

Hasq for Copyrighted Materials

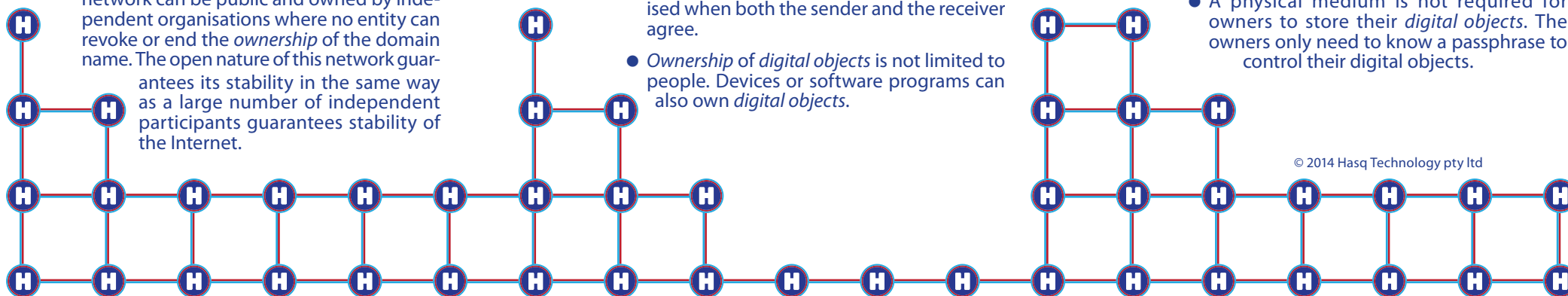
Hasq is convenient for registering and exchanging copyright, especially when materials to be copyrighted are in digital form. These include texts, images, videos, music and any content in proprietary digital formats. To register copyright, its owner creates a *digital object* mathematically tied to content to be protected and publishes it on a Hasq network. After the publication the owner is the only one capable of modifying the status of the *digital object*. This serves as a proof of *ownership* over copyrighted materials. The copyright can be passed on to a new owner only when the current copyright holder wishes to do so. Similarly, Hasq technology can be useful for authorisation and licencing of software products.

Hasq as a Messenger

The Hasq network can be used as a special type of messaging mechanism removing the need for dedicated SMTP servers. A sender and the intended recipient share a *digital object* representing a one-way communication channel. The sender modifies the object's associated data. The receiver reads the data by polling or receiving a notification from the server. The advantage of using Hasq is that messaging can work even in situations when the network is very unreliable.

Hasq as DNS Alternative

A *digital object* may represent an Internet domain name. The operating system network driver resolves this name by accessing a network of Hasq servers. Such a network can be public and owned by independent organisations where no entity can revoke or end the *ownership* of the domain name. The open nature of this network guarantees its stability in the same way as a large number of independent participants guarantees stability of the Internet.



Hasq Distribution

Hasq software is portable. It is mostly written in standard C++. It compiles and runs on different platforms. To simplify installation, Hasq server is distributed as a 10Mb bootable ISO image (currently x86 only), which includes both the operating system and the Hasq software.

Hasq Advantages

- *Issuer* has full control over issue of *digital objects*
- Hasq network owner can provide a full spectrum of anonymity to their clients: complete, partial or none
- Simple access protocol: ultimately no client software is required
- Lost references to owned *digital objects* can be restored using a passphrase only.
- High *transaction* processing speed. Moderate hardware supports speeds around a thousand *transactions* per second.
- Hasq servers store neither passwords nor any client details, leaving no sensible motive to hack Hasq servers.
- High level of security is achieved using modern Hash functions with no Public Cryptography involved. This reduces complexity and lowers hardware requirements for Hasq technology use.
- The process of *ownership* change allows intermediate states when the sender *ownership* is already lost but the receiver *ownership* is not yet acquired. The *transaction* is finalised when both the sender and the receiver agree.
- *Ownership* of *digital objects* is not limited to people. Devices or software programs can also own *digital objects*.



Hasq Breakthrough

Hasq is innovative technology with a vast array of real-world applications, such as crypto-currency, as an alternative to DNS, as a secure platform for blogs and messaging. There are many applications just in the financial sector alone: bonds, contracts, travelers cheques, international money transfers. These applications are all possible because Hasq has been designed as a general solution not tied to any particular industry.

Hasq Solves Customers' Problems

- Risk of fraud is significantly reduced by Hasq's use of a simple and secure way to identify the *digital object* owner.
- Hasq technology noticeably reduces costs of building and maintaining computer infrastructure.
- Reliability of *transactions* is maintained even in fragmented, unstable or slow networks.
- Hasq *transactions* are fast compared to *transactions* in other similar technologies.
- Anonymity for *transactions* can be maintained for both senders and recipients.
- *Ownership* cannot be taken away without the owner's consent.
- A physical medium is not required for owners to store their *digital objects*. The owners only need to know a passphrase to control their digital objects.

