

Scaling Typekit: Infrastructure for Startups

paulhammond.org/2012/startup-infrastructure

Hello!!



Paul Hammond

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twitter.com/ph

"If I could offer you only one tip for the future, sunscreen would be it. The long-term benefits of sunscreen have been proved by scientists, whereas the rest of my advice has no basis more reliable than my own meandering experience."

Mary Schmich

Chicago Tribune, June 1, 1997

<http://www.chicagotribune.com/news/columnists/chi-schmich-sunscreen-column,0,4054576.column>

“Infrastructure for Startups”

Infrastructure /'ɪnfrəˌstrʌktʃə(r)/ *n.*

I. basic structural foundations of a
society or enterprise

start-up /'stärt-,əp/ *n.*

1. the act or an instance of setting in operation or motion

2. a fledgling business enterprise

"A startup is a human institution designed to deliver a new product or service under conditions of extreme uncertainty"

Eric Ries

<http://www.startuplessonslearned.com/2010/06/what-is-startup.html>

"A startup is an organization formed to search for a repeatable and scalable business model"

Steve Blank

<http://steveblank.com/2010/01/25/whats-a-startup-first-principles/>

**A startup is a group of people
trying to find a way to make money**

**A startup is a group of people
who have borrowed some money
to find a way to make money**

**A startup is an exercise in
effective debt management**

Rule I:

Don't run out of money.

"A good rule of thumb is multiply the number of people on the team by \$10k to get the monthly burn"

Fred Wilson, Union Square Ventures

www.avc.com/a_vc/2011/12/burn-rates-how-much.html

Employees are the biggest cost to a startup.

Rule 2:

Your time is valuable. Don't waste it.

Types of startup

1. **Big company internal startups**
2. **Venture funded startups**
3. **Bootstrapped startups**

Types of startup

1. ~~Big company internal startups~~
2. Venture funded startups
3. Bootstrapped startups

**If you're building an internal startup at a big company then use existing infrastructure.
If it's not good enough, make it better.**

Possible startup outcomes

- 1. Become a self-sustaining business**
- 2. Get acquired**
- 3. Fail**

Types of acquisition

1. Technology acquisition
2. Product acquisition
3. Talent acquisition

Most startup infrastructure is temporary

"Technical debt"

“Technical debt is bad. You need to have a mechanism for dealing with it and if you don’t your systems will grind to a halt”

Some guy on the internet

"Shipping first time code is like going into debt. A little debt speeds development so long as it is paid back promptly with a rewrite."

Ward Cunningham, OOPSLA 1992

c2.com/doc/oopsla92.html

"I thought borrowing money was a good idea, I thought that rushing software out the door to get some experience with it was a good idea."

Ward Cunningham, 2009

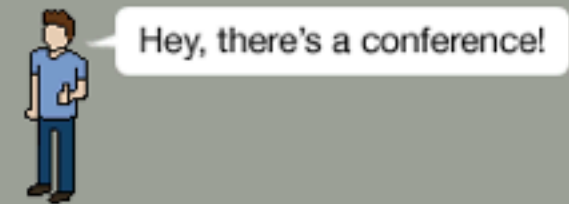
c2.com/cgi/wiki?WardExplainsDebtMetaphor

**A startup is an exercise in
effective debt management**

Small Batch, Inc.

start

Let's start a company!



Who's responsible?



Jeffrey Veen
Designer, Author,
and Entrepreneur



Bryan Mason
COO, Adaptive Path



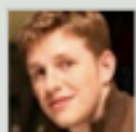
Who's speaking?



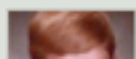
George Oates
Conference co-host
and Designer, Flickr



Evan Williams
Founder, Blogger
and Twitter



Matt Mullenweg
Founder, WordPress



Merlin Mann

Quit your day job.

Start is a one-day conference in San Francisco designed for **smart, talented Web people** to take hold of their ideas, follow their dreams, and start their own companies.

You'll hear from founders of **successful startups**, and learn from investors, lawyers, and others who can outline potential pitfalls. They'll give you **practical advice**, tell their **horror stories**, and **maybe lend you a little inspiration**. If you've ever dreamt of taking the plunge, don't miss this chance to hear from the experts!

What you'll learn

- ➔ **Where to start.** Hear how founders got started, where they screwed up, and why they kept going.
- ➔ **What you need.** Hiring? Firing?!? Who's watching the books? Do you really need a lawyer?
- ➔ **How to pitch.** Hear some of the web's most formidable entrepreneurs giving their best five-minute pitches. Then learn to hone yours.

When? Where?



August 7, 2008

[View the day's schedule.](#)



Cowell Theater, Fort Mason
San Francisco, CA

Cowell Theater is a wheelchair accessible facility.

[Map and directions](#)



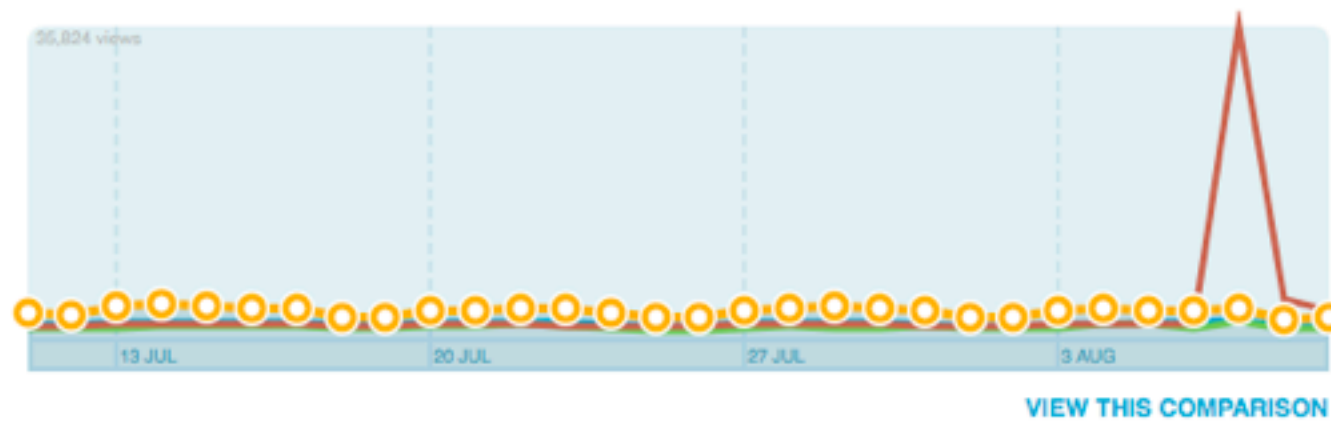
Who's sponsoring?



Lesson:

**Look an excuse to build
the infrastructure you need**

Who's more popular on Wikipedia? **Safari**, **Firefox**, **Internet Explorer**, or **Opera**



Trending Topics: August 9, 2009

- ▲ 5,795,100% Typhoon Morakot (International designation: 0908, JTWC designation: 09W, PAGASA name: Kiko) was the deadliest typhoon to impa... [more](#)
- ▲ 277% **UFC 105** is an upcoming mixed martial arts event to be held by the Ultimate Fighting Championship (UFC) on November 14, 2009 i... [more](#)
- ▲ 269% **UFC 106** is an upcoming mixed martial arts event to be held by the Ultimate Fighting Championship (UFC) on November 21, 2009 i... [more](#)
- ▲ 264% **UFC 108** is an upcoming mixed martial arts event to be held by the Ultimate Fighting Championship (UFC) on January 2, 2010 in... [more](#)
- ▲ 264% **UFC 107** is an upcoming mixed martial arts event to be held by the Ultimate Fighting Championship (UFC) on December 12, 2009 i... [more](#)

Most Read: last 30 days

- 1 **Solar eclipse of July 22, 2009**
1,071,551 views
- 2 **Erin Andrews**
830,878 views
- 3 **John Dillinger**
728,710 views
- 4 **Wikipedia:About**
643,023 views
- 5 **Transformers: Revenge of the Fallen**
640,707 views
- 6 **Selena Gomez**
625,068 views
- 7 **Green roof**
600,245 views
- 8 **Demi Lovato**
593,091 views
- 9 **Entourage (TV series)**
527,265 views
- 10 **Miley Cyrus**

Lesson:

**Look for isolated places
to test new technology**



PUBLIC

Introducing Typekit

May 27, 2009



When we started Small Batch Inc. last year, our goal was to explore what's now possible on the web. That exploration has taken many shapes: bringing together a community at [The Start Conference](#), working with our friends at [Twitter](#) for a few months, and digging deep into data with [Wikirank](#). Now we're focusing on an entirely new idea, and we'd like to share that with you. It's called Typekit.

