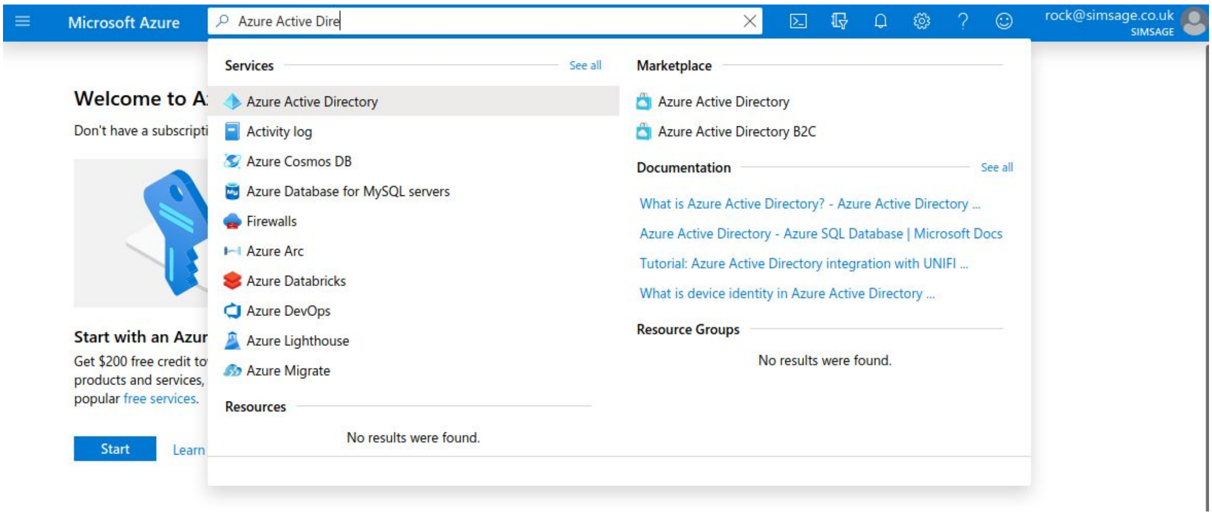
This is a short guide aimed at showing how to configure Microsoft Azure to enable the SimSage Office 365 crawler.

You need to be an administrator for your Office 365 setup for this to work. Sign-in to https://portal.azure.com/

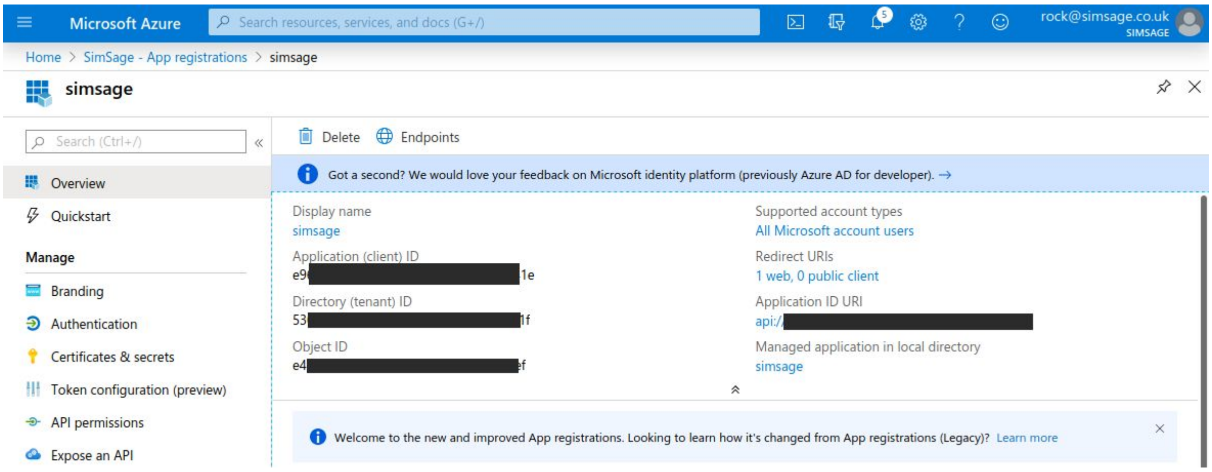
Search for “Azure active directory” and select it.



No results were found.

No results were found.

Take note of the Application (client) Id. This is your “client Id” in SimSage.
Take note of the Directory (tenant) Id. This is your “tenant Id” in SimSage.



Got a second? We would love your feedback on Microsoft identity platform (previously Azure AD for developer). →

