Equifax Developer Portal

User Guide

Version 2.2
January 2022

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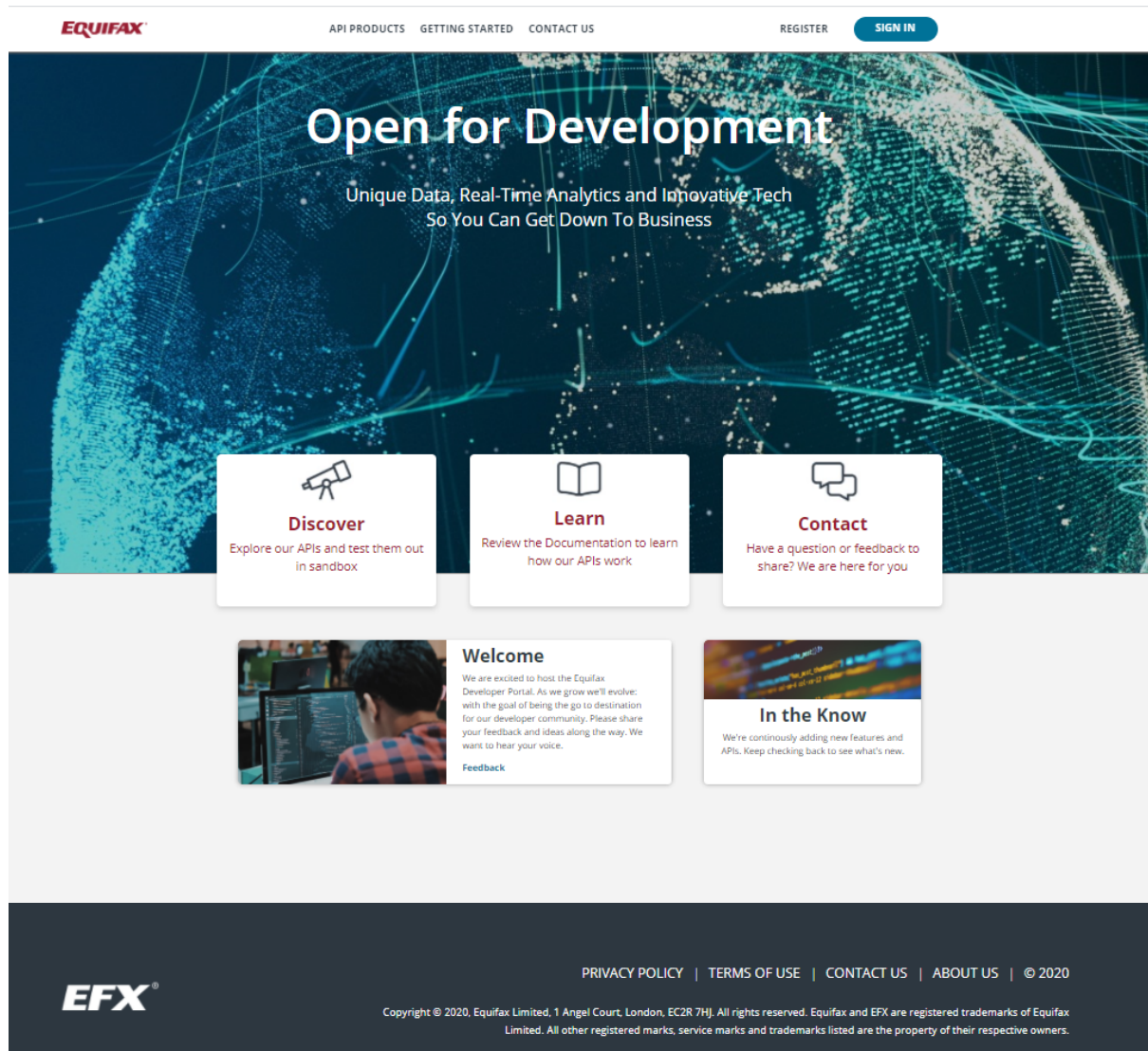| Document History					
Version	Date	Modification Details	Author	Reviewer	Review Date
1.0	04/02/2019	1st Draft	PE	SH	
1.1	19/11/2020	Rebranding & updates	PE	SH	
2.0	14/06/2021	Updated portal version	PE	SH	
2.1	02/12/2021	Change to Idams guidance	PE	SH	
2.2	18/01/2022	Change re Sandbox message for some products	PE		

For updates to this document please contact philip.england@equifax.com

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Introduction to Equifax Developer Portal

The Equifax Developer Portal provides access to a number of Equifax APIs, allowing developers to:

- Download API Specifications.
- Subscribe to a Product to register a new Application
- Test their Application in a Sandbox environment
- Promote their Application to UAT
- Promote their Application to 'Live' status.

Initially one individual can register and they will become the App creator, they will then be able to invite other developers from their Company to use the portal as collaborators. The portal is designed to give quick and easy access to these functions, however some activities such as promoting to UAT and Live will require behind the scenes activities by a number of teams at Equifax.

This guide is designed to step you through the process from Registration to Promoting an Application to Live.

