CEStronics

AccessOne

Access Control Software

System description and manual

English

Version VA1

BRO2262

Table of Content

1 About this manual

This manual contains basic information on the setup and administration of an access control system using the AccessOne access control system.
The manual must be regarded as a part of the product and should be kept for the entire service life of the product. The manual must be passed on to any subsequent user of the product.

Other applicable documents

Licence activation >	BRO2307_EN_Manual_Activating-Licence-Module-AccessOne
Installation >	BRO2313_EN_Instructions_Installation-of-AccessOne

Symbol conventions

Refers to other documents.

Indicates additional information and tips.

Indicates warnings in step-by-step instructions and particularly important information.

Writing conventions

In this document, control elements in the dialogue interface, such as buttons, are highlighted in a bold font (example: Click on **Create user**. Toolbar buttons are also indicated by capital letters (example: Click CANCEL). Names of data objects, selection and text fields and checkboxes are shown in quotation marks (example: Enter additional information in the 'Remarks' field).

Illustrations

The dialogues shown in this manual do not include all of the options available to the system. Depending on the licence held and the options activated, screenshots and descriptions may differ.

Notes on trademark protection

MIFARE, MIFARE Classic and MIFARE DESFire are registered trademarks of NXP B.V. and are used under licence.

BRO2316-1 Version: VA1

Always use the latest version of this manual. Updated versions are available free of charge from www.ces.eu.

1.1 Manufacturer and service

The copyrights to AccessOne are held by ACcesstronic GmbH. Service and support are provided by C.Ed. Schulte GmbH, Velbert. For service assistance, please contact CES Service. CES Service can be contacted at +49(0)2051 204 222 or by e-mail: hotline@ces.eu

Manufacturer	**Service and Support**	
ACcesstronic GmbH	C.Ed. Schulte GmbH	Tel: +49 (0) 2051-204-0
Gartenstr. 38	Zylinderschlossfabrik	Fax: +49 (0) 2051-204-229
52249 Eschweiler	Friedrichstr. 243	www.ces.eu
	42551 Velbert	info@ces.eu

1.2 Target groups of this manual

Setting up of AccessOne is commissioned by the system operator and is carried out by its own specialists or by service providers from the IT/administration sector. The access control system may only be operated by personnel with product training. The information contained in this manual is therefore intended for different target groups. The relevant target groups are indicated at the start of each main section. Observe our recommendations on the procedures for installation, setup and operation of AccessOne (see the general information on the next page).

Target group	Skills
IT/administration specialists	have many years of professional experience in the fields of IT structures, administration and networks. Particular characteristics of this target group: Knowledge of specialist IT terminology Knowledge of the structure and maintenance of networks, particularly knowledge of the network that they maintain
System operators	are experienced in the management of master key systems. This could be either knowledge of a number of such systems or an in-depth knowledge of a single master key system. Particular characteristics of this target group: Knowledge of the specialist terminology related to master key systems Skilled in the use of PCs and software
Product-trained personnel	have been given product training by CES or a CEStronics partner. These personnel are given detailed and specific information to prepare them for the required task. Particular characteristics of this target group: Knowledge of CEStronics products and experience in handling them (assembly, operation, etc.)

2 For your safety

2.1 Safety information

The AccessOne access control system described in this manual may only be operated by persons who are competent and qualified to do so. Qualified personnel have many years of professional experience in IT structures, administration and networks, and thanks to their experience in the management of master key systems or in-depth knowledge of a single master key system, are able to recognise risks and prevent potential hazards.

A blocked door can prevent help getting through or result in damage
Incorrectly programmed components can cause access to be blocked unintentionally. C.Ed. Schulte Zylinderschlossfabrik GmbH accepts no liability in the event that access to persons in need of help is prevented or material damage or any other damage occurs as a result of a blocked door.

2.2 Legal information

The purchaser is hereby explicitly advised that the use of the AccessOne access control system can be subject to legal and in particular data protection authorisation requirements and to the co-determination rights of the workforce. The purchaser and end user are responsible for the legally compliant use of the product.

2.3 System requirements

The minimum system requirements for AccessOne are based on the recommended system requirements for the Microsoft SQL Server.

- Operating system (server): Windows Server 2016 or later
- Operating system (PC): Windows 10 Professional or later
- RAM: at least 8 GB
- SQL Server: MS SQL Server 2016 or later; Express version can be used
- Hard disk: min. 1x 500 GB; 2x 500 GB recommended
- Network card

2.4 Data protection in AccessOne

Compliance with deletion periods

AccessOne features a parametrisable deletion process that starts shortly after midnight each day and erases data for which the deletion period has expired from the system. In particular, this includes movement data. The parameters can be set by the system user.

The deletion of personal logbook messages can be configured to comply with the General Data Protection Regulation (GDPR). The ‘LogbookRewriteOffset’ parameter specifies the number of days after which such messages are deleted.

Parameter	Description	Default setting
DateDeletedOffset	Delay period after which person datasets with a specified ‘dateDeleted’ date are finally deleted from the database.	3 days
VistorDeleteOffset	Delay period after which visitors are deleted.	183 days
EventDeleteOffset	Delay period after which completed events are deleted.	183 days
AppointmentDelOffset	Number of days after which appointments and all dependent data are deleted.	365 days
LogbookRewriteOffset	Number of days after which personal logbook messages are deleted from logbooks.	0 (not deleted)
LogbookDelMessages	The number of the personal logbook messages that should be deleted. Either individual numbers or number ranges can be specified.	All access messages
LogbookLastRunTime	Date when the last deletion process was completed successfully.	Date of last execution

Data minimisation

The data required for operation and to perform the tasks is specified by the user. For everyday use of AccessOne, only the surname and a personnel classification (internal/external/visitor) are required for each person. The surname does not need to be the actual surname of the ID card holder. A pseudonymised name (e.g. ‘MA_001’) can also be used. The use of the surname is normally regarded as non-critical in terms of the GDPR.

Input control

AccessOne logs every data modification together with the workstation, user and timestamp plus the old and new value of the relevant data field.

Access control – data access control – system access control

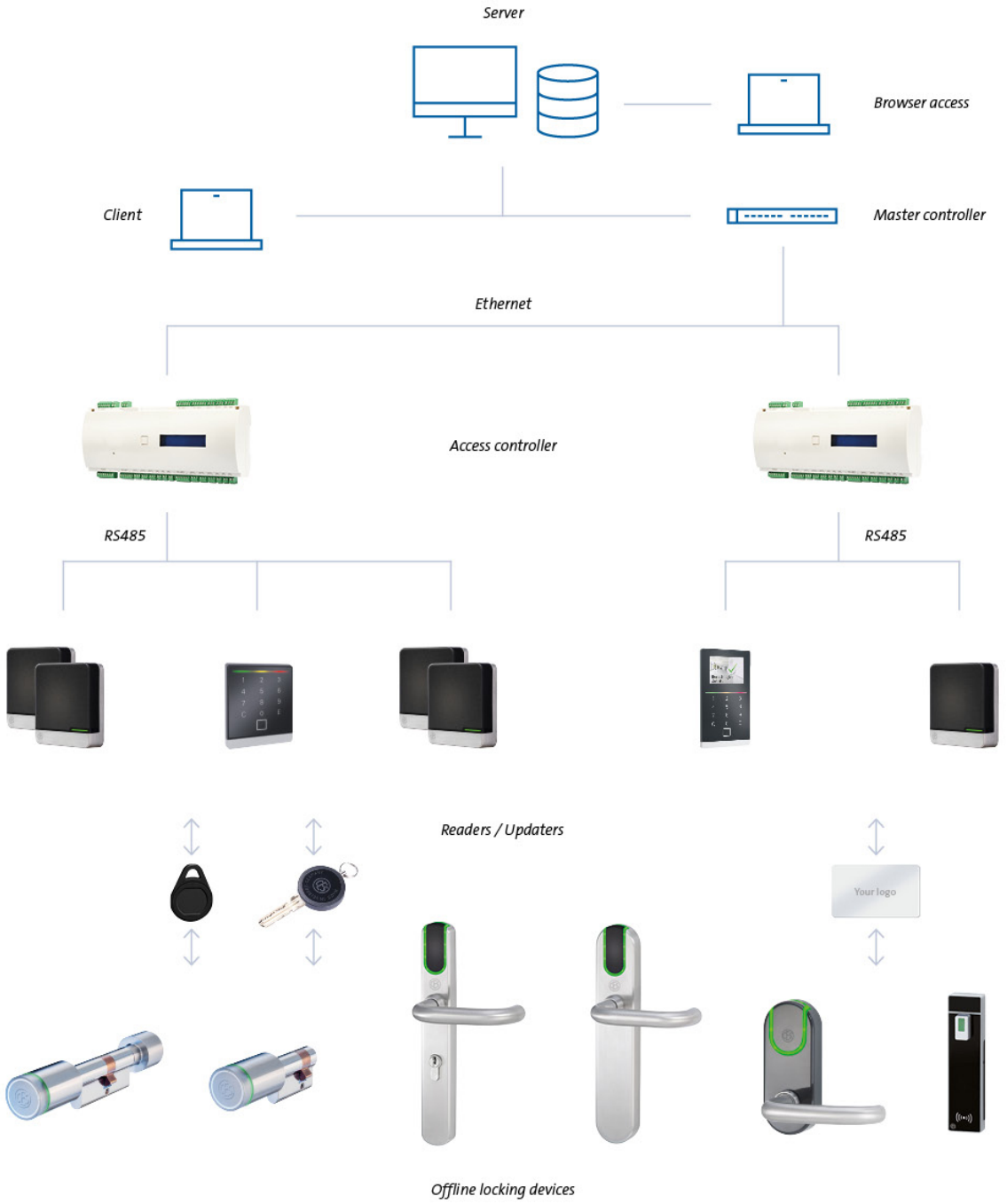
In accordance with DIN EN 50133-1 access is defined as the action of a person entering or leaving a secure area. Control and regulation of such access is performed by AccessOne. Data access designates the logical processing of data in computers in terms of reading, writing, changing and deleting. System access is the logical introduction to using an information system or communication network. System access control is thus the automated checking of the access authorisation to an information system or network.

To enable the required monitoring and control, suitable technical and organisational measures must be taken by the client in terms of creating and maintaining the IT infrastructure (USB port, password guidelines, LDAP, etc.). AccessOne supports this with the option of assigning relevant user authorisations in the user interface.

3 About AccessOne

In its full version, the AccessOne access control system is a flexibly scalable access control management software suite for large premises with up to 200,000 users, 16,000 ID card readers and up to 100,000 offline locking devices. A version for small and medium-sized businesses is available with the AccessOne KMU licence.

The access control system controls doors, barriers and other locking devices. The heart of the software is a user and authorisation management module that records all of the activities on the connected devices and monitors current processes. AccessOne is designed as an open system and can manage and control both online and offline devices. Communication is 128-bit end-to-end AES encrypted. Optional UPS and server redundancy concepts offer high levels of reliability and system security.



3.1 Function extensions

The following function extensions to the basic licence version of AccessOne are available:

ID card creation Art. no. 348120V	AccessOne extension allowing custom card layout design using a graphics editor.
Multi-Client function Art. no. 348121V	The Multi-Client function enables defined parts of the system, such as doors or persons, to be logically assigned to different, independent clients. These clients can manage the system parts assigned to them independently, but have no influence on the system parts assigned to a different client. However, it is also possible for system parts, such as entrance doors, to be used by multiple clients.
Visitor administration Art. no. 348122V	AccessOne extension enabling visitors to be logged into the system and day passes with limited access to be issued. Visitors are logged in via a web browser.
Parking area management Art. no. 348123V	AccessOne extension allowing the management of parking areas. Allows a number 'n' of rented parking spaces to be assigned to specific tenants, while the remaining spaces are counted but are available for all other authorised users to use. Counting the number of parking spaces that are currently in use, with entry and exit readers, is mandatory for this function.
Time registration Art. no. 348124V	AccessOne extension allowing the logging of arrivals and departures on access readers and/or separate time registration readers and daily export in CSV format to a higher-level working hours management system.
Server redundancy Art. no. 348125V	Adds a hot standby function to AccessOne.
Third-party supplier administration Art. no. 348126V	AccessOne extension module for managing master data of external company employees without accessing the master data of in-house personnel. This module enables clearance to be given to tradespeople working in the building and who require materials and/or an ID card for this purpose. Special approvals or necessary instructions can be stored and checked together with the validities. The external company employee confirms receipt of materials and knowledge of documents given to them by signing on an electronic signature pad.

3.2 Recommended procedure for initial setup of AccessOne

To reduce the burden for you as the user of entering large volumes of data when setting up the AccessOne access control system for the first time, we recommend that you perform the individual steps in a specific sequence. We make the distinction here between the system configuration of AccessOne by the system operator and/or a commissioned IT/administration specialist and that of creating devices, authorisations and person data by product-trained personnel.

The first steps must be performed by the system operator and/or commissioned specialist from the IT/administration sector:

Step	No.	Action
Configuration of AccessOne	1	Start the application and log in as the user (see ‘Logging on’ on page 16)
	2	Before you start to set up your AccessOne system, you must activate your licence within the system settings (see ‘Configuring the system’ on page 17).
	3	Once the system configuration is complete, create the different users so that each AccessOne user can later set up the system with their own allocation rights (see ‘User data’ on page 27).
	4	Define the location data of your AccessOne system. Then the location data can be allocated directly when setting up the devices (see ‘Location data’ on page 32).

The following steps can be carried out by product-trained personnel:

Step	No.	Action
Create devices	1	First, create your online devices such as door controllers and readers. All of the readers can also be used as updaters for access media. This is a precondition for setting up offline devices (see 'Online device data' on page 34).
	2	Once the online devices are set up, create the offline devices. This step is necessary so that you can subsequently define the authorisations with all of the created devices (see 'Offline device data (OSS-SO)' on page 54).
Create authorisation groups and profiles	3	First, set up the authorisation groups for the online and offline devices (see 'Authorisations' on page 60).
	4	The authorisation groups are integrated into authorisation profiles. Now all of the necessary steps for your authorisation concept have been completed (see 'Authorisation profiles' on page 68).
Create person data	5	The authorisations that have already been configured for the online/offline devices can now be allocated directly to the persons (see 'Person data' on page 70).
	6	Use the card designer to print ID cards. This ensures that the card layouts are allocated to the person (AccessOne extension allowing custom card layout design using a graphics editor).
	7	You can also assign a company to the person (AccessOne extension module for managing master data of external company employees without accessing the master data of in-house personnel).
Subsequent modifications	>	All of the created data can simply be modified if changes are required (see 'Group changes' on page 83).

4 Working with dialogues

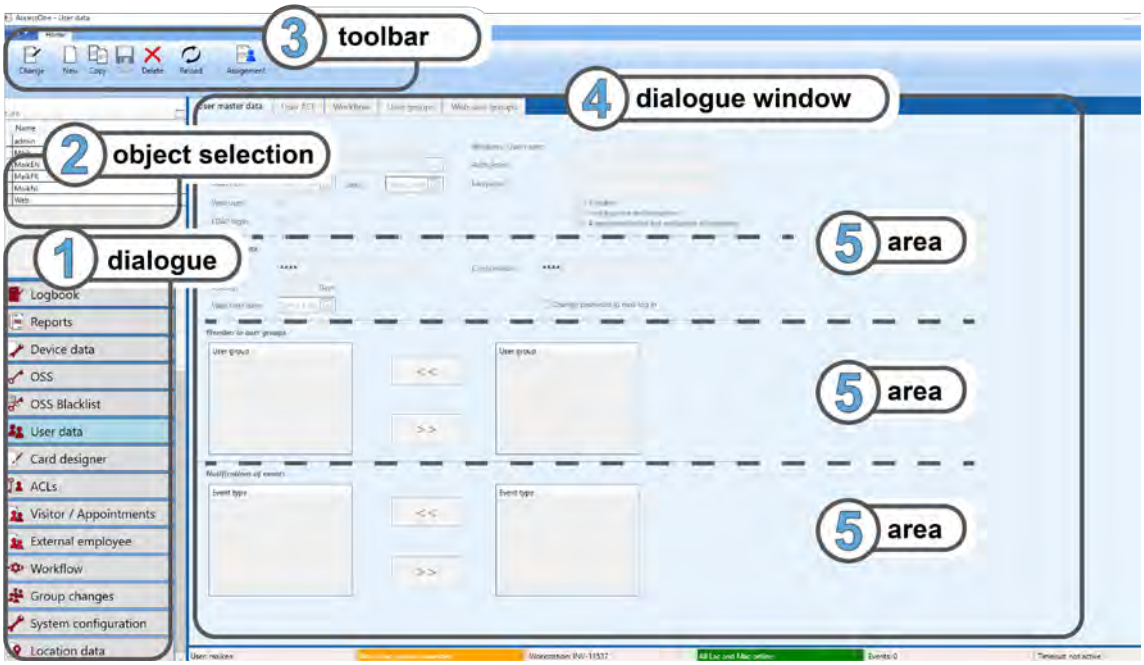
Target group of this section:

- Personnel with product training
- IT/administration specialists
- System operators

AccessOne is operated via a dialogue interface with a consistent operating concept. All of the dialogues have the same structure so that a new user will quickly understand the system.

The dialogue interface has the same design as familiar Microsoft Office products. The buttons to select a dialogue (1) are located at the bottom left. Above this is the object selection (2), which lists the available data objects and varies depending on the selected dialogue. When an item is selected from the dialogue selection (1), the dialogue window (4) displays the details of this element on a tab in one or more areas (5). The data relating to a given data object (e.g. persons or devices) is summarised on a number of tabs, depending on the contents. Buttons in the toolbar (3) offer basic functions for the tab currently being displayed.

For every dialogue it can be defined whether a user has access to it and the level of authorisation (read, write, delete). If a user has no authorisation for a dialogue, the relevant button is not visible in the display. The same also applies for tab pages in the dialogue window.



Empty fields that are mandatory are highlighted red when saved. Tool tips provide additional information on the relevant element when the mouse is moved over it.

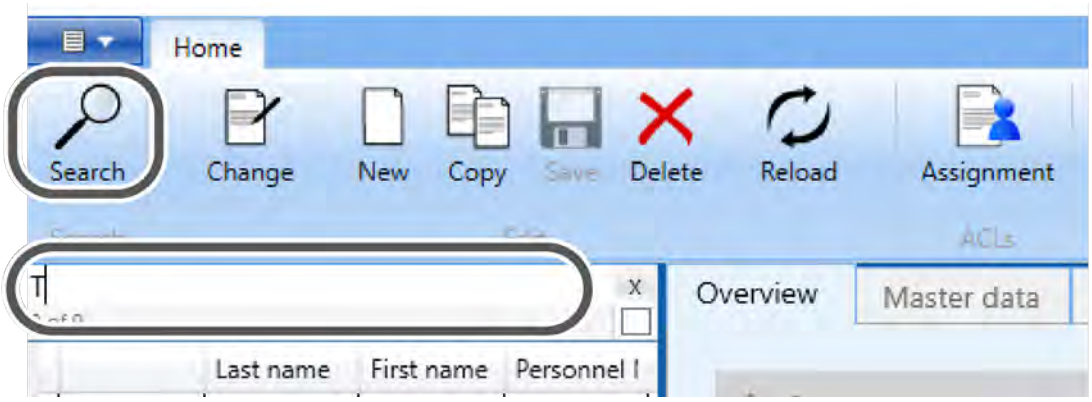
4.1 View mode – change mode

AccessOne distinguishes between view mode and change mode. In view mode, data can only be viewed but not changed, and are greyed out. In change mode, all buttons and input fields in a dialogue window are enabled. While in change mode, the selected dataset is internally locked to all other dialogue users.

4.2 Toolbar

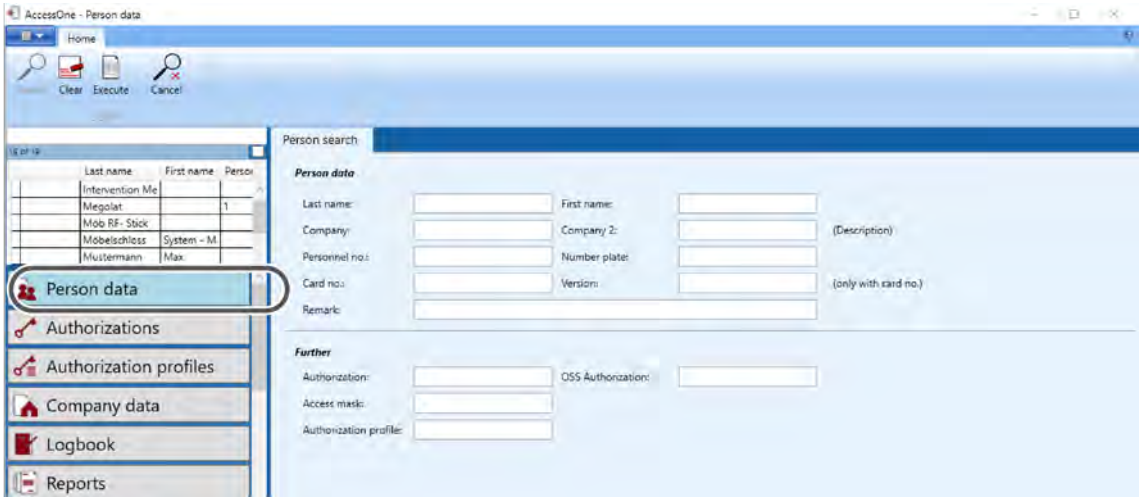
Search

The input field for searches is situated at the left-hand end of the toolbar, above the object selection.



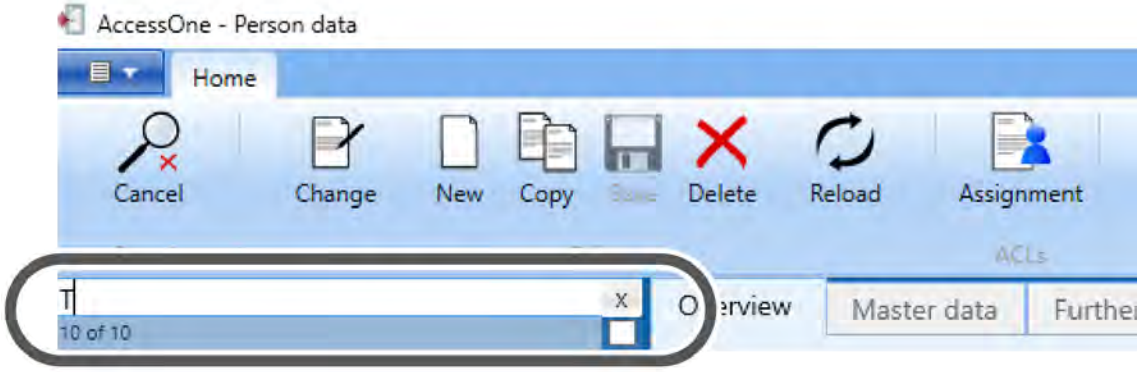
The SEARCH button in the menu bar is only active when the ‘Person data’ dialogue is selected.

Clicking the SEARCH button opens the 'Person Search' tab in the dialogue window. Additional search criteria are also available here (e.g. surname, name, company, personnel number, authorisation, authorisation profile, card number). The selection list in the input field is updated with each subsequent character entered.



For the 'Person Search' tab, only the CLEAR, EXECUTE and CANCEL buttons of the search function are available.

Clicking EXECUTE refreshes the filtered selection list. Datasets can be selected and edited individually. Search terms remain active until you click CANCEL. Therefore if you have, for example, preselected a company in the Search dialogue, the selection list will only display persons linked to this company, irrespective of any further terms you may have entered in the search field above the selection list. This search criterion is only removed again by selecting the Search dialogue again and then cancelling the search. CLEAR deletes any content in the search dialogue and you can enter new search criteria.



In the example shown here there are exactly two datasets with 'T' as the first letter. If no search criteria are entered, the display is limited to a maximum of 150 entries. This value can be adjusted in the AccessOne system parameters. You can temporarily suspend this restriction using the small button in the bottom right-hand corner of the search window. Then all of the datasets matching the search criterion are loaded into the selection list. If you do not enter a search term, all datasets in the database are loaded.

Change

Clicking CHANGE or double-clicking on the dataset in the selection list activates the input fields and buttons in the dialogue window on the right. The selected dataset is internally locked for all other dialogue users.

New

Creates a new, empty dataset.

Copy

Duplicates an existing dataset. Fields that must be unique to each dataset are automatically cleared.

Save

Saves and updates the dataset in the database. The database is then released for editing by other dialogue users again.

The current dialogue is automatically saved when you leave the dialogue page.

Delete

Deletes the currently selected dataset (highlighted blue). The action is performed following confirmation of a security prompt.

Refresh

Loads current data from the database and refreshes the view.

Assignment

Allocates the current dataset to a client. Only active if the client function is enabled.

5 Logging on

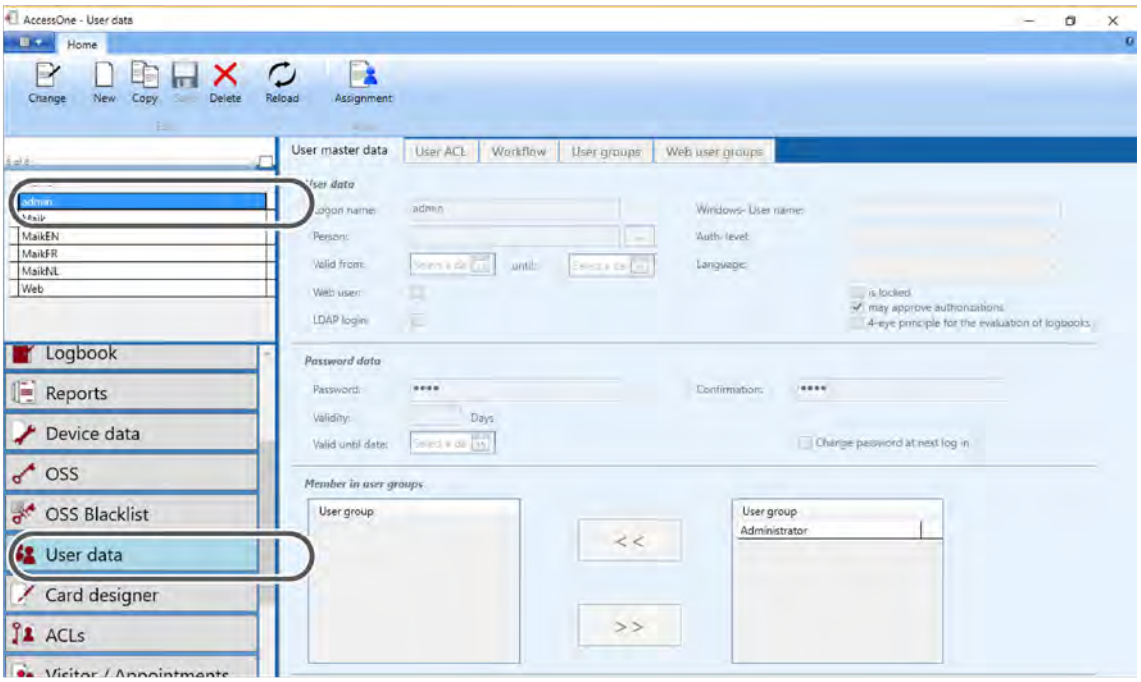
Once the software is successfully installed, you can log on as a user. To start the program, double-click the symbol on your desktop that was created automatically during installation.

For the first logon after installation, the following logon data should be used:

User name: admin

Password: admin

For security reasons, change the password as soon as you have logged on. To do so, go to the 'User Data' dialogue.



In the object search, select the logon name ‘admin’, then click the CHANGE button on top left of the toolbar. Create your own password. For best security, a password should be as long as possible and should include both letters and digits. You can use a password of any length. Re-enter the password to confirm it in the 'Confirmation' field.

If you wish to create a password that will be valid for a limited time, you have the option of doing so here. Confirm your change by clicking SAVE.

Creating additional users (see ‘User data’ on page 27) is described in detail later in this manual.

6 Configuring AccessOne

Target group of this section:

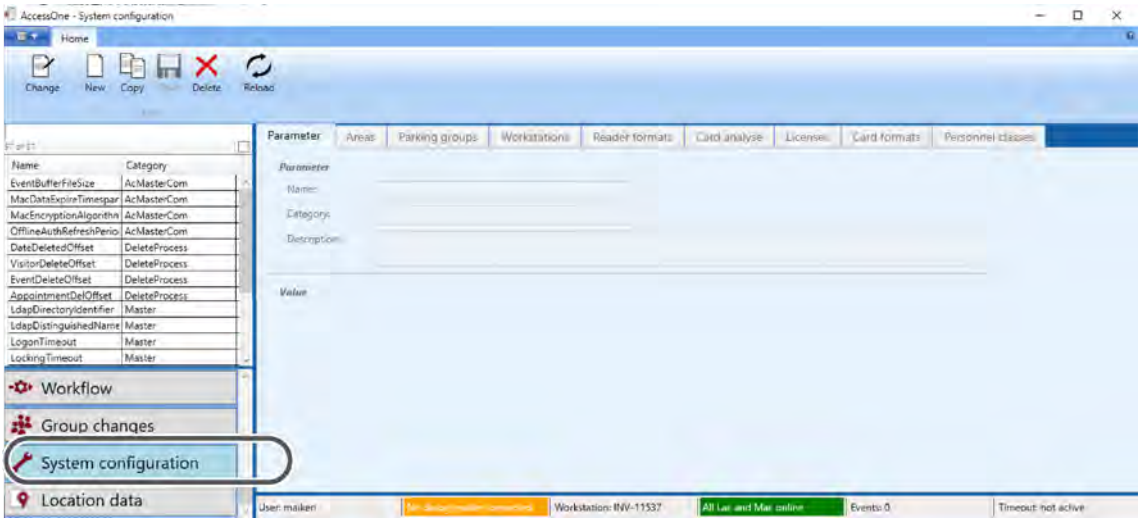
- IT/administration specialists
- System operators

To meet the requirements for setting up the access control system, you will have to modify a number of system parameters. You will specify areas and set up workstations. Additionally, you will define the reader and card formats to be used. Once you enter the user and location data, you have satisfied the requirements for configuring the devices and authorisations.

6.1 Configuring the system

6.1.1 Parameter

Shows the system parameters for your system.

