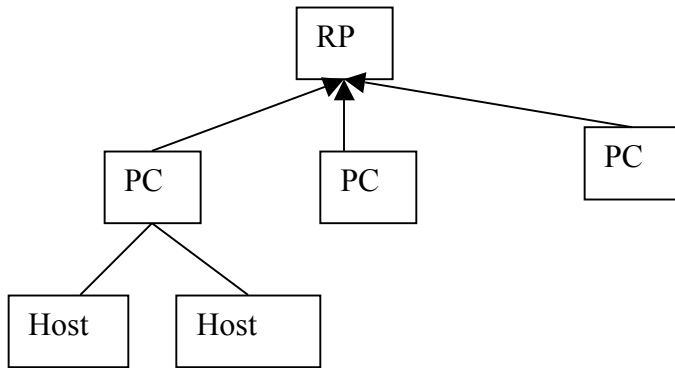


Week 8 class notes for second half class
- by Leon li-pang Lee

Multicasting

Reliability

Overlay Routing

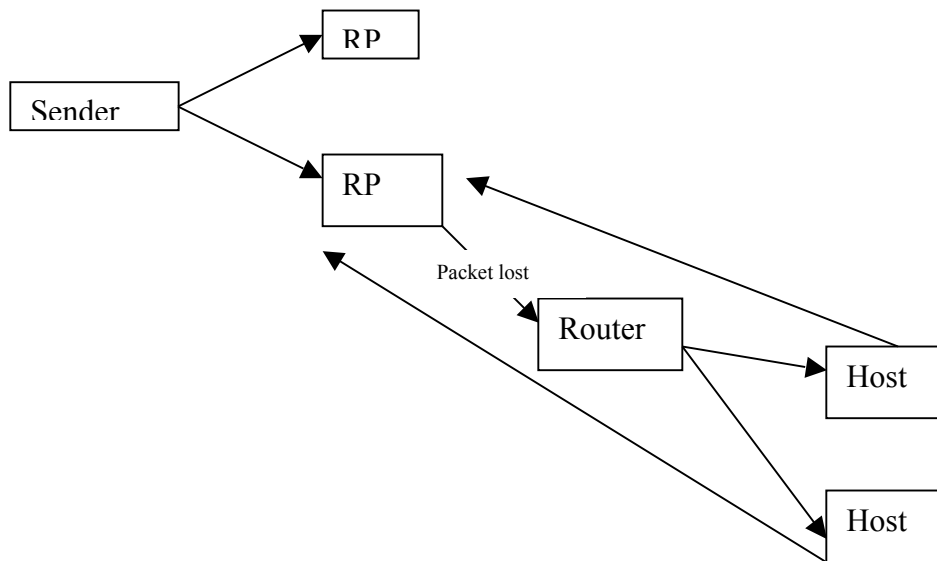


Reliable retransmission

Congestion control

Reliable Multicast Transport

- ack every packet -> as opposed to ack only lost packets



-nack missing packets ->

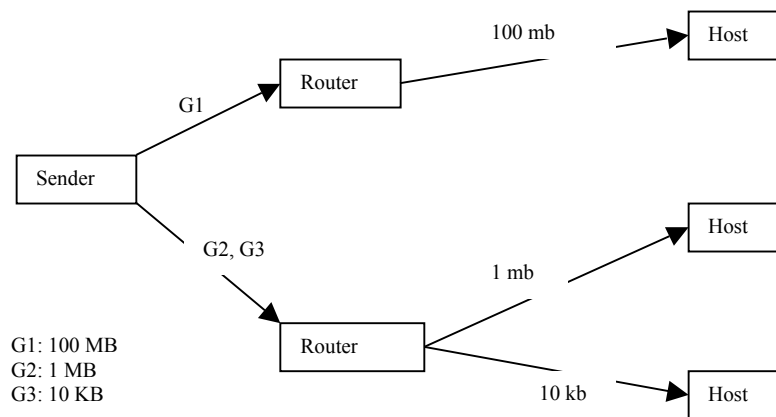
Merge naks

- Forward Nak per packets
- Cache and recent NAK

Hetergenous Bandwidth

- Persistent loss

Layered Multicast



1. Host subscribes different layers of transmission rate base on the capacity of T1 or DSL.
2. This will avoid over flooding in the channel and make packet transmission reliable
3. Retransmit whole set of packets again in certain time duration. If lost at the first time, receivers will get the whole set of packets next time.
4. SRM
 - Multicast Nak
 - Randomize timers to determine who need retransmission (timer time out based on the distance to sender)
 - if hear NAK - > turn off timer
 - randomize timer to reply (timer time-out based on the distance to nak)

How to applying layered Multicasting

- Dynamic auto configuration
 - Receiver drive control
- If transmission lost or over flooding, receiver should use dynamic auto configuration to dynamically transmit with lower transmitting rate.

Reliable flooding

