



# Azure Static Web Apps – Too good to be true?

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20 07 1969



IMPORTANT YOU MUST  
COLLECT GOODS BEFORE  
BOARDING AIRCRAFT

BOOK STALL





19 11 1969



fine art  
america





08 10 2008





A DeLorean DMC-12 from the movie Back to the Future II is shown driving through a tunnel of fire and lightning. The car is silver with a black interior and features a large, complex rear-mounted flux capacitor. It is surrounded by intense orange flames at the bottom and blue lightning bolts above, set against a dark, star-filled background.

12 5 2021



FOREVER 21

GAP

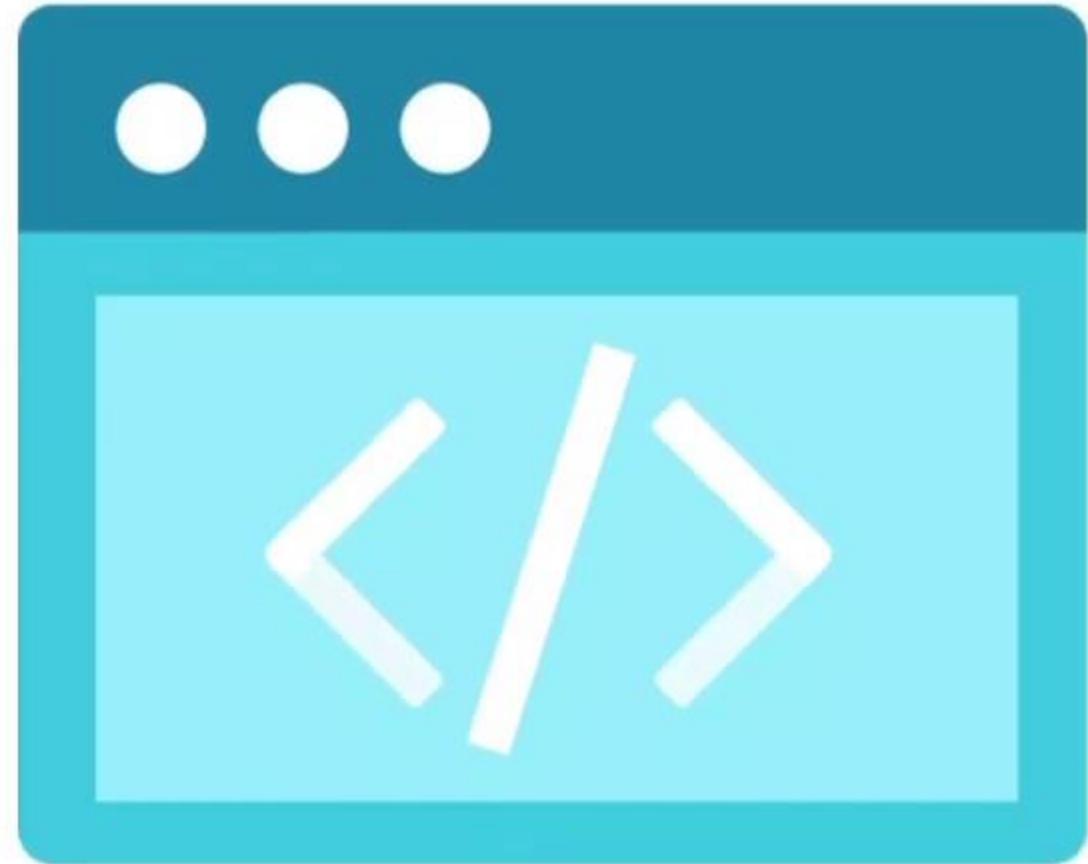
West 34th St

West 34th St

FLASHDANCERS  
GENTLEMEN'S CLUB  
1300 BROADWAY

SALE

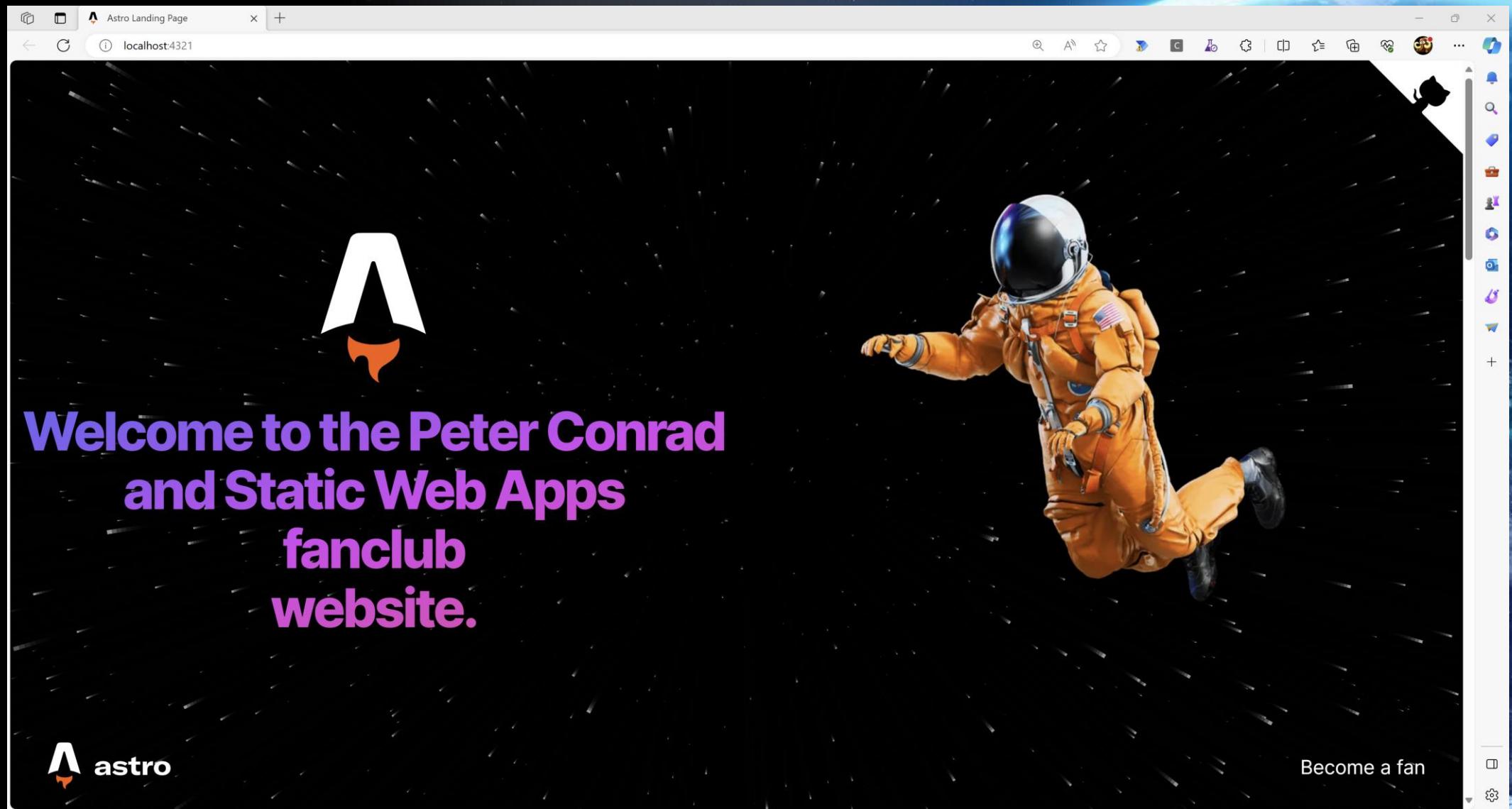
# Azure Static Web Apps





Welcome to the  
Peter Conrad &  
SWA Fan Club!

