



Passing the AWS Cloud Practitioner exam

Study Group #1: About the exam, what is the Cloud & AWS?

Presented By:
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Linux Academy



About Me

- Former AWS Instructor at Linux Academy
- Helped thousands get AWS certified
- Holds AWS certifications, including associate & pro-level certs

About Linux Academy

- We've trained hundreds of thousands of people
- 12,000+ Amazon employees train with us
- We offer certification prep, deep dive, and other training across 9 different categories including AWS, DevOps, Linux, Security, and more

About the Cloud Practitioner Exam

Exam Domains & how we'll cover them

Domain 1: Cloud Concepts

- 1.1 Define the AWS Cloud and its value proposition
- 1.2 Identify aspects of AWS Cloud economics
- 1.3 List the different cloud architecture design principles

Domain 2: Security

- 2.1 Define the AWS Shared Responsibility model
- 2.2 Define AWS Cloud security and compliance concepts
- 2.3 Identify AWS access management capabilities
- 2.4 Identify resources for security support

Domain 3: Technology

- 3.1 Define methods of deploying and operating in the AWS Cloud
- 3.2 Define the AWS global infrastructure
- 3.3 Identify the core AWS services
- 3.4 Identify resources for technology support

Domain 4: Billing and Pricing

- 4.1 Compare and contrast the various pricing models for AWS
- 4.2 Recognize the various account structures in relation to AWS billing and pricing
- 4.3 Identify resources available for billing support



Is this exam right for you?



Why do you want this certification?

- Can help get a promotion
- Can help with customer, prospect, or co-worker conversations
- Can help you get started in the Cloud/IT industry

The Cloud Practitioner certification is great for Sales, Marketing, Finance, Executives, or those who work directly in AWS or need to be able to speak about AWS at a fairly high technical level.

Great stepping stone for other, more technical AWS certifications

Other Options



AWS Essentials



AWS Certified Solutions Architect – Associate Level

Exam Overview

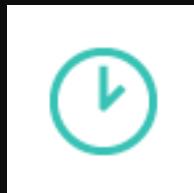


Exam Format

Multiple choice, multiple answer – 65 questions

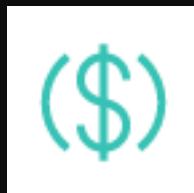
5) Which of the following is AWS's responsibility under the AWS shared responsibility model?

- A) Configuring third-party applications
- B) Maintaining physical hardware
- C) Securing application access and data
- D) Managing custom Amazon Machine Images (AMIs)



Exam Time

Up to 90 minutes



Exam Cost

\$100 per attempt (no limit on number of attempts)



Demystifying the Cloud

What Is the Cloud?





Business Challenges

Cost Control

- Capital Expenditures for equipment purchases
- Plan & spend for future growth
- Hardware sitting unused

Distributed Workforce

- More and more organizations have remote offices or remote employees, but still need access to resources

Slow Provisioning

- After purchasing equipment, you have to:
 - Provision
 - Test
 - Update
 - Maintain constant security

Then the Cloud came along...

- ✓ Office 365
- ✓ Dropbox
- ✓ Salesforce
- ✓ Zoom
- ✓ AWS + other cloud providers



What Is the Cloud?

Infrastructure as a Service (IaaS)

