

Azure Static Web Apps – Too good to be true?

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sopra  steria



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, multi-layered flux capacitor on its roof. It is surrounded by intense orange flames at the bottom and a dark, stormy sky filled with blue and white lightning bolts above. The scene is set against a dark, star-filled background.

12 5 2021



FOREVER 21

GAP

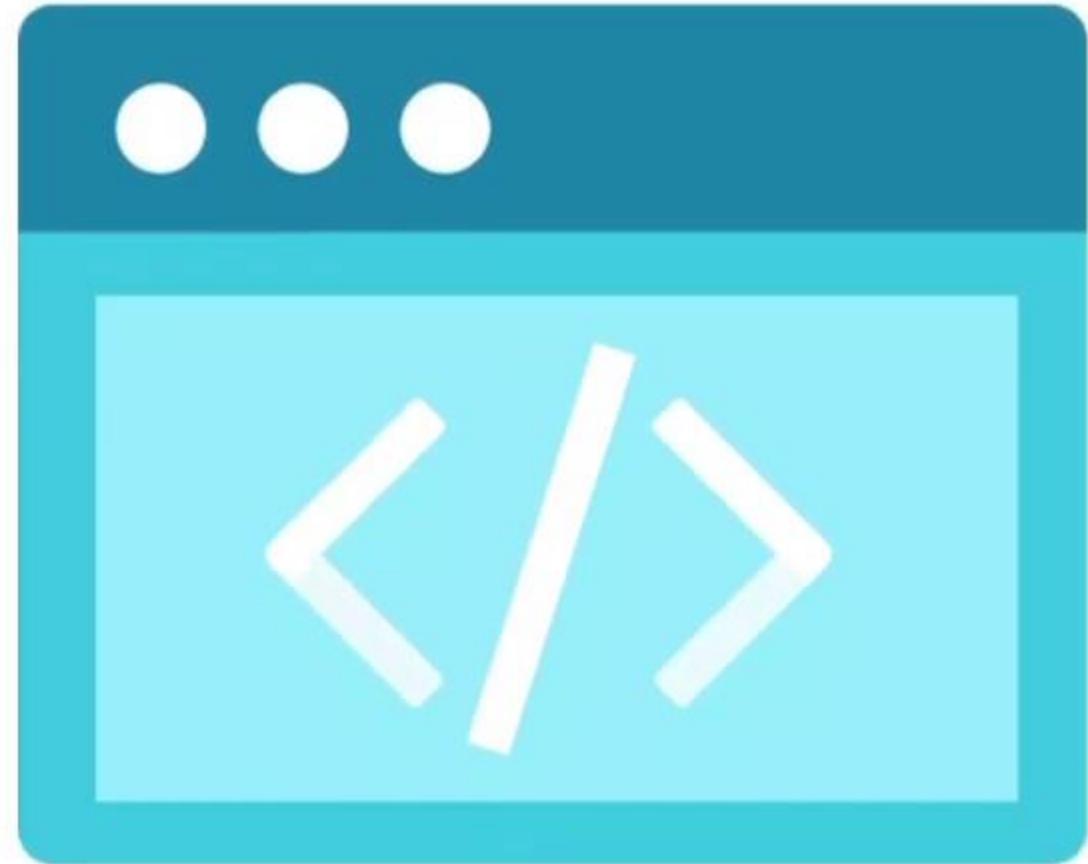
West 34th St

West 34th St

FLASHDANCERS
GENTLEMEN'S CLUB

SALE

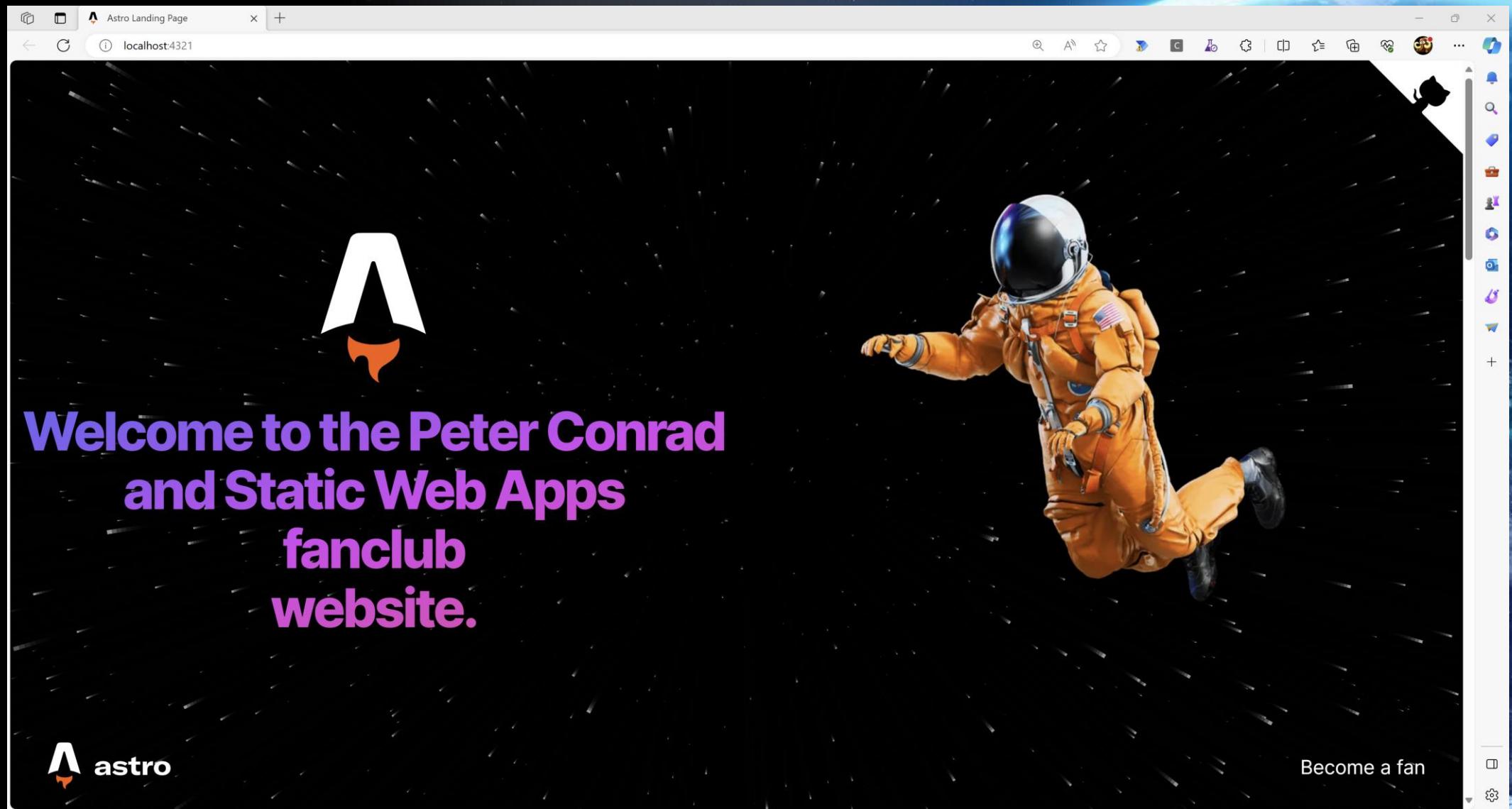
Azure Static Web Apps





Welcome to the
Peter Conrad &
SWA Fan Club!

