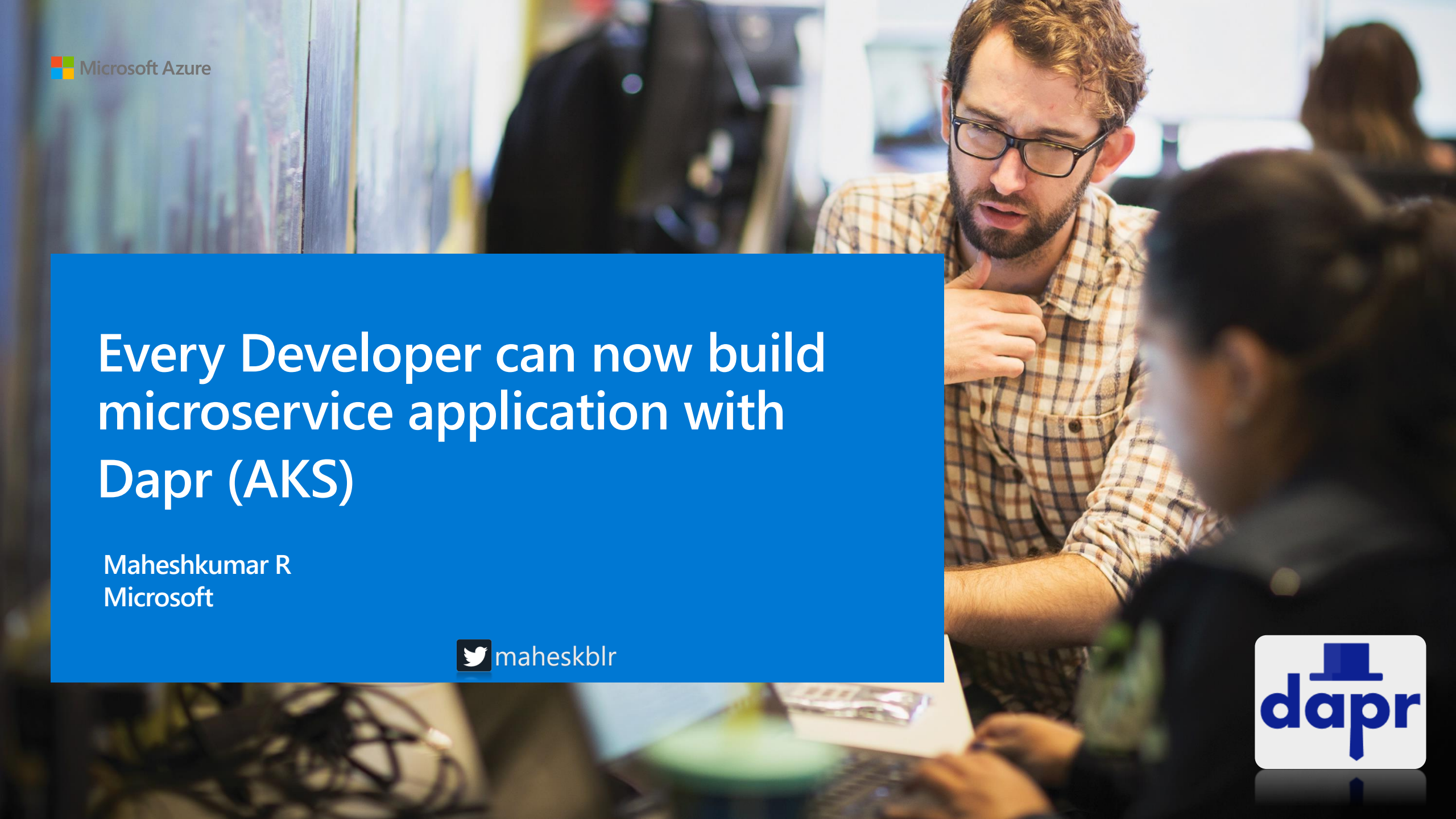

Microsoft Azure
Every Developer can now build microservice application with Dapr (AKS)
Maheshkumar R
Microsoft
maheskblr
dapr

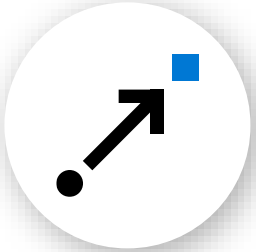
State of Enterprise Developers

Being asked to develop resilient, scalable, microservice-based apps that interact with services

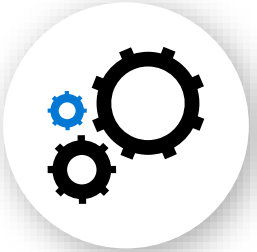
Increasingly polyglot. Write in many languages.

They want to leverage existing code

What is holding microservice development back?



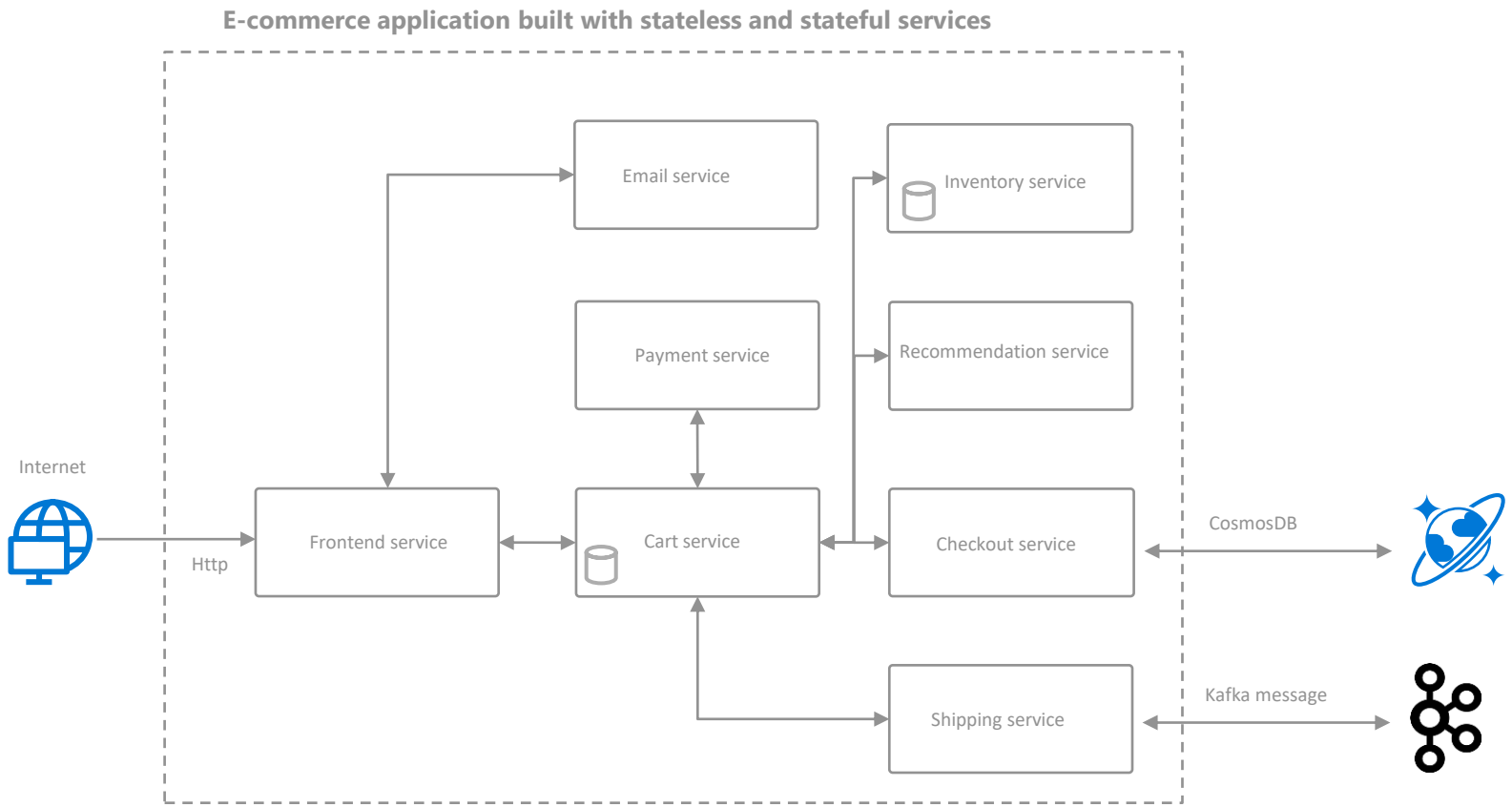
Hard to incrementally migrate from existing code to a microservices architecture



