

CONTACTSYNC® v8.5

Quick Start Guide

NETsec

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Introduction

contactSync

contactSync synchronizes contacts contained in a Shared Mailbox or in a modern Public Folder into users' mailboxes in the same Exchange environment.

It also synchronizes the Global Address List (GAL) into users' mailboxes, that are in the same environment. Mail-enabled objects in an on-premises Active Directory can be synchronized into Exchange mailboxes in the same Exchange environment and mail-enabled objects in a Microsoft 365 tenant can be synchronized into Exchange mailboxes in the same Exchange environment.

contactSync synchronizes the contacts into a subfolder within the user's mailbox contacts.

This **Quick Start Guide** describes with examples how to create an **Environment Configuration** for an Exchange environment and how to configure the policy to synchronize contacts into Exchange mailboxes.

For more information about different synchronization scenarios and the configuration settings, please take a look at the contactSync manual.

contactSync Documentation

https://www.netsec.de/en/products/contactsync/documentation.html

GALsync

GALsync synchronizes the Global Address List (GAL) between different Exchange environments, which can be on-premises Exchange environments or Exchange Online of Microsoft 365 tenants.

For each Exchange environment, you can configure which mail-enabled objects will be synchronized as mail-enabled contacts to the other Exchange environments. Also, you can configure how the received mail-enabled objects from the other Exchange environments will be synchronized as mail-enabled contacts to your own Exchange environment.

This will make the mail-enabled objects from the other Exchange environments visible as contacts in the Global Address List (GAL).

Please take a look at the GALsync documentation for additional information.

GALsync Documentation

https://www.netsec.de/en/products/galsync/documentation.html

Prerequisites

System Requirements

Components	Required
OS (64Bit)	Windows Server 2016 Windows Server 2019 Windows Server 2022 Windows Server 2025
Hardware	Processor: minimum dual core RAM: minimum 4GB
Software	.NET Framework 4.8.0 and later Windows PowerShell 5.1 and ExchangeOnlineManagement PowerShell module version 3.6 or later for Exchange Online PowerShell V3
Recommendations	 Exchange On-Premises: We recommend to install contactSync on a member server within the domain (e.g., dedicated contactSync server or file server). The machine should be uncritical (e.g., may be restarted without complications). The contactSync server must have a high bandwidth connection to the DC/GC. Exchange Online: See recommendations for on-premises; but you can use also a standalone computer.
Supported Exchange Versions*	Exchange 2013* SP1 and later Exchange 2016* and later Exchange 2019* and later Microsoft 365 Exchange Online

* Microsoft will be stopping support for Exchange 2026 and Exchange 2019 on the 14th October 2025.

Microsoft stopped supporting Exchange 2013 on the 11th April 2023. Microsoft stopped supporting for Windows Server 2012 and Windows Server 2012 R2 on the 10th October 2023.

As much as we would like to keep up compatibility for all versions, we cannot support an Environment, which is no longer supported by the manufacturer.

Microsoft will start blocking EWS requests to Exchange Online on 1st October 2026. <u>https://techcommunity.microsoft.com/blog/exchange/retirement-of-exchange-web-</u> <u>services-in-exchange-online/3924440</u>

Overview

contactSync requires a service account. The contactSync service account is only a domain user in the Active Directory and has an Exchange mailbox. The mailbox of the contactSync service account can be located at the on-premises Exchange or in Exchange Online.

On your contactSync server, the service account should be a local administrator and it should be possible to log on to the server as this account. Remote desktop connectivity may also be required.

Furthermore, the service account on the contactSync server needs the right to run as a service.

It is recommended to run the contactSync GUI always with the credentials of the local contactSync service account.

This can be confirmed on the information bar at the bottom of the contactSync GUI.

💄 NETSECDEMO\svc_contactSync 🛛 🖉 x64 🛛 🏶 contactSyncService is Running 🛛 🗞 NETsecDemo\Svc_contactSync

Exchange on-premises:

To access the mailboxes on your on-premises Exchange server, the contactSync service account needs to be member of the Exchange **Application Impersonation** role to gain access to the mailboxes to which the contacts are to be synchronized.

Please take a look at the chapter How to configure Exchange Application Impersonation

Exchange Online:

To access the mailboxes in Exchange Online, you have the option of user-based authentication or certificate-based authentication. Certificate-based authentication for Exchange Online is recommended so the contactSync service account will not require any additional authorizations.

The certificate-based authentication for Exchange Online is described in the chapter **Exchange Online certificate-based authentication via App Registration**

Service Account (on-premises)

The on-premises contactSync service account is a domain user of the on-premises Active Directory.

The on-premises service account is a member of the **Local Administrators** group on the Windows Server, where contactSync is installed.

The on-premises service account needs the local right to **run as a service** on the Windows Server, where contactSync is installed. This permission is added to the service account during the installation.

Make sure you can logon as the on-premises service account to the Windows Server, where contactSync is installed. It is likely that the on-premises service account requires membership in the local **Remote Desktop Users** group.

Note: We strongly recommend logging on as the service account to run the contactSync GUI.

The contactSync Service must run in the credentials of the on-premises service account.

In order to install contactSync you need administrative permission. Setup will also install the contactSync Service on the Windows Server you install contactSync on.

Important: If you configure the logon information for the Active Directory domain service account in the contactSync GUI using on-premises Exchange, it will be necessary use the format domain\username.

Exchange mailbox for the contactSync Service Account

The contactSync service account needs a licensed Exchange mailbox in the environment.

- contactSync must have direct access to the user mailbox of the service account via Exchange Web Services (EWS) for Exchange on-premises.
- Ensure that the mailbox is accessible (e.g., by Outlook Web Access).
- Ensure that the mailbox can send and receive email.

On-premises mailbox

For an on-premises Exchange scenario, the on-premises contactSync service account needs a mailbox located on the on-premises Exchange Server.

Exchange Online mailbox

An Exchange Online mailbox for the contactSync service account needs to be licensed with an Exchange Online license in the Microsoft 365 tenant.

For example: Microsoft 365 Business Basic, Exchange Online (Plan 1) or Microsoft 365 E1 license will work for the service account.

Local service account on a standalone server

If you run contactSync on a standalone Windows server, please create a local account for contactSync. This is only valid in Exchange Online cloud-only scenarios.

Please use the local account to configure and run the contactSync Service and the contactSync GUI in the credentials of this local account.

The local account needs the same local permissions as a domain user described above.

The local account will be required to use Modern Authentication for Microsoft 365 Exchange Online. The contactSync Service Account of the Microsoft 365 Exchange Online tenant is independent of this local account.

For example: contactSync is a local account of the standalone Windows server.

Please run also the contactSync GUI in the credentials of this local account.

Important: If you configure the logon information for the local service account in the contactSync GUI, it will be necessary use the format computername\username.

Execution Policy (Microsoft 365 Exchange Online)

If you configure a policy for Microsoft 365 Exchange Online, contactSync needs the parameter **ExecutionPolicy** to be set to **RemoteSigned** for the Windows PowerShell to connect to Exchange Online.

The reason for this is a security setting built into **Windows PowerShell** called execution policy. Execution policy determines how (or if) PowerShell runs scripts. By default, PowerShell's execution policy is set to Restricted; this means that scripts will not run. contactSync requires that scripts can be run.

Get-ExecutionPolicy

http://technet.microsoft.com/en-us/library/hh849821.aspx

Set-ExecutionPolicy RemoteSigned
<u>https://technet.microsoft.com/en-us/library/hh849812.aspx</u>

ExchangeOnlineManagement PowerShell module

contactSync requires **Windows PowerShell 5.1** and **ExchangeOnlineManagement PowerShell module version 3.6 or later** for Exchange Online PowerShell V3.

On the contactSync Server you need to install the **ExchangeOnlineManagement PowerShell module** so that contactSync direct can communicate with a Microsoft 365 Exchange Online tenant.

Install ExchangeOnlineManagement PowerShell module

On the contactSync Server, open **Windows PowerShell** as **Administrator**, then run the following to install:

Install-Module -Name ExchangeOnlineManagement -Force

When prompted, enter Y for Yes then Return



Please have look at the **Prerequisites for the Exchange Online PowerShell module** chapter of the **Microsoft Docs: About the Exchange Online PowerShell module**

https://learn.microsoft.com/en-us/powershell/exchange/exchange-online-powershellv2?view=exchange-ps#install-the-exchange-online-powershell-module

Update ExchangeOnlineManagement PowerShell module

On the contactSync Server, open **Windows PowerShell** as **Administrator**, then run the following to update:

Update-Module -Name ExchangeOnlineManagement -Force

Please have look at the **Prerequisites for the Exchange Online PowerShell module** chapter of the **Microsoft Docs: About the Exchange Online PowerShell module**

https://learn.microsoft.com/en-us/powershell/exchange/exchange-online-powershellv2?view=exchange-ps#update-the-exchange-online-powershell-module

Installation

Install contactSync

Open the contactSyncSetup.msi file and click Next



Accept the End-User License Agreement, then click Next

🖟 NETsec contactSync License Agreement	×
End-User License Agreement	
Please read the following license agreement carefully	\bigcirc
License agreement	^
BEFORE YOU CLICK ON THE "I AGREE" BUTTON AT "LICENSE AGREEMENT" STEP AND INSTALL THE SOFTWARE, CAREFULLY READ THE TERMS AND CONDITIONS OF THIS LICENSE. BY CLICKING ON THE "I AGREE" BUTTON AND BY INSTALLING THE SOFTWARE YOU ARE CONSENTING TO BE BOUND BY AND ARE BECOMING THE LICENSEE TO THIS LICENSE. IF YOU DO NOT AGREE TO ALL OF THE TERMS OF THIS LICENSE, CLICK THE "DO NOT ACCEPT" BUTTON AND DO NOT INSTALL OR USE THE	~
I accept the terms in the License Agreement	
\bigcirc I $\underline{d}o$ not accept the terms in the License Agreement	
< <u>B</u> ack <u>N</u> ext > Can	cel

Accept third party license agreement to use the libraries and tools, then click Next



Select the install path for the contactSync binaries, then click Next

# NETsec contactSync Setup	×
Select Installation Folder	
	Centaetton
The installer will install NETsec contactSync to the following folder.	
To install in this folder, click "Next". To install to a different folder, enter	it
Folder:	
C:\Program Files\WETsec contactSync\	Browse
\checkmark Create a shortcut for this program on the desktop.	
☑ Create a start menu entry for this program.	
Reset < Back Next >	Cancel

Click Install



Click Yes, if prompted



Click Finish



Configure contactSync Service

To launch contactSync, click the **NETsec contactSync** shortcut on the desktop.



When opened for the first time, the contactSync Service Wizard will open, prompting the user to enter the contactSync Service account credentials.

Click Next

團	contactSync Service Wizard	×
Ē	Welcome	
	Welcome to the contactSync Service Wizard	
	This wizard will guide you through the contactSync Service configuration.	
	To continue, click Next.	
	<back next=""> Cano</back>	zel

Enter the account credentials in **Domain\Username** format, then click **Next**.

團	contactSync Service Wizard	×
<u>Þ</u>	Logon Information	
	Logon Information	
	Specify a user account to be used by the application and for running the service. Choose a mailbox-enabled user account from your Active Directory. The contactSync Service runs in context of this user. The user should be a member of domain user group and must have the permission to log on as a service on the local machine. The user should also be a local administrator of the machine where contactSync runs. After the configuration, the service will be installed if necessary. Account Name (Domain\Username):	
	companydemo\svc_contactsync	
	Password:	
/	••••••	
	< Back Next > Can	cel

If authentication is successful, the user is prompted to confirm the is the correct account to use. Click **Yes**, then click **Next**.

南	contactSync Service Wizard	×
Ē	Logon Information	
	Logon Information Specify a user account to be used by the application and for running the service.	
	The use to log or The use runs. Are you sure you want to run the service as companydemo\svc_contactsync?	
X	Accounter Ves No Companydemo \svc_contactsync	
	< Back Next > Cancel	

Click Finish.

国	contactSync Service Wizard	×
Ē.	Service Control	
	Service Control	
	The contactSync Service is running.	
	The Service Account is companydemo\svc_contactsync	
	Click the Finish button to exit the contactSync Service configuration wizard.	
	Charge Cardentials University Cardination	
	Stop service Change Credentials Uninstall Service	
	< Back Finish Cance	4

The contactSync user interface opens upon completion of this wizard.

The bottom of the interface displays the current logged on user (on the left) and the contactSync user account (on the right).

NETsec contactSync — 🗖 🗎			
FILE ACTION OPTIONS HEL	P		
🖃 🛄 contactSync	🤨 contactSync 🔂 🔂 🖸	ancel	
	Environments RDelete Clone		
	🏟 Settings 📓 Exchange 🌐 Environments 🜌 Policies 间 Status 💡 Help		
	Policy Name Description		
ScompanyDEMO\svc_contactsync	/ x64 🏼 🎋 contactSyncService is Running 🛛 🗞 companydemo\svc_contactsync 🛛 🛕	<u>ġ</u>	

Apply contactSync License

Click the Help menu, then About

Click **Add license**, then browse to the location where the contactSync license was saved on the server, then select it and click **Open**.



Click **OK** to apply the license.

團	NETsec contactSync			
	contactSync Version 8.0 NETsec GmbH & Co. KG 2008-202 All rights reserved.	22.		
s. contactSync	Company Name: Company Address: Düren Contact Name: Contact Email: contactSync Mailboxes: contactSync Servers: There are 72 days left of The license is still 72 product.	NETsec GmbH & Co. KG Schillingsstr. 117, 52355 Dennis Bodden sales@netsec.de 5000 1 of your support. days valid for this	^	
	Add Lice	nse <u>O</u> K		

Create an Environment Configuration

Create an Environment Configuration for on-premises Exchange environment

First, please verify the contactSync GUI is running in the credentials of the local contactSync service account, otherwise contactSync cannot access its mailbox.

This can be confirmed on the information bar at the bottom of the contactSync GUI.

NETSECDEMO\svc_contactSync	al x64	contactSyncService is Running		NETsecDemo\Svc_contactSync	
----------------------------	--------	-------------------------------	--	----------------------------	--

From the Action menu select Create Environment.

庳				NETsec contactSync –	- 🗆 ×
<u>F</u> ILE		<u>OPTIONS</u>	<u>H</u> ELP		
🗗 🔯 cont	🕒 Cre	ate Environment		contactSync	Cancel
	Crea	ate contactSync	Policy	Environments	
	🍠 Ехр	ortConfiguration	n	Settings M Exchange I Environments R Policies II Status 2 Help	
	🥩 Imp	ort Configuration	1	nicy Name	
	🔿 Exp	ort Status			
	Con	figure Service			
NETSEC	CDEMO\sv	c_contactSync	a x64 🖉	🌾 contactSyncService is Running 🛛 🚴 NETsecDemo\Svc_contactSync	

In the General tab, enter a name for the environment and optional description.

庳	Environment Configuration	-	□ ×
	General Exchange Scenario		•
	General		
	Name Company Demo	(1
	Description	(i
			^
			~
	V Ok 🔞 Cancel	금 App	oly :

Click the **Exchange Scenario** tab, and select the **On-premises Exchange** environment.

When an 'On-premises Exchange environment' is selected, contactSync will authenticate to the mailbox of the account that runs the contactSync service.

Þ	Environment Configuration – 🗆 🗙
Г	General Exchange Scenario Exchange Server on-premises
	Exchange Scenario
	Please choose the Exchange scenario
	 On-premises Exchange environment The contactSync Server must be member of the on-premises Active Directory.
	O Hybrid Exchange environment
	The contactSync Server is member of the on-premises Active Directory. This on-premises Active Directory is connected to the Microsoft 365 / Office 365 tenant of Exchange Online with Microsoft Azure Active Directory Connect.
	Exchange Online environment
	The contactSync Server is member of the on-premises Active Directory.
	This on-premises Active Directory is connected to the Microsoft 365 / Office 365 tenant of Exchange Online with Microsoft Azure Active Directory Connect.
	✓ Ok S Cancel

Select the Exchange Server on-premises tab.

To verify connectivity to the mailbox, enter a recipient email then click **Send test email**.

Autodiscover is used by default to locate the Exchange Web Services URL and connect to its mailbox. If an error is returned which indicates the EWS URL cannot be resolved, a manual setting has been provided to enter a valid Exchange Web Services URL, such as the one shown below, which resolves the issue in most situations.

If the connection to the mailbox is successful, a test email will be sent to the specified recipient, and a popup message similar to the one below will be returned.

庳		Environment Configuration	- 🗆 ×
	General Exchange Exchange Serv	Scenario Exchange Server on-premises er on-premises	3
	Manage the settings	for the on-premises Exchange environment.	
	 Use Autodiscove Manual setting 	er to find the Exchange Web Services URL	
		e.g. https://casserver.domain.local/EWS/Exchange.asmx	
		Only for GALsync	
	Note: This setting	is only for GALsync in a special sychronization scenario with a hub-spoke to	pology.
	O No Exchange S	erver available. Only Active Directory Preparation.	i
	Use Exchar	nge Online mailbox of an external Microsoft 365 tenant for mailing	
	Use Exchar	ige Online mailbox for mailing	
	I ne Exchan	ge Online malibox must be nosted by Microsoft Azure public cloud	
		Send a test email to the recipient:	
	Email address	Send test email	
		V Ok Sancel	Apply

Apply the changes, then click $\mathbf{OK}.$

Account for access to the on-premises Exchange mailboxes

contactSync uses the local contactSync service account to access the on-premises Exchange mailboxes by default.

Please verify the contactSync GUI and the contactSyncService is always running in the credentials of the local contactSync service account.

This can be confirmed on the information bar at the bottom of the contactSync GUI.

💄 NETSECDEMO\svc_contactSync 🛛 🌌 x64 🛛 🏶 contactSyncService is Running 🛛 🗞 NETsecDemo\Svc_contactSync

In this case contactSync requires the **Exchange Application Impersonation** role in onpremises Exchange for this service account to access the on-premises Exchange mailboxes.

contactSync can also use a dedicated on-premises Exchange mailbox user, which has the **Exchange Application Impersonation** role in the on-premises Exchange to access the on-premises Exchange mailboxes.

Please take a look at the chapter:

How to configure Exchange Application Impersonation

Create an Environment Configuration for Hybrid Exchange environment

First, please verify the contactSync GUI is running in the credentials of the local contactSync service account, otherwise contactSync cannot access its mailbox and cannot communicate with Exchange Online.

This can be confirmed on the information bar at the bottom of the contactSync GUI.

💄 NETSECDEMO\svc_contactSync 🌌 x64 👋 contactSyncService is Running 🔥 NETsecDemo\Svc_contactSync

Important: When creating an environment, it is necessary that you logon to the contactSync server as the contactSync Service account. contactSync uses Windows authentication when accessing its mailbox (when on-premises). When creating an Exchange Online environment with certificate-based authentication the certificate will be stored in the certificate store of the current logged on user. The contactSync account will not be able to find and read the certificate when logged on as a different user.

If your Exchange Environment is a hybrid, you have the option to establish your synchronization focal point to either on-premises Exchange (Active Directory), or Exchange Online. A connection to on-premises Exchange and Exchange Online is configured in a hybrid environment. Since on-premises Active Directory hosts the master copy of all objects synced through Azure AD Connect, it is recommended an on-premises connection is used.

画	NETsec contactSync – 🗆 🗙
FILE ACTION OPTIONS HELP	_
🖃 🔯 cont 🚱 Create Environment 💦	contactSync 🔂 Cancel
Create contactSync Policy	Environments
Export Configuration	🖟 Settings 🔯 Exchange 🌐 Environments 🤓 Policies 🗐 Status 🕜 Help
Export Status	olicy Name Description
lmport Status	
Configure Service	
NETSECDEMO\svc_contactSync	🌼 contactSyncService is Running 🛛 🐁 NETsecDemo\Svc_contactSync

From the Action menu select Create Environment.

In the **General** tab, enter a name for the environment and optional description.

	Environment Configuration	- 🗆 ×
General Exchange Scenario		
General Name		
NETsec Demo		•
Description		
		^
		\sim
	V Ok 🔞 Cancel	Apply
		.:

Click the Exchange Scenario tab, then select Hybrid Exchange environment. The Exchange Online tab will be displayed. After checking the checkbox: The contactSync Server is a member of the on-premises Active Directory, the Exchange Server on-premises tab will be displayed. Select this tab.

庳	Environment Configuration	-	□ ×
	General Exchange Scenario Exchange Server on-premises Exchange Online		
	Exchange Scenario		
	Please choose the Exchange scenario		
	On-premises Exchange environment		
	The contactSync Server must be member of the on-premises Active Directory.		
	Hybrid Exchange environment		
	✓I The contactSync Server is member of the on-premises Active Directory. This on-premises Active Directory is connected to the Microsoft 365 / Office 365 tenant of Exchange Online with Microsoft Azure Active Directory Connect.		
	C Exchange Online environment		
	The contactSync Server is member of the on-premises Active Directory.		
	This on-premises Active Directory is connected to the Microsoft 365 / Office 365 tenant of Exchange Online with Microsoft Azure Active Directory Connect.		
	V Ok 🐼 Cancel	R A	pply

Select the Exchange Server on-premises tab.

contactSync connects to the on-premises mailbox of the contactSync service account. To test this connection, enter a recipient email address and click **Send test email**.

Autodiscover is used by default to locate the Exchange Web Services URL and connect to its mailbox. If an error is returned which indicates the EWS URL cannot be resolved, a manual setting has been provided to enter a valid Exchange Web Services URL, such as the one shown below, which resolves the issue in most situations.

Please note: If the mailbox of the contactSync on-premises service account is located in Exchange Online, it will be necessary to enter the Exchange Web Services URL for the on-premises Exchange Server.

A popup will be returned similar to the one below upon a successful connection to the contactSync mailbox, indicating the email was successfully sent to the target mailbox.

۵		Environment Configuration	- 🗆 ×
Г	General Exchange S	Scenario Exchange Server on-premises Exchange Online	(
	Exchange Serve	er on-premises	
	Manage the settings	for the on-premises Exchange environment.	
	Use Autodiscove	r to find the Exchange Web Services URL	
	⊖ Manual setting	e.g. https://casserver.domain.local/EWS/Exchange.asmx	
		Exchange Mailbox Test	
		Send a test email to the recipient:	
	Email address		
		Send test email	
		V Ok Sancel	Apply:

Account for access to the on-premises Exchange mailboxes

contactSync uses the local contactSync service account to access the on-premises Exchange mailboxes by default.

Please verify the contactSync GUI and the contactSyncService is always running in the credentials of the local contactSync service account.

This can be confirmed on the information bar at the bottom of the contactSync GUI.

🚨 NETSECDEMO\svc_contactSync 🛛 🖉 x64 🛛 🏶 contactSyncService is Running 🛛 🗞 NETsecDemo\Svc_contactSync

In this case contactSync requires the **Exchange Application Impersonation** role in onpremises Exchange for this service account to access the on-premises Exchange mailboxes.

contactSync can also use a dedicated on-premises Exchange mailbox user, which has the **Exchange Application Impersonation** role in the on-premises Exchange to access the on-premises Exchange mailboxes.

Please take a look at the chapter:

How to configure Exchange Application Impersonation

App registration for access to the Exchange Online mailboxes

Select the Exchange Online tab.

1	Environment Configuration —	
General Exchange Scenario Exchange Online Manage the settings for the Ex	Exchange Server on-premises Exchange Online	
Please use the certificate-base	d authentication via App registrations in the Microsoft Entra ID. Credentials Add Modify Modify Remove	
Usemame	Max. Connection	
	Organization Settings	
Instance hosted by	Microsoft 365 or Microsoft 365 GCC Microsoft Azure public cloud	
	🖋 Ok 🔞 Cancel 🕞 Ap	ply

The **Add** button on the left, will open a dialog window in which to configure **certificate-based authentication** via **App registration** for the Exchange Online tenant.

General Exchange Scen	ario Exchange Online					
Exchange Online						
Manage the settings for the Exchange Online tenant. Please use the certificate-based authentication via App registrations in the Microsoft Entra ID.						
	Credentials					
🕼 Add 🕕	🚨 Add 🚺 🧪 Modify 🚺 🎇 Remove	i				
庳	Exchange Online App Registration	×				
Corresponding settings AD) App registrations th Organization / Tenant	s for the Enterprise Application in the Microsoft Entra ID (forme hat enables access to Exchange Online.	rly Azure				
Application Display Nar	me	(i)				
Application ID		١				
	Certificate					
Friedly Name	FriedlyName					
Not After	Not After					
Subject	Subject					
Thumbprint	Thumbprint					
Has PrivateKey	Has PrivateKey					
User	User					
Choose Certificate	Create Certificate	(i)				
	Assigned API permissions					

A detailed description is in chapter

Exchange Online certificate-based authentication via App Registration

Create Environment Configuration for Exchange Online environment

First, please verify the contactSync GUI is running in the credentials of the local contactSync service account, otherwise contactSync cannot communicate with Exchange Online.

This can be confirmed on the information bar at the bottom of the contactSync GUI.

🚨 NETSECDEMO\svc_contactSync 🧖 x64 👋 contactSyncService is Running 🔥 NETsecDemo\Svc_contactSync

Important: When creating an environment, it is necessary that you logon to the contactSync server as the contactSync Service account. contactSync uses Windows authentication when accessing its mailbox (when on-premises). When creating an Exchange Online environment with certificate-based authentication the certificate will be stored in the certificate store of the current logged on user. The contactSync account will not be able to find and read the certificate when logged on as a different user.

From the Action menu select Create Environment.

<u>ل</u>		NETsec contactSync	- 🗆 ×
FILE ACTION OPTIONS	HELP		
🕞 🔯 cont 🚱 Create Environment	ContactS	Sync 📊 Save	Cancel
Create contactSync P	Environments		
Import Configuration	Settings 📓 E	ixchange 🌐 Environments 🖾 Policies 🔟 Status 😢 Help	
Export Status	olicy Name	Description	
Import Status			
🎯 Configure Service			
NETSECDEMO\svc_contactSync	av x64 🛛 🌾 contactSyne	cService is Running 🛛 👶 NETsecDemo\Svc_contactSync	

In the General tab, enter a name for the environment and an optional description.

- 🗆 ×
(1)
(1)
^
~
Apply

Select the **Exchange Scenario** tab, then select **Exchange Online environment**.

Check **The contactSync server is a member of the on-premises Active Directory**, if applicable.

