JAMstackin'

Cloud ready architecture for web sites

Story time: Guess the stack

10 pages of intranet information. Campus overview, organisational charts and most important telephone numbers. Updated 2-3x per year

Liferay Portal

Foodie-Facebook! 1000s of members put recipes online, like and share. They can put recipes on their weekly food plan. Coaches can comment and help adjusting.

Wordpress

An event page, where people can select seats and tickets to a multitude of events in real-time. They can reserve seats for friends who can buy within a couple of hours.

A Java enterprise application

An event page, where people can select seats and tickets to a multitude of events in real-time. They can reserve seats for friends who can buy within a couple of hours.

A Java Enterprise application, publishing 20 JSON files and 7 PHP scripts every other hour.

The tools of our trade

Hosting: Availability, stability, security

Application: Process, state

CMS: Data, structures, editors

Front-End: Markup, CSS, JS

Technology Lock-In

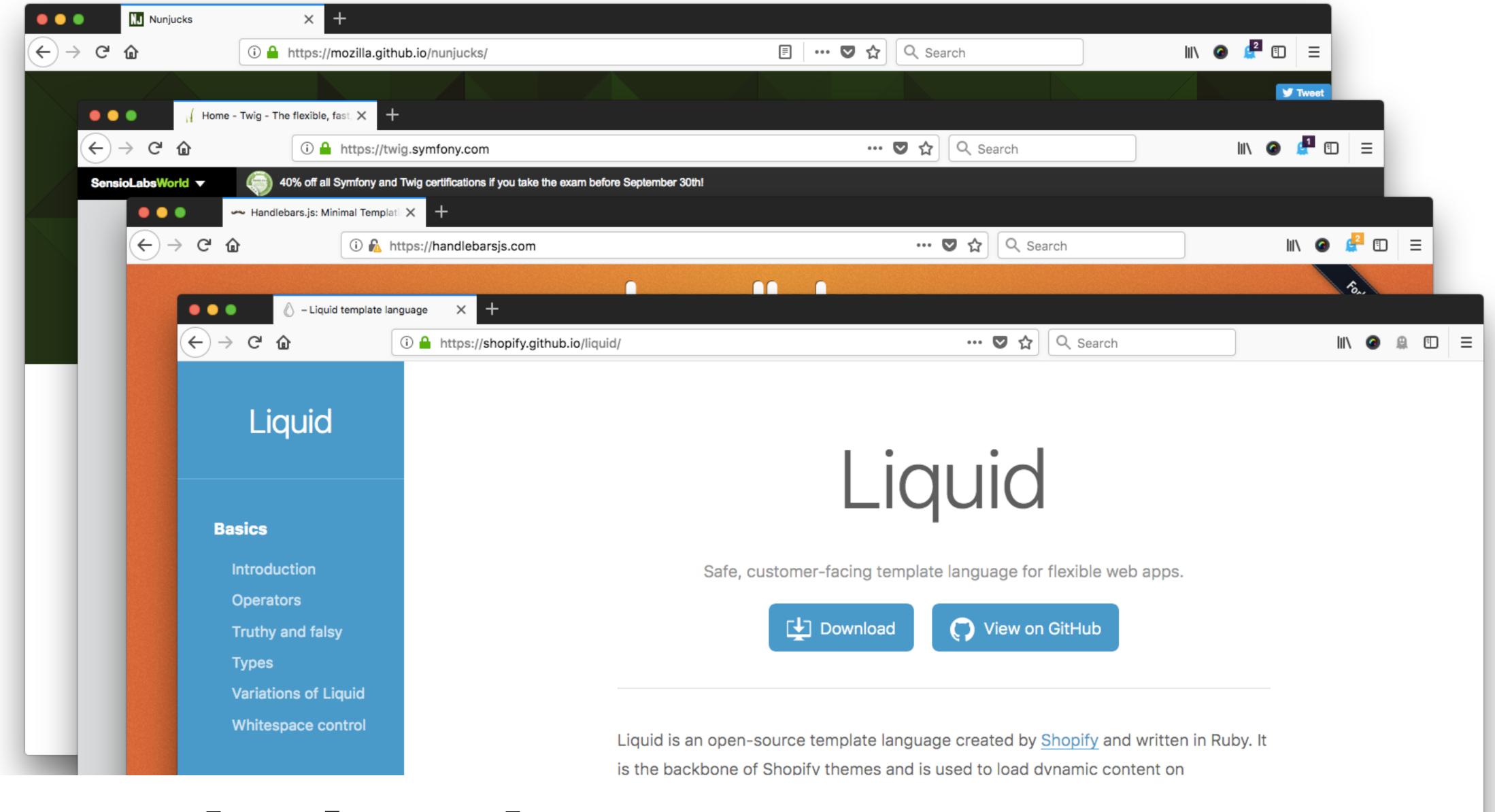
Hosting: Availability, stability, security

Application: Process, state

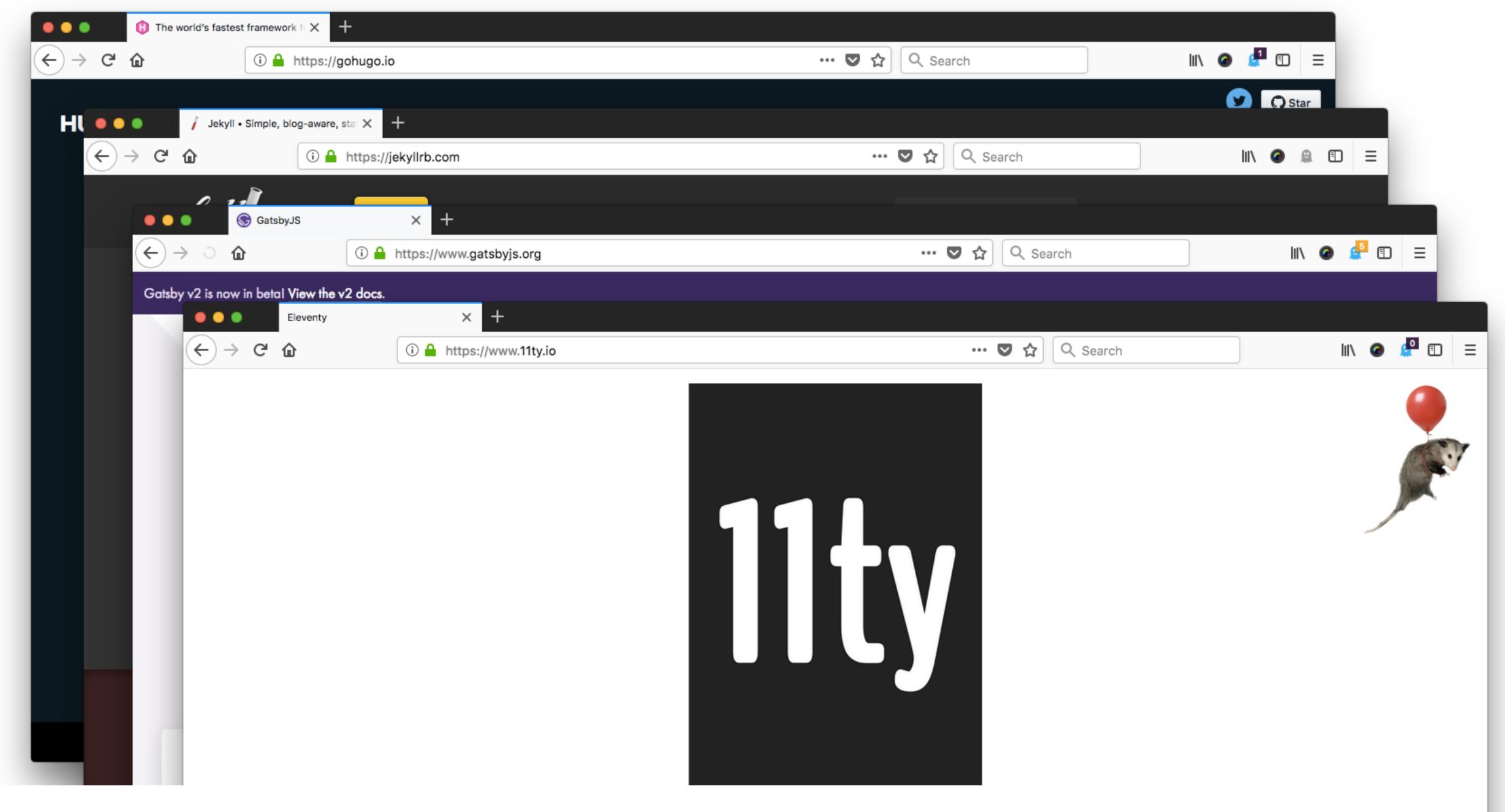
CMS: Data, structures, editors

Front-End: Markup, CSS, JS

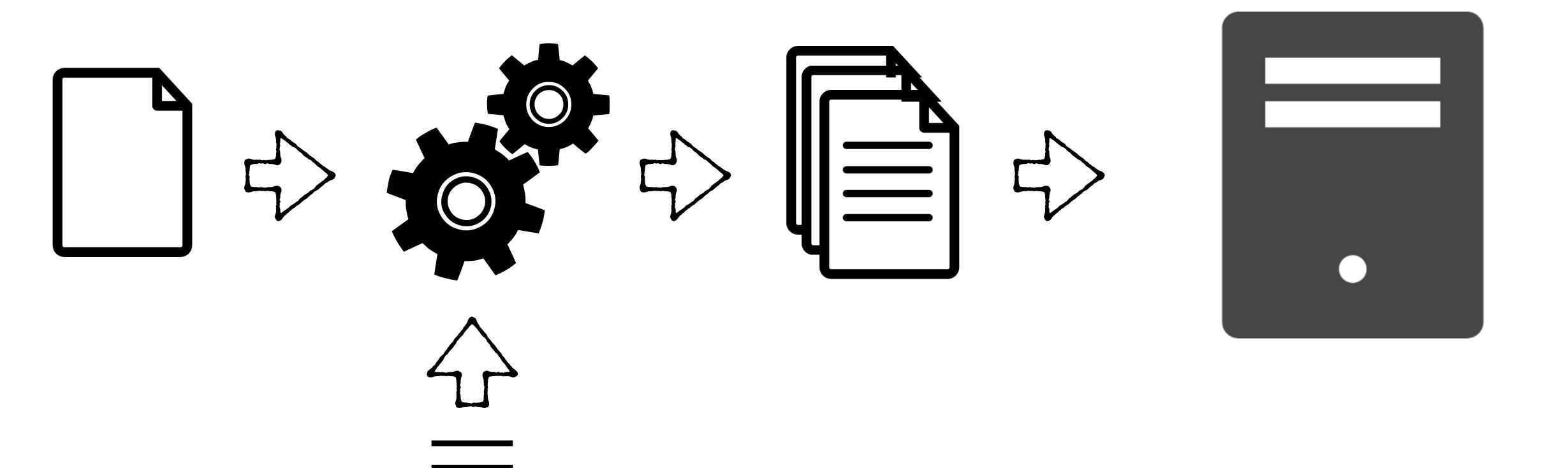
Front-End



Templating languages



Static site generators



```
<!doctype html>
{% if page.lang %}
<html lang="{{ page.lang }}">
{% else %}
<html lang="en">
{% endif %}
<head>
  {% include partial/head.html
</head>
<body {% if layout.mainClass %}</pre>
  {% include partial/header.htm
  {{ content }}
  {% include partial/footer.htm
</body>
</html>
```

```
title: "Wordpress as CMS for your JAMStack sites"
published: true
permalink: /wordpress-and-jamstack-sites/
layout: post
categories:
- Node.js
- Static site generators
- JAMstack
---
```

