

Using Custom Authentication in PnP Android 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 the `loginConfig` parameter of the `Web3AuthOptions` object during the initialization.

The `loginConfig` parameter is a key value map. The key should be one of the `Web3AuthProvider` in its string form, and the value should be a `LoginConfigItem` instance.

First, configure your own verifier in the Web3Auth Dashboard to use custom authentication.

note This is a paid feature and the minimum [pricing plan](#) to use this SDK in a production environment is the Growth Plan . You can use this feature in the development environment for free. Create Custom Verifier Check out how to create a [Custom 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 the `LoginParams` * during login. See [MFA](#) * for more details. Then, you should specify the details of your verifier in the `LoginConfigItem` struct, the details of this struct are as follows:

LoginConfigItem

[â](#)

Arguments^â

LoginConfigItem

- Table
- Interface

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 choose `google` , a Google sign-in flow will be used. If you choose `jwt` , 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 acceptsBoolean 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. data

class

```
LoginConfigItem ( var verifier : String , private
```

```
var typeOfLogin : TypeOfLogin , private
```

```
var name : String ?
```

```
=
```

```
null , private
```

```
var description : String ?
```

```
=
```

```
null , private
```

```
var clientId : String , private
```

```
var verifierSubIdentifier : String ?
```

```
=
```

```
null , private
```

```

var logoHover : String ?
=
null , private
var logoLight : String ?
=
null , private
var logoDark : String ?
=
null , private
var mainOption : Boolean ?
=
false , private
var showOnModal : Boolean ?
=
true , private
var showOnDesktop : Boolean ?
=
true , private
var showOnMobile : Boolean ?
=
true , )

```

typeOfLogin

[â](#)

```

enum

class TypeOfLogin { @SerializedName ( "google" ) GOOGLE , @SerializedName ( "facebook" ) FACEBOOK ,
@SerializedName ( "reddit" ) REDDIT , @SerializedName ( "discord" ) DISCORD , @SerializedName ( "twitch" ) TWITCH ,
@SerializedName ( "apple" ) APPLE , @SerializedName ( "line" ) LINE , @SerializedName ( "github" ) GITHUB ,
@SerializedName ( "kakao" ) KAKAO , @SerializedName ( "linkedin" ) LINKEDIN , @SerializedName ( "twitter" ) TWITTER
, @SerializedName ( "weibo" ) WEIBO , @SerializedName ( "wechat" ) WECHAT , @SerializedName (
"email_passwordless" ) EMAIL_PASSWORDLESS , @SerializedName ( "email_password" ) EMAIL_PASSWORD ,
@SerializedName ( "jwt" ) JWT } * Google * Facebook * Auth0 * JWT

Usage web3Auth =

Web3Auth

( Web3AuthOptions

( context =

this , clientId =

getString

( R . string . web3auth_project_id ) , network = Network . MAINNET , redirectUrl = Uri . parse

( "{YOUR_APP_PACKAGE_NAME}://auth" ) , // Optional loginConfig object loginConfig =

hashMapOf ( "google"

```

```

to

LoginConfigItem ( verifier =

"verifier-name" ,

// get it from web3auth dashboard typeOfLogin = TypeOfLogin . GOOGLE , clientId =

getString ( R . string . google_client_id )

// google's client id ) ) ) Usage web3Auth =

Web3Auth

( Web3AuthOptions

( context =

this , clientId =

getString

( R . string . web3auth_project_id ) , network = Network . MAINNET , redirectUrl = Uri . parse

( "{YOUR_APP_PACKAGE_NAME}://auth" ) , // Optional loginConfig object loginConfig =

hashMapOf ( "facebook"

to

LoginConfigItem ( verifier =

"verifier-name" ,

// get it from web3auth dashboard typeOfLogin = TypeOfLogin . FACEBOOK , clientId =

getString ( R . string . facebook_client_id )

// facebook's client id ) ) ) Usage web3Auth =

Web3Auth

( Web3AuthOptions

( context =

this , clientId =

getString

( R . string . web3auth_project_id ) , network = Network . MAINNET , redirectUrl = Uri . parse

( "{YOUR_APP_PACKAGE_NAME}://auth" ) , // Optional loginConfig object loginConfig =

hashMapOf ( "jwt"

to

LoginConfigItem ( verifier =

"verifier-name" ,

// get it from web3auth dashboard typeOfLogin = TypeOfLogin . JWT , clientId =

getString

( R . string . auth0_project_id )

// auth0's client id ) ) ) Usage web3Auth =

Web3Auth

( Web3AuthOptions

