

# continuous integration : flex

Brian LeGros



<http://brianlegros.com/blog>

# me

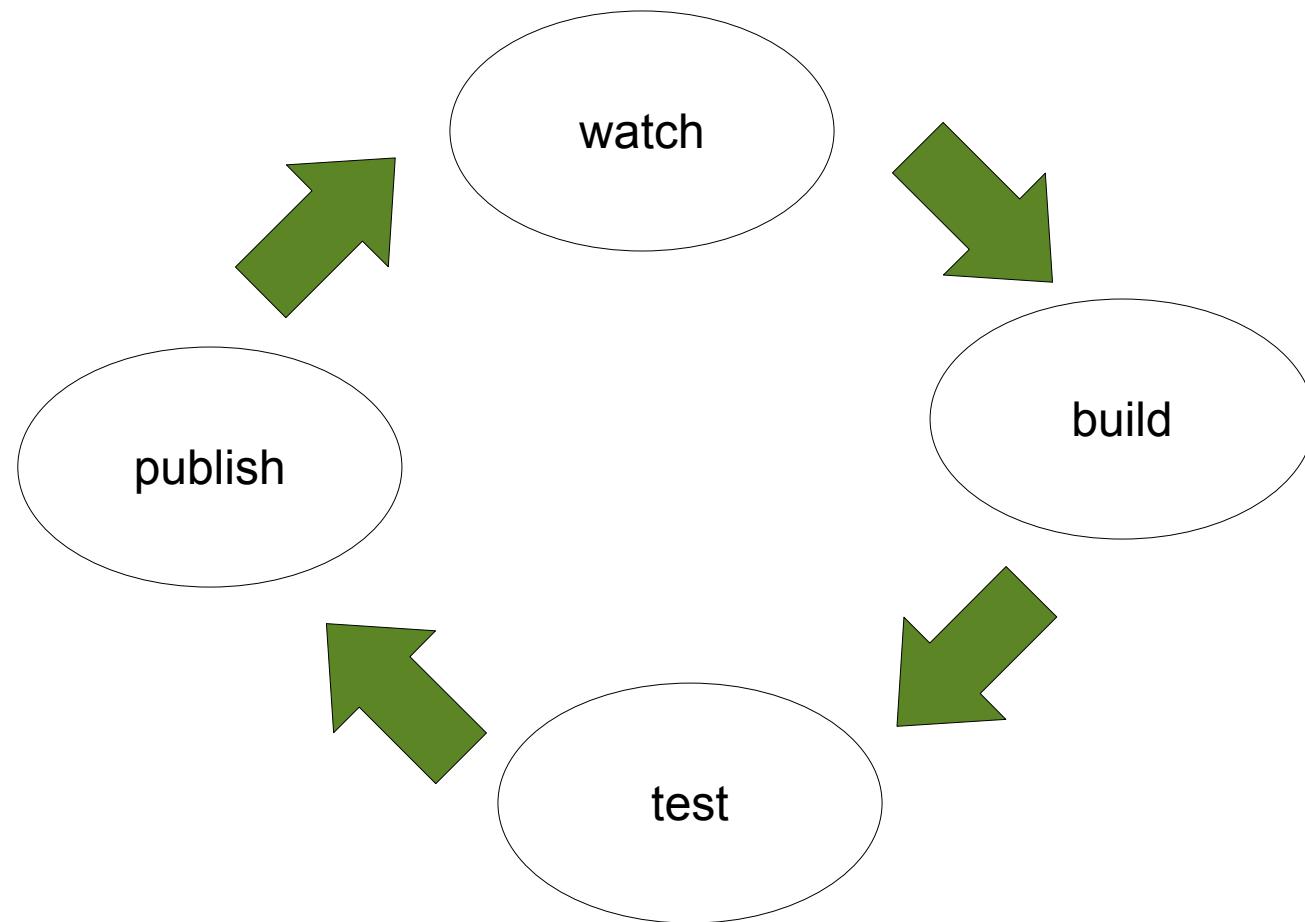
- application developer for ~9 years
- flex developer @ Highwinds CDN (<http://www.highwinds.com>)
- user group manager
  - Rich Application Developers of Melbourne(<http://itsrandom.info>)
  - Adobe Developers of Greater Orlando (<http://adogo.us>)
- contributor to fluint project (<http://code.google.com/p/fluint/>)

~2 hours

<http://adogo.us/meetings>

February meeting

# the continuous integration loop



# what?

- watch source code for a change
- update copy of source code to build
- execute build script
- publish feedback to developers
- fix, if necessary, and repeat

# why?

- More feedback up-front rather than at release time
- Supplement communication in distributed teams
- Verify the deployment process in an integration environment
- On-demand artifacts for working, tested builds
- Eases the path to automated deployment
- Establishes confidence in the build process

