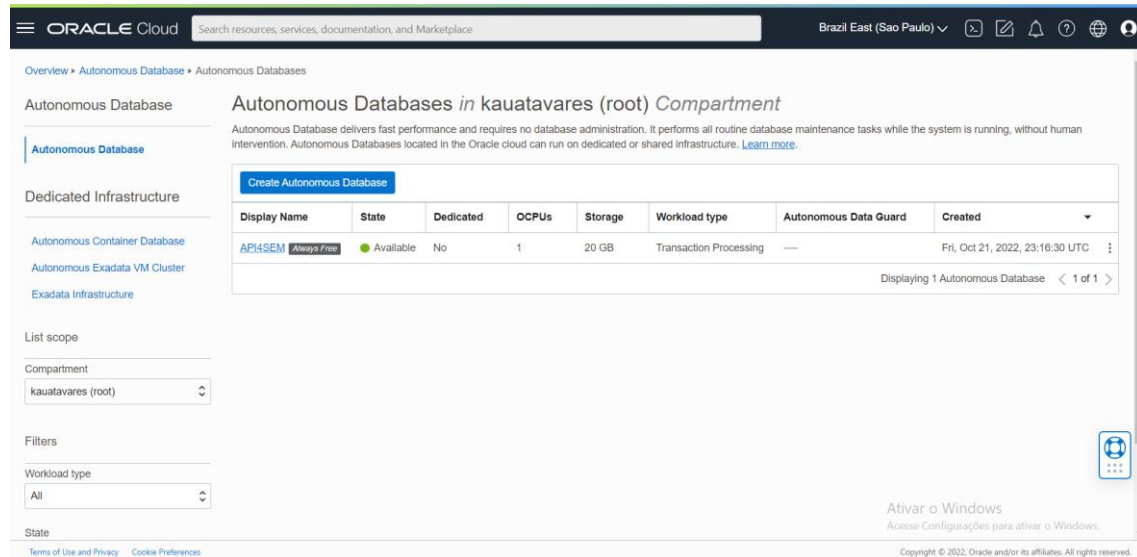


Como conectar Autonomous Database da Oracle Cloud com Spring Boot JDBC

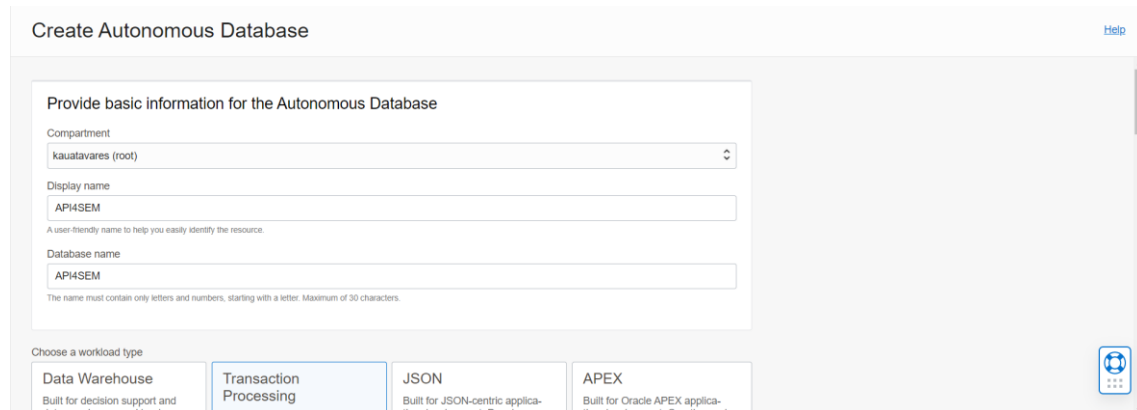
Primeiramente é necessário criar uma autonomous database, para isso, faça login no Oracle Cloud e Clique no link “Autonomous Database” no menu lateral esquerdo, a tela deverá ser essa:



The screenshot shows the Oracle Cloud console interface. The top navigation bar includes the Oracle Cloud logo, a search bar, and the region 'Brazil East (Sao Paulo)'. The left sidebar contains navigation links: 'Autonomous Database', 'Autonomous Container Database', 'Autonomous Exadata VM Cluster', and 'Exadata Infrastructure'. The main content area is titled 'Autonomous Databases in kauatavares (root) Compartment'. It features a 'Create Autonomous Database' button and a table listing existing databases. The table has columns: Display Name, State, Dedicated, OCPUs, Storage, Workload type, Autonomous Data Guard, and Created. One database is listed: 'API4SEM' with state 'Always Free' and 'Available'. Below the table, there are filters for 'List scope' (Compartment: kauatavares (root)), 'Workload type' (All), and 'State'. A Windows activation watermark is visible in the bottom right corner.

