40 GREAT JENKINS PLUGINS IN 40 MINUTES

Miro Cupak (DNAstack)

@mirocupak

2015-02-07

WHO AM I?

- currently software engineer at DNAstack
- contributor/administrator (~1 year) at Red Hat
- Jenkins user (~5 years)
- previously quality engineer at Red Hat

JENKINS

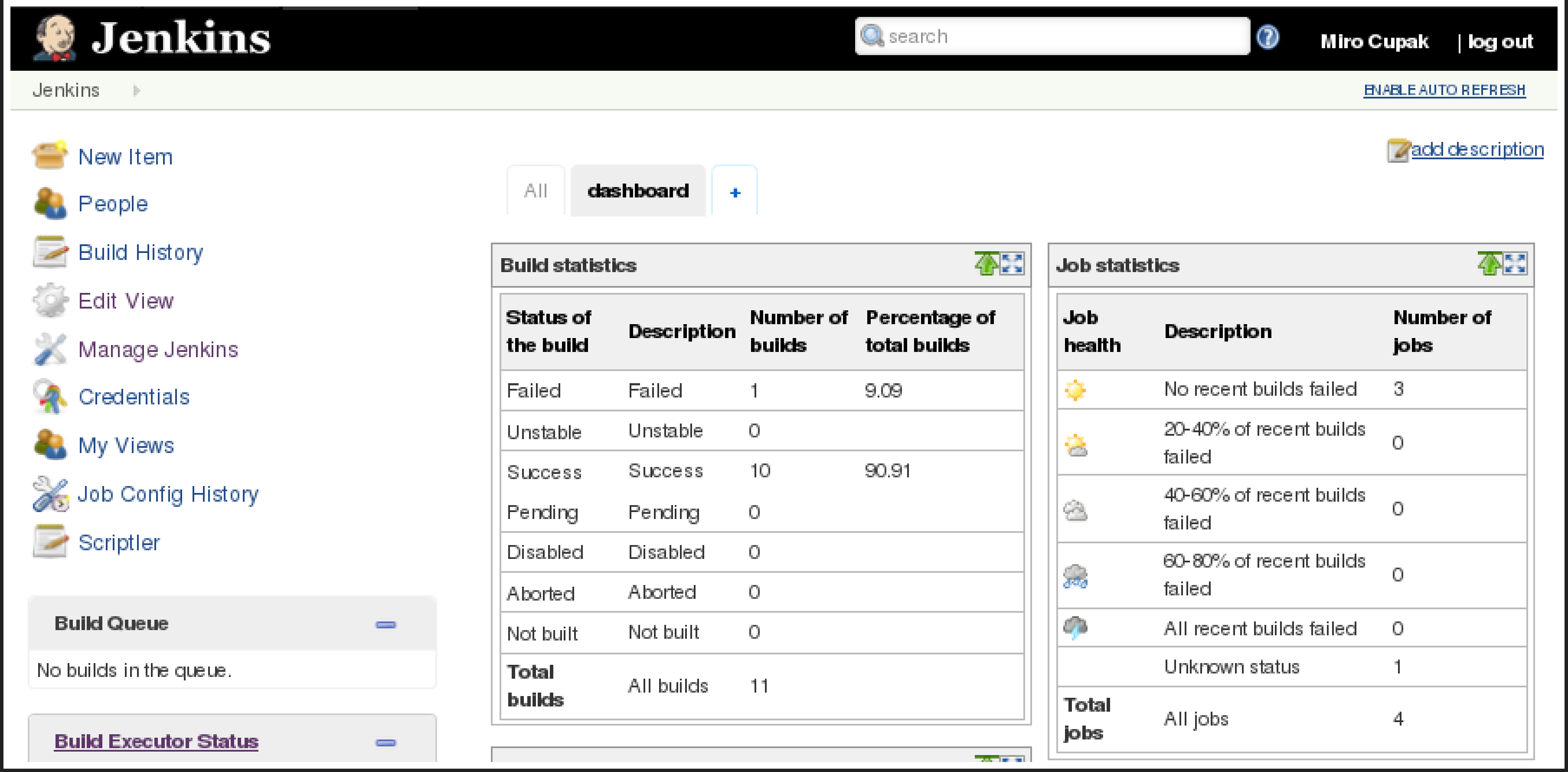
- 638 organization members on GitHub
- 100K active installations with 300K nodes
- 3.2M installations of 1050 unique plugins

Which plugins should you use?

#1

DASHBOARD VIEW

- view implementation containing portlets (well, sort of...)
- easy to extend



Build Queue

No builds in the queue.

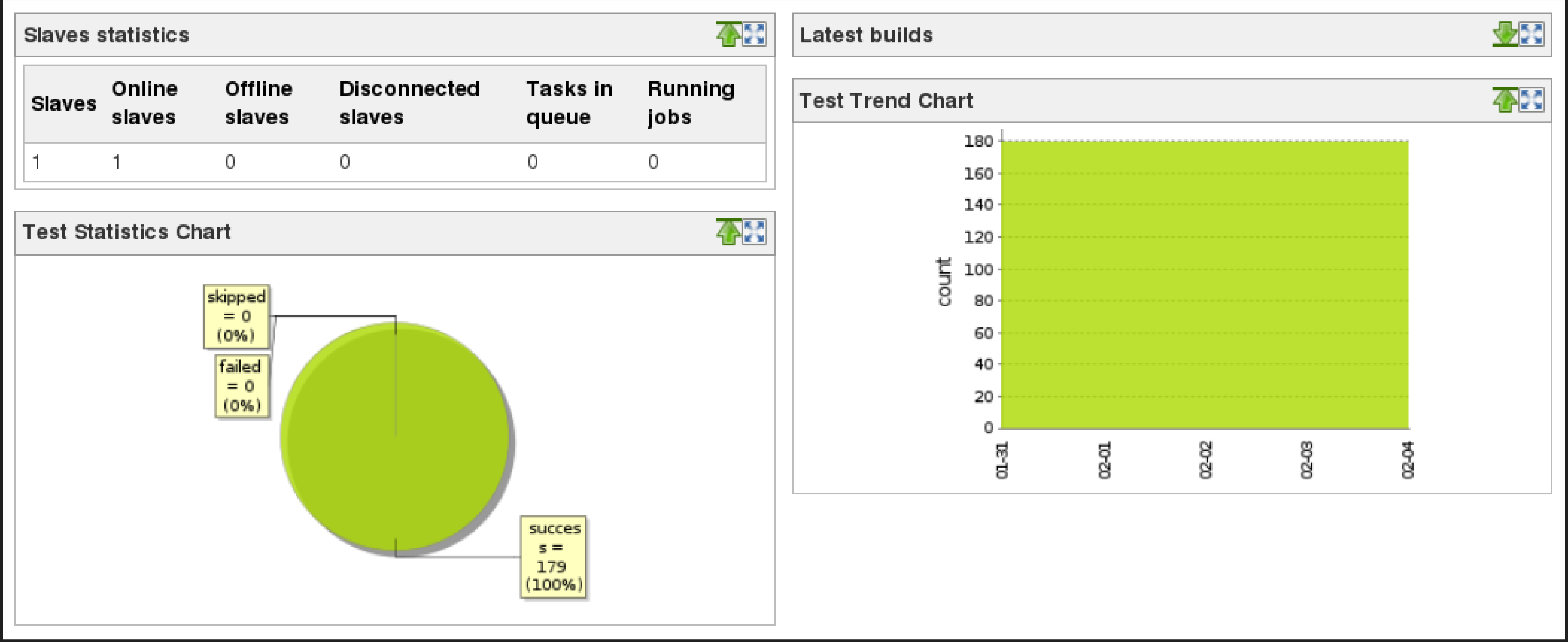
Build Executor Status

Build statistics

Status of the build	Description	Number of builds	Percentage of total builds
Failed	Failed	1	9.09
Unstable	Unstable	0	
Success	Success	10	90.91
Pending	Pending	0	
Disabled	Disabled	0	
Aborted	Aborted	0	
Not built	Not built	0	
Total builds	All builds	11	

Job statistics

Job health	Description	Number of jobs
☀	No recent builds failed	3
⛅	20-40% of recent builds failed	0
☁	40-60% of recent builds failed	0
🌧	60-80% of recent builds failed	0
⛈	All recent builds failed	0
	Unknown status	1
Total jobs	All jobs	4



Slaves statistics

Slaves	Online slaves	Offline slaves	Disconnected slaves	Tasks in queue	Running jobs
1	1	0	0	0	0

Latest builds

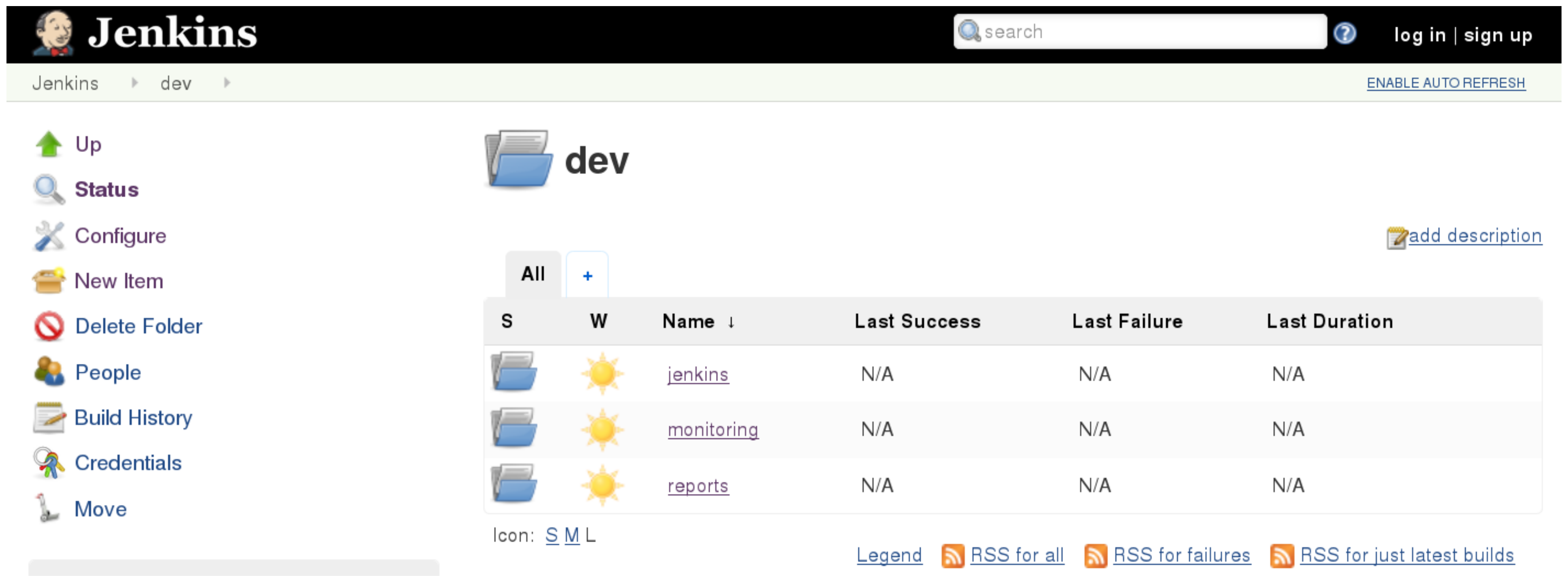
Test Statistics Chart

Test Trend Chart

#2

CLOUDBEES FOLDERS

- organizes jobs into hierarchical folders (think file system)
- better grouping capabilities than Nested View and others



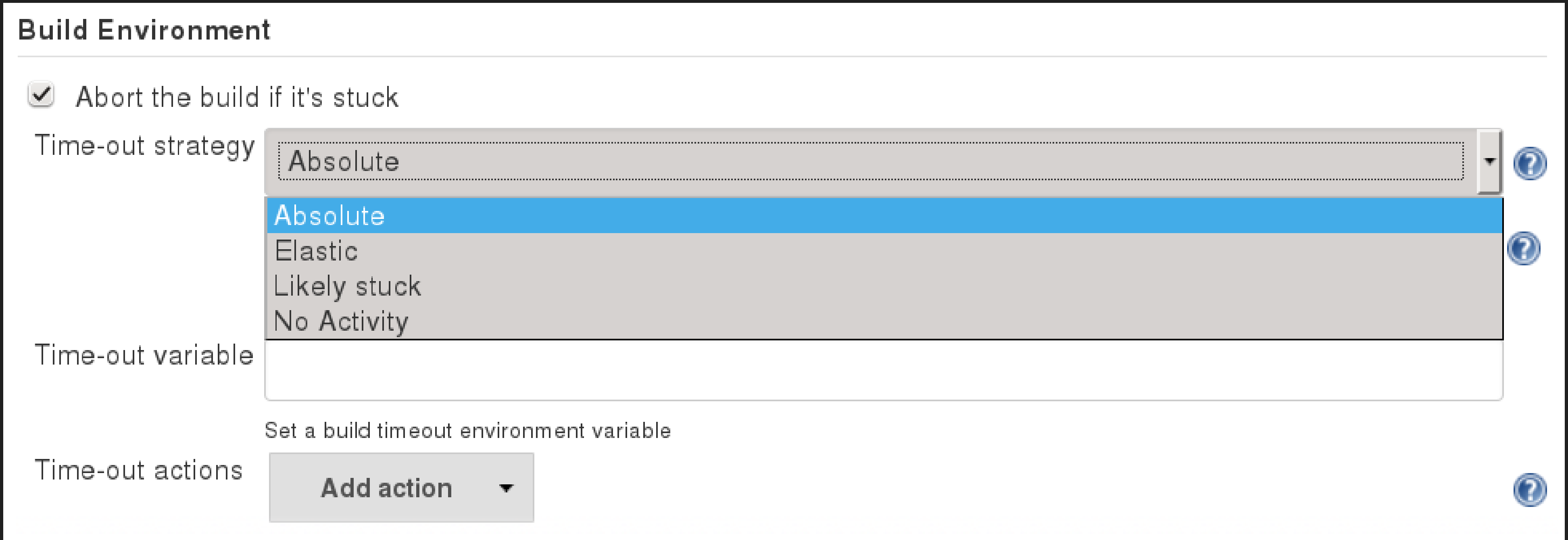
dev

S	W	Name ↓	Last Success	Last Failure	Last Duration
📁	☀	jenkins	N/A	N/A	N/A
📁	☀	monitoring	N/A	N/A	N/A
📁	☀	reports	N/A	N/A	N/A

#3

BUILD TIMEOUT

- automatically aborts a build if it's taking too long
- *usually* works



Build Environment

☑ Abort the build if it's stuck

Time-out strategy: Absolute

Time-out variable

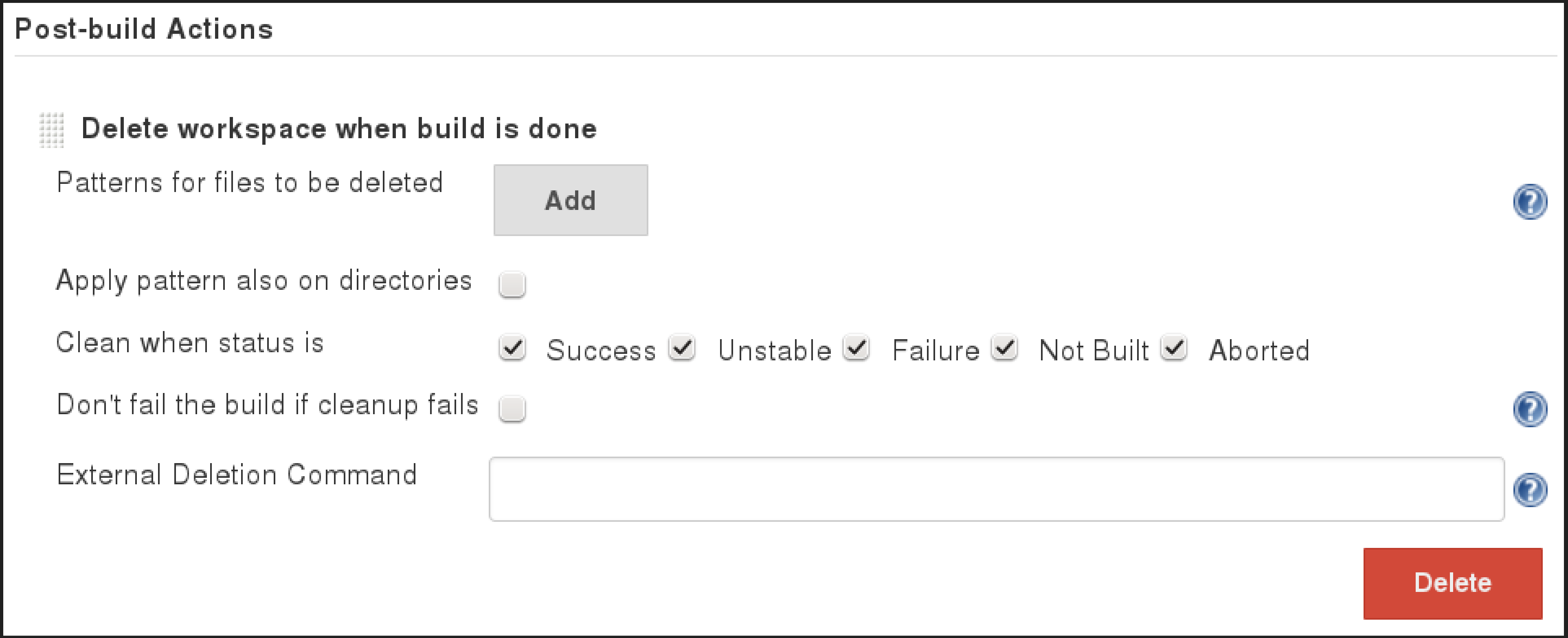
Set a build timeout environment variable

Time-out actions

#4

WORKSPACE CLEANUP

- removes data from the workspace before/after a build



Post-build Actions

Delete workspace when build is done

Patterns for files to be deleted [Add]

Apply pattern also on directories □

Clean when status is ☑ Success ☑ Unstable ☑ Failure ☑ Not Built ☑ Aborted

Don't fail the build if cleanup fails □

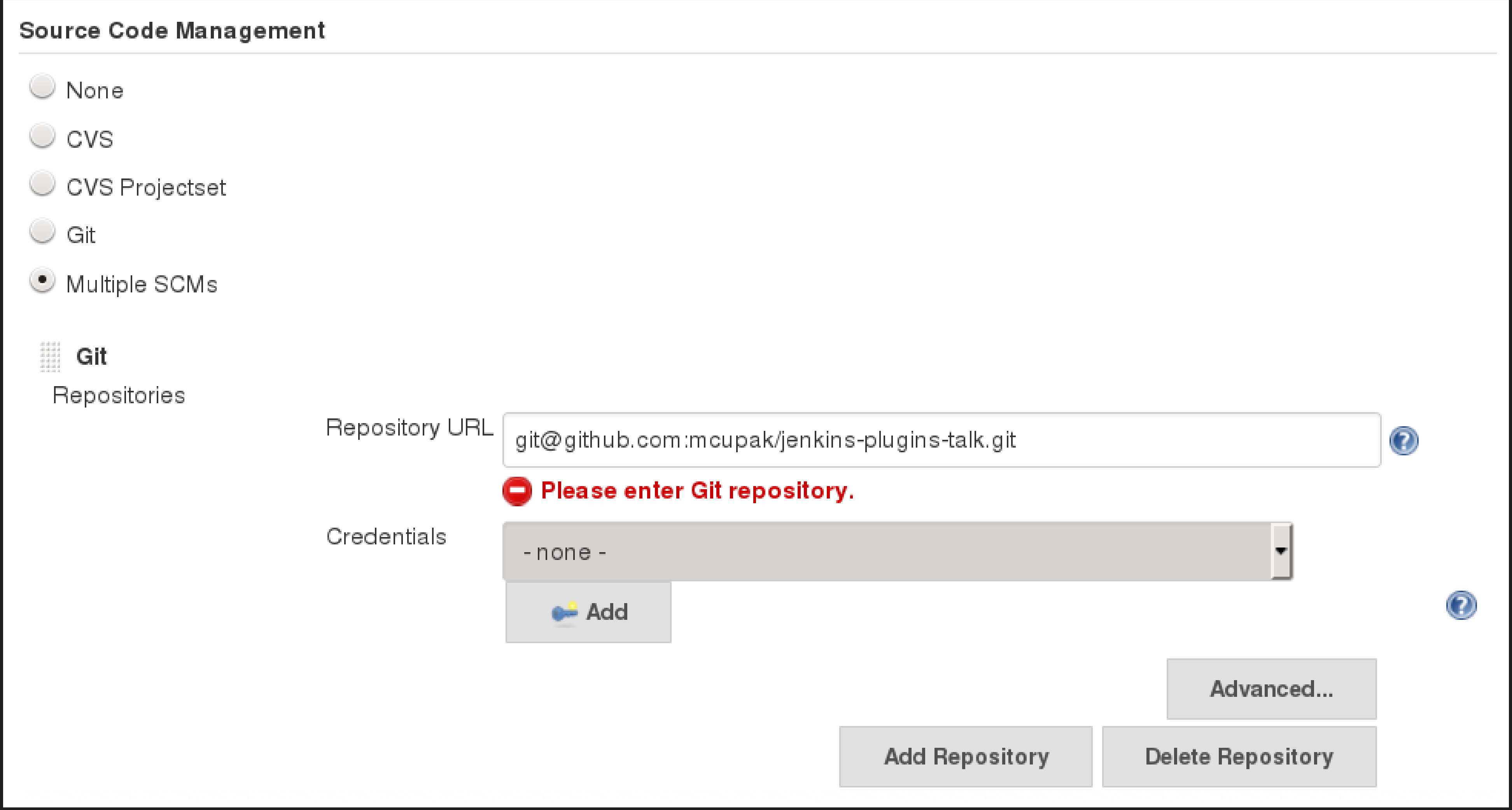
External Deletion Command

[Delete]

#5

MULTIPLE SCMS

- allows jobs to check out sources from multiple SCM providers



Source Code Management

○ None

○ CVS

○ CVS Projectset

○ Git

● Multiple SCMs

Git

Repositories

Repository URL: git@github.com:mcupak/jenkins-plugins-talk.git

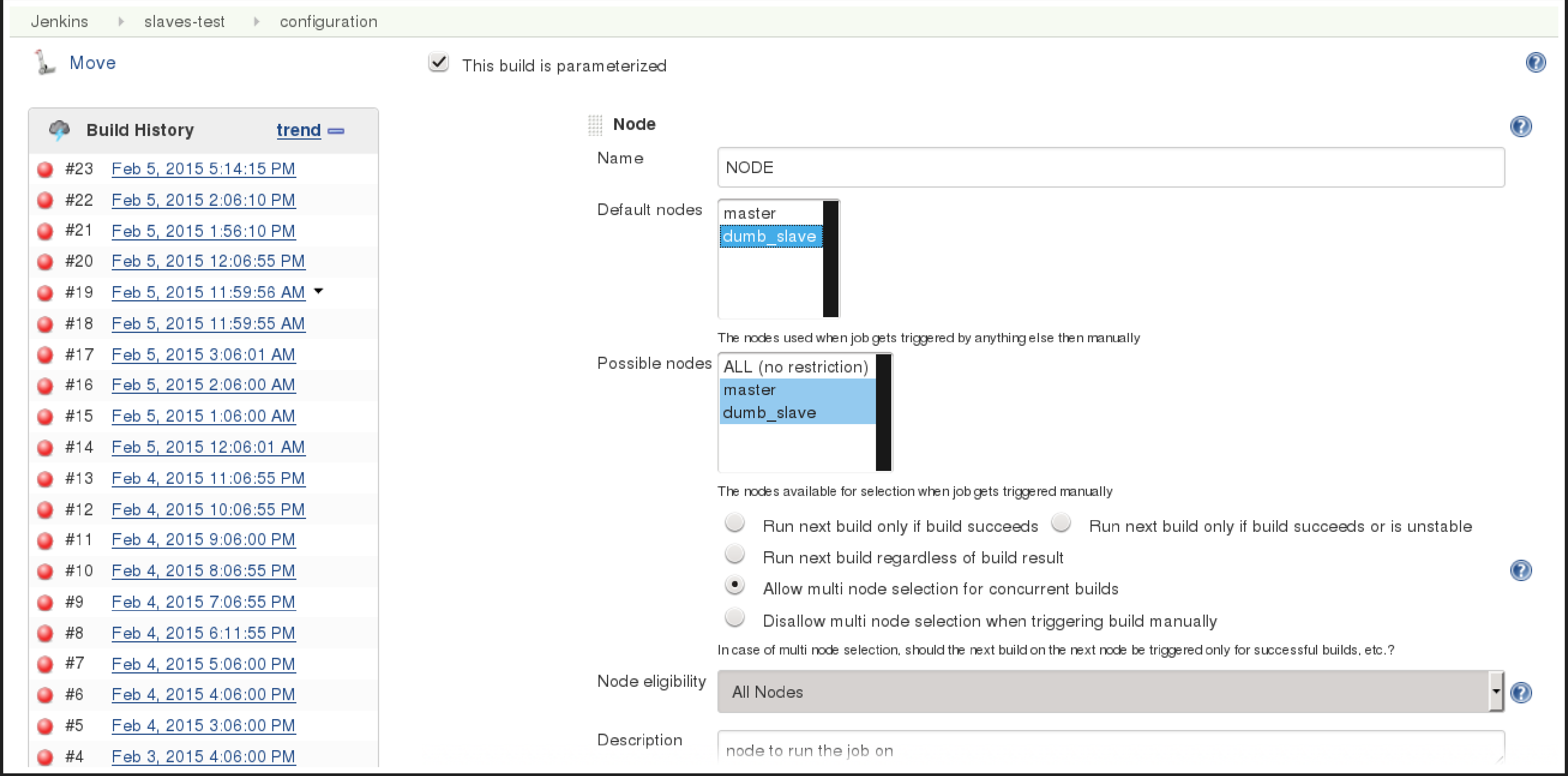
Please enter Git repository.

