



INTOACCESS
THE INTEGRATORS



Net2BookingServer

Manual 1.0

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Principle

The principle of the program is as follows:

For renting out spaces (even desk spaces), an external provider that offers a booking website (including payment handling) is being used.

The bookings as they end up in this system, are translated to Net2 entities (doors), to which the booking customers will be granted access during the times of their bookings.

A customer will need to identify him/herself, which is possible by either PIN or QR code, that will be created by the Net2BookingServer and send by email.

Customers that have no active bookings, will have no access and will (if this is configured) be removed from Net2 again after a certain time.

At this moment, the application supports booking systems that offer an **iCal** link, that allows access to the booking information. To be usable, the **iCal** data will have to comply with a few criteria.

Below you will find the providers against which the integration was successfully tested:

Aanbieder	Website
Skedda	https://www.skedda.com

The Net2BookingServer periodically checks if all booking users still have the required access and will change the access level at the moment it finds that this is not the case. When access is needed, this will be a **personal access level**. As soon as no further access is required, it will fall back onto a configurable (global) **fallback access level**.

Requirements:

1. For a quick response of the Net2 door controllers to a central change in access level, the use of Net2Plus (Ethernet) controllers is required. Paxlocks are (therefore) not supported in this concept.
2. The Net2BookingServer (typically) run on the central Net2 server, which needs to be in permanent connection with the Net2 controllers in order to relay any changes in access level. When this connection breaks, changes in access level will no longer propagate in time from server to controller. A reliable network connection is therefore a requirement.



Installation

The application can be installed using a single setup file: Net2BookingServer.msi

It is not mandatory to install the software on the Net2 server, but we advise you to do so in order to have the most robust configuration..

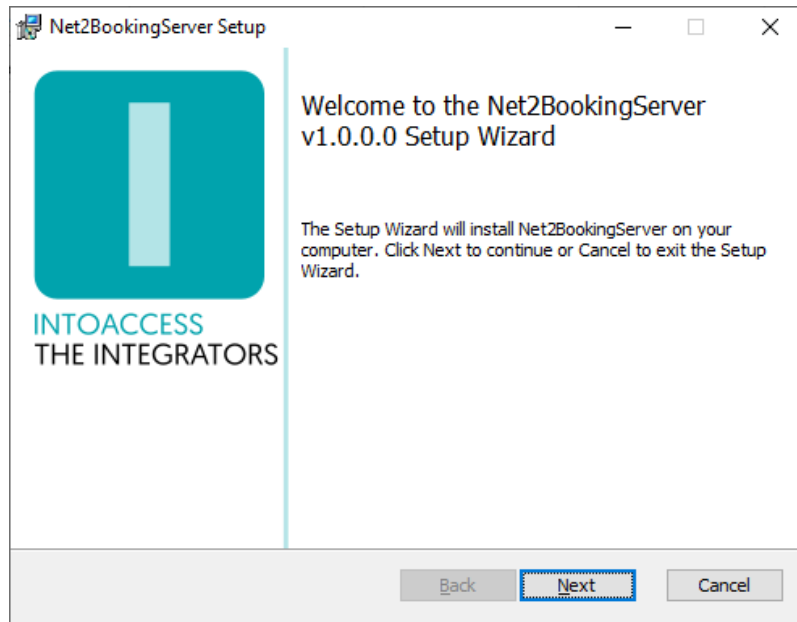


Image 1

The first dialog window will display what application version you will install. Note: the version number you see will most likely be different from the one displayed in Image 1.

Updates

Although a newer version should automatically replace any older version that may be present, you can choose to uninstall the existing version first. The configuration settings are not removed during this process, so after installing the new version, you do not have to configure everything all over again.



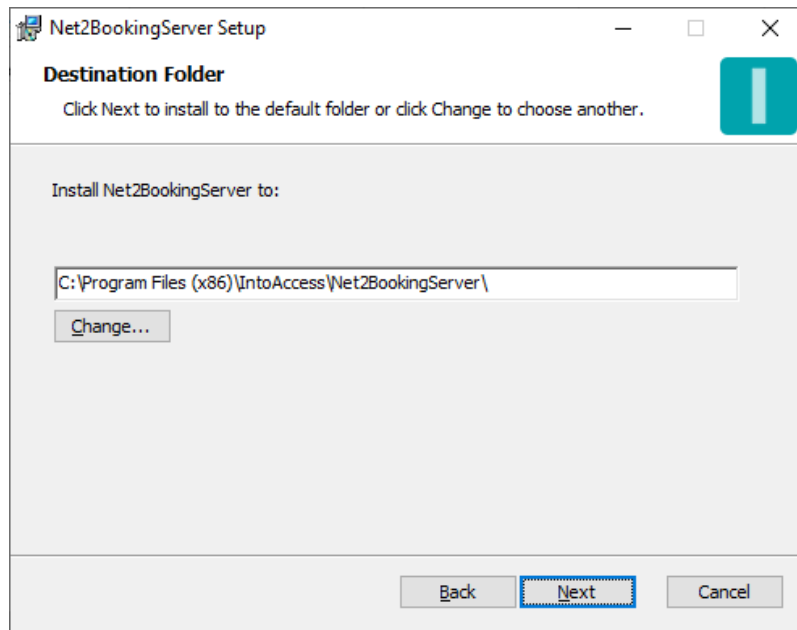


Image 2

The second dialog window shows where the application will be installed. The default value is typically fine.

