GoOSe Linux

Rebuilding Enterprise Linux

The 'Community' Way

Hello. My name is

Clint Savage

People online call me herlo

I participate online at the following places

I don't always blog, but when I do, I use
http://sexysexypenguins.com

This presentation

Is Interactive!

Please ask questions.

The Request

https://twitter.com/#!/dagwieers/status/57563280260087808

The Response

Goozbach's Tech Tips

Bootstrapping a RHEL Clone

By Derek Carter on April 12, 2011 11:07 PM | 1 Comment | No TrackBacks

There was some interesting action on the CentOS mailing list recently which stemmed from a tweet posted by Dag Wieers.

The question posited is: "How does one rebuild RHEL in a timely, open and collaborative way?"

Well, a few of my UTOSC friends and I did a little brainstorming and came up with what we think a good bootstrapping infrastructure for just such a project would entail:

A good model

A good example of how to run a distro is Fedora. Their infrastructure team is very open and inclusive. They do have a system which allows for automated timely builds as well.

http://blog.friocorte.com/2011/04/bootstrapping-a-rhel-clone.html

The Result?

An 'Enterprise Linux' Rebuild Project

With a goal to grow the EL Rebuild ecosystem

The GoOSe Project

Focused on making rebuilds a 'transparent ' process

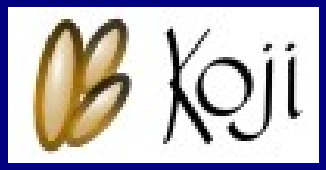
You need

Tools and Infrastructure

To rebuild an enterprise operating system

We stand on the shoulders of awesomeness!

http://github.com



https://fedorahosted.org/koji

http://python.org

Our Toolbelt

We have quite a bit of code too!

