

The background features a dark blue gradient with abstract geometric shapes. On the left, a large triangle is formed by a vertical orange line and a diagonal orange line. On the right, a large curved shape transitions from orange to blue. A thin blue line forms a rectangle in the lower right quadrant.

AWS re:Invent

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GAM304

Global game servers with compute, containers, and Amazon GameLift

Toni Syvanen

Game Tech Solutions Architect
AWS

Liga Viskinte

Technical Account Manager
AWS



Agenda

What to expect from this chalk talk

AWS game server hosting options

Challenges

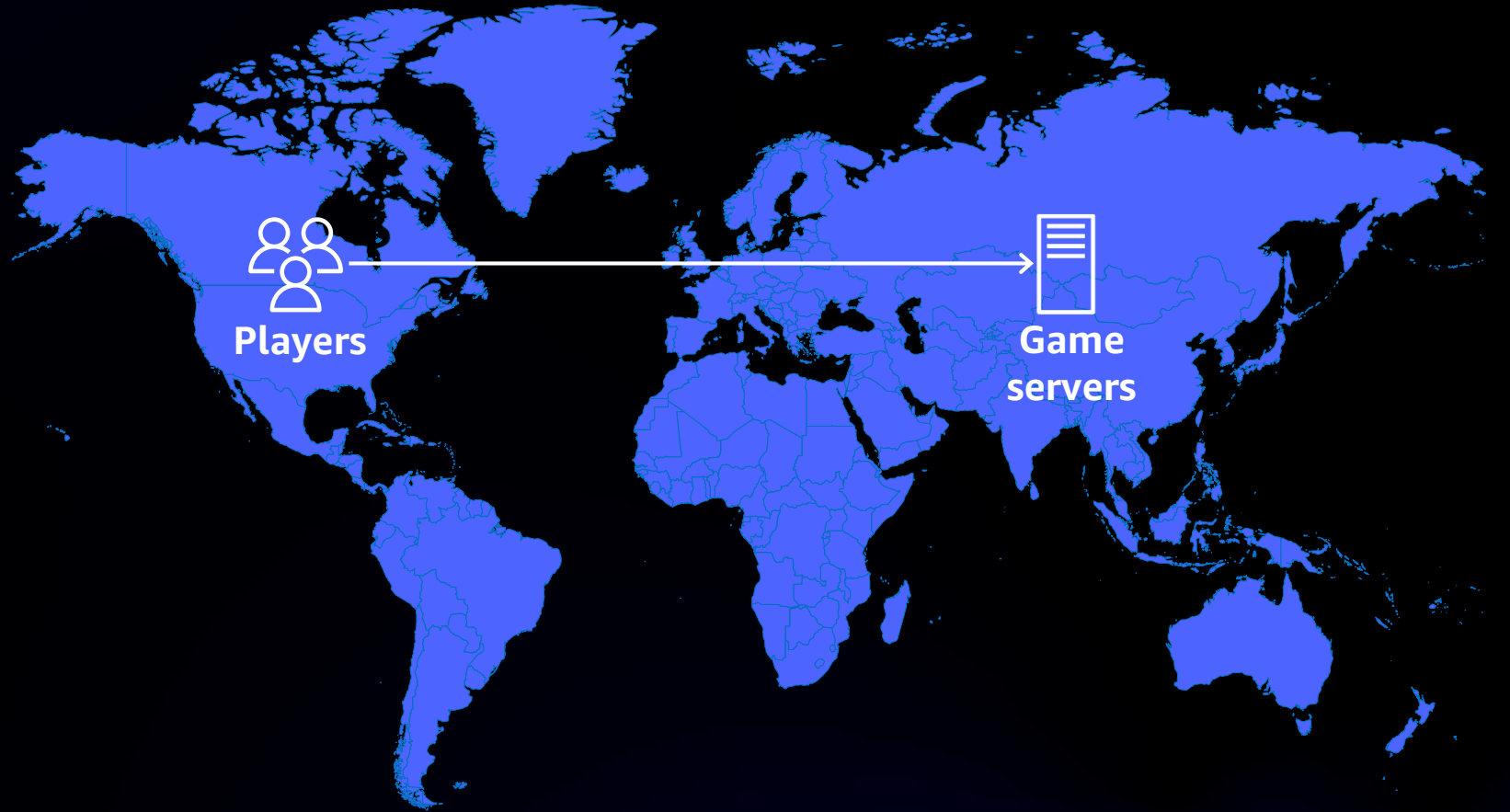
Q&A and whiteboarding

Closing

**What type of game are you
developing right now?**

What is a game server?

