

Local Overthrowing↓ governments using open source techniques

Steve Loughran
stevel@apache.org
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About me



- * I break things for a living
- * Because I am clumsy
- * I work on Ant, SmartFrog, & recently Hadoop
- * For fun, I fall off bicycles



Welcome to Bristol



Come enjoy one of the loveliest parts of the city -a 14 mile linear park from Bristol Bath, a park free of cars and buses,

A secret plan to turn it into a bus lane

From: Transport West of England
<transport@westofengland.org>

Tuesday, November 13, 2007

Route options between the city centre and Emerson's Green are currently being considered including the Bristol-Bath cycle path. Full public and stakeholder consultation on this scheme will be undertaken in 2008.



But not for long, if the road planners get their way

How to stop this?

So, assuming this is bad, what to do? Well, you want to stop it. But that's the wrong question. Step back

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How do you influence society?

This is the real question. How do you effect change?

OSS Project

- Distributed or local team
- Collaborate by email, web, IM, SCM, (F2F)
- Artifacts: application, docs, presentations, web sites
- Infrastructure: SourceForge, Apache
- Success: your product is used

Success: your idea is adopted

This is how an OSS project works. You work over a distance, collaborate to build some artifacts which, are used -if all goes to plan

Political Campaign

- Distributed or local team
- Collaborate by email, web, IM, ~~SCM~~, F2F, *phone*
- Artifacts: ~~application~~, docs, presentations, web sites, *leaflets, videos, demonstrations, events, press*
- Infrastructure: ~~SourceForge, Apache~~

Success: your idea is adopted

And here is a political campaign. A team -maybe global, maybe local. What's different is

- (a) Your output is different. Not code: press events and propaganda
- (b) No infrastructure to help you

But the output is the same: if your idea is adopted -especially by those with influence- you win

Revolution 0.9beta-1.0

- Organise, Educate, Agitate
- Slogan — “Bread and Peace”
- Logo: Hammer + Sickle
- Seize the communications
- Mass rising of the people

also: forks/branches punished by death



This is the basis of the russian and french revolution

paris commune of 1871 "the democratic and social republic!" ; russian october revolution of 1917: Bread and Peace.

Now:

- Get a domain
- Logo with the URL
- Build communications channels
- Mass rising of the people

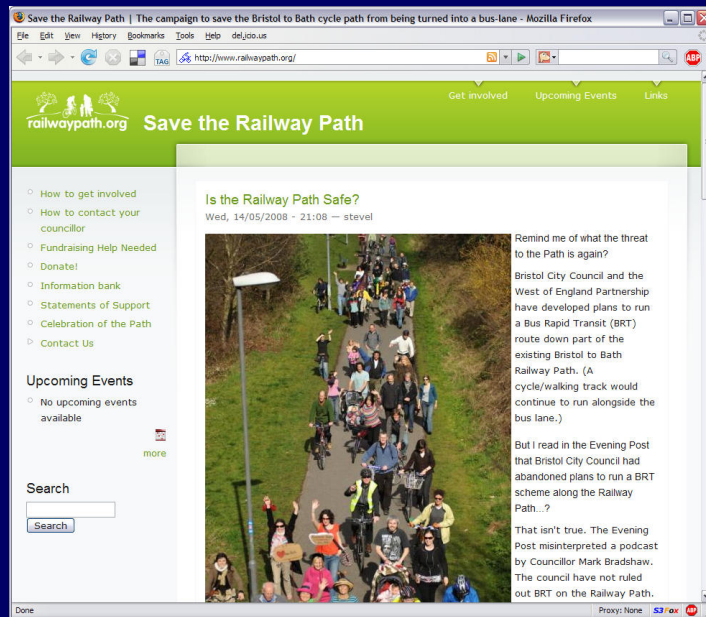


Now: domain, URL, logo. Something that prints well.

