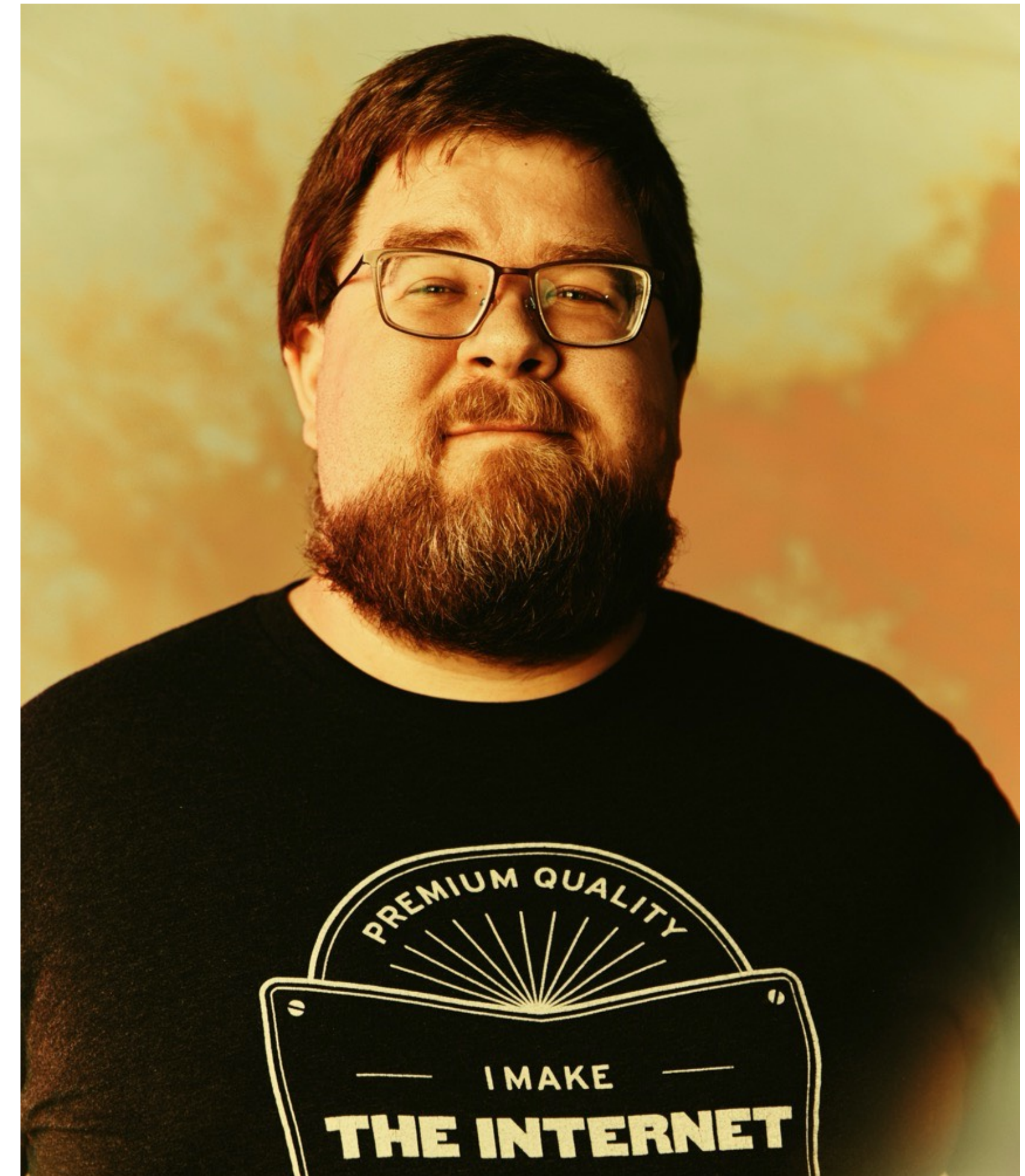


# Launching Your Site

WebCon 2021  
by Dan Ficker

# About Me

- Dan Ficker
- St. Paul, Minnesota
- Twitter: @deliriousguy
- Web: <http://da-man.com/>
- Customer Success Engineer, Pantheon



# We Want To Launch!

- A team built us a shiny new website
- They have given you the files and how the site works
- You are a front-end dev/back-end dev/project manager
- You are not a server admin!
- **You can do this.**

# What We Will Cover

- Gather Site Team Information
- How does DNS work?
- Change DNS records
- Configure SSL Certificates
- Acquire Hosting
- Let's Move It!





