

Connecting Software Connect Bridge CB Exchange Server Sync – User manual

Document History

Version	Date	Author	Changes
1.0	20 May 2015	DMI	Creation
1.1	19 Dec 2016	DMI	Updated after release
1.2	19 Dec 2016	ЈКТ	Review 1
1.3	20 Dec 2016	DMI	Added configuration possibilities
1.4	12 Jan 2017	DMI	Update after changing installer

Summary

This document describes the installation and configuration process of the Connect Bridge Exchange Server Sync

Supported versions

Exchange: 2010SP1, 2010SP2, Exchange 2013, Exchange 2016, Online, Office 365

Production version

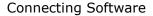
2.0.0

All rights reserved. No part of the document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the written permission of Connecting Software s.r.o. & Co. KG. Company or product names mentioned in this document may be trademarks or registered trademarks of their respective companies.



Table of Contents

1 Overview	3
1.1 Key features	
1.2 Supported versions	
2 How it works	4
2.1 Synchronization process	
3 System requirements	4
4 Installation process	4
4.1 Database connection initializing	7
4.2 Installation troubleshooting	
5 License requesting and license activation	
6 Configuration process	
6.1 Login into portal	
6.1.1 Login as a Super user	
6.1.2 Login as a Tenant administrator	
6.2 Configuration of Exchange server	
6.2.1 Concept of root user	
6.3 Synchronization pair configuration	
7 Troubleshooting	23
7.1 User logs	
7.2 Deep logs	
7.3 Most common issues	
7.3.1 Folder calendar synchronization failed because no results were found. T reverted	
7.3.2 Some Items Are Not Being Synchronized	24
7.3.3 Cannot find Office365 EWS URL	24
7.3.4 How to find correct Exchange Server version	





1 Overview

Microsoft Exchange Server is the most popular communication, collaboration and email messaging application today. It delivers the must have services like mail server, calendar, task manager and contacts manager. Companies can use it by installing it on their servers or can take advantage of the cloud services.

Usually a user has his own email account with mails, tasks, contacts and appointments but is not uncommon the scenario when a user has two or more mailbox accounts within same or different instances and versions of Exchange Server. The demand to keep mailboxes items synchronized leads to a problem. Connecting Software proposes a solution to this issue providing a tool which allows to synchronize multiple Exchange Mailboxes. For example if you need to synchronize one user on two or more exchange servers, even different versions of Exchange Server so that the user and the external party(in most cases customers) are not aware about that you are using two Exchange Servers or two mailboxes and for this purpose CB Exchange Server Sync Tool is an ideal solution.

The CB Exchange Server Sync Tool is an application dedicated to synchronize Microsoft Exchange user folders. Users and folders can be located either on the same version and instance of Exchange Server or they can be located on different instances.

The tool uses a windows service which performs the synchronization between mailboxes in periodic runs. The tool also provides a graphical user interface to set up the synchronization properties such as connection string to the data source, target folders and synchronization period.

The synchronization process runs in parallel with Microsoft Exchange Services in a non-blocking mode, therefore not influencing whatsoever in the general performance of Exchange Server itself.

WARNING: Service is operating on Exchange mailbox level. The service is creating, modifying and deleting items. We are not responsible for recovering the mailbox to the initial state. Please test the service in your test environment first and create backups before implementing to the production environment.

1.1 Key features

- Synchronize emails folders
- Synchronize contacts
- Synchronize tasks
- Synchronize calendar
- Synchronization between different Exchange versions
- Easy to install and to maintain
- Custom configuration for each synchronized user apart
- Provides run-time information about the executed synch operations
- Multiple tenants
- One-way and two-way synchronization

1.2 Supported versions

- Microsoft Exchange Server 2010 SP1
- Microsoft Exchange Server 2010 SP2
- Microsoft Exchange Server 2010 SP3
- Microsoft Exchange Server 2013

Connecting Software



Connect Bridge

- Microsoft Exchange Server 2016
- Office 365

2 How it works

The CB Exchange Server Sync consist of 5basic components:

- CB Exchange Server Sync service
- CB Exchange Server Sync configuration portal
- CB Exchange Server Sync configuration service
- Connect Bridge platform
- MS SQL Databases

CB Exchange Server Synchronization Service is the core of the application. It runs as a Windows service which role is to check the synchronization pairs for changes.

This service uses the Connect Bridge service to connect to the Exchange Server transparently making all the required operations such as insert, delete, and update.

CB Exchange Server Sync configuration portal is web portal which allows you to configure CB Exchange Server Sync service and displays you activity of the synchronization process. However, the portal is not communicating directly with the database nor CB Exchange Server Sync. The direct operation with those parts are done by CB Exchange Server Sync configuration service.

