Realizing a Virtual Private Network Using Named Data Networking

Title	Realizing a Virtual Private Network Using Named Data Networking
Publication Type	Conference Paper
Year of Publication	2017
Authors	Partridge, Craig, Nelson, Samuel, Kong, Derrick
Conference Name	Proceedings of the 4th ACM Conference on Information-Centric Networking
Publisher	ACM
Conference Location	New York, NY, USA
ISBN Number	978-1-4503-5122-5
Keywords	Human Behavior, IPsec, Named Data Network Security, named data networking, pubcrawl, resilience, Resiliency, Scalability, vpn
Abstract	An approach to creating secure virtual private networks for the Named Data Networking (NDN) protocol suite is described. It encrypts and encapsulates NDN packets from higher security domains and places them as the payload in unencrypted NDN packets, much as IPsec encapsulates encrypted IP datagrams in unencrypted IP datagrams. We then leverage the well-known properties of the IP-in-IP approach, taken by IPsec in tunnel mode, to understand the strengths and weaknesses of the proposed NDN-in-NDN approach.
URL	http://doi.acm.org/10.1145/3125719.3125720
DOI	10.1145/3125719.3125720
Citation Key	partridge_realizing_2017

Human behavior IPsec Named Data Network Security named data networking pubcrawl resilience Resiliency Scalability vpn