

# Despliegue del API REST en Weblogic

En el clase anterior creamos una aplicación REST que nos consumía datos del contenedor con el Oracle DB. A continuación vamos a ver como desplegar esta aplicación en WL y en la siguiente sección de esta clase veremos como poder consumirlo [pulsa aquí para ir directamente](#).

Tras tener el archivo war como vimos en la anterior clase y copiado al contenedor (a modo de recordatorio empleando el comando docker cp ./OpenwebinarDockerAPI/openwebinar\_mavel/app-rest-api/target/app-rest-api-0.1.0-SNAPSHOT.war oracle-wl:/u01/oracle/apps\_to\_deploy/ adaptado al path de la máquina de cada uno).

Deberemos ir a la consola de WL e ir a la sección de *Deployments*. Ahí se nos abrirá una nueva vista y deberemos pulsar sobre el botón de **install**, nos aparecerá la siguiente vista y deberemos poner en el input lo que se muestra en la imagen:

The screenshot shows the Oracle WebLogic Server Administration Console 12c interface. On the left, there's a sidebar with 'Change Center' and 'View changes and restarts' sections. The main area has a 'Domain Structure' tree with nodes like 'base\_domain', 'Domain Partitions', 'Environment', 'Deployments', 'Services', 'Security Realms', 'Interoperability', and 'Diagnostics'. The right side shows the 'Summary of Deployments' page with a 'Home' button and a search bar. A modal window titled 'Install Application Assistant' is open, prompting the user to 'Locate deployment to install and prepare for deployment'. It contains fields for 'Path:' (set to '/u01/oracle/apps\_to\_deploy/app-rest-api-0.1.0-SNAPSHOT.war'), 'Recently Used Paths:' (showing '(none)'), and 'Current Location:' (showing 'localhost / u01 / oracle /'). At the bottom of the modal are 'Back', 'Next', 'Finish', and 'Cancel' buttons.

- Path: /u01/oracle/apps\_to\_deploy/app-rest-api-0.1.0-SNAPSHOT.war
- Current Location: deberá estar seleccionado *app-rest-api-0.1.0-SNAPSHOT.war*.

Y a continuación pulsaremos sobre el botón *Next* para poder pasar a la siguiente vista que nos preguntará si nuestro WAR es una **aplicación** o una librería:

## ORACLE® WebLogic Server Administration Console 12c

The screenshot shows the Oracle WebLogic Server Administration Console interface. On the left, there's a sidebar titled 'Change Center' with a message about configuration editing. Below it is the 'Domain Structure' tree, which includes 'base\_domain' with nodes like 'Domain Partitions', 'Environment', 'Deployments', 'Services', 'Security Realms', 'Interoperability', and 'Diagnostics'. A 'How do I...' section lists 'Start and stop a deployed enterprise application'. The main content area is titled 'Install Application Assistant' and shows the first step: 'Choose installation type and scope'. It asks if the deployment should be installed as an application or library. Two options are available: 'Install this deployment as an application' (selected) and 'Install this deployment as a library'. Below this, it asks to select a scope for the deployment. At the bottom of the page are 'Back', 'Next', 'Finish', and 'Cancel' buttons.

Seleccionaremos la opción **Install this deployment as an application** y pulsaremos sobre **Next**. En la siguiente vista sólo seleccionaremos la opción **I will make the deployment accessible from the following location:**

## Install Application Assistant

[Back](#) [Next](#) [Finish](#) [Cancel](#)

### Optional Settings

You can modify these settings or accept the defaults.

\* Indicates required fields

#### General

What do you want to name this deployment?

\* Name:

#### Security

What security model do you want to use with this application?

- DD Only: Use only roles and policies that are defined in the deployment descriptors.**
- Custom Roles: Use roles that are defined in the Administration Console; use policies that are defined in the deployment descriptor.**
- Custom Roles and Policies: Use only roles and policies that are defined in the Administration Console.**
- Advanced: Use a custom model that you have configured on the realm's configuration page.**

#### Source Accessibility

How should the source files be made accessible?

- Use the defaults defined by the deployment's targets**

Recommended selection.

- Copy this application onto every target for me**

During deployment, the files will be copied automatically to the Managed Servers to which the application is targeted.

- I will make the deployment accessible from the following location**

Location:

Provide the location from where all targets will access this application's files. This is often a shared directory. You must ensure the application exists at this location.

#### Plan Source Accessibility

How should the plan source files be made accessible?

- Use the same accessibility as the application**

Recommended selection.

- Copy this plan onto every target for me**

During deployment, the plan files will be copied automatically to the Managed Servers to which the application is targeted.

- Do not copy this plan to targets**

You must ensure the plan files exist in the shared location and that each target can reach the location.

[Back](#) [Next](#) [Finish](#) [Cancel](#)

Pulsaremos sobre el botón de *Next* para terminar ya la configuración. En la vista siguiente generalmente se suele emplear la opción *No, I will review the configuration later.* para ir más rápido, pero en este caso para ver las distintas configuraciones seleccionaremos la opción *Yes, take me to the deployment's configuration screen:*

**ORACLE® WebLogic Server Administration Console 12c**

**Change Center**

**View changes and restarts**

Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

**Domain Structure**

- base\_domain
  - + Domain Partitions
  - + Environment
  - Deployments
  - + Services
  - Security Realms
  - + Interoperability
  - + Diagnostics

**How do I...**

- Start and stop a deployed enterprise application
- Configure an enterprise application
- Create a deployment plan
- Target an enterprise application to a server instance
- Test the modules in an enterprise application

**System Status**

Health of Running Servers as of 9:51 AM

Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (1)

**Install Application Assistant**

Home >Summary of Deployments

Back | Next | **Finish** | Cancel

**Review your choices and click Finish**

Click Finish to complete the deployment. This may take a few moments to complete

**Additional Configuration**

In order to work successfully, this application may require additional configuration. Do you want to proceed?

