

Spend Permissions

Create 1-click or no-click experiences that spend users' tokens.



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Overview (10m)

How it works

Roadmap

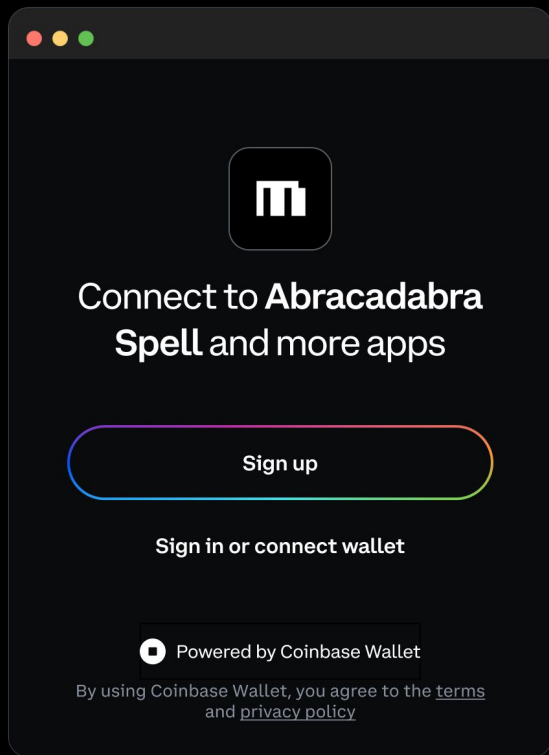
Fundamentals (30m)

Forkable Demo

Code Walkthrough

Sample use case (20m)

NFT micropayments



Self-custodial Passkeys

Stored securely on-device and with OS-level integration for biometric authentication (e.g. Face ID).

Gas sponsorship

Sponsor transactions to increase conversion or enable payment via custom ERC20 tokens.

Batch transactions

Reduce user confirmations by combining into one action, improving user experience and reducing costs.

How do we reduce friction to transact?

Session Keys

Allow apps to submit calls as the user.

Flexible, but uncomfortable security posture for a global account.

Spend Permissions

Allow apps to spend users tokens.

Confident security for a global account.
Can still solve majority of key use cases.

What can I build with it?

Micro-transactions

Before, each transaction required a popup confirmation for the user to sign.

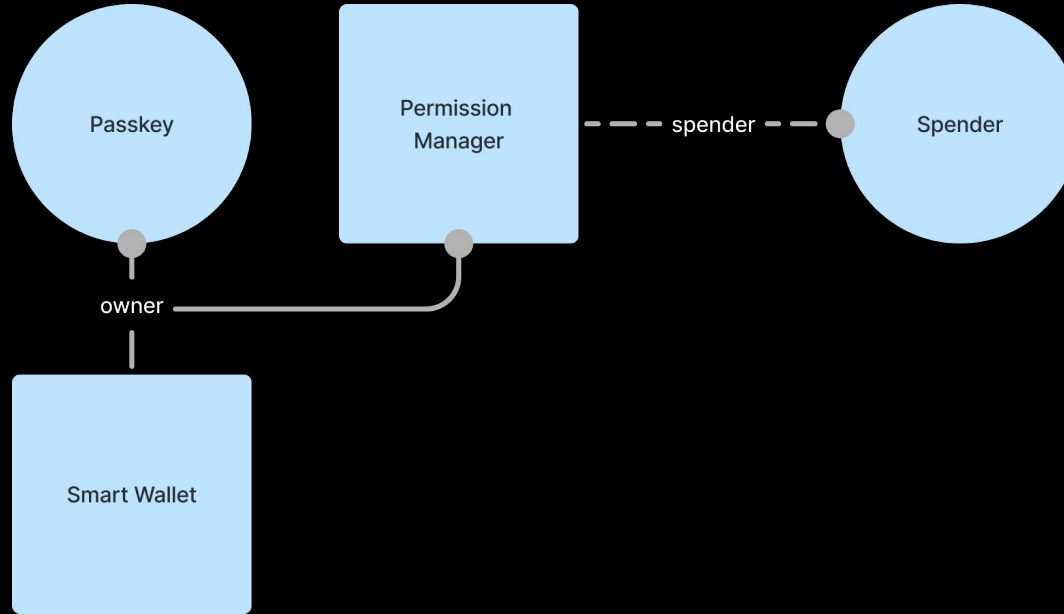
Now, users approve a daily allowance and apps provide 1-click transactions.

