Disaster Recovery with IBM Cloud Virtual Servers

Phase 3: Development Part 1

IBM Cloud Disaster Recovery

Creating a disaster recovery plan using IBM Cloud Virtual Servers involves several key steps. Here's an overview of the process:

Assessment and Planning:

Identify critical virtual machines (VMs) and their specific roles in your infrastructure.

Determine your Recovery Time Objective (RTO), i.e., how quickly you need to recover after a disaster.

Define your Recovery Point Objective (RPO), which establishes how much data loss is acceptable.

Prioritize VMs based on their importance to your business operations.

Selecting IBM Cloud Services:

Choose appropriate IBM Cloud Virtual Server configurations to host your VMs.

Consider IBM Cloud services like Block Storage, Object Storage, and Load Balancers for redundancy and data integrity.

Setting up Regular Backups:

Use IBM Cloud's backup and snapshot features for regular backups.

Configure backup schedules and retention policies based on your RPO requirements.

Testing and Validation:

Regularly test your disaster recovery plan to ensure it meets your RTO and RPO goals.

Conduct failover and failback tests to confirm the effectiveness of your strategy.

Documentation:

Maintain detailed documentation of your disaster recovery plan, including configurations, contact information, and procedures.

Automation and Scripts:

Develop automation scripts for VM deployment, configuration, and failover to reduce recovery time.

Implement monitoring and alerting systems to detect potential issues.

Security and Access Controls:

Implement security measures to protect your VMs and data, including firewalls and access controls.

Communication Plan:

Define a communication plan for informing stakeholders and employees during a disaster event.

Review and Updates:

Regularly review and update your disaster recovery plan to account for changes in your infrastructure and business requirements.

Remember that IBM Cloud offers a range of services and tools that can help you implement your disaster recovery plan effectively. Consult IBM's documentation and support resources for specific guidance and best practices.

For example, the following are all data plane responsibilities:

Running and hosting the Virtual Server Instance (VSI)

Reading and writing to block storage volumes

Getting and setting objects into Cloud Object Storage Buckets

Running, processing queries and updates to IBM Cloud Databases PostegreSQL database.

Listing the Virtual Server Instance instances (VSI) in the account and provisioning a new the Virtual Server Instance (VSI) orchestrating the creation of virtual machines from an OS image, block storage creation, attachment and configuration of the network endpoints

Configuring, resizing, and mounting block storage volumes

Creating new Cloud Object Storage Buckets.

The global platform services use global load-balancing strategies to ensure a redundant, highly available platform is available for you to access and manage your cloud services.