Subnetting

	Binary form	Dot-decimal notation
IP address	11000000.10101000.00000101.10000010	192.168.5.130
Subnet mask	11111111.11111111.11111111.11000000	255.255.255.192
Network prefix	11000000.10101000.00000101.10000000	192.168.5.128
Host part	00000000.00000000.00000000.00000010	0.0.0.2

A Laptop Walks Into a LAN...

DHCP Discovery	DHCP Offer
DHCP Request	DHCP ACK
ARP Request (For getting to DNS Server)	ARP Response
DNS Request	DNS Response
ARP Request (For getting to the host)	ARP Response
TCP SYN	TCP SYN-ACK
TCP ACK	
TCP GET	TCP Response
TCP FIN	TCP FIN-ACK
TCP ACK	

BGP

iBGP - Internal (Within an AS)

eBGP - External (Between Ases)

Follow the money.

- Route to customers first

- Route to peers second

- Route to Providers last

Multicast

CBT: *Core Based Tree*

- Pick a node that acts as the CORE

- If you want to send to the multicast group. send towards the core.

- If the message hits the spanning tree. Flood the tree

DVMRP: *Distance-vector multicast routing protocol*

- Use least cost path to reach every member of the multicast group.

- Centered on the sender