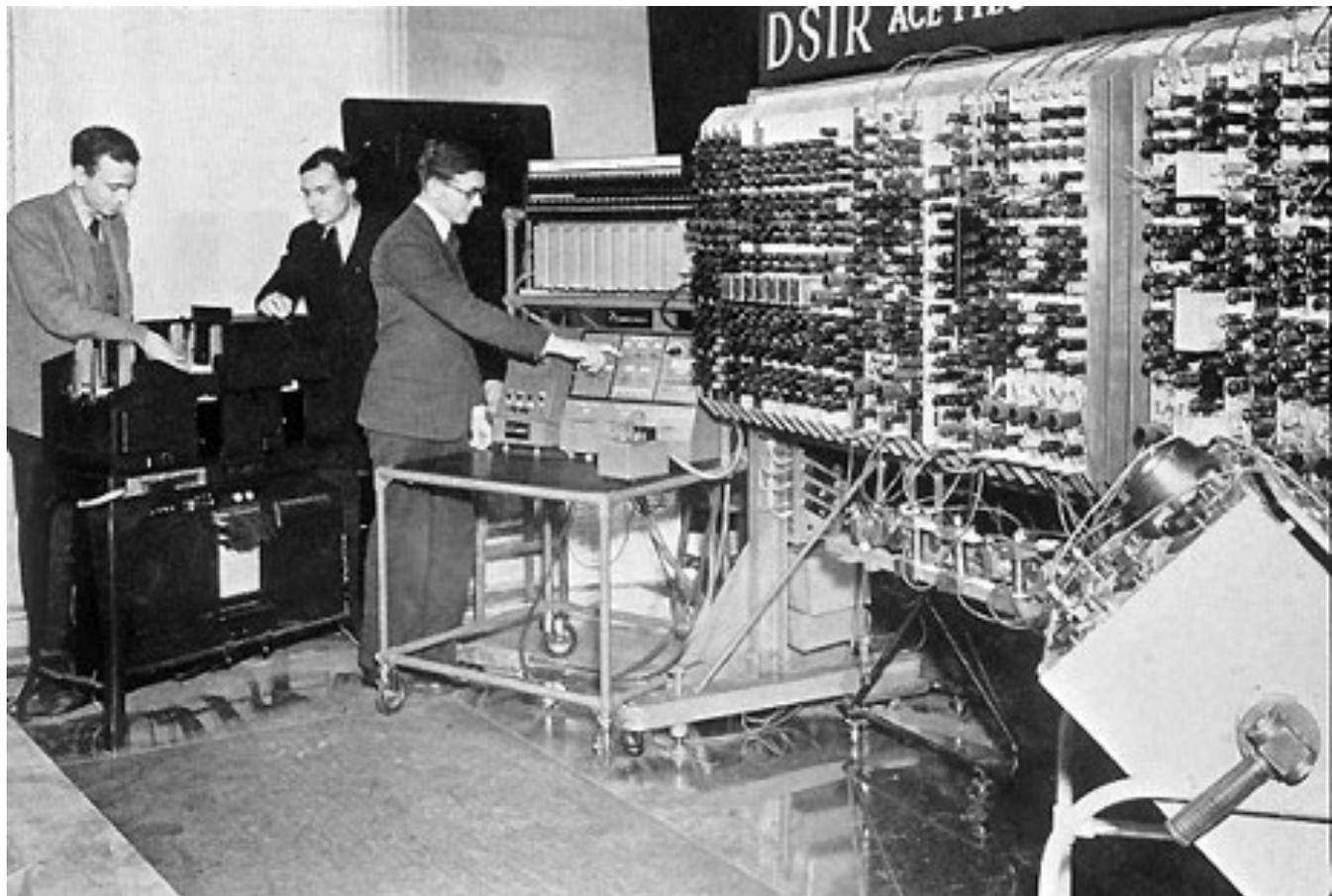


Upstream Open Source Networking Development The Good, The Bad, and the Ugly

Kyle Mestery
Justin Pettit
Russell Bryant

*A Long Time
Ago
In a Galaxy Not
So Far Away ...*



A Brief History of Networking



Fast Forward ...



