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- Introduction
  - What is the Cloud?
  - Its characteristics
  - Type of Services
  - Advantages
  - Disadvantages
  - Conclusions
  - Questions?

# Conventional Approaches

## ➤ Computer Storage Devices

- Internal Storage (Hard Disk)



- External storage

CD/DVD



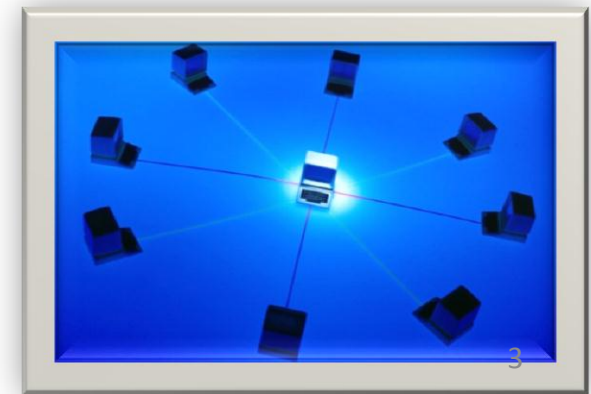
USB Drive



External Hard Drive



- Network Storage



# Conventional Approaches

## ➤ Applications

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





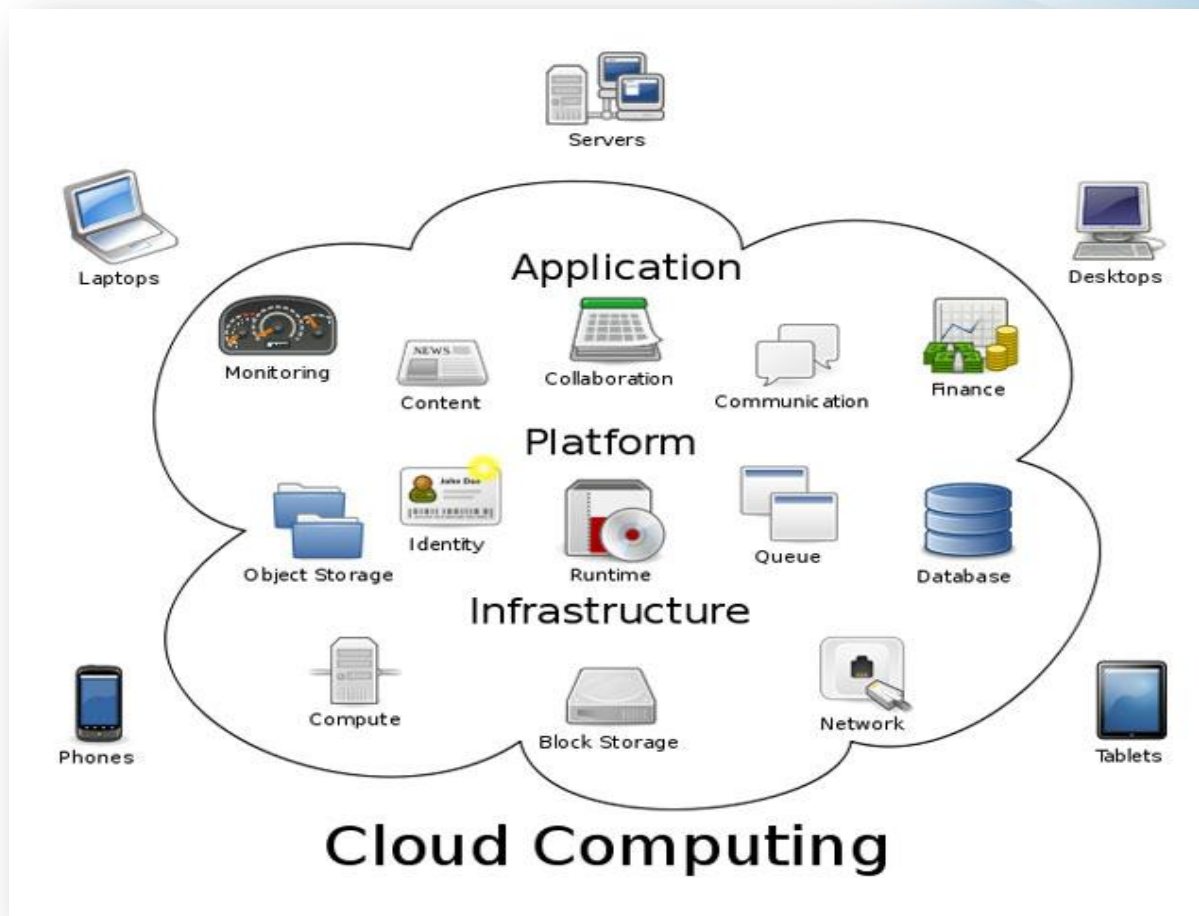
# So what is the cloud?



