



# Net2AzureSyncServer

Manual Version 1.11 (18 April 2024)

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# INTOACCESS THE INTEGRATORS

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# Installation and Configuration of the Net2AzureSyncServer

#### Installation

The Net2AzureSyncServer application is installed using a single Windows Installer file (\*.msi). The complete installation consists of a Windows Service and a 'manager' application which is mainly intended for the configuration of the actual service. It can also be used to start and stop the service.

#### Main principle

This application is designed from the basic idea that the management of all employees should be done solely within Azure. At the first run of the SyncServer, all relevant information will be copied to the Net2 database. Any modifications performed in Azure afterwards will result in an update action on the Net2 database.

#### Synchronization rules

The Net2AzureSyncServer application uses the following synchronization approach:

The application searches in Azure for all 'Groups' whose name match the name of an access level in Net2. (See Figure 1). Only those users who are member of one of those 'Groups' will be synchronized to Net2. They will be assigned the access level with the same name as their group<sup>(\*1)</sup>.

(1\*) This restriction does not apply for the 'Ultimate' version. More details you can be found under the heading 'Licence'. .





Furthermore, the following rules apply to the synchronization process:

- Azure users who are not member of at least one of the matching groups are exempt from the synchronization process.
- Any already existing user in Net2 will be ignored. The Manager application will give a warning about this when an evaluation is started because these users will end up twice in Net2 if they are present in Azure as well. This can be a serious problem if these users have an assigned card/badge also. Attempts to create a badge/card for these users will fail because card numbers can only be uniquely assigned to one single user.
- Additional user properties can be copied from Azure to Net2. See the: "Card and user properties" page.





# Configuration

The configuration of the Net2AzureSyncServer application has to be done using the supplied 'Manager application' (Net2AzureSyncService Manager). At the start of this application, it will give a short notification and place itself in the system tray at the lower right corner of the taskbar. (See Figure2)



A right mouse click on the icon opens the main menu. (See Figure 3)

It may be that the application will display a menu in Dutch initially. This can be adjusted by selecting 'English' in the menu option 'Taalinstellingen' (Language settings).

The menu options for Starting- and Stopping- the service are grayed out until the configuration process is successfully completed. Please select the menu option: 'Configure first!' in order to open the first configuration window.



Figure 3





### The Net2 connection page

The application will start with the page on which the Net2 connection parameters can be entered. (See Figure 4)

📀 Configuration form				- C	ı x
File About					
THE INTEGRATORS			Net2Azure	eSyncS	erver
Paxton Ne	et2 connect	tion			
Net2 connection pa Net2 Host:	192.168.1.55	1	Connect	<b>@</b>	
Operator name:	System engineer	2 ~			
Password:	****	3	Sign up		
				4	
		Save	settinas	a	ose
					.:

Figure 4

#### Input fields

- First, the (IP) address of the Paxton Server is requested at (1). This can either be an IP address or a network name. 'localhost' will do if the application is installed on he same machine as the Paxton server application. Please, don't supply a 'real' IP address in this case. The application needs to do some version checking based on the machine on which it is installed, the value 'localhost' has a special meaning in order to determine whether this is needed or not.
- Click 'Connect' next, the application will now try to establish a connection to the Net2 server. If this action is successful the options to select the operator name and supplying the corresponding password is enabled (2). Please select a user with 'administrator' rights, preferably the default 'System Administrator'.
- After a click on the 'Sign up' button (3) the application will attempt to sign up to the Net2 server. If this succeeds, a confirmation message will be given and the 'Next Page button' (4) will become enabled. If it doesn't succeed an error message will be given with information about the (possible) cause.



### The Azure Connections page

On this page, the authorization parameters for one, or more, tenants can be entered. (See Figure 5)

onfiguration form		_		×
File About				
THE INTEGRATORS	Net2Azi	ureSy	ncSer	ver
Azure tena	ant(s) information			
Define a tenant conr	nection			
Domain name:	826qf2.onmicrosoft.com	1		
Azure client ID:	eebcc7d3-bb90-418d-9306-58dd2b9d7d5f	2		
Azure client secret:	*****	3	<b>X</b>	
	4	Add		
Configured connection	ons			
	5			
<b>C</b>	5			0
	5 Save settings		Close	0

Figure 5

#### Input fields

- First you will be asked for the 'Domain name' (1) of your tenant.
- In the second field (2) you're asked for the 'Application client ID'. (See also Figure 6, showing where to find it in Azure)
- In the last (3) field you're asked for the 'Client secret'. (See also Figure 7, showing where to find it in Azure)
- Once this information is supplied this tenant information can be added to the tenant overview. (5) by pressing button (4)

The application will then try to make a connection with the supplied parameters. It will give a error message if this fails or some other problem occurs.