# Gathering Stakeholders

Making a List

Image: [NBC12](#)

# Tech Contacts



- Domain Registrar
- Domain Owner
- DNS Servers
- DNS Managers
- Hosting Provider



# The WHOIS Record

- Websites or commands to look up Whois records.
- Important Parts:
  - Registrar
  - Admin Contact
  - Expiration Date
  - DNS Nameservers

```
Domain Name: DA-MAN.COM
Registry Domain ID: 86660391_DOMAIN_COM-VRSN
Registrar WHOIS Server: whois.tucows.com
Registrar URL: http://tucowsdomains.com
Updated Date: 2020-05-15T08:48:58
Creation Date: 2002-05-16T20:35:09
Registrar Registration Expiration Date: 2021-05-16T20:35:09
Registrar: TUCOWS, INC.
Registrar IANA ID: 69
Reseller: Hover
Domain Status: ok https://icann.org/epp#ok
Registry Registrant ID:
Registrant Name: Contact Privacy Inc. Customer 0127784514
Registrant Organization: Contact Privacy Inc. Customer 0127784514
Registrant Street: 96 Mowat Ave
Registrant City: Toronto
Registrant State/Province: ON
Registrant Postal Code: M6K 3M1
Registrant Country: CA
Registrant Phone: +1.4165385457
Registrant Phone Ext:
Registrant Fax:
Registrant Fax Ext:
Registrant Email: da-man.com@contactprivacy.com
Registry Admin ID:
Admin Name: Contact Privacy Inc. Customer 0127784514
Admin Organization: Contact Privacy Inc. Customer 0127784514
Admin Street: 96 Mowat Ave
Admin City: Toronto
Admin State/Province: ON
Admin Postal Code: M6K 3M1
Admin Country: CA
Admin Phone: +1.4165385457
Admin Phone Ext:
Admin Fax:
Admin Fax Ext:
Admin Email: da-man.com@contactprivacy.com
Registry Tech ID:
Tech Name: Contact Privacy Inc. Customer 0127784514
Tech Organization: Contact Privacy Inc. Customer 0127784514
Tech Street: 96 Mowat Ave
Tech City: Toronto
Tech State/Province: ON
Tech Postal Code: M6K 3M1
Tech Country: CA
Tech Phone: +1.4165385457
Tech Phone Ext:
Tech Fax:
Tech Fax Ext:
Tech Email: da-man.com@contactprivacy.com
Name Server: ns1.hover.com
Name Server: ns2.hover.com
DNSSEC: unsigned
Registrar Abuse Contact Email: domainabuse@tucows.com
```

# WHOIS Record Highlights

- Registrar
  - Registrar URL: `http://turowsdomains.com`
  - Registrar: TUCOWS, INC.
- Important Dates
  - Updated Date: `2020-05-15T08:48:58`
  - Creation Date: `2002-05-16T20:35:09`
  - Registry Expiry Date: `2021-05-16T20:35:09`



# WHOIS Record Highlights

- Registrant Contacts (abbreviated)
  - Registrant Name: Contact Privacy Inc. Customer 0127784514
  - Registrant Phone: +1.4165385457
  - Registrant Email: da-man.com@contactprivacy.com
- Name Servers
  - Name Server: ns1.hover.com
  - Name Server: ns2.hover.com

# WHOIS Definitions

- Registrar: Company who leases the rights to the domain name.
- Registrant & Admin: Person/Organization who manages the domain name.
- Name Servers: Servers to query for DNS Records.

# Tech Contacts



- Domain Registrar: Hover.com
- Domain Owner: ? (private)
- DNS Servers: ns1.hover.com and ns2.hover.com
- DNS Managers: ?
- Hosting Provider: ?

# DNS Next Steps

- Find out who manages current name servers.
- See if they will continue hosting name servers.
- If not, set up new DNS name servers.
  - NOTE: Changing name servers can take a few days.
- Get login/contact for changing DNS records.





