

Title (en)

STORAGE SECURITY USING CRYPTOGRAPHIC SPLITTING

Title (de)

SPEICHERSICHERHEIT UNTER VERWENDUNG KRYPTOGRAFISCHER AUFTEILUNG

Title (fr)

SÉCURITÉ DE STOCKAGE PAR SÉPARATION CRYPTOGRAPHIQUE

Publication

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Application

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Abstract (en)

[origin: WO2010057191A2] Methods and systems for storing data securely and presenting a virtual disk in a secure data storage network are disclosed. One method includes receiving at a secure storage appliance a block of data for storage on a volume, the volume associated with a plurality of shares distributed across a plurality of physical storage devices. Another method includes receiving client credentials from a client device, the client credentials including a client identifier. The method also includes cryptographically splitting the block of data received by the secure storage appliance into a plurality of secondary data blocks. The method further includes encrypting each of the plurality of secondary data blocks with a different session key, each session key associated with at least one of the plurality of shares. The method also includes storing each data block and associated session key at the corresponding share, remote from the secure storage appliance. The method also includes authenticating the client device at a secure storage device. The method further includes determining a volume is associated with the client device based upon the client identifier, the volume associated with a plurality of shares stored on a corresponding plurality of physical storage devices. The method also includes, upon determining the volume is associated with the client device, presenting the volume to the client device.

IPC 8 full level

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Citation (search report)

See references of WO 2010057191A2

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US 2003084290 A1 20030501 - MURTY KUMAR [CA], et al

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