Angular 2 and Hexo

Static Meets Dynamic For the Best of Both Worlds!



Who am I?

Jeff Ammons

Microsoft MVP

Pluralsight Author CEO/Chief Instructor at Code Career Academy 25 Years Professional Experience in Software





Store content as text files of Markdown and YAML



```
title: 'Hello You Big, Beautiful World!'
    date: 2015-08-02 19:38:58
    tags: ['Greeting', 'Hello', 'Being Friendly']
    # Howdy!
    This is a sample post just to show off some
    *features* of our format.
8
    ## YAMI
    The bit at the top is **YAML**. It has the
    metadata.
    ## Markdown
    This content is written in **Markdown**.
14
```

Howdy!

This is a sample post just to show off some features of our format.

YAML

The bit at the top is YAML. It has the metadata.

Markdown

This content is written in Markdown.



```
title: 'Hello You Big, Beautiful World!'
YAML
                 date: 2015-08-02 19:38:58
                 tags: ['Greeting', 'Hello', 'Being Friendly']
                 # Howdy!
                 This is a sample post just to show off some
                  *features* of our format.
              8
                 ## YAMI
                 The bit at the top is **YAML**. It has the
                 metadata.
                 ## Markdown
                 This content is written in **Markdown**.
             14
             15
```

Howdy!

This is a sample post just to show off some features of our format.

YAML

The bit at the top is YAML. It has the metadata.

Markdown

This content is written in Markdown.



```
title: 'Hello You Big, Beautiful World!'
     YAML
                       date: 2015-08-02 19:38:58
                       tags: ['Greeting', 'Hello', 'Being Friendly']
                       # Howdy!
                       This is a sample post just to show off some
                       *features* of our format.
                   8
                       ## YAMI
Markdown
                       The bit at the top is **YAML**. It has the
                       metadata.
                       ## Markdown
                       This content is written in **Markdown**.
                   14
                   15
```

Howdy!

This is a sample post just to show off some features of our format.

YAML

The bit at the top is YAML. It has the metadata.

Markdown

This content is written in Markdown.



Rendered HTML Output

```
Howdy!
                         title: 'Hello You Big, Beautiful World!'
      YAML
                         date: 2015-08-02 19:38:58
                         tags: ['Greeting', 'Hello', 'Being Friendly']
                                                                                 This is a sample post just to show off some features of our format.
                                                                                 YAML
                         # Howdy!
                         This is a sample post just to show off some
                                                                                 The bit at the top is YAML. It has the metadata.
                          *features* of our format.
                      8
                                                                                 Markdown
                         ## YAMI
Markdown
                         The bit at the top is **YAML**. It has the
                                                                                 This content is written in Markdown
                         metadata.
                         ## Markdown
                         This content is written in **Markdown**.
                     14
                     15
```



- Store content as text files of Markdown and YAML
- Run processor locally to convert to HTML files



- Store content as text files of Markdown and YAML
- Run processor locally to convert to HTML files
- Version with Git



- Store content as text files of Markdown and YAML
- Run processor *locally* to convert to HTML files
- Version with Git
- Deploy with Git



- Store content as text files of Markdown and YAML
- Run processor *locally* to convert to HTML files
- Version with Git
- Deploy with Git
- Serve plain files via any web server



Why Would I Want One?

- Speed
- Scalability
- Reliability
- Lower AttackSurface

- Version Control
- Tools
- Zero Lock-in



When does it make sense?

- Primarily content site
 - Blog
 - "Brochure-ware" Site



When does it NOT make sense?

- Everything else...
 - It's not called a "General Purpose Site Generator"...



