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Subject:	Component for storing encrypted data in Pocket PC
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Annotation:

In modern society everybody needs to be able to carry various kinds of personal information with them, while at the same time somebody else gaining access to it could have dire consequences. Increasing numbers of people use mobile phones, pocket computers, as well as other mobile devices, to have access to their personal information everywhere, anytime. There is a need for the development of applications that store their users' data securely, in encrypted form. These applications, however, need a suitable storage mechanism for storing their encrypted information.

This diploma paper develops a component for data storage, enabling fast access and secure storage of large amounts of encrypted data for Pocket PC application that enables secure data storage. The needs of the application using the component are analyzed. Based on this analysis, a file format is designed to allow effective storage and data access, with the file operations designed to not allow leaving the file in an inconsistent state should an unforeseen situation occur. Various resource management algorithms are described.

The component's architecture is flexible, allowing its easy expansion with future functionality. The component is tested extensively by using an automated test application, and is successfully applied in practice in an application for secure storage of personal information.