

# The Butler and the Snake

Continuous Integration for Python



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Europython 2015 — Bilbao



Commit → Build → Report



Continuous Integration





Buildbot

45





"It's like Buildbot,  
but with a butler."



Jenkins (aka Hudson)





Nightly Builds





Commit



Build

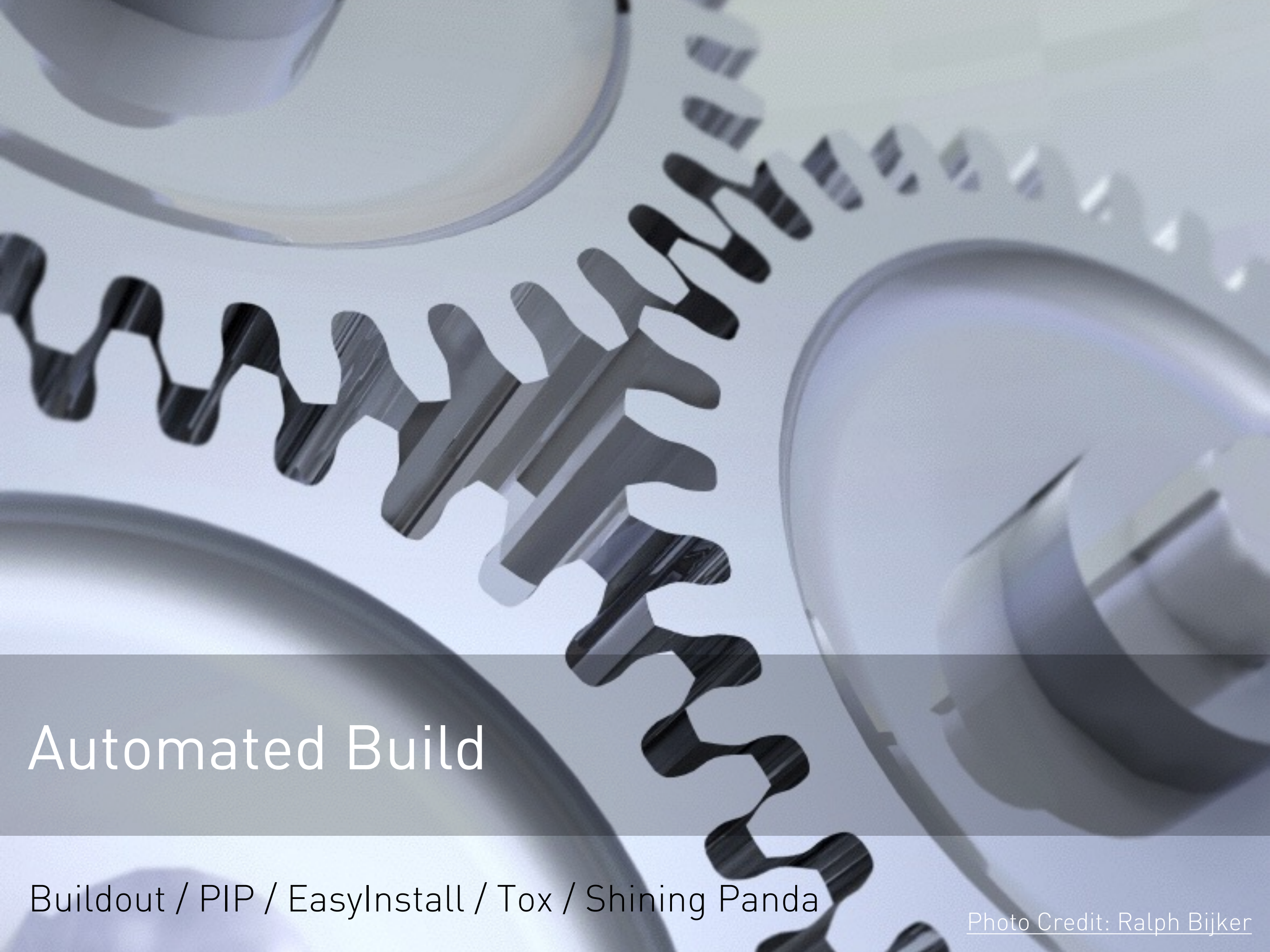


Notify



Solving the Nightly Build Problem





# Automated Build

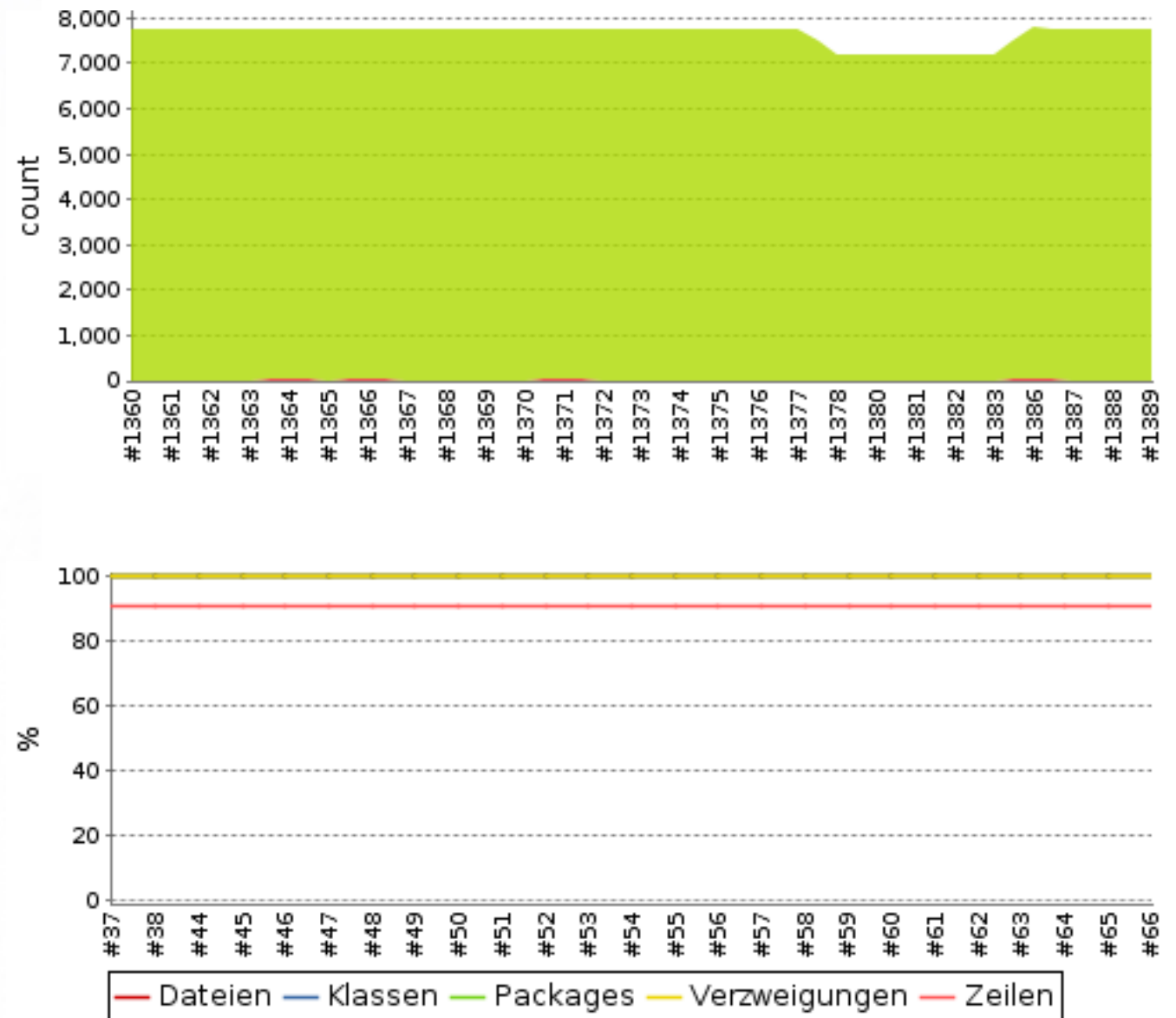
Buildout / PIP / EasyInstall / Tox / Shining Panda

