Anonymous Communication and its Importance in Social Networking

Nguyen Phong HOANG, Davar PISHVA

Institute of Information & Communications Technology, APU (Ritsumeikan Asia Pacific University), Japan nguyho10@apu.ac.jp, dpishva@apu.ac.jp

Abstract—Digital information has become a social infrastructure and with the expansion of the Internet, network infrastructure has become an indispensable part of social life and industrial activity for mankind. For various reasons, however, today's networks are vulnerable to numerous risks, such as information leakage, privacy infringement and data corruption. Through this research, the authors tried to establish an in-depth understanding of the importance of anonymous communication in social networking which is mostly used by ordinary and non-technical people. It demonstrates how the commonly used non-anonymous communication scheme in social networking can turn the Internet into a very dangerous platform because of its built-in nature of making its users' identity easily traceable. After providing some introductory information on internet protocol (IP), internal working mechanism of social networking and concept of anonymity on the Internet, Facebook is used as a case study in demonstrating how various network tracing tools and gimmicks could be used to reveal identity of its users and victimize many innocent people. It then demonstrates working mechanism of various tools that can turn the Facebook social networking site into a safe and anonymous platform. The paper concludes by summarizing pros and cons of various anonymous communication techniques and highlighting its importance for social networking platforms.

Keyword—A Security, Privacy, Network Tracing Tools, Anonymous Communication Tools, Social Networking, Facebook



Nguyen Phong HOANG was born in Tien Giang, Vietnam in 1992. He is presently a student at College of International Management, Ritsumeikan Asia Pacific University (APU), Beppu, Japan. He belongs to APU's Crossover Advanced Program (CAP), majoring in information & communication technology (ICT). He has received numerous scholarship and awards; APU Tuition Reduction Scholarship from 2010-2014, JASSO (Japan Student Services Organization) Scholarship from 2011-2012, and TOYOTA Tsusho Scholarship from 2013-2014. His research interests include information security, privacy and anonymous communication. He hopes to advance his research on TOR (The Onion Router), one of the most robust anonymous tools, during his graduate studies. He became an IEEE member in 2013.



Davar Pishva is a professor in ICT at the College of Asia Pacific Studies, Ritsumeikan Asia Pacific University (APU) Japan and presently serves as the Dean of College of Asia Pacific Studies. In teaching, he has been focusing on information security, technology management and carries out his lectures in an applied and practical manner. In research, his current interests include information security, environmentally sound and ICT enhanced technologies, and e-learning. He received his PhD degree in System Engineering from Mie University, Japan. He is Secretary General of IAAPS (International Association for Asia Pacific Studies), Senior Member of IEEE, and a member of IEICE (Institute of Electronics Information & Communication Engineers), IAAPS and University & College Management Association.