E - MAIL

By

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EMAIL – UA

User uses User Agent

UA to send and receive a message easier

Command-driven user agents: mail, pine, and elm

GUI-based user agents: Eudora, Outlook, and Netscape

EMAIL – MTA

Message Transfer Agents: Actual mail transfer

Client MTA: To Send a mail

Server MTA: To Receive a mail

SMTP: Defines MTA Client and Server in the Internet

Mostly, two pairs of MTA Client – Server are used

EMAIL – SMTP

First and Second stages of mail delivery use SMTP

SMTP is not involved in third stage SMTP

SMTP is a push protocol

SMTP pushes the message from the Client to the Server
In other words, the direction of the bulk data (messages) is
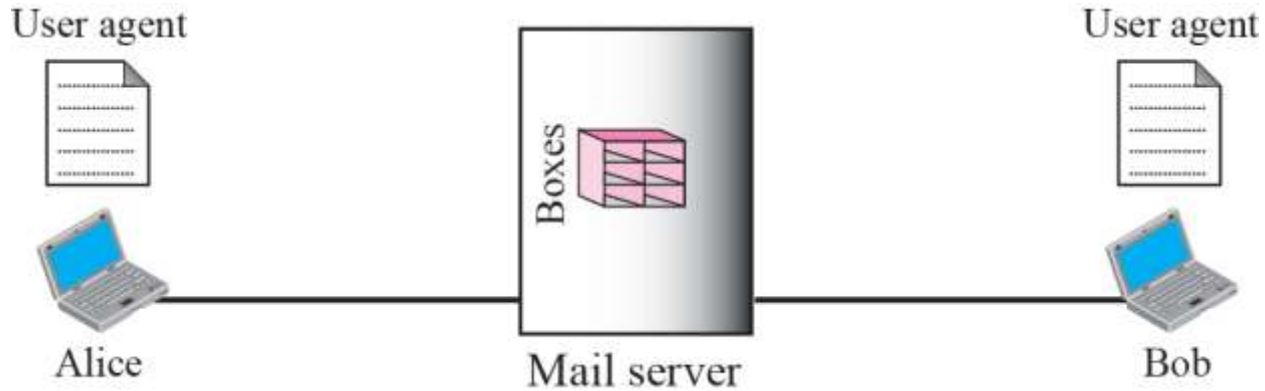from the client to the server

EMAIL – MAA

On the other hand, the third stage needs a pull protocol

The Client must Pull messages from the Server

The direction of the bulk data are from the server to the client
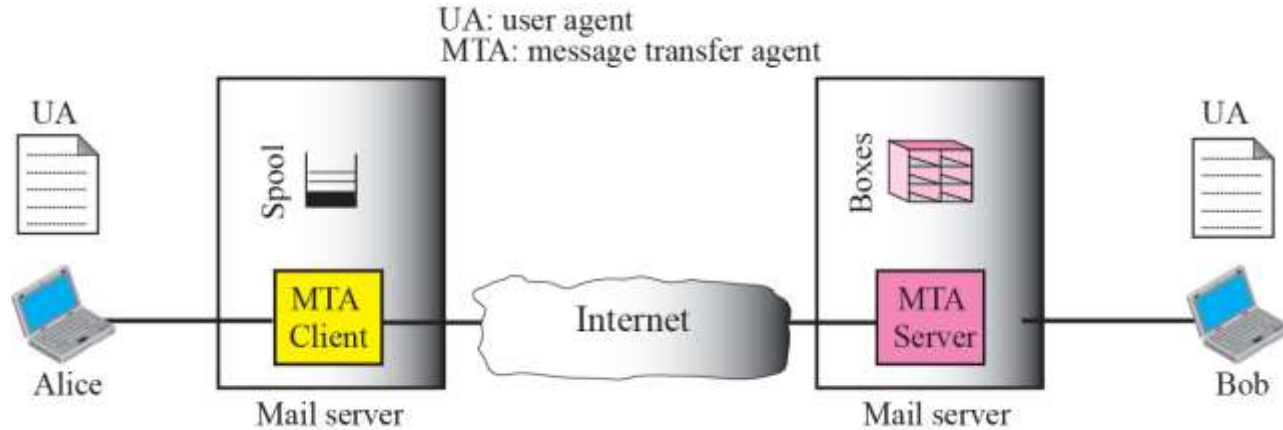
The third stage uses a Message Access Agent

