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Emisión

DIPLOMADO Desarrollo de Sistemas con Tecnología Java

Módulo 5-6 Desarrollo de aplicaciones empresariales con Jakarta EE

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Educación
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1971 - 2021

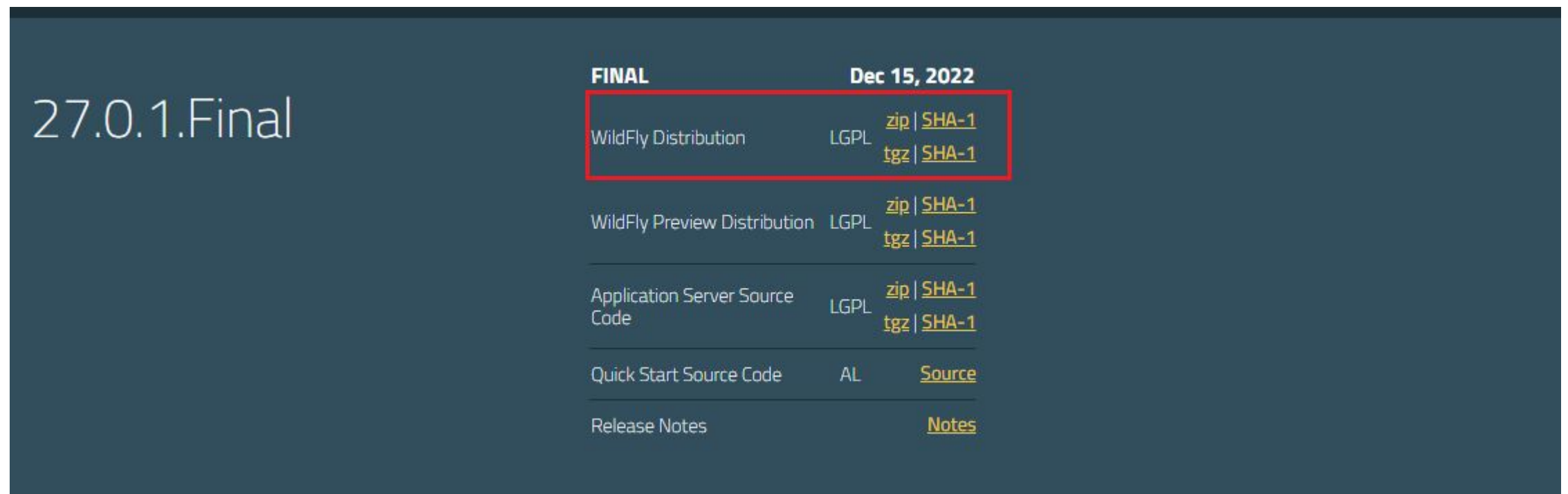


Configuración WildFly

Application Server: WildFly

- Descargar WildFly 27.0.1 Final, de la siguiente url:

<https://www.wildfly.org/downloads/>



27.0.1.Final

FINAL	Dec 15, 2022
WildFly Distribution	LGPL zip SHA-1 tgz SHA-1
WildFly Preview Distribution	LGPL zip SHA-1 tgz SHA-1
Application Server Source Code	LGPL zip SHA-1 tgz SHA-1
Quick Start Source Code	AL Source
Release Notes	Notes

Application Server: WildFly

- Descomprimir archivo zip wildfly-27.x.x.Final.zip
- Agregar un usuario para la consola de administración:

wildfly/bin/add-user.bat -m -u jbossadmin -p jbosspassword

```
PS C:\programs\wildfly\wildfly-27.0.1.Final\bin> .\add-user.bat -m -u jbossadmin -p jbosspassword
Added user 'jbossadmin' to file 'C:\programs\wildfly\wildfly-27.0.1.Final\standalone\configuration\mgmt-users.properties'
Added user 'jbossadmin' to file 'C:\programs\wildfly\wildfly-27.0.1.Final\domain\configuration\mgmt-users.properties'
Presione una tecla para continuar . . .
```


