

How to setup Single Sign On (SSO)

Document revision 1.2

Description

Following the standards of IT, TEOS support the Single Sign On SSO configuration using OpenID using OIDC, to be able to have Single Sign On using a lot of Identity platform such as Microsoft Entra ID.

Requirements

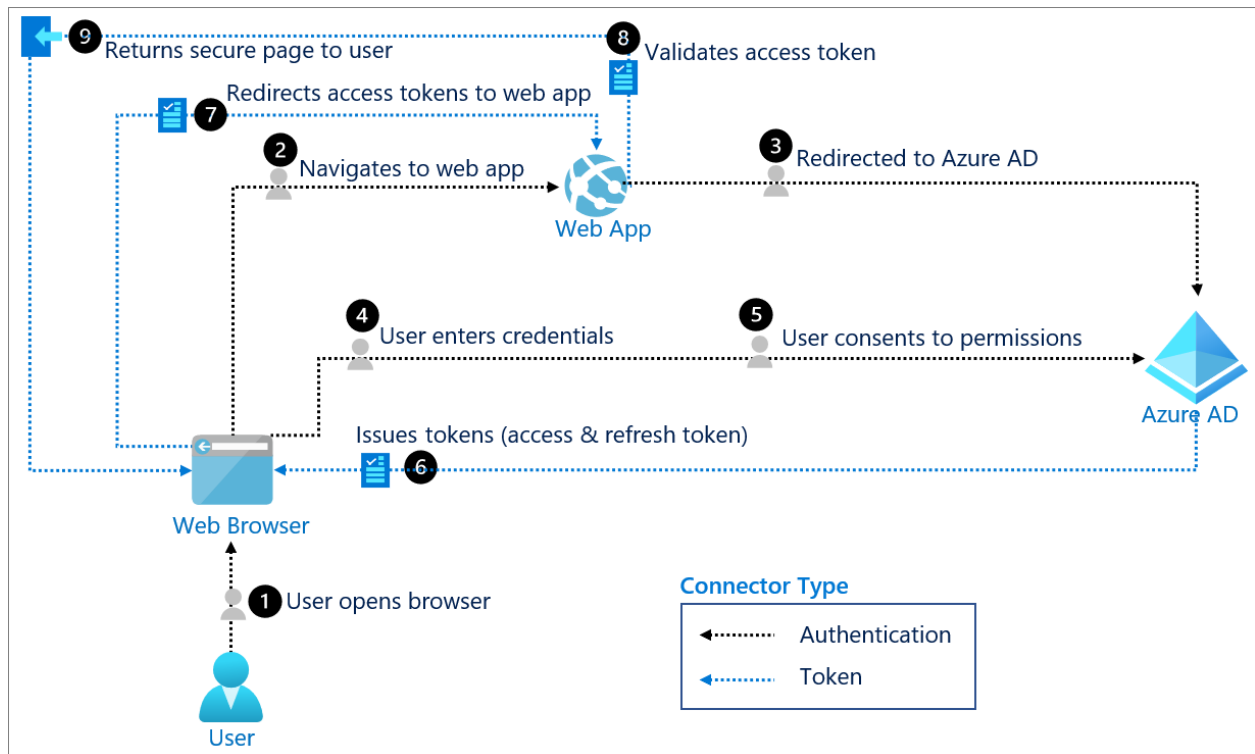
- Manage for TEOS server installed (from Version 3.3 at least)
- Manage for TEOS need to access Azure AD
- Access to the Manage for TEOS webpage interface with admin rights.
- A default URL access to skip SSO has been created to use the Admin/support access:
<https://tenantname.teoscloud.com/Account/SkipSsoLogin> (only for the admin panel access not for the employee app)
- Make sure TEOS Manage server can reach the needed URLs in internet (port 443)

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1. What is OpenID Connect SSO

OpenID connect is a protocol designed for user authentication. OpenID connect is a standard added on the top of OAuth 2.0 (Authorization Protocol) framework which adds ID Token to the access token in OAuth 2.0. OAuth and OpenID both act as Single Sign-On (SSO) standards. OpenID Connect must be in JWT(JSON) data format. One of the Key factors about OpenID Connect is the ability to exchange and make use of information.



Why OpenID Connect?

As we know that Open ID connect is an identity layer for authentication purpose above OAUTH2.0 framework, which is used for authorization, but back in the day OAUTH 2.0 was misused for pseudo authentication and as a result Open ID Connect entered the picture.

How OpenID Connect SSO Works?

OpenId connect is the Identity layer over the Base OAuth 2.0 Protocol. Identity is nothing but the Set of Attributes related to the Users. OpenID connect Identify the users with Specific Attributes sent by IdPs like Email. This Information is passed through the ID token and Signed with IETF JSON Web Signature. Another case of OpenID SSO is Azure acting as an IdP, to login into the OpenID connect application like native mobile applications running on Android and iOS, webapps OpenID Connect will redirect a user to an identity provider (IdP) to check the user's identity, either by looking for an active session i.e Single Sign-On (SSO) or by asking the user to authenticate. Once the IdP authenticates the user with SSO Session or valid Credentials and authorizes them to access a specific application, the IdP redirects back to that application. This redirection also passes information about the user back to the app confirming the user's identity and that it can use to.

Applications of OpenID Connect

Identity Providers like Google, Twitter, Facebook use this so that users can login in to the Identity Provider, and then access other apps and websites without having to sign in or share their login information. Native Single Sign-On is enabled by OpenID Connect. As the popularity of native applications grows due to their ease of use and distribution, there is a greater demand for default OAuth 2.0 in native environments.

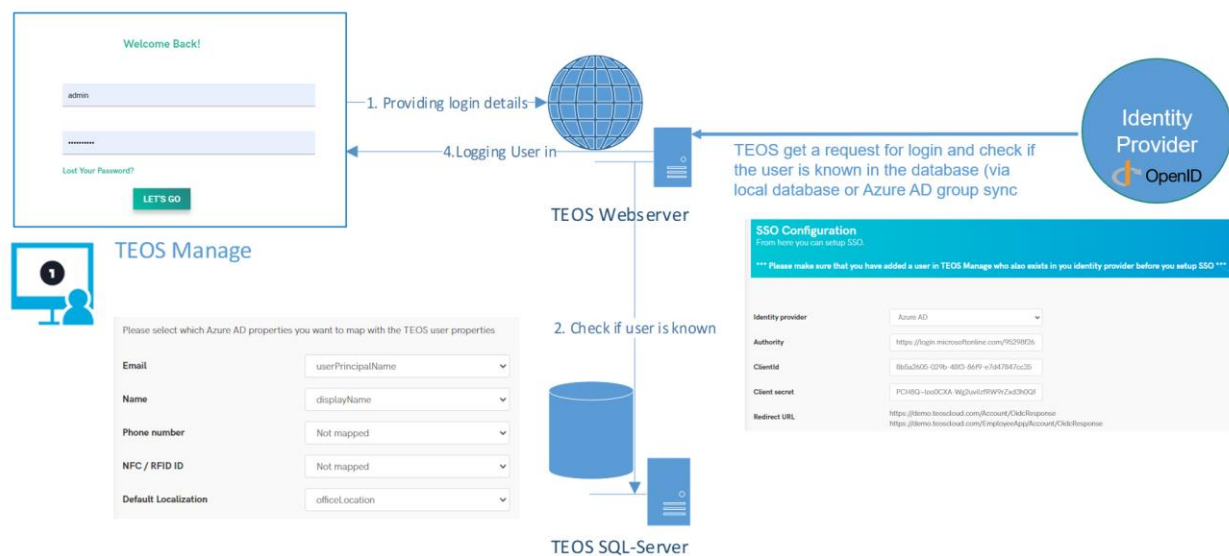
However, the burden of managing authentication across a sea of different native apps falls on the end user, who must know which login is for which app and which must be re-authenticated.

How does it work for TEOS?

Single Sign On with TEOS will allow user to login directly with his user rights access without having to login into the platform but login into his Windows Session or into the Identity Provider which will trust the authentication for TEOS using OIDC protocol and OpenID.

The user email address must be at least identified in TEOS Server having is field manually or using Azure AD. Azure AD, as the name suggests, is a directory – a container for your usernames, credentials, and access rights (typically to information-based resources).

Azure AD has been designed to enable easy integration with many of today's popular SaaS applications, enabling users to either single sign-on to applications directly or discover and launch them from a portal, such as Office 365 or the Azure AD access panel.



2. Enable user auto-registration

When configuring SSO within TEOS within Server management > Settings > SSO Configuration, it is possible to enable the option to automatically create a user with a default user role (which include a localization access) and a default language. This makes transparent the login and access for users for example using the employee application

Server Management / Settings / SSO Configuration

SSO Configuration

From here you can setup SSO.

