Annual Report
2017–2018

eQualitie

Since 2010, we've developed open source software tools and provided technology services to help defend and promote universal human rights on the Internet. We specialize in solutions that enable and promote freedom of speech and association online, as well as the right to privacy and equal access on the Internet.

Digital security for civil society

The question of censorship is <mark>really lipsum</mark> becoming more widespread, <mark>and it must be said</mark> and technology that implements it difficult to <mark>line goes here for redaction</mark> circumvent.

Executive Summary

Overall this was a tough year for upholding human rights on the Internet. Network level censorship is becoming more widespread and the technology enforcing it, difficult to circumvent. Web layer attacks continue to silence independent voices. In the midst of this regression, eQualitie stood firm to its principles and mission.

Negative trends included state surveillance and "innovative" control mechanisms (for example China's "social score" and Russia's "Yarovaya package") paint a bleak picture for the future. Network interference has become a commodity and in-country ISPs are now able to buy equipment which does all of the complicated dirty work for them. Targeted attacks against websites can be purchased online from multiple 'stresser' services. These attacks muzzle online voices and act, with impunity, as another form of censorship.

On the other hand, we are witnessing large media organizations promoting and collaborating on anti-censorship tool development. We also welcome the introduction of privacy features to popular communication tools. For example, several billion smartphone users this year, have access to encrypted messaging services after Facebook Messenger, Google Allo and Whatsapp implemented the Signal protocol from Whisper Systems.

Our work this year has focused on softening the blow and countering some of these threats. We aim to level the playing field between the user and censor. To introduce eQualitie into the network!

Digital security for civil society

One of the ways we've been working toward this goal is through our flagship product and service Deflect. This year we began to lay the foundations for a much stronger analytic approach to malicious behavior on the network. We are interested in harnessing machine lead technology to improve the classification of malicious vs benign behavior; to share threat data with our peers; and to remove the veil of impunity from those attacking Deflect clients.

In parallel, we began an effort to introduce the next generation of censorship circumvention technology, through the Ceno project. Utilizing existing peer-to-peer routing and distributed storage technology, we're bringing back the cypherphunk ideals and protocols to deal with some modern-day problems.

As part of our mission to increase security awareness and resources for civil society organizations and activists around the world, we have helped establish digital security training centres with partner NGOs. To date, these schools have been introduced for Belarus, Ukraine and Tunisia. This year we began working with Colnodo to develop a new center in Colombia. eQualitie provides guidance and expertise to develop training curricula and help introduce secure platforms and online services for training participants.

DEFLECT

CENO

eQ

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Digital security for civil society

A message from the board

Threats to civil society are increasing and eQualitie's work to protect it has never been more relevant. Technology tools that are truly open, free and usable for journalists, activists and small grassroots organisations are absolutely critical.

The eQualitie team has expanded both in number and in expertise to be able to meet this critical need and it's truly and exciting time for us as a board to help guide eQualitie and ensure its stability through this expansion. In particular it has made us very proud to see Deflect's positive impact on some of the most important social movements around the world.

The executive board is responsible for the long-term stability of the organisation. Board members in 2017 include:

Dmitri Vitaliev
Chair, Executive director and founder of eQualitie

Gabriella Coleman
Wolfe Chair in Scientific and Technological Literacy at McGill University

Carolyn Anhalt
Software and Network Engineer, Security Technology Consultant

Mallory Knodel
Head of Digital at Article 19

Alex Dalessio
Presidential Innovation Fellow, Co-Founder, Isabel.io

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Section 1

KEY EVENTS

Digital security for civil society

Article 19 of
The Universal Declaration
of Human Rights

Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers

Freedom of expression & association

We believe that the ability to express oneself freely on the Internet, without hindrance and interference is a human right, protected by *Article 19* of the UDHR. Likewise we operate on the understanding that the right to peaceful assembly and association, protected by Article 20, also applies to a website's ability to serve information to its readers.

Cyber attacks that attempt to nullify these inalienable rights have lead us to create an infrastructure protecting online platforms and ensuring their continuous operation. Sophisticated network filtering technology deployed in various nation states to censor their citizens' access to the Web inspired us to develop new methods for helping users circumvent these restrictions.

