



Inventory

Inventorying Office 365

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1. Introduction

The Office 365 Inventory collects data about users, groups, and licenses. In this document we describe the necessary steps to map information of your Microsoft Office 365 environment in Docusnap.

The last revision of this HowTos and screenshots took place on 22.04.2020. Please note that some of the information on the screenshots may no longer exist. However, the basic steps are still valid.

2. Preparing Microsoft Azure

The following chapters describe how to prepare the Microsoft Azure environment for inventorying Microsoft Office 365. Alternatively, a PowerShell script can be used for setup, as described in [Chapter 3](#).

Before you begin, make sure that your used Azure user is authorized as a **Global Administrator**.

2.1 Creating the New Azure Application

The Docusnap Office 365 Inventory requires mandatory a registered application, that is authorized to read and access the Microsoft Office 365 information. In this chapter, we describe how to create this application.

For example, the application is called **Docusnap Office 365**. The name is freely selectable.

2.1.1 App Registration

Create / register the app as follows:

- Select the **Azure Active Directory** in the resource overview or the search.
- In the **Manage** area, select **App registrations**.
- Click on the menu item **New registration**

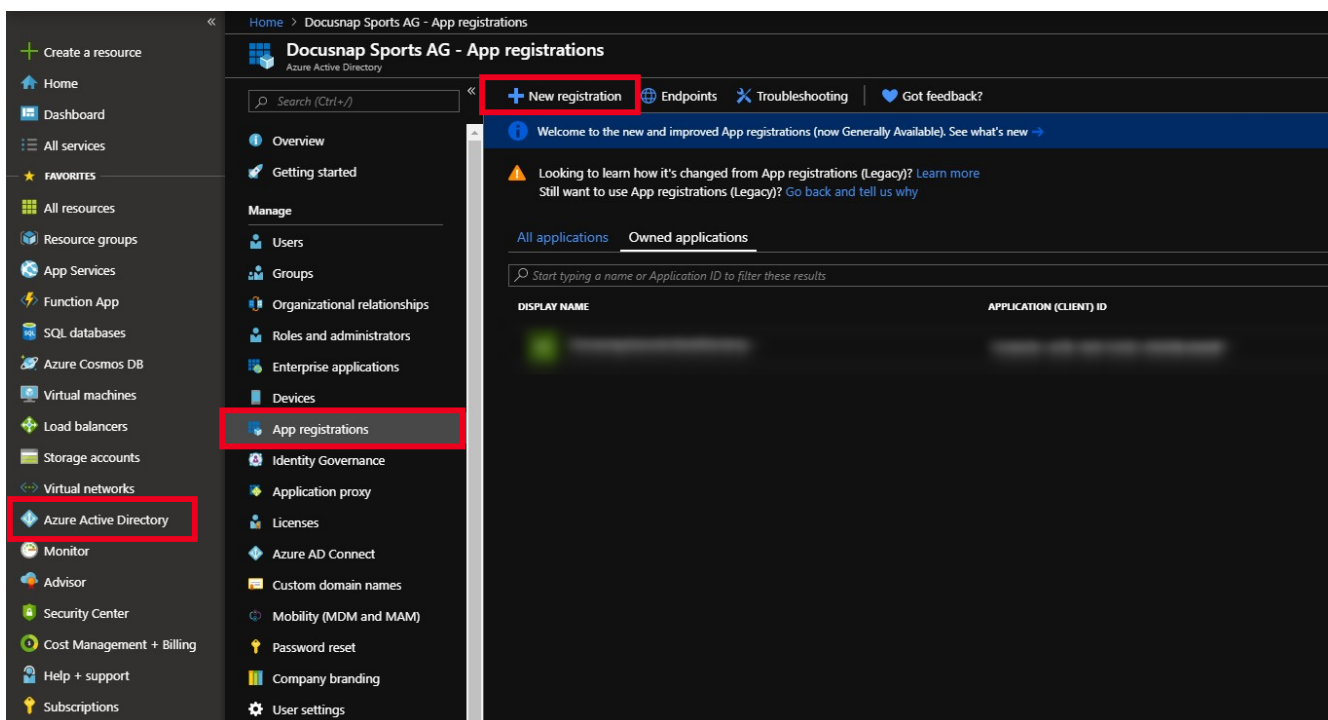
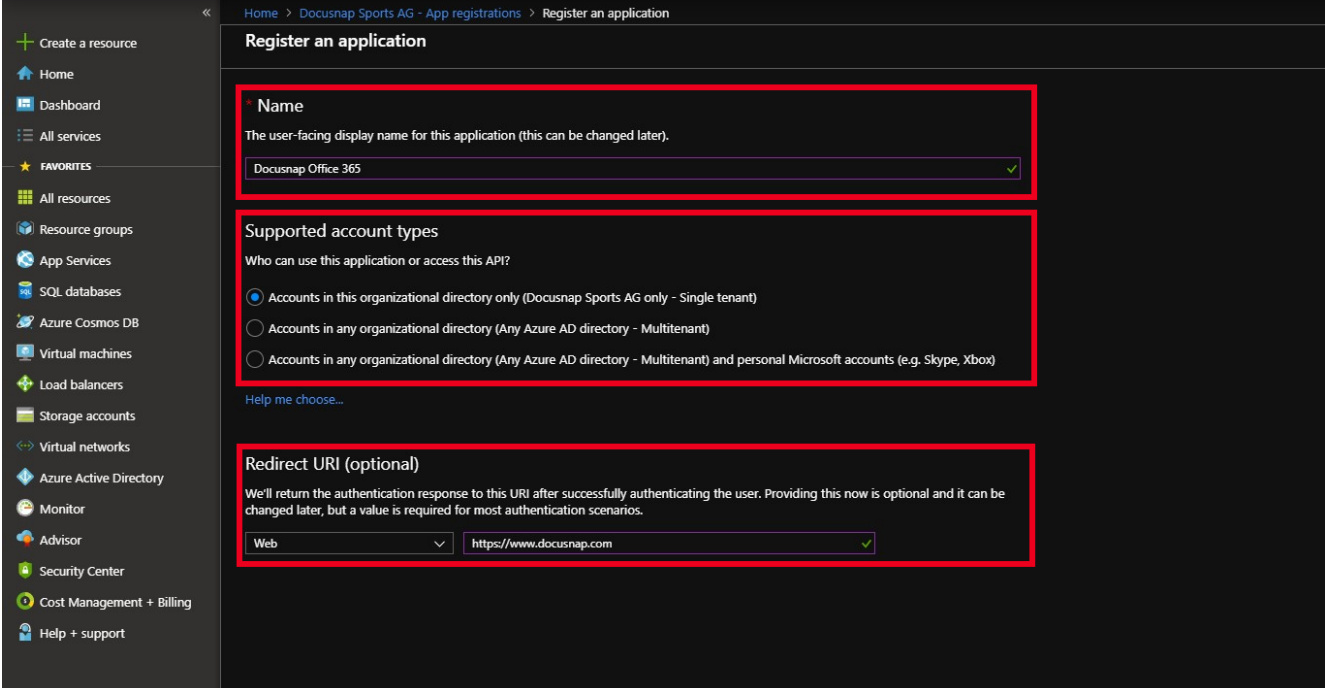


