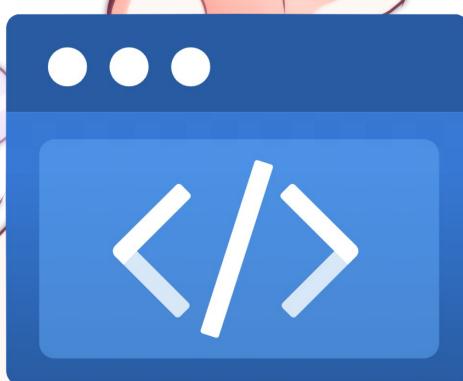


Azure Static Web Apps

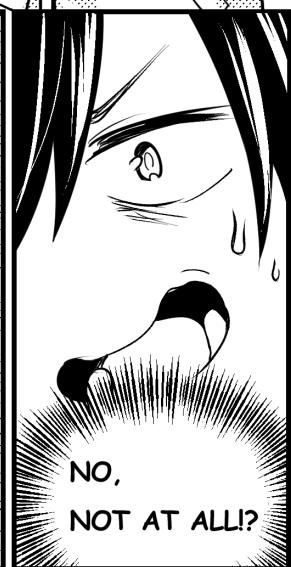
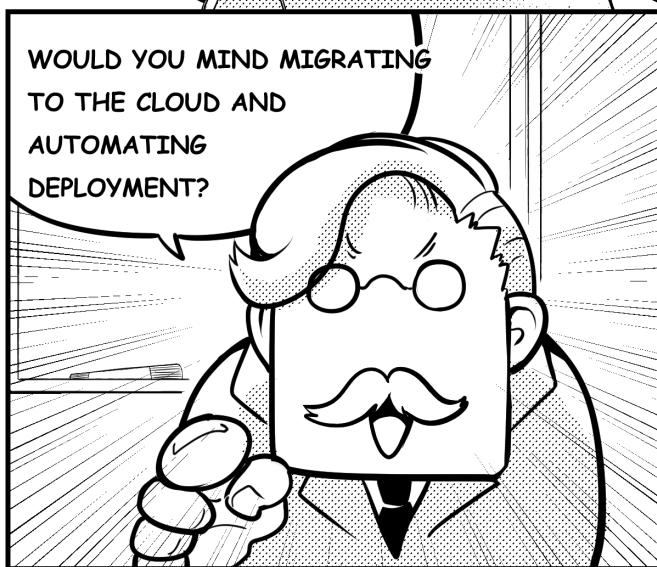
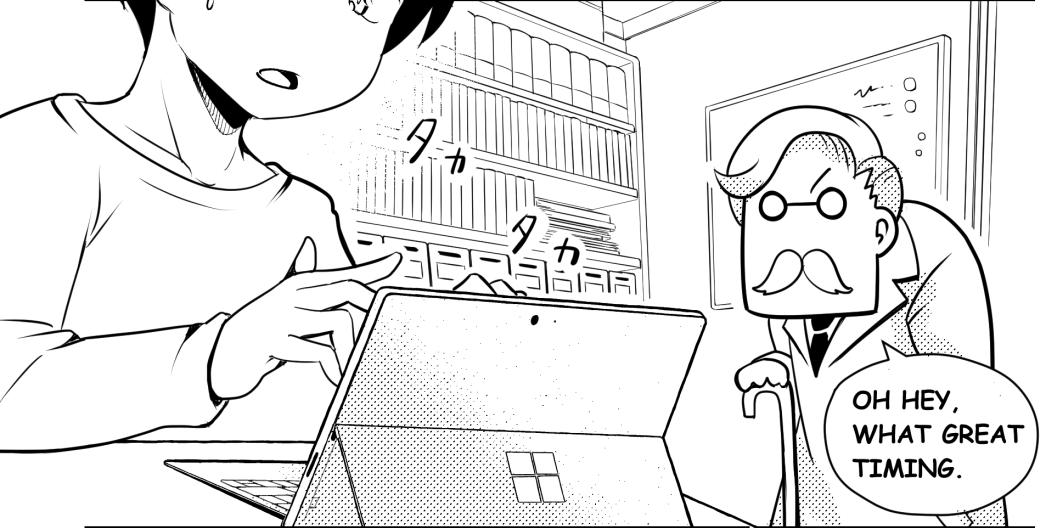
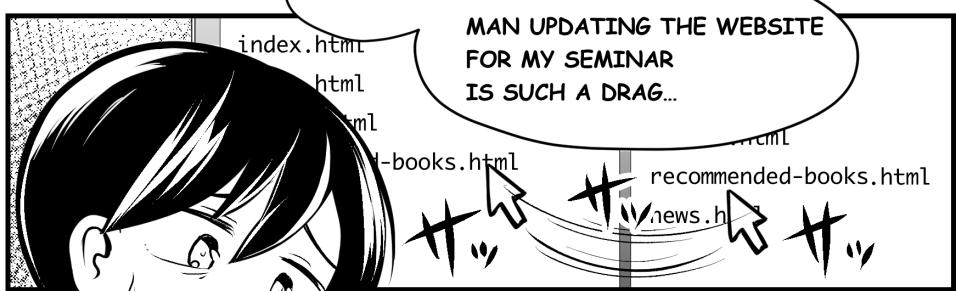