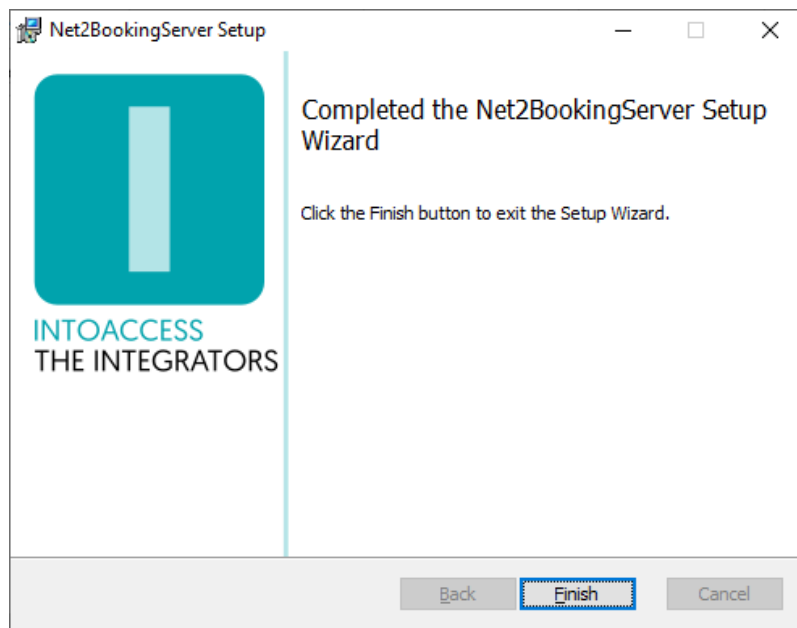


Image 3

The final dialog window will indicate whether the installation was successful.



Configuration

To help with the configuration, the *Net2BookingServer Manager* application is available and allows you to configure:

- How the application should connect to Net2;
- How the application should connect to the booking system;
- Which resources (rooms) are available and what ACUs (doors) are related to it;
- How the synchronization should behave;
- How booking customers should be notified.

When the manager application is started, a splash screen is displayed for a short period. After that, the application will minimize to a 'tray icon' in the bottom right corner of the screen.

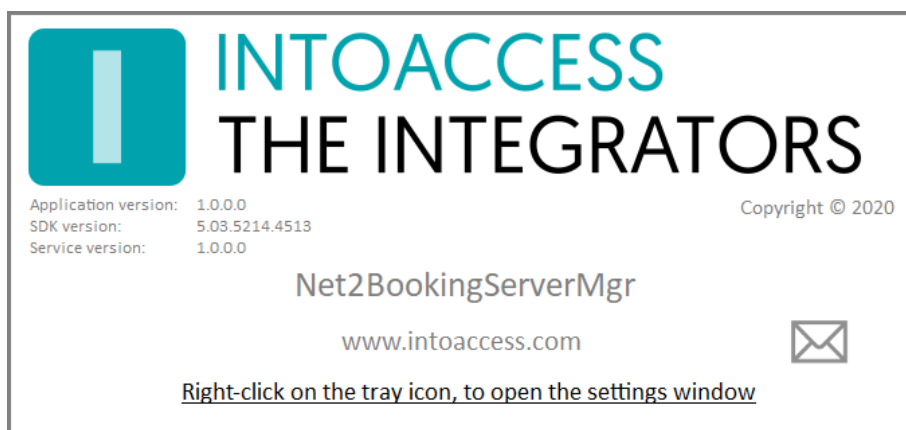


Image 4

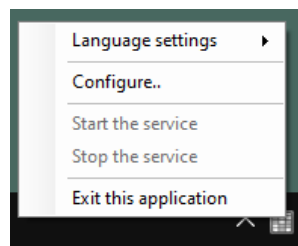


Image 5

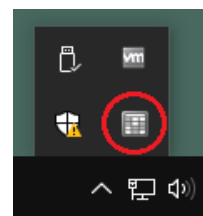


Image 6

By right clicking on the tray icon, the following pop-up menu will appear (providing it is not opened already):

- Language settings: Pick your language;
- Configure (first): Start application configuration;
- Start the service: Start the service (allowed after configuration);
- Stop the service: Stop the service (allowed after configuration);





- Exit this application: Exit the manager application.

The color of the tray icon is indicative of the service state. When the service is not running, its color is gray. The icon gets colored when the service is running.



Net2 connection

The first configuration page is for configuring the Net2 connection. When you start the configuration for the first time, this will require a few steps, but after the settings are saved, the next time it will connect automatically.

