

COMUNICACIÓN ENTRE MICROSERVICIOS: ASINCRÓNICA CON SPRING BOOT Y RABBITMQ (USANDO JSON)



Jesús Estenllos Loaiza Serrano 2313021

Desarrollo de Software III

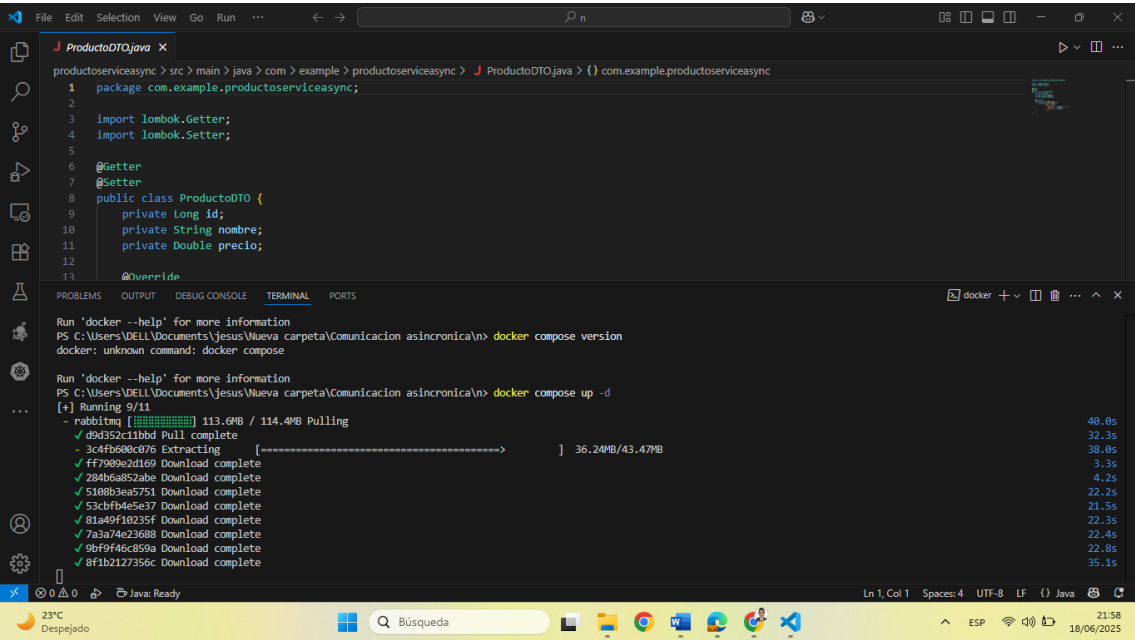
Docente: Ing. Álvaro Salazar

Grupo 50

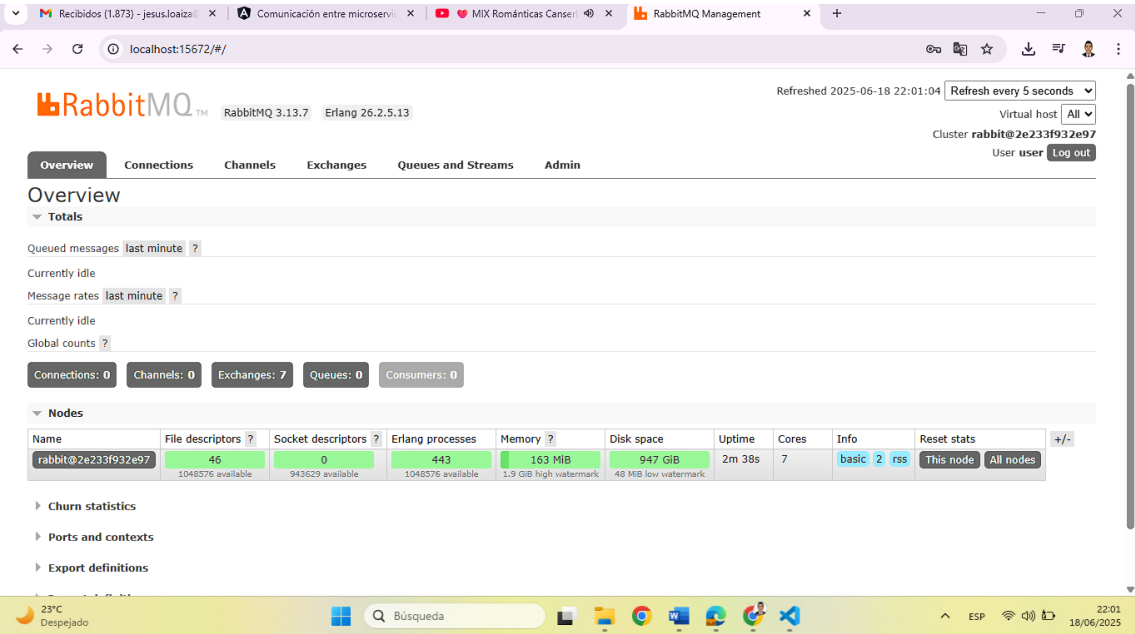
Sede Tuluá

17/06/2025

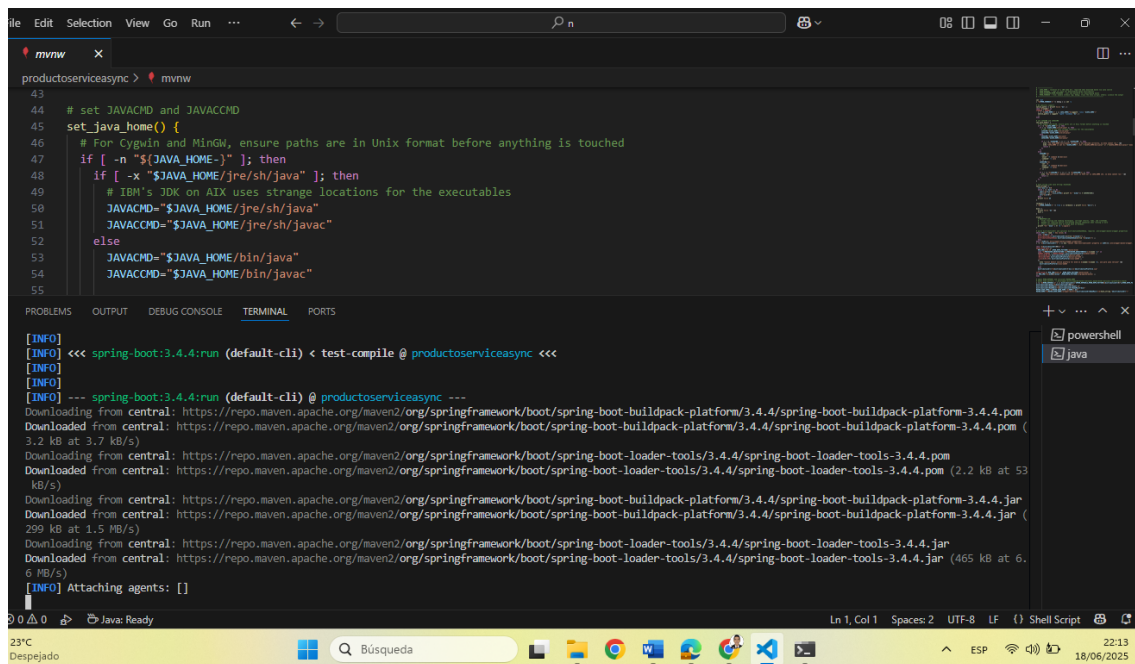
Levantamos el contenedor



Verificamos con el usuario y la contraseña



Levantamos ambos servicios servicios

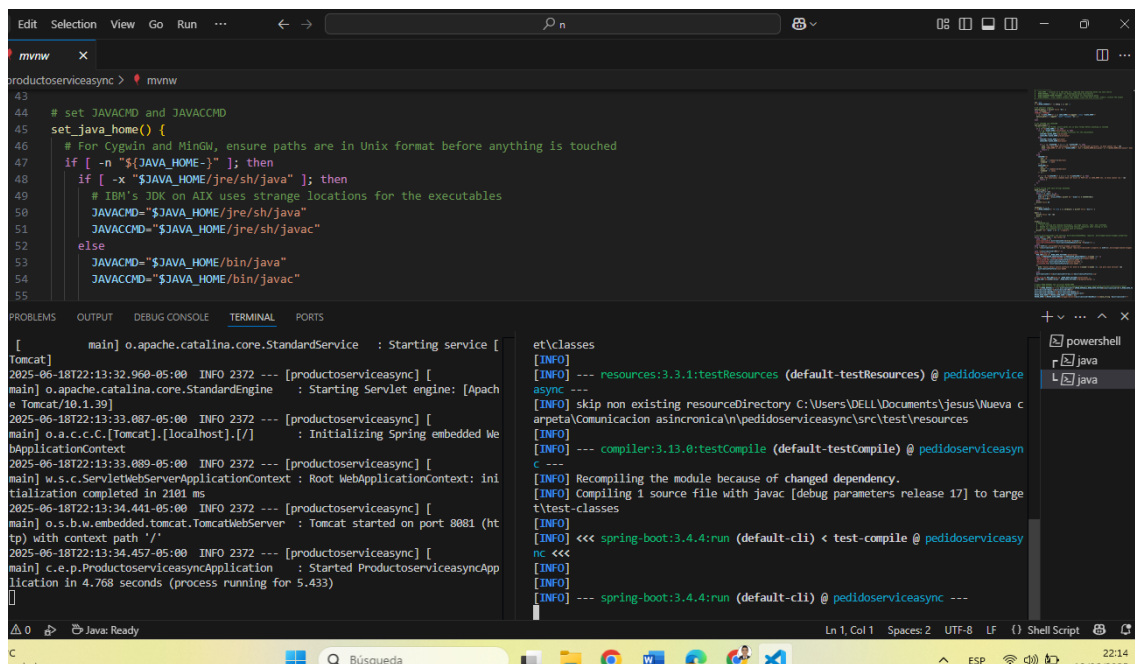


The screenshot shows an IDE window with a file named `mvnw` open. The script content is as follows:

```
productoserviceasync > mvnw
43
44 # set JAVA_CMD and JAVAC_CMD
45 set java_home() {
46 # For Cygwin and MinGW, ensure paths are in Unix format before anything is touched
47 if [ -n "${JAVA_HOME-}" ]; then
48 if [ -x "${JAVA_HOME}/jre/sh/java" ]; then
