

Securing Mobile Computing: Ensuring Safety in the Digital Realm

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Abstract: *As more and more people enjoy the various services brought by mobile computing, it is becoming a global trend in today's world. At the same time, securing mobile computing has been paid increasing attention. In this article, we discuss the security issues in mobile computing environment. Reanalyse the security risks confronted by mobile computing and present the existing security mechanisms. As mobile computing becomes increasingly ubiquitous in both personal and professional spheres, ensuring the security of mobile devices and the data they handle is paramount. This paper explores the challenges and solutions involved in securing mobile computing environments to maintain confidentiality, integrity, and availability. The abstract begins by examining the unique characteristics of mobile computing, including limited resources, diverse communication channels, and varying degrees of trust in network infrastructures. These characteristics introduce vulnerabilities that must be addressed to mitigate risks effectively. Next, the paper discusses the fundamental principles of mobile security, including encryption, authentication, and access control. These principles form the basis of a comprehensive security framework designed to protect data both at rest and in transit. Techniques such as end-to-end encryption, biometric authentication, and multi-factor authentication are explored in detail.*

Keywords: mobile computing