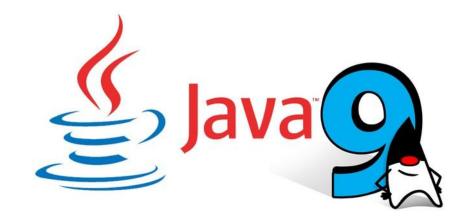


Hope has their soldiers

- Jigsaw/JPMS
- The Reactive API
- REPL
- Everything Else



OOTB

- Better Use of Memory
- Better Performance
- Better Use of Hardware
- Better Documentation
- Faster Compilation



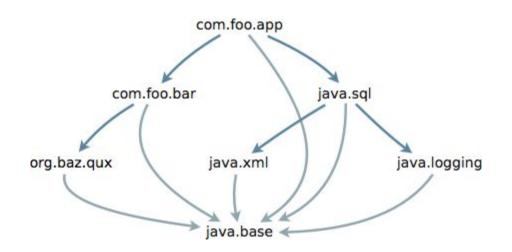
Hope home website

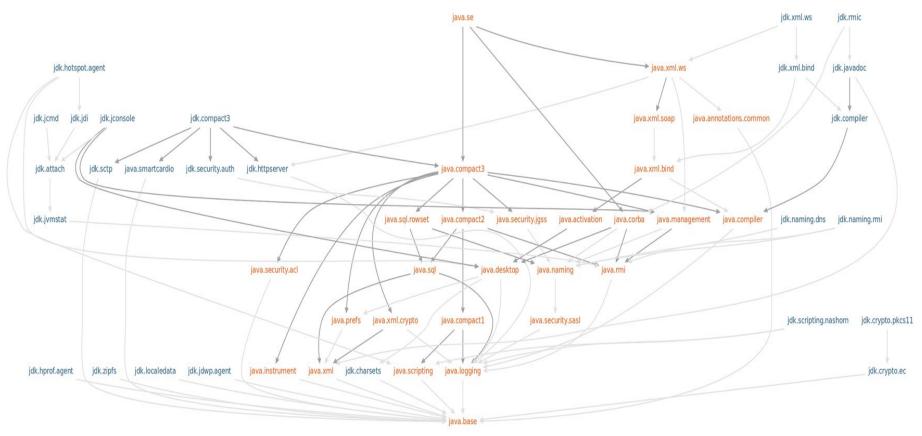
Hope manual

Jigsaw/JPMS



https://www.flickr.com/photos/distillated/4019168148/





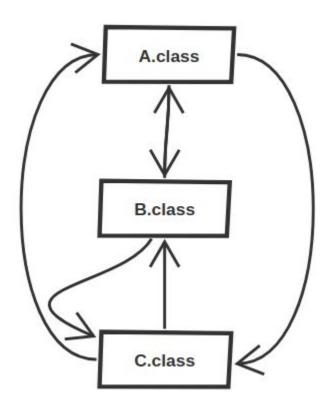
source : OpenJDK.java.net

JPMS

- Make the Java SE Platform, and JDK, more easily scalable down to small computing devices
- Improve the security and maintainability of Java SE Platform Implementations in general and the JDK in particular
- Enable improved application performance
- Make it easier for developers to construct and maintain libraries and large applications, for both the Java SE and EE Platforms

JPMS

- a class is a container of fields and methods
- a package is a container of classes and interfaces
- a module is a container of packages

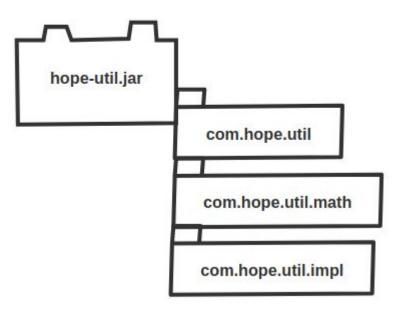


- ▼ II mockito-core-2.7.9.jar library root
 - ▶ META-INF
 - ▼ 📮 org.mockito
 - ▶ □ configuration
 - exceptions
 - ▶ **□** hamcrest
 - ▼ **□** internal
 - Configuration
 - reation
 - ▼ 📮 debugging
 - 📭 FindingsListener
 - InvocationsPrinter
 - G □ Localized
 - LocationImpl
 - 😘 🏿 LoggingListener
 - 😘 🌣 MockitoDebuggerImpl
 - VerboseMockInvocationLogger
 - ☐ □ WarningsCollector
 - 😘 🏿 WarningsFinder
 - 😘 🤏 WarningsPrinterImpl

