Java Versions

Version	Release date	End of Free Public Updates ^{[5][6]}	Extended Support Until
JDK Beta	1995	?	?
JDK 1.0	January 1996	?	?
JDK 1.1	February 1997	?	?
J2SE 1.2	December 1998	?	?
J2SE 1.3	May 2000	?	?
J2SE 1.4	February 2002	October 2008	February 2013
J2SE 5.0	September 2004	November 2009	April 2015
Java SE 6	December 2006	April 2013	December 2018
Java SE 7	July 2011	April 2015	July 2022
Java SE 8 (LTS)	March 2014	January 2019 for Oracle (commercial) December 2020 for Oracle (non-commercial) At Least September 2023 for AdoptOpenJDK	March 2025
Java SE 9	September 2017	March 2018	N/A
Java SE 10 (18.3)	March 2018	September 2018	N/A
Java SE 11 (18.9 LTS)	September 2018	N/A for Oracle At Least September 2022 for AdoptOpenJDK	Vendor specific
Java SE 12 (19.3)	March 2019	N/A for Oracle September 2019 for OpenJDK	N/A
Legend: Old version Older version, still supported Latest version Future release			

Hibernate History

Hibernate was started in 2001 by Gavin King with colleagues from Cirrus Technologies as an alternative to using EJB2-style entity beans. The original goal was to offer better persistence capabilities than those offered by EJB2; by simplifying the complexities and supplementing certain missing features.

- In early 2003, the Hibernate development team began Hibernate2 releases, which offered many significant improvements over the first release.
- JBoss, Inc. (now part of Red Hat) later hired the lead Hibernate developers in order to further its de-

velopment.

- In 2005, Hibernate version 3.0 was released. Key features included a new Interceptor/Callback architecture, user defined filters, and JDK 5.0 Annotations (Java's metadata feature). As of 2010, Hibernate 3 (version 3.5.0 and up) was a certified implementation of the Java Persistence API 2.0 specification via a wrapper for the Core module which provides conformity with the JSR 317 standard.[3]
- In Dec 2011, Hibernate Core 4.0.0 Final was released. This includes new features such as multi-tenancy support, introduction of ServiceRegistry (a major change in how Hibernate builds and manages "services"), better session opening from SessionFactory, improved integration via org.hibernate.integrator.spi.Integrator and auto discovery, internationalization support, message codes in logging, and a more distinction between the API, SPI or implementation classes.[4]
- In December 2012, Hibernate ORM 4.1.9 Final was released.[5]
- In Mar 2013, Hibernate ORM 4.2 Final was released.[6]
- In December 2013, Hibernate ORM 4.3.0 Final was released.[7] It features Java Persistence API 2.1.
- In September 2015, Hibernate ORM 5.0.2 Final was released. It has improved bootstrapping, hibernate-java8, hibernate-spatial, Karaf support.
- In November 2018, Hibernate ORM 5.1.17 Final was released. This is the final release of the 5.1 series.
- In October 2018, **Hibernate ORM 5.3** Final was released. It featured Java Persistence API 2.2 inheritance caching.
- In **December 2018, Hibernate ORM 5.4.0** Final was released. [8]

Spring Framework

Version history

Version	Date	Notes
0.9	2002	
1.0	2003	
2.0	2006	
3.0	2009	
4.0	2013	
5.0	2017	

The first version was written by <u>Rod Johnson</u>, who released the framework with the publication of his book *Expert One-on-One J2EE Design and Development* in October 2002. The framework was first released under the <u>Apache 2.0 license</u> in June 2003. The first milestone release, 1.0, was released in March 2004 with further milestone releases in September 2004 and March 2005. The Spring 1.2.6 fra-

mework won a <u>Jolt productivity award</u> and a <u>JAX (Java API for XML) Innovation Award</u> in 2006. Spring 2.0 was released in October 2006, Spring 2.5 in November 2007, Spring 3.0 in December 2009, Spring 3.1 in December 2011, and Spring 3.2.5 in November 2013. Spring Framework 4.0 was released in December 2013. Notable improvements in Spring 4.0 included support for Java SE (Standard Edition) 8, <u>Groovy</u> 2, some aspects of Java EE 7, and <u>WebSocket</u>.

Spring Framework 4.2.0 was released on 31 July 2015 and was immediately upgraded to version 4.2.1, which was released on 01 Sept 2015. It is "compatible with Java 6, 7 and 8, with a focus on core refinements and modern web capabilities".

Spring Framework 4.3 has been released on 10 June 2016 and will be supported until 2020. It "will be the final generation within the general Spring 4 system requirements (Java 6+, Servlet 2.5+)".

Spring 5 is announced to be built upon <u>Reactive Streams</u> compatible Reactor Core.