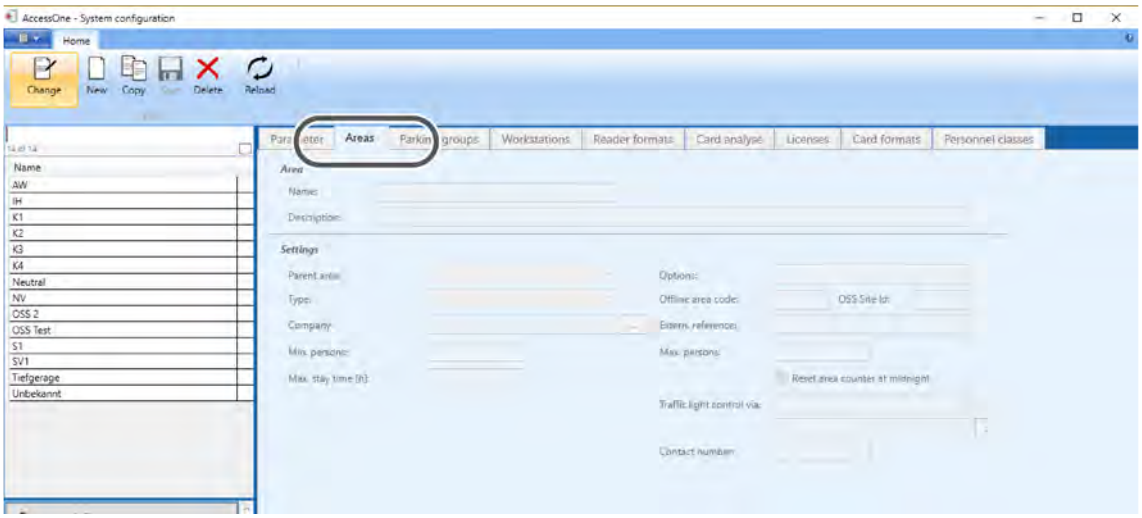


Explanation of parameters

Name	Explanation
EventBufferFileSize	Size of buffer file (MB) to store events for an individual MAC.
MacDataExpireTimespan	The time in minutes without a connection to the MAC after which the event buffer data becomes invalid.
MacEncryptionAlgorithm	Encryption algorithm for communication between AccessOne and MACs (default setting: none).
DateDeletedOffset	Time in days after which person datasets deleted via the dialogue are finally deleted from the database.
EventDeleteOffset	Number of days after which events are deleted from the database.
VisitorDeleteOffset	Number of days after which deleted visitors are deleted from the database.
LastRunTime (LastAccessProcess)	Time of the last process execution

Name		Explanation
LastRunTime (LockProcess)		Time of the last process execution
CardNoRecyling	Kartennummern wiederverwenden	1= Reissue card numbers by searching for gaps left by deleted cards. 0 = Issue card numbers consecutively.
DatabaseNumber		Identifier in dataset if more than one database is in use (00 until that is the case)
LockingTimeout		Time in seconds for which datasets currently being edited are locked. If the lockout is not renewed by the client within this period, the lock is lifted by the master process.
LogonTimeout		Time in seconds within which a client must renew their logon with the master before they are automatically logged off.
NumberLogonFailures		Maximum number of unsuccessful logon attempts
ProcessLogfileAge		Maximum age in days of debug log files
ProcessLogfileSize		Maximum size in MB of debug log files
XmlDoorDataDir		Directory for OSS door data exchange
CardNoZeroes		Fill printed card numbers with zeros up to specified overall length.
CardToCodeAlgorithm		Algorithm for determining card numbers from code data. Standard: 0 = card number matches code data.
DialogTimeout		Standard timeout in seconds during which the dialogue is not used. If this time is exceeded, the user is automatically logged out.
EntitiesToTake		Number of datasets displayed in the selection list.
MaxPinLength		Maximum length of PINs (PIN, EMA1, EMA2)
MaxPinValidity		Maximum validity period of PINs in days
OfflineValidityTime	Offline-Gültigkeitszeit	Standard validity of an offline card in hours, minutes (standard: 24.0).

6.1.2 Areas



Every door in AccessOne leads from an origin area to a destination area. These areas need not necessarily be different. If your building is divided into a number of secured areas, an entrance might lead, for example, from an external secured area (ASB) to an internal secured area (ISB). However, a connecting door can also lead from one ISB to another ISB.

You select the origin and destination areas with 'Area entrance' and 'Area exit' respectively.

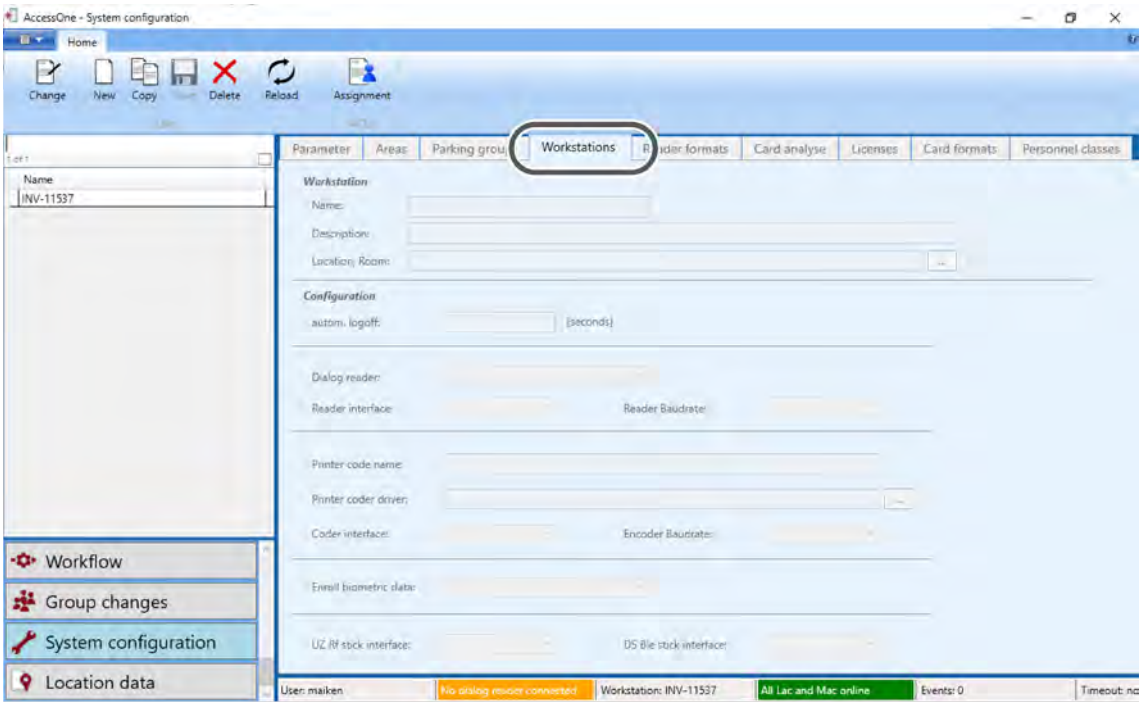
Settings

An area can be further subdivided under 'Settings'. For a 'Normal area', a minimum and a maximum permissible number of persons within the area can be specified. The maximum number of available parking spaces can be specified for a 'Parking area', for example.

6.1.3 Parking groups

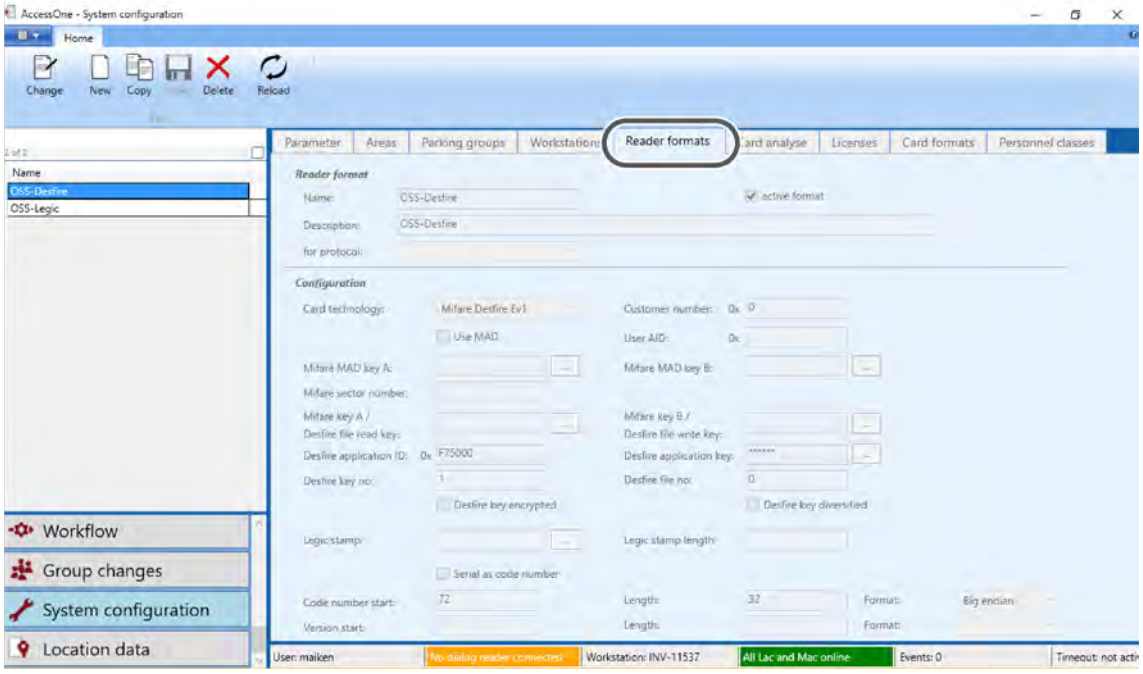
(Only enabled if you are using the optional parking area management module, art. no. 348123V)
Allows persons to be linked to a parking group. This group can then be assigned to a specific parking area.

6.1.4 Workstations



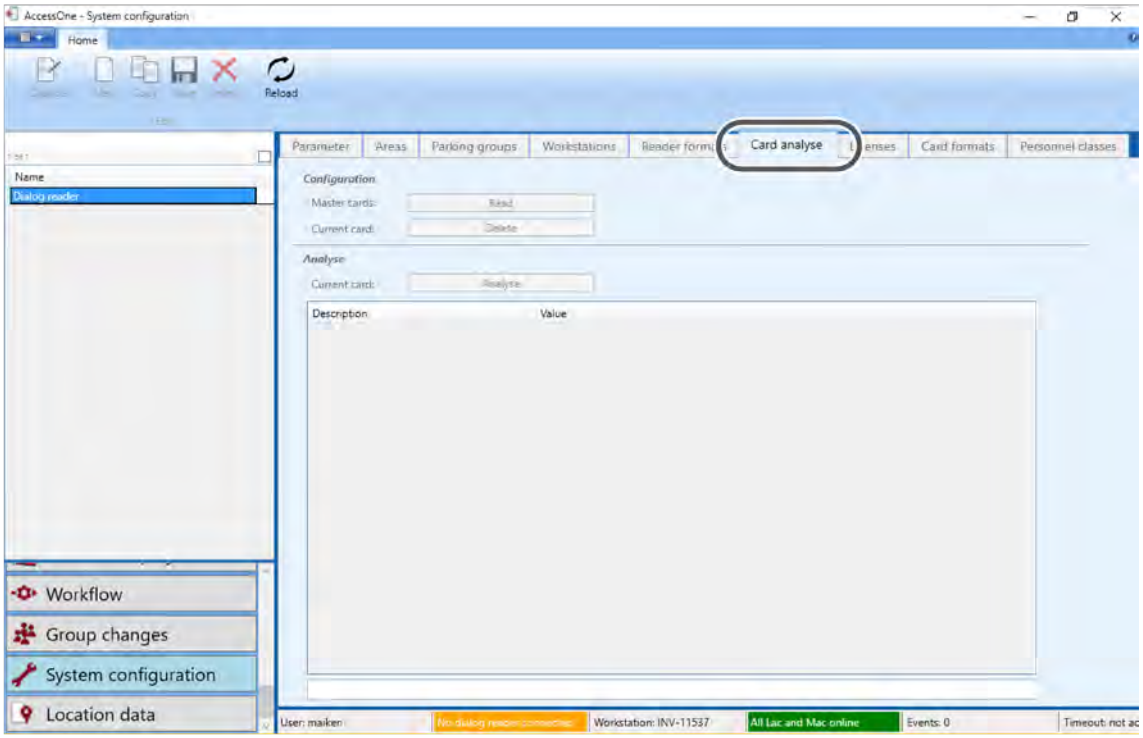
The various AccessOne clients and their exact Windows computer names are created in the 'Workstations' tab. This is used to define locally for each workstation whether a dialogue reader (e.g. an IdentBox) or a card printer with coding station is installed. The correct com ports must be set up for the end device in each case. You can read the com ports from your Windows Device Manager.

6.1.5 Reader formats



Here you specify the reader formats to be read by the card reader of the door controller.

6.1.6 Card analysis

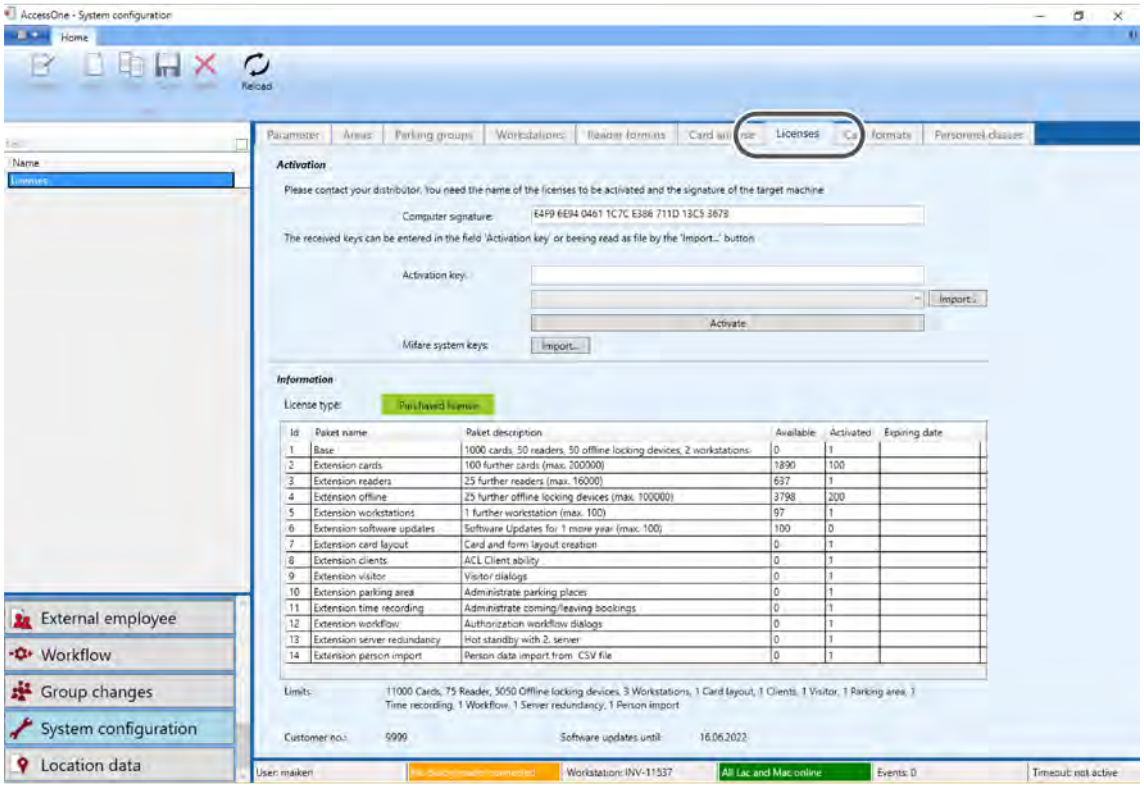


Master cards (e.g. LEGIC, IAM cards) that are important for using the write function of your dialogue reader (IdentBox) can be read in or deleted in the 'Card analyse' tab.

When the 'Analyse' button is pressed, locking medium cards of a previously defined card format are read out in detail via the connected dialogue reader.

In the ‘Replacement cards’ area, a defined number of replacement cards can be created in the database within the corresponding card number range.

6.1.7 Licences



The 'Licences' tab shows a list of program licences and their content.

The computer signature of your AccessOne server PC is required to activate a licence. Without licence activation, your AccessOne installation can only be used as a demo licence with restrictions.

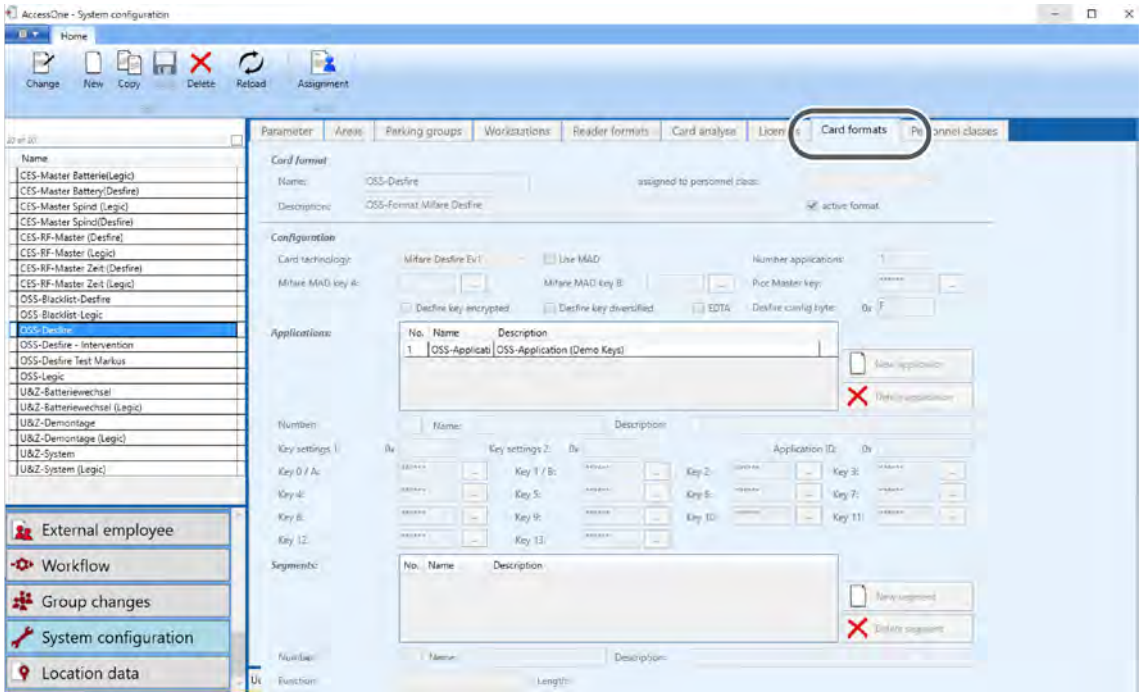
There are three types of licence:

- A test licence with minimum system features, which is active as soon as the AccessOne software is installed.
- A demo licence that is time-limited and created on the basis of customer requirements. This licence type can be renewed twice. On expiry of this period, the demo licence automatically converts to a test licence.
- The purchased licence offers all standard functions.

6.1.8 Card formats

The formats required to describe a card at a dialogue reader, coding station (such as in the card printer) or an access control wall terminal (updater for access media) are defined on the 'Card formats' tab.
Only one card format may be active for each card technology (Mifare, LEGIC, etc.). Nevertheless, other inactive card formats for the same card technology can be created.

To correctly define a card format, it is essential that the AccessOne user is familiar with the possible settings of the relevant card technology. Since Mifare-DESFire, in particular, gives the user a lot of freedom to define the access rights, it is possible for cards to be created that cannot be used if the settings are contradictory. The following text indicates which parameters affect which properties of the card. It does not, however, replace the need to read the relevant NXP and LEGIC documentation.



The parameters are set up at different structure levels:

- Parameters at card level
- Parameters at application level
- Parameters at file level

6.1.8.1 Parameters at card level

When a new card is created, the PICC master key is first changed from the standard value to the value defined here. Next, the properties that relate to the use of this PICC master key are set up. The settings are stored as the 'Desfire Config Byte' value.
This value is bit-coded and is interpreted as follows:
Bits 4 to 7 must be 0.
Bit 3 specifies whether this configuration can ever be changed in the future (even not by formatting the card).

- 0: The configuration can never be changed.
- 1: The configuration can be changed if the user has first been authenticated with the PICC master key.

Bit 2 specifies whether the PICC master key is required for creating or deleting an application or not.

- 0: An app can only be created or deleted with the PICC master key.
- 1: Creating an app does not require the key; deleting an app is possible with the PICC master key or appli-

cation master key.

Bit 1 specifies whether the PICC master key is required to query the contents of the card or not.

- 0: Query is only possible with the PICC master key.
- 1: No PICC master key required for query.

Do not pass the PICC master key to a third party. If you wish to allow third parties to create their own applications, a suitable setting for the 'Desfire Config Byte' would be 0x0f, for example. With this definition there is no need to disclose the PICC master key.

6.1.8.2 Parameters at application level

In accordance with the DESFire standard, key 0 is always the application master key (APMK). All other keys can be defined, but this is not necessary. It is recommended that you define at least one additional key so that a third party can gain access if necessary, without having to disclose the APMK.
Key settings 1 specifies what is controlled by the application master key. 0xE1 is an example of a useful value.

APMK application settings:

<table>
<tr><td>Bit7</td><td>Bit6</td><td>Bit5</td><td>Bit4</td><td>Bit3</td><td>Bit2</td><td>Bit1</td><td>Bit0</td></tr>
<tr><td colspan="4">Change key access rights</td><td rowspan="2">Configuration changeable</td><td rowspan="2">Create/delete freely without APMK</td><td rowspan="2">Free access to directory lists without APMK</td><td rowspan="2">Allow change to APMK</td></tr>
<tr><td>Bit3</td><td>Bit2</td><td>Bit1</td><td>Bit0</td></tr>
</table>

At application level, the coding is interpreted as (selected AID is not 0x00):

Bit 7 to bit 4 Specify the access rights for making changes to application keys (ChangeKey command).
0x0: Authentication of the APMK is required to change any key (standard setting).
0x1...0xD: Authentication with the specified key is necessary to change any key. A change key and a PICC master key can only be changed after authentication with the APMK. For other keys, authentication with the same key is required.
0xE: Authentication with the key to be changed (same KeyNo) is necessary to change a key.
0xF: All keys (except APMK, see Bit 0) within this application are frozen.

Bit 3 Specifies whether a change to the APMK settings is permissible:
0: Configuration can no longer be changed (frozen)
1: This configuration can be changed following authentication with the APMK (standard setting).

Bit 2 Specifies whether authentication of the APMK is necessary before Create file/Delete file.
0: Create file/Delete file is only permitted with APMK authentication.
1: Create file/Delete file is also permitted without APMK authentication.

Bit 1 Specifies whether master key authentication is required to access the file directory:
0: Master key authentication is required for execution of the GetFileIDs, GetFileSettings and GetKeySettings commands.
1: The GetFileIDs, GetISOFileIDs, GetFileSettings and GetKeySettings commands can be executed independently of a prior master key authentication (standard setting).

Bit 0 Specifies whether the APMK can be changed:
0: The APMK can no longer be changed (frozen).
1: The APMK can be changed (authentication with the current APMK required) (standard setting).

'Key settings 2' is used to define the number of keys valid for this application and the type of encryption used for access to this application.

The 'Key settings 2' parameter defines a group of settings:

Bits 0...3 The number of keys that can be stored within the application for cryptographic purposes. A maximum of 14 keys can be stored within a MIFARE DESFire EV1 application. An application can also be created without keys.

Bit 4 Reconfigurable function unit (RFU) must be set to 0.

Bit 5 Specifies the use of 2-byte ISO/IEC 7816-4 file numbers for files within the application:
0: No 2-byte file numbers are supported within the application.
1: 2-byte file numbers are supported within the application.

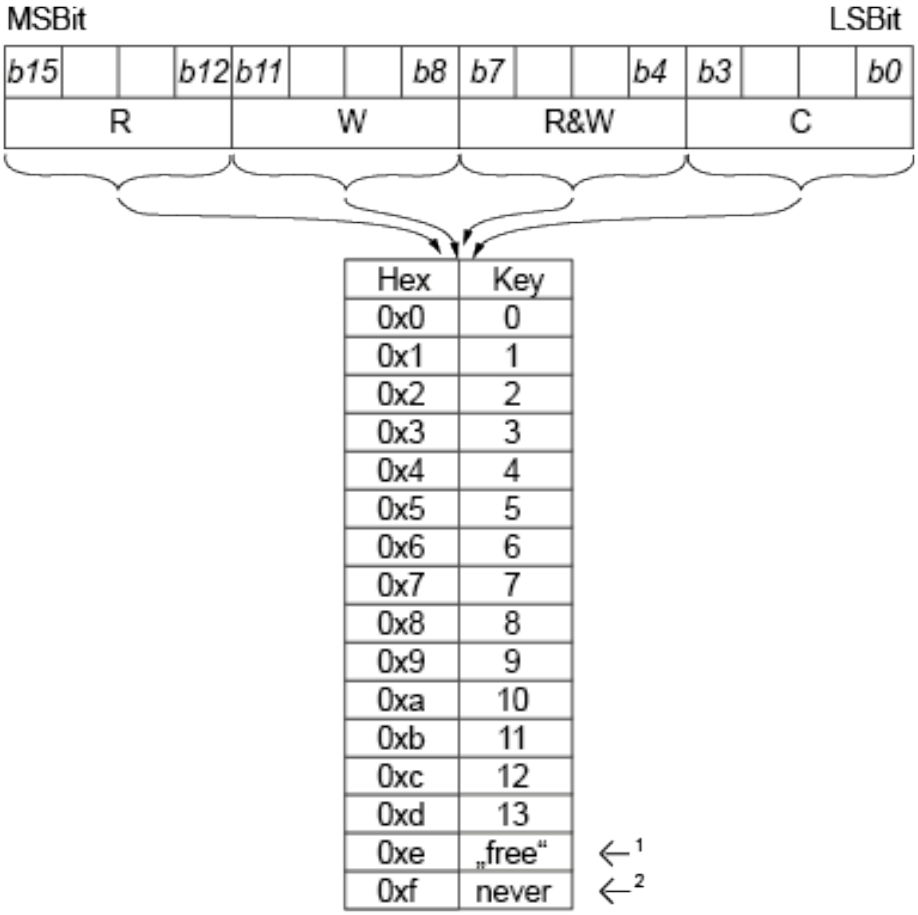
Bits 6...7 Specifies the cryptographical method of the application:
00: specifies DES and 2K3DES operations for the entire application.
01: specifies 3K3DES operations for the entire application.
10: specifies AES operations for the entire application.
An example of a valid value is 0x82 where two keys have been entered for the application. ISO/IEC 7816-4 is not supported. Bits 4 and 5 must therefore be 0. AES is normally used for the encryption.

6.1.8.3 Parameters at file level

For the comm and file settings, convenient selection boxes are provided accordingly. As regards to the access rights, you must specify which of the application keys has read or write access for each file and which key can, if appropriate, change this particular (access rights) setting (see table).

If, for example, you wish to allow reading and writing with key 1, but that these settings can only be changed with key 0 (APMK), the value for these rights would appear as follows: 0x1110.

Setting a value to 0xe will cause the communication to change from 'encrypted' to 'unencrypted'. This may in turn conflict with the application settings.



Hex	Key	
0x0	0	
0x1	1	
0x2	2	
0x3	3	
0x4	4	
0x5	5	
0x6	6	
0x7	7	
0x8	8	
0x9	9	
0xa	10	
0xb	11	
0xc	12	
0xd	13	
0xe	„free“	←[1]
0xf	never	←[2]

[1] no authentication possible

[2] no access

6.2 User data

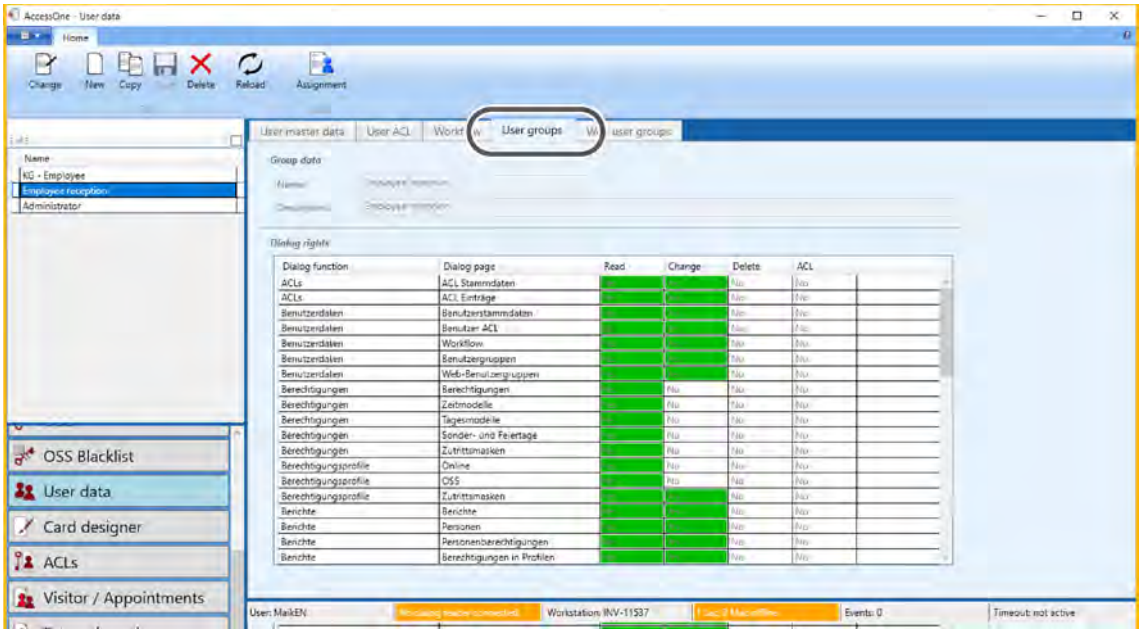
In the first step, you create different user groups as required, with individual dialogue authorisations. The created user groups are then assigned to individual users on the 'User Master Data' tab.

6.2.1 User groups

Dialogue rights in groups are created and summarised on the 'User Groups' tab. The dialogue rights in the Read – Change – Save – ACL (optional) columns can be enabled/disabled simply by clicking them.

To facilitate the process you can select and click multiple cells at the same time by pressing and holding the mouse button. The individual entries in each cell are then reversed (Yes>No and No>Yes).

You should use a meaningful name and provide a description for the group.
Clicking the CHANGE button selects the relevant function and highlights it green. Clicking the SAVE button saves the specified authorisations in the system.
In the following example, the 'Reception staff' user group is created and the rights of an employee at the reception of the main building are restricted to creating and modifying person data. The employee can, for example, change person master data and use the ID card and lockout functions in the overview dialogue.

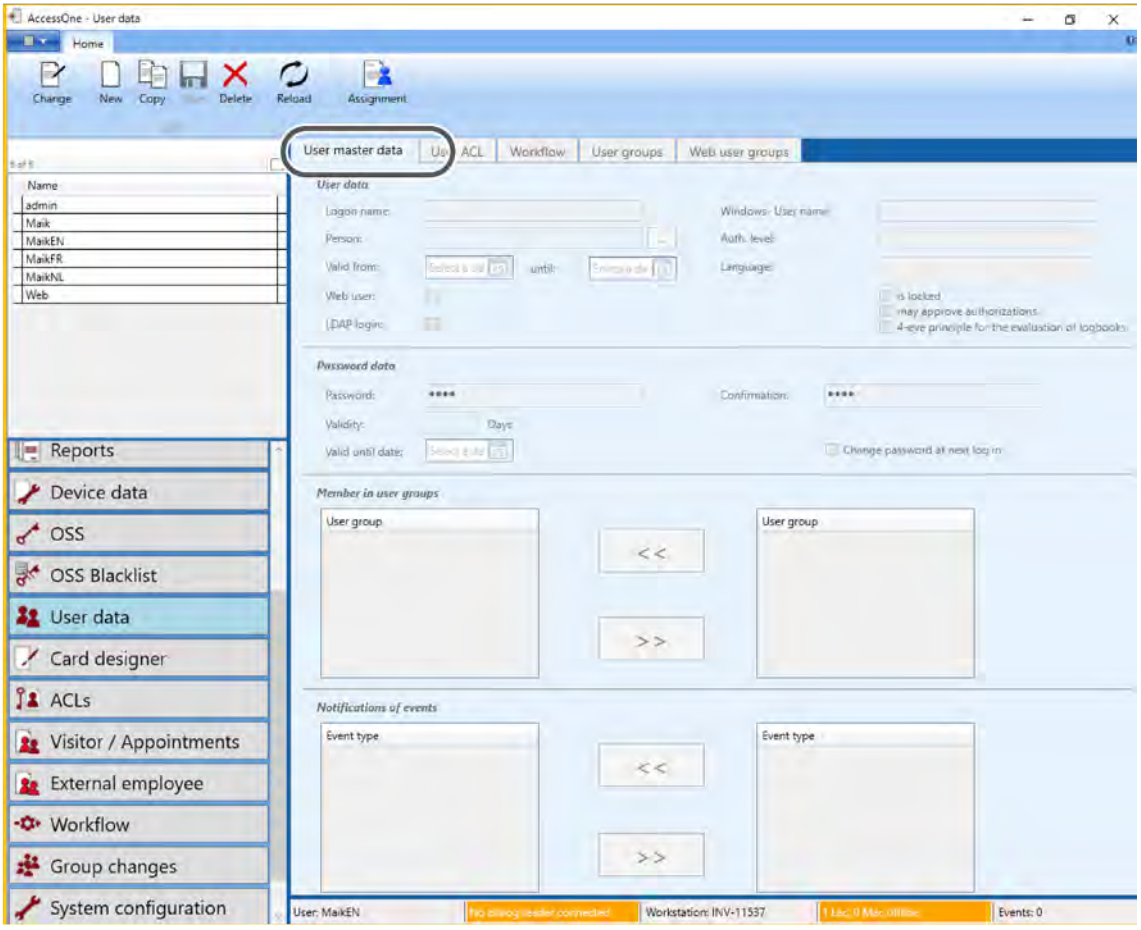


Members of the 'Reception staff' group should not be granted access to the ACL here to ensure that they cannot add persons to other access lists. The members of this group only have read access to all of the master data, enabling them to answer questions about ID cards and authorisations if necessary.