*** Please make sure that you have added a user in TEOS Manage who also exists in your identity provider before you setup SSO ***

Identity provider	Azure AD
Authority	https://login.microsoftonline.com/7c94eaea
ClientId	29f956b0-9017-4b36-834
Client secret	ZkK8Q-DkzBhMqb2GMh.ql
Create user in TEOS after first login if it does not exist	<input checked="" type="checkbox"/>
Default user role when created	Administrator
Language	English
Redirect URL	https://qa2024.teoscloud.com/Account/OidcResponse https://qa2024.teoscloud.com/EmployeeApp/Account/OidcResponse

The setup is very simple for this feature, just enable the option “create user in TEOS after first login if it does not exist” and select the default user role to apply when created. You can also define a default user language which can be changed after by the user.

3. Create users and rights before syncing SSO.

This section is used to manage your users. This consists of both creating the individual users, as well as assigning them to groups and permissions. These roles will be used to give view to part of the platform and uses as user rights capability within content management or device localization management or visibility of spaces in the Mobile App

Users

On the User Management page, you can create, delete or edit users.


Email	Name	Role	Sites
147@icg.com	Content Manager 147	FR-IL1 Content Manager	FR-IL1-DigitalSignage
147@icg.com	147 IT	FR-Monitoring	FR-ILM-QUADUPR (147 / IL1)
admin		Administrator	
employee@icg.com	employee	Administrator	Company A

User groups / roles

In this section you will see the standard/pre-created roles at the top. These roles can’t be adjusted and only have a view option. You can also create your own groups.

Group name	
Administrator	View icon
Power User	View icon
Facility Manager	View icon
IT Manager	View icon
AV Manager	View icon
Communication Manager	View icon
Content Creator	View icon
Limited	View icon

Standard roles

The rights for the standard roles can be seen when you click the  icon in front of the role.

Created roles

In the USER GROUPS / ROLES section as an administrator you can use the **ADD GROUP** button to add new roles which you can assign to a user when you are creating or editing a user.

You can give this role a name and select the sections in Manage for TEOS where you want the created role to have access to. When you select a menu item (the items with a – symbol in front) automatically it will select all subsections of that item.

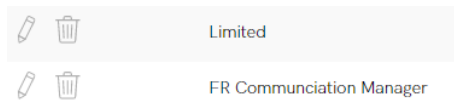
For example, if you select Schedules and Alarms it will also select Content schedules, Actions Schedule, Alarms, Meetings Schedule and Automation Scenarios.

If you select a subsection, it will automatically select the menu item.

For example, if you select Content schedule it will automatically activate Schedules and Alarms.

After saving this created role can be used when creating or editing a user.

After you have created a new role they will appear in the User group / role section from where you also have the options to edit or delete the create role.

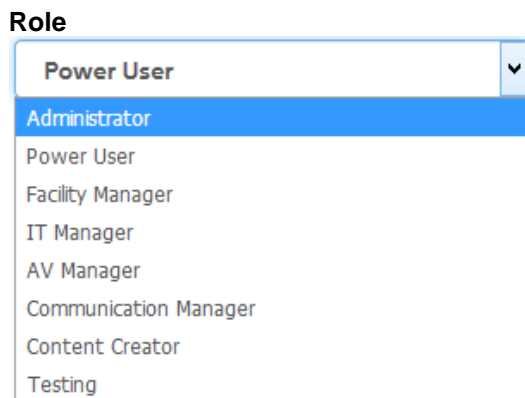


Creating / Editing a user

When creating or editing a user you will now have more options to use as role for a user.

When you are creating a user by clicking “Server Management” > “User Management” > “Add user” or editing a user by clicking the pencil icon in front of the username you also need to fill in the following details

- Name
- Email
- Phone number
- Language
- Tenant
- Role
- Password
- Confirm password
- Can create users in their group (to give the rights to create users for the users group)
- Disable access to Manage for TEOS platform
- Enable lockout (when a password is entered incorrect multiple times)
- Device group access*
- NFC ID



You can find the pre-configured roles here and after those you will see the created roles. In our example this created role is "Testing".

Users can be imported using script based on an excel (please consult the <https://teos.solutions> resources). The other option to get users on top of the manual creation on the platform is by synchronizing Azure AD Groups and assigning to roles. TEOS will then automatically synchronize users.

4. Azure AD user group synchronizations

4.1 Configure your Azure Environment


You will need to go to <https://portal.azure.com> to start the configuration of the TEOS application in your Tenant.

Sign-in with admin rights to be able to create applications and be able to consent permissions.


- 1) When logged in into azure portal, go to Azure Active Directory

Welcome to Azure!


Don't have a subscription? Check out the following options.



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Get \$200 free credit toward Azure products and services, plus 12 months of popular free services.
[Start](#) [Learn more](#)



Manage Azure Active Directory
Manage access, set smart policies, and enhance security with Azure Active Directory.
[View](#) [Learn more](#)



Access student benefits
Get free software, Azure credit, or access Azure Dev Tools for Teaching after you verify your academic status.
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Azure services

[Create a resource](#) [Azure Active Directory](#) [App Services](#) [Quickstart Center](#) [Virtual machines](#) [Storage accounts](#) [SQL databases](#) [Azure Cosmos DB](#) [Kubernetes services](#) [More services](#)

- 2) Go to the left column and click on app registrations to be able to create you TEOS application

Home > Sony France | Overview ...

Azure Active Directory

Overview | Manage tenants | What's new | Preview features | Got feedback?

Overview | Monitoring | Tutorials

Search your tenant


Basic information

Name	Sony France	Users	32
Tenant ID	12345678-1234-5678-9012-345678901234	Groups	1
Primary domain	teosdemo.nl	Applications	2
License	Azure AD Free	Devices	11


Alerts

Upcoming TLS 1.0, 1.1 and 3DES deprecation
Please enable support for TLS 1.2 on clients(applications/platform) to avoid any service impact.
[Learn more](#)


My feed



Global Administrator
[View role information](#)
[View profile](#)

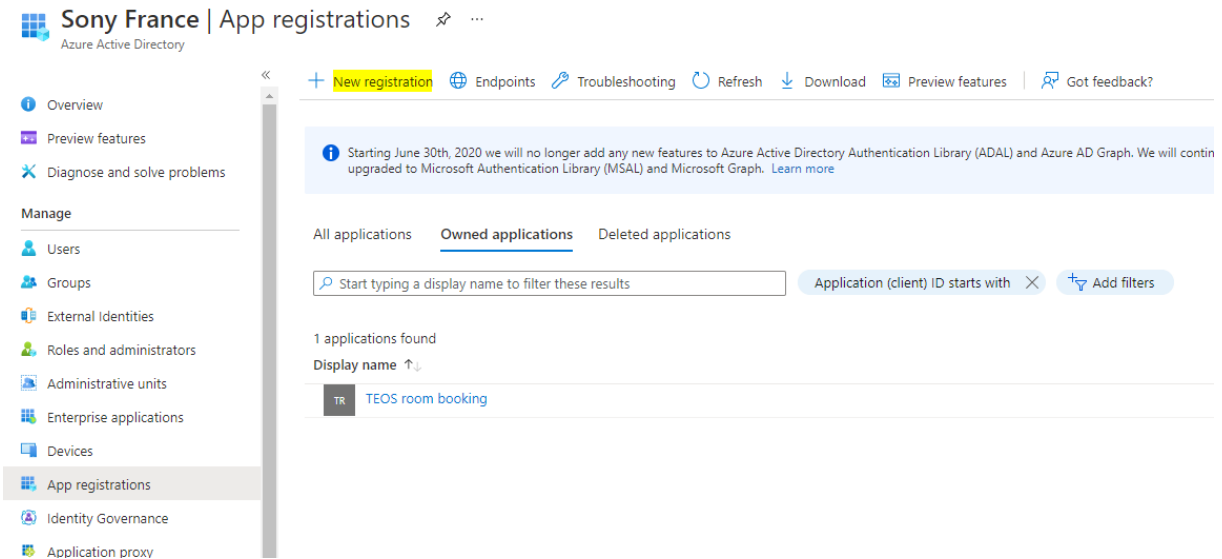


Secure Score for Identity
3.85%
Secure score updates can take up to 48 hours.
[View secure score](#)



Azure AD Connect
Not enabled
Sync has never run
[Go to Azure AD Connect](#)

3) Under app registrations press “New registration” and define a name for the App.



4) Define a name that you can easily recognize for a region or a country or where you will use the rooms/users. For Azure AD synchronization only, no need to add a redirect URI, the redirect URI is used mainly for Office365 rooms management and for our TEOS Employee App and Mobile App

Register an application

* Name

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

TEOS-AzureAD ✓

Supported account types

Who can use this application or access this API?

