Key And Storage Management
Software Manual

www.loxtop.com

1. Log-in

The default type of access is the Access code (factory default code is:1234).

Log In procedure:

1. Type in your access code then press Enter

For higher security:

1. PIN Code + RFID Card
2. PIN Code or RFID card + Fingerprint reader
3. RFID Card + PIN Code + Fingerprint reader
4. RFID Card + PIN Code + Fingerprint reader + Facial Recognition

In case of a mistyped Code or Invalid Card “Access Denied” error message will appear on the screen. If you have mistyped your code, press the “Del” button and start over. After a successful login your username will appear at the bottom left corner of the screen and the list of available keys and boxes in the middle.

1.1.1 PICK UP KEYS:

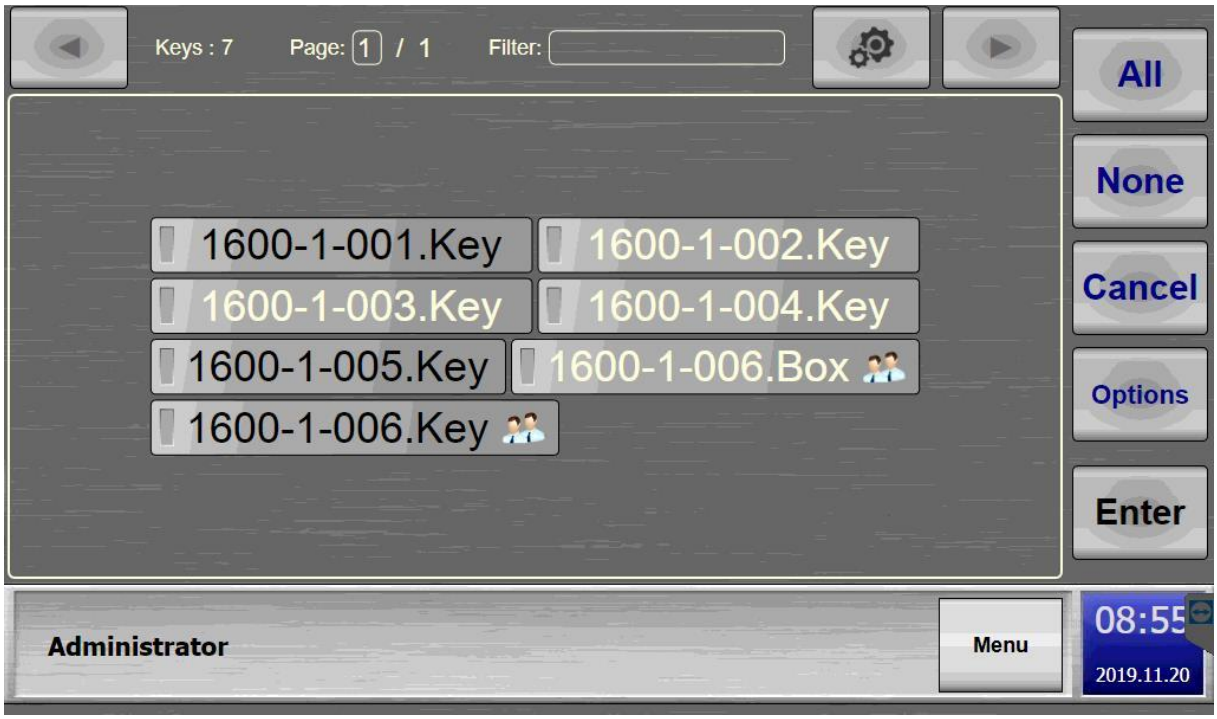
1. After a successful Log In, those keys appear on the screen which you have permission to use. → Select the keys by touching them on the screen. A green light indicates next to the name of the key if it has been selected → Enter → The system indicates where your selected keys are by blinking their positions. → You can remove the keys.

   Key names in black are out of the cabinet, if you select such a key you will be informed who took it last time. In one Log In session you are able to pick up 1 to 10 keys.

Buttons on the right side of the screen:

- All: Selects all of your keys which are in the cabinet
- None: Unmarks all selected keys
- Cancel: The system returns to the log-in screen.
- Options: Booking of keys/boxes
- Enter: Releases the selected keys/boxes

The system automatically returns to the Log In screen after 10 seconds (default duration) of inactivity.

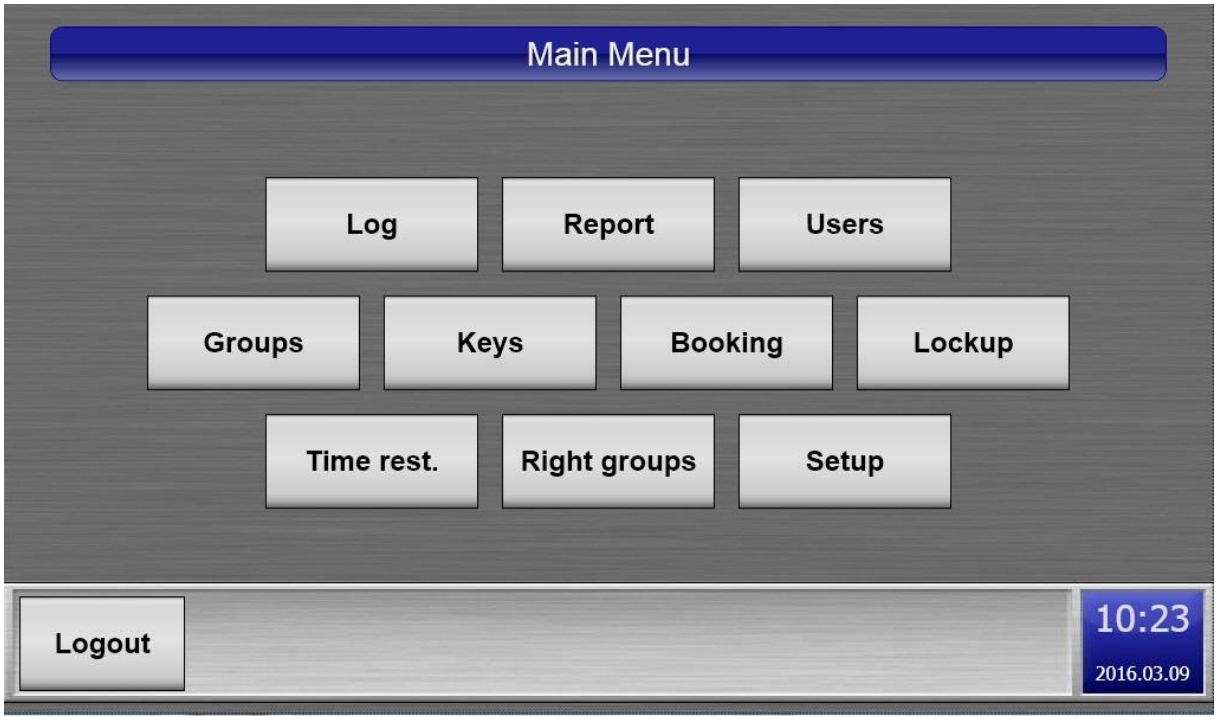


1.1.2 KEY RETURN:

Type in your log in code then press Enter. The door(s) will open and you can return the key(s) into the cabinet.

If your cabinet is not equipped with a door, you can put back keys into the cabinet without logging in. In this case the name of the user who has previously picked up the key will appear in brackets in the Log.

2. Menu



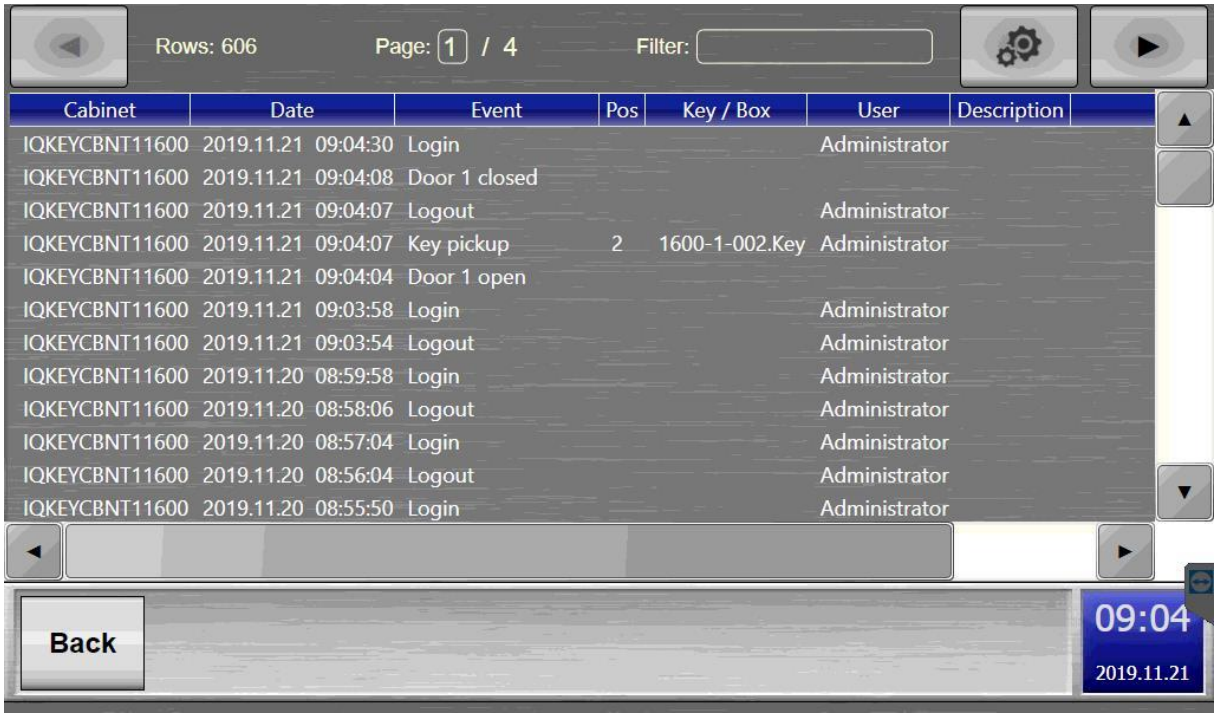
Administrator functions:

The terminal administrator has the right to configure the cabinet by using the “Menu” button.

In the “Menu” the followings are available:

- “Logout”: Logs out and the system returns to default state (Log In screen)
- “Log”: View log files
- “Reports”: View reports
- “Users”: Check and edit user permissions and access
- “Groups”: Check and edit group permissions and access
- “Keys”: View and edit keys
- “Booking”: Creating reservations
- “Time rest.”: Set up the forbidden time period
- “Right groups”: Sub administrator permissions can be set up here.
- “Setup”: System configuration
- “Lockup”: Box or Key lockup function

2.1.1 LOG



The system records all events: error, sabotage, login, logout, key removal, key return and so on.
You can navigate between the log data items by using right and left arrows. Between the navigation buttons you can find information about the number of log records, the current page, and how many pages are there totally. If you are on the first page the list is automatically updated whenever a new event occurs.
If you cannot see the last row of the list, just move the list into the right direction on the touch screen using your fingers.
You can filter the log by filling in the "***Filter***" text box. Tap the Filter text box -a keyboard will appear- then type in your information or part of it to search for and press Enter. You can look for event name, user name, key name or event description as well. If you are interested in a date, type the date in yyyy.mm.dd format, and only that day's events will appear in the log. To stop filtering delete contents from the "Filter" text box.

For faster operation, the log is divided into pages. Up to 200 log events are displayed on each page. On the PC screen you can see 100 000 events and in the Backup memory 200 000 events are stored, so the number of Total stored events is: 300 000. Navigate between the pages by using the right and left arrow buttons or you can go directly to the selected page. To do this, tap the text box next to the "**Page**" word and type in the requested page number. If the page number you entered is too high, the log will automatically go to the last page. The log will be automatically updated if you are on the first page.

The log list columns contain the following information:

- Date: Date and time when the event took place.
- Event: Login/out, Key return, Theft etc.(see full list on page 71.)
- Pos: Number of the key/box place related to the event.
- Key/Box: Name of the Key/Box if the event is related to key itself.
- User: Person's name who generated the event.
- Description: Those card numbers which are not in the system, weight in the box.

Press the ***„Back"*** button to get back to the main menu.

2.1.2 REPORT

The statement list (Report) shows the current state of the keys. Invisible parts of the list can be viewed by moving the list upwards.

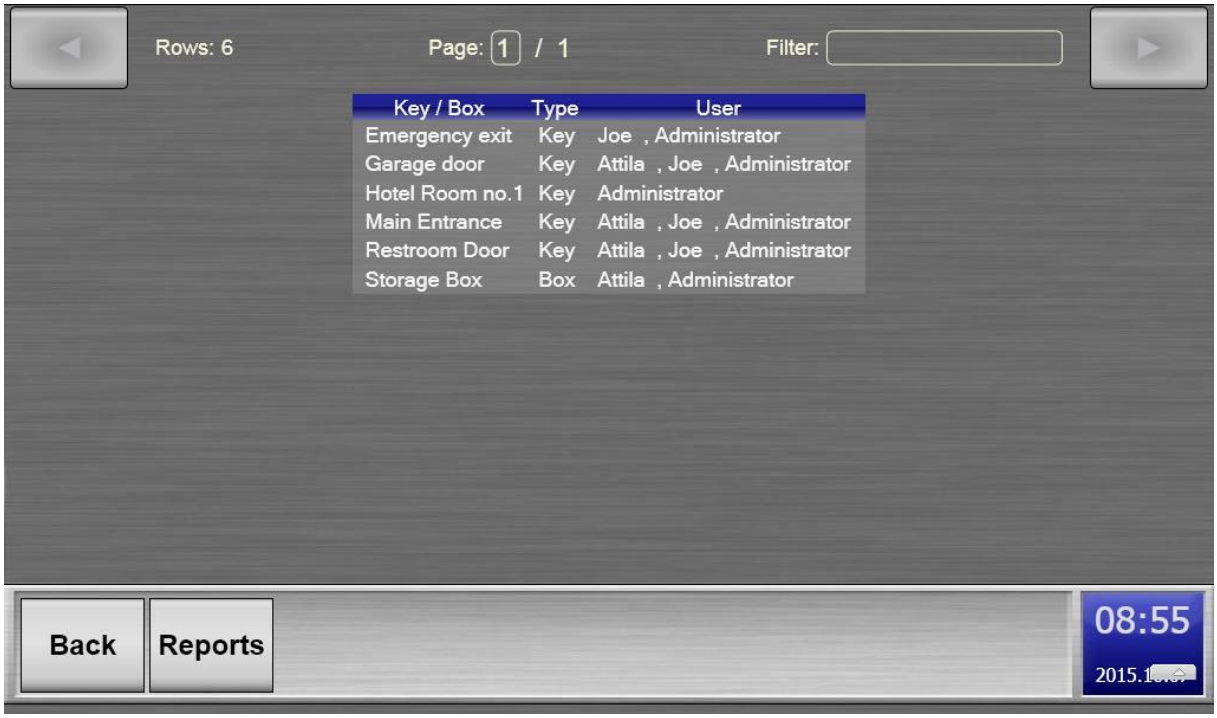
2.1.2.1 Keys state

2.1.2.2 User – Key/Box

The columns contain the following data:

- User: The name of the user
- Type: Type of access: Access code, Fingerprint, RFID Card
- Key/Box: Those keys and boxes which the user has access to use

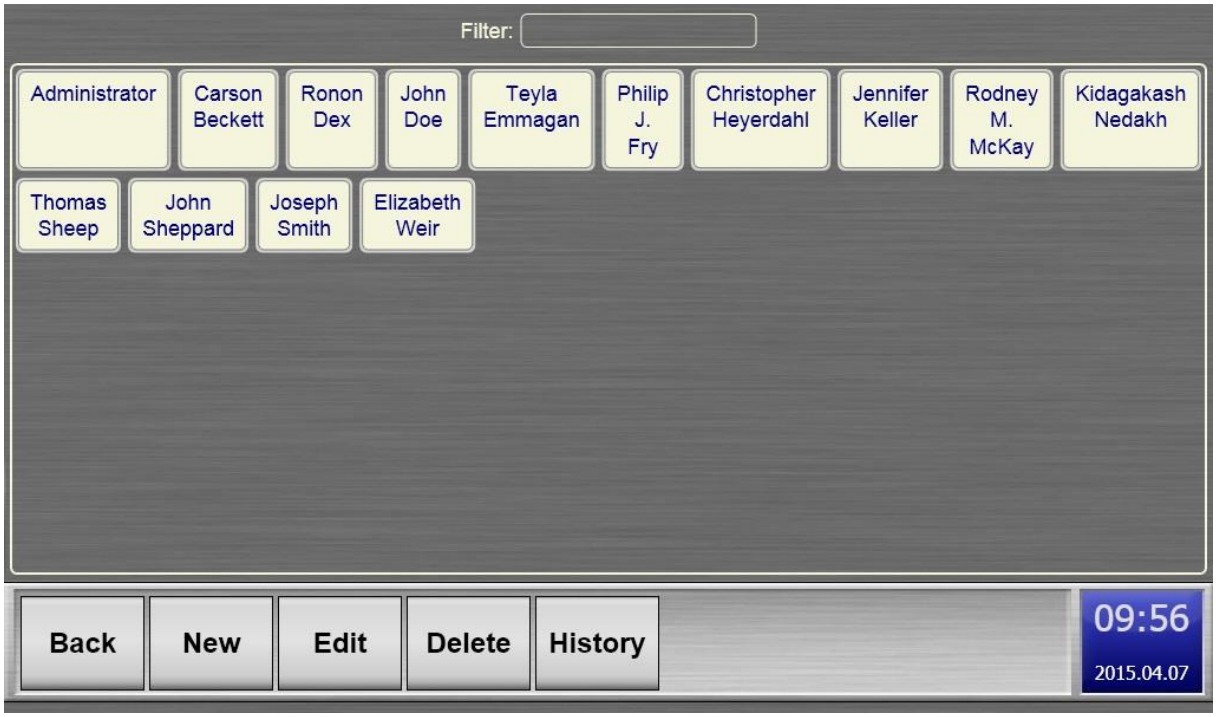
2.1.2.3 Key/Box User



The columns contain the following data:

- Key / Box: Number and name of the key
- Type: Key or box
- User: The user who has access to the keys/boxes

2.1.3 USERS



The users' personal details as well as their access codes and keys assigned to the IDs can be set and maintained in the "***Users***" menu.

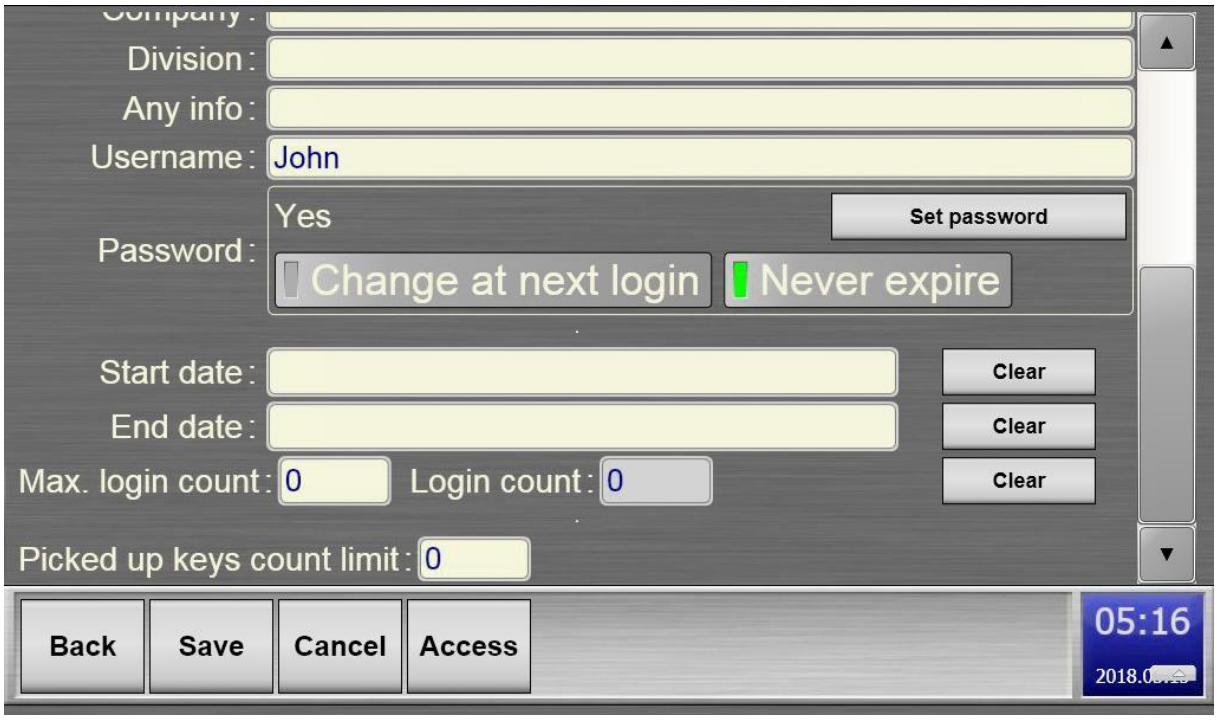
- Select a person: Tap the name in the box, the selected box gets a yellow frame
- Filtering persons: press the textbox next to the "Filter" → type in the requested information → press "OK"

  After filtering, only those users will remain in the list, whose personal data contains the requested information. In order to switch off filtering press the text box again, and delete the entered characters. If you want to find the user of a card, show the card to the card reader. If the system can identify the user after reading the card, he will be automatically selected within the list. If card reading is performed by a filtered list, and the person cannot be found in the list, then the system notifies you to switch off filtering and try your search again.

Operations:

- ***„Back"***: ***Back to main menu.***
- ***„New"***: ***Add new user***.
- ***„Edit"***: ***Modify selected user from the list***.
- ***„Delete"***: ***Erase selected user(s) from the list***.
- ***"History"***: ***Check history of the selected user.***

2.1.3.1 Add new users and Access



Log in as an Administrator → Menu → Users → New → Fill in the fields of the personal information for the user (tap the requested field and a virtual keyboard appears) type the text → Press "Enter" or "OK" buttons → Access → (*1) New (the length of the new code depends on the previous set up settings i.e. min. and max. length of the code, does it have prefix etc.) → Type in your access code → Enter → OK → Rights (here you can set up the rights of the user) → Key permissions → Select the keys/boxes, which you would like to assign to the user→ Save

*1: Or show an RFID card to the reader → Yes → Name the Card → Ok → for higher security a PIN can be added to the card → Enter your PIN → Ok → Add Rights (as above mentioned.)

"Username": optional authentication on the web-interface

"Password": required with the username to log in on the web-terminal

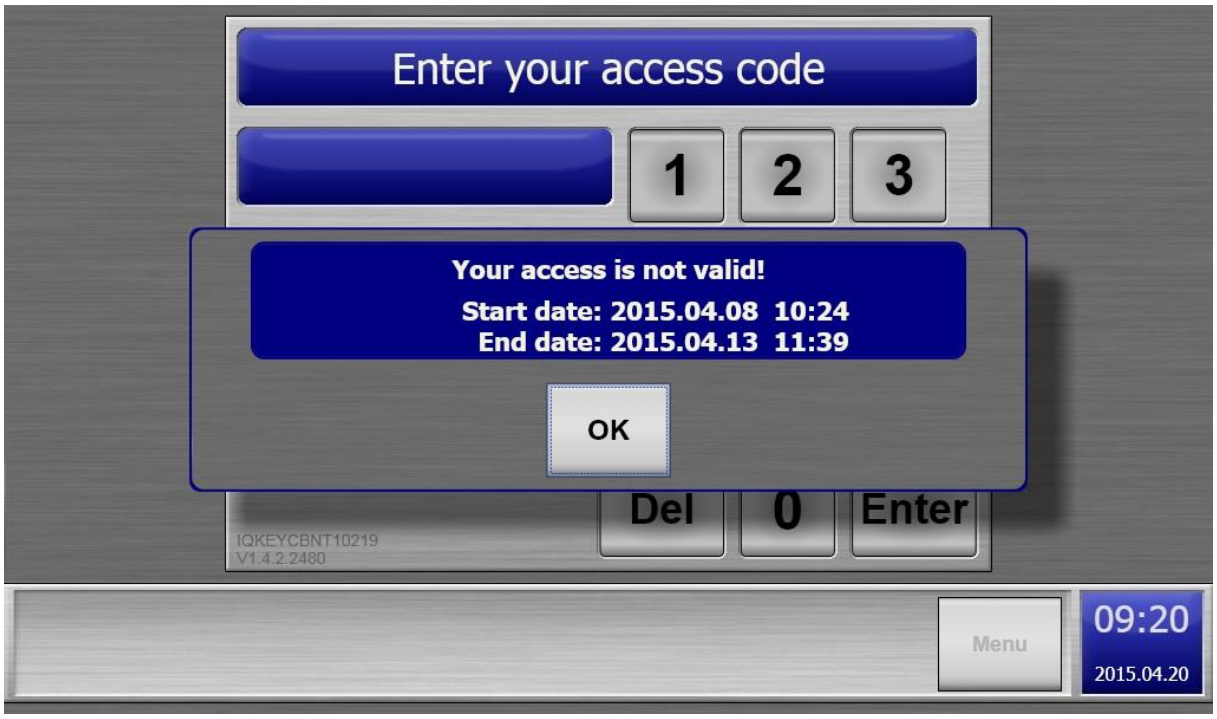
"Change at next login": The password must be changed at the first login if this function is enabled

"Never Expire": The entered password will never expire.

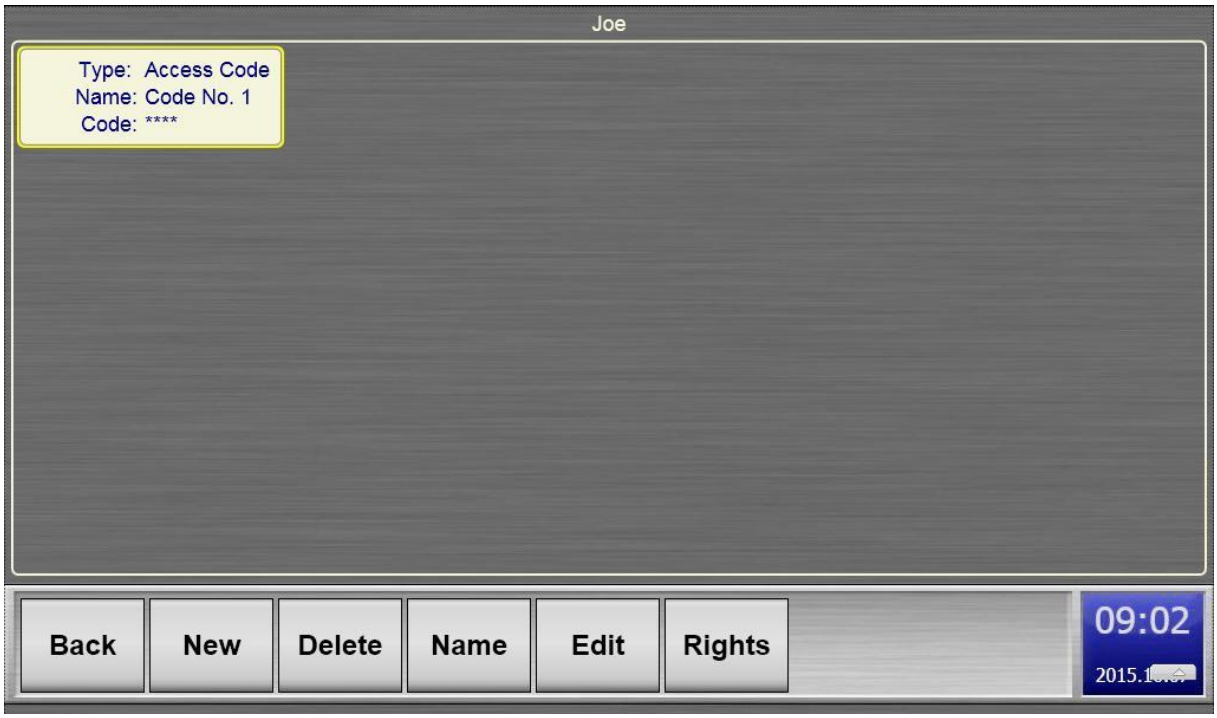
Start Date/End date: Add a predefined time period for a user where s/he will be able to use the system. Before and after that date the user won't be able to log in to the software terminal

Max. login count: You can set how many times a user can log in to the system by adjusting the “Max. login count”. It is also indicated of how many logins have been used up by the user by checking the “Login count”.

Picked up keys count limit: You can set how many keys a user can take out of the system. If they reach this number, they won’t be able to pick up additional keys until they return at least one from the the previously picked up ones.



When the user tries to access the cabinet out of the predefined time window he gets a “Your access is not valid!” message from the system indicating the Start/End date of his access period.



Functions:

- ***"New":*** ***Create new code***
- ***„Delete"***: ***Erase code***.
- ***„Name"***: ***Change the name of the access code***.
- ***„Edit"***: ***Change the access code***. (it does not work for cards)
- ***„Rights"***: ***Select rights belonging to access codes***.
- ***"Fingerprint"***: ***Add your fingerprint for higher security***.

Fingerprint reader configuration:

Connect the Fingerprint reader to the PC unit: Log In → Menu → Setup → System → Hardware → Fingerprint Reader→Fingerprint Reader serial port: select "COM4"

User rights:

- IQKEYCBNT Booking administrator: Can Add/Modify/Cancel reservations.
- IQKEYCBNT Terminal administrator: Configuration can be performed through the key cabinet's touch terminal.
- IQKEYCBNT Web administrator: Configuration can be made on the Web interface.

Modify user:

Select a User→Edit or tap twice on the Name→Modify the fields

Delete user:

Press Delete→Select the Person→Delete→Are you sure? → Yes

It removes all the previous added rights and code from the database.

The Administrator cannot be deleted, but his Access rights and Code can be modified.

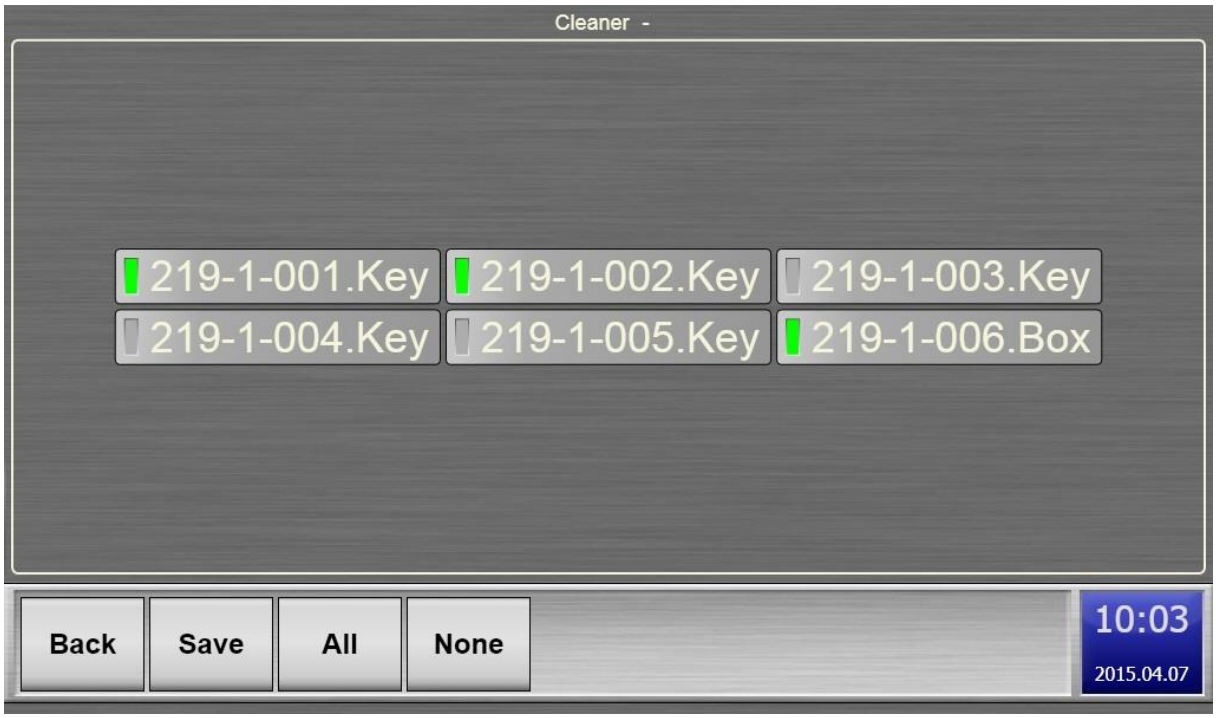
2.1.4 GROUPS

If a User is added to a Group (s)he has the Rights to use those keys -which are selected for that Group- with his/her own code.

2.1.4.1 New

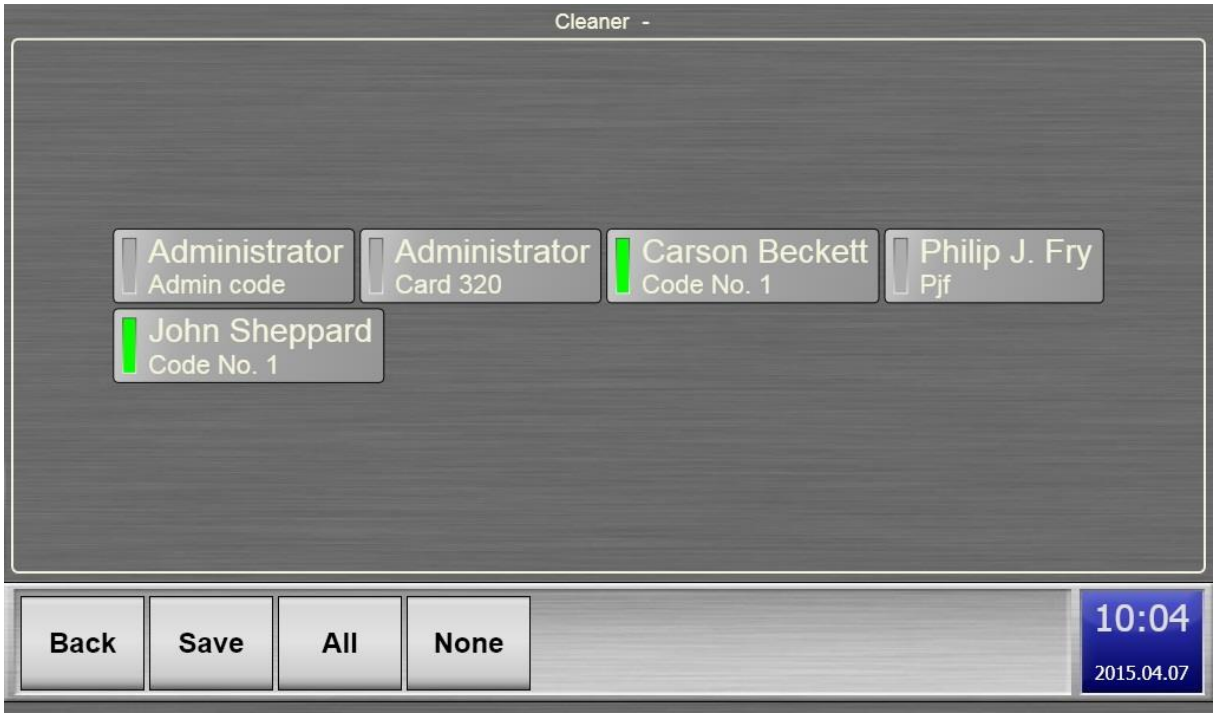
- Name the group → Description → Select the Members and Key permissions for the group → Save

2.1.4.2 Key permissions



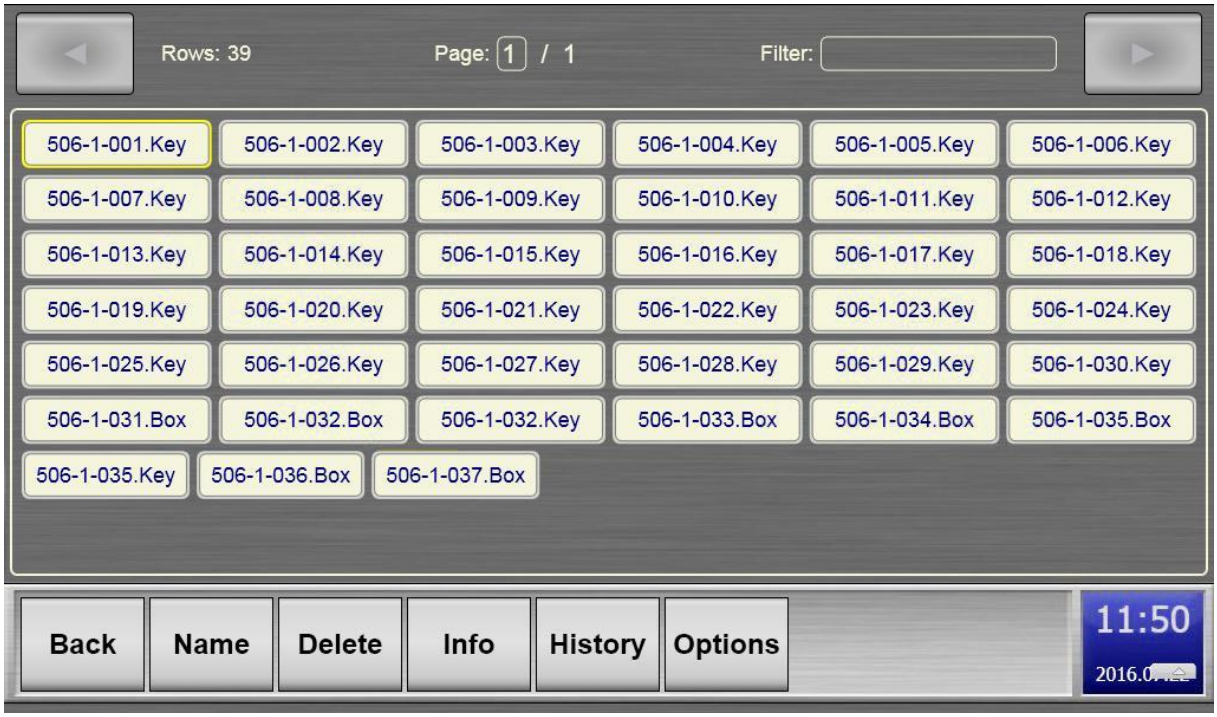
You have to add the key permissions to the group. Users -who are in the group- will have access to the selected keys and also to those keys which are added to their profile.

