Microsoft OAuth2 Authentication for email sending

This authentication method is supported by Imagicle UC Suite, starting from 2021.Winter.2 release, and it relays on advanced OAuth2 authentication available for cloud-based Office 365 email service. Previous Imagicle releases are supporting OAuth2 basic authentication, which is dismissed by Microsoft starting from July 2021.

Requirements

In order to enable Imagicle UCX Suite to send email notifications and to handle email-to-fax service, leveraging Microsoft Office 365 cloud service and OAuth2 authentication, you must configure an application on <u>Azure Web Portal</u>, taking note of Application ID, Directory ID and Client Secret data, needed later on while configuring this authentication method on Imagicle UCX Suite. Please read the following procedure to create a new application on Azure portal.

Azure web portal configurations

Please access to Azure portal and go to "App Registrations"

Microsoft Azure		
Home >		
App registrations	\$	
+ New registration	is 🤌 Troubleshooting 🛓 Download 💀 Preview features 🛛 🛇 Got feedback?	
Try out the new App registrations	s search preview! Click to enable the preview. $ ightarrow$	
Starting June 30th, 2020 we will r to be upgraded to Microsoft Aut All applications Owned applic	no longer add any new features to Azure Active Directory Authentication Library (ADAL) and Azure Al hentication Library (MSAL) and Microsoft Graph. Learn more cations	D Graph. We will continue to provide techni
Start typing a name or Application	ion ID to filter these results	
Display name		Application (client)
GI GiulianoAppTest		3d62f992-8a29-4fdc
TE TestAuthApp		2a321830-4133-4f6
CA CallBot		47e27225-b893-417
MY myMessagingBot		83a0bc9b-3c74-457
Test1		5025cb0b-e879-46d

Click on "New registration" and choose a name like "MyOAuth2App". Then select "Accounts in this organizational directory only" and hit "Register"

■ Microsoft Azure	℅ Search resources, services, and docs (G+/)
Home > App registrations >	
Register an application	
^ Name	
The user-facing display name for this applicati	on (this can be changed later).
MyOAuth2App	×
Supported account types	
Who can use this application or access this AP	17
Accounts in this organizational directory of	only (Imagicle spa only - Single tenant)
O Accounts in any organizational directory ((Any Azure AD directory - Multitenant)
O Accounts in any organizational directory ((Any Azure AD directory - Multitenant) and personal Microsoft accounts (e.g. Skype, Xbox)
O Personal Microsoft accounts only	
Help me choose	
Redirect URI (optional)	
We'll return the authentication response to thi changed later, but a value is required for most	s URI after successfully authenticating the user. Providing this now is optional and it can be authentication scenarios.
Public client/native (mobile 🗸 e.g. n	nyapp://auth 🗸
By proceeding, you agree to the Microsoft Dia	tform Policies -2
by proceeding, you agree to the microsoft Pla	
Register	

The following window appears, including Application ID and Directory ID. Please copy both data, for later usage.

Microsoft Azure	
Home > App registrations > MyOAuth2App ☆	
	💼 Delete 🌐 Endpoints 💀 Preview features
. Overview	↑ Essentials
📣 Quickstart	Display name : MyOAuth2App
🚀 Integration assistant	Application (client) ID : 1cb8b5d2-8724-4f32-8152-a16a230b682b
	Directory (tenant) ID : 969d5b92-bc05-403f-b576-97201b665e65
Manage	Object ID : 2c6bb16d-26b0-4910-8f6a-cff87b64bb2e
💳 Branding	
Authentication	Welcome to the new and improved App registrations. Looking to learn how it's changed from App registrations (Legac
📍 Certificates & secrets	
Token configuration	Starting June 30th, 2020 we will no longer add any new features to Azure Active Directory Authentication Library (ADA longer provide feature updates. Applications will need to be upgraded to Microsoft Authentication Library (MSAL) and
 API permissions 	

Now please click on "Certificates & secrets" option, included in left pane, and add a new "client secret" with the name of your choice and a long expiration period.

