

CONTACTSYNC® V8.5

Upgrade Instructions

NETsec

24. Juni 2025

contactSync version 8.5	4
Download	4
Upgrade Instructions	5
For updates from contactSync version 8.x to contactSync version 8.x	5
For updates from contactSync version 7.x to contactSync version 8.x	6
Where is the common application data folder?	7
Incompatibility	8
contactSync version 8.5.6 or later compared with contactSync 8.5.5 and earlier	8
contactSync version 8.5 compared with contactSync 8.4.6 and earlier	10
Install ExchangeOnlineManagement PowerShell module	10
Update ExchangeOnlineManagement PowerShell module	10
The registered Application in App registrations	11
Remove API permission for Exchange Web Services, if applicable	12
API permissions for Microsoft Graph	13
Update the Environment Configuration in contactSync	16
Update the Environment Configuration in contactSync	18
contactSync version 8.4.3 and later compared with contactSync 8.4.2 and earlier	21
Exchange Administrator role or Exchange Recipient Administrator role for the registered Application (App Registration)	23
contactSync version 8.4 compared with contactSync 8.3.x	26
Install ExchangeOnlineManagement PowerShell module	26
Update ExchangeOnlineManagement PowerShell module	26
Determine the primary SMTP address of the public folder located on-premises	42
Determine the primary SMTP address of the public folder located Exchange Onlin	e.44
contactSync version 8.3 compared with contactSync 8.2.x	49
Public Folder tab of the public folder policy for on-premises Exchange	49
Public Folder tab of the public folder policy for Exchange Online	52
contactSync version 8.2 compared with contactSync 8.1.x	55
Install ExchangeOnlineManagement PowerShell module	55
Update ExchangeOnlineManagement PowerShell module	55
Old design of version 8.1	56
New design of version 8.2	57
contactSync version 8.1 compared with contactSync 8.0.x	61
Remote PowerShell in Exchange Online is needed - Re-enabling or Extending RPS	
support	
contactSync version 8.0 compared with contactSync 7.6.x	
Migrate an existing policy	69

L	.icensing	83
D	Downgrading	83
	contactSync version 7.2 compared with contactSync 7.1.x	80
	contactSync version 7.2 compared with contactSync 7.2.9	.79
	contactSync version 7.3 compared with contactSync 7.2.x	.77
	contactSync version 7.4 compared with contactSync 7.3.x	.76
	contactSync version 7.5 compared with contactSync 7.4.x	.74
	contactSync version 7.6 compared with contactSync 7.5.x	./1

contactSync version 8.5

As of version 8.5, contactSync supports **Microsoft Graph** to access mailboxes in Exchange Online.

contactSync requires .NET Framework 4.8, Windows PowerShell 5.1 and the ExchangeOnlineManagement PowerShell module version 3.6 or later for Exchange Online PowerShell V3.

As of version 8.4, for all contactSync policy types it is possible to select the mailboxes in both on-premises and Exchange Online in a hybrid Exchange environment on the mailbox tab. Provided that the Exchange Online mailboxes have not been selected by Recipient Type in existing policies.

contactSync synchronizes contacts directly from a public folder to user mailboxes in your Exchange environment, whether it is in Exchange on-premises or Exchange Online. In Hybrid Exchange environments contactSync can access public folders and mailboxes in both locations.

As of version 8.3, contactSync can now also synchronize contacts from a Shared Mailbox into users' mailboxes located in the same Exchange environment.

As of contactSync version 8.1, the certificate-based authentication method to establish a connection to Exchange Online is available in the Environment Configuration. Exchange Online connections using the certificate-based authentication method, Azure AD App Permissions of a registered application are used for access.

contactSync also synchronize contacts from a modern Public Folder into users' mailboxes located in the same Exchange environment.

contactSync also synchronize the Global Address List (GAL) into users' mailboxes located in the same environment.

As of contactSync version 8.0, the **Environment Configuration** describes the Exchange environment and its settings by which contactSync connects to Exchange, which eliminates the requirement to configure authentication separately for each policy. Instead, contactSync now uses the credentials assigned to each configured environment.

Download

Download the most recent version from our website:

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

* Microsoft stopped supporting Exchange 2013 on the 11th April 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.

Upgrade Instructions

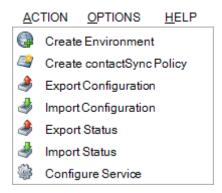
For updates from contactSync version 8.x to contactSync version 8.x

To install a new contactSync version, perform a backup of your contactSync data and install the new version.

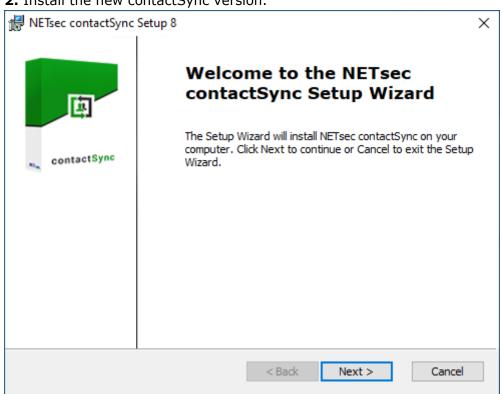
1. Backup (or copy) your contactSync program folder and the **common application** data folder.

Select **Action** -> **Export Configuration** to zip your Environment Configuration and Policy configuration.

Select **Action** -> **Export Status** to zip your log files.



2. Install the new contactSync version.



Important: Depending on the version gap, it may be necessary to reconfigure some options in your policies.

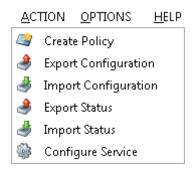
For updates from contactSync version 7.x to contactSync version 8.x

To install a new contactSync version, perform a backup of your contactSync data and install the new version.

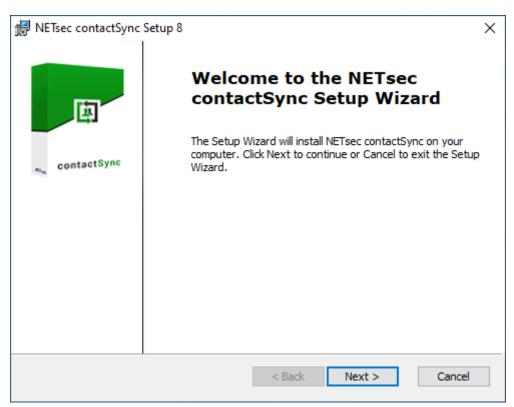
1. Backup (or copy) your contactSync program folder and the **common application** data folder.

Select **Action** -> **Export Configuration** to zip your Policy configuration.

Select **Action** -> **Export Status** to zip your log files.



2. Install the new contactSync version.



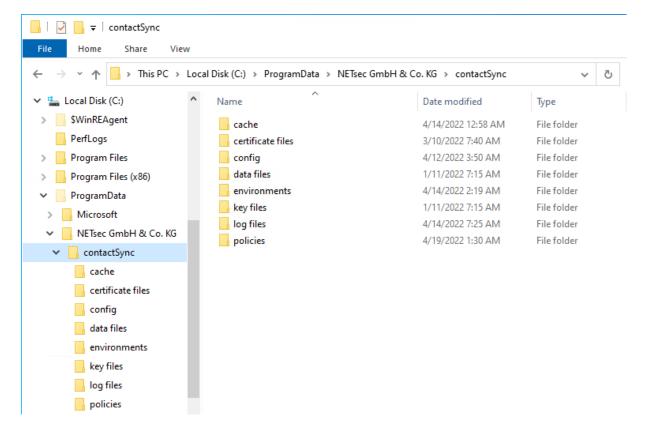
As of contactSync version 8, an **Environment Configuration** is necessary and must be configured. After that, existing policies can be migrated and new policies can be created and configured. Please see the **Incompatibility** chapter.

Important: Depending on the version gap, it may be necessary to reconfigure some options in your policies.

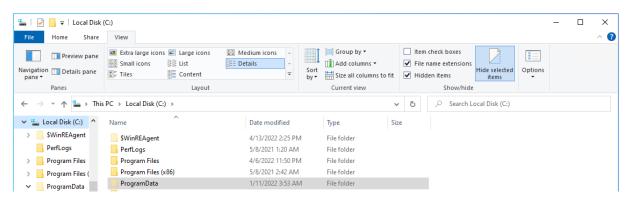
Where is the common application data folder?

The common application data folder can be retrieved in the Windows Explorer with the command





Note: The folder **ProgramData** is usually hidden. You may activate the option **Hidden items** of the File Explorer.



Incompatibility

contactSync version 8.5.6 or later compared with contactSync 8.5.5 and earlier

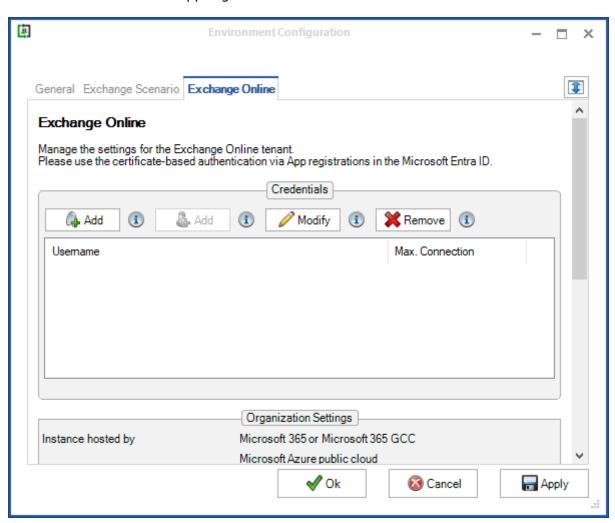
1. As of version 8.5.6, user-based authentication for applications no longer works.

For this reason, the option to create a new user-based credential account has been deactivated. Please note, Microsoft requires multifactor authentication for user-based accounts and restricts access via Exchange Web Services for Exchange Online.

It is still possible to modify existing user-based accounts, but the switch to certificate-based authentication for access to Exchange Online mailboxes via Microsoft Graph will be required.

If you still have user-based accounts, you will find information on switching to certificate-based authentication in the chapter **How to switch from user-based authentication to certificate-based authentication** in the contactSync manual. https://www.netsec.de/en/products/galsync/documentation.html

On the Exchange Online tab in the **Environment Configuration**, there is now only one available method to establish a connection to Exchange Online. Please use the certificate-based authentication via App registrations in Microsoft Entra ID.



2. 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 any longer, because Microsoft will start blocking Exchange Web Services (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-web-services-in-exchange-online/3924440

contactSync version 8.5 compared with contactSync 8.4.6 and earlier

1. As of version 8.5, contactSync requires .NET Framework 4.8, Windows
PowerShell 5.1 and the ExchangeOnlineManagement PowerShell module version
3.6 or later for Exchange Online PowerShell V3.