2.1 Synchronization process

The synchronization process is periodically executed after start. Application seeks for inserted, updated or deleted items on every side of the synchronization pair on each shot of the execution. When it finds a change in one side of the synch-pair it reflect this change on the other side. When deleted or updated items are being synchronized, it performs action according the last change by date/time.

Synchronization is done in cycles, here named as iterations which runs periodically according to the application setup.

The synchronization tool has connection credentials only of the two users who have been delegated to Owner items to multitude user's folders within their exchange. On this principles the root users can determine changes for each delegated mailbox and refer this changes to the other users which makes appropriate actions.

3 System requirements

- .NET Framework 4.6.1
- Single Windows machine (at least Windows 8 or later, Windows Server 2012 or later) with reachable Microsoft Exchange servers which will be in use
- One Exchange account (mailbox with basic authentication) for each Exchange which will be in use
- Microsoft SQL Server 2012 or later (could be Express) reachable from machine where CB Exchange Server Sync will be installed
- Internet Information Services 5.1 or later

4 Installation process

Basically consist of following components:

- 1. CB Exchange Server Sync service which handles the synchronization logic
- 2. Connect Bridge with Exchange connector



It is platform that provides connectivity to Microsoft Exchange server

ODBC Driver that provides connectivity between Connect Bridge and CB Exchange Server sync
 CB Exchange Server Portal and CB Exchange Server Management Service. Those components allows you to communicate with CB Exchange Server Sync service and provide the configuration possibilities

Let's start with the process of installation. Run (will be asked as administrator) the setup installer that was delivered to you.

However, before the installation you could be asked to install some of the prerequisites. Please, note that you need to have installed Microsoft SQL Server.

After finishing prerequisites installation the CB Exchange Server Sync is ready for installation. The very first screen you will see is the Welcome dialog (Figure 2 Welcome installation page), click *Next* to continue to Installation path dialog.

5	CB Exchange Server Sync Setup	×
	<section-header><text><text><text></text></text></text></section-header>	
	Back Next Finish Cance	

Figure 1 Welcome page of prerequisites installation





Figure 2 Welcome installation page

On the next screen you will be asked to specify target folder of the CB Exchange Server Sync. Click *Next* to continue.

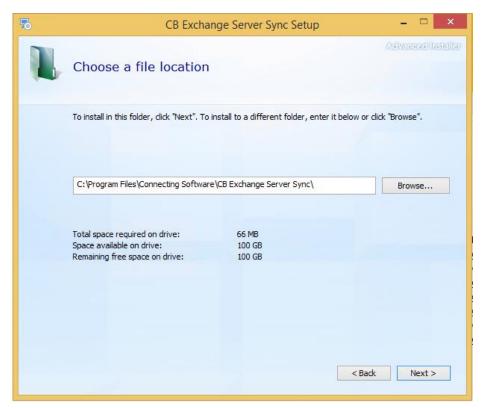


Figure 3 Installation location dialog

4.1 Database connection initializing

On the next screen you will be asked to create two SQL Server connection:

- One for the CB Sync Portal
- One for the service itself

Both dialogs gives you option to select SQL server within your network, however if you cannot find the server you want to use, you can type the name there or the SQL Browsing service is not up and running you are able to run the service on the machine where the SQL Server is installed see following picture.



Connecting Software

	Services					
on View Help						
T 🖸 🖬 🔤 🛛 🖬 🖬 🕨 🖿 🖬						
(Local) Services (Local)						
SQL Server Browser	Name	Description	Status	Startup Type	Log On As	
	Security Accounts Manager	The startup	Running	Automatic	Local Syste	
Stop the service	Security Center	The WSCSV	Running	Automatic (D	Local Service	
Pause the service Restart the service	Sensor Monitoring Service	Monitors va	Running	Manual (Trig	Local Service	
<u>Incluin</u> the service	G Server	Supports fil	Running	Automatic	Local Syste	
	Shell Hardware Detection	Provides no	Running	Automatic	Local Syste	
Description: Provides SOL Server connection	Smart Card	Manages ac	-	Disabled	Local Service	
information to client computers.	🌼 Smart Card Device Enumera	Creates soft	Running	Manual (Trig	Local Syste	
	Smart Card Removal Policy	Allows the s	-	Manual	Local Syste	
	SNMP Trap	Receives tra		Manual	Local Service	
	Software Protection	Enables the		Automatic (D	Network S	
	Spot Verifier	Verifies pot		Manual (Trig	Local Syste	
	SQL Server (SQLEXPRESS)	Provides sto	Running	Automatic	NT Service	
	SQL Server Agent (SQLEXPR	Executes jo	-	Disabled	Network S	
	SQL Server Browser	Provides SQ	Running	Automatic	Local Service	
	SQL Server VSS Writer	Provides th	Running	Automatic	Local System	
	SSDP Discovery	Discovers n	Running	Manual	Local Service	
	🌼 Still Image Acquisition Events	Launches a		Manual	Local Syste	
	🔍 Storage Service	Enforces gr		Manual (Trig	Local Syste	
	🔍 Superfetch	Maintains a	Running	Automatic	Local Syste	
	🤹 System Event Notification S	Monitors sy	Running	Automatic	Local Syste	
	🔍 System Events Broker	Coordinates	Running	Automatic (T	Local Syste	
	🔍 Task Scheduler	Enables a us	Running	Automatic	Local Syste	
	TCP/IP NetBIOS Helper	Provides su	Running	Automatic (T	Local Service	
	🎑 Telephony	Provides Tel		Manual	Network S	
	🖄 Themes	Provides us	Running	Automatic	Local Syste	

