Oracle Docker Windows Setup Guide

A step-by-step process on how to set up Oracle on Windows using Docker

Ben Brumm

www.databasestar.com

Oracle Docker Windows Setup Guide

In this guide, you're going to learn the exact steps to take to install Oracle on your Windows computer using Docker.

This guide includes:

- step-by-step instructions on downloading and setting up the required software
- explanations of the configurations you need to set (such as connecting to the database)

So if you want to set up Oracle on your Windows computer, you'll love this guide.

Let's get right into it.

Table of Contents

Download and Install Docker	3
Sign In to Oracle Container Registry	4
Find the Database Image	4
Command Prompt Login	5
Pull and Run the Image	6
Connect to the Database	7
Conclusion	8

Download and Install Docker

To run this setup, you'll need to install Docker.

I use Docker Desktop for Windows.

To download this:

Visit the Docker website at www.docker.com.

Click Get Started

Click Download Docker Desktop

Select the option that matches your processor.

Get Started with Docker

Build applications faster and more securely with Docker for developers

Learn how to install Docker

Download Docker Desktop

Docker Hub

Connect, collaborate, and create on Docker Hub — a central repository for finding and sharing container images and applications with ease.

The file will begin downloading.

Once it has completed, open it to start the installation.

Follow the steps in the installer, and Docker Desktop will be installed.

Run Docker Desktop from the Start menu.

Note: If you get errors later on in this guide about "docker daemon not found" or similar messages, it's likely because Docker is installed but not running. Run Docker Desktop and the error should be resolved.

Sign In to Oracle Container Registry

Oracle's Docker images are stored on the Oracle Container Registry, which is at <u>container-registry.oracle.com</u>. You'll need an Oracle account to use them, which is free.

To sign in to the registry:

Visit the Oracle Container Registry at container-registry.oracle.com

Click Sign In on the top right.

If you have an Oracle account, enter the username and password.

If you don't have an account, you can create one for free.

Once you have logged in, you should return either to the homepage or the page you were on.

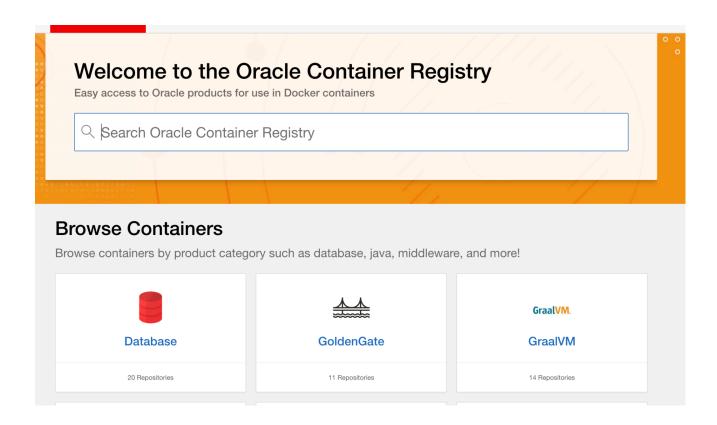
Find the Database Image

Once you've logged in to the Oracle Container registry, it's time to find the image to download.

To do this:

Visit the Oracle Container Registry at container-registry.oracle.com

Click on the Database section.



Click on the Free version.

Note: up until recently, the Express Edition was the latest one. However, in recent versions, this has been renamed to Free. So, the Free edition should be the latest version of Oracle database you can use for free.

Decide which Free image you want to use: Full or Lite.

There's a list of differences on this page, but for the basic SQL work, I believe the Lite version is sufficient.

Command Prompt Login

Next, we need to login to the Oracle Container Registry on the command prompt, so we can download the image and use it.

To do this:

Open a Command Prompt.

Type the docker login command to log in to the Oracle Container Registry on the Command Prompt.

docker login container-registry.oracle.com

For the username, enter your Oracle username

For the password, you'll need an Auth Token. This is not your Oracle account password.

To create an Auth Token, go back to the Oracle Container Registry.

Click on your email address, and then click Auth Token.





Click Create Secret Key, then copy it.

Paste the Secret Key somewhere secure, like your password manager (as you won't be able to see it again)

Also, paste the Secret Key into the Command Prompt as your password, and press Enter.

You should now be logged in to the Oracle Container Registry.

Pull and Run the Image

Now it's time to download the image (aka "pull" it) and then run it.

To do this:

Enter the docker pull command:

docker pull container-registry.oracle.com/database/free:latest-lite

This will download the lite version.

If you want the Full version, use this command instead:

docker pull container-registry.oracle.com/database/free:latest

The download of the image will begin. It should be completed in a minute or two.

Next, we run the container based on this image.

To do this:

```
docker run -d --name oracle-free -p 1521:1521 -e
ORACLE_PWD="mypassword"
container-registry.oracle.com/database/free:latest-lite
```

Notice there are two dashes "--" before the name parameter.

This will:

- Run the container in "detached" mode, meaning you can use the Command Prompt for other commands.
- Give the container the name of "oracle-free".
- Use port 1521
- Use the system password of **mypassword**. Feel free to change this. This password is used to log in to the database later.
- Use the image you just downloaded.

Run this command, and the container will begin starting.

Run the docker ps command to see the status.

```
docker ps
```

The status will say "starting" for a minute or two.

Once the status says "healthy", it's ready to connect. You can keep running docker ps to get an update of the status.

Connect to the Database

Now we can connect to the database.

To do this:

Open your favourite SQL editor and create a new connection.

Enter the following details:

- Connection Name: whatever you want, so that you can easily identify it
- Hostname: localhost
- Port: 1521
- Connection Type: Service Name (not SID)
- Service Name: FREEPDB1
- Username: SYSTEM
- Role: Default
- Password: mypassword (or whatever you changed it to in the docker run command)

Test the connection, which should pass.

Save the connection.

Then, connect to the database.

You should now be able to connect to the database and run SQL queries.

Conclusion

This guide explained the process of using Docker to set up an Oracle database on a Windows computer.

If you have any questions on this guide, let me know at ben@databasestar.com.

Thanks,

Ben Brumm

www.DatabaseStar.com