

AWS re:Invent

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CON310

Best practices for a container management platform

Jessica Deen

Principal Developer Advocate
AWS



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CON310 – Chalk talk Agenda

Session structure

1. Topic introduction and brief presentation (15 minutes)
2. Open mic whiteboard session (40 minutes)
3. Recap and additional links (5 minutes)

What is a container platform management system?

First, let's recap – What is a container?

Containers are becoming the new normal

- Containers as the new deployment unit
- They are faster and smaller than VMs
- They fully embrace immutability, Git, and CI/CD methodologies
- Same artifact can be deployed on laptop, data center, and cloud

Container best practices

- What is in the container?
- Image size and build speed
- Vulnerabilities and security
- Standardization
- Automatic updates

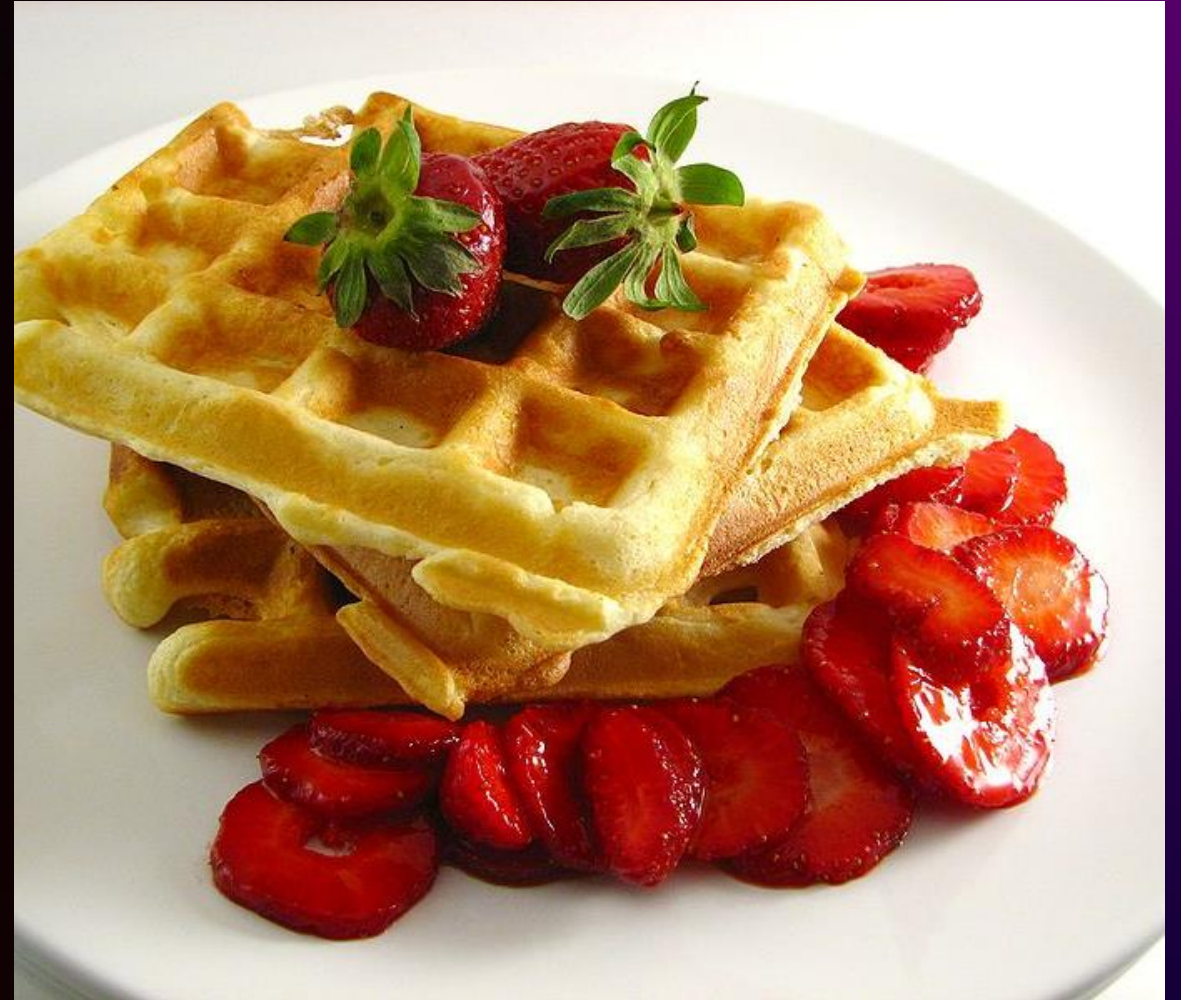
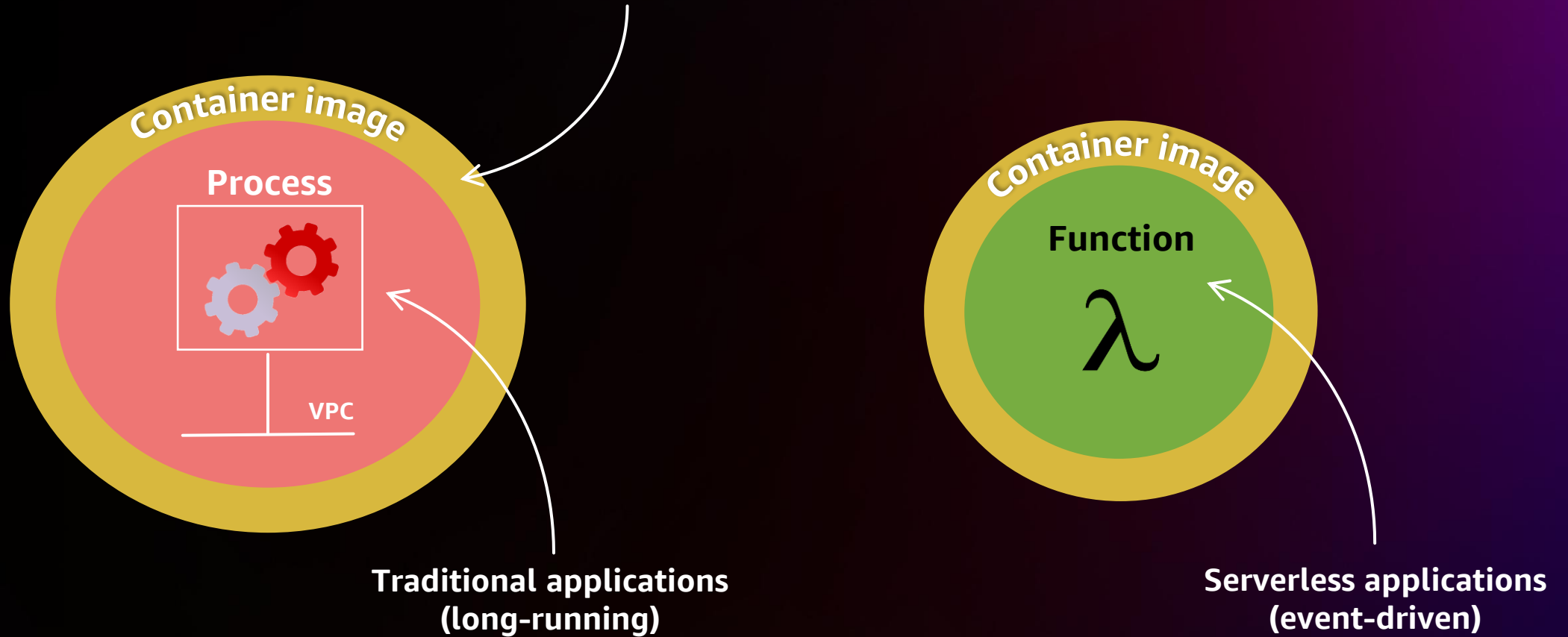


