

# Getting Started

At their base level, web APIs (such as those provided by Xero and QBO) are text based. An external program sends a request to the server, and it responds with a text-based (JSON or XML) representation of the data requested. This level of the process is usually taken care of by some form of vendor-provided library/wrapper. This provides a list of available queries you can make and details what the responses will look like. Importantly (for purposes of interacting with Ledgerflow) the wrapper also handles where the request needs to be sent.

The Ledgerflow API mimics the behaviour of the Xero API.

## A typical Xero API integration will use:

- Some form of wrapper to access the Xero API (there are different wrappers depending on tech stack)
- API credentials provided by Xero
- URL to send API requests to Xero
- URL to send a request for TTP access authentication

## Preparation for using Ledgerflow API

- You need to obtain Ledgerflow API access credentials provided by Ledgerflow
- You can reuse the integration code written for the Xero API
- You can reconfigure the wrapper to use your Ledgerflow credentials
- You can reconfigure the Xero API wrapper to point to Ledgerflow for API data queries
- You can reconfigure the Xero wrapper to point to Ledgerflow for authenticating TTP access to the source accounting system (end user consent)

## Preparation for access to non-Xero accounting platforms

Whilst Ledgerflow acts as a gateway to other accounting platforms you will need to get your own API access credentials to each of those accounting platform APIs and provide them to Ledgerflow and we will use those credentials to access those APIs on your behalf.

1. You will need to get API access credentials from the relevant accounting platforms
2. You can configure Ledgerflow using the Ledgerflow Developer portal - this is where you will store the credentials needed to access different accounting APIs

## Ledgerflow Operation - consent

You will need to put end-user consent in place in order to be a TTP for the end-user's accounting data - this is dealt with following the Xero protocol.

Consent for all accounting platforms is done following the Xero method (the wrapper will manage this) and Ledgerflow will take care of formatting the request that gets passed to the source accounting platform and the tokens that are passed back when consent is authenticated.

## Ledgerflow Operation - initial data extract to Ledgerflow

Immediately consent is in place Ledgerflow will upload all the accounting transactions into Ledgerflow. This may take up to 15 minutes depending on the source platform and how many transactions exist.

Data refreshes will then be scheduled, periodically every day or every month.

## Ledgerflow Operation - Extracting accounting data

Standard Xero API commands are used to query customer data from the end-users accounting platform

Responses will be returned in Xero API format irrespective of the source platform.

# Appendix

## Examples of the config changes required:

- Change the endpoint in your library configuration so that API requests are sent to <https://xero.api.ledgerscope.com> instead of <https://api.xero.com>.
- Change your credentials (usually referred to as ConsumerKey and ConsumerSecret) so that you can authenticate against Ledgerflow instead of Xero.

Our system has been designed to be "wire compatible" with Xero, so any request that you can send to Xero will be dealt with by Ledgerflow in the same manner. When you want to set up a new connection, instead of querying <https://api.xero.com> you send the same request to <https://xero.api.ledgerscope.com> (appending the source system to the URL eg "&KashFlow" or "&SageDesktop") and the rest of the process will happen exactly as your system expects. Internally you will need to configure your system to be able to direct API requests as "direct connections" or "Ledgerflow connections" but this is something that our support team will be able to help with