Week 8 Lecture 1

Network Layer: Data Plane + Control Plane

# 4.3 IP: Internet Protocol

## NAT: network address translation

**Private addresses**

10.0.0.0/8 (16,777,216 hosts)

172.16.0.0/12 (1,048,576 hosts)

192.168.0.0/16 (65536 hosts)

The above IP addresses are not routable

## Distance vector algorithm

Bellman-Ford equation

Let

dx(y): = cost of least-cost path from x to y

then

dx(y) = min {c(x,v) + dv(y)}

where:

* c is the cost to a neighbour v
* d is the cost from neighbour to destination y