HealthCare Authenticator (HCA)
Quick Start Guide - May 2023

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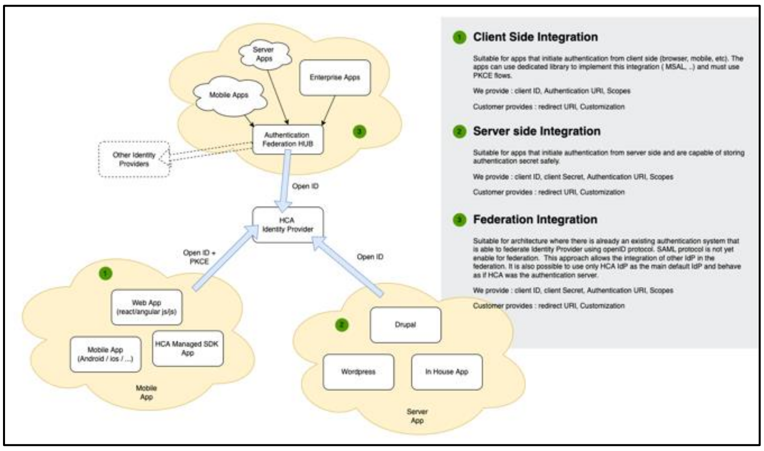
1 Introduction

In this quick start guide you will find information about how to integrate HealthCare Authenticator in your web site or mobile application. There are different ways to perform such an integration depending on the technology your web site or mobile is using. As examples:

- if your web site uses Javascript, you will opt for a Client-side integration using HCA JS or Angular JS SDK using OpenId protocol and a Proof Key for Code Exchange (PKCE).
- If your web site uses a CMS (WordPress, Drupal…) you will opt for a Server-side integration using OpenId protocol.
- If your web site already has an authentication solution installed, then you will choose a Federation integration using OpenID protocol.



Suitable for apps that initiate authentication from client side (browser, mobile, etc). The apps can use dedicated library to implement this integration (MSAL, ..) and must use PKCE flows.

We provide : client ID, Authentication URI, Scopes

Customer provides : redirect URI, Customization

Suitable for apps that initiate authentication from server side and are capable of storing authentication secret safely.

We provide : client ID, client Secret, Authentication URI, Scopes

Customer provides : redirect URI, Customization

Suitable for architecture where there is already an existing authentication system that is able to federate Identity Provider using openID protocol. SAML protocol is not yet enable for federation. This approach allows the integration of other IdP in the federation. It is also possible to use only HCA IdP as the main default IdP and behave as if HCA was the authentication server.

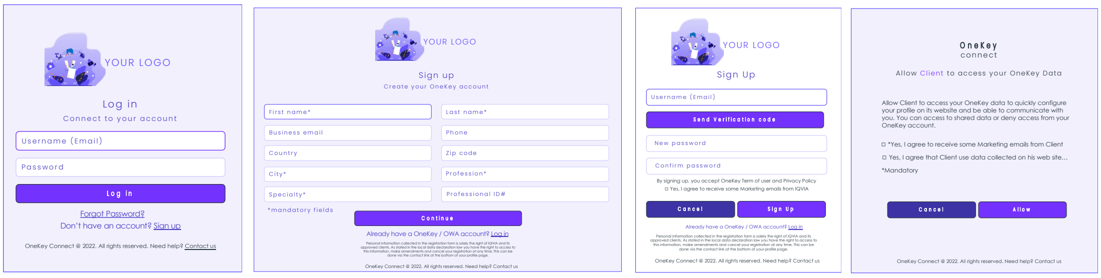
We provide : client ID, client Secret, Authentication URI, Scopes

Customer provides : redirect URI, Customization

HCA modes of integration

1.1 Authentication

In all cases, HCA will manage fully users' authentication, including Sign-up, Multi-Factor authentication, Consent gathering, Sign-in and Forget my password processes.



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Allow Client to access your OneKey data to quickly configure your profile on its website and be able to communicate with you. You can access to shared data or deny access from your OneKey account.

□ *Yes, I agree to receive some Marketing emails from Client

□ Yes, I agree that Client use data collected on his web site…

*Mandatory

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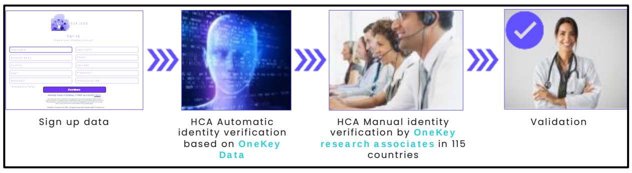
Examples of screens provided by HCA

1.2 Identity verification

HCA uses sign-up data to perform automatic identity verification based on OneKey data. It can also continue the process with manual identity verification performed by our research associates located all around the world. HCA provides an endpoint that allows to get identity verification status.


Sign up data
HCA Automatic identity verification based on OneKey Data
HCA Manual identity verification by OneKey research associates in 115 countries
Validation

HCA identity verification process

1.3 OneKey Profile

Once HCP identity has been verified, HCA endpoint can provide with additional data coming from our OneKey database.

Workplace name
Address
County
Phone number
Specialties
Professional Code
+ OneKey Insights

Example of data from HCP OneKey profile

1.4 Connect with a OneKey / OWA account

Once an HCP will have created his OneKey account, he will be able to use his OneKey credentials to connect to any other web site or mobile application using HCA or OWA (previous IQVIA version of HCA). If the HCP had already an OWA account, then he can do the same with his OWA credentials.

HCP can connect directly with his OneKey account

1.5 Get a Free Trial Subscription

To provide you with a free trial version of the HealthCare Authenticator (English non-customizable version with limited features) we will need from you:

- The name of your company
- A technical contact (name and email address)
- Your Domain name
- Your Identity server tenant name
- Redirection endpoint URIs*.

*Note that we have set a default endpoint URI to http://localhost:8080 to allow you a local test. You can provide us with different URIs (generally one for your development environment and one for your production environment). Bear in mind that if you do not use localhost, those URIs must be https ones.

In return we will provide you with:

- A Client ID that is required to authenticate requests from the HCA components and pre-built screens within your web site or mobile app.
- Claims URLs
- Discovery end point (OpenID connect Discovery URL): https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/v2.0/.well-known/openid-configuration

2 Client-side integration

2.1 Requirements

You must be comfortable developing in HTML5, CSS3, and JavaScript (JQuery and JQuery Mobile) at a minimum.

2.2 Downloading HCA SDK

HealthCare Authenticator SDK source code and binary files are available at the following GitHub location: https://github.com/orgs/hca-sdk

To integrate the HCA SDK within a website (using Angular JS) or JavaScript app, you can either:

- Load the HCA SDK directly from our CDN, by the following line of code inside your HTML template. We recommend placing it at the end of the body tag to avoid blocking the website initial rendering.

  For example:

  ```
  <body>
     <script src="https://static. healthcaresdks.com/hca/v1/hca-sdk.js"></script>
   </body>
  ```

- Download HCA SDK from GitHub and host it by your own.

2.3 Integration details

2.3.1 Initialize the HCA SDK

To initialize the HCA SDK, you need to add the following script at the end of the body:

JavaScript SDK within your JS/HTML app or website

```
<body>
   <!-- HCA SDK Set Configuration -->
   <script>
     hcaSdk.setHcaSdkConfig(<clientId>[,<scopes>]);
   </script>
 </body>
```

JavaScript SDK within your Angular app

```
// On the angular AppComponent, client should implement OnInit

export class AppComponent implements OnInit {
  isAccountLogged: boolean = false;
  accountProfile!: UserProfile;
  isProfileReady: boolean = false;

// In the OnInit Method configure the SDK:

ngOnInit() {
      this.accountProfile = this.initaccountProfile();
      // HCA Set Configuration
      hcaSdk.setHcaSdkConfig(<clientId>,<scopes>);
```

```
        hcaSdk.setLoginCallBack(this.resultLogin.bind(this));
  }

onLogin() {
    hcaSdk.signIn();
  }
onSignup() {
    hcaSdk.signUp();
  }

  initaccountProfile(): UserProfile {
    let userProfile: UserProfile = {
      title: '',
      firstName: '',
      lastName: '',
      email: '',
      phone: '',
      trustLevel: 0
    };
    return userProfile;
  }

}

export interface UserProfile {
  title: string;
  firstName: string;
  lastName: string;
  email: string;
  phone: string;
  trustLevel: number
}
```

ClientId: is the unique ID that identifies the application that we provided you with.

