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Why is Blockchain Authentication & Secure Evidence (BASE) critical?

BASE provides novel, "zero trust" solutions to critical challenges, helping to improving cybersecurity posture.

Why Deloitte and BASE to help improve your cybersecurity posture?

A stronger cybersecurity posture enabled by passwordless blockchain-based distributed identity (DID) subnet architecture can assist in efforts to mitigate internal and external cybersecurity risks, reduce the cost of attack remediation, and protect your company's brand and reputation. Deloitte has been serving the blockchain and digital asset ecosystem for over a decade and is a recognized leader in serving corporates, digital asset, blockchain, fintech, and payment companies.

Blockchain & Digital Assets

BASE



12+ years

of experience navigating through dynamic digitall asset regulatory landscape



Trusted advisor

to the blockchain and digital asset ecosystem

Cost Effective



Subject matter specialists

across the various risk domains



Experienced

serving clients from startups to global enterprise boardrooms



Distributed

Disperses control of authentication and authorization systems and data across multiple entities

Immutable

Ability of blockchain ledger to remain an indelible, unalterable history

Performable

Able to function in

accordance with

cybersecurity

requirements

Passwordless

Zero trust cryptographicallysecured authentication

Adaptive

Leverages smart contracts to manage permissions checks, mitigating phishing and attacks

Flexible

Can increase cost savings from attack mitigation by lessening the impact of a breach

Easily modified to accommodate new or updated business requirements

COMPLEMENTARY

BASE's underlying technology is a suite of complementary "zero-trust" modules that enhance traditional enterprise security tools.

TRUSTWORTHY

- Performance tested
- Security tested

Our approach to identity access management (IAM)

Deloitte's BASE platform facilitates passwordless IAM in a streamlined, modular fashion.



Cryptoghraphic permissioning

Help enhance ability of smart contracts, in conjunction with privilege database, to determine user/system permissions, thereby enabling distributed passwordless authentication and authorization



Data health fingerprinting

Help enhance "trustworthiness" of event logging (e.g., stack function executions and DevOps pipeline commits) by hashing system logs to relevant public and/or permissioned blockchains



Public private key rotation

Help strengthen systems security via continual automated smart contract re-publishing in support of public/private key rotation



Authentication and identity provider integration

Help assist with integration of identity providers (IdPs) and IAM providers to facilitate simplified injection into existing authentication workflows



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Deloitte's Blockchain Authentication Security Evidence tool - BASE

BASE provides authentication, authorization, and identity access management solutions to assist clients in managing cybersecurity risks.

Common cybersecurity threats BASE addresses can assist with





Denial-ofservice attack **Phishing**





Malicious Rootkits

Man-in-the middle attack







Social

Blockchain's Unique value

Multi-signature/threshold authentication

- Reduces bad actors' ability to exploit a single set of credentials
- Stronger than multi-factor authentication





Potential impact on cybersecurity posture:

Reduced breach impact: "Blast radius" of breach minimized, as malicious actors must compromise multiple users or systems to achieve the threshold, thereby reducing the overall breach impact.

Enhanced access control: Active directory no longer stores usernames and passwords, making it harder for a hacker to gain full credential access.

Secure privileges: Information on user privileges is stored separately, limiting a hacker's ability to manipulate access controls even if they gain unauthorized access.

Distributed consensus mechanism: Smart contract changes require multi-node validation. Unauthorized changes are automatically rejected, maintaining system integrity.

Blockchain Distributed Identification (DID) Architecture

Eliminates single-entity point of failure by distributing IAM components

Immutable reactive blockchain logging of all relevant events

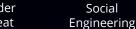
Provides full audit trail of tamper-evident, timestamped registry of events

Immutable proactive blockchain logging

Enables automated triggering of communications or actions based on a predetermined ruleset







Let's Talk.



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