EMAIL – Scenario 1

Sender and Receiver are on the Same mail server
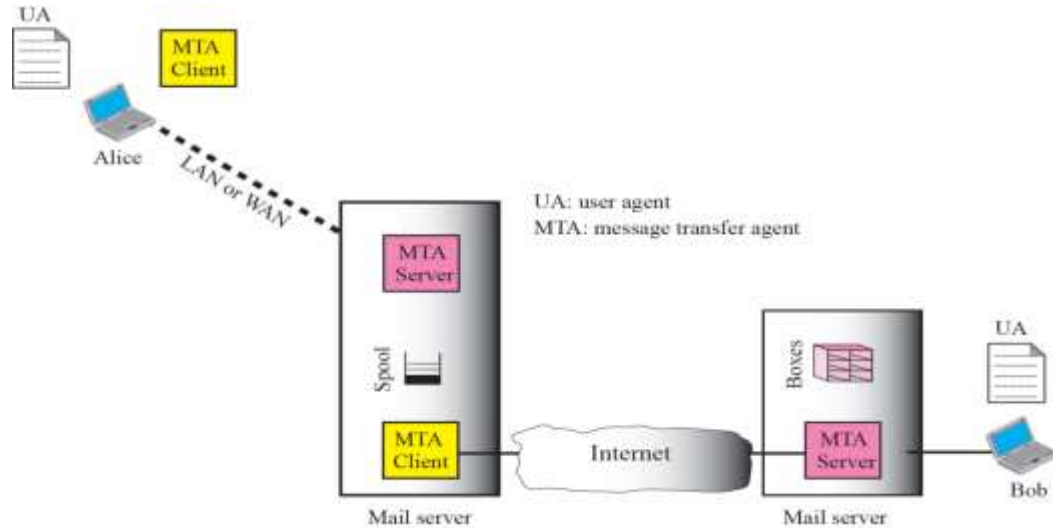
We need only two UAs

EMAIL – Scenario 2

UA: user agent
MTA: message transfer agent

Sender and Receiver of are on Different mail servers

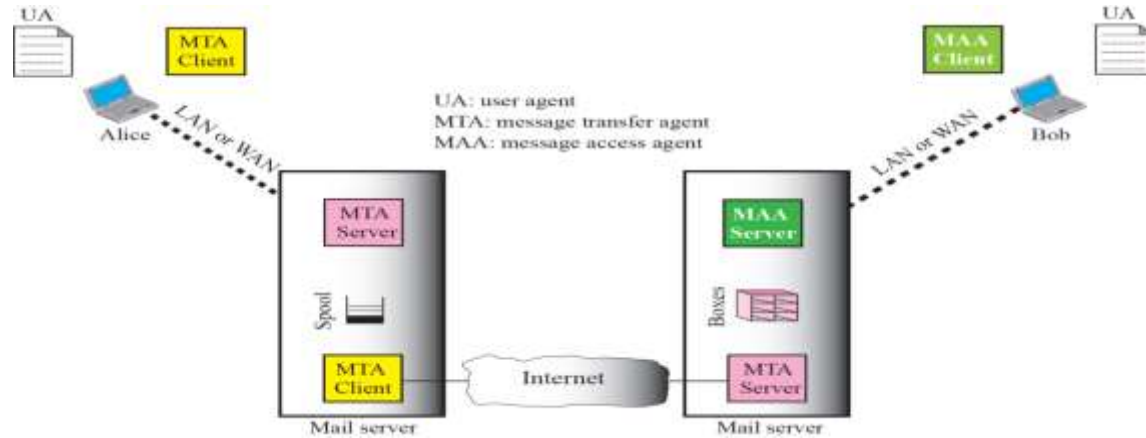We need two UAs and a pair of MTAs (C/S)

EMAIL – Scenario 3

Sender is connected to the mail server via a LAN/ WAN

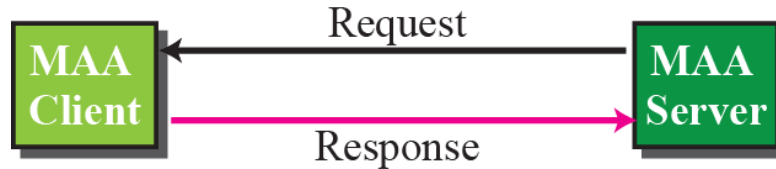We need two UAs and two pairs of MTAs (C/S)

EMAIL – Scenario 4

UA: user agent
MTA: message transfer agent
MAA: message access agent

Sender and Receiver are connected to the mail server via a LAN/WAN
We need two UAs, two pairs of MTAs (C/S), and a pair of MAAs (C/S)

a. Client pushes messages

b. Client pulls messages

References

- ✓ Books: Data communication and Networking, Behrouz A Forouzan, Fourth edition
- ✓ Computer Networks, Andrew S. Tanenbaum, 4th edition, PHI
- ✓ Data Communication and Networks, Achyut Godbole, 2007, TMH.
- ✓ Computer Networks: Protocols, Standards, and Interfaces, Uyless Black, 2nd ed, PHI
- ✓ Various relevant websites

Thank You