Setting up Microsoft SMTP with OAuth 2.0

Requirements

- PHP Version 7.4+ You can follow this link to upgrade your PHP version: <u>https://support.nagios.com/kb/article/nagios-xi-upgrading-to-php-7-860.html</u>
- Nagios XI Version 5.10 (this will not work for offline builds)
- A Microsoft Azure account with administrative privileges

If you're familiar with setting up an application in the Azure portal you can use this shortcut, otherwise continue past this section:

REQUIRED API PERMISSIONS:

APPLICATION PERMISSIONS - MAIL.SEND (REQUIRES ADMIN CONSENT)



On your Nagios XI server, navigate to Admin -> System Config -> Email Settings

Select Microsoft with OAuth2, enter your credentials and hit test credentials.

Client ID:	0b2fbbc2-4d23-4eb2-9897-8d1a9d0555de			
Tenant ID:	4d13c952-c5fe-48a3-bda2-8881a2c5c6a8			
Client Secret:				
	Test Credentials			

Register an Application with Microsoft Azure (for your XI server)

Applications can be registered through several Microsoft portals.

Portal 1: Microsoft Entra admin center - Azure Active Directory -> App Registration

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Figure 1: Microsoft Entra admin center
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Portal 2: <u>Azure Active Directory admin center</u> – Azure Active Directory –> App registrations

Figure 2: Azure Active Directory admin center

$\leftarrow \rightarrow \mathbf{C}$	O A https://aad.portal.azure.com/#viev	w/Microsoft_AAD_IA			
Azure Active Directory admin center					
«	Dashboard >				
📶 Dashboard	👔 Nagios Enterprises	Overview			
I All services	Azure Active Directory				
+ FAVORITES	«	+ Add 🗸 🛞			
🚸 Azure Active Directory 🗲	Overview				
🔒 Users	Preview features	O <u>Microsoft E</u>			
Enterprise applications	X Diagnose and solve problems	Overview Mo			
	Manage				
	🚨 Users	Search your			
	A Groups	Basic information			
	External Identities				
	🍰 Roles and administrators	Name			
	Administrative units	Tenant ID			
	🚸 Delegated admin partners	Primary domain			
	Enterprise applications	License			
2	Devices				
<u></u>	App registrations	Alerts			
	Identity Governance	Service			

Portal 3 Microsoft Azure portal – Search bar –> app registration –> App registrations

Figure 3: Microsoft Azure portal

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Home > App registra	tions 🖈		
+ New registration	Endpoints	🤌 Troubleshooting	C Refresh
Starting June 30t updates but we we	h, 2020 we will no vill no longer prov	longer add any new feat ide feature updates. App	ures to Azure Act lications will need

Give your app a name and select the appropriate account types for your situation. If you are unsure of which one to choose, just leave it on the default (MSFT only – Single tenant).

Note: You will only be able to access the API with accounts your app was configured to. If you want to send mail from an account outside of your tenant, you will need to adjust the supported account types accordingly.

Give your Azure App registration (your XI Server) permission to send mail

1. Add a permission to your app's API permissions - Azure - App Registrations -

[your application] – API permissions (1) -> + Add a permission (2).

Home > App registrations > Nagios XI 	nissions 🖈 …				×
.₽ Search ≪	🕐 Refresh 🔰 🗖 Got fee	dback?			
Overview					
 Quickstart Integration assistant 	The "Admin consent required in the column may not reflect to	ired" column sh he value in your	nows the default value for an organizatio organization, or in organizations where	n. However, user consent can be customized per permission, user, this app will be used. Learn more	, or app. This \times
Manage	Configured permissions				
Branding & properties	Applications are authorized to	call APIs when	they are granted permissions by use	rs/admins as part of the consent process. The list of configure	ed permissions
Authentication	should include all the permissi	ons the applica	ation needs. Learn more about permit	sions and consent	
📍 Certificates & secrets 🧲	🕂 🕂 + Add a permission 🗸	Grant admin co	onsent for MSFT		
Token configuration	API / Permissions name	Туре	Description	Admin consent req Status	
 API permissions 	Microsoft Graph (1)				
Expose an API	User.Read	Delegated	Sign in and read user profile	No	
No roles					
2 Owners	To view and manage consente	d permissions	for individual apps, as well as your ter	nant's consent settings, try Enterprise applications.	
2. Roles and administrators					
Manifest					

2. Select Microsoft Graph.



3. Under Application Permissions select Mail.Send.

Request API permissions	×
Microsoft Graph https://graph.microsoft.com/ Docs 🗗	
What type of permissions does your application require?	-1
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 permissions	expand all
P Mail.Send	×
Permission	Admin consent required
∨ Mail (1)	
Send mail as any user	Yes

Note: You may remove your app's default User.Read permission.

4. Click Grant admin consent for _____.

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Manage	Configured permissions Applications are authorized to call APIs when they are granted permissions by users/admins as part of the consent proc	ess. The
🔚 Branding & properties	list of configured permissions should include all the permissions the application needs. Learn more about permissions a consent	nd
Authentication Certificates & secrets	+ Add a permission - Grant admin consent for MSFT	
Token configuration	API / Permissions n Type Description	
 API permissions 	Microsoft Graph (1)	
Expose an API	Mail.Send Application Send mail as any user Yes 🔥 Not granted for MSFT	
📴 App roles		

Your permission should now look like this:

Mail.Send	Application	Send mail as any user	Yes	Granted for MSFT	•
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Copy your Azure OAuth2 credentials to your Nagios XI OAuth configuration page

Azure – App Registrations – [your application] – Overview

Copy your credentials from your Azure app registration to your Nagios XI OAuth configuration page

- 1. Copy your **Client ID** (1) to your Nagios XI OAuth configuration page.
- 2. Copy your **Tenant ID** (2) to your Nagios XI OAuth configuration page.



3. Add a certificate or secret.

3.1 Select + New client secret and create the secret. We suggest using a name related to its usage such as Nagios XI instance 12 – Mail.

3.2 Copy your **Client Secret** (3.2) to your XI OAuth credentials page as seen below.

ertificates & secret	S 🖈 …			
Got feedback?				
 Application registration certificate 	es, secrets and federated credent	tials can be found in the tabs below.		
ertificates (0) Client secrets (Federated credentials 	; (0)		
+ New client secret 3.1	ses to prove its identity when	requesting a token. Also can be referred	to as application password.	
New client secret 3.1 Description NagiotXI-User.Read	Expires	requesting a token. Also can be referred Value ③ uSh******	to as application password. Secret ID 52d6d3cb-1e19-4c1c-9770-40b928f0cf	52 10
secret string that the application u New client secret Description NagiosXI-User.Read NagiosXI-openid	Expires 9/5/2023 9/5/2023	value value	to as application password. Secret ID 52d6d3cb-1e19-4c1c-9770-40b928f0cf 39125b9f-3f58-41d5-a409-e78cdce409	52 D

Client ID:	d09b237e-f91b-4a9d-83a9-0e1eaac6bee1	1
Tenant ID:	4d13c952-c5fe-48a3-bda2-8881a2c5c6a8	-
		2 2
Client Secret:		
	Test Credentials	

You can now verify your credentials with Microsoft by using the Test Credentials button.



Troubleshooting

Common errors and solutions are presented below.

Issue: You get the following error after setup: "Mail failed to send... Resource could not be discovered."

Solution:

In Nagios XI, navigate to Admin > Email Settings.

Ensure that you have updated the **Send From** field on the Outbound tab of the Email Settings page.

Also ensure that all other settings on this page are appropriate for your Microsoft with OAuth 2 setup.