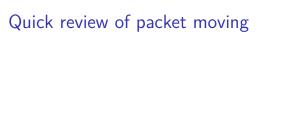
CSET2200 Lecture 8

Review/Questions



CIDR

► CLassless Inter-domain Routing

The problem

- Classful networks wasteful
- Aggregation was poor
- ► Route bloat
- Limited big networks

${\sf Example - UT}$

How to solve it

- ▶ Allow segmenting network on any bit
- Allow grouping of networks (aggregation)
- ► Allocation of smaller networks

VLSM

- Variable length subnet mask
- Allows networks to be sized differently
- Core concept of CIDR

Available Networks

Aggregation

- Adjacent networks can be combined where distinction not needed
- Allows more efficient routing
- ▶ Large blocks allocated to providers which split them

Example - UT Again

Matching Networks

- Done with Bitwise AND
- ▶ Network to match AND subnet network to match
- ▶ Remember 1 is our care bit

Examples

- ▶ 64.254.140.4/27
- **▶** 64.254.140.165/28
- **72.240.0.0/15**
- **▶** 131.183.222.23/23

Questions

Next session - more VLSM practice