2.1.4.3 Members



Any member of the group can pick any of those keys up which are added to the group. A member can use his access code/card to pick up those keys which have been added to the group.

2.1.5 KEYS



You can rename, delete keys/boxes and check their statuses in the “Keys” menu. Select one and tap the “Info” button to check their status. You can also check the history of a specific key by selecting it, and touching the “History” button.

2.1.5.1 Name

- The name of the key can be changed.

2.1.5.2 Delete

- Deletes the selected key from the database

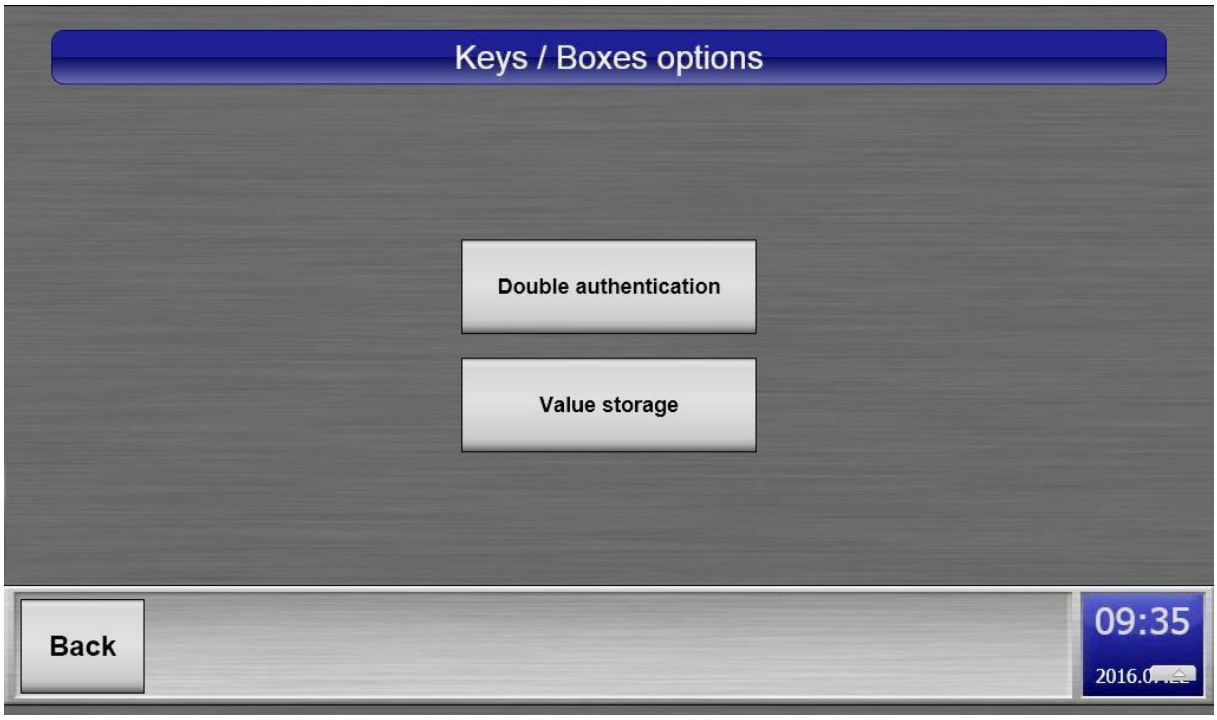
2.1.5.3 Info

You can check the status and detailed information of the keys by selecting one and touching the “Info” button.

2.1.5.4 History (Log)

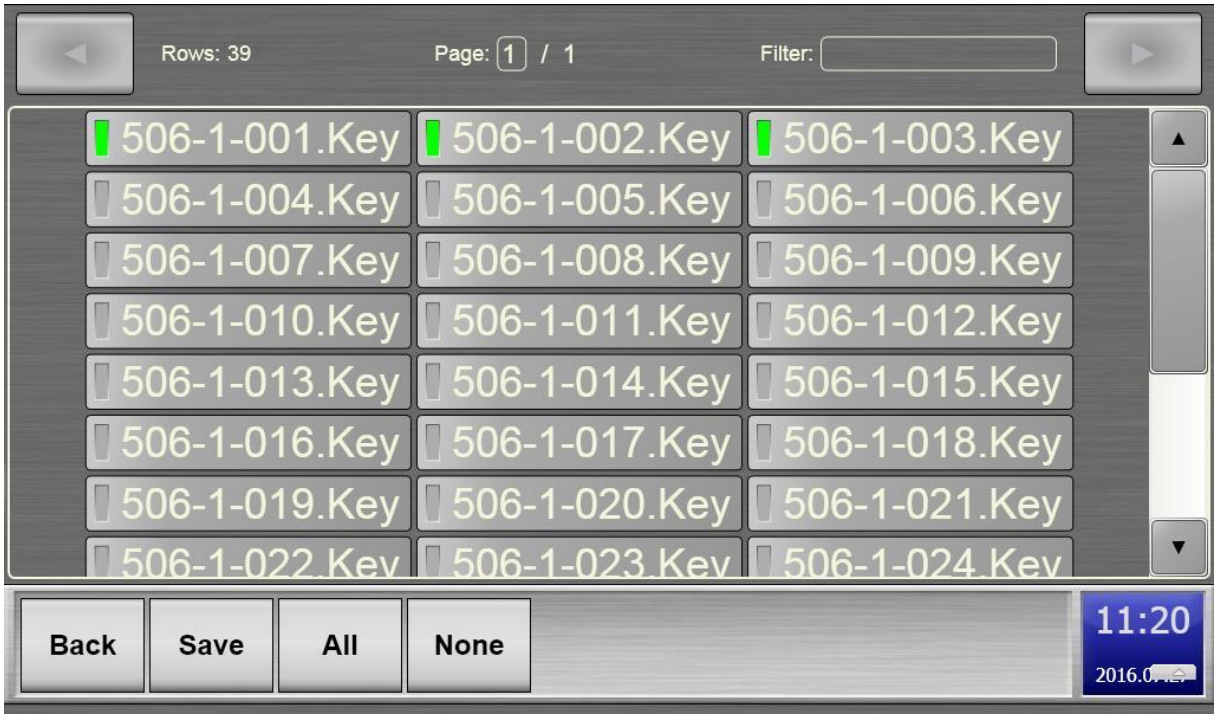
You can check the history of a specific key if you select it, and touch the “History” button.

2.1.5.5 Options

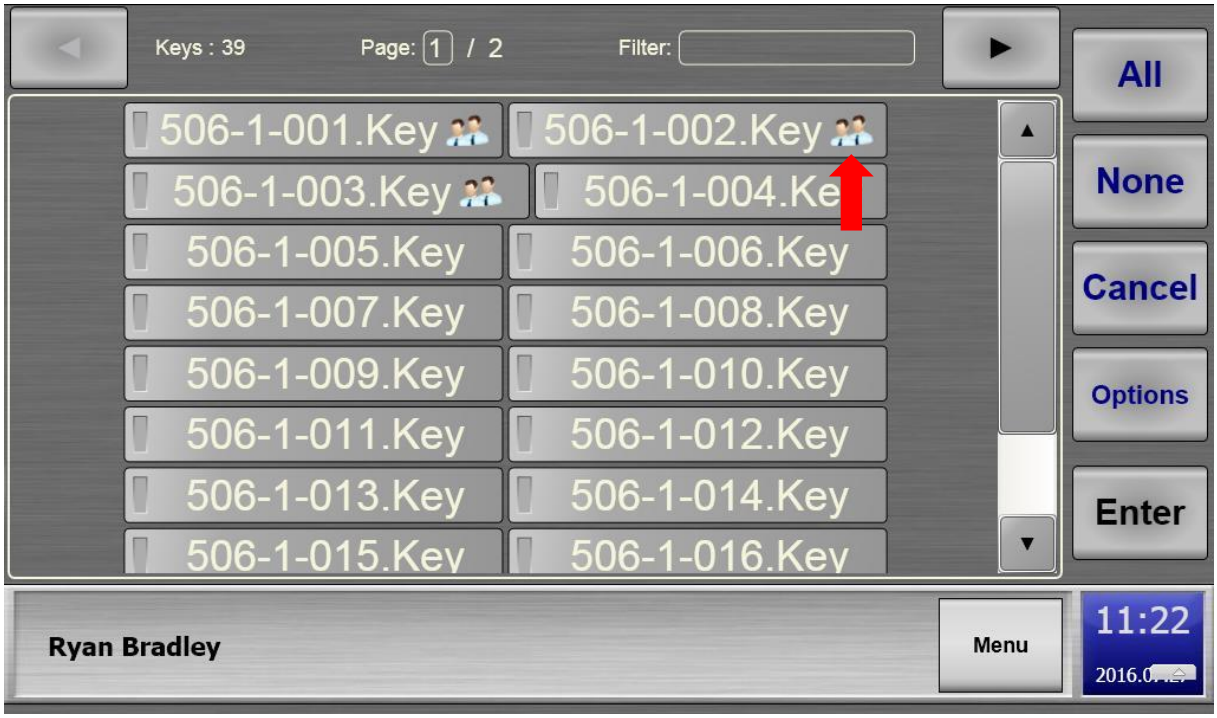


Under the “Options” button you have the possibility to select certain keys/boxes for “Double authentication” (two person authentication) or select boxes with weight measure to be used as “Value storage” lockers.

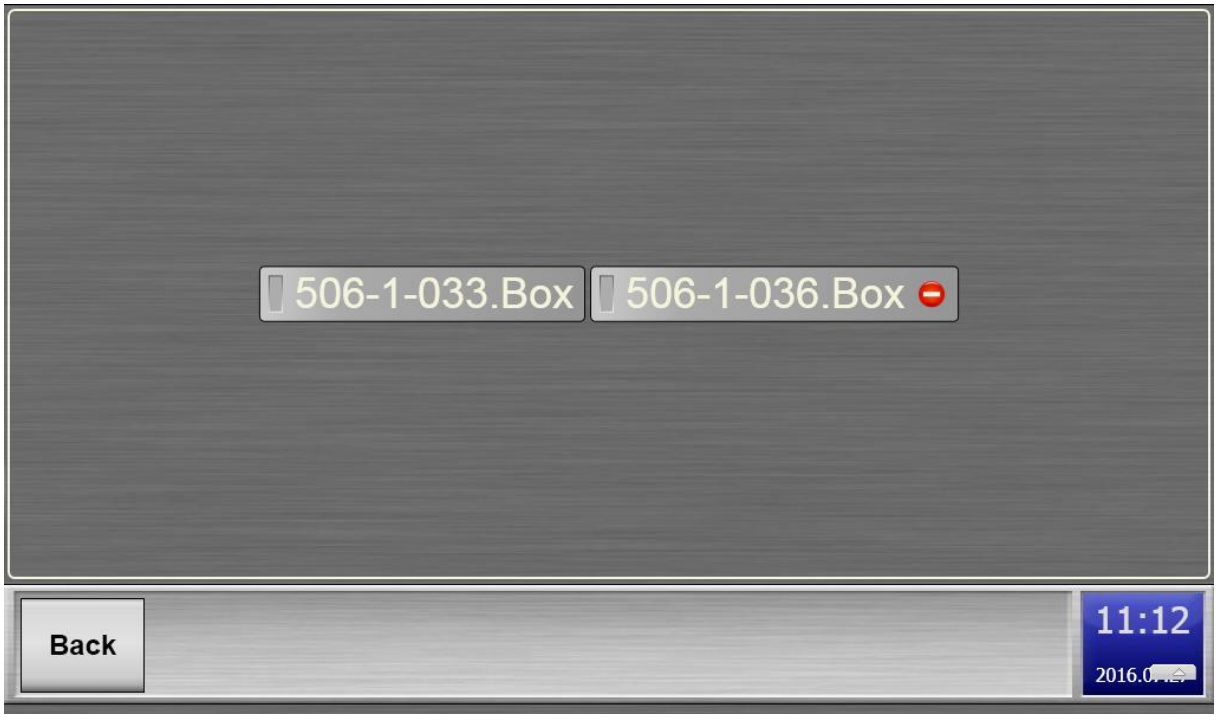
“Double authentication”: Enable/ disable double authentication for keys/boxes.



The users can check (if they have permission to that particular key/box) upon login which keys/boxes have enabled double authentication, because there is an icon with two figures next to the key's/box's name.

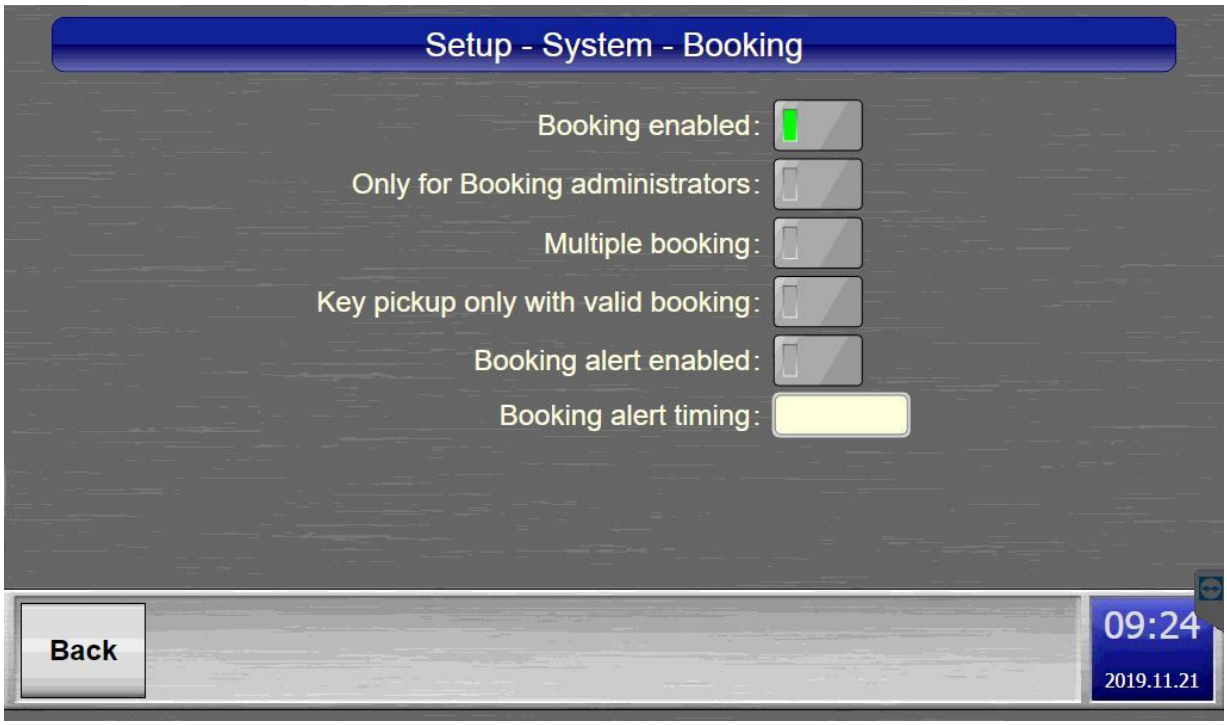


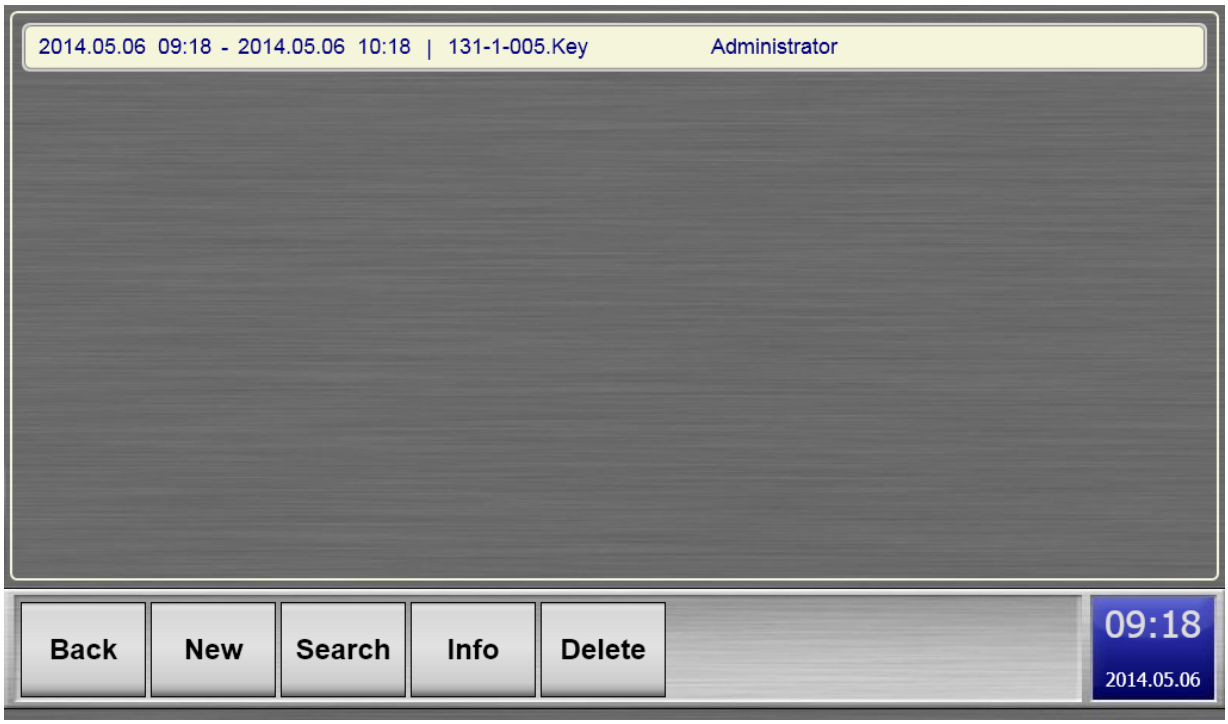
"Value storage": Select boxes to be used as value storage boxes. You will see a small "Stop" sign next to those boxes' names which are already issued to users, and are not available to be used as value storage boxes, as seen on the picture below:



2.1.6 BOOKING

The Booking configuration can be found in the Menu- Setup – System – Booking submenu





In the IQ Key and Storage Management Systems the booking is a function, which is useful for the users to reserve keys and boxes for a time period.

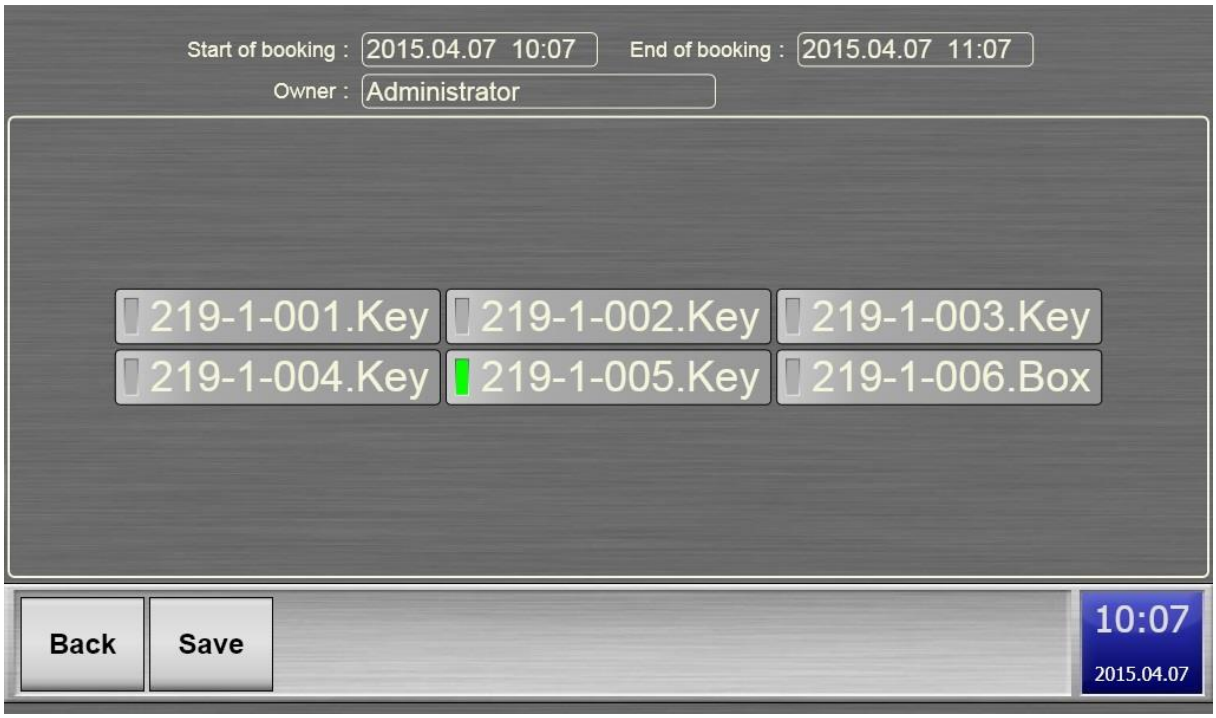
Multiple users can have simultaneous reservations for the same key/box for the same time period. The multiple booking function can be enabled in the following way:

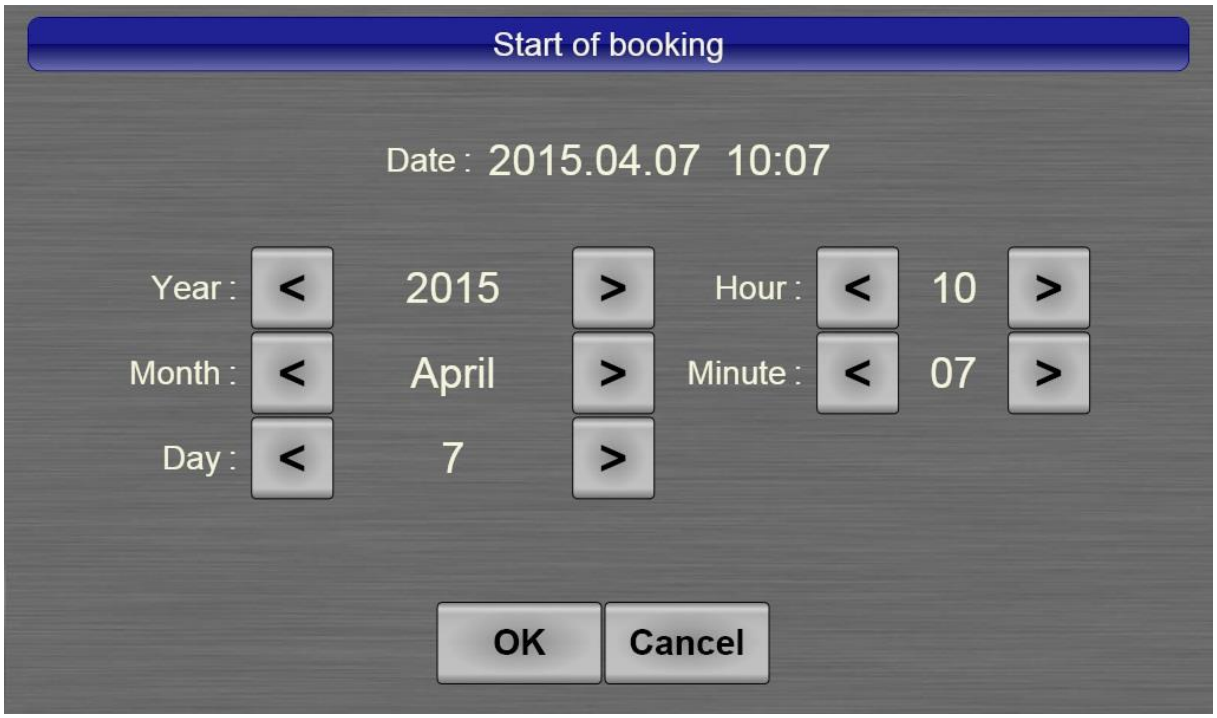
Menu → Setup → System → Security → (Scroll down) → Multiple Booking

A booking administrator can create reservations on behalf of the users. When creating/modifying user access levels you have the option to give him right to be a booking administrator in the following way:

Menu → Users → (Select a User) → Access → (Select/Create an access) → Rights → User rights → Select "Booking administrator" → Save

2.1.6.1 Creating new bookings

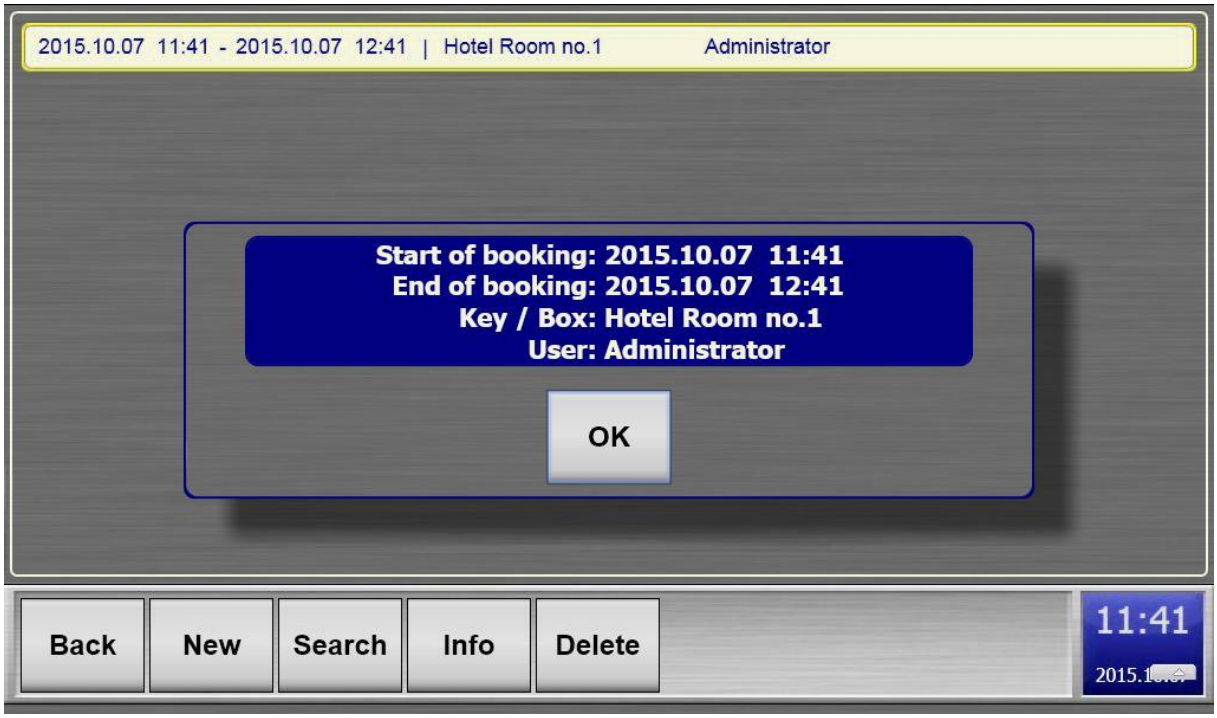




2.1.6.2 Search

You can search / filter among the existing bookings by specifying the start or end of the booking, search for the user or for the specific key / box.

2.1.6.3 Info



You can check who made the booking, and also for which period the key is booked.

2.1.6.4 Delete

A booking can only be deleted by those who created it or by the booking administrator.

2.1.7 LOCKUP FUNCTION

The terminal's lockup function enables the users to lock a box or a key permanently for a certain period of time. During this time period no one will be able to access those boxes or keys which are locked up. One example when the lockup function can be used is if electronic devices are stored in the boxes and they need a few hours of charging before they can be used again.

It's important to note that **only the administrator has the right to delete lockups**.

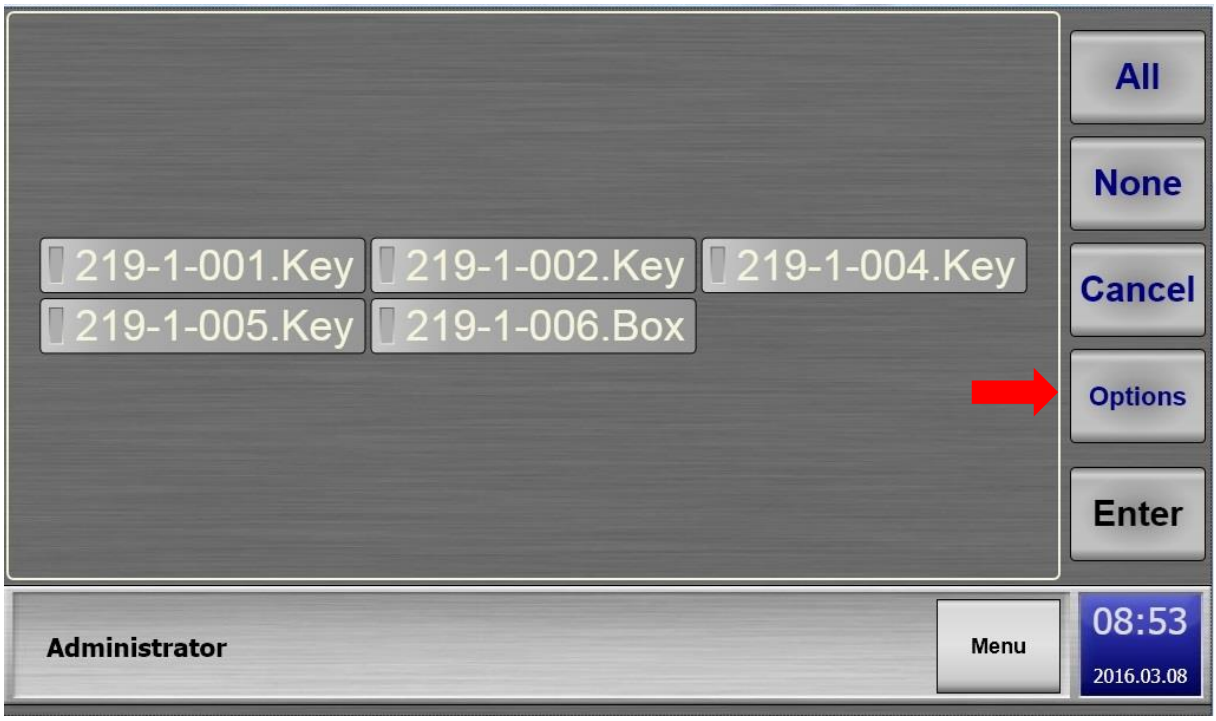
2.1.7.1 Enabling the lockup function

To enable the lockup function please do the following:
Log In → Menu → Setup → System → Security → Scroll down → Lockup enabled

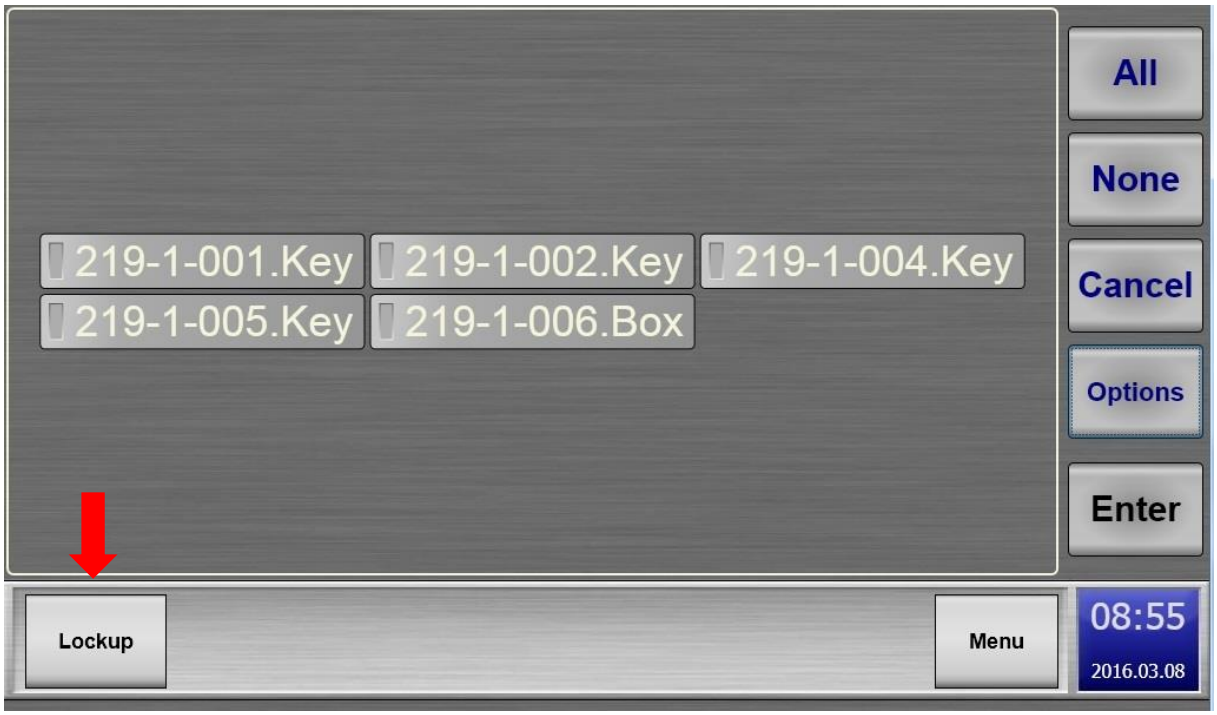
The administrator (or a user with proper access level) can also set the default/minimum/maximum lockup time in the Security menu.

2.1.7.2 Creating a new lockup

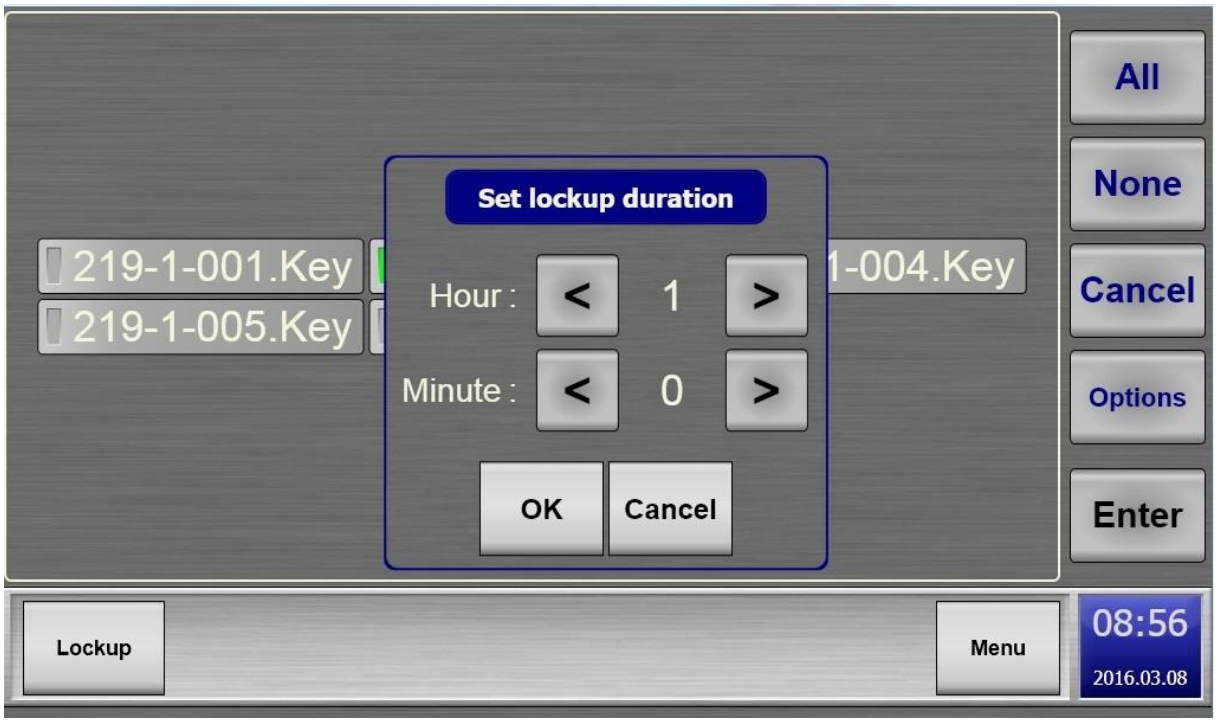
When the user/admin logs in to the cabinet he can see an "Options" button on the right side of the screen.