	Environment Co	nfiguration		- 🗆 ×
General Exchange Scenario	Exchange Online			
Exchange Scenario				
Please choose the Exchange	cenario			
On-premises Exchange en	vironment			
The contactSync Server m	ust be member of the	on-premises Activ	e Directory.	
O Hybrid Exchange environm	ent			
The contactSync Serve	r is member of the on-	premises Active D	irectory.	
This on-premises Activ Microsoft 365 / Office 3 Microsoft Azure Active	e Directory is connect 65 tenant of Exchange Directory Connect.	ted to the e Online with		
Exchange Online environm	ent			
✓ The contactSync Serve	r is member of the on-	premises Active D	irectory.	
This on-premises Activ Microsoft 365 / Office 3 Microsoft Azure Active	e Directory is connect 65 tenant of Exchange Directory Connect.	ted to the e Online with		
		V Ok	🐼 Cancel	Apply
				.:1

Select the Exchange Online tab.

團	Environment Configurat	tion			-		×
	General Exchange Scenario Exchange Online Exchange Online Manage the settings for the Exchange Online tenant. Please use the certificate-based authentication via App regis	trations ir	n the Microsoft Ent	tra ID.		R	
	Credentials)		_		ר	
	Add (1) Add (1) Modify	1	Max. Connection	n			
	Organization Sett Instance hosted by Microsoft 365 or M Microsoft Azure pu	ings icrosoft 36 blic cloud)k	65 GCC i Cancel		a A	pply	

The **Add** button on the left, will open a dialog window in which to configure **certificate-based authentication** via **App registration** for the Exchange Online tenant.

General Exchange Scen	ario Exchange Online				
Exchange Online					
Manage the settings for th	e Exchange Online tenant.				
Please use the certificate	 -based authentication via App registrations in the Microsoft Entra 	D.			
	Credentials				
🔒 Add 🕕	Add (I) Modify (I) Remove (I)				
囱	Exchange Online App Registration	×			
Corresponding settings for the Enterprise Application in the Microsoft Entra ID (formerly Azure AD) App registrations that enables access to Exchange Online.					
Organization / Tenant		i			
1					
Application Display Nan	ne	(1)			
Application ID					
	Certificate				
Friedly Name	FriedlyName				
Not After	Not After				
Subject	Subject				
Thumbprint	Thumbprint				
Has PrivateKey	Has PrivateKey				
User	User				
Choose Certificate	Create Certificate	i			
	Assigned API permissions				

A detailed description is in chapter

Exchange Online certificate-based authentication via App Registration

Exchange Online certificate-based authentication via App Registration

First, please verify the contactSync GUI is running in the credentials of the local contactSync service account, otherwise contactSync cannot decrypt the Application Id and cannot find the certificate later.

This can be confirmed on the information bar at the bottom of the contactSync GUI.

🕹 NETSECDEMO\svc_contactSync 🧖 x64 🔅 contactSyncService is Running 🐁 NETsecDemo\Svc_contactSync

Register an Enterprise Application in the **Microsoft Entra admin center** (formerly known as **Azure Active Directory admin center**) and enter the corresponding values in the **Exchange Online App Registration** dialog.

General Exchange Scena	ario Exchange Online				
Exchange Online					
Manage the settings for the Exchange Online tenant. Please use the certificate-based authentication via App registrations in the Microsoft Entra ID.					
	Credentials				
Add (1)	Add (1) Modify (1) Remove (1)				
庳	Exchange Online App Registration	×			
Corresponding settings AD) App registrations th	for the Enterprise Application in the Microsoft Entra ID (formerly A at enables access to Exchange Online.	zure			
Organization / Tenant		i			
Application Display Nan	ne	:			
Application ID		i			
	Certificate				
Friedly Name	FriedlyName				
Not After	Not After				
Subject	Subject				
Thumbprint	Thumbprint				
Has PrivateKey	Has PrivateKey				
User	User				
Choose Certificate	Create Certificate	1			
	Assigned API permissions				
The following description is based on the **Microsoft Documentation** article:

App-only authentication for unattended scripts in Exchange Online PowerShell and Security & Compliance PowerShell

https://learn.microsoft.com/en-us/powershell/exchange/app-only-auth-powershellv2?view=exchange-ps

庳	Exchange Online App Registration	×						
Corresponding settings for the Enterprise Application in the Microsoft Entra ID (formerly Azure AD) App registrations that enables access to Exchange Online.								
Organization / Tenant		(1)						
 Application Display Nar	ne	(i)						
Application ID		(1)						
	Certificate							
Friedly Name	FriedlyName							
Not After	Not After							
Subject	Subject							
Thumborint	Thumborint							
Has PrivateKev	Has PrivateKev							
User	User							
Choose Certificate	Create Certificate	(i)						
	Assigned API permissions							
Microsoft Graph	i							
Exchange Web Ser	vices 🕕							
Maximum Connection	2 🔹 (1) ✓ Set as primary account	(1)						
Email Address		(1)						
	Apply 🚳 Car	ıcel						

Register an Enterprise Application in Microsoft Entra ID

Logon to the Microsoft Entra admin center https://entra.microsoft.com

as a global administrator and expand Identity (formerly Azure Active Directory).



Expand Applications and go to App registrations. Then select New registration.

Microsoft Entra admin center	${\cal P}$ Search resources, services, and docs (G+/)
A Home	Home >
	App registrations 🖈 ··· ×
★ Favorites	+ New registration 🌐 Endpoints 🧷 Troubleshooting 🕐 Refresh 🞍 Download 💀 Preview features 🛛 🔊 Got feedback?
Identity	All applications Owned applications Deleted applications
(i) Overview	P Start typing a display name or application (client) ID to filter these r
A Users	V
ී¤ ^A Groups	This account isn't listed as an owner of any applications in this directory.
🔁 Devices	View all applications in the directory
B Applications	∧
Enterprise applications	
App registrations	
😋 Roles & admins	× •
Learn & support	
	~

М	licrosoft Entra admin center	ЯS	earch resources, services, and docs (G+/)	
	Home	Î	Home > App registrations >	
_			Register an application	\times
*	Favorites	\sim		
_		- 1	* Name	
>	Identity	^	The user-facing display name for this application (this can be changed later).	- 1
()	Overview		contactSync Enterprise App	- 1
8	Users	\sim		- 1
^a x ^a	Groups	\sim	Supported account types	- 1
昂	Devices	\sim	Who can use this application or access this API?	_
	Devices		Accounts in this organizational directory only (NETsec Demo only - Single tenant)	
₿	Applications		Accounts in any organizational directory (Any Azure AD directory - Multitenant) Accounts in any organizational directory (Any Azure AD directory - Multitenant) and normanal Microcoft accounts (a.g. Shuna, Yhav)	
	Enterprise applications		Accounts in any organizational directory (Any Accile AD directory - Multiteriant) and personal Microsoft accounts (e.g. skype, xbox) Personal Microsoft accounts only	- 1
	App registrations		Help me choose	- 1
A	Protection	\sim		
:	Identity governance	\sim	Redirect URI (optional)	
nîn	External Identities	\sim	We'll return the authentication response to this URI after successfully authenticating the user. Providing this now is optional and it can be changed later. but a value is required for most authentication scenarios.	
-0-	External identities	Ψ.		Ψ
2	Learn & support	~	By proceeding, you agree to the Microsoft Platform Policies 🖻	
		~~	Register	

Enter a name for the **Application**.

In this example, it has been named contactSync Enterprise App.

Select the **Accounts in this organizational directory only (***YourOrganizationName***) only - Single tenant)** radio button and click **Register**.

Transfer the information of the registered Application to the **Exchange Online App Registration** dialog.

м	croso	ft Entra admin center 🖉 P Search resources, services, a	nd docs (G+/)			
\$	Hom	e Home > App registrat	ions > /nc Enterpris	se App 🚿 …		×
*	Favo	Exchange Online App Registration	×	📋 Delete 🌐 Endpoints 💀 Preview feature	25	
٩	lden	Corresponding settings for the Enterprise Application in the Microsoft Er AD) App registrations that enables access to Exchange Online.	tra ID (formerly Azure	Got a second? We would love your feedback on Microsoft identity platform (previously Azure AD for		
()	Over	Organization / Tenant	(I)	developer).		
0	Licon	netsecdemotenant.onmicrosoft.com		A Eccentials		Â
~	Usen	Application Display Name	(1)	A Essentiais		
200	Grou	contactSync Enterprise App		Display name contactSync Enterprise App	Client credentials Add a certificate or secret	
5	Devi	Application ID		Application (client) ID	Redirect URIs	
		2653598a-4b3e-4ad4-a59f-2f504bf2ba52		2653598a-4b3e-4ad4-a59f-2f504bf2ba52	Add a Redirect URI	
₩0	Appl	Certificate		Object ID f7f216c5-e36e-4962-878b-71da7c114724	Application ID URI	
	Enter	Friedly Name Friedly Name		Directory (tenant) ID	Managed application in local directory	
		Subject Subject		e9148e4a-2027-4845-8c11-8c056e5acb8c	contactSync Enterprise App	
	Арр	Thumbprint Thumbprint		Supported account types		
ĉ	Role:	Has PrivateKey Has PrivateKey		<u>My organization only</u>		
ß	Pillin			Welcome to the new and improved App reg	istrations. Looking to learn how it's changed from App	×
	DIIIII	Choose Certificate Create Certificate	(1)	registrations (Legacy)? Learn more		
ŝ	Setti	Maximum 2 A				
	Previ	Connection		Get Started Documentation		
		Email Address	1			
	Dom			Build your application	with the Microsoft identit	N
	Mob	Apply	🔕 Cancel	pland your application	latform	y

Organization / Tenant needs the **.onmicrosoft.com** domain name of the Microsoft 365 tenant. Otherwise, you may encounter cryptic permission issues when you run a policy in the app context. The next chapter will describe where to find the domain name of the Microsoft 365 tenant.

Application Display Name must have the value of the **Display name** of the registered Application.

Application ID must have the value of the **Application (Client) ID** of the registered Application.

Where to find the domain name of the Microsoft 365 tenant? Click **Show more** to see **Settings**

м	icrosoft Entra admin	center	М	icrosoft Entra admin	center
A	Home	Í	A	Home	Î
*	Favorites	~	*	Favorites	~
٩	Identity	~	۵	Identity	^
i	Overview		i	Overview	
8	Users	\sim	8	Users	\sim
Aga	Groups	\sim	Aga	Groups	\sim
£	Devices	\sim	Ð	Devices	\sim
₿	Applications	\sim	₩8	Applications	\sim
≙	Protection	\sim	ළ	Roles & admins	\sim
٢	Identity governance	\sim	Ē	Billing	\sim
qja	External Identities	\sim	\otimes	Settings	\sim
	Show more		A	Protection	\sim

Expand Settings, go to Domain names and use the .onmicrosoft.com domain name.

м	licrosoft Entra admin center	crosoft Entra admin center \mathcal{P} Search resources, services, and docs (G+/)					
4	Identity	^ *	Home >				
()	Overview		Custom domain names ···				\times
8	Users	\sim	+ Add custom domain Č Refresh 🗙 Troubleshoot │ 🎫 Column	s 🔗 Got feedback?			
⁴ X ⁶	Groups	\sim					
-6	Devices	\sim	Cooking to move an on-premises application to the cloud and use Azure Actively	ve Directory Domain Services?			
₩6	Applications	\sim					
ĉ	Roles & admins	\sim					
	Billing	\sim	Name	Status	Federated	Primary	
ŝ	Settings	^	netsecDemo.com netsecdemotenant.onmicrosoft.com	 Verified Available 		~	
	Preview hub						
	Domain names						
	Mobility						
≙	Protection	\sim					

Please do not confuse the Microsoft 365 tenant domain names with the Exchange Online accepted domains.

Certificate for the registered Application

For app-only authentication in **Microsoft Entra ID** (formerly known as Azure Active Directory), you typically use a certificate to request access. Anyone who has the certificate and its private key can use the application, and the permissions granted to the application.

国	Exchange Online App Registration	×					
Corresponding settings for the Enterprise Application in the Microsoft Entra ID (formerly Azure AD) App registrations that enables access to Exchange Online.							
Organization / Tenant		i					
netsecdemotenant.onm	icrosoft.com						
Application Display Nar	ne	i					
contactSync Enterprise	Арр						
Application ID		i					
2653598a-4b3e-4ad4-a	59f-2f504bf2ba52						
	Certificate						
Friedly Name	NETsecDemo from contactSync Server						
Not After	2025-08-18						
Subject	CN=NETsecDemoFromContactSyncServer						
Thumbprint	7719A99A5BA61FD9F72E3CD9D51783D79DCB254F						
Has PrivateKey	True						
User	NETSECDEMO\svc_contactSync						
Choose Certificate	Create Certificate	(1)					
	Assigned API permissions						
✓ Microsoft Graph	1						
Exchange Web Ser	rvices (1)						
Maximum Connection	2 🔹 🚺 🗹 Set as primary account	i					
Email Address		(
	Apply 🐼 Ca	ncel					

Choose Certificate

Choose an existing certificate and its private key from the user certificate store of the current user, which runs the contactSync GUI.

The corresponding public key file of this selected certificate must be uploaded to the registered Application.

Create Certificate

Create a self-signed certificate, which will be saved in the current user certificate store and will be used to authenticate your Application against **Identity** (formerly Azure Active Directory), while requesting the app-only access token.

	NETsec contactSync – X								
Create certificates in current user store									
Create a self-sign	ed certificate for the Azure AD Enterprise Application registration.								
Subject:	NETsecDemoFromContactSyncServer								
Friendly Name:	NETsecDemo from contactSync Server								
NotAfter:	8/18/2025 🔹 🚺								
KeyLength:	4096 🔹 🚺 keySpec: KeyExchange								
FilePath:	FilePath: C:\ProgramData\NETsec GmbH & Co. KG\contactSync (1) \certificate files\NETsecDemoFromContactSyncServer_2025- 08-18.cer								
	Creating self-signed certificate is only possible starting with Windows Server 2016								
lertificate	Directory Apply Sclose								

Enter the **Subject**, and **Friendly Name** of the certificate.

In the example above, the forest name (NETsecDemo) and the name of the server (contactSync Server) from which the connection is established will be incorporated in both.

Click **Create** to generate a new certificate.

	NETsec contactSync – X							
Create certificates in current user store								
Create a self-sign	ed certificate for the Azure AD Enterprise Application registration.							
Subject:	NETsecDemoFromContactSyncServer							
Friendly Name:	NETsecDemo from contactSync Server							
NotAfter:	8/18/2025 🔹 🚺							
KeyLength:	4096 🔹 🚺 keySpec: KeyExchange							
FilePath:	C:\ProgramData\NETsec GmbH & Co. KG\contactSync \certificate files\NETsecDemoFromContactSyncServer_2025- 08-18.cer							
	Creating self-signed certificate is only possible starting with Windows Server 2016							
\NETsecDemoFre	omContactSyncServer_2025-08-18.cer'							
Code: 0 Message: The public part of Certificate 7719A99A5BA61FD9F72E3CD9D51783D79DCB254F is exported to the file C:\ProgramData\NETsec GmbH & Co. KG\contactSync\certificate files \NETsecDemoFromContactSyncServer_2025-08-18.cer.								
Message: Operati	on successfully completed 🗸 🗸							
Certificate Directory								

The public key file is created in the default path

C:\ProgramData\NETsec GmbH & Co. KG\contactSync\certificate files\

Click on the **Certificate Directory** button to open the folder in **File Explorer**

	NETsec contactSync			– ×			
Create certificate	s in current user store						
Create a self-sign	ed certificate for the Azure AD Enterpris	e Applicat	ion registration.				
Subject:	NETsecDemoFromContactSyncServer			i			
Friendly Name:	NETsecDemo from contactSync Serve	r		i			
NotAfter: 8/18/2025							
KeyLength:	4096 🔹 🕕	keySpec:	KeyExchange	i			
FilePath:	C:\ProgramData\NETsec GmbH & Co. \certificate files\NETsecDemoFromCor 08-18.cer	KG\conta htactSyncS	ctSync Gerver_2025-	(1			
NET Dame Fr	Creating self-signed co possible starting with V	ertificate is Vindows S	only erver 2016	Create			
Code: 0 Message: The pu exported to the fill \NETsecDemoFn Code: 0 Message: Operati	blic part of Certificate 7719A99A5BA61Fl e C:\ProgramData\NETsec GmbH & Co. omContactSyncServer_2025-08-18.cer. on successfully completed	D9F72E3C KG\contac	D9D51783D79DC tSync∖certificate f	B254F is iles			
Certificate	Directory	🖋 A	pply	8 Close			
Local Disk (C:) >	ProgramData > NETsec GmbH & G	Co.KG >	contactSync →	certificate fi			
Name	^	Date	modified	Туре			
I NETsecDem	oFromContactSyncServer 2025-08-1	8 8/18/	2023 2:33 AM	Security			

Then click **Apply** to close the Create Certificate dialog.

Upload certificate file for the registered Application

Go to **Certificates & secrets** of the registered Application in **Microsoft Entry ID** (Azure AD), and select the **Certificates** tab.

М	licrosoft Entra admin center	ρs	earch resources, services, and docs (G+/)						
\$	Home	Î	Home > App registrations > cont	actSyn erpr	ic Enterprise App ise App Certifica	tes & secrets	\$:	×
*	Favorites	\sim	₽ Search	«	🛜 Got feedback?				
۵	Identity	^	Overview	î					
i	Overview		🗳 Quickstart	L	Credentials enable confidential tokens at a web addressable lo	applications to identify the cation (using an HTTPS sche	mselves to the authenticatio me). For a higher level of as	n service when receiving surance, we recommend	
8	Users	\sim	🚀 Integration assistant	L	using a certificate (instead of a	client secret) as a credential			
⁹ 2 ⁰	Groups	\sim	Manage		A collection and intertion	difference and the descent	a and a state and the factor of the	×	
Ð	Devices	\sim	 Branding & properties Authentication 	L	Application registration of	ertificates, secrets and rederate	o credentiais can be found in	the tabs below.	1
₩6	Applications	^	📍 Certificates & secrets	┣	Certificates (0) Client se	crets (0) Federated cre	dentials (0)		
	Enterprise applications		Token configuration		Certificates can be used as se referred to as public keys.	crets to prove the applicatio	n's identity when requesting	a token. Also can be	
	App registrations		 API permissions 						
°°	Roles & admins	\sim	Expose an API		Thumborint	Description	Start data	Evpiror	
		*	App roles		manoprinc	Description	Start date	Expires	
2	Learn & support	^	Roles and administrators		No certificates have been add	ded for this application.			
		~	11 Manifest	¥					Ŧ

Select **Upload certificate**, then browse to the location where the certificate was saved. Select, and open it. The default path is:

C:\ProgramData\NETsec GmbH & Co. KG\contactSync\certificate files

Microsoft Entra	a admin center 🛛 🔎 s	Search resources, services, and docs (G+,	n				
🔒 Home	Î	Home > App registrations > con	tactSync Enterprise App erprise App Ce	Upload certificate			×
★ Favorites	~	Search	🛛 « 🛛 🗖 Got feedback	Upload a certificate (public key) with one of Select a file	the following file types:	.cer, .pem, .crt *	6
 Identity Overview 	^	 Øverview Quickstart 	Credentials enable	Description Enter a description for this certificate			
R Users	~	🚀 Integration assistant	C Open ← → · · ↑	ntactSync → certificate files	ر 5 v	Search certificate files	×
⁴ X ⁴ Groups	\sim	Branding & properties	Organize 🔻 New folde	er			0
🖾 Devices	\checkmark	Authentication	Pictures ^	Name	Date modified	Туре	Size
Applications	^	Certificates & secrets	Local Disk (C:)	NETsecDemoFromContactSyncServer_20	8/18/2023 2:33 AM	Security Certificate	
Enterprise ap App registrati	olications	Token configuration API permissions	Network	<	08-18 V Cust	om files	>
😋 Roles & admi	ns 🗸 🗸	App roles				Open Cance	el
💄 Learn & sup	port ^	 Owners Roles and administrators Manifest 	No certificates ha	Add Cancel			

Mi	Alicrosoft Entra admin center P Search resources, services, and docs (G+/)						
\$	Home	Î	Home > App registrations > contact contactSync Enter	rtSync Enterprise App rprise App Ce	Upload certificate \times		
*	Favorites	\sim	₽ Search	« 🖗 Got feedback	Upload a certificate (public key) with one of the following file types: .cer, .pem, .crt * "NETsecDemoFromContactSyncServer_2025-08-18.cer"		
۵	Identity	^	Overview	Î	Description		
i	Overview		🗳 Quickstart	Credentials enable tokens at a web ad	Enter a description for this certificate		
8	Users	\sim	🚀 Integration assistant	using a certificate (i			
ĥŖ ^e	Groups	\sim	Manage	Application n			
-6	Devices	\sim	 Authentication 				
₿,	Applications	^	📍 Certificates & secrets	Certificates (0)			
	Enterprise applications		 Token configuration API permissions 	Certificates can be referred to as pub			
	App registrations		Expose an API	↑ Upload certi			
ී	Roles & admins	× .	App roles	Thumbprint			
	Learn & sunnert	~	A Owners	No certificates ha			
	Learn & support		Roles and administrators		Add Cancel		
		~~	Manifest	v			

Add the selected certificate.

Microsoft Entra admin center	ρs	earch resources, services, and docs (G+/)						
A Home	Î	Home > App registrations > contactS	ync Enterprise App prise App Certificat	tes & secrets	\$		>	×
★ Favorites	~	Search «	🛜 Got feedback?					
Identity	^	Overview	Credentials enable confidential	applications to identify th	emselves to the auth	entication service when re	ceiving tokens at a web	
(i) Overview		🗳 Quickstart	addressable location (using an HTTPS scheme). For a higher level of assurance, we recommend using a certificate (instead of a client secret) as a credential				0	
A Users	\sim	🚀 Integration assistant						L
^ሳ ደ ⁴ Groups	ups V Manage Depictation registration certificates, secrets and federated credentials can be found in the tabs below.		×					
E During	~	🔤 Branding & properties						١.
4. Devices	~	Authentication	Certificates (1) Client sec	crets (0) Federated c	redentials (0)			
Applications	\sim	📍 Certificates & secrets	Cartification and he word as an				n ha safaanad ka ay ay bija barra	
Enterprise applications		Token configuration	Certificates can be used as sec	stets to prove the applicat	ion's identity when re	questing a token. Also ca	n be referred to as public keys.	1.1
Ann registrations		-> API permissions	↑ Upload certificate					
Appregistrations		🙆 Expose an API	Thumbprint	Description	Start date	Expires	Certificate ID	
ିତ Roles & admins	× •	App roles	7719A99A5BA61FD9F	CN=NETsecDemoFro	8/18/2023	8/18/2025	a78e1f63-e17f-49 🗅 📋	1
Learn & support	~	A Owners						
		👃 Roles and administrators						Ŧ
		Manifect						

Assign API permissions to the registered Application

API permissions for Microsoft Graph

Go to API permissions, then select Add a permission



Select the Microsoft APIs and click on Microsoft Graph



Select Application permissions



contactSync 8.5 Quick Start Guide

Search for **contact** and expand the **Contacts** in the result list. Select

Contacts.ReadWrite



Search for mail and expand the Mail in the result list. Select Mail.ReadWrite and Mail.Send



Click Add permissions

м	icrosoft Entra admin center	₽ Se	arch resources, services, and docs (G+/)						
>	Identity Overview	^ *	··· > contactSync Enterprise App API p 	ermissions > App registri ise App API pe	ations > co ermissic	ntactSync Enterprise App API permiss	Successfully saved Enterprise App.	nissions permissions for contactSync	×
8	Users Groups	× ×	 Search « Overview 	C) Refresh ₽ Got ▲ You are editing perm	feedback?	ur application, users will have to consent ever	n if they've already done so	o previously.	
₽0 ₩8	Devices Applications Enterprise applications	~	Quickstart for Integration assistant Changne	The "Admin consent i permission, user, or a <u>more</u>	required" colu Ipp. This colun	mn shows the default value for an organizati In may not reflect the value in your organizat	on. However, user consent ion, or in organizations wh	can be customized per this app will be used. <u>Learn</u>	×
%	App registrations Roles & admins Protection	~ ~	Branding & properties Authentication Certificates & secrets	Configured permissions Applications are authorized to call APIs when they are granted permissions by users/admins as part of the consent process. The list of configured permissions should include all the permissions the application needs. Learn more about permissions and consent					
i)	Identity Governance External Identities	~	API permissions Expose an API	API / Permission API / Permission API / Permissions na	Grant adr	nin consent for NETsec Demo	Admin consent req	Status	
	Show more		App roles Owners Roles and administrators Marifest	Contacts.ReadW Mail.ReadWrite Mail.Send	Application Application Application	Read and write contacts in all mailboxes Read and write mail in all mailboxes Send mail as any user	Yes Yes Yes	Not granted for NETsec Not granted for NETsec Not granted for NETsec	••••
			Support + Troubleshooting	To view and manage conse	ented permiss	sions for individual apps, as well as your te	nant's consent settings,	try Enterprise applications.	
2	Learn & support	~ «							

Select Add a permission again.

Select the **APIs my organization uses** tab on the **Request API permissions** dialog and search for **Office**.

Microsoft Entra admin ce	nter 🔎 Search r	resources, services, and docs (G+/)			
A Home	Hor	me > App registrations > contactS	Request API permissions		×
★ Favorites	~	Search «	Select an API Microsoft APIs APIs my organization uses My APIs		
Identity	^ ■	Overview	Apps in your directory that expose APIs are shown below		
(i) Overview	4	Quickstart	Q Office 365		
A Users	~ 🧧 🐔	Integration assistant	Name	Application (client) ID	
^{ମୁନ୍ଦ} Groups	Ma	nage	Office 365 Enterprise Insights	f9d02341-e7aa-456d-926d-4a0ca599fbee	
E During		Branding & properties	Office 365 Exchange Online	0000002-0000-0ff1-ce00-00000000000	
au Devices	ڪ	Authentication	Office 365 Information Protection	2f3f02c9-5679-4a5c-a605-0de55b07d135	
Applications	^ †	Certificates & secrets	Office 365 Management APIs	c5393580-f805-4401-95e8-94b7a6ef2fc2	
Enterprise applications		Token configuration	Office 365 Mover	d62121f3-e023-4972-b6b0-794190c0fd98	
App registrations		API permissions	Office 365 Search Service	66a88757-258c-4c72-893c-3e8bed4d6899	
•	۵	Expose an API	Office 365 SharePoint Online	00000003-0000-0ff1-ce00-00000000000	
Co Roles & admins	· · ·	App roles			
Learn & support	~ *	Owners			
		Roles and administrators			
		Manifect			

Click on Office 365 Exchange Online in the result list to open it.

