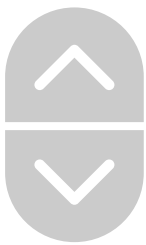


IPv6 Address Synthesis on Older Systems



1.5k

One question that’s been raised a bunch of times here on DevForums relates to IPv6 address synthesis. I've just updated the [Supporting IPv6-only Networks](#) pinned post to offer formal guidance on this topic (see FAQ #4). However, I want to follow up with some personal opinions.

My main point is that, while the above-mentioned guidance means that you don’t have to worry about this issue during App Review, you still have to worry about customers running your app on a device running an older version of iOS that’s attached IPv6-only network. You have a bunch of options to handle that case:

- use a DNS name — This is the best option, in that connecting to a DNS name solves this problem and helps in a bunch of other cases as well (for example, it’ll improve compatibility with VPN On Demand).
- raise your deployment target to 9.2 — This is the simplest *correct* option, allowing you to avoid this issue without writing any code.
- support IPv6 on your servers — If your change your servers to support IPv6, you’ll be able to connect to them using an IPv6 address or an IPv4 address depending on your environment.
- detect and specifically handle NAT64 — It’s technically possible to implement your own address synthesis using the algorithm described in [RFC 7050](#). However, we recommend against you doing this because
 - implementing this correctly involves a lot of ugly low-level networking code
 - that code will have a very limited lifespan; a year or two from now you’ll be able to safely assume iOS 9.2, at which point all of that effort will have been wasted
- you can apply the [ostrich algorithm](#) — Personally I wouldn’t do this but, ultimately, you are responsible for your relationship with your customers.

Share and Enjoy — Quinn “The Eskimo!” Apple Developer Relations, Developer Technical Support, Core OS/Hardware

```
let myEmail = "eskimo" + "1" + "@apple.com"
```

Network

Asked 4 years ago by [eskimo](#)

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