

Dear customer,

We would like to inform you about licensing change of Oracle's Java and its effects on caniasERP usage. Starting from January 2019, Oracle started to provide Java JDK/JRE on a subscription model which will be applied to commercial usage of Java 11+ versions, and future updates of Java 8.

With this subscription following features will be provided by Oracle:

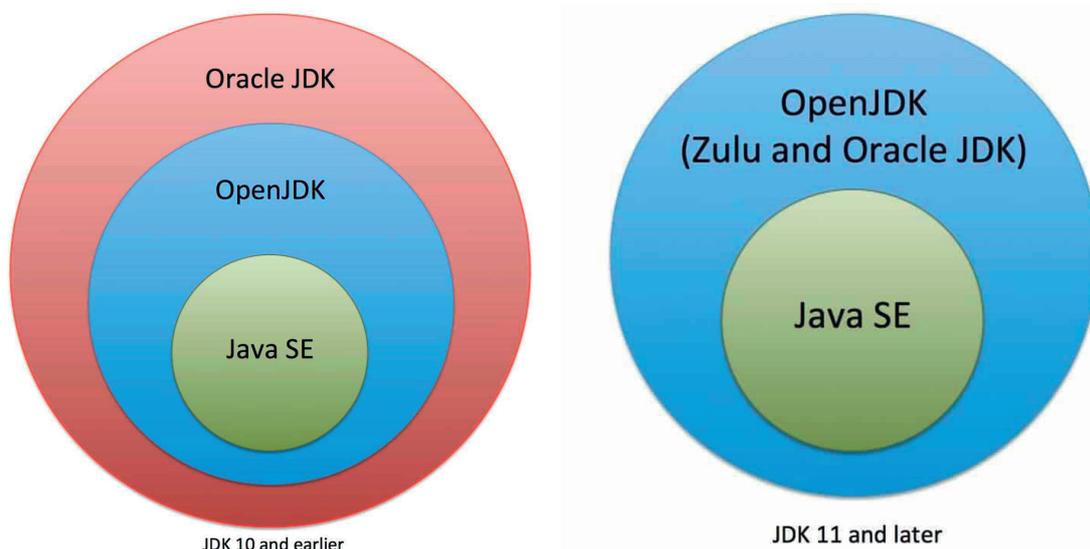
- Access to Oracle Java SE versions past their end-of-public-update times.
- Access to critical bug fixes.
- Licensing and support for cloud, server, and desktop deployments.
- Performance, stability, and security updates.
- Enterprise management, monitoring, and deployment capabilities.
- Around-the-clock support.

#### WHAT DOES JAVA SE, JDK, JRE, OPEN JDK/JRE, ORACLE JDK/JRE MEAN?

Java Platform, Standard Edition (Java SE) lets you develop and deploy Java applications on desktops and servers. Java offers the rich user interface, performance, versatility, portability, and security that today's applications require.

JRE (Java Runtime Environment) means the Java distribution that contains the necessary components for running a Java SE application. On the other hand, JDK (Java Development Kit) includes some development tools and the source code of basic Java packages in addition to JRE content.

Oracle JDK/JRE is the Oracle's implementation of Java JRE/JDK distributions, while Open JDK/JRE is community driven open source version of the distribution. However, the core packages of Open JDK/JRE is still based on the same source code repository of Oracle JDK/JRE. Differences are mainly observed in the additional packages and tools.



Till Java 10 Oracle JDK/JRE had some additional packages and tools on top of Open JDK/JRE. However, since Java 11 Oracle has also removed most of them. Content of the distributions are very similar for free users. For commercial users there are also some additional tools like Flight Recorder, Java Mission Control, and Application Class-Data Sharing... etc. There are also some minor differences on garbage collection mechanisms, font rendering... etc. But basically, all features provided by Java SE are covered in OpenJDK/JRE package which is an open-source implementation of the Java SE Platform and related projects.