# options

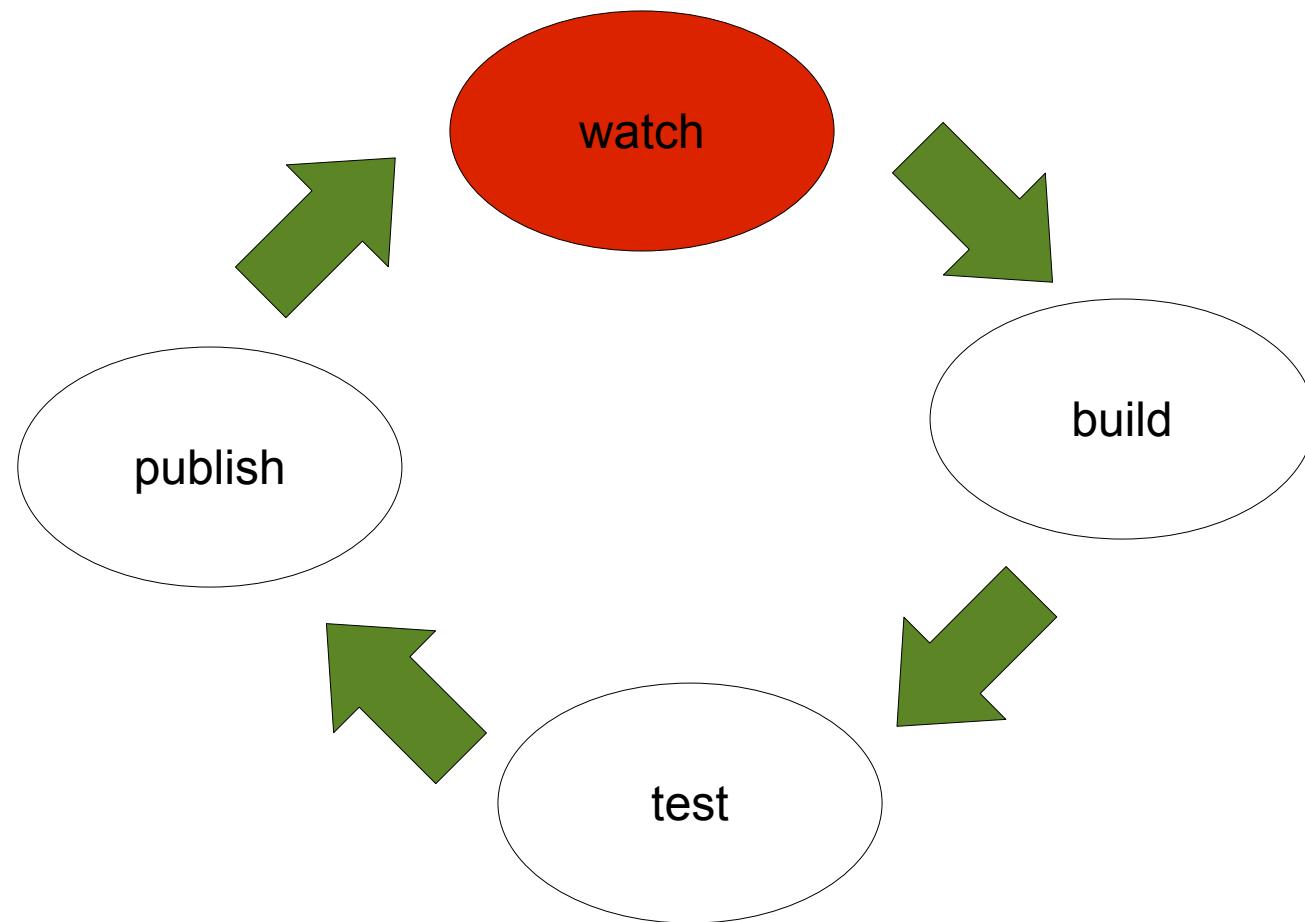


cruisecontrol.

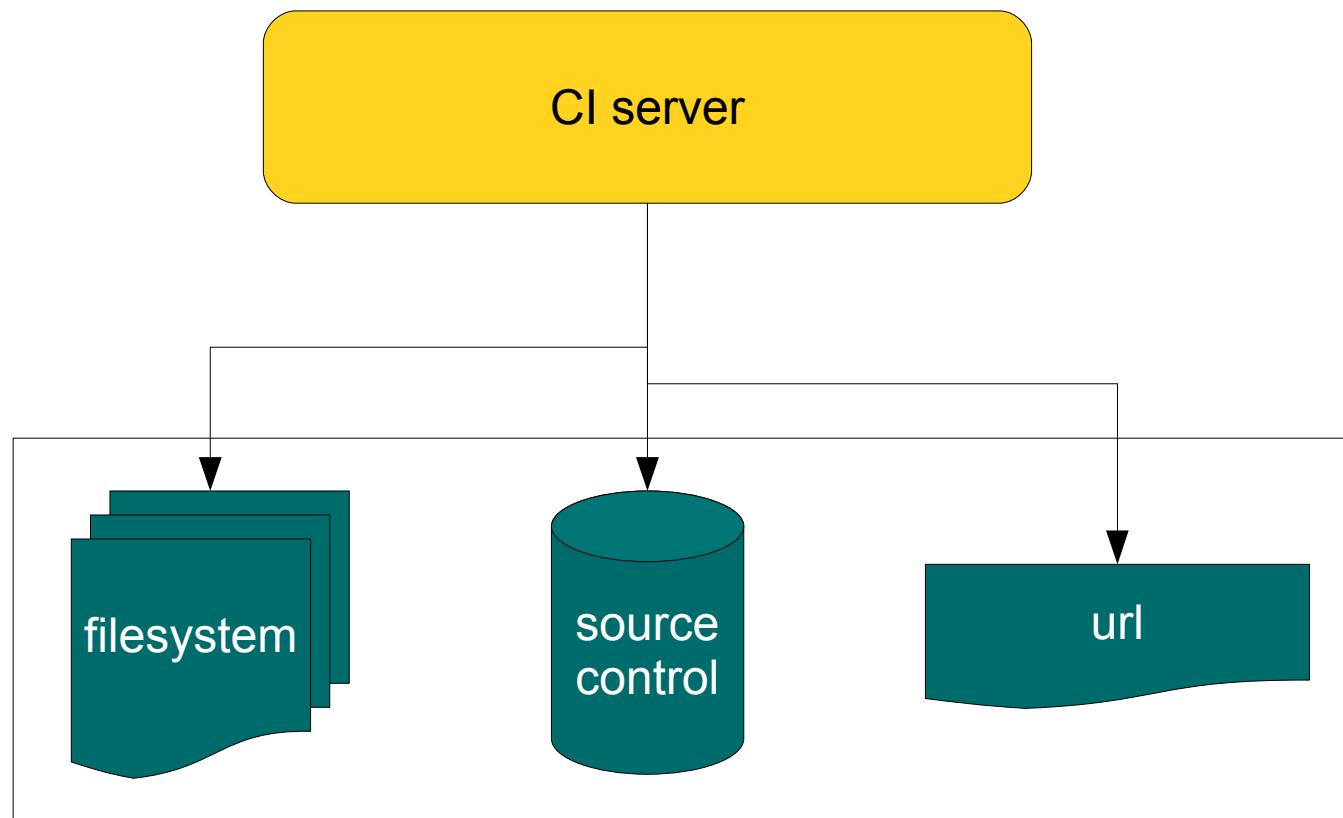
continuum

TC

# the continuous integration loop



# watch



# source control considerations

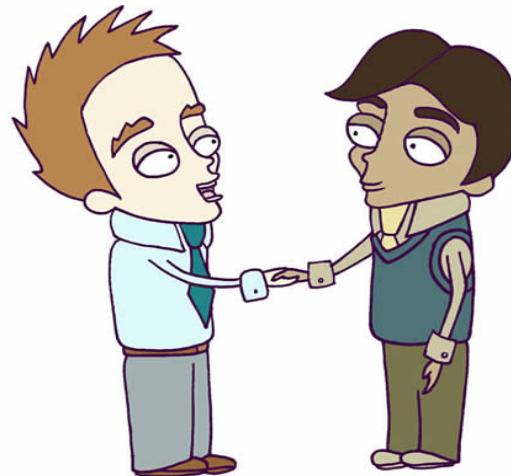
- locking strategies
- folder management

# pessimistic locking



- + • Simple learning curve
  - Sequential development creep
- • Managing hijackers
  - May cause CI build to fail if resources are locked

