

Axesso System

Access control and
time management
based on the KNX
installation bus

Version 1.0

Installation and system
manual

Revision: 2009-06-30



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Attention: There may be country-specific data protection requirements for storing user data. IPAS does not guarantee the conformity of the Axesso software with these requirements. It is up to the software operator to check the respective data protection legislation.

This user manual illustrates the installation and commissioning of the Axesso system. It contains detailed technical information, which requires an understanding of KNX and IP. Basic knowledge of the IPAS ComBridge Studio System is also recommended.

Users and operators please also see the additional user manual. In terms of content the user manual corresponds roughly to chapters 3 and 4 of this system manual.

Due to future technical developments, the content of the software and manual are subject to change without further notice.

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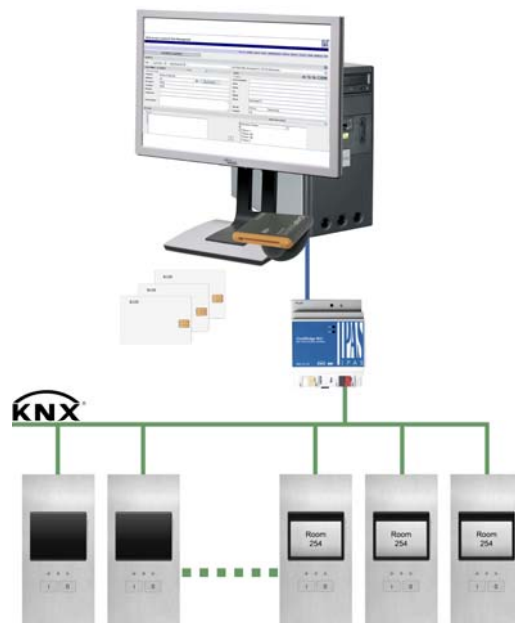
1. Overview and system structure

Thank you very much for choosing IPAS hard and software.

The IPAS **Axesso System** offers a powerful hard and software for access control and time management based on a standardised KNX bus installation. With the rising use of the KNX system, more and more projects integrating all aspects of technical building equipment are possible. Extending the use of this universal infrastructure to the area of access control and time management therefore lies at hand. Ease of installation, manufacturer independence, simple wiring, and widespread programming and commissioning knowledge that have made this system so successful apply to these tasks in the same manner.

1.1. Structure and composition of the Axesso system

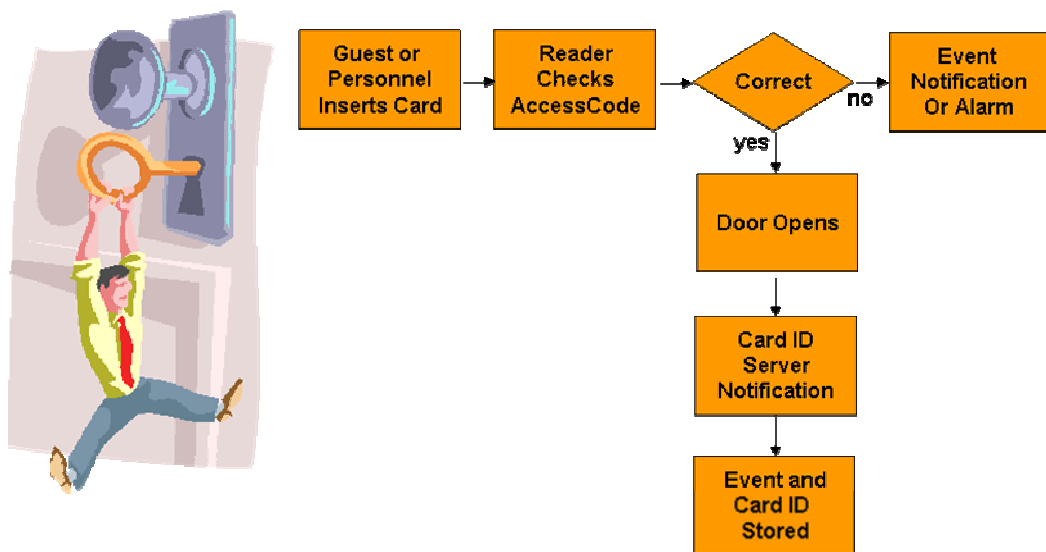
The Axesso system principally consists of the Axesso server and the card readers that are connected to a KNXnet/IP gateway via a KNX installation bus system.



The KNXnet/IP gateway (e.g. IPAS ComBridge NCI) connects the KNX system and the IP (Ethernet) network of the server. The communication between the server software and the readers is hence based on the existing network structures KNX and Ethernet.

1.2. Functioning of the Axesso system

The Axesso readers work autonomously within the KNX system. Once the access cards have been programmed, no server is required for the system's access function. If a card is inserted into the reader, the device compares the access code on the card and the code saved on the reader. If these are the same, the reader will permit access. An additional code (CardID-Code) is sent in encrypted format via the KNX bus for each attempted access. If the Axesso server is connected and active, the Axesso Software generates access reports, alarms and time recording data via this code. Special scenes may also be created for individual card holders.

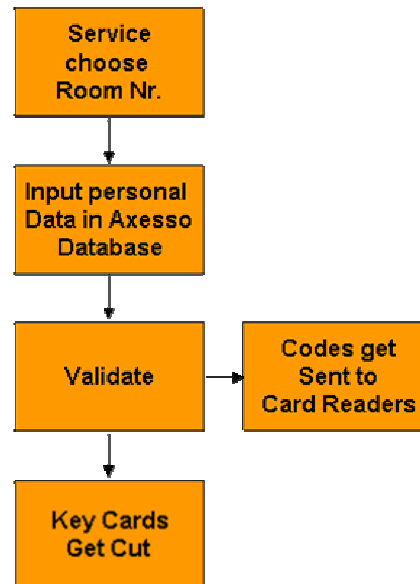


Apart from the card readers, the other central system component is the Axesso Software that is installed on the server. The Axesso Software is an independent web application based on the IPAS ComBridge Studio Suite. The software offers user administration, the storage of card holders and access data and the generation of alarms and scenes. For the system administrator the Axesso Software provides all the important setting and programming options to commission the system.

However, the software's main task is the generation and programming of access cards via the connected programming device and the sending of access information to the reader that is connected to the KNX.

The first thing to do when programming the cards is to choose the rooms that are to be accessible to the card holder and possibly enter the personal details of the card holder in the Axesso database. An empty (new or deleted) card is inserted into the connected programming device. After an internal plausibility check, the Axesso Software then generates two new codes (Card-ID-Code, Access Code). The access code is sent via the

KNXnet/IP gateway to the readers that are connected to the KNX. To avoid misuse, the data transfer is encrypted. At the same time, the programming device programs the Card-ID-Code onto the user's card.



If a card is no longer needed or if a user is to be removed from the database, the removal is also done via the Axesso software. Codes in the connected readers are deleted the same way when creating a card via the KNX bus.

1.3. Card reader functions and versions

Two types of card readers are available for the IPAS Axesso System:

1. Reader for contact cards (chip cards)

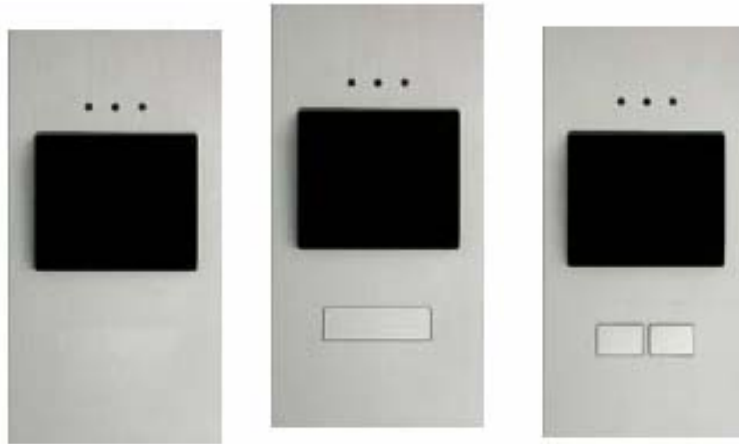
The chip card technology requires the cards to be inserted into a slot on the front of the device. Sliding contacts with the card enable communication to the memory chip.

2. Reader for contactless cards (transponder or RF-ID cards)

The transponder technology requires the card to be held about 1-2 cm away from the front of the reader. Data exchange between card and reader occurs without touch via a high frequency carrier signal (RF-ID).

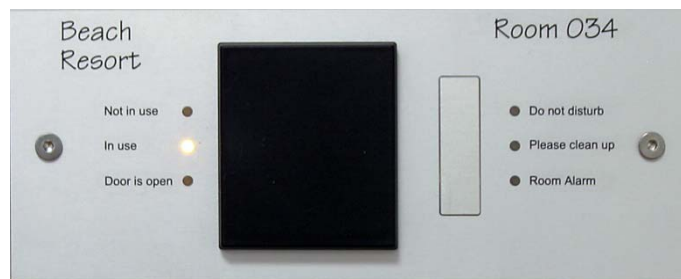
Within an Axesso system only one card type can be used. The mixed use of chip and transponder cards within a system is not possible. As there is no wear and tear with transponder cards, the use of such cards is preferable.

Three device models are available for both the chip card and the transponder card reader: without pushbuttons, with one pushbutton or with two pushbuttons.



The pushbuttons on the device make it possible to perform other KNX functions apart from the access function (e.g. bell button or light control). The functions are determined through the application in the ETS (see below).

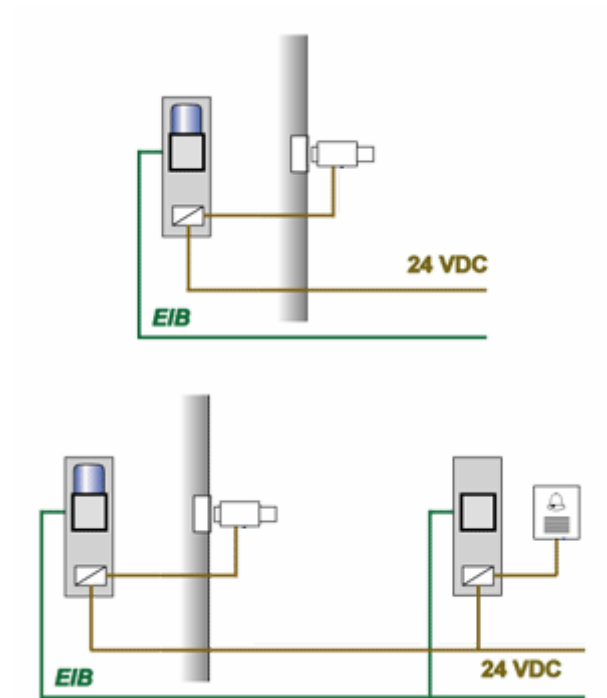
Apart from the devices shown there are additional transponder reader devices with three additional LEDs for hotel applications (Do Not Disturb, Please clean up, Room Alarm).



All Axesso card readers have an integrated binary output to activate DC low voltage door openers. When choosing a door opener, please make sure not to exceed the integrated switch contact's maximum current of 1A. In addition to the binary output all card readers have two binary inputs that can be connected to any potential-free contact (e.g. door contact or card holder in a hotel environment). The function of the contact input can also be set via the parameters in the ETS application.

In addition to the KNX bus power supply, the Axesso card readers also require a low voltage of 8-26VDC. This auxiliary supply is not only used to supply the device electronics but also to activate the door openers.

The following illustrations show typical connection scenarios:



A standard bus connector (KNX) and a screw clamp with 8 terminals are used to connect the devices. For an exact terminal lay-out, please see the appendix in chapter 5.

All Axesso card readers have an integrated magnet sensor. If a device is removed from its installation box, which is equipped with a security magnet, it will be de-activated immediately. An alarm telegram can also be sent via KNX.

2. Installation and commissioning of the Axesso Server Software

2.1. Installation requirements

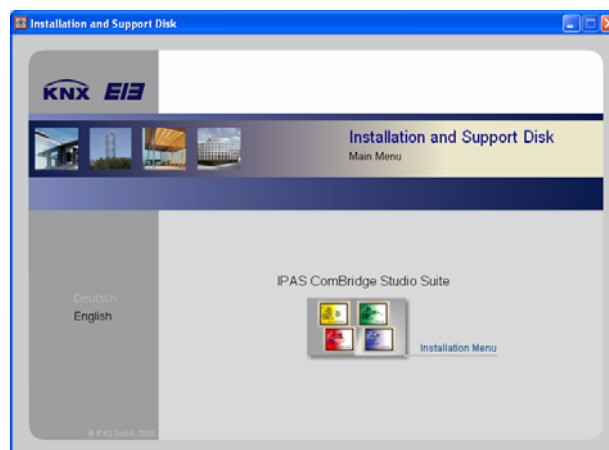
The Axesso Server Software as well as the required ComBridge Studio Suite can be installed on any PC with Windows 2000 or Windows XP operating systems. The memory required is about 20 MByte. Before installation, please make sure that enough memory is available on the hard drive. We recommend devices with at least 1GHz clock rate and 256MB RAM hard drive.

In order to display the Axesso web pages, Microsoft Internet Explorer from version 6.0 upwards is required on the server and possibly the operator's PC. Please use only Internet Explorer. Other web browsers (e.g. Firefox, Chrome, etc.) are not permitted.

The license on the target PC is cleared via the provided USB-Dongle. **Please insert the dongle into a free USB port.** The dongle must not be removed whilst using the Axesso Software.

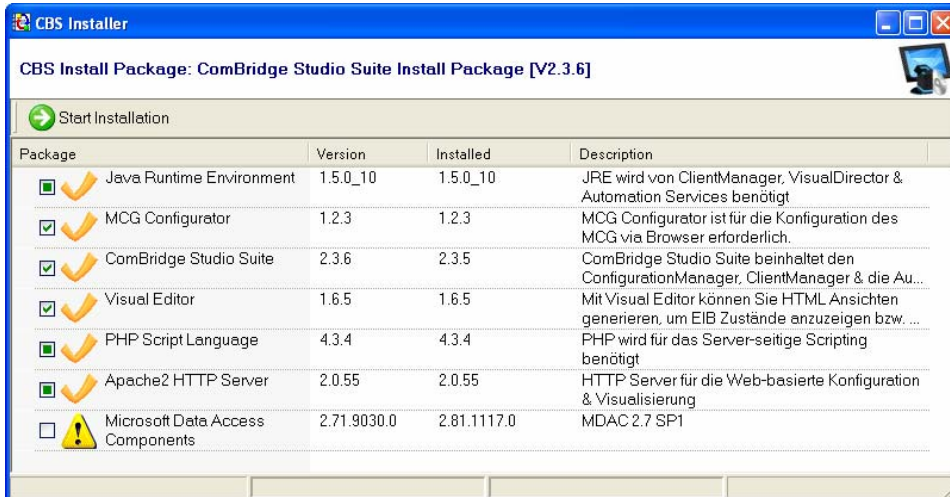
2.2. Installing ComBridge Studio Suite

The Axesso Software is an autonomous web application based on the IPAS ComBridge Studio Suite. Before installing the software it is therefore necessary to install the ComBridge Studio Suite on the Axesso server. Please insert the provided installation CD into the target computer. The installation setup is started automatically and the start screen appears. (Should the automatic start process be accidentally interrupted, go to the CD's root directory and start the file start.exe manually.)