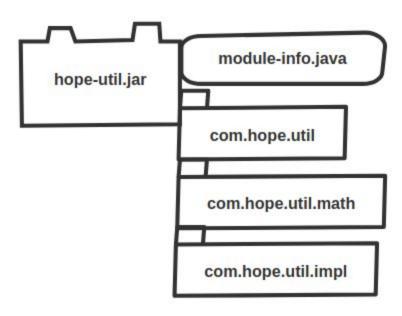


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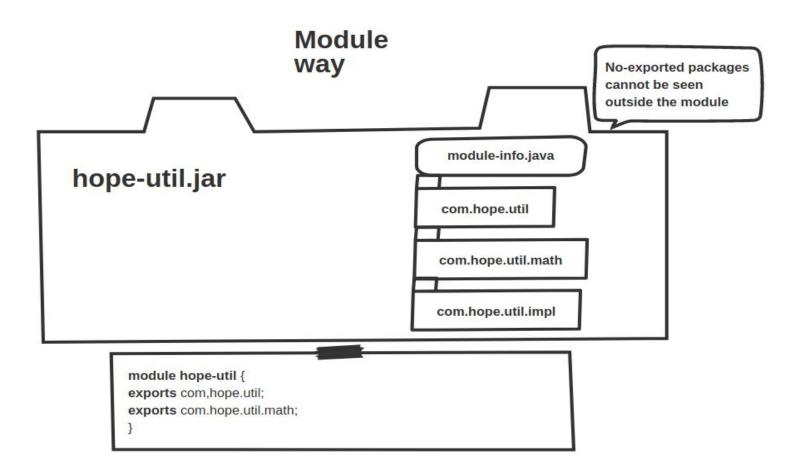
Classpath way



Module way



Module way module-info.java hope-util.jar com.hope.util com.hope.util.math com.hope.util.impl module hope-util { exports com, hope.util; exports com.hope.util.math;





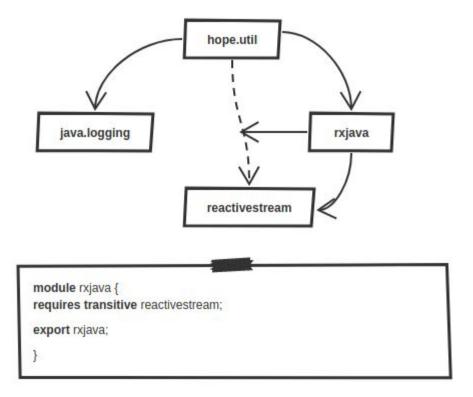
https://www.flickr.com/photos /aksbang/7569857980/

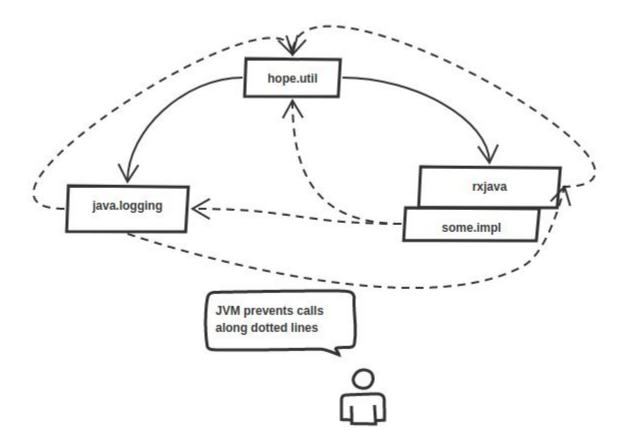


What modules does it depend on ?

What packages it export?

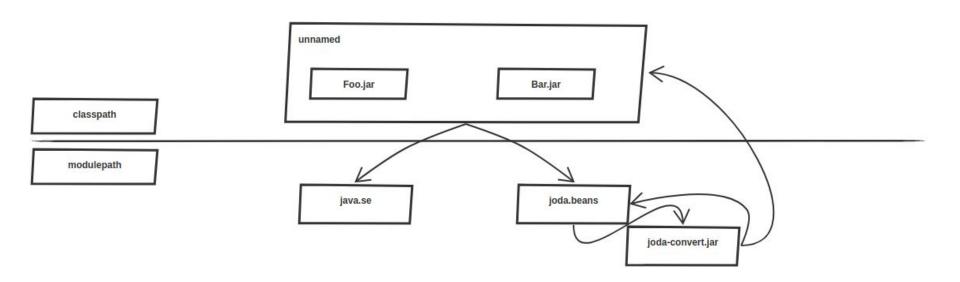
```
module hope.util {
requires reactivex.rxjava;
requires java.logging;
export com.hope.util
}
```





```
module hope.util {
requires transitive some_package;
opens hope.util.impl;
}
```

