

Cloud Computing For You and Your Grantees

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aspirationtech.org/publications/manifesto

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What are we talking about?

- ▶ What is “The Cloud”?
- ▶ What do **you** think about the cloud?
- ▶ What I love (and love less) about cloud
- ▶ Case studies on the same
- ▶ Pictures real and imagined
- ▶ Security issues in the cloud
- ▶ Paths for grantmakers to contemplate
- ▶ Whatever you all want to talk about

Who is Aspiration?

- ▶ We work with stakeholders across the nonprofit software supply chain:
 - We advise NGO technology decision makers on how to employ tech sustainably and affordably
 - We advise vendors and developers on how and what to build for NGO users
 - We advise grantmakers on technology strategies

Who is Aspiration?

- ▶ Most importantly, we support & advise
 - **Nonprofit and Foundation Staff**
on how to apply technology
 - **On Their Terms**
to
 - **Achieve Impact**
in their
 - **Program and Mission Work :^)**

What is the Cloud to Us?

- ▶ Apps running online, available remotely
 - Maintained, improved by somebody else
- ▶ Data stored on web-accessible servers
 - Collaboratively edited and curated by permissioned folks
- ▶ Access to all of the above from anywhere you have internet access
 - Client devices play a simpler role
 - Organizations can focus on workflow

What Think You About Cloud?

- Sorry for making you stand up, but...



Things I Love About the Cloud

- ▶ Real time collaboration
 - ...co-creating documents on a call...
- ▶ Open-ness
 - Inviting others into my work and thinking
- ▶ Focus-ability
 - Someone else manages technology pieces I don't want to think about

Things I Love About the Cloud

▶ Availability

- e.g. when my primary device and I are in separate locations
- Rich support for “oops, I forgot to bring...”

▶ Serendipity

- Due to all of the above, interesting things just happen

Cloud Case Study: Project Management

► The problem(s)

- Project management is really hard
- Too often done with clunktastic tools
- PM processes are often opaque
- Many projects fail because efforts of stakeholders, resources not well integrated
- It's hard to know “what's going on”
- Project assets too rarely find unified, long-term, high-availability homes

Cloud Solution: Basecamp

- ▶ Hosted project management
 - www.basecamp.com
- ▶ Simple set of essential features
 - Deadlines, docs, messages, reminders
- ▶ Per-project access and controls
 - Believable administrative interface
- ▶ Unified dashboard
 - Project deadlines, latest activity, status updates, new assets, active stakeholders

Aspiration 3.0

Dashboard

To-Dos

Calendar

All People

Search

Account (Upgrade/Invoices)

Templates

Settings

Latest activity across your projects

[Review 6 overdue milestones](#)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
21	22	23	24	Today 25	26	27
	<ul style="list-style-type: none"> Jessica and Uno Arrive! CMC Fundraising Event Sacramento - Misty 6pm 	<ul style="list-style-type: none"> Central Valley Training - Sacramento 5:30am 		<ul style="list-style-type: none"> Central Valley Training - Modesto 11:30am 	<ul style="list-style-type: none"> Build Your Nonprofit Website In A Day SFNTC 2am 	
28	29	30	31	Sep 1	2	3

[View the full calendar](#)

Aspiration — Events

Milestone	Taproot Meetup, SF, 6 pm	Completed by Allen G.	TODAY
Event	Drumbeat Cambodia	By Allen G.	Aug 21
Milestone	Aspiration Board Meeting NYC	Assigned to Allen G.	Aug 21
Milestone	TA Tech Strategy Session NYC	Assigned to Allen G.	Aug 21
Milestone	CCPF Grantee Event	Assigned to Allen G.	Aug 21

Aspiration — Aspiration Team

To-do	Shop for a better bathroom mirror Mike 082211	Assigned to Mike R.	TODAY
To-do	Get a razor scanner for the bathroom and use it Mike 082211	Assigned to Mike R.	TODAY

[+ Create a new project](#)