Photo [https://upload.wikimedia.org/wikipedia/commons/5/5b/Waffles_with_Strawberries.jpg] by [Parkerman & Christie](#) from San Diego, USA / CC BY 2.0 [Creative Commons Attribution 2.0]

Containers: Programming model or package?

The container image format (OCI) as a universal packaging mechanism



AWS customers are diverse

AWS serves millions of customers

They come from different backgrounds and industries

They want to optimize for different dimensions

Simplicity (because they are not an operations powerhouse)

Flexibility (because they have unique requirements)

Agility (because for them, speed is everything)

Hybridity (because they have regulatory requirements)

And more

There is no “one containers-based solution” that can serve them all



So what can we do?



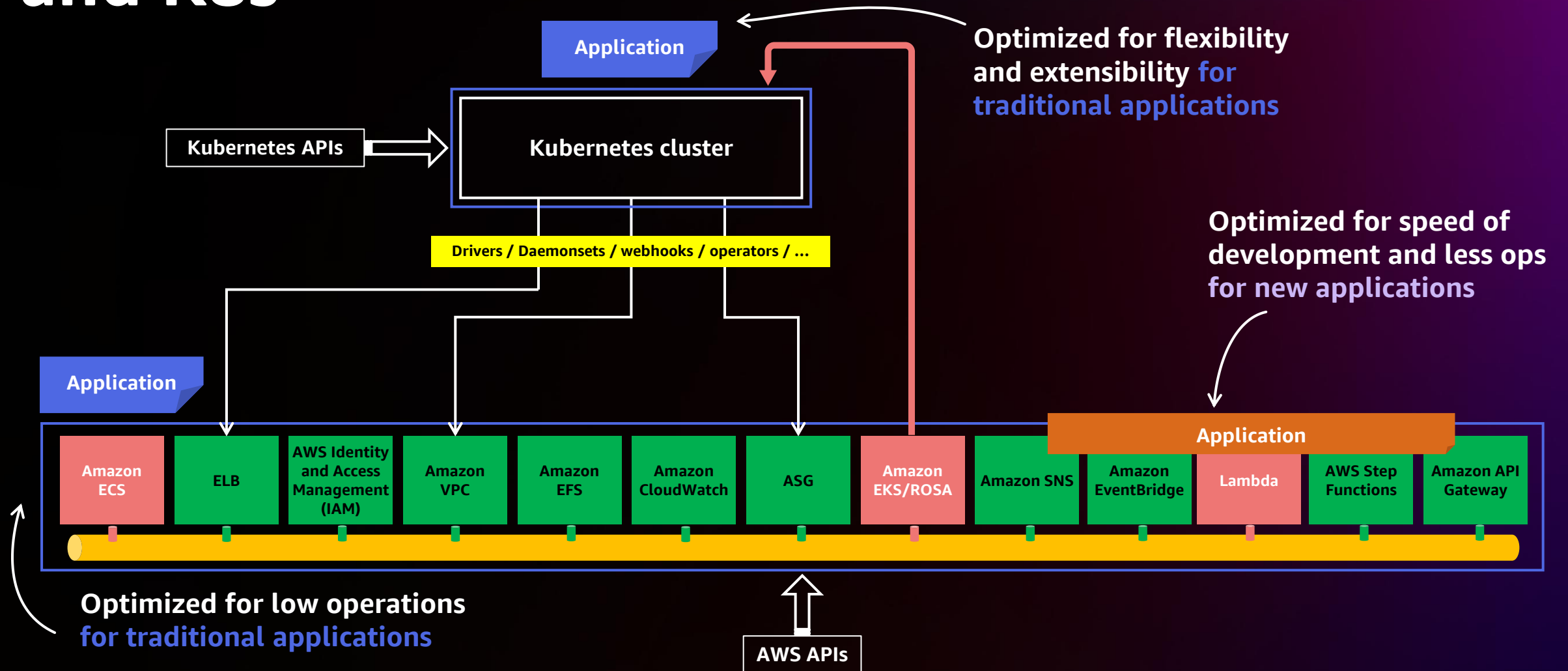
The layers



The services in scope



How to think about AWS Lambda, Amazon ECS, and K8s



Amazon Elastic Container Service (Amazon ECS)

AWS managed container service

No control plane to
manage, upgrade,
patch, and secure

Enterprise-grade serverless containers

With AWS Fargate
and AWS Fargate
Spot, run containers
without any host
management

End-to-end container orchestrator

Compute + Network
+ Storage + Security
+ Observability +
Build + Deploy

No additional charge

No charge for the
service; you only
pay for other AWS
services used

Open mic/whiteboard time!



Whiteboard

This section will contain the whiteboarding portion of the session

Topics – Best practices

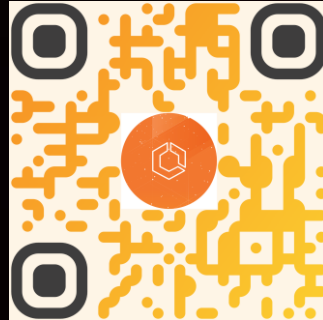
- Running your application
- Networking
- Storage
- Security
- Scaling

Additional links

[Amazon ECS workshop](#)



[Amazon ECS Best Practices](#)



[CON310 Recap Blog Post](#)



Thank you!

Jessica Deen

jldeen@amazon.com

 @jldeen



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