

Initializing Core Kit SFA Android SDK

Once you have installed the Web3Auth SDK, the next crucial step is to initialize it. This step requires passing various parameters that align with your project preferences. It's important to note that the initialization process is critical to the successful use of Web3Auth.

Create Web3Auth Instance

In your activity, create a `SingleFactorAuth` instance with `SingleFactorAuthArgs`.

SingleFactorAuth

`SingleFactorAuth (SingleFactorAuthArgs)`

Arguments

SingleFactorAuthArgs

The `SingleFactorAuth` Constructor takes `SingleFactorAuthArgs` as input.

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- Function Definition

Parameter Description network The Web3auth network to be used by the SDK. Supported values are `TorusNetwork.MAINNET`, `TorusNetwork.TESTNET`, `TorusNetwork.CYAN`, `TorusNetwork.AQUA`

```
enum TorusNetwork { MAINNET ( "mainnet" ) , TESTNET ( "testnet" ) , CYAN ( "cyan" ) , AQUA ( "aqua" ) ,  
private
```

```
final String val ;
```

```
TorusNetwork ( String s )
```

```
{ this . val = s ; }
```

```
public String toString ( )
```

```
{ return
```

```
val ; } }
```

```
public
```

```
SingleFactorAuthArgs ( TorusNetwork network )
```

```
{ this . network = network ; }
```

Instance

SingleFactorAuthArgs

`SingleFactorAuthArgs (TorusNetwork . TESTNET) singleFactorAuth =`

`SingleFactorAuth (singleFactorAuthArgs)`

Example

```
class MainActivity :
```

```
AppCompatActivity ( )
```

```
{ // ... private
```

```

lateinit
var singleFactorAuth : SingleFactorAuth private

lateinit
var singleFactorAuthArgs : SingleFactorAuthArgs private

lateinit
var loginParams : LoginParams private

var torusKey : TorusKey ?

=

null

override

fun

onCreate ( savedInstanceState : Bundle ? )

{ super . onCreate ( savedInstanceState ) setContentView ( R . layout . activity_main )

```

singleFactorAuthArgs

```

SingleFactorAuthArgs ( TorusNetwork . TESTNET ) singleFactorAuth =
SingleFactorAuth ( singleFactorAuthArgs )

// Setup UI and event handlers val signInButton = findViewById < Button
    ( R . id . signIn ) signInButton . setOnClickListener

{
    signIn ( )
}

private

fun

signIn ( )

{ loginParams =
LoginParams ( "web3auth-firebase-examples" ,
"sub" ,
"id_token" ) try

{ torusKey = singleFactorAuth . getKey ( loginParams ) . get ( ) }

catch

( e : ExecutionException )

{ e . printStackTrace ( ) }

catch

( e : InterruptedException )

{ e . printStackTrace ( ) } println ( ""Private Key: { torusKey !! . privateKey . toString ( 16 ) } "" . trimIndent ( ) ) println (
""Public Address: { torusKey !! . publicAddress } "" . trimIndent ( ) ) //... } Edit this page Previous Install Next
Authentication

```