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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.