Credentials: - none -

#6

NODE LABEL PARAMETER

- allows you to dynamically select the node where a job should run



Jenkins ▸ slaves-test ▸ configuration

Move

☑ This build is parameterized

Build History trend

● #23 Feb 5, 2015 5:14:15 PM
● #22 Feb 5, 2015 2:06:10 PM
● #21 Feb 5, 2015 1:56:10 PM
● #20 Feb 5, 2015 12:06:55 PM
● #19 Feb 5, 2015 11:59:56 AM
● #18 Feb 5, 2015 11:59:55 AM
● #17 Feb 5, 2015 3:06:01 AM
● #16 Feb 5, 2015 2:06:00 AM
● #15 Feb 5, 2015 1:06:00 AM
● #14 Feb 5, 2015 12:06:01 AM
● #13 Feb 4, 2015 11:06:55 PM
● #12 Feb 4, 2015 10:06:55 PM
● #11 Feb 4, 2015 9:06:00 PM
● #10 Feb 4, 2015 8:06:55 PM
● #9 Feb 4, 2015 7:06:55 PM
● #8 Feb 4, 2015 6:11:55 PM
● #7 Feb 4, 2015 5:06:00 PM
● #6 Feb 4, 2015 4:06:00 PM
● #5 Feb 4, 2015 3:06:00 PM
● #4 Feb 3, 2015 4:06:00 PM

Node

Name: NODE

Default nodes: master, **dumb_slave** (selected)

The nodes used when job gets triggered by anything else then manually

Possible nodes: ALL (no restriction), **master** (selected), **dumb_slave** (selected)

The nodes available for selection when job gets triggered manually

○ Run next build only if build succeeds ○ Run next build only if build succeeds or is unstable

○ Run next build regardless of build result

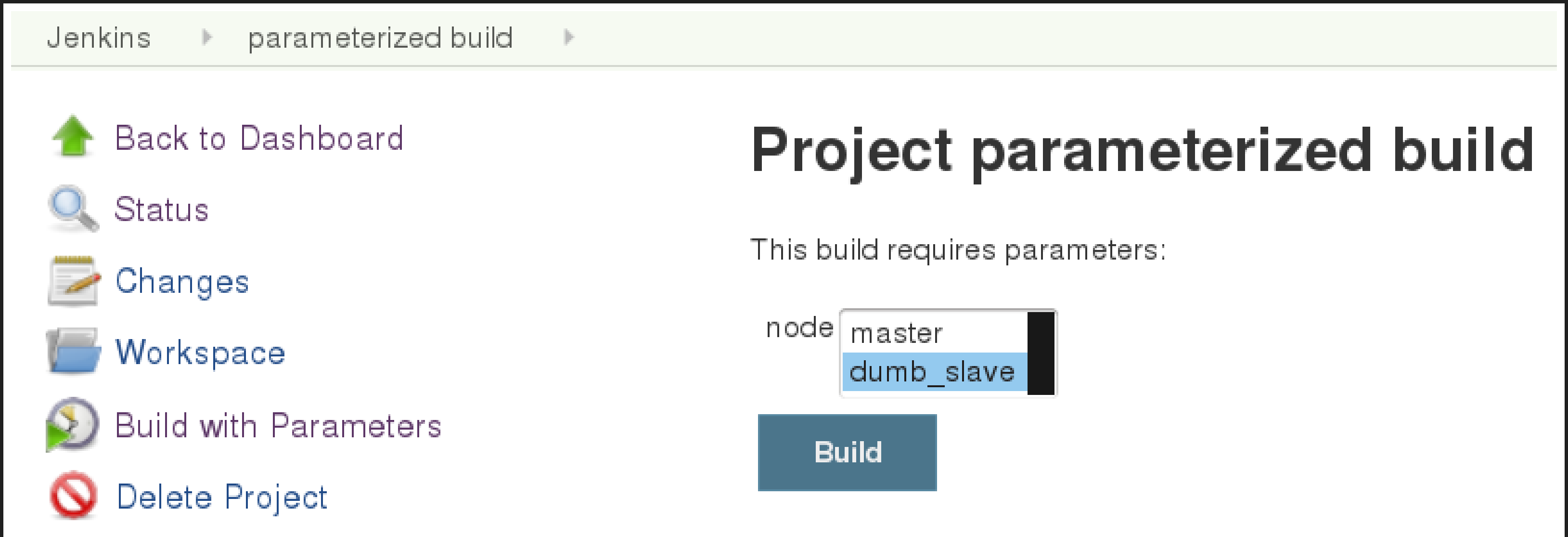
● Allow multi node selection for concurrent builds

○ Disallow multi node selection when triggering build manually

In case of multi node selection, should the next build on the next node be triggered only for successful builds, etc.?

Node eligibility: All Nodes

Description: node to run the job on



Project parameterized build

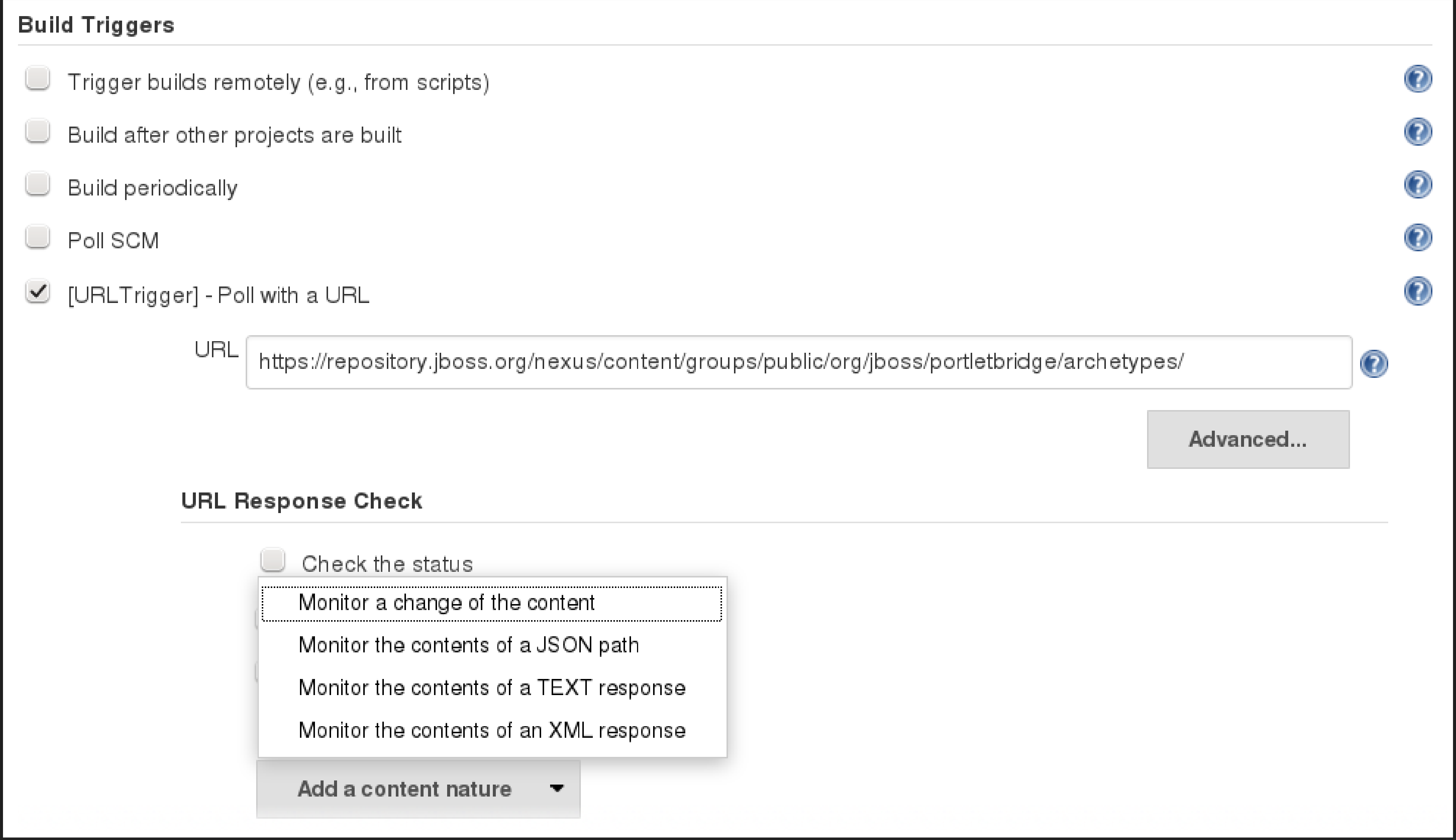
This build requires parameters:

node: master / dumb_slave (selected)

#7

URL TRIGGER

- polls given URLs for changes and triggers a build after a change is detected
- only HTTP(S), other protocols included in XTrigger



Build Triggers

☐ Trigger builds remotely (e.g., from scripts)

☐ Build after other projects are built

☐ Build periodically

☐ Poll SCM

☑ [URLTrigger] - Poll with a URL

URL https://repository.jboss.org/nexus/content/groups/public/org/jboss/portletbridge/archetypes/

URL Response Check

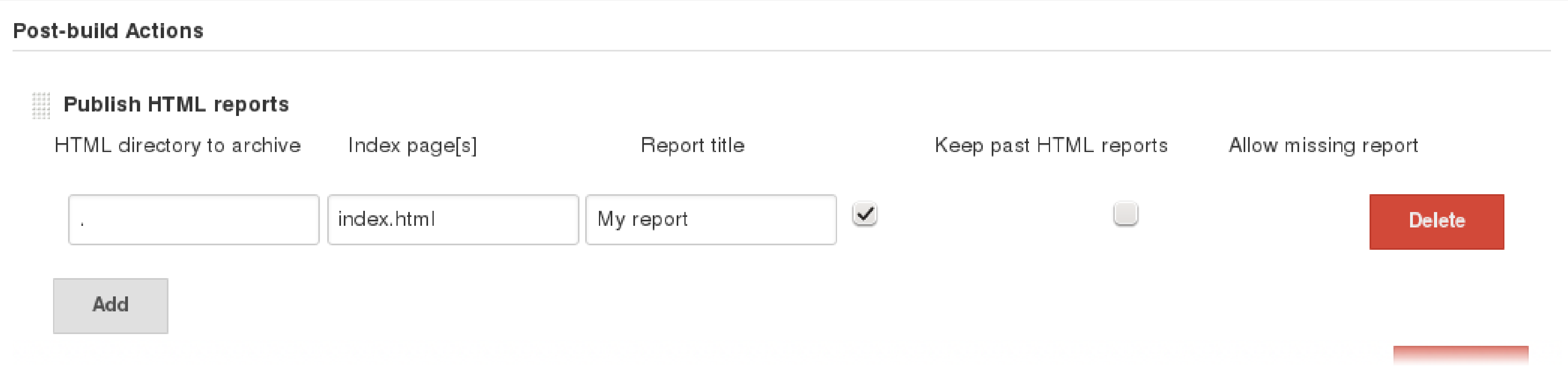
☐ Check the status

Monitor a change of the content
Monitor the contents of a JSON path
Monitor the contents of a TEXT response
Monitor the contents of an XML response
Add a content nature

#8

HTML PUBLISHER

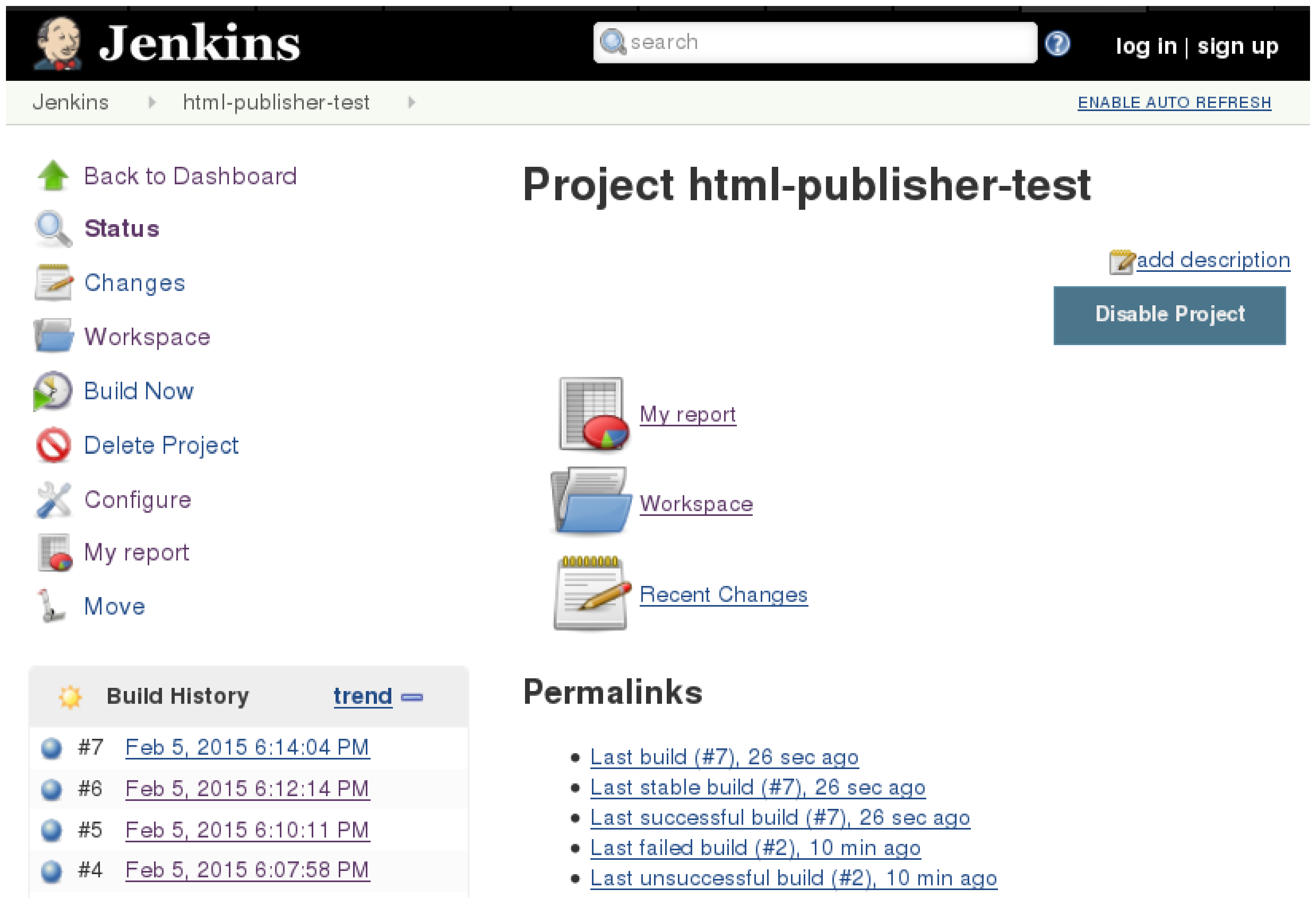
- publishes HTML reports to job/build pages



Post-build Actions

Publish HTML reports

HTML directory to archive	Index page[s]	Report title	Keep past HTML reports	Allow missing report
.	index.html	My report	☑	☐

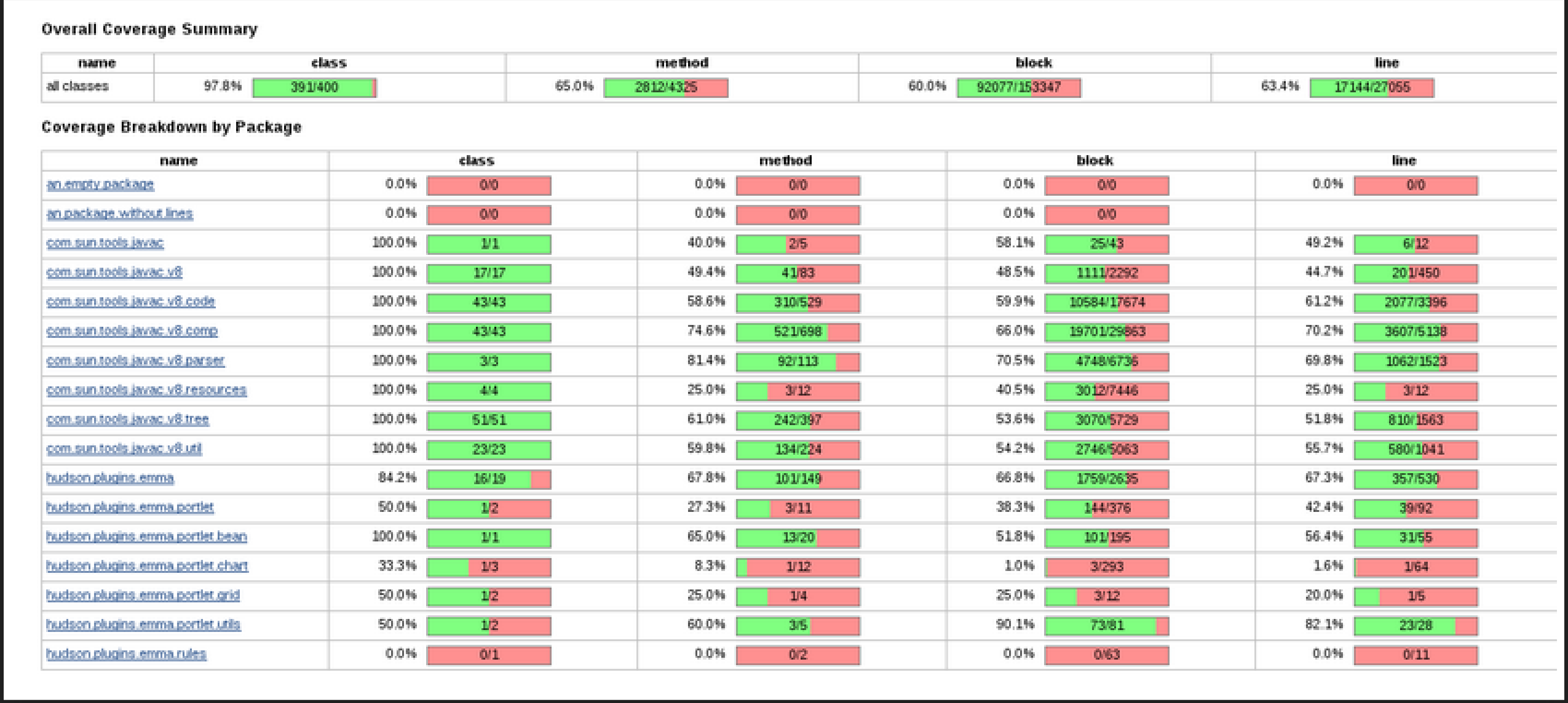


Project html-publisher-test

#7	Feb 5, 2015 6:14:04 PM
#6	Feb 5, 2015 6:12:14 PM
#5	Feb 5, 2015 6:10:11 PM
#4	Feb 5, 2015 6:07:58 PM

Permalinks

- Last build (#7), 26 sec ago
- Last stable build (#7), 26 sec ago
- Last successful build (#7), 26 sec ago
- Last failed build (#2), 10 min ago
- Last unsuccessful build (#2), 10 min ago



Overall Coverage Summary

name	class	method	block	line
all classes	97.8% 391/400	65.0% 2812/4325	60.0% 92077/153347	63.4% 17144/27055

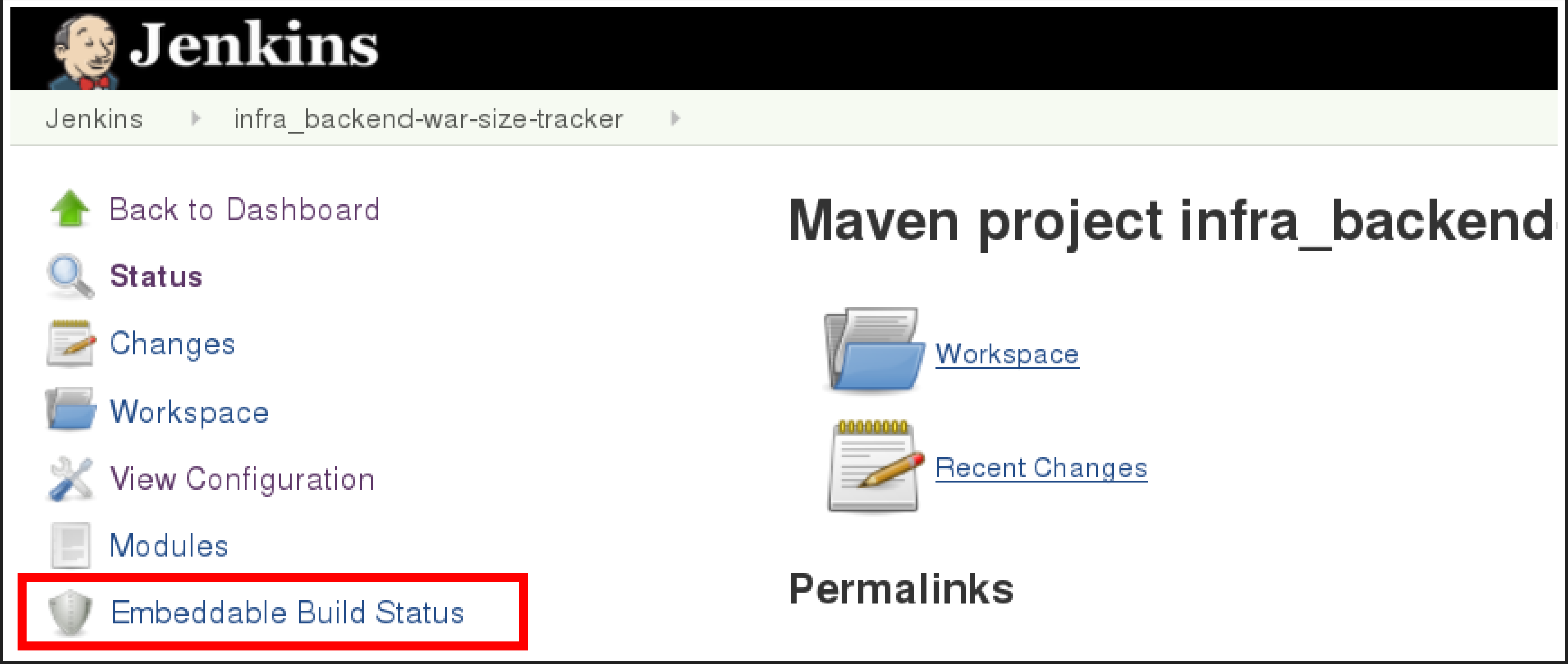
Coverage Breakdown by Package

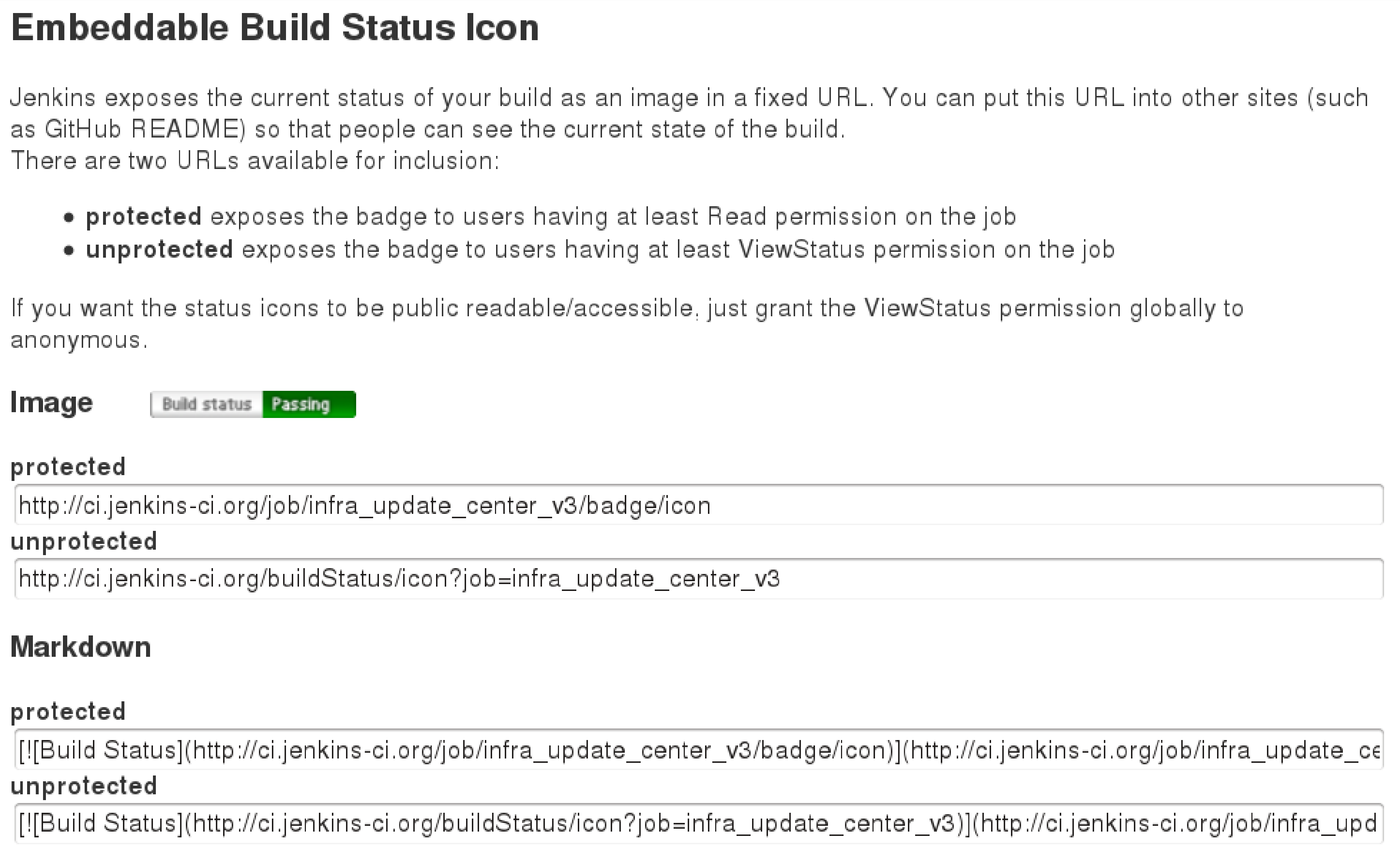
name	class	method	block	line
an.empty.package	0.0% 0/0	0.0% 0/0	0.0% 0/0	0.0% 0/0
an.package.without.lines	0.0% 0/0	0.0% 0/0	0.0% 0/0	
com.sun.tools.javac	100.0% 1/1	40.0% 2/5	58.1% 25/43	49.2% 6/12
com.sun.tools.javac.v8	100.0% 17/17	49.4% 41/83	48.5% 1111/2292	44.7% 201/450
com.sun.tools.javac.v8.code	100.0% 43/43	58.6% 310/529	59.9% 10584/17674	61.2% 2077/3396
com.sun.tools.javac.v8.comp	100.0% 43/43	74.6% 521/698	66.0% 19701/29863	70.2% 3607/5138
com.sun.tools.javac.v8.parser	100.0% 3/3	81.4% 92/113	70.5% 4748/6736	69.8% 1062/1523
com.sun.tools.javac.v8.resources	100.0% 4/4	25.0% 3/12	40.5% 3012/7446	25.0% 3/12
com.sun.tools.javac.v8.tree	100.0% 51/51	61.0% 242/397	53.6% 3070/5729	51.8% 810/1563
com.sun.tools.javac.v8.util	100.0% 23/23	59.8% 134/224	54.2% 2746/5063	55.7% 580/1041
hudson.plugins.emma	84.2% 16/19	67.8% 101/149	66.8% 1759/2635	67.3% 357/530
hudson.plugins.emma.portlet	50.0% 1/2	27.3% 3/11	38.3% 144/376	42.4% 39/92
hudson.plugins.emma.portlet.bean	100.0% 1/1	65.0% 13/20	51.8% 101/195	56.4% 31/55
hudson.plugins.emma.portlet.chart	33.3% 1/3	8.3% 1/12	1.0% 3/293	1.6% 1/64
hudson.plugins.emma.portlet.grid	50.0% 1/2	25.0% 1/4	25.0% 3/12	20.0% 1/5
hudson.plugins.emma.portlet.utils	50.0% 1/2	60.0% 3/5	90.1% 73/81	82.1% 23/28
hudson.plugins.emma.rules	0.0% 0/1	0.0% 0/2	0.0% 0/63	0.0% 0/11

#9

EMBEDDABLE BUILD STATUS

- exposes current build status as an image


Jenkins
Jenkins
infra_backend-war-size-tracker
Back to Dashboard
Status
Changes
Workspace
View Configuration
Modules
Embeddable Build Status
Maven project infra_backend
Workspace
Recent Changes
Permalinks



Embeddable Build Status Icon

Jenkins exposes the current status of your build as an image in a fixed URL. You can put this URL into other sites (such as GitHub README) so that people can see the current state of the build.
There are two URLs available for inclusion:

- **protected** exposes the badge to users having at least Read permission on the job
- **unprotected** exposes the badge to users having at least ViewStatus permission on the job

If you want the status icons to be public readable/accessible, just grant the ViewStatus permission globally to anonymous.