The **ExchangeOnlineManagement PowerShell module** needs to be installed or updated on the contactSync Server, so contactSync can directly 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 in the Microsoft Docs: About the Exchange Online PowerShell module https://learn.microsoft.com/en-us/powershell/exchange/exchange-online-powershell-v2?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
```

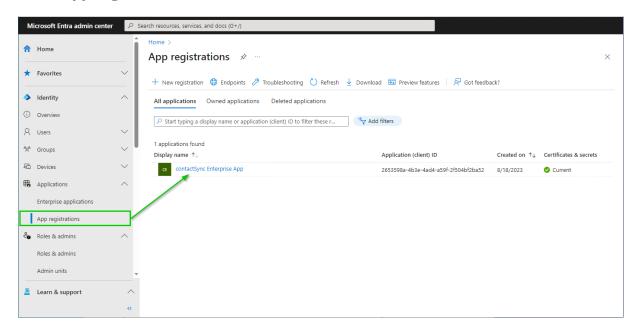
Please have look at the Prerequisites for the Exchange Online PowerShell module chapter in the Microsoft Docs: About the Exchange Online PowerShell module https://learn.microsoft.com/en-us/powershell/exchange/exchange-online-powershell-w2?view=exchange-ps#update-the-exchange-online-powershell-module

2. As of version 8.5, contactSync supports **Microsoft Graph** to access mailboxes in Exchange Online.

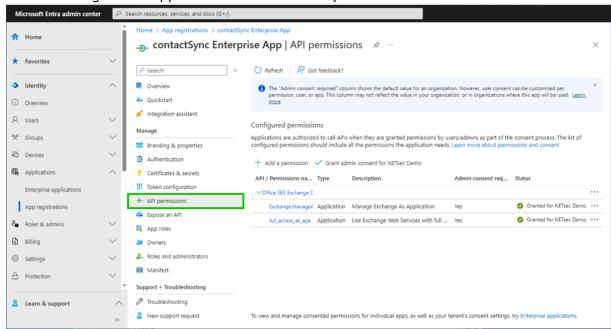
The following changes in the assigned API permissions of the App Registration in the **Microsoft Entra ID** are necessary to use Microsoft Graph to access mailboxes in Exchange Online.

The registered Application in App registrations

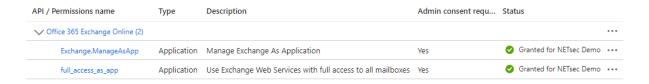
In the Microsoft Entra admin center menu, go to **Identity**, expand **Applications** and select **App registrations**.



Select the registered Application to see the API permissions.



The **Exchange.ManageAsApp** permission is also required to access Exchange Online mailboxes via **Microsoft Graph**.

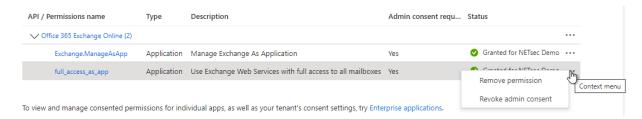


The **full_access_as_app** permission allows to access Exchange Online mailboxes via **Exchange Web Services** and is not needed to access Exchange Online mailboxes via **Microsoft Graph**.

Remove API permission for Exchange Web Services, if applicable

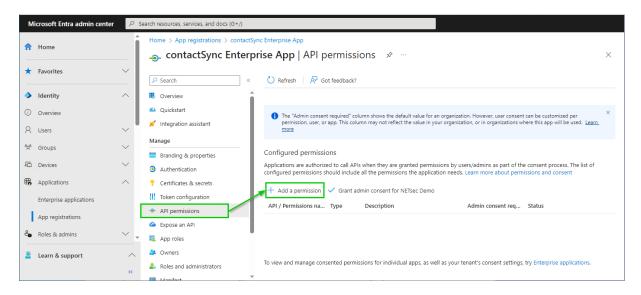
The **full_access_as_app** permission can be removed, except you use contactSync policies, which are **synchronizing contacts from a Public Folder**, that are located in Exchange Online, which at the moment need the **full_access_as_app** permission for Exchange Web Services.

If the **full_access_as_app** permission is not be needed anymore, it is necessary to **Revoke admin consent** first and then to **Remove permission** at the context menu of the permission entry.

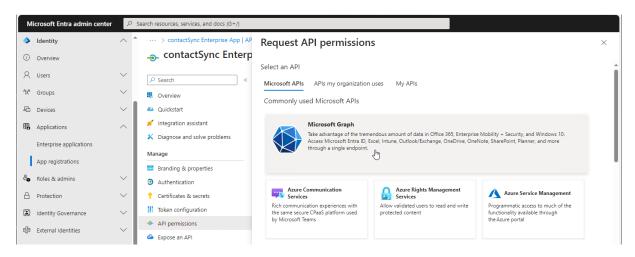


API permissions for Microsoft Graph

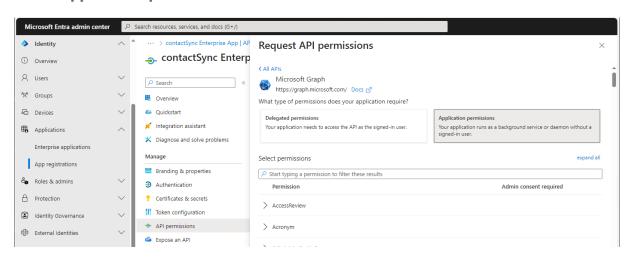
Go to API permissions, then select Add a permission



Select the Microsoft APIs and click on Microsoft Graph

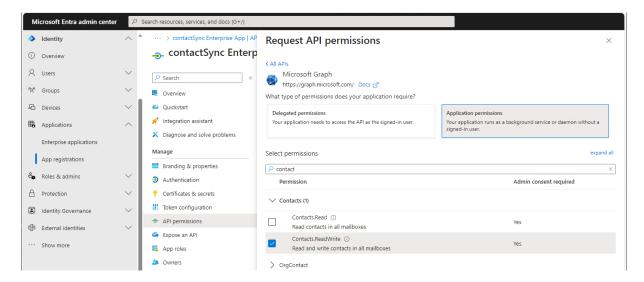


Select Application permissions



Search for ${f contact}$ and expand the ${f Contacts}$ in the result list. Select

Contacts.ReadWrite



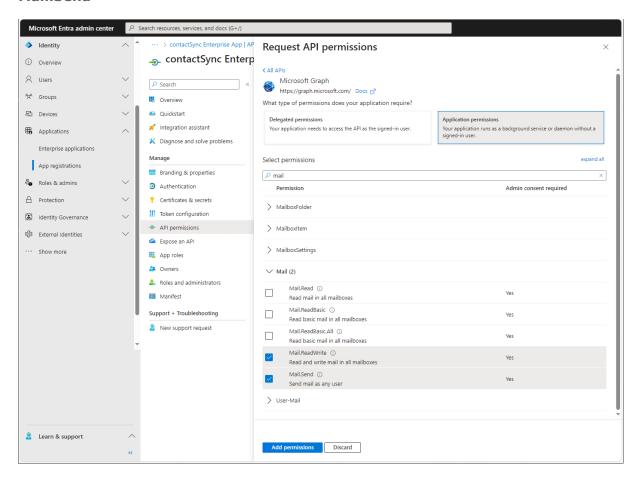
Search for mail and expand the Mail in the result list.

Select

Mail.ReadWrite

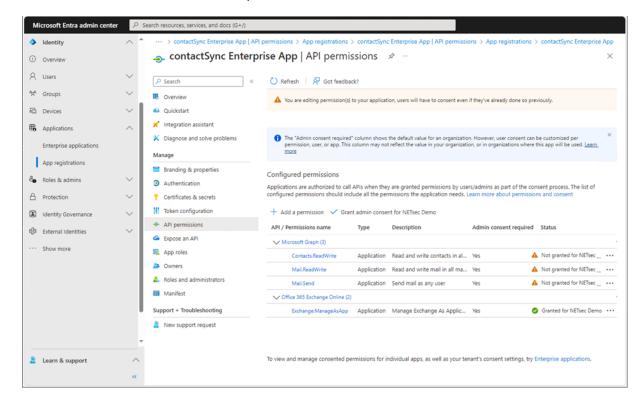
and

Mail.Send

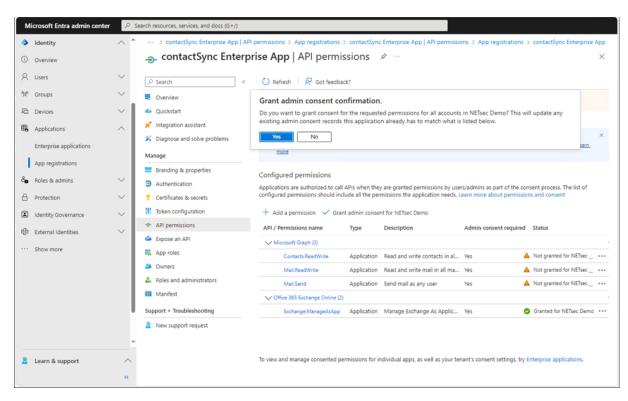


Click Add permissions

Click Grant admin consent for your tenant.

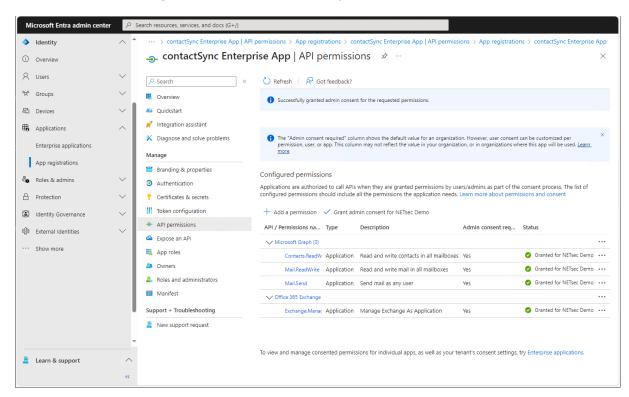


Click Yes to confirm the consent.



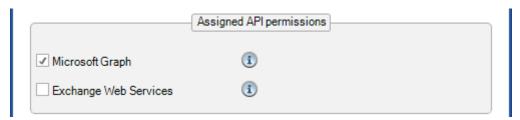
API permissions are assigned to the registered Application.

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

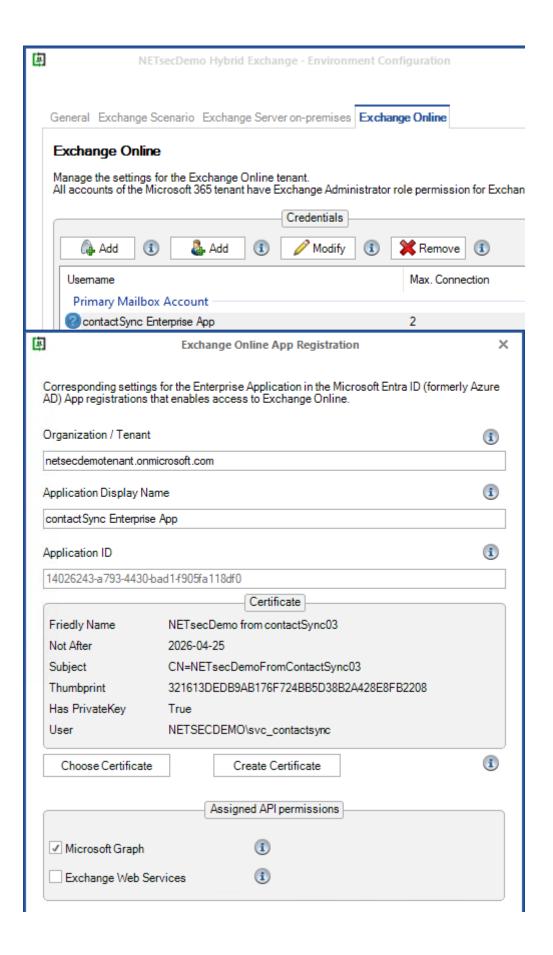


Update the Environment Configuration in contactSync

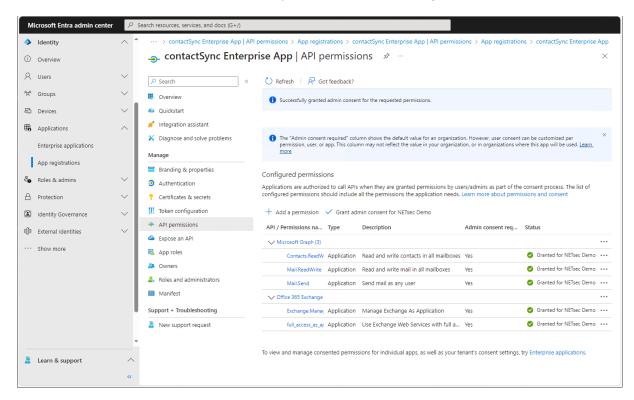
Accordingly, select Microsoft Graph at the Assigned API permissions group box in the Exchange Online App Registration dialog and uncheck the Exchange Web Services, if you have removed the full_access_as_app permission.





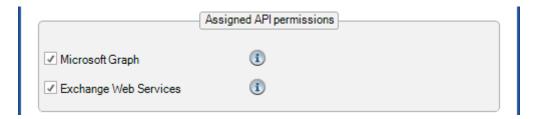


Policies synchronizing contacts from a Public Folder, which are located in Exchange Online, which at the moment need the permission for Exchange Web Services.

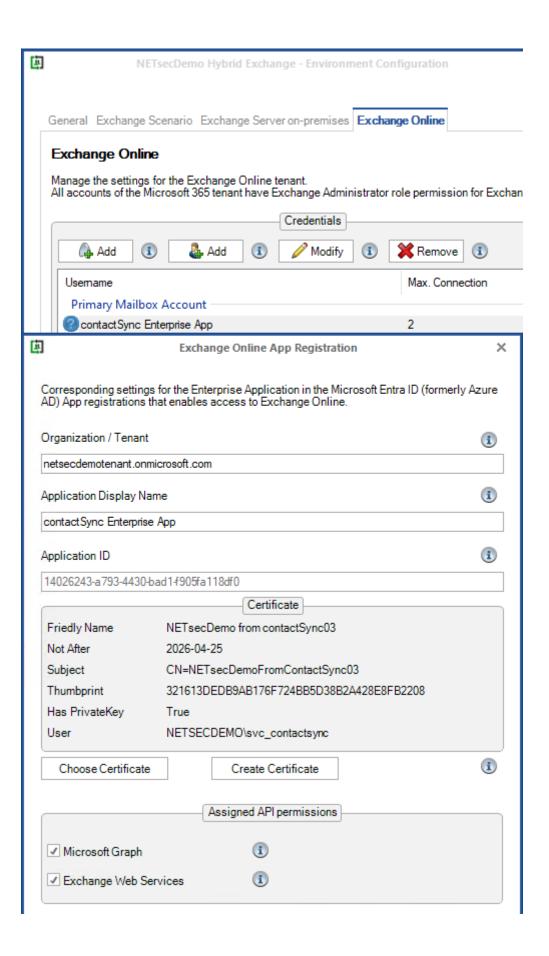


Update the Environment Configuration in contactSync

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

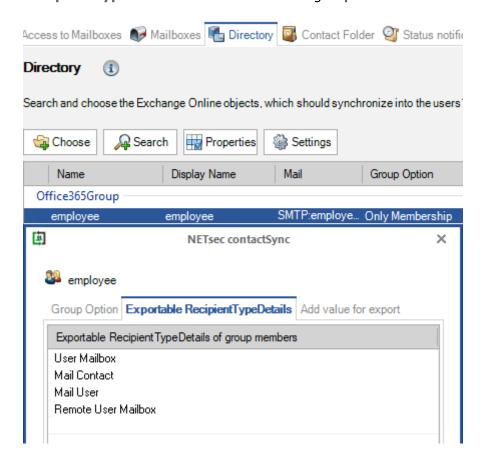






3. The behavior when synchronizing members of a selected group for policies, that synchronize from Exchange Online, has been adapted to the behavior when synchronizing from on-premises.

The members of a group selected in the policy are resolved, even if a **RecipientTypeDetails** for exporting the group is missing from the **Exportable RecipientTypeDetails** list of the selected group.



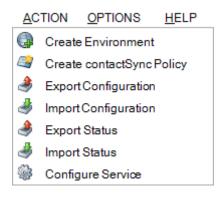
contactSync version 8.4.3 and later compared with contactSync 8.4.2 and earlier

Please note, during the first policy run after upgrading contactSync from an earlier version than 8.4.0, contactSync may update all previously synchronized contacts in the mailboxes.

1. Please backup the contactSync configuration of the earlier version than 8.4.3, before you install the latest one. The selection of mailboxes in contactSync policies will be automatically migrated to better support a hybrid Exchange environment.

Select **Action** -> **Export Configuration** to compress your Environment Configuration and Policy configuration to a zip file.

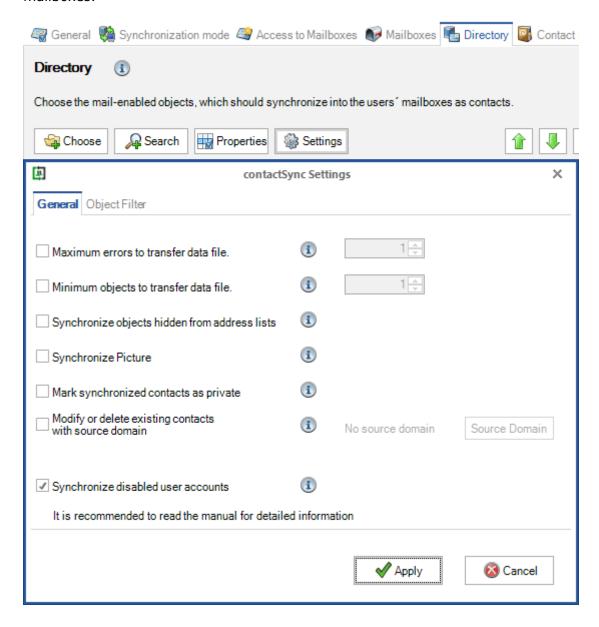
Select **Action** -> **Export Status** to compress your log files to a zip file.



2. As of version 8.4.2, user account objects that are disabled are no longer synchronized as contacts from on-premises Active Directory into users 'mailboxes by default.

Enable the **Synchronize disabled user accounts** option on the **General** tab of the **contactSync Settings** to also synchronize disabled user objects as contacts from onpremises.

