# Hosting Static HTML Website with Azure Static Web Apps

I started creating Websites with pure HTML in mid-nineties. Moved to content management systems like Umbraco or Microsoft Power Pages. But for static website, I would use GitHub pages in the past.

But now, since the GA of Azure Static Web Apps (SWA), I now have another free of charge option. In this post, I'll share how I create and deployed my own static website using SWA.

## Azure Static Web Apps

Typically on Azure, if you want to host websites, you will choose App Service or VMs. They support major backend languages and frameworks like .NET, Python, NodeJs, etc. However, if your website is pure static without any backend code, using App Service or VMs would be overkill since they are too expensive for a simple static website. Azure Static Web Apps solves this need of static websites by providing a free or less expensive option for hosting just static pages.

It can host pure HTML/JS websites that doesn't require code compilation as well as Angular, React, Vue or Blazor applications that need to be compiled. For GitHub pages users, you may like static page generators like Hugo, VuePress and Gatsby, SWA supports all of them.

In this post, I've already created a pure HTML website and upload the code to my GitHub repository. Let's see how to setup hosting and domain binding for this website on Azure SWA.

## Prerequisites

* An Azure account with an active subscription. If you don't have one, you can create an account for free. https://portal.azure.com/
* A GitHub account. https://github.com/
* Visual Studio Code https://code.visualstudio.com/
* Azure Static Web Apps extension for Visual Studio Code https://marketplace.visualstudio.com/items?itemName=ms-azuretools.vscode-azurestaticwebapps
* Install Git https://www.git-scm.com/downloads
* Static Website content managed in your GitHub repository

## Steps

1. Create a Static Web App
2. Review GitHub Actions
3. Create an Azure DNS Zone
4. Add Custom Domain

## Create a Static Web App

Go to Azure Portal, find Static Web Apps service and click «Create».

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Give it a name and select a hosting plan. I use free plan for this website. Then choose GitHub as source, click «Sign in with GitHub » to finish authorization.

Graphical user interface, text, application, email

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Choose my GitHub repo that contains the source code of my website. For pure HTML site, leave «Build Presets» as blank.

Graphical user interface, application

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Confirm the details and click «Review + create».

A picture containing text

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## Review GitHub Actions

Now, back to my GitHub, I can see Azure added a new commit in this repo that created a new GitHub Action to build and publish my website. Wait for a few minutes for this action to finish.

A screenshot of a computer

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A screenshot of a computer

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Open the created GitHub Action «azure-static-web-apps-<website-url>.yml». For a pure HTML static web site we need to skip the build app action during the deployment by adding «skip\_app\_build=true»

Text

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See details on [Build configuration for Azure Static Web Apps | Microsoft Learn](https://learn.microsoft.com/en-us/azure/static-web-apps/build-configuration?tabs=github-actions)

Check if deployment script works and website is deployed successfully.

A screenshot of a computer

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Now, go back to Azure Static Web Apps, click the URL that is generated randomly by Azure, my website is up and running now.

Graphical user interface, text, application, email

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(Picture Elisabeth Rüegg Website)

## Create an Azure DNS zone

The default URL <https://thankful-island-050612903.2.azurestaticapps.net> is super ugly, I'm going to bind it to the domain name I bought. Azure Static Web Apps will provide a free HTTPS certificate just like GitHub Pages does. In my case I use Azure DNS zone to manage the domain name.

Go to Azure Portal, find DNS zones service and click «Create».

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Assign it to the same resource group

Graphical user interface, application

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After deployment script finished you should get the overview. Before you can delegate your DNS zone to Azure DNS, you need to know the name servers for your zone. Azure DNS gives name servers from a pool each time a zone is created.

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## Add Custom Domain

Go to « Custom domains» menu in SWA, click «Add» and choose «Custom domain on Azure DNS».

Graphical user interface, text, application, email

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Enter my domain name «elisabethruegg.com» and bind it to the previous created DNS zone.

Graphical user interface, text, application

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SWA supports apex domain and sub domains. For apex domains, we have to verify it by a TXT record. In my case, «elisabethruegg.com» is an apex domain, so I need to click "Generate code" to get a TXT record value for validation.

Graphical user interface, application

Description automatically generated

Copy the generated code.

Go to your Domain Provider admin page (in my case GoDaddy) and add this TXT record to «elisabethruegg.com».

Graphical user interface, text, application, email

Description automatically generated

Switch back to the Azure Portal and after a while (10-20min) you should see «elisabethruegg.com» Status = Validated.

Graphical user interface, text, application

Description automatically generated

Now you can add Sub-domain «www» to your SWA by adding «www.elisabethruegg.com»

Graphical user interface, application

Description automatically generated

After a while (10-20min) you should see «www.elisabethruegg.com» Status = Validated and I am able to access my static website by my custom domain name with HTTPS.

<Website Screenshot>

## Conclusion

It's super easy to host a static HTML website free of charge with Azure Static Web Apps and GitHub.

6. Nov 2022

## References

* [What is Azure Static Web Apps? | Microsoft Learn](https://learn.microsoft.com/en-us/azure/static-web-apps/overview)
* [What is Azure DNS? | Microsoft Learn](https://learn.microsoft.com/en-us/azure/dns/dns-overview)
* [Delegate domain to Azure DNS | Microsoft Learn](https://learn.microsoft.com/en-us/azure/static-web-apps/azure-dns-zone)
* [teamruegg/ursrueggcom (github.com)](https://github.com/teamruegg/ursrueggcom)