



Configuration and administration

ELO Azure Administration



Table of contents

ELO Azure administration	3
Requirements	3
Initial app registration in Microsoft Azure	4
Authentication	10
Services	13

ELO Azure administration

Requirements

To start ELO Azure Administration, the following requirements must be met:

- The ELO Azure Administration service is installed and started. This module is installed using the ELO Server Setup.
 - You will find more information in the ELO server documentation under [ELO server > Installation > ELO Server Setup](#)

Please note

When using SSL: Configure the root certificate entered in the ELO setup on the ELO server in the respective certificate store. Example for Windows: under *Trusted Root Certification Authorities*.

Otherwise, ELO Azure Administration may not be able to be reached.

- You have access to a Microsoft Azure environment and the corresponding administrator account.
 - For more information, refer to the [Microsoft documentation](#).
- An app for ELO Azure Administration is registered in Microsoft Azure.
 - Refer to the section Initial app registration in Microsoft Azure for more information.
- You are using an account with main administrator rights in ELO.

Initial app registration in Microsoft Azure

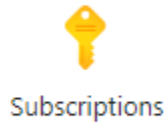
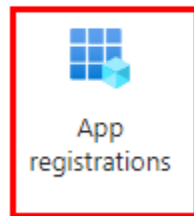
For ELO Azure Administration to connect to Microsoft Azure, you will have to register the app in Microsoft Azure first.

Please note

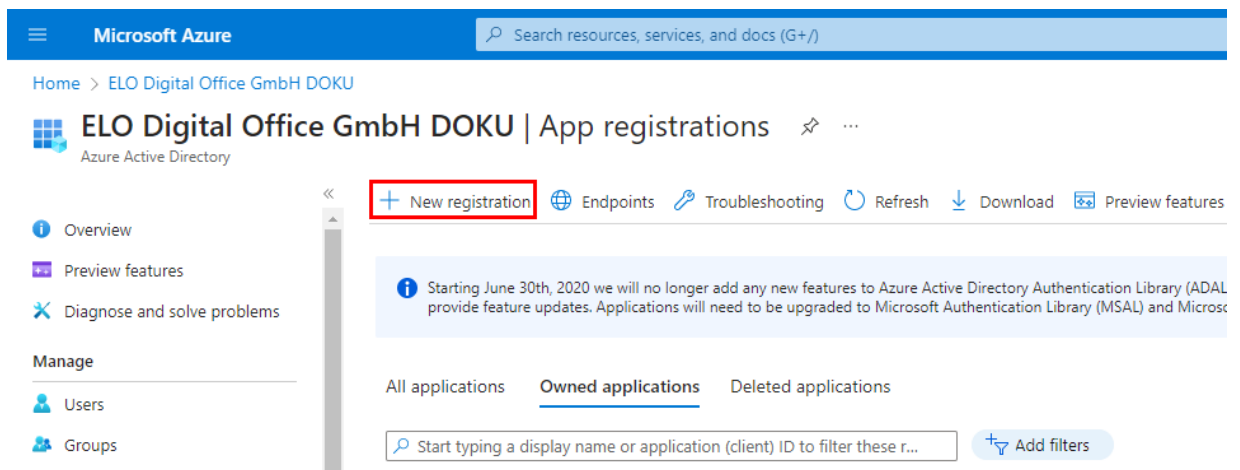
This documentation does not cover basic configuration of a Microsoft Azure environment or subscriptions, both of which are required for this.

1. Log on to Microsoft Azure as an administrator.

Azure services



2. Go to *App registrations*.



3. Select *New registration*.

The *Register an application* page opens.

4. Enter a name for the app. You can choose any name you like.

Example: ELO Azure Administration

- 5.

Under *Supported account types*, select *Accounts in any organizational directory and personal Microsoft accounts (any Microsoft Entra ID tenant - multi-tenant capable) and personal Microsoft accounts (e.g. Skype, Xbox)*.

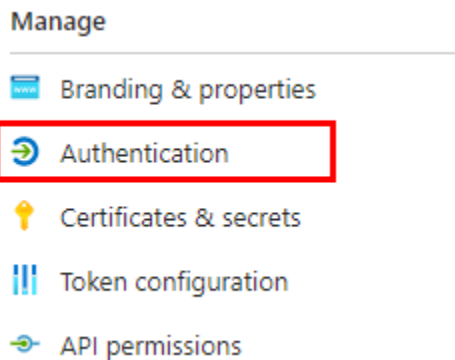
6. Select *Register*.

