Computer Know How Series

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Email Configuration and Usage – Thursday February 8th 2018 @ 2pm

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

1) Topic of the Day
   a. **Email Configuration and Usage** – Most know how to use email basics but what do all these settings mean?
   b. Let's discuss configuration and how security has changed the functionality.

2) Definitions and Terminology
   a. E-mail – Electronic mail messages distributed by electronic means from one computer user to one or more recipients via a network. (Electronic form of USPS and works similarly).
   b. E-mail Address – a name that identifies an electronic post office box on a network where e-mail can be sent. Every user on the Internet has a unique e-mail address.
      i. Username – portion of email address before @ symbol. This part is selected by the user.
      ii. Domain Name – portion of email address after @ symbol. This is designated by your ISP (Internet Service Provider). A personal Domain Name can also be purchased and setup.
   c. Mail Client – Installed application/program to Send and Receive Email.
   d. Webmail – ISP provided website that provides email access. Developed for remote access to email.
   e. POP/POP3 (Post Office Protocol) – a protocol used to retrieve/receive e-mail from a mail server.
   f. IMAP/IMAP4 (Internet Message Access Protocol) – a protocol for retrieving e-mail messages and supports folder syncing.
   g. SMTP (Simple Mail Transfer Protocol) – an Internet standard for electronic mail transmission.
   h. SSL (Secure Socket Layer) & TLS (Transport Layer Security) – SSL is the standard security technology for establishing an encrypted link between a server and server/client. TLS is a successor to SSL (SSL3).
   i. MAPI (Messaging Application Programming Interface) – a messaging architecture and a Component Object Model based API (Application Program Interface) for Microsoft Windows.
   j. Exchange – A line of messaging and collaborative software from Microsoft that is comprised of an email server, email client, and several groupware applications. The Microsoft Exchange line is prevalent in large corporations and is frequently used in conjunction with Microsoft Outlook.
   k. Network Port – A process-specific or application-specific software construct serving as a communication endpoint, which is used by the Transport Layer protocols of Internet Protocol (IP) suite, such as User Datagram Protocol (UDP) and Transmission Control Protocol (TCP). _____

3) Email Configuration – Determine your server settings with your ISP.
   a. Many settings and functions are involved to connect you and everyone to email services.
   b. Incoming mail
      i. POP or IMAP server hostname or IP address (ex: mail.yahoo.com).
      ii. POP ports – 110 (non-secure/encrypted) and 995 (secure/encrypted via SSL).
      iii. IMAP ports – 143 (non-secure/encrypted) and 993 (secure/encrypted via SSL).

    c. Outgoing Mail
   - i. SMTP server hostname or IP address (ex: smtp.yahoo.com).
   - ii. SMTP Authentication - username and password to confirm identity with mail server.
   - iii. SMTP ports – 25 (standard non-secure/encrypted), 587 (non-secure/encrypted but authenticated) and 465 (secure/encrypted and authenticated). Some organizations use other alternate ports that are not standardized. (ex: 80, 2525, 3535, etc)

    d. Security has improved over the years to protect your passwords but email is <u>NOT guaranteed secure</u> and should <u>NOT</u> be used to transmit personal or financial information/documents. Each portion of the delivery path must be controlled to guarantee security. This is why banks and medical organizations use their secure website to access their internal email system to perform secure email with their staff. Standard (non-secure) emails you receive will direct you to login on their secure website where you can interact with their internal system and staff. These secure organizations will not request information via email. Be aware of phishing emails.

4) Email Usage

    a. Email Client
   - i. Installed application/app on your computer or mobile device. (ex: Mail, Email, Windows Mail, Outlook, Thunderbird, etc)
   - ii. Terms; Inbox, Drafts, Outbox, Sent Items Junk Email, organizational folders, Send/Receive (Auto and Manual), etc.
   - iii. Read Message options; Inbox, Read Receipt Approval, Reply, Reply to All, Forward, etc.
   - iv. Message Composition options; New Message, Recipient (To, Cc, Bcc), Subject, Message Body (HTML/Plain Text), Attach file, Signature, Read Receipt, Delivery Receipt, Send, etc.

    b. Webmail
   - i. ISP website and commonly in the format http://webmail.domainname.com.
   - ii. You have little to no control of the interface or changes and can frustrate users.
   - iii. Terms and usage options are similar to mail clients but may vary based on service.

    c. Message routing and delivery process
   - i. Compose Message.
   - ii. Send Message.
   - iii. Outbox (Sent folder stores message once sent to SMTP server).
   - iv. Senders ISP SMTP server (ex; Yahoo). Delivered by reading the email address in reverse.
   - v. Mail could be routed through a Smarthost or secondary ISP. (not often)
   - vi. Recipients SMTP server (ex; Outlook.com/Hotmail).
   - vii. Mailbox delivery (user/recipient mailbox).
   - viii. Mailbox retrieval (initiated by mail client on POP, IMAP or MAPI). Webmail is similar to IMAP.

    d. Mailer Daemon – message from server for a failure/delay in the delivery process.

5) Links and Resources

    a. ISP Support site & your Technical Support

    b. Google.com – https://www.google.com

    c. OSI (Open System Interconnect) Model & Internet Model – IT troubleshooting models