# optimistic locking

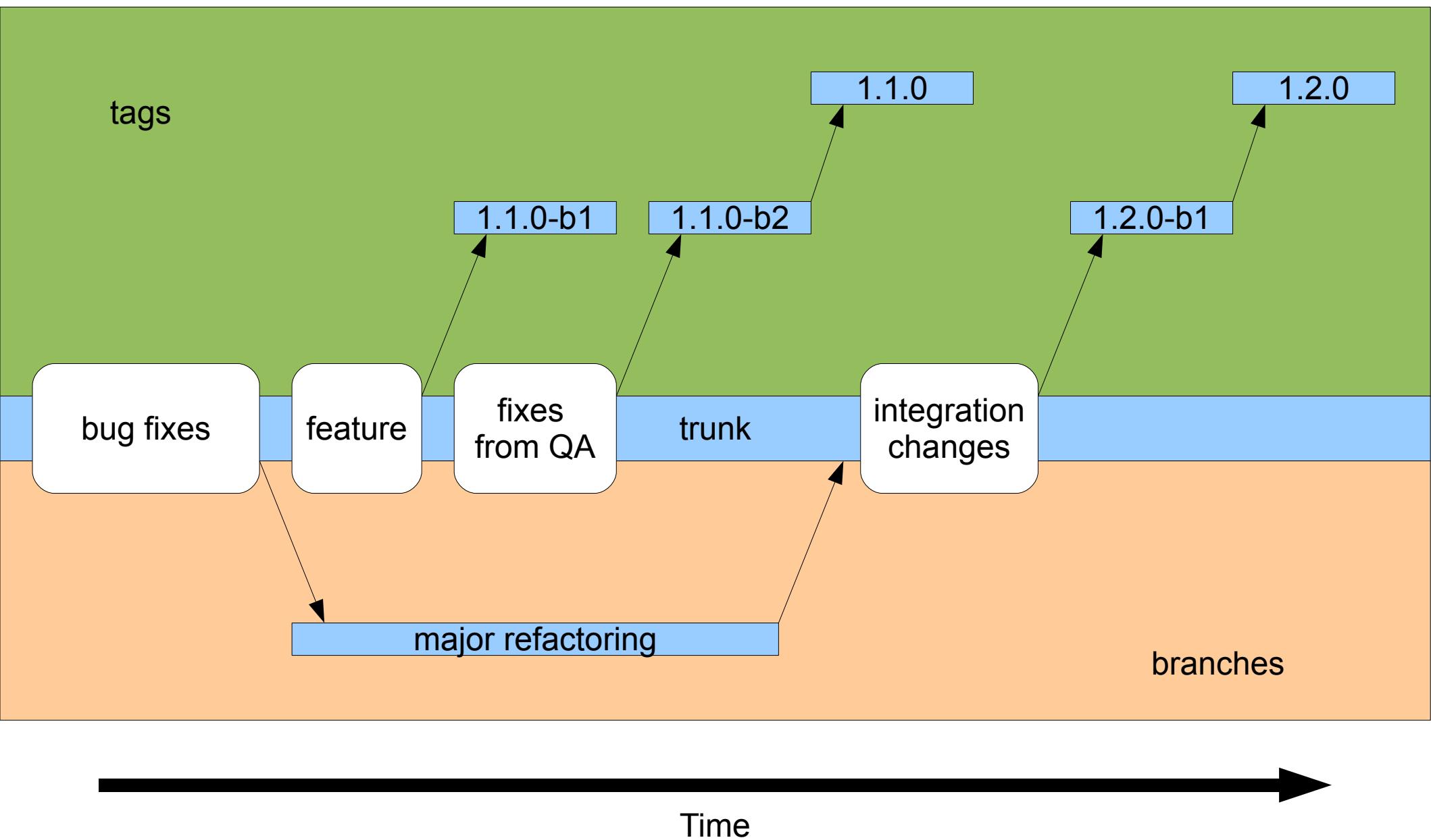


- +
  - Conducive to concurrent development
  - Unobstructed use by CI server
- - Potential for complex conflict resolution
  - Managing those who don't resolve conflicts

