

# 16. Analyzing Subnets

Resident Subnet—The subnet within which an address "resides."

Subnet ID—Lowest # in the subnet (all host bits = 0). When combined with the subnet mask, tells you all you need to know for math on the subnet.

Subnet Broadcast Address—Highest # in the subnet (all host bits = 1). Can be used to send a packet to all hosts on the subnet, even from outside the subnet, if "directed broadcast" is enabled.

Usable Addresses—everything in between.

Analyzing a Subnet—given an address and mask, be able to give

- Subnet ID
- Subnet Broadcast Address
- Range of Addresses (implied by the above two)

*Coverage of binary math, and-ing and or-ing bitmasks, and the math involved in analyzing a subnet omitted because I know it by heart, I've covered much of it in 14 & 15, and I'm sick of it.*