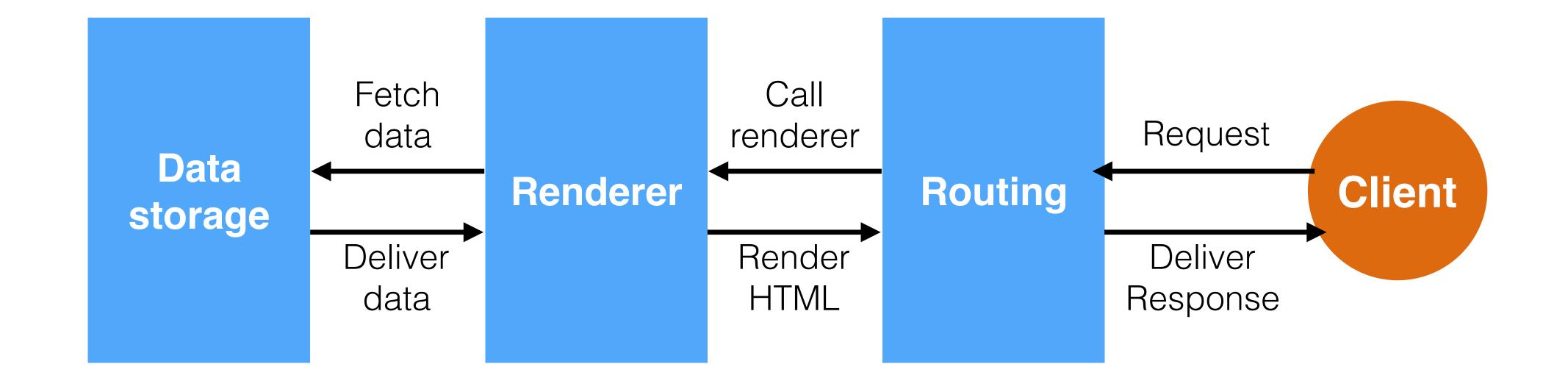
The almighty JAMStack brings you fast and secure static websites, and) they become even easy to edit! However, every once in a while you w [Calypso](https://developer.wordpress.com/calypso/).

One of the best advantages of using a static site generator is that t

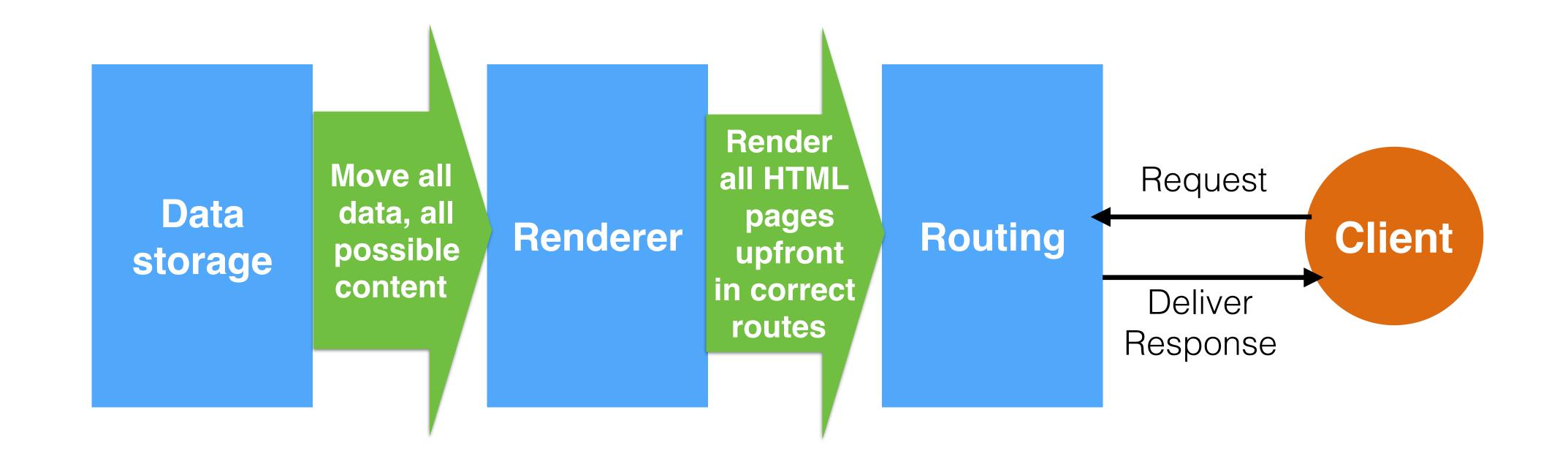
In this example, I use [Metalsmith](http://www.metalsmith.io/) as sta) for instance. And as long as your static site generator knows how t