Communications Channels

- Group Mailing List - Yahoo! Groups
- Web Site
- Mass media
- Leafletting
- TODO: mass SMS

Site: Drupal on Nearlyfreespeech.net

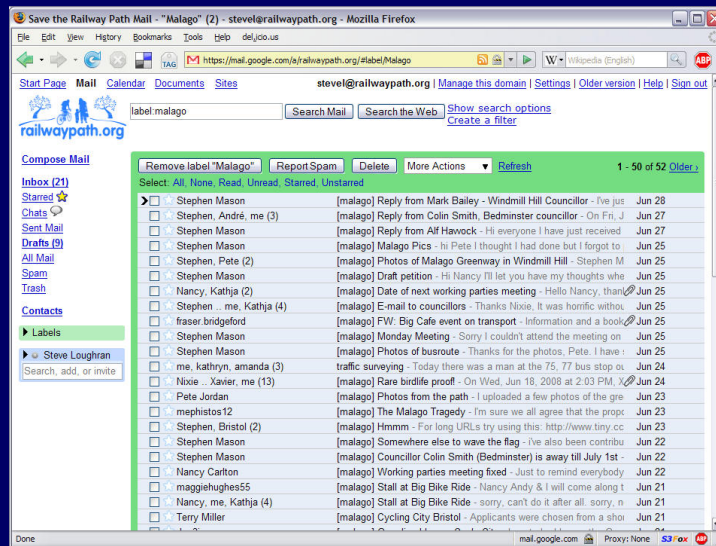


Credit: David Mawdsley

This is PAYG hosting; with domain its cost <\$20

There's also a facebook group. This is busy in the facebook community; some people live in it, and it brings them in. But it doesn't show up in PageRank; as far as the search engines are concerned, it doesn't exist.

Email: Google Apps



- @railwaypath.org is better than @hotmail.com
- Google Applications is utterly inadequate
- SPF record nightmares

Now, I could have turned a linux laptop@home into a mail server, but didn't want to have or be a SPOF. Google apps starts of OK, but soon gets out of its depth

Classic Media

- * Local Paper: "The Evening Post"
- * Local TV (not on Sundays)

Full-time press officer

- # Mobile phone #
- # Up to date with press stories
- # Good quotes on demand
- # Press releases

This is what you need. An FTE doing press duty on demand. Nobody wanted to do this; nobody could commit to the time