Display name
simsage

Application (client) ID
e9[redacted]1e

Directory (tenant) ID
53[redacted]1f

Object ID
e4[redacted]f

Supported account types
All Microsoft account users

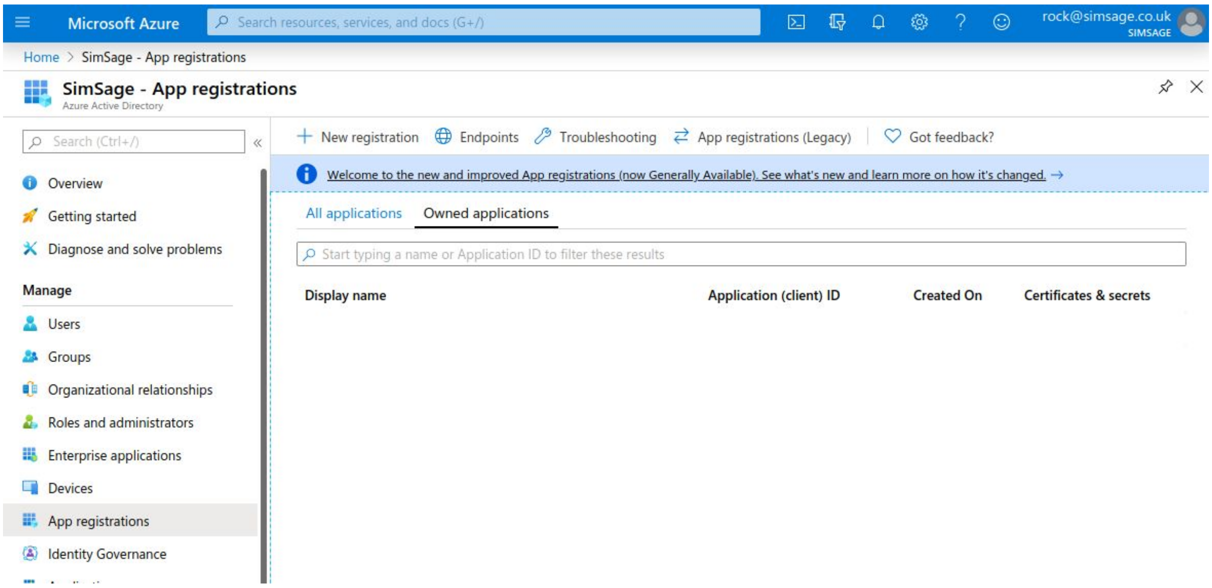
Redirect URIs
1 web, 0 public client

Application ID URI
api:/[redacted]

Managed application in local directory
simsage

Welcome to the new and improved App registrations. Looking to learn how it's changed from App registrations (Legacy)? Learn more

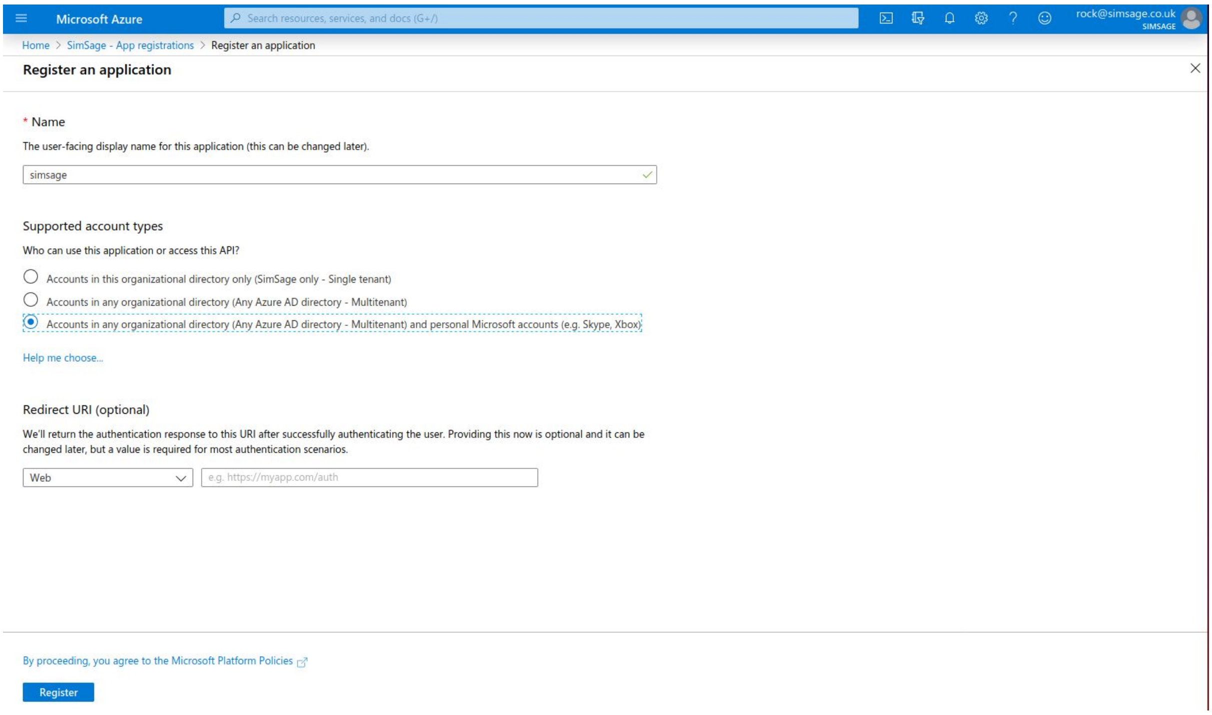
Select “App registrations” in the left-hand side menu and click “+ New registration” in the space located on the right-hand-side of this menu-item.



Welcome to the new and improved App registrations (now Generally Available). See what's new and learn more on how it's changed. →

A new window opens. Give this “application registration” a unique Name, and select the “Accounts in any organizational directory (Any Azure AD directory - Multi Tenant) and personal Microsoft accounts (e.g. Skype, Xbox)” radio button.

Finish by clicking the “Register” button at the bottom of this screen.


Microsoft Azure
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SIMSAGE
Home > SimSage - App registrations > Register an application
Register an application

* Name

The user-facing display name for this application (this can be changed later).

simsage

Supported account types

Who can use this application or access this API?

○ Accounts in this organizational directory only (SimSage only - Single tenant)

○ Accounts in any organizational directory (Any Azure AD directory - Multitenant)

● Accounts in any organizational directory (Any Azure AD directory - Multitenant) and personal Microsoft accounts (e.g. Skype, Xbox)

Help me choose...