Traditional CMS: Writing





Traditional CMS: Writing





Traditional CMS: Writing

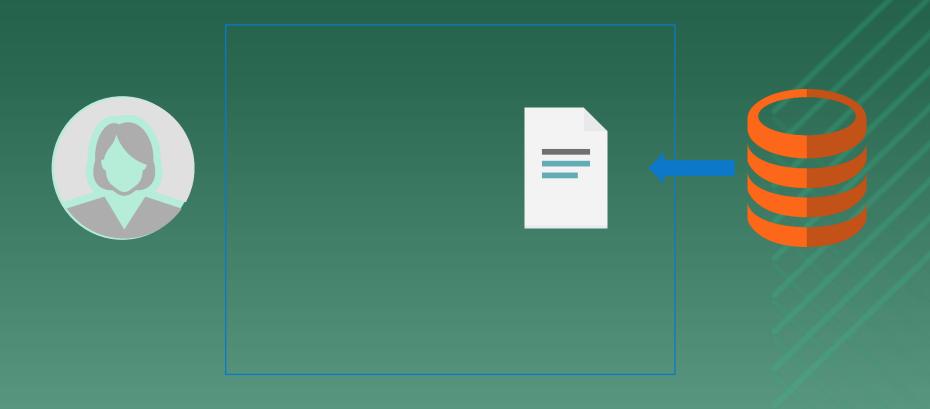








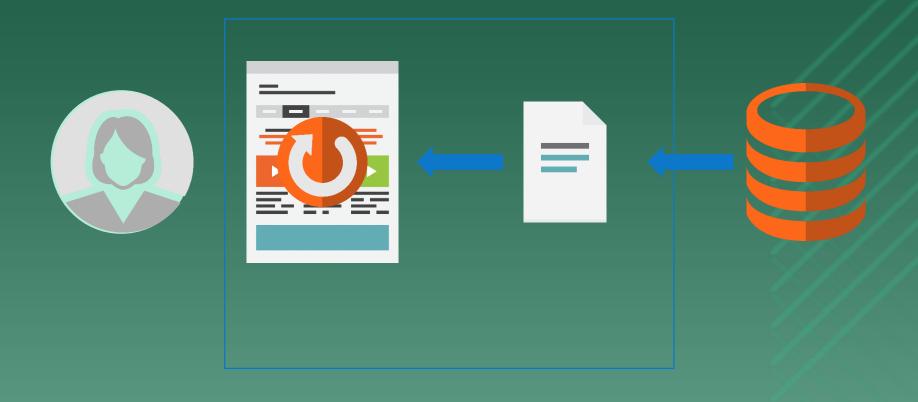




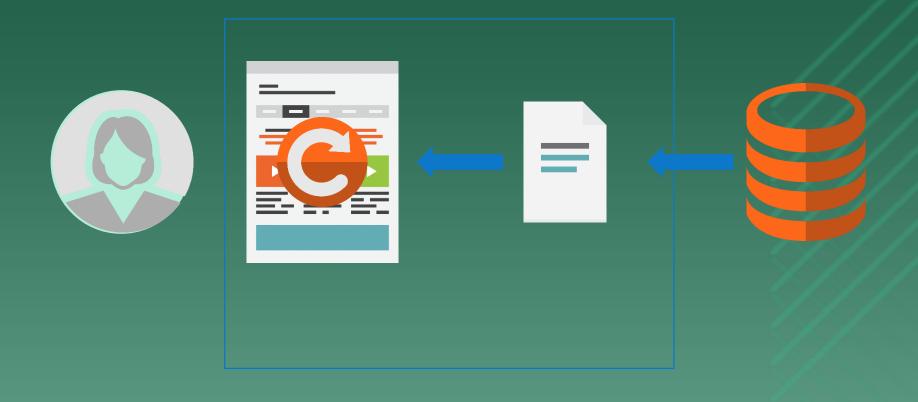




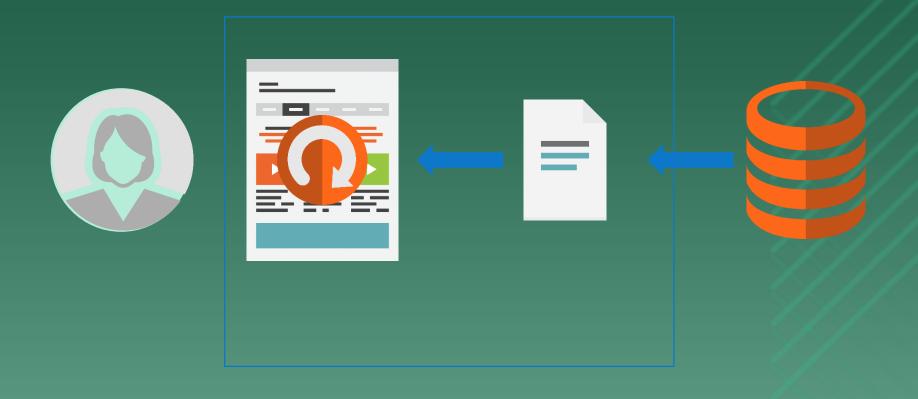




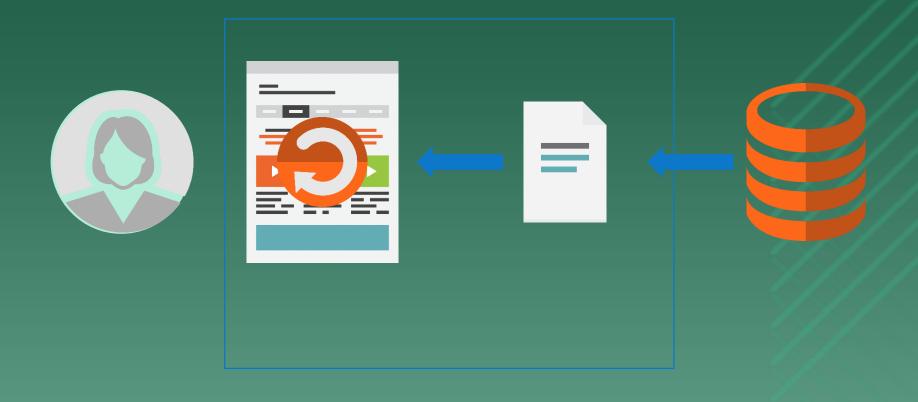




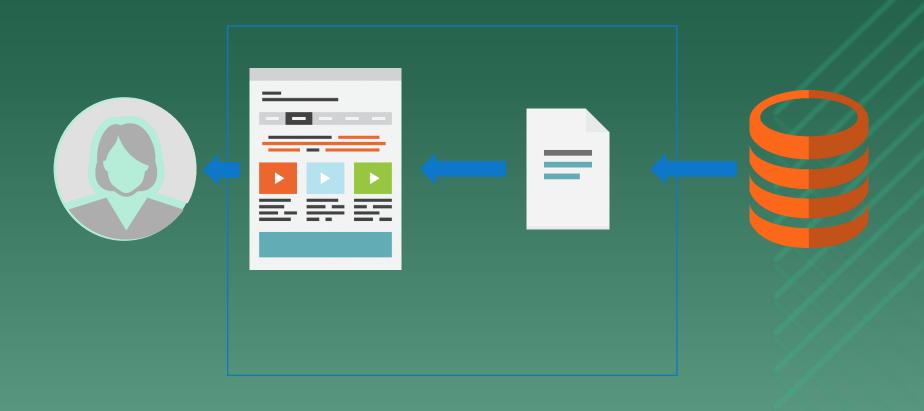














Static Site Generator: Writing





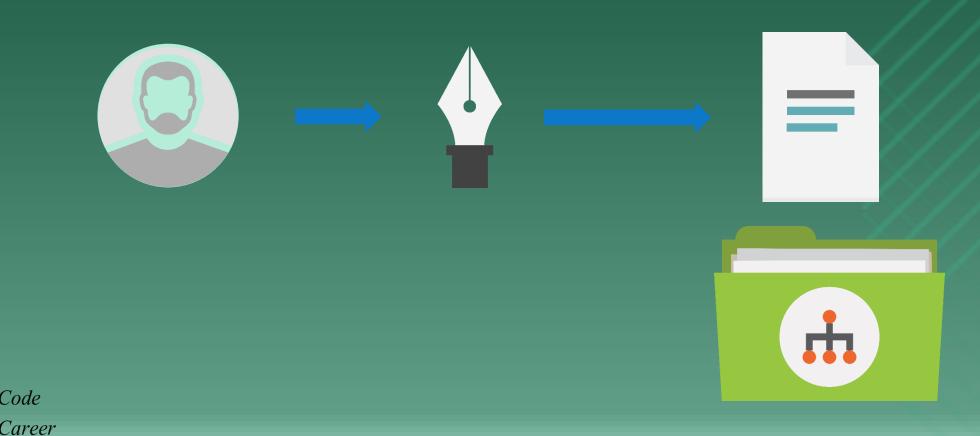
Static Site Generator: Writing





Static Site Generator: Writing

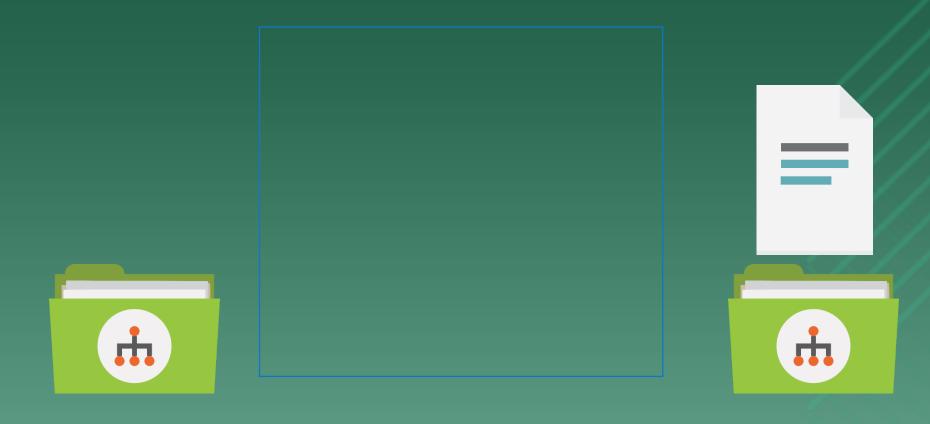
Code











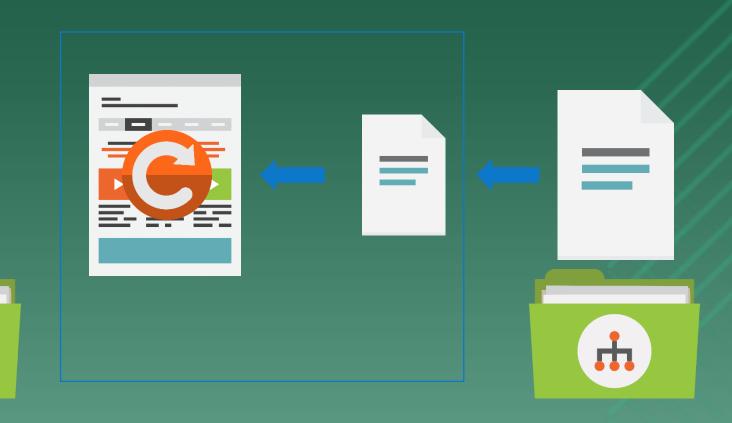


























Static Site Generator: Publishing





Static Site Generator: Publishing





Static Site Generator: Publishing





Static Site Generator: Reading





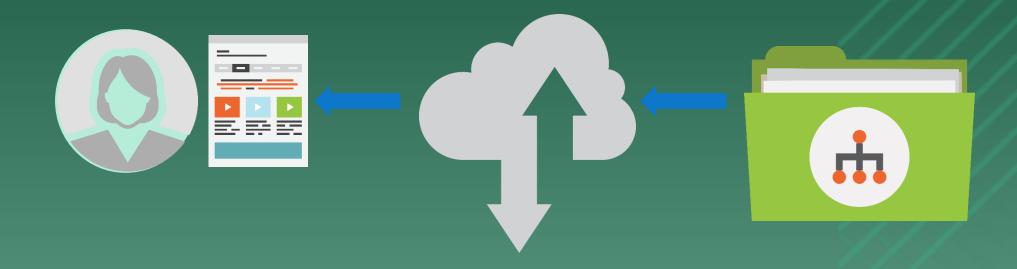
Static Site Generator: Reading







Static Site Generator: Reading