The Wordpress API

Every Wordpress installation comes with a full fledged JSON API. This

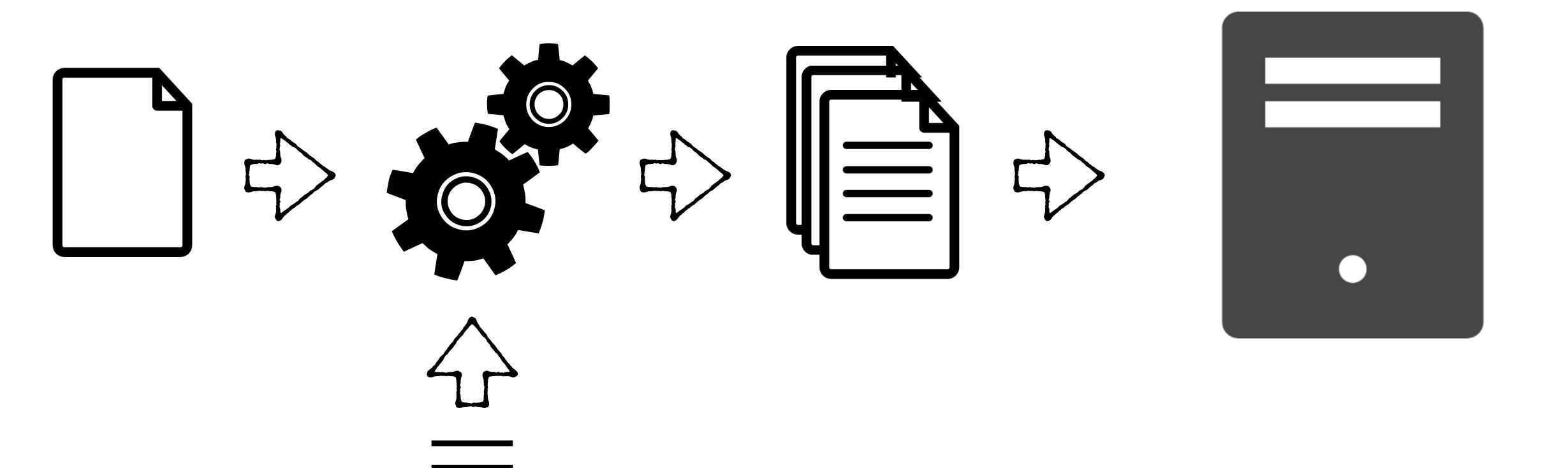


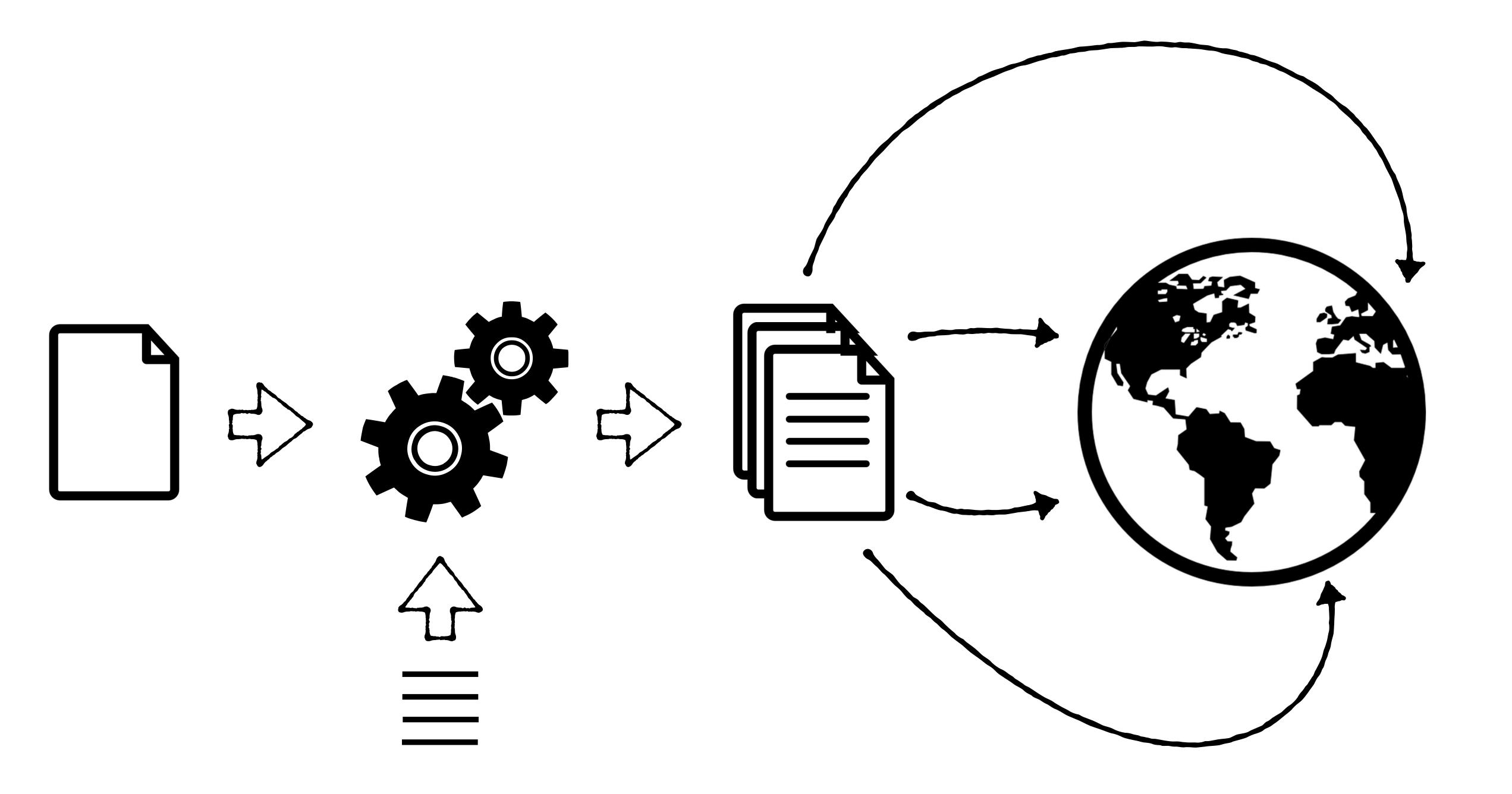
Traditional "Pull" Architecture

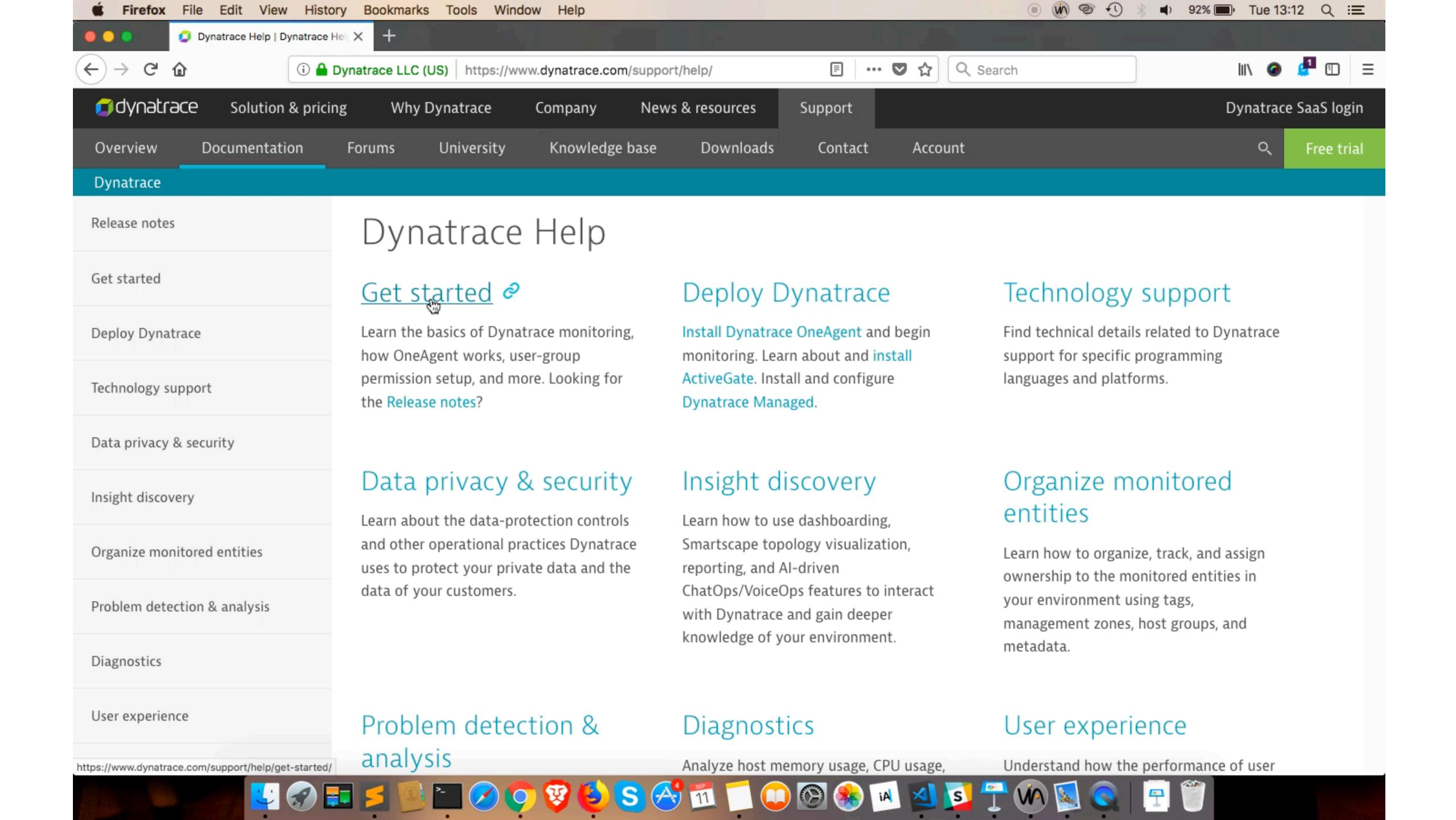


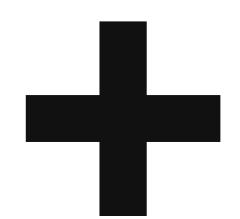
"Push" Architecture of static sites

Hosting









Sources: Markdown, JSON, APIs

It's just HTML

Deploy it: Storage, Dropbox

Scaleable, blazingly fast, secure

Needs a build process