Management and/or administration employees should be authorised to access the person data of employees permitted to enter the building.

6.2.2 User master data

Now create users who are permitted to log onto AccessOne.



User data

Assign a logon name. If the Windows user name is specified, the AccessOne software uses this for automatic logon (single sign-on). The person can be selected from a list. If the user profile should have only restricted validity, a from/until date can be specified. The user is automatically locked out when this validity expires. A user can also be manually locked out at any time with immediate effect (to do this, enable the checkbox).

In this screen the user can also be assigned the '4-eye principle for the evaluation of logbooks' attribute, which means that in order for detailed information from the logbook to be displayed, another user with this authorisation must also be logged in.

Similarly, the 'Approve authorisations' right can be assigned to the user. This right is required for certain authorisations that call for self-activation.

Password data

Assign a password to the user. You can specify a restricted validity for a particular period of time or simply state a 'Valid until date'.

Enable 'Change password at next log in': Once the user has entered their logon name and assigned password in the input mask for the first time, they will be asked to enter a new password and to confirm it. You can enter a password with any number of characters. The maximum password length can be set in the system.

Member in user groups

Allocate the dialogue pages and functions that the AccessOne user is permitted to see or edit after logging on. These dialogue rights are defined in advance for so-called user groups. Further information is available in section 6.2 'User data' on page 28.

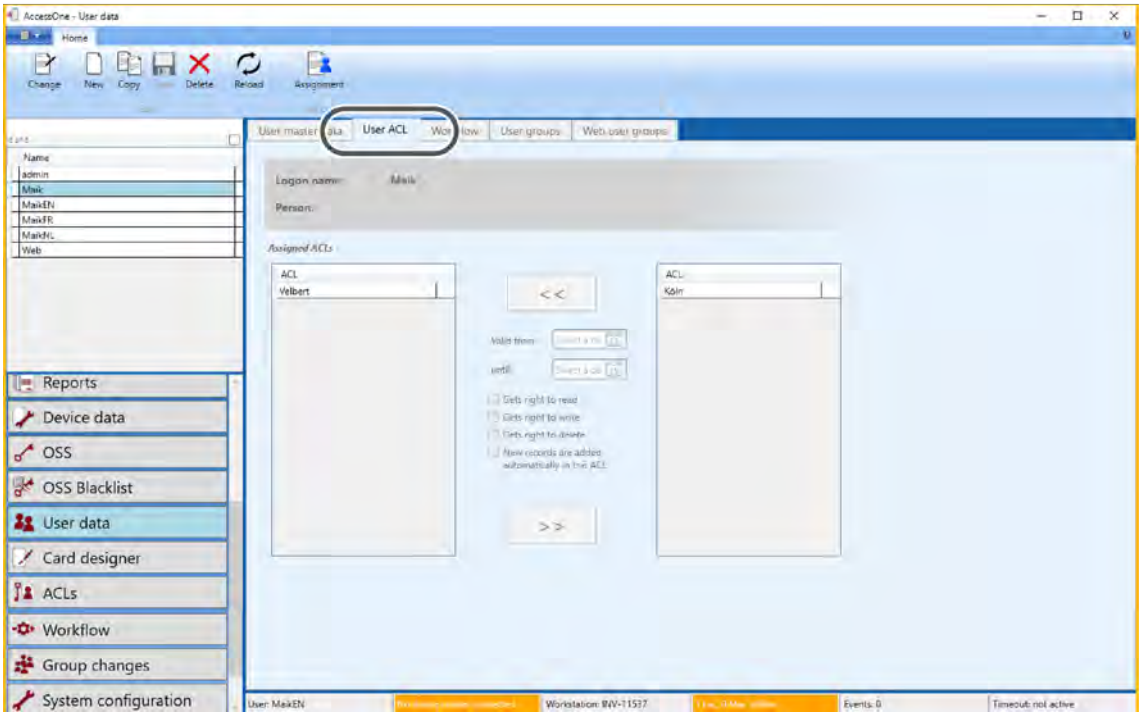
Authorisations for events

Allocate the events that the AccessOne user is permitted to see or edit after logging on.

6.2.3 User ACL (ACL Client ability)

(Only available if data separation is implemented.)

Access control lists (ACLs) can be allocated to dialogue users here. The ACLs can be set up and modified. This requires that the ACL function has been enabled by the administrator.



The ACL Client ability function is recommended if one AccessOne installation/database serves multiple customers (clients) and each customer can only view and edit their own data. Datasets that are not allocated to a specific client remain available to users from all clients. These parameters must be edited by a higher level person (system administrator). The management and system administrator should always be given master rights or additional rights. Employees, such as those at reception, should have their own sub-system for the access control system set up so that they can view, edit and delete master data. Users of a sub-system, such as the 'Reception staff' group, should, for example, not have access to the ACL function, as they could otherwise add persons to other access lists. Authorisation to read out master data is sufficient for users of this sub-system.

Where an AccessOne user only has one access list (ACL) assigned to them, they can only allocate the authorisations that are contained in that particular ACL. The AccessOne user can thus only issue authorisations to members of the 'Reception staff' group for doors allocated to the reception area of the building. Other doors are not displayed in the selection list.

Members of the 'Reception staff' group can view, edit and delete these authorisations but cannot add them again. They can only be added by the system administrator or another person with the relevant access or allocation right. It is at the discretion of the user to divide the data up in a way that is practical and in accordance with their specific (security) requirements.

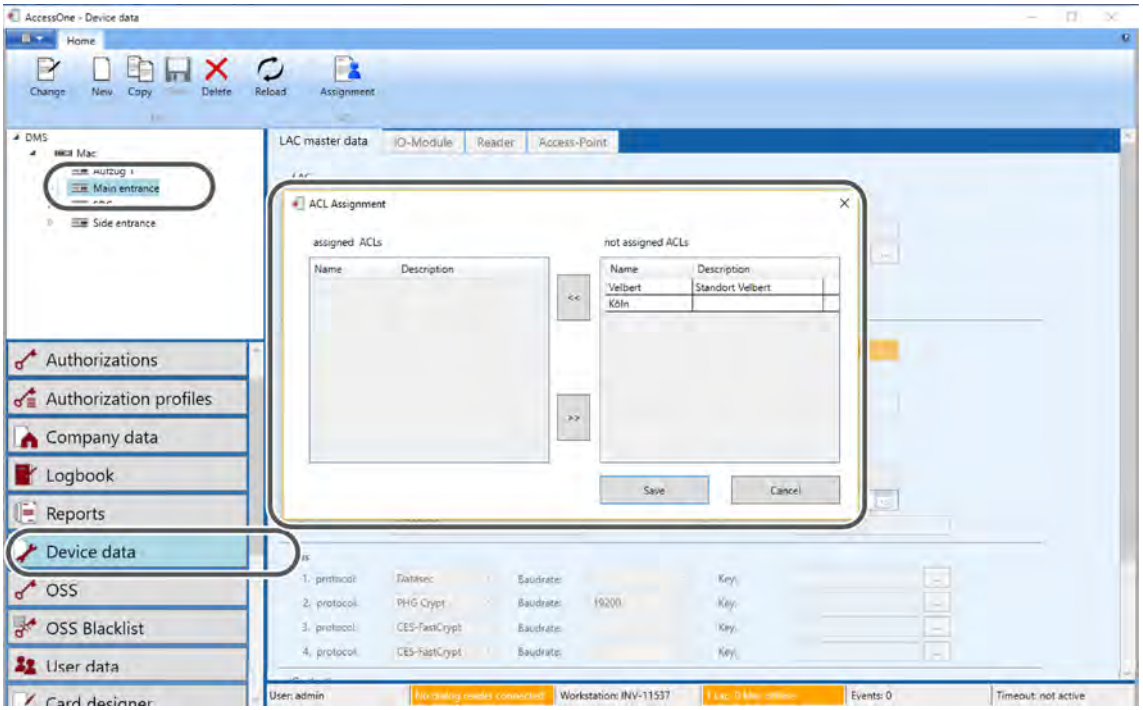
Workflow

The 'Workflow' tab allows workflows to be created for certain actions that must be performed, e.g. where approval from a superior is required.

6.2.4 Assigning datasets to access lists (ACL)

If access to data already entered into the system must subsequently be restricted, that data must be assigned to an ACL using the ASSIGNMENT button.

Important note: Data not assigned to an ACL is visible to everybody.



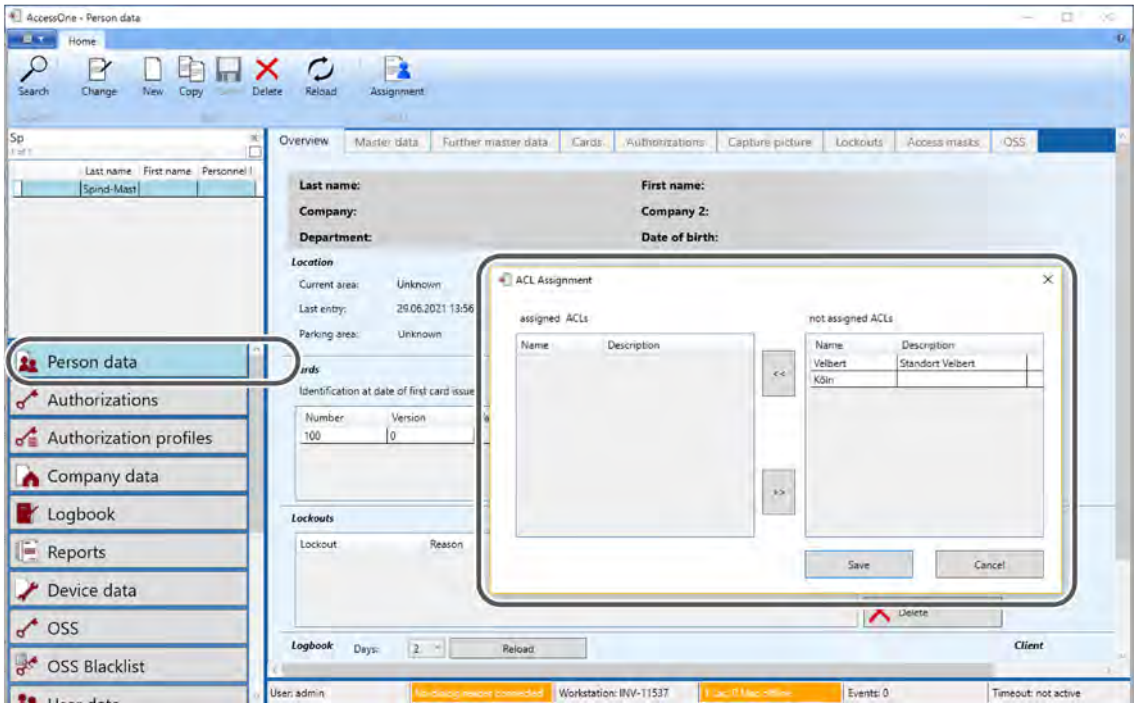
Recommended procedure and sequence

Start with the doors in the 'Device Data' dialogue. To do so, click the ASSIGNMENT button in the toolbar. Select a door from the selection list on the left and assign it to the appropriate ACL. Next, click SAVE CHANGES. The selected object is now highlighted with a coloured bar.

Proceed in the same way for the ‘Person data’ and ‘Authorisations’ dialogues.

6.2.5 Web user groups

(Only available in conjunction with the Visitor Administration licence module, art. no. 348122V.)



This area links together web pages for web-based visitor registrations and the allocation of external company employees to web user groups.

Information about users and their group memberships can also be provided and added to the system via the lightweight directory access protocol (LDAP). LDAP enables information in an LDAP directory to be retrieved.

6.3 Location data

The location data allows you to map all of the object structures relevant to the access control system. The structures are displayed concisely in the form of a tree.

Enter the location data as completely and in as much detail as possible, as it is subsequently used to set up hardware components.

If multiple locations have been created, the 'Location Search' tab is helpful. Click on ‘Locations’ in the tree to display all of the created locations, sorted by type. Double-click a location in the list to open the location in the tree on the left.

6.3.1 Creating a location

Select ‘Location Data’ in the dialogue selection. The 'Location Search' tab opens and the object, area, building, floor, room and door data are displayed hierarchically in the structure tree on the left.

An item can be entered or edited by clicking the NEW or CHANGE buttons on the relevant level.

Object

Define an object name for the location in which areas, buildings, doors, electronic cylinders, readers and off-line devices are situated. More than one location can be created at the object level.

Area

Define names for areas within the object (e.g. ‘Production’, ‘Development’, ‘Accounting’, etc.).

Building

Define a name for the building in which all of the areas of the object are located (e.g. ‘Building 3.1’) and specify the address and contact details.

Floor

Enter the floor name and floor number in which the doors, electronic cylinders, readers and offline devices of the main building of your object are situated, e.g. ‘Ground floor’.

Room

Assign names for the rooms on the same floor, e.g. ‘0.12’ and configure the rooms on the basis of responsible persons, usage and trade.

Door

Enter the name of the door of the room, e.g. ‘Door 0.12 external’.

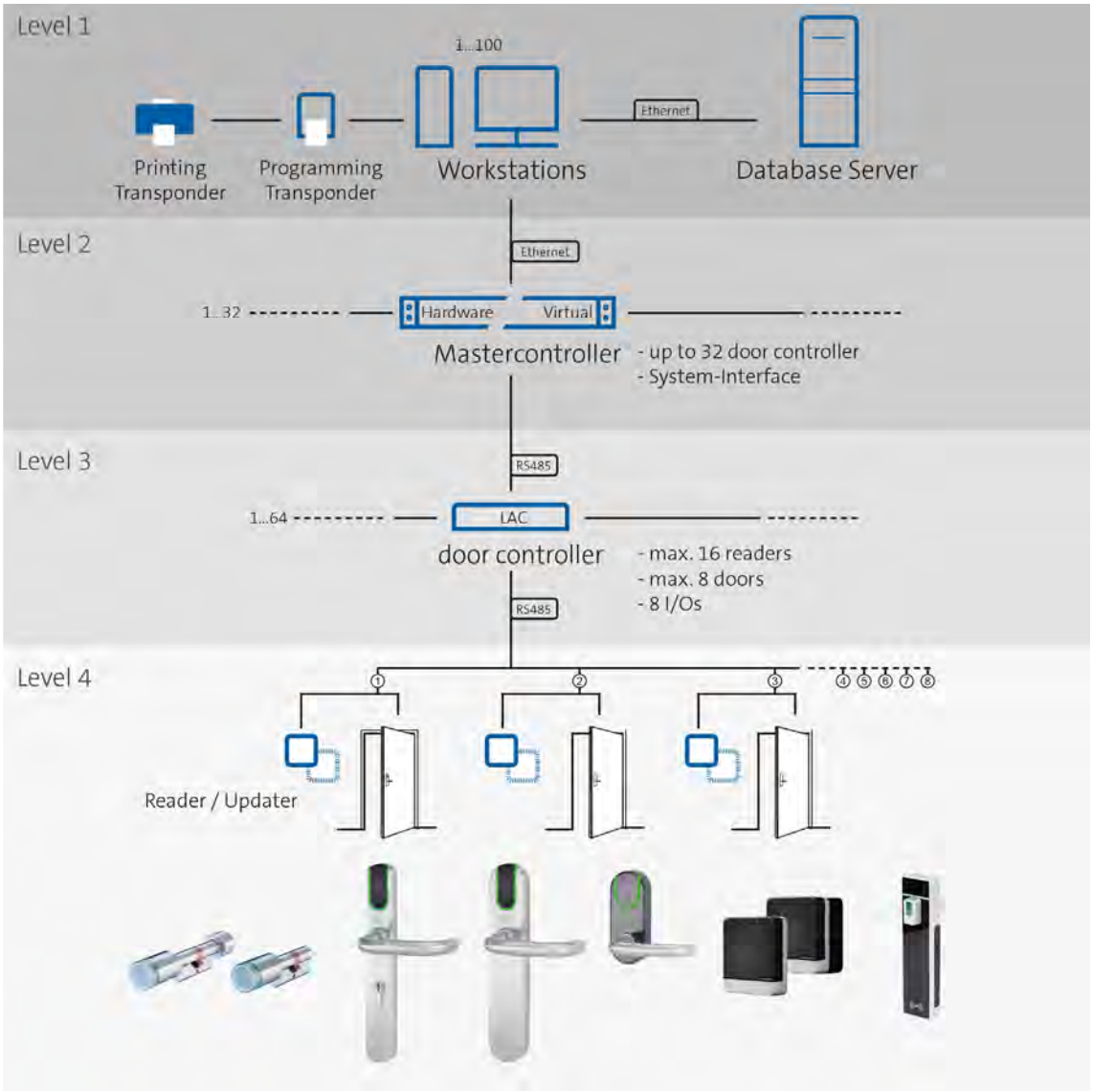
7 Configuring devices

Target group of this section:

- Personnel with product training

Setup of devices begins with the master controllers on level 2. After this the door controllers on level 3 are configured and the I/O modules are created. Finally, the connected online and offline devices are set up on level 4.

AccessOne – the 4-level concept



In hardware terms, AccessOne is based on a four-level concept that forms the basis for practically unlimited scalability. The application and database server processes run on Windows Server operating systems and on an installed SQL server. In most cases, the server software runs in a virtual environment (level 1). The master controller distributes the data to the door controllers and provides all functions at the levels above the individual door controllers (level 2). The master controller does not need not be physically present as a standalone component; it can also be virtualised just like the server software. The master controller is linked locally to the door controllers via a network (level 3). Each of the connected door controllers is autonomous and, once the data has been loaded, it has access to all of the authorisation data for a person, including offline data. All of

the access decisions are thus made locally (level 3). The readers are connected via a RS485 interface (level 4). All of the readers can also be used as updaters for offline devices.

7.1 Online device data

7.1.1 Displaying the device overview

AccessOne provides a device data editor for the creation and parametrisation of devices. This shows the devices in a tree structure in the object selection on the left. The top entry is the Data Management System (DMS), and the devices are arranged beneath this. All of the data changes and all of the messages from door controllers (TSG1, TSG8, AMC or LAC*) are completed here. This is therefore also where the status messages are interpreted, stored in the memory and displayed.

Click on 'DMS' entry to view the status of all the devices in the overview. The 'DMS' entry cannot be deleted and a second one cannot be created.

The status of an individual device (online or offline) is also displayed in the detailed view for the device.

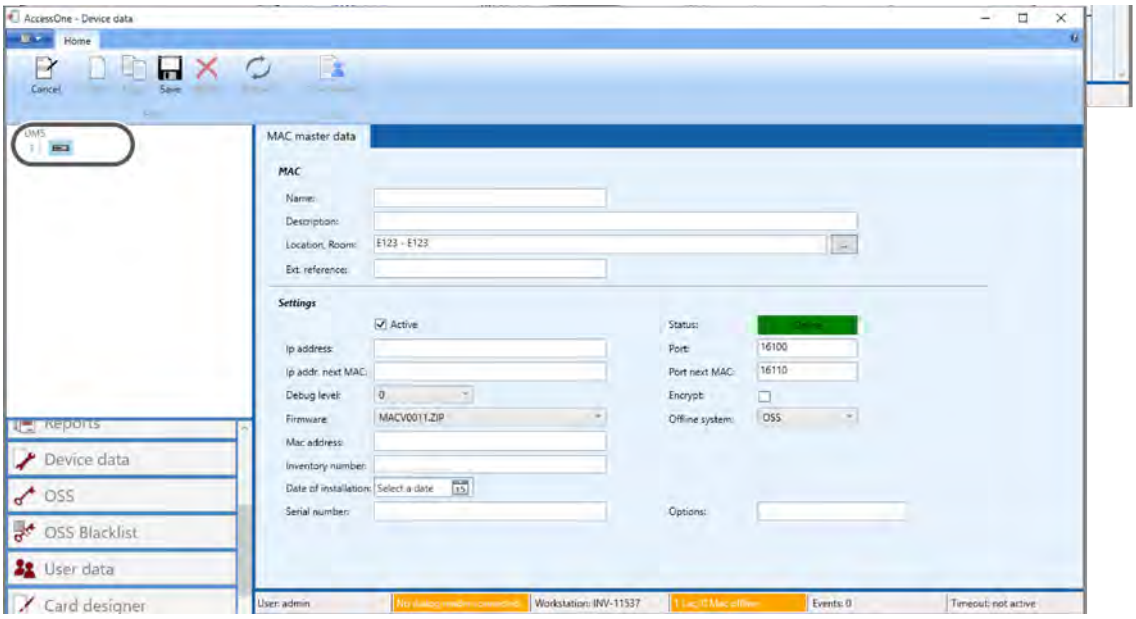
The dialogue window shows the status of all the available devices in list form. This view is not refreshed automatically. To refresh the list, click the REFRESH button. A search window is situated to the left above the object selection. When letters are entered here, the list beneath is filtered by all of the devices that contain these letters. They do not have to start with these letters. To simplify the search, no distinction is made between capital and lower-case letters. The names of the devices are shown in a blue font, which in AccessOne generally means that double-clicking on the name will take you directly to the tab for that entry. In the centre there is a further filter option, by device status. If, for example, you wish only to view the devices that are currently online, you select ‘Online’ from the drop-down menu. Right-clicking on the name of a door shows the available control commands that are permitted for that door.

* TSG = door controller, AMC = access modular controller, LAC = local access controller

7.1.2 Creating a master controller (MAC)

To create a new master controller (MAC), select the 'DMS' entry in the tree structure and click the NEW button.

7.1.2.1 MAC master data



An empty MAC tab now appears on the right, into which you can enter the required data. Each MAC requires a name; this should be chosen so that it describes the area of responsibility of this device. One MAC is normally sufficient for a small installation. For larger installations, one MAC per building complex is common. It therefore makes sense to name the master controller after the building it serves. An individual MAC can manage up to 32 access modular controllers (AMC).

You can also add a further ‘Description’, e.g. the exact installation location. The 'Location' selection box provides a list of the locations configured thus far. In a new system, only the location ‘Unknown’ is available. You can complete this list with additional locations using the 'System Configuration' > 'Locations' dialogue (see ‘Configuring the system’ on page 17). For applications in which the access control system is distributed over multiple locations, we recommend that you create these locations beforehand and then simply select them from the list when creating devices. Depending on the type, the location data contains additional information, such as the address of a contact person and telephone number, which is useful in the event of a malfunction.

An IP address and a port number must be specified for every MAC address. The IP address of the MAC is detailed in the network configuration on the MAC. You can also open a command window (cmd. exe) on the master controller and enter the ‘ipconfig’ command. The IP4 address shown for the LAN adapter is the IP address of the MAC. If you have any questions, please contact your network system administrator.

On newly installed master controllers, the port address is set to 50100. This address can be freely modified, but must be identical in the MAC configuration (Datasec\Mac\config\MacConfig.ini) and in this device data, as no communication can otherwise be set up.

The 'Debug Level' field is an aid for the manufacturer to generate detailed error logs in the event of a malfunction. The higher the debug level, the more extensive are the log entries that the master controller records for all of the actions. Ensure that the value is not higher than 1, as this may impact the performance of the

device.

The 'Encrypt' checkbox lets you specify whether or not the communication between the DMS and the MAC AES is encrypted. Encrypting the data slows the speed of establishing connections and then has a minimal effect on the throughput when exchanging data.

The 'Firmware' field allows the new software version to be entered if an upgrade is performed. This is automatically distributed to all master controllers and activated. Important: Each MAC has its own firmware.

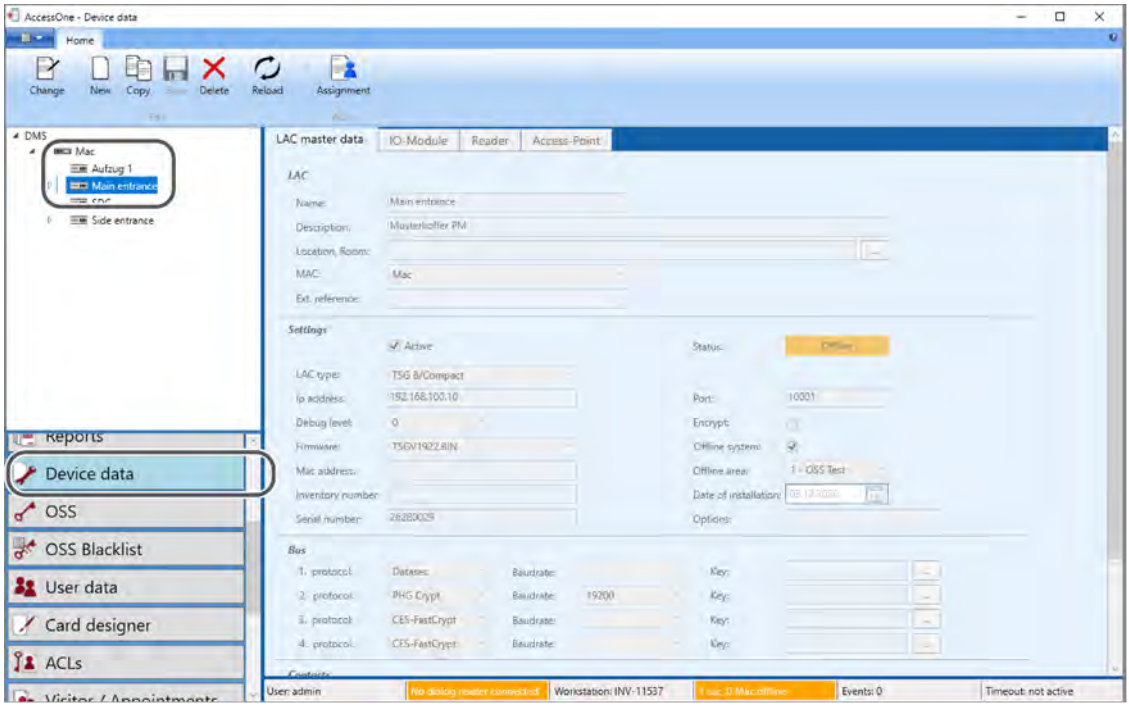
You should only change the preset value if you have received an appropriate update from CES. If card readers with the update function for offline systems are operated from your MAC, you must set this up when creating the MAC. In this case the choice of firmware(s) for use with the MAC will change. Any **subsequent** change to this MAC function is **not possible**. In such cases a new MAC must be created in the DMS and the LACs that have already been assigned must be ported to the newly created MAC.

You can also, optionally, add the MAC address, an inventory number and the installation date to the device. Please note that the MAC address can be important if your network only serves configured MAC addresses to prevent unauthorised persons connecting to your network.

A checkbox is provided for every device and every door, by means of which the device is activated. Only when this checkbox is selected will the device be loaded with data and started. The devices can thus already be configured and then only set as active following installation. Advantage: non-activated devices are not monitored by the system. Pre-configured but not activated devices are therefore also not reported as faulty devices. Overall, up to 32 local door controllers can be connected per MAC.

7.1.3 Creating a door controller (LAC)

7.1.3.1 LAC master data

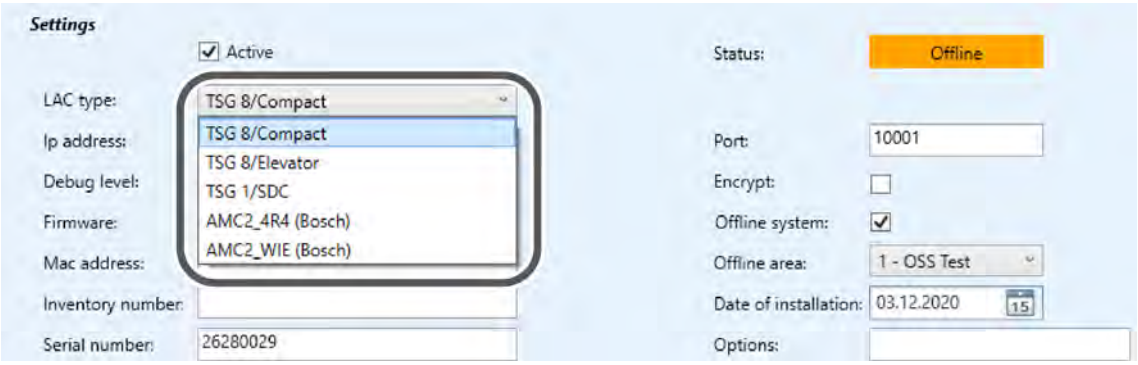


Local door controllers (local access controllers, LACs) are each created under the MAC to which they are also connected. Select the required master controller with the mouse and click

New.

The dialogue window now displays the tab for a door controller.

Each LAC requires a name and a description. Proceed here in the same way as for the master controller (MAC). In this case it is also sensible to choose a name that gives an indication of the scope of responsibility. The description further enables you to state the exact installation location.



AccessOne supports door controllers from various manufacturers. Under ‘LAC type’, select the hardware you are using. A mixture of controllers can be used within the same installation.

- TSG 8/Compact (Art. no. 348007V) central access controller for up to 8 doors with up to 16 readers
- TSG 1/SDC (Art. no. 348008V) central access controller for 1 door with up to 2 readers
- AMC2_4R4 with 4 RS485 connectors for up to 8 doors
- AMC2_WIE with 4 Wiegand interfaces for up to 8 doors

Specify an IP address for the LAC that can be reached from the MAC. The port address is preset to

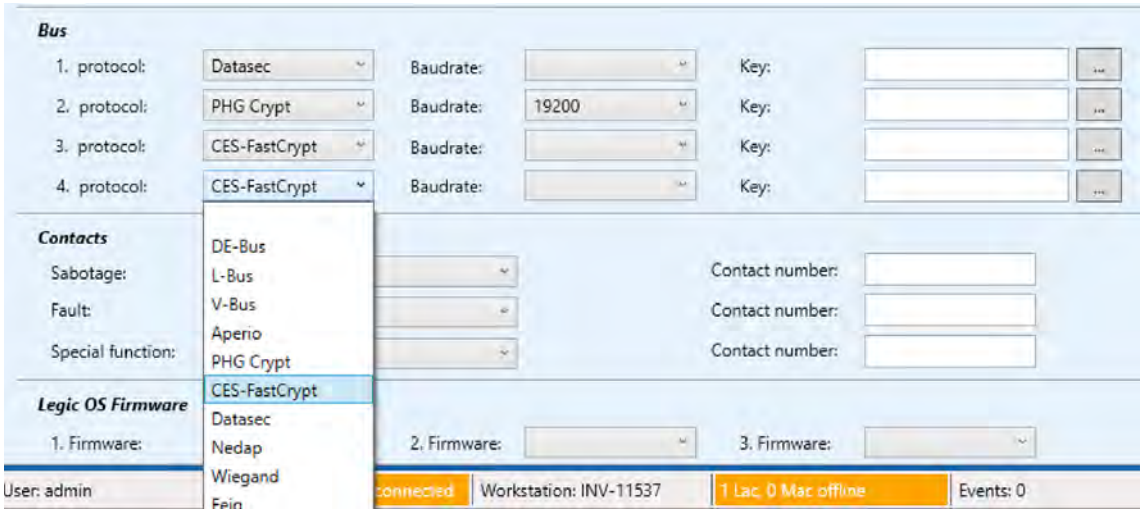
10001 and should not be changed. To set the IP address on the door controller, select the appropriate configuration for the door controller.