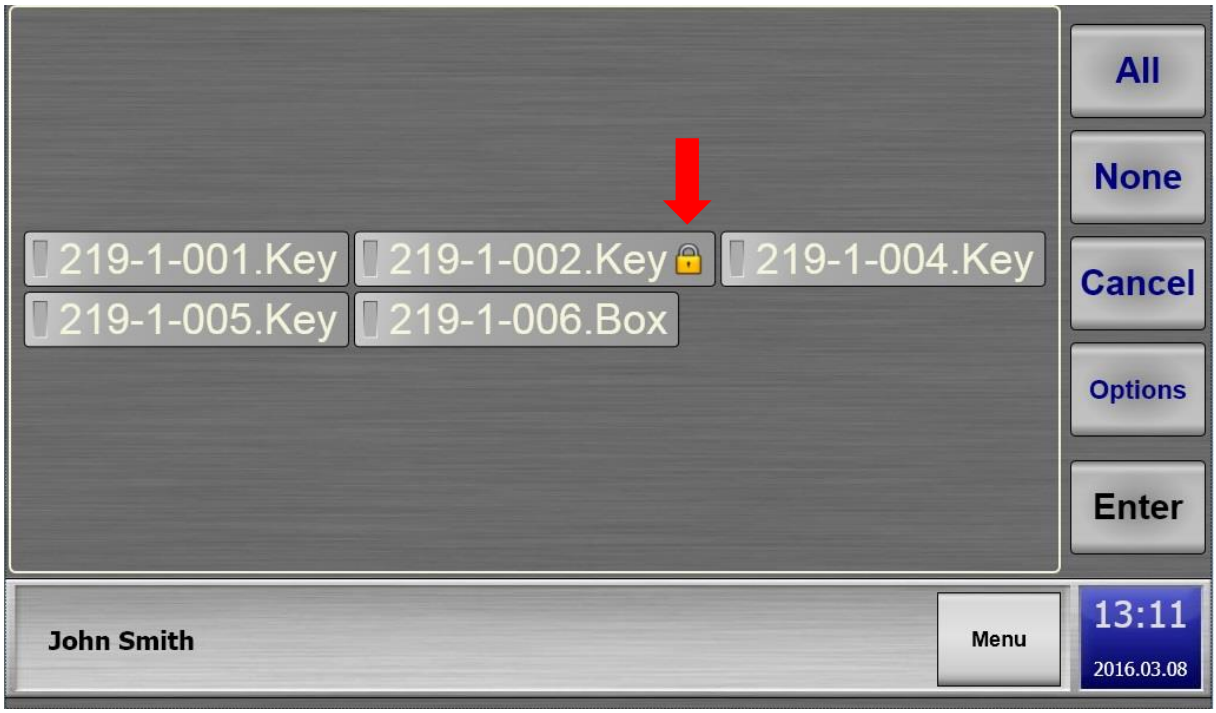
After pressing this button a “Lockup” button will appear in the place of the User’s name in the bottom left corner. (see on the picture below)



After the user has selected which key or box (more than one can be selected at a time) he would like to lock, he has to press the “Lockup” button to set the time period of the lockup (max. 48 hours). Carefully read the lockup description before pressing the “Ok” button, because the lockup can’t be deleted once it’s saved. (only by the administrator)

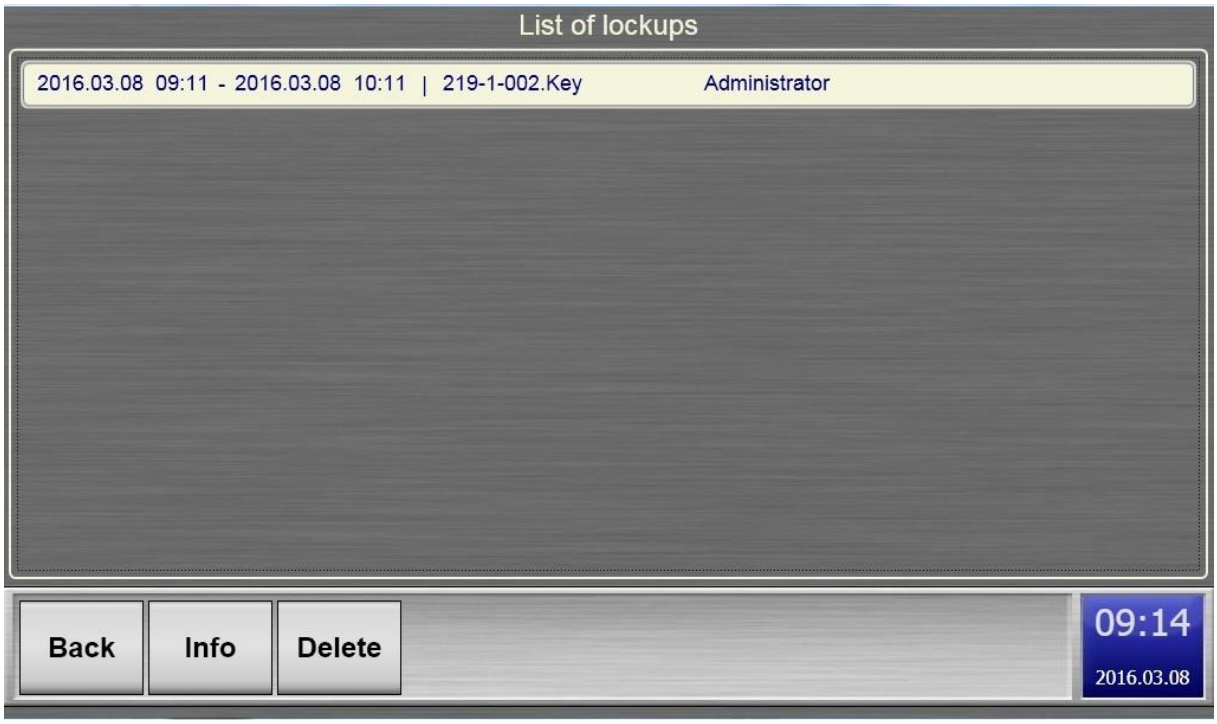


It’s easy for the users to identify which boxes are locked, because there is a small lock symbol next to them if they are locked. (see the picture below)

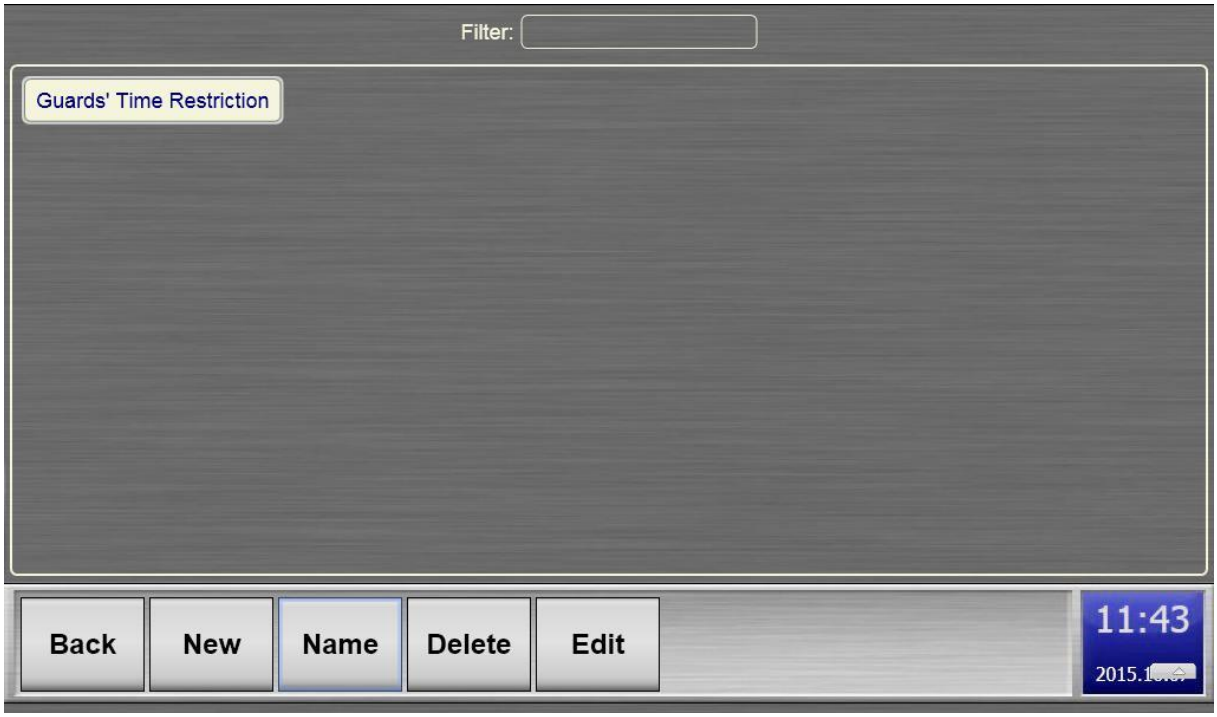


2.1.7.3 Deleting a lockup

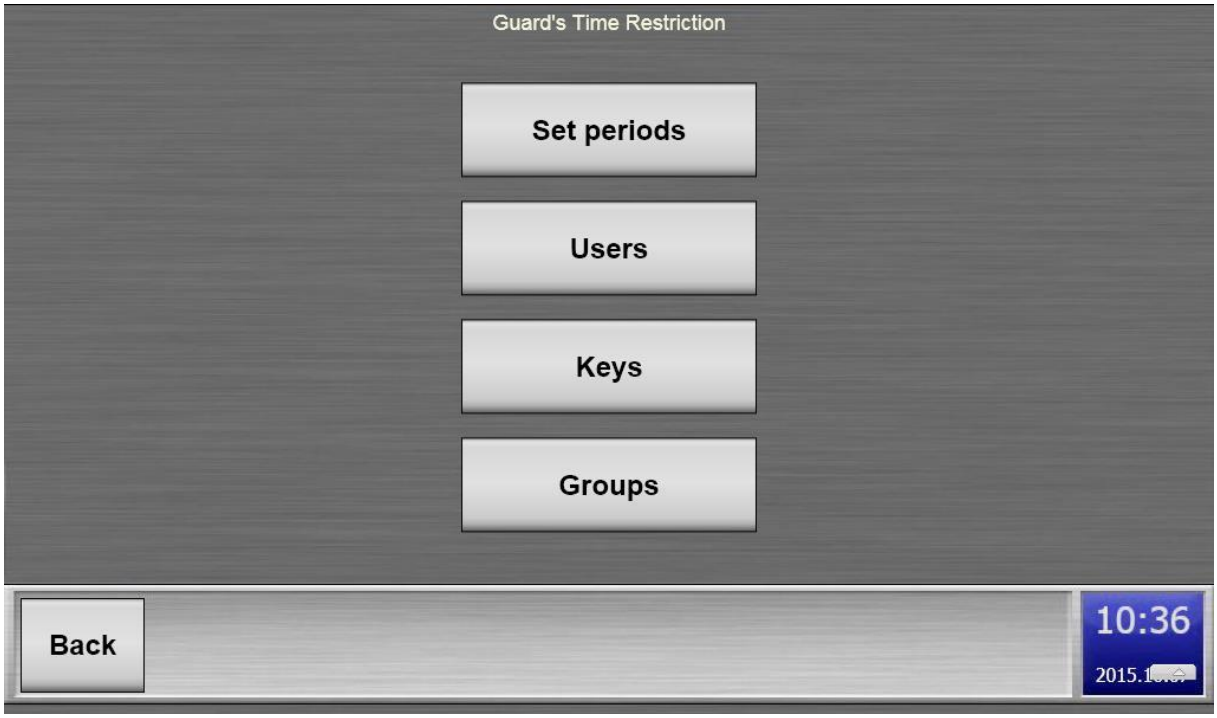
To delete a lockup the administrator has to go to **Log In → Menu → Lockup.** He can delete the lockup from the list by selecting it, and by pressing the delete button.



2.1.8 TIME REST.



Under the “Time rest.” tab you can adjust time periods when the users can pick up their keys. You can set the allowed/forbidden periods in 30 minute increments for each day. One or multiple users/groups can be added to each “Time restriction”. You can also set which keys/boxes can be used by the selected users during a Time Restriction period. Multiple time restrictions can be created in one cabinet.

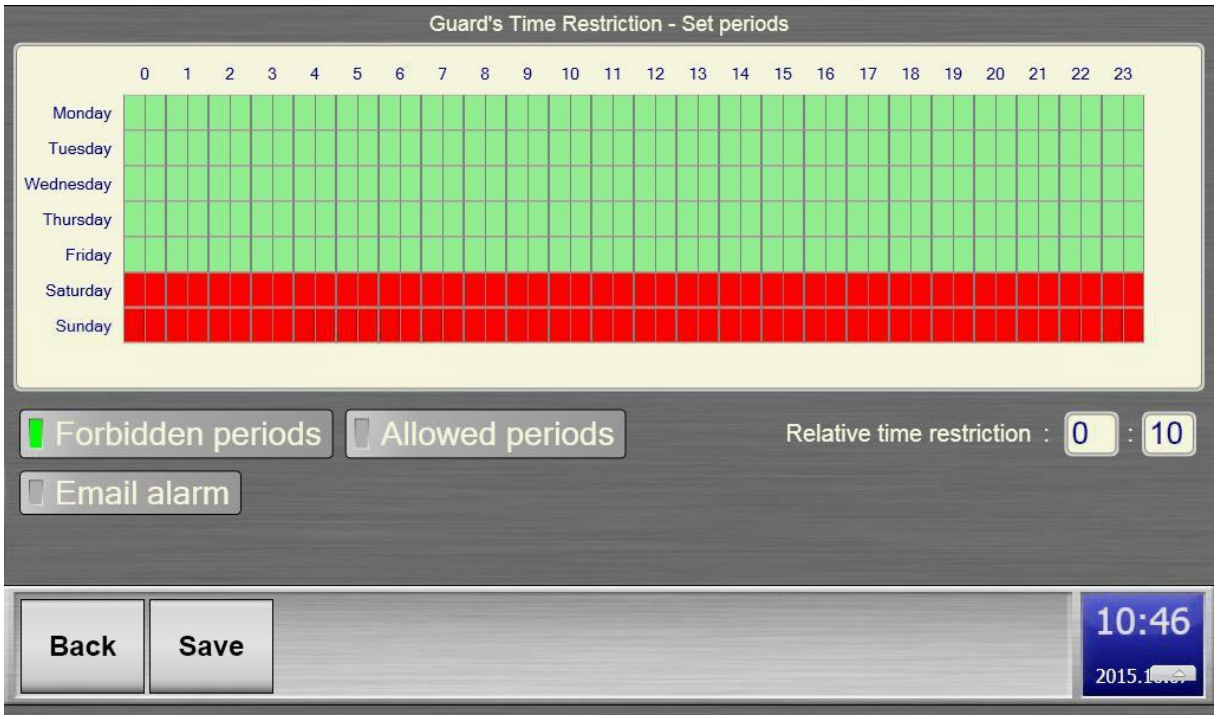


Set periods: The forbidden/allowed periods of the Keys/Boxes.

Users: The User who is related to the usage of the Keys/Boxes.

Keys: Set up of the keys which are in the Time Restriction.

Groups: Groups which are related to the Time Restriction.



On the above example we have set the weekend as a forbidden period. The users in this Time Restriction can only pick their keys up from Monday to Friday. They can't access the keys and/or boxes on Saturday and Sunday.

Forbidden periods:

If you select this option you will be able to mark the forbidden time periods.

Each field equals to a 30minute timeframe.

Allowed periods:

If you select this option you will be able to mark the allowed time periods.

Each field equals to a 30minute timeframe.

Red:

During this period the key/box cannot be used.

Green:

During this period the key/box can be used.

Save:

The restricted time period can be saved here.

Email alarm:

If you mark this and the email function is properly set up in the cabinet's system settings, then the cabinet will send an email alert if a key hasn't been returned to the cabinet in time.

Relative time restriction:

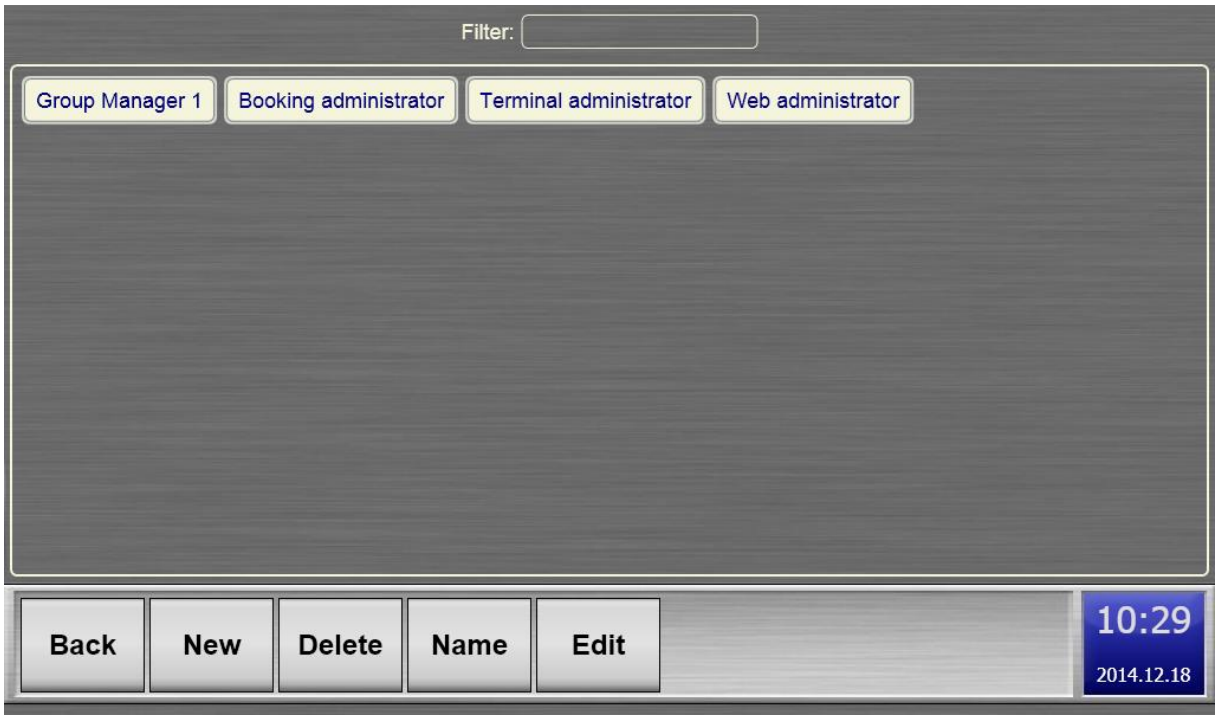
You can set a timeframe in a time restriction in which the user has to return the key(s) before this time period runs out. The counter starts at the time of key pickup. When this time runs out the system sends an email to a pre-set email address with a message that the key has not been returned.

2.1.9 RIGHT GROUPS:

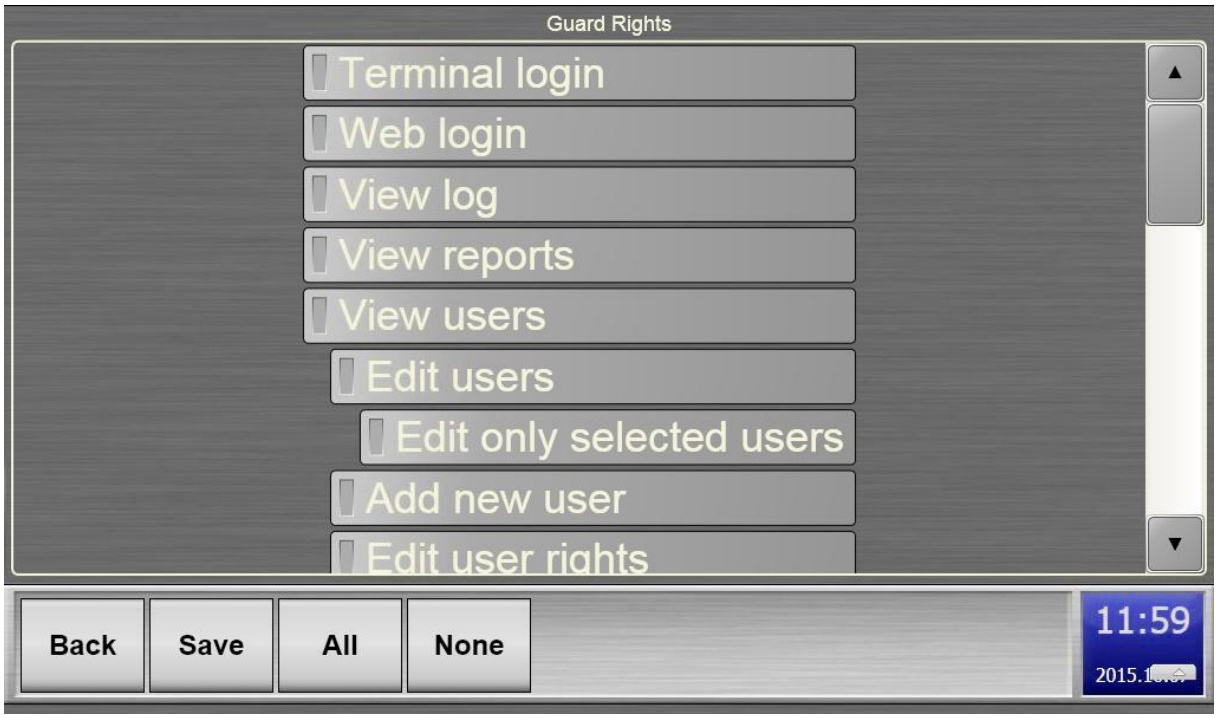
The cabinet has 3 default privileges, these are the followings:

- Terminal administrator has the right to configure the Cabinet
- Web administrator has the right to configure the cabinet through the web interface
- Booking administrator can create Bookings on behalf of others

If you need a group where the features of privileges can be customized, you have to create a new Right group and customize the permissions for the group.



Once you have created a new group, you will have the option to add privileges to it.



Under the “User rights” menu you can set a customized level of access for the group.

After setting up the permissions, assign the permission to the people’s entry codes.

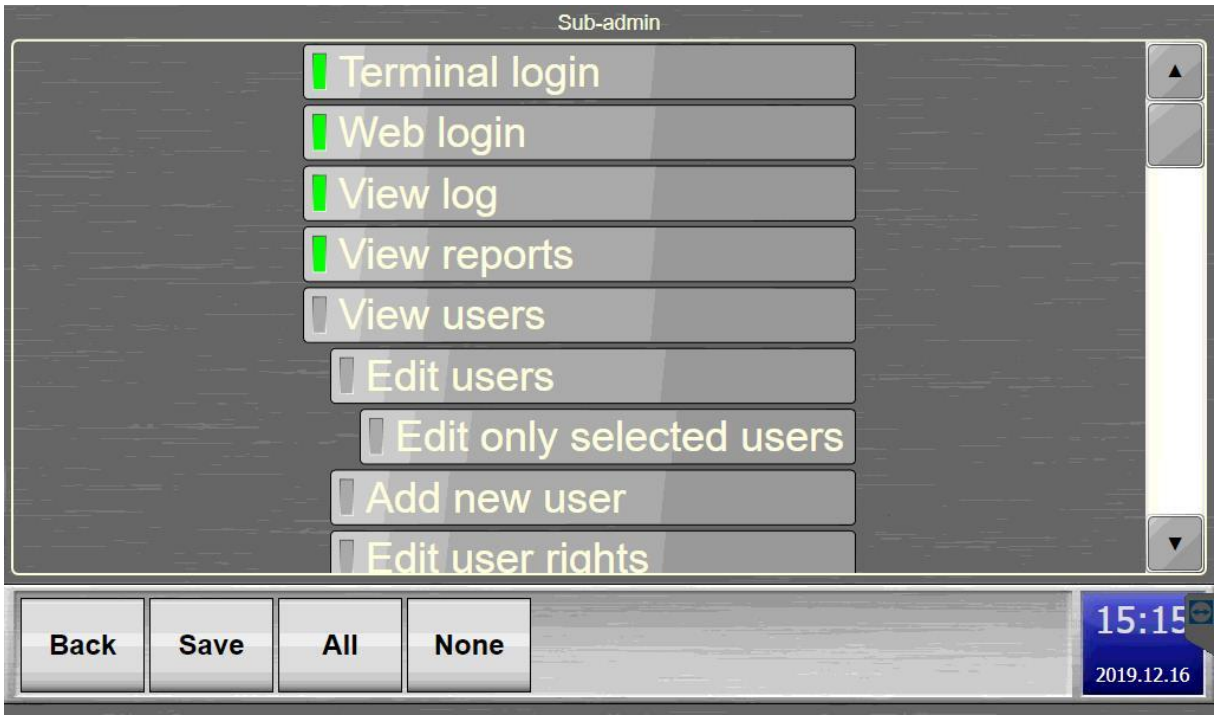
One access code/ user can be added to multiple groups. In this case, the right connection is „Or”.

For instance:

You have assigned a user’s entry code to a group where you enabled the Terminal Login, and the View Log, and you also added this code to a group where you enabled the WEB interface entry.

In this case with this access to the terminal and to the Web interface the user can log in and check the Log through the Web interface and also through the Terminal.

The Group Manager has the right to modify only certain users if you select the “Only the selected users”.



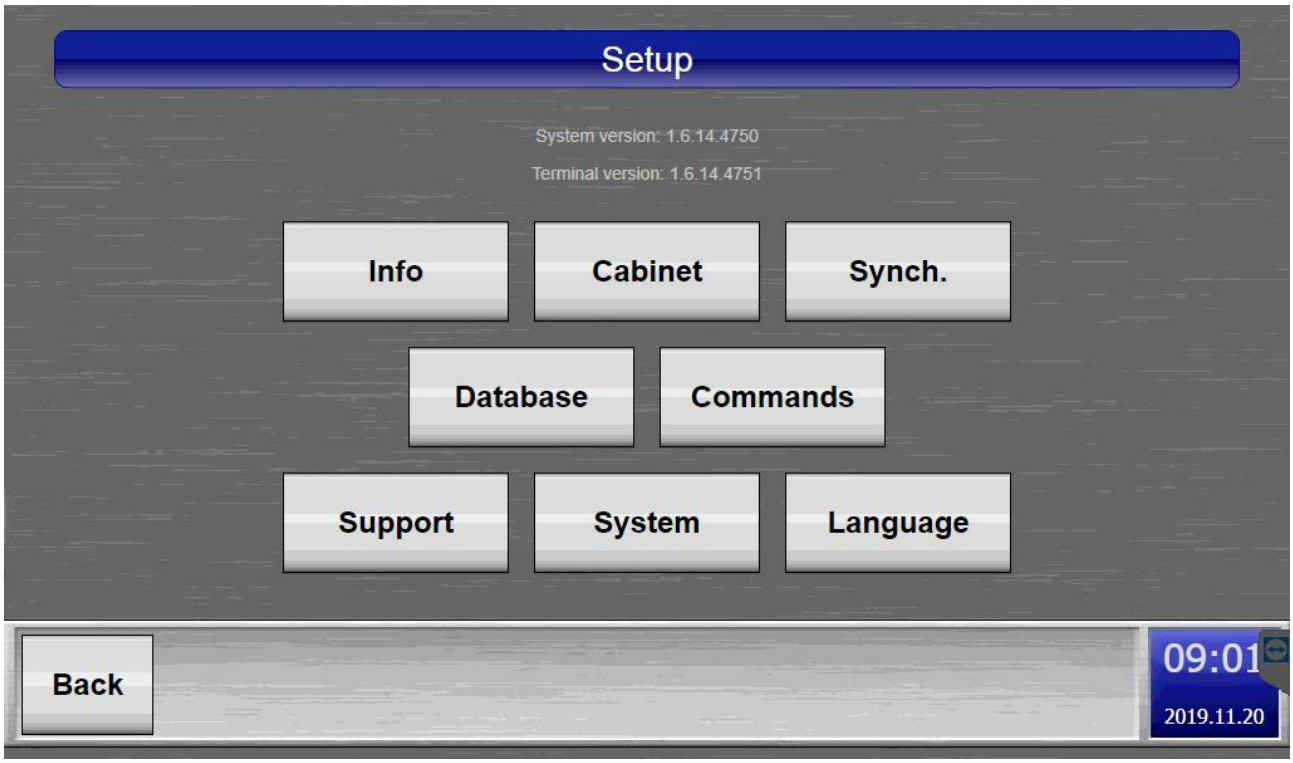
A new button will appear on the screen „Editable users”.

In the „Editable users” menu you can choose that which users’ profiles can be modified by the sub-admin (sub-admin = the user who is part of the right group).

Right Group:

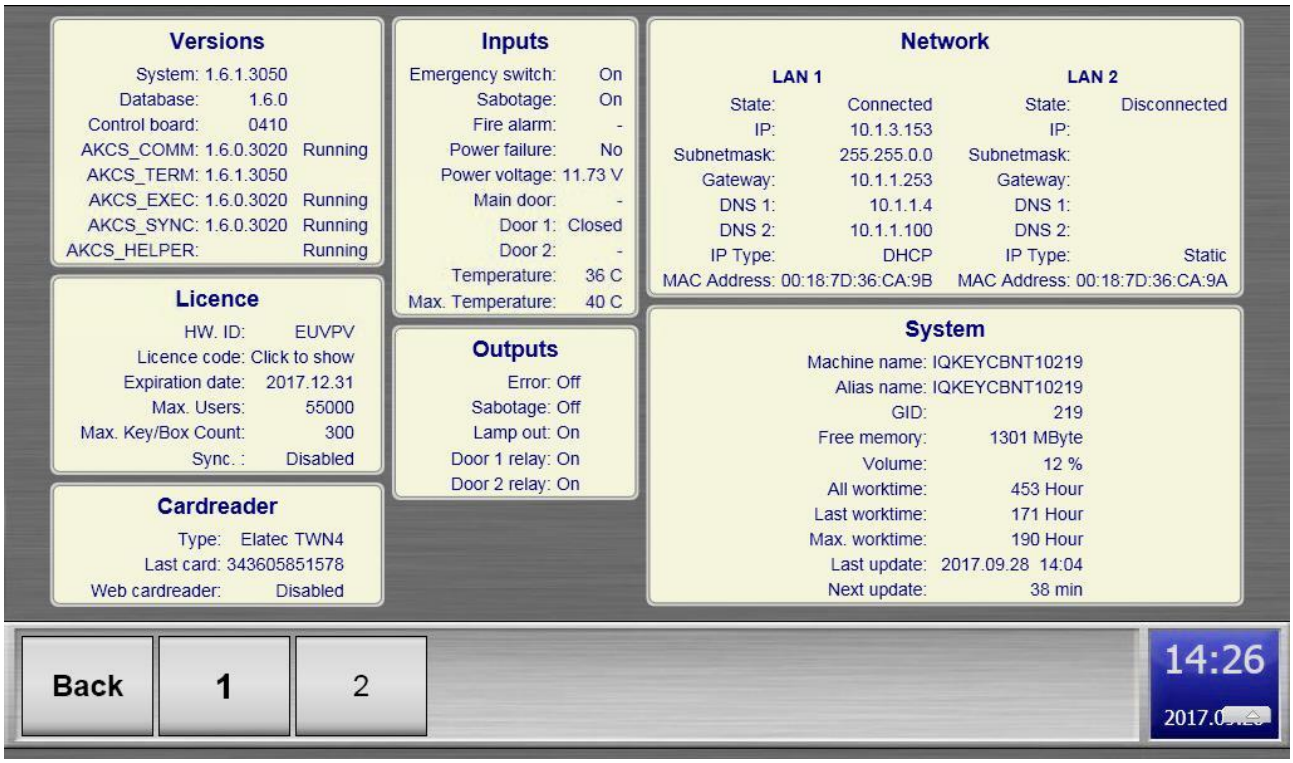
- Terminal login
- Web login
- View log
- View reports
- View users
  - Edit users
  - Edit only selected users
  - Add new user
  - Edit user rights
- View groups
  - Edit group rights
  - Edit group members
- View keys
  - Edit keys
- Edit bookings
- View Time Rest.
  - Edit Time Rest.
- View right groups
  - Edit right groups
- Setup
  - System information
  - Cabinet
    - Status
    - Keys
    - Scale
    - Calibration
    - Address
    - Statistic
  - Database
    - DB backup
    - DB config
    - GDPR
- Commands
- Synchronization
- Support
- Language
- System
  - Computer
  - Date and Time
  - Login
  - General
  - Daily report
  - Booking
  - Lockup
  - Hardware
    - Network
    - Blocks
    - Card Reader
    - Fingerprint Reader
    - Alcohol sensor
  - Security
  - Timing
  - Email

3. Setup



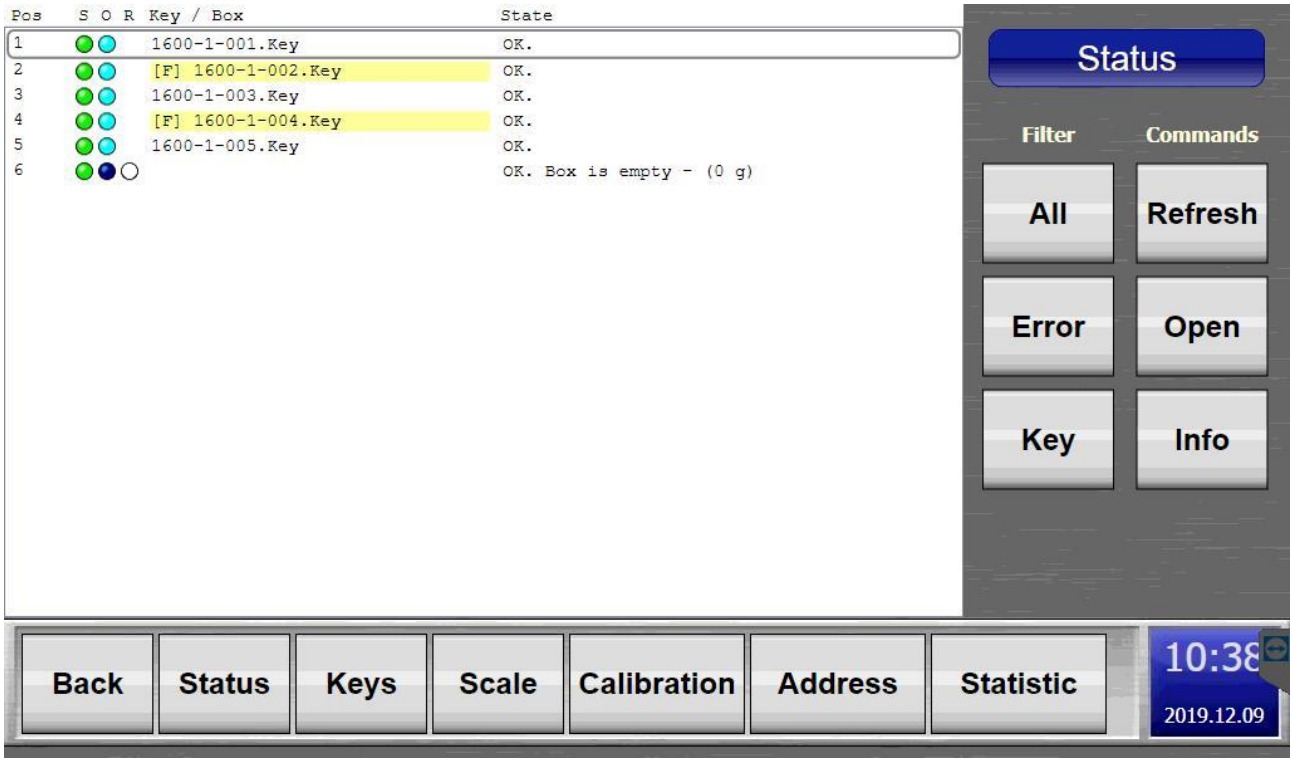
From the main menu you can get to a sub-menu by pressing the "***Setup***" button, where you can do hardware and software configurations, and you can also check the hardware's state.

3.1.1 INFO



Under the "Info" tab you will find the technical details of the cabinet.

3.1.2 CABINET



After selecting the "***Cabinet***" menu, a list regarding the cabinet status will be shown.

Meaning of the columns in the list:

1. column: Pos.: Key position number
2. column: S. Status LED
   - normal operation (green)
   - error in operation (red)
3. column: Optical sensor:
   - key is placed in (light blue)
   - key is removed (dark blue)
4. column: Key identification (RFID):
   - number of the identified key
   - key could not be recognized (Unknown key)
   - key has been removed (empty field)
5. column: State message:
   - „Keyplace OK.”: normal operation
   - technical fault, no communication (Not alive!)
   - „Key place error!”: Logical fault, the state of the optical sensor and the state of the RFID sensor is not matching.
6. column: Gramm: - Shows the weight of the item in the box.

3.1.2.1.1 Filter

Data within the table can be filtered (***Filter***):

3.1.2.1.1.1 All

All items will appear in the list, no filtering,

3.1.2.1.1.2 Error

a) only faulty key places will be displayed in the list,

b) only seamlessly operating key locations will appear in the list,

3.1.2.1.1.3 Key

Key: a) lists only that positions where a key is in,

b) lists only the empty key positions (where no key has been inserted).