Scopes: is a list of scopes that defines the information that the application would like to access to.

- *https://auth.onekeyconnect.com/x/profile.basic*
  to access to:
  - UserID
  - TrustLevel

- *https://auth.onekeyconnect.com/x/profile.extended*
  to access to:

  - UserID
  - Onekey ID
  - TrustLevel
  - Title
  - Firstname
  - Lastname
  - ProfessionalType
  - WorkplaceName
  - Address
  - PostalCode

- City
- County
- Country
- PhoneNumber
- ProfessionalCode
- Specialities

Note that using the ‘extended’ scope requires an existing OneKey subscription or a specific OneKey contract.

- *https://auth.onekeyconnect.com/x/m_regis*
  to collect mandatory consents from the user during sign-up process
- *https://auth.onekeyconnect.com/x/o_mail_mark*
  to collect optional consents from the user during sign-up process

```
Exemple of configuration:

hcaSdk.setHcaSdkConfig(
   context.$config.env.HCA_CLIENT_ID,
   [
   'https://auth.onekeyconnect.com/x/profile.extended',
   'https://auth.onekeyconnect.com/x/m_regis',
   'https://auth.onekeyconnect.com/x/o_mail_mark',
   ],
   false
)
```

Note that you can replace extended by basic. You must not have both basic and extended profile scopes in the same configuration.

2.3.2 Sign-up

2.3.2.1 Integration of the Sign-up button

Display the 'Sign Up' button UI on your app or web site
To display a Sign-Up button (that will disappear after a user successfully signed up) you should add this script:

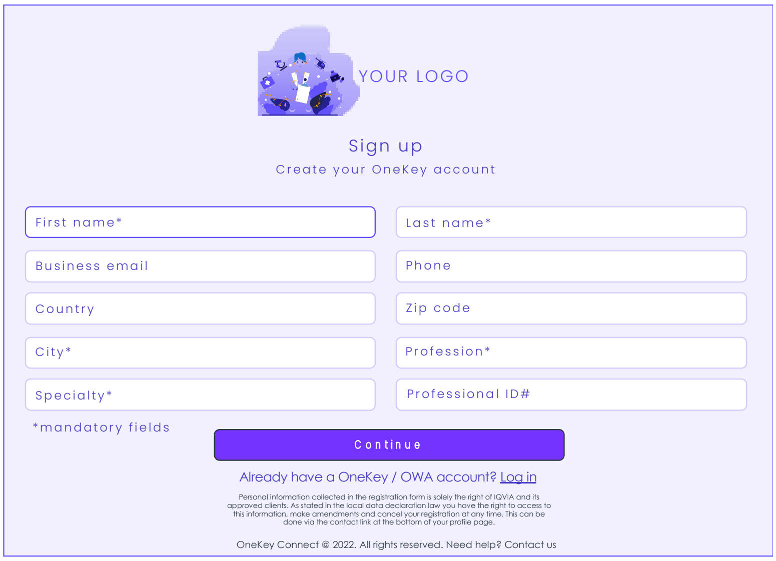
JavaScript SDK within your JS/HTML app or website

```
<body>
    <div>
        <!-- Place this div where want to display the Sign-Up button -->
        <div id="hca_signup">
        </div>
     </div>
 </body>
```

JavaScript SDK within your Angular app

```
// In the AppComponent HTML add the Signup Call:
<li class="nav-item"><a href="#" class="btn-signup waves-effect waves-light"
(click)="onSignup()">Sign up</a></li>
```

2.3.2.2 Sign-up form



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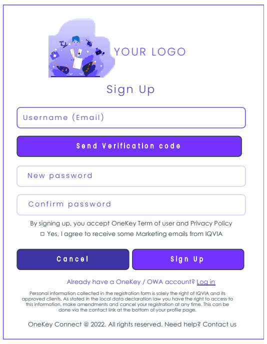
When a user clicks or taps on the sign-up button, he accesses to the sign-up form. The sign-up form contains fields to information on user’s profile:

- First Name
- Last Name
- Profession (List of OneKey professional types)
- Specialty (List of OneKey specialties)
- Postcode
- City
- Country (List of countries)
- Professional Code
- Phone
- Business Email

Note that First Name, Last Name, Country, City, Profession and Specialty are mandatory if your web site or mobile app requires a manual identity verification.

2.3.2.3 MFA form



By signing up, you accept OneKey Term of user and Privacy Policy

□ Yes, I agree to receive some Marketing emails from IQVIA

Already have a OneKey / OWA account? Log in

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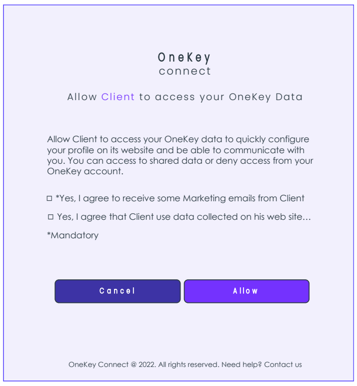
During sign-up process, Multi-Factor Authentication (MFA) is activated and mandatory, and he is required to enter his email address to receive an activation code. Once the email received, he will enter the code and create his password. The MFA form also contains check boxes for user to agree with OneKey terms and conditions (mandatory) and to collect user's consent (optional).

2.3.2.4 Consent Form



Allow Client to access your OneKey Data

Allow Client to access your OneKey data to quickly configure your profile on its website and be able to communicate with you. You can access to shared data or deny access from your OneKey account.

□ *Yes, I agree to receive some Marketing emails from Client

□ Yes, I agree that Client use data collected on his web site…

*Mandatory

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After Automatic identity verification, user will have to give his consent for us to provide you with data coming:

- His sign-up & MFA forms if he has not yet been identified.
- His sign-up & MFA forms and his OneKey account if he has been identified automatically.

The Consent form can also contain check boxes for user to:

- agree with your web site terms of use and your privacy policy: in that case, you must add (mandatory) https://auth.onekeyconnect.com/x/m_regis in the scopes when configuring HCA as identity provider.
- collect user's consents to allow you to use some of his data (up to ten check boxes that can be mandatory or optional): in that case, you need to add https://auth.onekeyconnect.com/x/o_mail_mark in the scopes when configuring HCA as identity provider.

Note that there are 72 different scopes for mandatory and optional consents (6 types and 6 channels). Connect with us to get the right ones.

2.3.3 Sign-in

2.3.3.1 Integration of the Sign-in Button

To display a Sign-in button (that will change to a sign-out after a user successfully logged in / Name of logged user + icon) you should add this script:

Display the 'Sign In' button UI on your app or web site:

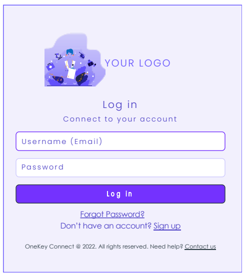
JavaScript SDK within your JS/HTML app or website

```
<body>
    <div>
        <!-- Place this div where want to display the Sign-In button -->
        <div id="hca_signin">
        </div>
     </div>
 </body>
```

JavaScript SDK within your Angular app

```
// In the AppComponent HTML add the LogIn Call:
<li class="nav-item"><a href="#" class="btn-login waves-effect waves-light"
(click)="onLogin()">Log in</a></li>
```

2.3.3.2 Sign-in Form



Don't have an account? Sign up

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When a user clicks or taps on the sign-in button, he accesses to the sign-in form. The sign-in form contains:

- Username, which is the email he used during HCA MFA process.
- Password, which is the password he defined during HCA MFA process.

Note that user can also log in with his OWA credentials (previous version of HCA).
From the sign-in form, user can also access to Forget Password form and to Sign-up form.

2.3.3.3 Handle login

To Define the return function to handle the login, you should add this script:

```
 <body>
   <!-- HCA SDK Set Configuration -->
   <script>
     hcaSdk.setLoginCallBack(updateUILogin);
```

```
  </script>
 </body>
The callback function below displays the ID of the logged user:
 function updateUILogin(account) {
  console.log(account.userId);
 }
```

2.3.3.4 Connected user

When user successfully signs in, the sign-in button can be replaced by user's information (icon, first name, last name, connection's date & hour).
To do that, please use data coming from basic OneKey Connect user's profile.
Note that an example of HCA's integration is available on GitHub, on which you will see how this capability has been implemented.

