

Java SE Products

This document describes the three Java SE product editions and the features available in those editions. It contains the following sections:

- Introducing the Java SE Product Editions
- Installation of Java SE Product Editions
- Licensing Considerations and Restricted-Use Licensing

Introducing the Java SE Product Editions

Java SE is available in three different product editions. Each product edition offers different functional capabilities, and is suitable for different kinds of applications and development scenarios.

Java SE

Java SE includes:

- The Java Development Kit (JDK),
- Java Runtime Environment (JRE),
- JavaFX,
- JRockit JDK.

The JDK is a superset of the JRE, and contains everything in the JRE, plus tools such as compilers and debuggers for development. A JRE provides a Java Virtual Machine (JVM), the standard class libraries and other components to run applications written in the Java programming language. JavaFX is a client platform designed to enable application developers to easily create and deploy rich internet applications (RIAs) that behave consistently across multiple platforms. Java SE can be used for free internally to run applications and may be redistributed in accordance with the *Oracle Binary Code License Agreement for the Java SE Platform Products*. The *Oracle Binary Code License Agreement for the Java SE Platform Products* must be accepted by you prior to download. Java SE does not include the commercial features as defined in the *Licensing Considerations and Restricted-Use Licensing* section below. It is easy to upgrade to the other Java SE product editions. Get Oracle Premier Support for the features included in Java SE with Oracle Java SE Support.

Oracle Java SE Advanced

Oracle Java SE Advanced can be purchased from Oracle and includes Java SE plus additional features for mission critical enterprise client and server deployments of Java. Oracle Java SE Advanced helps maximize up-time and reduce total cost of ownership. Oracle Java SE Advanced includes JRockit Mission Control and Flight Recorder with near zero overhead profiling and diagnostics in production environments. It provides unprecedented insight and actionable information for any component of any Java application. Deployment and configuration features of the Java for Business JRE & JDK enable centralized management of Java desktops in the enterprise.

Oracle Java SE Suite

Oracle Java SE Suite can be purchased from Oracle and includes Oracle Java SE Advanced plus additional features for soft real-time and virtualization. JRockit Real Time offers extremely low and predictable latencies for standard Java applications. JRockit Virtual Edition offers improved consolidation, security and manageability in virtualized environments where it can be run directly on the hypervisor without an operating system.

Revision Date: Feb 14, 2012 – Applies to JDK (6u25-6u31, 7, 7u1 - 7u3), JRE 6u25-6u31, 7, 7u1 - 7u3), Java for Business JDK (6u25-6u31, 7, 7u1 - 7u3), Java for Business JRE (6u25-6u31, 7, 7u1 - 7u3), JRockit JDK (R28.1.3, R28.1.4), JRockit Real Time (3.1.2, 4.0.1, 4.1) and JRockit Mission Control (3.1.2, 4.0.1, 4.1)

Installation of Java SE Product Editions

Oracle does not provide installation programs that correspond directly to Java SE, Oracle Java SE Advanced and Oracle Java SE Suite. Depending on the features licensed, one or more of the following individual packages must be downloaded:

- JRE
- JDK
- JavaFX
- JRockit JDK
- JRockit Mission Control
- Java for Business JRE
- Java for Business JDK

Licensing Considerations and Restricted-Use Licensing

Some of the packages described in *Installation of Java SE Product Editions* install commercial features that are restricted to Oracle Java SE Advanced or Oracle Java SE Suite. For example, the JRockit JDK comes with a deterministic garbage collector that requires a Oracle Java SE Suite license.

Commercial Feature Availability by Product Edition

Table 1-1 lists all the commercial features and the feature availability for Oracle Java SE Advanced and Oracle Java SE Suite. The Y value in a column means that the feature is available in the specified product edition; N means that use of the feature is not permitted in the specified product edition. This table can help you understand the difference between the product editions and determine whether you require Oracle Java SE Advanced or Oracle Java SE Suite.

Table 1-1 - Commercial Features in Java SE Product Editions

Feature	Java SE Advanced	Java SE Suite	Applicable Releases
Profiling and Diagnostics			
JRockit Flight Recorder (1)	Y	Y	JRockit JDK R28.1.3 JRockit JDK R28.1.4 JRockit JDK R28.1.5
JRockit Mission Control Console observability (1)	Y	Y	JRockit JDK R28.1.3 JRockit JDK R28.1.4 JRockit JDK R28.1.5 JRockit JDK R28.2.x JRockit Real Time 3.1.2 JRockit Mission Control 3.1.2 JRockit Mission Control 4.0.1 JRockit Mission Control 4.1

Revision Date: Feb 14, 2012 – Applies to JDK (6u25-6u31, 7, 7u1 - 7u3), JRE 6u25-6u31, 7, 7u1 - 7u3), Java for Business JDK (6u25-6u31, 7, 7u1 - 7u3), Java for Business JRE (6u25-6u31, 7, 7u1 - 7u3), JRockit JDK (R28.1.3, R28.1.4), JRockit Real Time (3.1.2, 4.0.1, 4.1) and JRockit Mission Control (3.1.2, 4.0.1, 4.1)

JRockit Mission Control Memory Leak Detector observability (1)	Y	Y	JRockit JDK R28.1.3 JRockit JDK R28.1.4 JRockit JDK R28.1.5 JRockit JDK R28.2.x JRockit Real Time 3.1.2 JRockit Mission Control 3.1.2 JRockit Mission Control 4.0.1 JRockit Mission Control 4.1
JRE Usage Tracking	Y	Y	Java for Business JRE 6u25 - 6u31 Java for Business JRE 7 Java for Business JRE 7u1-7u3
Extreme Low Latency			
JRockit Real Time, Deterministic GC	N	Y	JRockit JDK R28.1.3 JRockit JDK R28.1.4 JRockit JDK R28.1.5 JRockit JDK R28.2.x JRockit Real Time 3.1.2 JRockit Mission Control 3.1.2 JRockit Mission Control 4.0.1 JRockit Mission Control 4.1
Desktop			
JRE Installer Auto-Update Off	Y	Y	Java for Business JRE 6u25 – 6u31 Java for Business JRE 7 Java for Business JRE 7u1-7u3

(1) These features include configuration options, command line tools, APIs, protocols and the JMX MBeans under `oracle.jrockit.management` and `bea.jrockit.management` to enable observation of a running JVM and require Oracle Java SE Advanced or Oracle Java SE Suite licenses for the computer running the observed JVM.

Example: A company has 10 servers with the JRockit Flight Recorder enabled, that are being monitored from four workstations. The company needs Oracle Java SE Advanced or Oracle Java SE Suite licenses for the 10 servers, but not for the four client workstations.

Example: A company is using a third-party JMX tool to monitor their application. They only access MBeans in the `javax.management` package and their own custom MBeans. No Oracle Java SE Advanced or Oracle Java SE Suite license is required.