Multifactor, multiple people. Authentication approach for unlocking encrypted fies.

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Proposal of a system to authenticate access to encrypted files using both Multifactor and multiple people, across different locations.

Multifactor | Encryption

Introduction

Controlling who has access to files is often a requirement in industry and various other contexts. Systems for dealing with information that only is accessible with multiple peoples consent is therefore interesting to investigate. Software for file access control purposes include Dell Identity Manager[2], User Lock Access Manager [1] and native OS support such as an Access Control List. These systems is not adressing security as such, as not providing encryption capabilities. Common for these solutions is that file access is administered centrally by a administrator. We propose an approach were users actively set file permissions by agreeing to encrypt files by their common consent, only allowing access to these files when all parties has responded to the access request. The latter step is additionally secured by Mulfifactor Authentication.

System Description

System Description with figure.

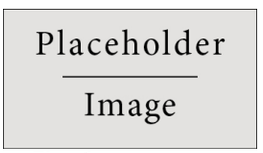

Fig. 1. Figure caption

Discussion

Discussion on strenghts and weaknesses of the solution

ACKNOWLEDGMENTS. This work was supported by..

1. **http://www.isdecisions.com/lp/userlock/userlock-windows-network-security.htm?gclid=CMfPI-rqisQCFciBfgodhxwAmQ**

2. **http://software.dell.com/products/identity-manager-data-governance/**

Reserved for Publication Footnotes

Table 1. Table caption

Treatments	Response 1	Response 2
Treatment 1	0.0003262	0.562
Treatment 2	0.0015681	0.910
Treatment 3	0.0009271	0.296