Figure 4 SQL Server Browser service

The next steps of configuring the SQL Server is to allow TCP/IP protocol in the SQL Server Configuration manager (see following picture). This is needed to be possible connect to SQL Server. If the TCP/IP protocol is not allowed you will get the error during the installation and you will not be able to install the software properly. Please, make sure that TCP/IP protocol is allowed.

a	SqLS	Server Configuration Manager	- 🗆 🗙
File Action View Help			
🗢 🤿 🙍 🗐 🙆 🖉			
SQL Server Configuration Manager (Local) SQL Server Services SQL Server Network Configuration (32bit) SQL Server Network Configuration SQL Native Client 11.0 Configuration	Protocol Name	Status Enabled Enabled Enabled	

Figure 5 Allowing the TCP/IP Protocol



If all needed configuration of SQL Server is done you can continue in the installation of CB Exchange Server Sync. Now, we will continue with configuration of the database connection. All the fields are required. The user you want to use for database connections needs to have appropriate right for creating database, we are recommending to use Superadministrator (sa) user for this purpose. Also, the user must have allowed the SQL authentication via Username and password. After you fill all the fields, you are able to click *Next* to continue. The installer will check whether the user can connect to database, if not it will not allow to continue installation process. On the next screen you will configure the Exchange Sync Engine database connection (Figure 7 CB Exchange Server Sync engine connection dialog), the process is the same as the Portal database configuration.

After the database configuration is done there is last step in configuration – tenant configuration (Figure 8 Tenant configuration). All the fields are required:

- Tenant name (company) the name of the tenant within you will be operating
- E-mail e-mail of the administrator which will be used for log in to the CB Exchange Server Portal
- Password password for the administrator for log in to the Portal
- Password (repeat) the same password for the administrator.

NOTE: Please make sure that you remember the user and the password.

This is all needed configuration of the software, now the setup will install the software.

5		CB Exchange Serve	er Sync Setup	×
		base connection	configuration.	Advanced Installar
	SQL Server: Database:	(local)\SQLEXPRESS	v	
	Username:	sa		
	Password:			Back Next >

Figure 6 CB Exchange Server Sync Portal database connection dialog



5		CB Exchange Server Sync Setup	×
	_	tabase connection nection will store the information needed for synchronization process.	irenesi häälle
	SQL Server:	(local)\SQLEXPRESS	
	Database:	(local)\SQLEXPRESS CNSC-WIN12SP13 CNS-HOST11 CNS-HOST11\DPM CNS-HOST11\VSDPM2012 CNS-HOST7\SQLEXPRESS	
	Username:	CNSM-NB57/SQLEXPRESS CNS-SP2010/CNSSP2010 CNS-SP2010/SHAREPOINT CNS-SP2010/SULEXPRESS	
	Password:	< Back	Next >

Figure 7 CB Exchange Server Sync engine connection dialog

Figure 8 Tenant configuration

4.2 Installation troubleshooting

During the installation you might face off several problems that this section might help you to solve in on your own.



5		CB Exchange Server Sync Setup	×
		abase connection	Antonoradi nafalitar
	SQL Server: Database:	(ocal)\SOLEXPRESS Database unreachable	
	Username:	Sa Login failed for user 'sa'.	
	Password:	••••	
		< Back	Next >

Figure 9 Login failed

If you are getting error such as on the Figure 9 Login failed, most probably the login to your database is not correct, make sure that you pass correct credentials.