• If needed, connection information for more than one tenant can be added. The application will dynamically build separate configuration pages for each tenant supplied.

The 'Next Page button' will be enabled once the application is able to successfully sign up to Azure, using the supplied connection parameters.

#### Azure Active Directory admin center >> Dashboard > 826qf2 <u>∼</u>h 826qf2 | App registrations 🖈 … X Azure Active Directory + New registration 🌐 Endpoints 🧷 Troubleshooting 🖒 Refresh 🞍 Download … \* Overview Preview features 8 Starting June 30th, 2020 we will no longer add any new features to Azure Active Directory Authentication Library (ADAL) and Azure AD Graph. We will continue to provide technical support and security updates but we will no longer provide feature updates. Applications will need to be upgraded X Diagnose and solve problems to Microsoft Authentication Library (MSAL) and Microsoft Graph. Learn more Manage Users **Owned applications** Deleted applications All applications 🚨 Groups Application (client) ID starts with $\times$ + Add filters Start typing a display name to . External Identities Roles and administrators 1 applications found 3 Administrative units Display name 1 Application (client) ID Created on ↑↓ Certificates & secrets Enterprise applications **I2A** Paxton eebcc7d3-bb90-418d-9306-07/02/2022 Current App registrations Identity Governance Application proxy Custom security attributes (Preview) Licenses Figure 6

I2A\_Paxton | Certificates & secrets 🛷 … Search (Ctrl+/) Sot feedback? Overview Quickstart  $\bigcirc$  Got a second to give us some feedback?  $\rightarrow$ 💉 Integration assistant Credentials enable confidential applications to identify themselves to the authentication service when receiving tokens at a web addressable locat scheme). For a higher level of assurance, we recommend using a certificate (instead of a client secret) as a credential Manage Branding & properties 3 Application registration certificates, secrets and federated credentials can be found in the tabs below. Certificates & secrets Token configuration Client secrets (2) Federated credentials (0) Certificates (0) API permissions A secret string that the application uses to prove its identity when requesting a token. Also can be referred to as application password. Expose an API + New client secret 1 App roles Description Expires Secret ID Value ① 🔉 Owners 21/08/2022 1B67Q~iFddD-QfqPD\_fXtu38DQWnQ4IN... 1a4ec8ad-3724-4bf0-8 Test secret and administrators | Preview 2rn\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* 07/02/2024 De I2A Paxton secret description 719098f5-6652-4697-9 0 Manifest Support + Troubleshooting Figure 7

#### API permissions in Azure

Please note that the application needs the following Azure permissions:

API / Permissions name	Туре	Description	Admin consent requ	Status
∽ Microsoft Graph (4)				
Application.Read.All	Application	Read all applications	Yes	Granted for
Group.Read.All	Application	Read all groups	Yes	Sranted for
User.Read	Delegated	Sign in and read user profile	No	📀 Granted for
User.Read.All	Application	Read all users' full profiles	Yes	📀 Granted for

Make sure that also the Type values are correct and all lines have the green check mark.





### Card and user properties

Once the setup of all tenants is ready, a new configuration page will become available for each tenant. (See Figure 8).

