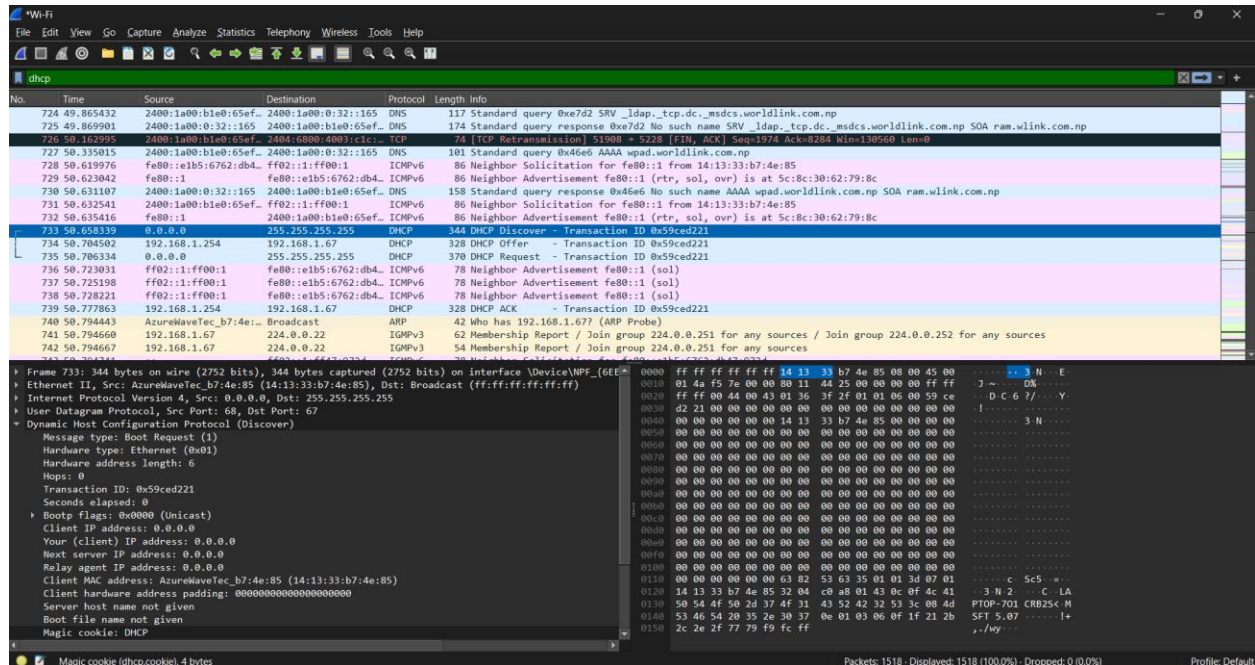


When DHCP starts up:

1) Client – DHCP Discover

- Client will make a DHCP Discover meaning it will send a discover request requesting for an IP address