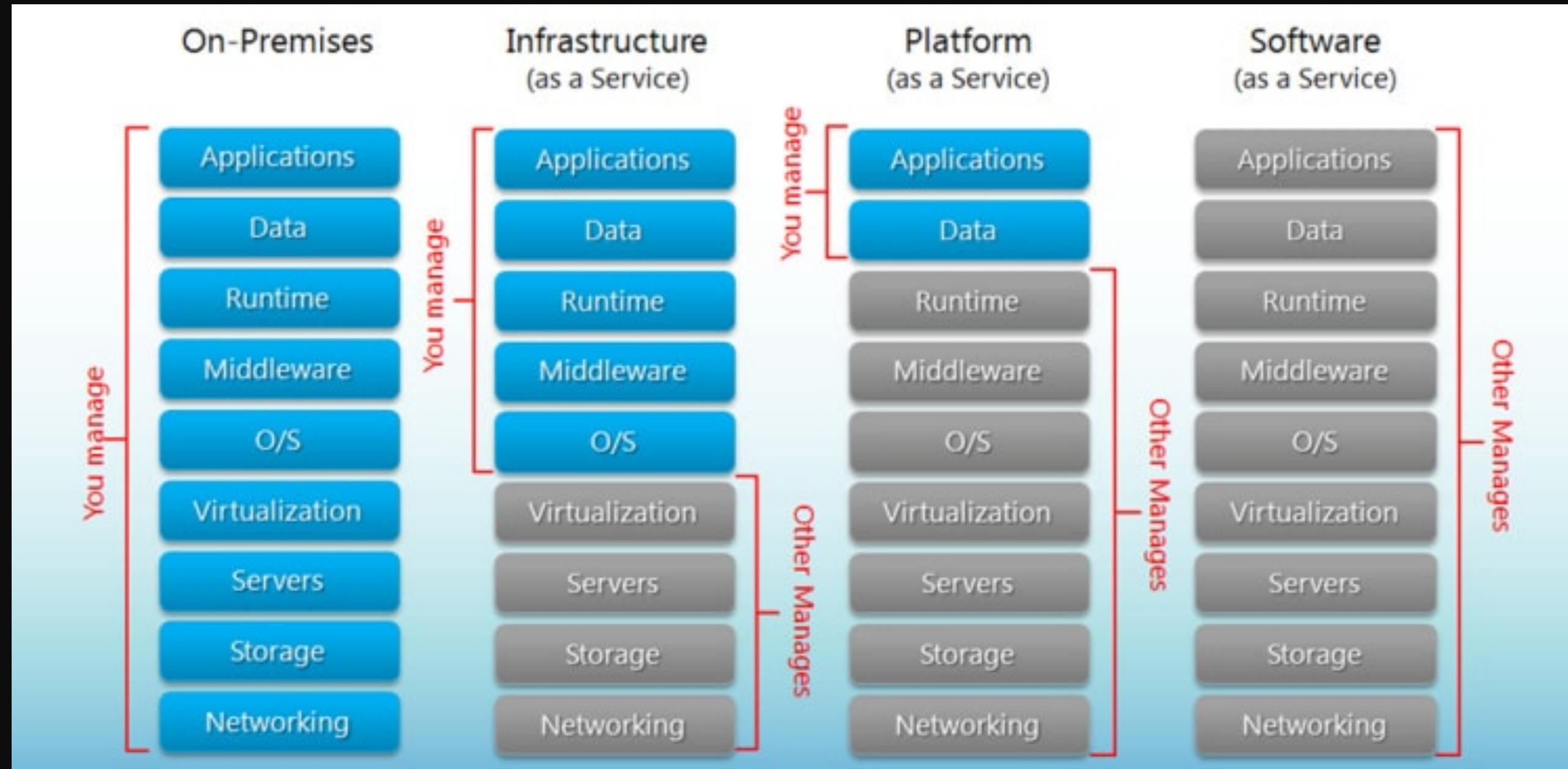
- Part or all of an infrastructure platform provided by a third party
- Examples:
 - DigitalOcean
 - Rackspace
 - AWS (EC2)

Platform as a Service (PaaS)

- Entire infrastructure and operating system provided by a third party
- Examples:
 - Heroku
 - AWS (Elastic Beanstalk)

Software as a Service (SaaS)

- Entire infrastructure, operating system, and software provided by a third party
- Examples:
 - Zoom
 - Dropbox



Credit: <https://www.hostingadvice.com/how-to/iaas-vs-paas-vs-saas/>

Cloud Types

Private Cloud

- On-premises – you control all of the layers
- Pros:
 - Fully customizable
 - You control physical security
- Cons:
 - **Lack of elasticity**
 - **High overhead**
 - **High capital costs**
 - Potentially higher latency

Hybrid Cloud

- Combination of public and private cloud
- Pros:
 - Adds flexibility
- Common uses include transition to public cloud and backup/Disaster Recovery

