Jenkins Community Survey Results

Brought to you by

CloudBees
The Java™ PaaS Company

Survey conducted October 2012

Sample Survey Participants

Many thanks to *everyone* who responded!

Results in a Nutshell

Jenkins

- **Jenkins is considered mission-critical by 83% of respondents!**
  - More than 90% of respondents are running more than one project on Jenkins

  - **People love Jenkins – 87% are Very Satisfied or Satisfied**

- **Jenkins use is growing in the Enterprise**
  - 6% more respondents than last year work for companies with > 500 developers

- **Jenkins is loved by Java developers, with 74% of respondents using Java.**
  - However, 38% use C/C++, 35% use Java Script, 29% use Python, and 25% use C#

- **Jenkins is useful for companies of any size, but 77% work for organizations with > 10 developers**

- **11% of respondents have contributed a plugin to Jenkins – impressive!**
  - Granted, active community members are more likely to take the survey, but this level of community contribution is outstanding for any open source project.

721 people responded to the survey

Results in a Nutshell

Jenkins

- **All types of job profiles are interested in Jenkins (Developer, QA, Exec, etc.).**
  - Developer is most common job role, but a surprising number identify themselves as DevOps (21%) and Build Manager (41%)
- **Typical installation profile:**
  - 68% had 1 master, 18% had 2-3.
  - Number of Build Agent varied fairly uniformly from 0-50; 6% have > 50.
  - Number of Executors also varied fairly uniformly from 0-50; 13% have > 50.
- **Top Pain Points / Areas to Improve to Increase Adoption:**
  - Quality/timely bug fixes
  - Documentation/examples
  - Lacking plugins for specific functionality
- **Last year:**
  - Additional reporting capabilities
  - High availability
  - Overall, wide variance in prioritization – different features were important to different users

Explosive Growth

- **Jenkins use grew 66% in the last year, from 32,160 active installations in Nov 2011 to 53,393 in Nov 2012**

  Source: Jenkins community stats (conservative reporting) – http://stats.jenkins-ci.org/jenkins-stats/svg/total-jenkins.svg

- **Now has more than 636 plugins, up from 469 at this time last year**
  Source: Jenkins community

Try Jenkins as a Service *– it's free!*

About the Jenkins Community Survey Methodology

- **721 responses – thank you!**

- Online survey that ran from 9/28 - 10/31
  - Details: http://blog.cloudbees.com/2012/09/take-2012-jenkins-survey.html

- Word spread through Jenkins-ci.org & Jenkins Wiki, CloudBees blog, LinkedIn groups, CloudBees contacts, and various forums/social media channels

- Sponsored by CloudBees

Please explain your answer to the question, "How satisfied are you with Jenkins? If there's anything you'd change, what would it be?"

Jenkins

It does EVERYTHING!

Jenkins works, saves time, increases productivity.

A little huge (memory consumption… but it's Java…)

Jenkins is a great tool but it is somewhat unreliable.

Jenkins is totally wonderful.

It just works.

More documentation

Jenkins makes my life easier.

Good functionality, lots of plugins.

I like its stability and configurability.

Jenkins is simple and extremely effective.

It's very easy to set up and start doing useful things..

It is quite stable, no so many bugs.

Easy to get up and running.

It's really adaptable.

Unsatisfied with Jenkins stability. Updates often break functionality.

Better streamlined UI

It is very difficult to find the plug-ins

UI design and performance

Having lots of plugins is a plus. But sometimes too many plugins is confusing.

I love the community support

Nothing to change, just things to add :)

Jenkins is absolutely, the king (or queen) of the build world… Next step, "world domination"!

Jenkins is awesome, and while very powerful, it's also very easy to grasp initially

Donate to the Jenkins Project!
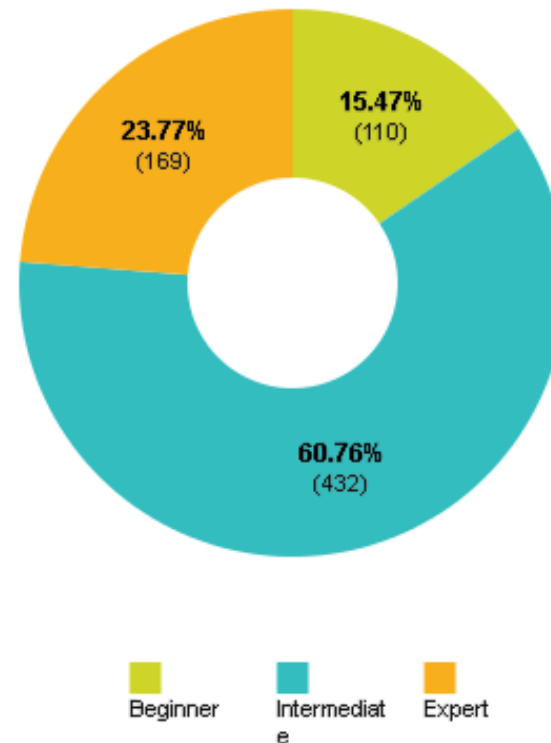
About Survey Takers and Their Companies

Knowledgeable Responses

- **85% considered themselves intermediate or expert Jenkins users**

- **In the 2011 survey, 81% considered themselves intermediate or expert**

What would you consider to be your level of Jenkins expertise?
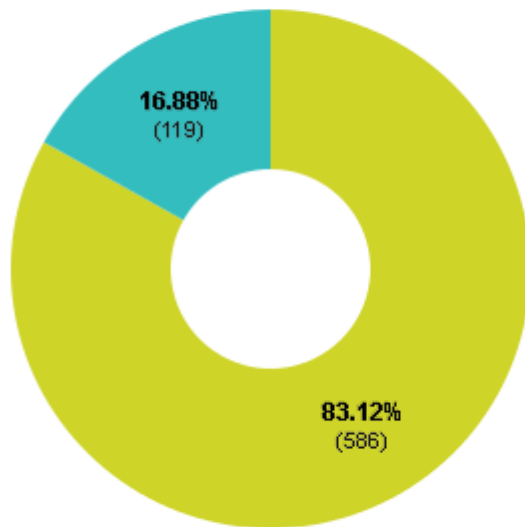
Answered: 711   Skipped: 10

- **15.47%** (110)
- **23.77%** (169)
- **60.76%** (432)

Beginner   Intermediate   Expert

Need Enterprise plugins and professional Jenkins support? *Try Jenkins Enterprise by CloudBees free*.

Jenkins is a Core Dev Tool

Would you consider Jenkins to be mission-critical to your development process?

Answered: 705   Skipped: 16

16.88%
(119)

83.12%
(586)

Yes   No

83% said YES!