Which increases as site grows bigger

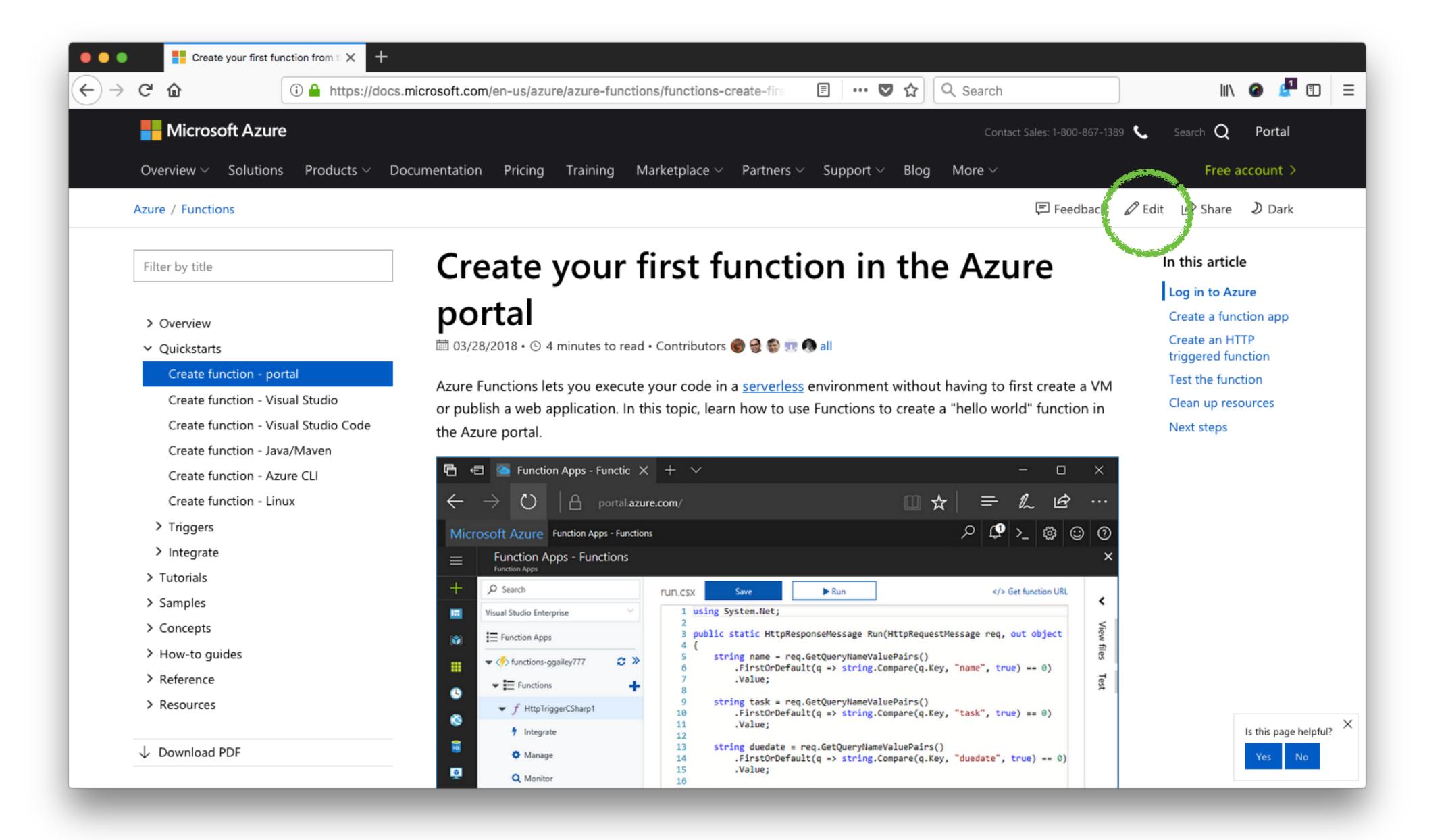
Not so good with binary data

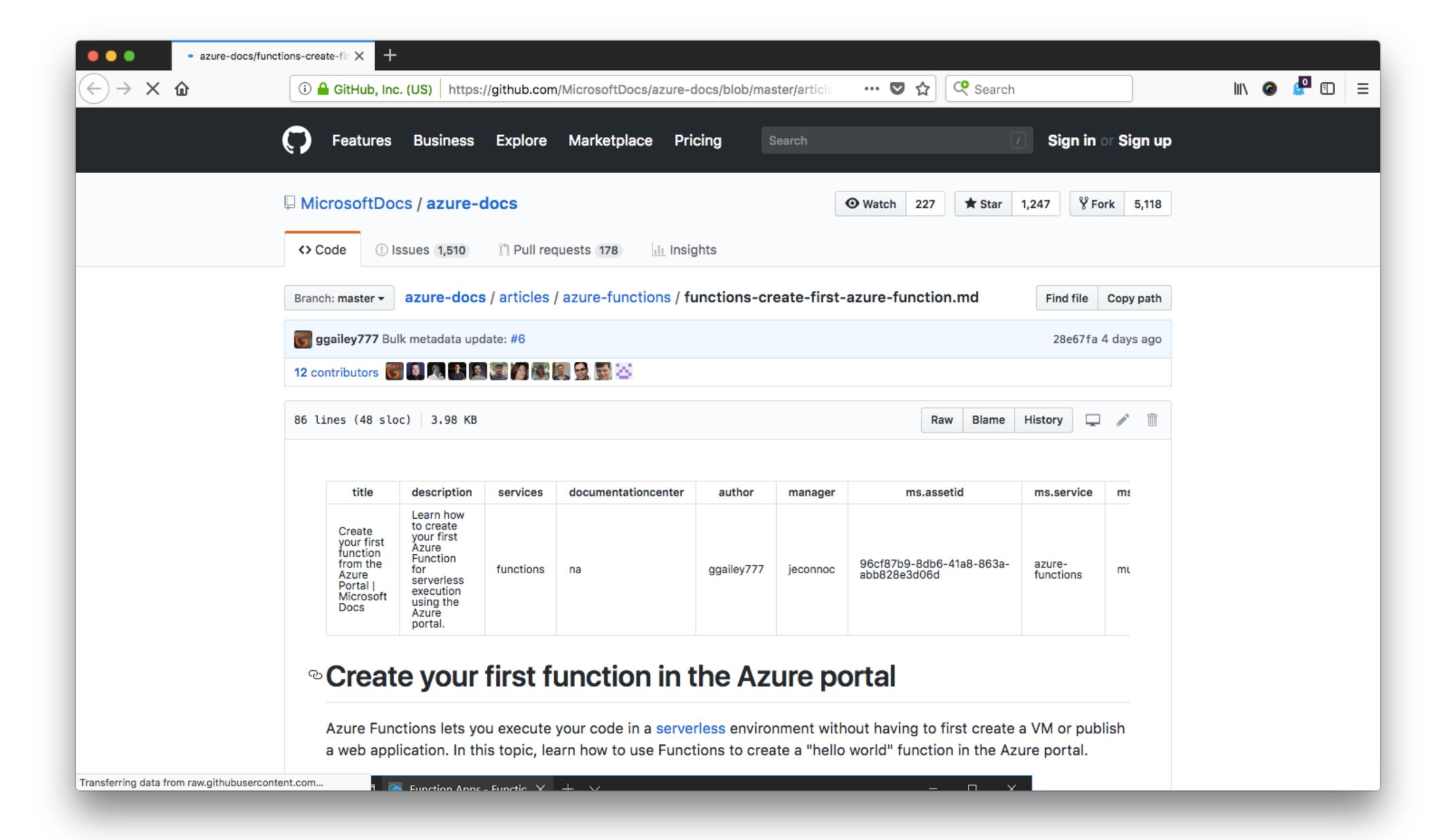
Some SSGs are more flexible than others

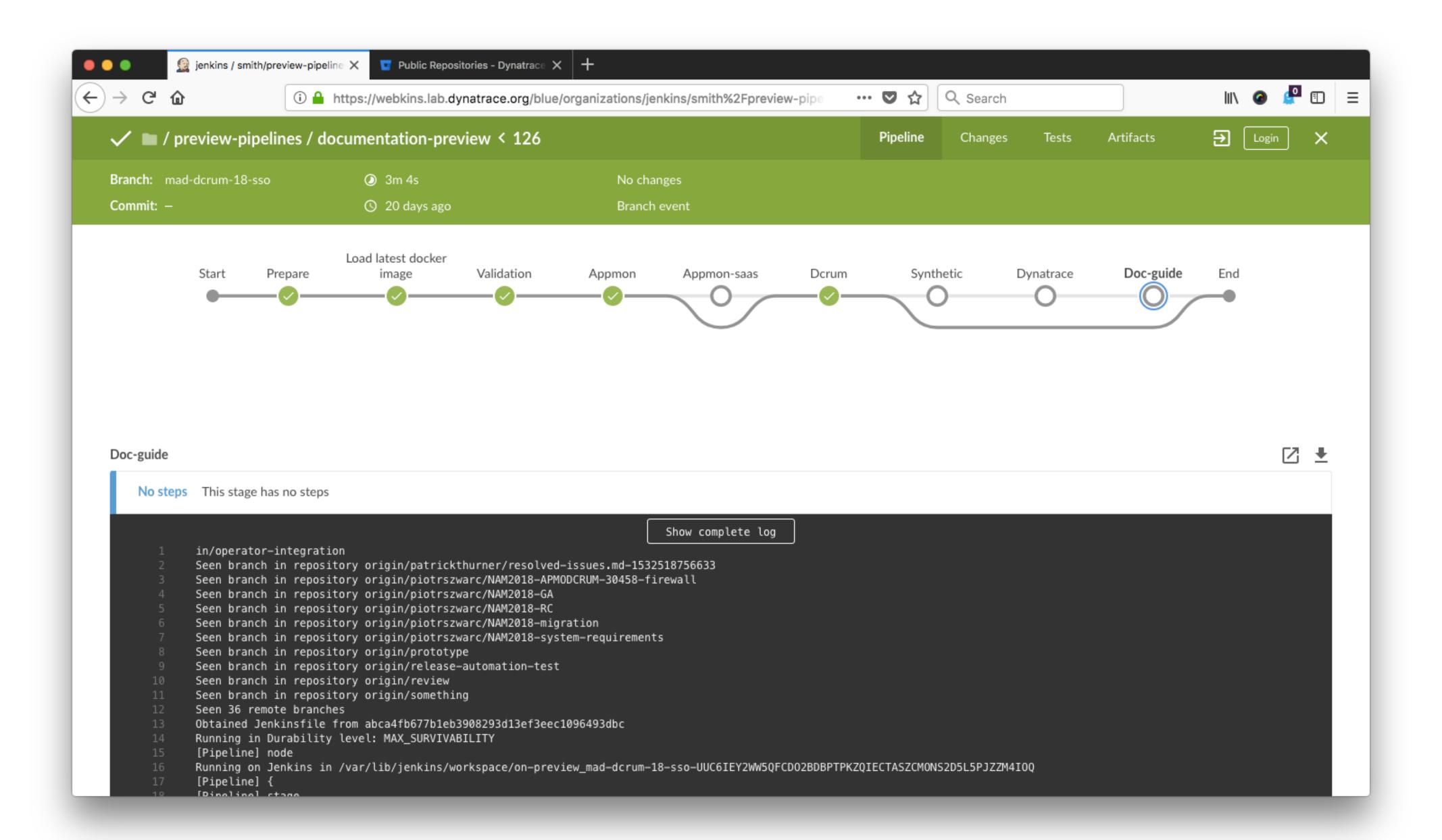
Hosting: Availability, stability, security

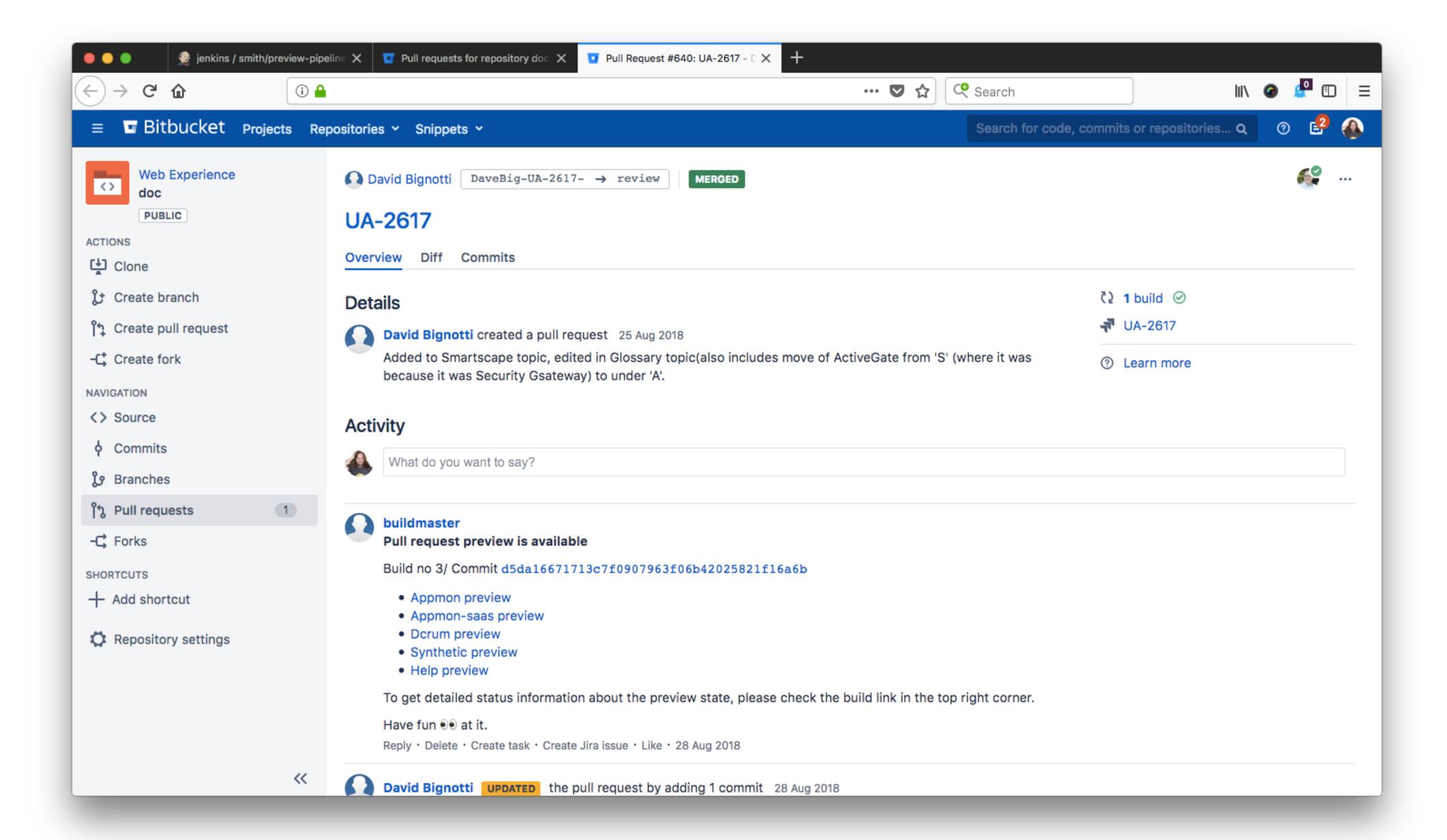
Front-End: Markup, CSS, JS

Content



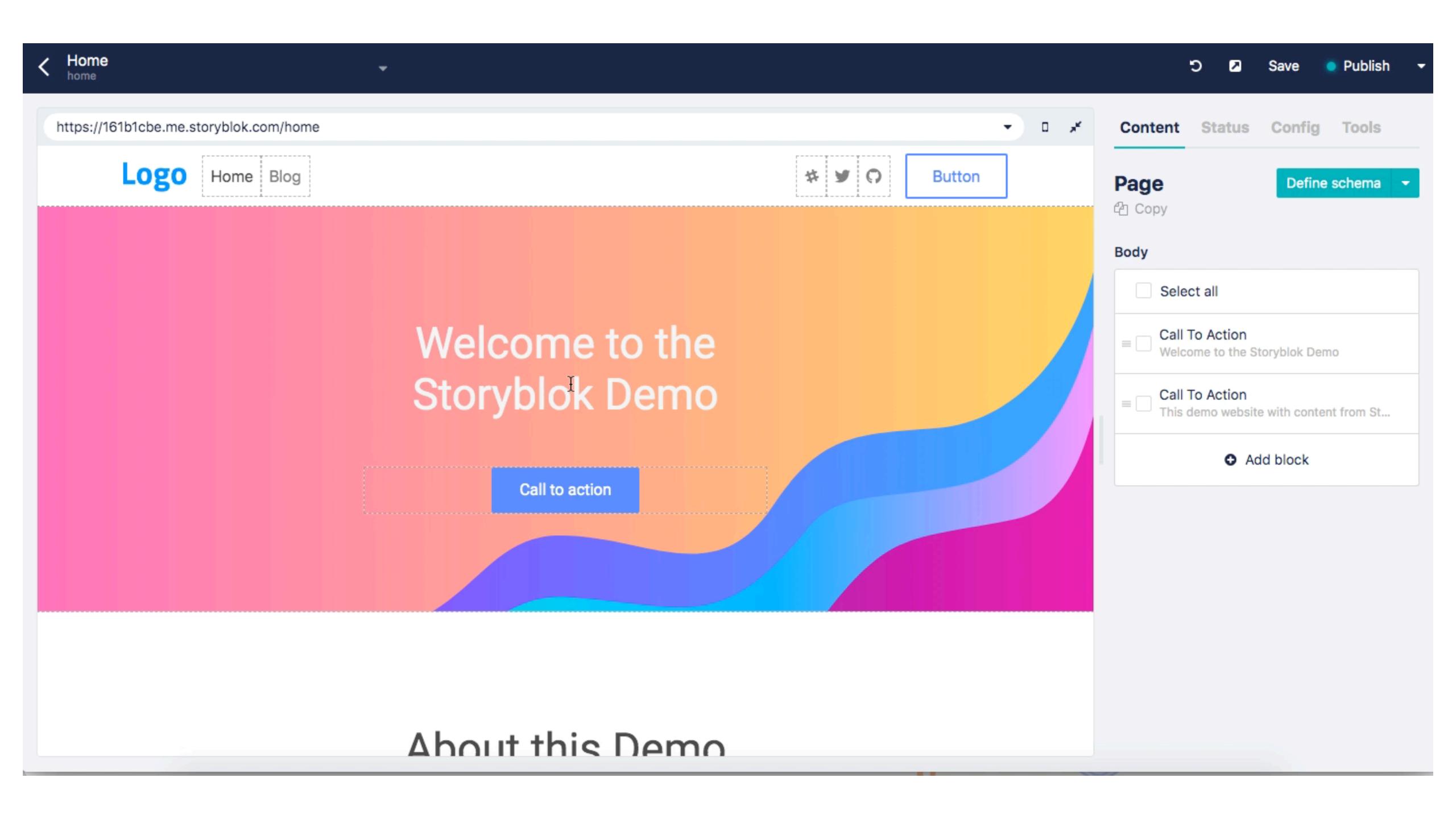


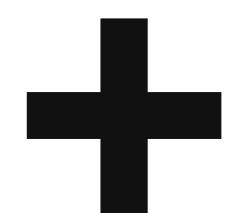




That's nothing for non tech-savvy users!