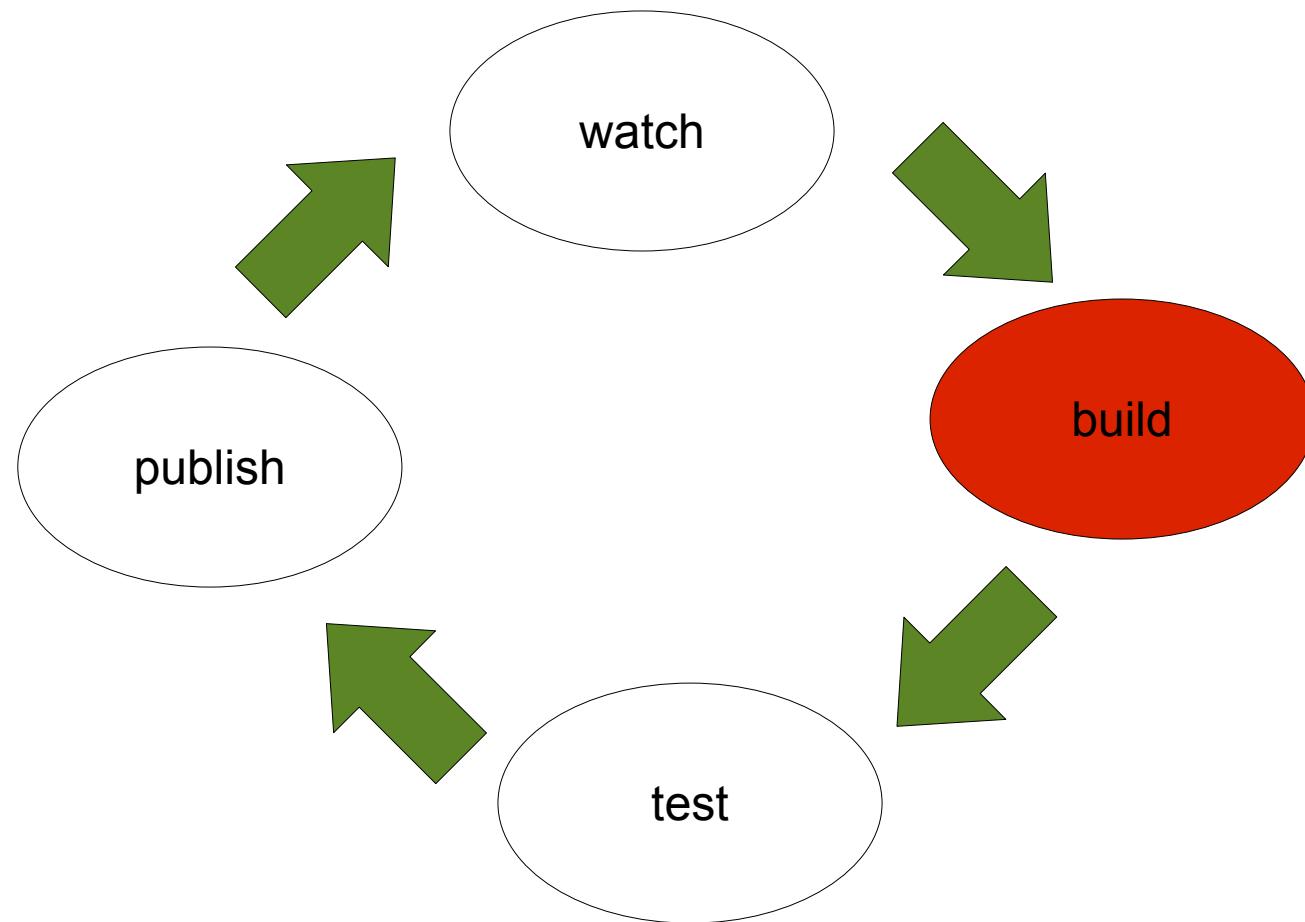
# folder management

- 📁 project
  - 📁 branches
  - 📁 tags
  - 📁 trunk

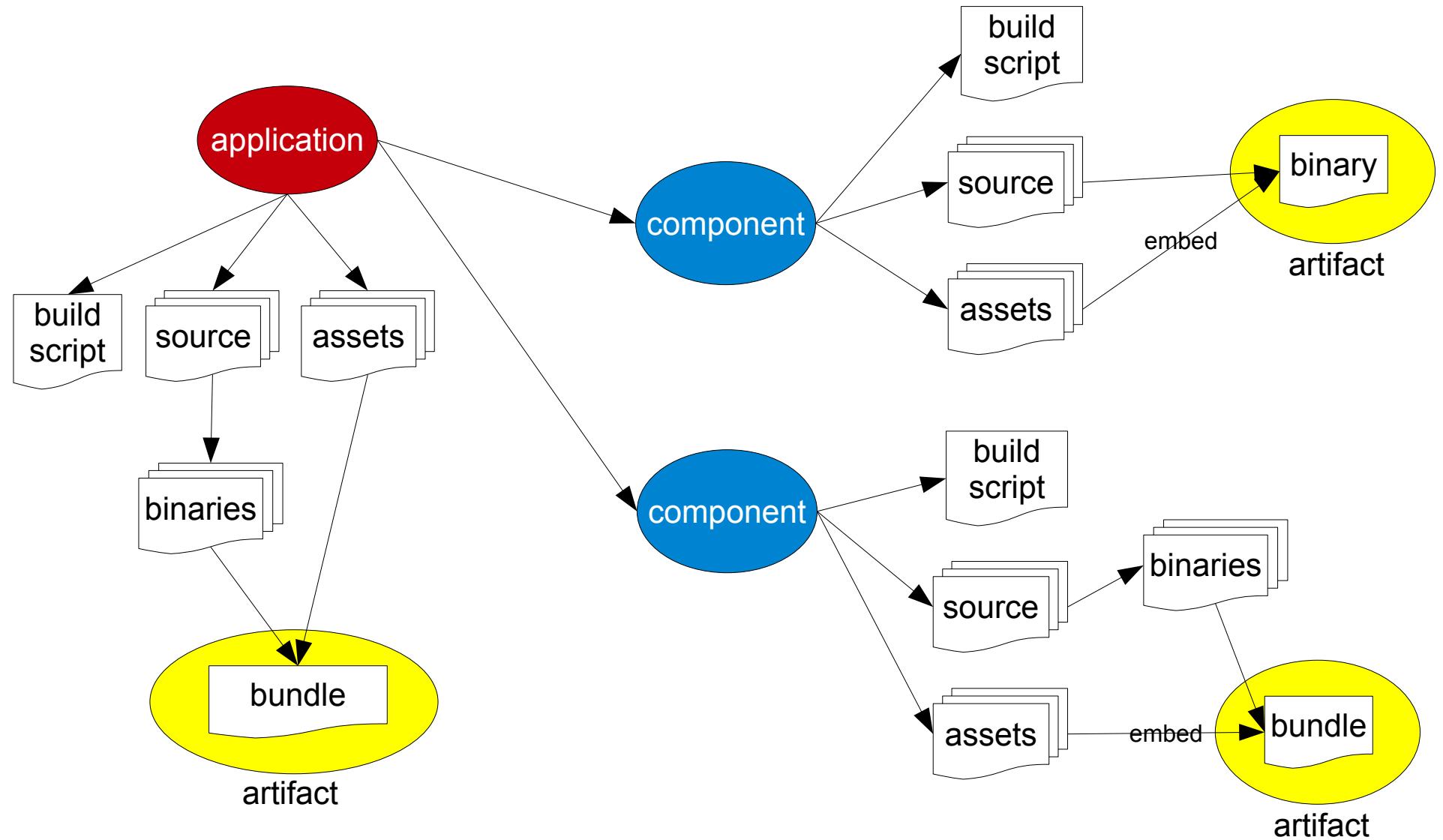
# example



# the continuous integration loop

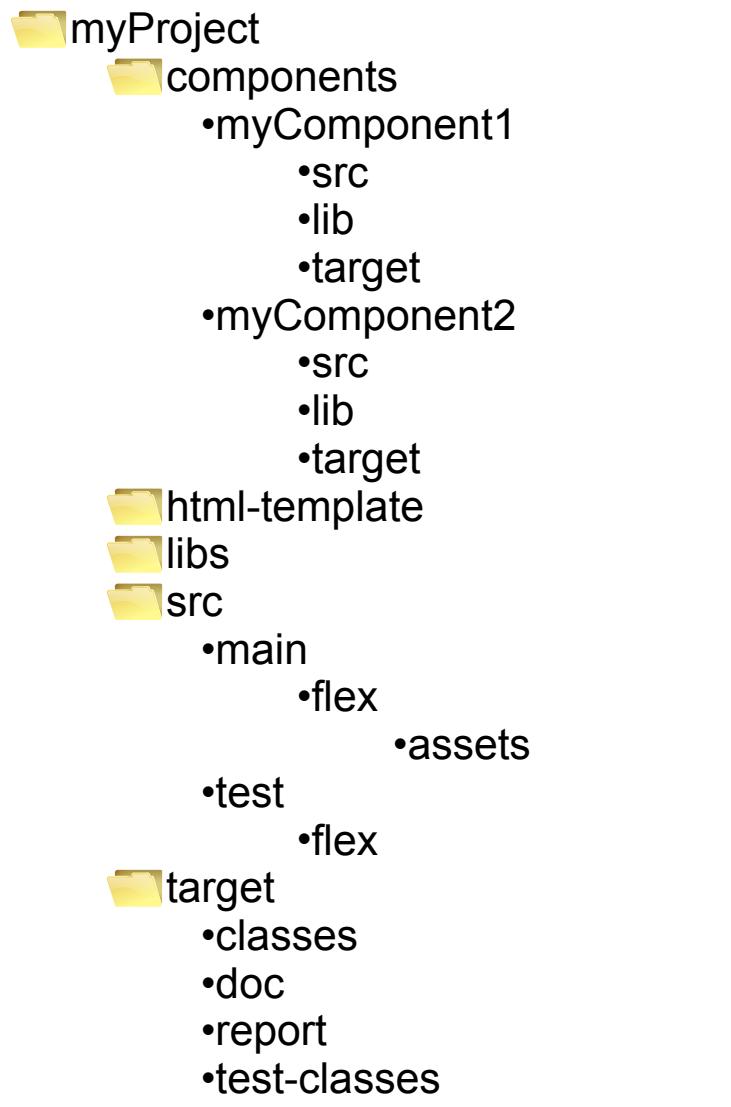