"I can't imagine how we survived without Jenkins for as long as we did. Deploying new application versions used to be tedious and error-prone. Now, I hardly give it a second thought."

"Jenkins continues to be one of the most important tools we use at our company…"

"We have around 40 Jenkins servers (with a lot of nodes) to build the C++, Java/JEE and database code for our products."

"Jenkins has become one the most important pieces of our infrastructure. More than 37 hours of build a day."   …
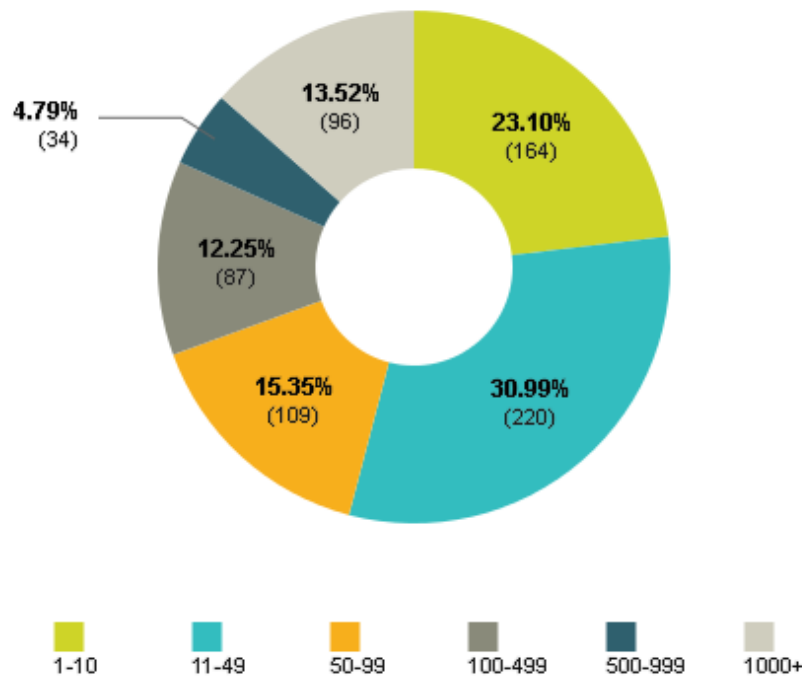
Up from 82% last year…

Demographics Show Growth in Enterprises

How many developers are in your organization?

Answered: 710   Skipped: 11

23.10% (164)		
30.99% (220)		
15.35% (109)		
12.25% (87)		
4.79% (34)		
13.52% (96)		

Legend: 1-10 · 11-49 · 50-99 · 100-499 · 500-999 · 1000+

- **Jenkins is useful for companies of any size, but 77% work for organizations with > 10 developers**

- **Jenkins is growing in Enterprises .**

  – 50% more respondents reported working for companies with > 500 developers (18% this year vs. 12% last year)

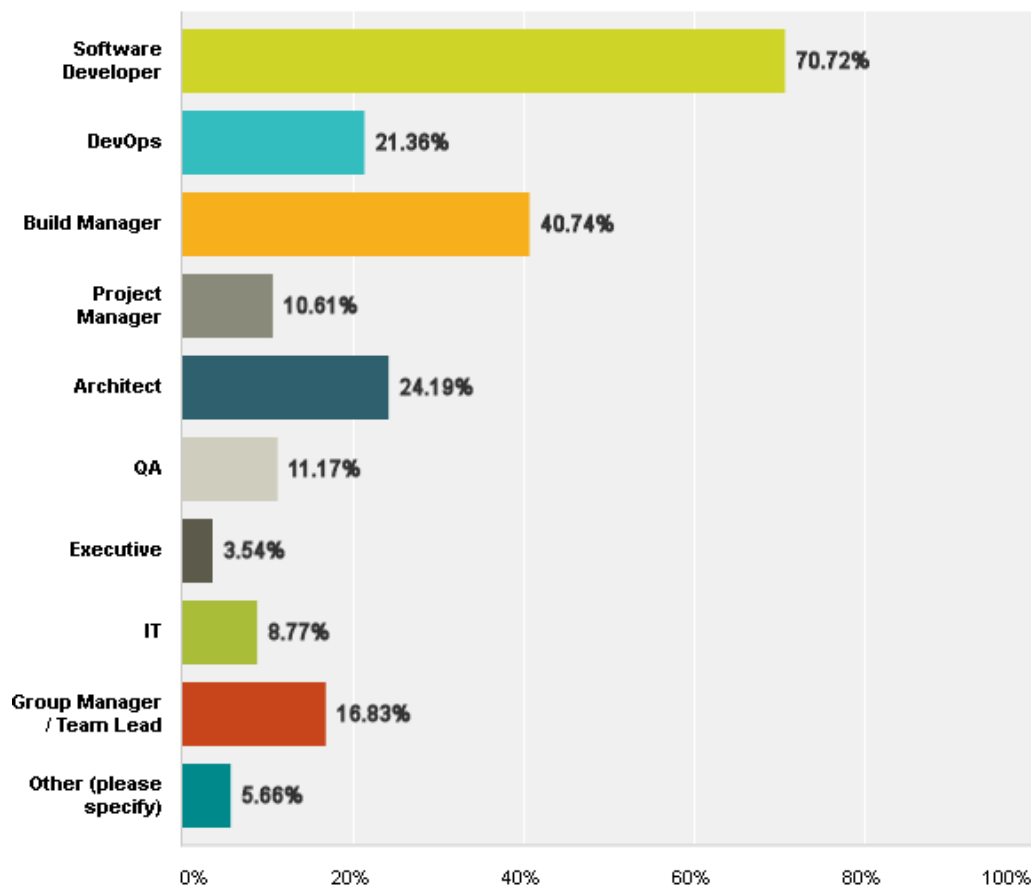# More Demographics: *Job Role*

- **All types of job profiles are interested in Jenkins (Developer, QA, Exec, etc.)**
    - "Developer" is the most common job role
    - But many also identify themselves as DevOps, Build Manager, and Architect

What's your job role?

Answered: 707   Skipped: 14

| Role	Percentage
Software Developer	70.72%
DevOps	21.36%
Build Manager	40.74%
Project Manager	10.61%
Architect	24.19%
QA	11.17%
Executive	3.54%
IT	8.77%
Group Manager / Team Lead	16.83%
Other (please specify)	5.66%

How Folks Use Jenkins

Typical Jenkins Deployments

- **68% of projects have 1 master**

- **18% have 2 or 3**

- **# Build Agents is distributed fairly uniformly up to 50**
  - Only 6% have > 50 Build Agents

- **# Executors also varies**
  - Only 13% have > 50 Executors

How big is your project's Jenkins installation in terms of Masters, Build Agents, and Executors?

