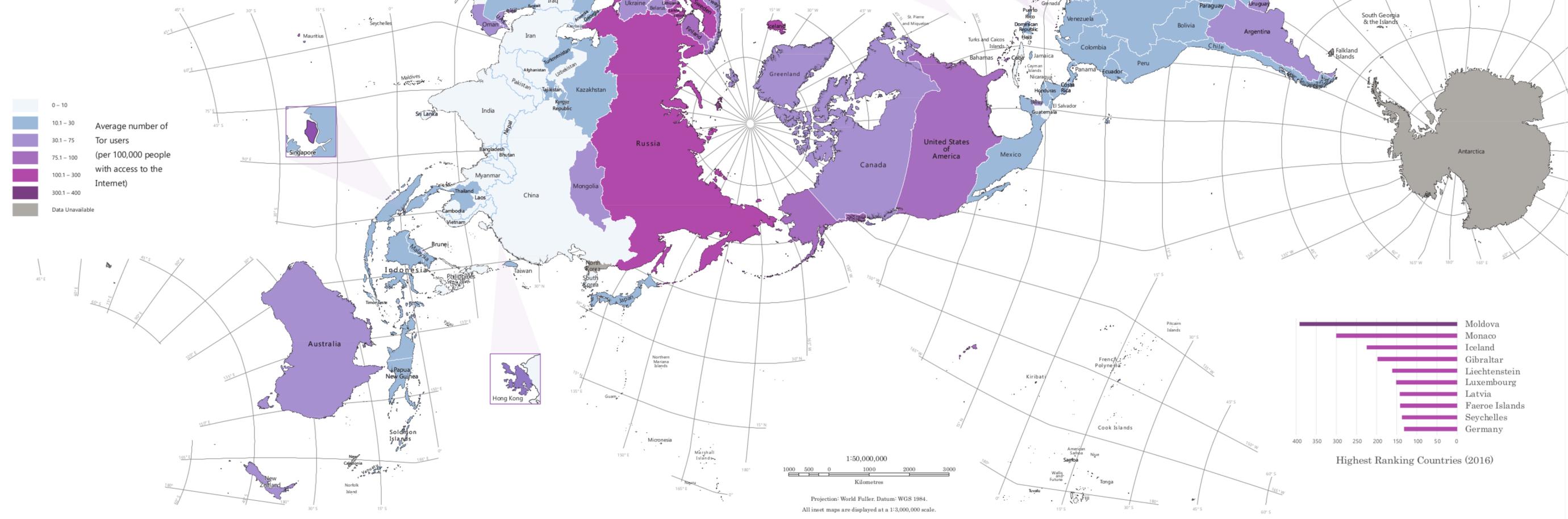


ANONYMOUSLY CONNECTED

Worldwide use of the Tor Network



Who Needs Privacy?

Global citizens have historically sought out privacy and anonymity for many reasons, prompting international debate and informing the constitutions of over 150 countries¹. The story of how these issues will translate to new communication technologies, such as the Internet, is still being told. Increasing public attention has been focused on online privacy since 2013's high-profile disclosures of the US National Security Agency's mass surveillance of phone call, email, and Internet activity of US citizens and foreign nationals².

Tor, originally created and deployed by the US Navy and now available to anyone as free software, is a way of enabling anonymous communication online, making anyone who uses it more difficult to track and monitor. Because it obscures users' locations, it can also be used to circumvent geographic blocking of content.

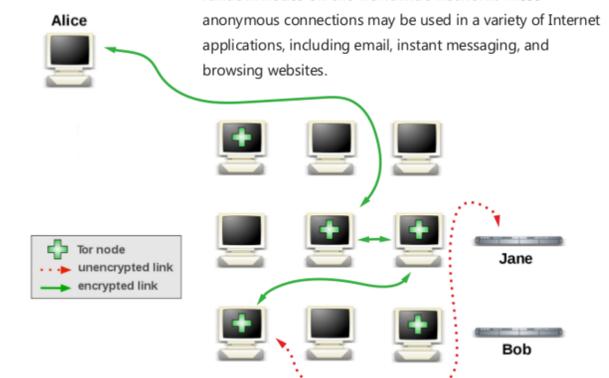
Privacy advocates argue that legitimate uses and benefits of anonymity tools like Tor outweigh the potential for abuse. While criminals may use this technology to help cover up their tracks, users may also include people living in regimes subject to state surveillance and censorship, journalists, IT professionals developing security solutions, social workers and their clients, and political dissidents.

Anonymity may also be valuable to people who want to stop advertising companies from harvesting data about their browsing habits and location, and users of public Wi-Fi networks, which do not provide a secure connection. Some users, meanwhile, simply hold a principled belief in the right to free expression and personal privacy, and may connect to Tor as a matter of preference, or in order to increase protection for others – the higher the number of connections, the less trackable any individual will be.

Tor is endorsed and praised by some civil liberties groups, and was awarded the Free Software Foundation's Award for Social Benefit in 2010, who cited its use in the ongoing democracy movements in North Africa and the Middle East during that time. The Tor Project and online privacy as an ethical issue have been discussed and debated in media outlets including The Guardian³, Vice Magazine⁴, and The New York Times (who have recently launched a secure version of their website accessible only via a Tor browser)⁵.

Although the users remain anonymous, the Tor Project is able to generate statistics regarding the origin of client connections to the network. This map displays, by country, the average number of people who have made a connection to the Tor network during 2016, for every 100,000 people in that country with access to the Internet.

How It Works



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Users' locations are obscured by the anonymous communication protocol called onion routing (the name Tor is an acronym for 'The Onion Router'). **When connected, messages from the user's computer are constantly encrypted and bounced in real time through a series of random nodes on the worldwide network.** These anonymous connections may be used in a variety of Internet applications, including email, instant messaging, and browsing websites.



Photo from <https://hive NYC.org> is licensed under CC-BY-SA 4.0.

January 19, 2017: Members of the Hive NYC educational group gather at the Mozilla headquarters in Brooklyn, New York for a meetup about digital privacy and surveillance, discussing growing concerns that marginalized groups in the US may be the targets for online surveillance, harassment, and identity theft, and discussing how to provide education and resources for youth participants.

January 25, 2018: Data Privacy Day was recognized in Canada with a workshop entitled **Secure Web Browsing and Anonymity with Tor Browser**. The event was held at the Toronto Public Library and featured a hands-on workshop led by a locally-based Tor developer, who shared knowledge and skills with over 40 community members in attendance.



Photo courtesy of Jonathon Hodge.