Subscriptions

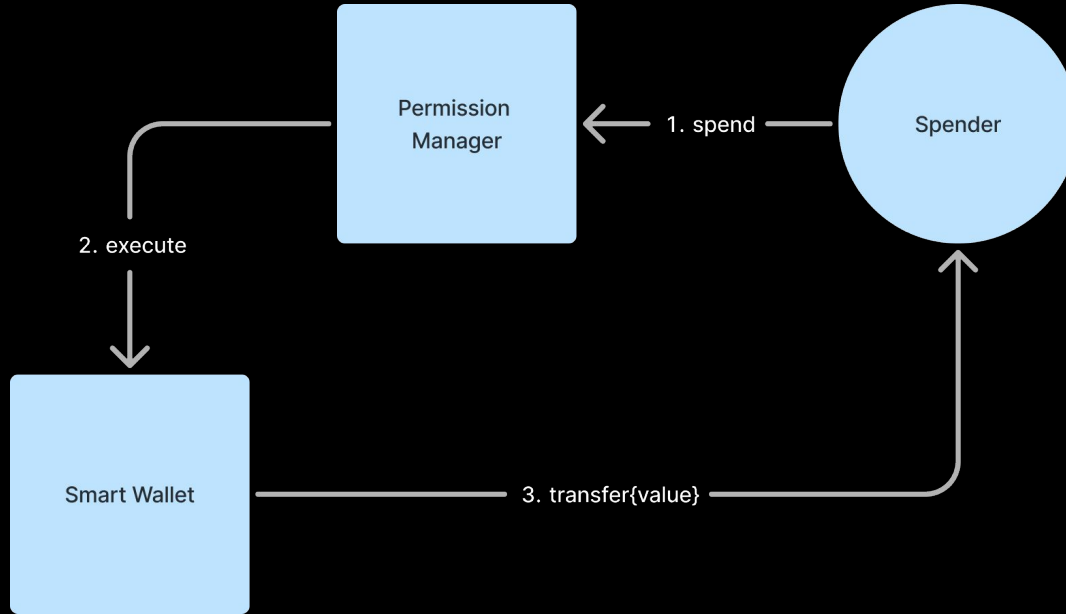
Before, users had to be in-app to confirm transactions.

Now, users approve a monthly allowance and apps withdraw on billing cycles.