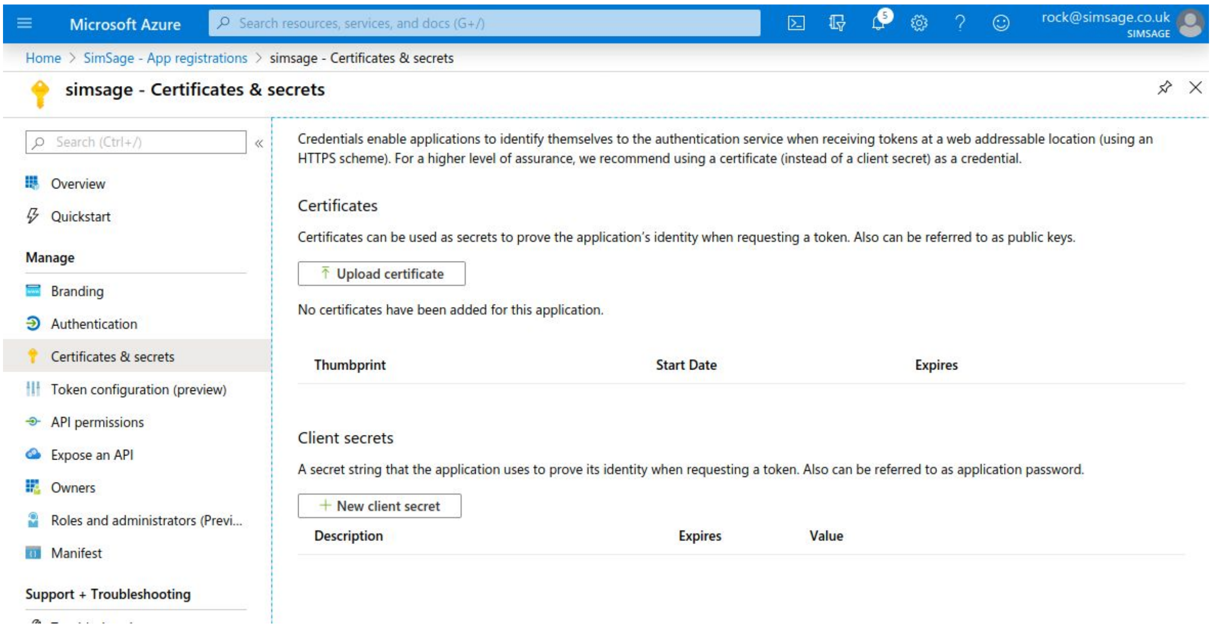
Redirect URI (optional)

We'll return the authentication response to this URI after successfully authenticating the user. Providing this now is optional and it can be changed later, but a value is required for most authentication scenarios.

Web | e.g. https://myapp.com/auth

By proceeding, you agree to the Microsoft Platform Policies

Next we setup a client-secret. Click “Certificates & secrets” in the left-hand-side menu.



simsage - Certificates & secrets

Credentials enable applications to identify themselves to the authentication service when receiving tokens at a web addressable location (using an HTTPS scheme). For a higher level of assurance, we recommend using a certificate (instead of a client secret) as a credential.

Certificates

Certificates can be used as secrets to prove the application’s identity when requesting a token. Also can be referred to as public keys.

No certificates have been added for this application.

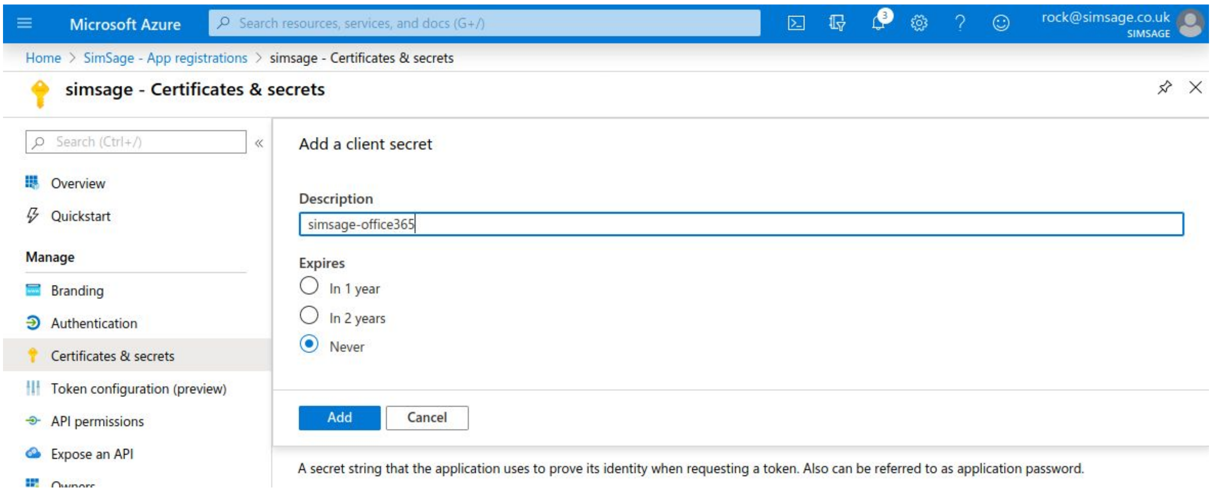
Thumbprint	Start Date	Expires

Client secrets

A secret string that the application uses to prove its identity when requesting a token. Also can be referred to as application password.

