INNOVATE

MODERN APPLICATIONS EDITION

20 October, 2022

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Serverless without Lambda

Also known as: Functionless

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Agenda

- Why work without AWS Lambda?
- Introduction example use case
- Amazon API Gateway without AWS Lambda
- Direct service integrations from AWS Step Functions
- Connecting Amazon EventBridge with other services

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FUNCTIONLESS

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Use Case: …

~370 million people worldwide own a cat

Source: Statista 2018

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Use Case: Newsletter

CATS NEWS

THE LATEST SCOOP FOR CAT OWNERS

Will local governments impose tax on cat owners?

Tax-paying dog owners demand justice!

ANYTOWN 20 October 2022 – A group of activist dog owners is asking the local government to impose a tax on cat owners. Why do dog owners need to bear the burden of tax while cat owners pay absolutely nothing?

Cat owners are furious about the proposal! John Doe, owner of 2 cats said that taxing cat owners discourages cat ownership and predicts plagues of mice in the city. Moreover, Doe argued that the burden of cats on society is negligible compared to dogs.

Dog owners on the other hand explain that dogs these days are not that much of a burden either. Jane Doe, owner of a Golden Retriever reported that her dog also once caught a mouse and argued it is unfair if cat owners don't bear the same tax burden as dog owners.

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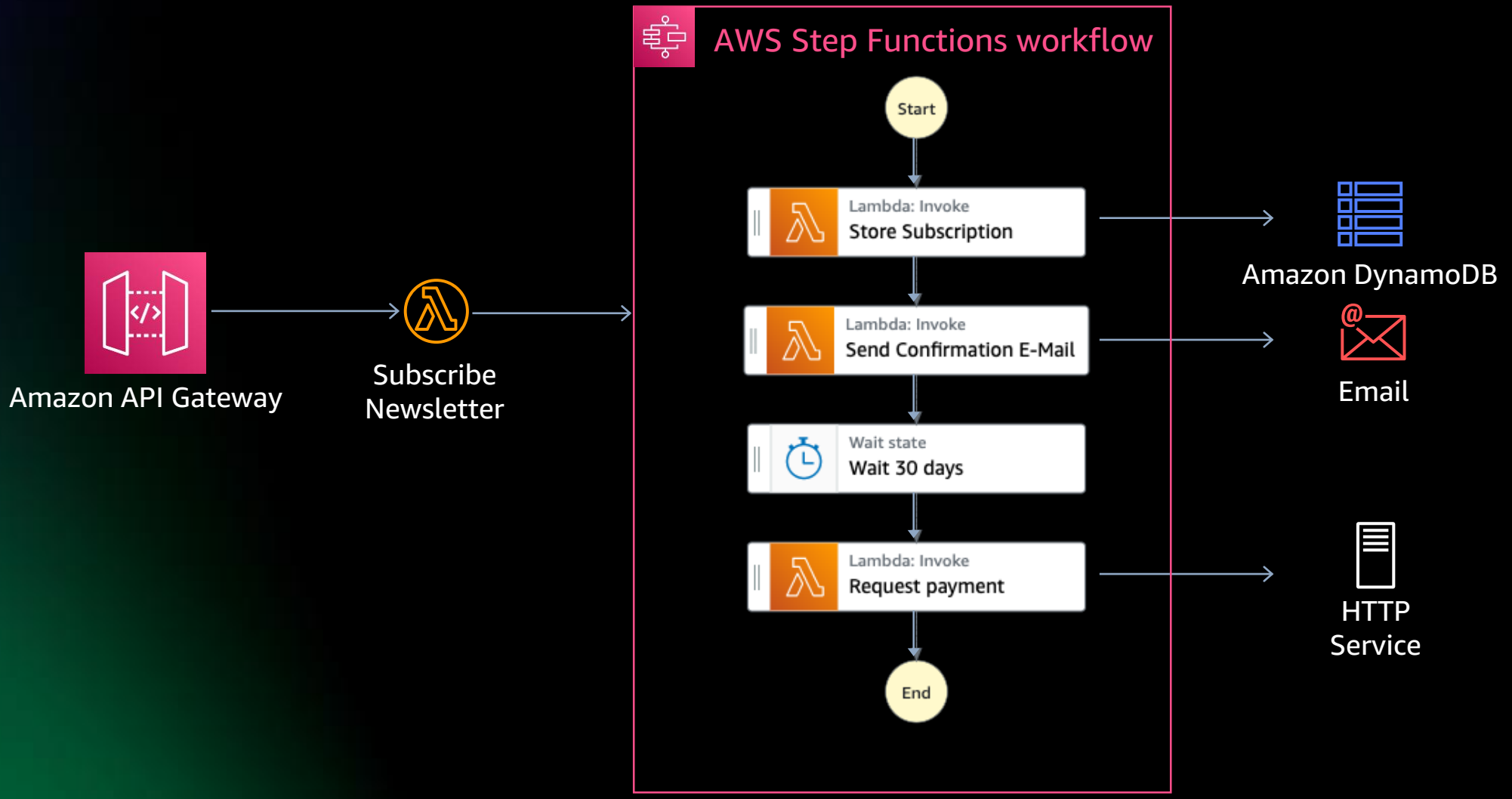