**Computing and software resources that are delivered on demand, as service.**

(2013, January) A Walk in the Clouds. *Cloud Computing*, CDW-G Reference Guide., 3-5.

*“The practice of using a network of remote servers hosted on the Internet to store, manage, and process data, rather than a local server or a personal computer”*



[http://www.us-cert.gov/reading\\_room/USCERT-CloudComputingHuthCebula.pdf](http://www.us-cert.gov/reading_room/USCERT-CloudComputingHuthCebula.pdf)

<http://www.blippitt.com/2010-new-oxford-american-dictionary-new-words/>

# Cloud History

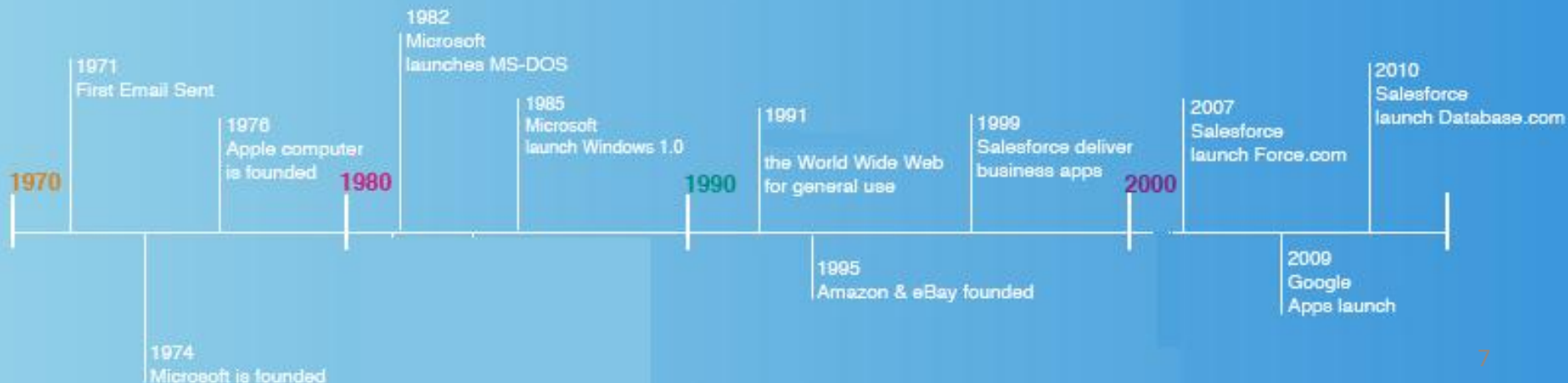


**Joseph Carl Robnett Licklider** (Lick) (1915-1990), was an American psychologist and Computer scientist who is considered one of the most important figures in Computer science and general computing history.