3.1.2.1.2 Refresh

- update list,

3.1.2.1.3 Open

- manually open key position selected from the list,

3.1.2.1.4 Info

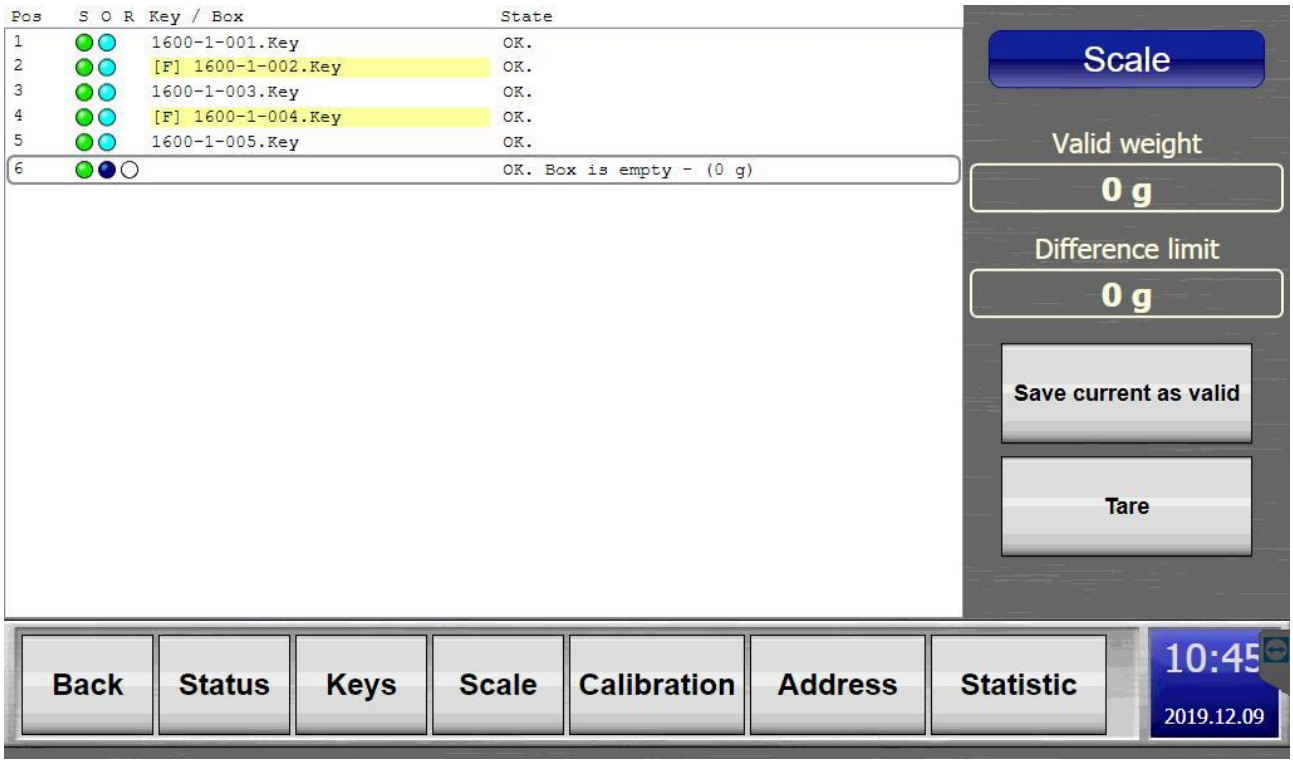
- View information about a given key place.

3.1.2.1.5 Tare

- Resets the scale to “0” gram

The "Open" and "Info" commands work only if a key position is highlighted in the list. A grey frame indicates if the key is selected.

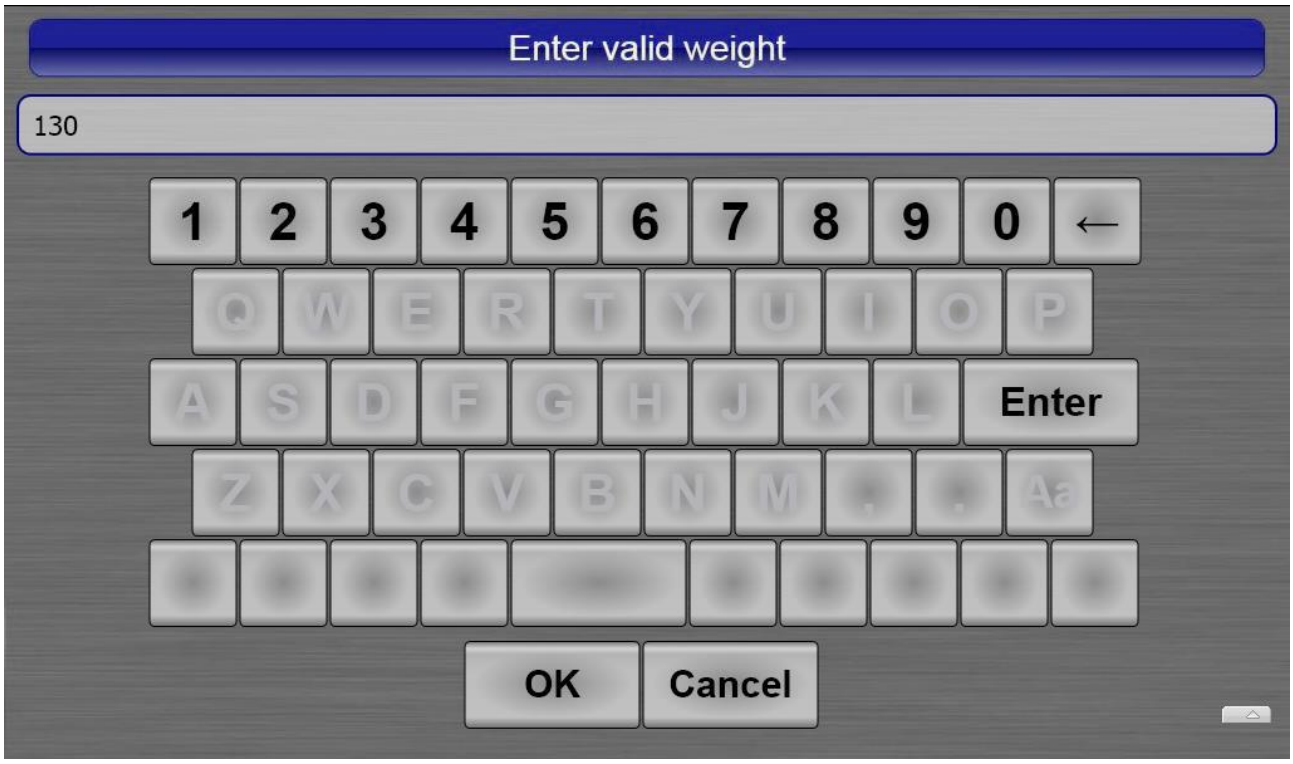
Weight measure / Scale:



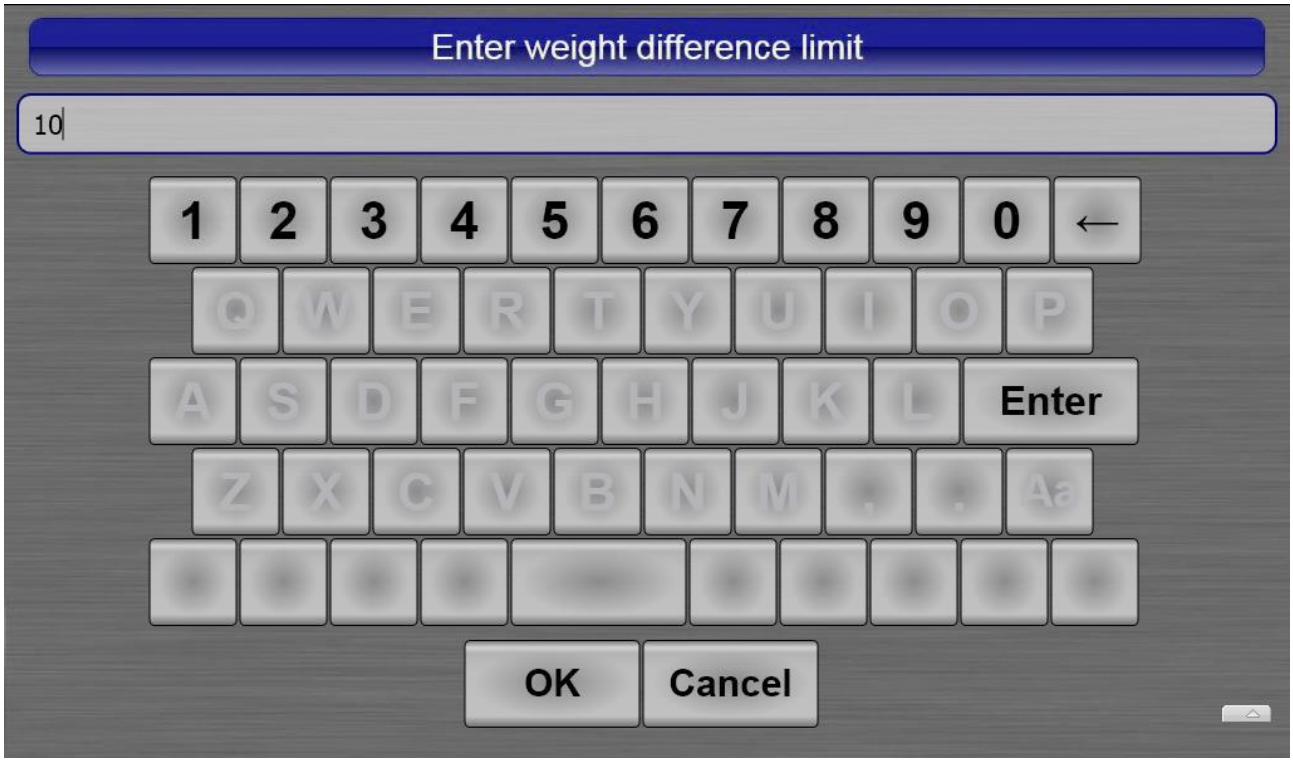
3.1.2.1.6 Scale

In order to save an item's weight in the cabinet menu, select the appropriate box from the list and then the "Scale" button at the bottom of the screen then follow instructions below.

- **Valid weight:** place the item on the measure tray. After you have pressed the „Save current as valid" button, the weight of the item will be saved and displayed next to the „Valid weight" title.
- **Diff. limit:** You can set how many grams (plus, minus) can be the difference between the valid and the measured weight before the system sets off an alarm. Note: the minimum difference limit is 10grams. For example if you set the difference limit to 10 grams, and set the valid weight to 100, the system will accept the weight as valid from 90 to 110grams. If it's out of this range the system will generate a warning.
- **Save current as valid:** After you have placed your item on the measure tray you can save its weight by pressing this button.
- **Tare:** You can reset the measure tray to zero by pressing this button.



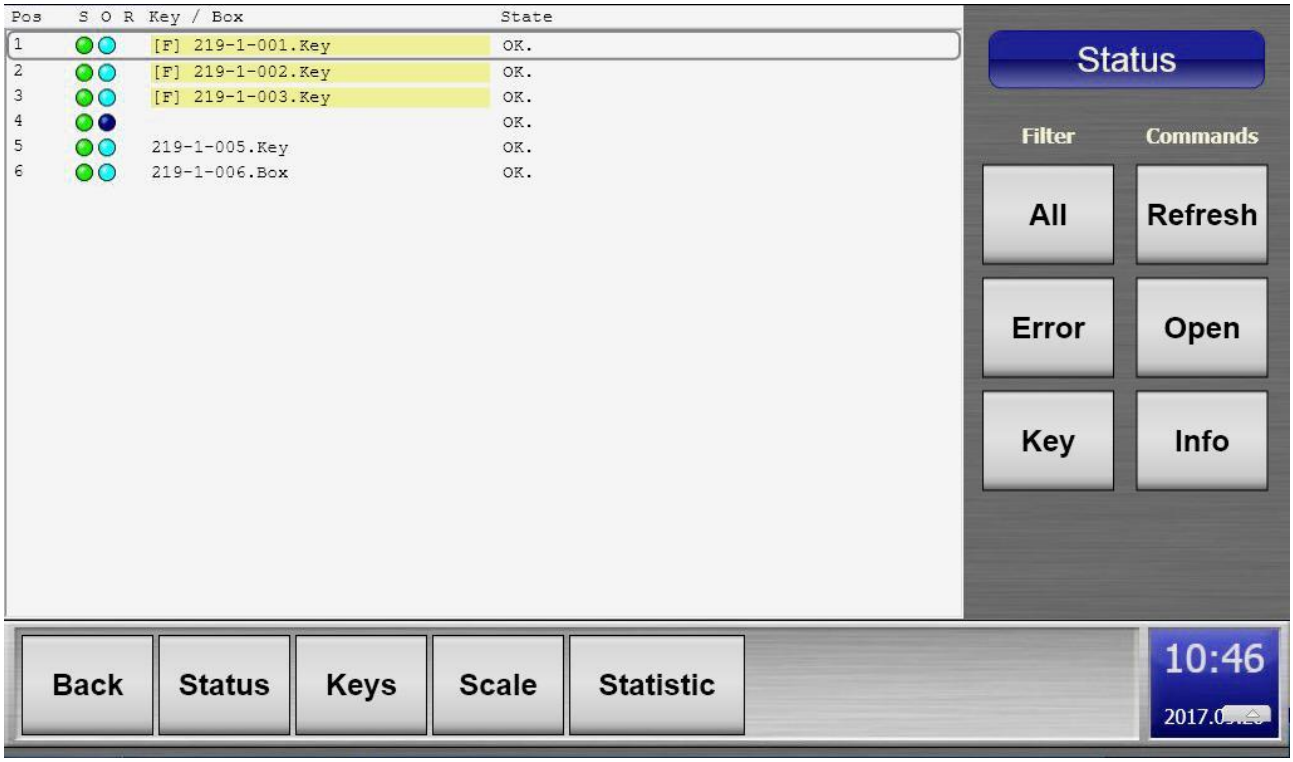
Upon touching the text field next to the **"Valid weight"** title you will be able to set the weight manually.



Upon touching the text field next to the **"Diff. limit"** title you can set the allowed weight difference in grams. The measured weight can differ from the saved weight by this amount to be detected as still valid.

If the user places an item into the box which doesn't have the correct weight, the system will indicate a warning. The user or administrator can get a more detailed information about the error by pressing the yellow warning symbol.

3.1.2.2 Keys



3.1.2.2.1 Set fixed key

- ***Set fix key"***: A key place can have **Normal** or **Fixed key** operating modes. In normal operation mode any key can be placed into the key place, the system will accept it. In Fixed key mode the system will accept only the specific key assigned to that key place. The system has to be taught to accept only that key at the given key place. In this mode if someone wants to insert a different key other than the fixed one, the system will reject that.
- ***To unfix a key:*** Remove the fixed key from the position and then press the "Set Fix Key", this will remove the previously given fixed key command.

3.1.2.2.2 New key

- ***„New key"***: In case we insert an unknown key into a key position, it can be saved into the database by using this button (adds a new key).

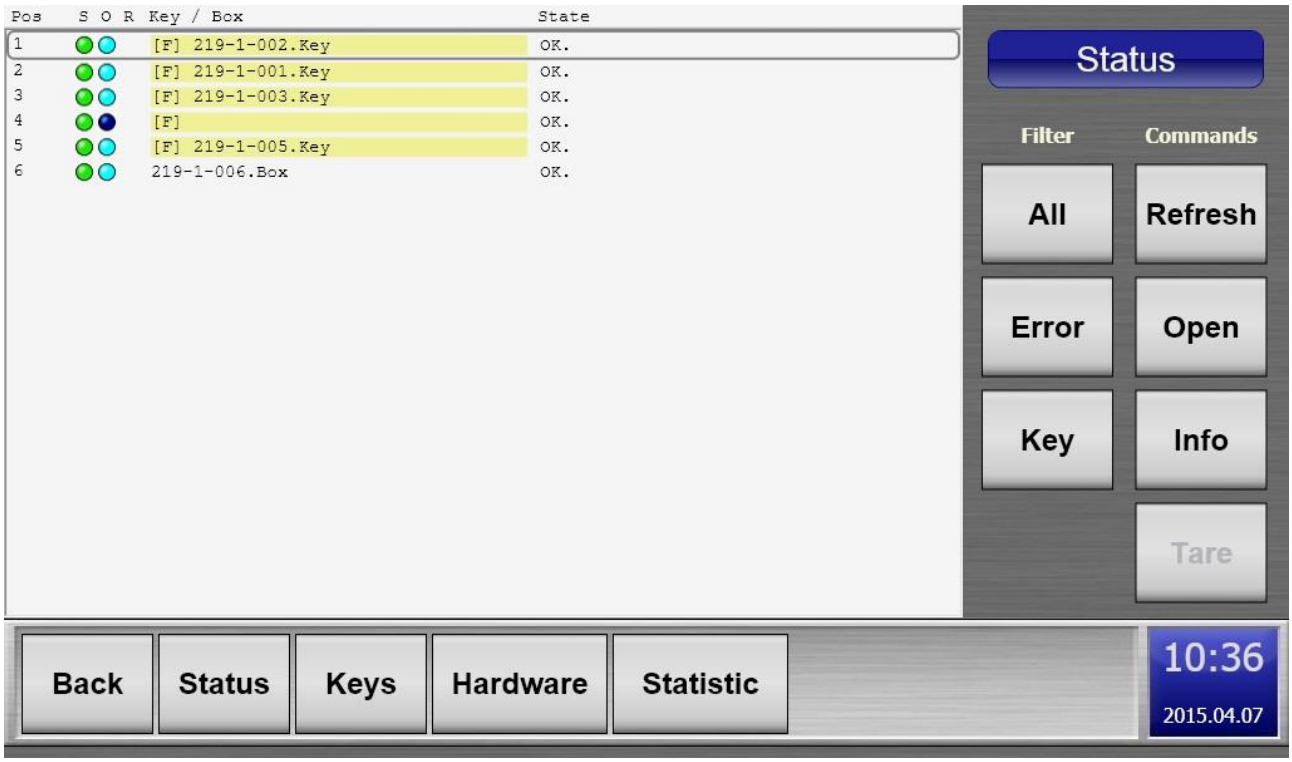
3.1.2.2.3 Replace key

- ***„Replace key"***: If you insert an unknown (new) key into the key place, then you can replace an already existing key (which was already saved in the cabinet database) by pressing this button. The new key will be placed upon the old key, so if you replace a key that way, you do not have to change the user rights for that key, because it will be inherited from the old one.

3.1.2.2.4 Rename key

- ***„Rename key”***: This button is only active if the selected key place in the list contains a known key. After pressing the button and entering the name, the key name will be altered, so it will appear in the system with its new name. Name modifications do not have effect on the users' permissions related to keys.

3.1.2.3 Hardware



In order for the Hardware button to be shown in the Cabinet menu you have to enable it in the Commands menu with the “SERVICE MODE ON” command.

3.1.2.3.1 Clear address

- ***"Clear address"***: Deletes the logical address of a key position. The communication to the key place is lost after deletion.

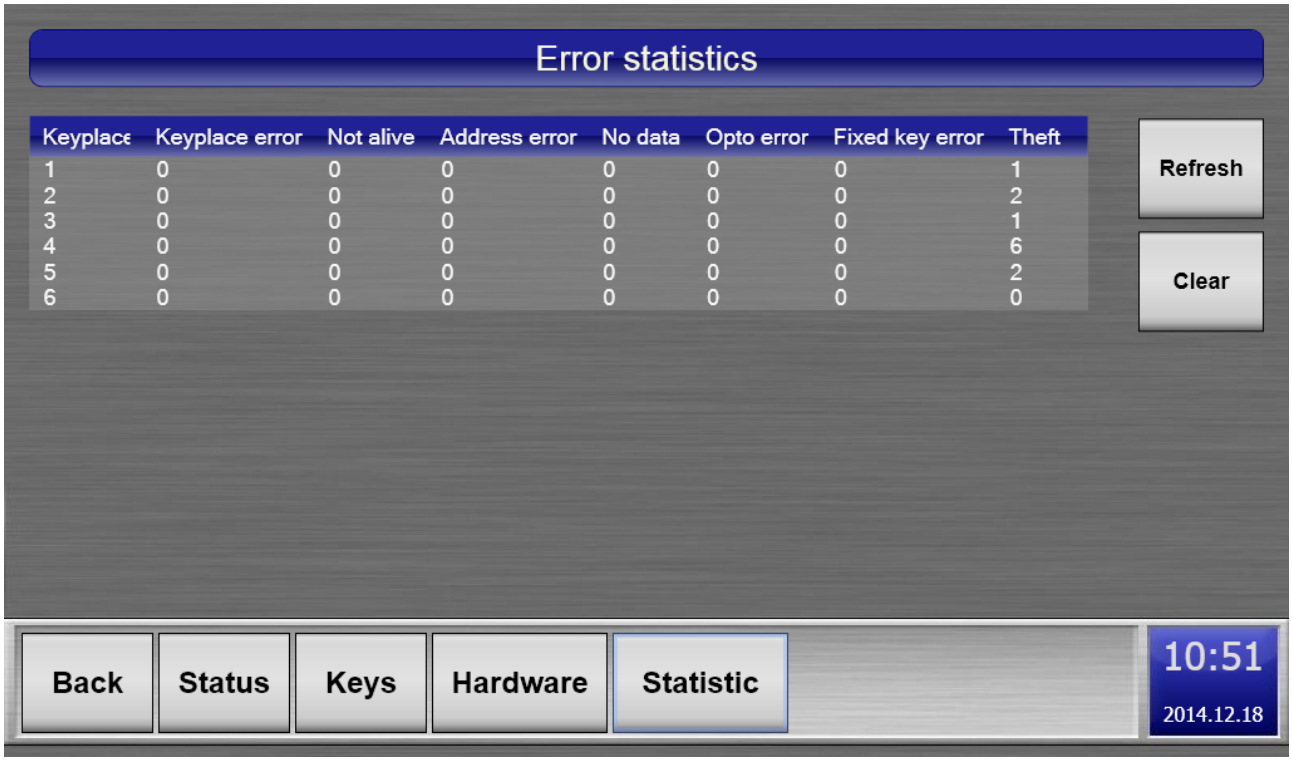
3.1.2.3.2 Set address

- ***"Set address":*** Sets the logical address of a key position. After activating this command, all of those key places will start flashing where they do not have logical address. Insert a key while the LED of the key position is blinking, the system will learn which key place should have the address. After inserting the key, the other blinking key places will go off automatically.

3.1.2.3.3 Auto addressing

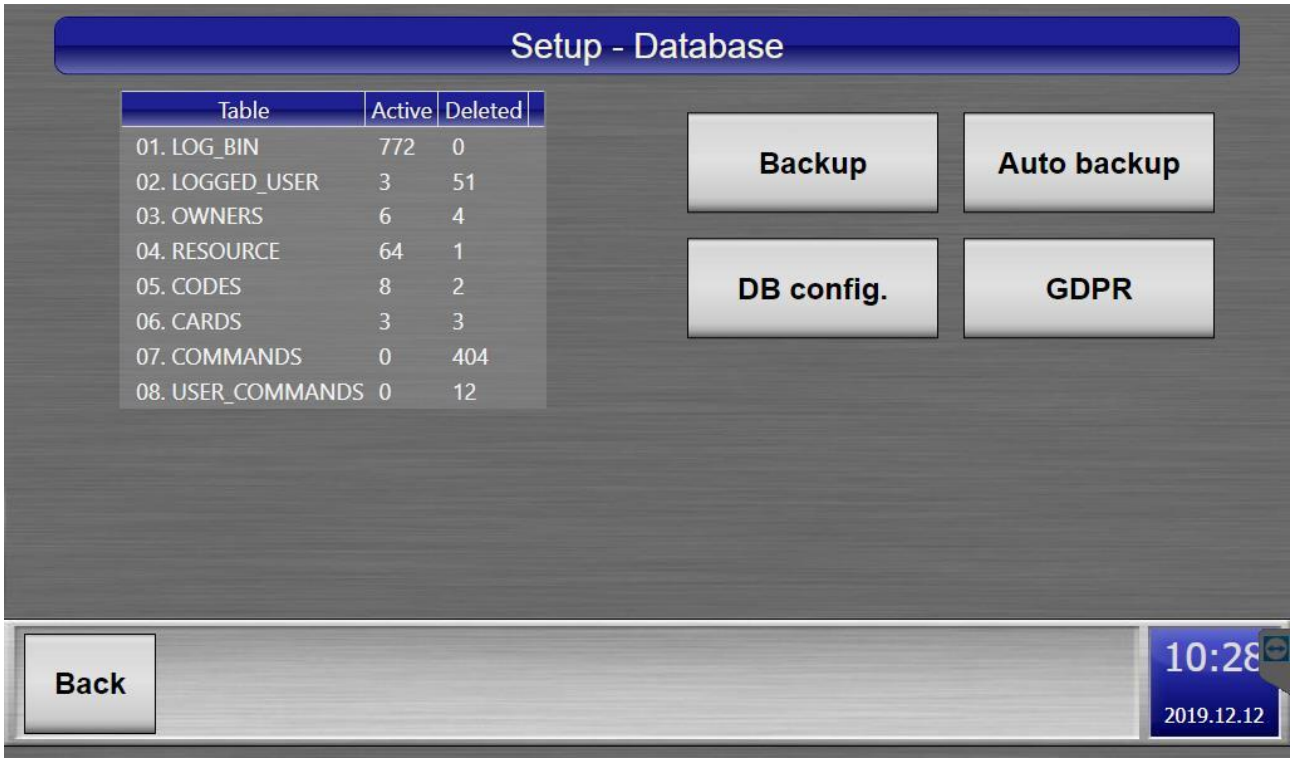
- ***"Auto Address"***: The automatic addressing of key positions. The software finds all the key locations that do not have address yet, it means they are currently not communicating and the addressing command will be sent to each one. For proper operation the cabinet's configuration must be set in "Setup > System > Blocks" menu.

3.1.2.4 Statistic



The "Error statistics" menu shows all the errors the system encountered during operation regarding the RFID keys, and boxes. You can reset the list by selecting the "Clear" button.

3.1.3 DATABASE



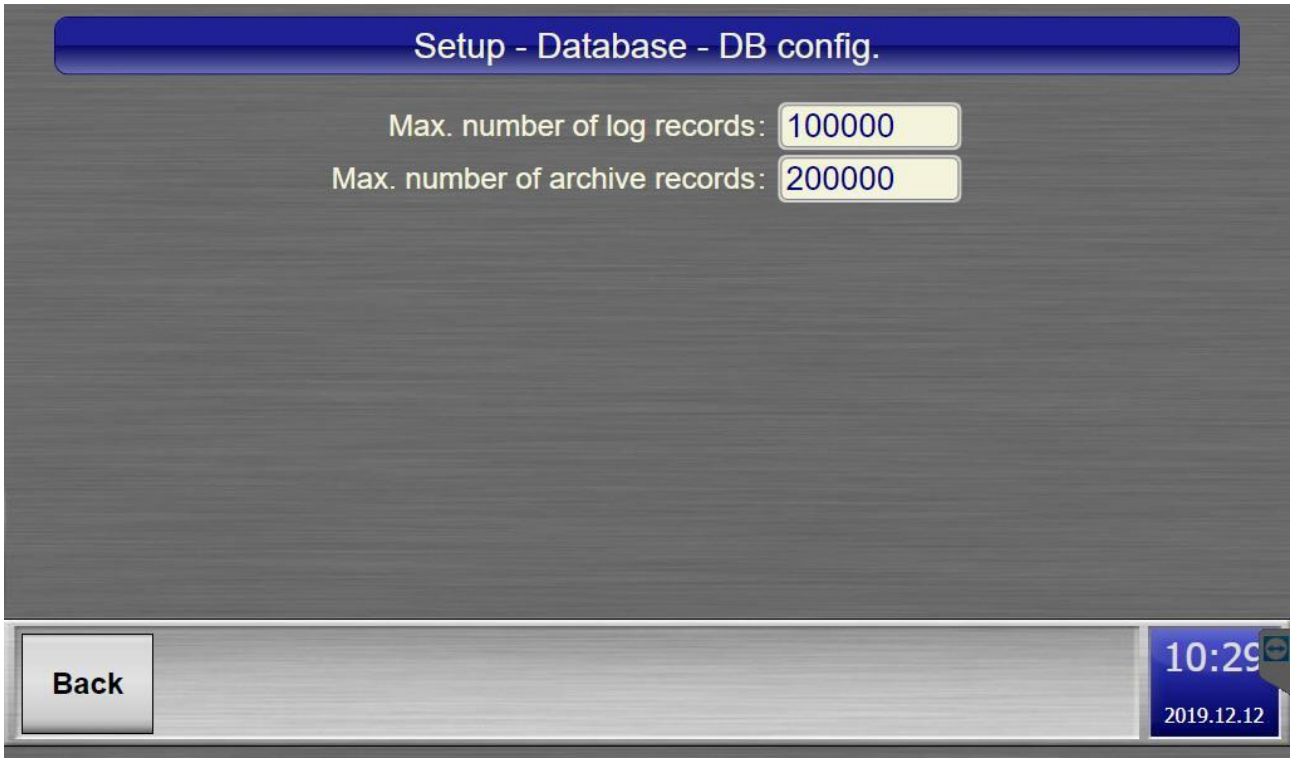
3.1.3.1 Backup.

By pressing the "***Backup***" button, the entire database can be saved in binary format onto the hard disk and to the flash drive. The system's last saved state can be restored from the backup in the future.

3.1.3.2 Auto backup

In the Auto backup you can set the exact times when you want the system to perform an automatic backup.

3.1.3.3 DB config.



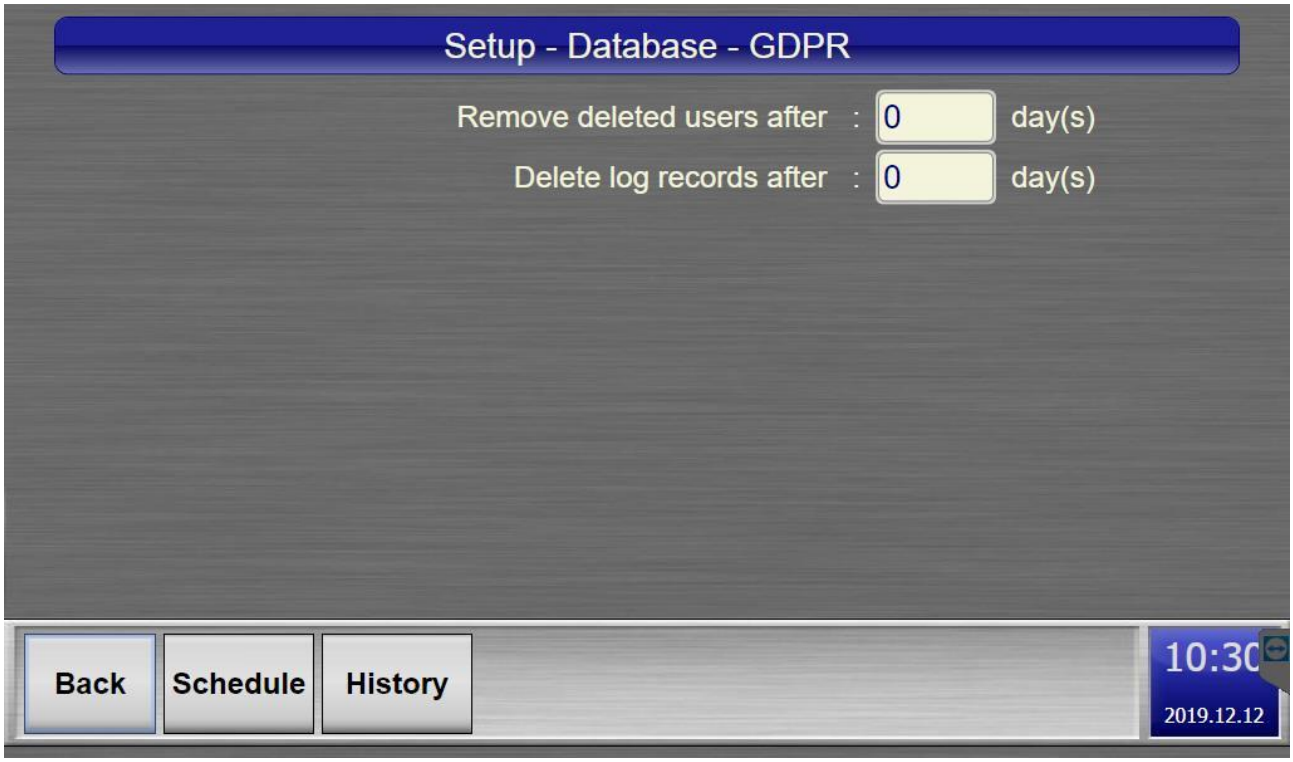
"**Max. number of log records** ":

- The maximum number of records in the active log (Max. is 100 000). If there are more log entries, then the added number the historic records will be stored in the archive log.

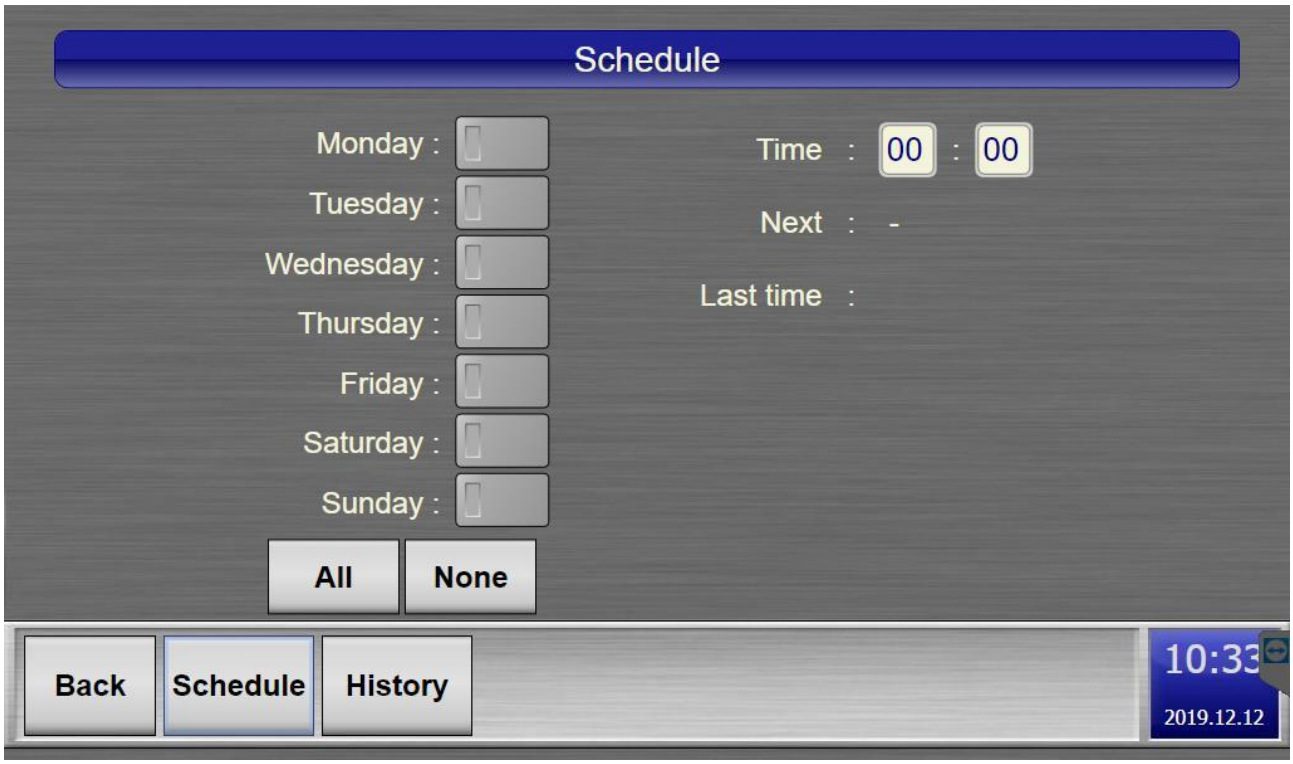
"**Max. number of archive records**":

- The maximum number of records stored in the archive log (Max. is 200 000).. If there are more log records than this, the oldest records are deleted.

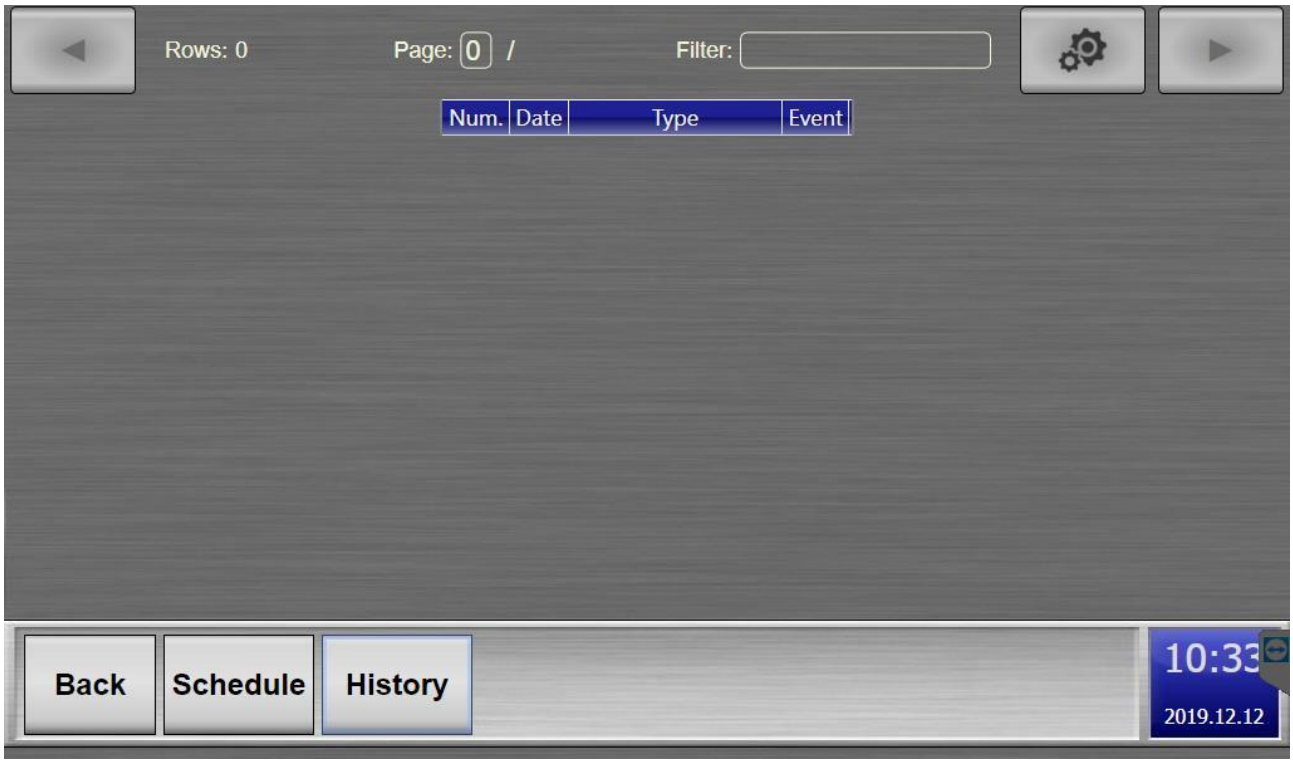
3.1.3.4 GDPR



The deleted user profiles can be automatically removed from the database and the log records can also be deleted by configuring the duration for how long to keep the data (x days).

