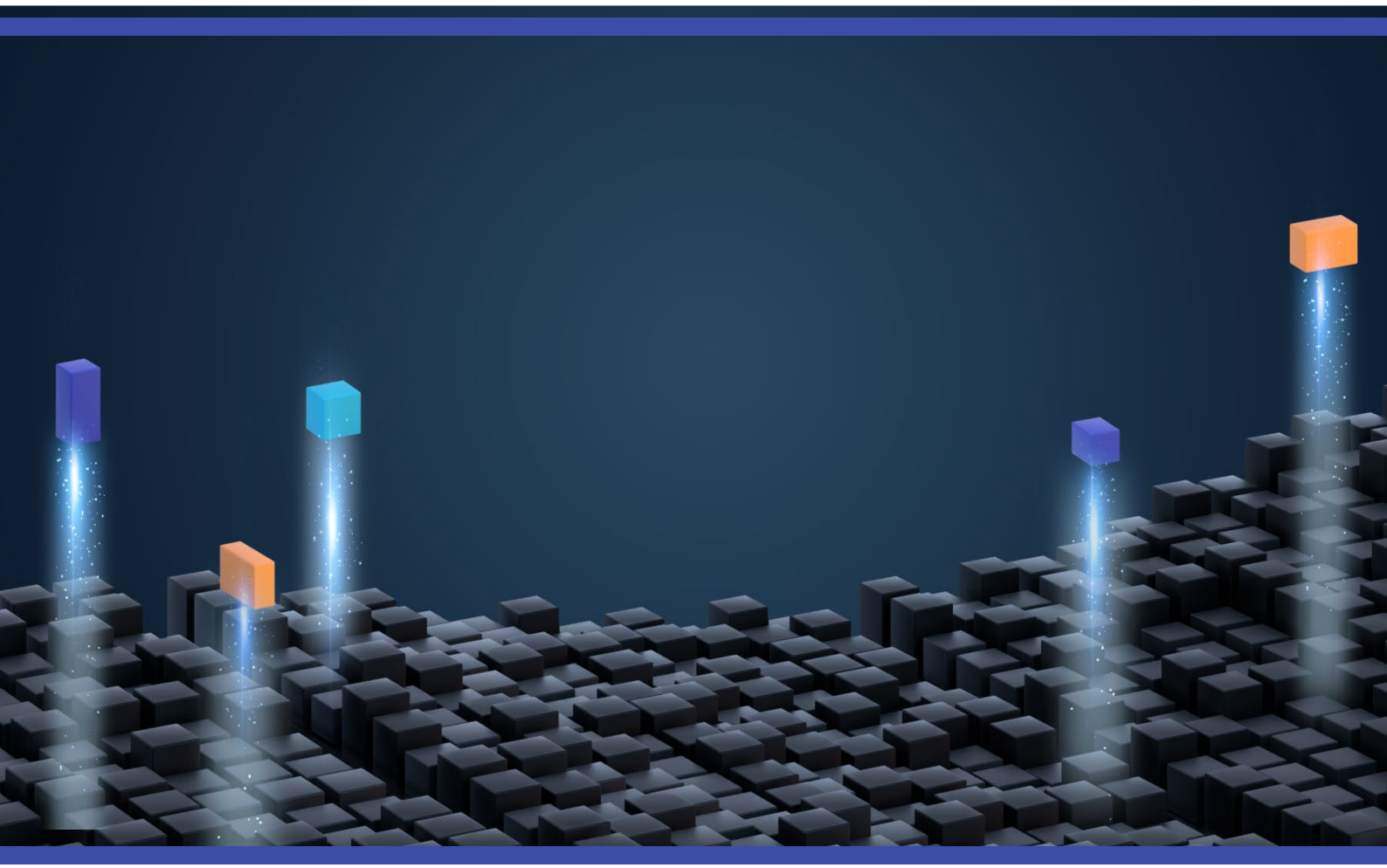
OpenLegacy
Digital to the Core

OpenLegacy Secure SDLC & Pipeline

DEVELOPMENT PROCESS

March 2021



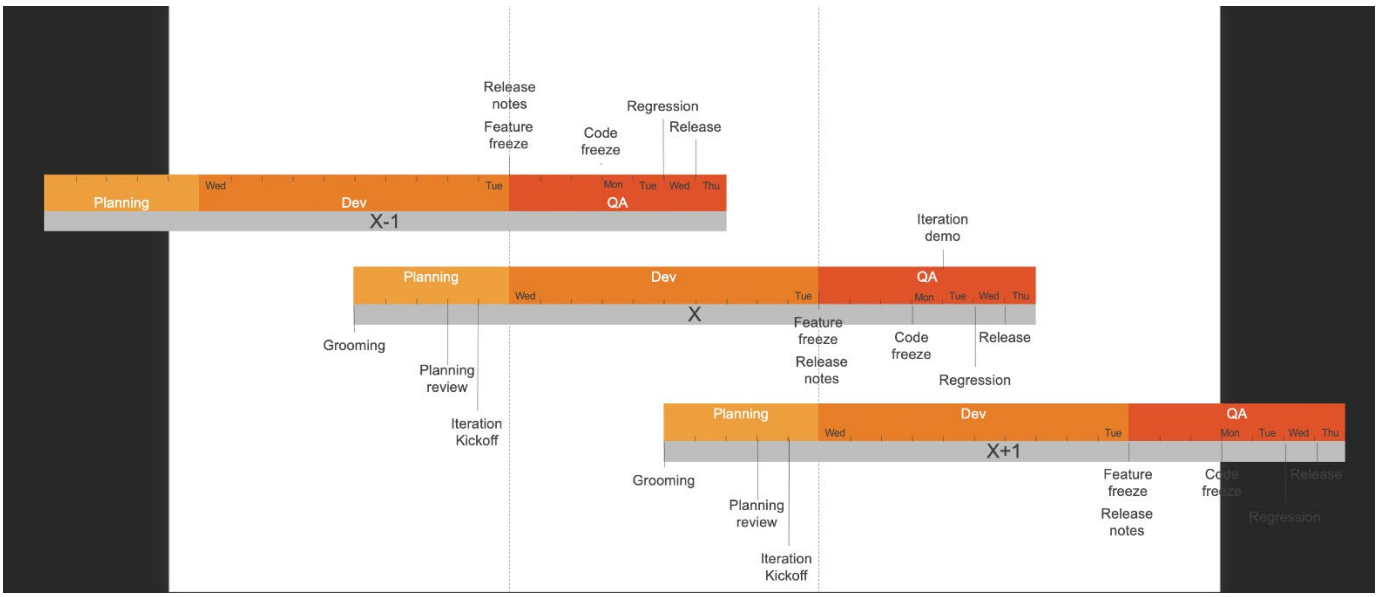
Contents

Heading 1..... 1
Heading 2..... **Error! Bookmark not defined.**
Heading 3..... **Error! Bookmark not defined.**
Heading 4..... **Error! Bookmark not defined.**
Heading 5..... **Error! Bookmark not defined.**
Table Example:..... **Error! Bookmark not defined.**
Normal Text Example: ..... **Error! Bookmark not defined.**
Bullet Example: ..... **Error! Bookmark not defined.**
Appendix Example:..... **Error! Bookmark not defined.**

© 2021 OpenLegacy Inc. All Rights Reserved.