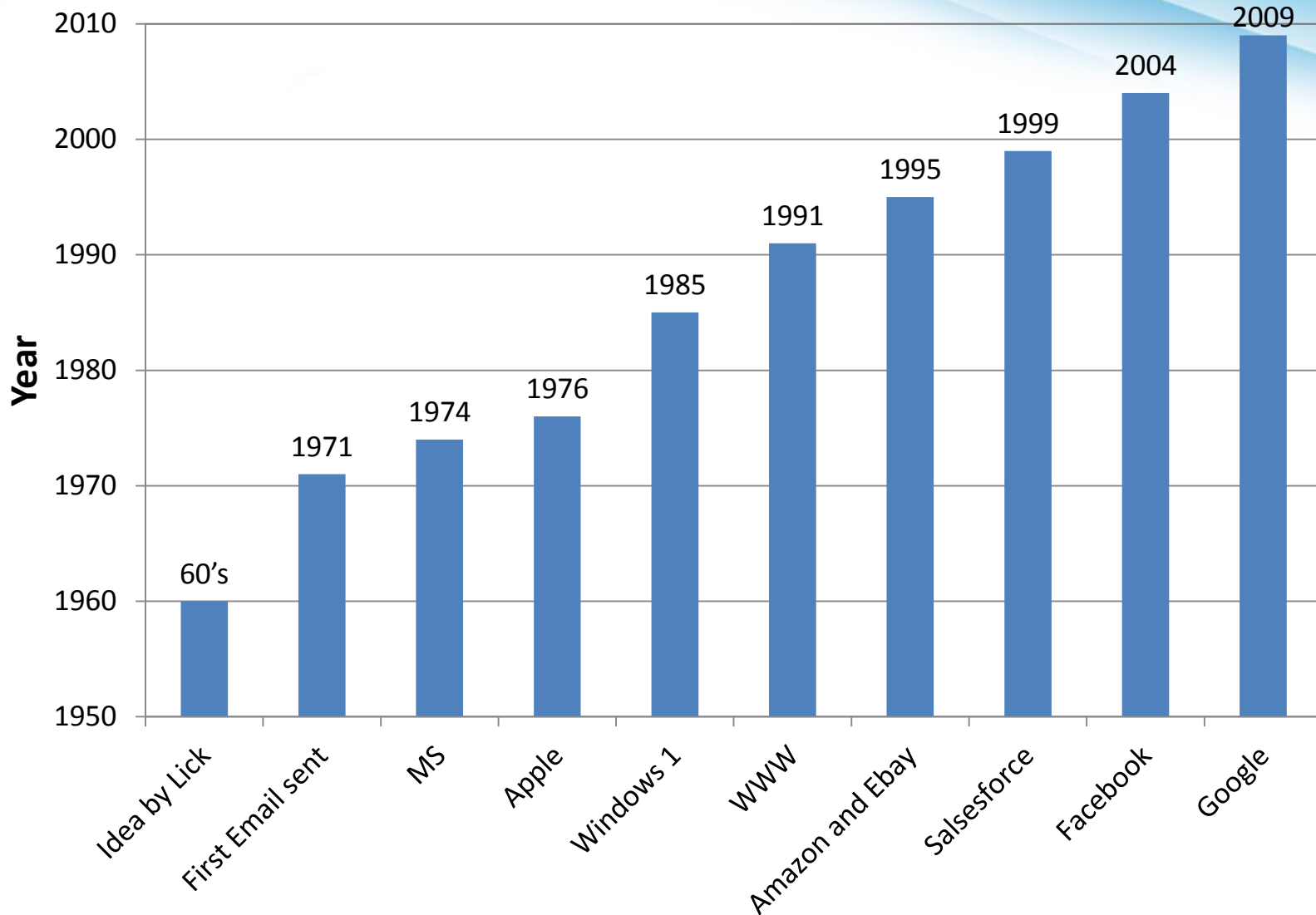
**His vision was for everyone on the globe to be interconnected and accessing programs and data at any site, from anywhere!**



## A Brief History of Cloud Computing



# Cloud History, Again!





# Do you Use the Cloud?



# Essential Characteristics of Cloud Computing



# Type of Services



- Software as a Service (SaaS):
  - Also referred to as “software on demand,” this service model involves outsourcing the infrastructure, platform, and software/applications.
  - Typically, these services are available to the customer for a fee, pay-as-you-go, or a no charge model.
  - The customer accesses the applications over the internet.
  - Provides Applications..

# Types of Services



- Platform as a Service (PaaS)
- PaaS provides a computing platform and a solution stack as a service.
  - Consumer creates the software using tools and/or libraries from the provider.
  - The consumer also controls software deployment and configuration settings. The provider provides the networks, servers, storage and other services.
  - Deploys customer created applications







# Types of Services



- Infrastructure as a Service (IaaS)
- A service model that involves outsourcing the basic infrastructure used to support operations--including storage, hardware, servers, and networking components.
- The service provider owns the infrastructure equipment and is responsible for housing, running, and maintaining it. The customer typically pays on a per-use basis.
- All infrastructure is provided on-demand
- Rent processors, storages and computing resources

# Cloud Service Models – Examples



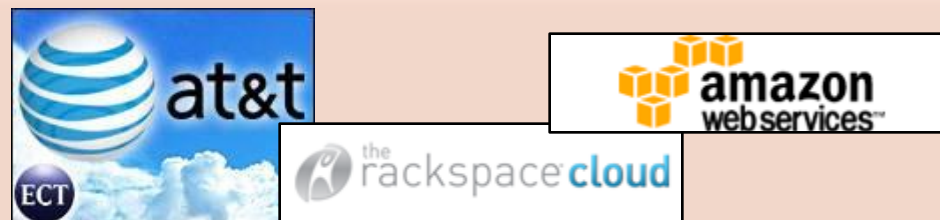
Software as a  
Service (SaaS)



Platform as a  
Service (PaaS)



Infrastructure as  
a Service (IaaS)



