Cloud Computing Architecture

AWS Compute Services: Serverless
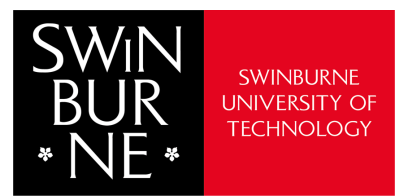
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Acknowledgement of Country

We respectfully acknowledge the Wurundjeri People of the Kulin Nation, who are the Traditional Owners of the land on which Swinburne's Australian campuses are located in Melbourne's east and outer-east, and pay our respect to their Elders past, present and emerging.

We are honoured to recognise our connection to Wurundjeri Country, history, culture, and spirituality through these locations, and strive to ensure that we operate in a manner that respects and honours the Elders and Ancestors of these lands.

We also respectfully acknowledge Swinburne's Aboriginal and Torres Strait Islander staff, students, alumni, partners and visitors.

We also acknowledge and respect the Traditional Owners of lands across Australia, their Elders, Ancestors, cultures, and heritage, and recognise the continuing sovereignties of all Aboriginal and Torres Strait Islander Nations.

AWS Compute Services: Serverless

In this Presentation:

– Container Services

– AWS Lambda

Image from: https://digitalcloud.training/aws-lambda/

Image throughout taken from: AWS Academy - ACF Module 1

Container Services

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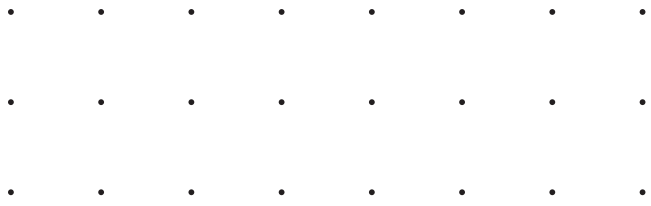
Container Services

Container basics

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- **Containers** are a method of operating system virtualization.

- Benefits –
  - Repeatable.
  - Self-contained execution environments.
  - Software runs the same in different environments.
    - Developer's laptop, test, production.
  - Faster to launch and stop or terminate than virtual machines