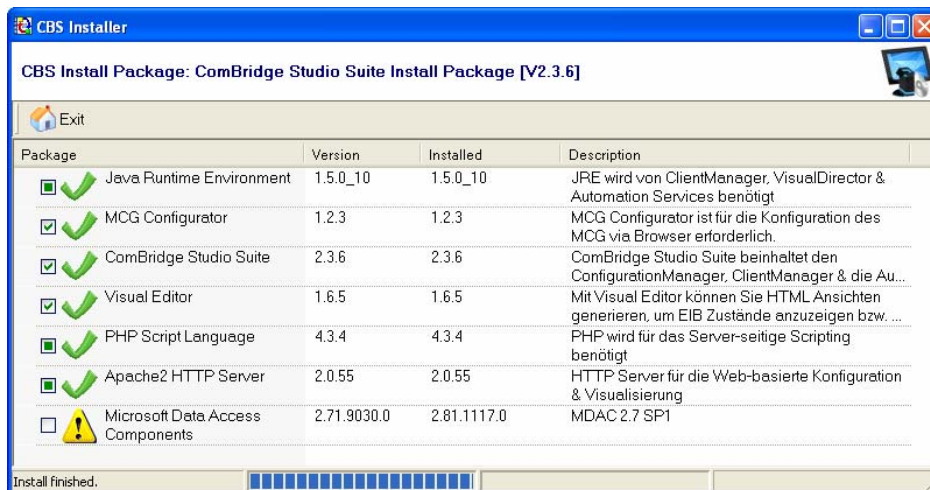


The installation program will guide you through the installation menu. Once the IPAS license requirements have been accepted, the actual installation of the ComBridge Studio

Software components begins. The installation program starts the CBS Install Package and automatically checks which components may already be installed on your PC. If no version of the ComBridge Studio Software has ever been installed on the Axesso server, we recommend the installation of all available components. To do this, please tick all packages and start the installation by clicking on the green arrow button.



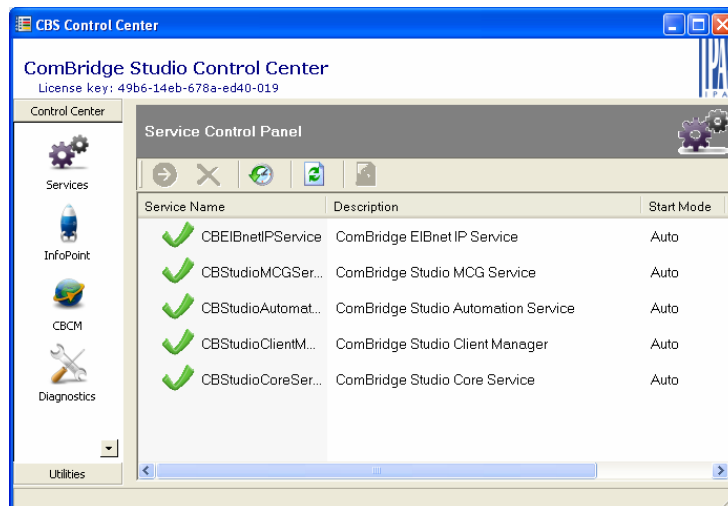
Further license agreements (Apache Webserver, possibly Java) need to be accepted during the installation process. Once all installation steps have been completed, the Install Package shows the message: **Install finished** in the message box in the bottom left-hand corner of the window.



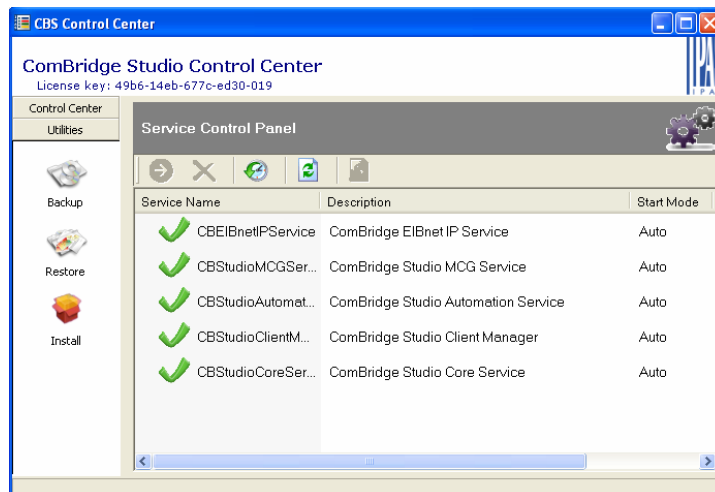
A green tick shows all newly and successfully installed components. (The Microsoft Data Access Components are generally already installed via the operating system.)

2.3. Installation of the Axesso Software

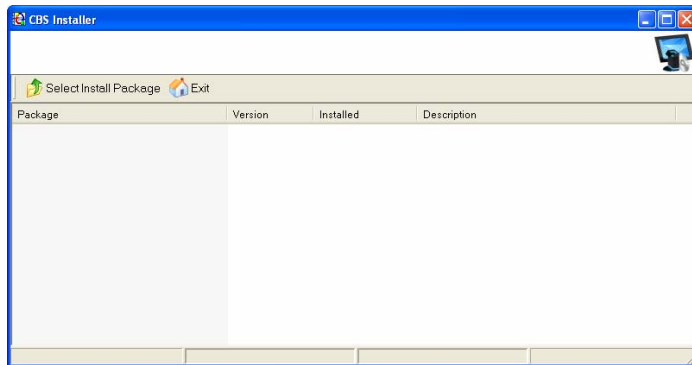
The Axesso Server Software is an additional application, which needs to be installed separately after the ComBridge Studio installation. To install the software, please choose the program CBS Control Center from the ComBridge Studio Suite start menu. The control center opens after the start.



Additional functions can be shown via the **Utilities** Button in the bottom right-hand corner.



A further selection window appears after pressing **Install**.

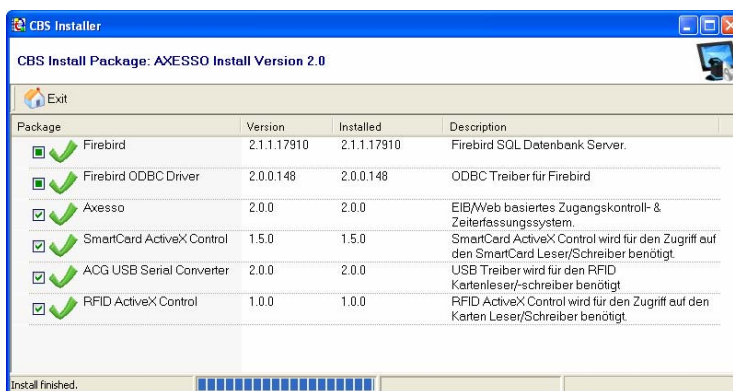


Use the **Select Install Package** button to select the Axesso installation package called axesso.ipkg from the CD's root directory and confirm your selection. This will start the installation of the Axesso Software.

As was the case with the ComBridge Studio installation, the Install Package now checks whether any individual components are already installed on the server.



Press the green arrow button to start the installation. Once the Axesso installation has been completed successfully, the **Install finished** message appears in the message box and the individual components are marked with a green tick.



Press **Exit** to leave the Installer.

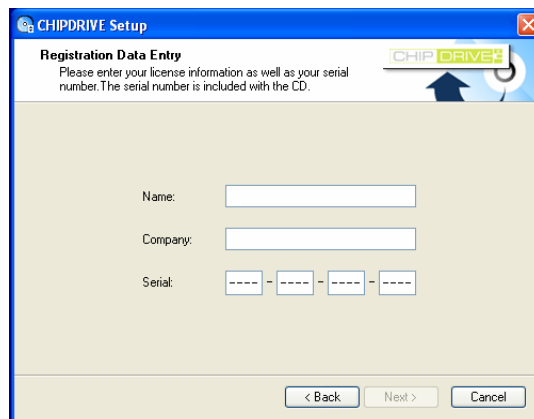
2.1. Connecting and setting up the card programming device/ Switch from transponder to chip card model

In the standard installation, the Axesso Software is installed for the use of transponder readers. The transponder card programming device can be connected directly to the server via a free USB port. After the USB plug has been inserted, the server's operating system recognises the programming device. The device driver may be installed again. In this case, please confirm the installation.

If the system is to be used with chip cards, additional installation and commissioning steps are required (Please skip the next paragraph if you use transponder devices).

For the chip card version, we deliver a chip card programming device instead of the transponder card device. The chip card programmer is currently only available for connection via a serial COM port (not USB). It is therefore necessary to use a PC with a free COM port as server.

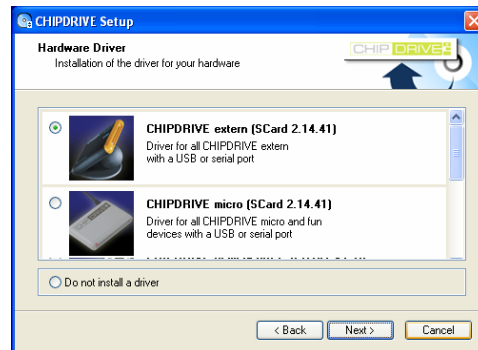
If you use chip cards, it is necessary to install the driver CD which is delivered with the programming device. Once the CD has been inserted, the installation starts automatically and asks for the registration details.



The screenshot shows a Windows-style dialog box titled "CHIPDRIVE Setup". The main heading is "Registration Data Entry". Below the heading, there is a small instruction: "Please enter your license information as well as your serial number. The serial number is included with the CD." To the right of the text is a logo for "CHIP DRIVE" featuring a stylized blue arrow pointing upwards. The form contains three input fields: "Name:" followed by a single-line text box, "Company:" followed by a single-line text box, and "Serial:" followed by a four-part input field where each part is a three-digit box separated by a hyphen. At the bottom of the dialog, there are three buttons: "< Back", "Next >", and "Cancel".

Please complete the fields with your personal details and the 16-digit serial number that is printed in the CD booklet.

When installing the driver, please select CHIPDRIVE extern and press **next>** to confirm your selection.



The driver installation is now complete. To activate the driver, one more setting is required.

Please open the file explorer and choose the following directory: `C:\Programme\IPAS`

`GmbH\ComBridge Studio Web\AxessoWeb_custom`

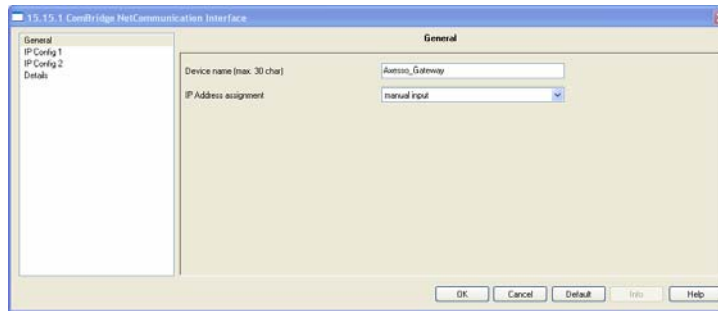
Please delete the file `prjenv.php` from the above directory and create a copy of the file `prjenv__chipcard__.php`. Change the name of the file copy to `prjenv.php`. The system has now been changed to use chip card readers.

2.2. Setting up the IP connection / Connecting the gateways

The Axesso software communicates with the readers on the KNX bus via a KNXnet/IP gateway. At the IP end, the gateway is connected to the same IP network as the Axesso server (Hub, Switch). At the KNX end, the accessibility of all connected card readers needs to be ensured (possibly via line or area couplers).

Before the Axesso Software is commissioned further, the IP gateway needs to be registered in the Configuration Manager. In relation to the Axesso system, we generally recommend you assign a fixed IP address to the gateway in the ETS. Whilst it is possible and permissible to assign an IP address via a connected DHCP server, this might mean that in case of an interrupted network connection a new and different DHCP address will be assigned, making a re-newed registration necessary.

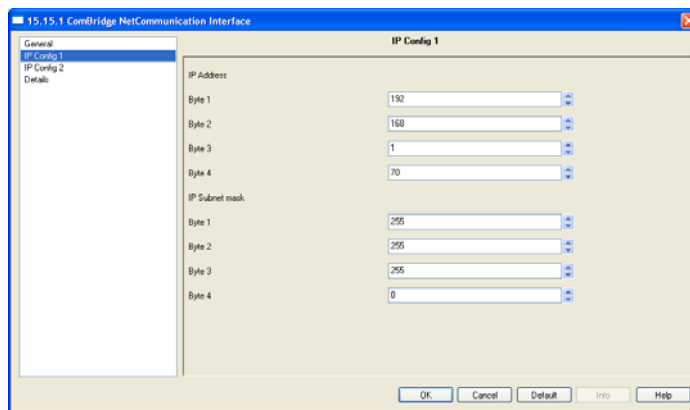
If, as recommended, a fixed IP address is used, the gateway needs to be set first to manual IP assignment. In the example of the IPAS ComBridge NCI gateway the settings are performed in the device's ETS parameters:



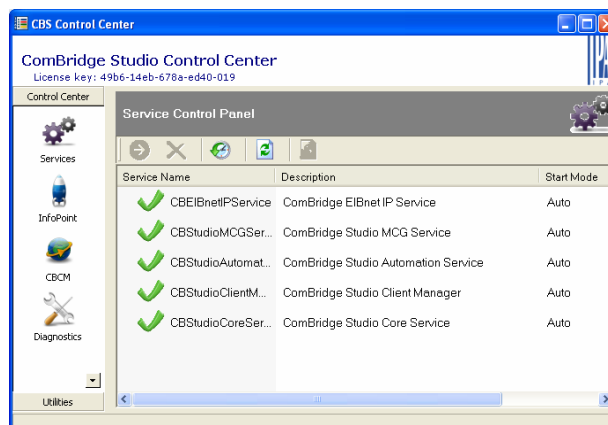
In the example the chosen name **Device Name** Axesso_Gateway has been assigned in the ETS.

Attention: Please do not use spaces as part of the device name!

