

# Disaster Recovery with IBM Cloud Virtual Servers

## PHASE 1

### PROBLEM DEFINITION:

Disaster recovery (DR) is a crucial aspect of any IT infrastructure strategy, ensuring that your systems and data are protected and can be quickly restored in case of unexpected events or disasters. IBM Cloud offers a range of services and solutions to help you implement disaster recovery for your virtual servers. Here are the steps and considerations for setting up disaster recovery with IBM Cloud Virtual Servers.

### PLATFORM DESIGN AND USER EXPERIENCE:

**CHALLENGE:** Design an intuitive and user-friendly platform that showcases artisanal products effectively.

**SOLUTION:** Invest in user-centered design, implement responsive web design, and conduct usability testing to ensure a seamless user experience.

### 1. Assessment and Planning:

Identify your critical workloads and data that need to be protected.

Determine your Recovery Point Objective (RPO) and Recovery Time Objective (RTO). RPO is the acceptable data loss, and RTO is the time it takes to recover your systems. Decide on the appropriate IBM Cloud data center or availability zone for your disaster recovery site.

### 2. IBM Cloud Virtual Servers:

Deploy your primary virtual servers in your chosen IBM Cloud region or availability zone.

### 3. Backup and Replication:

Use IBM Cloud Backup or another backup solution to regularly back up your virtual servers and data. Ensure backups are stored securely.

### 4. Replication Solution:

IBM Cloud offers solutions like IBM Hyper Protect Virtual Servers or third-party options for replicating your virtual servers and data to a secondary site. This secondary site should be in a different geographic location for better disaster recovery.

### 5. Network Configuration:

Set up a secure, high-speed network connection between your primary and secondary data centers or availability zones. IBM Cloud provides options like Direct Link for dedicated and reliable connectivity.

#### **6. Failover and Testing:**

Regularly test your disaster recovery setup to ensure it works as expected. Simulate failover scenarios to verify the recovery process.

Develop detailed runbooks and documentation for your DR procedures.

#### **7. Monitoring and Automation:**

Implement monitoring and alerting systems to detect issues in real-time.

Consider using automation tools or scripts to trigger failover procedures automatically when certain conditions are met.

#### **8. Security and Compliance:**

Ensure that security measures are in place to protect your data during replication and failover.

Comply with regulatory requirements relevant to your industry and location.

#### **9. Documentation and Training:**

Document your disaster recovery plan, including contact information, procedures, and responsibilities.

Train your team on the DR plan and conduct regular drills.

#### **10. Regular Updates:**

As your infrastructure and applications evolve, make sure your disaster recovery plan and systems are updated accordingly.

#### **11. Cost Management:**

Understand the cost implications of your disaster recovery setup and ensure it aligns with your budget.

#### **12. Third-Party Solutions:**

Consider third-party disaster recovery solutions that integrate with IBM Cloud if you need additional features or capabilities.

#### **13. Compliance and Testing:**

Ensure that your disaster recovery solution complies with industry standards and regulations.

Regularly test your DR plan to validate its effectiveness.

**CONCLUSION:**

Remember that disaster recovery is an ongoing process, and it's essential to periodically review and update your plan to meet changing business needs and technology advancements. IBM Cloud provides a robust infrastructure for implementing disaster recovery solutions, and working with their experts can help you design a solution tailored to your specific requirements.