

The Deep and Dark Web

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ABSTRACT

Here is the most heard word of the centuries DARK WEB / DEEP WEB, Previously it was mostly used by Russian federations and American Navy so that they can hide their confidential data without highlighting in the view area of other web surfers. But in now the days scenario has been changed the dark web is now been occupied by so called Hackers and Smugglers, Gangsters, is some context you find the robbed ATM Cards and their passwords, Smuggling of goods, Human trafficking details, Crypto Currency are also been stolen from some generators and distributed to Hackers in terms of funding. NASA, CIA, FBI, UN, NSA makes their eyes on all transactions to predict terror events. Today the DARK WEB is such huge and their community has spread worldwide. In the world of enhancement of Internet Dark Web getting more popular among youngsters in the path of curiosity the get sometimes leaded to wrong path. Dark Web is now Mostly Surfing by TOR Browser, ORP BOT, and I2P.

Keywords

Dark web, Deep web, Hidden web, Invisible web, Internet

INTRODUCTION

Deep web:- According to researchers, only 4% of the Internet is visible to the general public and that web is called Surface web but the remaining 96% of the Internet is called the Deep Web . It is the web which cannot be accessed by our general search engines, like Google, yahoo etc. These data is private, so kept out of reach. It is used by authorized person to access specific information. Few example of Deep web^[1]

- Companies internal networks and various type of databases
- Education , medical and government related pages

- Content format are can't readable by crawlers^[1]
- Intentionally prohibited content for crawler in page configuration. Here a page which is not link incidentally would also be a part of the invisible web.^[1]
- Sites requiring some form of authentication, like mail, accounts service, banking sites and some subscription based online media restricted by pay walls.

Dark web:- Dark Web term usage dates back as early as the 1970s when it was used to describe networks separate from ARPANET, a predecessor of the modern internet. Dark web is a subset of Deep web Where doing all the illegal Stuff like sell drugs, hacking software , fraud of money , pornography , higher hit man for killing anyone and many more. Dark web provide a user with anonymity but a service was introduced which allowed to someone to host a website on the dark web and remain anonymous. One the most famous website called the Silk road which was on dark web called the onion router (TOR), used to sell drugs and was taken down by FBI in 2002. It is most risk area, that's why any user should think many times before moving on that invisible web.^[1]

Importance of Dark and Dark web

- The Deep and Dark web are still a mystery even among information technology and security professionals. Because indices don't exist on this alternative webs, business need to work with an investigator or a company that specializes in monitoring keywords, people, or place across Deep and Dark web.^[2]
- The Dark web is not new, but it has increased his popularity year by year. This is driven by a few things explained by Mr. Tyler Logtenberg. He is senior Product Manager at Thred.
- Modern television or new technology depicts the Dark web as mystery. And hacker groups like an Anonymous have become a hip part of youth

culture. Also some high profile breaches, threats, and investigation have originated on Dark web.

- Your security team would be needed to take into consideration a risk or lack strategy. This would be including the monitoring of widespread topic on Dark web such as in IPP (intellectual property protection). It includes people selling company secrets and prototype designs, ways your business can be negatively impacted.^[2]
- The security consideration is the protection of your brand. The Deep and Dark webs are places where anyone can post requests for carnage of your company executives. They may also use the message boards to develop and share plot theories about your company which can have a very negative impact on your brand.
- Big corporation is also likely targets of organized crime. Any message boards for hacker groups can have sensitive information displayed. Many companies have mandates for their security team to be aware of these threats and check the Dark web. Yet many org don't know where to start because of the lack of organizations. Using a company such as Thred that specializes in this monitoring will assist your search of the wild west of the digital landscape.^[2]
- Thred has performed heavy research and development to expand the managed services offerings to include the dark web. And also has abilities to quickly add new websites and social networks to upcoming product releases.

Pros and cons of Deep and Dark web

Pros:

Obscurity

To be completely honest and good, that is a double-edged sword. Anonymity results in freedom, which sounds perfect. It is also honey which attracts all criminal or illegal activity which gives such a bad name to the Deep Web. Both companies and governments are very interested in monitoring our behaviour, and many users like to hide their identity in order to avoid political, economic or social oppression. To ensure that the user IP address cannot be tracked. It is not that anonymity is not a crime; It is actually a legally recognized authority.^[3]

Freedom of Speech

Freedom of speech would be a direct consequence of anonymity. The right to freely express their opinion on any subject of any harassment which is given to most Western countries, there is almost a

utopia in some parts of the world. Overcoming censorship is very positive feature that Dark web has allowed to which directly link us to our third advantage.

