Detailed Study of Cloud Storage Services on Aws Cloud (Amazon Web Services)

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ABSTRACT

This research revolves around understanding the Cloud Storage Services offered by world's most famous Cloud Provider Amazon Web Services (AWS). We will be covering major Cloud Storage Services like EBS, S3 and EFS. But first let's understand more about AWS. We should use these end-of-life services as a per-project and keep in mind the key benefits of these end-to-end services. Amazon EBS brings the highest end-to-end prices available with block for level of Amazon Elastic Compute Cloud (EC2) instances. Saves data to file system stored after EC2 status closure. Amazon EFS provides portable file storage, also designed for EC2. It can be used as a standard data source for any application or load that works in most cases. Using the EFS file system, you can configure file system installation settings. The main difference between EBS and EFS is that EBS is only accessible from a single EC2 state in your specific AWS region, while EFS allows you to mount a file system in multiple regions and scenarios.

Keywords: Amazon Elastic Compute Cloud, Cloud Storage Services

I. INTRODUCTION

In 2006, Amazon Web Services (AWS) began providing IT infrastructure services to businesses in the form of web services - now known as cloud computing. One of the key benefits of cloud computing is the opportunity to replace the previous infrastructure costs with a variable cost that measures your business. With Cloud, businesses no longer have to plan and purchase servers and other IT infrastructure or months ahead of time. Instead, they can quickly rotate hundreds or thousands of servers in minutes and deliver results quickly.

Today, Amazon Web Services offers the most reliable, affordable, low-cost cloud platform that offers thousands of large businesses in 190 countries around the world. With data center locations in the U.S., Europe, Japan, and Australia, customers/companies in all industries are using the following benefits.

II. OBJECTIVE, SCOPE, METHODOLOGY

Objectives

AWS provides number of storage services like EBS (Elastic Block Store), EFS (Elastic File System) and S3 (Simple Storage Service) and we will be looking deeply into all these services in terms of theoretical and practical as well. So below are the objectives that we will cover.

There are 2 Primary and 2 Secondary Objectives behind this detailed study Primary Objectives:
Descriptive understanding of Cloud Storage Services like EBS, S3, EFS
Practical Implementation of Storage Services like EBS, S3, EFS
Secondary Objectives:
Pricing Models for different Storage Services
Security Models and best practices for different Storage Services

Scope

As per objectives, our scope revolves around AWS Cloud Storage Services theoretical understanding and also the practical implementation of these services. We will be using data from AWS White Papers and for practical implementation we will be using live AWS Account. The scope is defined in below points:

- Theoretical Study of Cloud Storage Services using AWS White Papers and Online Content.
- Practical Steps to implement the Storage Services in AWS Cloud using live account.
- Pricing Models for different Storage Services as per latest AWS Pricing.
- Security Features available for different Storage Services like Encryptions, access etc.

III. Executive Summary

This is high level view of entire project on "Cloud Storage Services of AWS (Amazon Web Services)". As per objectives we will understand the AWS Cloud Storage Services theoretically and then we will implement the same practically. Alswe will cover the pricing models and Security features with these different services.
Let's understand about different Cloud Storage Services at high level:

AWS provides a complete range of services that you can store, access, manage, and analyze your data to reduce costs, increase capacity, and speed up composing. Choose from object storage, file storage, and block backup services, backup, and data migration options to build the foundation of your IT environment.

IV. REFERENCES

[1]. URL: aws.amazon.com/s3.
[2]. https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.wpdownloadmanager.com%2Fdownload%2Fwordpress-amazon-s3-storage-plugin%2F&psig=AOvVaw0Ez30DJ9II90kMDCuBImi9&ust=1637918751860000&source=images&cd=vfe&ved=2ahUKEwj2iqP8mLP0AhXOEnIKHbxkDekQr4kDegUIARDOAQ.
[3]. https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.eescorporation.com%2Famazon-s3-performance-optimization%2F&psig=AOvVaw0Ez30DJ9II90kMDCuBImi9&ust=1637918751860000&source=images&cd=vfe&ved=2ahUKEwj2iqP8mLP0AhXOEnIKHbxkDekQr4kDegUIARDSAQ.
[4]. https://www.google.com/url?sa=i&url=https%3A%2F%2Faws.amazon.com%2Fblogs%2Fsecurity%2Ftag%2Famazon-ebs-snapshot-scheduler%2F&psig=AOvVaw1KVkZRQJ93q0F89T4CPW2w&ust=1637918800537000&source=

images&cd=vfe&ved=2ahUKEwiYj76TmbP0Ah
VZYSsKHU3xBkIQr4kDegUIARC8AQ.

[5]. https://www.google.com/url?sa=i&url=https%3
A%2F%2Fwww.powerupcloud.com%2Famazo
n-ebs-multi-attach-now-available-on-
provisioned-iops-io1-
volumes%2F&psig=AOvVaw1KVkZRQJ93q0F8
9T4CPW2w&ust=1637918800537000&source=i
mages&cd=vfe&ved=2ahUKEwiYj76TmbP0Ah
VZYSsKHU3xBkIQr4kDegUIARDEAQ

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