Going headless





CMS, not Content Design System

100% output independet

For regular size projects free/cheap plans

CMS status independent of site status

Git as a CMS -> Sounds good, doesn't work

Almost no good open source alternatives

Big users pay big money

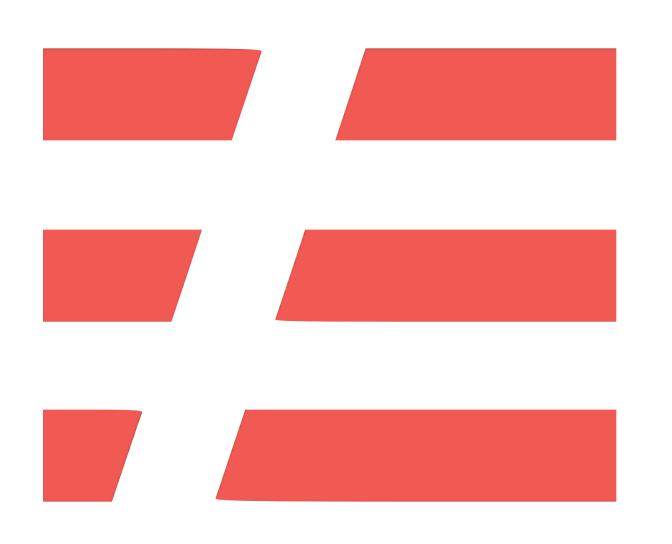
What's your content exit strategy

Hosting: Availability, stability, security

CMS: Data, structures, editors

Front-End: Markup, CSS, JS

Applications

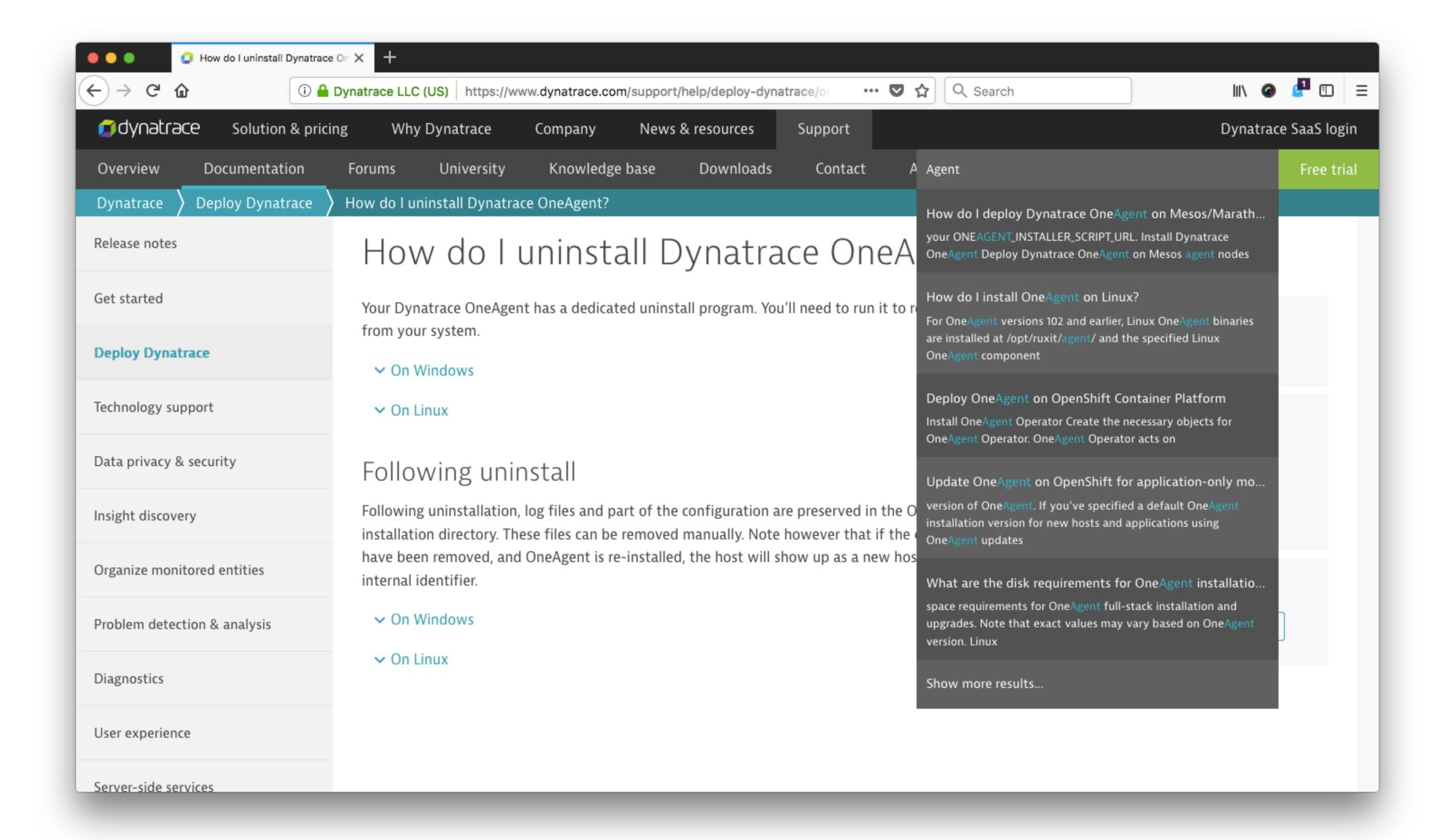


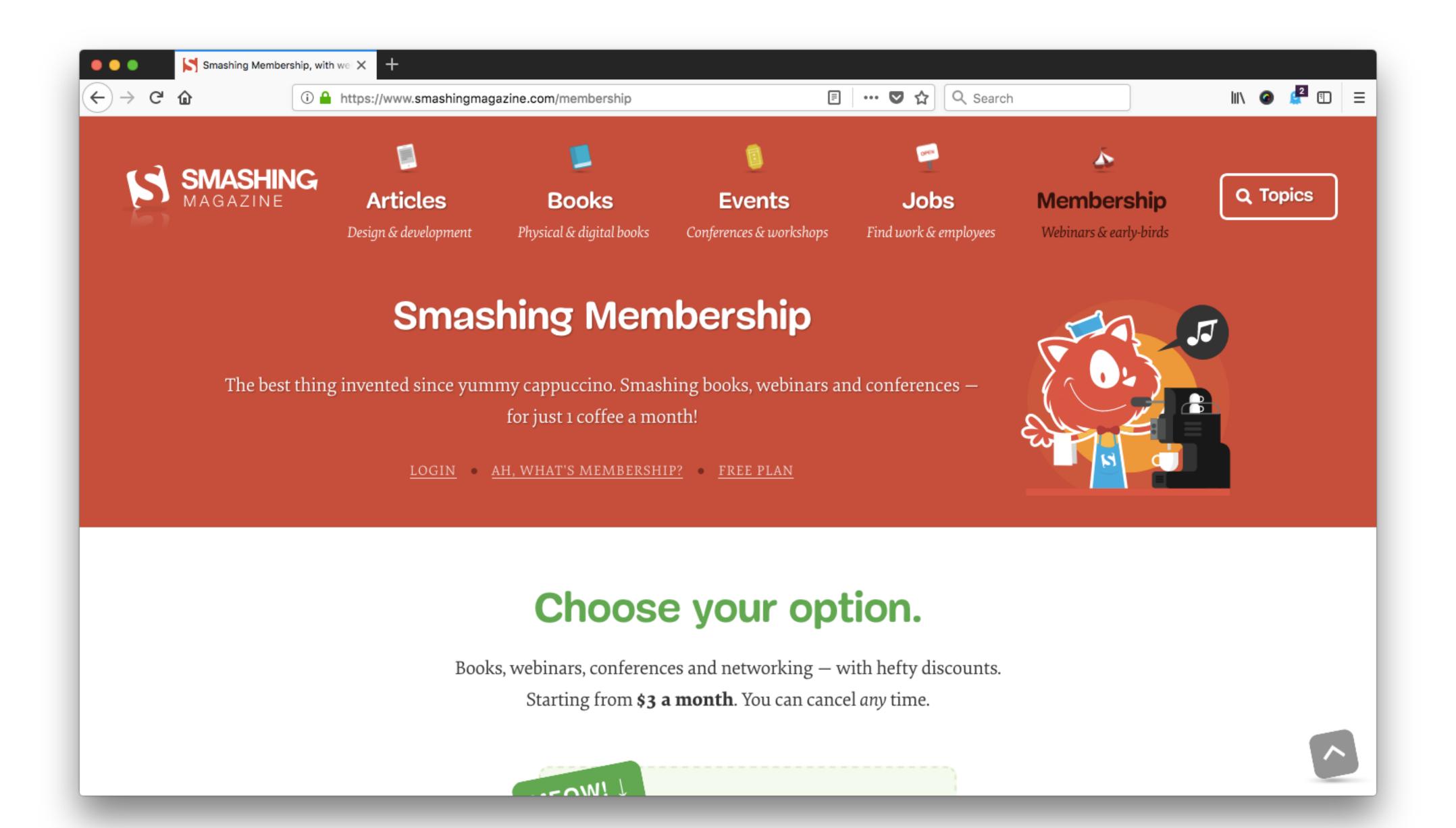
Serverless

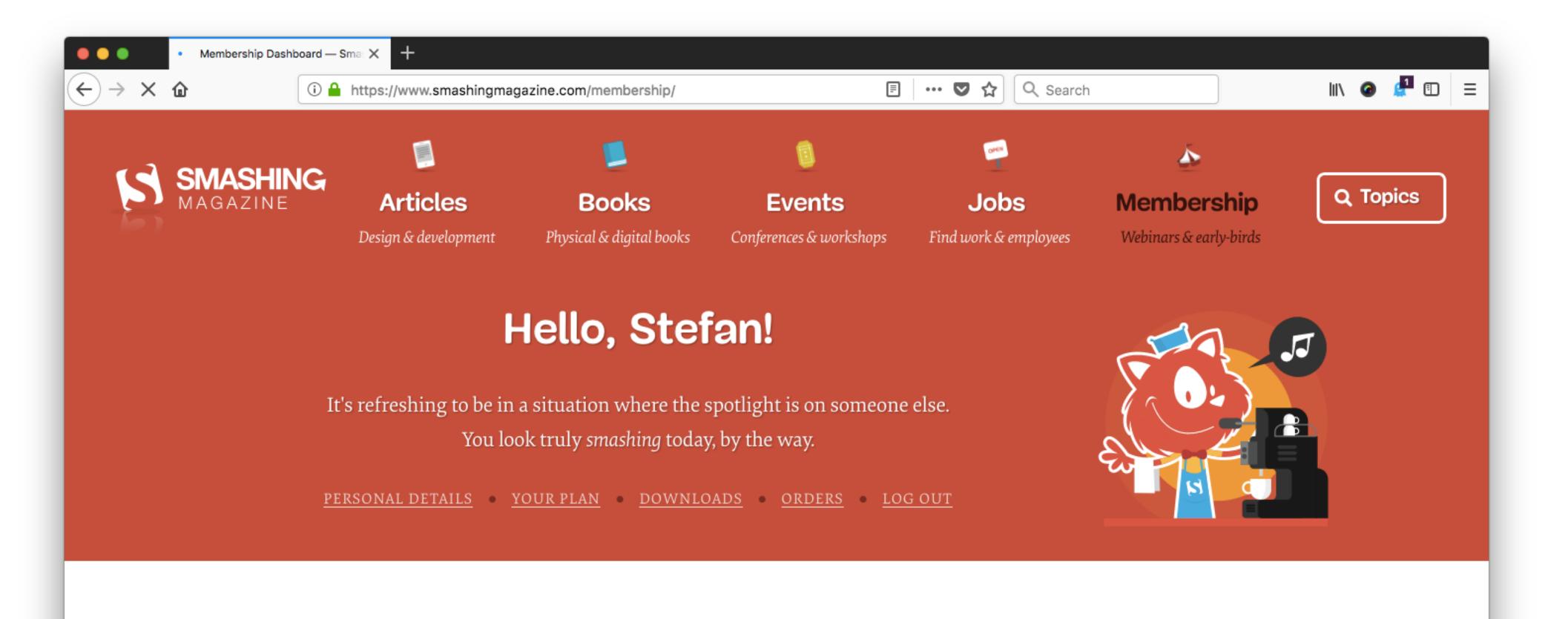
Serverless is not about having no servers, it's about not caring about servers