- ☒ Accounts in this organizational directory only (Sony France 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)
- ☐ Personal Microsoft accounts only

[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://example.com/auth ✓

Register an app you're working on here. Integrate gallery apps and other apps from outside your organization by adding from [Enterprise applications](#).

By proceeding, you agree to the [Microsoft Platform Policies](#)

[Register](#)

URL redirect for TEOS Manage (room booking): <https://auth.teosmanage.com/connect/office365.aspx>

URL redirect for Employee App: <https://auth.teosmanage.com/connect/office365-employee.aspx>

URL redirect for TEOS Manage (room booking): <https://auth.teosmanage.com/connect/office365v2.aspx>

URL redirect for Employee App: <https://auth.teosmanage.com/connect/office365-employeev2.aspx>

You can go to authentication menu under the left column to review the redirect URIs

[Got feedback?](#)

[Overview](#)
[Quickstart](#)
[Integration assistant](#)

Manage

[Branding & properties](#)
[Authentication](#)
[Certificates & secrets](#)
[Token configuration](#)
[API permissions](#)
[Expose an API](#)
[App roles](#)
[Owners](#)
[Roles and administrators](#)
[Manifest](#)

Support + Troubleshooting

[Troubleshooting](#)
[New support request](#)

Web
[Quickstart](#)
[Docs](#)

Redirect URIs

The URIs we will accept as destinations when returning authentication responses (tokens) after successfully authenticating or signing out users. The redirect URI you send in the request to the login server should match one listed here. Also referred to as reply URLs. [Learn more about Redirect URIs and their restrictions](#)

☒

☐

☐

☐

[Add URI](#)

Front-channel logout URL

This is where we send a request to have the application clear the user's session data. This is required for single sign-out to work correctly.

Implicit grant and hybrid flows

Request a token directly from the authorization endpoint. If the application has a single-page architecture (SPA) and doesn't use the authorization code flow, or if it invokes a web API via JavaScript, select both access tokens and ID tokens. For ASP.NET Core web apps and other web apps that use hybrid authentication, select only ID tokens. [Learn more about tokens](#)

5) When you pressed to register, go then to API permissions, and start to add permissions by pressing “add a permission” and select Microsoft graph

[Refresh](#)
[Got feedback?](#)

[Overview](#)
[Quickstart](#)
[Integration assistant](#)

Manage

[Branding & properties](#)
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[Owners](#)
[Roles and administrators](#)
[Manifest](#)

Support + Troubleshooting

[Troubleshooting](#)
[New support request](#)

Successfully granted admin consent for the requested permissions.

The “Admin consent required” column shows the default value for an organization. However, user consent can be customized per permission.

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 all the permissions the application needs. [Learn more about permissions and consent](#)

[Add a permission](#) ☒ Grant admin consent for Sony TEOS

API / Permissions name	Type	Description	Admin consent required
Microsoft Graph (11)			
Calendars.Read	Application	Read calendars in all mailboxes	Yes
Calendars.Read.Shared	Delegated	Read user and shared calendars	No
Calendars.ReadWrite	Delegated	Have full access to user calendars	No
Calendars.ReadWrite	Application	Read and write calendars in all mailboxes	Yes
Calendars.ReadWrite.Shared	Delegated	Read and write user and shared calendars	No
Directory.Read.All	Application	Read directory data	Yes
Group.Read.All	Application	Read all groups	Yes
GroupMember.Read.All	Application	Read all group memberships	Yes
OnlineMeetings.ReadWrite.All	Application	Read and create online meetings	Yes
User.Read.All	Application	Read all users' full profiles	Yes
User.ReadWrite.All	Delegated	Read and write all users' full profiles	Yes

To view and manage consented permissions for individual apps, as well as your tenant's consent settings, try [Enterprise applications](#).

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 if your permission is an application type permission or a delegated permission (in Azure AD it is only Application permissions)

Request API permissions

< All APIs



Microsoft Graph

<https://graph.microsoft.com/> [Docs](#)

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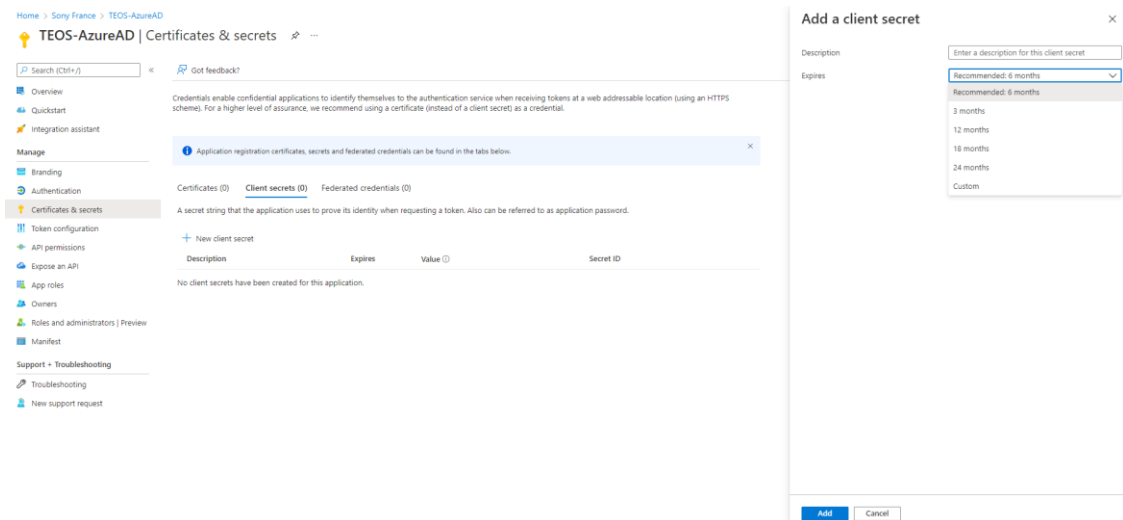
You can then search by the name of the requested permission and select the checkbox to add it

To get TEOS working with Azure AD you will need the following permissions:

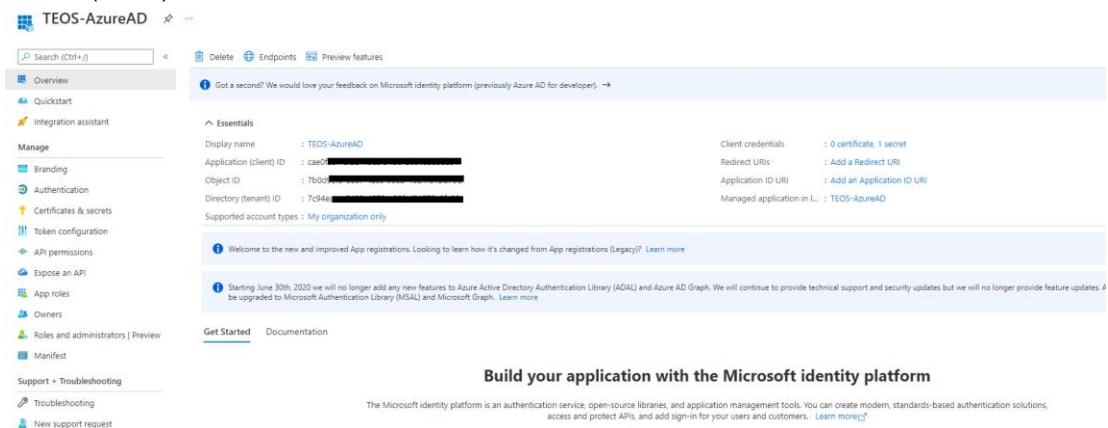
Permission name	Type	Description
Directory.Read.All	Application	Allows the app to read data in your organization's directory.
Group.Read.All	Application	Allows the app to list groups, and to read their properties and all group memberships on your behalf. Also allows the app to read calendar, conversations, files, and other group content for all groups you can access.
GroupMember.Read.All	Application	Allows the app to list groups, read basic group properties and read membership of all your groups.
User.read.All	Application	Sign in and read user profile

With those permissions, TEOS (when configured) will be able to get the user emails and names as minimum from user accounts and will be able when password verification is needed to verify against Azure AD if the user exists and if his password or Card ID is correct.

- After adding all the permission, you need to get a Client Secret that we will used by TEOS together with the Tenant ID and Client ID to be able to get the data. For that go to “Certificates & secrets” which on the left column. You can define under this section the expiration tie for the Client Secret (maximum 2 years). Copy then the value generated.