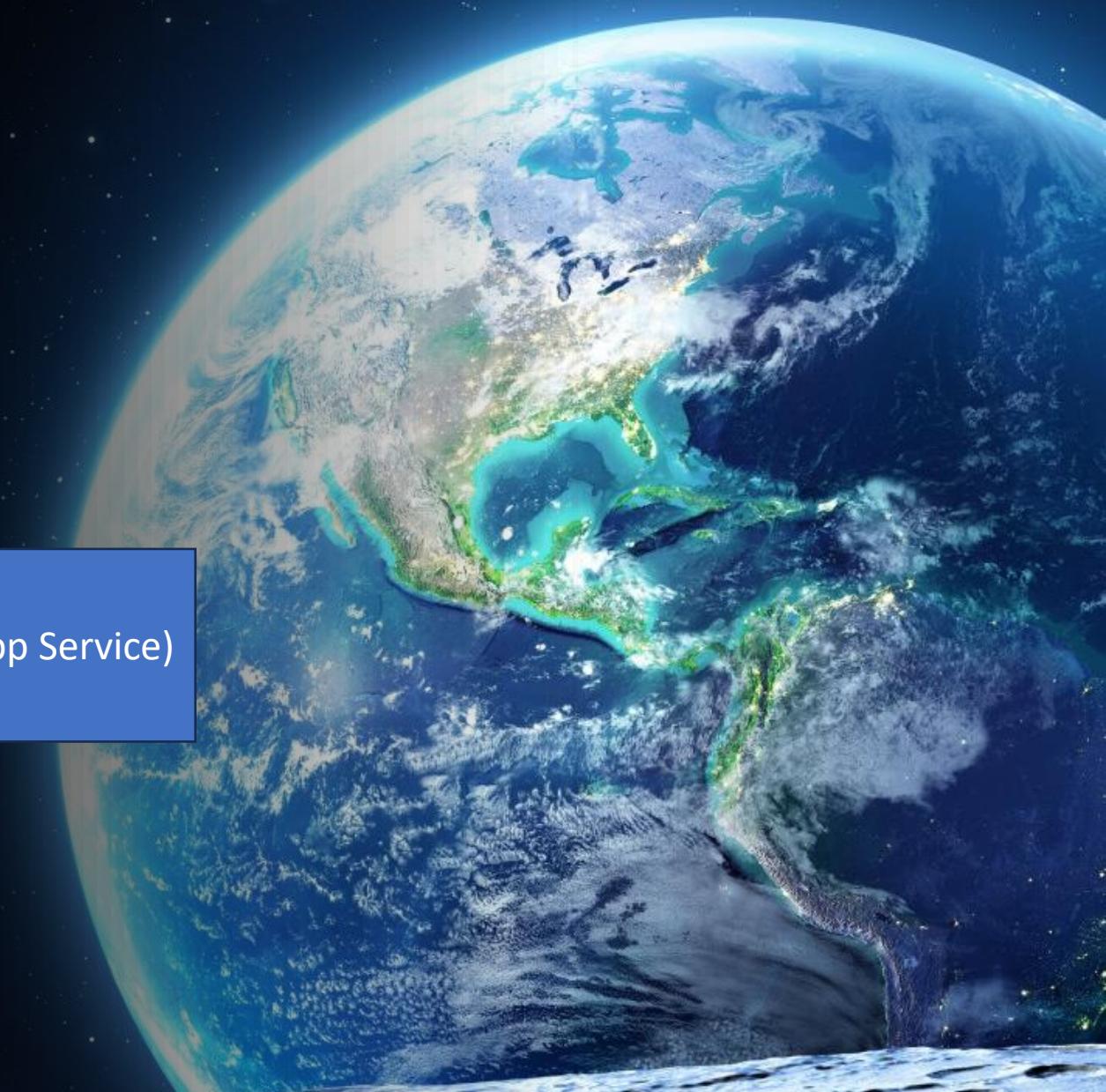




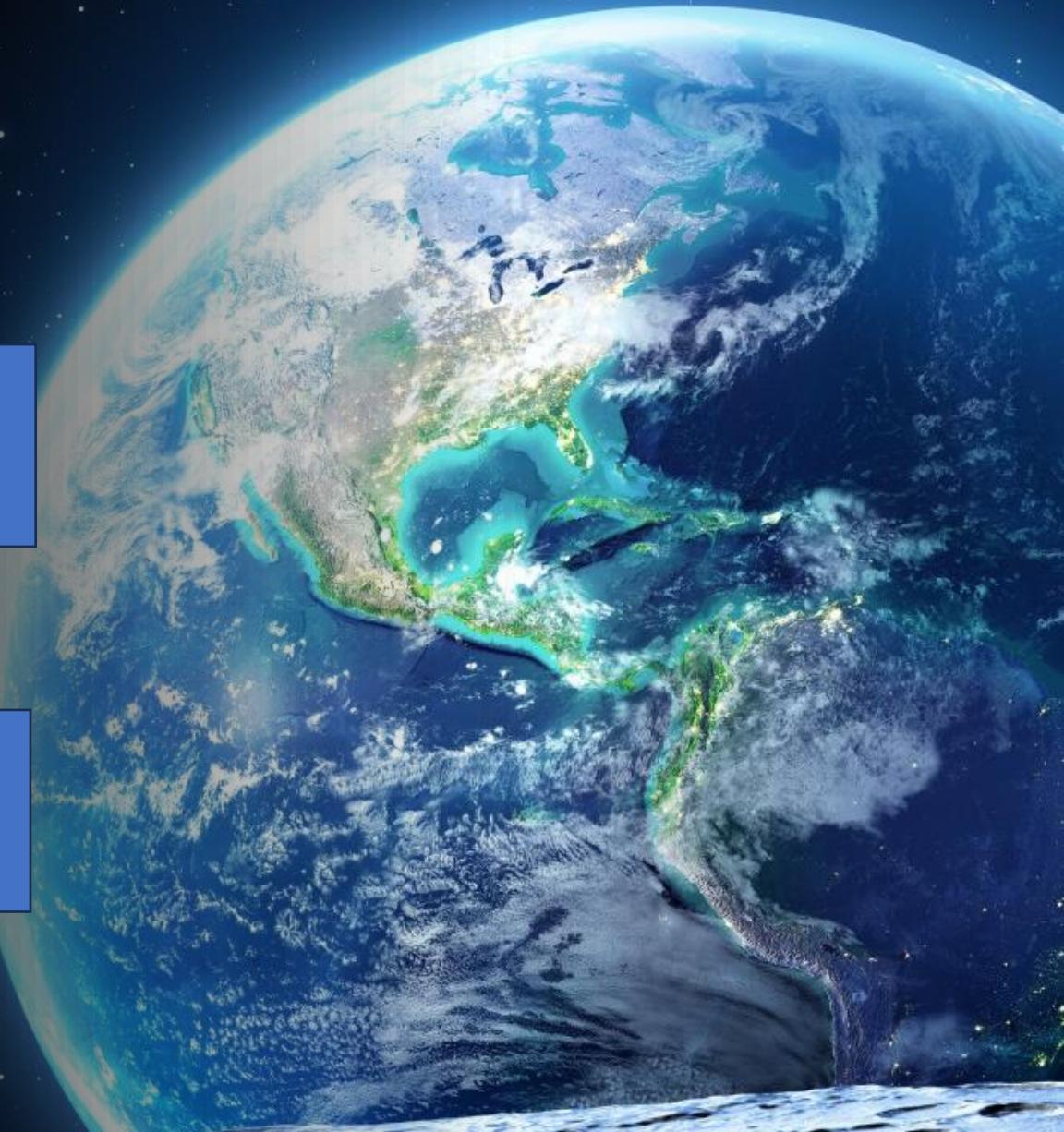
