

## Privacy Technology

**Clients/Wrappers** – These programs function to enhance aspects of a program that already exists. They can be open source and can be used to protect your privacy/data.

**Degoogle Phone** – A cellphone that has a custom Android operating system with Google removed; it is an open-source version of Android.

**Faraday Bag** – Faraday bags block radio frequencies (a component of which is cellular signals) from both being sent and received to an electronic device such as a mobile phone, car key or laptop. Faraday bags can be used to protect the integrity of your data and to reduce exposure to radiation emitted by the device.

**Internet Protocol (IP) Address** – An IP address is a unique address that identifies a device on the internet or a local network. In essence, IP addresses are the identifier that allows information to be sent between devices on a network; they contain location information and make devices accessible for communication.

**Internet Service Provider (ISP)** – Internet service providers (ISP) are companies that provide internet access to individuals or businesses.

**Linux Computer** – Linux is an open-source operating system (OS). There are many different Linux distributions that all provide different aesthetics and functions depending on the needs and technical knowledge of the individual.

**Onion** – Tor, short for The Onion Router, is free and open-source software enabling anonymous communication. Internet traffic is directed through a free, worldwide, volunteer overlay network that conceals an individual's location and usage from anyone conducting surveillance. Tor is meant to protect the user's personal privacy as well as their freedom.

**Open Source** – There are 10 key components to open-source software. 1. Free Redistribution: Code is freely distributed to anyone interested. 2. Source Code: The software must include source code, or the source code must be easily accessible. 3. Derived Works: The code should be modifiable as part of the product license. 4. Integrity of The Author's Source Code: The integrity of the original source code must be maintained. To avoid issues, derived code may be required to have a different name or version number associated with it. 5. No Discrimination Against Persons or Groups: The license must not discriminate against any person. 6. No Discrimination Against Fields of Endeavor: The code must be usable for any field of endeavour (i.e. business, gaming etc.). 7. Distribution of License: The license must be the same for anyone that uses the source code. 8. License Must Not Be Specific to a Product: The product rights must be attached all components of the code. 9. License Must Not Restrict Other Software: The license for the software must not prevent the use of other software that may be closed source. 10. License Must Be Technology Neutral: the technology that is used cannot affect the license.

**Search Engine** – A search engine is a software program where individuals search information in a web browser. Popular search engines include Google, Bing and Yahoo.

**Virtual Private Network (VPN)** – VPNs establish a protected and encrypted network connection. They disguise internet traffic and your online identity making it difficult for your internet service provider and third parties to track your activities.

**VPN Router** – This is a router that has a VPN already installed. These routers protect your home as they mask and encrypt all the data accessed from your home.

**Web Browser** – A web browser is software that allows you to access the internet. Web Browsers include Google Chrome, Microsoft Edge, Safari and many more.

## Cryptocurrency/Alternative Currencies

**Blockchain** – A ledger that facilitates the process of recording transactions and tracking assets in a business network. Basically, any asset can be tracked and traded on a blockchain. Blocks in a blockchain are where data is saved, and they are connected by chains that have data from the previous block. Each block contains a cryptographic hash of the previous block, a timestamp, and transaction data. The timestamp proves that the transaction data existed when the block was published. As blocks each contain information about the previous block, they form an immutable and unmodifiable chain. If data were altered retroactively, it would impact other blocks.

**Cold Wallets** – A cold wallet, otherwise known as a hardware wallet or cold storage, is a physical device that keeps your cryptocurrency offline. Taking your holdings offline helps reduce the likelihood of hacking and online attacks, but if you lose the wallet, the funds are lost.

**Cryptocurrency Exchanges** – These allow customers to trade cryptocurrencies or digital currencies for other assets.

**Hot Wallets** – A hot wallet is a cryptocurrency wallet that is always connected to the internet and cryptocurrency network. Hot wallets are used to send and receive cryptocurrency, and they allow you to view how many tokens you have available to use.

**Know Your Customer (KYC)** – Refers to an institution's obligation to carry out certain identity and background checks on its clients before using the platform.

**Private Key** – The passwords that give you access to your cryptocurrencies.

**Tokens** – The term “coin” has become synonymous with token. Some tokens exist on their own blockchain while others run on other blockchains. Examples of these include Bitcoin, Ethereum, and Monero.

**Wallets** – Cryptocurrency wallets store your private keys, keeping your crypto safe and accessible. They also allow you to send, receive, and spend cryptocurrencies like Bitcoin and Ethereum.

## Food Security

**Aquaponics** – The cultivation of plants and aquatic animals in a recirculating environment using nitrifying bacteria and worms to convert fish waste into useful plant nutrients. Aquaponics is a cooperation between plants and fish and the term originates from the two words aquaculture (the growing of fish in a closed environment) and hydroponics (the growing of plants usually in a soil-less environment).

**Permaculture** – Land management approaches that mirror natural ecosystems. The name is derived from the term “permanent culture”. There are many branches of permaculture including design, ecological, regenerative design, environmental design, and construction. Permaculture uses creative design processes based on whole systems thinking, considering all materials and energies in flow that affect or are affected by proposed changes. Permaculture can be understood as the growth of resilient and sustainable agricultural ecosystems in a self-sufficient and sustainable way.