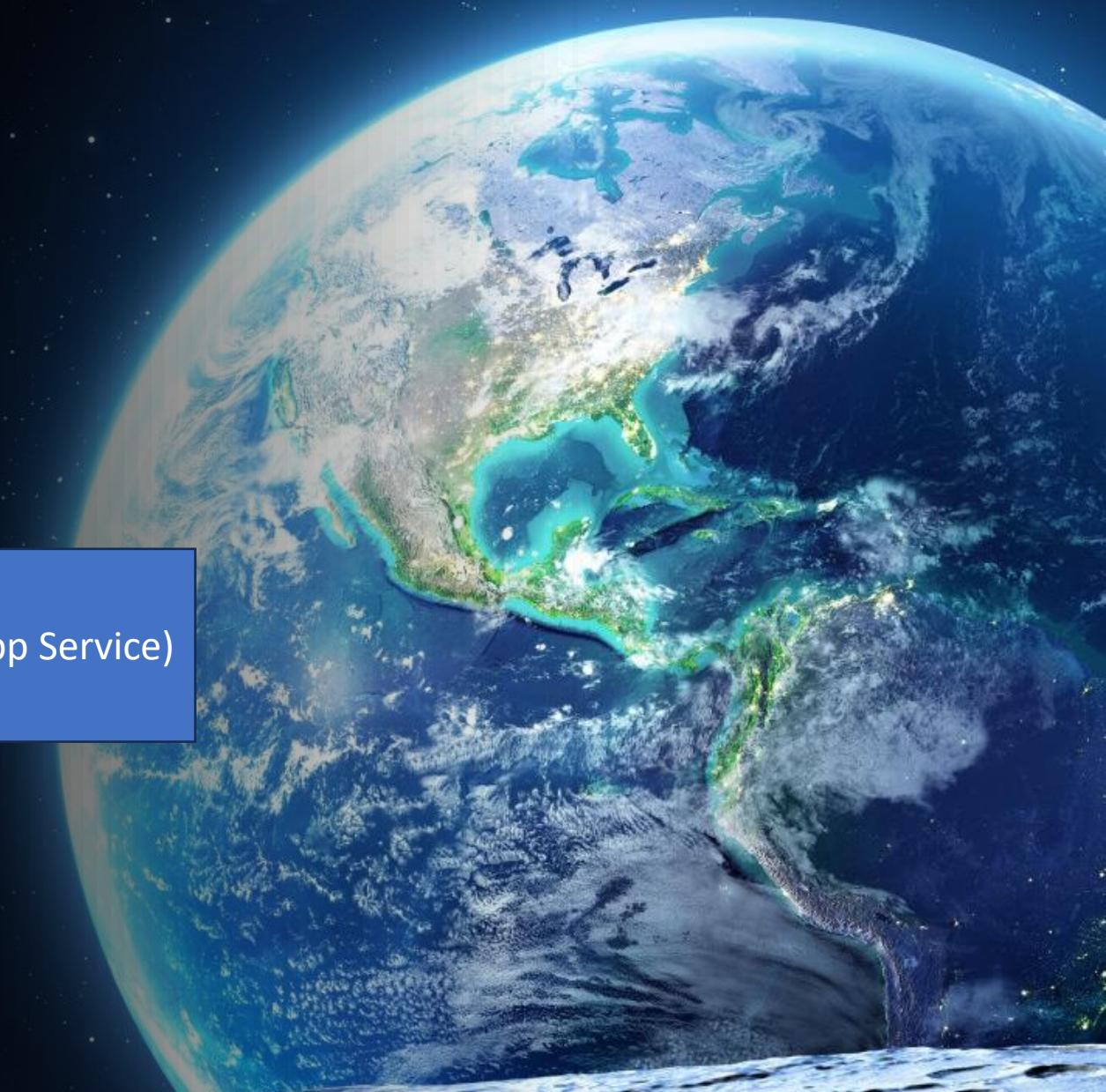




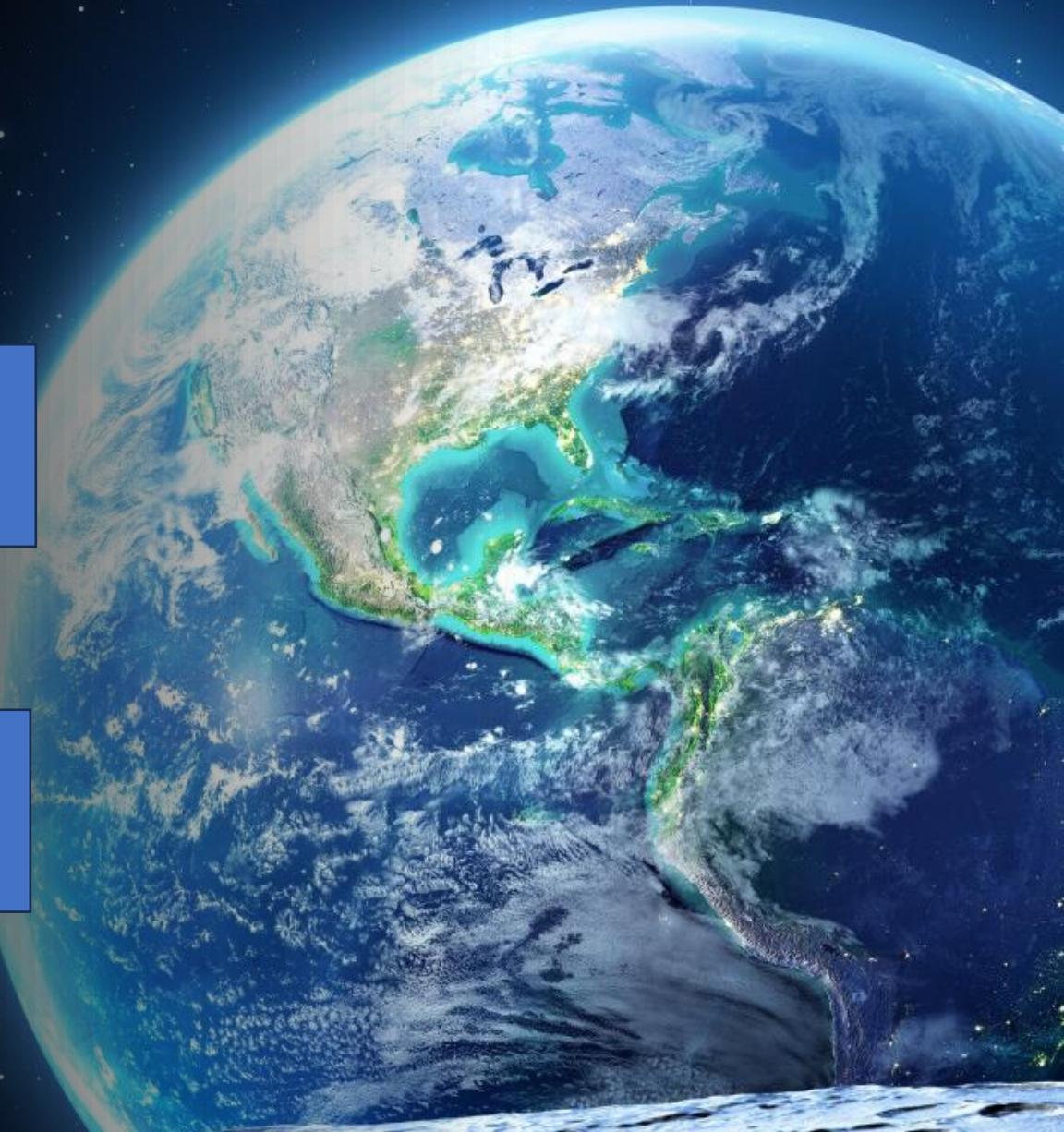
