BITAG Announces Technical Review Focused on Internet of Things (IoT) Security and Privacy Recommendations

Report will explore the technical aspects of the security and privacy of networked consumer devices

Denver, CO (JUNE 28, 2016): The Broadband Internet Technical Advisory Group (BITAG) is pleased to announce a review focused on the technical aspects of Internet of Things (IoT) security and privacy. This topic will result in a report with an anticipated publication date in Fall 2016.

The number of consumer devices that are connected to the Internet has been increasing rapidly, and these are included in what many call the "Internet of Things" (IoT). While BITAG's IoT report will not review general-purpose devices such as computers, smartphones, or tablets, IoT devices can include: sensors to better understand patterns of daily life and monitor health, monitors and controls for functions in residential homes (from locks to water systems, etc), and devices or appliances that anticipate a consumer's needs and can take action to address them (e.g., devices that monitor inventory and automatically order replacement products for a consumer). When combined with data analysis and machine learning, IoT devices may be able to take more proactive actions, highlight interesting information to end users, or make suggestions to end users that may affect their health, environment, finances, or other aspects of their lives.

The emergence of IoT presents opportunities for significant innovation, ranging from smart homes to smart cities and more. Some IoT devices are shipped with security flaws that can put end users at risk and negatively affect their Internet experience, for a variety of reasons. To address the technical issues underlying these security and privacy related concerns, BITAG's technical working group will analyze this topic and issue a report that will describe the issue in depth, highlight technical observations, and suggest appropriate best practices.

The lead editors of BITAG's report on IoT security and privacy are Jason Livingood, Vice President of Internet Services at Comast and Nick Feamster, Professor of Computer Science at Princeton University. Douglas Sicker, Executive Director of BITAG, Chair of BITAG's Technical Working Group, Department Head of Engineering and Public Policy and a professor of Computer Science at Carnegie Mellon University, will chair the review itself.

This will be BITAG's ninth technical review and report. BITAG's recent reports have focused on: differentiation of Internet traffic, Internet interconnection, real-time network management of Internet congestion, and port blocking, among other topics. Copies of these technical reports can be found on the BITAG website at www.bitag.org.

About BITAG. BITAG is a non-profit, multistakeholder organization focused on bringing together engineers and technologists in a Technical Working Group (TWG) to develop consensus on broadband network management practices and other related technical issues that can affect users' Internet experience, including the impact to and from applications, content and devices that utilize the Internet.

BITAG's mission includes: (a) educating policymakers on such technical issues; (b) addressing specific technical matters in an effort to minimize related policy disputes; and (c) serving as a sounding board for new ideas and network management practices. Specific TWG functions also may include: (i) identifying "best practices" by broadband providers and other entities; (ii) interpreting and applying "safe harbor" practices; (iii) otherwise providing technical guidance to industry and to the public; and/or (iv) issuing advisory opinions on the technical issues germane to the TWG's mission that may underlie disputes concerning broadband network management practices.

BITAG TWG reports focus primarily on technical issues, especially those with the potential to be construed as anti-competitive, discriminatory, or otherwise motivated by non-technical factors. While the reports may touch on a broad range of questions associated with a particular network management practice, the reports are not intended to address or analyze in a comprehensive fashion the economic, legal, regulatory or public policy issues that the practice may raise.

BITAG Leadership –

Executive Director & Chair of the Technical Working Group – Dr. Douglas C. Sicker is BITAG's Executive Director and Chair of the Technical Working Group. Doug is also currently the Department Head and professor of Engineering and Public Policy with a joint appointment in the School of Computer Science at Carnegie Mellon University, as well as the Chief Strategist of CMMB Vision. Previously, Doug was the DBC Endowed Professor in the Dept. of Computer Science at the University of Colorado at Boulder with a joint appointment in, and director of, the Interdisciplinary Telecommunications Program. Doug recently served as the Chief Technology Officer and Senior Advisor for Spectrum at the National Telecommunications and Information Administration (NTIA). Doug also served as the Chief Technology Officer of the Federal Communications Commission (FCC).

Deputy Director & General Counsel – Kaleb A. Sieh is BITAG's Deputy Director and General Counsel, where he performs an operations and legal role. Previously, he was a Research Fellow at the Silicon Flatirons Center at the University of Colorado Law School, where he engaged in research and writing in telecommunications law, technology, and policy. He received his J.D. from CU-Law and his B.A. in Economics from CU as well.

About BITAG's Technical Review Process. BITAG's core substantive work is performed through its Technical Working Group (TWG), which was formed with the core principles of being: technically driven, balanced, open, efficient, independent, and flexible. The TWG reviews technical issues brought to it through Review Requests submitted by both Members and non-Members, or through a majority weighted vote of the TWG engineers themselves. Each individual Review is taken up by a Committee of the TWG that is composed of engineers and technical experts representing a broad cross section of the Internet ecosystem. TWG Committees generally operate on a consensus basis, with backstop weighted voting procedures so that when consensus cannot be achieved, each Member category has an equal say in the work product regardless of the composition of the Committee. Finally, BITAG was structured to work as expeditiously as possible, with each Committee operating under a 120-day "shot clock" to complete the respective review and attendant technical report.

Questions, Suggestions or Topics? BITAG welcomes any questions, comments or suggestions. Also, if you are interested in submitting a technical review request to BITAG, please contact our Deputy Director, Kaleb Sieh, at ksieh@bitag.org.