

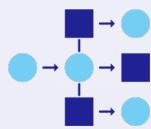
From Zero to Hero with Go and Dapr

Phil Kedy & Nick Greenfield



Why is microservice development difficult in Go?

In truth, Go is a fantastic choice for microservices. It's not hard, just **tedious** (lots of instrumenting)!



RPC and
Events



State
Management



Authentication
/ mTLS



Distributed
Tracing



Configuration
& Secrets

More boilerplate code than actual business logic



Distributed Application Runtime

Portable, event-driven, runtime for building distributed applications across cloud and edge

dapr.io

The Dapr logo at the top left.

dapr

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Star 16,126 Get Started

APIs for building portable and reliable microservices

Leverage industry best practices and focus on your application's logic.

Get Started

BOSCH ZEISS IGNITION GROUP Roadwork 高德地图 LEGENTIC Man

Build connected distributed applications faster

The Distributed Application Runtime (Dapr) provides APIs that simplify microservice connectivity. Whether your communication pattern is service to service invocation or pub/sub messaging, Dapr helps you write resilient and

By letting Dapr's sidecar take care of the complex challenges such as service discovery, message broker integration, encryption, observability, and secret management, you can focus on business logic and keep your code

Dapr Goals



Best-practices building blocks



Any language or framework



Consistent, portable, open APIs



Adopt standards



Extensible and pluggable components



Platform agnostic cloud + edge



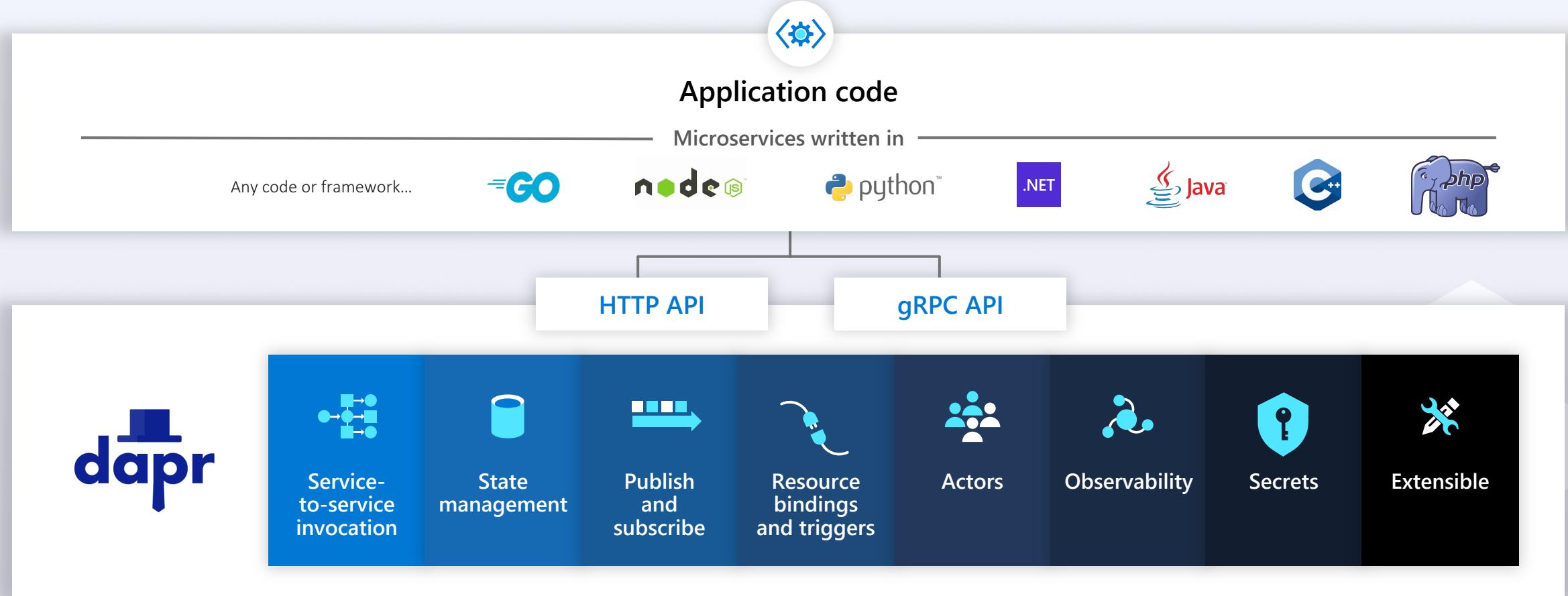
Community driven, vendor neutral

Microservice building blocks



Any language and framework

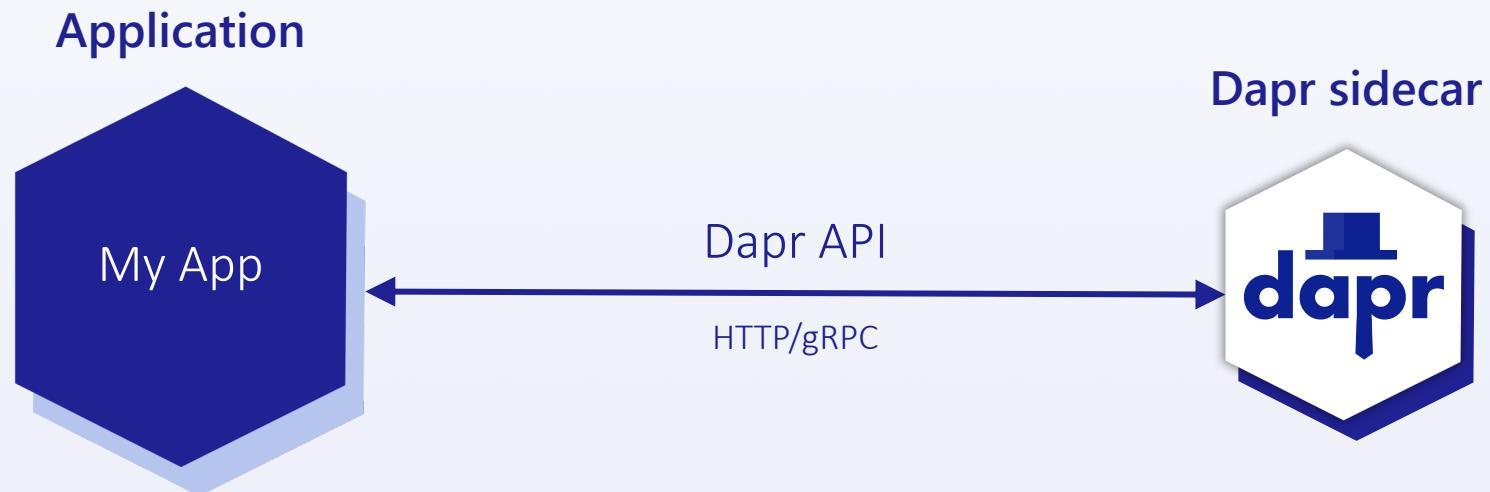
- ✓ Standard APIs accessed over HTTP/gRPC protocols from user service code
- ✓ Runs as local “side car library” dynamically loaded at runtime for each service