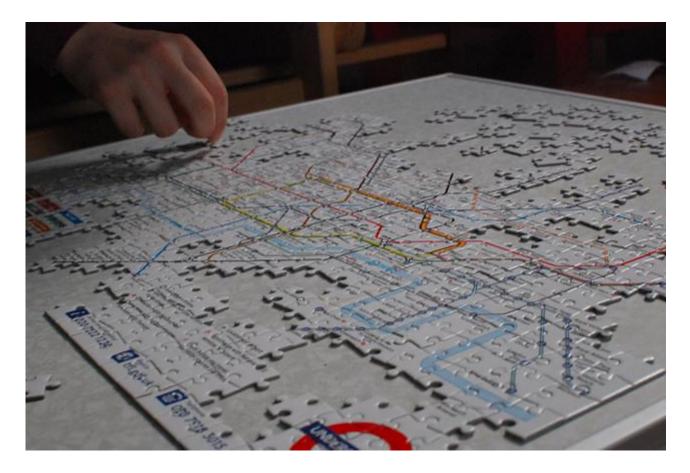
```
open module hope.util {
requires transitive some_package;
}
```







https://blog.idrsolutions.com/2017/11/4-things-to-remember-when-migrating-to-java-9/



https://www.flickr.com/photos/distillated/4019170798

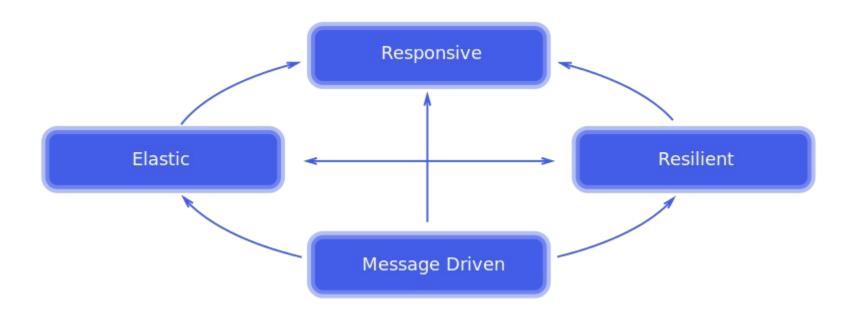


https://i1.wp.com/www.javaadvent.com/content/uploads/2015/12/

Reactive Stream API



https://www.flickr.com/photos/95907952@N08/



Reactive Stream API

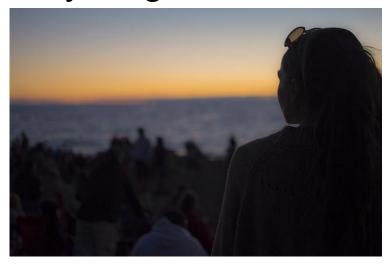


- ▼ □ java.base library root
 - java.util.concurrent
 - ▼ 🧐 Flow
 - **A Processor**
 - Publisher
 - Subscriber
 - Subscription

Implementations

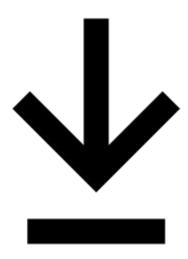


Anything else... on the horizon?



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JEP - Process

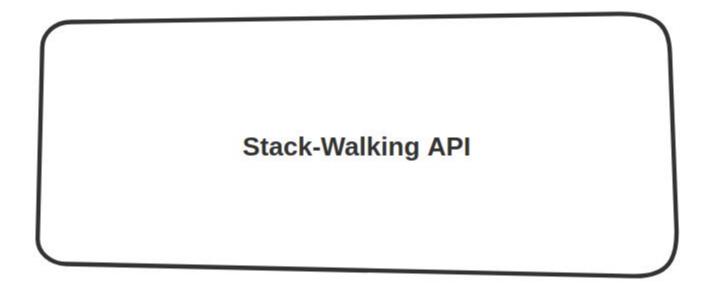


Convienience Factory Methods for Collections

Private methods for Interfaces

New methods on the Streams API

New methods on the Optional



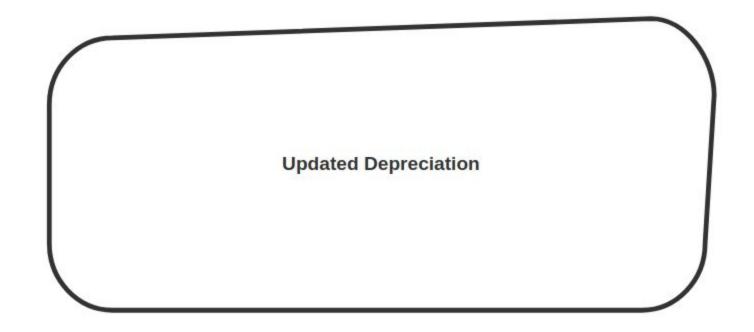


```
jar root
- A.class
- B.class
- C.class
- D.class
- META-INF
- versions
- 9
- A.class
- B.class
```