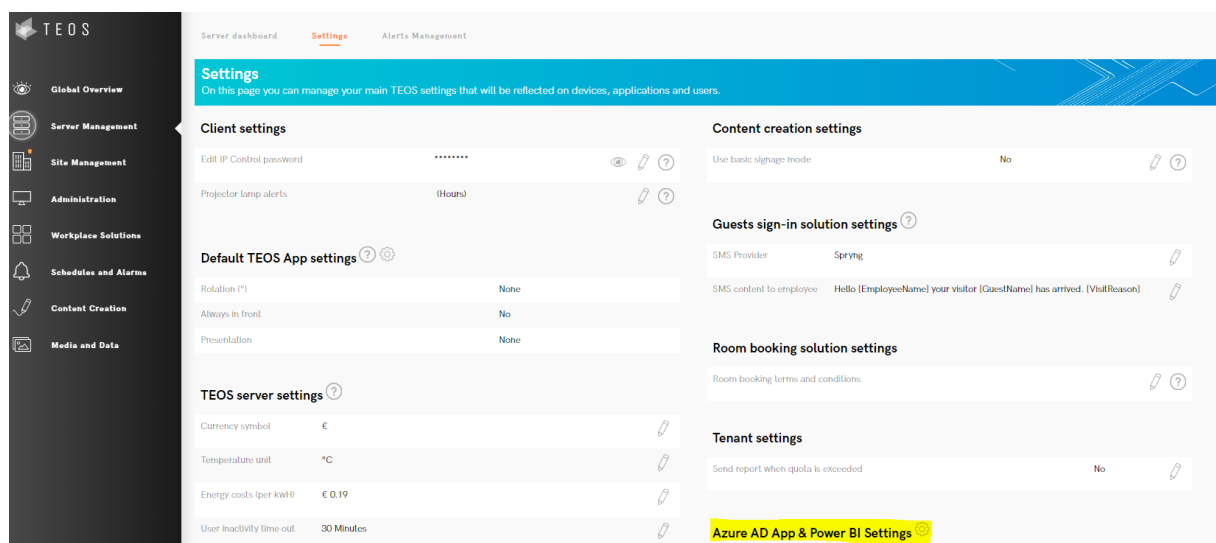


- 7) You can then find again the Client ID, Tenant ID on top of the Client Secret (value).



4.2 Sync TEOS with Azure AD User

Go to server management > settings and Azure AD App & Power BI



For the app usage, select under authentication "App Authentication". Insert then the Client ID, Tenant ID and secret code value of the third-party account you created for TEOS.

Azure AD App & Power BI Settings

On this page you can set-up your Azure AD and Power BI settings to use within TEOS.

Azure AD app configuration

Below settings apply to both the Azure AD settings and Office 365

Authentication type

App authentication

Client ID

Client Secret

Tenant ID

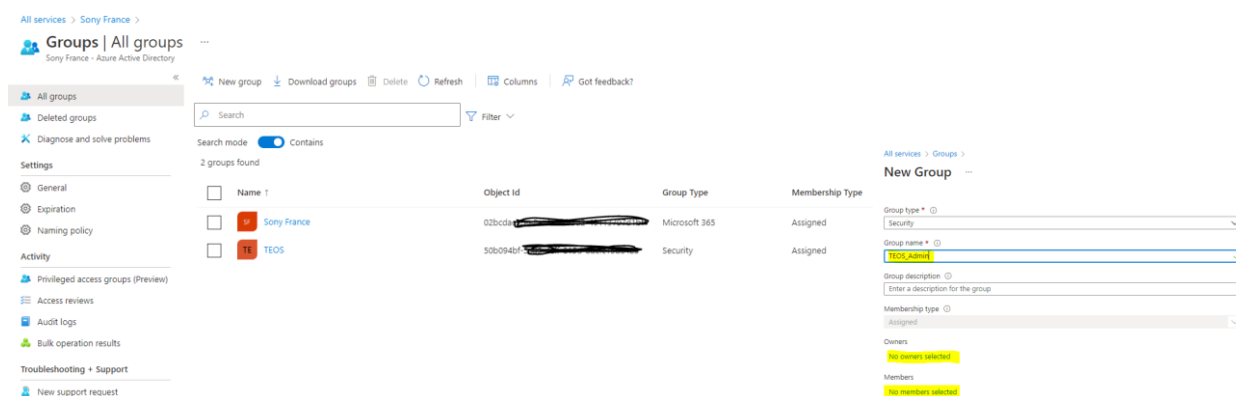
If you get an error in the synchronization, please go to your folders C:\\TEOS Manage > www > Backbone > web.config and make sure you have the correct url.

```
<add key="AllowSocialMediaDomain" value="https://auth.teosmanage.com" />
```

4.3 Add users from Azure AD to TEOS

4.3.1 Configuration in Azure AD

Go to Azure AD and Groups, you can create a new group which will get the role defined in TEOS (for example a group which will be administrator, another one which can be dedicated for content creation or even for resources right accesses)



When the group is created click on “no members selected” for you to be able to add users to the group

4.3.2 Configuration in TEOS

Go to Administration > Active Directory Settings

Select the AD Type to Azure AD. Select then the default language. You can then select the field that TEOS will be able to save in his database from user profiles.

The required ones are Email and name, the other properties are optional depending on your usage (phone number, NFC/Rfid ID, Default Localization). You can map the following properties to the TEOS user properties.

businessPhones	officeLocation
city	onPremisesSamAccountName
companyName	onPremisesUserPrincipalName
country	otherMails
department	preferredName
displayName	state
employeeId	streetAddress
faxNumber	surname
givenName	userPrincipalName
mail	
mailNickname	

You can finalize by linking the user group with TEOS to define the different roles, click save and synchronize to get the configuration done.

Global Overview

Server Management

Site Management

Administration

Workplace Solutions

Schedules and Alarms

Content Creation

Media and Data

Active Directory Settings

On this page you can manage your Active Directory settings to automatically synchronize your employees with TEOS and simplify the user creation and management process.

ADType

Azure AD

Save and synchronize

Last sync: 12/20/2021 12:15:03 PM

Items synchronized: 4

Default Language

English

Please select which Azure AD properties you want to map with the TEOS user properties

Email

userPrincipalName

Name

displayName

Phone number

Not mapped

NFC / RFID ID

Not mapped

Default Localization

officeLocation

When searching members in Azure AD groups, please fill in the Object ID or name of the group you want to get the members of.

AD groups / user roles

TEOS

Administrator

x

+

You can go then go to Administration > Users and you will see your synchronized users.

5. Configuration of Single Sign On (SSO) in Azure

5.1 Example of configuration in Azure

You will need to go to <https://portal.azure.com> to start the configuration of the TEOS in your Tenant.

Sign-in with admin rights to be able to create applications and be able to consent permissions.

- 1) When logged in into azure portal, go to Azure Active Directory

Welcome to Azure!

Don't have a subscription? Check out the following options.



Start with an Azure free trial

Get \$200 free credit toward Azure products and services, plus 12 months of popular free services.

Start

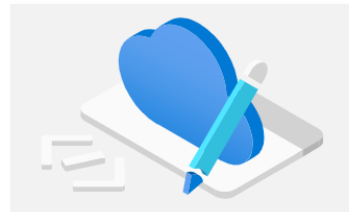


Manage Microsoft Entra ID

Azure Active Directory is becoming Microsoft Entra ID. Secure access for everyone.

View

Learn more



Access student benefits

Get free software, Azure credit, or access Azure Dev Tools for Teaching after you verify your academic status.

Explore

Learn more

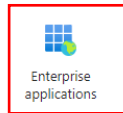
Azure services



Create a resource



Microsoft Entra ID



Enterprise applications



App registrations



Microsoft Entra Conditional...



App Service Certificates



Communication Services



Cost Management ...



Power BI Embedded



More services

- 2) Click on new application (or if you have already a TEOS dedicated application you can select it)

Home > Enterprise applications

Enterprise applications | All applications

Sony TEOS - Microsoft Entra ID

Overview

Overview

Diagnose and solve problems

Manage

All applications

Application proxy

User settings

App launchers

Custom authentication extensions (Preview)

Security

Conditional Access

Consent and permissions

+ New application Refresh Download (Export) Preview info Columns Preview features Got feedback?

View, filter, and search applications in your organization that are set up to use your Microsoft Entra tenant as their identity Provider.

The list of applications that are maintained by your organization are in [application registrations](#).