# How DNS Works

DNS = Domain Name System

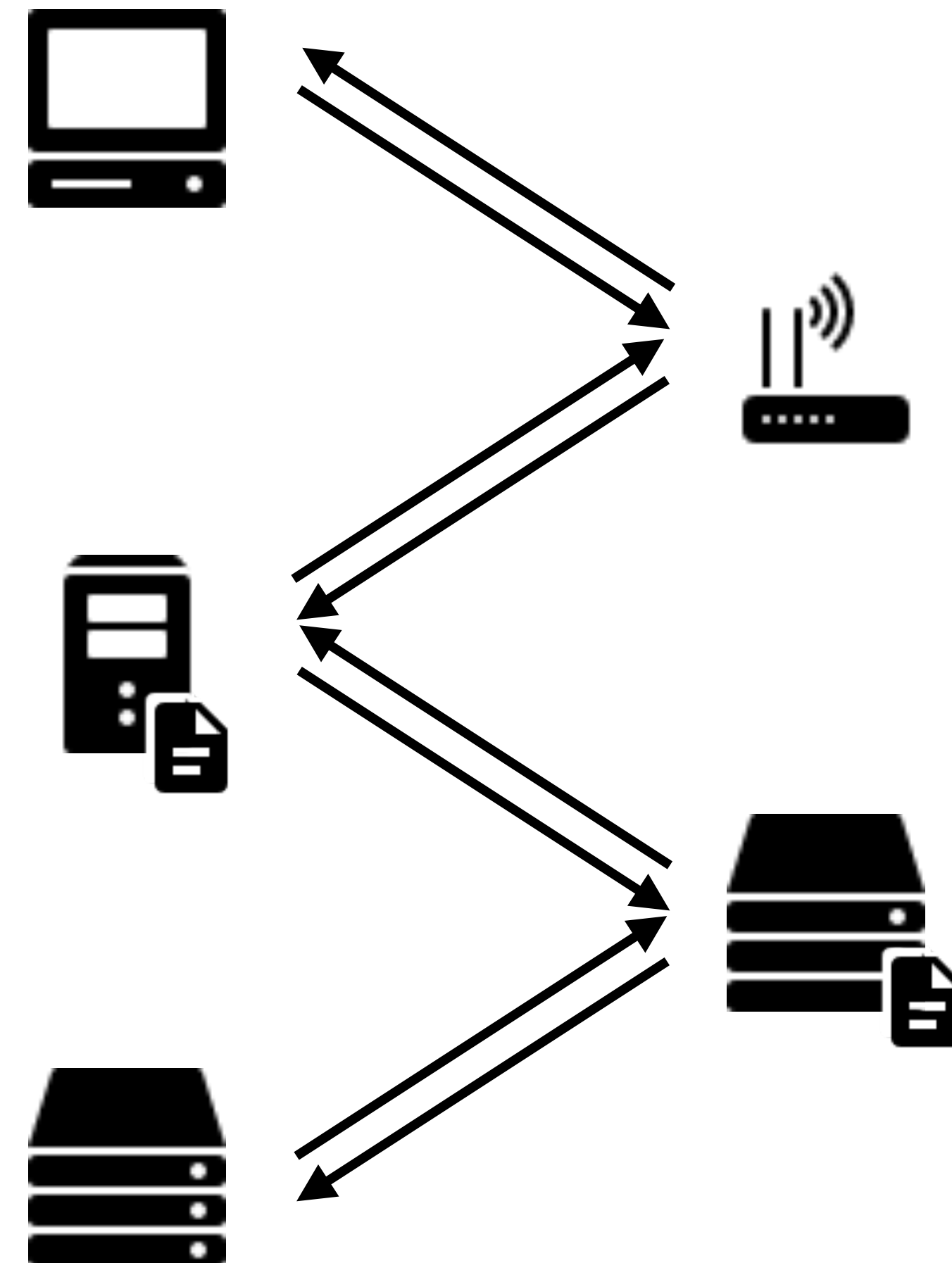
# Internet Overview

- Your Computer
- Local Network Router
- Internet Provider Router(s)
- Internet Backbone(s)
- Name Server(s)