Select Application permissions

м	icrosoft Entra admin center	ρs	earch resources, services, and docs (G+/)			
\$	Home	Î	Home > App registrations > contactS ContactSync Enterp	Request API permissions		×
*	Favorites	\sim	Search «	CAll APIs Office 365 Exchange Online		
۵	Identity	^	Overview	What type of permissions does your application require?		
Ō	Overview		🗳 Quickstart	Delegated permissions	Application permissions	1
8	Users	\sim	🚀 Integration assistant	Your application needs to access the API as the signed-in user.	Your application runs as a background service or daemon without a signed-in user.	
ĥxª	Groups	\sim	Manage			-
6	Devices	\sim	 Branding & properties Authentication 			
₩6	Applications	\sim	📍 Certificates & secrets			
	Enterprise applications		Token configuration			
1	App registrations		 API permissions 			
~	Polos & admins	~	Expose an API			
-	Roles & admins	*	App roles			
2	Learn & support	^	A Owners			
		~	Roles and administrators	Add permissions Discard		

Policies synchronizing contacts from Exchange Online and from Shared Mailboxes, which are located in Exchange Online, need only Microsoft Graph permissions.

Select Exchange.ManageAsApp Manage Exchange As Application

Microsoft Entra admin center	${\cal P}$ Search resources, services, and docs (G+/)		
Identity	contactSync Enterprise App All contactSync Enterprise	Request API permissions	×
C Overview 유 Users 약자 Groups 도 Devices	 Search « Search « Overview Quickstart Integration assistant 	C All APIS Office 365 Exchange Online https://outlook.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
Enterprise applications App registrations Roles & admins	X Diagnose and solve problems Manage Branding & properties	Select permissions	signed-in user. expand all
Protection Identity Governance	Authentication Certificates & secrets Token configuration	Permission Other permissions	Admin consent required
External Identities Show more	API permissions Expose an API App roles	Contacts	
	 A Owners Roles and administrators Manifest 	Exchange (1) Exchange.ManageAsApp ① Manage Exchange As Application	Ves
	Support + Troubleshooting	> IMAP > Mailbox	
2 Learn & support	~ «	Add permissions Discard	

Click Add permissions

Policies synchronizing contacts from Public Folder, which are located in Exchange Online, need additionally the permission for Exchange Web Services at the moment.

Select full_access_as_app Use Exchange Web Services with full access to all mailboxes and Exchange.ManageAsApp Manage Exchange As Application



Click Add permissions

м	icrosoft Entra admin center	₽ Se	earch resources, services, and docs (G+/)						
٩	Identity	^ *	··· > contactSync Enterprise App API p	ermissions > App registrations >	contactSynd	Enterprise App API permission	ons > App registrations >	contactSync Enterprise	Арр
0	Overview			i se App API permis	sions	\$			\times
8	Users	\sim	✓ Search «	🕐 Refresh 🖗 Got feedbac	:?				
			S Overview	You are editing permission(s) to	your applicat	ion, users will have to consent even	if they've already done so pre-	viously.	
	Applications	~	 Quickstart Integration assistant 						
	Enterprise applications		X Diagnose and solve problems	 The "Admin consent required" permission, user, or app. This c more 	column shows olumn may not	the default value for an organizatio reflect the value in your organization	n. However, user consent can l on, or in organizations where t	be customized per his app will be used. <u>Learn</u>	×
	App registrations		Branding & properties						
ළ	Roles & admins	\sim	Authentication	Configured permissions	Dis when the	vare granted permissions by use	rs/admins as part of the con	sent process. The list of	
A	Protection	\sim	📍 Certificates & secrets	configured permissions should inclu	de all the per	missions the application needs. L	earn more about permission	ns and consent	
:	Identity Governance	\sim	Token configuration	+ Add a permission 🗸 Grant	admin conse	nt for NETsec Demo			
đ	External Identities	\sim	 API permissions 	API / Permissions name	Туре	Description	Admin consent required	Status	
	Character and Ch		Expose an API	V Microsoft Graph (3)					
	Show more		u App roles	Contacts.ReadWrite	Application	Read and write contacts in al	Yes	Not granted for NETse	ec ·
			A Owners	Mail.ReadWrite	Application	Read and write mail in all ma	Yes	Not granted for NETse	ec ·
			Roles and administrators	Mail.Send	Application	Send mail as any user	Yes	Not granted for NETse	ec ·
			Manifest	✓ Office 365 Exchange Online (2)					
			Support + Troubleshooting	Exchange.ManageAsApp	Application	Manage Exchange As Applic	Yes	Not granted for NETse	ec ·
			Rew support request						
		-							
	Learn & support	~		To view and manage consented per	nissions for ir	ndividual apps, as well as your ter	nant's consent settings, try E	nterprise applications.	
-	Learn & support							and the opposite of the	
		**							

Click Grant admin consent for your tenant.

Click **Yes** to confirm the consent.

м	icrosoft Entra admin center	Р Se	arch resources, services, and docs (G+/)						
٩	Identity	^ *	··· > contactSync Enterprise App API p	permissions > App registrations >	contactSynd	Enterprise App API permissi	ons > App registrations >	contactSync Enter	prise App
0	Overview			ise App API permis	sions	\$			\times
8	Users	\sim	✓ Search «	🖔 Refresh 🕴 🛜 Got feedbad	k?				
ĥ	Groups	\sim	Overview	Grant admin consent cor	firmation				
岛	Devices	\sim	📣 Quickstart	Do you want to grant consent fo	r the request	• ed permissions for all accounts	s in NETsec Demo? This wi	ll update any	
₩,	Applications	~	🚀 Integration assistant	existing admin consent records t	his applicatio	n already has to match what is	listed below.		
	Enterprise applications		X Diagnose and solve problems	Yes No					×
	citerprise applications		Manage	more					
	App registrations		Branding & properties	Configured permissions					
ී	Roles & admins	\sim	Authentication	Applications are authorized to call A	APIs when the	are granted permissions by use	rs/admins as part of the con	sent process. The list	of
A	Protection	\sim	📍 Certificates & secrets	configured permissions should inclu	ude all the per	missions the application needs. I	earn more about permission	ns and consent	
۲	Identity Governance	\sim	Token configuration	+ Add a permission 🗸 Grant	admin conse	nt for NETsec Demo			
eîe	External Identities	\checkmark	API permissions	API / Permissions name	Туре	Description	Admin consent required	Status	
Ũ			Expose an API	V Microsoft Graph (3)					
	Show more		App roles	Contacts.ReadWrite	Application	Read and write contacts in al	Yes	A Not granted for	NETsec
			A Owners	Mail.ReadWrite	Application	Read and write mail in all ma	Yes	🔺 Not granted for	NETsec
			Roles and administrators	Mail.Send	Application	Send mail as any user	Yes	A Not granted for	NETsec
			Manifest	V Office 365 Exchange Online (2)					
			Support + Troubleshooting	Exchange.ManageAsApp	Application	Manage Exchange As Applic	Yes	A Not granted for	NETsec
			New support request						
		Ŧ							
2	Learn & support	~		To view and manage consented per	missions for ir	ndividual apps, as well as your te	nant's consent settings, try E	interprise applications	i.
		~~							

API permissions are assigned to the registered Application.

Policies synchronizing contacts from Exchange Online and from Shared Mailboxes, which are located in Exchange Online, need these API permissions.

м	Microsoft Entra admin center \mathcal{P} Search resources, services, and docs (G+/)							
۵	Identity	^ *	··· > contactSync Enterprise App API p	ermissions > App registrations > contactSync Enterprise App API permissions > App registrations > contactSync Enterprise A	\рр			
0	Overview		→ contactSync Enterpr	ise App API permissions 🛷 👓	×			
8	Users	\sim		🜔 Refresh 🔰 🖗 Got feedback?				
200	Groups	\sim	Overview	Successfully aranted admin consent for the requested permissions.				
る	Devices	\sim	🗳 Quickstart					
₩6	Applications	~	🚀 Integration assistant					
	Colored and Bastines		🗙 Diagnose and solve problems	The "Admin consent required" column shows the default value for an organization. However, user consent can be customized per	×			
	Enterprise applications		Manage	more				
	App registrations		Branding & properties					
ĉ	Roles & admins	\sim	Authentication	Configured permissions Applications are authorized to call APIs when they are granted permissions by users/admins as part of the consent process. The list of				
A	Protection	\sim	📍 Certificates & secrets	Applications are authorized to call APIs when they are granted permissions by users/admins as part or the consent process, the list of configured permissions should include all the permissions the application needs. Learn more about permissions and consent				
	Identity Governance	\sim	Token configuration	+ Add a permission 🗸 Grant admin consent for NETsec Demo				
ත්ස	External Identities		API permissions	API / Permissions na Type Description Admin consent req Status				
-0-	External identities		🙆 Expose an API	V Microsoft Graph (3)				
	Show more		App roles	Contacts.ReadW Application Read and write contacts in all mailboxes Yes 🛛 Stranted for NETsec Demo				
			🎎 Owners	Mail.ReadWrite Application Read and write mail in all mailboxes Yes 📀 Granted for NETsec Demo				
			Roles and administrators	Mail.Send Application Send mail as any user Yes 📀 Granted for NETsec Demo				
			11 Manifest	✓ Office 365 Exchange				
			Support + Troubleshooting	Exchange.Manas Application Manage Exchange As Application Yes 🔮 Granted for NETsec Demo				
			New support request					
		-						
2	Learn & support	^		To view and manage consented permissions for individual apps, as well as your tenant's consent settings, try Enterprise applications.				
		~~						

Accordingly, select **Microsoft Graph** at the **Assigned API permissions** group box in the Exchange Online App Registration dialog.

	Assigned API permissions	
✓ Microsoft Graph	1	
Exchange Web Services	(1)	

Policies synchronizing contacts from Public Folder, which are located in Exchange Online, need additionally the permission for Exchange Web Services at the moment.



Accordingly, select **Microsoft Graph** and **Exchange Web Services** at the **Assigned API permissions** group box in the Exchange Online App Registration dialog.

	Assigned API permissions	
Microsoft Graph	1	
✓ Exchange Web Services	(1)	

API permissions for Exchange Web Services (deprecated)

Please note, Microsoft has announced that on 1. October 2026 blocking Exchange Web Services (EWS) requests from non-Microsoft apps to Exchange Online.

Retirement of Exchange Web Services in Exchange Online

<u>https://techcommunity.microsoft.com/t5/exchange-team-blog/retirement-of-exchange-web-services-in-</u> <u>exchange-online/ba-p/3924440</u>



Go to API permissions, then select Add a permission

Select the **APIs my organization uses** tab on the **Request API permissions** dialog and search for **Office**.

Microsoft Entra adı	min center 🛛 🔎 s	search resources, services, and docs (G+/)		
1 Home	Î	Home > App registrations > contacts	Request API permissions	×
★ Favorites	~	₽ Search «	Select an API Microsoft APIs APIs my organization uses My APIs	
Identity	^	Overview	Apps in your directory that expose APIs are shown below	
(i) Overview		🗳 Quickstart	P Office 365	
A Users	\sim	🚀 Integration assistant	Name	Application (client) ID
^କ ୍ଷ୍ୟ Groups	\sim	Manage	Office 365 Enterprise Insights	f9d02341-e7aa-456d-926d-4a0ca599fbee
Devices	\sim	Branding & properties	Office 365 Exchange Online	00000002-0000-0ff1-ce00-00000000000
-		Authentication	Office 365 Information Protection	2f3f02c9-5679-4a5c-a605-0de55b07d135
HB Applications	^	Certificates & secrets	Office 365 Management APIs	c5393580-f805-4401-95e8-94b7a6ef2fc2
Enterprise applicat	tions	Token configuration	Office 365 Mover	d62121f3-e023-4972-b6b0-794190c0fd98
App registrations		API permissions	Office 365 Search Service	66a88757-258c-4c72-893c-3e8bed4d6899
An Dalas & admins	~	Expose an API	Office 365 SharePoint Online	00000003-0000-0ff1-ce00-00000000000
Co Roles & admins	*	App roles		
🚨 Learn & support	^	A Owners		
	«	Roles and administrators		
		Manifort		

Click on Office 365 Exchange Online in the result list to open it.

Select Application permissions

Microsoft Entra admin center		و م	Search resources, services, and docs (G+/)			
A	Home	Î	Home > App registrations > contactS ContactSync Enterp	Request API permissions		×
*	Favorites	~	✓ Search «	 All APIs Office 365 Exchange Online https://outlook.office.com 		
۵	Identity	^	Overview	What type of permissions does your application require?		
(i)	Overview	- 1	🗳 Quickstart	Delegated permissions	Application permissions	
8	Users	\sim	💉 Integration assistant	Your application needs to access the API as the signed-in user.	Your application runs as a background service or daemon without a signed-in user.	
ĥpª	Groups	\sim	Manage			-
Ð	Devices	\sim	 Branding & properties Authentication 			
₿,	Applications	\sim	📍 Certificates & secrets			
	Enterprise applications		Token configuration			
	App registrations		-> API permissions			
٩	Polos Quederios		🙆 Expose an API			
6	Roles & admins	*	App roles			
2	Learn & support	\sim	A Owners			
		~~	Roles and administrators	Add permissions Discard		
			Manifact			

Select full_access_as_app Use Exchange Web Services with full access to all mailboxes and Exchange.ManageAsApp Manage Exchange As Application



Click Add permissions



Click Grant admin consent for your tenant.

Click Yes to confirm the consent.

М	icrosoft Entra admin center	,₽ si	earch resources, services, and docs (G+/)				
A	Home	Î	Home > App registrations > contactSync Enterprise App contactSync Enterprise App API permissions * ····				
*	Favorites	~	✓ Search «	◯ Refresh 🖗 Got feedback?			
٩	Identity	^	Overview	Grant admin consent confirmation.			
0	Overview		🗳 Quickstart	Do you want to grant consent for the requested permissions for all accounts in NETsec Demo? This will update any existing admin consent records this application already has to match what is listed below.			
8	Users	\sim	📁 Integration assistant		×		
^A X ^A	Groups	\sim	Manage	more	earn_		
-6	Devices	\sim	 Authentication 	Configured permissions			
₿,	Applications	~	Configured permissions Configured permissions Configured permissions Configured permissions Configured permissions				
	Enterprise applications		Token configuration	configured permissions should include all the permissions the application needs. Learn more about permissions and consent			
	App registrations		API permissions	+ Add a permission 🗸 Grant admin consent for NETsec Demo			
0			🙆 Expose an API	API / Permissions na Type Description Admin consent req Status			
6	Roles & admins	~	App roles	✓ Office 365 Exchange C			
ß	Billing	\sim	A Owners	Exchange.ManageA Application Manage Exchange As Application Yes 🔺 Not granted for NE	.Tsec •••		
\$	Settings	\sim	Roles and administrators	full_access_as_app Application Use Exchange Web Services with full Yes 🔺 Not granted for NE	:Tsec •••		
A	Protection	\sim	III Manifest				
		Ŧ	Support + Troubleshooting				
2	Learn & support	^	Troubleshooting				
		~	New support request	To view and manage consented permissions for individual apps, as well as your tenant's consent settings, try Enterprise application	ns.		

м	icrosoft Entra admin center	ρs	earch resources, services, and docs (G+/)		
\$	Home	Î	Home > App registrations > contactSyn contactSync Enterpr	ic Enterprise App ise App API permissions → ····	×
*	Favorites	~	Search «	🕐 Refresh 🔗 Got feedback?	
۵	Identity	\sim	Overview	Successfully granted admin consent for the requested permissions.	
(j)	Overview		🗳 Quickstart		
8	Users	\sim	🚀 Integration assistant	•	×
Aga	Groups	\sim	Manage	The "Admin consent required" column shows the default value for an organization. However, user consent can be customized per permission, user, or app. This column may not reflect the value in your organization, or in organizations where this app will be used. more	eam.
5	Devices	\sim	Branding & properties		
m	t an Easting		Authentication	Configured permissions	
α 0	Applications		Certificates & secrets	Applications are authorized to call APIs when they are granted permissions by users/admins as part of the consent process. The list configured permissions should include all the permissions the application needs. Learn more about permissions and consent	t of
	Enterprise applications		II Token configuration		
	App registrations		- API permissions	+ Add a permission 🗸 Grant admin consent for NETsec Demo	
0	Polos & admins	~	Expose an API	API / Permissions na Type Description Admin consent req Status	
~	Notes & autilitis	Ť	App roles	✓ Office 365 Exchange C	
£	Billing	\sim	A Owners	Exchange.ManageA Application Manage Exchange As Application Yes 🥝 Granted for NETsec D	Demo •••
<u>نې</u>	Settings	\sim	Roles and administrators	full_access_as_app Application Use Exchange Web Services with full Yes 🥝 Granted for NETsec I	Demo •••
A	Protection	\sim	Manifest		
		v	Support + Troubleshooting		
2	Learn & support	~	Troubleshooting		
		~	2 New support request	To view and manage consented permissions for individual apps, as well as your tenant's consent settings, try Enterprise application	15.

API permissions are assigned to the registered Application.

Accordingly, select **Exchange Web Services** at the **Assigned API permissions** group box in the Exchange Online App Registration dialog.

ſ		Assigned API permissions	
	Microsoft Graph	1	
G	Exchange Web Services	(i)	

Exchange Administrator role for the registered Application

The **Exchange Administrator role** for **Exchange Online** is necessary because contactSync communicates via the **Exchange Online PowerShell** with the Microsoft 365 tenant.

The application requires **Exchange Administrator role** in the Microsoft 365 tenant, otherwise contactSync will not have access to the complete set of Exchange Online PowerShell cmdlets which are needed to function properly.



Expand Roles & admins. If you do not see Roles & admins in the Identity menu, click Show more

Go to **Roles & admins** in the expanded **Roles & admins** menu and search for **Exchange Administrator**.

Microsoft Entra admin cen	${\cal P}$ Search resources, services, and docs (G+/)					
Applications Enterprise applications	A Home > Roles and administra NEIsec Demo - Azure AD for workforce	tors All roles	×			
App registrations	 All roles Protected actions 	+ New custom role	tures ····			
Roles & admins Admin units	Diagnose and solve problems	Your Role: Global Administrator Administrative roles Administrative roles as used for granting access for privileged actions in Azure AD. We recommend using these buscess to manage hord avoircing configuration participation access to manage hord avoircing configuration of the role	uilt-in roles for delegating			
 Billing Settings 	ALCES TEVIEWS Audit logs Bulk operation results	 Access review access to manage broad application configuration permissions without granting access to manage other parts of Azure AD not r application configuration. Learn more. Audit logs Bulk operation results 				
Protection Identity governance	Troubleshooting + Support Image: Support request	Role Image Add fitters Role Image Add fitters	ype ↑↓			
External Identities	× •	Exchange Administrator Can manage an aspects of the Exchange product.	unc-m			
🙎 Learn & support	~ «					

Click on the **Exchange administrator** in the result list to open the **Exchange administrator role**.

м	icrosoft Entra admin center	2	Search resources, services, and docs (G+/)					
₿,	Applications	^	Home > Roles and administrators All ro	oles > Exchange Administrator				
	Enterprise applications		All roles	ator Assignments				×
	App registrations		«	assignments 🞍 Download assignments 💍	Refresh 🗹 M	/anage in PIM ····		
ಿ	Roles & admins	~	X Diagnose and solve problems					
Г	Roles & admins	긞	Manage	1 You can also assign built-in roles	to groups now. <u>Learn More</u> 🗹			×
-	Admin units	-1	Assignments	Search				
	Delegated admin partners		A stude	Search by name				
ß	Billing	~	Bulk operation results	Type All				\sim
500	Sattings	\sim	Troubleshooting + Support	Name	UserName	Туре	Scope	
0	Settings		New support request	Svc_contactSync	Svc_contactSync@NETsecDemo.com	User	Directory	
	Protection	~		Svc_GALsync	svc_galsync@NETsecDemo.com	User	Directory	
	Identity governance	· ·						
2	Learn & support	^						
		~						

Click Add assignments, then search for the newly registered application.

м	licrosoft Entra admin center	Q	Search re	sources, se	ervices, and docs (G+/)				
₿.	Applications	^	Ado	d assig	gnments				×
	Enterprise applications								Â
	App registrations		0	Try changi	ng or adding filters if you don't see	what you're looking for		Selected (1)	
ළ	Roles & admins	^	Search	(i)				Neset	- 1
	Roles & admins			contactSyr	nc		X	contactSync Enterprise App 2653598a-4b3e-4ad4-a59f-2f504bf2ba52	ð 🛛
	Admin units		All	Users	Enterprise applications				
	Delegated admin partners				Name	Туре	Details		
Ê	Billing	\sim	~	щ	contactSync Enterprise App	Enterprise ap	2653598a-4b3e-4ad4-a59f-2f504bf2ba52		- 1
0	Settings	\sim		*	Svc_contactSync	User	Svc_contactSync@NETsecDemo.com		- 1
≙	Protection	\sim							- 1
۲	Identity governance	\sim							
-									-
-	Learn & support	«	A	dd					

Select the newly registered application and click Add.

The application has been assign	gned the Exchange	Administrator Role
---------------------------------	--------------------------	--------------------

м	icrosoft Entra admin center	2	Search resources, services, and docs (G+/)						
₩6	Applications	^	Home > Roles and administrators All rol	ome > Roles and administrators All roles > Exchange Administrator					
	Enterprise applications			ator Assignments				×	
	App registrations		×	+ Add assignments $ imes$ Remove assignments	ients 🞍 Download assignments 💍	Refresh 🛛 Manage in P	IM		
್ರಿ	Roles & admins	^	X Diagnose and solve problems						
	Roles & admins		Manage Assignments	 You can also assign built-in roles to group 	s now. <u>Learn More</u> 🗹			×	
	Admin units		Description	Search					
	Delegated admin partners		Activity	Search by name					
ß	Billing	\sim	Bulk operation results	All				\sim	
(i)	Settings	\sim	Troubleshooting + Support	Name	UserName	Туре	Scope		
0			New support request	contactSync Enterprise App	2653598a-4b3e-4ad4-a59f-2f504bf2b	ServicePrincipal	Directory		
	Protection	\sim		Svc_contactSync	Svc_contactSync@NETsecDemo.com	User	Directory		
3	Identity governance	× .		Svc_GALsync	svc_galsync@NETsecDemo.com	User	Directory		
2	Learn & support	^							
		~							

Overview of the registered Application in App registrations

Go to **Identity** in the **Microsoft Entra admin center** menu, expand **Applications** and select **App registrations**.

N	licrosoft Entra admin center	𝒫 Search resources, services, and docs (G+/)					
A Home		Home >					
_		App registrations 🖈 ··· ×					
*	Favorites	+ Naw ranistration 🌐 Endpoints 🤌 Troublachonting 🖒 Refrach 🚽 Download 🔚 Draview fasturas 🗌 🐼 Got fastback2					
4	Identity	All applications Owned applications Deleted applications					
()	Overview						
8	Users	> Source (pring or supplied on a supplication (sincing to to mixed uncer mixed in the supplication of a supplication of the su					
⁴ 29	Groups	1 applications found Display name ↑↓ Application (client) ID Created on ↑↓ Certificates & secrets					
-8	Devices	contactSync Enterprise App 2653598a-4b3e-4ad4-a59f-2f504bf2ba52 8/18/2023 🔮 Current					
₩6	Applications						
	Enterprise applications						
	App registrations						
ී	Roles & admins						
	Roles & admins						
	Admin units	*					
2	Learn & support	^					
		«					

Select the registered Application to see the overview.

Microsoft Entra admin ce	enter 🔎 s	Search resources, services, and docs (G+/)				
f Home	Î	Home > App registrations >	erprise App 🛷 …		×	
★ Favorites	~	P Search				
Identity	~	Overview	Got a second? We would love your feedback on Microso	oft identity platform (previously Azure AD for developer). $ ightarrow$		
Overview		🗳 Quickstart				
8 Users	\sim	🚀 Integration assistant	↑ Essentials			
^A ନ ^A Groups	\sim	Manage	Display name contactSync Enterprise App	Client credentials <u>1 certificate, 0 secret</u>		
됴 Devices	\sim	Branding & properties	Application (client) ID 2653598a-4b3e-4ad4-a59f-2f504bf2ba52	Redirect URIs Add a Redirect URI		
4 Applications	~	Certificates & secrets	Object ID f7f216c5-e36e-4962-878b-71da7c114724	Application ID URI Add an Application ID URI		
Enterprise applications		Token configuration	Directory (tenant) ID e9148eda-2027-4845-8c11-8c056e5ach8c	Managed application in local directory		
App registrations		 API permissions Expose an API 	Supported account types My organization only			
Coles & admins	^	👪 App roles	California Deservativita			
Roles & admins		A Owners	Get Started Documentation			
Admin units	~	Roles and administrators	Build your application w	with the Microsoft identity platform		
Learn & support	^	Manifest Support + Troubleshooting	The Microsoft identity platform	Lis an authentication service, open-source libraries, and		
	~	Troubleshooting	 solutions, access and protect API 	Is, and add sign-in for your users and customers. Learn		

Please check whether the values of the registered Application are corresponding with the values in the **Exchange Online App Registration** dialog.

contactSync Enterprise App	☆ …	Exchange Online App Registration ×
Delete Endpoints Preview features		Corresponding settings for the Enterprise Application in the Microsoft Entra ID (formerly Azure AD) App registrations that enables access to Exchange Online.
Got a second? We would love your feedback on Microsoft iden	ntity platform (previously Azure AD for developer).	Organization / Tenant () netsecdemotenant.onmicrosoft.com
∧ Essentials		Application Display Name (1) contact Sync Enterprise App
Display name contactSync Enterprise App Application (client) ID 2653598a-4b3e-4ad4-a59f-2f504bf2ba52 Object ID f7t216c5-e36e-4962-878b-71da7c114724 Directory (tenant) ID e9148e4a-2027-4845-8c11-8c056e5acb8c Supported account hours	Client credentials <u>1 certificate, 0 secret</u> Redirect URIs <u>Add a Redirect URI</u> Application ID URI <u>Add an Application ID URI</u> Managed application in local directory <u>contactSync Enterprise App</u>	Application ID Certificate Friedly Name NETsecDemo from contactSync Server Not After 2025-08-18 Subject CN=NETsecDemoFromContactSyncServer Thumbprint 7719A99A5BA61FD9F72E3CD9D51783D79DCB254F Has PrivateKey True
Get Started Documentation Build your application with	n the Microsoft identity	Choose Certificate Create Certificate Assigned API permissions Microsoft Graph Exchange Web Services
The Microsoft identity platform is an application management tools. You ca solutions, access and protect APIs, and	authentication service, open-source libraries, an in create modern, standards-based authenticati I add sign-in for your users and customers. Lea	Maximum Connection 2 ↔ ① ✓ Set as primary account ① Email Address ③ svc_contactsync@netsecdemo.com ③ ✓ Apply ③ Cancel

Organization / Tenant needs the **.onmicrosoft.com** domain name of the Microsoft 365 tenant. Otherwise, you might encounter cryptic permission issues when you run a policy in the app context.