5 License requesting and license activation

After you successfully installed the CB Exchange Server Sync, you need to activate the software. This is done by "request and activation" process. Navigate to the installation folder of CB Exchange Server Sync (default C:\Program Files\Connecting Software\CB Exchange Server Sync). There is folder Connect Bridge which contains Connect Bridge platform software, navigate inside the folder and open MgServerService which contains application called **CBServiceController.exe** run the application as an administrator (see Figure 11 CB Service Controller location). The tray icon in the right bottom corner of the taskbar (see Figure 10 Tray of CB Service Controller).

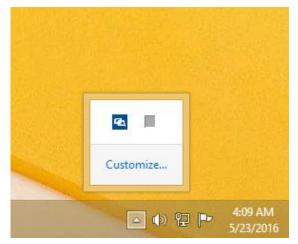


Figure 10 Tray of CB Service Controller



D → I	re View		gServerService			~
	Local Disk (C:) → Program Files → Connecti	ng Software → CB Exchange	Server Sync → Connec	t Bridge → MgServerService →	✓ C Search MgServerService	م
Favorites	Name	Date modified	Туре	Size		
🔜 Desktop	🕌 BackupLog	5/23/2016 4:02 AM	File folder			
\rm Downloads	Database	5/23/2016 4:02 AM	File folder			
🔛 Recent places	lib32	5/23/2016 4:02 AM	File folder			
	퉲 lib64	5/23/2016 4:02 AM	File folder			
🖳 This PC	\mu Plugins	5/23/2016 4:02 AM	File folder			
	AssemblyLoader.dll	5/12/2016 10:35 AM	Application extens	32 KB		
횎 Network	CB.Common.Configuration.dll	5/12/2016 10:35 AM	Application extens	38 KB		
	CB.Server.WebService.WCF.dll	5/12/2016 10:35 AM	Application extens	31 KB		
	CB.SharePoint.Helpers.dll	1/25/2016 4:30 PM	Application extens	26 KB		
	CBServiceController	5/12/2016 10:36 AM	Application	252 KB		
	CBServiceController.exe	5/23/2016 4:02 AM	CONFIG File	3 KB		
	ConnectorLister	5/12/2016 10:35 AM	Application	29 KB		
	ConnectorLister.exe	5/23/2016 4:02 AM	CONFIG File	1 KB		
	ConnectorListerStructures.dll	5/12/2016 10:35 AM	Application extens	27 KB		
	📄 debug	5/23/2016 4:02 AM	Text Document	1 KB		
	default_license.license	6/23/2015 4:37 PM	LICENSE File	17 KB		
	ICSharpCode.SharpZipLib.dll	5/12/2016 10:06 AM	Application extens	196 KB		
	IIOPChannel.dll	5/12/2016 10:06 AM	Application extens	328 KB		
	🚳 License.dll	5/12/2016 10:06 AM	Application extens	20 KB		
	🚳 log4net.dll	5/12/2016 10:06 AM	Application extens	282 KB		
	📄 logOutputfile	5/23/2016 4:02 AM	Text Document	0 KB		
	MG.DB.Abstracion.dll	5/12/2016 10:35 AM	Application extens	65 KB		
	🚳 MG.dll	5/12/2016 10:35 AM	Application extens	1,169 KB		
	Mg.PushNotification.WCF.dll	5/12/2016 10:35 AM	Application extens	14 KB		
	MG.RemoteObject.dll	5/12/2016 10:35 AM	Application extens	23 KB		

Figure 11 CB Service Controller location

Double click on the tray icon and the application will pop up. Click Request license, the application will look for some email client. If no client found it will allow you to save the request file to disk. The request file needs to be sent to the appropriate person from Connecting Software (person who sent the installer).

See the following images that should help you.

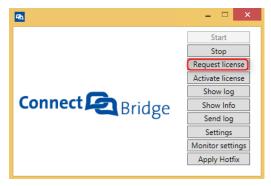


Figure 12 Request license

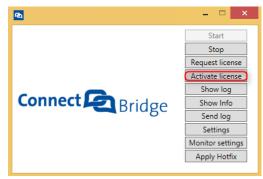


Figure 13 Activation license



After the activation of license the Connect Bridge server needs to be restarted.

6 Configuration process

After the installation is done properly it right time to configure the service. The configuration is done, as mentioned above, by the CB Exchange Sync portal.

6.1 Login into portal

This portal can be accessed by the URL address - <u>http://localhost/CbSyncPortal/</u> or via shortcut created on your Desktop during the installation process (see image below).



Figure 14 CB Exchange Server Sync portal shortcut

After the website is loaded (first access could take a while), you need to login into the portal – click **Log** in at the very top right corner (see **Error! Reference source not found.**).

