Integration of privacy preserving primitives in hardware wallets

Simon Masson, Renaud Dubois
ZKNox

Privacy and Compliance Summit

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ZKNOX team

Nicolas Bacca
20^+ years experience (10^+y web3)
Security and hardware specialist
Prev. Ledger cofounder/CTO

Renaud Dubois
20^+ years experience (3^+y web3)
Cryptographer
Prev. Ledger, Thales

Simon Masson
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- user end (secure enclaves, hardware wallets),
- back end (TEE, HSMs),
- on-chain (smart contracts).

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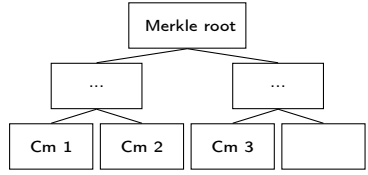
`https://zknox.eth.limo/`

`https://github.com/zknoxhq/`

Introduction: privacy in Ethereum (Railgun)

Alice
1 ETH



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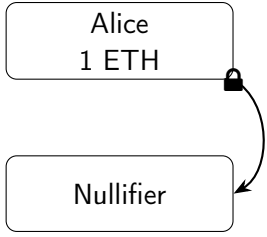

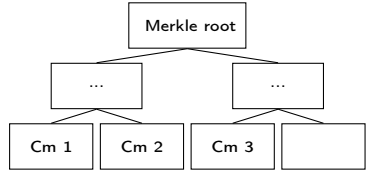

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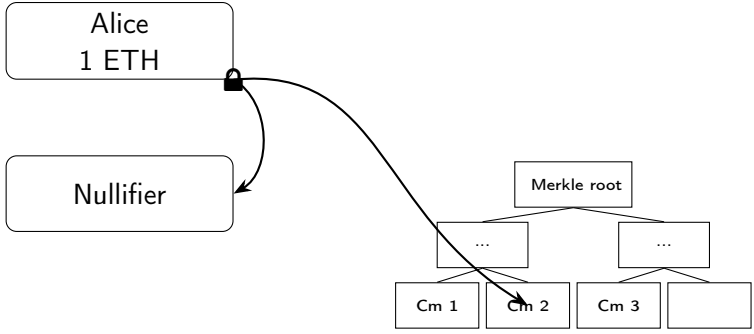

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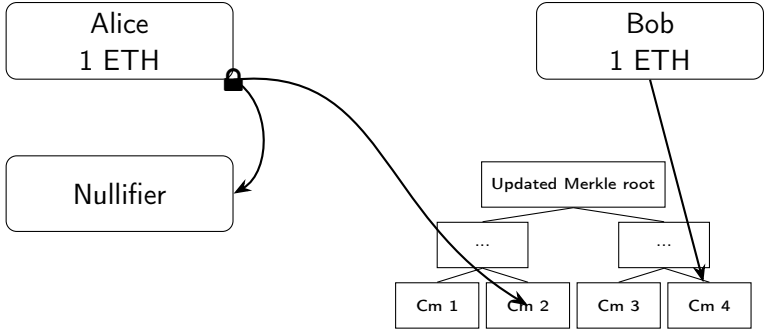

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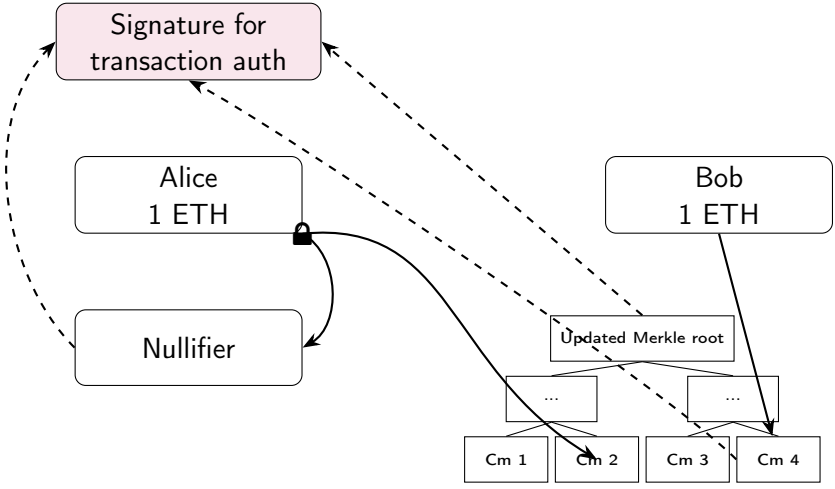

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We implement Railgun EdDSA signer in a Ledger application.