We've been following developments in web browsers very closely, looking for new and smarter ways to build stuff. Last fall, we started seeing renewed interest in linking to fonts via Cascading Stylesheets. While the [W3C working draft](#) has been around for years, a new wave of browser support will finally offer designers more control over fonts on the web. A [particularly cogent article](#) from John Allsopp, followed by frequent conversations with him, helped us understand that there was a significant opportunity here.

Web fonts today

So here's the situation: Every major browser is about to support the ability to link to a font. That means you can write a bit of CSS, include a URL to a font file, and have your page display with the typography you expect. For designers and developers, this is a significant step forward. No longer will you need to trap your content in images or Flash just to express yourself visually. Pages will be more usable, accessible, and indexable. This is a massive upgrade for the web.

But there's a problem. While it's technically quite easy to link to fonts, it's legally more nuanced. Almost all fonts are protected by copyright — even those [available for free](#) — and very few of them allow for linking via CSS or redistribution on the web. This is understandable; font files represent countless hours of finely detailed labor. Appropriately, type designers are concerned that they'll lose control of all that hard work.

The Typekit solution

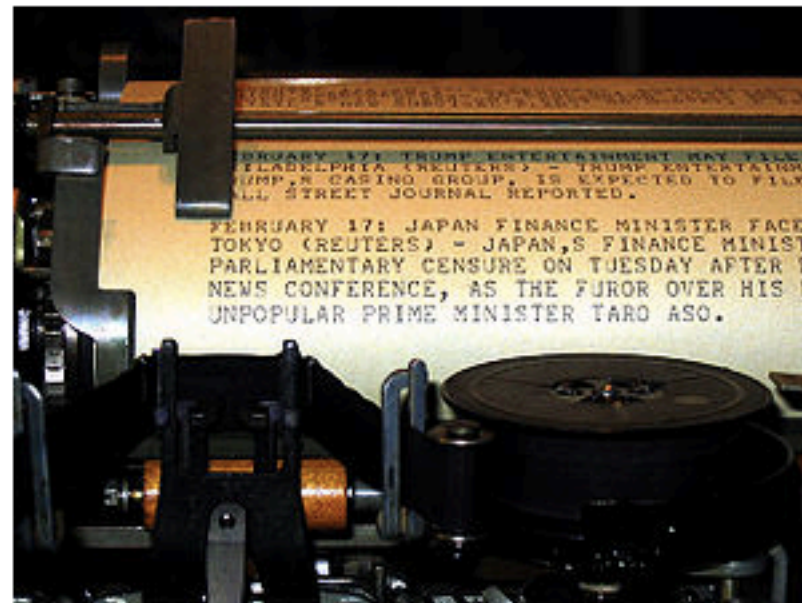
That's where Typekit comes in. We've been working with foundries to develop a consistent web-only font linking license. We've built a technology platform that lets us to host both free and

Small Batch Inc. Announces Typekit Funding

June 24, 2009

We're not huge fans of press releases, but we want to make sure we get this news out clearly. And here it is: We've closed a round of funding from an amazing collection of our friends, family, and colleagues. This gives us the help we need to build the amazing service we've got planned. Thanks everyone!

And here's the old-fashioned release, just off the wire!



San Francisco, Calif. — June 24, 2009 — Small Batch Inc. announced today that they have secured a round of equity funding from a group of investors led by San Francisco-based [True Ventures](#). Small Batch is developing [Typekit](#), a service enabling designers to build sites with web-native typography.

“This funding is the next step in our plan for bringing real typography to the web,” said Bryan Mason, Small Batch co-founder and President. “We want to build a nimble, safe tool that makes it easier for web designers to do amazing design online, and a lot of people believe in that goal. We’re excited and humbled by the team of investors supporting us.”

[Tony Conrad](#) of True Ventures leads a team of high-profile investors that also includes:

- [Evan Williams](#), Twitter CEO and Founder
- [Caterina Fake](#), Flickr and Hunch Founder
- [Matt Mullenweg](#), WordPress/Automattic Founder

Typekit is live

November 10, 2009

For the past few weeks, we've been offering an invitation-only sneak peek at the Typekit service. Now, we're happy to announce that we're open to the public. You can head over to [Typekit](#) and start using it immediately!

We've learned a lot about how browsers handle fonts and what web designers and developers need from a service like ours. We've been iterating daily to make Typekit as robust as possible. And we're pleased to have [maintained 100% uptime](#) since we invited our first users back in August. The introductory pricing will remain for a while, so [sign up now](#) to get the best deal. We'll also be announcing new foundry partners and adding new fonts to the library soon.

As ever, we're looking forward to seeing how typography will change web design, and how you'll use it to build new things. Have fun!

[★ Like](#) Be the first to like this.

Posted by The Typekit Team | [💬 28 Comments »](#)

Launching is Hard. Really Hard.

The easiest way to use Real Fonts on your website

This will change the way you design websites.

Add a line of code to your pages and choose from hundreds of fonts. Simple, bulletproof, standards compliant, accessible, and totally legal.

[Feature Tour](#)
[Try it for Free](#)

Bello Pro by [Underware](#)

A snap to set up



We've worked hard to make Typekit easy to use. Add and use fonts the way you want to.

[Try it for free](#)

Fast and reliable



Your fonts will be served from a robust network built with hundreds of servers worldwide.

[How it works](#)

All your favorites



We're working with foundries to bring the best possible fonts for your website.

[Browse fonts](#)

Stack at launch

Merb

Datamapper

Resque

MySQL & Redis

Munin & Pingdom

Chef-Solo

Ubuntu LTS

Slicehost

DynECT

Edgecast

Also

Github

Google Apps

Dropbox

Campfire

Skype

join.me

Every project tracking tool ever

Merb

All you need... nil you don't.

Built for speed.



Enjoy the performance of a framework that was engineered from the ground up to run at blazing speeds. [Read More](#)

Lightweight.



Too much unnecessary code wearing you down? Discover the advantages of a leaner, meaner codebase. [Read More](#)

Powerful.



Despite its small footprint, Merb's flexibility empowers developers to build and choose their own tools. [Read More](#)



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Merb gets merged into Rails 3!

Posted by David, December 23, 2008 @ 11:47 am

It's christmas, baby, and do we have a present for you. We're ending the bickering between Merb and Rails with a this bombshell: Merb is being merged into Rails 3!

We all realized that working together for a common good would be much more productive than duplicating things on each side of the fence. Merb and Rails already share so much in terms of design and sensibility that joining forces seemed like the obvious way to go. All we needed was to sit down for a chat and hash it out, so we did just that.

What this will mean in practice is that the Merb team is putting their efforts into bringing all of the key Merb ideas into Rails 3. Yehuda Katz will outright join [the Rails core team](#), Matt Aimonetti will work on a new evangelism team, and Carl Lerche and Daniel Neighman (hassox) will be co-starring the effort to bring all this over. We've immortalized the merge with plaque page at rubyonrails.org/merb.

What's being brought over?

Some of the key ideas that they'll be taking with them from Merb into Rails 3 are:

- Rails core: Yes, Rails is a full-stack framework and will remain so, but there's no reason we shouldn't also make it possible to run with less than the full monty. Rails 3 will make it easy to run just a bare minimum and then allow you to opt in just the stuff you want, if that's necessary for your particular situation. Think "rails myapp —core" (and "rails myapp —flat").
- Performance optimizations: Merb has a lot of Rails pieces rewritten to be faster. We'll be bringing all that good stuff over. We'll also bend the architecture in the places where that's necessary for a big yield. In short, Rails 3 will get all the

"We will also release versions of Merb specifically designed to help ease the transition to Rails 3 ... To be perfectly clear: we are not abandoning the Merb project."

Someone unaware of their future workload

PUBLIC

**merb / merb**forked from [wycats/merb](#)

Watch

130

Fork

113

Code

Network

Pull Requests 1

Wiki

Graphs

[Home](#)[Pages](#)[Wiki History](#)[Git Access](#)

Merb to Rails 3 transition resources

[New Page](#)[Edit Page](#)[Page History](#)

We ask community of Merb/Rails3 users who need to or want switch to Rails 3 to help us create official resource repository where it is possible to find all important resources.

Please feel free to edit this page and help others.

Links

- [Like rats deserting the good ship Merb](#)

Last edited by rizwanreza, a year ago

[Delete this Page](#)



THE GREAT MIGRATION

ChicagoRuby

October 4, 2011

David Demaree

david@typekit.com • @ddemaree



webdev opened this issue a month ago

Rails migration of the leftover merb controllers



webdev is assigned



No milestone



Open

3 comments

Labels



This issue is a continuation of the existing issue <https://github.com/typekit/typekit/issues/982>, that is about to get closed.

