

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

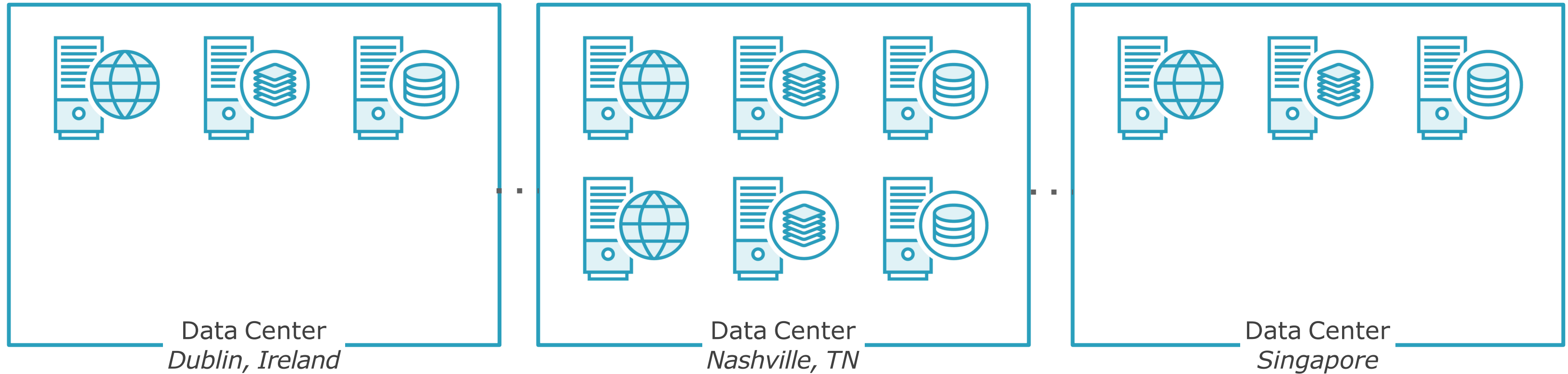
Launching a new social network for professionals

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

“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.”

Well-Architected Framework, Amazon Web Services

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

“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.”

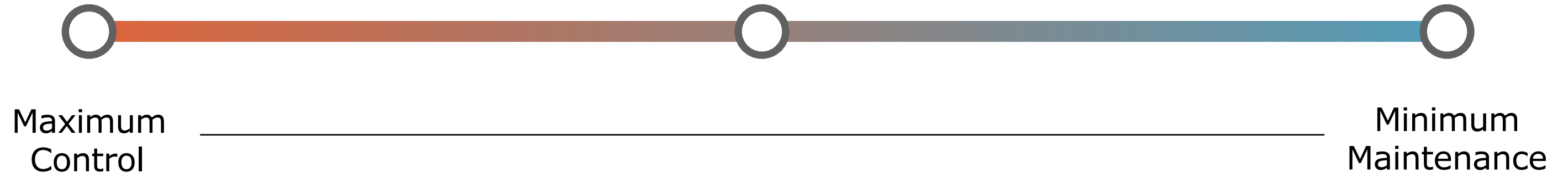
Amazon Web Services

Cloud Computing Models

Infrastructure as a
Service (IaaS)

Platform as a
Service (PaaS)

Software as a
Service (SaaS)



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 have cloud-like infrastructure in their datacenter

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)