

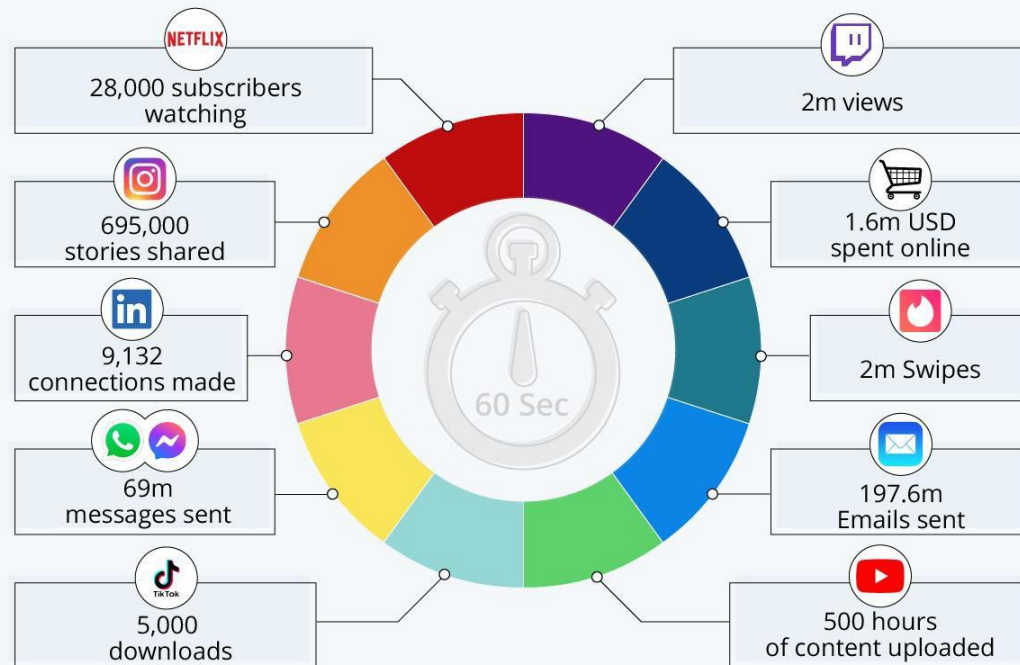
# Dark Web, O S I N T and Cryptos Investigation

U Ramamohan, SP AP

**(Credits Akshaya Kumar Nayak, Rohas nagpal, Ananth prabhu)**

# A Minute on the Internet in 2021

Estimated amount of data created  
on the internet in one minute



Source: Lori Lewis via AllAccess

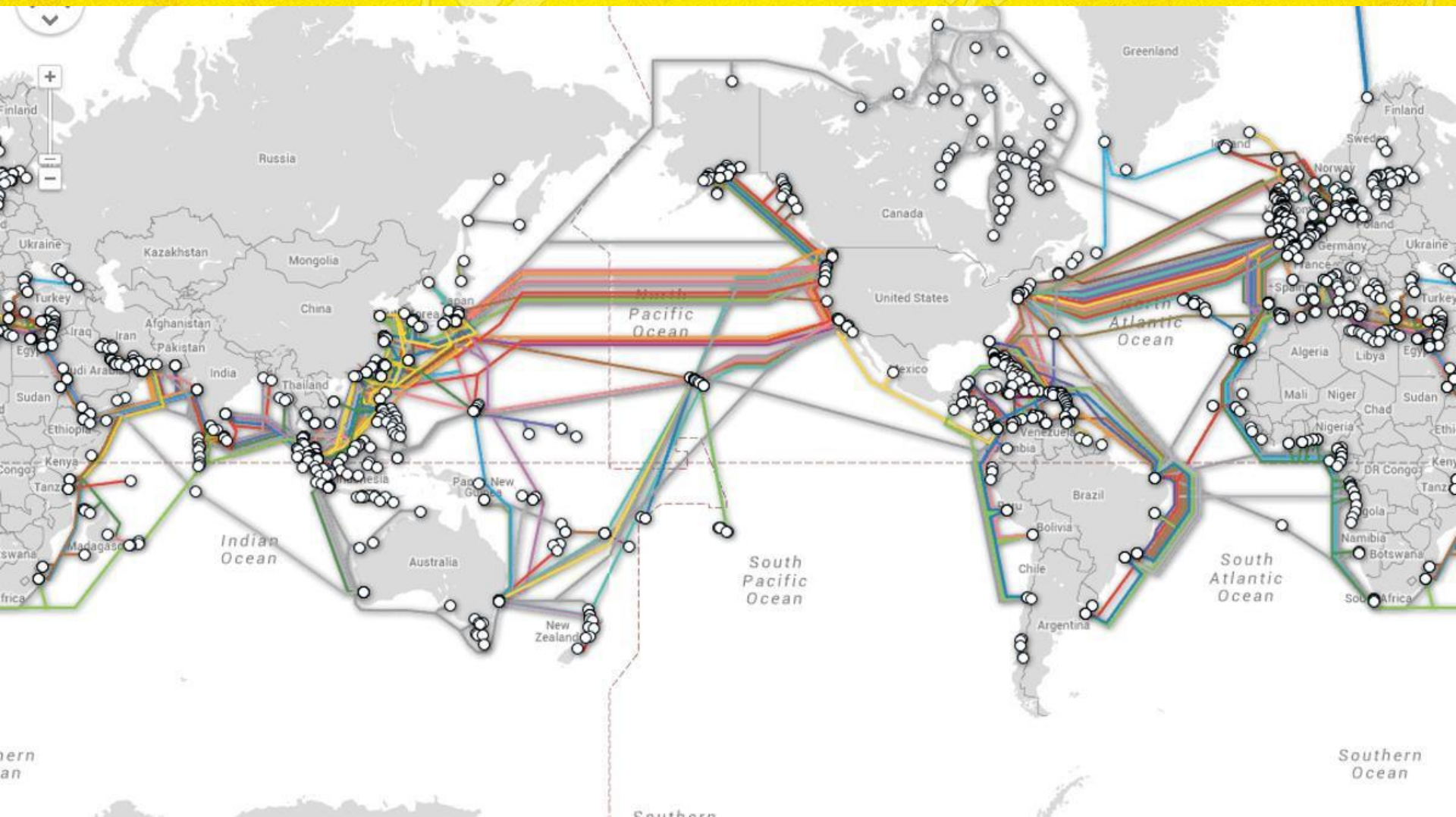


statista

# Definition

- Definition The Internet is a global system of interconnected computer networks that use the standard Internet protocols to link several billion devices worldwide









Hi Saurabh,

We recently updated the setting for voice and audio recordings in your Google Account and included more detail about how we use audio recordings to improve the Google products and technologies you use.

The updated setting allows Google to securely save audio recordings in your Google Account. Saved audio recordings help improve our audio recognition technologies, so products like Google Assistant can understand language even better in the future. To keep you in control of your audio recordings setting, we've turned it off for you until you are able to review the updated information. **Visit your Google Account to review and enable the audio recordings setting if you choose.**

**REVIEW SETTING**

At a glance, here's what this update means for you:

- Smuggler Case
- Child Missing Case
- Pondicherry Case
- Fake Bitcoin exchange case
- Drug Trafficking case
- Fugitive Case



RELIANCE

Air tel



**!dea™**



# Who is your MSP?

(Mobile Service Provider)

- To find out the Service Provider of any phone number. Visit the link:

[http://en.wikipedia.org/wiki/Mobile\\_telephone\\_numbering\\_in\\_India](http://en.wikipedia.org/wiki/Mobile_telephone_numbering_in_India)

- Install this software on your computer system as well as mobile phones based on android and Java

<http://www.shaplus.com/mobile/>

# What do you mean by IP address?

- An IP address, or simply an "IP," is a unique address that identifies a device on the internet or a local network. It allows a system to be recognized by other systems connected via the Internet Protocol.
- An IP address (or Internet Protocol address) identifies each networked computer and device on a network. When you sign up with Internet service and connect your modem, your ISP assigns you a public IP address. This address is how you communicate with all the other devices out there on the public Internet.

# Types of IP address:

## IPV4 & IPV6

- IPv4 address is 32-bit numeric address. Each of the four numbers can range from 0 to 255.

Example:-

**157.50.9.213**

- IPv6 address is 128-bit IP address written in hexadecimal which allow for approximately three hundred and forty trillion, trillion unique IP addresses.

Example:-

**2405:204:718f:7f76::fea:48bo**

# How to find out ISP from IPV4 Address

## Name of different websites:-

- <http://en.utrace.de/ip-address/>
- <http://whatismyipaddress.com/>
- <https://www.whatismyip.com/ip-address-lookup/>
- <http://ipaddress.com/>
- <http://www.apnic.net>
- <http://ipinfo.info>
- <http://www.ip2location.com/>
- <https://tools.tracemyip.org>
- <http://www.infosniper.net>
- <https://extreme-ip-lookup.com>

# <https://whatismyipaddress.com>

The screenshot shows the website [whatismyipaddress.com](https://whatismyipaddress.com) with the URL `ip/2409:4062:2e84:3733:78f8:c32d:38a2:b391` in the address bar. The page features a green header with navigation links: MY IP, IP LOOKUP, HIDE MY IP, VPNs, TOOLS, and LEARN. A search bar at the top right contains the text "IP Address|Search". Below the header, a row of logos indicates the site is "AS SEEN ON:" by various media outlets including PCWorld, The Guardian, CNN, USA Today, Digital Trends, and others.

The main content area displays the IP details for `2409:4062:2e84:3733:78f8:c32d:38a2:b391`. It includes a warning: "This information should not be used for emergency purposes, trying to find someone's exact physical address, or other purposes that would require 100% accuracy." Below this, a red button labeled "Lookup IP Address" is visible. The details section lists the following information:

- IP: 2409:4062:2e84:3733:78f8:c32d:38a2:b391
- Expanded IP: 2409:4062:2e84:3733:78f8:c32d:38a2:b391
- Hostname: 2409:4062:2e84:3733:78f8:c32d:38a2:b391
- ASN: 55836
- ISP: Jio
- Organization: Jio
- Services: None detected
- Type: [Wireless Broadband](#)
- Assignment: [Likely Static IP](#)

On the left side, there is a BYJU'S advertisement for the "National Aptitude Test" for classes 4 to 10, with a "Register for Free" button. On the right side, another BYJU'S advertisement is shown, featuring a child and a "Upto 100% Scholarship" offer, also with a "Register for Free" button.

# How to find out ISP from IPV6 Address

## Name of different websites:-

- <https://www.ultratools.com/tools/ipv6Info>
- <http://www.ip-tracker.org/locator/ip-lookup.php>
- <http://www.traceip.net>
- <https://myip.ms>

## Name of different websites:-

- <https://ipinfo.io>
- <https://spyse.com/target/ip>
- <https://dnslytics.com/whois-lookup>
- <https://viewdns.info/reverseip/>
- <https://viewdns.info/whois/>

# Name of different websites:-

- <https://centralops.net>
- <https://ping.eu>
- <http://cqcounter.com/whois/>
- <https://www.robtex.com>
- <http://networktools.nl>
- <http://atsameip.intercode.ca>
- <https://tools.tracemyip.org>

# <https://myip.ms>

VPN myip.ms

MYIP.MS  
Hosting Info, Websites & IP Database

IPv6 WHOIS Support

Enter Website or IPv4/IPv6 (2.1.7.5, yahoo.com) or any search text

Whois Lookup

Login | Register

Products | Hosting Companies | Websites | Blacklist / IP Database | Interesting | Sitemap | API

16 November 2020, 17:09:59

#1 World Live Whois IP Source

"Find Hosting Company On Any Website / Owner on Any IP Address" [Read Review »](#)

Whois Lookup, Reverse Whois on 377,000,000 websites, 9,000,000,000,000+ ipv4/ipv6 addresses

Find Hosting Company / IP Owner. Enter Site or IPv4/IPv6 (64.18.7.50, 2a01:7f8::19, yahoo.com)

Whois Lookup

Your IP Address Information

|                         |                                                    |                                                                                     |
|-------------------------|----------------------------------------------------|-------------------------------------------------------------------------------------|
| Your IP Address (IPv4)  | 157.41.121.174                                     |  |
| Your IP Address (IPv6)  | N/A (Your internet connection is not IPv6 capable) |                                                                                     |
| Your Organisation/ISP   | Reliance Jio Infocomm Limited                      |                                                                                     |
| Your IP Blacklist Check | Not Listed in Blacklist                            |                                                                                     |
| Do you use a Proxy?     | No Proxy Detected                                  |                                                                                     |

Our World Databases

1. Top World Hosting Companies »  
(based on 15,168,236 websites hosting info)

2. Blacklist IP Addresses Database »  
(93,013 ip addresses in live blacklist)

3. User Agents »  
(1,189,935 user agents in database)

4. Summary - List of all Countries »  
(253 Countries)

5. Cities SQL Database for Your Site »  
(176,000 Cities, 4,480 States)

To know the  
geographical location of  
IP Address

## Name of different websites:-

- <https://dnslytics.com/ip-geo-location>
- <https://viewdns.info/iplocation/>

# What do you mean by domain name?

- A domain name is a unique name that identifies a website. For example, the domain name of the Tech Terms Computer Dictionary is "techterms.com."
- **Each website has a domain name that serves as an address, which is used to access the website.**
- Whenever you visit a website, the domain name appears in the address bar of the web browser. Some domain names are preceded by "www" (which is not part of the domain name), while others omit the "www" prefix. All domain names have a domain suffix, such as .com, .net, or .org.

the address of your website

http://www.example.com

name

extension

prefix

sub-domain

domain name

# How to find out registrant details from a domain name of website

## Name of different websites:-

- <http://en.utrace.de/ip-address/>
- [www.domaintools.com](http://www.domaintools.com)
- [www.dnsstuff.com](http://www.dnsstuff.com)
- <http://whois.stsoftware.biz>
- <http://www.whois.com/>
- <https://mxtoolbox.com>

## Name of different websites:-

- <https://viewdns.info>
- <https://spyse.com/tools/domain-lookup>
- <https://dnslytics.com/whois-lookup>
- <https://viewdns.info/whois/>
- <https://host.io>

## Name of different websites:-

- <https://centralops.net>
- <https://ping.eu>
- <https://dnslytics.com>
- <http://cqcounter.com/whois/>
- <https://www.robtex.com>
- <http://networktools.nl>
- <http://atsameip.intercode.ca>
- <https://tools.tracemyip.org>

# <https://www.whois.com/>

VPN [www.whois.com/whois/odishapolice.gov.in](https://www.whois.com/whois/odishapolice.gov.in)

**Whois**  
Identity for everyone

WHOIS

DOMAINS WEBSITE CLOUD HOSTING SERVERS **NEW** EMAIL SECURITY WHOIS SUPPORT LOGIN

## odishapolice.gov.in

Updated 1 second ago

**Domain Information**

|                |                                                       |
|----------------|-------------------------------------------------------|
| Domain:        | odishapolice.gov.in                                   |
| Registrar:     | National Informatics Centre                           |
| Registered On: | 2013-05-13                                            |
| Expires On:    | 2021-05-13                                            |
| Updated On:    | 2019-10-16                                            |
| Status:        | OK                                                    |
| Name Servers:  | ns1.nic.in<br>ns7.nic.in<br>ns2.nic.in<br>ns10.nic.in |

**Registrant Contact**

Interested in similar domains?

- [theodishapolice.com](#) Buy Now
- [odishapoliceguide.com](#) Buy Now
- [odishapolicedepartmen  
t.com](#) Buy Now
- [bahrainpolice.com](#) Buy Now
- [odishapolice.net](#) Buy Now
- [indiapolice.net](#) Buy Now

# How to find out registrant details of an old website

## Name of different websites:-

- <https://who.is>
- <https://www.mydomain.com/whois/whois.bml>
- <https://www.whois.com/whois/>

To find out existence of  
domain name from  
keyword / related  
website

## Name of different websites:-

- <https://dnslytics.com/domain-search>
- <https://spyonweb.com>

To find out existence of  
domain type

## Name of different websites:-

- <https://dnslytics.com/domain-typos>

To know the IP history of  
a domain name

## Name of different websites:-

- <https://viewdns.info/iphistory>
- <https://www.iphistory.ch/en/>

# IMEI Number



# Structure of IMEI Number

| <u>Type</u><br><u>Allocation</u><br><u>Code</u><br><u>(TAC)</u> | <u>Unique Serial</u><br><u>Number</u><br><u>(SNR)</u> | <u>Check Digit</u><br><u>(CD)</u> |
|-----------------------------------------------------------------|-------------------------------------------------------|-----------------------------------|
| 08 digits                                                       | 06 digits                                             | 01 digit                          |