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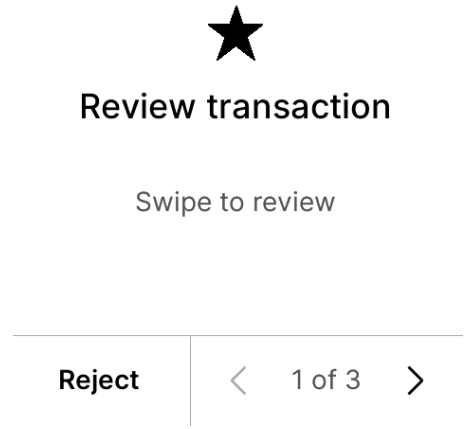

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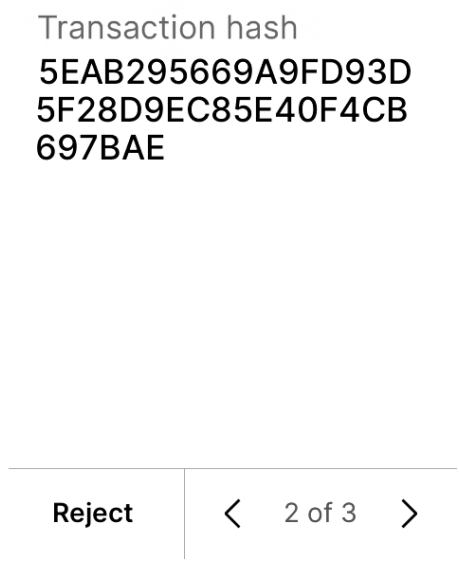

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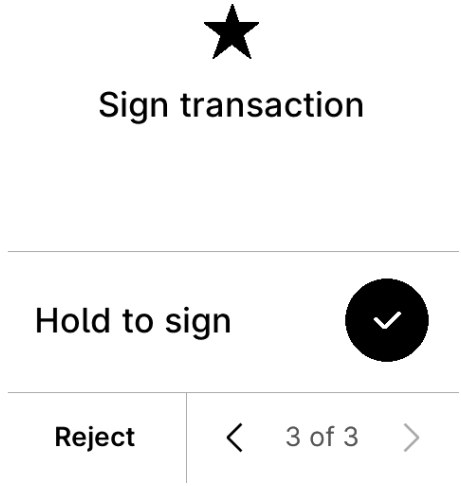

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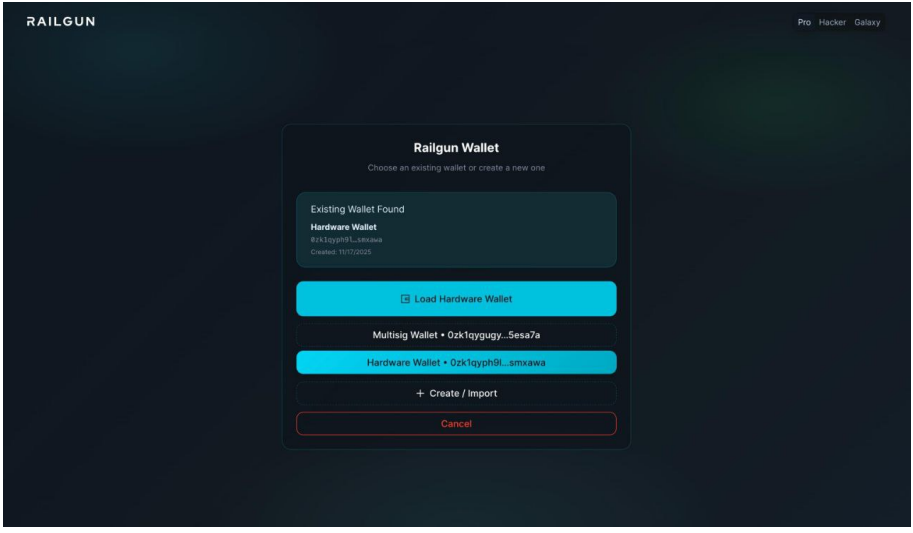
Transaction signed

Demonstration

Let's see how it works in practice : Railgun integration (thanks to Zy0n)



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soon in

Kohaku

Conclusion and perspectives

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Thank you for your attention.