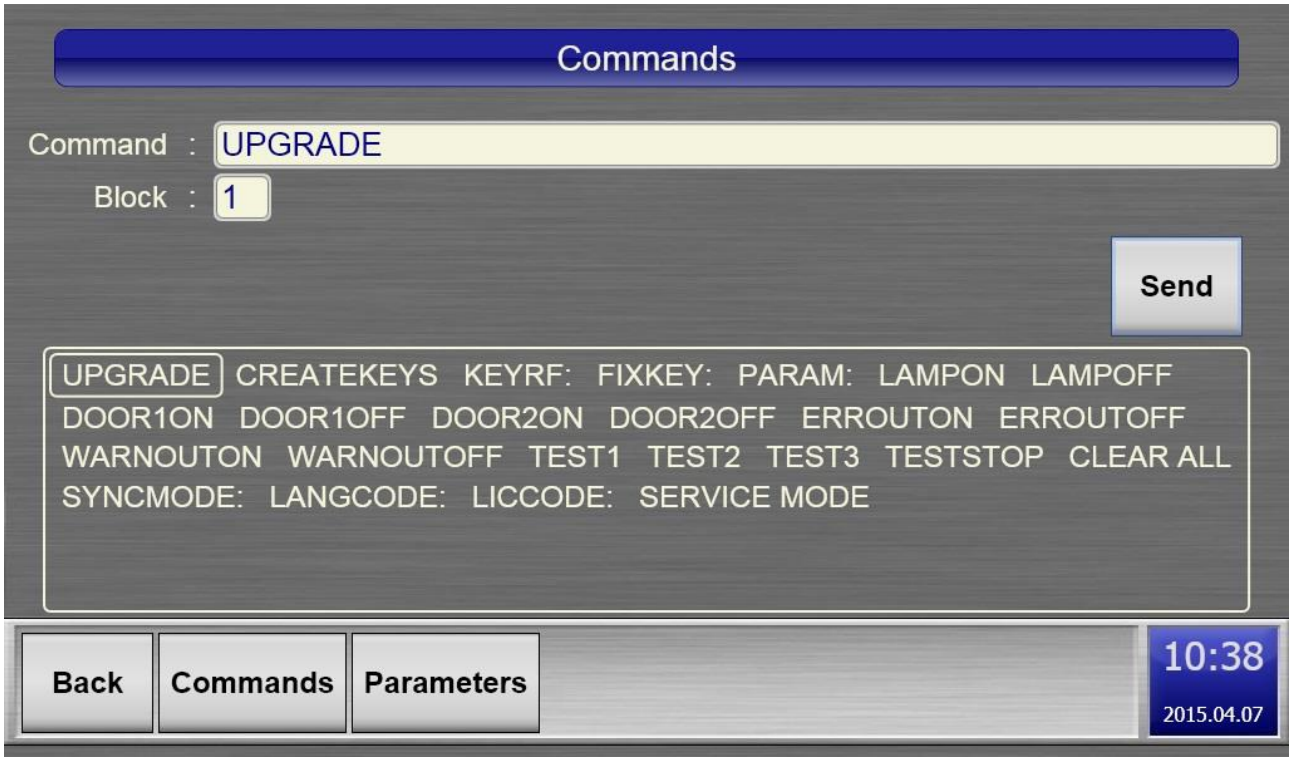


The user profile and log record automatic removal can be scheduled in the “Schedule” menu.



The removed event types, their number, and the date of removal can be checked in the “History” menu.

3.1.4 COMMANDS



Executing commands

Some of the system settings may only be changed by issuing commands. To run a command press the text field and enter the appropriate command in the textbox, then press the "***Send***" button to execute it. The ***„Block”*** field indicates the CAN Bus channel of the cabinet where the command will be sent.

Using the "***Parameters***" button you can view the current settings. The command prompt can be activated again by pressing the "***Commands***" button on the user interface. You can return to the previous menu with the "***Back***" button.

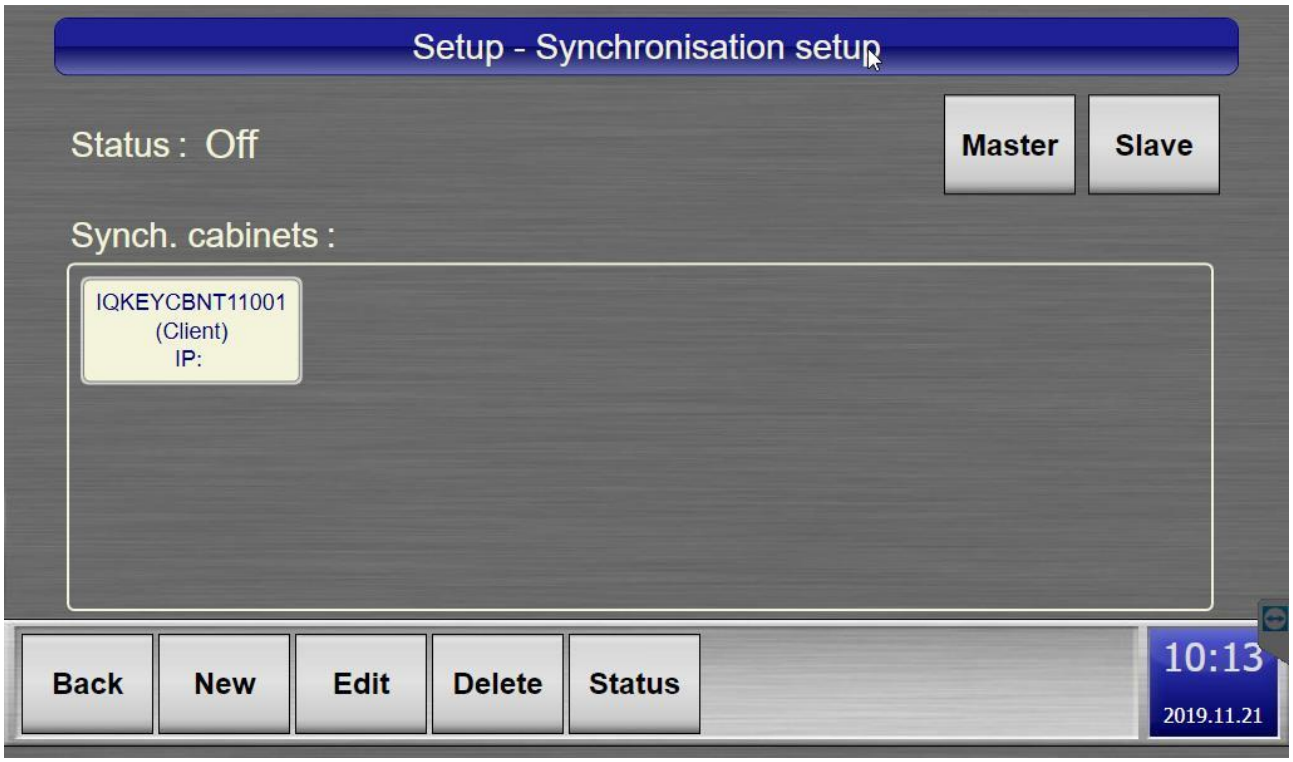
- "UPGRADE". The cabinet starts to upgrade in the next minute and updates the license information as well.
- „CREATEKEYS” It creates keys from unknown to normal (named) keys.
- "PARAM" The Key-place parameters can be specified.
- "TEST1" Opens key places in 5-key groups.
- "TEST2" Opens key places one by one.
- "TEST3" Opens key places in 10- key groups.
- "TESTSTOP" Stops the test.
- "LAMPON" The lamp is turned on (cabinet output panel), regardless of the cabinet’s state.
- "LAMPOFF" The lamp is turned off (cabinet output).

- "DOOR1ON" Switches the first door relay on. (AJT1)
- "DOOR2ON" Switches the second door relay on. (AJT2)
- "DOOR1OFF" Turns the first door relay off. (AJT1)
- "DOOR2OFF" Turns the second door relay off. (AJT2)
- "WARNOUTON" Turns the sabotage relay (cabinet output) on.
- "WARNOUTOFF" Turns the sabotage relay off.
- "ERROUTON" Turns the fault relay (cabinet error output) on.
- "ERROUTOFF" Turns the fault relay off.
- „LANGCODE" The language code can be entered manually.
- „LICCODE" The license code can be entered manually.(Divided by „dots" .)
- "LENEL" Lenel configuration window

3.1.4.1 License code activation:

A new license code can be activated in the commands menu in the following way:
Go to Menu → Setup → Commands → Send → select "LICCCODE:" from the commands → Type in the license code. (Example: "**LICCODE:WFJTJ-UGDXX-PISXX-HXXZG-TAKI3-PKPAF-RCUGJ**")

3.1.5 SYNCH.



Synchronizations between cabinets means that all the saved data will be transferred to all cabinets that are in Synch mode with each other.

1-3 cabinets can be connected together without any sync server.

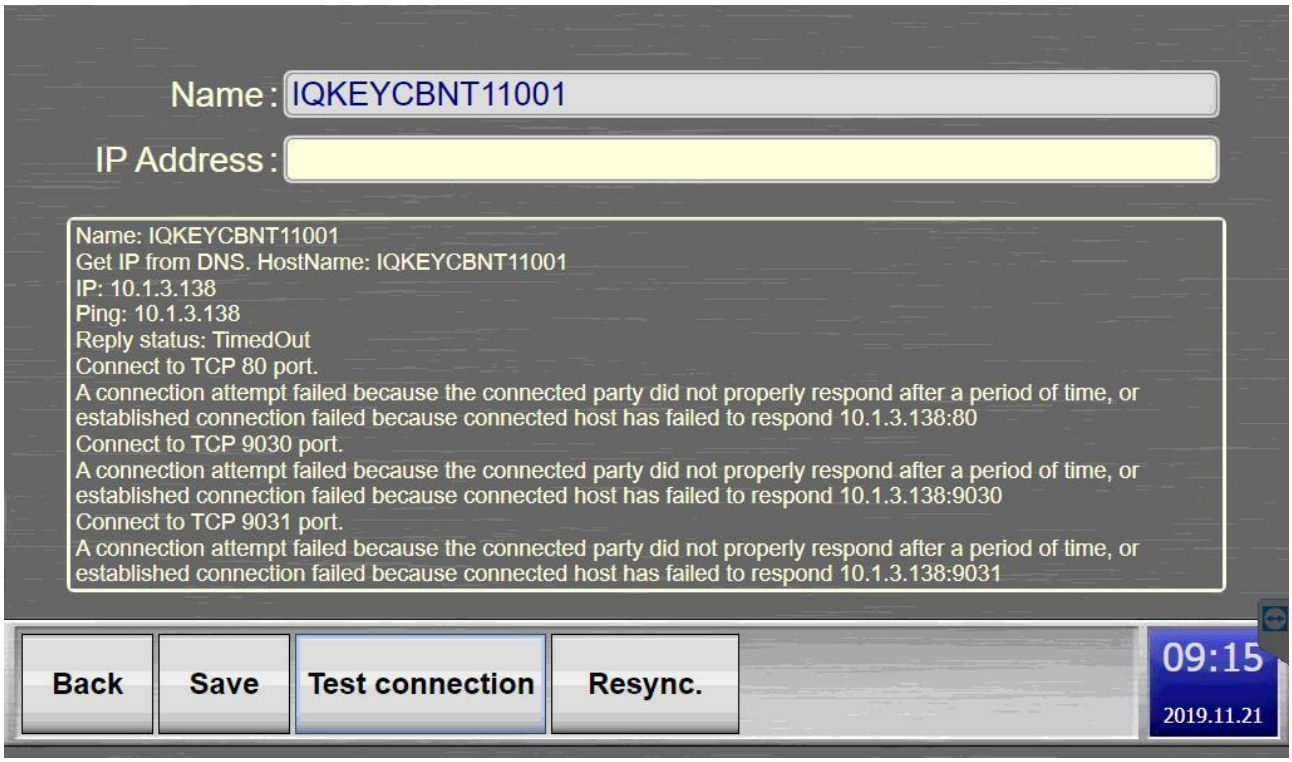
4-8 cabinets can be connected together and one of them will be the “Server” cabinet the others are “Client”

8- cabinets can be connected together but a Middleware synch is needed.

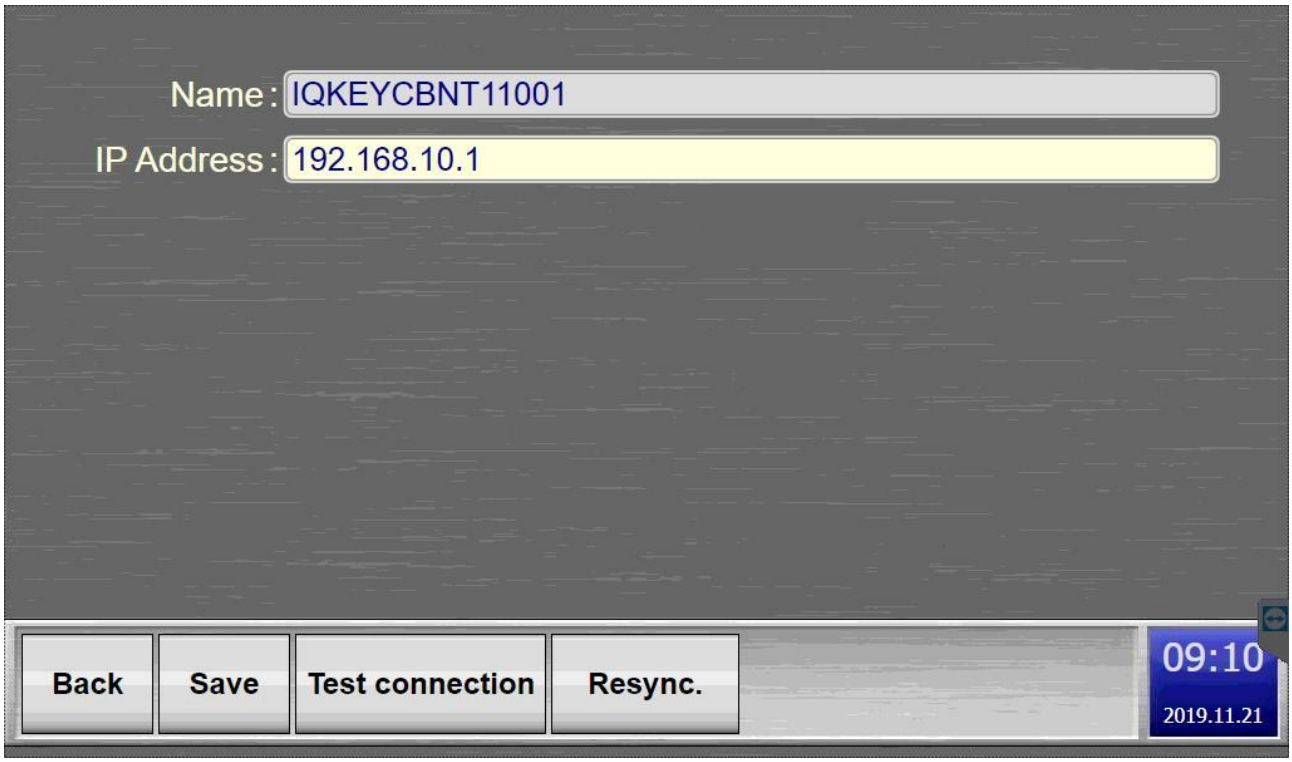
In each case the max. number of cabinets depends on how much keys or boxes do the cabinets hold. A server might be needed for only 3 cabinets if each of them holds 500 keys.

The IP address of each cabinet can be entered if you select the cabinet from the list, and press “Edit”. Don’t forget to press the “Save” button after you have entered the IP address. The IP address is necessary for the name resolution to work.

You can also test the connection between the cabinets by pressing the “Test connection” button. You will receive all necessary information about the status of the connection like: IP address of the other cabinet, connectivity to TCP80, 9030, 9031 ports.



The Synch can be restarted -and all changes will be sent- with the “Resync” button if there was a period of disconnection between the cabinets.



3.1.5.1 Master

- The server which receives the data from the slaves, and forward the data to the other slaves.

3.1.5.2 Slave

- Sends and receives signal from the Master.

3.1.5.3 New

- New slave can be added to the network.

3.1.5.4 Delete

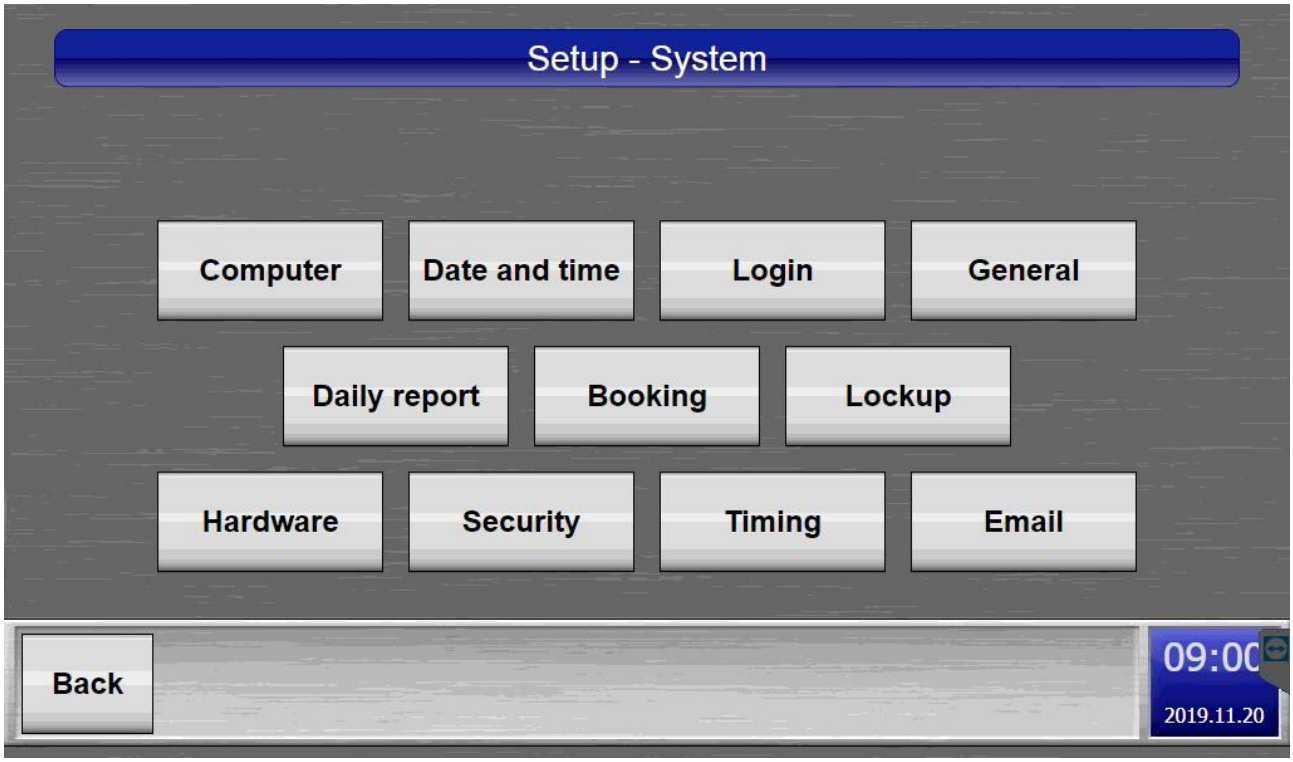
- Synch.-ed cabinets can be deleted

3.1.6 SUPPORT

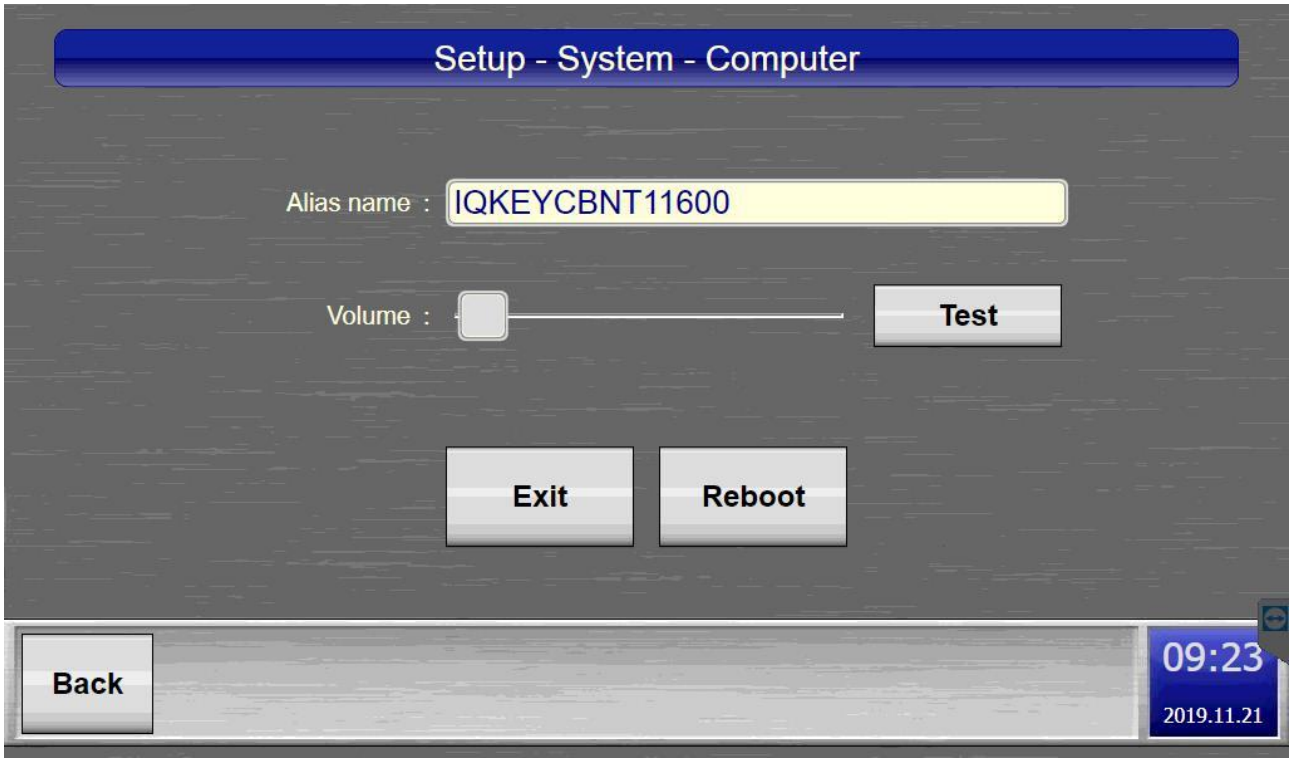
For remote support service the cabinet has to be connected to the Network through an Ethernet cable and be online.

With the help of the TeamViewer application it is possible to manage software modifications and troubleshoot remotely. In order to start the TeamViewer application, go to Menu →Setup → Support

3.1.7 SYSTEM



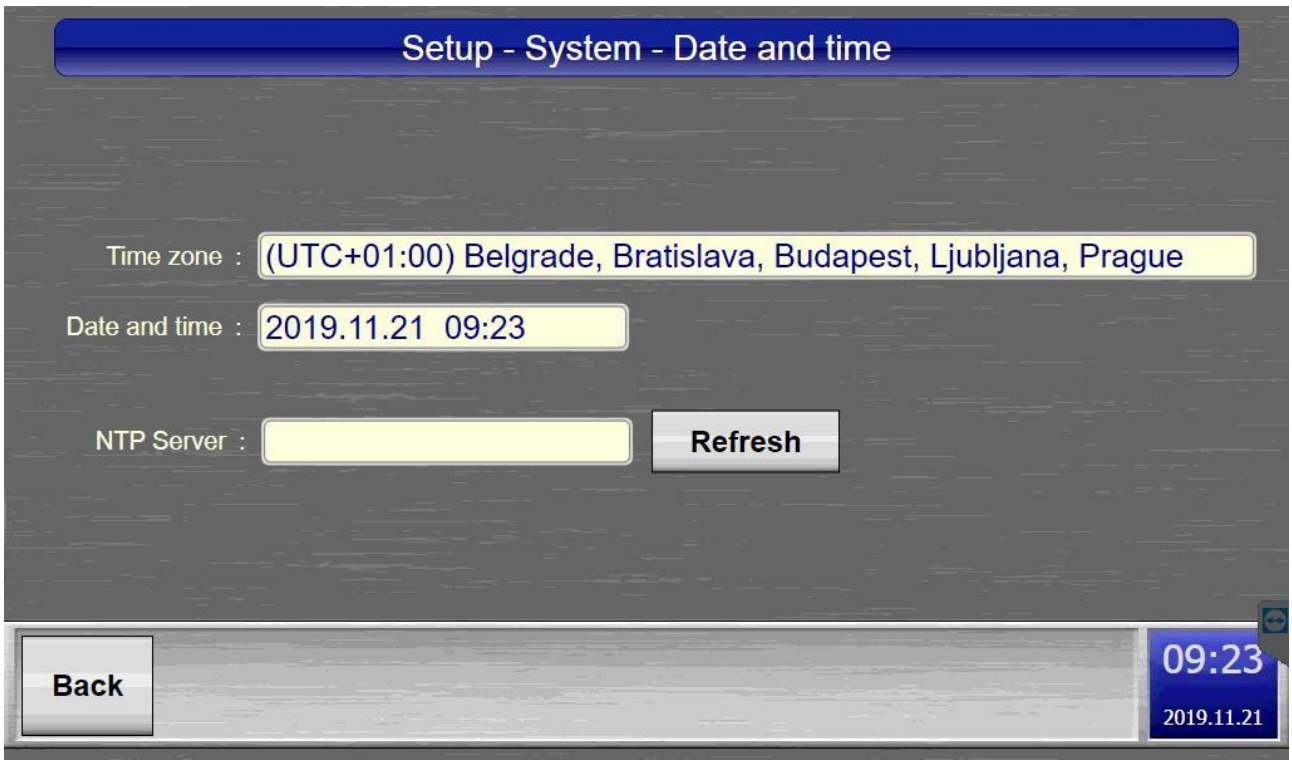
3.1.7.1 Computer



- Edit the alias name of the cabinet. The alias name is useful if the cabinet is synchronized with other cabinets. In this case this name will be displayed in the rest of the cabinets when information regarding this cabinet needs to be displayed.

- Adjust the system volume, move the slider to the appropriate direction, then touch the "***Test***" button to check it.
- Exit the software terminal (cabinets with Win 10 operating systems will automatically restart the terminal)
- Reboot the computer

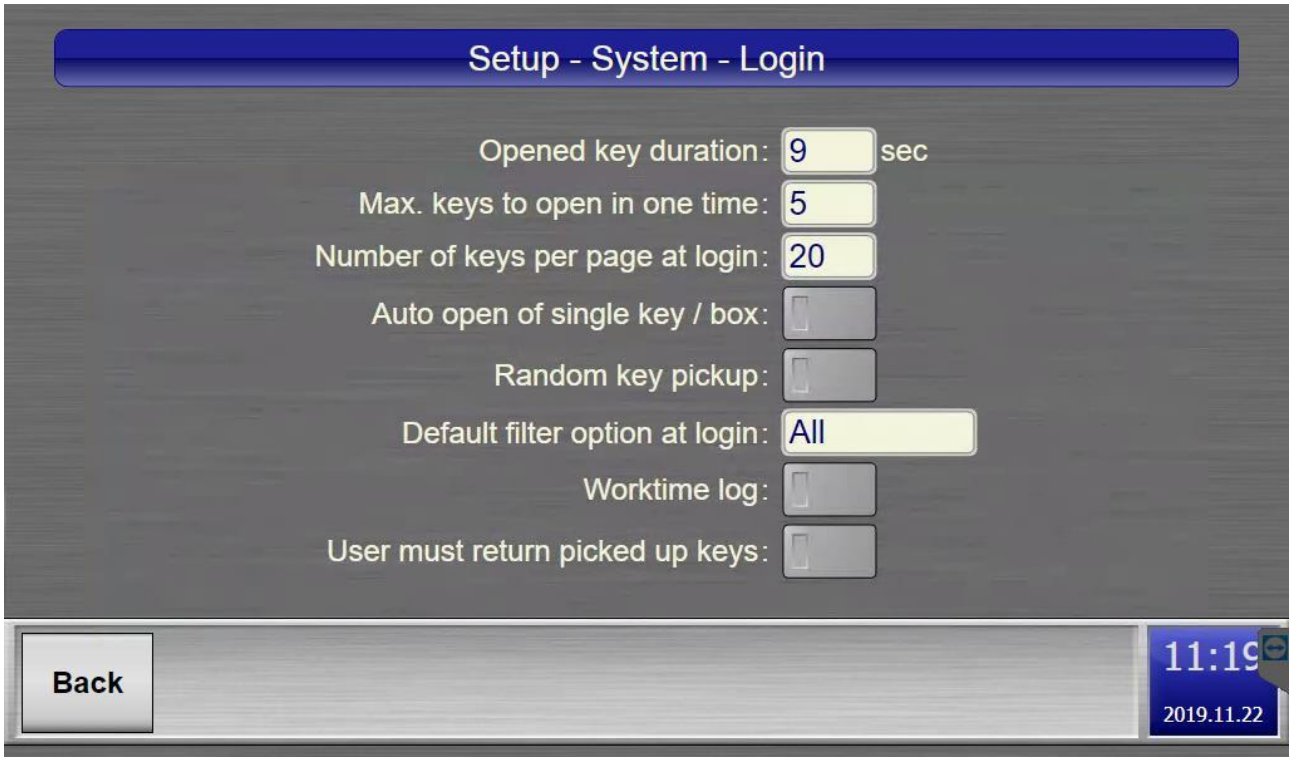
3.1.7.2 Date and Time



Date and time setup

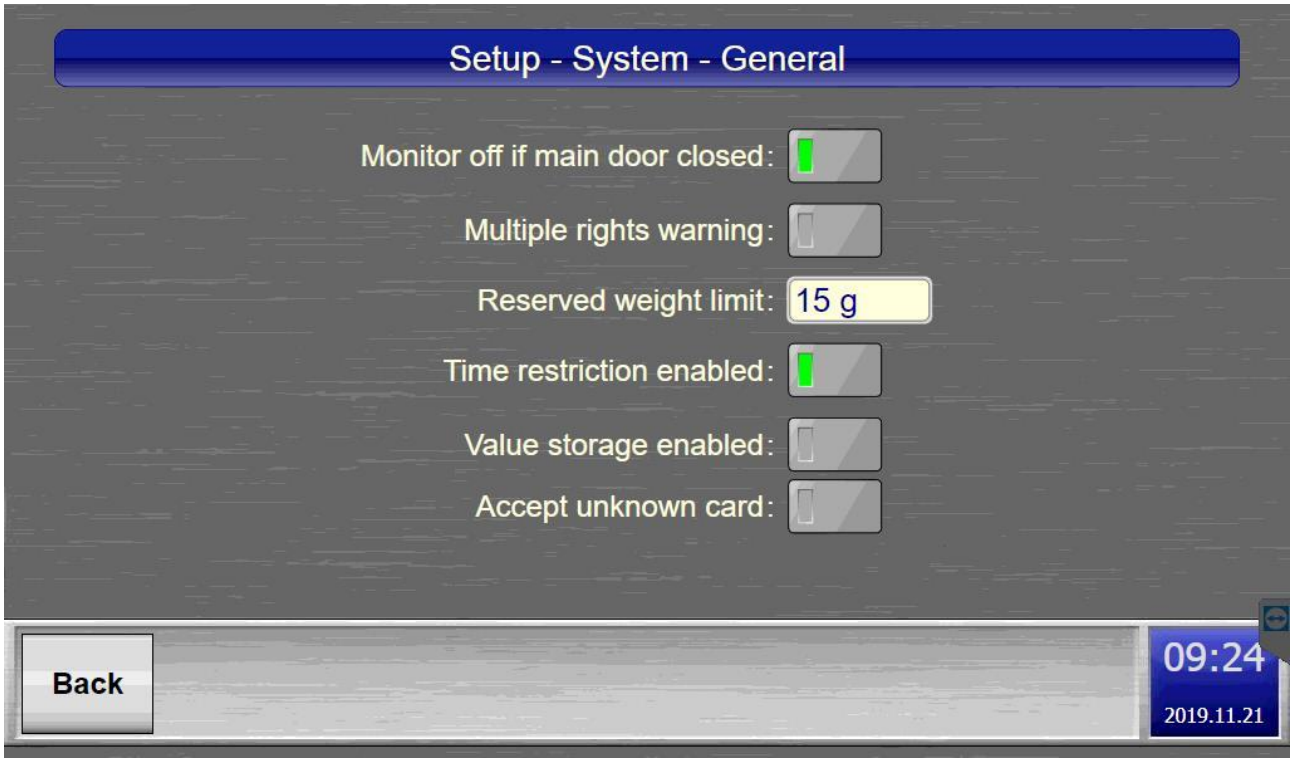
The system's date/time can be configured in this menu. It is also possible to choose a time zone and to connect to an NTP Server for automatic time sync.

3.1.7.3 Login



- "**Opened key duration**": how long the key place should be open when picking up a key.
- "**Max. keys to open in one time**": the amount of keys that can be picked up in one log-in from the cabinet.
- **"Number of keys per page at login"**: If you have hundreds of keys within one system and want to make the key pick up faster you can set a number such as 50, and 50 keys will appear on the screen per page. You can use the arrows to change between the pages.
- **"Auto open of single key / box":** if marked than the box/ key will be released automatically
- **"Random key pickup":** it randomizes the key pickup by randomly selecting and opening a key for the user.
- **"Default filter option at login":** default login filter for keys, boxes, bookings and all
- **„Worktime log":** Logs the Start and End time of work. If activated the software terminal offers two options:"Start of work", "End of work" when the user logs in. There is also a "Skip" button at the bottom of the screen for those users, who doesn't need worktime checking or if they log in for other purposes, like for example to open their storage boxes to get their phones at lunch break. Employers can easily check their employees' worktime in the log by using the filter function ("Start of work", or "End of work").
- **„User must return picked up keys":** the user has to return some of the picked up keys before he can remove further keys from the cabinet.

3.1.7.4 General



"**Monitor off if main door closed**":

- Available only at units built into Safes. Switches off the screen when closing the main door.

“Multiple rights warning”:

- If the administrator wants to add a key to multiple users He will be notified that the key already is issued to a user.

“Reserved weight limit”:

- If the weight is above the given number in the box the system indicates that the box is occupied in the cabinet menu. It is available with built in measuring tray.

“Time Restriction enabled”:

- Activates the time restriction function.

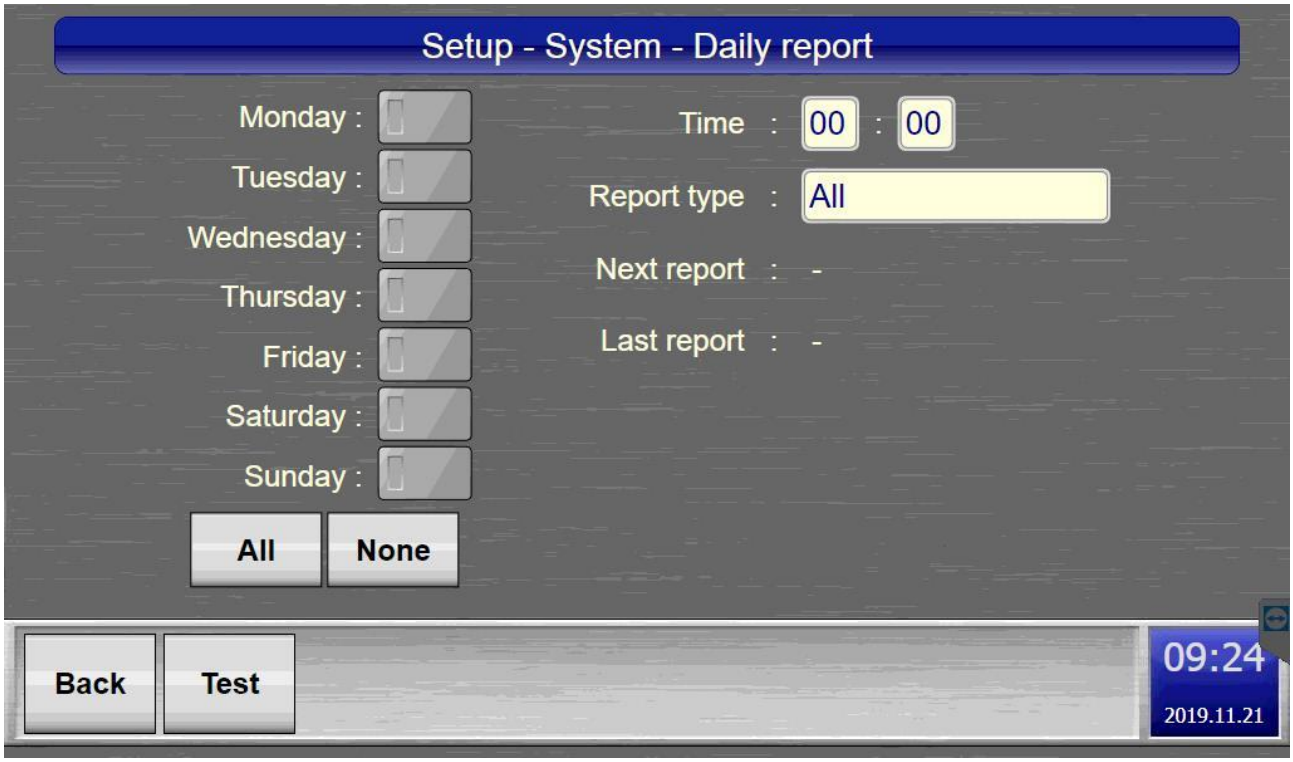
“Value storage enabled”:

- Enables the value storage function to those boxes which are equipped with weight measure and not added to any user’s profile.

