

6. IP Management:

Test Description:

- Ensure the AP is powered on, DHCP is enabled, and the pool range is known.
- Connect a client device to the AP and record the IP assigned by DHCP.
- In the AP's management UI, create a DHCP reservation for the client's MAC address with a chosen IP from the pool.
- Disconnect and reconnect the client; verify the reserved IP is assigned.
- Reboot the AP while the client is connected; verify the reserved IP is still assigned and there are no IP conflicts.

Connected Devices:

(Green circle = Connected, Red circle = Not Connected, Grey circle = Phantom)



Test Results:

S No	Room	Platform	Model	Connected Node	DHCP IP	Static IP	After Reconnection: Connected node	After Reconnection: Connected IP	After Reboot: Reconnected Node	After Reboot: Reconnected IP
1	Living Room	Android	iQOO Z9 Lite	GW	192.168.40.176	192.168.40.176	Leaf	192.168.40.176	Leaf	192.168.40.176
2	Living Room	Android	Samsung S9 FE	GW	192.168.40.123	192.168.40.123	Leaf	192.168.40.123	Leaf	192.168.40.123
3	Living Room	Android	Iitel P55 5G	GW	192.168.40.68	192.168.40.68	GW	192.168.40.68	GW	192.168.40.68
4	Living Room	iOS	iPhone 12	GW	192.168.40.28	192.168.40.28	GW	192.168.40.28	GW	192.168.40.28
5	Living Room	macOS	MacBook (MacBookAir-39)	Leaf	192.168.40.31	192.168.40.31	GW	192.168.40.31	GW	192.168.40.31
6	Living Room	Linux	Dell	Leaf	192.168.40.185	192.168.40.185	Leaf	192.168.40.185	Leaf	192.168.40.185
7	Living Room	Android	Samsung M06	Leaf	192.168.40.136	192.168.40.136	Leaf	192.168.40.136	Leaf	192.168.40.136

8	Living Room	Windows	Dell (66RG)	Leaf	192.168.40.179	192.168.40.179	Leaf	192.168.40.179	Leaf	192.168.40.179
9	Living Room	Windows	Dell (V9S)	Leaf	192.168.40.170	192.168.40.170	Leaf	192.168.40.170	Leaf	192.168.40.170
10	Living Room	Linux	Lenovo ThinkPad	GW	192.168.40.142	192.168.40.142	Leaf	192.168.40.142	Leaf	192.168.40.142
11	Living Room	Android	Oppo A3X	Leaf	192.168.40.2	192.168.40.2	Leaf	192.168.40.2	Leaf	192.168.40.2
12	Children Bedroom	Android	Lenovo M10	Leaf	192.168.40.233	192.168.40.233	Leaf	192.168.40.233	GW	192.168.40.233
13	Children Bedroom	Linux	Lenovo ThinkPad	Leaf	192.168.40.94	192.168.40.94	Leaf	192.168.40.94	Leaf	192.168.40.94
14	Children Bedroom	iOS	iPhone 14	GW	192.168.40.148	192.168.40.148	GW	192.168.40.148	Leaf	192.168.40.148
15	Children Bedroom	Windows	HP	GW	192.168.40.198	192.168.40.198	GW	192.168.40.198	GW	192.168.40.198
16	Children Bedroom	iOS	iPad 13	GW	192.168.40.152	192.168.40.152	GW	192.168.40.152	GW	192.168.40.152
17	Kitchen	Linux	Lenovo ThinkPad	Leaf	192.168.40.12	192.168.40.12	Leaf	192.168.40.12	Leaf	192.168.40.12
18	Kitchen	Android	Honor X Pad	Leaf	192.168.40.99	192.168.40.99	Leaf	192.168.40.99	Leaf	192.168.40.99
19	Kitchen	Windows	Dell	Leaf	192.168.40.113	192.168.40.113	Leaf	192.168.40.113	Leaf	192.168.40.113
20	Kitchen	Android	Oppo A3X	GW	192.168.40.110	192.168.40.110	Leaf	192.168.40.110	Leaf	192.168.40.110
21	Kitchen	Android	Samsung M14	Leaf	192.168.40.248	192.168.40.248	Leaf	192.168.40.248	Leaf	192.168.40.248
22	Kitchen	macOS	MacBook	Leaf	192.168.40.112	192.168.40.112	Leaf	192.168.40.112	Leaf	192.168.40.112
23	Kitchen	iOS	iPhone 12	Leaf	192.168.40.10	192.168.40.10	Leaf	192.168.40.10	Leaf	192.168.40.10
24	Guest Bedroom	macOS	MacBook	GW	192.168.40.108	192.168.40.108	GW	192.168.40.108	GW	192.168.40.108
25	Guest Bedroom	iOS	iPhone 13	GW	192.168.40.206	192.168.40.206	GW	192.168.40.206	GW	192.168.40.206
26	Guest Bedroom	Linux	HP	GW	192.168.40.202	192.168.40.202	GW	192.168.40.202	GW	192.168.40.202
27	Guest Bedroom	Android	Samsung M05	GW	192.168.40.100	192.168.40.100	GW	192.168.40.100	GW	192.168.40.100
28	Master Bedroom	Android	Samsung M06	Leaf	192.168.40.109	192.168.40.109	Leaf	192.168.40.109	Leaf	192.168.40.109
29	Master Bedroom	Android	STB	GW	192.168.40.213	192.168.40.213	GW	192.168.40.213	Leaf	192.168.40.213

Observations for IP Management Test:

- After reserving the IPs from the AP side, observed that the same IPs were allocated to all the devices after rebooting the AP and after disconnecting and reconnecting all the clients.