

Directions for Pipeline

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#JenkinsWorld



Directions for Pipeline

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The big stuff



- Jenkins Workflow Pipeline
- Out of the box in Jenkins 2
 - 2.x version scheme for central plugins
 - pride of place on https://jenkins.io/doc/
- Stage View open source, and Blue Ocean in beta
- Declarative Pipeline in beta
- I have no slide explaining what "Pipeline" is

Compatibility



- most SCMs now work
- many build steps, post-build actions, build environments, triggers
- most work being driven by plugin maintainers
- bigger features relying on Pipeline:
 - external workspace manager
 - Nexus & Artifactory
 - Kubernetes
 - Perforce

Robustness, diagnosis, & control



- Replay
- Pause
- hard kill
- thread dumps
- resumption progress
- abort inside Groovy

Syntax



- symbols in place of \$class:
 - step([\$class: 'JUnitResultArchiver', testResults: '*.xml'])
 - step junit('*.xml')
- step/wrap inlining:
 - step junit('*.xml')
 - junit '*.xml'
- Pipeline Model Definition

UI & docs



- coloration, code completion, snippets, examples in browser
- external syntax page
- static reference (work in progress)





- properties step for triggers, concurrent build, automatic building
- control over GitHub pull request build behavior
- load Jenkinsfile only from trusted PRs; readTrusted

Docker support



• compatible with bind-mounts (containerized Jenkins)



Shared libraries



- external libraries
- @Grab from global libraries





- block-scoped stages
- lock, milestone
- returnStdout & returnStatus options for sh & bat
- currentBuild.changeSets





- custom multibranch Pipeline project factories
- template transformer for definition from SCM
- template attribute control for a textarea using Pipeline syntax



Demo time!











- for (x in list) {...} works for some cases
- list.each {...} still does not work, but at least better reported

Visualization

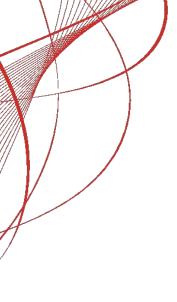


- display of nested stages
- matrix-y projects

More...



- test framework
- more flexible multibranch
- and <u>nine epics</u> more





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