Automatic deployment makes CI tools unnecessary!



Go to next page





I KIND OF
GOT FORCED
TO GO ALONG
WITH THE
PROFESSOR'S
ABSURD REQUEST

Well,
I'm
Counting
on you!

THERE'S SO MUCH
I NEED TO LEARN ABOUT THE CLOUD,
AND IT'S REALLY CONFUSING.

ON TOP OF THAT,
HOW DO YOU EVEN
AUTOMATICALLY DEPLOY?

FOR STARTERS,
I GUESS I'LL
LOOK IT UP.

HMM, I SEE.
CONNECT CI TOOLS AND
GITHUB WITH A TOKEN?

Config.yaml

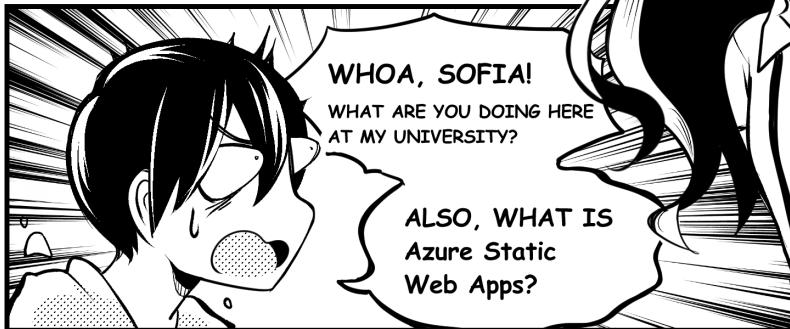
AND I NEED TO WRITE
A FILE CALLED YAML
TO GIVE COMMANDS
TO THE CI?

I HAVE
NO IDEA
WHAT THAT MEANS!

I'M
IN TROUBLE.

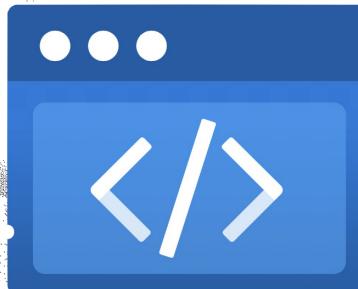


IN THAT CASE, USE
Azure Static Web Apps!



IT'S MICROSOFT'S
NEWEST SERVICE.

ALL YOU NEED IS
A GITHUB AND
AZURE ACCOUNT.



ONCE THE CODE IS
UP ON GITHUB,
YOU CAN USE IT
RIGHT AWAY!

HMM, SO I DON'T
NEED TO CONNECT
WITH TOKENS OR
WRITE A YAML...?

RIGHT!
JUST CHOOSE A
REPOSITORY AND
CLICK AWAY.

YOU COULD PUBLISH
SOMETHING
IN A MINUTE.

My-first-
static-web-app

A MINUTE?
REALLY?

I'LL BE
TIMING YOU.

LEAVE IT TO ME!

SEE?