Search by application name or object ID

Application type == Enterprise Applications

Application ID starts with Add filters

14 applications found

Name	Object ID	Application ID	Homepage URL	Created on	Certificate Expiry St
SA SAMLv2	1058acb3-55cf-4746-91ca-134...	3a0f3014-6085-49aa-ba40-2db...	https://account.activedirectory...	07/12/2023	-
PB Power BI	2fe8314a-7c81-43a7-a782-0f20...	581533e4-1088-4c63-a25f-286...		25/06/2023	-
TO TEOS Office365	316194ed-8ae2-403f-9d35-697...	23a07423-f43d-4758-ae13-c4a...		23/05/2022	-
TA TEOS Application	3185a2cd-8629-4ed9-9189-718...	30063cc2-b408-4885-b075-94c...		08/04/2022	-
YA Yammer	365982df-7237-476a-92d5-1ef...	2dc435c0-f4b0-46a2-9bfb-81ac...		25/06/2023	-
TE TEOS-AzureAD	40afc7ae-dcff-4c8c-9394-70ee3...	cae0fac4-af53-4bcc-94b6-a601...		17/12/2021	-
TE TestOnedrive	5b6efb3a-9816-445d-8ca0-2b3...	642a627e-9ae0-425e-a078-b3a...		08/03/2022	-

- 3) Under app registrations press “create your own application” and define a name for the App. Select “register an application to integrate with Microsoft Entra ID (app you’re developing)”

Browse Microsoft Entra Gallery

+ Create your own application Got feedback?

The Microsoft Entra App Gallery is a catalog of thousands of apps that make it easy to deploy and configure single sign-on (SSO) and automated user provisioning. When deploying an app from the App Gallery, you leverage prebuilt temp application here. If you are wanting to publish an application you have developed into the Microsoft Entra Gallery for other organizations to discover and use, you can file a request using the process described in [this article](#).

Search application Single Sign-on: All User Account Management: All Categories: All

Cloud platforms

Amazon Web Services (AWS)



Google Cloud Platform



Oracle



SAP



- 4) Define a name that you can easily recognize for a region or a country or where you will use the rooms/users.

Register an application

* Name

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

TEOS-AzureAD ✓

Supported account types

Who can use this application or access this API?

- ☒ Accounts in this organizational directory only (Sony France 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)
- ☐ Personal Microsoft accounts only

[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://example.com/auth> ✓

Register an app you're working on here. Integrate gallery apps and other apps from outside your organization by adding from [Enterprise applications](#).

By proceeding, you agree to the [Microsoft Platform Policies](#)

Register

Redirect URLs are shown in your TEOS tenant under server management > Settings > SSO Configuration, it is based directly on the tenant name.

URL redirect for TEOS Manage Page: <https://yourteostenantname/Account/OidcResponse>

(Example: <https://demo.teoscloud.com/Account/OidcResponse>)

URL redirect for Employee App: <https://yourteostenantname/EmployeeApp/Account/OidcResponse>

(Example: <https://demo.teoscloud.com/EmployeeApp/Account/OidcResponse>)

- 5) When you pressed to register, go then to permissions, and start to add permissions by pressing “add a permission” and select Microsoft graph

Search Refresh Got feedback?

Overview Quickstart Integration assistant Manage Branding & properties Authentication Certificates & secrets Token configuration API permissions Expose an API App roles Owners Roles and administrators Manifest Support + Troubleshooting Troubleshooting New support request

Successfully granted admin consent for the requested permissions.

The "Admin consent required" column shows the default value for an organization. However, user consent can be customized per permission.

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 all the permissions the application needs. [Learn more about permissions and consent](#)

+ Add a permission ✓ Grant admin consent for Sony TEOS

API / Permissions name	Type	Description	Admin consent required
Microsoft Graph (11)			
Calendars.Read	Application	Read calendars in all mailboxes	Yes
Calendars.Read.Shared	Delegated	Read user and shared calendars	No
Calendars.ReadWrite	Delegated	Have full access to user calendars	No
Calendars.ReadWrite	Application	Read and write calendars in all mailboxes	Yes
Calendars.ReadWrite.Shared	Delegated	Read and write user and shared calendars	No
Directory.Read.All	Application	Read directory data	Yes
Group.Read.All	Application	Read all groups	Yes
GroupMember.Read.All	Application	Read all group memberships	Yes
OnlineMeetings.ReadWrite.All	Application	Read and create online meetings	Yes
User.Read.All	Application	Read all users' full profiles	Yes
User.ReadWrite.All	Delegated	Read and write all users' full profiles	Yes

To view and manage consented permissions for individual apps, as well as your tenant's consent settings, try [Enterprise applications](#).

Add permissions Discard

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 if your permission is an application type permission or a delegated permission (delegated needed in this case)

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.

You can then search by the name of the requested permission and select the checkbox to add it

To get TEOS working with Azure AD you will need the following permissions:

Permission name	Type	Description
email	Delegated	View users' email address
profile	Delegated	View user basic profile
openid	Delegated	Sign users in
Offline_access	Delegated	Maintain access to data you have given it access to
User.read	Delegated	Sign in and read user profile

With those permissions, TEOS (when configured) will be able to get the user emails and names as minimum from user accounts and will be able when password verification is needed to verify against Azure AD if the user exists and if his password or Card ID is correct.

6) Go to Single sign on and click on go to application

Home > SSO TEOS

SSO TEOS | OIDC-based Sign-on

Enterprise Application

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1

Configure application properties

Please go to SSO TEOS in the App registrations experience to edit properties such as reply URLs, identifiers, optional claims, among others. Your account should have the required permissions (Global Administrator, Cloud Application Administrator, Application Administrator, or owner of the application object). [Learn more about admin roles in Microsoft Entra](#)

2

Attributes & Claims

This application does not have any JWT-based claims configured. Click on edit to start configuring claims.

[Go to application](#)

[Edit](#)

7) Go to Expose an API section and add a scope, this will create the api access for TEOS to connect. Define as scope name user_impersonation and give consent to admins and Users. Define a name for the admin consent display name (like TEOS SSO for example) and a description to be able to save

Home > SSO TEOS | OIDC-based Sign-on > SSO TEOS

SSO TEOS | Expose an API

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Troubleshooting

New support request

Application ID URI: [api://29f556b0-9017-4b36-b34a-...](#)

Scopes defined by this API

Define custom scopes to restrict access to data and functionality protected by the API. An application that requires access to parts of this API can request that a user or admin consent to one or more of these.

Adding a scope here creates only delegated permissions. If you are looking to create application-only scopes, use 'App roles' and define app roles assignable to application roles.

Scopes

Scopes	Who can consent	Admin consent display name	User consent display name	State
api://29f556b0-9017-4b36-b34a-.../user_impersonation	Admins and users	TEOS SSO	TEOS SSO	Enabled

Authorized client applications

Authorizing a client application indicates that this API trusts the application and users should not be asked to consent when the client calls this API.

Client ID

No client applications have been authorized

Scopes

Admin consent display name *

TEOS SSO

Admin consent description *

TEOS SSO

User consent display name *

TEOS SSO

User consent description *

e.g. Allows the app to read your files.

State

Enabled Disabled

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Configure application properties

Please go to SSO TEOS in the App registrations experience to edit properties such as reply URLs, identifiers, optional claims, among others. Your account should have the required permissions (Global Administrator, Cloud Application Administrator, Application Administrator, or owner of the application object). [Learn more about admin roles in Microsoft Entra](#)

2

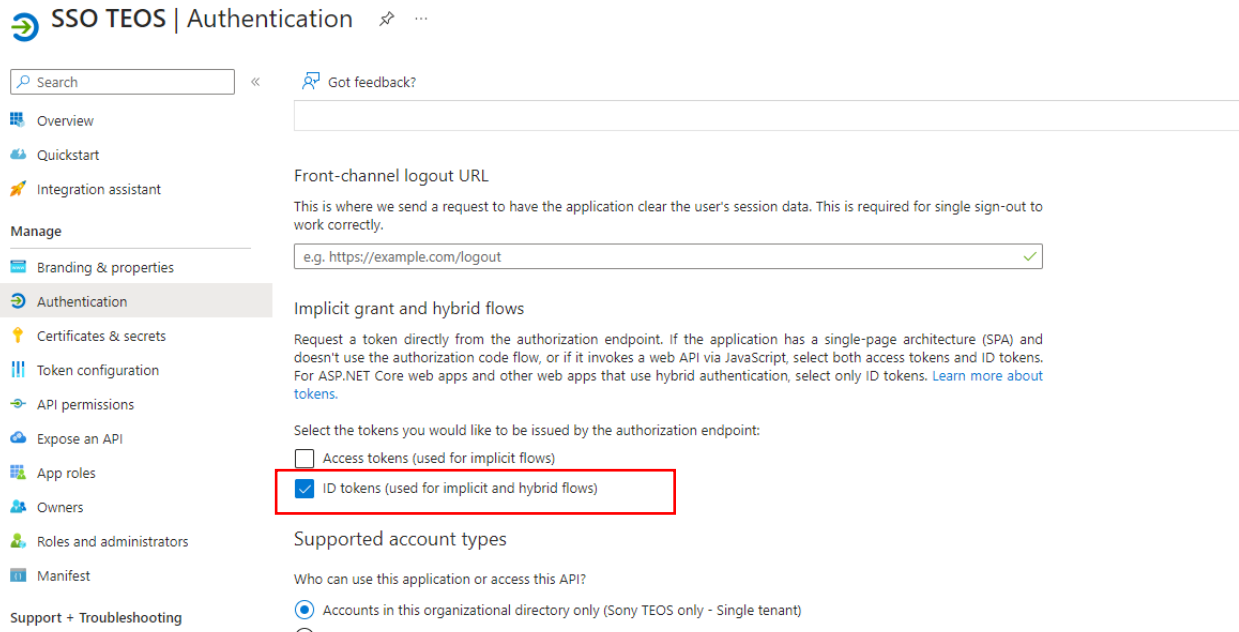
Attributes & Claims

This application does not have any JWT-based claims configured. Click on edit to start configuring claims.

