How to Use the Cloud
Desktop computers, laptops, smartphone, tablet = terminal

Mainframe and terminals

“cloud” = the mainframe computers that terminals connected to and the Internet that transfers the data to/from terminals & mainframes

(Which do the real work for advanced tasks)
MILES DAVIS
Kind of Blue

with Julian “Cannonball” Adderley
Paul Chambers
James Cobb
John Coltrane
Bill Evans
Wynton Kelly

So what?

Why do I care?

- Everything’s available
- Available instantly
- And everywhere
- Easy to share
- Automatic
- On multiple devices
- Synchronized
Mainframe computing

Personal computing “client”

Cloud computing “server”

Future - ???

Cycle that goes back and forth maybe
cloud computing

noun

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.
Internet vs. World Wide Web

• Technology people tend to use the two terms interchangeably, but they have specific and important meanings.

Internet = physical infrastructure that transfers data

World Wide Web = what that infrastructure transfers, websites etc.
1. You do something on a device such as visit a website, open an app, log into an account, create a document, etc.

2. Your device sends data toward the cloud – “uploading”, “requesting”, “submitting”

3. Data is sent into/thru the internet to the cloud service

4. Cloud service receives the data or the request you sent and (hopefully) does what you asked – storing data, send it somewhere, processing it, etc.

5. You receive data that the cloud service sent you – “downloading”, “viewing”, “accessing”, “streaming”
Desktop and laptop computers, smart phones, tablets, etc. Connect to...

Wireless routers makes your WiFi at home. This is like a local access road that gets you to the highway.
Routers and modems connect to...

Fiber optic cable
(or copper cable, other cable technologies)
Cables that connect you to internet provider
Cables connect to...

Internet providers
Comcast, AT&T, Time Warner, Verizon, etc.
Internet providers connect to... the internet backbone, including:

- Undersea cables
- Transfer tons of data for internet providers
and satellite dishes
Transfer tons of data for internet providers
Satellites, undersea cables, & other backbone cable = Internet interstate highways
Internet backbone connects you (through your Internet service provider) to

Website servers
Some are clean like Google, others are messy
1. You do something on a device such as visit a website, open an app, log into an account, create a document, etc.

2. Your device sends data toward the cloud – “uploading”, “requesting”, “submitting”

3. Data is sent into/through the cloud to the cloud service

4. Cloud service receives the data or the request you sent and (hopefully) does what you asked – storing data, send it somewhere, processing it, etc.

5. You receive data that the cloud service sent you – “downloading”, “viewing”, “accessing”, “streaming”
“Streaming”

Simultaneously loading and playing content like music, movies, videos
“Accessing”

- news feeds
- account information
- cloud service settings

A cloud service sends you something you can see/use ONLY while connected to the Internet
“Downloading”

- email attachments
- songs
- movies...

A cloud service sends you something you can use while later not connected to the internet.
“Uploading”
- email attachments
- videos
- profile pictures...

You send something to a cloud service for it to use for you.
Quiz: 1) yes / no – a popular word processor
Quiz: 2) yes / no – another word processor
Quiz: 3) yes / no – file management program
Quiz: 4) yes / no – another file manager
Quiz: 5) yes / no - Note taking app

6) yes / no / maybe so - music playing app
Quiz: 7) yes / no – email application
Quiz: 8) yes / no – another email system
Quiz: 9) multiple choice

The “cloud” is one way of talking about __________ , where __________ transfer data back and forth between devices and websites for you, the __________ , through your Internet connection.

A. the weather / storms / meteorologist
B. using the World Wide Web/ services / client
C. technology / satellites / client
D. the World Wide Web / WiFi networks / server
Clues to recognize cloud services

Many are accessed via web browsers

Sign-in / signup pages

Desktop and mobile versions with same info
To use the cloud you need...

Devices: Laptops, desktops, tablets, smartphones
To use the cloud you need...

To have or create an account

An account is like your online address – it’s how a cloud service contacts you, how it knows you from everyone else.
Your specific location online: like street # (275 for the library)

Security to make sure only you get in: like a garage door code
-make sure yours is secure by using Letters, 123s, !@#s
To use the cloud you need... an Internet connection: Wi-Fi, cellular, or wired

To use the cloud you MAY need...:

to install programs (desktops or laptops)

Apps (on a tablet or smartphone)

To use the cloud you need...

Web browser (on desktops or laptops)
Security Tips

• If possible, don’t store any personal information in the cloud service itself. That way, if the service is hacked, there’s little risk to you.

• Change your password if you hear that a service you use has been hacked. Be wary of password reset scams and emails providing links to log in through.

• Beware phishing emails falsely claiming to be a cloud service. Hover over links to check addresses.

   ✔ www.cloudserviceyou’relookingfor.com
   ✔ www.login.cloudserviceyou’relookingfor.com
   ✔ www.cloudserviceyou’relookingfor.com/login
   ❌ www.1cloudserviceyou’relookingfor.scam.com , cloudservice.216.123.42.234/

Whatever is immediately to the left of the “.com” is the real website a link goes to.
Examples

• Dropbox
• Evernote
• Pandora
• Spotify
• Netflix
• Google Drive
• Email
• YouTube

• TurboTax
• iCloud
• Facebook
• Pinterest

• Anything else you’ve heard about? We have time for questions and time to go through other/more examples.