Chapter 1

On Social Network Engineering for Secure Web Data and Services

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ABSTRACT

Online Social Network (OSN) applications are used every day by millions of people, and have impacts on the society, economy and lifestyle. They also accelerate the development, or the adoption, of new technologies, for instance to support new mobile paradigms. Besides, OSNs are an important building block of the Web 2.0, thus offering new services, such as product placement, advertising and user profiling. Hence, OSNs are valuable frameworks, contributing to the technological pool of the Internet itself. Their attitude of shifting an individual life into a digital space makes OSNs interesting targets for attacks, to disclose personal details, and to force human securities through digital insecurities. In order to be effective, OSN platforms must be properly engineered, also by having privacy and security protection as strict design constraints. To this aim, it is of crucial importance investigating potential new behaviors, Web-based technologies, traffic patterns and innovative security policies. In this perspective, this chapter discusses the state-of-the-art in the engineering of OSNs infrastructures, the key issues, and the research actions needed to effectively advance in the social network engineering for secure Web data and services.

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