

JUC New York 2012



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Creator of Jenkins

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<http://cloudbees.com/>

Thank you!

- For coming today
- For speaking
- For your help organizing events

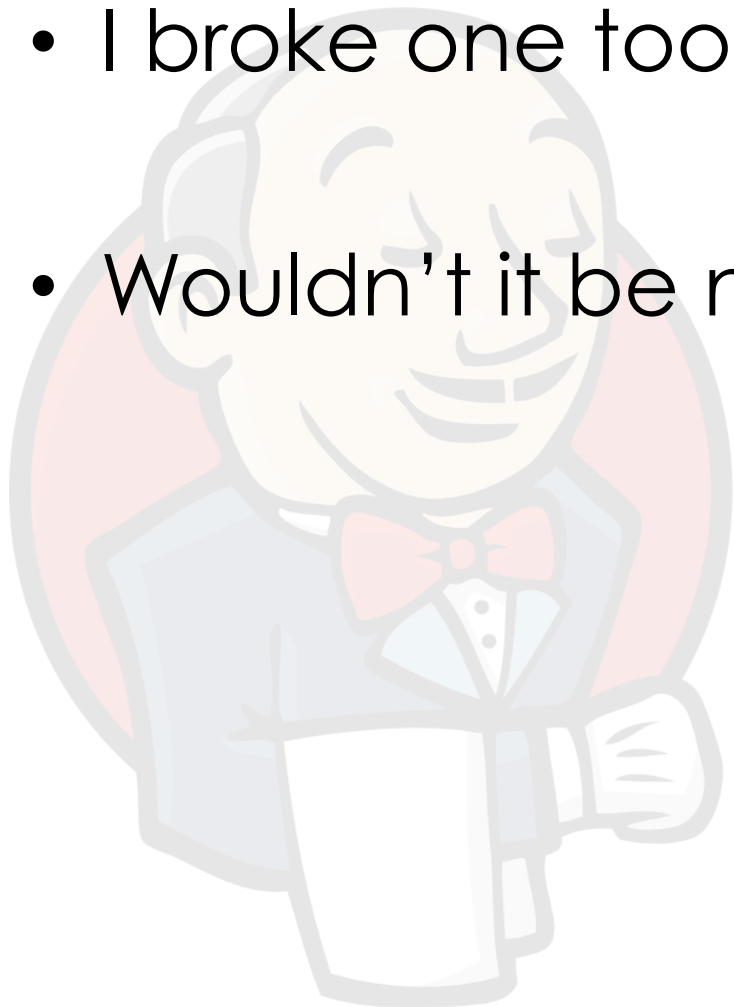


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2004 Summer

- I broke one too many builds
- Wouldn't it be nice if ...?



And so it began

- build.sh

```
#!/bin/bash -ex
exec 2>&1
cd /files/jaxb-ri
cvs update
ant
```

- monitor.sh

```
#!/bin/bash -ex
build.sh > build.log | | mail ...
```

- Run from cron

Then I wrote my version

The screenshot shows the Hudson web interface in a Mozilla Firefox browser window. The address bar shows the URL `http://kohsuke.sfbay/hudson/`. The interface features a green header with the Hudson logo and a navigation menu on the left. The main content area displays a table of jobs with their last success and failure times.

Job	Last Success	Last Failure	Last Duration
java.net cvs keep-alive	25 minutes (#389)	N/A	1 seconds
java.net log processor (daily)	8 hours (#4)	N/A	1 minutes
java.net log processor (weekly)	4 days (#1)	N/A	4 minutes
java.net mail automation	2 hours (#20)	N/A	0 seconds
java.net version check	20 minutes (#319)	6 days (#160)	3 seconds
javadoc	10 hours (#19)	1 days (#18)	11 minutes
jax-fast	30 minutes (#354)	1 days (#335)	9 minutes
jax-fast-2.0	1 hours (#134)	36 minutes (#135)	8 minutes
jaxb-ri	43 minutes (#396)	1 hours (#393)	6 minutes
msv nightly	19 hours (#9)	N/A	15 minutes
stapler	7 days (#39)	9 days (#38)	17 seconds
txw	7 days (#9)	7 days (#6)	44 seconds
xsom	10 days (#6)	N/A	1 minutes

At the bottom of the table, there are two buttons: `ATOM 0.3 for all` and `ATOM 0.3 for failures`. The status bar at the bottom left of the browser window shows the text `完了` (Completed).

By 1.15 (Feb '06)

Hudson - Microsoft Internet Explorer

Address: <http://kohlsuke.sfbay/hudson/>

Hudson

[ENABLE AUTO REFRESH](#)

[New Job](#)

[Configure](#)

[Reload Config](#)

Job	Status
hudson	
jaxb-ri	

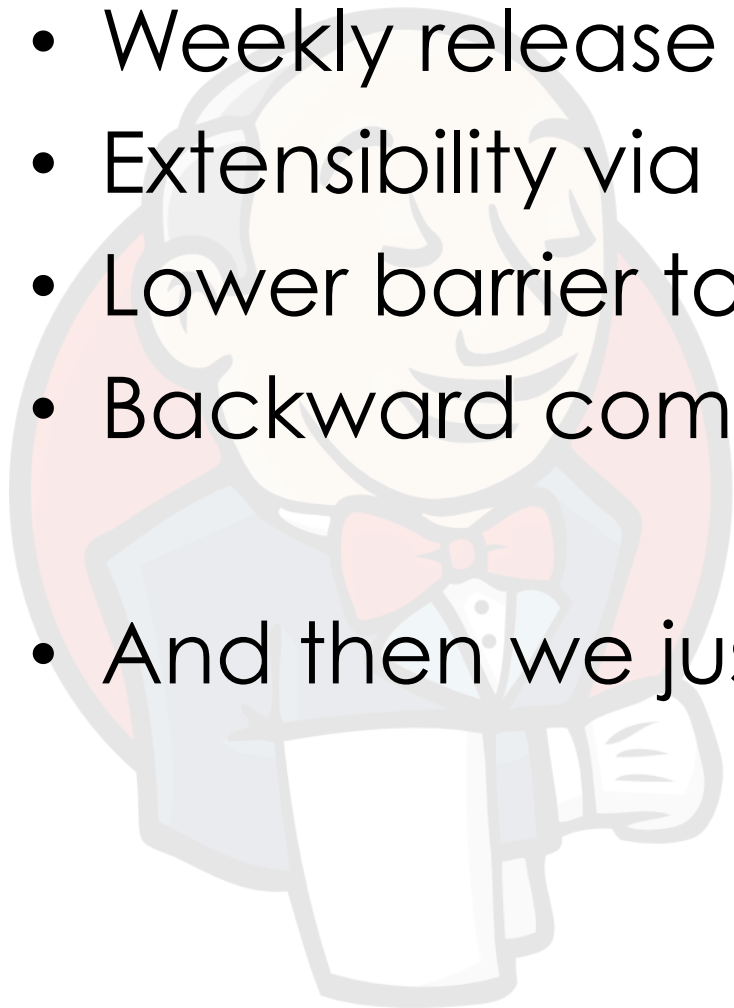
No.	Status
1	Idle
2	Idle
3	Building javanet-maven-repository-daemon #826
4	Building jaxb-ri #3181
5	Building glassfish #105
6	Idle

