

ExMixedFolders

Manual

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Feature Overview

ExMixedFolders is a Windows service capable of synchronizing Exchange folders, folder structures, or mailboxes within a single Exchange Server or across multiple Exchange Servers. This service is installed on a Windows Server and can access Exchange mailboxes and other data sources through various interfaces.

The service provides the following functionalities related to Exchange and Microsoft 365:

- Synchronization of folders between two mailboxes or public folders.
- Making Active Directory contacts available in a mailbox folder.
- Providing contacts from GAL lists in a mailbox folder.
- Making enterprise contacts from Microsoft 365 available in a mailbox.
- Synchronizing your categories between mailboxes.
- Creating backups of folders.
- Unidirectional synchronization of data from CSV, Excel, or iCalendar.
- Generating CSV, Excel, or iCalendar files from Exchange folders on a cyclical basis.
- Unidirectional synchronization of Google Calendar with a mailbox.
- CALDAV synchronization with calendar from a mailbox.
- Unidirectional synchronization of ODBC sources.

To access Exchange Server mailboxes, the Exchange Web Service (EWS) is utilized, available in Exchange versions from 2007 SP1 onwards. Therefore, the program does not necessarily need to be installed on the Exchange Server itself; it can also be installed on other continuously running PCs. Similarly, it allows access to Exchange Online, facilitating data synchronization between your local Exchange and different Exchange Online subscriptions. Access to Microsoft 365 is via EWS or Microsoft Graph (Beta, with some limitations).

Utilize the program whenever there's a need to constantly synchronize one folder with another, such as ensuring that mobile phones receive data from public folders or temporarily for migration purposes.

With ExMixedFolders, you can configure multiple Exchange Servers in the setup or configure multiple synchronization tasks that run continuously. These tasks enable you to connect mailboxes or folders of different users.

ExMixedFolders is also suitable for Exchange mailbox migration and can synchronize data between versions 2007 SP1, 2010, 2013, 2016, 2019, and Microsoft 365.

Starting from Exchange 2010, ExMixedFolders allows you to create backups of folders or folder structures for later restoration.

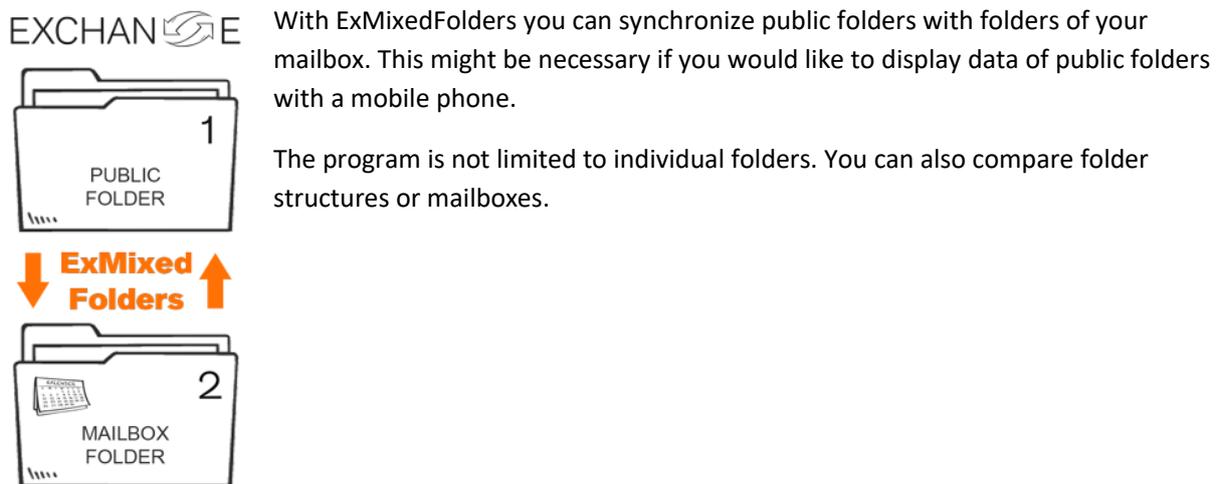
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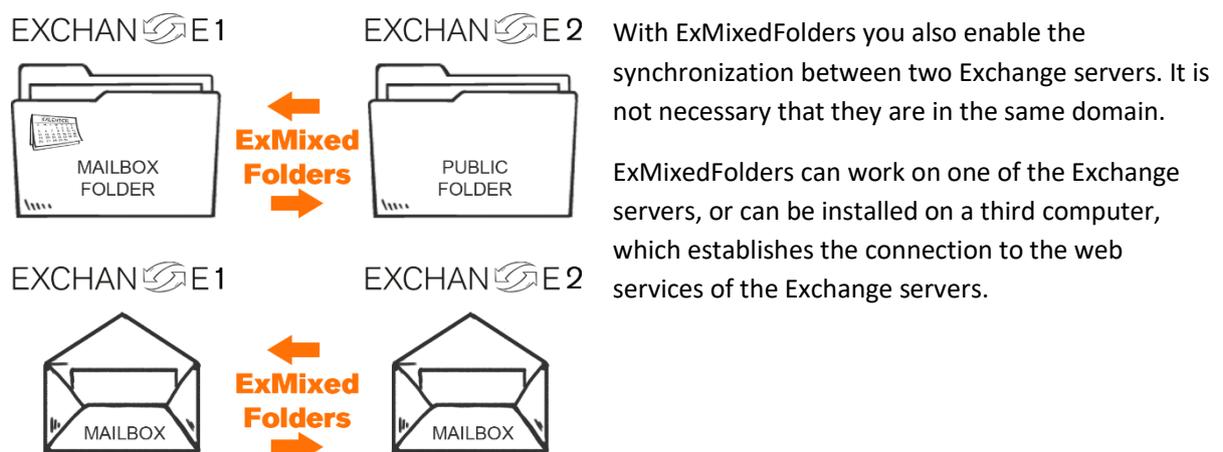
To use the program, at least Exchange version 2007 SP1 is required.

Usage scenarios

Synchronization within an Exchange server



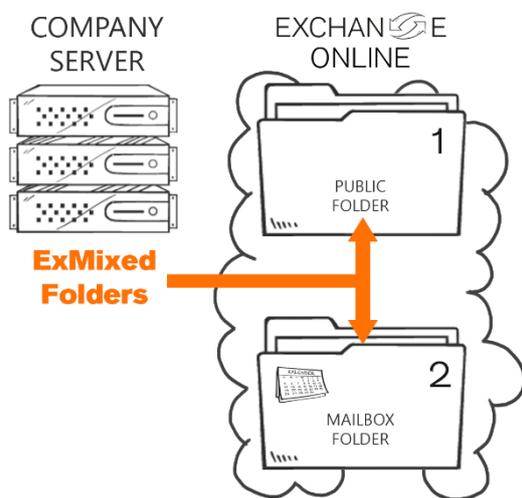
Synchronization between several Exchange servers



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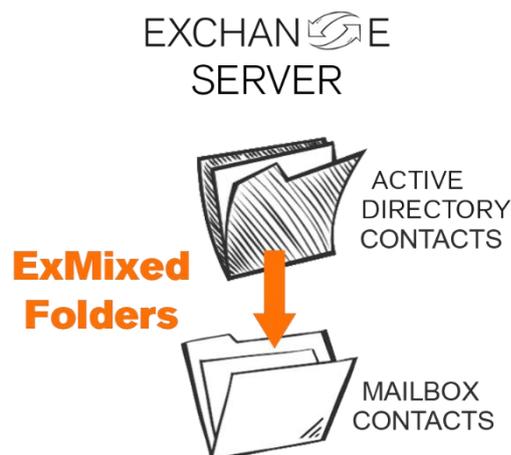
Synchronization with Exchange Online



ExMixedFolders can also synchronize folders or mailboxes of your Exchange Online accounts (e.g. Microsoft 365).

The program can help you migrate mailboxes to and from the cloud, while synchronization allows you to work parallel on both systems.

Synchronization of the Global address list with folders of your Mailbox



ExMixedFolders also supports the synchronization of Global Address Lists from Active Directory or AD contact objects with a contact folder in your mailbox. This functionality allows you to access contacts from your predefined address lists, for instance, to access contacts via your mobile phone when there's no server connection.

In Microsoft 365, LDAP access isn't available, resulting in the unavailability of GAL lists. Consequently, in this scenario, you can only access the entire list or perform filtered contact synchronization within ExMixedFolders.

However, within Microsoft 365, you do have the option to synchronize enterprise contacts using Microsoft Graph with the respective contact folders.

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Synchronization of the categories

As of Exchange 2010, you can also synchronize your main category lists with ExMixedFolders in a way that everyone in the company must use the same categories. In order to achieve this, ExMixedFolders offers a synchronization job that copies the categories from one mailbox to another or overwrites these. Furthermore, it is possible to provide a list in the data system.

Data import from ODBC CSV, iCalendar or Excel data as well as Export to CSV



Read data from Exchange folders.

Using the import/export task, it's also possible to cyclically save data from Exchange folders into a file. This supports iCalendar, CSV, and Excel files.

CalDAV Synchronisation

The CalDAV task allows you to synchronize CalDAV calendars with Exchange calendars. Access to Exchange can be achieved through Microsoft Graph or EWS.

Migration of data between mailboxes

You can also use the program for the migration of mailboxes between various Exchange versions and Office 365 as well as for migration of public folders.

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Backup and Recovery of Exchange folders

ExMixedFolders can create backups of Exchange folders, mailboxes or folder structures which you can restore later. Existing elements are not taken into account. Therefore, it is advisable to perform the recovery to an empty folder, otherwise duplicates might occur.

Configuration

After a successful installation, you will receive a configuration program in the ExMixedFolders program menu, with which you can adjust the settings for the service.

The program contains a configuration interface and a Windows service, which carries out the tasks in the background. The configurator does not have to be started during the synchronization and is therefore only used for monitoring or configuration of the service.

