

# Webinar 3: Sẵn sàng đối phó thảm họa với các giải pháp DR trên AWS



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# Agenda

- Resilience at AWS
- Disaster Recovery Strategies on AWS
- Demo
- Q&A
- Minigame



# Disaster Recovery Strategies on AWS

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# **Disaster Recovery Strategies on AWS**

- High Availability (HA) and Disaster Recovery (DR)
- RTO/RPO
- Strategies for Disaster Recovery in AWS

# Multi-AZ for High Availability (HA)





## Multi-AZ for Disaster Recovery (DR)



Each AWS Region has multiple AZs



A **Region** is a physical location in the world

Each AZ includes one or more discrete data centers



Data centers, each with redundant power, networking, and connectivity, housed in separate facilities



# Multi-Region for Disaster Recovery (DR)



Each AWS Region has multiple AZs





Recovery Point and Recovery Time Objective (RPO/RTO)

How much data can you afford to recreate or lose?

How quickly must you recover? What is the cost of downtime?



# Recovery Time Objective (RTO)





Length of Service Interruption

## **Recovery Point Objective (RPO)**





Data Loss before Service Interruption

#### **Strategies for Disaster Recovery**





















#### Strategy: Back up and restore





## Failover: Back up and restore to AZ





#### Failover: Back up and restore to Region





# Strategy: Pilot Light





# Failover: Pilot Light





(Aurora Global Database)

# Strategy: Warm Standby





## Failover: Warm Standby





(Aurora Global Database)

## Strategy: Multi-Site Active/active







# Demo

#### Strategies for Disaster Recovery



Backup &	Pilot	Warm	Multi
Restore	Light	Standby	Site
RTO/RPO:	RTO/RPO:	RTO/RPO:	RTO/RPO:
Hours	10s of Minutes	Minutes	Real-Time
<ul> <li>Lower priority use cases</li> <li>Solutions: Cloud Storage, Backup Solutions</li> <li>Cost: \$ to \$\$</li> </ul>	<ul> <li>Lower RTO/RPO requirements</li> <li>Solutions: Database Service, Replication Solutions</li> </ul>	<ul> <li>Core Applications and Services</li> <li>Solutions: Cloud Storage, Database Service, Replication Solutione</li> </ul>	<ul> <li>Mission Critical Applications and Services</li> <li>Solutions: Database Service, Replication Solutions</li> </ul>

#### Demo Architecture: Pilot Light











#### **AWS services and program**

AWS FIS

AWS Resilience Hub

AWS Elastic Disaster Recovery

AWS Well-Architected



CMC Telecommunication Infrastructure Corporation

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