# Cloud Signing Up!



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



<p><b>Name</b></p> <p>First <input type="text"/> Last <input type="text"/></p> <p><b>Choose your username</b></p> <p><input type="text"/> @gmail.com</p> <p><b>Create a password</b></p> <p><input type="password"/></p> <p><b>Confirm your password</b></p> <p><input type="password"/></p> <p><b>Birthday</b></p> <p>Month <input type="text"/> Day <input type="text"/> Year <input type="text"/></p> <p><b>Gender</b></p> <p>I am... <input type="text"/></p> <p><b>Mobile phone</b></p> <p><input type="text"/></p> <p><b>Your current email address</b></p> <p><input type="text"/></p>	<p><b>Default homepage</b></p> <p><input checked="" type="checkbox"/> Set Google as my default homepage.</p> <p>Your default homepage in your browser is the first page that appears when you open your browser.</p> <p><b>Prove you're not a robot</b></p> <p><input type="checkbox"/> Skip this verification (phone verification may be required)</p> <p><b>Image verification</b></p> <p>energies <i>Stankso</i></p> <p>Type the two pieces of text:</p> <p><input type="text"/> <input type="text"/></p> <p><b>Location</b></p> <p>United States <input type="text"/></p> <p><input type="checkbox"/> I agree to the Google <a href="#">Terms of Service</a> and <a href="#">Privacy Policy</a></p> <p><input checked="" type="checkbox"/> Google may use my account information to personalize +1's on content and ads on non-Google websites. <a href="#">About personalization.</a></p> <p><a href="#">Next step</a></p>
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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



# Downloads for storage

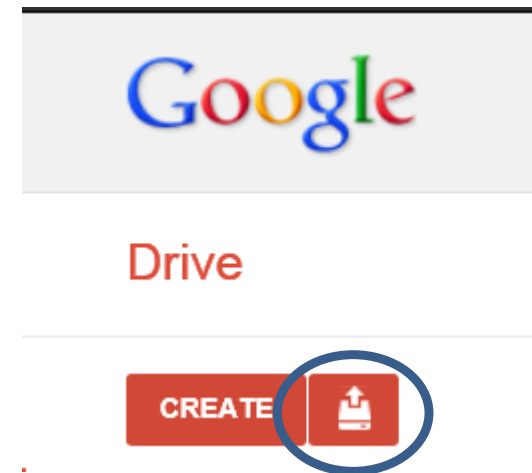
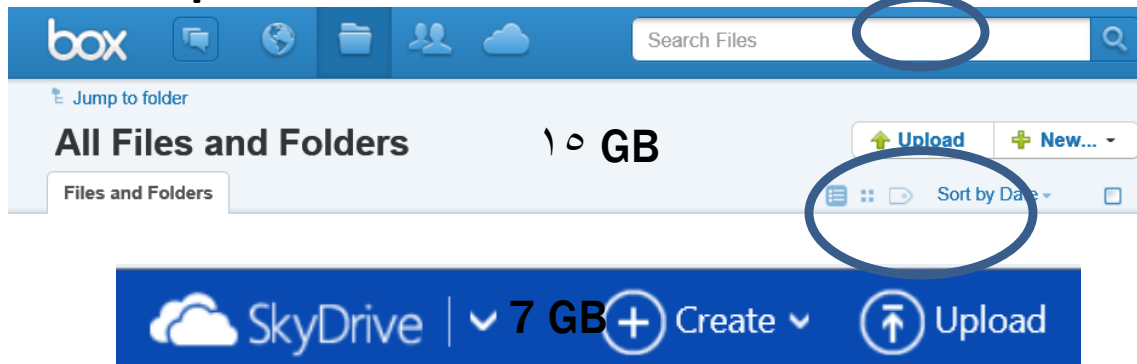
- Download a cloud based app to a computer **you own**
- The app lives on your Computer
- Save files to the app
- When connected to the Internet it will sync with the cloud
- The Cloud can be accessed from any Internet connection