Application Display Name must have the value of the **Display name** of the registered Application.

Application ID must have the value of the **Application (Client) ID** of the registered Application.

A Certificate is created and selected from Current User Personal Certificates store

\overlinea certmgr - [Certificates - Current User\Personal\Certificates] -				×
File Action View Help				
🗢 🄿 🗖 🛅 📋 🗟 🗟	? 5			
🗊 Certificates - Current User	Issued To	Issued By	Expiration	n Date
Personal	🛱 NETsecDemoFromContactSyncServer	NETsecDemoFromContactSyncSe	8/18/202	5
Certificates				
Enterprise Trust				

and the corresponding certificate file is attached to the Entra ID application.

📙 🛃 📕 🗢 certificate files			
File Home Share View			
\leftarrow \rightarrow \checkmark \uparrow \blacksquare « NETsec GmbH &	& Co. KG > contactSync > certificate files	✓ Õ	certificate files
VETsec GmbH & Co. KG 🔺	Name	Date modified	Туре
contactSync	RETsecDemoFromContactSyncServer_2025-08-18	8/18/2023 2:33 AM	Security Certificate
cache			
certificate files			

	Exchange Online App Registration	×
Corresponding settings D) App registrations t	for the Enterprise Application in the Microsoft Entra ID (formerly a tat enables access to Exchange Online.	Azure
Organization / Tenant		i
netsecdemotenant.onm	icrosoft.com	
Application Display Na	me	i
contactSync Enterprise	Арр	
Application ID		i
2653598a-4b3e-4ad4-a	5%-2f504bf2ba52	
	Certificate	
Friedly Name	NETsecDemo from contactSync Server	
Not After	2025-08-18	
Subject	CN=NETsecDemoFromContactSyncServer	
Thumbprint	7719A99A5BA61FD9F72E3CD9D51783D79DCB254F	
Has PrivateKey	True	
User	NETSECDEMO\svc_contactSync	
Choose Certificate	Create Certificate	i
	Assigned API permissions	_
✓ Microsoft Graph		
Exchange Web Se	rvices 🕕	
Maximum Connection	2 🔹 🚺 🗹 Set as primary account	i
Email Address		i
svc_contactsync@nets	ecdemo.com	
	Apply 🐼 Car	icel

contactSync 8.5 Quick Start Guide

The selection of the **Assigned API permissions** group box in the **Exchange Online App Registration** dialog must be corresponding with the **API permissions** in the App Registration.

Please check the settings of the **API permissions for Microsoft Graph**.

Policies synchronizing contacts from **Exchange Online** and from **Shared Mailboxes**, which are located in Exchange Online, need these API permissions.



Accordingly, the **Microsoft Graph** at the **Assigned API permissions** group box must be selected in the Exchange Online App Registration dialog.

	Assigned API permissions	
✓ Microsoft Graph	(1)	
Exchange Web Services	١	

Please check the settings of the **API permissions for Microsoft Graph** and **Exchange Web Services**, if **Public Folder contacts from Exchange Online** need to be synchronized in the users ' mailboxes.

Policies synchronizing contacts from **Public Folder**, which are located in Exchange Online, need additionally the permission for Exchange Web Services at the moment.



Accordingly, the **Microsoft Graph** and **Exchange Web Services** at the **Assigned API permissions** group box must be selected in the Exchange Online App Registration dialog at the moment.

	Assigned API permissions
Microsoft Graph	(1)
Exchange Web Services	(1)

庳	Exchange Online App Registration	×
Corresponding settings AD) App registrations th	for the Enterprise Application in the Microsoft Entra ID (formerly at enables access to Exchange Online.	Azure
Organization / Tenant		
netsecdemotenant.onmi	crosoft.com	
Application Display Nan	ne	i
contactSync Enterprise	Арр	
Application ID		(1)
2653598a-4b3e-4ad4-a	59f-2f504bf2ba52	
	Certificate	
Friedly Name	NETsecDemo from contactSync Server	
Not After	2025-08-18	
Subject	CN=NETsecDemoFromContactSyncServer	
Thumbprint	7719A99A5BA61FD9F72E3CD9D51783D79DCB254F	
Has PrivateKey	True	
User	NETSECDEMO\svc_contactSync	
Choose Certificate	Create Certificate	
	Assigned API permissions	
Microsoft Graph	1	
Exchange Web Ser	vices (1)	
Maximum Connection	2 💽 🚺 🗹 Set as primary account	i
Email Address		(i)
svc_contactsync@nets	ecdemo.com	
	Apply 🚳 Ca	incel

To complete the **Exchange Online App Registration** dialog, insert an **Email Address** of an Exchange Online mailbox.

Email Address of an Exchange Online mailbox is necessary to send and receive email. We recommend to use a dedicated Exchange Online mailbox for this purpose.

Click **Apply** to finish and close the **Exchange Online App Registration** dialog.

Test the Exchange Online PowerShell connection and the Exchange mailbox

<u>ل</u> م	Environmer	nt Configuration	<u> </u>	- 🗆 ×
General Exchange	Scenario Exchange Onlin	e		3
Exchange Onlin	e			
Manage the settings Please use the certif	for the Exchange Online to ficate-based authentication	enant. via App registrations	in the Microsoft Entra ID.	
		Credentials		
🗛 Add 🌘	Add 🚺	Nodify 🚺	KRemove (1)	
Usemame			Max. Connection	
ContactSync E	Enterprise App		2	
		enciention Cottings		
Instance hosted by	Micro	soft 365 or Microsoft	365 GCC	
incluice neered by	Micro	soft Azure public clo	Jd	
Exchange Web Ser	vices URL https:	//outlook.office365.cd	om/EWS/Exchange.asmx	
Organization Setti	ings			
	Remote Po	owerShell Connectio	n Test	
	Please test the Remote P	owerShell connection	n to Exchange Online	
Test				
Charulan				
Show log				•
	Exc	change Mailbox Test]	
	Send a test email to the re	cipient:		
Email address				
	Send test email	1		
		√ Ok	🕅 Cancel	
		V ON	- Californi	.:

Click the **Test** button for the **Remote PowerShell Connection Test**, to test connectivity to Exchange Online PowerShell.

Please wait for the test to finish before proceeding.

Upon a successful connection, a green circle with a checkmark will be displayed.

Invironment Configuration	- 🗆 ×
nange Online	
ge Online tenant. hentication via App registrations in the Microsoft Entra ID.	
Credentials	
(I) Modify (I) Kemove (I)	
Max. Connection	
2	
Occupitor Settings	
Microsoft 365 or Microsoft 365 GCC	
Microsoft Azure public cloud	
https://outlook.office365.com/EWS/Exchange.asmx	
Remote PowerShell Connection Test	
e Remote PowerShell connection to Exchange Online	
mote PowerShell connections is available anymore. t was successful for contactSync Enterprise App	
	Environment Configuration Aange Online ge Online tenant. hentication via App registrations in the Microsoft Entra ID. Credentials Microsoft App registrations in the Microsoft Entra ID. Organization Settings Microsoft 365 or Microsoft 365 GCC Microsoft Azure public cloud https://outlook.office365.com/EW/S/Exchange.asmx Remote PowerShell Connection Test e Remote PowerShell connection to Exchange Online mote PowerShell connection to Exchange Online

If the connection test failed, click the **Show log** button for detailed information.

A test email can also be sent to the desired recipient as an additional test to validate mail flow. To do this, click the **Send test email** button for the **Exchange Mailbox Test**.

contactS	/nc ×	
1	Code: 0 Message: Run as svc_contactSync	
	Code: 12098 Message: Exchange Online scenario is configured.	
	Code: 12063 Message: Organization: netsecdemotenant.onmicrosoft.com	
	Code: 12064 Message: App Registration Display Name: contactSync Enterprise App	
	Code: 12065 Message: Exchange Web Services URL: https://outlook.office365.com/EWS/Exchange.asmx	
	Code: 12066 Message: Email address: svc_contactsync@netsecdemo.com	
	Code: 12101 Message: Sending mail to administrator@netsecdemo.com successful.	^
	ОК	•
	Exchange Mailbox Test	
	Send a test email to the recipient:	
Email addr	administrator@netsecdemo.com	
	Send test email	
		1.0

Please note, that the e-mail address of the recipient for the test email will not be saved.

Create and Run contactSync Policies

Synchronize Contacts from Exchange On-Premises into Mailboxes

contactSync allows you to synchronize mail-enabled objects directly from on-premises as contacts into user mailboxes. It will connect to user mailboxes in your local Exchange Environment, whether it is in Exchange on-premises or Exchange Online if in hybrid mode.

Create new policy

Right click the desired environment and select **Create Policy** from the context menu or click **Create Policy** to the right.



Ensure the desired environment has been selected from the dropdown.

庳	NETsec contactSync - NETsec Demo Hybrid - New Policy	×
Environment Cor	figuration	
Environment Configuration Synchronization mode Access to Mailbacks	Environment Configuration	
Access to Mailboxes Mailboxes	Please choose the Environment Configuration for the new policy	
Unknown Source	NETsec Demo Hybrid	
 Contact Folder Notification emails Scheduler service General Summary 	Hybrid Exchange environment and the contactSync Server is member of the on-premises Active Directory.	
	Nex	tt > Cancel

Synchronization mode

Select Synchronize directory information (GAL) from on-premises into users' mailboxes in an Exchange environment.

Click Next.

庳	NETsec contactSync - NETsec Demo Hybrid - New Policy	×
New contactSy	nc Policy from on-premises Exchange	
Synchronization mode	1. What do you want to do?	
Access to Mailboxes Mailboxes	Synchronize directory information (GAL) from on-premises into users' mailboxes in the Exchange environment.	1
 Directory Contact Folder 	Synchronize directory information (GAL) from Exchange Online into users' mailboxes in the Exchange environment.	1
 Notification emails Scheduler service 	Synchronize public folder contacts into users' mailboxes in an Exchange environment.	1
 General Summary 	Synchronize shared mailbox contacts into users' mailboxes in an Exchange environment.	٩
	< Back Next >	Cancel
Access to Mailboxes for on-premises Exchange

contactSync requires access to user mailboxes in order to write to their contacts folder. The **Exchange Application Impersonation** can be configured for such access, which allows up to 5 concurrent connections to user mailboxes.

By default, contactSync will use the account which has been configured in the Environment configuration.

These two roles can be split between two separate accounts by entering the credentials of a dedicated mailbox user that has the **Application Impersonation** role.

]	NETsec contactSync - NETsec Demo Hybrid - New Policy	:
New contactSync	: Policy from on-premises Exchange	
 Environment Configuration Synchronization mode 	Access to Mailboxes	^
 Access to Mailboxes Mailboxes 	Account for access of on-premises Exchange mailboxes	(i)
 Directory Contact Folder 	Credentials of the on-premises service account Credentials of a dedicated mailbox user	() (i)
 Notification emails Scheduler service 	User Name:	
 General Summary 	E-Mail Address:	
	Use Autodiscover to find Exchange Web Services URL	
	Manual setting e.g. https://casserver.domain.local/EWS/Exchange.asmx	
	< Back Next >	Cancel

Please take a look at the chapter:

How to configure Exchange Application Impersonation

Access to Mailboxes for Exchange Online

By default, contactSync uses the Environment Configuration to access mailboxes. Application Impersonation, required for Exchange on-premises, will not be necessary when the certificate authentication via App Registration for Exchange Online is configured in the Environment Configuration.

Please take a look at the chapter

Exchange Online certificate-based authentication via App Registration

画	NETsec contactSync - NETsec Demo Hybrid - New Policy	×	
New contactSync	Policy from on-premises Exchange		
Environment Configuration	Account for access of Exchange Online mailboxes	^	
 Synchronization mode Access to Mailboxes 	5 count of concurrent mailboxes getting the contacts e.g. 5 mailboxes concurrently	1	
Mailboxes	Use the Environment Configuration settings	(i)	
Contact Folder	O Credentials of a dedicated mailbox user	(i)	
Notification emails	User Name:] 🛛 🚺 🖉	
Scheduler service	E-Mail Address:		
General	Modern authentication OAuth 2.0 for Exchange Online Login		
Summary	My Azure Cloud Instance is hosted by:		
	Microsoft Azure public cloud 🔹 https://login.microsoftonline.com		
	Exchange Web Services URL of Exchange Online		
	https://outlook.office365.com/EWS/Exchange.asmx		
		¥	
	< Back Next >	Cancel	

Click Next

Select the Mailboxes from On-Premises Exchange

You can select Mailboxes located in an on-premises Exchange Server, which will receive contacts. It could be an on-premises Exchange environment or a part of a hybrid Exchange environment.

In the **Mailboxes** window, you are prompted to select the mailboxes which will receive the contacts. There are two ways to do make your selection.

南	NETsec contactSync - NETsec Demo Hybrid - New Policy	×
New contactSync	Policy from on-premises Exchange	
 Environment Configuration Synchronization mode Access to Mailboxes Mailboxes Directory 	Mailboxes (1) Search and choose either Exchange Online or on-premises mailbox users which will receive mail-enabled objects as contacts.	
 Contact Folder Notification emails Scheduler service General Summary 	Display Name Primary SMTP Address Recipient Type Group Option	r
	< > > < Back Next> Cance	el

- 1. Click **Choose** to select mailboxes by OU where they reside in Active Directory.
- Click Search to open a search dialogue window from which you can search for the desired Active Directory objects. When searching Active Directory, mailboxes can be selected individually, by group membership, by container, or by OU. If you have a hybrid Exchange environment, an additional option is available to search for Exchange Online objects.

🗈 NETsec contactSync – 🗆 🗙	NETsec contactSync - NETsec Demo Hy	۵	NETsec contactSync		- 🗆 ×
Select organizational unit An active directory tree with all organizational units of every domain in the forest and is listed. All maillox users included in a selected OU (and all nested OUs) will be recognized for import contracts to their amillox. Note Y void on head to kit the mesked OUs.	Policy from on-premises E	Search Active Directory Search You can search an object by inserting an expr forest your exchange organization belongs to apply.	h Exchange Online ression. Uncheck all object types which you The result list contains all objects found. Sele	not want to have as a result. The sco ct certain or all objects to be gathered	ope of the query is the complete for resolve mailbox users and press
WIEfectDemo.Local Solution Compares Compares Solution Solution Solution	Mailboxes () Search and choose either Exchange mail-enabled objects as ontacts.	all employees	DynamicDistributionGrou	2	Search maximum Results 500 €
Consin Controllers Constructions Construction Construction	Choose Search Display Name Primary Sh	Active Directory search in Single and the domain con- Active Directory search is finished. Diplay Name DynamicDistributionGroup []All Employees	Primary Smtp Address AllEmployees@netsecdemo.com	Recipient Type MsExchDynamicDistributionList	DistinguishedName CN=All Employees.OU=Reso
Help Deak Help Helt Helt Septy Kepty Cancel	٢	Select all			Apply Scancel
15. 		< Back Next >	Cancel		

When the **Search Exchange Online** Radio Button has been selected, you can search for objects by Recipient Type, such as **UserMailbox**, **MailUniversalDistributionGroup**, **MailUniversalSecurityGroup**, **DynamicDistributionGroup**, or **Office365 Group**.

When OUs are selected, a prompt to select the OU depth is presented. If any groups are contained in the OU, contactSync will prompt the user to include mailboxes by group membership.

If multiple OUs have been selected, the checkbox at the bottom left will apply the settings to all selected OUs.

Click **OK**, then **Apply**.

	Ľ]	contactSync	
		Semployees		
NETsec contact		OU Option Exportable Recipient	TypeDetails	
Select organizational unit				
An active directory tree with all organizational mailbox users included in a selected OU (and a		Only this OU	(i)	
contacts to their mailbox. Note: You don't need		Only Sub-OUs	i	
Dr. 🔄 NETsecDemo.Local		OU + Sub-OUs	i	
CompanyGroups		Include group memberships	(i)	
Computers	Ľ	- Include nested		
🖽 🗔 🟐 Contacts		groups + memberships		
🗌 🟐 Domain Controllers				
🗗 🗹 😋 Employees				
Accounting				
Engineering				
- 🗌 🏐 International Users		Setting for all OUs 🔹 🕕		
🗆 😪 IT	L			
		Apply 🚳	Cancel:	

Verify the selected OUs are displayed.

Click Next.

Ø	NETsec contactSync - NETsec Demo Hybrid - New Policy	×
New contactSync F	Policy from on-premises Exchange	
Environment Configuration Synchronization mode Access to Mailboxes Mailboxes Directory	Mailboxes Image: Choose Search and choose either Exchange Online or on-premises mailbox users which will r mail-enabled objects as contacts. Image: Choose Image: Search Image: Choose Image: Search	receive Remove
 Directory Contact Folder Notification emails Scheduler service General Summary 	Display Name Primary SMTP Address Recipient Type Gr AD OU Employees OrganizationalUnit OU	oup Option
	<	>
	< Back Next >	Cancel

Click Next.

Instead of selecting OUs in Active Directory as described above, in the following example, the **All Employees** Dynamic Distribution Group has been selected from the Active Directory search.

Click **Search** to search for objects through an LDAP query. They can be selected individually, by group membership, by container, or OU

	NETsec contactSync - NETsec Demo Hyt	專		NETsec contactSync		- 🗆 ×
New contactSync	Policy from on-premises Ex	Search Active Directory You can search an object by ins complete forest your exchange mailbox users and press apply.	Search Exchan erting an expression. L organization belongs to	ge Online Incheck all object types which you do not want to The result list contains all objects found. Select o	have as a result. The scope of certain or all objects to be gath	f the query is the hered for resolve
Environment Configuration Synchronization mode Access to Mailboxes Mailboxes	Mailboxes () Search and choose either Brchange C mail-enabled objects as crintacts.	all employees	☑ OU ☑ Group he domain LDAP://NETs	DynamicDistributionGroup	Ĵ	Search
Directory Contact Folder Notification emails Scheduler service General	Display Name Primary SM	Display Name DynamicDistributionGroup All Employees		Primary Sritp Address AllEmployees@netsecdemo.com	Recipient Type MsExchDynamicDist	Distinguishe
Summary	٢	Select all			Apply	> 🔞 Cancel
		< Back	lext > Cancel			

All members with a mailbox in the selected group will receive the contacts, an option is also available to include nested groups.

Click Apply.

A new window opens with **Only Membership** preselected and the option to include nested groups.

	contactSync
	🐸 All Employees
NETsec contactSync	Group Option Exportable RecipientTypeDetails
Search Active Directory Search Exchange Online You can search an object by inserting an expression. Uncheck all object types whic complete forest your exchange organization belongs to. The result list contains all c mailbox users and press apply.	Only Membership
all employees User I OU I DynamicDistribut Container I Group	Include nested groups
Message: Search for objects in the domain LDAP://NETsecDemo.Local Active Directory search is finished.	
Display Name Primary Smtp Address	
DynamicDistributionGroup All Employees AllEmployees@netsecc	
<	Setting for all groups (1)
Select all	Apply Scancel

Click OK

Then click Apply

For continued instructions, please see Select mail-enabled objects on the Directory tab from On-Premises

Select the Mailboxes from Exchange Online

You can select Mailboxes located in Exchange Online which will receive the contacts. This is possible for an Exchange Online environment or a part of any hybrid Exchange environment.

When searching for Exchange Online objects, you can search for objects by Recipient Type, such as UserMailbox, MailUniversalDistributionGroup, MailUniversalSecurityGroup, DynamicDistributionGroup, or Office365 Group.

庳	NETsec contactSync - NETsec Demo Hybrid - New	<u>ل</u>	NETsec contactSync		- 🗆 ×
New contactSync	Policy from on-premises Exchange	Search Active Directory You can search an object by inse complete forest your exchanged mailbox users and press aperly.	Search Exchange Online Search Exchange Online Ganza and a search a search and a search a sea	o not want to have as a result. The scope ound. Select certain or all objects to be ga	of the query is the thered for resolve
Environment Configuration Synchronization mode Access to Mailboxes	Mailboxes () Search and choose either Exchange Online or op mail-enabled objects as contacts	all employees	✓ MailUniversalSecurityGroup ✓ Office365Group 如 DynamicDistributionGroup		Search maximum Results
 Mailboxes Directory 		Information 6ead58e1-7e0b-4da Information 0 scripts are in the qu The ConnectionInfo method was of Dientary Name	0-ab02-6630d5b7141c disconnected. ueue. called from: <ps_remotepowershelldisconnected>b_0</ps_remotepowershelldisconnected>	Recipient Tune	Show log
Contact Folder Notification emails Scheduler service General	Display Name Primary SM I P Address	DynamicDistributionGroup	AllEmployees@netsecDemo.com	DynamicDistributionGroup	CN=All Employees,0
E Summary		<		Apply	> & Cancel
		< Back Next >	Cancel		

In the example above, the **All Employees** Dynamic Distribution Group has been selected. You can expand your search by inserting a wild card character (*).

Click Apply.

All members with a mailbox in the selected group will receive the contacts, an option is also available to include nested groups.

<u>ل</u> ة	NETsec contactSync	×
	All Employees	
	Group Option Exportable RecipientTypeDetails	_
	Only Membership	
	Include nested groups	
	V Ok 🔀 Cancel	

Click OK

Verify the selected group(s) are displayed.

Click Next.

Select mail-enabled objects on the Directory tab from On-Premises

臣	NETsec contactSync - NETsec Demo Hybrid - New Policy	×
New contactSync F	Policy from on-premises Exchange	
 Environment Configuration Synchronization mode Access to Mailboxes Mailboxes Directory 	Directory Image: Choose the mail-enabled objects, which should synchronize into the users' mailboxes as contacts. Choose Image: Choose Ima	
Contact Folder Notification emails Scheduler service General Summary	Name Display Name Mail Logo Option Exp	2
	< <p>K Sack Next > Cance</p>	H

In the **Directory** window, it will be necessary to select mail-enabled objects to be synchronized as contacts into user mailboxes. This can be done 2 ways.

- 1. Click **Choose** to select OUs which contain the objects you would like to synchronize as contacts into user mailboxes.
- 2. (Preferred method) Click **Search** to search Active Directory for groups which contain the members you would like to be synchronized into user mailboxes.

🗵 NETsec contactSync – 🗆 🗙	NETsec contactSync - NETsec Demo Hybrid - New P 🖪 Search for on-premises objects – 🗆 🗙
Select organizational unit An active directory tree with all organizational units of every domain in the forest and is listed. All mail objects included in a selected OU (and all nested OUs) will be recognized for export at runtime. Note: You don't need to tick the nested OUs.	Policy from on-premises Exchange rou can search an object by inserting an expression. Uncheck all object types which you do not want to have as a result. The scope of the query is the complete forest your exchange organization belongs to. The result list contains all objects found. Select certain or all objects to be gathered for export and press apply.
🗈 🗐 NETsecDemo.Local	all employees
C - NETsecDemo CompanyGroups CompanyGroups Computers	Directory ① Choose the mail-enabled objects, shich should eyr ① Concose the mail-enabled objects, shich should eyr ① Container ① OU ① Dynamic Distribution Group ③
Contacts Somain Controllers	Choose Q Search Troperties Properties
Complexes Complexes Complexes Complexes	Name Display Name N Name Display Name Mail Logo Distinguished N
Contractors Customer Support Gig Explorering Executives Support	Dynamic Distribution Group All Employees All Employees All Employees@net. CN+All Employe
international Users international Users international Treations international Users i	Select all
Apply Scancel	< >
	< Back Next> Cancel

Selection by OU

When OUs are selected, a prompt to select the OU depth is presented. If any groups are contained in the OU, an option is available to include group membership, which will be displayed in the group contact properties.

	<u>ل</u>	contactSync
函 NETsec contac	Semployees	tTypeDetails Add value for export
Select organizational unit		
An active directory tree with all organizational mail objects included in a selected OU (and all runtime. Note: You don't need to tick the nester	 Only this OU Only Sub-OUs OU + Sub-OUs Include group memberships Include nested groups + memberships 	() () () ()
	Setting for all OUs	√ Ok
	Apply 6	Cancel

If multiple OUs have been selected, the checkbox at the bottom left will apply the settings to all selected OUs.

Click **OK**, then **Apply**.

Selection by Group and Membership

The preferred method for selecting contacts to be synchronized into user mailboxes is to search for a group which resides in Active Directory which contains all the desired mail-enabled object as group members.

The **All Employees** dynamic distribution group has been selected from the search query.

闽	NETsec contactSync - NETsec Demo	Search for on-premises objects — 🗆 🗙
New contactSync	Policy from on-premises	Search Active Directory You can search an object by inserting an expression. Uncheck all object types which you do not want to have as a result. The scope of the query is the complete forest your exchange organization belongs to. The result list contains all objects found. Select certain or all objects to be gathered for export and press apply.
Environment Configuration		all employees
Synchronization mode	Directory (1)	User i Contact i Group i
Access to Mailboxes	Choose the mail-enabled objects contacts.	S Container (1) OU (1) I Dynamic Distribution Group (1)
Mailboxes	🙀 Choose 🛛 👰 Search	Public Folder 🕕
Directory	Name Disp	Name Display Name Mail Logo DistinguishedN
Contact Folder		Dynamic Distribution Group
Notification emails		All Employees All Employees AllEmployees@net CN=All Employees
Scheduler service		
General		
Summary		< >>
		Select all
	<	>
		< Back Next > Cancel

Click Apply

You will receive a prompt to select how the group will be synchronized into user mailboxes. The selection includes only the group, only membership, or the Group and Membership. The option is also available to include nested groups.