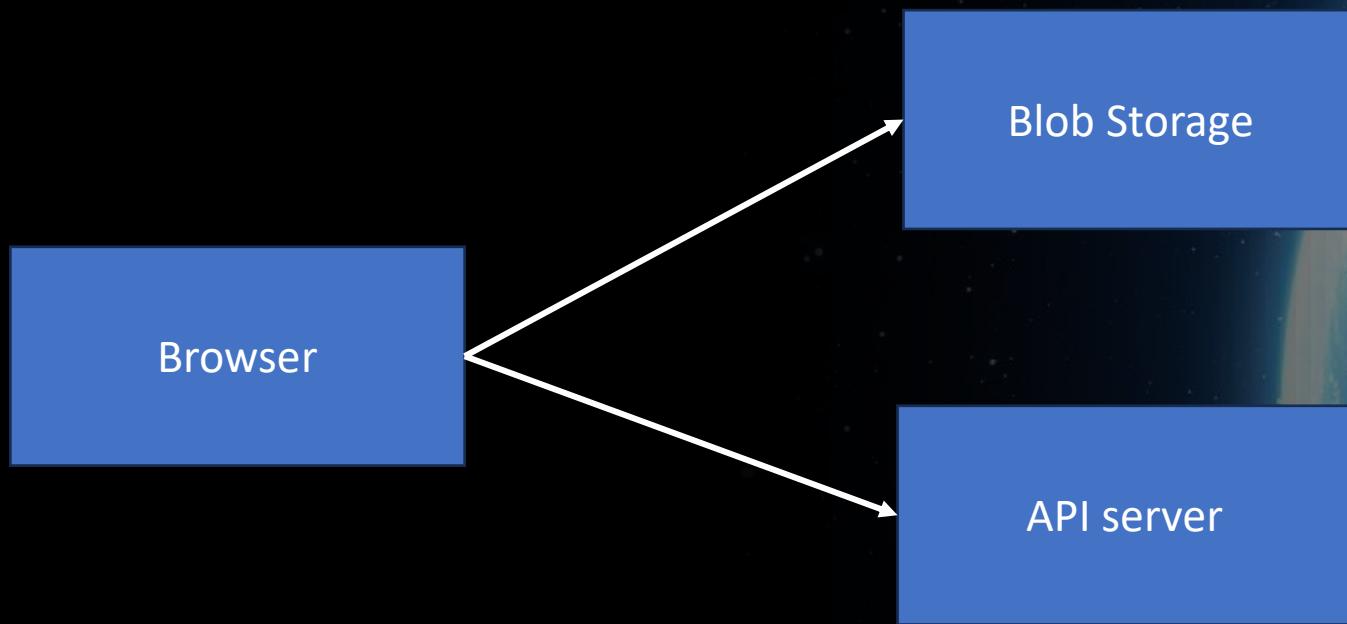
astro