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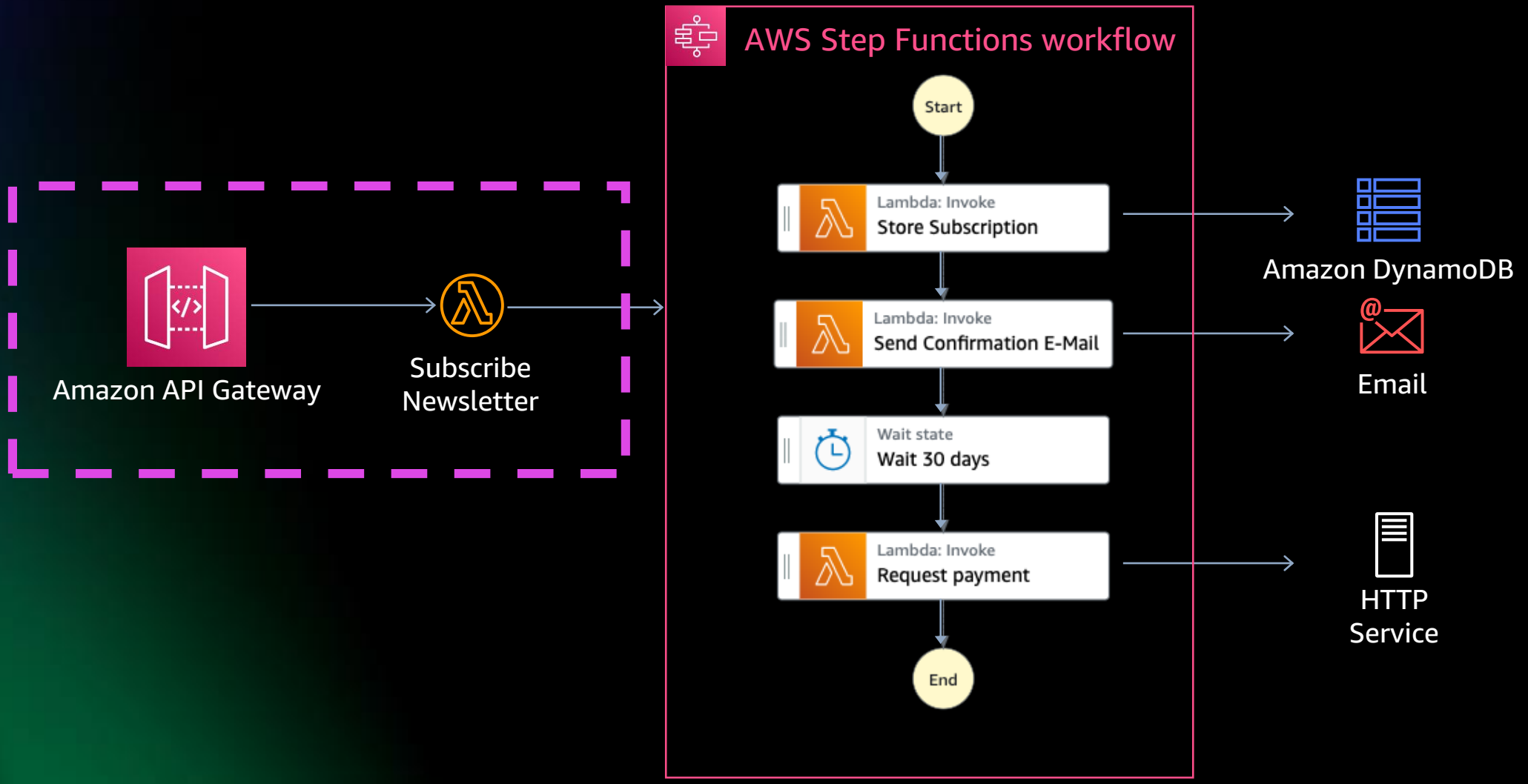

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Demo 1

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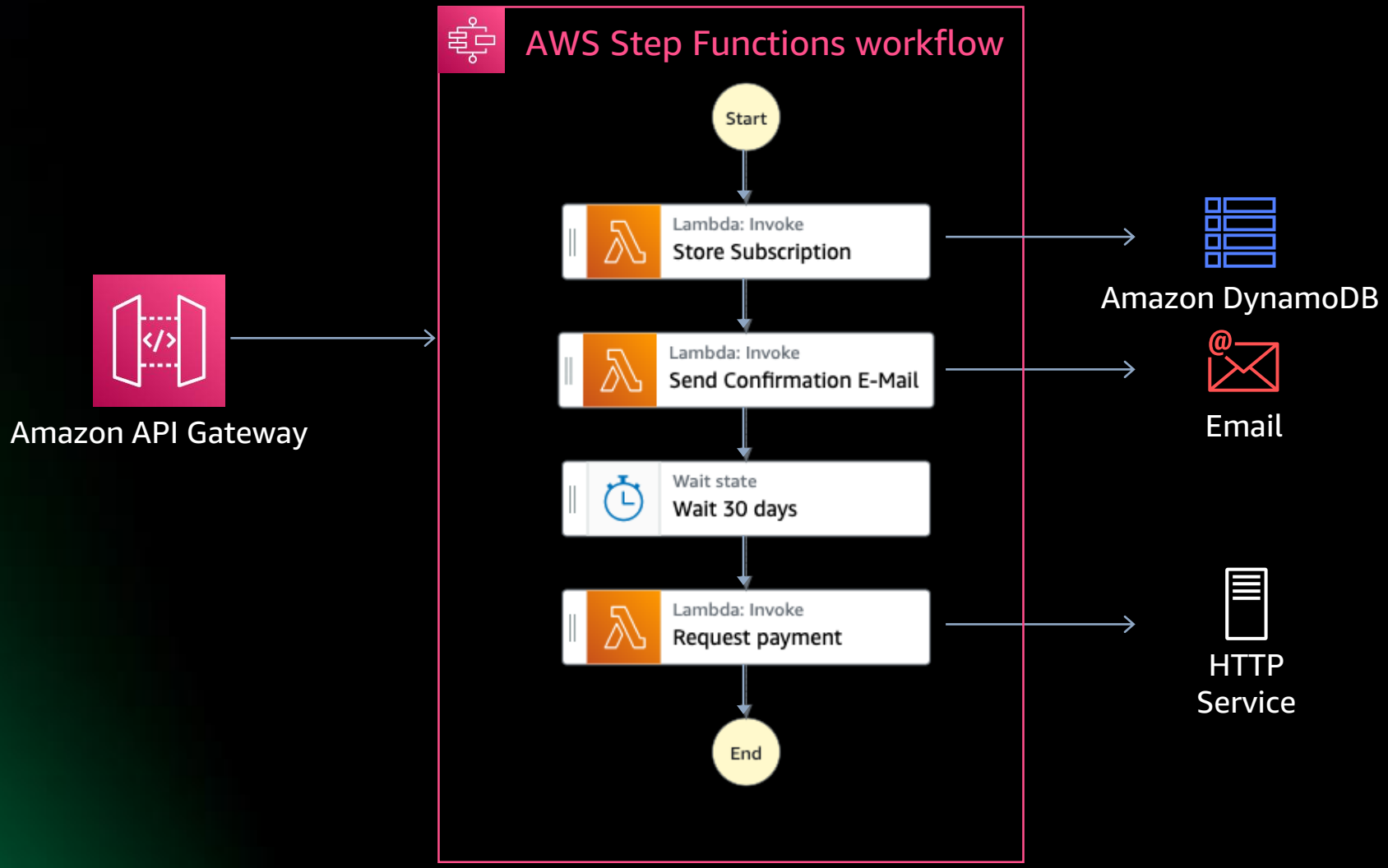

