

# CHAPTER THREE

## *STEP BY STEP GUIDE TO SAFELY ACCESSING THE DARK NET AND DEEP WEB*

Google only indexes a very small fraction of the world wide web. By some estimates, the Web includes 500 times more articles than that which Google yields in search results. The hyperlinks which Google and other search engines come back should you type in a question is called the "surface net", while all the other, non-searchable content is known as the deep web" or "invisible web".

Most of this information is concealed simply because the Huge majority of users Will not find it applicable. A lot of it's tucked away in databases which Google is not interested in or barred from crawling. A good deal of it's old and obsolete. The contents of iPhone programs, the documents on your Dropbox accounts, academic journals, court documents, and personal social networking profiles are examples of information which are not automatically indexed by Google but still exist online.

*Caution: Your ISP can discover You're using Tor.*

A lot of the Report revolves around the usage of anonymity networks such as Tor, Which are utilized to get the dark web. Internet providers can discover when Tor is used because Tor node IPs are people. If you would like to use Tor independently, you can utilize either a VPN or Tor Bridges (Tor nodes which aren't publicly flashed ). US Tor users in particular might want to utilize a VPN, which is quicker and much more dependable.

Recent changes in US laws mean net providers are free to market And share information on their clients, including their surfing habits. When using a

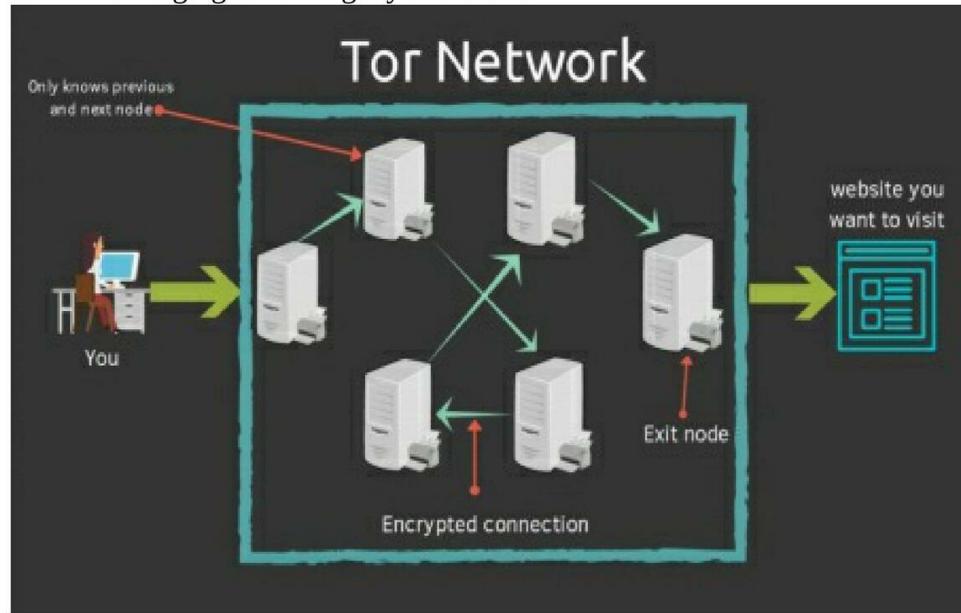
VPN, your ISP won't have the ability to realize that you're connected to some Tor entrance node, just an encrypted tunnel to your VPN server.

NordVPN is your #1 option for Tor and continues to be Designed with Tor consumers in your mind.

Deep net vs dark web

The deep web is frequently confused with all the dark web, also known as dark net, Black net, and black web. To put it differently, the deep internet is all the info stored on the internet that is not indexed by search engines. You do not require any special tools or a dim web browser to get into the profound web; you simply have to know where to search. Specialized search engines, directories, and wikis will help users find the information they're searching for.

A Number of the very best general deep internet search engines have closed down or been Obtained, such as Alltheweb and CompletePlanet. However, some are hanging about to get you started:



DeeperWeb -- deep search engine which leverages Google Search

The WWW Virtual Library -- The first index of the internet, but more of a directory than a search engine.

Surfwax -- Indexes RSS feeds. Not sure that this is still functioning...