"Functions as a Service"

It's like developing for the browser, but on the server







Coming Up Next in Membership



THU, AUG 16

wareian

Smashing Book 6: Exclusive final

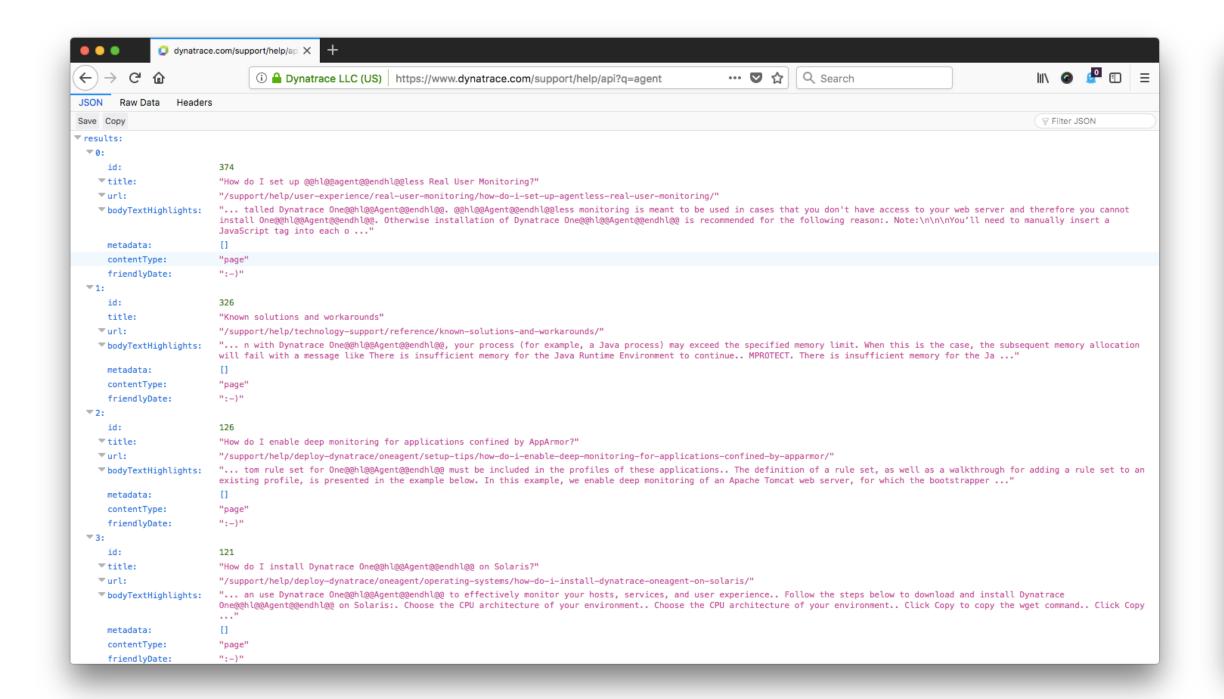
TUE, SEP 18

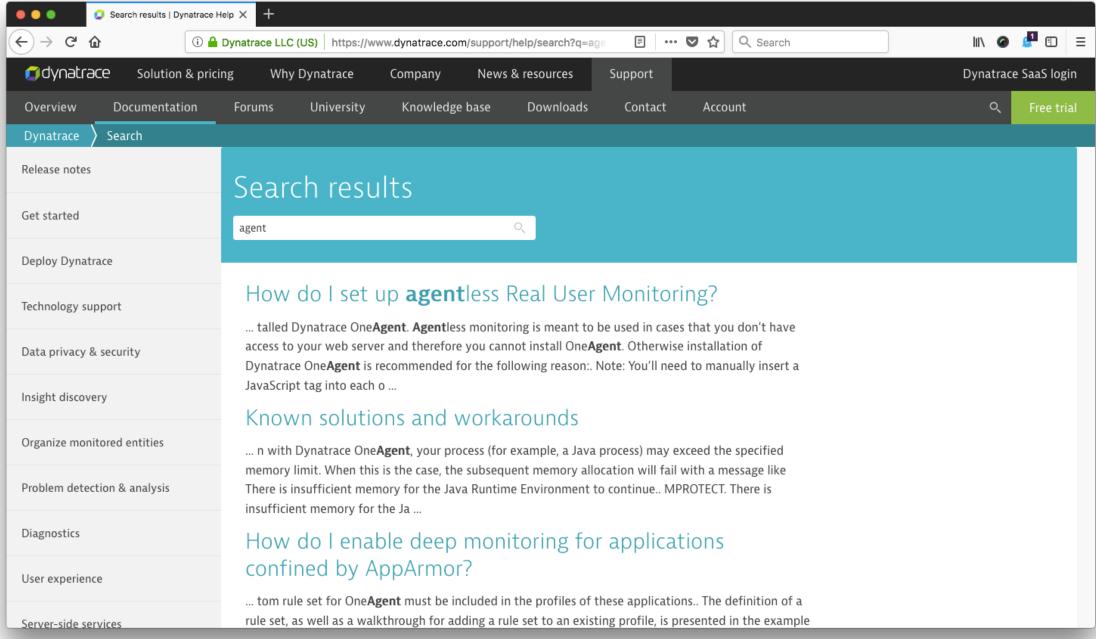
Smashing TV: Variable Fonts and Our

Now Typography



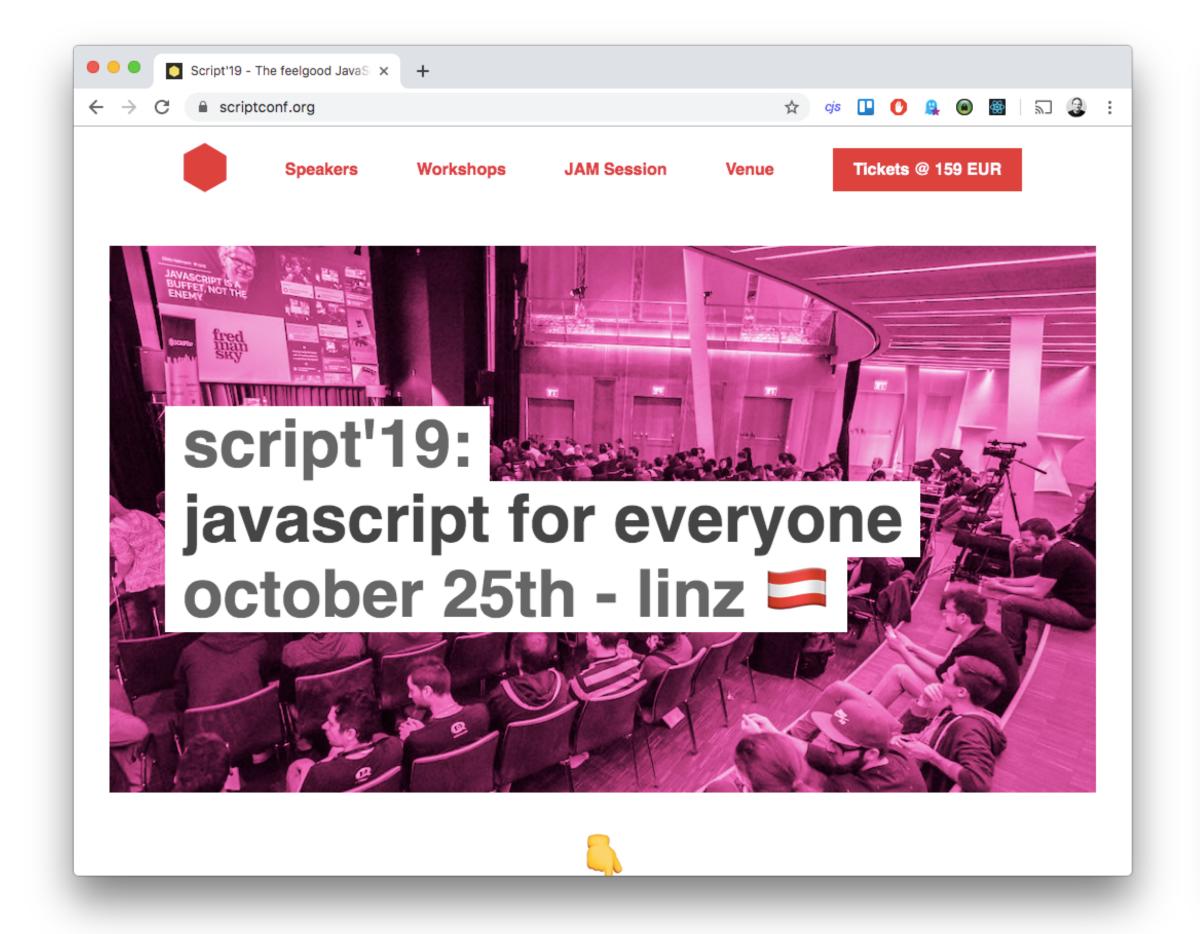
```
const qs = require('querystring')
module.exports = async function(context, req) {
  const params = qs.parse(req.body)
  context.log(req, params)
  const message = {
    "personalizations": [ { "to": [ { "email": "sbaumg@gmail.com" } ] } ],
    from: { email: params.mail },
    subject: "Feedback from Website",
    content: [{
      type: 'text/plain',
      value: `${params.name} says: ${params.text}`
    }]
  return {
    httpResponse: {
      body: { msg: "Message sent!" },
      status: 302
    sendgrid: message
```