Static Site Generator: Scaling





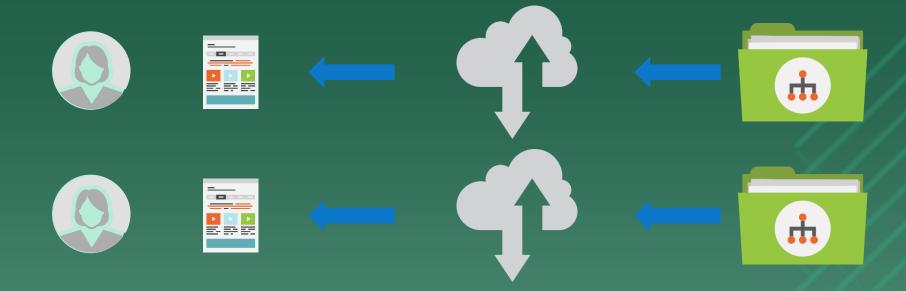




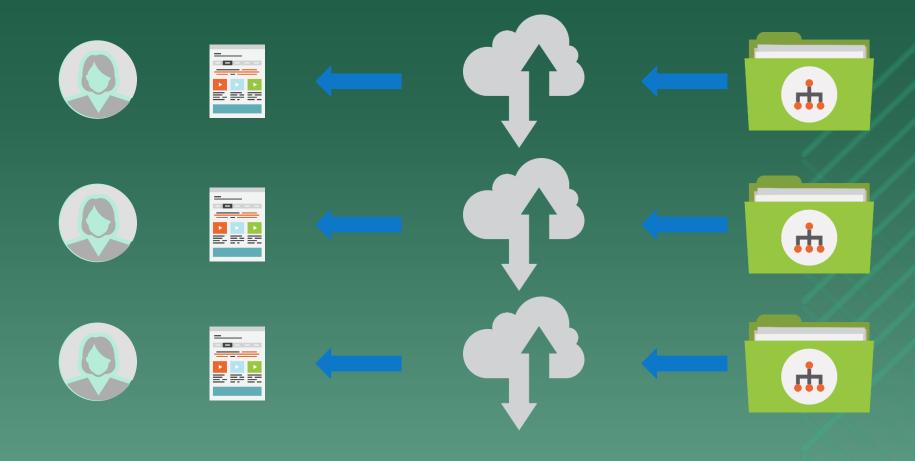




Static Site Generator: Scaling



Static Site Generator: Scaling





Common Post Format

YAML Markdown



YAML

YAML Ain't Markup Language

YAML is a human friendly data serialization standard for all programming languages.

Source: yaml.org



Markdown

Markdown is a text-to-HTML conversion tool for web writers. Markdown allows you to write using an easy-to-read, easy-to-write plain text format, then convert it to structurally valid XHTML (or HTML).

Source: http://daringfireball.net/projects/markdown/



```
title: 'Hello You Big, Beautiful World!'
    date: 2015-08-02 19:38:58
    tags: ['Greeting', 'Hello', 'Being Friendly']
    # Howdy!
    This is a sample post just to show off some
    *features* of our format.
8
    ## YAMI
    The bit at the top is **YAML**. It has the