# How to find the correct IMEI Number

## Name of different websites:-

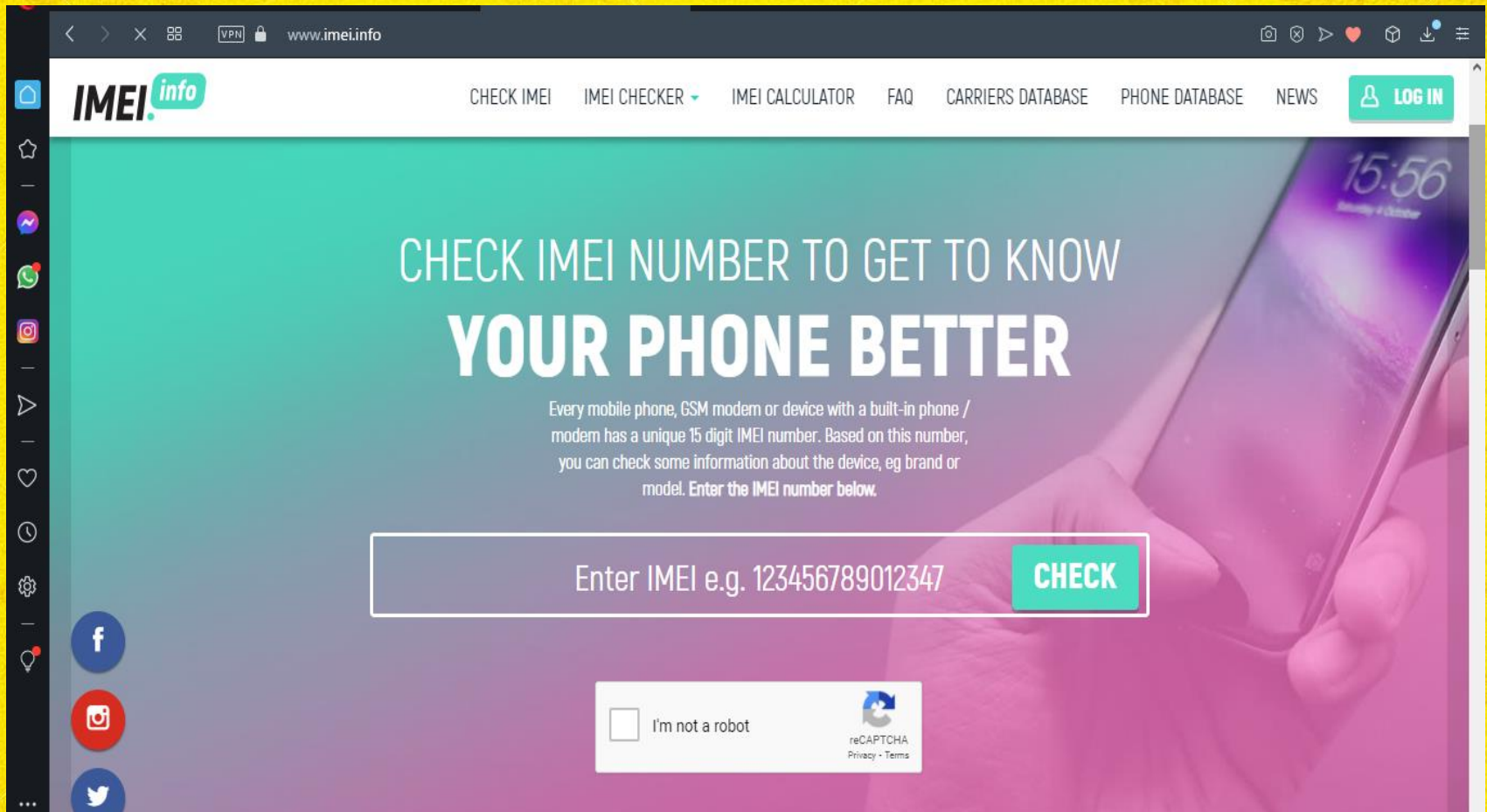
- <http://imei-number.com/imei-validation-check/>
- <http://www.imei.info/>
- <https://imeidata.net/tool/calculator>

# How to find the mobile handset details from IMEI Number

## Name of different websites:-

- <http://www.imei.info/>
- <http://imei-number.com/imei-number-lookup/>
- <http://www.numberingplans.com/?page=analysis>
- <http://www.nobbi.com/tacquery.php>
- <https://imeidata.net/check>

# <https://www.imei.info>



The screenshot shows the homepage of the IMEI.info website. The browser's address bar displays "www.imei.info". The website's navigation bar includes links for "CHECK IMEI", "IMEI CHECKER", "IMEI CALCULATOR", "FAQ", "CARRIERS DATABASE", "PHONE DATABASE", "NEWS", and a "LOG IN" button. The main content area features a large heading "CHECK IMEI NUMBER TO GET TO KNOW YOUR PHONE BETTER" and a subtext explaining that every mobile phone has a unique 15-digit IMEI number. Below this, there is a text input field with the placeholder "Enter IMEI e.g. 123456789012347" and a green "CHECK" button. At the bottom, there is a reCAPTCHA "I'm not a robot" checkbox and a reCAPTCHA logo with links to "Privacy" and "Terms". The left sidebar contains social media icons for Facebook, Instagram, and Twitter, along with other navigation icons.

IMEI.info

CHECK IMEI IMEI CHECKER IMEI CALCULATOR FAQ CARRIERS DATABASE PHONE DATABASE NEWS LOG IN

## CHECK IMEI NUMBER TO GET TO KNOW YOUR PHONE BETTER

Every mobile phone, GSM modem or device with a built-in phone / modem has a unique 15 digit IMEI number. Based on this number, you can check some information about the device, eg brand or model. Enter the IMEI number below.

Enter IMEI e.g. 123456789012347

CHECK

☐ I'm not a robot

reCAPTCHA  
Privacy · Terms

# MAC Address

- A media access control address (MAC address) of a computer is a unique identifier assigned to network interfaces for communications at the data link layer of a network segment.
- The MAC-Address (Media Access Control address) in general is the identifier of devices in a network.

|                   |                                        |
|-------------------|----------------------------------------|
| Network band:     | 2.4 GHz                                |
| Network channel:  | 1                                      |
| IPv4 address:     | 192.158.5.105                          |
| IPv4 DNS servers: | 192.158.0.5                            |
| Manufacturer:     | Qualcomm Communications Inc            |
| Description:      | Qualcomm QCA5375 802.11ac V<br>Adapter |
| Driver version:   | 12.0.5.445                             |

|                         |                    |
|-------------------------|--------------------|
| Physical address (MAC): | 9C-35-5B- 5F-4C-D7 |
|-------------------------|--------------------|

Copy

# How to find the Equipment details from MAC Address

## Name of different websites:-

- <http://www.macvendorlookup.com>
- [http://www.coffer.com/mac\\_finder/](http://www.coffer.com/mac_finder/)
- <http://www.adminsub.net/mac-address-finder/modem>
- <http://aruljohn.com/mac.pl>
- <http://www.whatsmyip.org/mac-address-lookup/>

# Name of different websites:-

- <https://www.wireshark.org/tools/oui-lookup.html>
- <http://www.adminsub.net/mac-address-finder>
- <https://dnslytics.com/mac-address-lookup>

# E-Mail Provider List



**Gmail**



**Hotmail /  
Outlook**



**Yahoo! Mail**



**Mail.com**



**Aol E-Mail**



**Office 365  
Mail**



**GMX**



**Rediff Mail**



**Rediff Mail Pro**



**Hush Mail**



**WEB.DE  
Web.de Mail**



**Com Cast**



# E-mail Header

- In most of the cyber crime where emails are involved, analysis of email headers plays a very important role. Each email whether it is a company email or Web-based email like gmail, hotmail, yahoo, rediffmail, etc., carries lot of information about that email. Information like sender IP address, email address, time and date when the email sent, through which server it passed, etc. can be obtained.

# Importance of E-mail Header

Email header analysis can help an investigator to find out the IP address of the email sender. Email message headers are digital histories that are attached to every email message that are sent and received. Headers record important information, including servers that the email has traveled through, and the date and time that the message was received or forwarded.

# E-mail message header

Email message header comprise of 2 sections.

- Message Description: Contains details of the sender and recipients, subject line, and sending date.
- Message Path: Contains the server name and timestamp for every server the message travelled through.

# How to analyze e-mail header

## Name of different websites:-

- <http://www.cyberforensics.in/OnlineEmailTracer/index.aspx>
- <http://whatismyipaddress.com/race-email>
- <https://toolbox.googleapps.com/apps/messageheader/>
- <https://testconnectivity.microsoft.com/MHA/Pages/mha.aspx>
- <http://mxtoolbox.com/EmailHeaders.aspx>
- [www.iptrackeronline.com](http://www.iptrackeronline.com)

# What do you mean by IFSC Code?

- IFSC stands for Indian Financial System Code. It is which is an eleven-character code assigned by RBI to identify every bank branches uniquely, that are participating in NEFT system in India.
- This code is used by electronic payment system applications such as RTGS, NEFT.
- The IFSC is an 11-character code with the first four alpha characters representing the bank name, and the last six characters (usually numeric, but can be alphabetic) representing the branch. The fifth character is 0 (zero) and reserved for future use.
- Usually, the IFSC code can be found on the cheque-book provided by the bank or on the first page of the Bank Passbook.

# How to find Bank details from IFSC Code

## Name of different websites:-

- <http://www.ifsccodebank.com/search-by-IFSC-code.aspx>
- <https://ifsc.bankifsccode.com>
- <https://www.ifscswiftcodes.com/IFSC-Code/>
- <https://www.askbankifsccode.com>

# Branch locator

# Name of websites:-

- <http://bankcontact.in>
- <https://www.bankbranchin.com>

# How to find Voter ID Card Information

# Name of websites:-

- <http://electoralsearch.in>
- <https://resident.uidai.gov.in/aadhaarverification>
- <http://www.ceoorissa.nic.in/FindYourName.asp>

# How to get User's Twitter ID

# Name of websites:-

- <http://gettwitterid.com>
- <https://codeofaninja.com/tools/find-twitter-id>

# How to get User's name from Twitter ID

# Name of websites:-

- <https://tweeterid.com>

# Know the Vehicle Details (R/C & D/L)

# Name of websites:-

- ❖ <https://parivahan.gov.in/parivahan/>
- ❖ <https://vahan.nic.in/nrservices/faces/user/jsp/SearchStatus.jsp>
- ❖ <https://sarathi.nic.in:8443/nrportal/sarathi/DlDetRequest.jsp>

# How to check Broken Link

# Name of websites:-

- ☐ <https://www.drlinkcheck.com>
- ☐ <https://www.deadlinkchecker.com>

# How to check deleted domain

# Name of websites:-

✓ <https://viewdns.info/iphistory/>

# Wayback Search

# Name of websites:-

➤ <http://web.archive.org>

Whether MNP or not?

# Name of websites:-

- <https://freecarrierlookup.com>
- <https://sendsms.global/free-carrier-lookup/>
- <https://www.ding.com>
- <https://www.truecaller.com>

# Bulk IP search

# Name of websites:-

- <https://www.infobyip.com/ipbulklookup.php>
- <https://app.ipapi.co/bulk/>
- <https://www.showmyip.com/bulk-ip-lookup/>
- <https://mxtoolbox.com/BulkLookup.aspx>
- <https://www.bulkseotools.com/bulk-ip-to-location.php>

# Reverse Image Search

# Name of websites:-

- [https://www.google.com/searchbyimage?image\\_url=](https://www.google.com/searchbyimage?image_url=)
- <https://www.bing.com/images/search?view=detailv2&iss=sbi&form=SBIIRP&sbisrc=UrlPaste&q=imgurl:>
- <https://yandex.com/images/search?source=collections&rpt=imageview&url=>
- <https://tineye.com/search?url=>

# Name of websites:-

- [https://graph.baidu.com/details?isfromtuso  
upc=1tn=pc&carousel=o&image=&image=](https://graph.baidu.com/details?isfromtuso<br/>upc=1tn=pc&carousel=o&image=&image=)
- <https://reverse.photos>
- <https://images.google.com>
- <http://www.pictriev.com>

# Reverse Phone Number Search

# Name of websites:-

- <https://www.truecaller.com>
- **Eyecon Android Application: Caller ID, Calls and Phone Contacts**
- <https://www.cyniq.in>

# Thumbnail search of video file

# Name of websites:-

- <https://citizenevidence.amnestyusa.org>
- Download InVID extension in Google Chrome

To find out details of VoIP /  
disposable number

# Name of websites:-

- <https://www.whitepages.com/reverse-phone>
- <https://freecarrierlookup.com>

# IP Logger / Tracker

# Name of websites:-

- <http://blasze.com>
- <https://clickmeter.com/>
- <http://grabify.link/>
- <https://iplogger.org>

# Online Request Portal

<https://www.facebook.com/records/login/>

Facebook

← → ↻ 🏠 🔒 <https://www.facebook.com/records/login/> ⚙️ ⋮ 📄 ⭐

facebook

Law Enforcement Online Requests



**Request Secure Access to the Law Enforcement Online Request System**

We disclose account records solely in accordance with our terms of service and applicable law.

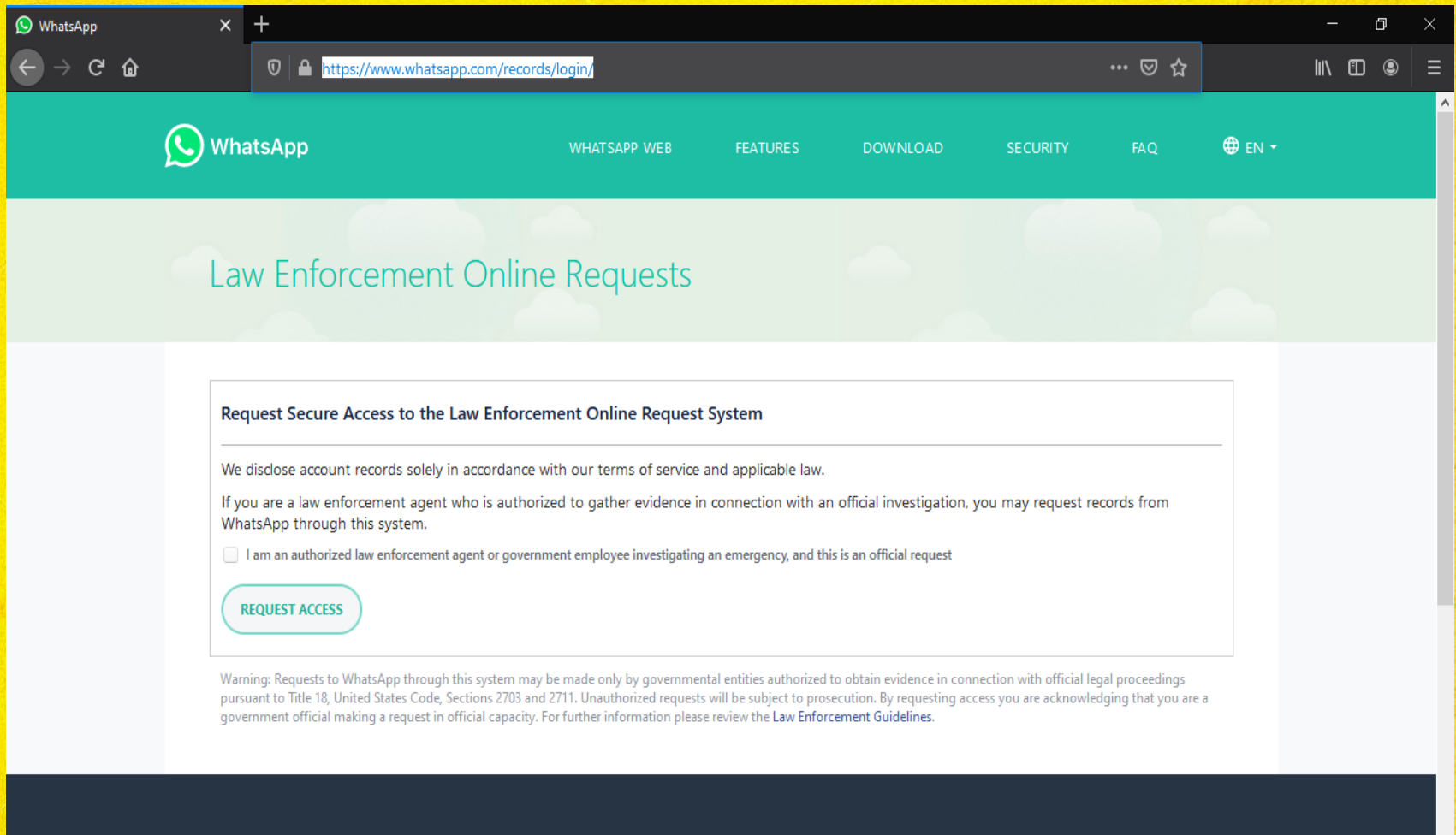
If you are a law enforcement agent or emergency responder who is authorized to gather evidence in connection with an official investigation or in order to investigate an emergency involving the danger of serious physical injury or death, you may request records from Facebook through this system.

☐ I am an authorized law enforcement agent or government employee investigating an emergency, and this is an official request

Request Access

Warning: Requests to Facebook through this system may be made only by governmental entities authorized to obtain evidence in connection with official legal proceedings pursuant to Title 18, United States Code, Sections 2703 and 2711. Unauthorized requests will be subject to prosecution. By requesting access you are acknowledging that you are a government official making a request in official capacity. For further information please review the [Law Enforcement Guidelines](#).

<https://www.whatsapp.com/records/login/>



The screenshot shows a web browser window with the URL <https://www.whatsapp.com/records/login/>. The page has a teal header with the WhatsApp logo and navigation links: WHATSAPP WEB, FEATURES, DOWNLOAD, SECURITY, FAQ, and a language selector (EN). Below the header is a light green banner with the text "Law Enforcement Online Requests". The main content area is white and contains a form titled "Request Secure Access to the Law Enforcement Online Request System". The form includes a disclosure statement, a description of the request process, a checkbox for authorized law enforcement agents, and a "REQUEST ACCESS" button. A warning paragraph is located at the bottom of the form.

WhatsApp

WHATSAPP WEB FEATURES DOWNLOAD SECURITY FAQ EN

## Law Enforcement Online Requests

### Request Secure Access to the Law Enforcement Online Request System

We disclose account records solely in accordance with our terms of service and applicable law.

If you are a law enforcement agent who is authorized to gather evidence in connection with an official investigation, you may request records from WhatsApp through this system.

☐ I am an authorized law enforcement agent or government employee investigating an emergency, and this is an official request

[REQUEST ACCESS](#)

Warning: Requests to WhatsApp through this system may be made only by governmental entities authorized to obtain evidence in connection with official legal proceedings pursuant to Title 18, United States Code, Sections 2703 and 2711. Unauthorized requests will be subject to prosecution. By requesting access you are acknowledging that you are a government official making a request in official capacity. For further information please review the [Law Enforcement Guidelines](#).

[https://legalrequests.twitter.com/forms/landing\\_disclaimer](https://legalrequests.twitter.com/forms/landing_disclaimer)

Legal Request Submissions

legalrequests.twitter.com/forms/landing\_disclaimer

Legal Requests

 Legal request submissions  
Please confirm your identity

Welcome to Twitter's online legal request submission site. You can submit your legal request (e.g., subpoena or court order) for account information or content removal by following the steps below. We also accept emergency disclosure requests from law enforcement through this site. All non-legal requests should be submitted through our [Help Center forms](#).