THERE ARE A BUNCH OF
TEMPLATES IN THE
PUBLIC DOCUMENTS.
SO YOU CAN TRY
THEM RIGHT AWAY
WITHOUT EVEN
HAVING TO WRITE
ANY CODE.

This article uses GitHub template rep
new repository. The templates featur
frameworks.

Angular

React

Vue

No F

Make sure you are logged in
location to create a new repository.
• <https://github.com>

WHICH ONE
DO YOU LIKE? ♪

YOU CAN CHOOSE
YOUR FRAMEWORK
FROM Angular,
React, AND Vue.js.



I'VE USED
Vue BEFORE!

LET'S GO
WITH THAT.

木子

OKAY,
MY REPOSITORY
IS DONE.

THAT ONLY
TOOK 10 SECONDS!

NEXT, GO TO AZURE PORTAL,
AND REGISTER THIS REPOSITORY.

<https://portal.azure.com/>

Microsoft Azure

Search resources, services, and do

Azure services



Create a
resource



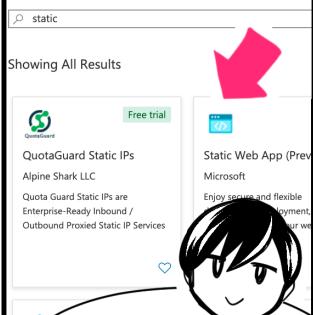
Static Web



All resources

**CLICK [CREATE RESOURCE]
BEFORE SEARCHING
FOR STATIC WEB APPS.**

ALL RIGHT,
HERE WE GO.



**CLICK HERE
TO [CREATE], RIGHT?**

ONCE YOU SELECT YOUR SUBSCRIPTIONS,
RESOURCE GROUPS, APPLICATION NAME,
AND REGION (THE LOCATION OF YOUR SERVER),

Subscription * Subscription

Resource Group * (New) SEMINAR-WEBSITE [Create new](#)

Static Web App details

Name * my-first-static-webapp

Region * Central US

SKU * Free [Sign in with GitHub](#)

**CLICK
[SIGN IN WITH GITHUB ACCOUNT].**

I GET IT!



AZURE CONNECTS
DIRECTLY WITH GITHUB,

SO YOU DON'T NEED TO
REGISTER A TOKEN!

THAT'S SO EASY!

7

BY THE WAY,
WHAT IS
A SUBSCRIPTION?



I'VE NEVER
HEARD OF
THAT BEFORE.

SUBSCRIPTIONS ARE CONTRACT FORMATS FOR YOUR CLOUD.

THE "FREE TRIAL VERSION" LETS YOU TRY OUT THE FEATURES...



Subscription

IT LATER CHANGES TO "PAY-PER-USE."

PAY-PER-USE MEANS YOU GET CHARGED ACCORDINGLY TO THE AMOUNT YOU USE.

P...PAY...?
HOW MUCH IS THIS GOING TO COST ME....?

DON'T WORRY!

EVEN IF YOU GO OVERBOARD, THERE'S A LIMIT IN PLACE, SO YOU'LL BE FINE!

DURING THE PREVIEW PERIOD, STATIC WEB APPS IS LIMITED TO THE FREE PLAN, ANYWAY.

THAT'S A RELIEF!

I GUESS I'LL NEED TO EXPLAIN RESOURCE GROUPS, AS IT'S A BIT COMPLICATED.

Resource group

SERVERS, STORAGE, AND NETWORKS,

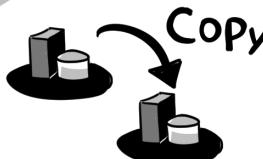
WHICH ARE USED BY THE CLOUD, ARE CALLED "RESOURCES."

RESOURCE GROUPS ALLOW YOU TO MANAGE THEM IN A SINGLE PLACE.



YOU CAN CREATE TEMPLATES FOR YOUR RESOURCE GROUPS,

COPY THEM, AND DELETE THEM ALL AT ONCE IF YOU DON'T NEED THEM ANYMORE.
IT'S A REALLY CONVENIENT FEATURE!