The Wild West: Open Source Networking



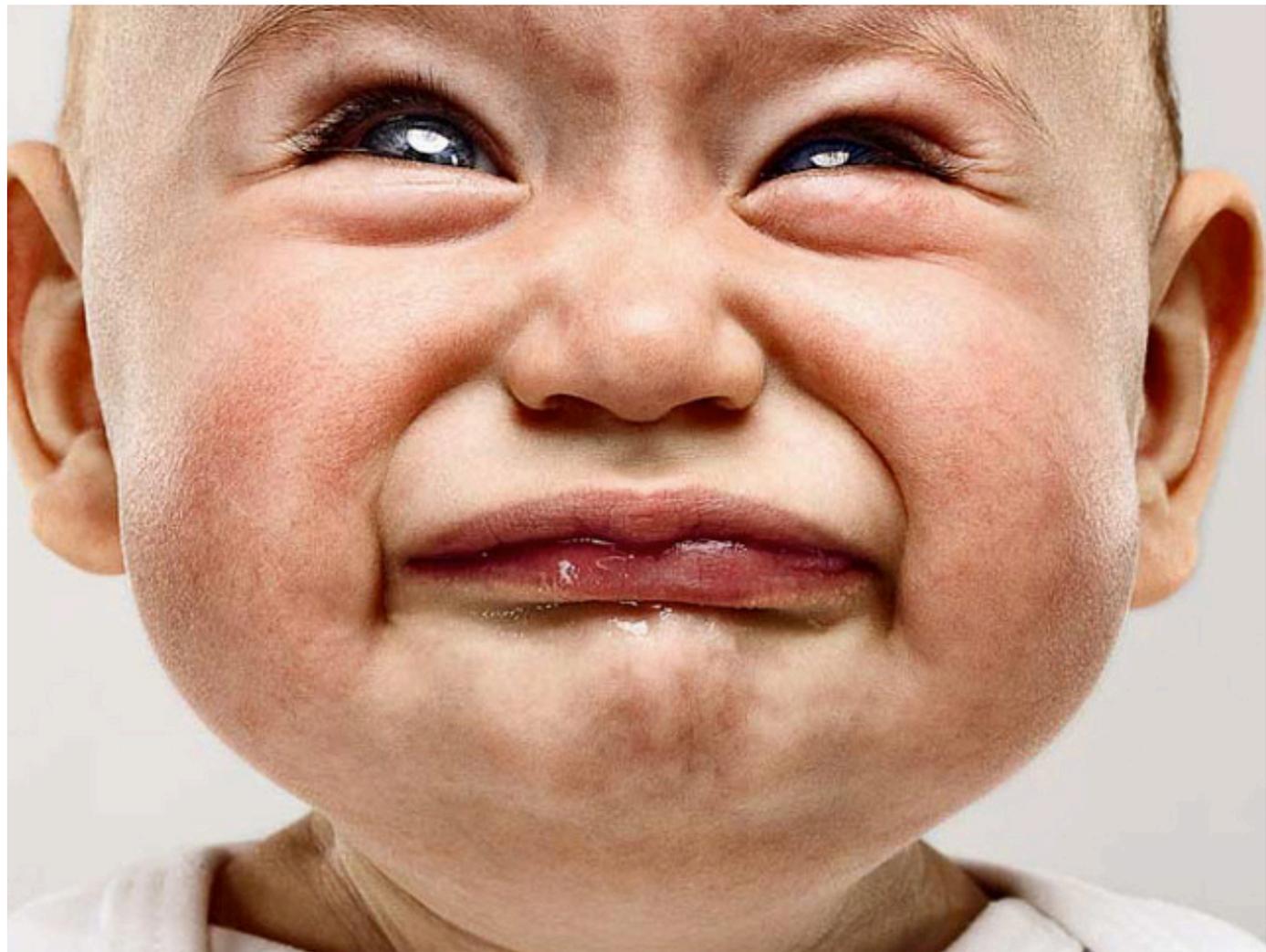
(Open Virtual Network)



