Local business helps protecting against cyberattacks

Ruppersberger had concerns about SOPA bill

by Bill Gates

The Stop Online Piracy Act, intended to help protect intellectual property rights on the Internet, is currently stalled in Congress after organized protests last month.

U.S. Rep. C.A. Dutch Ruppersberger (2nd District) had already expressed misgivings about the bill and stated his intention to vote against it.

"I won't be supporting it," Ruppersberger said in an interview in January. "I support the concept, but the bill, as written, needs to do more so it won't turn around and hurt our ability to defend against cyberattacks."

The irony — that a bill intended to fight online piracy would leave computers vulnerable to cyberattacks — was also noted by the owner of a local business devoted to protecting computers and networks from just such attacks.

"[As written,] SOPA would open up the door for other countries to [cyber] attack us easier," said Sean Rhudy, owner of Enhanced Computing Solutions on Holabird Avenue.

The bill would require Domain Name System (DNS) servers to stop referring requests for infringing domains (i.e., websites suspected of harboring pirated movies, software, music, etc) to their assigned IP addresses.

"The technical problem is, you can filter these websites out using DNS, but you circumvent the security protocols," Rhudy said. "You open the door for other risks."

As the ranking member of the House Intelligence Committee, Ruppersberger is involved in U.S. cybersecurity policy.

In November, he announced an investigation into the threat posed by Chinese-owned telecommunications companies working in the United States that provoked a response from the Chinese government.

The investigation, Ruppersberger said, would review the extent to which these companies provide the Chinese government an opportunity for greater foreign espionage, threaten the United States' critical infrastructure and further the opportunity for Chinese economic espionage.

"We are undergoing cyberattacks on a regular basis," Ruppersberger said. "The Chinese attack us on a regular basis.

"Some of our experts on cybersecurity say we can't pass [SOPA] until we resolve the cybersecurity issues."

As of earlier this week, SOPA's progress in Congress has been put on hold, partially due to online protests on Jan. 18 when several websites shut down.

Another bill, the Online Protection and Enforcement of Digital Trade Act (H.R. 782) was introduced two weeks ago by Rep. Darrell Issa, a Republican from California.

In a statement, Issa said his bill delivers stronger intellectual property rights for

Sean Rhudy, owner of Enhanced Computing Solutions on Holabird Avenue, helps individuals and businesses protect against cyberattacks with his account manager Dustin Goodman and technician Josh Perando. *photo by Roland Dorsey*

American artists and innovators while protecting the openness of the Internet.

Ruppersberger is, of course, concerned about cyberattacks on a national level.

But there's plenty of smaller threats to keep Rhudy and his company busy.

Rhudy started Enhanced Computing Solutions about 10 years ago. The company at first focused on residential computer systems, but now he estimates about 90 percent of their work is with commercial businesses.

"We still do work for 'walk-ins' for residents," Rhudy said. "We mainly help them manage threats. We believe in prevention, not reaction."

Many users, Rhudy said, don't even have anti-virus software installed.

Residential users are usually plagued by automatic viruses that try to steal passwords and other information by monitoring keystrokes, Rhudy said.

Businesses, on the other hand, will be attacked by an actual person attempting to break into their systems.

"We've noticed a spike in attacks on small companies," Rhudy said. "Servers hacked into people trying to steal the information."

In another twist, downloading pirated music files can introduce a script into a computer network, Rhudy said.

Using the Internet, e-mail and instant messages can also leave a company open to attacks.

Enhanced Computing Solutions does mostly consulting, plus surveillance work on systems to spot and eliminate vulnerabilities.

Ruppersberger particularly is concerned about cyberattacks on the nation's infrastructure — electrical grids, utilities, water-treatment plants, dams — as well as banks and air-traffic control systems.

It's a valid fear, Rhudy said.

"What have hackers stolen from us? Rather, what haven't they?" he said. "That's how vulnerable we are.

"Our infrastructure systems were not made to be on the Internet. But now they are, and attacks are a huge, huge concern."