[Go to application](#)

[Edit](#)

- 8) Go to authentication and make sure the option ID tokens (used for implicit and hybrid flows) is enabled.



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Front-channel logout URL

This is where we send a request to have the application clear the user's session data. This is required for single sign-out to work correctly.

e.g. <https://example.com/logout>

Implicit grant and hybrid flows

Request a token directly from the authorization endpoint. If the application has a single-page architecture (SPA) and doesn't use the authorization code flow, or if it invokes a web API via JavaScript, select both access tokens and ID tokens. For ASP.NET Core web apps and other web apps that use hybrid authentication, select only ID tokens. [Learn more about tokens.](#)

Select the tokens you would like to be issued by the authorization endpoint:

☐ Access tokens (used for implicit flows)

☒ ID tokens (used for implicit and hybrid flows)

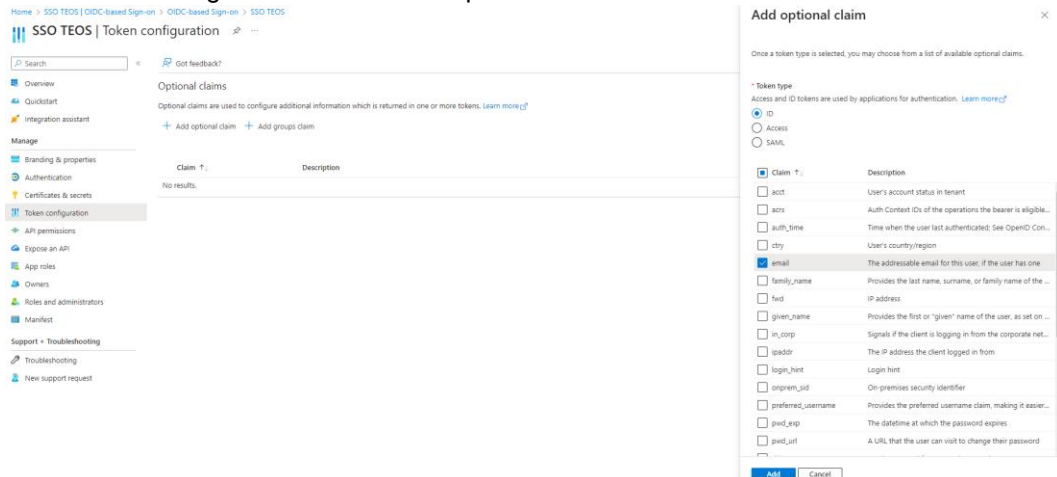
Supported account types

Who can use this application or access this API?

☒ Accounts in this organizational directory only (Sony TEOS only - Single tenant)

☐ Accounts in any organizational directory (Any Microsoft Entra ID tenant - Multitenant)

- 9) Go to token configuration and add an optional claim with ID and email



Home > SSO TEOS | OIDC-based Sign-on > SSO TEOS

SSO TEOS | Token configuration

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Optional claims

Optional claims are used to configure additional information which is returned in one or more tokens. [Learn more.](#)

+ Add optional claim + Add groups claim

Claim

Description

No results.

Add optional claim

Once a token type is selected, you may choose from a list of available optional claims.

Token type

Access and ID tokens are used by applications for authentication. [Learn more.](#)

☒ ID

☐ Access

☐ SAML

Claim

Description

☐ act

User's account status in tenant

☐ acs

Auth Context (Cs of the operations the bearer is eligible...

☐ auth_time

Time when the user last authenticated: See OpenID Con...

☐ cty

User's country/region

☒ email

The addressable email for this user, if the user has one

☐ family_name

Provides the last name, surname, or family name of the ...

☐ fud

IP address

☐ given_name

Provides the first or 'given' name of the user, as set on ...

☐ iis Corp

Signals if the client is logging in from the corporate net...

☐ ipaddr

The IP address the client logged in from

☐ login_hint

Login hint

☐ onprem_id

On-premises security identifier

☐ preferred_username

Provides the preferred username claim, making it easier...

☐ pwd_exp

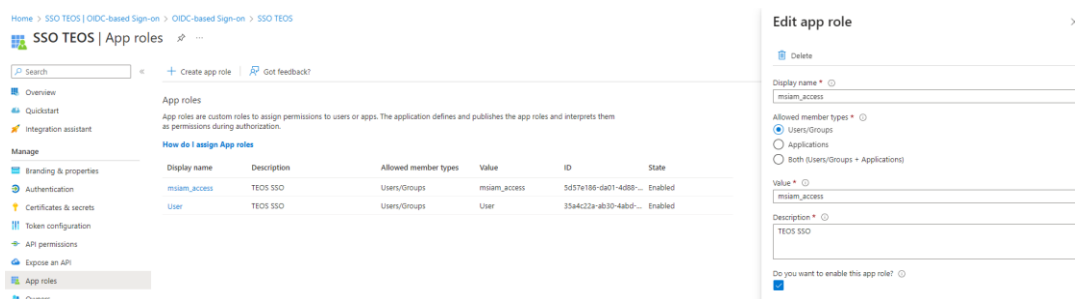
The datetime at which the password expires

☐ pwd_url

A URL that the user can visit to change their password

Add Cancel

- 10) Go to App roles and add the roles user (with user/groups type member) and value "User" as well as the msiam_access with same value and user/group type member



Home > SSO TEOS | OIDC-based Sign-on > SSO TEOS

SSO TEOS | App roles

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Create app role

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App roles

App roles are custom roles to assign permissions to users or apps. The application defines and publishes the app roles and interprets them as permissions during authentication.

How do I assign App roles

Display name	Description	Allowed member types	Value	ID	State
msiam_access	TEOS SSO	Users/Groups	msiam_access	5d57e195-da01-4d89-...	Enabled
User	TEOS SSO	Users/Groups	User	35A4C22a-4b3D-4abf-...	Enabled

Edit app role

Delete

Display name

msiam_access

Allowed member types

☒ Users/Groups

☐ Applications

☐ Both (Users/Groups + Applications)

Value

msiam_access

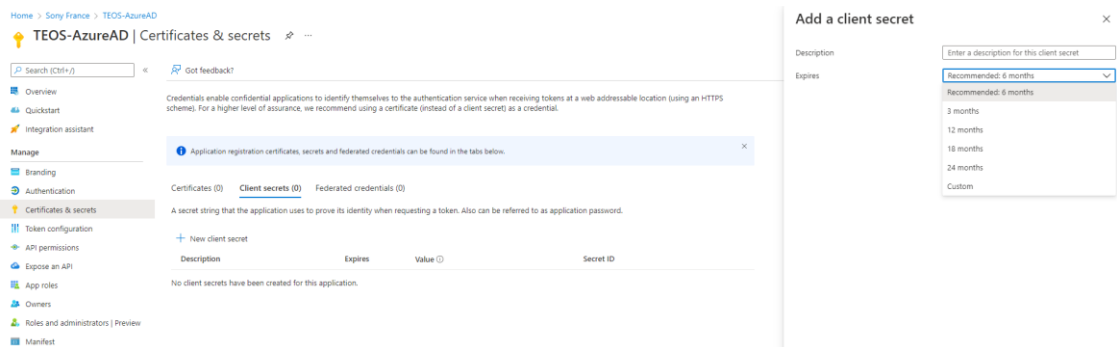
Description

TEOS SSO

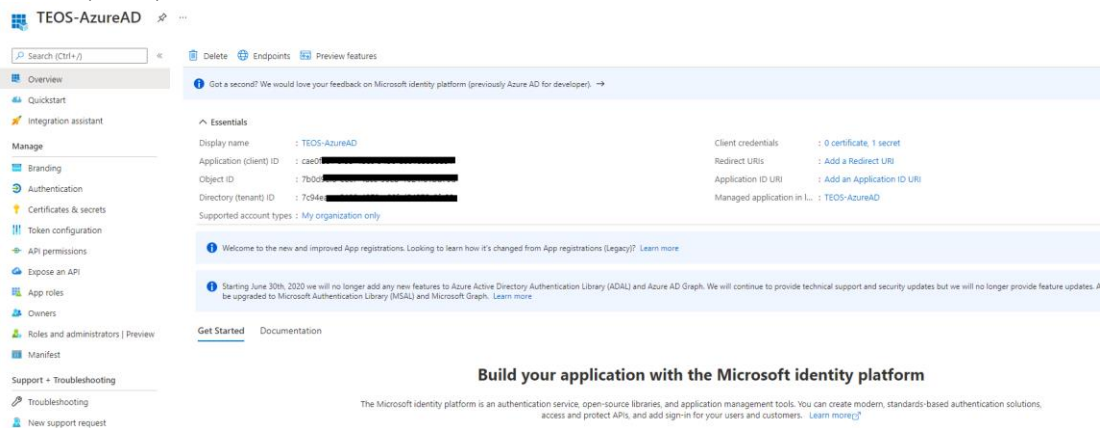
Do you want to enable this app role?

