

# Cloud Storage System like Dropbox

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**Abstract** - The carried-out application is a cloud-based software observed by using Network Connected Storage (NAS) architecture that is focused on providing documents via net utility. Network Connected Storage NAS is a report-degree storage architecture that makes data stored on networked devices more accessible. One of the three main storage architectures is NAS — alongside garage place networks (SAN) and direct-attached storage (DAS). NAS offers networks a single get entry to factor for storage with built-in protection, control, and fault-tolerant abilities. We do a few activities on this online program, such as creating, uploading, updating, deleting, and searching documents. Web browser is responsible where commonplace business programs on the line are accessed using usual cloud computing. Servers store all the software program and the data. These are broadly divided into 3 categories: Infrastructure as a service (IaaS), Platform as a service (PaaS), and software as a service (SaaS). According to pay by use basis, this style of virtualized assets provided with service over internet.

**Key Words:** Unbox, Network File Storage, own cloud storage, Performance, Cost

## 1. INTRODUCTION

### 1.1 Project Summary:

A net based pc era is considered to be as "Cloud Computing". A cloud image which was use to symbolize the internet along with flowchart and diagrams emerged the name cloud computing. To organize the files in a proper orderly manner & to enhance the storage space for this data are the Goals. Abstraction of details from the user who don't want to move into the understanding of, or the expertise required or managing the technology architecture within the cloud. This is considered a far paradigm shift. The goal of our project is to store and synchronized files. It provides document and folder backup, and we may view our data from multiple devices at any time and from anywhere. Regular virtualized assets with dynamic and scalable delivery are carried over the internet. Our project is initiated to tackle the need for storage faced by most users. Our system will be a Cloud based Storage web application named 'Unbox'. This Cloud Storage System will be cost efficient. To be able to operate and access this system, users have to accept our terms and policies to proceed. Our system will ensure privacy and disaster recovery by providing Backup Plans. This web application will have a dashboard page where users will be

able to access all the upload easily. We will also try to come up with new features in the future. Project Features consists of pages which are Dashboard, Sign up, Login, Forgot password. Users will be able to create Folders, download, upload, delete, add to favorites/starred and arrange the files he desires. Also, they will be able to Search the files he uploaded, through search Bar. If User is having difficulties using our application, he can contact our help center. Type of Users we have are Normal users using Unbox basic Unlimited Initial storage free for normal users. Admin will be having Special Privileges of adding and removing members, monitoring sharing activity, protecting company data, overseeing billing Information, verifying users. In the profile, User can change his settings or keep a track of his profile which includes General, Notifications, Security, Connected Apps. Admin should be able to define the Types of files accepted: Documents, Videos, Music/Voice, Excel, presentations, Images. Secure login, offline access, and file restore are all included. It also allows for file encryption and decryption while delivering files from one user to another.

### 1.2 Motivation:

The reason behind the motivation for this project is the Difficulties user face when backing up and running out of space while storing data. To tackle this problem and coming up with new features we proposed this system.

## 2. EXISTING SYSTEM

### 2.1 Creating a File Storage Service Similar to Dropbox:

We offer a reference framework for a Dropbox-like file storage system in this study by identifying its essential components and communication protocols. We also show how our Dropbox-like file storage system may be put on the Cloud, as well as a deployment architecture. We chose Amazon as a Cloud Provider to carry out a feasible implementation. We have also evaluated key performance metrics by presenting hypothetical scenarios. Optimal assumptions and estimates of user traffic and data storage utilization are made in the paper. In addition, cost parameters of cloud resources are evaluated with the actual dollar-values, based on the pricing information available on Amazon Web Services.

### 2.2 System design for cloud data storage and processing:

The data storage and processing system based on cloud computing may employ a cloud server as the core, synthesize sensor data, and provide data storage and computing capabilities to customers. This study enables cloud storage and cloud computing processing of remote important environment information and dynamic presentation of real-time / historical data in Android client by combining GPRS/Wireless Fidelity era with Ali cloud server. The experimental findings show that the system is stable and that the data is trustworthy.

### 2.3 A Cloud Computing Data Storage and Security Survey:

Cloud computing is expected to become the next generation of IT architecture. Cloud computing distributes application software and data bases to massive data centers, where information and service management may not be completely honest. This creates a slew of new security issues that have yet to be fully addressed. In this work, we focus on features for ensuring data storage security in the cloud, as well as architecture for data storage that might be carried out by other cloud service providers, and critical points for establishing data storage security.