≡ Microsoft Azure	
Home > App registrations > MyOAut	h2App
🔶 MyOAuth2App Ce	ertificates & secrets 👒
•	~
Search (Ctrl+/) «	Got feedback?
Overview	Add a client secret
4 Quickstart	Description
🚀 Integration assistant	DigitalFaxMailServiceSecret
Manage	Expires
💳 Branding	In 2 years
Authentication	
📍 Certificates & secrets	
Token configuration	Cancel
 API permissions 	
Expose an API	Client secrets
App roles Preview	A secret string that the application uses to prove its identity when requesting a tok
Owners	
Roles and administrators Preview	New client secret
11 Manifest	Description Expires Value
Support + Troubleshooting	No client secrets have been created for this application.

Once added, you'll get some data associated to it. Please copy "Value" field for later usage. Copy the field immediately after having created the client secret, because it will be automatically hidden after few minutes, for security reasons.

	Microsoft Azure		es, and docs (G+/)		
Hon	ne > App registrations > MyOAu	th2App			
•	MyOAuth2App C	ertificates & secrets	\$		
٩	Search (Ctrl+/) «	♡ Got feedback?			
15	Overview	Copy the new client secret value	e. You won't be able to retrieve it a	after you perform another	operation or leave this blade.
4 2	Quickstart	,·	,		
*	Integration assistant				
Man	age	Certificates			
	Branding	Certificates can be used as secrets to	prove the application's identity	y when requesting a tok	en. Also can be referred to as
Э	Authentication	Upload cortificato			
•	Certificates & secrets	opioad certificate			
11	Token configuration	Thumbprint		Start date	Expires
÷	API permissions	No certificates have been added for	this application.		
۵	Expose an API				
24	App roles Preview				
4	Owners	Client secrets			
	Roles and administrators Preview	A secret string that the application u	ses to prove its identity when re	equesting a token. Also	can be referred to as application
0	Manifest	+ New client secret		_	
Sup	port + Troubleshooting	Description	Expires	Value	
B	Troubleshooting	DigitalFaxMailServiceSecret	12/31/2299	uJO9k3_x03-d-7cF	~TptM9YDAEV84QJNv6

Now click on "Add permissions" and select "API's my organization users". Then search for "Office 365 Exchange online".

p		Request API permissions	
ermissions 🖈			
🕐 Refresh 🛛 🛇 Got feedback?		Microsoft APIs APIs my organization uses My APIs	
onfigured permissions		Apps in your directory that expose APIs are shown below	
pplications are authorized to call APIs wh I the permissions the application needs. I	en they are granted permissions by us Learn more about permissions and cor	P Office 365	
i		Name	Application (client)
 Add a permission	consent for Imagicle spa	Office 365 Enterprise Insights	f9d02341-e7aa-4560
API / Permissions name	Type Description	Office 365 Exchange Online	0000002-0000-0ff1
✓ Microsoft Graph (1)		Office 365 Information Protection	2f3f02c9-5679-4a5c
User.Read	Delegated Sign in and read user pr	Office 365 Management APIs	c5393580-f805-4401
		Office 365 Search Service	66a88757-258c-4c72
> view and manage permissions and user	consent, try Enterprise applications.	Office 365 SharePoint Online	0000003-0000-0ff1

Select "Office 365 Exhange online" and then select "Application Permissions"

Request API permissions		×
CAll APIS Office 365 Exchange Online https://outlook-tdf-2.office.com/ 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.	à
	Your application runs as a background service or daemon without a signe	d-in user.

From the list of available permission levels, please select "full_access_as_app" from "Other permissions" category.

