

Using Cloud Computing for Simple Hosting and CMS for Web Designers

A bridge to Productivity

Content Management Software



Presented By
Dr. Ahmad Raza Khan
Mr. Ahsan Ahmed

“Education is not the filling of a bucket but the lighting of a fire.”
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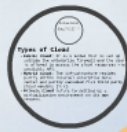
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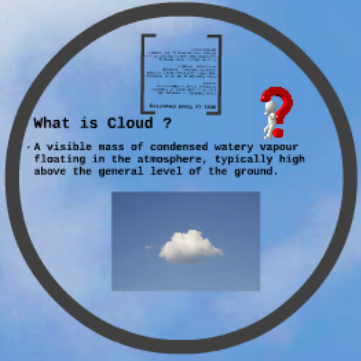


- Contents
- Cloud Computing Overview
- Cloud Applications
- Cloud Infrastructure
- Services offered in the Cloud
- Advantages
- Challenges
- Conclusion



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What is Cloud ?

· A visible mass of condensed watery vapour floating in the atmosphere, typically high above the general level of the ground.



Contents

- Cloud Computing Overview
- Cloud Architecture
- Cloud Infrastructure
- Getting Started in the Cloud
- References
- Questions
- Demo

What is Cloud Computing

- Cloud computing is computing that involves a large number of computers connected through a communication network.
- Cloud Computing is the latest technology that offers dynamically highly scalable resources (hardware, operating environment, software)
- It is an Internet based emerging technology that reduced the cost of data storage, data processing, and hardware infrastructure.



