

# Fundamental Cloud Concepts for AWS

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## 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

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# Demo

**Creating a new personal AWS account**

**Activating the new account**

**Configuring a budget alert for the account**

# Traditional Data Centers

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# Globomantics Social Network



**GLOBOMANTICS**

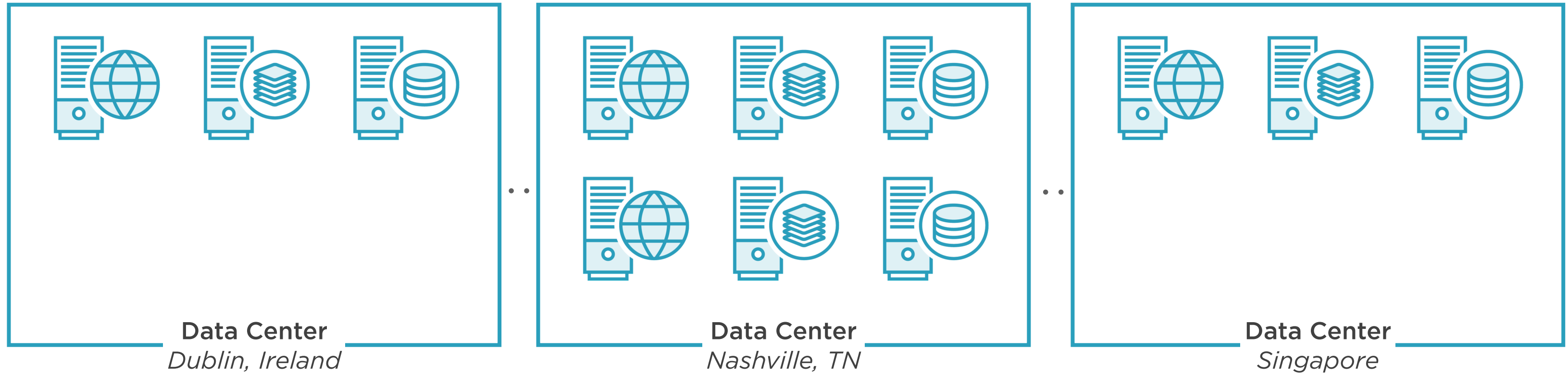
**Launching a new social network for professionals**

**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

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**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

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“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.”

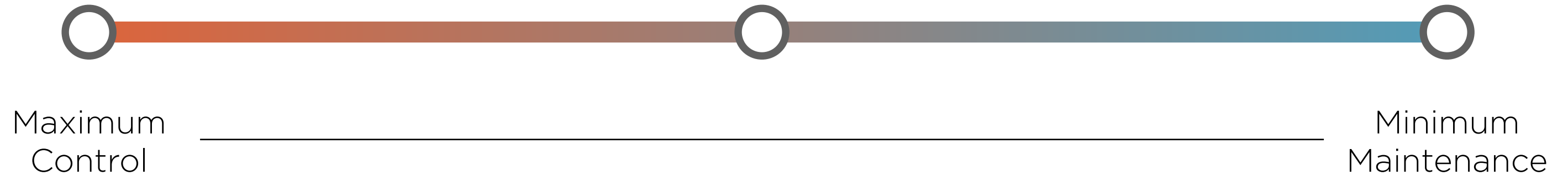
**Amazon Web Services**

# 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

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# 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

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# 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 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)**