Jenkins.debian.net
testing is silver but we really want gold

Holger Levsen

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Outline

▶ Motivation
▶ About jenkins
▶ About jenkins.debian.net
▶ Open questions
Who am I

- a Debian user since 1995
- a Debian volunteer since 2001
- a DD since 2007
- a Jenkins user since 2011
Who am I

- a Debian user since 1995
- a Debian volunteer since 2001
- a DD since 2007
- a Jenkins user since 2011
- set up jenkins.d.n in 2012
Who are you?

- who knows what Jenkins is?
Who are you?

- who knows what Jenkins is?
- who uses it?
Who are you?

- who knows what Jenkins is?
- who uses it?
- who wants to use it?
Who are you?

▶ who knows what Jenkins is?
▶ who uses it?
▶ who wants to use it?
▶ who plans to go the BoF?
testing is silver
but we really want gold
My motivation for this talk

- Build a team maintaining jenkins.d.n
- Have more teams use jenkins.d.n
- Have more teams write jenkins.d.n
Golden Jenkins usage

- gold jenkins.d.n usage = caring about the results
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- gold jenkins.d.n usage = caring about the results
  - email notification
  - irc notification
What is Jenkins

▶ a "continuous integration server"
▶ a "cron on steroids"
▶ much more
▶ all of the above
Continuous Integration and Job Scheduling Server

Jenkins monitors execution of repeated jobs, such as building a software project or jobs run by cron. Among those things, current Jenkins focuses on the following two jobs.

First:
- Building/testing software projects continuously:
  - Jenkins provides an easy-to-use so-called continuous integration system
  - Jenkins makes it easier for developers to integrate changes to the project
  - Jenkins makes it easier for users to obtain a fresh build.
- The automated, continuous build increases productivity.

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Jenkins monitors execution of repeated jobs, such as building a software project or jobs run by cron. Among those things, current Jenkins focuses on the following two jobs.

Second:

- Monitoring executions of externally-run jobs, such as cron jobs and procmail jobs, even those that are run on a remote machine.

For example, with cron:

- all you receive is regular e-mails that capture the output
- it is up to you to look at them diligently and notice when it broke

Jenkins keeps those outputs and makes it easy for you to notice when something is wrong.
Jenkins explained, again

- It runs stuff (via cron, via triggers)
- Stuff is treated as failing if the exit code is 1
- Stuff is treated as unstable if output matches some patterns
- Stuff is good, if exit code is 0

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Jenkins explained, again

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Jenkins history

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- used to be named "Hudson", forked in 2011
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- very friendly and active community
- new release every week
- long term releases roughly four times a year
Jenkins usage worldwide

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Some Jenkins users
Some more Jenkins users

- with public jenkins instance: Apache Bazar cocos2d-x coreboot Creativecommons Django CMS Doom Port Build Service Eclipse Communication Framework Freeswitch Grml iceScrum JBoss Jenkins JMRI JRuby KDE Linaro Mahara Mozilla Nuxeo OpenQuake Pentaho Piwik Plone PODAM Pylons Project Saiku Scala-Tools SQLAlchemy SQLAlchemy-migrate Tapestry 5 modules breadcrumbs + tagselect TYPO3 UTGB (University of Tokyo Genome Browser) Toolkit Wicket Stuff Zikula

- Open source projects using Jenkins, though Jenkins service not accessible for the public (yet): ConfigureMe DistributeMe Evolvis Fusionforge Icinga Joomla OpenJDK 7 for OS/X Openstack sip:provider CE

(Thanks to Michael Prokop for this list.)
Jenkins in Debian

- packaged by James Page
- ‘apt-get install jenkins‘ in Jessie just works fine

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Jenkins in Debian

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- ‘apt-get install jenkins‘ in Jessie just works fine
  - it’s easy to install plugins from the net
  - it’s easy to upgrade from the net

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jenkins.debian.net
j.d.n hardware

- 6 cores, 12 GB RAM, 250 GB disk space
- Thanks a lot to Profitbricks for their support + ressources
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- Hardware is really not an issue :-)
Software setup

- Wheezy + Jenkins LTS from jenkins-c-i.org
  - + kgb-client from source...
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  - + kgb-client from source...
- ssh://git.debian.org/git/users/holger/jenkins.debian.net.git
  - (includes Jenkins munin plugins)
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- ssh://github.com/h01ger/jenkins-job-builder
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  - (includes Jenkins munin plugins)
- ssh://github.com/h01ger/jenkins-job-builder
- currently only tests amd64
Jenkins plugins

- Jenkins GIT plugin
- Jenkins Subversion plugin
- Log Parser plugin
- HTML Publisher plugin
- Static Analysis Utilities
Jenkins plugins, continued

- Read-only configurations
- SCM Sync Configuration Plugin
- Dependency Graph Viewer Plugin
- View Job Filters
- Console Column Plugin
- Priority Sorter Plugin
- Throttle Concurrent Builds Plugin
- Next Executions Plugin
- Embeddable Build Status Plugin
Jenkins plugins, continued

- Sidebar Link
- Green Balls
- Compact Columns
- Simple Theme Plugin
- Locale plugin
- Jenkins Translation Assistance plugin
Git tree view

- ./job-cfg
- ./bin
- ./logparse
- ./d-i-preseed-cfgs
- ./etc
- ./userContent
- ./debian
Existing jobs

- g-i-installation jobs
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- webcheck jobs
- self jobs
Intro
Jenkins
jenkins.debian.net
Open questions

Job config

▶ Show in Jenkins and in source...
Debugging g-i-installation (and other) jobs

- Idea: repeat a specific job on any machine
Debugging g-i-installation (and other) jobs

- Idea: repeat a specific job on any machine
- currently at its infancy
- needs a bit work and mostly documentation
My questions

- Which teams will now send pull requests?
My questions

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- jenkins.debian.org?
My questions

- Which teams will now send pull requests?
- jenkins.debian.org?
- Will I manage to finally announce j.d.n on d-d-a now? ;-)

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Your questions / Comments

▶ Questions?
▶ Comments? Ideas?
▶ Thank you for caring about Debian quality!

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