In the upper area of the configurator, you will find the possibility of defining service access to the EWS of your Exchange server. The defined service will be displayed on the right part after they have been selected. You can display the configuration in a table in the "parameter overview". In the bottom area of the configurator, you can generate synchronization tasks, which you can use analogously to the service connections.

Warning: The service autonomously modifies configuration settings, such as 'synchronization status' or migration settings, within the configuration files. To implement these changes in the configurator, it's necessary to either restart it or reread the configuration.

Service Configuration

In the menu, under [Serviceconnection], you can set up and delete Exchange web service, Microsoft Graph, Google or CalDAV connections.

Create EWS access to Exchange or Microsoft 365

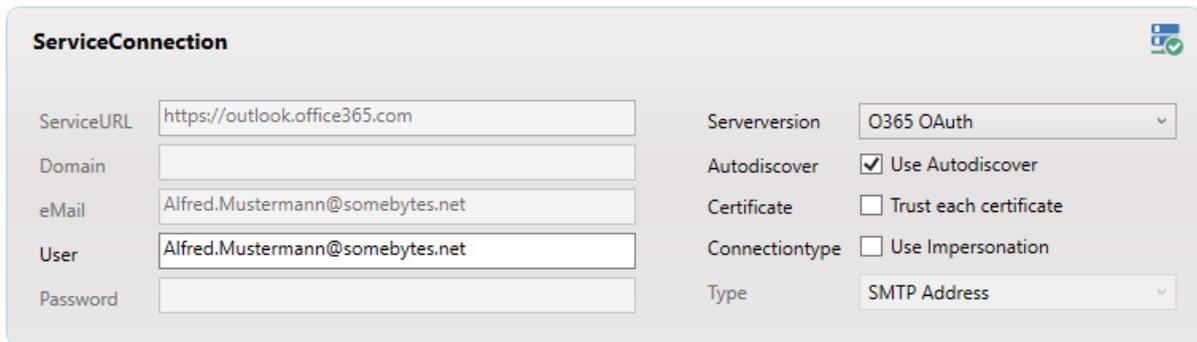
Create EWS-Access: Via the menu item [Serviceconnection] => [Create EWS access], you will get a new entry in the service list. This allows you to connect to the desired Exchange server. The EWS name is a freely definable name, it is used to identify your connections within the synchronization tasks.

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In the simplest case, the connection can be established via "Autodiscover". All you have to do is enter your user's name, password and email address. All information that is necessary for the connection is retrieved from the server.

If you are using Office 365, then it is possible to select "Microsoft 365" for the version and then the "Connect" button. You will be redirected to your Microsoft 365 registration, where you can enter the appropriate username and password.



The screenshot shows a dialog box titled "ServiceConnection" with a close button and a checkmark icon in the top right corner. The dialog is divided into two columns of fields. The left column contains: "ServiceURL" (text input with "https://outlook.office365.com"), "Domain" (text input), "eMail" (text input with "Alfred.Mustermann@somebytes.net"), "User" (text input with "Alfred.Mustermann@somebytes.net"), and "Password" (text input). The right column contains: "Serverversion" (dropdown menu with "O365 OAuth"), "Autodiscover" (checkbox checked, "Use Autodiscover"), "Certificate" (checkbox unchecked, "Trust each certificate"), "Connectiontype" (checkbox unchecked, "Use Impersonation"), and "Type" (dropdown menu with "SMTP Address").

If the options mentioned above fail, you have to configure the connection manually, which means that you also have to know and enter the Service URL. To do this, remove the tick from "Autodiscover" and enter the relevant information.

The following information is required for manual configuration:

1. Exchange Webservice URL
2. Username
3. Password
4. Optionally, you can also enter a proxy if you need to communicate via proxy.

Now enter the service URL of your Exchange server: e.g. `https://YOUR.EXCHANGE.SERVER` If you call up the web service URL (`https://YOUR.EXCHANGE.SERVER/EWS/Exchange.asmx`) as a test via browser, an XML file should be displayed after authentication. To do this, open the context menu of the edit field and select "Test URL".

Now enter a user account that has access to the data you want.

If your certificate contains errors, you have the option to use the checkbox at "Trust each certificate". However, this can result in you violating your company's security guidelines.

The following parameters can be used for the service connection:

Impersonation: If you would like to access data that lies in a mailbox different from yours, you can also use „Impersonation“, i.e. the right to access another person's data. (Overtaking of another user's identity)

Use Impersonation

Impersonation is also helpful if you use a password policy that requires users to change their password monthly. Otherwise you would have to keep track of this in ExMixedFolders. To be able to use impersonation, you need a user with a mailbox that acts as a service user for ExMixedFolders. Furthermore, this service user must be authorized accordingly.

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Configuration of impersonation in Exchange:

- **Exchange 2007**, per Exchange Management Shell: In order for a user to be able to do this, the right **ms-Exch-EPI-Impersonation** has to be set up for this user on the server. In addition, the mailbox you would like to access needs to have the right: **ms-exch-epi-may-impersonate**.
- **Exchange 2010 and up:**
 - **Via Admin-Center:** In Exchange Admin Center you find Permissions=>Administrative Roles, you will find a role named "ApplicationImpersonation" which allows administrators to adopt the identity of the selected users. Do these steps in order to have access to user mailboxes:
 1. Create a new administrative role group.
 2. Enter name and add "ApplicationImpersonation" as a role.
 3. Add the service user, who will have access to the user mailboxes.
 - **Via Exchange Management Shell:** Since Exchange 2010 it's done with "Application Impersonation Management Role". To do this, the user to be accessed must be listed in a so-called ManagementScope (similar to a group). Assuming that you want a user named "ExMixServiceAcc" to be able to access the data of the user "Testuser", you would have to enter the following in the Management Shell:
 - `new-managementscope -name:Impersonation4ExMixedFolders -RecipientRestrictionFilter:"Name -eq 'Testuser'"`
 - `new-ManagementRoleAssignment -Name:ImpersonationAssignment4ExMixedFolders -Role:ApplicationImpersonation -User:' ExMixServiceAcc @somebytes.local' -CustomRecipientWriteScope: Impersonation4ExMixedFolders`

The commands create a scope in which the test user is located. A role is assigned to the scope, which allows the user ExMixServiceAcc to access the mailboxes of the users who are in the scope.

ExMixedFolders provides you with a pre-configured configuration (usable in Exchange 2010 and up) in the context menu of the corresponding service connection after the configuration of the web service connections and the synchronization jobs (entry of the user addresses for User ID). Call up "Configuration help for impersonation".

In order to be able to access the desired mailbox of a user with the service user via "impersonation", the corresponding SMTP address of the user must be entered in the synchronization job.



The screenshot shows the 'SyncJob' configuration window. It features two columns for service connections. The left column (EWS 1) has a dropdown for 'ServiceConnection', a text field for 'User ID 1' containing 'Nachgeahmter User', and a dropdown for 'Ordner 1' containing '/Public/Somebytes/Kalender/'. The right column (EWS 2) has a dropdown for 'ServiceConnection', a text field for 'User ID 2' containing 'email@organisationonmicrosoft.com', and a dropdown for 'Ordner 2' containing '/Mailbox/Kalender/'. A central green double-headed arrow icon is positioned between the two columns. Below the arrow is a 'Kategoriefilter' dropdown menu.

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Server version: In order to be able to use the right functions, the service needs to know which version is used by your Exchange server.

Access as an application: With Microsoft 365 it is also possible to access your mailboxes via application and EWS.

ServiceConnectionEWS Sign in

ServiceURL	https://outlook.office365.com	Serverversion	Microsoft 365
Domain		Autodiscover	<input type="checkbox"/> Use Autodiscover
eMail	test@domain.tld	Certificate	<input type="checkbox"/> Trust each certificate
Tanant ID	?.onmicrosoft.com	Connectiontype	<input checked="" type="checkbox"/> Connect as App (Admin-Consent needed)
Password			<input checked="" type="checkbox"/> Use Impersonation
ClientID	12345	Type	SMTP Address
Thumbprint	12345		

For this purpose, it is necessary to add a new registry in Azure portal => App registries:

1. New registration => "Only accounts in this organization directory (single client)".
Redirect URI "Public Client/Native (mobile and desktop)"
<https://www.somebytes.com/exmixedfolders-authorizeready>
2. API Permissions:
 - (Office 365 Exchange Online) full_access_as_app.
3. Generate yourself a certificate in the client and add it to "Certificates & Secrets".

Here is an example of how they can generate the certificate:

```
$Cert = New-SelfSignedCertificate -CertStoreLocation "Cert:\LocalMachine\My" -FriendlyName  
"EWS4ExMixedFolders" -NotAfter (Get-Date).AddYears(5) -KeyExportPolicy Exportable -Subject  
"Zertifikat für ExMixedFolders - EWS"
```

```
Get-ChildItem "Cert:\LocalMachine\My\${$Cert.thumbprint}" | Export-Certificate -FilePath  
C:\temp\EWSExMixedFolders.cer
```

```
$Cert.thumbprint
```

Alternatively, you can have ExMixedFolders generate the powershell script by clicking on the service connection panel on the right and selecting the corresponding menu item.

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Enter the clientID, applicationID and the fingerprint of the certificate in the corresponding fields in the service connection at ExMixedFolders.

4. Optionally, you can specify an existing mailbox in the E-mail field so that the service can check whether the connection is working without an export task.
5. After clicking on "Connect" the administrator approval page appears with which you can allow the application as a company application.

You can find the client ID in the Azure AD Admin Center, under Properties. (Either a GUID or the domain e.g. contoso.onmicrosoft.com).

Microsoft Graph Connection (Beta)

To add a Microsoft Graph connection to your Microsoft 365 account, follow these steps:

In the Service Connection menu, click on "Microsoft Graph Connection" Click on "Connect" and provide the corresponding account details.

To access multiple mailboxes with a single account in MS Graph, the "Access as an App" option is required, which needs configuration in Azure.