Answered: 700   Skipped: 21

Donate to the Jenkins Project!
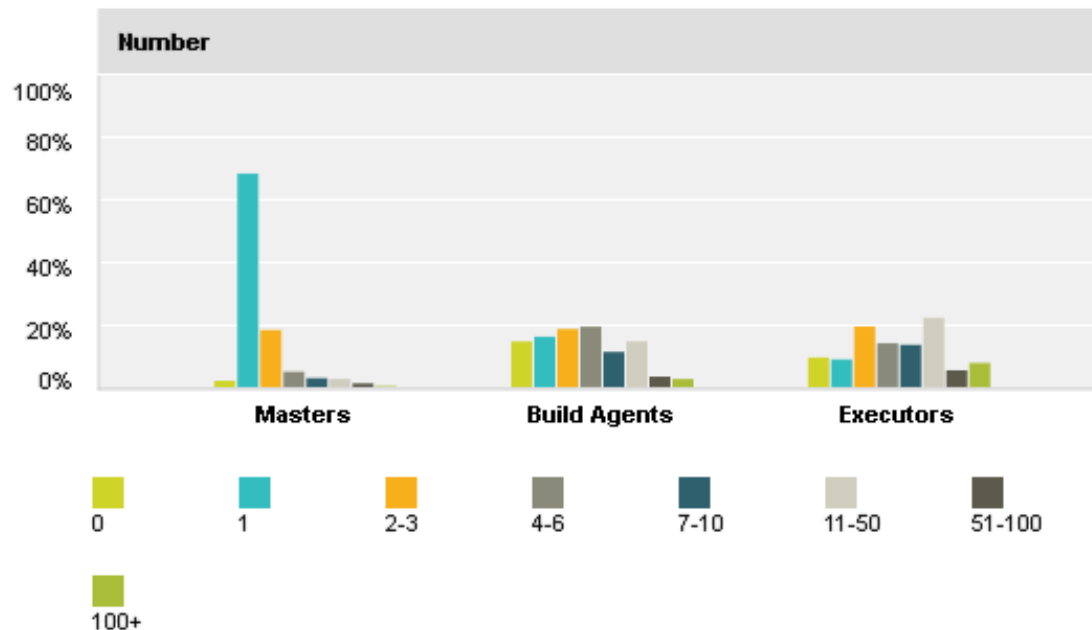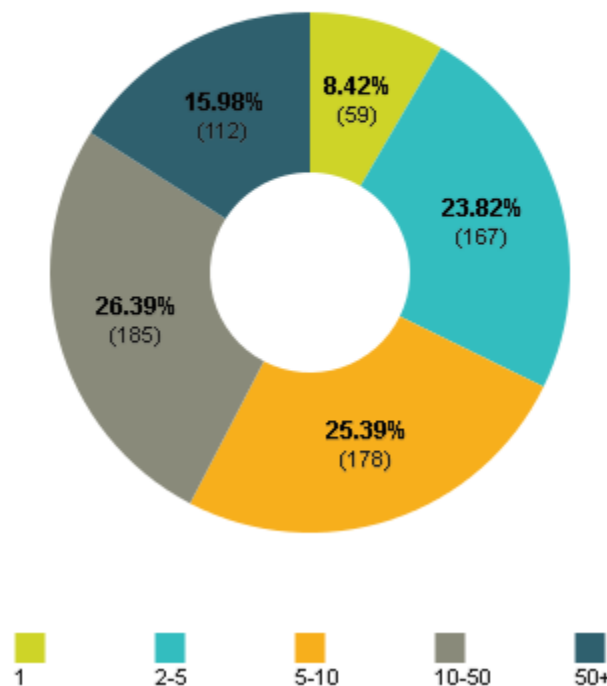
Typical Jenkins Deployments - 2

Jenkins

Remarkably similar distribution in 2011 survey:

- **75% have between 2 and 50 projects – exactly the same in 2011**

- **26% have 10-50 projects –25% last year**

- **42% have 10 or more projects – same as last year**

- **Only 8% have 1 project – exactly the same in 2011**

- **16% use Jenkins on a very large scale (> 50 projects) – 17% in 2011**

Jenkins is useful for companies with any number of projects, but most companies use CI when they have more than 1 project going on – its benefits are even more apparent for larger-scoped Dev projects

How many projects within your organization use Jenkins?
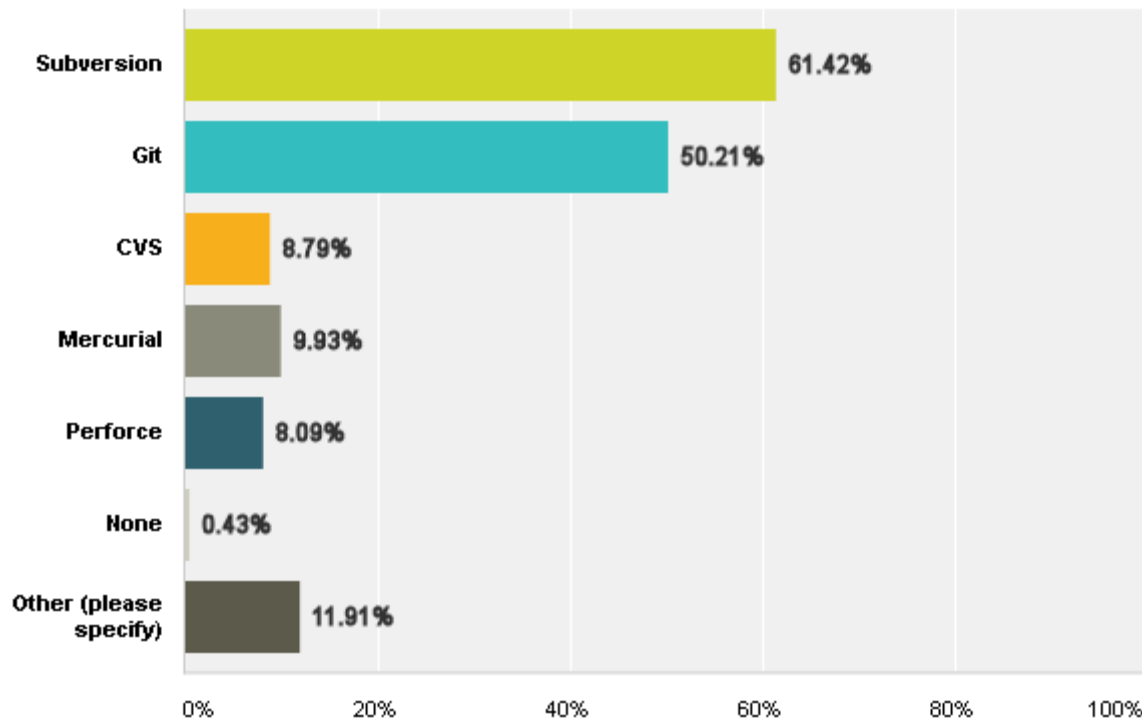
Answered: 701   Skipped: 20

| 8.42% (59) |
| 23.82% (167) |
| 25.39% (178) |
| 26.39% (185) |
| 15.98% (112) |

Legend: 1 | 2-5 | 5-10 | 10-50 | 50+

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Subversion & Git Rule

- **Subversion is by far the most popular SCM tool, used by 61%**

- **Git is next at 50%**

- **Everything else is miles behind**

What Source Code Management tool(s) do you use?

