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**THAPAR INSTITUTE**  
OF ENGINEERING & TECHNOLOGY  
(Deemed to be University)

# *Course: Computer and Communication Networks*

*Topic: E-Mail & SMTP*

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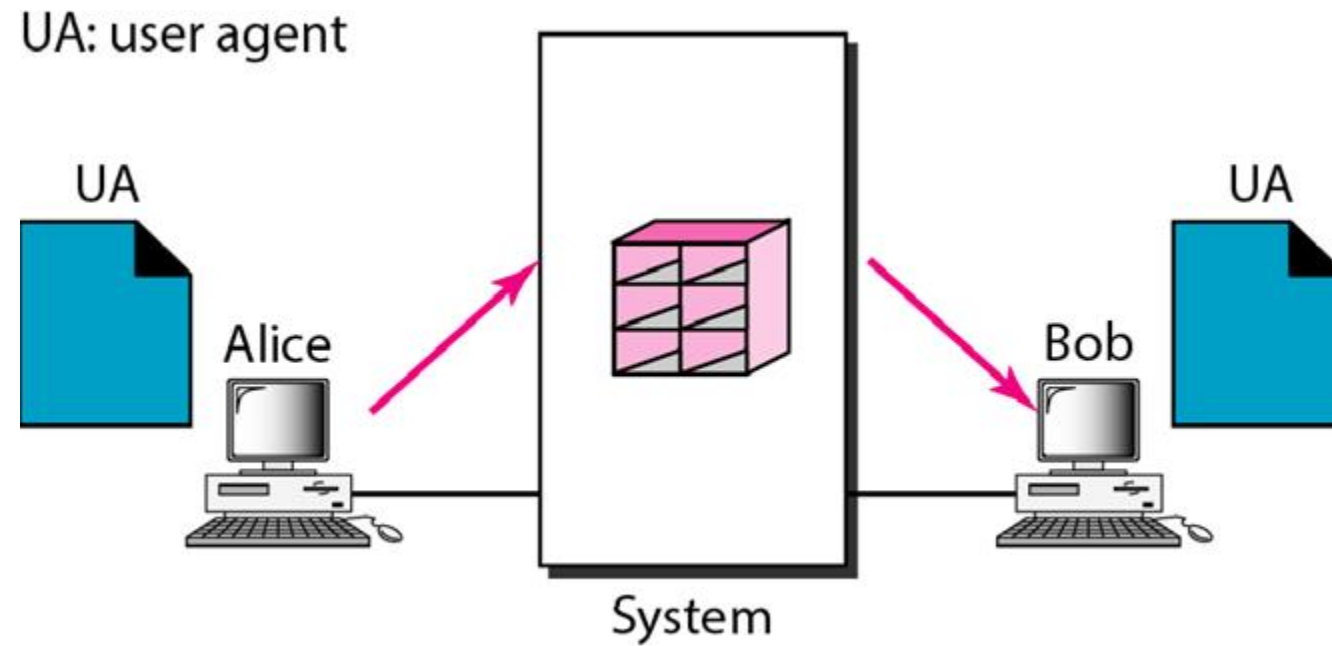
# *Outline of the lecture*

- Digital Subscriber Line
- How DSL Works
- Asymmetric digital subscriber line (ADSL)
- Other types of DSL
- Traditional Cable TV network
- Hybrid fiber-coaxial network (HFC)
- Cable Modem

# *Electronic Mail*

- **Email**, short for "**electronic mail**," is one of the most widely **used** features of the Internet, along with the web. It allows you to send and receive messages to and from anyone with an **email** address, anywhere in the world. **Email** uses multiple protocols within the TCP/IP suite
- The definition of an **e-mail** is a message sent from one computer to another over the Internet, using a set webmail server address. An **example** of an **e-mail** is a happy birthday message a person sends from **Features of email**
- automatic reply to messages.
- auto-forward and redirection of messages.
- facility to send copies of a message to many people.
- automatic filing and retrieval of messages.
- addresses can be stored in an address book and retrieved instantly.
- notification if a message cannot be delivered.
- their Yahoo account to their mom at her Gmail account.

