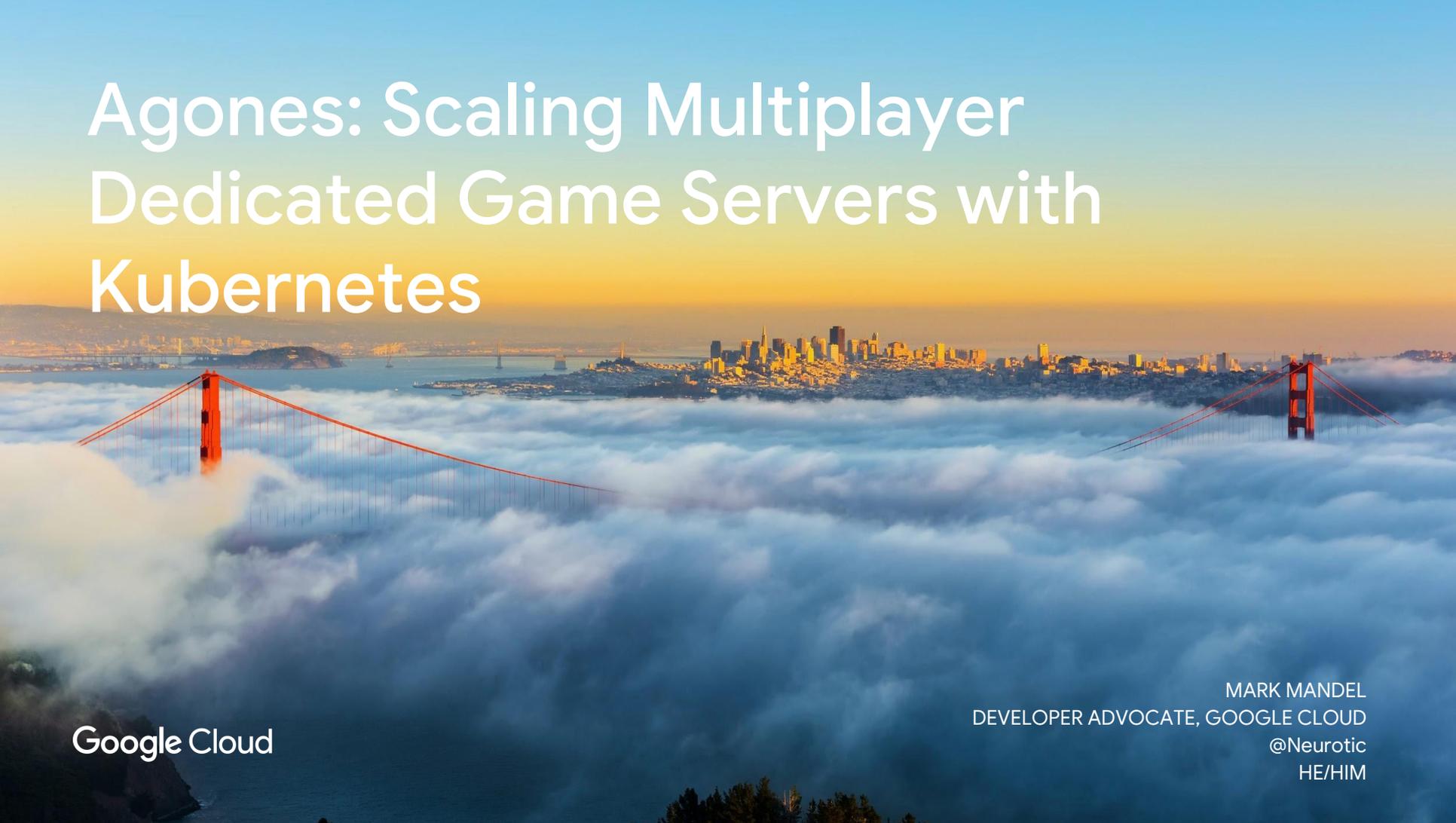


Agones: Scaling Multiplayer Dedicated Game Servers with Kubernetes



Google Cloud

MARK MANDEL
DEVELOPER ADVOCATE, GOOGLE CLOUD
@Neurotic
HE/HIM

Who are *you*?