IceRocket -- Searches the blogosphere and Twitter

These are all fine, but technical search engines tend to be better than General ones for locating information on the deep net. If you're trying to find a court case, as an instance, utilize your state or nation's public records search. If you require academic journals, take a look at our post on utilizing deep internet search engines for academic and technical research. The more specific you are, the better, or you'll just end up with exactly the identical search results you would find on Google. Should you want a particular file type, such as an Excel document or a PDF, find out how to define searches for that kind of document (e.g. kind:"filetype:PDF" on your DeeperWeb query).

The dark web is a little portion of the profound web that's kept hidden on goal. Sites and information on the dark net do typically take a particular tool to get. The kind of website most frequently connected with the dark net are marketplaces where illegal goods like narcotics, guns, and stolen credit card numbers have been purchased and sold. The darkest corners are utilized to engage hitmen, participate in human trafficking, and exchange child pornography. More than this, however, the dark net includes data and content which could be obtained with anonymity. It may be a website, discussion, chat area, or personal gaming server.

The attractiveness of the dark web is anonymity. Nobody knows who anybody else is in The actual world, as long as they accept the required precautions. Consumers are free from the prying eyes of both corporations and governments.

The dark net and Tor are often used by journalists and whistleblowers to Exchange sensitive information, such as Edward Snowden himself. The Ashley Madison info ditch, for example, was submitted to a website only available to Tor users.

### **The best way to get the Dark Internet safely**

The dark net isn't a single, centralized location. Exactly like the outside net, It's scattered among servers across the world. This guide will teach you on how best to get the dark net through Tor, brief for The Onion Router. Dark

internet website URLs are usually appended with ".onion" in lieu of ".com" or even ".org", signaling they're only available to Tor users.

Tor is a system of volunteer relays whereby the consumer's internet connection is routed. The link is encrypted and the visitors pops between relays located across the world, which makes the user anonymous.

Just just how can you get on the Tor network? The Simplest way is to download and Install the Tor Browser. According to Firefox, you can browse the net exactly as with any other browser, except each of your traffic is routed via the Tor Network. Be certain that you download the Tor Browser just from the official site, lest you risk downloading spyware, malware, or another virus for your device. Officially, the Tor Browser is only available on Windows, Mac, and Linux, so many experts advise against using third party browsers which use the Tor Network.

### **The best way to get the dark net on Android using Tor Browser (UPDATE)**

The official Tor Browser is currently available on Android. You can get it out of The Play Store or the Tor downloads webpage . As of writing, Tor Browser for Android is still in alpha, and also requires you set up Orbot for a prerequisite.

The Tor Browser is the most common dark browser. After Tor Browser is Installed, now you can get those .onion dark web sites.

### **Navigating the dark Web**

Now you Can safely navigate dark net sites and concealed wikis, but if you intend To do anything longer than that, you will want to take several steps. If you're planning to create a buy on a dark web market like Silk Road to find those medications your dying mother so desperately wants to endure, for example, you will want to create a bogus identity. Meaning setting up encrypted email using a brand new email address, with a pseudonym, establishing an anonymous bitcoin wallet, disabling Javascript from Tor Browser, exploring vendors, and much more.

Evidently, locating these .onion sites is your initial challenge, as they Will

not appear in Google search results. You can not simply Google "Silk Road" and aspire to land on the darkened web site. A couple of dark search engines which do indicator .onion websites comprise Onion.city, Onion.to, and NotEvil. To search several marketplaces for particular goods, especially medications and narcotics, there is Grams.

Reddit is also a valuable source for locating the dark web or profound web Website You're searching for. Try out the /r/deepweb, /r/onions, and /r/Tor subreddits. Hidden wiki directories similar to this 1 may also be handy to help narrow your search.

We can not emphasize enough that anonymity and security are overriding To people on shadowy web sites. Your ISP and the authorities may not have the ability to observe your action when on the Tor Network, however they do understand you're about the Tor Network, which alone is sufficient to raise eyebrows. In reality, a recent ruling from the US Supreme Court denoted that just using Tor was sufficient probable cause for authorities to try to capture any computer across the globe.

Another very important precaution is to make sure your .onion URLs are right. Onion URLs generally have a series of apparently random letters and figures. And as there's hardly any use of HTTPS on the darkened web, verifying whether a site is valid with an SSL certificate isn't possible. We recommend confirming the URL from three distinct sources prior to utilizing any website on the dark web. When you're sure you have the proper URL, store it into an encrypted notice --that the Tor browser won't cache it for later. Otherwise, there is a fantastic prospect of falling prey to a Millionaire scam similar to this imitation bitcoin mixer.