Definitely

Below are the groups of controllers that have been identified as OK to be migrated

```
# Simple enterprise management. These should be simple.
```

```
app/controllers/enterprise_kit_destinations.rb
```

```
app/controllers/enterprise_kit_environments.rb
```

```
app/controllers/enterprise_kits.rb
```

```
app/controllers/enterprises.rb
```

```
# Vendor tools. These should be simple.
```

```
app/controllers/vendor_font_vouchers.rb
```

```
app/controllers/vendor_fonts.rb
```

```
app/controllers/vendor_font_files.rb
```

```
app/controllers/vendor_font_variations.rb
```

```
app/controllers/vendor_users.rb
```

```
app/controllers/vendors.rb
```

```
# Vendor stats. These are simple, or could be done along with the Vendor Pulse project.
```

```
app/controllers/vendor_stats.rb # Project
```

```
app/controllers/vendor_family_stats.rb # Project
```

```
# User administration. Should be simple.
```

```
app/controllers/users.rb
```

Maybe

Lesson:

You will be stuck with your technology choices for a long time. Choose wisely.

Datamapper



DataMapper

Ruby Object Relational Mapper

DataMapper is an [Object Relational Mapper](#) written in [Ruby](#). The goal is to create an ORM which is fast, thread-safe and feature rich.

To learn a little more about this project and why you should be interested, read the [Why Datamapper?](#) page.

Recent News

DataMapper 1.2.0 released

DataMapper 1.2.0 is here!

[Read more](#)



Help

If you're having trouble, don't forget to check the documentation, which has both references and step by step tutorials.

[Read documentation](#)



Issues

If you're still having trouble, or you think you came across something you think might be a bug, let us know.

[Log a ticket](#)

News

DataMapper 1.2.0 released

DataMapper 1.2.0 is here!
13 October 2011 by solnic

v0.9.11

“The transition from the 0.10.x series to 1.0 does involve several changes regarding how users will interact with DataMapper”

Datamapper 1.0 release notes

datamapper.org/articles/datamapper-100-released.html

"DataMapper 0.10 is ready for release. We've worked on it for the past 11 months, pushed 1250 commits, written 3000+ specs, and fixed 140 tickets in the process."

Datamapper 0.10 release notes

datamapper.org/articles/datamapper_010_released.html

**Migrating to ActiveRecord was easier
than upgrading Datamapper**

Lesson:

Keep up with upgrades.

Lesson:

You will be stuck with your technology choices for a long time. Choose wisely.

Resque

Resque

Resque (pronounced like "rescue") is a Redis-backed library for creating background jobs, placing those jobs on multiple queues, and processing them later.

Background jobs can be any Ruby class or module that responds to `perform`. Your existing classes can easily be converted to background jobs or you can create new classes specifically to do work. Or, you can do both.

Resque is heavily inspired by DelayedJob (which rocks) and comprises three parts:

1. A Ruby library for creating, querying, and processing jobs
2. A Rake task for starting a worker which processes jobs
3. A Sinatra app for monitoring queues, jobs, and workers.

Resque workers can be distributed between multiple machines, support priorities, are resilient to memory bloat / "leaks," are optimized for REE (but work on MRI and JRuby), tell you what they're doing, and expect failure.

Resque queues are persistent; support constant time, atomic push and pop (thanks to Redis); provide visibility into their contents; and store jobs as simple JSON packages.

The Resque frontend tells you what workers are doing, what workers are not doing, what queues you're using, what's in those queues, provides general usage stats, and helps you track failures.

The Blog Post

For the backstory, philosophy, and history of Resque's beginnings, please see [the blog post](#).

Overview

Resque allows you to create jobs and place them on a queue, then, later, pull those jobs off the queue and process them.

Resque jobs are Ruby classes (or modules) which respond to the `perform` method. Here's an example:

- [Home](#)
- [Documentation](#)
- [Download](#)
- [Communication](#)
- [Presentations](#)
- [Use Cases](#)

News

Table of Contents

- [News](#)
- [Quickly Install Gearman](#)
- [Introduction](#)
- [How Does Gearman Work?](#)
- [How Is Gearman Useful?](#)

* [2012-04-12] java-gearman-service v0.6 has been released. The following changes have been made:

- The service now uses the slf4j logging facade, allowing the user to have better control over logging.
- Persistent background jobs are now supported through an application hook
- The API has been updated to be more user friendly, and it makes it easier to create divide-and-conquer/mapreduce applications (breaks the code of previous versions)
- A .properties file now may be used to set property values and finetune application.
- The javadocs have been completed
- Various bug fixes

You can find the newest version on the google code page (<http://code.google.com/p/java-gearman-service/>)

* [2012-04-12] Version 0.32 of the Gearman Server and C library released! You can find it at [Launchpad](#).

- Fix for Ubuntu shutdown issue.

* [2012-04-07] Version 0.31 of the Gearman Server and C library released! You can find it at [Launchpad](#).

- Fixes for bugs 975591, 974712, 970828, 967859, 967463.
- Valgrind fix around epoch retry.
- Numerous issues cleaned up around bouncing server during testing.

* [2012-03-15] Version 0.29 of the Gearman Server and C library released! You can find it at [Launchpad](#).

- Additional Fixes for Postgres.
- Additional debug calls in server via tuneable logging.
- Documentation update.
- Fixes for Ubuntu 11.10.

* [2012-01-27] Version 0.28 of the Gearman Server and C library released! You can find it at [Launchpad](#).

- -v has been deprecated because of parsing issues. Please use -verbose instead.
- -log-file=stderr will set output to stderr.
- Fix for gearman.spec file for rpm build.

▪ [2011-07-18] Version 0.12 of the Perl front end for the Gearman C library released! Get it on the [downloads page](#) or at [Launchpad](#).

Lesson:

You will need a queue.

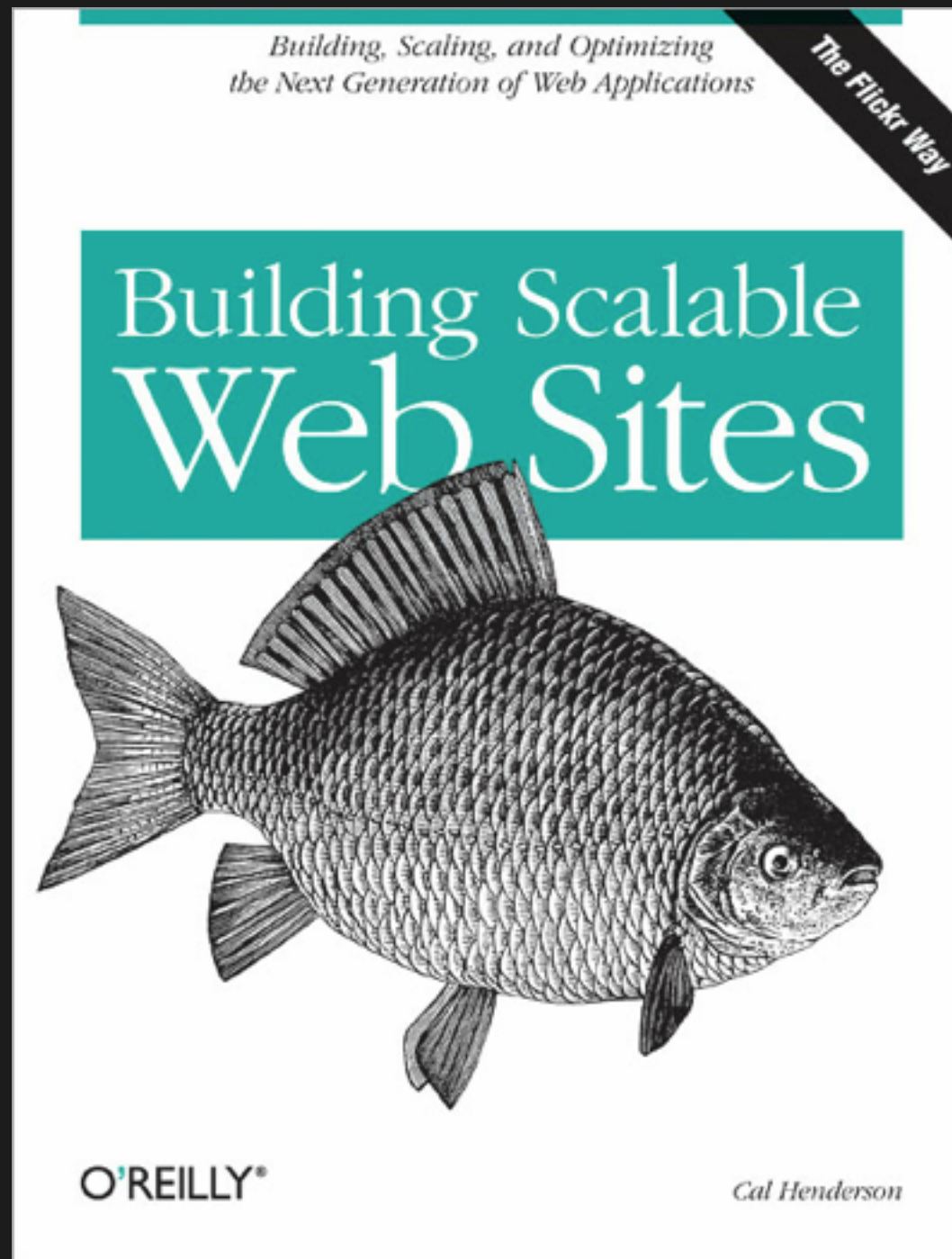
Start with one and everything is easier.