Programming model runtimes have narrow language support and tightly controlled feature sets

Runtimes only target specific infrastructure platforms with limited code portability across clouds and edge

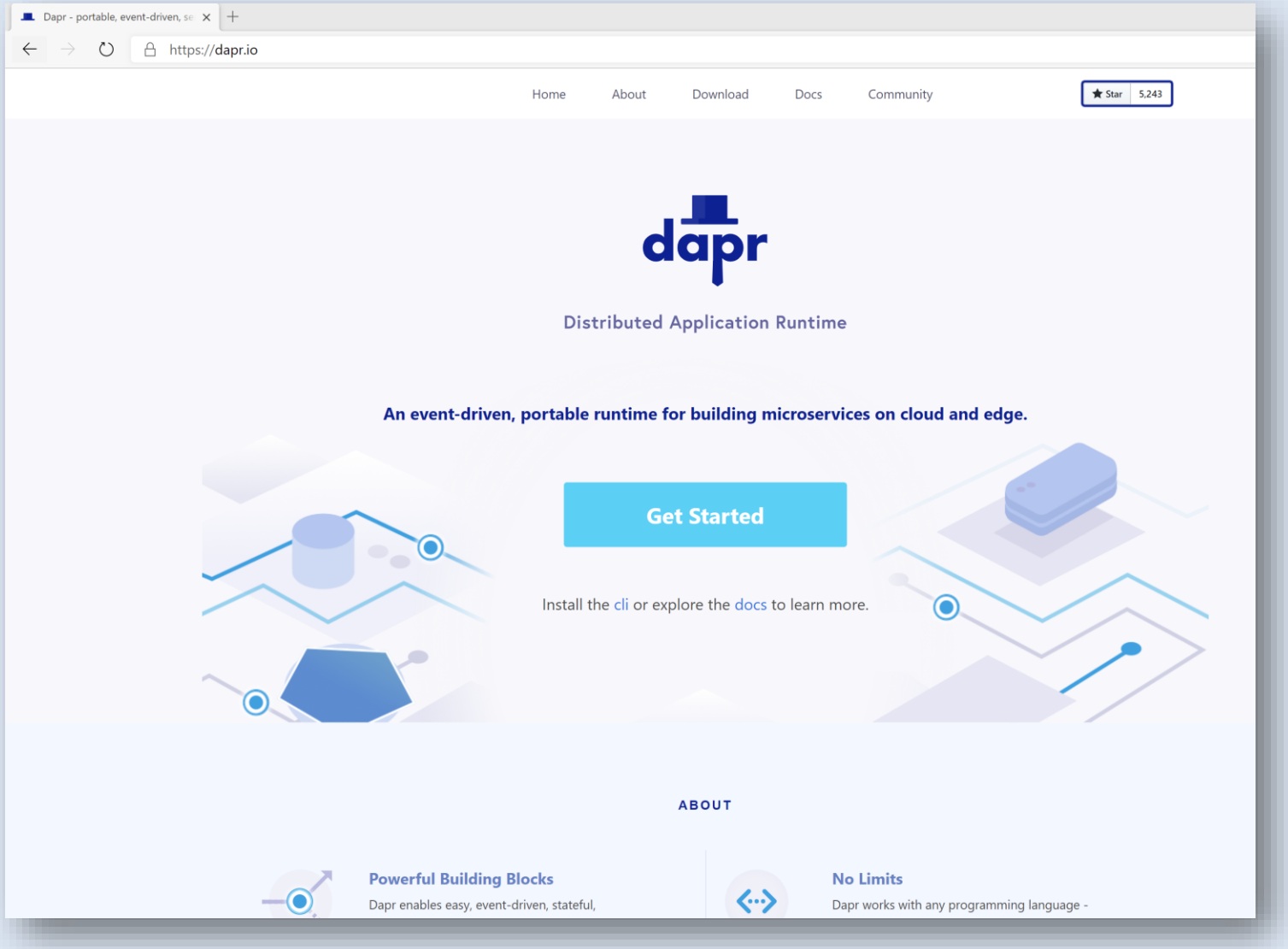
Distributed app development



Distributed Application Runtime

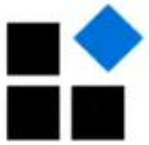
Portable, event-driven, runtime for building distributed applications across cloud and edge

https://dapr.io/



Introducing Dapr

A portable, event-driven, serverless runtime for building distributed applications across cloud and edge



Microservice Building Blocks

Make it easy for developers to create microservice applications without being an expert in distributed syst including migrating existing code

Sidecar Architecture

Developer first, standard APIs used from any programming language or framework

Cloud + Edge

Runs on multiple environments for cloud, on-prem, and small-edge including any Kubernetes

