## Web3Auth

One way to utilize Social Logins is via Web3Auth. This section will illustrate you to create Biconomy Smart Accounts with the help of Web3Auth Signer. Web3Auth allows you to introduce familiar Web2 experiences, with the following code snippets you can unlock authentication with email to create a smart account as well as authentication with different social providers to create a Smart Account.

tip Check out an end-to-end integration of Web3Auth with Biconomy on this example app and repo!

## **Dependencies**

You will need the following dependencies to create a Smart Account this way:

yarn add @biconomy/account @web3auth/modal @walletconnect/sign-client ethers@5.7.2

## **Imports**

```
import
{ createSmartAccountClient , BiconomySmartAccountV2 , PaymasterMode , }
from
"@biconomy/account" ; import
{ ethers }
from
"ethers" ; import
{ Web3Auth }
from
"@web3auth/modal" ; import
{
    CHAIN_NAMESPACES
}
from
"@web3auth/base" ;
```

## **Initialising Web3Auth**

Initialize the social login SDK

You will have to get the client ID from the Web3Auth dashboard. You can use the following code snippet to initialize the Web3Auth.

```
const chainConfig =
{ chainNamespace :
CHAIN_NAMESPACES . EIP155 , chainId :
"0x13881" , rpcTarget :
"https://rpc.ankr.com/polygon_mumbai" , displayName :
"Polygon Mumbai" , blockExplorer :
"https://mumbai.polygonscan.com/" , ticker :
"MATIC" , tickerName :
```

```
"Polygon Matic", };
//Creating web3auth instance const web3auth =
new
Web3Auth ( { clientId: "BExrkk4gXp86e9VCrpxpjQYvmojRSKHstPRczQA10UQM94S5FtsZcxx4Cg5zk58F7W1cAGNVx1-
NPJCTFIzqdbs",
// Get your Client ID from the Web3Auth Dashboard https://dashboard.web3auth.io/ web3AuthNetwork :
"sapphire devnet",
// Web3Auth Network chainConfig , // You can visit web3auth.io/docs for more configuration options uiConfig :
{ appName :
"Biconomy X Web3Auth", mode:
"dark",
// light, dark or auto loginMethodsOrder :
[ "apple",
"google",
"twitter" ] , logoLight :
"https://web3auth.io/images/web3auth-logo.svg", logoDark:
"https://web3auth.io/images/web3auth-logo---Dark.svg", defaultLanguage:
"en",
// en, de, ja, ko, zh, es, fr, pt, nl loginGridCol :
3, primaryButton:
"socialLogin",
// "externalLogin" | "socialLogin" | "emailLogin" } , } );
Creating Web3Auth Signer
await web3auth . initModal ( ) ; const web3authProvider =
await web3auth . connect ( ) ; const ethersProvider =
new
ethers . providers . Web3Provider ( web3authProvider as
any ); const web3AuthSigner = ethersProvider . getSigner ();
Creating Biconomy Smart Account
const
connect
async
()
=>
{ try
{ const chainConfig =
```

```
{ chainNamespace :
CHAIN NAMESPACES . EIP155 , chainId :
"0x13881", rpcTarget:
"https://rpc.ankr.com/polygon_mumbai", displayName:
"Polygon Mumbai", blockExplorer:
"https://mumbai.polygonscan.com/", ticker:
"MATIC", tickerName:
"Polygon Matic", };
//Creating web3auth instance const web3auth =
new
Web3Auth ( { clientId: "BExrkk4gXp86e9VCrpxpjQYvmojRSKHstPRczQA10UQM94S5FtsZcxx4Cg5zk58F7W1cAGNVx1-
NPJCTFIzqdbs",
// Get your Client ID from the Web3Auth Dashboard https://dashboard.web3auth.io/ web3AuthNetwork :
"sapphire_devnet",
// Web3Auth Network chainConfig , uiConfig :
{ appName :
"Biconomy X Web3Auth", mode:
"dark",
// light, dark or auto loginMethodsOrder :
[ "apple",
"google",
"twitter" ] , logoLight :
"https://web3auth.io/images/web3auth-logo.svg", logoDark:
"https://web3auth.io/images/web3auth-logo---Dark.svg", defaultLanguage:
"en",
// en, de, ja, ko, zh, es, fr, pt, nl loginGridCol :
3, primaryButton:
"socialLogin",
// "externalLogin" | "socialLogin" | "emailLogin" } , } );
await web3auth . initModal ( ) ; const web3authProvider =
await web3auth . connect ( ) ; const ethersProvider =
new
ethers . providers . Web3Provider ( web3authProvider as
any ); const web3AuthSigner = ethersProvider . getSigner ( );
const config =
{ biconomyPaymasterApiKey :
// <-- Get your paymaster API key from https://dashboard.biconomy.io/paymaster bundlerUrl:
```

```
"", 
// <-- Read about this at https://docs.biconomy.io/dashboard#bundler-url };

const smartWallet =
await

createSmartAccountClient ( { signer : web3AuthSigner , biconomyPaymasterApiKey : config . biconomyPaymasterApiKey ,
bundlerUrl : config . bundlerUrl , rpcUrl :
""

// <-- read about this at https://docs.biconomy.io/Account/methods#createsmartaccountclient } );

const address =
await smartWallet . getAccountAddress ( ); }

catch
( error )
{ console . error ( error ) ; } } Previous Turnkey Next Enable Fiat On Ramp
```