Image

protected

http://ci.jenkins-ci.org/job/infra_update_center_v3/badge/icon

unprotected

http://ci.jenkins-ci.org/buildStatus/icon?job=infra_update_center_v3

Markdown

protected

```
[![Build Status](http://ci.jenkins-ci.org/job/infra_update_center_v3/badge/icon)](http://ci.jenkins-ci.org/job/infra_update_ce
```

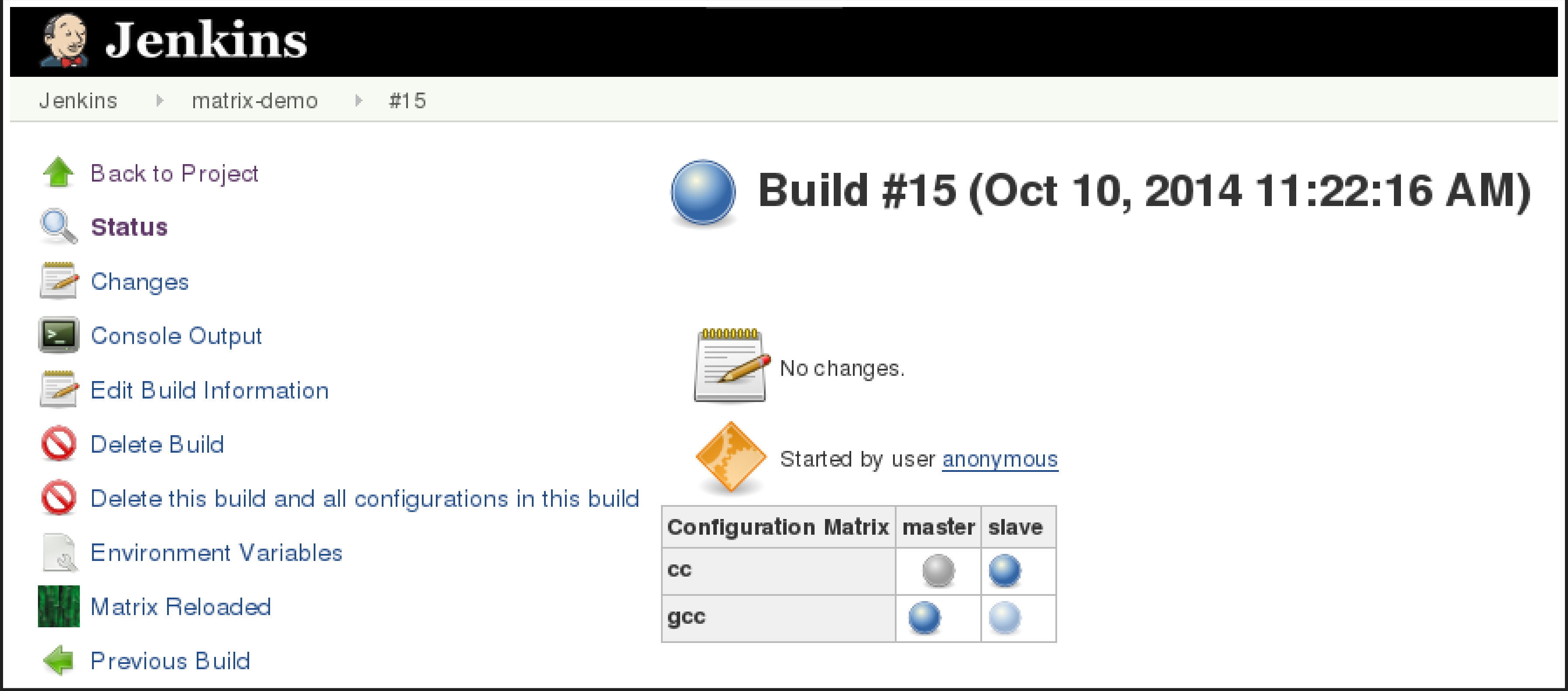
unprotected

```
[![Build Status](http://ci.jenkins-ci.org/buildStatus/icon?job=infra_update_center_v3)](http://ci.jenkins-ci.org/job/infra_upd
```

#10

MATRIX PROJECT

- supports multi-configuration (matrix) project type
- used to be a part of Jenkins core, now a bundled plugin
- essentially a parametrized job running all combinations of parameters



Jenkins ▸ matrix-demo ▸ #15

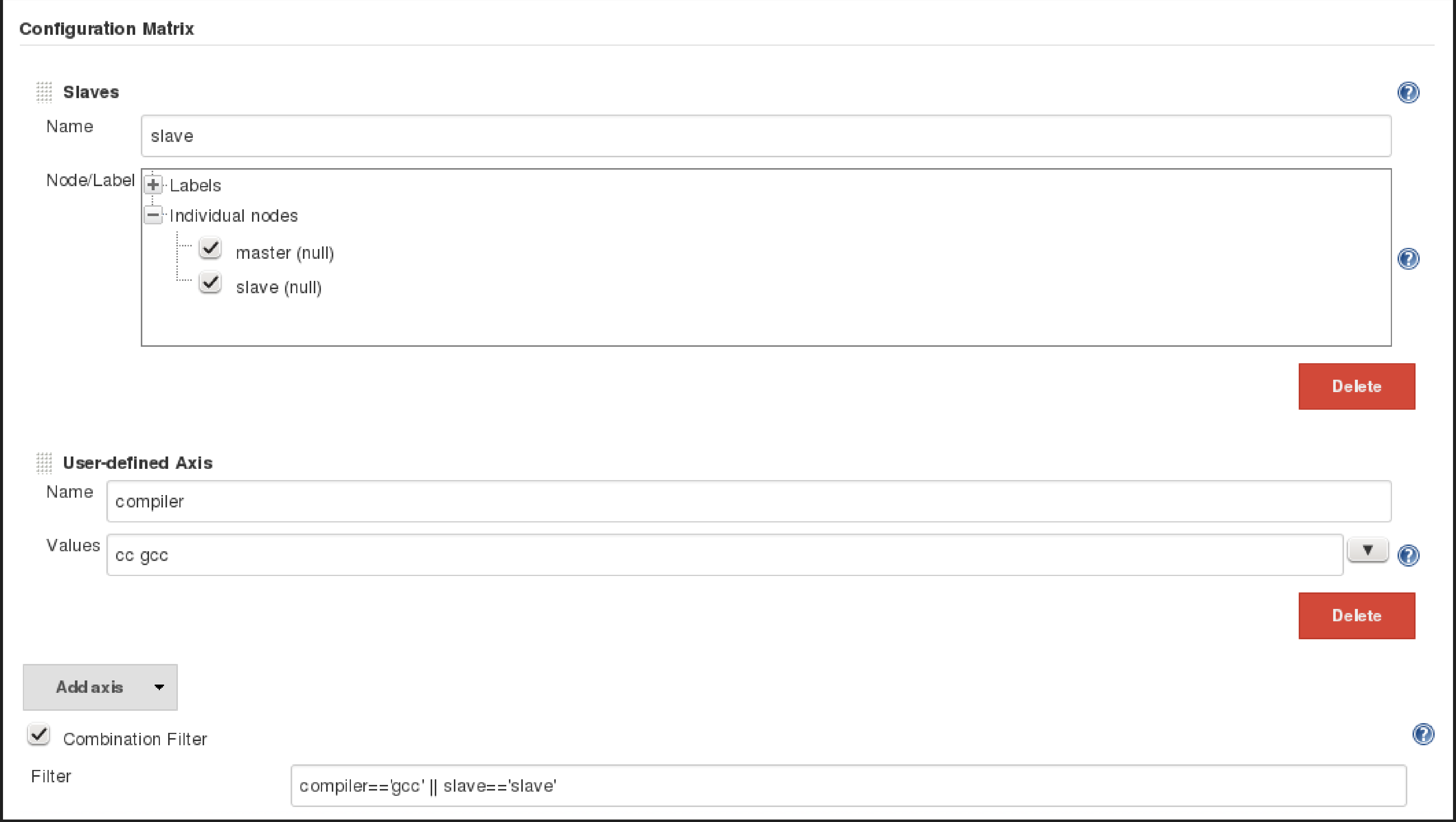
- Back to Project
- **Status**
- Changes
- Console Output
- Edit Build Information
- Delete Build
- Delete this build and all configurations in this build
- Environment Variables
- Matrix Reloaded
- Previous Build

Build #15 (Oct 10, 2014 11:22:16 AM)

No changes.

Started by user anonymous

Configuration Matrix	master	slave
cc	●	●
gcc	●	●



Configuration Matrix

Slaves

Name: slave

Node/Label:

- Labels
- Individual nodes
  - ☑ master (null)
  - ☑ slave (null)

User-defined Axis

Name: compiler

Values: cc gcc

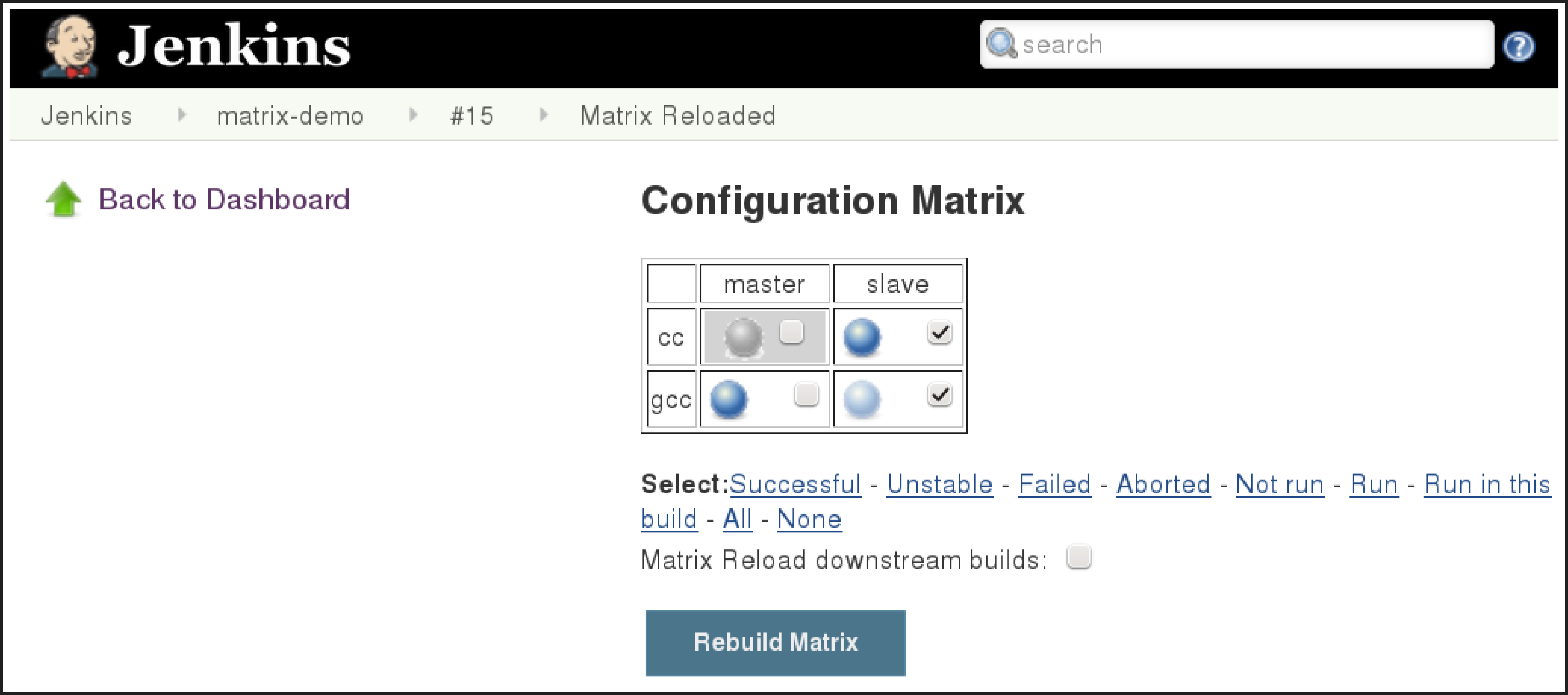
☑ Combination Filter

Filter: compiler=='gcc' || slave=='slave'

#11

MATRIX RELOADED

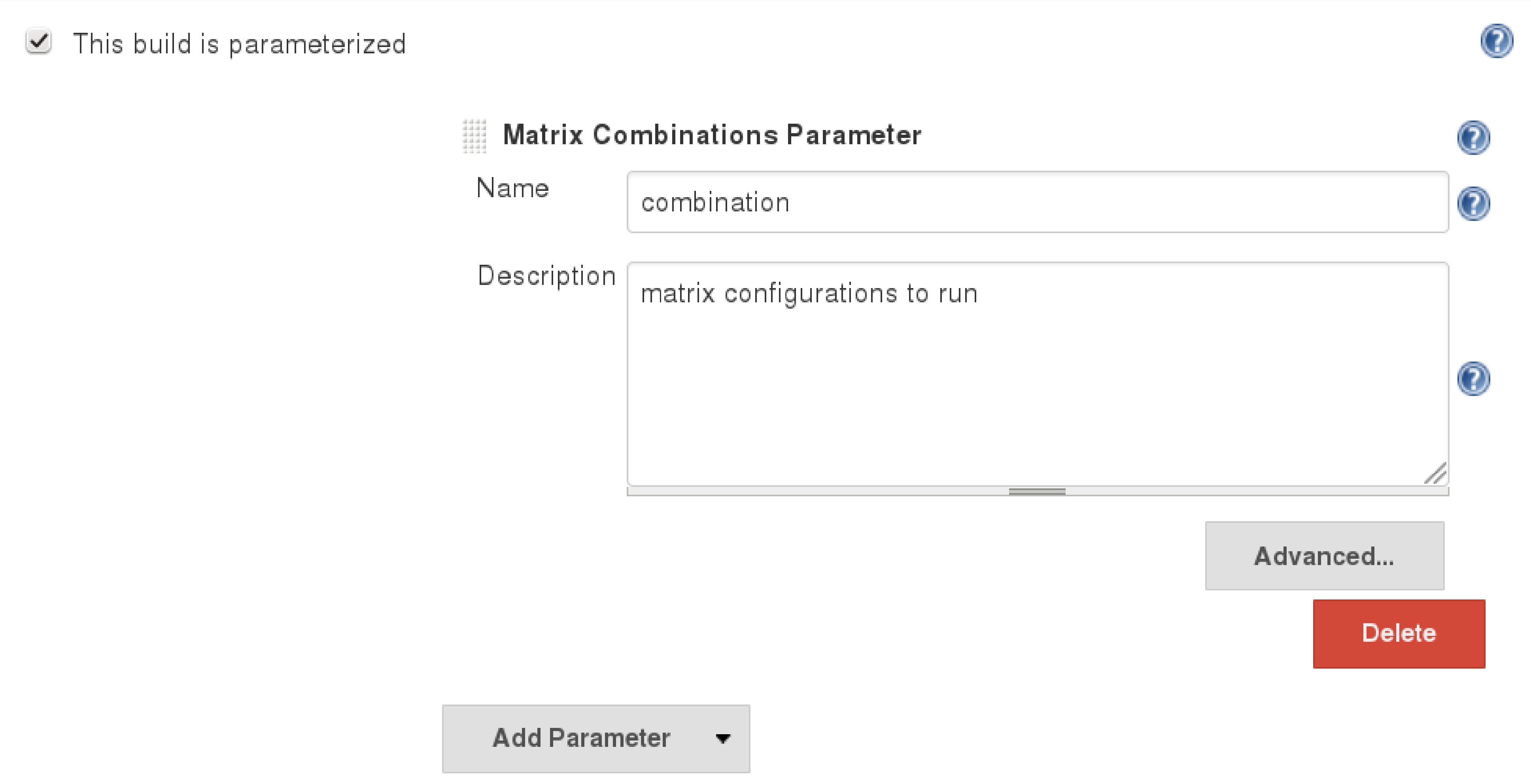
- rebuilds parts of matrix builds



#12

MATRIX COMBINATIONS

- allows the user to dynamically choose combinations to run in a matrix job
- introduces a *Matrix Combinations* parameter type

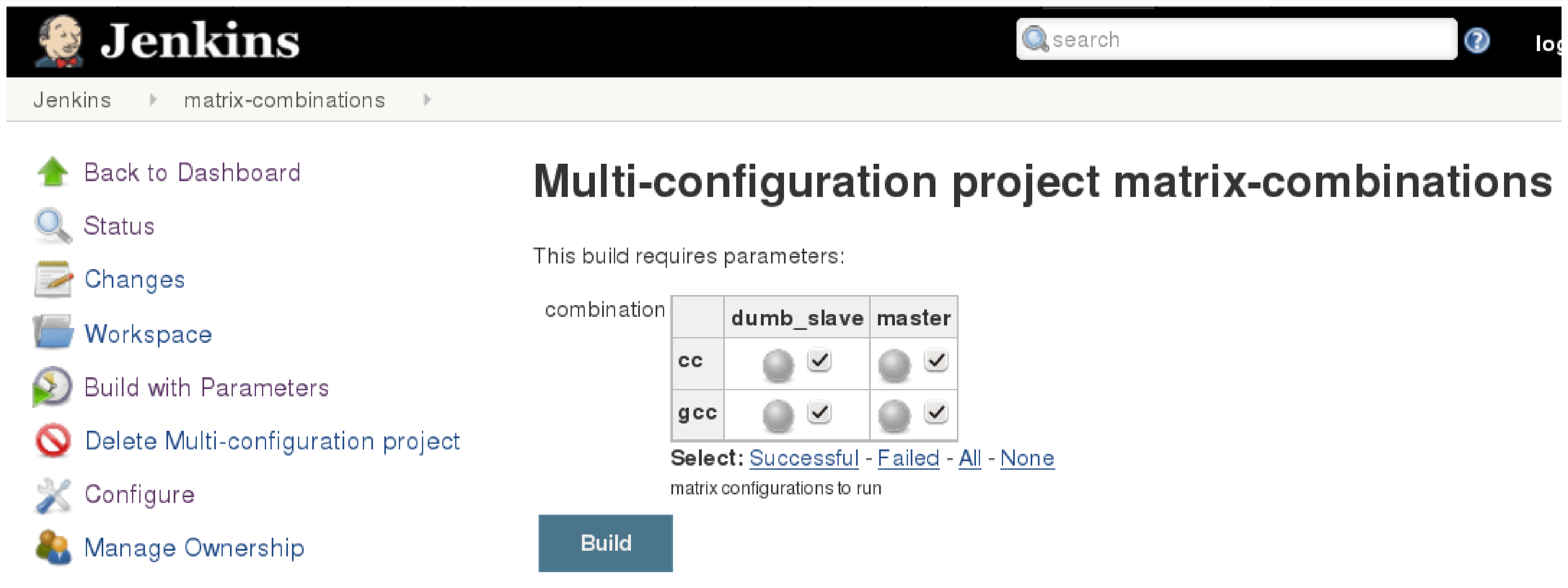


☑ This build is parameterized

Matrix Combinations Parameter

Name: combination

Description: matrix configurations to run



Multi-configuration project matrix-combinations

This build requires parameters:

combination

	dumb_slave	master
cc	● ☑	● ☑
gcc	● ☑	● ☑

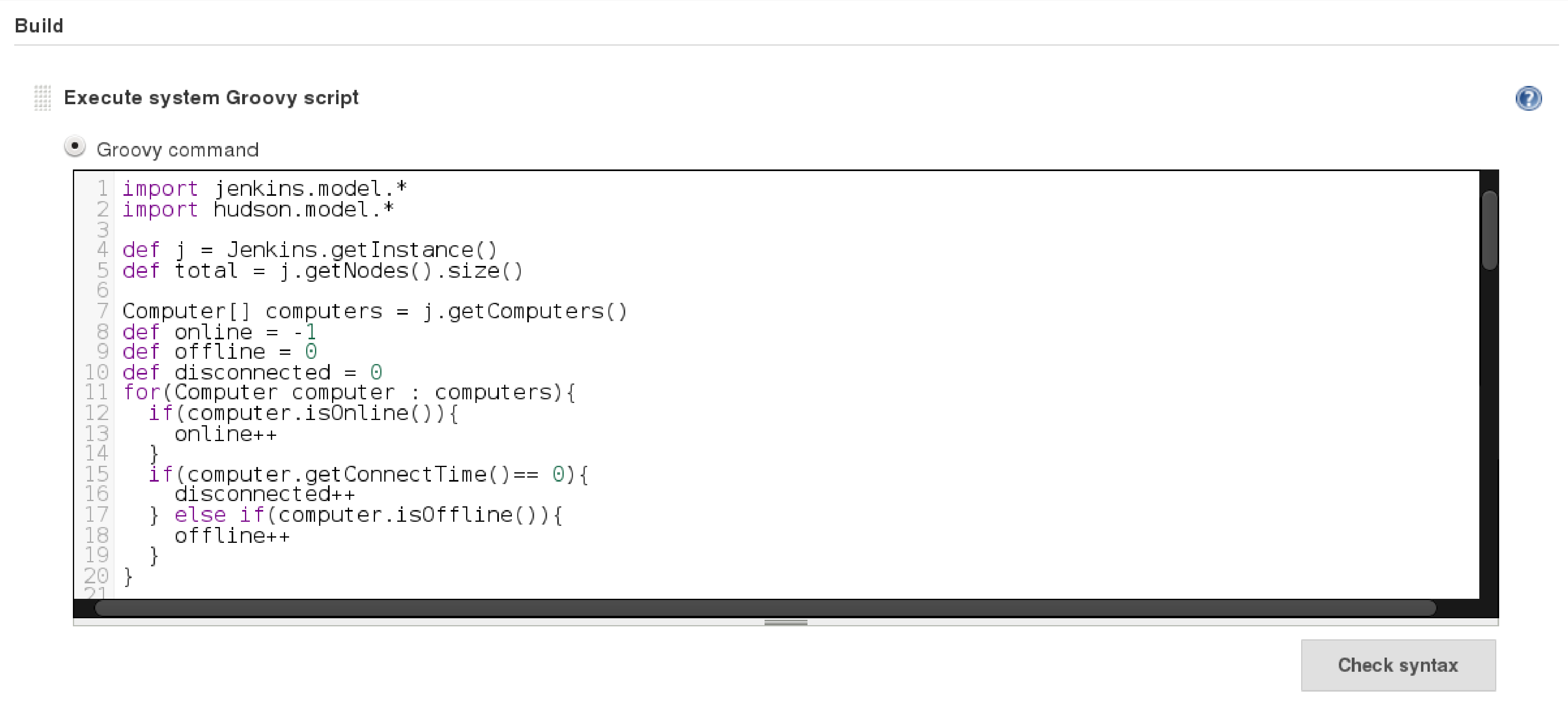
Select: Successful - Failed - All - None

matrix configurations to run

#13

GROOVY

- allows for execution of groovy code
- 2 types of build steps:
    - groovy scripts
        - run in the slave's JVM
    - system groovy scripts
        - run inside master's JVM



Build

Execute system Groovy script

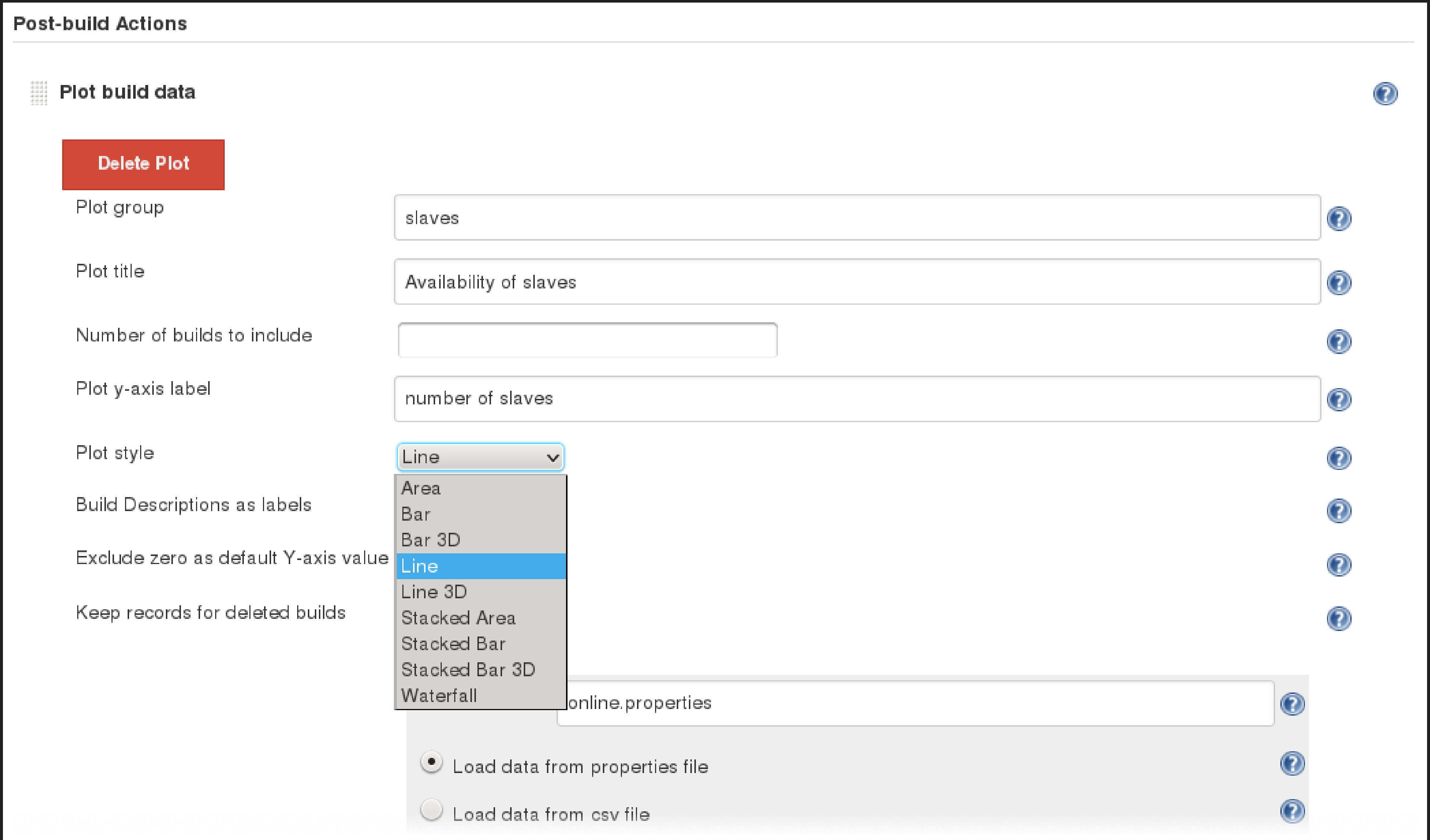
● Groovy command

```
import jenkins.model.*
import hudson.model.*

def j = Jenkins.getInstance()
def total = j.getNodes().size()

Computer[] computers = j.getComputers()
def online = -1
def offline = 0
def disconnected = 0
for(Computer computer : computers){
  if(computer.isOnline()){
    online++
  }
  if(computer.getConnectTime()== 0){
    disconnected++
  } else if(computer.isOffline()){
    offline++
  }
}
```