MySQL and Redis

MySQL and Redis and Elasticsearch

**"You will be stuck with your
technology choices for a long time.
Choose wisely."**

Me, five minutes ago



Scaling MySQL has been a solved problem for a long time

**Redis doesn't do much,
which is why it's awesome.**

**Our search needs are small,
Elasticsearch is easy to use.**

"Redis cluster is definitely the next big thing."

Salvatore Sanfilippo, 2011

antirez.com/post/short-term-redis-plans.html

Lesson:

Choose technology based on what it does today, not what it might do in the future.

Schema changes

Font network is up.

Recent Updates

Jun 14, 2012

08:00pm PDT

▲ TYPEKIT API

We've started today's scheduled maintenance. The Typekit API is unavailable until the maintenance is completed at approximately 8:30 PM PDT. Font serving is not affected. We'll post again here when the maintenance is complete.

08:00pm PDT

▲ TYPEKIT WEBSITE

We've started today's scheduled maintenance. The Typekit Website is unavailable until the maintenance is completed at approximately 8:30 PM PDT. Font serving is not affected. We'll post again here when the maintenance is complete.

Jun 13, 2012

All day

All systems go. 24 hour uptime.

Jun 12, 2012

All day

All systems go. 24 hour uptime.

Jun 11, 2012

02:54pm PDT

✔ TYPEKIT WEBSITE

Scheduled Maintenance: we've scheduled a maintenance window for Thursday, 14 June, between 8:00 and 8:30 PM PDT. The Typekit API will be unavailable during this time. Font serving will not be affected. As always, if you have any questions, please reach out to support@typekit.com.

02:54pm PDT

✔ TYPEKIT API

System Status

✔ **Font Network**

▲ **Typekit Website**

▲ **Typekit API**

Help Topics

[Accounts & Billing](#)

[Fonts](#)


[Design & Development](#)

[Using Typekit on Your Blog](#)

[Language Support](#)

Need Help?

Drop a line to support@typekit.com

 Follow [@Typekit](https://twitter.com/Typekit) on Twitter

How Are We Doing?

Our public uptime report is available from [Pingdom](#).

Lesson:

**You do not need 99.999% uptime.
Yet.**

Munin

Now collectd+nagios+custom code

Uptime and performance monitoring made easy

Be the first to know when your website is down.

Get downtime alerts. Get troubleshooting help. Get uptime & performance reports.



Uptime reports



Response time reports



Email, text & twitter alerts



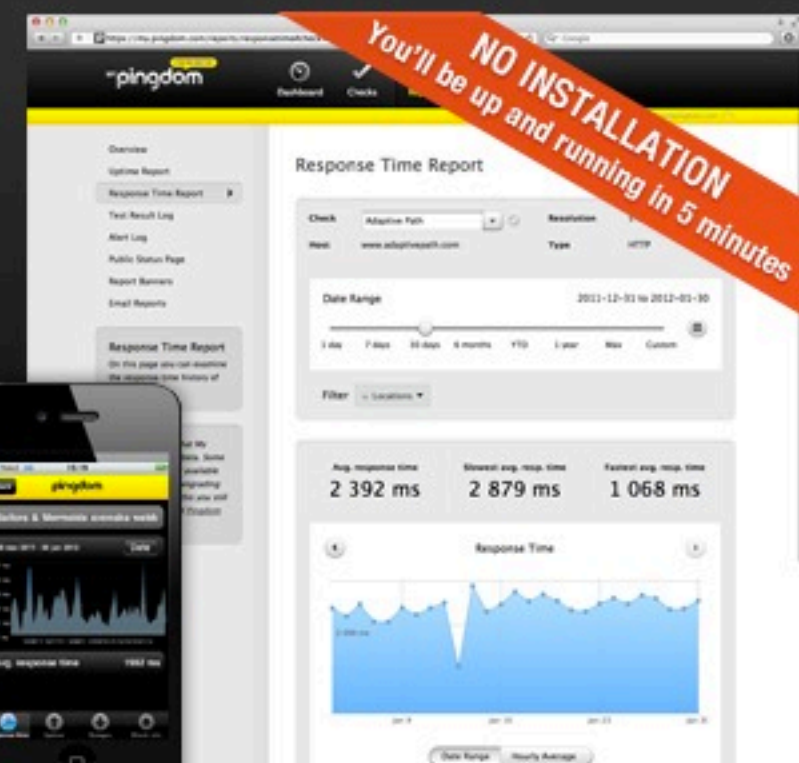
Multiple check locations



Error analysis



Public and email reports



30-day risk-free trial

Business

Business and enterprise favorite

- + Monitor **30** sites/servers
- + **200** SMS alerts on signup
- + **Unlimited** email & twitter alerts
- + **Unlimited** contacts
- + **Discount** on SMS alerts
- + And more

NOW
**50%
OFF**

30-day risk-free trial

Personal

Great for small websites and blogs

- + Monitor **5** sites/servers
- + **20** SMS alerts on signup
- + **Unlimited** email & twitter alerts
- + **Unlimited** contacts
- + And more

Risk-free trial included
Business and Personal accounts come with a free 30-day trial so you can try us out at no cost. No charge is made unless you keep your account past the trial period.

Free account

We also offer a free account that lets you monitor one website and includes 20 SMS alerts.

FREE SIGN UP

Alert the right person, every time.

PagerDuty schedules on-calls and adds **phone** and **SMS** to your existing IT monitoring tools.

- ✓ Respond to problems quickly, even at 4 am
- ✓ Minimize expensive downtime
- ✓ Quick and easy setup

See Plans and Pricing

RISK-FREE 30 DAY TRIAL

Service: Nagios

1 Triggered 0 Acknowledged

General settings

Service name: Nagios

Enabled: Yes

Escalation policy: Monitor

Integration settings

Service type: Nagios

Service API key: [REDACTED]

Incident settings

Incident ack timeout: Enabled: Acknowledged incidents time out after 30 minutes.

Incident auto-resolution: Enabled: Open incidents will auto-resolve in 4 hours.

Incidents

Resolve Acknowledge Reassign

Show: All (2) | All open (1) | Triggered (1) | Acknowledged (0) | Resolved (1)

1:39 / 4:19

Try a sample alert on your phone right now!

Plug PagerDuty into any of these monitoring tools to enable **Phone** & **SMS** alerts

Nagios

Zenoss

pingdom

splunk

MUNIN

neustar

Scout

keynote



Alerting that works (and wakes you up)

When your systems go down, PagerDuty will wake you up. You choose how you want to be alerted - via phone, SMS or email, to multiple numbers, with retries.



Integrate all your existing monitoring tools

PagerDuty works great with almost all monitoring tools including: Nagios (and Icinga), Keynote, New Relic, Pingdom, Cloudkick, Circonus, Red Gate SQL Monitor, Server Density, Zenoss, Monit, Munin and many others. If it can send email, it will work with PagerDuty.