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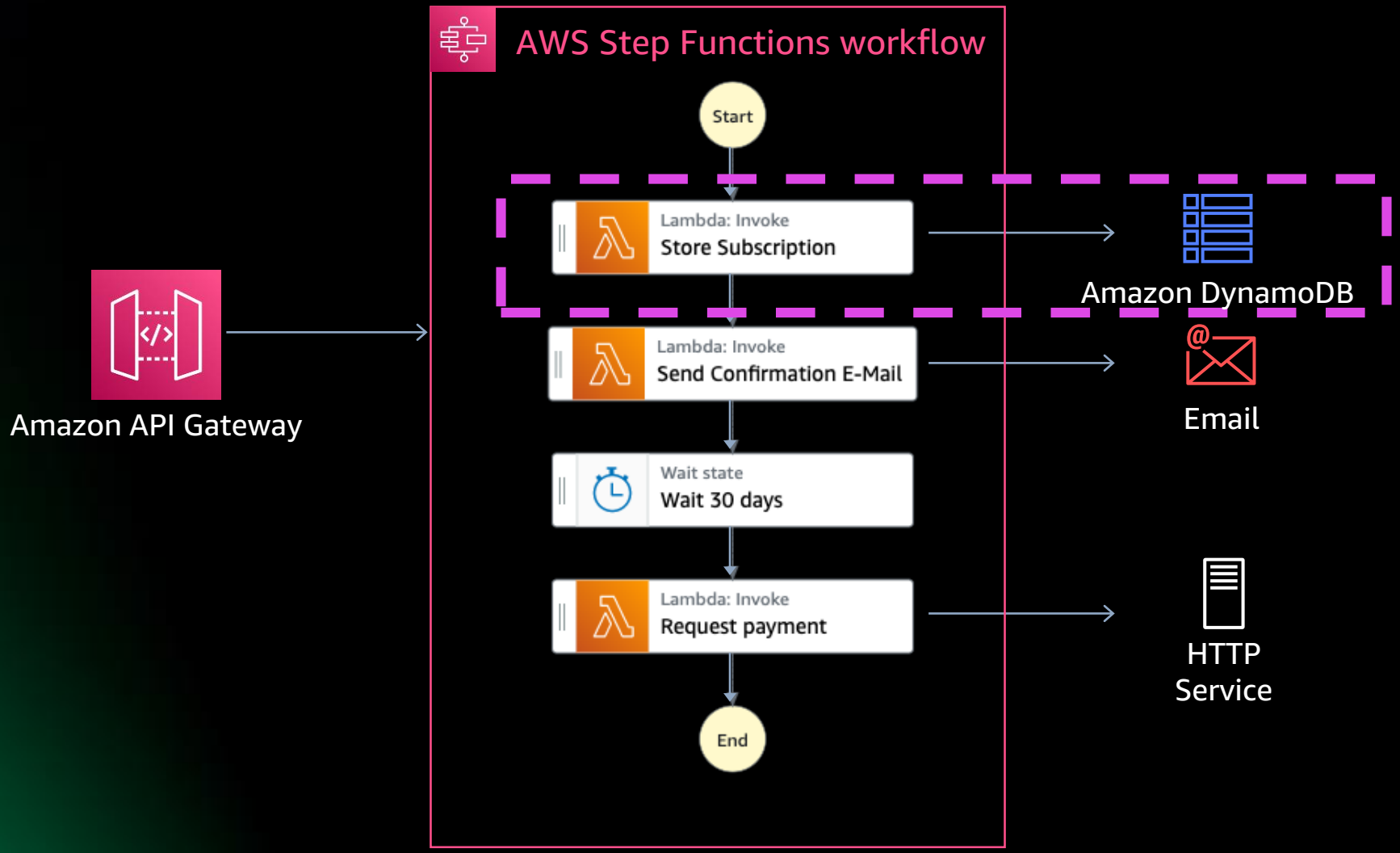

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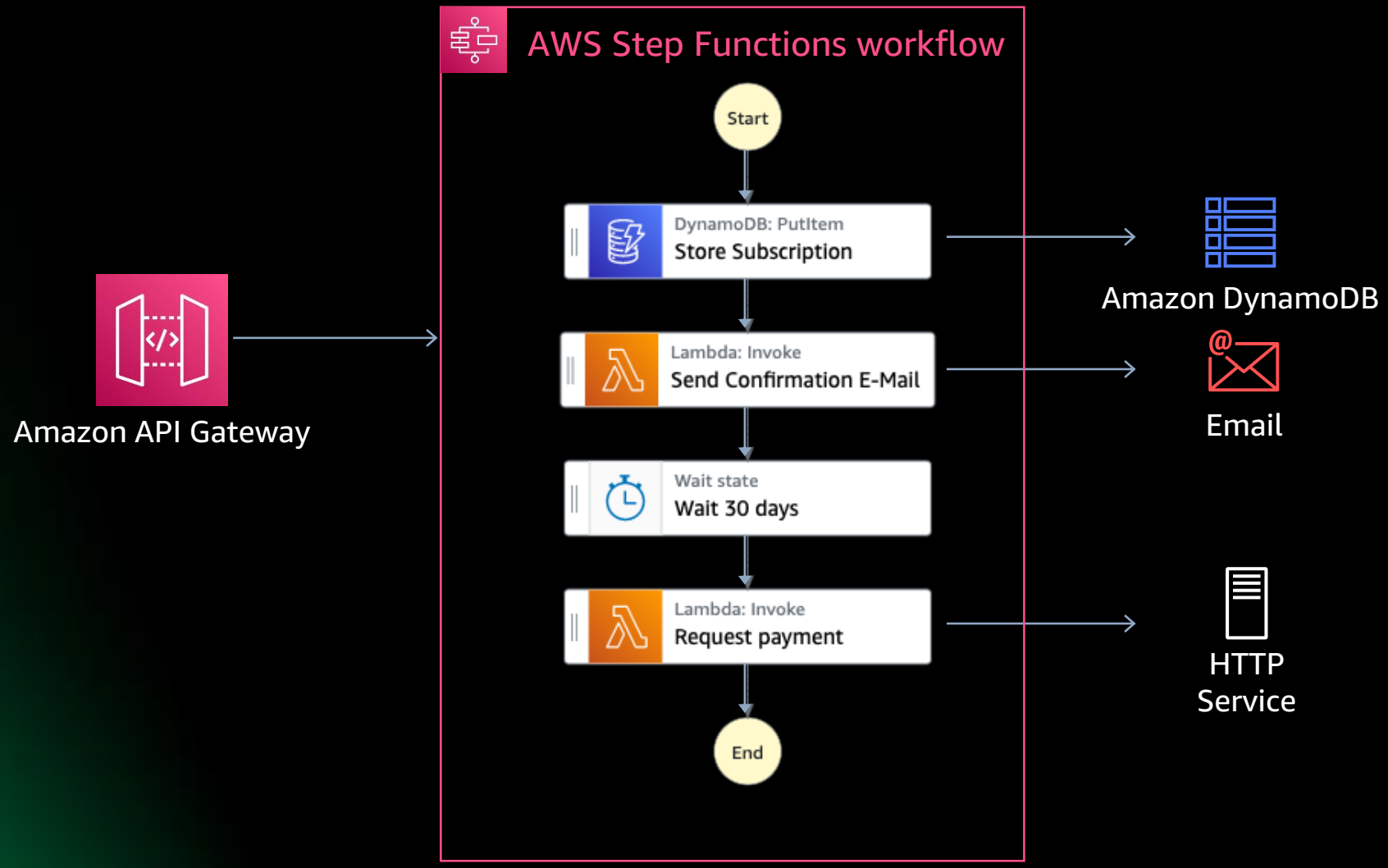