Public Cloud

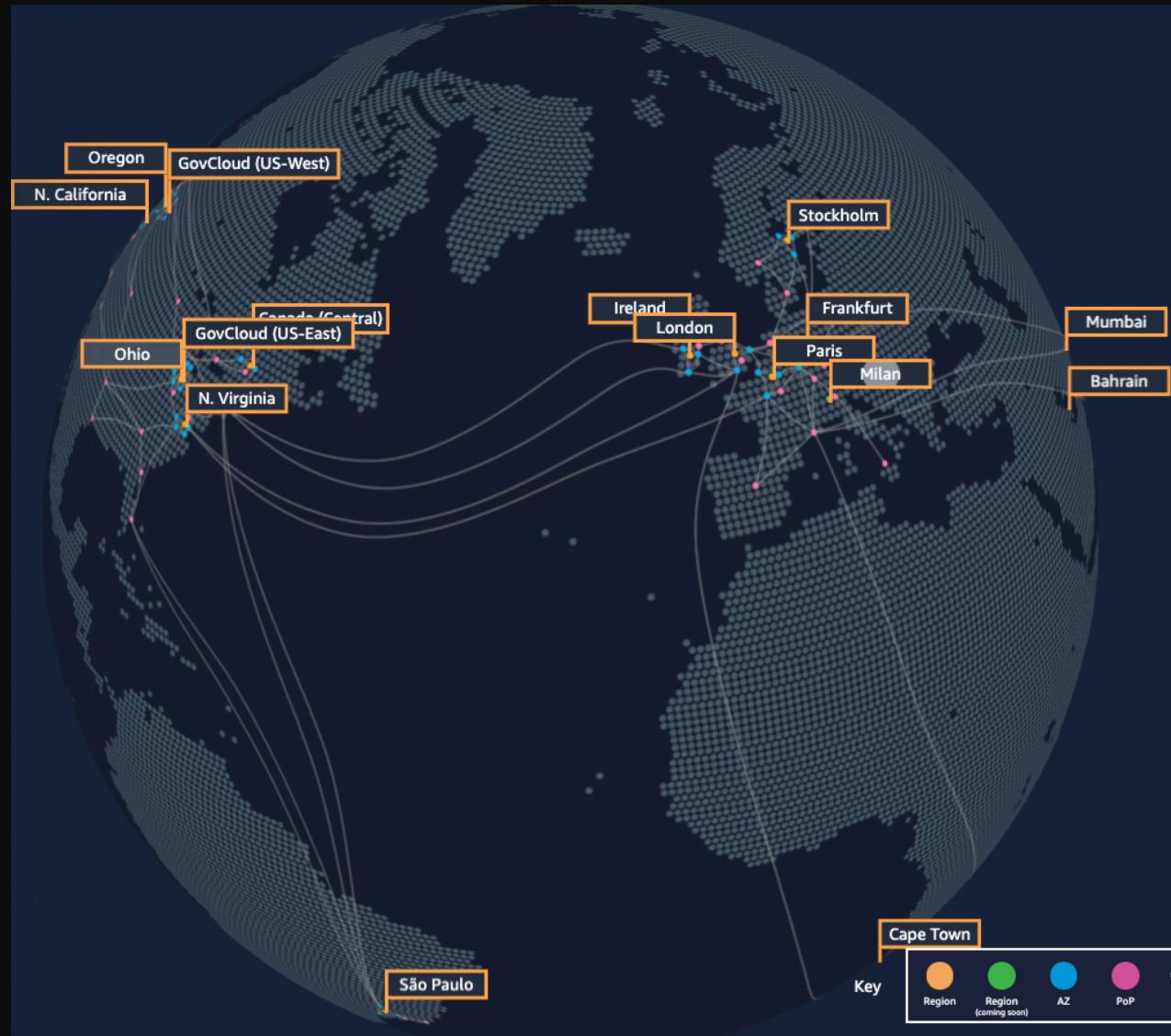
- No on-prem
- Pros:
 - No capital costs
 - **Pay as you go**
 - **Elasticity and infinite scalability**
 - Low overhead
- Cons:
 - Less control over hardware
 - Less control over physical security
 - Could have governance issues

What type of cloud is AWS?

What Is the AWS Cloud Made Of?

AWS Global Infrastructure

- Data Centers
 - Secure facilities where AWS equipment is stored and managed
- Regions (21+)
 - Geographically separated locations around the world
- Availability Zones (AZs) (64+)
 - Regions have two or more AZs for fault tolerance and redundancy
 - Connected via low latency network
- Edge Locations (170+)
 - Delivers content closer to where users are for low latency
 - Backbone infrastructure of Amazon CloudFront



Pop Quiz

Question: What do you call data centers that are connected via low latency networks?

- A) Regions**
- B) Data center**
- C) Edge locations**
- D) Availability Zones**

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AWS Shared Responsibility Model

AWS is responsible for:

Security 'of' the cloud, like:

- ✓ Physical security
- ✓ Data decommissioning

You are responsible for:

Security 'in' the cloud, like:

- ✓ Patching software
- ✓ Properly configuring and securing resources (like S3, EC2, databases)
- ✓ Data encryption



Pop Quiz

Question: Who is responsible for properly discarding of hard drives storing your customer's data?