Trusted By

Brain**tree**

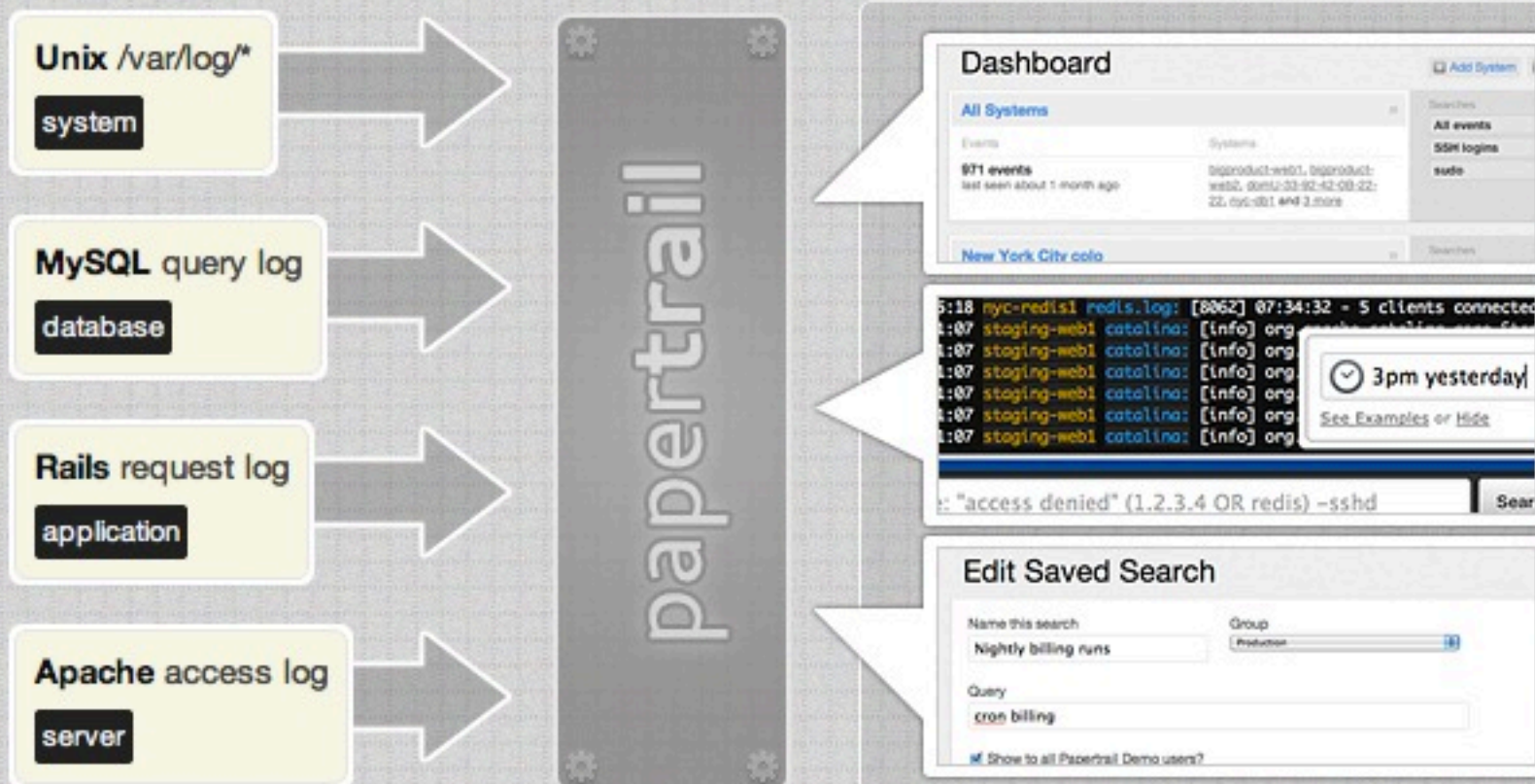
heroku

Engine Yard

OPSCODE

Fog Creek
SOFTWARE

linode.com



Aggregate

Logs from all apps, files, and syslog.

Tail & Search

In realtime - from a browser, command-line, and API.

React & Analyze

Send alerts, detect trends, and securely archive.

Hosted log management for servers, apps, and cloud services.

Instantly manage logs from 2 servers—or 2,000.

Start Logging!

Free. No expiration.
No credit card.

Papertrail helps **detect, resolve, and avoid infrastructure problems** using log messages. Papertrail's practicality comes from **our own experience** as sysadmins and developers, and entrepreneurs. [Take the tour](#) or [sign up](#).

Take a Tour

Pricing & Sign Up

Starts at \$0. Setup takes one minute.

**A syslog server is easy to run.
Why use Papertrail?**

**Papertrail is better than anything
we would build ourselves.**

“Employees are the biggest cost to a startup.”

Me, 30 minutes ago

**Papertrail is cheaper than
running it ourselves.**

Lesson:

**Hosted services are usually cheaper
and better than anything you will build.
Use them.**

\$70 per month

#monitoringsucks

#monitoringsucks sucks too

**I do not want to build a visibility pipeline
from several open source projects. I just
want to be woken up when the site is down.**

**Pricing model for hosted monitoring
services discourages adding metrics**

Monitoring is hard.

Chef

**Moved from Chef-Solo to
Hosted Chef in Early 2011**

O'REILLY

Velocity

Web Performance and Operations

CONFERENCE

Building a Faster and Stronger Web

Santa Clara, CA

June 25–27, 2012

REGISTER

PROGRAM

EXHIBIT HALL

CONNECT

ABOUT

YOUR ACCOUNT

Michelin Starred Cooking with Chef

Jon Cowie (Etsy)

11:00am Monday, 06/25/2012

Operations Ballroom ABCD

Please note: to attend, your registration must include [Tutorials](#).

Opscode's Chef is a reasonably new system at 2 years old and hasn't yet matured to have the established best practices and base of reference materials of Ops staples such as Apache, PostgreSQL and so forth.

This talk is designed for intermediate Chef users, who are comfortable with the building blocks of Chef such as roles, cookbooks, environments et al, and aims to equip them with ideas, best practices and thinking patterns to help them get more out of Chef, and build a dependable and resilient Chef infrastructure.


I'll talk about some techniques and approaches for making Chef less intimidating and easier to learn for both intermediate and advanced users. I'll look at getting under the hood and figuring out the nuts and bolts of Chef through both a critical approach and experimentation, and delve into the Chef source code without a safety harness with real world examples of how to write Knife plugins

I'll also demonstrate some best practices we've identified at Etsy and how we've made Chef a comfortable, essential part of our Engineering team's workflow.

The main topics covered will be:

- Familiarity and Understanding – Building resilient and dependable Chef infrastructures isn't just cookbooks and recipes. Building a team around it is equally important. I'll look at the importance of helping the entire team to

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Ubuntu LTS

**No startup has ever failed because they
picked the wrong linux distribution.**

Lesson:

Some decisions just don't matter.

Move on.

Upstart? Runit? God? Daemontools?

Upstart? Runit? God? Daemontools?

Lesson:

**Use a tool as it was intended to be used.
Or pick a different tool.**

Lesson:
Go with the flow.

Slicehost



**THE WORLD'S LEADING SPECIALIST IN THE
HOSTING & CLOUD COMPUTING INDUSTRY**

I would like to start a dialogue about our plans for the Slicehost™ product over the next year. This email is meant to provide an overview of our thoughts, but we would like to continue the conversation directly with our customers in the forums.

Before we get into details about Slicehost, it is important to note that there are two tectonic shifts happening in IT at the moment.

The first of these shifts is the internet's change from running primarily on IPv4 to [IPv6](#), a completely separate addressing format. This is our industry's way of dealing with an exhaustible supply of precious resources (IP addresses) that have become scarce.

Embracing openness and collaboration in the creation and consumption of IT is the second of these shifts. This year has seen major announcements regarding the [OpenStack™](#) technology, a massively scalable cloud operating system, along with [Open Data Center](#), a data center design process modeled after open source software projects.

How do these changes impact your account with Slicehost?

As you know, after Slicehost joined Rackspace in 2008, Slicehost technology was used to power the Rackspace® Cloud Servers™ product. With two brands, two control panels and two sets of Support, Engineering and Operations teams it has been a challenge to keep development parity between the products. In order to prepare for the next set of advancements in Cloud Computing, driven by the industry changing shifts I mentioned above, we will convert current Slicehost accounts to Rackspace Cloud Servers accounts over the next year.

Converting from Slicehost accounts to Rackspace Cloud Servers accounts will enable you to prepare for IPv6, and give you access to Cloud Files, the Cloud Files CDN Powered by Akamai, and Cloud Load Balancers.

Naturally, this decision has not been easy. There has been extensive planning, and will continue to be more, to ensure this change is as seamless as possible for everyone.

I understand this is big news, and I want to give us a chance to discuss it over the coming weeks and months. I will make certain that information is communicated to you. Most immediately, to help continue this conversation, we have created a new section within the forum to specifically address and discuss the merger of our two products.

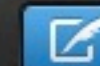
Sincerely,

Mark Interrante

Rackspace

VP, Product

Now Rackspace & Amazon EC2

**Artur Bergman**

@crucially

Following



EC2 -- 16 times more expensive than bare metal -- the gods must be crazy (and I am pretty sure the bare metal is still faster)

[← Reply](#) [↺ Retweet](#) [★ Favorite](#)**16**

RETWEETS

4

FAVORITES

12:30 PM - 14 Jan 12 via web · [Embed this Tweet](#)

Reply to @crucially

“Employees are the biggest cost to a startup.”

Me, 40 minutes ago

"If I was doing a startup, AWS would be perfect to bootstrap and try my idea out"

Artur Bergman

radar.oreilly.com/2007/06/amazon-ec2-and-s3-disaster-pla.html

Lesson:
Start with EC2.

EC2 credentials

Your Account

- [Account Activity](#)
- [Usage Reports](#)
- [Security Credentials](#)
- [Personal Information](#)
- [Payment Method](#)
- [Consolidated Billing](#)
- [AWS Identity and Access Management](#)**
- [AWS Management Console](#)
- [DevPay Activity](#)

IAM Related Resources

- [FAQs](#)
- [Documentation](#)
- [Release Notes](#)
- [Sample Code & Libraries](#)
- [Developer Tools](#)
- [Community Forum](#)

AWS Platform is Hiring!

