DEEP WEB

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The web we surf today is roughly estimated to be 1% of the web that exists and the rest of the 99% of the web is called as deep web/ dark net. This phenomenon is commonly explained with an example of an iceberg in an ocean and guessing the size of the iceberg over the surface of the ocean is completely pointless. Deep web/Dark net came in to existence to provide privacy to the user as the content posted/uploaded to the Deep web/Dark net is anonymous.

Since that no regular search engines can surf the Deep web/Dark net one requires a unique software such a "Tor". Tor helps the user to stay anonymous on the Deep web/Dark net. As every great invention or discovery even the Deep web/Dark net has the users who use it for both good as well as evil deeds

1. CLOUD COMPUTING ON DEEP WEB

Today in our ever changing world where everything around us is connected to everything that you can possible think off. World Wide Web has taken over our markets, finance, services, technological innovations in the fields of science, medical and media where information technology and being connected on the web plays a major role but setting up a new business or getting staring on web based application and competing with the major leading industries or technological giants is highly expensive as maintaining a web server to hold on to your data, infrastructure that can keep all your servers and computers cool, a well-trained technical staff that can handle this servers. Will this just might not do it as every software we possibly know gets updated very often and keeping up with all this might just turn way too complicated and expensive for a small business.

The solution for all this problems is as simple as cloud computing where small business, start-ups and new applications can use shared servers to run or accesses there files without all the technical handling and infrastructure. There are many companies that provide shared server services or cloud computing services where all the infrastructure, technical assistance, the latest software upgrades and few additional services are provided on monthly based fee plans.

This helps the organization to put all it major resources into the development of the organization, business expansion, applications development, RND, customer support, etc.

The only problem with the Deep Web or Dark net is that it requires a special browser to access the web sites in it, but the deep web has a large no of data server providers that can change the feature of small business. This can be used for one's advantage, the business can use the free services for their internal business usage.

"Tor the onion routing" was developed by United States Naval Research Laboratory in mid-1990. It was developed by Paul Syverson, Michael Reed and David Goldschlag with the purpose of protecting U.S intelligence communications online. The Tor project launched on 20th September 2001 and in the year 2004 the naval research laboratory released the software under free licence. In 2006 mathewson and six others founded the Tor project, a Massachusetts-based research education non-profit organization responsible for maintaining Tor.

Tor project was funded by EFF, U.S International Broadcasting Bureau, University of Cambridge, Google and many more. Tor has been praised for providing anonymity and privacy to vulnerable users such as political activists who fear the surveillance, arrest and other consequences, users who seek circumvent censorship.

2. PURPOSE

The purpose of the existence of the deep web/dark net is very unique approach to solve the major concern of the modern world where connectivity is much higher and privacy is getting lower day by day on the name of censorship by many legal body's and constant need of acquiring the data of user by major corporate companies in the name of providing a better product is actually invading users privacy.

Deep web/dark net is filled with a huge set of users who are in need of privacy or a censor free internet. Privacy is one of the basic need for every human, censorship free internet and anonymous internet usage is very helpful and important for many users. There are also various situations in which a person might choose to withhold their identity. Acts of charity have been performed anonymously when benefactors do not wish to be acknowledged. A person who feels threatened might attempt to mitigate that threat through anonymity. A witness to a crime might seek to avoid retribution, for example, by anonymously calling a crime tip line. Criminals might proceed anonymously to conceal their participation in a crime. Anonymity may also be created unintentionally, through the loss of identifying information due to the passage of time or a destructive event.

Anonymous commercial transactions can protect the privacy of consumers. Some consumers prefer to use cash when buying everyday goods, to prevent sellers from aggregating information or soliciting them in the future. Credit cards are linked to a person's name, and can be used to discover other information, such as postal address, phone number, etc. The electronic cash system was developed to allow secure anonymous transactions. Another example would be Enmity, which actually makes a purchase on a customer's behalf. When purchasing taboo goods and services, anonymity makes many potential consumers more comfortable with or more willing to engage in the transaction. Many loyalty programs use cards that personally identify the consumer engaging in each transaction, or that act as a numerical pseudonym, for use in data mining.

Most commentary on the Internet is essentially done anonymously, While these usernames can take on an identity of their own, they are frequently separated and anonymous from the actual author. According to the University of Stockholm this is creating more freedom of expression, and less accountability. However, the Internet was not designed for anonymity: IP addresses serve as virtual mailing addresses, which means that any time any resource on the Internet is accessed, it is accessed from a particular IP address. This address can be mapped to a particular Internet Service Provider (ISP), and this ISP can then provide information about what customer that IP address was leased to. This does not necessarily implicate a specific individual but it provides regional information and serves as powerful circumstantial evidence. Anonymizing services such as I2P and Tor address the issue of IP tracking. In short, they work by encrypting packets within multiple layers of encryption. The packet follows a predetermined route through the anonymizing network. Each router sees the immediate previous router as the origin and the immediate next router as the destination. Thus, no router ever knows both the true origin and destination of the packet. This makes these services more secure than centralized anonymizing services.

Cognitive computing based on cloud computing with the help of Deep Web:

Cognitive computing is the next major step for innovation in the science of information technology. As we are eliminating a large amount of time in processing complex data that we require for cognitive computing with the help of high powered processer and high band width that's being provided by our cloud server

provider will help the developer to develop algorithms and applications that will empower the new business, innovations and ideas.

3. EXAMPLE:

Consider you run a restraint and have newly adopted a web based application to provide all your services on a mobile application platform. With the help of cloud computing you can store, analyse all the user shared data to provide the best and faster service possible and with the help of cognitive computing you can understand user's requirements and develop your products and services. Also anticipate the user requirements and suggest the products and services that they might desire

This just doesn't help in the improvement/development of the organization but will also help us to create a better customer relationships and loyal partners and the data gathered from deep web is completely private to the organization and the developers can test run their applications for better customer reviews.

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