All	JAX-WS	JAXB	Tango	java.net	+
Job	Last Success	Last Failure	Last Duration		
Common annotations	4 days (#16)	9 months (#3)	39 seconds		
bsh	6 months (#11)	10 months (#2)	59 seconds		
dtd-parser	6 months (#8)	N/A	1 minute		
fi	28 days (#586)	1 month (#567)	7 minutes		
fi (weekly)	6 days (#53)	13 days (#52)	5 minutes		
glassfish	4 hours (#104)	1 day (#88)	1 hour		
hudson	4 minutes (#201)	N/A	1 minute		
istack-commons	12 days (#19)	16 days (#5)	14 seconds		
iapex	3 days (#55)	9 hours (#64)	1 minute		
java-ws-xml community discussion updater	4 minutes (#16146)	10 hours (#16125)	1 minute		
java.net acl processor	18 hours (#162)	N/A	0 seconds		

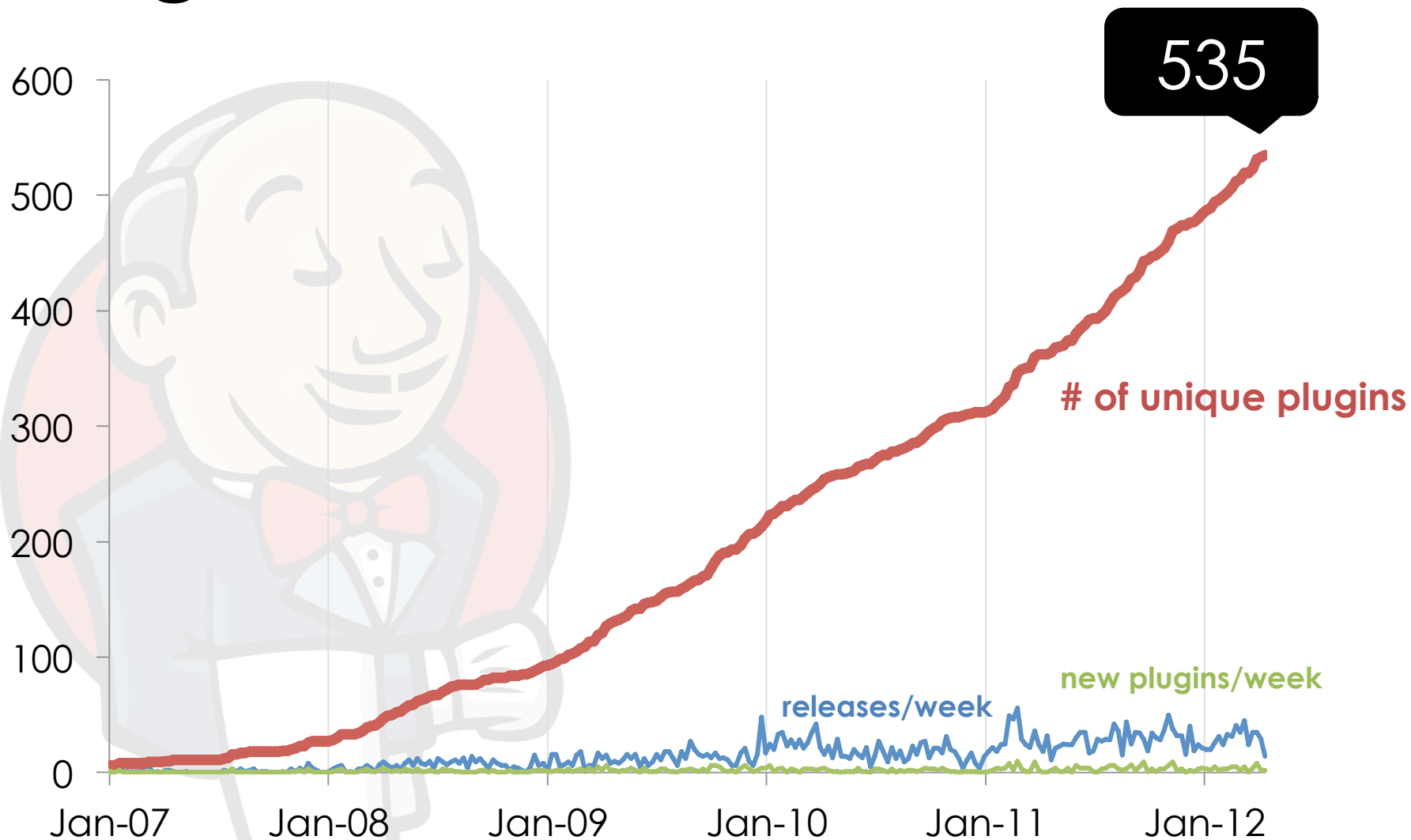
Internet

The culture was established early on

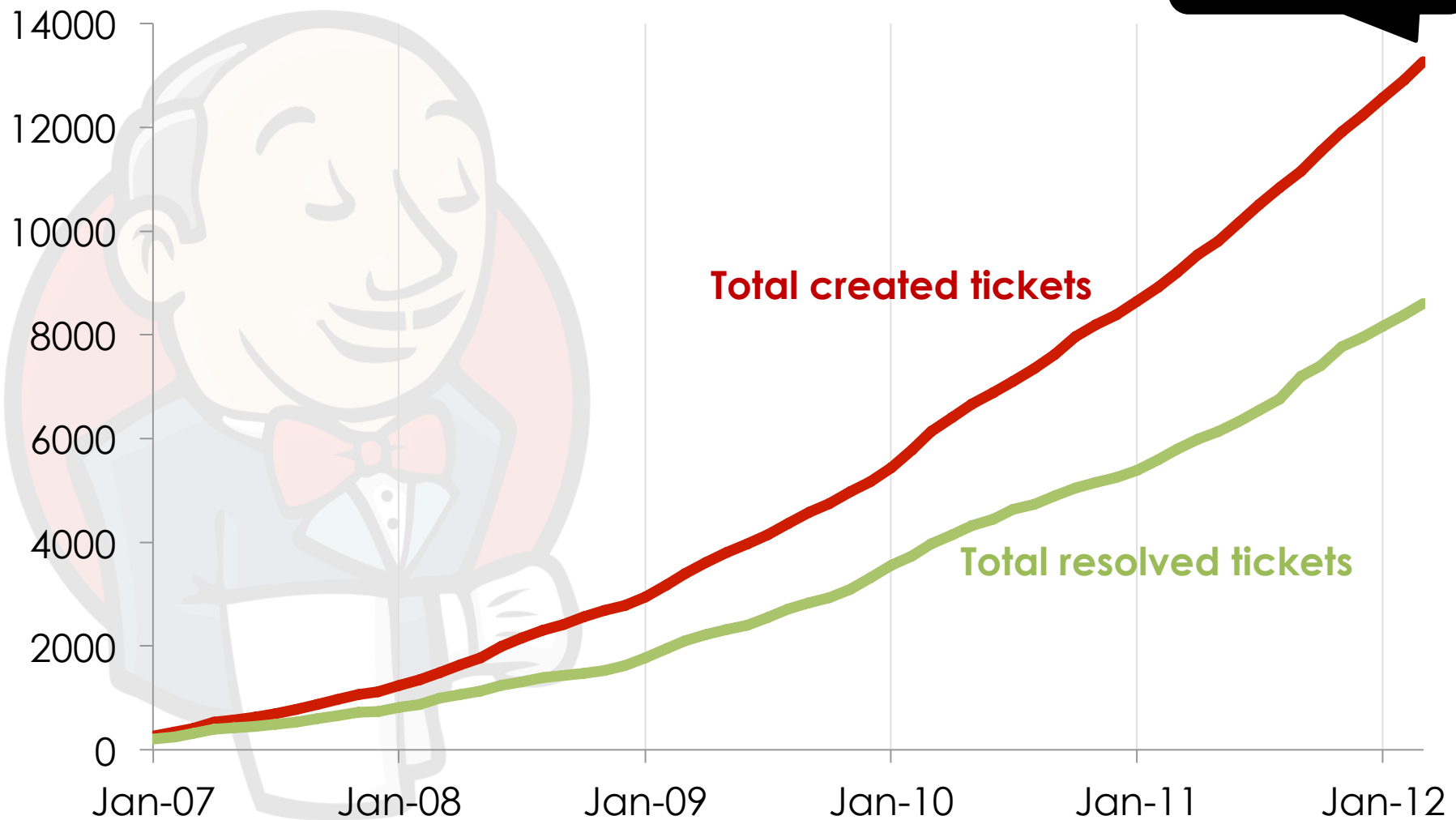
- Weekly release cycles
- Extensibility via plugin
- Lower barrier to entry
- Backward compatibility matters
- And then we just kept on keeping on



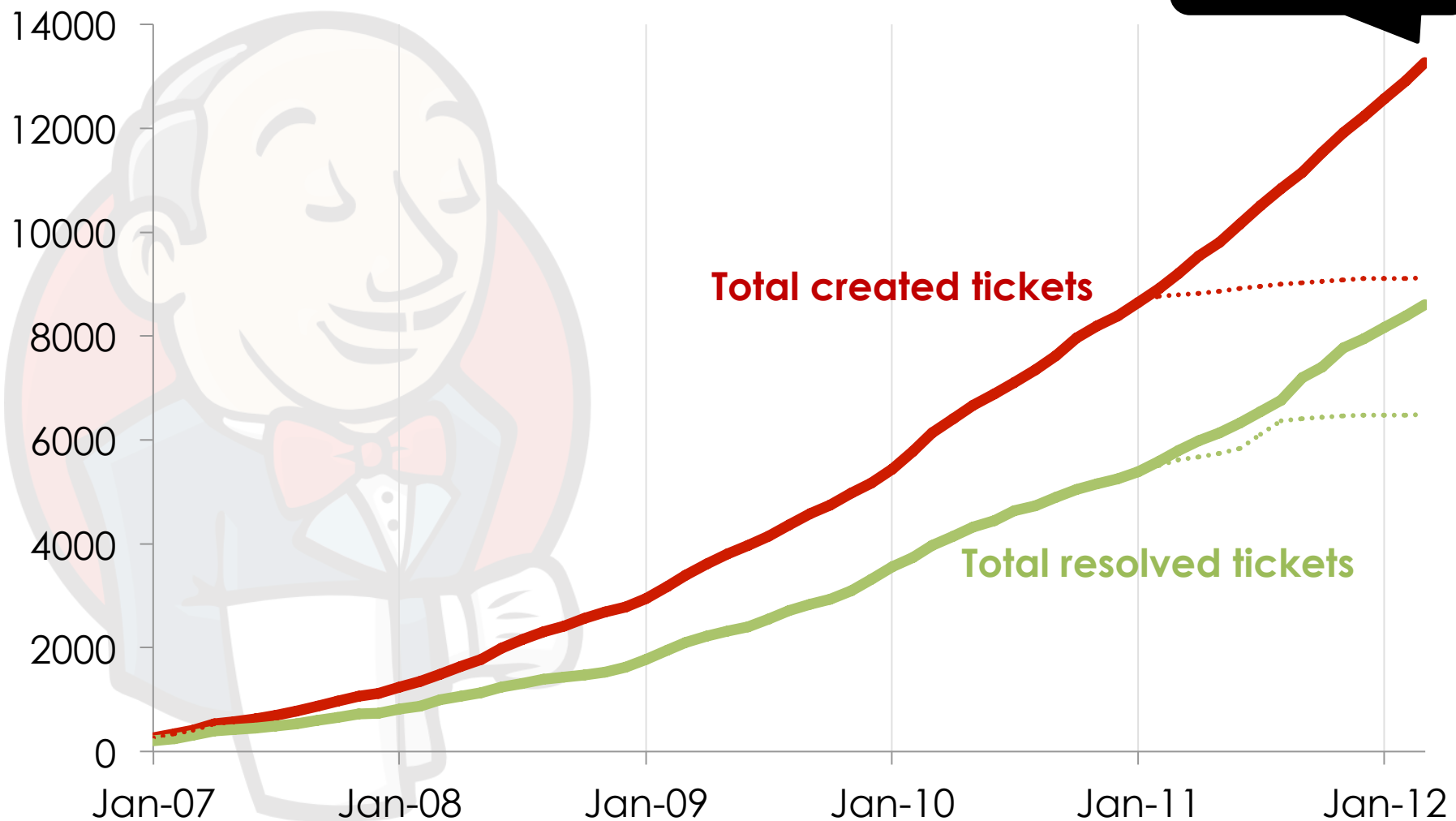
Plugin Growth



Ticket Activities



How's my brother?