Because of This we highly recommend using another layer of safety via a VPN.

### **VPN over Tor versus Tor over VPN**

A VPN allows a user to encrypt All of the Online traffic travel to and Out of her or his device and route it via a server at a location of the user's picking. A VPN in conjunction with Tor further increases the safety and anonymity of the consumer.

While somewhat similar, Tor highlights ideology, and also a VPN highlights solitude.

Combining them reduces danger, but there is a significant distinction in how Both of these tools socialize. Let us first talk Tor over VPN.

Should you connect to a VPN and flame up Tor Browser, you are using Tor Over VPN, that is undoubtedly the most frequent method. Your entire device's traffic goes into the VPN server, then it circulates via the Tor Network before finishing up at its final destination. Your ISP just see's the encrypted VPN traffic, and also will not understand you are on Tor. You are able to get .onion sites normally.

Tor over VPN needs you hope your VPN supplier, which may see that you Are using Tor and maintain metadata logs, even though it can not really observe the content of your encoded Tor traffic. A log less VPN, that does not store any visitors logs nor session logs is highly preferable. Traffic logs include the information of your traffic, such as lookup queries and sites you visited, whilst session logs include metadata such as your IP address, even when you logged in to the VPN, and also just how much data was moved. Traffic logs are a larger concern than session logs, but are great.

For built in Tor over VPN performance, NordVPN functions servers which Automatically route you via the Tor network. You do not even have to utilize to Tor Browser, but bear in mind other browsers may still pass identifying data through the system.

Tor over VPN also does not shield users from malicious Tor exit nodes. Since Tor nodes comprise of volunteers, not all them play with the rules. The last relay prior to your traffic travels to the destination site is referred to as the departure node. The exit node decrypts your own traffic and so can steal your private info or inject malicious code. Furthermore, Tor exit nodes tend to be blocked by sites that don't trust the mand Tor over VPN can not do anything about this, either.

Then there is the popular VPN over Tor, that Is advised from the official Tor Project. Only two VPN suppliers we know of, AirVPN and BolehVPN, provide this support, but neither of those score highly for rates. In cases like this, the purchase price of both tools is changed. Internet traffic passes

through the Tor Network, then through the VPN. This usually means the VPN supplier does not see your actual IP address as well as the VPN protects you away from these lousy exit nodes.

Tor over VPN needs you put any hope on your VPN supplier but not your ISP and is greatest if you would like to get .onion sites. VPN over Tor needs you put trust on your ISP but maybe not your own VPN and is greatest if you would like to prevent poor Tor exit nodes. Some believe VPN over Tor more protected since it preserves anonymity during the whole procedure (assuming you cover your VPN anonymously). Even though the official Tor Project advises against VPN over Tor, the two approaches are superior not to using a VPN in any way.

The significant caveat is rate. Because of all of the nodes Your traffic moves Through, Tor alone considerably restricts bandwidth. Adding a VPN for it, even only a fast 1 such as IPVanish can make it slower, so please be patient.

## I2P

I2P is an Alternate Anonymous community to Tor. Contrary to Tor, nevertheless, it can't be used to get the public net. It may simply be used to get hidden services particular to the I2P network. I2P can't be utilized to get .onion websites since it's an entirely different network from Tor. Rather, I2P uses its own brand of concealed websites called "eepsites".

**So why can you use I2P rather than Tor?** In the end, it is Not as popular, Can not be utilized to get normal sites, and is not as simple to use, among other advantages. Both rely upon a peer-to-peer routing arrangement along with layered encryption to create browsing anonymous and private.

I2P has a few benefits, however. It is much faster and reliable than Tor for numerous technical factors. The peer reviewed routing arrangement is much more advanced and it doesn't rely upon a reliable directory to find route details. I2P uses one-way channels, so that an eavesdropper can simply capture inbound or outbound visitors, not .

Establishing I2P requires more configuration on the consumer's role than Tor. I2P Have to be downloaded and installed, and then setup is done via the router . Then individual programs must each be configured to operate with

I2P. On an internet browser, then you will want to configure your browser proxy settings to use the appropriate port.

## Freenet

Much like I2P, Freenet is a midsize network inside the community which can not Be used to access websites online web. It may simply be used to get the material uploaded into the Freenet, and it is a peer-to-peer dispersed datastore. Contrary to I2P and Tor, you do not require a host to host articles. As soon as you upload something, it remains there indefinitely even in the event that you quit using Freenet, so long as it's popular.

