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CSA 1526

CLOUD COMPUTING

Assignment - 3

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CLOUD BACKUP AND DISASTER RECOVERY

Introduction:

In today's digital world, business and individuals Rely heavily on data. Any Loss due to hardware failure, Cyberattacks, or Natural disasters Can Lead to Serve Consequences.

1. Importance of Cloud Backup & Disaster Recovery

* Business Continuity

* Data Protection

* Scalability

* Cost Efficiency

* Compliance and Security

2. key Parameters in Cloud Backup & disaster Recovery

A. Data Backup

* Automated Backups

* Storage tiers

* Encryption & Security

B. Redundancy

* Geographical Replication

* RAID and Snapshot technologies

* Multi-Cloud Strategies

C. Failover Solutions

* Hot, Warm and Cold Failover

* Disaster Recovery as a Service (DRaas)

* Automated Orchestration

3. Best Practices for Cloud Backup

* Follow the 3-2-1 Rule

* Regular Testing

* Policy and Compliance Alignment

What is Cloud backup, and why is it critical

for disaster Recovery?

Cloud BackuP Involves Copying data and storing it

on Remote Servers Managed by third - Party

Service Providers, Enabling business to access and

Restore their Information in case of data loss.

* In disaster Recovery, cloud BackuP Plays a

critical Role by ensuring that data is securely

Stored off- site, Protecting against data loss from

System failures, cyber attacks, Natural disasters, or

accidental deletion.

* This off-site storage allows for quick

Restoration of data, Minimizing down time and

Ensuring business Continuty.

2. How do Cloud Backups Solutions differ from traditional Backup Methods?

* Cloud Backup Solutions and traditional backup Methods differ Significantly in their approach to data storage, accessibility, Scalability and Cost. Here's a Comparative overview:

1. Storage Location and Accessibility

* Cloud Backup - Location With Internet

* Traditional Backup - Enternal Hard drive

2. Scalability

* Cloud Backup - User's Need

* Traditional Backup - Additional Hardware

3. Cost Structure

* Cloud Backup - Storage Space

* Traditional Backup - Potential Personnel.

Discuss the Role of data Redundancy in Cloud disaster Recovery.

Data Redundancy is a fundamental component of cloud disaster Recovery strategies, Ensuring that Critical Information Remains accessible and Intact during un forseen Events.

key Roles of data Redundancy in Cloud Disaster:

1. Ehnanced Data Availability

2. Improved Fault tolerance

3. Data Integrity and Protection

4. Regulatory Compliance & Security

5. Encryption and Access Controll.

6. Adherence to standards

7. Verlioning

4. How do business Implement disaster Recovery Strategies in the Cloud?

* Implementing disaster Recovery (DR) Strategies in the Cloud Involves a series of Structured Steps to ensure business Continuity and data Integrity during unforeseen Events.

1. Define objectives:

* Recovery time objective

* Recovery Point objective

2. Conduct Risk Assessment

* Identify Potential threats

* Analyze Impact

3. Establish Clear Roles and Responsibilities:

* Step-by-Step Guides.