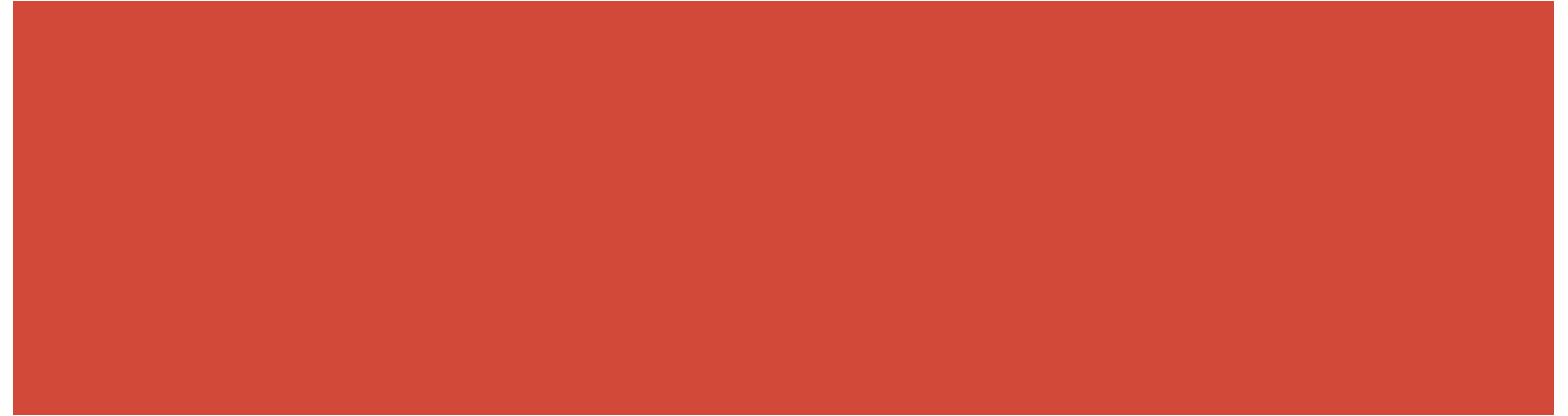# Documentation

a whirlwind tour of how to Jenkins better with 2.0

Hello

- R Tyler Croy (rtyler on IRC)
- Current Jenkins board member
- Project infrastructure / jenkins.io

Documentation

built-in

help text

☐ Disable this project   ❓

☐ Execute concurrent builds if necessary   ❓

When this option is checked, multiple builds of this project may be executed in parallel.

By default, only a single build of a project is executed at a time — any other requests to start building that project will remain in the build queue until the first build is complete.
This is a safe default, as projects can often require exclusive access to certain resources, such as a database, or a piece of hardware.

But with this option enabled, if there are enough build executors available that can handle this project, then multiple builds of this project will take place in parallel. If there are not enough available executors at any point, any further build requests will be held in the build queue as normal.

Enabling concurrent builds is useful for projects that execute lengthy test suites, as it allows each build to contain a smaller number of changes, while the total turnaround time decreases as subsequent builds do not need to wait for previous test runs to complete.
This feature is also useful for parameterised projects, whose individual build executions — depending on the parameters used — can be completely independent from one another.

Each concurrently executed build occurs in its own build workspace, isolated from any other builds. By default, Jenkins appends "@<num>" to the workspace directory name, e.g. "@2".
The separator "@" can be changed by setting the `hudson.slaves.WorkspaceList` Java system property when starting Jenkins. For example, "`hudson.slaves.WorkspaceList=-`" would change the separator to a hyphen.
For more information on setting system properties, see the wiki page.

However, if you enable the *Use custom workspace* option, all builds will be executed in the same workspace. Therefore caution is required, as multiple builds may end up altering the same directory at the same time.

help text

Name

newnode

Description

Optional human-readable description for this agent.

This could include information useful to users, such as how many CPU cores the agent has, how much RAM it has installed, its physical location, etc.

# of executors

1

The maximum number of concurrent builds that Jenkins may perform on this agent.

A good value to start with would be the number of CPU cores on the machine. Setting a higher value would cause each build to take longer, but could increase the overall throughput. For example, one build might be CPU-bound, while a second build running at the same time might be I/O-bound — so the second build could take advantage of the spare I/O capacity at that moment.

Agents must have at least one executor. To temporarily prevent any builds from being executed on an agent, use the *Mark this node temporarily offline* button on the agent's page.

This does not apply to the Jenkins master — setting the number of executors to zero will prevent any builds from being executed on the master.

autogenerated

Jenkins CLI

You can access various features in Jenkins through a command-line tool. See the Wiki for more details of this feature. To get started, download jenkins-cli.jar, and run it as follows:

```
java -jar jenkins-cli.jar -s http://localhost:8080/ help
```

Available Commands

add-job-to-view	Adds jobs to view.
build	Builds a job, and optionally waits until its completion.
cancel-quiet-down	Cancel the effect of the "quiet-down" command.
clear-queue	Clears the build queue.
connect-node	Reconnect to a node.
console	Retrieves console output of a build.
copy-job	Copies a job.
create-job	Creates a new job by reading stdin as a configuration XML file.
create-node	Creates a new node by reading stdin as a XML configuration.

autogenerated

DSL Reference
Click to download IntelliJ GDSL

Steps

− **archive**: Archive artifacts

Archives build output artifacts for later use.

includes

Include artifacts matching this Ant style pattern. Use a comma separated list to add more than one expression.

Type: String

excludes (optional)

Exclude artifacts matching this Ant-style pattern. Use a comma-separated list to add more than one expression.

Type: String

⊕ **bat**: Windows Batch Script

⊕ **build**: Build a job

⊕ **checkout**: General SCM

Pipeline

Definition

Pipeline script ▾

Script

```
1  node {
2      stage 'Build'
3      echo 'Hello World 1'
4      stage 'Test'
5      echo 'Hello World 2'
6      stage "Test even more"
7      echo "hi"
8      stage "Test extra good"
9      echo "YO!"
10     stage "Deploy"
11     echo "Derploy!"
12  }
```

☑ Use Groovy Sandbox

Pipeline DSL Reference

Click here for the reference in a new window.

Click here for IntelliJ GDSL.

more consistent terms

- New Item
  - Folder
  - Project
  - Pipeline
  - Job
- Nodes, Agents

jenkins.io

use-case pages

/doc/

auto-generated step reference

wiki

Future Work

plugin documentation

more autogenerated docs

Getting Help

Stack Overflow

https://stackoverflow.com/questions/tagged/jenkins

The users mailing list

jenkinsci-users@googlegroups.com (https://groups.google.com/forum/#!forum/jenkinsci-users)

IRC

#jenkins on Freenode

Pitch In!

jenkins.io

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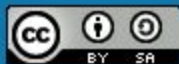
Resources

Events
Documentation
Blog

Stack Overflow

https://stackoverflow.com/questions/tagged/jenkins

The users mailing list

jenkinsci-users@googlegroups.com (https://groups.google.com/forum/#!forum/jenkinsci-users)

IRC

#jenkins on Freenode

thanks!