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2) Server – DHCP Offer

- Server will respond and offer an IP address

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Wi-Fi

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dhcpc

No.	Time	Source	Destination	Protocol	Length	Info
724	49.865432	2400:1a00:b1e0:65ef::	2400:1a00:0:32::165	DNS	117	Standard query 0xe7d2 SRV _ldap._tcp.dc._msdcs.worldlink.com.np
725	49.869901	2400:1a00:0:32::165	2400:1a00:b1e0:65ef::	DNS	174	Standard query response 0xe7d2 No such name SRV _ldap._tcp.dc._msdcs.worldlink.com.np SOA ram.wlink.com.np
726	50.162995	2400:1a00:b1e0:65ef::	2400:6800:4003:c1c::	TCP	74	[TCP Retransmission] 51908 → 5228 [FIN, ACK] Seq=1974 Ack=8284 Win=130560 Len=0
727	50.335015	2400:1a00:b1e0:65ef::	2400:1a00:0:32::165	DNS	101	Standard query 0x46e6 AAAA upad.worldlink.com.np
728	50.619976	fe80::e1b5:6762:db4::	ff02::1:ff00:1	ICMPv6	86	Neighbor Solicitation for fe80::1 from 14:13:33:b7:4e:85
729	50.623042	fe80::1	fe80::e1b5:6762:db4::	ICMPv6	86	Neighbor Advertisement fe80::1 (rtr, sol, ovr) is at 5c:8c:30:62:79:8c
730	50.631107	2400:1a00:0:32::165	2400:1a00:b1e0:65ef::	DNS	158	Standard query response 0x46e6 No such name AAAA upad.worldlink.com.np SOA ram.wlink.com.np
731	50.632541	2400:1a00:b1e0:65ef::	ff02::1:ff00:1	ICMPv6	86	Neighbor Solicitation for fe80::1 from 14:13:33:b7:4e:85
732	50.635416	fe80::1	2400:1a00:b1e0:65ef::	ICMPv6	86	Neighbor Advertisement fe80::1 (rtr, sol, ovr) is at 5c:8c:30:62:79:8c
733	50.658339	0.0.0.0	255.255.255.255	DHCP	344	DHCP Discover - Transaction ID 0x59ced221
734	50.704502	192.168.1.254	192.168.1.67	DHCP	328	DHCP Offer - Transaction ID 0x59ced221
735	50.706334	0.0.0.0	255.255.255.255	DHCP	370	DHCP Request - Transaction ID 0x59ced221
736	50.723031	ff02::1:ff00:1	fe80::e1b5:6762:db4::	ICMPv6	78	Neighbor Advertisement fe80::1 (sol)
737	50.725198	ff02::1:ff00:1	fe80::e1b5:6762:db4::	ICMPv6	78	Neighbor Advertisement fe80::1 (sol)
738	50.728221	ff02::1:ff00:1	fe80::e1b5:6762:db4::	ICMPv6	78	Neighbor Advertisement fe80::1 (sol)
739	50.777863	192.168.1.254	192.168.1.67	DHCP	328	DHCP ACK - Transaction ID 0x59ced221
740	50.794443	AzureWaveTec.b7:4e::	Broadcast	ARP	42	Who has 192.168.1.67? (ARP Probe)
741	50.794668	192.168.1.67	224.0.0.22	IGMPv3	62	Membership Report / Join group 224.0.0.251 for any sources / Join group 224.0.0.252 for any sources
742	50.794667	192.168.1.67	224.0.0.22	IGMPv3	54	Membership Report / Join group 224.0.0.251 for any sources

User Datagram Protocol, Src Port: 67, Dst Port: 68

Dynamic Host Configuration Protocol (Offer)

Message type: Boot Reply (2)

Hardware type: Ethernet (0x01)

Hardware address length: 6

Hops: 0

Transaction ID: 0x59ced221

Seconds elapsed: 0

Bootp flags: 0x0000 (Unicast)

Client IP address: 0.0.0.0

Your (client) IP address: 192.168.1.67

Next server IP address: 0.0.0.0

Relay agent IP address: 0.0.0.0

Client MAC address: AzureWaveTec.b7:4e:85 (14:13:33:b7:4e:85)

Client hardware address padding: 00000000000000000000

Server host name not given

Boot file name not given

Magic cookie: DHCP

Option: (53) DHCP Message Type (Offer)

Option: (54) DHCP Server Identifier (192.168.1.254)

