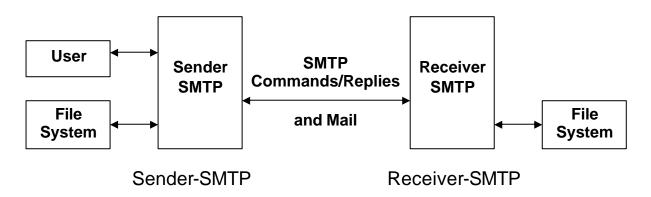
# Model for SMTP Use



## The SMTP Commands

- HELLO (HELO) identify the sender-SMTP to the receiver-SMTP.
- MAIL (MAIL) initiate a mail transaction in which the mail data is delivered to one or more mailboxes.
- RECIPIENT (RCPT) identify an individual recipient of the mail data.
- **DATA (DATA)** the receiver treats the lines following the command as mail data from the sender.
- **SEND (SEND)** initiate a mail transaction in which the mail data is delivered to one or more terminals.
- SEND OR MAIL (SOML) initiate a mail transaction in which the mail data is delivered to one or more terminals or mailboxes.
- **SEND AND MAIL (SAML)** initiate a mail transaction in which the mail data is delivered to one or more terminals and mailboxes.
- **RESET (RSET) -** specifies that the current mail transaction is to be aborted.
- VERIFY (VRFY) asks the receiver to confirm that the argument identifies a user.
- **EXPAND (EXPN)** asks the receiver to confirm that the argument identifies a mailing list, and if so, to return the membership of that list.
- **HELP (HELP)** causes the receiver to send helpful information to the sender of the HELP command.
- NOOP (NOOP) It specifies no action other than that
- **QUIT (QUIT)** the receiver must send an OK reply, and then close the transmission channel.
- **TURN (TURN) -** the receiver must either (1) send an OK reply and then take on the role of the sender-SMTP, or (2) send a refusal reply and retain the role of the receiver-SMTP.

## **Minimum Implementation**

COMMANDS -- HELO MAIL RCPT DATA RSET NOOP QUIT

## The SMTP Procedures

- 1. MAIL <SP> FROM:<reverse-path> <CRLF>
- 2. RCPT <SP> TO:<forward-path> <CRLF>
- 3. DATA <CRLF>

### **Example of the SMTP Procedure**

R: 220 BBN-UNIX.ARPA Simple Mail Transfer Service Ready

- S: HELO USC-ISIF.ARPA
- R: 250 BBN-UNIX.ARPA
- S: MAIL FROM:< JQP@MIT-AI.ARPA >

R: 250 OK

S: RCPT TO:< Jones@BBN-Vax.ARPA >

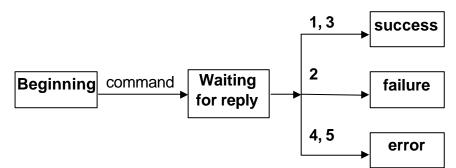
R: 250 OK

- S: RCPT TO:<Green@BBN- Vax.ARPA>
- R: 550 No such user here
- S: DATA
- R: 354 Start mail input; end with <CRLF>.<CRLF>
- S: Date: 2 Nov 81 22:33:44
- S: From: John Q. Public <JQP@MIT-AI.ARPA>
- S: Subject: The Next Meeting of the Board
- S: To: Jones@BBN-Vax.ARPA
- S: To: Green@BBN- Vax.ARPA
- S:
- S: Bill:
- S: The next meeting of the board of directors will be
- S: on Tuesday.
- S:

John.

- S: .
- R: 250 OK
- S: QUIT
- R: 221 USC-ISIE.ARPA Service closing transmission channel

# **Reply Codes**



#### General division:

- 1yz Positive Preliminary reply
- 2yz Positive Completion reply
- 3yz Positive Intermediate reply
- 4yz Transient Negative Completion reply
- 5yz Permanent Negative Completion reply

### Examples:

- 211 System status, or system help reply
- 214 Help message
- 220 <domain> Service ready
- 221 <domain> Service closing transmission channel
- 250 Requested mail action okay, completed
- 251 User not local; will forward to <forward-path>
- 354 Start mail input; end with <CRLF>.<CRLF>
- 421 <domain> Service not available, closing transmission channel
- 450 Requested mail action not taken: mailbox unavailable [E.g., mailboxbusy]
- 451 Requested action aborted: local error in processing
- 452 Requested action not taken: insufficient system storage
- 500 Syntax error, command unrecognized
- 501 Syntax error in parameters or arguments
- 502 Command not implemented
- 503 Bad sequence of commands
- 504 Command parameter not implemented
- 550 Requested action not taken: mailbox unavailable [E.g., mailbox not found, no access]
- 551 User not local; please try <forward-path>
- 552 Requested mail action aborted: exceeded storage allocation
- 553 Requested action not taken: mailbox name not allowed
- 554 Transaction failed

### Sizes

Object	The maximum total length in characters
User	64
Domain	64
Path	256
Command line	512
Reply line	512
Text line	1000
Recipients buffer	100