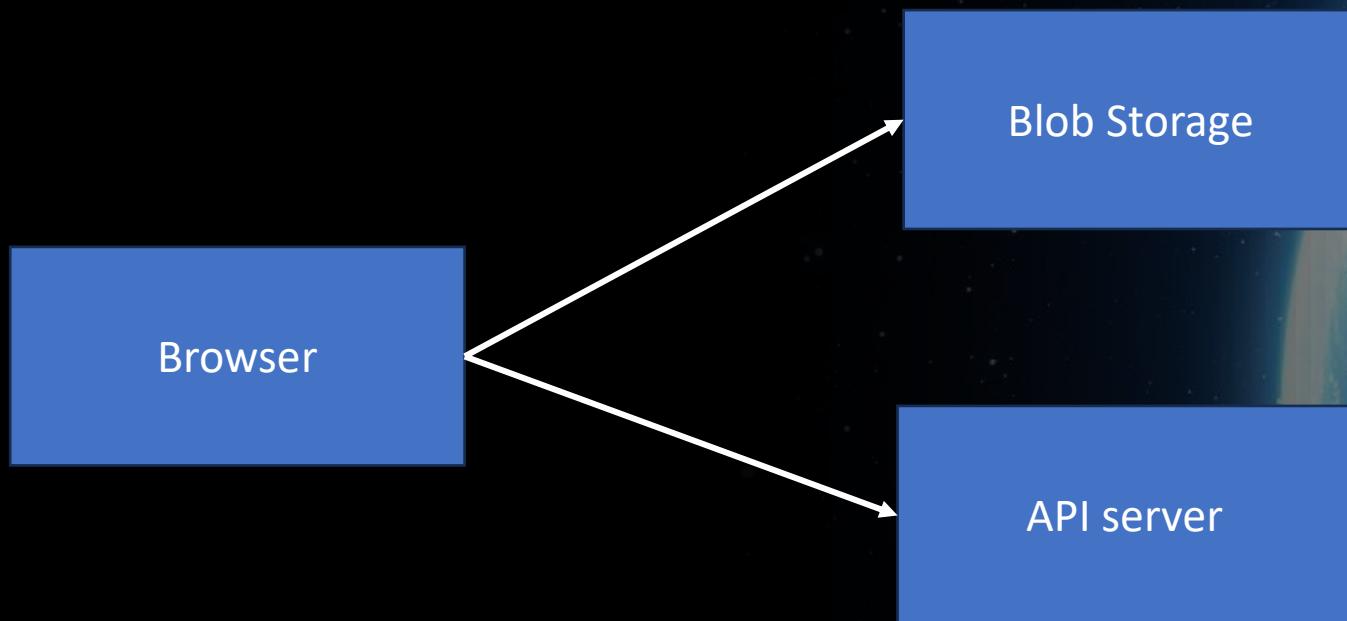
astro