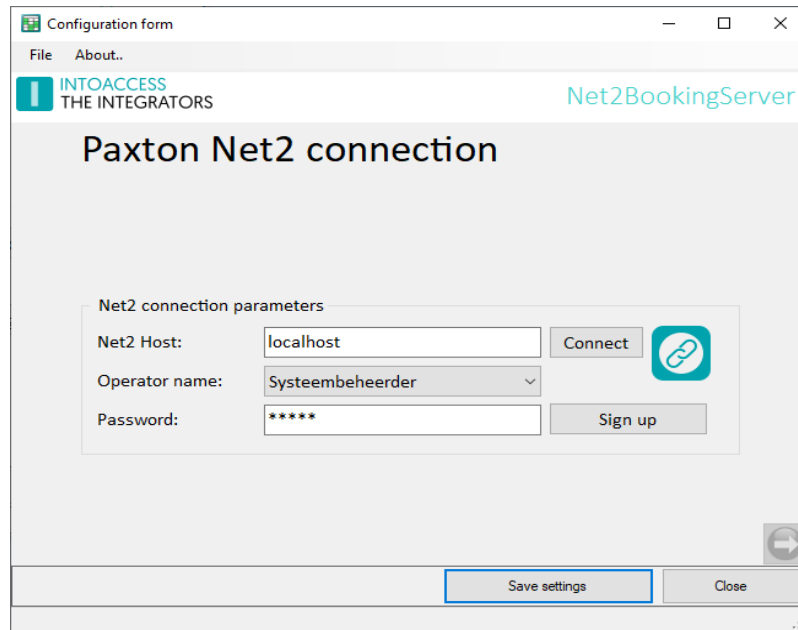


Image 7

- Enter the (ip)address of the Net2 server. If you have installed the attendance tool on the Net2 server, you can use the default 'localhost' value. Do not use an external adapter ip address in this case!!;
- Click the Connect button; the application now tries to fetch the Net2 operators.(these users you can find under “Net2 operators” of the standard Net2 application);
- Select an operator with which the application should log on. It is required that this user has the “System Engineer” role;
- Enter the proper password;
- Click the Sign up button.

If all goes well, a message will appear that the connection was successful and the right hand arrow will change from gray to colored.



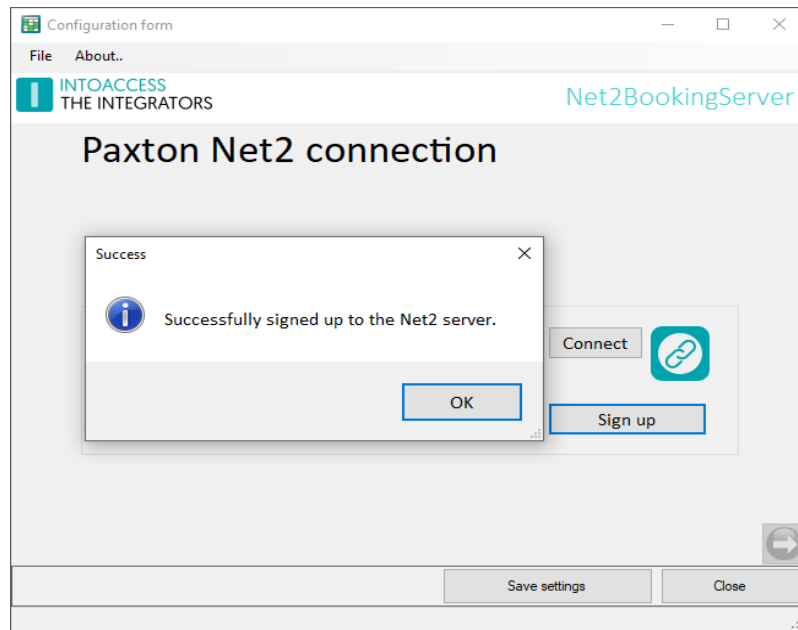


Image 8

After closing the success message, you can proceed to the next configuration window, by clicking on the right hand arrow.

Select booking system

On this configuration page you can select the type of booking system:

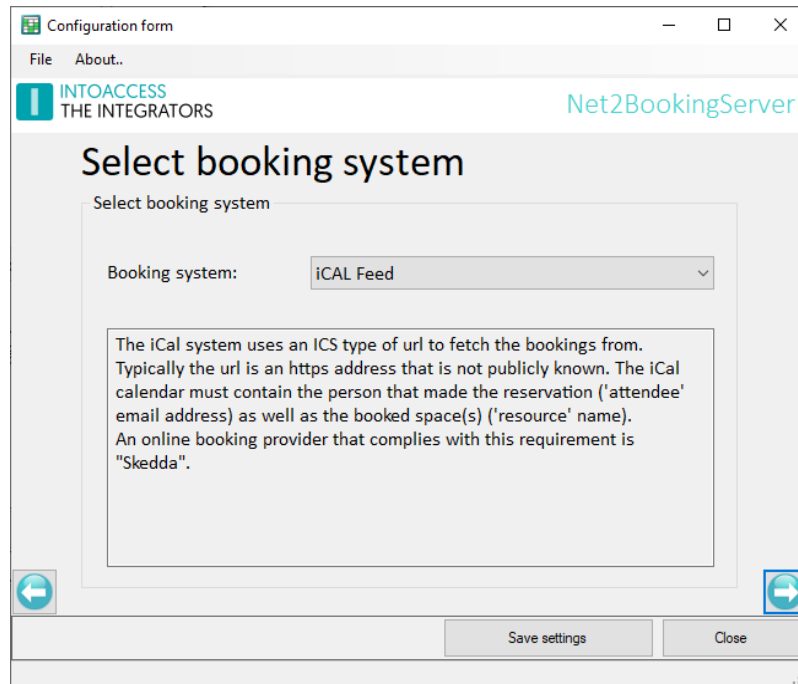


Image 9

At this moment that is only a booking system that offers an 'iCal feed', that meets a few requirements. A (simplified) iCal contents, could look like the sample below.

Most important are the VEVENT fields: ATTENDEE, DTEND, DTSTART, RESOURCES, UID, where the ATTENDEE should contain the email address of the booking customer and RESOURCES the name/names of the booked resources/spaces.