Your projects

Aspiration

[Aspiration Team](#)
[Answr/SSC](#)
[Board](#)
[CCPF 2011](#)
[Communications](#)
[Consulting](#)
[Development](#)
[eAdvocacy Book Sprint](#)
[eAdvocacy Training](#)
[Events](#)
[Operations](#)
[TAI New Tech Strategy](#)
[Web Site](#)

Projects on hold

Aspiration

[FrontlineSMS](#)

[Your archived projects](#)

Basecamp Pros and Cons

- ▶ Basecamp rocks because
 - Criminally simple: subverts resistance
 - As a result, fairly ubiquitous paradigm
 - It just kinda works
- ▶ Basecamp sucks because
 - Criminally simple: features missing
 - Weak integration with other cloud tools
 - Lame data export/project migration

Basecamp changes our game

- ▶ Establishes collaboration zones
 - Private places to throw it all together
 - Relatively “organizational culture neutral”
- ▶ Reduces collaboration boundaries
 - No fighting firewalls for access to servers
- ▶ Preserves organizational memory
 - Across fire drills and turnover
- ▶ Drives accountability and transparency
 - Your laundry is on(the)line

Case Study 2-Mozilla Etherpad

- ▶ Etherpad is a collaborative text editor
 - Like Google Docs without the overhead
- ▶ Mozilla uses it for conference call notes
 - Call host sets up template, shares link
 - Notes are available in real time, no waiting
 - Call participants can contribute notes, fixes
 - Chat feature provides channel for providing input, context without interrupting
 - “Real-time cloud”

Public Pad

Pad Options

Import/Export

Saved revisions

Time Slider

B *I* U ~~S~~



100%



together. Test and iterate with users. Share outputs with global community. 2hr – 2 days.

- See also: <http://michellethorne.cc/2012/01/mozilla-event-menu-lite/>
- QUESTION: Is "Hack Jam" the right term? If not, what are the alternatives. Discuss.

^^

- Hack Day
- Hack Fest
- Hackathon

◦ ...

- "Meet-up" is missing from this list. Small, super informal, self-organized. e.g., A bunch of like-minded people who just want to get together at a cafe or bar to talk about *maybe* organizing a more robust event together.

Toronto Youth Hackjam - February 18th, 1 pm - 4:30 pm (Heather)

Related to above: thoughts on lingo, messaging, etc.?

<http://torontoyouthhackjam.eventbrite.com> pw: firefox

Looking to open registration tomorrow, if all goes well

Where should a city's youth activities "live"? On a website? The wiki? etc.

- Notes and Feedback
 - Do we want to start trying to brand and message this as a "Hive Toronto Pop-up"?
 - We've had three successful "Hive Pop-up events" now:
 - London
 - Toronto (though we didn't necessarily brand it that way)
 - Tokyo
 - Let's steer towards "Hive Toronto" / a bigger "Hive Pop-Up Toronto"?
- Big Blue Button update (Michelle + Matt)
 - Blog post coming on this soon – but save the date:
 - "How to host awesome online events" learning lab slated for

Help request: Popcorn dev site

- Can anyone (like ross or brian) help us make the dev.mozillapopcorn.org site more awesome? Finally added popcorn to the popcorn site, but it looks poor
 - dev.mozillapopcorn.org, advance video to around 0:40 seconds
 - needs css love. popcorn events are all added

Calendar:

<http://lanyrd.com/profile/mozilla/>

List upcoming events you're attending, hosting, or think would be of interest to the Mozilla community:

- Please include event name, date, location, link and who's participating.

gunner

[Invite](#) other users and they will show up here.

Share this pad

Well

Tara Tiger Brown: Fabulous. Thanks Sunny 8:49
and Carla. I'll ping you.

Laura: thanks gunner, nice to hear you again 8:49
thornet: bye! but talk to all you DML folks still 8:49
^^

Sunny: @tara sounds good! 8:49

OpenMatt: If you're going to DML, stay on 8:49

Carla: Tara, I believe we may have met 8:49
already at a transmedia event

Sunny: chau chau folks! 8:49

Chris: so stay on if you are going to dml 8:49

Tara Tiger Brown: Oh great Carla. 8:49

Tara Tiger Brown: I think I might go to DML. 8:49
Should I go? Mimi Ito said it will be good.