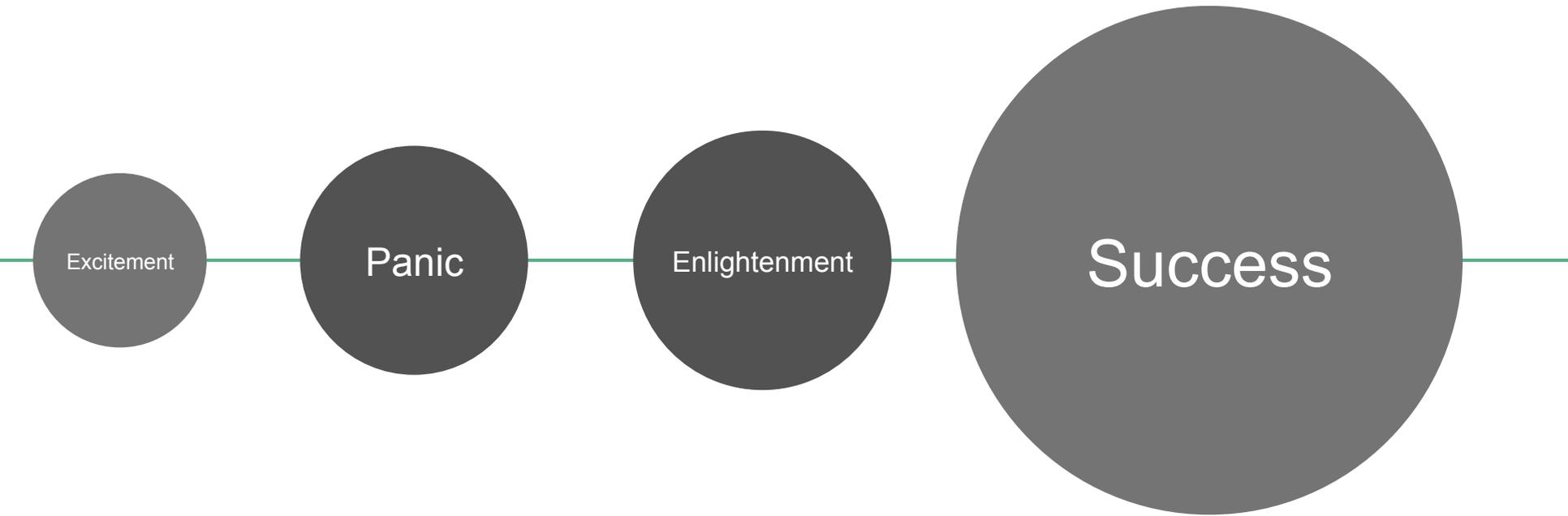
PROJECT
CALICO



Open Source Routing
A Project of The Network Device Education Foundation



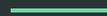
The Four Stages Of Open Source Networking Development



Contributing:



Two Ways



“I want to
contribute,
please help
me!”

“Your project is
too hard to
contribute to.”

“I want to
contribute,
please help
me!”

Open Source Projects need more than code!

- Documentation
 - QA
 - Infrastructure
 - Blogs
 - IRC
-

“I found a bug!”

“Your project
sucks, I found a
bug!”

“I found a bug!”

**Report the bug in the project's
bug tracker**

Include all relevant information

Include steps on how to reproduce

Wait

**Different projects work through
their bug backlog different ways**

**If no word heard after a week, poke
developers on IRC or the
mailing list**

“I found a bug
and I have a fix
for the bug!”

“You’re not
merging my bug
fix fast enough!”

