

## Access Manager Suite (AMS) to QuickBooks Online (QBO) API Configuration

### 1.0 - Set up QuickBooks Online Company

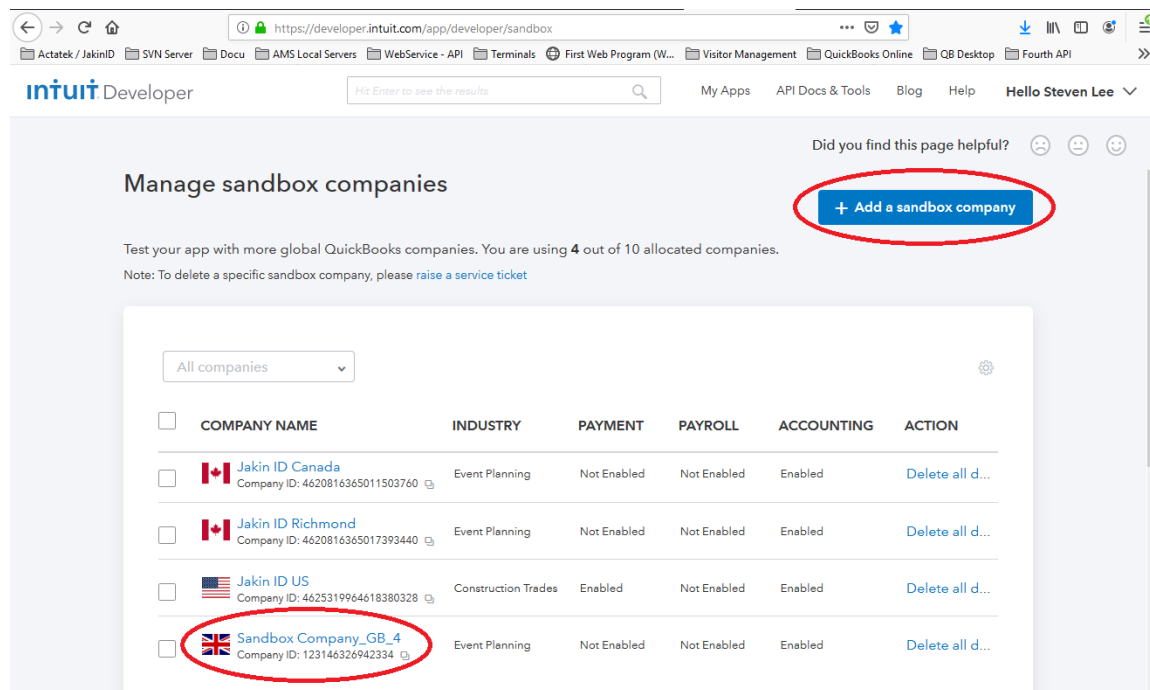
If the QuickBooks company account is not available yet on QuickBooks Online, create a company on the QuickBooks Online (QBO) first.

Go to Sandbox

<https://developer.intuit.com/app/developer/sandbox>

Click on **[+ Add a sandbox company]** button to add a new company

A new company, "Sandbox Company\_GB\_4" as example below, will be created.



Click on the Company created to go to home page of the company to setup the name of company name, logo etc.

<https://app.sandbox.qbo.intuit.com/app/homepage> (company home page)

<https://app.sandbox.qbo.intuit.com/app/settings> (company settings)

### 2.0 - Set up QuickBooks Online API Connection Authentication OAuth2.0

Go to QuickBooks Online OAuth 2.0 setup page and follow Step 1,2,3,4 to complete QBO Authentication settings.

Will copy the token keys provided onto a Access Manager Suite (AMS) API configuration file later.

<https://developer.intuit.com/app/developer/playground>

#### Step (1)

**Select app** - Select whether the company is created for **Sandbox** or **Production** version

(Sandbox)

(Production)

**Client ID** - QuickBooks Account specific ID string pattern will be given,

e.g. AB7001sTMVcdwo8ABZig5Di4bCBd464xChg83t6xuyVY8W75rZ

**Client Secret** - QuickBooks Account specific password string pattern will be given,

e.g. XYvDKjNOLnU9On4IRXglwQXi8n00QXdk8Y5T2J5T

**Scopes** - Checkbox to select **[x] Accounting**

Click on **[Get authorization code]** button to create authorization code to proceed to Step (2).