OL Secure Software Development Life Cycle (SDLC) and Pipeline

The OpenLegacy R&D team follows a Secure development process and practice:
The OpenLegacy R&D team is assimilating the Agile-Scrum development methodology; we work in two-week development cycles, followed by a stabilization phase - see the following diagram:



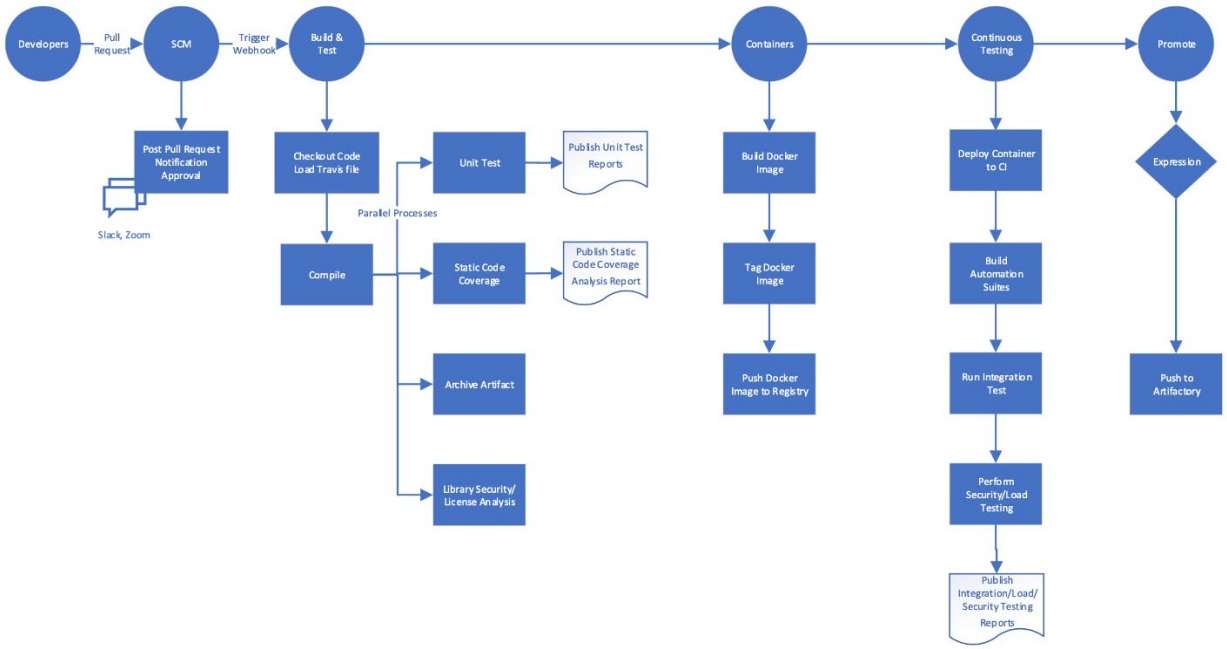
We conduct daily sync-up meetings, to make sure we are on track and that issues get targeted quickly.
We use git flow as our branching model, so when a feature is ready to be pushed to development, we open PR, and senior developers/team leads/architects need to approve the code to ensure it meets all coding best practices, coding styles and secure coding practices.
Once the code is pushed to the Development branch, our automation tool (currently we use Travis) runs our pipeline that includes the following steps:

- Build & Test
  - Compile the code
  - Run unit-test
  - Using Sonar cube for static code analysis and code coverage
  - Using JFrog x-Ray for vulnerability scan
  - Publish reports (vulnerability, sonar & unit-tests results)
    - We review all High vulnerabilities and upgrade our 3rd party to latest version, as applicable
    - in some cases where there are false positives, we mark these as such
- Packaging
  - Build jars

© 2021 OpenLegacy Inc. All Rights Reserved.

    - Build images
    - Push to Artifactory and Docker Hub
- Continues testing
    - Run regression cycle
        - regression cycle runs more than 30 different automation suites
        - each suite focuses on a different legacy
        - all regression flows run in parallel to achieve fast responses
    - Create openLegacy projects for all backends (mainframe, SAP, AS/400....)
    - Run integration tests for these projects
    - In some cases run load tests
- Fixing issues (bugs, vulnerabilities and upgrade of 3rd parties)
- Repeat

During the development cycles, we follow the 10 top OWASP to cover security concerns and overcome them.



© 2021 OpenLegacy Inc. All Rights Reserved.