Answered: 705   Skipped: 16

Tool	Percentage
Subversion	61.42%
Git	50.21%
CVS	8.79%
Mercurial	9.93%
Perforce	8.09%
None	0.43%
Other (please specify)	11.91%

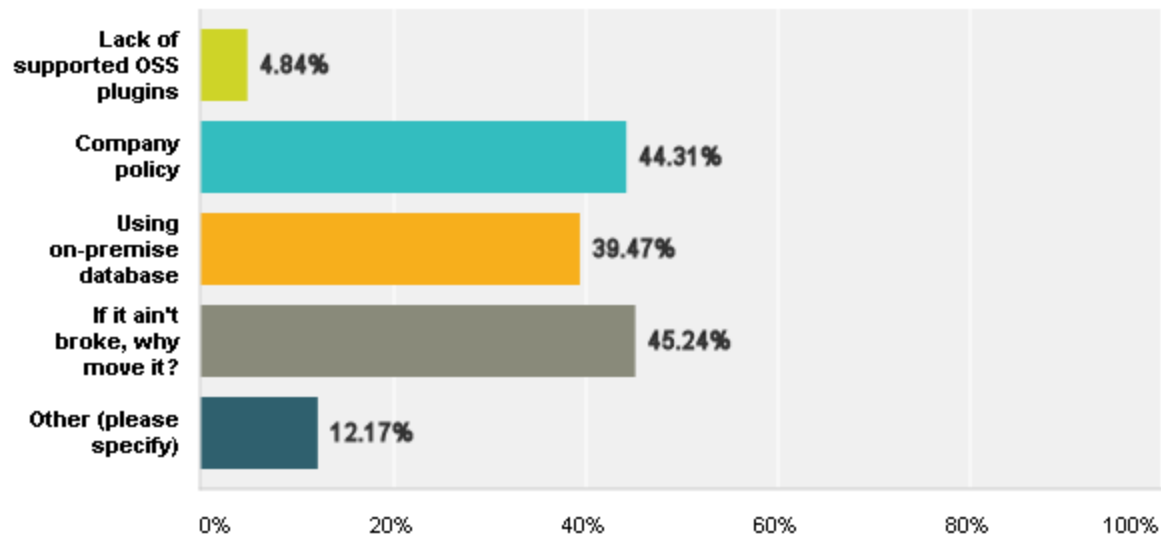# Cloud Use Among Jenkins Users

Cloud in General

- **21% report doing Source Code Management in the Cloud**
- **26% are deploying applications to a Cloud infrastructure**

Jenkins in the Cloud

- **5% use Jenkins as a Service, with another 8% planning to use in next 6-12 months**
- **Company policy, inertia, and on-premise resources the most-cited reasons for not using Jenkins in the Cloud**

If you don't use hosted Jenkins, why not?
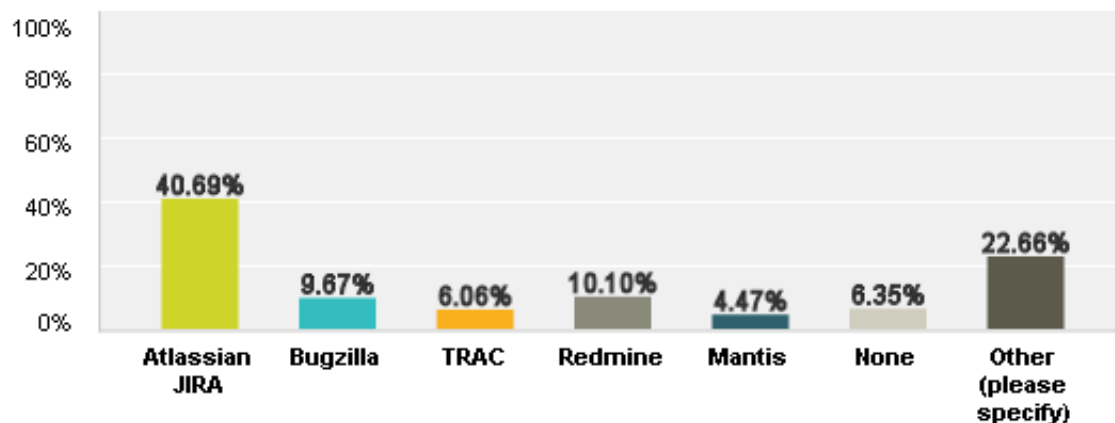
Answered: 641   Skipped: 80

Category	Percentage
Lack of supported OSS plugins	4.84%
Company policy	44.31%
Using on-premise database	39.47%
If it ain't broke, why move it?	45.24%
Other (please specify)	12.17%

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Atlassian JIRA Wins for Issue/Bug Trackers

What is your primary Change Management system?