# build

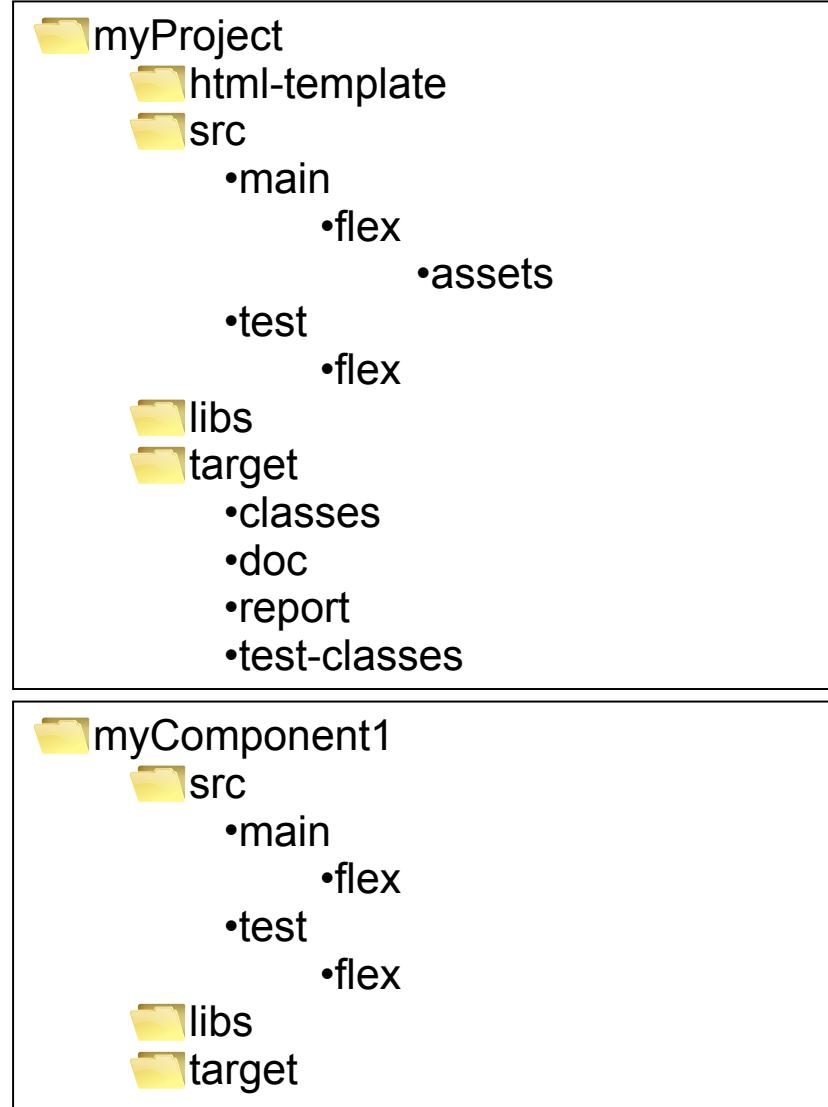


# project organization

Nested



Individual



# build lifecycle

1. clean
2. init
3. build
4. test
5. package

# tools



supports

- flex sdk
- flexunit
- fluint
- html-wrapper
- asdoc

Built by:

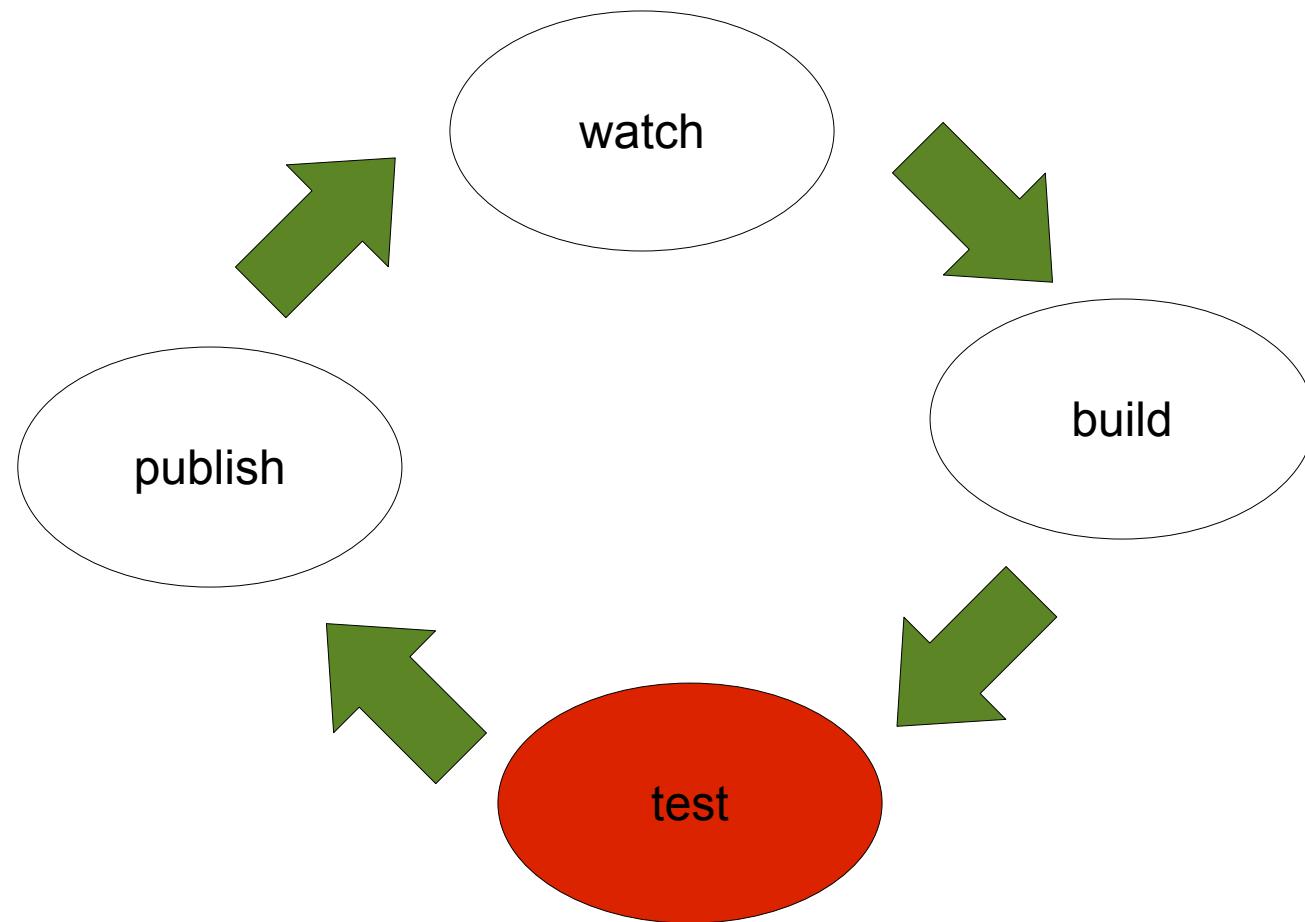
**maven**

supports

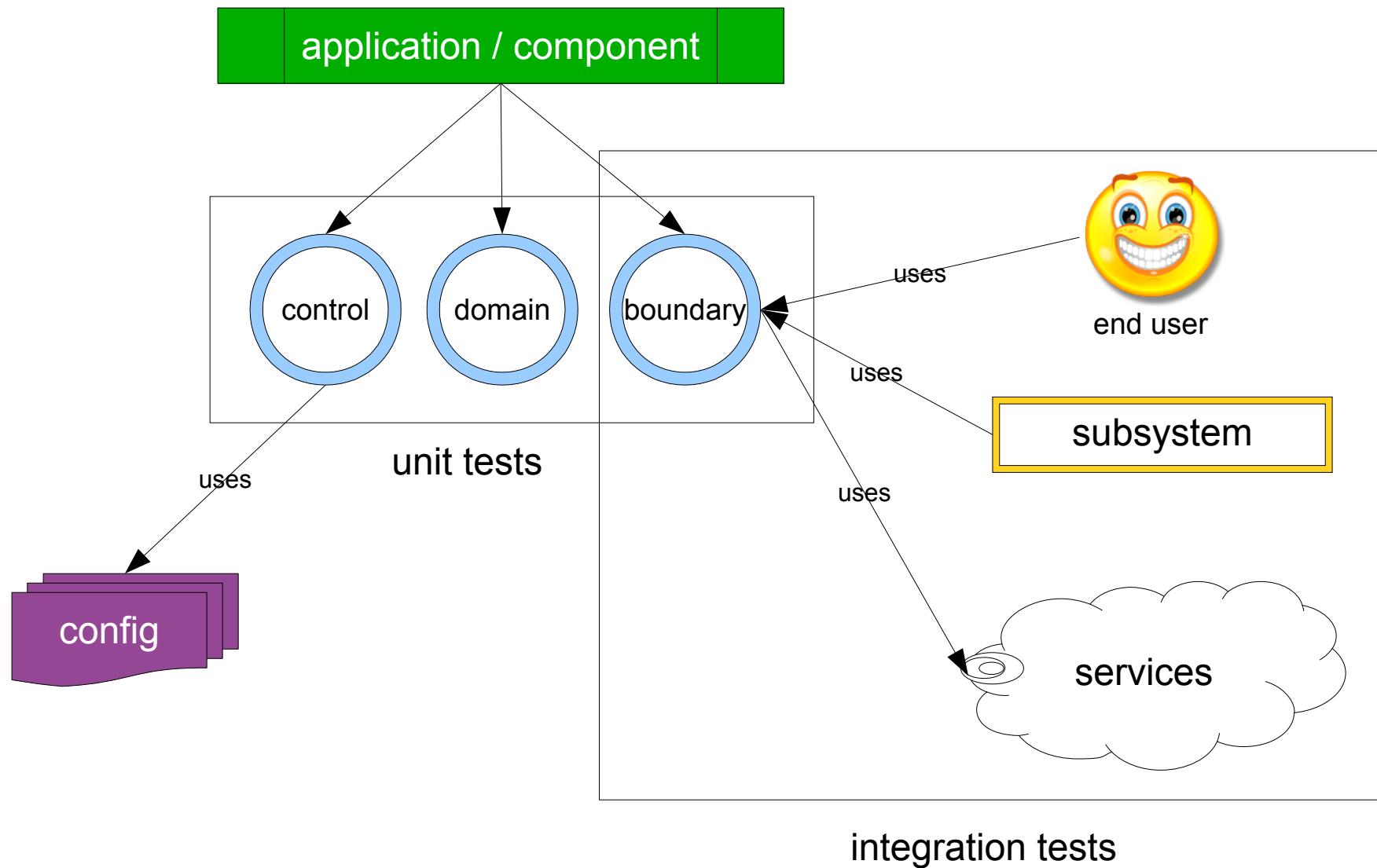
- flex-mojos
- flexunit
- fluint \*\*
- html-wrapper
- asdoc