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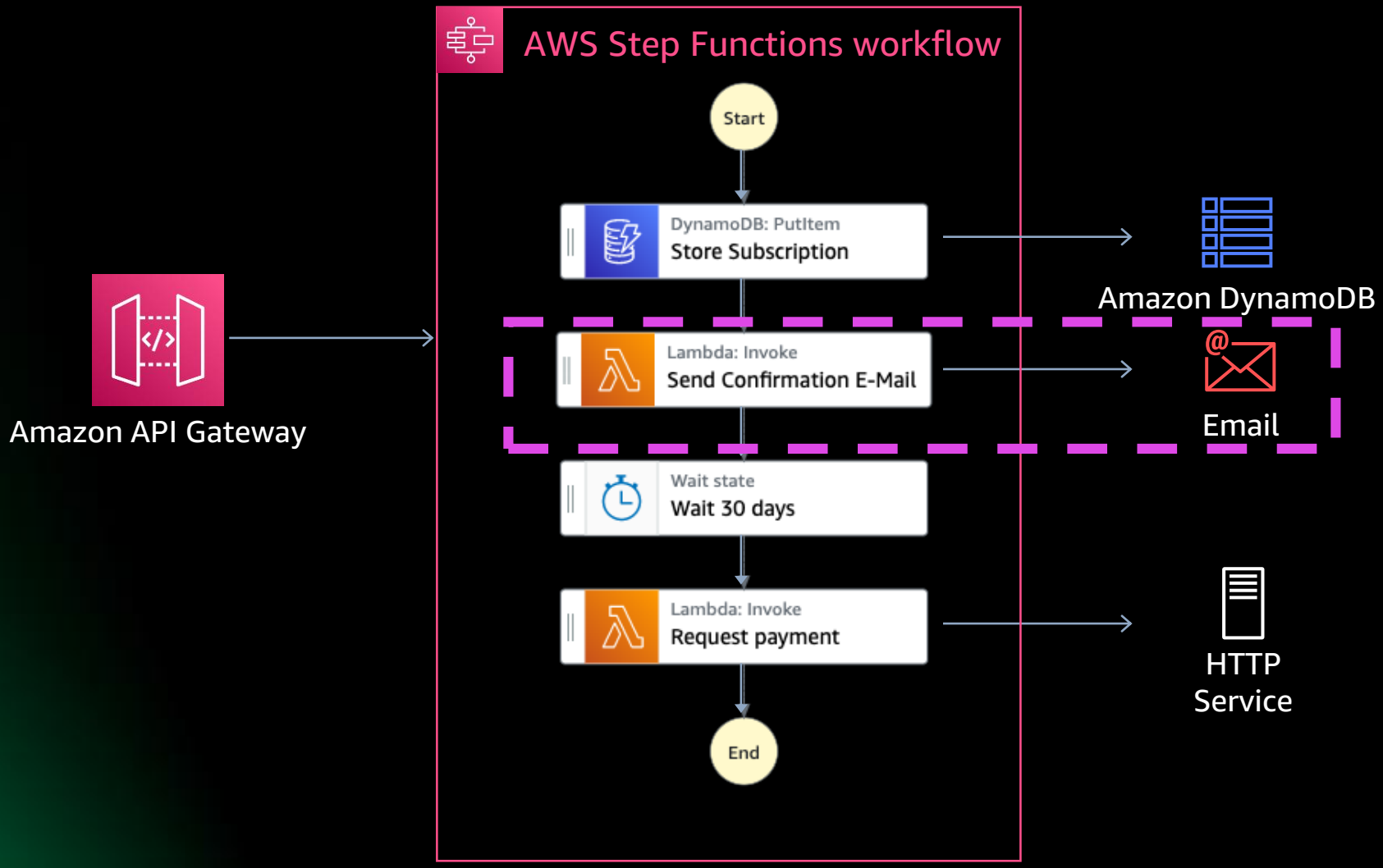