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## OAuth 2.0 Playground

**Step 1**

### Get authorization code

Your first step is to create the authorization request with the parameters that identify your application and permissions that the user will be asked to grant to your application. [Learn more](#)

**Select app**

SLee\_QBO (Sandbox)

The playground is configured and ready to use with your own app's credentials from the Keys tab on the app dashboard, including the playground's OAuth 2.0 redirect URI. If this redirect URI is no longer listed on your Keys tab, click [here](#) to add it.

**OAuth Keys**

**Client ID**

AB7001sTMVcepq8MM... 7cl464xChg83t6wyoVY8W75rZ

**Client Secret**

XYvREjNOLnW5Yn4L... 3n00QXcRkaL72J5T

**OAuth settings**

**Scopes**

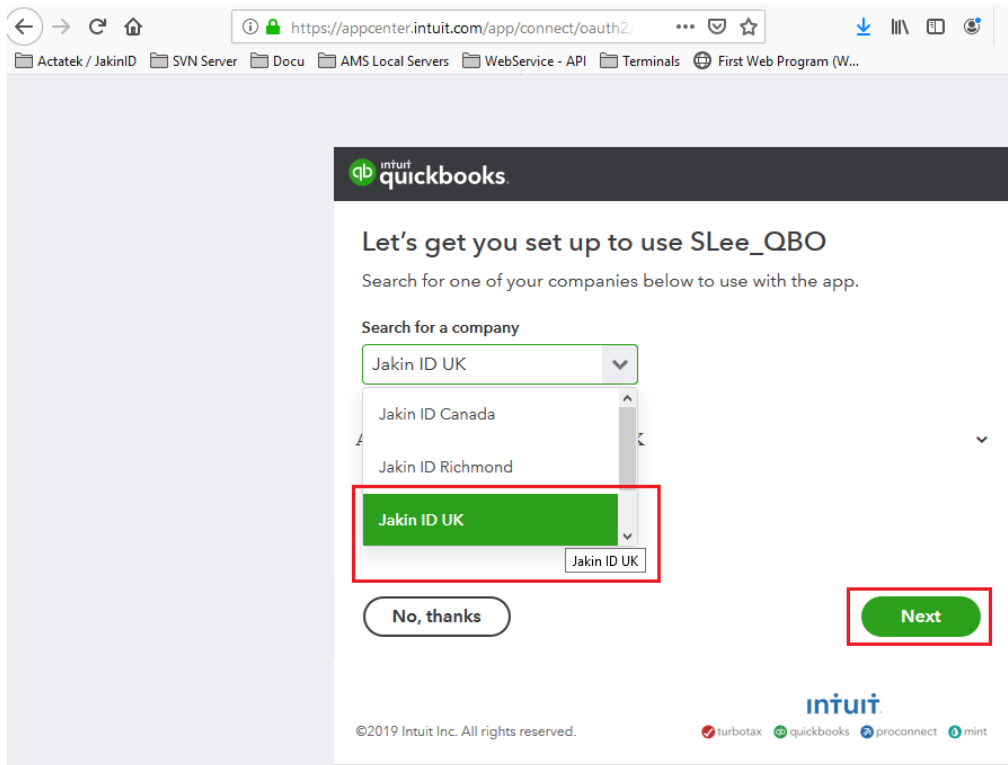
☒ Accounting ☐ Payments ☐ OpenID ☐ Profile ☐ Email

☐ Phone ☐ Address

com.intuit.quickbooks.accounting

**Get authorization code**

Once clicked on **[Get authorization code]** button, will bring you to a screen to select the company, e.g. Jakin ID UK.



Click [Next] button and [Connect] button to proceed.

## Step (2)

**Authorization Code** - QuickBooks company specific code pattern will be created, e.g. AB25678293105MsSUzsBFXbACde37GQdtJZ2fhHPXDV1VCqXOH

**Realm ID** - QuickBooks company specific ID will be created, e.g. 123144326941234

Click on [Get tokens] to get the **Access Token** to proceed to next **Step (3)** and will also generate **Refresh token** pattern to proceed to **Step (4)**

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no Enter to see the results

🔍

Step 2

Get OAuth 2.0 token from auth code

After the app receives the authorization code, it should exchange the authorization code for refresh and access tokens.