# 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



2 GB



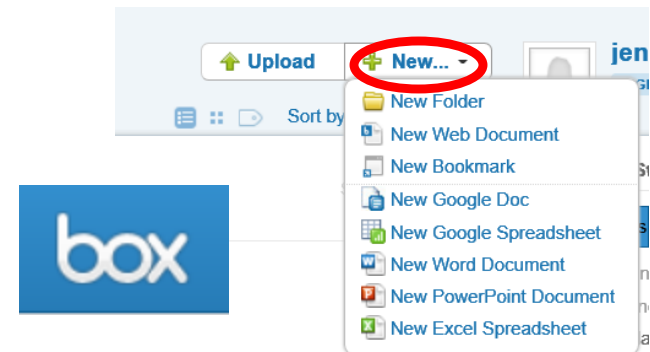
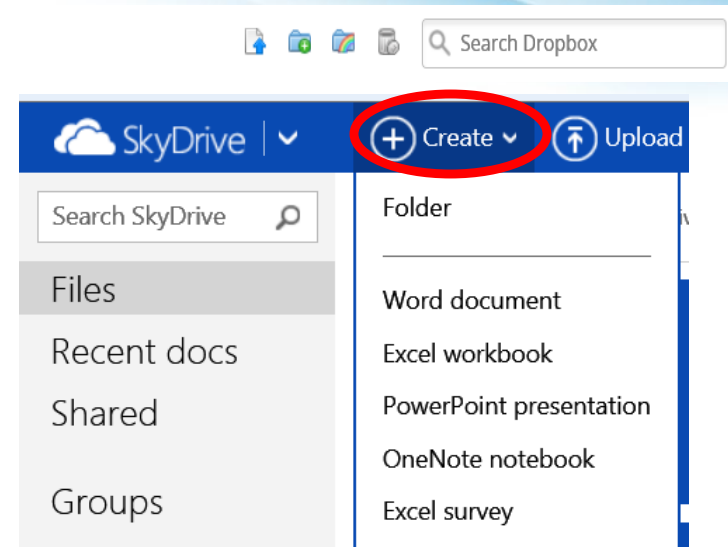
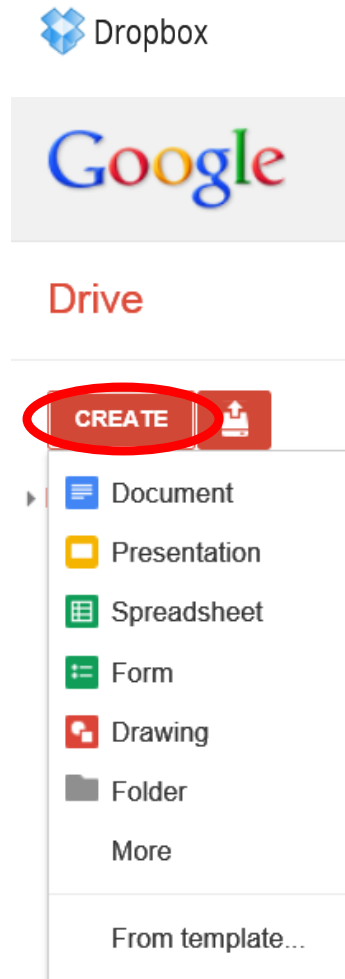


# More than Storage

**Software  
and  
Applications**

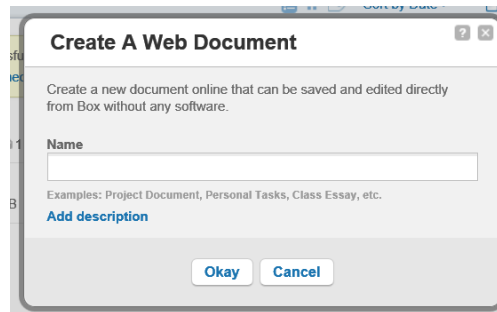
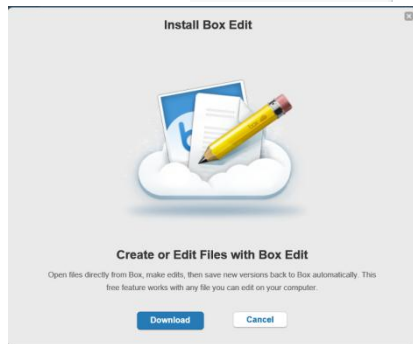
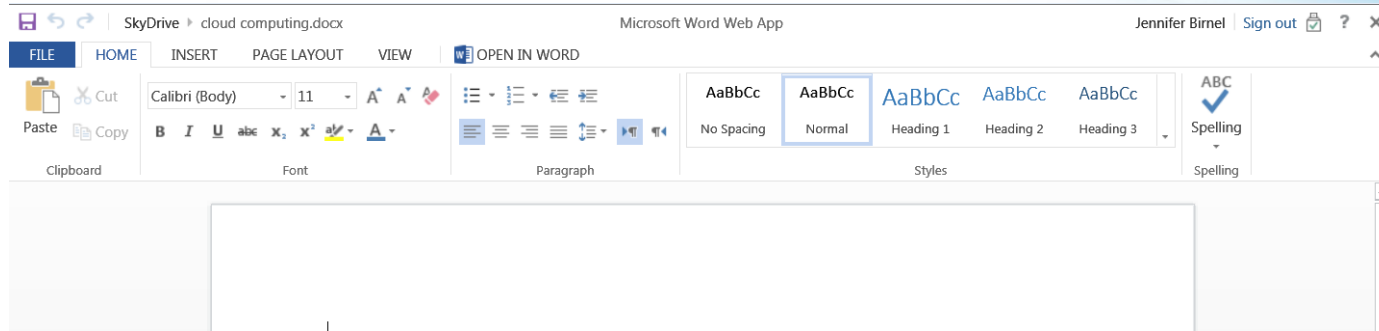
# Document Creation

- Google Docs
- SkyDrive
- Box
- One Drive





# Download required?



# Internet is Required



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



# 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







# File Sharing





Sharing settings

Link to share (only accessible by collaborators)

<https://docs.google.com/file/d/0B8hZL-kOGafSY1B6QWc0WIZGQUk/edit?usp=sharing>

Share link via:    

Who has access

	Private - Only the people listed below can access	<a href="#">Change...</a>
	Jennifer Birmel (you) jennbirmel@gmail.com	<a href="#">Is owner</a>

Add people:




Enter names, email addresses, or groups...