[Photo Credit: Ralph Bijker](#)





# Testing

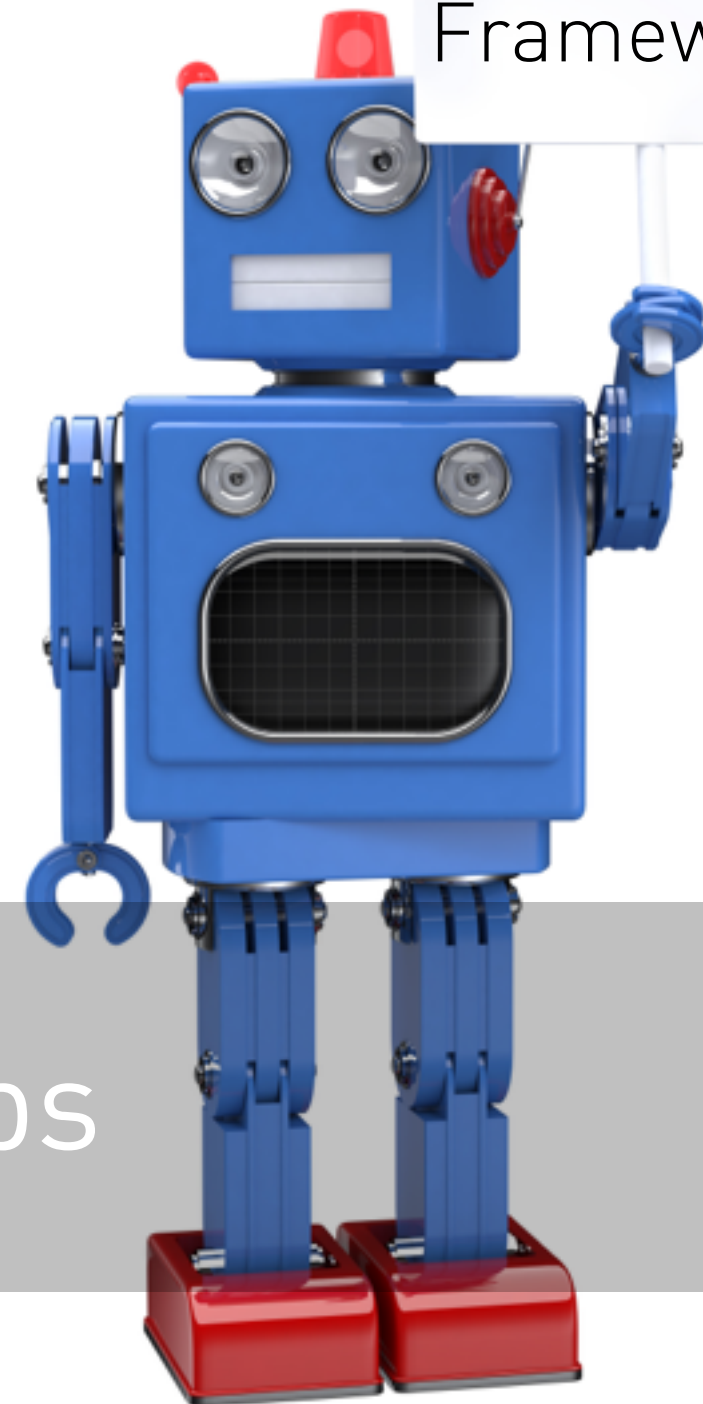
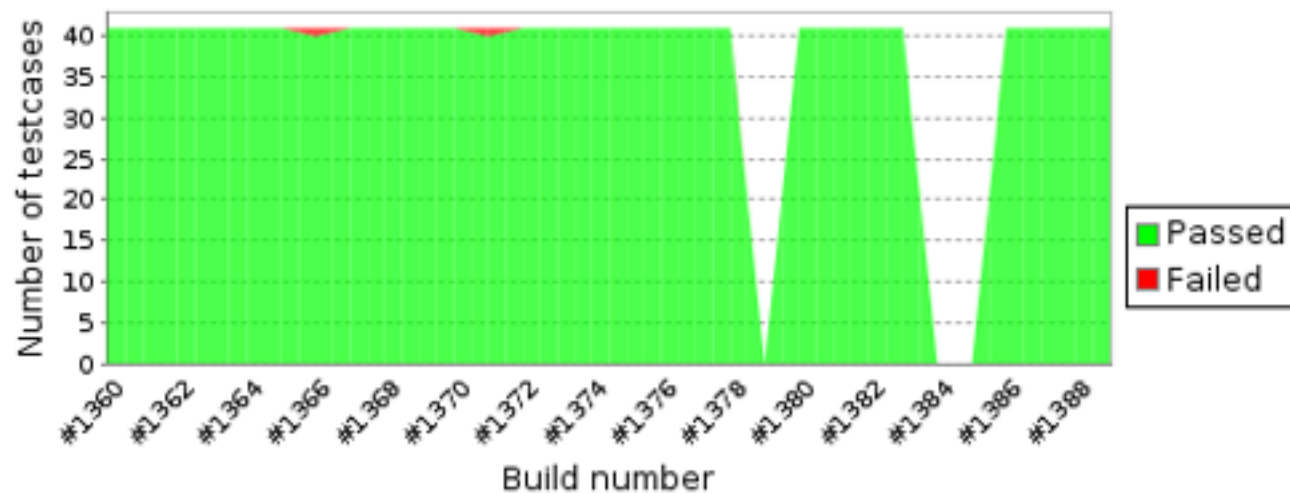