Description	Expires	Value

Click the “New client secret” button. This will bring up the next screen.



simsage - Certificates & secrets

Add a client secret

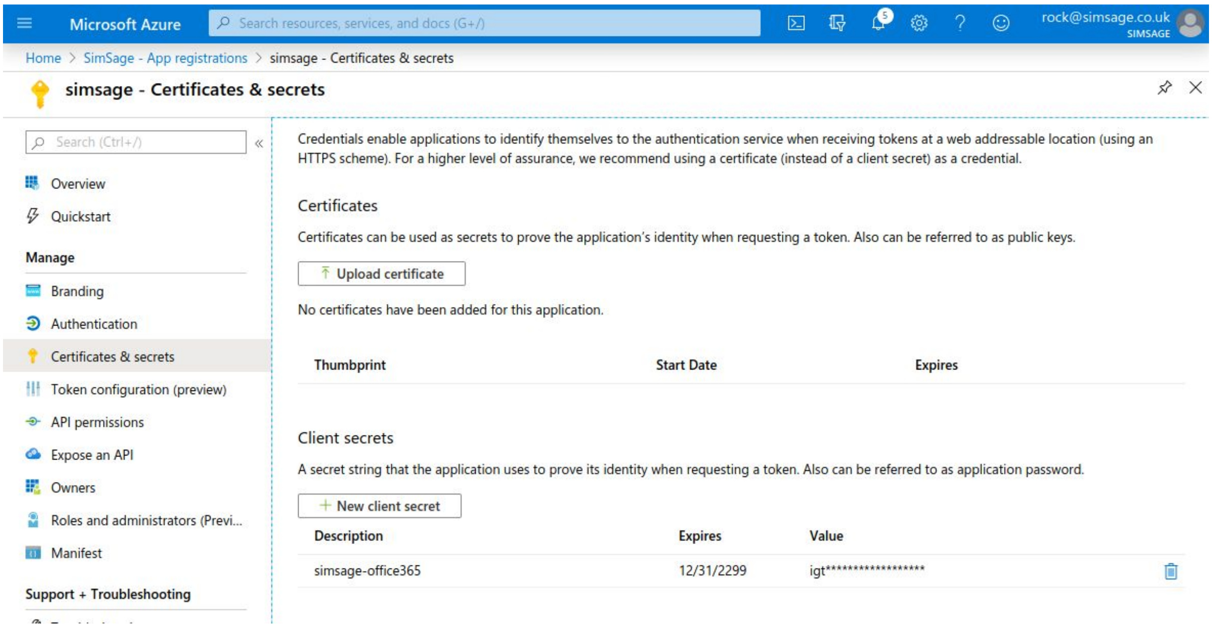
Description: simsage-office365

Expires
○ In 1 year
○ In 2 years
● Never

A secret string that the application uses to prove its identity when requesting a token. Also can be referred to as application password.

Give the secret a description. We recommend to select Never expire the secret. Click the “Add” button to finish adding this new secret.

IMPORTANT this new secret will only show itself once. Copy its value and keep it somewhere safe so you can refer to it when asked by SimSage later. This is the “client secret” value required by SimSage.



simsage - Certificates & secrets

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Thumbprint	Start Date	Expires

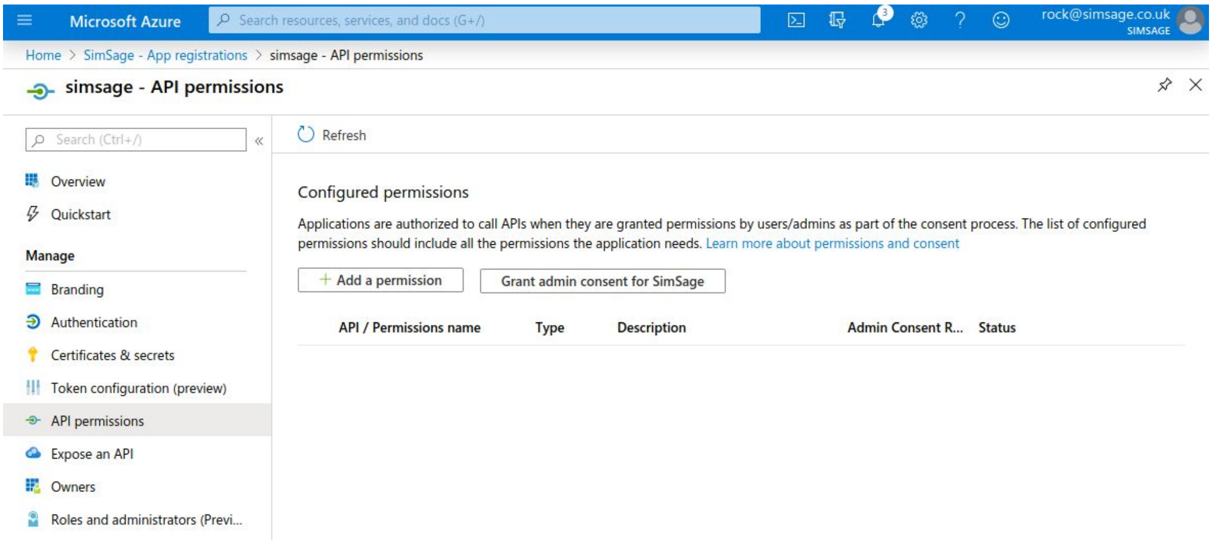
Client secrets

A secret string that the application uses to prove its identity when requesting a token. Also can be referred to as application password.

Description	Expires	Value
simsage-office365	12/31/2299	igt******************

Revisiting the secret at a later stage will no longer show the secret's value. You can never recover this value. If you lose the secret, delete the existing one, and create it anew.