YOU CAN NAME THEM IN A WAY THAT MAKES IT EASY FOR YOU.
I'LL NAME MINE "SEMINAR-WEBSITE."

ALL RIGHT,
NOW THAT I'M CONNECTED TO GITHUB, I CAN CHOOSE A REPOSITORY.

llminatoll

my-first-static-web-app

master

Next : Build >

I'LL CHOOSE THE REPOSITORY I JUST MADE... I'LL JUST USE THE MASTER BRANCH FOR MY PUBLIC BRANCH.

ALL THAT'S LEFT TO DO IS DECIDE ON A FEW BUILD SETTINGS, AND YOU'RE DONE!

THAT ONLY TOOK 40 SECONDS!

Basics Build Tags Review + create

Provide initial build variables. These can later be modified in the workflow file.

Build Details

App location * ⓘ

/

e.g. "api", "functions", etc...

Api location ⓘ

dist

App artifact location ⓘ

Review + create

< Previous

Next : Tags >

THIS DEPENDS ON THE FRAMEWORK YOU USE, BUT ALL THE INFORMATION YOU NEED ON HOW TO WRITE IS HERE ON THIS OFFICIAL DOCUMENT.

WHOA!?

MY BUILD JUST STARTED!

I HAVEN'T EVEN WRITTEN A YAML!

WHAT A SURPRISE!

YOUR BUILD IS OVER IN A FLASH!

THAT WAS SO FAST!

I CAN'T WAIT TO SEE OUR PUBLISHED WEBSITE!

✓ Your deployment is complete

Deployment name: Microsoft.Web-StaticApp-Portal-c0fa051d-b3
Subscription:
Resource group: SEMINAR-WEBSITE

▼ Deployment details ([Download](#))

^ Next steps

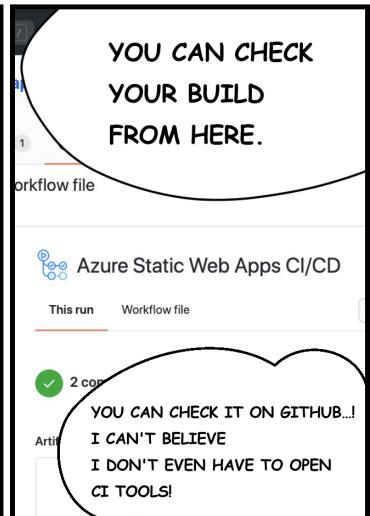
[Go to resource](#)

Click the [Go to Resource] button and click the URL!

WOW!
IT'S REALLY UP ALREADY!

....AND IT'S ONLY BEEN EXACTLY A MINUTE.

YOU CAN CHECK YOUR BUILD FROM HERE.



<https://black-ocean-xxx.azurestaticapps.net/>

HEY, LOOK!
THE AUTOMATICALLY
GENERATED URL
IS BLACK-OCEAN!
THAT SOUNDS
REALLY COOL!

I WONDER IF
THERE ARE ANY
OTHER VARIATIONS?

HERE ARE
A FEW EXAMPLES.

polite-dune



mango-sky

happy-stone

ambitious-meadow

jolly-coast

gray-smoke

THAT'S REALLY COOL!
MANGO-SKY SOUNDS
PRETTY CUTE!

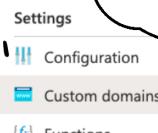
BUT I CAN'T REALLY
LEAVE IT AS A RANDOM URL.



Umm...
I DON'T THINK THE PROFESSOR
WILL APPROVE OF IT WITHOUT
A DOMAIN FOR THE SEMINAR...

OF COURSE,
YOU CAN CREATE
CUSTOM DOMAINS*!

REALLY?
WHAT A
RELIEF!



* <https://aka.ms/custom-domain>

SORRY TO BUTT IN WHEN
YOU'RE HAVING A GREAT
TIME, BUT I MADE A PULL
REQUEST FOR THE NEW PAGE.

WOULD YOU MIND
CHECKING IT?