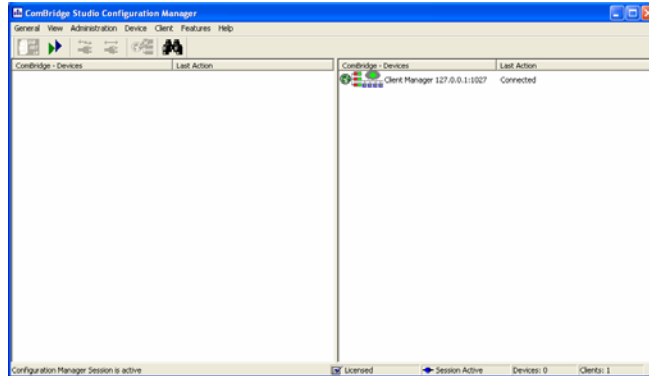
When assigning a fixed IP address please make sure that the chosen address is within the permitted range. Please do coordinate the address assignment with the responsible network administrator. The following example shows the address setting 192.168.1.70 for the IPAS gateway in the ETS:



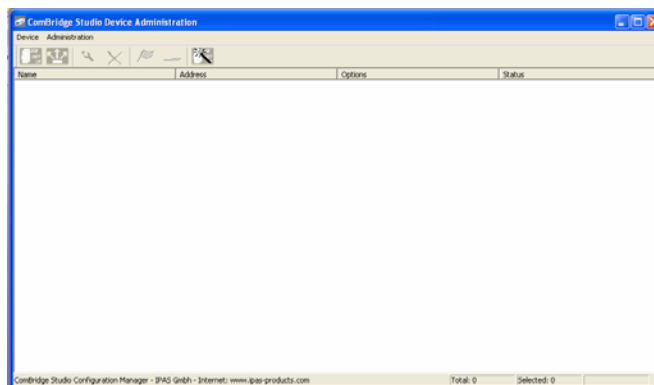
If the gateway settings have been configured in the ETS and loaded onto the device, the gateway can be registered in the Configuration Manager via the CBS Control Center.



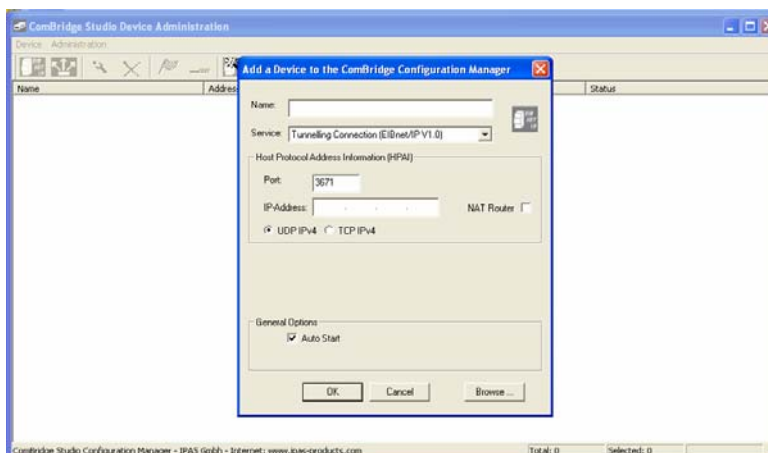
To do so, please open the ComBridge Configuration Manager (CBCM) by clicking on the CBCM symbol in the Control Center.



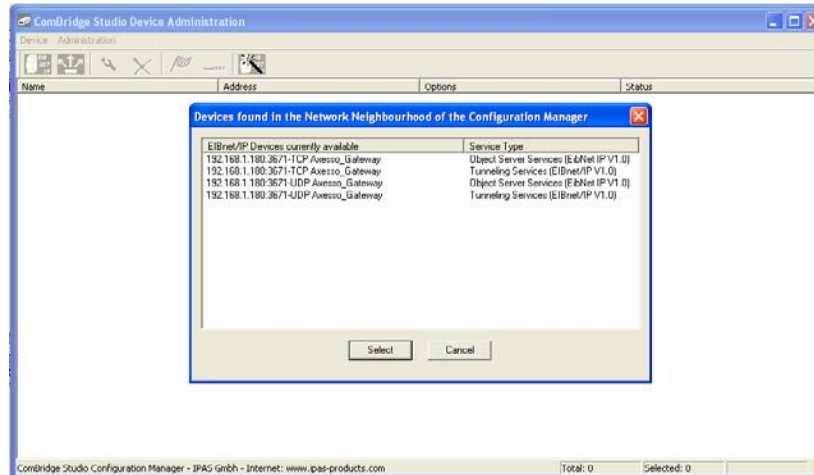
The field on the right hand side of the *Configuration Manager* shows the services connected to the system (Standard: Client Manager). On the left hand side the connected gateways are displayed. To add the Axesso IP gateway, please click on the **Devices** button in the top left hand corner. The **Device Administration** window appears.



A further click on the **Add-Device** button at the top left opens the Device Editor window.

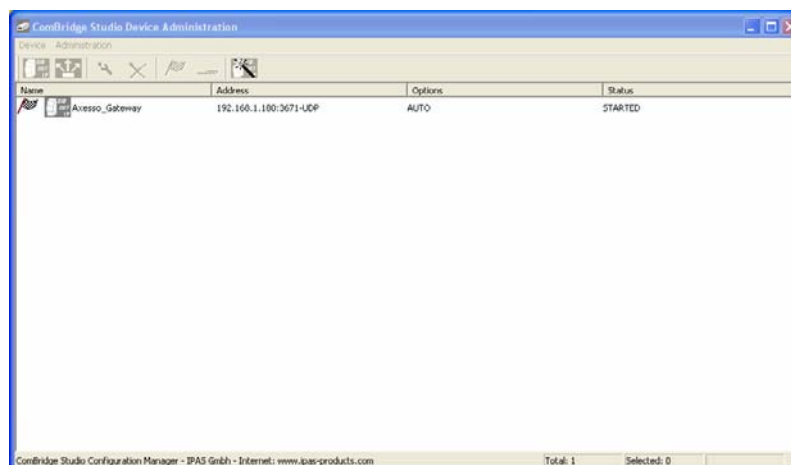


This window is used to either manually set the details of the IP gateway that is used for the connection (see ComBridge Studio manual) or to search for the IP gateways that are connected to the network via the *Browse* button. The search brings up all IP devices that are connected to the network with their set IP address and the device name that has been configured in the ETS.



If an IPAS gateway is used for the IP connection, please note that every IPAS gateway allows several connection types, which will be displayed simultaneously in the browser window (e.g. NCI 4 connection types, WCI 2 connection types). For the Axesso application, please use the UDP connection via the Object Server Service. Once the appropriate connection has been selected and confirmed via the Select button, the device details are automatically inserted into the **Device Editor** window where they can be confirmed with OK.

The connected gateway is then displayed in the gateway list in the **Device Administration** window.



The flag in front of the gateway name in the list symbolises a successful connection. The windows for the Configuration Manager can now be closed one after the other.

2.3. Commissioning the readers in the ETS

In order to commission and configure the Axesso readers, application programs are available for the ETS (from version ETS-3 upwards).

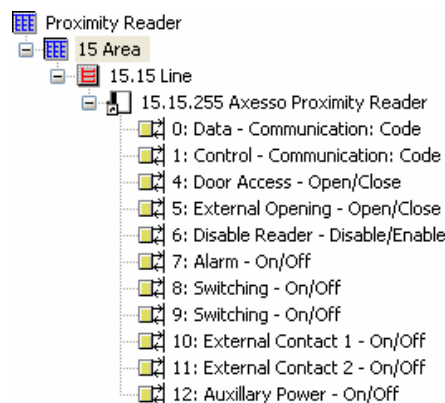
To commission the transponder readers, please use application:

3707-ProxReader-01-0101

For the chip card version, please use application:

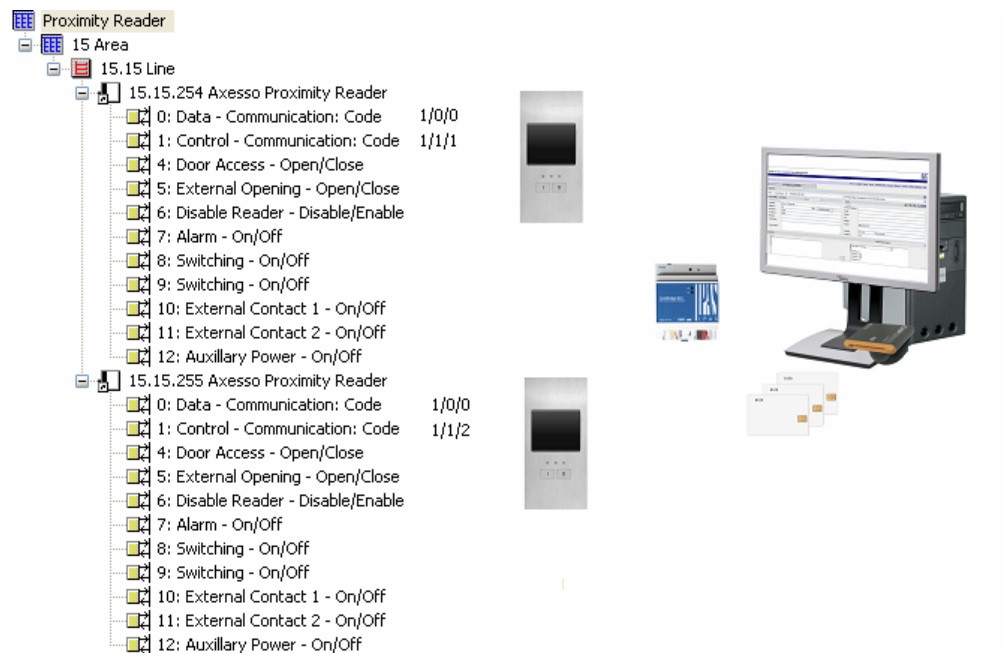
3706-ChipcardReader-01-0101

The Axesso Server software and the readers communicate via two 14Byte long communication objects of type EIS 16. Within the application programs, object numbers 0 and 1 are reserved for the communication.



When a room is accessed, object number 0 called “Data” is used to transmit the CardID to the server software for identification purposes (reports, time management). Object number 1 “Control” is used for the bi-directional data and command exchange (including programming of the AccessCode) between readers and software. In order to ensure that the system functions properly, both objects need to be linked with group addresses. To transmit data within the communication object types, an encryption algorithm is available in the Axesso System.

When linking the group addresses it is important to ensure that the data object of all readers used in the system is linked to the same group address whilst the control objects of the individual readers do have to be linked with different group addresses. For example:



Additional parameters and objects are available in the application program for configuration and additional functions. Apart from the objects for data exchange with the software that were described above, the following communication objects are available:

Obj. 4: Door Access – Open/Close

The card reader sends a 1 Bit open telegram via this object when a valid card is placed in front of/ into the reader. After a configurable time period the object is changed to closed and re-sent. The object reacts in response to the internal binary output on the card reader. It can be connected directly if a switch actor (instead of the internal contact) is used to control the door opener.

Obj. 5: External Opening – Open/Close

This object is used to initiate the opening of the binary contact in the card reader via a 1-telegram to the KNX bus. The duration of the opening can be configured just as the opening with a valid card.

Obj. 6: Disable Reader – Disabled/Enabled

This object can be used to disable the reader via the KNX bus. A disabled reader remains inactive even if a card is valid. A permanently red LED on the reader indicates that it has been disabled. The reader is only active again once it has been enabled via a 0 telegram.

Obj. 7: Alarm – On/Off

An alarm telegram (1-telegram) is sent via this object if an unauthorised removal of the reader from its mounting box is attempted (magnet switch). The alarm can be used, for example, to activate an alarm bell or switch on the main lights.

Obj. 8: Switching – On/Off

A switch telegram (depending on the chosen function) is sent via this object when the right-hand (or central) pushbutton is pressed.

Obj. 9: Switching – On/Off

A switch telegram (depending on the chosen function) is sent via this object when the left-hand pushbutton is pressed.

Obj. 10: External Contact 1 – On/Off

A switch telegram is sent via this object if a connected external contact is activated.

Obj. 11: External Contact 2 – On/Off

A switch telegram is sent via this object if a connected external contact is activated.

Obj. 12: Auxiliary Power – On/Off

A 1-telegram is sent via this object when the required auxiliary power (12V / 24V) is missing from the card reader. Once the power is connected again, the object is re-sent with value 0.

Obj. 13: Additional LED – Scene

This object is only available if a hotel card reader is used and the right parameter selection is set. The additional LEDs on the hotel card reader can be controlled via this object.

The individual object values have the following meaning:

Value 0 → LED All Off

Value 1 → LED Room Alarm

Value 2 → LED Please clean up

Value 3 → LED Do Not Disturb

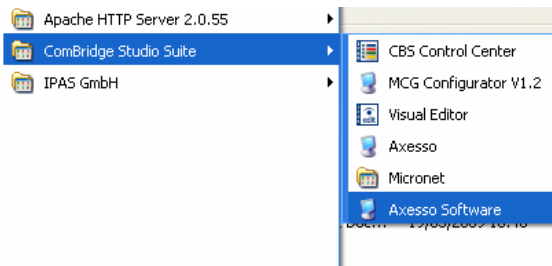
Obj. 14: Alarm LED – On/Off

This object is only available if a hotel card reader is used and the right parameter selection is set. The object can be used to switch on or switch off the Alarm LED via a 1 Bit telegram.