Display Name	State	Dedicated	OCPUs	Storage	Workload type	Autonomous Data Guard	Created	
API4SEM	Always Free	Available	No	1	20 GB	Transaction Processing	—	Fri, Oct 21, 2022, 23:16:30 UTC

Em seguida clicar no botão “Create Autonomous Database” e configurar de acordo com a sua necessidade, nesse exemplo foi usada a seguinte configuração:



The screenshot shows the 'Create Autonomous Database' configuration page. It has a 'Help' link in the top right. The main section is titled 'Provide basic information for the Autonomous Database'. It contains three input fields: 'Compartment' (set to 'kauatavares (root)'), 'Display name' (set to 'API4SEM'), and 'Database name' (set to 'API4SEM'). Below the 'Database name' field, there is a note: 'The name must contain only letters and numbers, starting with a letter. Maximum of 30 characters.' At the bottom, there is a section 'Choose a workload type' with four options: 'Data Warehouse', 'Transaction Processing' (selected), 'JSON', and 'APEX'. Each option has a brief description below it.

Choose a workload type

Data Warehouse

Built for decision support and data warehouse workloads. Fast queries over large volumes of data.

Transaction Processing

Built for transactional workloads. High concurrency for short-running queries and transactions. ✓

JSON

Built for JSON-centric application development. Developer-friendly document APIs and native JSON storage.

APEX

Built for Oracle APEX application development. Creation and deployment of low-code applications, with database included.

Choose a deployment type

Shared infrastructure

Run Autonomous Database on Shared Exadata Infrastructure. ✓

Dedicated infrastructure

Run Autonomous Database on Dedicated Exadata Infrastructure.

Dedicated Exadata infrastructure is not available for Always Free Oracle Autonomous Database.

Configure the database

Always Free ⓘ



Show only Always Free configuration options

Create administrator credentials ⓘ

Username *Read-only*

ADMIN

ADMIN username cannot be edited.

Password

.....

Confirm password

.....

Choose license and Oracle Database edition

Choose a license type

Bring your own license (BYOL)

Bring your organization's Oracle Database software license to the Oracle Database service. [Learn more](#).

License included

Subscribe to a new Oracle Database software license and the Oracle Database service. ✓

Provide contacts for operational notifications and announcements ⓘ

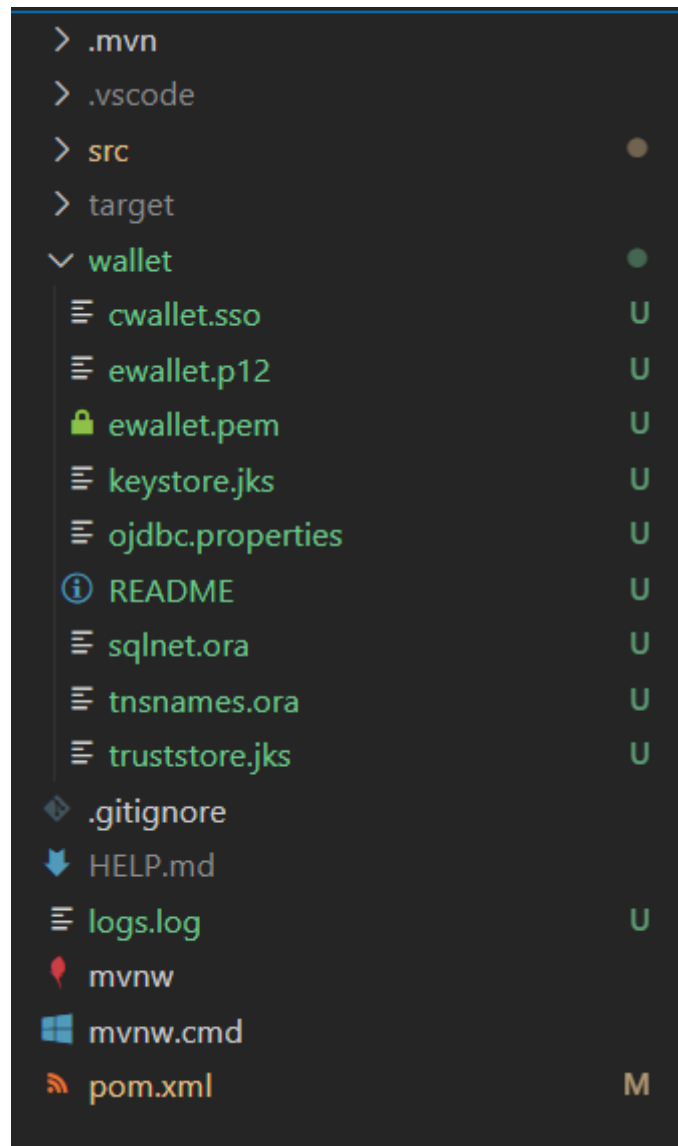
Contact Email

Enter a valid email ID



Add Contact

Quando a database for criada, será gerado um arquivo .zip chamado Wallet, nele contém diversos arquivos de configuração. O arquivo zip deverá ser extraído para a **raiz do projeto** Spring boot, o diretório de arquivos ficará da seguinte forma