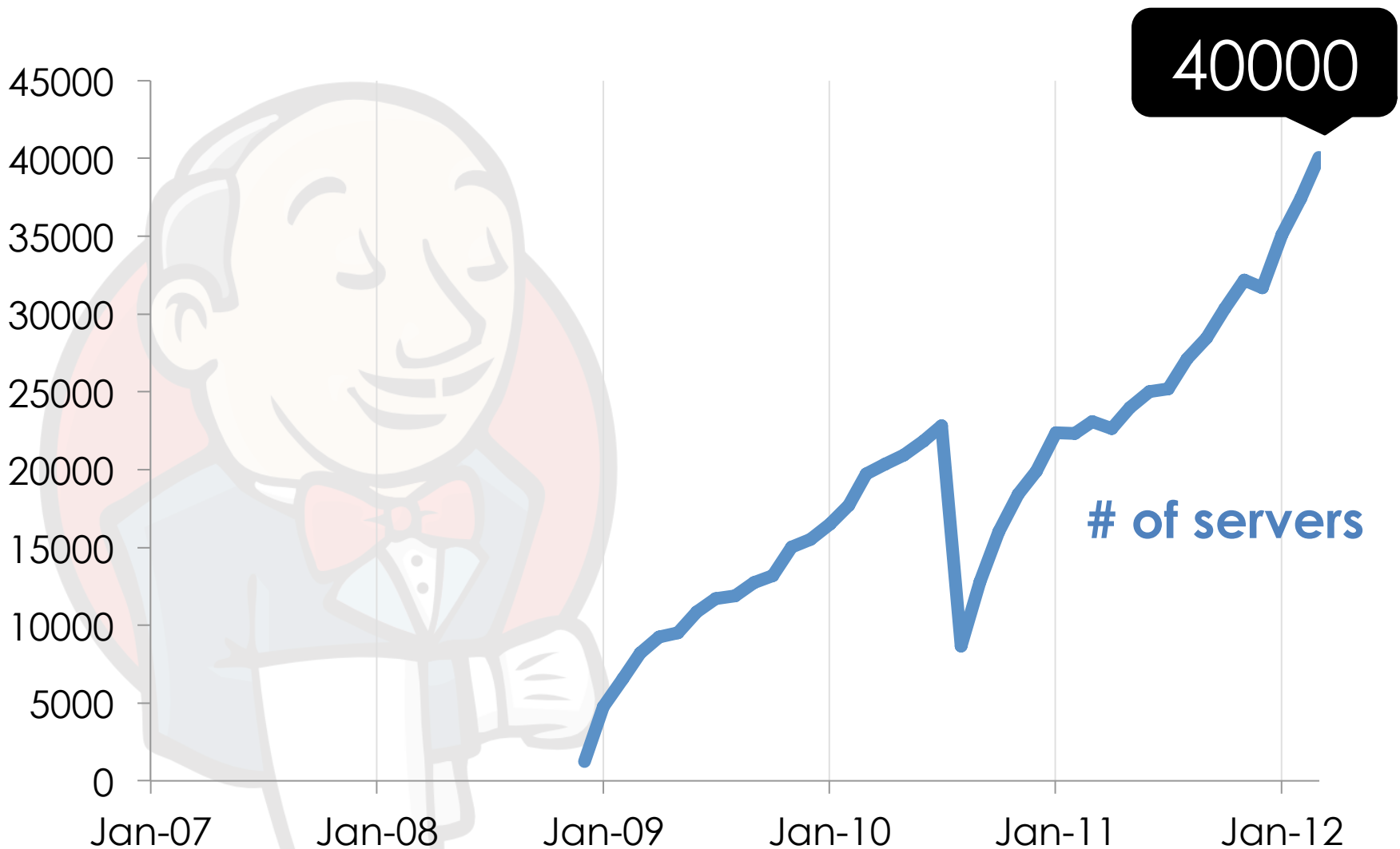


Jenkins User Conference

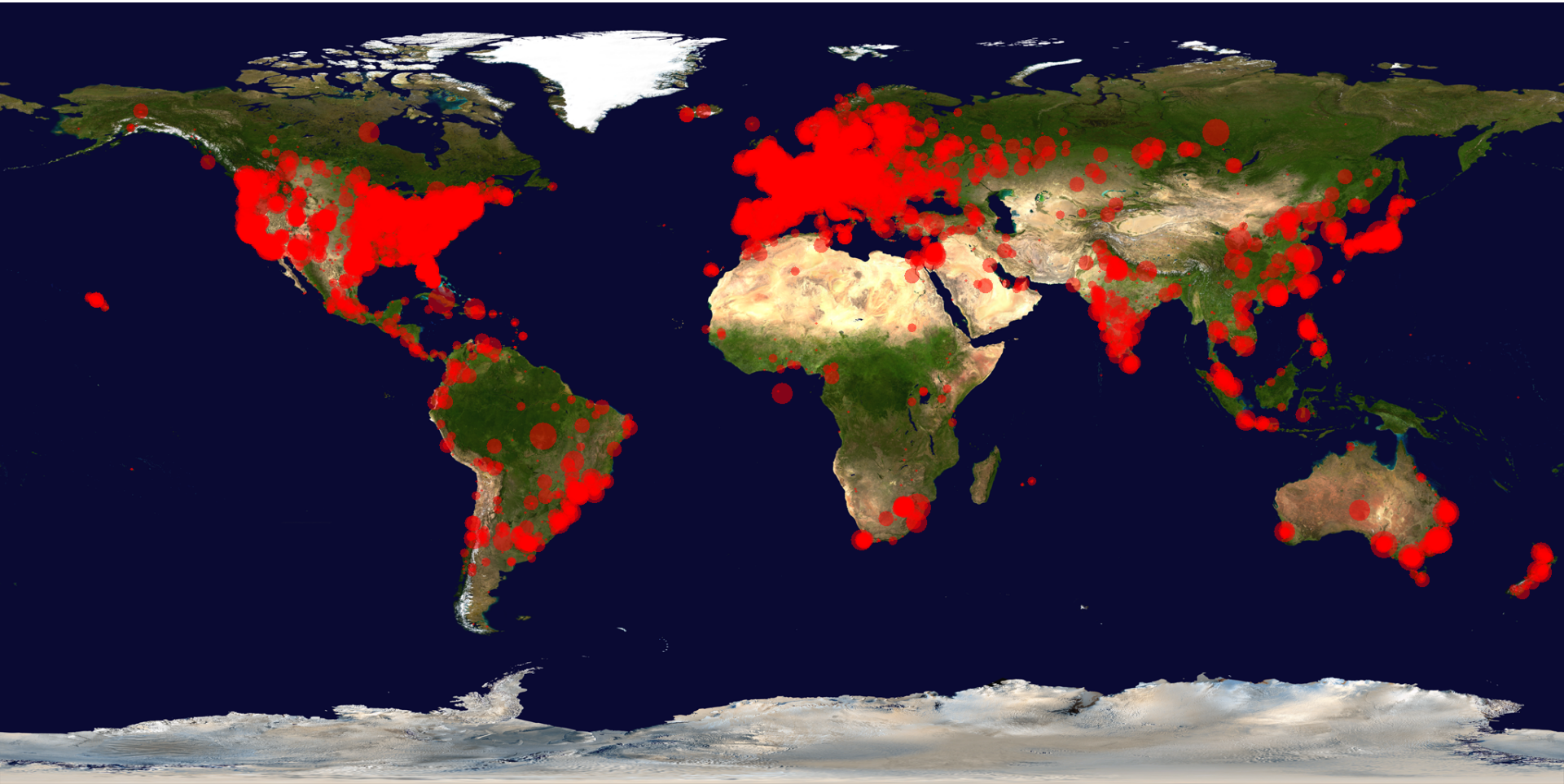
New York, May 17th 2012



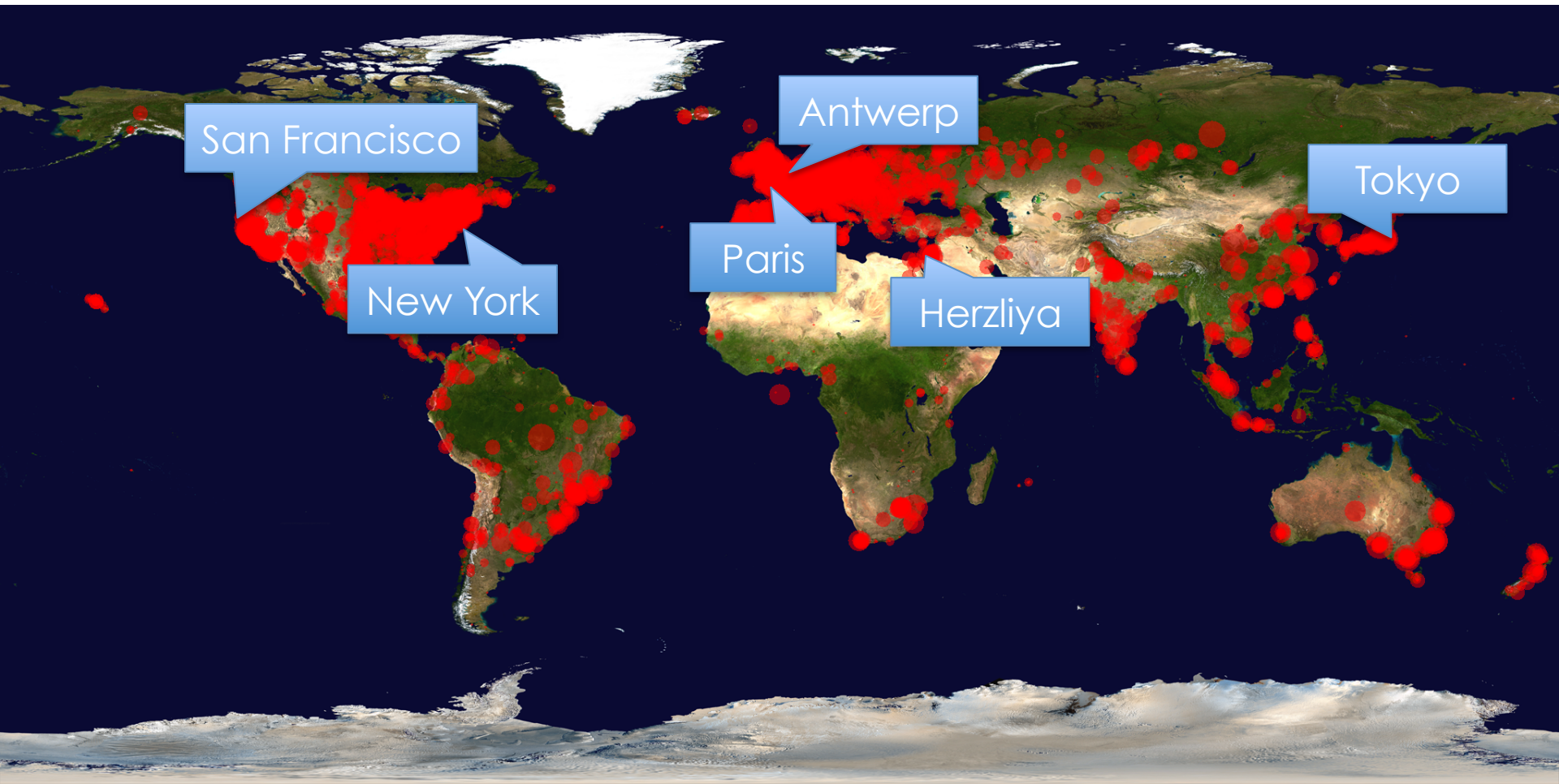
Installation Growth



Usage All Around the World



And so JUC around the world!

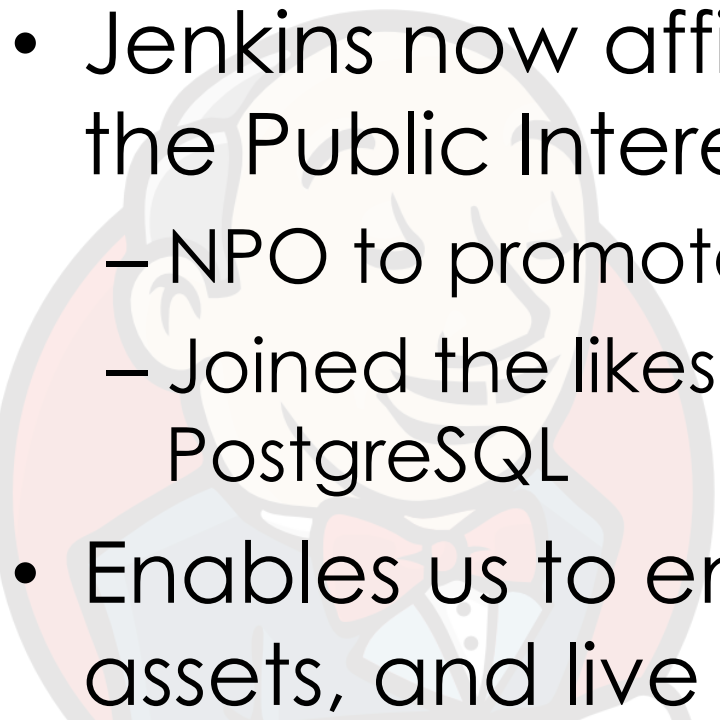




More Transparent/ Formal Governance



Legal Entity

- Jenkins now affiliated with Software in the Public Interest (SPI)
 - NPO to promote free and open software
 - Joined the likes of Debian, Drupal, PostgreSQL
 - Enables us to enter into contract, own assets, and live longer than individuals
- 

Fundraising Drive

- Through SPI, so tax deductible
- jenkins-ci.org/donate
- Goal was \$5130, but we've raised \$12000+!

A bar chart with two horizontal bars. The top bar is blue and represents the amount raised, labeled '\$12446'. The bottom bar is a darker blue and represents the goal, labeled '\$5130'. The bars are positioned over a faint background image of a smiling cartoon character wearing a suit and a bow tie.