	, Р s	earch resources, services, and docs (G+/)			Σ	Ŗ	¢ 🔅	?	٢	aldo.antignar
DigitalFax	4			Request API permissions						
 ○ Refresh ○ Got feedback? 	~			CAll APIs Office 365 Exchange Online https://outlook-tdf-2.office.com/						
onfigured permissions				What type of permissions does your application require?						
pplications are authorized to call APIs I the permissions the application need	when they are s. Learn more a	granted permissions by users/admins as pa about permissions and consent	art of the consent process. The list of co	Delegated permissions Your application needs to access the API as the signed-in user.		Application Your application signed-in	on permissi cation runs user.	ons as a back	kground s	service or daemo
 Add a permission V Grant adm 	nin consent for	Imagicie spa								
API / Permissions name	Туре	Description	Admin consent req	Select permissions						
✓Microsoft Graph (1)				Start typing a reply url to filter these results						
User.Read	Delegated	Sign in and read user profile	•	Permission				Ad	dmin con	isent required
2 view and manage permissions and user consent, try Enterprise applications.		✓ Other permissions (1)								
				full_access_as_app ① Use Exchange Web Services with full access to all mailb	ooxes			Ye	s	
				> Calendars						
				Contacte						

Once permission has been assigned, you must authorize it for your organization, by clicking on "Grant admin consent for <company_name>".

	2	Search resources, services, and docs (G+/)			_
lail2DigitalFax					
alFax API permissio	ns 🖈				
🕐 Refresh 🛛 🛇 Got feedback	k?				
You are editing permission(s) to	o your application, u	users will have to consent even if they've already done so previou	usly.		
Configured permissions					
Applications are authorized to call A all the permissions the application r	APIs when they are needs. Learn more	granted permissions by users/admins as part of the conser about permissions and consent	nt process. The list of con	figured permissions should inc	lude
+ Add a permission 🗸 Grant	admin consent fo	r Imagicle spa			
API / Permissions name	Туре	Description	Admin consent req	Status	
✓ Microsoft Graph (1)					
User.Read	Delegated	Sign in and read user profile	-		
✓ Office 365 Exchange Online	(1)				
full_access_as_app	Application	Use Exchange Web Services with full access to all mailb	Yes	A Not granted for ImagicI	
This is the resulting page.					
𝒫 Search resources, service	s, and docs (G+/)				- £
issions & ◯ Refresh ♡ Got feedback?	,				
Configured permissions					
Applications are authorized to call AP all the permissions the application ne	Pls when they are g eds. Learn more a	granted permissions by users/admins as part of the consen bout permissions and consent	t process. The list of con	figured permissions should inc	lude
+ Add a permission 🗸 Grant a	admin consent for	Imagicle spa			
API / Permissions name	Туре	Description	Admin consent req	Status	
∽ Microsoft Graph (1)					
User.Read	Delegated	Sign in and read user profile	-	🥝 Granted for Imagicle spa	
✓ Office 365 Exchange Online (1)				
full_access_as_app	Application	Use Exchange Web Services with full access to all mailb	Yes	Granted for Imagicle spa	

To view and manage permissions and user consent, try Enterprise applications.

Optional configurations to restrict EWS Application to a mailbox set (Imagicle Digital Fax only)

Above described API Permission level privileges allows the application to access all EWS API on all organization mailboxes.

However, it's possible to optionally apply an advanced configuration on Microsoft Office 365 to restrict the application to access only a specific mailbox.

This is accomplished by accessing Exchange Online Administration Portal and create a new mail-enabled security group: Go to **Recipients** â **Groups** â **New mail-enabled security group**



Fill the form with a name and an alias. Those will be used later as a target of an Application Policy.

New Mail-enabled security group - Lavoro - N	Microsoft Edge	- 0	×
https://outlook.office365.com/	ecp/UsersGrou	ps/NewSecuri	ity
new mail-enabled security group	C		
Mail-enabled security groups can be used to distribute messages and to assign access permissions to Active Directory resources. Lea more	arn		A
Imagicle Digital Fax			
*Alias:			- 1
imagicle.digital.fax			- 1
*Email address:			- 1
imagicle.digital.fax @ [imagicleucdev.onn	micro 🗸		
Notes:			
		\square	
*Owners:			
+ -			-
	Save	Cancel	

Save form and edit the newly created group, go to **membership**, add a member, search for the mailbox to be granted to Digital Fax and add it:

😼 Edit Mail-enabled security group - Lavoro - Microsoft Edge

https://outlook.office365.com/ecp/UsersGroups/EditSecurityDistributionGroup.aspx?Activ

Imagicle Digital Fax

general	
yunu ar	
<u> </u>	

ownership

membership

membership approval delivery management message approval email options MailTip group delegation

Members:

	oncesos.com/cep/rickers/memberri
р д	
DISPLAY NAME	EMAIL ADDRESS
Adele Vance	AdeleV@imagicleucdev.onmicrosoft.com
Alex Wilber	AlexW@imagicleucdev.onmicrosoft.com
Diego Siciliani	DiegoS@imagicleucdev.onmicrosoft.com
Digital Fax	fax@imagicleucr <mark>k</mark> ev.onmicrosoft.com
Grady Archie	GradyA@imagicleucdev.onmicrosoft.com
Henrietta Mueller	HenriettaM@imagicleucdev.onmicrosoft
Imagicle Digital Fax	imagicle.digital.fax@imagicleucdev.onmic
Isaiah Langer	lsaiahL@imagicleucdev.onmicrosoft.com
Johanna Lorenz	JohannaL@imagicleucdev.onmicrosoft.com
Joni Sherman	JoniS@imagicleucdev.onmicrosoft.com
Lee Gu	LeeG@imagicleucdev.onmicrosoft.com
Lidia Holloway	LidiaH@imagicleucdev.onmicrosoft.com
	1 selected of 20 total
add -> D	igital Fax[remove];

https://outlook.office365.com/ecp/Use

Connect to Exchange Online PowerShell and create an Application Access Policy to allow Digital Fax application to only access the newly created mail security group, by executing the following command, where:

• Appld value corresponds to the application "Client ID" value created within Azure app registration portal

• PolicySecurityGroupId corresponds to "Display Name" of the previously create security group

New-ApplicationAccessPolicy -AccessRight RestrictAccess -AppId <AppId> -PolicyScopeGroupId "Imagicle Digital Fax" -D

Output should be:

```
RunspaceId : 2d08b315-81dd-4140-8a28-4a49431fb44d
ScopeName : Imagicle Digital Fax
ScopeIdentity : Imagicle Digital Fax
Identity
8f8ccdec-23bd-4452-bdb3-becc0c415a99\da34af4b-b01f-47e4-bfac-2f9fc3f1383e:S-1-5-21-2724517575-989
AppId
                : da34aq4b-b01f-47e4-bfac-2f9fc3f1383e
ScopeIdentityRaw :
S-1-5-21-2724537575-989916663-4003715733-16076635;697c48d2-f812-4072-a10f-4455db66025e
Description : Restrict Imagicle Digital Fax accessible mailboxes
                : RestrictAccess
AccessRight
ShardType
               : All
               : True
IsValid
ObjectState : Unchanged
```

Verify the rule, to check if the application can properly access the needed mailbox by executing the following command:

Test-ApplicationAccessPolicy -Identity <mail2fax address> -AppId <clientId>

Output should be:

```
RunspaceId : 2e08b315-81dd-4143-8a28-4a49431fa44d AppId :
da34ee4b-b01f-44e4-bfac-2f9fc3f1383e Mailbox : fax MailboxId :
c82eee91-a3e0-43f0-9a43-03e7ec7b1e96 MailboxSid :
S-1-5-21-2722357575-989916663-4003711733-159675946 AccessCheckResult : Granted
```

Then please verify the application can't access any other mailbox, by executing the following command:

Test-ApplicationAccessPolicy -Identity <any other mail address> -AppId <clientId>

In this case, output should be similar to below sample:

```
RunspaceId : 2d08b235-81dd-4140-8a28-4a49431fa44dAppId :
da34af4e-b01f-47e4-beec-2f9fc3f1383eMailbox : faxMailboxId :
c82eee91-a3e0-43f0-9a43-03c7ec7b1e96MailboxSid :
S-1-5-21-272451125-989916663-4003715733-15450946AccessCheckResult : Denied
```