Fig. 1 - App registration

2.1.2 Register the application

The following information is required to register the application:

- **Name:** Enter the application name **Docusnap Office 365**.
- **Supported account types:** Here you can select who can use the application - select **Accounts in this organizational directory only**



Home > Docusnap Sports AG - App registrations > Register an application

Register an application

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

Docusnap Office 365 ✓

Supported account types
Who can use this application or access this API?

☒ Accounts in this organizational directory only (Docusnap Sports AG 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...](#)

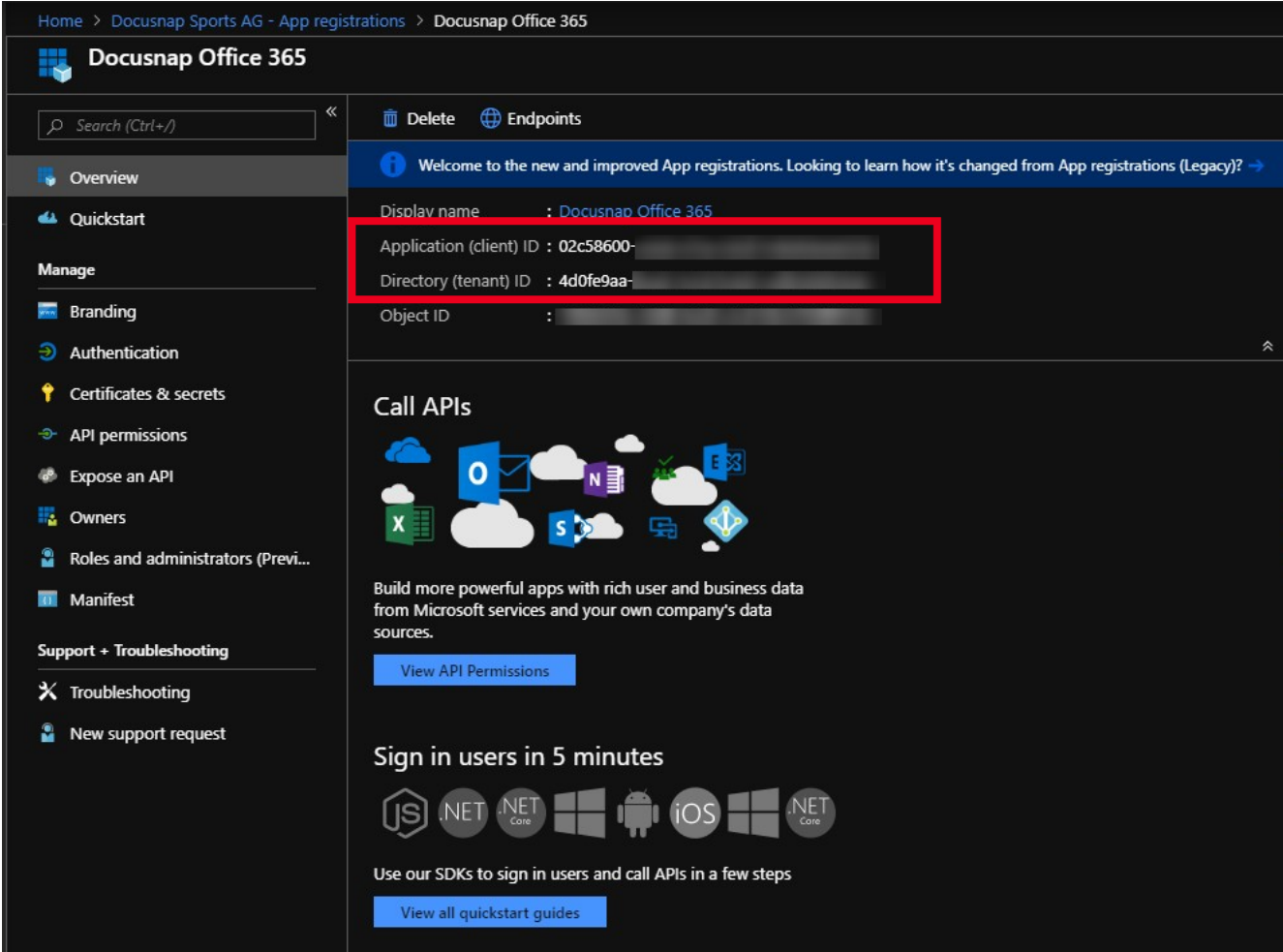
Redirect URI (optional)
We'll return the authentication response to this URI after successfully authenticating the user. Providing this now is optional and it can be changed later, but a value is required for most authentication scenarios.

Web https://www.docusnap.com ✓

Fig. 2 – Register the application

2.1.3 Determine Application and Directory ID

After the creation is completed, the overview dialog of the application is displayed. Now note / copy the application and directory ID.



Home > Docusnap Sports AG - App registrations > Docusnap Office 365

Docusnap Office 365

Search (Ctrl+/)

Overview

Quickstart

Manage

Branding

Authentication

Certificates & secrets

API permissions

Expose an API

Owners

Roles and administrators (Previ...

Manifest

Support + Troubleshooting

Troubleshooting

New support request

Delete Endpoints

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

Display name : Docusnap Office 365

Application (client) ID : 02c58600-

Directory (tenant) ID : 4d0fe9aa-

Object ID :

Call APIs

Build more powerful apps with rich user and business data from Microsoft services and your own company's data sources.