\$12446

\$5130

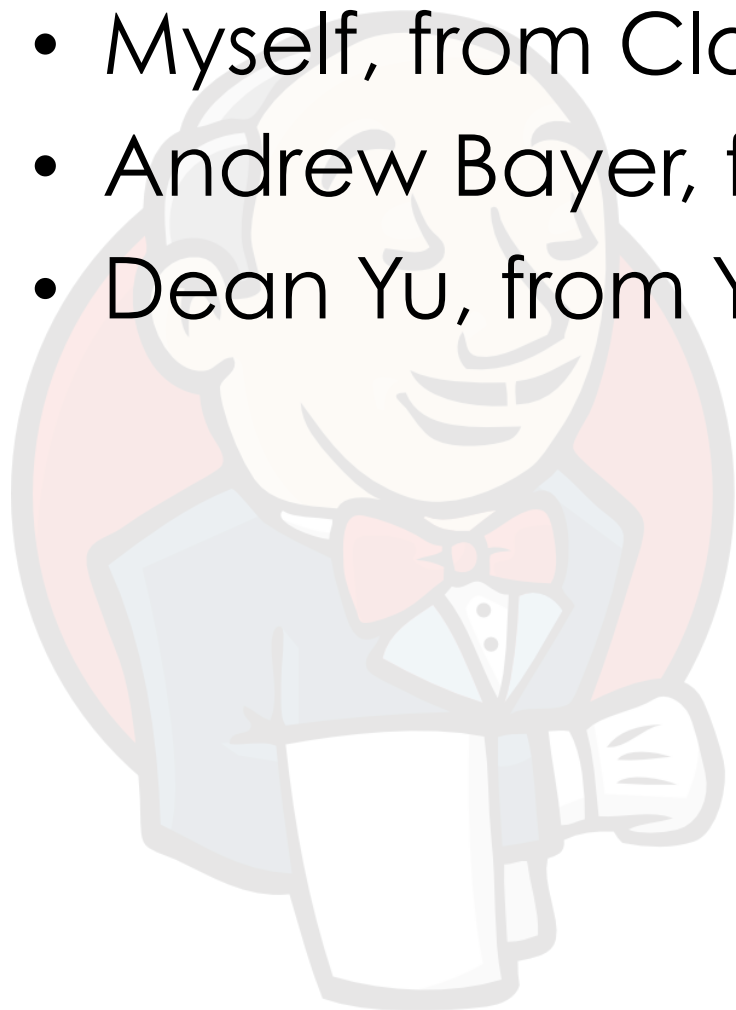
Jenkins CIA Agent



- Presenting Jenkins somewhere?
 - We'll send you T-shirt & stickers!
- Join the CIA to spread words

Interim Governance Board

- Myself, from CloudBees
- Andrew Bayer, from Cloudera
- Dean Yu, from Yahoo



Project Meeting

- Bi-weekly meetings
 - Held in IRC
 - Agenda/participation open to anyone
 - Logs available online

For Jul 6th Meeting

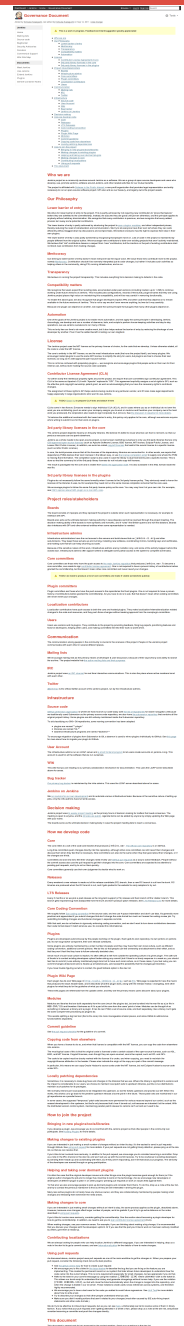
WHEN [July 6th 18:00 UTC](#), which should be 11am PDT, 2pm EDT, 8pm CET, 3am Tokyo.

- How do we handle pull requests which are pending for a long time
 - see <http://echelog.matzon.dk/logs/browse/jenkins/1309816800> (since ~19:40) for a related discussion
- What is the current state of the 'The new EMailer' ?
 - Maybe to get things going again, deprecate the built-in EMailer and deliver email-ext bundled?
- Infra update from [R. Tyler Croy](#) regarding new machines at the [OSUOSL](#)
- CLA discussion. We should start collecting CLA for core, and our current plan on the record was to reuse Apache CLA.

MINUTES [summary](#) and [raw](#)

Governance Document

- Our implicit modus operandi, made explicit
- <https://wiki.jenkins-ci.org/display/JENKINS/Governance+Document>



Governance Document

- Clarifies how we work
 - Should make onboarding easier
- License policies
- Project roles
- Name usage
- Check list for pull requests



Contributor License Agreement

- As a part of governance document, the project approved of collecting CLA for core
 - Based on CLA used by Apache
 - Further clarifies the rights associated with contributions
 - Protect users and projects from potential legal disputes

Infrastructures and Releases

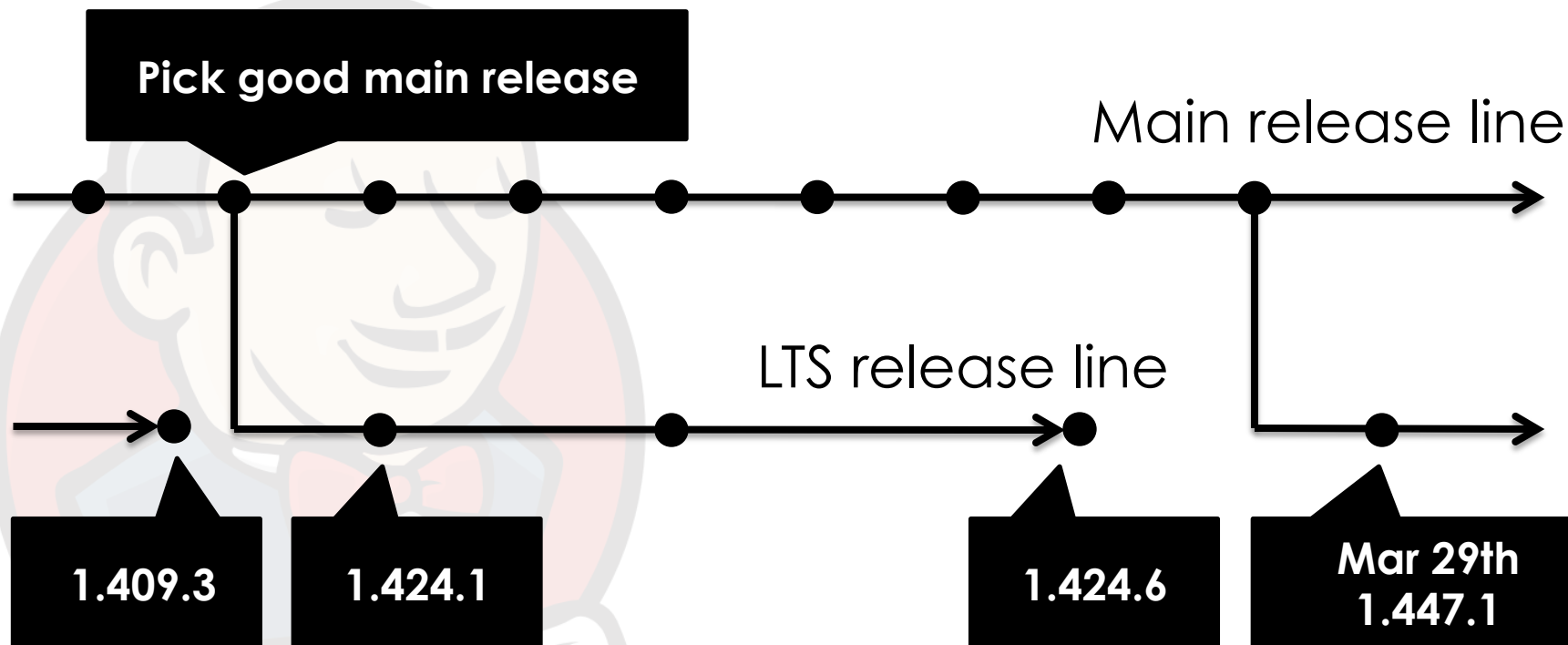
A nighttime photograph of a city skyline, likely New York City, viewed from a bridge. The bridge's structure is visible in the foreground, with its lights reflecting in the water below. The city skyline is filled with illuminated skyscrapers, including the Empire State Building. The sky is dark, and the overall scene is lit up by the city's lights.