collective.xmltestreport / pytest / Coverage / Cobertura



Robot Framework

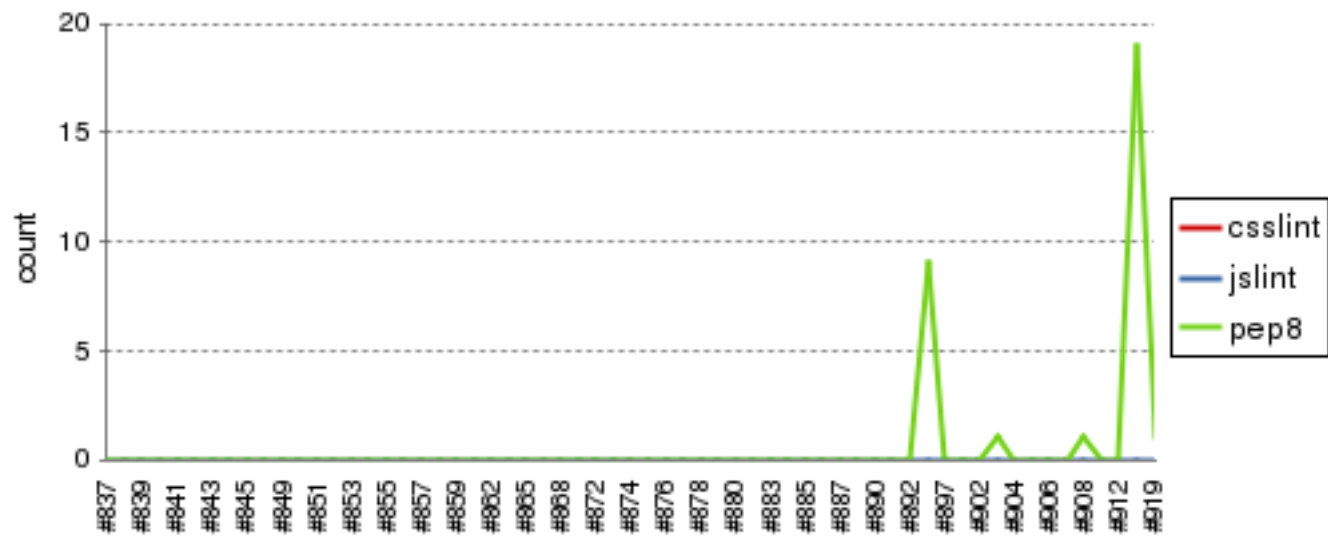
```
50 Test Valid Login
51     Given a login form
52     When I enter valid credentials
53     Then I am logged in
```