As already mentioned in the selection screen, **Skedda** meets the requirements.

```
BEGIN:VCALENDAR
PRODID:-//Skedda Pty Ltd//Skedda//EN
VERSION:2.0
BEGIN:VTIMEZONE
TZID:UTC+02
BEGIN:STANDARD
DTSTART:20160101T020000
TZNAME:UTC+02
TZOFFSETFROM:+0200
TZOFFSETTO:+0200
END:STANDARD
END:VTIMEZONE
BEGIN:VEVENT
ATTENDEE;CN=Some User:mailto:some.user@somedomain.com
```





DESCRIPTION:Spaces: Room #4
DTEND;TZID=UTC+02:20210414T220000
DTSTAMP:20210420T072531Z
DTSTART;TZID=UTC+02:20210414T123000
RESOURCES:Room #4
SEQUENCE:0
STATUS:CONFIRMED
SUMMARY:Some User: (Room #4)
UID:24600000_637539930000000000
END:VEVENT
BEGIN:VEVENT
ATTENDEE;CN=Another User:mailto:another.user@otherdomain.com
DESCRIPTION:Spaces: Room #1
DTEND;TZID=UTC+02:20210416T110000
DTSTAMP:20210420T072531Z
DTSTART;TZID=UTC+02:20210416T100000
RESOURCES:Room #1
SEQUENCE:0
STATUS:CONFIRMED
SUMMARY:Another User: (Room #1)
UID:24663825_637541568000000000
END:VEVENT
END:VCALENDAR



iCal Configuration

On this configuration page you can define the url(s) of the iCal feed containing the bookings. Typically this would be just a single url, but if resources are divided over multiple sub systems ('venues'), multiple urls are possible.

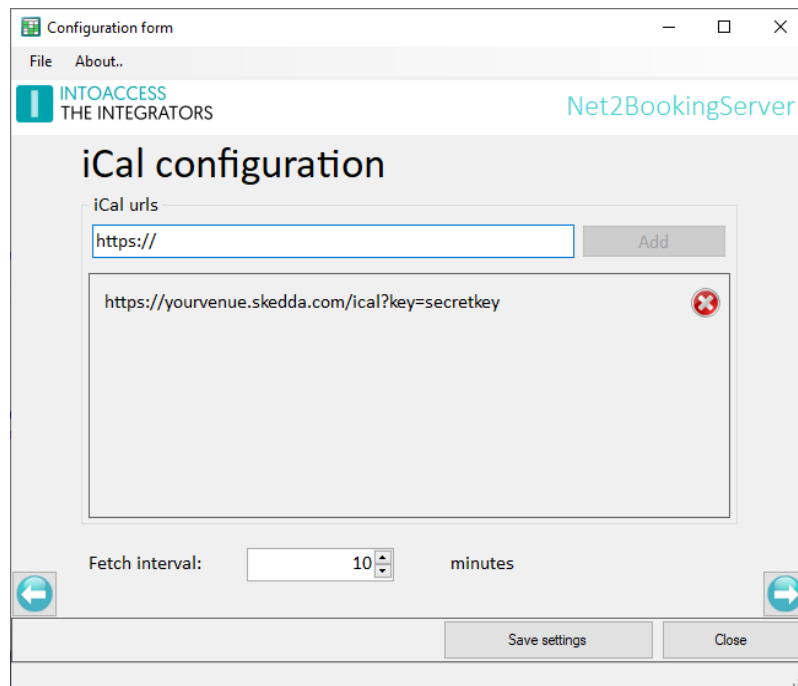


Image 10

Also the minimal interval between subsequent fetches of the data at the booking system can be selected. A shorter interval will lead to a bigger load, so it is important to consider if a lower value than the default of 10 minutes is really required.



Resource ACU relation

On this configuration page you can define which resources (rooms) you will rent out and through which doors access is required to get to this resource.

The names of the resources need to match the names of the resources as they are defined on the (online) booking system.

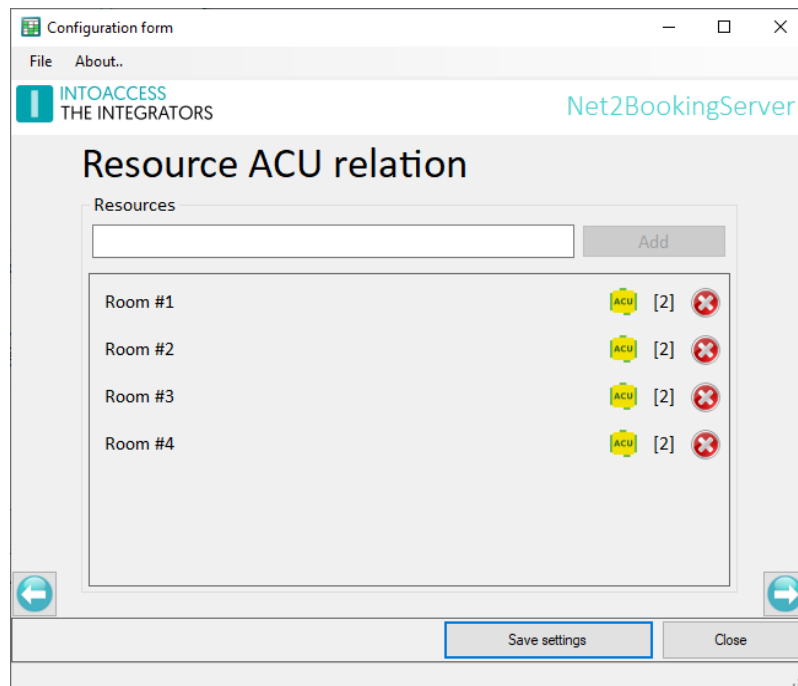


Image 11

Adding a resource:

- Enter the resource name, after which the 'Add' button is enabled;
- The new resource will appear in the list below; initially without a link to any door (ACU), which will be visible as [0].
- By clicking on the ACU symbol, you can then pick the ACUs that provide access to that particular resource. (see Image 12 and Image 13)
- Resources can be removed by clicking on the cross. (confirmation will be asked)

In the sample screens blow, you can see that Room #1 and Room #2 both have the (common) front door selected, besides the door that gives access to the specific space.

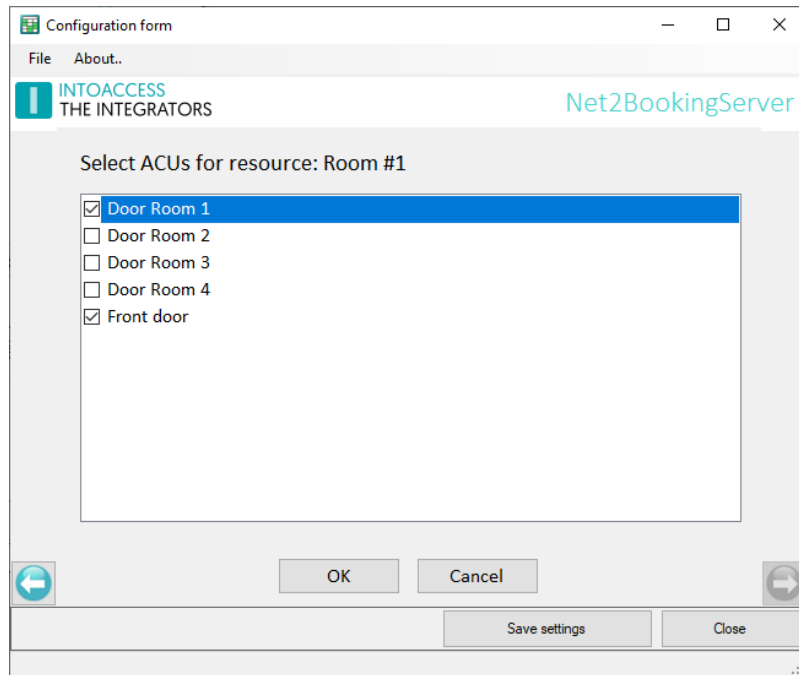


Image 12

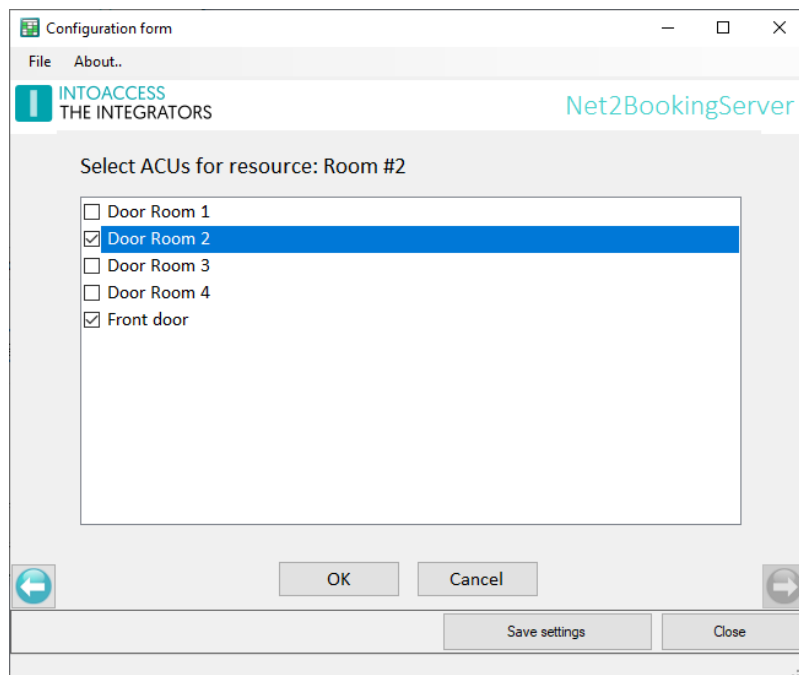


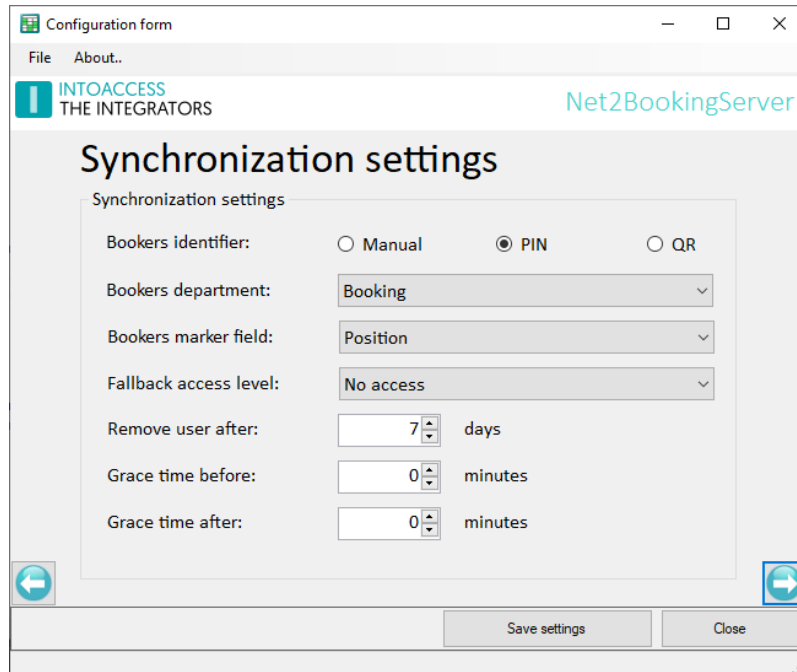
Image 13



Synchronization settings

On this configuration page, the behavior of the synchronization can be defined..

As booking customer identification, you can select if an automatically generated PIN or QR code is sent. The 'Manual' option is added to offer the possibility to issue more permanent means of identification (like card or keyfob). In that case the automatic removal of users should probably be disabled altogether. You can do this by selecting -1 at 'Remove user after'.



The screenshot shows a window titled 'Configuration form' with a menu bar containing 'File' and 'About..'. The window contains the 'INTOACCESS THE INTEGRATORS' logo and the text 'Net2BookingServer'. The main content area is titled 'Synchronization settings' and contains a form with the following fields:

- Bookers identifier:** Radio buttons for 'Manual', 'PIN' (selected), and 'QR'.
- Bookers department:** A dropdown menu showing 'Booking'.
- Bookers marker field:** A dropdown menu showing 'Position'.
- Fallback access level:** A dropdown menu showing 'No access'.
- Remove user after:** A spinner box with '7' and the text 'days'.
- Grace time before:** A spinner box with '0' and the text 'minutes'.
- Grace time after:** A spinner box with '0' and the text 'minutes'.

At the bottom of the form are two buttons: 'Save settings' and 'Close'. There are also left and right navigation arrows on the left and right sides of the form area.

