Building a profitable business around your open source project

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@hackerkid

- Software Engineer at Zulip (2017 -)
- Mentor in Google Summer of Code

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- Popular open source business models.
- Introduction to Zulip and history.
- Zulip's business model.
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Why open source projects needs a business model?

- Maintainers need to spend a significant amount of time reviewing pull requests, working on new issues etc.
- Hard to manage when you are working on a full time job.

- You can't rely only on unpaid volunteers to drive the development of the project.
- Most big open source projects needs multiple people working on it full time to be successful.
- And to hire them you need a sustainable source of income.

For example, most of the Linux Kernel contributors are employed by companies like Intel, Red Hat, Samsung etc to contribute to kernel full time.

Also, the revenue incentivizes you to work on the project more and make it even better.

If it’s not fun anymore, you get literally nothing from maintaining a popular package.

Dominic Tarr
@dominictarr

Having a sustainable source of revenue help you plan ahead of time.

Also helps you compete with proprietary software projects from big companies by hiring better engineers.

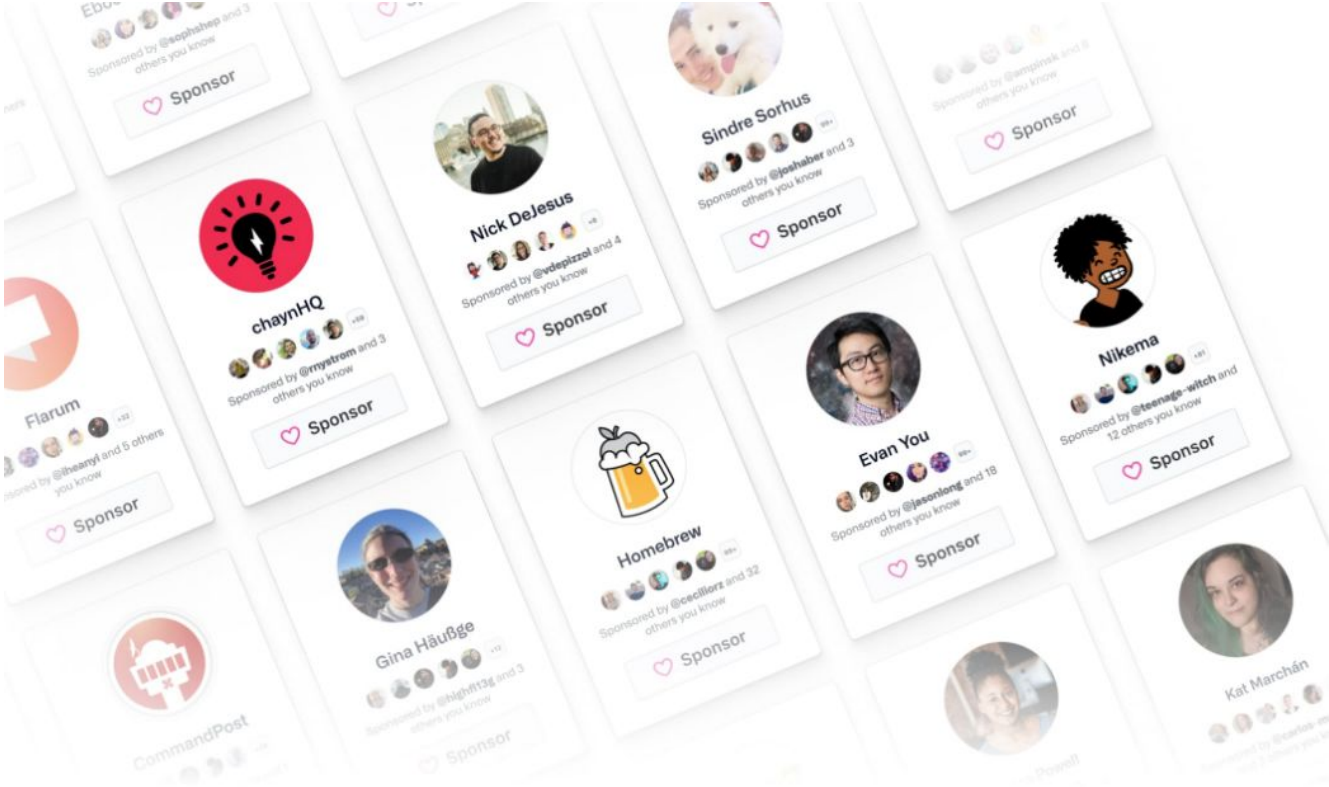
Revenue can be also used as a good matrix of how well the project is doing.