Portal Home Page

Portal Logon

Equifax Developer Portal is a browser based tool which is accessed via a secure internet connection. Login via - https://developer.equifax.co.uk
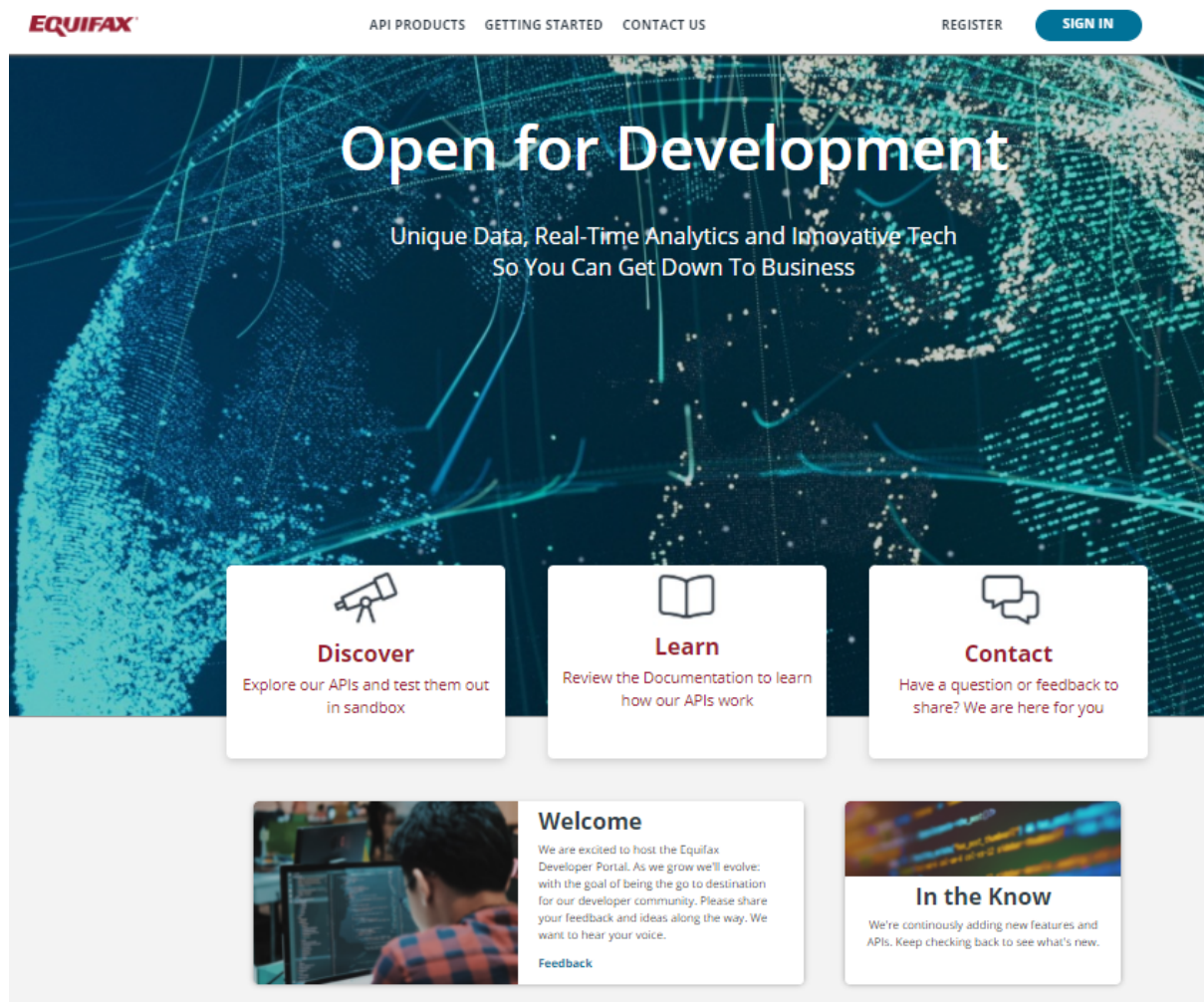
The Home page has a number of links and shortcuts which will assist you in learning more about the Portal. At the top left of the page you will find the following links.

API Products – This will link to a Page where you can see a list of the Available API Products. You can access the same page by Clicking on the 'Discover' panel.

Getting Started – This will open a Page describing the process of using the portal from registration to Go Live. You can access the same page via the 'Learn' panel.

Contact Us – This provides an email form where you can send any questions or issues to the Equifax team for us to look into and respond. Mandatory fields on this screen are marked with an asterisk. You can access the same page via the 'Contact' panel or the Feedback link in the Welcome panel.

In the Top right are 2 more links.

Sign In – Used to access the system once you have initially registered.

Register - Used to create your account when you start using the portal.

At the bottom of the Home page you will find links to additional information such as the *Terms of Use* and *Privacy Policy*.

Getting Started

Before you begin setting up and using the Developer Portal, it is strongly recommended that you read the information on the *Getting Started* page. As well as providing an overview to the process, this page also contains links to useful tools such as Swagger and Postman.

Portal Setup

Developer Portal Registration

To register to use the service, click on the '**Register**' link on the top right of the screen. This will open the Registration screen as shown below.
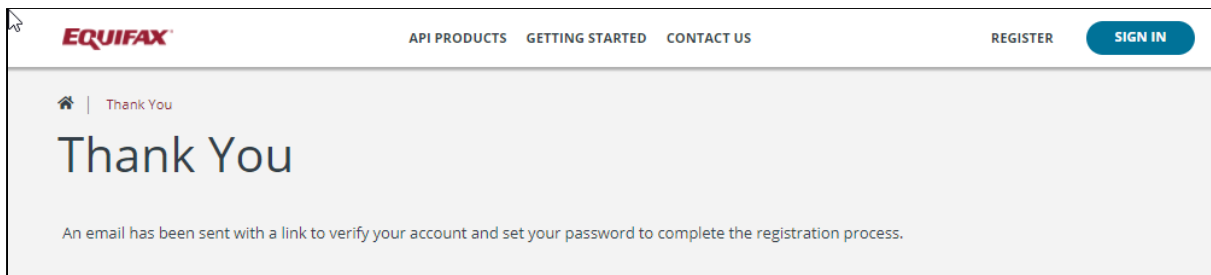

Now complete all the fields and then tick the terms of use and verification box before clicking on ~REGISTER~
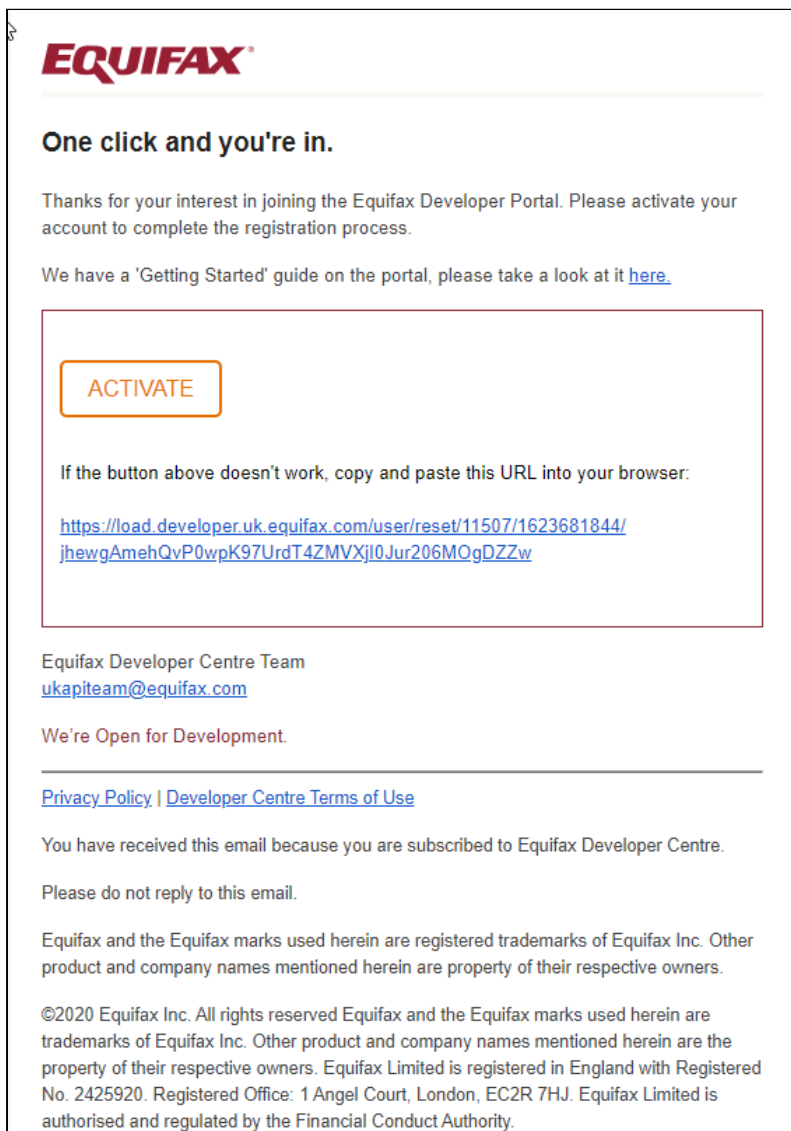
Note - the email address registered for a user can only be registered once.