Answered: 693   Skipped: 28

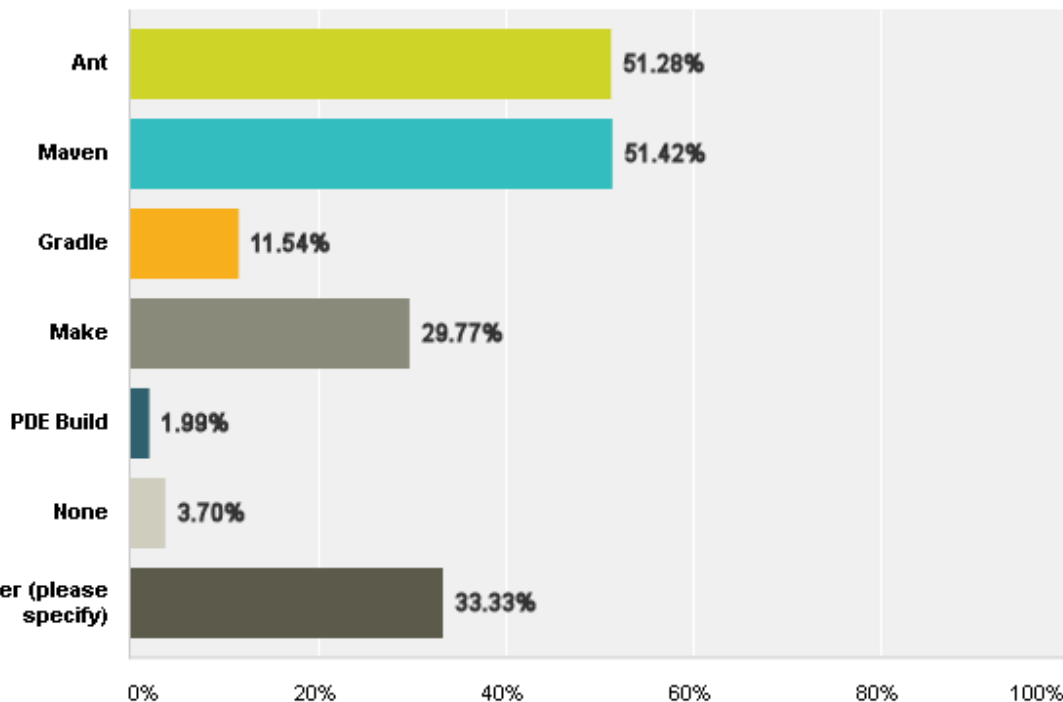| Atlassian JIRA	Bugzilla	TRAC	Redmine	Mantis	None	Other (please specify)
40.69%	9.67%	6.06%	10.10%	4.47%	6.35%	22.66%

- **Atlassian JIRA is the most-used CMS (41%)**
- **No other CMS used by more than 10%**

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Ant & Maven Tie for Most-used Build Tool

Jenkins

What Build tool(s) do you use?

Answered: 702   Skipped: 19

Tool	Percentage
Ant	51.28%
Maven	51.42%
Gradle	11.54%
Make	29.77%
PDE Build	1.99%
None	3.70%
Other (please specify)	33.33%

- **Ant & Maven both used by 51%**
- **Make next at 33%**
- **MSBuild came up frequently in the "Other" responses**

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Build Platforms: Linux Then Windows

- **Linux most popular (77%)**

- **Followed by Windows (65%)**

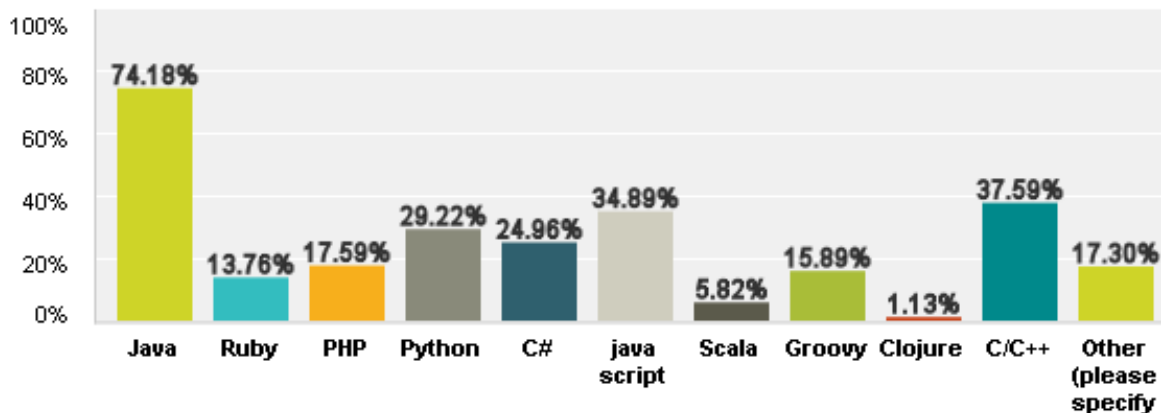## What platform(s) do you perform your builds on?

Answered: 699   Skipped: 22

Platform	Percentage
Linux	77.25%
Windows	64.66%
Mac OS X	23.18%
Solarix	8.87%
HP-UX	2.86%
AIX	4.15%

Try Jenkins as a Service – *it's free!*
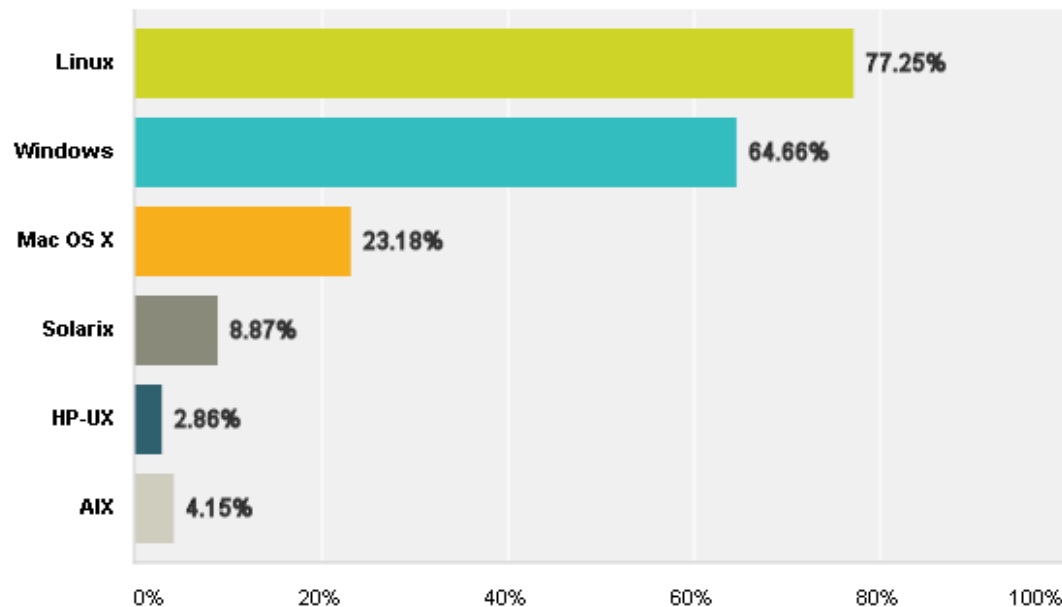
Java + Much More

- **Jenkins users love Java but use many other languages too**
- **38% code in C/C++**

What computer language(s) do you use?

Answered: 705   Skipped: 16

Myriad Jenkins Uses

Jenkins

What types of tasks do you use Jenkins for?