GitHub stars doesn't convey much other than popularity.

Common Open Source Business Models

Donations

Accept recurring or one time donations from users.



GitHub sponsors

Pros

- Super easy to set up.
- No additional effort required for making this work.

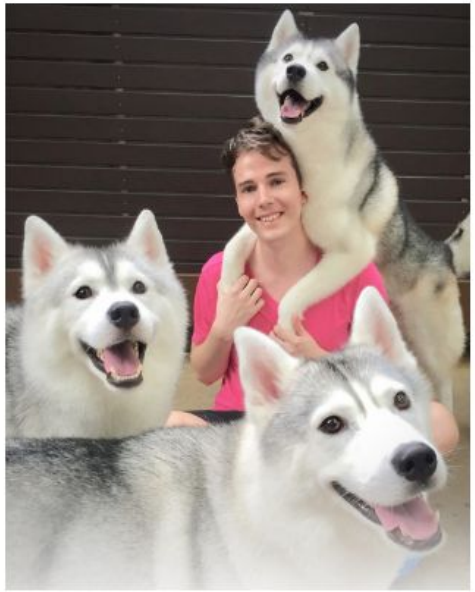
Cons

Very little money in donations.

Hard to convince companies to donate than buying the software.

About Sindre Sorhus

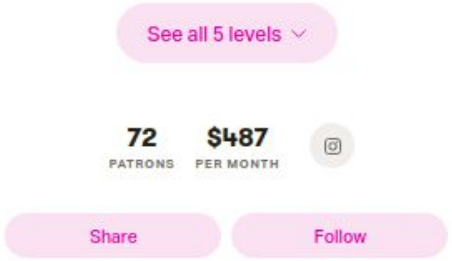
Hey, I'm Sindre 🦄



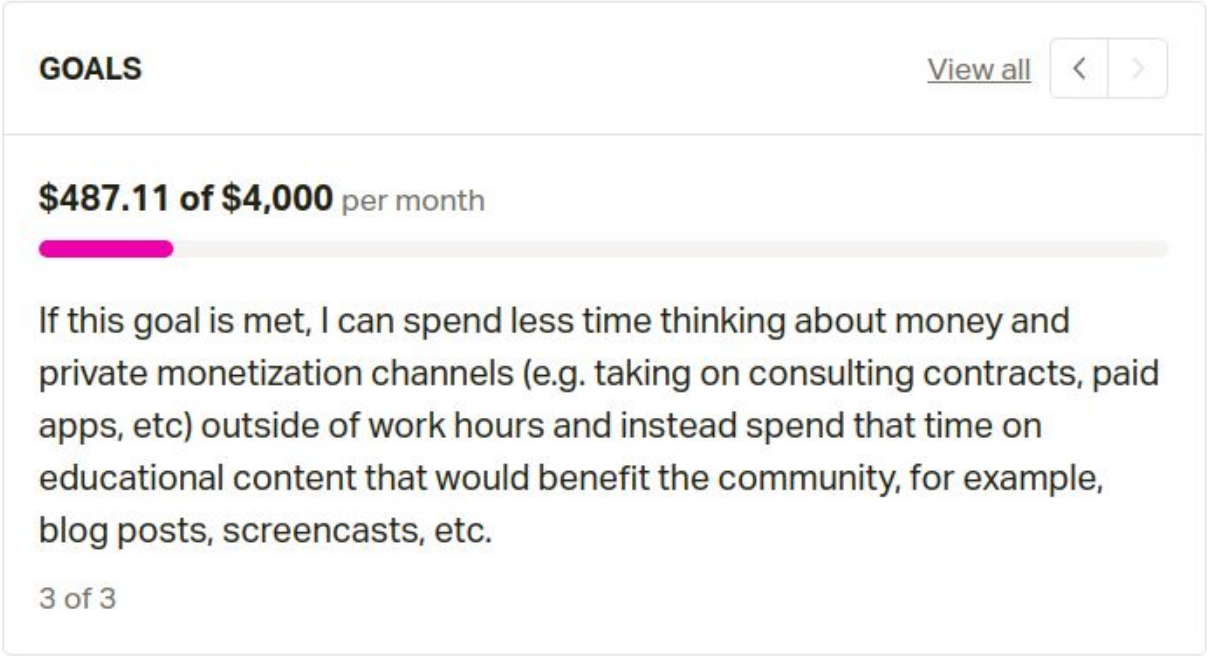
I love open source. For more than 4 years I've been working on open source full-time, 8-12 hours a day, while living off savings. I'm on Patreon now as my savings are slowly running out and I need your help to continue my open source efforts.

