

Fundamental Cloud Concepts for AWS

Understanding Cloud Computing



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AWS Cloud Practitioner Learning Path

Fundamental Cloud
Concepts for AWS

Understanding AWS
Core Services

Introduction to Security &
Architecture on AWS

AWS Certified Cloud
Practitioner Exam Prep



Setting Up an AWS Account

Demo

Creating a new personal AWS account

Activating the new account

Configuring a budget alert for the account



Traditional Data Centers

Globomantics Social Network



GLOBOMANTICS

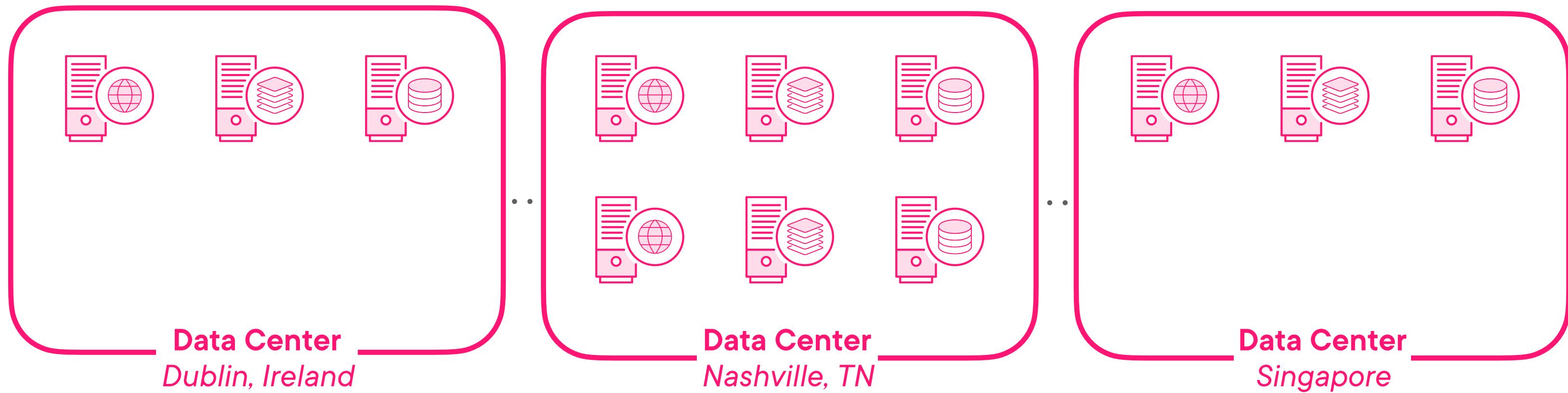
Launching a new social network for professionals

Focusing on the United States at launch

Looking to expand into Europe and Asia if launch is successful

Securing funding for the initial infrastructure

Social Network Data Centers



Large up-front investment

Forecasting demand is difficult

Slow to deploy new data centers and servers

Maintaining data centers is expensive

You own all of the security and compliance burden

Traditional Data Centers





Benefits of Cloud Computing

**Trade capital expense for
variable expenses**

**Benefit from massive
economies of scale**

Stop guessing capacity

Increase speed and agility

**Stop spending money
maintaining data centers**

Go global in minutes

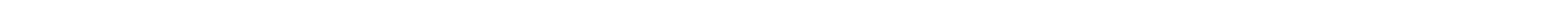
Advantages of Cloud Computing

Well-Architected Framework, Amazon Web Services

“Elasticity is the ability to acquire resources as you need them and release resources when you no longer need them. In the cloud, you want to do this automatically.”

Reliability

**A solution's ability to provide functionality for its users when it is needed.
Amazon's global infrastructure is built to maximize reliability for your
cloud workloads.**



Agility

- The cloud lowers the cost of trying new ideas or business processes**
- Reduces the time required to maintain infrastructure**
- Reduces risk for the organization around security and compliance**
- Provides access to emerging technologies**

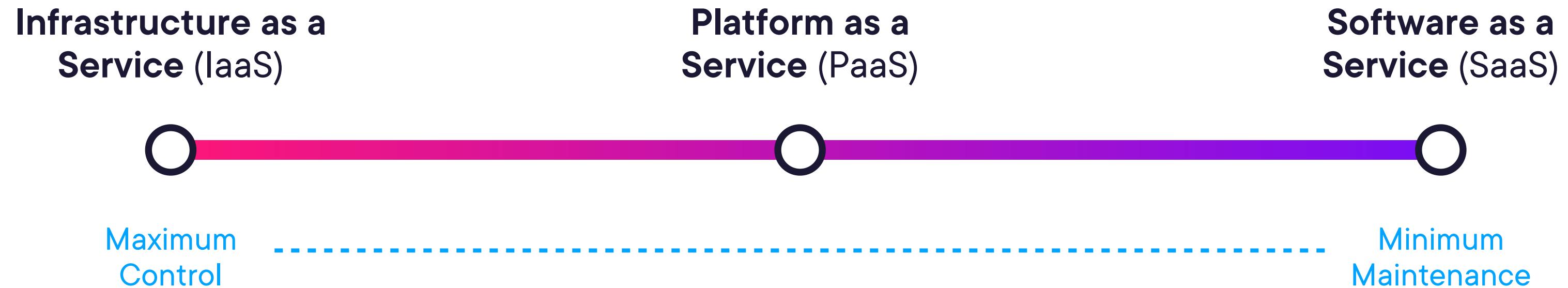


Types of Cloud Computing

Amazon Web Services

“Cloud computing is the on-demand delivery of compute power, database storage, applications, and other IT resources through a cloud services platform via the Internet with pay-as-you-go pricing.”

Cloud Computing Models



Cloud Deployment Models

Public Cloud

Deployed onto a public cloud provider like AWS

On-Premises Private Cloud

Cloud-like platform in a private data center

Hybrid

Cloud applications connected to a private data center



| Cloud Computing Scenarios

Scenario 1



Roger's company runs several production workloads in its data center

They are using VMWare to manage infrastructure in their data center

They want to use AWS and integrate it with their data center for new workloads

Which cloud deployment model would his company be following?

Scenario 2



Eliza's company is trying to decide whether to fund a new line of business

Eliza's team is looking to monetize a new emerging technology

This new line of business will require new infrastructure

What benefit of cloud computing would be most relevant to her company?

Scenario 3



Jennifer is the CTO at an insurance company

They are considering moving to the cloud instead of colocating servers

They want to make sure they have maximum control of the cloud servers

Which cloud computing model would they need to leverage?



Summary



Summary

- Reviewed the course resources
- Created an AWS account for personal use
- Examined how organizations leverage traditional data centers
- Explored the benefits of cloud computing
- Reviewed cloud computing models
- Understood cloud computing deployment models

Scenario 1



Roger's company runs several production workloads in its data center

They are using VMWare to manage infrastructure in their data center

They want to use AWS and integrate it with their data center for new workloads

Which cloud deployment model would his company be following?

Solution: Hybrid Cloud

Scenario 2



Eliza's company is trying to decide whether to fund a new line of business

Eliza's team is looking to monetize a new emerging technology

This new line of business will require new infrastructure

What benefit of cloud computing would be most relevant to her company?

Solution: Pay as you go

Scenario 3



Jennifer is the CTO at an insurance company

They are considering moving to the cloud instead of colocating servers

They want to make sure they have maximum control of the cloud servers

Which cloud computing model would they need to leverage?

Solution: Infrastructure as a Service (IaaS)