### WHAT IS LONG TERM SUPPORT (LTS)?

For product releases after Java SE 8, Oracle will designate a release, every three years, as a Long-Term-Support (LTS) release. Java SE 11 (18.9 LTS) is an LTS release. For the purposes of Oracle Premier Support, non-LTS releases are considered a cumulative set of implementation enhancements of the most recent LTS release. Once a new feature release is made available, any previous non-LTS release will be considered superseded. For example, Java SE 9 was a non-LTS release and immediately superseded by Java SE 10 (also non-LTS), Java SE 10 in turn is immediately superseded by Java SE 11. Java SE 11 however is an LTS release, and therefore Oracle Customers will receive Oracle Premier Support and periodic update releases, even after Java SE 12 is released. (You may visit Oracle Java SE Support Roadmap for details.) Similar approach is used by Open JDK community as well.

### WHAT DO THESE MEAN?

If you use new updates (released after January 2019) of Java 8 in your business environment, you have to subscribe to Oracle Java commercial licensing plan. Current cost of the subscription is \$25 per month per processor for servers and cloud instances, with volume discounts available. For PCs, the price starts at \$2.50 per month per user, again with volume discounts.

If you use any Java version prior their end-of-public-update times, you may continue to use as it is. However, if you update the product with a version past their end-of-public-update times (January 2019 for Java 8), you will violate the license terms of Oracle.

The good news is, it is not the only option since we have completed our developments and test to support OpenJDK/JRE packages. Therefore, the customers are able to prefer using OpenJDK instead of Oracle JDK.

### WHAT IS THE WEB CLIENT COMING UP WITH CANIASERP 8.02? ANY ADVANTAGE ON USING JAVA?

caniasERP offers a new web-based client to access your business applications through a cutting edge and user-friendly interface that you can access through your favorite internet browser. We've developed our new client to give our users the best ERP experience without compromising the security requirements of the new era.

You can access all your business applications without any restrictions on a mobile or desktop device using your favorite web browser. You can even transfer your session between devices without any data loss on your session. Through Web Client Java JRE installation on client device won't be required, so that there will be no need of commercial Java subscription for clients.

## WHAT ARE THE OPTIONS ON JAVA TO CONTINUE USING CANIASERP (6.04 AND 8.02 VERSIONS)?

### **1. Continue with older version of Oracle Java 8 distributions (JDK or JRE)**

This is basically stopping auto updates and doing nothing (if you have not already updated since January 2019). You may continue with free versions of Oracle JDK/JRE both at client and server side without getting updates on it. Choosing this way, you will not get some minor changes and security patches of your Java distribution.

### **2. Subscribe to Oracle commercial licensing plan**

You may subscribe to Oracle's commercial licensing plan and keep your Java up-to-date. Oracle requires a monthly subscription per each processor on the server side. On the other hand, there will be 2 options on the client side. If the users will use caniasERP via their web browsers using Web Client, there will be no need for client subscriptions. Oracle commercial licensing plan will be required for Swing clients (clients reaching the server via JNLP) only. Using Canias IDE for development purposes can be performed on Swing clients only.

### **3. Use OpenJDK**

You may start using OpenJDK/JRE instead of Oracle JDK/JRE. Features provided by OpenJDK cover all requirements of caniasERP at the server side. On the other hand, OpenJFX Runtime and IcedTea Web Start may be required at the client side. OpenJFX Runtime is required for non-Windows clients because DJ Browser can be used on Windows clients only. If all clients are Windows client and DJ Browser is used, OpenJFX is not a must. Likewise, IcedTea Web Start is required only if Swing Client is used to reach caniasERP. If any of these additional packages are required in your company, we recommend an OpenJDK installation including OpenJFX Runtime and IcedTea Web Start at the client side like ojdkbuild release on GitHub. At the time of installation, OpenJFX Runtime and IcedTea Web Start can be installed with this release. (<https://github.com/ojdkbuild/ojdkbuild/releases/tag/1.8.0.201-1>)

## WHAT ABOUT OLDER VERSIONS OF CANIASERP (6.02 AND 6.03 VERSIONS)?

Java 6 and Java 7 versions are not subject to Oracle's new subscription model. Therefore, there is nothing you should do for the 6.02 and 6.03 versions of caniasERP because you use prior versions of Java distributions (Java 6 or Java 7).

## CAN JAVA 11 BE USED WITH CANIASERP?

All developments and tests to use Java 11 on server side are completed. However, the tests to use Java 11 on client side continue. Once the client side tests are finalized, the customers who subscribe to Oracle's commercial licensing plan will be able to use Oracle JDK/JRE 11 and the customers who choose to use OpenJDK will be able to use Open JDK/JRE 11.