Answered: 707   Skipped: 14

Task	Percentage
Build	95.19%
Test	86.42%
Code quality analysis	64.07%
Batch tasks	38.47%
Release	48.37%
Operation	14.85%
Deployment	47.81%
Other (please specify)	5.37%
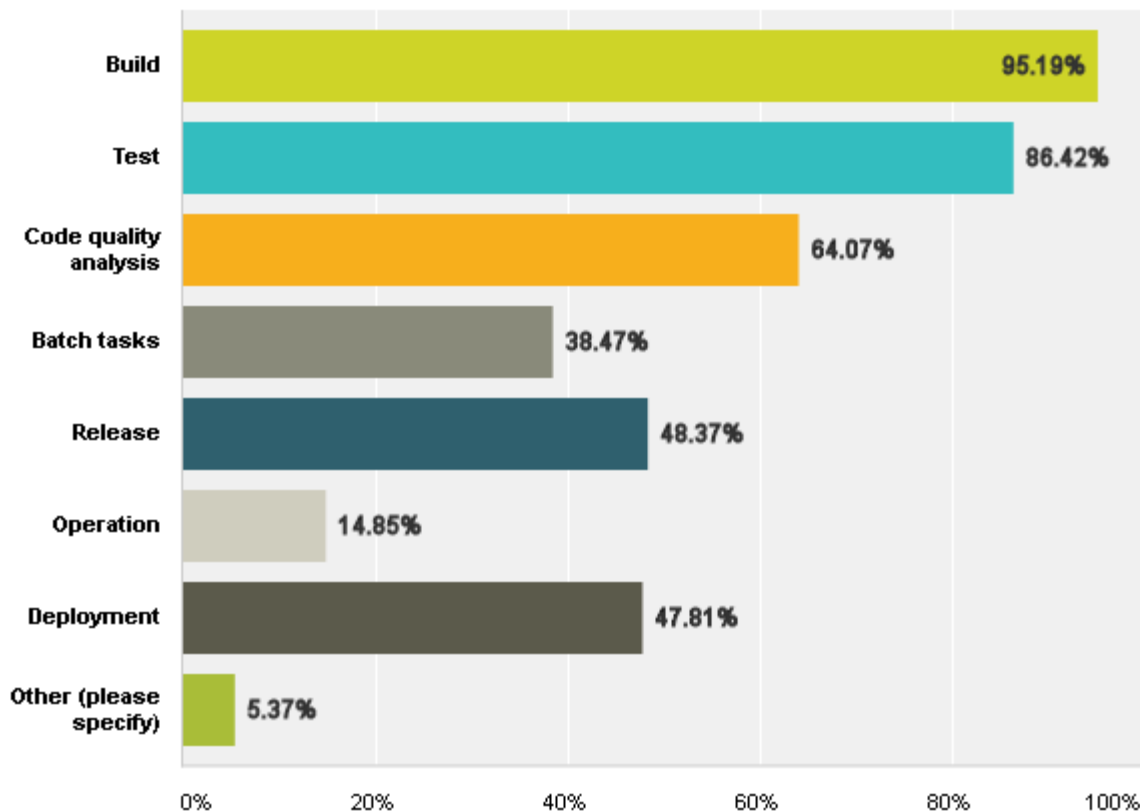
- **Kohsuke's commentary: "Jenkins is really a generic automation platform, not just a tool to manage builds and tests."**

- **Commonly used across many functions in development lifecycle**

- **Almost half (48%) use Jenkins to deploy software, an indicator of Jenkins' importance to continuous delivery**

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Jenkins Updates

- **Most people deploy a Jenkins update once/month (29%) or once/quarter (31%)**

- **83% use the Main Line Release of Jenkins**
  - Interesting that so few are on LTS (17%), since Quality was the #1-cited area for improvement

- **Bigger companies are more likely to be on LTS**
  - 24% of respondents who use LTS work for companies with > 500 developers, while only 18% of overall respondents work for companies that large

- **Kohsuke's commentary: More than ¾ of users are on the most recent dozen releases**

How often do you deploy a new Jenkins release?
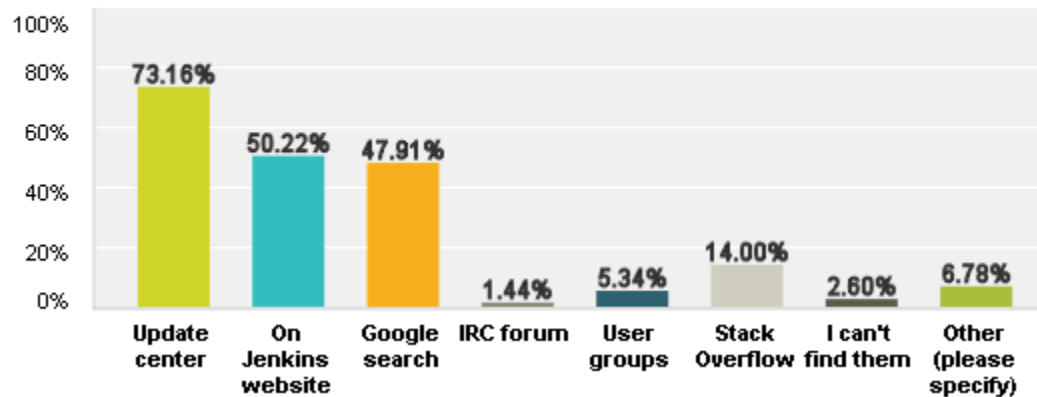
Answered: 696   Skipped: 25

- 22.56% (157)
- 28.74% (200)
- 31.03% (216)
- 17.67% (123)

Every release | Once a month | Once a quarter | When was the last time I upgraded?
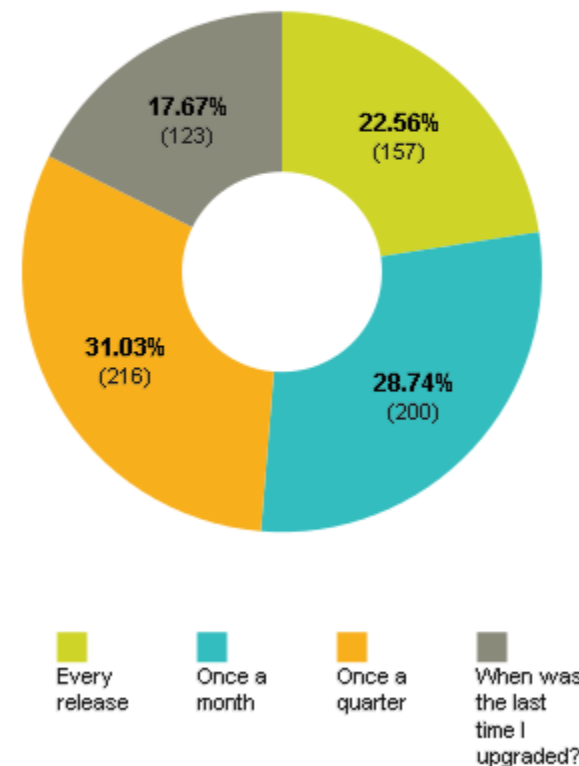
Finding Plugins

- **Update center is most likely place to search for plugins**
- **Jenkins website is an excellent resource, and Google is very helpful too**

How do you typically find plugins?