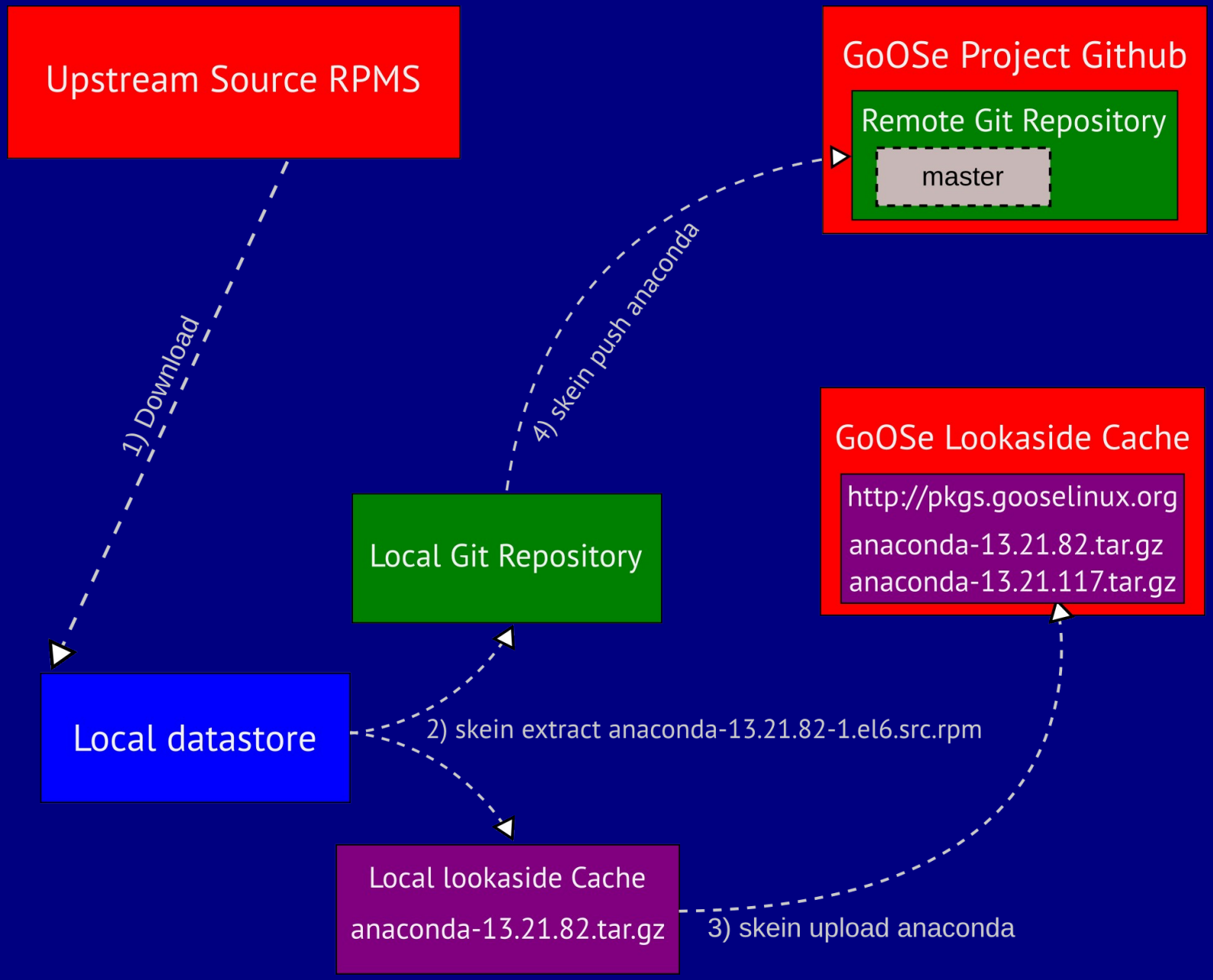
Written for the GoOSe Project

- skein – manages imports and builds
- grapple – git hook to automate koji
- reposort – dependency ordering (alpha)