Become a fan

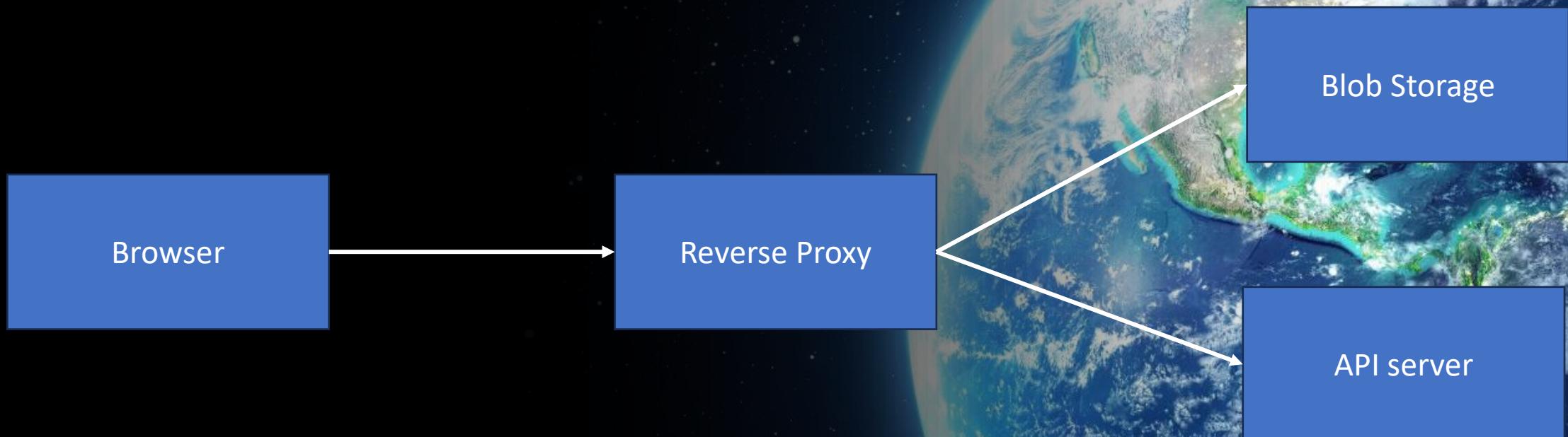
Traditional hosting



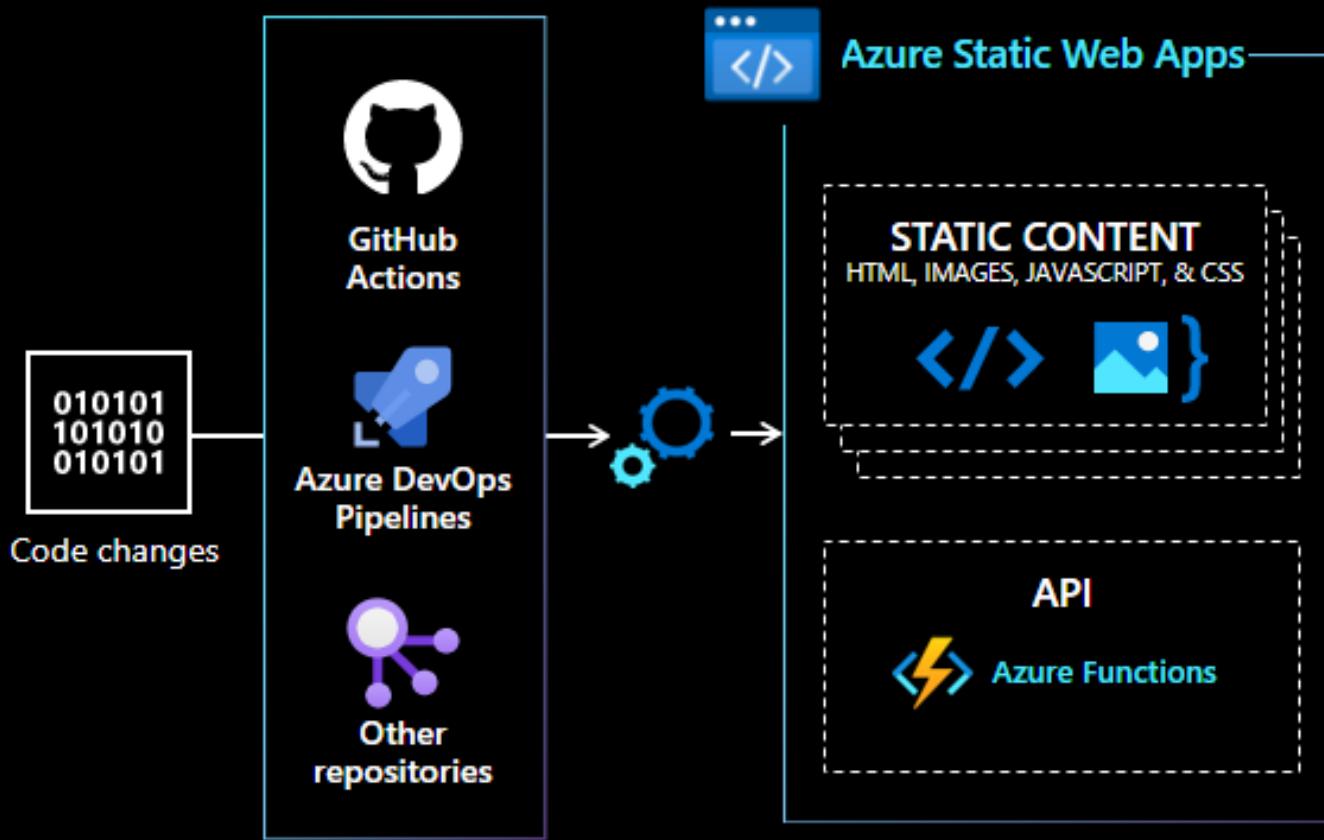
Traditional hosting



Traditional hosting



What are Azure Static Web Apps?



Features



Globally distributed
hosting



Built-in authentication
and routing rules



Streamlined build &
deployment



Generated staging
environments

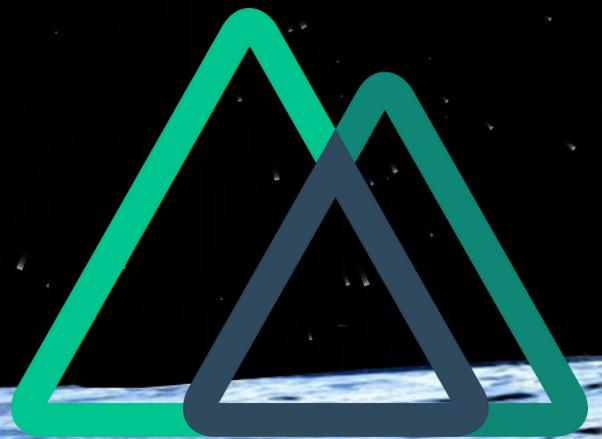
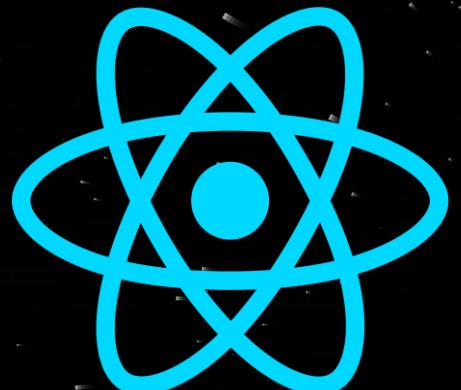


Custom domains and
free SSL certificates



CLI support

Supported frameworks





Hello fans!
Our first Static Web App...