49 # IBM's JDK on AIX uses strange locations for the executables
50 JAVAC_CMD="${JAVA_HOME}/jre/sh/java"
51 JAVAC_CMD="${JAVA_HOME}/jre/sh/javac"
52 else
53 JAVAC_CMD="${JAVA_HOME}/bin/java"
54 JAVAC_CMD="${JAVA_HOME}/bin/javac"
55 }
```

The terminal output shows the following information:

```
[INFO] <<< spring-boot:3.4.4:run (default-cli) < test-compile @ productoserviceasync <<<
[INFO]
[INFO]
[INFO] --- spring-boot:3.4.4:run (default-cli) @ productoserviceasync ---
Downloading from central: https://repo.maven.apache.org/maven2/org/springframework/boot/spring-boot-buildpack-platform/3.4.4/spring-boot-buildpack-platform-3.4.4.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/boot/spring-boot-buildpack-platform/3.4.4/spring-boot-buildpack-platform-3.4.4.pom (3.2 kB at 3.7 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/springframework/boot/spring-boot-loader-tools/3.4.4/spring-boot-loader-tools-3.4.4.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/boot/spring-boot-loader-tools/3.4.4/spring-boot-loader-tools-3.4.4.pom (2.2 kB at 53 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/springframework/boot/spring-boot-buildpack-platform/3.4.4/spring-boot-buildpack-platform-3.4.4.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/boot/spring-boot-buildpack-platform/3.4.4/spring-boot-buildpack-platform-3.4.4.jar (299 kB at 1.5 MB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/springframework/boot/spring-boot-loader-tools/3.4.4/spring-boot-loader-tools-3.4.4.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/boot/spring-boot-loader-tools/3.4.4/spring-boot-loader-tools-3.4.4.jar (465 kB at 6.6 MB/s)
[INFO] Attaching agents: []
```