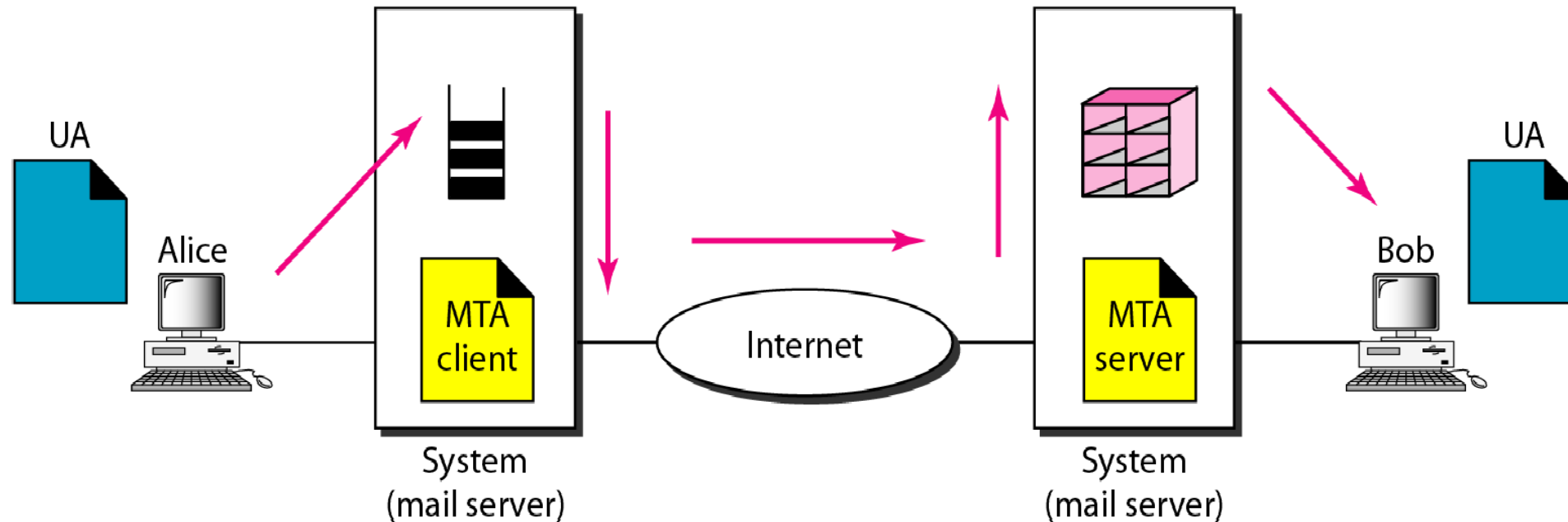
# *First scenario*



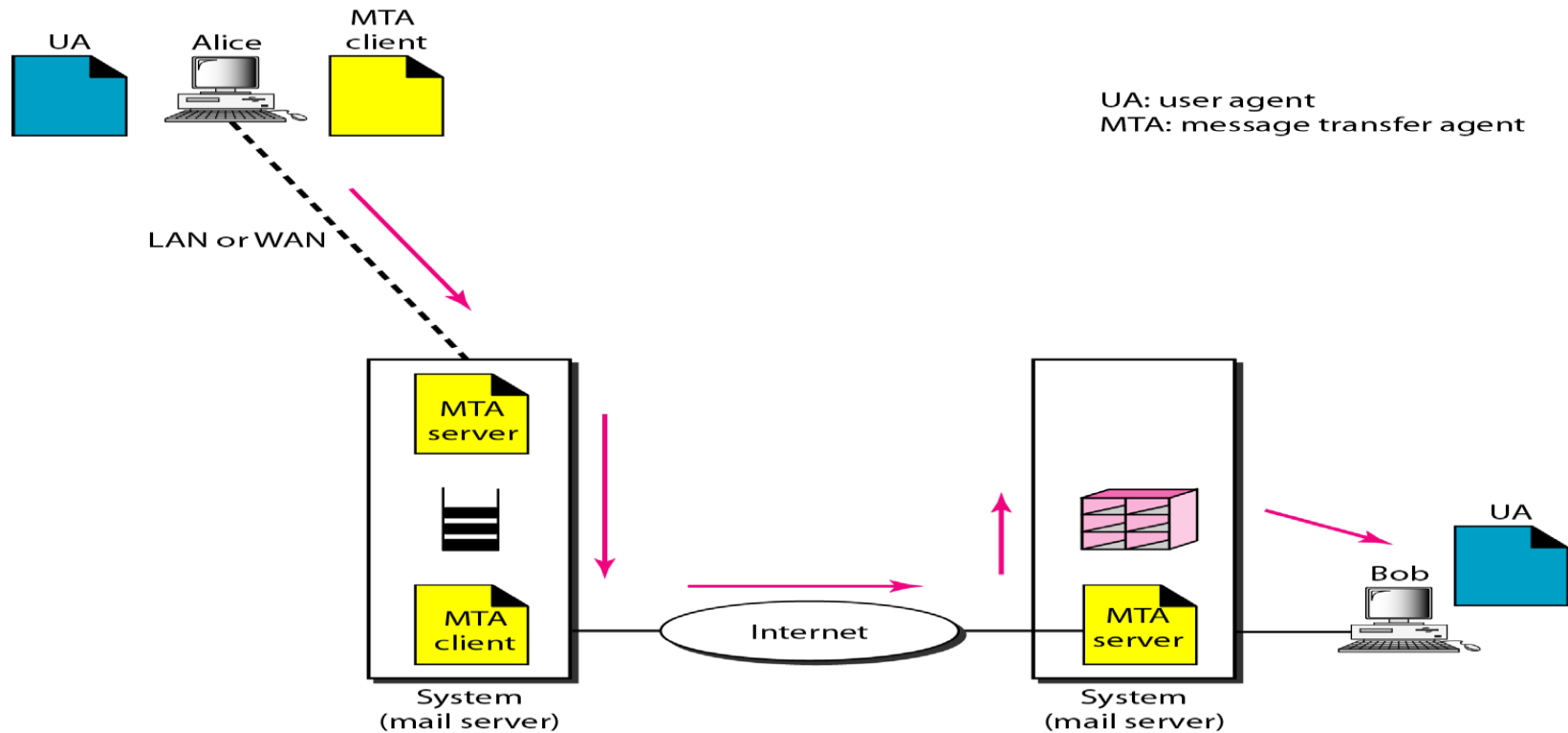
# *Second scenario*

UA: user agent