#14

PLOT

- outputs simple charts (plots) from builds



Post-build Actions

Plot build data

Plot group: slaves

Plot title: Availability of slaves

Number of builds to include:

Plot y-axis label: number of slaves

Plot style: Line

Build Descriptions as labels

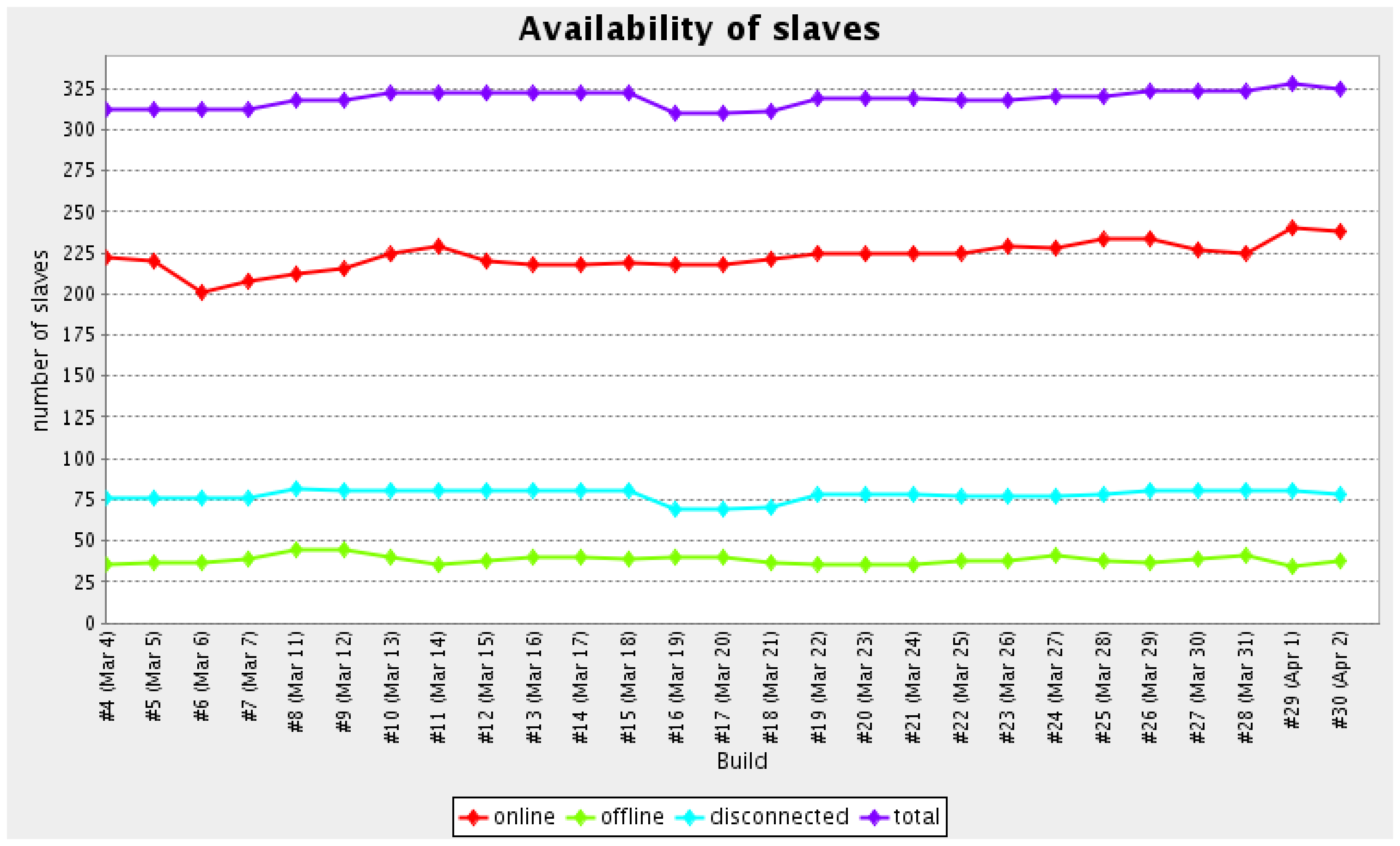
Exclude zero as default Y-axis value

Keep records for deleted builds

online.properties

● Load data from properties file

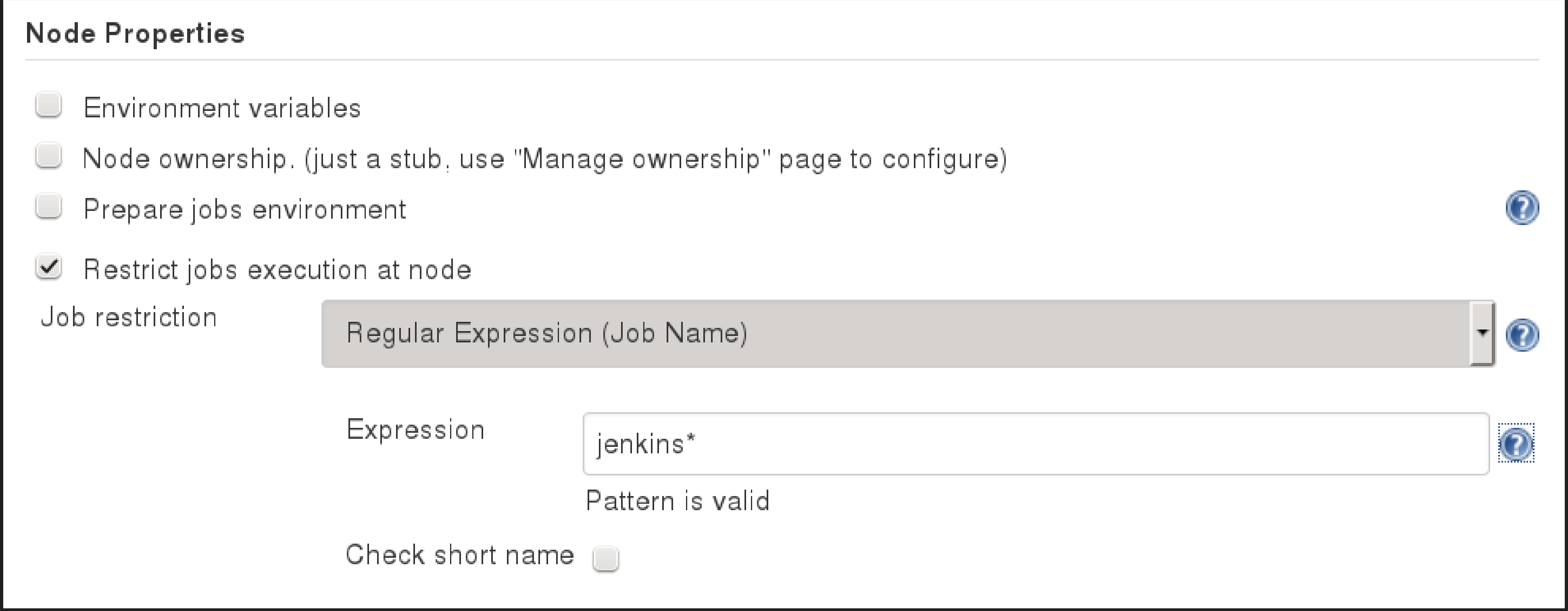
○ Load data from csv file


Availability of slaves
number of slaves
325
300
275
250
225
200
175
150
125
100
75
50
25
0
#4 (Mar 4)
#5 (Mar 5)
#6 (Mar 6)
#7 (Mar 7)
#8 (Mar 11)
#9 (Mar 12)
#10 (Mar 13)
#11 (Mar 14)
#12 (Mar 15)
#13 (Mar 16)
#14 (Mar 17)
#15 (Mar 18)
#16 (Mar 19)
#17 (Mar 20)
#18 (Mar 21)
#19 (Mar 22)
#20 (Mar 23)
#21 (Mar 24)
#22 (Mar 25)
#23 (Mar 26)
#24 (Mar 27)
#25 (Mar 28)
#26 (Mar 29)
#27 (Mar 30)
#28 (Mar 31)
#29 (Apr 1)
#30 (Apr 2)
Build
online
offline
disconnected
total

#15

JOB RESTRICTIONS

- restricts how builds can be triggered and where they can run



Node Properties

□ Environment variables

□ Node ownership. (just a stub, use "Manage ownership" page to configure)

□ Prepare jobs environment

☑ Restrict jobs execution at node

Job restriction: Regular Expression (Job Name)

Expression: jenkins*

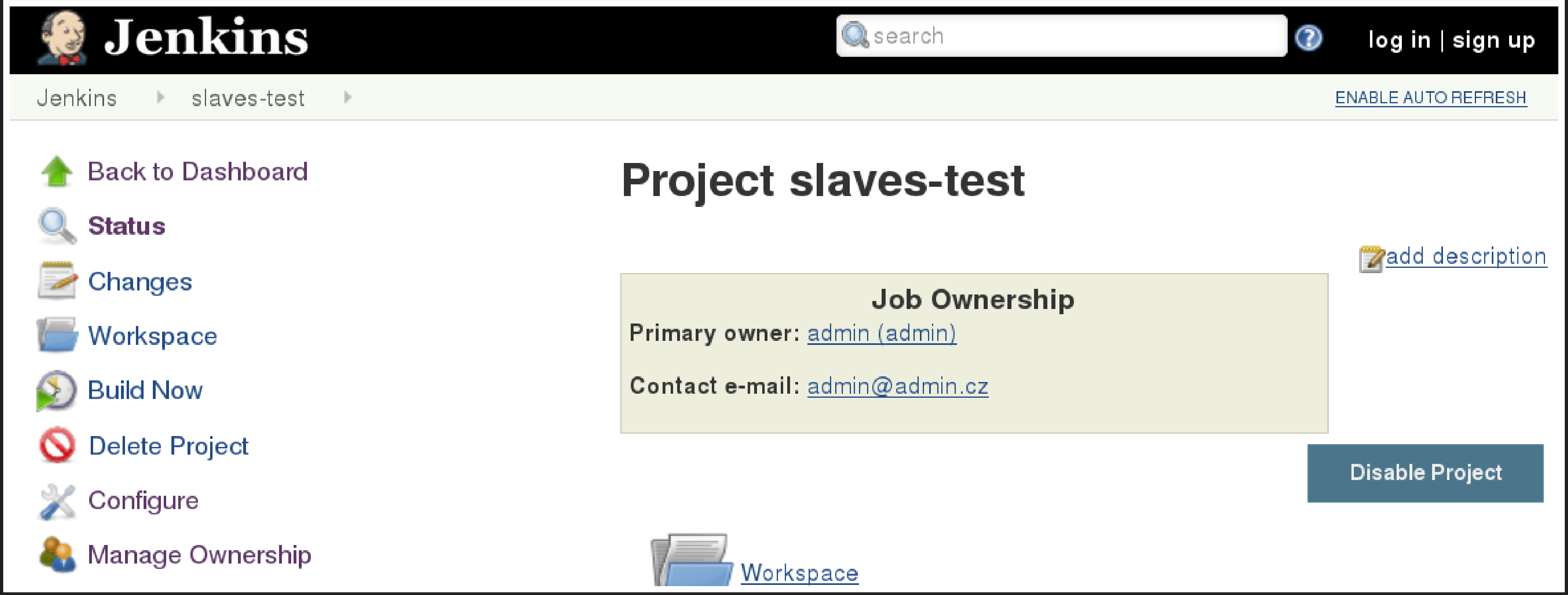
Pattern is valid

Check short name □

#16

OWNERSHIP

- introduces concept of owners of jobs and slaves
- includes:
  - ownership-based security (via Role Strategy and Job Restrictions plugins)
  - summaries
  - reasonable default assignments



Project slaves-test

Job Ownership

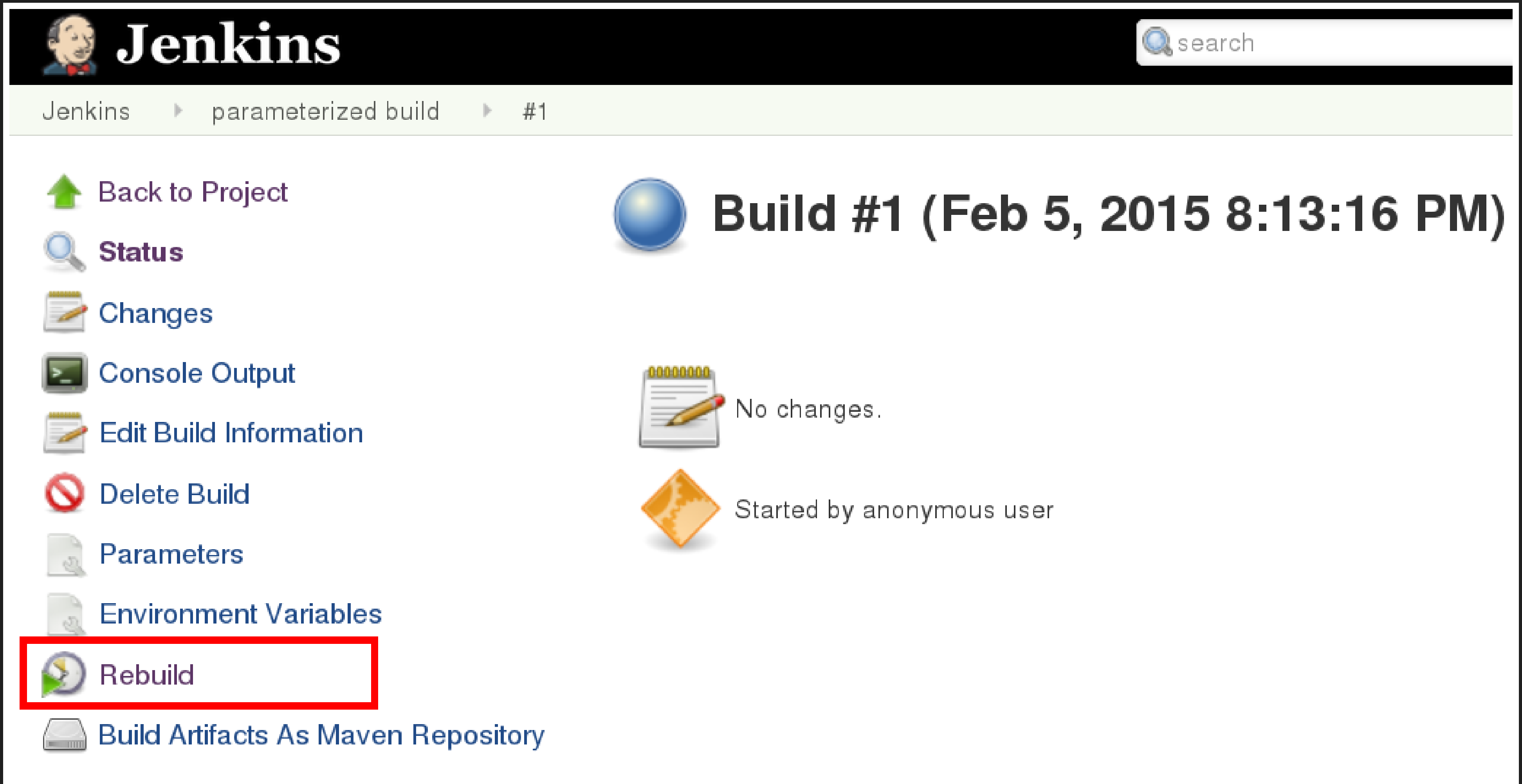
Primary owner: admin (admin)

Contact e-mail: admin@admin.cz

#17

REBUILD

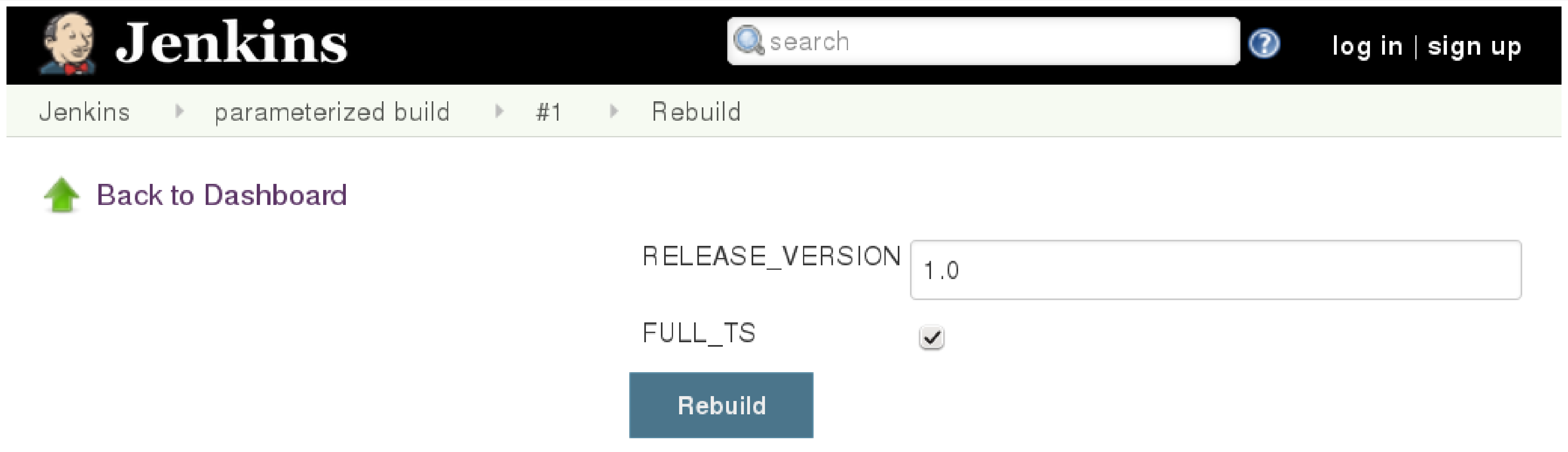
- rebuilds a parameterized build with the same parameters



Build #1 (Feb 5, 2015 8:13:16 PM)

No changes.

Started by anonymous user



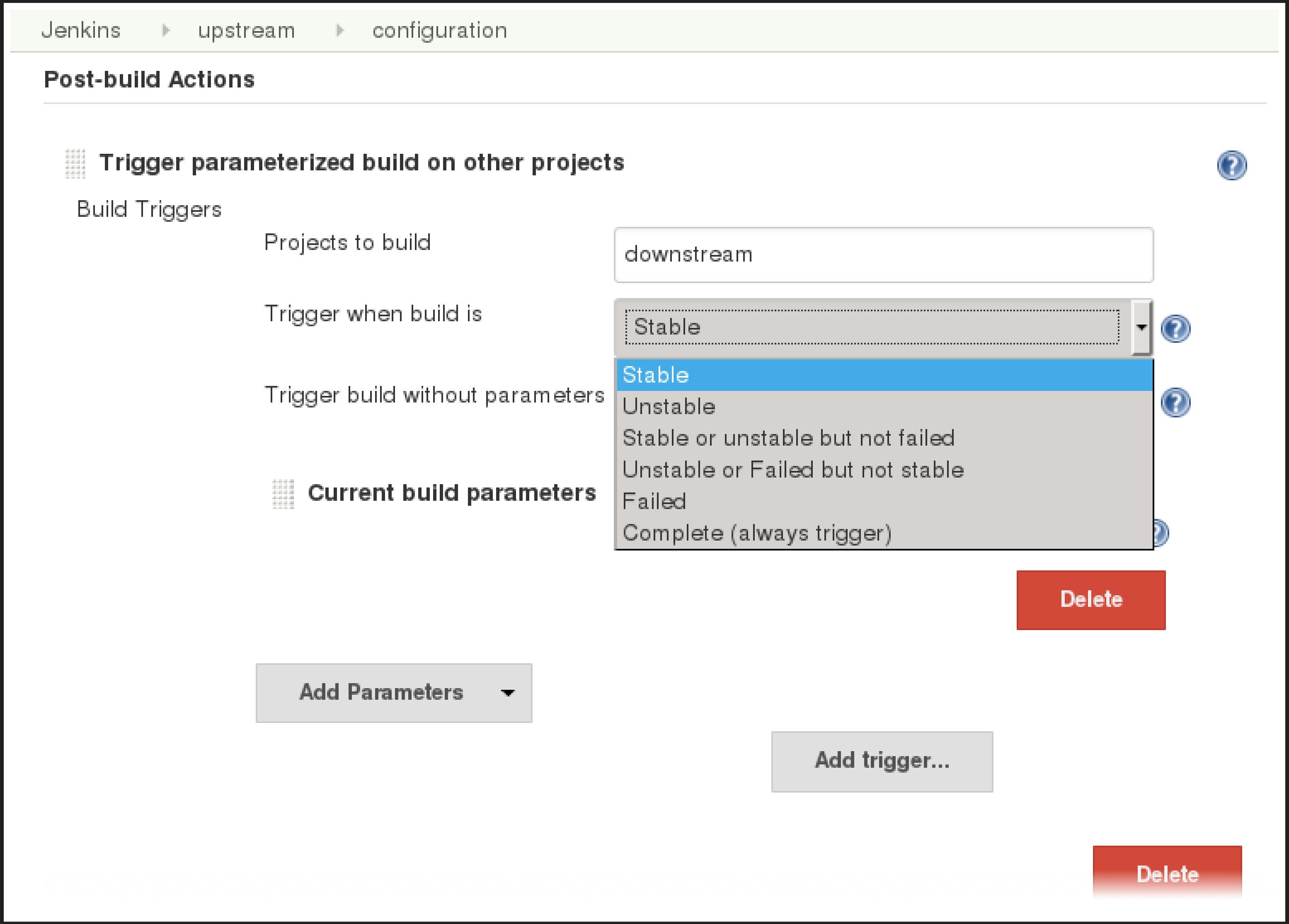
RELEASE_VERSION 1.0

FULL_TS ☑

#18

PARAMETERIZED TRIGGER

- extension of out-of-the-box upstream-downstream job relationship
- provides job chaining with parameter passing



Jenkins ▸ upstream ▸ configuration

Post-build Actions

Trigger parameterized build on other projects

Build Triggers

Projects to build: downstream

Trigger when build is: Stable

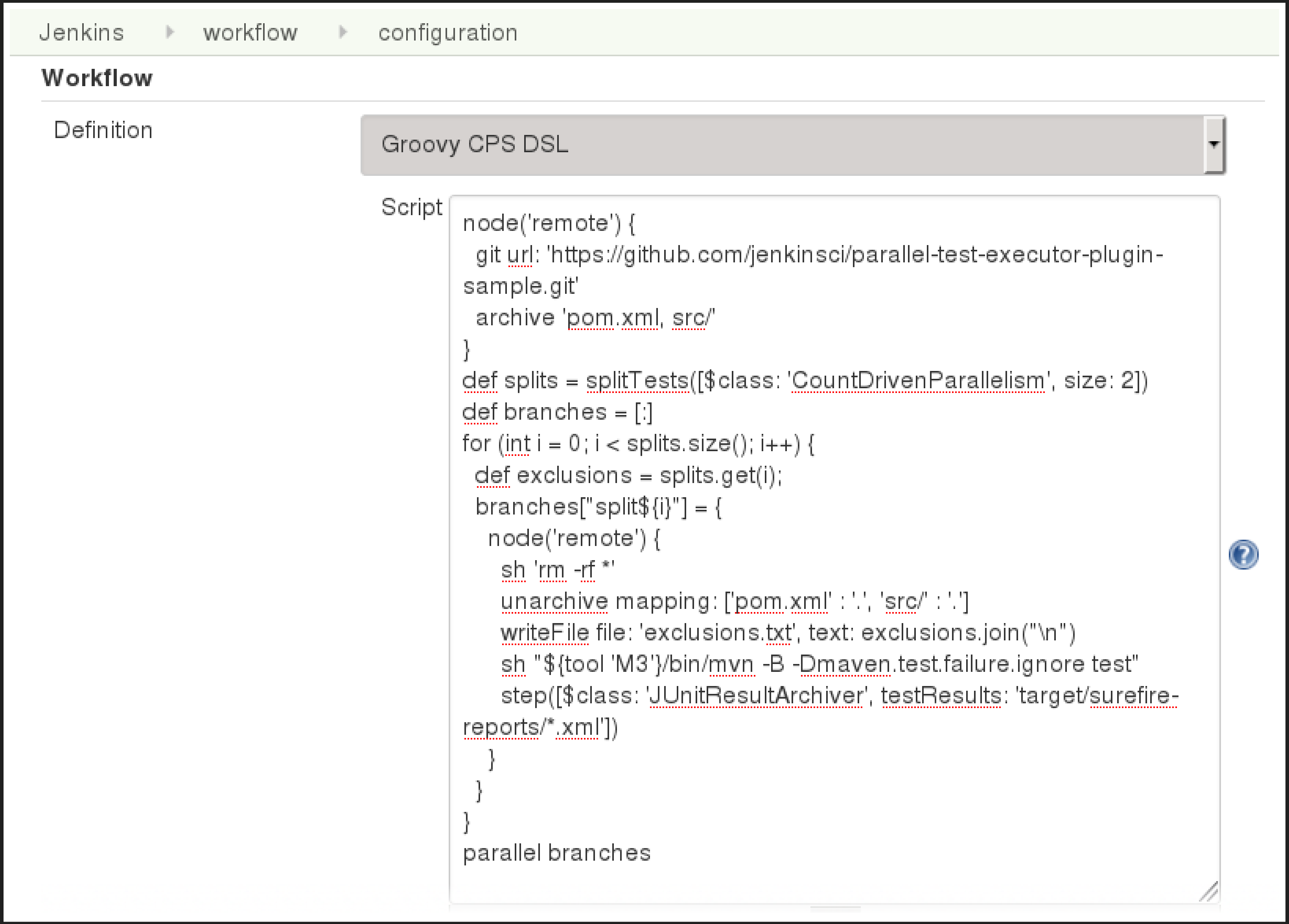
Trigger build without parameters

Current build parameters

Stable
Unstable
Stable or unstable but not failed
Unstable or Failed but not stable
Failed
Complete (always trigger)
Delete
Add Parameters
Add trigger...
Delete

