

Title: New directions in Cloud Computing Security

Abstract:

Cloud computing is considered as one of the most prominent paradigms in the information technology industry, since it can significantly reduce the costs of hardware and software resources in computing infrastructure. This convenience has enabled corporations to efficiently use the cloud storage as a mechanism to share data among their employees.

In this talk, I will describe two new directions on cloud computing security. The first issue deals with the extension of public key encryption with equality test. We revisit the notion and introduce the case where multi-ciphertext equality test is required. The second direction is with focussing on the effort to use cloud computing as a mechanism for data sharing. We consider a new direction where a malicious data publisher is involved.

Short Biography:

Willy Susilo is a Distinguished Professor in the School of Computing and Information Technology, Faculty of Engineering and Information Sciences at the University of Wollongong (UOW), Australia. He is the director of Institute of Cybersecurity and Cryptology, School of Computing and Information Technology, UOW and the Head of School of Computing and Information Technology at UOW.

He is an IEEE Fellow, an IET Fellow, an ACS fellow and an AAIA fellow. He was awarded the prestigious Australian Research Council Future Fellowship in 2009. In 2016, he was awarded the "Researcher of the Year at UOW. He is the Editor-in-Chief of the Elsevier's Computer Standards and Interfaces and the MDPI's Information journal. He is currently an Associate Editor of IEEE Transactions on Dependable and Secure Computing, ACM Computing Surveys and Elsevier's Computers and Security. He has also served as the program committee member of several international conferences.