You can also, optionally, add the MAC address, an inventory number and the installation date to the device.

The 'Encrypt' checkbox lets you specify whether or not the communication is AES encrypted. Encrypting the data slows the speed of establishing connections and then has a minimal effect on the throughput when exchanging data.

The 'Offline system' checkbox means that the AMC detects when offline systems are being operated and an updater is available.

The relevant protocols, depending on the hardware and interface, can be specified here.



A checkbox is provided for every device and every door, by means of which the device is activated. Only when this checkbox is selected will the device be loaded with data and started. The devices can thus already be configured and then only set as active following installation. Advantage: non-activated devices are not monitored by the system. Pre-configured but not activated devices are therefore also not reported as faulty devices. Overall, up to 32 local door controllers can be connected per MAC.

The 'Reports' dialogue selection contains a device list that provides the relevant hardware documentation data for all of the devices. If all of the data is entered, the system can provide complete system documentation at all times.

7.1.3.2 IO modules

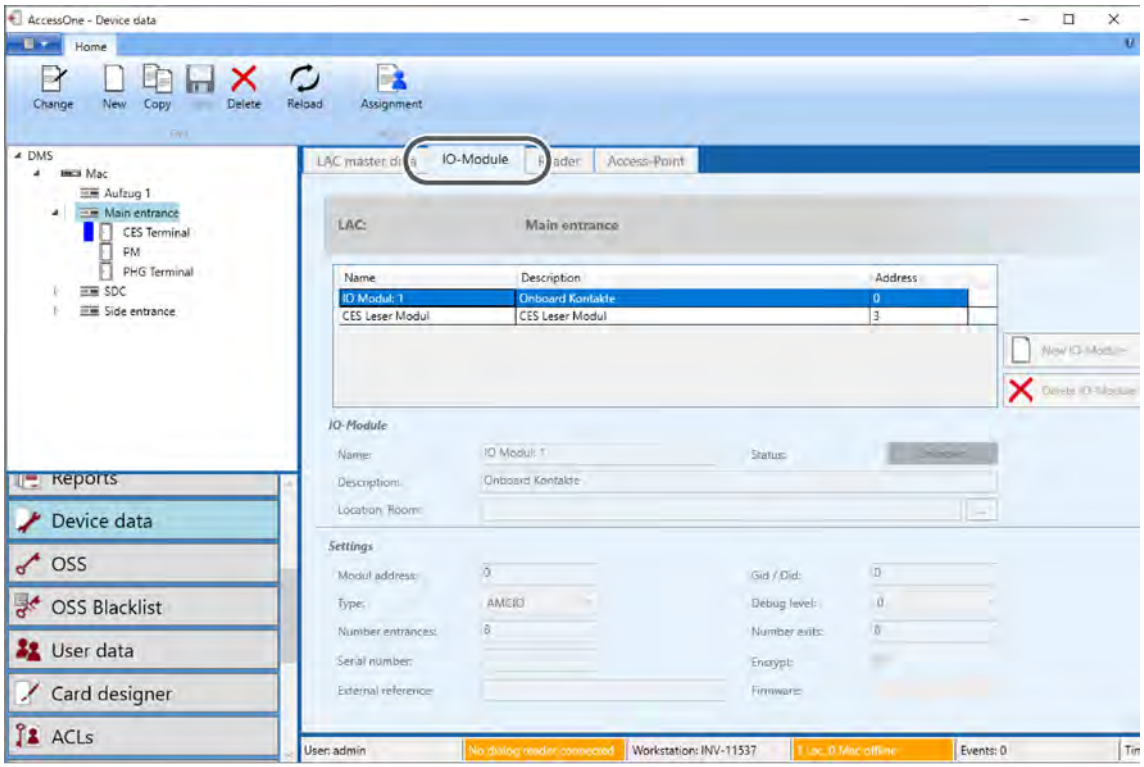
The door controller properties section also includes a tab for IO modules. Each local door controller requires hardware components to monitor input signals (e.g. door status signals) and to issue control commands. These are known as the input-output (IO) modules of the LAC. An IO module has several input circuits to check whether an external contact is open or closed.

AccessOne treats IO modules as separate modules, even if the relevant hardware is in fact contained in the door controller or ID card reader. This makes it possible to freely allocate signals across all available IO modules.

AccessOne can determine whether the IO module concerned is an onboard module of the LAC or a separate IO module. The IO module provided onboard is set up by default when the LAC is created. Separate IO

modules must be added manually with their relevant bus address. Signal programming of the IO modules is performed individually at a later stage when the respective doors are configured.

Go to the ‘IO modules’ tab to configure the hardware for the inputs and outputs of the door controller.



If you have selected a door controller that already has inputs and outputs integrated in the device, this IO module is automatically created when you move to this tab.

To create a new IO module, click the 'New IO Module' button and complete the relevant input fields. The module address for internal contacts is 0.

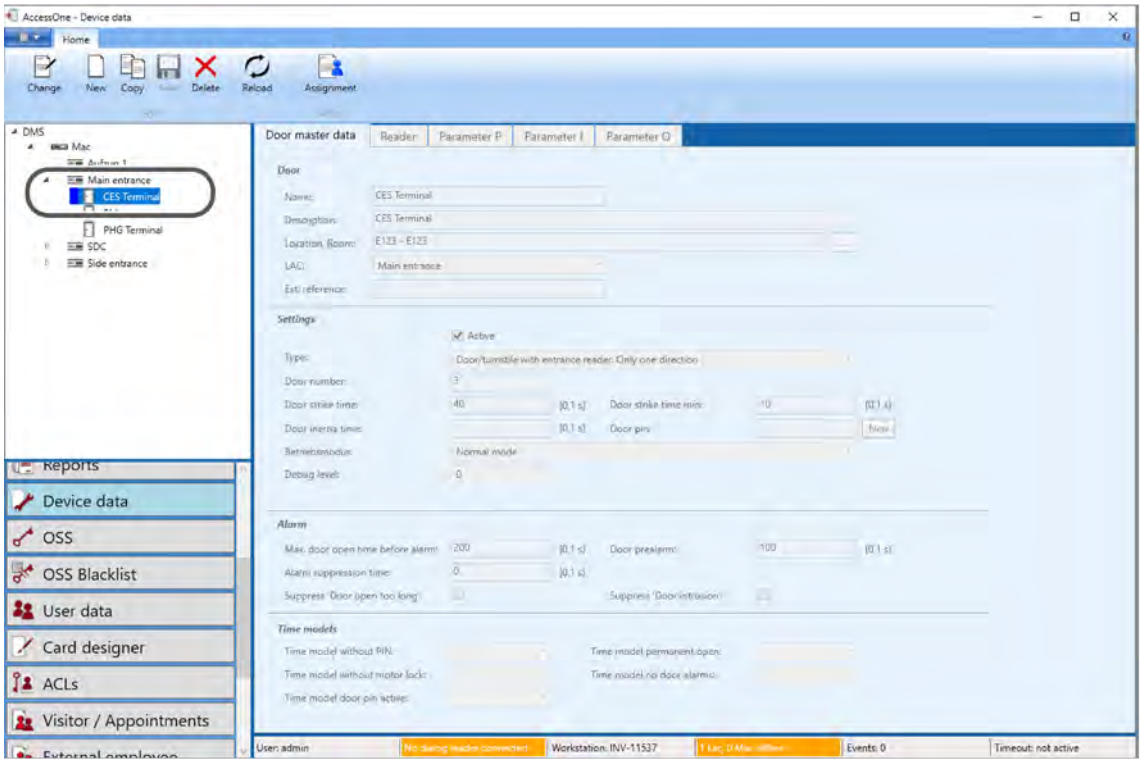
Select 'AMC-IO' as the type if you have chosen an AMC as the door controller. If you are using a TSG central access controller, select 'TS2' as the type for a door controller module with four inputs and outputs and two reader interfaces, or 'IO8' for a relay board with eight inputs and outputs. For separate door controller modules that are connected to the reader bus, enter the bus address that has been set and select the type 'TSM'. TSM door controller modules have two inputs and two outputs (note: this varies depending on the version/ type). You should enter only the actual number of inputs and outputs that are available, otherwise control commands issued for relays that do not exist may result in error messages.

Up to 64 input signals and 64 output signals can be controlled by each door controller. The distribution to IO modules has no relevance, provided that the address range of the reader bus, with a maximum of 16 subscribers, is not exceeded.

7.1.4 Creating a door

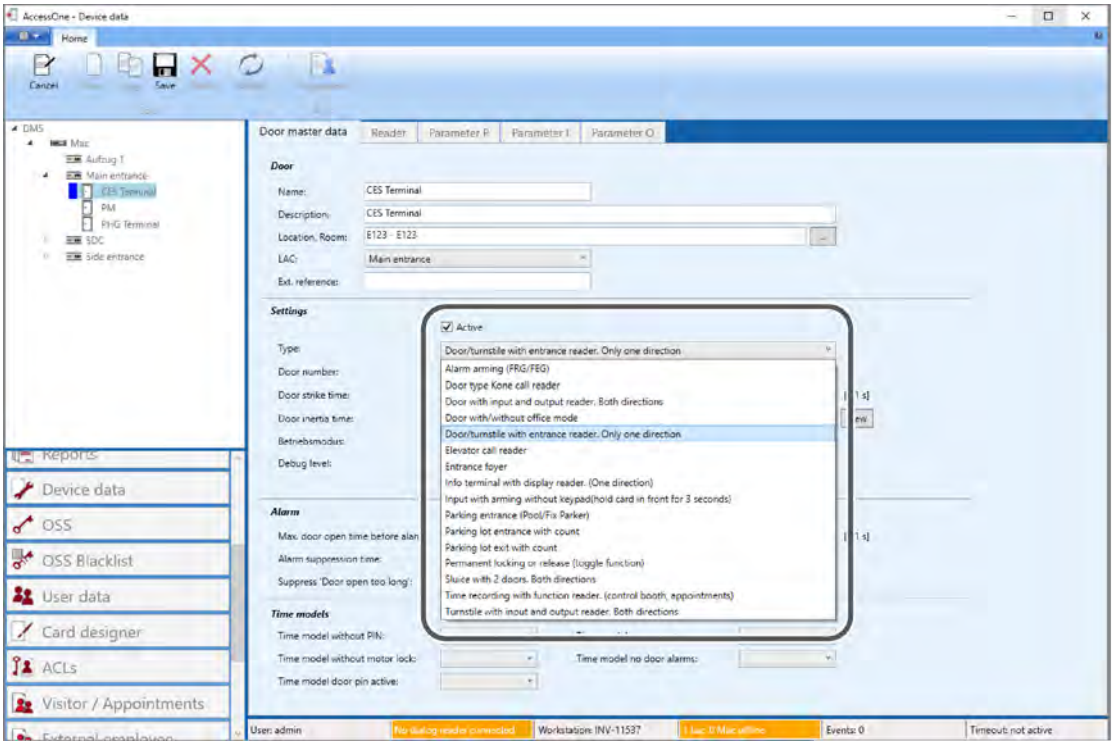
7.1.4.1 Door master data

To create a door on a door controller (LAC), select the appropriate door controller from the selection list on the left and click the NEW button. The window now displays the properties page for a door controller on the right.



The general properties of a door are defined in this tab. In addition to a meaningful name and the location, the type of the required door is also specified. The type determines how the access sequence is arranged and which input and output signals are used.

AccessOne provides pre-configured door models that cover all of the standard tasks performed by a door. Additional, special door models that meet customer-specific requirements can be added if required. Select the appropriate type for your application. In the following example, a simple entrance door used in only one direction is selected.



After selecting the door type, the basic parameters of this access can be set in the input fields.

'Settings' area

Each device has an 'Active' checkbox that is used to activate the device. Only when this checkbox is selected will the device be loaded with data and started. The devices can thus already be configured and then only set as active following installation. Advantage: non-activated devices are not monitored by the system. Pre-configured but not activated devices are therefore also not reported as faulty devices.

You select the origin and destination areas with 'Area entrance' and 'Area exit' respectively. Every door in AccessOne leads from an origin area to a destination area. These areas may be different but do not have to be so.

Example: If your building is divided into a number of secured areas, an entrance might lead, for example, from an external secured area (ASB) to an internal secured area (ISB). However, a connecting door can also lead from one ISB to another ISB.

The areas are created in the 'System Configuration' dialogue selection in the 'Areas' tab. For a particular area in the building, the system can count how many persons are currently present there and can, for example, check whether the maximum number of persons has been reached. If this is the case, no further access is permitted. The requirement for this is that a person without an ID card cannot enter the area in question and the entrances and exits are fitted with access control devices, such as turnstiles, so that it is not possible for multiple people with access authorisation to enter the area at the same time.

Each door requires a unique door number in the door controller. This number must be between 1 and 8 since a maximum of eight doors are supported per door controller.

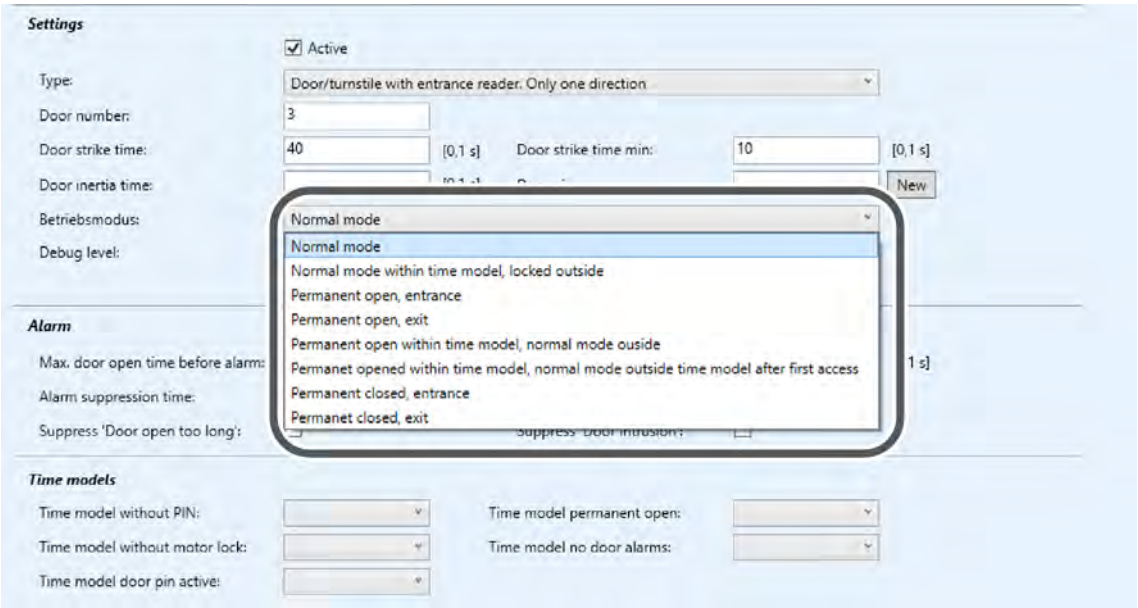
The value in the 'Door strike time' field defines the maximum amount of time for which the door opener remains actuated when an authorised access medium is presented. This value is entered in tenths of a second. Thus, entering 40 in this example means 40 x 0.1 s = 4 seconds. If the door has a door contact, the door cont-

roller can determine whether the door was opened. In this case, the release is cancelled as soon as it is detected that the door is open. In this case, the value in the 'Door strike time min.' field makes it possible to ensure that the door opener remains actuated for enough time to guarantee that the door can be opened safely.

There are door opening contacts that are integrated into the lock or the magnetic closure device that signal that the door is already open even if it has been moved only a few millimetres. In this case, if no minimum opening time were specified, the door would be locked again immediately and in some circumstances no access would then be possible.

The value in the 'Door inertia time' field specifies how long the AMC should wait after a door has been accessed and after detecting that a door has been closed again before reactivating the intruder monitoring system of the door. With heavy doors it may be the case that when the door returns to the closed position in the door frame, it may vibrate briefly, such that the door controller briefly detects that the door is closed and then momentarily senses it open again, before a steady closed state is detected. Without this inertia time, accessing a door could always be followed by a message reporting that the door had been forced.

In operating mode, the following alternatives can be selected:



Normal mode (default): In this mode the door can only be accessed only with the appropriate authorisation and a valid ID card.

Permanent open: The door opener is constantly active; the green LED on the ID card reader is on permanently and anybody can open this door without an ID card.

Permanent open within time model, normal mode outside: The door can be opened during office hours without an ID card, but outside these (freely definable) times, only authorised persons should have access.

Permanent open within time model, normal mode outside time model after first access: Following the first authorised opening, the door remains open. During the selected time model the door changes to the 'Permanent open' state. This ensures that at least one authorised employee is present.

Normal mode within time model, locked outside: Outside the assigned time model, this door cannot be used, even with an authorised ID card. Within the time model, a valid ID card and the appropriate authorisation are required to open the door.

Alarm

The parameters for the door alarm are set in the 'Alarm' section.

Max. door open time before alarm: Defines how long the system should wait for the door to be closed again before an alarm is issued. This value is specified in tenths of a second. If the specified time is exceeded, the system generates a log entry with the text 'Door open too long'.

Door prealarm: The value in this field should be smaller than that in the previous field. It specifies when an attention signal should be generated on the reader. This means that the person can close the door before an alarm is issued. If the door remains open longer than this specified value, the ID card reader mounted on the door repeats an acoustic signal until the door is closed again or an alarm is issued.

Time alarm suppression: This value is necessary for doors that are constantly monitored by an additional intruder alarm system. Here it may be necessary to inform that system, by means of an output signal, that the door is now being opened for an authorised purpose. The signal is cancelled soon after the door has been closed again, but no later than after the time specified by the value in this field.

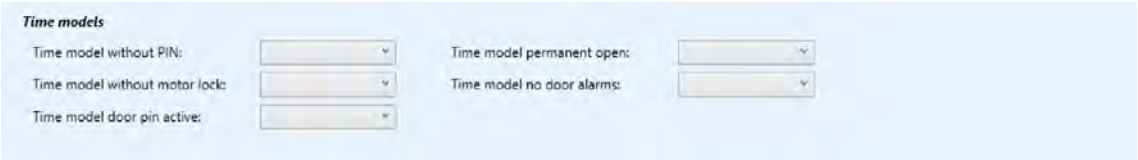
Suppress 'Door open too long': Here you determine whether the system should trigger an intruder alarm or not if the door is opened without an ID card.

Suppress 'Door intrusion': With this checkbox you can control the alarm signal on site.

The system does not generate separate door status messages. The information of whether the door was opened or not is obtained from the relevant access log entry.
Log entries:
'Access permitted': The door was opened following an authorised activation.
'Access not permitted': The door was not opened, even though it was released.

Time models

In this section the time models that may be required for general behaviour can be selected:



A total of four time models are available:

Time model without motor lock: If the door has a motor lock, the mechanical load is reduced by only enabling the motor lock before and after the specified time model is activated.

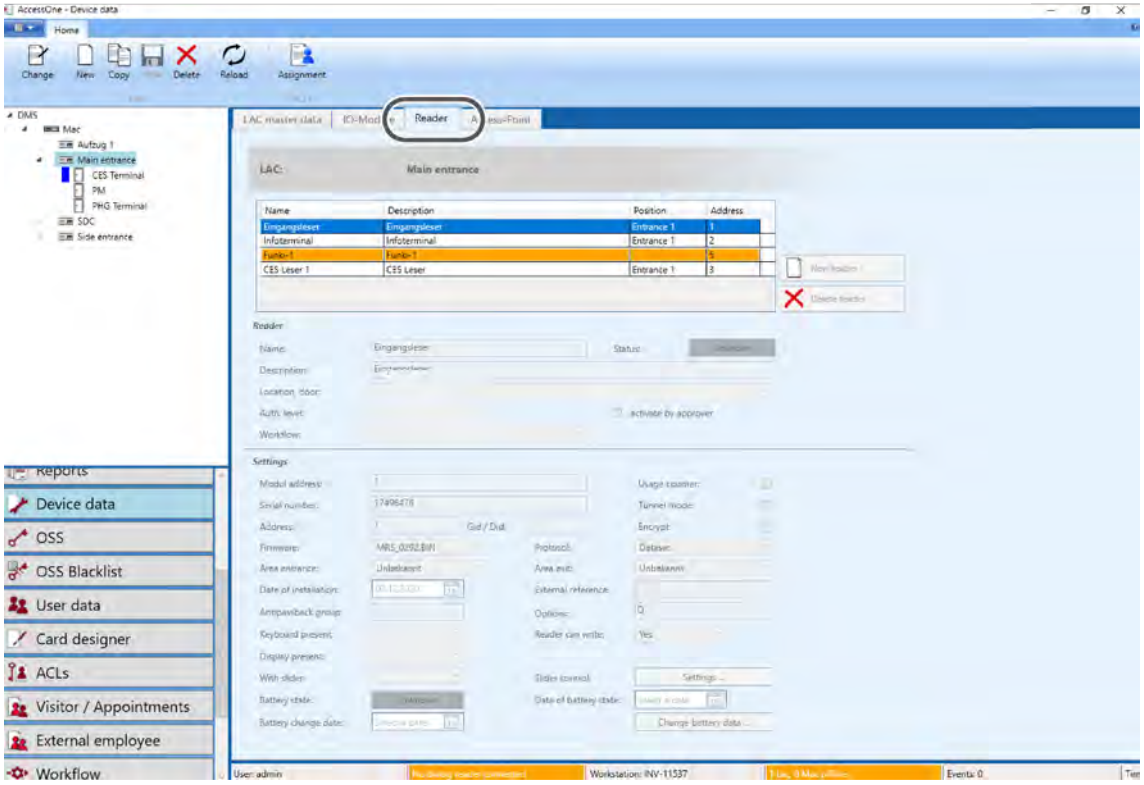
Time model without PIN: The requirement for entering a PIN into the ID card reader is restricted to times outside the specified time model.

Permanent open: The door opener is always active and the door can be opened without an ID card (this setting is the same as the 'Permanent open' time model).

Time model no door alarm: Door alarms are issued only outside the specified time model.

7.1.4.2 Readers

The ID card readers associated with the door are defined on the 'Reader' tab.



To create a new reader, click the 'New Reader' button. The system then adds a new line to the overview list and allows you to enter the parameters associated with the reader in the fields below it.

'Reader' area

In the 'Reader' area you can specify the name, description, location, authorisation level and workflow.

Authorisation level

Five authorisation levels ranging from 'very low' to 'very high' can be selected. This reader can only be entered into an authorisation or for a person if the user at the dialogue station has at least the same or a higher authorisation level. You can use the authorisation levels to ensure that not every AccessOne user can issue access authorisation to sensitive areas.

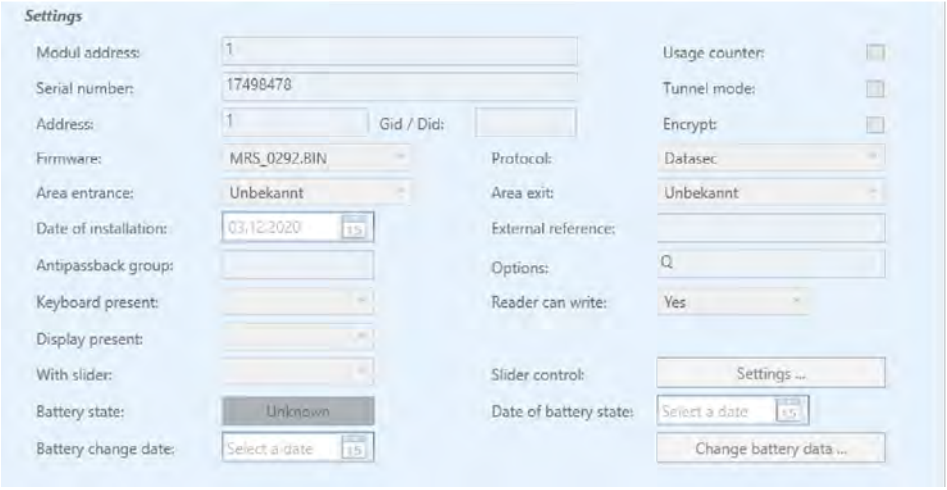
The 'Activate by approver' checkbox ensures a further activation is required by a user with suitable authorisation.

Workflow

Here you can create specific work steps that must be approved by a superior, such as the allocation of authorisations for a particular area.

'Settings' area

In the 'Settings' area, you specify the technical properties of the ID card reader.



Module address

The first field is read-only and indicates the internal reader index allocated by the system. This is used to compile the authorisations and cannot be changed.

Card reader serial number

The serial number of the reader is required to implement the internal bus addressing of the reader. With these readers, the bus address cannot be set using DIP switches but is controlled by a configuration software. AccessOne automatically allocates the address when the serial number of the reader is entered. If, for example, a reader configured to address 3 fails to issue a signal, the door controller will try to identify that reader using the serial number. If identification is successful, the relevant address, in this case 3, is assigned to it.

Address (manual entry)

Each reader must have a bus address between 1 and 8.

Depending on the reader protocol, another fixed numerical value is added to the bus address, as in some reader protocols the addresses A to H are issued. This occurs automatically, since the conventions of the different reader protocols are stored in the door controller.

Firmware

Selection field for the firmware version. The current version is displayed at all times.

GID/DID

If readers with an old V-protocol or 9-way protocol are connected to the door controller, a group ID (GID) and a device ID (DID) must be specified in addition to the logical bus address. The GID forms the tens digit and the DID the units digit. Both values must be between 1 and 8. Example: The value ‘12’ describes a reader address with a GID of 1 and DID of 2.

Usage counter

The reader checks whether the ID card has reached the maximum number of uses for the current day.

Tunnel mode

Relevant only for LEGIC readers with DE bus. Like most other card readers, Deister ID card readers can only evaluate one stamp in the case of LEGIC cards. If the card has more than one segment and if all of the segments have to be evaluated, the intelligence of the reader must therefore be disabled and ‘Tunnel mode’ employed. In this mode, the commands to the LEGIC chip for searching and reading a segment are passed from the reader to the master controller. The AMC firmware can then read the segments that are activated in the AccessOne reader formats successively.

With the DE bus and Datasec bus, communications with the ID card reader can also be AES encrypted.

Encrypt

The link between the MAC and controller is additionally encrypted.

Date of installation

Automatically pre-filled when the reader is set up with the current day, but can be changed as desired. The date of installation is part of the system documentation.

External reference number

For internal labelling by the customer.

Options

For internal labelling by the customer.

Antipassback group (time-based)

Disables an access medium from being passed to another person after being used and thus allowing them to also gain access with the same medium. In order to treat adjacent doors equally, these doors can be combined in a group. Readers in the same antipassback group are treated as if they were mounted side by side and serve the same access. An access medium that has been used on a reader in this group is locked for all other readers of the same group for a set period (this period can be set in the door parameters). The value entered is a number between 1 and 99. Up to 99 door groups can be created.

Reader position

In AccessOne a door can be equipped with up to four readers – two for the entry direction and two for the exit direction. Example: at vehicle entrances it can be useful to fit a second reader for use by commercial vehicles above the reader used by cars.

Reader can write

The reader can write to cards. Example: updating access rights on offline locking devices. With some readers, the software can detect this automatically, while with others it must be specified explicitly. If no value is specified, any write function available in the reader is not used.

Keypad available

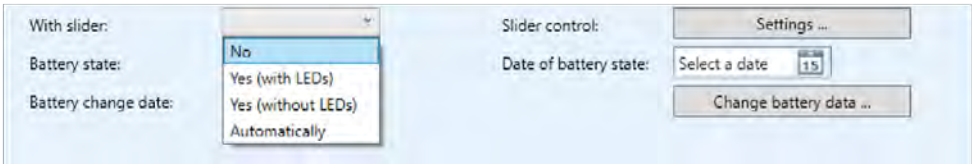
At some access points it is necessary to enter a PIN to arm the intruder alarm or as an addition to a biometric to gain access. Since on some of the readers, the keypad must be activated by a control command from the door controller, there is an option here to specify this explicitly. In most cases, however, the door controller detects the presence of a keypad automatically.

Display available

A display on the reader is only actuated if a suitable entry is provided here.

With slider

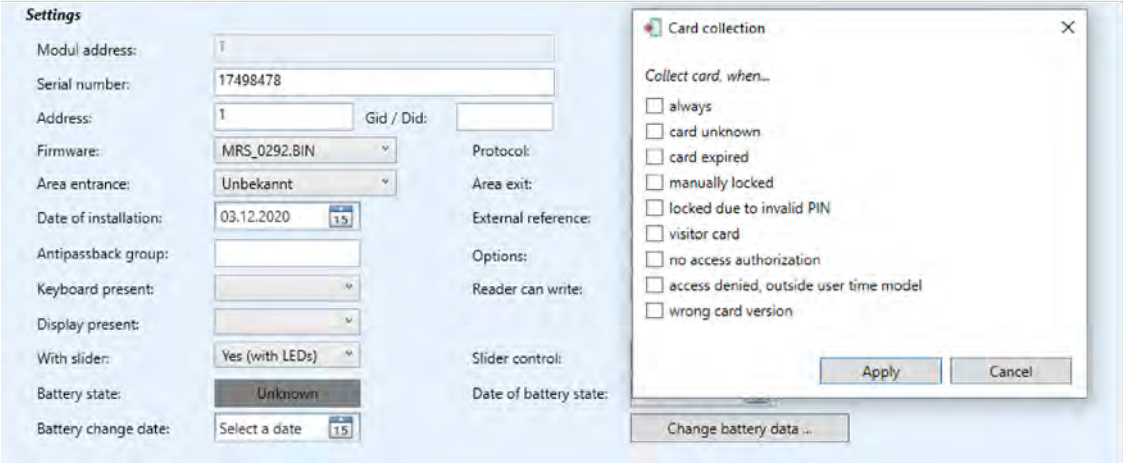
Here you can specify whether the reader is equipped with a motorised card slider.



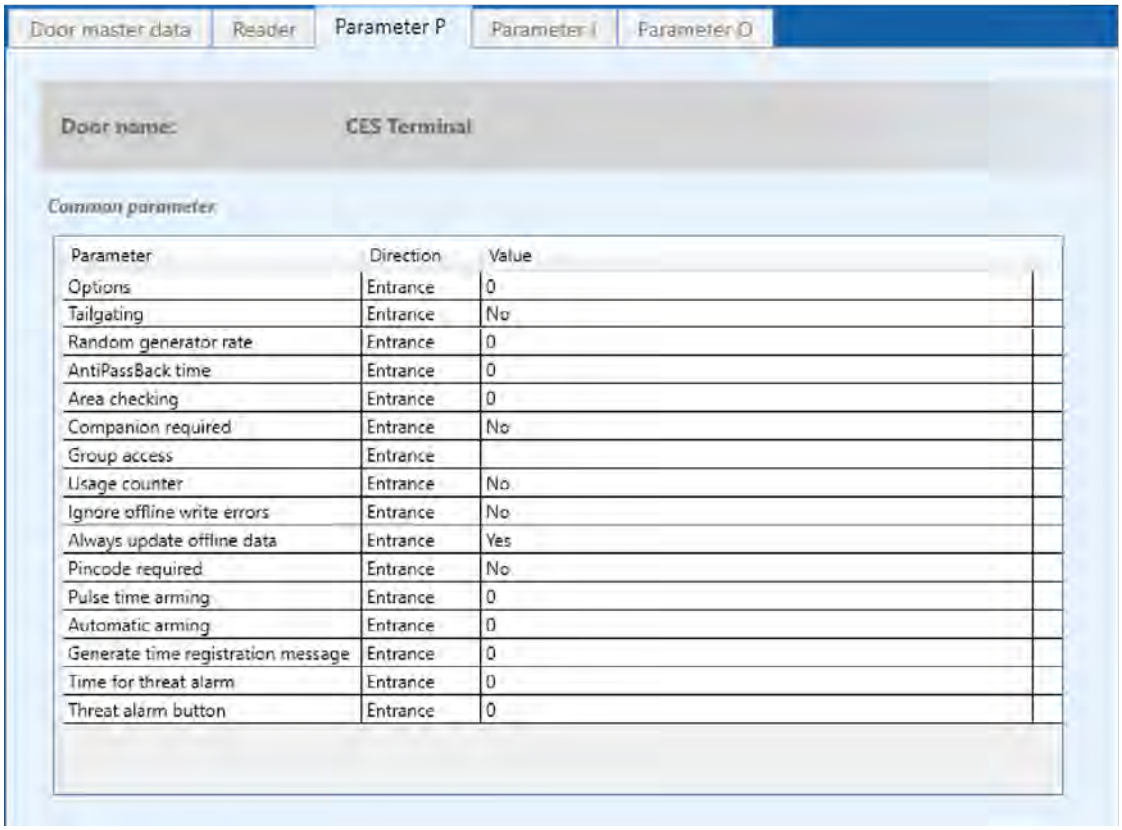
If the slider slot is fitted with LEDs, these must be actuated instead of the LEDs on the reader. In this case select 'Yes (with LEDs)'. If you select 'Yes (without LEDs)', the LEDs of the reader are actuated.

