引言

- 1. 什么是 JVM?
- 2. 学习 JVM 有什么用?
- 3. 常见的 JVM
- 4. 学习路线

什么是 JVM?

定义:

Java Virtual Machine - java 程序的运行环境 (java 二进制字节码的运行环境)

好处:

- 一次编写, 到处运行
- 自动内存管理,垃圾回收功能
- 数组下标越界检查
- 多态

比较:

jvm jre jdk

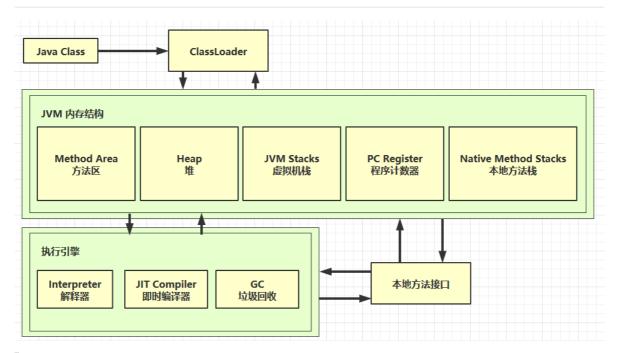
学习 JVM 有什么用?

- 面试
- 理解底层的实现原理
- 中高级程序员的必备技能

常见的 JVM

| Name \$ | Creator \$ | First public release \$ | Latest stable version | Latest release date | Cost, availability \$ | License + |
|--------------------------------------|--|----------------------------|--------------------------|------------------------------------|-----------------------|--|
| CACAO | Vienna University of Technology | ? | 1.6.0 ^[1] | 4 September 2012 ^[1] | Free | GPL version 2 or later ^[2] |
| Eclipse OpenJ9 (formerly IBM J9) | IBM | ? | 0.8.0 | 15 March 2018 ^[3] | Free | Apache License 2.0 Eclipse Public License 2.0 |
| GCJ | GNU | 6 September 1998 | 6.4 (Terminal) | 4 July 2017 | Free | GPL version 2 or later, with the "libgcc exception" ^[4] |
| HotSpot, OpenJDK edition | Sun Microsystems, Oracle | 27 April 1999 | ? | 21 September 2017 | Free | GPL version 2 only |
| HotSpot, Oracle JDK edition | Sun Microsystems, Oracle | 27 April 1999 | ? | September 2017 | Free | Proprietary |
| HotSpot, Java SE embedded edition | Sun Microsystems, Oracle | 27 April 1999 | ? | ? | Commercial | Proprietary ^[5] |
| HotSpot, Zero port | Gary Benson ^[6] | ? | ? | ? | Free | GPL version 2 only |
| IKVM.NET | Jeroen Frijters | 28 June 2004 | 7.0.4335.0 | 5 December 2011 | Free | zlib License ^[7] |
| JAmiga | Peter Werno, Joakim Nordström | 19 May 2005 ^[8] | 1.2 | 6 January 2014 | Free | GPL version 2 or later |
| JamVM | Robert Lougher | 13 March 2003 | 2.0.0 | 30 July 2014 | Free | GPL version 2 or later |
| Jato VM | Pekka Enberg and contributors ^[9] | ? | 0.3[10] | 4 January 2012 ^[10] | Free | GPL version 2 only ^[9] |
| JC virtual machine | Archie L. Cobbs | ? | 1.4.7 | 13 November 2005 | Free | LGPL version 2.1 or later |

学习路线



参考资料