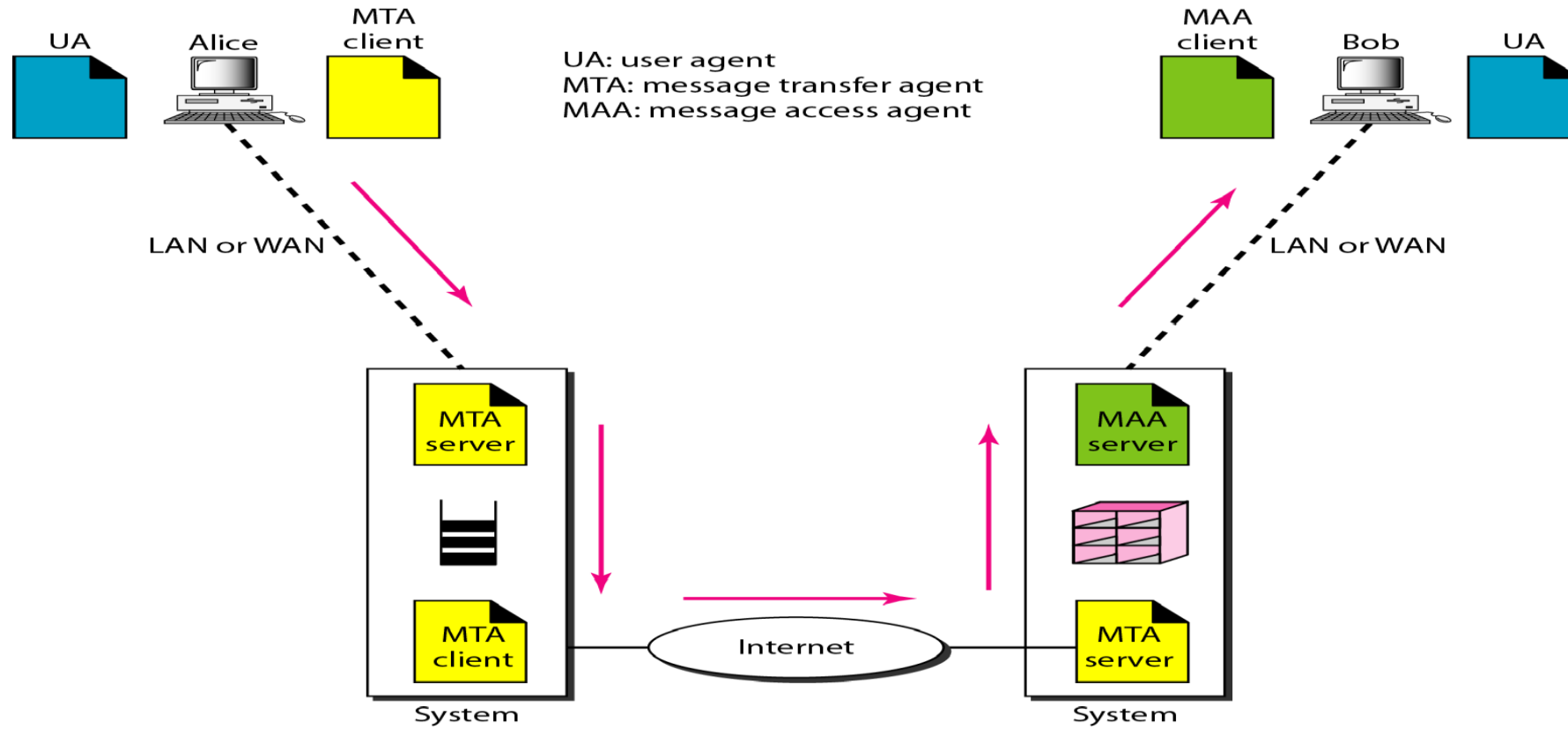
MTA: message transfer agent



# Third scenario

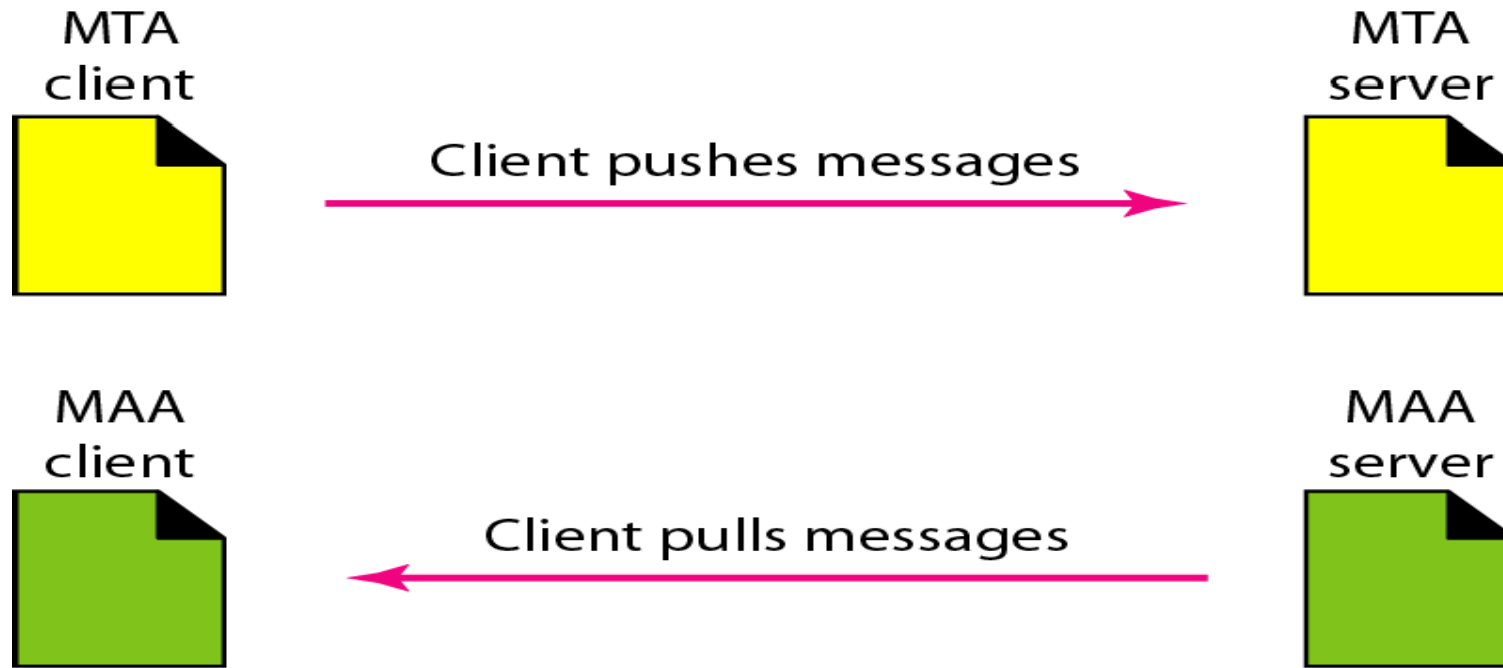


# *Fourth scenario*



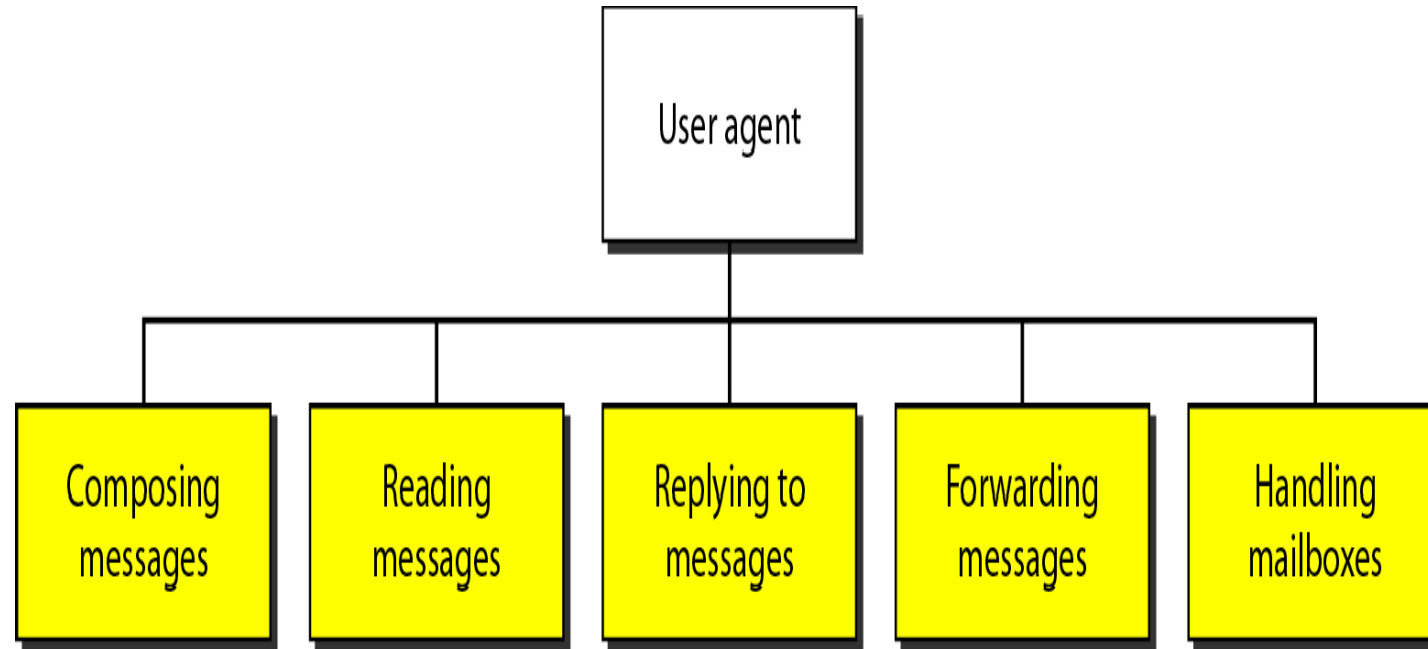