View API Permissions

Sign in users in 5 minutes

Use our SDKs to sign in users and call APIs in a few steps

View all quickstart guides

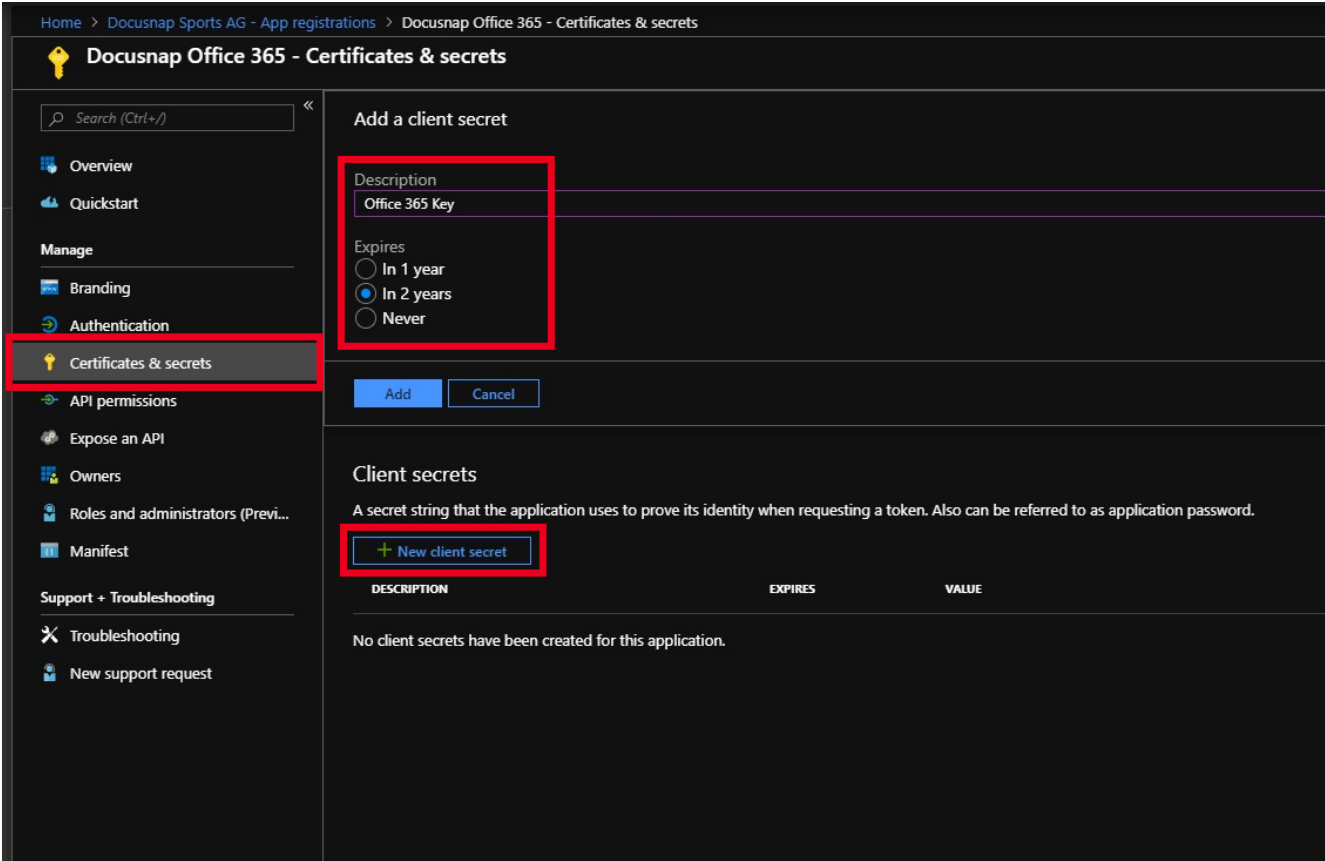
Fig. 3 - Determine Application and Directory ID

2.1.4 Create a client secret

Now create a client secret. In the **Manage** area, select the item

- Certificates & secrets
- New client secret
- Enter a **Description** and
- the validity of the secret

Note: The key can only be viewed directly after creation. If the key is lost or becomes invalid, it must be recreated.



Home > Docusnap Sports AG - App registrations > Docusnap Office 365 - Certificates & secrets

Docusnap Office 365 - Certificates & secrets

Search (Ctrl+J)

Overview

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API permissions

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Manifest

Support + Troubleshooting

Troubleshooting

New support request

Add a client secret

Description

Office 365 Key

Expires

☐ In 1 year

☒ In 2 years

☐ Never

Add Cancel

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.

+ New client secret

DESCRIPTION	EXPIRES	VALUE
No client secrets have been created for this application.		

Fig. 4 - Create a secret client key

2.1.5 Authorizing the application – API permissions

Now the application must be authorized for the Windows Azure Service Management API.

- In the Manage pane, select API Permissions
- Add a permission
- Microsoft Graph

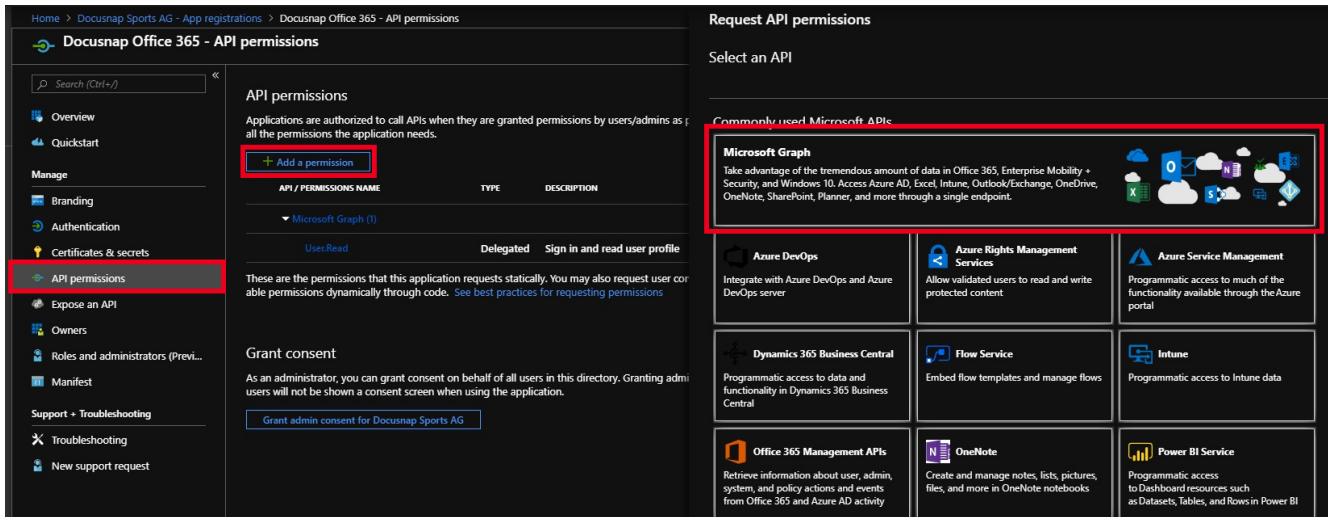


Fig 5 – Authorize Application

Choose Application permissions as the type of permission to be granted.