The app is registered in Microsoft Azure.

Authentication settings

Once registration is complete, you have to configure some settings for app authentication.

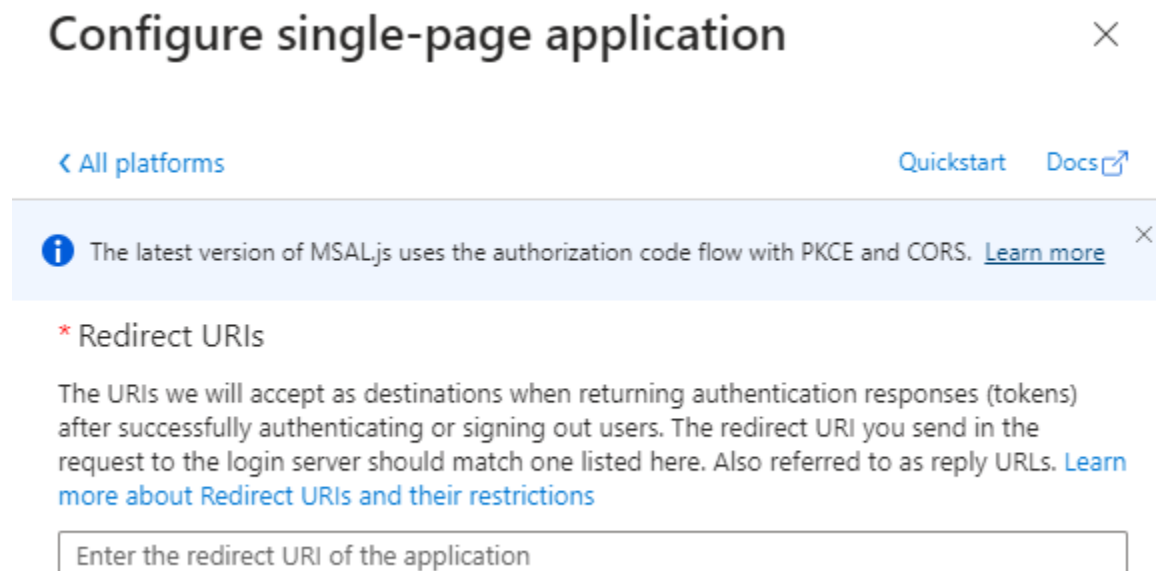
1. In Microsoft Azure, go to *Authentication*.



2. Select *Add a platform*.

The *Configure platform* area appears.

3. Select *Single-page application*.



The *Configure single-page application* area opens.

- 4.

In the *Enter the redirect URI* field, enter a URL as follows:

```
https://<Server>:<Port>/ix-<Repository>/plugin/de.elo.ix.plugin.proxy/  
azadministrations/auth-end/blank.html
```

Example:

```
https://desktop-8luhtiv:9093/ix-EXTEN/plugin/de.elo.ix.plugin.proxy/  
azadministrations/auth-end/blank.html
```

Information

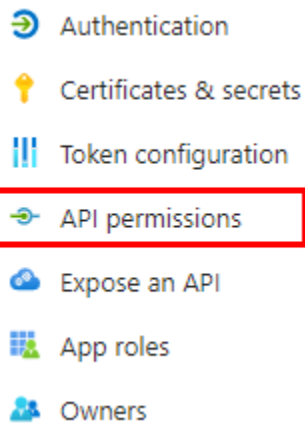
The URL must match the path to ELO Azure Administration in the respective ELO environment.

5. Enable the following settings:
 - Access tokens (used for implicit flows)
 - ID tokens (used for implicit and hybrid flows)
6. Save the settings with *Configure*.

The authentication settings are now configured.

API permissions

The app for ELO Azure Administration requires several permissions.



1. Open the *API permissions* area.
2. Select *Add permissions*.

The *Request API permissions* area opens.