In the event of an upgrade from a contactSync version 8.4.1 or earlier versions to the current contactSync version, the **Synchronize disabled user accounts** option is enabled in the existing policies, which synchronize objects from on-premises into users' mailboxes.



3. As of version 8.4.3, it is possible to assign the **Exchange Recipient Administrator role** for Exchange Online instead of the **Exchange Administrator role** to the App Registration.

Please also take a look at the Exchange Online certificate-based authentication via App Registration chapter in the contactSync manual for the complete description of how to configure an App Registration. In the following, only the part Exchange Administrator role for the registered Application is replaced in order to be able to use the Exchange Recipient Administrator role for Exchange Online.

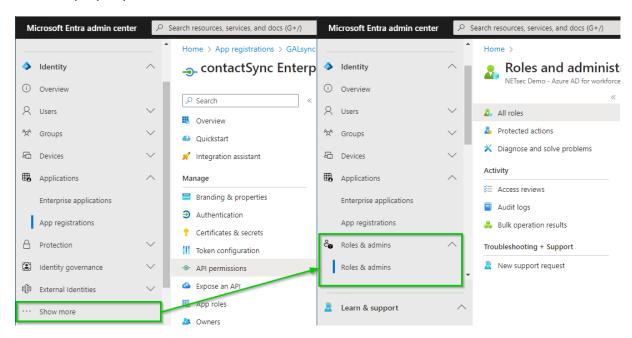
Exchange Administrator role or Exchange Recipient Administrator role for the registered Application (App Registration)

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

Please note that the Exchange Recipient Administrator role for Exchange Online has restrictions, e.g. it is not possible to check whether application access policies exist for the registered application (App Registration).

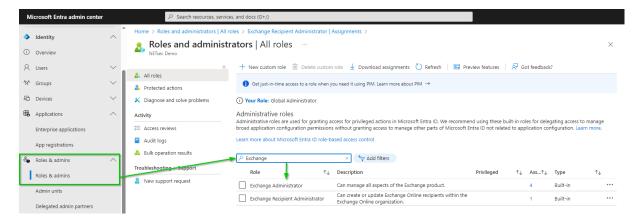
It may be that the Exchange Administrator role must be assigned to the registered application (App Registration) in the event of problems.

The application requires **Exchange Recipient Administrator role** or the **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.



The result is Exchange Administrator and Exchange Recipient Administrator.

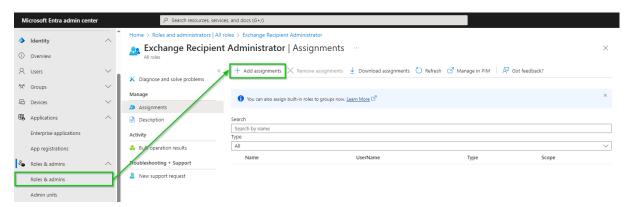
Decide which of the two roles should be assigned to the App Registration.

Please note that the Exchange Recipient Administrator role for Exchange Online has restrictions, e.g. it is not possible to check whether application access policies exist for the registered application (App Registration).

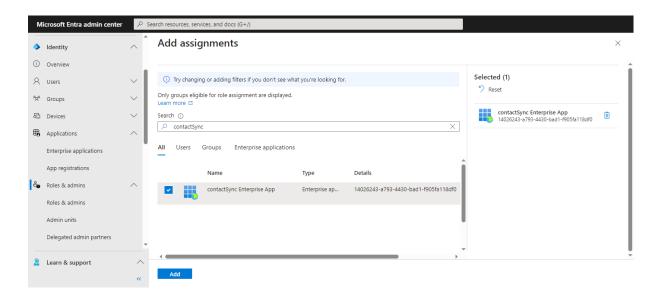
It may be that the Exchange Administrator role must be assigned to the registered application (App Registration) in the event of problems.

For example, the **Exchange Recipient Administrator** for Exchange Online.

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

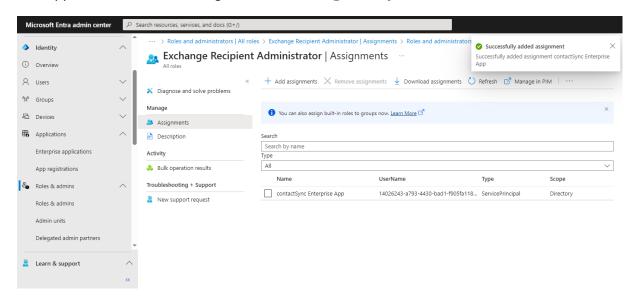


Click **Add assignments**, then search for the registered application.



Select the registered application and click Add.

The application has been assigned the **Exchange Recipient Administrator role**.



contactSync version 8.4 compared with contactSync 8.3.x

Please note, during the first policy run after upgrading contactSync from an older version than 8.4.0, contactSync may update all previously synchronized contacts in the mailboxes.

1. As of version 8.4, contactSync requires .NET Framework 4.8, Windows
PowerShell 5.1 and the ExchangeOnlineManagement PowerShell module version
3.4 or later for Exchange Online PowerShell V3.

The **ExchangeOnlineManagement PowerShell module** needs to be installed or updated on the contactSync Server, so contactSync can directly 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 in the Microsoft Docs: About the Exchange Online PowerShell module https://learn.microsoft.com/en-us/powershell/exchange/exchange-online-powershell-w2?view=exchange-ps#install-the-exchange-online-powershell-module

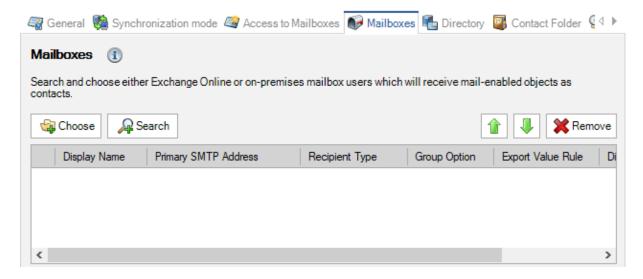
Update ExchangeOnlineManagement PowerShell module

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

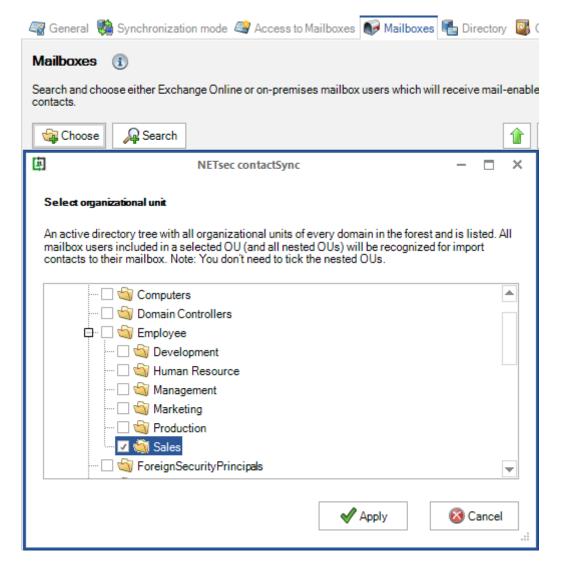
```
Update-Module -Name ExchangeOnlineManagement -Force
```

Please have look at the Prerequisites for the Exchange Online PowerShell module chapter in the Microsoft Docs: About the Exchange Online PowerShell module https://learn.microsoft.com/en-us/powershell/exchange/exchange-online-powershell-w2?view=exchange-ps#update-the-exchange-online-powershell-module

2. As of version 8.4, the handling of hybrid Exchange environments has been extended for contactSync policies. In hybrid Exchange environments, mailboxes can be selected from Exchange on-premises and Exchange Online within the same policy if no Recipient Type has been selected in Mailboxes tab.

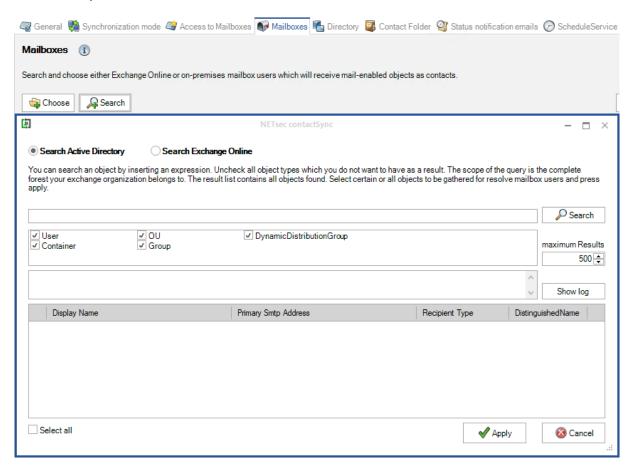


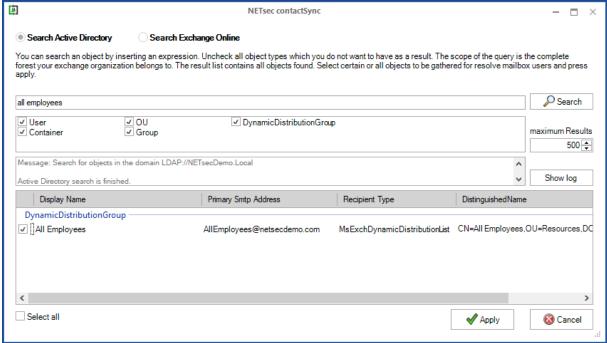
Click **Choose** to select mailboxes by OU where they reside in Active Directory.



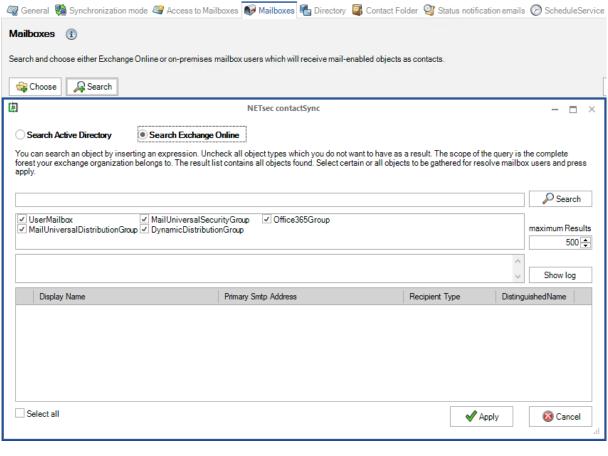
Click **Search** to open a search dialog window from which you can select where to search for the desired objects in a hybrid Exchange environment.

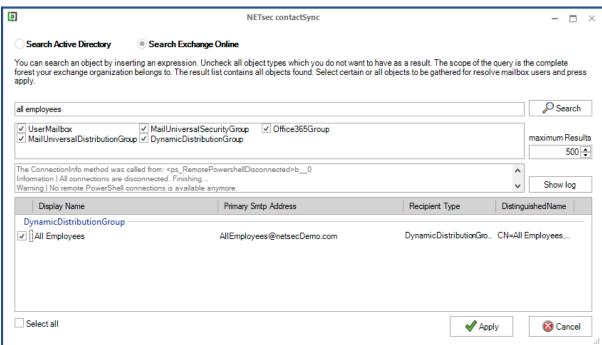
When searching Active Directory, mailboxes can be selected individually, by group membership, by container, or by OU. It is recommended to select mailboxes by group membership.



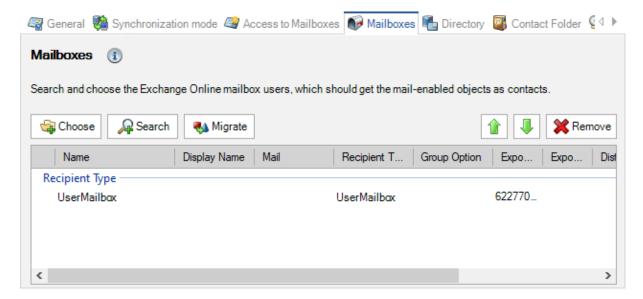


When searching in Exchange Online, mailboxes can be selected individually or by group membership. It is recommended to select mailboxes by group membership.



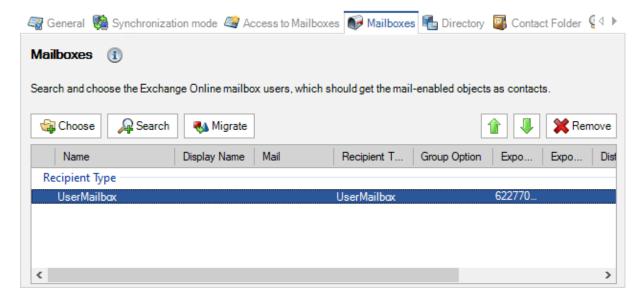


3. As of version 8.4, the option to select new mailboxes by **Recipient Type** for Exchange Online is no longer available. The selection by **Recipient Type** has been deprecated and will not be supported for new policies any longer.



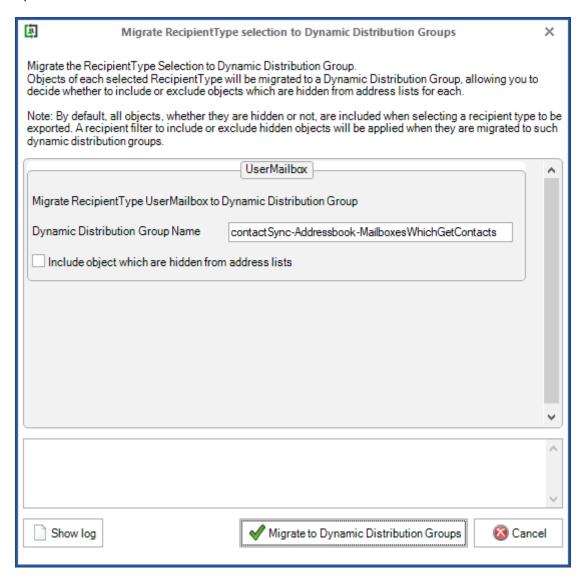
The mailbox selections, which will receive the contacts, can be selected on-premises and Exchange Online for hybrid Exchange environments within the same policy, if no **Recipient Type** on the **Mailboxes** tab is selected.

In the **Mailboxes** tab of an existing policy, if a **Recipient Type** has already been selected, it is recommended to migrate the selected **Recipient Type** to a dynamic distribution group.



