## ## What is OAuth 2.0?

OAuth is an [open standard for authorization](https://oauth.net/2/). It is commonly used as a way for users to log into third-party websites using Microsoft, Google, Facebook etc. accounts without exposing their password. It is increasingly becoming an industry standard for security and permission-based application experiences and is what we use at OrderCloud.io.

OAuth allows you to configure a total of four different workflows all of which use the following Method and Request URL.

```

POST https://auth.ordercloud.io/oauth/token HTTP/1.1  
Content-Type: text/html; charset=UTF-8

```

## ## Required Information

All of the information required for an authentication request can be accessed from your [Dashboard](https://documentation.ordercloud.io/platform-guides/getting-started/using-the-dashboard).

## ## 1. Password Grant Type

This workflow is most appropriate for client apps where the user is a human, i.e, a registered OrderCloud.io Buyer or Admin user.

A successful authentication with this workflow requires the following information:

1. Client ID
2. Scope
3. Username
4. Password
5. Grant Type: `grant\_type=password`

```

POST https://auth.ordercloud.io/oauth/token HTTP/1.1  
Content-Type: text/html; charset=UTF-8  
  
client\_id=xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx&grant\_type=password&username=xxxxxxxx&password=xxxxxxxx&scope=FullAccess

```

## ## 2. Client Credentials Grant Type

This configuration is best suited for an application where you need a way for your backend system to log in. It is also appropriate when you are just getting started and need to seed your application with users who can subsequently authenticate using the Password Grant type.

A successful authentication with this workflow requires the following information:

1. Client ID
2. Client Secret
3. Scope
4. Grant Type: `grant\_type=client\_credentials`

```

POST https://auth.ordercloud.io/oauth/token HTTP/1.1  
Content-Type: text/html; charset=UTF-8  
  
client\_id=xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx&grant\_type=client\_credentials&client\_secret=xxxxxxxxxxxxx&scope=FullAccess

```

## ## 3. Anonymous Shopping or Guest Checkout

There are some B2B clients that will want to enable visitors to browse a catalog of products and/or checkout without registering themselves. We call this Anonymous Shopping or Guest Checkout. An in-depth guide for this workflow is detailed [here](https://documentation.ordercloud.io/platform-guides/authentication/anonymous-shopping)

## ## 4. Elevated Password Grant Type

The final workflow is the same as the Password Grant Type workflow except that it has an additional requirement of a Client Secret. This type of workflow is generally used for applications accessing the API on behalf of a user, rather than a user accessing it directly as in a Password Grant type. An app requesting an access token has to know the client secret in order to gain the token. This prevents malicious apps that have not been authorized from using the tokens from ever obtaining a valid access token.

To use this workflow you will first need to set the Client Secret in the Dashboard's app tab and include the Client Secret in each request

```

POST https://auth.ordercloud.io/oauth/token HTTP/1.1  
Content-Type: text/html; charset=UTF-8  
  
client\_id=xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx&grant\_type=client\_credentials&client\_secret=xxxxxxxxxxxxx&scope=FullAccess

```

## ## Subsequent Requests

A successful authentication (using one of the four workflows) will yield a response like the following:

```

{  
 "access\_token": "eyJ0eXAi0iJKV1QiLCJhbGci0iJ",  
 "token\_type" : "bearer",  
 "expires\_in" : 35999,  
 "refresh\_token": "878ca890-af6a-48b6-98a2-1e1cf4a.."  
}

```

The `access\_token` from the response will need to be included in each and every OrderCloud.io API request as part of the Authorization header prefaced by `Bearer`.

```

GET https://api.ordercloud.io/v1/buyers HTTP/1.1  
Authentication: Bearer eyJ0eXAi0iJKV1QiLCJhbGci0iJ9...  
Content-Type: application/json; charset=UTF-8

```

## ## Conclusion

You should now have a basic understanding of the four different OAuth 2 workflows. Each of these workflows return a token which allows you to make authenticated calls to OrderCloud.io.