Editors will be allowed to add people and change the permissions. [\[Change\]](#)

[Done](#)

**Share**

Send email

Post to   

Get a link

[Help me choose](#)

**Permissions**

This file is not shared

Send a link to "Professional Cover Letter.docx" in email

To

|

Include a personal message (optional)

☒ Recipients can edit

☐ Require everyone who accesses this to sign in

[Share](#)

[Done](#)



# Other Software Services



- Photo editing software
- Online banking apps
- Social media apps
- Communication





# Useful Applications

# Google Applications



Google

Drive

My Drive

CREATE

- Folder
- Document
- Presentation
- Spreadsheet
- Form
- Drawing

Connect more apps

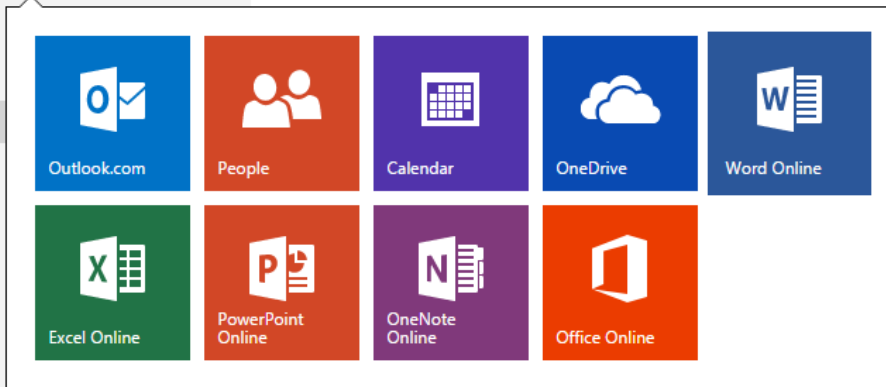
TITLE	OWNER	LAST MODIFIED
☆ ComputerDept2013-2014	me	22 Mar me
☆ H_Drive_1_myresearch files	me	22 Mar me
☆ wathaq_Last	me	23 Mar me

7.78 GB (51%) of 15 GB used  
[Manage](#)

<https://drive.google.com>

15 GB Free

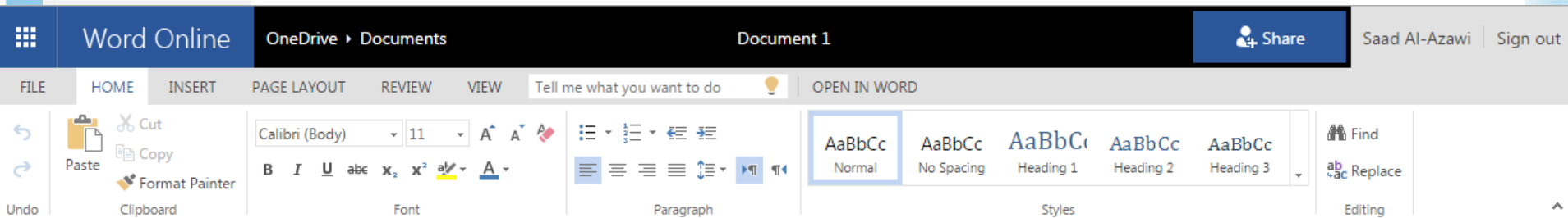
# Microsoft Applications One Drive



setting will only apply to Microsoft

<https://onedrive.live.com>

**15 GB Free**



**Online Office**

# Dropbox



Sign in

 **Dropbox**

First name Last name

Email

Password

☐ I agree to Dropbox Terms

Download Dropbox

Sign up

Free for Windows, Mac, Linux, and Mobile

 Check out our Pro and Business plans!

<http://www.dropbox.com>

**3 GB Free**



# WWW.Ebay.com



ebay Shop by category

All Categories Search Advanced

Back to search results | Listed as Sony α (alpha) NEX-5 14.2 MP Digital Camera - Silver (K... in category: Cameras & Photography > Digital Cameras

**Sony α (alpha) NEX-5 14.2 MP Digital Camera - Black (Kit w/ 18-55mm Lens)**

Condition: **Used** Time left: **1h 21m 4s** (20 Apr, 2014 11:28:11 BST)

£119.09 14 bids

Enter your max bid

**Place bid**

Additional coverage available  
Add to Watch list Add to collection

100% positive feedback Limited time remaining

Collect 119 Nectar points  
Get Started | Conditions

Postage: **£11.00** Express Delivery | See details  
Item location: Redditch, Worcestershire, United Kingdom  
Posts to: United Kingdom

Delivery: Estimated by Thu. 24 Apr.

