SecureChain in business.

A white paper.

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1. Introduction

"In June 2003, the US Government announced that Rijdael – Advanced Encryption Standard may be used for classified information" (east-tec.com). An endorsement by the public sector proving how secure Advanced Encryption Standard (AES) is. AES is also implemented in the private sector. It can be used in a web application, to secure data. Alongside encryption standards, different efforts to increase security on the web are being developed.

2 factor authentication was introduced to confirm a user's identity. A GSM SMS is sent to the user's phone with a code. This code is entered and verified with the server. Once the verification process is complete, the user will be signed in. Nonetheless, vulnerabilities of servers also present a threat. In the event of a server breach, any clear text data can be used by attackers. How can the private sector implement encryption without weighing their data's risk?

2. The bottleneck of integration.

Here is a list of AES integration bottlenecks SecureChain addresses :

- Update a codebase to support encryption (End users may lack full control of their data's encryption if implemented).
- AES-256 key storage.
- Key sharing between users of your organization.
- Enable AES encryption/decryption on users' devices.

3. A low cost integration.

SecureChain connects to your devices via browser or mobile extension (refer to GIF https://sc.gophersauce.com/sc20.gif). The extension manages the user's session and offers a seamless encryption experience. SecureChain features a web portal to help users manage their account. Within this portal, users can update a password, give another user access to their encrypted data or enable 2 factor authentication (refer to GIF https://sc.gophersauce.com/sc21.gif). The extension is open source, with a native codebase for each target platform.

4. Requirements

SecureChain is a web server you can install anywhere. It requires 64Mb of
ram, a CPU with frequency 100Mhz and a hard disk with at least 5Gb free. The
size of disk may increase depending on the number of users in your organization.
SecureChain also provides Kubernetes deployments. It is ready for docker as well.
You will need to configure SecureChain on the first launch to interact with your
authentication system.

5. Summary

SecureChain provides encryption/decryption services to any user of your
organization. This is possible with the help of mobile and browser extensions.
SecureChain is deployed as service within your organization. To learn more about
SecureChain visit : https://sc.gophersauce.com. To inquire about SecureChain send
a message to : botsecurechain@gmail.com

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Works Cited

East-tec.com. "In June 2003, the US Government announced that Rijdael –
Advanced Encryption Standard may be used for classified information.".
https://www.east-tec.com/kb/what-is-the-aes-standard/.