Discovery

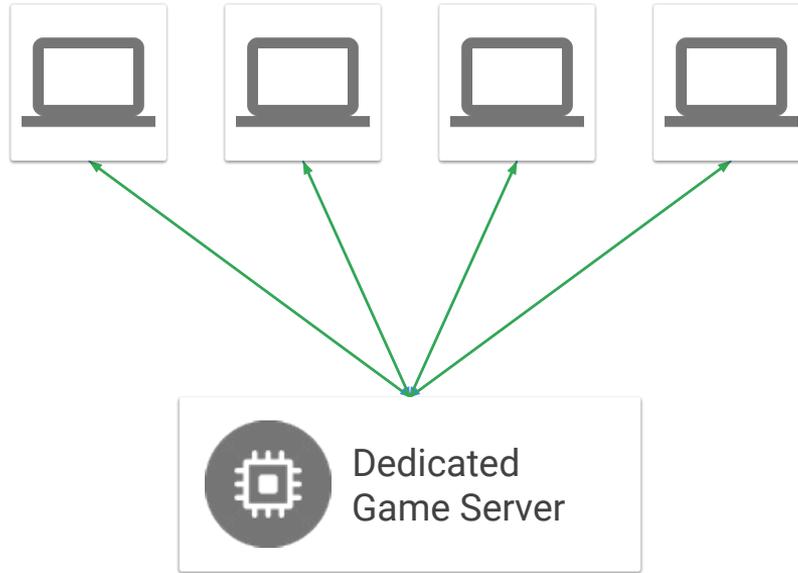


Eureka

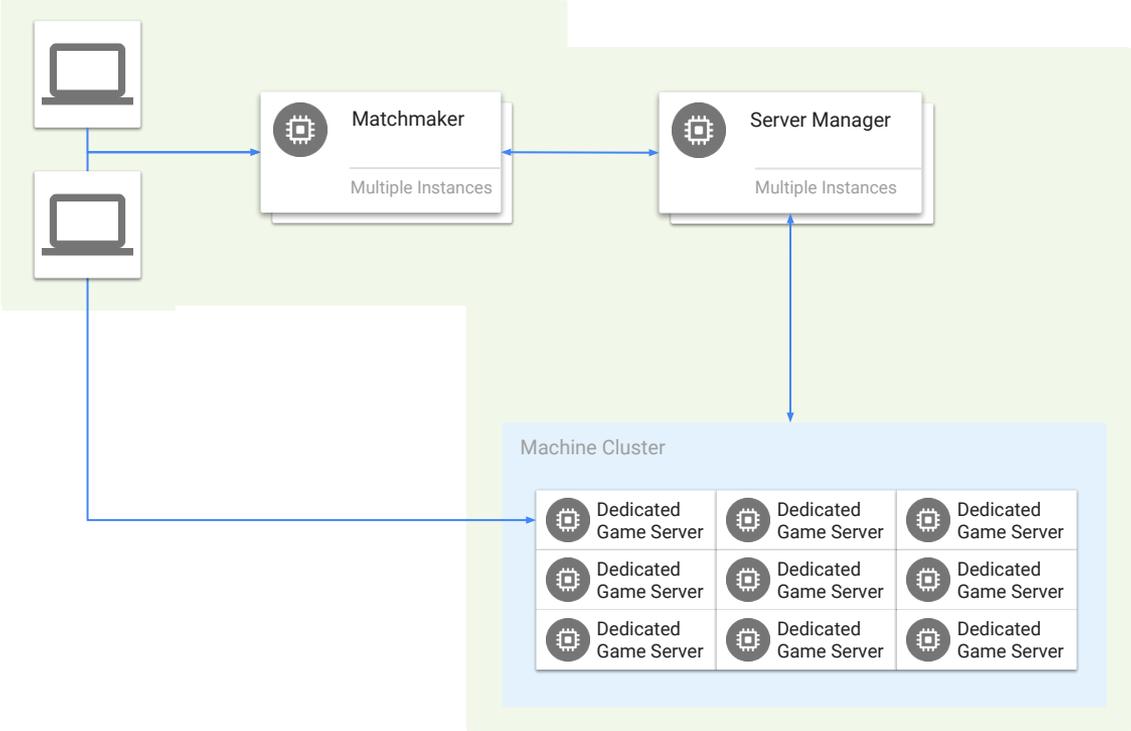
Pegasus



Authoritative server



Traditional architecture



Agones



Agones is designed as a batteries-included, open-source, dedicated game server hosting and scaling project built on top of Kubernetes, with the flexibility you need to tailor it to the needs of your multiplayer game.

Agones and Ubisoft



**Carl Dionne, Development Director,
Online Technology Group, Ubisoft.**

“Agones helps by providing us with the flexibility to run dedicated game servers in optimal datacenters, and by giving our teams more control over the resources they need.”

Containers

Packaging Game Servers

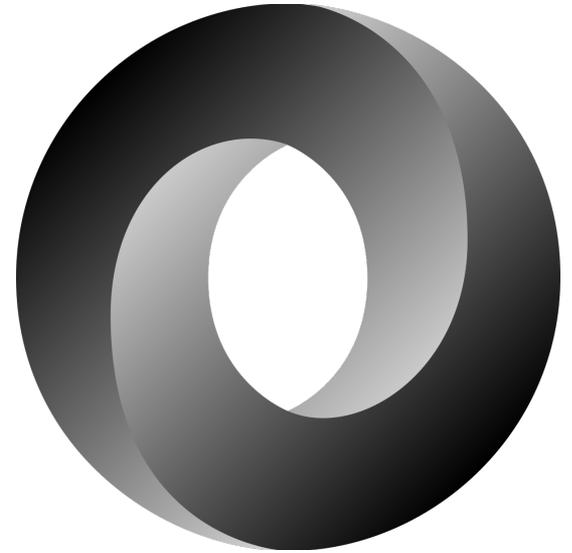
We can put dedicated game servers inside Docker containers!