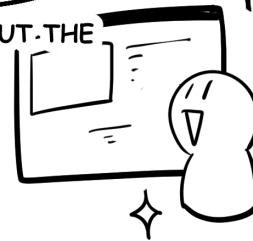
TO SEE THE UPDATES,

I HAVE TO PULL THE
PULL REQUESTED BRANCH
TO LOCAL AND CHECK THE
BUILD ON MY OWN
COMPUTER...

THAT
WON'T BE
NECESSARY!

THERE'S
A PULL REQUEST PREVIEW FEATURE,
SO YOU DON'T NEED TO DEPLOY IT
ON YOUR OWN COMPUTER.

YOU CAN CHECK OUT THE
TEST DEPLOYED
PULL REQUEST
DIRECTLY



VIA A NON-PUBLIC URL!

THAT'S A CONVENIENT FEATURE!
USUALLY IT'S A PAIN CREATING
A TEST ENVIRONMENT.

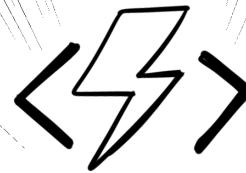


THERE ARE ACTUALLY
A BUNCH OF OTHER
AWESOME FEATURES
ON AZURE STATIC WEB APPS.
FOR EXAMPLE...

YOUR BUILD WILL
RUN AUTOMATICALLY
ON STATIC SITE
GENERATORS



LIKE GATSBY AND HUGO



Azure Functions



YOU CAN CONSOLIDATE
AND DEPLOY A BACKEND
API (AZURE FUNCTIONS)
TOGETHER

YOU CAN ALSO
INCORPORATE
FACEBOOK AND GOOGLE
ACCOUNT
VERIFICATION



AWESOME!
THEY GIVE YOU
SO MUCH FREEDOM!

AT FIRST, I ACTUALLY THOUGHT,
'WOULDN'T GITHUB PAGES BE ENOUGH?'
BUT GITHUB PAGES DOESN'T HAVE API CONSOLIDATION
OR VERIFICATION FEATURES.

THAT'S RIGHT.
ALSO, THE DOCUMENTS AND TUTORIALS
ARE ALL LOCALIZED INTO LANGUAGES
AROUND THE WORLD, SO THAT'S SOMETHING
THAT SETS IT APART FROM OTHER TOOLS.

THE NEXT DAY

HOW'S THE
WEBSITE FOR
THE SEMINAR
COMING ALONG?

WAIT, WHAT?
IT'S ALREADY
DONE?

ON TOP OF THAT,
YOU USED Vue.js FOR A
COOL LAYOUT, AND THERE'S
ALSO A TEST ENVIRONMENT!

HEHE!

ACTUALLY, IT'S ALL
THANKS TO
Azure Static Web Apps!

YOU TOO CAN USE AZURE STATIC WEB APPS
TO DEPLOY SUPER-FAST ONTO THE CLOUD!

Popular Learning Paths

if you are wondering where to start

Intro to coding



<https://aka.ms/Intro-to-Dev>

Tips ✨

You can create your own collections combining your favorite modules just like this one!

