

# Oracle GraalVM

## Enterprise Edition FAQ

GraalVM Enterprise is built on the global standard for enterprise-class application development, Java SE. GraalVM Enterprise is a multilingual virtual machine, and delivers even higher efficiency, better isolation and greater agility for enterprises in cloud and hybrid environments.

### What are the capabilities of GraalVM Enterprise?

- [Run your code faster and more efficiently](#)
- [Compile Java and other JVM-based applications ahead-of-time for faster startup and lower memory footprint](#)
- [Interoperate directly with most modern programming languages for more efficient development process](#)
- [Embed languages with the Graal SDK](#)
- [Use a single set of tools to monitor, debug, and profile all your code.](#)

### What are the main benefits of using GraalVM Enterprise?

- Efficiency: Contains optimization algorithms that look for specific ways to accelerate application processes by rearranging compiled code. You can start up services up to 100x faster and do so with 5x less memory consumption.
- Security: Includes security features to address some of the common sources of security application vulnerabilities, including buffer overflows in native code.
- Agility: Allows legacy applications to be modernized and new ones to be built faster.

### What are the core features of GraalVM Enterprise?

GraalVM core features include:

- GraalVM Compiler - generates the compiled code to run in either the JVM or in our Native Image Virtual Machine
- GraalVM Native Image - allows applications to be compiled ahead of time into a binary that runs natively on the system
- Polyglot capabilities - support for Java, Scala, Kotlin, JavaScript, Node.js;
- The Language Implementation Framework - allows implementing any language for the GraalVM environment
- LLVM runtime - allows native code to run in an interpreted environment in GraalVM Enterprise

## How do I start using GraalVM?

There are a few ways you can choose from:

- [Oracle Cloud](#). GraalVM Enterprise is free to use (including support) on Oracle Cloud: [try it](#) or refer to the [Getting started manual](#);
- For on-premise evaluation, please download the latest version from [Oracle Technology Network](#).

## What are the differences between Oracle GraalVM Enterprise Edition and GraalVM Community Edition?

There are several key advancements in GraalVM Enterprise making it a preferred product for enterprises over GraalVM Community, including:

- Improved efficiency with higher peak performance and lower memory footprint to lower your infrastructure costs and improve application reaction times
- Improved security features to safeguard your applications across all languages
- Enterprise support 24x7x365 to deliver peace of mind that your environment is backed by GraalVM experts worldwide

## What releases of GraalVM Enterprise are currently available?

The current version is [Oracle GraalVM Enterprise Edition 19.0](#).

## What are the execution options GraalVM offers for Java and JVM applications?

For JVM-based applications, GraalVM offers two independent execution modes:

1. Running applications in a regular JIT compilation setup with additional performance advantages, coming from new optimizations algorithms.
2. Compiling applications ahead-of-time into native executables, which can run standalone with instant startup and low memory footprint.

## What are the advantages of running Node.js applications on GraalVM?

Running in the context of Node.js GraalVM enables polyglot applications (e.g., use Java, R, or Python libraries), running Node.js with large heap configurations and Java's garbage collectors, and using GraalVM's interoperability to define data structures in C/C++ and use them from JavaScript.

## What does GraalVM offer for Ruby, R, or Python?

In addition to GraalVM benefits such as language interoperability (e.g., use Java or JavaScript from Ruby, R, or Python applications), GraalVM can achieve high speedups of 10x or more for those languages and provide access to developer tools.

### **What is GraalVM Enterprise Subscription?**

GraalVM Enterprise Subscription provides licensing and support for on-premises environments. For Oracle Cloud Infrastructure customers, GraalVM Enterprise is available for free, including support.

GraalVM Enterprise Subscription includes:

- Oracle Premier Support (24x7x365);
- Access to Performance, Stability and Security Updates;
- MOS (My Oracle Support);
- Annual 1 Year Term Licensing.

### **What is the cost of GraalVM Subscription?**

For inquiries related to sales, support, product and/or licensing, please contact us at <https://oracle.com/contact>

### **What's the GraalVM Enterprise License?**

Oracle Master License Agreement. The Oracle GraalVM Native Image tool is available under an Early Adopter license.

### **What if I want to embed GraalVM Enterprise in hardware for redistribution?**

Please contact your Oracle Java Sales representative or send email to [graalvm\\_enterprise\\_ww\\_grp@oracle.com](mailto:graalvm_enterprise_ww_grp@oracle.com).

### **How do I get support updates?**

Comprehensive GraalVM Enterprise support is provided via My Oracle Support (MOS).

### **Where do I send feedback and/or questions for GraalVM Enterprise?**

If you are a customer, use My Oracle Support. For all other inquiries related to sales, support, product and/or licensing, please contact us at <https://oracle.com/contact>.

### **Additional Resources**

For general information, please refer to <https://www.oracle.com/tools/graalvm-enterprise-edition.html>

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