Become a fan

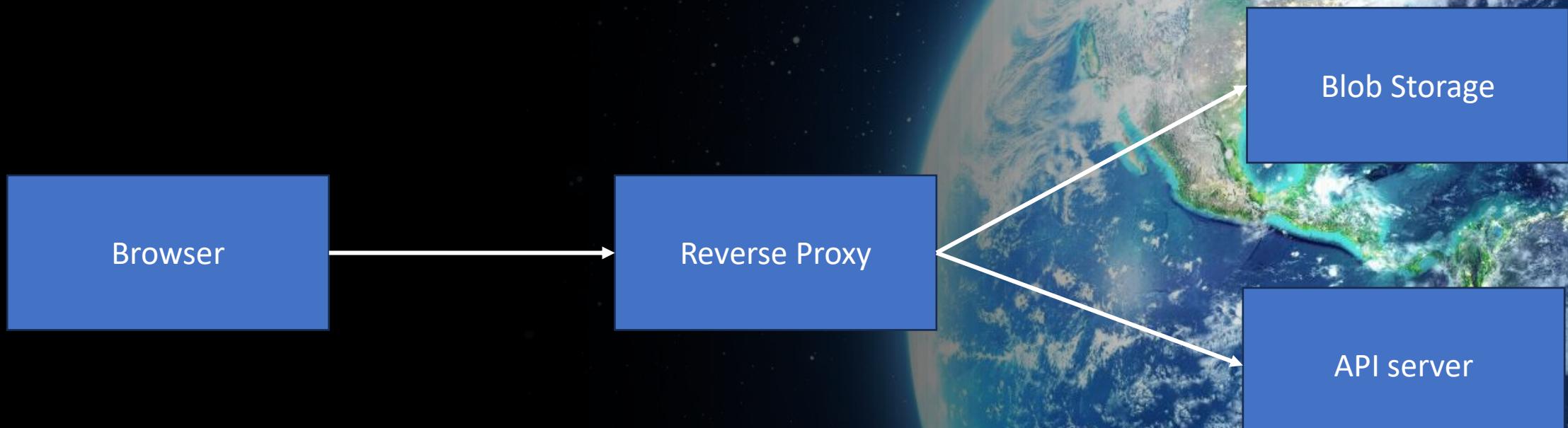
# Traditional hosting



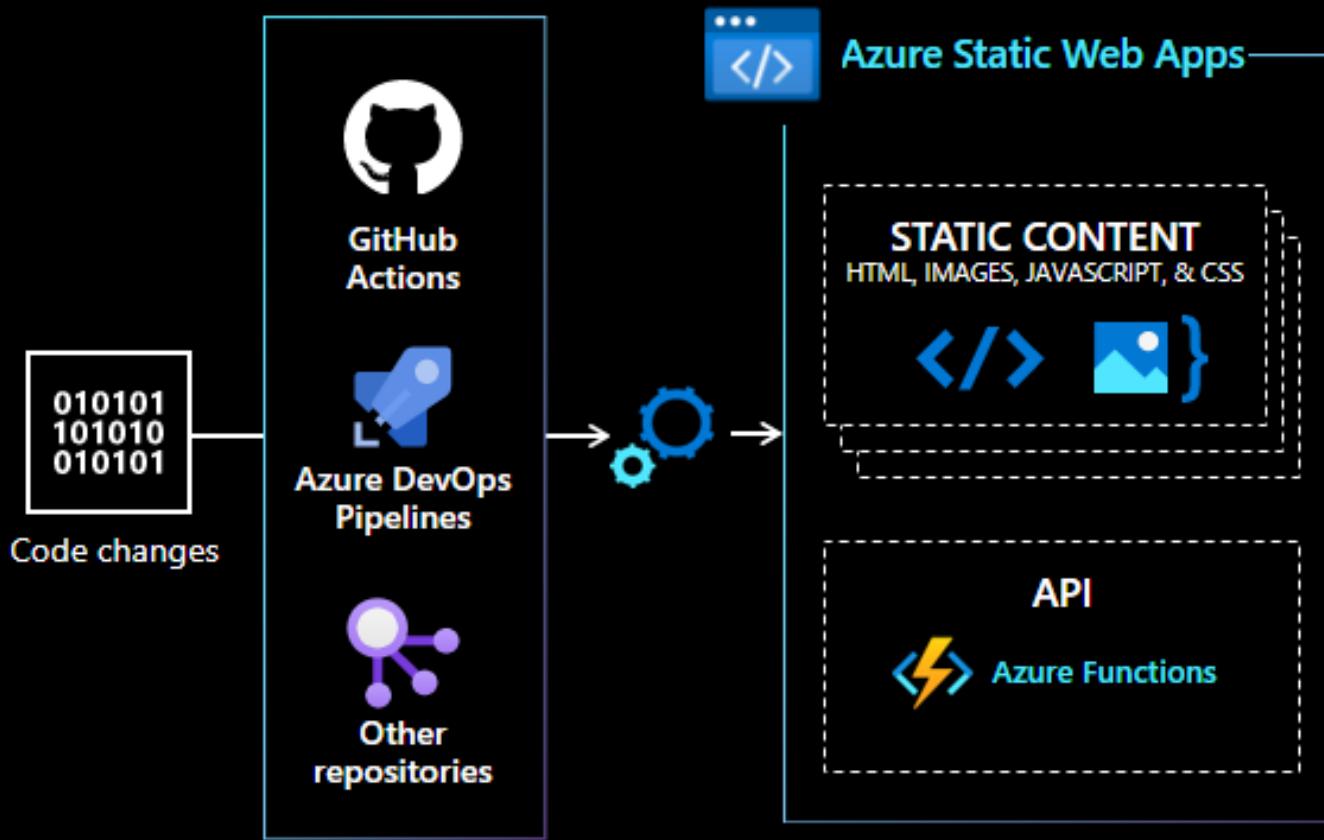
# Traditional hosting



# Traditional hosting



# What are Azure Static Web Apps?



# Features



Globally distributed hosting



Built-in authentication  
and routing rules



Streamlined build &  
deployment



Generated staging  
environments

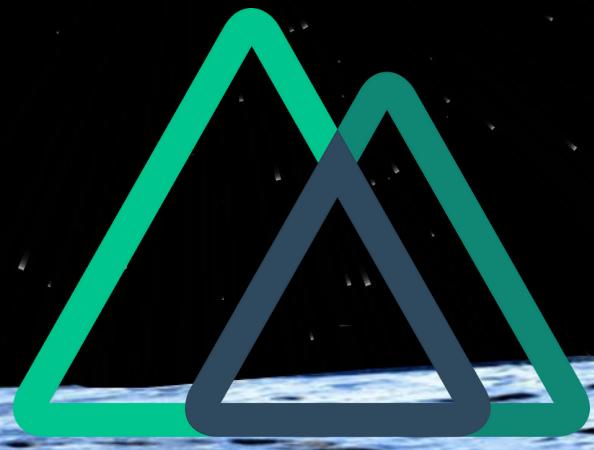
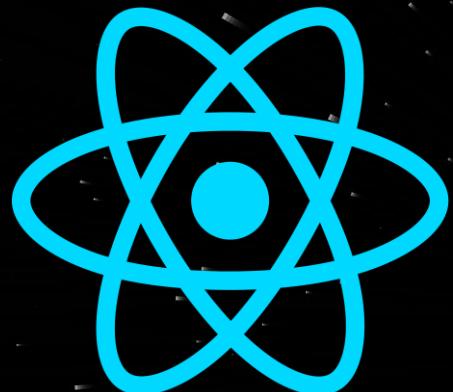


Custom domains and  
free SSL certificates



CLI support

## Supported frameworks





Hello fans!  
Our first Static Web App...





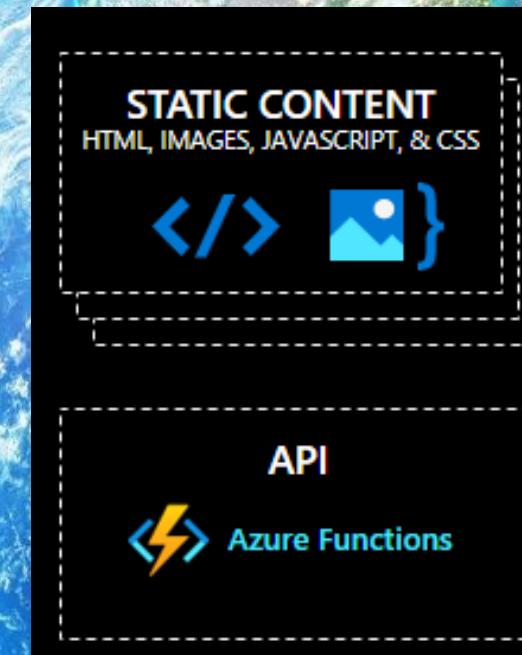
# Configuration management



# Configuration Management

Client settings are managed inside the *staticwebapp.config.json* file:

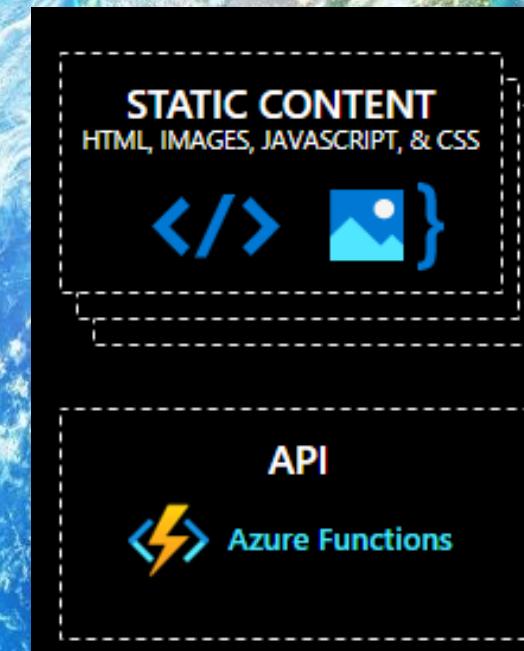
- Routing
- Authentication
- Authorization
- Fallback rules
- HTTP response overrides
- Global HTTP header definitions
- Custom MIME types
- Networking



# Configuration Management

## Application settings:

- Available as environment variables to the backend API of a static web app
- Can store secrets used in authentication configuration
- Are encrypted at rest
- Managed through Azure Portal, Azure CLI or IaC





Tweak our config...