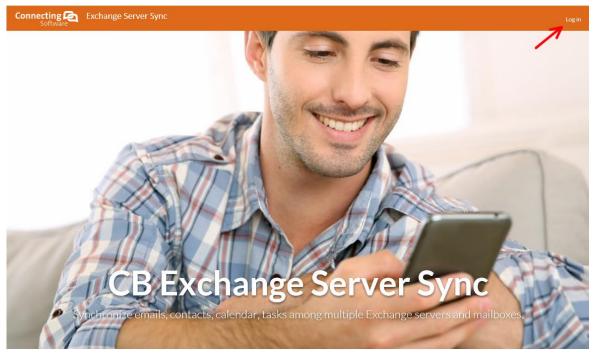


Figure 15 Homepage of the CB Exchange Server Sync portal

The CB Exchange sync portal has some user hierarchy which defers responsibility for every role involved:

- Super user is user which is running under System tenant (this tenant is created automatically and cannot be deleted nor changed). This user is responsible for creating new tenants, managing administrators and managers of existing tenants
- *Tenant Administrator* this user is able to manage everything within his tenant he is able to create another tenant administrators/managers, manage the Exchange server and pair configuration



• Tenant Manager – this is low privilege user, this user is only able to manage synchronization pairs

6.1.1 Login as a Super user

The initial super user e-mail is <u>superuser@superuser.com</u> and password **Superuser**. This can be changed by the end user later on.

As mentioned in previous section super user is user with the highest privileges. After successful login with super user, you are able to manage tenant, users, see the logs, change password for super user (see Figure 16 Login with the Super user)

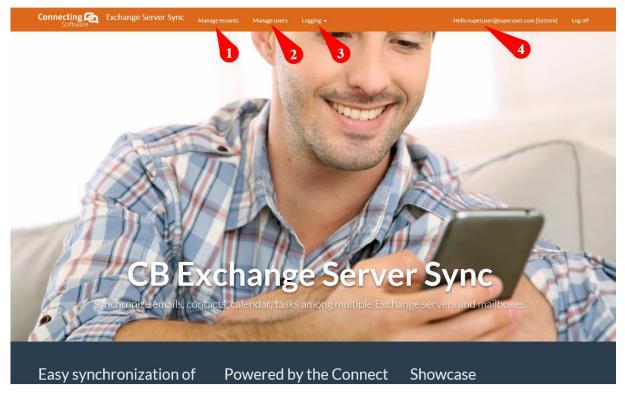


Figure 16 Login with the Super user

6.1.2 Login as a Tenant administrator

To log in you need a tenant administrator created by Super user (see section above). Right after successful login you are able to manage your tenant see Figure 17 Homepage after login, you can:

- 1. Manage your users you can create another user which will have access to the portal for your tenant
- 2. Create configurations this will be describe later on in next chapters.
- 3. Trouble shoot your synchronization and portal via Logs
- 4. Change your user password
- 5. Log off





Figure 17 Homepage after login

6.2 Configuration of Exchange server

The configuration process consist of two parts – Exchange Server and Pair configuration. This section describes the Exchange server configuration. *Please note, that you need to be logged in as a Tenant administrator.*

To configure Exchange Server navigate to Configuration -> Exchange servers. The list of already existing Exchange servers will be showed. To create new one click **Create New**, the form as Figure 18 Create Exchange Server form will be shown.



Connecting Connecting Connecting	nge Server Sync Manage users Configuration + Logging +
Create Exchange server	
Server alias	My Exchange
Server URL	https://yourexchange.com/ews/Exchange.asmx
Server version	2010 🗸
Root user name	admin or admin@domain.com or domaindmin
Root user email	user@domain.com
Root user password	
	Test connection
Back to List	Save

Figure 18 Create Exchange Server form

6.2.1 Concept of root user

To be able to configure CB Exchange Server sync properly, it is necessarily to understand the concept of root user.

The Root user is the user on each side of the synchronization part which is granted access to all the other synchronized users which are to participate in the synchronization. Thus each user wishing to participate in the synchronization process needs to grant this root user Owner permissions.

Any exchange user can become a root user if other users grant them the 'Owner' permission level of their folders. This principle with a single root user is implemented in order to simplify the process and to avoid password exposure of the participating users.

The concept of the root user is describe at the following picture Figure 19 Root user concept diagram.

This way of configuration is more suitable for users synchronizing more than one pair because it will save time when it comes to configuring the service in addition to that fact that there is no need to store the password of each individual exchange user participating in the synchronization process.

