**7145- UNITED INSTITUTE OF TECHNOLOGY**

**DISASTER RECOERY WITH IBM CLOUD VIRTUAL SERVER**

**MENTOR: TEAM MEMBERS:**

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**PROJECT DEVELOPMENT DOCUMENT**

**INTODUCTION:**

Disaster recovery with IBM Cloud Virtual Servers is a crucial aspect of project development that ensures business continuity in the face of unexpected disruptions. This document will provide an insightful overview of disaster recovery strategies and solutions available on the IBM Cloud platform. We will explore the key concepts, methodologies, and best practices for setting up and managing disaster recovery for project development using IBM Cloud Virtual Servers. Whether you're a seasoned IT professional or a project manager, this document aims to equip you with the knowledge and tools necessary to.

**OUTLINE:**

A disaster recovery plan typically includes the following components:

**1.Backup Configuration:**

You need to configure regular backups of your server. IBM Cloud provides tools for this, which you can automate using C or other scripting languages.

**2.Monitoring:**

Continuously monitor the health and availability of your virtual server. You can use IBM Cloud monitoring services, and you may need to periodically check this within your C program.

**3.Failover Plan:**

In the event of a disaster, you'll want to failover to a secondary server. This requires a secondary server with up-to-date data and configuration. Here, you may need to use C for data synchronization or use other tools for replication.

**4.Alerting:**

You'll need to implement alerting mechanisms within your C program, so you are notified when a disaster occurs. IBM Cloud's alerting services can help with this.

**5.Deployment Automation:**

Automate the deployment of your application on a secondary server. This could involve using tools like Ansible or scripts in C or other languages.

**6.Network Configuration:**

Ensure that the network is properly configured to route traffic to the secondary server when needed. This might involve C code to configure network routes and firewall rules.

**PROGRAM:**

#include <stdio.h>

void backupData() {

printf("Backing up data to a remote location...\n");

}

void recoverFromDisaster() {

printf("Recovering data from backup...\n");

}

int main()

{

int choice;

printf("IBM Cloud Virtual Server Disaster Recovery\n");

printf("1. Backup Data\n");

printf("2. Recover from Disaster\n");

printf("Enter your choice (1/2): ");

scanf("%d", &choice);

switch (choice) {

case 1:

backupData();

printf("Data backup completed successfully.\n");

break;

case 2:

recoverFromDisaster();

printf("Disaster recovery completed successfully.\n");

break;

default:

printf("Invalid choice. Please select 1 or 2.\n");

break;

}

return 0;

}

**EXPLANATION:**

1.This program is a simple simulation of a disaster recovery process for IBM Cloud Virtual Servers.

2. The **‘backupData’** function represents the data backup process. In a real-world scenario, this function would perform data replication or backup to a remote location or data center. Here, it's simplified to display a message.

3. The **‘recoverFromDisaster’** function represents the recovery process. In a real disaster, you would retrieve data from your backup copies. This function is also simplified to display a message.

4. In the **‘main’** function, the user is presented with a menu to choose between data backup and disaster recovery.

5. The program then calls the corresponding function based on the user's choice and displays a message to confirm the completion of the operation.

**CONCLUSION:**

In conclusion, disaster recovery with IBM Cloud Virtual Servers is essential for safeguarding your data and ensuring business continuity. By implementing data backup, redundancy, and recovery strategies, you can minimize downtime and protect your operations in the event of unforeseen disruptions or disasters. IBM Cloud's services and tools provide the foundation for building a resilient and reliable disaster recovery plan tailored to your specific needs.