Select the **Recipient Type** entry, e.g. **UserMailbox**, in the list and click **Migrate**.

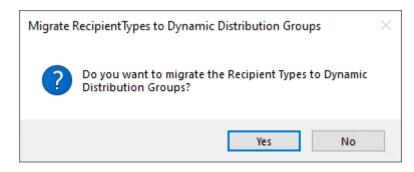
The Migrate RecipientType selection to Dynamic Distribution Groups dialog will open.

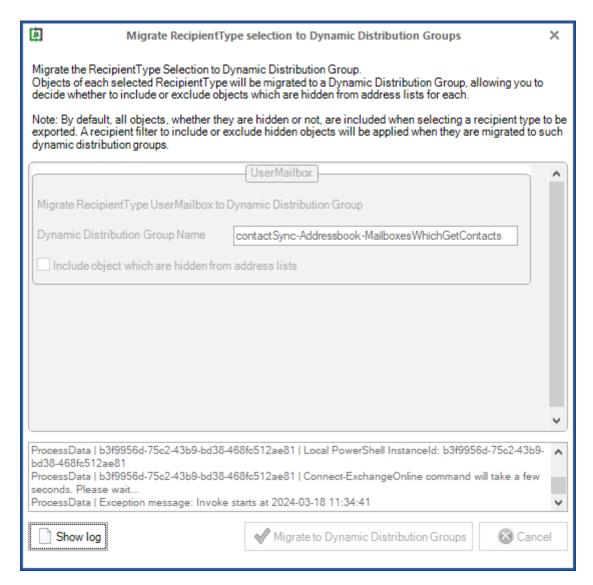


For each **Recipient Type** a dynamic distribution group will be created in Exchange Online.

The name of each dynamic distribution group must be unique in Exchange Online. The proposed name of the dynamic distribution group can be changed accordingly in the dialog before it is created in Exchange Online.

Click on Migrate to Dynamic Distribution Groups.



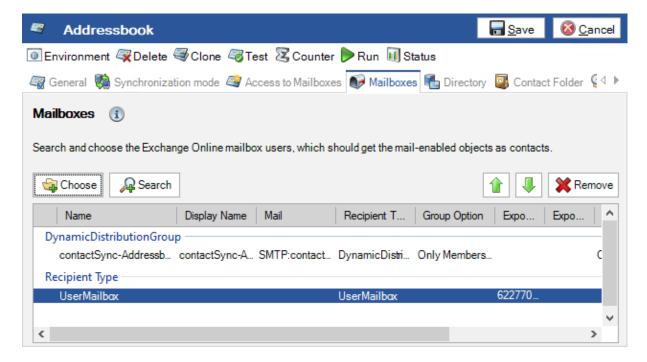


To create the dynamic distribution groups in Exchange Online, the **Exchange Online PowerShell** is used along with the settings from the **Environment Configuration**.

If the creation was successful, the dialog closes automatically.

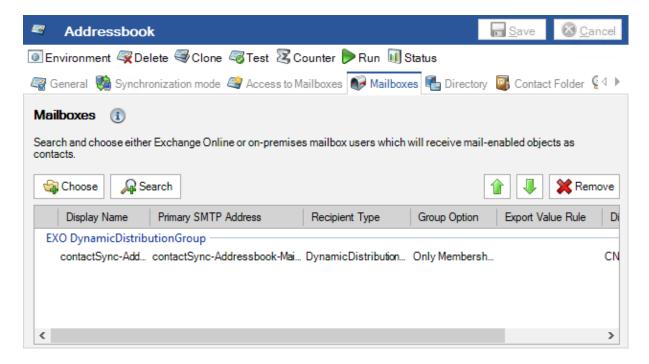
If an error occurs, the dialog remains open and the log file can be viewed by clicking on **Show log** in order to understand what did not work.

Once the dynamic distribution groups have been successfully created, the **Recipient Type** entries and the dynamic distribution group entries are displayed together until the policy is saved.



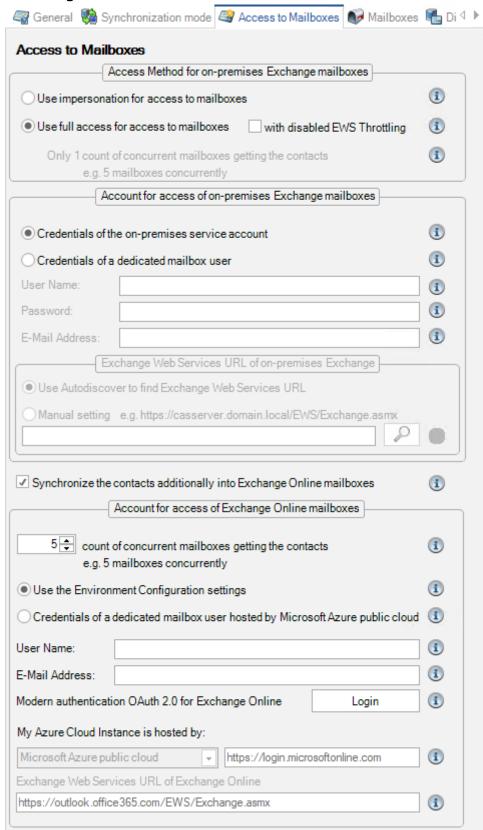
Please save the policy.

When the policy is saved, the migrated **Recipient Type** entries are removed from the list.



4. As of version 8.4, the access method **Full Access** to on-premises Exchange mailboxes has been deprecated and will not be supported for new policies any longer.

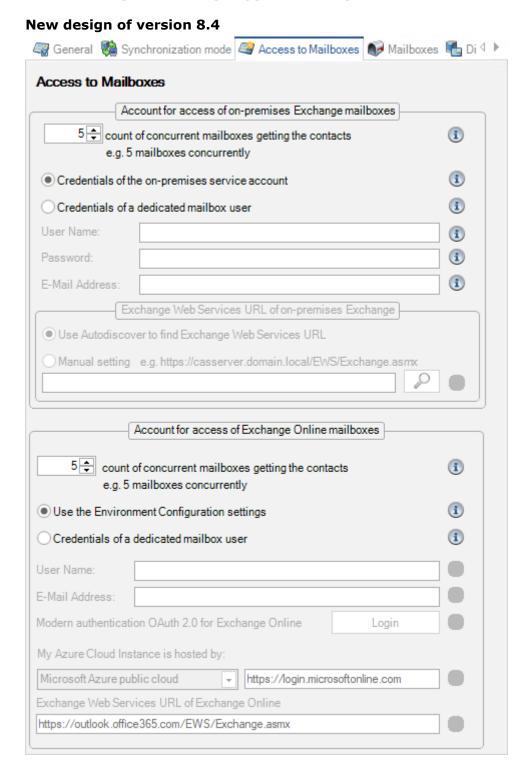
Old design of version 8.3



It is recommended to switch the access method to Exchange Application

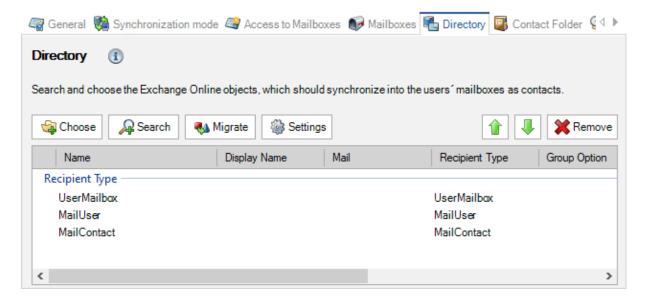
Impersonation for on-premises Exchange mailboxes. To access the mailboxes on your on-premises Exchange server, the contactSync service account needs to be a member of the Exchange Application Impersonation role to get access to the mailboxes to which the contacts are to be synchronized. Afterwards choose Use impersonation for access to mailboxes on the Access to Mailboxes tab to switch to Exchange Application Impersonation in the contactSync policy.

Please take a look at the chapter in the contactSync manual **How to configure Exchange Application Impersonation**

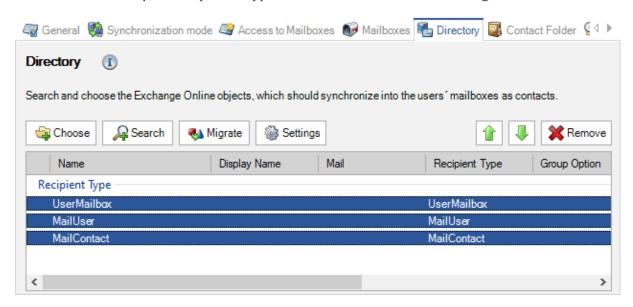


5. As of version 8.4, it is possible to migrate a selected **Recipient Type** on the **Directory** tab of a contactSync policy to a dynamic distribution group.

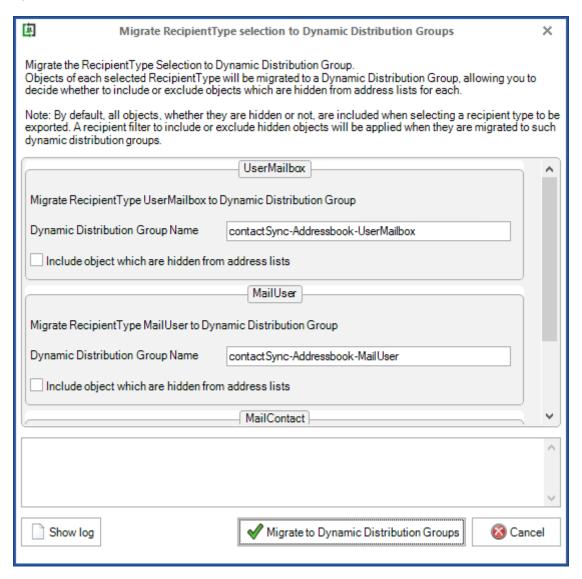
The selection by **Recipient Type** will be deprecated and is not recommended to use for configuration any longer. It is recommended to define the selection of objects to be synchronized by membership in a group. The group can be searched for in the **Search** dialog and only its members are synchronized as contacts with the group option **Only Membership**. This allows you to specify much more precisely which objects will actually be synchronized as contacts into the mailboxes.



Select one or multiple Recipient Type entries in the list and click Migrate.



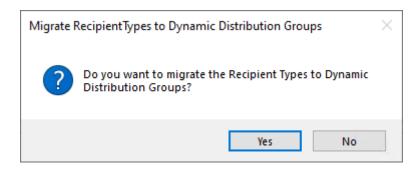
The Migrate RecipientType selection to Dynamic Distribution Groups dialog will open.

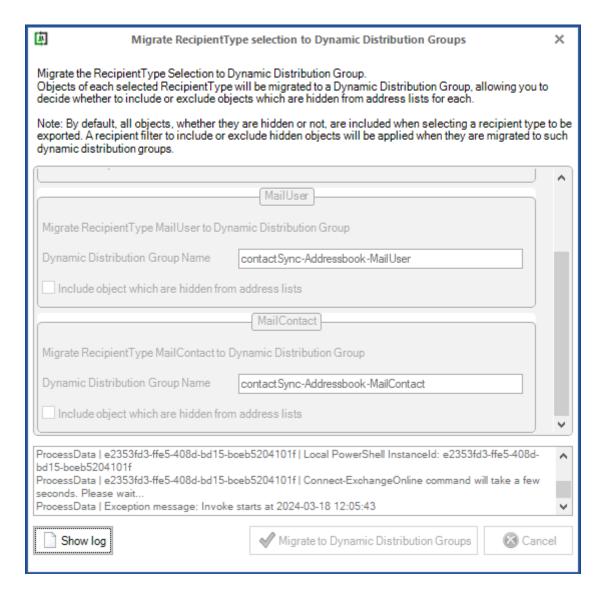


For each **Recipient Type** a dynamic distribution group will be created in Exchange Online.

The name of each dynamic distribution group must be unique in Exchange Online. The proposed name of the dynamic distribution group can be changed accordingly in the dialog before it is created in Exchange Online.

Click on Migrate to Dynamic Distribution Groups.



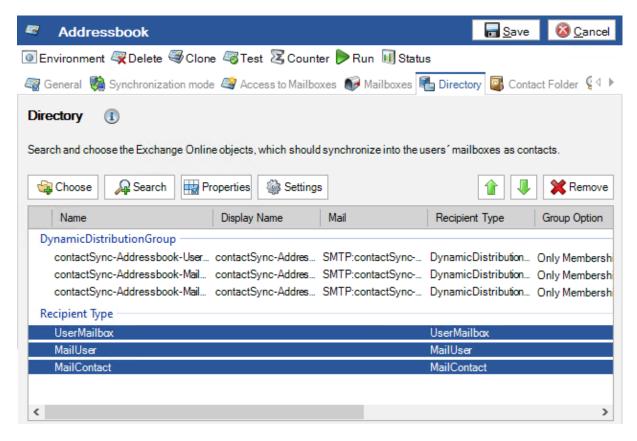


To create the dynamic distribution groups in Exchange Online, the **Exchange Online PowerShell** is used along with the settings from the **Environment Configuration**.

If the creation was successful, the dialog closes automatically.

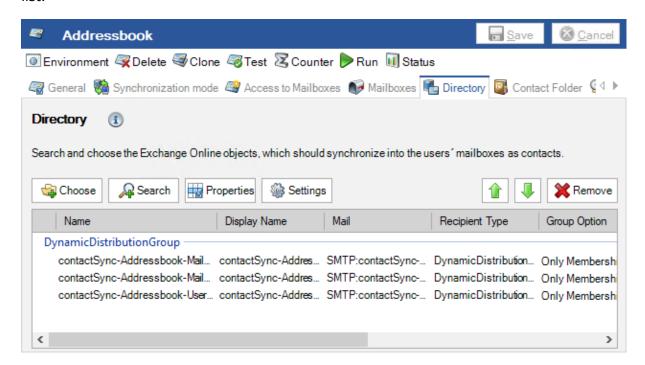
If an error occurs, the dialog remains open and the log file can be viewed by clicking on **Show log** in order to understand what did not work.

Once the dynamic distribution groups have been successfully created, the **Recipient Type** entries and the dynamic distribution group entries are displayed together until the policy is saved.



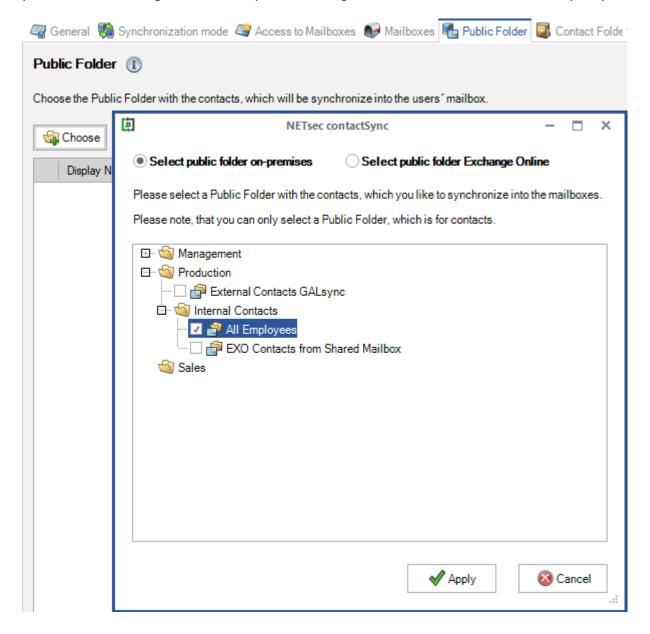
Please save the policy.

When the policy is saved, the migrated **Recipient Type** entries are removed from the list.



6. As of version 8.4, the contactSync policy to synchronize contacts from a Public Folder to mailboxes has been consolidated to one policy type.

The selection of the Public Folder, that contains the contacts, can be selected onpremises or Exchange Online for hybrid Exchange environments within the same policy.



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.

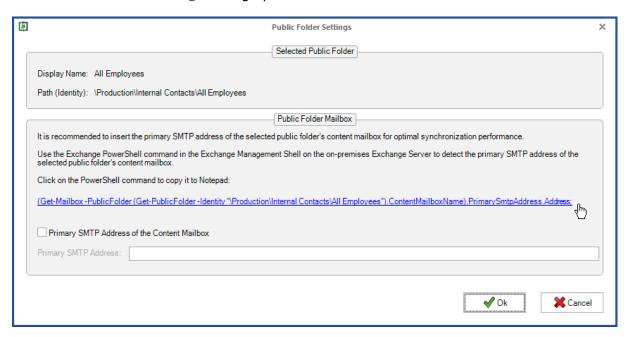
After clicking **Apply** the **Public Folder Settings** dialog will open. This will help to determine the primary SMTP address of the public folder. The determination procedure differs between a public folder that is located on-premises and a public folder that is located in Exchange Online.

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

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

Please do not confuse the **Public Folder Settings** dialog with the **contactSync Settings** dialog, which opens by clicking on the **Settings** button.

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



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.



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.