Your Container

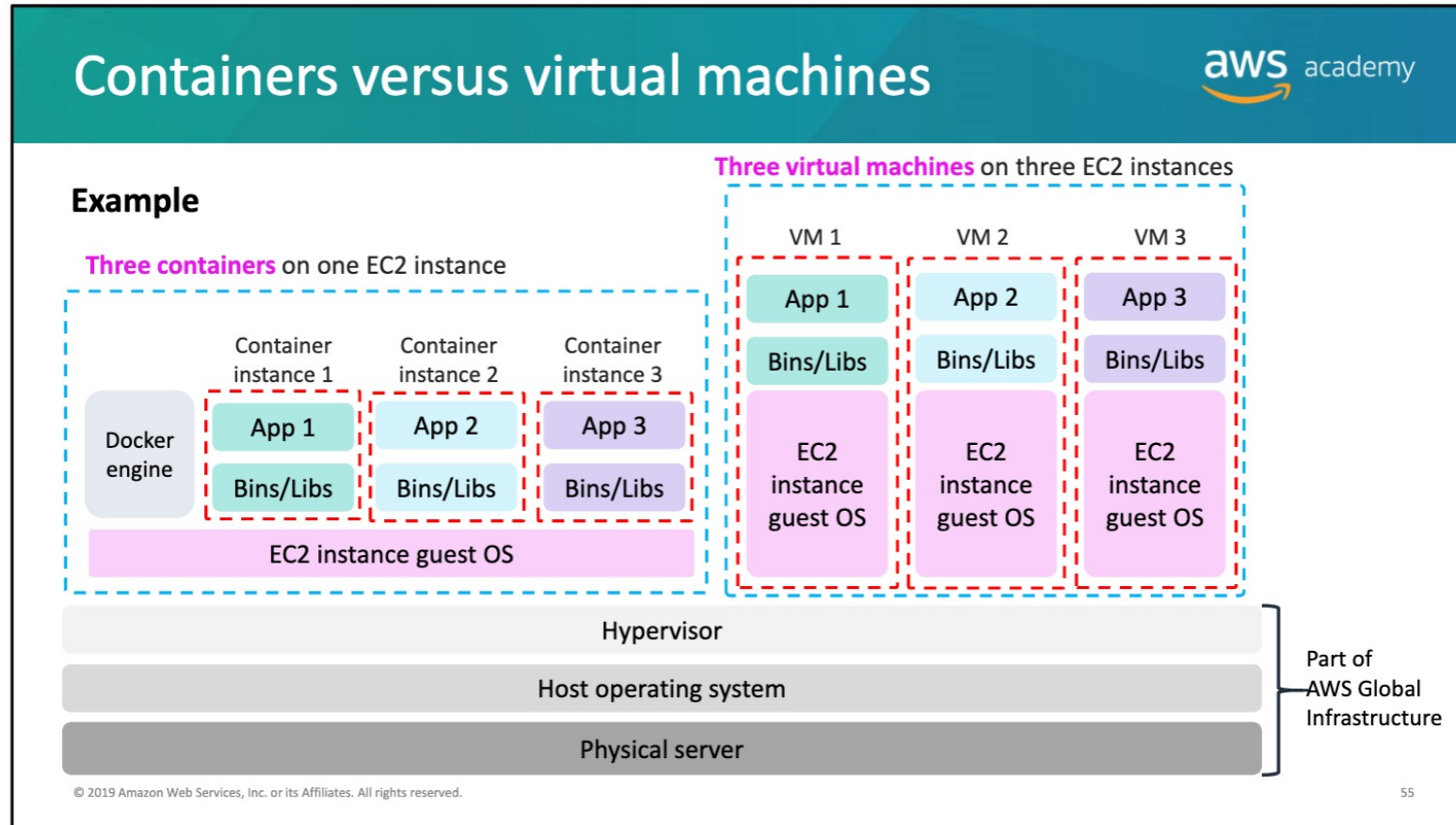Your application

Dependencies

Configurations

Hooks into OS

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Container Services

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Container Services
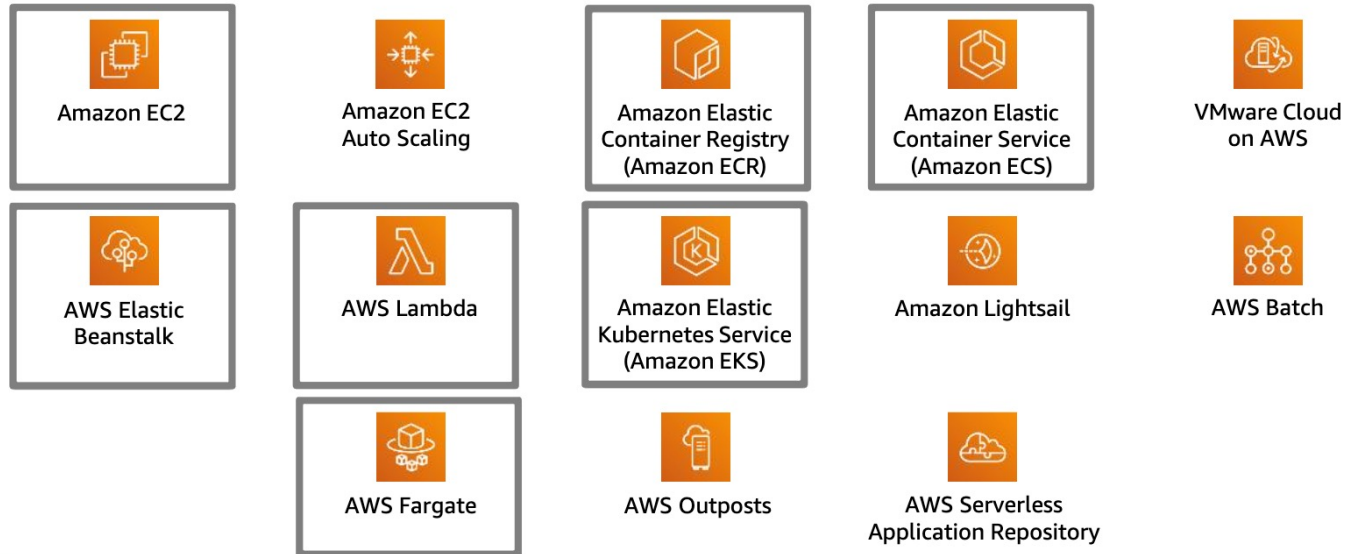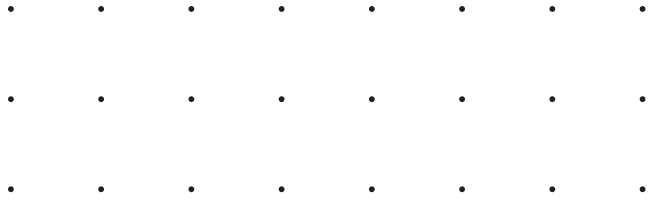
AWS Lambda

AWS Lambda

AWS Lambda: Run code without servers

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AWS Lambda is a **serverless** compute service.