Use the keyword Directory to find the Directory.Read.All permission and add this permission.

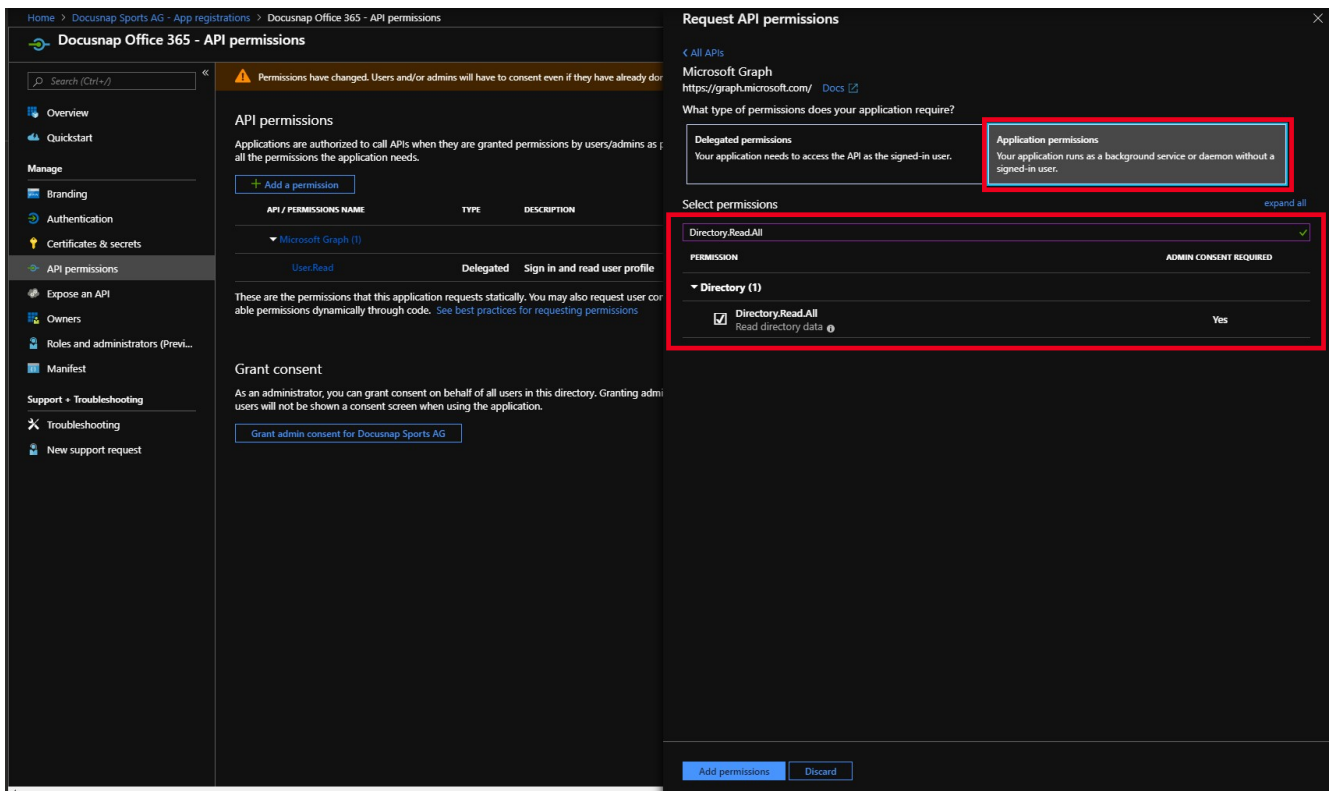
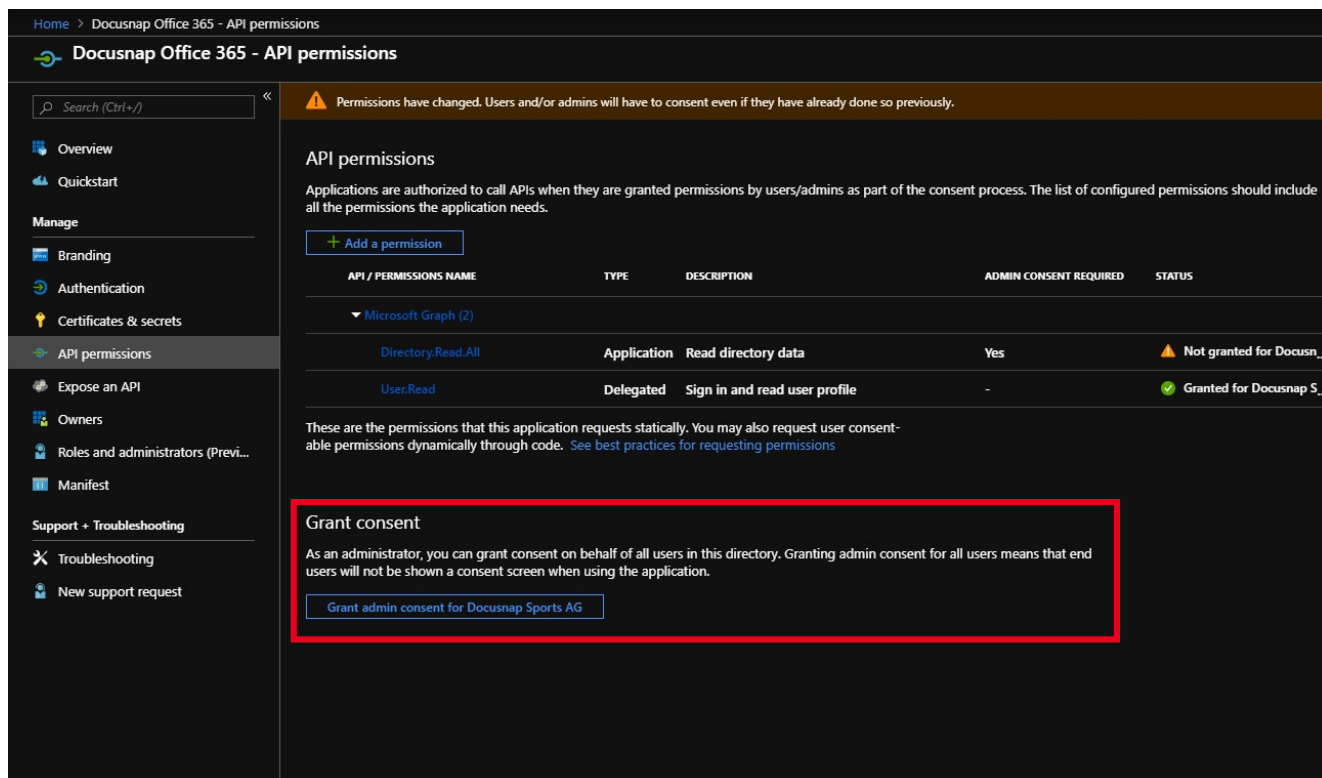