Slider control

If a motorised slider is present, this section is used to specify whether the card is returned after being read and the conditions under which it should be retained.



7.1.4.3 Parameter P



Parameter	Direction	Value
Options	Entrance	0
Tailgating	Entrance	No
Random generator rate	Entrance	0
AntiPassBack time	Entrance	0
Area checking	Entrance	0
Companion required	Entrance	No
Group access	Entrance	
Usage counter	Entrance	No
Ignore offline write errors	Entrance	No
Always update offline data	Entrance	Yes
Pincode required	Entrance	No
Pulse time arming	Entrance	0
Automatic arming	Entrance	0
Generate time registration message	Entrance	0
Time for threat alarm	Entrance	0
Threat alarm button	Entrance	0

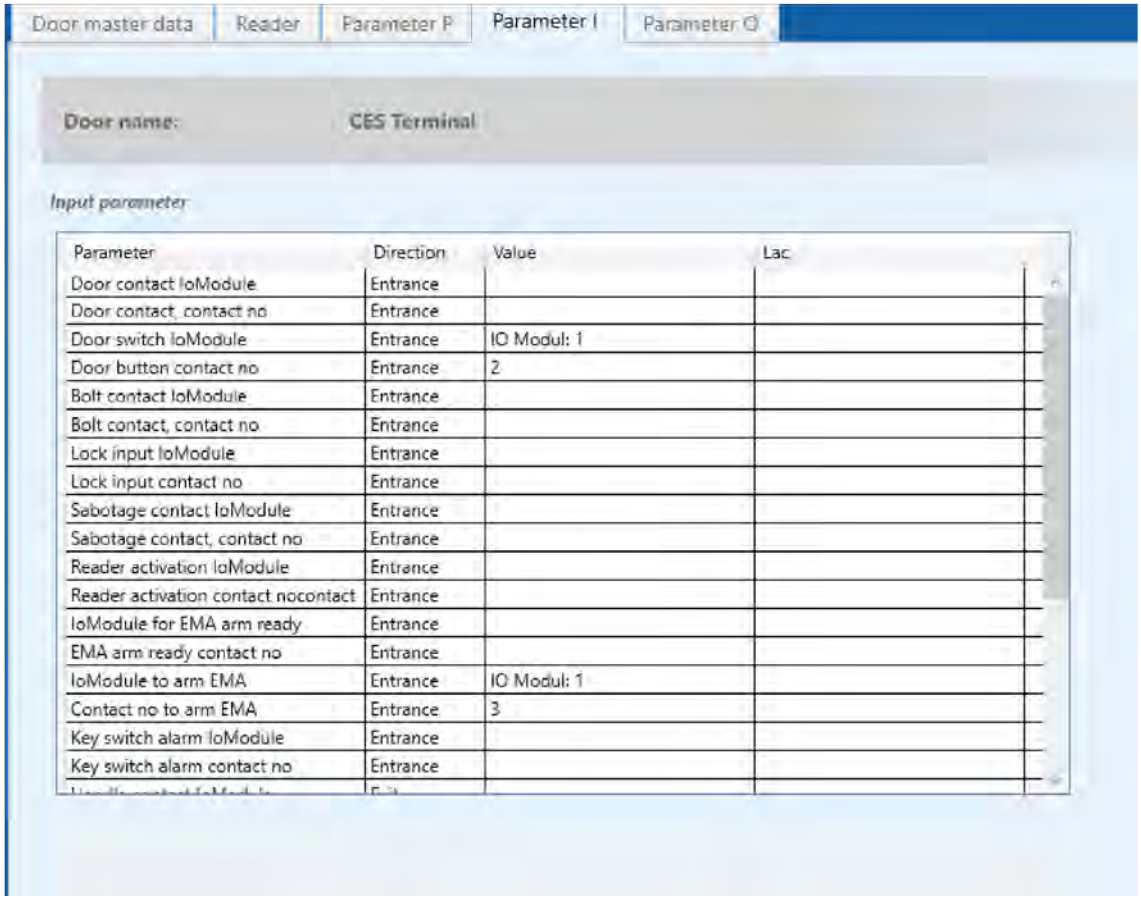
This tab contains the parameters that affect the sequence control of the door. The number of parameters listed on this page is dependent on the complexity of the selected door type. The following example is based on a standard door with one direction of passage. For doors used in both directions, the parameters are provided for each of the entry and exit directions.

Options	The options are used to enable customer-specific actions to be implemented. On all door types, the value 1 determines that the authorisation time model for is ignored on this door. A good application for this is the exit reader, for example. Example: a person should no longer be allowed to enter the building after 17:00 but is free to leave. After 17:00 the entry reader will reject the person with the message 'Not permitted, outside time model'. If option 1 is set, the exit reader checks only whether an authorisation exists for this reader and ignores the time model.
Tailgating	This specifies whether the controller requires the door to be closed again after each authorised entry before the next card is accepted.
Random generator rate in %	If a random bag check is desired, the percentage rate can be set here with a value between 0 and 100. The software uses a random generator. Example: a value of 50 means that for every 100 passes, exactly 50 persons are denied access with the message 'Authorised for check'. A lockout is then set for this person that must then be deleted by security personnel once the check has taken place. This lockout also acts to prevent access at other access points.
AntiPassBack time	Specifies how long, after being successfully used, a card is locked on readers in the same AntiPassBack group (time in seconds).

Area checking	The current location of a person (= area) is monitored by AccessOne with each use of their ID card on a reader. The door controller is therefore also able to check whether the person who has just held their card up to the reader is in fact registered in the same area in which the reader is located. If this is not the case, then either the person has passed through an open door without presenting their card to a reader, or the card has been stolen. If the area checking function is enabled, a door can then only be passed through if the person's location is the same as the location of the ID card reader. The requirement for this is a clear separation of the access areas and a constant monitoring of entry and exit movements by the access control system.
Companion required	Visitors may not enter particular areas unsupervised. On detecting a visitor card, therefore, the door controller waits for up to 10 seconds for a second card to be presented, which must be for a member of staff. Only when this occurs and the accompanying person has the required authorisation for this door will the door be released. During the waiting period, the green LED on the reader flashes to indicate that while one authorisation has been granted, another card is required.
Group access	Where an area should only be entered by more than one person at a time, this situation can be set up using this parameter. If, for example, the value 3 is entered, at least three cards for different authorised persons must be held up to the reader in succession before the door will be released.
Usage counter	AccessOne allows an ID card to be created with a fixed maximum number of uses. If this value is set to 1, the ID card is comparable to a single-use admission ticket. Every reader, that has this parameter set, checks whether the maximum usage of the ID card is still greater than zero. If yes, and if the person has the necessary authorisation, the door is released and the usage counter counts down by one. If the counter has reached zero, no further door for which this parameter is also set will open. If this parameter is set on the reader at the building entrance, the situation will be that the visitor can enter the building exactly once. The counter is not checked within the building and the visitor is not restricted while there.
Ignore offline write errors ignorieren	This parameter is only useful if an offline locking system is in use. It controls whether access should also be granted if the process of writing the access authorisation for the offline doors was performed without errors. Normally, the door opens only if the card holder holds their card in front of the reader for sufficient time that it could be successfully written to.
Always update offline data aktualisieren	To avoid too many write operations, the door controller updates the card only when at least half of its validity has expired. This update, however, only takes place in offline locking systems.
PIN code required	This value specifies whether a PIN must be entered to gain access. It requires that the reader has a keypad.

7.1.4.4 Parameter I

On this page the inputs are specified, i.e. which input on the respective IO board is connected to the monitoring contacts of the connected peripherals.



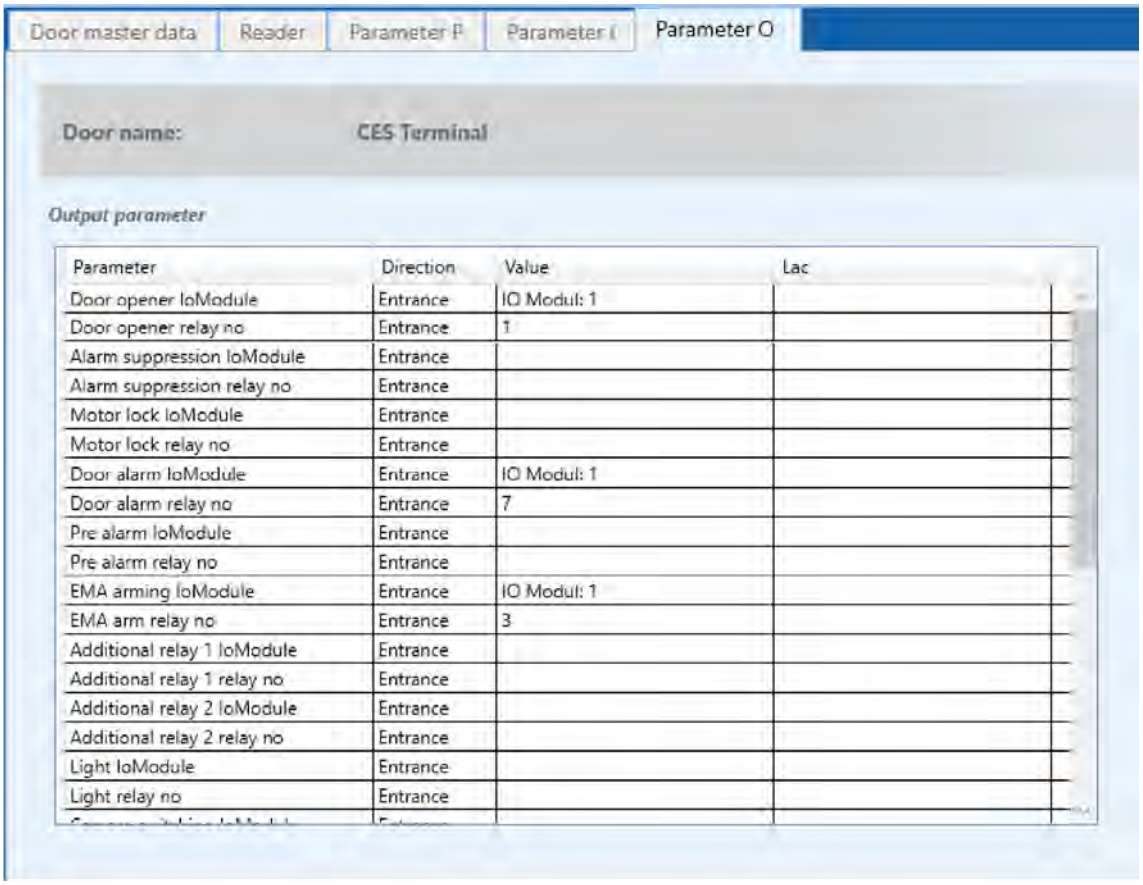
Meaning of the individual input signals, regardless of door type:

Door contact IoModule	The IO module to which the door contact is connected (input).
Door contact	Number of the contact on this module.
Door switch IoModule	The IO module to which the request-to-exit contact is connected.
Bolt contact IoModule	An additional signal that states whether the door should not only be closed but that the locking bolt should also be extended.
Lock input IoModule	The IO module to which the contact for blocking passage is connected.
Sabotage contact IoModule	If this signal is detected, a tamper message is generated and the tamper relay is actuated.
Group access	Where an area should only be entered by more than one person at a time, this situation can be set up using this parameter. If, for example, the value 3 is entered, at least three cards for different authorised persons must be held up to the reader in succession before the door will be released.
Reader activation IoModule	The IO module to which the slider contact/light barrier is connected.
IoModule for EMA arm ready	The IO module to which the 'Alarm system ready' contact is connected.
IoModule to arm EMA	The IO module to which the 'Alarm system armed' contact is connected.
Key switch alarm IoModule	The IO module to which the (key) contact 'Please arm the alarm system' is connected.

Handle contact IoModule	Triggered if the lever handle (door handle) of a door that has no ID card reader is actuated from the inside. This prevents an intruder alarm being issued when the door is opened with the lever handle.
Key contact IoModule	Similarly to the handle contact, a signal here indicates that the door is being opened using a key.

7.1.4.5 Parameter O

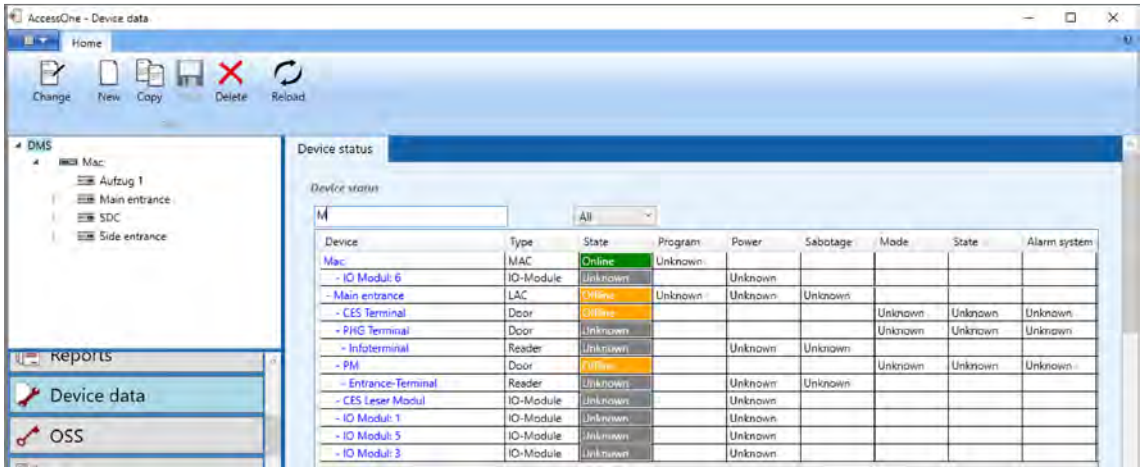
On this page, the output signals are specified, i.e. which relay output on the respective IO board is connected to the actuators of the connected peripherals.



Meaning of the individual output signals:

Door opener IoModule	The IO module to which the door opener relay is connected (output).
Alarm suppression IoModule	The IO module to which the alarm suppression relay is connected (output).
Motor lock IoModule	On self-locking doors, the motor lock must be actuated in addition to the door opener to retract the deadbolt. This output signal can be combined with a time model. If the door is in the 'Permanent open' state, this signal is constantly set.
Door alarm IoModule	Output signal for the intruder alarm. This is always set if a door has been opened without authorisation or is open for too long. The setting of this signal can be suppressed in the parameter settings.
Pre alarm IoModule	If a pre-alarm time has been set for a door, this signal is set once the door has been opened and the set time has expired.
EMA arming IoModule	The IO module to which the relay for arming the alarm is connected (output).
Additional relay 1 IoModule	The IO module to which the relay for special function 1 is connected (output).
Additional relay 2 IoModule	The IO module to which the relay for special function 2 is connected (output).

7.1.5 Displaying the device status



Click on ‘DMS’ in the tree structure with the left mouse button to view the status of all devices in the overview. The status of an individual device (online or offline) is displayed in the detailed view for the device. This entry cannot be deleted and a second one cannot be created.

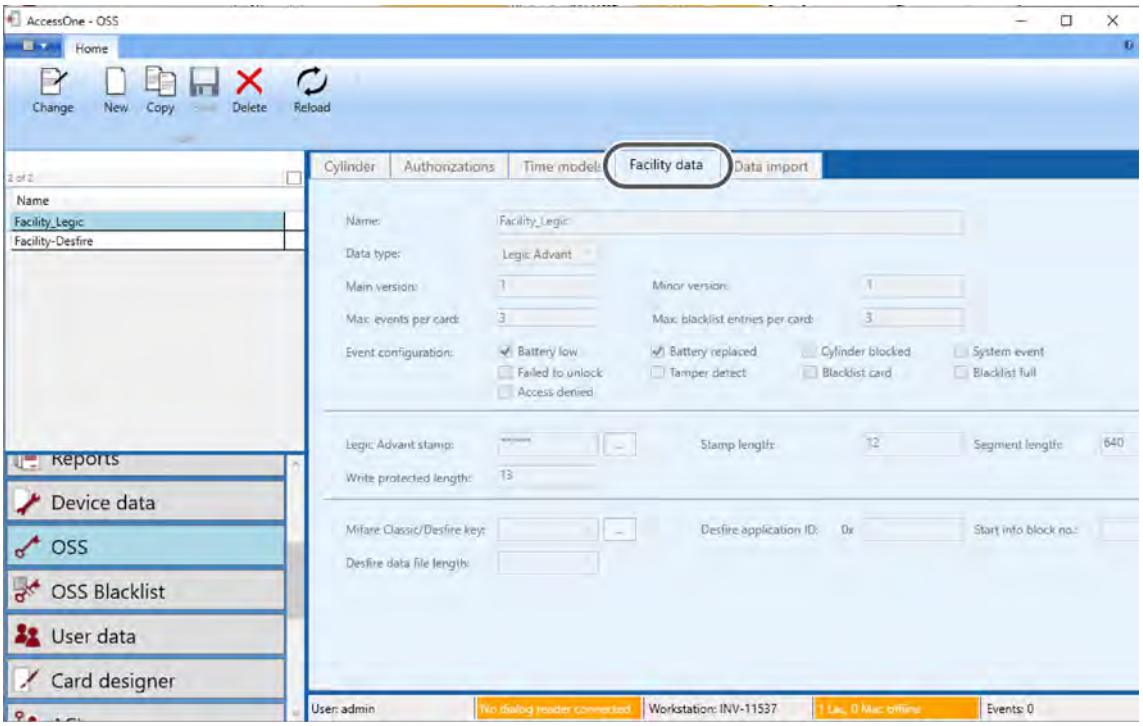
Right-click on DMS to view a further range of choices. Here you can create a new MAC, a new EMC or a new PS-Online (key cabinet).

7.2 Offline device data (OSS-SO)

Facility data must be created for every installation of OSS Standard Offline. Basic data for the offline devices, such as electronic cylinders and handle sets, are entered here. This and other data are used to determine the size of the memory on the locking medium for offline data and how much space should be reserved for events and lockout list entries. With MIFARE, the facility data contains the access keys to offline segments of the card and application ID. For LEGIC this is where the stamp is stored.

7.2.1 Facility data

Facility data are normally pre-installed by CES but can also be added or changed by the user. There is one dataset per system. To create a new entry, click New in the toolbar.



Specify a name and choose the data type. Enter the main and sub-version number (e.g. the digits 1 and 0 for version 1.0). The version number is important as a distinguishing feature.

In the 'Event configuration' area, specify which events should be written on to the card by the electronic cylinder. These settings apply across the system; they are thus written on the updater in the same way for all of the locking media.

For a LEGIC advant system, enter the stamp and stamp length. To enter the stamp, click the button to the right of the input field. Both the stamp and key are normally entered in hexadecimal format, i.e. digits 0-9 and letters A-F are permitted. The total length of the key value for Mifare DESFire is 32 characters (Mifare Classic: 12 characters).

The access keys are encrypted and saved in the database. Once entered, for security reasons this value will NEVER again be displayed in clear text; it is only possible to enter a new value.

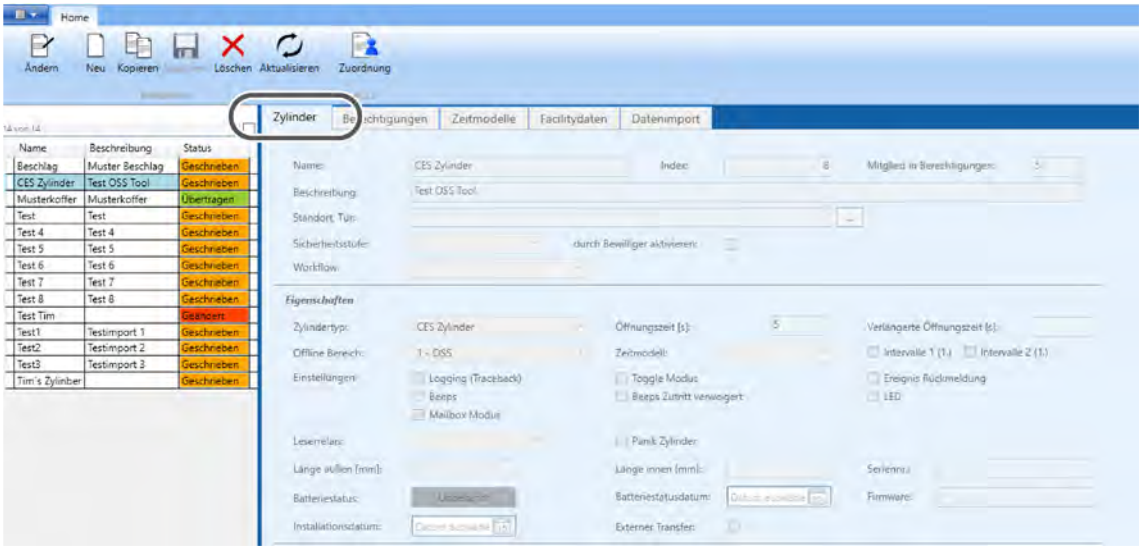
Click SAVE in the toolbar when the entries are complete.

If you change the key, the change is effective immediately. This may mean that from this time onwards no further locking medium can be updated.

7.2.2 Cylinders (and handle sets)

The offline components are created on this tab. Click NEW in the toolbar and enter the data for the cylinder.

In the 'Description' field, specify the exact installation location. Offline components are battery-powered. As standard offline components they are capable of writing the battery status back to the locking medium if the battery falls below a certain voltage level. The installation location must be known so that a low battery can be replaced.



Cylinders and handle sets are clearly distinguished by their number. AccessOne allocates the number automatically when a new electronic cylinder is set up and saved (it appears in the 'Index' field).

Properties area

Further information on the installed device is entered here.

Cylinder type

Choose between cylinder, handle set and wall terminal. These devices may require different batteries.

Open time

Specifies how long the cylinder remains coupled during an authorised access. A value of 5-10 seconds is normally sufficient (default setting: 5).

Extended open time

The standard open time can be extended for certain person groups.

Offline area

With Standard Offline, the offline area number (site ID) must always be specified. The value 0 is not permissible here. The area number allows an installation to be divided into several areas. In this case there are multiple cylinders with the number 1, i.e. one for each area. This means that the cylinder number is only unique in combination with the area number. When a person moves from one area to another, the updater deletes the data of the previous area and replaces it with that of the current area. By dividing it into multiple areas, the number of offline locking devices in an installation can in theory be unlimited.

Time model

Selection options for the time model. Function is dependent on the device type and manufacturer.

Intervals 1 and 2

Function is dependent on the device type and manufacturer.

Settings

Available settings are dependent on the device type and manufacturer.

Reader relay

Function is dependent on the device type and manufacturer.

Panic cylinder

Device type information.

Length

Information on internal and external length.

Serial number

Serial number is specified here.

Battery status

The 'Battery Status' field shows whether an offline device has signalled a low battery. The ‘Date of battery state’ indicates when this message was created. If the battery is replaced, the offline device generates a ‘Battery changed’ message the next time an activation occurs, which is returned to the system via the ID card updating the data accordingly. The ‘Reader battery state’ report can generate a list of devices with low batteries at any time.

Finally, transfer the data by clicking **Transfer**.

7.2.3 Programming offline devices

Programming the data onto offline devices is completed directly from the tab. The following items are required:

- RF-Stick
- System-Master
- RF-Stick-Master

Procedure:

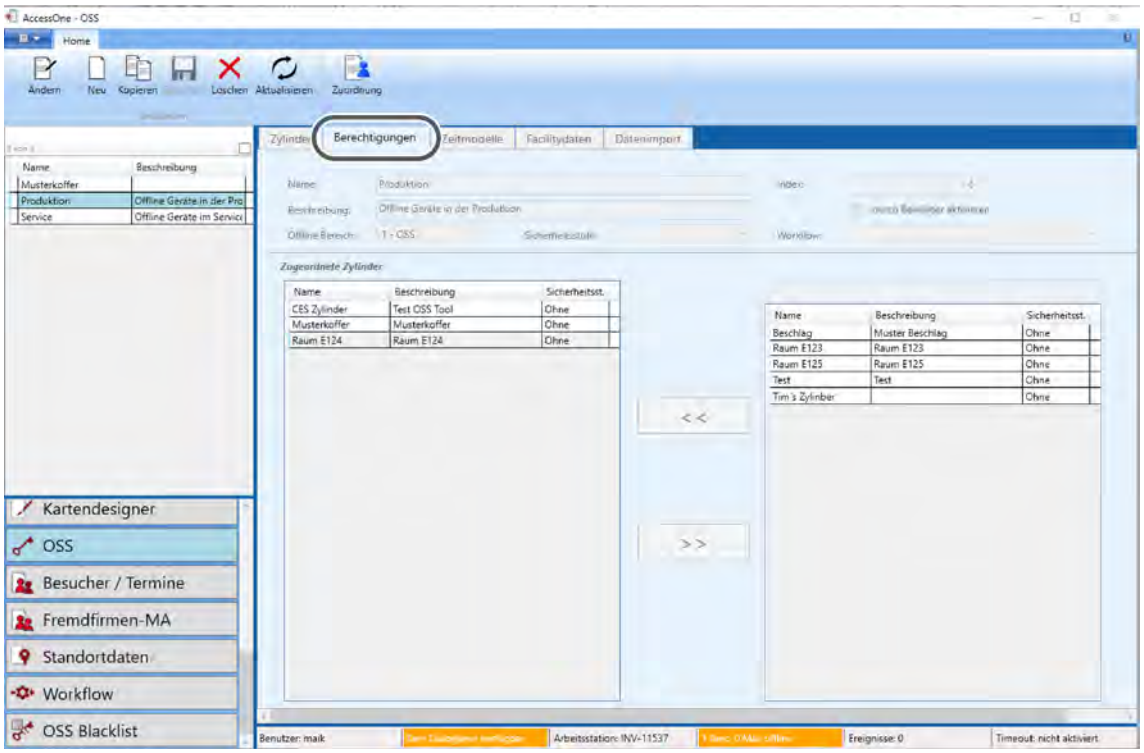
1. Insert RF-Stick into the PC.
2. Click TRANSFER.
3. Import A-licence into AccessOne (a one-off procedure for the first device that is programmed)
4. Hold the RF-Stick-Master in front of the device.

7.2.4 Authorisations

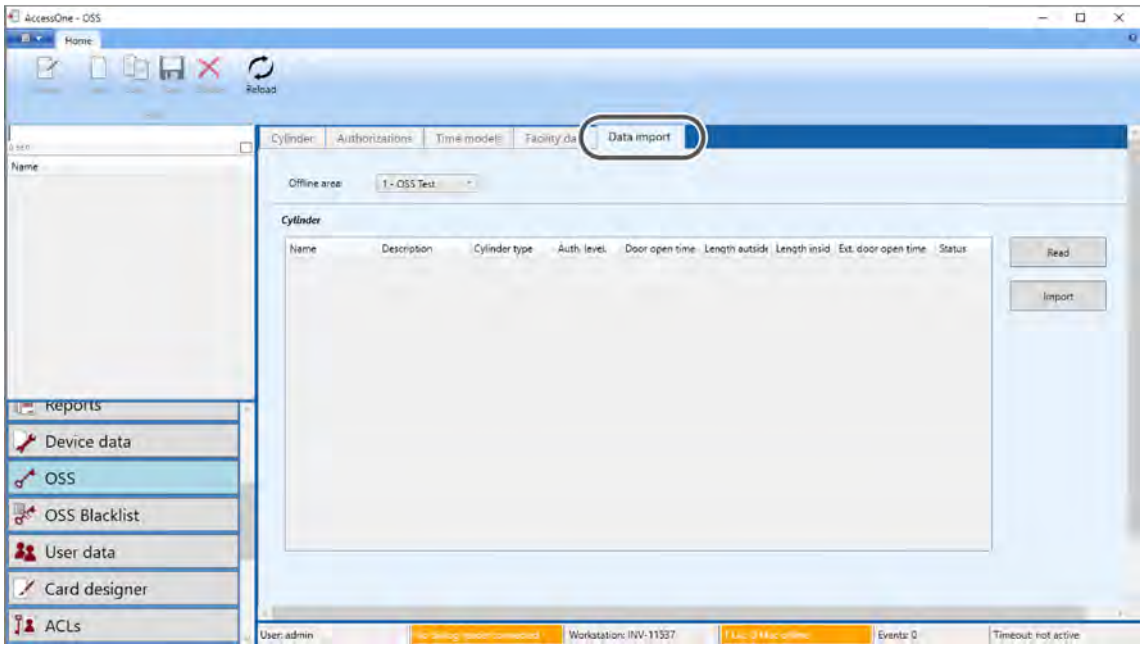
Link several doors into a door group.

If you allocate a new authorisation to a cylinder, you must also transfer this data to the offline device.

Authorisations should be designed so that they only link rooms with the same authorisation level. If a room or corridor has multiple access points, the relevant electronic cylinders should be combined in a single authorisation. You can then link the door groups via the authorisation profiles based on the user profile.



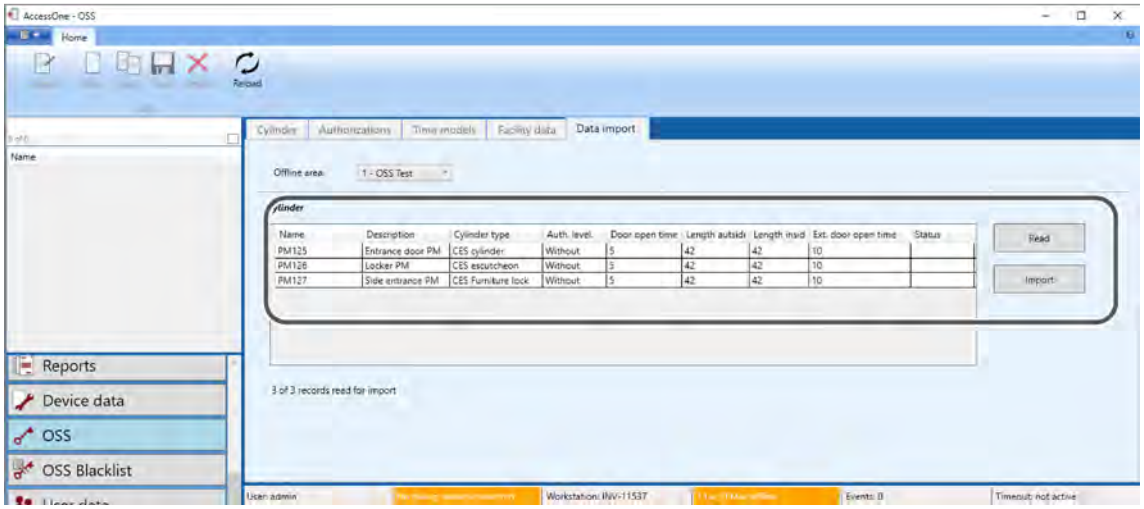
7.2.5 Data import



Allows the import of a *.csv door list. Select the required offline area and click **Read**. Choose the relevant door list from the directory folder.