WORKFLOW

- allows you to write complex workflows in Groovy with an embedded DSL
- forget Build Flow and Join plugins
- introduces a new *workflow* job type
- collection of plugins
- supports:
  - core job-related stuff (triggers, parameters, SCM...)
  - durable pipelines
  - allocation of slaves and workspaces
  - human input integrated into flows
  - sandboxing via Script Security plugin



Workflow

Definition: Groovy CPS DSL

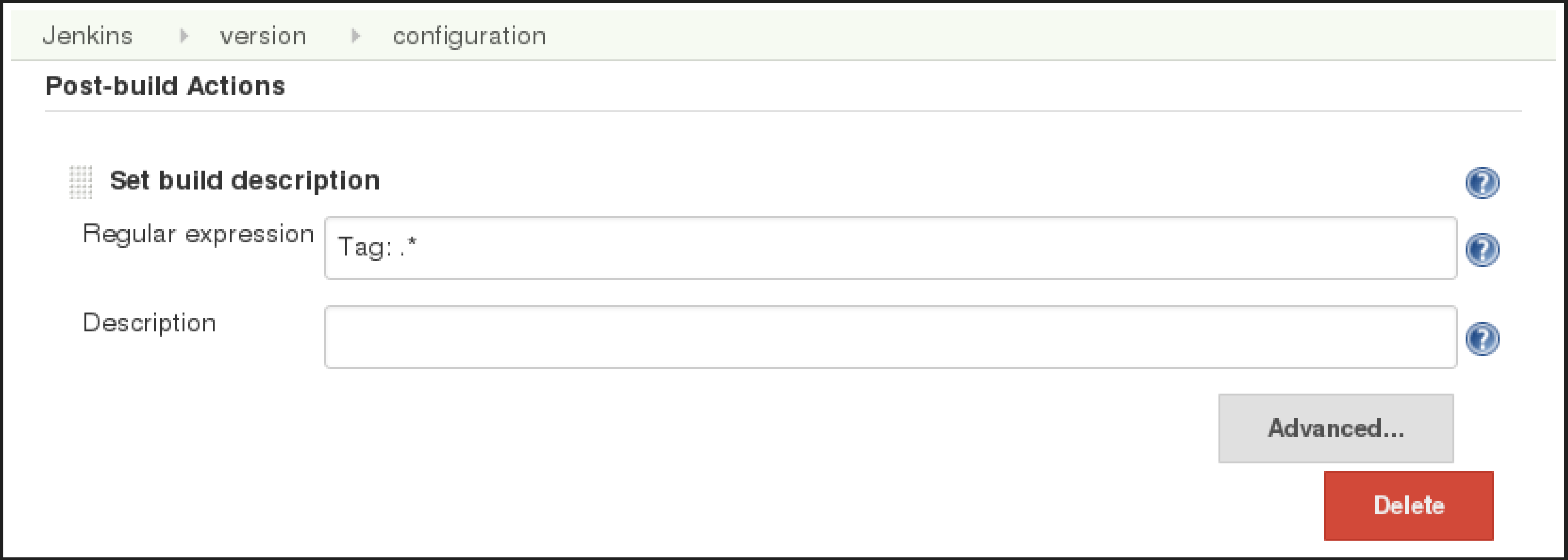
Script

```
node('remote') {
  git url: 'https://github.com/jenkinsci/parallel-test-executor-plugin-sample.git'
  archive 'pom.xml, src/'
}
def splits = splitTests([$class: 'CountDrivenParallelism', size: 2])
def branches = [:]
for (int i = 0; i < splits.size(); i++) {
  def exclusions = splits.get(i);
  branches["split${i}"] = {
    node('remote') {
      sh 'rm -rf *'
      unarchive mapping: ['pom.xml' : '.', 'src/' : '.']
      writeFile file: 'exclusions.txt', text: exclusions.join("\n")
      sh "${tool 'M3'}/bin/mvn -B -Dmaven.test.failure.ignore test"
      step([$class: 'JUnitResultArchiver', testResults: 'target/surefire-reports/*.xml'])
    }
  }
}
parallel branches
```

#20

DESCRIPTION SETTER

- sets the description for a build
- uses a regular expression to find a line in the console log

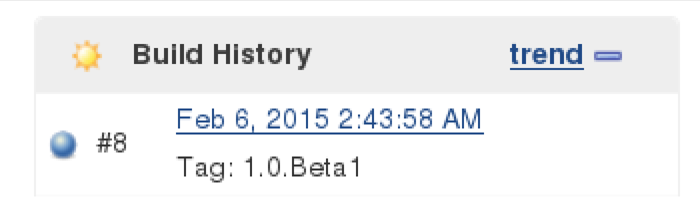


Post-build Actions

Set build description

Regular expression: Tag: .*

Description:



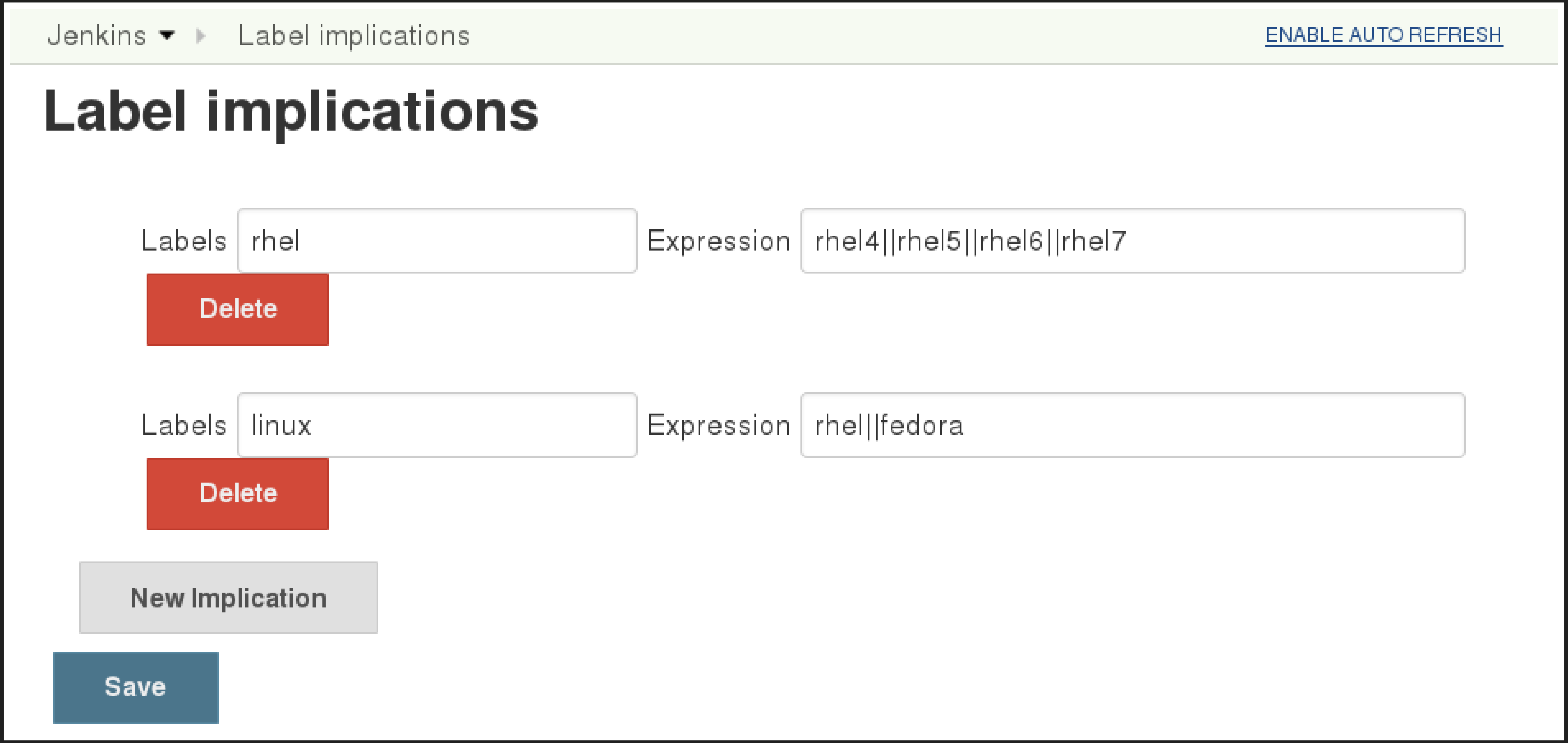
#8 Feb 6, 2015 2:43:58 AM

Tag: 1.0.Beta1

#21

IMPLIED LABELS

- recognizes implication rules to infer node labels



Label implications

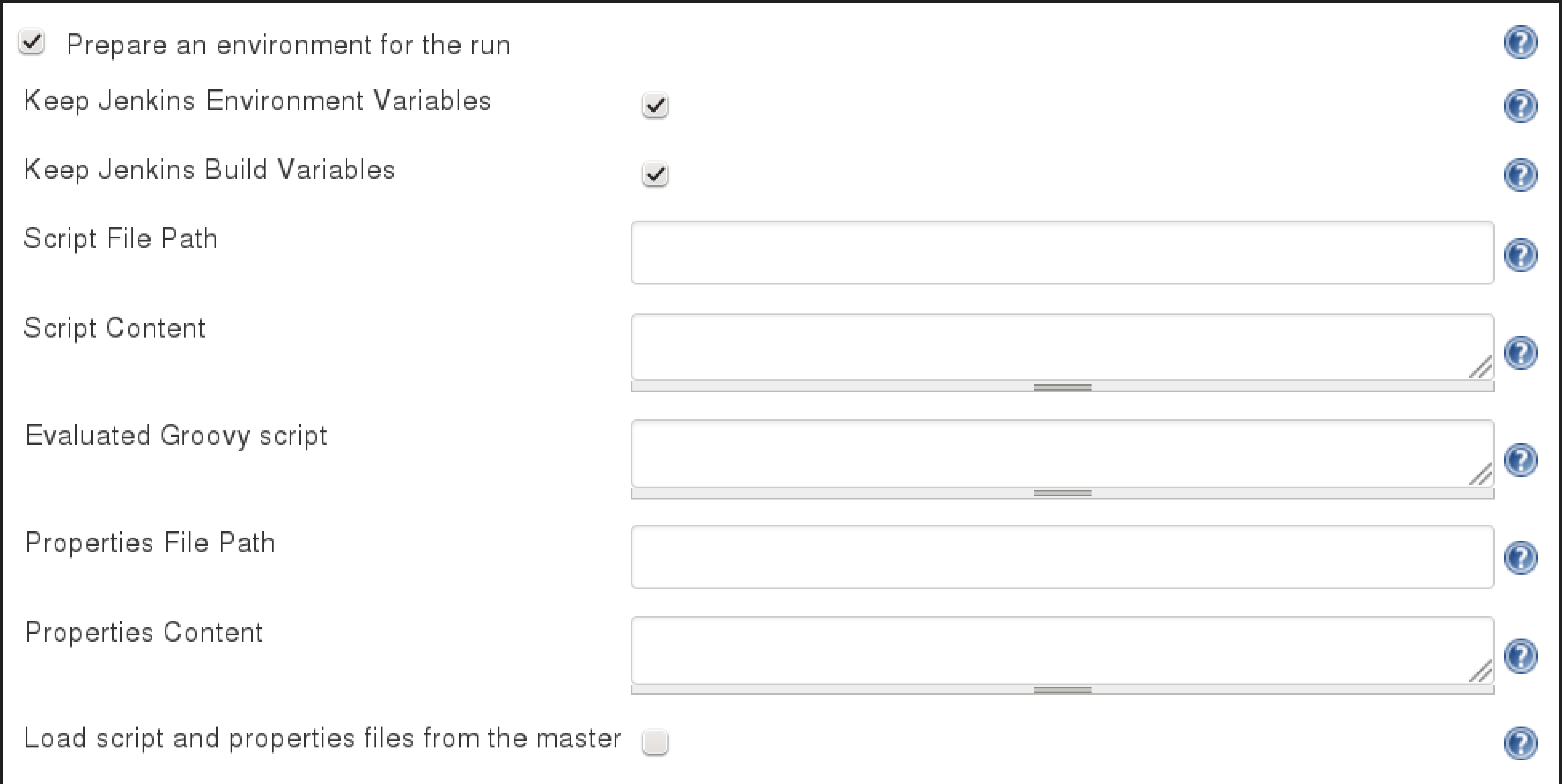
Labels: rhel Expression: rhel4||rhel5||rhel6||rhel7

Labels: linux Expression: rhel||fedora

#22

ENVIRONMENT INJECTOR

- manages environment variables for jobs and nodes
- use cases:
  - set up clean environment for nodes
  - inject variables based on user parameter values
  - inject environment variables from the evaluation of a Groovy script



☑ Prepare an environment for the run

Keep Jenkins Environment Variables ☑

Keep Jenkins Build Variables ☑

Script File Path

Script Content

Evaluated Groovy script

Properties File Path

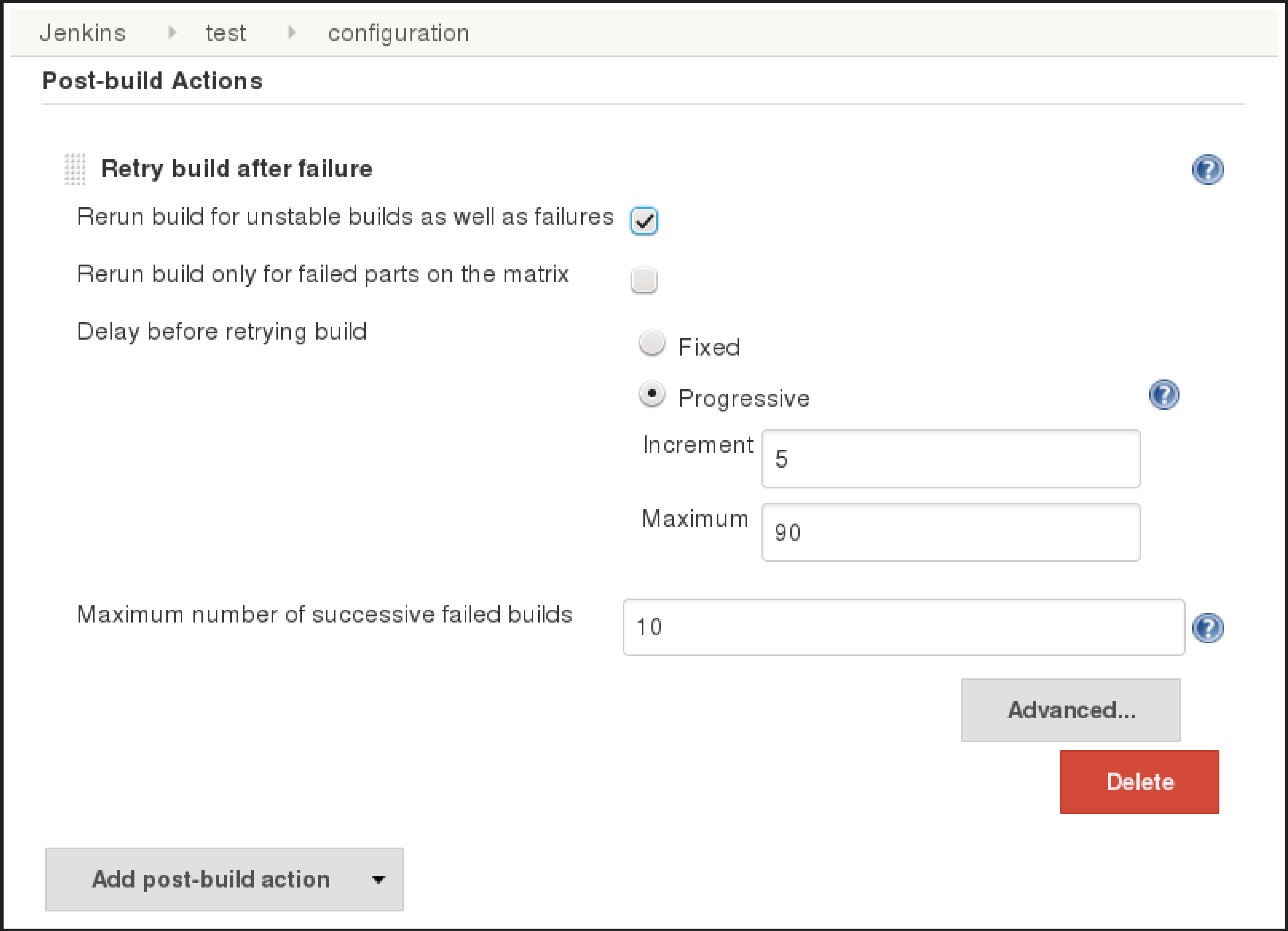
Properties Content

Load script and properties files from the master □

#23

NAGINATOR

- automatically reschedules a build after a build failure



Jenkins ▸ test ▸ configuration

Post-build Actions

Retry build after failure

Rerun build for unstable builds as well as failures ☑

Rerun build only for failed parts on the matrix □

Delay before retrying build

○ Fixed

● Progressive

Increment: 5

Maximum: 90

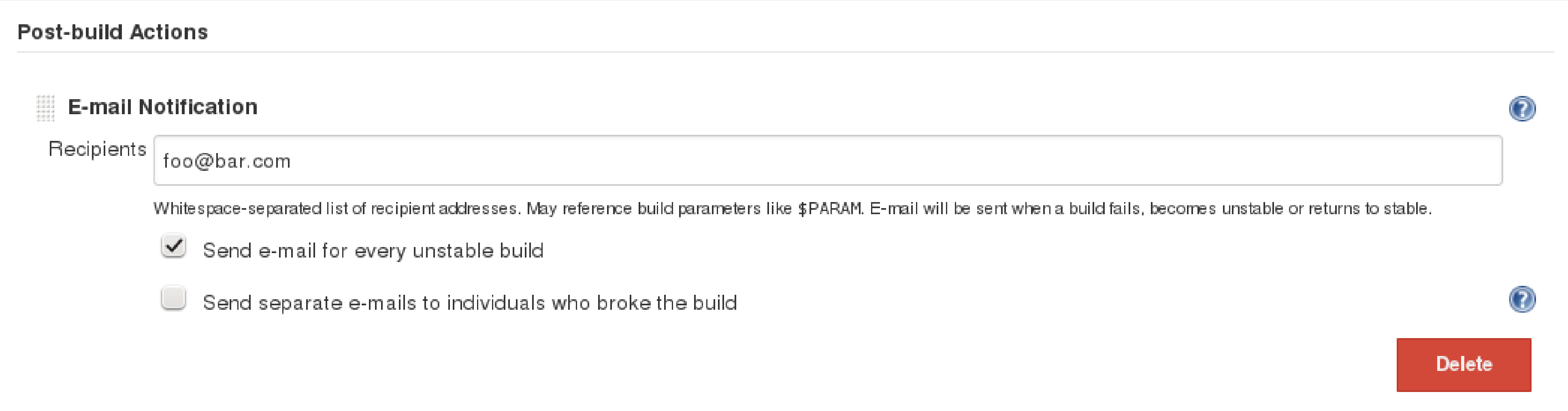
Maximum number of successive failed builds: 10

#24

EMAIL EXTENSION

- controls all aspects of email notifications

Mailer



Post-build Actions

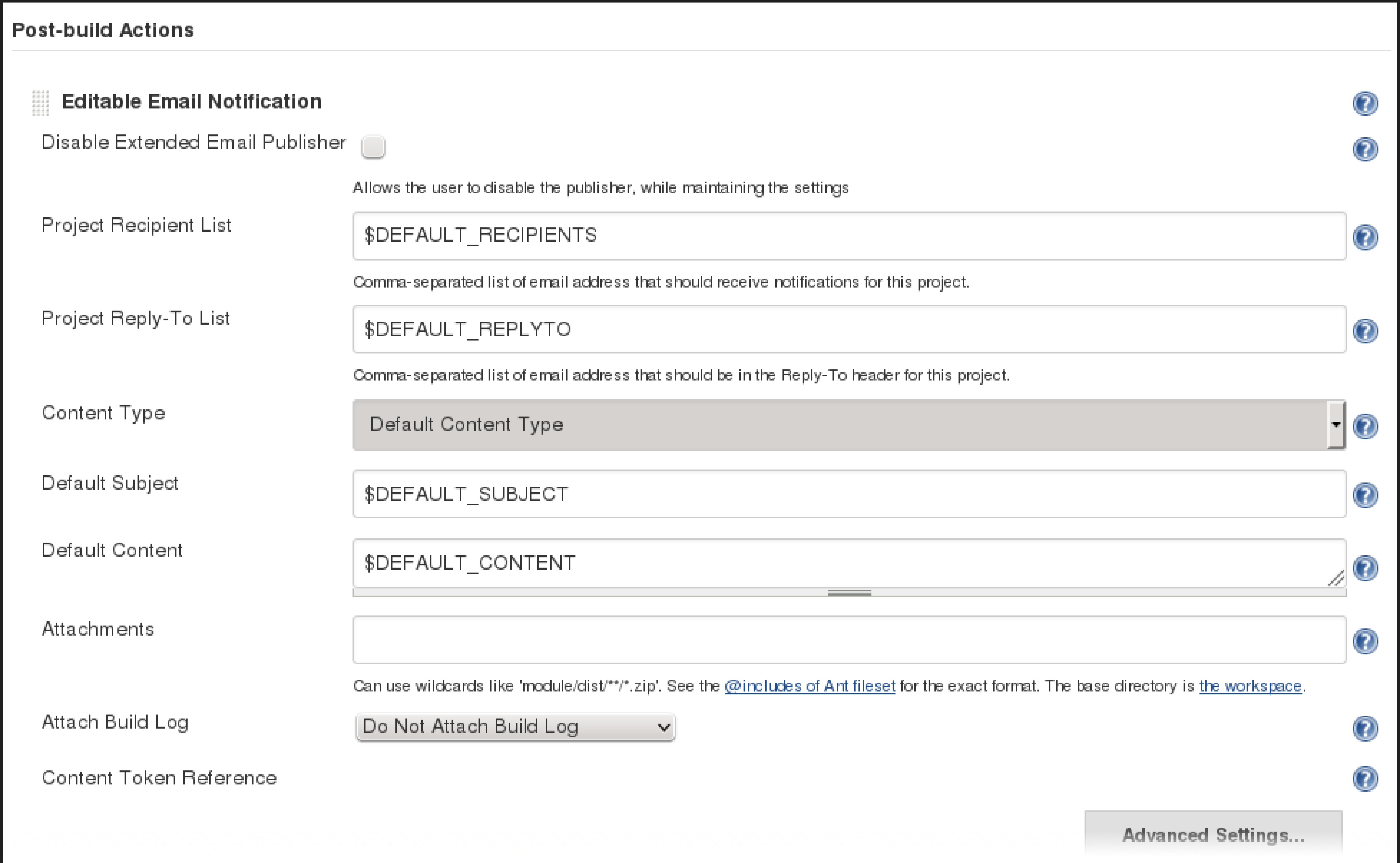
E-mail Notification

Recipients: foo@bar.com

Whitespace-separated list of recipient addresses. May reference build parameters like $PARAM. E-mail will be sent when a build fails, becomes unstable or returns to stable.

☑ Send e-mail for every unstable build

□ Send separate e-mails to individuals who broke the build



Post-build Actions

Editable Email Notification

Disable Extended Email Publisher □

Allows the user to disable the publisher, while maintaining the settings

Project Recipient List: $DEFAULT_RECIPIENTS

Comma-separated list of email address that should receive notifications for this project.

Project Reply-To List: $DEFAULT_REPLYTO

Comma-separated list of email address that should be in the Reply-To header for this project.

Content Type: Default Content Type

Default Subject: $DEFAULT_SUBJECT

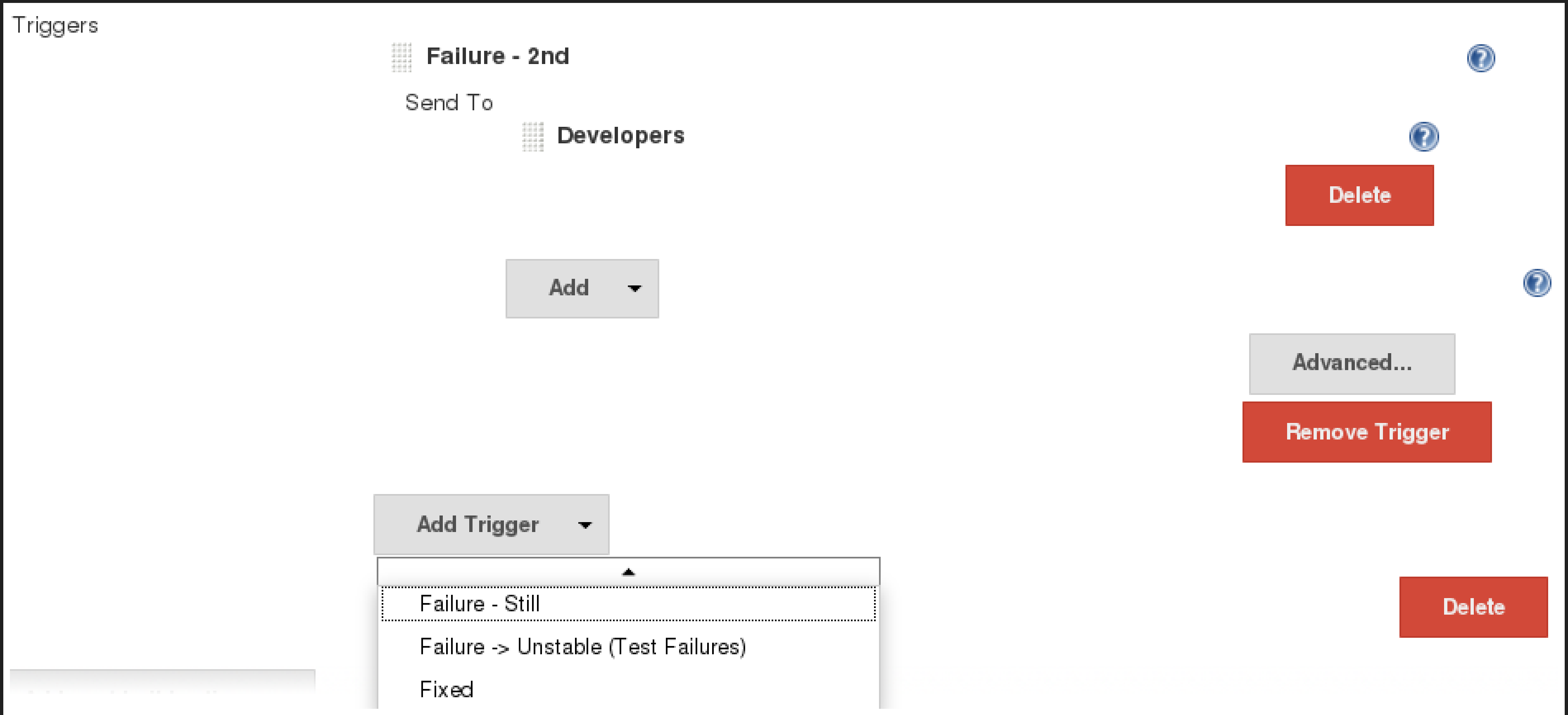
Default Content: $DEFAULT_CONTENT

Attachments:

Can use wildcards like 'module/dist/**/*.zip'. See the @includes of Ant fileset for the exact format. The base directory is the workspace.