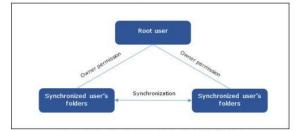


Figure 19 Root user concept diagram



6.2.1.a How to grand owner permission to the Root user

There are two possibilities how to grant the appropriate permission to the root user – via Microsoft Outlook or PowerShell script directly on Exchange Server. We will describe the procedure "how to grant owner permission to calendar folder for root user via MS Outlook" as an example:

1. From Outlook, go to your Calendar tab, right click your calendar and click Properties as shown below

	Open in New Window	ų
	New Caloridar	
	Hide This Calendar	
	Courtey	
	🙅 Color	
	III] Bonome Calendar	
	🐀 🖉opy Calendar	
	Meine Coleman	
	🙀 Orbeite Colonitar	
	😚 Recover Deleted Item	s
40	A Movelip	
	♥ Meve Dgwn	
	Share	

Figure 20 Outlook folder properties

From the calendar properties dialog shown below, click the Permissions tab, click "Add" button to display the "Add Users" screen. Select your root user from the list of users and change the permission level to "Owner" form the Permission Level options list.

Name		Permissio	on Lev	el
Default Fest User02		None Owner		
Add	Por	nove	Dror	perties
Permissions	Ker	nove	Fiot	Jerues
	Owner			~
<u>R</u> ead O None Full Details	5	<u>/</u> rite <u>C</u> reate if Create s Edit owr Edit all	<u>u</u> bfolo	ders
Delete įtems None Own All	5	it <u>h</u> er <u>F</u> older a F <u>o</u> lder c Folder v	ontact	:

Figure 21 Properties of folders

NOTE: Please, contact your system administrator for assistance in case the Permissions tab in the Properties window isn't available. Repeat the steps discussed in this section for every folder which will be synchronized by the root user.

Private items synchronization

If you want private items to be fully synchronized you need to set up the permission so that the Delegate can see your private items. To do that, click "File" from Outlook's main menu to display the "Account information" screen shown below, click "Account Settings" and choose "Delegate Access".



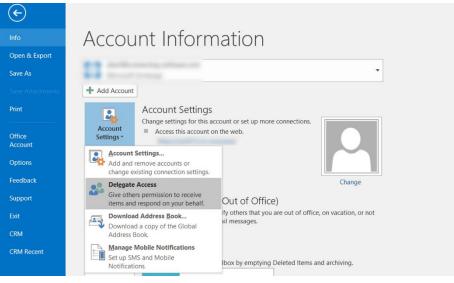


Figure 22 Account Outlook information

As shown below, from the "Delegates" screen, click "Add" to select a user, select the required user and click "ok"

	Delegate		Delegates on your behalf, including o	×		
9	respondin without g right-click	ng to meeting re iving send-on-be	quests. If you want to gran ehalf-of permissions, close Change Sharing Permissio	t folder permissions this dialog box,		
				dd Users		
		Search: Name	only OMore columns Addr Go	ess Book		Advanced Find
	Deliver request My oresp	Name	Title	Business Phone	Location	Department
		5		2		,
		< Add ->			0	

Figure 23 Delegate access dialog

From the "Delegate Permissions" dialog, choose the desired permissions and enable the option "Delegate can see my private items" as shown in figure 14 below.



Delegate Permissions: Test User02							
This delegate has the following permissions							
	Calendar	Custom	~				
	Delegate receives copies of meeting-related messages sent to me						
Ż	Tasks	Custom	~				
	Inbox	Custom	~				
2=	Contacts	Custom	~				
	Notes	None	~				
Auto	Automatically send a message to delegate summarizing these permissions						
✓ Dele	Delegate can see my private items						
	OK Cancel						

Figure 24 Delegate access user properties

2. The same operation could be done via PowerShell on your Exchange server.

After we created the root user(s) we are able to continue in configuration process of Exchange server. For the correct configuration of Exchange server you will need following information:

- Server alias it is an alias for your Exchange server configuration for easier identification of the configuration
- Server URL Exchange Web Services (EWS) URL of you Exchange server. Possible values are:
 - o <u>https://yourexserver.domain.com/ews/Exchange.asmx</u>
 - o Office365
- Server version the version of the Exchange server you are about to configure
- Root user name the user name of the root user
- Root e-mail address the primary e-mail address of the root user
- Root user password the password of the root user

After you fill in the needed information you need to test your connection before you could save the configuration. As shown below, we got "401 Unauthorized" error message as we miss typed the root user name and we are not able to save the configuration until the connection is successful – see the Figure 25 Create Exchange Server filled form.



Server alias	Office365
Server URL	https://outlook.office365.com/ews/Exchange.asmx
Server version	Office365 V
Root user name	Children of the Children of Control of Contr
Root user email	Children of Capital Annual Control of Capital
Change password	2
Root user password	•••••
	Test connection
	Success!

Figure 25 Create Exchange Server filled form

After the Exchange server is successfully configured we can move on pair configuration.

