

Data Storage and Access with Cloud Support

Prof. Ashwini S. Mane¹, Mangal V. Wagh², Aboli V. Tarte³, Mayuri A. Fulzale⁴, Priyanka S. Mehta⁵

Department of Computer Engineering, Zeal College of Engineering and Research, Narhegaon, Pune, India^{1,2,3,4,5}

Abstract: Home cloud network is a system that uses mobile devices to upload or download files and features automatically through internet from anywhere around the home, sometime a home cloud network is called a smart home. This network uses a merging of a mobile phone application and computer based program to provide the user interface to the consumer. The home cloud system differs from other system by allowing the user to operate the system from anywhere around the world through internet connection. In a Home Cloud network we developed Home cloud network that employs the integration of cloud network, touch screen mobile devices, wireless communication, power line communication to provide the user to upload and download within their home. This system uses a consolidation of a mobile phone application, raspberry-pi hardware and PC based program to provide a means of user interface to the consumer. This system is designed to be low cost and expandable. We propose a system in which we can share all images within that cloud network. Suppose user took a picture and store on cloud then other android user can see that images.

Keywords: Home cloud, cloud computing, raspberry-pi.

I. INTRODUCTION

“This system uses a consolidation of a mobile phone application, raspberry-pi hardware and PC based program to provide a means of user interface to the consumer. The Home cloud system is designed to be low cost and expandable. We propose a system in which we can share all images within that cloud network. Home cloud network is a system that uses mobile devices to upload or download files and features automatically through internet from anywhere around the home, sometime a home cloud network is called as smart home. This network uses the merging of a mobile phone application and computer based program to provide the means of user interface to the consumer. The home cloud system differs from other system by allowing the user to operate the system from anywhere around the world through internet connection. In the Home Cloud network project we developed a Home cloud system that employs the integration of cloud networking, touch screen mobile devices wireless communication, powerline communication to provide the user to download and upload in their home.

II. PROJECT IDEA

The Home Cloud Network project includes cloud storage. User can upload and download files from android phone device. Device need an application of home cloud network.

III. MOTIVATION OF PROJECT

As per our propose technique we will implement following things

- Uploading and downloading of files based on encryption and decryption algorithm.
- Using SEED algorithm for encryption and decryption
- Any home user can see files if it is publicly available

Home cloud system is highly scalable, flexible and the capabilities of home cloud system are limited by only our imagination.

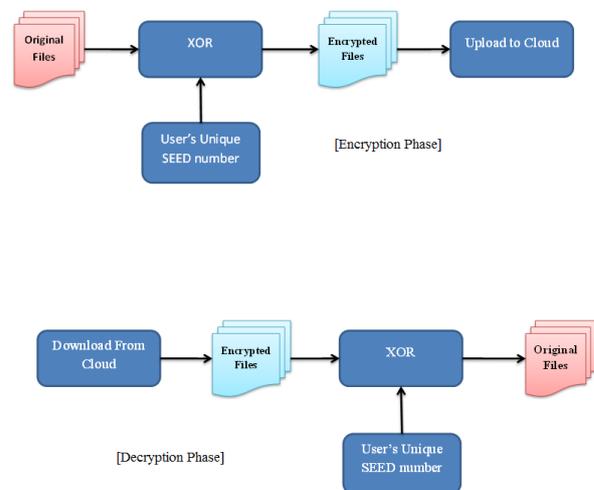


Fig. 1 Architecture Diagram.

I. FRAMEWORK

As shown in the figure first User do login . He has to choose a file for uploading then the SEED algorithm is used for encryption purpose. Encrypted file will uploaded on the cloud storage. When user want to download the file this file is decrypted first using SEED algorithm and then user can see original file.

A. Description of functions:

The dynamic aspects of system is described by the Activity diagram and it is most important diagram in UML diagram and it is basically like flowchart and it is represent the flow form step by step activity. The activity can be described the operation of the system. Activity is the particular operation of a system. It is used for imagine the dynamic nature of system and to construct the executable system using the engineering technique like reverse and forward engineering. Message part is only things is the missing in activity diagram.

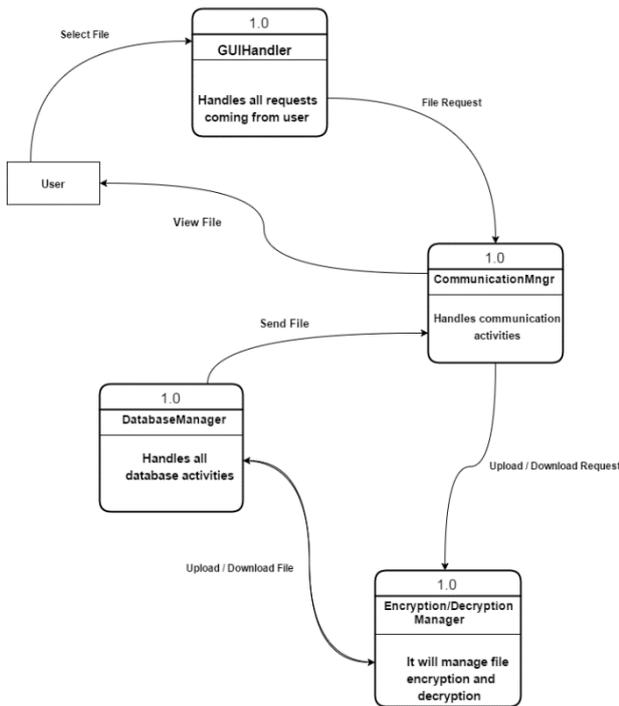


Fig. 2 Frame work for Data Storage And Access With Cloud Support

IV. CONCLUSION

The proposed system will be cost-efficient and reliable the most feasible home cloud system network which will very helpful to individuals to upload and download the files.

There are a number of advantages like below:

- It has flexible Range.
- Remove the need of a personal computer.
- Cost efficient.
- Include services of central data repository.

REFERENCES

- [1] Tso, F.P., White, D.R., Jouet, S., Singer, J., and Pezaros, D.P. (2013) The Glasgow raspberry pi cloud: a scale model for cloud computing infrastructures. In: First International Workshop on Resource Management of Cloud Computing (CCRM), 8-11 Jul 2013, Philadelphia, PA, USA.
- [2] Sumant Ku Mohapatra, Ramya Ranjan Choudhury, Pravanjan Das, "The Future Direction In Evolving WI-FI: Technologies, Application and Services", International Journal of Next-Generation Networks (IJNGN) Vol.6, No.3, September 2014.
- [3] Thoraya Obaid, HaleemahRashed, Ali Abou-Elnour, Muhammad Rehan, Mussab Muhammad Saleh, and Mohammed Tarique, Zigbee Technology and its Application in Wireless Home Automation Systems:A Survey., International Journal of Computer Networks & Communications (IJCNC) Vol.6, No.4, July 2014.
- [4] Carles Gomez and Josep Paradells, Technical University of Catalonia, Wireless Home Automation Networks:A Survey of Architectures and Technologies, IEEE Communications Magazine, June 2010.
- [5] Ms. Kruti Sharma, Prof. Kavita R Singh, Seed Block Algorithm: A Remote Smart Data Back-up Technique for Cloud Computing, 2013 International Conference on Communication Systems and Network Technologies.