Accept: application/json

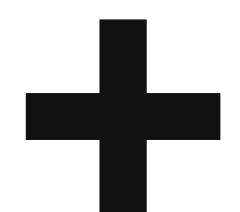
Accept: text/html



Accept: text/html

```
♦ https://scriptconf.org/_next/sta x +
             scriptconf.org/_next/static/LF560RCcngTKukjKJE8bH/pages/index.js
(window.webpackJsonp=window.webpackJsonp||[]).push([[15],{"/EDR":function(e,a,s){(window.__NEXT_P=window.__NEXT_P||
[]).push(["/",function(){var e=s("23aj");return{page:e.default||e}}])},"23aj":function(e,a,s){"use strict";s.r(a);var
t=s("qltI"),n=s.n(t),r=s("m/Pd"),o=s.n(r),l=(s("6xDr"),n.a.createElement);function i(){return l("div",
{className: "grid"},1("div",null,1("img",{src: "https://scriptconf.org/2018/assets/images/general/stage.jpg?v=2",alt: "Stage
",loading:"lazy"})),l("div",null,l("img",
{src:"https://scriptconf.org/2018/assets/inst/16123705_1912801235616741_6248527999444975616 n.jpg?
v=2",alt:"Food",loading:"lazy"})),l("div",null,l("video",
{src:"/static/assets/tobi.mp4",autoPlay:!0,muted:!0,loop:!0})),l("div",null,l("img",
{src:"https://scriptconf.org/2018/assets/images/2018/crowd.jpg?v=2",alt:"Crowd",loading:"lazy"})),1("div",null,1("img",
{src:"https://scriptconf.org/2018/assets/inst/16230966_1400392266680211_9007714693766184960_n.jpg?
v=2",alt:"Chris",loading:"lazy"})),l("div",null,l("img",{src:"/static/assets/images/andre.jpg?
v=2",alt:"Andre",loading:"lazy"})))}var m=s("MX0m"),c=s.n(m),p=n.a.createElement;function g(){return p(n.a.Fragment,null,p(c.a,
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3038143937{font-size:4rem;}}",".group.jsx-3038143937{z-index:2;}"]),p("div",{className:"jsx-3038143937 group"},p("h1",
{className: "jsx-3038143937 speaker-block reduced"},p("span",{className: "jsx-3038143937 no-nope drop"}, "script'19:")),p("p",
{className: "jsx-3038143937 speaker-block"},p("span",{className: "jsx-3038143937 no-nope drop"}, "javascript for everyone")),p("p",
{className: "jsx-3038143937 speaker-block reduced"},p("span",{className: "jsx-3038143937 no-nope drop"}, "october 25th - linz
\ud83c\udde6\ud83c\uddf9"))))}var d=n.a.createElement;function h(){return d(n.a.Fragment,null,d(c.a,{id:"201463395"},[".more.jsx-
201463395{font-size:4rem; max-width:55rem; margin:0 auto; text-align:center; -webkit-animation:bounce-jsx-201463395 2s
4; animation: bounce-jsx-201463395 2s 4;}", "@media (max-width:550px) {.more.jsx-201463395 {display:none;}}", "@-webkit-keyframes
bounce-jsx-201463395{0%,20%,50%,80%,100%{-webkit-transform:translateY(0);-ms-transform:translateY(0);transform:translateY(0);}40%
{-webkit-transform:translateY(-30px);-ms-transform:translateY(-30px);transform:translateY(-30px);}60%{-webkit-
transform:translateY(-15px);-ms-transform:translateY(-15px);transform:translateY(-15px);}}","@keyframes bounce-jsx-
201463395{0%,20%,50%,80%,100%{-webkit-transform:translateY(0);-ms-transform:translateY(0);transform:translateY(0);}40%{-webkit-
transform:translateY(-30px);-ms-transform:translateY(-30px);transform:translateY(-30px);}60%{-webkit-
transform:translateY(-15px);-ms-transform:translateY(-15px);transform:translateY(-15px);} "]),d("div",{className:"jsx-201463395
more"}, "\ud83d\udc47"))}var u=n.a.createElement;function f(){return u(n.a.Fragment,null,u(c.a,{id:"993912675"},[".masthead.jsx-
993912675{background-image:url(/static/assets/central-backdrop.jpg?v=2);background-size:cover;margin:2rem auto;max-
width:60rem;display:-webkit-box;display:-webkit-flex;display:-ms-flexbox;display:flex;-webkit-align-items:center;-webkit-box-
align:center;-ms-flex-align:center;align-items:center;position:relative;}","@media(min-width:500px){.masthead.jsx-993912675{min-
height:73vh;}}",".masthead.jsx-993912675:after{position:absolute;left:0;bottom:0;right:0;top:0;content:'';background-
color:hotpink;mix-blend-mode:color;z-index:1;}"]),u("main",{className:"jsx-993912675 masthead"},u(g,null)),u(h,null))}var
x=s("vrEE"),j={entries:[{first:"harry",last:"roberts",color:"green",myskills:"Performance consultant"},
{first:"emma",last:"wedekind",color:"crimson",myskills:"Ladybug Podcast, JSParty.fm"},
{first: "vitaly", last: "friedman", color: "hotpink", myskills: "Smashing Magazine"},
{first:"jen",last:"looper",color:"#9013FE",myskills:"Microsoft Cloud Advocate"},
{first: "anna", last: "henningsen", color: "orange", myskills: "Node.js Core Contributor"},
{first: "jo", last: "franchetti", color: "dodgerblue", myskills: "Codebar.io"},
{first: "marvin", last: "hagemeister", color: "#fdee00", myskills: "Preact.js Core Team"},
{first: "dylan", last: "schiemann", color: "turquoise", myskills: "Creator of Dojo, Sitepen"}]}, k={entries:
[{first:"william", last: "imoh", color: "hotpink", myskills: "Scotch.io, Forloop Africa, JAMStack Lagos, Nigeria"},
{first:"vanessa",last:"b\xf6hner",color:"#9013fe",myskills:"Sinnerschrader"},
{first: "alexandre", last: "chopin", color: "crimson", myskills: "Creator of Nuxt.js"},
{first: "samuel", last: "snopko", color: "orange", myskills: "Storyblok Ambassador"},
{first: "matthew", last: "sweeney", color: "dodgerblue", myskills: "ZEIT" } ] }, b=s("UXZV"), v=s.n(b); function y() {return(y=v.a||function(e)
{for(var a=1;a<arguments.length;a++){var s=arguments[a];for(var t in s)Object.prototype.hasOwnProperty.call(s,t)&&
(e[t]=s[t])}return e}).apply(this,arguments)}var w=s("YFqc"),N=s.n(w),M=n.a.createElement;function T(e){var
a=e.first,s=e.last,t=e.color,r=e.myskills;return M(n.a.Fragment,null,M(c.a,{id:"97714233",dynamic:[t]},[".speaker-card.__jsx-
```

Accept: */*



Pay what you need

Manageable attack surface

Defined Input and Output

Integration with 3rd party services is easy

Serverless architectures are hard

What about platform independence

What if we like state

More interfaces, more contracts

Hosting: Availability, stability, security

Application: Process state

CMS: Data, structures, editors

Front-End: Markup, CSS, JS

JAMStack

Javascript A PIS Markup

Javascript A PIS Markup

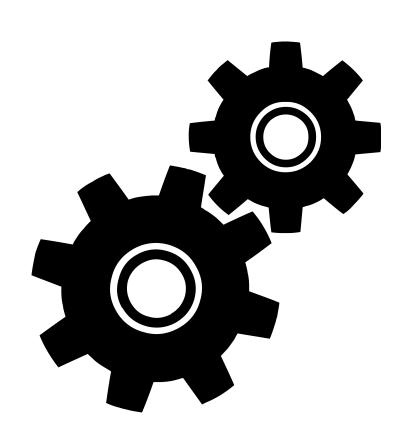
Templated markup prebuilt at deploy time. Using a static site generator. Deployable anyhwere

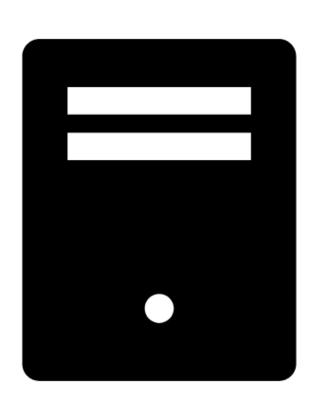
Javascript A PIS Markup

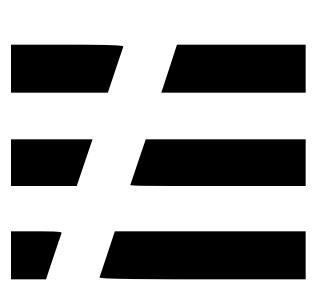
Server side processes and DB actions are abstracted into reusable APIs over HTTPS and JavaScript

Javascript A PIs Markup

Dynamic processes are done on the client. Via JavaScript. Deployed markup is extended with functionality from APIs client-side.