A confirmation message will be displayed, as shown below.

This informs you that an email has been sent to your registered email address, which will enable you to verify your account and set your password. The email will be similar to the one shown below.

You should now **Click** on **Activate**. This will open the *Choose A New Password* page

Create New Password

NEW PASSWORD

New Password

Password strength:

CONFIRM NEW PASSWORD

Confirm New Password

Passwords match:

SAVE   CANCEL

Your Password should meet the following criteria.

- At least 12 characters long
- Contain uppercase letters
- Contain lowercase letters
- At least 1 number
- Contain punctuation

As you meet these criteria creating your password, the password strength bar will grow and the items met will vanish

Once password and confirmation password match, **Click** on **Save**.

You will now be taken to the Sign In screen where you will be able to use your new credentials to access the system. This is the screen you will use to sign into the portal hereafter via the *Sign In* option - top right.

EQUIFAX

API PRODUCTS   GETTING STARTED   CONTACT US   REGISTER   SIGN IN

Sign-In

Company Email

philip.england+galacticbank@equifax.com

Password

••••••••••••

Forgot Password?   Sign-In

Need an account? Register Here.

This will take you to the Development Portal Dashboard as shown below. You will see your first name in the top right of the screen - indicating you are logged in.
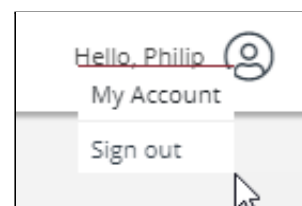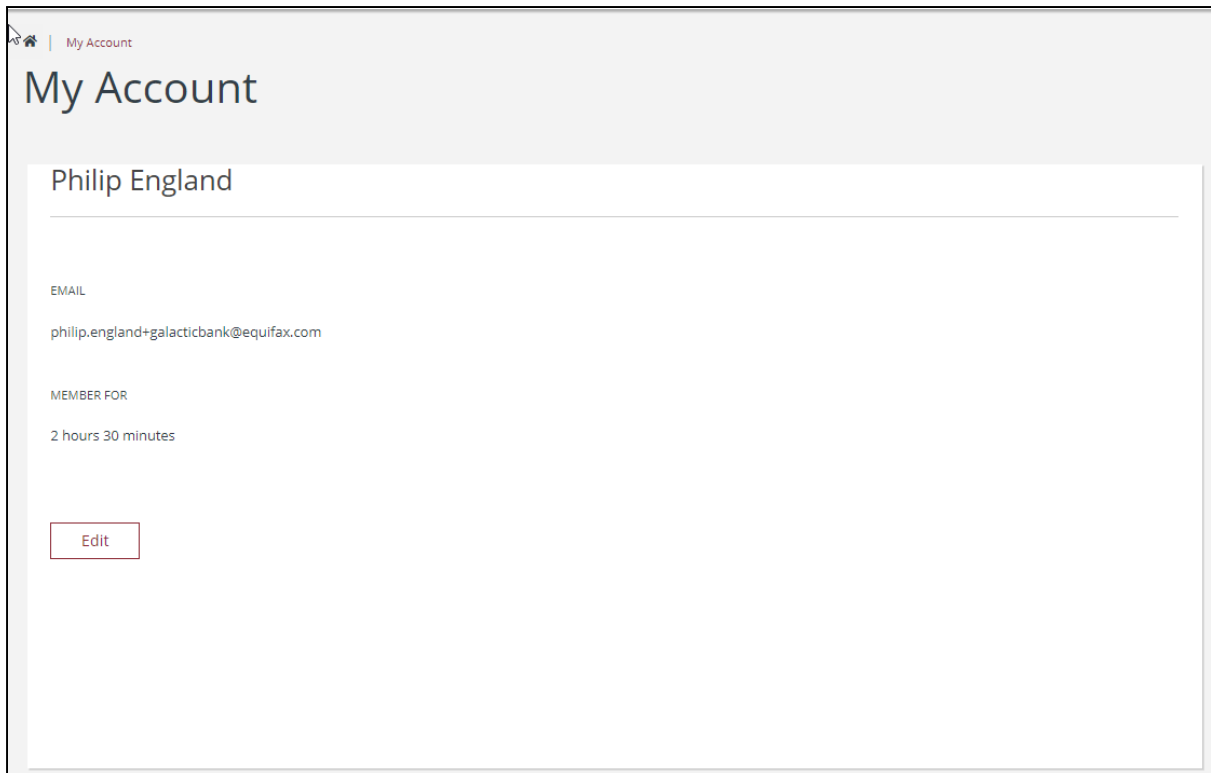

The main part of the screen displays the development journey of an API from Exploring available products through to Go Live. Selecting any of these panels will link you to that stage of the process.

