

Off-Chain

**Signer**

Browser  
with WebAuthn support

OR

Yubikey

**Client (Desktop or Mobile)**

Start

1. Create User Operation

2. Get the hash for userOp

3. Use WebAuthn signer to sign the hash of userOp

4. Request sponsorship from paymaster and get back paymasterAndData field and estimated gas fields

5. Send user operation + signature of the hash

**Paymaster**

pm\_sponsorUserOperation

OR

alchemy\_requestGasAndPaymasterAndData

**Bundler**

eth\_sendUserOperation

On-Chain

**Entrypoint**

1. Check account existence

2. Validate Signature

3. Validate Paymaster Data

4. Execute userOp

**Smart Contract defined in userOp**

Function call defined in userOp

**WebAuthnAccountFactory**

createAccount  
based on initCode

**WebAuthnAccount**

Validate WebAuthn  
generated signature on-chain

**WebAuthn256r1**

verify

**Paymaster**

Validate paymaster data