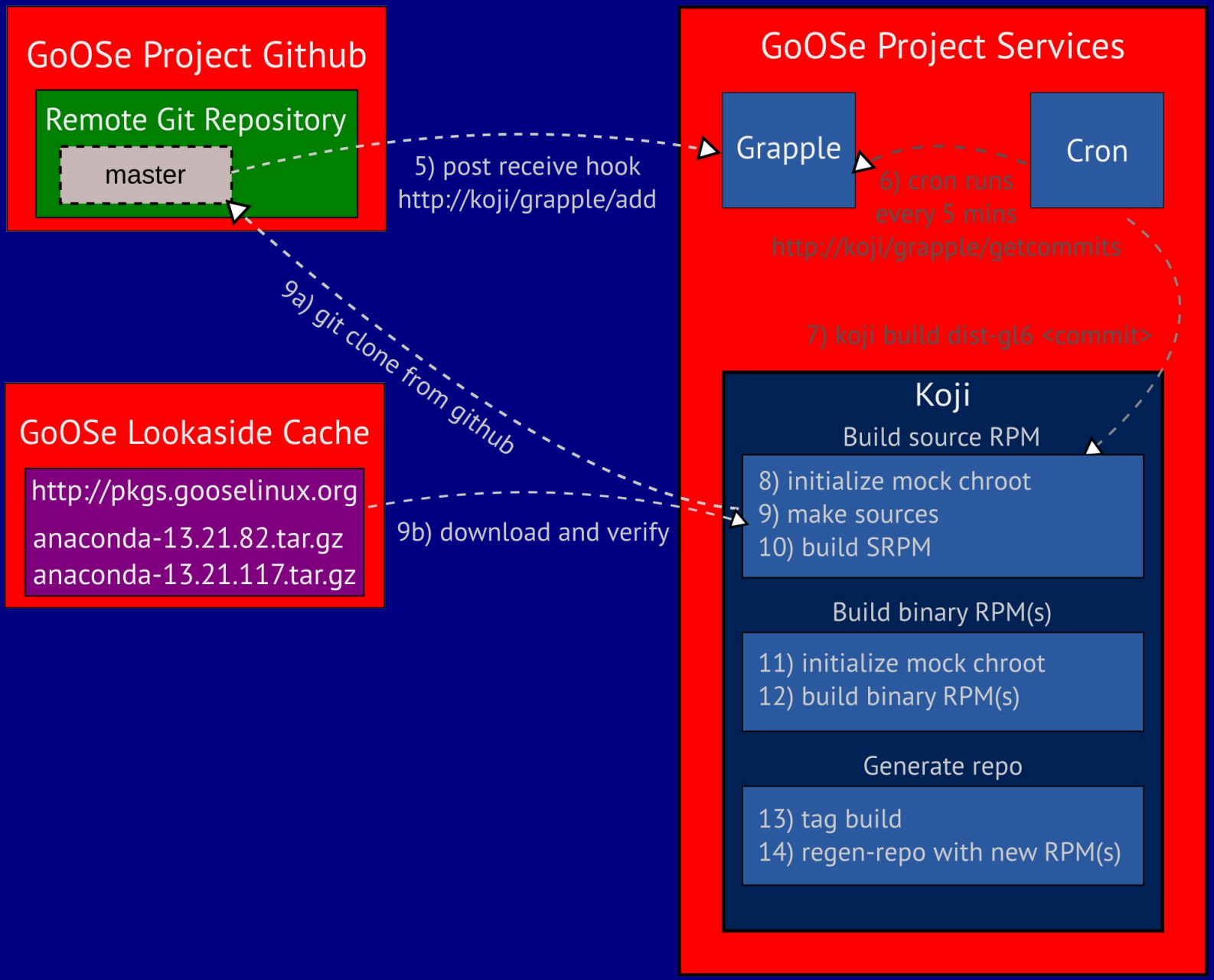
Forks from other projects

- Python-github2
- Python-github3 (soon)
- supybot-gribble / meetbot

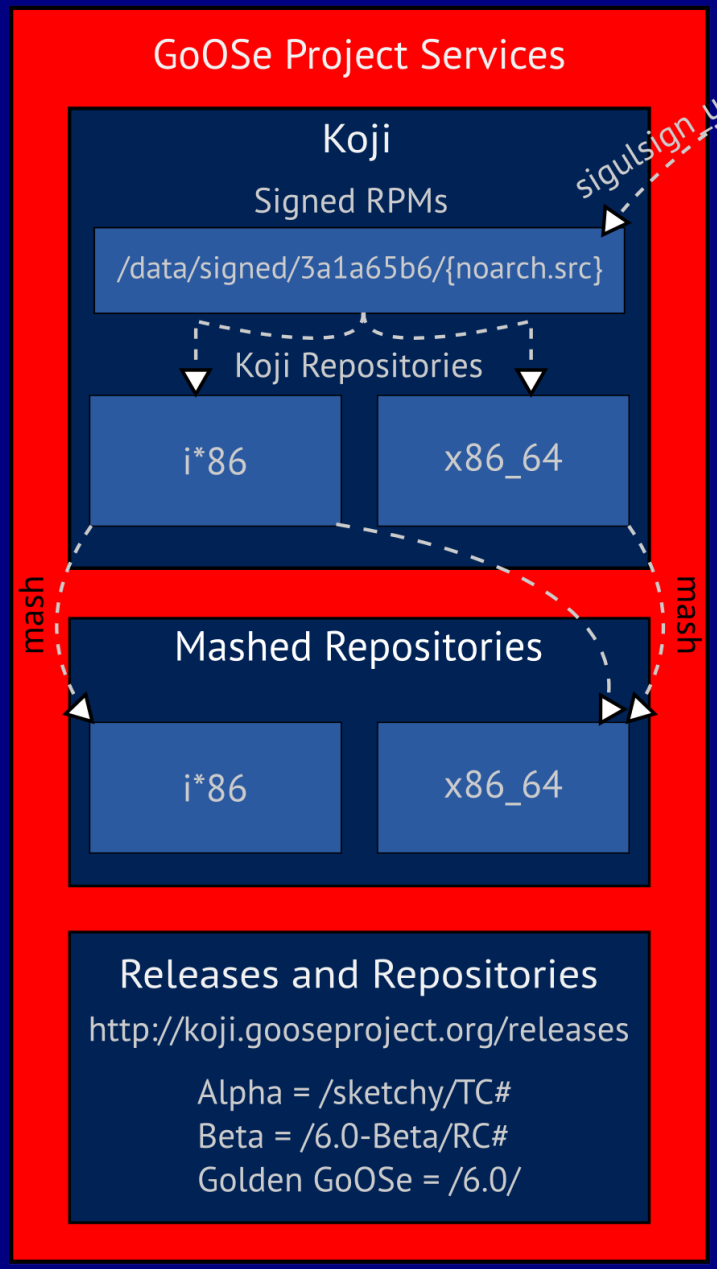
Building GoOSe Linux - Part I
Importing from Upstream