## 3. PROPOSED METHODOLOGY

### 3.1 Context Diagram:

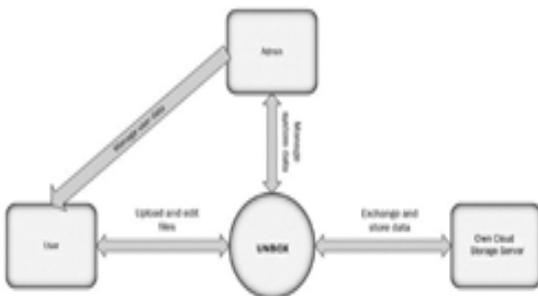


Fig- 1 Context Diagram

User will upload and edit files the unbox cloud storage system

Own cloud storage server is the storage used for storing all types of data

Admin will manage system data of the cloud storage

Admin will manage user data

### 3.2 Architecture of system

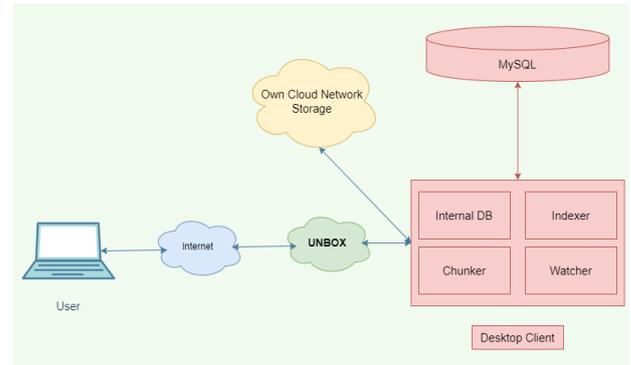


Fig- 2 Architecture of system

As shown in the above architecture diagram (Fig.2),

#### Components

**User:** user will open the website with internet connectivity. User will register or sign in to our web application. Registered information will be stored in database.

**Internet:** Medium through which user will access the website.

**Unbox system:** User will open the dashboard and access, read, upload , delete files.

**Owncloud storage system:** Data will be stored in Own Cloud Storage.

**Desktop client:** Clients can share any data through our storage over the network without consuming any extra space in their devices.

**Chunker:** It may store in small chunks or whole file as it is if file is small.

### 3.2 Storage Architecture of System

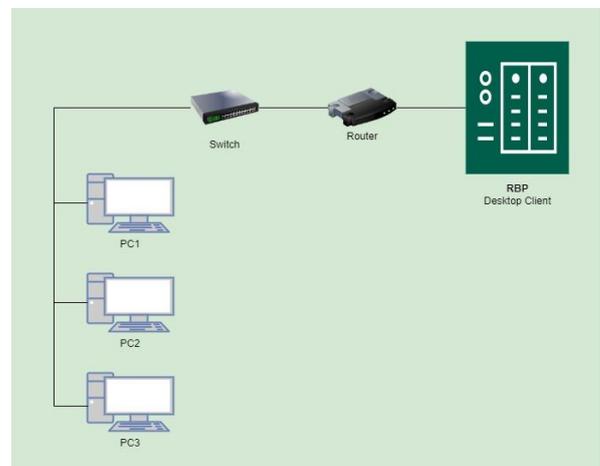


Fig- 3 Storage architecture of system

Samba is a re-implementation of the Server Message Block networking protocol that allows Linux computers to interact smoothly with Microsoft's Active Directory installations. For more details visit[8] In modern setups, the terms Common internet file system (CIFS) and Samba are interchangeable, but most people will refer to SMB. Samba is one of the easiest file servers to install and configure, making it one of the best options for setting up a NAS, especially if you plan to target Windows systems.

The SMB protocol is implemented by the Common Internet File System.

Raspberri Pi: To establish a linux server on which samba service will be enabled.

RBP SMB server: We will setup RBP Samba server using Raspberry Pi command line interface. It is a file sharing server.

PC: These are number of Computers which will be able to access the files on the NAS.

Using Samba on our RBP, we will be able to easily share directories in a way that can be accessed from nearly any OS. We can use NFS freely in our devices after the server is set up. The user can upload and edit any type of file in any format on this shared file server. We can also access these shared folders into our mobile devices through an app called Network Browser.

#### 4. RESULT

Output:

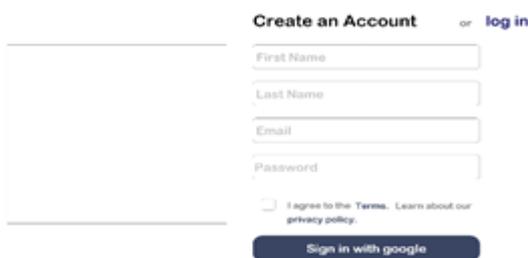


Fig- 4 Create account Page

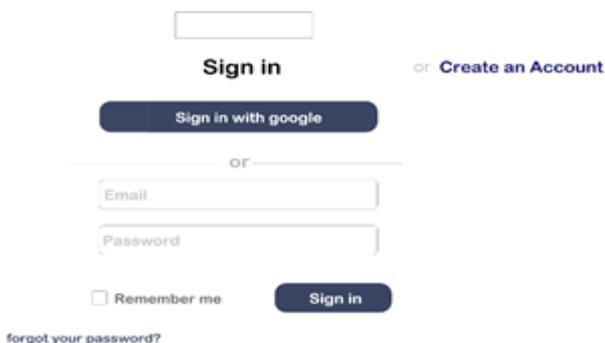


Fig- 5 Signin Page

#### Forgot your password?

Enter your email address to reset your password. Do not forget to check your spam folder.

Submit

Fig- 6 Forgot Password Page



Fig- 7 Dashboard of System

Sample paragraph Define abbreviations and acronyms the first time they are used in the text, even after they have been defined in the abstract. Abbreviations such as IEEE, SI, MKS, CGS, sc, dc, and rms do not have to be defined. Do not use abbreviations in the title or heads unless they are unavoidable.

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#### 5. CONCLUSIONS

Using RBP, we have created a Network Access storage. A server that helps us to share and synchronize the unbox storage system. We have set up a Samba Networking protocol for configuring linux file server. A private file storage is set up using multiple operating system PCs. CIFS has been created using SMB protocol for storing and managing files.

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