DEMO

Taking Your First Steps with Dapr

Sidecar model



`POST http://localhost:3500/v1.0/invoke/cart/method/neworder`

`GET http://localhost:3500/v1.0/state/inventory/item67`

`POST http://localhost:3500/v1.0/publish/shipping/orders`

`GET http://localhost:3500/v1.0/secrets/keyvault/password`

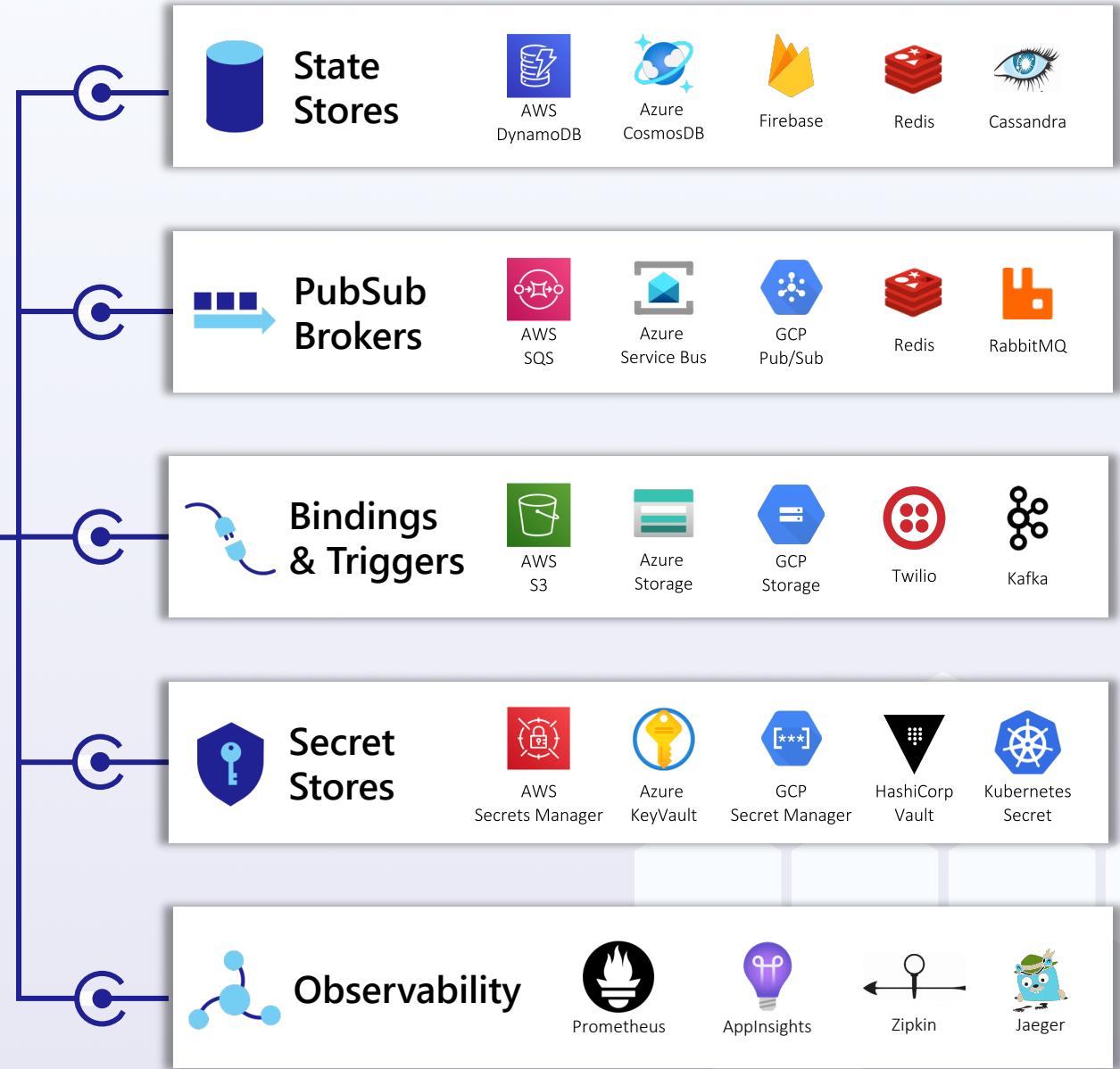
Dapr components



Swappable YAML files with