SDK Integration

Existing SDKs

- C++
- Go
- Rust*
- REST



SDK Functionality



- Readiness & Shutdown
- Health Status
- Access & Watch Configuration
- Set Configuration values

xonotic/gameserver.yaml

```
apiVersion: "stable.agones.dev/v1alpha1"
kind: GameServer
metadata:
  name: "xonotic"
spec:
  ports:
    - name: default
      portPolicy: "dynamic"
      containerPort: 26000
  template:
    spec:
      containers:
        - name: xonotic
          image: gcr.io/agones-images/xonotic-example:0.3
```

xonotic/fleet.yaml

```
apiVersion: "stable.agones.dev/v1alpha1"
kind: Fleet
metadata:
  name: xonotic
spec:
  replicas: 2
  template:
    spec:
      ports:
      - name: default
        portPolicy: "dynamic"
        containerPort: 26000
      template:
        spec:
          containers:
          - name: xonotic
            image: gcr.io/agones-images/xonotic-example:0.3
```

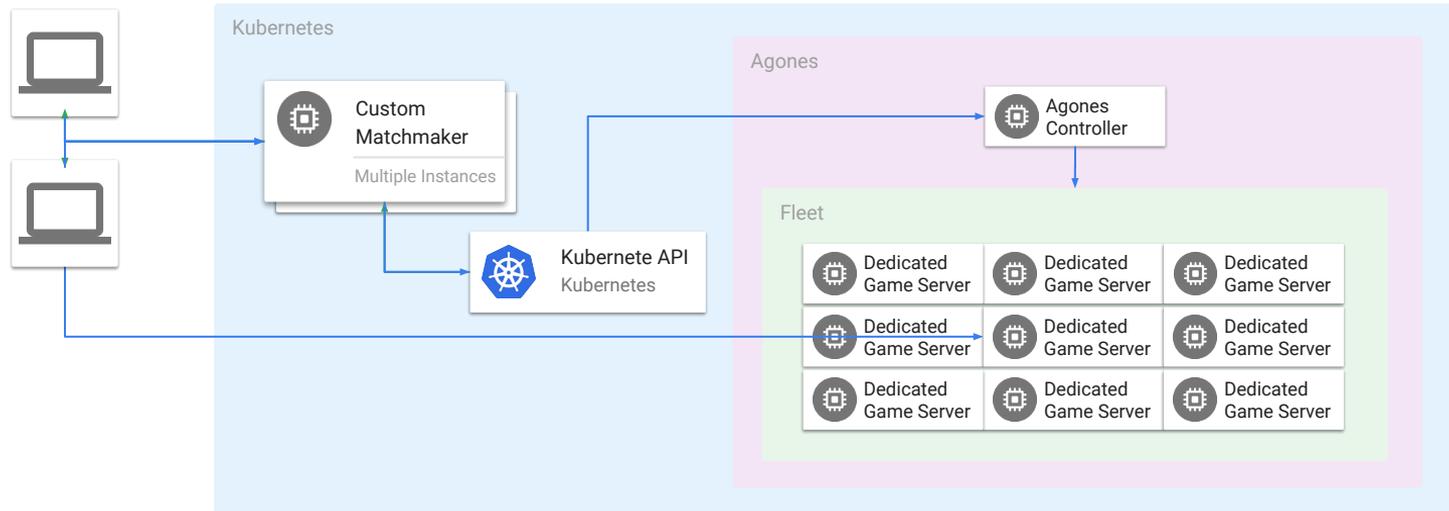
xonotic/fleetallocation.yaml

```
apiVersion: "stable.agones.dev/v1alpha1"  
kind: FleetAllocation  
metadata:  
  generateName: xonotic-  
spec:  
  fleetName: xonotic
```

Demo

```
`kubectl apply -f fleet.yaml`
```

Agones Architecture



Other Features



- Works across cloud providers
- Fleet and node autoscaling
- Local development tools

Roadmap



- Expanded Fleet auto scaling
- Statistic collection and display
- Commercial engine integrations
- Windows hosting
- Multi cluster

Questions?



Agones

- agones.dev
- [@agonesdev](https://twitter.com/agonesdev)

Me

- [@Neurotic](https://twitter.com/Neurotic)
- twitch.tv/markmandel
- youtube.com/marksmandel
- gcppodcast.com

Thank you.

Google Cloud