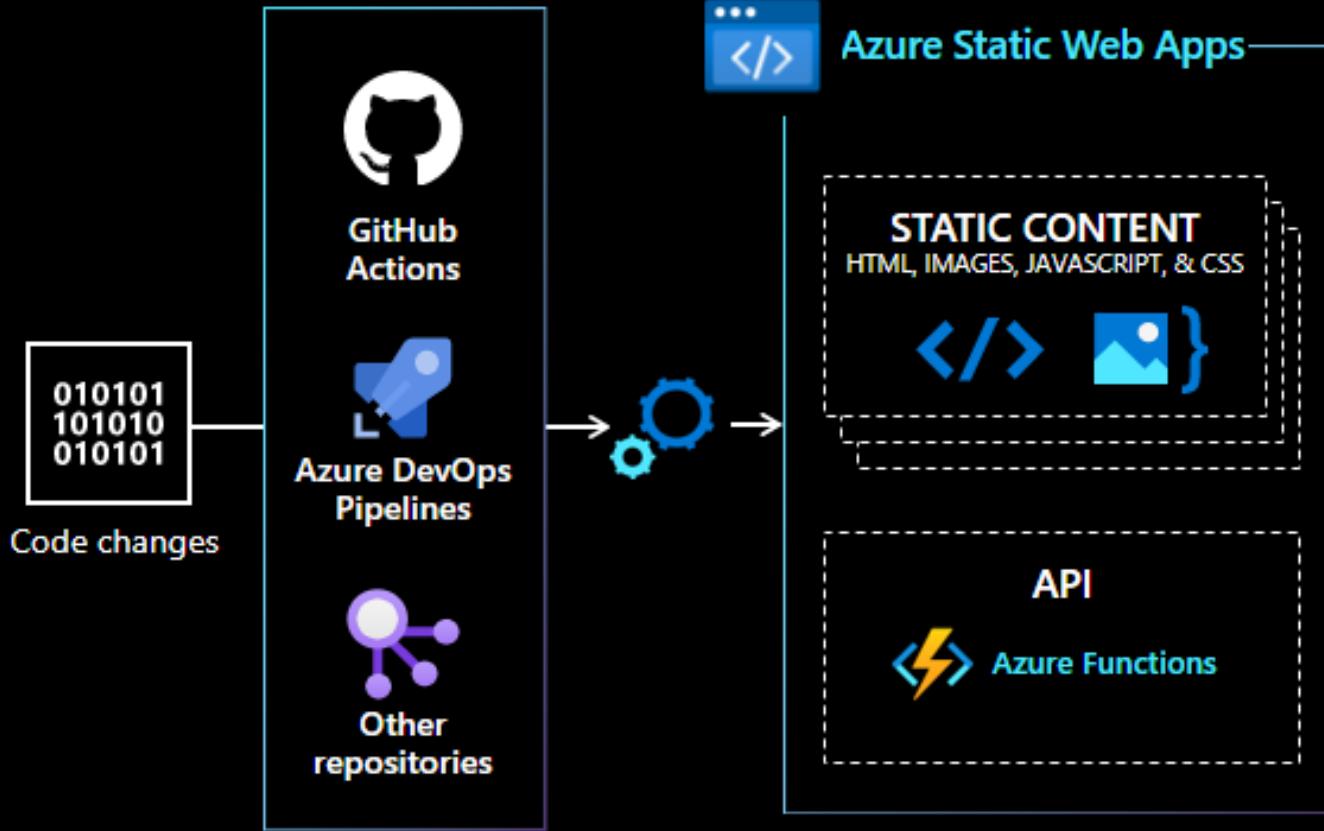




# Deployment



# Deployment



# Deployment



```
1 resource swa_resource 'Microsoft.Web/staticSites@2021-01-15' = {
2   name: name
3   location: location
4   tags: null
5   properties: {
6     branch: 'main',
7     repositoryToken: tokenParam,
8     repositoryUrl: 'https://github.com/wullemsb/wullemsb.github.io',
9     buildProperties: {
10       appLocation: './',
11       apiLocation: './api',
12       outputLocation: './output'
13     }
14   }
15   sku: {
16     name: sku
17     size: sku
18   }
19 }
```

# Environments

Multiple supported environments:

- Production



A screenshot of a web browser window. The address bar shows the URL: "https://orange-water-0d57c4f1e.4.azurestaticapps". The main content area displays a simple static web page with the title "Azure Static Web Apps - Welcome". The browser interface includes standard navigation buttons (back, forward, search) and a tab bar with other open tabs.

# Environments

Multiple supported environments:

- Production
- Pull Request



A screenshot of a web browser window. The address bar shows the URL: "https://orange-water-0d57c4f1e-&lt;PRNUMBER&gt;.4.azurestaticapps". The page content is the standard "Azure Static Web Apps - Welcome" page, featuring a large orange header with the text "Azure Static Web Apps" and a sub-header "Welcome to your new static web app!". Below this, there's sample content: "This is a static web app built with Blazor Server and deployed to Azure Static Web Apps. It's served from a single static file." At the bottom, there are links to "View on GitHub" and "Edit on GitHub". The browser interface includes standard navigation buttons like back, forward, and search, along with a tab labeled "Azure Static Web Apps - Welcome".

# Environments

Multiple supported environments:

- Production
- Pull Request
- Branch



A screenshot of a web browser window. The address bar shows the URL: "https://orange-water-0d57c4f1e-&lt;BRANCHNAME&gt;.4.azurestaticapps". The main content area of the browser displays the "Azure Static Web Apps - Welcome" page, which includes a "Get started" button and some descriptive text about static web apps.

# Environments

Multiple supported environments:

- Production
- Pull Request
- Branch
- Named environments.



A screenshot of a web browser window. The address bar shows the URL: <https://orange-water-0d57c4f1e-<ENVIRONMENTNAME>.4.azurestaticapps>. The page content is a simple "Azure Static Web Apps - Welcome" page with some placeholder text and icons.



Time for a change of  
environment...