Option: (51) IP Address Lease Time

Magic cookie (dhcp.cookie), 4 bytes

Packets: 1518 - Displayed: 1518 (100.0%) - Dropped: 0 (0.0%) Profile: Default

3) Client – DHCP Request

- Client will officially request for that IP address

Wi-Fi

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dhcpc

No.	Time	Source	Destination	Protocol	Length	Info
724	49.865432	2400:1a00:b1e0:65ef::	2400:1a00:0:32::165	DNS	117	Standard query 0xe7d2 SRV _ldap._tcp.dc._msdcs.worldlink.com.np
725	49.869901	2400:1a00:0:32::165	2400:1a00:b1e0:65ef::	DNS	174	Standard query response 0xe7d2 No such name SRV _ldap._tcp.dc._msdcs.worldlink.com.np SOA ram.wlink.com.np
726	50.162995	2400:1a00:b1e0:65ef::	2400:6800:4003:c1c::	TCP	74	[TCP Retransmission] 51908 → 5228 [FIN, ACK] Seq=1974 Ack=8284 Win=130560 Len=0
727	50.335015	2400:1a00:b1e0:65ef::	2400:1a00:0:32::165	DNS	101	Standard query 0x46e6 AAAA upad.worldlink.com.np
728	50.619976	fe80::e1b5:6762:db4::	ff02::1:ff00:1	ICMPv6	86	Neighbor Solicitation for fe80::1 from 14:13:33:b7:4e:85
729	50.623042	fe80::1	fe80::e1b5:6762:db4::	ICMPv6	86	Neighbor Advertisement fe80::1 (rtr, sol, ovr) is at 5c:8c:30:62:79:8c
730	50.631107	2400:1a00:0:32::165	2400:1a00:b1e0:65ef::	DNS	158	Standard query response 0x46e6 No such name AAAA upad.worldlink.com.np SOA ram.wlink.com.np
731	50.632541	2400:1a00:b1e0:65ef::	ff02::1:ff00:1	ICMPv6	86	Neighbor Solicitation for fe80::1 from 14:13:33:b7:4e:85
732	50.635416	fe80::1	2400:1a00:b1e0:65ef::	ICMPv6	86	Neighbor Advertisement fe80::1 (rtr, sol, ovr) is at 5c:8c:30:62:79:8c
733	50.658339	0.0.0.0	255.255.255.255	DHCP	344	DHCP Discover - Transaction ID 0x59ced221
734	50.704502	192.168.1.254	192.168.1.67	DHCP	328	DHCP Offer - Transaction ID 0x59ced221
735	50.706334	0.0.0.0	255.255.255.255	DHCP	370	DHCP Request - Transaction ID 0x59ced221
736	50.723031	ff02::1:ff00:1	fe80::e1b5:6762:db4::	ICMPv6	78	Neighbor Advertisement fe80::1 (sol)
737	50.725198	ff02::1:ff00:1	fe80::e1b5:6762:db4::	ICMPv6	78	Neighbor Advertisement fe80::1 (sol)
738	50.728221	ff02::1:ff00:1	fe80::e1b5:6762:db4::	ICMPv6	78	Neighbor Advertisement fe80::1 (sol)
739	50.777863	192.168.1.254	192.168.1.67	DHCP	328	DHCP ACK - Transaction ID 0x59ced221
740	50.794443	AzureWaveTec.b7:4e::	Broadcast	ARP	42	Who has 192.168.1.67? (ARP Probe)
741	50.794668	192.168.1.67	224.0.0.22	IGMPv3	62	Membership Report / Join group 224.0.0.251 for any sources / Join group 224.0.0.252 for any sources
742	50.794667	192.168.1.67	224.0.0.22	IGMPv3	54	Membership Report / Join group 224.0.0.251 for any sources

User Datagram Protocol, Src Port: 68, Dst Port: 67

Dynamic Host Configuration Protocol (Request)

Message type: Boot Request (1)

Hardware type: Ethernet (0x01)

Hardware address length: 6

Hops: 0

Transaction ID: 0x59ced221

Seconds elapsed: 0

Bootp flags: 0x0000 (Unicast)

Client IP address: 0.0.0.0

Your (client) IP address: 0.0.0.0

Next server IP address: 0.0.0.0

Relay agent IP address: 0.0.0.0

Client MAC address: AzureWaveTec.b7:4e:85 (14:13:33:b7:4e:85)

Client hardware address padding: 00000000000000000000

Server host name not given

Boot file name not given

Magic cookie: DHCP

Option: (53) DHCP Message Type (Request)

Option: (61) Client identifier

Option: (50) Requested IP Address (192.168.1.67)