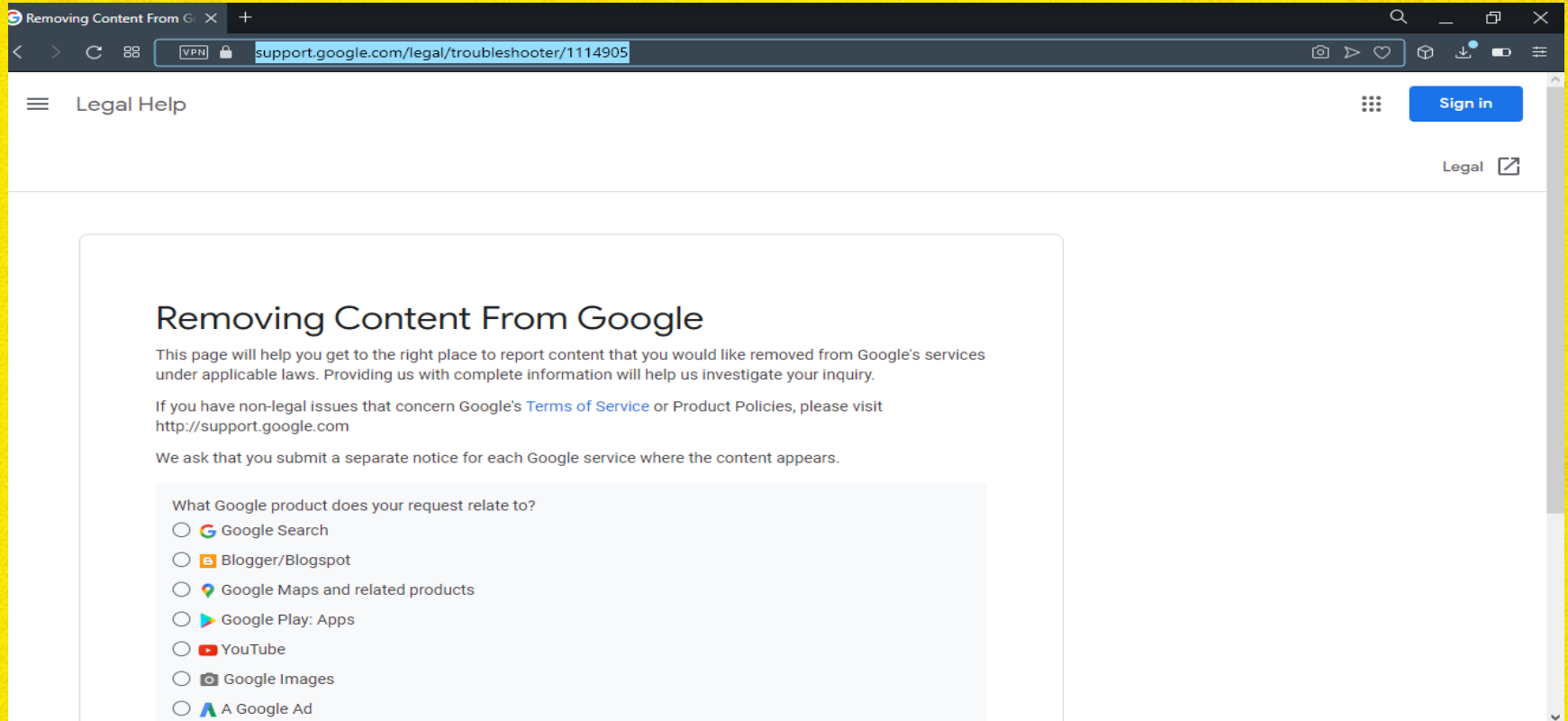
If you are a law enforcement agent, government official, or other third-party intending to submit a valid legal request, please enter your full name, official email address, and confirm your authority by checking the box below. No other uses of this form are permitted.

More information is available in our [Law Enforcement Guidelines](#), [Accessing your Twitter data support article](#), and Twitter's [Privacy Policy](#).

**Full name:\***

**Official email address:\***

# For removal of content from Google's services



The screenshot shows a web browser window with the address bar displaying [support.google.com/legal/troubleshooter/1114905](https://support.google.com/legal/troubleshooter/1114905). The page title is "Removing Content From Google". The main content area contains the following text:

Removing Content From Google

This page will help you get to the right place to report content that you would like removed from Google's services under applicable laws. Providing us with complete information will help us investigate your inquiry.

If you have non-legal issues that concern Google's [Terms of Service](#) or Product Policies, please visit <http://support.google.com>

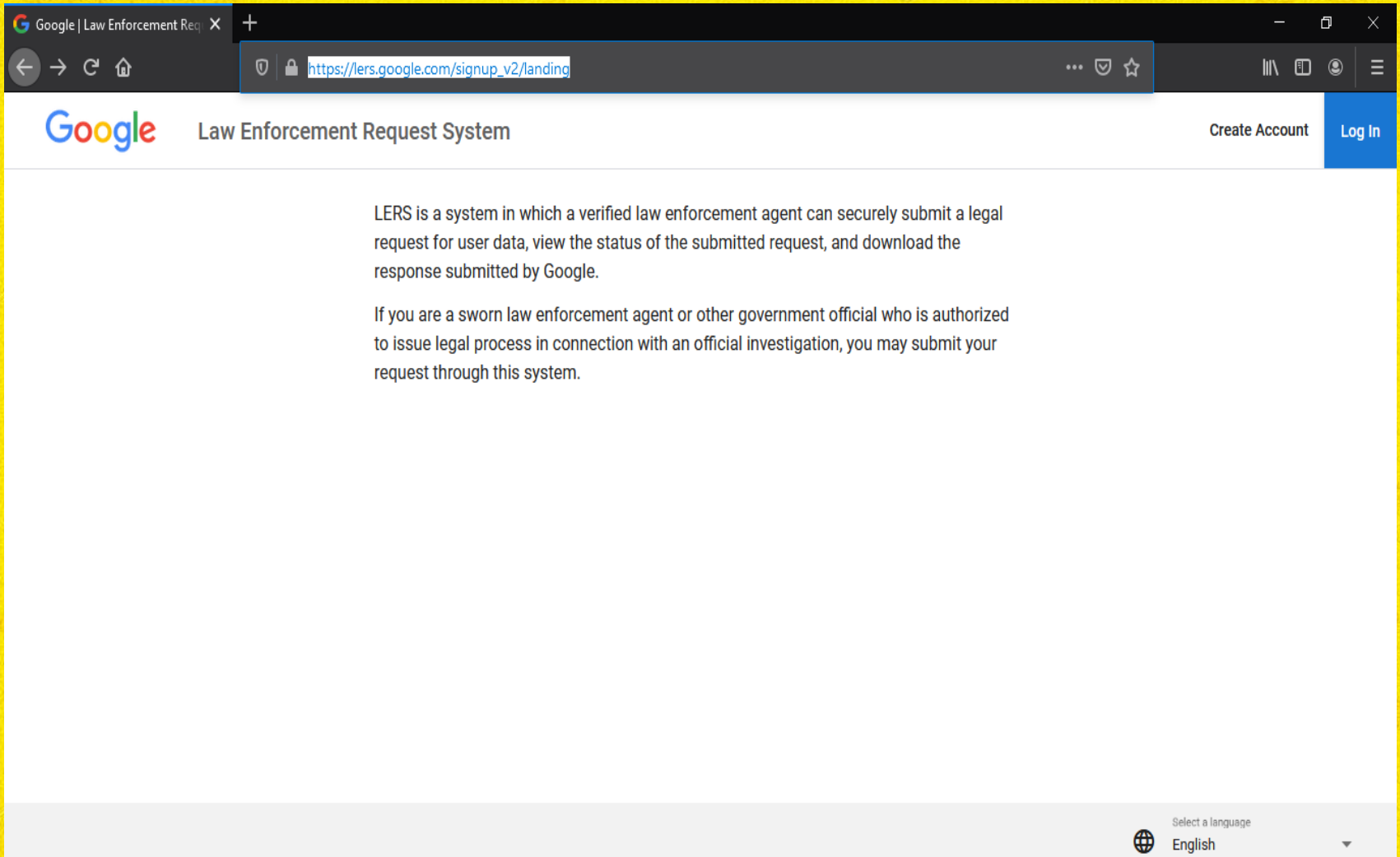
We ask that you submit a separate notice for each Google service where the content appears.

What Google product does your request relate to?

- ☐ Google Search
- ☐ Blogger/Blogspot
- ☐ Google Maps and related products
- ☐ Google Play: Apps
- ☐ YouTube
- ☐ Google Images
- ☐ A Google Ad

<https://support.google.com/legal/troubleshooter/1114905>

# [https://lers.google.com/signup\\_v2/landing](https://lers.google.com/signup_v2/landing)



The screenshot shows a web browser window with the address bar displaying [https://lers.google.com/signup\\_v2/landing](https://lers.google.com/signup_v2/landing). The page header features the Google logo, the text "Law Enforcement Request System", and links for "Create Account" and "Log In". The main content area contains the following text:

LERS is a system in which a verified law enforcement agent can securely submit a legal request for user data, view the status of the submitted request, and download the response submitted by Google.

If you are a sworn law enforcement agent or other government official who is authorized to issue legal process in connection with an official investigation, you may submit your request through this system.

The footer includes a language selection menu with a globe icon, the text "Select a language", and "English" with a dropdown arrow.

# [https://lers.google.com/signup\\_v2/requestaccount](https://lers.google.com/signup_v2/requestaccount)

Google | Law Enforcement Req

+

← → ↻ 🏠

🔒 [https://lers.google.com/signup\\_v2/requestaccount](https://lers.google.com/signup_v2/requestaccount)

⋮ 📄 ⌕ ☆

⌵ 📄 📄 📄 ⌵

 Law Enforcement Request System [Log In](#)

## Request Access to LERS

To request a LERS account, enter your official government-issued email address below.

Enter your official email

username@domain.com

☐ I'm not a robot   
reCAPTCHA  
Privacy · Terms

☐ I attest that I am a sworn law enforcement agent or government official authorized to submit legal requests to Google and my access to this system is being made in my official capacity.

SUBMIT

If you already have an account, please sign in [here](#).

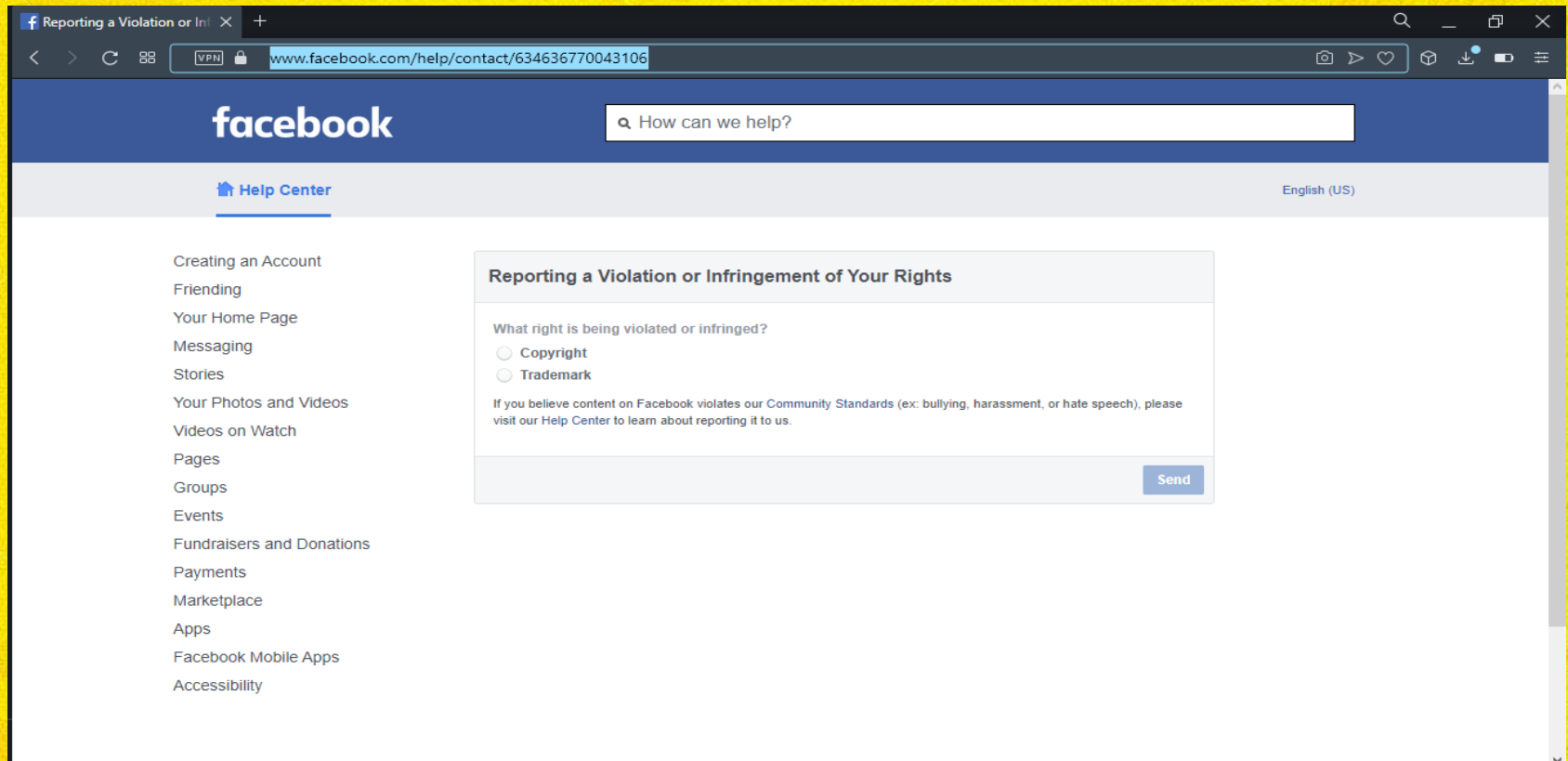
We will process the information you provide us as described in the [Privacy policy](#).

 Select a language

English

⌵

<https://www.facebook.com/help/contact/634636770043106>



The screenshot shows a web browser window with the Facebook Help Center interface. The address bar displays the URL [www.facebook.com/help/contact/634636770043106](https://www.facebook.com/help/contact/634636770043106). The Facebook logo is in the top left, and a search bar with the placeholder text 'How can we help?' is in the top right. Below the navigation bar, the 'Help Center' tab is selected. On the left side, a list of help topics is visible: Creating an Account, Friending, Your Home Page, Messaging, Stories, Your Photos and Videos, Videos on Watch, Pages, Groups, Events, Fundraisers and Donations, Payments, Marketplace, Apps, Facebook Mobile Apps, and Accessibility. The main content area is titled 'Reporting a Violation or Infringement of Your Rights'. It contains a section 'What right is being violated or infringed?' with two radio button options: 'Copyright' and 'Trademark'. Below this, a note states: 'If you believe content on Facebook violates our Community Standards (ex: bullying, harassment, or hate speech), please visit our Help Center to learn about reporting it to us.' A 'Send' button is located at the bottom right of the form.

facebook

How can we help?

Help Center

English (US)

Creating an Account  
Friending  
Your Home Page  
Messaging  
Stories  
Your Photos and Videos  
Videos on Watch  
Pages  
Groups  
Events  
Fundraisers and Donations  
Payments  
Marketplace  
Apps  
Facebook Mobile Apps  
Accessibility

**Reporting a Violation or Infringement of Your Rights**

What right is being violated or infringed?

☐ Copyright  
☐ Trademark

If you believe content on Facebook violates our Community Standards (ex: bullying, harassment, or hate speech), please visit our Help Center to learn about reporting it to us.

Send

[Reporting a Violation or Infringement of Your Rights](https://www.facebook.com/help/contact/634636770043106)

<https://help.instagram.com/contact/552695131608132>

Instagram Help Centre

help.instagram.com/contact/552695131608132

 Instagram

How can we help?

Help Centre

Using Instagram >

Managing Your Account >

Troubleshooting and Login Help >

Privacy and Safety Center >

Instagram for Businesses >

Copyright Report Form

Use this form to report content that you believe infringes your copyright

To ensure that you're in the right place, what best describes your issue?

☐ My account has been hacked

☐ I am being bullied or harassed

☐ I found inappropriate or abusive content

☐ My name (or the name of my organisation) is being used without my permission

☐ Someone has posted my private information

☐ I (or someone I am legally responsible for) appear in content that I do not want displayed on Instagram

☐ I found content which I believe infringes my trademark

☐ I found content which I believe infringes my copyright

Send

## Lawful intercept and monitoring

- According to **TRAI** (Telecom regulation authority of India) act of 1997, each and every service provider has to save the record of customer information for a stipulated time and will be given on demand.
- This regulation is mandatory for every telecom provider and only those who agree on terms can be given licenses from **DOT**.
- **C-DoT** ( Center for development of telematics) is responsible for lawful interception of voice's, SMS's, CAF's, CDR's and also Internet traffic. Which again complies with section 5(2) of the **Indian telegraph act** r/w rule 419(A) of IT Rules.
- 79(3)B I T Act: Removal of content
- 69A I T Act: Blocking of website.

Money is the most universal and most efficient system of mutual trust ever devised.

Even people who do not believe in the same god or obey the same king are more than willing to use the same money.

*Yuval Harari*

A blockchain is typically a bunch of computers (nodes) connected to each other. All of these computers contain the same information (e.g. a ledger of transactions). To “hack” this information, you will need to “hack” most of these computers at the same time. And that’s a pretty tough thing to do!

There are many blockchains in the world. The Bitcoin Blockchain is the first and oldest one. It records all transactions of the bitcoin cryptocurrency. Anyone can run a node of this blockchain. All you need is a computer with enough storage space and a strong Internet connection.

**Some of the most popular blockchains are:**

1. Algorand
2. Avalanche
3. Binance Smart Chain
4. Cardano
5. Celo
6. Ethereum (Mainnet)
7. Fantom

1. Algorand
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7. Fantom

- 
8. Flow
  9. Polkadot
  10. Polygon
  11. Solana
  12. Stacks
  13. Stellar
  14. Terra
  15. Tezos
  16. Waves



Algorand  
ALGO



Avalanche  
AVAX



Binance Coin  
BNB



Cardano  
ADA



Celo  
CELO



Ether  
ETH



Fantom  
FTM



Flow  
FLOW



Polkadot  
DOT



Polygon  
MATIC



Solana  
SOL



Stacks  
STX



Stellar  
XLM



Terra  
LUNA



Tezos  
XTZ



Waves  
WAVES

**For a deep-dive into Blockchain technology, you may find these resources useful:**

Video on "Blockchain Basics":

<https://youtu.be/O535GlscUxo>

Video on "Introduction to Ethereum":

[https://youtu.be/cF-lo\\_SmSj0?t=84](https://youtu.be/cF-lo_SmSj0?t=84)

Video on "Introduction to 15 Public Blockchains":

<https://youtu.be/oSGOfcePjKw?t=73>

"How to send an email to an Ethereum address":

<https://rohas.substack.com/p/how-to-send-an-email-to-an-ethereum>

## 2. What Are Cryptos?

A Blockchain can have 1 or more “smart assets”. Calling these assets cryptocurrencies is not accurate because all blockchain smart assets do NOT work as currencies.