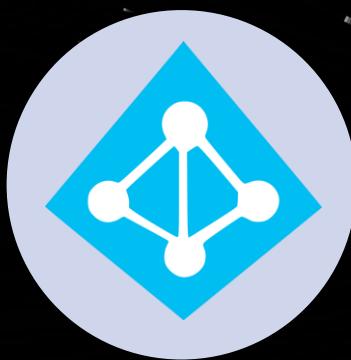




# Security



# Built-in authentication



Azure Active  
Directory



Github



Custom  
providers



Knock, knock,  
who's there...?



# Authorization

- 2 built-in roles:
  - Anonymous
  - Authenticated
- Link route to roles to secure endpoint
- Create your own roles
- Link users through
  - Invitations
  - Custom Azure Function





Authorize me!



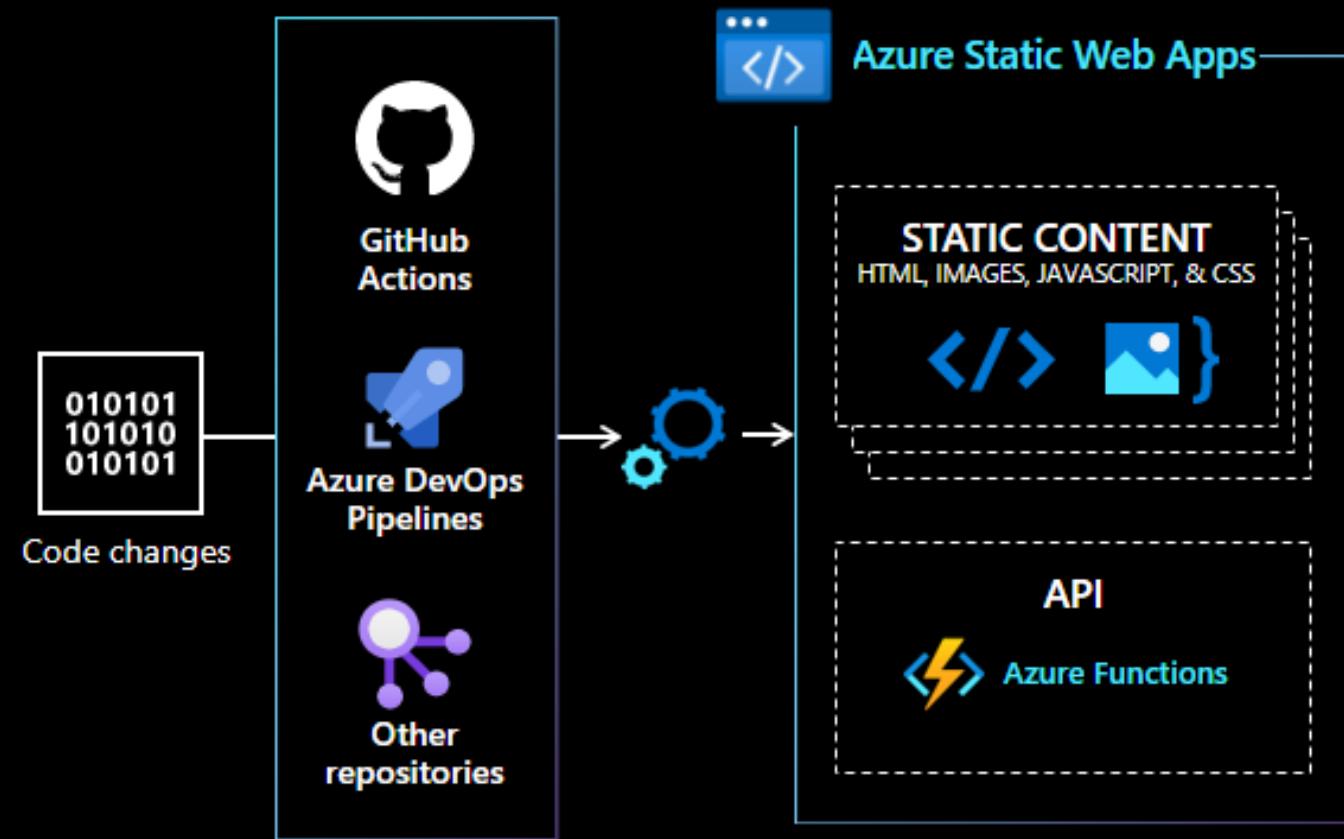


# API Integration



# Managed functions

- Integrated security
  - Direct access to user authentication and role-based authorization data
- Seamless routing
  - No CORS rules required





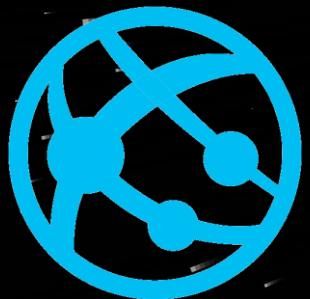
# Manage my functions!