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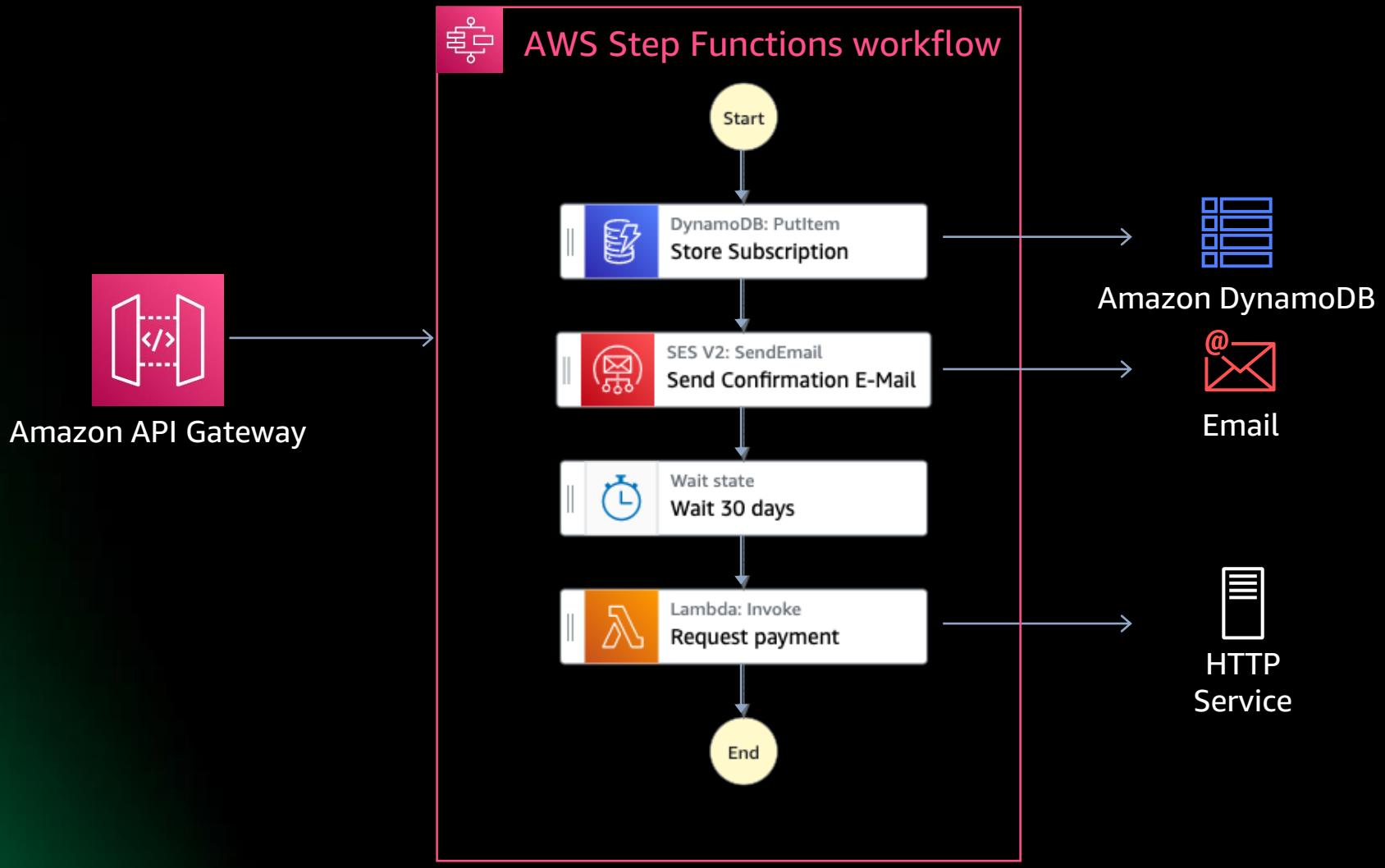

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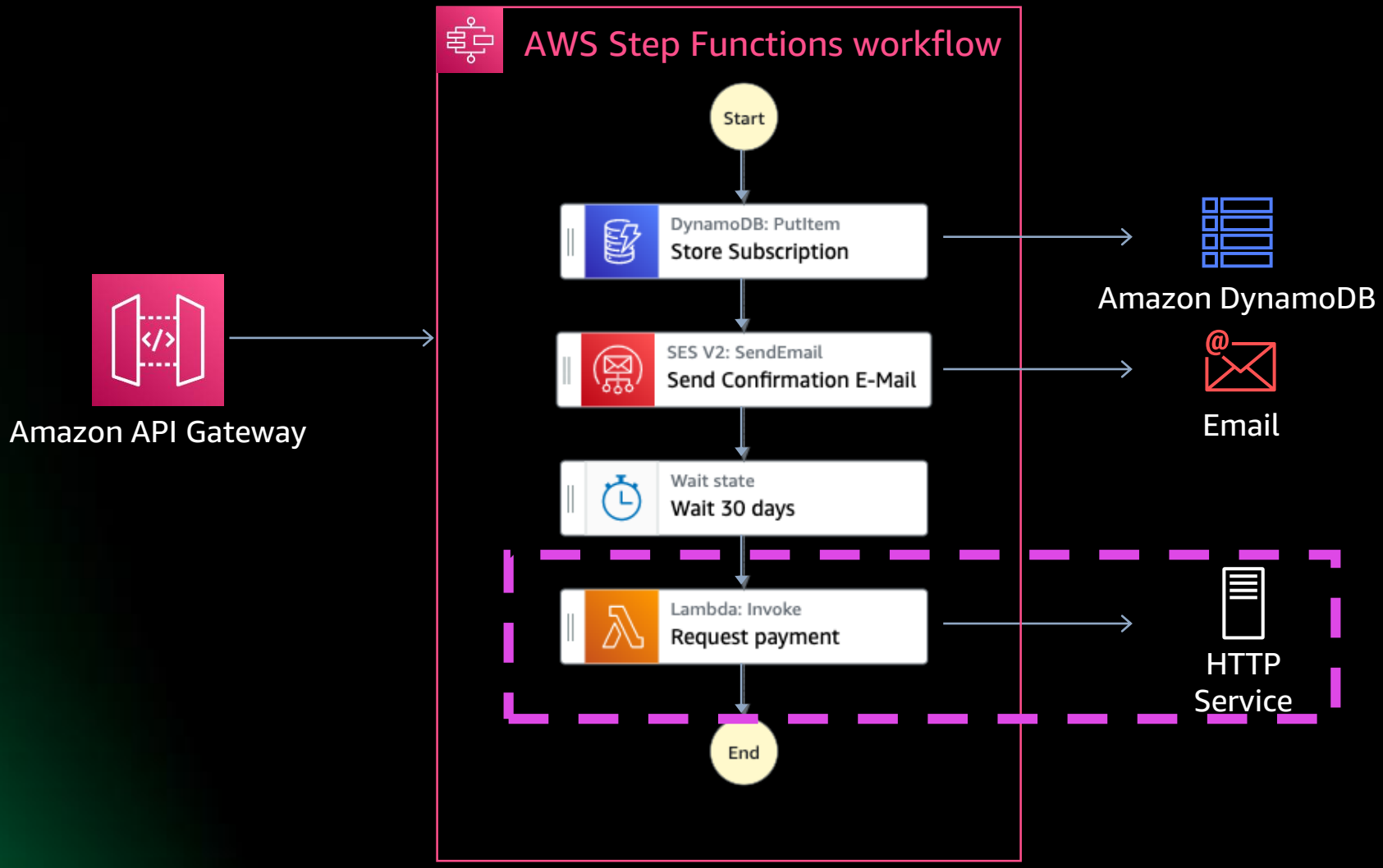