I actively maintain 1100+ npm packages (2 billion downloads a month) and many popular projects. You're probably depending on some of my packages in your dependency

Show more



$487/72 = $6.76 per contributor



210 sponsors

Approximate revenue

$487 (Patreon)

+

$6.76 * 210 (GitHub sponsors)

=

$1888.96 < $4,000

Open Core

- Core functionality is available for free and open source.
- Additional features are released as paid proprietary software.

GitLab Community Edition

GitLab Community Edition (CE) is an open source end-to-end software development platform with built-in version control, issue tracking, code review, CI/CD, and more. Self-host GitLab CE on your own servers, in a container, or on a cloud provider.

Star 4786 HTTPS https://gitlab.com/gitlab-or

Files (3.5 GB) Commits (78,582) Branches (1,843) Tags (793) Readme Changelog MIT License Contribution guide CI/CD configuration

master gitlab-ce History Find file

Merge branch '5594-geo-add-repository-verification-failures-to-api' into 'master'
Douglas Barbosa Alexandre authored 5 hours ago

b60364c0

Name	Last commit	Last update
.github	Address feedback about wording.	2 years ago

- Valued over $6 Billion.
- 1000+ employees
- VC funded

Some other notable companies

- Neo4j
- Redis
- Elastic
- MySQL
- Cassandra

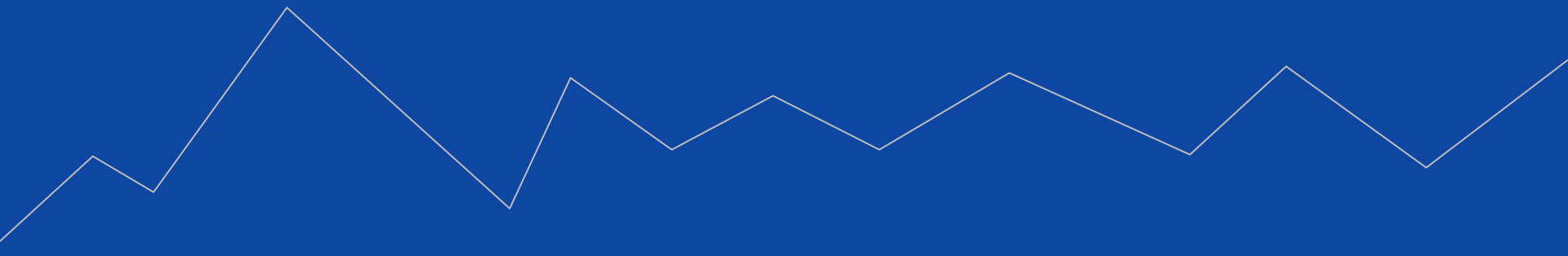
Pros

- Easy to scale with more customers.
- Possibility to charge per user in a company. (Additional revenue without any marketing or sales)
- Recurring revenue.