Payments: **PayPal** | See payment information

Returns: No returns accepted

**Seller information**  
**honez177** (243 ★)  
100% Positive Feedback  
Follow this seller  
See other items

**GRAB A FORD TRUCK DEAL. TODAY.**  
BUILT Ford TOUGH  
REQUEST FOR A QUOTE

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Internet access

www.ebay.co.uk





amazon.co.uk

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Watches Men Women Swiss Made Luxury Sports Children Watch Brands Best Sellers Special Offers Watch Education

< Back to search results for "tissot watches"



Tissot

**Tissot Gents Watch PRC 200 T17158642**

★★★★☆ (2 customer reviews)

Price: **£247.99**

**Usually dispatched within 4 to 5 days.**  
Dispatched from and sold by [Designer Posh Watches](#).

- Water Resistance : 20 ATM / 200 meters / 660 feet
- Chronograph Display
- Steel Bracelet Strap

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Basket

Wish List

Your Account

Your Orders

Where's My Stuff?

Your Wish List

Your Recommendations

Your Subscribe & Save Items

Manage Your Kindle

Your Cloud Player  
Play from any browser

Your Cloud Drive  
5 GB of free storage

Your Prime Instant Video  
Unlimited streaming of thousands of movies and TV shows

Your Watchlist

Your Video Library

Your Rental List

Your Games and Software Library

Your Apps & Devices

Not Saad? Sign Out

Quantity: 1

**£7.99** + FREE UK delivery  
dispatched within 4 to 5  
Sold by **Designer Posh Watches**

Add to Basket

or  
turn on 1-Click ordering.

Add to Wish List

**More Buying Choices**  
**£149.17**  
d & new from **£149.17**

to sell? [Sell yours here](#)

Share

# WWW.paypal.com

Google Chrome to save your password?

[Log Out](#) | [Help](#) | [Security](#)


## PayPal

[My Account](#) [Send Money](#) [Request Money](#) [Merchant Services](#) [Auction Tools](#) [Products & Services](#) [Help](#)

[Overview](#) [Add Funds](#) [Withdraw](#) [History](#) [Resolution Centre](#) [Profile](#)

**Welcome, Saad Al-Azawi**

Account Type: Personal [Upgrade](#) | Status: Unverified [Get Verified](#) | Account Limits: [View Limits](#)

 Change the way you pay with the all-new PayPal app.

PayPal balance: **\$0.00 USD** [Currency converter](#)

Available balance in USD (primary): \$0.00 USD

Total balance (all currencies, available and pending) converted to USD: \$0.00 USD [Hide](#)

Currency	Total
USD (Primary)	\$0.00 USD
GBP	£0.00 GBP

**Pay however you want**

No matter what your balance, you can use PayPal – if you have a balance we'll use it first on your next purchase. [Learn more](#)

My recent activity | [Payments received](#) | [Payments sent](#) [View all my transactions](#)

**My recent activity - Last 7 days (13 Apr 2014-20 Apr 2014)**


[Archive](#) [What's this?](#) [Payment status glossary](#)


<input type="checkbox"/>	Date	Type	Name/Email	Payment status	Details	Order status/Actions	Gross
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Last login 12 March 2014 3:25 p.m. GMT

**To Do**

- [Policy updates](#)