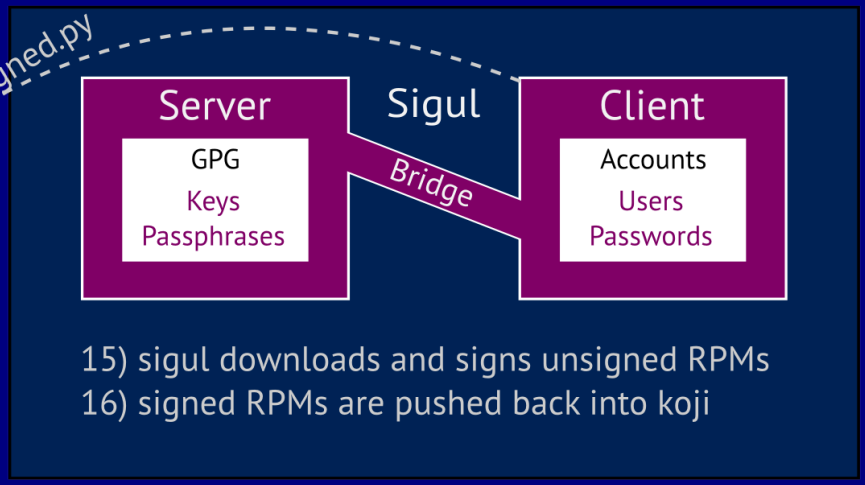


Building GoOSe Linux - Part II
How an RPM is built



Building GoOSe Linux - Part III
GPG Signing, Repo Mashing, ISO Creation





15) sigul downloads and signs unsigned RPMs
16) signed RPMs are pushed back into koji

Mash

17) mash creates published repositories.
comps xml defines package groups within repo.

Pungi

18) pungi uses the appropriate mashed repository and a kickstart file to create the installation ISO.

