

Mitigation and Prevention in Data Security to Improvised Public Cloud

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Abstract- Cloud computing is a type of online based computing. Which gives shared computer dealing out resources and data to the computers. it is very challenging part to maintain the safety of all stored data which many users want to use in many applications. The stored data in cloud is so important that the users make ensure either the data is corrupted or lost. This work studies the problem of ensuring the mitigation and prevention of data storage in Cloud Computing. This paper, proposes to collect the data and store data in the cloud. The methodology followed is, when any user attempt any wrong password for three times the system take them as an unauthorized user and block the IP address. So, In future they cannot access applications from that IP address and if they are not unauthorized user then they have to send a mail to client so they will unblock the user.

Index Terms- data security, cloud computing, cloud data storage

INTRODUCTION

Cloud computing is the combination of many pre existing technologies that have matured at different rates and in different contexts. The goal of cloud computing is to allow users to take benefit from all these technologies. Many organizations are moving into cloud because it allows the users to store their data on clouds and can access at anytime from anywhere. Data breaching is possible in cloud environment, since data from various users and business organizations lie together in cloud. By sending the data to the cloud, the data owners transfer the control of their data to a third person that may raise security problems. Sometimes the Cloud Service Provider (CSP) itself will use/corrupt the data illegally [1].

Security and privacy stands as major obstacle on cloud computing i.e. preserving confidentiality, integrity and availability of data. A simple solution is

to encrypt the data before uploading it onto the cloud. This approach ensures that the data are not visible to external users and cloud administrators but has the limitation that plain text based searching algorithm are not applicable. In this paper, we discuss how to more secure data storage on public cloud [1].

CLOUDSTORAGE

Cloud storage is one of the primary use of cloud computing. We can define cloud storage as storage of the data online in the cloud. A cloud storage system is considered as a distributed data centers, which typically use cloud-computing technologies and offers some kind of interface for storing and accessing data. When storing data on cloud, it appears as if the data is stored in a particular place with specific name.

ALGORITHM

Step-1: initialize AWS server
Step-2: setup python AWS cloud watch agent
Step-3: if file is empty, it isn't listed.
Execute "echo "month date time message" >> /var/log/myapp/request.log"
Step-4: define log analysis matric pattern
Step-5: define alarm for cloud watch log trigger
Step-6: define sns notification email (sns-simple notification service)
Step -7: setup subscription email
Step 8: setup goto3
Step 9: define input value A
A = ec2.send_command (Instance IDs)
Step 10: setup IAM auth
Response ec2.client.associate_iam_instance_profile
Step 11: if response == 3 add value in E1
E1 = file of IP collect

Step 12: using IAM json policy denied

CONCLUSION

PROPOSED WORK

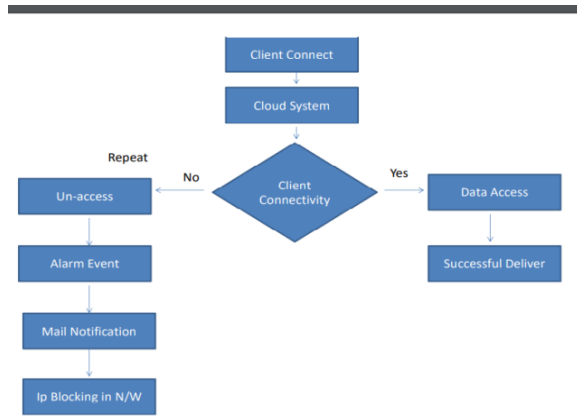


Figure-1.1 Proposed work flow

Client connects with the cloud system. There are two possibilities for client. If the client attempt true password then they can access the data but if the password is attempt wrong for three times then the alarm event is generate and the auto mail is sending to the client. When the client receiving the mail the IP address is block for that user and client assume that they are the unauthorized users.

SYSTEM ACTIVITIES

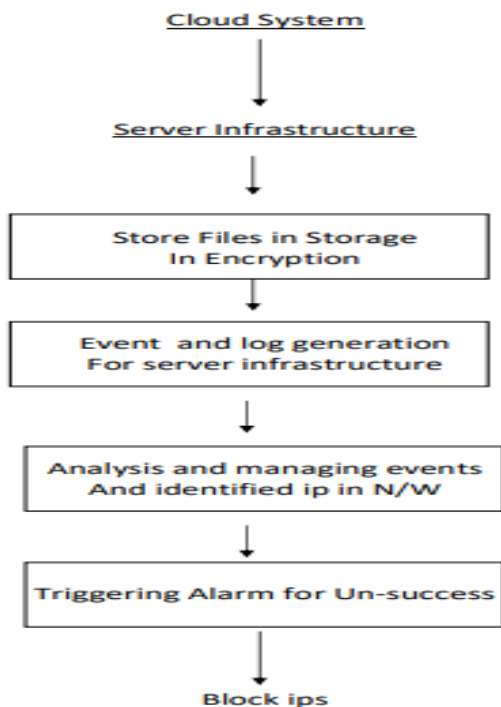


Figure 1.2 System activities

Cloud computing provide the facility to store the confidential data but the security is important of data. Here we are providing the security, when any user attempt any incorrect password of login page for three times. The IP address of that user will automatically block and then after any user cannot login from that IP Address and we are also using the encryption and decryption for providing the more security.

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