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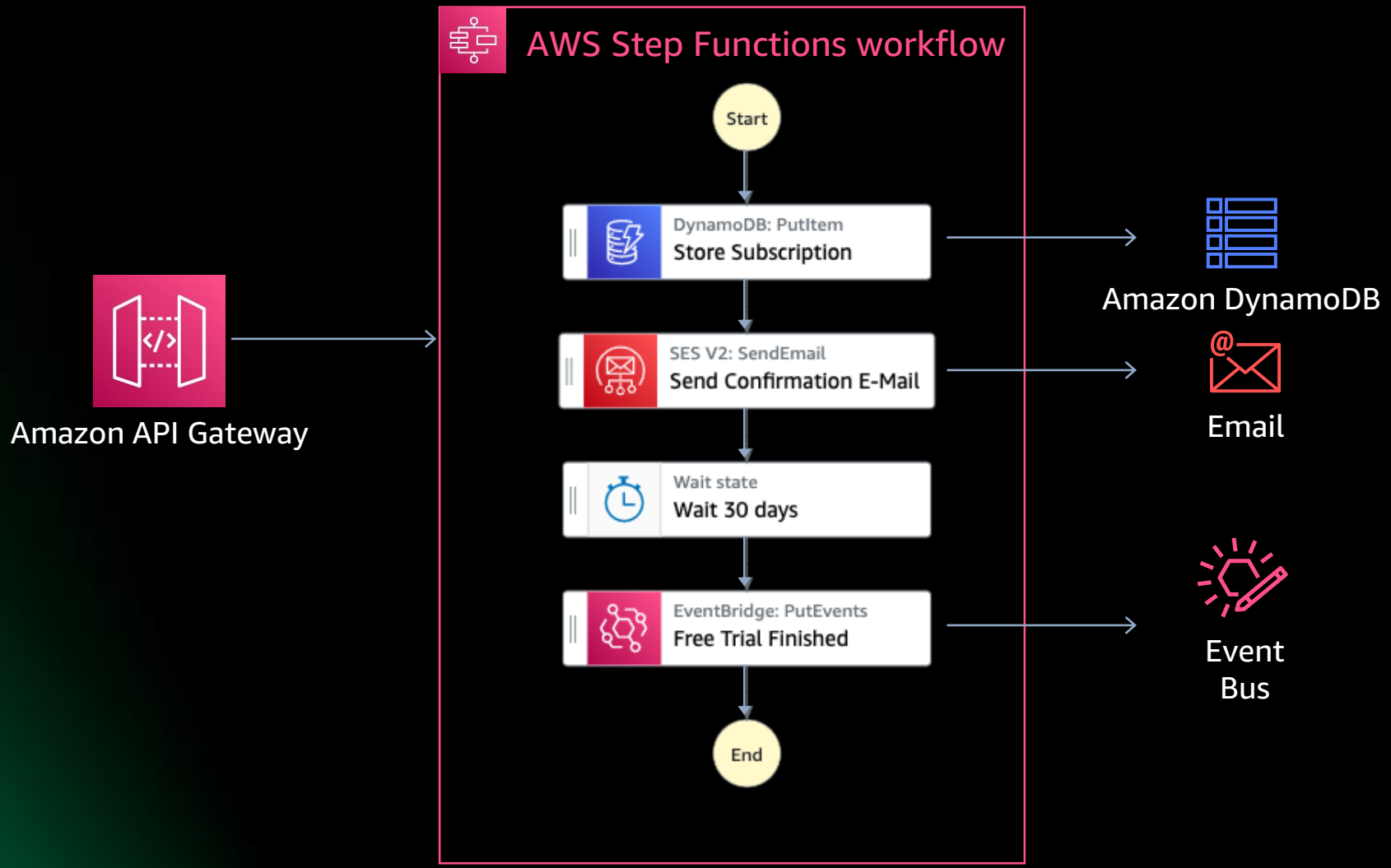