In the Azure Portal => App Registrations, add a new registration:

1. New Registration => "Accounts in this organizational directory only (single tenant)"
2. Redirect URI "Public client/native (mobile and desktop)":
`https://www.somebytes.com/exmixedfolders-authorizeready`
3. API permissions, depending on the tasks you intend to perform:
 - User.Read
 - Contacts.ReadWrite
 - Calendars.ReadWrite
 - OrgContact.Read.All
 - Contacts.ReadWrite
 - User.Read.All
4. Generate a certificate on the client and add it to 'Certificates & Secrets'

Here is an example of how you can generate the certificate:

```
$Cert = New-SelfSignedCertificate -DnsName domain,tld -CertStoreLocation "Cert:\LocalMachine\My"  
-FriendlyName "MicrosoftGraph4ExMixedFolders" -NotAfter (Get-Date).AddYears(5) -KeyExportPolicy  
Exportable -Subject "MicrosoftGraph Zertifikat für ExMixedFolders"  
Get-ChildItem "Cert:\LocalMachine\My\$(($Cert.thumbprint))" | Export-Certificate -FilePath C:\App-  
Zertifikat-Microsoft-MS-Graph\msgraphExMixedFolders.cer  
$Cert.thumbprint
```

Alternatively, you can have ExMixedFolders generate the powershell script by clicking on the service connection panel on the right and selecting the corresponding menu item.

5. Enter the Tenant ID, Application ID, and the certificate thumbprint into the respective fields in the service connection for ExMixedFolders.

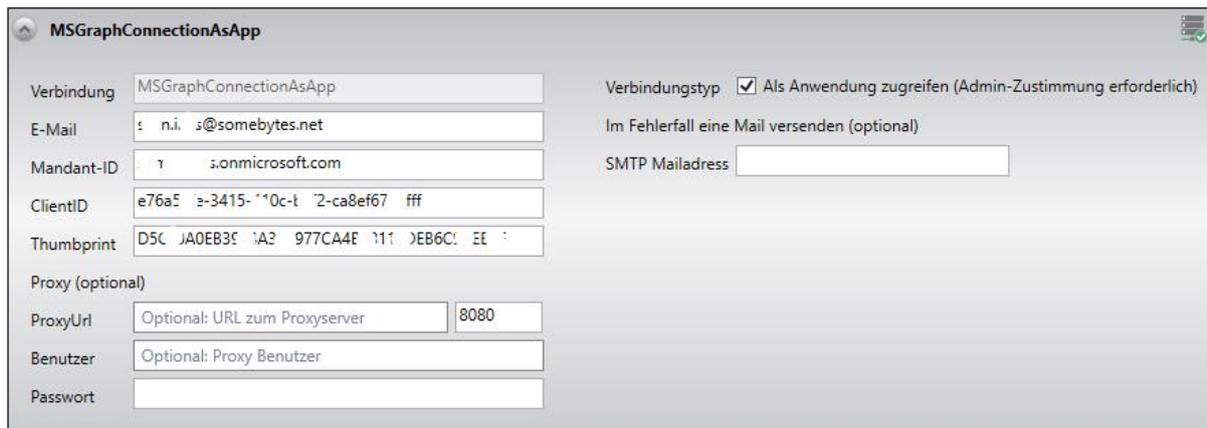
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6. After clicking 'Connect,' the administrator consent page will appear, allowing you to authorize the application as an enterprise application.

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The screenshot shows a configuration window titled "MSGraphConnectionAsApp". It contains several input fields and checkboxes:

- Verbindung:** MSGraphConnectionAsApp
- E-Mail:** n.i. s@somebytes.net
- Mandant-ID:** 1 s.onmicrosoft.com
- ClientID:** e76a5 3-3415-110c-t 2-ca8ef67 fff
- Thumbprint:** D5C JA0EB3E 1A2 977CA4E 111 EB6C EE
- Proxy (optional):**
 - ProxyUrl:** Optional: URL zum Proxyserver
 - Benutzer:** Optional: Proxy Benutzer
 - Passwort:** (empty field)
- Verbindungstyp:** Als Anwendung zugreifen (Admin-Zustimmung erforderlich)
- Im Fehlerfall eine Mail versenden (optional):** (checkbox)
- SMTP Mailadress:** (empty field)

You can find the Tenant ID in the Azure AD Admin Center, under Properties. (Either a GUID or the domain, for example, contoso.onmicrosoft.com).

If you're using this connection in tasks, you'll need to specify the mailbox you want to access in the 'User ID' field.

Google Connection

To add a Google connection to your Google Calendars, click on 'Google Connection' in the Service Connection menu. Click on 'Connect' and provide the corresponding account. (You can now use the Google Calendar synchronization under synchronization tasks).

CalDAV Connection

To add a CalDAV connection to your CalDAV calendars, click on 'CalDAV Connection' in the Service Connection menu. Here, you can specify the server, as well as the username and password.

A CalDAV connection serves to synchronize CalDAV calendars from Synology NAS, OwnCloud, NextCloud, or even iCloud with calendars in the Exchange mailbox.

For instance, in the case of Synology, you can enter a URL such as `https://[SynologyNASName]/caldav/[UserName]`. You can then select the corresponding calendar in the task.

For iCloud, the URL would be `https://calendars.icloud.com`. Additionally, you'll need an app-specific password, which you can generate at <https://appleid.apple.com/account/manage>.

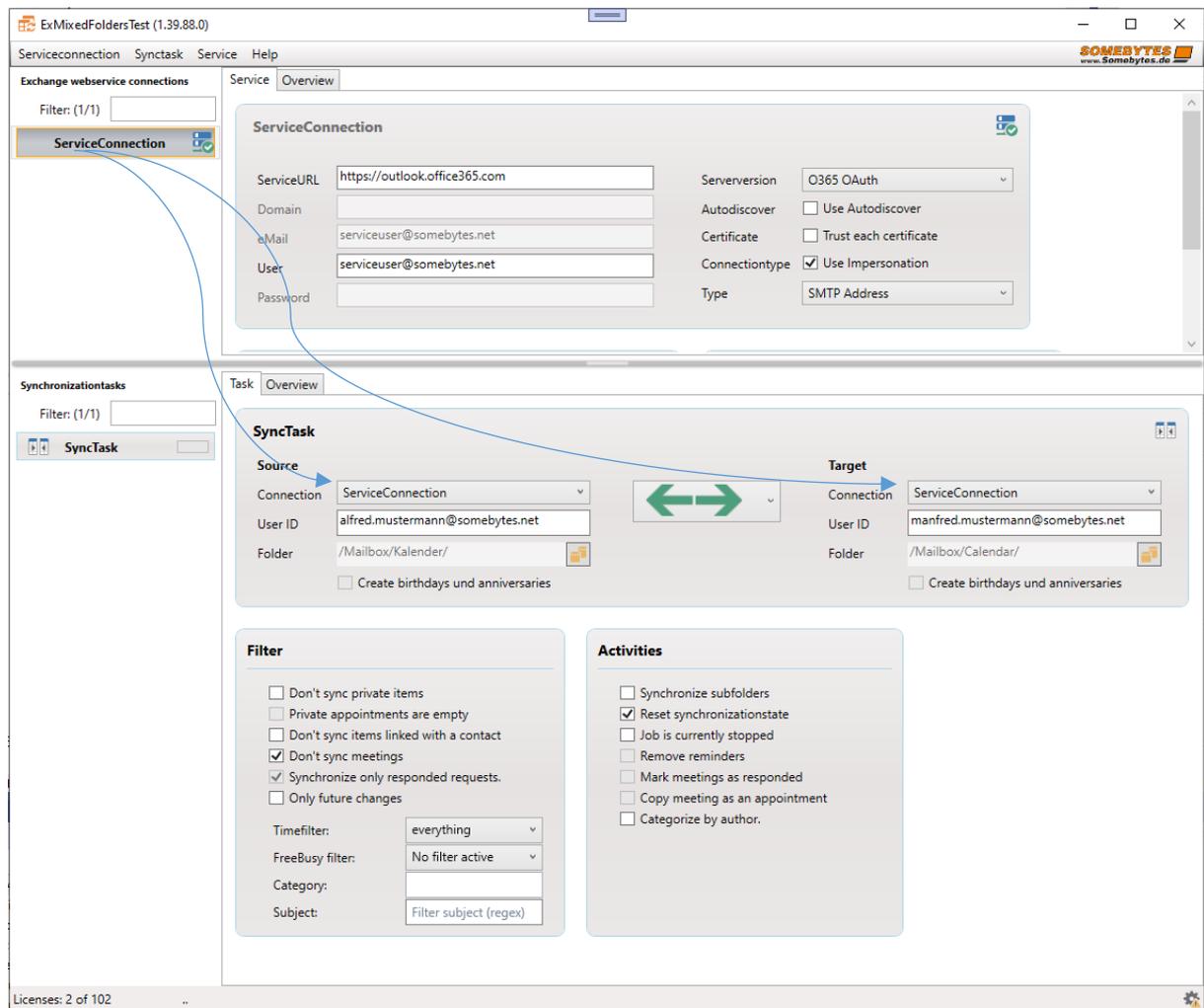
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Configuration of synchronization-tasks (Add folder pairs)

In the menu, under [Synctasks] you can set up and delete synchronization tasks. A task sets up a connection between two folders of one mailbox or between two folders of different mailboxes.

Mailbox folder synchronization



To merge folders, you have to add a synchronization task in the second part of the configurator.

A synchronization-task contains two Exchange folders that are synchronized with each other. You can use the selection box in the middle to decide in which direction the changes will be processed.

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Unidirectional: With the right arrow, all new and changed elements are transferred to the folder configured on the right; deleted elements are also deleted there. When additional elements are created on the right side, these are not taken into account. The left arrow has the same function, only in the opposite direction.



Bidirectional: The double-arrow synchronizes both folders in such a way that changes are taken into account and processed on both sides.



Mirroring: The red arrow has a similar effect to the green arrow, with the difference that the elements created, changed or deleted to the right are undone. Newly created elements on the right side are deleted. **Attention:** elements already found on the right side are also deleted. This variant ensures that the user cannot make any changes in the folder. With the option “allow own elements in the target” you allow the target folder to add further elements to the already in the source folder existing elements.

