Copy of OAuth2.0 Email Integration Between Genesys and Microsoft (Client Credentials Flow)

- 1. Introduction
- 2. Creating application on the Azure portal
- 3. Creating new Microsoft user
- 4. Register service principal in Exchange
  - 4.1. Installing the AzureAD and Exchange Powershell module
- 4.2. Register service principal in Exchange
- 5. Configuring custom SMTP integration in Genesys
- 6. Known error codes
- 6.1. Error 535 5.7.3.
- 6.2. Error 535 5.7.139.
- Related articles

# 1. Introduction

Since Genesys revealed the types of OAuth flows used for Microsoft 365 integration, now is the time to setup EMail integration using new type of flow - Client Credential Grant Flow. More on the subject can be seen in the official Microsoft document 📑 OAuth 2.0 client credentials flow on the Microsoft identity platform - Microsoft identity platform



# 2. Creating application on the Azure portal

First step in the process is to create application on the Azure portal and give appropriate permissions.

1. With appropriate login credentials, login to *Accord Accord Ac* 

2.	/hen logged in, in the search bar, type "entra id" and from the list of results, click on the "Microsoft Entra ID"					
	🔎 entra id	×				
	All Services (45) Resources Resource Groups	Marketplace (7) Documentation (99+)				
	Microsoft Entra ID (0)					
	Services					
	Microsoft Entra ID	📩 Microsoft Entra ID risky users				
	春 Microsoft Entra ID Protection	🗞 Microsoft Entra ID roles and administrators				
	A Microsoft Entra ID risk detections	Microsoft Entra ID Security				
	nicrosoft Entra ID risky sign-ins	💑 Microsoft Entra ID risky workload identities				

3. From the left menu, under the Manage submenu, choose "App registrations".

App registrations

4. Now we can create new application, by clicking on the "New registration" option on the top menu.

+ New registration

5. All you have to do here is type the application name, in our example we will be creating application named OAuth2ForGenesysPoC. After entering application name, click on the Register button at the bottom of the page.

### Home > startelecom.ca | App registrations >

## Register an application

\* Namo

OAuth2ForGenesysPoC	×
Supported account types	
Who can use this application or acce	ess this API?
<ul> <li>Accounts in this organizational</li> </ul>	directory only (startelecom.ca 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 on	ly
Help me choose	
Redirect URI (optional)	
We'll return the authentication respo changed later, but a value is require	nse to this URI after successfully authenticating the user. Providing this now is optional and it can be d for most authentication scenarios.
	e.g. https://example.com/auth

6. After registering the application, you will be taken to the application itself. Please copy values for the fields:

- \* Application (client) ID,
- \* Directory (tenant) ID

as those will be needed later on for creating Custom SMTP Integration on the Genesys side.

OAuth2ForGenesys	PoC 🖉 …			
	🔋 Delete 🌐 Endpoints	Preview features		
Cverview	Got a second? We would lo	ve your feedback on Microsoft identity platfor	m (previously Azure AD for developer)	÷
duickstart				
💅 Integration assistant	↑ Essentials			
Manage	Display name :	DAuth2ForGenesysPoC	Client credentials	: O certificate. 1 secret
Branding & properties	Application (client) ID :		Redirect URIs	: Add a Redirect URI
Authantication	Object ID :	*******	Application ID URI	: Add an Application ID URI
Autoritication	Directory (tenant) ID :	*********************	Managed applicati	on in I : OAuth2ForGenesysPoC
Certificates & secrets	Supported account types :	My organization only		
Token configuration				
API permissions	Starting June 30th, 2020 technical support and se	we will no longer add any new features to Az	ure Active Directory Authentication Library	(ADAL) and Azure AD Graph. We will con

7. Please note the "Endpoints" button in the image 2.3. We will need one more information from there, so please click the "Endpoints" button and copy the value from the OAuth 2.0 token endpoint (v2) field. This endpoint we will need later on in the process.

OAuth 2.0 token endpoint (v2)	
https://login.microsoftonline.com/ ************************************	D

Image 2.4. OAuth 2.0 token endpoint

8. Next step would be creating a secret which will be used for authentication. To generate one, click on the "Certificates & secrets" options from the left menu.

📍 Certificates & secrets

9. In the window that got opened, click on the "New client secret", add a description and the expiration period. Click add to save. After saving, please copy the Value of the newly created secret, as it will be needed later on.

Add a client secret		×
Description	PoCSecret	
Expires	90 days (3 months)	$\sim$
Image 2.5	Creating the client secret	

Please note that the secret's value is shown only once (on creation). If you fail to save it, you must recreate a new secret.

10. Next, we have to add appropriate API permissions. Click on the "API permission" button in the left menu and add the permissions given in the following image:

+ Add a permission 🗸 Grant admin consent for :				
API / Permissions name	Туре	Description	Admin consent req	Status
✓ Office 365 Exchange Online (2)				
SMTP.SendAsApp	Application	Application access for sending emails via SMTP AUTH	Yes	📀 Granted for 🕬 👘 🖓 🛶
User.Read	Delegated	Read user profiles	No	Sranted for a state of the second

Do not forget to grant admin consent after adding needed permissions. Failing to do so can produce an error in result returned from Microsoft Exchange Online - 535 5.7.3. Authentication unsuccessful.

# 3. Creating new Microsoft user

The second step is to create a valid Microsoft user and mailbox, assign it appropriate licenses, and update it with the allowed email applications, which are needed for this implementation to work.

- 1. With appropriate login credentials, login to https://admin.microsoft.com
- 2. Add a new user and assign it at least Microsoft 365 Standard license.
- 3. When you're done creating a mailbox and assign appropriate licenses, most important step is to turn on SMTP AUTH on the mailbox, since by default, this option is turned off. This option can be found by selecting the mailbox itself and when you do that, a new window on right side is opened. Select the "Mail" tab and from there, click on the "Manage email apps" option.