The door list is normally created by CES when the system is set up. The list can however also be edited by the customer.

Name	Beschreibung	Zylindertyp	Sicherheitsst.	Türöffnungszeit	Länge aussen	Länge innen	Verl. Türöffnungszeit
PM124	Eingangtür PM	CES Zylinder	Ohne	5	42	42	10
PM125	Spind PM	CES Möbelschloss	Ohne	5	42	42	10
PM126	Nebeneingang PM	CES Beschlag	Ohne	5	42	42	10

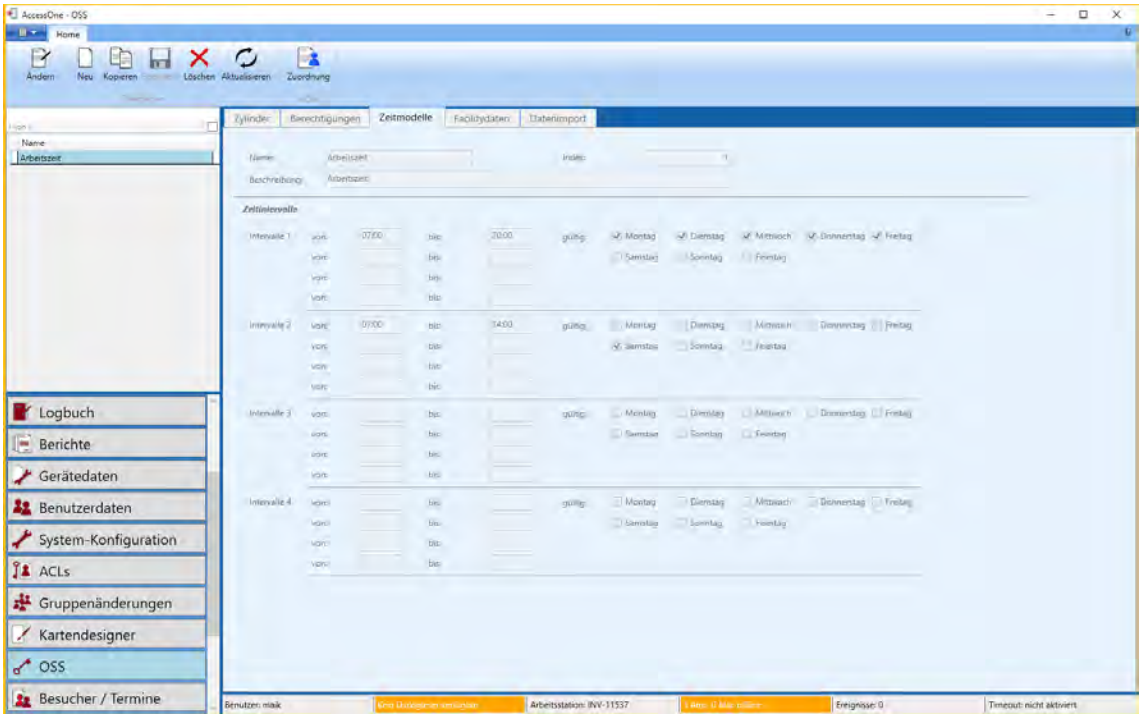


You can now review the imported file again in the list view, in the ‘Cylinder’ field. Press the 'Import' button to import the list into the database. The confirmation is displayed in the text field beneath the field.

7.2.6 Time models

OSS Standard Offline uses a different time model format and is less flexible than AccessOne is for online components. As a result, the online time models cannot be used consistently throughout the installation; there is a separate tab for OSS Standard Offline time models.

In OSS Standard Offline, a time model consists of up to four intervals. For each interval group, days can be selected on which it is valid. If no time model is included in the authorisation for a particular person, the authorisation is valid for the whole day.



In the example, access is granted Mondays to Fridays from 7:00 to 20:00 and on Saturdays from 7:00 to 14:00. No access is permitted on Sundays or public holidays.

8 Configuration of authorisations

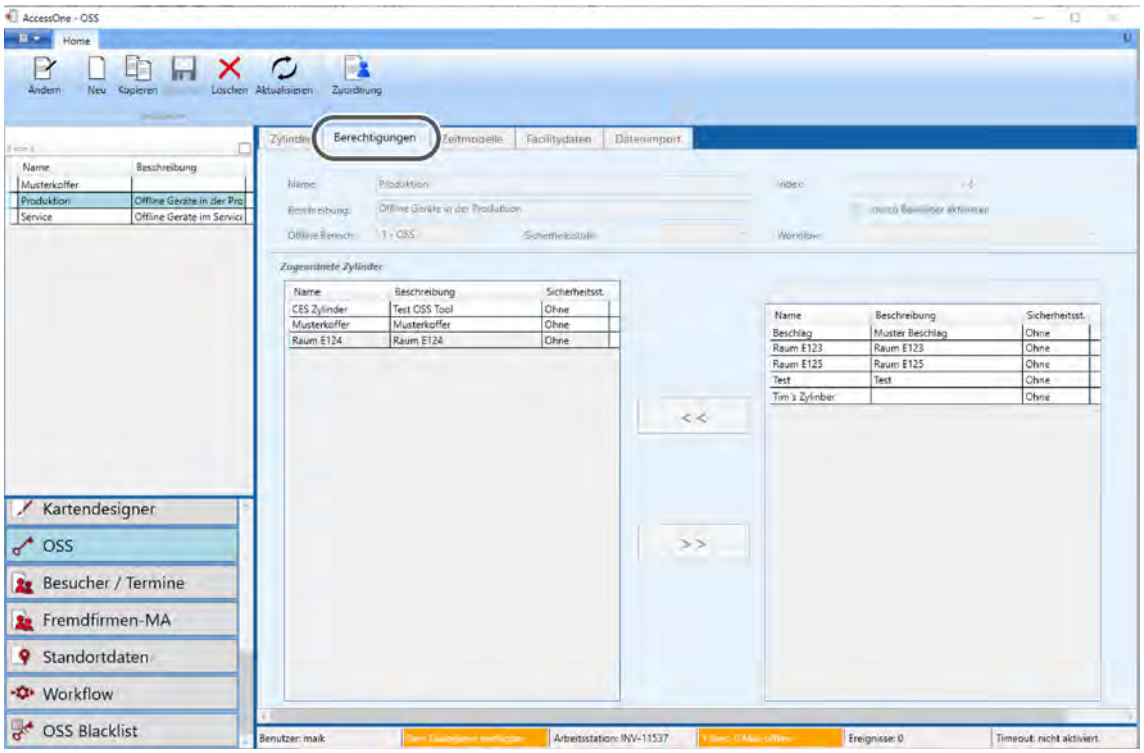
Target group of this section:

- Personnel with product training

8.1 Authorisations

First, set up authorisation groups for online and offline devices. Then use day and time models to define further restrictions or door functions (e.g. opening functions at specific times of day), taking special days and holidays into account.

8.1.1 Authorisations in the overview



Selecting the 'Authorisations' dialogue opens multiple tabs in the dialogue window.
In the 'Authorisations' tab, multiple readers can be combined in one group. The readers are selected from the list of unassigned readers (right-hand list) and allocated to the current group with the '<<' button.

Authorisation groups consist of linked authorisations. The authorisations listed on the right-hand side of the window (unassigned) can themselves also be individual authorisations or group authorisations.

8.1.2 General information on time and day models

Time models are used at various places in AccessOne.

- To restrict access. A person-based time model can be created here, such as a time model for an employee. If no separate time model is specified in the authorisation, the person-based time model always applies.
- Time models are used for doors, e.g. to specify a 'permanent open' function at particular times of day.

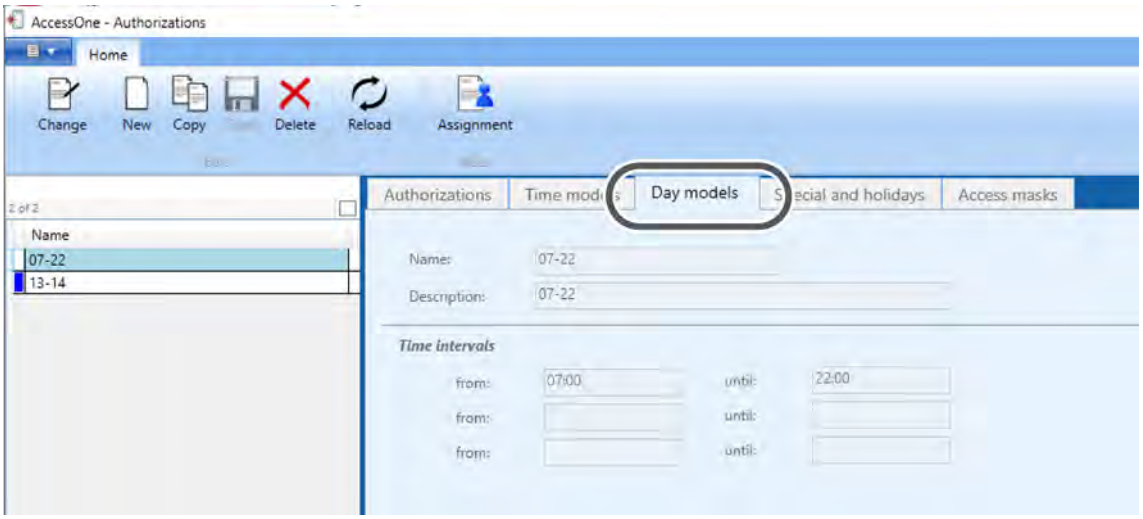
In AccessOne, a time model either equates to a weekly plan, consisting of individual day models for each day of the week, or to additional day models for special or holidays.

Each day model can contain three intervals and specifies access times for exactly one day.

We recommend the following procedure when defining the plans:

1. Create time models
2. Combine special and holidays in groups
3. Create time models for doors

8.1.3 Day models



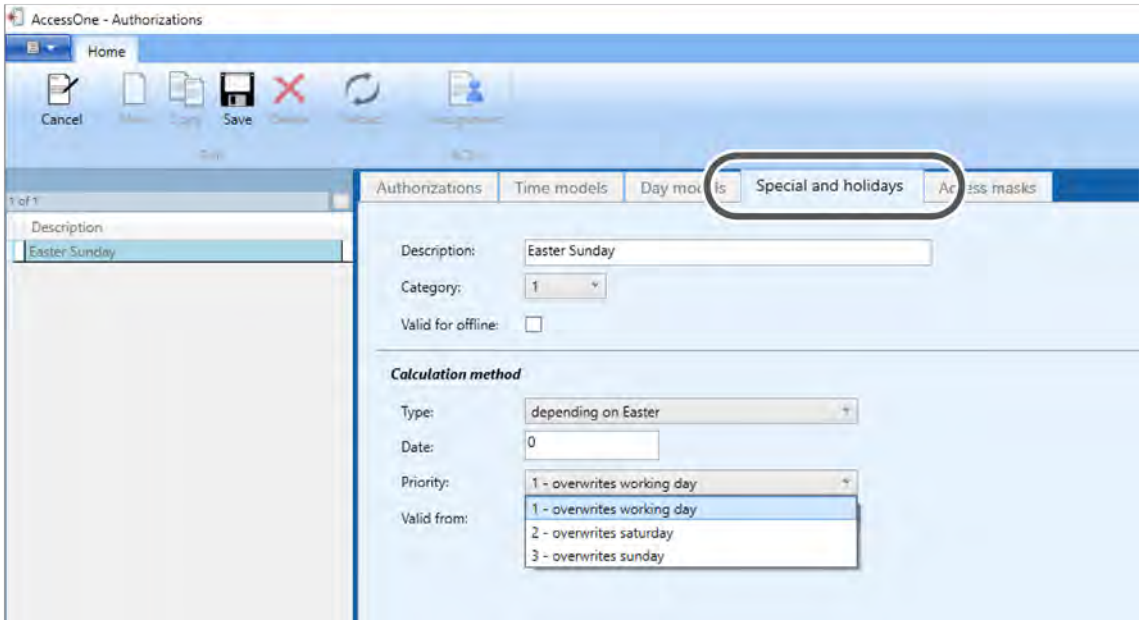
In the toolbar, click NEW. Enter a name for your day model. You can optionally add a description.
Enter at least 1 interval in the 'Time intervals' section. This must be defined with a 'from'/'until' time.
Then click SAVE.

TIP Also create the 'No entry' time model. This model is, for example, useful for employees who are authorised on certain days but not on others. Holidays can thus easily be taken into account.

8.1.4 Special and holidays

Click NEW and enter a 'name' for the special day. The categories are used to arrange the special days into groups and thus to enable a day model to be created for such a group.

TIP Combine all of the national holidays in one category. The 'No access' day model then applies for these days. (Alternatively, no access in this category is equivalent to a day model with an interval from 0:00 to 0:00.). By sorting the holidays into appropriate categories, a situation can be reached in which the holidays that apply in the relevant region are taken into consideration for the time model, while the others are ignored.



The calculation method is selected below:

Most moveable festivals and holidays of the Christian year are determined by the date of Easter Sunday:

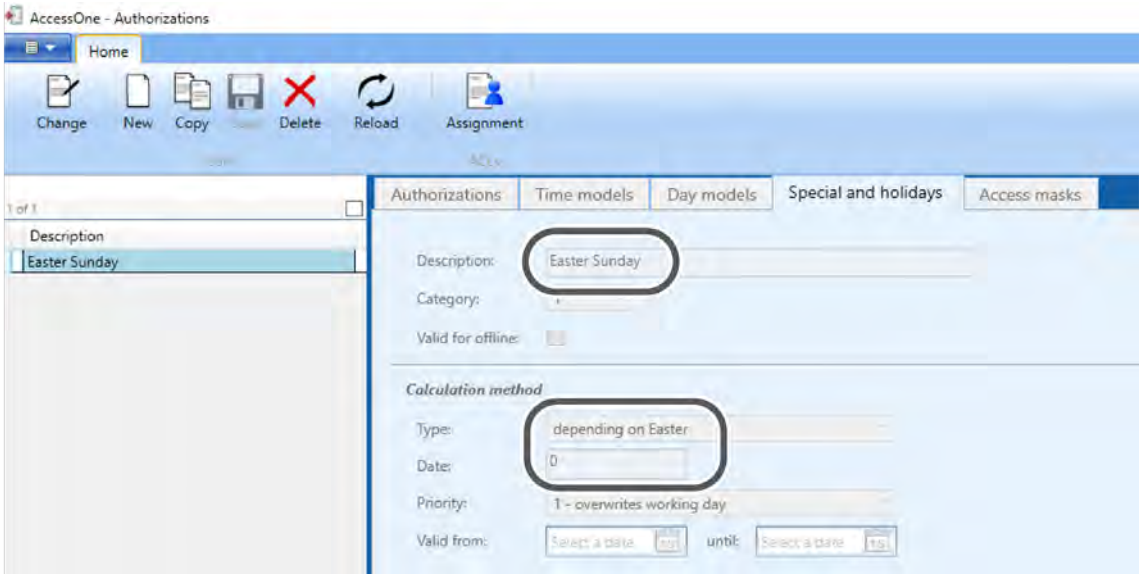
- Ash Wednesday = 46 days before Easter
- Palm Sunday = 7 days before Easter
- Maundy Thursday = 3 days before Easter
- Good Friday = 2 days before Easter
- Easter Monday = 1 day after Easter
- Ascension = 39 days after Easter (i.e. the 40th day)
- Whit Sunday = 49 days after Easter (i.e. the 50th day)

In the Catholic Church the following festivals also apply:

- Corpus Christi = 60 days after Easter
- Feast of the Sacred Heart = 68 days after Easter

The door controller calculates the date of Easter Sunday automatically and can therefore determine these Easter-dependent holidays if they are created in the system. For days that are calculated in relation to Easter, the number of days that must be added to the calculated date is entered in the date field.

In the example below, Easter Monday (= 1 day after Easter) is defined as follows:



If the holiday comes before Eater, a negative value can be entered. Example: for Good Friday (2 days before Easter), the entry is -2.

- Fixed date

  Special days that must be created again every year, or one-off occasions such as company celebrations, are created with a fixed date. They are then valid exactly once.

- Annually recurring

  There are dates for special and holidays that recur every year, such as 1 May and 24 December. For these, choose the date from the calendar. The year number is ignored during the check.

- Priority/category

  The priority of a special day determines its relevance. A normal holiday has a priority of 1; if it falls on a working day, the day model for the working day does not apply, but rather the day model for the special day.

Example 1: Christmas Eve is allocated to category 8, and all category 8 special days are entered in your time model with a day model of half a working day (07:00-12:00). Thus if Christmas Eve falls on a Monday, the secured areas can be entered between 07:00 and 12:00. Should it fall on a Saturday or a Sunday, however, no access should be granted. In this case, priority for Christmas Eve should be set to 1, since Saturday and Sunday have a higher level of priority.

Example 2: some employees require access for weekend stocktaking. For this special day, a priority 2 or even 3 must be set so that the ordinary Saturday or Sunday day model is overwritten.

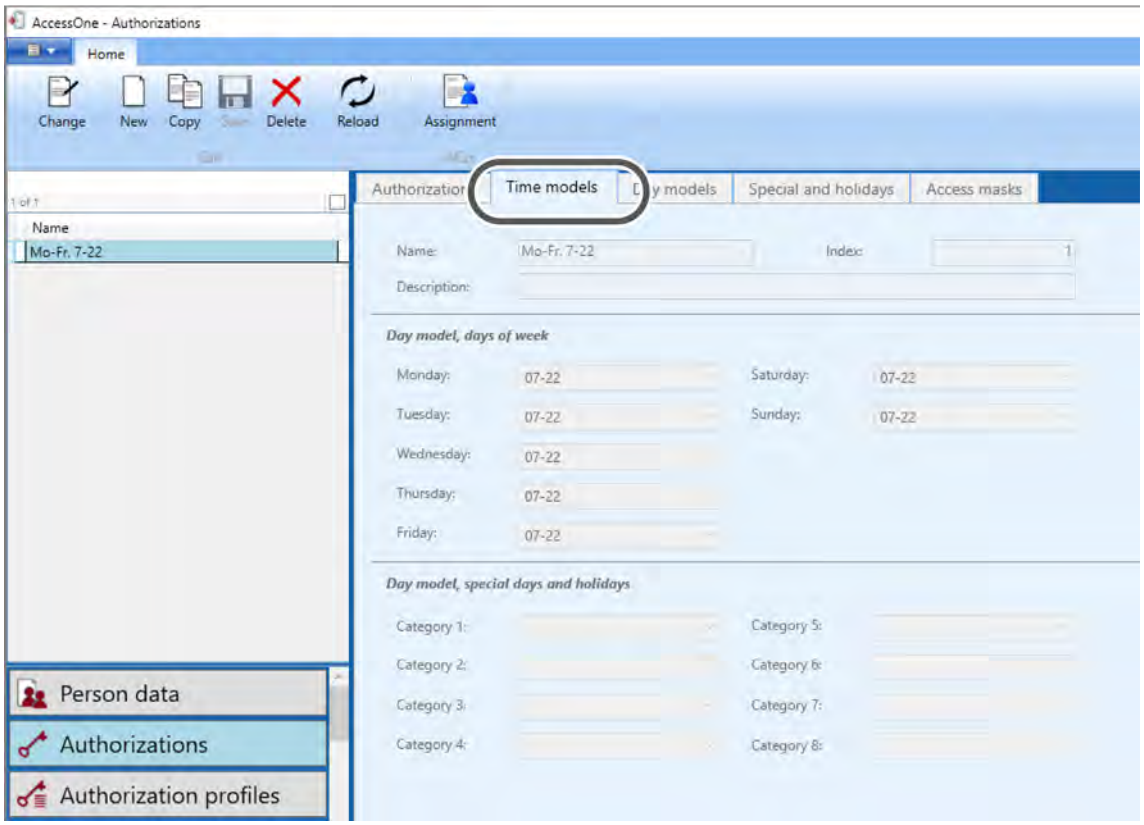
The following table gives an overview of holidays in Germany:

Holiday	Regions applicable
New Year's Day	National
Epiphany	Baden-Württemberg, Bavaria, Saxony-Anhalt
Good Friday	National
Easter Sunday	National
Easter Monday	National
Labour Day/1 May	National
Ascension day	National
Whit Sunday	National
Whit Monday	National
Corpus Christi	Baden-Württemberg, Bavaria, Hesse, North Rhine-Westphalia, Rhineland-Palatinate, Saarland
Assumption Day	Bavaria (Catholic areas), Saarland
Day of German Unity	National
Reformation Day	Brandenburg, Mecklenburg-Western Pomerania, Saxony, Saxony-Anhalt, Thuringia
All Saints' Day	Baden-Württemberg, Bavaria, North Rhine-Westphalia, Rhineland-Palatinate, Saarland
Day of Prayer and Repentance	Saxony
Christmas Day	National
Boxing Day	National

We recommend that you select the categories for special days such that holidays that apply in the same region are grouped together in the same category.

National holidays	Category 1
Epiphany	Category 2
Corpus Christi	Category 3
Assumption Day	Category 4
Reformation Day	Category 5
All Saints' Day	Category 6
Day of Prayer and Repentance	Category 7
Other category 8 special days	Category 8

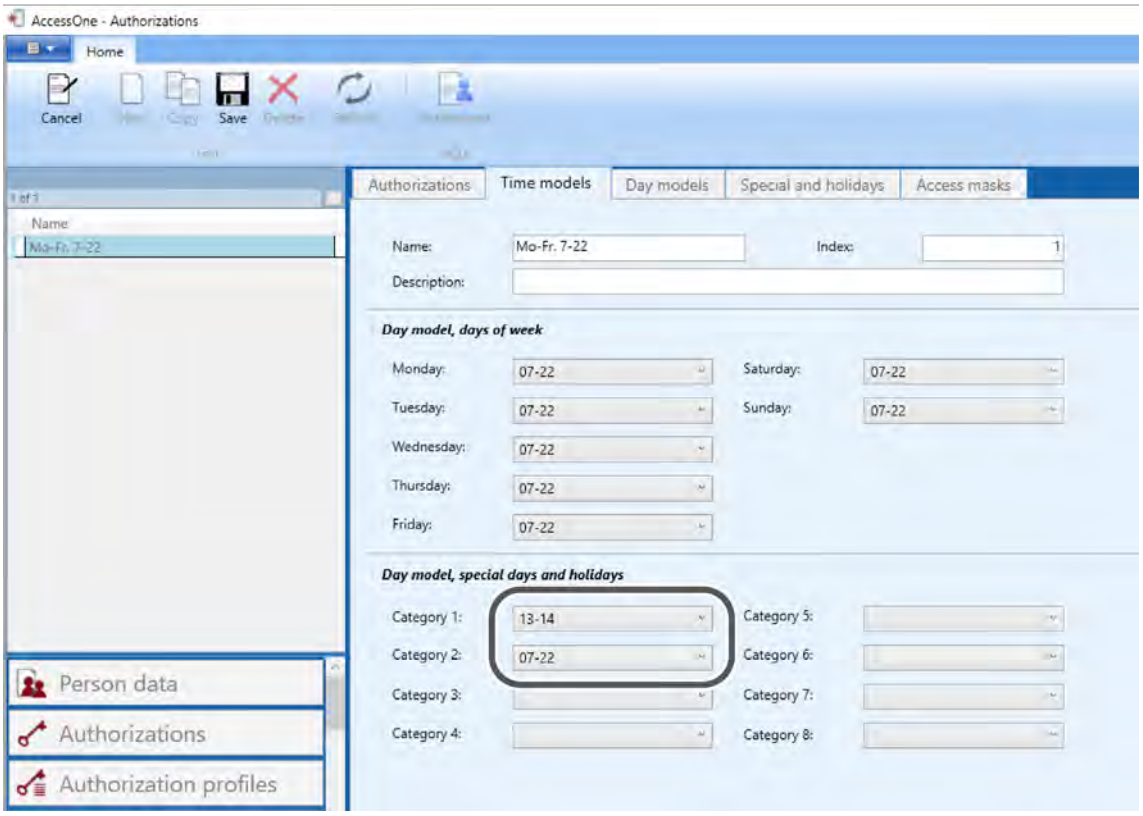
8.1.5 Time models



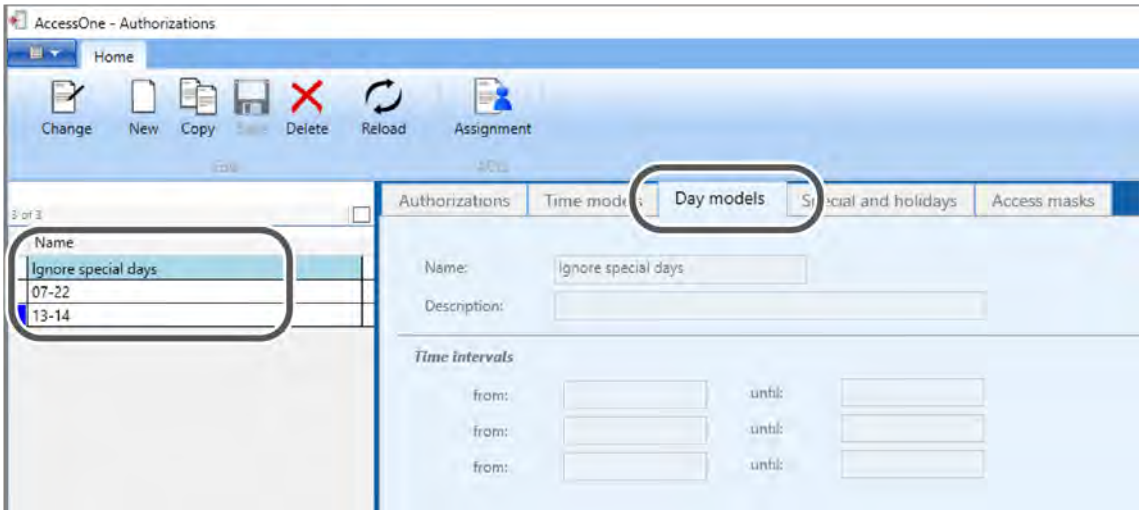
If no special day is set up in the system, no access is granted on this date. Click NEW and enter the relevant information. Save the time model. If you navigate to another page without saving, in this case AccessOne will save the time model automatically.

The 'Description' input field is used for internal allocation within the company.

The entry in the 'Index' field is a sequential control number to indicate the order in which the time models were created.

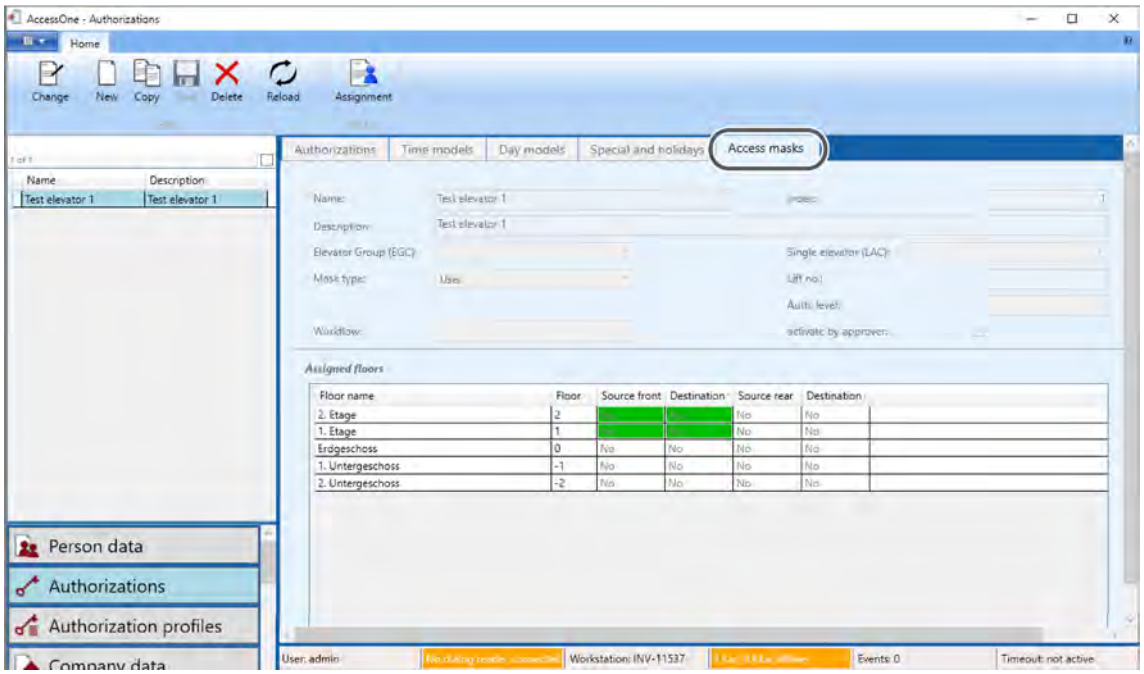


In this example, the same day model applies from Monday to Friday. Category 1 holidays are ignored in this time model, i.e. if the holiday is on a weekday, the usual weekday day model applies. For category 2 special days there is a corresponding day model. For all other special days, i.e. those in categories 3 to 8, no day model is entered and access is thus blocked.



In order to override a special day so that the ordinary day model of the relevant working day applies, a special day model must be created, unless such a model was automatically created during installation (e.g. 'Ignore special days').

8.1.6 Access masks

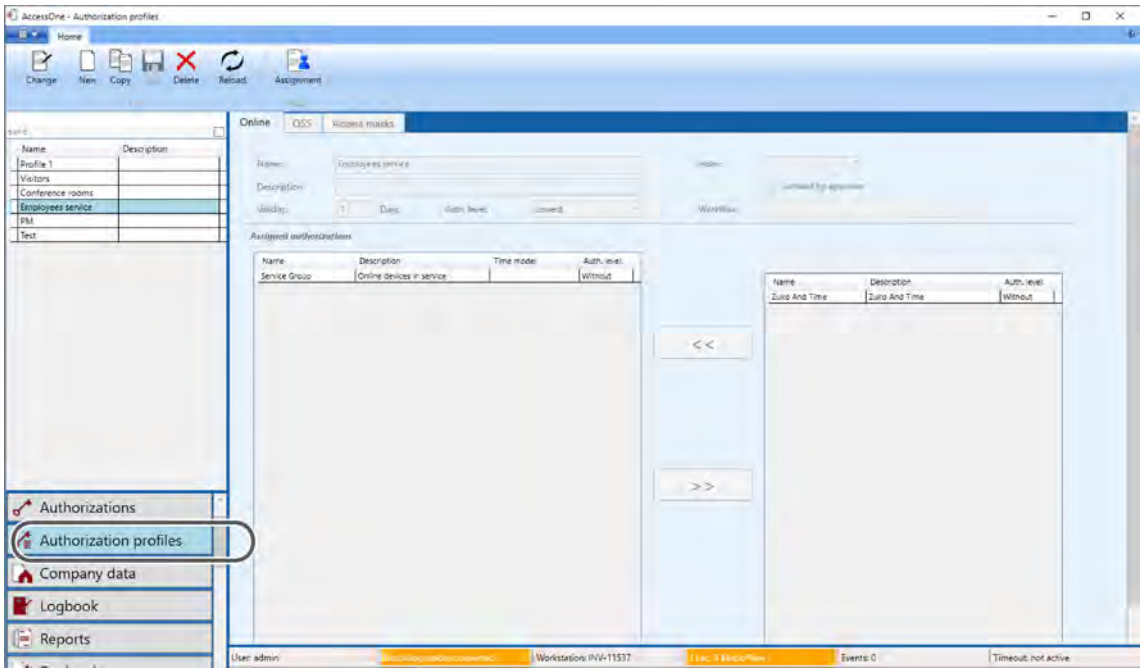


Access authorisations for a previously created elevator group can be created in the 'Access masks' dialogue. Click NEW to create a blank access mask. Enter the name and a description and select an elevator group to view the floors of this group. Next, define the mask type (‘User’ or ‘Emergency’). To allow authorised access to the floors, switch or drag the ‘Start’ and ‘Destination’ doors from 'No' to 'Yes'. Save your entries.