Diversity is good for project

- We rely on diverse entities to run jenkins-ci.org
- Thanks to



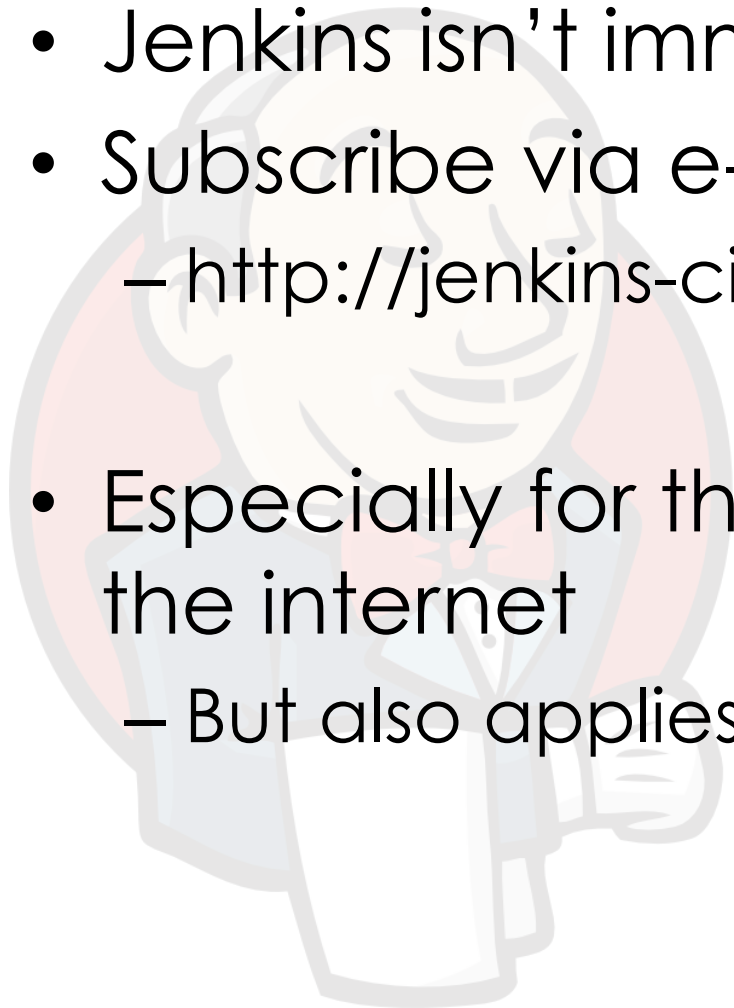
Long-Term Support Releases



Backporting proven/critical fixes only

Security Advisories

- Jenkins isn't immune to vulnerabilities
- Subscribe via e-mail or RSS feed
 - <http://jenkins-ci.org/advisories>
- Especially for those who run Jenkins on the internet
 - But also applies to intranet Jenkins



Jenkins is now in Ubuntu



Package: jenkins (1.409.1-0ubuntu2) [universe]

Continuous Integration and Job Scheduling Server

Packages providing jenkins

[jenkins-tomcat](#)
Jenkins CI on Tomcat 6

Other Packages Related to jenkins

depends
 recommends
 suggests

- [adduser](#)
add and remove users and groups
- [daemon](#)
turns other processes into daemons
- [default-jre-headless](#)
Standard Java or Java compatible Runtime (headless)
or [java6-runtime-headless](#)
virtual package provided by [default-jre-headless](#), [openjdk-6-jre-headless](#), [openjdk-7-jre-headless](#)
- [jenkins-common](#)
Jenkins common Java components and web application
- [upstart-job](#)
virtual package provided by [upstart](#)
- [jenkins-ssh-slaves-plugin](#)
Package not available

Download jenkins

Architecture	Package Size	Installed Size	Files
all	11.6 kB	120.0 kB	[list of files]






more native packages



- Mac OS X and Solaris, especially new



Or native package

-  Windows
-  Ubuntu/Debian
-  Red Hat/Fedora/CentOS
-  Mac OS X
-  openSUSE
-  FreeBSD
-  OpenBSD
-  Solaris/OpenIndiana
-  Gentoo

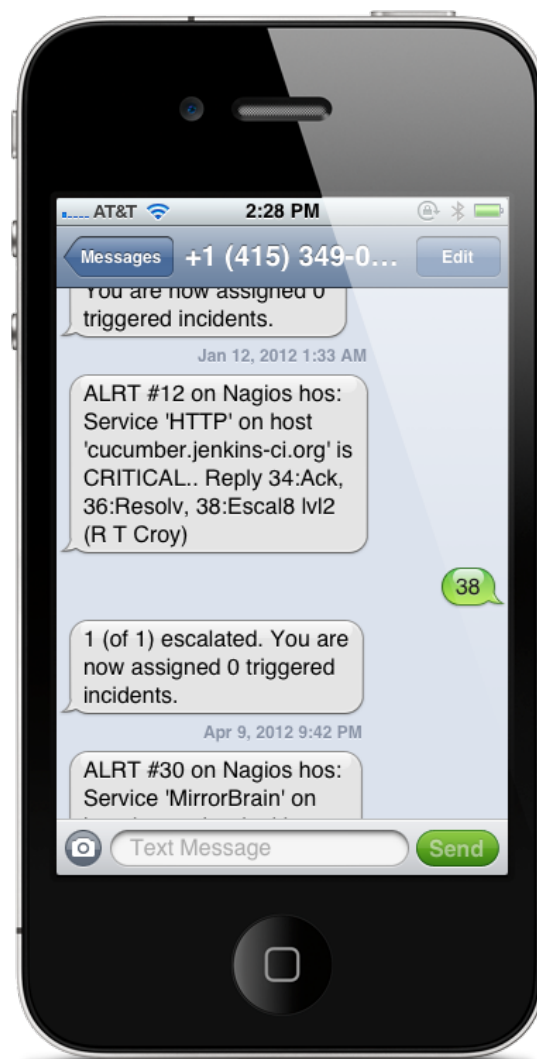
More Open Infrastructure



- For longest time, infra work was behind the closed door
 - We can't just hand out system access to everyone
- But now Tyler is pushing Puppet to work
 - <http://github.com/jenkinsci/infra-puppet>
 - “Open-sourcing” server setup
 - Send in pull requests to make changes
 - # of trusted admins is less of a bottleneck