# The Request Path

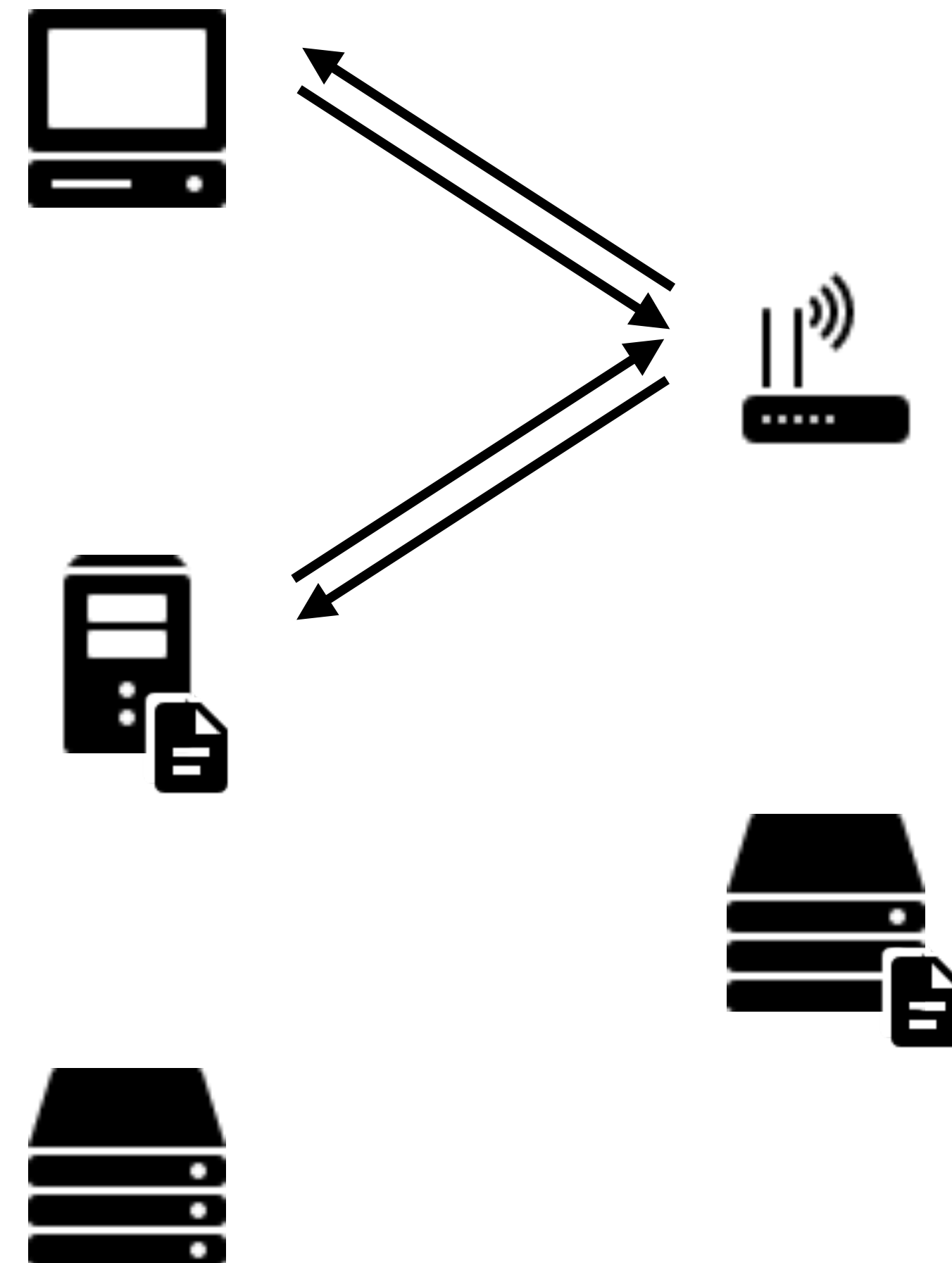
- Your computer asks the router, “Where is da-man.com?”
- The router doesn’t know, so it passes the request on.
- If no one knows, the name server knows
- DNS servers can save a copy to use for later requests of the same data.





# Time To Live (Caching)

- Response: “23.185.0.2”
- It includes a TTL of 3600 seconds.
- Routers assume this data is good for the next 3,600 seconds.
- Routers can keep it and give it to others until expiration.
- Result: Faster to get commonly-used DNS records when TTL is longer.





