IPv6 on iPhone

Starting from iOS 4, iPhones provide support for IPv6 over the WiFi interface. Only stateless autoconfiguration is possible: the iPhone listens to Router Advertisement packets and automatically gets IPv6 configuration. The IPv6 Toolkit, downloadable from the App Store, shows extended information on the IPv6 configuration of the iPhone:

Figure 1. IPv6 toolkit interface

Note that two IPv6 addresses are auto-configured using a /64 announced prefix:

1. One address with a MAC-based interface identifier on the last 64 bits,
2. A second address with a random interface identifier, as specified by RFC 4941 on Privacy extensions for stateless address autoconfiguration in IPv6.

On the integrated Safari navigator, the ipv6-test.com website shows that the iPhone can be considered as a dual stack equipment and that the RFC 4941 autoconfigured address is used over the internet.

Figure 2. Testing IPv6 on an iPhone