The Indian law calls them “virtual digital assets”. I prefer to simply call them “Cryptos”.

There are 9000+ Cryptos being actively traded in 450+ exchanges across 50,000+ market pairs.

Based on my analysis, Cryptos can be divided into 11 categories:

### **Bitcoin-style Cryptos**

In the Bitcoin-style, there are a bunch of computers / entities called miners who are constantly trying to solve mathematical puzzles. Roughly every 10 minutes, one of these miners wins this race to solve the puzzle.

---

This miner wins a reward which is currently 6.25 bitcoins. That's about \$240,000. Yes, you read that right. Every 10 minutes there is someone getting \$240,000 worth of bitcoin.

But don't get too jealous. Mining is a very expensive operation and requires tons of money to be spent on computers and electricity. And you can never be sure how much you will actually end up earning.

Many years ago anyone could mine or create bitcoins using a laptop! Well, not anymore. Today you need a ton of computing power for this.

Another thing to remember is that in most Bitcoin-style Cryptos, there is no "pre-mining". This means that no Cryptos are created upfront and distributed to the project founders. The blockchain starts with 0 Cryptos and new Cryptos are "created" and earned by miners.

## **Ethereum-token style Cryptos**

In the Ethereum-token style, you can create your own Crypto in minutes.

My daughters were quite fed up hearing about dog-themed Cryptos. So they decided to create their own cat-themed Crypto. All they needed to do was customize a smart contract and 'publish' it to the Ethereum blockchain.

That's it! In a few minutes, they had created a new Crypto with a supply of 7 billion - roughly one for each human on Earth. True story.

There are some other styles of Cryptos also, but that's a story for another day.

# 3. The 11 types of Cryptos

There are 9000+ Cryptos being actively traded in 450+ exchanges across 50,000+ market pairs.

Based on my analysis, Cryptos can be divided into 11 categories:

## 1. Ready money

Ready money Cryptos are those that can be used to buy and sell stuff or which can be quickly converted to 'cash'.

Examples: Bitcoin (BTC), Bitcoin Cash (BCH), Litecoin (LTC), and fiat-pegged stablecoins such as Tether (USDT).

## 2. Open Blockchain Tokens

An Open Blockchain Token (OBT) is a unique form of crypto recognized under the laws of Wyoming, US. An OBT must be exchangeable for specified consumptive purposes services e.g. software, content, or real/tangible personal property.

Example: Wrapped Asset Token (WRAP)

### **3. Hush coins**

Did you know that Bitcoin isn't 100% anonymous? All its transactions are recorded on its publicly available Blockchain. That's what led to the birth of hush coins or privacy coins - some of which are private by default, while others let the users decide if they want to activate the functionality or not.

Example: Monero (XMR)

---

### **4. Application coins**

Application coins are those which are part of a specific use case. Example: Filecoin (FIL) is the native Crypto of the Filecoin network. It can be used to pay miners to store/distribute data and to retrieve information. Storage providers guarantee a minimum service level by providing FIL as collateral.

### **5. Security tokens**

Security tokens are like equity shares and represent ownership of a company.

Example: Exodus

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Example: Exodus

## **6. Non-Fungible Tokens (NFTs)**

Non-Fungible Tokens (NFT) are the Crypto versions of things like art and real estate. They are used as digital proof-of-ownership of the underlying asset. NFTs can be of many types, including art, collectibles (trading cards, sneakers), domains, virtual game items (avatars, skins, weapons, etc).

Example: CryptoKitties

## **7. Algorithmic stablecoins**

Algorithmic stablecoins are Cryptos whose price stability is maintained by an algorithm. They are different from fiat-pegged stablecoins whose stability is maintained by the fiat currency they are pegged to.

Example: Frax (FRAX)

## **8. Governance tokens**

Governance tokens give holders a vote in a project's development.

Example: Uniswap (UNI)

## **9. Public Blockchain natives**

Using a public blockchain involves the payment of gas fees or transaction fees. This fee is payable in the native Crypto of that blockchain.

## **10. Asset-backed tokens**

An asset-backed token or a Wrapped Asset is a blockchain token pegged to or collateralized by an asset such as art, gold, fiat currency, debt, equity shares, trade invoices, real estate, etc. It's called a "wrapped" asset or token because the original asset is put in a "wrapper" or "digital vault" that enables the wrapped version to be traded on a blockchain.

Example: Coffee coin

## **11. Lending / Borrowing Cryptos**

These tokens make it easy for investors to borrow and lend funds in a Decentralised Finance market.

Example: Aave (AAVE)

When you buy gold, you actually get coins (or bricks) of the shiny metal. You can keep these coins safe in... a safe!

When you buy a house, you actually get physical possession of it.

Crypto is very different. You don't really get anything physical. Your Crypto journey starts with a 'wallet'.

**This is what a typical Bitcoin wallet looks like:**

[private] =>

fa9af8856397ab2fcd0546cd248791ad9a3046aa3d49fddbdc380ccbce4a5527

[public] =>

03c3948b65fc5c86e74af384cd5ef965dc5bf0e940d7ecafd98dc75517a9d45efc

[address] => 1Mk13r5uu51F5jQ6yGuBPxkuZw91nM4MeY

[wif] => L5crYHJ3wP1KF88guJChXPDAQNJ6dS3WBv56JN1o491K7FdMtXdd

If you write this down on a piece of paper, it would be called a... paper wallet.

The **address** is similar to your bank account or UPI ID. Anyone can send crypto to your address. If you send crypto to the "wrong" address, it's gone forever!

Also, remember that the same address doesn't work for all cryptos e.g. a Bitcoin address won't work for Dogecoin.

## bitaddress

[www.bitaddress.org](http://www.bitaddress.org) is a JavaScript Client-Side Bitcoin Wallet Generator. It enables Bitcoin addresses and their corresponding private keys to be conveniently generated in a web browser.

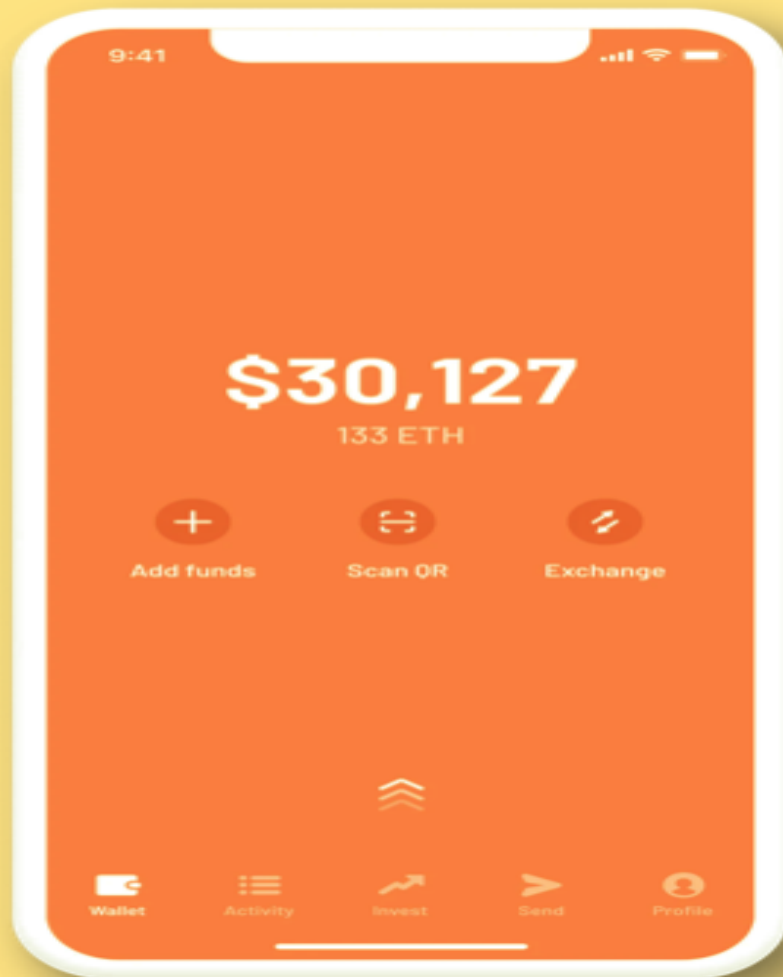
Live site: <https://www.bitaddress.org>

To generate a Bitcoin wallet (which is a Bitcoin address and its corresponding Bitcoin private key), simply move your mouse randomly on the bitaddress page.



Open Source JavaScript Client-Side Bitcoin Wallet Generator

| 16%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 16% | 16%            | Brain Wallet |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----------------|--------------|
| 16%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 16% | Wallet Details |              |
| <p>Generating Bitcoin Address...<br/>MOVE your mouse around to add some extra randomness... 16%<br/>OR type some random characters into this textbox <input type="text"/></p> <p>536baccfa75fb724d660d37acf6f423b371c62faba6c6f58dbdf834d9733c3f0d<br/>ceal9f0171f876aa7837f44c709fde276d0ad7106c4cdc664b1c48fd7ef7a0861<br/>ab9d0fb97ec6e2a6abd313d47865d086bd1bab0b35f34c492c36a457d8629eb0e<br/>12b7ed4dlc043aceeeeb347c1b7639f9d84a98905c323fa24ba2679731a8d3b9b<br/>dfcfb57f7108304c7640b3f8152a890b295ad6574248617681f5a593b24c24a79<br/>1267a0733a4101662dbe155498657969419624bcd441723c2e10a2ce31c24a8f5<br/>54caff6aa6c70926b6b139090179f22d041691102fa7fa6139945b237e7be9799<br/>517ab53d0f612431e42713cd3c4f058618576767c9ee6e058156975eb</p> |     |                |              |

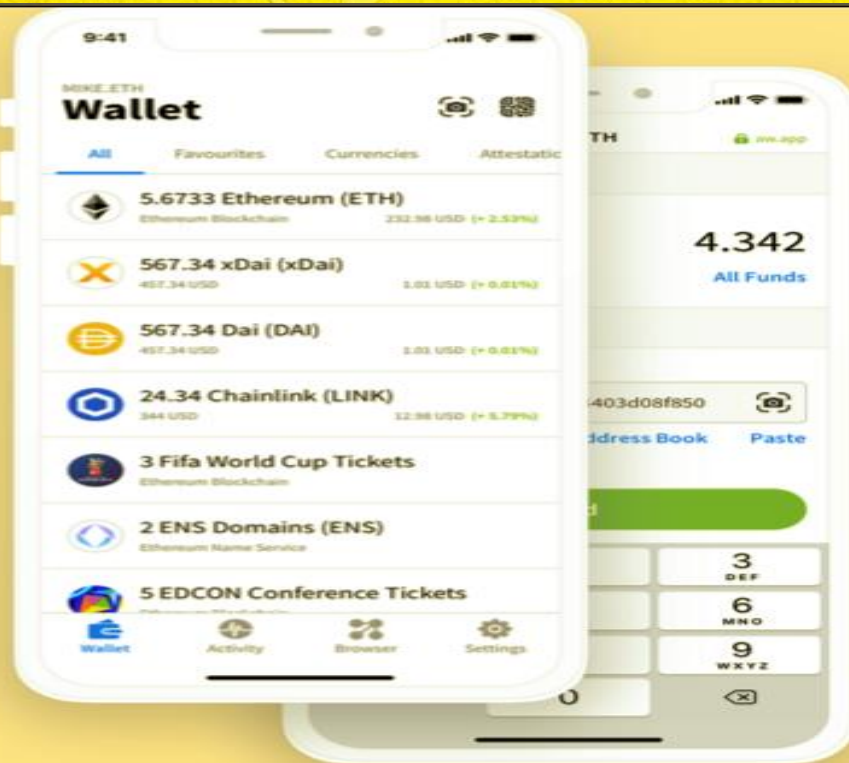


## Argent

Argent is a crypto wallet that can be used to:

- store and send crypto,
- borrow crypto,
- earn interest, and
- invest.

<https://www.argent.xyz>



## AlphaWallet

AlphaWallet is an open-source, production-ready and easy-to-customise white-label wallet.

## Pillar

Pillar is a non-custodial, community-owned wallet with its own L2 Payment Network.

### **Core features include:**

- ☐ 100% encrypted chats with your contacts.
- ☐ Unlimited transactions without fees in any token.
- ☐ Buy crypto directly - USD, GBP and EUR available in the app.
- ☐ Pillar replaces alpha-numeric addresses with simple usernames.
- ☐ Pillar Offers Engine enables you to find the best deals to swap your Tokens, all in one place.

<https://pillarproject.io>

# Ethereum's Original Wallet

MyEtherWallet (our friends call us MEW) is a free, client-side interface helping you interact with the Ethereum blockchain. Our easy-to-use, open-source platform allows you to generate wallets, interact with smart contracts, and so much more.



## Create A New Wallet

Generate your own unique Ethereum wallet. Receive a public address (0x...) and choose a method for access and recovery.

[Get Started](#) →



## Access My Wallet

Connect to the blockchain using the wallet of your choice.

- Send and Swap ETH & Tokens
- Sign & Verify Messages
- Interact with Contracts, ENS, Dapps, and more!

[Access Now](#) →

MyEtherWallet (MEW) is a free, client-side interface for interacting with the Ethereum blockchain.



METAMASK

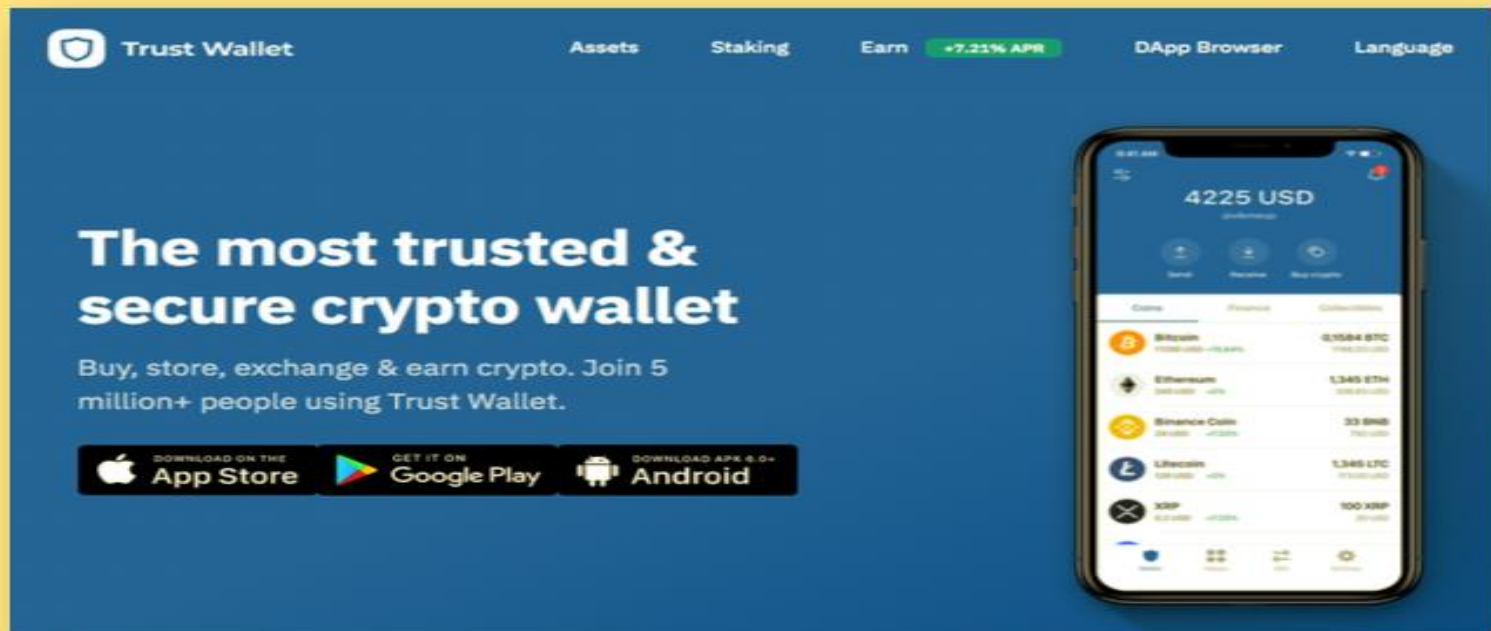


# A crypto wallet & gateway to blockchain apps

Start exploring blockchain applications in seconds. Trusted by over 1 million users worldwide.

[Download now](#)



The image shows the Trust Wallet website banner. At the top, there is a navigation bar with the Trust Wallet logo, 'Assets', 'Staking', 'Earn' (with a green badge showing '+7.21% APR'), 'DApp Browser', and 'Language'. The main heading is 'The most trusted & secure crypto wallet'. Below it, a subtext says 'Buy, store, exchange & earn crypto. Join 5 million+ people using Trust Wallet.' There are three buttons for downloading the app: 'App Store', 'Google Play', and 'Android'. On the right, a smartphone displays the Trust Wallet app interface, showing a balance of 4225 USD and a list of cryptocurrencies: Bitcoin (0.1584 BTC), Ethereum (1.345 ETH), Binance Coin (33 BNB), Litecoin (1.345 LTC), and XRP (100 XRP).

Trust Wallet

Assets Staking Earn **+7.21% APR** DApp Browser Language

## The most trusted & secure crypto wallet

Buy, store, exchange & earn crypto. Join 5 million+ people using Trust Wallet.

DOWNLOAD ON THE App Store GET IT ON Google Play DOWNLOAD APK 6.0+

4225 USD

| Crypto       | Balance    | Collectibles |
|--------------|------------|--------------|
| Bitcoin      | 0.1584 BTC | 1.345 ETH    |
| Ethereum     | 1.345 ETH  | 33 BNB       |
| Binance Coin | 33 BNB     | 1.345 LTC    |
| Litecoin     | 1.345 LTC  | 100 XRP      |
| XRP          | 100 XRP    |              |

Some of the features of Trust Wallet are:

- Buy Bitcoin in under 5 minutes.
- Easily earn interest on the crypto in your wallet.
- See your collectibles, art & non-fungible digital assets in one place.
- Exchange your crypto within the app.
- Track charts and prices within the wallet.