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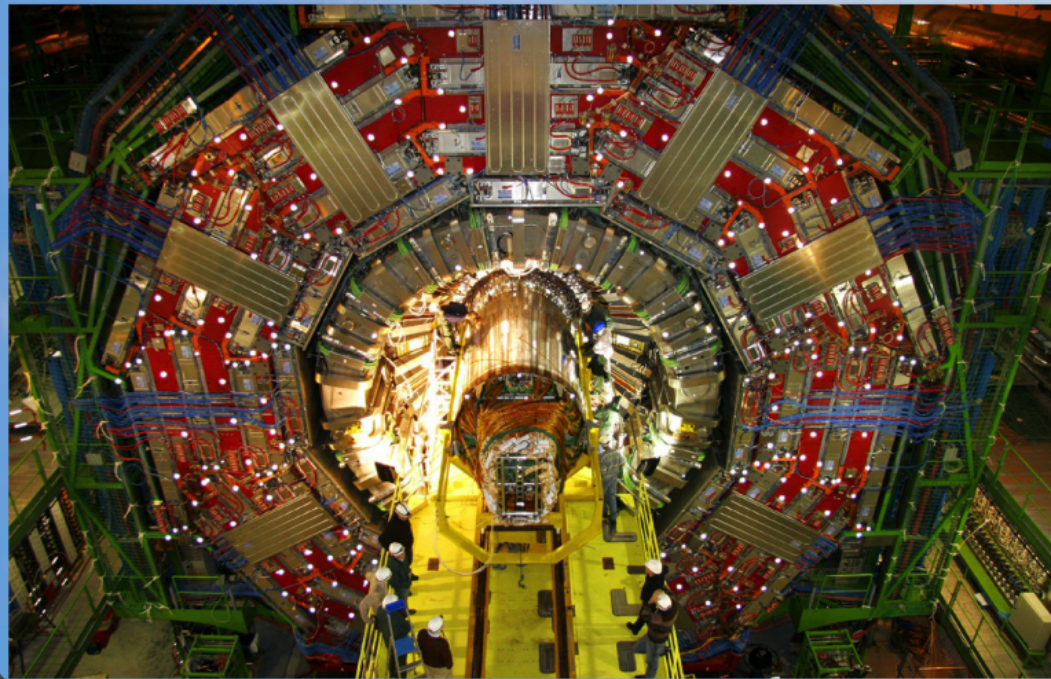
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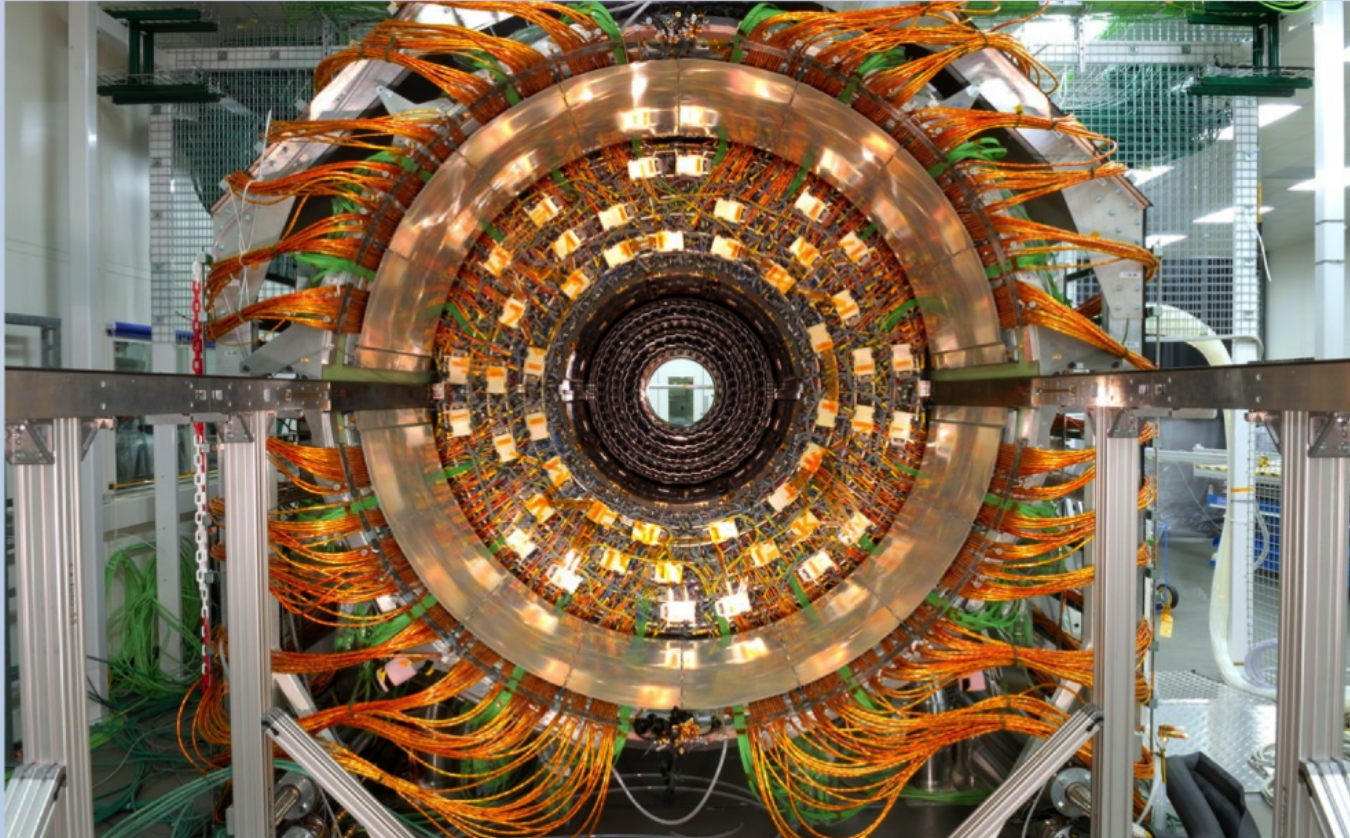
Well if not Then is this a cloud
Computing



Is This a Cloud Computing



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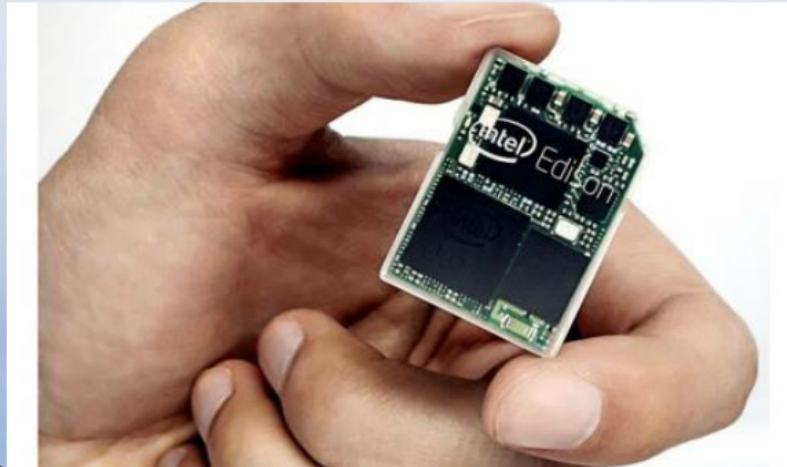
Cloud Architecture

The cloud architecture has three different types of layers

- a) **SAAS** - Software as a Service: Provide on demand availability of software as a service to its users
- b) **PAAS** - Platform as a Service: Provides a complete solution for software development.
- c) **IAAS** - Infrastructure as a Service: Refers to computing and storage infrastructure as a service

What is the Shape of Cloud ?