For easier identification of the synchronization job, assign a name of your choice for the job and choose a service and a folder for the right and left part.

SyncJob1	
Source	Target
Connection: EX2010	Connection: EX2010
User ID: Impersonated user/Mailbox	User ID: user2000@somebytes.local
Folder: /Public/Somebytes/Kontakte/	Folder: [bz1@somebytes.net]/Mailbox/Contacts/1
<input type="checkbox"/> Create birthdays und anniversaries	<input type="checkbox"/> Create birthdays und anniversaries

Filter

- Don't sync private items
- Private appointments are empty
- Don't sync items linked with a contact
- Don't sync meetings
- Synchronize only responded requests.
- Only future changes

Timefilter: everything

FreeBusy filter: No filter active

Category:

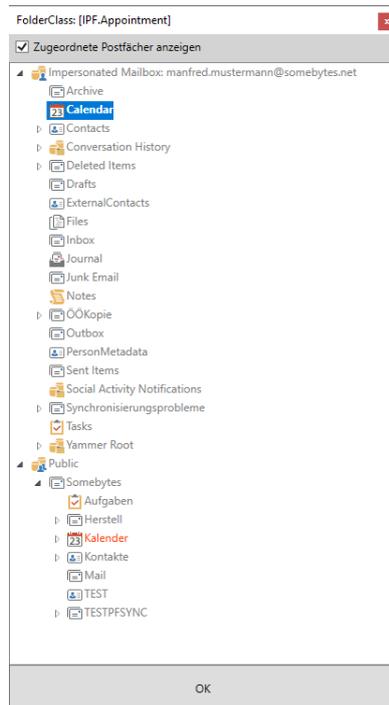
Subject: Filter subject (regex)

Activities

- Synchronize subfolders
- Reset synchronizationstate
- Job is currently stopped.
- Remove reminders
- Mark meetings as responded
- Copy meeting as an appointment
- Copy attendees
- Categorize by author.

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When you have selected a folder on the left side, you will see all folders that can be selected presented in black in the folder selection dialog. Those folders that you may not choose due to the so-called MessageClass are grayed out, preventing that, for example, calendar folders are synchronized with contact folders, which would result in an error.

Folders for which you have no ownership rights are displayed in red. You must have rights to change items modified by others. ExMixedFolders saves information in the elements. If you select a red displayed folder nevertheless, only the elements on which the user from ExMixedFolders has modification rights are transferred.

User ID: In case that you have selected "Impersonation" as a service, here you can enter the user whose data or mailbox you wish to access.

Tip for pros: When you wish to create a large amount of jobs for your users, we recommend the Automatic Job Generator. You can start this with a right click on the User ID field "Create jobs with this template". You will now receive a dialog in which you need to enter the e-mail addresses of the users. When the corresponding folders are found in the mailbox, the assistant will create the jobs according to the selected template. Furthermore, the configuration via Excel is available through "edit in Excel" (F12).

Filter:

- **No synchronization of private objects:** With this option, you exclude the private objects from the synchronization.
- **Only synchronize private objects:** With this option, only private elements will be synchronized into the target.
- **No synchronization of linked appointments:** With this option you can exclude those elements from the contact synchronization that have a link to a contact. This is the case for birthdays that Outlook creates automatically, based on the contacts. You need this function whenever you want to synchronize two mailboxes that have the same contacts on both sides. This is necessary, because Outlook creates a date in the contact field birthday whenever there is a change.
- **No synchronization of meetings:** With this option, you can leave out meeting requests when you synchronize calendars.
- **Only synchronize confirmed meetings:** Meetings will only be synchronized if they have been confirmed already from the attendee. (PidLidResponseStatus)
- **Only synchronize future elements:** This filter is only needed for resetting the synchronization status. When it is set, all the elements that are in the folder at that time, will not get synchronized. If you change something about the elements afterwards, this and all future changes will be worked out.

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- **Time filter:** This filter will prevent the unnecessary synchronization of too many elements that already are in the past during the fundamental synchronization. This function checks the “DateTimeReceived” field. For e-mail, for appointments and tasks it is the “appointment ends (End)” field. For all other elements and for recurring events, the LastModificationDate field is used for filtering.
Elements that have been transferred once are not deleted afterwards, even if the element is older than the time filter specifies. An exception here is the synchronization “Reflection (Red Arrow).” If you change an item and the time filter does not fit during synchronization, then the item on the right is deleted, the same happens if you reset the synchronization status with all items.
 - **Free/Busy filter:** If the filter is set, only elements that have the corresponding setting are synchronized. (In Outlook called “View As”)
If the filter of an element changes and for the reason no longer fits the filter, then the element on the destination page is deleted again. If you have activated Bidirectional Synchronization on your behalf, then we will use the source (left) as master. Elements that you delete on the right remain.
 - **Category filter:** It is possible to match only elements from a certain category. To do this, enter the desired category name in the corresponding field. Any elements that are not in the specified category are not taken into account in the synchronization process. If you want to reverse the function, set the category to ~to synchronize only elements that do not contain the corresponding category. You can specify several categories separated by semicolons.
If you remove the category in the source page from the element, then the element is deleted again on the destination page. If you have activated Bidirectional Synchronization on your behalf, then we will use the source (left) as the master. Elements that you delete on the right remain.
 - **Subject filter:** This filter allows you to filter the synchronization so that only elements containing the contents of this field are transmitted. You can use regular expressions here to create more complex filters. The entire filter can be reversed by placing a ~ in front of the filter.
If you change the subject of an element and it no longer fits the filter, then the element is deleted on the target page. If you have activated Bidirectional Synchronization on your behalf, then we will use the source (left) as master. Elements that you delete on the right remain.
- If you want to synchronize all items that have the words “birthday” or “holiday” in the subject line, you could define the filter as follows: Birthday|Holiday, but if you want to synchronize only events that do not have this text in the subject line, use ~ Birthday|Holiday.

Actions:

- **Insert Birthdays/Anniversaries:** Since the Outlook function “Create Birthday” does not work when synchronizing contacts, ExMixedFolders can create your birthday in your standard calendar. To do this, click on the corresponding function in the source or destination.
- **Synchronize subfolders:** If you check this box, all subfolders within the selected folders are also synchronized. If you want to synchronize a mailbox completely, you must also activate this function.

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- **Reset synchronization status:** If you reset the job, you will have each item rechecked to see if it needs to be synchronized (modification date). You only need this checkbox in the event of an error, when configuring the filter or when connecting folders for the first time.
- In connection with the “Sync only future changes” option, you can synchronize only items that have been changed since the last start of the service.
- **Remove content of private appointments:** If you only synchronize in one direction, it is also possible to remove the content of private appointments to display empty pods on the destination page.
- **Remove reminders:** For tasks or calendars, you can remove the reminders during synchronization. Reminders can only be removed if you synchronize unidirectionally.
- **Copy meeting as agreed:** If you use “mirroring”, ExMixedFolders also allows you to set the “agreed” field when copying meetings.
- **Copy meeting as appointment:** Here, meetings in the destination are converted into appointments.
- **Copy attendees:** If you are converting meetings into appointments, you can use this option to decide whether the attendees should be copied. The disadvantage is that such appointments are recognized as meetings in the iPhone.
- **Categorize by Author:** When you use this option for calendars or task folders, your items are categorized by their respective author name. For example, you can create a color representation of different users, and you also need to add the corresponding color to the usernames in the main category list of Outlook.
- **Add optional attendee in meetings:** Meeting requests can only be created by ExMixedFolders as a copy in the destination, because the user of the destination mailbox is not the same as the organizer or participant of the origin mailbox. This results in the disadvantage that information is missing or the usual meeting functionality is not available. (e.g. "accepted/declined" of the individual attendees).

Then as a workaround you can use this function to automatically add the target person as an optional participant to the meeting. The meeting is sent with a meeting request by Exchange to the target person and can be accepted. (Attention the target here is always the default folder, not the selected target folder from the synchronization task.)

Making ActiveDirectory addresses available in the mailbox

With AD synchronization, you make the contacts you have selected via LDAP filter available in the mailbox.

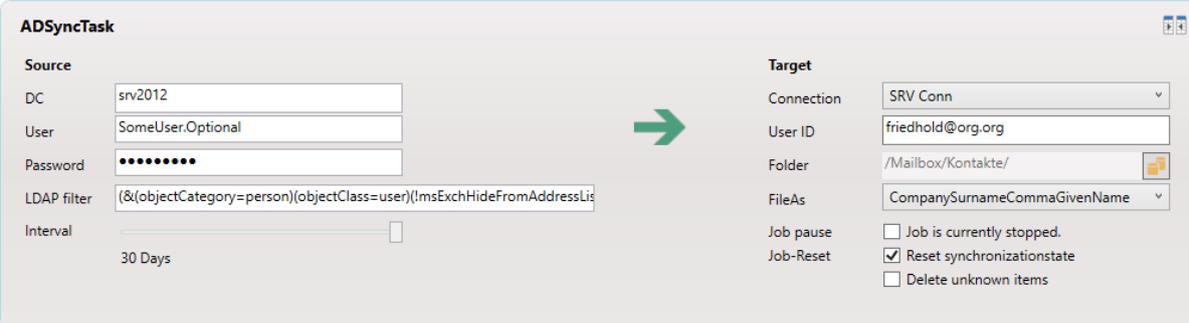
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Create new task

-  **Add synchronizationtask**
Task which can synchronize between Exchange folders
-  **Migration**
Migrate from one Mailbox/Folder to another
-  **Create GAL job**
Synchronize global address lists with Exchange folders
-  **ActiveDirectory sync task**
Synchronize ActiveDirectory contacts to an Exchange folder
-  **Create CSV / iCal / Excel Import / Export job**
Import CSV,iCalendar, Excel to Exchange and even export Exchange folders
-  **Add categoriesyncjob (Exchange 2010)**
Synchronize category lists from one mailbox to another or import a category xml file
-  **Backuptask (2010 SP1)**
Create a Backup from an Exchange folder
-  **New recover backup job (2010 SP1)**
Recover from a previous backup
-  **Maintenancetask**
Maintenance of an Exchange folder, e.g. to categorize items or remove duplicates

The AD is cyclically searched for changes and the addresses in the destination folder are modified accordingly.