Cons

- Not really open source.
- Disincentivized to add important features to the open source version.

SaaS
(Software as a Service)



- Charge customers for hosting the online web service of the product.
- Typically also provides customer support
- Usually prioritizes feature requests from paying customers.

Companies

—

- Zulip
- Automattic ($3 billion valuation)
- Ghost.org (Non profit)
- Sentry ($100 million+ valuation)

Pros

- Recurring revenue
- Easy to scale to large number of customers.
- Can charge per user.
- Aligned with the development of the open source project.

Cons

- Other companies can offer the SaaS offering of your open source project.
- Sometimes it's hard to convince users to pay for the SaaS service than hosting it by themselves.

November 6, 2019

Re-Licensing Sentry

DAVID CRAMER

More than a decade ago, a small piece of code that would eventually be called Sentry was born. When I wrote this code, I didn't know much about open-source, so when it came down to licensing, I just grabbed the first reasonable suggestion thrown my way. That suggestion happened to be the BSD 3-Clause License.

Fast forward to today, and a lot has changed. Sentry is far more than that original 70-line snippet; it's a complex product made up of millions of lines of code that is used by tens of thousands of businesses around the world. It's also no longer a personal project; it now employs nearly 100 individuals who depend on it for their livelihood.

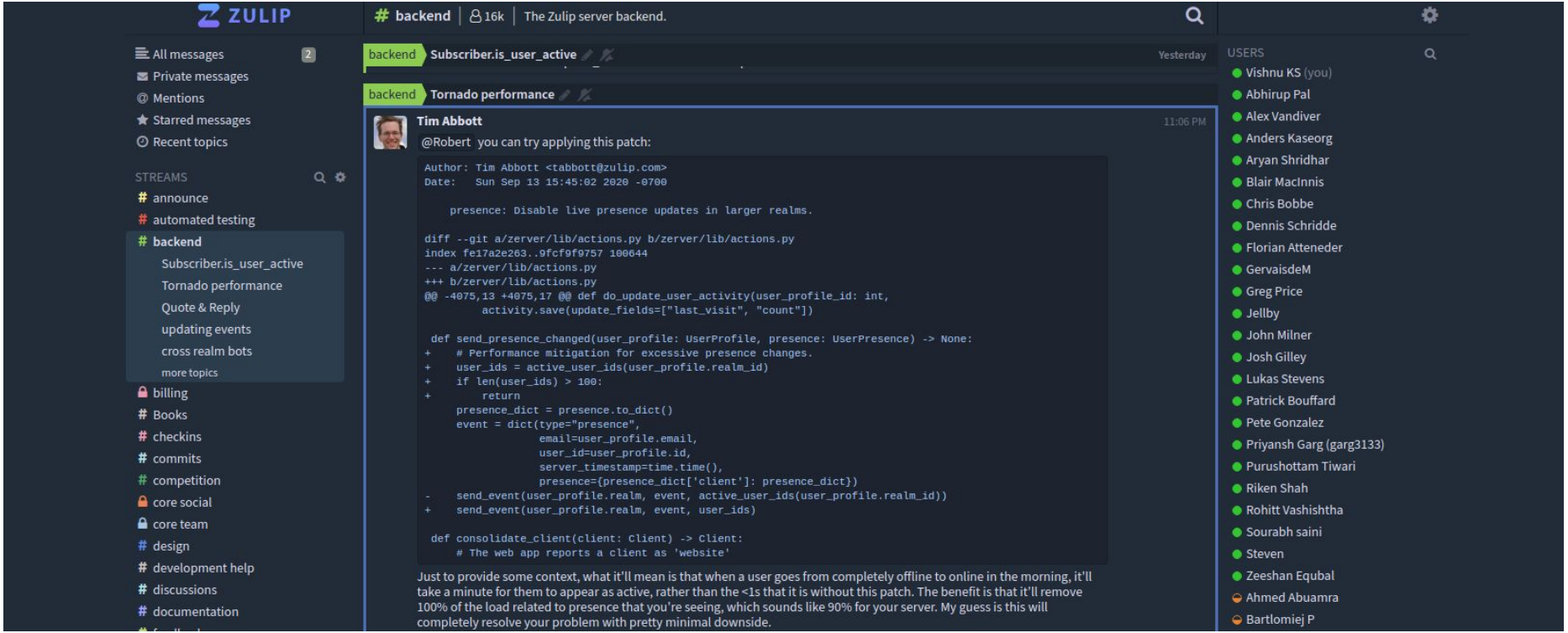
Sentry – both the project and the company – is large enough now to question whether the licensing decision made 11 years ago was the right one.

