Computer Networking Protocols

email protocol

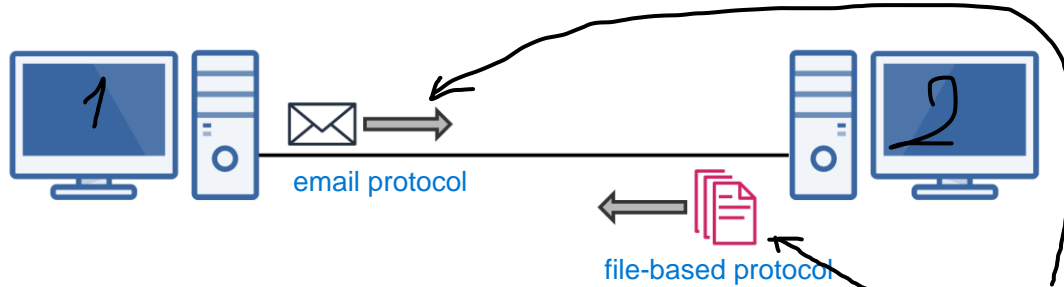file-based protocol

similar

- Computers communicate with each other with network protocols.

- Protocols are rules governing how machines exchange data and enable effective communication.

- **Some Everyday Examples**

  - When you call somebody, you pick up the phone, ensure there is a dial tone, and if there is, you dial the number.

  - When you drive your car, you obey the rules of the road.

Protocols Continued

- **Physical Protocols**: describe the medium (wiring), the connections (RJ-45 port), and the signal (voltage level on a wire).

  go hand in hand when we put a network together
  => If we don't have variety of physical protocols and logical protocols, a network is not going to operate properly

- **Logical Protocols**: software controlling how and when data is sent and received to computers, supporting physical protocols.

- Computer networks depend on many different types of protocols in order to work properly.

- Example Common TCP/IP Suite of Protocols:

  o **Web Communication**: HTTP

  o **E-mail**: POP3, SMTP, IMAP

  o **File Transfers**: FTP