Magic cookie (dhcp.cookie), 4 bytes

Packets: 1518 - Displayed: 1518 (100.0%) - Dropped: 0 (0.0%) Profile: Default

4) Server – DHCP Acknowledgement

- Server acknowledges that the IP address has been given out

No.	Time	Source	Destination	Protocol	Length	Info
724	49.865432	2400:1a00:b1e0:65ef::	2400:1a00:0:32::165	DNS	117	Standard query 0xe7d2 SRV _ldap._tcp.dc._msdcs.worldlink.com.np
725	49.869901	2400:1a00:0:32::165	2400:1a00:b1e0:65ef::	DNS	174	Standard query response 0xe7d2 No such name SRV _ldap._tcp.dc._msdcs.worldlink.com.np SOA ram.wlink.com.np
727	50.335015	2400:1a00:b1e0:65ef::	2400:1a00:0:32::165	DNS	101	Standard query 0x46a6 AAAA wpad.worldlink.com.np
728	50.619976	fe80::e1b5:6762:db4::	ff02::1:ff00:1	ICMPv6	86	Neighbor Solicitation for fe80::1 from 14:13:33:b7:4e:85
729	50.623042	fe80::1	fe80::e1b5:6762:db4::	ICMPv6	86	Neighbor Advertisement fe80::1 (rtr, sol, ovr) is at 5c:8c:30:62:79:8c
730	50.631107	2400:1a00:0:32::165	2400:1a00:b1e0:65ef::	DNS	158	Standard query response 0x46a6 No such name AAAA wpad.worldlink.com.np SOA ram.wlink.com.np
731	50.632541	2400:1a00:b1e0:65ef::	ff02::1:ff00:1	ICMPv6	86	Neighbor Solicitation for fe80::1 from 14:13:33:b7:4e:85
732	50.635416	fe80::1	2400:1a00:b1e0:65ef::	ICMPv6	86	Neighbor Advertisement fe80::1 (rtr, sol, ovr) is at 5c:8c:30:62:79:8c
733	50.658339	0.0.0.0	255.255.255.255	DHCP	344	DHCP Discover - Transaction ID 0x59ced221
734	50.704502	192.168.1.254	192.168.1.67	DHCP	328	DHCP Offer - Transaction ID 0x59ced221
735	50.706334	0.0.0.0	255.255.255.255	DHCP	370	DHCP Request - Transaction ID 0x59ced221
736	50.723031	ff02::1:ff00:1	fe80::e1b5:6762:db4::	ICMPv6	78	Neighbor Advertisement fe80::1 (sol)
737	50.725198	ff02::1:ff00:1	fe80::e1b5:6762:db4::	ICMPv6	78	Neighbor Advertisement fe80::1 (sol)
738	50.728223	ff02::1:ff00:1	fe80::e1b5:6762:db4::	ICMPv6	78	Neighbor Advertisement fe80::1 (sol)
739	50.777863	192.168.1.254	192.168.1.67	DHCP	328	DHCP ACK - Transaction ID 0x59ced221
740	50.794443	AzureWaveTec_b7:4e::	Broadcast	ARP	42	Who has 192.168.1.67? (ARP Probe)
741	50.794660	192.168.1.67	224.0.0.22	IGMPv3	62	Membership Report / Join group 224.0.0.251 for any sources / Join group 224.0.0.252 for any sources
742	50.794667	192.168.1.67	224.0.0.22	IGMPv3	54	Membership Report / Join group 224.0.0.251 for any sources

User Datagram Protocol, Src Port: 67, Dst Port: 68

Dynamic Host Configuration Protocol (ACK)

Message type: Boot Reply (2)

Hardware type: Ethernet (0x01)

Hardware address length: 6

Hops: 0

Transaction ID: 0x59ced221

Seconds elapsed: 0

Bootp flags: 0x0000 (Unicast)

Client IP address: 0.0.0.0

Your (client) IP address: 192.168.1.67

Next server IP address: 0.0.0.0

Relay agent IP address: 0.0.0.0

Client MAC address: AzureWaveTec_b7:4e:85 (14:13:33:b7:4e:85)

Client hardware address padding: 000000000000000000000000

Server host name not given

Boot file name not given

Magic cookie: DHCP

Option: (53) DHCP Message Type (ACK)

Option: (54) DHCP Server Identifier (192.168.1.254)

Option: (51) IP Address Lease Time

Magic cookie (dhcp.cookie), 4 bytes

Packets: 1518 - Displayed: 1518 (100.0%) - Dropped: 0 (0.0%) Profile: Default