Attach Build Log: Do Not Attach Build Log

Content Token Reference



Triggers

Failure - 2nd

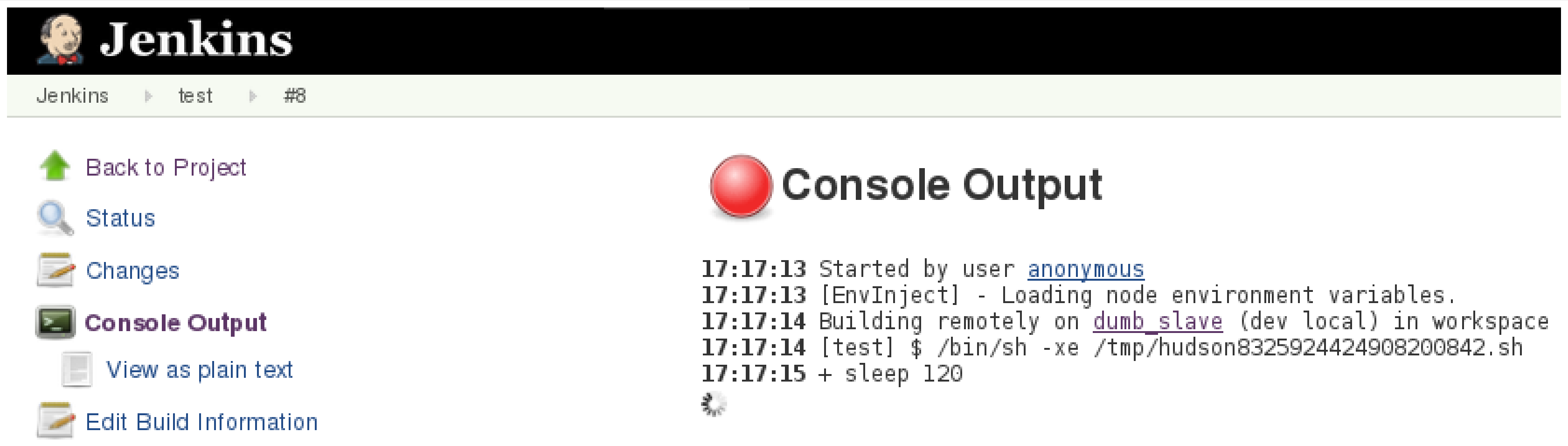
Send To

Developers

#25

TIMESTAMPER

- adds timestamps to console output

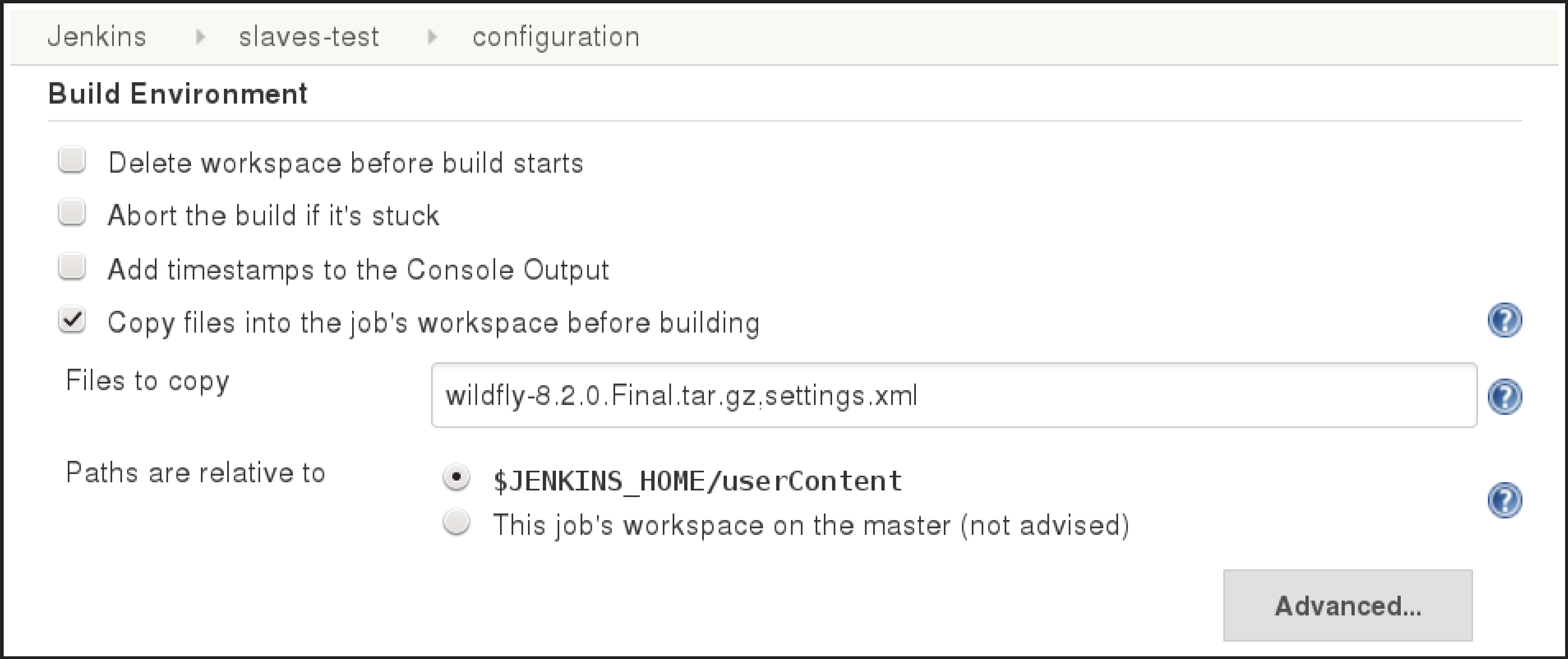


```
17:17:13 Started by user anonymous
17:17:13 [EnvInject] - Loading node environment variables.
17:17:14 Building remotely on dumb_slave (dev local) in workspace
17:17:14 [test] $ /bin/sh -xe /tmp/hudson8325924424908200842.sh
17:17:15 + sleep 120
```

#26

COPY TO SLAVE

- transfers data between the master's file system and jobs' workspaces



Jenkins ▸ slaves-test ▸ configuration

Build Environment

☐ Delete workspace before build starts

☐ Abort the build if it's stuck

☐ Add timestamps to the Console Output

☑ Copy files into the job's workspace before building

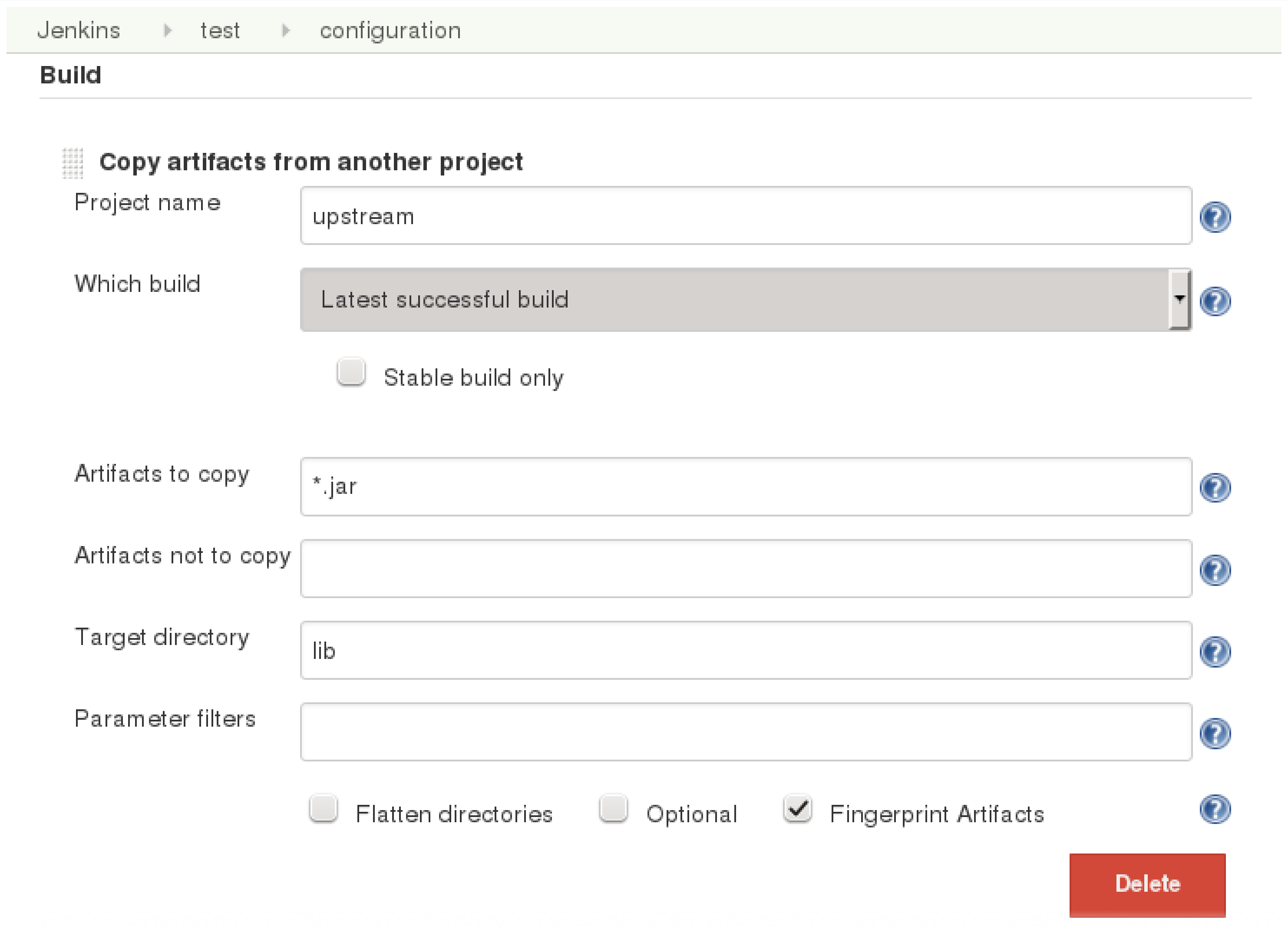
Files to copy: wildfly-8.2.0.Final.tar.gz,settings.xml

Paths are relative to:
● `$JENKINS_HOME/userContent`
○ This job's workspace on the master (not advised)

#27

COPY ARTIFACT

- copies an artifact from another build/job into the current build's workspace



Build

Copy artifacts from another project

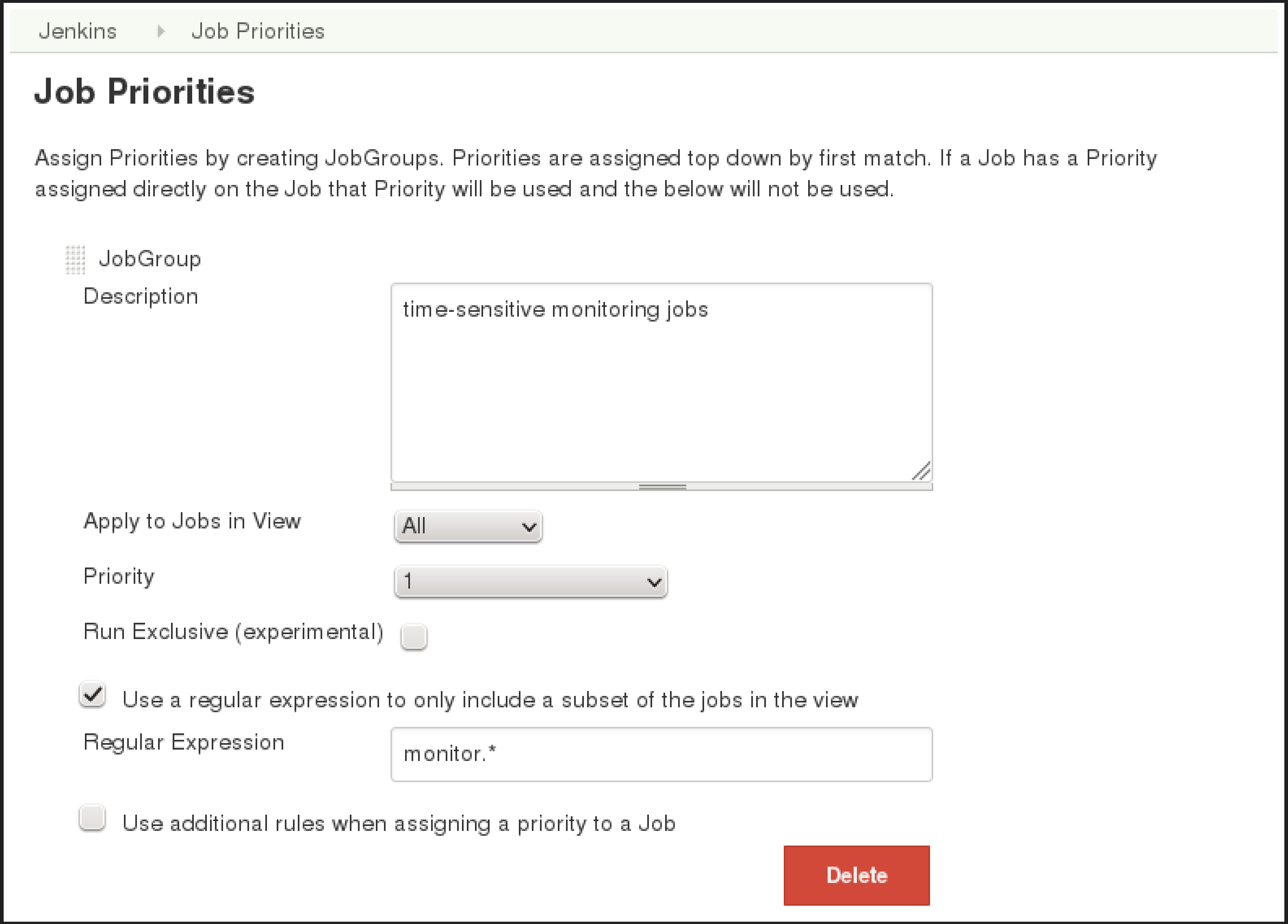
Project name	upstream
Which build	Latest successful build
	□ Stable build only
Artifacts to copy	*.jar
Artifacts not to copy	
Target directory	lib
Parameter filters	

□ Flatten directories □ Optional ☑ Fingerprint Artifacts

#28

PRIORITY SORTER

- queues jobs according to their priorities
- the lower the priority, the sooner the job runs



Jenkins › Job Priorities

Job Priorities

Assign Priorities by creating JobGroups. Priorities are assigned top down by first match. If a Job has a Priority assigned directly on the Job that Priority will be used and the below will not be used.

JobGroup

Description: time-sensitive monitoring jobs

Apply to Jobs in View: All

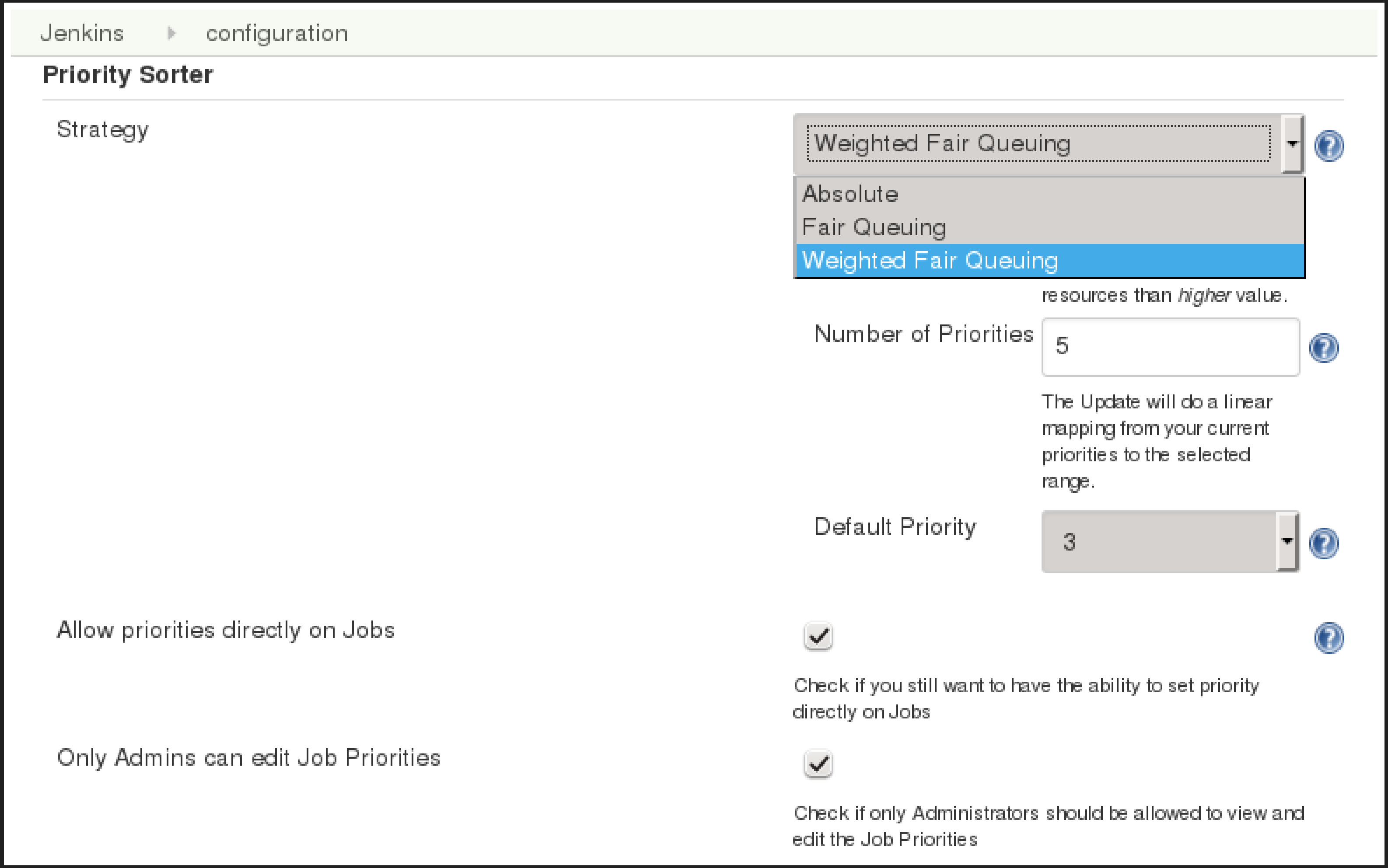
Priority: 1

Run Exclusive (experimental) □

☑ Use a regular expression to only include a subset of the jobs in the view

Regular Expression: monitor.*

□ Use additional rules when assigning a priority to a Job



Jenkins ▸ configuration

Priority Sorter

Strategy: Weighted Fair Queuing

resources than *higher* value.

Number of Priorities: 5

The Update will do a linear mapping from your current priorities to the selected range.

Default Priority: 3

Allow priorities directly on Jobs ☑

Check if you still want to have the ability to set priority directly on Jobs

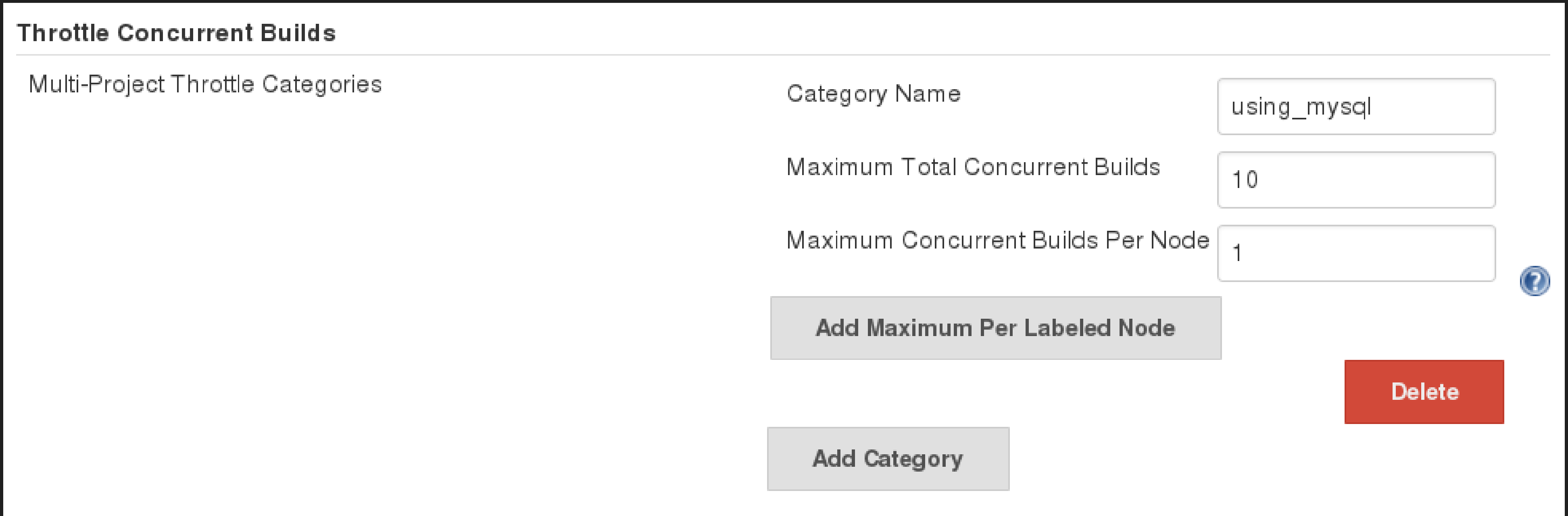
Only Admins can edit Job Priorities ☑

Check if only Administrators should be allowed to view and edit the Job Priorities

#29

THROTTLE CONCURRENT BUILDS

- limits the number of concurrent builds of a project running per node or globally
- replaces Locks and Latches plugin