🐼 Conf	figuration form				-		×
File	About						
TH TH	Toaccess He integrators			Net2A	AzureSy	ncSe	erver
	Azure-Ne	t2 card ar	nd u	ser prop	pertie	S	
	Dor	nain: 826qf2.on	micro	soft.com			1
	- All Azure attribute	- Net2 access means	relation	s			
	Card attribute:	ext5ljvrcxv_custon	n.attribu	te1	Ľ	Î	2
	LP attribute:	[Not used]			Ľ	<u></u>	3
	PIN attribute:	[Not used]				Î	4
	Department name	origin					
	Origin:	Use assigned Net2 a	access le	evel as departme	nt name	ľ	5
	- All Azure attribute	- Net2 field relations					
	userPrincipalNam	e		Surname	C i	ĵ	6
0	ext88mj6u49_gov	ernorExtension.gover	nortkid	Address 1	ľ	1	•
				Save settings		Close	e
							.::
		Figu	re 8				

• A short overview of the users found by the application will be shown after pressing button (1). (See Figure 9) This small assessment will reveal potential problems early on.

Configuration form		_		×
ile About				
	Net2Azı	ureSyr	ncSer	vei
🐼 Access Level - Azure Groups	-		$\times$	
Corresponding Azure group - Access levels found				
Group/Access level name	Number	of mem	bers	
All Company 1		1	2	
Paxton access basic		3		
Paxton toegang algemeen		7		
Retail		18		
Sales and Marketing		17		
Number of users who are member of multiple groups	: 3	18	i 4	
Show all groups found 5		Clo	se	
			*	E
	Save settings		Close	

Figure 9



On the left side of this panel the name of the Azure group/Net2 access level combination is shown (1). The number of users found in that group is presented on the right side (2)

The users who are member of more than one group/access level combination are shown at (3). This number can only be more than '0' if opted for an Ultimate licence. Press the [i] button to see which users are involved. (see Figure 10)

🐼 Cor	nfiguration form			_		$\times$
File	About					
	🚱 Users Member Of Multiple Groups		-		$\times$	
	User:	Gro	oup:			ver
	DiegoS@826qf2.onmicrosoft.com	Pax Ret Sali	ton toegang algemeen ail es and Marketing		^	
	HenriettaM@826qf2.onmicrosoft.com	Pax Ret	aton toegang algemeen ail		÷.	
	IsaiahL@826qf2.onmicrosoft.com	Pax Ret	es and Marketing ton toegang algemeen ail			
	JohannaL@826qf2.onmicrosoft.com	Sal Pax Ret	es and Marketing tton toegang algemeen ail			
		Sal	es and Marketing			
	Jeroentje@826qf2.onmicrosoft.com	Pax Ret	ton toegang algemeen ail			
0	DattiE@876af7 anmicrosoft com	Pot	-sil F		¥	
				Clo	ose	
			Save settings		Close	
						.::

Figure 10

An overview of all Azure groups found, will be displayed by pressing button (5). Please note that this list can be rather long. (See Figure 11)

C	Configuration form					$\times$
File	About					
I		Net2A	zure	Syn	cSer	ver
	Overview of all groups found.		_		;	×
	Sales and Marketing, Paxton access basic, Digital Initiativ Company, Paxton toegang algemeen, Sample Team Site, I Team, Retail	ve Public I U.S. Sales,	Relatio , Mark	ons, A 8 Pro	ll oject	
				OK		
	Show all groups found			OK Clos	se v	

Figure 11

#### Card / licence plate and PIN settings

At (2) the card information can be added. (See Figure 8)
 After pressing the 'edit' button a new window will be opened. (See Figure 12)
 (Leave all entries at '[not used]' if Azure doesn't hold any means of identification.)

📀 Azure card attribute selection form	– 🗆 X
INTOACCESS THE INTEGRATORS	
Select the source of the card number	
Net2 access means         Card settings       1         Azure holds Mifare cards:       Image: Swap bytes:         Cards are in hexadecimal format:       Image: Swap bytes:         Net2 card type:       Proximity ISO card       2         Selected card attribute:       TagID       9	Azure attributes       Extension attr. by application       Source application:       HelloID-Connector       Application extension properties:       8       TagID       4       User attribute:       [Not used]       5
- Selected licence plate attribute: [Not used] - Selected PIN attribute: [Not used]	Schema extension: [Not used] 6  V Set Extension property: 7
	OK Cancel

Figure 12

At the top left of this window (1) the card type (2) the application may expect to encounter in Azure can be configured.

Shown on the right are three possible sources that could contain the actual card information. The 'Extension attr. by application' will only be enabled when one or more 'applications' that expose their attributes are detected in Azure. In the example above is an 'HelloID-Connector' app detected (3).