3. Add the following delegated permissions:
 - Azure Service Management:



user_impersonation

- Microsoft Graph:
 - Application.ReadWrite.All
 - Directory.ReadWrite.All
 - RoleManagement.ReadWrite.Directory
 - User.Read
 - User.ReadWrite.All

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](#)

+ Add a permission Grant admin consent for ELO Digital Office GmbH

API / Permissions name	Type	Description	Admin consent requ...	Status
▼ Azure Service Management (1)				...
user_impersonation	Delegated	Access Azure Service Management as organization users	No	...
▼ Microsoft Graph (5)				...
Application.ReadWrite.All	Delegated	Read and write all applications	Yes	⚠ Not granted for ELO Dig... ...
Directory.ReadWrite.All	Delegated	Read and write directory data	Yes	⚠ Not granted for ELO Dig... ...
RoleManagement.ReadWrite.Dir	Delegated	Read and write directory RBAC settings	Yes	⚠ Not granted for ELO Dig... ...
User.Read	Delegated	Sign in and read user profile	No	...
User.ReadWrite.All	Delegated	Read and write all users' full profiles	Yes	⚠ Not granted for ELO Dig... ...

1. Select *Grant admin consent for <tenant>*.

The *Confirm admin consent* dialog box opens.

2. Click *Yes* to confirm.

The permissions are added.

Configuring the service

Once the app has been set up in Azure, you now have to update the configuration of *ELO Azure Administration* in the ELO system.

1. In Microsoft Azure, open the overview for the app you created above.

The screenshot shows the Azure portal interface for an application named "ELO Azure Administration". The "Essentials" section is highlighted with a red box, containing the following information:

- Display name: [ELO Azure Administration](#)
- Application (client) ID: [cc810f16-0766-49d9-a6b6-b1c8e3286cb4](#)
- Object ID: f529088a-3736-48ac-bd21-0923c694644f
- Directory (tenant) ID: a1656576-c91f-4204-8389-13aec52af44b
- Supported account types: [All Microsoft account users](#)

Other visible information includes the "Client credentials" section with a link to "Add a certificate or secret", "Redirect URIs" with a link to "0 web, 1 spa, 0 public client", and "Application ID URI" with a link to "Add an Application ID URI". The "Managed application in local directory" is also listed as "ELO Azure Administration".

2. Copy the values of the following fields:

- Display name
- Application ID (client)

3. On the server machine running ELO, open the following directory:

```
<ELO>\servers\ELO-Azure-Administration
```

Information

The placeholder <ELO> stands for the ELO installation directory.

4. Open the *appsettings.json* file in a suitable editor.

You will find the following entries in the header area of the file:

```
"AppsManagementDashboard": {
  "MicrosoftAppId": "",
  "MicrosoftAppName": ""
},
```

5. Insert the copied values into the JSON file.

Example:

```
"AppsManagementDashboard": {
  "MicrosoftAppId": "cc810f16-0766-49d9-a6b6-b1c8e3286cb4",
  "MicrosoftAppName": "ELO Azure Administration"
},
```

6.

Save the file.