AWS Identity and Access Management (IAM)

AWS Identity and Access Management (IAM) enables you to securely control access to AWS services and resources for your users. IAM enables you to create and manage users in AWS, and it also enables you to grant access to AWS resources for users managed outside of AWS in your corporate directory. IAM offers greater security, flexibility, and control when using AWS.

To get started using IAM, try the [AWS Management Console](#).

IAM enables identity federation between your corporate directory and AWS services. This enables you to use your existing corporate identities to grant secure and direct access to AWS resources, such as Amazon S3 buckets, without creating a new AWS identity for those users. To learn more about configuring identity federation with your corporate directory, try out our [sample application](#).

Introducing roles for EC2 instances

Roles for EC2 instances is a new feature that makes it easier for you to securely access AWS services from within your EC2 instances. It ensures that you automatically will have valid AWS access keys on your EC2 instances, and makes it easier for you to control the AWS service permissions you want to grant to applications running on your EC2 instances. To the right is a short video that illustrates how easy it is to get started. Visit the [Working with roles](#) section in the Using IAM guide for more details.

Getting started with IAM roles for EC2 instances



The page contains the following categories of information about IAM. Click to jump down to:

- [Functionality](#)
- [Service Highlights](#)
- [Features](#)
- [Pricing](#)
- [Resources](#)
- [Detailed Description](#)
- [Intended Usage and Restrictions](#)

Lesson:

Never use the EC2 root credentials.

Databases in virtual environments

Ephemeral or EBS?

Backups?

Lesson:

**Rent a high memory instance then
stop worrying about disk IO for a while.**

DynECT

Edgecast

CDNs are not created equal

Contact Us - Sales

Please call **1.877.4AKAMAI (1.877.4252624)** to speak with Sales, or fill out the information below and an Akamai representative will contact you shortly.

All fields required.

First Name

Last Name

Title

Company

Country

Choose Your Country

State

Choose Your State

Phone

Email

(username@hostname.com)

Industry

How did you hear about Akamai?

Select

I am looking for
(select all that apply)

- ☐ Advertising
- ☐ Content Delivery (CDN)
- ☐ Streaming (Video, Music, Social Media)
- ☐ Software Downloads
- ☐ Online Application Acceleration Services
- ☐ eCommerce
- ☐ Other

Comments

(maximum 1500 characters)

**If you're not haggling with your CDN,
then you're paying too much money.**

Amazon CloudFront

- [CloudFront Overview](#)
- [FAQs](#)
- [Pricing](#)
- [Amazon CloudFront SLA](#)
- [What's New?](#)
- [Amazon CloudFront Events](#)

Developer Resources

- [AWS Management Console](#)
- [Documentation](#)
- [Release Notes](#)
- [Sample Code & Libraries](#)
- [Developer Tools](#)
- [Community Forum](#)

Streaming Media Awards

Amazon CloudFront receives Streaming Media Magazine's Editors' Pick and European Readers' Choice Awards

Amazon CloudFront

Amazon CloudFront is a web service for content delivery. It integrates with other Amazon Web Services to give developers and businesses an easy way to distribute content to end users with low latency, high data transfer speeds, and no commitments.

Amazon CloudFront adds Sydney, Australia edge location

We are excited to announce the launch of our newest edge location in Sydney, Australia to serve end users of Amazon CloudFront and Amazon Route 53. Read our [announcement](#) or visit the [AWS blog](#).

Amazon CloudFront can now deliver all of your content, including the dynamic portions of your site that change for each end-user. Learn more by reading this page or by visiting the [AWS Blog](#).

Amazon CloudFront at Velocity Conference June 25th-27th

AWS will have a booth and Nathan Dye, Software Development Manager for Amazon CloudFront, will be hosting a session at the conference titled "Amazon CloudFront: Delivering Dynamic Content from the Edge".

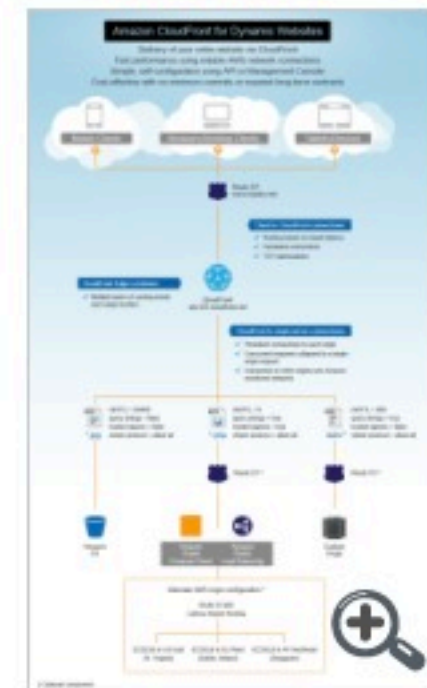
Learn about Amazon CloudFront's latest features on the [Amazon CloudFront What's New](#) page.

Amazon CloudFront can be used to deliver your entire website, including dynamic, static and streaming content using a global network of edge locations. Requests for your content are automatically routed to the nearest edge location so content is delivered with the best possible performance. Amazon

Easy to sign up,
pay only for what you
use

[Sign Up Now](#)

Amazon CloudFront: How it Works



CloudFront has over 20,000 active customers which is double the number of customers from the same time last year. [Read more.](#)



Sign Up

Email (login)

Your name

Password

Confirm

Company

Pricing Plan

Choose a plan...



[Already a user?](#)

Sign Up

Support

Font Network Requirements

1. High uptime
2. High performance

Edgecast was better than anything that two engineers would build by themselves.

Plan:

- 1. Copy static files to an origin run by Edgecast.**
- 2. Sleep easily at night.**



Rev Dan Catt
@revdancatt

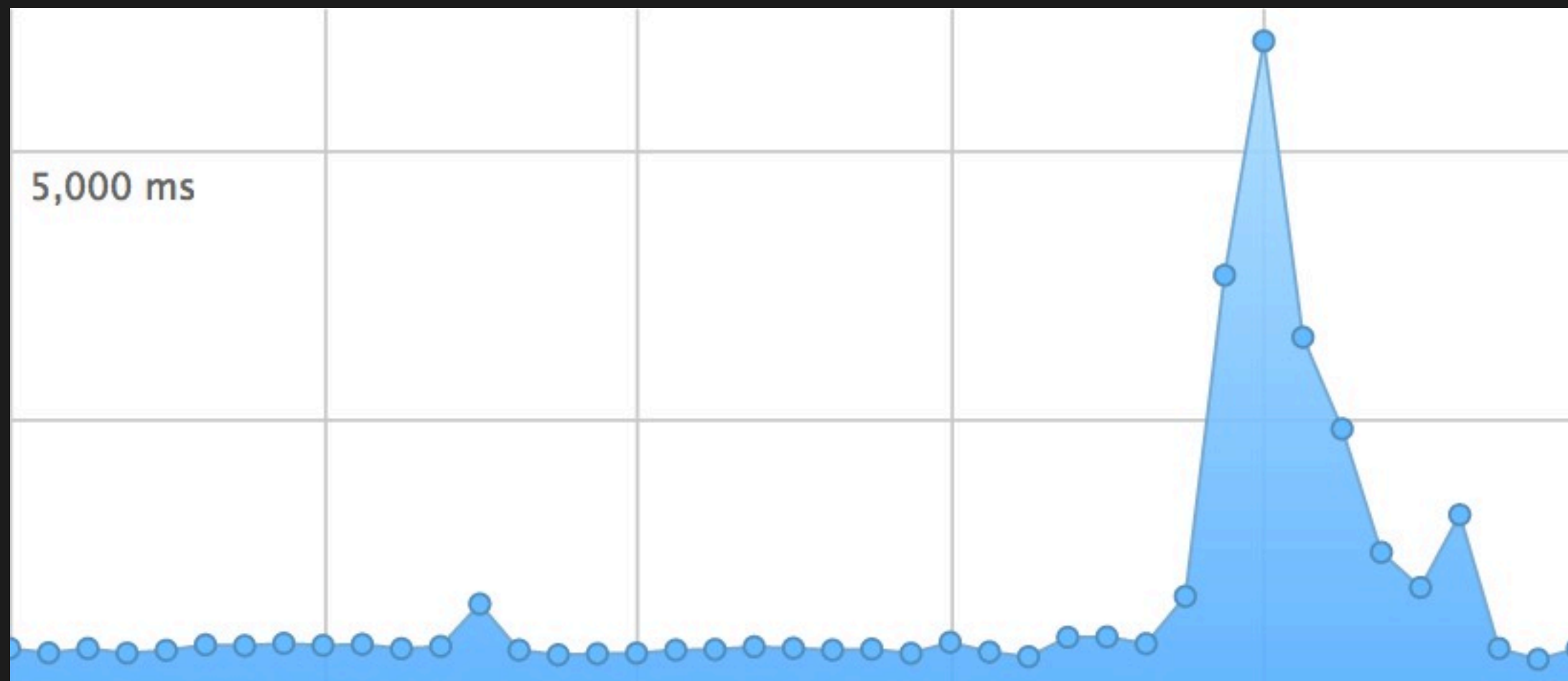
Following



Frustrated by how long the browser hangs
on use.typekit.com, keeps happening :(
[#typekit](#)

Reply Retweet Favorite

8:26 AM - 16 Dec 10 via Echofon · [Embed this Tweet](#)



**But, we're not keeping up with kit
publishing for about.me**



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About.Me Has 400,000 Beta Testers, Opens Doors To All



MICHAEL ARRINGTON

Thursday, December 16th, 2010

0 Comments



In September **About.me** started letting people reserve names for its personal profile page. They guaranteed your name (I'm **about.me/mike**, for example) and started letting those people in slowly in batches.