For example, this past year, we've had to deal with funded businesses **plagiarizing or copying our work** to directly compete with Sentry. This has included **taking marketing content from our website, plagiarizing our documentation** and framing it as their own, or **straight-up copy/pasting** our product visuals.

Sentry has now moved it's projects to **Business Source License** from Apache 2.0, MIT and BSD 3-Clause.

- You cannot offer a commercial version of Sentry’s service (the license grant restriction)
- After 36 months, the code becomes Apache-2.0 licensed (the conversion period)

- Zulip is an open source group chat application.
- Focuses heavily on topics.

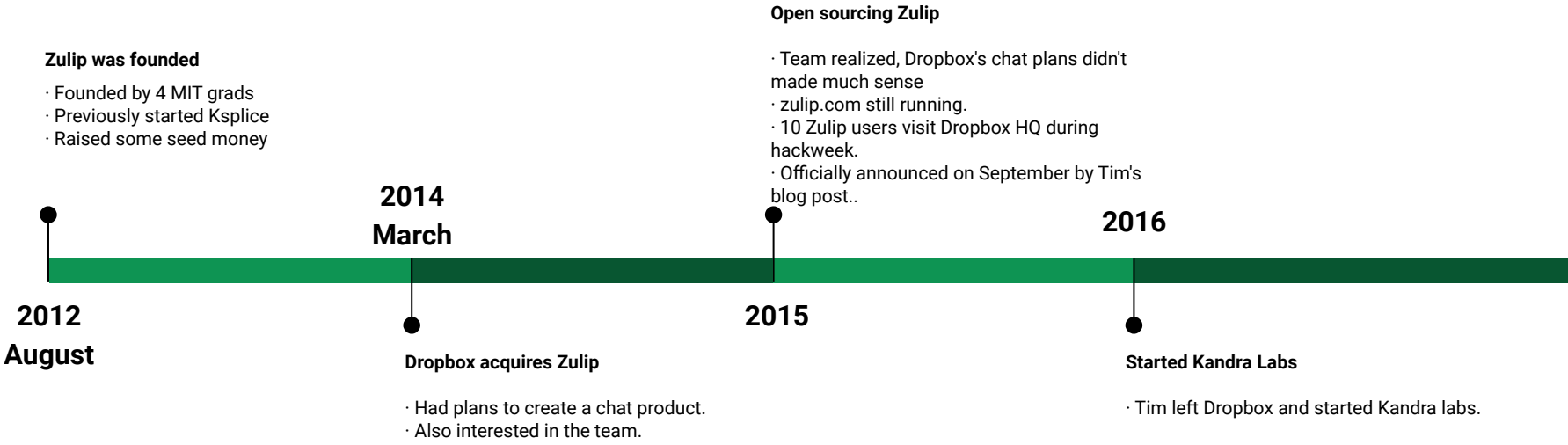

ZULIP
backend | 16k | The Zulip server backend.
All messages 2
Private messages
Mentions
Starred messages
Recent topics
STREAMS
announce
automated testing
backend
Subscriber.is_user_active
Tornado performance
Quote & Reply
updating events
cross realm bots
more topics
billing
Books
checkins
commits
competition
core social
core team
design
development help
discussions
documentation
backend Subscriber.is_user_active Yesterday
backend Tornado performance
Tim Abbott 11:06 PM
@Robert you can try applying this patch:
Author: Tim Abbott <tabbott@zulip.com>
Date: Sun Sep 13 15:45:02 2020 -0700
presence: Disable live presence updates in larger realms.
diff --git a/zerver/lib/actions.py b/zerver/lib/actions.py
index fe17a2e263..9fcf9f9757 100644
--- a/zerver/lib/actions.py
+++ b/zerver/lib/actions.py
@@ -4075,13 +4075,17 @@ def do_update_user_activity(user_profile_id: int,
activity.save(update_fields=["last_visit", "count"])
def send_presence_changed(user_profile: UserProfile, presence: UserPresence) -> None:
+ # Performance mitigation for excessive presence changes.
+ user_ids = active_user_ids(user_profile.realm_id)
+ if len(user_ids) > 100:
+ return
presence_dict = presence.to_dict()
event = dict(type="presence",
email=user_profile.email,
user_id=user_profile.id,
server_timestamp=time.time(),
presence={presence_dict['client']: presence_dict})
- send_event(user_profile.realm, event, active_user_ids(user_profile.realm_id))
+ send_event(user_profile.realm, event, user_ids)