Dentro do arquivo pom.xml, precisa adicionar as seguintes dependências:

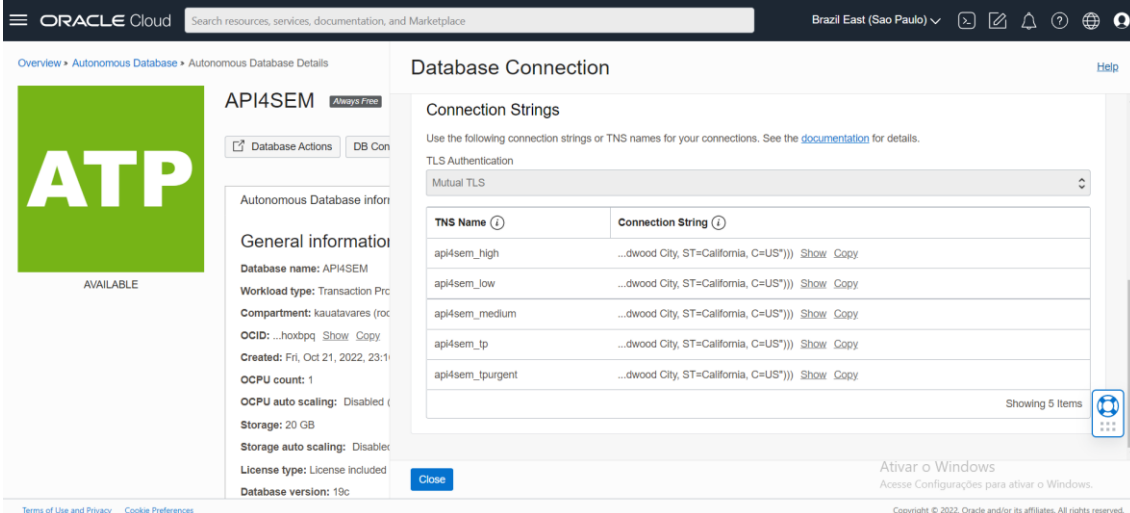
```
<dependency>
  <groupId>com.oracle.database.jdbc</groupId>
  <artifactId>ojdbc11-production</artifactId>
  <version>21.5.0.0</version>
  <type>pom</type>
</dependency>
<dependency>
  <groupId>com.oracle.database.security</groupId>
  <artifactId>oraclepki</artifactId>
  <version>21.5.0.0</version>
  <scope>runtime</scope>
</dependency>
<dependency>
  <groupId>com.oracle.database.security</groupId>
  <artifactId>osdt_cert</artifactId>
  <version>21.5.0.0</version>
  <scope>runtime</scope>
</dependency>
<dependency>
  <groupId>com.oracle.database.security</groupId>
  <artifactId>osdt_core</artifactId>
  <version>21.5.0.0</version>
  <scope>runtime</scope>
</dependency>
```

Dentro do arquivo application.properties, adicionar as seguintes linhas

```
spring.datasource.url=jdbc:oracle:thin:@<Nome dentro do arquivo
tnsnames.ora>?TNS_ADMIN=./wallet
spring.datasource.username=<Usuário>
spring.datasource.password=<Senha>
spring.datasource.driver-class-name=oracle.jdbc.OracleDriver
spring.jpa.hibernate.ddl-auto=update
```

Exemplo:

Oracle cloud



The screenshot displays the Oracle Cloud console interface. On the left, a sidebar shows the 'API4SEM' Autonomous Database instance with a green 'ATP' logo and 'AVAILABLE' status. The main panel is titled 'Database Connection' and includes a 'Connection Strings' section. This section provides a table of connection strings for various instance types. The table has two columns: 'TNS Name' and 'Connection String'. The connection strings are in the format '...dwood City, ST=California, C=US*)'. Below the table, there is a 'Close' button and a 'Showing 5 items' indicator. At the bottom right, there is a 'Ativar o Windows' (Activate Windows) watermark.

TNS Name	Connection String
api4sem_high	...dwood City, ST=California, C=US*)
api4sem_low	...dwood City, ST=California, C=US*)
api4sem_medium	...dwood City, ST=California, C=US*)
api4sem_tp	...dwood City, ST=California, C=US*)
api4sem_tpurgent	...dwood City, ST=California, C=US*)

Application.properties

```
spring.datasource.url=jdbc:oracle:thin:@api4sem_high?TNS_ADMIN=./wallet
spring.datasource.username=ADMIN
spring.datasource.password=ADMIN
spring.datasource.driver-class-name=oracle.jdbc.OracleDriver
spring.jpa.hibernate.ddl-auto=update
```