Safe Smart Account

The vision for Safe Smart Accounts is to become the standard core used in all smart contract-based wallets. It also aims to make the benefits of Account Abstraction accessible to users and developers.

The architectural design of Safe Smart Account keeps the following principles in mind:

- Secure default
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    - Uses a multi-signature logic where a threshold of owners must confirm a transaction before execution to provide a secure default without trusting any additional contract. For example, a module, guard, or fallback handler (explained below).
- Minimal gas costs
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    - Optimises gas costs by storing the transaction data that should be executed and the confirmations off-chain.
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    - Uses a proxy pattern to reduce setup costs.
- Maximum flexibility
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    - Support Modules are contracts that can use alternative access patterns (instead of multi-signature) to execute transactions.
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    - Supports thedelegatecall
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    - function, which introduces complex execution logic by loading instructions from other contracts and executing via a Safe Smart Account.

Here are some core components of a Safe Smart Account that you will learn about:

Safe Modules

Safe Modules are smart contracts that extend Safe's functionality with added custom features while the module logic remains separate from Safe's core contracts.

Safe Guards

Safe Guards make checks before and after a Safe transaction.

Signatures

Safe contracts support alternative signature schemes such asEIP-1271(opens in a new tab) andEIP-712(opens in a new tab) and relaying by making the confirmation/verification logic independent ofmsg.sender . Read more about thesignature schemes(opens in a new tab) supported by Safe.

â Go Home Safe Modules