Using of PnP Unity SDK

Once you've installed and successfully initialized Web3Auth, you can use it to authenticate your users.

Logging in a Userâ

web3Auth.login(LoginParams)

<u>â</u>

This function helps your users to trigger the login process. The login flow is triggered based on the selected provider. You can view the list of selected providers in the provider section.

tip Additionally, you can associate a function to be triggered on successful login. This function receives the user's profile as a parameter.

Argumentsâ

web3Auth.login() requiresLoginParams as a required input.

LoginParams

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- Table
- Interface

Parameter Description loginProvider It sets the OAuth login method to be used. You can use any of the supported values areGOOGLE ,FACEBOOK ,REDDIT ,DISCORD ,TWITCH ,APPLE ,LINE ,GITHUB ,KAKAO ,LINKEDIN ,TWITTER ,WEIBO ,WECHAT ,EMAIL_PASSWORDLESS . extraLoginOptions? It can be used to set the OAuth login options for correspondingloginProvider . For instance, you'll need to pass the user's email address as. The Default value for the field isnull , and it acceptsExtraLoginOptions as a value. redirectUrl? Url where user will be redirected after successfull login. By default user will be redirected to same page where login will be initiated. Default value for the field isnull , and acceptsURI as a value. appState? It can be used to keep track of the app state when user will be redirected to app after login. Default isnull , and acceptsstring as a value. mfaLevel? Customize the MFA screen shown to the user during OAuth authentication. Default value for field isMFALevel.DEFAULT , which shows MFA screen every 3rd login. It acceptsMFALevel as a value. dappShare? Custom verifier logins can get a dapp share returned to them after a successful login. This is useful if the dapps want to use this share to allow users to login seamlessly. It acceptsstring as a value. curve? It is used to determine the public key encoded in the jwt token which returned ingetUserInfo function after user login. This parameter won't change the format of private key returned by Web3Auth. Private key returned bygetPrivKey is always secp256k1. The default value isCurve.SECP256K1 . sessionTime? It allows developers to configure the session management time. Session Time is in seconds, and takes anint as a value. public

```
class
LoginParams { public
Provider loginProvider {
  get ;
  set ;
```

```
} public
string dappShare {
get;
set;
} public
ExtraLoginOptions extraLoginOptions {
get;
set;
} public
Uri redirectUrl {
get;
set;
} public
string appState {
get;
set;
} public
MFALevel mfaLevel {
get;
set;
} public
int sessionTime {
get;
set;
} public
Curve curve {
get;
set;
} }
Provider
<u>â</u>
public
enum
Provider { [ EnumMember ( Value =
"google" ) ] GOOGLE , [ EnumMember ( Value =
"facebook" ) ] FACEBOOK , [ EnumMember ( Value =
"reddit" ) ] REDDIT , [ EnumMember ( Value =
```

```
"discord")] DISCORD, [EnumMember ( Value =
"twitch")] TWITCH, [EnumMember ( Value =
"apple")] APPLE, [EnumMember ( Value =
"line")] LINE, [EnumMember ( Value =
"github")] GITHUB, [EnumMember ( Value =
"kakao")] KAKAO, [EnumMember ( Value =
"linkedin")] LINKEDIN, [EnumMember ( Value =
"twitter")] TWITTER, [EnumMember ( Value =
"weibo")] WEIBO, [EnumMember ( Value =
"wechat")] WECHAT, [EnumMember ( Value =
"email_passwordless")] EMAIL_PASSWORDLESS, [EnumMember ( Value =
"email_password")] EMAIL_PASSWORD, [EnumMember ( Value =
"ijwt")] JWT, [EnumMember ( Value =
"jwt")] JWT, [EnumMember ( Value =
"CUSTOM_VERIFIER")] CUSTOM_VERIFIER}
```

ExtraLoginOptions

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TheLoginParams class accepts the ExtraLoginOptions as an optional input, containing advanced options for custom authentication, email passwordless login, etc. This parameter can be considered as advanced login options needed for specific cases.

```
LoginParams ( )
{ selectedLoginProvider , extraLoginOptions =
ExtraLoginOptions ( )
} * Table * Interface
```

Parameter Description additional Params? Additional params in Dictionary 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, this could 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 be no more than 60 seconds, with a maxium of 120 seconds. It takesstring as a value, verifierIdField? The field in the JWT token that maps to verifier id. Please make sure you have selected the 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 to configure the display of UI. It takesDisplay as a value, prompt? Prompt shown to the user during the authentication process. It takesPrompt as a value, max age? Maxium time allowed without reauthentication. If the last time the user authenticated is greater than this value, then the user must reauthenticate. It takesstring as a value. ui locales? The space separated list of language tags, ordered by preference. For examplefr-CA fr en . id_token_hint? It specify 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? acr 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 be execute for the authorization server. It takesstring as a value, nonce? nonce value 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

class

ExtraLoginOptions

{ public

```
Dictionary < string,
string
     additionalParams {
get;
set;
} public
string domain {
get;
set;
} public
string client_id {
get;
set;
} public
string leeway {
get;
set;
} public
string verifierIdField {
get;
set;
} public
bool isVerifierIdCaseSensitive {
get;
set;
} public
Display display {
get;
set;
} public
Prompt prompt {
get;
set;
} public
string max_age {
get;
set;
```

```
} public
string ui_locales {
get;
set;
} public
string id_token_hint {
get;
set;
} public
string login_hint {
get;
set;
} public
string id_token {
get;
set;
} public
string acr_values {
get;
set;
} public
string scope {
get;
set;
} public
string audience {
get;
set;
} public
string connection {
get;
set;
} public
string state {
get;
set;
} public
```

```
string response_type {
  get ;
  set ;
} public
string nonce {
  get ;
  set ;
} public
string redirect_uri {
  get ;
  set ;
}
```

