

5-4-3 DHCP 封包格式 (一)



✦ DHCP Over UDP Over IP 封裝

◆ Server : 67/udp

◆ Client : 68/udp

Ethernet Header	IP Header	UDP Header	DHCP Header/Body
Des.MAC	Protocol = 17	Source Port	
Source MAC	Source IP	Dest. Port	
Type = 0x0800	Dest. IP	Port = 67/68	
...			

✦ DHCP 封包包裝

- ◆ OP=0 : DHCP Request
- ◆ OP=1 : DHCP Response
- ◆ ciaddr : 舊位址
- ◆ yiaddr : 分配位址
- ◆ siaddr : BOOTP 位址
- ◆ giaddr : Relay Agent
- ◆ chaddr : Client 硬體
- ◆ sname : Server 名稱

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OP	HTYPE	HLEN	HOPS
Transaction ID			
Seconds		Flags	
Client IP Address (ciaddr)			
You IP Address (yiaddr)			
Server IP Address (siaddr)			
Gateway IP Address (giaddr)			
Client Hardware Address (chaddr, 16 Byte)			
Server Name (sname, 64 byte)			
File name (128 Byte)			
Option (312 Byte)			



5-4-3 DHCP 封包格式 (二)



★ DHCP Option

◆ DHCP 封包類別

◆ 網路參數

Code	LEN	Value
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CODE	Value	DHCP 封包類別
53	1	DHCP Discovery
53	2	DHCP Offer
53	3	DHCP Request
53	4	DHCP Decline
53	5	DHCP Ack
53	6	DHCP Nack
53	7	DHCP Release

CODE	Value	DHCP 封包類別
01	255.255.255.0	Sub-net mask = 255.255.255.0
03	...	Router Address
06	168.95.1.1	DNS Address = 168.95.1.1
0F	tsnien.idv.tw	Domain name = tsnien.idv.tw
2C	...	WINS Server Address