6.3 Synchronization pair configuration

Pair configuration is the very last step to the final configuration of CB Exchange Server Sync. The synchronization pair is pair of two Exchange users which will synchronize together.

To configure pairs navigate Configuration -> Sync pairs. The following screen will be shown.

Connecting Construction Exchange Server Sync	Manage users Configuration 👻 Logging 👻	Hello user@company.com [Company] Log off
Sync pairs Create New		
First User	Second User	Status
		Stopped <u>Edit Delete Start</u>
© 2016 - Corputiting Software	3	4 5 6

Figure 26 Sync pairs main screen

The screen for you will be without any pair, however once you have at least one pair you can edit(4), delete(5) or start(6) synchronization for specific pair.



First user configuration	
First server	Office365
First user filter	Type at least three letters
First user	- 3
Second user configuration	
Second server	Office365
Second user filter	Type at least three letters
Second user	•
Items to synchronize	🖀 Calendar 🔳 Contacts 🔳 Deleted Items 🔳 Drafts 🔳 Inbox 📄 Sent Items 📄 Tasks
Polling interval (s)	60 5 4
Start day of sync	©6
Synchronization type	First-to-Second Y
Include subfolders	- 8 7
	Save

To create new pair click Create New(1). The following screen will be shown.

Figure 27 Create new pair screen

The first section contains the first user of the synchronization pair – the primary account – while the second section contains the second user – the replica account.

Primary and Replica concept

The first section contains the first user of the synchronization pair – the primary account – while the second section contains the second user – the replica account.

Action on Primary account	Action on replica account	Effect on Primary account	Effect on replica account
Deleting an item	Deleting the same item	Item will be deleted	Item will be deleted
Updating an item	Updating the same item	Item will be updated	Item will be updated by Primary account

			updates and replica account updates will be lost
Updating an item	Deleting the same item	Item will be deleted	Item will be deleted
Deleting an item	Updating the same item	Item will be deleted	Item will be deleted

For example, if an item is deleted from the primary account but updated at the replica account, then the item will be deleted from the replica account as shown in case 4 in the above table. In other words, actions done at the primary account are overriding actions done at the replica account, except when an item is deleted form the Replica account as shown in case 3 in the above table.

Now we can move to the setting of the pairs. Let's describe all possibilities:

- First server (1) this is the alias we gave to the Exchange Server root user configuration that we configured previously
- *First user filter (2)* Using the filter you can easily search for the exchange user participating in the synchronization pair. You need to type at least 3 letters from the email address of the user and the list will display all email addresses matching your search text as shown below.

First user filter	Cn5		-
Firstower	CNSAzure09@cnsco	nnectanmicrosoft.com	,
n in the second s	-01@*	Lonmicrosoft.com	
	028	1.onmicrosoft.com	
	-030-	Lonmicrosoft.com	
_	:043:	ormicrosoft.com	
	-05@c	onnicrosoft.com	
r configuration	06.91	armicrosoft.com	
	,07@c	onmicrosoft.com	
	:089:	onmicrosoft.com	
stuser Using	0%6	onnicrosoft.com	
	>10gk	onmicrosoft.com	
	911@*:	anmicrosoft.com	
Second server	+12.0	anmicrosoft.com	
Petron Perver	-13@	annicrosoft.com	
	1400	onmicrosoft.com	
cord user filter	15@	onmicrosoft.com	
Contraction (Contraction)	160	onmicrosoft.com	- 5
	=17@<	anmicrosoft.com	
Second user	·18@	onmicrosoft.com	
Contraction of the second	e19@	onmicrosoft.com	
	÷20@<	onmicrosoft.com	

Figure 28 User filtering

- First user (3) choose the first user from the list of users displayed in the First User List.
- Follow the same steps for set up second user
- *Items to sync (4)* Check the items that you want to synchronize. At least one item need to be checked to able to save the pair configuration.
 - Note: Make sure that the root user has owner permission
- Polling interval (5) The synchronization service needs to check the Exchange server for new changes since the last synchronization. This number indicates how often to check for updates
 - $\circ~$ Note: Smaller interval is better for faster and better synchronization but it increases the traffic.
- Start date of sync (6) All items created or modified on that date and later will be synchronized. Any item created or modified before that date will not be synchronized.
 - Synchronization type (7) type of the synchronization for this specific pair
 - *First-To-Second*: Changes made at the first user will be replicated to the second user but not the opposite.



- Second-To-First. Changes made at the second user will be replicated to the first user but not the opposite.
- Bidirectional: Changes made at any user will be synchronized with the other user.
- Include subfolders (8) Check this option to include subfolders in the synchronization process (applies only to mail folders like inbox, draft, sent and deleted items)

Now, click "save" to save the pair configuration. You will be redirected to the Pair Configuration page (see Figure 26 Sync pairs main screen). After this you are able to start synchronization for created pair.