<https://trustwallet.com>

### **1. Blackmail**

Victims receive an email claiming that their computer has been 'hacked' and the hacker has hijacked their web camera and recorded 'intimate' moments. The scammers then threaten to release the video online unless some Bitcoin is paid to them.

### **2. Fake Exchanges**

A 'fake' exchange tricks investors by offering Bitcoin or other cryptos for a very low price. And then they steal your money!

### **3. Free Giveaways**

Scammers offer free cryptos in exchange for a small 'registration fee'. Once you pay the fees, they vanish!

### **4. Impersonation**

Scammers create fake social media accounts that impersonate famous people. These accounts are used to carry out a variety of frauds.

### **5. Malware**

Many victims end up downloading malicious software and apps. These apps can change crypto addresses when they're copy-pasted from the victim's clipboard. The result - you end up sending crypto to the scammer's address instead of the actual person you want to pay.

### **6. Meet-in-person attacks**

Never meet anyone in person to buy crypto. You could get robbed and even murdered! Scammers may also pay you in counterfeit currency in exchange for your crypto.

### **7. Phishing emails**

Never engage with emails that ask for your seed phrase, private keys, or passwords. These emails may look authentic but remember that there is no legitimate reason for anyone to ask for your seed phrase, private keys, or passwords.

### **8. Phishing websites**

People land up on phishing websites by clicking on links in fake emails and sometimes even through search engine results. These websites can steal your passwords and even fool you into installing malware.

### **9. Ponzi Schemes**

Beware of schemes where you are offered a large guaranteed return in exchange for a small deposit.

### **10. Pyramid Schemes**

Beware of 'pyramid schemes' which promise you high returns based on the number of people you invite into the crypto network.

### **11. Pump-and-Dumps**

In a pump-and-dump scheme, scammers artificially 'pump' up the price of a crypto and sell it to unsuspecting victims. Once enough people have bought the crypto, the scammers disappear and the value of the crypto crashes to near-zero.

### **12. Scam coins and rug-pulls**

While there are many great cryptos, there are also many scam coins. Be careful while investing in new cryptos. Check out the team, whitepaper, website, and other available information carefully before investing.

# 7. Crypto Tax

**This is an India-specific post. Please skip if it doesn't apply to you.**

Many of you have asked me these questions on Crypto Tax:

1. How will Crypto profits be taxed?
2. Will free Cryptos from airdrops, L&E, P2E games be taxed?
3. Will I be taxed even if I don't sell my Crypto?
4. How will Crypto mining be taxed?
5. How will Crypto staking and lending be taxed?
6. Will Crypto exchanges deduct TDS?
7. Will salaries paid in Crypto be taxed?
8. Do I have to pay tax even if I use a DEX?
9. Do I have to pay tax even if I use a foreign Crypto exchange?
10. Do I have to pay tax even if I use a P2P marketplace?
11. What if I gift crypto to a friend?

## 1. Supply Metrics

**Circulating Supply** is the number of coins/tokens that are circulating in the market and are in public hands. Usually, the lower this number, the higher the prices are likely to be.

Examples: The circulating supply of Bitcoin (BTC) increases approx every 10 minutes as new bitcoins are generated with every block that is mined. The crypto with one of the highest circulating supplies is SHIBA INU with 394,796,000,000,000 SHIB.

32

---

**Maximum supply** is the maximum number of coins/tokens that will ever exist in the lifetime of a Crypto.

Examples: The maximum supply of Bitcoin (BTC) is 21 million while that of Ether (ETH) is unlimited!

**Total supply** is the number of coins/tokens that have been already created, minus coins/tokens that have been 'burned'.

Examples: In the case of Bitcoin (BTC), the circulating supply is equal to the total supply. Binance Coin (BNB) regularly 'burns' coins and this helps maintain its price.

### **1. Blackmail**

Victims receive an email claiming that their computer has been 'hacked' and the hacker has hijacked their web camera and recorded 'intimate' moments. The scammers then threaten to release the video online unless some Bitcoin is paid to them.

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## 2. Capitalization metrics

**Market Capitalization** is the total market value of a Crypto's circulating supply.

Market Capitalization = Circulating Supply x Current Price

Historically, Bitcoin (BTC) has always had the highest market capitalization and Ethereum the second highest. If this were reversed, it would be called the Flipping.

**Fully Diluted Market Capitalization (FDMC)** is the market capitalization if the maximum supply was in circulation.

FDMC = Price x Max Supply

If the maximum supply is unknown or unlimited, like in ETH, then:

FDMC = Price x Total Supply

If the maximum supply and total supply are both unlimited, then we can't calculate the FDMC.

## 3. Volume

Volume measures how much of a crypto was traded in the last 24 hours.

## **7. Total value locked (TVL)**

Total value locked (TVL) represents the total of all assets deposited in a Decentralised Finance protocol earning rewards, interest, new coins / tokens, fixed income, etc.

Cryptos: 18,056 Exchanges: 460 Market Cap: \$1,736,814,781,944 24h Vol: \$88,834,471,987 Dominance: BTC: 42.4% ETH: 17.6% ETH Gas: 19 Gwei

Cryptocurrencies &gt; Coins &gt; Bitcoin

**Bitcoin** BTC

Rank #1 Coin On 2,883,596 watchlists

[bitcoin.org](#) [Explorers](#) [Community](#)[Source code](#) [Whitepaper](#)

Tags:

[Mined](#) [PoW](#) [SHA-256](#) [Store Of Value](#) [View all](#)Bitcoin Price (BTC)  
**\$38,852.48** ▲ 1.60%15.08 ETH ▼ 0.01%

Low: \$37,260.20

High: \$39,430.23 24h

[Buy](#) [Exchange](#) [Gaming](#) [Earn Crypto](#)Market Cap   
**\$737,320,773,443**  
▲ 1.60%Fully Diluted Market Cap   
**\$815,902,134,038**  
▲ 1.60%Volume 24h   
**\$30,595,001,430**  
▲ 33.57%Volume / Market Cap  
**0.04148**Circulating Supply   
**18,977,362.00 BTC**

90%

Max Supply   
Total Supply 21,000,000  
18,977,443[Overview](#) [Market](#) [Historical Data](#) [Holders](#) [Project Info](#) [Wallets](#) [News](#) [Socials](#) [Ratings](#) [An](#) [Share](#)

## Bitcoin to USD Chart

[Price](#) [Market Cap](#) [TradingView](#) [History](#)1D 7D 1M 3M 1Y YTD ALL  



Search DeFi protocols...



Total Value Locked (USD)

\$194.44b

Change (24h)

1.16%

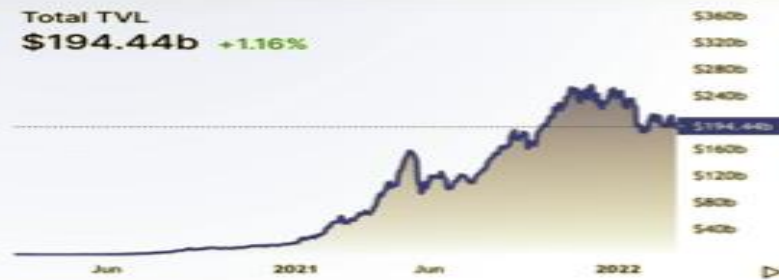
Curve Dominance

9.12%



Total TVL

\$194.44b +1.16%



☒ Staking ☒ Pool2 ☒ Borrows ☒ Offers ☒ Treasury ☒ Double Count

TVL Rankings

**All** | Ethereum | Terra | Fantom | BSC | Avalanche | Solana | Tron | Others

| Name                    | Chains | 1d Change | 7d Change | 1m Ch |
|-------------------------|--------|-----------|-----------|-------|
| 1  Curve (CRV)          |        | +0.41%    | -3.06%    | -8    |
| 2  MakerDAO (MKR)       |        | +1.11%    | -7.47%    | -14   |
| 3  Lido (LDO)           |        | +5.08%    | -6.79%    | +32   |
| 4  Convex Finance (CVX) |        | -0.08%    | -0.69%    | -8    |
| 5  Anchor (ANC)         |        | +2.36%    | +3.05%    | +45   |
| 6  AAVE (AAVE)          |        | +1.71%    | -7.23%    | -15   |
| 7  WBTC (WBTC)          |        | +2.81%    | -8.34%    | -9    |
| 8  Uniswap (UNI)        |        |           |           | -1    |

## Crypto Marketcap (\$ billion)

1742 0.40% ↑

\$ 1742 billion

Market Cap

\$ 89 billion

Total daily volume

📊 Markets

📈 Fear & Greed

📖 Learn

## Crypto Velocity

As on 8-March, 09:59 UTC



## HyFi Nodes

Location of active Haddock nodes



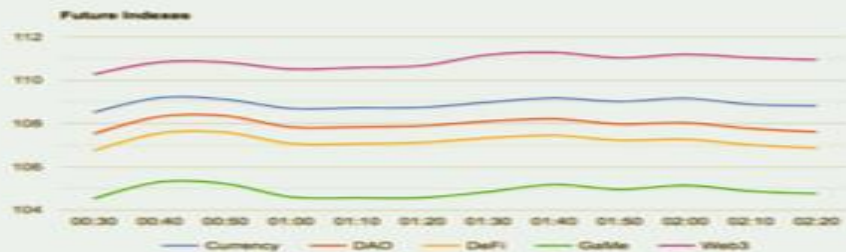
## Dominance

As on 8-March, 09:59 UTC



## FUTURE Indexes

Over the last 2 hours (PDT / PST)



## HyFi Tokens

HyFi Tokens provide liquidity on the HyFi network of Blockchain.

➔ Details

## FUTURE Currency Index

| Crypto  | Time  | Value  |
|---------|-------|--------|
| 7-March | 00:30 | 107.22 |
| 7-March | 00:40 | 107.28 |
| 7-March | 00:50 | 107.36 |
| 7-March | 01:00 | 107.40 |
| 7-March | 01:10 | 106.20 |
| 7-March | 01:20 | 107.96 |
| 7-March | 01:30 | 106.16 |
| 7-March | 01:40 | 106.27 |
| 7-March | 01:50 | 106.51 |
| 7-March | 02:00 | 106.19 |
| 7-March | 02:10 | 106.11 |
| 7-March | 02:20 | 106.49 |
| 7-March | 02:30 | 106.70 |
| 7-March | 02:40 | 106.74 |
| 7-March | 02:50 | 106.96 |
| 7-March | 03:00 | 106.17 |
| 7-March | 03:10 | 106.01 |
| 7-March | 03:20 | 106.56 |
| 7-March | 03:30 | 106.66 |
| 7-March | 03:40 | 106.62 |

## FUTURE DAO Index

| Crypto  | Time  | Value  |
|---------|-------|--------|
| 7-March | 00:30 | 106.99 |
| 7-March | 00:40 | 106.79 |
| 7-March | 00:50 | 106.20 |
| 7-March | 01:00 | 106.39 |
| 7-March | 01:10 | 106.76 |
| 7-March | 01:20 | 106.76 |
| 7-March | 01:30 | 106.64 |
| 7-March | 01:40 | 107.06 |
| 7-March | 01:50 | 107.22 |
| 7-March | 02:00 | 106.20 |
| 7-March | 02:10 | 106.20 |
| 7-March | 02:20 | 107.63 |
| 7-March | 02:30 | 107.63 |
| 7-March | 02:40 | 107.69 |

## Trust In Crypto

Messari provides reliable data and market intelligence for crypto investors and professionals.

ROI |  | **Top Assets** | DeFi | Smart Contract Platforms | Currencies | Stablecoins >

Mcap: \$1.71T

ROI: **+1.34%**

BTC dominance: 42.93%

| #  | NAME                                                                                            | PRICE       | MCAP     | 24H           |
|----|-------------------------------------------------------------------------------------------------|-------------|----------|---------------|
| 1  |  Bitcoin       | \$38,810.49 | \$735B   | <b>+1.66%</b> |
| 2  |  Ethereum      | \$2,573.16  | \$308B   | <b>+1.80%</b> |
| 3  |  Tether        | \$1.00      | \$79.72B | <b>-0.10%</b> |
| 4  |  BNB           | \$384.37    | \$63.38B | <b>+3.01%</b> |
| 5  |  USD Coin      | \$1.00      | \$52.83B | <b>-0.03%</b> |
| 6  |  XRP           | \$0.724     | \$34.67B | <b>-2.39%</b> |
| 7  |  Terra         | \$81.31     | \$29.80B | <b>+1.13%</b> |
| 8  |  Cardano       | \$0.806     | \$27.09B | <b>-0.81%</b> |
| 9  |  Solana        | \$83.45     | \$26.73B | <b>+1.48%</b> |
| 10 |  Avalanche    | \$72.07     | \$19.16B | <b>-1.63%</b> |
| 11 |  Binance USD | \$1.00      | \$17.95B | <b>-0.02%</b> |
| 12 |  Polkadot    | \$16.75     | \$16.53B | <b>+2.50%</b> |
| 13 |  Dogecoin    | \$0.119     | \$15.75B | <b>-0.67%</b> |
| 14 |  TerraUSD    | \$1.00      | \$13.75B | <b>+0.07%</b> |
| 15 |  Shiba Inu   | \$0.0000233 | \$12.74B | <b>+1.23%</b> |

# 5 BEST ANONYMOUS BROWSERS

- 1] TOR
- 2] IRON
- 3] BRAVE
- 4] WATER FOX
- 5] COMODO DRAGON

An iceberg floating in a blue sky with white clouds. The tip of the iceberg is above the water line, and the much larger base is submerged. The top part of the iceberg is labeled 'Surface Web' and the bottom part is divided into 'Deep Web' and 'Dark Web'. Logos for reddit, CNN.com, and bing are on the right. A list of content types is in the middle right, and a large percentage '96%' is on the far right. A list of activities is at the bottom right.

reddit

CNN.com

bing

## Deep Web

Academic databases  
Medical records  
Financial records  
Legal documents  
Some scientific reports  
Some government reports  
Subscription only information  
Some organization-specific  
repositories

## Dark Web

TOR  
Political protest  
Drug trafficking  
and other illegal activities

**96%**

of content on the  
Web (estimated)

# Uses for the Dark Web

## For better...

- To circumvent government censorship
- To provide whistleblowers protection
- To avoid monitoring

## For worse...

- Enables sales of illegal firearms, drugs, counterfeits, etc.
- Human exploitation (porn, trafficking, etc).
- Hire hitmen, hackers, etc.

# About .onion Sites

- Can only be accessed when using Tor
- No master database of all .onion sites
- Use of Tor allows for the creation of .onion sites
- Domains are randomly generated, either 16 or 56 characters long

# Challenges with Tor Investigations

- The network was designed to provide anonymity
- Best chance at unmasking means finding a clear web connections
- They don't take PayPal, so be ready for Bitcoin
- Accounts need to be anonymized and not tied to your person
- There's no Google, so you may not find what you're after
- Cultural distrust of others

# Check for Sites on the Same Server

---



- Only works for sites running Apache web server
- Visiting `example.onion/server-status` can reveal:
  - Server information (operating system, uptime status, creation date)
  - Other domains using the same server
  - IP addresses accessing the server
  - What resources (pages, images, etc) are being accessed

# TOR Protection

1. Fingerprinting (IP address)-based tracking
2. Storage (cookie)-based tracking
3. Session (URL rewriting)-based tracking
4. Cache (ETags)-based tracking

 amiunique.org

Web Slice GalleryHOTS | CBSE X, CBS...Google CodeCreating Passionate...Gmail - Compose...Bhagavad Gita Quo...Other book

uniqueMy fingerprintMy historyMy extensionGlobal statisticsFAQPrivacy policy

# Learn how identifiable you are on the Internet

## Help us investigate the diversity of web browsers.

This website aims at studying the diversity of browser fingerprints and providing developers with data to build good defenses. Contribute to the efforts by viewing your own browser fingerprint or consult the current data provided by users around the world!

[View my browser fingerprint](#)

If you click on this button, we will collect your browser fingerprint, we will put a cookie on your browser for 6 months. More details are available in the privacy policy

Check out the blog post for our new NDSS 2022 paper on GPU fingerprinting with WebGL !  
Thanks to everybody who visits the site and helps us collect data to find these privacy bugs.

|                                                                                                                                                                                              |        |                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------------------------------------------------------------------------------------------------------------------|
| Similarity ratio duration : <input type="radio"/> 7 days <input type="radio"/> 15 days <input type="radio"/> 30 days <input type="radio"/> 90 days <input checked="" type="radio"/> All time |        |                                                                                                                    |
| User agent ⓘ                                                                                                                                                                                 | 0.83%  | Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/98.0.4758.82 Safari/537.36 |
| Platform ⓘ                                                                                                                                                                                   | 32.06% | Win32                                                                                                              |
| Cookies enabled ⓘ                                                                                                                                                                            | 85.88% | yes                                                                                                                |
| Timezone ⓘ                                                                                                                                                                                   | 1.24%  | -330                                                                                                               |
| Content language ⓘ                                                                                                                                                                           | Unique | en-IN,en,en-GB,en-US,kn,hi,eu                                                                                      |
| Canvas ⓘ                                                                                                                                                                                     | 0.15%  | Cwm fjordbank glyphs vext quiz, 😊<br>Cwm fjordbank glyphs vext quiz, 😊                                             |
| List of fonts (JS) ⓘ                                                                                                                                                                         | 2.18%  | Agency FB, Algerian, Arial, Arial Black, Arial Narrow and 164 others                                               |

## Details for LEA

1. Any evidence of the use of Tor browser for exfiltration of confidential information
2. Any email/website visited/used where we can find evidence of his activity
3. Any clues related to his activity
4. Any credentials used for suspicious communication Any other files of interest'

# Common Sites visited on DAR-KWEB

- Hidden Wiki – a very famous wiki on the dark web
- Three different darknet search engines i.e. Ahmia, DuckDuckGo, and Excavator
- Secmail - a tor based secure email service
- Galaxy3 – a tor based social networking platform
- StealthPay – an anonymous money transfer platform
- Keybase – a secure communication website
- Anonymous text sharing websites i.e. ZeroBin and StrongHold Paste
- Anonymous file sharing website i.e. SecureDrop



+



iH iTechHacks

# How To Use TOR Network on Google Chrome

## Step 1

Download and install Tor Browser:

<https://www.torproject.org/download/download>

## Step 2

Download and install Google Chrome:

<https://www.google.com/chrome/>

## Step 3

Start Tor browser and leave it running. This will provide our connection to Tor for us.