4. On the newly opened window, you will be presented with the application user has access to. If unchecked, please check the option next to "Authenticated SMTP" as this method of authentication is used by Client Credential Grant Flow.





# 4. Register service principal in Exchange

When the application is registered on the Azure portal and all admin consents are in place, it is time to register the application's service principal in Exchange using the Exchange Online Powershell.

#### 4.1. Installing the AzureAD and Exchange Powershell module

In order to continue, we must install EXO (Exchange Online) powershell module. When installed, we must connect and login by using admin credentials.

- 1 Install-Module -Name ExchangeOnlineManagement -allowprerelease
- 2 Import-module ExchangeOnlineManagement

3 Connect-ExchangeOnline -Organization <tenantId>

Also, to continue to the next step, we must install the AzureAD PowerShell module. After the installation, we should connect current powershell session to the EntralD.

- 1 Install-Module -Name AzureAD -allowprerelease
- 2 Import-module AzureAD
- 3 Connect-AzureAD

### 4.2. Register service principal in Exchange

Assuming the previous step is successfully completed, we can try using the New-ServicePrincipal cmdlet in order to register the Entra AD application's service principal in Exchange.

- 1 \$AADServicePrincipalDetails = Get-AzureADServicePrincipal -SearchString OAuth2ForGenesysPoC
- 2 New-ServicePrincipal -AppId \$AADServicePrincipalDetails.AppId -ObjectId \$AADServicePrincipalDetails.ObjectId -DisplayName "EXO Serviceprincipal for EntraAD App \$(\$AAD
- 3 \$EXOServicePrincipal = Get-ServicePrincipal -Identity "EXO Serviceprincipal for EntraAD App OAuth2ForGenesysPoc"
- 4 Add-MailboxPermission -Identity "genesysintegration\_cf@YOUR\_DOMAIN" -User \$EXOServicePrincipal.Identity -AccessRights FullAccess
- Please note that "OAuth2ForGenesysPoC" is the application name registered on Entra ID.
- By doing this, we conclude the settings which are needed to be done on the Microsoft side. If successfully completed, you should leave Microsoft portal(s) with these information at hand:
  - Client ID
  - · Client secret
  - OAuth 2.0 Token Endpoint URL
  - Email (username)

## 5. Configuring custom SMTP integration in Genesys

Next step in this PoC is to create and configure a custom SMTP integration and input all the information we got from Microsoft.

1. In the properties tab of the SMTP integration, we have to enter basic SMTP settings. Since we're using Microsoft Exchange, please will those fields with the information given in the image 5.1.

Is	O Add Property	
P	roperty Name	Value
C	ontact Information	
be	e used for notification purposes.	
м	ax Email Size	10 0
M 40	ax email size supported by the SMTP Server. A value between 1 and 0 In MB	
SI	MTP Host *	smtp.office365.com
п	The host of the SMTP server for this integration. SMTP Port The port to use when making connections to the SMTP server. Port 587 or 465 is recommended.	
SI		587 0
T1 58		
U	se STARTTLS Command	True ~
T	ue if the SMTP server requires a STARTTLS command to initialize a .S connection. Servers that support SMTPS do not require this.	

Image 5.1. Basic SMTP settings

2. Next step is to enter credentials, so let's open that tab and click on Configure (if you already have previous settings, you'll have Change button). In this window you can enter all the credentials brought from Microsoft. One field which value is missing is "Scopes". In this field, for this type of integration please type "https://outlook.office.com/.default". What does this mean? In Client Credential Grant Flow, we cannot use more specific scope. At the moment, .default scope is the only one which is being accepted by the Microsoft API.

#### **Change Credentials**

Credential Type	
OAuth 2.0 (Credential Flow)	~
Client ID*	
The Client ID from the Auth server.	
Client Secret*	
The Client Secret from the Auth server.	۲
Access token endpoint*	
JRL to retrieve access token from the Auth server.	
Username*	
The username used for authentication.	
Scopes	
ist of scopes seperated by a space.	

Image 5.2. Entering the data

3. Next you may try activating the custom SMTP integration. If everything is all right, you will get status Active.

### 6. Known error codes

Since Genesys does not return any usable error information, all the debugging can be done using either curl commands or checking the Sign-in logs on the Azure portal.

#### 6.1. Error 535 5.7.3.

This error can be shown in several cases:

• If case of getting this error from the Microsoft Exchange Online on the Sign-In Logs page of the Azure portal, please re-check the permissions given to the application. As told, please confirm these permissions are in place:

+ Add a permission 🗸 Grant	admin consen	it for startelecom.ca			
API / Permissions name	Туре	Description	Admin consent req	Status	
✓ Office 365 Exchange Online (2)					•••
SMTP.SendAsApp	Application	Application access for sending emails via SMTP AUTH	Yes	Granted for startelecom	
User.Read	Delegated	Read user profiles	No	Granted for startelecom	
		Image 6.1 Configuring API permis	sion set		

- Please check if the scope is valid: "https://outlook.office.com/.default"
- Please check whether the Entra AD application's service principal in Exchange is registered.

# 6.2. Error 535 5.7.139.

If case of getting this error from the Microsoft Exchange Online on the Sign-In Logs page of the Azure portal, please re-check if the "Authenticated SMTP" option is set on the mailbox used for OAuth2.0 integration.

A Please note, that if tenant policies are in place which prohibit SMTP authentication, then this option would not be enough for resolving the given error.

### Related articles

If you are interested in other types of flows available for integration, please refer to pages down below.

■ OAuth2.0 SMTP Integration Between Genesys and Microsoft (ROPC Flow)