Well, not so slowly I guess, since the company says 400,000 sites have now been created, and another 20,000 on the waiting list were let in overnight. And starting today anyone can go to the site and start using it immediately.

The site offers people free profile pages. You

can include your name, bio and links to Twitter, Facebook, LinkedIn and other sites that have information about you. But what makes About.me really pop are the high resolution images people upload to go with their profiles. Just click the icon of a person with a right arrow on the top left of my **page** to start scrolling randomly through profiles to see what I'm talking about.

About.me also provides data and analytics to users to show total profile views, links to your profile, etc. Additional analytics layers are being added to show your activity on various social networks as

GOT A TIP? TELL US.



EDGECAST:
HOW THE
BUSIEST SITES
STAY FAST.

UPCOMING EVENTS

09/08/12

Disrupt SF 2012
San Francisco, CA

09/08/12

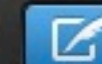
Disrupt SF
Hackathon 2012
San Francisco, California

TRENDING

**CDN origins are designed to
handle high read rates,
but not high write rates.**

Plan

1. Build our own origin for about.me
2. Rebuild our publishing pipeline
3. Copy all existing data over

**Paul Hammond**

@ph

On Wednesday we decided there was no possible way to get this project done before the end of January. We launched it this afternoon.

[← Reply](#) [🗑 Delete](#) [★ Favorite](#)**1**

RETWEET

10

FAVORITES

5:48 PM - 19 Dec 10 via web · [Embed this Tweet](#)

HOT TOPICS [FACEBOOK](#) [APPLE](#) [GOOGLE](#) [ANDROID](#) [DISRUPT SF](#) [STARTUP BATTLEFIELD](#)[Guides](#) [Events](#) [CrunchBase](#)[Comment](#) 0 [Like](#) 688 [Tweet](#) 847 [Share](#) 37 [+1](#) 0

AOL Acquires Personal Profile Startup About.Me

 **MICHAEL ARRINGTON** ▾

Monday, December 20th, 2010

0 Comments



Michael Arrington & Tony Conrad
Discuss the About.Me Website

GOT A TIP? TELL US.

UPCOMING EVENTS

09/08/12

Disrupt SF 2012
San Francisco, CA

09/08/12

**Disrupt SF
Hackathon 2012**
San Francisco, California

TRENDING

**The Stupid Rise Of The**

Designing for Disaster: How Teams Can Thrive in the Cloud

Jeff Veen (Typekit)

9:10 Wednesday, 9/11/2011

Keynote

Location: Hall 1 B/C

Presentation: [Designing for Disaster_ How Teams Can Thrive in the Cloud Presentation \[PDF\]](#)

A few months ago, Jeff sat on a couch in the Typekit offices, staring out the window, and wondering if everything their company had been working towards was about to slip through their fingers. How that story ends is interesting (spoiler alert: the company is still going strong), and Jeff will share lessons on how they got through it and why they were ready for it. But beyond that, he'll look at how you, your team, your clients, or your company can cultivate a culture of making amazing things—not just on the next project, but on everything you work on for the rest of your career.

Video

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software

**keynote****New
Relic.**

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**CITRIX**

Jeff Veen

Typekit

Jeffrey Veen is a founder and CEO of [Typekit](#), a cloud-based font subscription service for web designers. Jeffrey was also one of the founding partners of Adaptive Path and project lead for Measure Map, the well-



Lesson:

**Work for awesome people
(we're hiring).**

Lesson:

**Systems perform in unexpected ways
as they grow**

“When request rates significantly increase on a single partition, partition splits become detrimental to request performance”

Doug Grismore, AWS Storage Operations

aws.typepad.com/aws/2012/03/amazon-s3-performance-tips-tricks-seattle-hiring-event.html

Didn't notice growth until it was too late.

**Took over a year to migrate
everyone to our new origin.**

Lesson:

**Know your escape plan for every
infrastructure provider.**

Github

Lesson:

Github organizations are awesome.

Google Apps for your domain

Lesson:

Separate your work and personal email.

Google App Engine

Font network is up.

Recent Updates

Jun 23, 2012

Now

All systems go.

Jun 22, 2012

All day

All systems go. 24 hour uptime.

Jun 21, 2012

All day

All systems go. 24 hour uptime.

Jun 20, 2012

All day

All systems go. 24 hour uptime.

Jun 19, 2012

All day

All systems go. 24 hour uptime.

Jun 18, 2012

All day

All systems go. 24 hour uptime.

Jun 17, 2012

All day

All systems go. 24 hour uptime.

Dates and times are in [Pacific Time](#).

System Status

✓ **Font Network**

✓ **Typekit Website**

✓ **Typekit API**

Help Topics

[Accounts & Billing](#)

[Fonts](#)


[Design & Development](#)

[Using Typekit on Your Blog](#)

[Language Support](#)

Need Help?

Drop a line to support@typekit.com

 Follow [@Typekit](#) on Twitter

How Are We Doing?

Our public uptime report is available from [Pingdom](#).

Font network is up.

New Event

[Sign out](#)

Affected service

☐ Font Network ☐ Typekit Website ☐ Typekit API

Status

☒ Normal ☐ Degraded ☐ Down

Description

Create Event

Recent Events

- June 14, 2012 08:21pm PDT - Typekit Website:Normal ([Edit](#))
- June 14, 2012 08:21pm PDT - Typekit API:Normal ([Edit](#))
- June 14, 2012 08:00pm PDT - Typekit Website:Down ([Edit](#))
- June 14, 2012 08:00pm PDT - Typekit API:Down ([Edit](#))
- June 11, 2012 01:54pm PDT - Typekit API:Normal ([Edit](#))
- June 11, 2012 01:53pm PDT - Typekit Website:Normal ([Edit](#))
- June 05, 2012 03:06pm PDT - Typekit API:Normal ([Edit](#))
- June 05, 2012 03:05pm PDT - Typekit Website:Normal ([Edit](#))
- May 25, 2012 02:23pm PDT - Typekit Website:Normal ([Edit](#))
- May 25, 2012 02:22pm PDT - Typekit API:Normal ([Edit](#))

System Status [?]

✓ Font Network

✓ Typekit Website

✓ Typekit API

Cheat Sheet

Communicating during a crisis is intended to serve three main goals:

- ◊ To broadcast what is going on
- ◊ To demonstrate what we are doing in response
- ◊ To diffuse frustration

As such, all crisis communication should:

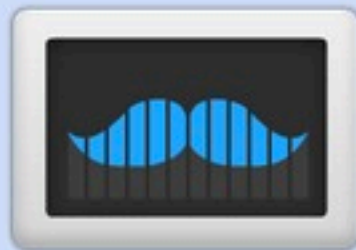
- ◊ Occur promptly
- ◊ Be brief
- ◊ Be as transparent as possible
- ◊ Articulate our actions
- ◊ Where possible, offer a sincere apology

Important Links

[Crisis Style Guide](#)

[Crisis Protocol Spreadsheet](#)

**Google App Engine is perfect for
public status dashboards**



Stashboard

The open source status page for cloud services and APIs.

The screenshot shows a web browser window titled 'Stashboard'. It contains a table with columns for 'Service', 'Current', and dates from 7/16/2010 to 7/12/2010. All services listed (Account Portal, Incoming Phone Calls, Incoming SMS, Outgoing Phone Calls, Outgoing SMS, REST API, Website) show a green status icon in the 'Current' column and all dates. A legend at the bottom indicates: green circle for 'The service is up', yellow triangle for 'The service is experiencing intermittent problems', and red circle for 'The service is currently down'.