Throttle Concurrent Builds

Multi-Project Throttle Categories

Category Name: using_mysql

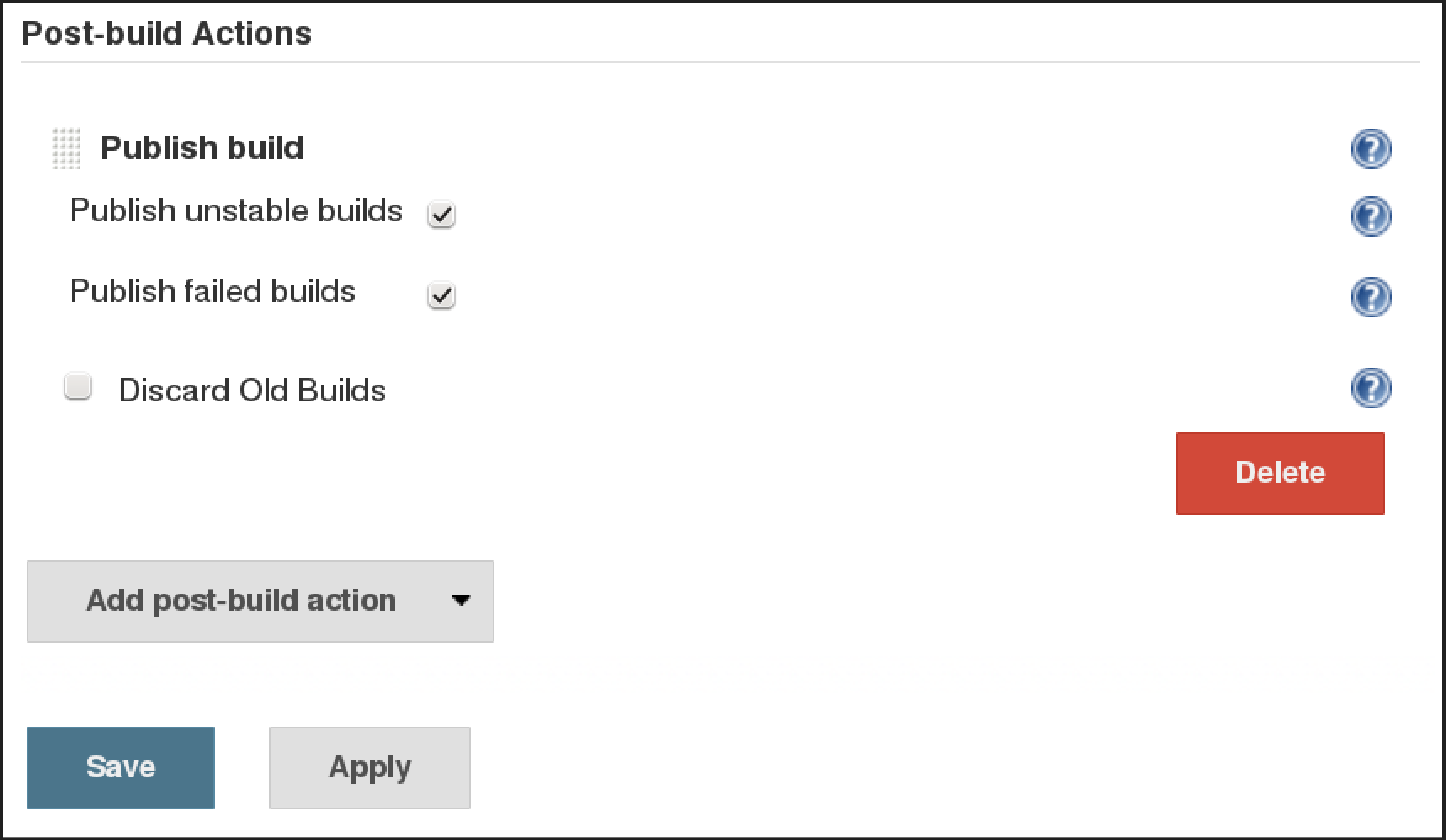
Maximum Total Concurrent Builds: 10

Maximum Concurrent Builds Per Node: 1

#30

BUILD PUBLISHER

- sends builds to another Jenkins master over HTTP



Post-build Actions

Publish build

Publish unstable builds ☑

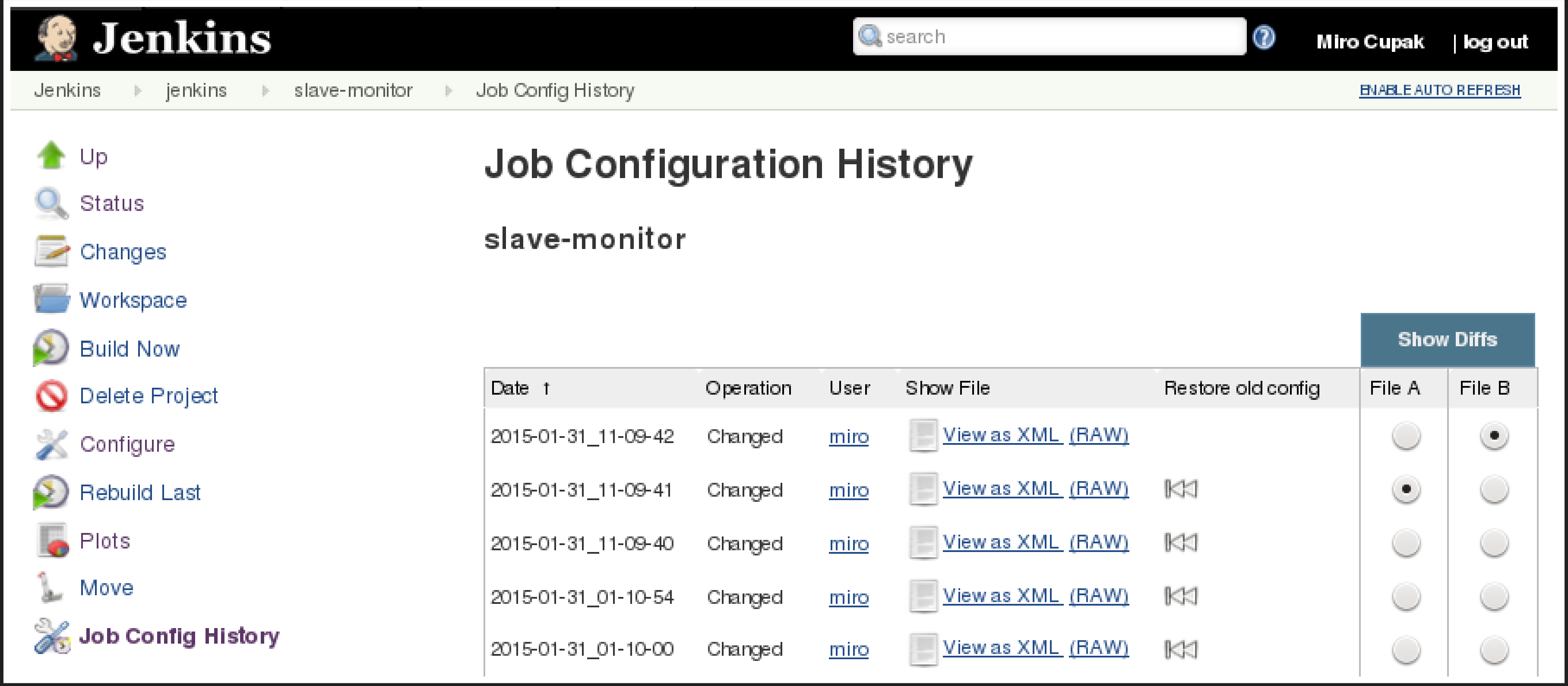
Publish failed builds ☑

☐ Discard Old Builds

#31

JOB CONFIGURATION HISTORY

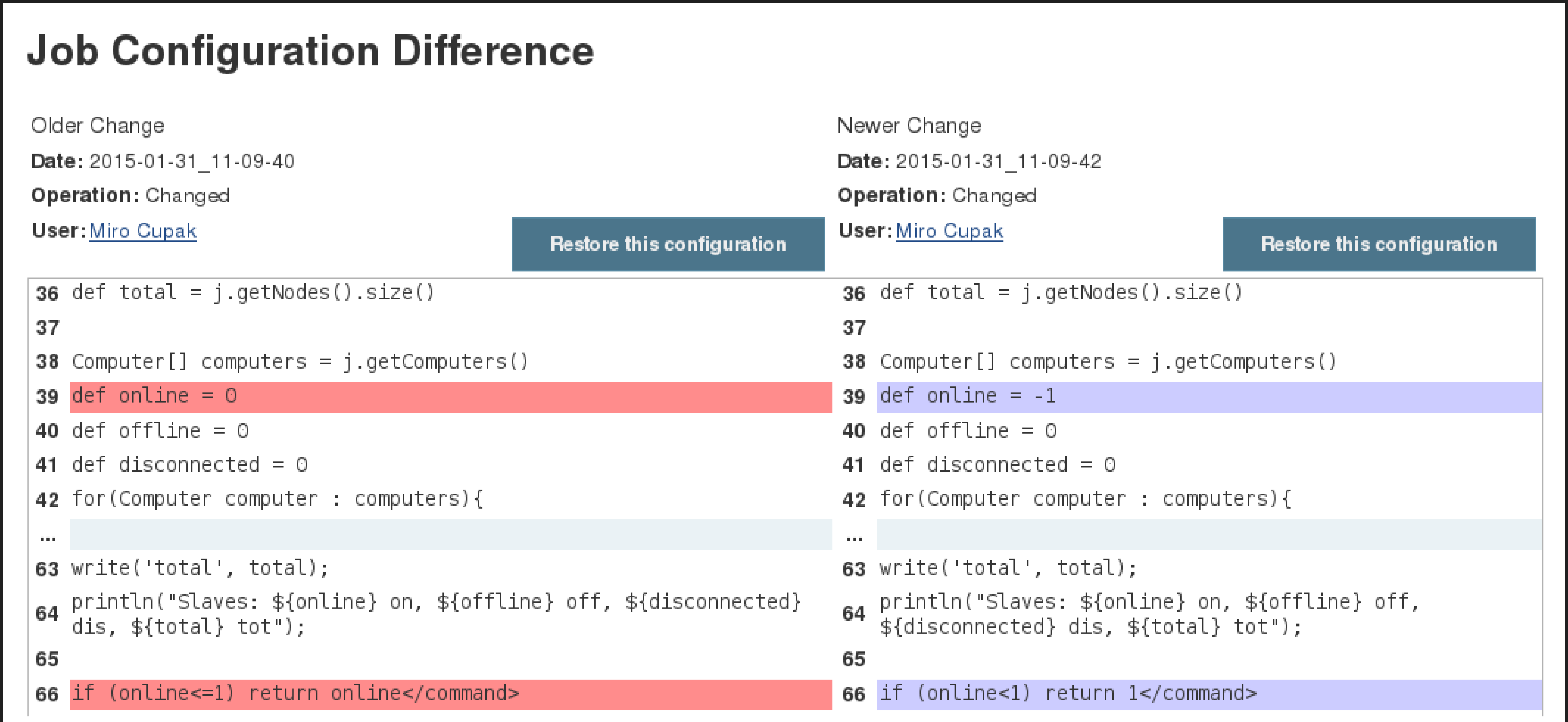
- versioning of job and system configuration



Job Configuration History

slave-monitor

Date ↑	Operation	User	Show File	Restore old config	File A	File B
2015-01-31_11-09-42	Changed	miro	View as XML (RAW)		○	●
2015-01-31_11-09-41	Changed	miro	View as XML (RAW)	⏮	●	○
2015-01-31_11-09-40	Changed	miro	View as XML (RAW)	⏮	○	○
2015-01-31_01-10-54	Changed	miro	View as XML (RAW)	⏮	○	○
2015-01-31_01-10-00	Changed	miro	View as XML (RAW)	⏮	○	○



Job Configuration Difference

Older Change

Date: 2015-01-31_11-09-40

Operation: Changed

User: Miro Cupak

```
def total = j.getNodes().size()

Computer[] computers = j.getComputers()
def online = 0
def offline = 0
def disconnected = 0
for(Computer computer : computers){
...
write('total', total);
println("Slaves: ${online} on, ${offline} off, ${disconnected} dis, ${total} tot");

if (online<=1) return online</command>
```

Newer Change

Date: 2015-01-31_11-09-42

Operation: Changed

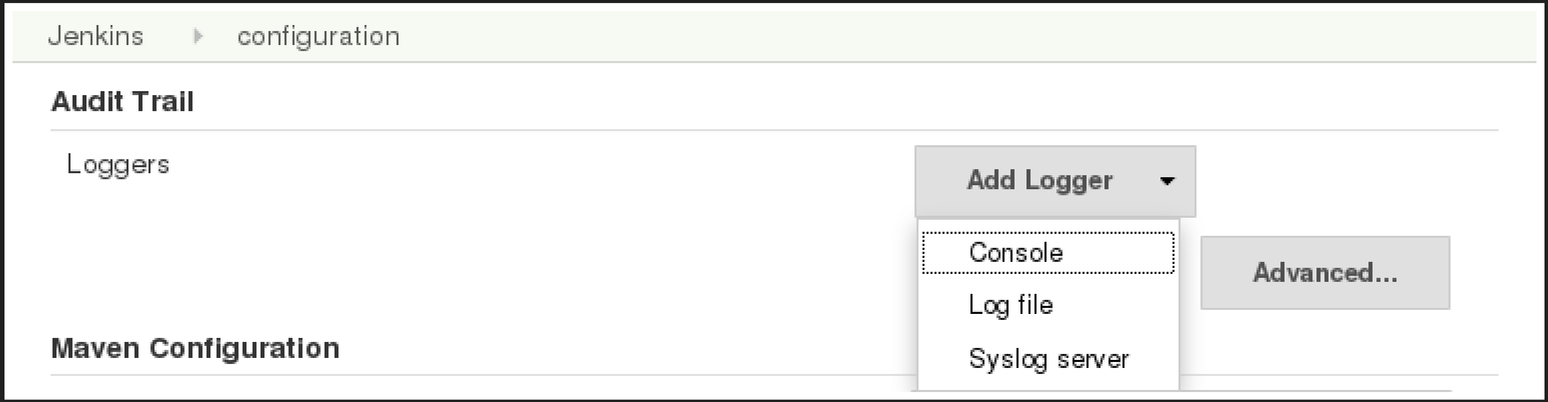
User: Miro Cupak

```
def total = j.getNodes().size()

Computer[] computers = j.getComputers()
def online = -1
def offline = 0
def disconnected = 0
for(Computer computer : computers){
...
write('total', total);
println("Slaves: ${online} on, ${offline} off, ${disconnected} dis, ${total} tot");

if (online<1) return 1</command>
```

#32

AUDIT TRAIL

- records who performed a particular operation and when


Jenkins
configuration
Audit Trail
Loggers
Add Logger
Console
Log file
Syslog server
Advanced...
Maven Configuration

#33

TMP CLEANER

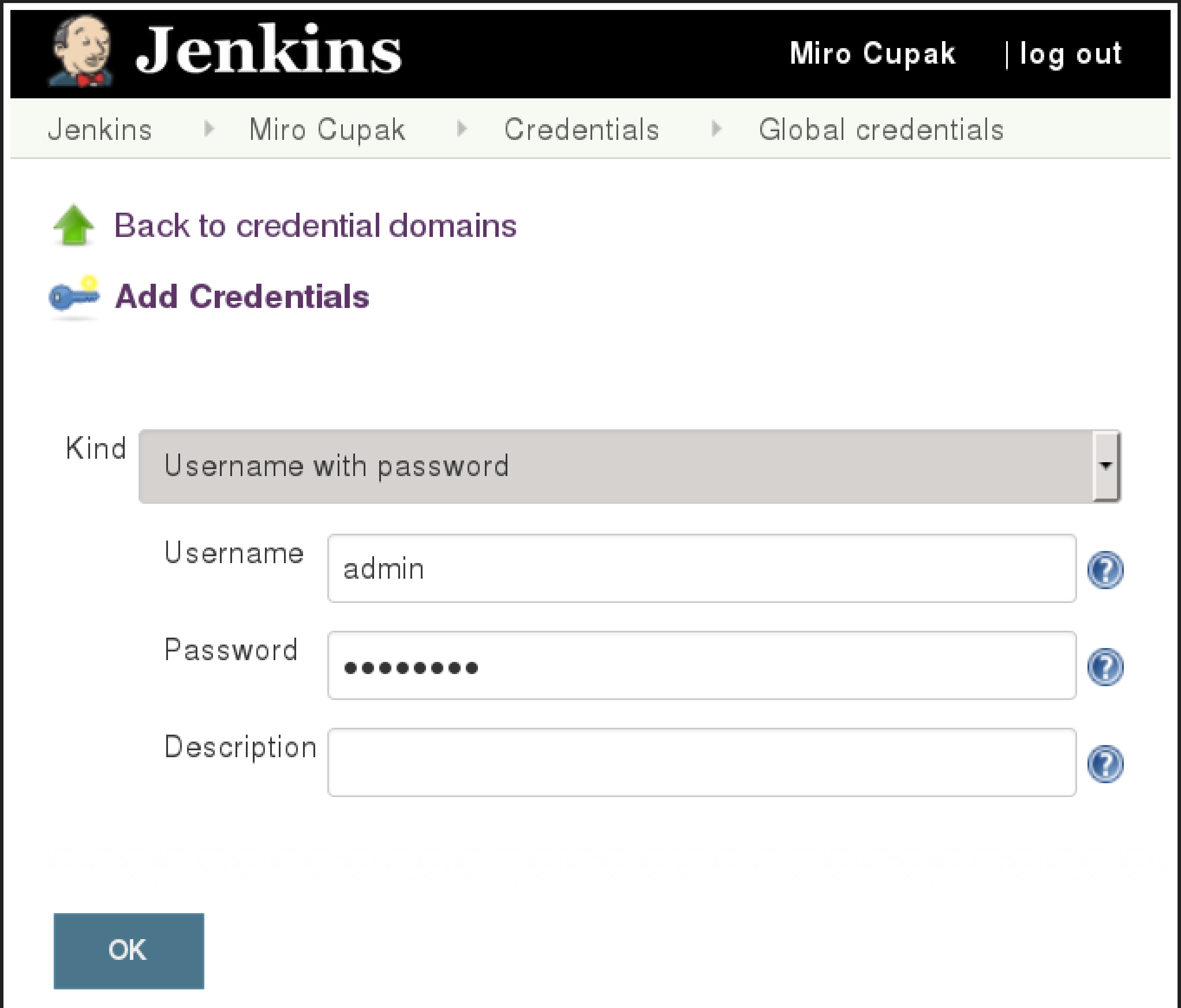
- periodically cleans up JVM temporary files
- no UI

```
-Dhudson.plugins.tmpcleaner.TmpCleanWork.minutes
-Dhudson.plugins.tmpcleaner.TmpCleanWork.days=1
```

#34

CREDENTIALS

- allows you to store and manage credentials in Jenkins
- exposes API to other plugins
- organizes credentials into domains



Jenkins

Miro Cupak | log out

Jenkins ▸ Miro Cupak ▸ Credentials ▸ Global credentials

Back to credential domains

Add Credentials

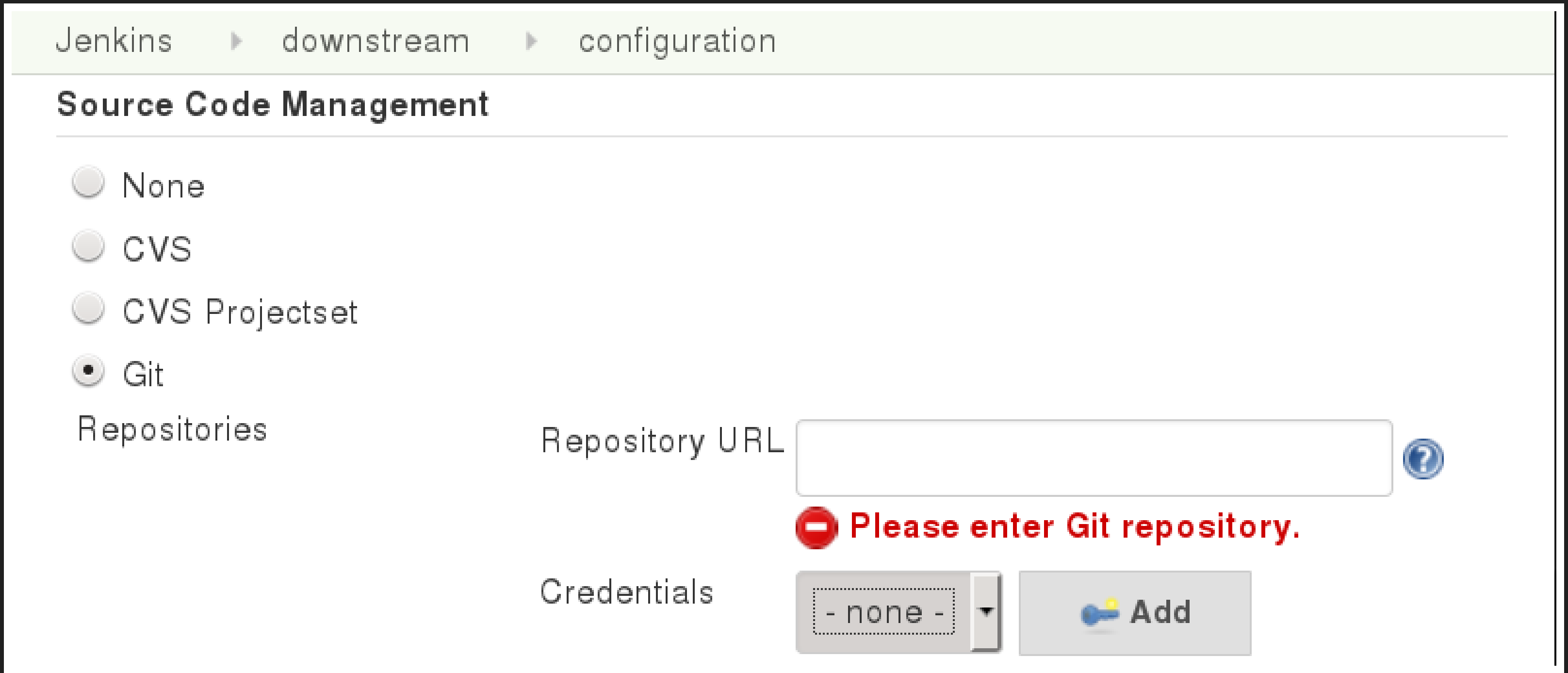
Kind: Username with password

Username: admin

Password: •••••••••

Description:

OK



Source Code Management

○ None

○ CVS

○ CVS Projectset

● Git

Repositories

Repository URL

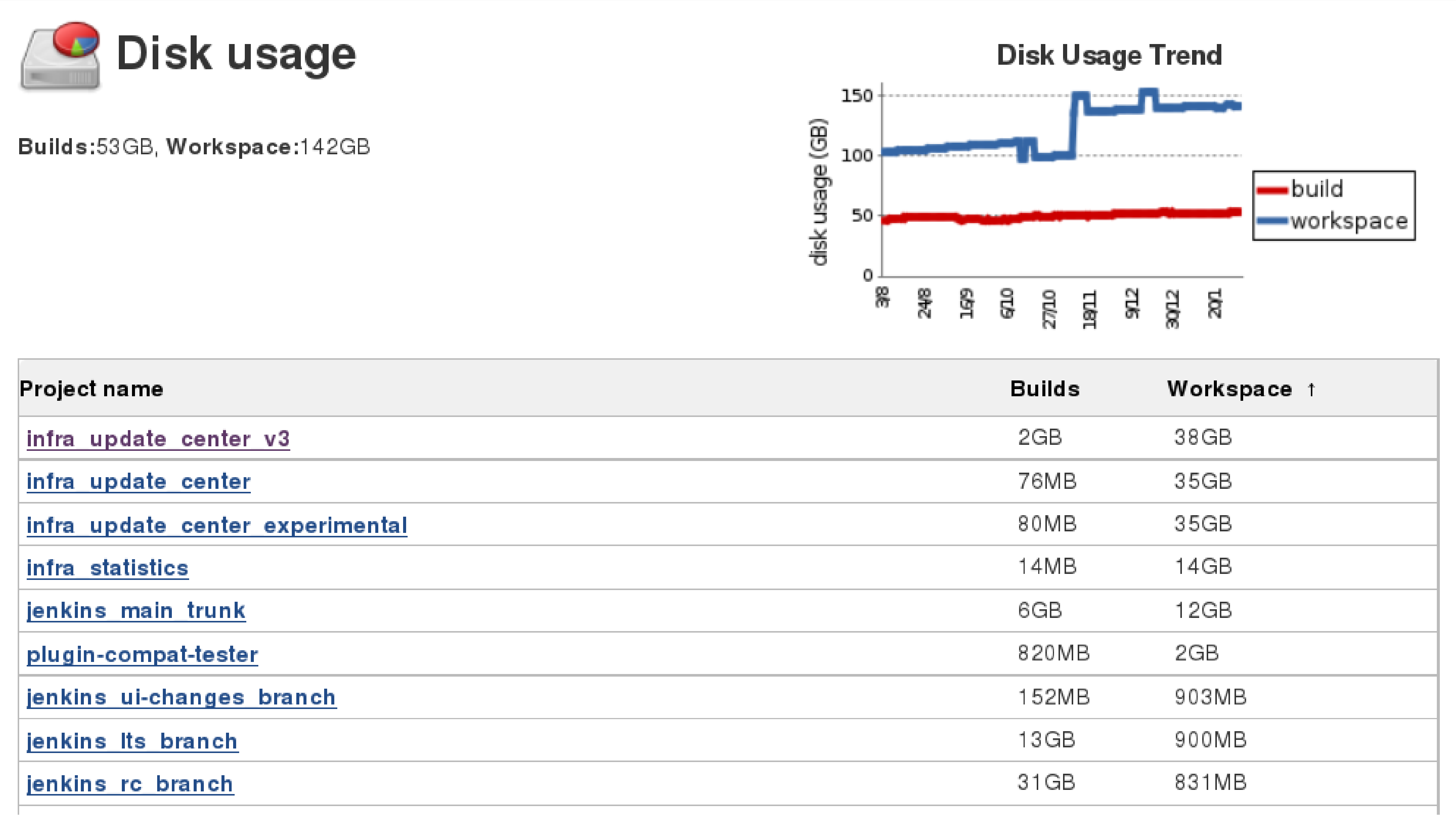
Please enter Git repository.

Credentials: - none -

#35

DISK USAGE

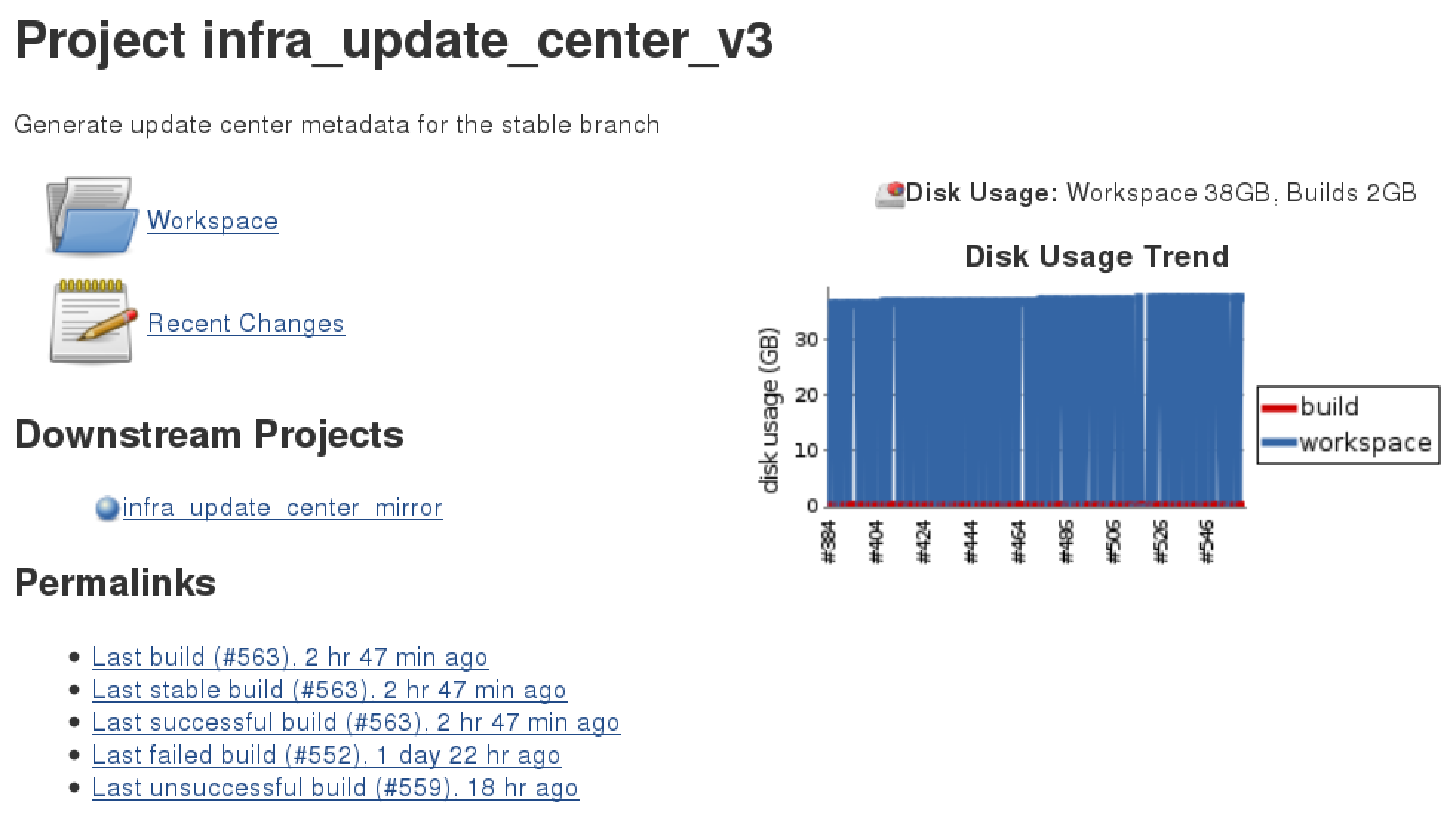
- periodically calculates disk space occupied by jobs
- beware of performance impact!



