What did we cover

Datagram Switching

Pros

* + - Connectionless
      * The packet contains all the information needed to send a message
      * There is no need to discover network topology
      * Each switch holds it’s own routing table
      * The packet header only contains destination switch
    - Packets are treated indecently (so we can route around failures)

Cons

* + - Each packet contains full address of the destination
    - Packets are treated independently (so Difficult to provide quality of service)
    - Difficult to provide dedicated bandwidth between src and dest

Virtual Circuit

Pros

* + - Can reserve a bandwidth for circuits
    - Smaller packet headers, only (VIC) Virtual Circuit IDentifier and (CRC) used to detect errors

Cons

* + - Overhead for RRT to figure out topology
    - Node failures require new

Source Routing

Pros

* + - Packet contains header with all output ports
    - Rotate switch each time

Cons

* + - Reverse paths only accurate with switch ids rather than ports, only ports does not give a reversible path

Flow Identification

* Used to guarantee bandwidth
* Flow table (this is the same thing as the virtual circuit table)
  + Each port maintains it’s own list of entries
  + Each port uses the VCID to access the table