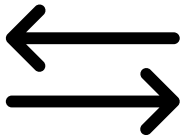
Dapr Goals

Best-Practices
Building Blocks

Any Language
or Framework

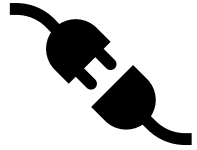
Community Driven
Vendor Neutral

Adopt Standards



Consistent, Portable,
Open APIs

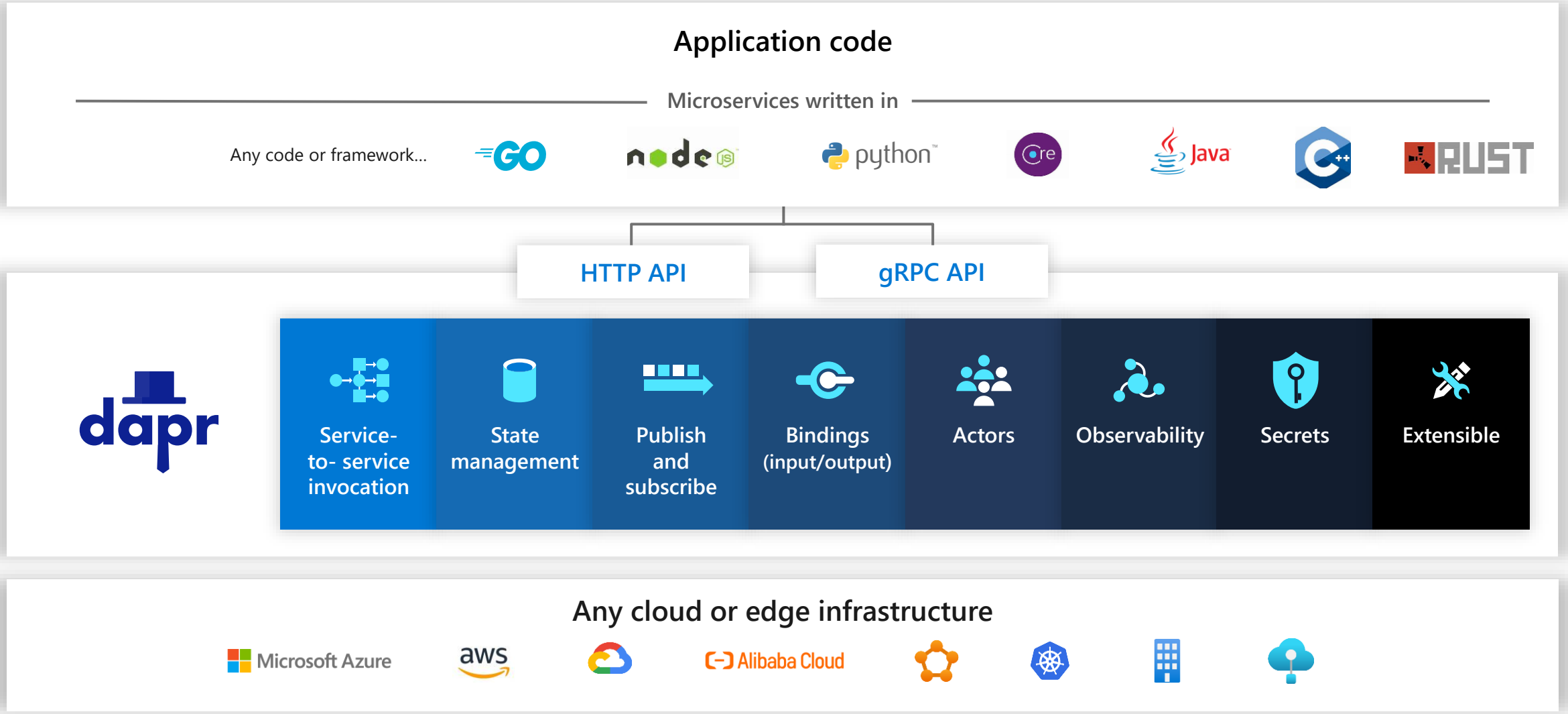
Platform Agnostic
Cloud + Edge



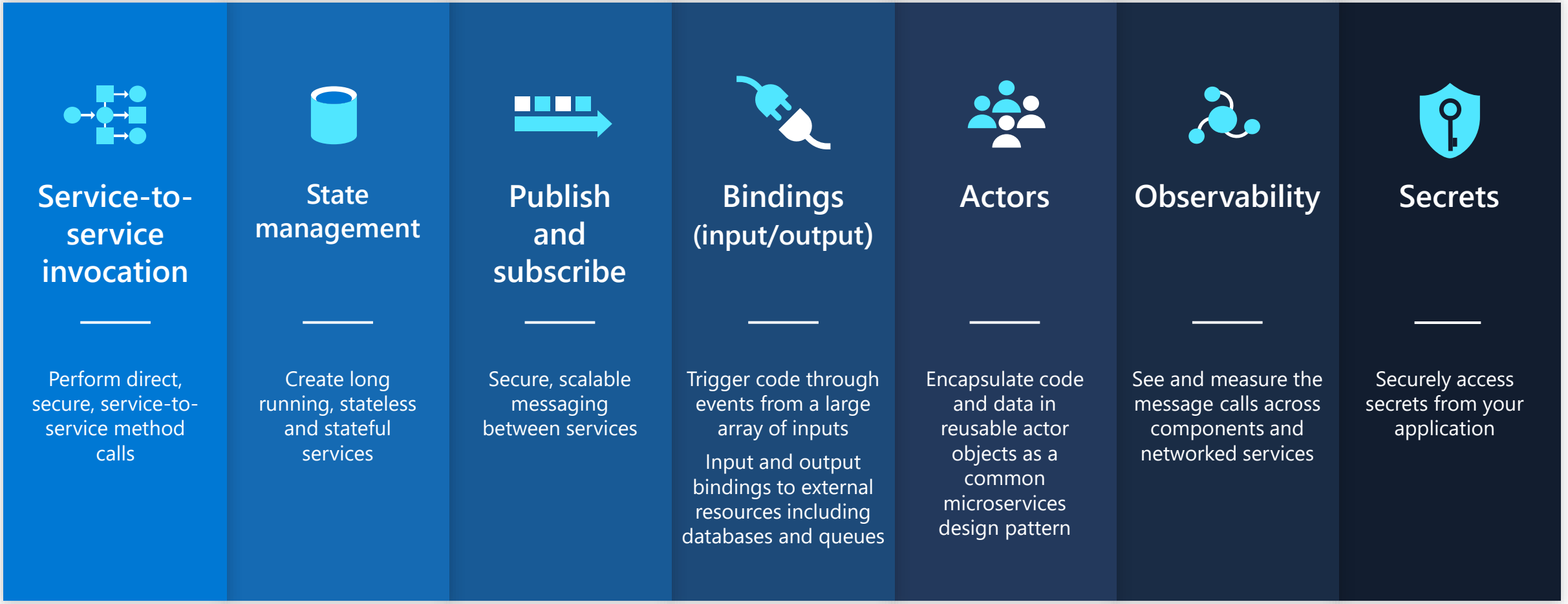
Extensible and
Pluggable Components

