

Email Protocols

▶ SMTP (Simple Mail Transfer Protocol)

- SMTP is the protocol used in sending outgoing emails.
- Mail servers and other message transfer agents use SMTP to send and receive mail messages. Proprietary systems such as Microsoft Exchange and webmail systems such as Outlook.com & Gmail may use non-standard protocols internally, but all use SMTP when sending to or receiving email from outside their own systems.

SMTP

Port 25

Secure SMTP

Port 465

▶ IMAP (Internet Message Access Protocol)

- IMAP is an email accessing protocol. It is used to access the mails from the server itself. Applications like Outlook using IMAP will synchronize a copy of the mail on the server to the user's computer. All mail data is kept on the server as well as the user's computer until they delete mail.
- Using the IMAP protocol means that emails will be stored in the mail server and could be accessible from any clients anywhere if they all use IMAP.

IMAP

Port 143

SSL IMAP

Port 993

▶ POP (Post Office Protocol)

- POP is an email accessing protocol used to download emails from a mail server. Applications like Outlook and Outlook Express using POP will download all emails from the server to the user's computer, and then delete them on the server.
- The POP protocol assumes that there is only one client/computer that will be connecting to the mailbox.

POP

Port 110

SSL POP

Port 995

▶ Differences between POP and IMAP

- POP downloads the mail on to the user's computer; IMAP keeps email on the server and provides viewing from multiple places simultaneously.
- POP downloads and disconnects from the server, IMAP stays connected for a longer period of time and is able to send notifications as new mail arrives.
- All the email folders and data are on the server in IMAP, using POP emails are downloaded and stored on the clients's computer.
- In IMAP, changes made (i.e. marking a email as read, as forwarded) are synchronized to the mail server so they are visible from any IMAP client, whereas in POP once you have downloaded the email to a computer, no more access is available from other devices.