Authorization Code

AB11572293320RmiZ.....3dhcZXuFL9fDILwFC

Realm ID

12314f.....2334

Get tokens

Step 3

Make API calls (optional)

The Make API Calls panel is populated with the Realm ID and the current access token, ready for you to test out some API calls. The Call API dropdown list contains the three available API calls you can make from the playground. Availability of each is based on the scopes you choose when getting your access token.

Realm ID

12314f.....334

Access token

eyJlbmMiOiJBMTI4Q0I.....IjoizGlyIn0.V9PR401M

expires in 60 minutes

Call APIs for

Make API calls

### Step (3)

**Access token** - QuickBooks company specific token pattern is created as sample below. The key will need to be refresh hourly.

eyJlbmMiOiBMNTI4Q0JDLUUhTmJlU2liwiYWxnIjoizGlyIn0..V9PR401MLheBKHZu57vmmA.Aof1DnVcbT4WLk953oly0\_QpR  
FcsGUBrkzNeRqSaT7TUMjdNafVXrXoo9swWwW\_4Q8P18u8wsiDC2hsCe7dUtay-9Xk1Ffb-  
fd7U9HzR4YTivZNti0a5fmDOtatgPfD\_arzliCWNhToxPy2l1V1rxl6CVZsUIV7cO8lWKzU-  
lWJn0lhRytqYcBoUtcxw1eLAokWWb-  
RjyvLLwtd443bAEVnmzirWwLQfT6zFk0zO...rocv\_VlXQULdc85\_rn7elSplyKX6uDrgJYueOGC7NRRb8X7A4EMWkwckjKKK-  
\_VM9grytzDVkX\_eBmziDj0lceGrm60KbvZs0F0W-Y\_3LhWjZHGennQC8sMwJ2yFJLn97ot-  
yeC8EqwsvBM49rVd1v19Ecga4oW4x7hBdAF5DeeE0xpGo...jv2mnab\_HT7\_NP8rJTNa7mR\_suNqWOa3aAZA714ZJ7F3hYo  
3DFfyXfC66TXSOlgjLNSvD8g99Lg4MBBRJfssBqSxNUNN5UZGTuvgs8v1Ceba6sRFW0GX2\_r7oZlp888nuUkPB87JrJAMGW  
AzPoR417JW4AODqzeay0Dc5teBmsVa7hJMDowSfh7i3YAG...pwpQzWMDEVodubOtCPGsoWOHWPbLuzaeWirUNjoTiO  
dQ90UZ3FUJllsZ4wx0s5Xs0jeI9POWATANQLXfqJkGtGGpa1vh6PayDCM.E y5eFO6FXdunX-7GRPA7Q

#### Step (4)

**Refresh token** - QuickBooks company specific token pattern is created. The Refresh token can be used together with token above to refresh to get a new Access token for every hour.

Sample Refresh token, AB11581019539xO2...iKX0rP4ODaqwk4b3IR

The refresh token will be expired in 101 days.

Step 3

### Make API calls (optional)

The Make API Calls panel is populated with the Realm ID and the current access token, ready for you to test out some API calls. The Call API dropdown list contains the three available API calls you can make from the playground. Availability of each is based on the scopes you choose when getting your access token.

Realm ID

1231.....334

Access token

eyJlbmMiOiJBMTI4Q.....ZGlyIn0..V9PR401M

expires in 53 minutes

Call APIs for

Accounting

Get company info

Step 4

### Refresh access token (optional)

Refresh token

AB11581019539.....P4ODaqwk4b3IR

expires in 101 days

Access token

eyJlbmMiOiJBMTI.....ZGlyIn0..V9PR401M

expires in 53 minutes

Refresh Access Token

### 3.0 - Setup Access Manager Suite (AMS) to QuickBooks Online API Configuration File

Create a QuickBooks Online API configuration file as below and put into local folder accessible to AMS server. Copy and paste the following highlighted Token, ID string patterns into the AMS QuickBooks API configuration file.