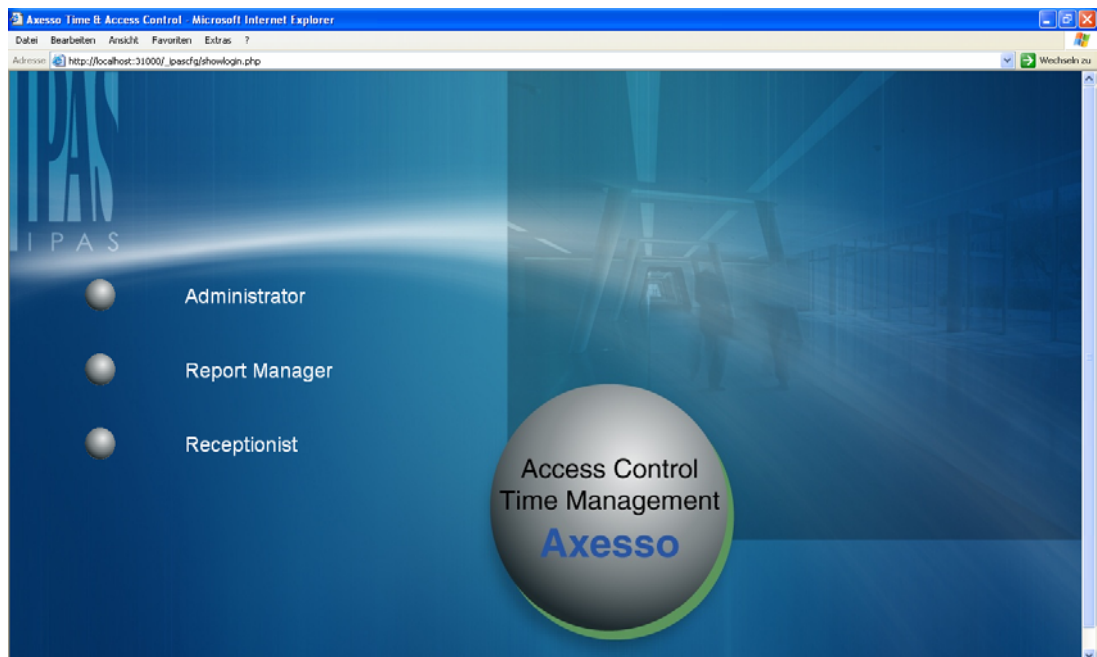
2.4. Setting the communication parameters in the Axesso Software

Once the readers have been configured and commissioned with ETS, the communication parameters as well as the rooms and card readers need to be set up in the Axesso Server Software.

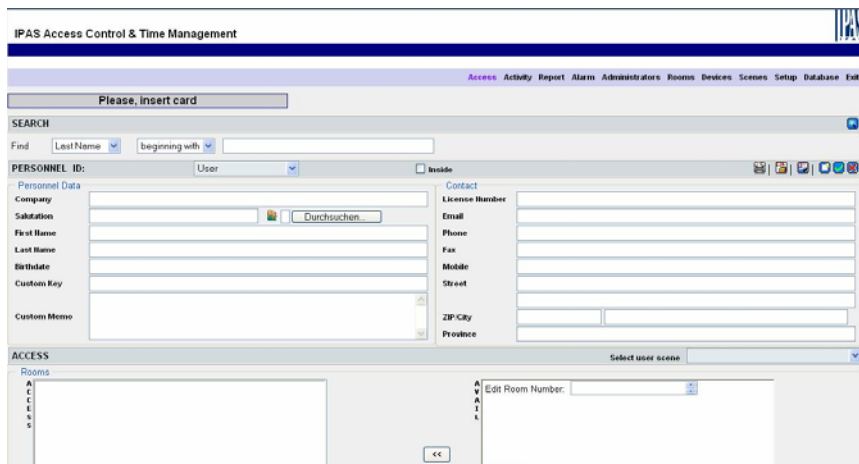
To do this, please start the installed software under the program start directory ComBridge Studio Suite → Axesso Software



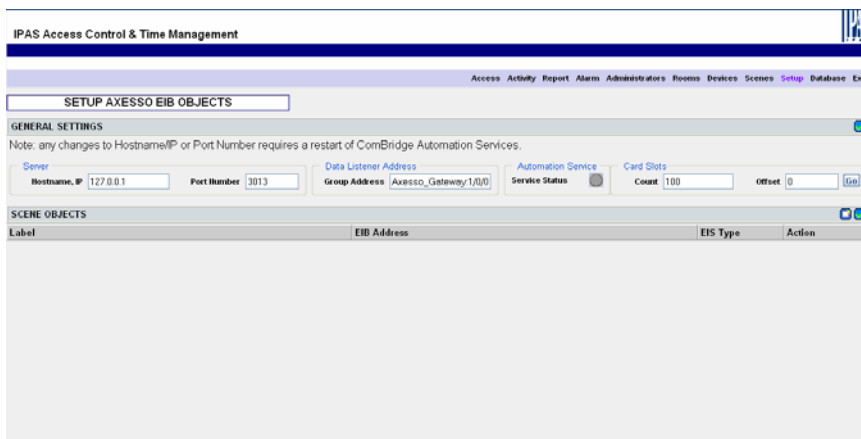
Axesso then automatically starts the Internet Explorer and if the installation has been successful, the log-in-screen appears:



The first time, please log in as administrator by pressing the corresponding button. After the login the software automatically changes to the **Access** site. During the first login the start can take up to 30 seconds as the connected card programming device has to be initialised first.

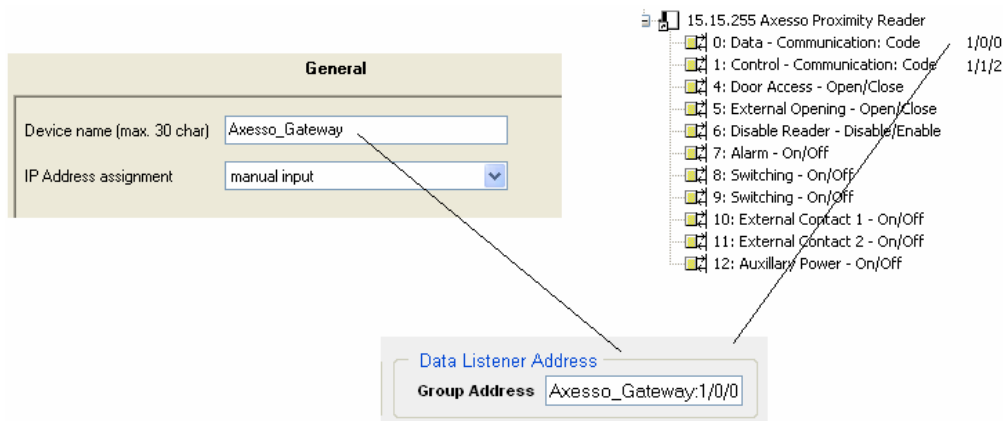


To set the communication parameters, please change to the **Setup** view in the top bar.




The group address and the gateway that are to be used for the communication need to be entered under “Data Listener Address“ in the following format: **<Device Name Gateway>:<Group Address>**.

For the chosen settings example this would be:



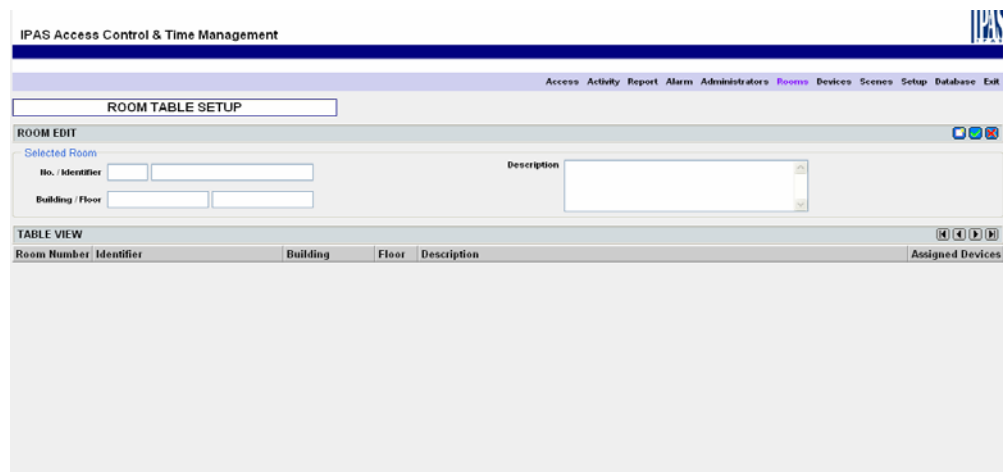
The device name of the gateway arises from the setting in the parameters of the KNXnet/IP gateway. The group address arises from the common group address for all objects number 0 in the connected readers. When displaying the group address, please choose the three-step display format. Use “/” as a separator as usual. Do not insert any spaces between the Device Name, the “.” character and the group address.

After entering the Data Listener Address, please confirm your entry by pressing the **Update Recordset** button  in the upper right-hand corner.


The other fields on the Setup page should only be changed in exceptional circumstances and by an experienced user (for a description of the functions, please see below). In most cases no adjustments or settings are required.

2.5. Setting up rooms in the Axesso Software

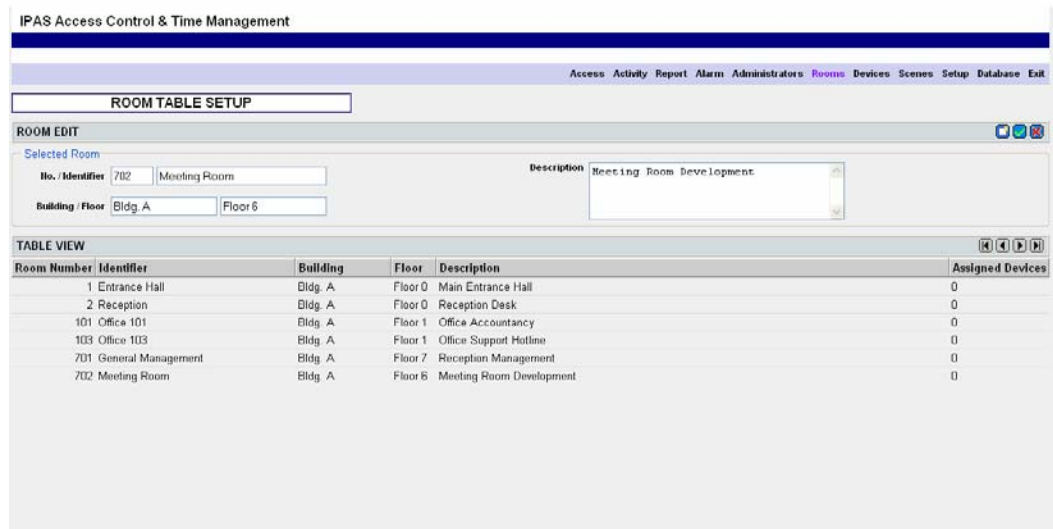
The next step is to set up the rooms in the software. Please change to the Rooms page to do so.



The screenshot shows the 'ROOM TABLE SETUP' page in the IPAS software. At the top, there is a navigation menu with options like 'Access', 'Activity', 'Report', 'Alarm', 'Administrators', 'Rooms', 'Devices', 'Scenes', 'Setup', 'Database', and 'Exit'. The main content area is divided into two sections: 'ROOM EDIT' and 'TABLE VIEW'. The 'ROOM EDIT' section has a 'Selected Room' label and three input fields: 'No. / Identifier', 'Building / Floor', and 'Description'. The 'TABLE VIEW' section shows a table with columns for 'Room Number', 'Identifier', 'Building', 'Floor', 'Description', and 'Assigned Devices'. The table is currently empty.

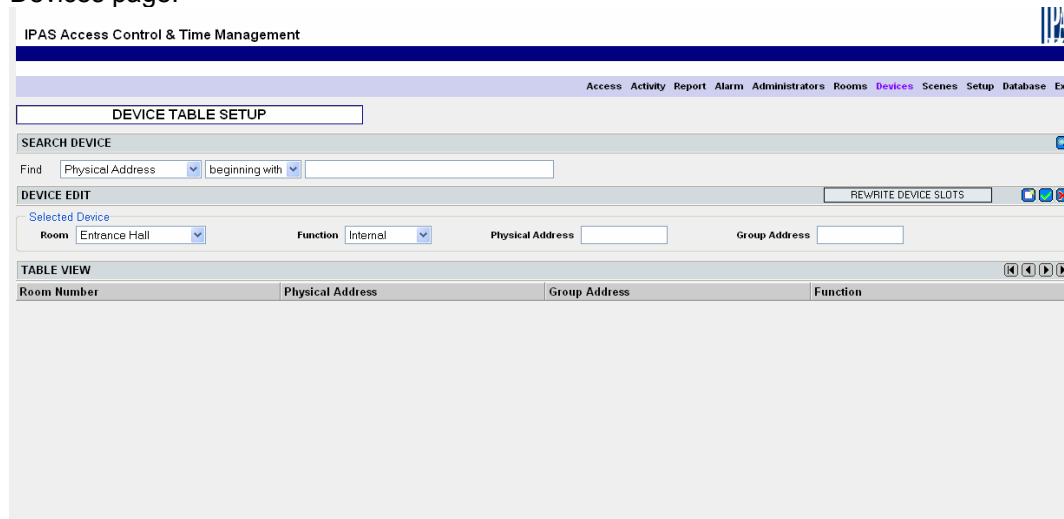
The individual rooms that are to be part of the system need to be set up. For identification and classification purposes the five fields No. / Identifier / Building / Floor / Description are available for each room. Please create all required rooms through entries in the appropriate fields and confirm your entries by pressing the **Update Recordset** button .


For example:



2.6. Setting up readers in the Axesso Software

Once all the required rooms have been created, you can set up the card readers in the software, which will be used to access the rooms. For this purpose please change to the Devices page.



To set up the readers, please choose on the left hand side the room that is to be assigned to the reader. Afterwards set the function, the physical address and the group address (incl. Gateway Device Name) and confirm your entries by pressing the **Update Recordset** button . Please remember that physical addresses are entered in the usual format BB.LL.TT without spaces. The group address entry refers to the control object (Nr. 1) of

each reader. The syntax is analogue to the Data Listener Address with the device name of the KNXnet/IP gateway that is used for the communication at the front:

<Device Name Gateway>:<Group Address>

For example:

For the Function setting you can choose between Internal, Outgoing or Incoming. For standard access applications, please always choose Internal. Only choose the settings Incoming and Outgoing when the readers are also to be used for time recording (see chapter 2.7).

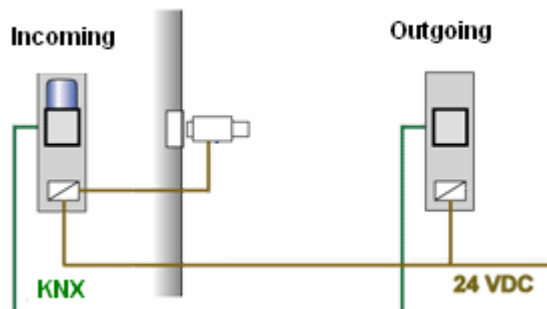
When assigning the readers, please remember that several readers can be assigned to one room (several entries). When access to the room is enabled for a user, the AccessCodes are automatically programmed onto all readers in the room. The following example shows a usual Device page:

Room Number	Physical Address	Group Address	Function
1	15.15.254	Axesso_Gateway:1/1/4	O
1	15.15.255	Axesso_Gateway:1/1/1	I
2	15.15.20	Axesso_Gateway:1/1/12	X
101	12.1.17	Axesso_Gateway:1/4/1	X
103	12.1.42	Axesso_Gateway:1/4/11	X
701	12.7.23	Axesso_Gateway:1/4/201	X
702	12.7.12	Axesso_Gateway:1/4/68	X

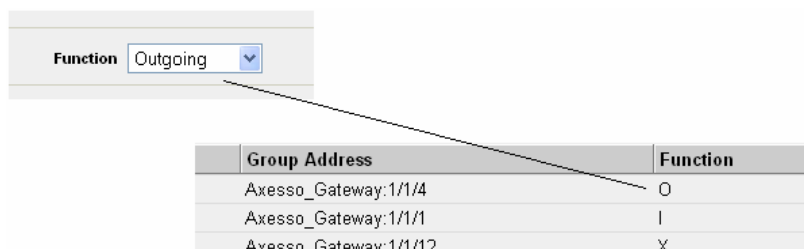
After the communication parameters have been set, the rooms created and the card readers set up, the Axesso System is operational.