Chris: yes tara you should 8:50

Philipp: i'm here (philipp) 8:50

Sunny: @tara a lot of us will be there 8:50

Carla: @tara it's worth it. 8:50

Sunny: myself, carla, erin knight, jess klein, 8:50
chris lawrence, lainey

OpenMatt: <https://etherpad.mozilla.org/DML> 8:50

Tara Tiger Brown: Bye Mozilla folks. It was 8:51
fun. Talk to some of you soon.

January 31, 2012

Mari: <https://etherpad.mozilla.org/January-back-up> 8:16

February 16, 2012

Chat:

Case Study 3: BART Protests



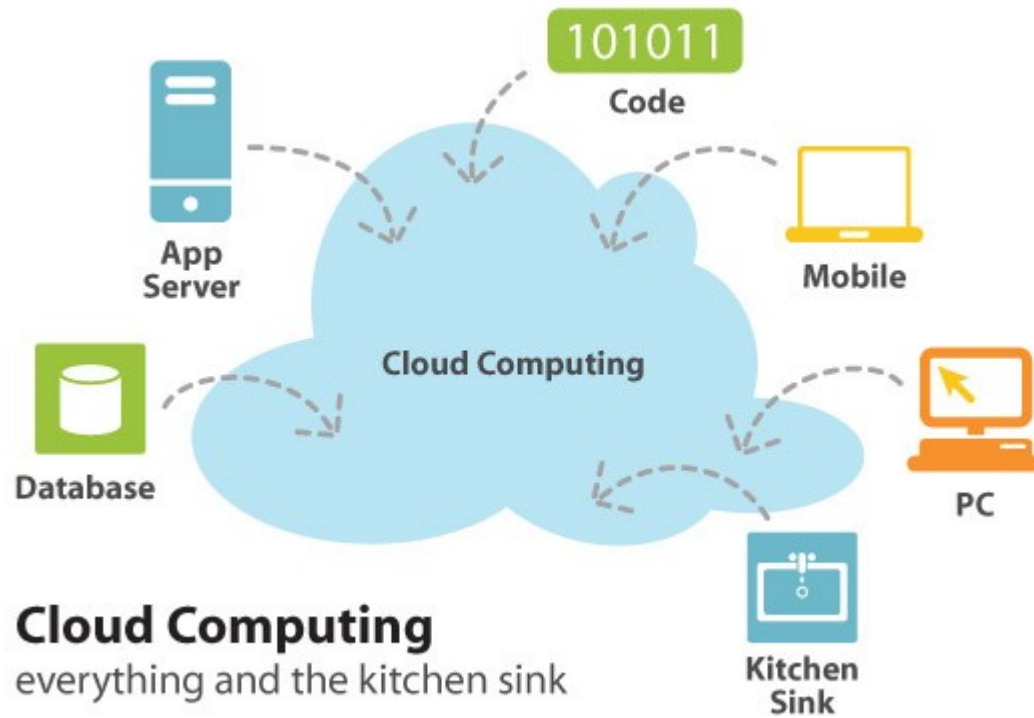
2011 SF BART Protests

- ▶ Activists used social media and other cloud platforms to organize, coordinate
 - Enabled rapid turnout, adaptation of tactics
 - Dramatic (annoying) successes achieved
 - So the next time...
- ▶ SF Police cut off internet in stations
 - Instantly disconnected network
 - Neutralized rapid response, coordination
- ▶ Cloud lesson: Have a Plan “B”

Let's get conceptual...