## Step 4

Now we need to get Chrome to proxy its traffic through Tor. The setup is slightly different for each operating system:

## Windows

- 1 You should have a Chrome shortcut on your desktop. Right-click on it and select **Copy**.
- 2 Right-click on your desktop and select **Paste**.
- 3 Rename the new shortcut to **Chrome Tor**.
- 4 Right-click on the Chrome Tor shortcut and select **Properties**.

- 5 In the target field add the following after the chrome.exe part:

```
--proxy-server="socks5://localhost:9150" --host-resolverrules="MAP *  
~NOTFOUND , EXCLUDE localhost"
```

- 6 Click the **Apply** button and then click **OK**.
- 7 Make sure you have all Chrome windows closed and then double click your Chrome Tor **shortcut**.
- 8 You should see Chrome open and you can now proceed to **step 5** below to verify for your connection.

## Mac OS X

1 If Chrome is open, close it (right-click on Chrome in the dock and select **Quit**).

2 Open your **/Applications** folder and go to **Utilities**.

3 Double-click on **Terminal**.

4 Copy and paste this command into the Terminal window, and press **Enter**:

4 

```
/Applications/Google\ Chrome.app/Contents/MacOS/Google\ Chrome --proxy-server="socks5://localhost:9150" --host-resolverrules="MAP * ~NOTFOUND , EXCLUDE localhost"
/Applications/Google\ Chrome.app/Contents/MacOS/Google\ Chrome --proxy-server="socks5://localhost:9150" --host-resolverrules="MAP * ~NOTFOUND , EXCLUDE localhost"
```

5 Chrome should open and you can now proceed to **step 5** below to verify for your connection.

- 1 If Chrome is open, close it.
- 2 Open your terminal application.
- 3 Copy and paste the following command into the terminal window:

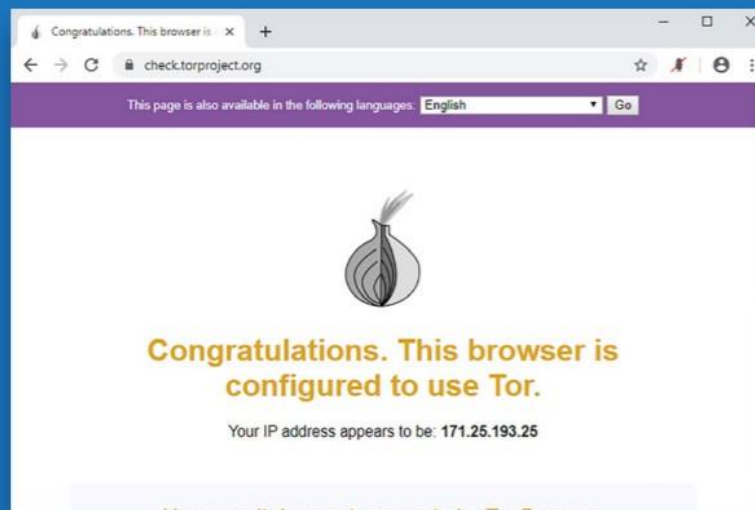
```
google-chrome --proxy-server="socks5://localhost:9150" --host-resolverrules="MAP  
* ~NOTFOUND , EXCLUDE localhost"/Applications/Google\ Chrome.app/  
Contents/MacOS/Google\ Chrome --proxy-server="socks5://localhost:9150" --host-  
resolverrules="MAP * ~NOTFOUND , EXCLUDE localhost"
```

- 4 You should see Chrome open and you can now proceed to **step 5** below to verify for your connection.

## Step 5

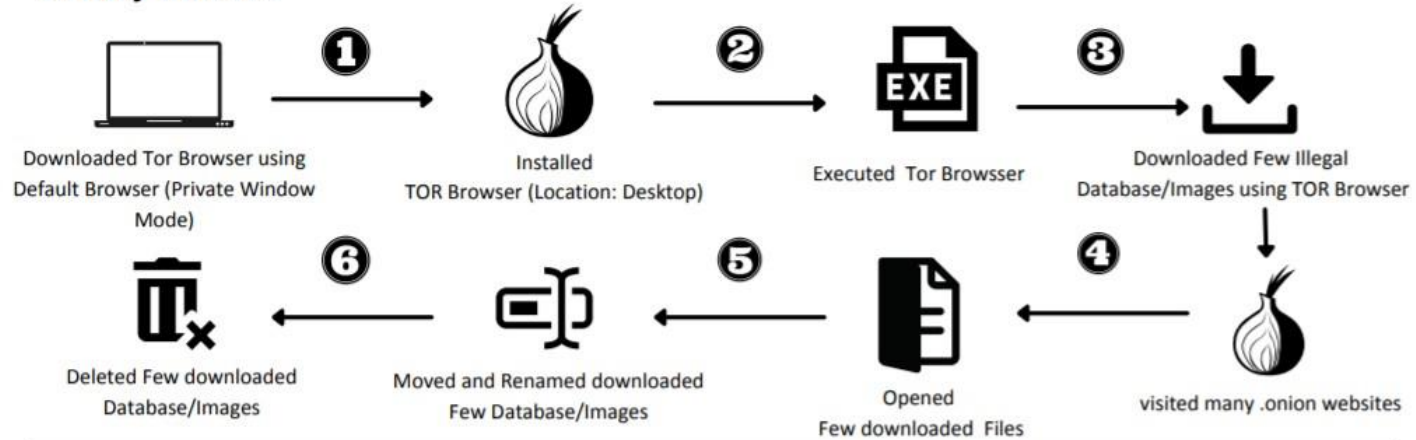
Now we need to verify that everything is working. In your Chrome Tor browser window head to:  
<https://check.torproject.org>

You should see a message that you are connected to Tor but not using a Tor Browser. This indicates that you have set everything up successfully.



Validating that we are connected to Tor.

### Activity Process



### Anti-Forensics



Figure 1: Scenario1 - Running Tor Browser from System

### Activity Process: Portable Program Execution

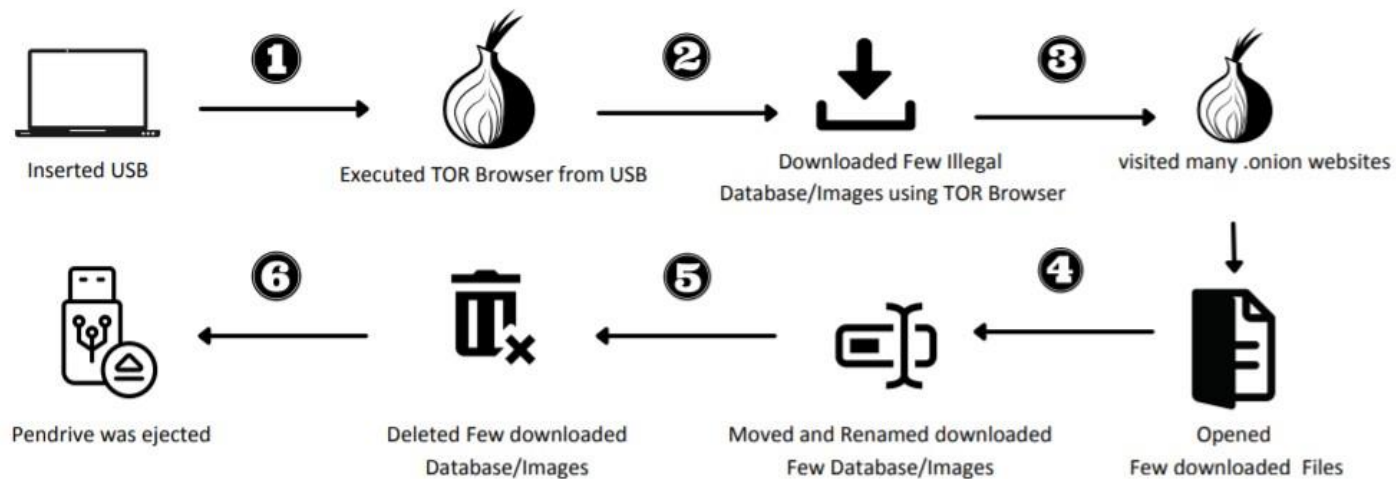


Figure 2: Scenario2 - Running Tor Browser from USB

### **List of Darkweb OSINT & Bitcoin Analysis Methods:**

- TinyEye Reverse Image Search
- Wayback Machine
- Breached Database (Forums)
- Blockchain Explorer
- Maltego
- Hidden Codes, Embedded video Links to the clearnet
- Whois History
- Download URL - Whois Search
- WhatWeb - Web Scanner
- WGET Torrify
- GraphSense
- TorBo



# OnionScan

TOOL TO CHECK THE ANONYMITY OF DARK WEBSITES

- It queries apache server mod\_status to find any leaking information in the server like **IP Address or hosted server**.
- It also checks for open directories and even in **backup copies** of the website.
- It strips EXIF data from images to **find geolocation data and much more**.
- Onionscan identifies **cryptocurrency addresses** that can correlated a shared
- Also correlated clearnet versions of a site and **find user information like email address**.

# Photos On Dark Web Reveal Geo-locations Of 229 Drug Dealers — Here's How

📅 September 21, 2016    👤 Swati Khandelwal



com/images/-yr-uxs5vrMM/.../dark-web-hackers.png

GraphSense App

Not Secure | beta.graphsense.info

☆ ⓘ 🔍 👤 ⋮



# GRAPHSENSE

Cross-Ledger Cryptocurrency Analytics Platform

## Supported currencies

### Litecoin

**Last update** a month ago  
**Lastest block** 1539663  
**Transactions** 29,542,771  
**Addresses** 36,159,330  
**Clusters** 2,516,384

### Bitcoin

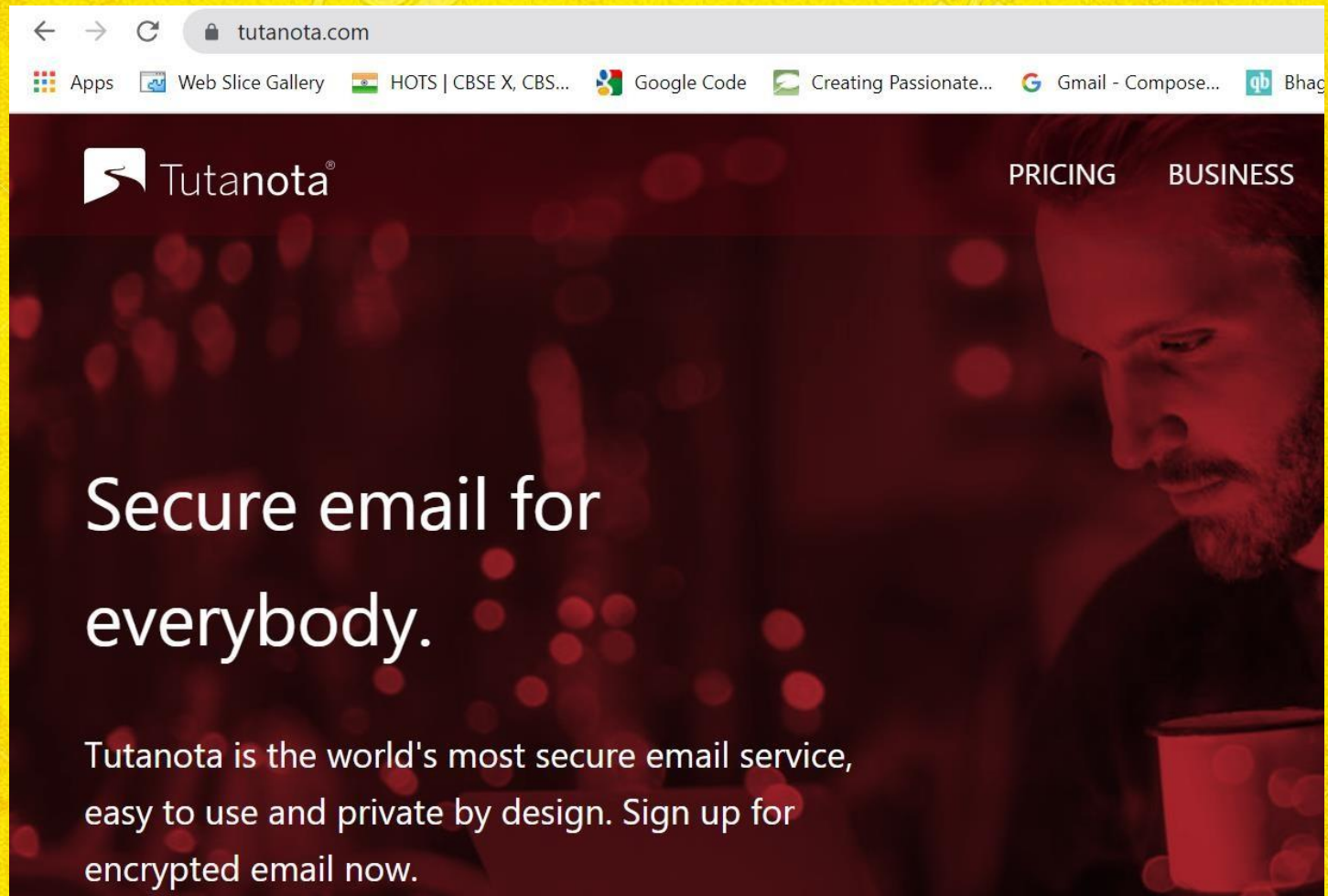
**Last update** 2 months ago  
**Lastest block** 551628  
**Transactions** 360,023,510  
**Addresses** 479,523,410  
**Clusters** 48,741,487

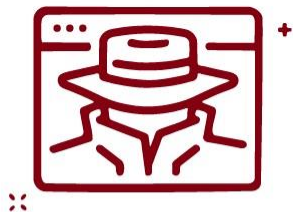
### Bitcoin Cash

**Last update** a month ago  
**Lastest block** 559858  
**Transactions** 257,039,658  
**Addresses** 273,691,113  
**Clusters** 28,679,182

### Zcash

**Last update** a month ago  
**Lastest block** 442662  
**Transactions** 4,157,501  
**Addresses** 2,902,347  
**Clusters** 261,932





## Encrypted Email

With end-to-end encryption and 2FA, your emails have never been more secure. The built-in encryption guarantees that your mailbox belongs to you: Nobody can decrypt or read your data.



## We Love Open Source

Tutanota is open source so security experts can verify the code that protects your emails. Our Android app is Google-free making Tutanota the best [open source email](#) service.



## On Any Device

Our apps for iOS, Android & desktops let you send secure emails wherever you are. Our fast web client & apps make sure email encryption is a pleasant experience.