Search for on-premises objects	自 contactSync
Search Active Directory You can search an object by inserting an expression. Uncheck all object types v want to have as a result. The scope of the query is the complete forest your exc organization belongs to. The result list contains all objects found. Select certain be gathered for export and press apply. all employees User Image: Contact Container Image: Contact Public Folder Image: Contact Name Display Name Mail Logo Dynamic Distribution Group ✓ All Employees All Employees All Employees All Employees All Employees	 All Employees Group Option Exportable RecipientTypeDetails Add value for export Only group Only Membership Group + Membership Include nested groups Include nested groups
	☐ Setting for all groups ③

Ensure the selected group is displayed in the Directory window

国	NETsec contactSync - NETsec Demo Hybrid - New Policy	×
New contactSync	Policy from on-premises Exchange	~
 Environment Configuration Synchronization mode Access to Mailboxes Mailboxes 	Directory (1) Choose the mail-enabled objects, which should synchronize into the users 'mailboxes as contacts.	
 Directory Contact Folder Notification emails Scheduler service General 	Name Display Name Mail Logo Option Dynamic Distribution Group All Employees All Employees All Employees Only Me	Exp 161
Summary	<	>
	< Back Next > Can	cel

Then click Next

Select the Mailbox Contact Folder

Click **Choose** to select the contacts folder where the contacts will be synchronized to.

contactSync, can be configured to import contacts directly into the top-level Contacts folder. We recommend a new folder is created, which keeps the contactSync created contacts separate from the user-created contacts.

	NETsec contactSync	×
NETsec contactSync - NETsec Demo	Please select a folder for contact synchronization. We recommend to create a new folder for the contact synchronization. All folders displayed by this control can be selected. Adding and deleting folders inside this dialog will not result in physically removing or adding this folder inside a mailbox.	1
New contactSync Policy from on-premises Revironment Configuration Synchronization mode Access to Mailboxes Mailboxes Properties	Selected Path: Mailbox\Contacts\NewFolder	•
Directory Contact Folder Notification emails Scheduler service General Summary	Allow synchronization into the well-known contact folder of the mailboxes Do not bluch untagged contacts, these contacts will not be synchronized Synchronize untagged contacts with contactSync Synchronize an additional contact for each untagged contact	(i) (i) (i)
	Create folder 1 Remove folder 1 V Cancel	-

Select the top-level **Contacts** folder, then click **Create folder** to create a subfolder where the contacts will be synchronized, then give the new folder a name.

Click **OK**, then click **Next**.

Status notification email

An optional status notification email can be sent to the specified recipient(s) each time the policy runs, which provides a brief summary of activity. However, if your preference is to receive one only when an error has been logged, check the **Send only on error** checkbox. Click the **Test** button to send a test email. Then verify it has been received.

Click Next.

臣	NETsec contactSync - NE	Tsec Demo Hybrid - New Policy	×
New contactSync	: Policy from on-pr	emises Exchange	
 Environment Configuration Synchronization mode Access to Mailboxes 	Status notificatio	n emails	
Mailboxes Directory Contact Folder	Subject Send to	contactSync Summary - Contacts for All Employees administrator@netsecdemo.com	() ()
 Notification emails Scheduler service General 		Test I Send only on error	1
Summary			
		< Back Next >	Cancel

Schedule policy run

contactSync can be scheduled to run at regular intervals. We recommend the policy is manually run before any schedules are set. After the synchronization has completed successfully, you can go back and set it to run on the desired schedule.

Click Next.

	NETsec contactSync - Company Demo - New Policy	×
New contactSync	Policy for on-premises Exchange	
Environment Configuration	Scheduler service	-
Synchronization mode	No schedule service Weekly Monthly	Ð
Access to Mailboxes		
Mailboxes		
Directory		
Contact Folder		
Notification emails		
Scheduler service		
🗏 General		
Summary		
	< Back Next :	> Cancel

The **Weekly** schedule allows you to select which days of the week the policy runs, along with start time and frequency.

Scheduler service			
○ No schedule service	Weekly	Monthly	i
Monday	Tuesday	Wednesday	
Thursday	Friday	Saturday	
Sunday			
every day			
start time 0	➡ h O➡ min	once a day	•

The **Monthly** schedule allows you to select which days of the month the policy runs, along with start time and frequency.

Schedu	ller servi	æ						
O No scl	nedule serv	ice 🚺	0	Weekly	i	Mon	thly 🚺	
□ 1.	2 .	3.	4.	5.	6 .	7.	29.	
8.	<mark>9</mark> .	<u> </u>	□ 11.	12 .	13.	☐ 14.	30.	
15.	16 .	☐ 17.	18.	19.	20.	21.	31.	
22.	23.	24.	25.	26.	27.	28.		
start tir	ne	0 . ↓ h	0	÷ min	once a	day	T	١

Policy name and description

Enter a policy name and optional description, then click Next.

围	NETsec contactSync - NETsec Demo Hybrid - New Policy	×
New contactSync	Policy from on-premises Exchange	
Environment Configuration Synchronization mode Access to Mailboxes	General Policy Name	
Mailboxes	Contacts for All Employees Description	
 Directory Contact Folder Notification emails 	Synchronizes the members of the All Employees Dynamic Distribution Group into each group member's mailbox contained therein.	
 Scheduler service General 		
Summary	Environment Configuration	
	< Back Next > Cance	el l

To ensure your settings have been properly configured contactSync will check your policy settings and notify you of any detected errors.

Click Finish.

與	NETsec contactSync - NETsec Dem	no Hybrid - New Policy	×
Summary			
Environment Configuration Synchronization mode Access to Mailboxes	Summary	Ø Not Used	
	Policy name	Contacts for All Employees	
Mailboxes	Synchronization mode	Synchronize GAL to on-premises mailboxes.	
Directory	Oirectory	Objects selected	
Contact Folder	Mailboxes	1 entry found	
Notification emails	Contact Folder	Mailbox\Contacts\All Employees	
	Votification	Logon to mailbox	
Scheduler service	Notification	Send test mail to recipient	
General	Scheduler service		
Summary			
			N
		< Back Finish	Cancel

Execute Policy and Check Log File

The new policy is accessible by selecting it from either link shown below. Select the policy node.



Click the Run button.

国	NETsec contactSync	– 🗆 ×
FILE ACTION OPTIONS HELF		
ContactSync	Contacts for All Employees	🙆 <u>C</u> ancel
NETsec Demo Hybrid Sector All Employees	💿 Environment 🧟 Delete 🗟 Clone 🚳 Test 💈 Counter 🕨 Run 🕕 Status	
	🧟 General 🦓 Synchronization mode 🥝 Access to Mailboxes 🚱 Mailboxes 🐁 Directory 🧕 Contact F	Folder 🕻 🖡 🕨
	General	
	Policy Name	(1)
	Contacts for All Employees	

The status and a detailed summary are displayed upon completion.

All operations have been summarized below. Further details can be obtained from the log file.



Results of synchronization shown below.



The corresponding log file can be opened by selecting the Status tab, and right-clicking the associated log and selecting **Open log file** from the context menu. This allows you to easily find the error and identify its cause.

(j)	NETsec contactSync	– 🗆 ×
FILE ACTION OPTIONS HELF		
□ tontactSync	Contacts for All Employees	🙆 <u>C</u> ancel
VETsec Demo Hybrid	Environments 🥞 Create Policy	
	🎲 Settings 🔯 Exchange 🌐 Environments 🖉 Policies 🚺 Status 😢 Help	
	All Gontacts for A - Not Hide: O Completed A Canceled B Errors	🙆 Reload
	Policy Name Start Time Operati Errors Analy Added Modifi Up-to	Deleted
	contactSync	
	Contacts for Al. 3/29/2024 8:14:5 Completed 0 186 62:50 82 0 9 So Contacts for Al. 3/29/2024 8:14:5 Completed 185 186 0	
	Copen log file	
	Export log file	
	Export all log files	

Searching for the string **error** yields 282 log entries containing this string.

Right-click any line which contains an error, then select open details.

Details of the error can be found in both the Message and Exmessage marked below.

The error indicates binding to the configured contact folder failed. Upon further review of the configuration, the dedicated users to write to this folder are lacking the Application Impersonation Role. After assigning the correction permissions, the policy run was successful

D	log20240329081450_970x06058.txt - NETsec LogViewer – 🗆 🗙
📙 Open 🖶 Save \mid 🍸 Set Filter 🍸 Clea	r Filter 📔 🖉 🔎 🔎 Clear Search
Timestamp Policy 20240329_081451_188 ContactsforAllEmployees.xm 20240320_001451_180 ContactsforAllEmployees.xm	log20240329081450_970x06058.txt - NETsec LogViewer Details ×
20240329_081451_190 ContactsforAllEmployees.xm 20240329_081451_190 ContactsforAllEmployees.xm 20240329_081451_190 ContactsforAllEmployees.xm 20240329_081451_243 ContactsforAllEmployee.xm	ContactsforAllEmployees.xml Typ Error Code Typ
20240329_081451_243 ContactsforAllEmployees.xm 20240329_081451_245 ContactsforAllEmployees.xm 20240329_081451_245 ContactsforAllEmployees.xm 20240329_081451_245 ContactsforAllEmployees.xm	53006 vés, iransferritioden/Ubjects:XV, rý Task
20240329_081451_246 Contactsfor/IIEmployees.xm 20240329_081451_246 Contactsfor/IIEmployees.xm 20240329_081451_247 Contactsfor/IIEmployees.xm 20240329_081451_247 Contactsfor/IIEmployees.xm	62 Source contactSyncLibrary.ContactFolderFunctions.EnsureContactFolderExistance() Message
20240329_081451_247_C_ntactsforAllEmployees.xm 20240329_081451_248_ContactsforAllEmployees.xm 20240329_081451_248_ContactsforAllEmployees.xm	2. Binding to folder failed. You may want to check, if the credentials given for ews-service (netsecdemo\blazer) have not the permission to access to TodCURZ@netsecdemo.com's mailbox and (contact) folders. Exmessage Resolving Exchange Web Services URL via Autodiscover with mail address 'TodCURZ@netsecdemo.com' for the on-premises Exchange Server
20240329_081451_248_ContactsforAllEmployees.xm 20240329_081451_249_ContactsforAllEmployees.xm 20240329_081451_249_ContactsforAllEmployees.xm 20240329_081451_249_ContactsforAllEmployees.xm	failed. Please check that the mailbox of netsecdemolyblazer' is located on the on-premises Exchange Server and the permissions and credentials for 'netsecdemolyblazer' are correct. Otherwise configure the manual setting for the Exchange Web Services URL of the on- premises Exchange Server, (ExMessage: The Autodiscover service couldn't be located.) The Autodiscover service couldn't be located.
282 results found	Exsource 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
20240329_081506_345 [ContactsforAllEmployes.xr 20240329_081506_346 [ContactsforAllEmployees.xr 20240329_081506_347 [ContactsforAllEmployees.xr 20240329_081507_772 [ContactsforAllEmployees.xr 20240329_081507_772 [ContactsforAllEmployees.xr	I Gront 53000 2612 62 contactSynt Show line in main view ContactFolderExistance() 2. Binding to folder failed. You may want to check, if the credentials given for ew I Gront 44042 2012 542 GALsynchit Doen details ToSingleMailbox() Enversion FourierstangeErlolderExistance() Processing destination user failed. You may want to check, if the credentials given for ew I Gront 44042 2612 622 GALsynchit Dopen details ToSingleMailbox() Processing destination user failed Todd CUR2 (SMTP.TodCUR2@netsecdem.corl I Gront 44048 2614 52 GALsynchit Add to Search ToSingleMailbox() Processing destination user failed. Todd CUR2 (SMTP.TodCUR2@netsecdem.corl I Gront 44048 2614 52 GALsynchit Add to Search ToSingleMailbox() Processing destination user failed. Todd user year to check, if the credentias given for ew I Gront 44048 6514 52 GALsynchit W Save results to file ToSingleMailbox() FourtStructFoldFoldFoldEx fold fold fold fold fold fold fold fold
Copyright © NETsec GmbH & Co. KG 2019-2024 - \	rersion 2.8.0.0 📔 C\ProgramData\NETsec GmbH & Co. KG\contactSymc\log files\log20240329_081450_970x06058.txt

Synchronize Contacts from Exchange Online into Mailboxes

contactSync allows you to synchronize mail-enabled objects directly from Exchange Online as contacts into user mailboxes. It will connect to user mailboxes in your local Exchange Environment, whether it is in Exchange on-premises, Exchange Online or part of a hybrid Exchange environment.

Create new policy

Select the desired environment node, then click **Create Policy**.

車	NETsec contactSync	- 🗆 ×
FILE ACTION OPTIONS HELF	,	
ContactSync	NETsec Demo Hybrid	🐼 <u>C</u> ancel
📟 🕮 NE <u>Tsec Demo Hvbrid</u>	Environment BC create Policy	
🥰 Create Policy 🔪		
Environments	Denvironments 🖾 Policies 💵 Status 🔇 Help	
Status	Policy Name Description	
Juitas		
Configuration		

Ensure the desired environment has been selected from the dropdown.

闽	NETsec contactSync - NETsec Demo Hybrid - New Policy	×
Environment Con	figuration	
 Environment Configuration Synchronization mode Access to Mailboxes Mailboxes Unknown Source Contact Folder Notification emails Scheduler service General Summary 	Environment Configuration Please choose the Environment Configuration for the new policy NETsec Demo Hybrid + Hybrid Exchange environment and the contactSync Server is member of the on-premises Active Directory.	t> Cancel
	100	Cancer

Synchronization mode

Select Synchronize directory information (GAL) from Exchange Online into users' mailboxes in the Exchange Environment.

Click Next.

庳	NETsec contactSync - NETsec Demo Hybrid - New Policy	×
New contactSynd	Policy from Exchange Online	
Environment Configuration	Synchronization mode	
 Synchronization mode Access to Mailboxes Directory Contact Folder Notification emails Scheduler service General Summary 	 1. What do you want to do? Synchronize directory information (GAL) from on-premises into users' mailboxes in the Exchange environment. Synchronize directory information (GAL) from Exchange Online into users' mailboxes in the Exchange environment. Synchronize public folder contacts into users' mailboxes in an Exchange environment. Synchronize shared mailbox contacts into users' mailboxes in an Exchange environment. 	() () () ()
	< Back Next >	Cancel

Access to Mailboxes for On-Premises Exchange

contactSync requires access to user mailboxes in order to write to their contacts folder. The **Exchange Application Impersonation** can be configured for such access, which allows up to 5 concurrent connections to user mailboxes.

By default, contactSync will use the account which has been configured in the Environment configuration.

These two roles can be split between two separate accounts by entering the credentials of a dedicated mailbox user that has the **Application Impersonation** role.

]	NETsec contactSync - NETsec Demo Hybrid - New Policy	:
New contactSync	Policy from Exchange Online	
 Environment Configuration Synchronization mode 	Access to Mailboxes	^
 Access to Mailboxes Mailboxes 	5 count of concurrent mailboxes getting the contacts e.g. 5 mailboxes concurrently	1
 Directory Contact Folder 	Credentials of the on-premises service account	(i)
Notification emails	O Credentials of a dedicated mailbox user User Name:	() ()
General	Password: E-Mail Address:	(i) (i)
Summary	Exchange Web Services URL of on-premises Exchange	
	Manual setting e.g. https://casserver.domain.local/EWS/Exchange.asmx	• •
	< Back Next >	Cancel

Please take a look at the chapter:

How to configure Exchange Application Impersonation

Access to Mailboxes for Exchange Online

By default, contactSync uses the Environment Configuration to access mailboxes. Application Impersonation, required for on-premises Exchange, will not be necessary when the certificate authentication via App Registration for Exchange Online is configured in the Environment Configuration.

Please take a look at the chapter

Exchange Online certificate-based authentication via App Registration

臣	NETsec contactSync - NETsec Demo Hybrid - New Policy	×
New contactSync	Policy from Exchange Online	
 Environment Configuration Synchronization mode 	Account for access of Exchange Online mailboxes	^
Access to Mailboxes	5 count of concurrent mailboxes getting the contacts e.g. 5 mailboxes concurrently	
Directory	Use the Environment Configuration settings	
Contact Folder	O Credentials of a dedicated mailbox user	
Notification emails	User Name:	
Scheduler service	E-Mail Address:	
🗏 General	Modern authentication OAuth 2.0 for Exchange Online Login	
Summary	My Azure Cloud Instance is hosted by:	
	Microsoft Azure public cloud	
	Exchange Web Services URL of Exchange Online	
	https://outlook.office365.com/EWS/Exchange.asmx	~
	<back next=""> Car</back>	ncel

Click Next

Select the Mailboxes from On-Premises Exchange

You can select Mailboxes located in an on-premises Exchange Server, which will receive contacts. It could be an on-premises Exchange environment or a part of a hybrid Exchange environment.

In the **Mailboxes** window, you are prompted to select the mailboxes which will receive the contacts. There are two ways to do make your selection.

	NETsec contactSync - NETsec Demo Hybrid - New Policy	
New contactSynd	Policy from Exchange Online	
 Environment Configuration Synchronization mode Access to Mailboxes Mailboxes 	Mailboxes (1) Search and choose either Exchange Online or on-premises mailbox users which will rece mail-enabled objects as contacts.	emove
 Directory Contact Folder Notification emails Scheduler service General Summary 	Display Name Primary SMTP Address Recipient Type Group	Option
	< 	> Cancel

- Click **Choose** to select mailboxes by OU where they reside in Active Directory.
- Click **Search** to open a search dialogue window from which you can search for the desired Active Directory objects. When searching Active Directory, mailboxes can be selected individually, by group membership, by container, or by OU. If you have a hybrid Exchange environment, an additional option is available to search for Exchange Online objects.

NETsec contactSync - NETsec Demo Hybrid	囱	NETsec contactSync	- 🗆 ×
Policy from Exchange Online	 Search Active Directory Se You can search an object by inserting an complete forest your exchange organizat mailbox users and press apply. 	earch Exchange Online excression. Uncheck all object types which you do not want to hav on belongs to. The result list contains all objects found. Selected	e as a result. The scope of the query is the an or all objects to be gathered for resolve
Mailboxes () Search and choose either Exchange Onli mail-enabled objects as contracts.	al employees If User If OU If Container If Group Message: Search for objects in the domain Active Directory search is finished.	DynamicDistributionGrap	
Display Name Primary SMTP	Display Name DynamicDistributionGroup	Penary Sntp Address Recipient Type AllEnployees@netsecdemo.com MsExchDynam	DistriguishedName
د	Select all	Cancel	Apply Scancel
	NTrue contactsync - NTrue Demo Hydrol Policy from Exchange Online Mailboxes Saarch and choose either Exclures Online Saarch and choose either Exclures Online Deplay Name Primary SMTP Deplay Name Primary SMTP	KThe contactive: NETher bono hybrid Policy from Exchange Online Not can serie an object by inserting an You can serie an You can seri	X Mitthee contactSync Policy from Exchange Online Image: Search and object by insetting an excrement. Uncheck all object to ynes which you 20metange to here inside in the object by insetting an excrement. Uncheck all object to ynes which you 20metange to here inside in the object by insetting an excrement. Uncheck all object to ynes which you 20metange to here inside interference interference inside interference inside interference inside interference

When the **Search Exchange Online** Radio Button has been selected, you can search for objects by Recipient Type, such as **UserMailbox**, **MailUniversalDistributionGroup**, **MailUniversalSecurityGroup**, **DynamicDistributionGroup**, or **Office365 Group**.

When OUs are selected, a prompt to select the OU depth is presented. If any groups are contained in the OU, contactSync will prompt the user to include mailboxes by group membership.

If multiple OUs have been selected, the checkbox at the bottom left will apply the settings to all selected OUs.

Click **OK**, then **Apply**.

	Ē		contactSync	
		Semployees		
NETsec contac		OU Option Exportable Recipient	TypeDetails	
Select organizational unit				
An active directory tree with all organizational mailbox users included in a selected OU (and a		Only this OU	i	
contacts to their mailbox. Note: You don't need		Only Sub-OUs	i	
En 🔄 NETsecDemo.Local		OU + Sub-OUs	i	
UC=NETsecDemo		Include group memberships	i	
		Include nested	i	
Contacts Grading Controllers		groupa + memberanipa		
🗗 🔽 😋 Employees 🗸				
🗌 🔄 Accounting				
Contractors				
Customer Support				
🖂 뉔 International Users	[Setting for all OUs 🔹 🕕		🖌 Ok
📃 🦾 П 🗠 П				
		Apply 🔇	Cancel	

Verify the selected OUs are displayed.

Click Apply

4]	NETsec contactSync - NETsec Demo Hybrid - New Policy	×			
New contactSync P Environment Configuration Synchronization mode Access to Mailboxes Mailboxes Directory	It is sec contact sync - NETsec Demo Hybrid - New Policy olicy from Exchange Online Mailboxes () Search and choose either Exchange Online or on-premises mailbox users which will receive mail-enabled objects as contacts. Image: Choose () Image: Choose () <				
 Contact Folder Notification emails Scheduler service General Summary 	AD OU Employees OrganizationalUnit OU + SubOU				
	< Back Next > Cance	:			

Click Next.

Instead of selecting OUs in Active Directory as described above, in the following example, the "All Employees" Dynamic Distribution Group has been selected from the Active Directory search.

		ē		NETsec contactSync		- 🗆 ×
	NETsec contactSync - NETsec Demo Hybrid	Search Active Direct	ory OSearch Excha	nge Online		
New contactSync	Policy from Exchange Online	You can search an object complete forest your exc mailbox users and press	t by inserting an expression. hange organization belongs t apply.	Uncheck all object types which you do no o. The result list contains all objects found	t want to have as a result. The scope of I. Select certain or all objects to be gat	of the query is the thered for resolve
	/	all employees				Search
 Environment Configuration Synchronization mode 	Mailboxes (1)	User Container	✓ OU ✓ Group	DynamicDistributionGroup		maximum Results
 Access to Mailboxes Mailboxes 	Search and choose either Exchange Unlin mail-enabled objects as contacts.	Message: Search for obje Active Directory search is	ects in the domain LDAP://NET	secDemo.Local		Show log
 Directory Contact Folder 	Display Name Primary SMTP	Display Name DynamicDistribution	nGroup	Primary Smtp Address	Recipient Type	DistinguishedName
 Notification emails Scheduler service 		All Employees		AllEmployees@netsecdemo.com	MsExchDynamicDistributionList	CN=All Employees,
General						
Summary						
		Select all			Apply	Cancel
	s and the second		>			
		< Back	Next > Cancel			

All members with a mailbox in the selected group will receive the contacts, an option is also available to include nested groups.

庳] contactSync							
	All Employees							
	Group Option Exportable RecipientTypeDetails							
	Only Membership (1)							
	Include nested groups							
	Setting for all groups (1)							

Click OK.

The selected group(s) are displayed under the appropriate heading.

围	NETsec contactSync - NETsec Demo Hybrid - New Policy	×
New contactSync	Policy from Exchange Online	
 Environment Configuration Synchronization mode Access to Mailboxes Mailboxes 	Mailboxes ① Search and choose either Exchange Online or on-premises mailbox users which will receive mail-enabled objects as contacts.	
 Directory Contact Folder Notification emails Scheduler service General Summary 	Display Name Primary SMTP Address Recipient Type Group Option AD DynamicDistributionGroup All Employees AllEmployees@netsecdemoc MsExchDynamicDist Only Member	n rs
	< <p>K State Cancel</p>	el

Verify the selected Group(s) is displayed.

Click Next.

Select the Mailboxes from Exchange Online

You can select Mailboxes located in Exchange Online which will receive the contacts. This is possible for an Exchange Online environment or a part of any hybrid Exchange environment, as shown in the screenshot below.

When searching for Exchange Online objects, you can search for objects by Recipient Type, such as UserMailbox, MailUniversalDistributionGroup, MailUniversalSecurityGroup, DynamicDistributionGroup, or Office365 Group.

庳	NETsec contactSync - NETsec Demo Hybrid	南	NETsec contactSync		- 🗆 ×
New contactSync	Policy from Exchange Online	You can search an object by insatifing an ex forest your exchange organization belongs t apply.	ch Exchange Online pression. Uncheck all object types which you do not want to o. The result list contains all objects found. Select certained	have as a result. The scope of the q all objects to be gathered for resolve	uery is the complete mailbox users and press
Environment Configuration Synchronization mode Access to Mailboxes Mailboxes Directory	Mailboxes () Search and choose either Exchange Online mail-enabled objects as contacts.	al employees	UniversalSecurityGroup II Office385Group micDistributionGroup		
Contact Folder	Display Name Primary SMTP A	Dienlay Name	Primary Smto Address	Recipient Type	DistinguishedName
Notification emails		DynamicDistributionGroup		Treopers Type	Distriguisticartanio
Scheduler service		 All Employees 	AllEmployees@netsecDemo.com	DynamicDistributionGro	CN=All Employees,
General					
Summary	K	Select all		🖋 Apply	r ── ── ── ── ── ── ── ── ── ── .d
		< Back Next > C	ancel		

In the example above, the **All Employees** Dynamic Distribution Group has been selected. You can expand your search by inserting a wild card character (*).

Click Apply.

102

All members with a mailbox in the selected group will receive the contacts, an option is also available to include nested groups.

庳	NETsec contactSync	×					
All Employees							
Group Option Exportal	ble RecipientTypeDetails						
Only Membership	(1)						
Include nested gro	ıps 👔						
L	🖌 Ok	X Cancel					

Click OK

Verify the selected group(s) are displayed. Click Next.

臣	NETsec contactSync - NETsec Demo Hybrid - New Policy	×				
New contactSync Policy from Exchange Online						
 Environment Configuration Synchronization mode Access to Mailboxes Mailboxes 	Mailboxes (1) Search and choose either Exchange Online or on-premises mailbox users which will receive mail-enabled objects as contacts.					
 Directory Contact Folder Notification emails Scheduler service General Summary 	Display Name Primary SMTP Address Recipient Type Group Option EXO DynamicDistributionGroup	s				
	< >					
	< Back Next > Cance	1				

Select mail-enabled objects on the Directory tab from Exchange Online

Click **Search** to search for objects via Exchange Online PowerShell query. They can be selected individually, or by group membership (preferred method).