```
Welcome to the Exchange Management Shell!

Full list of cmdlets: Get-Command
Only Exchange cmdlets: Get-Excommand
Cmdlets that match a specific string: Help *cstring>*
Get general help: Help
Get Reperal help: Help
Get help for a cmdlet: Help <cmdlet name> or <cmdlet name> -?
Exchange team blog: Get-ExBlog
Show full output for a command: <command> | Format-List

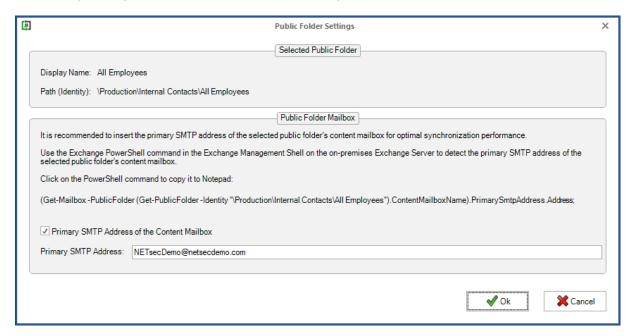
Show quick reference guide: QuickRef
VERBOSE: Connecting to DemoEx2019.NETsecDemo.Local.
VERBOSE: Connected to DemoEx2019.NETsecDemo.Local.

[PS] C:\Windows\system32>\Get-Mailbox -PublicFolder (Get-PublicFolder -Identity "\Production\Internal Contacts\All Employees").ContentMailboxName).PrimarySmtpAddress.Address;
NETsecDemo@netsecdemo.com
[PS] C:\Windows\system32>\Get-Mailbox -PublicFolder (Get-PublicFolder -Identity "\Production\Internal Contacts\All Employees").ContentMailboxName).PrimarySmtpAddress.Address;
```

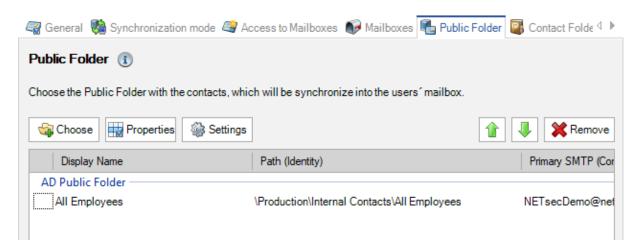
The result will be the primary SMTP address of the Public Folder mailbox.

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.



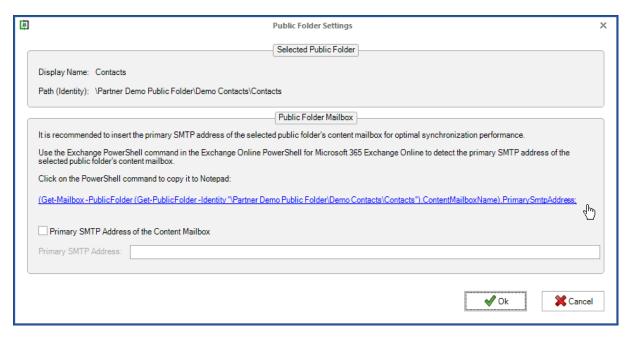
Click Ok.



Verify the selected public folder is displayed.

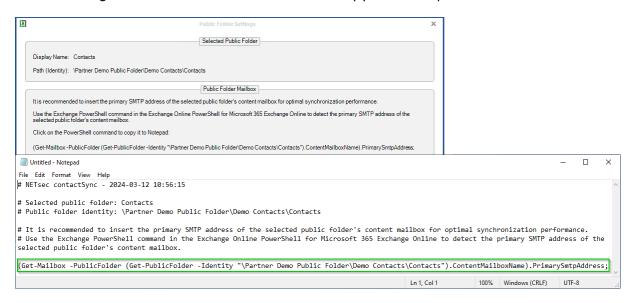
Determine the primary SMTP address of the public folder located Exchange Online

The **Public Folder Settings** dialog opens.



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.



Run the PowerShell command in **Exchange Online PowerShell** for **Microsoft 365 Exchange Online** to retrieve the primary SMTP address of the selected public folder's content mailbox.

```
Windows PowerShell

Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\svc_contactSync> Connect-ExchangeOnline

This V3 EXO PowerShell module contains new REST API backed Exchange Online cmdlets which doesn't require WinRM for Client-Server communication. You can now run these cmdlets after turning off WinRM Basic Auth in your client machine thus making it more secure.

Unlike the EXO* prefixed cmdlets, the cmdlets in this module support full functional parity with the RPS (V1) cmdlets.

V3 cmdlets in the downloaded module are resilient to transient failures, handling retries and throttling errors inherently.

REST backed EOP and SCC cmdlets are also available in the V3 module. Similar to EXO, the cmdlets can be run without WinRM basic auth enabled.

For more information check https://aka.ms/exov3-module

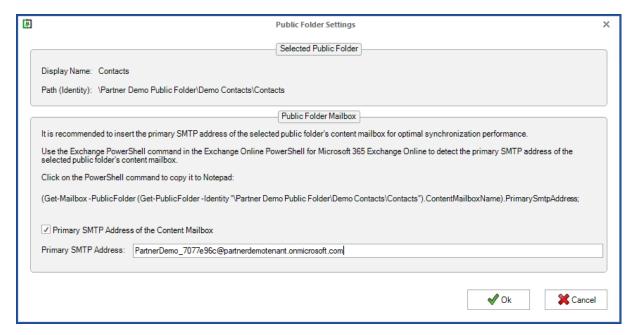
PS C:\Users\svc_contactSync> (Get-Mailbox -PublicFolder (Get-PublicFolder -Identity "\Partner Demo Public Folder\Demo Contacts\Contacts").ContentMailboxName).PrimarySmtpAddress; PartnerPomo 2072Pd6:@partnerdemotenant.onmicrosoft.com

PS C:\Users\svc_contactSync> .
```

The result will 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.

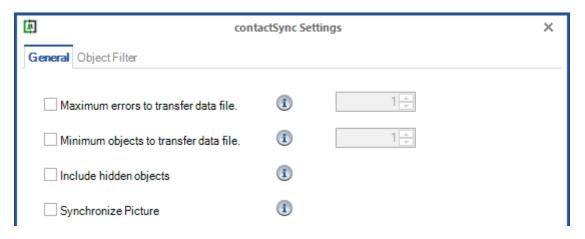


Click OK

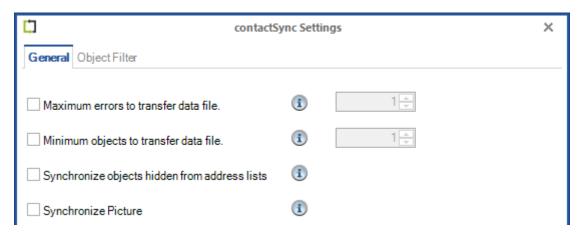
Verify the selected public folder is displayed.

7. The contactSync Settings option **Include hidden objects** was renamed to **Synchronize objects hidden from address lists**. This will synchronize hidden objects from the address lists in an on-premises Exchange as contacts into mailboxes.

Old design of version 8.3



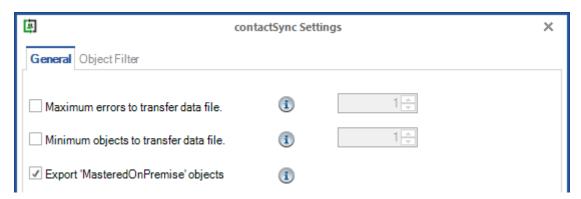
New design of version 8.4



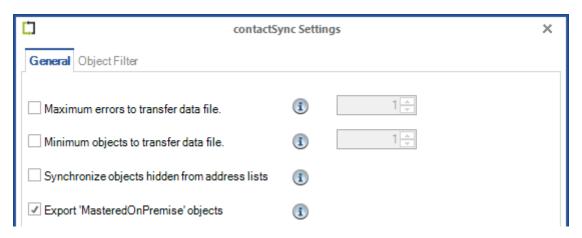
8. As of version 8.4, by default objects that are hidden from address lists are no longer synchronized from Exchange Online as contacts into mailboxes.

A new option has been added to the contactSync Settings **Synchronize objects hidden from address lists**. This will synchronize hidden objects from the address lists in Exchange Online as contacts into mailboxes.

Old design of version 8.3



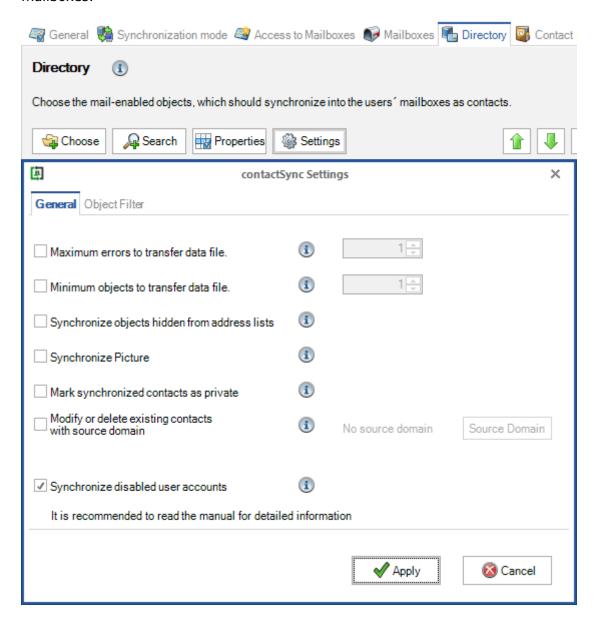
New design of version 8.4



9. As of version 8.4.2, user account objects that are disabled are no longer synchronized as contacts from on-premises Active Directory into users 'mailboxes by default.

Enable the **Synchronize disabled user accounts** option on the **General** tab of the **contactSync Settings** to also synchronize disabled user objects as contacts from onpremises.

In the event of an upgrade from a contactSync version 8.4.1 or earlier versions to the current contactSync version, the **Synchronize disabled user accounts** option is enabled in the existing policies, which synchronize objects from on-premises into users' mailboxes.



contactSync version 8.3 compared with contactSync 8.2.x

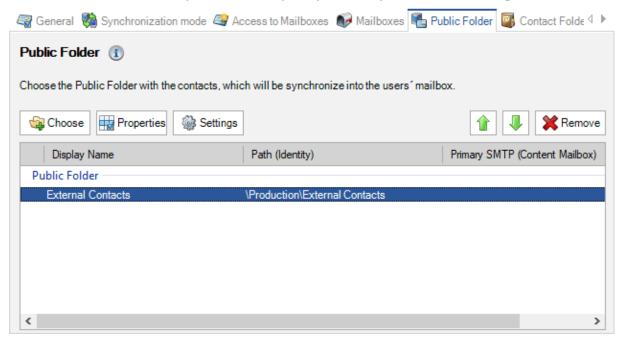
1. As of version 8.3, contactSync does not use Autodiscover to detect the Exchange Web Services URL for Exchange Online anymore, instead it uses the default Exchange Web Services URL for Exchange Online world-wide:

https://outlook.office365.com/EWS/Exchange.asmx

Otherwise please use the manual setting for the Exchange Web Services URL for Exchange Online.

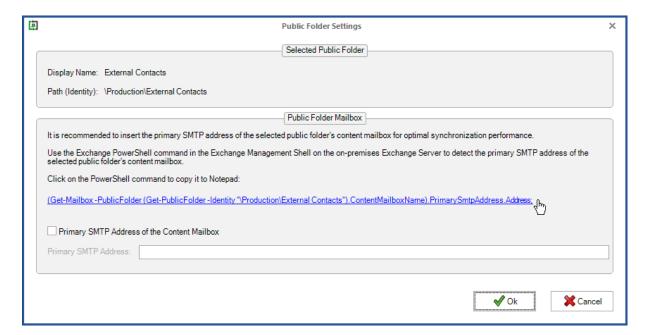
- 2. As of version 8.3, contactSync does not support Exchange 2010 any longer.
- **3.** A policy to synchronize Public Folder contacts into mailboxes has an additional Public Folder Setting to insert the primary SMTP address of the content mailbox of the selected public folder, to gain optimal synchronization performance.

Public Folder tab of the public folder policy for on-premises Exchange.

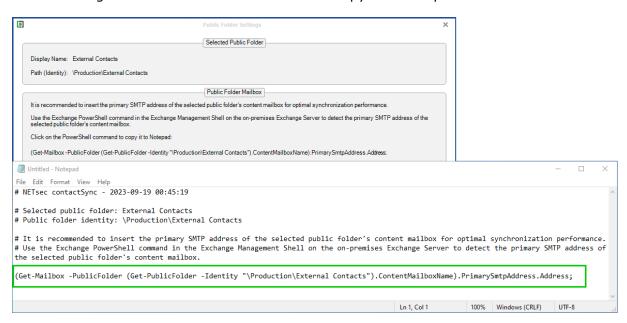


Double-click on the public folder entry to open the **Public Folder Settings** dialog.

Please do not confuse the **Public Folder Settings** dialog with the **contactSync Settings** dialog, which opens by clicking on the **Settings** button.



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



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.