2.7. Setting up readers for time management

If the Axesso system is to be used as a time management system, please remember that always at least two readers are required for the recording of time. Coming in and going out are always recorded via separate devices. The incoming reader(s) are usually set up outside the main entry (or possibly additional side entries). These devices can then also be used to open the respective entry. The outgoing reader(s) are usually mounted inside and only serve the purpose of time recording. Only occasionally (e.g. when turnstiles or exit barriers are used) these readers are also used to perform an opening function.



The Axesso Server software makes it possible to calculate the time between coming in and going out. The time recording starts when the incoming reader is first activated and it stops upon going out. Please remember to set up all readers with an incoming or outgoing function as Incoming or Outgoing in the Axesso software. The readers are set on the Devices page of the Axesso Software.

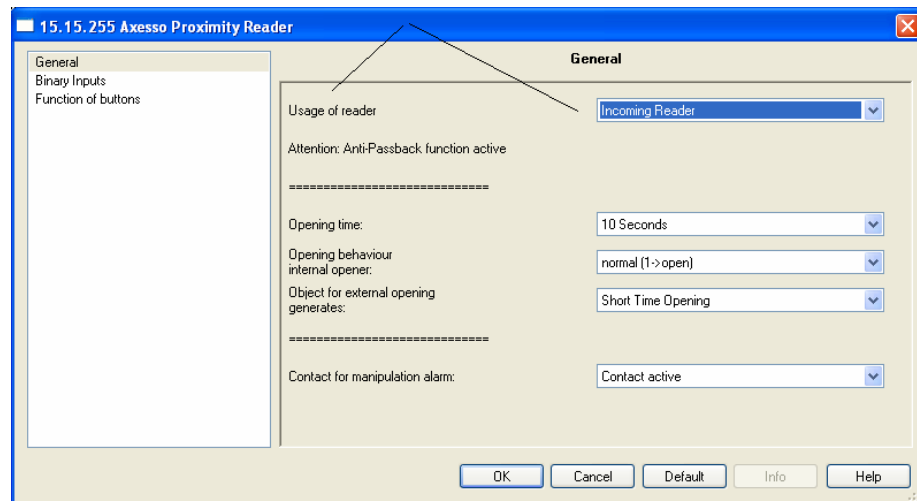


All readers that are set as incoming or outgoing are marked with an "I" or "O" in the list of devices.

2.8. Anti-passback function of the Axesso System

If the system is used for the main entries of larger buildings or premises, it makes sense to activate the anti-passback function of the readers at the entries and exits. In this case the card can only be used for one entry. After the incoming reader has been activated, the card is blocked for further entries. Only once the exit reader has been passed, the card is ready for the next entry. This function is used particularly in combination with turnstiles or similar entry systems. It ensures that a card is not used by several people by passing it across the turnstile.

Of course the anti-passback function can only be used sensibly when both incoming and outgoing readers are installed. Whether a reader is used for entry or exit is determined through the device's ETS parameters.

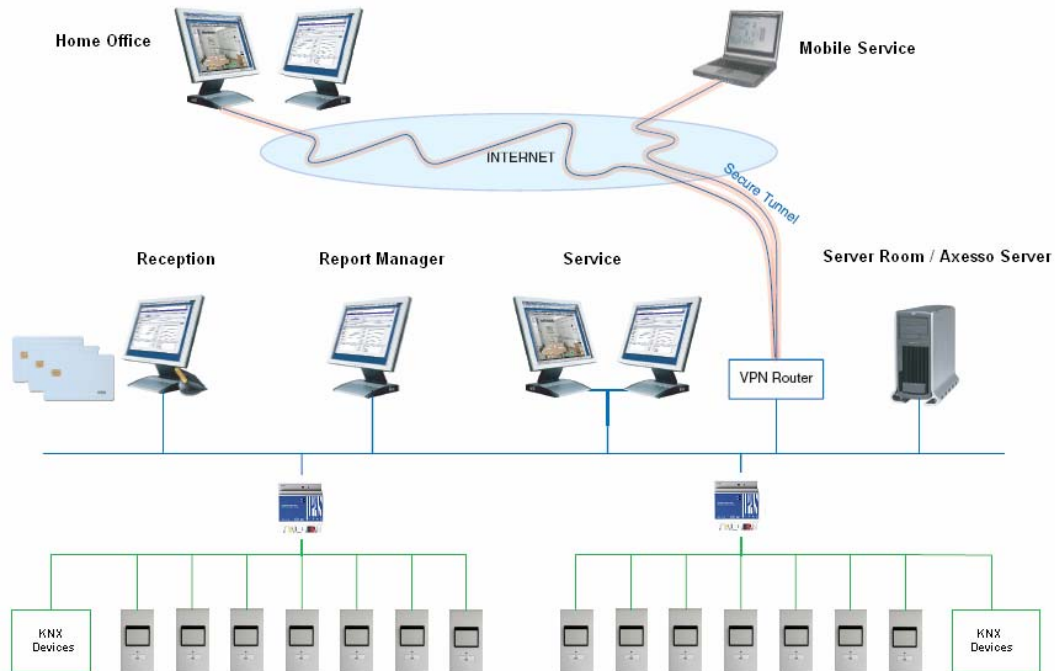


Attention: The setting Incoming- Outgoing-Reader in the ETS Parameters always activates the anti-passback function and bears no relation to the incoming and outgoing function of the time recording. The time recording has to be set in the Axesso Software (see chapter 2.7). Incoming and outgoing functions for time recording are also possible without activating the anti-passback function. Vice versa it is also possible to use only anti-passback without time recording.

2.9. Using the Axesso Software from additional operator stations

The web-based concept of the Axesso software makes it possible to operate the software from additional operator stations. This way the Axesso Server with the sensitive card

holder information can be installed for example in a safe server room whilst the operator stations used to generate the cards or to administer and generate reports can be set up locally for the respective service or administration employees. The operator stations require no specific software (other than possibly device drivers for the connected programming devices) as they directly access the Axesso pages via the standard Internet Explorer and the IP network.

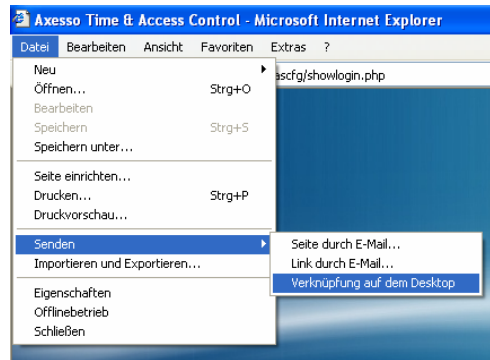


If the Axesso Software is installed and commissioned on the server, Internet Explorer has to be started on the computers that are connected to the network. The Axesso Server is accessed via the server's IP address.

For this purpose, the server's IP address followed by the port number 31000 has to be entered in Internet Explorer in the following format: <http://<IP>:31000/>, for example <http://192.168.11.177:31000/>. Once the entry has been confirmed, the Axesso application starts on the browser.

Attention: In addition to the TCP-Port: 31000 (for HTTP communication) the application also uses TCP-Port: 3013 (for internal communication). Please make sure that both ports are cleared on the network and not blocked by a firewall. Please do clarify this with the system administrator.

To make it easier for the user, the web access can, of course, also be set up directly on the desktop. To create the link from Internet Explorer use the function File → Send → Link to the Desktop.



If the external operator station is also to be used to generate cards, the right programming device (Chipcard or Transponder Card) needs to be connected. As the programming device requires drivers that are not part of the standard Windows system, the Axesso Driver Setup needs to be installed on the operator's PC. To do this, please start the file Driver_Setup on the provided installation CD. The installation program will guide you through the installation process.

3. Operation and function of the Axesso Server Software

The Axesso software is the central component within the Axesso access control and time management system. The software fulfils the following tasks which are described in detail in the next chapters:

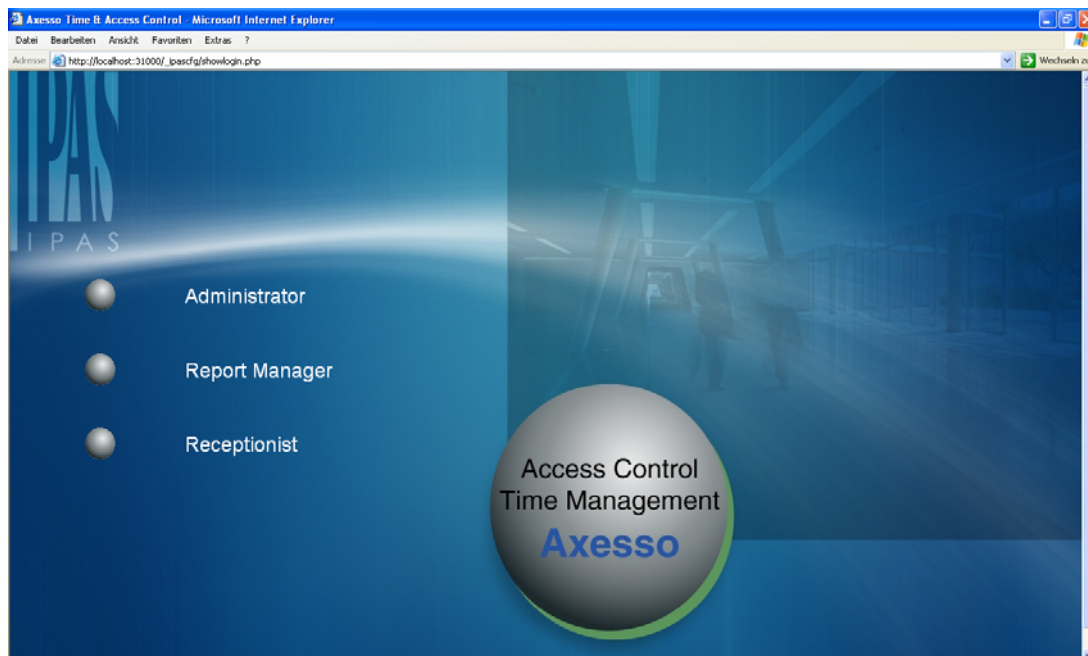
- Setting up and administering users and generators of access cards
- Communication with connected readers, downloading access codes
- Activating scenes assigned to card holders
- Overview of access data and alarms as well as generating reports

For the system administrator there are further requirements that are covered by the software:

- Commissioning the system, setting up rooms and readers
- Creating scenes
- Database maintenance and administration

The Axesso software is realised completely as a browser application. The software is loaded from Internet Explorer via the server's IP address <http://<IP>:31000/> or a link that has been set up by the system administrator.

After the start the software's login screen appears in the browser window.




Depending on your access rights you can now log in as Administrator, Report Manager or Receptionist (possibly other project-specific users have been created).

3.1. Setting up new card holders and generating access cards

When logging in as **Receptionist** or **Administrator** you have the possibility to set up new card holders, to change card holder details and to generate or cancel cards. After the login (potentially after entering a password set up by the Administrator), the software starts the Access page.

The first time the page is loaded, the connected programming device is initialised first. Please wait till the request **Please insert card** appears in the upper part. The initialisation process can take around 30 seconds. The programming device is now operational. If you would like to create a card holder and an access card, insert an empty card into the programming device first (chip cards) or place it onto the device's contact surface (transponder cards). The software checks whether the card is empty. Should the card have been programmed already, the card holder's details are displayed on the Access Screen. If it is a new or cancelled card, no entries appear under the card holder's details and the request **Please insert card** changes to **ACCESS CONTROL**.

You can now enter details in the entry fields under the categories **-Personnel Data-** and **-Contact-**. The entries for **First Name** and **Last Name** are compulsory. All other entries are optional and can remain empty. A cardholder photo can also be assigned via the  symbol and the **Search** function.

A fully completed entry is shown in the following example:

The screenshot shows the 'ACCESS CONTROL' software interface. At the top, there is a search bar with 'Last Name' selected and 'beginning with' as the search criteria. Below this, the 'PERSONNEL ID: 000016' is displayed. The main area is divided into 'Personnel Data' and 'Contact' sections. The 'Personnel Data' section includes fields for Company (American Food Co.), Salutation (Ms.), First Name (Kathrin), Last Name (Door), Birthdate (2), Custom Key (AF-12), and Custom Memo (vegetarian). The 'Contact' section includes License Number (DR12 ZU), Email (kd@amfood.org), Phone (+44-7654-9812), Fax (+44-7654-1001), Mobile (+44-6578212), Street (Portobello Road 34), ZIP/City (KTA 34 S London), and Province (U.K.). A dropdown menu is open over the 'Personnel Data' field, showing a list of user groups: User, Employee, Visitor, Guest, Manager, Service Personnel, Security Personnel, Cleaning Personnel, and Maintenance Personnel.

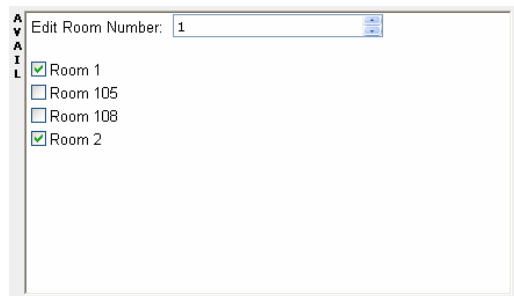
For classification purposes, the card holder can be allocated to a user group. The group allocation is done in the selection window above the **-Personnel Data-** field.

This is a close-up of the dropdown menu from the previous screenshot. It shows the 'PERSONNEL ID: 000016' at the top, followed by the 'Personnel Data' section. The dropdown menu is open, displaying a list of user groups: User, Employee, Visitor, Guest, Manager, Service Personnel, Security Personnel, Cleaning Personnel, and Maintenance Personnel. The 'User' option is currently selected and highlighted in blue.