def consolidate_client(client: Client) -> Client:
# The web app reports a client as 'website'
Just to provide some context, what it'll mean is that when a user goes from completely offline to online in the morning, it'll take a minute for them to appear as active, rather than the <1s that it is without this patch. The benefit is that it'll remove 100% of the load related to presence that you're seeing, which sounds like 90% for your server. My guess is this will completely resolve your problem with pretty minimal downside.
USERS
Vishnu KS (you)
Abhirup Pal
Alex Vandiver
Anders Kaseorg
Aryan Shridhar
Blair MacInnis
Chris Bobbe
Dennis Schridde
Florian Atteneder
GervaisdeM
Greg Price
Jellby
John Milner
Josh Gilley
Lukas Stevens
Patrick Bouffard
Pete Gonzalez
Priyansh Garg (garg3133)
Purushottam Tiwari
Riken Shah
Rohitt Vashishtha
Sourabh saini
Steven
Zeeshan Equbal
Ahmed Abuamra
Bartlomiej P

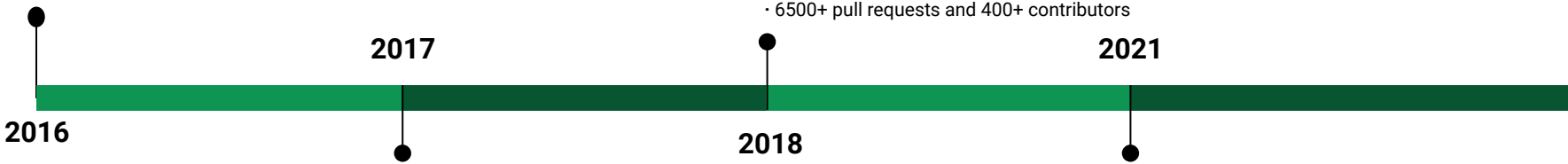
- Clients in Windows, Linux, Mac, Android, and iOS
- Either self host the Zulip server or use the SaaS offering in zulip.com

History

```
commit ea43d2e40e59cb0240ea362fe30f9a435a4a2a1f
Author: Tim Abbott <tabbott@zulip.com>
Date:   Tue Aug 28 12:41:50 2012 -0400

    Initial commit of sqlalchemy models.

    (imported from commit 8f4763da55bd3f2bbea090d196c6d7850e2b2c71)

diff --git a/models.py b/models.py
new file mode 100644
index 0000000000..8462595e16
--- /dev/null
+++ b/models.py
@@ -0,0 +1,142 @@
+from sqlalchemy import create_engine
+engine = create_engine('sqlite:////tmp/humbug.db', echo=False)
+from sqlalchemy import Column, Integer, String, ForeignKey
+from sqlalchemy.ext.declarative import declarative_base
+Base = declarative_base()
+
+class User(Base):
+    __tablename__ = 'users'
+
+    id = Column(Integer, primary_key=True)
+    username = Column(String)
+    realm_id = Column(Integer)
+    email = Column(String)
+    password = Column(String) # obviously going to be replaced with Django stuff here
+
+    def __init__(self, username, realm_id, email, password):
+        self.username = username
+        self.email = email
+        self.realm_id = realm_id
+        self.password = password
+
```