- **realmId**
- **clientId**

- clientSecret
- scope
- authCode
- accessToken
- refreshToken

C:\Temp\QboApi\_JakinID\_UK.config (Please replace parameters below with tokens for your QBO company)

```
<?xml version="1.0" encoding="utf-8"?>
<configuration>
  <appSettings>
    <add key="companyInfo" value="Jakin ID UK" />
    <add key="realmId" value="12314. . .42334" />
    <add key="aspnet:UseTaskFriendlySynchronizationContext" value="true" />
    <add key="baseUrl" value="https://sandbox-quickbooks.api.intuit.com/" />
    <add key="redirectURI" value="https://localhost/QBO/QboApiQuery.aspx" />
    <add key="clientId" value="AB7001sTMVcepq8MZig. . . 464xChg83t6yoVY8W75rZ" />
    <add key="clientSecret" value="XYvREjNOLnW5n4l. . . 00QXcRkal2J5T" />
    <add key="scope" value="com.intuit.quickbooks.accounting" />
    <add key="appEnvironment" value="sandbox" />
    <add key="lastTokenRefresh" value="10/23/2019 5:28:22 PM" />
    <add key="logPath" value="C:\\Temp\\QBOAPI.log" />
    <add key="authCode" value="AB11572290709JeiF . . . KFfU8a0H59GW5Fu9" />
    <add key="accessToken" value="eyJlbmMiOiJBMTI4Q0JDLUhTMjU2IiwiaWFnZW50IjoiZGlyIn0. . 9EmOPyequIibA2rHy2alsQ.9XF5z1Lpi4MWgHdVU_qQMBn97N2iYEGDWrgkH4mslv
hcERdsg74F6a7b832xgE80g3iMbHke_EMcjJSIFv77594CaMbB-zJsmamNnyHBew4Tlxa56tJU. . .
.4z15BoRAoM8_Jqu313CdQFBXwdLGMq0NVfxn9xCg8kNkmNOus6dTz7Ta0S29XgBJd8hIKLsdFegHP1W9rqAjfJg-
txX1hRnci1I9hzfSB2tNIW3780dgZXt8xmCnj1UCdGaZ6JMSkAmsb81Qq5p_RLBunKbvQjDHB-
s0fAwuy9ktWeiQwdbpJH0_JWDDPwcvS6VN5__J50nNowCtw_dkS10p109t1uVwukCoVrXNqhsucdCpZvgXg4U9AmQe_EJl0M0swVbYCYC8TLWTnM8R4us25Nmi
XCZn-MHouFI6aQZbRA1URE59oc0922zu4bbzOqFHQM10zMuq61g7QWbcpr4.RZcCAk-8G9qAySd22ZrkVA" />
    <add key="refreshToken" value="AB115810167968YOWu. . . ZagIuL2MnRYqKpi" />
  </appSettings>
</configuration>
```

### 3.1 – Setup Access Manager Suite (AMS) QuickBooks Online API Settings

- Login to AMS as Administrator with the AMS Domain  
<http://localhost/AccessManager/Account/Login.aspx>
- Go to **Control Panel > System Configuration > Configure System**  
<http://localhost/AccessManager/Account/SystemUpdate.aspx>
- Scroll to the bottom of **Configure System** screen.
- Checkbox to [x] Enable Payroll API
- Set **Payroll API Config Path** to access the QuickBooks configuration file prepared above, e.g.  
C:\Temp\QboApi\_JakinID\_UK.config
- Click **[Set]** button at the right hand side of Payroll API Setting section.
- Verify that AMS shows message "**Payroll API is Enabled.**"

Welcome admin @ JakinIDUK ! [ Log Out ]

## ACTATEK ACCESS MANAGEMENT SUITE

Home Access Manager Access Application Control Panel About

### CONTROL PANEL

- System Account
- System Configuration
  - Configure Database
  - Configure System
  - Configure Server
  - Edit/Delete Server
- Payroll API Configuration
- System Notification
- System Utility

### CONFIGURE SYSTEM

**Payroll API is Enabled.**

System Update

Activation Key:

Put key into textbox together with end caps [.....]