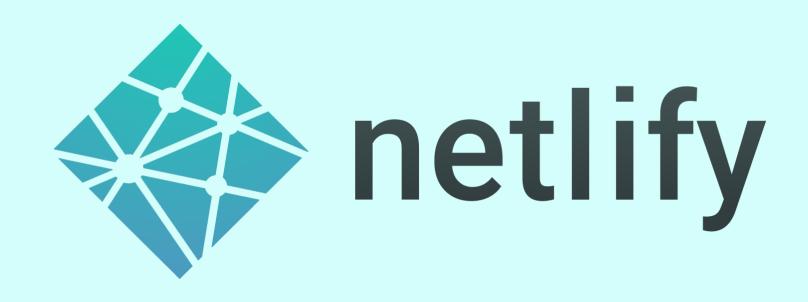




build

deploy

enhance







Focus on builds and deployment

Prepared functions for common use cases

Ready for most web sites

All-in Serverless: Every language, every technology

Builds through builders or commands

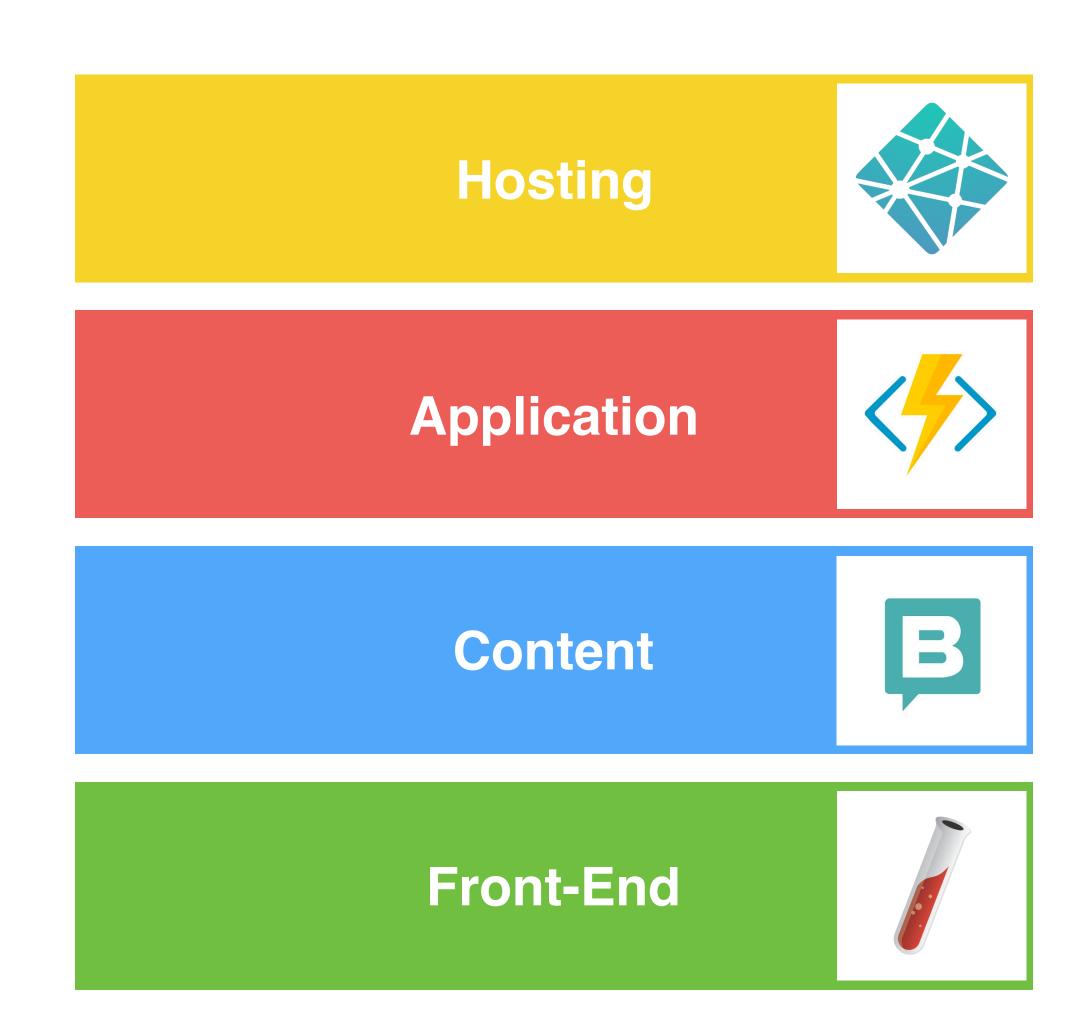
Static tags along

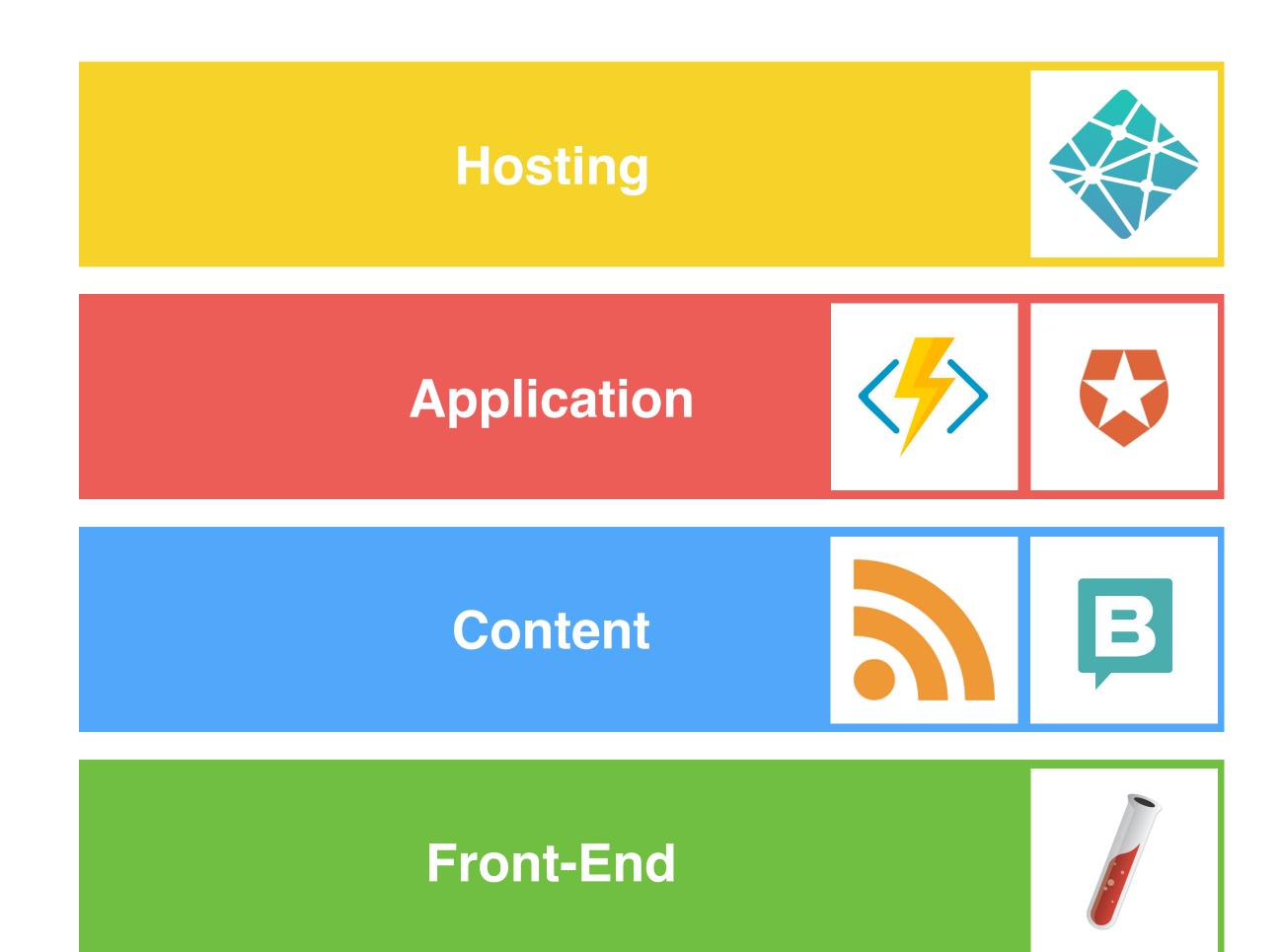
Enterprise level Cloud:

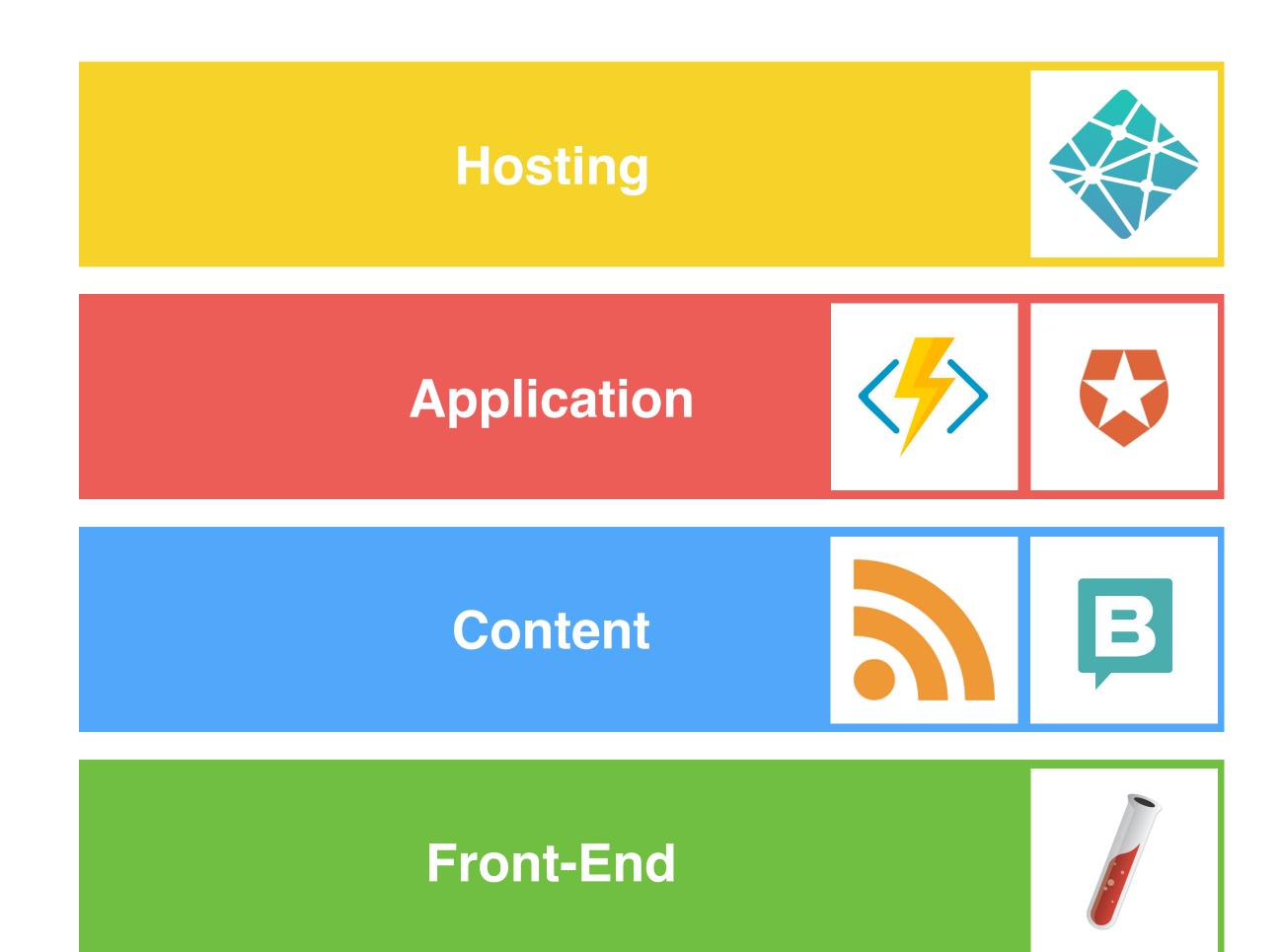
Azure DevOps
Azure Storage
Azure CDN
Azure Functions

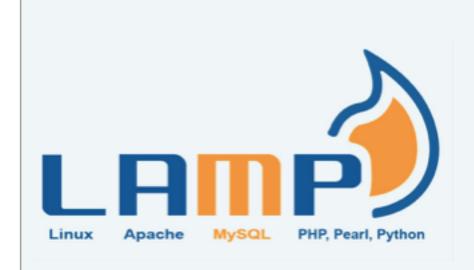
No technology lock-in Incremental adoption

The most important thing about JAMstack is that you can start right away with a small piece of your current website.

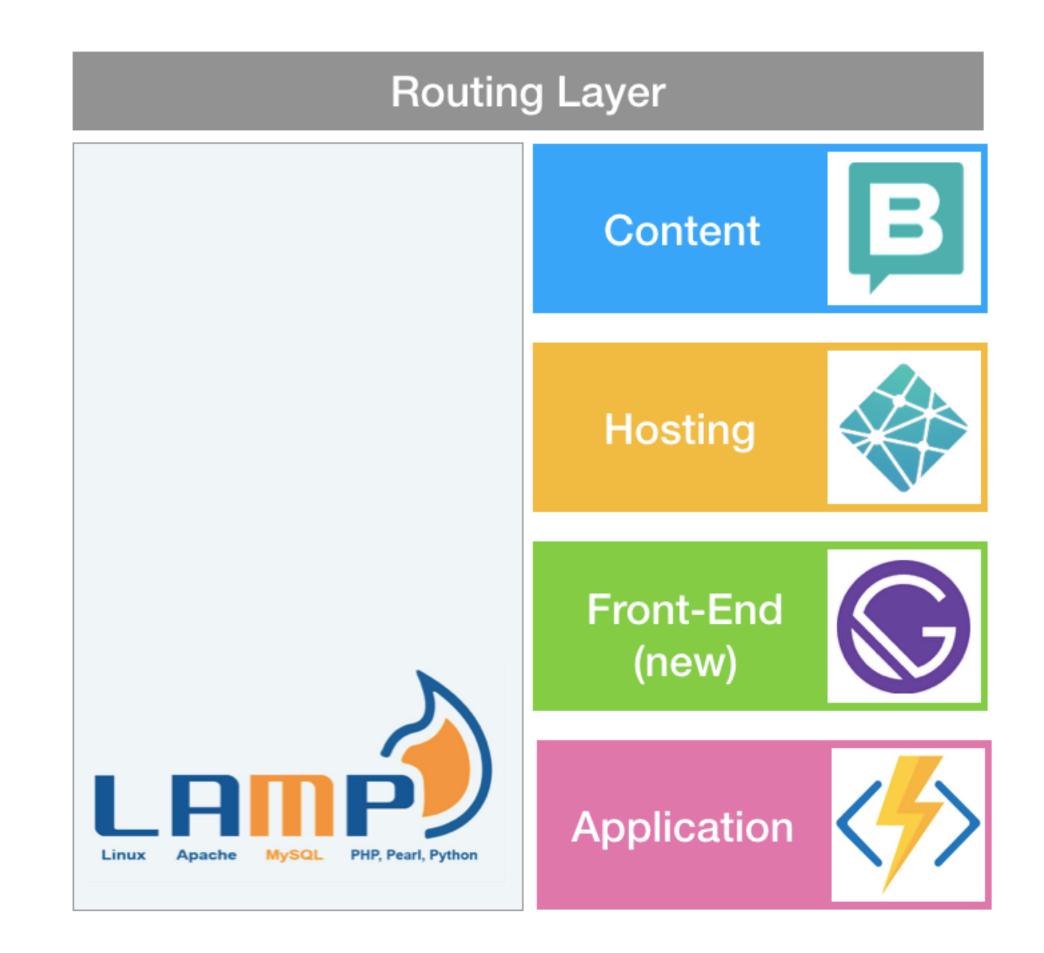




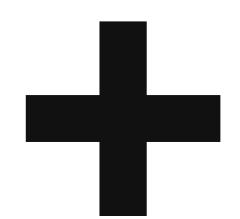








Sum it up



Every piece is independent

Resilient, failsafe, sustainable

Incremental adoption

Full control of every part in your app

Lots of technologies: Fragmentation

Very platform specific

This is 3rd party land!

Exit strategies!

Every web site and web app that can be done with JAMstack, should be done with JAMstack



(every web site can be done with JAMstack)





@ddprrt

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