Other options are 'User attribute' (5) and 'Schema extension' (6). Possible 'extension properties' belonging to the selected Schema extension will be presented at (7).

Press the appropriate 'set' (8) button to make the final selection. The choice made will be presented in one of the lower left boxes. (9)

The origin of an optional licence plate and/or PIN code can be defined in a similar fashion.

#### Department source

• At (5) the way the users department name is determined can be set. (See Figure 8)

After pressing the edit button the a new window is presented in which the method for determining the department can be set. (See Figure 13)

Azure department source selection form     INTOACCESS     THE INTEGRATORS	– 🗆 X
THE INTEGRATORS         Select the source of the department name         Net2         Department origin         O Department name is equal to the assigned 1 access level         O Use the selected department name         @ Use the selected Azure attribute         Selected department name         Not used         6         Selected department attribute:         Not used         7	Azure attributes         Extension attr. by application         Source application:         [Not used]         Application attribute(s):         [Not used]         User attribute:         5         department       4         Schema extension:         Not used       > Set         Extension property:
	OK Cancel

Figure 13

The application offers three different options to determine the department name.

1. A depart name can be used which has the same name as the users access level (1). This department name will be created by the application if it doesn't already exists.

This method isn't advised when deploying an Ultimate licence as users may be member of multiple Azure groups in this case.

- 2. The users can be placed in a fixed department (2). This is presumably an appropriate option when multiple tenants are to be synchronized to Net2. The desired department must be created in advance in this case though. A selection can be made from the list of existing departments shown at (6)
- 3. The department name may be retrieved from an Azure attribute (3). Select the attribute holding the department name from one of the possible provided sources at the right side. In the example above the 'department' attribute is selected. Press the 'set' button to confirm this choice. The selected attribute will then be placed in the panel at the lower left (7).

#### Assignment of user attributes

• At (6) a selection can be made of Azure user attributes that must be synchronized to Net2. (See Figure 14)

Azure attribute selection form	- 🗆 X
THE INTEGRATORS	
Link an Azure attribute to a Net2 user fi	eld
Net2 User field: First name 1 ✓	Azure Extension attr. by application Source application: [Not used] ~ Application extension properties: [Not used] ~ User attribute: givenName 2 ~ Schema extension: [Not used] ~ Extension property:
	Close 3 Add
Figu	re 14

The Paxton user field can be selected on the left hand panel (1),

The connected source attribute can be selected from any of the three sources at the right hand panel. Both the Net2 field, as well as the Azure attribute, will be added to the overview (see Figure 8) when the 'Add' button (3) is pressed.

Press the 'Close' button when done.



# Sync Timing Settings Page

This page offers the possibility to let the application perform the synchronization either at a fixed interval or at fixed times. (See Figure 15 and Figure 16)

#### Synchronization using a fixed interval

When using a fixed interval (1), two fields can be configured. The actual interval time can be set at (3). The minimum interval time is 10 seconds. However, such a small interval time is only necessary in very exceptional cases. An interval time of around 300 seconds (5 minutes), or even more, will be sufficient in most cases.

The synchronization will only take place during the selected timezone. This means that the interval will not trigger a synchronization cycle when the current time is not within the time of the selected timezone. The default timezone is the timezone that is active 'All day and every day'. If a timezone doesn't have any time slots, it will not appear in the selection list (4).

📀 Configuration form	_	- 🗆	×
File About			
THE INTEGRATORS	Net2Azure3	SyncSe	erver
Sync timing			
Synchronize with a fixed interval	$\bigcirc$ Synchronize at fixed time	₅ 2	
Fixed interval synchronisation Synchonization interval in seconds: 3	60		
Only synchronize during the selected timez	one		
Select a timezone: All day, every da	ay <b>4</b> `	1	
			Đ
	Save settings	Close	е
			:

Figure 15





#### Synchronization at fixed times

When using fixed times (1), the option to add one or more time of day is enabled (2). After clicking this button a new 'Enter a new time' window (3) will be opened. You can enter multiple times with this window open by pressing the 'Add time' button. Times already entered can be removed by pressing the corresponding 'Remove' button (4).