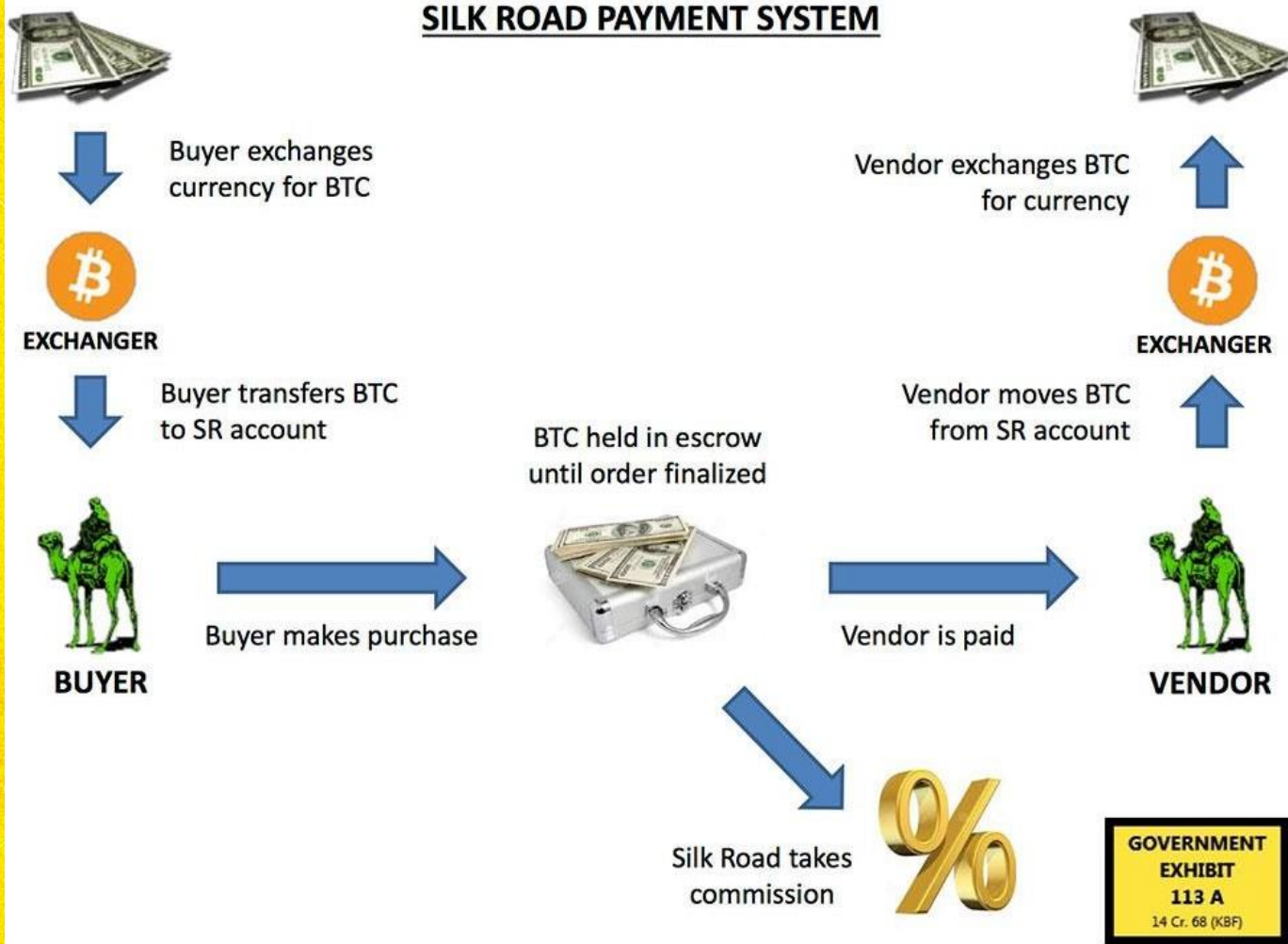


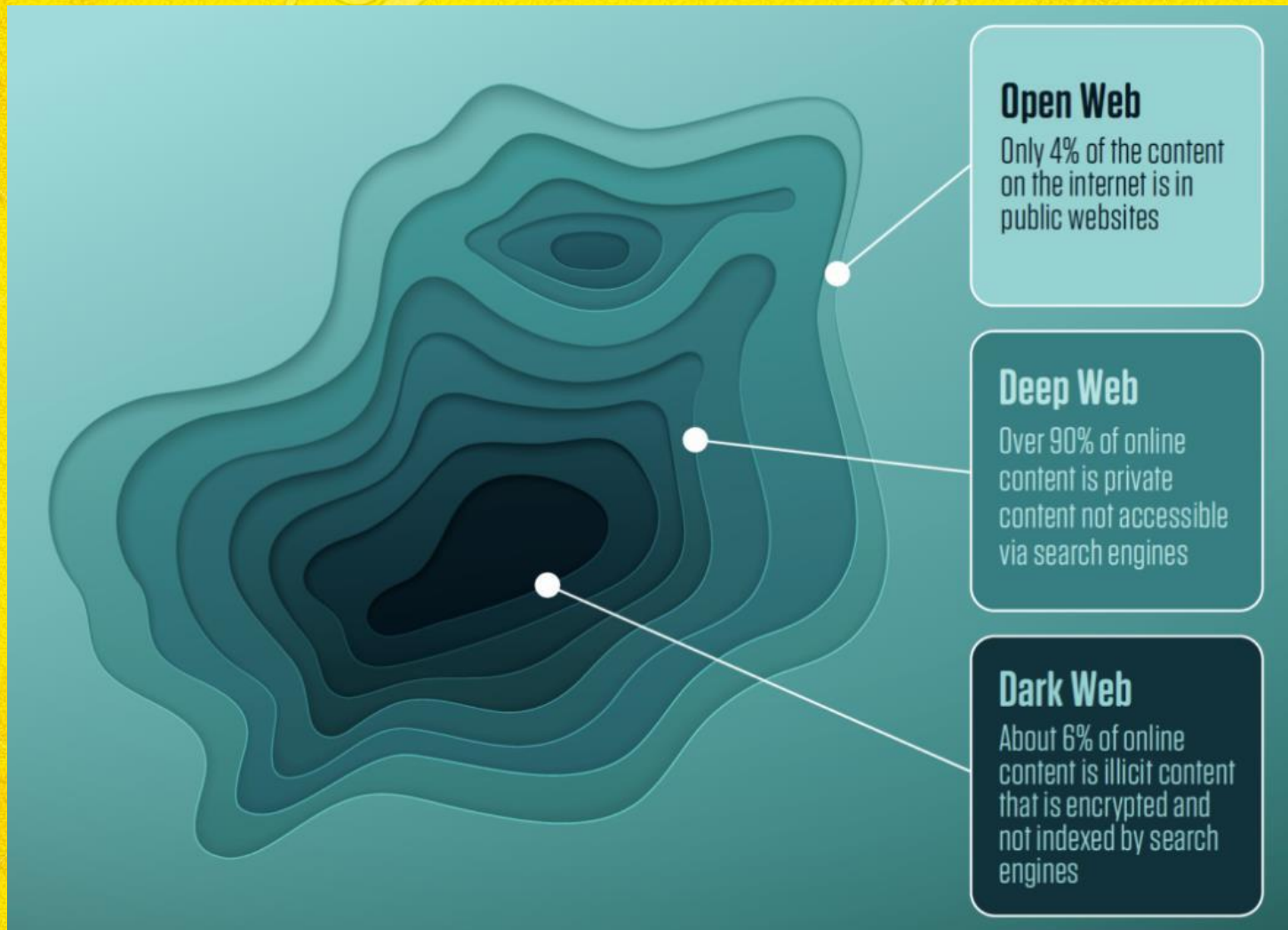
## **THIS HIDDEN SITE HAS BEEN SEIZED**

by the Federal Bureau of Investigation,  
in conjunction with the IRS Criminal Investigation Division,  
ICE Homeland Security Investigations, and the Drug Enforcement Administration,  
in accordance with a seizure warrant obtained by the  
United States Attorney's Office for the Southern District of New York  
and issued pursuant to 18 U.S.C. § 983(j) by the  
United States District Court for the Southern District of New York



## SILK ROAD PAYMENT SYSTEM





### Open Web

Only 4% of the content on the internet is in public websites

### Deep Web

Over 90% of online content is private content not accessible via search engines

### Dark Web

About 6% of online content is illicit content that is encrypted and not indexed by search engines

# What can be found on the Dark Web?



Illegal content



Illegal marketplaces



Cybercrime services



Cryptocurrency services

## Dark Web Content

A study by *Gareth Owen of Portsmouth University* discovered that content on the Dark Web was dominated by:

Illegal pornography, black markets, hacking groups and botnet operations (those commonly associated with spam, fraud and malicious attacks).



### Hidden Services on the Dark Web (January 2015)



# SECURITY PRECAUTIONS WHEN VISITING THE DARK WEB

- DON'T TRUST ANYONE
- COVER YOUR WEBCAM WITH TAPE
- DON'T DOWNLOAD ANYTHING
- DISABLE JAVASCRIPT ON YOUR BROWSER
- CHECK THAT YOUR VIRTUAL PRIVATE NETWORK (VPN) IS WORKING
- USE PROXIES
- ANONYMOUS OPERATING SYSTEMS
  - TAILS
  - WHONIX
  - JONDO
- INTERNET CAFE



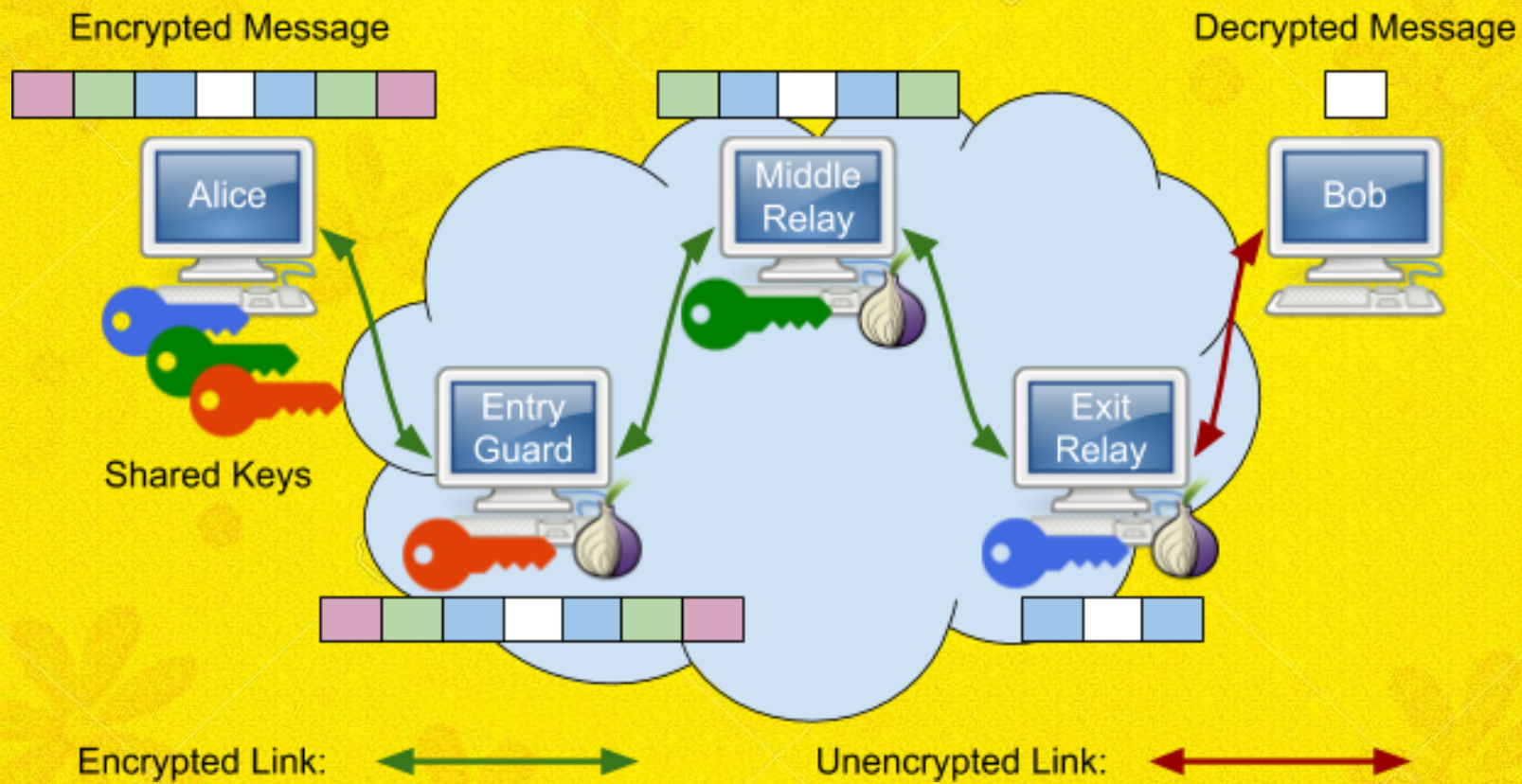
# DARK WEB ANONYMITY SYSTEMS

- TOR BROWSER (ANONYMITY NETWORK)
  - CLIENT-SERVER
  - ORBOT
  - HORNET (HIGH SPEED ONION ROUTING)
- I2P (INVISIBLE INTERNET PROTOCOL)
  - PEER TO PEER
  - ACTS LIKE A NETWORK LAYER
  - BUILDS ADDITIONAL LAYER WITHIN TCP/IP
- FREENET
  - MIX BETWEEN TOR AND I2P

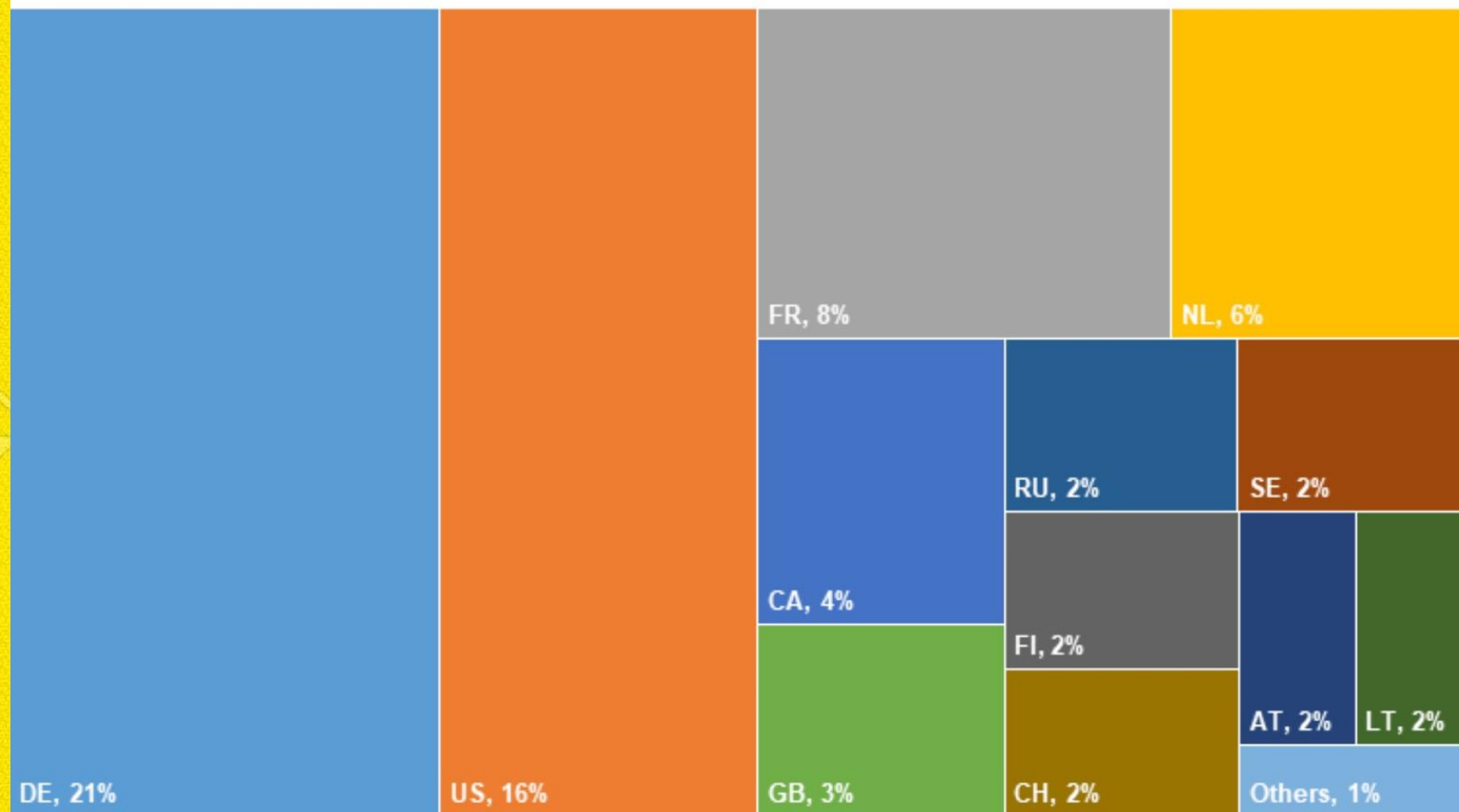


# 3-LAYER ENCRYPTION





## TOP IP GEOLOCATION COUNTRIES OF TOR NODES



## Freedom Hosting

In 2013, the FBI managed to infiltrate “Freedom Hosting”, a hosting operation serving child pornography sites

It inserted an exploit kit which targeted a vulnerability in Firefox 17 (used in Tor browser)

This resulted in the download of a file which would report back the identity of the user

Resulted in the arrests of the owner, and many of the consumers



## Silk Road

The Silk Road marketplace was reportedly identified through a non-anonymized captcha

## Welcome To Video

Child sex abuse marketplace

More than 8 terabytes of data

Used bitcoin – 7,300 recorded transactions from more than 1 million user addresses

UK National Crime Agency used BitCoin transaction analysis to identify users

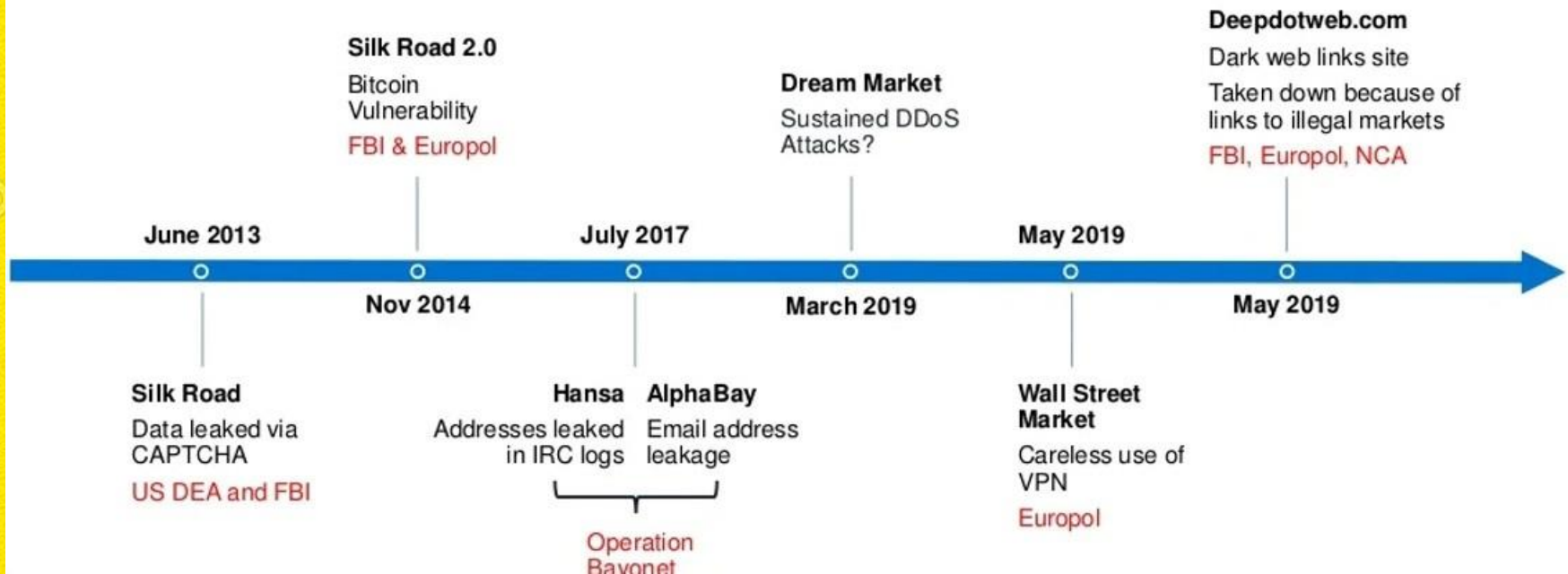
Arrests of 337 users made in 38 countries

23 abused children identified and rescued

Abusers found, not by using offensive hacking, but by simply tracing bitcoin transactions



# Dark Web Markets



# How do I create a .onion domain?

## +Create a web server with TOR

+Tor suggests binding your server to localhost. This is great for protecting your real IP address, because when you set up your onion resources later, you'll be able to create a visible port for visitors to connect with.

## +Configure your server's .onion services

## +Install & Setup Configure Tor create dark web

+First of all we just install and configure the Tor app on our Kali Linux. To do that we use the command in our Kali Linux Terminal. Tor will be added to our system after providing our root password.

# MESSAGE BUNDLING

Message Message Message  
Message Message  
Message Message

A photograph of a bunch of garlic bulbs on a wooden surface. The word "Message" is overlaid on each of the six visible bulbs, arranged in two rows of three. The background is a blurred kitchen setting. The entire image is set against a yellow background with a repeating pattern of faint, stylized icons and the text "123RF".

