

Using Core Kit SFA iOS SDK

After successfully installing and initializing SingleFactorAuth, you can use it to authenticate your users and obtain their private and public keys.

The SingleFactorAuth instance natively provides the following functions:

- getKey()
- - Returns the torus key using the verifier
- ,verifierId
- &idToken
- .

getKey()

[^](#)

getKey()

To obtain a user's Torus key using the Web3Auth SFA iOS SDK, you can call the `getKey()` function.

Variable Description loginParams Parameters for the login. It takes LoginParams as the value.

Returns [^](#)

public

func

getKey (loginParams :

LoginParams)

async

throws

->

TorusKey

LoginParams

[^](#)

getKey(loginParams: LoginParams)

- Table
- Type

Parameter Description verifier The verifier obtained from the Web3Auth Dashboard. It's a mandatory field and takes String as a value. verifierId The verifierId used for the verification. It takes String as a value. idToken The idToken of the user obtained from login provider. It takes String as a value. subVerifierInfoArray? Sub verifier info. Usually used during aggregate verifier. It takes Array as a value. public

class

LoginParams

{ public

let verifier :

String public

let verifierId :

String public

```

let idToken :
String public
let subVerifierInfoArray :
[ TorusSubVerifierInfo ] ?
public
init ( verifier :
String , verifierId :
String , idToken :
String )
{ self . verifier = verifier self . verifierId = verifierId self . idToken = idToken self . subVerifierInfoArray =
nil }
init ( verifier :
String , verifierId :
String , idToken :
String , subVerifierInfoArray :
[ TorusSubVerifierInfo ] )
{ self . verifier = verifier self . verifierId = verifierId self . idToken = idToken self . subVerifierInfoArray = subVerifierInfoArray }
} Usage let loginParams =
LoginParams ( verifier :
"YOUR_VERIFIER_NAME" , verifierId :
"YOUR_VERIFIER_ID" , idToken :
"YOUR_ID_TOKEN" ) let torusKey =
try
await singleFactorAuth . getKey ( loginParams : loginParams ) NOTE Web3Auth SFA iOS SDK only works for users who
havenot enabled MFA . MFA enabled users For MFA enabled users, you'll see an Error message.

```

Example

```

import
SingleFactorAuth import
JWTDecode
/ . . ./
let jwt =
try
decode ( jwt : id_token ) let result =
try
await
SingleFactorAuth ( singleFactorAuthArgs :
. init ( network :
. CYAN ) ) . getKey ( loginParams :

```

```

    . init ( verifier :
"web3auth-firebase-examples" , verifierId : jwt . subject ??
"YOUR_VERIFIER_ID" , idToken : id_token ) )
await
MainActor . run ( body :
{ privateKey = result . getPrivateKey ( ) publicAddress = result . getPublicAddress ( ) } )

```

Session Management^â

We have also included Session Management in this SDK, so calling the initialize function to get the TorusKey value without re-logging in the user if a user has an active session will return the TorusKey struct; otherwise, it will return nil.

```

if
let savedKey =
try
await singleFactoreAuth . initialize ( )
{ print ( savedKey . getPrivateKey ( ) ) print ( savedKey . getPublicAddress ( ) ) }

```

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