

# Jordan University of Science and Technology

## Security-Aware Placement and Migration Algorithm in IaaS Interclouds

**Authors:** Abdalrhman Almodawar Mahmoud Al-Ayyoub Mohammad S. Alhammouri

**Abstract:** Recently, the cloud computing paradigm experienced an increase in popularity and expansion through small, medium and large companies and enterprises as well as individuals. This surge of interest has raised many concerns and fears related to many aspects of these systems such as security, performance, availability, ability of customization, difficulties to integrate cloud with in-house IT, etc. A major concern when using cloud computing is the security issue raised by the fact that cloud computing systems allow users share resources even if are adversaries. This will allow cross Virtual Machine (VM) attacks. A simple and very effective way of preventing this kind of attacks is physically separating adversaries. In this paper, we present a VM placement and migration policy for Interclouds built around this idea.