How to set up a DHCP reservation for a camera or NVR

A DHCP reservation tells the router to hand a camera or recorder the same IP address every time. It is the easiest way to stop a recorder losing its cameras, or an app losing the recorder, after a power cut.

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By default most cameras and recorders ask the router for an address (DHCP) every time they boot. Usually they get the same one back. Sometimes, after a long outage, a router replacement or a busy network, they do not. Then the NVR shows channels offline, a port forward points at the wrong device, or the monitoring station loses the feed.

A **DHCP reservation** (also called a static lease, address reservation or fixed IP) fixes this on the router side: the router recognises the device by its MAC address and always gives it the same IP. The device itself stays on DHCP, so if you move it to another network it still gets online.

	DHCP reservation (router)	Static IP (on the device)
Where it is set	Router or firewall	Camera or recorder network menu
Survives router replacement	No, must be recreated	Yes
Risk of address conflict	Low, the router manages the pool	Higher if the address is inside the DHCP pool
Device moved to another network	Still gets online	May be unreachable until changed
Best for	Small sites, ISP routers, mixed devices	Sites without a router you control, or isolated camera networks

Reservation vs static IP on the device. Both are valid; pick one per device and write it down.

Create the reservation

1. **Find the device's current IP and MAC address**
   The MAC address is printed on the label of most cameras and recorders, and is shown in the recorder's network or system information page. The vendor discovery tools (SADP for Hikvision, ConfigTool for Dahua, Reolink Client's LAN scan) show both IP and MAC. See how to find a camera or recorder's IP address.

2. **Log in to the router**
   Open the router's web page or app with an admin account. On ISP gateways this is often in the ISP's app rather than a browser page.

3. **Open the DHCP or LAN settings**
   Look for **DHCP Server**, **LAN Setup**, **Address Reservation**, **Static Leases** or, on some systems, a per-client setting called **Fixed IP**. The router table below lists where it usually lives.

4 **Add the reservation**
Choose the device from the connected-clients list if offered (this fills the MAC for you), or type the MAC manually. Enter the IP you want. Keeping the address it already has is simplest because nothing else needs changing.

5 **Save and reboot the device**
Reboot the camera or recorder (or disconnect it for a minute) so it requests a fresh lease. Some routers only apply reservations to new leases.

6 **Confirm it took**
Check the router's client list shows the device at the reserved address, and that the NVR channels and any port forwards still work.

7 **Record it**
Keep a simple sheet: device, location, MAC, IP. It saves an hour the next time someone replaces the router.

Where reservations usually live

Router family	Usually found under
TP-Link	Advanced > Network > DHCP Server > Address Reservation
ASUS	LAN > DHCP Server > manual assignment list
Netgear	Advanced > Setup > LAN Setup > Address Reservation
Linksys	Connectivity > Local Network > DHCP Reservations
Ubiquiti UniFi	Client device settings > Fixed IP Address
pfSense / OPNsense	DHCP server settings for the interface > static mappings

Menu names vary by firmware version. If yours differs, search the maker's help site for 'address reservation' and your model.

Cameras plugged into the NVR's PoE ports

Many NVRs have built-in PoE ports that run their own small internal network for the cameras. Those cameras get addresses from the NVR, not from your router, and they will not appear in the router's client list. You do not need reservations for them; only the NVR's own LAN port needs a fixed address on your network.

> **Pick a tidy range**
> If you are reserving several devices, group them (for example .200 to .229 for cameras and the recorder). It makes them easy to spot in client lists and easy to move to their own camera VLAN later.

Frequently asked questions

Can I reserve an address that is outside the DHCP pool?
On most routers, yes, and some require it. On others the reservation must sit inside the pool. If the router refuses the address, check which rule it follows in its help page.

Do I need a reservation if I use the maker's cloud app?

The app will usually keep working without one, because the recorder connects out to the cloud. You still want one if the NVR records IP cameras on your main network or if you have any port forwards.

Related guides

- How to give a camera or NVR a static IP address — vuepointsecure.com/support/how-to-give-a-camera-or-nvr-a-static-ip-address
- How to find a camera or recorder's IP address — vuepointsecure.com/support/how-to-find-a-camera-or-recorders-ip-address
- How to set up port forwarding for a camera or NVR — vuepointsecure.com/support/how-to-set-up-port-forwarding-for-a-camera-recorder
- All support articles — vuepointsecure.com/support

Need help with a site? Call (888) 203-2260 or visit vuepointsecure.com/contact. Menu names and defaults vary by model and firmware; check your device's documentation.