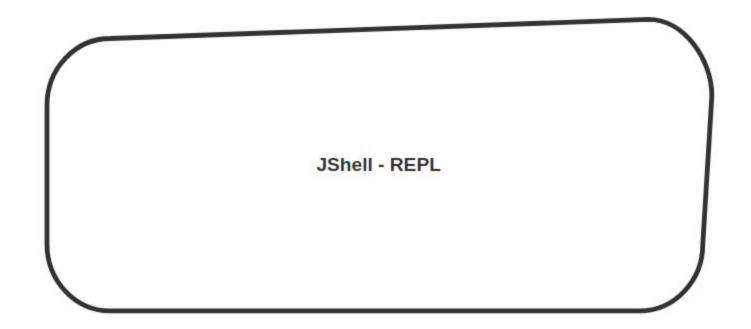
http://openjdk.java.net/jeps/238

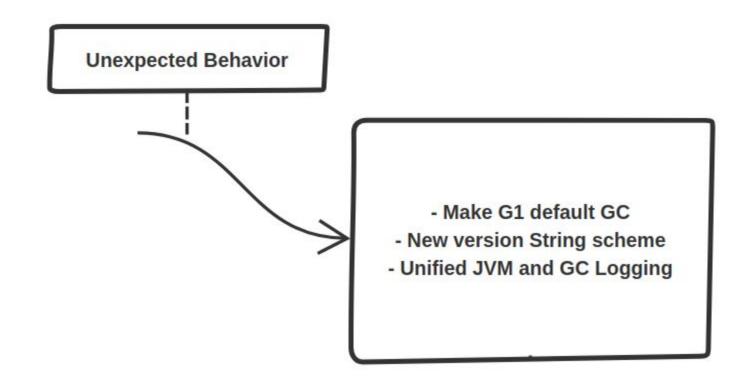
```
jar root
- A.class
- B.class
- C.class
- D.class
- META-INF
- versions
- 9
- A.class
- B.class
- 10
- A.class
```

http://openjdk.java.net/jeps/238









Tools, Libraries e.g. Maven/Gradle e.g. Jackson, RxJava

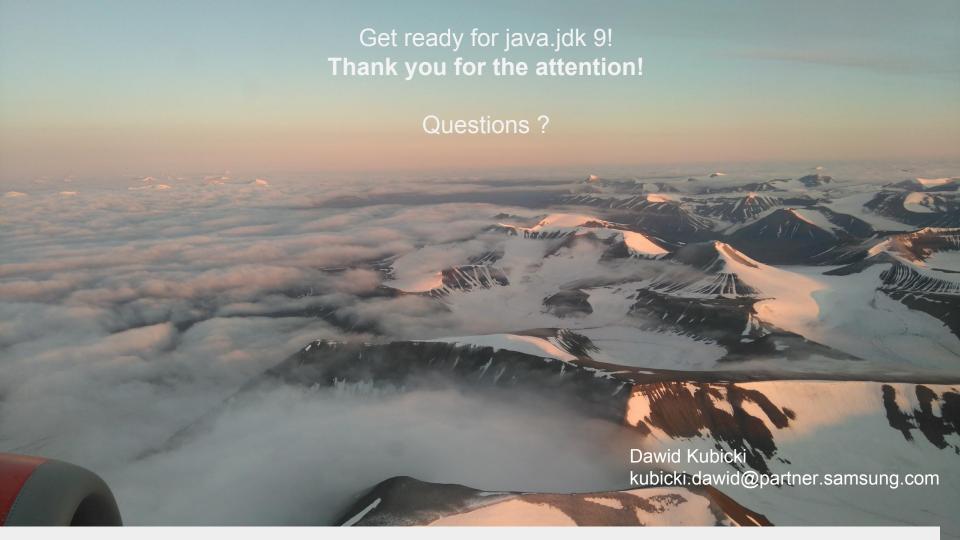


https://www.flickr.com/photos/rockpowered/5752246688

JDK 10 is schedule on March 20th, 2018



https://www.flickr.com/photos/41498713@N08/



Resources

- K. Malawski Why Reactive ? Foundational Principles for Enterprise Adoption
- http://blog.joda.org/
- https://blog.jetbrains.com
- http://openjdk.java.net
- http://www.geonames.org/
- https://trishagee.github.io/
- https://docs.oracle.com/javase/9/
- https://docs.oracle.com/javase/10/
- https://jaxenter.com/
- http://www.baeldung.com/