Reliable Fog Computing Storage Scheme


*Assistant Professor, VSM College of Engineering
**B.Tech.CSE, VSM College of Engineering

ABSTRACT

Reliable fog computing storage scheme plays a major role as catering storage service, In this the users can store the data/files by registration and login by using their credentials and also they can retrieve the data by downloading files when ever they want but for retrieving the data the users should send the request to the admin to download the files. When admin accepts the users request then the secret key and hash code are send to the users email, and then by entering the secretkey and hash code users can download the files. By using this Reliable Fog Computing Storage Scheme many security issues can be solved the major issues like-privacy breach, data loss, malicious modifications.

KEYWORDS: secretkey, hash code, Fog Server, securing data from threats, data downloading.

1.INTRODUCTION:

Reliable fog computing storage scheme plays a wide role as catering storage service. In this a long years data can be stored and retrieved, and By using this Reliable Fog Computing Storage Scheme many security issues can be solved the major issues like-privacy breach, data loss, malicious modifications. For this issues solving we combined to use an techniques like A fog server based 3layer architecture has been used to employing many clouds and the underlying technique are also used like hash Solomon code and customized hash algorithm to reach the target. The target is nothing but modification detection and data recoverability. And also to prevent from the malignant retrieval and to avoid from data loss Xor combination is used. Xor combination combined with block management and collision Resolving hashing contributes to main privacy and to prevent data loss.

A.Objective:
The foremost target of the paper is to prevent from the threats of the users data and provide more security for the data. This scheme give security or preventing from cyber threats to follow efforts spend by respective project on a particular task.

The manual system offers us to data loss or vulnerable attacks like hacking, system crash to reduce this difficult we have to execute this application storing data on a commercial public fogserver. many organizations, Dropbox, google drive, icloud are providing a variety storage services when they get inspired by the fact.

B.Issue definition:

This current system isn't giving secure storage services, This manual system gives us extremely less security for saving data and a couple of data might be lost in view of mismanagement. And the long years data that is stored that may lead to data loss and system crash, privacy beach, malicious modifications and also some vulnerable attacks.

2.IDENTIFY, RESEARCH AND COLLECT IDEA:

In [1], author goal is to provide a well secured storage scheme for the users to storage the data. The version of the scheme is to grant to store the data for a years long and also a long years data can also be retrieved. So this is playing a crucial role in our day to day life. Due to increasing technology the personal data which is used to store also get increased so for that reliable fog computing storage scheme is essential.

In [2], author invented this is because for the data privacy and security authentication of no security storage schemes has become a difficult task to maintain. This also time consuming process so, to resolve and manage without any data loss storing by dividing the content into fog storage blocks for this the reliable fog computing.
storage scheme is used. So for this, this include the combinations of techniques to satisfy the user requirements and in this authentication securities are also provided.

In [3], author fought for a scheme to the users to store the data for long years and retrieve the long years back data when ever they want. That results into planning the scheme and establishing computing storage Company with the increasing rate of customers for storing the data safely with the increasing of scheme at larger rate. It difficult to manage the scheme by using improper storage schemes. To overcome the downside of improper storage schemes an the reliable fog computing storage scheme has been implemented with modern technology of javascript for managing data storage and planning for users.

In [4], author proposed reliable fog computing storage scheme a long years data can be stored and retrieved, and By using this Reliable Fog Computing Storage Scheme many security issues can be solved the major issues like-privacy breach, data loss, malicious modifications. So this is playing a crucial role in our day to day life. Due to increasing technology the personal data which is used to store also get increased so for that reliable fog computing storage scheme is essential.

3.METHODOLOGY:
The methodology of this scheme defines how to implement project. It is basically used to how the data is collected, how the data is stored and how to retrieve data according to the user requirement. This system explain how these data can be analyzed and stored. In this project model the administrator to register the users and store their data and they can also retrieve their data when ever they want, but when the user want to store the data the user should send the request to the admin when the admin accepts the users request user can retrieve the data by downloading. In this the main roles are playing to retrieve the data are secret key and hashcodes by entering this, user can retrieve the data. The main concept of this methodology is represent the overall structure as well as storing procedure of the scheme. The data can be stored in database. It stores all information of user details in the form of blocks. Data base store data and also data is display in table format only.

4.EXISTING SYSTEMS:
In cloud computing, once the users outsource the data to the cloud they can no longer protect it physically. The data which is stored in the cloud storage scheme can be access, search or modify by the CSP(Cloud Service Provider). So the CSP may loss the data unintentionally at that time due to some technical faults. Alternating, a hacker can violate the privacy of the user data and also dataloss, malicious modifications, server crash are examples of cyber threats this problems causing the user unsatisfy. So for this reason some mechanisms are caused they are known as cryptographic mechanisms they are as follows encryption, hash chain, by using this confidentiality, integrity and availability several research communities introduce the idea of reliable Fog Computing Storage Scheme.

5.PROPOSED SYSTEMS:
This scheme is proposed to provide data confidentiality, availability, integrity. In this Xor combination is used to provide the confidentiality and integrity. By combining the Xor combination with CHR and block management leads to protecting the data from data loss and privacy. And Reliable Scheme the data is stored in the Fog server by dividing the content into number of fog servers blocks. This scheme store the users data with high security as well as providing the users to download the data with same security. By this the security threats are not at all arrive near the user data.

6.SYSTEM ARCHITECTURE:
This system will defines that how the data is stored and retrieved. It is basically used to define the overall architectural as well as working procedure of the process. All the information of management is stored in database as well as data is display in table format only.
In architecture it shows how the data is stored and maintained by the user. In this the cloud is present that will manage the data and by using the internet the data owner can outsource the data and also user can store and access the data by using fog server with the help of internet. In this the data which is stored in the fog server can Accessed authorized user.
7. OUTPUT SCREENS:

A. HOME PAGE:

Figure2: Home page
B. USER LOGIN:

Data User Login

Login

sanlar

Login

New User Register Here

Figure 3: User Login page

C. FILE UPLOAD:

File Upload

Upload

12
raw materials
4672
Choose File: content2.docx

Upload

Figure 4: File upload
D. Admin Accepting the User Request:

![Image showing a table with columns: Name, Username, Email, Filename, Status, Action. Two rows are shown with the status 'accept' and 'pending'.]

Figure 5: Admin accepting request

E. Secret Key and Hash Code:

![Image showing a view file with options to view secret key and file view.]

F. File Download:

![Image showing a view file with an option to download.]

Figure 7: File download
8. FUTURE SCOPE:
The major limitations of this scheme is track the user efforts and maintain the user profile. For the future purpose we need to add more storage. This project can be extended to a level such that it can be used for the different types of users. This project can be improved to one more step to make it more efficient and more user friendly. This project can developed as android also. For the future recommendations to include data storage then easy store and retrieve the data. This project also provides facilities to manage different projects and divided in to sub modules.

9. CONCLUSION:
This scheme is used to store the data securely And data retrieve the data without any data loss. This scheme is proposed to provide data confidentiality, availability, integrity. In this Xor combination is used to provide the confidentiality and integrity. By combining the Xor combination with CHR and block management leads to protecting the data from data loss and privacy. And Reliable Scheme the data is stored in the Fog server by dividing the content into number of fog servers blocks. This scheme store the users data with high security as well as providing the users to download the data with same security. By this the security threats are not at all arrive near the user data.

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REFERENCES:


