Future of OpenEdge build process

a.k.a. Why Ant/PCT should die

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History

- PCT was born in 2003
- Consistent builds across OpenEdge versions, operating systems, DB types, …
- No Jenkins at this time

- Soon adopted by many companies, and got improvement requests and patches from multiple vendors

What’s wrong

- XML syntax is quite cumbersome
- Conditional behavior is hard to write and maintain (additional libraries required)
- Specific to a directory structure

What happened in the Java world ?

- Initial release of Maven in 2004
- Quickly became the de facto build standard for open source Java projects
- And widely used in commercial projects, in-house development…
- Brought two key features :
  - Convention over configuration
  - Dependency management

Convention over configuration

- The directory structure is imposed by the Maven builder
  - Java source code stored in src/main/java
  - Unit tests stored in src/test/java
  - Web application stored in src/main/web
- As long as you follow the conventions, Maven will be able to build your project
- You only have to describe exceptions
  - « Maven turn complex things easy, but easy things can become a nightmare »

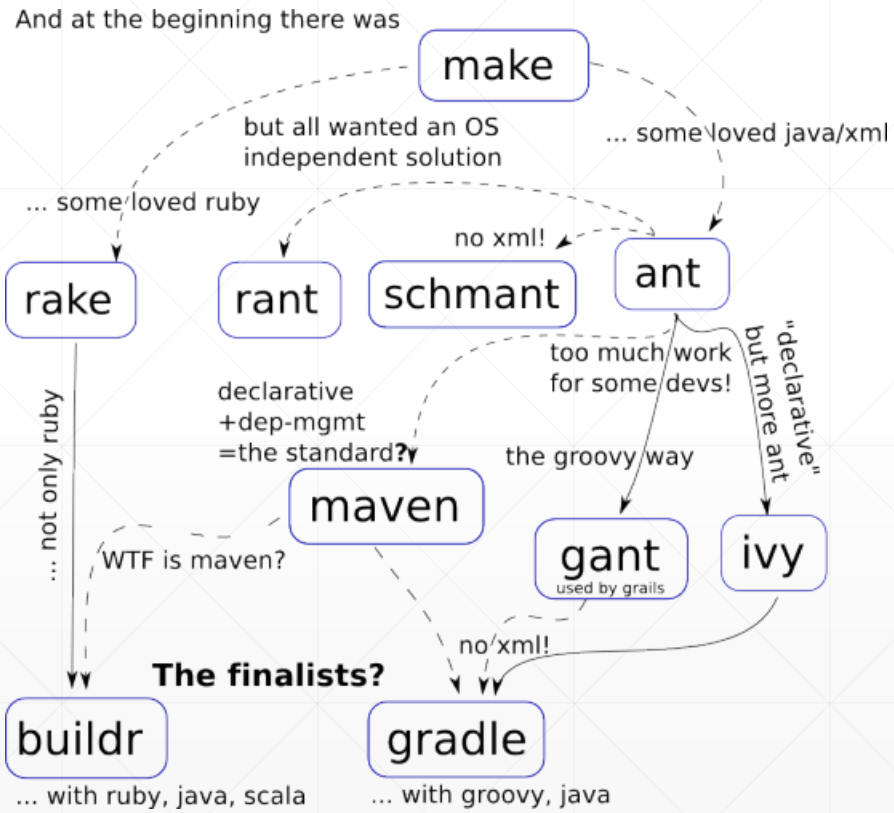
Dependency management

- Use public and/or private repositories
- A project only needs to declare its main dependencies
  - Dependency on commons-fileutils 1.0.1 and slf4j 2.6
- Which are downloaded during the build
- Hierarchy generated on the fly

From Eclipse

- Maven projects are configured on the fly
- Classpath is set up automatically
- Source and test entries automatically added
- Initial Maven build is executed
- Dependency management done on the fly

Summary


And at the beginning there was
make
but all wanted an OS
independent solution
... some loved java/xml
... some loved ruby
no xml!
rake
rant
schmant
ant
too much work
for some devs!
"declarative"
but more ant
declarative
+dep-mgmt
=the standard?
the groovy way
... not only ruby
maven
WTF is maven?
gant
used by grails
ivy
no xml!
The finalists?
buildr
gradle
... with ruby, java, scala
... with groovy, java

With OpenEdge

- Huge monolithic projects are the norm rather than the exception
  - Long build times
- Large build scripts – Reusability is quite limited
- No code convention
- Developer Studio setup is long
- No dependencies

What could we do ?