Freenet enables users to attach in one of 2 manners: darknet and opennet. Darknet mode permits you to define who your friends are around the community and just join and share content together. This enables groups of individuals to make closed anonymous networks composed only of people they trust and know.

Otherwise, consumers can connect into opennet manner, which automatically Assigns peers on the community. Unlike darknet style, opennet utilizes a couple of servers that are dedicated along with the decentralized peer reviewed community.

Configuration is quite straightforward. Simply download, install, and operate. When you start your default browser, Freenet is going to be prepared and running via its interface. Notice that you need to use another browser than the one you normally use to make sure anonymity.

Freenet remains an experiment designed to withstand denial-of-service strikes and censorship.

Google & Bing know virtually everything. Why just "nearly"? Having a market Share of about 92 percent Google is the best performer among the various search engines, Bing with roughly 3 percent is obviously beaten to put two, but clearly before other candidates. Both search engines catch all of their information automatically and therefore are for at least 95 percent of the planet's inhabitants the beginning page to the net.

Everything that appears on the very first pages is visible Online and is

Clicked by users. Everything else is dismissed. But all results accumulated by Google & Co. aren't complete. How many percentage of the world wide web isn't indexed by search engines isn't known. It's also rather easy to conceal a web site from Google & Co.

## What is the Deep Web?



Everything which isn't found by search engines is known as "Deep Web". And Then there's a specially encrypted place on the internet, the so-called darknet. Incidentally, this isn't just for prohibited purposes. Technically that the Darknet is a portion of the Deep Web. It's also occasionally called "Hidden Web", and at times the words Darknet and Deep Internet are used synonymously.

## Is your darknet illegal?

No, the darknet isn't illegal. On the opposite: the Darknet is just one of those last bastions of freedom of speech, or so the system can be used globally by journalists, human rights organisations, regime critics and repressed

minorities. At precisely the exact same time, but it's unfortunately also a playground for offenders.

The Darknet is a community with no censorship and surveillance -- together with its Benefits and pitfalls. By way of instance, some newspapers such as the New York Times have put up their own webpages in Darknet so that informants can transmit confidential data anonymously.

Incidentally, famous IT journalists such as Mike Tigas possess their own Homepage in Darknet -- however, that exists "on the standard" Internet.

### **What and where is the darknet?**

How do I get into the Darknet? Is Darknet banned? -- These are likely the Usual queries in connection with this component of the world wide web. Darknet employs the very same areas of the Web that all other Web providers utilize: Sites, email and document sharing. All this, like the rest of the web, is publicly accessible -- you just need to understand how to get there and the place to hunt.

If You Would like to browse the Darknet, you need anonymous access to this Tor Network. Tor is initially an abbreviation for "The Onion Router" and it's a community for anonymizing relationship information, that was in operation since about 2002 and has been chiefly developed by students at Cambridge University. You'll have the ability to read the word "onion" a few times from the subsequent post.

The Term berry is a reference to the various layers that Need to pass Via the information in route by the consumer to the site: There's almost always a whole chain of servers included in the relation between the user and the host so as to produce the best possible anonymity. Presently, about 2 million people use the Tor system daily.

Concerning the technical heritage of the Tor system, anyone who hunts the "normal" Web, e.g. Google, is attached directly to Google with their particular IP address. From the Tor system, you will find three additional servers (so-called "nodes") involving your IP along with the web site that you need to see, and it's thus not possible to follow where the visitor comes from. The source code where the Darknet relies is open source and may be seen by

everybody. If you'd like, you could also actively take part and supply your personal server, which acts as an anonymous node from the darkweb or Tor network. Obviously, it's also possible to place your pages to Darknet.  
What's a Tor Browser?

The Tor Browser is a unique version of Firefox that automatically selects The Tor system as the online access point. The Tor Browser can also be contained within our Windows compatible Cyber Shield program!

Also for additional operating systems along with your cell phone you will find alternatives For Darknet plugins to download, e.g. that the "Tor Browser" for MacOS, the "Onion Browser" to get iPhone & iPad and Orfox, Orbot or "Tor Browser" -- for Android. You most likely have the largest choice for a consumer of a device under Android.

But we urge the version within our applications Cyber Shield, as the Tor Browser in this variant is also doubly secured without the access to a computer can occur!