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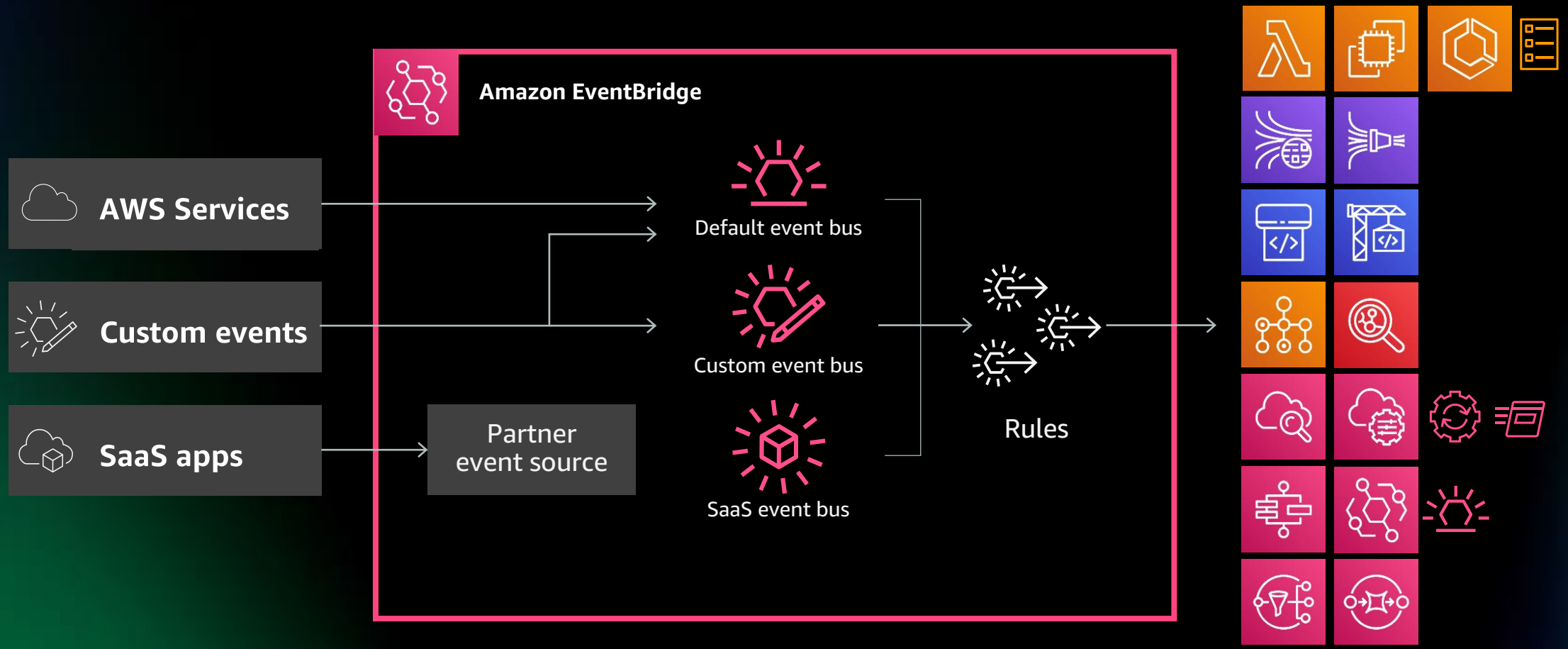
Amazon EventBridge Architecture



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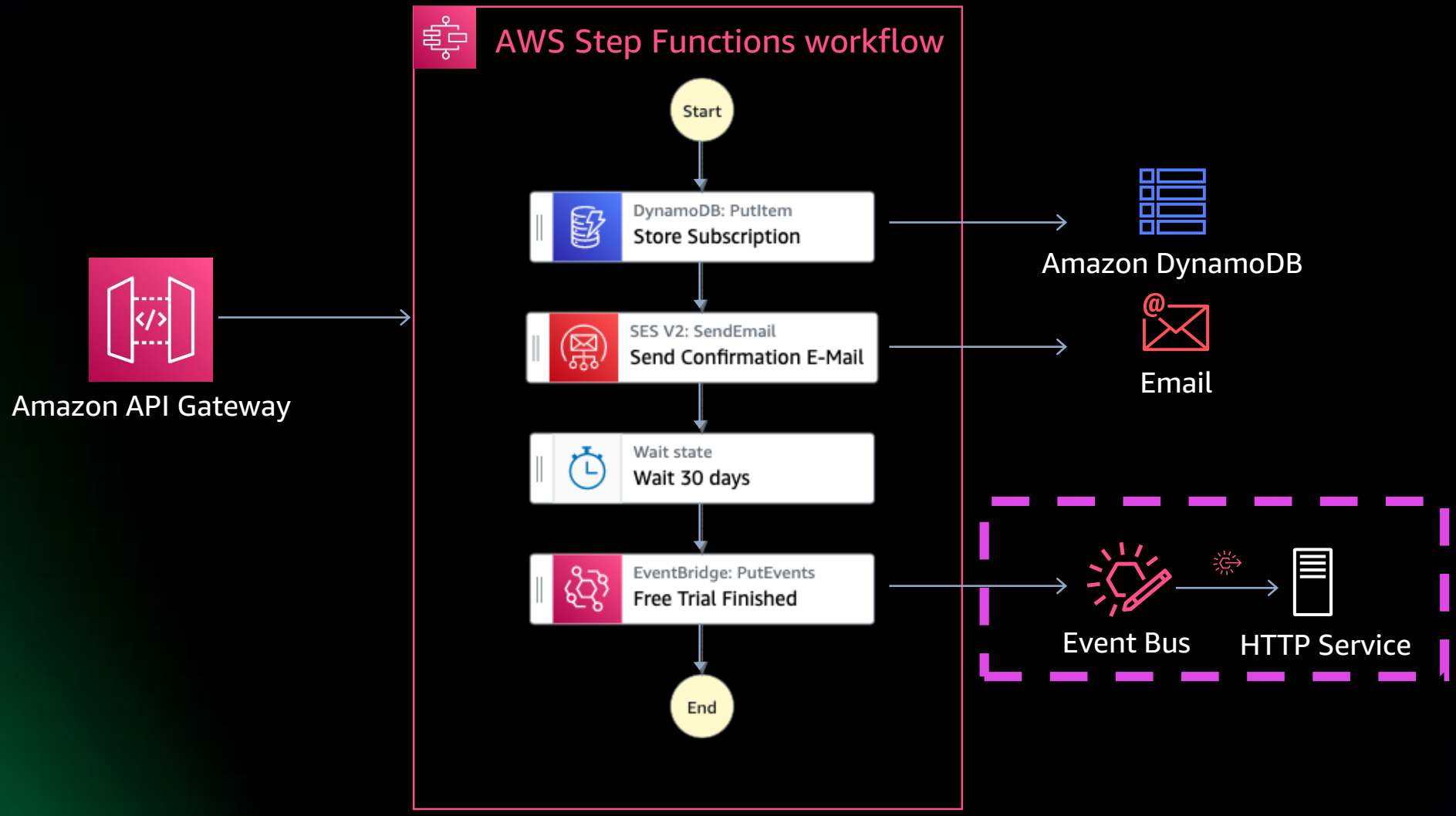