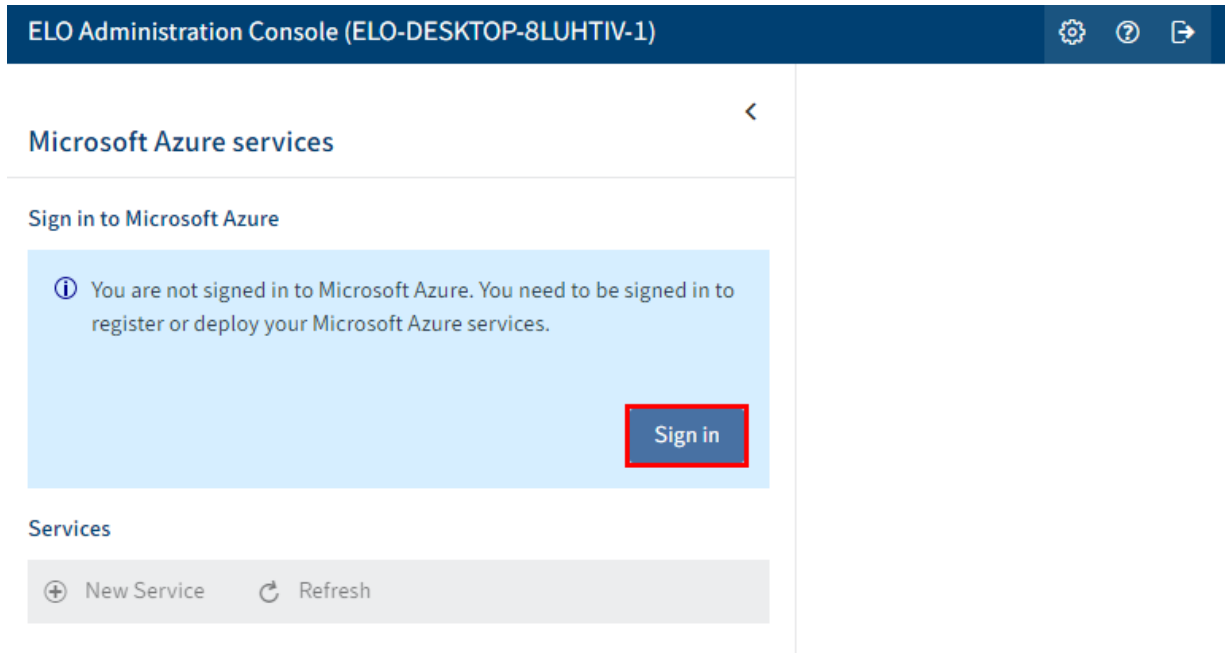
7. Restart the *ELO Azure Administration* service.

Service configuration is now complete. You can now authenticate with Microsoft Azure via ELO Azure Administration.

Authentication

When starting ELO Azure Administration for the first time, you will have to log on with the Azure administrator account.

1. Open the ELO Administration Console.
2. Log on with an account with main administrator rights.
3. Open the *ELO Azure Administration* area.



4. Select *Sign in*.



Sign in

Email, phone, or Skype

No account? [Create one!](#)

[Can't access your account?](#)

Back

Next



Sign-in options

[Terms of use](#) [Privacy & cookies](#) ...

The *Sign in* dialog box opens.

Please note

This pop-up dialog box may be blocked by your browser. If this is the case, disable your pop-up blocker for the sign-in URL.

5. Enter the e-mail address for the administrator account in Microsoft Azure.
6. Select *Next*.

The *Enter password* dialog box appears.

7. Enter the password for the administrator account in Microsoft Azure.
- 8.

Select *Sign in*.

The system attempts to sign in.

9. Verify sign-in via a method of your choice (Microsoft Authenticator app or by phone).

ELO Azure Administration is now connected to Microsoft Azure. You can now create services.

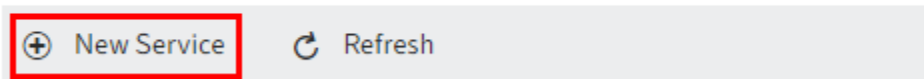
Services

After successful logon, you can create services for Microsoft Azure apps via ELO Azure Administration.