# *Push versus pull in electronic email*

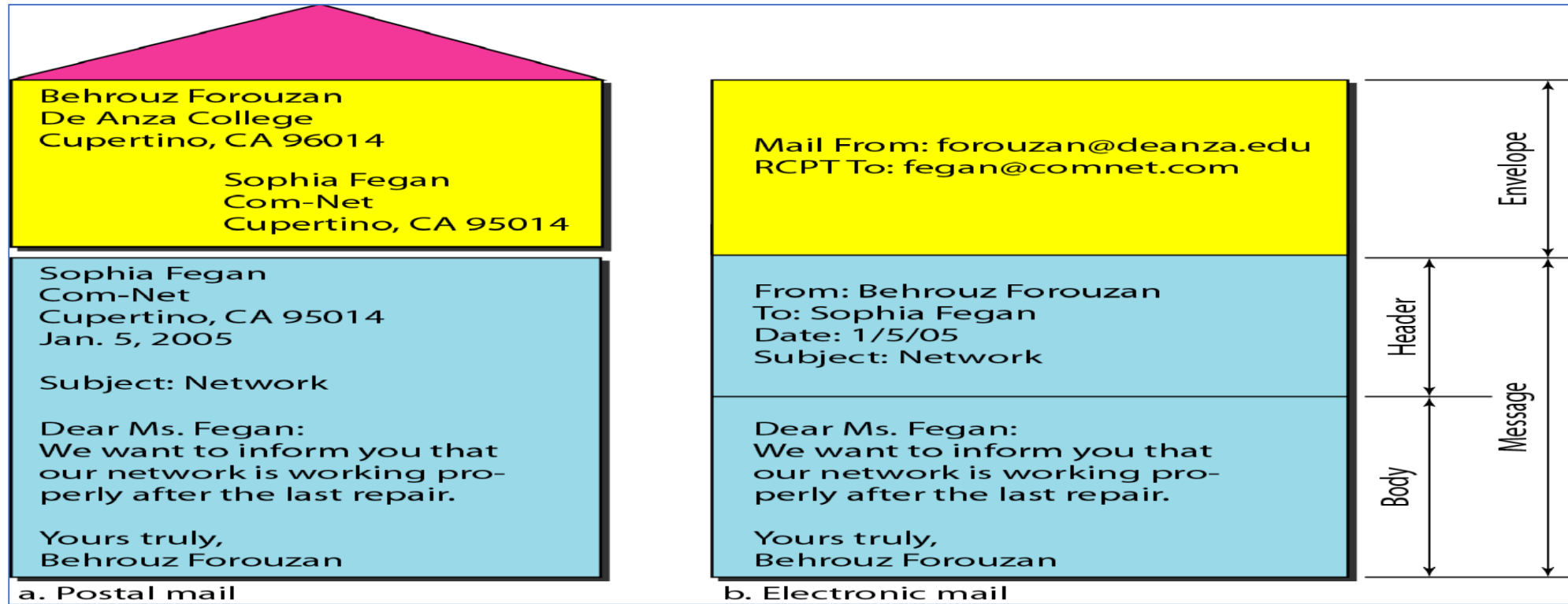


- **When both sender and receiver are connected to the mail server via**
  - **a LAN or a WAN, we need two UAs, two pairs of MTAs**
    - **and a pair of MAAs.**
- ***This is the most common situation today.***