Introduction to version control with Git



<https://aka.ms/Intro-to-Git>

Azure fundamentals



<https://aka.ms/AFUN-LP>



Deploy a website



<https://aka.ms/Deploy-a-Website>



Azure Static Web Apps



<https://aka.ms/StaticWeb-API>



Create and publish a static web app with Gatsby

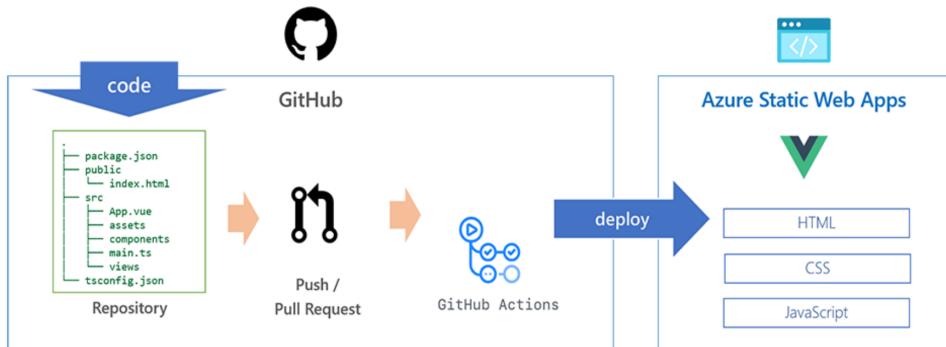


<https://aka.ms/StaticWeb-Gatsby>



Create scalable Vue.js application with Azure Static Web Apps

Have you joined Microsoft Build 2020, where Microsoft introduced various exciting news to the world? Among all of the updates, I am especially keen to introduce Azure Static Web Apps, the hosting service for static website which has been finally announced as Public Preview, and that enables us to create & deploy Vue.js Web application literally within "a few minutes".



Vue.js is made based on the concept of "Progressive Framework", hence we can start writing from very small, and gradually grow them into the enterprise scale. In this post, I would like to introduce the first step to create scalable application using Vue.js and Azure Static Web Apps.

Creating new project with Vue CLI

In order to be ready to use Azure Static Web Apps, your application code needs to be on GitHub.

First, write some basic code. A shortcut to create Vue.js project is to use Vue CLI. For example, with Vue CLI, you can configure Router, or TypeScript in the appropriate way.

Let's get started. Using Terminal, move to directory where the application will be created to run the command like below,

```
$ npm i -g @vue/cli  
$ vue create .
```



Let's create the
Vue project!

Next, create the project with frequently-used configuration with Vue CLI prompt.

I choose TypeScript here because I believe TypeScript is going to be major in Vue.js project. Also, select Router, ESLint, Prettier and Jest which is majorly used in many projects. For "Use class-style component syntax?", I suggest to select "No" since it is not longer mainstream with Vue.3x.

```
Vue CLI v4.3.1
? Please pick a preset: Manually select features
? Check the features needed for your project: TS, Router, Linter, Unit
? Use class-style component syntax? No
? Use Babel alongside TypeScript (required for modern mode, auto-detected polyfills, transpiling JSX)? No
? Use history mode for router? (Requires proper server setup for index fallback in production) Yes
? Pick a linter / formatter config: Prettier
? Pick additional lint features: Lint on save
? Pick a unit testing solution: Jest
? Where do you prefer placing config for Babel, ESLint, etc.? In dedicated config files
? Save this as a preset for future projects? (y/N) N
```

After a while, Vue.js project will be generated.

Let's check if application runs properly on local.

```
$ npm run serve
```

If the green Vue.js logo on the initial screen shows up, the basic configuration is all set up. You can already run not only TypeScript compile but also unit testing and formatting.

The rest is just to add the code for features of the your application!

At this point,
push codes to GitHub in order to
get ready for the deploy to Azure.



Provisioning Azure Static Web Apps

Open Azure portal and go to "Create a resource", and search "static web apps".

Fill in all the necessary information as follow.

In this process, you link this resource with the GitHub Repo.

Static Web App (Preview) >

Basics Build Tags Review + create

App Service Static Web Apps is a streamlined, highly efficient solution to take your static app from source code to global high availability. Pre-rendered files are served from a global footprint with no web servers required. [Learn more](#)

Project Details

Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * ⓘ

Resource Group * ⓘ myk-mmld [Create new](#)

Static Web App details

Name * swa-vue

Region * West US 2

SKU * Free

Source Control Details

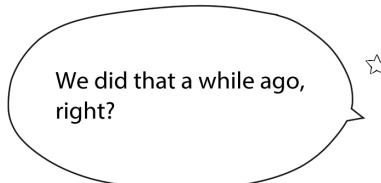
GitHub account k-miyake

Organization * k-miyake

Repository * azure-swa-vue

Branch * master

[Review + create](#) < Previous [Next : Build >](#)



Click "Next:Build", and it takes you to the next step. In this step, type "dist" for "App artifact location". "dist" is a directory which outputs the static files for hosting , such as HTML,CSS, Javascript when we run npm run build (standard build command of Vue CLI) .

Static Web App (Preview)

Basics Build Tags Review + create

Provide initial build variables. These can later be modified in the workflow file.