- ▶ There are 2 ways of envisioning Cloud
 - The way it is sold
 - The way it works in practice
 - ...and we've got pictures
- ▶ We look at cloud through a lens of organizational development
 - Goal: .orgs control their technology destiny
 - The path to the same is workflow-driven
 - Our mantra: “Sort the Technology Last”

The Cloud of Lore



Source: <http://crenk.com/the-cloud-in-the-classroom/>

Our Cloud of NPTEch Reality



Control in the NPTech Cloud

- ▶ Grantmakers should follow cloud strategies that maximize their control over long-term destiny
- ▶ Much comes down to what routes through your domain name
 - “Why Facebook=Enterprise #FAIL for us”
- ▶ The game is figuring out what makes sense to store at what layer of control

It's all about the Data

- ▶ Tragedy of the 501 “990-driven” reality
 - There are budget line items for software
 - There are budget line items for hardware
 - There are budget line items for labor
 - There are rarely line items for DATA
- ▶ Apps are vessels to story & carry data
 - As you consider cloud, it's about the DATA
 - Your DATA is your digital power
 - Center your cloud thinking on this truth

Control in the NPTech Cloud

- ▶ We look at the cloud as 4 layers of enterprise leverage
- ▶ (1) Stuff behind your domain name on remote servers you own and administer
 - Outside of your walls, it's the highest level of control
 - “vpn to internalserver.aspirationtech.org”
 - Cloud factor: “meh”, but an essential option to know you have

Control in the NPTech Cloud

- ▶ We look at the cloud as 4 layers of enterprise leverage
- ▶ (2) Stuff behind your domain name on remote servers you contractually control on terms you like
 - Someone else handles the lower levels
 - e.g. our Drupal and Wordpress sites hosted at www.rochen.com
 - Cloud factor: “woof”, “yum”, “yay”

Control in the NPTech Cloud

- ▶ We look at the cloud as 4 layers of enterprise leverage
- ▶ (3) Stuff behind your domain name on application servers you don't control
 - e.g. Wordpress.com, Google for Domains
 - The idealized cloud of “I don't think about IT or hosting hassles”; limited control
 - Concerns: Redundancy, long-term support
 - You “retain” your ability to migrate
 - Cloud factor: hmmm

Control in the NPTech Cloud

- ▶ We look at the cloud as 4 layers of enterprise leverage
- ▶ (4) Behind “their” domain/”the rest”
 - A.K.A. “minimal control of your destiny”
 - Basecamp, Facebook, Bit.ly, YouTube ...
 - Your mileage is guaranteed to vary
 - If you love yourself, keep local copies of anything that matters
 - Cloud factor: psychic required

Aspiration's Cloud Fatalism

- ▶ All tech relationships should be predicated on divorce
 - The “Hollywood Marriage” rule
 - Nothing tech lasts forever. Nothing.
 - “Pre-nup thinking” becomes critical
 - Model for eventual (or sudden) migration
 - Verify data export on a regular basis
 - Show restraint towards “lock-in” features

Aspiration's Cloud Checklist

- ▶ Relationship questions to ask about cloud options
 - Can we put it behind our (sub) domain?
 - Can we talk to other clouds in this relationship?
 - Who else is this cloud hanging out with?
 - Are they like us?
 - Can we leave when we want?

Aspiration's Cloud Checklist

- ▶ Asset questions to ask...
 - Can we export our data on demand in open, complete formats?
 - Is our data really our data?
 - Is our data secure, encryptable, private?
 - Who else can look at our data?
 - In what legal jurisdiction is our data stored?
 - What is your policy regarding government requests for data?

Cloud Benefits?

- ▶ Can it save paper?
 - Maybe but...
 - Prioritize general tools over specialized ones in the near term
- ▶ Can I work from my phone or pad?
 - Yes but...
 - Rate of change is still high
 - Beware cul-de-sac solutions
 - We are betting “apps” go away

Cloud Issues for Grantmakers

- ▶ Security of cloud-based grants management systems
 - There is no simple yes/no answer to the question of “is it more/less secure?”
- ▶ Security is a process, not a state
 - Redundancy is the golden rule
 - Develop cloud competency before putting mission critical data there
 - Take a “threat matrix” approach when assessing risk and security

Cloud Security: Threat Matrix

► Threat: Data loss

- Is your data redundantly backed up? S3?
- Have you practiced test restores?

