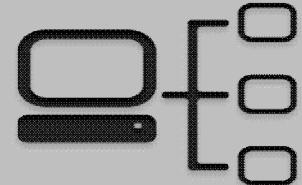


Class C Example #1



- **Details & Requirements**
 - Network Address: 192.168.1.0
 - Default Subnet Mask: 255.255.255.0
 - Requires 2 Subnets
- **How many host bit do we need to borrow?**
 - 1 host bit, $2^1 = 2$ Subnets
- **How many addresses hosts per subnet?**
 - 7 host bits left, $2^7 = 128$ Addresses / Subnet
 - $2^7 - 1 = 126$ Addresses / Subnet
- **What are the valid subnets?**
 - 192.168.1.0 and 192.168.1.128
- **New Subnet Mask?**
 - 11111111.11111111.11111111.10000000
 - 255.255.255.128 or /25

Subnet	#1	#2
Network Address	192.168.1.0	192.168.1.128
First Host IP	192.168.1.1	192.168.1.129
Last Host IP	192.168.1.126	192.168.1.254
Broadcast Address	192.168.1.127	192.168.1.255