Configuración Servidor WildFly

- En el archivo standalone/configuration/standalone-full.xml, se puede realizar la configuración del servidor, entre ellos los puertos. Modificar el puerto de administración del 9990 a 9991:

```
<socket-binding-group name="standard-sockets" default-interface="public"
  port-offset="${jboss.socket.binding.port-offset:0}">
  <socket-binding name="ajp" port="${jboss.ajp.port:8009}"/>
  <socket-binding name="http" port="${jboss.http.port:8080}"/>
  <socket-binding name="https" port="${jboss.https.port:8443}"/>
  <socket-binding name="iiop" interface="unsecure" port="3528"/>
  <socket-binding name="iiop-ssl" interface="unsecure" port="3529"/>
  <socket-binding name="management-http" interface="management" port="${jboss.management.http.port:9991}"/>
  <socket-binding name="management-https" interface="management" port="${jboss.management.https.port:9993}"/>
  <socket-binding name="txn-recovery-environment" port="4712"/>
  <socket-binding name="txn-status-manager" port="4713"/>
  <outbound-socket-binding name="mail-smtp">
    <remote-destination host="${jboss.mail.server.host:localhost}" port="${jboss.mail.server.port:25}"/>
  </outbound-socket-binding>
</socket-binding-group>
```

Iniciar WildFly

- Para iniciar el servidor, ejecutar el siguiente comando en una terminal:

wildfly/bin/standalone.bat --server-config=standalone-full.xml

```
PS C:\programs\wildfly\wildfly-27.0.1.Final\bin> .\standalone.bat --server-config=standalone-full.xml
Calling "C:\programs\wildfly\wildfly-27.0.1.Final\bin\standalone.conf.bat"
Setting JAVA property to "C:\programs\java\jdk-17\bin\java"
```

=====

JBoss Bootstrap Environment

JBOSS_HOME: "C:\programs\wildfly\wildfly-27.0.1.Final"

JAVA: "C:\programs\java\jdk-17\bin\java"

```
13:14:19,060 INFO [org.jboss.as] (Controller Boot Thread) WFLYSRV0025: WildFly Full 27.0.1.Final (WildFly Core 19.0.1.Final) started in 4242ms - Started 3
28 of 601 services (372 services are lazy, passive or on-demand) - Server configuration file in use: standalone-full.xml
13:14:19,064 INFO [org.jboss.as] (Controller Boot Thread) WFLYSRV0060: Http management interface listening on http://127.0.0.1:9991/management
13:14:19,065 INFO [org.jboss.as] (Controller Boot Thread) WFLYSRV0051: Admin console listening on http://127.0.0.1:9991
```

WildFly Running

localhost:9991/console/index.html

Iniciar sesión

http://localhost:9991

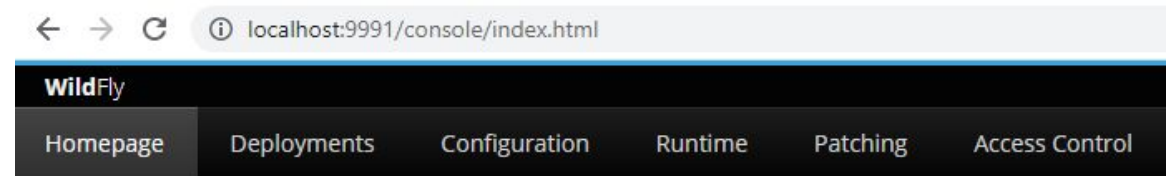
Nombre de usuario jbossadmin

Contraseña

Iniciar sesión

Cancelar

WildFly Running



WildFly Application Server



Deployments

Add and manage deployments

[Deploy an Application](#) | [Start](#)

Deploy an application to the server

1. Use the 'Add Deployment' wizard to deploy the application
2. Enable the deployment



Runtime

Monitor server status

[Monitor the Server](#) | [Start](#)

View runtime information such as server status, JVM status, and server log files.

