

**ANNOUNCEMENT**

Engiweb Security new Technical Paper has been selected for the:

**24th IFIP - International Information Security Conference (SEC 2009)  
held in Cyprus on May 18-20, 2009**

**Paper title and authors**

**Mining Stable Roles in RBAC**

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**Paper abstract**

In this paper we address the problem of generating a candidate role-set for an RBAC configuration that enjoys the following two key features: it minimizes the administration cost; and, it is a stable candidate role-set. To achieve these goals, we implement a three steps methodology: first, we associate a weight to roles; second, we identify and remove the user-permission assignments that cannot belong to a role that have a weight exceeding a given threshold; third, we restrict the problem of finding a candidate role-set for the given system configuration using only the user-permission assignments that have not been removed in the second step—that is, user-permission assignments that belong to roles with a weight exceeding the given threshold. We formally show—proof of our results are rooted in graph theory—that this methodology achieves the intended goals. Finally, we discuss practical applications of our approach to the role mining problem.

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