- Dedicated process running on a host – runs game world simulation or a rule engine
- Hosted on public internet so that game clients can reach it

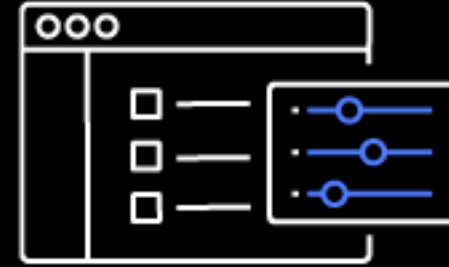


AWS game server hosting options

Game server hosting: The choice is yours



Build your own
Virtual machine or
container hosting

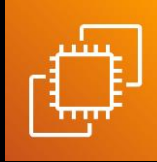


Managed services
Managed solution for deployment,
virtual machine management,
and session placement

What is your game server hosting choice?

Game server hosting: Build your own

Virtual machine hosting



Amazon Elastic Compute
Cloud (Amazon EC2)

WITH



Amazon EC2
Auto Scaling

Container hosting



Amazon Elastic
Kubernetes Service
(Amazon EKS)

OR



Amazon Elastic Container
Service (Amazon ECS)

OR



AWS Fargate

Game server hosting: Managed services



Amazon GameLift hosting

- Fully managed game server hosting
- Global reach and worldwide game placement
- Auto scaling and monitoring



Amazon GameLift FleetIQ

- Simple API layer for game session management
- Use your existing tools and software without GameLift's game server management layer
- Leaves server management in your hands

Challenges

Player expectations



- Great in-game experience
- Uninterrupted play – no server lag
- Have fun with friends

Technical challenges



- Latency – group players in a location close to them
- Scaling – right amount of game servers available
- Operational – ease of management and observability