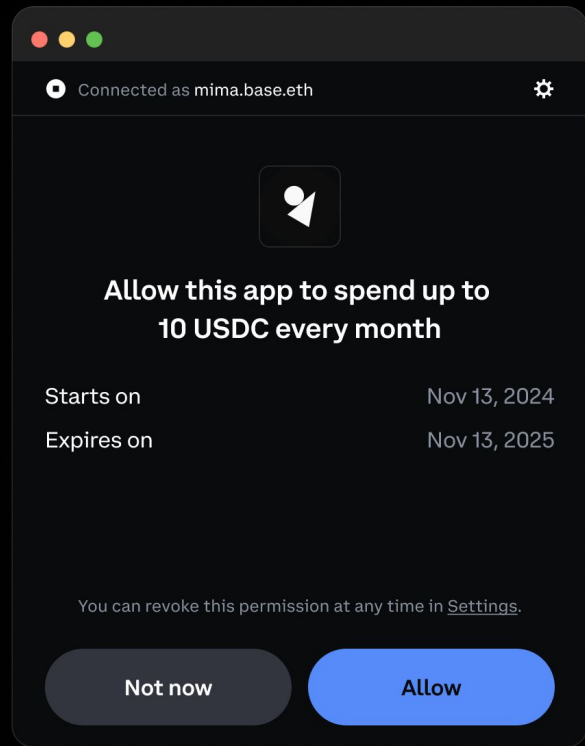
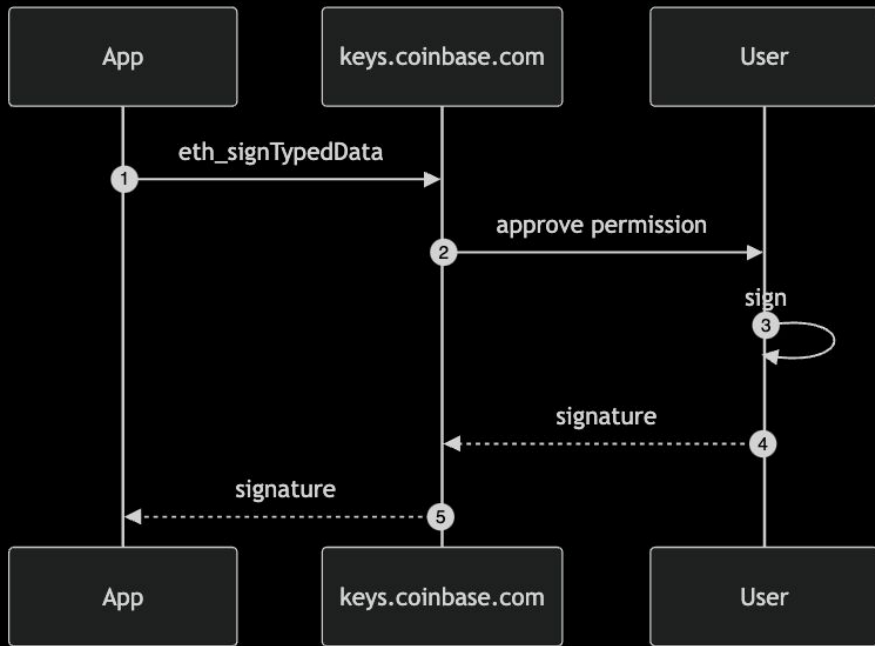
(and more)



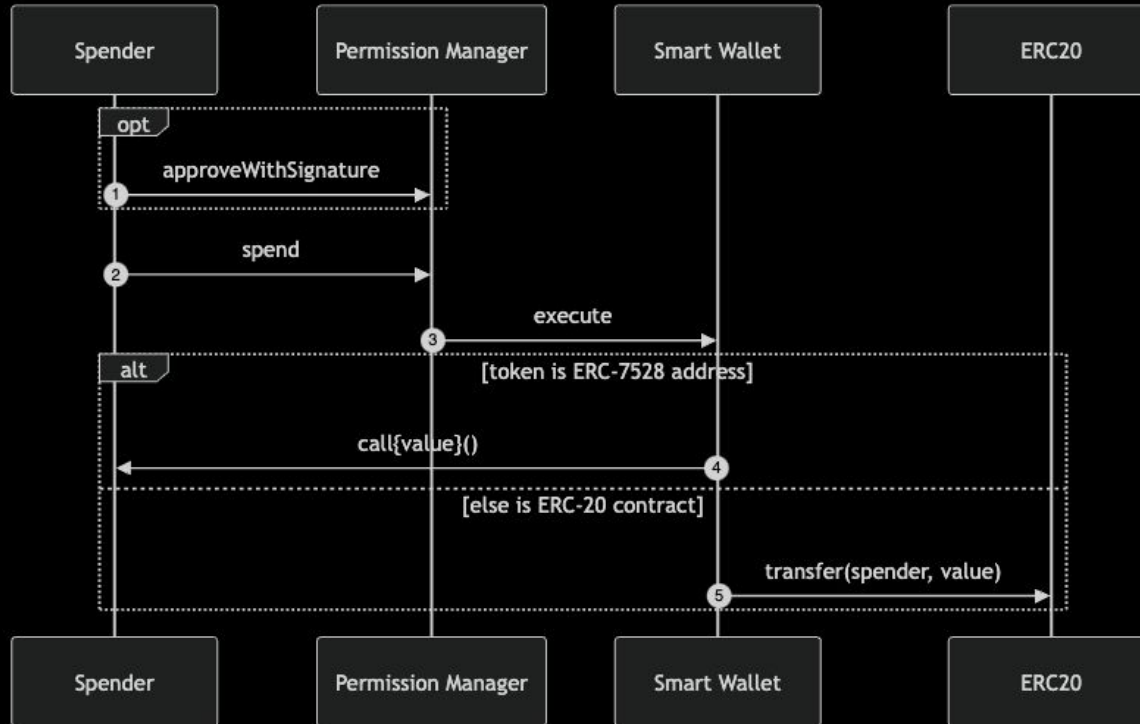
Smart Wallets are owned by one or many keys/contracts.
Permission Manager delegates spend permissions to spenders.