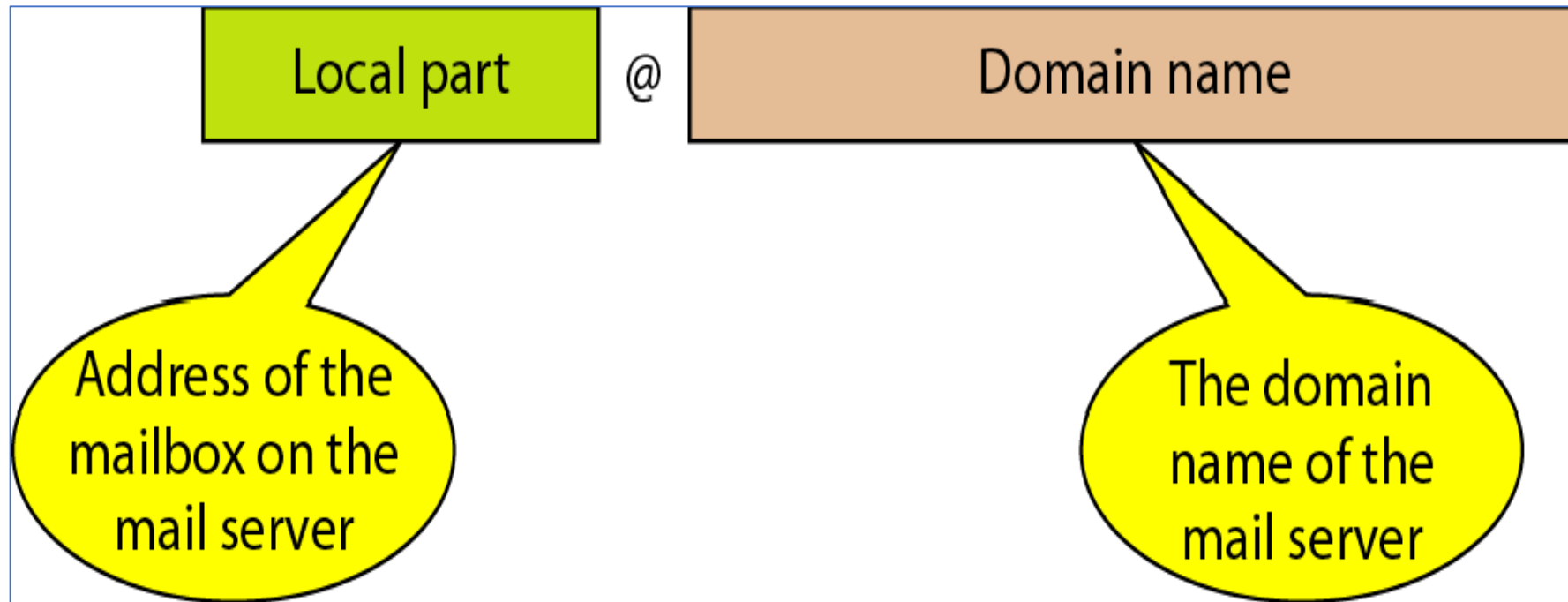
# *Services of user agent*



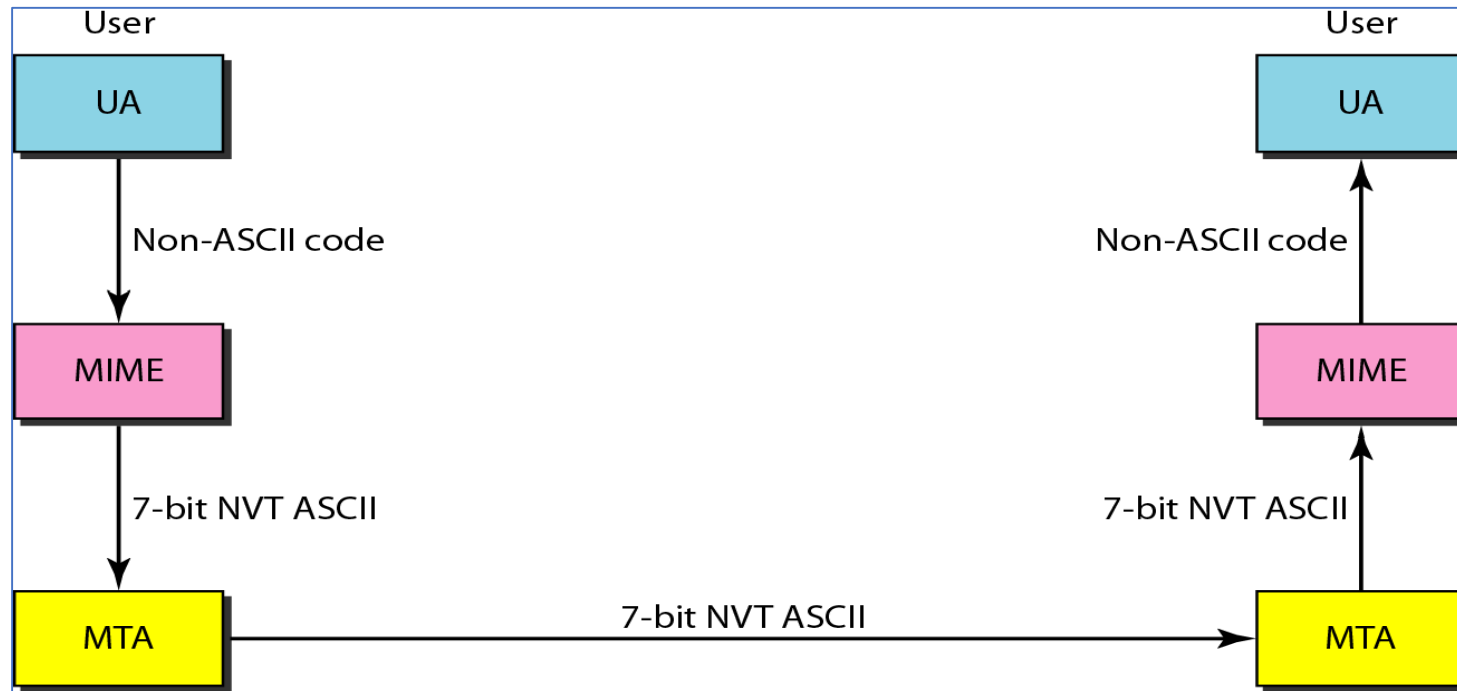
# Format of an email



# *E-mail