My Account and Sign Out

If you move your mouse pointer over your user name, options for *My Account* and *Sign Out* will become available. If you select the first of these you will see the following screen displaying your user details.
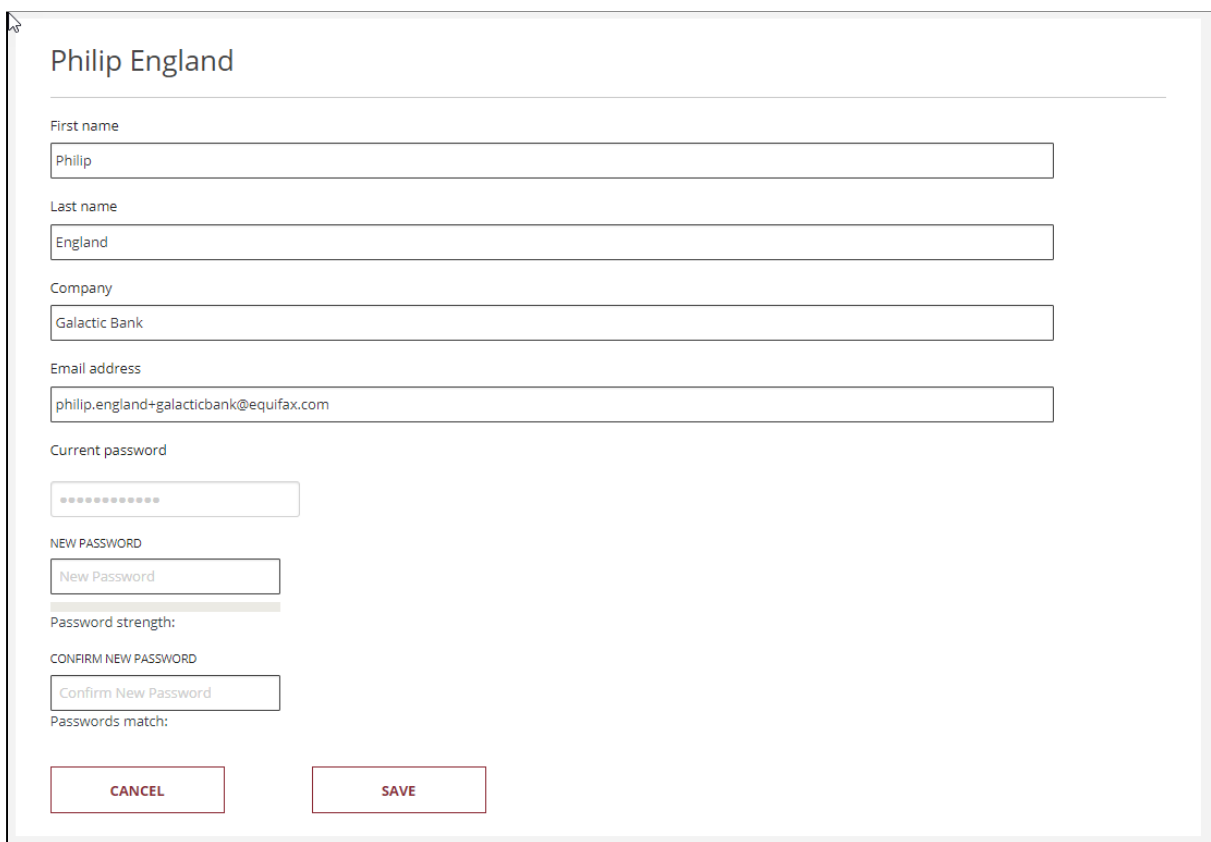
Selecting **Edit** on this screen will allow you to edit Name Company name and Password details. You will not be able to change the email address you registered.

Once changes have been made, **Click** on **Save**.

Explore API Products

API Products

Clicking on the API Products link will open the *API Products* page which will list the available API Products in the categories of Public Products and Private Products.

To view the details of an API, you can either **Click** on the **API name** or the '**More**' link associated with it.

This will open the API overview page as shown below.

API Overview

This page describes the API in terms of a description of what it does, the benefits, key features and the likely Use case for the API.

To view more technical information and download the API specification, **Click** on the **API reference** tab at the top of the document.

To return to the API products page you can use the links at the top of the page.

API Reference

The ***API Reference*** Tab will describe the nature of the API, list parameters and results, responses and provide an option to download the OpenAPI specification.

There is an option to run this using Postman, a collaboration platform for testing API's.

Downloading an API specification

To Download the OpenAPI specification **Click** on [Download]

This will drop a YAML file onto your footer bar in the bottom left. This file can be opened with an API development application such as **Swagger** (See Getting Started for link to download this free tool).
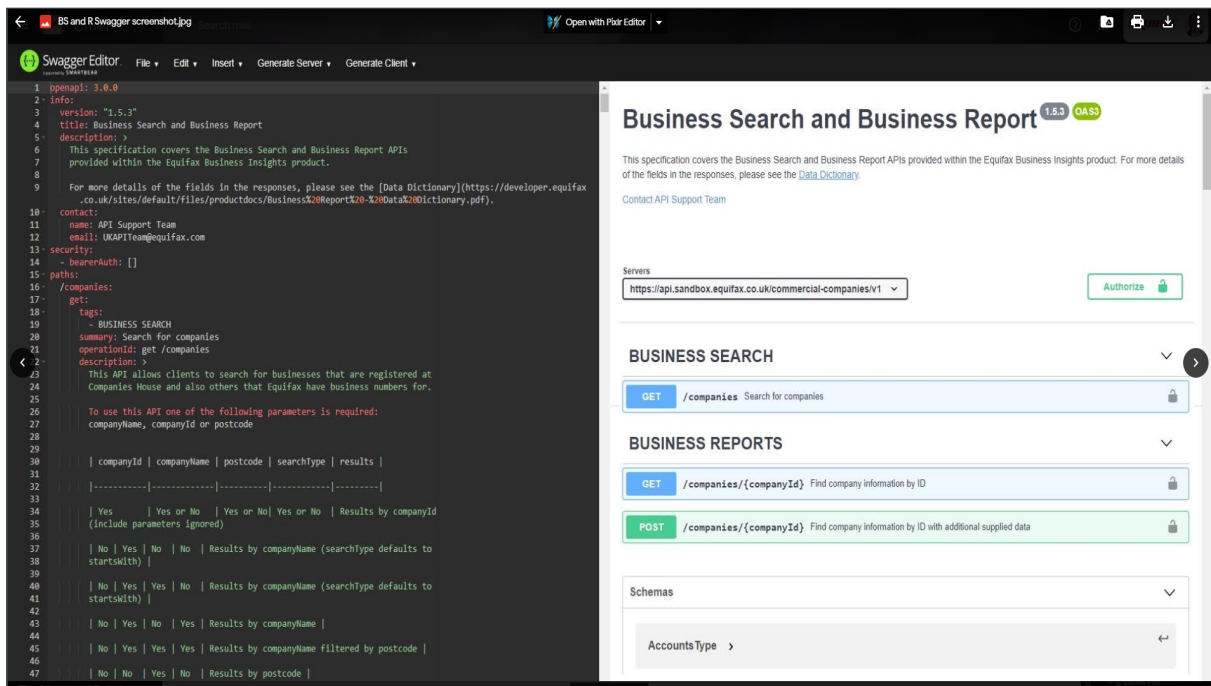
Additional API Docs
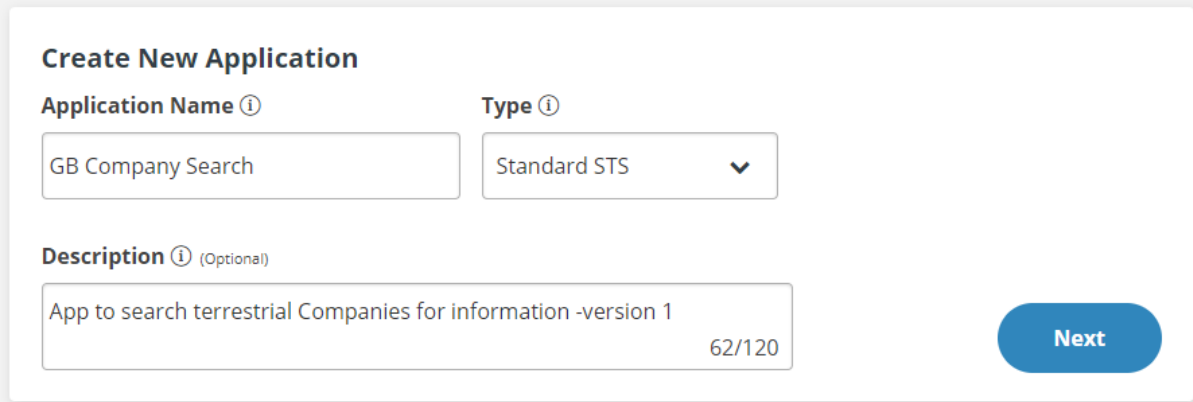
Some API's will have additional information in the form of documentation that you can download via this tab.
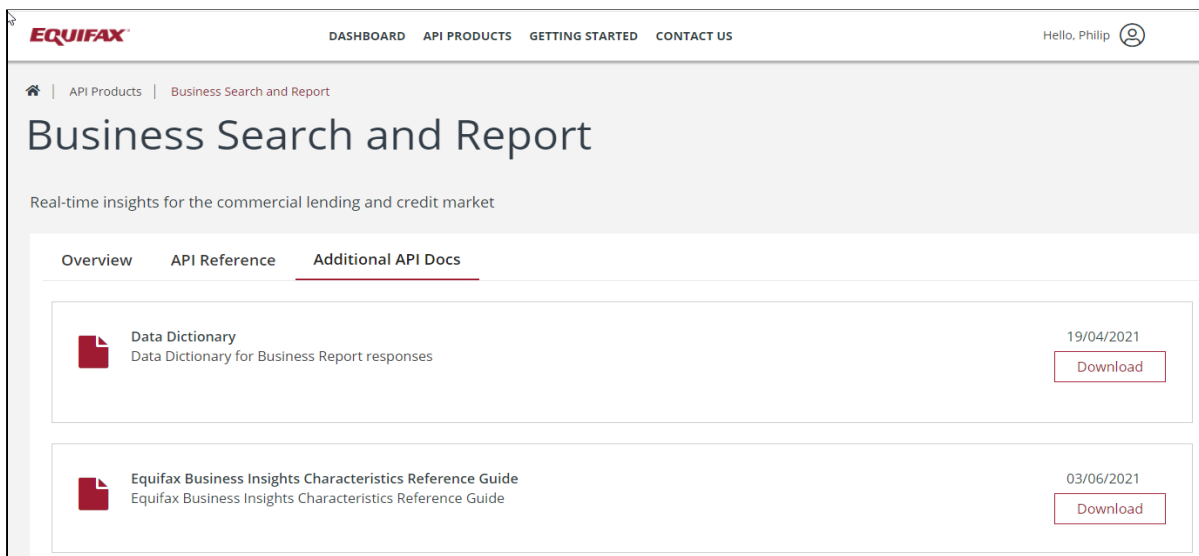
Create an App