2.3.3.5 Service calls for additional data 1

The method isAccountLogged checks if the user is logged in or not (return true if the user is logged in and false if not:
hcaSdk.isAccountLogged()

Examples:

JavaScript SDK within your JS/HTML app or website

```
function isLogged() {
console.log("isLogged:" + hcaSdk.isAccountLogged());
}
```

JavaScript SDK within your Angular app

```
isLogged() {
   console.log(hcaSdk.isAccountLogged());
 }
```

2.3.3.6 Sign-out link

In order the user to sign-out please use the following function:

JavaScript SDK within your JS/HTML app or website

```
hcaSdk.signOut()
```

JavaScript SDK within your Angular app

```
onLogout() {
   hcaSdk.signOut();
 }
```

2.3.3.7 Edit my profile

To edit his profile and manage his consents, user is redirected to OneKey connect web app at the following method: hcaSdk.openUserProfile()

Note that an example of HCA's integration is available on GitHub, on which you will see how this capability has been implemented.

2.3.3.8 Service calls for additional data 2

The method getProfile() retrieves the profile data of the logged user
Example:

JavaScript SDK within your JS/HTML app or website

```
function getProfile() {
    hcaSdk.getProfile(callbackProfile);
 }

 function callbackProfile(data) {
   console.log(data);
 }
```

JavaScript SDK within your Angular app

```
getProfilePromise = () => {
  return new Promise((resolve, reject) => {
    hcaSdk.getProfile((data: any, err: any) => {
     if (err) return reject(err)
     resolve(data)
    })
  })
 }
```

Note that Get Profile method's use Me API (Cf. below) that provides 2 endpoints to retrieve:

- /api/hca/user/me/account: user's sign-up data, including validated email in MFA process and TrustLevel from HCA:
    - UserID
    - First Name
    - Last Name
    - Profession
    - Specialty
    - Postcode
    - City
    - Country
    - Professional Code
    - Phone
    - Business Email
    - Email
    - Trust level

- /api/hca/user/me/profile: user's OneKey data. Available OneKey data depends on scopes defined when configuring HCA (Cf. 2.3.1) and on existing OneKey subscription / contract and identity verification process' status or result:

  For a profile.basic scope. You will have access to:

- UserID
- TrustLevel

For a profile.extended scope. You will have access to:

- UserID
- Onekey ID
- TrustLevel
- Title
- Firstname
- Lastname
- ProfessionalType
- WorkplaceName
- Address
- PostalCode
- City
- County
- Country
- PhoneNumber
- ProfessionalCode
- Specialities

2.3.3.9 First Sign-in & Consent

If a user signs-in for the first time on your web site or mobile app using his OneKey credentials (and didn't sign-up on your web site), then HCA will proceed to an automatic sign-up and user won't have to fill a sign-up form.

In that case, user will have to give his consent for us to provide you with data coming his OneKey account using Consent form mentioned above.

Note: At the end of the sign in process, our authentication server calls back the redirect URI that was given in the parameters, this triggers a reload of the webpage, the SDK process the information and make it available to your code. It is important to consider this workflow when using SDK's function to access user information. This information is only available once the redirect URI is called.

2.3.4 Call backs

There are 3 more call back functions In additions the ones described above:

- A call back function to access Token

```
// HCA Set callback function to handle access Token
hcaSdk.setTokenCallBack(updateUIToken);
```

- A call back function to handle Cancel action

```
// HCA Set callback function to handle cancel action
 hcaSdk.setCancelCallBack(onCancel);
```

Ex.: When a user cancels his sign-in or sign-up process, you need to intercept HCA error message to provide user with a message and/or redirect him (e.g. to your home page).

- A call back function to handle Cancel action

```
// HCA Set callback function to handle errors
```

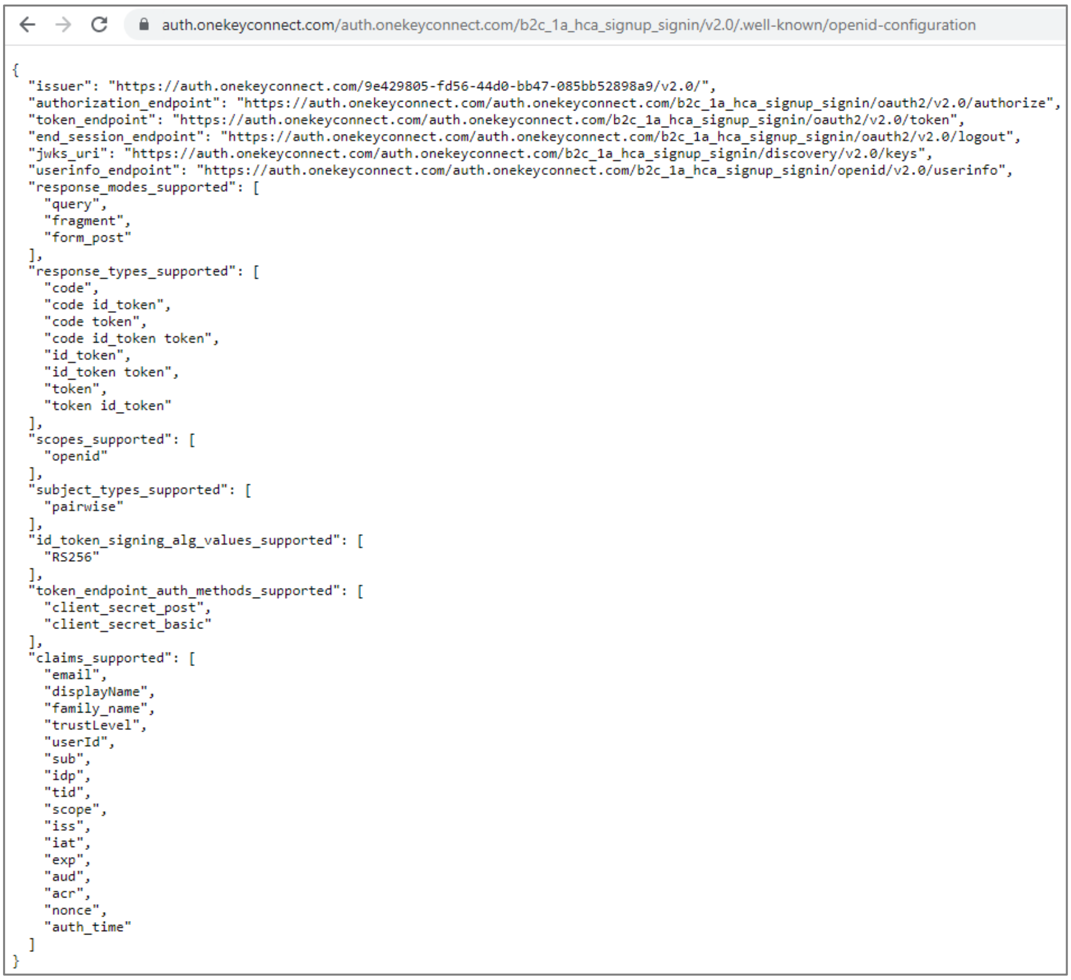
```
        hcaSdk.setErrorCallBack(onError);
```

2.4 HCA Discovery end point

2.4.1 Using HCA Discovery end point

The HCA discovery end point (https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/v2.0/.well-known/openid-configuration) defines a mechanism for you to discover HCA and obtain information needed to interact with it. It enables you to:

- Verify the identity of the End-User based on the authentication performed by Authorization Server,
- Obtain basic profile information about the End-User in an interoperable and REST-like manner (Cf. below: email, displayName, family_name, trustLevel…),
- Obtain OAuth 2.0 endpoint locations (Cf. below: userinfo_endpoint, end_session_endpoint…).



auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/v2.0/.well-known/openid-configuration

```
{
  "issuer": "https://auth.onekeyconnect.com/9e429805-fd56-44d0-bb47-085bb52898a9/v2.0/",
  "authorization_endpoint": "https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/oauth2/v2.0/authorize",
  "token_endpoint": "https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/oauth2/v2.0/token",
  "end_session_endpoint": "https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/oauth2/v2.0/logout",
  "jwks_uri": "https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/discovery/v2.0/keys",
  "userinfo_endpoint": "https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/openid/v2.0/userinfo",
  "response_modes_supported": [
    "query",
    "fragment",
    "form_post"
  ],
  "response_types_supported": [
    "code",
    "code id_token",
    "code token",
    "code id_token token",
    "id_token",
    "id_token token",
    "token",
    "token id_token"
  ],
  "scopes_supported": [
    "openid"
  ],
  "subject_types_supported": [
    "pairwise"
  ],
  "id_token_signing_alg_values_supported": [
    "RS256"
  ],
  "token_endpoint_auth_methods_supported": [
    "client_secret_post",
    "client_secret_basic"
  ],
  "claims_supported": [
    "email",
    "displayName",
    "family_name",
    "trustLevel",
    "userId",
    "sub",
    "idp",
    "tid",
    "scope",
    "iss",
    "iat",
    "exp",
    "aud",
    "acr",
    "nonce",
    "auth_time"
  ]
}
```

(More details on: https://openid.net/specs/openid-connect-discovery-1_0.html)

2.4.2 Using HCA UserInfo end point

This HCA Discovery endpoint includes UserInfo endpoint URL, here:
https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/openid/v2.0/userinfo

METHOD: GET

URL: https://auth.onekeyconnect.com/auth.onekeyconnect.com/openid/v2.0/userinfo?p=b2c_1a_hca_signup_signin

HEADER: Bearer <token>

This UserInfo endpoint is an OAuth 2.0 protected resource where you can retrieve consented claims, or assertions, about the end-user authenticated with his HCA/OneKey account. The claims are typically packaged in a JSON object where the sub member denotes the subject (end-user) identifier.

You need to call UserInfo endpoint using signed JWT (JSON Web Token) that you obtain during authentication process. It will return a JSON object including UserInfo Fields with data coming from the sign-up and MFA process:

UserInfo field	Description	Source
objectID	UserID	HCA
displayName	Last Name	Sign-up form
givenName	First Name	Sign-up form
surname	Last Name	Sign-up form
zipCode	Postal Code	Sign-up form
city	City name	Sign-up form
country	Country	Sign-up form
phone	Phone number	Sign-up form
businessEmail	Email provided	Sign-up form
profession	Profession Type code	Sign-up form
specialty	Specialty code	Sign-up form
email	Email and username	Sign-up form (MFA)
uci	Professional Code	Sign-up form
oneKeyID	OneKey ID (If the client has access to OneKey extended profile and if user has been identified)	HCA / OneKey
trustLevel	User’s trust level	HCA

3 Server-side integration

3.1 Requirements

CMS (Content Management System) users

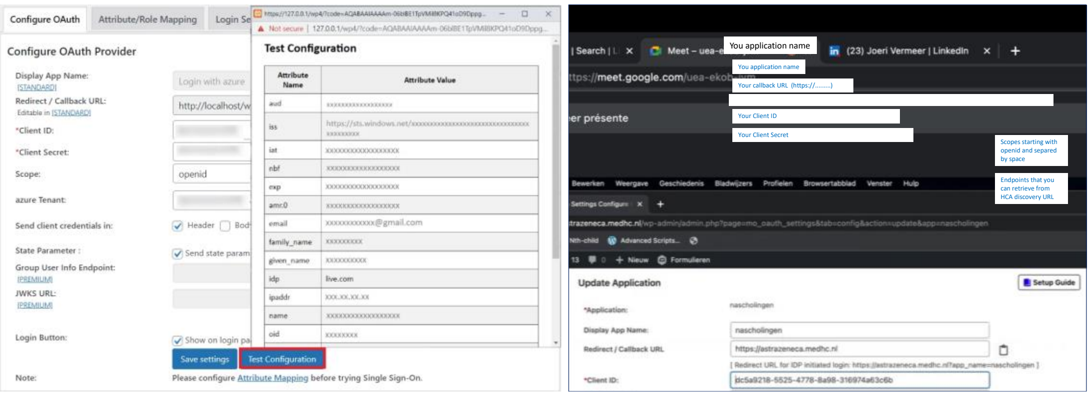
- You must add a CMS (e.g. Drupal or WordPress) OpenID Connect (OIDC / openidconnect) Client plugin (e.g. https://plugins.miniorange.com/wordpress-oauth-client-setup or https://plugins.miniorange.com/drupal) to your web site.
- This plugin will be integrated with the HealthCare Authenticator. It will act as a Service provider to establish a trust between HCA (which is the OAuth/OpenID/JWT Identity Provider) and your CMS. This will allow users to quickly and securely login to your CMS site using HCA.

3.2 Integration details

3.2.1 Configuring HCA as identity provider

To configure HCA as identity provider, you will need to log as an administrator and follow your CMS OpenID Connect Client plugin documentation. In general, you will be required to add a new identity provider (OAuth provider) by providing the following information:

- Identity provider name : OneKey
- Client ID: this refers to the Client ID you got from your account on our web site (https://www.healthcaresdks.com/en/authenticator).
- Client Secret: this refers to the Client Secret you got from your account on our web site. It will be used to create a Policy Key.



Configure OAuth | Attribute/Role Mapping | Login Se

Configure OAuth Provider

Display App Name: [STANDARD] — Login with azure
Redirect / Callback URL: Editable in [STANDARD] — http://localhost/w
*Client ID:
*Client Secret:
Scope: openid
azure Tenant:
Send client credentials in: ☑ Header □ Bod
State Parameter : ☑ Send state param
Group User Info Endpoint: [PREMIUM]
JWKS URL: [PREMIUM]
Login Button: ☑ Show on login pa

Save settings | Test Configuration

Note: Please configure Attribute Mapping before trying Single Sign-On.

https://127.0.0.1/wp4/?code=AQABAAIAAAAm-06bBE1TpVM8KPQ41oD9Dppg...
Not secure | 127.0.0.1/wp4/?code=AQABAAIAAAAm-06bBE1TpVM8KPQ41oD9Dppg...

Test Configuration

Attribute Name	Attribute Value
aud	xxxxxxxxxxxxxxxxx
iss	https://sts.windows.net/xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxx
iat	xxxxxxxxxxxxxxxxxx
nbf	xxxxxxxxxxxxxxxxxx
exp	xxxxxxxxxxxxxxxxxx
amr.0	xxxxxxxxxxxxxxxxxx
email	xxxxxxxxxxxx@gmail.com
family_name	xxxxxxxxx
given_name	xxxxxxxxxx
idp	live.com
ipaddr	xxx.xx.xx.xx
name	xxxxxxxxxxxxxxxxxx
oid	xxxxxxxx

| Search | L
Meet – uea-e
(23) Joeri Vermeer | LinkedIn
ttps://meet.google.com/uea-ekob
er présente
Bewerken Weergave Geschiedenis Bladwijzers Profielen Browsertabblad Venster Hulp
Settings Configura
Nth-child Advanced Scripts...
13 0 + Nieuw Formulieren
Setup Guide

You application name

You application name

Your callback URL (https://.........)

Your Client ID

Your Client Secret

Scopes starting with openid and separed by space

Endpoints that you can retrieve from HCA discovery URL

trazeneca.medhc.nl/wp-admin/admin.php?page=mo_oauth_settings&tab=config&action=update&app=nascholingen

Update Application

*Application: nascholingen
Display App Name: nascholingen
Redirect / Callback URL: https://astrazeneca.medhc.nl
[Redirect URL for IDP initiated login: https://astrazeneca.medhc.nl?app_name=nascholingen]
*Client ID: dc5a9218-5525-4778-8a98-316974a63c6b

Examples of configuration: *https://plugins.miniorange.com/wordpress-oauth-client-setup*

You will also need to provide a list of scopes separated by space that defines the information that the application would like to access to:

1. *Openid*
2. *https://auth.onekeyconnect.com/x/profile.basic* ***or*** *https://auth.onekeyconnect.com/x/profile.extended*
   to request access to OneKey data that you will get using Me API (Cf. below).