# Another Whois/DNS Example

Registrant:  
University of Illinois  
1304 West Springfield Avenue  
Urbana, IL 61801-2910  
US

Administrative Contact:  
Domain Admin  
University of Illinois Technology Services  
1304 West Springfield Avenue  
Urbana, IL 61801-4399  
US  
+1.2172441000  
dns-admin@illinois.edu

Technical Contact:  
University of Illinois Technology Services  
1304 West Springfield Avenue  
Urbana, IL 61801-4399  
US  
+1.2172441000  
dns-admin@illinois.edu

Name Servers:  
DNS1.ILLINOIS.EDU  
DNS2.ILLINOIS.EDU  
DNS3.ILLINOIS.EDU

Domain record activated: 13-Jan-1997  
Domain record last updated: 25-Mar-2021  
Domain expires: 31-Jul-2021

- Whois of illinois.edu on right
- Nameservers are:  
DNS1.ILLINOIS.EDU  
DNS2.ILLINOIS.EDU  
DNS3.ILLINOIS.EDU
- DNS lookup of webcon.illinois.edu points to IP address “18.220.149.166”
- This IP address looks to be hosted by Amazon according to IP lookup.





# Hosting

The Launch Pad?

Maybe this analogy doesn't work.



# Hosting Requirements

- Depends on your application.
- What kind of web server?
  - Is there server-side code that needs to run? PHP? JavaScript? Something else?
- Does the application have a database?
- How much traffic do you expect to need to handle at one time?
- What hosts can meet these needs?



# Hosting Trade-Offs

- Hosting can be from \$2 to thousands per month.
- More money can get more performance.
- More money can also get more simultaneous traffic.
- More money will usually get better support.



# Stakeholder List



- Domain Registrar: Hover.com
- Domain Owner: Me
- DNS Servers: ns1.hover.com and ns2.hover.com
- DNS Managers: My login to Hover.com
- Hosting Provider: Pantheon

# Getting DNS Records

- With VPS or Private Server, you may just point to IP:
  - A record: 23.185.0.2
- Shared/cloud hosts require to know what domains you point.
- Shared/cloud hosts may give you an A or CNAME record to the server:
  - CNAME: live-sitename.pantheonsite.io