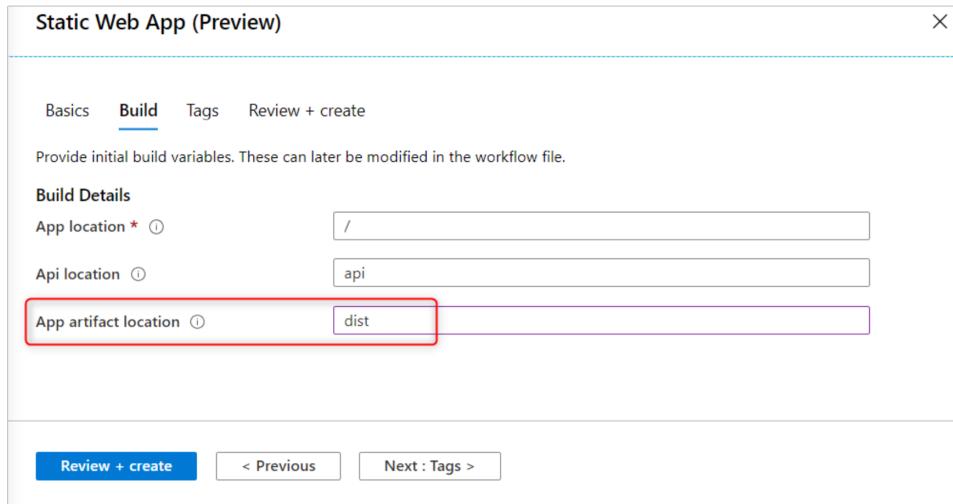
Build Details

App location *

Api location

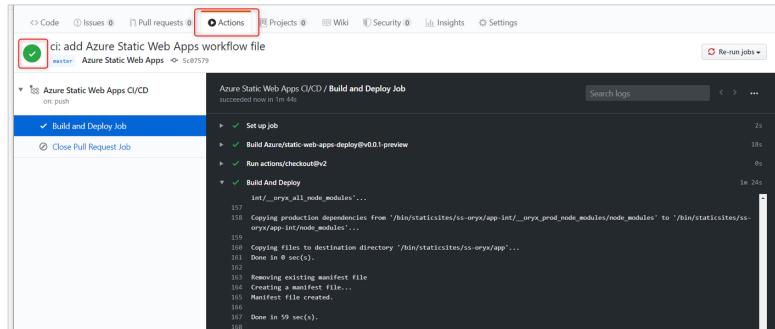
App artifact location (1)

Review + create < Previous Next : Tags >



Click "**Review + Create**" and and wait a few minutes, deployment is complete! You don't need to configure CI service or write the build script in YAML.

At this point, build workflow of GitHub Actions runs automatically in the background. To check the build status, you can open Actions tab in GitHub. If the Icon is green, then the build and deploy is successfully completed.

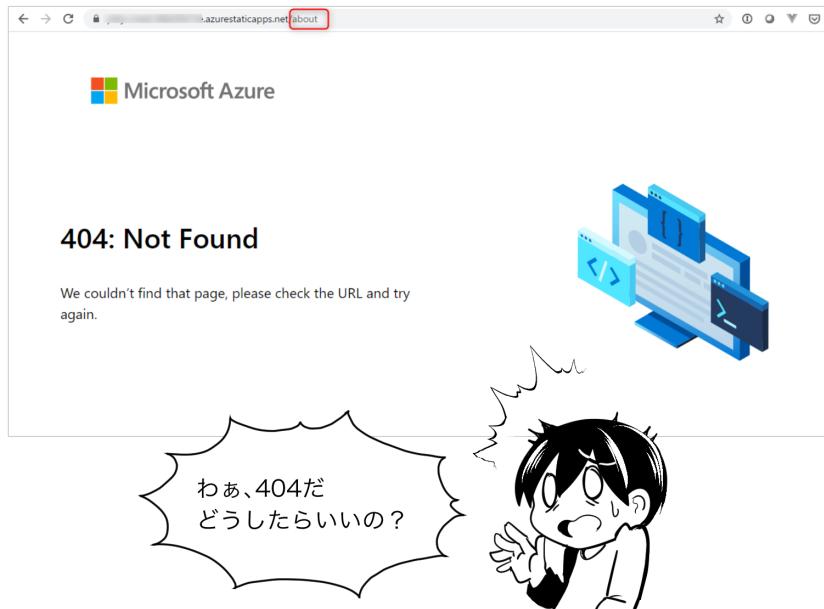


Now, let's go back to the Azure portal and click the site URL.
You will see the same page published as the application you ran locally.