Next we need to set permissions for the SimSage Office 365 crawler.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Refresh
Add a permission
Grant admin consent for SimSage

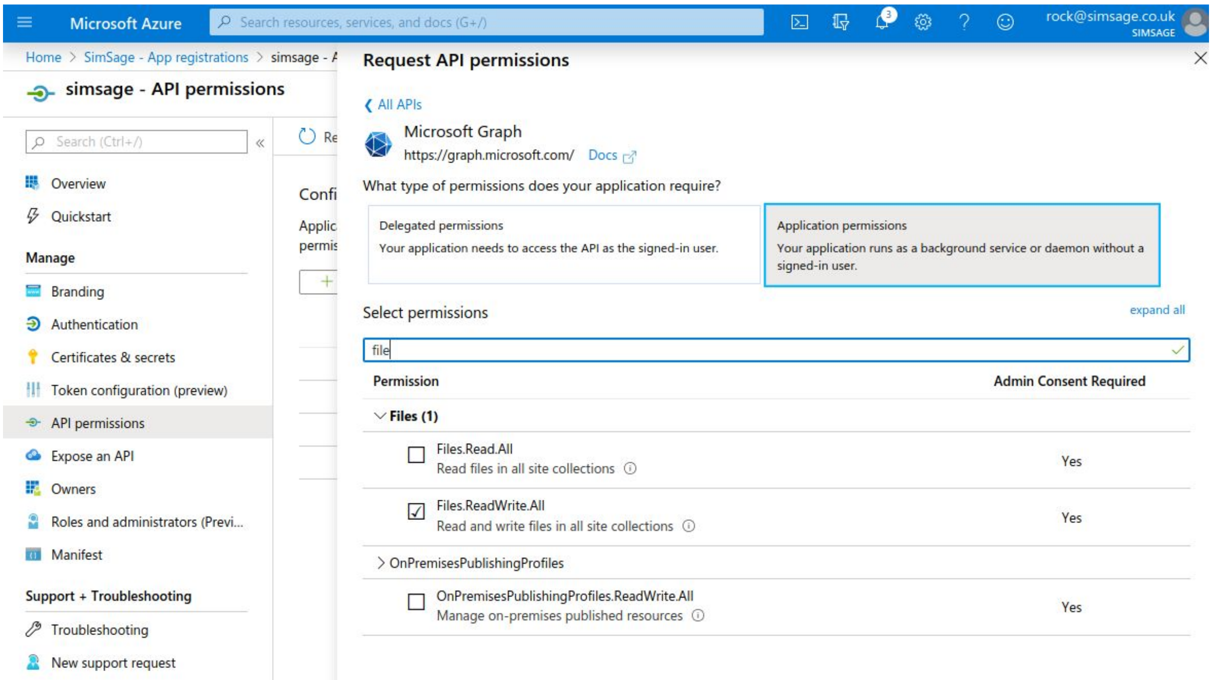
simsage - API permissions

Configured permissions

Applications are authorized to call APIs when they are granted permissions by users/admins as part of the consent process. The list of configured permissions should include all the permissions the application needs. Learn more about permissions and consent

API / Permissions name	Type	Description	Admin Consent R...	Status

Click "API permissions" in the left-hand-side menu. Click "+ Add a permission" in the new pane that appears.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Home > SimSage - App registrations > simsage - A
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Manifest
Support + Troubleshooting
Troubleshooting
New support request

Request API permissions

❮ All APIs

Microsoft Graph
https://graph.microsoft.com/ Docs

What type of permissions does your application require?

Delegated permissions
Your application needs to access the API as the signed-in user.

Application permissions
Your application runs as a background service or daemon without a signed-in user.

Select permissions — expand all

file

Permission	Admin Consent Required
∨ Files (1)	
□ Files.Read.All Read files in all site collections ⓘ	Yes
☑ Files.ReadWrite.All Read and write files in all site collections ⓘ	Yes
> OnPremisesPublishingProfiles	
□ OnPremisesPublishingProfiles.ReadWrite.All Manage on-premises published resources ⓘ	Yes

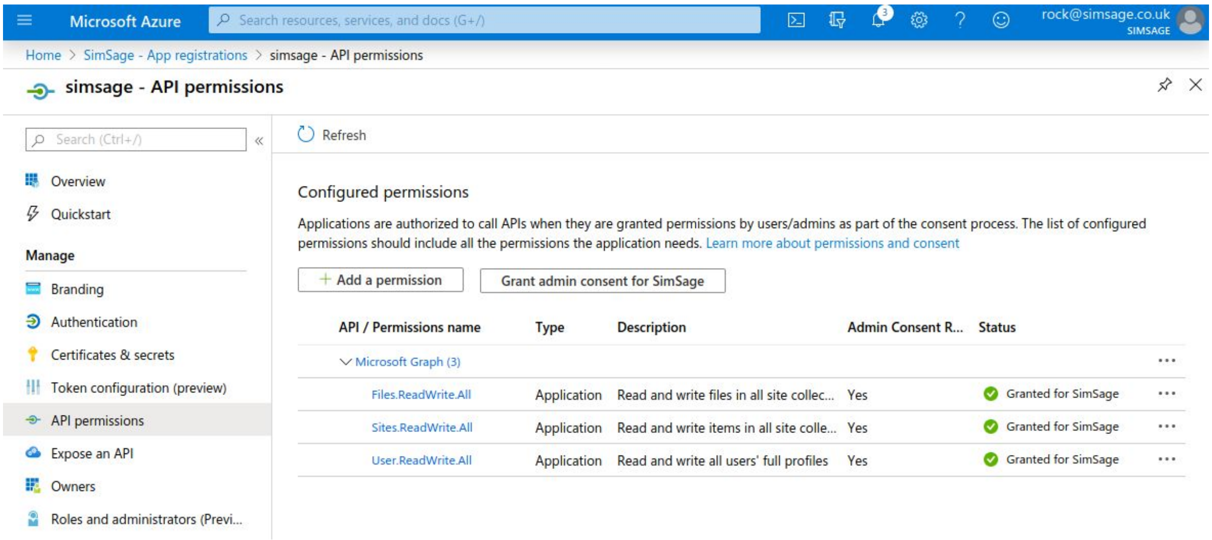
Select “Microsoft Graph” and select “Application permissions”. Then start typing in the “Select permissions” text box.