da-man.com

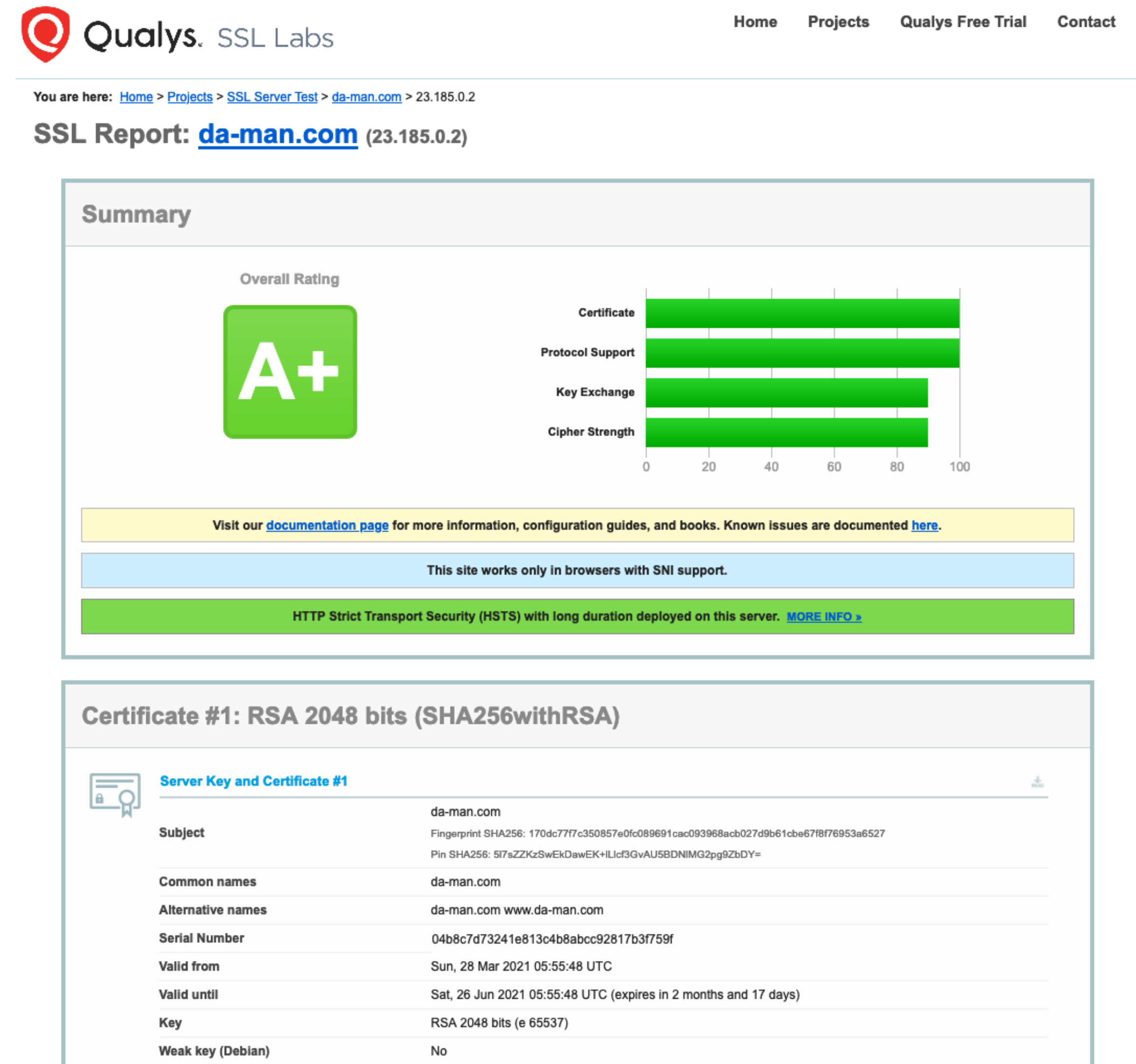
## DNS

✓ DNS pointing successfully at Pantheon's Global CDN  
See our [performance guide](#) for best practices to boost your site's performance

Type	Detected Values	Required Values
A	23.185.0.2	<input type="text" value="23.185.0.2"/>
AAAA	2620:12a:8000::2	<input type="text" value="2620:12a:8000::2"/>
AAAA	2620:12a:8001::2	<input type="text" value="2620:12a:8001::2"/>

# SSL Config & Setup

- Most hosts and DNS providers offers SSLs, plus some specific companies like DigiCert, Comodo, etc.
- Will include install instructions for various platforms.
- Optimal config at [cipherlist.eu](https://cipherlist.eu).
- Config tester at [SSLLabs.com](https://SSLLabs.com).
- Free basic certs at [LetsEncrypt.com](https://LetsEncrypt.com).







# SEO Considerations

Making a Robot-Friendly Transition



# HTTP 301 Response

- Redirects browsers and tells the Internet, “This content has permanently moved.”
- Search engines move link reputation and other ranking from the old URL to the new one.

# Redirect Content

- The old “About Us” page was at `/about.asp` or `/info/about`.
- They should be redirected to the new page, `/about-us`.
- If the old page does not exist on the new site, don’t just redirect to a random page. 404 page is fine.
- Your CMS may be able to do this. Or you can also do the redirects in server configuration files.

# Redirect Domains

- A site can often be accessed by webcon.illinois.edu or www.webcon.illinois.edu.
- Maybe even illinoiswebcon.org, ilwebcon.com too (not real sites).
- Redirect all to webcon.illinois.edu.
- Helps make sure search engines are less confused about duplicate content.
- Keeps links consistent for all visitors.

# Redirect to HTTPS

- If the old site was not HTTPS, redirect all traffic from HTTP to HTTPS.
- Don't redirect just to the home page, redirect to the new page's site on the HTTPS URL.
- More generally, any request to HTTP could be redirected to HTTPS.
- Optional: Implement HSTS so browsers redirect to HTTPS in future.





# The Big Launch



# Final Preparations

- Edit your hosts file to point to the IP or view it on a working test domain. Verify site is looking good.
  - You can still see the old/new site side-by-side.
- Put the TTL on all DNS records as low as 600 seconds.
  - Less time of both old and new being accessed/cached at same time.
- If previous TTL was 3,600 or 86,400 seconds, wait that long so that DNS caches are updated.



# Making The Switch

- Update the DNS records to point to the new host.
- For the length of the TTL time after change, some visitors will see the old site and some the new.
- The site is now live.





# Post-Launch Testing

- Check on various networks that the website looks like it moved.
- Verify DNS Propagation: [whatsmydns.net](https://whatsmydns.net)
- Verify SSL Configuration: [ssllabs.com](https://ssllabs.com)
- Verify redirects in place and working.
- After verifying, increase DNS TTL to a higher amount.
- ***Congratulations!***



# Thank You

Any Questions?

# Kill The Website Relaunch

- Blog Post from Pantheon CEO, Zack Rosen
- Don't Relaunch every few years
- Make smaller, incremental improvements
- Always be improving instead
- We call this WebOps
- <https://pantheon.io/blog/kill-website-relaunch>

