## Editorial

Volume 5 Issue 4 is a special issue that draws the best papers from the _Conference on Availability, Reliability and Security_ (ARES/CISIS 2009), held in Fukuoka, Japan in March 2009. Majority of the work in terms of undertaking reviews, identifying pertinent papers was undertaken by Edgar Weippl and Amin Anjomshoaa, both of Secure Business Austria and Priv.-Doz. at the Vienna University of Technology, Austria.

The ARES special issue presents 3 papers. The first paper is by Mehran Ahsant of Royal Institute of Technology, Sweden and Jim Basney of University of Illinois at Urbana-Champaign, USA. In their paper titled "Workflows in Dynamic and Restricted Delegation" the authors argue that top-down delegation of rights is usually not possible in highly dynamic situations since it may not be possible to anticipate all the necessary requirements. Since allowing more or less rights can cause significant problems, determining and acquiring only required rights and credentials for completing a task, when they are needed may be the correct requirement. The authors refer to such a model as an on-demand delegation framework that provides just-in-time acquisition of rights for a restricted and dynamic delegation. In a final synthesis the authors define and present a formal model for bottom up delegation.

The second paper is by Marco Descher, Philip Masser, Thomas Feilhauer of Vorarlberg University of Applied Sciences, David Huemer and A Min Tjoa of Vienna University of Technology, Austria. In their paper "On Retaining Data Control to the Client in Infrastructure Clouds", the authors present a sample implementation of a secure virtual machine that consists of an encrypted partition, containing the data to be hosted, and a boot system, containing the logic to verify and access the encrypted partition. Such an implementation is important since Cloud Computing involves handing over of ultimate control of the data to the vendor (third party). The model presented by the authors illustrates how data control can be retained by the user.

The third paper is by Chunyan Mu and David Clark of King's College London, UK. Titled, "Automatically Compute Information Flow Quantity via Probabilistic Semantics", the authors argue that it would be useful to quantify

information flows in the computational world since information about confidentiality inputs may flow to public outputs. Using probabilistic semantics, the authors present an automatic quantitative analyzer that is based on the leakage definition of the relevant language.

We hope that this special issue makes a useful contribution to the body of knowledge and will become reference material for future research.

**Gurpreet Dhillon,**
**Editor-in-Chief**