Fig 6 - Authorize Application II

Now you must give your consent for the previously set permissions. To do this, select the control Grant admin consent for "Your subscription".



Home > Docusnap Office 365 - API permissions

Docusnap Office 365 - API permissions

Permissions have changed. Users and/or admins will have to consent even if they have already done so previously.

API 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.

[+ Add a permission](#)

API / PERMISSIONS NAME	TYPE	DESCRIPTION	ADMIN CONSENT REQUIRED	STATUS
▼ Microsoft Graph (2)				
Directory.Read.All	Application	Read directory data	Yes	⚠ Not granted for Docusnap...
User.Read	Delegated	Sign in and read user profile	-	✅ Granted for Docusnap S...

These are the permissions that this application requests statically. You may also request user consentable permissions dynamically through code. [See best practices for requesting permissions](#)

Grant consent

As an administrator, you can grant consent on behalf of all users in this directory. Granting admin consent for all users means that end users will not be shown a consent screen when using the application.

[Grant admin consent for Docusnap Sports AG](#)

Fig 7 – Grant Consent

3. Alternative: PowerShell Script

Alternatively, a PowerShell script can be used to perform the steps described above.

The script is in the installation directory of Docusnap

C:\Program Files\Docusnap X\Tools\scripts\ o365.key.creation.ps1

Important: The PowerShell script must be run as an administrator!

- Start PowerShell Script as an administrator
- Reload libraries if necessary and confirm execution dialogs
- Log in in the appearing window

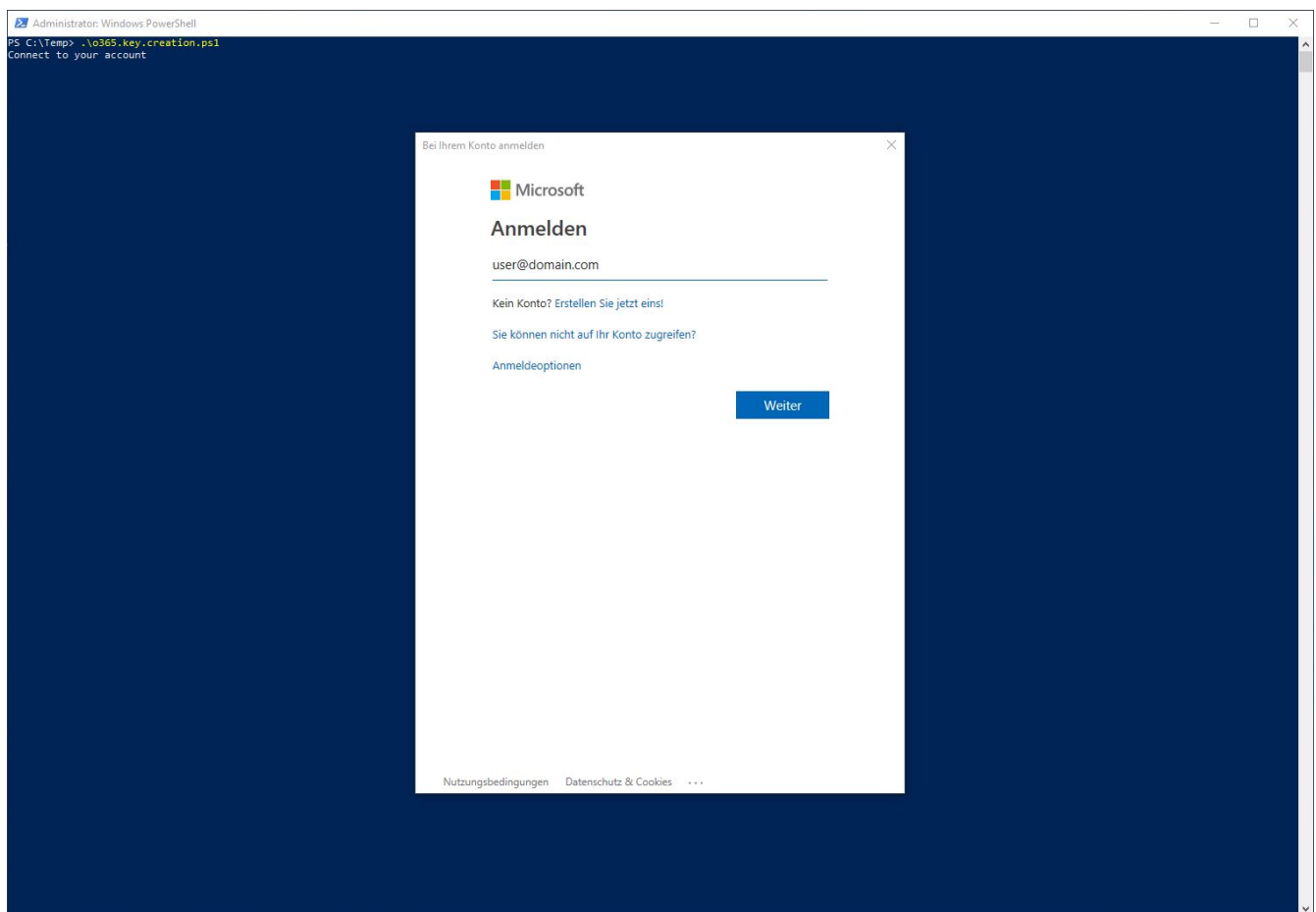
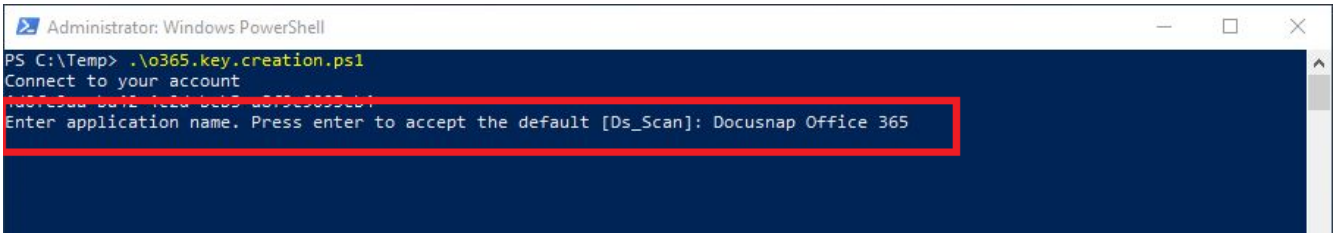