Upload your code

The code you run is a **Lambda function**

AWS services / Mobile apps / HTTP endpoints
Run your code on a *schedule* or in response to *events*

Your code runs only when it is triggered

Pay only for the compute time that you use

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AWS Lambda

Benefits of Lambda

AWS Lambda

- It supports multiple programming languages
- Completely automated administration
- Built-in fault tolerance
- It supports the orchestration of multiple functions
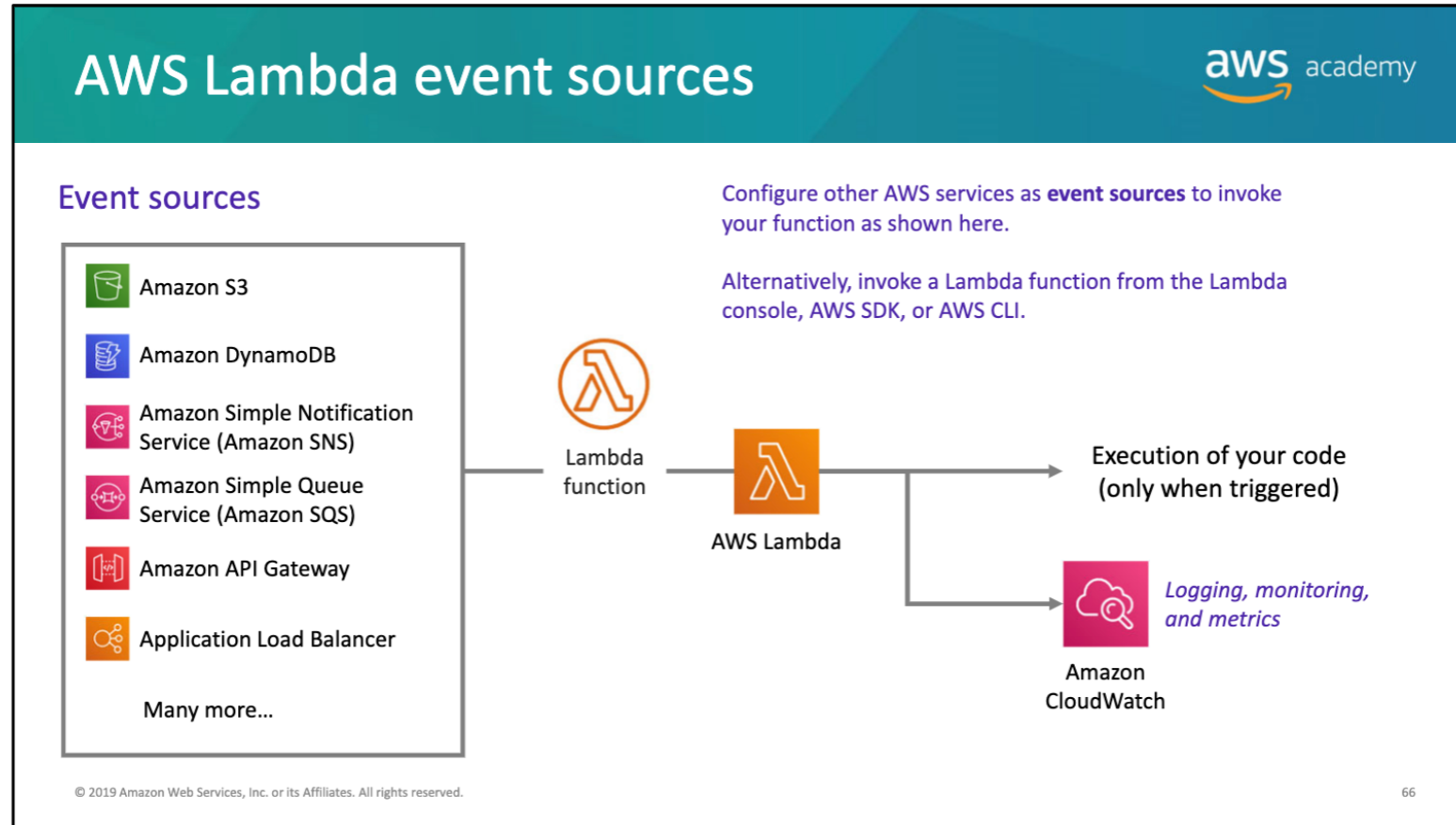- Pay-per-use pricing

