OPEN OBSERVATORY OF NETWORK INTERFERENCE (OONI)

Vasilis Ververis (andz@torproject.org)

Language: English, Portuguese



Since 2012, OONI has collected millions of network measurements across more than 190 countries around the world, shedding light on various instances of network interference.





OONI

Detect censorship and signs of network tampering Shares observations and data about the nature, methods, and prevalence of censorship and network tampering around the world, through the use of open methodologies and FLOSS tools

- Network measurement data (reports) submitted by volunteers
- Complete dataset (from 2012) available to use/download

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EVIDENCE OF INTERNET CENSORSHIP

Transparency: What is blocked, where and how?
What is the *health* of the network that we are using?
Legality: Can the blocking of specific types of sites and services be legally justified?
Story-telling & Advocacy: What is the impact of censorship on human rights?



DATA REPRESENTATION

OONI explorer









- Blocking of websites
- Blocking of instant messaging apps
- Blocking of censorship circumvention tools (Tor, VPN, Psiphon, Lantern)
- Detection of *middle boxes* proxy technologies that could be responsible for censorship and/or surveillance
- Speed and network performance tests (NDT)





PIRATEBAY BLOCKED IN ARGENTINA

asurement

Web Connectivity 2017-03-23 06:24:01 UTC

 $20170323T062328Z_AS7303_UYQj7sql3cX8qzQXjRGZ4QCHf6lCnALEmLqcOjoFxpyIshSmI4$

st runtime: 1.82408 seconds

be

Network: Telecom Argentina S.A., AR (AS7303)	Name: ooniprobe-android	Version: 1.1.2
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⑦ This measurement contains data that could be a sign of network tampering or censorship.

site

https://thepiratebay.se on for blocking: dns measurements for URL

NEWS WEBSITE NTN24 BLOCKED IN VENEZUELA



asurement

Web Connectivity 2017-03-03 03:48:36 UTC

20170303T034153Z_AS8048_3ndo86P4sVdRgJ7N9CPMX5ft97YeHCbpCkofTTKol42forLpfN

st runtime: 4.69504 seconds

be

letwork: CANTV Servicios, Venezuela, VE (AS8048)	Name: ooniprobe	Version: 2.0.1
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⑦ This measurement contains data that could be a sign of network tampering or censorship.

site

http://ntn24.com on for blocking: dns measurements for URL

WHATSAPP BLOCKED IN BRAZIL

```
# OONI Probe Report for http_requests (0.2.5)
# Mon May 2 23:17:02 2016
probe_asn: AS26615
probe_cc: BR
software_name: ooniprobe
software_version: 1.4.2
test_helpers: {}
test_name: http_requests
test_start_time: '2016-05-02 21:17:02'
test_version: 0.2.5
agent: agent
body_length_match: null
```

OONI RESULTS (1/4)

- March 2017: Thailand blocked news and censorship circumvention tool websites
- December 2016: Malaysia block pages and censorship
- December 2016: Ethiopia DPI used to block media websites during major political protests

OONI RESULTS (2/4)

- December 2016: Belarus blocked Tor
- October 2016: Zambia blocked websites during general elections
 - May 2016: Uganda blocking of social media

OONI RESULTS (3/4)

• May 2016: Brazil blocked WhatsApp

• June 2015: Greece and EEEP blocklists

July 2013: Zambia, a country under Deep Packet Inspection

OONI RESULTS (4/4)

- May 2013: Uzbekistan and Turkmenistan Internet filtering and DPI
- April 2012: Hadara Palestine Internet agency Hadara restricts access to certain content for users in Bethlehem

• March 2012: T-Mobile USA Web Guard *Parental controls* blocked number of websites (Newgrounds, Cosmopolitan Magazine, and the Tor Project

OONI STATISTICS





- Millions of network measurements collected from 190+ countries
- 2766+ unique ASNs

HELP REVEAL INTERNET CENSORSHIP

Install ooniprobe

Raspberry Pi



To install ooniprobe on Raspberry pi devices see our lepidopter install guide

OS X and Linux



To install ooniprobe on unix based systems read our installation guide



- Available for: Linux, Mac OS, Raspberry Pi, IOS, Android
- Source code:

https://github.com/TheTorProject/ooni-probe

GET INVOLVED

- IRC: #ooni on OFTC
- Mailing lists: ooni-dev, ooni-talk, ooni-operators
- Code: https://github.com/TheTorProject/ooni-probe (Mirror: https://gitweb.torproject.org/ooni-probe.git)
- Submit URLs for testing: https://ooni.torproject.org/get-involved/contributetest-lists
- Partnerships: https://ooni.torproject.org/getinvolved/partnership-program/