Yes, take me to the deployment's configuration screen.

No, I will review the configuration later.

**Summary**

**Deployment:** /u01/oracle/apps\_to\_deploy/app-rest-

**Name:** app-rest-api-0.1.0-SNAPSHOT

**Staging Mode:** I will make the deployment accessible

**Plan Staging Mode:** Use the same accessibility as the application

**Security Model:** DDOOnly: Use only roles and policies defined in the application

**Scope:** Global

**Target Summary**

**Components**

app-rest-api-0.1.0-SNAPSHOT

Back | Next | **Finish** | Cancel

Tras pulsar a *Next* se nos pondrá una vista con la configuración general de WAR:

## ORACLE® WebLogic Server Administration Console 12c

**Change Center**

**View changes and restarts**

Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

**Domain Structure**

- base\_domain
  - + Domain Partitions
  - + Environment
  - Deployments
  - + Services
  - Security Realms
  - + Interoperability
  - + Diagnostics

**How do I...**

- Deploy Web applications
- Configure Web applications
- Create a deployment plan
- Test the deployment
- Monitor Web applications and servlets

**System Status**

Health of Running Servers as of 9:52 AM

Failed (0)
Critical (0)
Overloaded (0)
Warning (0)
OK (1)

**Settings for app-rest-api-0.1.0-SNAPSHOT**

**Overview Deployment Plan Configuration Security Targets Control**

**Save**

Use this page to view the installed configuration of a Web application.

**Name:** app-rest-api-0.1.0-SNAPSHOT

**Scope:** Global

**Context Root:** /app-rest-api

**Path:** / u01/oracle/ap

**Deployment Plan:** (no plan specified)

**Staging Mode:** no stage

**Plan Staging Mode:** (not specified)

**Security Model:** DDOOnly

**Deployment Order:** 100

**Deployment Principal Name:**

**Save**

**Modules and Components**

Name
app-rest-api-0.1.0-SNAPSHOT
REST Services
None to display
Web Services
None to display

Y si vamos a la sección de Testing podremos ver la dirección IP que tiene el

contenedor y el rescuso de nuestra aplicación que definimos en el archivo app-rest-api/src/main/webapp/WEB-INF/weblogic.xml:

```
<wls:context-root>/app-rest-api</wls:context-root>
```

The screenshot shows the 'Testing' tab of the deployment configuration for 'app-rest-api-0.1.0-SNAPSHOT'. It displays a table of deployment tests:

Name	Test Point
app-rest-api-0.1.0-SNAPSHOT	
/wls-cat/index.jsp	Classloader Analysis Tool
default	<a href="http://172.17.0.2:7001/app-rest-api">http://172.17.0.2:7001/app-rest-api</a>

Salvo expresa necesidad, en nuestro caso podremos emplear localhost, ya que hemos redirigido el tráfico de nuestro localhost puerto 7001 al puerto del contenedor, como recordatorio:

```
docker run -d --name oracle-wl -p 7001:7001 -p 9002:9002 -v $PWD_WL:/u01
```

Con la opción -p creamos un tunel de nuestra máquina al contenedor, por ello y volviendo a nuestro caso, en vez de emplear <http://172.17.0.2:7001/app-rest-api> podremos emplear <http://localhost:7001/app-rest-api> como podemos ver en el siguiente ejemplo:

<http://172.17.0.2:7001/app-rest-api/avengers/get/1> vs <http://localhost:7001/app-rest-api/avengers/get/1>

Finalmente para validar que esté todo bien desplegado iremos a la sección de "Deployments" y deberemos ver la aplicación como se muestra a continuación:

## ORACLE® WebLogic Server Administration Console 12c

The screenshot shows the Oracle WebLogic Server Administration Console interface. On the left, there's a navigation tree under 'Domain Structure' for a 'base\_domain' named 'app-rest-api-0.1.0-SNAPSHOT'. The 'Deployments' node is selected. A 'How do I...' panel lists 'Install an enterprise application' and 'Configure an enterprise application'. At the top right, there's a header bar with links like Home, Log Out, Preferences, Record, Help, and a search bar. The main content area is titled 'Summary of Deployments' and has tabs for Configuration, Control, and Monitoring. It displays a table of deployed applications, with one entry for 'app-rest-api-0.1.0-SNAPSHOT' which is marked as 'OK'.

Name
app-rest-api-0.1.0-SNAPSHOT

This page displays the list of Java EE applications and standalone application modules currently deployed to this domain. You can update (redeploy) or delete installed applications and modules from the domain. To install a new application or module for deployment to targets in this domain, click the Install link.

Customize this table

Deployments

Install Update Delete

Name ↗

app-rest-api-0.1.0-SNAPSHOT

Install Update Delete

Deberá estar la sección de *State* a **Active** y la sección de *Health* a **OK**.