

somebody killed.

Lewman says that's what drives Tor's volunteers, including hundreds of computer scientists and professionals, who recognize there's an "arms race" between efforts such as Tor and the security services in countries that fear them. Other anonymizer tools are available, and may be adequate for some uses. But people using less effective tools sometimes get arrested.

Lewman says he's heard about sources' disappearances from journalists covering drug wars in Latin American countries where traffickers are tied in with intelligence services. "They say they don't understand. 'All we were doing was e-mailing each other. I didn't use my real name. He didn't use his real name.' "

Lewman's first inkling of data privacy's role in human rights came when he noticed something odd while monitoring his company's network in China. Late at night, when traffic should have been light, it was inexplicably busy. Chinese users were accessing its "virtual private networks" — cyber-tunnels, essentially, to open Internet servers in Japan and South Korea — to participate in the broader, uncensored world.

Lewman joined the Tor Project as a volunteer when he returned to the United States, and is now one of its 15 paid employees. What began as a loose, open-source coding project became a full-fledged nonprofit organization in 2006.

The transition was partly spurred a year earlier by Voice of America, which offered what became the first of a series of grants: \$200,000, enough to support two full-time employees.

"They said to us, 'We have tens of thousands of people using your software' " in countries with censorship, Lewman recalls. So the government-funded multimedia broadcaster offered a grant to improve the software and to translate it into more languages.

You may ask, as I did, whether there's a conflict between governments' legitimate interests in security and Tor's efforts to protect people who want anonymity online. Doesn't that include the bad guys?

It might. But Lewman says that concern is outweighed by the benefits — both abroad and at home — of speech and communications that are reliably secure. Undercover investigators, journalists and businesspeople are among its most avid users.

Lewman says law enforcement officials are even among the 3,000 volunteers who make their computers available for the complex, multifaceted software to work its anonymizing magic.

"They feel like they use Tor so much they should give something back," he says. "There are parts of the government that fund us and then there are parts of the government that wish everybody could be bar-coded and stamped 24 hours a day for their safety."

How does Tor work? The best metaphor may be the one it started with. It's built on software called an "onion routing protocol" that was developed in the 1990s by the U.S. Naval Research Lab to protect naval communications. You can peel back layer after layer, and still be hardly anywhere.

In the most basic terms, Tor routes encrypted communications through three different servers. Your e-mail from that coffee shop could go anywhere in the world — say, from Sweden to Argentina to Japan. And the encryption keys change every 10 minutes.

"Anyone watching the network, all they see is this encrypted traffic to these apparently random servers," Lewman says. "There's nothing else they could see."

You can find out more about Tor, and download its software, at www.TorProject.org

Contact Jeff Gelles at 215-854-2776 or jgelles@phillynews.com.

Vrei Sa Cresti Capre?

afaceri-capre.ro/FermaCapre

Descopera Acum Toate Secretele Unei Afaceri Cu Capre - Doar Aici

FEATURED ARTICLES



'Swiss Cheese Pervert' terrorizes Mayfair

More:

In Bulk Trucking, Chemical Leaman Is Rolling Toward The Top

Frank Nofer, 71, famed graphic artist George Mattson, 88, Olympian, Crew



Mob wife Alicia DiMichele faces sentence in Brooklyn



High school student says cops roughed him up for nothing

De Mazia Art Brings \$2.38 Million

Leader Of Jbm Sentenced To Life Aaron Jones Was Convicted Of Conspiring To Distribute \$100 Million In Cocaine. He D

Coach	Plans To Appeal.
	Jbm 8 Believed Founders

Index by Keyword | Index by Date | About Philly.com | Contact Us | Terms of Use & Privacy Statement | Copyright 2014