Fig 8 - PowerShell - login

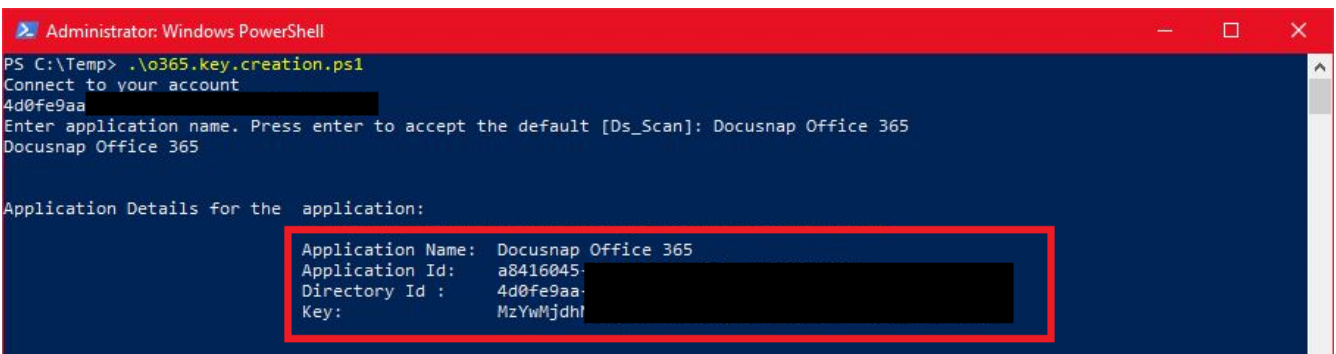
- Assign a name for the application: Docusnap Office 365



```
Administrator: Windows PowerShell
PS C:\Temp> .\o365.key.creation.ps1
Connect to your account
4d0fe9aa-84eb-4b72-b205-b079c36536b1
Enter application name. Press enter to accept the default [Ds_Scan]: Docusnap Office 365
```

Fig. 9 - PowerShell - application name

- All required information (Application ID, Directory ID and Key) is displayed afterwards
- **Important** - copy the displayed IDs - the key can no longer be found afterwards

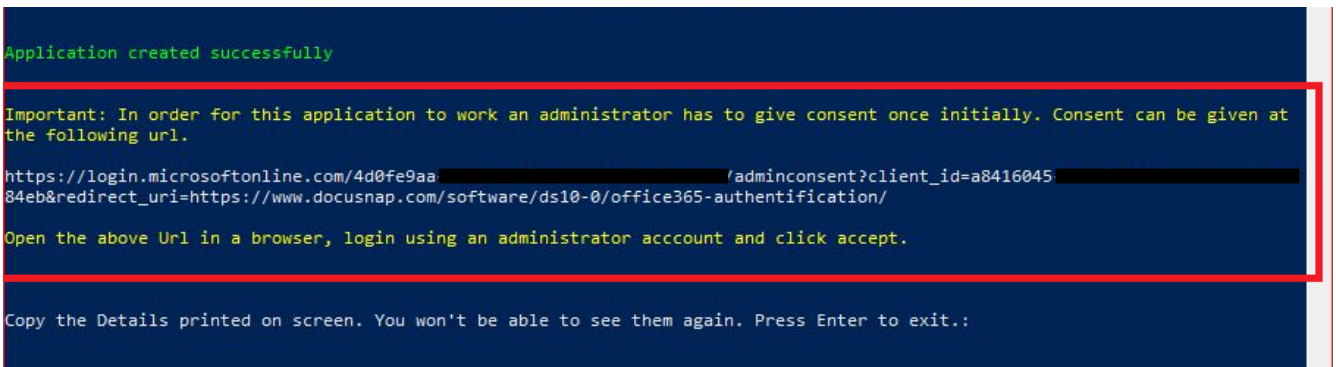


```
Administrator: Windows PowerShell
PS C:\Temp> .\o365.key.creation.ps1
Connect to your account
4d0fe9aa-84eb-4b72-b205-b079c36536b1
Enter application name. Press enter to accept the default [Ds_Scan]: Docusnap Office 365
Docusnap Office 365

Application Details for the application:
Application Name: Docusnap Office 365
Application Id: a8416045-84eb-4b72-b205-b079c36536b1
Directory Id : 4d0fe9aa-84eb-4b72-b205-b079c36536b1
Key: MzYwMjdhdHl
```

Fig. 10 - PowerShell – inventory credentials

- You have to open the displayed URL in the browser - log in and confirm the access



```
Application created successfully

Important: In order for this application to work an administrator has to give consent once initially. Consent can be given at the following url.
https://login.microsoftonline.com/4d0fe9aa-84eb-4b72-b205-b079c36536b1/adminconsent?client_id=a8416045-84eb-4b72-b205-b079c36536b1&redirect_uri=https://www.docusnap.com/software/ds10-0/office365-authentication/
Open the above Url in a browser, login using an administrator account and click accept.

Copy the Details printed on screen. You won't be able to see them again. Press Enter to exit.:
```

Fig. 11 - PowerShell - confirm access

4. Inventorying Office 365 with Docusnap

4.1 Docusnap Office 365 Inventory Wizard

4.1.1 Prerequisite: proxy configuration

If your network uses a proxy, you must specify the proxy parameters in the connection settings. It is possible that you normally do not need these settings when using the other scan modules. Basically, the proxy settings must be suitable for the respective DDS (Docusnap Discovery Service). The settings shown in the exemplary screenshot are suitable for interactive Azure inventory scans. If you selected the Discovery Service of another location as the DDS, you would have to adjust the proxy settings for this DDS installation.

