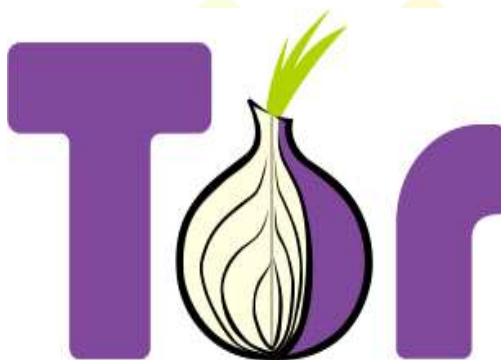### What is Dark web?

The dark web is the World Wide Web content that exists on darknets, overlay networks that use the Internet but require specific software, configurations or authorization to access. The dark web forms a small part of the deep web, the part of the Web not indexed by web search engines, although sometimes the term deep web is mistakenly used to refer specifically to the dark web.

The darknets which constitute the dark web include small, friend-to-friend peer-to-peer networks, as well as large, popular networks like *Tor, Freenet, I2P* and *Riffle* operated by public organizations and individuals. Users of the dark web refer to the regular web as Clearnet due to its unencrypted nature.

Definition of Dark web.

Darknet websites are accessible only through networks such as Tor *("The Onion Routing" project)* and I2P *("Invisible Internet Project").* Tor browser and Tor-accessible sites are widely used among the darknet users and can be identified by the domain *".onion".* While Tor focuses on providing anonymous access to the Internet, I2P specializes on allowing anonymous hosting of websites. Identities and locations of darknet users stay anonymous and cannot be tracked due to the layered encryption system. The darknet encryption technology routes users' data through a large number of intermediate servers, which protects the users' identity and guarantees anonymity.

The Onion Router (Tor)

Tor is free software for enabling anonymous communication. The name is derived from an acronym for the original software project name "The Onion Router". Tor directs Internet traffic through a free, worldwide, volunteer overlay network consisting of more than seven thousand relays.

The user's privacy is protected here, but cannot hide the fact that someone is using Tor.

Tor's intended use is to protect the personal privacy of its users, as well as their freedom and ability to conduct confidential communication by keeping their Internet activities from being monitored. As normally the surface web uses the extensions such as .com, .edu, .org, .gov etc. But for surfing the on the Tor browser. Onion extensions is used in the dark web websites with the wired IP addresses.

Onion Routing is implemented by encryption in the application layer of a communication protocol stack, nested like the layers of an onion. Tor encrypts the data, including the next node destination IP address, multiple times and sends it through a virtual circuit comprising successive, random-selection Tor relays. Each relay decrypts a layer of encryption to reveal the next relay in the circuit to pass the remaining encrypted data on to it. The final relay decrypts the innermost layer of encryption and sends the original data to its destination without revealing or knowing the source IP address. Because the routing of the communication is partly concealed at every hop in the Tor circuit, this method eliminates any single point at which the communicating peers can be determined through network surveillance that relies upon knowing its source and destination.

Developer(s):
The Tor Project, Inc

Initial release:
September 20, 2002; 15 years ago[1]
Stable release:
0.3.3.9 (14 July 2018; 54 days ago[2]) [±]
0.2.9.16 (LTS) (14 July 2018; 54 days ago[2]) [±]
0.2.5.16 (LTS) (1 December 2017; 9 months ago[3]) [±]

Preview release :
0.3.4.4-rc (9 July 2018; 59 days ago[4]) [±]

Written in:
C,[5] Python, Rust[6]

Operating system:
Microsoft Windows Unix-like (Android, Linux, macOS)

Size:
50–55 MB

Type:
Onion routing, anonymity

License:
BSD 3-clause license[7]

Website:
torproject.org

Hidden Wikki

So, Unlike the normal Wikipedia we use in our day to day lifes there's a Hidden Wkki on the dark side of the internet i.e the Dark Web.