- Intel® Atom™ SoC based on leading-edge 22nm Silvermont microarchitecture including a dual-core CPU and single core MCU.
- Integrated Wi-Fi, Bluetooth, memory and storage.
Support for over 30 industry-standard I/O interfaces via a 70-pin connector.





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Major Players



The Average Cloud user

- Connects to the cloud via the Internet
- Does computing tasks, or Runs applications, or Stores Data

Types of Cloud

- **Public Cloud:** It is a model that is set up outside the enterprise firewall and the user is allowed to access the cloud resources via available API.
- **Hybrid Cloud:** The infrastructure resides partly within internal enterprise data center and partly consumed from third party cloud vendors [1-2].
- **Private Cloud** refers to setting up a virtualization environment on its own servers.

The Average Cloud user

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The Cloud Requires

- An Internet connection
- An account - Created with a user name and a password
- Agree to Terms

Do you Use the Cloud?



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Computer Storage

- Computers have internal or hard drive storage(C: Drive)
- CPU has a drive for storing programs, documents, pictures, videos, presentations, etc.



The Back Story

From ground to cloud

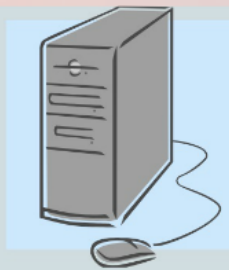
Internal Storage

- Content is stored on THAT computer
- To use content must return to THAT computer
- Cannot access this content from another device or computer



Computer Storage

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Standard Computer Tower
or Central Processing Unit
(CPU)



Inside the Computer

Internal Storage

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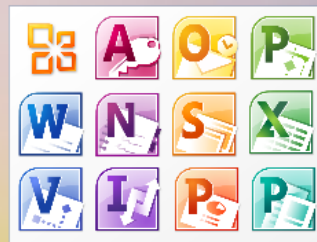
External Storage

- Allows your content to become mobile
- Save to the storage device
- Take device to any compatible computer
- Open and use content



Programs

- Purchase programs
- Load to the computer
- Each computer would need the
- program loaded and stored on the internal drive



Networked Storage

- Multiple work stations talk to one unit that stores information and data.
- Data is not saved to the C: drive, but to a network drive.
- Can retrieve the data stored to the network from any of the connected workstations.



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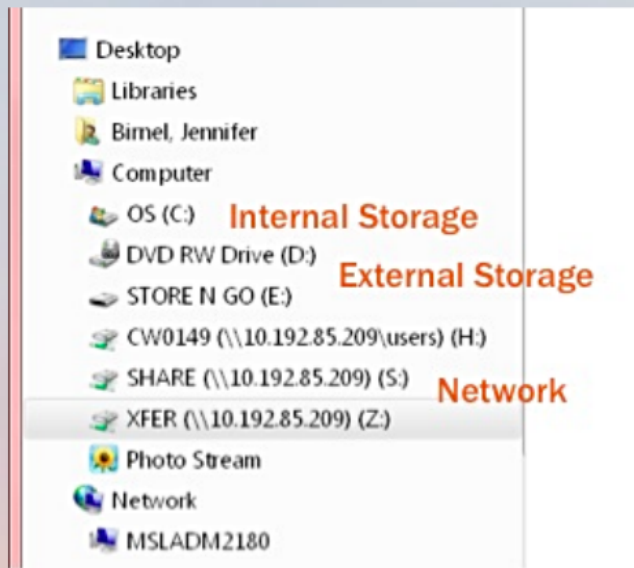
Cloud Storage

- Create an Account - User name and password
- Content lives with the account in the cloud
- Log onto any computer with Wi-Fi to find your content



Saving documents

- When you do a "save as" on your computer, you choose where to save the material.