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Deflect

This was the sixth year of operations for the Deflect DDoS mitigation infrastructure. In 2017 we achieved the following milestones.

- ✅ Introduced our own statistics platform for live and historic traffic visualization
- ✅ Automate the provision and renewal of Let's Encrypt encryption certificates for Deflect clients
- ✅ Mitigated over a hundred individual attacks on the Deflect network
- ✅ Created a technical and marketing strategy for commercializing Deflect services
- ✅ Re-designed and rebuilt the Deflect documentation portal and website, linking it with the Transifex platform for localization
- ✅ Over 300 websites protected, serving on average one million daily readers

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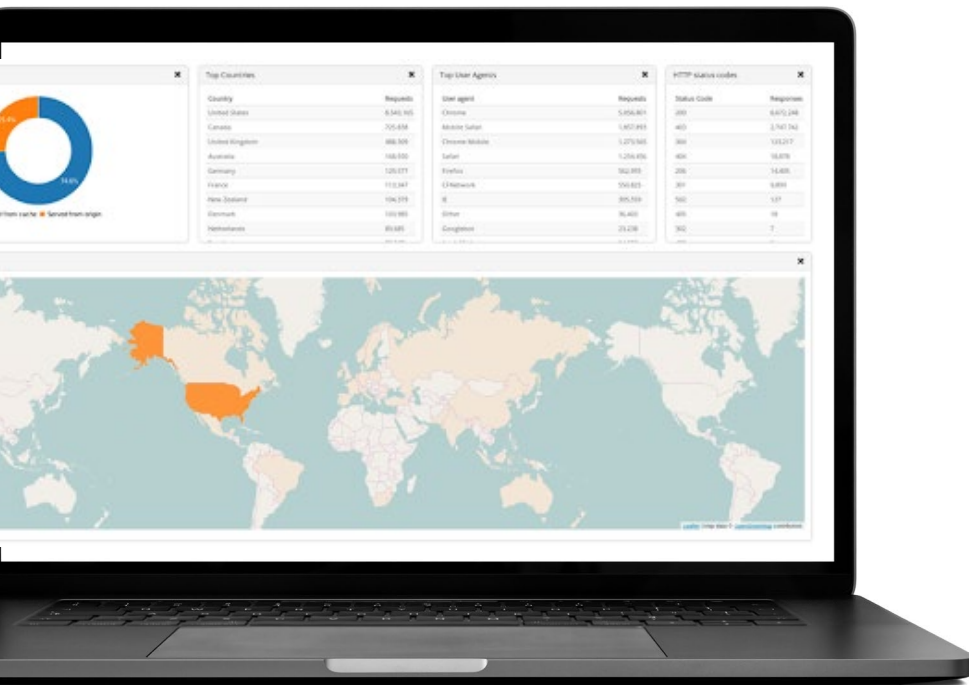
64M