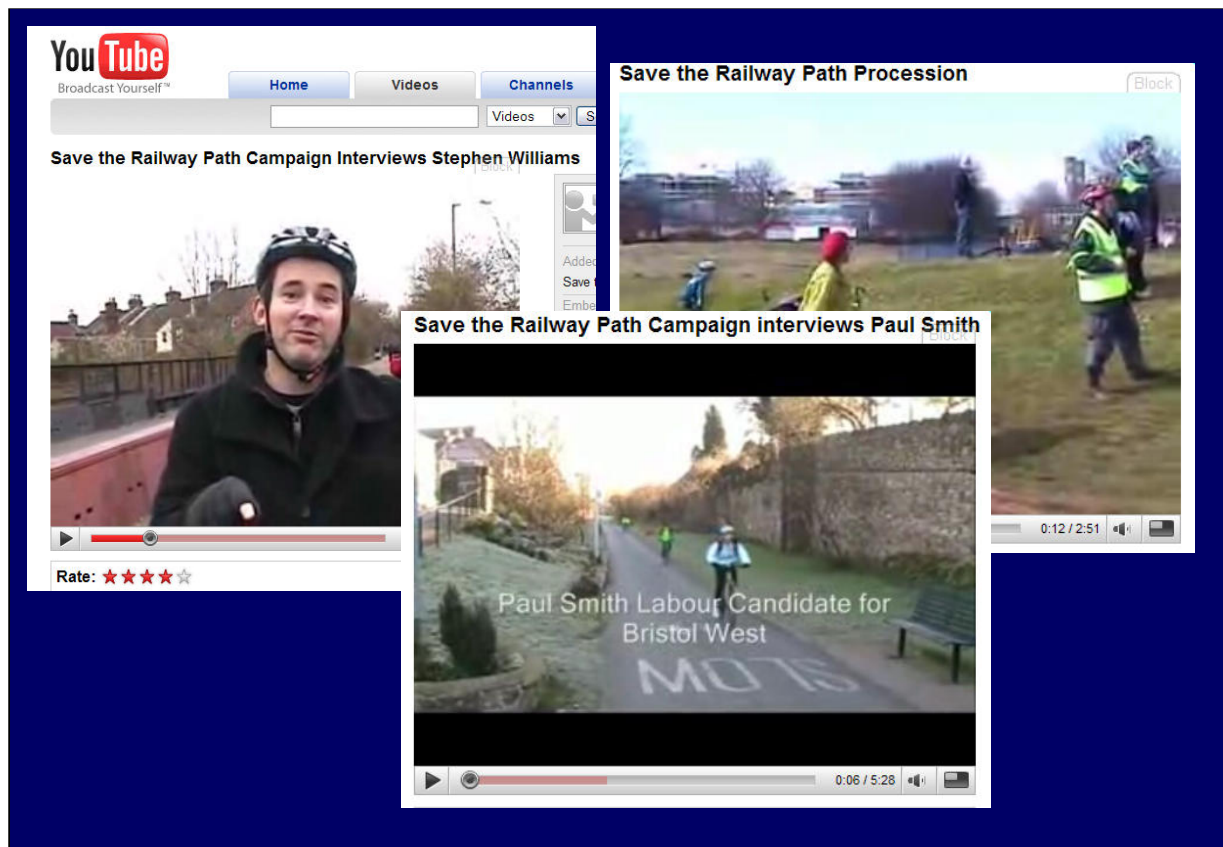
Emergent Media

- * Local blogs
- * Debate + Influencers
- * Humour, scandal
- * Local video journalists: Bristol5on1
- * Politician Blogs: exploit their comments



Alongside the mass media comes those of local politicians and other widely read people. Identify what the blogs are, what they like. Keep them happy. All the local politicians have some form of blog too. If they allow comments, you can get your message across.

One thing to keep an eye on is independent journalism and political activists doing their own reporting via you tube. There's some good stuff out there.



YouTube is our propaganda source. We would do

- * interviews with MPs, prospective of all supporting parties
- * Videos of events
- * Films of the path itself

By getting politicians down on the path at peak hours, we also reinforced how insane it would be to run buses down it

Leaflets/Posters



- * Biggest expense
- * Days to print

Agile Printing: people laser printing 50 pages on demand

Leaflets are one of the big expenses; they take effort to do well, and you need to get them out in the hands of people to whom it matters. Most recently, we've been playing with having people do on-demand-printing at home, where you can do short runs

- good for small events; issue timely news
- No/less wasted leaflets
- Cost is low (voluntary is free, B/W toner and paper is cheap)
- Can do custom leaflets for different parts of the city

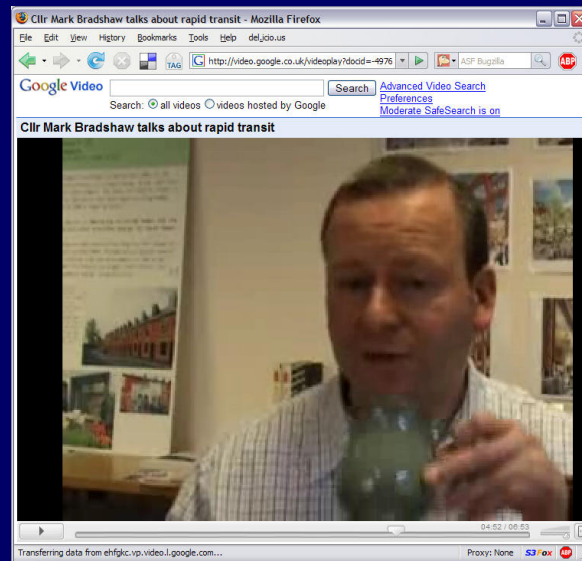
Mass rising of the people



This is what takes governments to change their mind. Not emails, petitions, blogs, but hundreds to thousands of citizens on Here is the population of the city, saying "this is what we want". One of the largest demos in the past 20 years, after the poll-tax and stop the war demos. No trouble, no arrests. Party time!

To organise something like this is a serious undertaking, which is why I'm glad other people undertook it. Which shows why a wide base of activists is a key to success: the more people you have, the more you can do. But in a campaign like this, it's *the broader the set of skills and abilities the more you can do*. We have wildlife people worrying about nature; we have engineers looking at the engineering aspects of the project, others the economics. But to organise a mass event, its not formal training you need, its willingness to get out there, work with others and put in the hours.

