# DISASTER RECOVERY WITH IBM CLOUD VIRTUAL SERVERS

## Phase-2 Project Submission

### **Document Title: Transformation Plan for Disaster Recovery Using IBM Cloud Virtual Servers**

### **Phase 2: Transformation**

In this phase, we will outline the detailed steps for transforming the disaster recovery plan, as designed in the previous phase, into a practical and actionable solution. The transformation process involves a series of actions and considerations to ensure that the plan is implemented effectively and efficiently.

### **Step 1: Infrastructure Assessment and Setup**

**Objective:** Ensure the necessary infrastructure is in place to support disaster recovery on IBM Cloud Virtual Servers.

1. **Assessment of Existing Infrastructure:**
   - Evaluate the current on-premises infrastructure and IBM Cloud resources.
   - Identify any gaps or requirements for additional resources.

2. **IBM Cloud Virtual Server Setup:**
   - Provision the required virtual servers on IBM Cloud to serve as the disaster recovery environment.
   - Configure networking, security, and access controls as per the disaster recovery plan.

### **Step 2: Disaster Recovery Strategy Implementation**

**Objective:** Put the disaster recovery strategy into action by defining key parameters and processes.

1. **Define RTO and RPO:**

- Establish specific Recovery Time Objectives (RTO) and Recovery Point Objectives (RPO) as determined in the design phase.

- Communicate these objectives to the team and stakeholders.

2. **Replication Configuration:**

- Configure replication mechanisms to synchronize data between on-premises systems and IBM Cloud Virtual Servers.

- Ensure real-time or near-real-time data replication based on RPO requirements.

## **Step 3: Backup and Data Capture**

**Objective:** Implement regular backups to capture critical data and configurations.

1. **Data Identification:**

- Collaborate with relevant teams to identify critical data and configurations to be included in backups.

- Document the data types, sources, and frequency of backups.

2. **Backup Implementation:**

- Deploy backup solutions compatible with on-premises systems and IBM Cloud.

- Automate backup processes to ensure data capture at defined intervals.

## **Step 4: Recovery Testing**

**Objective:** Validate the effectiveness of the recovery procedures to minimize downtime.

1. **Test Scenario Development:**

- Create a range of test scenarios simulating various disaster situations.

- Document the expected outcomes and success criteria for each scenario.

**2. **Recovery Testing:****

- Execute recovery tests using the disaster recovery plan.

- Monitor and record the results, including the time taken to recover and any issues encountered.

**3. **Issue Resolution:****

- Address any identified issues promptly and update the disaster recovery plan accordingly.

- Repeat testing until the plan meets the desired performance criteria.

## **Step 5: Business Continuity Integration**

****Objective:**** Ensure that the disaster recovery plan aligns with the organization's overall business continuity strategy.

**1. **Alignment Assessment:****

- Review the disaster recovery plan to confirm its alignment with the broader business continuity framework.

- Ensure that IT recovery objectives support the organization's core business objectives.

**2. **Communication and Training:****

- Communicate the finalized disaster recovery plan to all relevant stakeholders.

- Provide training and awareness sessions to ensure that team members understand their roles and responsibilities in executing the plan.

## **Step 6: Documentation and Ongoing Maintenance**

****Objective:**** Maintain comprehensive documentation and establish procedures for ongoing plan maintenance.

**1. **Documentation:****

- Document all configurations, procedures, and test results related to disaster recovery.

- Maintain a central repository for easy access and updates.

2. **Ongoing Maintenance:**

- Implement a schedule for regular plan reviews and updates to accommodate changes in infrastructure, technology, or business processes.

- Appoint responsible individuals or teams for plan maintenance and testing.

By following these steps, we aim to transform the disaster recovery plan from a conceptual design into a practical, well-implemented solution. This transformation process will ensure that the organization is well-prepared to respond effectively to unforeseen events, minimize downtime, and safeguard critical business operations using IBM Cloud Virtual Servers.