    metadata.
    ## Markdown
    This content is written in **Markdown**.
14
```

Howdy!

This is a sample post just to show off some features of our format.

YAML

The bit at the top is YAML. It has the metadata.

Markdown

This content is written in Markdown.



```
title: 'Hello You Big, Beautiful World!'
YAML
                 date: 2015-08-02 19:38:58
                 tags: ['Greeting', 'Hello', 'Being Friendly']
                 # Howdy!
                 This is a sample post just to show off some
                  *features* of our format.
              8
                 ## YAMI
                 The bit at the top is **YAML**. It has the
                 metadata.
                 ## Markdown
                 This content is written in **Markdown**.
             14
             15
```

Howdy!

This is a sample post just to show off some features of our format.

YAML

The bit at the top is YAML. It has the metadata.

Markdown

This content is written in Markdown.



```
title: 'Hello You Big, Beautiful World!'
     YAML
                       date: 2015-08-02 19:38:58
                       tags: ['Greeting', 'Hello', 'Being Friendly']
                       # Howdy!
                       This is a sample post just to show off some
                       *features* of our format.
                   8
                       ## YAMI
Markdown
                       The bit at the top is **YAML**. It has the
                       metadata.
                       ## Markdown
                       This content is written in **Markdown**.
                   14
                   15
```

Howdy!

This is a sample post just to show off some features of our format.

YAML

The bit at the top is YAML. It has the metadata.

Markdown

This content is written in Markdown.