Unique readers served

100+

DDoS events mitigated

20M

Average daily hits

328,928

Unique bots banned

Most common DDoS method

WORD-PRESS PINGBACK ATTEMPT

Highest readership locations

UKR MEX USA

RUS TUR

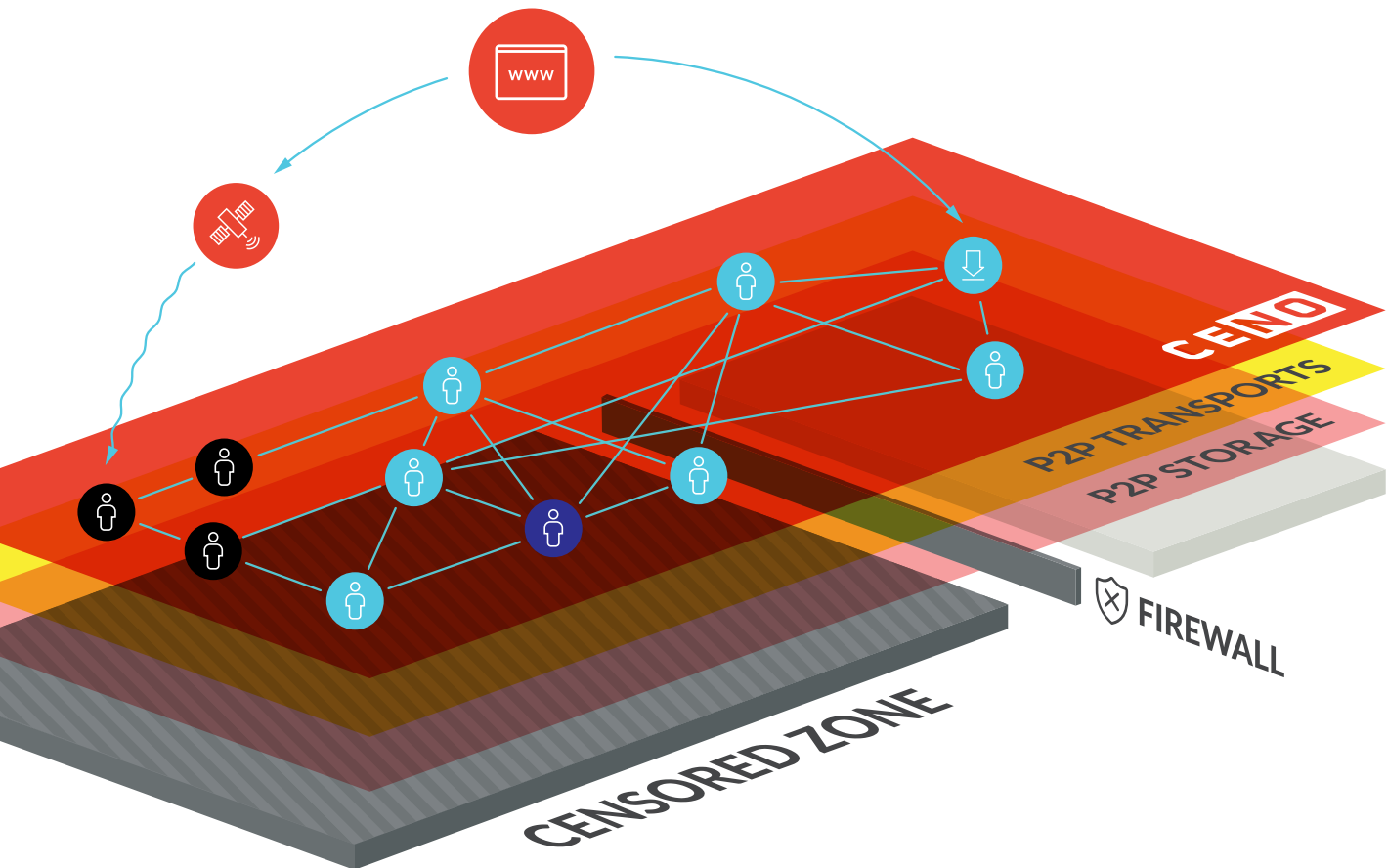Digital security for civil society

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CENO

The first year of project implementation was dedicated to architecture design, threat modeling, prototyping various approaches and creating a network testbed for measuring Internet filtering in target network environments.

CENO

CENO Components

- Darknet node
- Malicious node
- CENO node
- Injector node

CENO inserts websites

WWW

CENO

P2P TRANSPORTS

P2P STORAGE

FIREWALL

CENSORED ZONE

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Digital Security Schools

Since 2011, eQualit.ie has helped establish digital security training centers around the world. Their purpose is to create local capacity for providing continuous education on Internet communications privacy, secure information handling and general computer, Internet awareness.

The schools work with local civil society organizations, including independent media and human rights groups. They are housed with a local country partner, an established NGO with an interest in developing this type of project and capacity. Our model is to provide financial assistance, technical support and pedagogical guidance for the first year of project operations. We believe this effort to be cost effective and targeted towards creating lasting change on the ground.