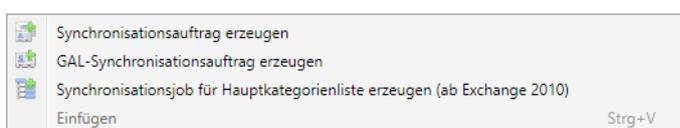
Source	Target
DC: srv2012	Connection: SRV Conn
User: SomeUser.Optional	User ID: friedhold@org.org
Password: [masked]	Folder: /Mailbox/Kontakte/
LDAP filter: (&(objectCategory=person)(objectClass=user)(!msExchHideFromAddressList))	FileAs: CompanySurnameCommaGivenName
Interval: 30 Days	Job pause: <input type="checkbox"/> Job is currently stopped.
	Job-Reset: <input checked="" type="checkbox"/> Reset synchronizationstate
	<input type="checkbox"/> Delete unknown items

In an ActiveDirectory synchronization job, select the destination folder and the synchronization interval. Then enter the path of your domain, e.g. LDAP://DC=test,DC=local or GC:\\test and optionally also a user and password. The username and password is not required if the service already has access to the AD.

The LDAP filter allows you to limit your query in the ActiveDirectory.

The ActiveDirectory synchronization job copies the addresses in addition to the existing contacts in the destination folder. Contacts will only be deleted if they have been previously synchronized with the AD job, unless they use the option “Delete Unknown Items.”

Making the global address book in the mailbox available

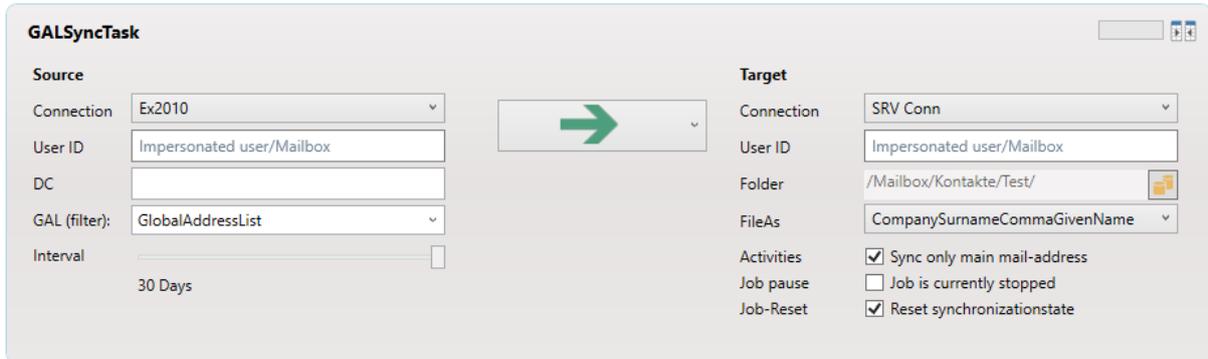


In the synchronization jobs menu, select “Create GAL synchronization job”

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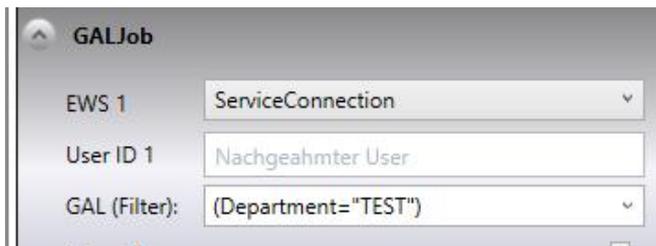
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Now, on the left side of the panel, select the Exchange connection from which you want to get the Global Address List. The available lists are queried in the ActiveDirectory and offered as a selection in the GAL Filter. The users included in the GAL list are requested from Exchange by “receiver resolution.”



If the lists are not accessible (e.g. O365) then all users will be queried at Exchange and they will be restricted with the filter you enter yourself in the filter. To transfer the complete list, place a star here.

To define your own filter, use the following syntax: (Property="Value") or (!Property="Value") to negate the statement.



You can use the following attributes for the property:

[Alias](#), [AssistantName](#), [BusinessHomePage](#), [CompanyName](#), [CompleteName](#), [ContactSource](#), [Department](#), [DisplayName](#), [Generation](#), [GivenName](#), [Initials](#), [JobTitle](#), [Manager](#), [Mileage](#), [NickName](#), [OfficeLocation](#), [Profession](#), [Surname](#), [State](#), [CountryOrRegion](#), [Street](#), [PostalCode](#), [City](#), [PhoneNumbers](#), [AssistantPhone](#), [BusinessFAX](#), [BusinessMobile](#), [Callback](#), [CarPhone](#), [CompanyMainPhone](#), [HomeFAX](#), [HomePhone](#), [IPPhone](#), [HomePhone](#), [Mms](#), [MobilePhone](#), [Msn](#), [OtherFAX](#), [OtherTelephone](#), [Pager](#), [PrimaryPhone](#), [RadioPhone](#), [Telex](#), [TtyTddPhone](#), [BusinessPhone](#), [BusinessPhone2](#), [PhoneNumbers](#)

Example1 with AND link: (CompanyName="Bear") (Department="IT")

Example 2: (Alias="User1")

Example 3: (JobTitle="Concierge")

The filter can also process regular expressions:

(Property="RegEx")

Example1: (Alias="User[1-9]")

Example 2: (CompanyName="Apple|Bear")

Example3, all entries that have a phone number: (PhoneNumbers=".*")

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For the GAL job, set an interval at which the job will run. Addresses of the GAL that no longer exist are deleted from the contact folder, new ones are added and changed contacts are adapted.

The GAL synchronization job copies the addresses in addition to the existing contacts. Contacts will only be deleted if they have been previously synchronized with the GAL job, unless they use the “Delete Unknown Items” option.

Sync Microsoft 365 enterprise contacts and user data unidirectionally with a mailbox folder.

After creating a Microsoft Graph service connection with appropriate access permissions, there is the option to synchronize enterprise contacts (Graph designation: OrgContacts and Users) with a mailbox folder.

To do this, select the source and destination connections and optionally provide a filter to select the contacts. This filter works as follows: (Property="Value") or (!Property="Value") for negating the statement. You can use properties from the orgContact object (<https://learn.microsoft.com/en-us/graph/api/resources/orgcontact?view=graph-rest-1.0>) or User (<https://learn.microsoft.com/en-us/graph/api/resources/user?view=graph-rest-1.0>).

Here are some examples:

AND conjunction: (CompanyName="Birne")(department="IT")

The filter can also process regular expressions:

(Property="Regex")

Example 1: (givenName="User[1-9]")

Example 2: (CompanyName="Somebytes|Microsoft")

CalDAV Synchronisation

Create a new task from the menu => Synchronization Tasks => [CalDAV Task].

Select a source CalDAV connection and its associated calendar. Choose the synchronization direction and then select the target mailbox and the respective folder. Access to the mailbox can be done via Microsoft Graph or EWS.

CSV, iCal or Excel files import/export

Create a new task from the menu => synchronization tasks => [CSV / iCal / Excel import/export task].

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To use the task to import to Exchange, set the arrow to the right. Specify on the left which CSV or Excel file you want to read. The file is checked cyclically for changes. As soon as it has changed, the file is imported. The file must contain the ID field, which is used to find the items later in the Exchange folder.

The synchronization job allows you to create contacts, appointments, tasks or e-mails (public deployment, IPM.Post). In the program folder of ExMixedFolders you will find the following example import files.

```
importContactsExample.txt - contacs (CSV)
importMailExample.txt - post (CSV)
importAppointmentsExample.txt - appointments (CSV)
importContatcsExample.xlsx- contacts (Excel)
```

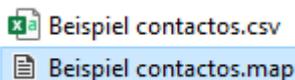
In the import file, you can use a "CMD" command field where you control whether the item receives an update. With "ADD", the element is added only if it does not exist, otherwise it is not changed. If you do not deploy the field, it is assumed to be CMD=UPDATE, overwriting any existing element in Exchange with each operation except if you use the LASTMODIFIEDTIME Field. (In the mapping file, see below, you can override the default behavior.) The LASTMODIFIEDTIME File takes care that the Exchange Item is overwritten only if the Field is newer than the LastModifiedTime on the Target.

An overview of the possible field names can be found in the file "CSV Excel to Exchange Importfields.xlsx" in the program folder.

Assignment of fields:

If your CSV file is unable to provide the predefined field names, it is possible to create an additional mapping file (similar to schema.ini) which is stored in the same folder. The file must be named like the import file, with ".map" as the file extension.

The content of the ".map" file can contain the following. In the first lines, general settings are defined,



once the field separator with SEPERATOR=; and a command, in case you do not have a CMD field in the

The contents of the ".map" file may contain the following. The first rows specify general settings, first the field separator with SEPERATOR=; and a commando in case you don't have a CMD field in the import file and you want to override the default value "UPDATE."

To define the field mappings, first create a section [MAP]. Below [MAP] you can define the fields with the schema "Default field=field in your own CSV file."

Here is an example of a mapping file:

```
SEPERATOR=;
CMD=ADD
[MAP]
ID=DNI
Surname=Apellidos
GivenName=Nombre
```

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If you are importing an iCalendar, you will need to select a calendar on the right hand side, and it is also possible to specify a web address.

Target page:

On the right hand side of the import job you will find the selection of the Exchange folder and a property that allows you to set items that are missing from the import file to be deleted. However, this is only useful if you always export the complete inventory from your database. The option only deletes items that have already been matched with the tool.

Export:

For an export job, the arrow to the left is positioned. This creates a CSV file with the data from the Exchange folder, which you can then process. If your source is a calendar, you can add also a file with the extension .ics in order to export into an iCalendar file.

ODBC Data unidirectional synchronization

Create a new job from the menu => Sync Jobs => [ODBC Import Job].

