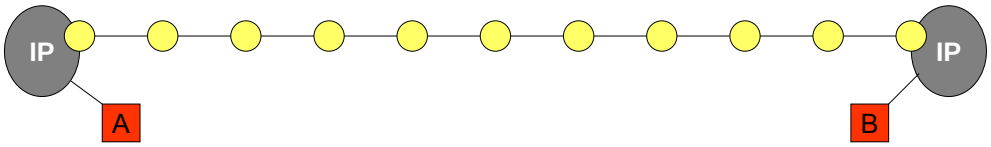
Quick Organizational Note

- We are a bit behind on our schedule:
  - 21 ➔ 18 lecture slots (compared to 2006)
- Some “optimizations” in the contents
  - Interoperability/evolvability: without SIP
  - Reality: without RFC 3819
    - ➔Assignment 3: read and design
  - Internet Design Principles not talked about in the lecture
    - Assignment 3: read: David D. Clark: The Design Principles of the DARPA Internet Protocols. ACM SIGCOMM 1988.
- Will make full use of next Thursday

Assignment 3: Link Layer Mapping

Assume a given link layer…

- Link MTU: 100 bytes
- Per hop packet erasure probability: 10%
  - (independent of what you send)
- Layer 2 path: 10 hops
  - Resulting loss probability: ~65%
- Arbitrary IP paths at both ends (IP path MTU 1280 bytes)



What to do?

- Read RFC 3819
- You have full control of the yellow spots
  - In effect, you create a single L3 hop from a sequence of L2 hops
- Discuss the options when designing a link layer mapping for the above scenario
  - To deal with packet losses
  - To address fragmentation
- Which of your options would you recommend for a mapping protocol?
  - Do not write more than two pages (font size ≥ 10 points)