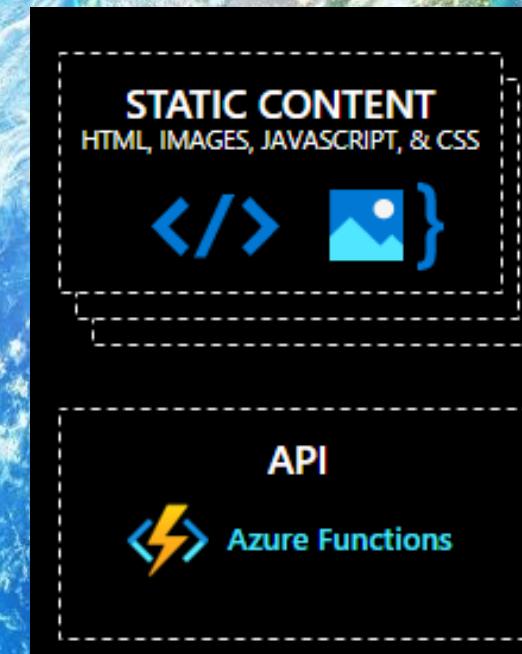
Configuration management



Configuration Management

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

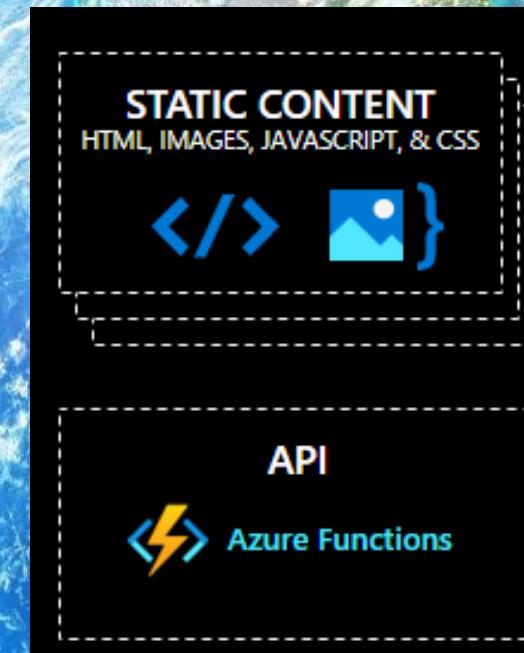
- Routing
- Authentication
- Authorization
- Fallback rules
- HTTP response overrides
- Global HTTP header definitions
- Custom MIME types
- Networking



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...

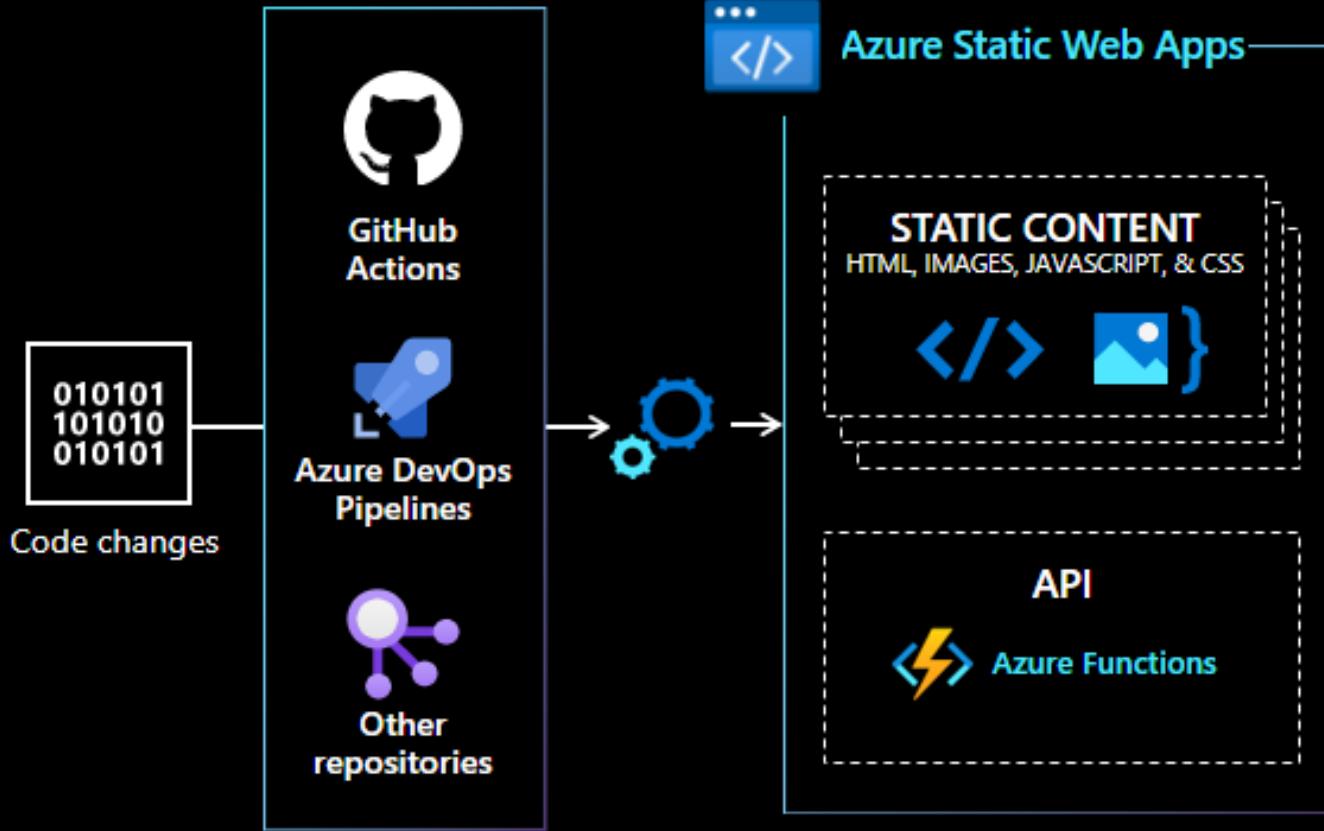




Deployment



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 text "Azure Static Web Apps - Welcome". The browser interface includes standard navigation buttons (back, forward, search) and a tab labeled "Azure Static Web Apps - Welcome".

Environments

Multiple supported environments:

- Production
- Pull Request



A screenshot of a web browser window. The address bar shows the URL: "https://orange-water-0d57c4f1e-<PRNUMBER>.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 introductory text about static web apps.

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-<BRANCHNAME>.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...

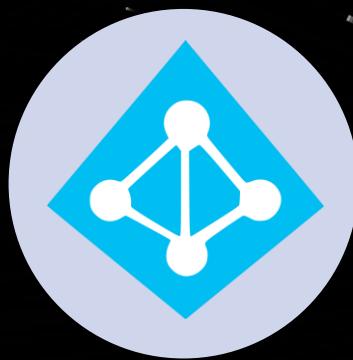




Security



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!



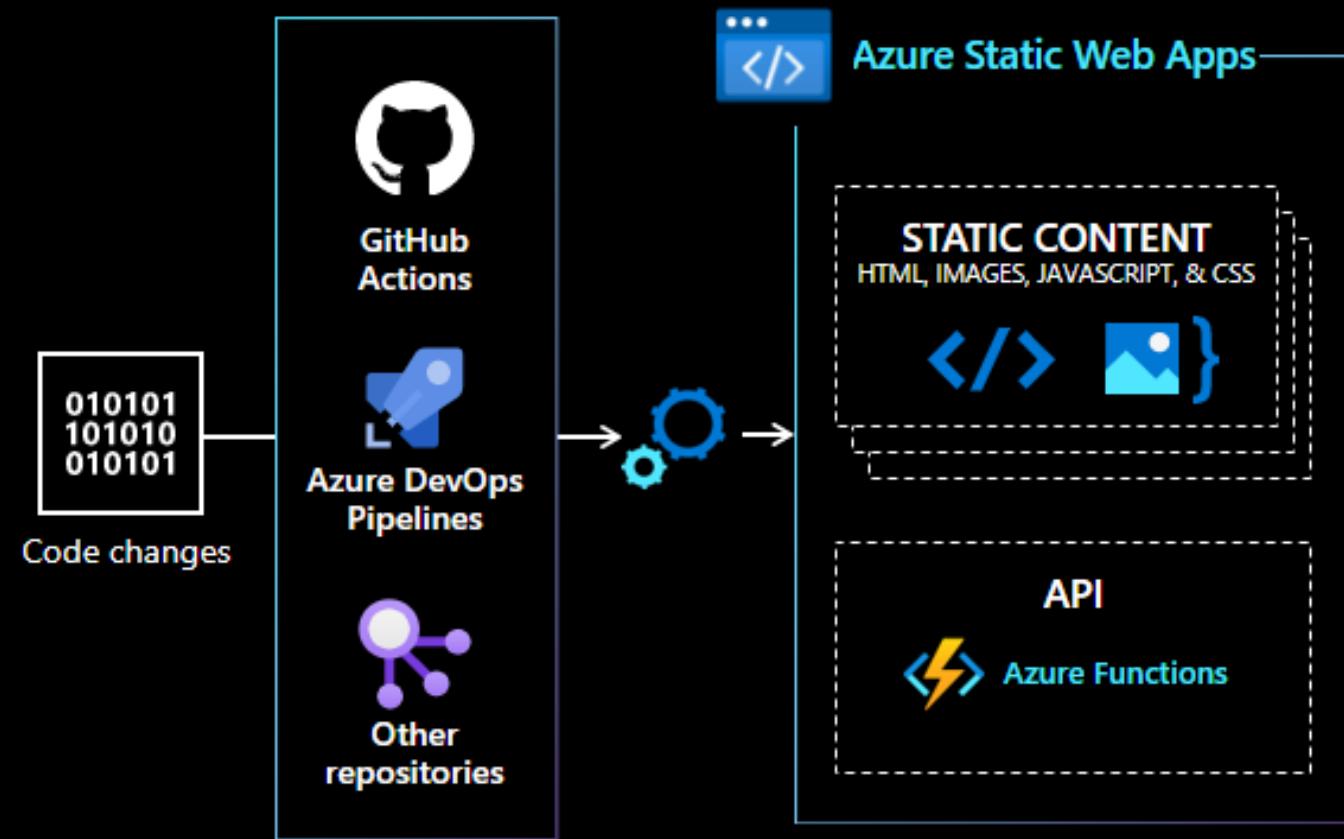


API Integration



Managed functions

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





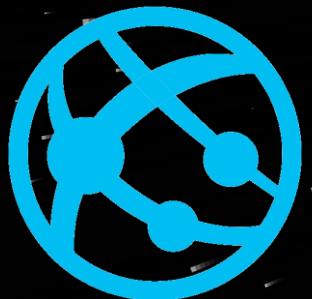
Manage my functions!