 **Loaded down?**

 **Downloaded.**

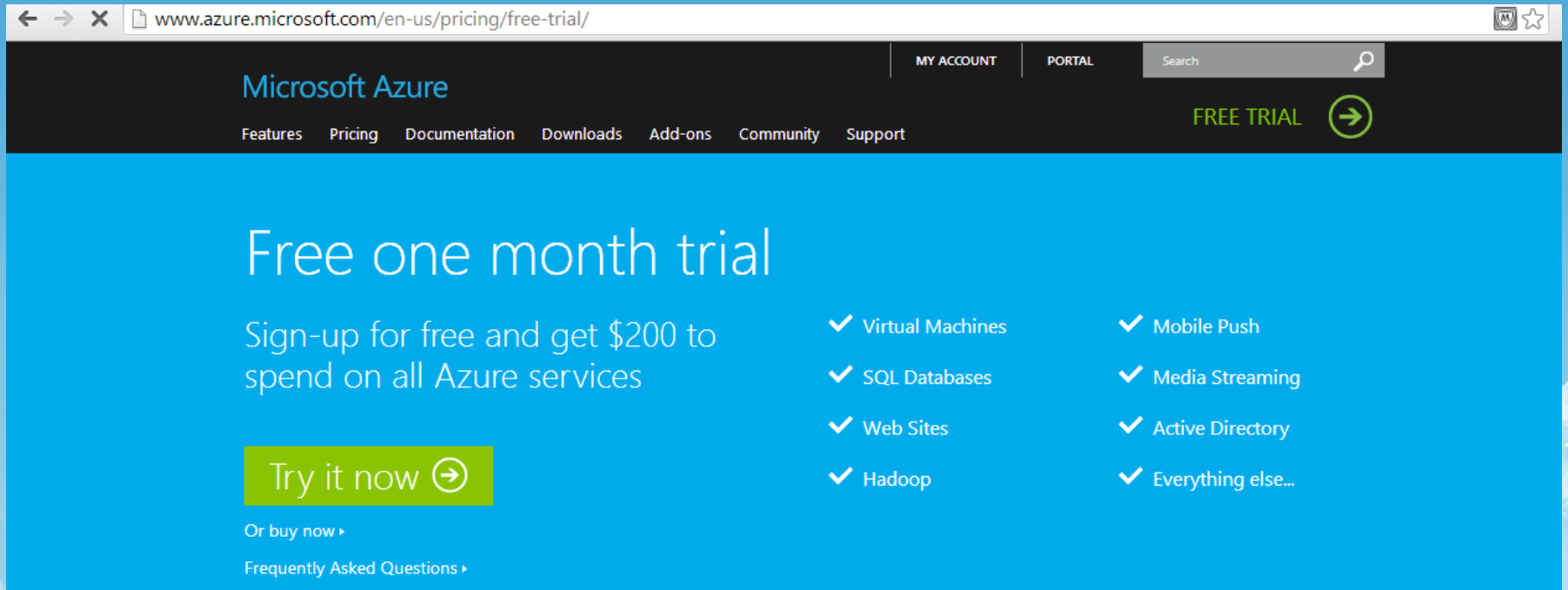
[Download The Free App](#)

**Have a question?**  
We're here to help. [Contact us](#)



# Windows Azure : Famous Platform

[www.azure.microsoft.com/en-us/](http://www.azure.microsoft.com/en-us/)



The screenshot shows the Microsoft Azure website's pricing page for a free trial. The browser address bar displays [www.azure.microsoft.com/en-us/pricing/free-trial/](http://www.azure.microsoft.com/en-us/pricing/free-trial/). The navigation bar includes links for Features, Pricing, Documentation, Downloads, Add-ons, Community, and Support, along with a 'FREE TRIAL' button. The main content area features a large blue background with the text 'Free one month trial' and 'Sign-up for free and get \$200 to spend on all Azure services'. A green 'Try it now' button is prominently displayed. Below this, there are links for 'Or buy now' and 'Frequently Asked Questions'. A list of services included in the trial is shown on the right, including Virtual Machines, SQL Databases, Web Sites, Hadoop, Mobile Push, Media Streaming, Active Directory, and Everything else... The page number '33' is visible in the bottom right corner of the screenshot.

Microsoft Azure

Features Pricing Documentation Downloads Add-ons Community Support

FREE TRIAL

## Free one month trial

Sign-up for free and get \$200 to spend on all Azure services

Try it now

Or buy now

Frequently Asked Questions

- ✓ Virtual Machines
- ✓ SQL Databases
- ✓ Web Sites
- ✓ Hadoop
- ✓ Mobile Push
- ✓ Media Streaming
- ✓ Active Directory
- ✓ Everything else...



Azure Data Centres

# CLOUD STORAGES COMPARISON



## Selected Cloud Storage Providers

	Free (GB)	Advance (GB)	Cost/Year (USD)
Dropbox	3	1000	120
Google Drive	15	1000	120
Mega	50	2000	227
Apple iCloud	5	1000	240
MS OneDrive	15	1000	84
Tresorit	3	1000	300





# Advantages

- Cost saving: You pay for what you use
- Easy installation and maintenance
- Increased storage
- Highly automated
- Flexibility
- Better mobility
- Shared resources
- Back up and restoration



# Disadvantages

- Data security and privacy
- Network connectivity and bandwidth
- Service unavailability due to power outage
- Dependence on outside agencies
- Limited flexibility
- Cost
- Knowledge and integration
- Long term stability of service provider

# Conclusion



Cloud Computing is the fastest growing part of network based computing . It Provides tremendous benefits to customers of all sizes: simple users, developers, enterprises and all types of organizations.

# References



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8. www.onedrive.live.com
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10. <https://mega.co.nz/>
11. www.slideshare.net
12. Other Internet resources.

# Thank You!



## Any Questions?