1. Select the server
2. View log files or JVM usage

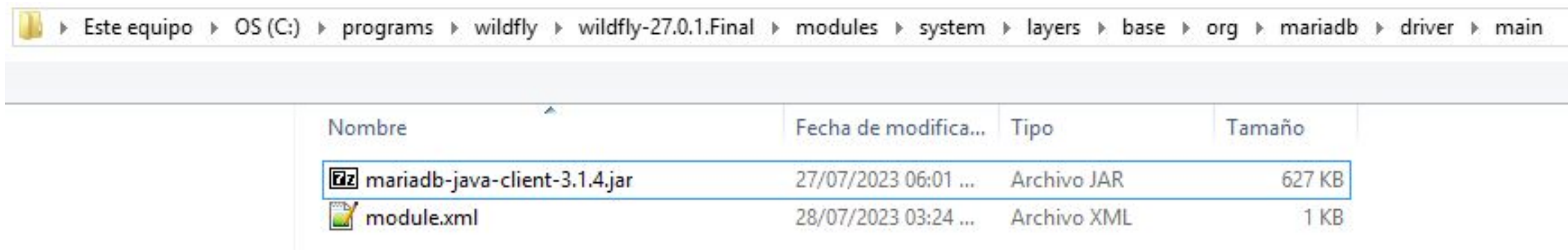
Detener WildFly



- Para detener el servidor, presionar CTRL+C en la ventana donde se inició el servidor previamente

```
13:19:14,757 INFO [org.wildfly.extension.undertow] (MSC service thread 1-2) WFLYUT0008: Undertow HTTP listener default suspending
13:19:14,758 INFO [org.wildfly.extension.undertow] (MSC service thread 1-2) WFLYUT0007: Undertow HTTP listener default stopped, was bound to 127.0.0.1:8080
0
13:19:14,759 INFO [org.wildfly.extension.undertow] (MSC service thread 1-6) WFLYUT0004: Undertow 2.3.0.Final stopping
13:19:14,766 INFO [org.jboss.as] (MSC service thread 1-5) WFLYSRV0050: WildFly Full 27.0.1.Final (WildFly Core 19.0.1.Final) stopped in 189ms
¿Desea terminar el trabajo por lotes (S/N)? S
```

Agregar MariaDB Driver WildFly

- Agregar los siguientes directorios:
`wildfly/modules/system/layers/base/org/mariadb/driver/main`
- Agregar los archivos mostrados:



Nombre	Fecha de modifica...	Tipo	Tamaño
 mariadb-java-client-3.1.4.jar	27/07/2023 06:01 ...	Archivo JAR	627 KB
 module.xml	28/07/2023 03:24 ...	Archivo XML	1 KB

module.xml

```
<module xmlns="urn:jboss:module:1.5" name="org.mariadb.driver">
  <resources>
    <resource-root path="mariadb-java-client-3.1.4.jar"/>
  </resources>
  <dependencies>
    <module name="javax.api"/>
    <module name="javax.transaction.api"/>
  </dependencies>
</module>
```

Agregar MariaDB Driver WildFly

- En el archivo standalone/configuration/standalone-full.xml, agregar la siguiente configuración en la sección de drivers:

```
<driver name="mariadb" module="org.mariadb.driver"/>
```

```
<drivers>
  <driver name="h2" module="com.h2database.h2">
    <xa-datasource-class>org.h2.jdbcx.JdbcDataSource</xa-datasource-class>
  </driver>
  <driver name="mariadb" module="org.mariadb.driver"/>
</drivers>
```


Agregar Pixup DataSource WildFly

WildFly Application Server



Deployments

Add and manage deployments

▼ Deploy an Application | Start ➔

Deploy an application to the server

1. Use the 'Add Deployment' wizard to deploy the application
2. Enable the deployment



Runtime

Monitor server status

▼ Monitor the Server | Start ➔

View runtime information such as server status, JVM status, and server log files.

1. Select the server
2. View log files or JVM usage



Configuration

Configure subsystem settings

▼ Create a Data source | Start ➔

Define a data source to be used by deployed applications. The proper JDBC driver must be deployed and registered.

1. Select the Data sources subsystem
2. Add a Non-XA or XA data source
3. Use the 'Create Data source' wizard to configure the data source settings



Access Control

Manage user and group permissions for management operations

▼ Assign User Roles | Start ➔

Assign roles to users or groups to determine access to system resources.

1. Add a new user or group
2. Assign one or more roles to that user or group

Agregar Pixup DataSource WildFly

Configuration	Subsystem (35)	Datasources & Drivers	JDBC Driver
Subsystems	Filter by: name or subtitle	Datasources	Filter by: driver name or provider type
Interfaces	Batch	JDBC Drivers	h2
Socket Bindings	JBeret		mariadb
Paths	Core Management		
System Properties	Datasources & Drivers		
	Deployment Scanners		
	Discovery		
	Distributable EJB		
	Distributable Web		

mariadb



The JDBC driver is provided by module `org.mariadb.driver`.

Main Attributes

Driver Class Name:	org.mariadb.jdbc.Driver
Driver Datasource Class Name:	
Driver XA Datasource Class Name:	
Driver Version:	3.1
JDBC Compliant:	true

Agregar Pixup DataSource WildFly

Configuration	Subsystem (35)	Datasources & Drivers	Datasource
Subsystems >	<i>Filter by: name or subtitle</i>	Datasources >	<i>Filter by: name, xa, .../disabled, deployment</i>
Interfaces >	Batch		
Socket Bindings >	JBeret		
	Core Management		
Paths	Datasources & Drivers >		
System Properties	Deployment Scanners		
	Discovery		
	Distributable EJB		
		JDBC Drivers >	
			ExampleDS



Add DataSource
Add XA DataSource

ne

non-X

which

- XA dat

data

Agregar Pixup DataSource WildFly

Add Datasource ✕

Choose Template

Attributes

JDBC Driver

Connection

Test Connection

Review

1

2

3

4

5

6

Choose one of the predefined templates to quickly add a data source or choose "Custom" to specify your own settings.