# Robot Framework / Saucelabs

Robot / Saucelabs Jenkins Plugins





# Static Code Analysis

Pep8 / Pyflakes / Pylint / plone.recipe.codeanalysis / Violations Plugin





# Notifications

Email-Ext Plugin / LDAP / Jenkins Dashboard Plugin





Build is still broken





Agreement on the Team

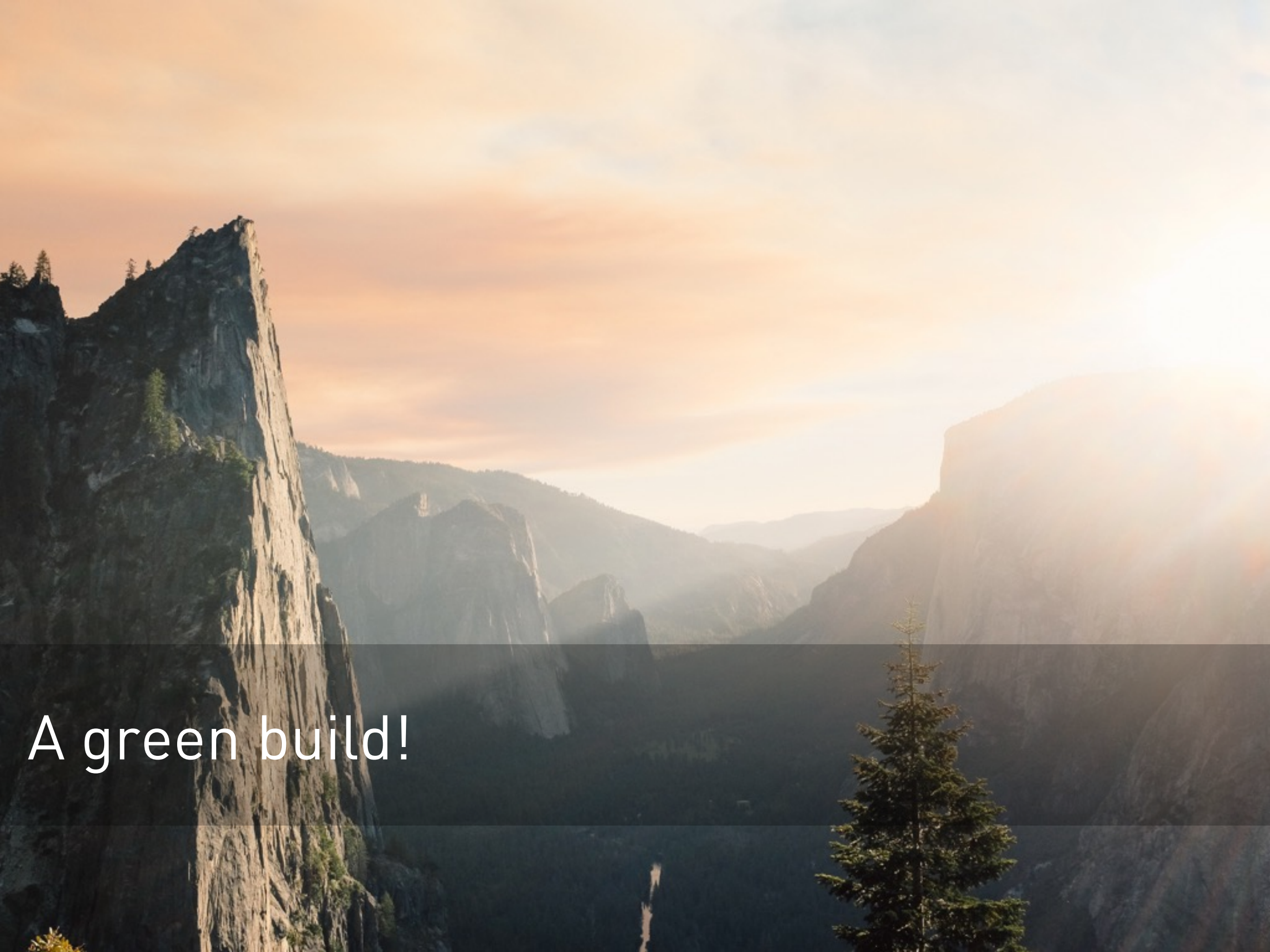




