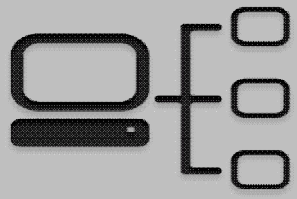
Class B Example #2



Details & Requirements
- Network Address: 155.14.0.0
- Default Subnet Mask: 255.255.0.0
- Requires 4 Subnets

How many host bit do we need to borrow?
- 2 host bit, 2^2 = 4 Subnets

How many addresses hosts per subnet?
- 14 host bits left, 2^{14} = 16,384 Addresses / Subnet
- 2^{14} - 2= 16,382 Addresses / Subnet

New Subnet Mask?
- 11111111.11111111.**11**000000.00000000
- 255.255.192.0 or /18

What are the valid subnets?
- Equation: 256 – Subnet Mask = 256 – 192 = **64**
- 0, 64, 128 and 192 in 3rd Octet:
- 155.14.0.0, 155.14.64.0, 155.14.128.0, 155.14.192.0

Subnet	Network /Subnet Address	Host IP Addresses	Broadcast Address
1	155.14.0.0	155.14.0.1 to .63.254	155.14.63.255
2	155.14.64.0	155.14.64.1 to .127.254	155.14.127.255
3	155.14.128.0	155.14.128.1 to .191.254	155.14.191.255
4	155.14.192.0	155.14.192.1 to .255.254	155.14.255.255