Georgia Tech releases cyber threats forecast for 2013

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The year ahead will feature new and increasingly sophisticated means to capture and exploit user data, escalating battles over the control of online information and continuous threats to the U.S. supply chain from global sources. Those were the findings made by the Georgia Tech Information Security Center (GTISC) and the Georgia Tech Research Institute (GTRI) in today's release of the Georgia Tech Emerging Cyber Threats Report for 2013.

The report was released at the annual Georgia Tech Cyber Security Summit, a gathering of industry and academic leaders who have distinguished themselves in the field of cyber security.

According to GTISC, GTRI and the experts cited in the report, specific threats to follow over the coming year include, among others:

- Cloud-based Botnets – The ability to create vast, virtual computing resources will further convince cyber criminals to look for ways to co-opt cloud-based infrastructure for their own ends. One possible example is for attackers to use stolen credit card information to purchase cloud computing resources and create dangerous clusters of temporary virtual attack systems.
- Search History Poisoning – Cyber criminals will continue to manipulate search engine algorithms and other automated mechanisms that control what information is presented to Internet users. Moving beyond typical search-engine poisoning,

researchers believe that manipulating users' search histories may be a next step in ways that attackers use legitimate resources for illegitimate gains.

- Mobile Browser and Mobile Wallet Vulnerabilities – While only a very small number of U.S. mobile devices show signs of infection, the explosive proliferation of smartphones will continue to tempt attackers in exploiting user and technology-based vulnerabilities, particularly with the browser function and digital wallet apps.
- Malware Counteroffensive – The developers of malicious software will employ various methods to hinder malware detection, such as hardening their software with techniques similar to those employed in Digital Rights Management (DRM), and exploiting the wealth of new interfaces and novel features on mobile devices.

"Every year, security researchers and experts see new evolutions in cyber threats to people, businesses and governments," said Wenke Lee, director of GTISC. "In 2013, we expect the continued movement of business and consumer data onto mobile devices and into the cloud will lure cyber criminals into attacking these relatively secure, but extremely tempting, technology platforms. Along with growing security vulnerabilities within our national supply chain and healthcare industry, the security community must remain proactive, and users must maintain vigilance, over the year ahead."

"Our adversaries, whether motivated by monetary gain, political/social ideology or otherwise, know no boundaries, making cyber security a global issue," said Bo Rotoloni, director of GTRI's Cyber Technology and Information Security Laboratory (CTISL). "Our best defense on the growing cyber warfront is found in cooperative education and awareness, best-of-breed tools and robust policy developed collaboratively by industry, academia and government."

Today's Georgia Tech Cyber Security Summit is one forum where the IT security ecosystem can gather together to discuss and debate the evolving nature of cyber threats, and to chart the course for creating solutions through collaborations among industry, government and academia. The 2012 Summit was keynoted by Brendan Hannigan, IBM Internet Security and included a panel of security experts from Damballa, AirWatch, E*TRADE, MAAWG, Pindrop Security and Symantec Research Lab.

More information: The report can be downloaded by visiting www.gtsecuritysummit.com/report.html

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