8.2 Authorisation profiles

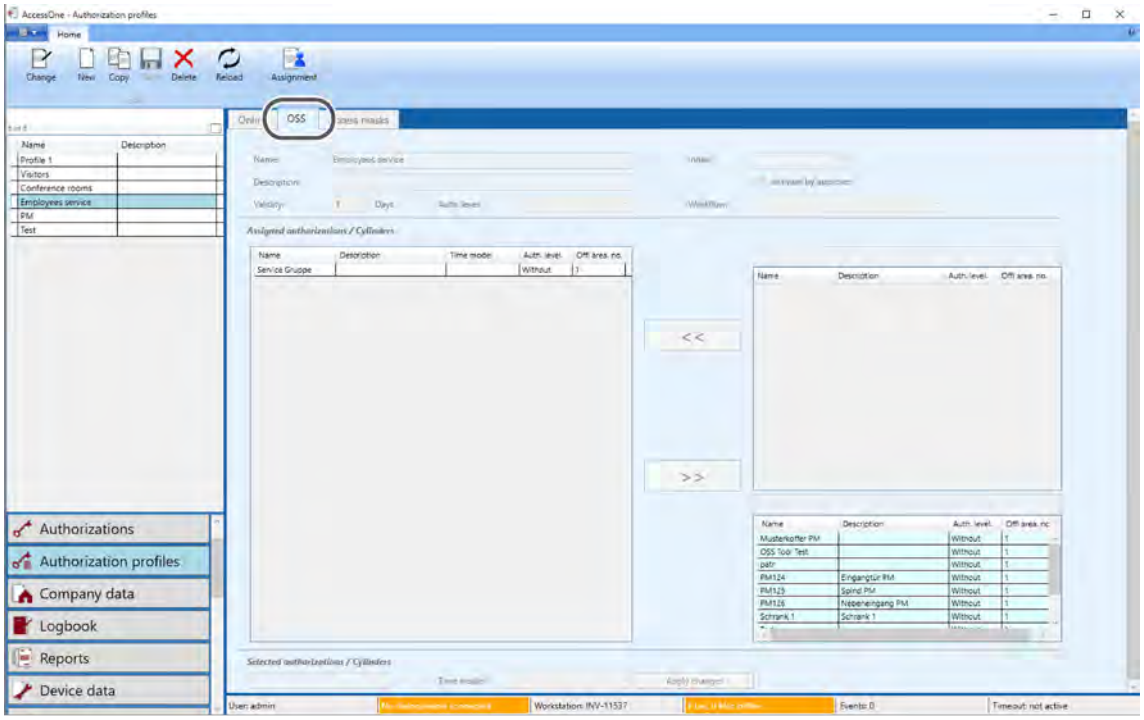
In the 'Authorisation profiles' dialogue the user can create an authorisation profile from multiple authorisation groups. This allows the authorisations for online and offline devices to be linked and thus be combined in a profile.

8.2.1 Online authorisations in the overview



In the 'Online' tab, authorisation groups can be combined in an authorisation profile. The groups are selected from the list of unassigned groups (right-hand list) and allocated to the current profile (left-hand list) with the '<<' button.

8.2.2 Offline authorisations in the overview



In the 'OSS' tab, offline devices can also be combined in the selected profile. From the right-hand list (unassigned groups and devices) you can allocate both an authorisation group and an individual offline device to the current profile using the '<<' button.

Before offline devices can be integrated, those offline devices must be set up (see 'Offline device data (OSS-SO)' on page 54).

9 Creating person data

Target group of this section:

- Personnel with product training

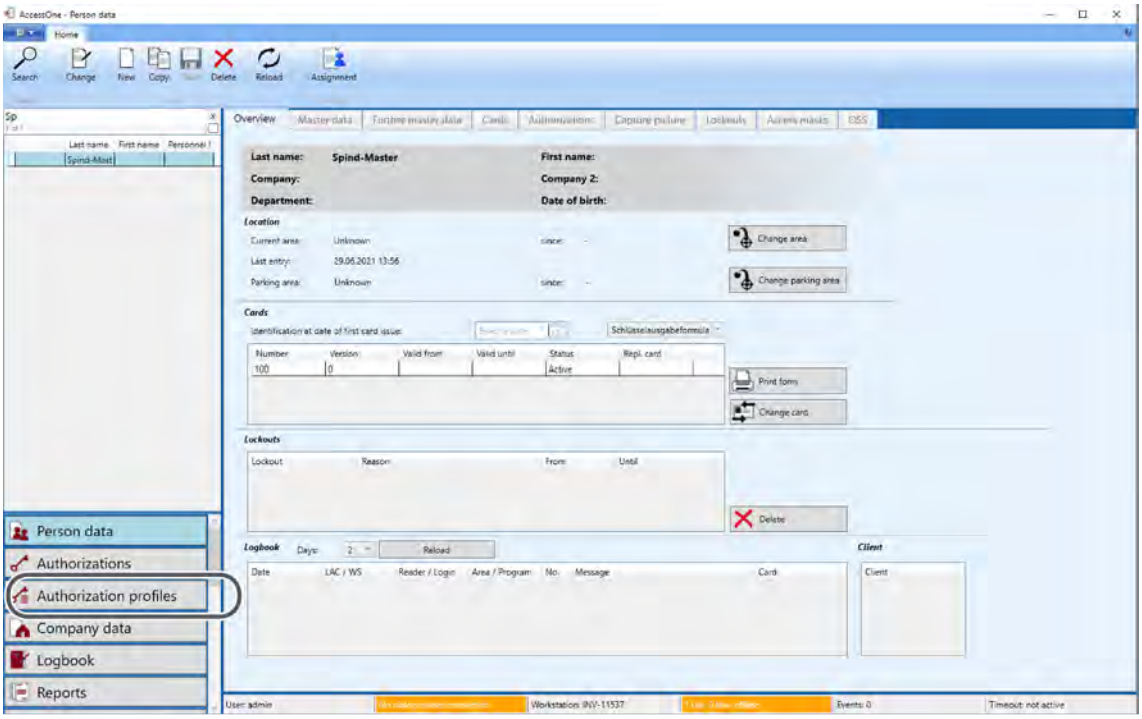
The ‘Person data’ dialogue allows you to assign authorisations and to record all of the necessary data about the person. You should allocate the previously configured authorisations for online and offline devices directly to the persons.

9.1 Person data

9.1.1 Person data in the overview

All significant data on the person is displayed in the first tab. It is also possible to delete a lockout or to assign a new ID card to a person who has forgotten theirs (‘Change card’ button). This deactivates the previously active ID card.

This overview is intended to quickly record properties that are assigned to a person (e.g. for security personnel).



‘Location’ area

The Location area displays the ‘Current area’, ‘Last entry’ and ‘Parking area’.

Current area

When a person with an authorised ID card passes through a door secured with AccessOne, the location is recorded. Every door has a definition specifying the adjacent areas. The area entered at the time of the activation is displayed here.

Last entry

Every day at midnight, the log book for the current day is read and the last entry is entered in the dataset for the respective person. This information is displayed under ‘Last entry’. It can happen that an entry is several weeks ago. In this case the current location is not known. Nevertheless, the date of the last entry saved for the person is retained.

In AccessOne this date can also be used to automatically lock out persons who were not present for a definable period. This is controlled by means of the ‘Absence time’ lock type (see ‘Lockouts’ on page 80).

Cards

The list provides an overview of the access media assigned to a person. The current status and validity are stored. You can change a person’s access medium by means of the ‘Change card’ button. If the person has lost their ID card, a replacement card must be activated.

Lockouts

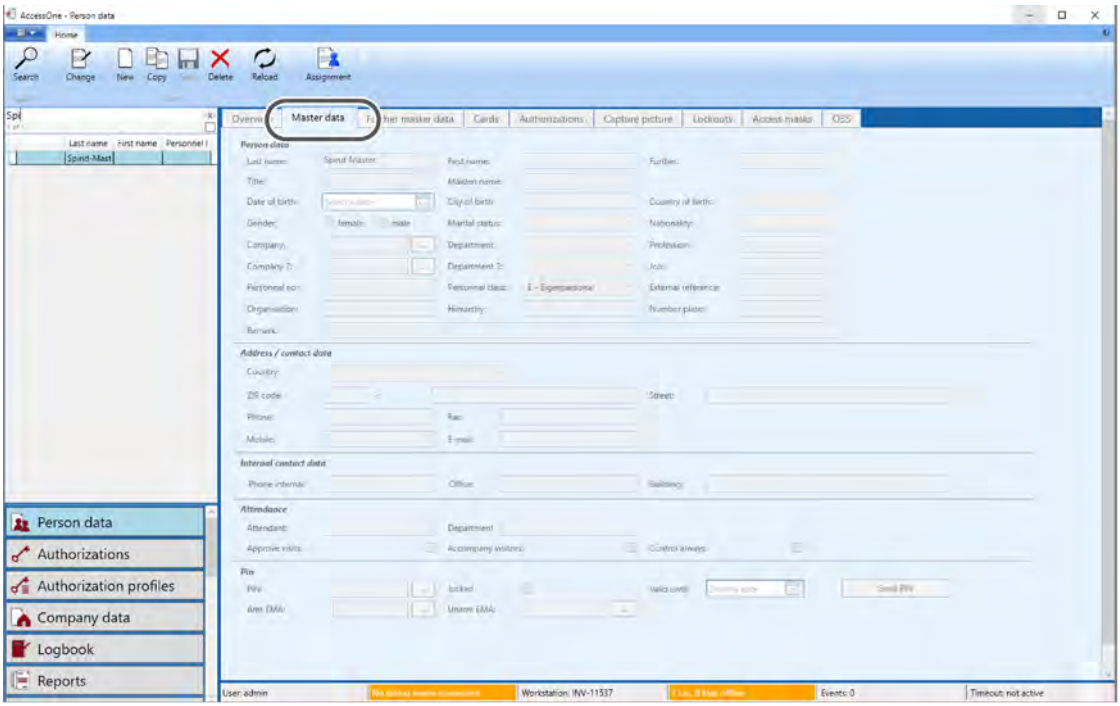
Indicates whether a lockout has been entered for this person. Lockouts can also apply to the future and may in this case only become active from a later time. Lockouts that are currently active are highlighted orange. Lockouts can also be selected and deleted in this dialogue. If a lost ID card is then found again, the relevant lockout can be removed here. To do this, simply select the active lockout and then press the 'Delete' button.

Logbook

Clicking the 'Refresh' button shows the logbook messages about the person for the last two days. You can set the value between 2 and 7 days.

Example: a person is denied access and they inform the security personnel about this. The security service can then see at which door the person was refused entry and whether changes have been made to the person data, e.g. whether an authorisation has been taken away or a time model changed.

9.1.2 Master data



To create new person data, click NEW. The 'Master data' tab opens automatically. If you wish to leave this tab, you must first complete the two mandatory fields marked red, 'Name' and 'Personnel class'.

Person data

This area contains mandatory fields that must be completed for every person ('Name' and 'Personnel class'). AccessOne makes a distinction between the classes 'Staff', 'External staff' and 'Visitors'. Additional personnel classes can be created in the database by the administrator, but must be allocated to the three pre-defined classes – staff, external staff or visitors. Thus the user can divide external staff between, 'external companies with personnel leasing' or 'external companies', for example. Some lockouts are set based on the personnel class. Thus you can set a lockout following excessive absence to occur for staff after six weeks, but for external staff after just two weeks. Personnel class is also evaluated at the points of access.

Example: for bag checking purposes, the settings can be implemented in such a way that visitors are always checked, but in-company staff are checked only on the random check basis.

The personnel number is an external classification criterion that generally comes from an external personnel management system (e.g. SAP). This is used to assign persons in the access control system to the data held by the personnel department. The personnel number can also be used as a search criterion.

Define the company and department in the 'Company data' dialogue. It is defined here whether the company is an 'Own company' or an 'External company'. Only own companies can be entered into the 'Company' field; only external companies can be entered into 'Company 2'. The departments are predefined in the company data and can only be selected here. It is important therefore to enter the companies first and only then add the persons.

Address

Enter all of the relevant address data for the person here.

Contact data

Enter all of the relevant contact data for the person here.

Attendant

An attendant can be entered for external company employees. This must always be a member of in-company staff. The attendant is the responsible contact person for the persons entrusted to them.

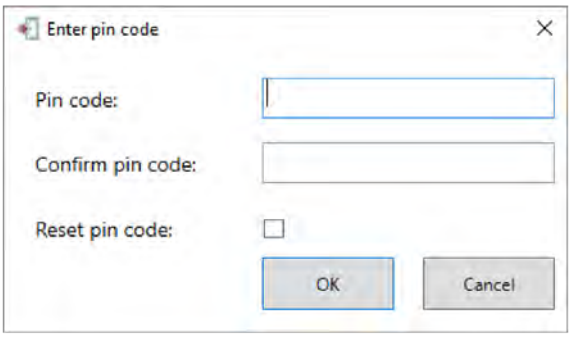
PIN codes

AccessOne involves the use of three PIN codes. One PIN is the personal number code for the access control system. Certain doors can only be opened by entering this PIN code. The minimum length of the PIN can be set by a system parameter (standard length 4 characters, maximum 6 characters).

The PIN can be given a limited validity and can also be locked. If the wrong PIN code is entered three times, this PIN is automatically locked and must be changed in the system.

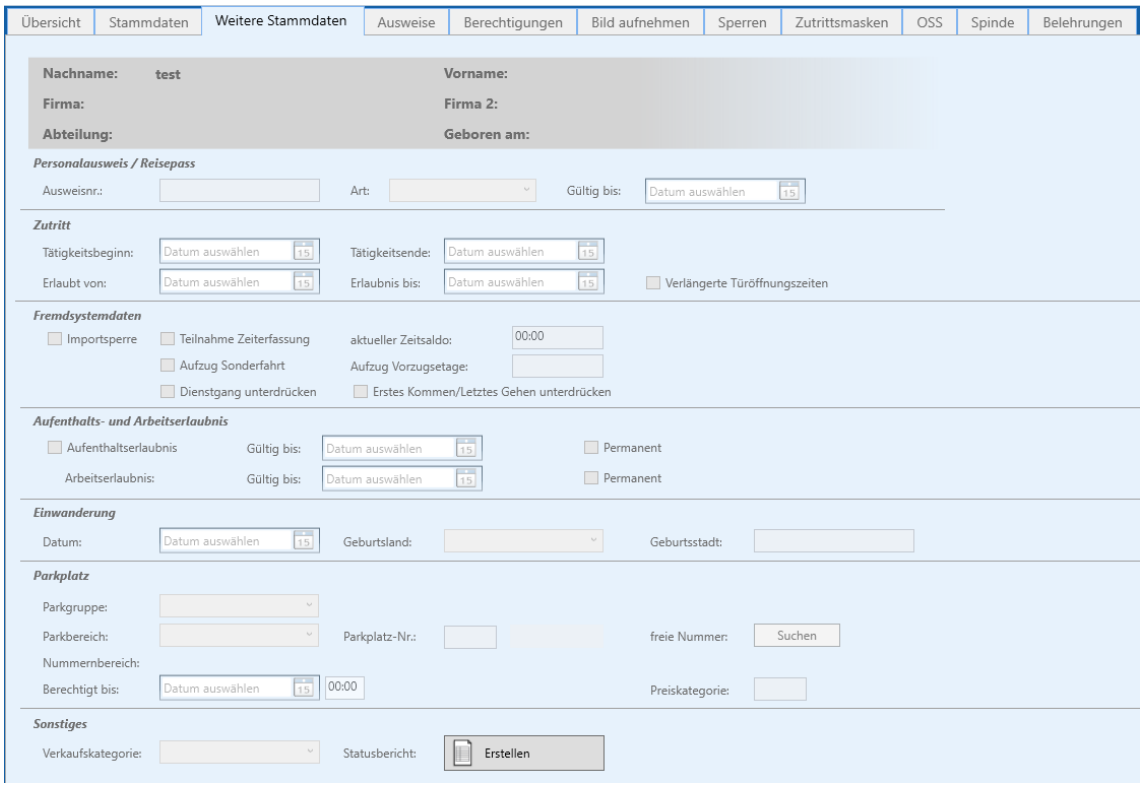
Two additional PINs are used in the system to arm and disarm the intruder alarm system. The PIN for arming and disarming can be identical, but must be different from the PIN used for access control.

It is a VDS*1 requirement that two different PIN codes are used. These PIN codes do not have a time-limited validity. Within the authorisation for a person at a door, there is an option to determine whether the person can arm the intruder alarm, disarm it or both. A PIN code can only be entered if this authorisation exists.



All PIN codes must be entered discreetly. The four- to six-digit PIN code must be entered twice and must include at least three different numbers. They are entered by the relevant ID card holder via a separate numeric keypad.

9.1.3 Further master data



Enter all of the data that you wish to store for the person.

ID card/passport

Here you can enter the number of the person's ID card or passport together with its duration and validity. This data is stored for documentation purposes only.

Access

Start and finish dates (e.g. for limited contracts) are entered here so that appropriate lockouts can be set automatically. For staff, this data is, for example, used to specify the start date of new employees or the leaving date for employees who have given notice. An appropriate lockout is set before the start date or once the finish date is reached. Persons can thus be entered into the system before their first day of work. An element of this occurs automatically through the interface for the personnel data management system of the personnel department. When the leaving date is reached, the ID card is automatically locked.

External system data

Here you can select an import lock, preventing the system from synchronising data with external SAP sources on a daily basis, for example. When data is changed in AccessOne, it should not be possible to overwrite it again.

Instruction

If there is an obligation in the company for binding training to be given to new employees, you can enter the date of the first and second training sessions here. You can also enter the date on which the next training session must take place.

Residence and work permit

A valid residence and work permit is a statutory prerequisite for employment. For persons with limited residence and/or work permits, the system monitors compliance, provided that the relevant data is entered here. Entry of this data is in the interest of the employer, who is liable to prosecution if persons work on his system without this permit.

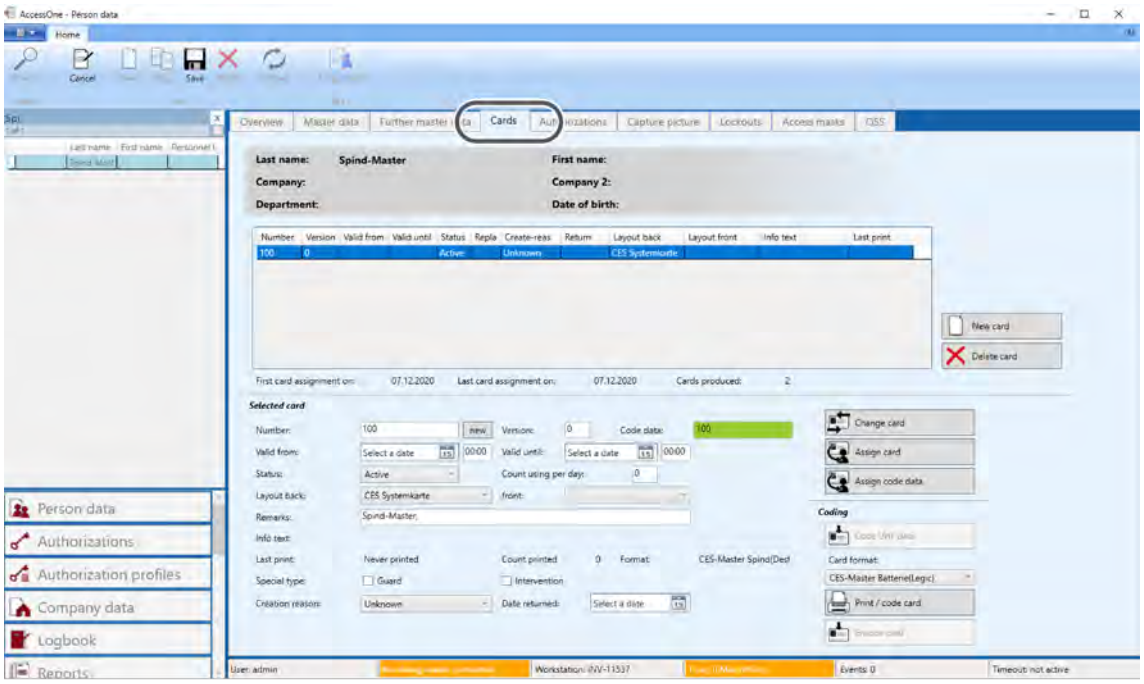
Immigration

This entry is for documentation purposes only and is optional.

Miscellaneous

The 'Vending category' is used to enable the use of an ID card at vending machines. A prerequisite is that the cards are coded by AccessOne.

9.1.4 ID cards (access media)



On this tab you can create, change, assign or print ID cards. In the table view you can see all the ID cards defined for this person.

A person can have more than one card. This is particularly necessary where different ID card technologies are in use.

To create a new ID card, select a person, then click CHANGE in the upper menu bar and click 'New card'.

To delete an ID card, select it in the list and then click 'Delete card'.

CAUTION: No security prompt is given before final deletion. If this button is pressed inadvertently, click the CANCEL button in the toolbar. Changes made in the current tab are then discarded.

Selected card

All of the data related to the ID card can be entered or updated here. The ID card number serves only as a classification criterion. Generally this has nothing to do with the code number in the ID card, although it can be identical to it.

The version number is a single digit ranging from 0 to 9 or A to Z. If an ID card is faulty, an identical ID card with the same card and code number can be produced again, but with the version number increased by one and stored together with the number coded in the ID card. Only the ID card with the current version number is thus valid. This number is checked at the door. If the number does not match, an appropriate message is

generated and access is denied.

Valid from/until

Cards may only be valid for a limited amount of time. This validity period is monitored by the system. The card is rejected outside the validity period. If no value is set, this means that the validity is unlimited.

Status

Only active ID cards are loaded on to the door controllers. Accordingly, an inactive ID card will not work. The system will then report: 'Card unknown'. Select 'Active' here if the ID card should also be valid.

Layout back/front

The 'Card designer' dialogue explains how to print cards. There you can also choose between various pre-defined layouts. If you are creating a new ID card, specify here which layout you wish to use. Layouts can be defined separately for each ID card.

A default layout can be determined based on the personnel class of the person, where the relevant layouts for each personnel class are created by the administrator (see 'Master data' on page 72).

Code data exist

When the ID card is created, the associated information stored in the card must also be saved. In cases where pre-coded ID cards are used, this is done using the **Assign card** button. A prompt asks you to hold up an ID card to the dialogue reader, so that the card information can be read and stored in the dataset. The display turns green and shows 'Code data exist'.

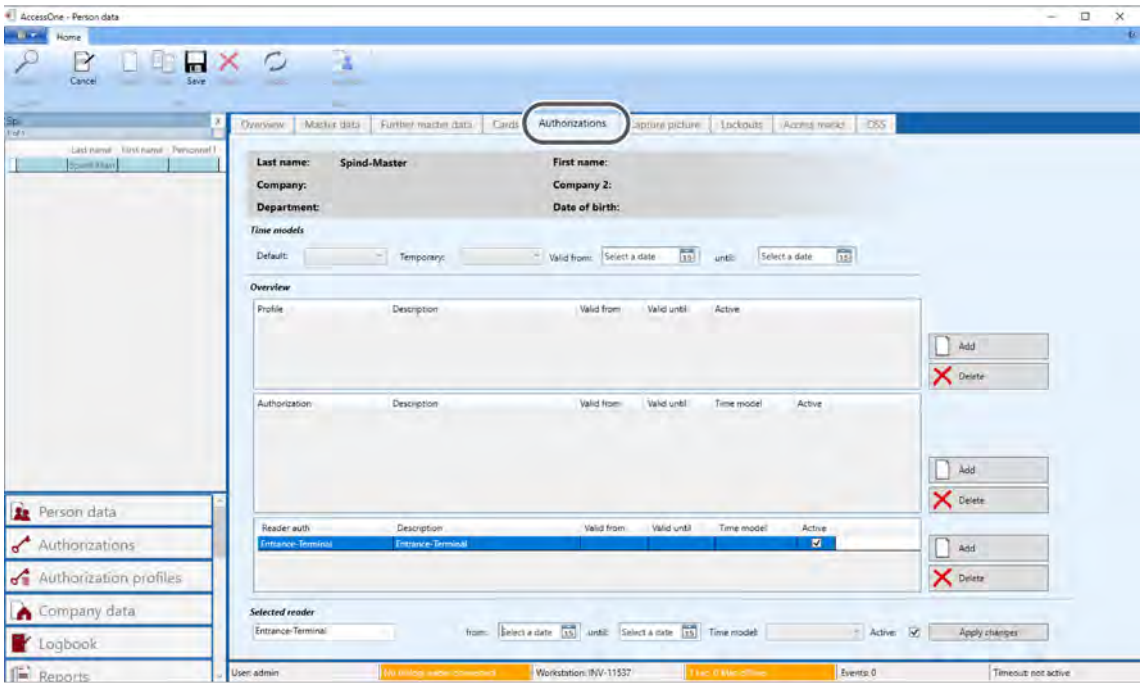
If the cards are coded by AccessOne, the **Assign code data** button is active instead. In this case, AccessOne applies a rule that corresponds to the customer's card format and determines a unique free code number. This number is assigned to the ID card. The **Code UHF card** button is used to code the ID card via the dialogue reader. Alternatively, the card can be coded and printed in a single step by pressing the **Print / code card** button. For this, a coding unit must be installed in the printer.

Print / code card

Shows a print preview of the ID card and its prepared layout. Once confirmed, the ID card is printed. If the printer is capable, the ID card is coded at the same time.

- 'Last print' shows the date and time when this card was last printed.
- 'Count printed' shows the number of cards printed for the selected person.
- 'Creation reason' allows you to select a reason for (re)issuing the card.
- 'Date returned' specifies the date on which the card was handed back. After this date the card is locked.

9.1.5 Authorisations



In this menu, defined time models are allocated to the person. These must have first been created in the 'Authorisations' dialogue (see ‘Authorisations’ on page 60).

All of the information relevant to the access authorisations is included here:

Time models

A standard time model can be specified for each person. This then applies if there is no specific time model assigned to the authorisation. You can thus, for example, specify that a person normally has access from 09:00 to 17:00 but can continue to access the underground parking area after that time. Alternatively, access to particular areas can be restricted more tightly.

If no time model is specified, access is not time-restricted.

Additionally, you can specify a temporary time model that overwrites the standard time model for a particular period. Such a time model could allow a shorter time window (e.g. in cases of short-time working) or a longer window (e.g. for weekend working).

Beneath this are the two lists containing the selected profiles and authorisations for the person.

Profiles

A profile consists of a group of authorisations. Multiple authorisations can be combined under one profile. Profiles allow authorisations to be set up according to the person's function. One profile can thus be created for cleaning staff and another for technicians, for example. This method simplifies the choice of authorisations that each employee requires to perform their work.

Example: the building entrances are linked under one authorisation, and a profile for building entrances then contains the authorisations for each building.

Changes to the authorisations contained in the profiles will have immediate effect on the profiles. AccessOne transfers the profiles directly to the door controllers, so that a change to an authorisation or a profile immediately affects all persons who have been assigned this profile, without the need for additional datasets to be transferred.

A limited validity and a time model can be specified for each profile. If no time model is specified, the time model stored for the person applies. The profile is valid without limit if no validity restriction is entered. If a start date is given but no end date, the profile has unlimited validity from the start date. If an end date is entered it limits the validity.

To remove a profile from the list, select it and click the Delete button beside the selection list. To create a new profile, press the 'Add' button. A selection box opens, from which the required profile can be selected. You can make multiple selections by holding down the CTRL key while clicking.

Authorisations

Authorisations combine readers into a related group. See also the 'Authorisations' dialogue (see 'Authorisations' on page 60). The same rules apply for authorisations as for profiles.

Selected authorisation

If one or more authorisation or profile is selected by clicking, the details are shown in these fields and can be edited here. Click the

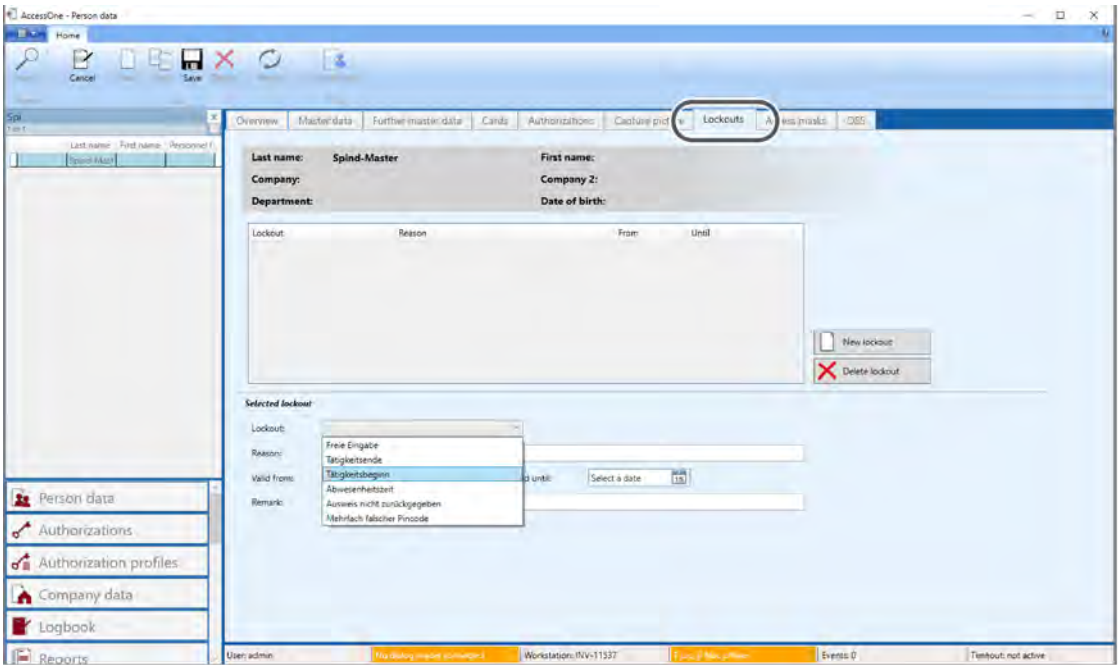
Apply changes button to then enter the changed fields into the authorisation or profile.

To adopt the changes, the **Apply changes** button must be pressed, otherwise the changes are not saved.

Up to 64 authorisations and/or profiles can be allocated to one person (e.g. 10 profiles plus 22 authorisations). If the same authorisations are always specified for a large number of persons, we recommend that these authorisations are combined in their own authorisation profile.

If a person is assigned an authorisation that is already contained in an authorisation profile allocated to that person, this redundant authorisation is deleted during the automated midnight maintenance process.

9.1.6 Capture picture



In the ‘Capture picture’ tab you can allocate an image to a person by importing it, or alternatively taking a photograph.

If you wish to import an image for the person, select the person in the selection control on the left and click CHANGE in the toolbar above. Now press the **Import picture** button.

You can select files in the *.bmp, *.png or *.jpg formats. To take a photo, a camera must be connected to your PC/laptop.

