Subnetting With CIDR

Wednesday, November 04, 2015 8:56 AM

Subnet Mask

11111111	111111111	111111111	000000000	/24
255	255	255	0	

Network ID			Host ID
11010000	01010001	10111110	000000000
208	190	121	0

Subnet Mask

11111111	111111111	111111111	1	0000000	/25
255	255	255		128	

Network ID				Host ID
11010000	01010001	10111110	0	0000000
208	190	121		1111111

Subnet Mask

11111111	111111111	111111111	1	0000000	/25
255	255	255		128	

Network ID				Host ID
11010000	01010001	10111110	0	0000001
208	190	121		1111110

CIDR	Classless Inter Domain Routing
CIDR Notation	WACK or the /network bits

- Subnet masks must be a string of Ones, followed by a string of Zeros.

By extending the subnet mask by 1 bit, you create two separate subnets.

But increasing the mask by 2 bits (WACK 26)

- 255.255.255.192 /26

You will make 4 different subnets.

More CIDR Subnetting Practice

Wednesday, November 11, 2015 9:04 AM

Example Question:

Network ID - 163.74.6.0
Subnet Mask - 255.255.255.0 /24

By adding two network bits, you are creating four different subnets. /26
255.255.255.192

Example Question:
Can you create 16 networks that support 7 computers each?

First, try out adding network bits to the subnet mask.
To get 16 subnets, you add 4 network bits. /28
2^4 = 16
16 - 2 = 14
Yes you can.

Example Question:
How many individual hosts will you have if you have 7 subnets.

You will have 30 different hosts, 2^3 = 8, 32-2 = 30.

- It helps to memorize the subnet mask for /25 and greater subnets.
- The number of hosts is inverse to the number of subnets.
- Practice subnetting so you can answer questions.