



OpenJDK 8

Packaging OpenJDK 8 applications in containers

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Abstract

OpenJDK is a Red Hat offering on the Red Hat Enterprise Linux platform. The Packaging OpenJDK 8 applications in containers guide provides an overview of this product and explains how to package the applications in a container.

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MAKING OPEN SOURCE MORE INCLUSIVE

Red Hat is committed to replacing problematic language in our code, documentation, and web properties. We are beginning with these four terms: master, slave, blacklist, and whitelist. Because of the enormity of this endeavor, these changes will be implemented gradually over several upcoming releases. For more details, see [our CTO Chris Wright's message](#).

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- In the Red Hat Customer Portal, view the document in **Multi-page HTML** format.

Procedure

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NOTE

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2. Highlight the section of the document where you want to provide feedback.
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4. Enter your feedback in the text box and click **Submit**.
A documentation issue is created.
5. To view the issue, click the issue tracker link in the feedback view.

CHAPTER 1. OPENJDK APPLICATIONS IN CONTAINERS

OpenJDK images have default startup scripts that automatically detect application **JAR** files and launch Java. The script's behavior can be customized using environment variables. For more information, see **/help.md** in the container.

The OpenJDK applications in the **/deployments** directory of the OpenJDK image are run when the image loads.



NOTE

Containers that contain OpenJDK applications are not automatically updated with security updates. Ensure that you update these images at least once every three months.

Application **JAR** files can be fat JARs or thin JARs.

- Fat JARs contain all of the application's dependencies.
- Thin JARs reference other JARs that contain some, or all, of the application's dependencies. Thin JARs are only supported if:
 - They have a flat classpath.
 - All dependencies are JARs that are in the **/deployments** directory.

CHAPTER 2. DEPLOYING OPENJDK APPLICATIONS IN CONTAINERS

You can deploy OpenJDK applications in containers and have them run when the container is loaded.

Procedure

- Copy the application **JAR** to the **/deployments** directory in the image **JAR** file.
For example, the following shows a brief Dockerfile that adds an application called **testubi.jar** to the OpenJDK 8 UBI8 image:

```
FROM registry.access.redhat.com/ubi8/openjdk-8
```

```
COPY target/testubi.jar /deployments/testubi.jar
```

CHAPTER 3. UPDATING OPENJDK CONTAINER IMAGES

To ensure that an OpenJDK container with Java applications includes the latest security updates, rebuild the container.

Procedure

1. Pull the base OpenJDK image.
2. Deploy the OpenJDK application. For more information, see [Deploying OpenJDK applications in containers](#).
The OpenJDK container with the OpenJDK application is updated.

Additional resources

- For more information, see [Red Hat OpenJDK Container images](#) .