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AWS Lambda

AWS Lambda

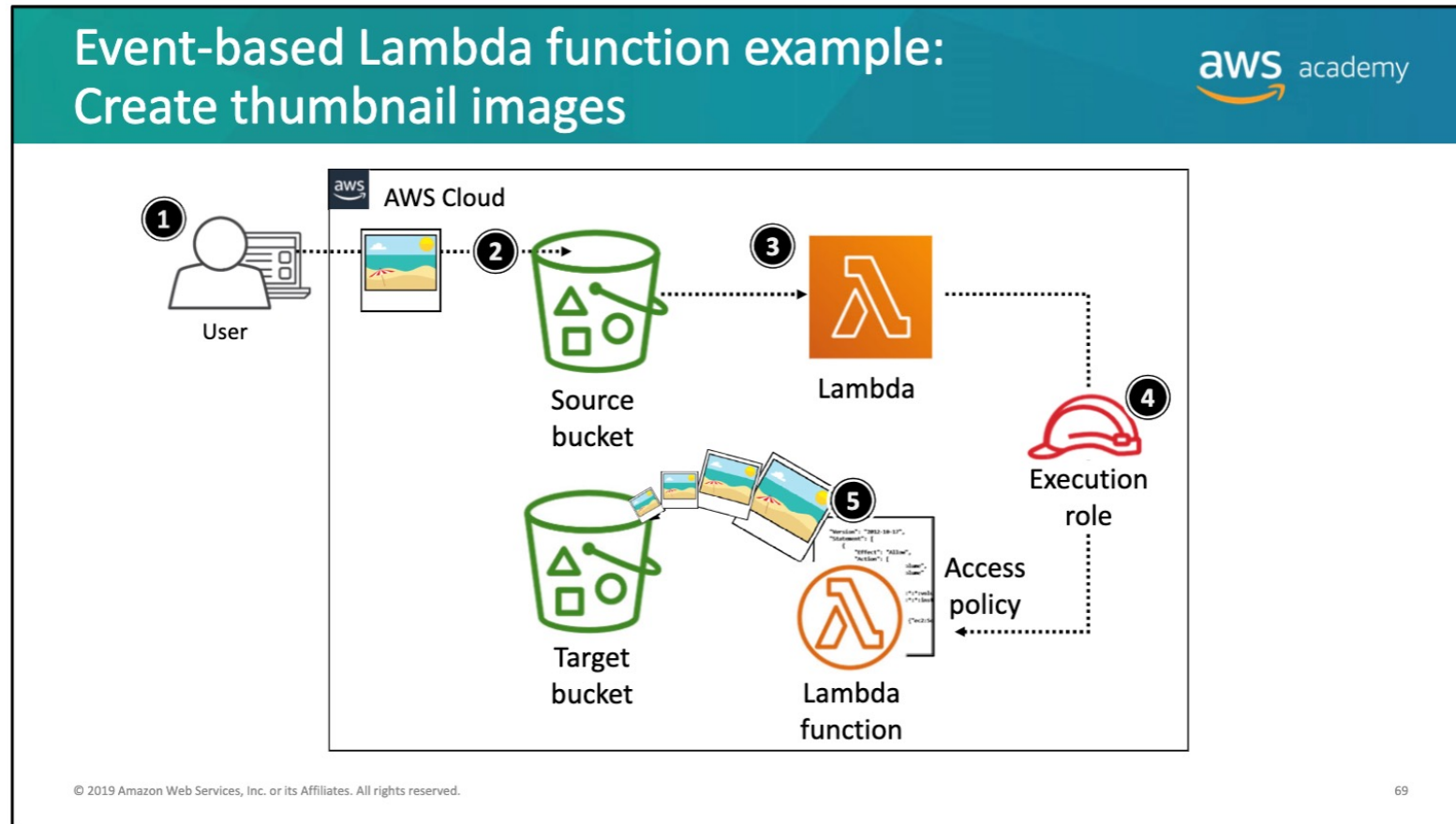Event-based Lambda function example:
Create thumbnail images

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Want to learn more?

Check out:

[AWS Academy – ACF Module 6: Compute](#)

[AWS Documentation](#)