EPICS Continuous Integration: Status and Support
Build and test infrastructure:

- Number of unit tests in EPICS Base is increasing:
  
  3.14: 2.6k → 3.15: 8.5k → 3.16: 9.2k → 7.0: 23k

  - C++ builds
  - Only master branch
  - Host builds: Linux, MacOS, Solaris, Windows
  - Cross builds to many targets (VxWorks and RTEMS)

- Jenkins instance at PSI (behind institute firewall)
  - C++ builds
  - Linux host build
  - Cross builds to many VxWorks targets
  - Pull request builds
Build and test infrastructure:

  - Host builds on Linux (gcc, clang) and MacOS
  - Cross builds for RTEMS, Windows (WINE)
  - Pull request builds

  - Host builds on Windows (all branches and pull requests)
  - 32bit or 64bit architecture
  - DLL or static build
  - Debug or optimized build
  - Full matrix: 50 builds, taking ~13 hours (only one builder)

  - Five parallel builders
Still on the wishlist:

- Test coverage
- Static code analysis

Maybe use/integrate a tool like Codacy (https://app.codacy.com)?
Common CI support for EPICS modules

• Complex helper scripts for Travis-CI & Co. as a Git submodule

• Easy to use:
  1. Add ci-scripts as a Git submodule to your EPICS software module
  2. Copy an example .yml configuration and adapt to your needs
  3. Activate your repository on the CI platform

• Travis-CI: Linux, MacOS, RTEMS-cross and MinGW-cross

• Git submodules always use a specific commit:
  ci-scripts developments don’t break your builds

[https://github.com/epics-base/ci-scripts](https://github.com/epics-base/ci-scripts)

• Travis-CI (Linux, MacOS, RTEMS-cross, WINE-cross) works
• AppVeyor (native Windows builds) is next