```
Welcome to the Exchange Management Shell!

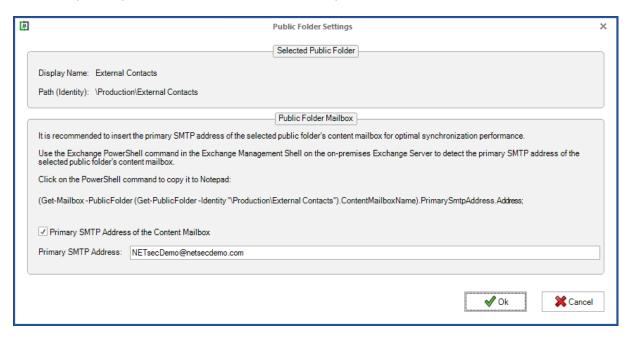
full list of cmdlets: Get-Command
Only Exchange cmdlets: Get-Excommand
Only Exchange cmdlets: Get-Excommand
Cmdlets that match a specific string: Help *<string>*
Get general help: Help
Get help for a cmdlet: Help <cmdlet name> or <cmdlet name> -?
Exchange team blog: Get-Exallog
Show full output for a command: <command> | Format-List

[PS] C:\Windows\system32>\Get-Mailbox -PublicFolder (Get-PublicFolder -Identity "\Production\External Contacts").ContentMailboxName).PrimarySmtpAddress.Address;
NETsecDemo@netsecdemo.com
[PS] C:\Windows\system32>____
```

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

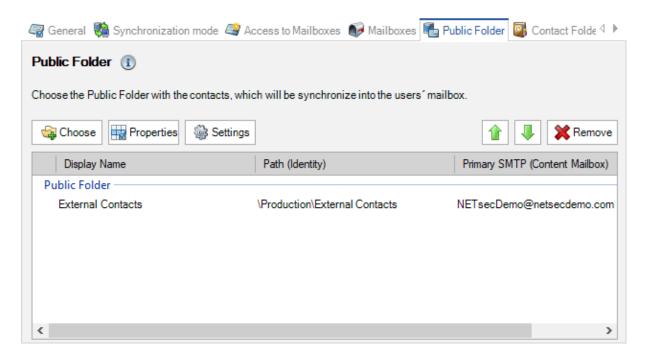
Copy the primary SMTP address to insert it in the **Public Folder Settings** dialog.

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.

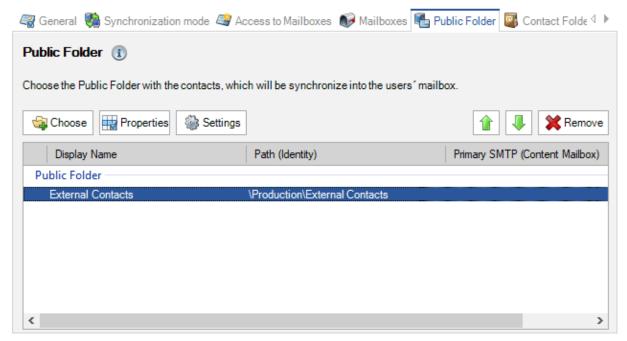


Next click Ok.

Verify the selected public folder is displayed.

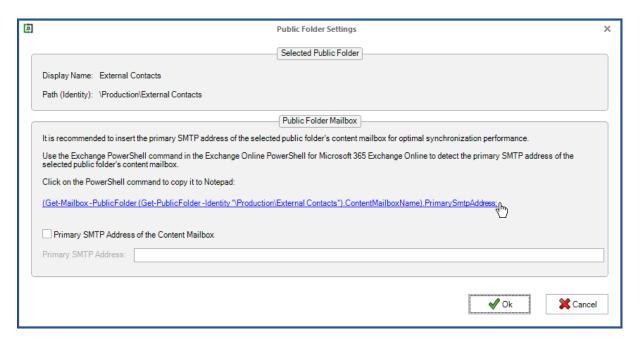


Public Folder tab of the public folder policy for Exchange Online.

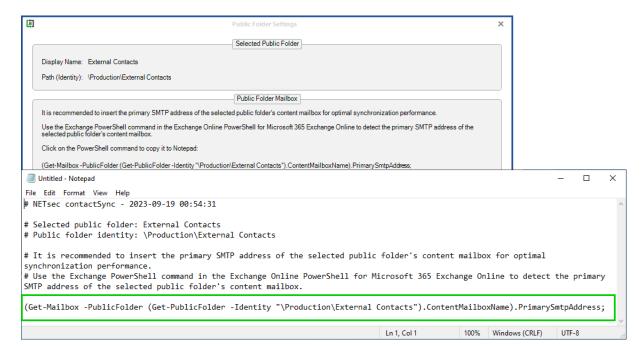


Double-click on the public folder entry to open the **Public Folder Settings** dialog.

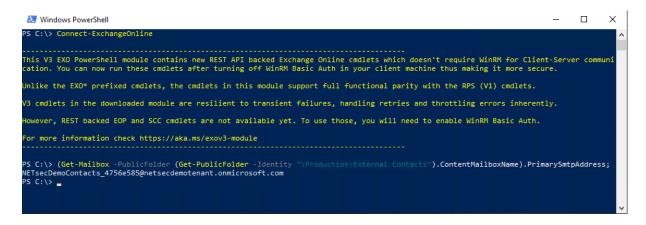
Please do not confuse the **Public Folder Settings** dialog with the **contactSync Settings** dialog, which opens by clicking on the **Settings** button.



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



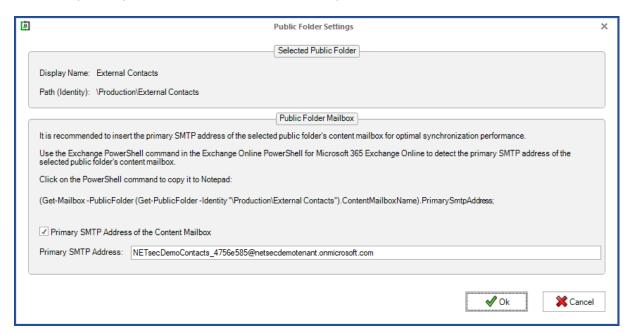
Run the PowerShell command in the **Exchange Online PowerShell** for the **Microsoft 365 Exchange Online** to retrieve the primary SMTP address of the selected public folder's content mailbox.



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

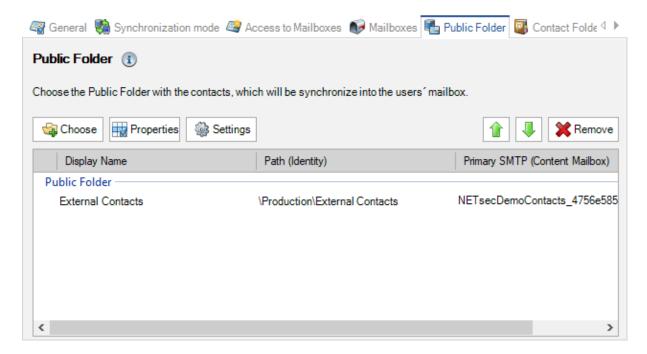
Copy the primary SMTP address to insert it in the **Public Folder Settings** dialog.

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.



Next click Ok.

Verify the selected public folder is displayed.



contactSync version 8.2 compared with contactSync 8.1.x

1. As of version 8.2, contactSync requires Windows PowerShell 5.1 and ExchangeOnlineManagement PowerShell module version 3.1 or later for Exchange Online PowerShell V3.

The **ExchangeOnlineManagement PowerShell module** needs to be installed or updated on the contactSync Server, so contactSync can directly communicate with an Office 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-powershell-v2?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:

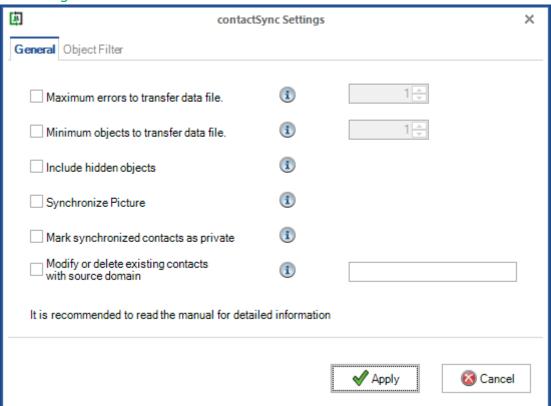
```
Update-Module -Name ExchangeOnlineManagement -Force
```

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-powershell-v2?view=exchange-ps#update-the-exchange-online-powershell-module

2. As of version 8.2, the **Modify or delete existing contacts with source domain** option in the **contactSync Settings** is redesigned.

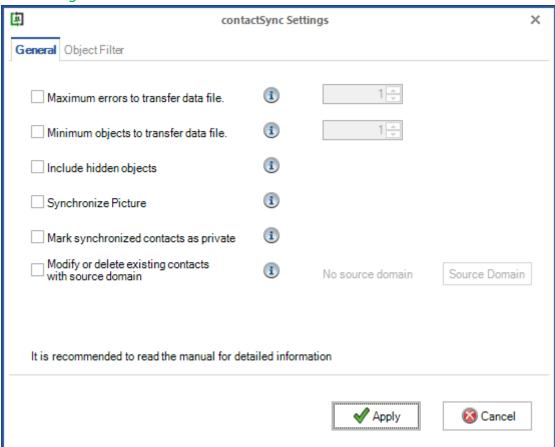
Old design of version 8.1



Example of configuration with an old source domain:

Modify or delete existing contacts with source domain	-	
	(i)	DC=forestB,DC=com

New design of version 8.2

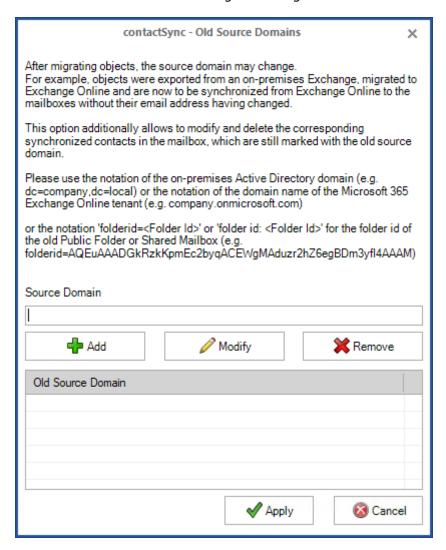


Example of configuration with an old source domain:



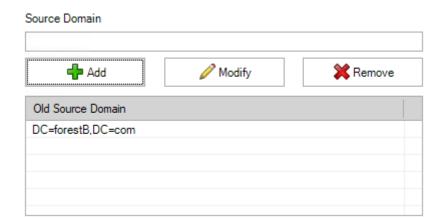
Enable the **Modify or delete existing contacts with source domain** option and click the **Source Domain** button to open the dialog to manage the old source domains.

The **Old Source Domain** dialog to manage the old source domain values.

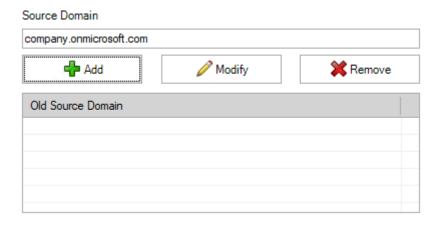


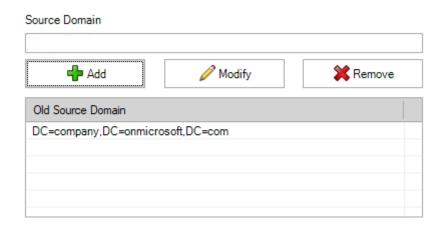
Insert the old source domain value and add it to the Old Source Domain list.

Source Domain DC=forestB,DC= com Add Modify Remove

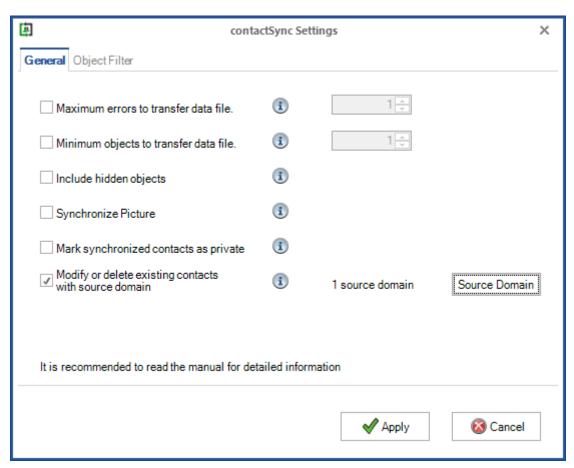


Please note, the source domain syntax company.onmicrosoft.com will be added as DC=company, DC=onmicrosoft, DC=com to the **Old Source Domain** List.





After clicking **Apply** to close the **Old Source Domain** dialog, the count of old source domain values is shown at the **Modify or delete existing contacts with source domain** option in the **contactSync Settings** dialog.



contactSync version 8.1 compared with contactSync 8.0.x

1. As of version 8.1, contactSync requires Windows PowerShell 5.1 and the ExchangeOnlineManagement PowerShell module for Exchange Online PowerShell V3.

The **ExchangeOnlineManagement PowerShell module** needs to be installed on the contactSync Server, so contactSync can directly communicate with an Office 365 Exchange Online tenant.

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

```
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**

 $\frac{\text{https://learn.microsoft.com/en-us/powershell/exchange/exchange-online-powershell-}{\text{v2?view} = \text{exchange-ps\#prerequisites-for-the-exchange-online-powershell-module}}$

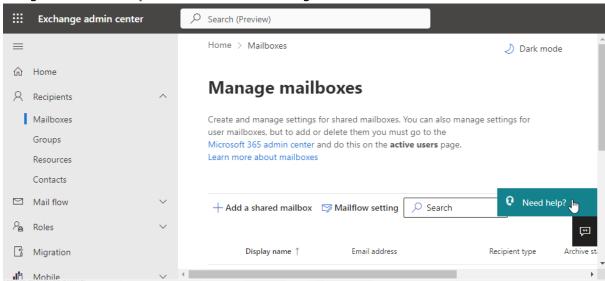
Remote PowerShell in Exchange Online is needed - Re-enabling or Extending RPS support

Microsoft announced the deprecation of Remote PowerShell (RPS) in Exchange Online, but offers the possibility of re-enabling or extending the RPS support in the Exchange Team Blog article:

<u>Deprecation of Remote PowerShell in Exchange Online – Re-enabling or Extending RPS support</u>

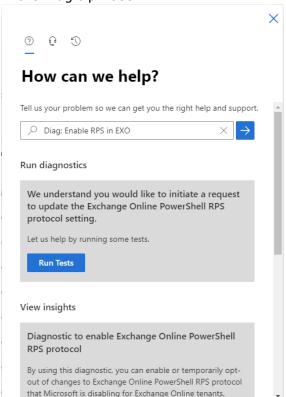
Using the Self-Service Tool

You can go to the Microsoft 365 admin center or the Exchange admin center and click on the green **Need help?** button in the lower right-hand corner of the screen.