“Accept unknown card”:

- This is an option for the value storage function. If both the “value storage” and “accept unknown card” are enabled, the user can log in with an unknown access card, and the system will offer a list of available (empty) value storage boxes.

3.1.7.5 Daily Report



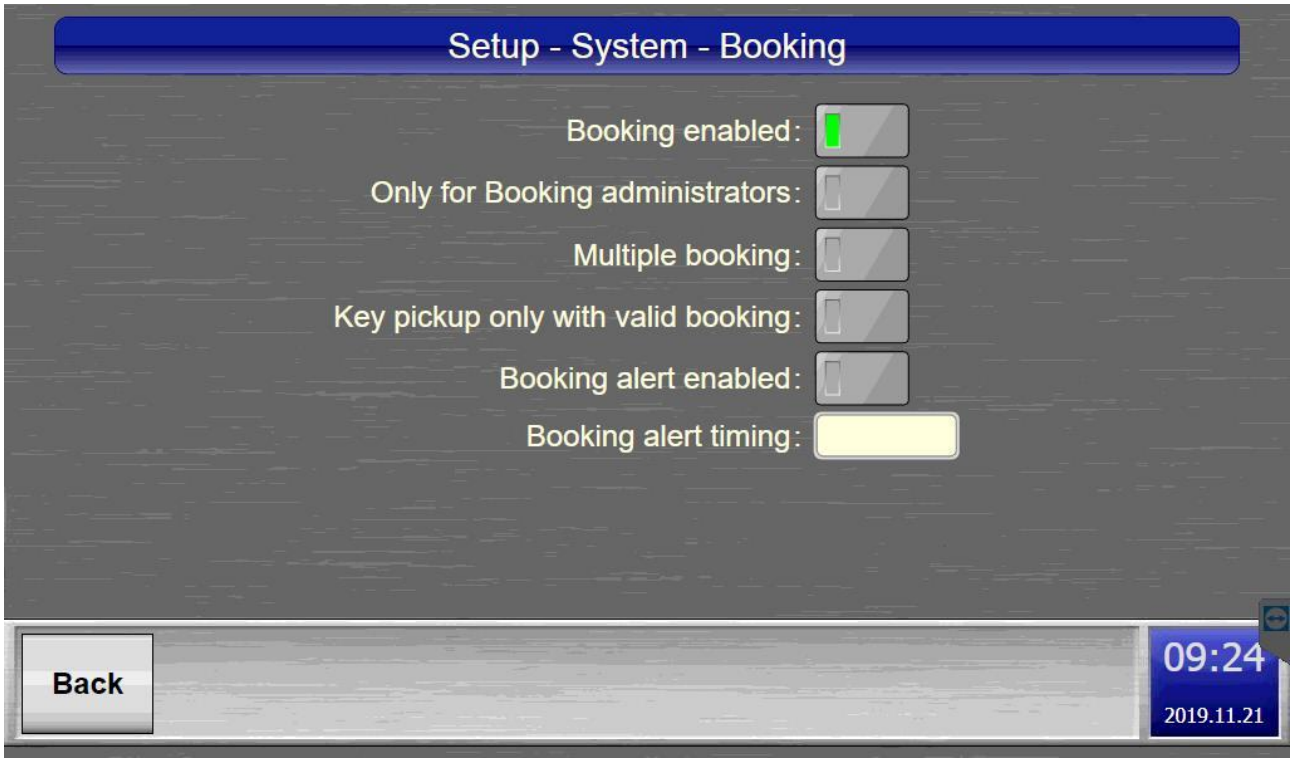
The email daily report can be configured in this menu separately for each day of the week.

Time: The time of the email report dispatch can be set.

Report type: Three types can be selected by touching the textbox →

- All: Report will be sent for all keys
- Returned keys: Report will be sent for only the missing keys
- Missing keys: Report will be sent with only the missing keys

3.1.7.6 Booking



“Booking enabled”:

- Activates the booking function in the system.

“Only for booking administrators”:

- The booking function will only be enabled for those who have „Booking administrator” right level

“Multiple Booking”:

- Different users can book the same key for the same time periods.

“Key pickup only with valid booking:

- Key pickup is only possible if it is booked.

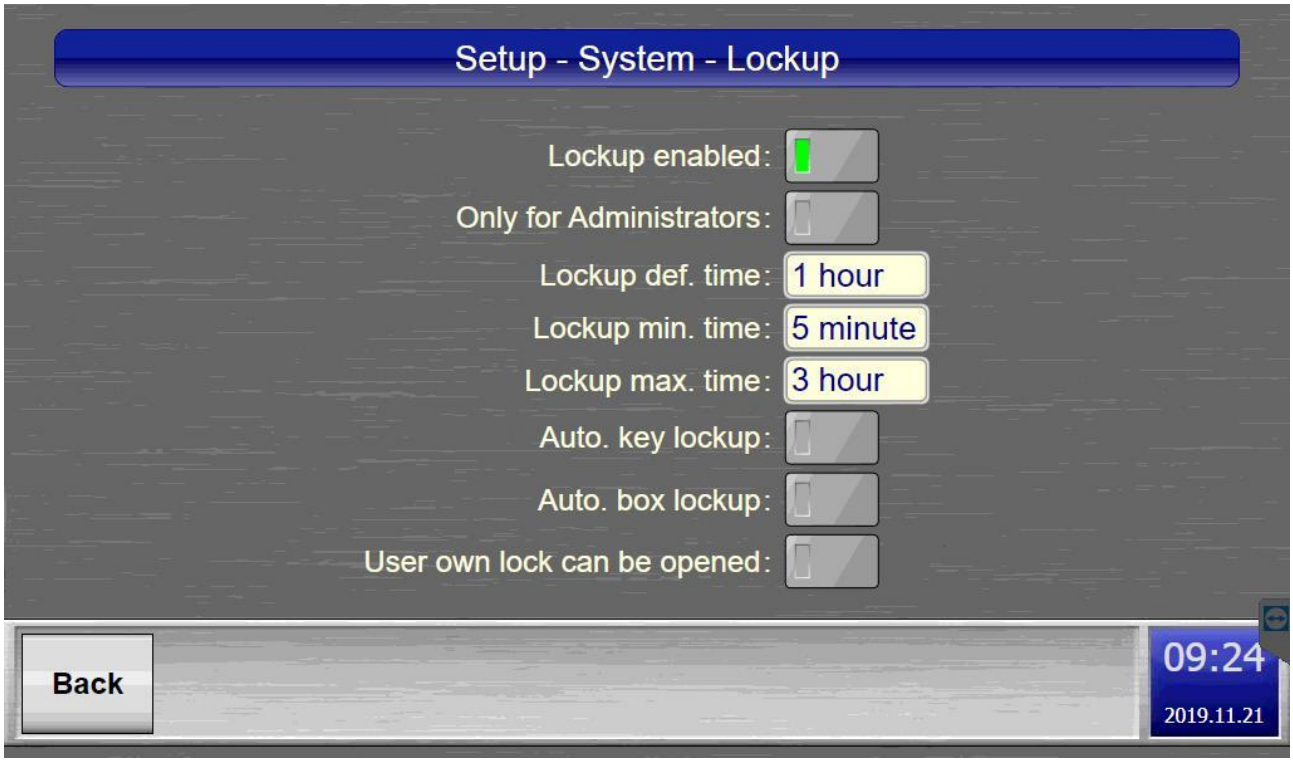
“Booking alert enabled”:

- If a user tries to pickup a key which has an upcoming booking for someone else then the user will receive a notification that the booking period is near.

“Booking alert timing”:

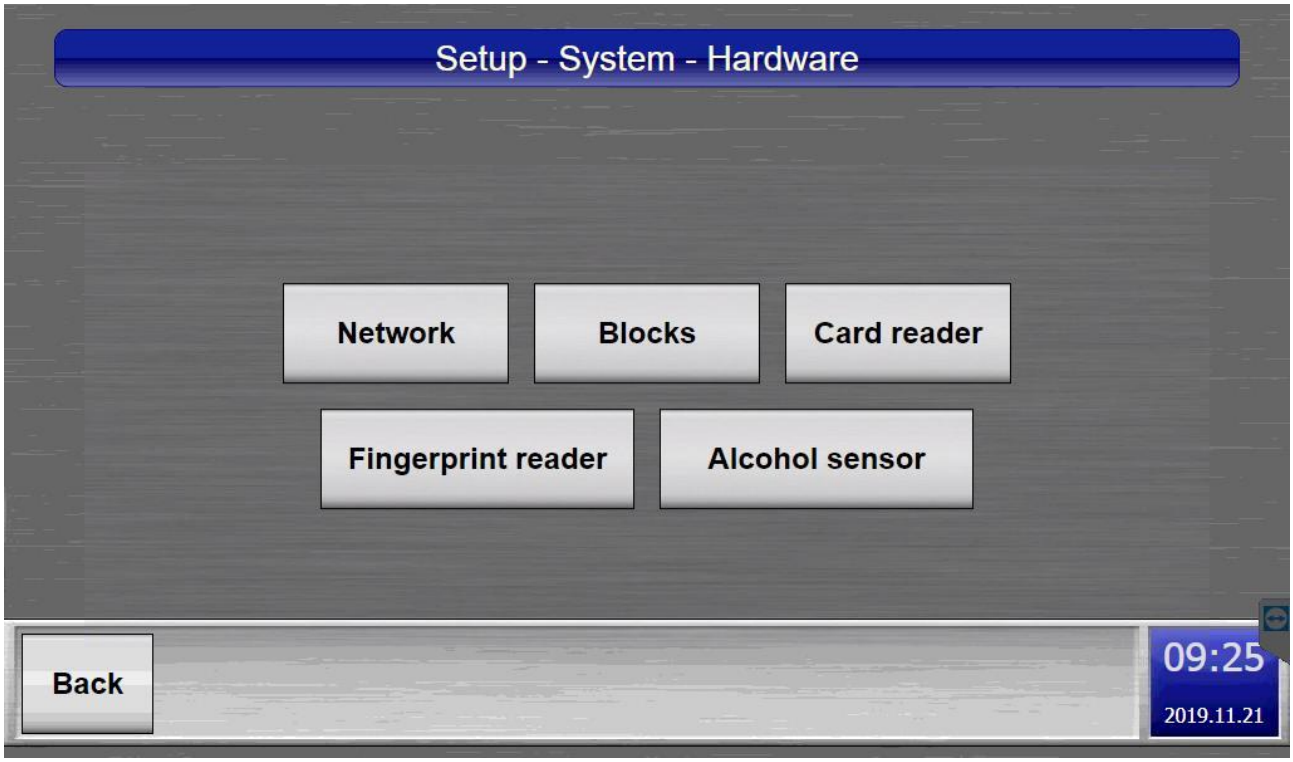
- It means how long before the actual booking should the sytem alert the user that there will be a booking period starting soon for the same key.

3.1.7.7 Lockup

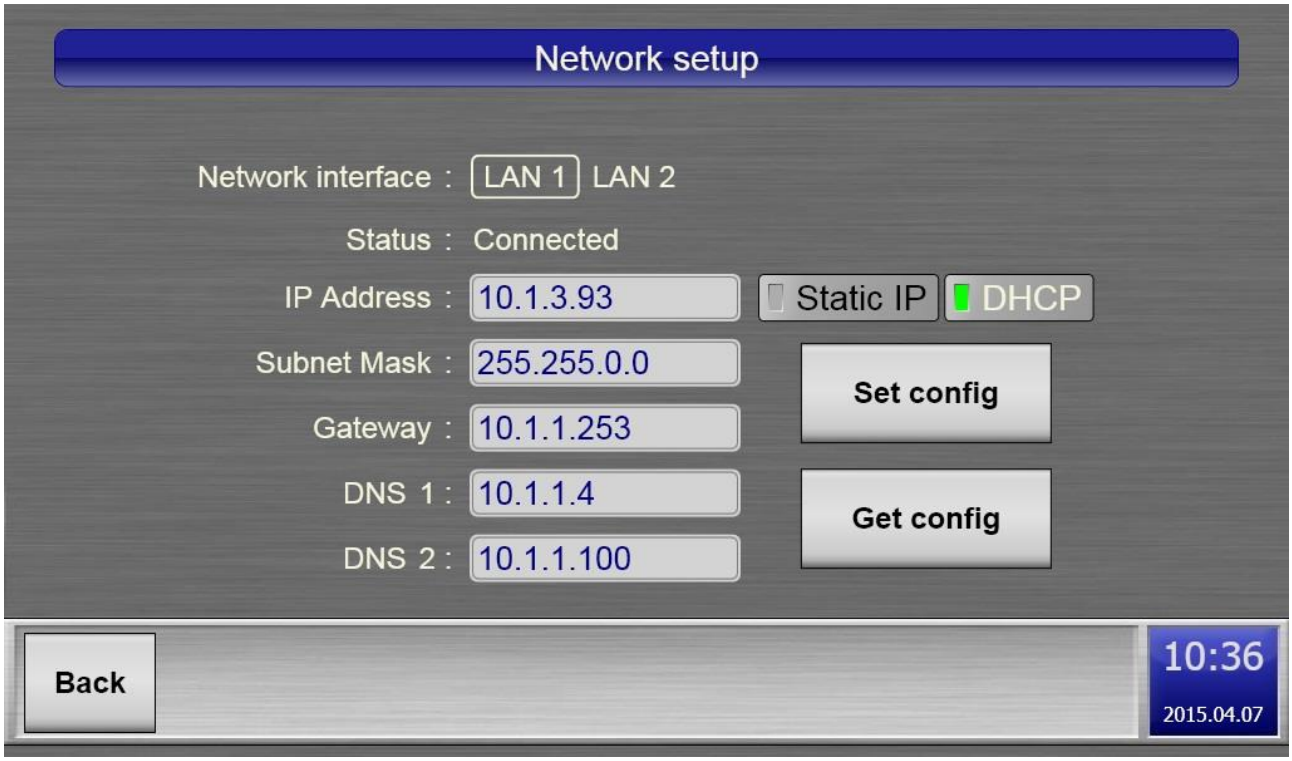


- **Lockup Enabled:** Activates the lockup function.
- **Only for Administrators:** Lockup is only available for Administrators.
- **Lockup def. time:** The default lockup time can be adjusted.
- **Lockup min. time:** The minimum lockup time can be set.
- **Lockup max. time:** The maximum lockup time can be set.
- **Auto. key lockup:** Automatic keyholder lockup after the keyfob is placed back in the cabinet
- **Auto. box lockup:** Automatic box lockup after the box's door has been closed
- **User own lock can be opened:** the user who created the lockup can open the locked box

3.1.7.8 Hardware



3.1.7.8.1 Network

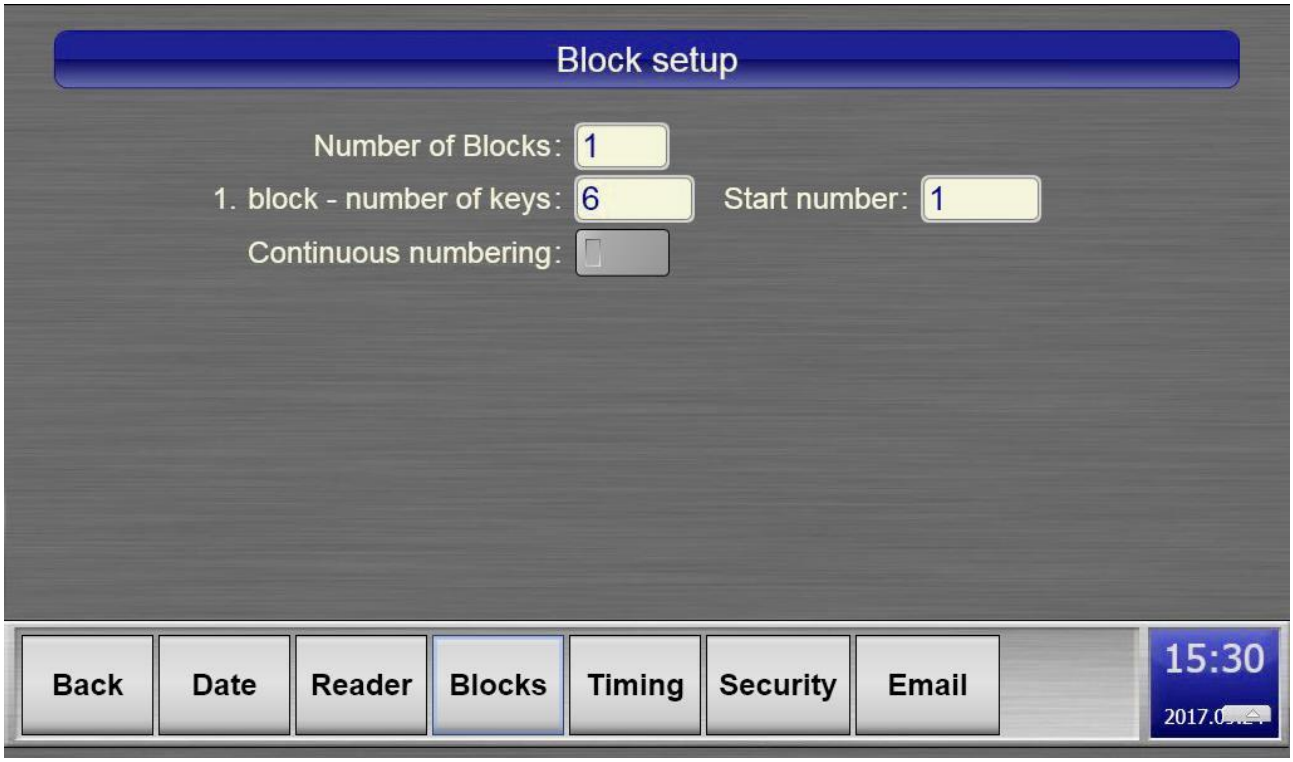


You can configure the network settings of the cabinet on this interface.
In the "***Network Interface***" section you can select the Ethernet interface used by the system. you can set the parameters for each network connection.

The "***DHCP***" mode makes a kind of automatic configuration possible; it does not require an operator's intervention.
Attention! ***The DHCP mode is only available when the cabinet's computer is connected to a network with a DHCP server that carries out the automatic IP configuration task.***
If you are unsure about the operation mode, please contact your network system administrator!

In the "***Static IP***" settings mode each parameters must be given manually.
• "***IP Address***": the unique network ID of the cabinet, eg.: 192.168.0.99
• "***Subnet mask***": network mask, for example: 255.255.255.0
• "***Gateway***" the gateway's IP address, eg.: 192.168.0.254
• "***DNS1***", "***DNS2***" network name server IP addresses.
After entering the parameters press the "***Set config***" button, and it will save the settings. The "***Get config***" button can be used to retrieve the previously set values or to read the values given by the DHCP server.

3.1.7.8.2 Blocks

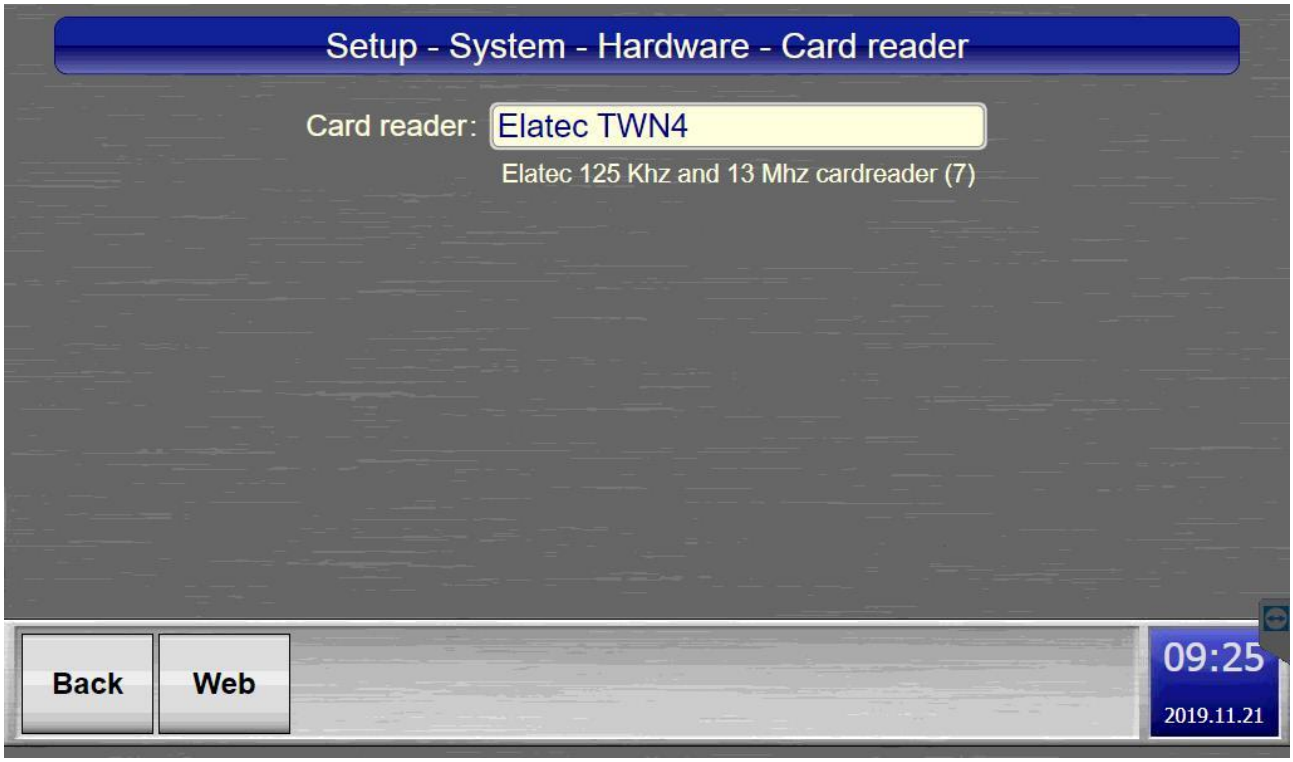


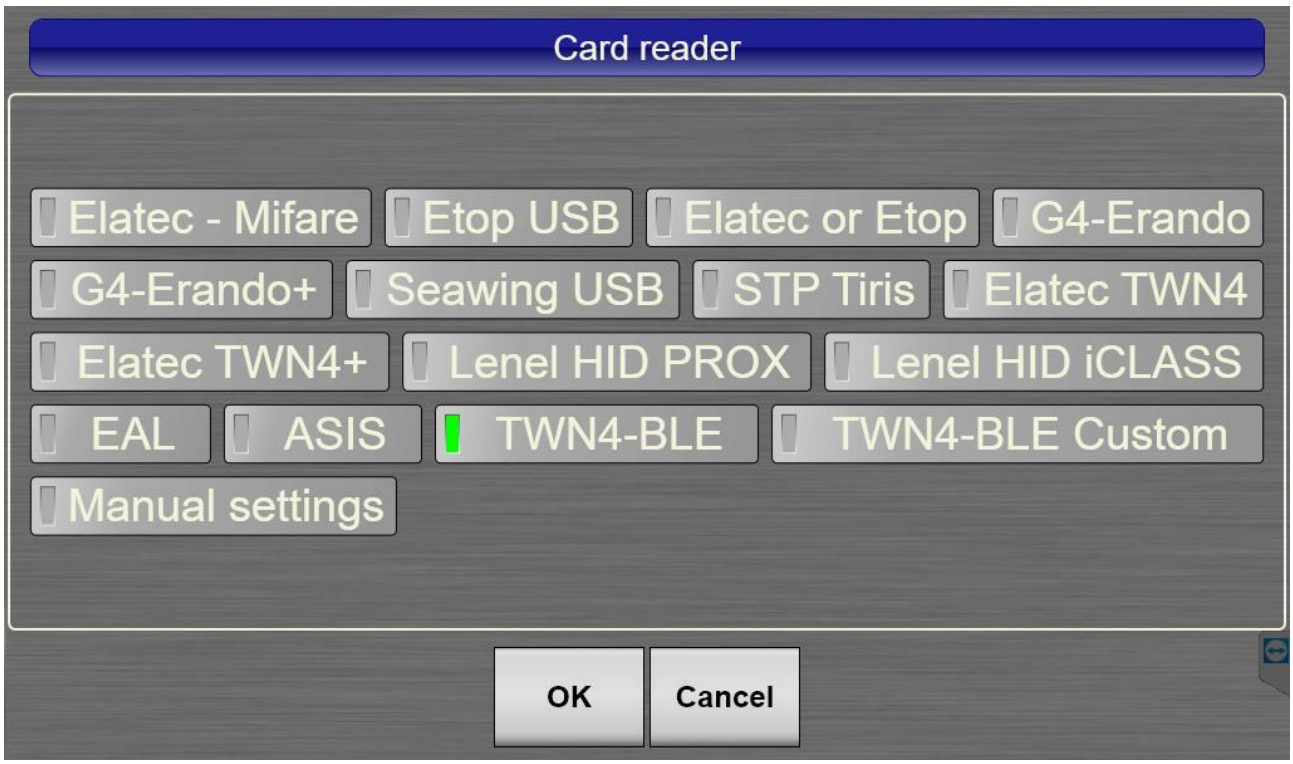
The configuration of key positions in the cabinet can be carried out here. In the "**Number of Blocks**" field you can set the number of CAN-bus channels. This number ranges from 1 to 4, as there are 4 CAN-bus channels on the control board. If the system detects that there is only one channel connected to the keys, then this field is not editable.

The number of keys which can be used in a given key cabinet is enabled by the Licence code. If you would like to expand the cabinet with more key modules please contact our Support Centre.
The panels of the cabinet can be removed by changing the key panels to blank panels and changing the number of the keys in the “Block setup”.

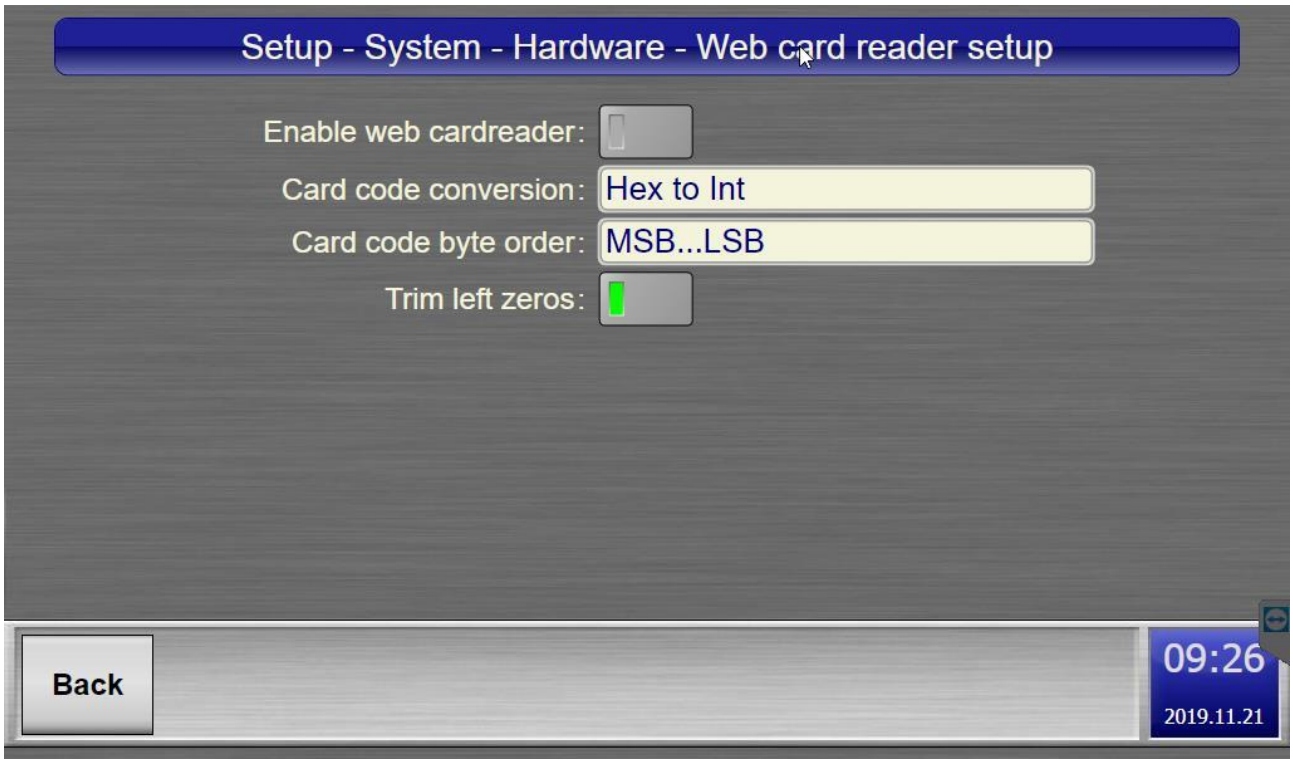
You can set the number of keys belonging to each channel in the additional fields. If you have set all the fields to the appropriate value, save the configuration by clicking on the "**Save**" button.

3.1.7.8.3 Card Reader



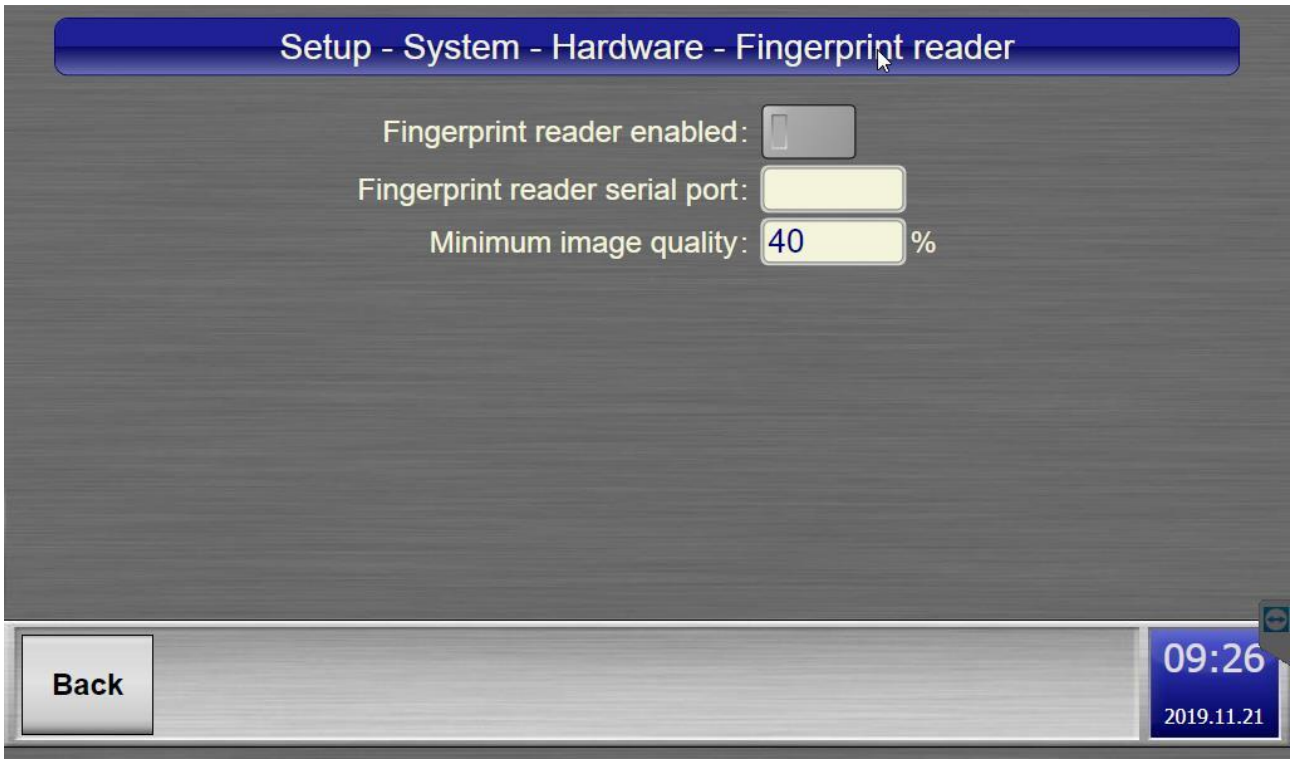


Choose the type of card reader which is connected to the cabinet. Press the text box and select a card reader and save it by pressing the “Ok” button.



Enable web card reader: If you mark this field you will be able to add/modify card remotely through the Web- Application.

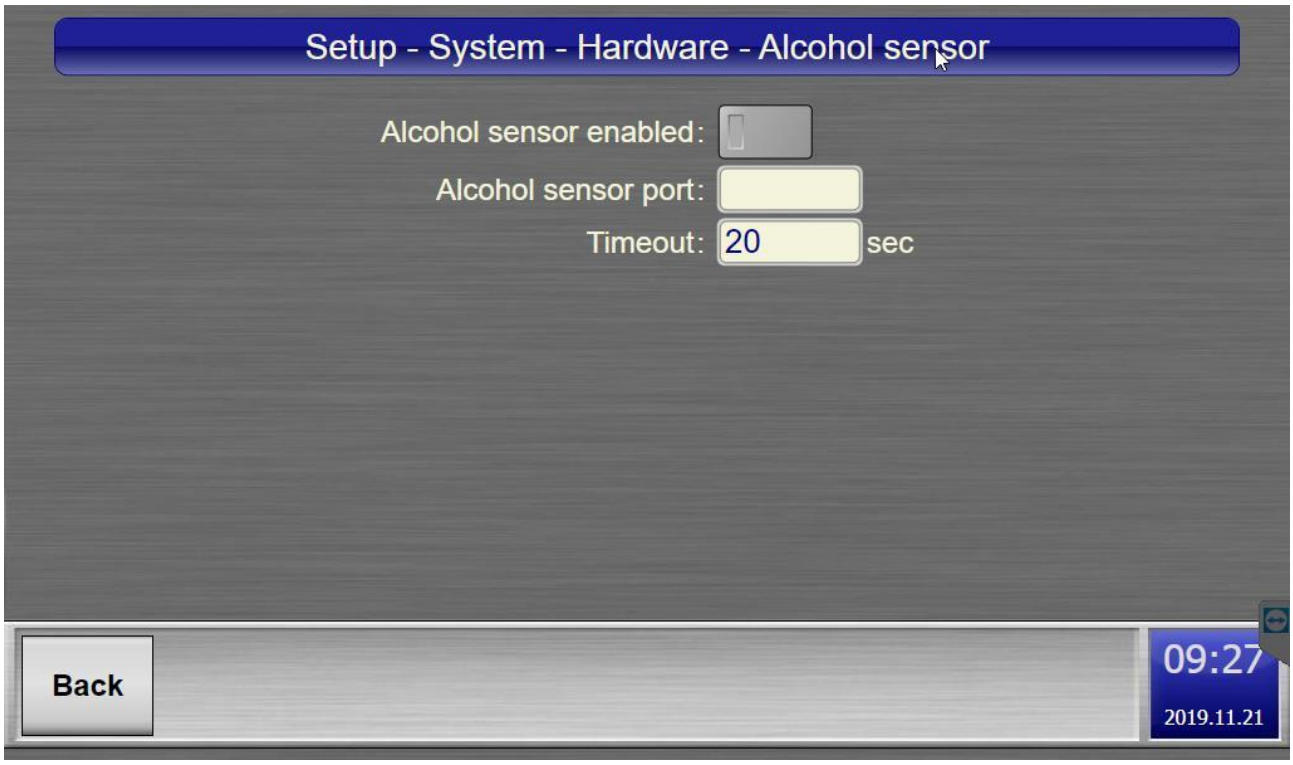
3.1.7.8.4 Fingerprint Reader



If the cabinet has fingerprint reader, it can be enabled by pressing the "Fingerprint reader enabled" button. Please note that the correct serial port has to be selected, which is COM2 by default. If the above configuration is finished please go to the Menu- Setup – System – Computer submenu and press the "Exit" button in order for the

FP reader configuration changes to take effect. After the Software Terminal restart the fingerprint reader is ready to be used.