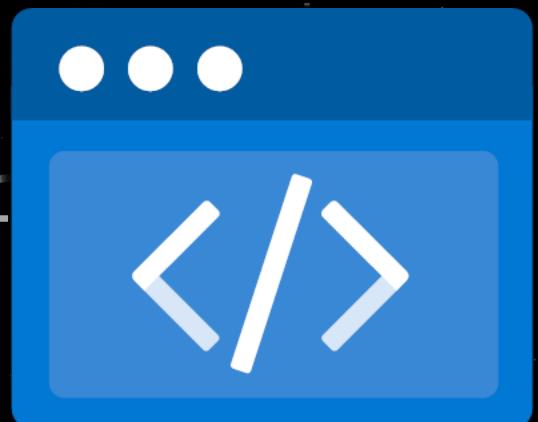
Linked APIs



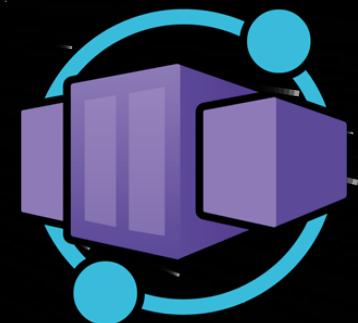
Azure Functions



Azure App Service



Azure API Management



Azure Container Apps



Bring our own API

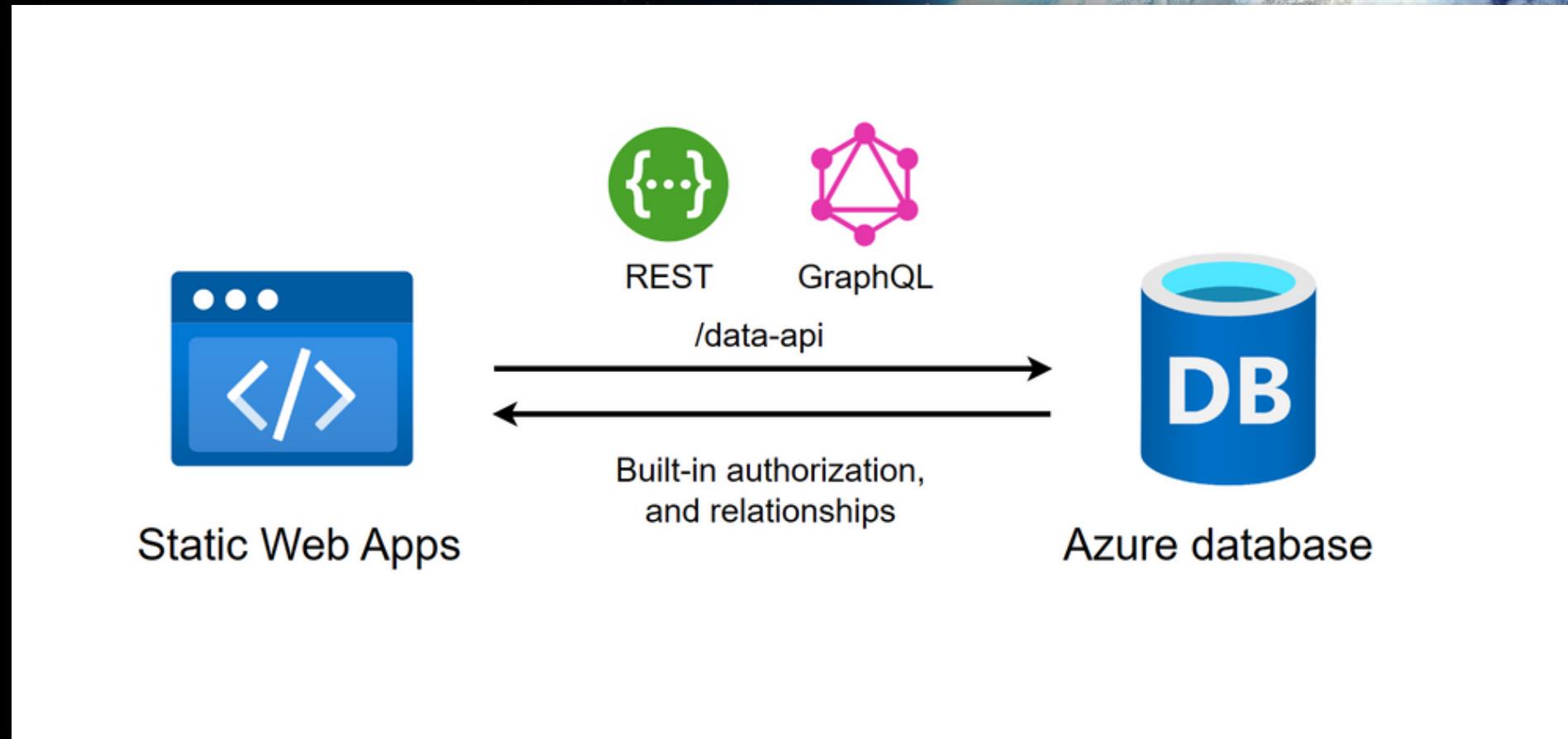




Database connections



Database Connections



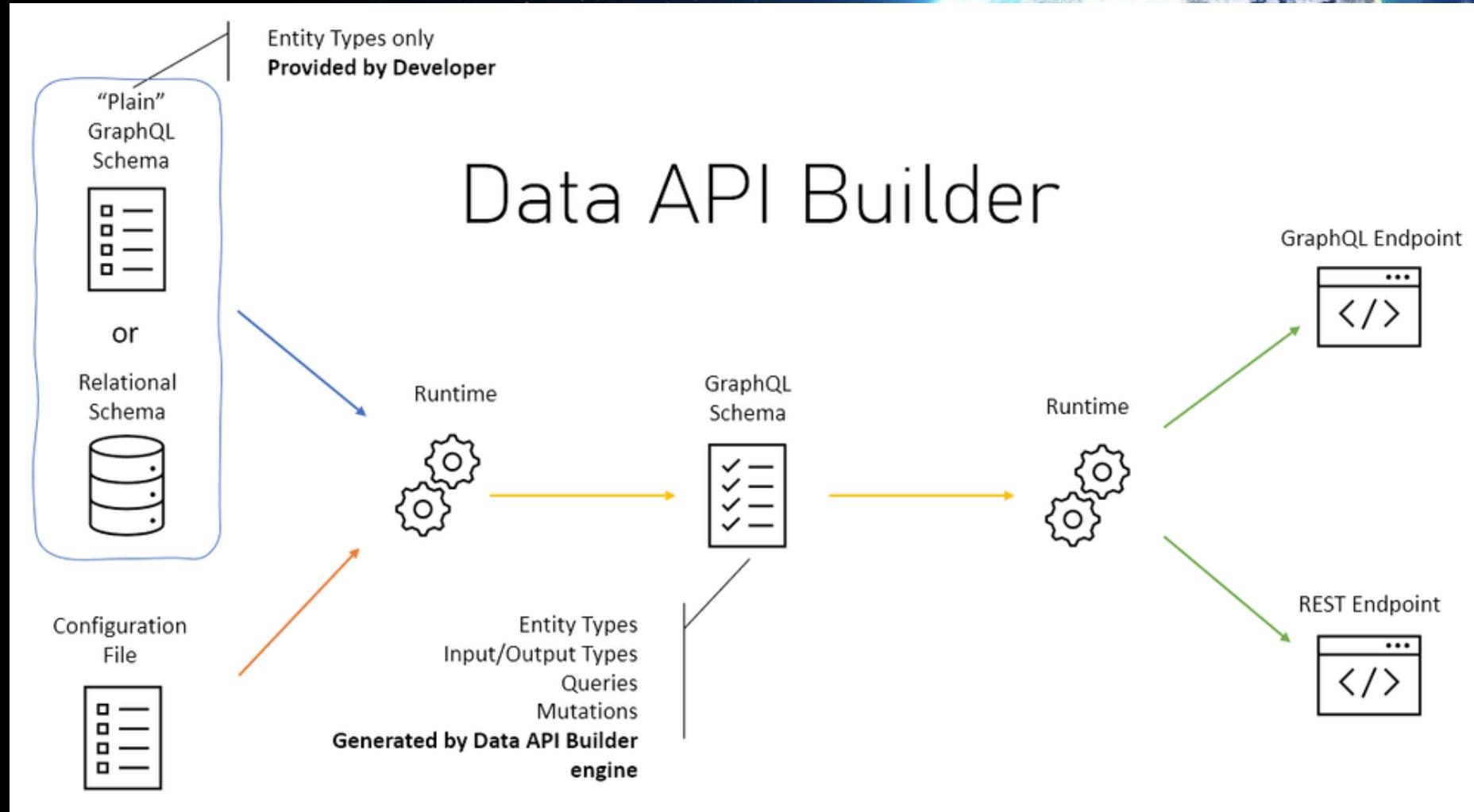
Database Connections

Supported databases

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



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)

