

## Data Communications and Networking Fourth Edition

### **Chapter 26**

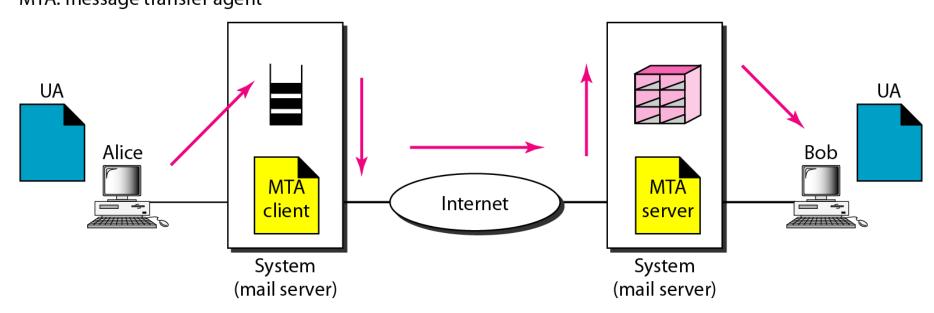
### **Electronic Mail,**



When the sender and the receiver of an e-mail are on the same system, we need only two user agents.

#### Figure 26.7 Second scenario in electronic mail

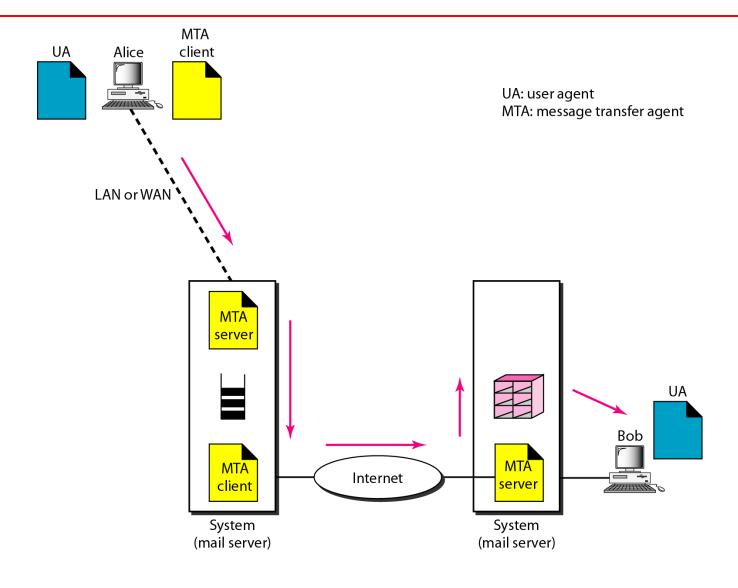
UA: user agent MTA: message transfer agent





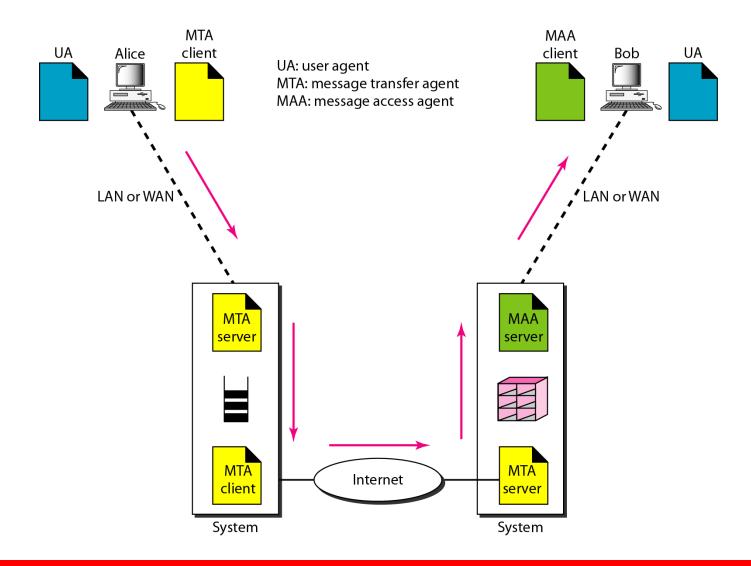
When the sender and the receiver of an e-mail are on different systems, we need two UAs and a pair of MTAs (client and server).

#### Figure 26.8 Third scenario in electronic mail

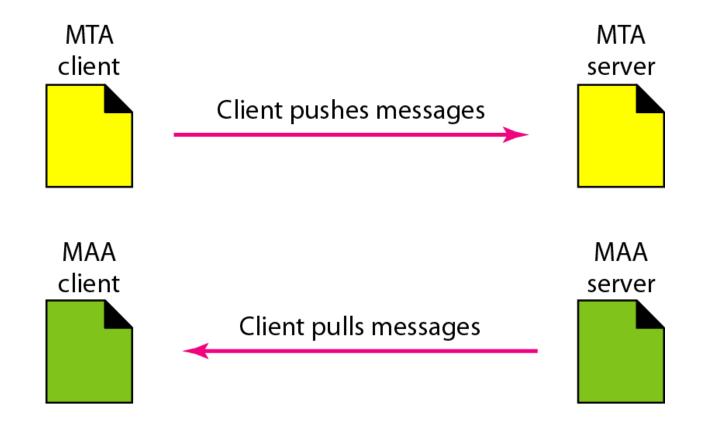


When the sender is connected to the mail server via a LAN or a WAN, we need two UAs and two pairs of MTAs (client and server).

#### Figure 26.9 Fourth scenario in electronic mail



#### Figure 26.10 Push versus pull in electronic email

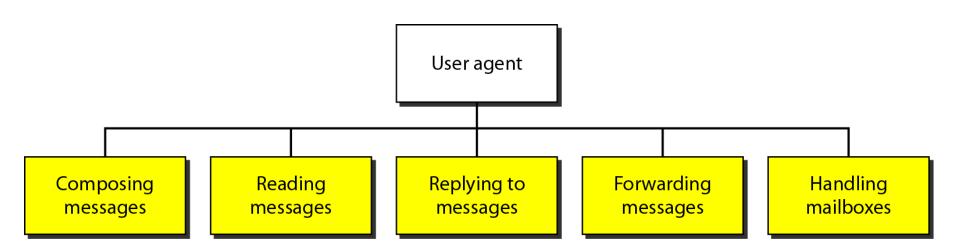




When both sender and receiver are connected to the mail server via a LAN or a WAN, we need two UAs, two pairs of MTAs and a pair of MAAs.

This is the most common situation today.

#### Figure 26.11 Services of user agent





## Some examples of command-driven user agents are *mail*, *pine*, and *elm*.



# Some examples of GUI-based user agents are *Eudora*, *Outlook*, and *Netscape*.