Answered: 693   Skipped: 28

Update center: 73.16%
On Jenkins website: 50.22%
Google search: 47.91%
IRC forum: 1.44%
User groups: 5.34%
Stack Overflow: 14.00%
I can't find them: 2.60%
Other (please specify): 6.78%

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Outstanding Plugin Contributions by the Community

Jenkins

- **11%** have contributed a plugin (current total now > 636!)

- **60% have written or are interested in writing a plugin**

- *Although certainly survey-takers are more likely to be active community members, this level of community contribution is exceptional for any open source project!*

Have you or your organization contributed a Jenkins plugin to the community?
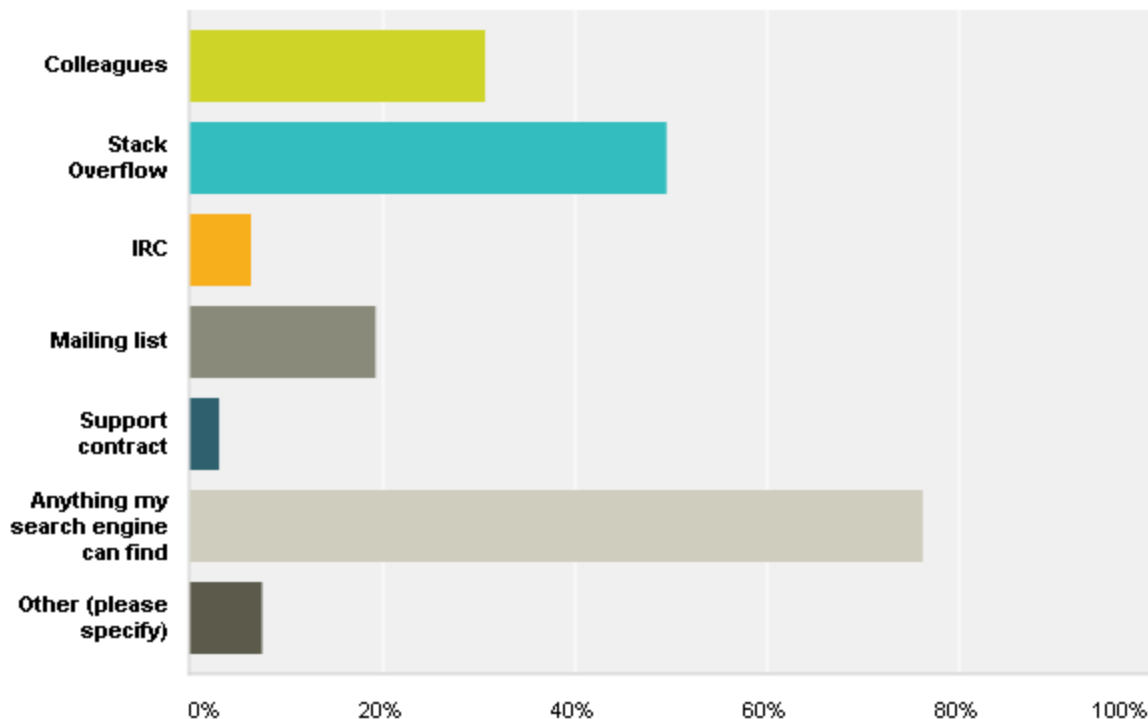
Answered: 695   Skipped: 26

Yes!	11.37%
I wrote one but it won't be useful to others	7.34%
I wrote one and I'd like to but I can't	1.87%
I'm planning to contribute	4.75%
I'm interested writing one	34.82%
Nah	39.86%

0%   20%   40%   60%   80%   100%
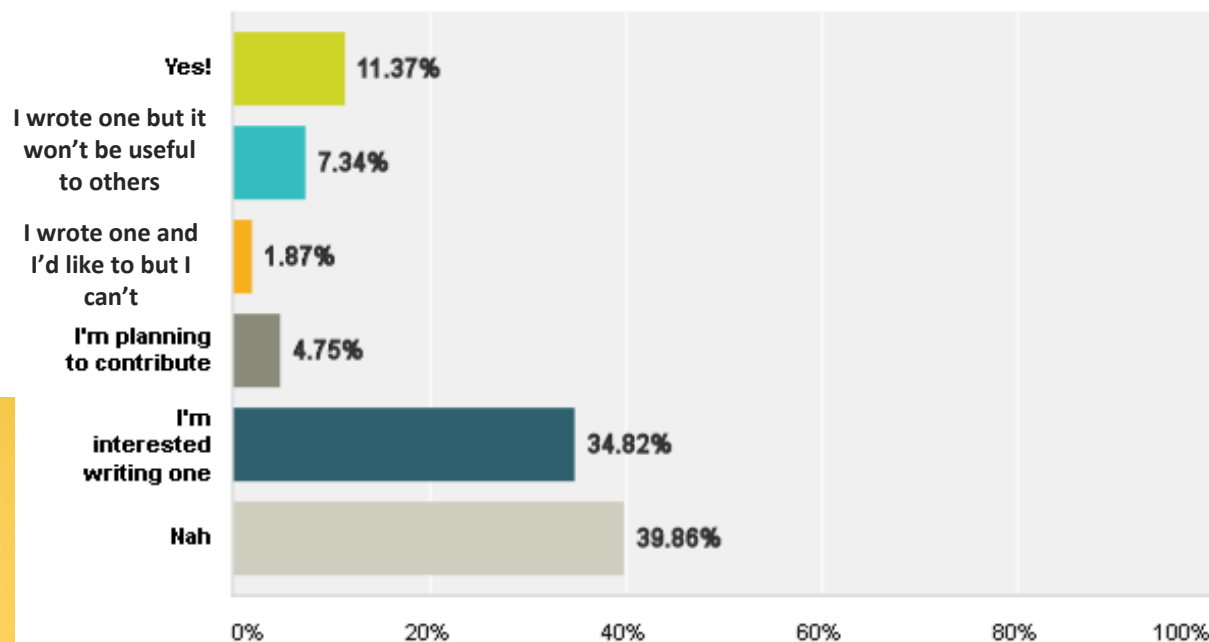
Where People Look for Support

How do you typically get Jenkins support?