Create New Application

To create a new Application, navigate to the Dashboard and then complete the New application section in the bottom right of the screen.

When complete, **Click** on

The *Application Details* page will be displayed, initially this will be blank as shown below. This App is now in the Sandbox.

Add API Product(s) to your Application

You will next need to add an API product by using the **+ Add API Product** link in the top right of the page. This will load the **Add API Products** page as shown below.

Select the API product(s) you want to add to your APP by ticking the box next to each API product name.

NOTE - Unless you are <u>only</u> using the "Equifax Gateway (XML Consumer)" product, then you <u>must</u> always include the "Security Service" product in your selections to access the Identity Access Management Systems (IdAMS)

When done **Click** on **ADD**

You will then be returned to the **Application Details** page, where the Credentials and Details section and the API Products section will now be populated. Note that the app is shown as in 'Sandbox', with 'Test' and 'Live' still greyed out.

An example is shown below.

GB Company Search ✎
App to search terrestrial Companies for information -version 1

Current Environment: Sandbox   **Promote to Test**

Credentials & Details

Sandbox   Test   Live

Auto-Generated Token
To test in sandbox, use this static Access Token with each product's scope.

••••••••••••••••••••••••   👁 ⎘
Expires at: 9:13 am UK Time

Manually Generated Token
If you prefer to manually generate the Access Token, copy and paste the Client ID and Secret.

Client ID

••••••••••••••••••••••••   👁 ⎘

Client Secret

••••••••••••••••   👁 ⎘

API Products   + Add API Product

Click on the Product name to view the product details and spec

Business Search and Report ↗   🗑
Base live URL   https://api.equifax.co.uk/commercial-companies/   ⎘

Security Service ↗   🗑
Base live URL   https://api.equifax.co.uk/security-service/   ⎘

Collaborators ⓘ

Enter Email Address to Add Collaborator   + Add Collaborator

philip.england+GBCEO@equifax.com ✕

These sections contain icons as detailed below.

👁 This icon will allow you to switch between a hidden view or detailed view of the credentials.

⎘ This icon will copy the contents of the field to your clipboard.
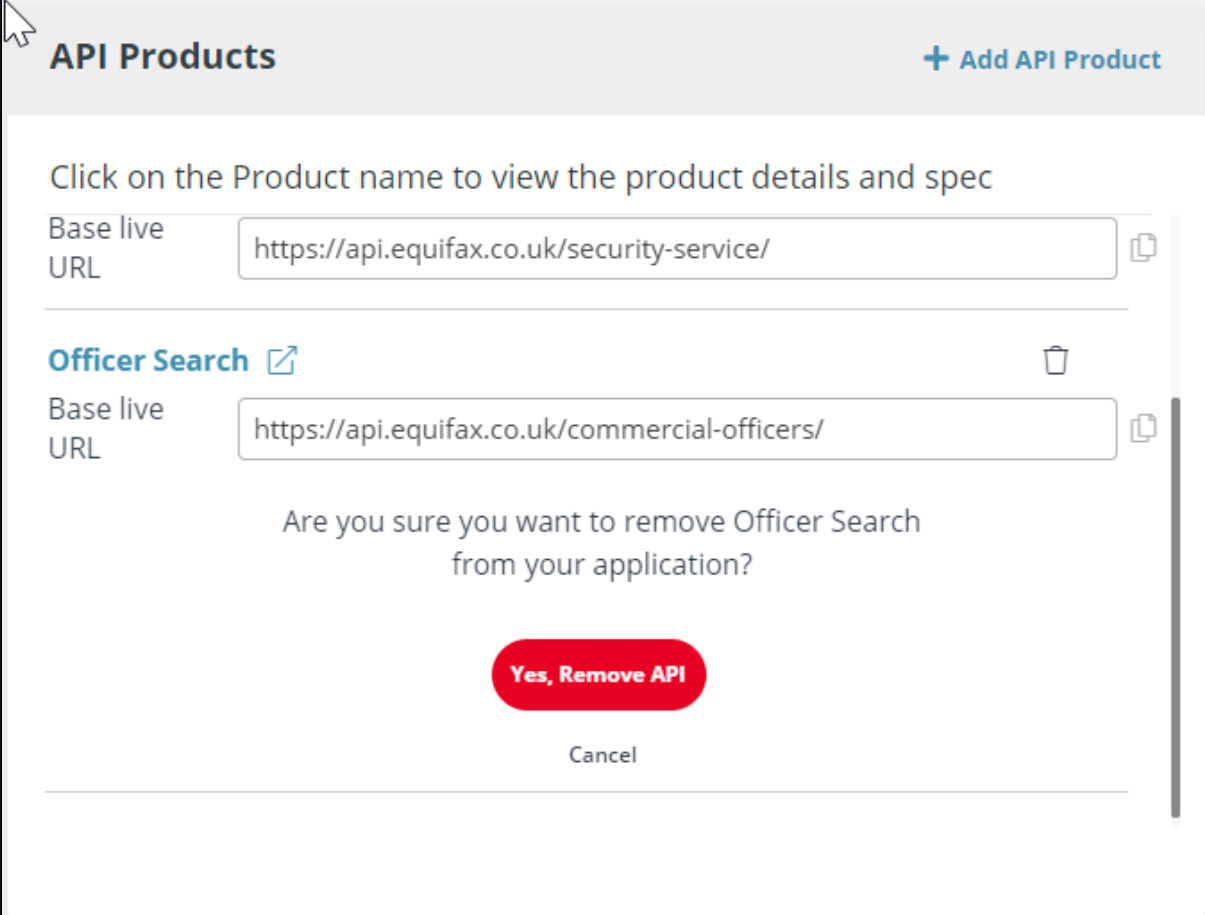
🗑 This icon will remove the selected API Product from your Application.