You need to select the following permissions. You can do this in one go if you like, or repeat the above step three times. We only require three permissions. These are:

Files.ReadWrite.All	for reading OneDrive files
Sites.ReadWrite.All	for reading SharePoint files
User.ReadWrite.Alll	for reading User data for security permissions and OneDrive

We only ever “read” from these systems. The “ReadWrite” is required for all three though.

The finished permissions are shown in the screenshot below. Make sure you click the “Grant admin consent for <name of your organisation>” button. This finalizes and activates the permissions.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Configured permissions

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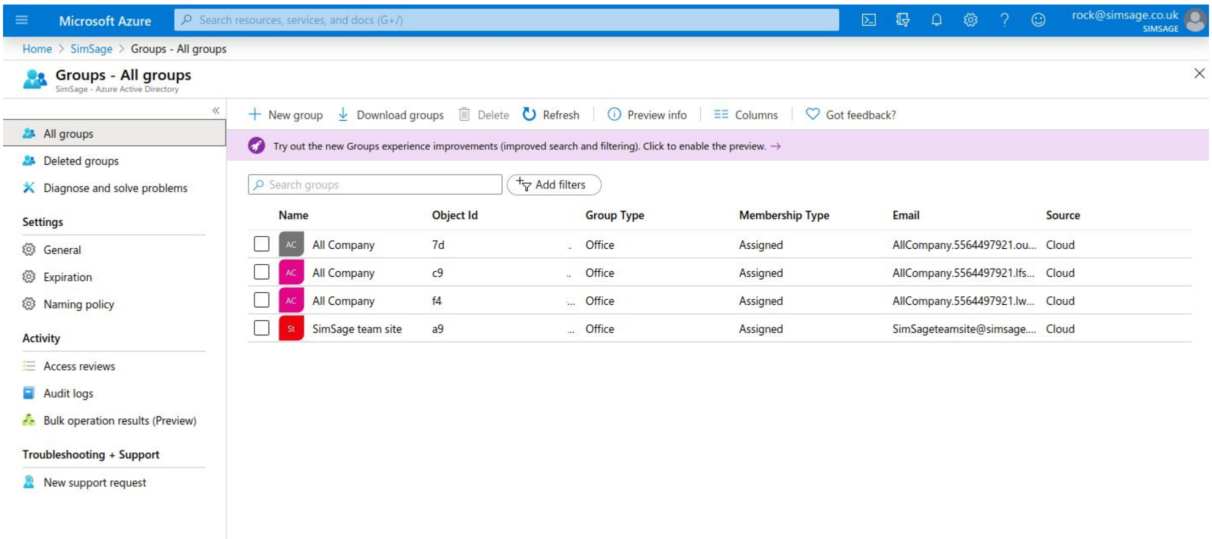
API / Permissions name	Type	Description	Admin Consent R...	Status
∨ Microsoft Graph (3)				
Files.ReadWrite.All	Application	Read and write files in all site collec...	Yes	✓ Granted for SimSage
Sites.ReadWrite.All	Application	Read and write items in all site colle...	Yes	✓ Granted for SimSage
User.ReadWrite.All	Application	Read and write all users' full profiles	Yes	✓ Granted for SimSage

SharePoint site IDs

SharePoint site IDs are required if you want to index sites other than the default site. These site IDs can only be gotten through Azure Active Directory.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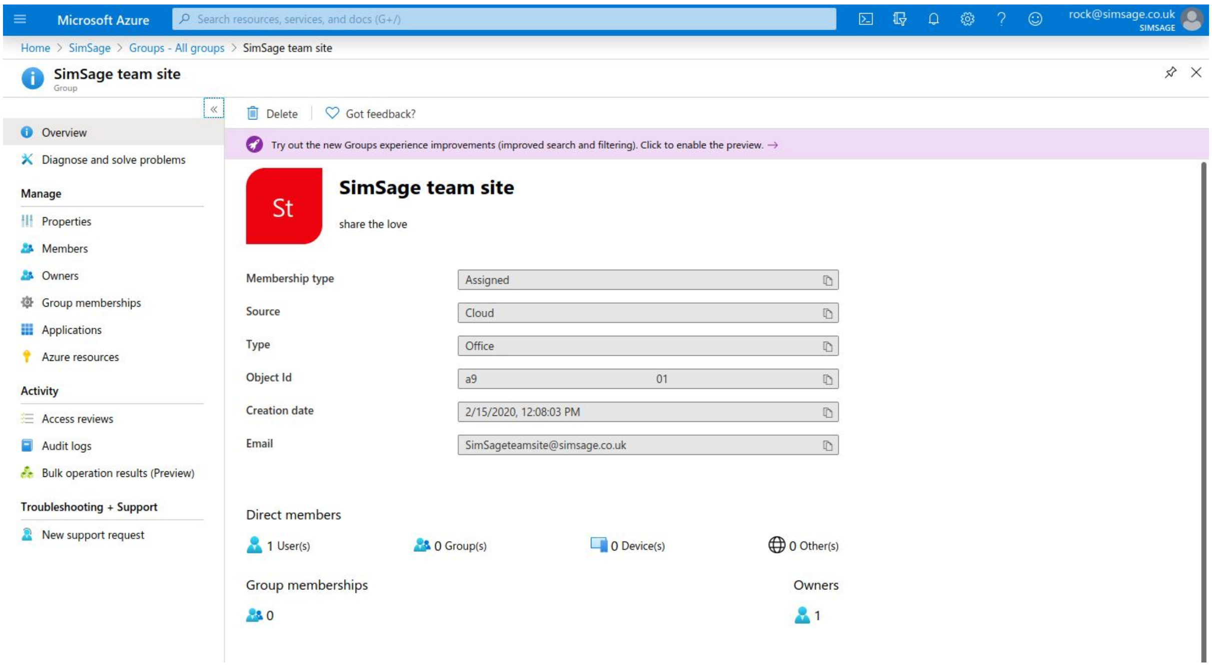
SIMSAGE
Home > SimSage > Groups - All groups
Groups - All groups
SimSage - Azure Active Directory
All groups
Deleted groups
Diagnose and solve problems
Settings
General
Expiration
Naming policy
Activity
Access reviews
Audit logs
Bulk operation results (Preview)
Troubleshooting + Support
New support request
New group
Download groups
Delete
Refresh
Preview info
Columns
Got feedback?
Try out the new Groups experience improvements (improved search and filtering). Click to enable the preview. →
Search groups
Add filters

