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Dark Web

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Анотація

В даній роботі розглядається Dark Web (Темна мережа) - частина глобальної мережі, яка не відслідковується пошуковими системами та вимагає особливого клієнтського забезпечення. Dark Web допомагає зберігати анонімність під час користування мережею Інтернет, що дозволяє активістам, журналістам або військовим конфіденційно передавати та отримувати секретні або компрометуючі дані, але водночас це дозволяє безперешкодно переглядати сторінки з нелегальним контентом та займатися протизаконною діяльністю.

Ключові слова: Темна мережа, Глибока мережа, Tor, інтернет, конфіденційність, нелегальна діяльність.

Abstract

Dark Web is considered in this work. Dark Web is a part of the Web, that is not tracked by search engines and requires special software. It helps to keep the anonymity of using the Internet, it allows activists, journalists or military men to send and receive secret or compromising data, but it also allows to browse pages with illegal content or engage in illegal activities freely.

Keywords: Dark Web, Deep Web, Tor, the Internet, confidentiality, illegal activities.

With the increasing usage of the Internet, people become aware of the possibility that their private information can be easily used against them. So the knowledge about Dark Web began to spread.

The term "Dark Web" is often confused with the term "Deep Web", but when the Deep Web is the collection of all sites on the web that can't be accessed by a search engine, accounting for 90% of the Internet; those unindexed sites include all user databases, webmail pages, registration-required web forums, and pages behind paywalls. There are huge numbers of such pages, and most of them exist for mundane reasons[1]. The Dark Web (also called Darknet) is a subset of the Deep Web that is not only not indexed, but that requires something special to be able to access it, e.g., specific proxying software or authentication to gain access[2]. The Dark Web often is on top of additional sub-networks, such as Tor, I2P, and Freenet. The actual Dark Web, by contrast, likely accounts for less than 0.01% of the Web[3].

The most common way to access the Dark Web is Tor. The name is an acronym derived from the original software project name The Onion Router, however, the correct spelling is "Tor", capitalizing only the first letter[4]. Tor was originally developed by the US Naval Research Laboratory and was later funded by the Electronic Frontier Foundation digital rights group, Google and the US National Science Foundation, among others[5].

It makes an attempt to hide a person's location and identity by sending data across the Internet via a very circuitous route. Encryption applied at each hop along this route makes it very hard to connect a person to any particular activity. Its users include the military, law enforcement officers and journalists - who use it as a way of communicating with whistle-blowers - as well as members of the public who wish to keep their browser activity secret.

In addition, it is also most commonly associated with the sale of drugs, weapons, counterfeit documents and child pornography. Infamous examples of Dark Web sites include the Silk Road and

its offspring. The Silk Road was (and maybe still is) a website for the buying and selling of recreational drugs.

But, it should be noted that Dark Web is not so "dark" as it seems. One of the first high profile Dark Web sites was the Tor hidden service WikiLeaks created to accept leaks from anonymous sources. That idea has since been adapted into a tool called SecureDrop, software that integrates with Tor hidden services to let any news organization receive anonymous submissions. Even Facebook has launched a Dark Web site aimed at better catering to users who visit the site using Tor to evade surveillance and censorship.

"There're human rights activists, journalists, military, law enforcement [and] normal people," says Runa Sandvik, a privacy and security researcher. "It just really depends on what you want to do." [6].

People operating within closed, totalitarian societies can use the Dark Web to communicate with the outside world. For example, Tor is a valuable tool for Chinese dissidents who can't access sites like Twitter. And it became a valuable tool during the Arab Spring.

So, one can say, that the Dark Web is like two sides of the same coin, it has both advantages and disadvantages, and only its user can decide how to use it - for good or for bad needs.

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