Image 14

The booking customers are automatically created as a Net2 user. At 'Bookers department' you can select the department under which they will be placed.

To distinguish booking users from other Net2 users, they will get a '**BOOKINGSYNC**' marking in a configurable user field. With this, the application knows that these users fall under its control. Note that the memo is reserved to store bookings.

Booking users that are already known in Net2, but should not have access at a certain moment, will get the 'No access' access level by default. If needed you can change this to another access level.

Booking users that made no new bookings in a while, can automatically be removed after a configurable number of days passed the end of their validity period. Any PIN or QR code that was assigned to them before, will be released at that moment.

Around the by the booking system supplied reservation time blocks, optionally additional time to access the resource(s) can be allowed (before and/or after).



Email settings

The email configuration is typically optional and offers the possibility to send application messages to anyone that needs to take action if the system malfunctions. Within the context of the Net2BookingServer, sending emails is an essential function, so enabling it is mandatory.

The addressed on this config page will only receive an email when something goes wrong. In a following config page however, the notification messages for booking users can be configured. (these use the same server settings)

Webmail

To use web mail providers (like Gmail), it may be required to lower the security settings of the mail account.

SMTP

The SMTP settings offer optional encryption/authentication. To use this, select port 587 first.

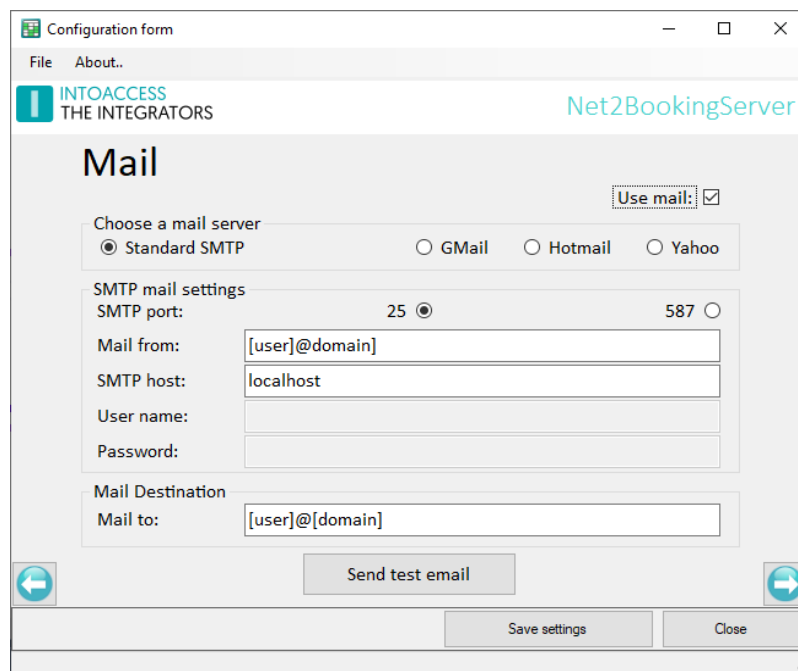


Image 15

To address multiple persons, additional email addresses can be added separated by a semi-colon (;).



Notification settings

This config page is fully dedicated to the way the booking customers are informed about their booking and the access code that will allow them in.