- A) Your organization**
- B) Amazon Web Services**
- C) A 3rd party managing data centers for AWS**
- D) It's a shared responsibility between your organization and AWS**

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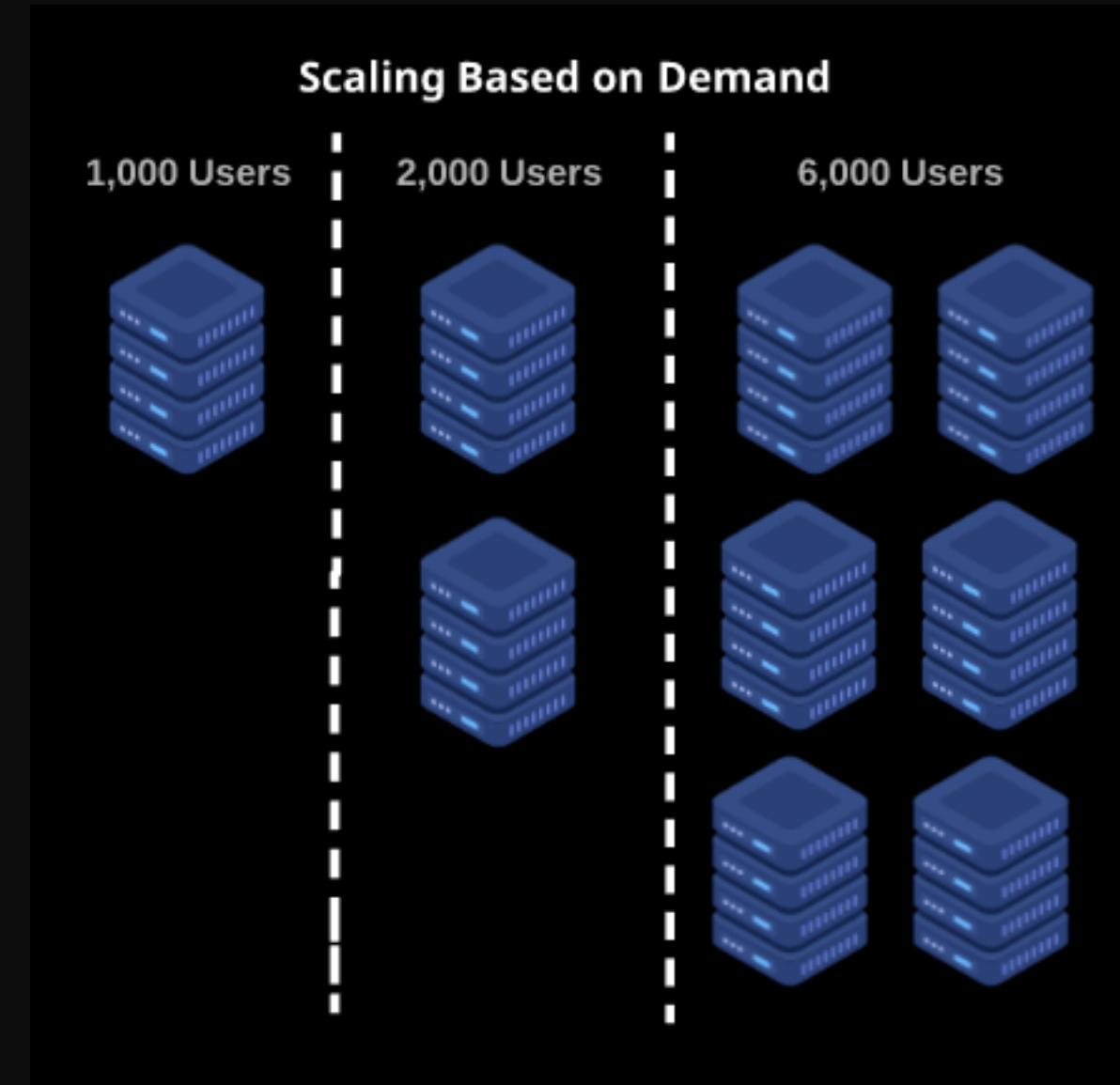
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Cloud Benefits & Terminology