Dapr: Distributed Application Runtime

Build apps using any language with any framework

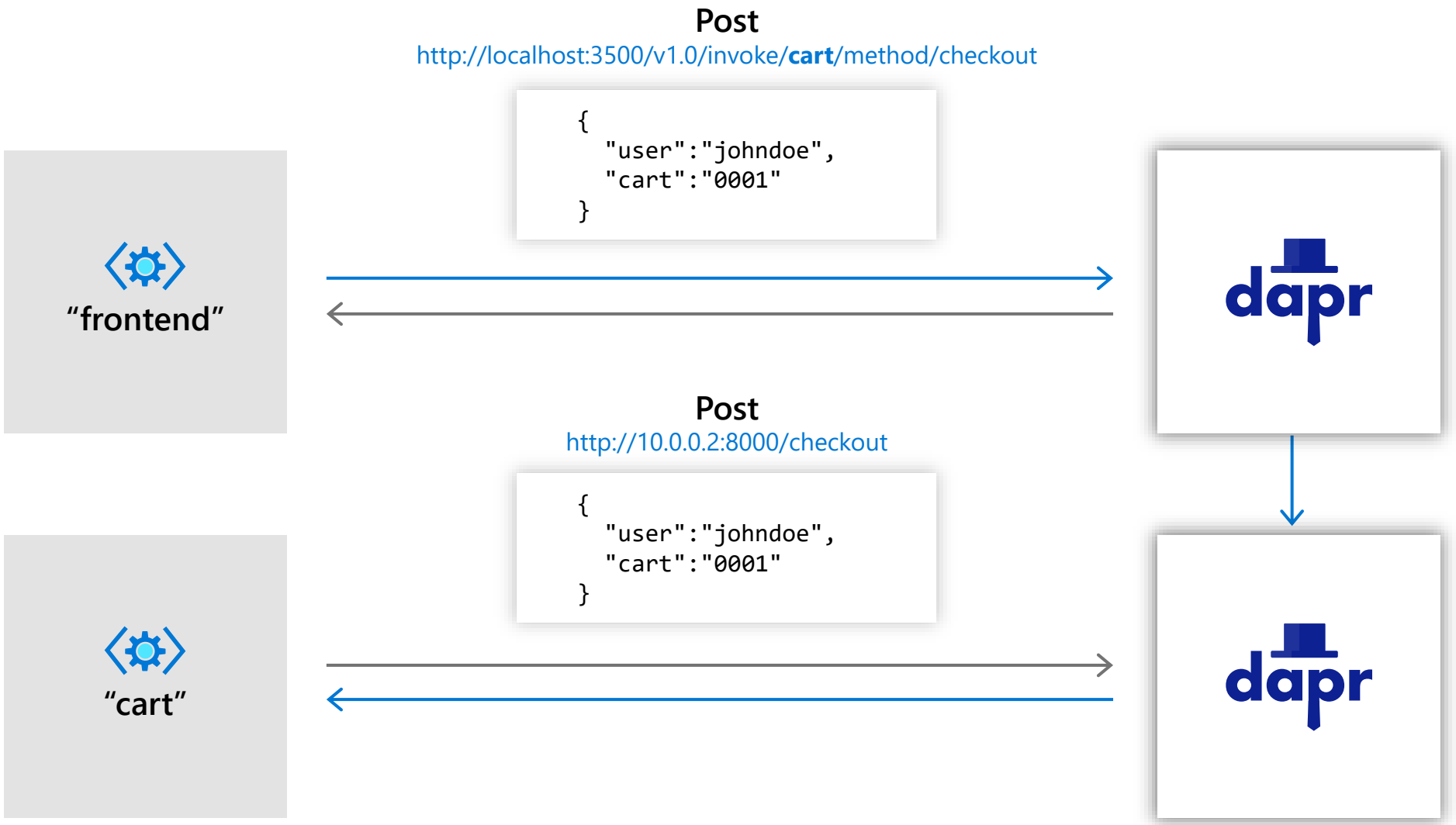


Microservice building blocks



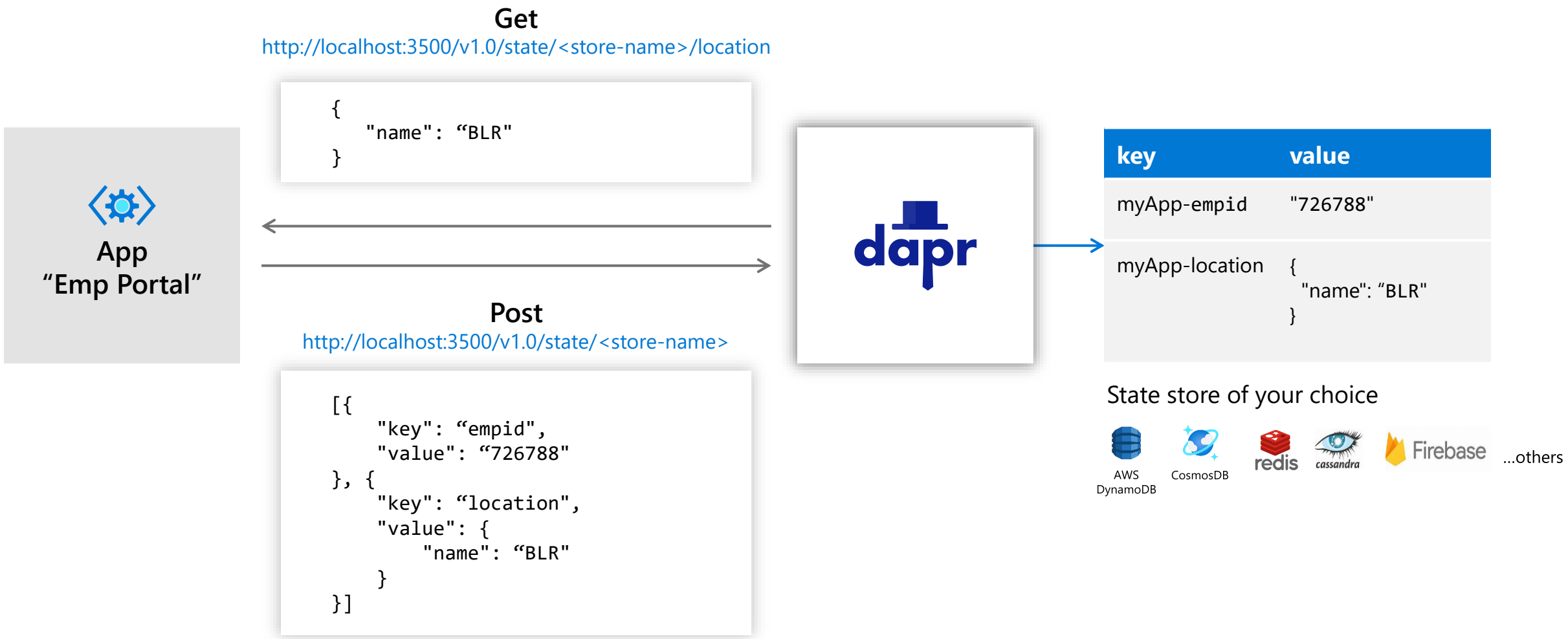
Microservice building blocks

Service invocation



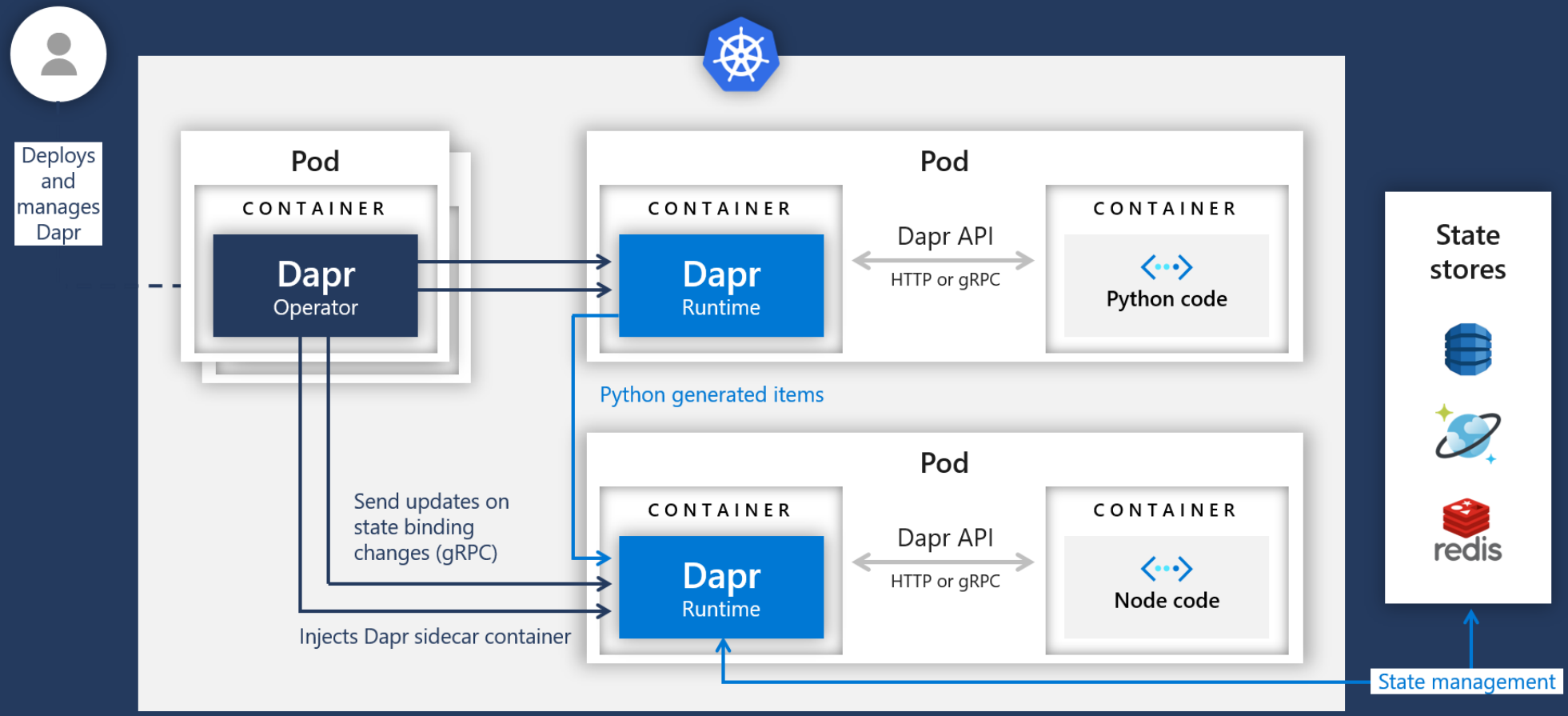
Microservice building blocks

State management: key/value



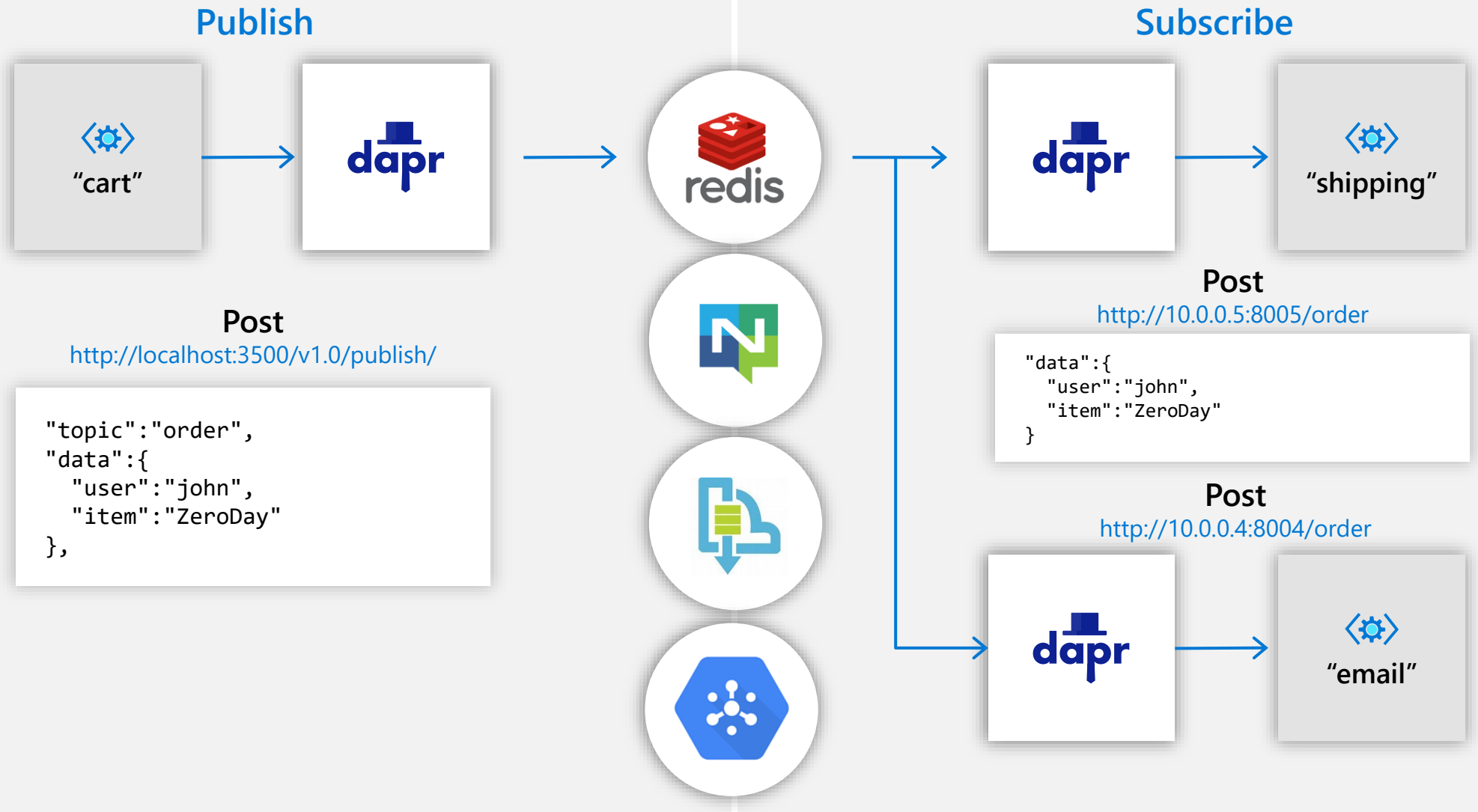
