Part1

(a)

Wireshark filter

ip.dst==140.112.172.2

String without encoded

??? ANSI?? ? ???? ? LesMiserable

SECRET

sGossiping

/發P幣

[A[B

String encoded by base64

//sY//sf//oYAEFOU0n/8P/6HwCHACD/8P/9Af/9A//9AP/7AExlc01pc2VyYWJsZQ0KU0VDUkVU

DQoNCnNHb3NzaXBpbmcNCg0KL7VvULn0DQobW0EbW0I=

(b)

Telnet, TCP

(c)

let Data = Application Data

let Ht = Header of transport layer

let Hn = Header of network layer

let Hl = Header of link layer

User Computer

Encode Data with Ht, Hn, Hl

|

| Transmitted on physical layer

v

Decode Hl

Switch: read something in Hn

Encode Hl

|

| Transmitted on physical layer

v

Decode Hl, Hn

Router: read something in Ht

Encode Hl, Hn

|

| Transmitted on physical layer

v

Decode Hl, Hn, Ht

PTT Server: Got the data

Part2

(a)

DHCP is on the Application layer.

DHCP use UDP(transport layer) to dynamic allocated IP to other computer.

"The Dynamic Host Configuration Protocol (DHCP) is a standardized network protocol used on Internet Protocol (IP) networks." - by Wikipedia

(b)

使用支援IPv6的proxy代理

使用Tunnel Broker

使用支援IPv6的VPN代理

檢查 自己的電腦的網卡/作業系統 && 且到目標伺服器路徑上所有的機器都有正確的設定好IPv6

(c)

Governments of the Industrial World, you weary giants of flesh and steel, I come from Cyberspace, the new home of Mind. On behalf of the future, I ask you of the past to leave us alone. You are not welcome among us. You have no sovereignty where we gather. -from "A Declaration of the Independence of Cyberspace"

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