



Setup Federated Services with Microsoft Entra ID in Swyx v14.20 and higher using PowerShell

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1. Foreword

To make Federated Services between Swyx and Microsoft Entra ID work, an App Registration with the appropriate settings have to be configured in Entra ID. This is documented in the Swyx manual, see:

https://help.enreach.com/controlcenter/14.25/web/Swyx/en-US/#page/help/chap_serverconfiguration.06.31.html

To support administrators in creating this Entra ID App Registration Enreach provides a PowerShell script that creates and configures the App Registration in Entra ID automatically.

2. Prerequisites

2.1 Connectivity to Microsoft Entra ID

Please make sure you have a working, stable internet connection to Microsoft Entra ID. The PowerShell script uses the Microsoft Graph API, i.e. you must be able to connect to <https://graph.microsoft.com> and depending on your Entra ID to https://*.onmicrosoft.com.

2.2 Access rights to configure Microsoft Entra ID

The account you use to connect to Microsoft Entra ID must have permission to configure App Registrations. The account at least needs:

```
Application.ReadWrite.All  
AppRoleAssignment.ReadWrite.All  
User.Read
```

permissions.

2.3 PowerShell

The script needs PowerShell version 7.x.

2.5 PowerShell GET Modules

Please install/update your PowerShell GET module via the command:

```
Install-Module PowerShellGet -Force
```

NOTE: You may be prompted to install and import a NuGet provider. Please confirm this request with 'Yes'.

2.6 Customize PowerShell Script Execution Policy

If you never ran PowerShell scripts, please adjust the execution policy to allow running local PowerShell scripts. Use the following command:

```
Set-ExecutionPolicy -ExecutionPolicy RemoteSigned -  
Scope CurrentUser
```

2.7 Installing the Microsoft.Graph PowerShell Module

Please install the Microsoft.Graph PowerShell module required for script execution with the following command:

```
Install-Module Microsoft.Graph -Scope CurrentUser
```

Or refer to the [Install the Microsoft Graph PowerShell SDK](#) (External Link) for installation instructions.

NOTE: You will receive a message that the module is from an untrusted repository. Follow the suggested action or confirm this request with 'Yes'.

3. Script execution

The script will guide you through the individual steps of the configuration. Please note that you need some of the information that is displayed during the script run for later configuration in the Swyx Control Center (SCC).

3.1 Step-By-Step

Step 1: Run PowerShell as Administrator

Step 2: Ensure all necessary modules (s. Prerequisites) are installed

Step 3: Run the PowerShell - Script by calling the following command (This is one line):

```
.\RegisterAppForAppOnlyAuth.ps1 -AppName "
MyOwnAppReg" -GraphScopes "User.Read.All",
"Contacts.Read", "People.Read.All",
"Calendars.Read", "Mail.Send",
"Presence.ReadWrite.All"
```

NOTE: "MyOwnAppReg" parameter is the name of the App registration. Please adjust it to something meaningful in your environment.

Expected result [Example]:

```
SUCCESS
Application ID: cb0c33d2-dd42-4145-b802-761a21453d11
Tenant/Domain ID: 0290a166-f33a-4a08-bee8-1eb799527a1d
Client secret: ...
Secret expires: 5/2/2026 7:22:31 AM
OpenID Connect Metadata
Document : https://login.microsoftonline.com/0290a166-f33a-4a08-bee8-
1eb799527a1d/v2.0/.well-known/openid-configuration
```

Step 4: Store following values for later configuration:

- Application ID
- Domain ID
- Client secret
- Meta Document URL

3.2 App permissions

The app registration needs the following permissions.

Azure AAD Right	Short description	Swyx usage
User.Read.All	Read all users' full profiles in the organization.	Used for Synchronization between Swyx User and Entra ID account to enable Federated authentication and all other Federated Services with Swyx and Entra ID
Calendars.Read	Read users' calendars and events.	Used for calendar-based callrouting rules as well as (optional) User "Away" status detection via calendar appointments
Contacts.Read	Read users' contacts.	Used for the "Contacts Synchronization" feature, e.g. to allow Swyx to show contact names for caller numbers
People.Read.All	Read the relevant people and relationships for all users.	Used for the "Contacts Synchronization" feature, e.g. to allow Swyx to show contact names for caller numbers.
Mail.Send	Send emails on behalf of the signed-in user.	Used for sending Swyx E-Mails via Microsoft 365 Graph API instead of SMTP
Presence.Read.All	Read user's MS Teams Presence Status	Used for Swyx MS Teams Presence state synchronization
Presence.ReadWrite.All	Read and write user's MS Teams Presence Status	Used for Swyx MS Teams Presence state synchronization when using "Bidirectional" synchronization so that Swyx "Speaking" status is synced back to MS Teams

4. Configuration in Swyx Control Center

Use stored values to configure Identity Provider in Swyx Control Center

- Application ID
- Domain ID
- Client secret
- Meta Document URL

For details refer to Swyx Control Center Documentation (Chapter 4.20):https://help.enreach.com/controlcenter/14.25/web/Swyx/en-US/#page/help/chap_serverconfiguration.06.29.html