This year we are welcoming two digital schools in Ukraine and Colombia

DSS 380 with Internews Ukraine

DSS 57 with Colnodo

Digital security for civil society

Events

eQualit.ie in Valencia

In advance of the Internet Freedom Festival we convened a team meeting to discuss architectural design decisions on the new iteration of the https://censorship.no project we embarked upon this year. During the festival itself, eQualit.ie presented the Deflect and (n+1)sec projects to large auditoriums as well as helping to host the Tools & Technology Showcase one more time.

ISP infrastructure meeting

In June we organized a meet up in Montreal for about 35 independent and ethical Internet service providers from around the world. Topics for the meeting included discussions on how to survive as an independent core infrastructure service provider; how to better share resources and facilitate access to secure hardware and servers; how to complement each other's software development efforts. We discussed better methods for collaboration including threat information sharing and fundraising. Rethinking the ways we use critical infrastructure is acutely important, considering the corporate state of the Internet today and the power several companies have over the network. We need to ensure that independent, secure and trustworthy hosting alternatives continue to exist. A report on the outcomes of the meeting will be published over the course of the next few months.

Internet Freedom Conference

Also in June we organized and hosted a conference in Montreal around the topic of Internet Freedom, for organizations and partners from our community. Topics and thematics included reporting back on our individual projects over the last year, progress made and difficulties encountered. We facilitated discussions and break-out sessions to share best practices in our fight for human rights in the digital age. Two panel sessions completed the program, discussing threats to human rights posed by restrictions to encryption and the ongoing debate of data transparency vs. data privacy.

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Section 2

ORGANIZA-TIONAL

Organizational

eQualitie is headquartered in Montreal, Canada. However, we are a remote-first company. Our colleagues live and work from different countries and timezones.

This is often a challenge and a lot of internal processes and policies are in place to aid a collaborative work environment. We are further professionalizing our business operations to ensure we can cater to the needs of a growing company.

Our staff are now entitled to

- ✓ 24 days annual leave
- ✓ Contributions to private health care, co-working office rental, laptop purchase
- ✓ Our international long-term consultants are now eligible for parental leave

Countries where eQualitie staff work from

12

CAN	USA	NLD	FRA
SVK	ESP	BLR	RUS
GRC	AUS	KEN	DEU

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Annual retreat

ICELAND

Once a year we get together for an annual retreat. In 2017 we huddled around the Laugrvatn lake in Iceland to take stock of the year, catch up with each other and see the beautiful sights and geothermal attraction of the place.

Section 3

FINANCIALS & FUNDING

Financials and funding

eQualit.ie is incorporated in Canada and operates on not-for-profit principles.

The organization is funded primarily by public grants and private consultancy contracts. In 2017 revenue income originated from Canadian and US government funds for international development and human rights promotion, as well as from private foundations and for contract services.

We do not accept funding that would affect our ability to pursue work free of external interference, and we fiercely protect the privacy of our clients and the independence of our staff. In all cases we operate according to the eQualit.ie Manifesto and release our efforts as open source tools to the public and free services to qualifying organizations.

eQualitie Inc
Statement of earnings

For the year ended March 31, 2018
(Unaudited – See Notice to Reader)

	2018 ($) 12 months	2017 ($) 3 months
Income (Consulting)	1,807,919	1,047,649
Cost of sales	1,293,081	770,426
Gross margin	**514,838**	**278,223**
Administrative expenses		
Salaries and wages	404,279	229,862
Travel	86,145	52,168
Rent	23,376	10,012
Professional fees	16,247	6,583
Office expenses	9,565	6,952
Interest and bank charges	6,218	5,267
Telecommunications	4,855	2,302
Taxes and permits	1,916	488
Advertising and promotion	1,679	–
Bad debts	1,288	–
Amortization of capital assets	742	751
Meals and entertainment	313	–
Foreign exchange losses (gains)	(13,403)	(16,210)
Total	543,220	298,175
Loss before income taxes	**(28,382)**	**298,175**
Income taxes (Current)	**–**	**–**
Net loss	**(28,382)**	**(19,952)**

The accompanying notes are an integral part of these financial statements

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