Network Administration Part 1

1. 1+1=1!

(a). https://en.wikipedia.org/wiki/Link_aggregation

1. Increased bandwidth

2. Provide redundancy to prevent single point of failure.

3. It can balance the network load across links.

4. The traffic from a failed link can automatically switched over to other working links in the aggregation, thereby achieving high availability.

(b).

https://www.cisco.com/c/en/us/td/docs/switches/datacenter/nexus5000/sw/configuration/guide/cli/CLIConfigurationGuide/EtherChannel.html

3. CSIE Crime Tracer

https://supportforums.cisco.com/t5/lan-switching-and-routing/sh-ip-arp-command-syntax/td-p/2073471

https://www.cisco.com/c/m/en_us/techdoc/dc/reference/cli/n5k/commands/show-mac-address-table.html

https://www.techrepublic.com/blog/data-center/10-commands-you-should-master-when-working-with-the-cisco-ios-104071/

1. Check ARP table to get 140.112.29.197's MAC address.
2. Check different MAC tables and enter the port's interface until the MAC address's interface is end user not switch.

   Control 140.112.29.254(core switch)
   show ip arp 140.112.29.197(and we will get 140.112.29.197's MAC address.)
   show mac address-table address (140.112.29.197's MAC address.)
   show interface status | include (the port find on previous command)
   ……
   We will find the next switch which the core switch connects to. Control the next switch and do the steps above again until we cannot find the next switch (that is the edge switch end user is using and by using previous commands we can find the port.)