Business requirements

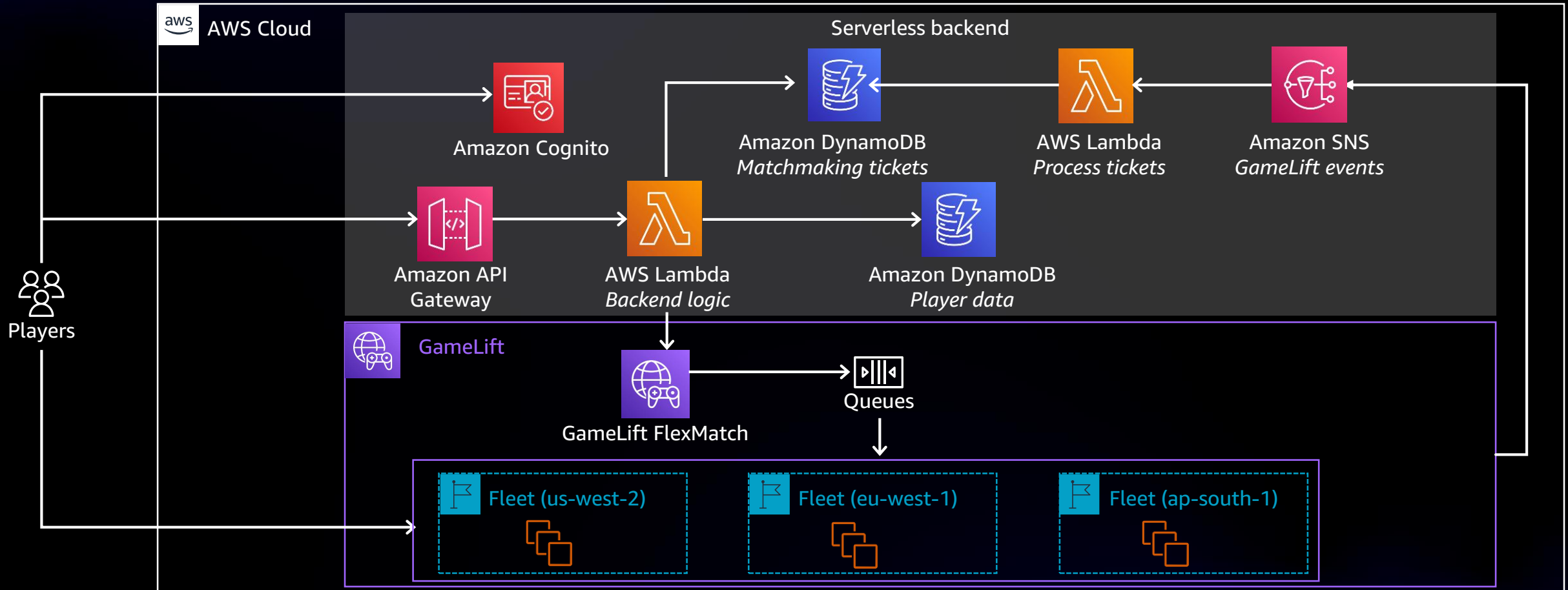


- Cost of the first player
- Launch plans
- Ability to reach players in different geographical regions