Apart from the purpose of organisation and order, the group allocation also influences the system function. By default the following special functions are valid for individual card holder groups:

Card holder group	Anti-Passback	Automatic deletion	Extra function for hotel	Use
User	Yes	No	No	User group for general card holders with standard functions
Employee	Yes	No	No	User group employees with standard functions
Visitor	Yes	Yes	No	User group visitors with extra function semi-automatic deletion (s. Chapter 3.10)
Guest	Yes	No	Yes	User group guests with extra functions, only in hotel readers
Manager	No	No	Yes	User group Manager with extra function, no Anti-Passback
Service Personnel	Yes	No	Yes	User group service personnel with extra functions, only in hotel readers
Security Personnel	No	No	Yes	User group security personnel with extra function, no Anti-Passback, extra functions in hotel readers
Cleaning Personnel	Yes	No	Yes	User group cleaning personnel with extra functions in hotel readers
Maintenance Personnel	No	No	Yes	User group maintenance personnel with extra function, no Anti-Passback, extra functions in hotel readers

Once the cardholder's details have been entered and assigned to a user group, you can choose the rooms that are to be accessible. To choose the rooms, you can either click on the desired rooms in the **AVAILABLE** window or you can enter the room number directly in the **Edit Room Number** field.

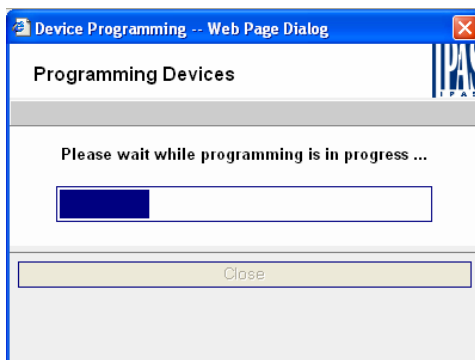


After a selection has been made, the selected rooms are listed in the **ACCESS** window.


To complete the process of user group and room allocation, press the **Update Recordset**-button .

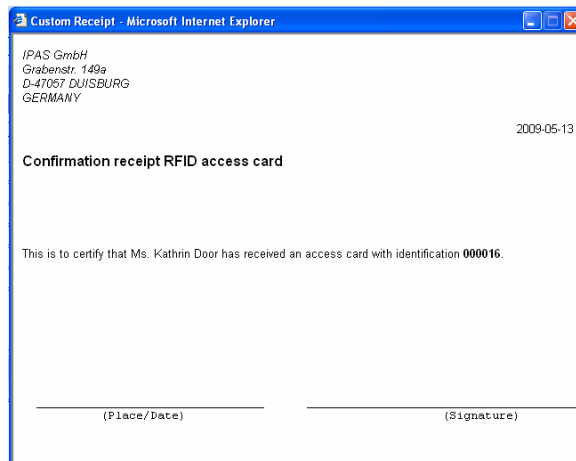
The details are saved in the Axesso database. Each card holder is given a unique personnel ID for administration purposes.

At the same time the Axesso software generates Software Access and CardID-Codes. The software writes the codes onto the card and programmes them onto the connected card readers. Whilst the readers are programmed, a dialogue box shows the status of the programming process.





Once the programming process has been completed successfully, you can close the dialogue box. The access details are now saved both on the card and the card reader. The programmed card now allows access to the corresponding rooms.


To confirm that a card has been issued, you can print a receipt. Please press the **Print Receipt** button  in the function bar on the Access page. The receipt can now be printed.



3.2. Setting up new users without access cards and search function for users

The previous chapter focused on setting up card holders in order to directly issue the corresponding cards. However, it is also possible to only enter the user's details and save them in the database. If a card then needs to be generated at a later point, you can search for the already entered user details via the search function and create the corresponding card.

To set up the details, please create an empty entry sheet first by pressing the **Clear Edit** button . You can now enter the details, as described in chapter 3.1, without a card. Complete the data entry by pressing the **Update Recordset** button .

To create an access card for a user who was set up earlier, place a new (empty) card onto the device and select the already existing user in the database. You can enter different search criteria in the **SEARCH** field (e.g. initial of the surname) and search via the **SEARCH** button .

Select the desired user to create an access card.

If you use the **SEARCH** function without entering any criteria or if you select the “%“-symbol, a list comes up with all database entries.


The entries are displayed in alphabetically ascending order according to surname.

3.3. Assigning card holder scenes


An additional software function makes it possible to assign a specific scene to each card holder. Specific telegrams are sent via the KNX bus when the card is placed onto the device. These may, for example, create a certain light scene. The different scenes are set by the system administrator (see chapter 4.9). The allocation of scenes to a card holder, however, is done via a selection box in the Access window when the card is created.

3.4. Changing card holder details


If you would like to change the details of a card holder or extend the card holder's access rights (access to additional rooms), the changes can also be made on the Access screen. If you have the card holder's card at hand, place it onto the connected programming device. The software recognises the card holder and displays the holder's details on the screen. You can now directly make the changes (e.g. new phone number or address,

different access rights). Press the **Update Recordset** button  to confirm the changes in the database. If the access rights have been modified, the card readers are also re-programmed. A dialogue box with information about the status of the programming process appears. The dialogue box needs to be closed once the programming process has been completed.


Data can also be modified without the existing card. You can search for and select the user whose details you would like to change via the software's search function (see above).

Once the details have been changed, press the **Update Recordset** button .


3.5. Cancelling access cards

To cancel a card, place it onto the programming device. The card holder's details are displayed on the Access screen. Pressing the **Release User Access** button  removes the access codes from the readers and deletes the card content. The card now has no longer access to the rooms.

The card holder's details remain in the database and can be selected again in the future to issue a new card. Only the system administrator can remove the card holder's details completely from the database (see chapter 4.2).

Access details can also be deleted without placing the card onto the programming device. In this case, select the user via the search function and press the **Release User Access** button . In this case the card still exists and is not empty. It still contains the programmed access codes. However, as the codes have been removed from the readers, the card no longer has any access function.

3.6. Generating identical card copies for a user

In some cases, a user may require several functionally identical cards. A second card can easily be created via the **Reforce Cardwrite** button . Once the first card has been created (see above), simply place another empty card onto the programming device. Use the search function to select the right user and press the **Reforce Cardwrite** button. This creates a second card identical to the first one. Please remember that when a card is cancelled, the copy also becomes invalid.

3.7. Axesso Software protocol function and activity report

All successful processes in the system are stored in an activity report. To display the report you need to be logged in as **Report Manager** or **Administrator**.

IPAS Access Control & Time Management

Access Activity Report Alarm Exit

ACTIVITY VIEW

SEARCH ACTIVITY

Find: Last Name beginning with []

Period: None Last Month Last Week
 This Month This Week Today

ACTIVITY EDIT

New Time Record

Date: [] Time: [] Action: Incoming

TABLE VIEW Page 1 of 1

Time	First Name	Last Name	Room No.	Room Id.	Device	Action	??
2009-05-13 17:18:54	Susan	Sting	1	Room 1	15.15.255 A		REVERSE
2009-05-13 17:18:53	Susan	Sting	1	Room 1	15.15.255 A		REVERSE
2009-03-19 14:56:51	Max	Gödel	2	Room 2	15.15.254 A		REVERSE
2009-03-19 14:56:48	David	Grey	2	Room 2	15.15.254 A		REVERSE
2009-03-19 14:56:44	Anna	Franca	1	Room 1	15.15.255 X		REVERSE
2009-03-19 14:56:43	Anna	Franca	2	Room 2	15.15.254 A		REVERSE
2009-03-19 14:56:38	Marie	Curie	1	Room 1	15.15.255 X		REVERSE
2009-03-19 14:56:35	Kathrin	Door	1	Room 1	15.15.255 X		REVERSE
2009-03-19 14:56:31	Kira	Brown	1	Room 1	15.15.255 X		REVERSE
2009-03-19 14:56:28	Susanne	Anoine	1	Room 1	15.15.255 X		REVERSE

All activities that were performed with valid cards are listed in the bottom part of the page. The activities are sorted in chronologically descending order, i.e. the last activity of a valid card is shown at the top. Apart from the exact time of the access, the list also displays the first and surname of the card holder as well as some details of the card reader that was used for the access. This makes it possible to fully trace the usage of each room.


The displayed list can be limited to certain users or time periods via the **SEARCH** function.


The entire activity list can be exported into a Microsoft EXCEL table via the csv Export

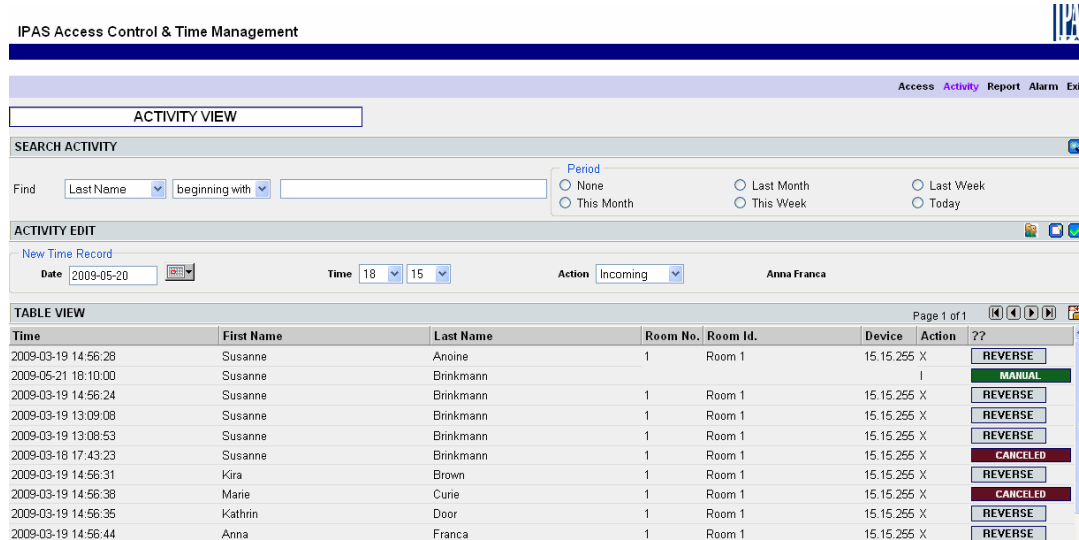
Activity Data button

	A	B	C	D	E	F	G	H	I	J
	stamp	firstname	lastname	room	roomid	device	act	reversal	name	scarduser_id
2	13/05/2009 17:18	Susan	Sting	1	Room 1	15.15.255	A			6
3	13/05/2009 17:18	Susan	Sting	1	Room 1	15.15.255	A			6
4	19/03/2009 14:56	Max	Gödel	2	Room 2	15.15.254	A			18
5	19/03/2009 14:56	David	Grey	2	Room 2	15.15.254	A			8
6	19/03/2009 14:56	Anna	Franca	1	Room 1	15.15.255	X			17
7	19/03/2009 14:56	Anna	Franca	2	Room 2	15.15.254	A			17
8	19/03/2009 14:56	Marie	Curie	1	Room 1	15.15.255	X			20
9	19/03/2009 14:56	Kathrin	Door	1	Room 1	15.15.255	X			16
10	19/03/2009 14:56	Kira	Brown	1	Room 1	15.15.255	X			9
11	19/03/2009 14:56	Susanne	Anoine	1	Room 1	15.15.255	X			23
12	19/03/2009 14:56	Susanne	Brinkmann	1	Room 1	15.15.255	X			2
13	19/03/2009 13:09	Susanne	Brinkmann	1	Room 1	15.15.255	X			2
14	19/03/2009 13:08	Susanne	Brinkmann	1	Room 1	15.15.255	X			2
15	18/03/2009 17:43	Susanne	Brinkmann	1	Room 1	15.15.255	X			2

As the system's time management function is also administered via the time entries for each activity, the entries can be edited manually or deleted retrospectively. To edit or

delete an entry, click on the entry in the list to select it. The name of the selected entry appears in the top bar **ACTIVITY EDIT**. Press the **Clear Edit** button  to remove the entry completely from the time recording. The word **CANCELLED** now appears behind the entry in the list.

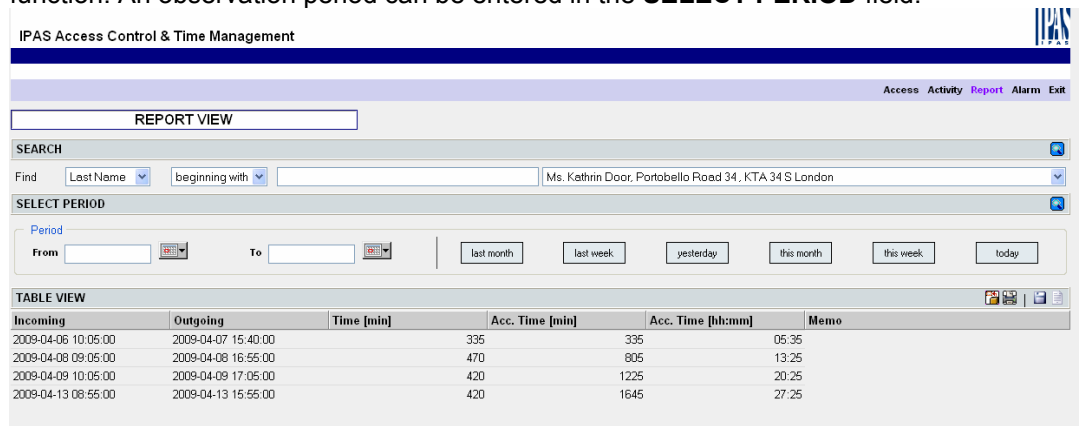
To subsequently edit any entry for time recording purposes, set the time and date in the **ACTIVITY EDIT** bar and press the **Post New Time Record** button . In this case the entries are marked with **MANUAL**.