If you do not have a HCA/OneKey contract or OneKey subscription, use the basic profile.basic scope. You will have access to:

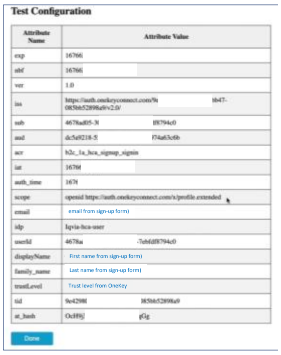
- UserID
- TrustLevel

If you have a HCA/OneKey contract or OneKey subscription, use the basic profile.extended scope. You will have access to:

- UserID
- Onekey ID
- TrustLevel
- Title
- Firstname
- Lastname
- ProfessionalType
- WorkplaceName
- Address
- PostalCode
- City
- County
- Country
- PhoneNumber
- ProfessionalCode
- Specialities

3. *https://auth.onekeyconnect.com/x/m_regis*
   to collect mandatory consents from the user during sign-up process
4. *https://auth.onekeyconnect.com/x/o_mail_mark*
   to collect optional consents from the user during sign-up process

Generally, the solution you use will allow you to test the configuration. In that case, you will see all the values returned by HCA (First Name, Last Name, Email) to CMS in a table (Cf. below).
Once you see all the required values, then you will have to proceed User Attribute / Role Mapping which is mandatory for enabling users to successfully login into CMS.



Test Configuration

Attribute Name	Attribute Value
exp	16766
nbf	16766 [redacted]
ver	1.0
iss	https://auth.onekeyconnect.com/9e [redacted] bb47-085bb52898a9/v2.0/
sub	4678ad05-3 [redacted] f8794c0
aud	dc5a9218-5 [redacted] f74a63c6b
acr	b2c_1a_hca_signup_signin
iat	1676 [redacted]
auth_time	1676
scope	openid https://auth.onekeyconnect.com/x/profile.extended
email	email from sign-up form)
idp	Iqvia-hca-user
userId	4678a [redacted] -7ebfdf8794c0
displayName	First name from sign-up form)
family_name	Last name from sign-up form)
trustLevel	Trust level from OneKey
tid	9e4298 [redacted] 085bb52898a9
at_hash	OcH9j [redacted] gGg

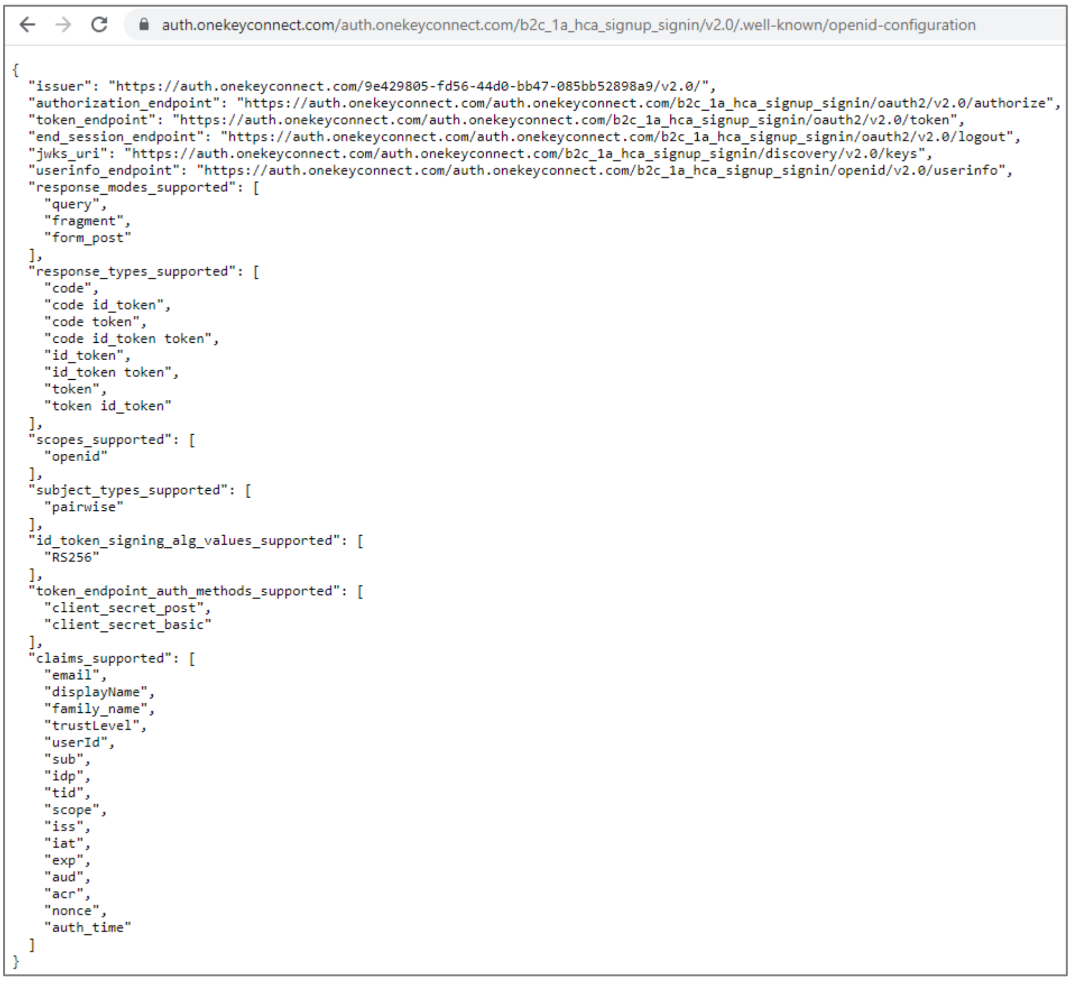
Test configuration example

3.2.2 Using HCA Discovery end point

The HCA discovery end point (https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/v2.0/.well-known/openid-configuration) defines a mechanism for you to discover HCA and obtain information needed to interact with it. It enables you to:

- Verify the identity of the End-User based on the authentication performed by Authorization Server,
- Obtain basic profile information about the End-User in an interoperable and REST-like manner (Cf. below: email, displayName, family_name, trustLevel…),

- Obtain OAuth 2.0 endpoint locations (Cf. below: userinfo_endpoint, end_session_endpoint…).


auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/v2.0/.well-known/openid-configuration

```
{
  "issuer": "https://auth.onekeyconnect.com/9e429805-fd56-44d0-bb47-085bb52898a9/v2.0/",
  "authorization_endpoint": "https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/oauth2/v2.0/authorize",
  "token_endpoint": "https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/oauth2/v2.0/token",
  "end_session_endpoint": "https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/oauth2/v2.0/logout",
  "jwks_uri": "https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/discovery/v2.0/keys",
  "userinfo_endpoint": "https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/openid/v2.0/userinfo",
  "response_modes_supported": [
    "query",
    "fragment",
    "form_post"
  ],
  "response_types_supported": [
    "code",
    "code id_token",
    "code token",
    "code id_token token",
    "id_token",
    "id_token token",
    "token",
    "token id_token"
  ],
  "scopes_supported": [
    "openid"
  ],
  "subject_types_supported": [
    "pairwise"
  ],
  "id_token_signing_alg_values_supported": [
    "RS256"
  ],
  "token_endpoint_auth_methods_supported": [
    "client_secret_post",
    "client_secret_basic"
  ],
  "claims_supported": [
    "email",
    "displayName",
    "family_name",
    "trustLevel",
    "userId",
    "sub",
    "idp",
    "tid",
    "scope",
    "iss",
    "iat",
    "exp",
    "aud",
    "acr",
    "nonce",
    "auth_time"
  ]
}
```

(More details on: https://openid.net/specs/openid-connect-discovery-1_0.html)

3.2.3 Using HCA UserInfo end point

This HCA Discovery endpoint includes UserInfo endpoint URL, here: https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/openid/v2.0/userinfo

```
METHOD: GET

URL: https://auth.onekeyconnect.com/auth.onekeyconnect.com/openid/v2.0/userinfo?p=b2c_1a_hca_signup_signin

HEADER: Bearer <token>
```

This UserInfo endpoint is an OAuth 2.0 protected resource where you can retrieve consented claims, or assertions, about the end-user authenticated with his HCA/OneKey account. The claims are typically packaged in a JSON object where the sub member denotes the subject (end-user) identifier.

You need to call UserInfo endpoint using signed JWT (JSON Web Token) that you obtain during authentication process.