Share your challenges and requirements

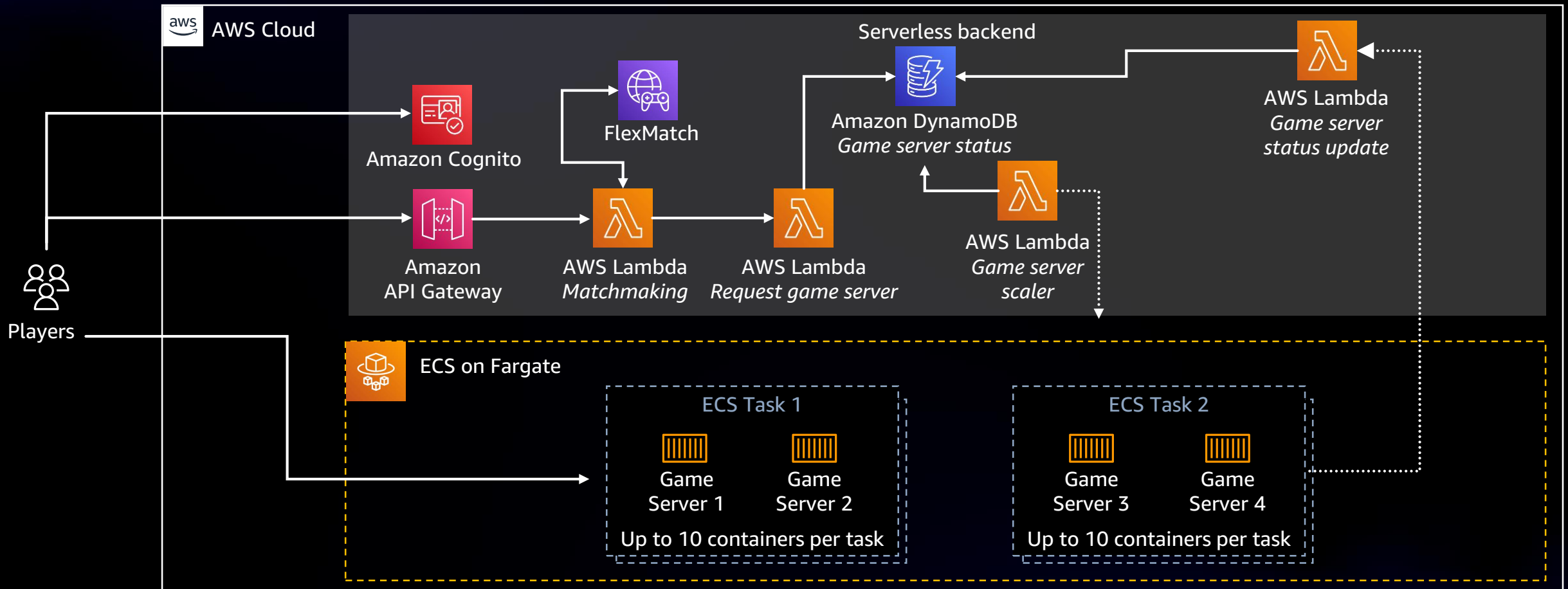
Reference architectures

Game servers on GameLift hosting



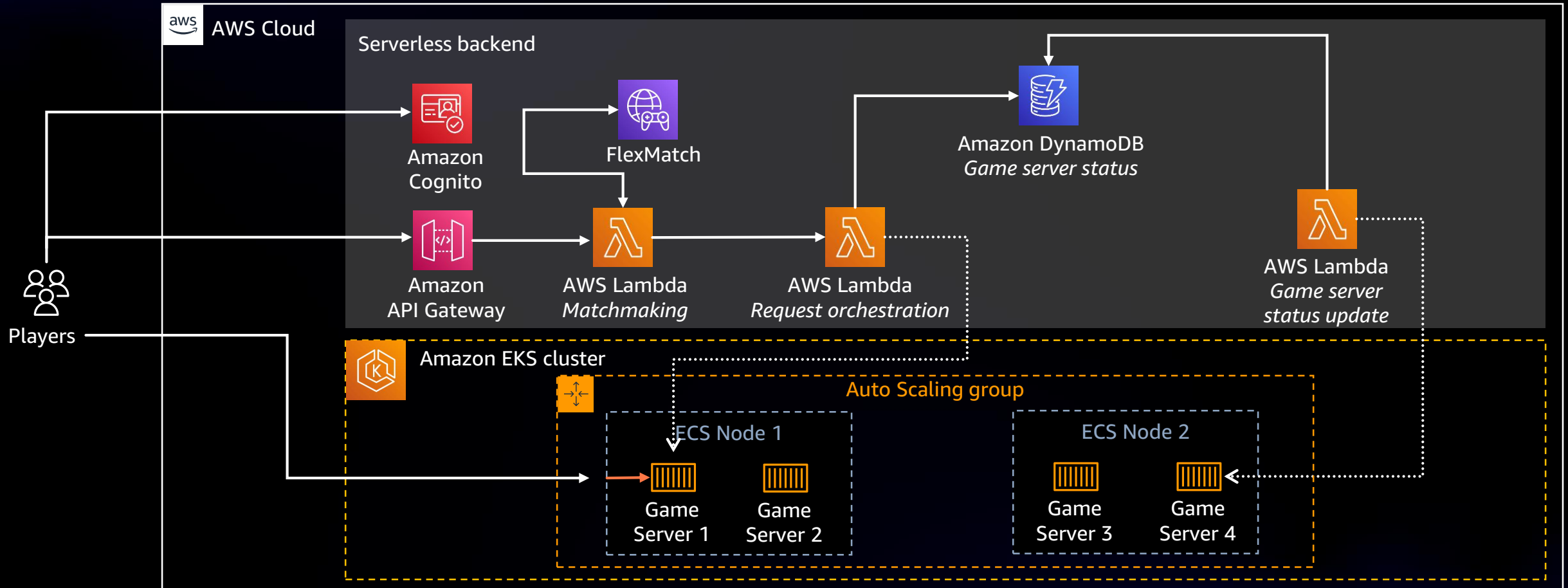
GameLift serverless backend: <https://github.com/aws-samples/aws-gamelift-and-serverless-backend-sample>

Game servers on ECS on Fargate



Game server hosting on AWS Fargate: <https://github.com/aws-samples/fargate-game-servers>

Game servers on EKS



Useful resources

- **Game Tech website**
<https://aws.amazon.com/gametech/>
- **Customer references**
<https://aws.amazon.com/gametech/customers/>
- **re:Invent 2021 Game Tech chalk talk**
GAM303 – Extend your global game architecture to the edge with AWS

Thank you!