So basically Hidden Wikki is the key to access any possible thing in the black market of dark web. The Hidden Wikki serves as the Directory link to any .onion sites. The Hidden Wikki cannot be accessed through the surface internet for *eg.* the browsers like (Google, firefox, bing, internet explorer etc). It can only get accessed throught the darkweb browser like (Tor or Tor's gateway).

including links claiming to offer money laundering, contract killing, cyber-attacks for hire, contraband chemicals, and bomb making. The rest of the wiki was essentially uncensored as well and

also offered links to sites hosting child pornography and abuse images.

Services of Dark web.

So basically there are lots of services in dark web. basically you can do anything in this part of the internet here are few of services.

- **The Hitman / Assassination Market**

The Hitmen Network will deploy three contract killers to entertain your offer, so long as the target is not a major politician or a person under the age of 16. "Tell others about this shop, and earn 1% from every purchase they will make," reads a message on the site. It is unknown how or if the hit is confirmed.

Basically there is no risk of getting caught or getting in any kind of trouble. The contract killer *(Hitmen)*which a person would be assigning to kill someone. The Hitmen won't be taking any of your personal details or the reason why you wanted to kill that particular person. Just the victims photograph and the address would be asked, And you'll be notified about the payment and the time until of which the work would be done. There's no need to exchange your debit or credit card number or bank details the payment should be done in crypto currency *(Bitcoin)*

A target's name is added to a hit list and then bidders use bitcoin to fund the pool. Currently, NSA Director Keith Alexander has a 10 bitcoin bid on his head; 40 bitcoins are offered for assassinating President Obama; and a whopping 124.14 ($75,000) for chairman of the Federal Reserve, Ben Bernanke.

- **The Ammunition Market**

The Dark Web Gun Trade May Be Bigger Than You Think.

The first study into the dark web gun trade finds tens of thousands of dollars worth of transactions every month.

The dark web is an enabler for the circulation of illegal weapons already on the black market, as well as a potential source of diversion for legally owned weapons. Although the arms trade is small in volume compared to other products trafficked online, its potential impact on international security is significant.

Basically, any type of Firearms and Explosives can be purchased anonymously. the payment is asked to be done in crypto currency (bitcoins).

One possible avenue is via the 'dark web', which hosts many different online black markets that facilitate the sale of firearms, weapons, explosives and banned digital materials. The role of the dark web has grown in prominence in recent years following its link to the 2016 Munich Shooting, where a lone-wolf terrorist used a weapon purchased on the dark web. These terror attacks cemented widespread public concern that the dark web is an enabler and facilitator for terrorists and organised criminals seeking firearms. However, despite these concerns, very little is known about the size and scope of the weapons trade on the dark web

- **Drugs Marketing**

The illegal drug trade or drug trafficking is a global black market which also includes in the dark web markets or crypto markets dedicated to the cultivation, manufacture, distribution and sale of drugs that are subject to drug prohibition laws. Most jurisdictions prohibit trade, except under license, of many types of drugs through the use of drug prohibition laws.

shopping for drugs on the so-called dark net, accessible not through traditional search engines but by way of special browsers and software that conceal IP addresses and make users harder to trace. These drug markets are clandestine dispensaries of illicit and dangerous substances that are sold in exchange for cryptocurrencies, such as bitcoin. For police, they pose a challenging front in the fight against the opioid crisis.

The Public Health Agency of Canada predicts the number of opioid-related overdose deaths for 2017 will surpass 4,000 once the figures are available from all provinces and territories. Fewer than 3,000 such deaths were reported a year earlier.

According to the RCMP's national headquarters and municipal police forces in cities such as Calgary, there are growing indications that the drug trade is increasingly moving to the dark web.

- **Conclusion**

This work described web-based printing system with significant features allows users to save their time. Associated features of the system makes it maximum utilization. As Queue Monitoring, Centralized server Print Releasing and for online transactions E-wallet is congaed.

- **Acknowledgement**