↗ This icon will take you to the API reference page of the API

Removing an API Product(s) from your Application

If you want to remove an API product you have selected from your application, you can do this by clicking on the [icon] icon next to its name.

To confirm removal, **Click** on [Yes, Remove API]

Adding Collaborators to your Application

If you want to involve others from your organisation in the testing process of your API, you can invite them to participate as Collaborators. Collaborators can access but not edit your app details and credentials. They can be added and removed at any stage of your app's development journey.

To invite simply fill in their email address details and **Click** on ➕ **Add Collaborator**

They will receive an invitation email and a separate account activation email as shown below.
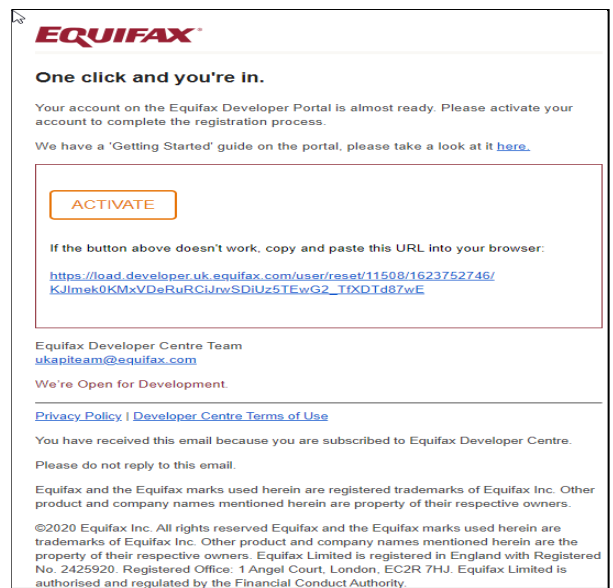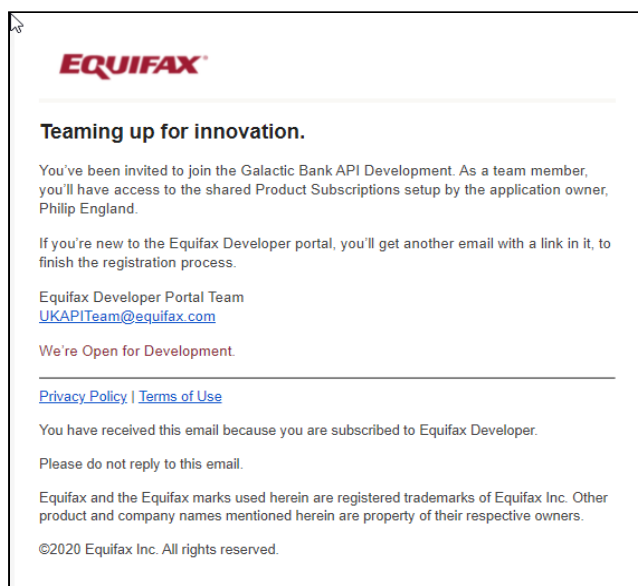
Collaborators will be listed on the *Application Details* page from where you can also remove them via the X at the end of their email address.
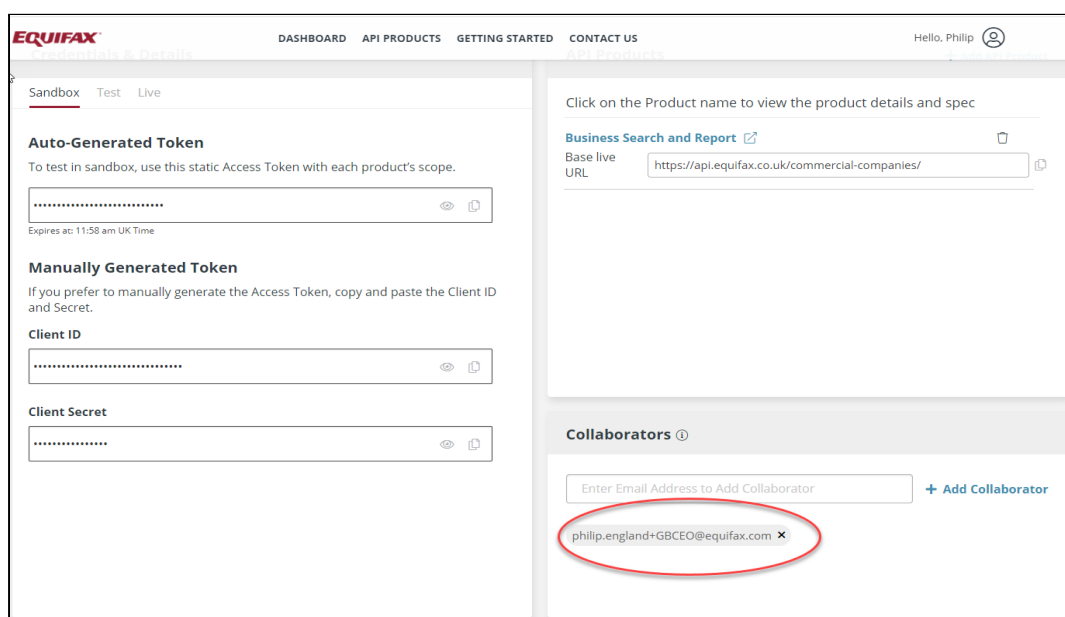
If you return to the Dashboard, your Application will now be shown in the *My Apps* section. You can access it by clicking on the App name. Note that the Environment shows as 'Sandbox.'