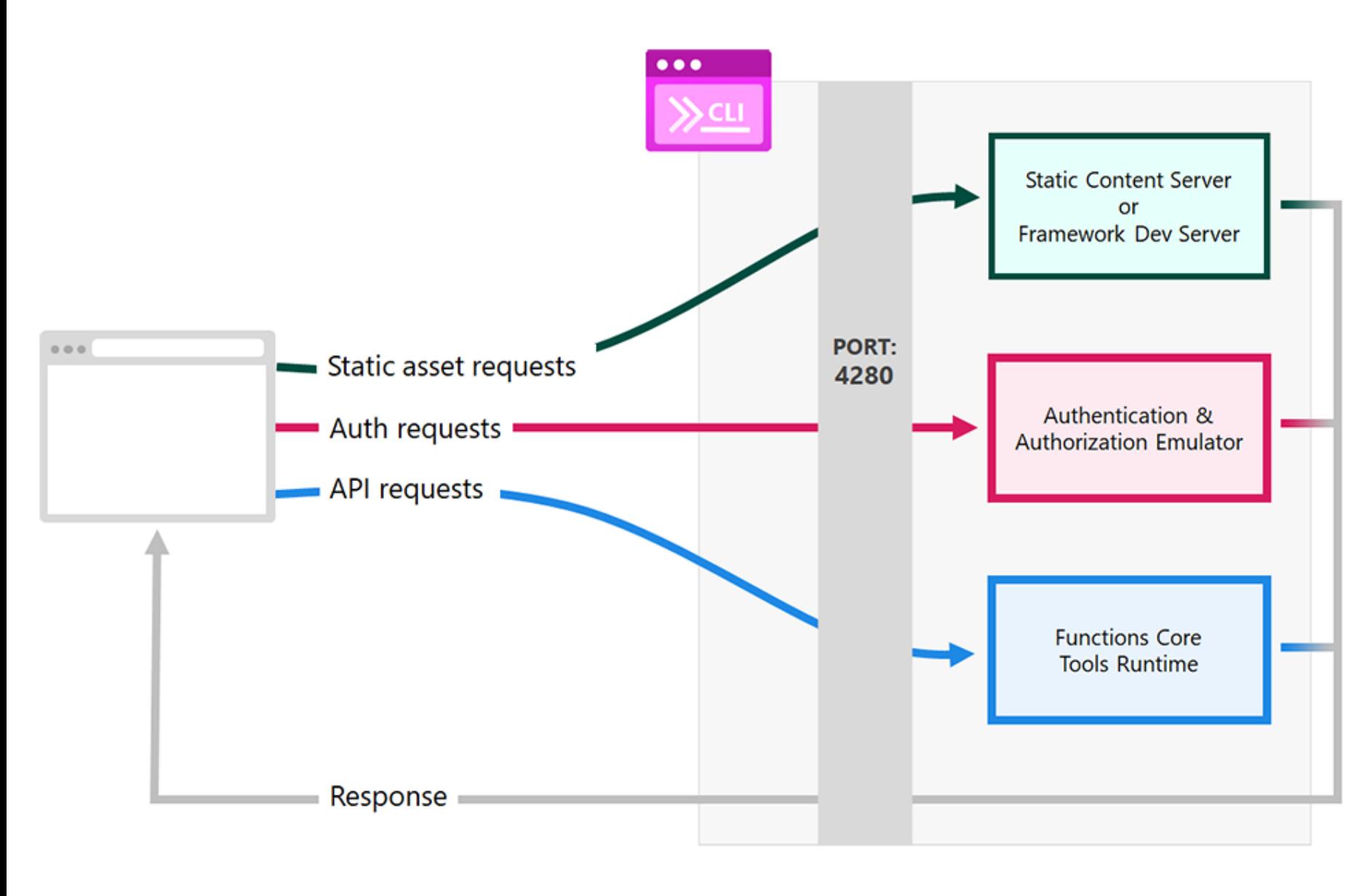
Build/deploy to multiple environments
using `swa deploy`



Configure

Setup environment variables
and config settings.

SWA CLI



CLIs
have more fun





Enterprise-Grade Edge

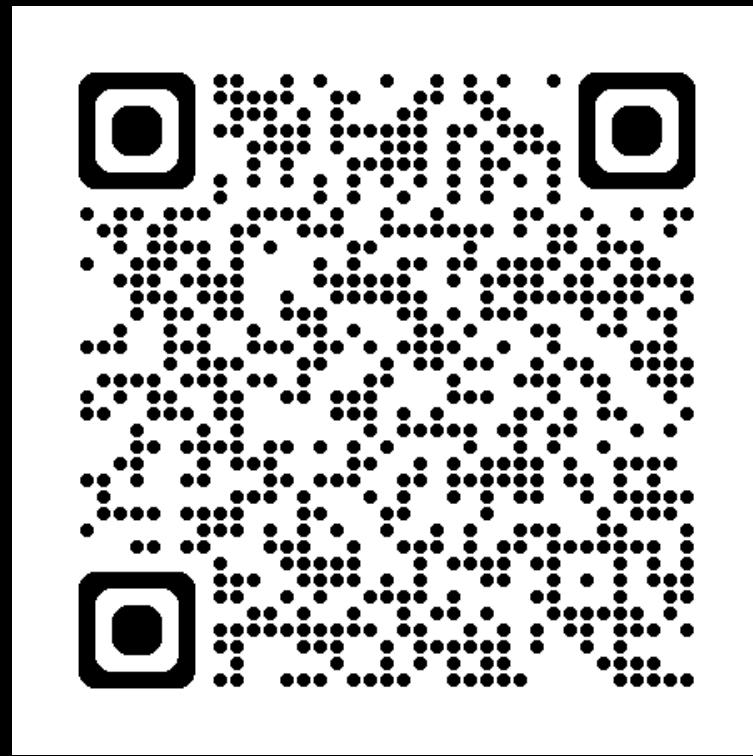


Enterprise-Grade Edge

- 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!



sopra  steria

Pricing

	Free (For hobbies/personal projects)	Standard (For general purpose production app)	Dedicated (preview) (For enterprise workloads)
Price	Free*	€8.335/app/month**	€91.680/app/month
Included Bandwidth	100 GB per subscription	100 GB per subscription	100 GB per subscription
Bandwidth Overage	N/A	€0.186 per GB per subscription	€0.186 per GB per subscription
Custom Domains	2 per app	5 per app	10 per app
SSL Certificates	Free	Free	Free
Service Defined Authentication	✓	✓	✓
Custom Authentication	N/A	✓	✓
Storage (Included Qty. / Max Size per Deployment)	0.50 GB / 0.25 GB/app	2.00 GB / 0.50 GB/app	2.00 GB / 0.50 GB/app
Azure Functions¹	Managed	Managed or Bring your own	Managed or Bring your own
Enterprise-grade edge	N/A	€16.225/app/month	€16.225/app/month
Database Connections (public preview)	Free during public preview	Free during public preview	Free during public preview
SLA	N/A	✓	N/A