

# IPv6 Intro

## Refresher

For a quick crash course into IPv6 checkout my [IPv6 Quick Explainer](#) guide.

## Why Did I Setup IPv6?

Beyond just being good to know because it'll be what we're all using sooner than later there are a few practical advantages of IPv6 over IPv4. Most important to me though is being able to have IP addresses that don't have to be masqueraded by the router. This has several knock-on effects I appreciate.

## No Need for Hairpin NAT

I don't have to masquerade IP addresses which means that when I access a device from my LAN I can use the same IP address that is used when people access a device from the WAN. I don't have to setup a hacky [Hairpin NAT](#) or necessarily use [Split-horizen DNS](#) to just have everything work. The less janky configurations I have to create and maintain to paper over problems of IPv4 the better.

## Fine-grained DNS Control

Because each device can have a publically routable address I can setup subdomains to **actually** point to different addresses. As an example I can have `wireguard.swigg.net` point to my router IP address for VPN access while `*.swigg.net` can point to my server IP address I am running in my DMZ. With IPv4 I had to have them both point to my router public IP address and then use some sort of proxy to forward based on hostname plus do something janky like above.

---

Revision #11

Created 1 April 2021 19:51:38 by [dustin@swigg.net](mailto:dustin@swigg.net)

Updated 5 May 2021 16:06:12 by [dustin@swigg.net](mailto:dustin@swigg.net)