囱	NETsec contactSync - NETsec Demo Hybrid	a	Search for Exchange Online objects		- 🗆 ×
New contactSync	Policy from Exchange Online	Search Exchange Online			
,		You can search an object by inserting an expression. Unc forest your exchange organization belongs to. The result li	neck all object types which you do not want st contains all objects found. Select certain	to have as a result. The scope of the o or all objects to be gathered for export	uery is the complete and press apply.
Environment Configuration		all employees			Search
Synchronization mode	Directory (1)	✓ UserMailbox ✓ MailContact	MailUniversalSecurityGro	p 🗹 Office365Group	energianum Resulta
Access to Mailboxes	Search and choose the Exchange Online o mailboxes as contacts.	MailUser MailUniversalDistr	ibutionGroup 🖉 DynamicDistributionGroup		500 ÷
Mailboxes Directory		Warning No remote PowerShell connections is available an	/more.		^
		Information Remote PowerShell connections: 0 ; No connec The ConnectionInfo method was called from: <pre>cps_RemotePo</pre>	tion: 0 wershellDisconnected>b0		✓ Show log
Contact Folder	Name Display Na	Display Name	Mail	Recipient Type	DistinguishedName
Notification emails		DynamicDistributionGroup			
Scheduler service		All Employees	SMTP:AllEmployees@netsecDemo	DynamicDistributionGroup	CN=All Employees,OU=
General					
Summary					
					,
	<	Select all		M Apply	/ 🔯 Cancel
		<back next=""> Cancel</back>			

We recommend selecting a group which contains all the desired objects to be synchronized into the target mailboxes. This will prevent service accounts and other unnecessary objects from being synchronized into them.

When a group is selected, a prompt is presented to select how to handle its synchronization. These options include:

- Only group
- Only Membership
- Group + Membership

An option is also available to include nested groups.

If multiple groups have been selected, the above settings can be applied individually, or checking the **Settings for All Groups** will apply the settings to all selected groups.

In the example below, only group members will be synchronized.

Click OK

庳	NETsec	contactSync	×
🕮 All Employ	yees		
Group Option	Exportable Recipier	ntTypeDetails Add value	for export
Only gro	oup	(I)	
Only Me	mbership	() ()	
Group +	Membership	i	
Include i	nested groups	(i)	
Setting for a	ill groups 🔳	🖋 Ok	X Cancel

Ensure the selected group is displayed, then click $\ensuremath{\textbf{Next}}.$

]	NETsec contactSync - NETsec Demo Hybrid - New Policy	>					
New contactSync Policy from Exchange Online							
 Environment Configuration Synchronization mode Access to Mailboxes 	Directory (1) Search and choose the Exchange Online objects, which should synchronize into the mailboxes as contacts.	ie users'					
 Mailboxes Directory 	Choose A Search Reporties Settings	💥 Remove					
Contact Folder	Name Display Name Mail Recipient T	Group Option					
 Notification emails Scheduler service 	All Employees All Employees SMTP:AllEmpl DynamicDistri	Only Member					
General							
Summary							
	<	>					
	< Back Next >	Cancel					

Select the Mailbox Contact Folder

Click **Choose** to select the contacts folder where the contacts will be synchronized to.

contactSync, can be configured to import contacts directly into the top-level Contacts folder. We recommend a new folder is created, which keeps the contactSync created contacts separate from the user-created contacts.

		NETsec contactSync	×
<u>ت</u>	NETsec contactSync - NETsec Demo Hybrid	Please select a folder for contact synchronization. We recommend to create a new folder for the contact synchronization.	(i)
New contactSync	Policy from Exchange Online	All folders displayed by this control can be selected. Adding and deleting folders inside this dialog will not result in physically removing or adding this folder inside a mailbox.	
		Selected Path: Mailbox\Contacts\NewFolder	i
Environment Configuration		Contacts CompanyEmployees	
Synchronization mode	Mailbox Contact Folder		
Access to Mailboxes	Choose 🕽 🕄		
Mailboxes	Properties (1)		
Directory			
Contact Folder		Allow synchronization into the well-known contact folder of the mailboxes	i
Notification emails	Selected of	O Do not buch untagged contacts, these contacts will not be synchronized	i
Scheduler service	Nothing selected	O Synchronize untagged contacts with contactSync	i
General		Synchronize an additional contact for each untagged contact	i
Summary		Delete all upported excilence contacts during the post even tion	
		Delete an unmached manbox contacts during the next execution	
		Create folder 👔 🖌 🖉 Can	bel
		< Back Next > Cancel	

Select the top-level **Contacts** folder, then click **Create folder** to create a subfolder where the contacts will be synchronized, then give the new folder a name.

Click OK, then click Next

Status notification email

An optional status notification email can be sent to the specified recipient(s) each time the policy runs, which provides a brief summary of activity. However, if your preference is to receive one only when an error has been logged, check the **Send only on error** checkbox. Click the **Test** button to send a test email. Then verify it has been received.

Click Next.

Ē	NETsec contactSync - NET	sec Demo Hybrid - New Poli	cy	×		
New contactSync Policy from Exchange Online						
 Environment Configuration Synchronization mode Access to Mailboxes Mailboxes Directory Contact Folder Notification emails Scheduler service General Summary 	Status notification Send Summary Subject Send to	emails (1) contactSync Summary - Comp administrator@netsecdemo.co Test (1)	any Employees m ✓ Send only on error	 (1) (1) (1) (1) (1) 		
			< Back Next >	Cancel		
Schedule policy run

contactSync can be scheduled to run at regular intervals. We recommend the policy is manually run before any schedules are set. After the synchronization has completed successfully, you can go back and set it to run on the desired schedule.

Click Next.



The **Weekly** schedule allows you to select which days of the week the policy runs, along with start time and frequency.

Scheduler service			
○ No schedule service	Weekly	Monthly	(i)
Monday	Tuesday	Wednesday	
Thursday	Friday	Saturday	
Sunday			
every day			
start time 0	♠ h 0♣ min	once a day	•
	// //	/	

The **Monthly** schedule allows you to select which days of the month the policy runs, along with start time and frequency.

	Schedul	er servio	æ	~					
	Nosche	edule servi	ice 🔳	0	Weekly	1	• Mon	thly 🔳	
	□ 1.	2 .	3.	4.	5.	6 .	7.	29.	
	8.	9 .	10.	<u> </u>	12 .	13.	14.	30.	
	15.	<u> </u>	<u> </u>	18.	<u> </u>	20.	21 .	31.	
	22 .	23.	24.	25.	26.	27.	28.		
	start tim	e	0 🌩 h	0	≑ min	once a	day	•	(
Į									

Policy name and description

Enter a policy name and an optional description, then click $\ensuremath{\textbf{Next}}.$

函	NETsec contactSync - NETsec Demo Hybrid - New Policy	×
New contactSync I	Policy from Exchange Online	
Environment Configuration Synchronization mode	General Policy Name	(
Access to Mailboxes	Company Employees	
Mailboxes Directory Contact Folder Notification emails	Description This policy will synchronize all Exchange Online All Employees Dynamic Distribution Group as contacts into the same All Employees Dynamic distribution group members' mailboxes.	1
Scheduler service		¥
General		
Summary	Environment Configuration	•
	NETsec Demo Hybrid	-
	< Back Next >	Cancel

To ensure your settings have been properly configured contactSync will check your policy settings and notify you of any detected errors.

Click Finish.

۵	NETsec contactSync - NETsec Den	no Hybrid - New Policy X
Summary		
Environment Configuration Synchronization mode Access to Mailboxes	Summary Serror Ok	Not Used
	Policy name	Company Employees
Manboxes	Synchronization mode	Synchronize GAL to Exchange Online mailboxes.
Directory	Oirectory	Objects selected
Contact Folder	Mailboxes	1 entry found
Notification empile	Contact Folder	Mailbox\Contacts\Company Employees
Noulicationemails	Notification	Logon to mailbox
Scheduler service	Votification	Send test mail to recipient
General	Scheduler service	
Summary		
·		
		< Back Finish Cancel

Execute policy and check log files

The new policy is accessible by selecting it from either link shown below. Select the policy node.

庳	NETsec contactSync – 🗖 🗧
FILE ACTION OPTIONS HELI	p
ContactSync	NETsec Demo Hybrid
Company Employees	Environment Create Environment Create Policy
Company Employed	🏟 Settings 🔯 Exchange 🌒 Environments 🜌 Policies 🕡 Status 🔞 Help
	Policy Name Description
	NETsec Demo Hybrid contactSync Policies
<	Company Employees This policy will synchronize all company employees into all company employees

Click Run.

国	NETsec contactSync	– 🗆 ×
FILE ACTION OPTIONS HEL	P	
ContactSync	Company Employees	Order Cancel
NETsec Demo Hybrid Scompany Employees	Image: Status Status Image: Status <	
	🧟 General 🍓 Synchronization mode 🥝 Access to Mailboxes 🕡 Mailboxes 🌆 Directory 🧕 Contact F	Folder 🕻 🖡 🕨
	General	
	Policy Name	:
	Company Employees	
	Description	1
	This policy will synchronize all company employees into all company employees' maibloxes as contacts	^

The status and a detailed summary are displayed upon completion. contactSync synchronized 7 contacts into 2 separate mailboxes.

車		NETsec contactSync		- 🗆 ×
FILE	ACTION OPTIONS H	ELP		
a Co	npany Employees			📊 Save 🛛 🐼 Cancel
	Run 🔟 Status 🚳 Close			
Status —	6 1 I I			
Policy r	on finished			
Folicy r	untime 0.00.30			
Summan	/			
Analyze	d objects: 0			
Mailbox	es: IZ			
Last me	u objects: u seage: Import into mailboxes done	· Mailhoves to be imported into: 12 Mailhoves su	coessfully imported into: 11 Mailhoyes failed to be	imported into: 1 Contacts
Data file	objects read: 8	. Manbakes to be imported into. 12 (Manbakes Su	coostany imported into. If phanboxes failed to be	Imported mo. 1 contacta
Contact	s to be synchronized with each ma	ailbox: 8		
Mailbox	es to be imported into: 12			
Process	ed mailboxes: 12			
Import f	ailed for mailboxes: 0			
Count o	finner warnings occured during in	nport: 0		
Count o	finner errors occured during impo	rt: 0		
Details -				
Receive	enartial results: 43			
Merged	obiects: 10			
Skipped	mastered-on-premises objects: 0)		
Contact	s to be created: 88			
Contact	s matched: 0			
Contact	s uptodate: 0			
Contact	s to be modified: 0			
Contact	s to be deleted: 0			
Contact	s created: 88			
Contact	s modified: 0			
Contact	s deleted: 0			
Contact	s failed to be created: 0			
Contact	s railed to be modified: U			
Contact	s idiled to be deleted. U			~
Information	Search for mailboxes In Exchang	e Online has finished. Only count: False		
Information	Search for mailboxes In Exchange	e Online has finished. Only count: False		
Stop showin	g PowerShell log entries.			
S NETSE	CDEMO\svc_contactsync 4	x64 🛛 🌾 contactSyncService is Running	🗞 NETsecDemo\Svc_contactSync	

Results of synchronization shown below.



The corresponding log file can be opened by selecting the **Status** tab, and right-clicking the associated log and selecting **Open log file** from the context menu. This allows you to easily find the error and identify its cause.

囱	NETsec contactSync	- 🗆 ×
FILE ACTION OPTIONS HEL	P	
ContactSync	Company Employees	🐼 <u>C</u> ancel
D NETsec Demo Hybrid	Environments @Create Policy	
	🏶 Settings 📓 Exchange 🌐 Environments 🖉 Polici 🕻 间 Status 🔰 Help	
	🕨 All 🚽 🥥 Company Em 👻 🧏 Hide: 🖉 Completed 🙆 Canceled 🔕 Errors	🙆 Reload
	Policy Name Start Time Operati Errors Analy Added Modifi Up-to	Deleted
	contactSync	
	Company Er 🛃 Open log file 2 26 99 0 0	0
	Export log file	
	Export all log files	

Searching for the string "error" yields 3 log entries containing this string.

Double-click the line which contains the error. This will highlight the line in the log which contains the details of this log entry.

Double-click the highlighted line in the log viewer to open a new window containing the details of the error.



Synchronize Contacts from Public Folder

contactSync allows you to synchronize contacts directly from a public folder to user mailboxes. It will connect to public folders in your local Exchange Environment, whether it is in Exchange on-premises or Exchange Online. In Hybrid Exchange Environments contactSync can access public folders in both locations.

Create a new policy

Right click the Environment and select **Create Policy** from the context menu.

臣	NETsec contactSync	- 🗆 ×
FILE ACTION OPTIONS HELF		
ContactSync	NETsec Demo Hybrid	🙆 <u>C</u> ancel
METsec Demo Hvbrid	Contractor Balling	
Create Policy	Environment Create Policy	
	🕒 Environments 🥝 Policies 间 Status 🕜 Help	
Environments		
Status	Policy Name Description	
Configuration		
	ŕ	

Ensure the desired environment has been selected from the dropdown.

南	NETsec contactSync - NETsec Demo Hybrid - New Policy	×
Environment Configuration Environment Configuration Synchronization mode Access to Mailboxes Mailboxes Unknown Source Contact Folder Notification emails Scheduler service General Summary	NETsec contactSync - NETsec Demo Hybrid - New Policy Ifiguration Environment Configuration Please choose the Environment Configuration for the new policy NETsec Demo Hybrid Hybrid Exchange environment and the contactSync Server is member of the on-premises Active Directory.	×
	Next >	Cancel

Synchronization mode

Select Synchronize public folder contacts into users' mailboxes in an Exchange environment.

Click Next.



Please note, the Exchange Web Services URL is required to access Public Folders.

For on-premises Public Folder, the Exchange Web Services URL for the on-premises Exchange Server must be set manually in the configuration or the mailbox of the contactSync service account must be located on the on-premises Exchange Server. The policy is cancelled if Autodiscover cannot detect the Exchange Web Services URL for the on-premises Exchange Server.

Synchronizing contacts from Public Folder, which is located in Exchange Online, is deprecated.

No access to Public Folders in Exchange Online from 1. October 2026 anymore, because Microsoft will start blocking EWS requests to Exchange Online on 1. October 2026.

Retirement of Exchange Web Services in Exchange Online

https://techcommunity.microsoft.com/blog/exchange/retirement-of-exchange-webservices-in-exchange-online/3924440

Access to Mailboxes for on-premises Exchange

contactSync requires access to user mailboxes in order to write to their contacts folder. It will be necessary to use **Exchange Application Impersonation** for access, which allows up to 5 concurrent connections to user mailboxes.

Since the contactSync mailbox requires the **Exchange Administrator** role, you can split these two roles between two separate accounts by entering the credentials of a dedicated mailbox user that has the **Application Impersonation** role.

	NETsec contactSync - NETsec Demo Hybrid - New Policy	
New contactSync	Public Folder Policy for Exchange	
 Environment Configuration Synchronization mode 	Access to Mailboxes	^
 Access to Mailboxes Mailboxes 	Account for access of on-premises Exchange mailboxes 5 count of concurrent mailboxes getting the contacts e.g. 5 mailboxes concurrently	:
 Public Folder Contact Folder 	 Credentials of the on-premises service account Credentials of a dedicated mailbox user 	() ()
 Notification emails Scheduler service 	User Name: Password:	(i)
 General Summary 	E-Mail Address:	1
	Use Autodiscover to find Exchange Web Services URL Manual setting e.g. https://cassenver.domain.local/E/V/S/Exchange.asmr.	
	< Back Next >	Cancel

Please take a look at the chapter:

How to configure Exchange Application Impersonation

Access to Mailboxes for Exchange Online

By default, contactSync uses the Environment Configuration to access mailboxes. Application Impersonation, required for on-premises Exchange, will not be necessary when the certificate authentication via App Registration for Exchange Online is configured in the Environment Configuration.

Please take a look at the chapter

Exchange Online certificate-based authentication via App Registration

🖾 NE	Tsec contactSync - Partner Demo Exchange Online - New Policy	×
New contactSync	Public Folder Policy for Exchange	
 Environment Configuration Synchronization mode 	Access to Mailboxes Account for access of Exchange Online mailboxes	^
Access to Mailboxes		
Public Folder	e.g. 5 mailboxes concurrently	
Contact Folder	Use the Environment Configuration settings	1
Notification emails	O Credentials of a dedicated mailbox user	1
Scheduler service	User Name:	
🗏 General	E-Mail Address:	
Summary	Modern authentication OAuth 2.0 for Exchange Online	
	My Azure Cloud Instance is hosted by: Microsoft Azure public cloud	
	< Back Next >	Cancel

Click Next

Select the Mailboxes from On-Premises Exchange

You can select Mailboxes located in an on-premises Exchange Server, which will receive contacts. It could be an on-premises Exchange environment or a part of a hybrid Exchange environment.

In the **Mailboxes** window, you are prompted to select the mailboxes which will receive the contacts. There are two ways to do make your selection.

與	NETsec contactSync - NETsec Demo Hybrid - New Policy	×
New contactSync	Public Folder Policy for Exchange	
 Environment Configuration Synchronization mode Access to Mailboxes Mailboxes Rublic Folder 	Mailboxes ① Search and choose either Exchange Online or on-premises mailbox users which will receive mail-enabled objects as contacts.	
Contact Folder Notification emails Scheduler service General Summary	Display Name Primary SMTP Address Recipient Type Group Optio	n
	< <p>K Sack Next > Cancel</p>	el

- Click **Choose** to select mailboxes by OU where they reside in Active Directory.
- Click **Search** to open a search dialogue window from which you can search for the desired Active Directory objects. When searching Active Directory, mailboxes can be selected individually, by group membership, by container, or by OU. If you have a hybrid Exchange environment, an additional option is available to search for Exchange Online objects.

🗈 NETsec contactSync — 🗆 🗘	NETsec contactSync - NETsec Demo Hy	NETsec contactSync -
Select organizational unit An active directory tree with all organizational units of every domain in the forest and is listed. All mailbox users included in a selected OU (and all nested OUs) will be recognized for import contracts to their amblox. More: You don't need to bit, the nested OUs.	Public Folder Policy for Ex	Search Active Directory Search Exchange Online You can earth an object by intenting an expression. Uncheck all object types which you do not want to have as a result. The scope of the query is the complete first your exchange organization belongs to. The result list contains all objects and Select certain or all objects to be pathered for resolvemables users and press apply.
NETsecDemo Local Group Victors Goropartics Goropartics	Mailboxes () Search and choose either Exchange mail-enabled objects as contacts.	Al Employees
Controllers C	Display Name Primary SM	Display Name Primary Sintp Address Recipient Type DistinguishedName DynamicDistributionGroup Image: Sector
	d.	< >> Select all < Back Next > Cancel

When the **Search Exchange Online** Radio Button has been selected, you can search for objects by Recipient Type, such as **UserMailbox**, **MailUniversalDistributionGroup**, **MailUniversalSecurityGroup**, **DynamicDistributionGroup**, or **Office365 Group**.

When OUs are selected, a prompt to select the OU depth is presented. If any groups are contained in the OU, contactSync will prompt the user to include mailboxes by group membership.

If multiple OUs have been selected, the checkbox at the bottom left will apply the settings to all selected OUs.

Click **OK**, then **Apply**.

	ļ		contactSync	
		Smployees		
NETsec contac	ſ	OU Option Exportable Recipient	TypeDetails	
Select organizational unit				
An active directory tree with all organizational mailbox users included in a selected OU (and a		Only this OU	i	
contacts to their mailbox. Note: You don't need		Only Sub-OUs	i	
NETsecDemo.Local		OU + Sub-OUs	i	
CompanyGroups		Include group memberships	i	
Computers		□ Include nested aroups + memberships	i	
🗆 🖂 🌍 Domain Controllers		5		
Contractors				
🗌 🔄 Customer Support				
🔄 🔄 Engineering				
····· 🗌 🍓 Executives				
🗌 😋 International Users		Setting for all OUs 🕕		🖋 Ok
		Apply 😵	Cancel	

Verify the selected OUs are displayed.

Click Apply

国	NETsec contactSync - NETsec Demo Hybrid - New Policy		×
New contactSync	Public Folder Policy for Exchange		
 Synchronization mode Access to Mailboxes Mailboxes Public Folder Contact Folder Notification emails Scheduler service General Summary 	Search and choose either Exchange Online or on-premises r mail-enabled objects as contacts.	mailbox users which wi	Il receive
	<		>
	< B	Back Next >	Cancel

Click Next.

Instead of selecting OUs in Active Directory as described above, in the following example, the **All Employees** Dynamic Distribution Group has been selected from the Active Directory search.

		庳		NETsec contactSync		- 🗆 ×
車	NETsec contactSync - NETsec Demo Hybi			_		
New contactSync	Public Folder Policy for Exc	 Search Active Directory You can search an object b prest your exchange organi apply. 	y inserting an expression. Unc ization belongs to. The result I	Online heck all object types which you do not ist contains all objects found. Select cer	want to have as a result. The scope of tain or all objects to be gathered for res	the query is the complete solve mailbox users and press
Environment Configuration Synchronization mode Access to Mailboxes Mailboxes	Mailboxes () Search and choose either Exclange Or mail-enabled objects as contects.	all employees	UU Group s in the domain LDAP://NETsect	DynamicDistributionGroup Demo.Local		maximum Results
Public Folder		Display Name		Primary Smtp Address	Recipient Type	DistinguishedName
Contact Folder Notificationemails Scheduler service General Summary	Usplay Name Primary Jiwi	DynamicDistributionGr	roup	AllEmployees@netsecdemo.com	MsExchDynamicDistributionList	CN=All Employees
		Select all			✓ 4	Apply 😣 Cancel
		< Back	Next > Cancel			

All members with a mailbox in the selected group will receive the contacts, an option is also available to include nested groups.

庳] contactSync
	All Employees
	Group Option Exportable RecipientTypeDetails
	Only Membership (1)
	Include nested groups
	Setting for all groups (1)

Click OK.

The selected group(s) are displayed under the appropriate heading.

南	NETsec contactSync - NETsec Demo Hybrid - New Policy	×
New contactSync	Public Folder Policy for Exchange	
Environment Configuration Synchronization mode Access to Mailboxes Mailboxes	Mailboxes (1) Search and choose either Exchange Online or on-premises mailbox users which will receive mail-enabled objects as contacts.	
 Public Polder Contact Folder Notification emails Scheduler service General Summary 	Display Name Primary SMTP Address Recipient Type Group Optio AD DynamicDistributionGroup	1
	< 2	•
	< Back Next > Canc	el

Click Next

Select the Mailboxes from Exchange Online

You can select Mailboxes located in Exchange Online which will receive the contacts. This is possible for an Exchange Online environment or a part of any hybrid Exchange environment, as shown in the screenshot below.

When searching for Exchange Online objects, you can search for objects by Recipient Type, such as UserMailbox, MailUniversalDistributionGroup, MailUniversalSecurityGroup, DynamicDistributionGroup, or Office365 Group.

函	NETsec contactSync - NETsec Demo Hybric	囱	NETsec contactS	iync	- 🗆 ×
New contactSync	Public Folder Policy for Exch	You can search an object by insert forest your exchange organization press apply.	Search Exchange Online an expression. Uncheck all object types whele on the result list contains all objects for the result list contains all objects f	ich you do not want to have as a result. The scope out of the scope out of the scope of the scop	of the query is the complete resolve mailbox users and
Environment Configuration Synchronization mode Access to Mailboxes Mailboxes Duble Colden	Mailboxes () Search and choose either Exchange Onli mail-enabled objects as contacts.	all employees UserMatbox MartOniversalDistributionGroup Information f15a1590-5b7f-4aa4-ab Information f15a1590-5b7f-4aa4-ab Information f15a1590-5b7f-4aa4-ab	MailUniversalSecurityGroup DynamicDistributionGroup 23-275356143c22 is disconnected. 23-275356143c22 disconnected. Connected. Finithma.	365Group	Show log
Contact Folder	Display Name Primary SMTP	Display Name	Primary Smtp Address	Recipient Type	DistinguishedName
 Notification emails Scheduler service General Summary 		I All Employees	AllEmployees@netse	cDemo.com DynamicDistributionGroup	CN=All Employees,
	<	Select all		🖋 Арр	Ny 🔞 Cancel
		< Back Next >	Cancel		

In the example above, the **All Employees** Dynamic Distribution Group has been selected. You can expand your search by inserting a wild card character (*).

Click **Apply**.

Synchronizing contacts from Public Folder, which is located in Exchange Online, is deprecated.

No access to Public Folders in Exchange Online from 1. October 2026 anymore, because Microsoft will start blocking EWS requests to Exchange Online on 1. October 2026.

Retirement of Exchange Web Services in Exchange Online

https://techcommunity.microsoft.com/blog/exchange/retirement-of-exchange-webservices-in-exchange-online/3924440 All members with a mailbox in the selected group will receive the contacts, an option is also available to include nested groups.

<u>ل</u> ة	NETsec contactSync	×
	2 All Employees	
	Group Option Exportable RecipientTypeDetails	
	Only Membership	
	Include nested groups	
	V Ok 💥 Cancel	

Click OK

Verify the selected group(s) are displayed. Click Next.

庳	NET	sec contactSync - Partner Demo Exchange Online - New Policy	×
	New contactSync I Environment Configuration Synchronization mode Access to Mailboxes Mailboxes	Public Folder Policy for Exchange Mailboxes ① Search and choose either Exchange Online or on-premises mailbox users which will receive mail-enabled objects as contacts.	
	 Public Folder Contact Folder Notification emails Scheduler service General Summary 	Search Image: Construction of the search	
		< <p>K Sack Next > Cancel</p>	

Select Public Folder

Depending on the Exchange environment a Public Folder with contacts can be selected.

Click **Choose**, then select the appropriate radio button **Select public folder onpremises**, or **Select public folder Exchange Online** to open and expand the public folder tree, then select the public folder from which to synchronize contacts. Then click **Apply**.

þ	NETsec contactSync - NETsec Demo Hybrid - New Po	🖾 NETsec contactSync – 🗆 🗙
In the second se		Select public folder on-premises Select public folder Exchange Online
New contactSync F	Public Folder Policy for Exchange	Please select a Public Folder with the contacts, which you like to synchronize into the mailboxes.
		Please note, that you can only select a Public Folder, which is for contacts.
 Environment Configuration Synchronization mode Access to Mailboxes Mailboxes Public Folder Contact Folder Notification emails Scheduler service General Summary 	Public Folder () Choose the Public rolder with the contacts, which w Choose Properties Settings Display Name P	□ Internal Contacts GALsync □ Internal Contacts GALsync □ Internal Contacts Image: State St
	<	Apply Scancel
		.: < Back Next > Cancel

Please note, the Exchange Web Services URL is required to access Public Folders.

