Lambda

- **Lambda functions**

- **Intro to serverless computing**

Execution continuum

← →

EC2, EKS, ECS, Fargate

- *Run any software you want for as long as you want*
- *Complete control over HW and SW*
- *Hardest to config*

Elastic Beanstalk

- *Upload .zip file*
- *Limited software choices*
- *Some control over HW and SW*
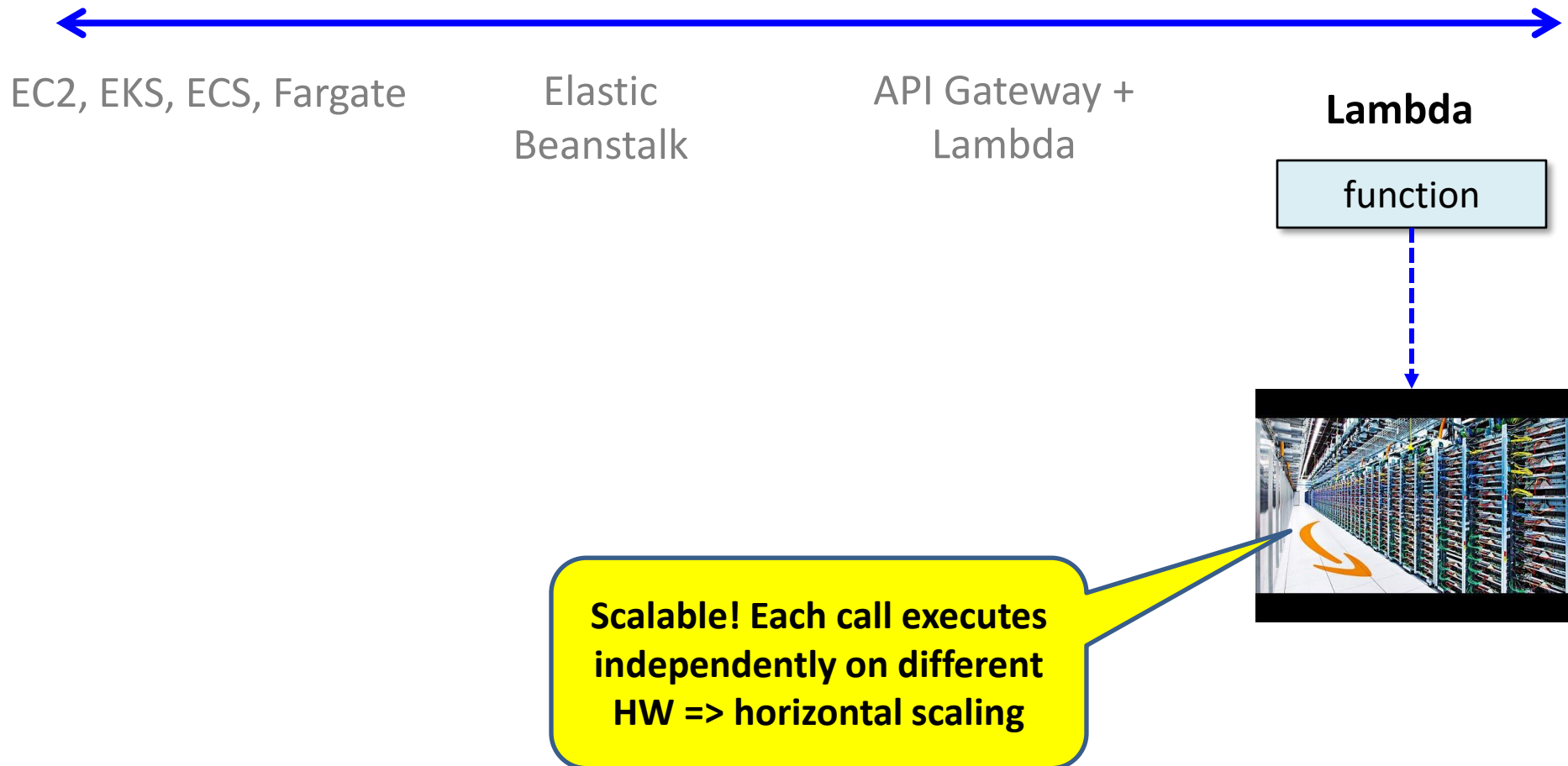
API Gateway + Lambda

- *Function based*
- *Near-zero config*
- *Web service + functions (15-min limit)*

Lambda

- *Function based*
- *Near-zero config*
- *Short execution (< 15 mins)*

AWS lambda

- **By far the simplest, least expensive way to compute**

EC2, EKS, ECS, Fargate

Elastic Beanstalk

API Gateway + Lambda

Lambda

function

Scalable! Each call executes independently on different HW => horizontal scaling

AWS lambda / Azure functions / Google functions

- **Standalone functions executed on demand**
  - *Can be written in JavaScript, Python, Java, C++, etc.*
  - *Execution time is limited (AWS => 15 minutes)*

- **Callable in a variety of ways:**
  - *Like a traditional function( ) using AWS library*
  - *Based on **events** that occur (e.g. uploading an item into S3)*
  - *Via **function URL** through AWS-managed web server*
  - *Via **API Gateway** offering a more customizable AWS-managed web server (e.g. test vs. production, more authentication options, …)*