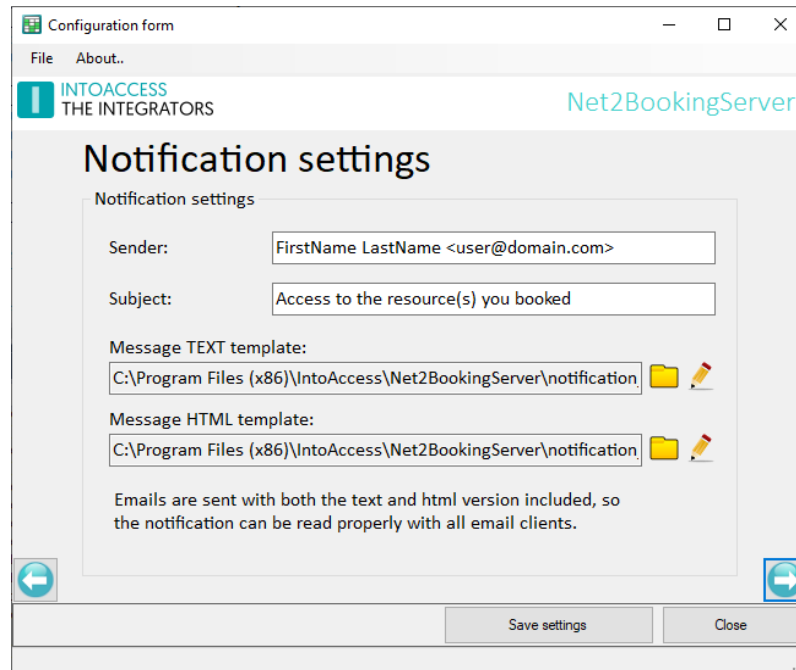


Image 16

If you notice an exclamation mark at the top, you did not enable the mail functionality in an earlier config page. Since email notifications are required, that setting is mandatory.

At the **Sender** field, you can define who will be visible as sender of the notification emails. Both the extended form 'FirstName LastName <email address>' as well as just an email address is allowed.

The **Subject** field contains the subject of the email.

Originally emails were purely text, but at some point in time html was added to dress up messages with stuff like different font sizes, weights or colors and such. With that, also the inclusion of images was made possible. Since there are many people however, that prefer to read email as plain text, it is good practice to send a plain text form of the message besides the html form. The fields **Message TEXT template** and **Message HTML template** are meant for that purpose.

The template file for the 'text' format is the file that contains the plain text version of the message. The template for the 'html' format is the file that contains the dressed up version of the message.



Each template supports the use of a number of placeholders, to indicate where the variable parts of the message should go. Below you will find the list of supported values:

Plaatsvervanger	Beschrijving
#FIRST_NAME#	First name of the booking customer
#SUR_NAME#	Surname of the booking customer
#START_PERIOD#	Start date of the booking customer validity period in Net2
#END_PERIOD#	End date of the booking customer validity period in Net2
#ACCESS_CODE#	Access code; PIN (number) or QR (image)
#RESOURCES#	List of booked resource (that have not expired yet)

Please note that a PIN code can be properly displayed in a 'text' template, but a QR code only as an attachment. For an 'html' template, a QR code will be displayed as an 'inline' image.



Application licence

The trial/test version as it can be downloaded from the IntoAccess website, is fully functional but will stop working after a certain date when it is not licensed.

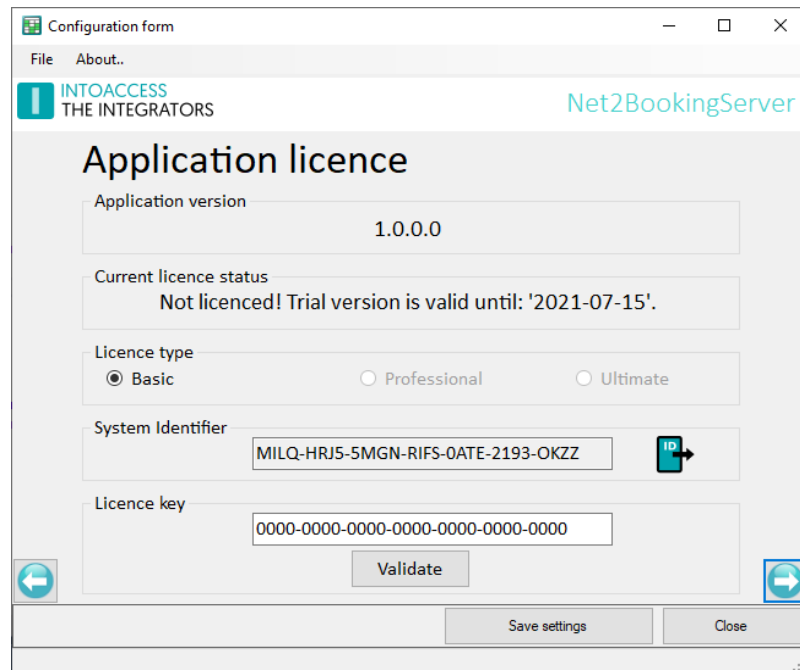


Image 17

After buying a license, you can export the “System identifier” file (click on the icon), email it to IntoAccess (info@intoaccess.com) and receive your license code.

Note: the System identifier differs per PC and therefore also the required license code.

Service Control

The service control window offers a way to stop and start the background service.

