# AALIM MUHAMMED SALEGH COLLEGE OF ENGINEERING

### **Project: Disaster Recovery with IBM Cloud Virtual Servers**

Phase 3: Disaster Recovery with IBM Cloud Virtual Servers

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#### **IBM Cloud Virtual Servers Disaster Recovery Plan**

#### **Disaster Recovery Strategy**

Recovery Time Objective (RTO): The RTO is the maximum amount of time that an application or service can be unavailable after a disaster. For IBM Cloud Virtual Servers, the RTO is typically 4-6 hours.

Recovery Point Objective (RPO): The RPO is the maximum amount of data that can be lost in a disaster. For IBM Cloud Virtual Servers, the RPO can be as low as near-zero, depending on the backup solution used.

Priority of Virtual Machines: Virtual machines should be prioritized based on their criticality to the business. Critical virtual machines should be recovered first, followed by less critical virtual machines.

#### **Backups**

Regular backups of the on-premises virtual machines should be set up using backup tools or scripts. Backups can be stored on-premises or in the cloud. For disaster recovery purposes, it is recommended to store backups in the cloud. This will ensure that the backups are available and accessible even if the on-premises infrastructure is unavailable.

## <u>Steps for Implementing a Disaster Recovery Plan Using IBM Cloud Virtual Servers</u>

Identify the critical virtual machines that need to be protected.

Choose a backup solution that meets your RPO and RTO requirements.

Set up regular backups of the critical virtual machines to the cloud.

Create IBM Cloud Virtual Servers in a different geographic region than your on-premises infrastructure.

Develop a disaster recovery plan that describes how you will recover the critical virtual machines to IBM Cloud Virtual Servers in the event of a disaster.

Test the disaster recovery plan regularly to ensure that it is working properly.

#### **Example Disaster Recovery Plan**

#### The following is an example of a disaster recovery plan for IBM Cloud Virtual Servers:

- If a disaster occurs, the first step is to assess the damage and determine the extent of the outage.
- Once the damage has been assessed, the next step is to recover the critical virtual machines to IBM Cloud Virtual Servers.
- To recover a virtual machine, the backup image of the virtual machine must be restored to an IBM Cloud Virtual Server.
- Once the virtual machine has been restored, it can be started and tested.
- Once the virtual machine has been tested and confirmed to be working properly, it can be put into production.

#### **Conclusion**

IBM Cloud Virtual Servers can be used to implement a robust disaster recovery plan. By following the steps outlined above, you can ensure that your critical virtual machines are protected and can be recovered quickly in the event of a disaster.