Political Activism

In the deep web there is a good work for a speaker. Oppressive governments are a irrecoverable reality in the twenty first century. Information is a very powerful weapon to this kind of regimes, and its citizen's movements on the WWW (World Wide Web) are strictly monitored to avoid the spread of revolutionary ideas. Blocking websites especially the one related to social media like Facebook any many more, is a common measure in abusive environments.^[3]

Knowledge

The deep web stores the largest virtual libraries you could possibly imagine. It's a great space for researchers and students, since what they can find in the Deep web will more probably not be available from standard search engines. Scientific findings that haven't made public and could influence health and social benefits of large populations can be found in the deepest of the web waters. Literatures from all ways of thinking that you will not find in the book storefronts are also stored in the deep web.

Amazing individuals

We act with the resources we have access to concerns our individual responsibilities and criticism. Certain person in what could be called the Deep web community is dedicating both time and effort to help other altruistically. From doctors offering professional advice on Silk Road to those people who are checking to highlight who is behind the major crimes, a whole movement is trying to make the deep web a better place.^[3]

No physical contact

Another important reason with vendors is that people choose Dark Web instead of buying products on the road. Users should not be afraid that someone will see them or they will be arrested when buying a product.

A product which is not available on surface web that product buy on Deep Web:

Some items being sold on Dark web markets cannot be found in every country. Not easily, people can get almost every medication, and this is just one click away.

Cons:

- Risk Exploring the Deep Web can be dangerous. Think many times before clicking any returned search links. Because any ruling authority does not control the Deep Web, users absolutely enjoy anonymity and can participate in conversations for illegal activities such as copyrighted material, pornography and other criminal acts. Exploring a search engine like Google is results may lead you into the Internet Dark web corners, leaving you vulnerable to horrid characters and sites designed to spread malware or hack your computer.^[3]
- Customers can never make sure that the goods they order are those that they will get. What they can do is order the products from dependable.
- Storing money in online wallets is big disadvantage of buying products on the Dark Web markets. The persons should always keep their bit coins in their personal wallets until they are ready to purchase an item or a product.
- Seizing shipments is always a risk factor if your order is to cross any international border. The risk of getting caught by you or your vendor is also increased.
- There is a high probability that there may be occasional problems with some dark web markets. Some markets can stay down for a month.

Literature Survey

This topic is organized to get information about the previous researchers, and through the help of previous researchers research I was made seminar report on the deep and dark web. Explanations have been provided about the previous researchers made by various researchers who help researchers to get detailed information about this topic. Here I was talked about the importance and advantage of the deep and dark web using the help of previous researchers research. In this topic we have discuss about the future enhancement on deep and dark web. The importance of this chapter is being explained in a proper way, because it will help to another person to learn this topic and increase the future enhancement of this topic. And will help the learners to achieve the goals and goals set out This structure of research depicts the important nature of this chapter. Sufficient information can be obtained by the researcher to do further research on this topic.^[4]

CONCLUSION

In this report, we saw the introduction of Deep and Dark web and understood the importance and

advantage of Deep and Dark web. The part of the Internet that is easily searchable and accessible for public is known as surface web. The Deep web browser however, is an area of the Internet where websites are not indexed and can't be found through regular search engine like Google or require authorization for access. The Dark Web is a part of the Deep Web that needs specific security mechanism supporting anonymity to be in place to allow access to its sites and pages, instance of privacy networks like peer to peer networks like I2P (Invisible Internet Project). It is very important to acknowledge the roaring markets for sensitive information to use on the surface of dark web, and also, the dispersion of this information on the Deep web. To completely product all aspects of an org, the Deep web must be included in the threat scopes.

Future enhancement:

It will be more secure

It is likely for technological developments related to Dark web to improve the steal thinness of Dark web, the report says, noting that extreme libertarians are trying to find new ways to become more anonymous and avoid detection by law enforcement agency.^[5]

Marketplaces will become stronger

Trend Micro foresees the rise of new, completely decentralized marketplaces that the replies on bit coins block chain technology. It divine that this will be used to implement full winded marketplaces without a single point of failure, guarantee of trust and safe transactions.^[5]

Bit coin become harder to take

Cryptography currencies go hand with deep web marketplaces, the report says. In that regard, we will see new, advanced ways to make Bit coins even less traceable than they are now. It also notes that malware (malicious spyware) could take advantage the blockchain technology.

More people will use it:

While the report notes that regular web users don't have much of a reason to start using the deep web anytime soon it predicts that increasing public awareness could mean increased use of Internet in the Dark web and other similar intended sites in the deep web.

REFERENCES

- [1] Introduction of Deep and Dark

https://en.wikipedia.org/wiki/Deep_and_Dark_and_Dangerous

[2] Importance of Deep and Dark web

<https://www.thredtech.com/category/dark-web/>

[3] Pros and Cons of Deep and Dark web

<https://www.djdesignerlab.com/2015/07/5-benefits-of-the-deepweb/>

[4] Literature survey

Critical Analysis of the Emerging Dark Web

<https://repository.cardiffmet.ac.uk/handle/10369/8541>

[5] Future enhancement

<https://www.business-reporter.co.uk/2015/06/22/5-predictions-for-the-future-of-the-deep-web/>

Journal of Engineering Sciences