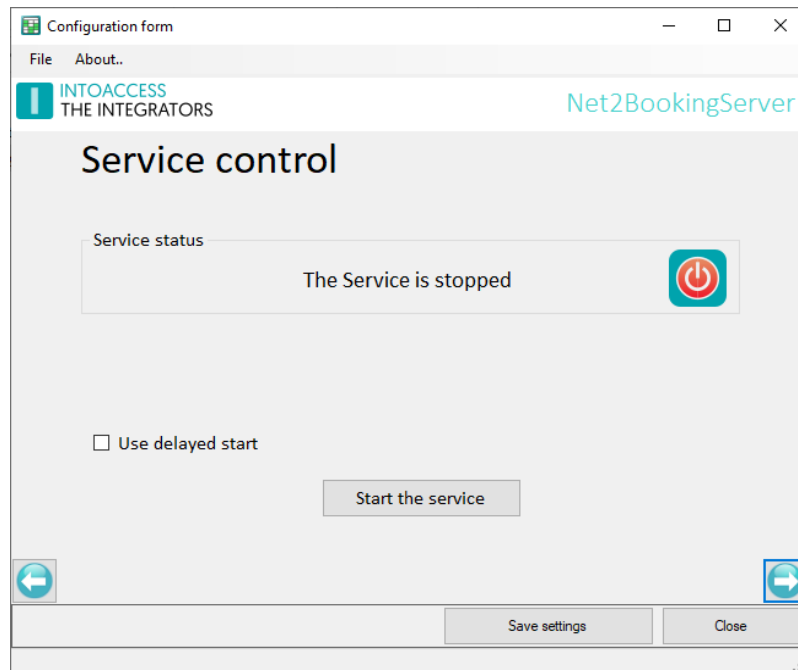


Image 18

Other ways to start and stop the service are:

- Using the tray icon pop-up menu;
- Using the Windows service manager (look for “Net2 Booking Server”);

By default, the Net2BookingServer has a service dependency on Net2, in order to make sure that it will only start after Net2 is up and running. This dependency can cause problems with some Net2 configuration tools, that attempt to restart the Net2 service. Temporarily switching off the Net2JsonRestServer is typically enough to use the tools without issues. If this is inconvenient for you, you can select the Use delayed start option, which will remove the Net2 dependency and replace it by a ‘delayed’ service start. Note that you have to reboot the PC in order to have the service show up with a ‘delayed’ startup type in the Windows service manager.

Also note that this setting is only relevant when the service is running on the same PC as Net2.

Log Settings

This page, see Image 19, offers the possibility to review the last (max. 500) lines of the log file. The application will log its 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.

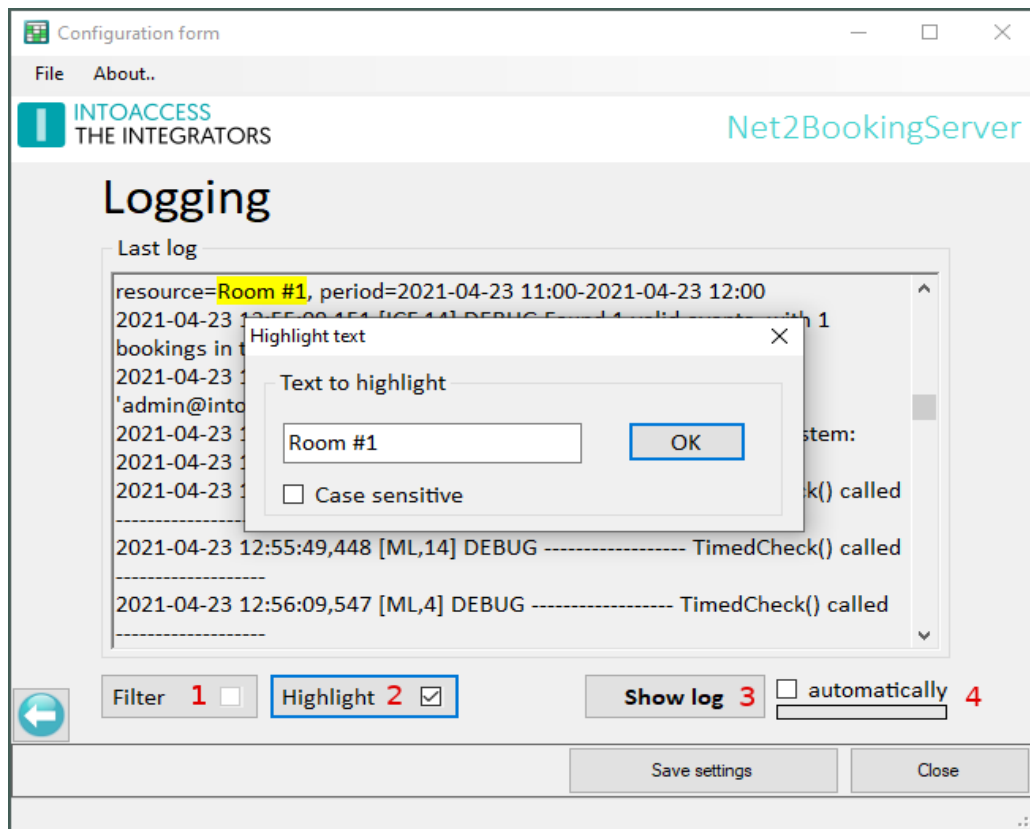


Image 19

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 files are located in the folder:

c:\IntoAccess\Logging\Net2BookingServer





Manual Net2BookingServer
Versie 1.0