The screenshot shows the same IDE window with the `mvnw` script. The terminal output shows the following information:

```
[main] o.apache.catalina.core.StandardService : Starting service [Tomcat]
2025-06-18T22:13:32.968-05:00 INFO 2372 --- [productoserviceasync] [main] o.apache.catalina.core.StandardEngine : Starting Servlet engine: [Apache Tomcat/10.1.39]
2025-06-18T22:13:33.887-05:00 INFO 2372 --- [productoserviceasync] [main] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring embedded WebApplicationContext
2025-06-18T22:13:33.889-05:00 INFO 2372 --- [productoserviceasync] [main] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: initialization completed in 2101 ms
2025-06-18T22:13:34.441-05:00 INFO 2372 --- [productoserviceasync] [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port 8081 (http) with context path '/'
2025-06-18T22:13:34.457-05:00 INFO 2372 --- [productoserviceasync] [main] c.e.p.ProductoserviceasyncApplication : Started ProductoserviceasyncApplication in 4.768 seconds (process running for 5.433)
```

The terminal output also shows the following information:

```
et\classes
[INFO] --- resources:3.3.1:testResources (default-testResources) @ pedidoserviceasync ---
[INFO] skip non existing resourceDirectory C:\Users\DELL\Documents\jesus\Nueva carpeta\Comunicacion asincronica\n\pedidoserviceasync\src\test\resources
[INFO] --- compiler:3.13.0:testCompile (default-testCompile) @ pedidoserviceasync ---
[INFO] Recompiling the module because of changed dependency.
[INFO] Compiling 1 source file with javac [debug parameters release 17] to target\test-classes
[INFO] <<< spring-boot:3.4.4:run (default-cli) < test-compile @ pedidoserviceasync <<<
[INFO]
[INFO]
[INFO] --- spring-boot:3.4.4:run (default-cli) @ pedidoserviceasync ---
```

Y mandamos una lista de productos desde producto-service. Por ejemplo, con curl

```

Edit Selection View Go Run ...
productoserviceasync > mvnw
43
44 # set JAVACMD and JAVACMD
45 set java_home() {
46 # For Cygwin and MinGW, ensure paths are in Unix format before anything is touched
47 if [ -n "${JAVA_HOME-}" ]; then
48 if [ -x "${JAVA_HOME/jre/sh/java}" ]; then
49 # IBM's JDK on AIX uses strange locations for the executables
50 JAVACMD="${JAVA_HOME/jre/sh/java}"
51 JAVACMD="${JAVA_HOME/jre/sh/javac}"
52 else
53 JAVACMD="${JAVA_HOME/bin/java}"
54 JAVACMD="${JAVA_HOME/bin/javac}"
55
>> -Body '[{"id":1,"nombre":"Laptop","precio":1500.0}, {"id":2,"nombre":"Mouse","precio":25.0}]'
>> -Headers @("Content-Type" = "application/json")

StatusCode      : 200
StatusDescription:
Content         : Productos enviados con éxito al pedido-service
RawContent      : HTTP/1.1 200
                  Keep-Alive: timeout=60
                  Connection: keep-alive
                  Content-Length: 47
                  Content-Type: text/plain; charset=UTF-8
                  Date: Thu, 19 Jun 2025 03:45:39 GMT

                  Productos enviados con éxito al pedido...
Forms           : {}
Headers         : {[Keep-Alive, timeout=60], [Connection, keep-alive], [Content-Length, 47], [Content-Type,
                  text/plain; charset=UTF-8]...}
Images          : {}

```