Adjusting the proxy settings:

- Click on the **gear wheel (Settings)** in the top right-hand corner of the title bar
- Select **General**
- In the Options dialog, click **Connections**.
- Under **Proxy Settings**:
 - select **Set up manually**
 - Under **Address**, enter your proxy **URL** including the **Port** number
 - Enter suitable values in the **User** and **Password** fields
- Click **OK** to confirm your changes

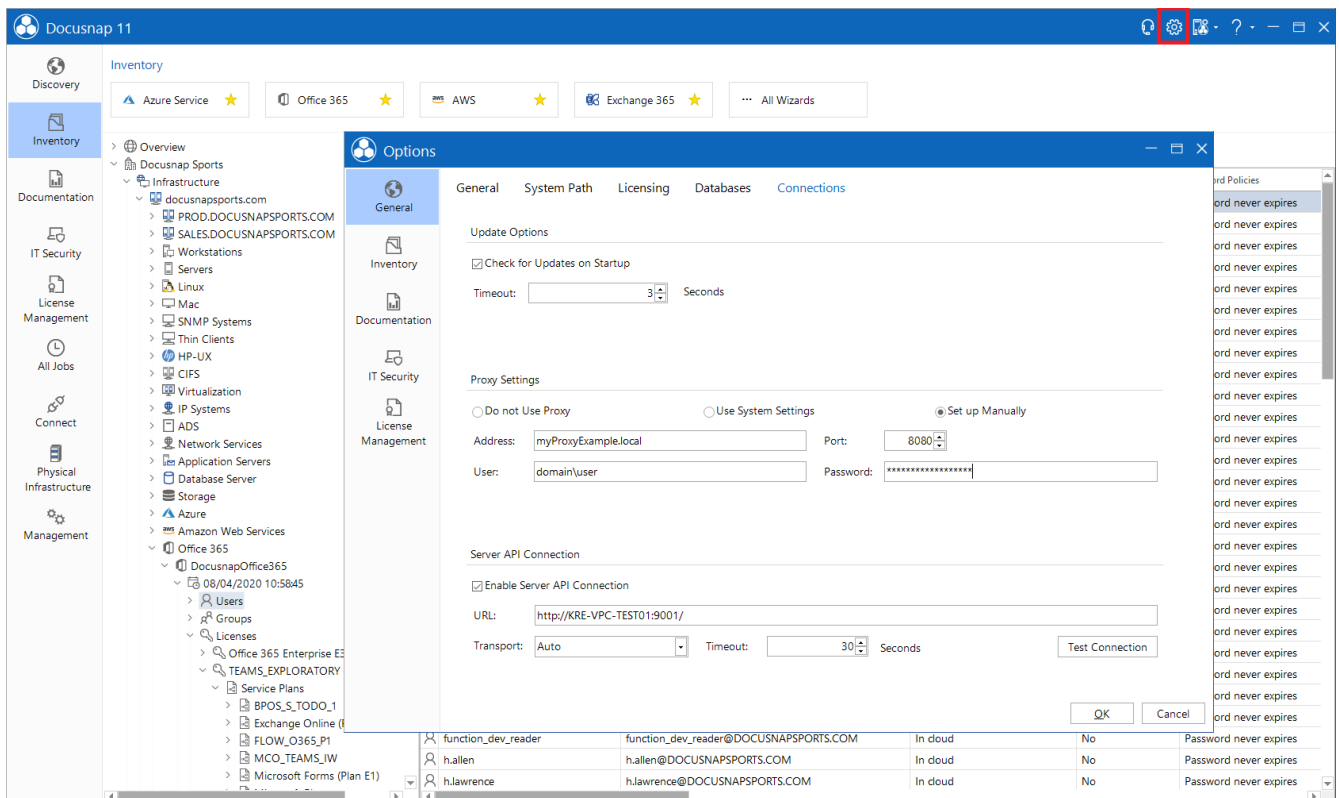


Fig. 12 - Docusnap Proxy Settings

4.1.2 Inventorying Office 365

Start the Office 365 Inventory Wizard by clicking the button in the Inventory section. If you do not see the button, you can find it by clicking the All Wizards button.

Select the desired company and domain.

Now you need the IDs and key information previously collected in Azure:

- **Directory ID** corresponds to the ID of your Azure Active Directory
- The ID of the previously created application is entered as the **Application ID**
- In the **Key** field, insert the value of the previously created key.

Then click Save. If you receive a proxy error, refer to the [Proxy Configuration](#) section of this chapter.

