

Settings of the Avendoo® mail system with the Graph API of MS365

Configuration of MS365

Prerequisites

- Administrative rights to
 - o Create to inboxes
 - o Create enterprise applications in EntraID
 - o Create ClientSecrets in APP registrations
 - o Access to ExchangeOnline (module: ExchangeOnlineManagement) via Powershell
- An inbox which is placed in the Cloud and can be called via API.
- During the configuration the application rights *Mail.Send* and *Mail.ReadWrite* are granted and limited to the specific inbox.

1. Configuration of the APPs

- a. Create a new enterprise application, but **not** from the catalog.
- b. Set the visibility for users to “No” in the properties.
- c. Give a new owner.
- d. Make a note of the application ID and the object ID.
Note that you need them both later in Powershell.
- e. Switch to the *APP registrations*.
You find a registration name which you have pre-given.
- f. Make a note of the following values which you need for configuration in Avendoo®:
 - Client ID and
 - Application ID.
- g. Switch to *Certificates and Secrets*.
- h. Create a new ClientSecret.
We recommend a validity of two years, but you can also choose a shorter validity.
- i. Make a note of the “value” but the ID is not needed.
Note that the value is only NOW readable. If you leave the page, you can’t read it anymore.

1. Grant permissions

To grant the permissions, RBAC for applications is used. You find more information in this item: <https://learn.microsoft.com/en-us/exchange/permissions-exo/application-rbac>

Note that we recommend - like written in the article above - to grant the rights and save them. We **cannot** guarantee the current status of the Microsoft instruction. Please **note** that you as customer are responsible for the [...] back-up.

1. Connect with ExchangeOnline via Powershell
Connect-ExchangeOnline
2. Create a ServicePrincipal for the enterprise application
New-ServicePrincipal -AppId <Application-ID (enterprise application)> -ObjectId <Object-ID (enterprise application)> -DisplayName <Enter a name>
3. Create a ManagementScope which refers to an inbox user.
New-ManagementScope -Name <Enter a name> -RecipientRestrictionFilter "PrimarySmtAddress -eq <Primary SMTP address>"
4. Grant the required rights and roles *Mail.Send* and *Mail.ReadWrite*.
New-ManagementRoleAssignment -Role "Application Mail.Send" -App <application ID (enterprise application)> -CustomResourceScope <given name from the ManagementScope>
New-ManagementRoleAssignment -Role "Application Mail.ReadWrite" -App <application ID (enterprise application)> -CustomResourceScope <given name from the ManagementScope>
5. You can output the granted right and roles of the enterprise application as following:
Test-ServicePrincipalAuthorization -Identity <given name from the ServicePrincipal> | format table
6. The process of granting rights in Microsoft365 can take some time. Usually, they do work after one hour, but the process can take more time.

Configuration in Avendoo®

Prerequisites

Your author account got the right *Administration*.

Configuration

1. Log into the author backend.
2. Choose **Administration** → **System settings**.
3. Enter “mail.configuration” in the search field and press the *Enter* key.
The *Wizard for system settings* opens.
4. Add the template (see the following text).
5. Change <Mail> into primary SMTP address of the inbox.
6. Change the <Name> in the name of the inbox.
7. Enter the following data for authentication in the upper field:
 - a. tenantId = Client ID from the APP registration
 - b. clientId = Client ID from the APP registration
 - c. clientSecret = the value of the Secrets, which you have created before

Warnings

- Make a note of the expiration date of the ClientSecrets and exchange this date before it expires. This is important because Avendoo® will be no more able to evoke and to send e-mails.
- Note the valid limits of ExchangeOnline regarding sending mail:
<https://learn.microsoft.com/en-us/office365/servicedescriptions/exchange-online-service-description/exchange-online-limits#sending-limits-1>
- E-mails up to a size of 150 MB can be sent.
- Use the specific inbox **ONLY** for the communication with Avendoo®. Using a communication between system admins and learners is not considered.
- Configure the inbox for setting UPN equal to the primary SMTP address.

Template

```
##### MS-Graph #####
# Authentication
avendoo.mail.msGraph.tenantId=
avendoo.mail.msGraph.clientId=
avendoo.mail.msGraph.clientSecret=

# Sender/Inbox
avendoo.mail.msGraph.id.eLearning=<Mail>
avendoo.mail.msGraph.id.webmaster=<Mail>
#
#####
#
# The id or the name of the inbox
avendoo.mail.msGraph.inboxFolder=inbox
# User-Id for MS user for internal Actions like Load and Delete Mail (ID of the Webmaster)
avendoo.mail.msGraph.id.internal=<Mail>
# User-Id for MS user for sending mails with unknown mail address (ID of the Webmaster)
avendoo.mail.msGraph.id.unknown=<Mail>
#####
# Limit about the amount of e-mails every 5 minutes
avendoo.mail.smtp.maxsend=100
#####
# Configuration for recognizing incorrect e-mails
avendoo.mail.postfix2.withOriginalMimeMessage=message/rfc822
avendoo.mail.postfix2.mailerdaemonSubject=Undelivered Mail Returned to Sender
avendoo.mail.postfix2.mailerdaemonAddress=Mail Delivery System
avendoo.mail.postfix2.errorDescription=Diagnostic-Code
avendoo.mail.postfix2.errorAttachment=message/delivery-status
#####
# The amount of trials to send e-mails, until the e-mail address of the recipient is set to invalid.
avendoo.mail.delivery.maxerrors=10
#####
# Possible BCC
avendoo.mail.bcc=
#####
# Address of sender for administrative use (should be set, like elearningAdmin)
avendoo.mail.address.webmaster=<Mail>
# Absenderadresse (standard)
avendoo.mail.address.elearningAdmin=<Mail>
#####
# Name of sender
avendoo.mail.address.name=<Name>
#####
# Modus for iCal attachments (file or default)
avendoo.mail.ical.mode=default
```