DEMO# 1

Dapr state management and components



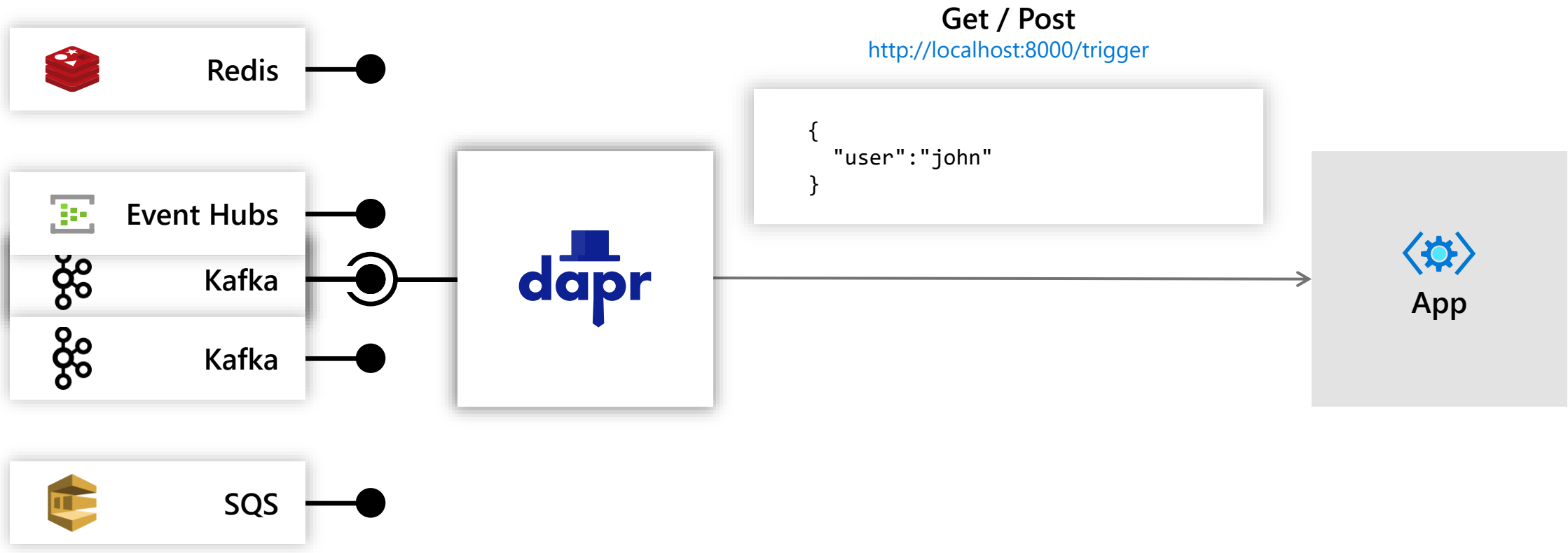
Microservice building blocks

Publish and subscribe



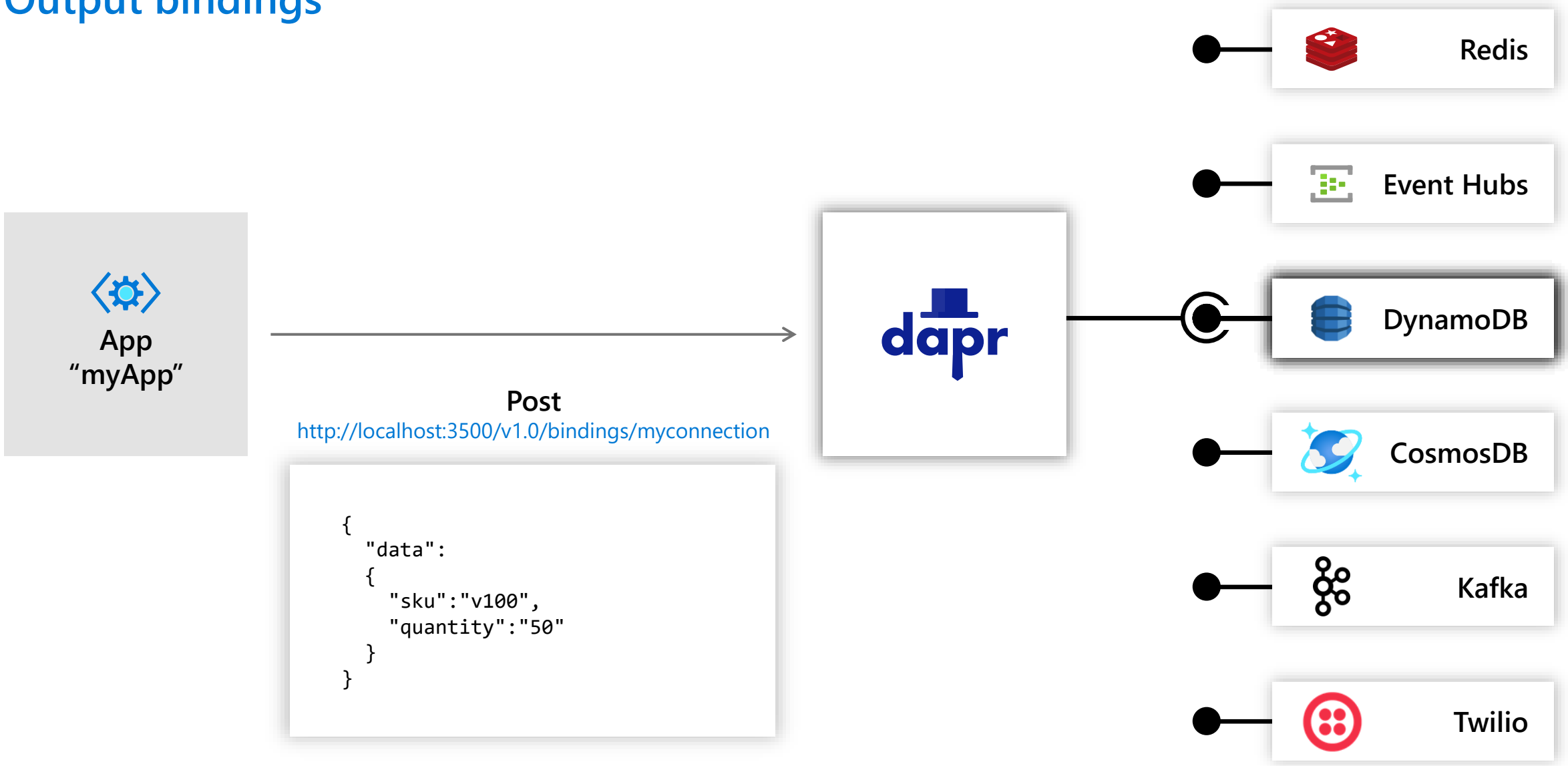
Microservice building blocks

Input Bindings



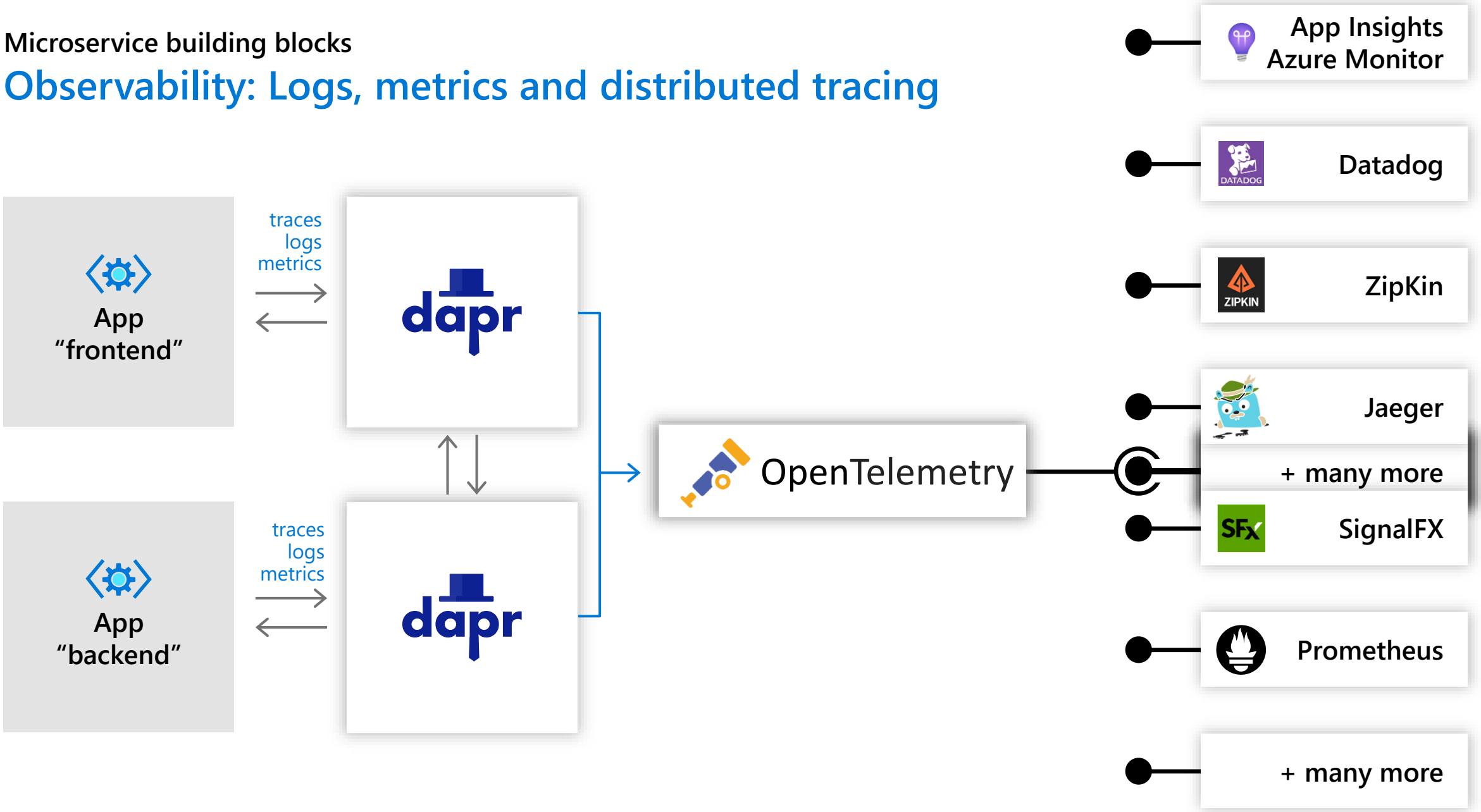
Microservice building blocks

Output bindings



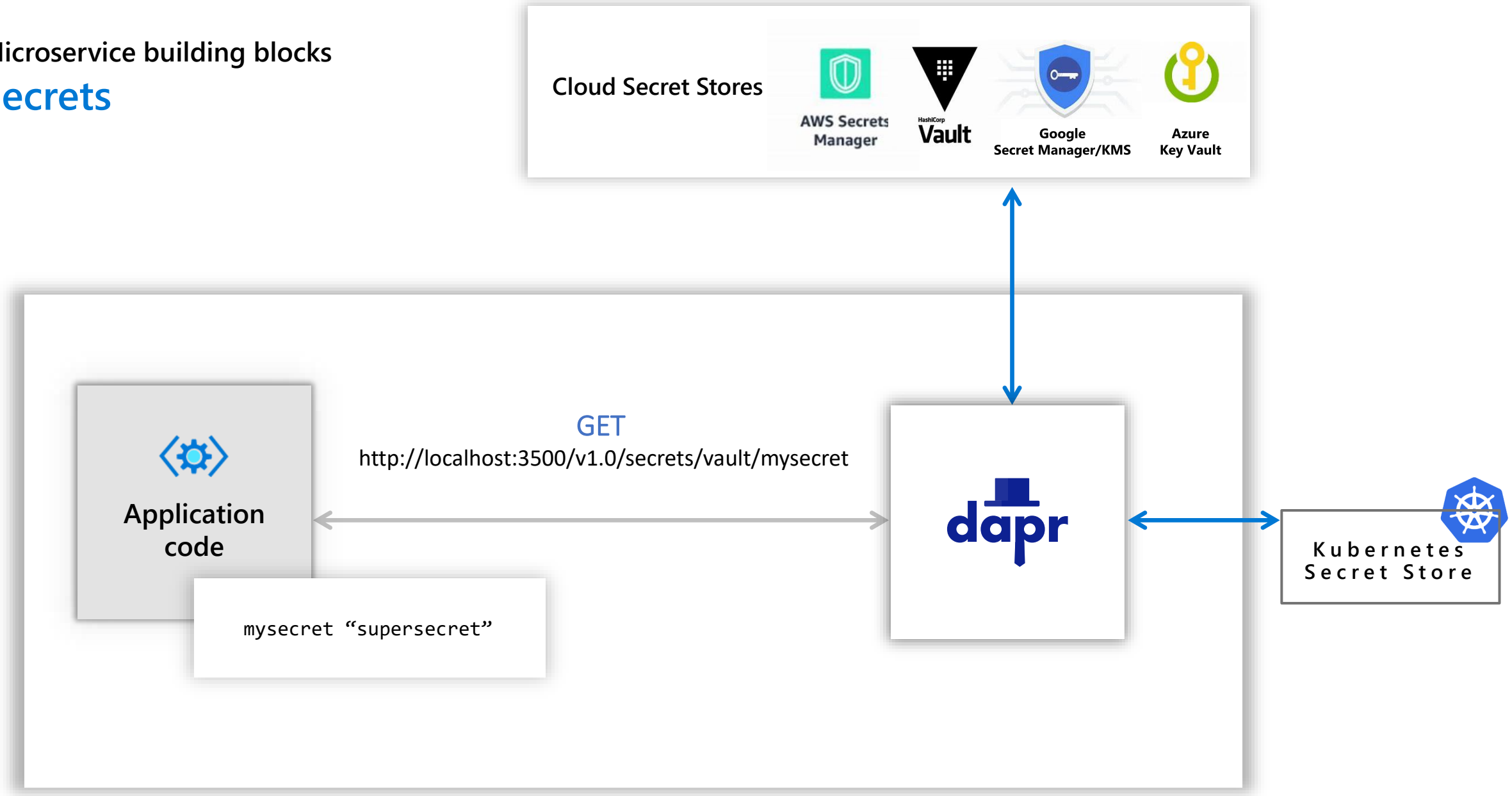