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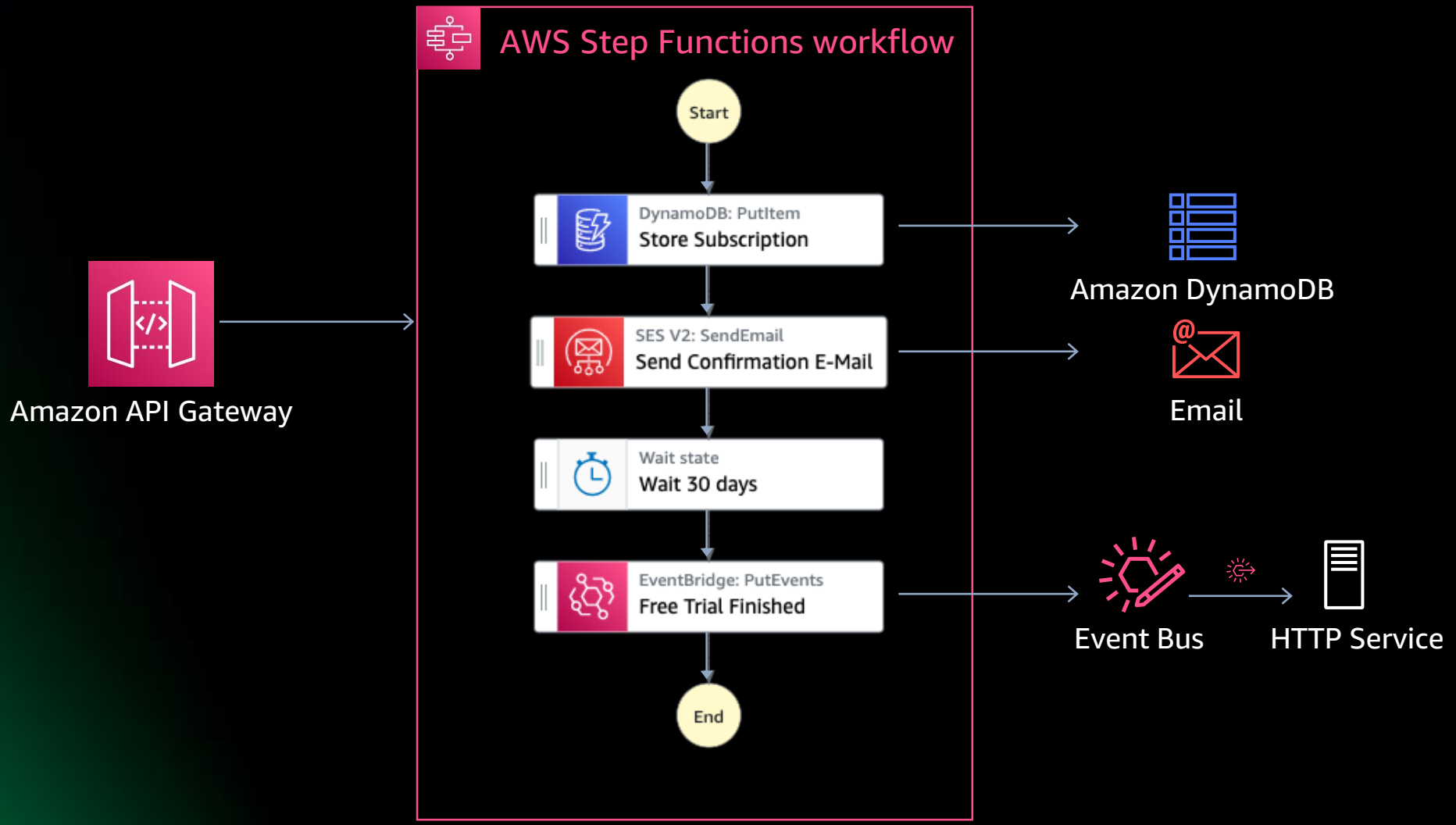

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AWS Cloud Development Kit

Familiar
Your language
Just classes and methods

Tool Support
AutoComplete
Inline documentation

Abstraction
Sane defaults
Reusable classes

```
class UrlShortener extends Stack {
  constructor(scope: App, id: string, props?: UrlShortenerProps) {
    super(scope, id, props);

    const vpc = new ec2.Vpc(this, 'vpc', { maxAzs: 2 });
    const cluster = new ecs.Cluster(this, 'cluster', { vpc: vpc });
    const service = new patterns.NetworkLoadBalancedFargateService(this, 'sample-app', {
      cluster,
      taskImageOptions: {
        image: ecs.ContainerImage.fromAsset('ping'),
      },
      dom
    });
      domainName
      domainZone

    // Setup AutoScaling policy
    const scaling = service.service.autoScaleTas
    scaling.scaleOnCpuUtilization('CpuScaling',
      targetUtilizationPercent: 50,
      scaleInCooldown: Duration.seconds(60),
      scaleOutCooldown: Duration.seconds(60)
    });
  }
}
```

```
(property) patterns.NetworkLoadBala
ncedServiceBaseProps.domainName?: s
tring | undefined

The domain name for the service, e.g.
"api.example.com."

@default

- No domain name.
```

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Resources

- Amazon API Gateway: Working with models and mapping templates
- AWS Step Functions: Optimized integrations
- AWS Step Functions: AWS SDK service integrations
- AWS Step Functions: Intrinsic functions
- Amazon EventBridge: API destinations

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Visit the Modern Applications Resource Hub

Dive deeper with these resources to help you develop an effective plan for your modernization journey.

- Build modern applications on AWS
- Business value of cloud modernization
- An introduction to event-driven architectures
- Accelerate full-stack web and mobile app development
- Determining the total cost of ownership: Comparing serverless and server-based technologies
- Building event-driven architectures with AWS
- Continuous learning, continuous modernization

https://tinyurl.com/modern-apps-aws

Visit resource hub

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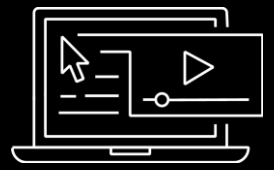

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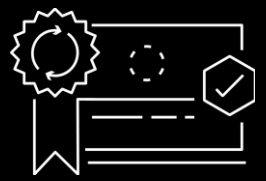

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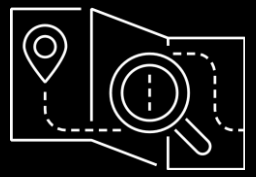
AWS Certified DevOps – Professional



Create a self-paced learning roadmap
AWS ramp-up guide - Developer
AWS ramp-up guide - DevOps

aws

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