3.1.7.8.5 Alcohol sensor

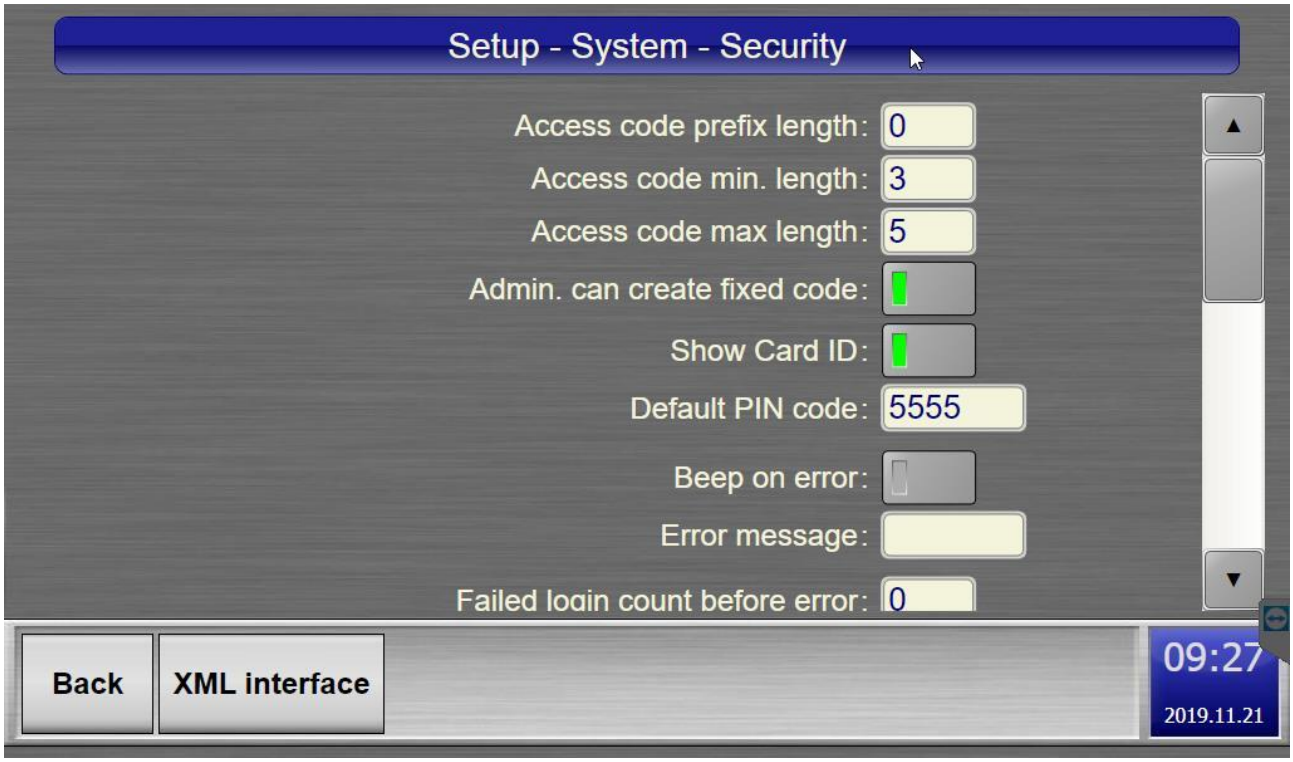


"Alcohol sensor enabled": Activates the alcotest sensor if it is connected

"Alcohol sensor port": Serial port used by the alcohol sensor

"Timeout": alcohol sensor remains activated for this period of time

3.1.7.9 Security



"**Access code prefix length**":

- The length of the generated random prefix that is added to the beginning of the access code. Its length can be from 0 to 4 digits. In case of 0 the system will not generate prefix codes but it will give an alert if there are identical codes and the code given for the second time will not be accepted.

"**Access Code min. length**":

- The minimum length of access codes. A shorter code than this will not be accepted when adding a new code or changing an existing code.

"**Access code max. length**":

- The maximum length of access codes. A longer code than this will not be accepted when adding a new code or when changing an existing code.

"**Admin can create fixed code**":

- You can set here whether a Web administrator can generate fixed codes. If a fixed access code is generated on the web interface, the user does not have to change it at the first login. Picking up keys is immediately available after the access code is entered.

“Show Card ID”:

- Marking this you will be able to see the ID of the RFID Card when registering.

“Default PIN Code”:

- This PIN code can be assigned to RFID Cards, which are added through the WEB interface

“Beep on Error”:

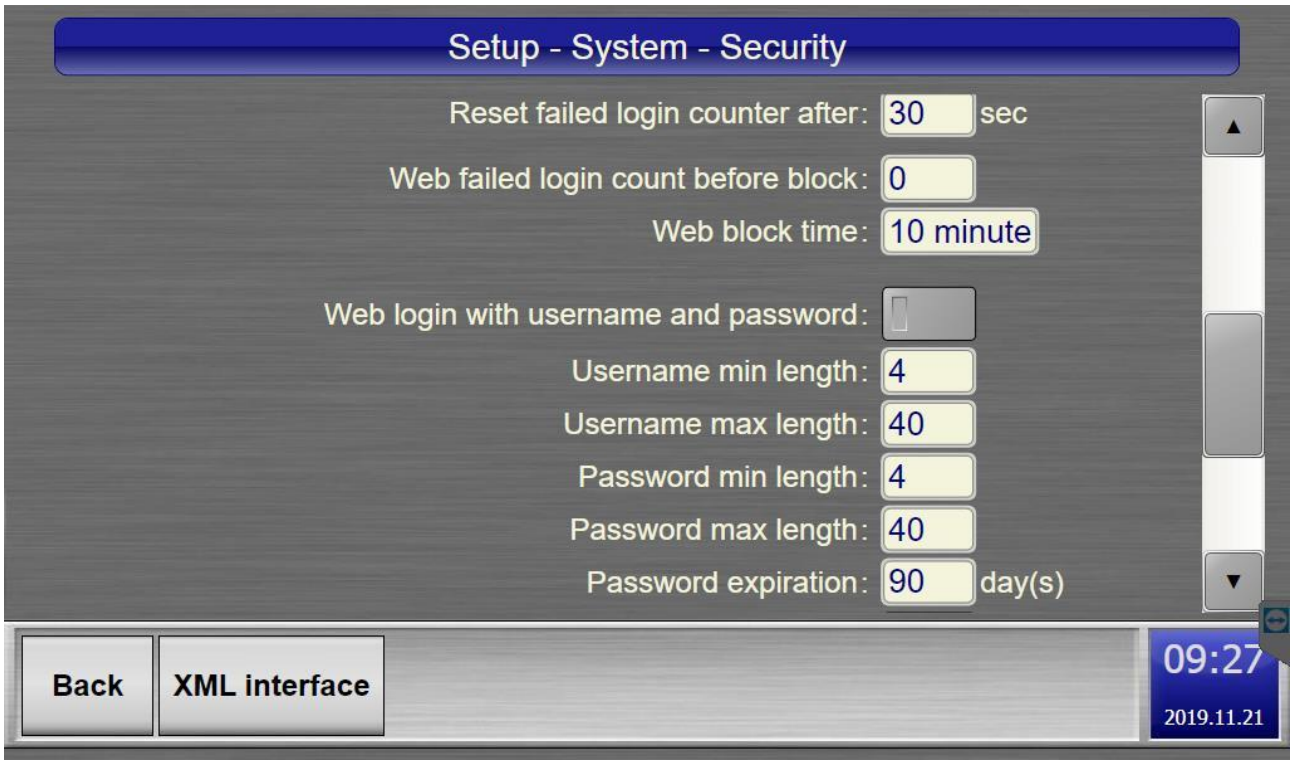
- The cabinet starts to beep if there is an error.

“Error message”:

- In case of an Error this message appears on the screen. (it can be a phone number, email address etc.)

“Failed login count before error”:

- The system starts to beep and an error message appears on the screen when the attempted logins reached this number.



“Reset failed login counter after”: The cabinet resets automatically after set number of seconds.

“Web failed login count before block”: When the user has „x” failed logins on the web-interface, the system will not let him try again for „x” time (see below „Web block time”)

“Web block time”: The time it takes for the web login to be enabled again after a web login block.

“Web login with username and password”: Enables the use of username and password on the web-terminal

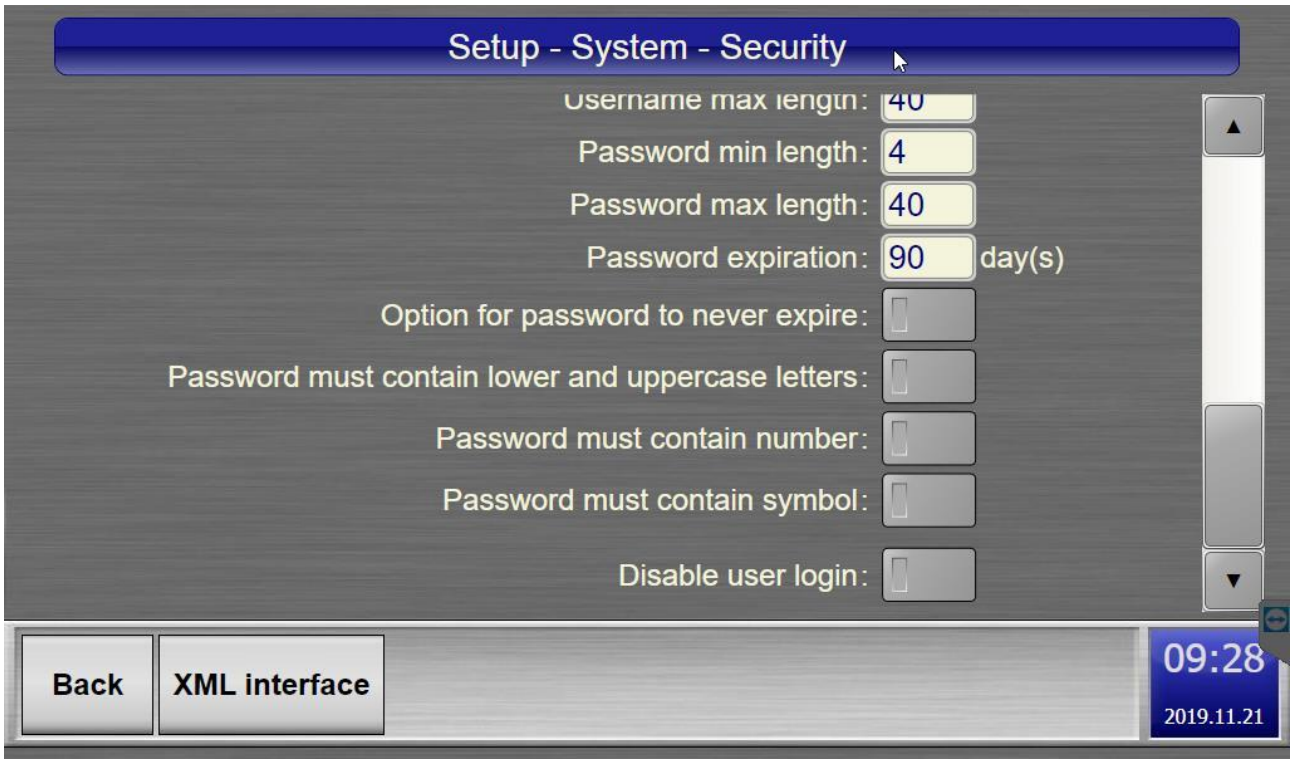
“Username min. length”: The minimum length of the username.

“Username max. length”: The maximum length of the username.

“Password min. length”: Minimum length of the password in characters.

“Password max. length”: Maximum length of the password in characters.

“Password expiration”: Assign an expiration for the password in days (the maximum is 365 days).



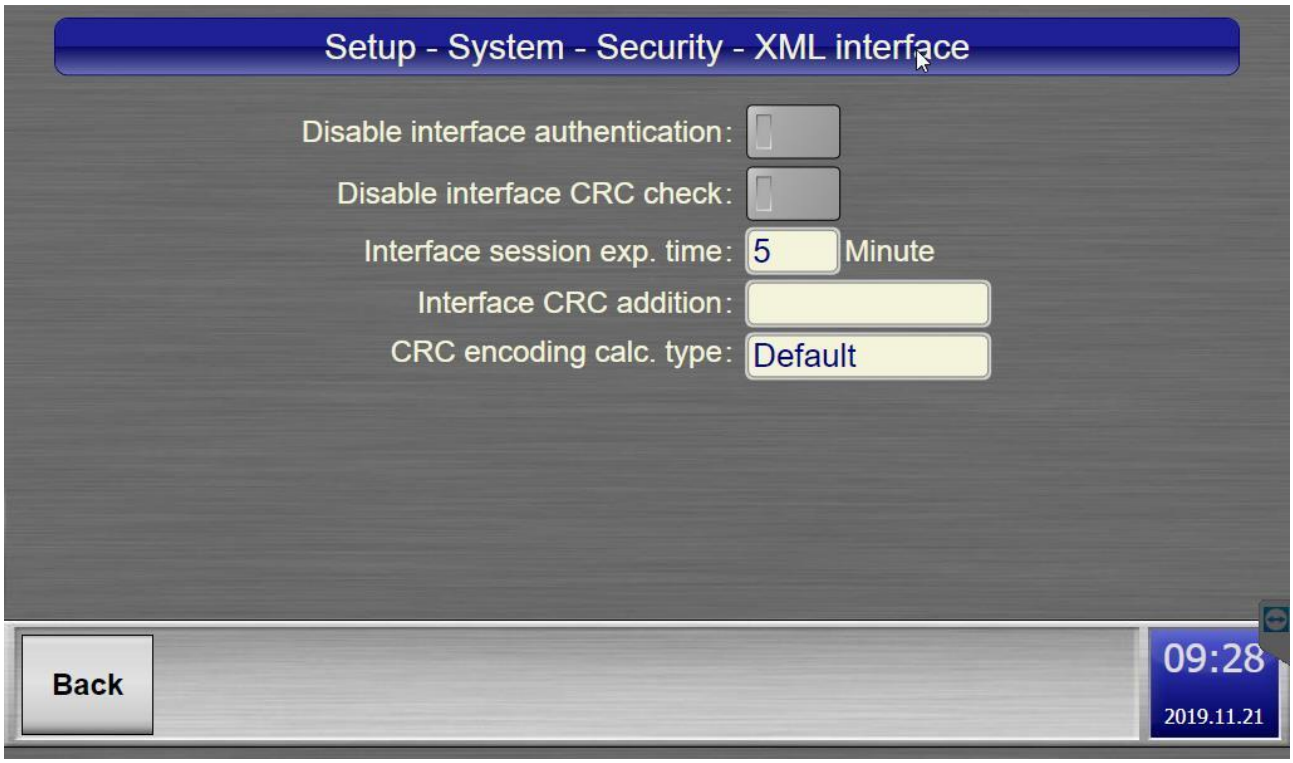
"Option for password to never expire": Enable permanent password

"Password must contain lower and uppercase letters": If enabled, the password must contain lower and uppercase letters.

"Password must contain number": If enabled, the password must contain a number.

"Password must contain symbol": If enabled, the password must contain a symbol.

"Disable user login": disables the login for all users, except for the administrator



"**Disable interface authentication**":

- Turns Interface Authentication off.

"**Disable interface CRC check**":

- Switch off CRC checking.

"**Interface session exp. time**":

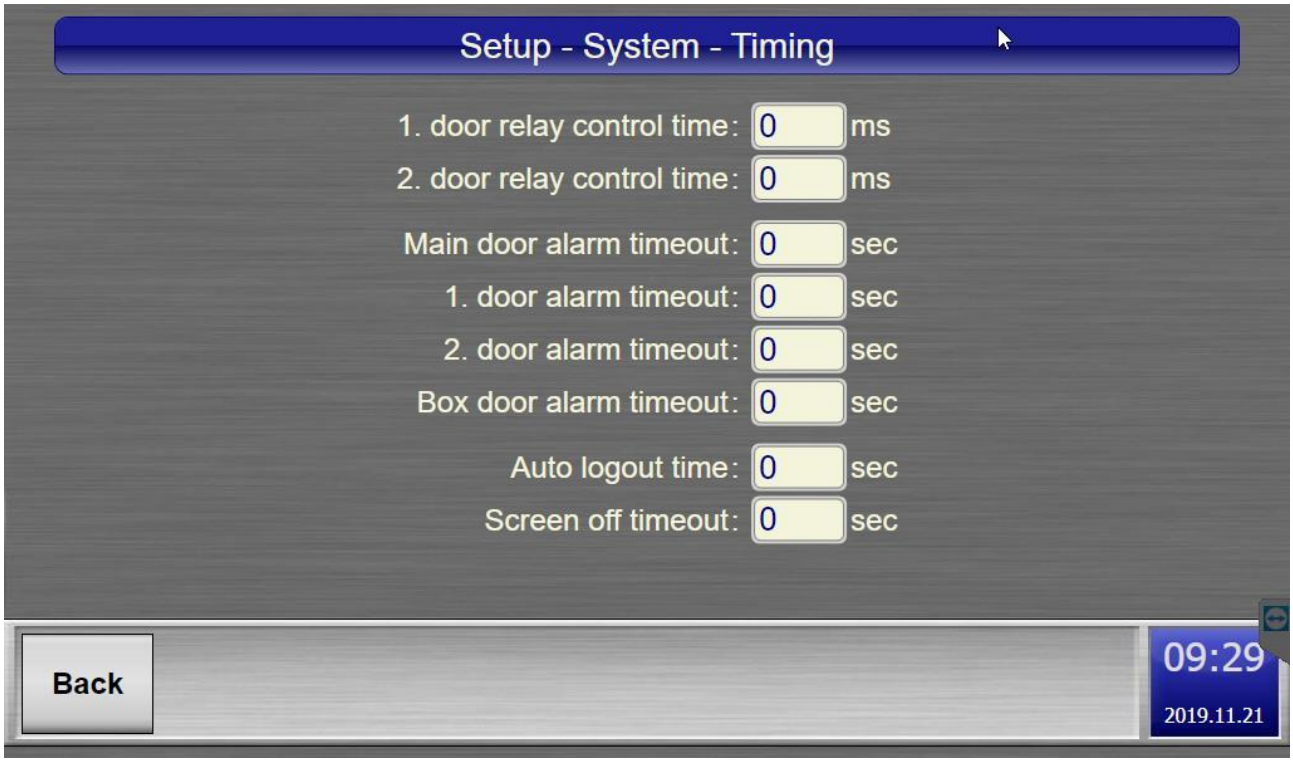
- The expiration time of the started work processes.

"**Interface CRC addition**":

- The data to be calculated every time into CRC when sending data to the interface.

“CRC encoding calc. type”: Encoding types: ASCII, UTF7, UTF8, UTF32, Unicode

3.1.7.10 Timing



System timings can be configured in this menu.

- "**1. door relay control time**": Pull-in duration of the first door's relay.
- "**2. door relay control time**": Pull-in duration of the second door's relay
- "**Main door alarm timeout**": The maximum duration of the main door's opened state before an alarm is generated. (In most cases it refers to the safe cabinet's door only.)
- "**1. door alarm timeout**": The maximum time of the first door's opened state. If the door will not be closed within this time, the system generates an alarm.
- "**2. door alarm timeout**": The maximum time of the second door's opened state. If the door will not be closed within this time, the system generates an alarm.
- "Invert main door input": not in use
- "Invert door 1 Input": not in use
- "Invert door 2 input": not in use
- "Invert sabotage input:" not in use
- **"Auto Logout time":** The system will log out automatically when this time runs out.
- **"Screen off Timeout":** The screen turns off if this time runs out.

3.1.7.11 Email

SMTP Setting

Setup of the Mailing Server: Menu – Setup – System – Email

The cabinet itself does not contain Mailing server functions, instead of this it sends emails through a preprogramed mailing server using SMTP protocol.

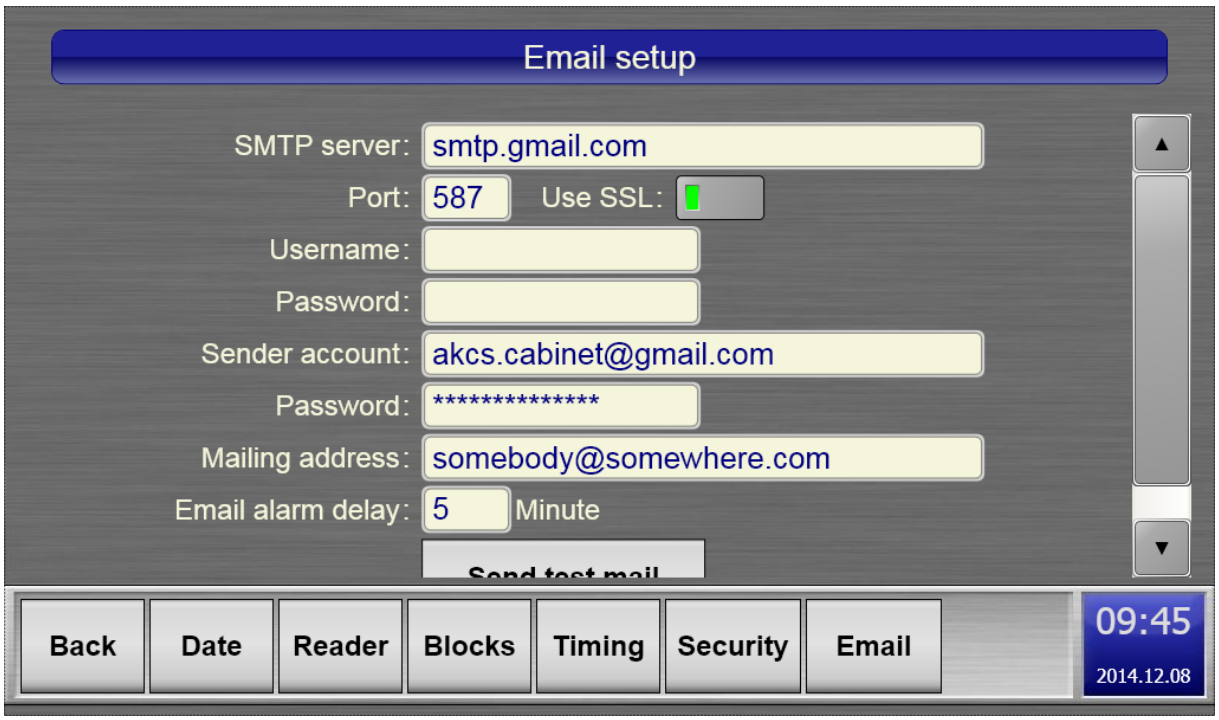
Setting options:

SMTP Server:	The name of the mailing server or IP address
Port:	The SMTP communication goes through Port 25 or in case of secure connection (SSL) on Port 587
Use SSL:	It should be switched on if the communication goes through a secured channel with the mail server. (Secured)
Username:	If the mailing server requires a log in, please type in the login name here.
Password:	Password for the username.
Sender account:	The email alerts will be sent from this account.
Password:	Password of the sender account.
Mailing address:	The mails will be sent to this address.
Email alarm delay:	The delay between the start of alert and the email alert.

„Send test mail" you can send a test mail and check if everything is correct by using this button.

In case you can't send test mails please check the settings again and also check the local **firewall settings.**

In many cases the mailing servers use the sender account and password for identification.



3.1.8 LANGUAGE

The language of the cabinet can be set up by using the arrows and by selecting the desired language. Also you have the option to choose a maximum of 4 quick language options which will be available on the log-in screen.

As you can see on the example below, we selected 4 languages to be displayed on the log-in screen.

Now every user can choose from the selected language options. By touching one of the flags the cabinet will switch to the preferred language.

4. Proper shut down of the cabinet

Before shutdown, the batteries should be disconnected from the power supply in order to completely disconnect the cabinet from electricity.

You can stop the system by pressing the "***Reboot***" button from the "***Setup***" -> "***System***" menu.

Just unplug the cabinet once the PC shuts down and the display turns off.

Caution!

If you do not remove the power, the safety electronics' Watchdog circuit will restart the system.

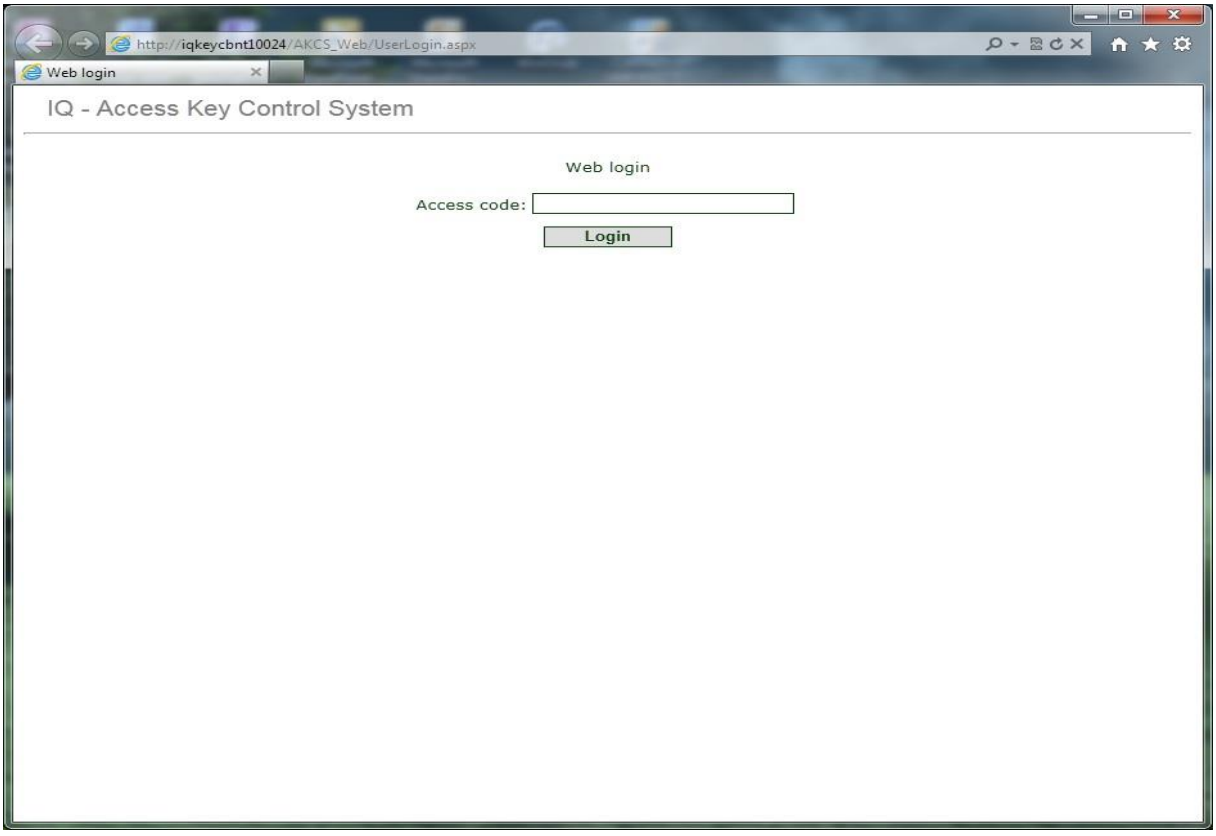
5. Web-based configuration

You can connect the cabinet to networks. If the cabinet's computer is connected directly to an external PC, then cross UTP cable is required for the connection, otherwise if the cabinet computer is connected with other computers in the network using switch or router, then normal (straight) UTP cables can be used. After connecting the cabinet to the network, you have to set up the IP addresses, gateways etc. Please refer to chapter **3.1.3 Network connection** in this manual. If you are unsure about the settings please ask your network administrator.

To have access to the key cabinet from a remote computer (a computer within the same network, where the cabinet is also connected to) you have to open up a web browser and navigate to: http://cabinetnumber /akcs_web

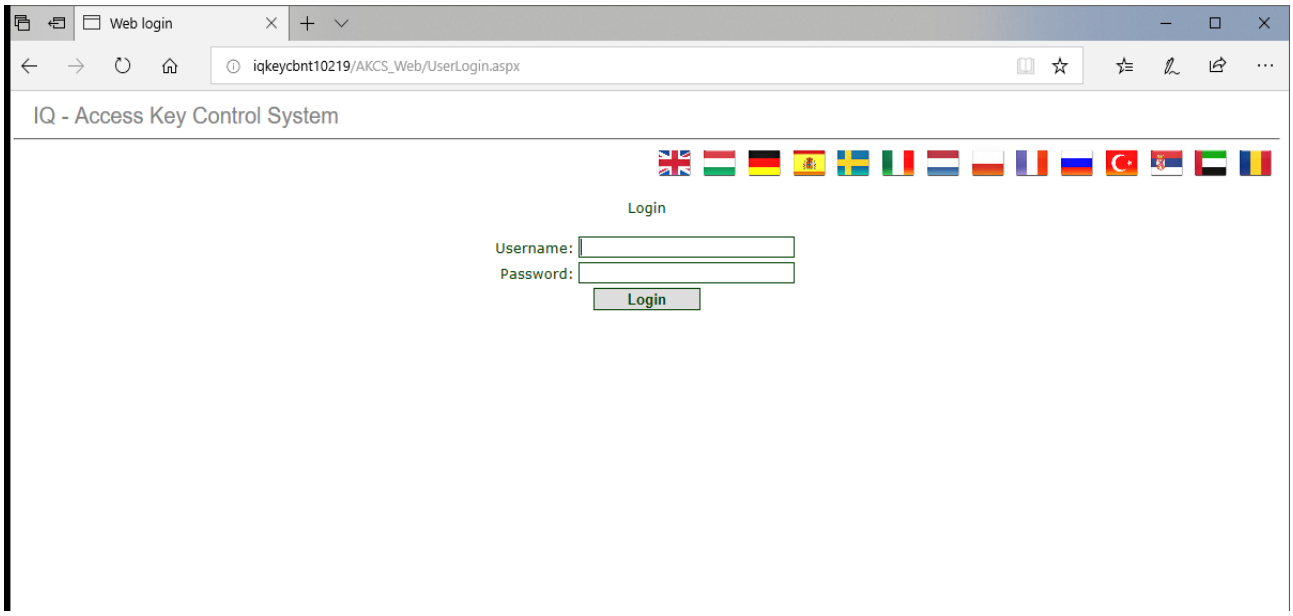
<cabinetnumber>: You can check the cabinet number on the sticker inside the key cabinet's door. Or in the cabinet terminal software if you go to **Administrator >Menu** > **Setup** > **Info** menu, the first row (MACHINENAME) shows the key cabinet's serial number. In this example the cabinet's serial number is: 10024, so browse to http://iqkeycbnt10024/akcs_web or http://ip address/akcs_web

Login



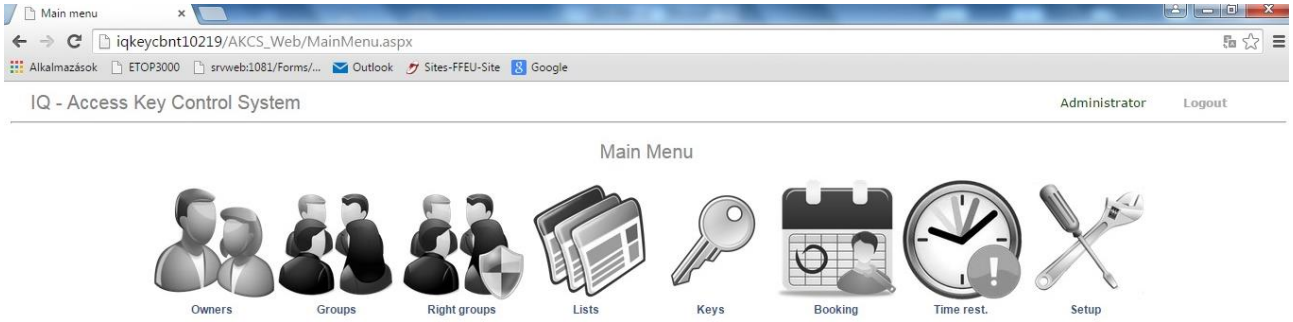
Web-based login

If you would like to log in to the web-application, you will need to enter your password (and also the username if this security feature is enabled in the software terminal).



The Web interface has more or less the same functions as the cabinet's touch terminal, as you can see on the main menu below, except the hardware configurations which are only available through the touch-terminal.

The Main Menu on web-interface



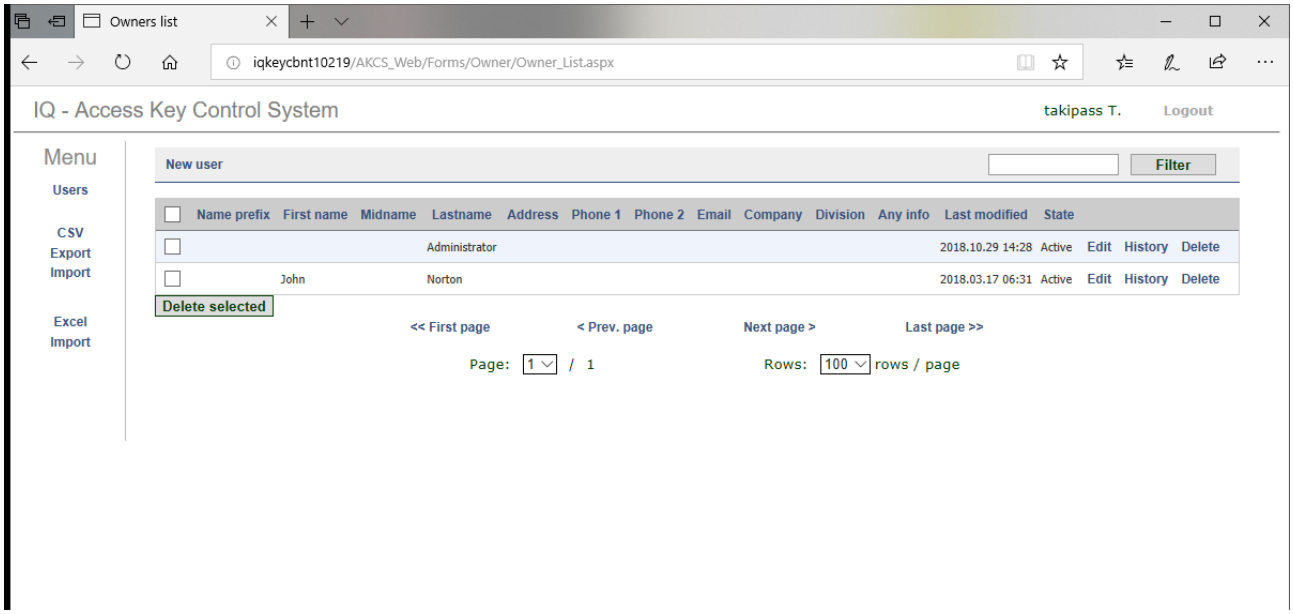
Web Main Menu functions

Users:	View, Add or Edit users and their access rights, Export/Import users
Groups:	View, Add or Edit groups. Add keys, and users to the group
Right groups:	View, Add or Edit right groups. Add different rights, and users to the group
Lists:	View the Log, check which key is taken or which ones are in the cabinet, Check key-place statuses
Keys:	View key list, Edit/Rename or Delete keys
Booking:	In the LoxTop Key and Asset Management Systems the booking function is an application, which is useful for the users to reserve keys and boxes for themselves to a given date / time.

Time rest. More than onetime restriction can be created in the same cabinet, but only 1 key/box can be included in onetime restriction.

Setup: Cabinet configuration settings: View info about key-places; set key name; view license code and expiration date; set software language and keyboard layout language; view system information; check out database information; set network synchronization with other cabinet.

Users

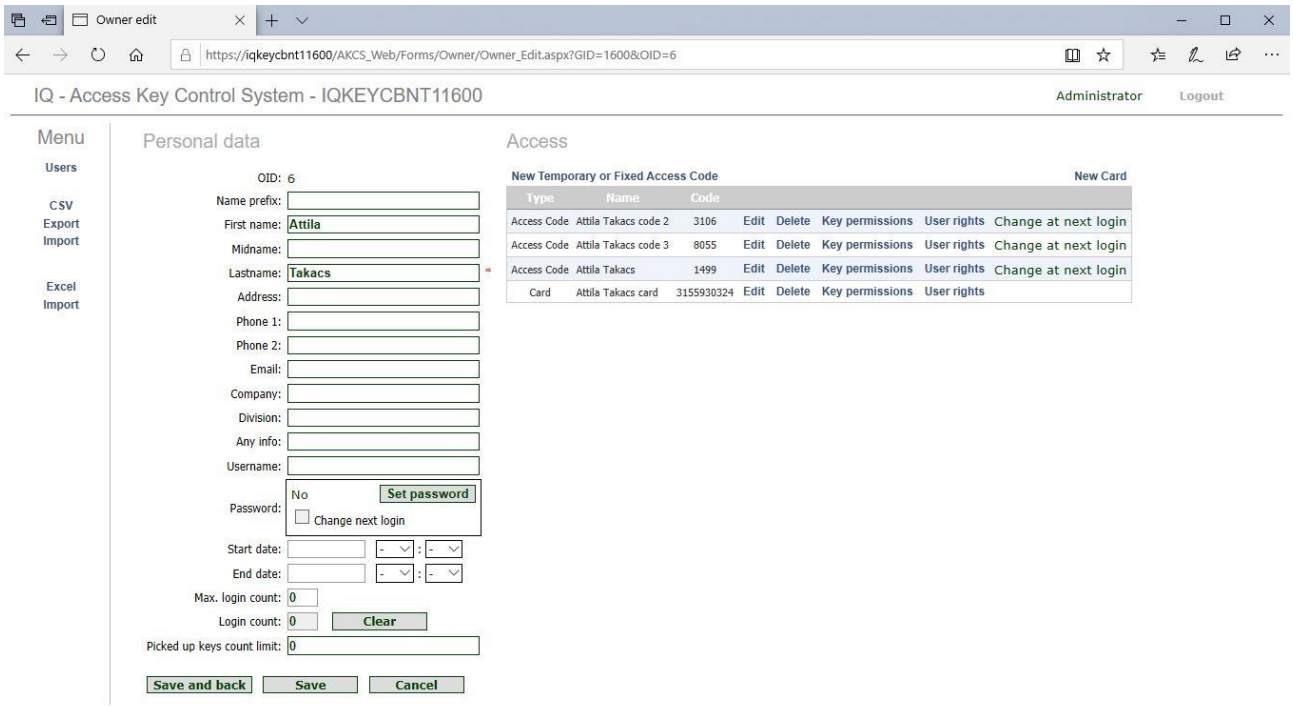


List of key users (users)

To add a new key user, click on "**New User**" and fill in the personal data.