Source:

Here you will find a field [ODBCConnectionString] to set an ODBC connection string to access your external data.

You will also find a field [ODBCCommand], which allows you to select the required data. To do this, use a table, view or query where you have to use certain fields known to ExMixedFolders. The fields you can use can be found in the file: C:\Program Files\Somebytes\ExMixedFolders\ODBC to Exchange Importfields.xlsx.

Depending on the set interval, the ODBC task calls the query you have selected and runs through the table. If an element is missing, it is created and if an element already exists, it is overwritten or not in the LASTMODIFIEDTIME field, depending on the value.

Deletions are performed in the target when an element is no longer present in the source. There is also an option "Delete Unknown Items", which allows you to specify that elements in the source that were not originally created with the task should be deleted.

Target:

Select an Exchange target folder that matches your data.

Backup/Recovery

With a backup task, you can make a cyclical backup of a folder or a structure. You can later restore the backup to an empty folder with a restore job. The backup job will overwrite the older backup file, so if you

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want to create a new backup file, you can do the following. The backup job can call a batch file after a successful backup, if you enter the command `move%1%2` in it and call the file with the default parameters, then the files are renamed automatically after creation.

Ziel

Backupordner: D:\temp\

Start nach Backup: D:\temp\BackupMove.bat %file% %filenamewithdatetime%

Job Pause: Auftrag vorübergehend deaktivieren.

Unterordner: Unterordner einbeziehen

Mailbox migration

To migrate one or more mailboxes, the migration task is useful.

The migration task works like a synchronization task, with the difference that all properties related to the migration can be configured here.

Select the connection to the source server and the connection to the target server. To migrate a mailbox, select it on both sides. Also, check the "Synchronize subfolders" checkbox to migrate the entire mailbox.

Quelle

Verbindung: EX2007U8

Benutzer: Nachgeahmter User

Ordner: /Mailbox/

Migration

- Gelöschte Elemente migrieren
- Zielordner zuerst leeren
- Fehlerhafte Ordner zurücksetzen
- Revisionsdaten erzeugen
- Entfernt Duplikate in der Quelle
- Entfernt Duplikate im Ziel
- Revisionsdaten initial erzeugen
- Migration wird ausgeführt
- Elemente im Ziel nicht überschreiben

Ziel

Verbindung: Ex2013

Benutzer: user8@somebytes.local

Ordner: /Mailbox/

Unterordner Unterordner synchronisieren

Job-Reset: Synchronisationsstatus zurücksetzen

Job-Pause: Auftrag vorübergehend deaktivieren.

Zeitfilter: Alles

Reset bei Fehler: Nicht aktiv

Options:

- **Migrate Deleted Items:** Here you determine whether the "Deleted Items" folder will also be migrated.
- **Delete target folder first:** If you already have data in the target mailbox that you want to delete before the migration.
- **Reset incorrect folders:** If you enable this option, every folder that is erroneously marked will be reset and synchronized again with the destination after the synchronization service is restarted.

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For example, folders are marked as bad if the source or destination server has been unavailable for a while.

- Generate revision data: At the end of the migration, you will receive some csv files, with which you can check by Excel, for example, which files might not have been transferred.
- Remove duplicates: This function checks the source folder (possibly also in the destination folder) for duplicates before the migration and removes them.
- Create revision data initially: The csv files are created before the migration.
- Migration is running: You need this option if, for example, you don't want to use the migration job as such, but perhaps as a maintenance job to remove duplicates in certain folders.
- Do not overwrite items in the target page: For example, if you enable this feature, you can already make changes to items on the target page that are not overwritten if something changes in the source. (This function is not available in Mirror mode)

If you activate the "Mirror" mode (red arrow), ExMixedFolders works as follows. Any changes made on the target page will undo the migration task.

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Task generator for Active Directory group members

If you want to automatically create synchronization tasks for a large group of people where the members change frequently, the task generator is a good idea. With this you create synchronization tasks for group members of an Active Directory group automatically in the background and then start the synchronization.

In order to be able to use this task, you need an Active Directory with a user group in which you collect the relevant users and an already functioning task that you use as a template for generating the sub-tasks.

The orders are then generated and deleted cyclically in the background, depending on whether users are added to or removed from the ActiveDirectory group. The ExMixedFolders service is stopped, the new task templates are created and then the program is started again. The actual tasks are created and any Exchange folders that may be required are created.

Proceed as follows to create this task generator.

1. Create an order of your choice as an example and use Impersonation to select the mailbox.
2. If this works to your satisfaction, save it as a *.ttpl file. [Right click on the order] => [Save as template] => [* .ttpl file]
3. If necessary, adapt the file to your needs using a text editor (further information can be found here: C:\Programs\Somebytes\ExMixedFolders\BuildTasksByAdGroupMembers.en.pdf).
4. Create a group in Active Directory in which you select the people who should receive the synchronization job as members.
5. Delete the sample task, as this will then be created by the generator if the corresponding user is in the group.
6. Now create the task generator via [Synchronization tasks] => [Advanced] => [Automatic task creation through AD group membership] and enter the path to the template in step 2.
7. Enter the domain controller or the domain.
8. Enter the AD group in which you enter the members.
9. Set a time for the task to run and an interval.

After you have started the ExMixedFolders service with [Save and restart service], the corresponding tasks are created and (depending on the start time) started.

If you want to see the new tasks, you have to restart the configurator because it is not updated by the service.

Note: This task runs the BuildTasksByAdGroupMembers.exe program with the appropriate parameters in the background, which in earlier versions had to be entered manually in the Windows task manager.

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Task generator for Exchange group members

If you want to automatically create synchronization tasks for a large group of people where the members change frequently, the task generator is a good idea. With this you automatically create synchronization tasks for group members of an Exchange group in the background and then start the synchronization. As a group you can use any group that you have created in Exchange, including Exchange online, such as Microsoft 365 groups, teams or distribution lists.

In order to be able to use this job, you need an already functioning task that you use as a template for generating the sub-tasks.

The tasks are then generated and deleted cyclically in the background, depending on whether users are added to or removed from the group list. The ExMixedFolders service is stopped, the new task templates are created and then the program is started again. The actual tasks are created and any Exchange folders that may be required are created.

Proceed as follows to create this task.

1. Create a task of your choice as an example and use Impersonation to select the mailbox.
2. If this works satisfactorily, save it as a *.ttpl file. [Right click on the order] => [Save as template] => [* .ttpl file]
3. If necessary, adapt the file to your needs using a text editor.
4. For example, create a distribution group in which you select the people as members who should later automatically receive the synchronization job.
5. Delete the sample job, as this will then be created by the generator if the corresponding user is in the group.
6. Now create the task generator via [Synchronization tasks] => [Advanced] => [Automatic task creation for Exchange group members] and enter the path to the template in step 2.
7. Enter the SMTP name of the group.
8. Set a time for the task to run and an interval.

After you have started the ExMixedFolders service with [Save and restart service], the corresponding tasks are created and (depending on the start time) started.

If you want to see the new tasks, you have to restart the configurator because it is not updated by the service.

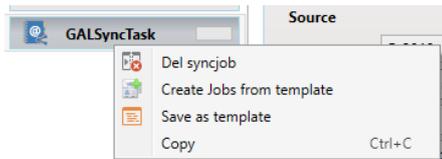
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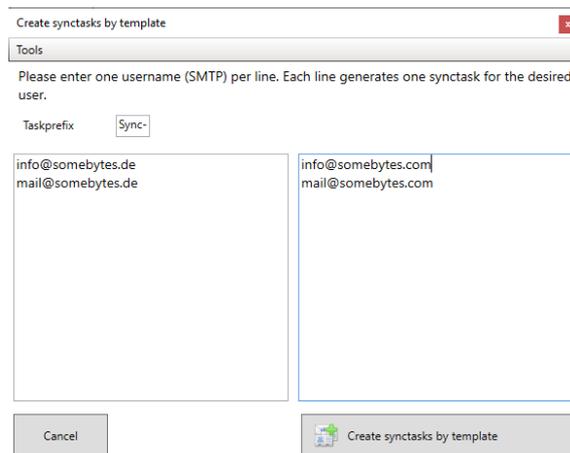
Create more than one task in one step

If you require large amounts of synchronization jobs, this would be very laborious in the configurator. In order to ease the work, you can first create an example service and task which you can later use to create more of these. As next you find some ways how you can create tasks from these.

1. You can automatically create additional tasks from an existing task using the context menu. To do this, select "Create synchronization jobs according to this template".



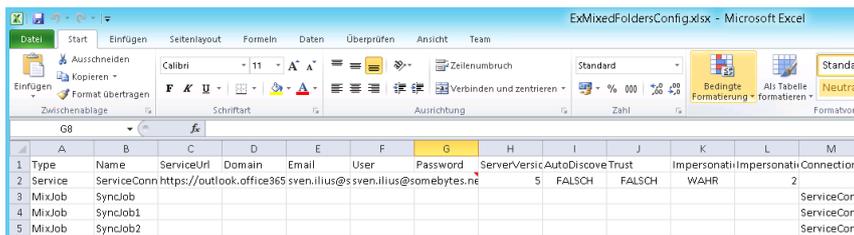
In the following dialog you can add the mailboxes for the source and target to a list and then create the resulting tasks.



2. In ExMixedFolders there is the possibility to save a task as a template, which you can use later in a task wizard or in the menu. Save the template in the .tpl format that the task assistant can use. (If you save the template with the file extension .jobtemplate in the directory C:\ProgramData\ExMixedFolders\, then you can use the template from the Synchronization job => Templates menu.) The task assistant can be started in the menu under Synchronization tasks => Task assistant. Here you can now select the template and the source connection and target connection. In the next step, you will be shown the mailboxes in the source and destination. You can select these and create their synchronization tasks in the next step.
3. Configuration in Excel: If you require large amounts of synchronization jobs, this would be very laborious in the configurator. In order to ease the work, you can first create an example service and job and then click on "Change/create configuration in Excel" in the "Service" menu entry. When Excel has been installed, it will open and show you your current configuration.

