Guest editors' preface

Data and information have become critical resources for organizations. Protecting the data and controlling access to the data is becoming increasingly important. As new technologies emerge, security takes on new dimensions. For example, the web has resulted in new security concerns for the various applications and databases. Much research is being carried out on data and applications security. One of the premier conferences in this area is the IFIP 11.3 Working Conference on Data and Applications Security. This special section consists of five papers which are enhanced versions of the papers presented at the Fourteenth Working Conference held in Schoorl, The Netherlands, 21–23 August 2000. All 35 papers, presented at the conference, have been published in [1].

The first paper by Devanbu, Gertz, Martel and Stubblebine focuses on integrity aspects of publishing large infrequently updated databases. They develop techniques for ensuring trust but at the same time allowing more scalable publication of large databases. The second paper by Barbará, Goel and Jajodia discusses techniques for protecting file systems against corruption. In particular they develop checksum techniques to accomplish this. The third paper by Hale, Papa and Shenoi discusses language extensions for programmable security. In particular access control extension to Java is proposed. The fourth paper by Teepe, van de Riet and Olivier describes how workflow can be analyzed for security and privacy. This will enable people to check whether companies are maintaining privacy rules. The fifth paper by Altenschmidt, Biskup, Flegel and Karabulut describes a security architecture for multimedia mediators. In particular, the security module controls the usage of credentials.

The five papers discussed in this special section describe some of the key research being carried out in data and applications security. As new technologies emerge there will be new areas and opportunities for data and applications security research.

Reference

[1] B. Thuraisingham, R. van de Riet, K. Dittrich and Z. Tari, eds, *Data and Applications Security, Developments and Directions, Proceedings of the IFIP-WG11.3 Conference on Security and Database*, Kluwer Academic Publishers, 2001.

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