Disk usage

Builds:53GB, **Workspace:**142GB

Project name	Builds	Workspace ↑
infra_update_center_v3	2GB	38GB
infra_update_center	76MB	35GB
infra_update_center_experimental	80MB	35GB
infra_statistics	14MB	14GB
jenkins_main_trunk	6GB	12GB
plugin-compat-tester	820MB	2GB
jenkins_ui-changes_branch	152MB	903MB
jenkins_lts_branch	13GB	900MB
jenkins_rc_branch	31GB	831MB



Project infra_update_center_v3

Generate update center metadata for the stable branch

Workspace

Recent Changes

Downstream Projects

infra_update_center_mirror

Permalinks

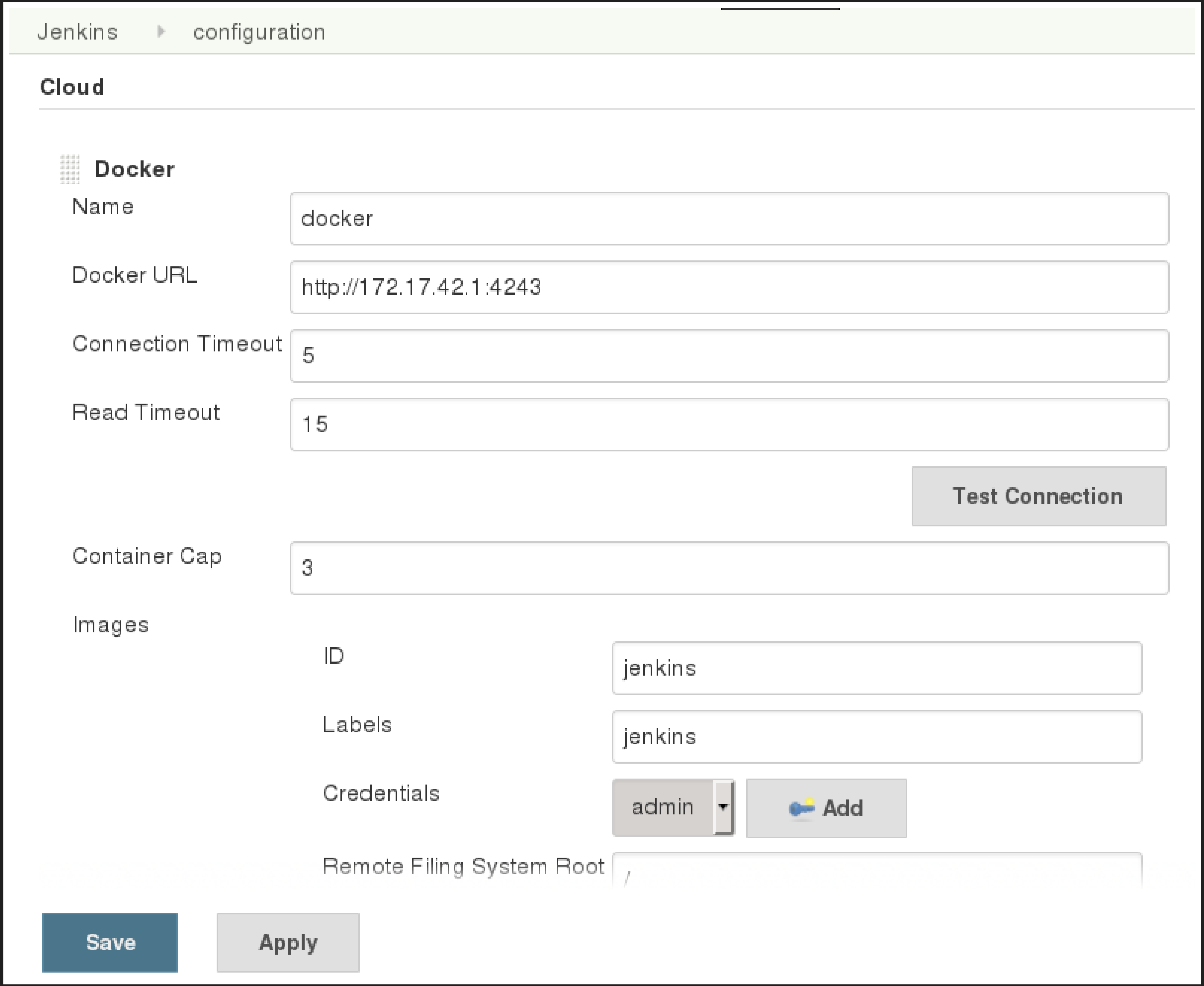
- Last build (#563), 2 hr 47 min ago
- Last stable build (#563), 2 hr 47 min ago
- Last successful build (#563), 2 hr 47 min ago
- Last failed build (#552), 1 day 22 hr ago
- Last unsuccessful build (#559), 18 hr ago

Disk Usage: Workspace 38GB, Builds 2GB

#36

DOCKER

- dynamically provisions Docker slaves
- needs images with JDK and SSH server
- allows to commit a container



Cloud

Docker

Name: docker

Docker URL: http://172.17.42.1:4243

Connection Timeout: 5

Read Timeout: 15

Container Cap: 3

Images

ID: jenkins

Labels: jenkins

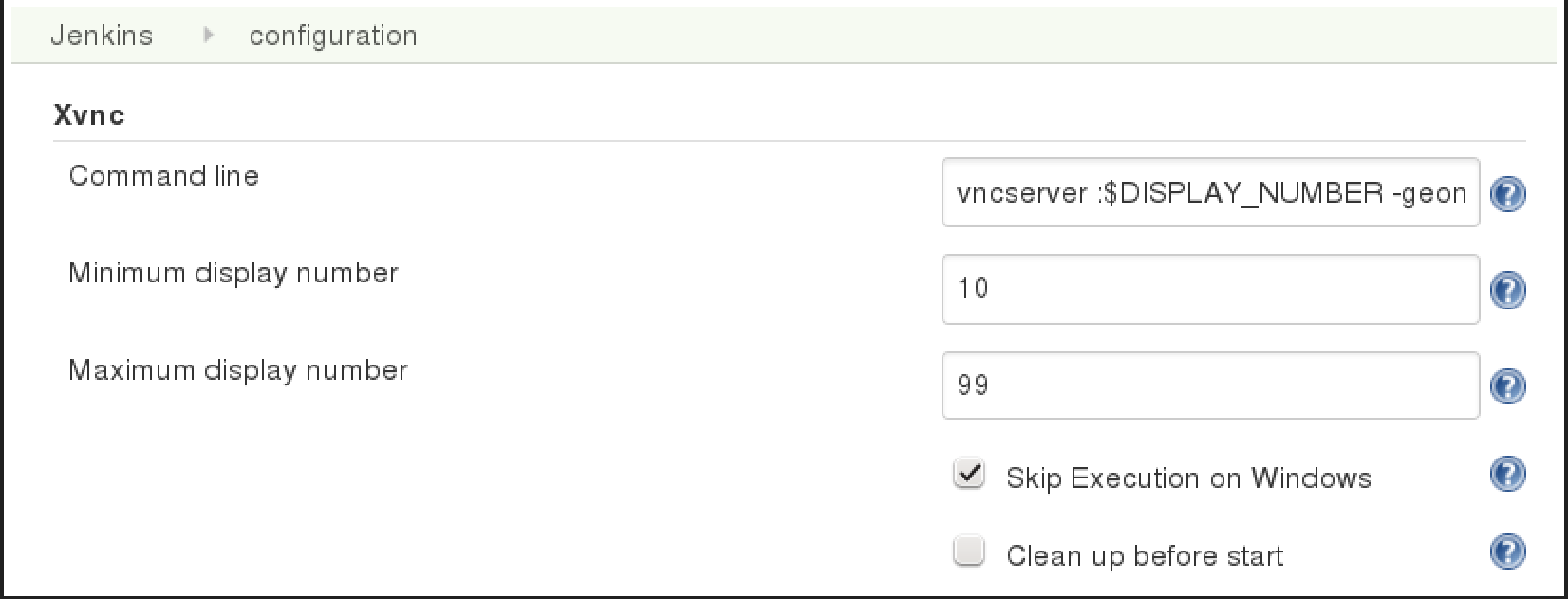
Credentials: admin

Remote Filing System Root: /

#37

XVNC

- runs Xvnc session during a build
- each build gets its own display allocated from a free list



Jenkins ▸ configuration

Xvnc

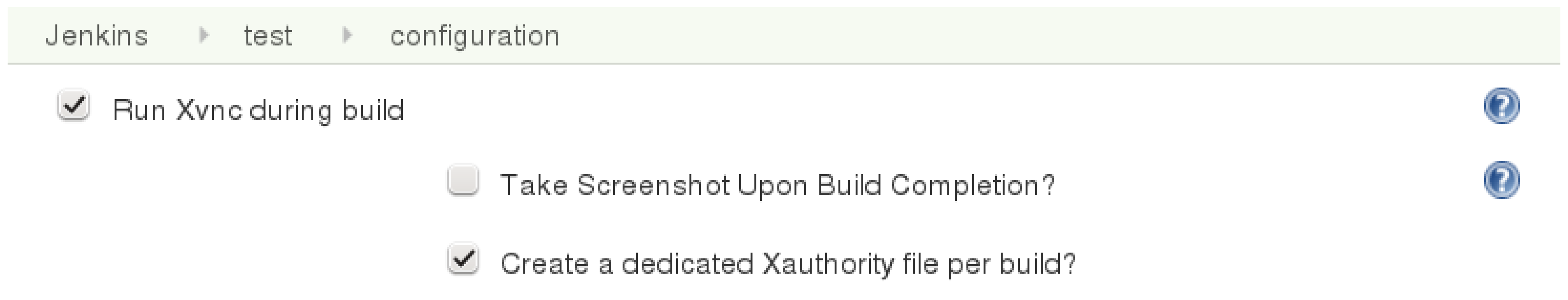
Command line: vncserver :$DISPLAY_NUMBER -geon

Minimum display number: 10

Maximum display number: 99

☑ Skip Execution on Windows

□ Clean up before start



Jenkins ▸ test ▸ configuration

☑ Run Xvnc during build

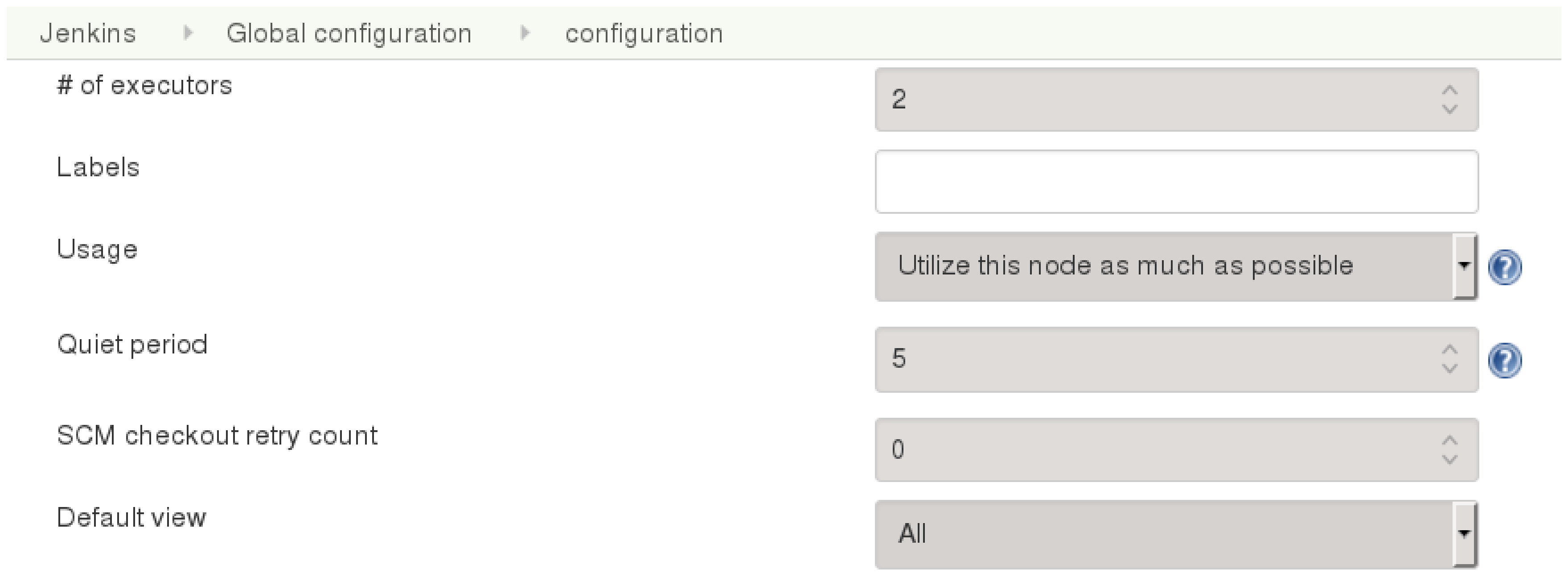
□ Take Screenshot Upon Build Completion?

☑ Create a dedicated Xauthority file per build?

#38

READ-ONLY CONFIGURATIONS

- shows global and job configurations in read-only mode



# of executors: 2

Labels:

Usage: Utilize this node as much as possible

Quiet period: 5

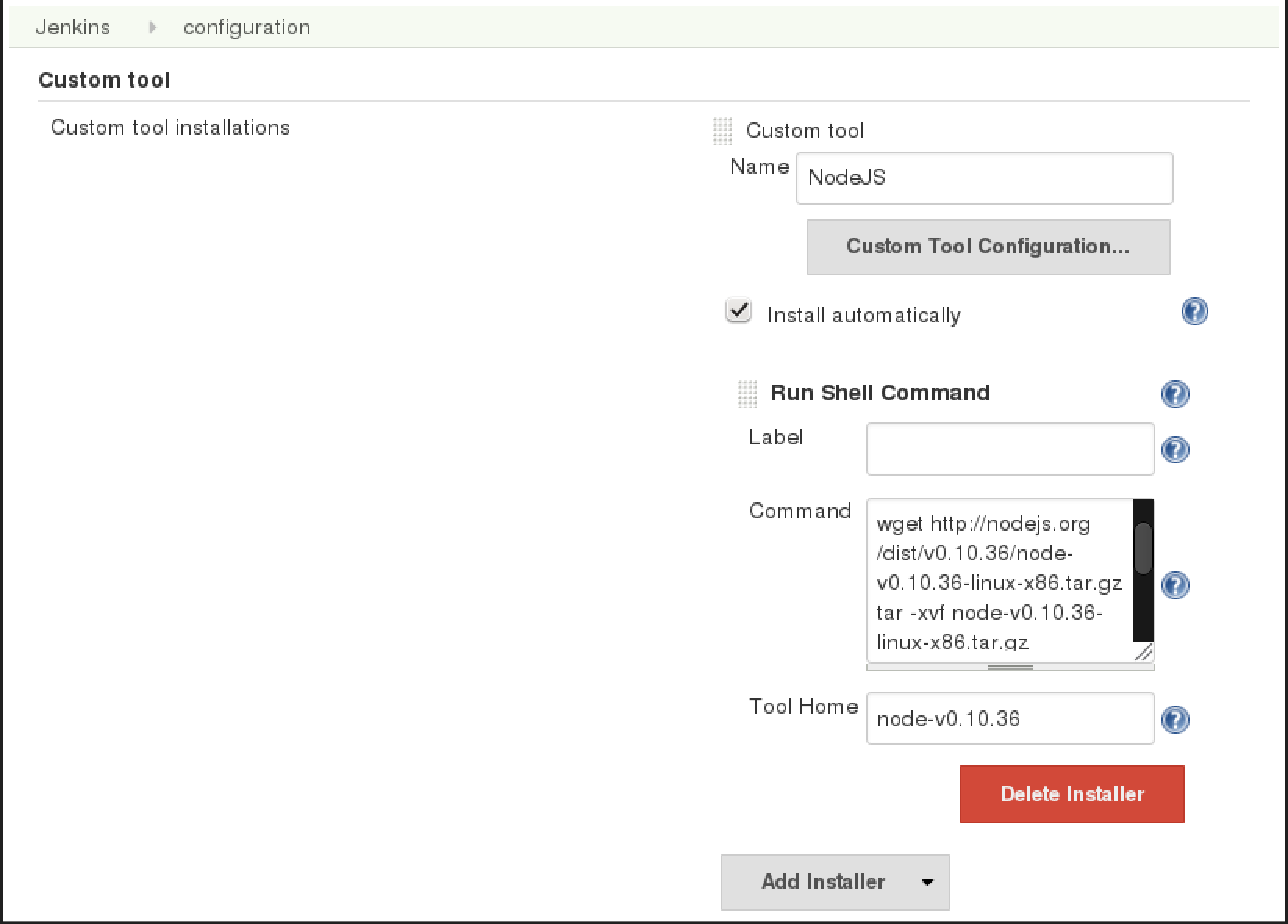
SCM checkout retry count: 0

Default view: All

#39

CUSTOM TOOLS

- installs tools on slaves as needed



Custom tool

Custom tool installations

Custom tool

Name: NodeJS

☑ Install automatically

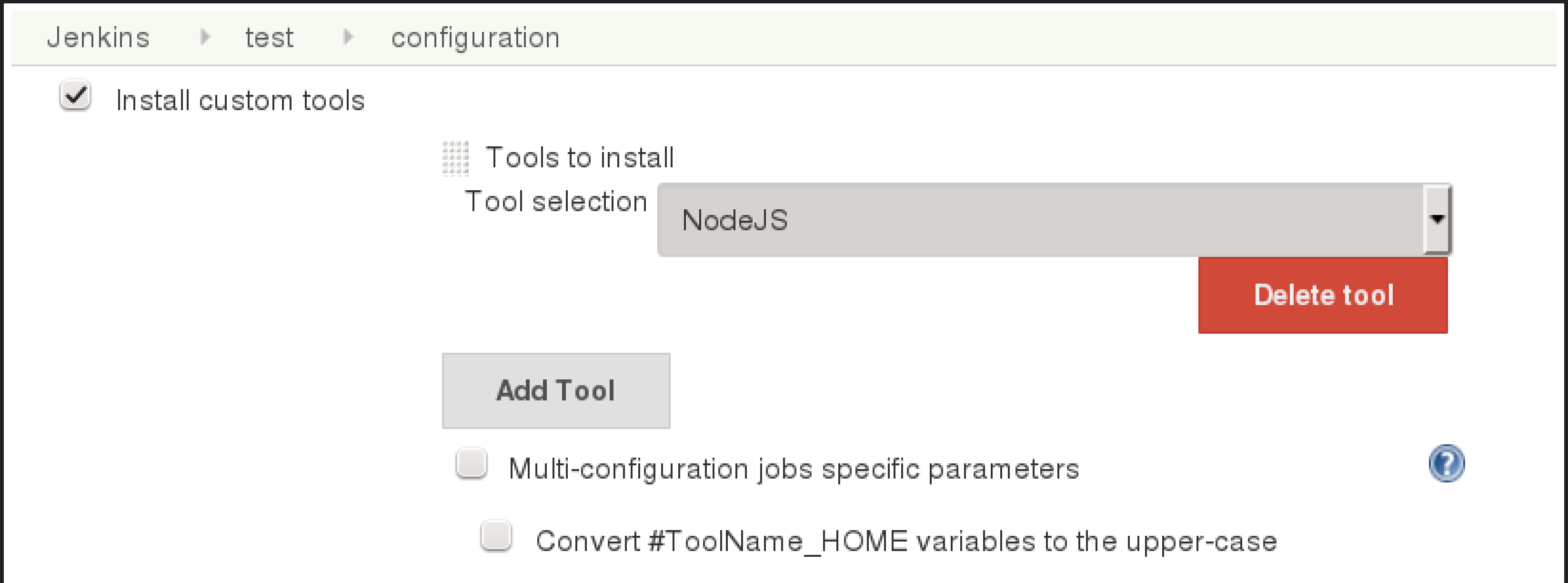
Run Shell Command

Label:

Command:

```
wget http://nodejs.org/dist/v0.10.36/node-v0.10.36-linux-x86.tar.gz
tar -xvf node-v0.10.36-linux-x86.tar.gz
```

Tool Home: node-v0.10.36


Jenkins ▸ test ▸ configuration

☑ Install custom tools

Tools to install

Tool selection: NodeJS

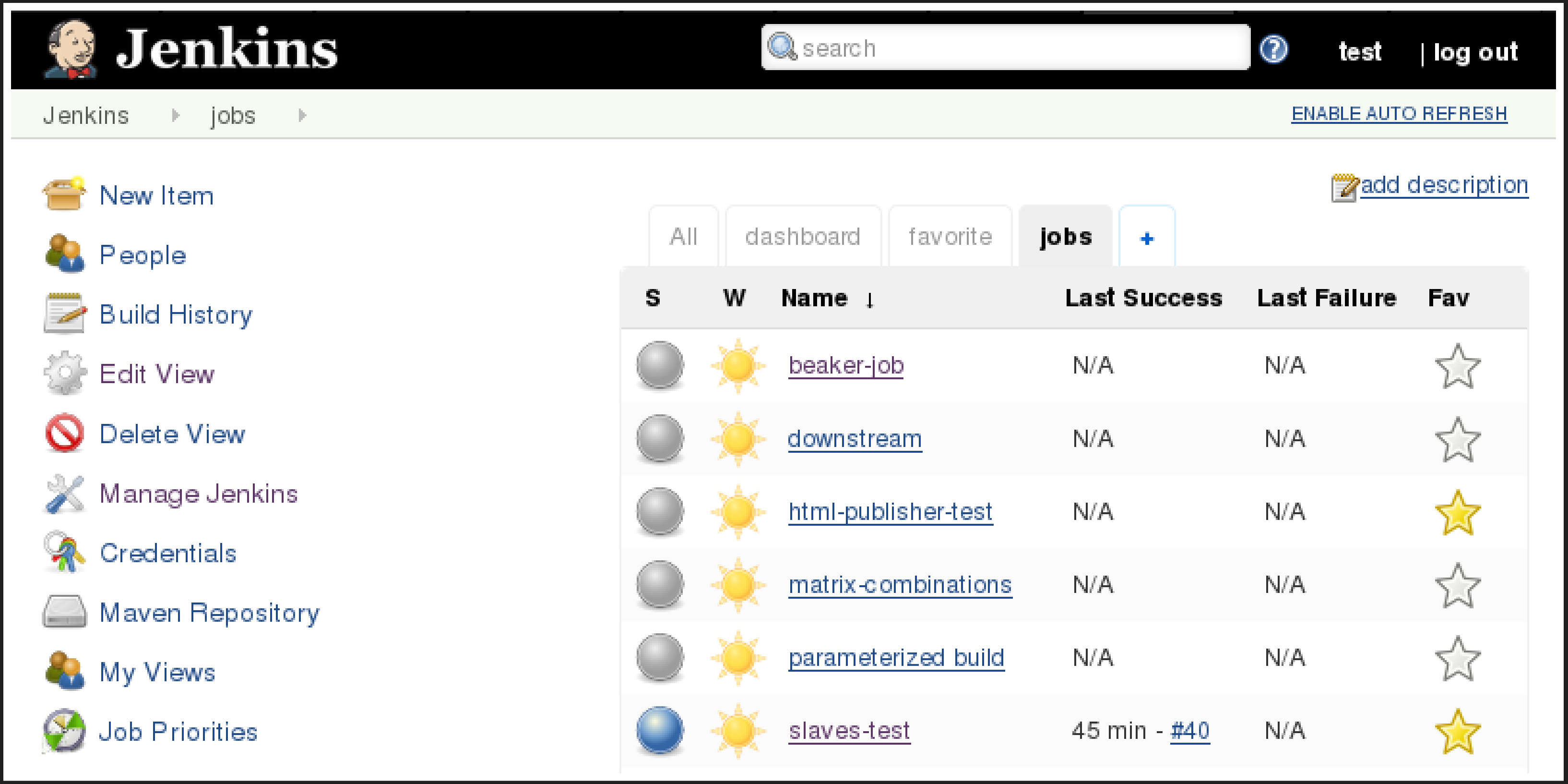
□ Multi-configuration jobs specific parameters

□ Convert #ToolName_HOME variables to the upper-case

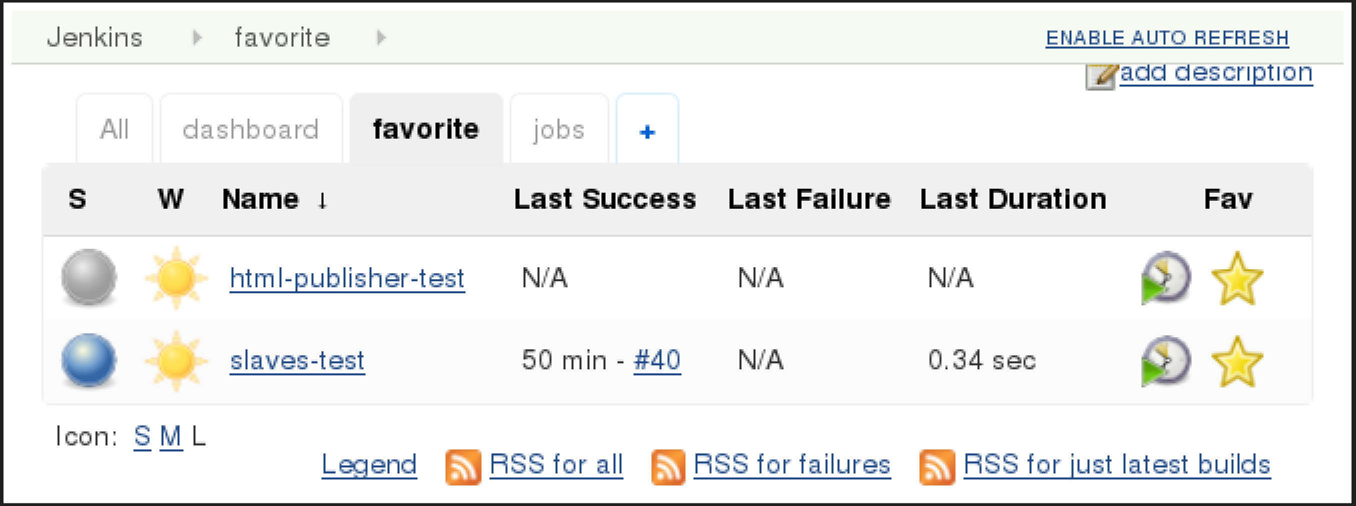
#40

FAVORITE

- allows the users to mark jobs as favorite



S	W	Name ↓	Last Success	Last Failure	Fav
●	☀	beaker-job	N/A	N/A	☆
●	☀	downstream	N/A	N/A	☆
●	☀	html-publisher-test	N/A	N/A	★
●	☀	matrix-combinations	N/A	N/A	☆
●	☀	parameterized build	N/A	N/A	☆
●	☀	slaves-test	45 min - #40	N/A	★



Jenkins ▸ favorite ▸ ENABLE AUTO REFRESH

add description

All | dashboard | **favorite** | jobs | +

S	W	Name ↓	Last Success	Last Failure	Last Duration	Fav
●	☀	html-publisher-test	N/A	N/A	N/A	★
●	☀	slaves-test	50 min - #40	N/A	0.34 sec	★

Icon: S M L

Legend RSS for all RSS for failures RSS for just latest builds

THANK YOU.

@mirocupak #devconfcz DEVCONF.CZ DEFINE FUTURE http://devconf.cz/f/81

http://mcupak.github.io/jenkins-plugins-talk