It will return a JSON object including UserInfo Fields with data coming from the sign-up and MFA process:

UserInfo field	Description	Source
objectID	UserID	HCA
displayName	Last Name	Sign-up form
givenName	First Name	Sign-up form
surname	Last Name	Sign-up form
zipCode	Postal Code	Sign-up form
city	City name	Sign-up form
country	Country	Sign-up form
phone	Phone number	Sign-up form
businessEmail	Email provided	Sign-up form
profession	Profession Type code	Sign-up form
specialty	Specialty code	Sign-up form
email	Email and username	Sign-up form (MFA)
uci	Professional Code	Sign-up form
oneKeyID	OneKey ID (If the client has access to OneKey extended profile and if user has been identified)	HCA / OneKey
trustLevel	User's trust level	HCA

User Information Fields: These are the claims related to the OneKey account. Your authentication solution requests these fields from HCA SDK when a user is authenticated with his OneKey account.

3.2.4 Using HCA Me end points

HCA provides an API to retrieve User's data: Me API. Me API has 2 endpoints to allow you to retrieve user's sign-up data and user's OneKey data (Cf. below). You need to call Me endpoints using signed JWT (JSON Web Token) that you obtain during authentication process.

3.2.4.1 me/account

User's sign-up data, including validated email in MFA process and TrustLevel (coming from OneKey):

```
METHOD: GET
URL: https://apim-prod-westeu-onekey.azure-api.net/api/hca/user/me/account
HEADER: Bearer <token>
```

- UserID
- First Name
- Last Name
- Profession
- Specialty

- Postcode
- City
- Country
- Professional Code
- Phone
- Business Email
- Email
- Trust level

3.2.4.2 me/profile

User’s OneKey data. Available OneKey data depends on scopes defined when configuring HCA (Cf. 4.2.1) and on existing OneKey subscription / contract and identity verification process’ status or result.

METHOD: GET
URL: https://apim-prod-westeu-onekey.azure-api.net/api/hca/user/me/profile
HEADER: Bearer <token>

For a profile.basic scope. You will have access to:

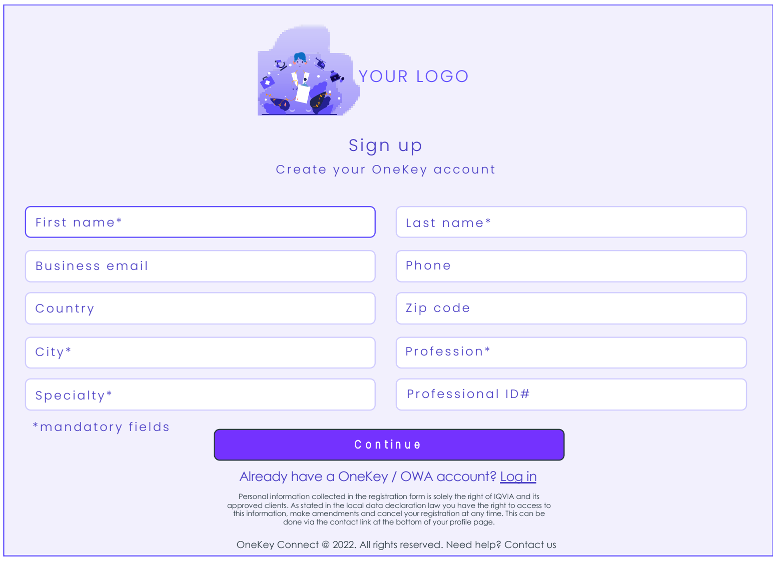
- UserID
- TrustLevel

For a profile.extended scope. You will have access to:

- UserID
- Onekey ID
- TrustLevel
- Title
- Firstname
- Lastname
- ProfessionalType
- WorkplaceName
- Address
- PostalCode
- City
- County
- Country
- PhoneNumber
- ProfessionalCode
- Specialities

3.3 Sign-up

3.3.1 Sign-up form



Sign up

Create your OneKey account

*mandatory fields

Already have a OneKey / OWA account? Log in

Personal information collected in the registration form is solely the right of IQVIA and its approved clients. As stated in the local data declaration law you have the right to access to this information, make amendments and cancel your registration at any time. This can be done via the contact link at the bottom of your profile page.

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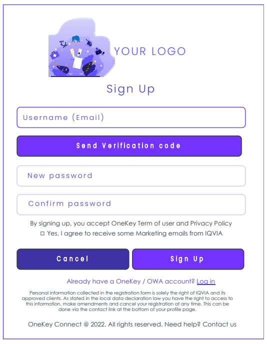
When a user clicks or taps on the sign-up button, he accesses to the sign-up form. The sign-up form contains fields to information on user’s profile:

- First Name
- Last Name
- Profession (List of OneKey professional types)
- Specialty (List of OneKey specialties)
- Postcode
- City
- Country (List of countries)
- Professional Code
- Phone
- Business Email

Note that:

- First Name, Last Name, Country, City, Profession and Specialty are mandatory if your web site or mobile app requires manual identity verification.

3.3.2 MFA form



Username (Email)

New password

Confirm password

By signing up, you accept OneKey Term of user and Privacy Policy

□ Yes, I agree to receive some Marketing emails from IQVIA

Already have a OneKey / OWA account? Log in

Personal information collected in the registration form is solely the right of IQVIA and its approved clients. As stated in the local data declaration law you have the right to access to this information, make amendments and cancel your registration at any time. This can be done via the contact link at the bottom of your profile page.

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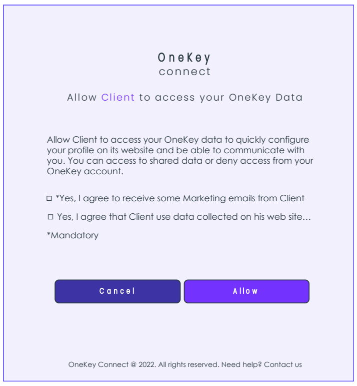
During sign-up process, Multi-Factor Authentication (MFA) is activated and mandatory, and he is required to enter his email address to receive an activation code. Once the email received, he will enter the code and create his password. The MFA form also contains check boxes for user to agree with OneKey terms and conditions (mandatory) and to collect user's consent (optional).

3.3.3 Consent Form



Allow Client to access your OneKey Data

Allow Client to access your OneKey data to quickly configure your profile on its website and be able to communicate with you. You can access to shared data or deny access from your OneKey account.

□ *Yes, I agree to receive some Marketing emails from Client

□ Yes, I agree that Client use data collected on his web site…

*Mandatory

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After Automatic identity verification, user will have to give his consent for us to provide you with data coming:

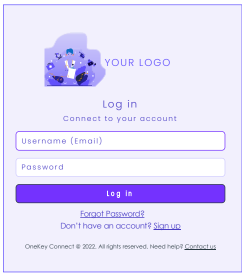
- His sign-up & MFA forms if he has not yet been identified.
- His sign-up & MFA forms and his OneKey account if he has been identified automatically.

The Consent form can also contain check boxes for user to:

- agree with your web site terms of use and your privacy policy: in that case, you must add (mandatory) https://auth.onekeyconnect.com/x/m_regis in the scopes when configuring HCA as identity provider.
- collect user's consents to allow you to use some of his data (up to ten check boxes that can be mandatory or optional): in that case, you need to add https://auth.onekeyconnect.com/x/o_mail_mark in the scopes when configuring HCA as identity provider.

Note that there are 72 different scopes for mandatory and optional consents (6 types and 6 channels). Connect with us to get the right ones.

3.4 Sign-in



Don't have an account? Sign up

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First Sign-in & Consent
If a user signs-in for the first time on your web site or mobile app using his OneKey credentials (and didn't sign-up on your web site), then HCA will proceed to an automatic sign-up and user won't have to fill a sign-up form.

In that case, user will have to give his consent for us to provide you with data coming his OneKey account using Consent form mentioned above.

3.5 Others

Data from Sign-up process
After Sign-up process HCA will give access to data from Sign-up and MFA form and from identity verification if purchased (OneKey record) using endpoints described above.

Cancel
When a user cancels his sign-in or sign-up process, you need to intercept HCA error message to provide user with a message and/or redirect him (e.g. to your home page).

4 Federation integration

4.1 Requirements

Your authentication solution must be OpenID compatible.

4.2 Integration details

4.2.1 Configuring HCA as a new identity provider

To configure HCA as a new identity provider within your authentication system, you will need to log as an administrator and follow corresponding documentation.