Metric of success: they copy you



-as they accede to your demands

The council backs down, and does so on a video made even worse than ours

Skills

organising events
marshalling
direct action
fundraising
leafletting

lobbying
negotiating
organising teams
politics
strategies

biology
geology
geography
economics
traffic studies
surveying
statistics
civil engineering

letter-writing
copy-editing
slide creation
graphic design
leaflet creation
emailing

filming
photography
interviewing
editing

press releases
quotes
media tracking
archiving

PHP
Perl
datamining
web sites
mail lists

Here are some of the things that we've needed in our campaign. Notice how little of this is code related. There is a big world out there, and you need a lot of skills to win. I am lucky that so many people helped. I did the powerpoint.

-1 to:

- * Collaboration via Subversion or other SCM tool
- * Shared calendars & docs in Google apps
- * Issue trackers for todo lists
- * Apache style voting algorithms
- * Having all discussions in the open

Here are things that we take for granted in OSS, that don't work here. Some because of the training effort, requirements for good connectivity, others because they don't work in such a community. In particular, if you are trying to fight a single opponent, sometimes you need to be secretive

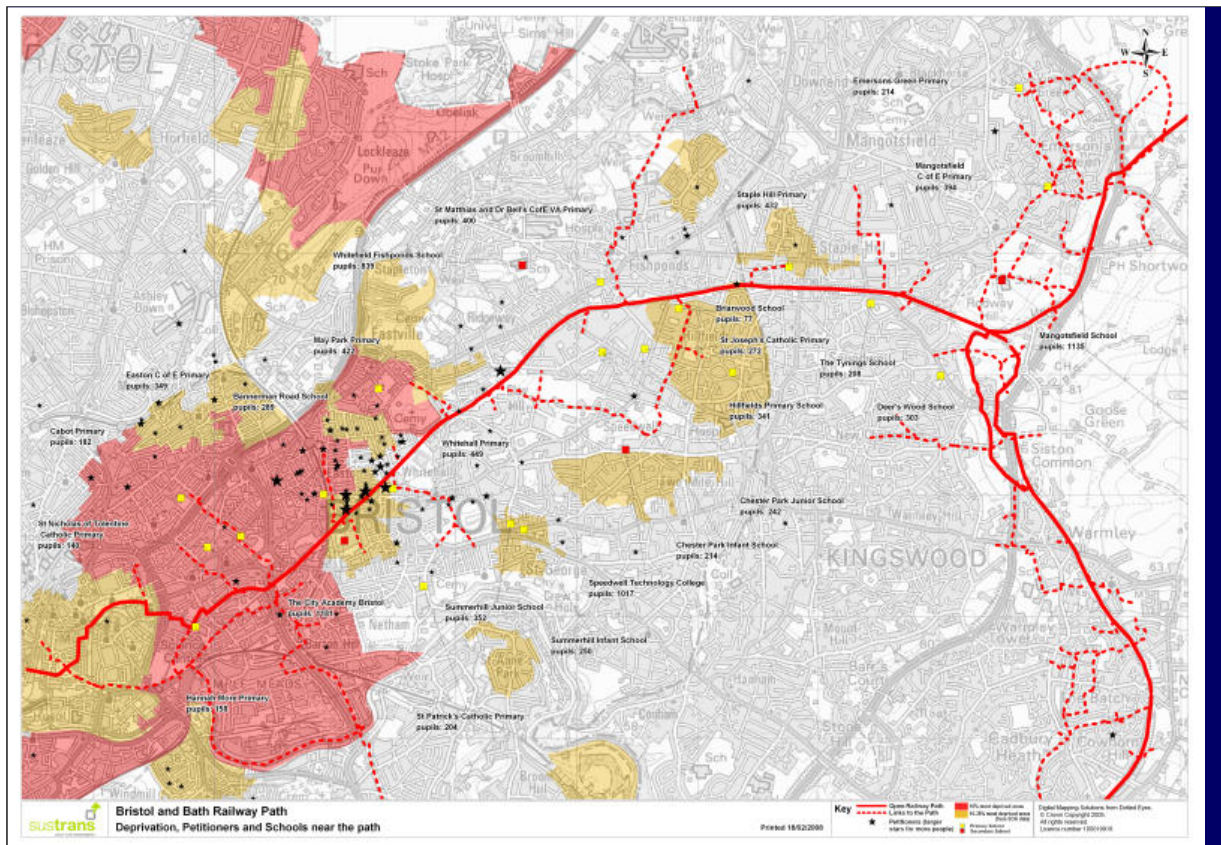
Forking and Branching

- Branch: Malago Greenway, South Bristol.
—reuse press list; spreadsheets on politicians.
- Rewrite: Belfast Bike path under threat
—take on lessons
- Have to rebuild infrastructure from scratch. Why?

We need a SourceForge for political campaigns

In classic revolutions, forking was punishable by death. Here we celebrate reuse, just wish it was easier.

One thing we don't have is an easy way to bring up a web site + announcements list + private and public shared docs. you can hack a lot of these things together but it's pretty painful.



Now, here's something interesting. A demographics map of postcodes of activists overlaid on a deprivation. We have inadequate coverage of the inner core along the path; the poorer bit which would suffer even more from a lost path. Why? One possibility, implicit ethnic bias in the campaign. Another: by being biased towards online, we disenfranchise people who don't have home PCs with broadband connectivity. Which has to be considered a luxury.

Embrace the phone!

- 40-60% of households don't have broadband
- It's OK for apache.org to require internet access, but not community campaigns
- The Internet can make campaigns more agile, but must not lock out the deprived parts of the country
- We need to take advantage of mobile phones

If the regime fights back

- * “Infiltration”
- * Regulation of Investigatory Powers Act 2000