Nearly infinite Scalability

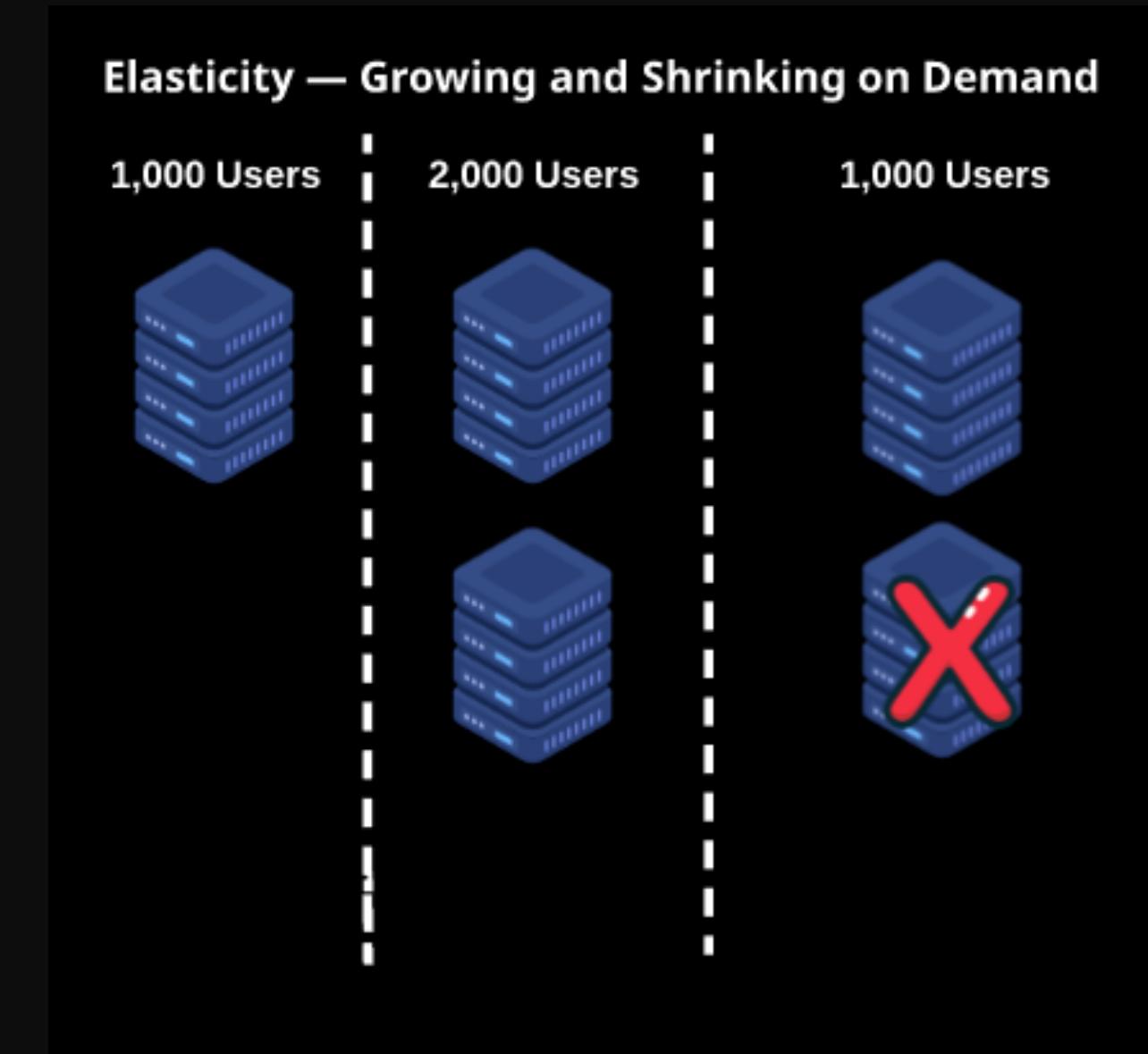
- Ability to grow in size, capacity, scope when needed
- AWS allows you to do this on demand versus 2+ years ahead
- Typically can scale in seconds or minutes, versus hours/weeks/months