In general, you will be required to add a new identity provider (OAuth provider) by providing the following information:

- Identity provider name: OneKey
- Client ID: this refers to the Client ID you received from us.
- Client Secret: this refers to the Client Secret you received from us. It will be used to create a Policy Key.
- You will also need to provide a list of scopes separated by space that defines the information that the application would like to access to:
    - *https://auth.onekeyconnect.com/x/profile.basic or https://auth.onekeyconnect.com/x/profile.extended*
      to request access to OneKey data that you will get using Me API (Cf. below).

      If you do not have a HCA/OneKey contract or OneKey subscription, use the basic profile.basic scope. You will have access to:
        - UserID
        - TrustLevel

      If you have a HCA/OneKey contract or OneKey subscription, use the basic profile.extended scope. You will have access to:
        - UserID
        - Onekey ID
        - TrustLevel
        - Title
        - Firstname
        - Lastname
        - ProfessionalType
        - WorkplaceName
        - Address
        - PostalCode
        - City
        - County
        - Country
        - PhoneNumber
        - ProfessionalCode
        - Specialities

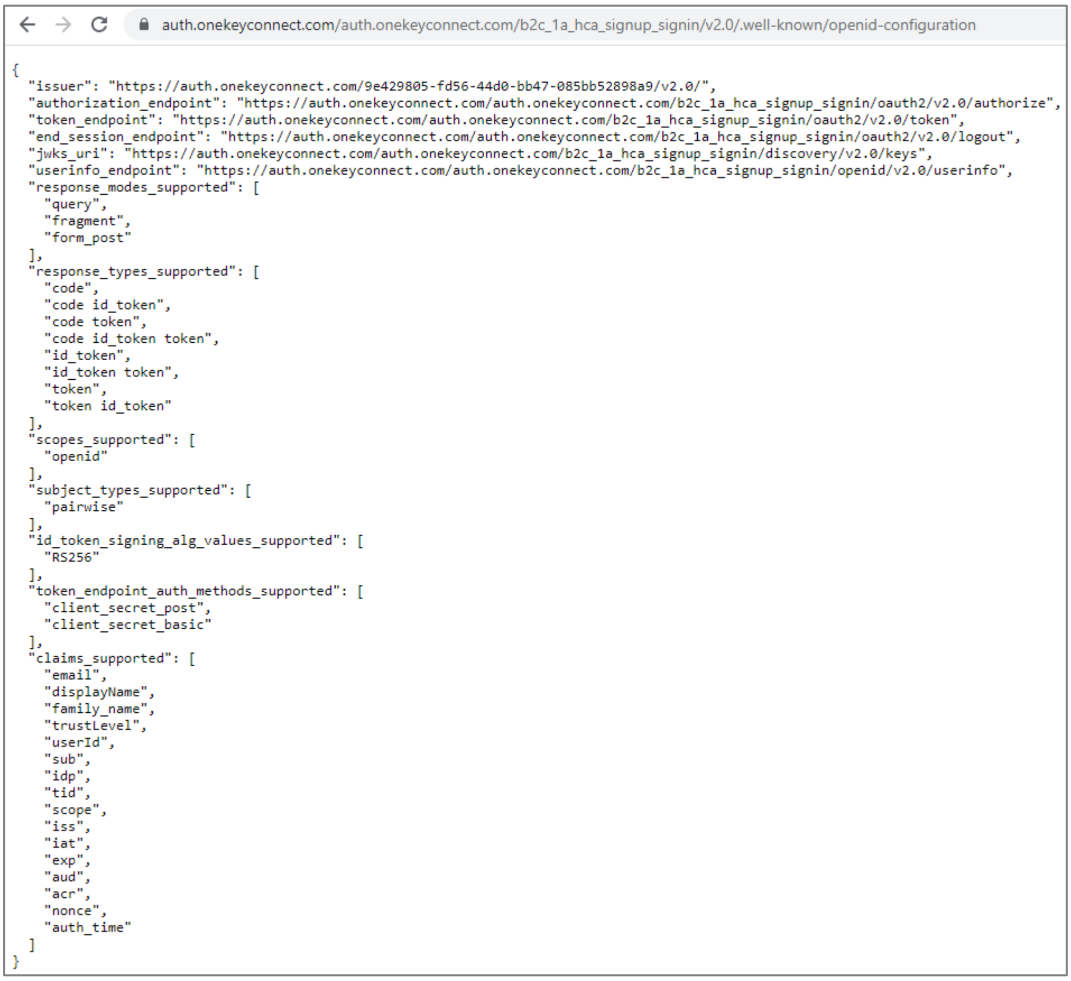
    - https://auth.onekeyconnect.com/x/m_regis
      to collect mandatory consents from the user during sign-up process
    - https://auth.onekeyconnect.com/x/o_mail_mark
      to collect optional consents from the user during sign-up process

- User Information Fields: User Information Fields are the claims related to the OneKey account. Your authentication solution requests these fields from HCA SDK when a user is authenticated with his OneKey account.

4.2.2 Using HCA Discovery end point

The HCA discovery end point (https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/v2.0/.well-known/openid-configuration) defines a mechanism for you to discover HCA and obtain information needed to interact with it. It enables you to:

- Verify the identity of the End-User based on the authentication performed by Authorization Server,
- Obtain basic profile information about the End-User in an interoperable and REST-like manner (Cf. below: email, displayName, family_name, trustLevel...),
- Obtain OAuth 2.0 endpoint locations (Cf. below: userinfo_endpoint, end_session_endpoint...).


auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/v2.0/.well-known/openid-configuration

```
{
  "issuer": "https://auth.onekeyconnect.com/9e429805-fd56-44d0-bb47-085bb52898a9/v2.0/",
  "authorization_endpoint": "https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/oauth2/v2.0/authorize",
  "token_endpoint": "https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/oauth2/v2.0/token",
  "end_session_endpoint": "https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/oauth2/v2.0/logout",
  "jwks_uri": "https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/discovery/v2.0/keys",
  "userinfo_endpoint": "https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/openid/v2.0/userinfo",
  "response_modes_supported": [
    "query",
    "fragment",
    "form_post"
  ],
  "response_types_supported": [
    "code",
    "code id_token",
    "code token",
    "code id_token token",
    "id_token",
    "id_token token",
    "token",
    "token id_token"
  ],
  "scopes_supported": [
    "openid"
  ],
  "subject_types_supported": [
    "pairwise"
  ],
  "id_token_signing_alg_values_supported": [
    "RS256"
  ],
  "token_endpoint_auth_methods_supported": [
    "client_secret_post",
    "client_secret_basic"
  ],
  "claims_supported": [
    "email",
    "displayName",
    "family_name",
    "trustLevel",
    "userId",
    "sub",
    "idp",
    "tid",
    "scope",
    "iss",
    "iat",
    "exp",
    "aud",
    "acr",
    "nonce",
    "auth_time"
  ]
}
```

(More details on: https://openid.net/specs/openid-connect-discovery-1_0.html)

4.2.3 Using HCA UserInfo end point

This HCA Discovery endpoint includes UserInfo endpoint URL, here: https://auth.onekeyconnect.com/auth.onekeyconnect.com/b2c_1a_hca_signup_signin/openid/v2.0/userinfo

This UserInfo endpoint is an OAuth 2.0 protected resource where you can retrieve consented claims, or assertions, about the end-user authenticated with his HCA/OneKey account. The claims are typically packaged in a JSON object where the sub member denotes the subject (end-user) identifier.

You need to call UserInfo endpoint using signed JWT (JSON Web Token) that you obtain during authentication process.

METHOD: GET
URL: https://auth.onekeyconnect.com/auth.onekeyconnect.com/openid/v2.0/userinfo?p=b2c_1a_hca_signup_signin
HEADER: Bearer <token>

It will return a JSON object including UserInfo Fields with data coming from the sign-up and MFA process:

UserInfo field	Description	Source
objectID	UserID	HCA
displayName	Last Name	Sign-up form
givenName	First Name	Sign-up form
surname	Last Name	Sign-up form
zipCode	Postal Code	Sign-up form
city	City name	Sign-up form
country	Country	Sign-up form
phone	Phone number	Sign-up form
businessEmail	Email provided	Sign-up form
profession	Profession Type code	Sign-up form
specialty	Specialty code	Sign-up form
email	Email and username	Sign-up form (MFA)
uci	Professional Code	Sign-up form
oneKeyID	OneKey ID (If the client has access to OneKey extended profile and if user has been identified)	HCA / OneKey
trustLevel	User’s trust level	HCA

User Information Fields: These are the claims related to the OneKey account. Your authentication solution requests these fields from HCA SDK when a user is authenticated with his OneKey account.