Microservice building blocks

Observability: Logs, metrics and distributed tracing

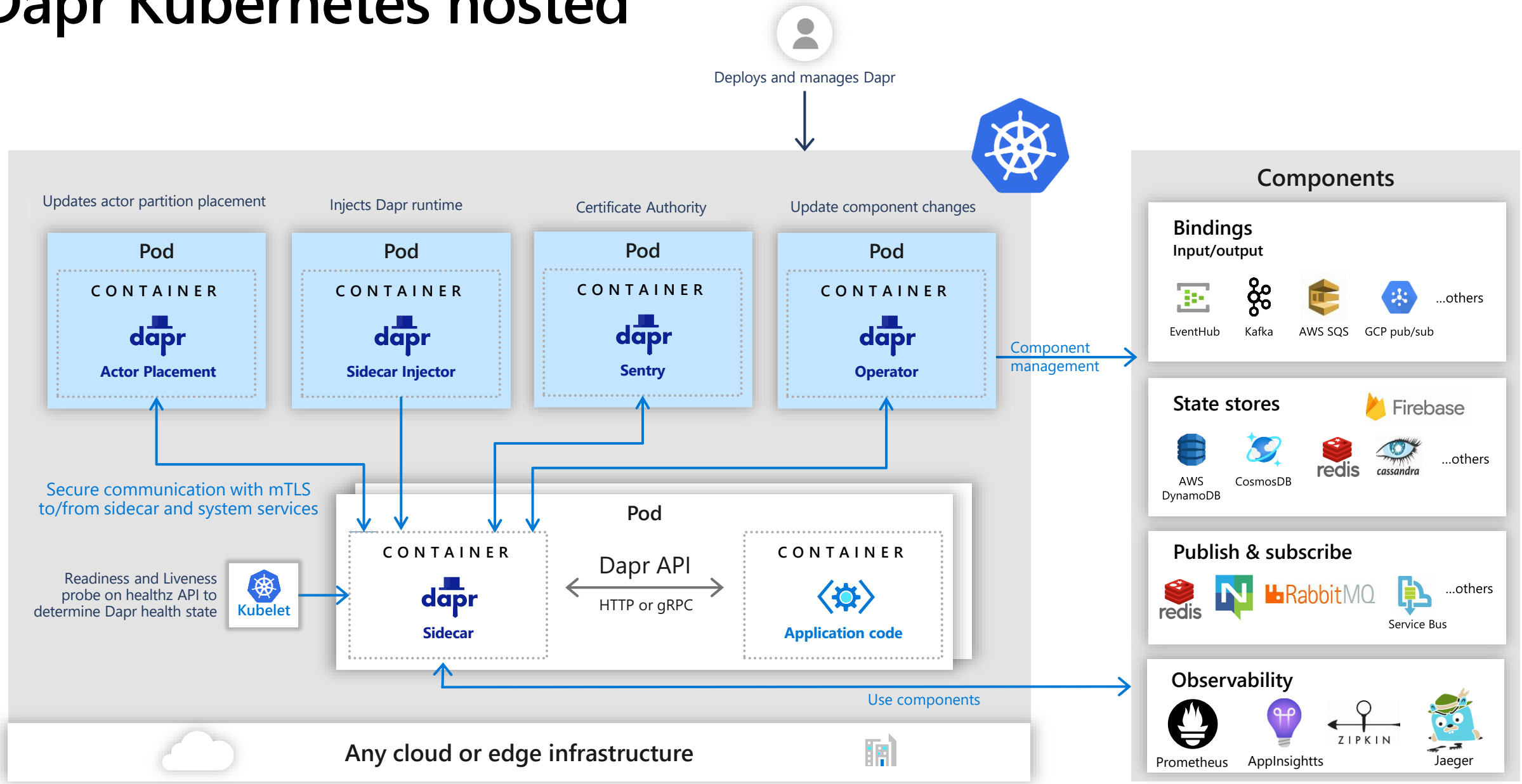


Microservice building blocks

Secrets

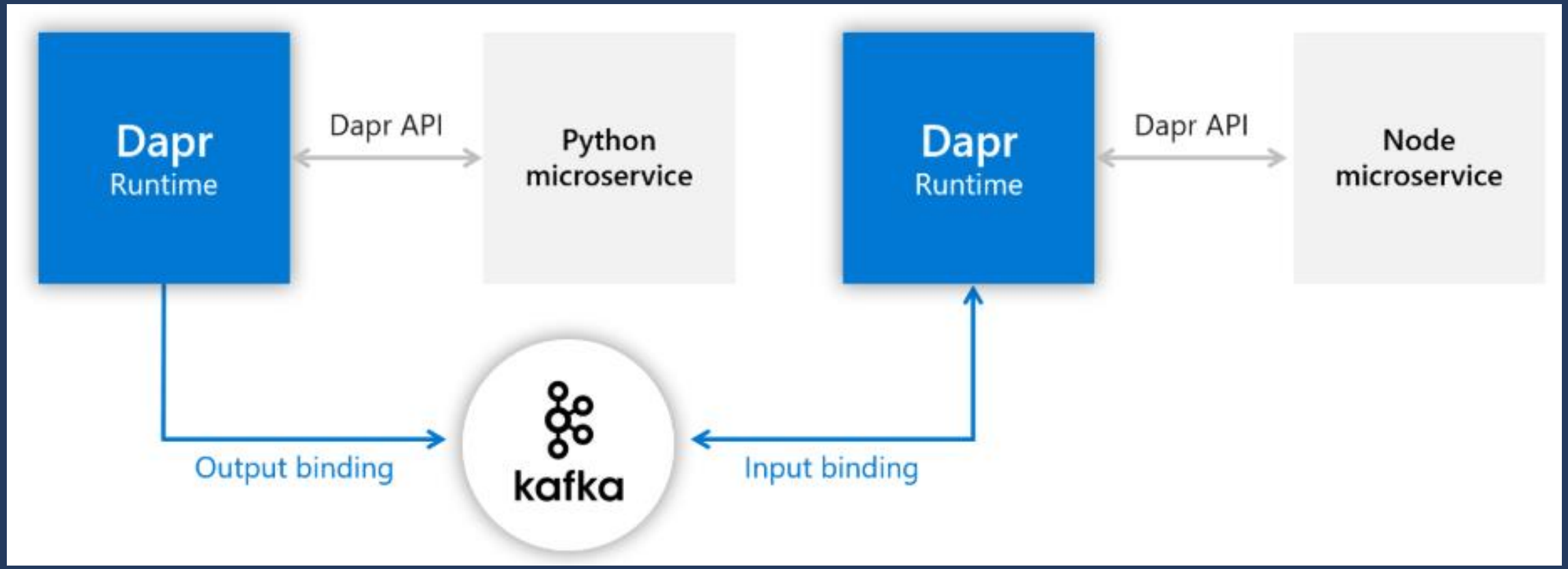


Dapr Kubernetes hosted

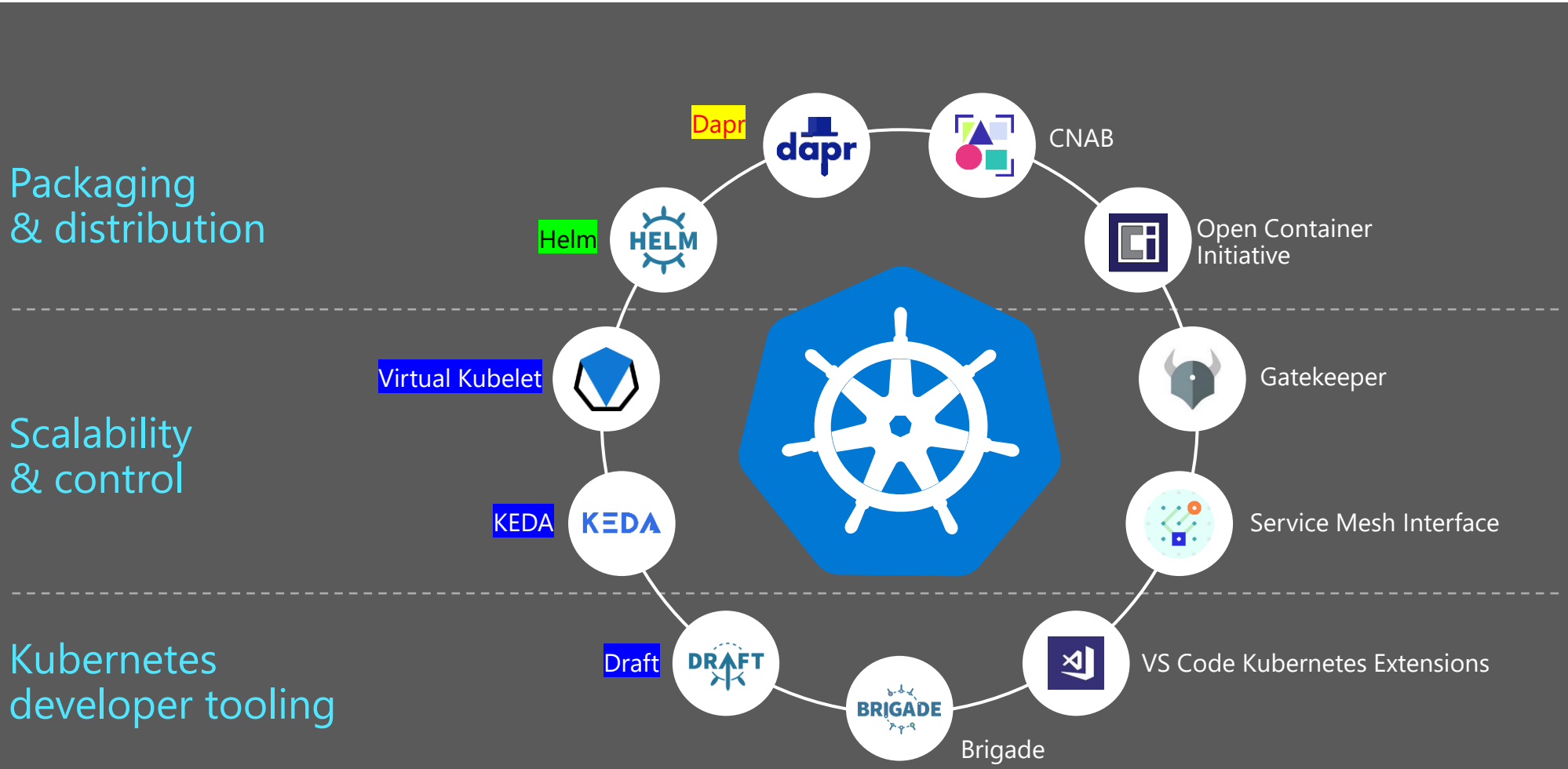


DEMO# 2

Dapr Bindings and components



Microsoft's contributions to the community



Get involved

maheskblr

GitHub | https://github.com/dapr/dapr#community

Recent Dapr Posts (April 2020)

- Developing the next big thing by streamlining microservices with DAPR
  - Alex Mang - Developing The Next Big Thing By Streamlining Microservices With DAPR
- Kubernetes NGINX ingress controller with Dapr
  - https://carlos.mendible.com/2020/04/05/kubernetes-nginx-ingress-controller-with-dapr/
- An introduction to Dapr (Distributed Application Runtime)
  - https://www.partech.nl/nl/publicaties/2020/04/introduction-to-dapr-distributed-application-runtime#
- Dapr - Creating a user login/register microservice
  - https://xaviergeerinck.com/post/coding/javascript/dapr-creating-account-microservice/

Start today - https://dapr.io/

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