For on-premises Public Folder, the Exchange Web Services URL for the on-premises Exchange Server must be set manually in the configuration or the mailbox of the contactSync service account must be located on the on-premises Exchange Server. The policy is cancelled if Autodiscover cannot detect the Exchange Web Services URL for the on-premises Exchange Server.

After clicking **Apply** the **Public Folder Settings** dialog will open to help to determine the primary SMTP address of the public folder. The determination procedure differs between a public folder that is located on-premises and a public folder that is located in Exchange Online.

Synchronizing contacts from Public Folder, which is located in Exchange Online, is deprecated.

No access to Public Folders in Exchange Online from 1. October 2026 anymore, because Microsoft will start blocking EWS requests to Exchange Online on 1. October 2026.

Retirement of Exchange Web Services in Exchange Online https://techcommunity.microsoft.com/blog/exchange/retirement-of-exchange-webservices-in-exchange-online/3924440

Determine the primary SMTP address of the public folder located on-premises

Determine the primary SMTP address of the public folder located Exchange Online

Synchronizing contacts from Public Folder, which is located in Exchange Online, is deprecated.

No access to Public Folders in Exchange Online from 1. October 2026 anymore, because Microsoft will start blocking EWS requests to Exchange Online on 1. October 2026.

Retirement of Exchange Web Services in Exchange Online

https://techcommunity.microsoft.com/blog/exchange/retirement-of-exchange-webservices-in-exchange-online/3924440

Determine the primary SMTP address of the public folder located on-premises The **Public Folder Settings** dialog opens.

庳	Public Folder Settings	×
ſ	Selected Public Folder	
	Display Name: All Employees	
	Path (Identity): \Production\Internal Contacts\All Employees	
	Public Folder Mailbox	
	It is recommended to insert the primary SMTP address of the selected public folder's content mailbox for optimal synchronization performance.	
	Use the Exchange PowerShell command in the Exchange Management Shell on the on-premises Exchange Server to detect the primary SMTP address of the selected public folder's content mailbox.	
	Click on the PowerShell command to copy it to Notepad:	
	(Get-Mailbox - PublicFolder (Get-PublicFolder - Identity "\Production\Internal Contacts\All Employees").ContentMailboxName).PrimarySmtpAddress.Address;	
	Primary SMTP Address of the Content Mailbox	
	Primary SMTP Address:	
	√ Ok X Cance	

contactSync needs the primary SMTP address of the selected public folder's content mailbox for optimal synchronization performance.

Click on the generated PowerShell command to copy it to Notepad.

庳	Public Folder Settings	×					
	Selected Public Folder						
Display Name: All Employees							
Path (Identity): \Production\Internal Contacts\All Employees							
	Public Folder Mailbox						
It is recommended to insert the primary SMTP address of the select	ed public folder's content mailbox for optimal synchronization performance.						
Use the Exchange PowerShell command in the Exchange Manager selected public folder's content mailbox.	nent Shell on the on-premises Exchange Server to detect the primary SMTP address of the						
Click on the PowerShell command to copy it to Notepad:							
(Get-Mailbox -PublicFolder (Get-PublicFolder -Identity "\Production	\Internal Contacts\All Employees").ContentMailboxName).PrimarySmtpAddress.Address;						
Untitled - Notepad					-		\times
File Edit Format View Help							
<pre># NETsec contactSync - 2024-03-12 09:05:39</pre>							^
# Selected public folder: All Employees							
<pre># Public folder identity: \Production\Interna</pre>	l Contacts\All Employees						
<pre># It is recommended to insert the primary SMT # Use the Exchange PowerShell command in the selected public folder's content mailbox.</pre>	P address of the selected public folder's content mailbo Exchange Management Shell on the on-premises Exchange Se	x for op rver to	otimal sync detect the	hronization per primary SMTP a	formance. ddress of	f the	
(Get-Mailbox -PublicFolder (Get-PublicFolder	-Identity "\Production\Internal Contacts\All Employees")	.Content	tMailboxNam	e).PrimarySmtpA	ddress.Ad	ldres	s;
							~
	L	n 1, Col 1	100	0% Windows (CRLF)	UTF-8		

Run the PowerShell command in the **Exchange Management Shell** on the on-premises Exchange Server to retrieve the primary SMTP address of the selected public folder's content mailbox.



The result should be the primary SMTP address of the Public Folder mailbox.

Copy the primary SMTP address to insert it in the **Public Folder Settings** dialog.

Enable the option **Primary SMTP Address of the Content Mailbox** and insert the detected primary SMTP address of the selected public folder's content mailbox.

庳	Public Folder Settings	×	
	Selected Public Folder		
	Display Name: All Employees		
	Path (Identity): \Production\Internal Contacts\All Employees		
	Public Folder Mailbox		
	It is recommended to insert the primary SMTP address of the selected public folder's content mailbox for optimal synchronization performance	ce.	
	Use the Exchange PowerShell command in the Exchange Management Shell on the on-premises Exchange Server to detect the primary SM selected public folder's content mailbox.	ITP address of the	
	Click on the PowerShell command to copy it to Notepad:		
	(Get-Mailbox -PublicFolder (Get-PublicFolder -Identity "\Production\Internal Contacts\All Employees").ContentMailboxName).PrimarySmtp4	Address:Address;	
	✓ Primary SMTP Address of the Content Mailbox		
	Primary SMTP Address: NETsecDemo@netsecdemo.com		
	√ Ok	Cancel	

Click Ok.

南	NETsec contactSync - NETsec Demo Hybrid - Nev	v Policy	×
New contactSync I	Public Folder Policy for Exchang	e	2
Environment Configuration Synchronization mode Access to Mailboxes Mailboxes Dublic Folder	Public Folder (1) Choose the Public Folder with the contacts, white Choose (1) Properties (1) Settings	ch will be synchronize into the users' mailbox	t. ve
Contact Folder Notification emails Scheduler service General Summary	Display Name AD Public Folder All Employees	Path (Identity)	Prin
	<	< Back Next > Car	> icel

Verify the selected public folder is displayed.

Click Next.

Determine the primary SMTP address of the public folder located Exchange Online

The **Public Folder Settings** dialog opens.

庳	Public Folder Settings	×
ſ	Selected Public Folder	
	Display Name: Contacts	
	Path (Identity): \Partner Demo Public Folder\Demo Contacts\Contacts	
	Public Folder Mailbox	
	It is recommended to insert the primary SMTP address of the selected public folder's content mailbox for optimal synchronization performance.	
	Use the Exchange PowerShell command in the Exchange Online PowerShell for Microsoft 365 Exchange Online to detect the primary SMTP address of the selected public folder's content mailbox.	
	Click on the PowerShell command to copy it to Notepad:	
	(Get-Mailbox - Public Folder (Get-Public Folder - Identity "\Partner Demo Public Folder\Demo Contacts\Contacts").ContentMailboxName).PrimarySmtpAddress;	2
	Primary SMTP Address of the Content Mailbox	
	Primary SMTP Address:	
	✓ Ok X Cance	4

contactSync needs the primary SMTP address of the selected public folder's content mailbox for optimal synchronization performance.

Click on the generated PowerShell command to copy it to Notepad.

南	Public Folder Settings	×]			
	Selected Public Folder					
Display Name: Contacts						
Path (Identity): \Partner Demo Public Folder\Demo Contacts\Conta	cts					
	Public Folder Mailbox					
It is recommended to insert the primary SMTP address of the selected	d public folder's content mailbox for optimal synchronization performance.					
Use the Exchange PowerShell command in the Exchange Online Po selected public folder's content mailbox.	werShell for Microsoft 365 Exchange Online to detect the primary SMTP address of the					
Click on the PowerShell command to copy it to Notepad:						
(Get-Mailbox - PublicFolder (Get-PublicFolder - Identity "Partner Der	no Public Folder\Demo Contacts\Contacts").ContentMailboxName).PrimarySmtpAddress;					
Untitled - Notepad					- 🗆	×
File Edit Format View Help						
# NETsec contactSync - 2024-03-12 10:56:15						^
<pre># Selected public folder: Contacts # Public folder identity: \Partner Demo Publi</pre>	c Folder\Demo Contacts\Contacts					
<pre># It is recommended to insert the primary SMT # Use the Exchange PowerShell command in the selected public folder's content mailbox.</pre>	P address of the selected public folder's content mailbo Exchange Online PowerShell for Microsoft 365 Exchange On Exchange Online PowerShell for Microsoft 365 Exchange Online PowerShell for Microsoft 365	ox for nline †	optimal synch to detect the	ronization perf primary SMTP ac	Formance. Idress of t	:he
(Get-Mailbox -PublicFolder (Get-PublicFolder	Identity "\Partner Demo Public Folder\Demo Contacts\Cor	ntacts	").ContentMail	boxName).Primar	rySmtpAddre	ess;
	Ln	1, Col 1	100%	Windows (CRLF)	UTF-8	

Run the PowerShell command in the **Exchange Online Management Module** for PowerShell to retrieve the primary SMTP address of the selected public folder's content mailbox.



The result should be the primary SMTP address of the Public Folder mailbox.

Copy the primary SMTP address to insert it in the **Public Folder Settings** dialog.

Enable the option **Primary SMTP Address of the Content Mailbox** and insert the detected primary SMTP address of the selected public folder's content mailbox.

n performance.
imary SMTP address of the
Name).PrimarySmtpAddress;
V Ok
ilbo

Click OK

Select the Mailbox Contact Folder

Click **Choose** to select the contacts folder where the contacts will be synchronized to.

contactSync, can be configured to import contacts directly into the top-level Contacts folder. We recommend a new folder is created, which keeps the contactSync created contacts separate from the user-created contacts.



Select the top-level **Contacts** folder, then click **Create folder** to create a subfolder where the contacts will be synchronized, then give the new folder a name.

Click OK, then click **Next**.

Status notification email

An optional status notification email can be sent to the specified recipient(s) each time the policy runs, which provides a brief summary of activity. However, if your preference is to receive one only when an error has been logged, check the **Send only on error** checkbox. Click the **Test** button to send a test email. Then verify it has been received.

Click Next.

臣	NETsec contactSync - NETsec Demo Hybrid - New Policy			
New contactSync	Public Folder Pol	icy for Exchange		
Environment Configuration Synchronization mode Access to Mailboxes	Status notification	n emails		
 Mailboxes Public Folder Contact Folder 	Subject Send to	contactSync Summary administrator@netsecdemo.cc	pm	1
Notification emails Scheduler service		Test	Send only on error	1
General Summary				
		l	< Back Next >	Cancel

Schedule policy run

contactSync can be scheduled to run at regular intervals. We recommend the policy is manually run before any schedules are set. After the synchronization has completed successfully, you can go back and set it to run on the desired schedule.

Click Next.

	NETsec contactSync - NETsec Demo Hybrid - New Policy	2
New contactSync	Public Folder Policy for Exchange	
Environment Configuration	Scheduler service	
Synchronization mode	No schedule service Weekly Monthly	
Access to Mailboxes		
Mailboxes		
Public Folder		
Contact Folder		
Notification emails		
Scheduler service		
🗏 General		
Summary		
	< Back Next >	Cancel

The **Weekly** schedule allows you to select which days of the week the policy runs, along with start time and frequency.

Scheduler service			
○ No schedule service	Weekly	Monthly	(i)
Monday	Tuesday	Wednesday	
Thursday	Friday	Saturday	
Sunday			
every day			
start time 0	➡ h O➡ min	once a day	•

The **Monthly** schedule allows you to select which days of the month the policy runs, along with start time and frequency.

Schedul	er servi o edule servi	xe ice (î)	Ö	Weekly	ī	Mon	thly 🛈	
1.	2.	3.	4.	5.	6.	7.	29.	
8.	9.	<u> </u>	11.	12 .	13 .	14.	30.	
15.	16 .	□ 17.	18.	<u> </u>	20.	21 .	31.	
22.	23.	24.	25.	26.	27.	28.		
start tim	e	0 <u></u> + h	0	÷ min	once a	day	•	١

Policy name and description

Enter a policy name and an optional description, then click **Next**.

لق ا	NETsec contactSync - NETsec Demo Hybrid - New Policy	×
New contactSync	Public Folder Policy for Exchange	
 Environment Configuration Synchronization mode Access to Mailboxes 	General Policy Name	I
Mailboxes	Public Folder Contacts for Sales Team	
Public Folder	Description Import of public folder contacts into individual Sales Team members' mailboxes	^
Notification emails		
Scheduler service		~
🗖 General		
Summary	Environment Configuration	i
	NETsec Demo Hybrid	-
	< Back Next >	Cancel

To ensure your settings have been properly configured contactSync will check your policy settings and notify you of any detected errors.

Click Finish.

與	NETsec contactSync - NETsec Demo Hyl	orid - New Policy X
Summary		
 Environment Configuration Synchronization mode Access to Mailboxes 	Summary Serror Ok	⊘Not Used
Mailboxes	Policy name Pul	olic Folder Contacts for Sales Team
	Synchronization mode Pul	olic Folder contacts into on-premises mailboxes.
Public Folder	Public Folder Pul	olic Folder selected
Contact Folder	📀 Mailboxes 1 e	ntry found
	Contact Folder Ma	ilbox\Contacts\Public Folder Contacts
Notification emails	Notification Log	jon to mailbox
Scheduler service	Notification Ser	nd test mail to recipient
General	Scheduler service We	ekly
Summary		
		< Back Finish Cancel

Execute policy and check log files

Select the policy node and click Run.

回	NETsec contactSync	– 🗆 ×
FILE ACTION OPTIONS HELP		
□ □ contactSync	Public Folder Contacts for Sales Team	Orancel
NETsec Demo Hybrid Public Folder Contacts for Sales Team	💿 Environment 🐺 Delete 💐 Clone 🧠 Test 💈 Counte 🕞 Run 🕕 Status	
	🧟 General 🍓 Synchronization mode 🥝 Access to Mailboxes 🕡 Mailboxes 📲 Public Folder 📑	Contact F 4 ►
	General	
	Policy Name	(1)
	Public Folder Contacts for Sales Team	
	Description	i
	Import of public folder contacts into individual Sales Team members' mailboxes	~

The status and a detailed summary are displayed upon completion. contactSync synchronized 3500 contacts into 7 separate mailboxes

團		NETsec contactSync	– 🗆 X
F	LE ACTION OPTIONS	HELP	
-	Public Folder Contacts	for Sales Team	🐼 Cancel
20	ounter Þ Run 🔟 Status 🚳 (lose	
Sta	tus		
	Operation inisned		
	oney runnine 0.14.00		
	nativized objects: 3500		
1 1	failhoves: 7		
	xported objects: 3500		
1	ast message: Import into mailboxes	done: Mailboxes to be imported into: 7 Mailboxes successfully imported into: 7 Mailboxes failed to be imported into: 0	Contacts to
1)ata file objects read: 0		
1	Frrors: 0		
(Contacts to be synchronized with ea	ch mailbox: 3500	
	failboxes to be imported into: 7		
	Processed mailboxes: 7		
	mport failed for mailboxes: 0		
	Count of inner warnings occured duri	ig import: 0	
	Count of inner errors occured during	import: 0	
De	tails		
	Built tasks: 10		
	ound children: 8		
	Contacts to be created: 24500		
	Contacts matched: 0		
(Contacts uptodate: 0		
(Contacts to be modified: 0		
	Contacts to be deleted: 0		
	Contacts created: 24500		
	Contacts modified: U		
	contacts deleted: U Contacts failed to be created: 0		
	Contacts railed to be created: 0		
	Contacts failed to be deleted: 0		
			~
Proce	ssData Added mailbox Steve Ilian	a with DistinguishedName: CN=Steve Ilianka,OU=Sales,OU=Employees,DC=NETsecDemo,DC=Local	
Inform	nation Search for mailboxes on-pre	mises has finished. Only count: False	
Stop	snowing PowerSnell log entries.		
<u> </u>	ETSECDEMO/svc_contactsync	X04 wp contactsyncService is Running to NETsecDemolSvc_contactSync	



Results of synchronization shown below:

The corresponding log file can be opened by selecting the **Status** tab, and right-clicking the associated log and selecting **Open log file** from the context menu. This allows you to easily find the error and identify its cause.

(j)	NETsec contactSync	- 🗆 ×
FILE ACTION OPTIONS HELF		
□ I contactSync	Import from Public Folder	Cancel
 Company Demo Import from Public Folder 	Environments Create Policy	
	Import from P Impo	🔞 Reload
	Policy Name Start Time Operati Errors Analy Added Modifi Up-to contactSync Public Folder	Deleted
	Solution Par. 10/21/2022 2005. Constant of 59 0 0 0 Open log file Export log file Export all log files	0

Searching for the string **error** yields 9 log entries containing this string.

Double-click the line which contains the error. This will highlight the line in the log which contains the details of this log entry.

Double-click the highlighted line in the log viewer to open a new window containing the details of the error.

log2	02 ↓ log20221021140501_291x09205.txt - NETsec LogViewer Details - □ ×
늘 Open 🖶 Save 🕎 Set Filter 🍞 Clear Filter 🚺 error	Timestamp 20221021_140516_921
Timestamp Policy Typ Code Task Three 20221021_140516_030 ImportfromPublicFolder.xml Warning 53011 9 5	d Policy ImportfromPublicFolder.xml Typ Error Code 53006 Task
20221021 140516 030 ImportfromPublicForder.xml ProcessData 53012 10 4	9 Thread
20221021 140516 030 ImportfromPublicFolder.xml ProcessData 53012 9 5	5
20221021_140516_218 mportfromPublicFolder.xml Error 53006 10 4 20221021_140516_921 mportfromPublicEetter.xml Error 44048 10 4	Source contactSyncLibrary.ContactFolderFunctions.EnsureContactFolderExistance() Message 2. Binding to folder failed. You may want to check, if the credentials given for ews-service (') have not the permission to access to KeyserSoze@CompanyDemo.de's mailbox and (contact) folders. Exmessage The account does not have permission to impersonate the requested user.
	Exsource MicrosoftExchange.WebServices
20221021_140516_92 1 ImportfromPublicFolder.xml Error \$52006 9 5	ContactSynCubrary.ContactFolderFunctions.EnsureContactFolderExistance[] 2. Binding to tolder failed. You may want to check
9 results found	
20221021_140516_214	contactSyncLibrary.ContactFolderFunctions.EnsureContactFolderExistance() 2. Binding to folder failed. You may want to check, if th
20221021_140516_921 ImportfromPublicFolder.xml Error 44048 10 4	GALsyncLibrary.EwsContactImportHandler.ImportInToSingleMailbox() EnsureFirstTargetFolderExists failed for Charles Phillips
20221021_140516_921 ImportfromPublicFolder.xml Error 53006 9 5	contactSyncLibrary.ContactFolderFunctions.EnsureContactFolderExistance() 2. Binding to folder failed. You may want to check, if the
20221021_140516_921 ImportfromPublicFolder.xml Error 44048 9 5	GALsyncLibrary,EwsContactImportHandler.ImportInToSingleMailbox() EnsureFirstTargetFolderExists failed for Keyser Söze (S) CAL-Library,EwsContactImportHandler.ImportInToSingleMailbox() CAL-Library,EwsContactImportHandler.Impo
© 2022 NETsec GmbH & Co. KG - Version 2.4.0.0	C\ProgramData\NETsec GmbH & Co. KG\contactSync\log files\log20221021_140501_291x09205.txt

Synchronize Contacts from Shared Mailbox

contactSync allows you to synchronize contacts directly from a shared mailbox to user mailboxes. It will connect to a Shared Mailbox in your local Exchange Environment, whether it is in Exchange on-premises or Exchange Online. In Hybrid Exchange Environments contactSync can access the shared mailbox in both locations.

Create new policy

Right click the Environment and select **Create Policy** from the context menu.

臣	NETsec contactSync	- 🗆 ×
FILE ACTION OPTIONS HELI		
ContactSync	Company Demo	Cancel
Company Demo	Environment A Create Policy	
Environments	🕒 Environments 🖾 Policies 🛐 Status 🕜 Help	
II Status	Policy Name Description	
Configuration	Company Demo contactSync Policies	
	Demo Users Import Import into select user mailboxes the contacts which reside in the GALynd	c Cont

Ensure the desired environment has been selected from the dropdown.

围	NETsec contactSync - Company Demo - New Policy	×
Environment Confi	guration	
 Environment Configuration Synchronization mode Access to Mailboxes Mailboxes Unknown Source Contact Folder Notification emails Scheduler service General Summary 	Environment Configuration Please choose the Environment Configuration for the new policy Company Demo V Hybrid Exchange environment and the contactSync Server is member of the on-premises Active Directory.	
	Next	t> Cancel

Synchronization mode

Select Synchronize shared mailbox contacts into users' mailboxes in an Exchange environment.

Click Next.



Access to Mailboxes for on-premises Exchange

contactSync requires access to user mailboxes in order to write to their contacts folder. It will be necessary to use **Exchange Application Impersonation** for access, which allows up to 5 concurrent connections to user mailboxes.

Since the contactSync mailbox requires the **Exchange Administrator** role, you can split these two roles between two separate accounts by entering the credentials of a dedicated mailbox user that has the **Application Impersonation** role.

1	NETsec contactSync - Company Demo - New Policy		×
New contactSync	Shared Mailbox Policy for Exchange		>
 Environment Configuration Synchronization mode 	Access to Mailboxes		^
 Access to Mailboxes Mailboxes 	5 count of concurrent mailboxes getting the contacts e.g. 5 mailboxes concurrently	i	
 Shared Mailbox Contact Folder 	Credentials of the on-premises service account	(i)	
 Notification emails Scheduler service 	O Credentials of a dedicated mailbox user User Name:	1	F
General	Password: E-Mail Address:	() ()	
Summary	Exchange Web Services URL of on-premises Exchange		
	Manual setting e.g. https://casserver.domain.local/EWS/Exchange.asmx	•	v
	< Back Next >	Са	incel

Please take a look at the chapter:

How to configure Exchange Application Impersonation

Access to Mailboxes for Exchange Online

By default, contactSync uses the Environment Configuration to access mailboxes. Application Impersonation, required for on-premises Exchange, will not be necessary when the certificate authentication via App Registration for Exchange Online is configured in the Environment Configuration.

Please take a look at the chapter

Exchange Online certificate-based authentication via App Registration

	NETsec contactSync - Company Demo - New Policy	
Environment Configuration Synchronization mode	Access to Mailboxes	^
Access to Mailboxes	Account for access of Exchange Online mailboxes	
Mailboxes	5 count of concurrent mailboxes getting the contacts	(1)
Public Folder	e.g. 5 mailboxes concurrently	
Contact Folder	Use the Environment Configuration settings	1
Notification emails	Credentials of a dedicated mailbox user	1
Scheduler service	User Name:	
🗏 General	E-Mail Address	
Summary	Modern authentication OAuth 2.0 for Evolutions Online	
	Hodern adurentication GAdur 2.0 for Exchange Online	
	My Azure Cloud Instance is hosted by:	
	Microsoft Azure public cloud	
	Exchange Web Services URL of Exchange Online	

Click Next
Select the Mailboxes from On-Premises Exchange

You can select Mailboxes located in an on-premises Exchange Server, which will receive contacts. It could be an on-premises Exchange environment or a part of a hybrid Exchange environment.

In the **Mailboxes** window, you are prompted to select the mailboxes which will receive the contacts. There are two ways to do make your selection.

	NETsec contactSync - Company Demo - New Policy	
New contactSync	Shared Mailbox Policy for Exchange	
Environment Configuration Synchronization mode Access to Mailboxes Mailboxes	Mailboxes (1) Search and choose either Exchange Online or on-premises mailbox users wh contacts from the Shared Mailbox.	ich will receive
 Snared Mailbox Contact Folder Notification emails Scheduler service General Summary 	Display Name Primary SMTP Address Recipient Type	Group Option
	< 	> t> Cancel

- Click **Choose** to select mailboxes by OU where they reside in Active Directory.
- Click **Search** to open a search dialogue window from which you can search for the desired Active Directory objects. When searching Active Directory, mailboxes can be selected individually, by group membership, by container, or by OU. If you have a hybrid Exchange environment, an additional option is available to search for Exchange Online objects.

■ NETsec contactSync – □ ×	NETsec contactSync - Company Demo -	Search for objects	- 🗆 ×
Select organizational unit An active directory tree with all organizational units of every domain in the forest and is listed. All maillocus users included in a selected OU (and all nested OUs) will be recognized for import contracts to ther maillocu. Nucl. "Yoo on reset O to kit. Here all OUs."	ic Shared Mailbox Policy for Ex	Search Active Directory Search Exchange Online You can search an object by inserting an expression. Uncheck all object types which you do not want to have forestly one exchange organization belongs to. The result list contains all objects found. Select certain or all objects poly.	as a result. The scope of the query is the complete jects to be gathered for resolve mailbox users and press
	Mailbaxes () Search and choose either Exchange Onli contacts from the Shared Mailbax.	sales User Jontainer Jong JonamicDistributionGroup	Search maximum Results 500 🜩
G Managers	Choose Q Search Display Name Primary SMTP	Message: Search for objects in the domain LDAP.INETsecDemo.Local Active Directory search is finished. Display Name Primary Smtp Address	Show log Recipient Type DistinguishedName
		OU □ Sales Group	OrganizationalUnit OU=Sales,OU=Emp Group CN=Sales,OU=Sale
Comparisons Compariso		Select all	Apply Scancel
Apply Scancel		<back next=""> Cancel</back>	li.

When the **Search Exchange Online** Radio Button has been selected, you can search for objects by Recipient Type, such as **UserMailbox**, **MailUniversalDistributionGroup**, **MailUniversalSecurityGroup**, **DynamicDistributionGroup**, or **Office365 Group**.

When OUs are selected, a prompt to select the OU depth is presented. If any groups are contained in the OU, contactSync will prompt the user to include mailboxes by group membership.

If multiple OUs have been selected, the checkbox at the bottom left will apply the settings to all selected OUs.

Click **OK**, then **Apply**.

	團		contactSync
	4	Sales	
NETsec contactSy		OU Option Exportable Recipient	TypeDetails
Select organizational unit			
An active directory tree with all organizational units mailbox users included in a selected OU (and all n		Only this OU	•
contacts to their mailbox. Note: You don't need to t		Only Sub-OUs	(i)
···· 🗌 📹 Contractors ···· 🗌 😋 Customer Support		OU + Sub-OUs	(1)
🗋 🟐 Engineering		Include group memberships	I
🖓 Executives 崎 Help Desk 崎 HR 崎 International Users 崎 IT 崎 Managers		☐ Include nested groups + memberships	3
····· ↓ ···· ↓ ··· ↓ ···· ↓ ··· ↓ ··· ↓ ··· ↓ ··· ↓ ···· ↓ ···· ↓ ··· ↓ ··· ↓ ·		Setting for all OUs	√ Ok
		Apply 🔞 Ca	ncel

Verify the selected OUs are displayed.

