Private Addressing - What it is, RFC 1918 ranges, and why it matters

Gridinsoft Help Center

What it is

Private addressing uses special IP ranges reserved for inside networks only. Home and office devices get addresses like 192.168.x.x, 10.x.x.x, or 172.16-172.31.x.x so they can talk to each other while sharing one public IP on the internet. These ranges are defined in RFC 1918.

Why it matters

Private IPs keep internal devices off the public internet by default and make home networking simple. They are a building block of NAT and basic privacy, but they are not a firewall - you still need good security settings.

How it works - quick tour

- Reserved ranges: 10.0.0.0/8, 172.16.0.0/12, 192.168.0.0/16
- Router hands them out via DHCP to laptops, phones, printers, IoT
- NAT translates many private devices to one public IP when going online
- Traffic from the internet cannot route to private ranges directly

Simple safety tips

- Change your router’s admin password and keep firmware updated
- Use WPA2/WPA3 Wi-Fi and a guest network for visitors and IoT
- Avoid broad port forwarding; only open what you truly need
- Document your subnets to prevent overlaps across sites and VPNs