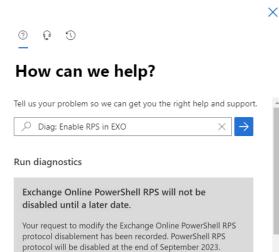


When you click the button, you enter our self-service help system. Here you can enter the magic phrase

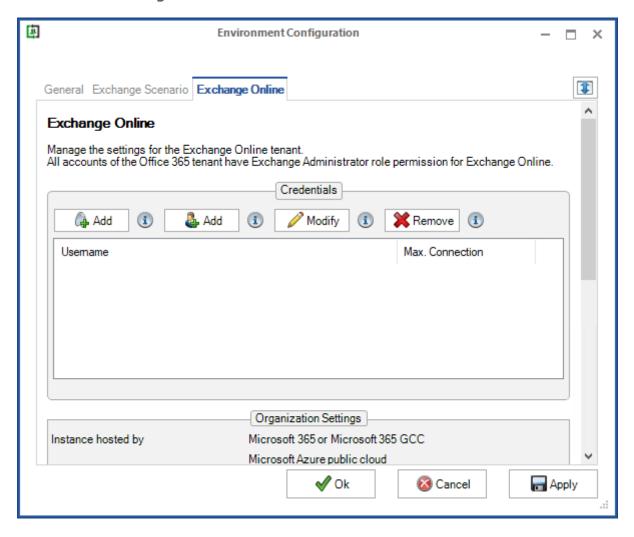
Diag: Enable RPS in EXO



Click **Run Tests** to check your tenant settings to see if we have disabled RPS, and then review the results. If we have not disabled RPS for your tenant, and you are running the diagnostic, we will offer you the option to temporarily opt out of RPS disablement or re-enable RPS. Click the checkbox and then click **Update**.



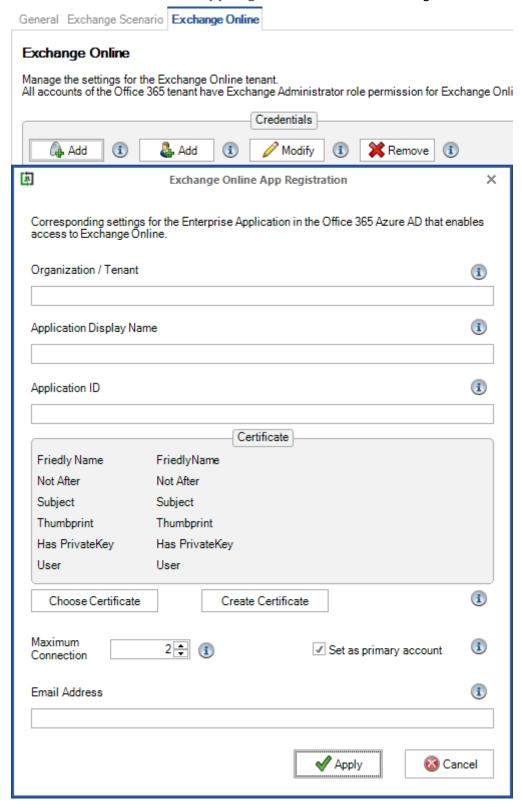
2. As of contactSync version 8.1, the **certificate-based authentication** method to establish a connection to Exchange Online is available on the Exchange Online tab of the **Environment Configuration**.



Please take a look at the **contactSync 8.1 manual** for further information

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

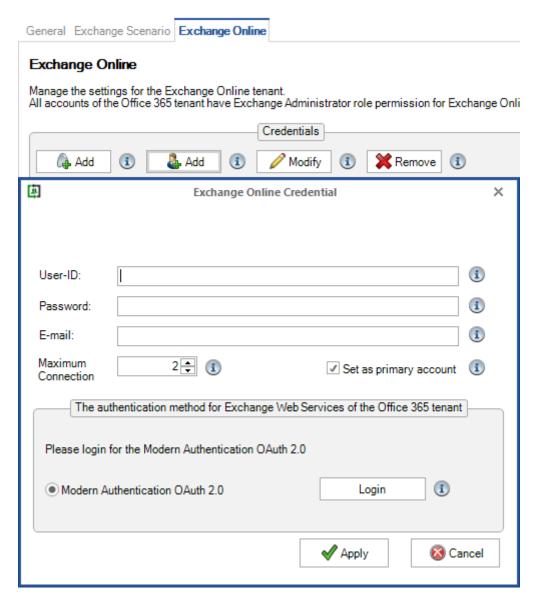
The **Add** button on the left, will open a dialog window in which to configure **certificate-based authentication** via **App registration** for the Exchange Online tenant.



Please take a look at the Exchange Online certificate-based authentication via App Registration chapter in the contactSync 8.1 manual for further information

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

The **Add** button on the right, will open a dialog window in which to configure **user-based authentication** via **Service Account** for the Exchange Online tenant.

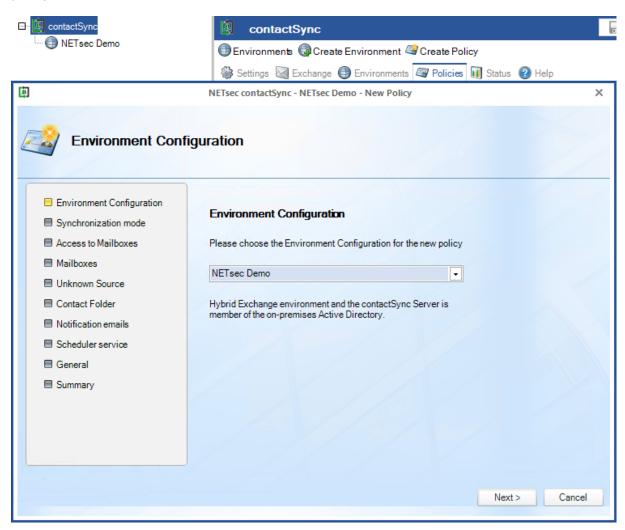


Please take a look at the Exchange Online authentication via Service Account chapter in the contactSync 8.1 manual for further information

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

contactSync version 8.0 compared with contactSync 7.6.x

1. As of contactSync version 8.0, new policies can only be created for an **Environment Configuration**. You must create and configure an **Environment Configuration** before s policy can be created.



2. As of version 8.0, contactSync requires Windows PowerShell 5.1 and the ExchangeOnlineManagement PowerShell module for Exchange Online PowerShell V2 (ExchangeOnlineManagement module version 2.0.3 - 2.0.5).

The **ExchangeOnlineManagement PowerShell module** needs to be installed on the contactSync Server, so contactSync can directly communicate with an Office 365 Exchange Online tenant.

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

```
Install-Module -Name ExchangeOnlineManagement -RequiredVersion 2.0.5 -Force
```

When prompted, enter Y for Yes then Return

```
Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Windows\system32> Install-Module -Name ExchangeOnlineManagement -Force

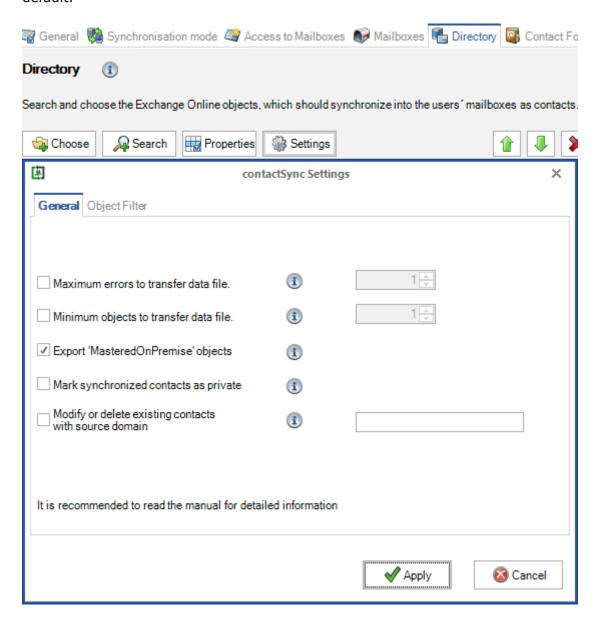
NuGet provider is required to continue
PowerShellGet requires NuGet provider version '2.8.5.201' or newer to interact with NuGet-based repositories. The NuGet provider must be available in 'C:\Program Files\PackageManagement\ProviderAssemblies' or 'C:\Users\Svc_GALsync\AppData\Local\PackageManagement\ProviderAssemblies'. You can also install the NuGet provider by running 'Install-PackageProvider -Name NuGet -MinimumVersion 2.8.5.201 -Force'. Do you want PowerShellGet to install and import the NuGet provider now?

[Y] Yes [N] No [S] Suspend [?] Help (default is "Y"): y
PS C:\Windows\system32> ■
```

Please take look at the Prerequisites for the EXO V2 module chapter of the Microsoft Docs: About the Exchange Online PowerShell V2 module

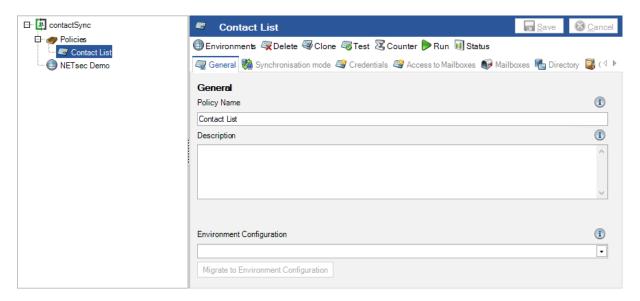
https://docs.microsoft.com/en-us/powershell/exchange/exchange-online-powershell-v2?view=exchange-ps#prerequisites-for-the-exo-v2-module

3. As of contactSync version 8.0, newly created policies for Exchange Online have the **Export `MasteredOnPremise' objects** option of the **contactSync Settings** enabled by default.



Migrate an existing policy

Policies created by contactSync Version 7 or earlier versions have no associated Environment Configuration.



You can migrate such a policy to a corresponding Environment Configuration.

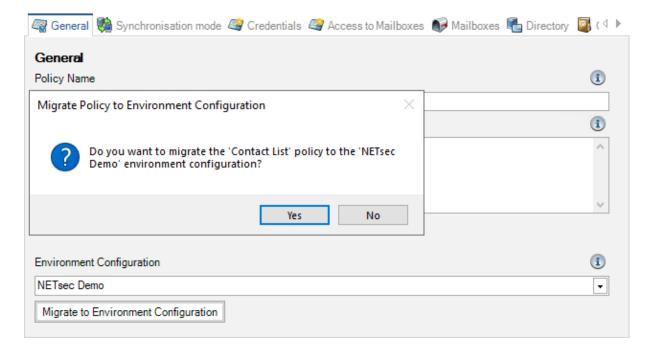
Please note that a policy can only migrate once.

Select the corresponding **Environment Configuration** on the **General** tab of the policy and click **Migrate to Environment Configuration**.



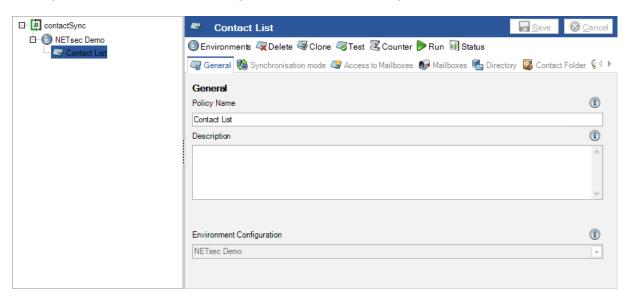
If you are sure, you have selected the correct **Environment Configuration** for the policy migration, click **Yes** to migrate the policy to the selected Environment Configuration.

Please note that a policy can only migrate once.



After that, please save the policy.

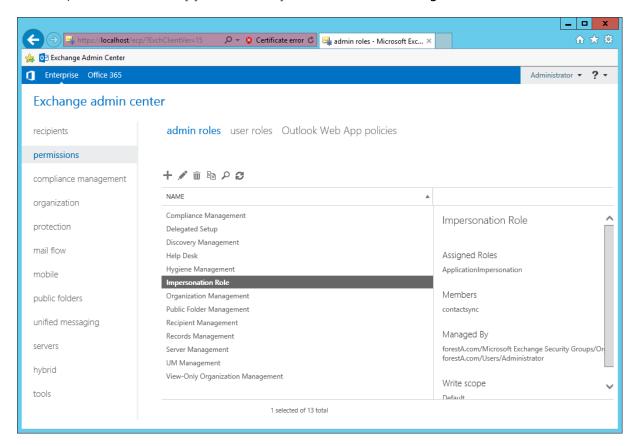
The policy now belongs to the corresponding Environment Configuration and uses the settings of the Environment Configuration for the Exchange environment.



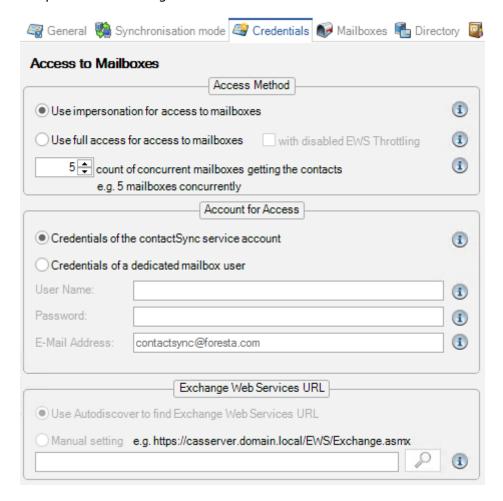
contactSync version 7.6 compared with contactSync 7.5.x

As of contactSync version 7.6, the default access method to the mailboxes has changed to Exchange Impersonation on the **Access to mailboxes** Credentials tab of the policy.

The service account must be member of an **Admin Role** in the **Exchange Admin Center**, which has the **ApplicationImpersonation** role assigned.