```

```
( context =
this , clientId =
getString
( R . string . web3auth_project_id ) , network = Network . MAINNET , redirectUrl = Uri . parse
( "{YOUR_APP_PACKAGE_NAME}://auth" ) , // Optional loginConfig object loginConfig =
hashMapOf ( "jwt"
to
LoginConfigItem ( verifier =
"verifier-name" ,
// get it from web3auth dashboard typeOfLogin = TypeOfLogin . JWT , ) ) )
```

ExtraLoginOptions

for special login methods[â](#)

Additional to theLoginConfig 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
- Interface

Parameter Description
additionalParams? Additional params inHashMap 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 takesString 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? Boolean to confirm Whether the verifier id field is case sensitive or not. display? Allows developers the configure the display of UI. It takesDisplay as a value. prompt? Prompt shown to the user during authentication process. It takesPrompt 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. data

class

ExtraLoginOptions (private

var additionalParams : HashMap < String , String

?

=

null , private

var domain : String ?

=

null , private

var client_id : String ?

=

null , private

var leeway : String ?

=

null , private

var verifierIdField : String ?

= null , private

var isVerifierIdCaseSensitive : Boolean ?

=

null , private

var display : Display ?

=

null , private

var prompt : Prompt ?

=

null , private

var max_age : String ?

=

null , private

var ui_locales : String ?

=

null , private

var id_token : String ?

=

null , private

var id_token_hint : String ?

=

null , private

var login_hint : String ?

=

null , private

var acr_values : String ?

=

null , private

var scope : String ?

=

null , private

var audience : String ?

```

=
null , private
var connection : String ?
=
null , private
var state : String ?
=
null , private
var response_type : String ?
=
null , private
var nonce : String ?
=
null , private
var redirect_uri : String ?
=
null )

```

Using Auth0 Login

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

web3Auth

```

Web3Auth
( Web3AuthOptions
( context =
this , clientId =
getString
( R . string . web3auth_project_id ) , network =
Network . MAINNET , redirectUrl =
Uri . parse
( "{YOUR_APP_PACKAGE_NAME}://auth" ) , // Optional loginConfig object loginConfig =
HashMapOf ( "jwt" to LoginConfigItem ( verifier =
"verifier-name" ,
// get it from web3auth dashboard for auth0 configuration typeOfLogin =
TypeOfLogin . JWT , clientId =
getString
( R . string . auth0_client_id )

```

```
// auth0's client id, get it from auth0 dashboard ) ) )
val loginCompletableFuture :
CompletableFuture < Web3AuthResponse
= web3Auth . login ( LoginParams ( Provider . JWT , extraLoginOptions =
ExtraLoginOptions ( domain :
"https://username.us.auth0.com" ,
// domain of your auth0 app verifierIdField :
"sub" ,
// The field in jwt token which maps to verifier id. ) ) )
```

Custom JWT Login[â](#)

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

```
Web3Auth
( Web3AuthOptions
( context =
this , clientId =
getString
( R . string . web3auth_project_id ) , network =
Network . MAINNET , redirectUrl =
Uri . parse
( "{YOUR_APP_PACKAGE_NAME}://auth" ) , // Optional loginConfig object loginConfig =
HashMapOf ( "jwt" to LoginConfigItem ( verifier =
"verifier-name" ,
// get it from web3auth dashboard for auth0 configuration typeOfLogin =
TypeOfLogin . JWT , ) ) )
val loginCompletableFuture :
CompletableFuture < Web3AuthResponse
= web3Auth . login ( LoginParams ( Provider . JWT , extraLoginOptions =
ExtraLoginOptions ( id_token :
"Your JWT id token" , ) ) )
```

Email Passwordless[â](#)

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

```
val loginCompletableFuture : CompletableFuture < Web3AuthResponse
= web3Auth . login ( LoginParams ( Provider . EMAIL_PASSWORDLESS , extraLoginOptions =
ExtraLoginOptions ( login_hint =
```

