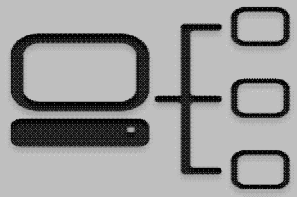
Class B Example #1



- **Details & Requirements**
  - Network Address: 136.18.0.0
  - Default Subnet Mask: 255.255.0.0
  - 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?**
  - 15 host bits left, 2^{15} = 32,768 Addresses / Subnet
  - 2^{15} - 2= 32,766 Addresses / Subnet
- **New Subnet Mask?**
  - 11111111.11111111.**1**0000000.00000000
  - 255.255.128.0 or /17
- **What are the valid subnets?**
  - Equation: 256 – Subnet Mask = 256 – 128 = **128**
  - 0 and 128 in 3rd Octet:
    - 136.18.0.0 & 136.18.128.0

Subnet	#1	#2
Network Address	136.18.0.0	136.18.128.0
First Host IP	136.18.0.1	136.18.128.1
Last Host IP	136.18.127.254	136.18.255.254
Broadcast Address	136.18.127.255	136.18.255.255