History of Zulip Inc





Tim started Kandra Labs

- Hired Christie to improve documentation.
- Hired Sumana to build community.
- Rishi, Steve joined full time in Engineering.
- Started process to acquire trademarks.
- Participated in Google Summer of Code
- Received SBIR grant.

Re launched zulip.com

- 1000+ PRs/150+ contributors
- SaaS offering and Enterprise contracts
- Largest PyCon sprint ever in Portland with 75+ contributors
- Google Code in, Outreachy and GSoC

Started charging customers

- Started charging customers for SaaS Standard plan.
- 4x year over growth in daily active users.
- Participated in GSoC and GCI.
- 6500+ pull requests and 400+ contributors

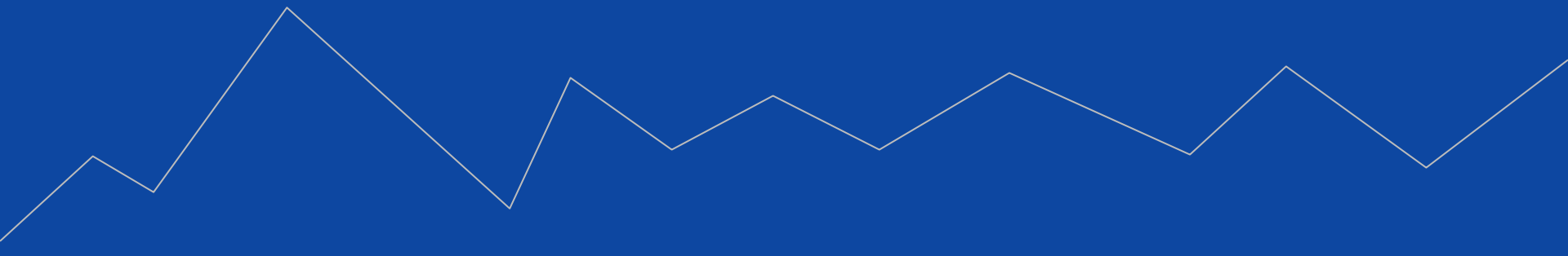
Current state

- 11000+ pull requests.
- 650+ contributors
- 10 full time employees.

Zulip Sprint in Pycon 2017, Portland

zulip
zulip

Zulip Business Model



SaaS

Free plan

- Limited storage (5GB for entire organization)
- Limited message history (10k messages)
- Some enterprise features like guest users, user groups etc are limited.

SaaS

Standard plan

- $8/user/month or $80/user/year
- No message history limit
- Increased storage (10GB per user)
- Full access to enterprise features.
- Priority support

- Free for open source projects and events.
- Heavily discounted (85% - 100%) for
    - Educational institutions
    - Non profits
    - Group of friends
    - etc

Enterprise support for on premise installations

- Support response SLAs
- High availability assistance
- Input to Zulip roadmap

Charging for the push notification forwarding service

- iOS and Android apps will only allow trusted servers mentioned in the app to send push notification.
- This means self hosted servers have to recompile the app and publish it on their own.
- As a better alternative, Zulip runs a central push notification forwarding service on behalf of self hosted servers.
- We currently give away the service for free, but has plans to charge companies which sends a lot of push notifications.

Grants

Zulip has received nearly 1 million dollars in **SBIR** grants from the **US National Science Foundation**.

SBIR
America's Seed Fund

Donations

- Has GitHub sponsors enabled.
- Not much success from the model.

Consulting

- We often get requests to customize Zulip specifically for a company.
- But have not pursued that direction since it's not aligned with best interest of open source project.
- Also super hard to scale since the company specific customizations in most cases are useless for other customers.

Questions?