“I found a bug
and I have a fix
for the bug!”

Report the bug in the project's bug tracker

Include all relevant information

Include steps on how to reproduce

Post the patch

**Ensure the patch passes whatever
CI the project uses**

**Respond in a timely manner to
comments the patch receives**

“I have a fancy
new feature,
can I contribute
it?”

“You must
accept my new
feature!”

“I have a fancy
new feature,
can I contribute
it?”

Add the feature to the project's roadmap

- **Projects track these in different ways**
 - **Is the project interested?**
 - **Does it align with the project's goals?**
 - **Is it within scope of the project?**
-

“I have a great project idea! Let's work together to figure out how to address common goals.”

“I have a great project idea! Can I replace you entirely but still be considered part of the same community?”

“I have a great project idea! Let's work together to figure out how to address common goals.”

Evaluate how your project idea can fit with the existing project

Does it overlap?

Does it provide extra value?

Can something be abstracted?

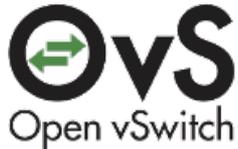
Is the community interested?

Does it fit the communities goals?

Do you have a plan for testing, documentation and support?

Comparing Open Source Contributions: Open vSwitch, Neutron, and OpenDaylight

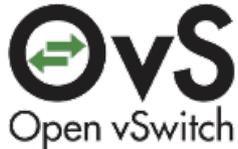
Infra and Docs

Project	Infra	Docs	New Contributors Docs
 Open vSwitch	github	Combination of webpages and in-tree docs	<u>Yes</u>
 openstack. CLOUD SOFTWARE	OpenStack gerrit	Mostly in-tree docs and devref, some wiki articles remain	<u>Yes</u>
 OPEN DAYLIGHT	OpenDaylight gerrit	Wiki articles	<u>Yes</u>

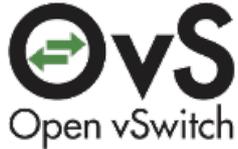
I Want to File a Bug

Project	Where To Go	Where Bug Tracked	Notes
 <p>OvS Open vSwitch</p>	Mailing list	Mailing list and github issues	Mailing list is the primary location
 <p>openstack. CLOUD SOFTWARE</p>	Launchpad	Launchpad	If filing for a neutron sub-project, may need to use different Launchpad project
 <p>OPEN DAYLIGHT</p>	Wiki	Bugzilla	Need to select correct project to file bug in

I Want to Add a Feature

Project	Where To Go	Where Feature Is Tracked	Notes
 Open vSwitch	Mailing list	Mailing list	Make use of the ML for feature addition requests
 openstack CLOUD SOFTWARE	Neutron docs	Launchpad as an RFE bug and neutron-specs git repository	RFE process is documented well, but may take time to complete
 OPEN DAYLIGHT	Part of existing project use ML. If new, propose project .	ML, wiki, and IRC meetings.	New project or part of existing one? The choice is yours.

Project Evolution

Project	Started	Evolved To	Foundation
 <p>Open vSwitch</p>	Small core group of contributors	Taking on a new project (OVN), growing slowly but surely	No foundation*
 <p>openstack CLOUD SOFTWARE</p>	Rough consensus of many disparate groups into one codebase	Focused group of repositories	OpenStack Foundation
 <p>OPEN DAYLIGHT</p>	Many separate groups under the same large umbrella	More and more projects and repositories	Linux Foundation

Practical Advice on Succeeding Upstream



PLAN AHEAD
D.

Respect

GIVE IT



TO GET IT

LYRICS TO LIVE BY:

— *#329* —

**“IF YOU GIVE A LITTLE LOVE, YOU CAN
GET A LITTLE LOVE OF YOUR OWN.”**

NOAH AND THE WHALE, GIVE A LITTLE LOVE

little ♥ ♥
♥ ♥ things

*Empower your Open
Source Developers!*





Thank you!