Service	Current	7/16/2010	7/15/2010	7/14/2010	7/13/2010	7/12/2010
Account Portal	Up	Up	Up	Up	Up	Up
Incoming Phone Calls	Up	Up	Up	Up	Up	Up
Incoming SMS	Up	Up	Up	Up	Up	Up
Outgoing Phone Calls	Up	Up	Up	Up	Up	Up
Outgoing SMS	Up	Up	Up	Up	Up	Up
REST API	Up	Up	Up	Up	Up	Up
Website	Up	Up	Up	Up	Up	Up

Fork me on GitHub

[ABOUT](#) [INSTALLING](#) [DOCUMENTATION](#) [DOWNLOAD](#) [COMMUNITY](#) [GITHUB REPO](#)



About

Stashboard is a status dashboard for APIs and software services. It's similar to the Amazon [AWS Status Page](#) or the Google [Apps Status Page](#). Stashboard was originally written by [Twilio](#) to provide [status information](#) on its Voice and SMS APIs. Stashboard is designed to provide a generic status dashboard for any hosted service or API. The code can be downloaded, customized, and run on any Google App Engine account.

- Track multiple different API or SaaS services
- Set custom status messages and icons such as Up/Down
- Show historical status for each service
- Runs on Google App Engine so it's independent of your infrastructure (unless your app is on GAE)
- Full REST API for both getting and setting status information
- CNAME to <http://status.yourapp.com>

Stashboard is written in Python and hosted on Google App Engine.

Head over to stashboard.appspot.com to play with the latest version.

"Buy or Build?"

**If your product is the infrastructure,
build it.**

**If your requirements are actually unique,
build it.**

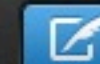
**If existing products don't meet your needs,
build it.**

**If buying costs more than your salary,
build it.**

Otherwise, buy it.

**Otherwise, buy it.
For now.**

**It is still your problem if a
3rd party provider has an outage**



Lanyrd
@lanyrd

Follow



An outage on Amazon EC2 and RDS is causing widespread downtime, it's affecting us and a lot of other sites too

news.ycombinator.com/item?id=4114829

Reply Retweet Favorite

8

RETWEETS

5

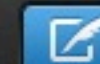
FAVORITES



9:34 PM - 14 Jun 12 via Tweetbot for iOS · [Embed this Tweet](#)

Reply to @lanyrd

Say sorry.



Quora Operations
@QuoraOps

[Follow](#)

We are working to restore full functionality to Quora, but are experiencing intermittent platform instability. Thanks for your patience.

[Reply](#) [Retweet](#) [Favorite](#)

6

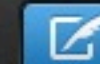
RETWEETS



10:05 PM - 14 Jun 12 via Tweetbot for iOS · [Embed this Tweet](#)

Reply to @QuoraOps

**Write your status update without naming
your infrastructure provider.**



**PAGER
DUTY** **PagerDuty**
@pagerduty

Following



We've done an emergency flip to our secondary non-AWS provider. We're catching up on sending out notifications now.

Reply Retweet Favorite

1
RETWEET



9:24 PM - 14 Jun 12 via web · Embed this Tweet

Reply to @pagerduty

Buy or Build?

**Buy or Build?
Or neither?**

“The minimum viable product is that version of a new product which allows a team to collect the maximum amount of validated learning about customers with the least effort”

Steve Blank (again)

<http://www.startuplessonslearned.com/2009/08/minimum-viable-product-guide.html>

"Minimum Viable Infrastructure"

**You are not Facebook. Or Etsy.
Yet.**

**You don't have 100 engineers.
Yet.**

**You don't need a highly scalable data store.
Yet.**

**You don't need multi-vendor redundancy.
Yet.**

**You don't need 99.999% uptime.
Yet.**

Rule I:

Don't run out of money.

Rule 2:

Your time is valuable. Don't waste it.

Rule 3:

Setup the infrastructure you need.

Rule 4:

Don't setup infrastructure you don't need.

**If a Typekit EC2 app server instance stops it is automatically replaced.
This has never happened.**

**Almost all performance problems have
been on things we don't yet measure.**

**All scaling pain points
have been unexpected.**

Rule 5:

Don't make future work for yourself.

"You ain't gonna need it"

Every startup scaling story:

- 1. Find the biggest problem**
- 2. Fix the biggest problem**
- 3. Repeat**

No startup scaling story ever:

- 1. Up front infrastructure build based on reports from other companies**
- 2. Immediate success**

***“Most of your initial scaling problems
won’t be glamorous”***

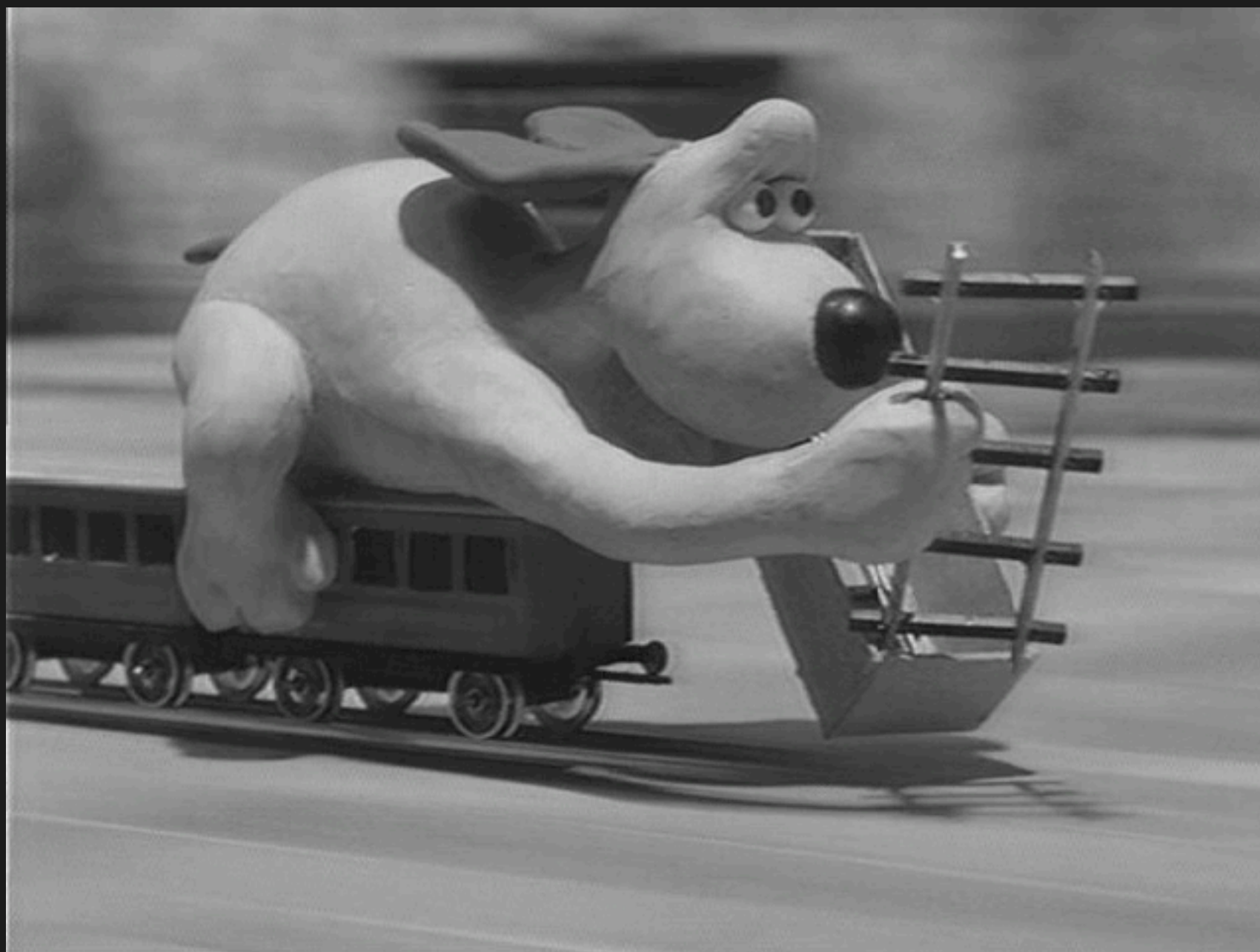
Mike Krieger, Instagram

scribd.com/doc/89025069

"Change is what you should be optimizing for. You never know what's coming next."

Kellan Elliot McCrea, Etsy

Northside Festival, June 14th 2012



Minimum Viable Infrastructure:

- 1. Source Control**
- 2. Config Management**
- 3. Some servers**
- 4. Backups**
- 5. External availability monitoring**

Minimum Viable Infrastructure:

1. Github Organizations
2. rsync & bash
3. Amazon EC2
4. s3cmd
5. Pingdom

Then improvise like crazy.

Really?

No. But maybe a little.

Watch out for

- 1. Black swans**
- 2. Vendor lock in**
- 3. Unsupported products**
- 4. Time wasting**

And get good at improvising

Thank you & good luck!

Slides will be available at
paulhammond.org/2012/startup-infrastructure
soon.

Questions?