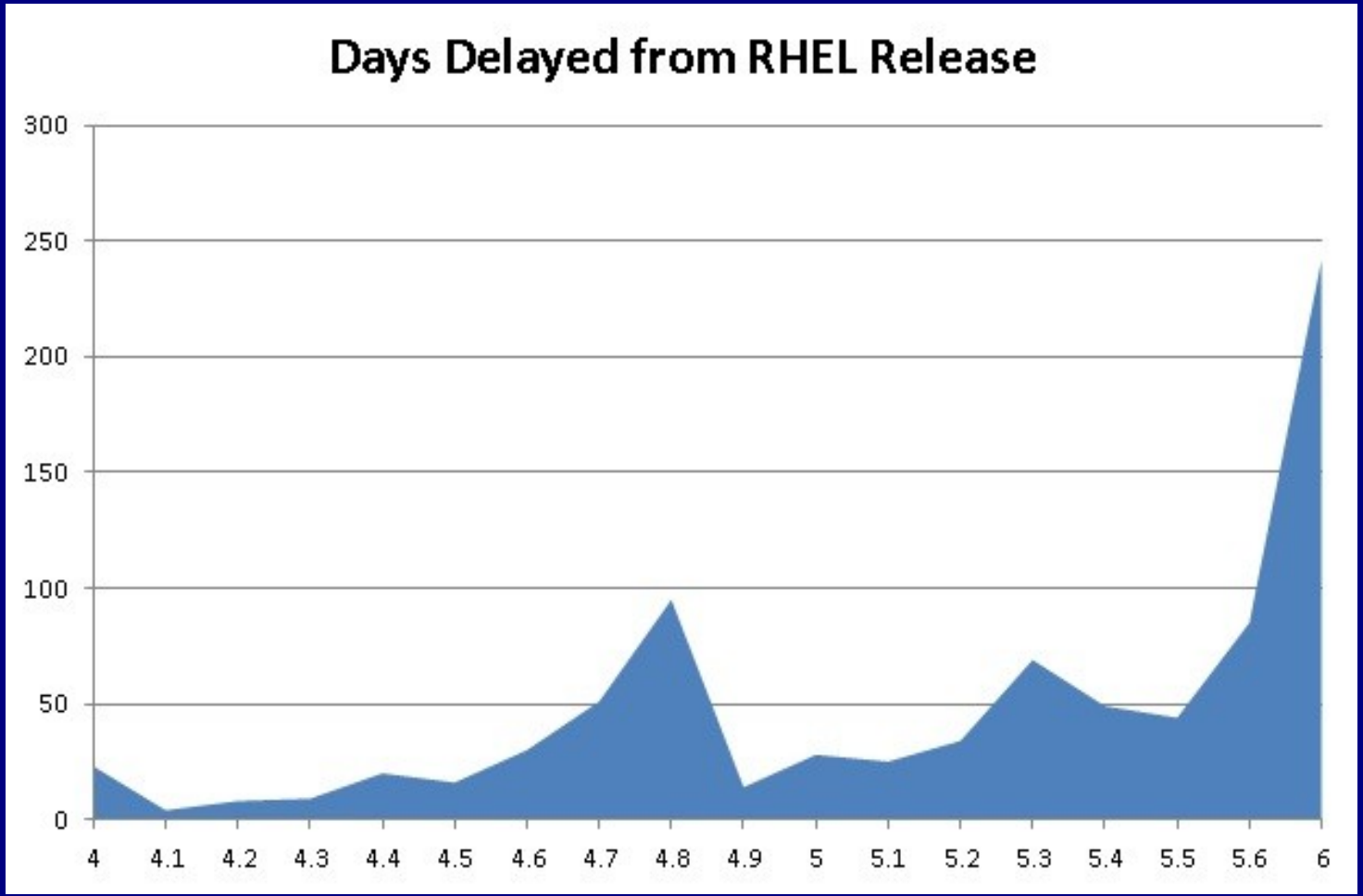
Why are you building

The GoOSe Project?

Doesn't CentOS* already do this?

Is there really a need?

* - Ask Scientific Linux, ClearOS, Acendos.
They likely have thought this through as well.



CentOS releases are becoming more time-consuming.

Image Credit: http://www.standalone-sysadmin.com/blog/2011/07/centos-6-great-but-for-how-long/

“No, no, you have it all wrong ! The C in CentOS means Closed ;-)”

-- Dag Wieers (Feb 16, 2011)

http://lists.centos.org/pipermail/centos-devel/2011-February/006644.html

What is going on here?

“CentOS is for the community ... it is not BUILT buy the community.” [sic]

-- Johnny Hughes (March 10, 2011)

http://lists.centos.org/pipermail/centos-devel/2011-March/007101.html

Something important is missing!

It is all about

The Community

A community of 'contributors'