Rendered HTML Output

```
Howdy!
                         title: 'Hello You Big, Beautiful World!'
      YAML
                         date: 2015-08-02 19:38:58
                         tags: ['Greeting', 'Hello', 'Being Friendly']
                                                                                 This is a sample post just to show off some features of our format.
                                                                                 YAML
                         # Howdy!
                         This is a sample post just to show off some
                                                                                 The bit at the top is YAML. It has the metadata.
                          *features* of our format.
                      8
                                                                                 Markdown
                         ## YAMI
Markdown
                         The bit at the top is **YAML**. It has the
                                                                                 This content is written in Markdown
                         metadata.
                         ## Markdown
                         This content is written in **Markdown**.
                     14
                     15
```



Prerequisites

- Node.js
- Npm
- Git
- Text editor



Which Text Editor Should I Use?

- Sublime Text
- Visual Studio Code
- Atom
- Notepad++
- Vim
- Emacs
- [Insert any other editor you like here]



Hexo

- Super simple
- Fast
- Easy to work with



Super Easy Install

npm install hexo-cli -g



Create a New Blog

hexo init

npm install



Create a New post

hexo new "My New Post"

hexo new post "My New Post"



Test Blog Locally

hexo server



Generate Blog for Publishing

hexo generate



Just Enough Git

```
git init
git add .
git commit -m "My commit message"
git push origin master
```



Where Can I Deploy my Blog?

- GitHub Pages
- Azure Web App
- Windows Server
- Linux Server
- Raspberry Pi
- ... Any web server



For Full Instructions...

- Check out my Pluralsight course!
 - Build a Better Blog with a Static Site Generator
 - https://www.pluralsight.com/courses/static-site-generator-build-better-blog

How About the Dynamic Bits??

- Hexo Widgets
- UI Elements supported by many themes
- Angular 2 Components are a nice fit
- Keep the static bits static and the dynamic bits dynamic!





Monday, September 12th 2016

Hello, World from Code Career Academy!



The time has come to take the wraps off of what I've been working on this year!

Code Career
Academy is an immersive code school in

Popular Posts

- 1. Formatted JSON in Notepad++
- 2. Is It Hot In Here Or Is It Just My CPU?
- 3. DIY Productivity Tablet
- 4. Teaching PowerShell To Speak
- 5. <u>Kindle To Raspberry Pi Via Remote</u> Desktop
- 6. Configure Raspberry Pi As WiFi Router
- 7. Formatted JSON In Notepad++ Video
- 8. My Secret Weapon: Pluralsight
- 9. Vim Eye For The Visual Studio Guy
- 10. <u>Visual Studio Tip: Add Existing</u>
 <u>Directory</u>

Recent Posts

Hello, World from Code Career





Monday, September 12th 2016

Hello, World from Code Career Academy!



The time has come to take the wraps off of what I've been working on this year!

Code Career
Academy is an immersive code school in

Popular Posts

Dynamic Widget

- 1. Formatted JSON in Notepad++
- 2. Is It Hot In Here Or Is It Just My CPU?
- 3. DIY Productivity Tablet
- 4. Teaching PowerShell To Speak
- 5. <u>Kindle To Raspberry Pi Via Remote</u> Desktop
- 6. <u>Configure Raspberry Pi As WiFi</u> <u>Router</u>
- 7. Formatted JSON In Notepad++ Video
- 8. My Secret Weapon: Pluralsight
- 9. Vim Eye For The Visual Studio Guy
- 10. <u>Visual Studio Tip: Add Existing</u>
 <u>Directory</u>

Recent Posts

Hello, World from Code Career



Seasoning

- Dynamic widgets should be the salt and pepper on static content sites
 - Don't over do it!
 - Otherwise it was never really a static content site