# Continuous Integration Rules

[buildoutcoredev.readthedocs.org](http://buildoutcoredev.readthedocs.org)





A green build!





# Scalability

Server-Node / Provisioning / Jenkins Port Allocator Plugin



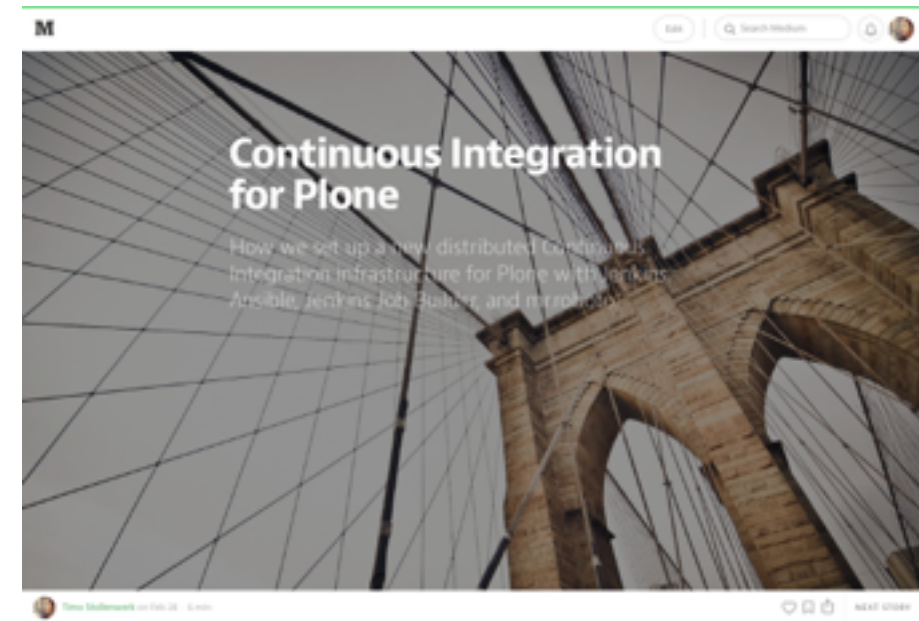
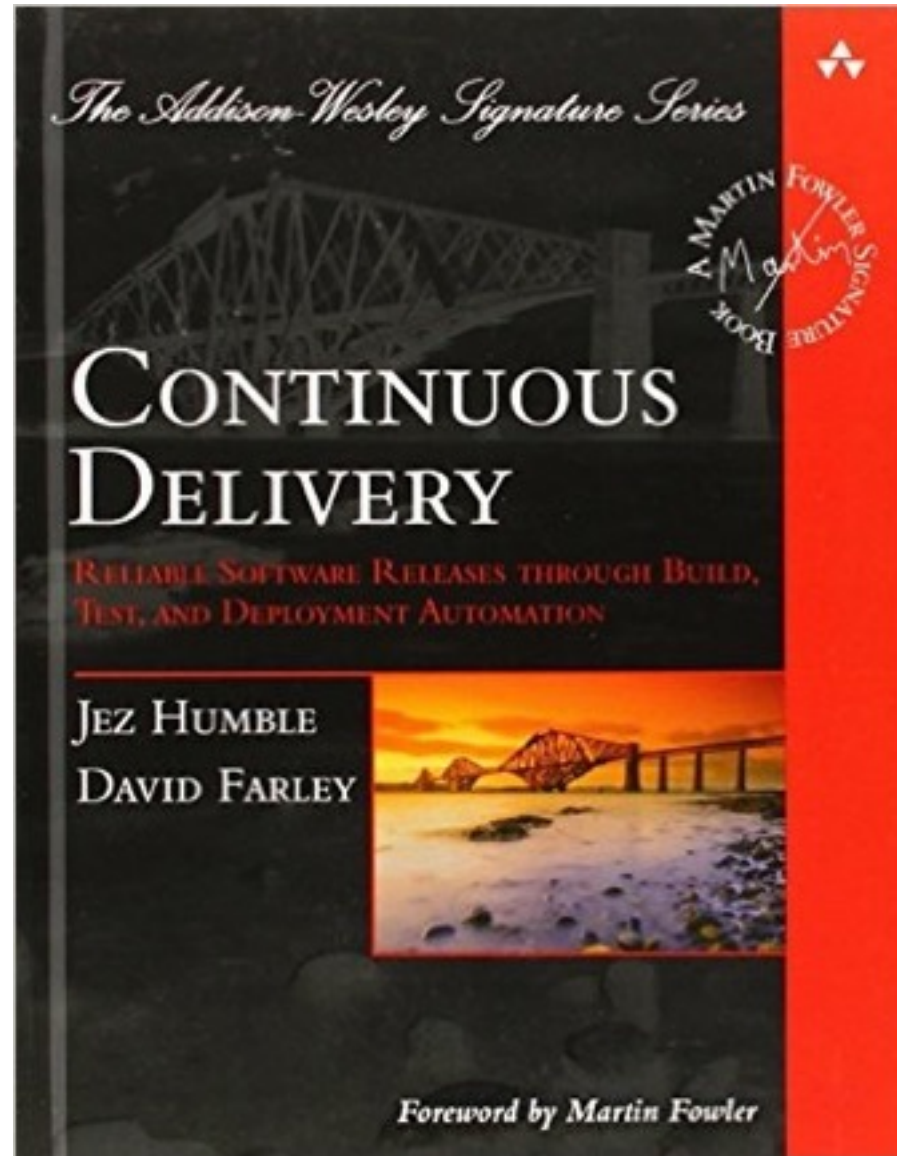
# Continuous Deployment