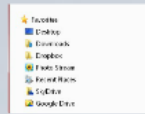
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Save file as

- Do "save as" to save a file to your computer and the cloud
- The syncing folders makes data retrieval easier
- Box and DropBox require this download to work



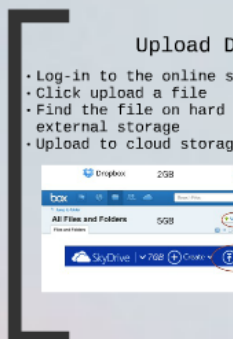
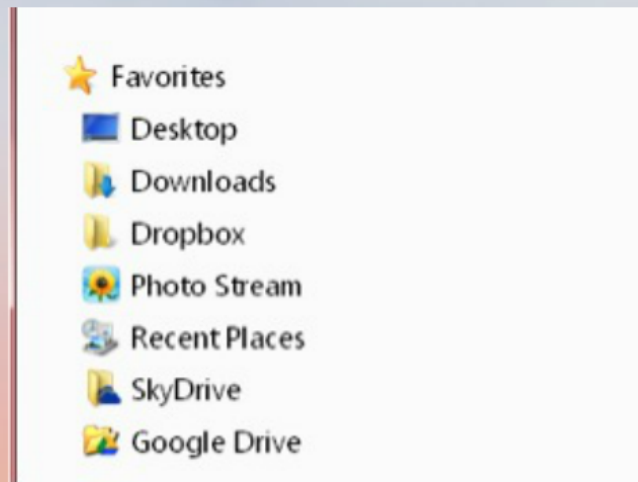
Downloads for storage

- Download a cloud based app to a computer you own
- The app lives on your Computer
- Save files to the app
- When connected to the Internet it will sync with the cloud
- The Cloud can be accessed from any Internet connection



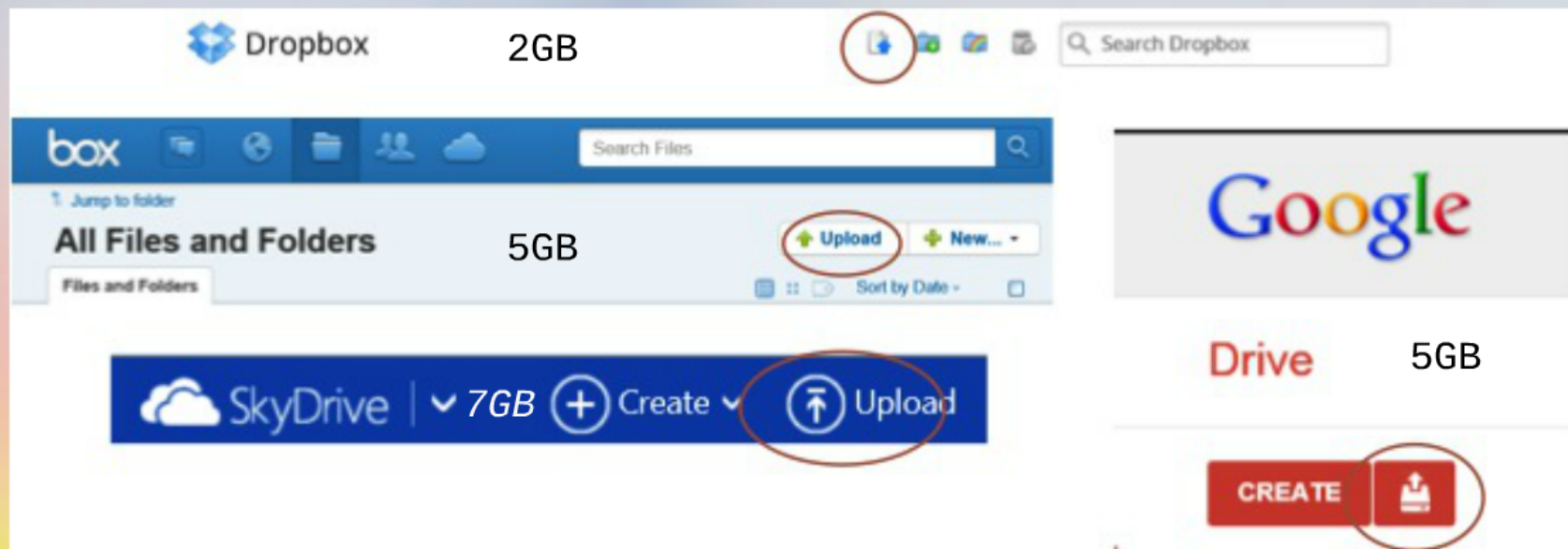
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Upload Documents

- Log-in to the online storage account
- Click upload a file
- Find the file on hard drive, network, or external storage
- Upload to cloud storage