Access Manager Server Setting

Automatic Synchronization:

Payroll API Setting

☒ Enable Payroll API

Payroll API Config Path:

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#### 4.0 – Connect AMS to QuickBooks Online via API

- Go to **Control Panel > Payroll API Configuration > Configure Payroll API**  
<http://localhost/AccessManager/Account/PayrollApiSetup.aspx>

Welcome admin @ JakinIDUK ! [ Log Out ]

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- System Utility

### CONFIGURE QUICKBOOKS API CONNECTION

Connect to QuickBooks API

Jakin ID UK  
RealmId: [12314..42334]  
Domain: JakinIDUK

**Get QBO Company Information**  
 QBO QboApiCompanyInfo successful : [Jakin ID UK]

Add Time Activity to the Selected QBO Employee

Select AMS User to Create Employee on QBO

Reload QBO Employees List

Create QBO Employees from AMS Users

Refresh Token  
  
Refresh Token:[AB115..YqKpi] Refreshed at:[10/28/2019 2:03:57 PM]

- To verify QuickBooks API connected normally, click on [Get QBO Company Info]
- Verify the QuickBooks returns the correct company name, e.g. [Jakin ID UK]

#### 4.1 – Create QuickBooks Employee on QuickBooks Online

- First, create user on the AMS with both **First Name and Last Name**.

**QuickBooks requires both First Name and Last Name set.**

<http://localhost/AccessManager/ACTatekAccessManager/frmAddUser.aspx>

- The AMS user created will show up at the drop-down list below. QBO employee is not yet created.
- Select AMS user from the drop-down list.
- Click on [Create Employee] will create corresponding employee on QuickBooks Online company account.
- Verify the newly created QBO employee showing up at the QBO Employee drop-down list.
- From now on, IN/OUT event logs pair will trigger creation of TimeActivity record on QuickBooks Online.

The screenshot shows the ACTATEK ACCESS MANAGEMENT SUITE interface. The top navigation bar includes links for Home, Access Manager, Access Application, Control Panel, and About. The left sidebar contains a CONTROL PANEL menu with options like System Account, System Configuration, Configure Database, Configure System, Configure Server, Edit/Delete Server, Payroll API Configuration, System Notification, and System Utility. The main content area is titled CONFIGURE QUICKBOOKS API CONNECTION. It includes a section for connecting to the QuickBooks API, showing Jakin ID UK information. Below this, there's a section for adding time activity to selected QBO employees, with a table showing employee names and time activity dates. A red box highlights the 'Select AMS User to Create Employee on QBO' dropdown menu, which currently shows 'Wen, Thomas (A001)'. A red arrow points to this dropdown with the text 'Will see QuickBooks employee created here.'

#### 5.1 – Access QuickBooks Company to see Employee and Time Activity Report

- Login to QuickBooks Online and select the QBO company, e.g. Jakin ID UK.
- <https://developer.intuit.com/app/developer/sandbox>
- Go to Employees from QuickBooks menu on the left.



Dashboard Employees

Need to pay your employees?  
Create payslips in minutes with automatic tax calculations.  
**Choose your plan**

Set up payroll Create paychecks in minutes Get payroll taxes done

Filter by name

NAME ▲	PHONE NUMBER	EMAIL ADDRESS	ACTION
Wen, Thomas (A001)			<a href="#">Edit</a> ▼

Previous 1-1 Next

**Employees**

**Add an employee**

- To access the QuickBooks Report, click on the Reports at the QuickBooks menu at the left.

**Report > All Reports > Manage Employees > Recent/Edited Time Activities**

Recent/Edited Time Activities Report

Back to report list Time Activity Date

All Dates

Customise Save customisation

Sort Add notes

Jakin ID UK

**RECENT/EDITED TIME ACTIVITIES**  
Created/Edited: Since September 28, 2019

ACTIVITY DATE	LAST MODIFIED	CUSTOMER	EMPLOYEE	MEMO/DESCRIPTION	RATES	DURATION	BILLABLE	AMOUNT
28/10/2019	28/10/2019 09:28:29 PM		Wen, Thomas (A001)	AMS Event for Wen, Thomas (...)		1:00	No	

Monday, 28 October 2019 02:28 pm GMT-07:00

**Reports**