address*

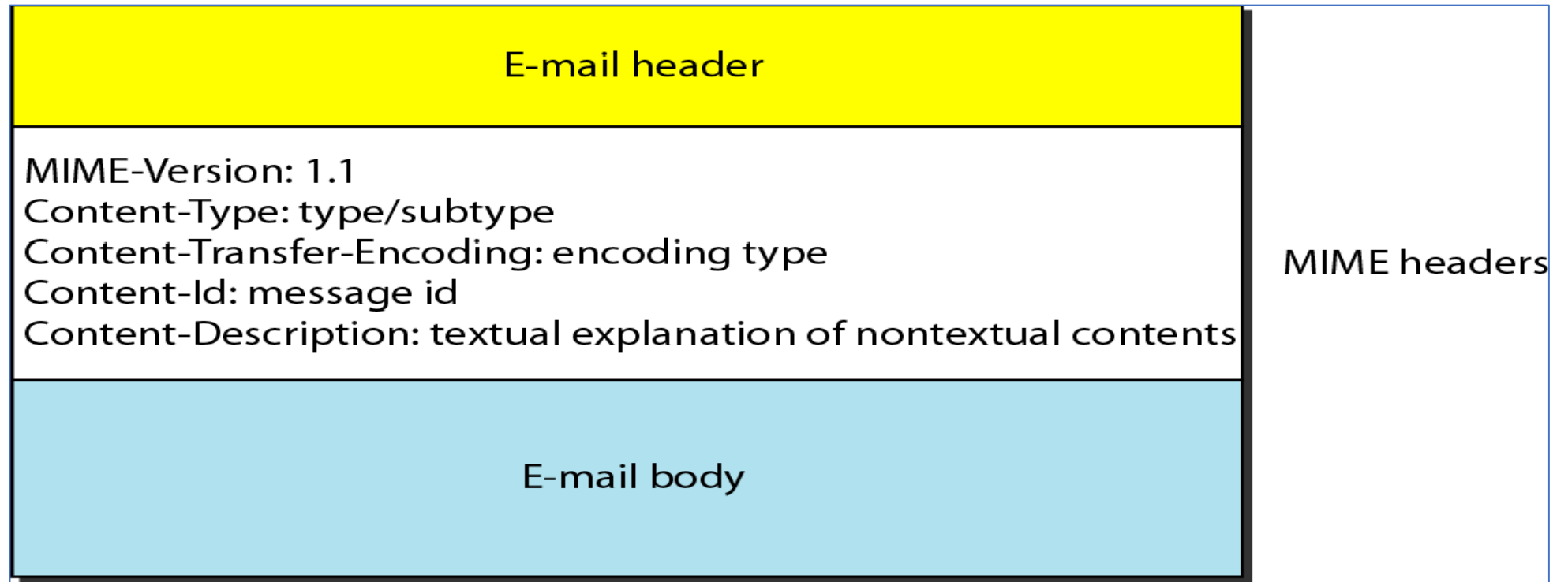


# *MIME*

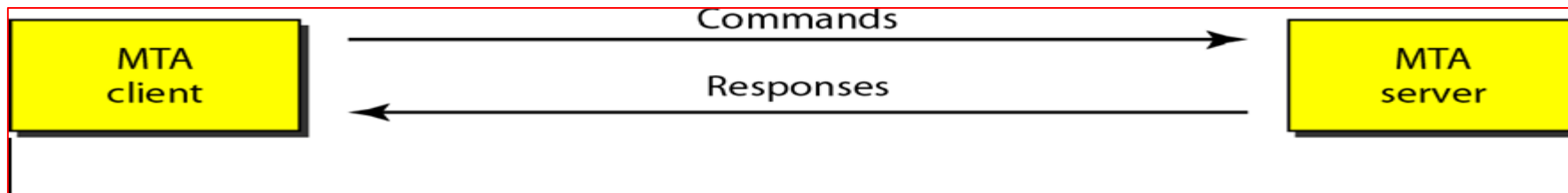
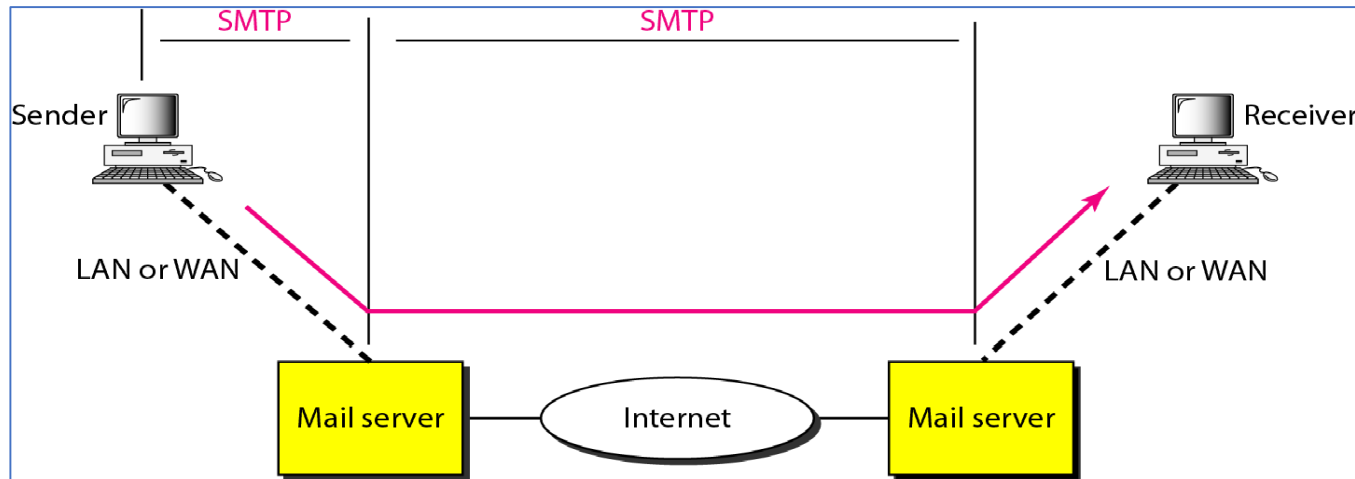