☒

- 11) After adding all the permission, you need to get a Client Secret that we will use by TEOS together with the Tenant ID and Client ID to be able to get the data. For that go to "Certificates & secrets" which on the left column. You can define under this section the expiration time for the Client Secret (maximum 2 years). Copy then the value generated.



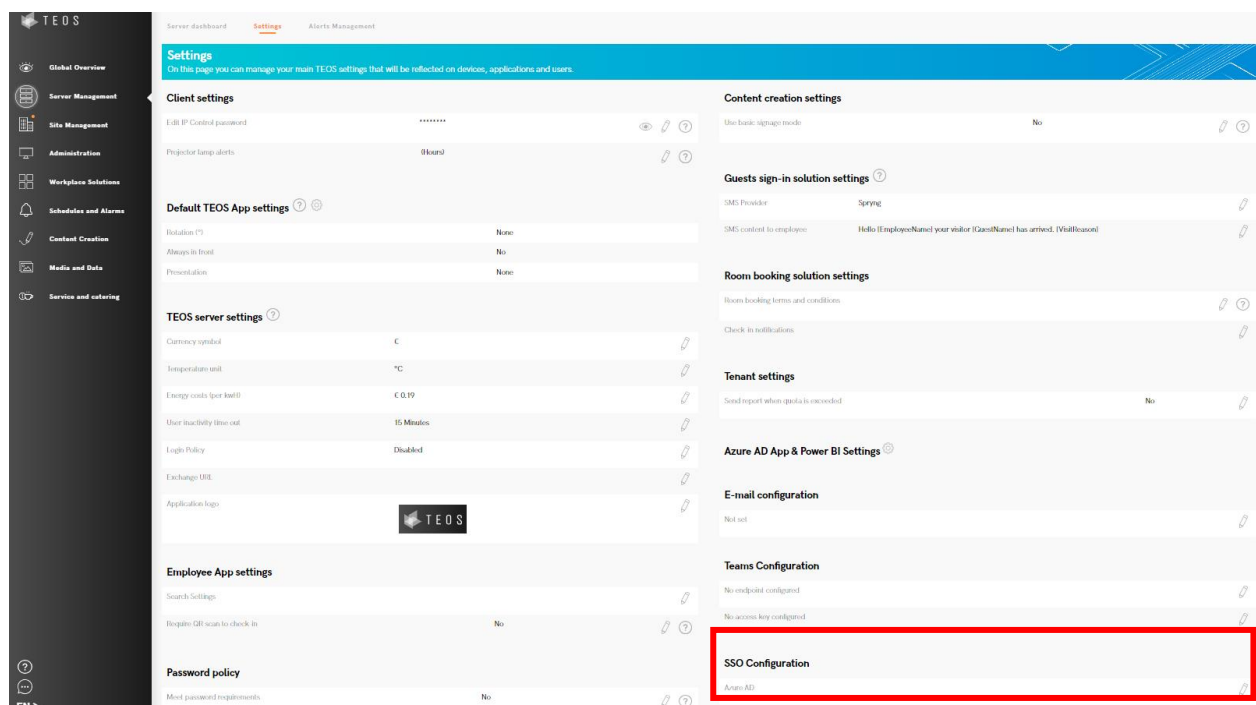
12) You can then go to your overview to find again the Client ID, Tenant ID on top of the Client Secret (value).



5.2 Configuration under TEOS

After making sure you have all your users including admin users, Go to server management > settings.

Under settings from Version 3.2.1 you can find the option, click on the pencil to edit it



Within this section you will be able to select Azure AD (or Entra ID) as Identity provider or Ping One as another identity provider. As an example below the Entra ID configuration will be done base on Azure configuration. As the protocol use is OIDC, any other identity provider should work and the fields for the other identity providers can be used.

Server Management / Settings / SSO Configuration

SSO Configuration

From here you can setup SSO.

*** Please make sure that you have added a user in TEOS Manage who also exists in you identity provider before you setup SSO ***

Identity provider	Azure AD
Authority	https://login.microsoftonline.com/95298f26-8b5a2605-029b-48f3-86f9-e7d47847cc35
ClientId	8b5a2605-029b-48f3-86f9-e7d47847cc35
Client secret	PCH8Q~leo0CXA-Wg2uvilzfRW9rZxd3h0QF
Redirect URL	https://demo.teoscloud.com/Account/OidcResponse https://demo.teoscloud.com/EmployeeApp/Account/OidcResponse

<https://identityURL/tenantID/>

Make sure on your identity provider, the redirect URL are copied from your own TEOS tenant name.

You need then to add the authority of the Identity provider in TEOS SSO configuration tab (this mainly includes the URL of the identity provider and the tenant ID (<https://identityURL/tenantID/> for our example with Azure Open ID connect: <https://login.microsoftonline.com/tenantID/>). Finish by the client ID and client secret needed to get the Application access with the permission to consult user email for the login to the platform.

Click save on the right top page.

Log off and try to login again, the SSO access must be directly active, and the admin local account should not be accessible anymore.

If any issue on configuration happens, contact us to support@teos.support

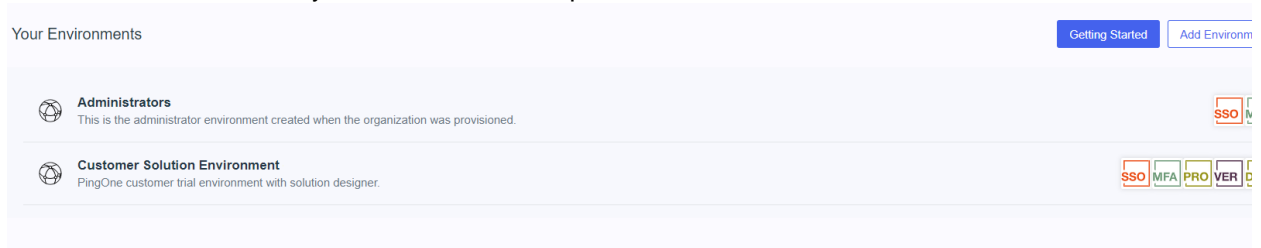
6. Configuration of Single Sign On (SSO) in Ping Identity

6.1 Example of configuration in Ping Identity

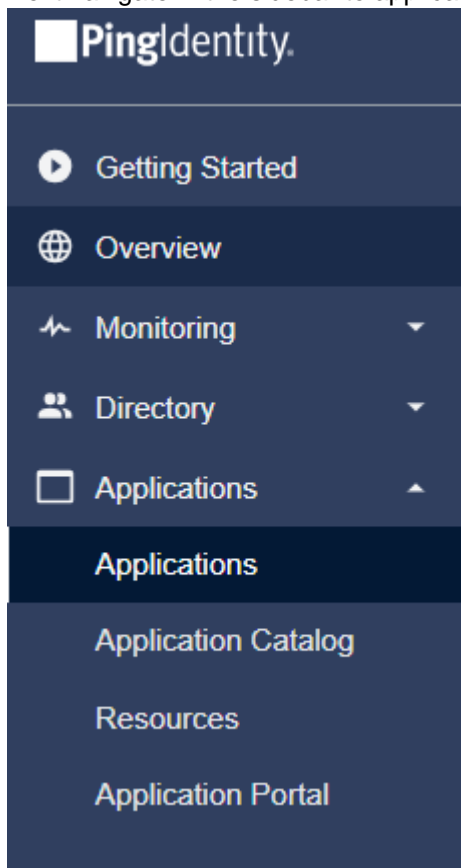
You will need to go to https://console.pingone.eu/?env=ENV_ID (complete URL is different for each customer) to start the configuration for TEOS in your Tenant.

Sign-in with admin rights to be able to create applications and configure the required application settings.

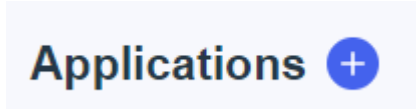
- 1) On the dashboard, select your environment to open it.