Contributors are the key

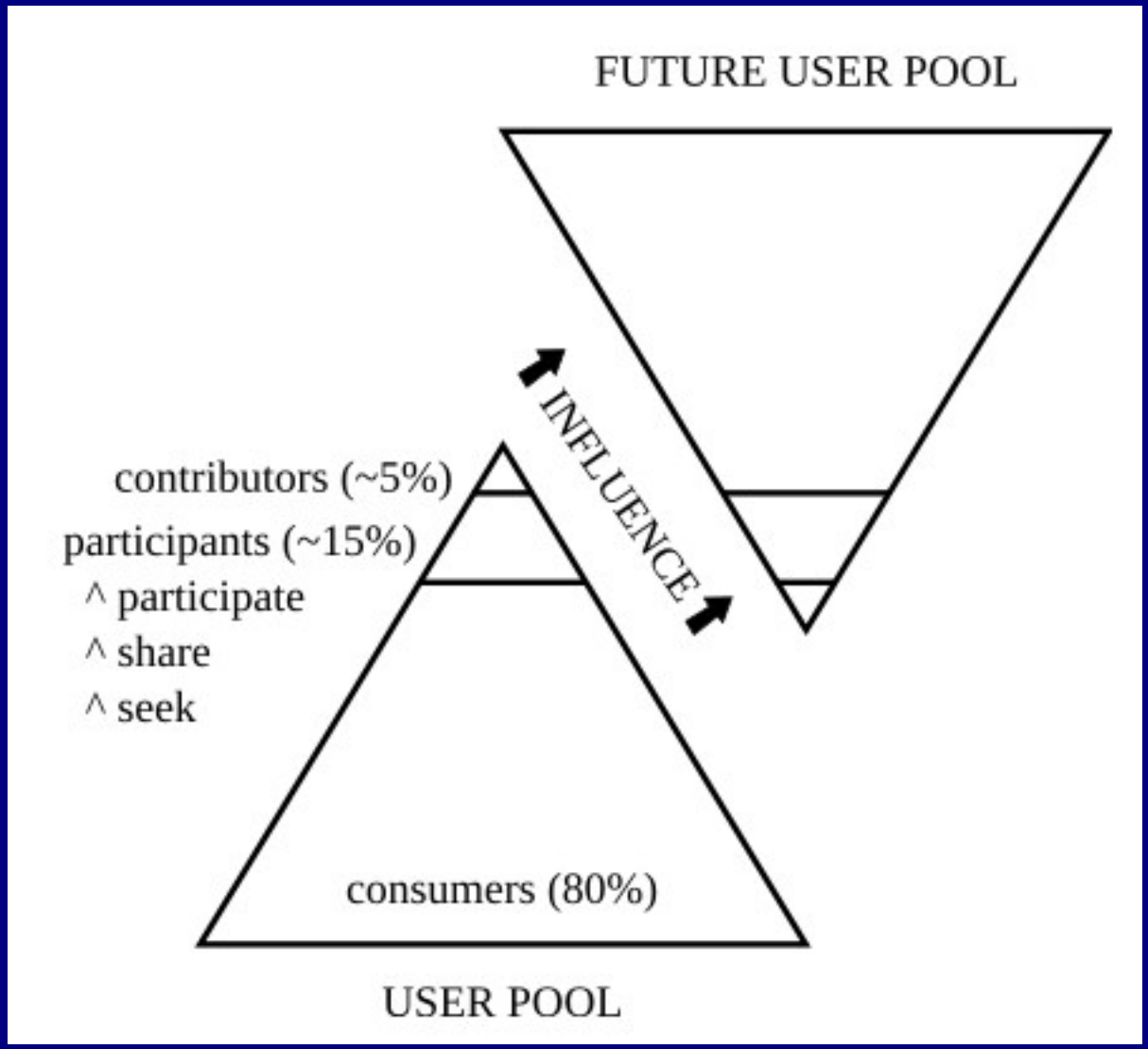


Image Credit: http://iquaid.org/2009/04/14/community-sets/

to successful communities

Mirroring of Upstream Sources

Collaboratively Creating Docs

Collaborating with other Enterprise Linux Rebuild projects

More Hands, Less Work

Makes it easier to do the hard stuff

Building QA Test Suites

Cross-project backups

Fork the gooseproject/main repository
And send us a pull request!

Join the GoOSe Project

We need your help!

How far have you gotten

One Year into the Project

Share your progress

We currently have 16

Contributors

Many are in #gooseproject every day

5 of which have made more than two commits

Much of our contribution has been in setup and configuration of toolsets like koji, mash, etc.

We have successfully built almost 2200

Most built without intervention, some were a lot more work

Packages

Patches to be sent upstream are tracked on github

Over 13000 rpms reside in our koji repository today

We have successfully performed 6 Alpha composes

Alpha ISOs are called 'sketchy'

ISOs

The latest (TC6) now has gpg signed RPMs

All ISOs are downloaded and tested

GoOSe 6.0 Beta is available today!

get.gooseproject.org

Download your copy now!

Thank you for your attention!

web: http://gooseproject.org
email: herlo@gooseproject.org
project url: http://github.com/gooseproject
irc.freendode.net: #gooseproject

Slides available @ http://speakerdeck.com/u/herlo/p/goose-linux-rebuilding-enterprise-linux