

Java 8 (a.k.a 1.8)

JSR 337, what's new

Language changes:

- **lambda expressions** (JSR 335, includes method handles)
- continuation of Project Coin (small language improvements)
- annotations on Java types

Library changes:

- Improved Date and Time API

Java 7 (a.k.a 1.7)

JSR 336, features and enhancements

Language changes:

- Project Coin (small changes)
 - `switch` on Strings
 - **try-with-resources**
 - **diamond operator**

Library changes:

- **new abstracted file-system API (NIO.2)** (with support for virtual filesystems)
- improved concurrency libraries
- elliptic curve encryption
- more incremental upgrades

Platform changes:

- **support for dynamic languages**

Java 6 (a.k.a 1.6)

JSR 270. features and enhancements

Mostly incremental improvements to existing libraries, no new language features (except for **the `@Override` snafu**).

Java 5 (a.k.a 1.5)

JSR 176, features and enhancements

Language Changes:

- **generics** (that's the big one)
- **annotations**
- `enum` types
- `varargs`, enhanced for loops (for-each)

Library changes:

- concurrency utilities in `java.util.concurrent`

Java 1.4

JSR 59

Language changes:

- **the `assert` keyword**

Library changes:

- **regular expressions** support
- **NIO**
- integrated XML handling

Java 1.3

Mostly minor improvements, really.

Platform changes:

- HotSpot JVM: improvement over the original JIT

Java 1.2

Language changes:

- the `strictfp` keyword

Library changes:

- a **unified collections system**
- **Swing** as a new UI-System on top of AWT

Platform changes

- a real JIT, greatly improving speed

Java 1.1

Language changes:

- inner classes

Library changes:

- AWT event changes
- JDBC, RMI
- reflection