Darknet: Please be cautious!

As anywhere in life, you need to bring a healthy Part of skepticism when Employing the Darknet. Where no censorship or surveillance is possible, you'll also discover a lot of shady characters. However there aren't just trading areas for weapons or drugs! So seeing Darknet department stores might not be the best thought.

You should not provide your personal data everywhere and you should not upload Self-created images & videos everywhere. Downloads from Darknet are possibly dangerous and you should not purchase anything in Darknet. Do your self a favor.

Simply do not believe or trust anybody when browsing Darknet! Recall: Another Users are anonymous also! At times it's even a good idea to conceal your webcam if you proceed from the Darknet. But that may be a bit overly paranoid.

We hope we did not scare you today? However a little caution can not hurt while Surfing the Darknet!  
Guide throughout the Darknet

In Darknet you will find none of the typical domains together with all the endings. com, . net, . Org or comparable. The expansion used in Darknet is. onion.

The hottest page in Darkweb is most likely the Onion edition of Facebook. This page permits you to use Facebook anonymously without the fear of monitoring. This support is also the only alternative for individuals from countries such as China, Iran or any African nations where Facebook is censored and blocked. The address is:

<https://www.facebookcorewwi.onion/>

Many sites in Darknet do not stay online very long. That is why the Darknet -- such as the rest of the Web -- also has search engines and less or more up-to-date connection lists.

The best Dog at the Darknet search engines was Grams for quite a while. Nearly the Google of Darknet. With Grams it had been possible to seek the Darknet -- and it seemed quite similar. Whereby Grams didn't actively hunt the Darknet alone, however, a site always needed to be enrolled with Grams first. However, Grams has vanished from the scene for many months now.

A recent option is Torch. The present speech of Torch is  
<http://xmh57jrznw6insl.onion>

Wiki Links (<http://wikilink77h7lrb1.onion/>), deep Weblinks (<http://depppr5ooheo7n6.onion/>), OnionDir, Tor Links or Hidden Wiki (<http://zqktlw14fecv06ri.onion>) are normal link directories, together with their benefits and pitfalls.

And do not Be amazed: The sites and connect portals in Darknet remind one of sites from the 90s of the past millennium. So the Darknet may make a relaxing setting.

Obviously there's also email in the Darknet! 1 supplier is e.g. TorBox, where you are able to make an anonymous accounts at no cost. However, you may just send and receive e-mails inside the Darknet. The service may be reached at the following address <http://torbox3uiot6wchz.onion/>

if you would like to earn cash transfers in Darknet, then you need to look for services such as OnionWallet. OnionWallet & Co. behave like PayPal and resemble an electronic handbag. The URL to the Bitcoins currency box is as

follows: <http://aewfdl3tyohbcenp.onion/>

An Option is e.g EasyCoin: <http://ts4cwattzgsiitv7.onion/>

The "dark web" and "dark net" connote A subset of key sites which exist within an encrypted network.

Even Though the World Wide Web dominates most every aspect of our daily lives at this Time, it is important not to forget that it's only existed for a couple decades. Even though this is a comparatively brief length of time compared with the length of human history, it's a large number of technological lifetimes. Therefore, the world wide web is an exceptionally amazing place, a period of countless individual websites which are linked to one another in a complex blend of means.

The Most Well-known Sites, such as Facebook (FB), Google (GOOG) and Amazon (AMZN) are well-known across the world. Apart from those popular websites, there is a far bigger collection of less-traveled areas of the world wide web. And lurking beyond each the fundamental, accessible regions of the net are different pockets of websites. These past groups constitute the so-called "dark web" or "dark web."

### **'Dark Web' versus 'Deep Web'**

The phrases "dark web" and "dark net" are Sometimes used interchangeably but with subtle differences in meaning. They normally connote a subset of sites that exist on a community that's encrypted.

That the system is encrypted signifies that it Isn't searchable with Traditional means, like an internet search engine, and it is not visible through conventional web browsers. Dark baits exist in several types, and the expression itself does not necessarily imply any nefarious undertones. A dark web is any kind of overlay network that requires specific consent or tools to get.

Why would individuals desire to host sites on a dark web? Dark baits are Commonly associated with many different unique purposes. They may be utilized for lots of crimes, such as illegal file sharing, black markets, as well as a way for the trade of prohibited products or services. These are frequently

the most highly-publicized applications of a dark web.