4.2.4 Using HCA Me end points

HCA provides an API to retrieve User's data: Me API. Me API has 2 endpoints to allow you to retrieve user's sign-up data and user's OneKey data (Cf. below). You need to call Me endpoints using signed JWT (JSON Web Token) that you obtain during authentication process.

4.2.4.1 me/account

User's sign-up data, including validated email in MFA process and TrustLevel (coming from OneKey):

```
METHOD: GET
URL: https://apim-prod-westeu-onekey.azure-api.net/api/hca/user/me/account
HEADER: Bearer <token>
```

- UserID
- First Name
- Last Name
- Profession
- Specialty
- Postcode
- City
- Country
- Professional Code
- Phone
- Business Email
- Email
- Trust level

4.2.4.2 me/profile

User's OneKey data. Available OneKey data depends on scopes defined when configuring HCA (Cf. 4.2.1) and on existing OneKey subscription / contract and identity verification process' status or result.

```
METHOD: GET
URL: https://apim-prod-westeu-onekey.azure-api.net/api/hca/user/me/profile
HEADER: Bearer <token>
```

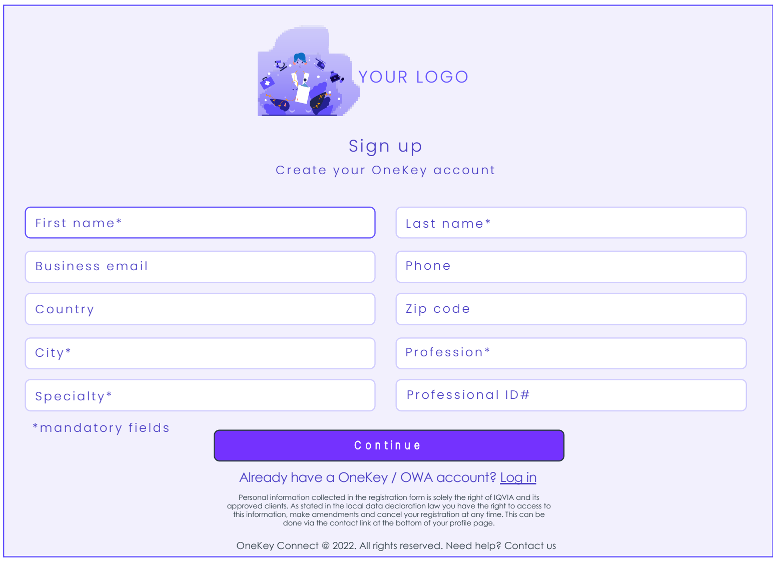
For a profile.basic scope. You will have access to:
- UserID
- TrustLevel

For a profile.extended scope. You will have access to:

- UserID
- Onekey ID
- TrustLevel
- Title
- Firstname
- Lastname
- ProfessionalType
- WorkplaceName
- Address
- PostalCode
- City
- County
- Country
- PhoneNumber
- ProfessionalCode
- Specialities

4.3 Sign-up

4.3.1 Sign-up form



Create your OneKey account

Already have a OneKey / OWA account? Log in

Personal information collected in the registration form is solely the right of IQVIA and its approved clients. As stated in the local data declaration law you have the right to access to this information, make amendments and cancel your registration at any time. This can be done via the contact link at the bottom of your profile page.

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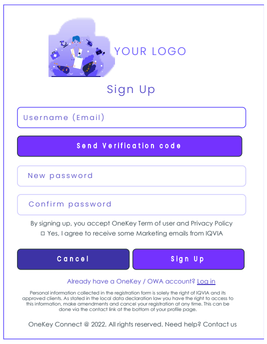
When a user clicks or taps on the sign-up button, he accesses to the sign-up form. The sign-up form contains fields to information on user’s profile:

- First Name
- Last Name
- Profession (List of OneKey professional types)
- Specialty (List of OneKey specialties)
- Postcode
- City
- Country (List of countries)
- Professional Code
- Phone
- Business Email

Note that:

- First Name, Last Name, Country, City, Profession and Specialty are mandatory if your web site or mobile app requires manual identity verification.

4.3.2 MFA form



By signing up, you accept OneKey Term of user and Privacy Policy

□ Yes, I agree to receive some Marketing emails from IQVIA

Already have a OneKey / OWA account? Log in

Personal information collected in the registration form is solely the right of IQVIA and its approved clients. As stated in the local data declaration law you have the right to access to this information, make amendments and cancel your registration at any time. This can be done via the contact link at the bottom of your profile page.

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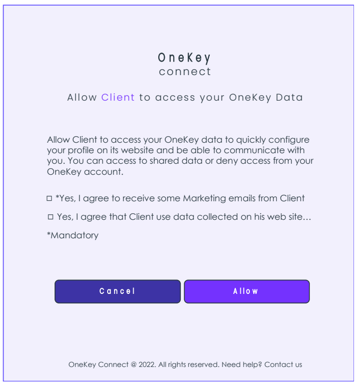
During sign-up process, Multi-Factor Authentication (MFA) is activated and mandatory, and he is required to enter his email address to receive an activation code. Once the email received, he will enter the code and create his password. The MFA form also contains check boxes for user to agree with OneKey terms and conditions (mandatory) and to collect user's consent (optional).

4.3.3 Consent Form



Allow Client to access your OneKey Data

Allow Client to access your OneKey data to quickly configure your profile on its website and be able to communicate with you. You can access to shared data or deny access from your OneKey account.

□ *Yes, I agree to receive some Marketing emails from Client

□ Yes, I agree that Client use data collected on his web site…

*Mandatory

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After Automatic identity verification, user will have to give his consent for us to provide you with data coming:

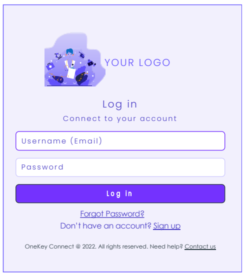
- His sign-up & MFA forms if he has not yet been identified.
- His sign-up & MFA forms and his OneKey account if he has been identified automatically.

The Consent form can also contain check boxes for user to:

- agree with your web site terms of use and your privacy policy: in that case, you must add (mandatory) https://auth.onekeyconnect.com/x/m_regis in the scopes when configuring HCA as identity provider.
- collect user's consents to allow you to use some of his data (up to ten check boxes that can be mandatory or optional): in that case, you need to add https://auth.onekeyconnect.com/x/o_mail_mark in the scopes when configuring HCA as identity provider.

Note that there are 72 different scopes for mandatory and optional consents (6 types and 6 channels). Connect with us to get the right ones.

4.4 Sign-in



Log in

Connect to your account

Forgot Password?

Don't have an account? Sign up

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First Sign-in & Consent
If a user signs-in for the first time on your web site or mobile app using his OneKey credentials (and didn't sign-up on your web site), then HCA will proceed to an automatic sign-up and user won't have to fill a sign-up form.

In that case, user will have to give his consent for us to provide you with data coming his OneKey account using Consent form mentioned above.

4.5 Others

Data from Sign-up process
After Sign-up process HCA will give access to data from Sign-up and MFA form and from identity verification if purchased (OneKey record) using endpoints described above.

Cancel
When a user cancels his sign-in or sign-up process, you need to intercept HCA error message to provide user with a message and/or redirect him (e.g. to your home page).

5 Get a Production Subscription

You tested your app or web site with HCA free trial solution and now you want to go live with real data and a customized solution. To provide you with a Pro version, we will need from you the following information:

- List of countries and for each country:
  - Language(s)
  - Which level of identity verification do you require?
    - TL1: no identity verification
    - TL2A: automatic identity verification only
    - TL2: manual identity verification done by research associates using different data sources if TL2A failed
    - TL4: Identity verification made by phone by research associates.
  - Graphical elements for sign-in, sign-up, MFA and Consent forms.
  - Links to your web site terms and conditions and Privacy.
  - List of the fields (check box) you want us to add during sign-up process to collect mandatory and optional user's consents.
  - URL of your web site (https) and Production Redirection endpoint URIs.

We will provide with a Customization guide to help you to provide us all these information. Once we will provide you the customized pro version of HCA SDK, you will be good to go.