Bytecode

Return to Glossary

Bytecode is computer object code that is processed by a program, usually referred to as a Virtual Machine (VM), rather than by the “real” computer machine, the hardware processor. The VM converts each generalized machine instruction into a specific machine instruction or instructions that this computer's processor will understand. **Bytecode** is the result of compiling source code written in a language that supports this approach. Most computer languages, such as C and C++, require a separate compiler for each computer platform - that is, for each computer operating system and the hardware set of instructions that it is built on. Windows and the Intel line of microprocessor architectures are one platform; Apple and the PowerPC processors are another. Using a language that comes with a VM for each platform, your source language statements need to be compiled only once and will then run on any platform.

The best-known language today that uses the **Bytecode** and VM approach is the Java Virtual Machine (JVM). The LISP language, used in artificial intelligence applications, is an earlier language that compiled **Bytecode**. Other languages that use **Bytecode** or a similar approach include Icon and Prolog.

Source: https://whatis.techtarget.com/definition/bytecode