CLOUD COMPUTING



CONTENTS

- Data Resiliency
- Cloud Provisioning
- Asset Management System
- Cloud disaster recovery

Launching Virtual Machine on AWS

- Select EC2 Service(Elastic Compute2)
- Select Launch Instance
- Select AMI(Amazon Machine Image)
- Select Instance Type
- Create a Key pair
- Download Remote Desktop File
- Launch Instance

DATA RESILIENCY

- Dictionary meaning of Resiliency: the capacity to recover quickly from difficulties; toughness.
- Resiliency is the ability of a server, network, storage system or an entire data center to recover quickly and continue operating even when there has been an equipment failure, power outage or other disruption.
- Data center resiliency is often achieved through the user of redundant components, subsystems, systems or facilities.

- Cloud resilience is understood as a way to readapt to a crisis situation.
- This applies to the infrastructure and the data.
- Here infrastructure is comprised of virtual servers and data volume such as tablets and smart phones.

RESILIENCY MODELING AND ANALYSIS(RMA)

- There are four phases of RMA
- Pre-Work: Creates a diagram to capture resources, dependencies and component interactions
- Discover: Identifies failures and resilience gaps
- Rate: Perform Impact Analysis
- Act: Produces work items to improve resilience

CLOUD PROVISIONING

- * Cloud provisioning is the allocation of a cloud providers resources and service to a customer.
- ❖ Cloud provisioning is a key feature of the cloud computing model relating to how a customer procures cloud services and resources from a cloud provider.

Types of cloud provisioning

- Advanced Provisioning
- Dynamic Provisioning
- User self Provisioning

ADVANCE PROVISIONING

• With advance provisioning the customer signs a formal contract of service with the cloud provider.

• The provider then prepares the agree upon resources for the customer is charged a flat fee or is billed.

Dynamic Provisioning

- With dynamic provisioning cloud resources are deployed flexibly to match a customers fluctuating demands.
- The customer is billed on a pay per use.

USER SELF PROVISIONING

- User self provisioning also called cloud self service.
- The customer buys resources from the cloud provider through a web interface or portal.
- This usually involve creating a user account and paying for resources with a credit card.

CLOUD ASSET MANAGEMENT

- Cloud asset management(CAM) is a component of cloud management services focused exclusively on the management of business's physical cloud environment.
- CAM keeps track of every aspect of your cloud estate, managing the maintenance, compliance, upgrading and disposal of cloud assets.

- Cloud asset management strives to provide business with the ability to make better decisions, supported by valuable data.
- When you align the long term integrity of your cloud infrastructure with your cloud management objectives you build a stronger cloud framework with minimized risks

CLOUD DISASTER RECOVERY

- Data is the most valuable asset of modern day organizations.
- It loss can result in irreversible damage to your business including the loss of productivity, revenue, reputation and even customers.

WHY CHOOSE DISASTER RECOVERY IN CLOUD

- The primary goal of disaster recovery is to minimize the overall impact of disaster on business performance.
- In case of disaster critical workloads can be failed over to a DR site in order to resume business operation.
- Due to its cost efficiency, scalability and reliability, disaster recovery in cloud has become the most lucrative option for small and medium sized businesses.

DISASTER RECOVERY WITHOUT CLOUD

-Firstly, We need to maintain Physical Data center where we can keep backup data

Following are some disadvantages:

- -Maintenance and Security
- -Cost
- -Dedicated Human Resources
- -Secured Network

EFFECTIVE CLOUD BASED DR PLAN SHOULD INCLUDE THE FOLLOWING STEPS:

- Perform a risk assessment and business impact analysis.
- -RTO(Recovery Time Objective)
- -RPO(Recovery Point Objective)
- Choose prevention, preparedness, response and recovery measures.
- Test and update your cloud based DR plan.

PPRR

- Prevention
- Preparedness
- Response
- Recovery

BENEFITS OF DR(DISASTER RECOVERY)

- You don't need to build a secondary physical site.
- Depending on your current business demands you can easily scale up or down by adding required resources.
- DR in cloud computing can be performed in a matter of minutes from anywhere

- You are required to pay only for the cloud computing services you actually use.
- You can store your backed up data across multiple geographical locations.
- State of the art network infrastructure ensures that any issues or errors can be quickly identified and taken care of by a cloud provider

THANK YOU!!!