

Browsing Privacy

How easy is it for someone to track our movements in the world wide web? Dynamic IP addresses? NAT? Disabling cookies?

This all seems to be of not much help! Interestingly our individual PC and browser configurations are so diverse that there are rarely two of the same kind! And this information is available for the server. Means two corporations using a common database could identify you as being one and the same person accessing their web pages.

You can put this to the test here:

<https://panopticklick.eff.org/>

At least my configuration proofed to be unique out of 1,379,358 tested so far!

IPv6 Privacy Implications

The 128 IPv6 address space is divided into a 64 bit prefix and a 64 bit interface identifier. Especially the interface identifier is of interest here. The Interface Identifier was planned to have the MAC address embedded. The MAC address can identify the used HW uniquely. Furthermore it will tell us the manufacturer plus potentially the type of equipment if there are different MAC blocks used for different products.

This privacy design flaw can be corrected by using the Privacy Extensions. Those do not embed the MAC address and change the Interface Identifier regularly, while listening additionally on the previously assigned Identifiers for some time.

IPv6 privacy extensions are available on many OS, but for example not on iOS (4) and Android (≥ 2.1). As especially those devices are personal devices, the users are easily re-identifiable if IPv6 is used!