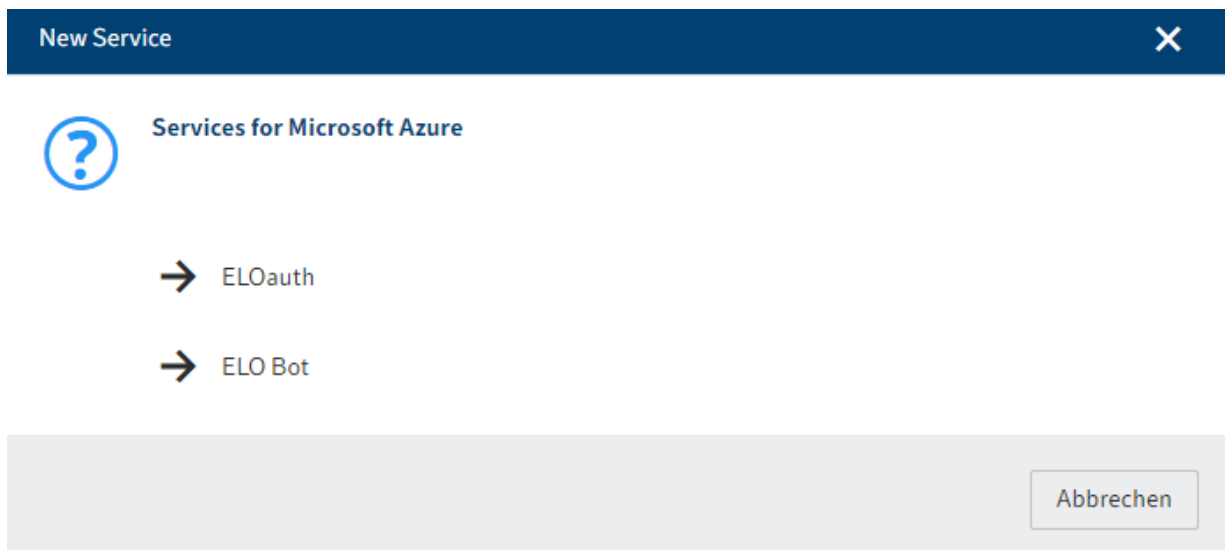
Create service

1. Open ELO Azure Administration.

Services



2. Select *New Service*.



The *New Service* dialog box appears. The following services are available:

- ELOauth: The ELOauth ELO Indexserver plug-in authenticates against an external system. You will find more information in the *ELO Indexserver* documentation under [Plug-ins > ELOauth](#).
- ELO Bot: The ELO Bot for Microsoft Teams connects Microsoft Teams to the ELO repository. Refer to the [ELO Bot for Microsoft Teams](#) documentation for more information.

3. Select a service.

Information

This documentation uses the *ELO Bot* service as an example. The configuration interface may vary depending on which service is selected.

In ELO Azure Administration, the service is shown as *Not registered*.

4. Select the service.

ELO Bot

Data for registration in Microsoft Azure

Deploy and register Synchronize with Azure Remove service

⚠ The service is not registered in Microsoft Azure.

Azure application name * ELO Bot Azure subscription * Select a subscription

Resource group name * ELOBotResourceGroup Azure region * Select a region

Azure Bot name/ID * ELOBotForMSTeams Azure app ID

Azure Bot app secret Base URL * https://elobotformsteams.ngrok.i

Message endpoint https://elobotformsteams.ngrok.i

Manifest

ELO repositories

Add repository Edit Refresh list Remove repository

Name	Indexserver URL	Web Client URL

The configuration interface for the service opens.

5. Enter the data required to register the service. Grayed out fields are completed automatically.

Please note

The base URL entered for the ELO Bot must be able to forward queries from the Internet to the internal ELO Bot for MS Teams service and must be available online.

You will find general information on the *ELO Bot* and *ELOauth* in the following documents:

- For ELO Bot: *ELO Bot for Microsoft Teams* documentation under [ELO for Microsoft > ELO Bot for Microsoft Teams](#)
- For ELOauth: *ELO Indexserver* documentation under [Plug-ins > ELOauth](#)

Please note

If you use both the ELO Bot and ELOauth, you will have to register them via the same Azure app to enable communication between the services.

6. Once you have entered the required data, select *Deploy and register*.

Services

The screenshot shows a 'Services' section with a header bar containing a '+ New Service' button and a 'Refresh' button. Below the header, two service entries are listed. The first entry is 'ELOauth' with an Azure app ID of '829e0e0e-caa2-44' and a green 'Registered' status indicator. The second entry is 'ELO Bot Doku' with an Azure app ID of '2e0ee226-7498-4' and a green 'Registered' status indicator.

Service Name	Azure app ID	Status
ELOauth	829e0e0e-caa2-44	Registered
ELO Bot Doku	2e0ee226-7498-4	Registered

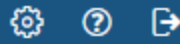
The service is registered as an app in Microsoft Azure. In ELO Azure Administration, the services are shown as *Registered*. You can now use the services.

Remove service

You can remove services via ELO Azure Administration and unregister them in ELO as well as Microsoft Azure.

1. Select the service you want to remove.

The configuration interface for the service opens.



 Remove service

ELO DOKU Su ▼

West Europe ▼

2. Select *Remove service*.

Please note

The service is deleted without any further confirmation.

The service is removed. ELO Azure Administration also automatically removes the service in Microsoft Azure.