At this moment, YAML file is already added to `.github/workflows` in GitHub repository, so do not forget to pull them to local.

Setting fallback routes

We selected "History Mode" when we set up Router with Vue CLI. In the SPA, re-loading a specific page cause 404 if we do not configure anything on the hosting environment.



To enable History Mode in a hosting environment, you need to make the appropriate setting for the environment. In case of hosting Vue.js on Azure Static Web Apps, create **routes.json** file under **public** directory like below.

```
{  
  "routes": [  
    {  
      "route": "/*",  
      "serve": "/index.html",  
      "statusCode": 200  
    }  
  ]  
}
```



So, let's push this change to brunch and create pull request.

Here, The pull request is triggered and the deployment to Static Web Apps is executed.

Enable fallback route #2

Open k-miyake wants to merge 1 commit into `master` from `fallback-route`

Conversation 0 Commits 1 Checks 0 Files changed 1

k-miyake commented now
Add routes.json to enable the fallback

add routes file 3f4a7ff

Add more commits by pushing to the `fallback-route` branch on [k-miyake/azure-swa-vue](#).

Some checks haven't completed yet
1 queued check

● [Azure Static Web Apps CI/CD / Close Pull Request Job \(pull_request\)](#) Queue... Details

This branch has no conflicts with the base branch
Merging can be performed automatically.

[Merge pull request](#) You can also [open this in GitHub Desktop](#) or view [command line instructions](#).

Once build process is completed, you can confirm the deployed change under "**Environments**" in Azure Portal.

Settings

- Configuration
- Custom domains
- Functions
- Environments**
- Role management
- Locks
- Export template

Production

There is one production environment per app. Check its status and last update time here.

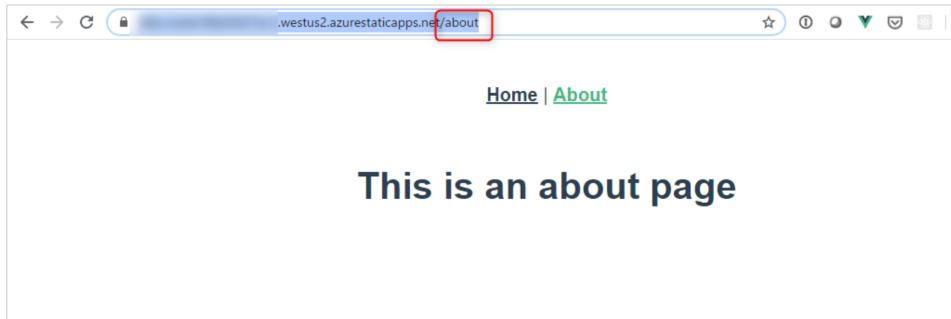
Branch	Last Update Time	Status	Browse
master	2020年5月25日 20:07:25 JST	Ready	Browse

Staging

Open pull requests against the linked repository to create a staging environment.

Title	Branch	Last Update Time	Status	Browse
Enable fallback route	route	2020年5月25日 20:40:...	Ready	Browse

Let's check "about" page which we had problem with earlier.
Now, it no longer shows 404 page after reloading.



All you have to do for the rest is just to merge pull request and wait for it being deployed to "production" environment.
When pull request is closed, staging environment will be automatically deleted.



I hope you experienced how easy it is to host scalable Vue.js application with Azure.
Azure Static Web Apps is currently available to Public Preview, for free! Who wouldn't try it?

first appearance:

Create scalable Vue.js application with Azure Static Web Apps

<https://dev.to/miyake/create-scalable-vue-js-application-with-azure-static-web-apps-12np>

The Manga Guide to Azure Static Web Apps

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p15-21 Technical writing : Kazuyuki Miyake @kazuyukimiyake