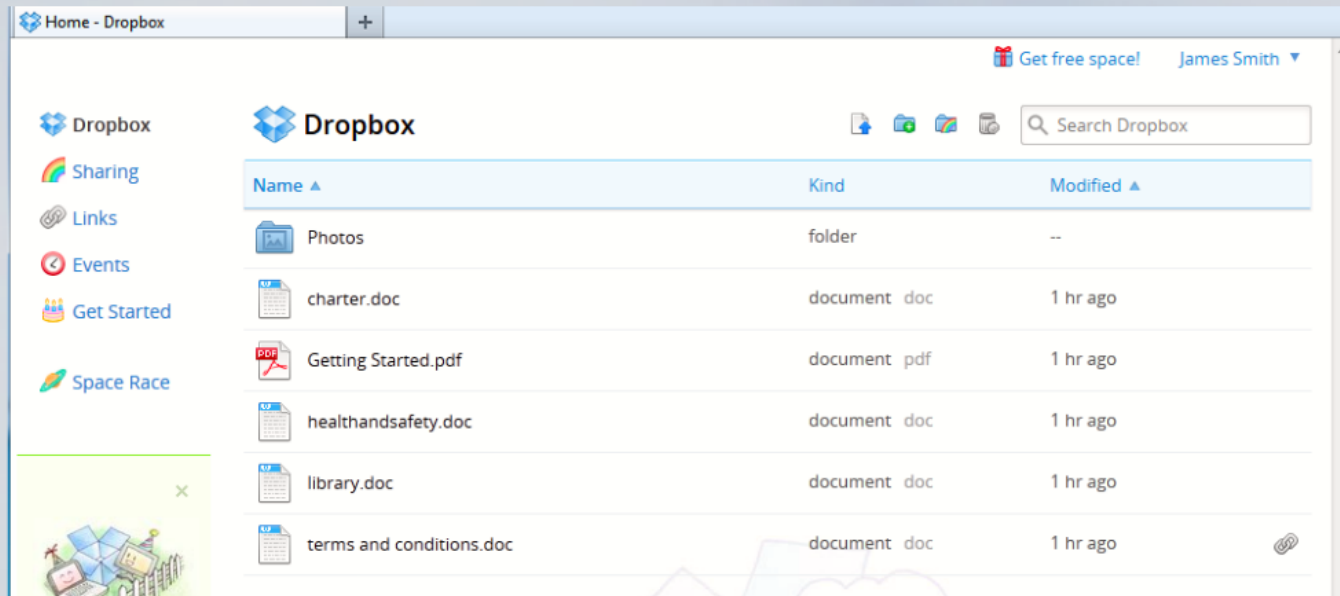
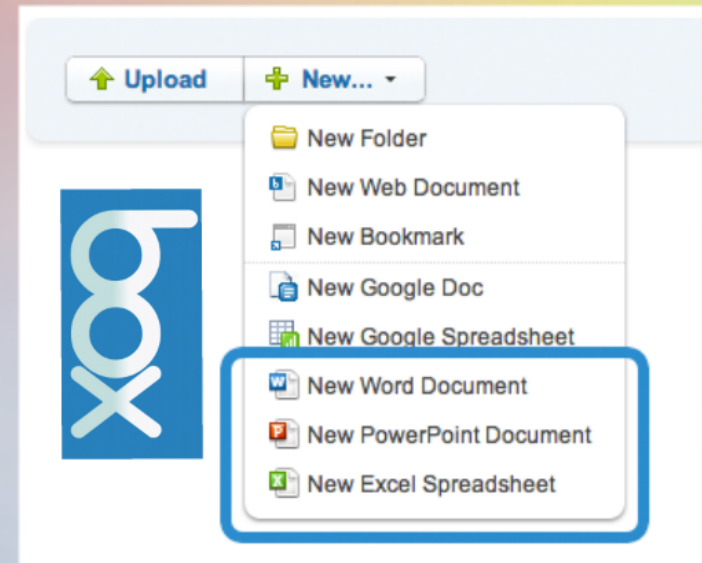
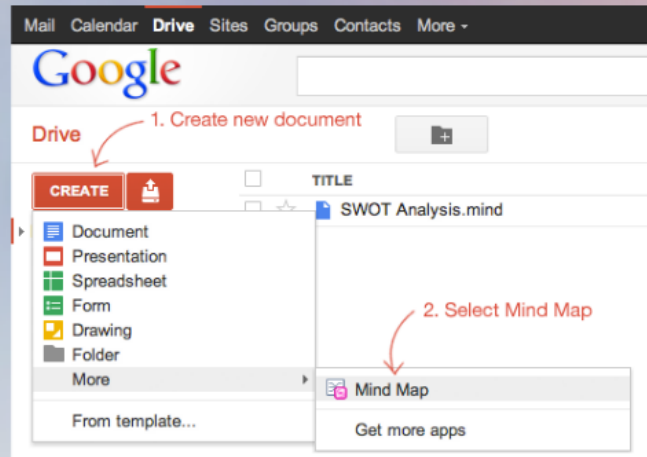


