Never A Wrong (Semantic) Version Again!
About Me

- Ferry Huberts M.Sc.
- Open Source Entrepreneur (pelagic.nl)
- Member of the bnd / bndtools team
- Contributor in several other projects
  - Like olsrd, cgit
Meaning of Semantic

se·man·tic
adjective \si-'man-tik\

Origin of SEMANTIC
Greek sēmantikos significant, from sēmainein to signify, mean, from sēma sign, token

Meaning of Version

version
noun \ˈvər-zhən, -shən\

Origin of VERSION
Middle French, from Medieval Latin version-,
versio act of turning, change, from Latin
vertere to turn — more at worth

Meaning of Semantic Version

A Semantic Version is
A change with (strict) meaning
Semantic Versioning Schemes

- OSGi

- SemVer.org
  http://semver.org/

- Eclipse
  http://wiki.eclipse.org/Version_Numbering
Semantic Versioning

- OSGi

Premise

Semantic Versions are all about (Backward) Compatibility
Semantic Version

Major.Minor.Micro.Qualifier*

- Major: incompatible change for providers and consumers
- Minor: incompatible change for providers
- Micro: compatible change
- Qualifier: anything (e.g. build identity)

* Major, Minor and Micro are numbers, Qualifier is a string
Coherent set of exported classes
Hands-On

bndtools

The easy, powerful and productive way to develop with OSGi. Based on bnd and Eclipse.
Rocket Example

Provider

rocket.control

rocket.blackbox

Consumer

rocket.control.api.
RocketControlListener

API

rocket.control.api.

bndtools
Summary

• Semantic Versions:
  – Theory:
    • conceptually easy
  – Reality:
    • not so easy
    • easy to forget to update the multiple places
  – There are some subtleties

• bndtools can handle* it for you

• Never Stop Thinking

* except for semantic changes not detectable by a machine, like kph to mph renames
bndtools:  http://bndtools.org/
         https://github.com/bndtools/bndtools
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