Establishing direct connection between two remote wireless clients

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***Abstract*— Wireless clients are usually placed into private address realm (private network) in the Internet. The clients in the private address realm are able to communicate to each other in the same private network, and using special boxes (NAT boxes) the clients can also communicate to the public internet. This solution "hides" the wireless clients from the outside public internet world: they are unreachable from the outside world, or from other private networks.**

In special situations the requirement of the direct connection between two wireless clients (located in different private networks) may occur. One widely used solution for this kind of problem is the special configuration of the NAT boxes (called "port forwarding"), but also there are many cases, where the NAT box configuration is not allowed (e.g. the applied security policy does not allow it).

In this paper we would like to introduce a software based solution for the mentioned situation: The solution (named UDPTUN) establishes a direct tunnel connection between two clients located in different private networks (without changing or touching the configuration of the NAT boxes).

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