B04902103 資工二 蔡昀達

DHCP

1. 我們可以用 “DHCP Snooping”，這個功能會透過switch阻擋所有的untrusted DHCP server ，使得裝置只能跟legitimate device做聯絡，因此電腦就不會連錯server導致資料被竊取

DNS

1. 因為只要csie.ntu.edu.tw的維護小組同意，那我們是可以隨意設定在這之下的網域的。既然是我們隨意設定的網域，別人當然也就不會送出query（因為別人不知道正確的domain name）

2. (1) dns.csie.ntu.edu.tw

(2) 因為在用domain name時，越右邊的網域範圍越大，像是csie.ntu.edu.tw => tw>edu>ntu>csie ; 然而，IP則相反，像是140.112.30.21為例，140>112>30>21。因此在做reverse ip lookup時要將IP反轉，才能從較小的網域回推回去

3. whois

4. When you update the nameservers for a domain, it may take up to 24-72 hours for the change to take effect. This period is called DNS propagation.

10 minutes. TTL is the time period for which servers cache the information for your DNS records. For example, if you set the TTL for a particular record to one hour, servers store the information for that record locally for an hour before retrieving updated information from your authoritative nameserver. Shorter TTL settings make can increase propagation speed.

5. An Open DNS Resolver is any DNS resolver that is publicly accessible, and willing to resolve recursive queries for anyone on the internet.

The DNS protocol is one of a few that can turn a very small query into a large response (in both size, and required computing power). Because of this, having an open resolver opens your server up to be used in DNS Amplification Attacks.