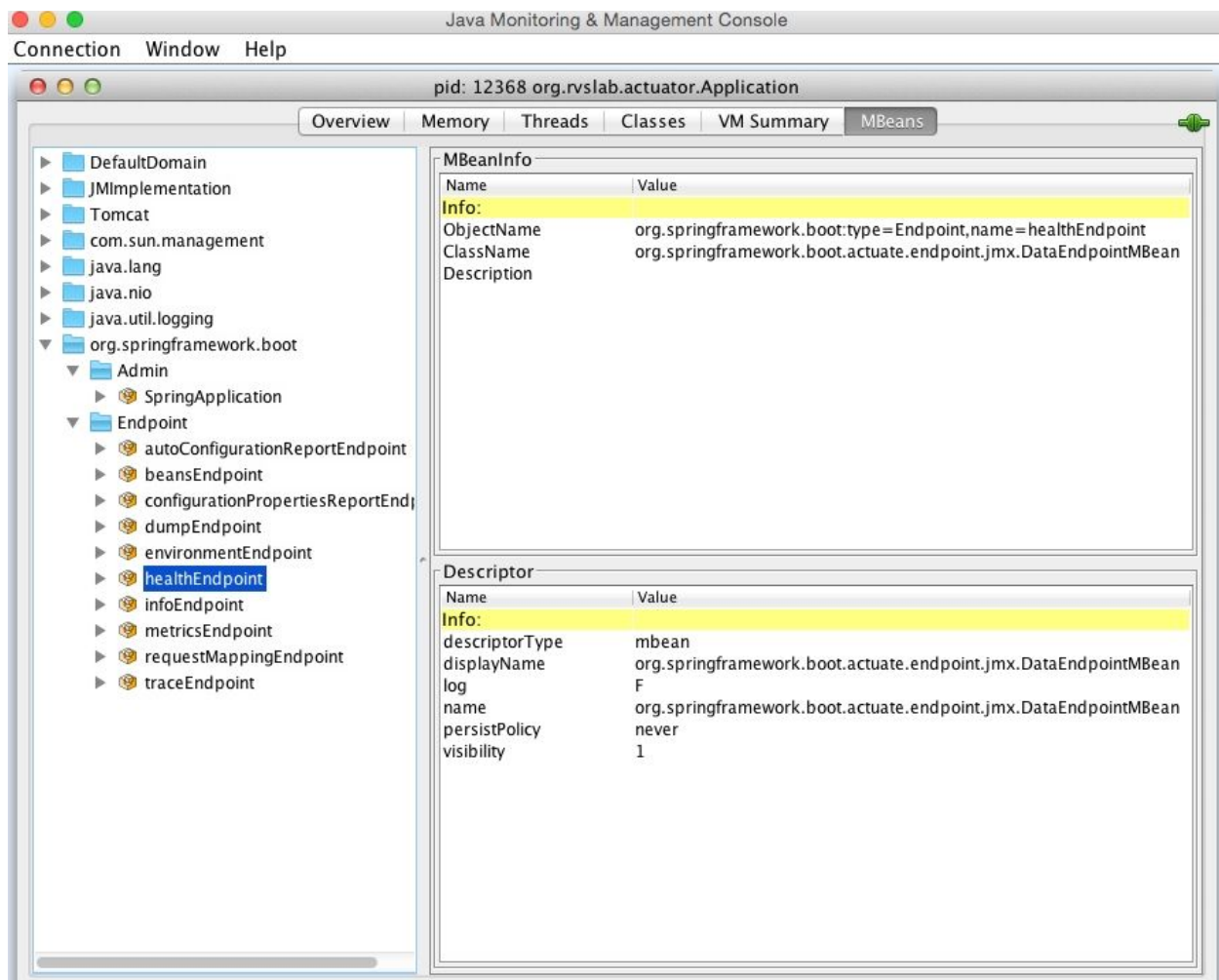
Links					
rel	title	name / index	docs	GET	NON-GET
self					
dump					
configprops					
env					
mappings					
info					
health					
autoconfig					
metrics					
trace					
beans					

Some of the important links are listed as follows:

- `dump`: This performs a thread dump and displays the result
- `mappings`: This lists all the HTTP request mappings
- `info`: This displays information about the application
- `health`: This displays the application's health conditions
- `autoconfig`: This displays the autoconfiguration report
- `metrics`: This shows different metrics collected from the application

Monitoring using JConsole

Alternately, we can use the JMX console to see the Spring Boot information. Connect to the remote Spring Boot instance from JConsole. The Boot information will be shown as follows:



Monitoring using SSH

Spring Boot provides remote access to the Boot application using SSH. The following command connects to the Spring Boot application from a terminal window:

```
$ ssh -p 2000 user@localhost
```

The password can be customized by adding the `shell.auth.simple.user.password` property in the `application.properties` file. The updated `application.properties` file will look similar to the following:

```
shell.auth.simple.user.password=admin
```

When connected with the preceding command, similar actuator information can be accessed. Here is an example of the metrics information accessed through the CLI:

- `help`: This lists out all the options available
- `dashboard`: This is one interesting feature that shows a lot of system-level information