Cloud Benefits & Terminology

Elasticity

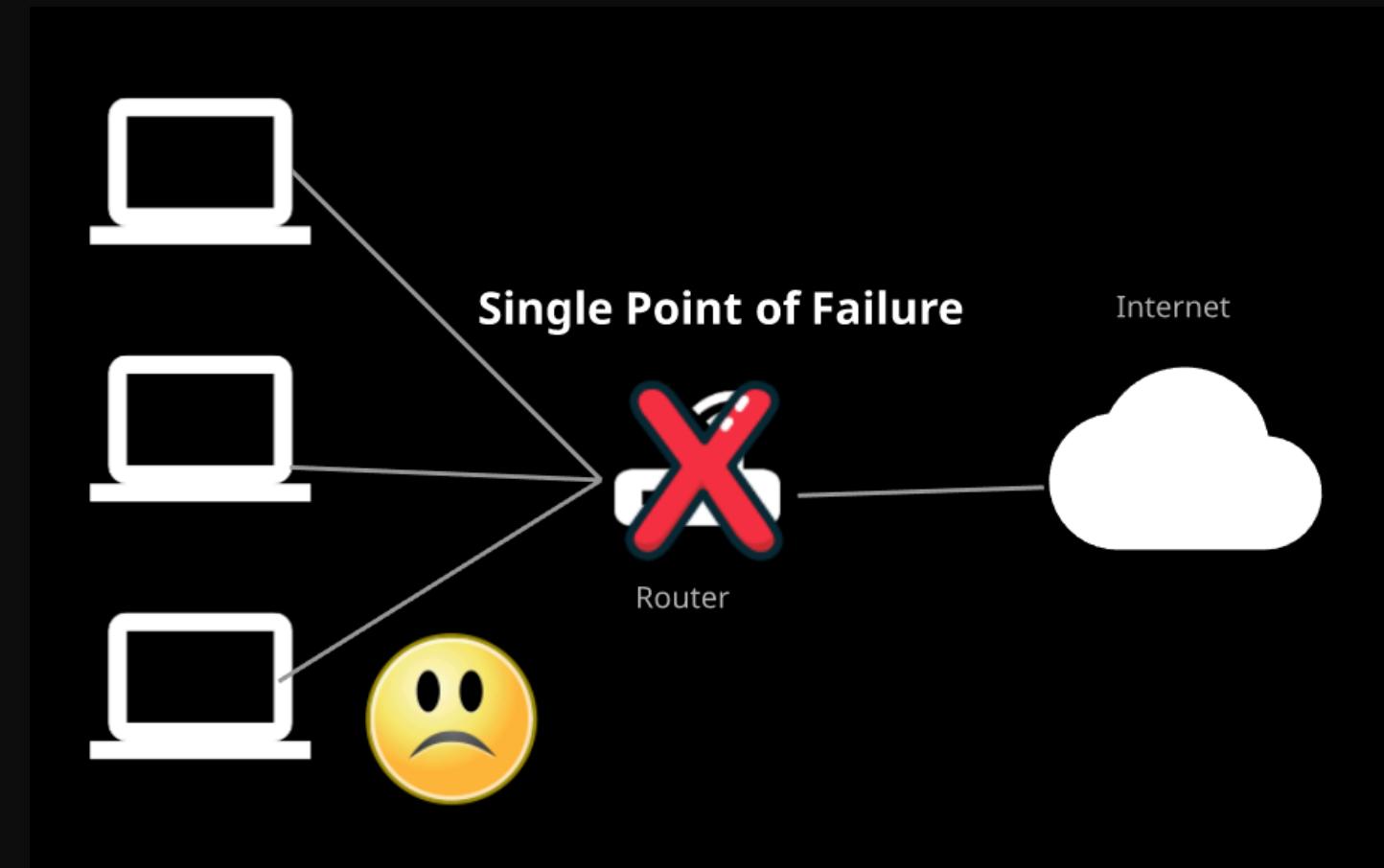
- Ability to not only grow, but then shrink when no longer needed
- Can offer significant cost savings



Cloud Benefits & Terminology

High Availability, Fault Tolerance

- High Availability:
 - Systems being accessible when someone or something tries to access them
- Fault Tolerance:
 - The ability to withstand a certain amount of failure while still being functional



Pop Quiz

Question: Which of these are benefits of the AWS cloud versus on-premises? (Select 2)

- A) AWS removes IT costs
- B) You are able to scale in minutes versus days
- C) You can completely customize the servers without having to always manage them
- D) Lower up-front IT costs

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Homework

Review key terms & additional information

- ✓ **Download presentation**
- ✓ **Download sample AWS exam questions and answer them:**
 - ✓ #5, #6
- ✓ **Review the GitHub repo**

Read up on the following:

- ✓ **Identity and Access Management**
- ✓ **IAM Users**
- ✓ **IAM Groups**
- ✓ **IAM Policies**
- ✓ **Access Keys**

Additional Info

Next meeting – August 21st:
Getting Started with AWS

Linux Academy Community
<https://linuxacademy.com/join/community>

Linux Academy Slack Channel
<https://linuxacademy-community-slack.herokuapp.com/>

Thank you