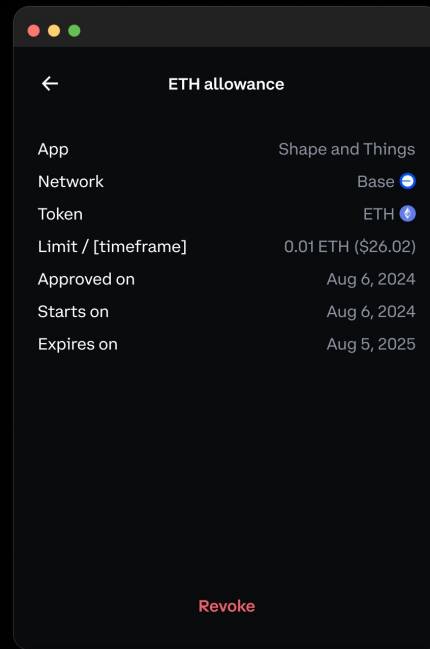
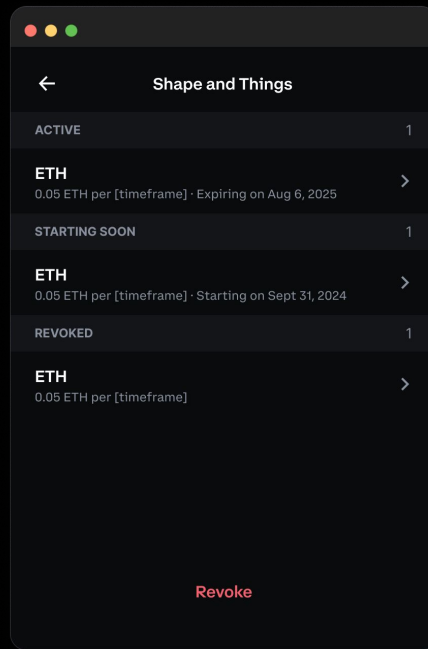
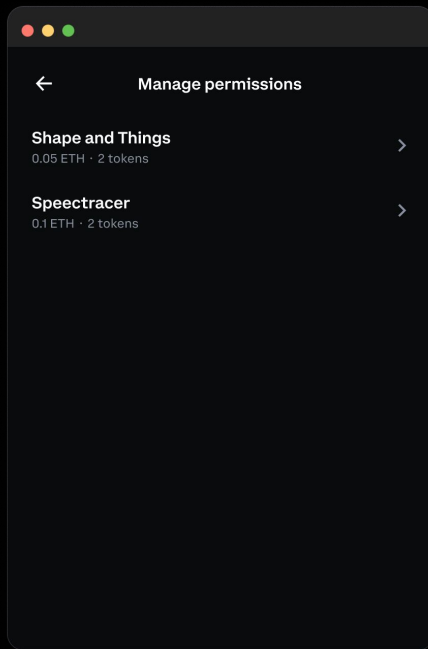
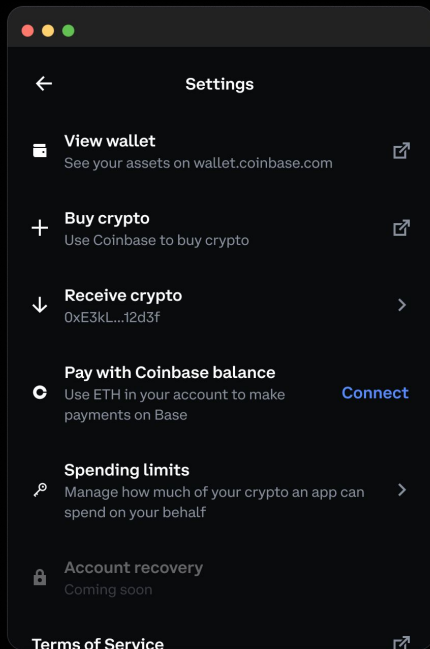
Spenders call into Permission Manager to spend tokens with a permission. Permission is validated and incremented prior to calling Smart Wallet to transfer.