► Threat: Governments

- Who are your grantees, where are they?
- What jurisdiction does your data live in?
- Are you funding in areas of “national security”? e.g. Immigration?
- Let Wikileaks and MegaUpload be lessons

Cloud Security: Threat Matrix

- ▶ Threat: Intelligence seekers
 - Who are your grantees' opponents and assailants?
 - Who wants to know more about who and how you are funding?
- ▶ Threat: Disgruntled staff
 - Have a proactive password policy
 - Staff turnover should trigger thorough password changes

Paths to Cloud Security

- ▶ Employ redundant multi-vendor backup
 - And don't forget local download
- ▶ Force SSL connections or VPN access
 - Preclude "snooping" of data and passwords
 - Assert your expectation of privacy
- ▶ Have well-thought-out data policies
 - Have clear and enforced exclusion and retention policies for cloud
 - Understand “3rd party” privacy issues

The Other Thing: The Big “I”

- ▶ Online enterprise identity is unsolved
 - We all manage dozens of credentials
 - “Fragmented” is an understatement
 - Battle for control of online identity rages
- ▶ The other other “I” thing online
 - Org identity and individual identity blur
 - “Can you invite my @GMail, not my @.org”
 - You need clear policies for distinguishing

So What to Do?

- ▶ Focus on three poles of NPTech
 - First People
 - Then Process
 - Last Technology
- ▶ Do incremental research and migration
 - Acknowledge that cultural change is hard
 - Leverage opportunity to improve processes
 - Don't make any big cloud bets right away

Migration approaches

- ▶ Take a workflow-oriented approach
 - Consider cloud for related sets of business processes, tasks, outcomes
- ▶ Which workflows are least effective now?
 - Distinguish mission critical versus “everything else”
 - Start by migrating non-mission-critical workflows :^)

Migration approaches

- ▶ Have a stated goal
 - Explore cloud-based ways of achieving the same
 - Have metrics for success: “takes less time”, “requires less steps”, “costs less”
 - Get feedback from users: e.g. “sucks less”
 - Assert your right to “have it your way”
- ▶ *“Technology challenges are organizational development opportunities in disguise”*

For me, today, the cloud enables workflows like

- ▶ Collaboration on documents
 - Discipline with tools is biggest challenge
- ▶ Online Publishing
 - Posting, maintaining, tracking metrics
- ▶ Project management
 - How was it I did this before cloud?
- ▶ For other folks, there are many others
 - Grants management, CRM, finances...
 - All are candidate migrations

The NPTech Cloud is young

- ▶ Enterprise data management
 - We need more than just newer data silos
 - Many apps don't understand how grantmakers and nonprofits work
- ▶ Identity, identity, identity
 - Stuff needs to talk to stuff on OUR terms
 - It's a tough, unsolved problem
 - This is where to be wary in placing bets

The NPTech Cloud is young

- ▶ Interoperability, interoperability, inter...
 - Prioritize open standards, long-term APIs, free/open source-based solutions
 - Don't adopt anything browser-specific
- ▶ Establish rich offline synchronization
 - Single-points-of-failure are **so** 1970's
- ▶ Don't trailblaze
 - Copy/model others' successes, learnings
 - Unless you're a trailblazer

The Outlook for Cloud

- ▶ Cloud is not a fad
 - And it really can deliver benefits
- ▶ Intentionality is key to migration
 - Involve all users in process from Day 0
 - Base migration on workflows, not tools
 - Assert control and portability of your data
 - Maximize control of your online identity
 - Have fallback plans at the ready
 - Rinse and repeat

The Outlook for Cloud

- ▶ The cloud gets grantmakers to better places
 - Innovative ways of engaging grantees
 - New modes for building allies, support, awareness
 - Collaboration, cost savings, convenience
 - Ability to focus on impact, not on IT
 - Paving the way for mobile

The Outlook for Cloud

- ▶ These are exciting times for new paradigms
 - There is more than one way to get there
 - The journey should be the .org reward
 - Make your organization's path one of greatest sustainability, not least resistance :^)

Thank You!

Questions?