- ☐ Custom
- ☐ H2
- ☐ PostgreSQL
- ☐ MySQL
- ☒ MariaDB
- ☐ Oracle
- ☐ Microsoft SQLServer
- ☐ IBM DB2
- ☐ Sybase

Agregar Pixup DataSource WildFly

Add Datasource

X

Choose Template

Attributes

JDBC Driver

Connection

Test Connection

Review

1

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4

5

6

Help

Name

pixupDS

JNDI Name *

java:/jdbc/pixupDS

Required fields are marked with *

Agregar Pixup DataSource WildFly

Add Datasource ✕

Choose Template

Attributes

JDBC Driver

Connection

Test Connection

Review

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[? Help](#)

Driver Name *

Driver Module Name

Driver Class Name

mariadb

org.mariadb

org.mariadb.jdbc.Driver

Required fields are marked *

Agregar Pixup DataSource WildFly

Add Datasource

X

Choose Template

Attributes

JDBC Driver

Connection

Test Connection

Review

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5

6

Help

Connection URL

jdbc:mariadb://localhost:3306/pixupdb?useTimeZone=true&serverTimezone=UTC&autoReconnect=true&u

User Name

pixupdb_owner

Password

pixupdb_password

Security Domain

Credential Reference Store

Credential Reference Alias

Credential Reference Clear T...

Credential Reference Type

Agregar Pixup DataSource WildFly

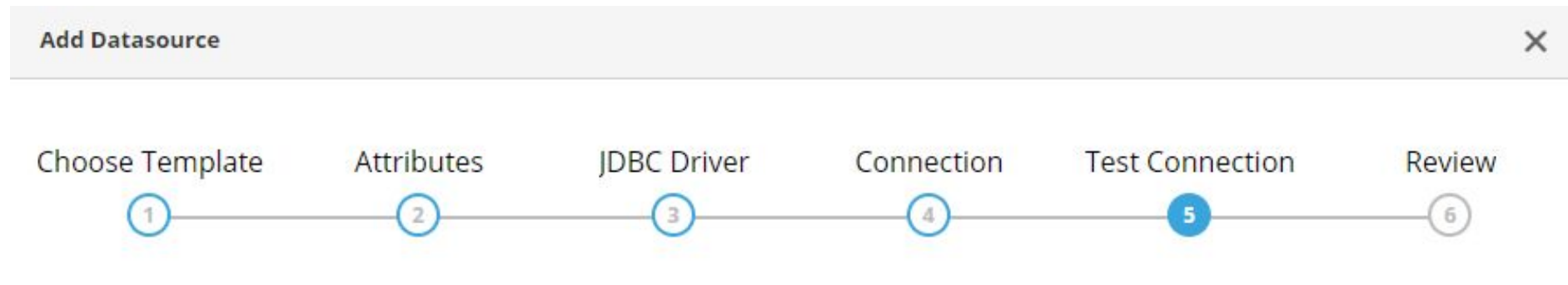
username = pixupdb_owner

password = pixupdb_password

url=

jdbc:mariadb://localhost:3306/pixupdb?useTimeZone=true&serverTimezone=UTC&
autoReconnect=true&useSSL=false

Agregar Pixup DataSource WildFly



On this page you can test the connection of your data source.

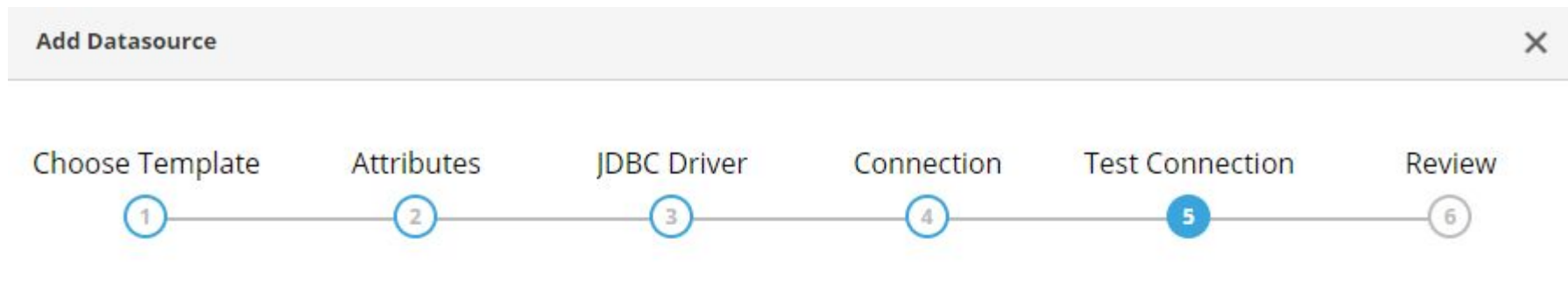
Please note that testing the connection changes the semantics of this wizard:

- If you press **Test Connection** for the **first time**, the data source is **created in advance**.
- If you **go back** and change settings, this will **modify** the newly created data source. Please note that you cannot change the name and JNDI bindings once the data source has been created.
- If you **cancel** the wizard, the data source will be **removed** again. This might require a reload of the server.

If you choose to continue without testing the connection, the data source will be created after finishing the wizard.

Test Connection

Agregar Pixup DataSource WildFly



Test Connection Successful

Successfully tested connection for data source **pixupDS**.

Agregar Pixup DataSource WildFly

Add Datasource

Choose Template

Attributes

JDBC Driver

Connection

Test Connection

Review

1

2

3

4

5

6

Help

Name	pixupDS
JNDI Name	java:/jdbc/pixupDS
Connection URL	<code>jdbc:mariadb://localhost:3306/pixupdb? useTimeZone=true&serverTimezone=UTC&autoReconnect=true&useSSL=false</code>
Driver Name	mariadb
User Name	pixupdb_owner
Password	pixupdb_password
Credential Reference	

Agregar Pixup DataSource WildFly

Add Datasource ×

Choose Template

Attributes

JDBC Driver

Connection

Test Connection

Review

1


2

3

4

5

6



Operation Successful

Datasource **pixupDS** successfully added.

[View Datasource](#)

Agregar Pixup DataSource WildFly

Datasource ⊕ ↺

Filter by: name, xa, .../disabled, deployment

- ✓ ExampleDS
- ✓ **pixupDS** View ▾

pixupDS

Datasource

✓ The datasource **pixupDS** is enabled. [Disable](#)

Main Attributes

JNDI Name:	java:/jdbc/pixupDS
Driver Name:	mariadb
Connection URL:	jdbc:mariadb://localhost:3306/pixup_all?useTimeZone=true&serverT...
Enabled:	true
Statistics Enabled:	false

Configurar Mail-Session

- Agregar la siguiente configuración en la sección mail-session:

```
<custom-server name="smtp" outbound-socket-binding-ref="mail-smtp" ssl="true"  
username= "youremail" password= "yourapppassword">
```

```
<property name="mail.smtp.ssl.trust" value="smtp.gmail.com"/> </custom-server>
```

```
<subsystem xmlns="urn:jboss:domain:mail:4.0">  
  <mail-session name="default" jndi-name="java:jboss/mail/Default">  
    <custom-server name="smtp" outbound-socket-binding-ref="mail-smtp" ssl="true"  
      username="megaboa@gmail.com" password="tdlyedgtdedsyarbc">  
        <property name="mail.smtp.ssl.trust" value="smtp.gmail.com" />  
      </custom-server>  
    </mail-session>  
  </subsystem>
```

Configurar Mail-Session

- Agregar la siguiente configuración en la sección outbound-socket-binding:

```
<remote-destination host="smtp.gmail.com" port="465"/>
```

```
<socket-binding-group name="standard-sockets" default-interface="public"
  port-offset="${jboss.socket.binding.port-offset:0}">
  <socket-binding name="ajp" port="${jboss.ajp.port:8009}"/>
  <socket-binding name="http" port="${jboss.http.port:8080}"/>
  <socket-binding name="https" port="${jboss.https.port:8443}"/>
  <socket-binding name="iiop" interface="unsecure" port="3528"/>
  <socket-binding name="iiop-ssl" interface="unsecure" port="3529"/>
  <socket-binding name="management-http" interface="management" port="${jboss.management.http.port:9991}"/>
  <socket-binding name="management-https" interface="management" port="${jboss.management.https.port:9993}"/>
  <socket-binding name="txn-recovery-environment" port="4712"/>
  <socket-binding name="txn-status-manager" port="4713"/>
  <outbound-socket-binding name="mail-smtp">
    <remote-destination host="smtp.gmail.com" port="465"/>
  </outbound-socket-binding>
</socket-binding-group>
```

Contacto

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