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	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Type	Name	ServiceUrl	Domain	Email	User	Password	ServerVersion	AutoDiscover	Trust	Impersonation	Impersonation	Connection
2	Service	ServiceConn	https://outlook.office365	sven.ilius@somebytes.net	sven.ilius@somebytes.net			5	FALSCH	FALSCH	WAHR		2
3	MixJob	SyncJob											ServiceConn
4	MixJob	SyncJob1											ServiceConn
5	MixJob	SyncJob2											ServiceConn

The EWS inputs (Type: Service) are found in the top section and the jobs (Type: MixJob) are found beneath these. In order to create further services, insert these below the already existent EWS accesses. Please be sure to enter a new name in the Name field. The Password field is encoded in the comment when already existing configurations are called up. If you would like to insert an additional service with another password, you can also enter this directly in the Password field in plain text.

Proceed exactly the same for synchronization jobs. Copy an entry, change the name and possibly the folders or users.

When you save the file, ExMixedFolders will read these in and present them as a configuration.

4. You can also use ExMixedFolders to create tasks based on membership in an AD group. There are separate instructions for this, which you can find in <C:\Programs\Somebytes\ExMixedFolders\BuildTasksByAdGroupMembers.eng.pdf>.
5. Add tasks via PowerShell: ExMixedFolders comes with a PowerShell module that can generate syntasks in the PowerShell. For this it is necessary that you have already created service connections to the source and destination in the configurator and that they are configured for impersonation.

The Powershell module is loaded as follows:

```
Import-Module 'C:\Program Files\Somebytes\ExMixedFolders\ExMixedFoldersPS.dll'
```

With the following command you can create a migration job for a mailbox:

```
Add-ExMixedFoldersSync user1@server1.net user1@server2.net ServiceConnection1 ServiceConnection2
```

The parameters 1 and 2 are the source and destination mailboxes and the 3rd and 4th positions are the source and destination connections to the exchange server.

If you want to configure several tasks at the same time, you can use import-csv, for example. To do this, create a CSV file that contains the addresses of the mailboxes from the source and the destination. This can look like this:

```
Users1;Users2
user1@somebytes.de;user1@server2.de
user2@somebytes.de;user2@server2.de
user3@somebytes.de;user3@server2.de
user4@somebytes.de;user4@server2.de
user5@somebytes.de;user5@server2.de
user6@somebytes.de;user6@server2.de
```

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With the following command you now read in the CSV file and use the addresses as input for the program.

```
Import-Module 'C:\Program
Files\Somebytes\ExMixedFolders\ExMixedFoldersPS.dll'
$csv = import-csv D:\migrationusersTest.csv -Delimiter ';'
Add-ExMixedFoldersMigration $csv.Users1 $csv.Users2 ServiceConnection1
ServiceConnection2
```

The command works as follows. First, the ExMixedFolders service is stopped. Then the appropriate migration jobs (.tpl files) are created using a template (the default is C:\ProgramData\ExMixedFolders\MigrationTaskTemplate.tpl).

The service is then started again and the prepared job blanks (.tpl files) are read in by ExMixedFolders and converted into a migration job (.conf files).

You can create your own .ttl template in order to generate the jobs you like to. For this you can use a working configuration which you can modify via notepad and save it as a .ttl file. If you define folders in FolderPath1 or FolderPath2 variable, you will notice that these folders are created in the source and target, if they don't exist.

The Add-ExMixedFoldersSync command has some other parameters as well:

Template: Here you can enter another template that you have prepared. (Default = C:\ProgramData\ExMixedFolders\MigrationTaskTemplate.tpl)

Tenant:

If you use several instances of ExMixedFolders, you can specify the corresponding service here. (Standard = ExMixedFolders)

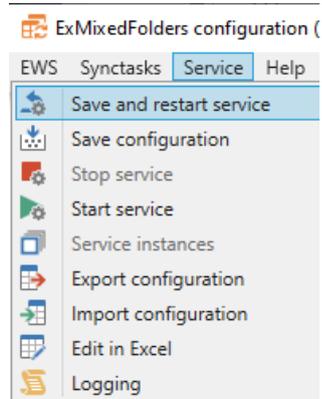
Projekt: You can enter a name here, which is then appended to the job name. (Default = migration)

StartService: If the ExMixedFolders service is not yet to be started, you can enter a false here. (Default = true)

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Manage ExMixedFolders service



Here you can save your settings and manage the ExMixedFolders service.

You can also find this service if you enter „services.msc“ under „Run“ “services.msc”. Or double-click the service icon on the far right of the status bar.

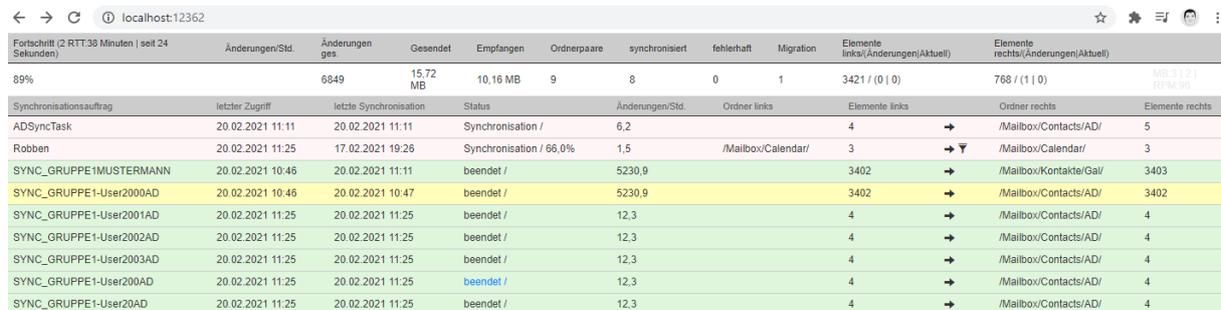
Monitor service

The program creates HTML statistics for your synchronization jobs. You can display this with Service => Log file => Folder overview. Here you will see each folder pair with the number of elements located to the right and the left. The number of elements unfortunately can't be displayed in most public folders.

You can acquire an overview of the current situation of the service with the help of the overview. When the data records are shown green, you can presume that the synchronization job is functioning correctly. When red, either elements are still being synchronized or the number of elements doesn't agree. You must check the job if the status is "Error/Finished". It may be the case that several elements couldn't be transferred.

In the upper part you can view the progress of the current synchronization run. You will also see how many folder pairs currently need to be processed. The number is identical with the number of synchronization orders, or, in the event that sub-folders are being synchronized, these are also listed here. You are also shown the complete elements to the right and left. The elements processed in the current run are shown in brackets. Finally, the elements changed/created since the start of the service are displayed.

In the event that you synchronize sub-folders, you can display these by clicking on the synchronization order.



The screenshot shows a web browser window with the address bar displaying 'localhost:12362'. The page content is a table with the following columns: Fortschritt (2 RTT:38 Minuten | seit 24 Sekunden), Änderungen/Std., Änderungen ges., Gesendet, Empfangen, Ordnerpaare, synchronisiert, fehlerhaft, Migration, Elemente links/(Änderungen/Aktuell), Elemente rechts/(Änderungen/Aktuell), and a small summary box on the right showing '89%' and '3421 / (0 | 0)'. The table lists various synchronization tasks and folder pairs, including 'ADSyncTask', 'Robben', and several 'SYNC_GRUPPE1-User' entries. The 'Robben' row is highlighted in pink, and the 'SYNC_GRUPPE1-User2000AD' row is highlighted in yellow. The 'SYNC_GRUPPE1-User2000AD' row shows a status of 'beendet /' and 5230,9 elements on both sides. The 'SYNC_GRUPPE1-User2001AD' through 'SYNC_GRUPPE1-User2004AD' rows show a status of 'beendet /' and 4 elements on both sides. The 'SYNC_GRUPPE1-User20AD' row shows a status of 'beendet /' and 4 elements on both sides.

Fortschritt (2 RTT:38 Minuten seit 24 Sekunden)	Änderungen/Std.	Änderungen ges.	Gesendet	Empfangen	Ordnerpaare	synchronisiert	fehlerhaft	Migration	Elemente links/(Änderungen/Aktuell)	Elemente rechts/(Änderungen/Aktuell)	
89%		6849	15,72 MB	10,16 MB	9	8	0	1	3421 / (0 0)	768 / (1 0)	3421 / (0 0) 768 / (1 0)
Synchronisationsauftrag	letzter Zugriff	letzte Synchronisation	Status	Änderungen/Std.	Ordner links	Elemente links	Ordner rechts	Elemente rechts			
ADSyncTask	20.02.2021 11:11	20.02.2021 11:11	Synchronisation /	6,2		4	/Mailbox/Contacts/AD/	5			
Robben	20.02.2021 11:25	17.02.2021 19:26	Synchronisation / 66,0%	1,5	/Mailbox/Calendar/	3	/Mailbox/Calendar/	3			
SYNC_GRUPPE1MUSTERMANN	20.02.2021 10:46	20.02.2021 11:11	beendet /	5230,9		3402	/Mailbox/Kontakte/Gal/	3403			
SYNC_GRUPPE1-User2000AD	20.02.2021 10:46	20.02.2021 10:47	beendet /	5230,9		3402	/Mailbox/Contacts/AD/	3402			
SYNC_GRUPPE1-User2001AD	20.02.2021 11:25	20.02.2021 11:25	beendet /	12,3		4	/Mailbox/Contacts/AD/	4			
SYNC_GRUPPE1-User2002AD	20.02.2021 11:25	20.02.2021 11:25	beendet /	12,3		4	/Mailbox/Contacts/AD/	4			
SYNC_GRUPPE1-User2003AD	20.02.2021 11:25	20.02.2021 11:25	beendet /	12,3		4	/Mailbox/Contacts/AD/	4			
SYNC_GRUPPE1-User2004AD	20.02.2021 11:25	20.02.2021 11:25	beendet /	12,3		4	/Mailbox/Contacts/AD/	4			
SYNC_GRUPPE1-User20AD	20.02.2021 11:25	20.02.2021 11:25	beendet /	12,3		4	/Mailbox/Contacts/AD/	4			

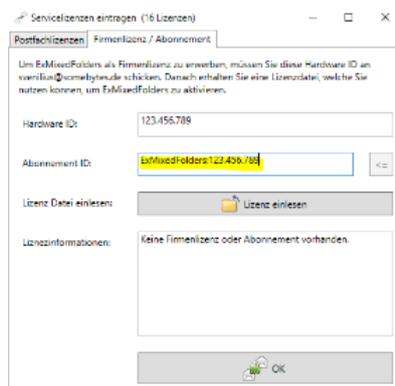
Licensing

Per mailbox:

ExMixedFolders requires a license for every Mailbox you would like to access. Enter the licenses received from Somebytes horizontally in the dialog and restart the service. If you would like to reach several Mailboxes in your configuration, for which you have no license, those remaining will not be loaded.