- * PGP keys on demand
- * Datamining mobile phone call data, emails, ISP TCP traffic logs, oystercard, ANPR data, youtube data

Apache Hadoop is the foundation for such datamining:
HDFS is the petabyte file system,
Map/Reduce the algorithm

Now, people in the audience are thinking "yeah, but what about a repressive regime". It's a lot easier to protest about something minor in a democracy, what if there were laws against it.

First the bad news: the UK has some oppressive laws that even local councils can use. RIPA lets any authority spy on people suspected of criminal activities. And when your campaign starts thinking of direct action of any form, that makes you subject to it.

The other issue is bulk datamining of commodity surveillance data, logs of mobile, network, road and public transport traffic. This whole idea scares me because its only recently that with algorithms like Map/Reduce and petabyte file systems like Hadoop DFS and Google FS that governments have been able to make use of such data. Don't think they aren't, or at least aren't busy trying to.

We can datamine too: “George”

```
{event,lost,"00:0F:B3:92:05:D3","2008-04-17T22:11:15",1124313075}.  
{event,found,"00:0F:B3:92:05:D3","2008-04-17T22:11:29",1124313089}.  
{event,lost,"00:0F:B3:92:05:D3","2008-04-17T22:24:45",1124313885}.  
{event,found,"00:0F:B3:92:05:D3","2008-04-17T22:25:00",1124313900}.  
{event,found,"00:60:57:70:25:0F","2008-04-17T22:29:00",1124314140}.
```

- * Bluetooth discoverable phones
- * Log peak pedestrian traffic
- * Identify return trips; correlated devices
- * Give us better use data than the consultants

This is a prototype I'm putting together in my free time.

I've been running it at home; an old laptop with the KDE Bluetooth scanner polling continually; calling 50 lines of ruby script on every device found/lost event; collecting as XML and now Erlang tuples.

Not enough data to justify Hadoop; couchdb looks interesting though; the datasets work and its very Map/Reduce friendly.



MANET routing; battery powered; mobile communications and journalism devices

Now, what about a really oppressive regime. you need something that doesn't rely on a cellphone network -which they can shut down (e.g. Burma) or ISPs that can block traffic (Great Firewall of china). You want something with a built in camera, peer-peer networking that route packets across nodes in the mesh, that has battery backup so even if the curfew includes a power cut you can still talk. And you need to be able to see the source to be sure it hasn't been subverted or has back doors in.

The kids OLPC to the right of the photo meets these requirements, the corporate windows desktop with closed source OS, BIOS, Keyboard Controller firmware does not. Just a thought...