# *MIME header*

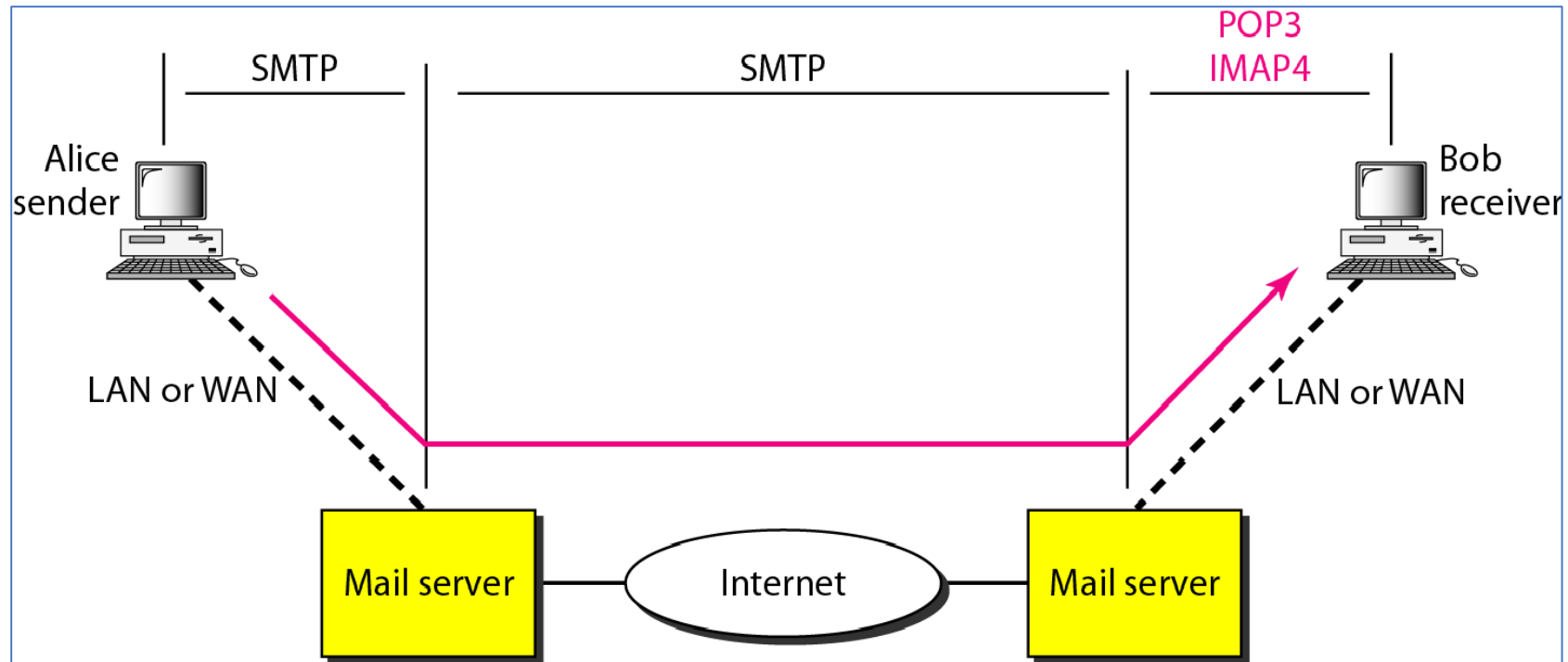


# SMTP



**Keyword:** argument(s)

# *POP3 and IMAP4*



Thank You