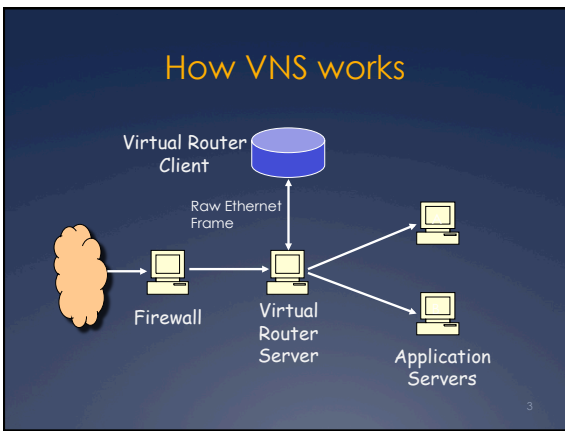


# Precept 5

## Router & Assignment 2

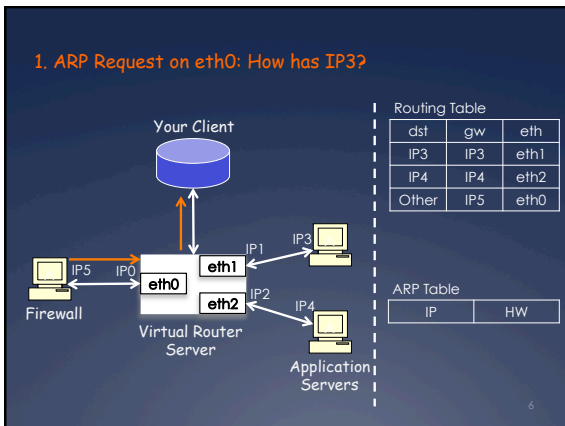
Peng Sun

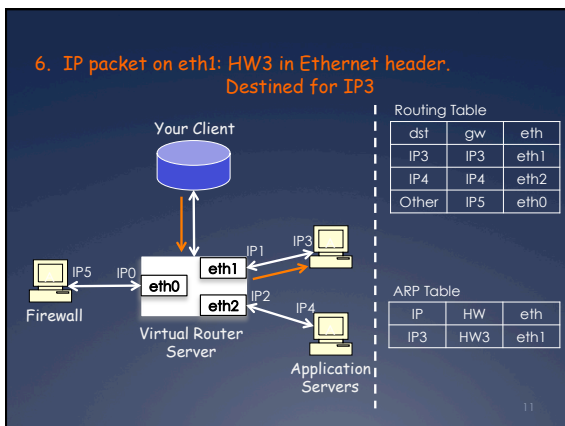
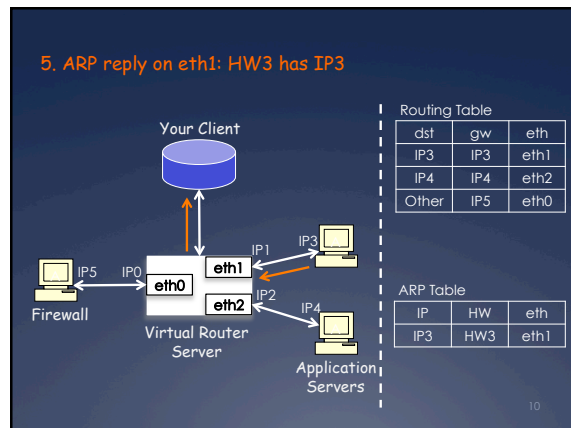
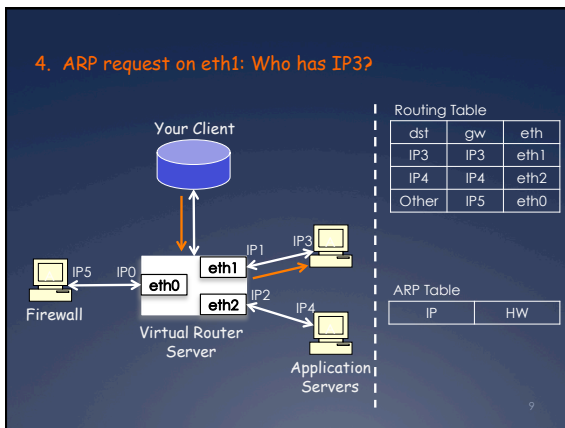
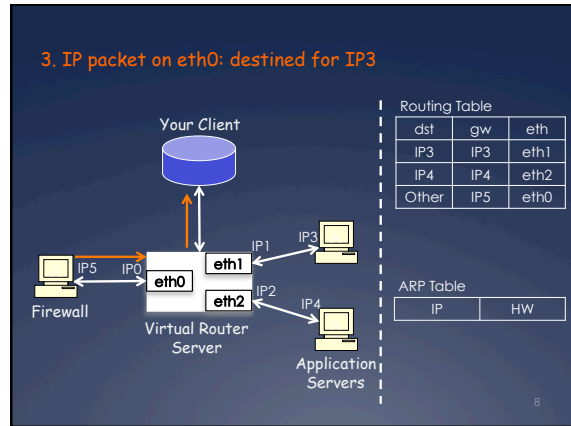
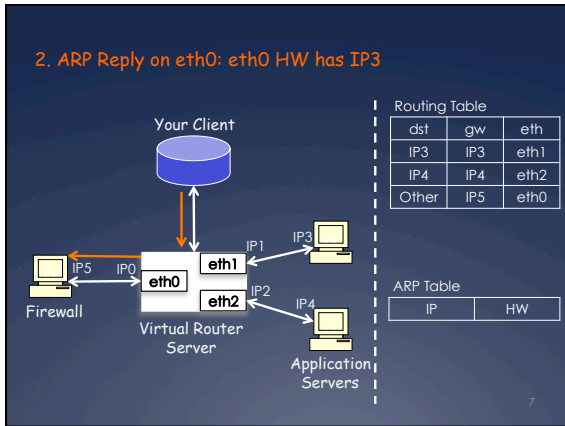
- ### How VNS works
- Just informational
  - You don't have to know it to finish assignment



- ### Your VR Client
- Receive a Raw Ethernet Frame
  - Analyze headers to decide actions
  - Modify the frame
    - e.g., decrement TTL, update checksum
  - Or generate new frame
    - e.g., ARP reply, ICMP echo reply
  - Specify interface & Send the new frame to VR server

- ### How Router works
- Scenario:
  - A TCP connection to one application server





## Big / Little endian

- Network order: big endian
- Host order: usually little endian (x86)
- Functions:
  - htonl, htons
  - ntohs, ntohl

## Some Exam Questions

- Spring'11 Midterm Q1
- Spring'10 Midterm Q1
- Spring'09 Midterm Q4
- etc.

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