Click Next

5	NETsec contactSync - Company Demo - New Policy	×				
New contactSync Shared Mailbox Policy for Exchange						
 Environment Configuration Synchronization mode Access to Mailboxes Mailboxes Shared Mailbox 	Mailboxes () Search and choose either Exchange Online or on-prer contacts from the Shared Mailbox.	mises mailbox users which will receive				
 Contact Folder Notification emails Scheduler service General Summary 	Display Name Primary SMTP Address AD OU Sales	Recipient Type Group Option OrganizationalUnit Only OU				
	<	>				
		< Back Next > Cancel				

Instead of selecting OUs in Active Directory as described above, in the following example, the **Sales** Distribution Group has been selected from the Active Directory search.

		囱		NETsec contactSync		- 🗆 ×
۵.	NETsec contactSync - Company Demo - New Polic	Search Active Directory	Search Exchange O	nline		
New contactSync	Shared Mailbox Policy for Exchange	You can search an object by inser forest your exchange organization apply.	rting an expression. Unche n belongs to. The result list	ick all object types which you do not want contains all objects found. Select certain	to have as a result. The scope of t or all objects to be gathered for res	the query is the complete solve mailbox users and press
Environment Configuration Synchronization mode Access to Mailboxes Mailboxes	Mailboxes () Search and choose either Exchange Briline or on-pren contacts from the Shared Mailbox	sales JUser Juser Container Juser Message: Search for objects in the] OU] Group e domain LDAP://NETsecDe	DynamicDistributionGroup mo.Local		Maximum Results
Shared Mailbox Contact Folder Notification emails Contact Folder	Choose Search Display Name Primary SMTP Address	Active Directory search is finished. Display Name OU Sales		Primary Smtp Address	Recipient Type OrganizationalUnit	DistinguishedName OU=Sales,OU=Emp
E General		Group - ✓ []Sales	:	Sales@netsecdemo.com	Group	CN=Sales,OU=Sale
	د	Select all	_		✓ A	Apply 🔞 Cancel .::
		<back next=""> Ca</back>	ancel			

All members with a mailbox in the selected group will receive the contacts, an option is also available to include nested groups.

ļ.	contactSync
	👺 Sales
ſ	Group Option Exportable RecipientTypeDetails
	Only Membership (1)
[Setting for all groups (1)

Click OK.

The selected group(s) are displayed under the appropriate heading.

面	NETsec contactSync - Company Demo - New Policy	×
New contactSync S Environment Configuration Synchronization mode	Shared Mailbox Policy for Exchange Mailboxes (1)	
 Access to Mailboxes Mailboxes Shared Mailbox Contact Folder Notification emails Scheduler service General 	Search and choose either Exchange Online or on-premises mailbox users which will receive contacts from the Shared Mailbox.	n
Summary	< 	el

Click Next

Select the Mailboxes from Exchange Online

You can select Mailboxes located in Exchange Online which will receive the contacts. This is possible for an Exchange Online environment or a part of any hybrid Exchange environment, as shown in the screenshot below.

When searching for Exchange Online objects, you can search for objects by Recipient Type, such as UserMailbox, MailUniversalDistributionGroup, MailUniversalSecurityGroup, DynamicDistributionGroup, or Office365 Group.

۵	NETsec contactSync - Company Demo - New Policy	۵.	NETsec contactSync		- 🗆 ×
New contactSync	Shared Mailbox Policy for Exchange	Search Active Directory Search You can search an object by inserting an expr forest your exchange organization belongs to apply.	Exchange Online ession. Uncheck all object types which you don The result list contains all objects found. Select	olymant to have as a result. The scope certain of all objects to be gathered for	of the query is the complete resolve mailbox users and press
Environment Configuration Synchronization mode Access to Mailboxes Multiverent	Mailboxes () Search and choose either Exchange Online or on them contacts from the Shared Mailbox.	sales V UserMailbox MailUniversalDistributionGroup Dynam	iiversalSecurityGroup ☑ Office365Group iicDistributionGroup		maximum Results
Mailboxes Shared Mailbox Contact Folder	Choose Search Display Name Primary SMTP Address	Warning No remote PowerShell connections is Information Remote PowerShell connections: (The ConnectionInfo method was called from: Deplay: Name	available anymore.); No connection: 0 (s_RemotePowershellDisconnected>b_0 Primary Swite Address	Paginiant Tung	Show log
Notification emails Scheduler service		UserMailbox Sales Online MailUniversalDistributionGroup	SalesOnline@netsecDemo.com	UserMailbox	CN=Sales Online,
 General Summary 		☑ Sales	Sales@netsecdemo.com	MailUniversalDistributionGroup	CN=b46b2684-64
	¢	Select all			Apply Scancel
		< Back Next > Cancel			

In the example above, the **Sales** Distribution Group has been selected. You can expand your search by inserting a wild card character (*).

Click Apply.

All members with a mailbox in the selected group will receive the contacts, an option is also available to include nested groups.

ļ.	NETsec contactSync	×
[Sales Group Option Exportable RecipientTypeDetails	
	Only Membership	
	Include nested groups	
[Setting for all groups 🕕 🖌 🖓 Ok	

Click OK

Verify the selected group(s) are displayed. Click Next.

国	NETsec contactSync - Company Demo - New Policy	×
New contactSync St	nared Mailbox Policy for Exchange	
 Environment Configuration Synchronization mode Access to Mailboxes Mailboxes 	Mailboxes (1) Search and choose either Exchange Online or on-premises mailbox users which will receive contacts from the Shared Mailbox.	
 Shared Mailbox Contact Folder Notification emails Scheduler service General Summary 	Display Name Primary SMTP Address Recipient Type Group Option EXO MailUniversalDistributionGroup Sales sales@netsecDemo.com MailUniversalDistrib Only Members	5
	< > > < Back Next > Cance	

Select Shared Mailbox

The Shared Mailbox page is displayed below.

闽	NETsec contactSync - Company D	Demo - New Policy	×
New contactSync	Shared Mailbox Policy fo	or Exchange	
 Environment Conliguration Synchronization mode Access to Mailboxes Mailboxes Shared Mailbox Contact Folder 	Shared Mailbox (1) Search Search Search for the S synchronized in Choose Properties	No Shared Mailbox Shared Mailbox containing co nto the users' mailboxes.	selected Intacts, which will be
 Notification emails Scheduler service General Summary 	Display Name	Path	Folder ID
		< Bac	k Next > Cancel

Click Search to open the Search for objects dialog window.

庳	Search for objects		- 🗆 ×
Search Active Directory Search Exchange	ge Online		
You can search an object by inserting an expression. U forest your exchange organization belongs to. The resu apply.	Jncheck all object types which you do not want to hav It list contains all objects found. Select certain or all o	ve as a result. The scope of the quer objects to be gathered for resolve m	ry is the complete ailbox users and press
•			Search
✓ SharedMailbox ✓ RemoteSharedMailbox			maximum Results
Message: Search for objects in the domain LDAP://NETs Active Directory search is finished.	ecDemo.Local		Show log
Display Name	Primary Smtp Address	Recipient Type D	istinguishedName
SharedMailbox Demo Shared Mailbox RemoteSharedMailbox	demosharedmailbox@netsecdemo.com	SharedMailbox CN	I=Demo Shared
Sales Department	SalesDept@netsecdemo.com	RemoteSharedMailbox CN	I=Sales Departm
Select all		Apply	Cancel .:i

Select where you want to search in a hybrid Exchange environment. Search in the onpremises **Active Directory** or search in **Exchange Online** for a Shared Mailbox.

Then search for and select the desired Shared Mailbox which contains the contacts to be synchronized into user mailboxes.

Here you may pick either all objects or specify a filter by ticking recipient types you want to choose. With a wildcard * you can widen your search criteria, and broaden the results.

Next select the desired shared mailbox and click **Apply**.

Select Contact Folder in the Shared Mailbox

After a shared mailbox is selected, click **Choose** to select the contact folder with contacts you want to synchronize into the mailboxes.

ē	NETsec contactSync - Company Demo - New Policy	×
New contactSync	Shared Mailbox Policy for Exchange	
 Environment Contiguration Synchronization mode Access to Mailboxes Mailboxes Shared Mailbox Contact Folder Notification emails Scheduler service General Summary 	Shared Mailbox Selected on-premises Shared Mailbox Display Name: Demo Shared Mailbox Primary SMTP Address: demosharedmailbox@netsecdemo.com Choose Properties Settings Display Name Path Folder ID	
	< Back Next > Cance	2

庳	NETsec contactSync	-		×
Selecto	xontacts folder			
Please s mailbox	select a Shared Mailbox folder with the contacts, which you like to synchro es.	nize in	to the	
Pleaser	note, that you can only select a Shared Mailbox folder, which is for contact	s.		
	 ➢ Contacts ➢ Sales ☑ ➢ Production ☑ ➢ Management 			
	Apply	🔞 C	ancel	

Here, a shared mailbox with all contact folders will be displayed. You may tick a contact folder in the tree, but only a contact folder dedicated for contacts can be selected.

Afterwards click **Apply**, the selected contact folder is listed on the **Shared Mailbox** tab.

In this example the **Production** folder contacts in the **Demo Shared Mailbox** will be synchronized into the selected user mailboxes of the policy. Click **Next**.

Į.	NETsec contactSync - Company Demo -	New Policy	×
New contactSync	Shared Mailbox Policy for Ex	change	- 2/2
 Environment Configuration Synchronization mode Access to Mailboxes Mailboxes Shared Mailbox Contact Folder Notification emails 	Shared Mailbox () Search Display Name: Primary SMTP Addres Choose Properties S Se Display Name	lected on-premises Shared M Demo Shared Mailbox s: demosharedmailbox@net ettings Path	lailbox tsecdemo.com Remove Folder ID
General	Shared Mailbox Folder Production	Contacts\Production	AAMkADY2YjV
		< Back	Next > Cancel

Select the Mailbox Contact Folder

Click **Choose** to select the contacts folder where the contacts will be synchronized to.

contactSync, can be configured to import contacts directly into the top-level Contacts folder. We recommend a new folder is created, which keeps the contactSync created contacts separate from the user-created contacts.

	NETsec contactSync	×
NETsec contactSync - Company Now contactSync Shared Mailbox Policy	Please select a folder for contact synchronization. We recommend to create a new folder for the contact synchronization. All folders displayed by this control can be selected. Adding and deleting folders inside this dialog will not result in physically removing or adding this folder inside a mailbox.	1
New contact Sync Snared Mailbox Policy	Selected Path: Mailbox\Contacts\NewFolder	•
Summary	Delete al unmatched mailbox contacts during the next execution Editing folder name done for Mailbox\Contacts\NewFolder to Shared Production Contacts Create folder Create	() 5. H

Select the top-level **Contacts** folder, then click **Create folder** to create a subfolder where the contacts will be synchronized, then give the new folder a name.

Click OK, then click **Next**.

Status notification email

An optional status notification email can be sent to the specified recipient(s) each time the policy runs, which provides a brief summary of activity. However, if your preference is to receive one only when an error has been logged, check the **Send only on error** checkbox. Click the **Test** button to send a test email. Then verify it has been received.

Click Next.

囱	NETsec contactSync -	Company Demo - New Policy	×
New contactSync	Shared Mailbox I	Policy for Exchange	
 Environment Configuration Synchronization mode Access to Mailboxes Mailboxes Shared Mailbox Contact Folder Notification emails Scheduler service General Summary 	Status notification	n emails	 1 1 1 1
]	< Back Next >	Cancel

Schedule policy run

contactSync can be scheduled to run at regular intervals. We recommend the policy is manually run before any schedules are set. After the synchronization has completed successfully, you can go back and set it to run on the desired schedule.

Click Next.

	NETsec contactSync - Company Demo - New Policy	
New contactSync	Shared Mailbox Policy for Exchange	
Environment Configuration	Scheduler service	
Synchronization mode	No schedule service Oweekly Oweekly Oweekly	
Access to Mailboxes		
Mailboxes		
Shared Mailbox		
Contact Folder		
Notification emails		
Scheduler service		
General		
Summary		
	<back next=""> Can</back>	cel

The **Weekly** schedule allows you to select which days of the week the policy runs, along with start time and frequency.

Scheduler service			
○ No schedule service	Weekly	Monthly	(i)
Monday	Tuesday	Wednesday	
Thursday	Friday	Saturday	
Sunday			
every day			
start time 0	h 0≑ min	once a day	•

The **Monthly** schedule allows you to select which days of the month the policy runs, along with start time and frequency.

Scheduler service		
ONo schedule service 🕕	Weekly (1)	Monthly
1. 2. 3.	4. 5. 6.	7. 29.
8. 9. 10.	11. 12. 13	. 🗌 14. 🗌 30.
□ 15. □ 16. □ 17.	18 . 19 . 20 .	21. 31.
22. 23. 24.	25. 26. 27	. 28.
start time 0 🔶 I	n 0 🌩 min once	a day 💌 🚺
·		

Policy name and description

Enter a policy name and an optional description, then click **Next**.

庳	NETsec contactSync - Company Demo - New Policy	×	
New contactSync	Shared Mailbox Policy for Exchange		
 Environment Configuration Synchronization mode Access to Mailboxes Mailboxes Shared Mailbox Contact Folder Notification emails Scheduler service General Summary 	General Policy Name Production contacts from shared mailbox Description Environment Configuration Company Demo	 I · · · 	
	< Back Next >	Cancel	

To ensure your settings have been properly configured contactSync will check your policy settings and notify you of any detected errors.

Click Finish.

国	NETsec contactSync - Com	pany Demo - New Policy X
Summary		
 Environment Configuration Synchronization mode Access to Mailboxes 	Summary	Ok 🖉 Not Used
Mailboxee	Policy name	Production contacts from shared mailbox
Mandoxes	Synchronization mo	de Shared Mailbox contacts into Exchange mailboxes.
Shared Mailbox	Shared Mailbox	Shared Mailbox selected (on-premises)
Contact Folder	Shared Mailbox	Shared Mailbox folder selected
	Mailboxes	2 entries found
Notification emails	Contact Folder	Mailbox\Contacts\Shared Production Contacts
Scheduler service	Notification	Logon to mailbox
E Canard	Notification	Send test mail to recipient
	Scheduler service	
Summary		
		< Back Finish Cancel

Execute policy and check log files

Select the policy node and click **Run**.

囱	NETsec contactSync	– 🗆 ×
FILE ACTION OPTIONS HEL		
ContactSync	Production contacts from shared mailbox	🙆 <u>C</u> ancel
Company Demo Production contacts from shared n	Image: Status Image: Image	
	🧟 🕼 🖓 🖓 🖓 Synchronization mode 🖓 Access to Mailboxes 📦 Mailboxes 📲 Shared Mailbox	Contact Fol 🔍 🕨
	General	
	Policy Name	(1)
	Production contacts from shared mailbox	

The status and a detailed summary are displayed upon completion. contactSync synchronized 103 contacts into 10 separate mailboxes

南	NETsec contactSync		- 🗆 ×
FILE ACTION OPTIONS HELP			
Production contacts from shared	mailbox		Save Sancel
Run 🖩 Status 🚳 Close			
Status			
✓ Operation finished			
Policy runtime 0:07:23			
Summary			
Analyzed objects: 103			
Mailboxes: 10			
Exported objects: 103	es to be imported into: 10 Mailboxes sur	poessfully imported into: 10 Mailboyes failed to be	imported into: 0 Contacta
Data file objects read: 0	es to be imported into. To I Manboxes suc	coessiony imported into. To I Manboxes failed to be	imported into: 0 Contacts
Errors: 0			
Contacts to be synchronized with each mailbox: 103	1		
Mailboxes to be imported into: 10			
Processed mailboxes: 10			
Import failed for mailboxes: 0 Count of inner warnings occured during import: 0			
Count of inner errors occured during import: 1			
Details			
Built tasks: 8			
Found children: 0			
Merged objects: 0			
Skipped mastered-on-premises objects: 0			
Contacts to be created: 994			
Contacts matched: 36			
Contacts uptodate: 36			
Contacts to be modified: U			
Contacts created: 891			
Contacts modified: 0			
Contacts deleted: 0			
Contacts failed to be created: 0			
Contacts failed to be modified: 0			
Contacts failed to be deleted: 0			*
ProcessData b922d1b5-2080-45ee-bd5c-8d94dacd3df	Not connected.		
Information Search for mailboxes In Exchange Online h Ston showing PowerShell Ico entries	as finished. Only count: False		
NETSECDEMO/svc. contactsvnc.	contactSyncService is Running	Sectors NETsecDemo\Svc.contactSvnc	
	- contractory neocratice is realining		

The corresponding log file can be opened by selecting the **Status** tab, and right-clicking the associated log and selecting **Open log file** from the context menu. This allows you to easily find the error and identify its cause.

囱	NETsec contactSync	- 🗆 ×
FILE ACTION OPTIONS HELI		
□- 🛄 contactSync	Import GAL to Production folder	Cancel
Company Demo Generation contacts from shared m	🕒 Environments 🥰 Create Policy 💵 Status	
	🎲 Settings 🔯 Exchange 🌐 Environments 🥰 Policies 间 Status 😢 Help	
	Mile: Completed 🕰 Canceled 🕸 Errors	🚳 Reload
	Policy Name Start Time Operati Errors Analy Added Modifi Up-to	Deleted
	contactSync Shared Mailboxes	
	Production con 8 Professor 0.42.4 C 13 0 0 0 Export log file Export all log files	0

Searching for the string "error" yields 4 log entries containing this string.

Double-click the line which contains the error. This will highlight the line in the log which contains the details of this log entry.

Double-click the highlighted line in the log viewer to open a new window containing the details of the error.

E	log20230829034243_668x04734.txt - NETsec LogViewer	- 🗆 ×
🖶 Open 🖶 Save 🆙 Set Filter 🍞 Clear Filter 📔 error	🔎 😞 Clear Search	
Timestamp Policy Timestamp 20230829_034245_111 Productioncontactsfromsharedmailbox.mn In 20230829_034245_113 Productioncontactsfromsharedmailbox.mn In 20230829_034245_118 Productioncontactsfromsharedmailbox.mn In	Code Task Thread Source matio Iog20230829034243_668x04734.txt - NETsec LogViewer Details matio Timestamp matio 20230829_034245_174 Policy Policy matio Forg rmatio Code 48003 Fror matio Task 7 Source GALsyncLibrary.EOMailboxSearchHandler.StartMailboxSearch() Message No object selected for export.	Message — 🗆 X
20230829_034245_174 Productioncontactsfromsharedmailbox.xml Er 20230829_034245_705 Productioncontactsfromsharedmailbox.xml Er 20230829_034247_506 Productioncontactsfromsharedmailbox.xml In	r	duction contacts from shar
20230829_034247_633 Productioncontactsfromsharedmailbox.xml Si	Imary 47001 339 5 GALsyncLibraryLogger.Close() operation:Canceledjanalysed	:13 exported:0 add:0 uptod

How to

How to configure Exchange Application Impersonation

contactSync requires a service account with the Exchange Application Impersonation role on the on-premises Exchange Server to access on-premises Exchange mailboxes.

If the user credentials of a service account are used for Exchange Online, contactSync requires the Exchange Application Impersonation role on Exchange Online for this service account to access Exchange Online mailboxes.

Exchange Application Impersonation enables a caller to impersonate a given user account. This enables the caller to perform operations by using the permissions that are associated with the impersonated account, instead of the permissions that are associated with the caller's account.

For more information, please have look at the following Microsoft Docs:

Impersonation and EWS in Exchange

https://docs.microsoft.com/en-us/exchange/client-developer/exchange-webservices/impersonation-and-ews-in-exchange

MSDN Library - Configuring Exchange Impersonation

https://docs.microsoft.com/en-us/previous-versions/office/developer/exchange-server-2010/bb204095(v=exchg.140)?redirectedfrom=MSDN

Exchange Impersonation in Exchange 2013, 2016, 2019 and Exchange Online How can you check existing management role for Exchange Application Impersonation and how you can create a management role for Exchange Application Impersonation?

For on-premises Exchange:

Please log in on the on-premises Exchange Server with an Exchange Administrator account and open the Exchange Management Shell.

For Microsoft 365 Exchange Online:

Please connect via Exchange Online PowerShell to the Microsoft 365 tenant with an Exchange Administrator account.

Check existing Exchange Impersonation:

Please verify whether a Role Group for ApplicationImpersonation exists.

You can check the existing Exchange Impersonation via PowerShell:

Get-ManagementRoleAssignment -Role ApplicationImpersonation

[PS] C:\Windows\system32>Get-ManagementRoleAssignment -Role ApplicationImpersonation

B	Ν	Machine: forestA-Ex.fo	restA.com		_ D X
[PS] C:\Windows\system32>Get-M	anagementRoleAssign	nment -Role Applica	ationImpersonation		<u>^</u>
Name	Role	RoleAssigneeName	RoleAssigneeType	AssignmentMethod	EffectiveUserNam e
ApplicationImpersonation-Hy ApplicationImpersonation-Or ApplicationImpersonation-Im	ApplicationImp ApplicationImp ApplicationImp	Hygiene Manage Organization M Impersonation	Ro le Group Ro le Group Ro le Group	Direct Direct Direct	All Group Mem All Group Mem All Group Mem
[PS] C:\Windows\system32>_					~

You can find an existing **Role Group** in the **Exchange Admin Center** under **Permissions** as **Admin Roles**.

E.g., the Impersonation Role to manage the ApplicationImpersonation



Create an Impersonation Role Group for ApplicationImpersonation via PowerShell

You can create a new Role Group to manage the **ApplicationImpersonation** and add your contactSync service account as member of the **Role Group**.

This example creates a Role Group called Impersonation Role:

New-RoleGroup -Name "Impersonation Role" -Roles "ApplicationImpersonation" -Members contactsync@foresta.com

8	Machine: forestA-Ex.forestA.com					
<mark>[PS]</mark> C:\Windows\system32>New- @foresta.com	RoleGroup -Name "Impersonation	Role" -Roles "ApplicationImpe	rsonation" -Members contactsync			
Name	AssignedRoles	RoleAssignments	ManagedBy			
Impersonation Role	{ApplicationImpersonation}	{ApplicationImpersonation	{forestA.com/Microsoft Exc			
[P\$] C:\Windows\system32>_			~			

The **Impersonation Role** is also available in the **Exchange Admin Center** under **Permissions** as **Admin Roles**.

	2/Event Clienth/an-15 O = O Catificate area do 🖂 1	
nttps://iocalhost/ecp	admin roles - Microsoft Exc X	
👍 📴 Exchange Admin Center		
Enterprise Office 365		Administrator 👻 📍 👻
Exchange admin ce	enter	
recipients	admin roles user roles Outlook Web App policies	
permissions		
compliance management	+ 🖋 亩 🖻 ዖ 😅	
organization	NAME	
ol gan Lation	Compliance Management	
protection	Delegated Setup	
mail flow	Discovery Management	
mail now	Help Desk	Assigned Roles
mobile	Hygiene Management	ApplicationImpersonation
	Impersonation Role	
public folders	Organization Management	Members
	Public Folder Management	contactsync
unified messaging	Recipient Management	
sen (ers	Records Management	Managed By
SELVELS	Server Management	forestA.com/Microsoft Exchange Security Groups/Or forestA.com/Users/Administrator
hybrid	UM Management	
	View-Only Organization Management	Write scope
tools		Default
	1 selected of 13 total	

Create an Impersonation Role for ApplicationImpersonation via Exchange Admin Center

You can create a new **Role Group** in the **Exchange Admin Center** under **Permissions** as **Admin Roles**.

Add new admin role:



The **new role group** dialog:

Add the name Impersonation Role

Add ApplicationImpersonation to the Roles

Add your contactSync service account to the Members

e	Role Group - Interne	t Explorer	_ □	x
new role group				Help
new role group				
*Name:				^
Impersonation Role				
Description:				
Write scope:				
Default	~			
Organizational unit:				
0				
Roles:				
+ -				
NAME				
NAME		<u> </u>		
ApplicationImpersonation				
Members:				
+ -				
NAME	DISPLAYAMANT			
NAME	DISPLAY NAME	A		
contactsync	contactsync			
				~
		save	cancel	
			🔍 100%	▼

168

Afterwards the new Impersonation Role is available as Admin Role.

You can check the Assigned Roles and the Members of the Impersonation Role.



Support: What to do when I notice an error / bug?

We always try to provide a very responsive, solution orientated and effective support. Should you encounter any issue, bug or inconvenience please do not hesitate to contact us.

Please email us at support@netsec.de.

To enable us providing you the best quality support possible, please provide us with the following information:

Environment Overview

- Which Exchange version do you use?
- Which contactSync version do you use?
- Does the contactSync service account have an Exchange mailbox and where it is located?

Description of the issue

Please describe your issue/bug/inconvenience thoroughly, in detail, what you wanted to achieve and what you were doing as it occurred.

A screenshot of the issue often helps us to understand.

Configuration and log files

We also require the configuration and the logs, preferably zipped.

In menu Action -> Export Configuration you can zip the policies.

In menu Action -> Export Status you can zip the log files.

HELP

Create Environment
 Create contactSync Policy
 Export Configuration

OPTIONS

- 👋 Import Configuration
- I Export Status

ACTION

- Import Status
- 🚳 Configure Service

The log files of a policy can be also compressed on the **Status** tab:

🍪 Settings 📓 Exc	hange 🌐 Environments 🥰	Policies	🕕 Status	Help			
N All	- 🥝 Contact List -	📡 Hide:	Comp	oleted 🛆	Canceled	😣 Errors	🙆 Reload
Policy Name	Start Time Operati	Errors	Analy	Added	Modifi	Up-to	Deleted
contactSync							
📀 Contact List 🌉	Open log file	10	8	0	0	2	0
	Export log file						
	Export all log files						

Please send an email to <u>support@netsec.de</u> with a description of the issue and attach the compressed file with the configuration and the compressed file with the log files.

Alternatively, you could also upload the compressed files for us at the **NETsec Support Dropzone**

https://transfer.netsec.de/dropzone/support

Do you have more questions or need further support? Please do not hesitate to contact the contactSync Support Team.

contactSync Support Team

By phone +49 2421 998 78 16 or via e-mail support@netsec.de