On-premises Exchange:

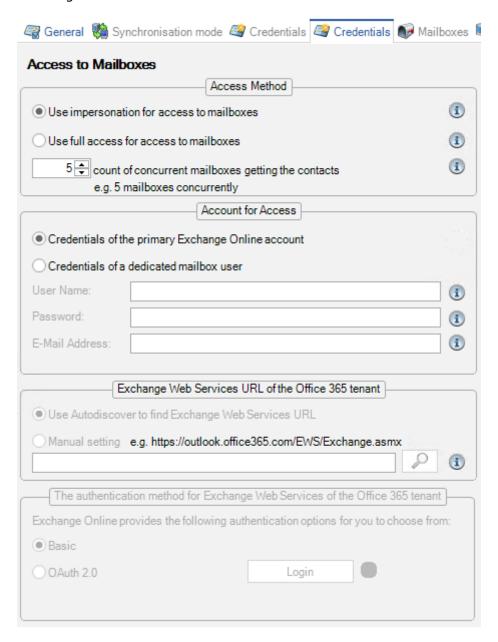


If **Exchange Application Impersonation** is configured, maximum 5 mailboxes concurrently are recommended.

If **Full Access** is configured in an on-premises Exchange environment and the serverside EWS Throttling is disabled, maximum 5 mailboxes concurrently are recommended.

Note: It depends on the Exchange environment how many mailboxes getting the contacts to be synchronized at the same time.

Exchange Online:



If **Exchange Application Impersonation** is configured (recommended), contactSync can connect to up to 5 mailboxes concurrently.

If **Full Access** is configured, contactSync can only connect to one mailbox at a time.

Note: It depends on the Exchange environment how many mailboxes getting the contacts to be synchronized at the same time.

contactSync version 7.5 compared with contactSync 7.4.x

1. The shortcut on the desktop and the start menu entry are renamed to NETsec contactSync.



2. The contactSync service account of an Office 365 Tenant needs access to its own mailbox. Therefore, Modern Authentication OAuth 2.0 for Exchange Web Services (EWS) can be configured.

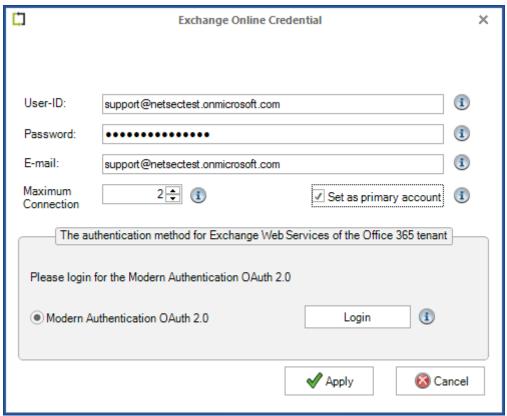
Please note, that Microsoft will stop supporting and fully decommission the Basic Authentication for Exchange Web Services (EWS) to access Exchange Online on 13th October 2020.

Please check first, that the contactSync GUI is running in the credentials of the local contactSync service account, otherwise contactSync cannot decrypt the token later.

You can check this on the information bar at the bottom of the contactSync GUI.

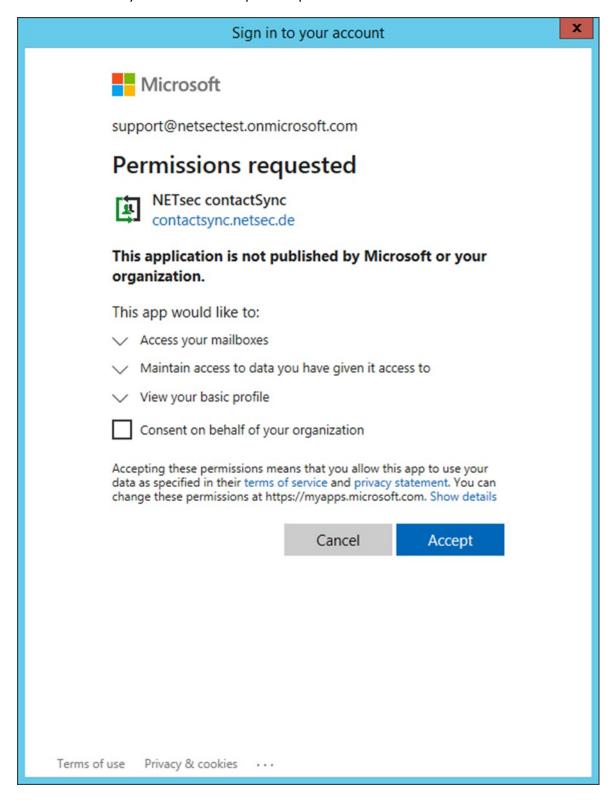


Enter the credentials of the contactSync service, and click the **Login** button.

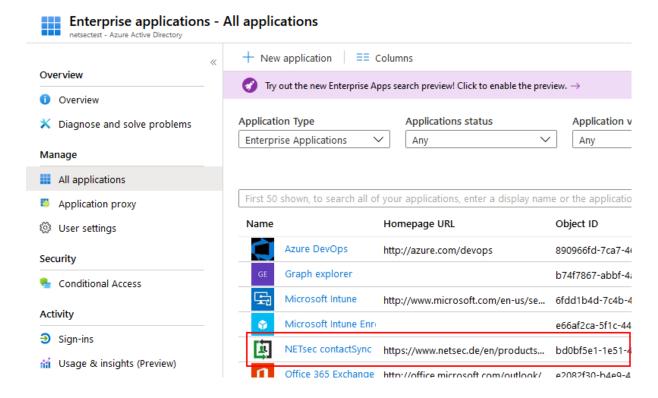


Please note, that the User-ID and the E-mail address can be different for an Exchange Online mailbox user. This depends on your Office 365 Exchange Online tenant.

NETsec contactSync needs the requested permissions.



NETsec contactSync has an entry in **Enterprise Applications** of your Office 365 **Azure Active Directory Admin Center**, where you can also check and manage the permissions.



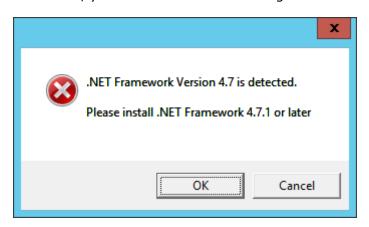
contactSync version 7.4 compared with contactSync 7.3.x

1. The old config.xml and old policy files may sometimes be incompatible.

contactSync version 7.3 compared with contactSync 7.2.x

1. contactSync needs .NET Framework 4.7.1 or later.

Otherwise, you will receive the following errors and contactSync does not work.





Error message:

Could not load file or assembly 'netstandard, Version=2.0.0.0, Culture=neutral, PublicKeyToken=cc7b13ffcd2ddd51' or one of its dependencies. The system cannot find the file specified.

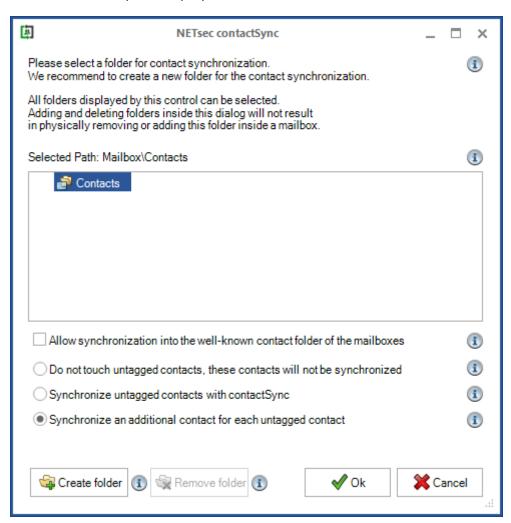
You can download the Microsoft .NET Framework 4.7.1 here:

https://www.microsoft.com/en-us/download/details.aspx?id=56116

2. Please check all credentials for the Office 365 accounts, because on some occasions, credentials are unable to be upgraded to the new version.

Note: If you downgrade to an old version, you have to insert all credentials again.

3. contactSync has the option to create and synchronize the contacts into the well-known contact folder of the mailboxes. Please be careful with this option because it allows you to directly change and delete contacts that your employees have created. This could also confuse some of your employees.

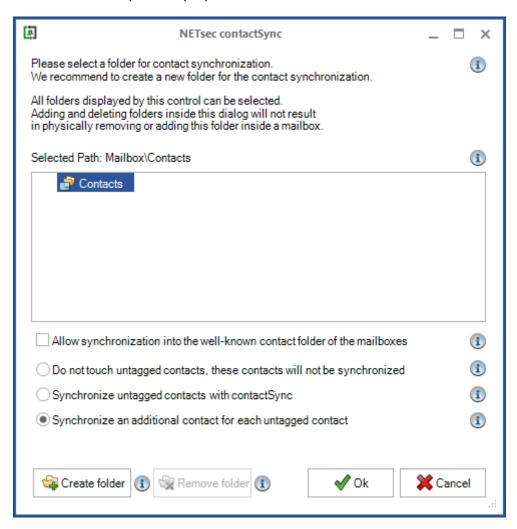


The default behavior has changed since contactSync 7.2.10 for existing contacts which were not created by contactSync, but in the selected contact folder and below it.

The default is now, that an additional contact for each existing contact, which was not created by contactSync, will be created and synchronized in the selected contact folder inside the mailboxes.

contactSync version 7.2 compared with contactSync 7.2.9

1. contactSync has the option to create and synchronize the contacts into the well-known contact folder of the mailboxes. Please be careful with this option because it allows you to directly change and delete contacts that your employees have created. This could also confuse some of your employees.



The default behavior has changed since contactSync 7.2.10 for existing contacts which were not created by contactSync, but in the selected contact folder and below it.

The default is now, that an additional contact for each existing contact, which was not created by contactSync, will be created and synchronized in the selected contact folder inside the mailboxes.

contactSync version 7.2 compared with contactSync 7.1.x

1. contactSync 7.2 has a redesigned remote PowerShell management for Office 365 tenants. contactSync will now try to reconnect broken remote PowerShell sessions to the Office 365 tenant during a policy run.

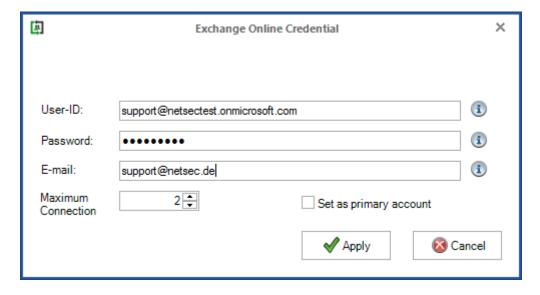
Note: If a PowerShell connection to the Office 365 tenant is broken, then contactSync will try to reconnect to the Office 365 tenant, but it may happen, that some data are not completely synchronized due to the broken connection.

In this case contactSync will try to complete it in the next synchronization run.

In the worst case it can happened, that some existing contacts in the mailboxes of the synchronization will be deleted and that after they are re-created NDR issues in the target environment can occur.

- 2. contactSync needs PowerShell 3.0 and later to connect to Office 365 tenants.
- **3.** contactSync needs the credentials for its Office 365 Exchange Online mailbox, and uses the User-ID as the email address in existing policies.

Please check your policies in the Office 365 tenant, to see whether there are any differences between the User-ID and email address.



4. contactSync will try to reconnect broken remote PowerShell sessions to the Office 365 tenant during a policy run.

Note: If a PowerShell connection to the Office 365 tenant is broken, contactSync will try to reconnect to the Office 365 tenant, but it may happen, that some data are not completely synchronized.

contactSync will try to complete it in the next synchronization run.

5. contactSync version 7.2 supports the local security option **System cryptography: Use FIPS compliant algorithms for encryption, hashing, and signing.**

If the local security option System cryptography: Use FIPS compliant algorithms for encryption, hashing, and signing is enabled,

contactSync 7.2 cannot communicate encrypted with older versions.

6. contactSync has a defined scope of **RecipientTypeDetails**, of which mail-enabled objects will be synchronized into the mailbox as contact.

For example: This enables to synchronize only mailbox users in a selected organizational unit (OU).

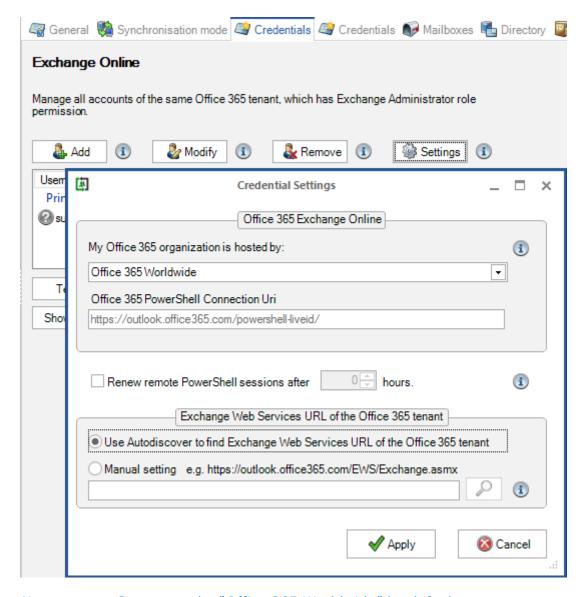
contactSync uses a default scope of **RecipientTypeDetails** for existing policies.

Please check your existing policies, that all **RecipientTypeDetails** are in the scope.

Note: If the msExchRecipientTypeDetails / RecipientTypeDetails property is not set, the object will be synchronized.

7. contactSync supports different Office 365 locations, particularly Office 365 Germany.

Select the Office 365 location in the **Settings** dialog on the Exchange Online Credentials tab.



Note: contactSync uses the "Office 365 Worldwide" by default.

Downgrading

Should you want to perform a downgrade to your previous version of contactSync, the changes you make in your new installation will not be reflected in the previous, older version. For downgrading, uninstall the new version, restore the backup of the contactSync program folder and commend data folder and run your previous installation file.

Licensing

For our customers with valid support the new version will be free of charge.

If you do not have valid support, you can keep using your contactSync version. If you install a newer version of contactSync, you have to buy a new license.

If you run contactSync version 8.5 without a license you will be able to synchronize contacts into maximum 20 mailboxes for up to 21 days!

Please note: Upgrading from contactSync to GALsync is possible without installing GALsync. Only the license needs to be updated.

If you have any licensing questions or queries, please feel free to contact our **contactSync Sales Team**by phone +49 2421 998 78 20
or via e-mail sales@netsec.de

If you have any technical questions or queries, please feel free to contact our **contactSync Support Team**by phone +49 2421 998 78 16
or via e-mail support@netsec.de