Apps request permissions via common `eth_signTypedData` RPC.
Users sign an EIP-712 object defining a Spend Permission.

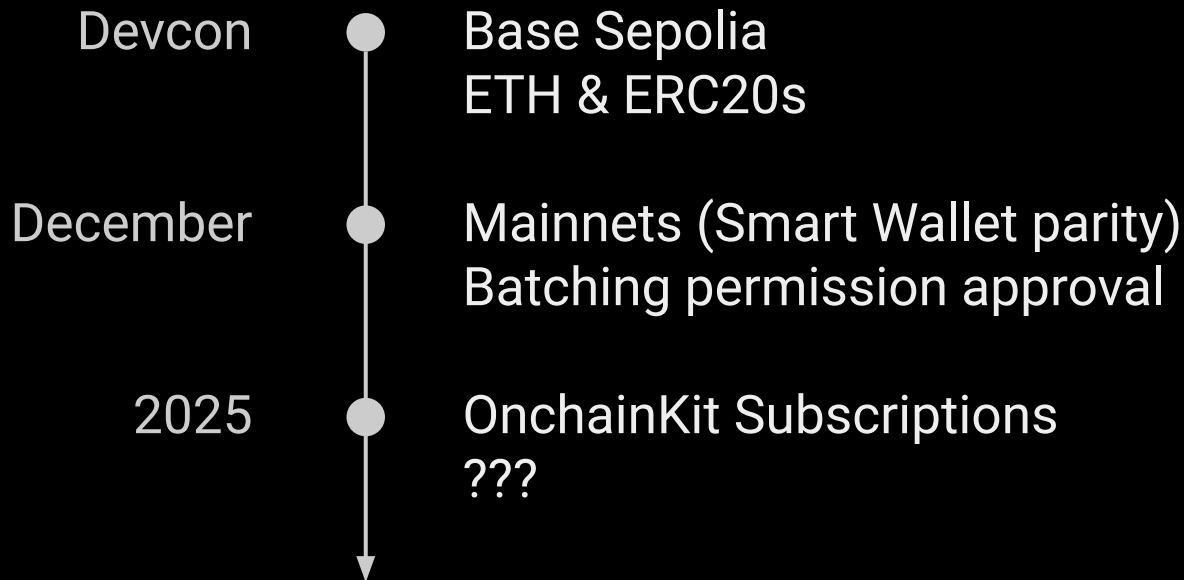


Apps submit a transaction from Spender to spend on Permission Manager
Optionally batch with approving with the user's signature from previous step.



Users can revoke permissions at any time from Settings.
Permissions are grouped per-app for simple batch revocation.

When can I start?



Demo Repo

[https://github.com/lukasrosario/
spend-permissions-demo](https://github.com/lukasrosario/spend-permissions-demo)