Curve

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TheLoginParams class accepts acurve parameter. This parameter can be used to select the elliptic curve to use for the signature.

```
LoginParams ()
{ selectedLoginProvider , curve = Curve . SECP256K1 } * SECP256K1 * ED25519

public

void
login () { var selectedProvider = Provider . GOOGLE ; var options =

new

LoginParams () { loginProvider = selectedProvider , curve = Curve . SECP256K1 } ; web3Auth . login ( options ) ; } public

void
login () { var selectedProvider = Provider . GOOGLE ; var options =

new

LoginParams () { loginProvider = selectedProvider , curve = Curve . ED25519 } ; web3Auth . login ( options ) ; }
```

Sample Responseâ

{ "ed25519PrivKey": "666523652352635....", "privKey": "0ajjsdsd....", "coreKitKey": "0ajjsdsd....", "coreKitEd25519PrivKey": "666523652352635....", "sessionId": ".....", "error": ".....", "userInfo": { "aggregateVerifier": "w3a-google", "email": "john@gmail.com", "name": "John Dash", "profileImage": "https://lh3.googleusercontent.com/a/Ajjjsdsmdjmnm...", "typeOfLogin": "google", "verifier": "torus", "verifierId": "john@gmail.com", "dappShare": "<24 words seed phrase>", // will be sent only incase of custom verifiers "idToken": "", "oAuthIdToken": "", // will be sent only incase of custom verifiers "oAuthAccessToken": "", // will be sent only incase of custom verifiers "isMfaEnabled": true // returns true if user has enabled mfa } }

Example^â

- Google
- Facebook
- · Discord
- Twitch
- · Email Passwordless
- JWT

```
public
void
login () { var selectedProvider = Provider . GOOGLE ; var options =
new
LoginParams () { loginProvider = selectedProvider } ; web3Auth . login (options); } public
void
login () { var selectedProvider = Provider . FACEBOOK ; var options =
new
LoginParams () { loginProvider = selectedProvider } ; web3Auth . login ( options ) ; } public
void
login () { var selectedProvider = Provider . DISCORD ; var options =
new
LoginParams () { loginProvider = selectedProvider } ; web3Auth . login ( options ) ; } public
void
login () { var selectedProvider = Provider . TWITCH ; var options =
new
LoginParams () { loginProvider = selectedProvider } ; web3Auth . login ( options ) ; } public
void
login () { var selectedProvider = Provider . EMAIL PASSWORDLESS ; var options =
new
LoginParams () { loginProvider = selectedProvider , extraLoginOptions =
new
ExtraLoginOptions () { login_hint =
"hello@web3auth.io" } } ; web3Auth . login ( options ) ; } public
void
login ( ) { var selectedProvider = Provider . JWT ; var options =
new
LoginParams () { loginProvider = selectedProvider , extraLoginOptions =
new
ExtraLoginOptions () { id_token =
"your_jwt_token" } } ; web3Auth . login ( options ) ; }
```

Logging out a userâ

web3Auth.logout()

â

Trigger logout flow. This function doesn't take parameters. A completable future containing a void object will be returned on successfull logout otherwise an error response is returned.

tip Additionally you can associate a function to be triggered on successful logout.

```
void
Start () { web3Auth =
GetComponent < Web3Auth
     (); web3Auth.setOptions(new
Web3AuthOptions () {
}); web3Auth . onLogout += onLogout ; } private
void
onLogout () { // Functions to be called after user logs out }
Exampleâ
public
void
logout () { web3Auth . logout (); Debug . Log ("Logged out!"); }
Working Exampleâ
/Assets/Web3Auth.cs using
System; using
System . Linq ; using
System . Collections . Generic ; using
UnityEngine; using
UnityEngine . UI; using
Newtonsoft . Json ;
public
class
Web3custom
MonoBehaviour { Web3Auth web3Auth ;
// Start is called before the first frame update void
Start () { web3Auth =
GetComponent < Web3Auth
     (); web3Auth . setOptions ( new
Web3AuthOptions () { redirectUrl =
new
Uri ( "torusapp://com.torus.Web3AuthUnity/auth" ) , clientId =
"BAwFgL-r7wzQKmtcdiz2uHJKNZdK7gzEf2q-m55xfzSZOw8jLOyli4AVvvzaEQO5nv2dFLEmf9LBkF8kaq3aErg", network =
Web3Auth . Network . TESTNET , } ) ; web3Auth . onLogin += onLogin ; web3Auth . onLogout += onLogout ;}
public
void
login () { var selectedProvider = Provider . GOOGLE ; var options =
```

```
new
LoginParams () { loginProvider = selectedProvider } ; web3Auth . login ( options ) ; }
private
void
onLogin ( Web3AuthResponse response ) { var userInfo = JsonConvert . SerializeObject ( response . userInfo , Formatting .
lndented ) ; Debug . Log ( userInfo ) ; }
public
void
logout () { web3Auth . logout () ; }
private
void
onLogout () { Debug . Log ( "Logged out!" ) ; } Edit this page Previous Initialize Next Whitelabel
```