It is also possible to buy an enterprise license with which you can synchronize as many mailboxes you like. This license type is bound on one hardware.

Subscription:



This is a temporary or rental license. This method is particularly useful when migrating data, since you will probably no longer need the software after the project has been completed.

Enterprise:

You don't need to consider the number of mailboxes with a company license. The license form makes sense when you want to synchronize more than 100 mailboxes. The license is linked to one computer.

With this license form you also have the possibility to allow the service to run in several instances in order to delimit application cases from one another. For example, as a system company you could offer the service as a service, which allows you to administer the configurations of your clients separately.

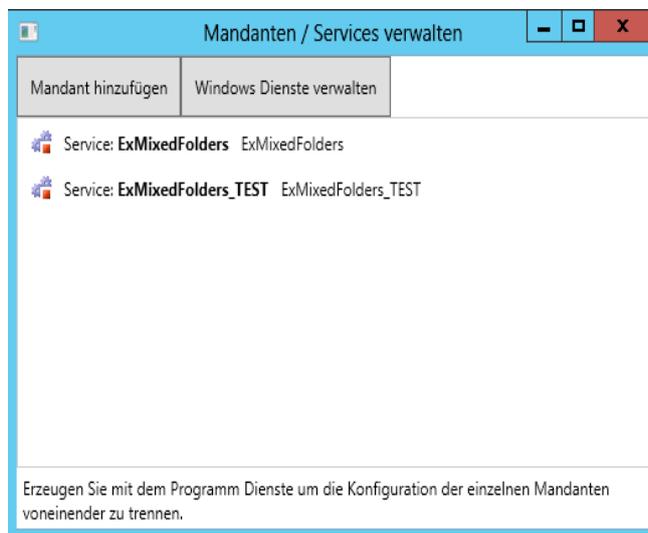
Further information on licensing can also be found on Somebytes.com:

<https://www.somebytes.com/en/products/exmixedfolders/faq/licensequestions/>

Extended configuration options

Clients

With the company license it is possible to start several services and configure these differently. In the process you must be sure that you don't use one mailbox or one folder in both services, which would make simultaneous access to elements possible.



The main application case actually involves the servicing of several clients and the separation of the configurations from one another. Failure security can also be mentioned here, as the shutting down of a client is possible while the second continues to run in the event of a separation.

In order to create another service, start the "Administer clients" entry in the configurator main menu under Service.

To start or stop a service, click on the context menu in the left symbol or on the service title to delete or configure. You create a new service with "Add client".

Expert settings

Backup: To back up the configuration files please save all files in the directory:
C:\ProgramData\ExMixedFolders\ ending with „.conf“ and “.sqlite”.

The configurations are saved as .bak during every storage process, so that you can also access them in an emergency situation.

Certain high priority synchronization jobs:

If you have a large number of synchronization jobs, it may be necessary to run certain jobs with higher priority. To do this, add .PRIO to the task-name. ExMixedFolders now recognizes these orders as orders that you would particularly like to execute.

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Attach a category while syncing:

This function was implemented in order to distinguish between different users, each of the users would have its own category. Each of the elements which is touched from ExMixedFolders gets a category.

In order to activate this behavior, you must change the configuration file manually. Please open in that case the according file "...job.settings.conf" from "C:\ProgramData\ExMixedFolders\".

Find or insert these entry:

```
<AddCategory1></AddCategory1>
```

```
<AddCategory2></AddCategory2>
```

insert the categoryname of your wish either into AddCategory1 or AddCategory2.

1 stands for sync between left to right and 2 from right to left.

Example:

```
<AddCategory1>CategoryOfYourWish</AddCategory1>
```

```
<AddCategory2></AddCategory2>
```

Remove information's from element in order to show it as private:

With the setting "ForceCleanPrivate" you can achieve that on the elements on the target folder are shown as empty elements (private). You can use this function only in unidirectional mode.

In order to activate this behavior you must change the configuration file manually. Please open in that case the according file "...job.settings.conf" from "C:\ProgramData\ExMixedFolders\".

Change this setting from false to true:

```
<ForceCleanPrivate>>true</ForceCleanPrivate>
```

Attach organizer to the subject of the appointment:

With the setting "AddOrganizer2Appointments" you can reach that the organizer of the appointment is attached to the subject, which is only possible in unidirectional mode.

In order to activate this behavior, you must change the configuration file manually. Please open in that case the according file "...job.settings.conf" from "C:\ProgramData\ExMixedFolders\".

Change this setting from false to true:

```
<AddOrganizer2Appointments>>true</AddOrganizer2Appointments>
```

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If you want to have this behavior only on private elements, you can use the following setting:

```
<AddOrganizer2CleanedPrivate>true</AddOrganizer2CleanedPrivate>
```

Choose synchronized SMTP addresses in GAL tasks:

Take this switch if you like to select the synchronized SMTP email-address in a GAL job by yourself.

In order to activate this behavior, you must change the configuration file manually. Please open in that case the according file "...job.settings.conf" from "C:\ProgramData\ExMixedFolders\".

Set the unneeded address-fields to false:

```
<SyncMailAddress1>true</SyncMailAddress1>
```

```
<SyncMailAddress2>true</SyncMailAddress2>
```

```
<SyncMailAddress3>true</SyncMailAddress3>
```

Exchange Throttling policy:

The Exchange Server's [throttling policy](#) prevents too many simultaneous connections or too much CPU time that the Exchange Server has to spend for the respective client. You can edit the policy on the Exchange Server using PowerShell (Set-ThrottlingPolicy).

No matter how you set your Exchange Server, ExMixedFolders tries to find out the optimal number of connections by automatically changing values between two limit values (MaxDegreeOfParallelismAutoMax and MaxDegreeOfParallelismAutoMin) until the best performing setting for the client has been found.

If the preset values are not sufficient for you, you can proceed as follows to change the values.

Use this setting if you want to limit the CPU load by the service.

To do this, open the file "C:\ProgramData\ExMixedFolders\settings.conf" and search for the following location:

```
<MaxDegreeOfParallelismAutoMax>25</ MaxDegreeOfParallelismAutoMax>
```

Also change the "MaxDegreeOfParallelismInit" value to a value below "MaxDegreeOfParallelismAutoMax".

```
<MaxDegreeOfParallelismInit>3</ MaxDegreeOfParallelismInit>
```

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Logging:

By default, ExMixedFolders creates log files (ExMixedFolders.log) in the following path: C:\ProgramData\ExMixedFolders\logs\. If you would like to save these files in a different path, you can change the path with the following setting:

To do this, open the file C:\Program Files (x86)\Somebytes\ExMixedFolders\ExMixedFolders.exe.config and search for the following location:

```
<setting name = "LoggingPath" serializeAs = "String">  
    <Value>c:\temp\ExMixedFoldersLog\</ value>  
</ Setting>
```

Insert a path of your choice here.

Hide subject and folder names in the log:

By default, ExMixedFolders displays the subject of the message or folder name in the event of errors. If you want to avoid this for data protection reasons, you can start the service with the following setting:

To do this, open the file C:\Program Files\Somebytes\ExMixedFolders\ExMixedFolders.exe.config and search for the following location:

```
<setting name = "CanShowNamesInLog" serializeAs = "String">  
    <Value>>true</ value>  
</ Setting>
```

And change the value true to false.

Database:

The program uses sqlite databases to get links between elements faster. Depending on the number of elements to be synchronized, these databases can be several GB in size. If you want to save the data in another directory, please use the following setting:

To do this, open the file "C:\ProgramData\ExMixedFolders\settings.config" and search for the following location:

```
<DBDataPath>c:\temp\ xMixedFoldersLog\</ DBDataPath>
```

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Insert a path of your choice here. Copy the old databases into this directory in order to continue synchronizing without interference.

Note: For every change that you make manually in one of the configuration files mentioned above, you must stop the service (ExMixedFolders) before and start it again after the change.

Troubleshooting

- Some questions are answered in the FAQ section, please see the following page: <https://www.somebytes.com/en/products/exmixedfolders/knowledgebase/>
- You can also find known problems and their solutions in: <http://support.somebytes.net/viewforum.php?f=25>
- Should you encounter problems with the service, you can look up the service's error messages in the file ExMixedFolders.log under C:\programdata\ExMixedFolders\logs\ which you can discuss with info@somebytes.net as well. You can change the logging behavior with NLog.config from the NLog project. (<https://nlog-project.org/config/>).
- Further log data (please also see Logging in the configurator) can be found under C:\ProgramData\ ExMixedFolders\logs\.
- By default, ExMixedFolders is run as a SYSTEM user. You can, however, enter another user if you wish. In order to configure the service, please enter services.msc at the command prompt or go to "Services" within the control panel. Here you will find the service ExMixedFolders.
- It is possible, that mails exceeding the size of 10MB will not be synchronized. The reason for this is a standard limitation within the EWS. You can change the limit as follows: Please start the Exchange management console and enter the command „**get-receiveconnector | select identity,maxmessagesize**“. You will now receive the current values. With „**set-receiveconnector "Connector Name" -maxmessagesize 30MB**“, you can increase the value to 30 MB. You will find more information in your Exchange Server documentation.