# COMPARISON



| Tor            | I2P         |
|----------------|-------------|
| Cell           | Message     |
| Client         | Router      |
| Circuit        | Tunnel      |
| Directory      | NetDB       |
| Hidden Service | Eepsite     |
| Onion          | Garlic      |
| Less Secure    | More Secure |

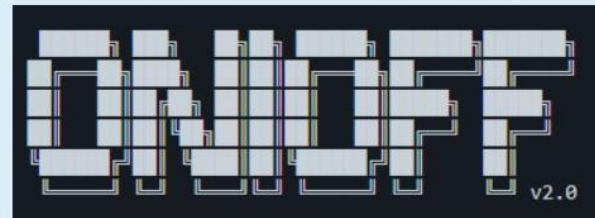


- Katana
- OnionSearch
- Ahmia Search Engine
- DarkSearch

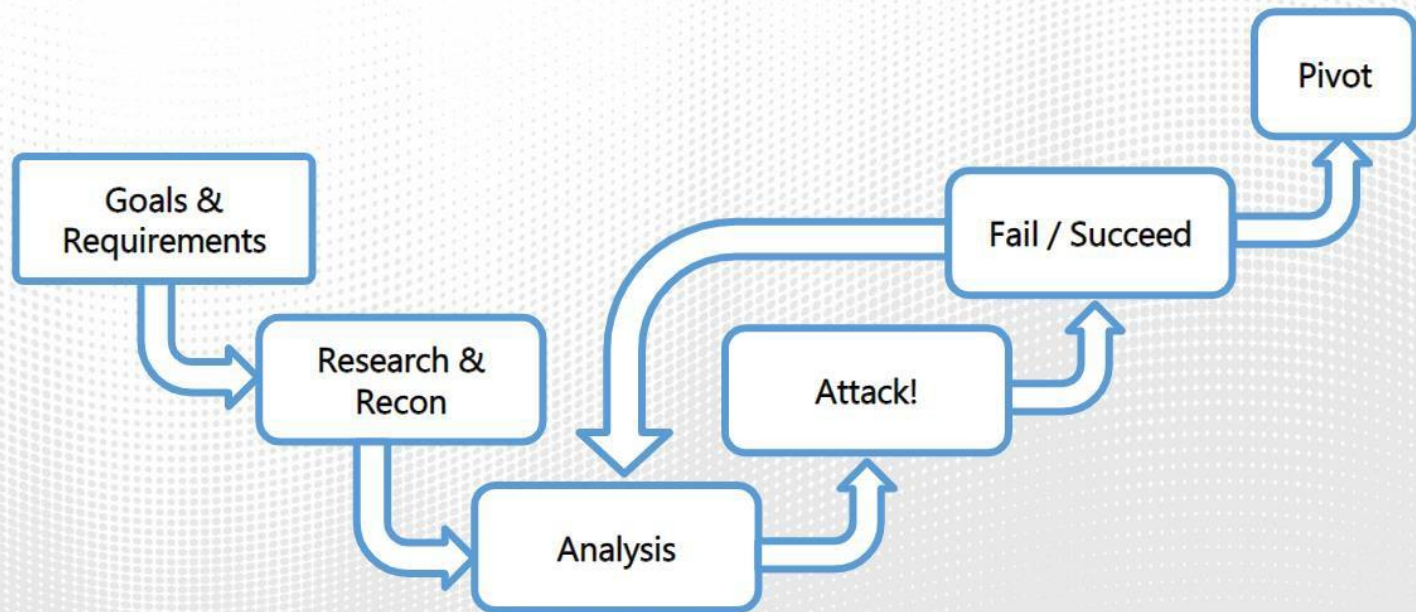


Image Sources: Katana, OnionSearch, Ahmia, DarkSearch

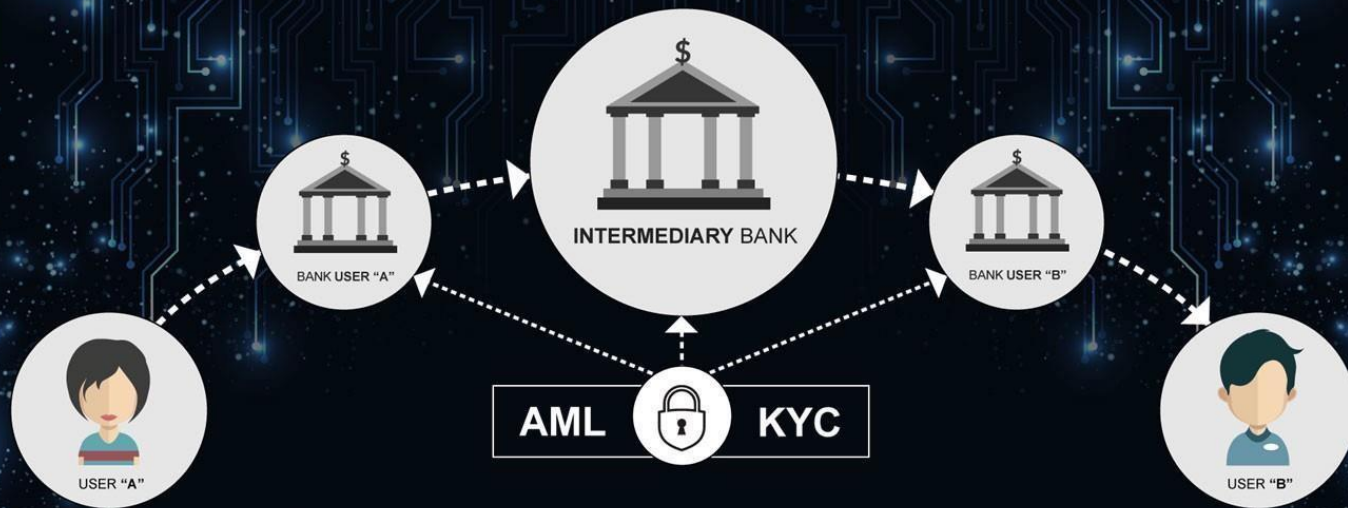
- OnionScan
- Onioff
- Onion-nmap

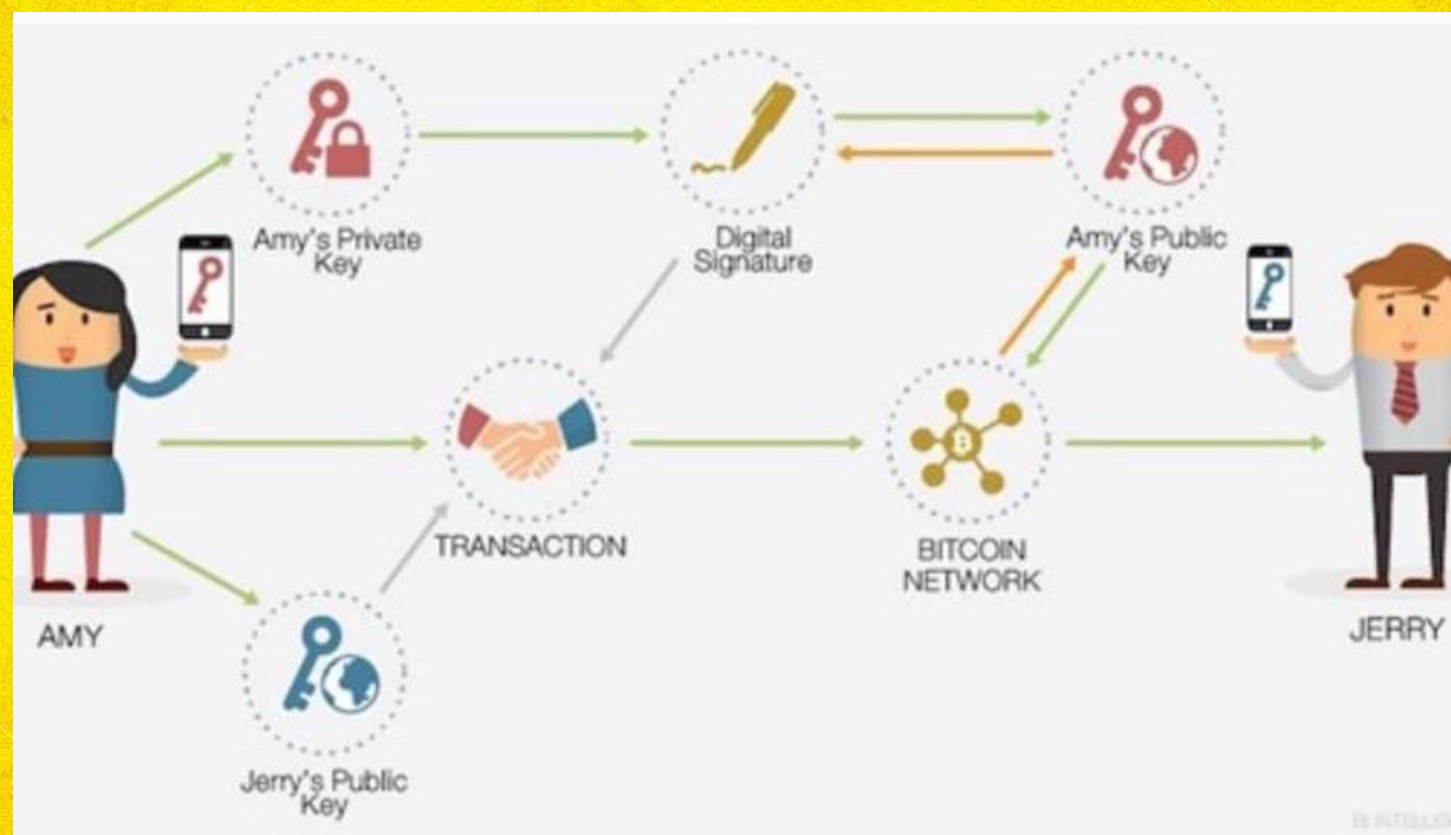


Social engineering is an organized process

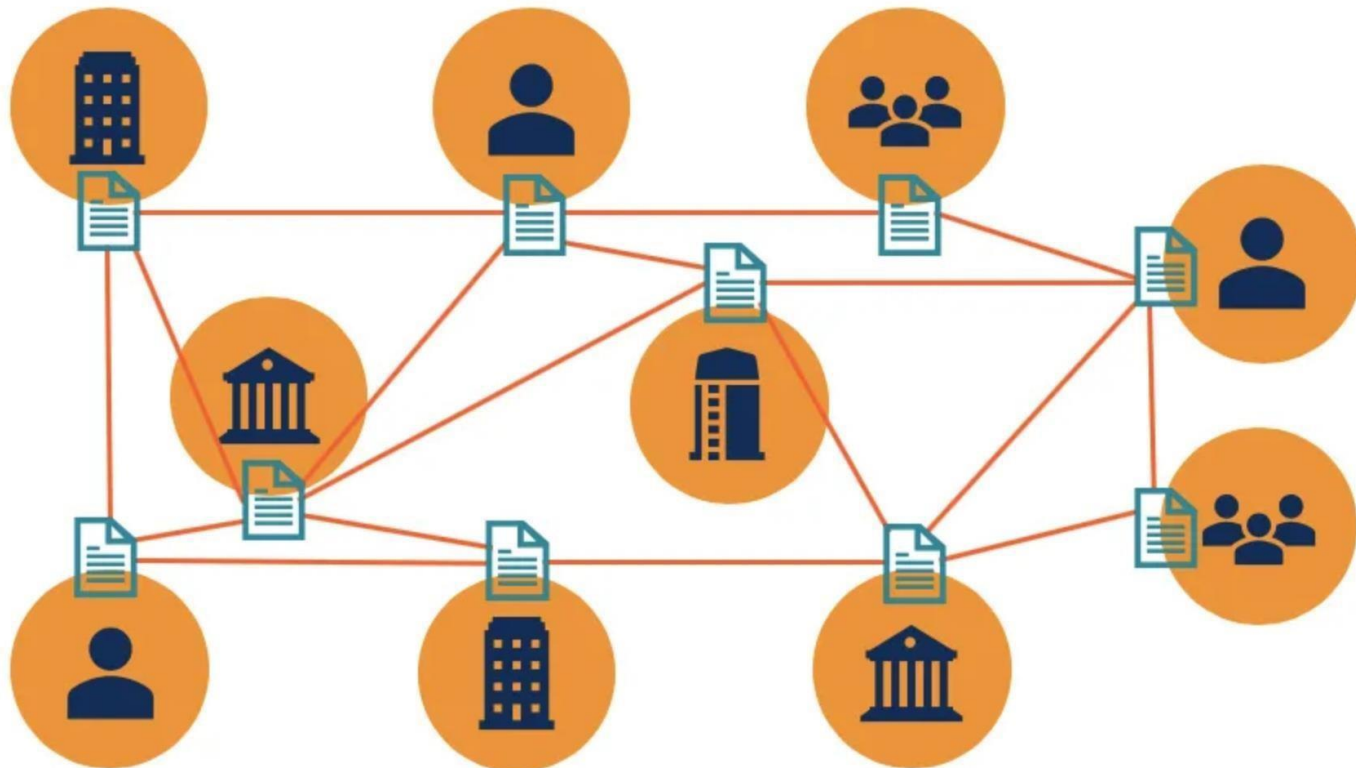


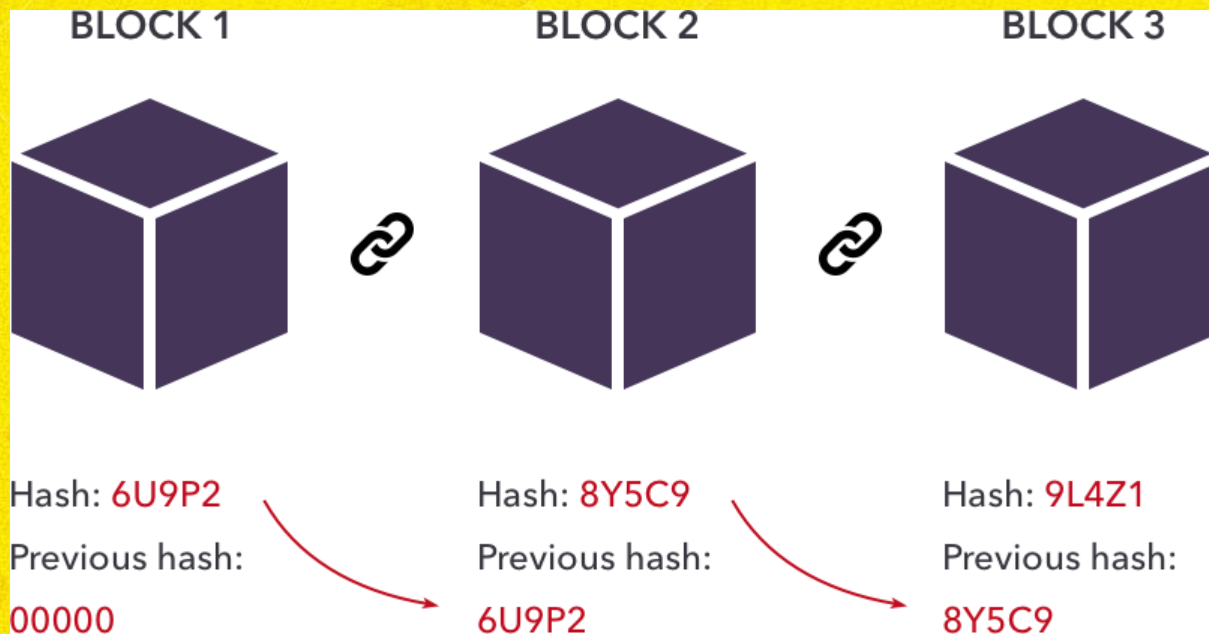
# TRADITIONAL BANKING SYSTEM





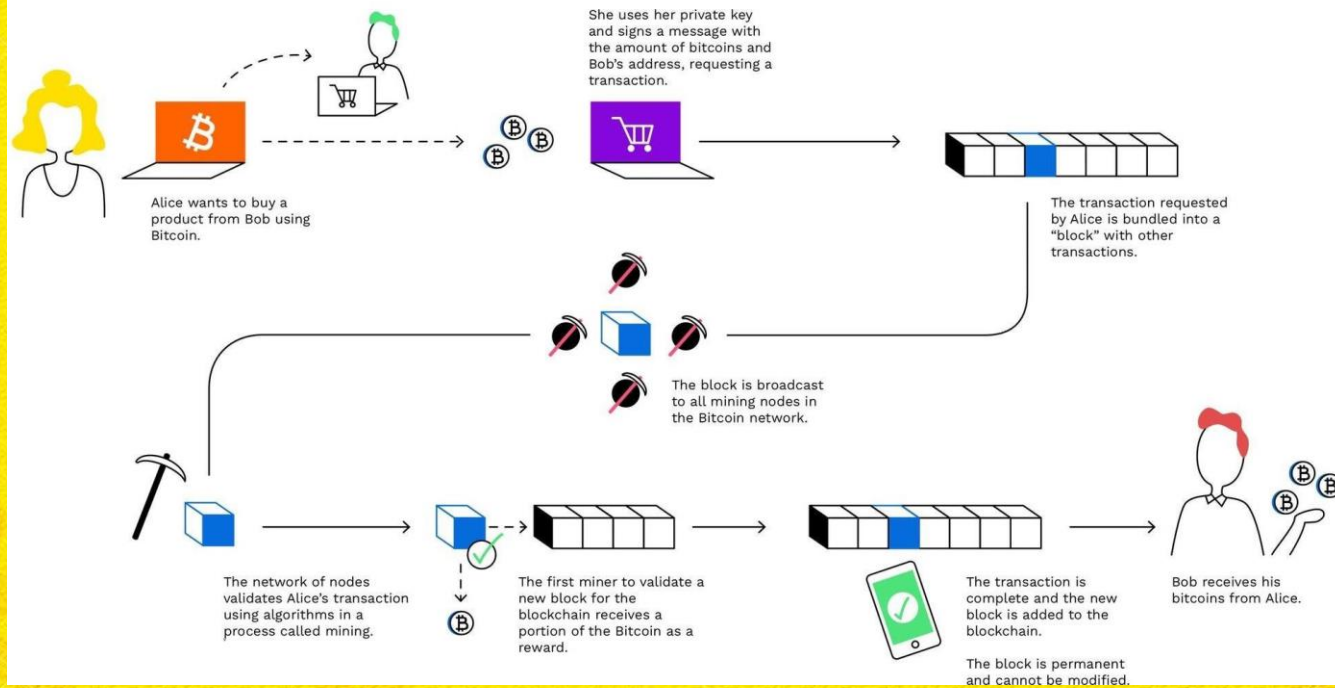
# Distributed Ledger Technology





## What is Bitcoin Mining?

How Bitcoin Transactions work



By Patrícia Estevão

[illegible]

New bitcoins  
are created!



2 2 2

THE END!

Machine