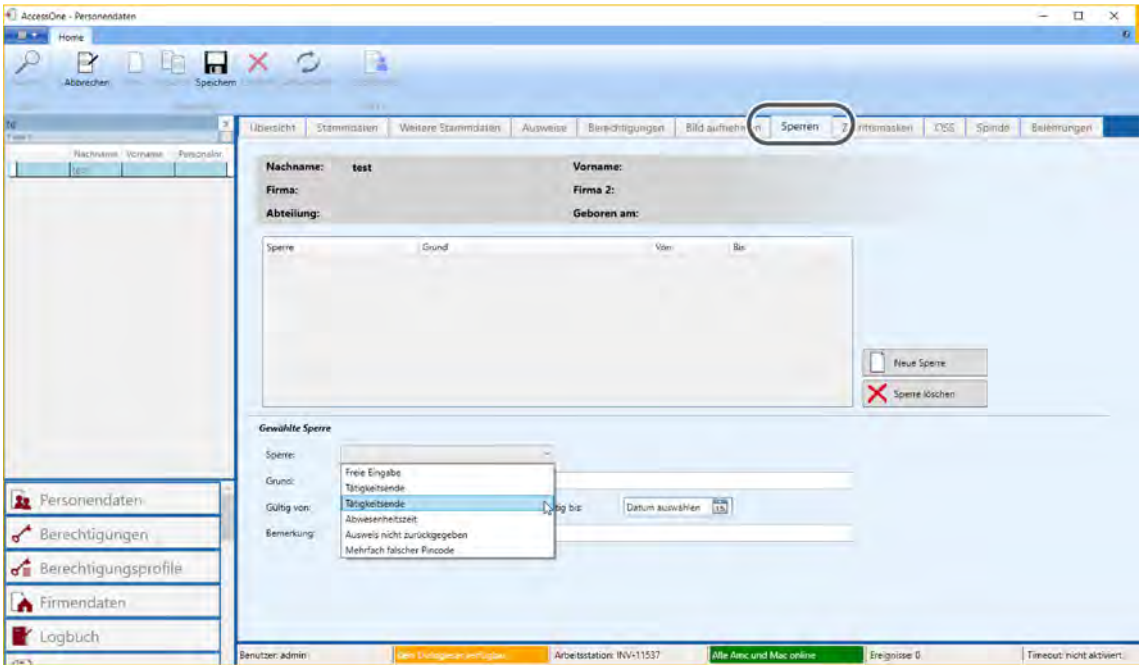
In the ‘Camera’ dropdown box, select the relevant device. You can select a different resolution and other camera settings to suit the type of device connected.

Press the **Start camera** button to take the photograph.

After choosing the preferred image section (green frame), press the **Save picture** button and the image will be displayed in the preview in the top right-hand area.

If you move to another tab without saving, the image is not retained for further editing.

9.1.7 Lockouts



In this tab you can lock people out, e.g. if an employee has lost their ID card.

To do so, double-click the person in the selection control on the left whom you wish to block. This takes you into editing mode. The **New lockout** button is now active and you can assign a lockout to the person.

You implement additional settings in the 'Selected lockout' section.

If the lockout is time-limited (e.g. prior to a start of work date), select the 'Valid from' and 'Valid until' dates accordingly.

Enter any comments about the lockout in the 'Remark' input field. Save the lockout by clicking the SAVE button in the toolbar. You can delete a lockout by selecting it in the list and pressing the **Delete lockout** button.

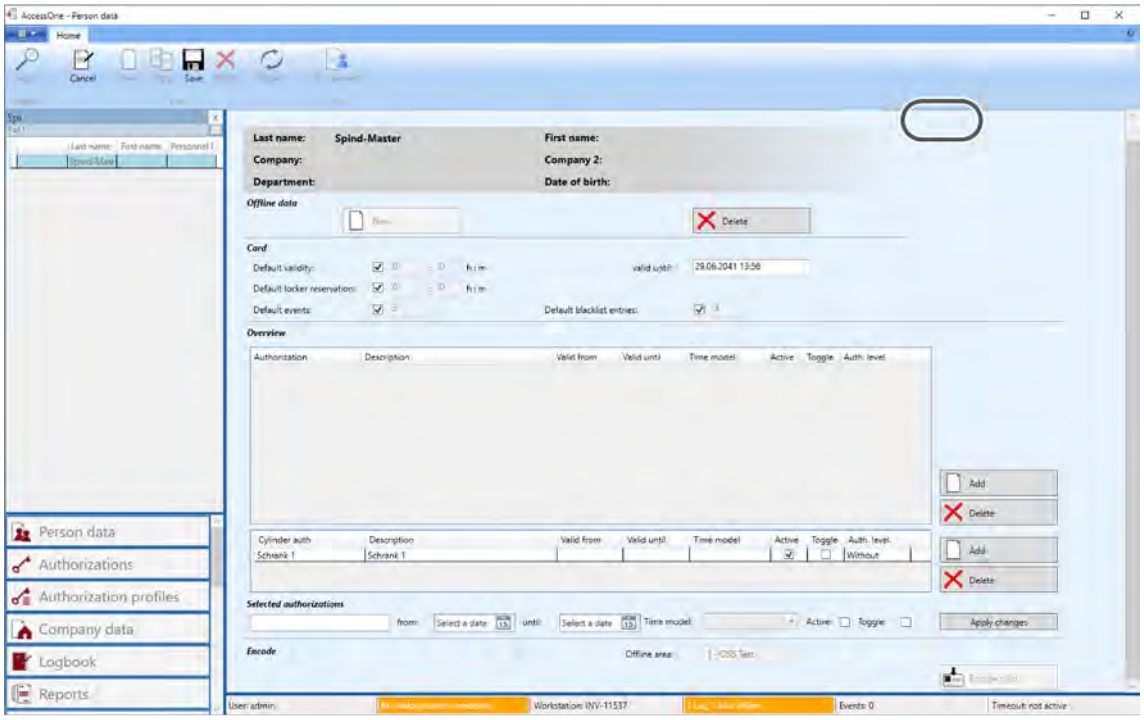
AccessOne distinguishes between automatic and manual lockouts. Additional lockouts can also be predefined in the system if required.

Example: lockouts before the start of work and after the end of work.

This lockout can also be set manually and is effective immediately. It should be noted in this case that during the night, the system updates the lockout based on the data entered for the person. If a person is, for example, locked out after the end of work, but has to return to the office the next day, the lockout can be manually deleted, but will automatically be set again after midnight.

9.1.8 OSS-SO

Thanks to the OSS Standard Offline, electronic cylinders and handle sets from different manufacturers can read the same authorisations from the card and can interpret them in the same way.



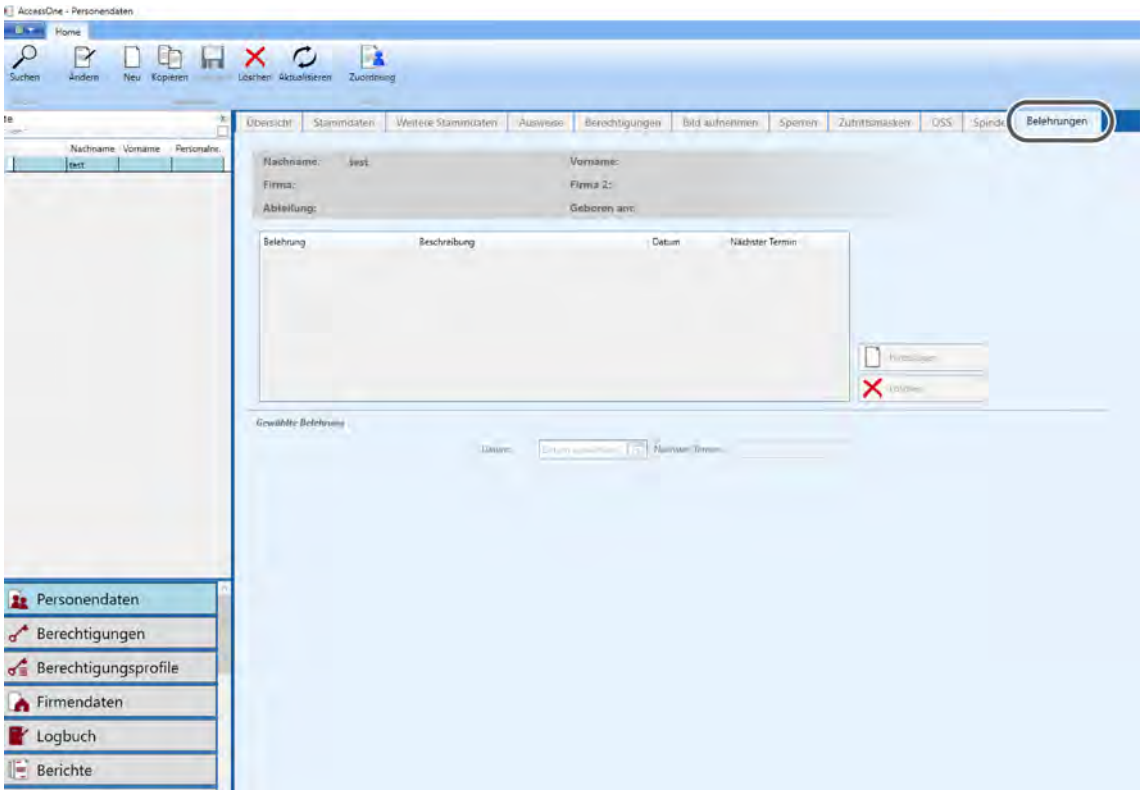
The setup and management of electronic cylinders and handle sets that are compatible with the OSS standard is fully integrated into AccessOne. To set up an electronic cylinder, you also need the configuration tool supplied by the respective manufacturer so that the configuration data can be programmed in.

All of the configuration data is stored in AccessOne. You can then generate an .xml file from the user interface that is read in by the relevant configuration tool. This file contains all the data for initialising the electronic cylinder.

After the requisite licence has been installed, the function selection includes an OSS button. This enables you to open dialogues in which to maintain the data for offline components. Here you specify the validity of the cards for each person and add profiles, authorisations and electronic cylinder authorisations.

Finally, you code the ID card.

9.1.9 Instructions

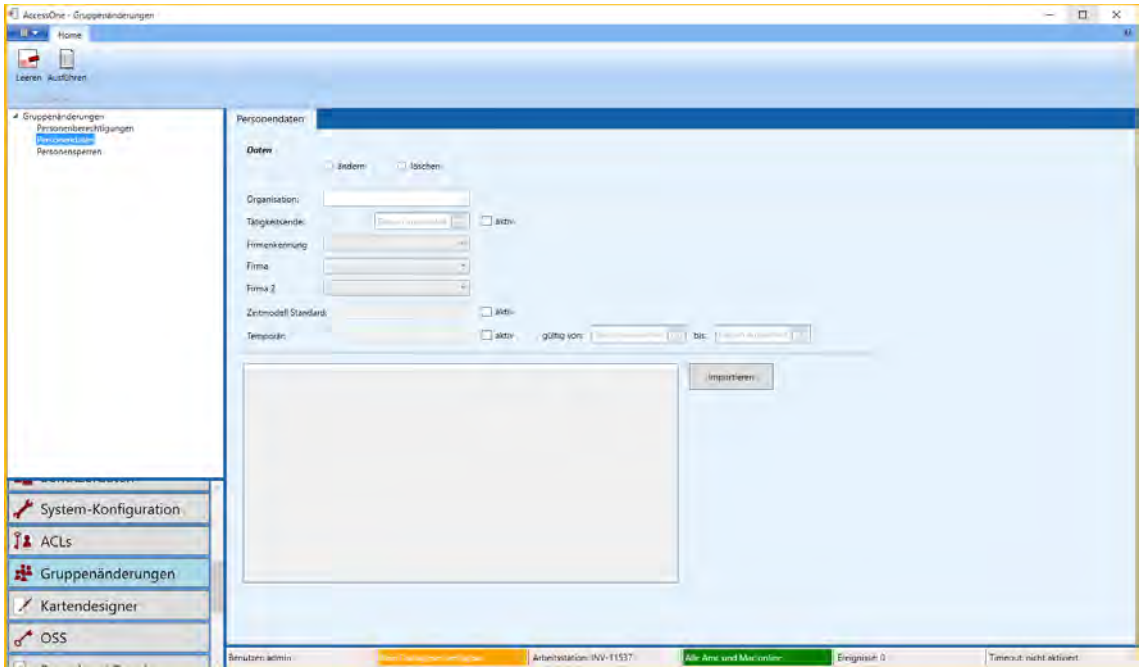


Instructions that must be given within a specific timeframe (e.g. for accident prevention regulations (UVV), data protection (GDPR), etc.) can be stored here. Click the 'Add' button to select these and enter them with a date.

9.2 Group changes

In the ‘Group changes’ dialogue, changes to person data, person lockouts and authorisations can be applied to entire groups by means of a data import.

9.2.1 Person data

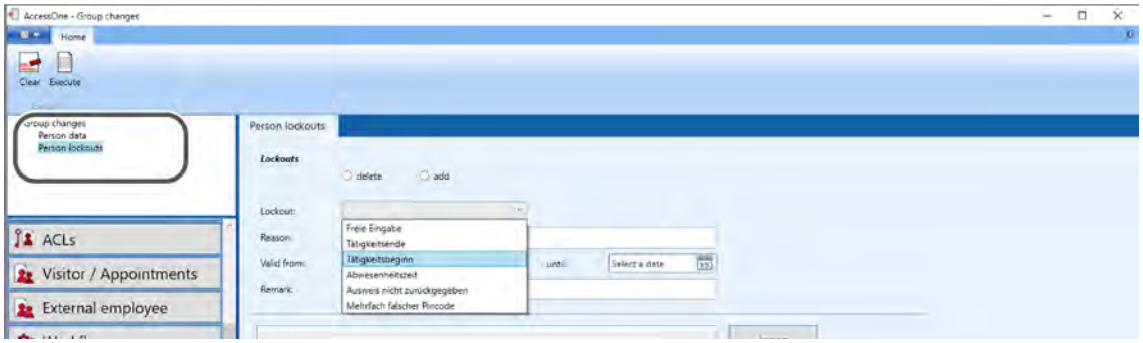


In the ‘Person data’ tab, previously created data for person groups that have been imported by clicking the **Import** button can be changed or deleted.

The data to be imported must be available in *.csv file format. This file can be generated by means of the dialogue page 'Reports > Persons > Person group export'. Various filters for configuring person groups are available on this dialogue page. When a report is created, the created person group can be stored on the hard drive as a MS Excel file and continue to be edited.

The *.csv file saved from this program serves as an import file for all group change dialogues.

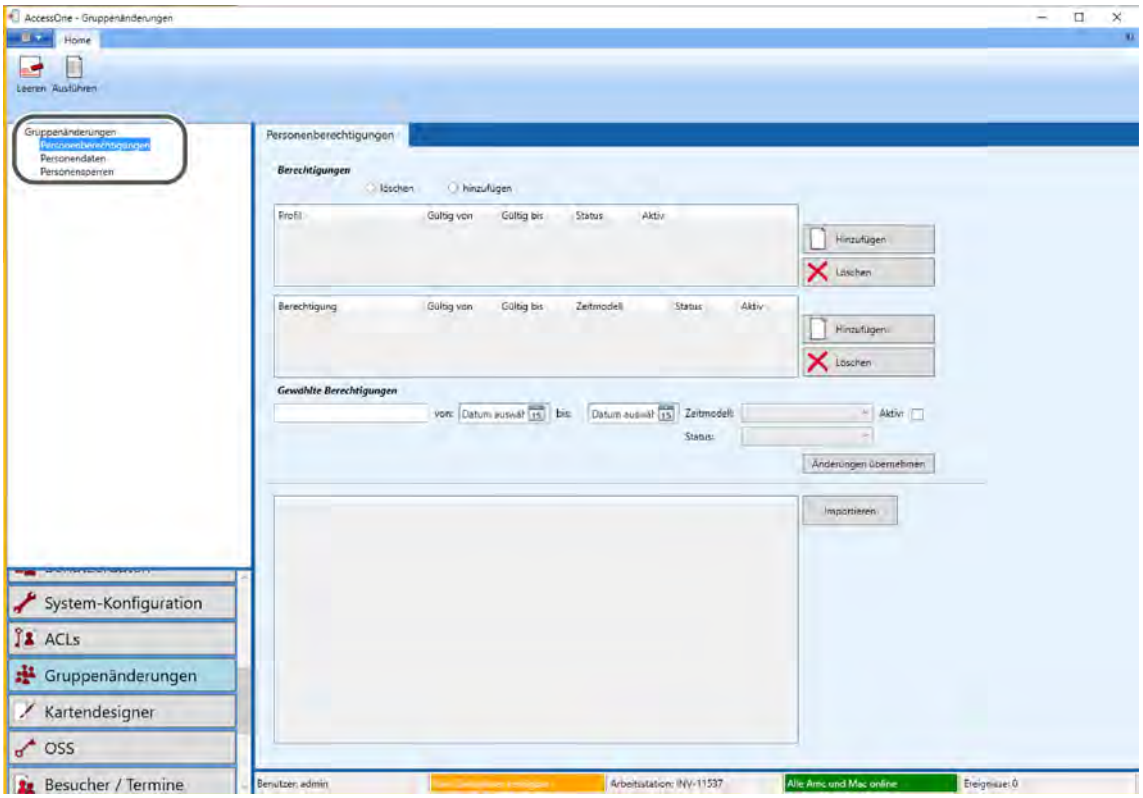
9.2.2 Adding or deleting person lockouts

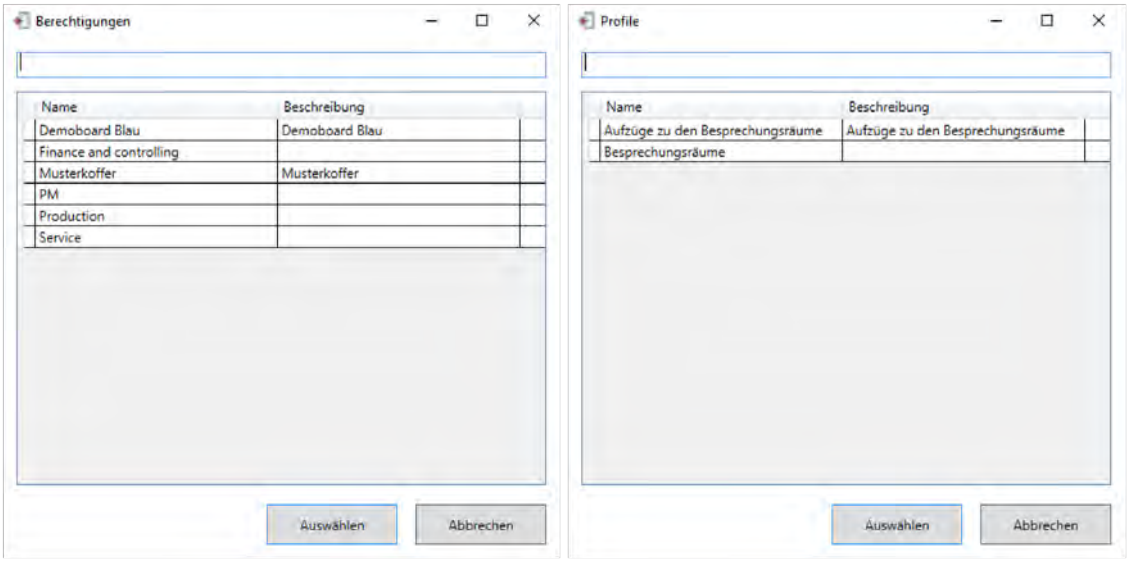


In the ‘Person lockouts’ tab, lockout data for a specific person group can be added by importing a file or deleted.

The ‘Lockout’ input field offers various reasons for the lockout; that can be selected with a validity period.

9.2.3 Modifying person authorisations





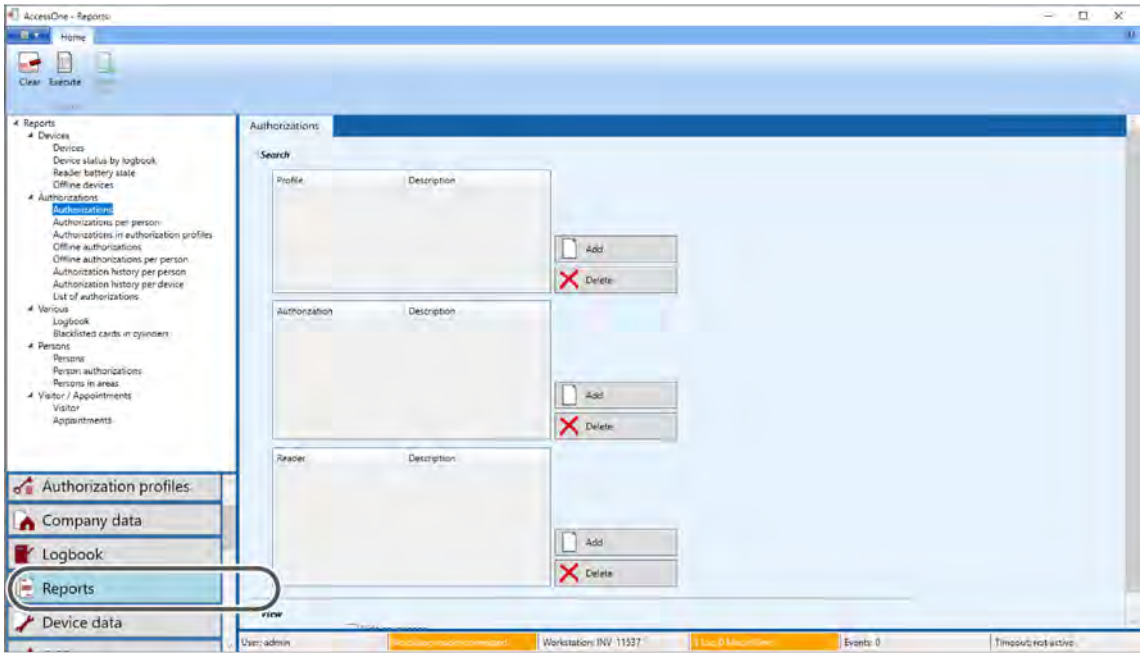
In the ‘Person authorisations’ tab, authorisations for a given person group can be added or deleted by means of a file import or by entering profile and authorisation information. Always confirm changes by pressing **Apply changes**.

10 System documentation

To document the system at a specific point in time, reports can be created and logbook entries viewed and exported.

10.1 Reports

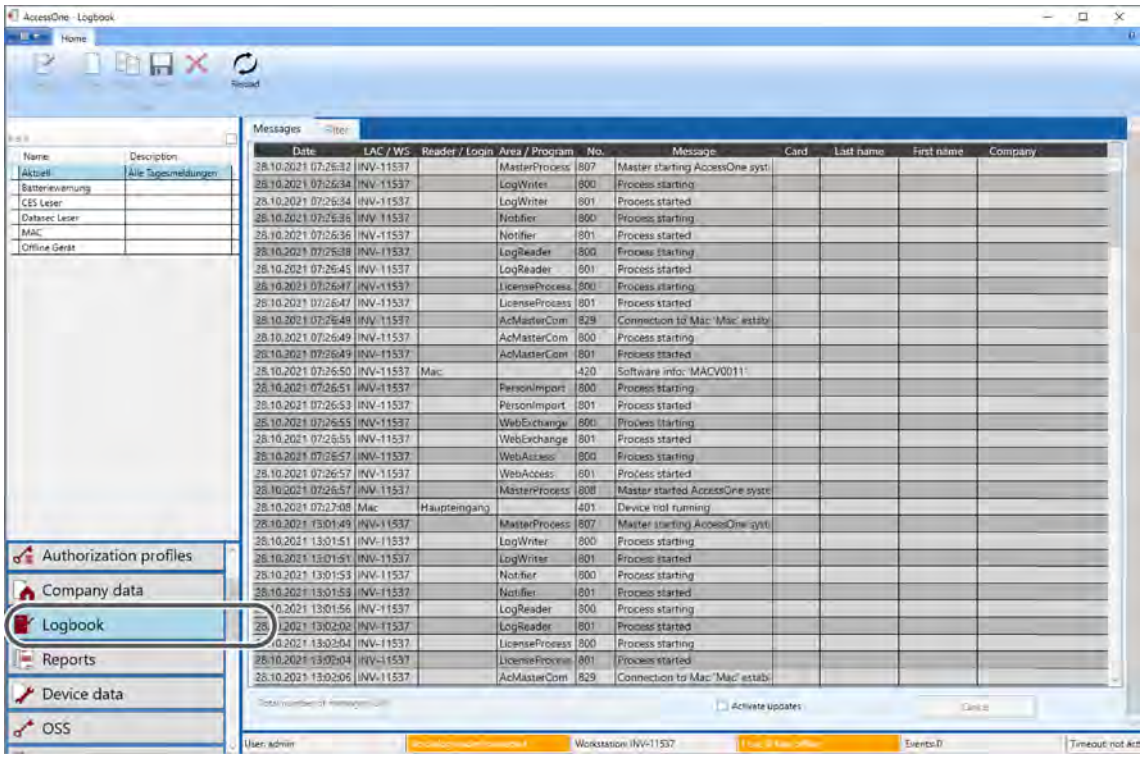
The 'Reports' dialogue selection allows all of the previous entries to be viewed and exported. AccessOne can export a complete system documentation at any time.



10.2 Logbook

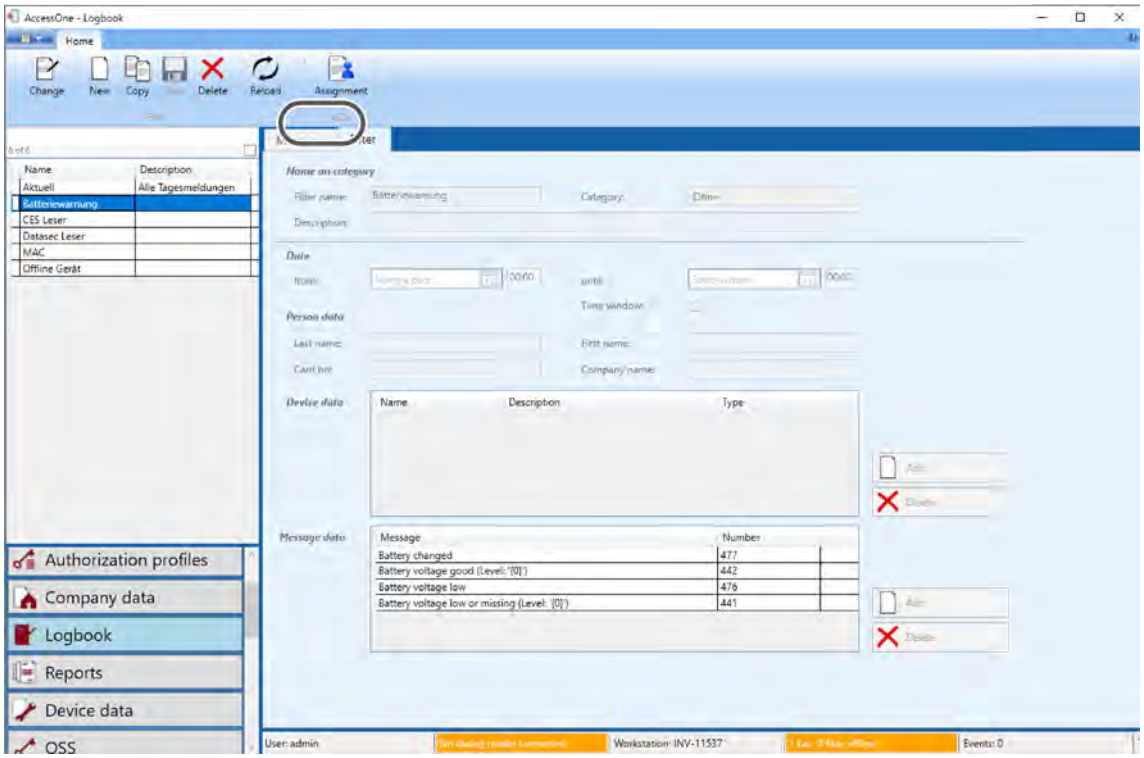
The 'Logbook' dialogue lets you retrieve all current messages of the day and create individual filters.

10.2.1 Messages

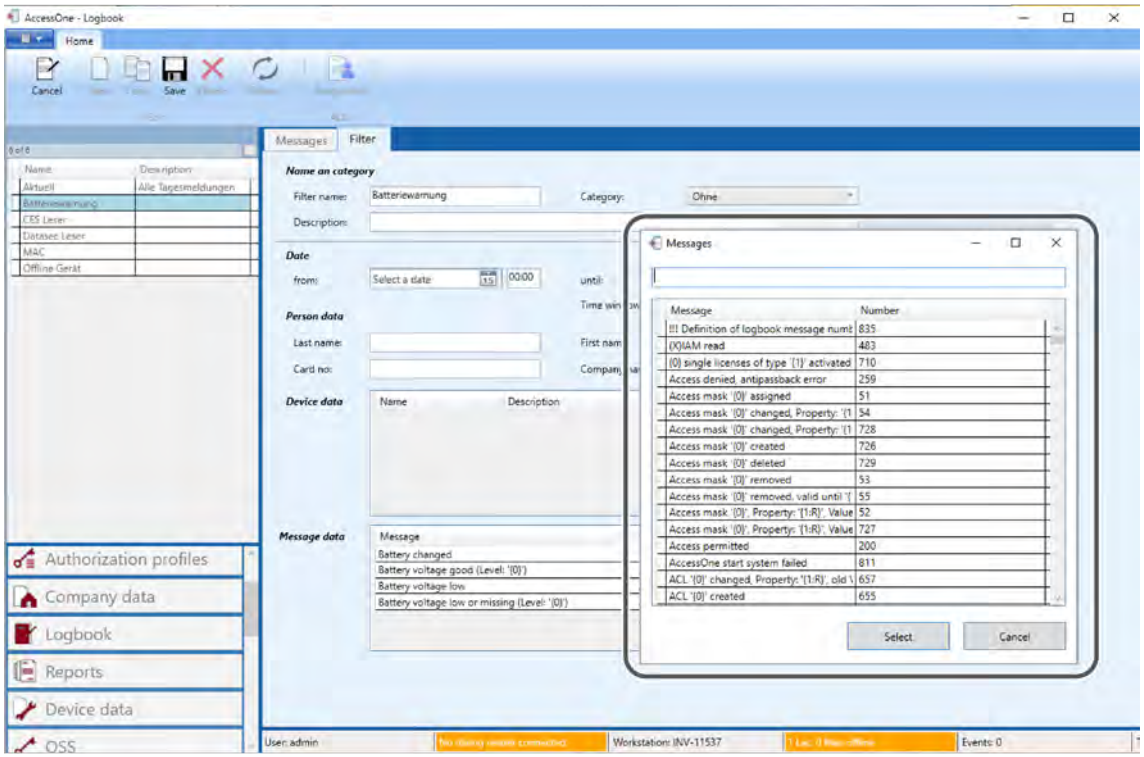


10.2.2 Filters

Define individual filters. AccessOne offers a variety of options for adding a filter.



Click the **Add** button to open a window listing all of the devices and message data that can be used for filtering.



11 Troubleshooting

Connection between the clients and AccessOne server not working	In installation directory	Check the entries in the file ClientConfig.xml in the installation directory\AccessOne\config. Do the entries for 'MasterHost' and 'Master-Port' match?
	On the server	- Have the SQL Server and SQL Browser services been started and have the TCP/IP and named pipes protocols been activated? - Check the firewall rules. Are the SQL Server port (standard: TCP 1433), SQL Browser port (standard: UDP 1434) and the configured AccessOne ports (e.g. TCP 50000-500xx) accessible?
	Server-client interaction	Is the time synchronised between the client and AccessOne server? A time difference of less than 5 minutes is allowed.

Teaming up for security
since 1840

C.Ed. Schulte GmbH
Zylinderschlossfabrik
Friedrichstraße 243
42551 Velbert, Germany
+49 2051 204 0
+49 2051 204 229
info@ces.eu