In the Role column you will see either of the following symbols.

   - Indicates you are the creator of the App.
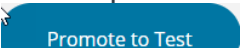
   - Indicates you are a collaborator

There is also a section of the Dashboard where you can enter a partner code - this will grant access to specialist partner API's for you to add to your App.

In order to progress with testing of your App, you will now need to promote it to the test environment.

Please note that not all products have a Sandbox, for more details please see the 'API Product' page for each product (see pages 13 and 14 above)

Requesting Promotion to the Test Environment

From the Application Details page, to request the promotion of your App from Sandbox to Test environment – **Click** on [Promote to Test]

You should now enter a target Go-Live date, you can select this from the calendar that is presented in this field. Entry of this target date will assist with the planning of resources at Equifax to help you meet this goal.

Next, please enter an IP address (and CIDR value) which covers all the public IP addresses of your platform that calls the APIs, then click the 'Add IP' button. Multiple IPs and CIDRs can be entered by repeating this process. (IP whitelisting is an Equifax security requirement.)

If you need further assistance on using CIDR please refer to the information in Appendix A of this guide.

 Or contact Equifax at : ukapiteam@equifax.com

An example is shown below

When all your IP addresses have been added, **Click** on

Your Dashboard will now show that the Application status is 'Pending Test.' You will also see that you will be waiting for a new set of Test credentials to be delivered.

An email will also be sent to you and all collaborators showing the App is pending test. (see below)

EQUIFAX

Your application promotion to TEST is pending.

We have received a request to promote the following application to the TEST environment.

Application name : test-4844bbb5-22db-42e1-aa59-80a5c98b6635-gb-company-search

Products requested : Test-Business Search and Report , Test-Security Service , Test-Officer Search

We will update you via email when the approval is done, but you can also check the Dashboard page on the portal for approval status updates. If you have any questions, please contact your Client Project Manager or Sales contact.

Equifax Developer Portal Team
UKAPITeam@equifax.com

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You have received this email because you are subscribed to Equifax Developer.

Please do not reply to this email.

Your Promotion activity will trigger an administrative process at Equifax to set up your access to the Test Environment.

EQUIFAX

You're API ready.

The product subscription you requested access to is ready to go. Simply sign-in to the Equifax Developer portal and navigate to the My Account page where your subscription is waiting for you.

If you are experiencing difficulties in progressing, please contact us at UKAPITeam@equifax.com

Equifax Developer Portal Team
UKAPITeam@equifax.com

We're Open for Development.

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In due course you will be notified by email that this process is now complete.

On the Dashboard, you will see your APP is now showing the Environment as 'Test.' This can be seen in the screenshot below, compared to a second App for Open Banking that has been added to the example, which remains in the 'Sandbox' environment.

If you click on the App, you will see the API products all show as 'Approved' and the App is shown as being in the Test Environment, with a button for 'Promote to Live' now available in the top right.

To retrieve Client ID and Client secret details, you will now need to **Click** on the link in the *Credentials and Details* pane to communicate with IdAMS.

Requesting Promotion to the Live Environment

The process of requesting promotion to live is similar to the Test Promotion process described earlier.

From the *Application Details* page, **Click** on ![Promote to Live]

Again you can make adjustments to Go Live Date, IP ranges and add collaborators.

When done, **Click** the ![Submit] button.

Again the screen will show a status of 'Pending Live' until further admin processes are completed by Equifax.

EQUIFAX

Your application promotion to LIVE is pending.

We have received a request to promote the following application to the LIVE environment.

Application name : live-4844bbb5-22db-42e1-aa59-80a5c98b6635-gb-company-search

Products requested : Business Search and Report , Security Service , Officer Search

We will update you via email when the approval is done, but you can also check the Dashboard page on the portal for approval status updates. If you have any questions, please contact your Client Project Manager or Sales contact.

Equifax Developer Portal Team
UKAPITeam@equifax.com

When this is done, you will receive a further email notification.

Congratulations, your App will now be live!

Appendix 1 – CIDR Ranges

CIDR is the short for Classless Inter-Domain Routing, an IP addressing scheme that replaces the older system based on classes A, B, and C.

A single IP address can be used to designate many unique IP addresses with CIDR. A CIDR IP address looks like a normal IP address except that it ends with a slash followed by a number, called the IP network prefix. CIDR addresses reduce the size of routing tables and make more IP addresses available within organizations.

Every device connected to the Internet needs to have an identifier. Internet Protocol (IP) addresses are the numerical addresses used to identify a particular piece of hardware connected to the Internet.

The two most common versions of IP in use today are Internet Protocol version 4 (IPv4) and Internet Protocol version 6 (IPv6). Both IPv4 and IPv6 addresses come from finite pools of numbers.

For IPv4, this pool is 32-bits (232) in size and contains 4,294,967,296 IPv4 addresses.
The IPv6 address space is 128-bits (2128) in size, containing
340,282,366,920,938,463,463,374,607,431,768,211,456 IPv6 addresses.

A bit is a digit in the binary numeral system, the basic unit for storing information.

Not every IP address in the IPv4 or IPv6 pool can be assigned to the machines and devices used to access the Internet. Some IP addresses have been reserved for other uses, such as for use in private networks. This means that the total number of IP addresses available for allocation is less than the total number in the pool.

The Classless Inter-Domain Routing (CIDR) is commonly known as the CIDR chart and is used by those running networks and managing IP addresses. It enables them to see the number of IP addresses contained within each "slash notation" and the size of each "slash notation" in bits.