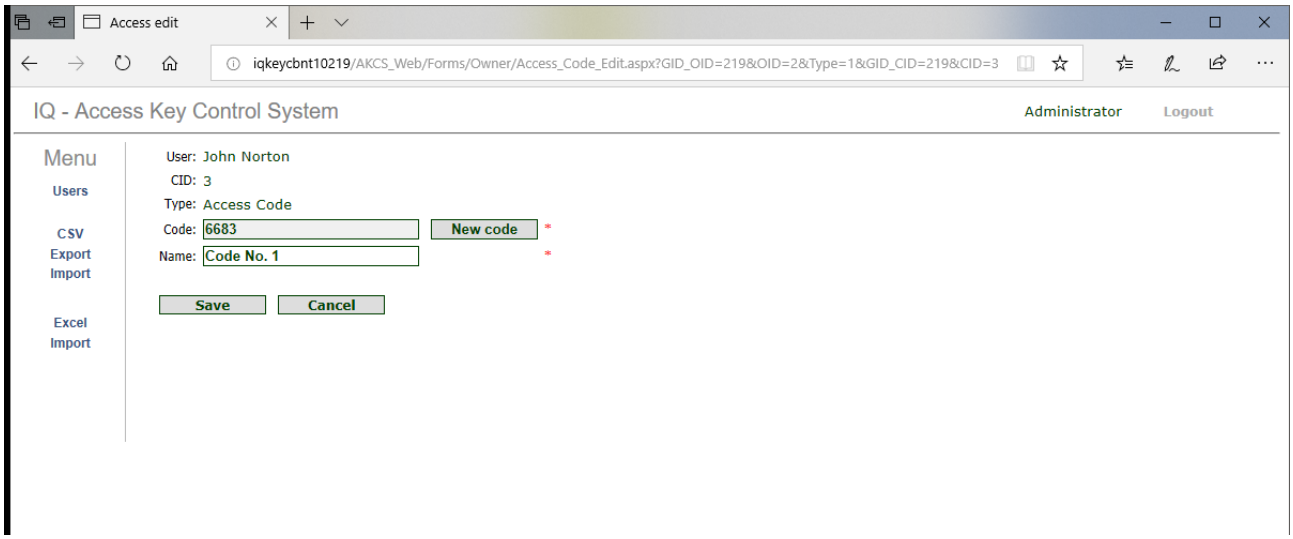
If you wish to get back to the main menu, click "**Menu**" in the top left corner.

To edit (modify) or delete a user click "**Edit**" or "**Delete**" right in the user row.



Add key user - Set user data

After you have created a new key user by clicking on "**New User**", you have to assign a new temporary access code to him. The user will change this temporary code to a permanent one when he/she logs into the cabinet for the very first time. To give a new temporary code, click "**Edit"** at the user row and then click "**New Temporary Access Code**". The system generates a temporary code, please name the code and click "**Save**".

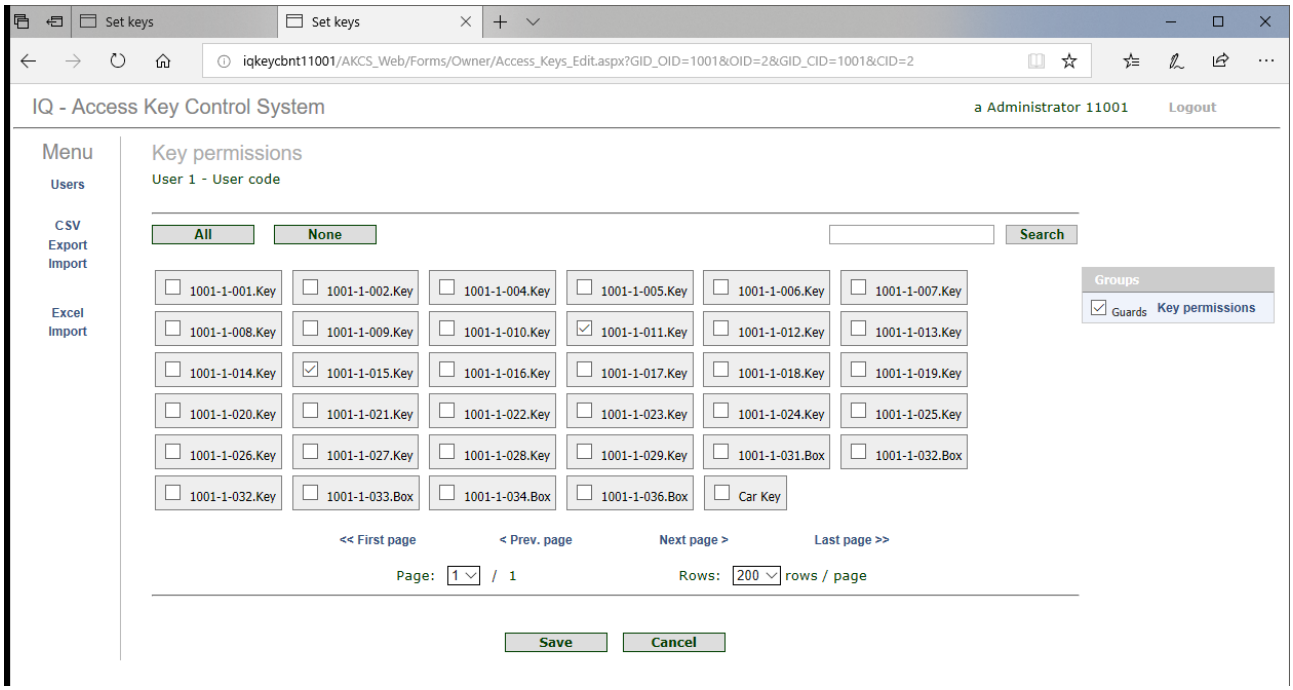


Set user access code

When the user logs in to the system with his temporary code, he will receive a notification to change that code. After pressing the OK button, the user will have two options. If he selects “Card” and then shows an access card to the card reader, he will be able to use that to log in to the system. If he selects the “Access code” option then he will be able to type in a new access code and save it (this access code will be the new valid code).

Now you have to assign keys to the key user, which ones the user is allowed to pick up.

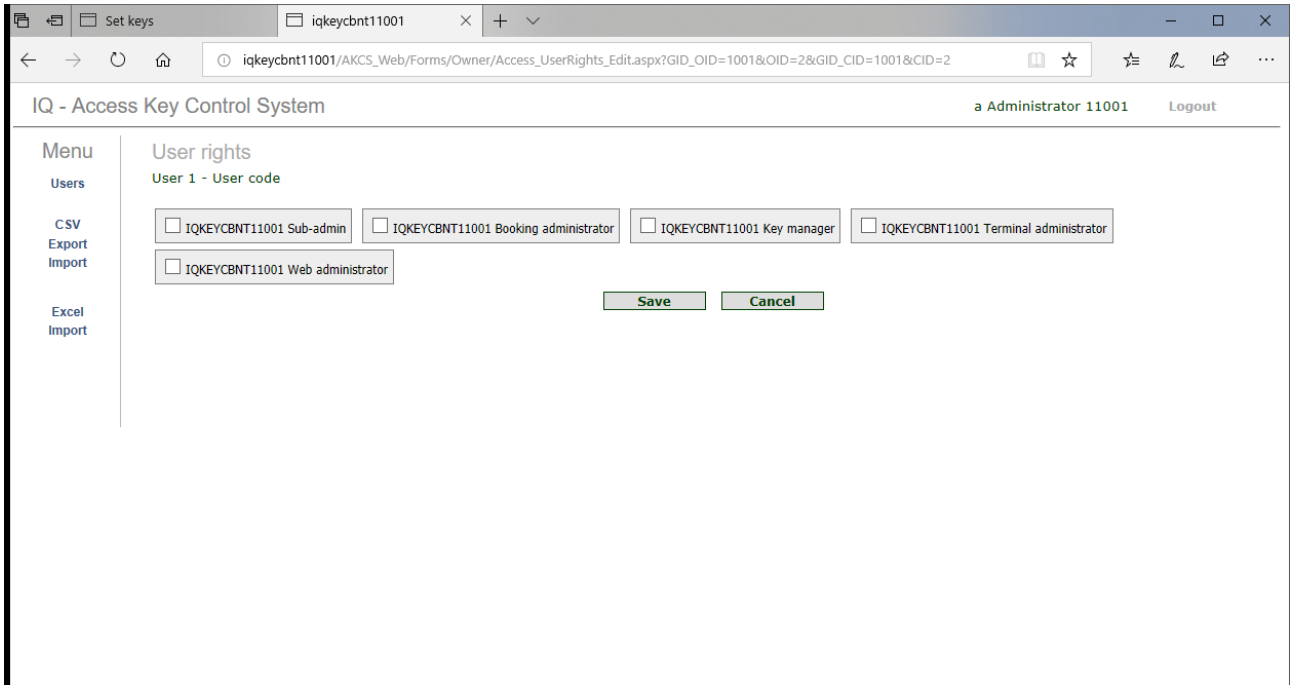
To do this, click on “**Set keys**”.



Set keys

You can give permission to pick up all keys by clicking on "**All**" button, while "**None**" clears all previous selections, otherwise you can click the desired keys one by one. When everything is configured, click on "**Save**".

Now set user rights for the key user by clicking on "**Set user rights"** at the user settings.



Set user access rights

Web Administrator: The user is allowed to configure the cabinet from the web interface.

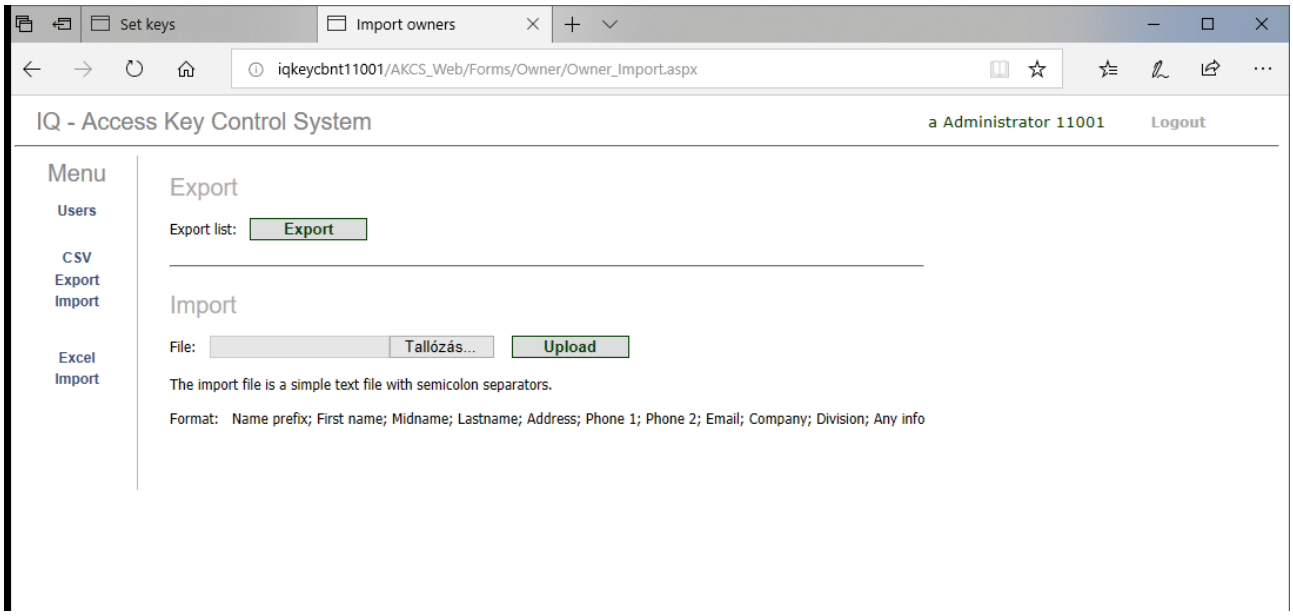
Terminal Administrator: The user is permitted to use the cabinet from the key cabinet's built-in terminal.

Booking administrator: The user can add/Modify/Cancel of reservations

If you click both, then the user will have rights to use the cabinet also from the remote web-interface and also from the cabinet's computer.

When user settings are done click **Save** to get back to the User list.

In case you would like to add several users you may perform a mass upload of users with the **Import** function from an excel or CSV.



User Export/Import

Click **Import/Export** then search for the text file, which contains the user data, then click **Upload**.

In the text file one row contains one user's data; each field is separated by a semicolon (;).

Eg.:

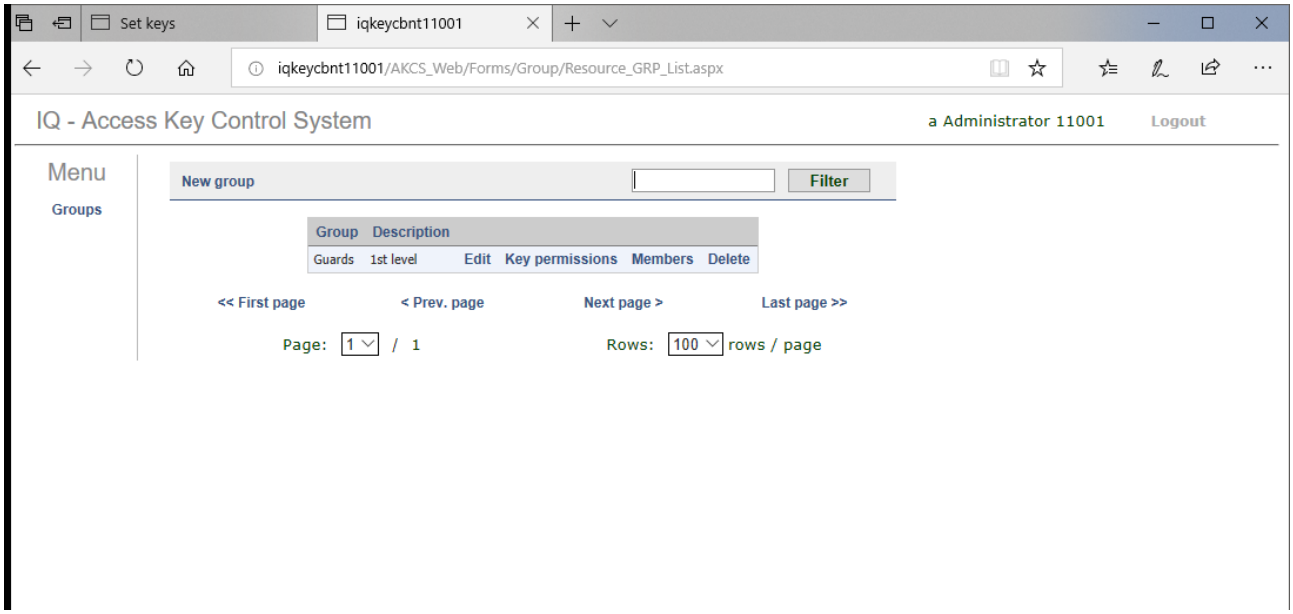
NAMEPREFIX;FIRSTNAME;MIDNAME;LASTNAME;ADDRESS;PHONE1;PHONE2;EXTINFO1;EXTINFO2;EXTINFO3;EXTINFO4

Export

On the other hand you can also export the user list (key user list) into a .CSV file, what you can edit later on for example using Excel. Click the **Export** button in order to save the key user list.

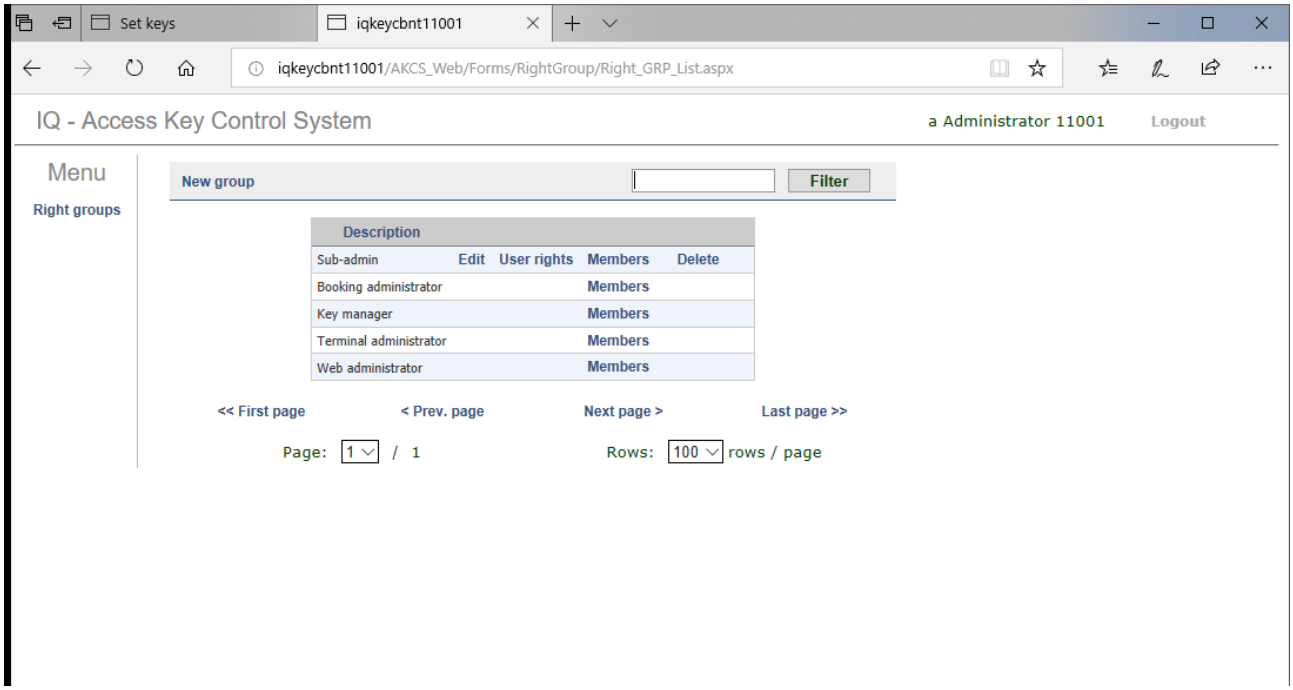
Click on **Menu** to return to the Main Menu.

Groups



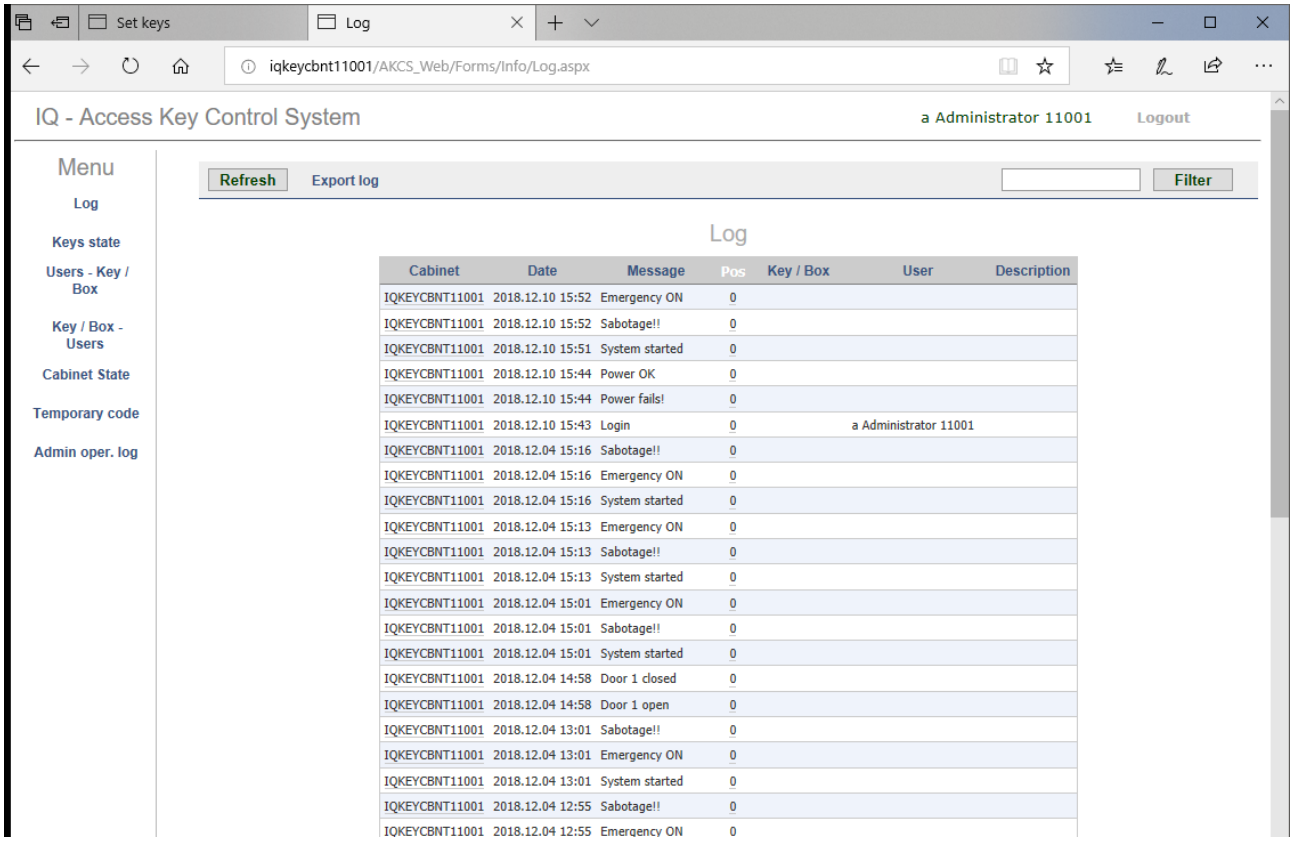
You can create/edit/add key permissions/members to a group. You can also search for a group in the list by typing in the group name or part of it into the textbox on top of the page.

Right groups



Lists

In the **Log** you can see the system events.



Lists - Event Log

Menu: Return to the Main menu

Log: View the Log, check cabinet events

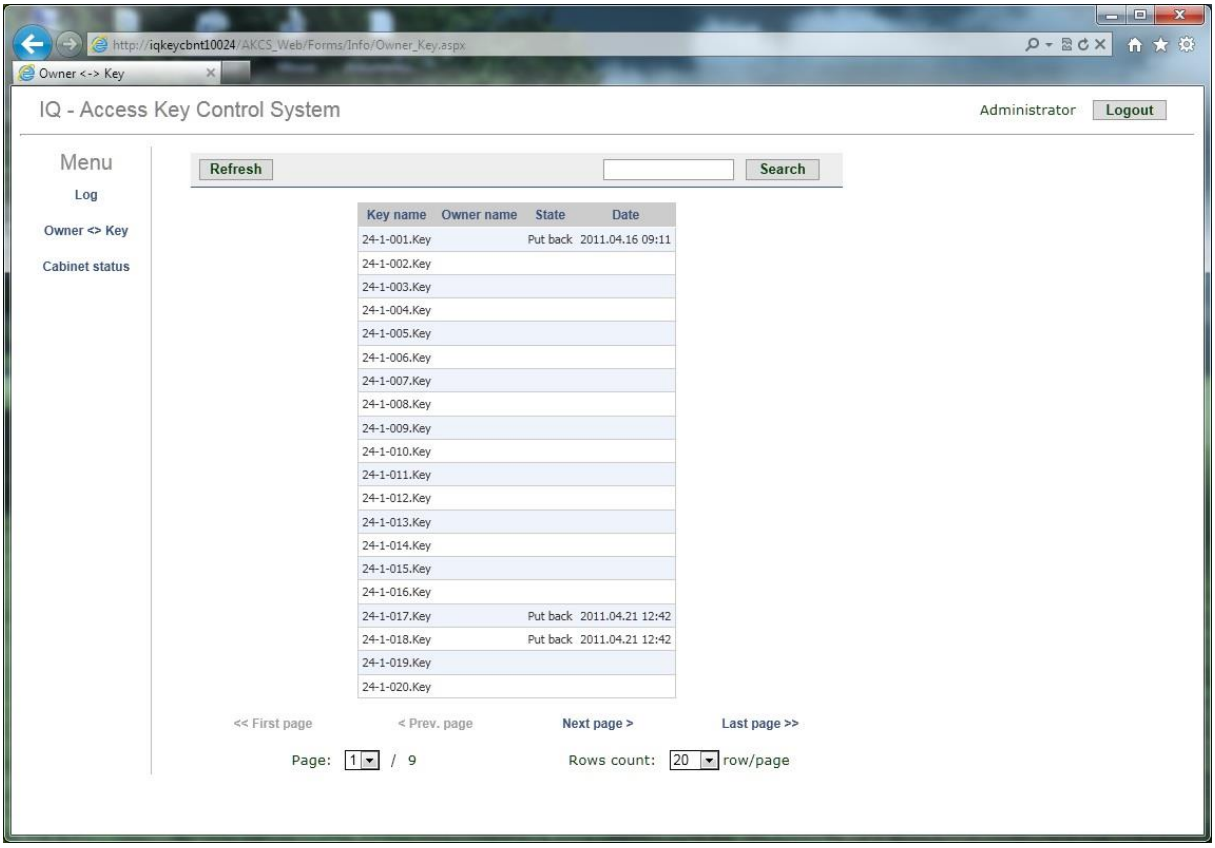
User <> Key/Box: Check which key is absent or which ones are in the cabinet, which user has removed or returned the key and at what time (key history)

Cabinet state: Check the key-places' and boxes' hardware status

Temporary Code: List of temporary access codes

Admin oper. log: Event log of all administrator activity, such as user access level modifications, RFID keyholder replacements, changes in the security settings, etc. Activation of this feature is only possible by sending a request to the LoxTop Support Centre.

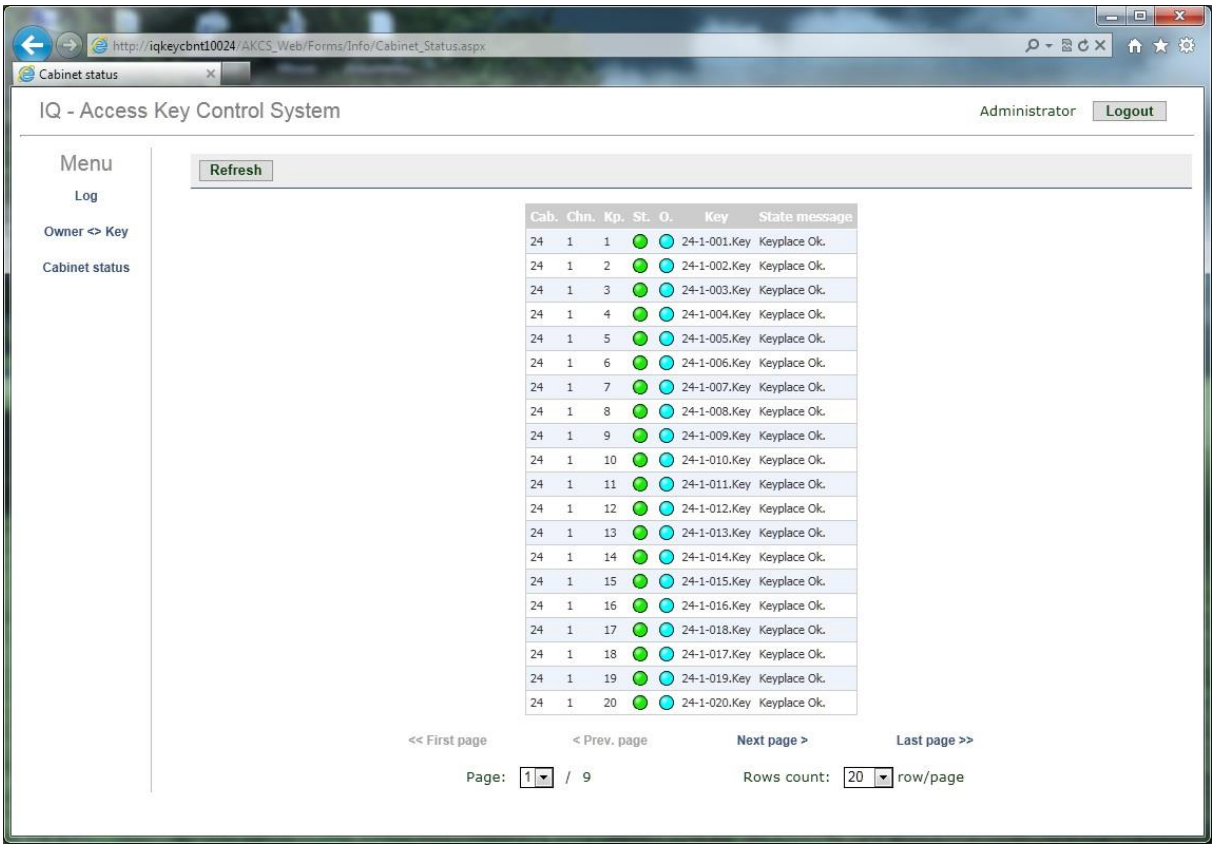
To check the key statuses click on **User<>Key**:



Lists – Key history

This list shows the history of the keys: which keys are in the cabinet, which ones are out, who took it and when the keys were put back.

Cabinet status check can be performed by clicking on **Cabinet status**:



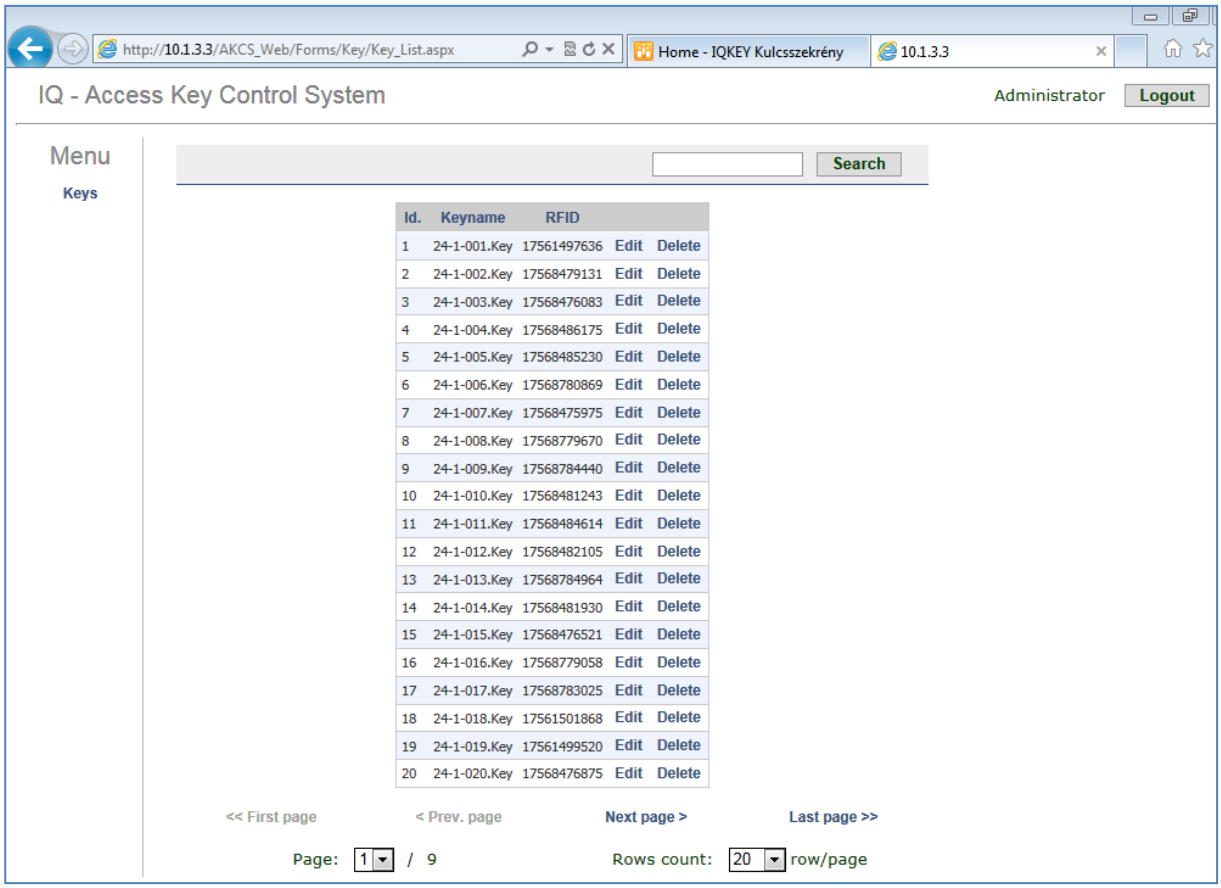
Cabinet Status check

The list shows if all key-places are working correctly.

Click **Menu** to get back to the main menu.

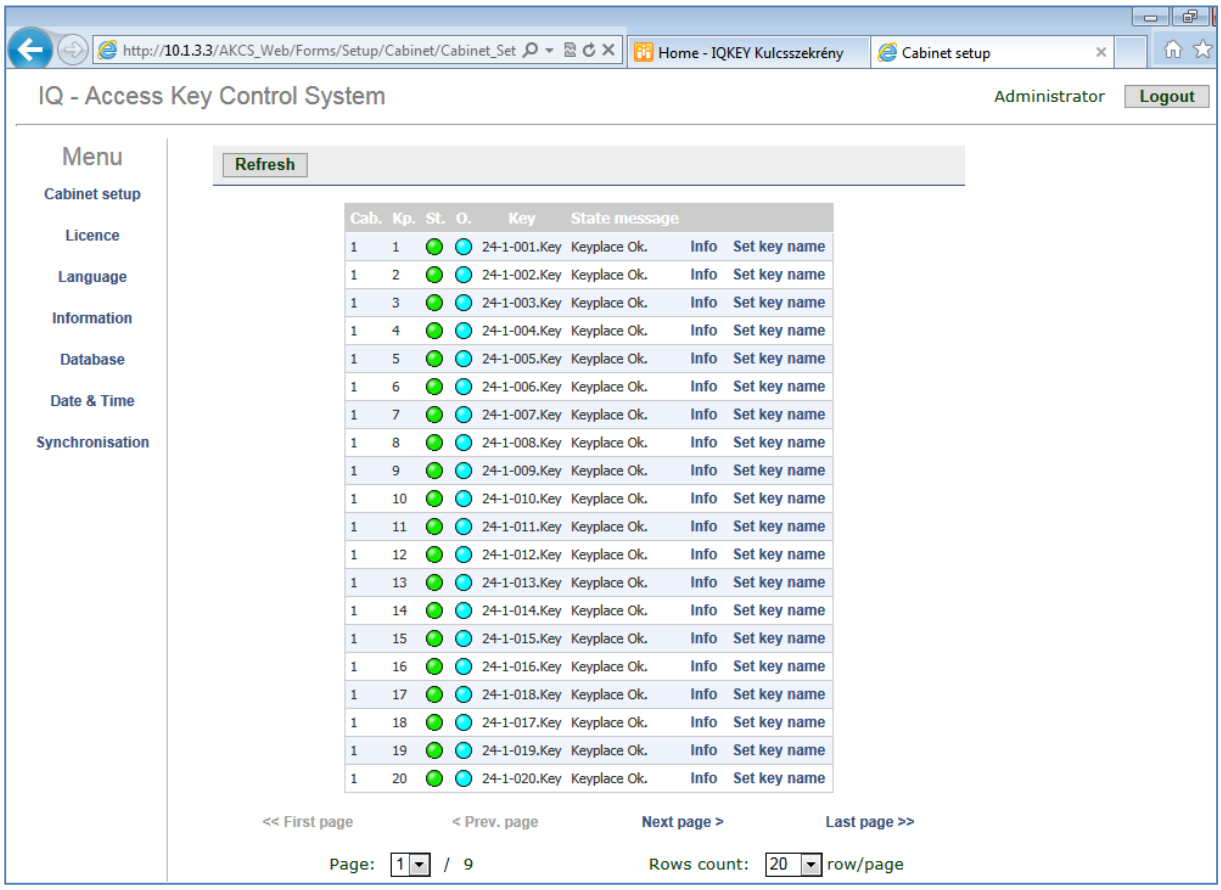
Keys

Here you can Edit, Rename or Delete the keys.



Keys

Setup



Setup

Cabinet setup: View key place statuses and key place info, Rename Key / Set key name

License: Check the current license code and it's expiration date

Language: Set Software Language and Keyboard layout language

Information: View key cabinet's system information

Database: View database information

Synchronization: Synchronize the cabinet with other cabinets in the network; specify this cabinet to be Master (Server) or Slave (Client)

Event types:

Not alive!	Key return
Address error!	Key remove theft
Opto error!	Box open
Fixed key error!	Box closed
Keyplace error!	Box forced opening!
Attempted login	Login
Login with emergency code	Logout
Fingerprint identification fail	Power fails!
Door 1 closed	Forced power off!
Door 1 open	Power OK
Door 2 closed	Picked up
Door 2 open	Put back
Door open	Dropsafe
Door closed	Privilege
Door alarm restored	Key
Door open alarm!	System started
Emergency OFF	System stopped
Emergency ON	Unknown card!
Remote Emergency OFF	Wrong access code!
Remote Emergency ON	Wrong PIN code!
Sabotage OFF	End of worktime
Sabotage!!	Start of worktime
Key pickup	

Notes