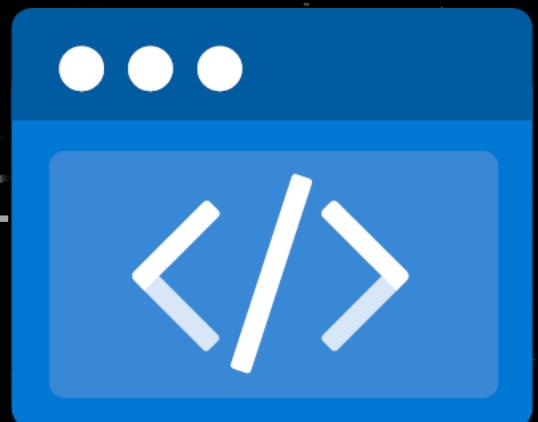
# Linked APIs



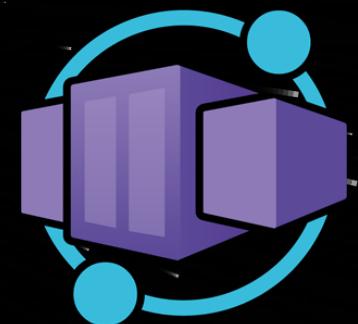
Azure Functions



Azure App Service



Azure API Management



Azure Container Apps



Bring our own API

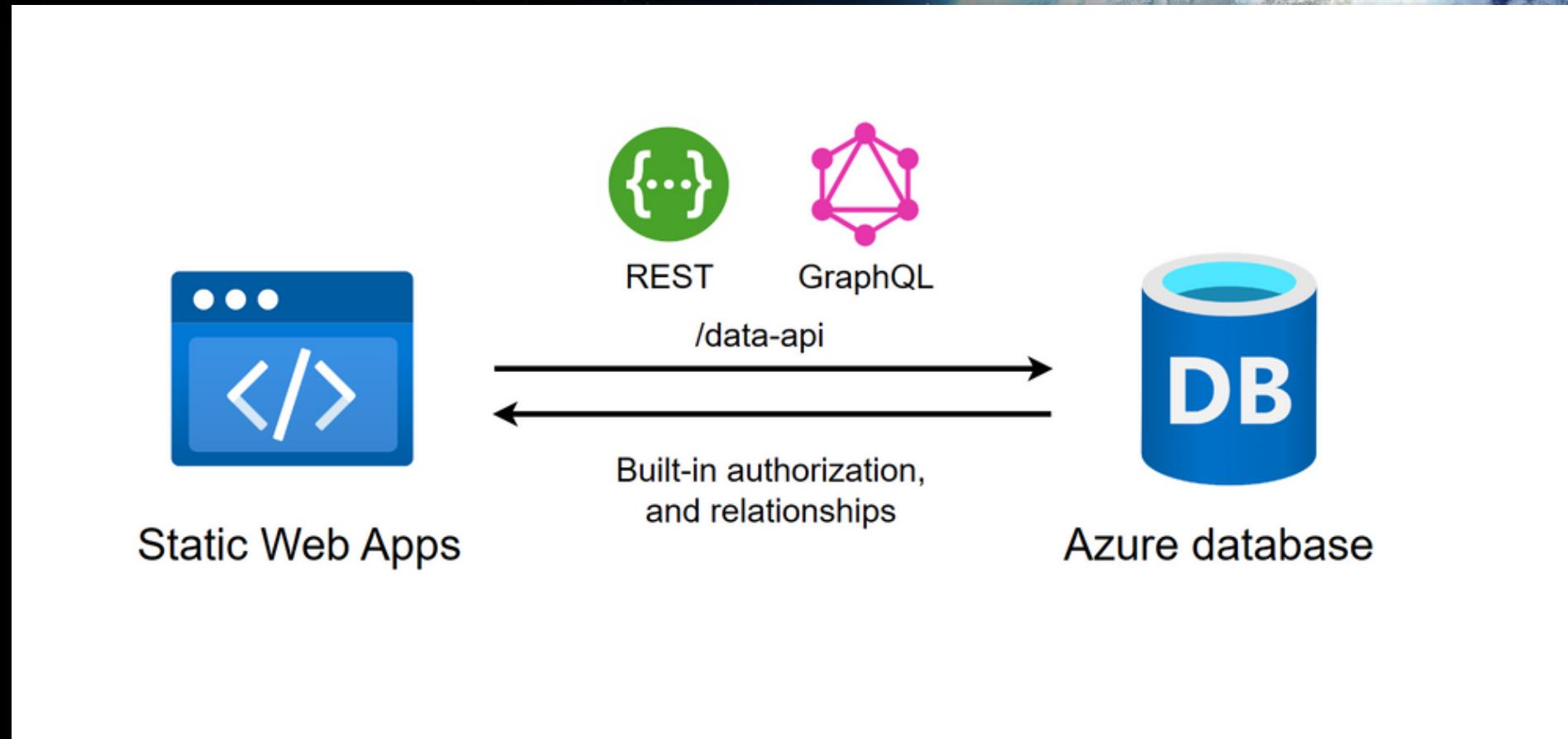




# Database connections



# Database Connections



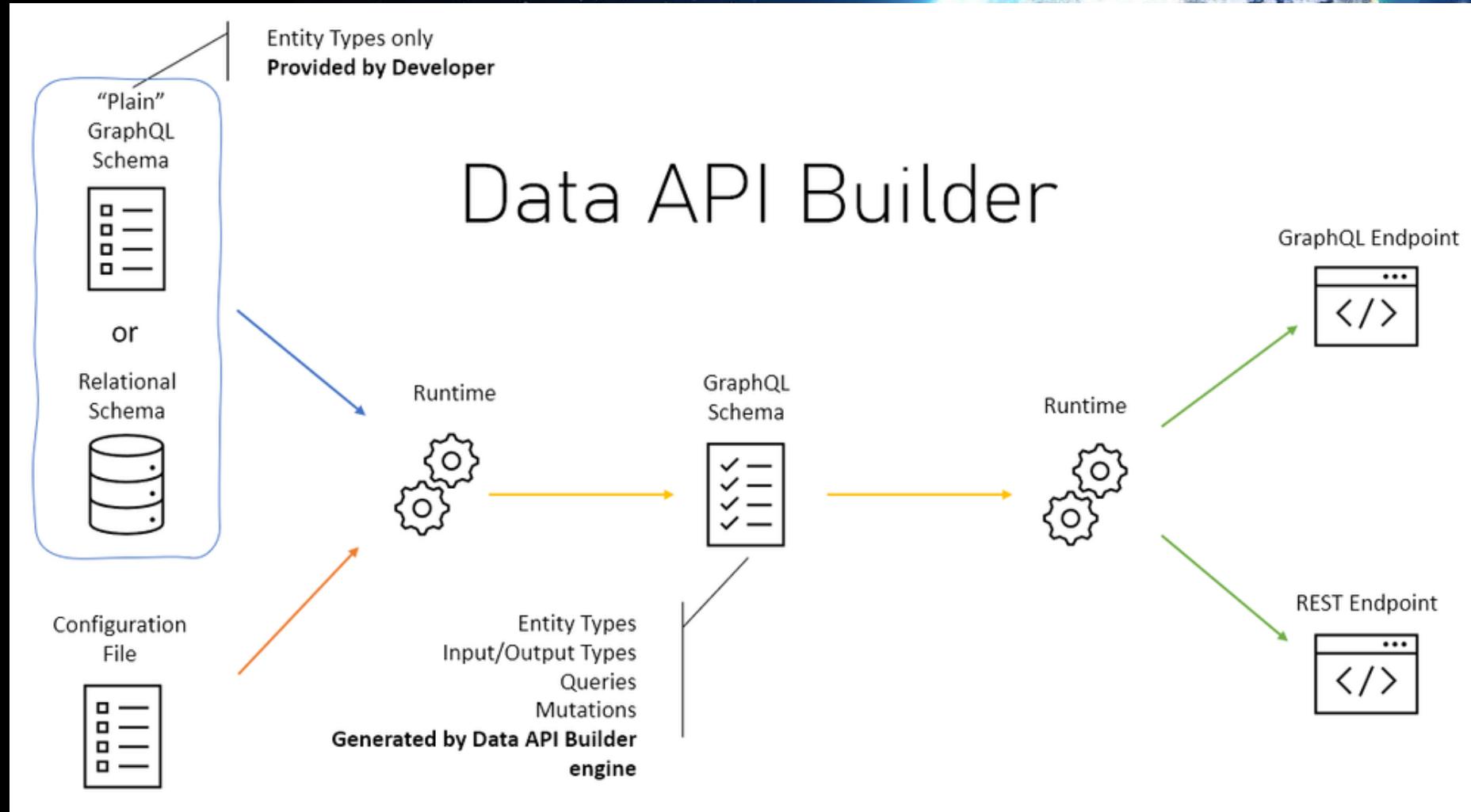
# Database Connections

Supported databases

- Azure Cosmos DB
- Azure SQL
- Azure Database for MySQL
- Azure Database for PostgreSQL



# Database Connections





Show me your data!