- 2) Next navigate in the sidebar to applications -> Applications



- 3) Create a new application by clicking on the + in the top right



You need to give your application a name, and optional a description. The type of application needs to be: OIDC Web App. After configuring this, press "Save".

Add Application ×

Application Name *

TEOS SSO

Description

Icon

Max Size 1.0 MB

Application Type

Show Details

Select an option below or view the [Application Catalog](#) to use a templated integration. If you can't find what you need in the catalog, consider SAML or OIDC to get started.

SAML Application

OIDC Web App

Native

Single-Page

Worker

Save

Cancel

4) In this next page you can find your Client ID and Secret. Copy these for use in TEOS Manage later.

TEOS SSO

Client ID: 4805dc64-4de5-4e97-969d-631c58cc881d

Overview

Configuration

Resources

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Attribute Mappings

Access

Protocol

OpenID Connect

Resource Access

1 Scope

Policies

None Selected

Attributes

1 Mapped

Access

All Users

App Type

Web App (OpenID Connect)

Description

Not Set

Environment ID

Client ID

Client Secret

Home Page URL

No Home Page Configured

Signon URL

Default Signon Page

23 | How to configure Single Sign On (SSO)

SONY

- 5) Next open the Configuration tab, and expand the URLs section.
TEOS needs to know the Issuer URL, so for this copy the last url:
Issuer: <https://auth.pingone.eu/<Environment-ID>/as>

[Overview](#) [Configuration](#) [Resources](#) [Policies](#) [Attribute Mappings](#) [Access](#)

Configuration details for an OIDC application.

URLs ▲

Authorization URL
[https://auth.pingone.eu/\[redacted\]/as/authorize](https://auth.pingone.eu/[redacted]/as/authorize) 

Pushed Authorization Request URL
[https://auth.pingone.eu/\[redacted\]/as/par](https://auth.pingone.eu/[redacted]/as/par) 

Token Endpoint
[https://auth.pingone.eu/\[redacted\]/as/token](https://auth.pingone.eu/[redacted]/as/token) 

JWKS Endpoint
[https://auth.pingone.eu/\[redacted\]/as/jwks](https://auth.pingone.eu/[redacted]/as/jwks) 

UserInfo Endpoint
[https://auth.pingone.eu/\[redacted\]/as/userinfo](https://auth.pingone.eu/[redacted]/as/userinfo) 

Signoff Endpoint
[https://auth.pingone.eu/\[redacted\]/as/signoff](https://auth.pingone.eu/[redacted]/as/signoff) 

OIDC Discovery Endpoint
[https://auth.pingone.eu/\[redacted\]/as/.well-known/openid-configuration](https://auth.pingone.eu/[redacted]/as/.well-known/openid-configuration) 



Token Introspection Endpoint
[https://auth.pingone.eu/\[redacted\]/as/introspect](https://auth.pingone.eu/[redacted]/as/introspect) 

Token Revocation Endpoint
[https://auth.pingone.eu/\[redacted\]/as/revoke](https://auth.pingone.eu/[redacted]/as/revoke) 

Issuer
[https://auth.pingone.eu/\[redacted\]/as](https://auth.pingone.eu/[redacted]/as) 

- 6) After copying the URL, press the edit button on the right of the page.

Overview **Configuration** Resources Policies Attribute Mappings Access

Configuration details for an OIDC application.  

URLs ▾

a. For Response Type, enable all 3 items

- i. Code
- ii. Token
- iii. ID Token

Response Type

☒ Code

☒ Token

☒ ID Token

b. Grant type keep as default on Authorization code enabled: OPTIONAL. And the option implicit enabled.

Grant Type ?

☒ Authorization Code

PKCE Enforcement

☒ Implicit


☐ Client Credentials


☐ Refresh Token

c. Enter the two redirect URLs you can find in TEOS. These URLs are (replace TEOS-URL.com with your own domainname):

- <https://TEOS-URL.com/Account/OidcResponse>
- <https://TEOS-URL.com/EmployeeApp/Account/OidcResponse>
-

Redirect URIs





- d. Next change the Token Endpoint Authentication Method to “Client Secret Post”

Token Endpoint Authentication Method

Client Secret Post

After this last setting, scroll down and press Save.


- 7) Following on the resource tab, add the resource: email. The resource for openid is added by default already. Afterwards it will look like this:


[Overview](#) [Configuration](#) [Resources](#) [Policies](#) [Attribute Mappings](#) [Access](#)

These resources define the connection between PingOne and the application, and contain scopes, which define ap permissions. See [Resources](#).

ALLOWED SCOPES

The openid scope is always granted and cannot be removed.

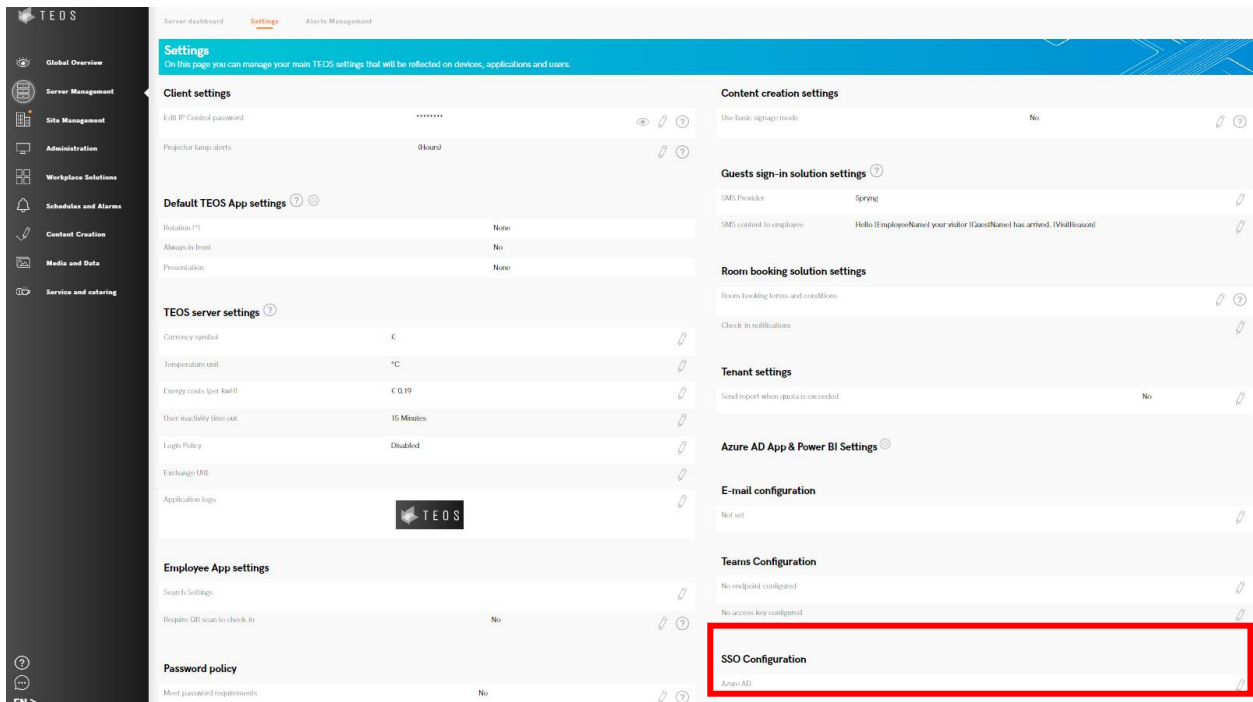
 email
OpenID Connect

 openid
OpenID Connect

6.2 Configuration under TEOS

After making sure you have all your users including admin users, Go to server management > settings.

Under settings from Version 3.2.1 you can find the option in Servermanagement -> Settings., click on the pencil to edit it



Within this section you will be able to select Azure AD (or Entra ID) as Identity provider or Ping One as another identity provider. As an example below the PingOne configuration will be done base on Ping Identity configuration.

Identity provider	PingOne	<a href="https://auth.pingone.eu/<Environment-ID>/as">https://auth.pingone.eu/<Environment-ID>/as
Authority	https://auth.pingone.eu/	
ClientId		
Client secret		https://identityURL/tenantID/
Redirect URL	https://TEOS-URL.com/Account/OidcResponse https://TEOS-URL.com/EmployeeApp/Account/OidcResponse	

Make sure on your identity provider, the redirect URL are copied from your own TEOS tenant name.

You need then to add the authority of the Identity provider in TEOS SSO configuration tab (this mainly includes the URL of the identity provider and the Client ID and Secret . After filling the URL, ID and secret from the application created above, Click save on the right top page.

Log off and try to login again, the SSO access must be directly active, and the admin local account should not be accessible anymore.

If any issue on configuration happens, contact us to supprt@teos.support



Visit us on

<https://teos.solutions>