📀 Configuration form		_		$\times$
File About				
THE INTEGRATORS	١	Net2AzureS	yncSer\	/er
Sync timing				
O Synchronize with a fixed interval	Synchroni	ize at fixed times	1	
Fixed interval synchronization Synchonization interva	×			
Fixed times synchronis Hour Minute	Add time	Damaua	^	
Add an extra time	Auu unie	Kelliove		
3	OK	Remove		
	06:30	Remove		
	07:30	Remove 4	F III	
	08:30	Remove		
0			~	0
	Save s	ettings	Close	

Figure 16





## Special Settings Page

This page offers the possibility to change the default behavior of the application (See Figure 17).

S Configuration form		- (	⊐ ×		
File About					
THE INTEGRATORS	et2Azur	eSync	Server		
Special settings					
- Handling of Azure users with a 'disabled' account					
Remove from Net2:	1a	۲			
Bar this user and move him/her to a separate department:	1b	0			
Ignore this state:	1c	0			
Handling of users who are no longer present in Azure:					
Remove from Net2:	2a	۲			
Bar this user and move him/her to a separate department:	2b	0			
Access level handling					
Exclude the user's Access Level from the sync process:	3				
Temporary Access Levels handling					
Allow the employment of 'Temporary Access Levels':	4				
Default values for unmapped boolean fields	Default values for unmapped boolean fields				
Alarm user: 5a True	e O Fa	alse 🖲			
Anti-passback user: 5b True	e O Fa	alse 🖲			
Save setti	Save settings				
			.::		

Figure 17

#### Input fields

- At (1[x]) can be stated how the application should deal with users whose account are disabled in the Azure.
  - By default (1a) these users will be removed from the Net2 database.
  - The second option (1b) will bar (block) the user and move him/her to a separate department. When this option is selected the application will ask for the target department. (See Figure 18)

0				
۲				
0				
Select the department for the barred users				
~				



- The third option (1c) will cause the application to completely ignore this state. In this case disabled users will retain their access rights in Net2.
- At (2[x]) can be specified how the application should deal with users who are 'no longer present' in Azure.
  - By default (2a) these users will be removed from the Paxton database.
  - The second option (2b) will bar (block) the user and move him/her to a separate department. When this option is selected you'll be asked to select the target department. This works the same as with 'disabled' users.
- At (3) the option is given to exempt access levels from the synchronization process. In this case a user will be given an access level only initially. The access level may then later be changed manually if needed.
- At (4) it is possible to have the application respect manually assigned 'temporary access levels'. Normally the original access level is restored on the next synchronization cycle. However, the application will ignore temporary access levels if this option is set.
- At (5) the default values can be set regarding the 'Alarm-' and 'Anti-passback user'. It is not (yet) possible to copy these values directly from Azure.





### The Mail settings page

This page, see Figure 19, offers the possibility to configure the application such that possible problems can be reported by mail. It is strongly advised to activate this option because the application is running as a 'Windows service' and hence not capable of showing error messages on screen. If this mail option is activated, the application will create a daily usage report as well containing all the modifications performed the last 24 hours.

🐼 Confi	guration form					-		×
File A	bout							
	COACCESS E INTEGRATORS				Net2Az	ureSyr	ncSe	erver
	Mail							
					ι	Jse mail:	$\checkmark$	
	<ul> <li>Choose a mail serverse</li> <li>Standard SMTF</li> </ul>	er P <b>1</b>	0.0	GMail	⊖ Hotmail	🔿 Yah	00	
	SMTP mail settings SMTP port:	5	25 〇	2		587	۲	3
	Mail from:	AdSyncSer	vice@domain.o	com	4			
	SMTP host:	mail.intoa	ccess.com		5			
	User name:	admin			6			
	Password:	•••••			7			
	Mail Destination Mail to: 8	name1@d	omain.com; na	me2@d	lomain.com			
			$\cup$					
Send test email								
					Save settings		Clos	e
								.::

Figure 19

The application can utilize a SMTP server (1), or a Web mail account for sending mail. In case of a Web mail provider, it is recommended to create a separate account with minimal safety rules applied, otherwise the web mail provider won't accept messages sent by the application. Some notes:

- There is no real difference in the settings between using web mail and a SMTP server using the STARTTLS protocol over port 587.
- Mail providers using the the SSL/TLS (SMTPS) protocol are not supported.

