NOVEL METHOD TO UPGRADE EXISTING SECURE COMPUTER SYSTEMS TO ENFORCE TWO-PERSON CONTROLS TO PROTECT AGAINST THE INSIDER THREAT

Objective: Seeking corporate partner in the information security space to develop and monetize a patent-pending method to enforce two-person-control rules in a secure-computing system to protect against mistakes and the insider threat:

- Develop application software
- File for international patents
- Market to potential customers
- Product Installation and servicing

Market: Secure computer systems, servers, and databases that must protect the confidentiality and integrity of sensitive information such as classified information, personally identifiable information, medical records, financial records, and proprietary information.

Advantages:

- Reduces risk from the insider threat (system administrator gone rogue)
- Reduces risk of data breaches caused by mistakes
- Enables efficient workflow while adding protection
- Method can be patched onto an existing secure computer systems
- Existing user-access controls determine which resource requests are allowed by an individual – higher privilege resource requests are performed under two-person control
- High-risk resource requests can have higher levels of protection with m-person controls
- Leverages public-private key cryptography to protect the integrity and non-repudiation of resource requests

Patent Pending: U.S. Patent Application No. 15857716 (filing date Dec. 29, 2017) (Niall Duffy, applicant)

Technical abstract: A script running with highest privilege executes resource requests requiring two-person control, but only after validating a first digital signature signed by a requester and validating one or more additional digital signatures signed by reviewers. To detect playback attacks, a nonce can be included in the signed message and compared with nonce values from previously processed resource requests. The method enables efficient workflow while limiting privilege of system administrators to protect against the insider threat.

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