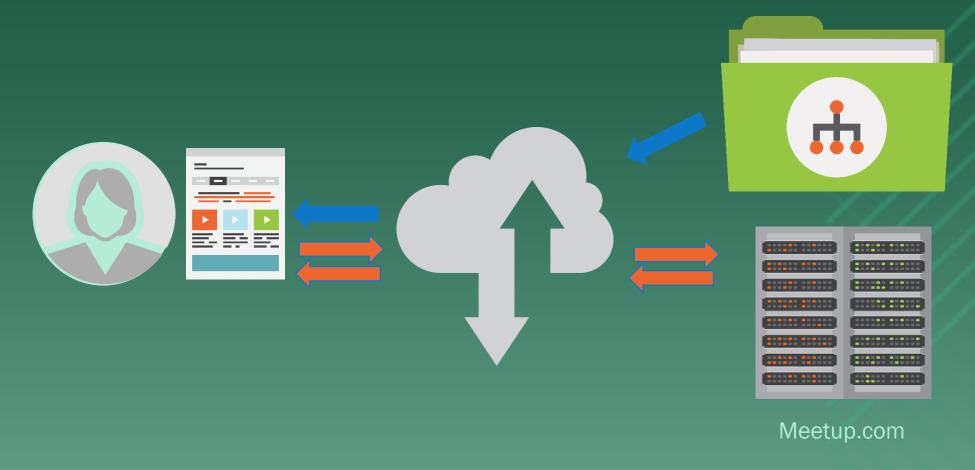


Where can I get dynamic content?

- REST APIs
 - Public APIs
 - Your own API sites
- Pre-gen JSON files
- Pre-gen HTML fragment

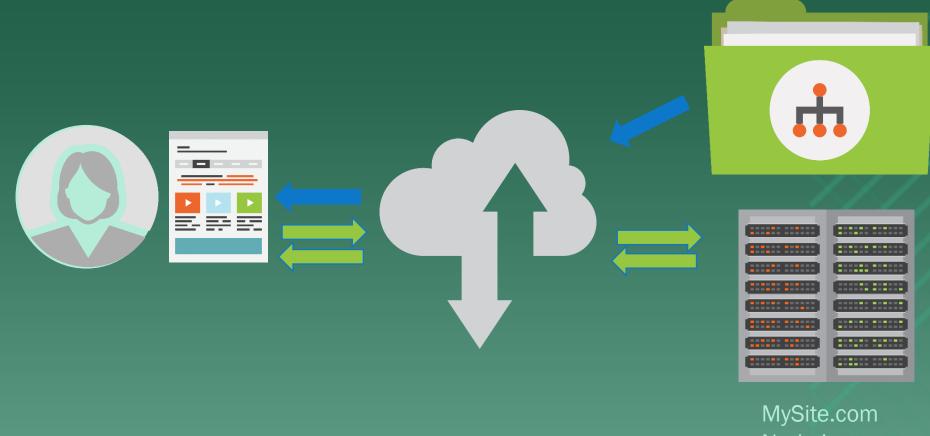


Example Widget/Component Sources





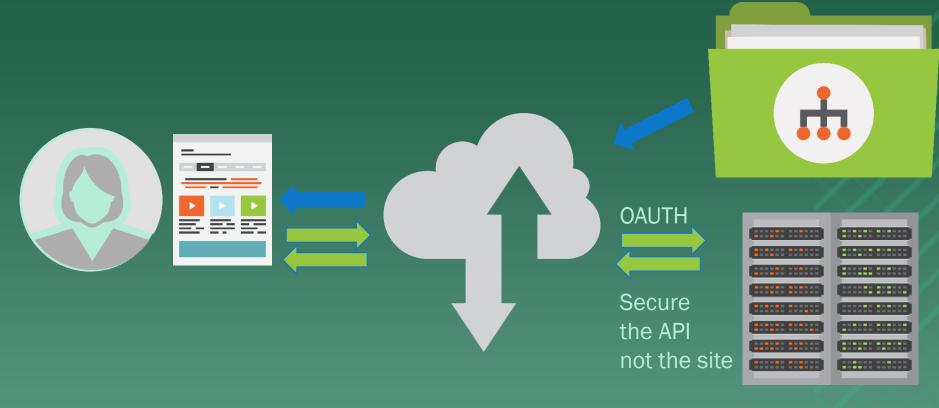
Example Widget/Component Sources





MySite.com Node.js Ruby on Rails ASP.NET

Example Widget/Component Sources





MySite.com Node.js Ruby on Rails ASP.NET

Resources

- https://hexo.io/
- https://www.staticgen.com/
- https://www.pluralsight.com/courses/static-site-generator-buildbetter-blog
- http://ammonsonline.com/top-5-reasons-to-blog-with-a-static-file-generator/



Contact Info

- https://www.pluralsight.com/authors/jeff-ammons
- Company: http://codecareeracademy.com
- Twitter: jeffa00
- Linked-In: jeffammons
- Blog: http://jeffa.tech
- User Group: http://ggmug.com

