Abstract

There is an increasing request nowadays to connect to core networks from different places. Workers regularly need to connect to internal private networks over the Internet from home, hotels, airports or from other external networks. Security becomes a main attention when staff or business partners have constant access to internal networks from insecure external locations. Currently, such a secured access is realized with Virtual Private Network (VPN) connections. Although operational, the current VPN solutions suffer of severe limits. Most of the VPN solutions are not satisfactorily secured since they are using weak authentication. The more secured ones are quite often expensive and require the usage of security tokens that demand administration from the service provider. On the user's side there is a need for additional care and attention since he/she has to carry an extra device. In this paper, the focus is to examine the structure, security, and benefits of VPNs.

References
2. Pereira, R. & Beaulieu, S., Extended Authentication within ISAKMP/Oakley (XAUTH), IETF, online: http://tools.ietf.org/id/draft-ietf-ipsec-isakmp-xauth06.txt