More than Storage

Software and applications

Document Creation

Google Docs
SkyDrive
Box



Internet is required

- Creation is happening in the cloud
- Saving is going to the cloud
- To retrieve files, must return to the cloud



Implications

What are we comfortable with using?

The image displays three distinct user registration forms side-by-side, illustrating different design approaches to a common task: user sign-up.

- Form 1 (Left): Microsoft-style**
 - Who are you?** Section: Name (First/Last), Birth date (Month/Day/Year), Gender (Select one).
 - How would you like to sign in?** Section: Microsoft account name (someone@example.com), with a link to "Or get a new email address".
 - Create a password** section: Password field with a note "8-character minimum; case sensitive".
 - Reenter password** section: A second password field.
- Form 2 (Middle): Google-style**
 - Name** section: First/Last.
 - Choose your username** section: Username field (example: @gmail.com) and a link "I prefer to use my current email address".
 - Create a password** section: Password field.
 - Confirm your password** section: Confirmation field.
 - Birthday** section: Month/Day/Year.
 - Gender** section: "I am..." dropdown.
- Form 3 (Right): Dropbox-style**
 - Fields for First Name, Last Name, Email, and Password.
 - Strength indicator for the password field.
 - Confirm Password field.
 - Your Phone field.
 - Storage selection: "5 GB - Free".
 - Agreement checkbox: "I agree this is for non-commercial use only".
 - Green "Continue" button.
 - Disclaimer: "By registering you agree to Box's Terms of Service".

Below the Dropbox form, a simplified version of a registration form is shown with fields for First name, Last name, Email, and Password, followed by a "Sign up" button and a link to "I agree to Dropbox Terms".

Benefits

- Saving Large Files
- Multiple file types - Photos, videos, presentations, docs
- Back-up of stored files
- File Sharing
- Access from devices
- Nothing to forget (thumb drive, cd)
- Project collaboration



Disadvantages

- Security Issues
- Terms of Service
- Privacy Policies

Cloud Computing

Advantages

- Storage and Scalability
- Backup and Recovery
- Mobility
- Cost Efficiency
- IT Innovation

Disadvantages

- Control and Reliability
- Security and Compliance
- Compatibility
- Unpredicted Costs
- Contracts and Lock-Ins

References

[1] Dr. Ahmad Raza Khan "Cloud Services for Collaborative Web Based Project Management System" International Journal of Computer Science Issues, Vol. 8, Issue 6, No 2, November 2011.

[2] Dr. Ahmad Raza Khan, Cloud Service for Collaborative web based Project Management System, International Conference on Cloud Computing and eGovernance (ICCCEG 2012), Bangkok, ISBN : 978-81-920575-0-7.

[3] Dr. Ahmad Raza Khan, Impact of Cloud Computing Collaboration with Educational Space, International Conference on Cloud Computing and eGovernance (ICCCEG 2012), Bangkok, ISBN : 978-81-920575-0-7

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[4] S. Sengupta, "Cloud Computing Security-Trends and Research Directions", IEEE World Congress on Services, pp. 524-531, 2011.

[5] S. Ramgovind, "The Management of Security in Cloud Computing", IEEE, pp. 1-7, 2010. A. N. Kumar, "Learning programming by solving problems. In Informatics Curricula and Teaching Methods", L. Cassel and R.A. REIS, Eds. Kluwer Academic, pp. 29-39, 2003.

News On Cloud Computing

Today



Virtualisation giant VMware has announced 'VMware vCloud Hybrid Service - Disaster Recovery', a service which provides a continuously available recovery site if a VMware data centre hits the skids.



Amazon cloud computing services to get price cut

Research Topics

Using Social Networking
Tools for knowledge sharing

Designing a Virtual Cloud
Infrastructure

Cloud Computing for Teaching and
Learning: Strategies for Design and
Implementation



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