Below are tables for IPV4 and IPV6 CIDR

IPv4 CIDR							
Address format	Difference to last address	Mask	Addresses		Relative to class A, B, C	Restrictions on *a*, *b*, *c* and *d* (0..255 unless noted)	Typical use
			Decimal	2^n			
a.b.c.d/32	+0.0.0.0	255.255.255.255	1	2^0	$\frac{1}{256}$ C		Host route
a.b.c.d/31	+0.0.0.1	255.255.255.254	2	2^1	$\frac{1}{128}$ C	*d* = 0 ... (2*n*) ... 254	Point to point links (RFC 3021)
a.b.c.d/30	+0.0.0.3	255.255.255.252	4	2^2	$\frac{1}{64}$ C	*d* = 0 ... (4*n*) ... 252	Point to point links (glue network)
a.b.c.d/29	+0.0.0.7	255.255.255.248	8	2^3	$\frac{1}{32}$ C	*d* = 0 ... (8*n*) ... 248	Smallest multi-host network
a.b.c.d/28	+0.0.0.15	255.255.255.240	16	2^4	$\frac{1}{16}$ C	*d* = 0 ... (16*n*) ... 240	Small LAN
a.b.c.d/27	+0.0.0.31	255.255.255.224	32	2^5	⅛ C	*d* = 0 ... (32*n*) ... 224	
a.b.c.d/26	+0.0.0.63	255.255.255.192	64	2^6	¼ C	*d* = 0, 64, 128, 192	
a.b.c.d/25	+0.0.0.127	255.255.255.128	128	2^7	½ C	*d* = 0, 128	Large LAN
a.b.c.0/24	+0.0.0.255	255.255.255.0	256	2^8	1 C		
a.b.c.0/23	+0.0.1.255	255.255.254.0	512	2^9	2 C	*c* = 0 ... (2*n*) ... 254	
a.b.c.0/22	+0.0.3.255	255.255.252.0	1,024	2^{10}	4 C	*c* = 0 ... (4*n*) ... 252	Small business
a.b.c.0/21	+0.0.7.255	255.255.248.0	2,048	2^{11}	8 C	*c* = 0 ... (8*n*) ... 248	Small ISP/ large business
a.b.c.0/20	+0.0.15.255	255.255.240.0	4,096	2^{12}	16 C	*c* = 0 ... (16*n*) ... 240	
a.b.c.0/19	+0.0.31.255	255.255.224.0	8,192	2^{13}	32 C	*c* = 0 ... (32*n*) ... 224	ISP/ large business
a.b.c.0/18	+0.0.63.255	255.255.192.0	16,384	2^{14}	64 C	*c* = 0, 64, 128, 192	
a.b.c.0/17	+0.0.127.255	255.255.128.0	32,768	2^{15}	128 C	*c* = 0, 128	
a.b.0.0/16	+0.0.255.255	255.255.0.0	65,536	2^{16}	256 C = B		
a.b.0.0/15	+0.1.255.255	255.254.0.0	131,072	2^{17}	2 B	*b* = 0 ... (2*n*) ... 254	
a.b.0.0/14	+0.3.255.255	255.252.0.0	262,144	2^{18}	4 B	*b* = 0 ... (4*n*) ... 252	
a.b.0.0/13	+0.7.255.255	255.248.0.0	524,288	2^{19}	8 B	*b* = 0 ... (8*n*) ... 248	
a.b.0.0/12	+0.15.255.255	255.240.0.0	1,048,576	2^{20}	16 B	*b* = 0 ... (16*n*) ... 240	
a.b.0.0/11	+0.31.255.255	255.224.0.0	2,097,152	2^{21}	32 B	*b* = 0 ... (32*n*) ... 224	
a.b.0.0/10	+0.63.255.255	255.192.0.0	4,194,304	2^{22}	64 B	*b* = 0, 64, 128, 192	
a.b.0.0/9	+0.127.255.255	255.128.0.0	8,388,608	2^{23}	128 B	*b* = 0, 128	
a.0.0.0/8	+0.255.255.255	255.0.0.0	16,777,216	2^{24}	256 B = A		Largest IANA block allocation
a.0.0.0/7	+1.255.255.255	254.0.0.0	33,554,432	2^{25}	2 A	*a* = 0 ... (2*n*) ... 254	
a.0.0.0/6	+3.255.255.255	252.0.0.0	67,108,864	2^{26}	4 A	*a* = 0 ... (4*n*) ... 252	
a.0.0.0/5	+7.255.255.255	248.0.0.0	134,217,728	2^{27}	8 A	*a* = 0 ... (8*n*) ... 248	
a.0.0.0/4	+15.255.255.255	240.0.0.0	268,435,456	2^{28}	16 A	*a* = 0 ... (16*n*) ... 240	
a.0.0.0/3	+31.255.255.255	224.0.0.0	536,870,912	2^{29}	32 A	*a* = 0 ... (32*n*) ... 224	
a.0.0.0/2	+63.255.255.255	192.0.0.0	1,073,741,824	2^{30}	64 A	*a* = 0, 64, 128, 192	
a.0.0.0/1	+127.255.255.255	128.0.0.0	2,147,483,648	2^{31}	128 A	*a* = 0, 128	
0.0.0.0/0	+255.255.255.255	0.0.0.0	4,294,967,296	2^{32}	256 A		

IPV6 CIDR

Prefix	Number of equivalent subnets			Host bits
	/48	/56	/64	
/24	16M	4G	1T	104
/25	8M	2G	512G	103
/26	4M	1G	256G	102
/27	2M	512M	128G	101
/28	1M	256M	64G	100
/29	512K	128M	32G	99
/30	256K	64M	16G	98
/31	128K	32M	8G	97
/32	64K	16M	4G	96
/33	32	8M	2G	95
/34	16K	4M	1G	94
/35	8K	2M	512M	93
/36	4K	1M	256M	92
/37	2K	512K	128M	91
/38	1K	256K	64M	90
/39	512	128K	32M	89
/40	256	64K	16M	88
/41	128	32	8M	87
/42	64	16K	4M	86
/43	32	8K	2M	85
/44	16	4K	1M	84
/45	8	2K	512K	83
/46	4	1K	256K	82
/47	2	512	128K	81
/48	1	256	64K	80
/49		128	32	79
/50		64	16K	78
/51		32	8K	77
/52		16	4K	76
/53		8	2K	75
/54		4	1K	74
/55		2	512	73
/56		1	256	72
/57			128	71
/58			64	70
/59			32	69
/60			16	68
/61			8	67
/62			4	66
/63			2	65
/64			1	64

K = 1,024	G = 1,073,741,824
M = 1,048,576	T = 1,099,511,627,776

Further Information and Help

If you require assistance, you can use the Contact Us link at the top of the page (see below)
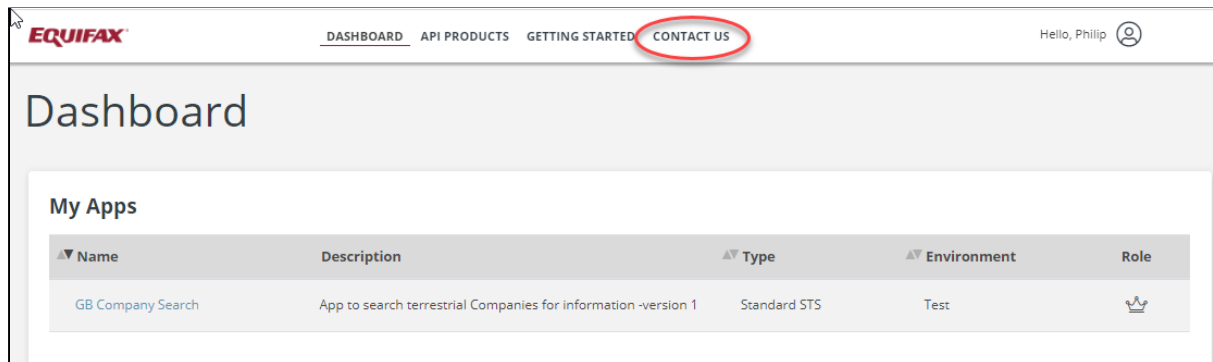
This will open the Contact Us / Feedback page where you can enter the details of your query.

To route your query to the correct person, please select from the drop down list shown.