Answered: 693   Skipped: 28

- **Search engines are Step 1**

- **Aside from straight Internet search, Stack Overflow the most common place to find community support for Jenkins**
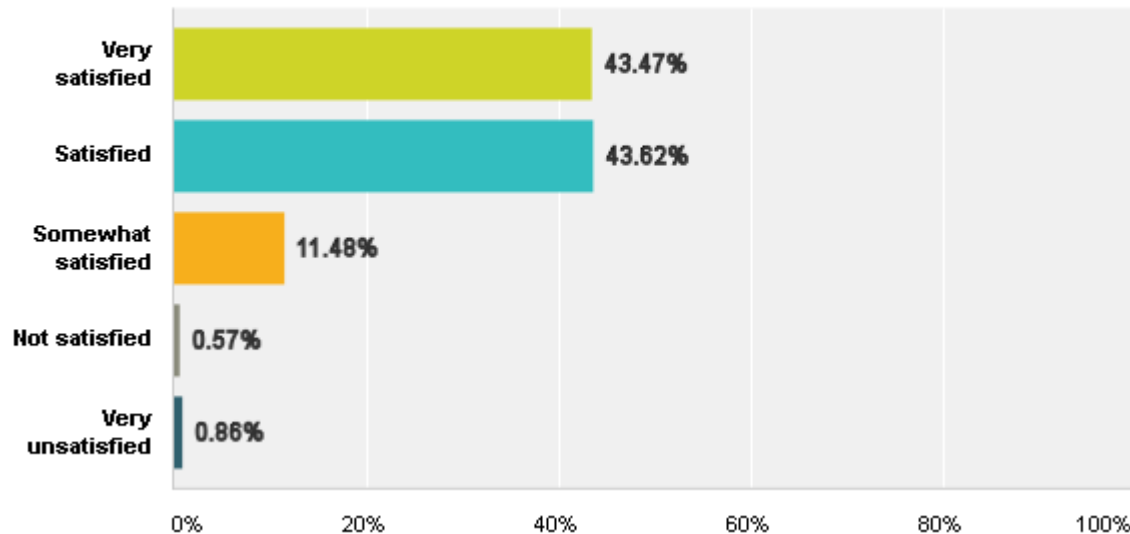
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Improving Jenkins

Serious Satisfaction

- **87% are Very Satisfied or Satisfied!**

How satisfied are you with Jenkins?

Answered: 697   Skipped: 24

Response	Percentage
Very satisfied	43.47%
Satisfied	43.62%
Somewhat satisfied	11.48%
Not satisfied	0.57%
Very unsatisfied	0.86%

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New UI Changes

- **93% liked this year's Jenkins UI changes**

- **See http://blog.cloudbees.com/2012/04/jenkins-ui-improvements.html for details**

Important Features for Development

Jenkins

- **Quality / timely bug fixes was considered the most important area on which to spend development resources**

- Documentation/examples and Missing plugins were next

Please prioritize the groups of features where you would like more development in the order of importance: 1 = Top Priority, 5 = Very Low Priority

	1	2	3	4	5	Total	Average Rating
Security / audit	14.95% 100	23.02% 154	28.85% 193	16.59% 111	16.59% 111	669	2.97
Documentation / examples	18.76% 127	27.47% 186	30.28% 205	16.40% 111	7.09% 48	677	2.66
Missing plugins	13.98% 93	27.97% 186	32.03% 213	17.74% 118	8.27% 55	665	2.78
Quality / timely bug fixes	35.89% 243	23.34% 158	20.53% 139	10.93% 74	9.31% 63	677	2.34
IDE integration	12.44% 82	19.12% 126	24.13% 159	19.42% 128	24.89% 164	659	3.25
Better UI	15.92% 107	25.45% 171	25.15% 169	18.60% 125	14.88% 100	672	2.91

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Making Jenkins Easier to Adopt

Jenkins

- **Results were consistent with features respondents considered important for development focus**

- **Quality of Jenkins / timely bug fixes is the most important factor in making Jenkins easier to adopt and strengthening its impact in companies**

- **Documentation and Examples are highly desirable as well**

Please prioritize the items below in terms of making Jenkins easier to adopt and strengthening its impact in your organization or project: 1 = Top Priority, 5 = Very Low Priority

	1	2	3	4	5	Total	Average Rating
Security / audit	17.73% 114	24.11% 155	26.75% 172	14.00% 90	17.42% 112	643	2.89
Documentation / examples	25.08% 163	30.31% 197	21.38% 139	13.38% 87	9.85% 64	650	2.53
Missing plugins	14.13% 90	28.57% 182	31.55% 201	14.13% 90	11.62% 74	637	2.81
Quality / timely bug fixes	28.40% 184	25.62% 166	24.38% 158	12.35% 80	9.26% 60	648	2.48
IDE integration	15.17% 96	18.33% 116	24.80% 157	16.27% 103	25.43% 161	633	3.18
Better UI	20.44% 131	20.28% 130	27.61% 177	14.51% 93	17.16% 110	641	2.88

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Open Feedback

If there's anything you'd change about Jenkins, what would it be?

- Many different ideas, but a few consistent themes
- Some suggestions included:
    - More focus on release stability & bug fixes
    - Better streamlined UI
    - Better Git integration on Windows
    - Specific plugin functionality & fixes
    - More documentation. More examples. More demo jobs.
    - Think scalability
    - Nada!
    - Love Jenkins, it gets the job done.

Jenkins Resources

Jenkins

- Jenkins-CI
    - http://jenkins-ci.org – Home
    - http://jenkins-ci.org/node - Blog

- Jenkins User Conference San Francisco 2012 Videos and Slides
http://www.cloudbees.com/jenkins-user-conference-2012-san-francisco-abstracts.cb

- Jenkins in the Cloud for unlimited scalability and easier management
    - Learn more and try free: http://www.cloudbees.com/dev.cb

- *Jenkins Enterprise by CloudBees*
    - Get long term support and powerful enterprise plug-ins from *the* Jenkins experts, including Jenkins Founder Kohsuke Kawaguchi
    - Try it free: http://www.cloudbees.com/jenkins-enterprise-by-cloudbees.cb

- Sign up to receive *Continuous Information*, the Jenkins community newsletter from CloudBees
    - www.cloudbees.com/jenkins-newsletter.cb?2012survey

Additional Conclusions

- **Jenkins community continues to grow fast – active installations up 66% in the last year, with 636 plugins**
- **Jenkins is considered mission-critical by nearly 9 out of 10 users**
- **Users are happy with Jenkins but would love to see improvements in quality / bug fixes and documentation**
- **CI in general – and Jenkins in particular – will continue to spread rapidly within organizations**
- **Jenkins will continue to expand beyond continuous integration tasks, particularly into the area of continuous deployment**

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PS - Chocolate!

We asked everything else, why not get a full User Profile of the typical Jenkins Junkie?!

49% prefer chocolate!

Chocolate, vanilla, or strawberry?

Answered: 673   Skipped: 48

Strawberry. You just can't beat that fruity goodness. 22.73% (153)

Chocolate! Is there even a question? 49.03% (330)

There's no taste like vanilla. 28.23% (190)

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