#### Input fields:

- Select the desired port number, and hence the applied security, at (2) or (3);
- Enter the senders address at (4);
- Enter the address of the mail provider at (5);
- The fields for entering the user name (6) and password (7) are only relevant if a secure connection over port 587 is selected;
- Enter the recipient address(es) at (8). Multiple addresses can be entered here separated by a semicolon.



### The Licence page

This page, see Figure 20, offers the possibility to select, enter, and validate a licence.

A licence can be obtained directly from IntoAcces.

Please send an email to <u>info@intoaccess.com</u> for more information about the procurement process.

Configuration form	-	- 0	×
File About			
INTOACCESS Net	2Azure	SyncSe	erver
Application licence			
1.4.0.0			
Current licence status Not licenced! Trial version is valid until: '2022	-03-15'.		
Licence type O Professional 1	<ul> <li>Ultimate</li> </ul>	•	
System Identifier T5DV-AC95-SLSO-C7RC-CU73-TB1G-58YZ	2	₽	
Licence key 3			
		~	
Save setting	s	Clos	e
			.::

Figure 20

#### Input fields

- The desired licence can be selected at (1);
  - A 'Professional' licence is suited for situations where the assignment of access rights can be handled by a single access level.
  - The Ultimate licence adds the ability to utilize multiple 'AD Security Group Net2 Access Level' combinations. See below for a more elaborated explanation.
- You'll be asked for the 'System Identifier' export file. Click on button (2) to create a readable text file if you want to order a licence for this application. Please note that a licence is **not restricted in time**, and **all future updates will be provided for free**. Check our website for information about the availability of new versions.
- Once you have received a licence code you can enter it at (3). Please do not forget to validate the supplied licence. It can be validated by pressing the Validate button (4).

# The Ultimate licence

#### The benefit of the Ultimate licence

As mentioned above the Ultimate version allows the use of multiple 'Azure Groups', to assign access rights in Net2.

An example of such a configuration is described below.

Consider the following situation:

The following access levels are defined in Net2:

- 'Basic Access', this access level contains the access rights that apply to all personnel. It might regulate the access rights at the Main entrance, the Central lobby, the Bicycle storage, and the doors of department 'A' and 'B', but only allow access during 'Working hours'.
- 'Department A', this access level allows access to the doors of department 'A' from 6:00 AM to 22:30 PM only.
- 'Department B', this access level allows 24x7 access to the doors of department 'B' only.

Azure contains Groups with the (exact) same name.

All Azure users may now be assigned to the Group: 'Basic Access'. By doing so they will gain all the access rights as defined by the Net2 Access level 'Basic Access'.

Anyone who needs additional access rights, for instance the rights as defined in the Net2 Access level 'Department A', can now be made member of that Group also. In this case the application will create a new Net2 Access level in which the access rights of both the access levels 'Basic Access' and 'Department A' are merged. This new access level will give access to the Central lobby, the Bicycle storage and Department 'B' as defined by the 'Basic Access' access level, and the additional rights as defined by the Access level 'Department A'. The application will use the least restrictive time zone definition in case of overlapping doors. It will create a new time zone if needed.

This behavior is an extension of the Paxton 'Advanced Permissions' concept. Paxton prohibits situation where the combination of desired Access levels would contain overlapping doors. This situation is solved by this application by creating a new Timezone for each of these overlapping doors if necessary.

The only limiting factor that applies to this solution is the total number of access levels (which may not exceed 255) and the total number of time zones (which may not exceed 64). These limits are imposed by Paxton.



### Access level type deployment

New is the option to deploy 'individual' authorizations instead of the normal 'global' access levels. (See Figure 22)



Figure 21

Please note that this option is exclusively available (and only useful) for users using the 'Ultimate' licence.

The use of 'global' authorizations is the most insightful. A possible disadvantage of this method is that the number of authorizations can reach the limit of 255 (global) authorizations. This issue can occur in situations with many access points where fine-grained access policies are important..

This limit can now be circumvented by using 'individual' authorizations. This authorization form has no limit on the number of authorizations that can be used.

