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Browser Plugin to interact with SkyTrust

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Plugin to securely store data in cloud storage services.

Online services for data storage (e.g. Dropbox, Google Drive) provide no ability to encrypt stored data prior to the actual upload process. Desktop programs of third-party vendors are in principle capable of supplying this functionality. However, these applications are likely not available for specific (mobile) operating systems or fail to protect sensitive key material adequately. As a consequence, in this project a browser plugin for Google Chrome has been elaborated as a proof-of-concept which rewrites existing browser interfaces in order to insert a transparent encryption layer. Instead of relying on tertiary desktop applications, cryptographic operations are performed on a secure platform, named SkyTrust, which also protects the used key material. The advantage of this approach is that existing web applications require no adaptation in order to cryptographically protect a user's data.