	Name	Object Id	Group Type	Membership Type	Email	Source
□	AC All Company	7d	Office	Assigned	AllCompany.5564497921.ou...	Cloud
□	AC All Company	c9	Office	Assigned	AllCompany.5564497921.lfs...	Cloud
□	AC All Company	f4	Office	Assigned	AllCompany.5564497921.lw...	Cloud
□	St SimSage team site	a9	Office	Assigned	SimSageteamsite@simsage....	Cloud

Click on “All groups” on the left-hand-side of your Azure Active Directory menu. The pane on the right-hand-side shows all your SharePoint sites by name.

Click on the site whose id you need to view all its details.


Microsoft Azure
Search resources, services, and docs (G+/)
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SIMSAGE
Home > SimSage > Groups - All groups > SimSage team site
SimSage team site
Group
Overview
Diagnose and solve problems
Manage
Properties
Members
Owners
Group memberships
Applications
Azure resources
Activity
Access reviews
Audit logs
Bulk operation results (Preview)
Troubleshooting + Support
New support request
Delete
Got feedback?
Try out the new Groups experience improvements (improved search and filtering). Click to enable the preview. →
St

SimSage team site

share the love

Membership type	Assigned
Source	Cloud
Type	Office
Object Id	a9 01
Creation date	2/15/2020, 12:08:03 PM
Email	SimSageteamsite@simsage.co.uk

Direct members

1 User(s) 0 Group(s) 0 Device(s) 0 Other(s)

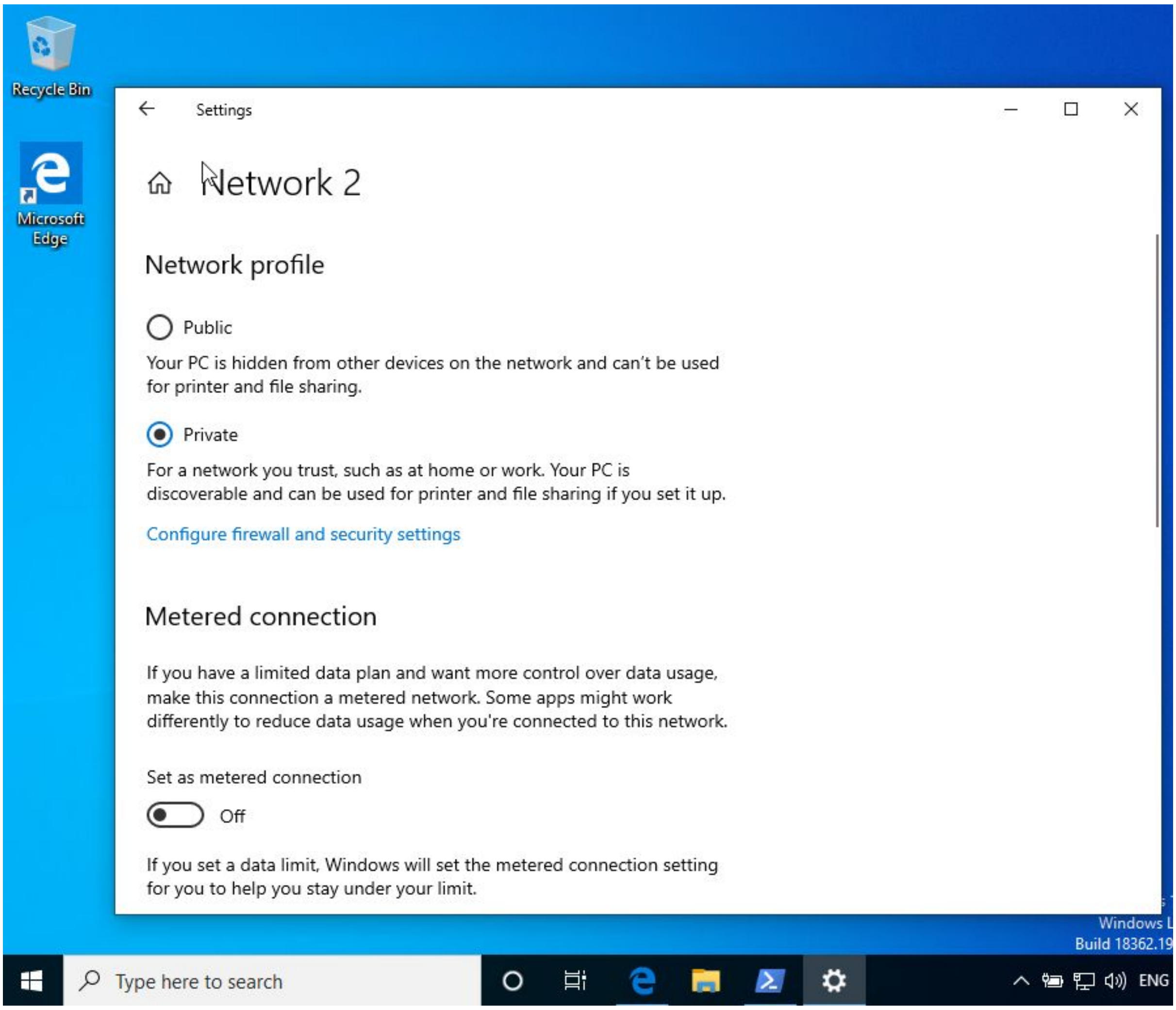
Group memberships 0

Owners 1

Copy the “Object Id” (it has been masked for security reasons in the image shown above). This is your SharePoint site ID.