Technology At a Glance

Hasq technology is a service for keeping registers of *digital objects*. The service is provided by a network of Hasq servers. A server is essentially a web server running Hasq software. Anyone can set up a Hasq network or join an existing one. Users can access Hasq networks from web browsers or lightweight client software.

SOME TERMINOLOGY:

Digital object — a digital sequence of certain length.

Ownership — the ability to control a *digital object* and the associated data.

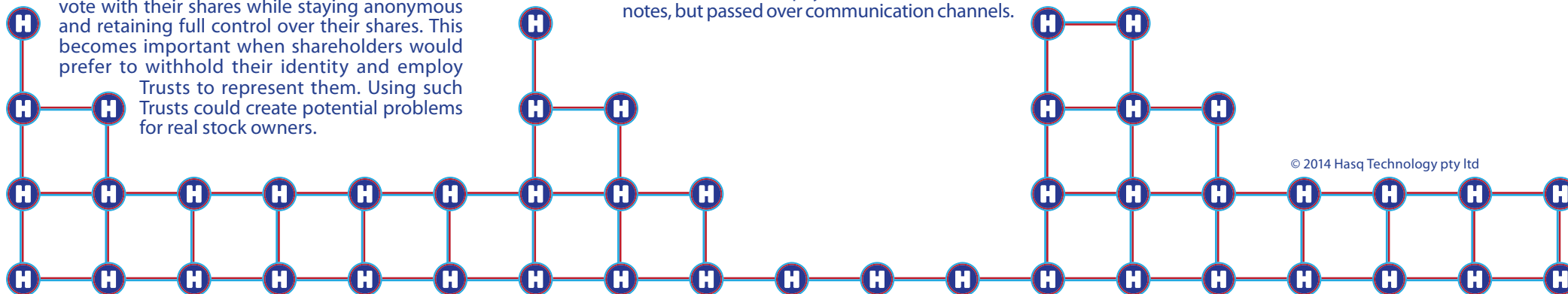
Transaction — a process of accessing or modifying a *digital object*. This includes change of *ownership*.

Issuer — an entity producing *digital objects* and being responsible for the arising obligations and operational activities.

The generalisation of these concepts is what makes Hasq so powerful. For example, if a *digital object* represents a unit of currency, then a *transaction* becomes equivalent to one party paying the other.

Hasq as a Shareholders Registry

Shareholders registries would get a lot of benefits from using Hasq. Similarly to financial applications, the *Issuer* produces shares and a unique *digital object* is assigned to each share. The objects then get distributed to the shareholders. The shareholders can sell their *digital objects* (shares) in the same way as they would sell shares in real life. Using the Hasq mechanism, the shareholders can vote with their shares while staying anonymous and retaining full control over their shares. This becomes important when shareholders would prefer to withhold their identity and employ Trusts to represent them. Using such Trusts could create potential problems for real stock owners.



Solution for the Financial Industry

Hasq greatly simplifies the process of issuing and exchanging any kind of IOUs, bonds, other debt instruments, etc. The *Issuer* has full control over the number of *digital objects* (representing the *Issuer's* obligations) in the system. A new owner buys obligations from the *Issuer*. *Ownership* is obtained by changing a *digital object's* passphrase so that no one else can claim *ownership*. Now the owner has the option of transferring *ownership* (selling the obligation) to another person or back to the *Issuer*. The price of obligations can be determined by the *Issuer* or the market. This is identical to how bonds or other obligations work in the real world. Travellers cheques are an example of IOUs and one area where Hasq technology can provide great benefits to business operators:

- No need to stock paper cheques
- No need to maintain a complex and expensive conventional database to keep customers' information secure
- No need to employ teams of specialists for manual verification of cheques
- Customers cannot misplace their cheques
- Cheques are cleared instantly
- Hasq is a significantly more secure and reliable system than existing solutions

A similar approach can be used for creating money surrogates such as Disney dollars, gift cards, bonus cards, reward points, etc. Hasq technology can also be useful in money transfers, particularly international transfers. The closest resemblance of such transfers is a payment with actual banknotes, but passed over communication channels.

Business Development Options

- Selling commercial licences
- Providing Hasq network services
- Developing customer specific software
- Releasing free software and opening source code

Hasq Today

ABOUT US

Hasq Technology Pty Ltd was established by a small group of enthusiasts and an investor in late 2012.

PATENT

Patent pending for the technology and the original ideas.

STAGE OF WORK

A prototype has been completed and is currently undergoing extensive testing.

WHO WE ARE LOOKING FOR

Hasq Technology Pty Ltd is looking for investors and business partners to complete and commercialise the project.

FOR MORE INFORMATION PLEASE CONTACT:

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