7 Troubleshooting

This section describes possible problems you might face off while using the CB Exchange Server Sync.

7.1 User logs

The user logs from the CB Exchange Sync and related component could be found in the CB Exchange Sync Portal. Please, navigate *Logging* at the very top menu – see Figure 29 Logging navigation.

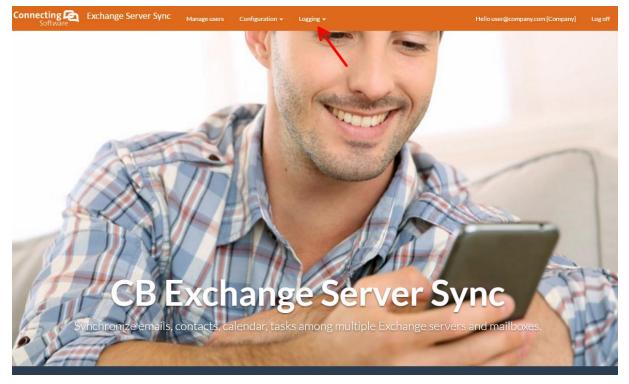


Figure 29 Logging navigation

There are two types of loggings – *Portal* (1) and *Engine* (2). The portal logs are showing information related to portal management such as creating tenant, synchronization profile etc. On the other hand Engine logs are showing only related stuff to CB Exchange Server Sync service such an errors/warnings/info about the synchronization process.



Figure 30 Types of loggings



7.2 Deep logs

The full logs of the CB Exchange Server Sync service could be found at C:\[installation folder]\Connecting Software\CB Exchange Server Sync\Engine\log (by default it is C:\Program Files\Connecting Software\CB Exchange Server Sync\Engine\log). The logs contain most of the action that the service is doing.

Another service involved in the process is Connect Bridge server. This service has own logs as well, the path to log file is following C:\Program Files\Connecting Software\CB Exchange Server Sync\Connect Bridge\MgServerService\logOutputfile.txt

In case of contacting support please provide above mentioned logs – it will help first level support.

7.3 Most common issues

This section will describe most common issues that you can face off.

7.3.1 Folder calendar synchronization failed because no results were found. The time stamp will be reverted

The synchronization process is trying to resolve the root user mailbox and if it fails, then the above mentioned error occurs. The error could occur due to various reasons, but in most of the cases it happened when the e-mail address is not correct or the e-mail address used by the root user is not a primary e-mail address.

7.3.2 Some Items Are Not Being Synchronized

This could happen because of two reasons:

- Due to the "Start Day of Sync" field, as explained earlier, items created before that date will be skipped by the synchronization process even when those items are modified later on, after starting the synchronization.
- Due to items' privacy. By default, we don't synchronize private items, however as explained earlier in section [Private items synchronization] of this document you could enable this feature via "Delegate Access" option. However, only new private items which are created after enabling this feature will be synchronized.

7.3.3 Cannot find Office365 EWS URL

As explained earlier, the EWS URL of Office365 is https://outlook.office365.com/ews/Exchange.asmx or simply "Office365" as the service is capable of auto discovering the EWS URL.

7.3.4 How to find correct Exchange Server version

The correct settings of the Exchange Server version is very important for synchronization process. You have several possibilities how to discover your Exchange Server version.

- 1. You can contact your IT administrator. He/She should have this kind of information
- 2. Using Microsoft Outlook
 - a. Press and hold CTRL while you right click the Outlook icon in the notification area – right of the task bar



Figure 31 Task bar

b. Click Connection status



c.

Activity									
Avg Resp	Avg Proc	Sess Type	Interface	Conn	Notif	RPC	Version	Networ	Ī
13		Foreground	vEthernet	HTTPS		Async		Unrestr	
16		Background	vEthernet	HTTPS		Async		Unrestr	
		Cache	vEthernet	HTTPS		Async	15.0.1156.4000	Unrestr	
5	73 14	Cache Foreground	vEthernet vEthernet		Async Async	Async Async	15.0.1156.4000 15.0.1156.4000	Unrestr Unrestr	
<									>

Figure 32 Connection status dialog

d. Compare the version with the EXCHANGE SERVER	bellow table VERSION
2007	8.0.685.24 or 8.0.685.25
2007 SP1	8.1.240.006
2007 SP2	8.2.176.002
2007 SP3	8.3.83.006
2010	14.0.639.21
2010 SP1	14.1.218.15
2010 SP2	14.2.247.5
2013	15.0.516.032