However, they're also employed to get a host of different explanations. Dark baits are often called upon as a way of protecting political dissidents out of reprisal, or as an instrument for permitting people to bypass censorship networks. They could ease whistleblowing and information flows, and they can help protect people from surveillance. Therefore, and due to the great number of software of a dark web, they're a hotly contested issue.

"Dark internet" is usually confused with "deep web." The Deep net identifies unindexed websites that are unsearchable; in the majority of situations, this is because these websites are guarded by passwords. "Dark internet" websites are intentionally concealed from the surface internet by additional ways. A huge majority of sites constitute the "deep web," since they're password-protected.

#### *Encryption as well as the Dark Web.*

Some of the common methods that dark baits are split from the surface internet is through encryption. Most dark sites utilize the Tor encryption instrument to help conceal their identity.

Tor enables individuals to conceal their place, appearing like they are in a different nation. Tor-encrypted networks demand that people use Tor so as to see them. Therefore, those users' IP addresses and other identifying info is encrypted. All this combines to imply that many people can see websites on the dark web, provided that they have the right encryption tools. However, it can be unbelievably difficult to ascertain who oversees those websites.

Additionally, it suggests that, if anybody engaging in the dark web has their identity revealed, it could be harmful.

Tor uses layers and layers of encryption, securing traffic by routing it via a dense network of protected relays to anonymize it. Tor isn't illegal applications in and of itself, in precisely the exact same manner that torrenting tools aren't prohibited. (See also: How Can BitTorrent Sites like The Pirate Bay Make Money? ) In the instances, however, the computer software is often utilised to run illegal action (either through the darkened net or, even in the instance of torrenting tools, to obtain pirated material).

To place Tor's dark web links in context, It's useful to Keep in Mind That Tor Quotes only about 4 percent of its visitors is used for dim net services, together with the rest simply accounted for by people accessing routine sites with an higher level of anonymity and security.

### **Infamous Cases of this Dark Web**

When most People Today think of this dark web, a Couple of notable examples come to mind. These are websites or networks of websites which are made headlines for just one reason or another. Most are prohibited for a couple of reasons. But, there are additional possible dark nets, rather than all them are always prohibited.

Among the Most Well-known examples of a darkened community was that the Silk Road marketplace. Silk Road has been a site used for the purchasing and selling of many different illegal things , such as recreational firearms and drugs.

Silk Road Was set in 2011 and is often considered the initial dim net sector. Even though it was closed down by authorities in 2013, it's spawned a variety of copycat markets.

Marketplaces like Silk Road were instrumental in the development of Cryptocurrencies, the majority of which rely upon decentralization and improved safety measures. The anonymity and privacy of several cryptocurrencies has made them the option of option when completing trades in dark markets.

### **Reasons to Use or Avoid the Dark Web**

Besides prohibited purchases and sales, there are valid reasons one may Be interested in utilizing the dark web. People within closed societies and confronting intense censorship can use the dark web to communicate with other people beyond the society. Even people within open societies might have some interest in utilizing the dark web, especially as concerns regarding government snooping and data collection continue to rise globally.

However, a large Part of the action that Occurs on the dark Net is prohibited.

It is not tough to surmise why this could be the situation: the dark web offers a degree of individuality safety the surface internet doesn't. Criminals seeking to secure their identities so as to prevent detection and capture have been attracted to the facet of the dark web. Because of this, it is unsurprising that several noteworthy hacks and information breaches are linked with the dark web in some manner or another.

In 2015, as an Example, a trove of consumer info was stolen out of Ashley Madison, a site purporting to provide spouses a way of cheating on their spouses. The stolen information showed on the dark web, where it was later recovered and shared with the general public. In 2016, then-U.S. Attorney General Loretta Lynch cautioned that gun sales happening over the dark internet were becoming more prevalent, as it enabled buyers and sellers to prevent regulations. Illegal pornography is another relatively common occurrence on the dim web.

Thinking about the nefarious underbelly of this dark web, it is Not Surprising that Most individuals don't have any reason to get it. And given the greater importance of cryptocurrencies from the monetary world, it is likely that dim nets will get more of a characteristic for ordinary internet users later on. Meanwhile, they might also still supply offenders a way of eluding capture, though accurate anonymity is not guaranteed, even if utilizing encryption of the kind found in those networks.