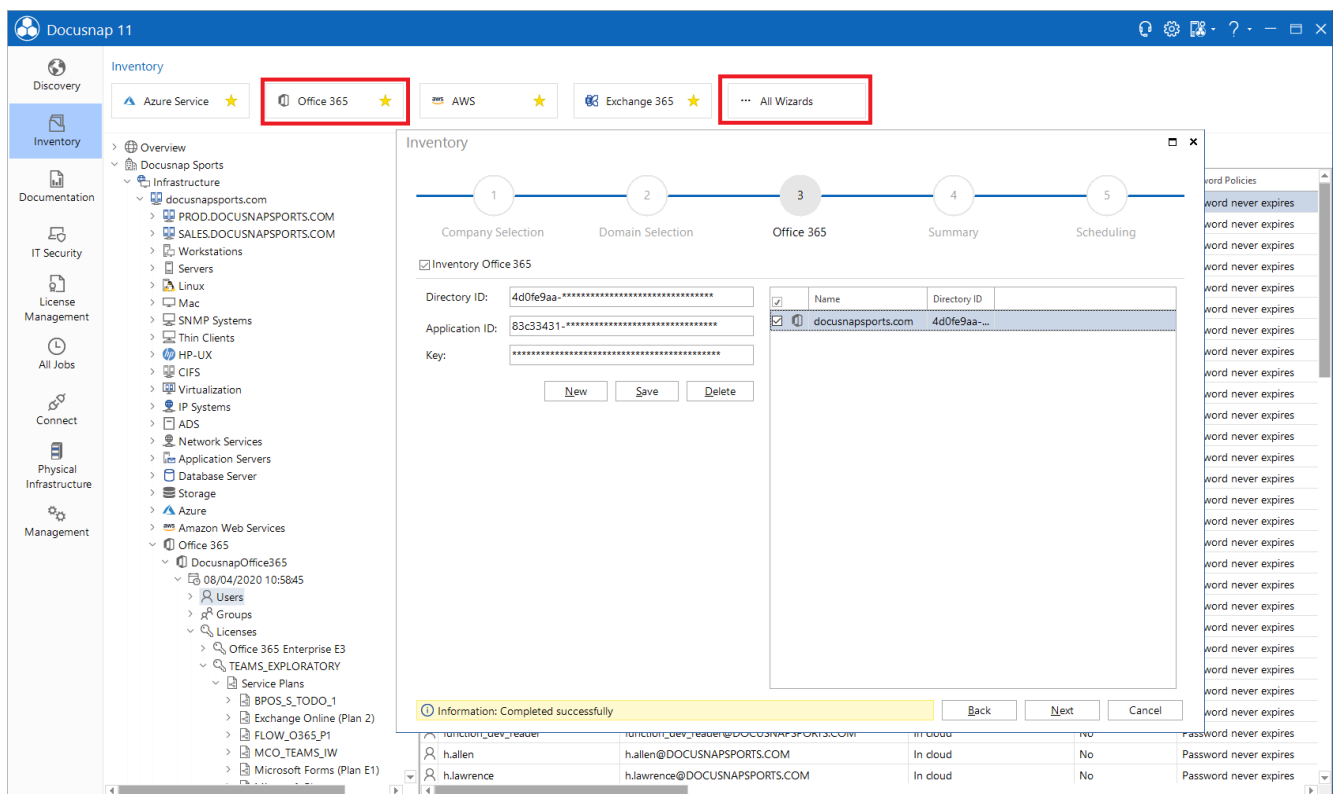
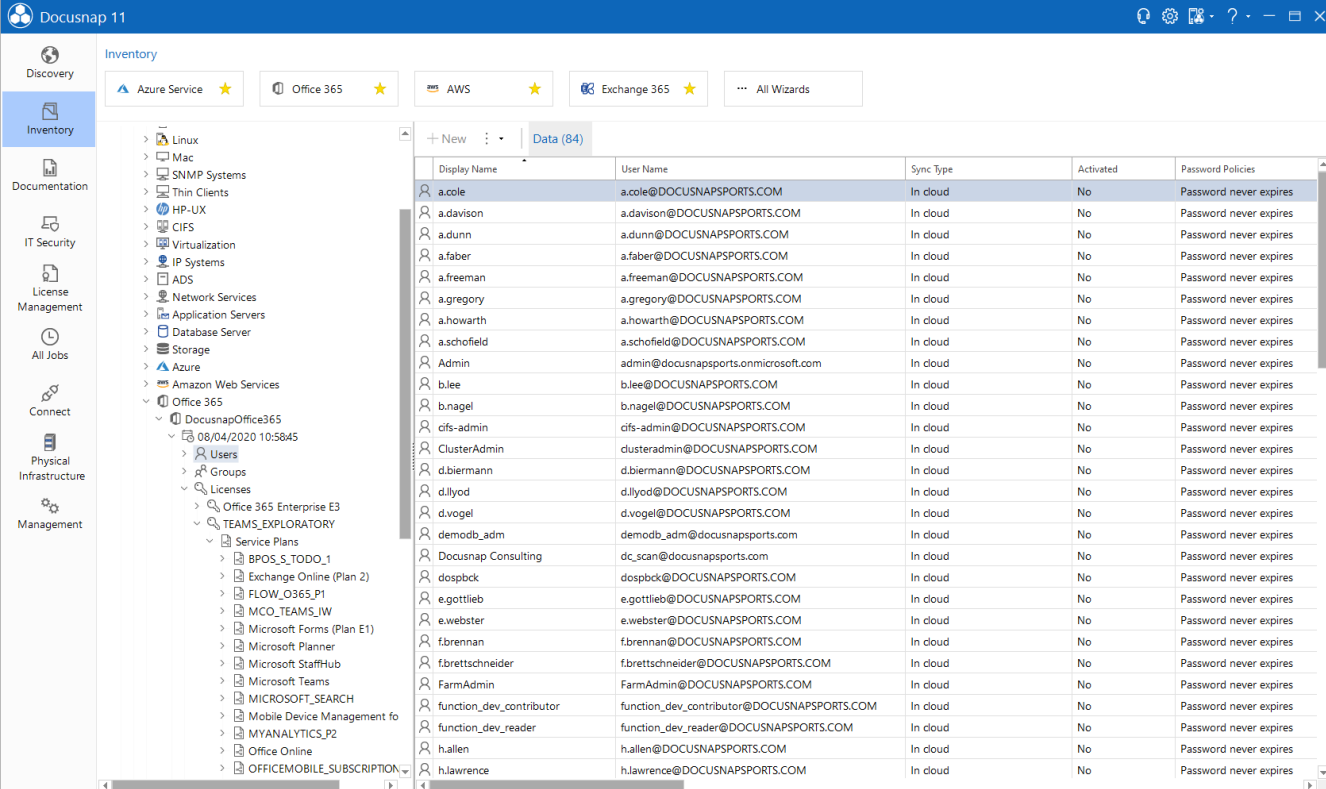


Fig. 13 – Add IDs for inventory

4.2 Office 365 scan result in Docusnap

The scan result can be found in the Inventory module as a separate node called Office 365 below the previously selected domain, within the infrastructure of your client.

The screenshot below shows the top level of an Office 365 inventory:



Display Name	User Name	Sync Type	Activated	Password Policies
a.cole	a.cole@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
a.davison	a.davison@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
a.dunn	a.dunn@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
a.faber	a.faber@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
a.freeman	a.freeman@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
a.gregory	a.gregory@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
a.howarth	a.howarth@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
a.schofield	a.schofield@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
Admin	admin@docusnapsports.onmicrosoft.com	In cloud	No	Password never expires
b.lee	b.lee@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
b.nagel	b.nagel@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
cifs-admin	cifs-admin@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
ClusterAdmin	clusteradmin@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
d.biermann	d.biermann@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
d.llyod	d.llyod@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
d.vogel	d.vogel@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
demodb_admin	demodb_admin@docusnapsports.com	In cloud	No	Password never expires
Docusnap Consulting	dc_scan@docusnapsports.com	In cloud	No	Password never expires
dospbck	dospbck@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
e.gottlieb	e.gottlieb@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
e.webster	e.webster@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
f.brennan	f.brennan@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
f.brettschneider	f.brettschneider@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
FarmAdmin	FarmAdmin@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
function_dev_contributor	function_dev_contributor@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
function_dev_reader	function_dev_reader@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
h.allen	h.allen@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires
h.lawrence	h.lawrence@DOCUSNAPSPORTS.COM	In cloud	No	Password never expires

Fig. 14 - Scan result

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VERSION HISTORY

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