Enabling Microsoft Exchange for Office 365

This process requires a Microsoft Windows installation with PowerShell. Windows 8.1, Windows 10, or Windows 2016 with GUI.



Network 2

Network profile

○ Public

Your PC is hidden from other devices on the network and can't be used for printer and file sharing.

● Private

For a network you trust, such as at home or work. Your PC is discoverable and can be used for printer and file sharing if you set it up.

Configure firewall and security settings

Metered connection

If you have a limited data plan and want more control over data usage, make this connection a metered network. Some apps might work differently to reduce data usage when you're connected to this network.

Set as metered connection

Off

If you set a data limit, Windows will set the metered connection setting for you to help you stay under your limit.

Make sure your network connection is set to private or domain.

Open a PowerShell session as Administrator. We've taken our instructions from:

https://docs.microsoft.com/en-us/powershell/exchange/exchange-online/connect-to-exchange-online-powershell/connect-to-exchange-online-powershell?view=exchange-ps

We will go through this guide in an abbreviated manner now. All commands following are PowerShell commands and must be issued as the administrator on your Windows machine.

```
> Set-ExecutionPolicy RemoteSigned
```

See if "Basic" is enabled for "winrm"

```
> winrm get winrm/config/client/auth
```

If it is set to false, execute the following command

```
> winrm set winrm/config/client/auth @{Basic="true"}
```

Set your Microsoft Office 365 admin credentials

```
> $UserCredential = Get-Credential
```

NB. This will pop-up a GUI box asking for your user-name and password. These must be your Office 365 administrator credentials.

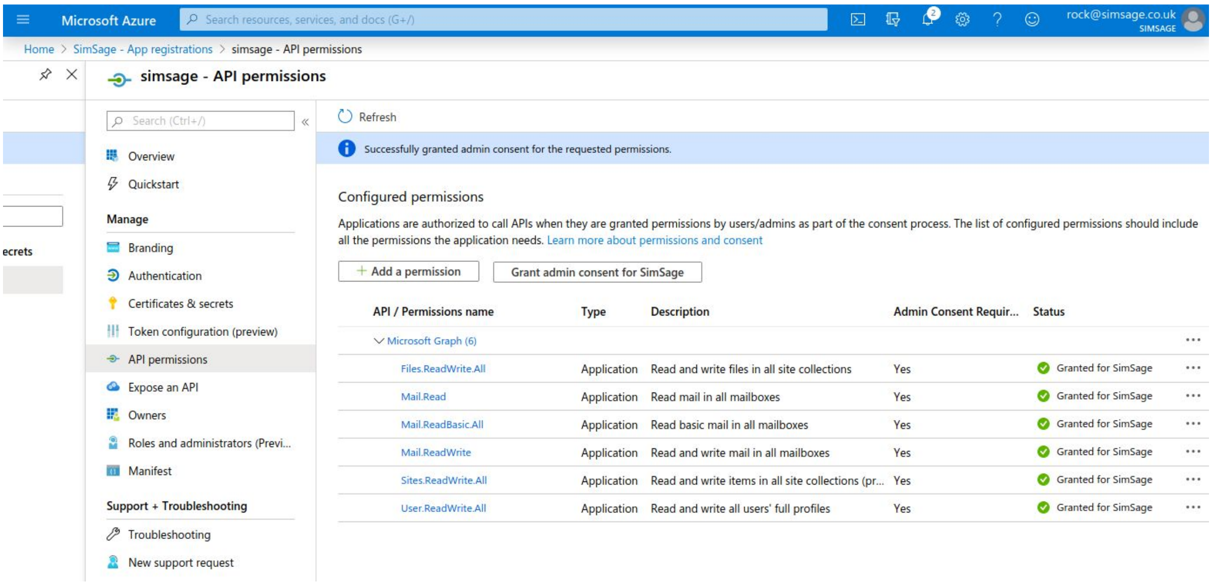
Then we setup a session with our remote Office 365 cloud server (all on one line)

```
> $Session = New-PSSession -ConfigurationName Microsoft.Exchange
-ConnectionUri https://outlook.office365.com/powershell-liveid/
-Credential $UserCredential
-Authentication Basic
-AllowRedirection
```

And finally we enable the Graph API through the following command:

```
> Import-PSSession $Session -DisableNameChecking
```

Finally, we need to enable our Microsoft Graph API inside the Azure portal as we did before. The combined permission set is shown below. Don't forget to click the "Grant admin consent for …" button.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Refresh
+ Add a permission
Grant admin consent for SimSage

Successfully granted admin consent for the requested permissions.

Configured permissions

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API / Permissions name	Type	Description	Admin Consent Requir...	Status
∨ Microsoft Graph (6)				
Files.ReadWrite.All	Application	Read and write files in all site collections	Yes	✓ Granted for SimSage
Mail.Read	Application	Read mail in all mailboxes	Yes	✓ Granted for SimSage
Mail.ReadBasic.All	Application	Read basic mail in all mailboxes	Yes	✓ Granted for SimSage
Mail.ReadWrite	Application	Read and write mail in all mailboxes	Yes	✓ Granted for SimSage
Sites.ReadWrite.All	Application	Read and write items in all site collections (pr...	Yes	✓ Granted for SimSage
User.ReadWrite.All	Application	Read and write all users' full profiles	Yes	✓ Granted for SimSage

The permissions to add are:
Mail.Read, Mail.ReadBasic.All, and Mail.ReadWrite