

# Computer Know How Series

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**Cloud Services** – Thursday October 13<sup>th</sup> 2016 @ 2pm

<http://www.aehost.net/morpd> or <http://www.morpd.com>

- 1) What is the Cloud?
  - a. Where is the Cloud? – The Internet
  - b. What makes up the Cloud? – Vendors, Hardware, Software, Services, Protocols, Security
  - c. What does the Cloud do for me? – More than you think! Many everyday activities.
  - d. Are you using the Cloud? – Most likely, you are using the Cloud every day.
- 2) What is a Cloud Service? – *A Cloud Service is any resource that is provided over the Internet.*
  - a. Email, Web Hosting, Storage, Calendar, Apps, Streaming/VoIP (Video over Internet Protocol), Backups, VoIP (Voice over Internet Protocol), Collaboration Tools (meeting and document sharing), etc
  - b. Most anything you can run from a web browser (Edge, Internet Explorer, Chrome, Safari, Firefox).
- 3) The Basics of a Cloud Services
  - a. Devices & Network Connections – Physical (wired/wireless), Protocols, Applications/Services
  - b. Vendor/Account Providers (Microsoft, Apple, Google, Yahoo, Amazon, DropBox, etc)
  - c. Provided Services (see Section 2a above)
  - d. Access & Communication Security – App, Browser, etc & SSL (Secure Socket Layer) over HTTPS (HyperText Transfer Protocol Secure)
  - e. Credentials/Login (Username [email address], Password & Domain [if applicable])
    - i. Do not confuse email address login with the Account Provider and services provided.
- 4) Examples/Demos
  - a. How does Email work?
    - i. Apps (Web and Local) – Webmail, Outlook, Mail (Windows or Apple), etc
    - ii. Providers/Networks of Servers – Server host names and domain names
    - iii. Protocols – POP3 (Post Office Protocol), IMAP4 (Internet Message Access Protocol), SMTP (Simple Mail Transfer Protocol), MAPI (Messaging Application Programming Interface), EAS (Exchange Active Sync)
    - iv. Security – Username (email address), Password, Protocols over SSL (different ports)
  - b. How does a Website work?
    - i. Domain name (domain & extension) – aehost.net, applicationsetc.com, google.com
    - ii. IP address (public or private) – 69.62.245.158, 192.168.1.1
    - iii. Web Hosting – personal/home, or commercial subscription/service
    - iv. Protocols & Access – HTTP/HTTPS (HyperText Transfer Protocol Secure), FTP (File Transfer Protocol) & Web Browser and Web Editing Applications (Dreamweaver, etc)
  - c. How does Cloud Storage work? (MS Onedrive, iCloud Drive, Google Drive, Personal NAS)
    - i. Access – App to view and/or sync data (website, local app)
    - ii. Hosting (personal/commercial) – Server(s), Protocols (HTTP/HTTPS)
    - iii. Synchronization – Each device (Desktop, Laptop, Tablet, Mobile) that is connected to a service can synchronize/access all or part of the data stored.
    - iv. Offline Access – If data is synchronized to device(s) then access to that data is available when offline (not connected to the Internet).

5) Links

- a. Definition - [http://www.webopedia.com/TERM/C/cloud\\_services.html](http://www.webopedia.com/TERM/C/cloud_services.html)
- b. Cloud Computing - [https://en.wikipedia.org/wiki/Cloud\\_computing](https://en.wikipedia.org/wiki/Cloud_computing)
- c. Cloud Storage – [www.onedrive.com](http://www.onedrive.com), [www.icloud.com](http://www.icloud.com), [drive.google.com](http://drive.google.com), [www.dropbox.com](http://www.dropbox.com), [www.cubby.com](http://www.cubby.com)
- d. Backup – [www.carbonite.com](http://www.carbonite.com), [www.mozy.com](http://www.mozy.com)