Infrastructure Improvements

- Server monitoring
 - <http://nagios.jenkins-ci.org/>
 - And Pager Duty
- Now 9 mirrors around the world
- Runs our own DNS
- Outsourcing work
 - Hosted Artifactory
 - Hosted Jenkins

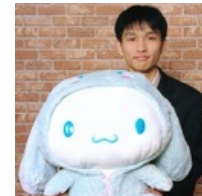


NEWSSTAND

What's New?

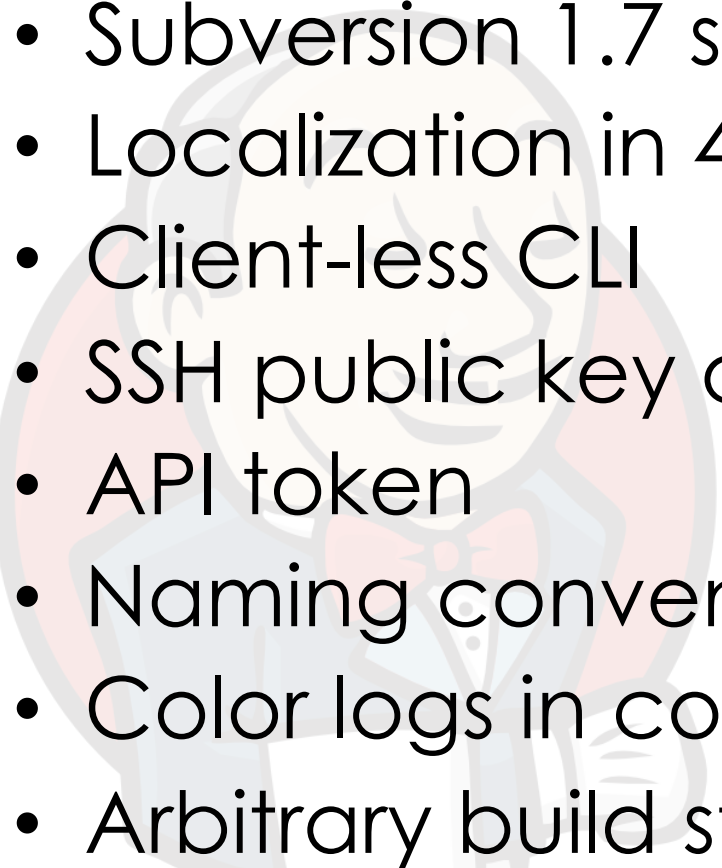


Beyond what you saw...



- Frontend modernization
 - Prototype 1.7, YUI 3
 - JavaScript performance improvements
- Page load performance
 - gzip compression on by default
 - Images in plugin with cache headers

And more features

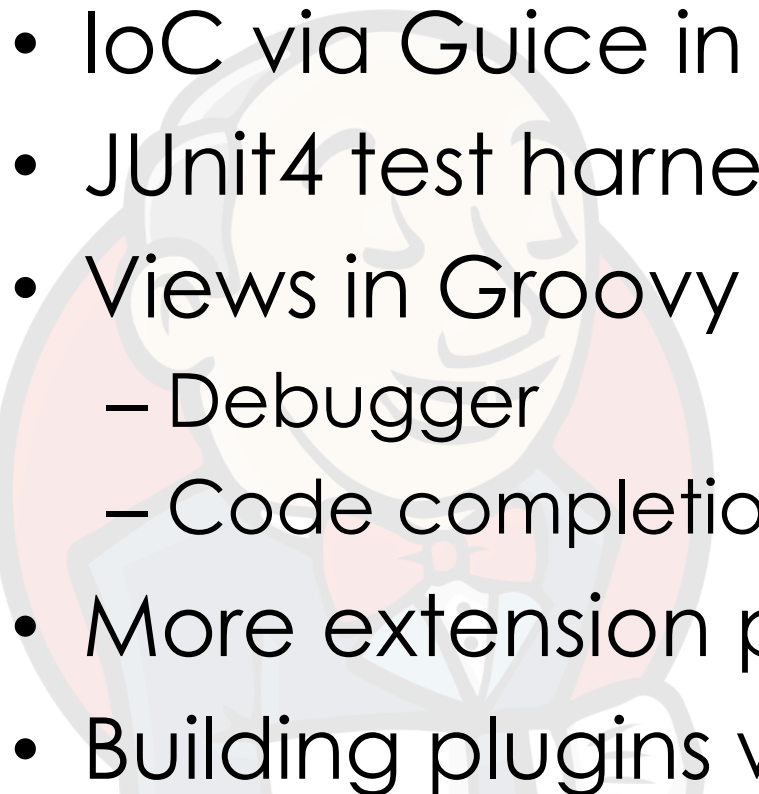
- Subversion 1.7 support
 - Localization in 40 languages
 - Client-less CLI
 - SSH public key authentication
 - API token
 - Naming convention enforcement
 - Color logs in console
 - Arbitrary build steps in Maven projects
- 

Developing plugins in Ruby



- Develop plugins in Ruby
 - No Java, no Maven, no Jelly
- With decent assistance
 - Live code reloading
 - Skeleton generation
 - Packaging & release
- Runs on JRuby

More developer improvements

- IoC via Guice in core
 - JUnit4 test harness
 - Views in Groovy (not Jelly)
 - Debugger
 - Code completion
 - More extension points
 - Building plugins with Gradle, JRebel
- 



Upcoming Features



BuildHive.cloudbees.com

- Love to get your feedback
- Pieces you'd like to use on your own?



More from my day job...

- Jenkins Enterprise by CloudBees
 - High-availability
 - Host your own update center
 - Validated merges
- More free plugins!
 - Folder
 - Backup to cloud
- Open-source plugins!
 - Credentials
 - File leak detector
- Just released!





What I'd like to work on

- Start-up performance improvements
- Help finding plugins you need
- Easier test parallelization
 - By taking advantages of slaves
- Distributed execution assistance
 - Use Jenkins slaves as general-purpose computing grid

Conclusions

- A lot is going on, in terms of
 - Governance
 - Adoption
 - Development
- And lots more progress to come
- Enjoy the rest of the day!
 - Talk to each other