\*\* - with a little help from Ant

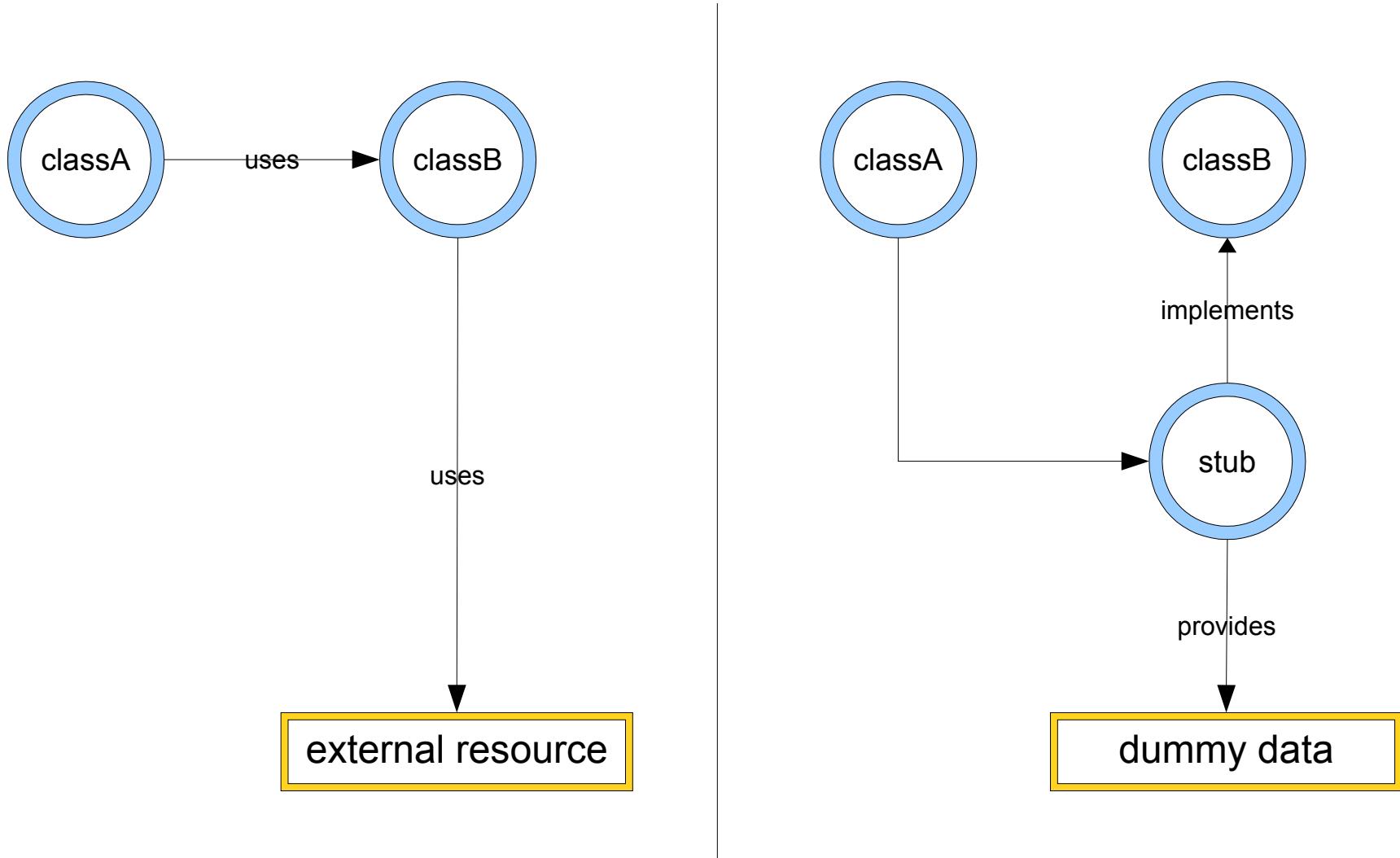
# the continuous integration loop



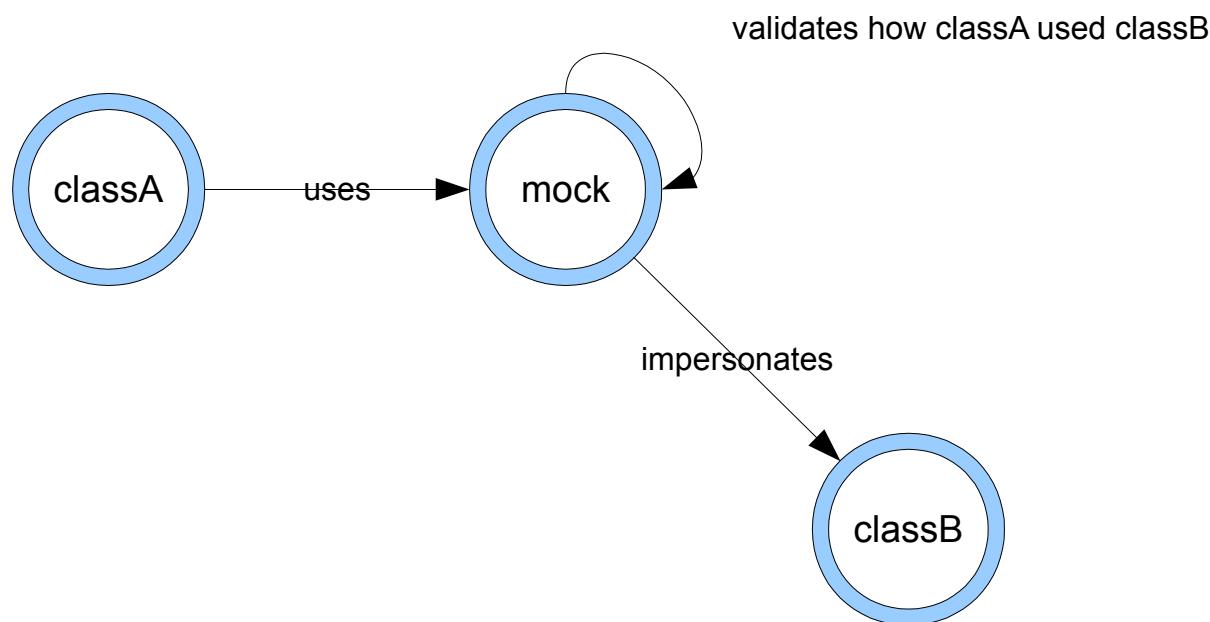
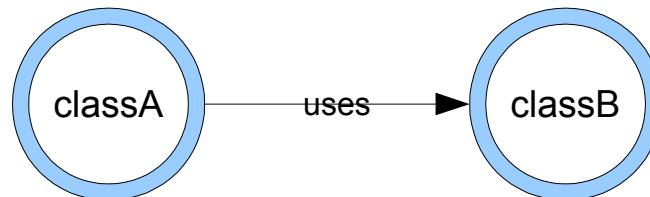
# test