zest.releaser / devpi / Jenkins Workflow Plugin





# Summary



The Plone Testing & Continuous Integration team worked hard over the last few months setting up a new Continuous Integration (CI) infrastructure for Plone. Yesterday we were able to finally go live with our new system on [jenkins.plone.org](https://jenkins.plone.org).

Name	Average Duration	Last Duration	Failed Tests	Passed Tests	Build Results
Plone 4.3.10-Release-2.8	45 min	45 min	0/0	222/222	100% Passed
Plone 4.3.10-Release-2.7	45 min	45 min	0/0	222/222	100% Passed
Plone 4.3.10-Release-2.6	45 min	45 min	0/0	222/222	100% Passed
Plone 4.3.10-Release-2.5-Addons	45 min	45 min	0/0	222/222	100% Passed
Plone 4.3.10-Release-2.4-Addons	45 min	45 min	0/0	222/222	100% Passed

### A New Jenkins Server

Gil Forcada, Ramon Navarro Bosch and I moved our Jenkins master server to a new and more powerful machine. We are using a distributed CI system with a Jenkins server, to collect and serve the test results, and a few nodes that actually run the tests. This allows us to easily scale our CI infrastructure and makes sure the Jenkins web interface is always accessible even though the master can suffer heavy load.

# Further Reading

<https://medium.com/@timostollenwerk/continuous-integration-for-plone-b7b0b72c21dc>



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<http://de.slideshare.net/tisto/the-butler-and-the-snake-europython-2015>



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