# SWA CLI





## Static Web Apps CLI

All-in-One Local Development Tool For Azure Static Web Apps

[Get Started →](#)



Install

Install the Azure Static Web Apps CLI  
using `yarn` or `npm`.



Init

Setup your project  
using `swa init`



Login

Authenticate with Azure services  
using `swa login`



Start

Preview and debug your static web app  
using `swa start`.



Deploy SWA (cloud)

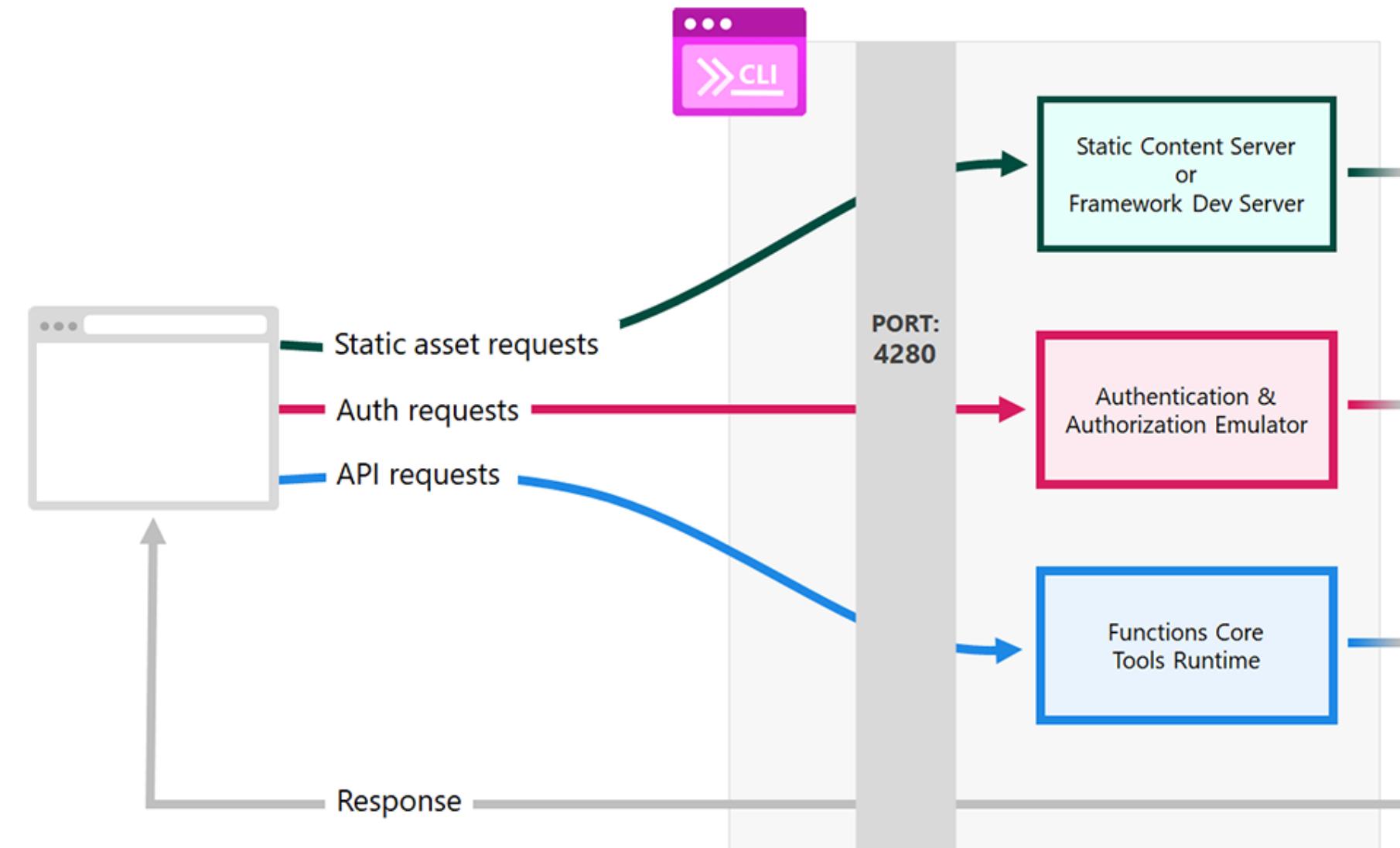
Build/deploy to multiple environments  
using `swa deploy`



Configure

Setup environment variables  
and config settings.

# SWA CLI



CLIs  
have more fun





# Enterprise-Grade Edge

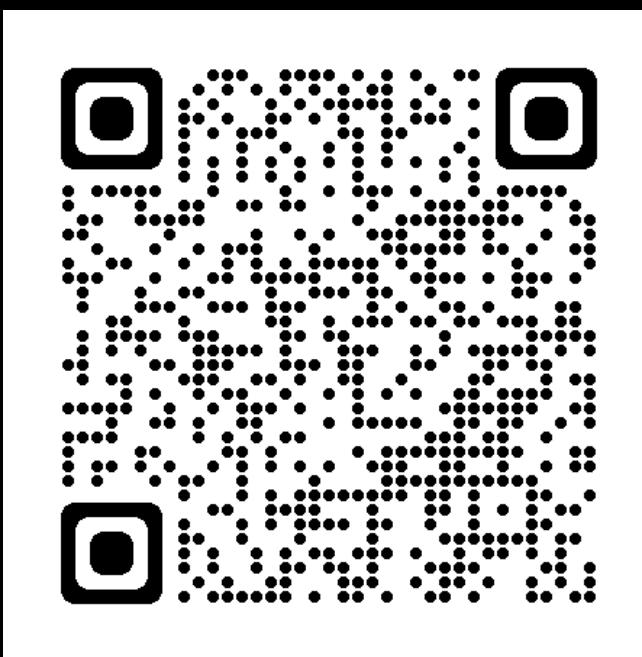


# Enterprise-Grade Edge

- Combines capabilities of Azure SWA, Azure Front Door and Azure CDN
- Global presence (118+ edge locations)
- Caching assets at the edge
- DDOS protection
- Faster page loads (IPV6 & HTTP/2)



Welcome to the  
SWA Fan Club!



ORDINA  
www.ordinaweb.it

# Pricing

	Free (For hobbies/personal projects)	Standard (For general purpose production app)
Price	Free*	€8.196/per app/month**
Included Bandwidth	100 GB per subscription	100 GB per subscription
Bandwidth Overage	N/A	€0.183 per GB per subscription
Customised Domains	2 per app	5 per app
SSL Certificates	Free	Free
Service Defined Authentication	✓	✓
Customised Authentication	N/A	✓
Storage (Included Qty. / Max Size per Deployment)	0.50 GB / 0.25 GB / per app	2.00 GB / 0.50 GB / per app
<a href="#">Azure Functions<sup>1</sup></a>	Managed	Managed or Bring your own
Enterprise-grade edge	N/A	€15.955/per app/month
Database connections	Free during public preview	Free during public preview
SLA	N/A	✓