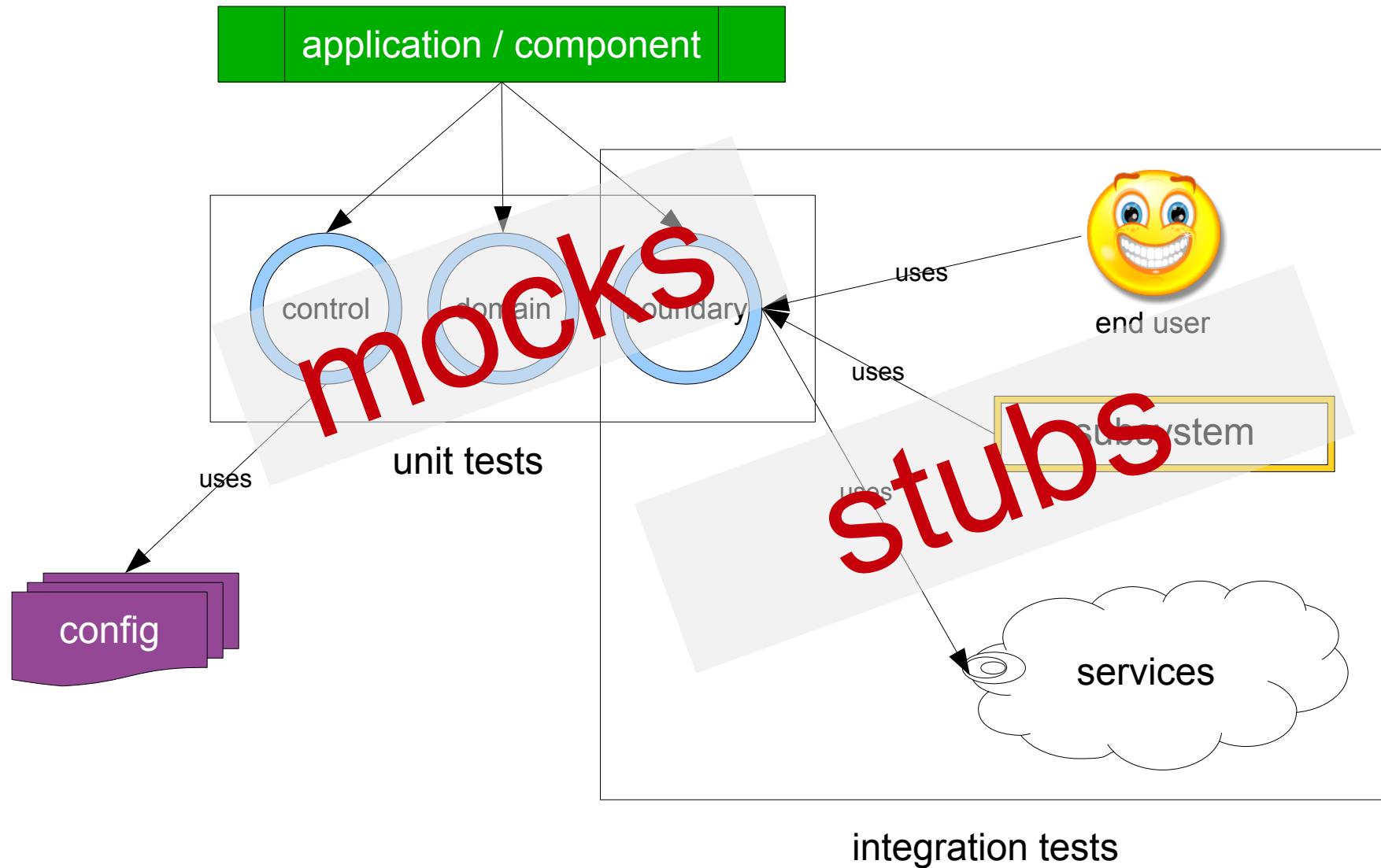
# stubs



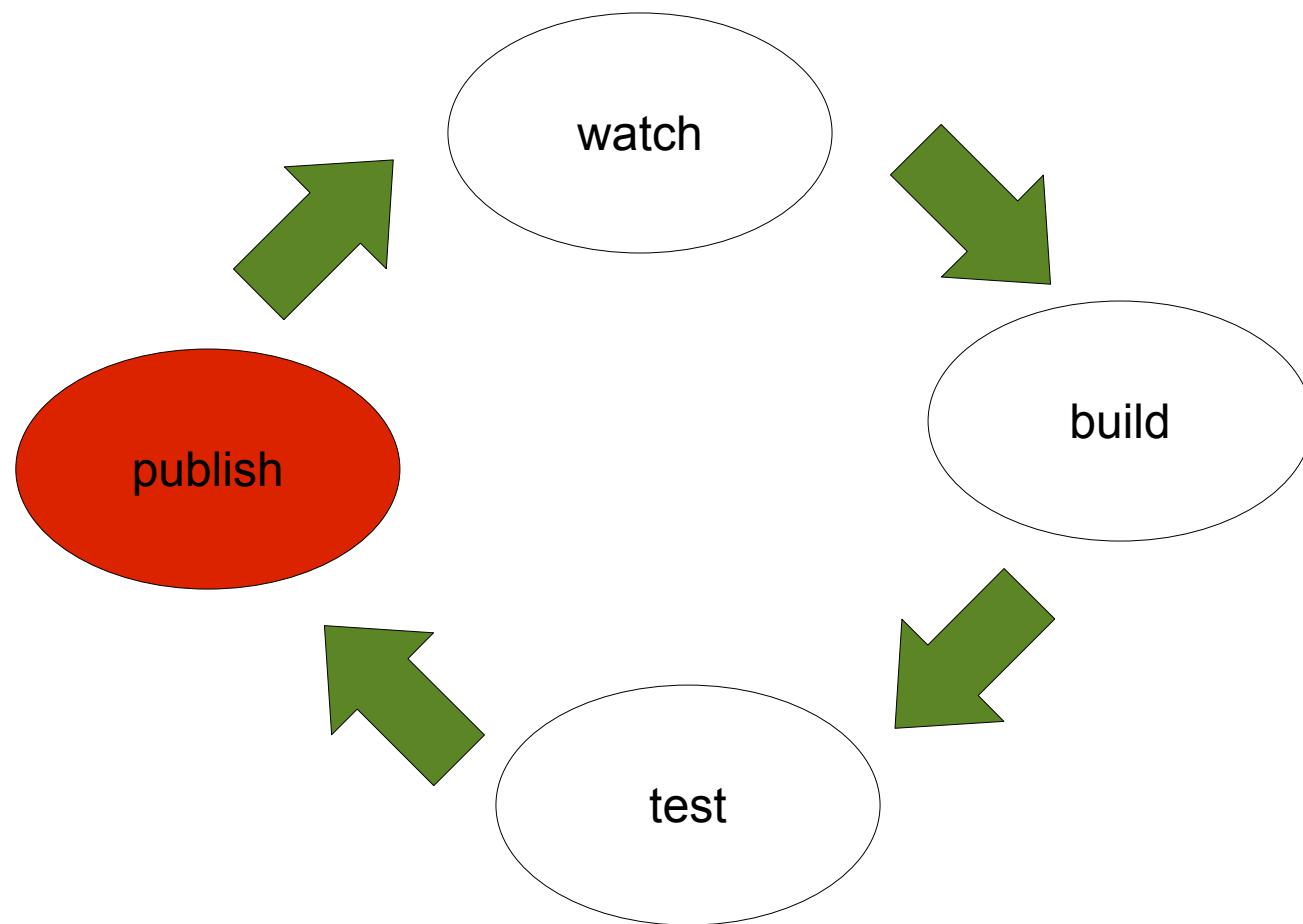
# mock objects



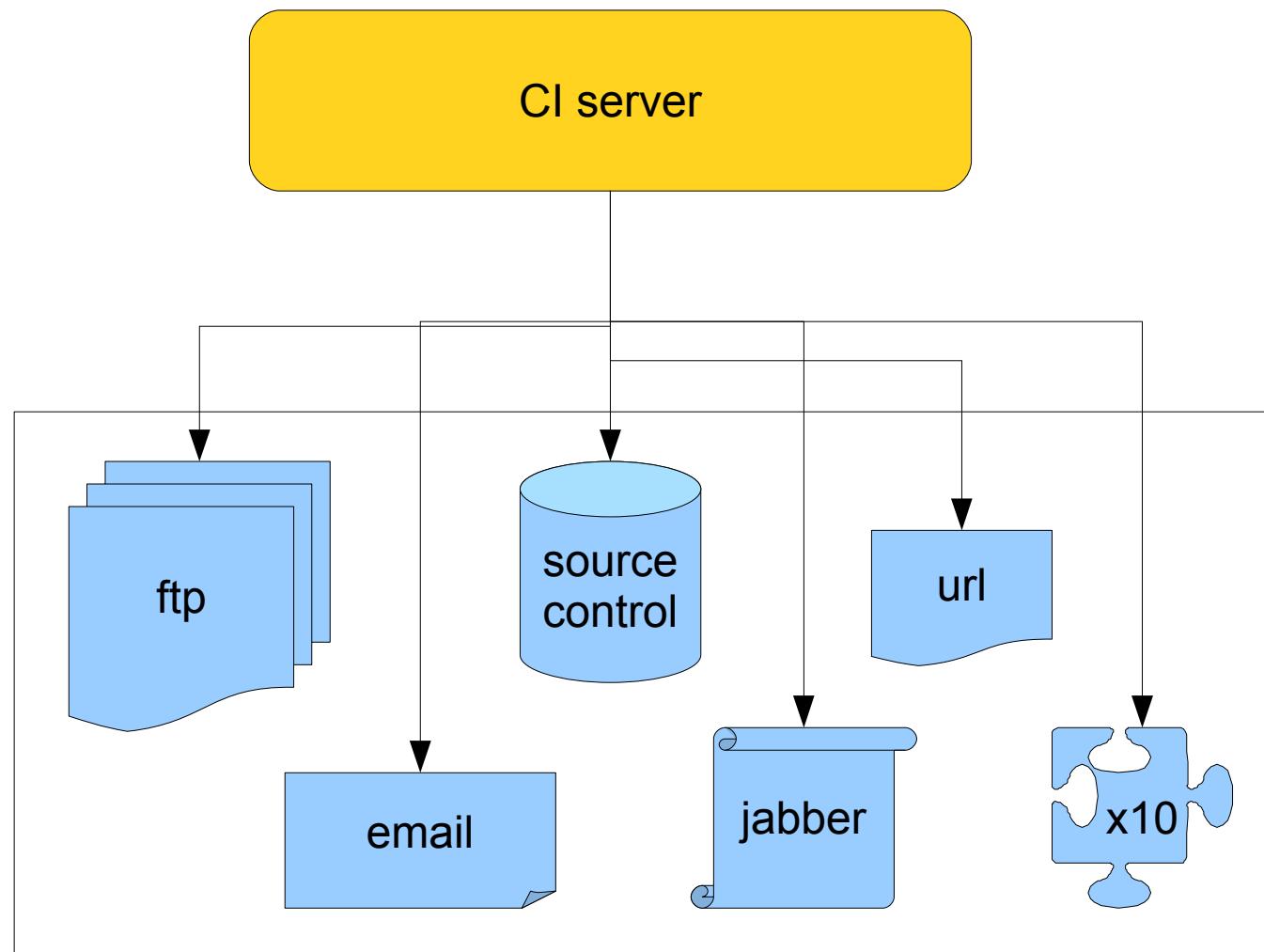
# automated regression



# the continuous integration loop



# publish



# outcome

**success** == build ran to completion, exited with no errors, and test reports show no failures

**failure** == build was halted, exited with errors, or test reports show failures

# feedback loop



broken build



fix, fix, fix

# how to get started

1. organize your project
2. write integration tests
3. create build scripts
4. setup your CI server
5. add more unit tests



wake up :)