Please note: in both cases there is an absolute limit on the number of different time zones (64) that can be created.

When using 'individual' authorizations you can choose to compare, per user, the determined authorization with the already assigned authorization. This method is the safest but also the most labor intensive. (2a)

Alternatively, one may choose to compare a "fingerprint" of the calculated authorization to the stored "fingerprint". This method is significantly faster but is only safe when it can be guaranteed that a user's authorization will never be changed manually.



### The Service Control page

This page, see Figure 22, offers the possibility to start and stop the background service.

🐼 Configuration form			- 🗆	×
File About				
THE INTEGRATORS		Net2Azure	eSyncSe	rver
Service cont	trol			
Service status	The Service is s	topped		
Use delayed start	Start the se	ervice		
		Save settings	Close	
				.::

Figure 22

The starting and stopping of the service may take a few seconds, so please be patient.

In rare cases the Service may refuse to start. If this happens to you please have a look at the end of the log-file to find out what might caused it. In case the reason is not obvious, please send all log files to <u>info@intoaccess.com</u> with a short description of what went wrong. The development team will investigate your problem with the highest priority.

By default, the background service will receive a dependency on the Net2 services, so it will start only after Net2 has started. This dependency can however sometimes get in the way when you you try to make a Net2 database backup, but the Net2 service refuses to shutdown because the sync application depends on it. The simplest solution for that is to manually stop the sync service first and then perform the backup.

If that is not an option for some reason, you can also opt to check the "Use delayed start" box. This will remove the service dependencies (only visible after restarting the OS by the way) and delay the startup of the sync service until all other (non delayed) services have been started.





# The log settings page

This page, see Figure 23, offers the possibility to review the last (max. 500) lines of the log file. The application will log it's activity with a high level of detail. Especially when the application encounters an unexpected problem this log file might contain invaluable information, even for you as an end user.

Please have a look at the last lines of this file if the application refuses to start or otherwise behaves
unexpectedly.

Configuration form	- D >	<
File About		
INTOACCESS THE INTEGRATORS	Highlight text × yncServe	er
Log Settings	Text to highlight INFO OK Case sensitive	
2019-09-13 16:34:42,525 [BL,1] INFO OS ve 2019-09-13 16:34:42,671 [LC,1] DEBUG Test 0000-0000' against system identifier: 'QEFB 2019-09-13 16:34:42,675 [LC,1] INFO Applie 2019-09-13 16:34:42,731 [LC,1] INFO Using licence type: Ultimate License. 2019-09-13 16:34:42,732 [BL,1] INFO Settin 2019-09-13 16:34:42,790 [Hotel,1] DEBUG A 8025, userId=0 and password hash: 'MhEdD 2019-09-13 16:34:43,476 [Hotel,1] DEBUG A 8025, userId=0 and password hash: 'MhEdD 2019-09-13 16:34:43,476 [Hotel,1] DEBUG A 2019-09-13 16:34:43,646 [Hotel,1] INFO Ap 2019-09-13 16:34:43,646 [Hotel,1] INFO Ap 2019-09-13 16:34:43,646 [Hotel,1] INFO Ap	ersion: Windows 8/2012 64-bit ting settings license key: '0000-0000-0000-0000- -FILI-ALFB-PQTJ-P77D-CT3G-5CZZ'. cation is not licensed. ; a fixed time trial license which is valid until: 2019-10-18, lig up Net2 controller Authenticating against Net2 with host: '192.168.1.55', port: BxjMwwVWAcbEwQENzs2ATYeNwoHVSwEADZCTQteTQ'. Net2 Authentication succeeded uplication is running against SDK version: '5.03.5214.4513'	
	Save settings Close	
		:

Figure 23

You can resize the window in order to get a better overview of the content.

This page also offers the possibility to filter the log file on certain terms (1) and/or to mark certain terms (2). An obvious 'filter term' could be the word 'ERROR' or 'WARN'. If the application works properly, both terms should not appear in the log file.

Option (4) offers the possibility to automatically reload the log file at a fixed interval.

The log file itself can be found in the folder: c:\IntoAccess\Logging\Net2AzureSyncServer\





Manual Net2AzureSyncServer

Version 1.11