Time	First Name	Last Name	Room No.	Room Id.	Device	Action	??
2009-03-19 14:56:28	Susanne	Anoine	1	Room 1	15.15.255 X		REVERSE
2009-05-21 18:10:00	Susanne	Brinkmann			I		MANUAL
2009-03-19 14:56:24	Susanne	Brinkmann	1	Room 1	15.15.255 X		REVERSE
2009-03-19 13:09:08	Susanne	Brinkmann	1	Room 1	15.15.255 X		REVERSE
2009-03-19 13:08:53	Susanne	Brinkmann	1	Room 1	15.15.255 X		REVERSE
2009-03-18 17:43:23	Susanne	Brinkmann	1	Room 1	15.15.255 X		CANCELLED
2009-03-19 14:56:31	Kira	Brown	1	Room 1	15.15.255 X		REVERSE
2009-03-19 14:56:38	Marie	Curie	1	Room 1	15.15.255 X		CANCELLED
2009-03-19 14:56:35	Kathrin	Door	1	Room 1	15.15.255 X		REVERSE
2009-03-19 14:56:44	Anna	Franca	1	Room 1	15.15.255 X		REVERSE

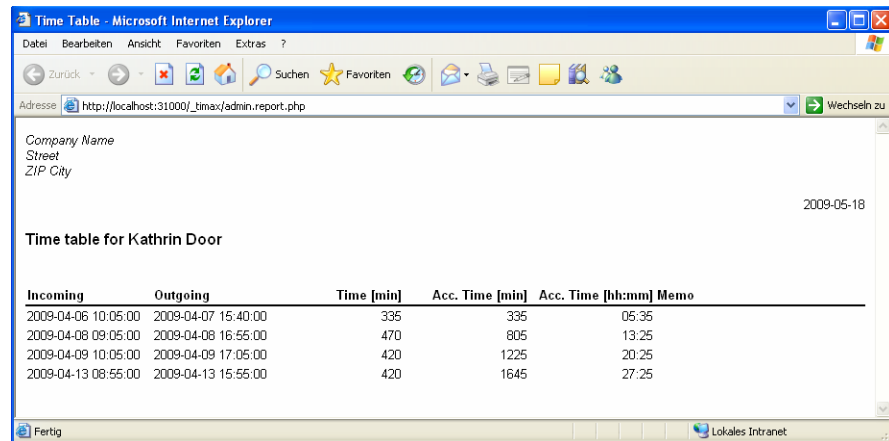
3.8. Recording and calculating usage times

As all activities of a card holder are marked with a time stamp it is possible to calculate the usage/working hours between activation of the incoming and outgoing readers and to accumulate them to a total working time. This Axesso Software time management function is displayed on the **Report** screen. The desired card holder can be selected via the search function. An observation period can be entered in the **SELECT PERIOD** field.



Incoming	Outgoing	Time [min]	Acc. Time [min]	Acc. Time [hh:mm]	Memo
2009-04-06 10:05:00	2009-04-07 15:40:00		335	335	05:35
2009-04-08 09:05:00	2009-04-08 16:55:00		470	805	13:25
2009-04-09 10:05:00	2009-04-09 17:05:00		420	1225	20:25
2009-04-13 08:55:00	2009-04-13 15:55:00		420	1645	27:25

In the table of working hours shown below the daily start and finish times as well as the daily working time and the working time accumulated in the observation period are displayed for an individual user. These details can be directly sent to a printer via the Print Table button .




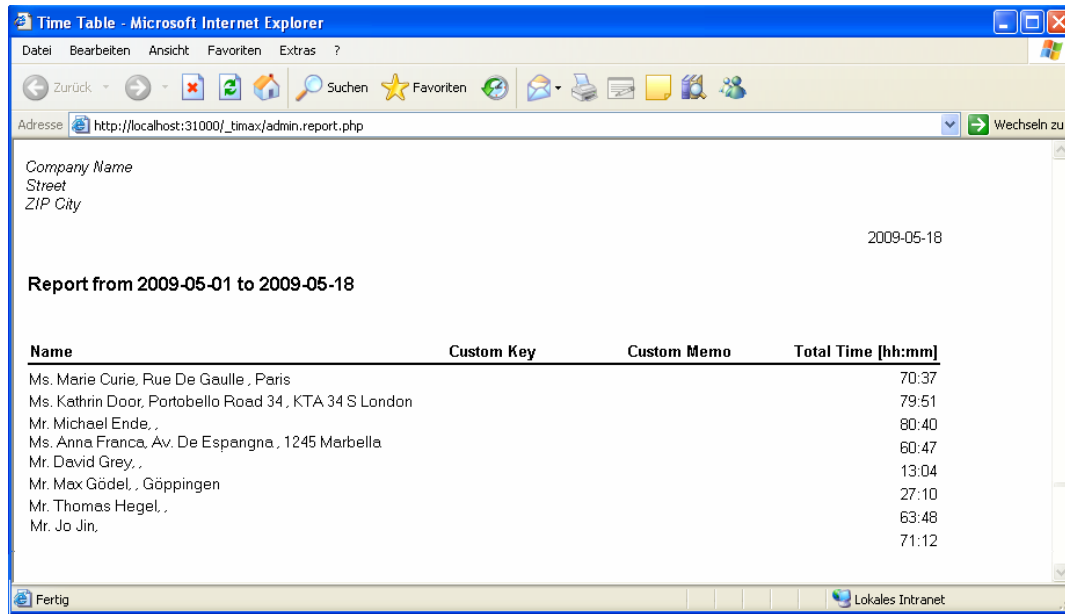
Incoming	Outgoing	Time [min]	Acc. Time [min]	Acc. Time [hh:mm]	Memo
2009-04-06 10:05:00	2009-04-07 15:40:00	335	335	05:35	
2009-04-08 09:05:00	2009-04-08 16:55:00	470	805	13:25	
2009-04-09 10:05:00	2009-04-09 17:05:00	420	1225	20:25	
2009-04-13 08:55:00	2009-04-13 15:55:00	420	1645	27:25	

They can also be exported to an EXCEL csv file via the Export Data button .

	A	B	C	D	E	F	G
1	incoming	outgoing	minutes	summin	hh	mm	
2	06/04/2009 10:05	07/04/2009 15:40	335	335	5	35	
3	08/04/2009 09:05	08/04/2009 16:55	470	805	13	25	
4	09/04/2009 10:05	09/04/2009 17:05	420	1225	20	25	
5	13/04/2009 08:55	13/04/2009 15:55	420	1645	27	25	
6							
7							
8							

The EXCEL file can then be edited for further analysis.

In addition to the detailed display of the recorded working hours for each user, it is also possible to display the accumulated times (without details) for all users on an overview page. This can also be sent directly to print or exported into an EXCEL csv file. To print, press the **Print Summary** button .




Company Name
Street
ZIP City

2009-05-18

Report from 2009-05-01 to 2009-05-18

Name	Custom Key	Custom Memo	Total Time [hh:mm]
Ms. Marie Curie, Rue De Gaulle, Paris			70:37
Ms. Kathrin Door, Portobello Road 34, KTA 34 S London			79:51
Mr. Michael Ende, .			80:40
Ms. Anna Franca, Av. De Espangna, 1245 Marbella			60:47
Mr. David Grey, .			13:04
Mr. Max Gödel, Göppingen			27:10
Mr. Thomas Hegel, .			63:48
Mr. Jo Jin,			71:12

To create the EXCEL csv data, press the **Export Summary** button .

	A	B	C	D	E	F	G	H
1	name	customkey	custommemo	begin_date	end_date	hh	mm	
2	Ms. Marie Curie		""	2009-05-01	2009-05-18	70	37	
3	Ms. Kathrin Door		""	2009-05-01	2009-05-18	79	51	
4	Mr. Michael Ende		""	2009-05-01	2009-05-18	80	40	
5	Ms. Anna Franca		""	2009-05-01	2009-05-18	60	47	
6	Mr. David Grey		""	2009-05-01	2009-05-18	13	4	
7	Mr. Max Gödel		""	2009-05-01	2009-05-18	27	10	
8	Mr. Thomas Hegel		""	2009-05-01	2009-05-18	63	48	
9	Mr. Jo Jin		""	2009-05-01	2009-05-18	71	12	
10								

3.9. Protocolling unauthorised access attempts


If a card holder attempts to access a room to which he has no authorisation, an alarm entry is generated in the alarm list. Unauthorised access attempts are protocollod with a time stamp, name and room data.

Time	First Name	Last Name	Room No.	Room Id.	Device	Action
2009-05-13 17:18:54	Susan	Sting	1	Room 1	15.15.255	A
2009-05-13 17:18:53	Susan	Sting	1	Room 1	15.15.255	A
2009-03-19 14:56:51	Max	Gödel	2	Room 2	15.15.254	A
2009-03-19 14:56:48	David	Grey	2	Room 2	15.15.254	A
2009-03-19 14:56:43	Anna	Franca	2	Room 2	15.15.254	A

3.10. Semi-automatic deletion of card holder details ("Reminder function")

For data protection reasons it may be necessary to delete the details of some users after a certain time period. For this purpose the software offers a "reminder function". This function reminds the operator of data which have been stored on the database for longer than the allowed storage period. By default this function only applies to card holders in the user group **Visitor**. The pre-set time period, after which a reminder is created, is 90 days. If the software recognises card holders in the **Visitor** group, who have been set up more than 90 days ago, a reminder window appears.

State	Name	Card Created	Last Access
<input type="checkbox"/>	Max Gödel	2009-03-19 14:55:19	2009-03-19 14:56:51
<input type="checkbox"/>	David Grey	2009-03-19 14:54:59	2009-03-19 14:56:48
<input type="checkbox"/>	Kira Brown	2009-03-19 14:52:49	2009-03-19 14:56:31
<input type="checkbox"/>	Susanne Anoine	2009-03-19 14:51:02	2009-03-19 14:56:28
<input type="checkbox"/>	Susanne Brinkmann	2009-03-19 13:01:21	2009-03-19 14:56:24






This list can also be called up manually at any time via the **Clean activities** button  on the software's **Activity** page.

The displayed list shows both the date the card was created and the date the card was last used.

The list shows all "expired" users in the **Visitor** group independent of whether the user still has a valid card or whether the card has already been cancelled.

The **State** symbol in front of the card holder's name provides quick and easy information.

The symbols have the following meaning:

-  Card has already been cancelled
-  Card exists and has been used today
-  Card exists and was used yesterday
-  Card exists and has not been used for two weeks
-  Card exists and has never been used






If the entries refer to users whose cards have already been cancelled (symbol ) , the users can be manually selected by clicking on the selection box:

TABLE VIEW			
<input type="checkbox"/>	<input checked="" type="checkbox"/>	State	Name
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Max Gödel
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		David Grey
<input type="checkbox"/>	<input checked="" type="checkbox"/>		Kira Brown
<input type="checkbox"/>	<input checked="" type="checkbox"/>		Suzanne Ann

Pressing the **Remove selected items** button  removes all details that belong to the user (personal details and activities) from the database. If the “expired“ user still has a valid card, this needs to be cancelled first on the **Access** screen (see chapter 3.5) before a selection is possible.


The reminder function for automatic deletion is only meant to remind the operator. The details that are to be deleted need to be confirmed manually through the individual selection process. **Please remember to comply at all times with country-specific data protection requirements. The software operator has to ensure that all legal requirements are met and needs to instruct the operating personnel accordingly.**

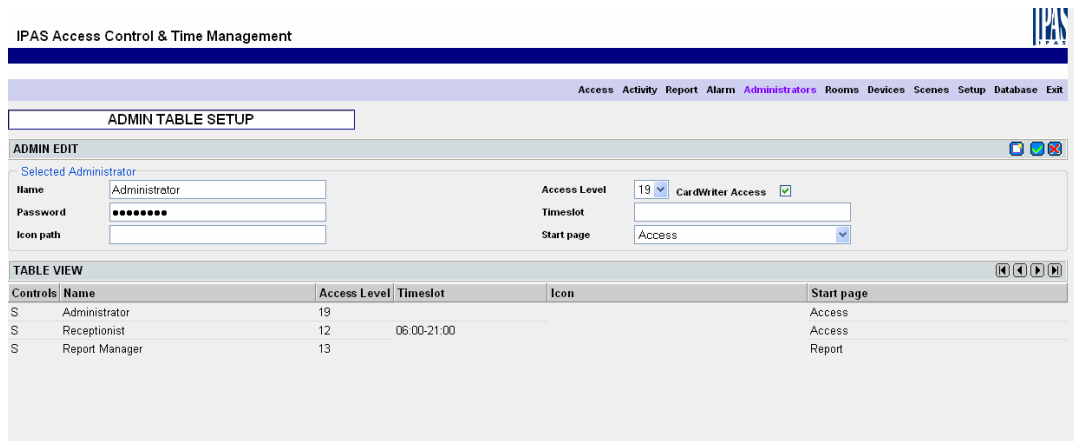
4. Additional Axesso Software functions for the system administrator

In addition to the functions for the **Receptionist** and **Report manager**, the software contains important functions for the system administrator.

The functions for communication, room and reader set up, that are necessary for commissioning, were already explained in detail in chapters 2.4 to 2.6. The following chapters therefore only focus on the additional settings that are accessible to the system administrator.

4.1. Setting up additional operators and creating passwords

By default the Axesso Software is installed for three operators: Administrator, Report Manager and Receptionist. The names and operator settings can be modified on the **Administrator** screen. Each operator can be allocated a password via the **password** field, which will have to be entered for future logins. The access can also be limited in terms of time via the **Timeslot** field. Other specific settings can be performed via the **Access Level**, **Cardwriter Access** and **Start page**. All changes need to be confirmed with the **Update Recordset** button. 




The screenshot shows the 'ADMIN TABLE SETUP' window. At the top, there is a navigation menu with options: Access, Activity, Report, Alarm, Administrators, Rooms, Devices, Scenes, Setup, Database, and Exit. The main area is titled 'ADMIN EDIT' and contains a form for editing an administrator. The form has the following fields:

- Name:** Administrator
- Password:** A masked field with 10 dots.
- Icon path:** An empty text field.
- Access Level:** A dropdown menu set to '19'.
- CardWriter Access:** A checked checkbox.
- Timeslot:** An empty text field.
- Start page:** A dropdown menu set to 'Access'.

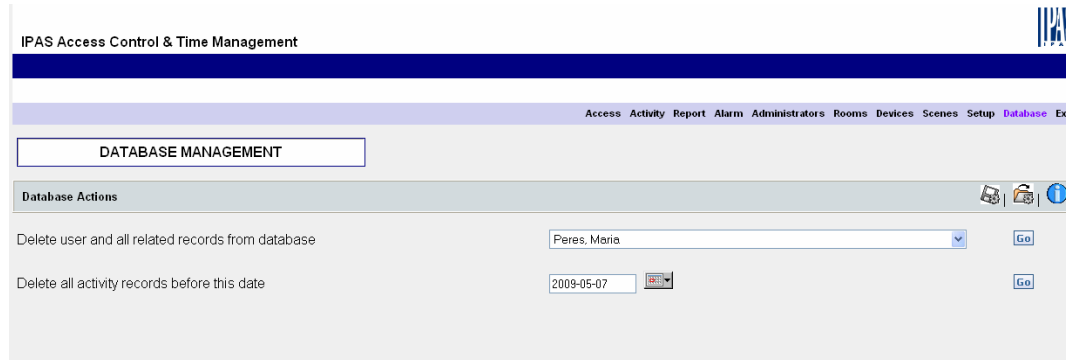
Below the form is a 'TABLE VIEW' section with a table listing the current administrators:

Controls	Name	Access Level	Timeslot	Icon	Start page
S	Administrator	19			Access
S	Receptionist	12	06:00-21:00		Access
S	Report Manager	13			Report

If additional operators are required, these can be added on the **Administrator** screen. To create a new operator, please generate an empty entry via the **Edit new recordset** button. Enter the name and additional settings for the operator in the **ADMIN EDIT** field and confirm your entries by pressing the **Update Recordset** button . The next time the system is started, the additional operator can log in.

