Using Custom Authentication in PnP iOS SDK

To use custom authentication (Using Social providers or Login providers like Auth0, AWS Cognito, Firebase etc. or even your own custom JWT login) you can add the configuration to theloginConfig parameter of theW3AInitParams object during the initialization.

TheloginConfig parameter is a key value map. The key should be one of theWeb3AuthProvider in its string form, and the value should be aW3ALoginConfig struct.

To use custom authentication, first you'll need to configure your own verifier in the Web3Auth Dashboard in Custom Authentication section.

note This is a paid feature and the minimumpricing plan to use this SDK in a production environment is theGrowth Plan . You can use this feature in the development environment for free. Create Custom Verifier Check out how to create aCustom Verifier on the Web3Auth Dashboard. using dapp share * dApp Share is only returned for the Custom verifiers. * Also, 2FA should be enabled for the account using it. UsemfaLevel = MFALevel.MANDATORY * in theW3ALoginParams * during login. SeeMFA * for more details. Once the custom verifier is created, you need to specify the details of your verifier in theW3ALoginConfig struct, the parameters of the struct are as follows:

W3ALoginConfig

â

Argumentsâ

W3ALoginConfig

- Table
- Struct

Parameter Description verifier The name of the verifier that you have registered on the Web3Auth Dashboard. It's a mandatory field, and acceptsString as a value. typeOfLogin Type of login of this verifier, this value will affect the login flow that is adapted. For example, if you choosegoogle , a Google sign-in flow will be used. If you choosejwt , you should be providing your own JWT token, no sign-in flow will be presented. It's a mandatory field, and acceptsTypeOfLogin as a value. clientId Client id provided by your login provider used for custom verifier. e.g. Google's Client ID or Web3Auth's client Id if using 'jwt' as TypeOfLogin. It's a mandatory field, and acceptsString as a value. name? Display name for the verifier. If null, the default name is used. It acceptsString as a value. description? Description for the button. If provided, it renders as a full length button. else, icon button. It acceptsString as a value. verifierSubIdentifier? The field in JWT token which maps to verifier id. Please make sure you selected correct JWT verifier id in the developer dashboard. It acceptsString as a value. logoHover? Logo to be shown on mouse hover. It acceptsString as a value. logoLight? Light logo for dark background. It acceptsString as a value. logoDark? Dark logo for light background. It acceptsString as a value. mainOption? Show login button on the main list. It acceptsBool as a value. Default value is false. showOnModal? Whether to show the login button on modal or not. Default value is true. showOnDesktop? Whether to show the login button on desktop. Default value is true. showOnMobile? Whether to show the login button on mobile. Default value is true. public

struct

W3ALoginConfig :

Codable

{ let verifier :

String let typeOfLogin :

TypeOfLogin let clientId :

String let name :

String ? let description :

String ? let verifierSubIdentifier :

String ? let logoHover :

String ? let logoLight :

String ? let logoDark :

String ? let mainOption :

Bool ? let showOnModal :

Bool ? let showOnDesktop :

Bool ? let showOnMobile :

Bool ? }

typeOfLogin

â

public

enum

TypeOfLogin :

String ,

Codable

{ case google case facebook case reddit case discord case twitch case apple case github case linkedin case twitter case weibo case line case email_password case passwordless case jwt } * Google * Facebook * JWT

Usage web3Auth =

await

Web3Auth (W3AInitParams (clientId :

"YOUR_CLIENT_ID" , network :

. sapphire_mainnet , loginConfig :

[Web3AuthProvider . JWT . rawValue :

. init (verifier :

"YOUR_VERIFIER_NAME" ,

// get it from web3auth dashboard typeOfLogin :

TypeOfLogin . google , clientId :

"YOUR_GOOGLE_CLIENT_ID" ,)])) Usage web3Auth =

await

Web3Auth (W3AInitParams (clientId :

"YOUR_CLIENT_ID" , network :

. sapphire_mainnet , loginConfig :

[Web3AuthProvider . JWT . rawValue :

. init (verifier :

"YOUR_VERIFIER_NAME" ,

// get it from web3auth dashboard typeOfLogin :

TypeOfLogin . facebook , clientId :

"YOUR_FACEBOOK_CLIENT_ID" ,)])) Usage web3Auth =

await

Web3Auth (W3AInitParams (clientId : "YOUR_CLIENT_ID" , network :

. sapphire_mainnet , loginConfig :

[Web3AuthProvider . JWT . rawValue :

. init (verifier :

"YOUR_VERIFIER_NAME" ,

// get it from web3auth dashboard typeOfLogin :

TypeOfLogin . jwt , clientId :

"YOUR_CLIENT_ID" ,

// get it from web3auth dashboard)]))

ExtraLoginOptions

for special login methodsâ

Additional to theW3ALoginConfig you can pass extra options to thelogin function to configure the login flow for cases requiring additional info for enabling login. TheextraLoginOptions accepts the following parameters:

- Table
- Struct

Parameter Description additionalParams? Additional params in[String:String] format for OAuth login, use id_token(JWT) to authenticate with web3auth. domain? Your custom authentication domain inString format. For example, if you are using Auth0, it can be example.au.auth0.com. client_id? Client id inString format, provided by your login provider used for custom verifier. leeway? The value used to account for clock skew in JWT expirations. The value is in the seconds, and ideally should no more than 60 seconds or 120 seconds at max. It takesInt as a value. verifierIdField? The field in JWT token which maps to verifier id. Please make sure you selected correct JWT verifier id in the developer dashboard. It takesString as a value. isVerifierIdCaseSensitive? Bool to confirm Whether the verifier id field is case sensitive or not. display? Allows developers the configure the display of UI. It takesString as a value. prompt? Prompt shown to the user during authentication process. It takesString as a value. max_age? Max time allowed without reauthentication. If the last time user authenticated is greater than this value, then user must reauthenticate. It takesString as a value. ui_locales? The space separated list of language tags, ordered by preference. For instancefr-CA fr en . id_token_hint? It denotes the previously issued ID token. It takesString as a value. id_token? JWT (ID Token) to be passed for login. login_hint? It is used to send the user's email address during Email Passwordless login. It takesString as a value. acr_values? acc_values scope? The default scope to be used on authentication requests. The defaultScope defined in the Auth0Client is included along with this scope. It takesString as a value. audience? The audience, presented as the aud claim in the access token, defines the intended consumer of the token. It takesString as a value. connection? The name of the connection configured for your application. If null, it will redirect to the Auth0 Login Page and show the Login Widget. It takesString as a value. state? state response_type? Defines which grant to execute for the authorization server. It takesString as a value. nonce? nonce redirect_uri? It can be used to specify the default url, where your custom jwt verifier can redirect your browser to with the result. If you are using Auth0, it must be whitelisted in the Allowed Callback URLs in your Auth0's application. public

struct

ExtraLoginOptions :

Codable

{ let display :

String ? let prompt :

String ? let max_age :

String ? let ui_locales :

String ? let id_token_hint :

String ? let id_token :

String ? let login_hint :

String ? let acr_values :

String ? let scope :

String ? let audience :

String ? let connection :

String ? let domain :

String ? let client_id :

String ? let redirect_uri :

String ? let leeway :

Int ? let verifierIdField :

String ? let isVerifierIdCaseSensitive :

Bool ? let additionalParams :

[String

:

String] ? }

Using Auth0 Loginâ

Auth0 has a special login flow, called the SPA flow. This flow requires aclient_id anddomain to be passed, and Web3Auth will get the JWTid_token from Auth0 directly. You can pass these configurations in theExtraLoginOptions object in the login function.

web3Auth

await

Web3Auth (W3AInitParams (clientId : "YOUR_CLIENT_ID" , network :

. sapphire_mainnet , // Optional loginConfig object loginConfig :

[Web3AuthProvider . JWT . rawValue :

. init (verifier :

"YOUR_VERIFIER_NAME" ,

// get it from web3auth dashboard for auth0 configuration typeOfLogin :

TypeOfLogin . jwt , clientId :

"YOUR_AUTH0_CLIENT_ID" ,

// auth0's client id, get it from auth0 dashboard)]))

let result =

await web3Auth . login (W3ALoginParams (selectedLoginProvider , extraLoginOptions :

. init (// Domain of your auth0 app domain : "https://username.us.auth0.com" , // The field in jwt token which maps to verifier id verifierIdField :

"sub" ,)))

Custom JWT Loginâ

If you're using any other provider like Firebase, AWS Cognito or deploying your own Custom JWT server, you need to put the jwt token into theid_token field of theextraLoginOptions , additionally, you need to pass over thedomain field as well, which is mandatory. If you don't have a domain, just passover a string in that field.

web3Auth

await

Web3Auth (W3AInitParams (clientId : "YOUR_CLIENT_ID" , network :

. testnet , // Optional loginConfig object loginConfig :

[Web3AuthProvider . JWT . rawValue :

. init (verifier :

"YOUR_VERIFIER_NAME" ,

// get it from web3auth dashboard typeOfLogin :

TypeOfLogin . jwt , clientId :

"BPi5PB_UiIZ-cPz1GtV5i1I2iOSOHuimiXBI0e-Oe_u6X3oVAbCiAZOTEBtTXw4tsluTITPqA8zMsfxIKMjiqNQ" ,

// get it from web3auth dashboard)]))

let result =

await web3Auth . login (W3ALoginParams (selectedLoginProvider , extraLoginOptions :

. init (domain : "your-domain" , id_token :

"your_jwt_token")))

Email Passwordlessâ

- To use theEMAIL_PASSWORDLESS
- login, you need to put the email into thelogin_hint
- field of theextraLoginOptions
- .

let result =

await

Web3Auth ( ) . login (W3ALoginParams (selectedLoginProvider , extraLoginOptions :

. init (loginHint :

"hello@web3auth.io"))) Edit this page Previous Whitelabel Next Multi Factor Authentication