

MIST 2015: 7th International Workshop on Managing Insider Security Threats

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ABSTRACT

In this paper, we provide a brief summary of the 7th International Workshop on Managing Insider Security Threats (MIST 2015). MIST 2015 is held in conjunction with the 22nd ACM Conference on Computer and Communications Security (ACM CCS 2015). The workshop aims to showcase the most recent challenges and advanced technologies for managing insider security threats.

Categories and Subject Descriptors

K.6.5 [Security and Protection]: *Invasive software (e.g., viruses, worms, Trojan horses), Unauthorized access (e.g., hacking, phishing).*

General Terms

Insider threats, Data leakage prevention, Cyber security and defense.

Keywords

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1. INTRODUCTION

Nowadays, insider attacks by authorized users have considerably increased with great potential to cause critical damages [1]. For example, malicious insiders can harm their organizations by stealing intellectual property, sabotaging corporate IT systems, or misusing IT systems to execute financial fraud. However, in spite of rigorous researches, it still remains one of the most difficult challenges in the areas of security to prevent, detect, and respond to insider threats and attacks [2, 3].

Motivated by this, the MIST workshop has been annually held since 2009 with the purpose of providing a forum for the most recent challenges and advances in defending against insider security threats and information leakages as follows:

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- **1st MIST** (in conjunction with IFIPTM 2009)
June 16, 2009, Purdue University, West Lafayette, USA
- **2nd MIST** (in conjunction with IFIPTM 2010)
June 15, 2010, Morioka, Iwate, Japan
- **3rd MIST** (in conjunction with InCos 2011)
December 1-2, 2011, Fukuoka Institute of Technology, Fukuoka, Japan
- **4th MIST**
November 8-9, 2012, Kyushu University, Fukuoka, Japan
- **5th MIST**
October 24-25, 2013, Pukyong National University, Busan, Rep. of Korea
- **6th MIST**
November 21-22, 2014, Konkuk University, Seoul, Rep. of Korea

The main topics of MIST 2015 include but not limited to:

- Theoretical foundations and algorithms for addressing insider threats
- Insider threat assessment and modeling
- Security and cryptography technologies to prevent, detect and predict insider threats
- Cryptographic protocols against insider threats
- Validating the trustworthiness of staff
- Post-insider threat incident analysis
- Data breach modeling and mitigation techniques
- Registration, authentication and identification
- Certification and authorization
- Database security
- Device control system
- Digital forensic system
- Fraud detection
- Network access control system
- Intrusion detection
- Keyboard information security
- Information security governance
- Information security management systems
- Risk assessment and management

- Log collection and analysis
- Trust management
- IT compliance (audit)
- Continuous auditing
- Corporate ethics, accountability and integrity

2. MIST PROGRAM

MIST 2015 is a one-day workshop, which takes place on October 16, 2015 in conjunction with the ACM CCS 2015 in The Denver Marriot City Center, Denver, Colorado, USA. The workshop provides six oral and four poster presentations. Moreover, it is powered by the following invited talk and panel discussion:

- Invited talk: Dr. William R. Claycomb
“Detecting Insider Threats: Who Is Winning the Game?”
- Panel discussion: Prof. Kangbin Yim *et al.*
“Cyber Threats to Industrial Control Systems”

3. WORKSHOP ORGANIZERS

Ilsun You (general co-chair) received his M.S. and Ph.D. degrees in Computer Science from Dankook University, Seoul, Korea in 1997 and 2002, respectively. Also, he obtained his second Ph.D. degree from Kyushu University, Japan in 2012. Now, he is working as an associate professor at Soon Chun Hyang University, Republic of Korea. Dr. You has published more than 120 papers and 30 special issues in his main areas including internet security, formal security analysis, and insider threats. He is a Fellow of the IET and a Senior member of the IEEE.

Elisa Bertino (general co-chair) is Professor of Computer Science at Purdue University, and serves as research director of the Center for Education and Research in Information Assurance and Security (CERIAS) and Director of Cyber Center (Discovery Park). Previously, she was a faculty member and department head at the Department of Computer Science and Communication of the University of Milan. Her main research interests include security, privacy, digital identity management systems, database

systems, distributed systems, and multimedia systems. She has served as chair of the ACM SIGSAC and as a member of the editorial board of the following international journals: IEEE Security & Privacy, ACM Transaction on Information and System Security, IEEE Transactions on Dependable and Secure Computing, ACM Transactions on Web. She is currently the editor in chief of IEEE Transactions on Dependable and Secure Computing and served as editor in chief of the VLDB Journal. She co-authored the book "Identity Management - Concepts, Technologies, and Systems". She is a fellow of the IEEE and a fellow of the ACM. She received the 2002 IEEE Computer Society Technical Achievement Award for outstanding contributions to database systems and database security and advanced data management systems and the 2005 IEEE Computer Society Tsutomu Kanai Award for pioneering and innovative research contributions to secure distributed systems.

4. ACKNOWLEDGMENTS

We would like to express our special thanks to all authors who submitted papers as well as the program committee members for their timely and nice review work. In addition, we thank the invited speaker and the panelists for their contribution.

5. REFERENCES

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