4.2. Removing users and activities from the database

The system administrator has additional options via the **Database** page to remove card holders and activities.



Via the first function, whole users with all corresponding activities can be selected and removed from the database. **Attention: Using this function only removes the entries from the database. It does not make the corresponding card invalid. Please make sure that the card is cancelled first (see chapter 3.5).**

Especially in systems with many card holders, the number of entries in the activity report can become very large. To reduce the amount of data, activities up to a certain date can be deleted. To delete the activities use the second function on the **Database** page.

4.3. Data storage and backups

As with all IT systems, it is strongly recommended to regularly create backups of card holder and access data and archive them. To create a backup of the Axesso database,

use the **Backup database** button . The backup files are stored in the directory `C:\Programme\IPAS GmbH\ComBridge Studio Web\AxessoWeb\backup\db` under the name `axessodb<date><time>.fbk`.


Please remember that all data (card holders and activities) is backed up. This particularly applies to data in the user group **Visitor**. Should the country-specific data protection laws only permit a temporary storage of user data, the software operator needs to ensure that the backup files are deleted accordingly.

For security reasons the restoration of the database from the backup files cannot be performed on the Axesso Web surface. Please use File Explorer to create a copy of the required file (usually the one with the latest date) from the backup directory `C:\Programme\IPAS GmbH\ComBridge Studio Web\AxessoWeb\backup\db`. Rename the copied file as `axessodb.fbk`. Then change to the directory `C:\Programme\IPAS GmbH\ComBridge Studio Web\AxessoWeb\bin` and use a double click to start the file `restore.bat`. The current database is automatically replaced by the backup data.

4.4. Complete deletion of the database

To create an empty database you can also use the restore and backup process described in chapter 4.3. In this case all you need to do before using the function `restore.bat` is to rename the file `axessodb_empty.fbk` to `axessodb.fbk`.

4.5. Database status information

To obtain information about the current status of the database, press the **Get Database Info** button  on the **Database** screen.



The screenshot shows a web browser window titled "Access Control & Time Management - Microsoft Internet Expl...". The page content includes the IPAS logo and a section titled "Database Info" with the following data:

Database Info	
Total slots	2000
Free slots	1987
Cards in use	13
Guest cards in use	5

4.6. Setting the time period for semi-automatic deletion

Chapter 3.10 focused on the "reminder function" and the semi-automatic deletion of card holders and activities for the user group **Visitor**. By default the time period after which a reminder is generated is 90 days.

Depending on a country's or system operator's data protection requirements other time periods can be set. The period is set in the file `_timax.cfg.php` in the following directory:

```
C:\Programme\IPAS GmbH\ComBridge Studio Web\AxessoWeb\_timax .
```

To change the time period please open this file with the editor and change the following line, for example from 90 to 30 days: `$GUEST_EXPIRE_DAYS = 90;`


4.7. Setting the display language

Following the installation, the Axesso Software is displayed in English. Via the language selection button in the `CBWebDev.config.php` file in the directory `c:\Programme\IPAS GmbH\ComBridge Studio Web\AxessoWeb_custom` the software can be changed to other languages. At present the following languages are available:

- English → Entry en
- German → Entry de
- Spanish → Entry es
- Dutch → Entry nl

Other languages are currently in preparation. To change the language, open the above file with the editor and modify the following entry: `$CBWD_LANG = "en";` After this has been saved and the computer re-started, Axesso appears in the selected language.

4.8. Export and Import of card holder details via EXCEL files

The advanced operator (system administrator) has the option to not only enter card holders on the entry mask of the Axesso Software but also to import users from an EXCEL list or to export user details. Import and export are performed via a file in the EXCEL csv format with the separator “;”. The export can be performed at any time from the software’s Access page via the **Export User Data** button .

The user details can then be saved in a csv file or (if MS-EXCEL is available on the operator station) directly displayed.

The EXCEL file shows the details from the database in the following format:


	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
	scarduser_id	salut	lastname	firstname	birthdate	street1	street2	pcode	city	province	phone	fax	mobile	email	custommemo	cu	scardgroup	company	
1	1	Mr.	Mertz	Werner														3	Walter & Co
2	2	Mr.	Müller	Fritz Walter														3	Walter & Co
3	3	Mr.	Page	Jimmi														0	American Frie
4	4	Ms.	Sting	Susan														0	Teleo Lmtd.
5	5	Mr.	Hegel	Thomas														5	IPAS GmbH
6	6	Mr.	Grey	David														3	Brown & Gree
7	7	Ms.	Brown	Kira		Av. Cherbourg		ZUT34L	London	U.K.								3	Brown & Gree
8	8	Mr.	Miller	Peter		Bondstreet 12		KTU12L	Manchester	U.K.								3	Brown & Gree
9	9	Mr.	Jin	Jo														0	China Import I
10	10	Ms.	Lee	Peggy														0	China Import I
11	11	Mr.	Olsen	Fred														0	China Import I
12	12	Mr.	Manne	Manfred		Fuchsweg 12		34040	Espelkamp	Germany								0	
13	13	Mr.	Marx	Karl		Leninstrasse 1		10230	Berlin	Germany								0	
14	14	Ms.	Door	Kathrin		Portobello Road 34		KTA 34 5	London	U.K.								0	
15	15	Ms.	Franca	Anna		Av. De Espangna		1245	Marbella	Spain								1	
16	16	Mr.	Gödiel	Max					Göppingen									2	IPAS GmbH
17	17	Mr.	Maxwell	Geroge														0	IPAS GmbH
18	18	Ms.	Curie	Marie		Rue De Gaulle			Paris	France								4	Gopin France
19	19	Mr.	Mercator	Bernd						Germany								4	Gopin France
20	20	Ms.	Peres	Maria														3	
21	21	Ms.	Anoine	Susanne														3	
22	22	Mr.	Schmidt	Herbert														3	
23	23	Mr.	Ende	Michael														0	
24	24	Ms.	Simon	Tanja														0	
25																			
26																			
27																			

Within the list you can now add or modify data or add new users at the end of the list. To assign users to the cards and codes, use the **scarduser_id**. This value must never be changed. Added users at the end of the list must not be given a **scarduser_id**. This entry must remain empty for new users.

Once the list has been modified or extended the file has to be saved again as a csv file with separators. The user group is set via a number from 0 to 8 in the **scardgroup** in column Q.

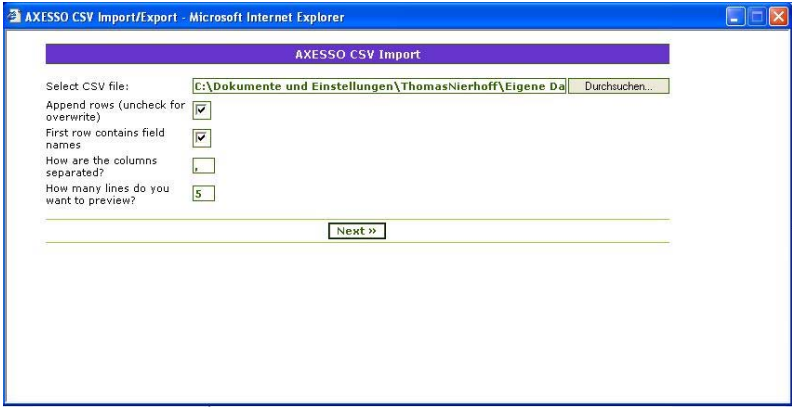
The following allocation applies:

- USER 0
- EMPLOYEE 1
- VISITOR 2
- GUEST 3
- MANAGER 4
- SERVICE 5
- SECURITY 6
- CLEANING 7
- MAINTANANCE 8

The card holder details can be imported via the **Import User Data** button  on the **Database** page.

Attention: The import overwrites existing card holder details irrevocably. Therefore only use the function if you have thoroughly checked all data entered. We strongly recommend you create a security backup of the database before the import (see chapter 4.3).

After pressing the button, the following window appears:

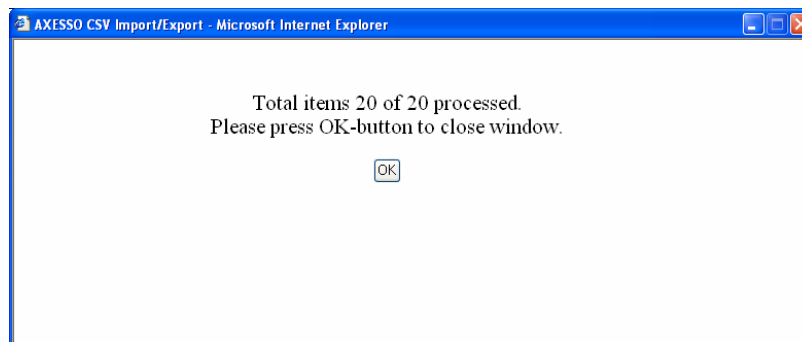


You can now select the file, which you would like to import, in the Import window. If you select a csv file that contains all user details and which is to overwrite the current data in

the database, remove the flag in the Append rows box. It is also possible to only add data via the csv export. In this case please use an EXCEL file which only contains the header and new user details. The fields in the **SCARDUSER_ID** column must then remain empty. The software creates its own ID during the import. If you would like to import a csv file which only adds users, please make sure you tick the Append Rows box.

Attention: During the import data is not double-checked. Please therefore make sure that all settings are correct before pressing the Next button. If the Append-Flag is set and a previously exported csv file is imported again, all entries are doubled as the data has been appended.


Once all windows have been confirmed with **next>>** the following message appears.




Press the **O.K.** button to complete the import.

4.8 Setting user scenes


The software offers the opportunity to allocate a specific user scene to each card holder. When the card is placed on the device, the KNX bus sends specific telegrams, e.g. to set a light scenario. The scenes are assigned when the cards or card holders are set up (see chapter 3.3). Defining and creating the scenes requires knowledge of the connected KNX system and therefore has to be done by the system administrator.


To create the scenes, first go to the Setup window and set up the group addresses of all objects that are to be used in the scenes. Create a new object by pressing the **Add new scene object** button . Enter the object name in the **Label** field (we recommend you use the same name as in the ETS.) Enter the group address and the gateway in the field **EIB-Address**. Use the already known syntax <Device Name Gateway>:<Group Address>. In the field EIS Type enter the object type according to the ETS (e.g. EIS1 for 1Bit and EIS6 for 1Byte).

The data cannot be imported from the ETS.

Confirm the objects entered by pressing the **Update scene object** button .

Once all objects and group addresses have been set up, you can create the individual scenes on the **Scenes** screen. First set up the name of the scene via **Add New Scene** in the **Scene Name** field.

Use the **Add new scene part** button  to assign each scene objects from the object table created on the **Setup** screen. Use the **Room Identifier** to determine which reader is to activate the object. In addition to the compulsory entries object and object value, you can also set a time period in which the object is to be sent. If the room is accessed outside the selected time period, the object is not sent.

All entries in the fields on the **Scenes** screen need to be confirmed by pressing the **Update scene parts** button .

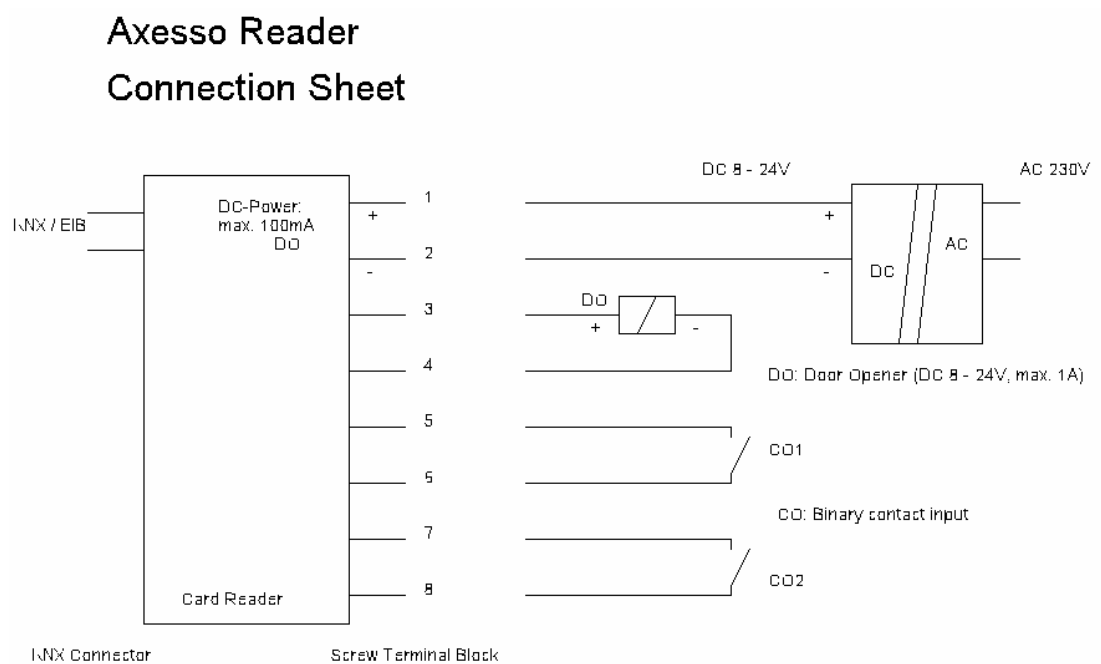
If all scenes have been set up, they can be assigned to individual card holders when the cards are generated. Individual settings can hence be automatically performed as soon as the card reader is activated.

Attention: The scene objects are directly created and sent from the Axesso Software. For the scene modus to function it is therefore necessary that the Axesso Server is in operation and that a network connection exists.

5. Appendix

5.1. Diagram for the connection of card readers

The following diagram shows the connection of the card readers. The readers are connected via a bus connector (KNX) on the back and via a screw block with 8 terminals.



5.2. Frequent problems and their causes

Problem:

- The setup cannot be installed.

Possible causes:

- Your system does not meet the necessary system requirements (outdated operating system). Please use a permitted operating system: Windows 2000, Windows XP
- An older version of the software is already installed on your PC. Please un-install the old version.

Problem:

- After the program start no cards can be read or created. On the **Access** screen the message "Reader connect failed" appears

Possible causes:

- The USB connection to the programming device is interrupted. Please check the connection and re-start Axesso.
- The device drivers for the programming device were not installed correctly. Please install the drivers again.

More to follow

5.3. Technical Support

For all problems and questions that could not be solved through chapter 5.1, please contact the IPAS GmbH technical support at support@ipas-products.com .