

A Collaborative Access Control Framework for Online Social Networks

Hanaa Alshareef, Raúl Pardo, Gerardo Schneider, Pablo Picazo-Sanchez

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Abstract

Most Online Social Networks allow users to set their privacy settings concerning posting information, but current implementations do not allow a fine grained enforcement in case the posted item concerns other users. In this paper we propose a new collaborative access control framework that takes into account the relation of multiple users for viewing as well as for sharing items, eventually solving conflicts in the privacy settings of the users involved. Our solution is based on the sensitive level of users with regard to the posted item and on trust among users. We provide a thorough evaluation of our framework where we focus on how varying some of the parameters directly influence the outcome of the permitting/denying decision of the proposed algorithms. Last but not least, we present a proof-of-concept implementation of our approach in Diaspora, an open source social network.