resource connection details

Over 70 components available

Create components for your resource at:
github.com/dapr/components-contrib

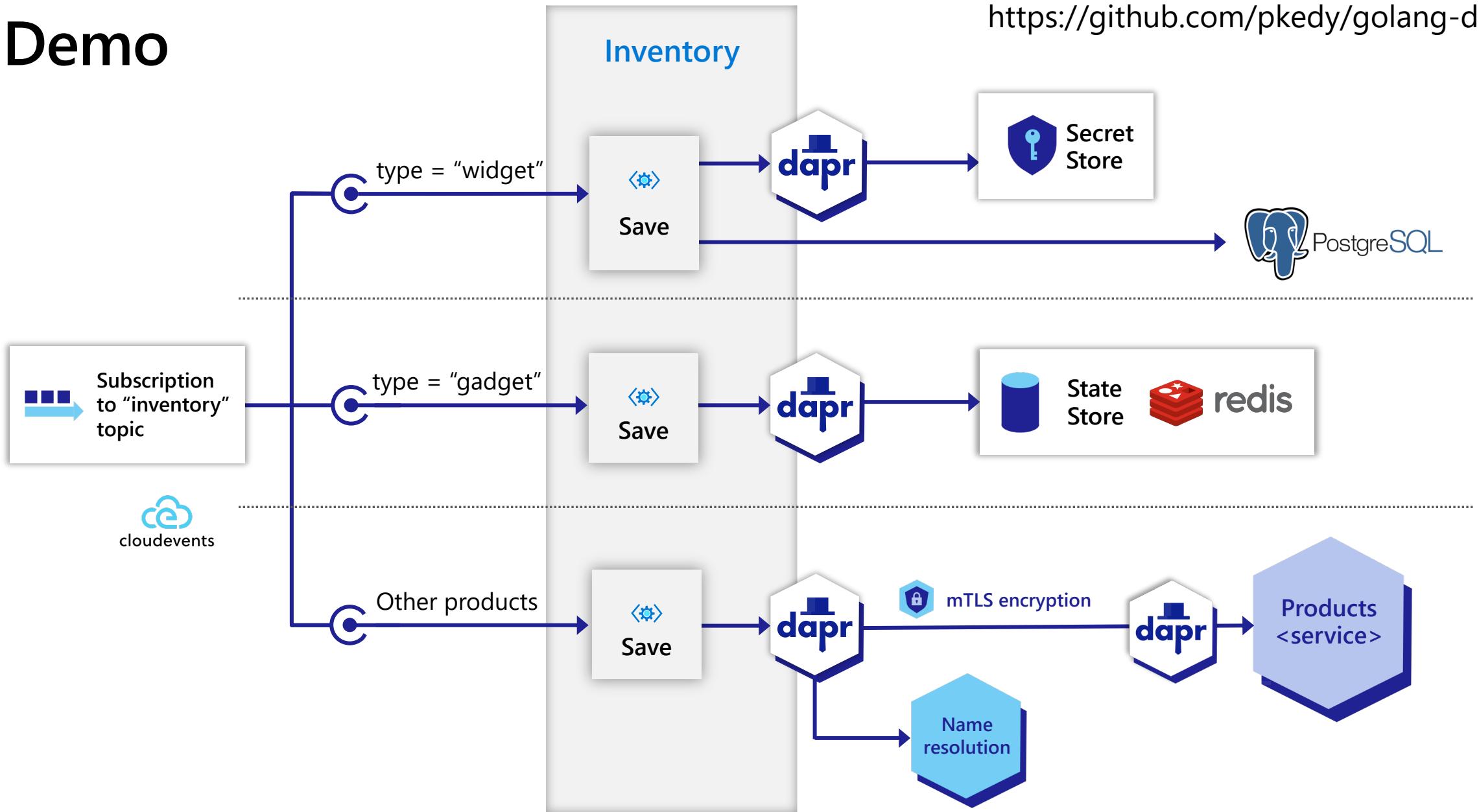


DEMO

Exploring the Building Blocks

Demo

<https://github.com/pkedy/golang-dapr>



Resources



<https://dapr.io>

<https://aka.ms/dapr-community>

<https://github.com/dapr>

<https://aka.ms/dapr-ebook>

