2N® Lift8

Call Center

User Manual

Version: 2.6.0   www.2n.cz

The 2N TELEKOMUNIKACE a.s. is a Czech manufacturer and supplier of telecommunications equipment.

The product family developed by 2N TELEKOMUNIKACE a.s. includes GSM gateways, private branch exchanges (PBX), and door and lift communicators. 2N TELEKOMUNIKACE a.s. has been ranked among the Czech top companies for years and represented a symbol of stability and prosperity on the telecommunications market for almost two decades. At present, we export our products into over 120 countries worldwide and have exclusive distributors on all continents.

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2N TELEKOMUNIKACE a.s. administers the FAQ database to help you quickly find information and to answer your questions about 2N products and services. On www. faq.2n.cz you can find information regarding products adjustment and instructions for optimum use and procedures „What to do if...".

2N TELEKOMUNIKACE a.s. hereby declares that the 2N product complies with all basic requirements and other relevant provisions of the 1999/5/EC directive. For the full wording of the Declaration of Conformity see the CD-ROM (if enclosed) or our website at www.2n.cz.

The 2N TELEKOMUNIKACE a.s. is the holder of the ISO 9001:2009 certificate. All development, production and distribution processes of the company are managed by this standard and guarantee a high quality, technical level and professional aspect of all our products.

1. 2N® Lift8 Communicator

2N® Lift8 Communicator is a user alarm call management application. When an alarm call comes in, all data on the lift are displayed including a map with the lift location, cabin camera monitoring and note recording option. It is a VoIP client. Make sure that the 2N® Lift8 Server is installed on a PC and connected to one and the same network with the 2N® Lift8 Communicator to make the device work properly.

Here is what you can find in this section:

- 1.1 Installation and Login
- 1.2 Introduction to Application
- 1.3 Use

Refer to the 2N® Lift8 product pages at www.2n.cz, download section, for the latest FW version.

1.1 Installation and Login

After the application is launched, the installation program will scan your PC for another **2N® Lift8 Communicator** version and ask you to uninstall the currently available version if identical with the new one. Use the system control panel Add or Remove programs to uninstall the existing product version for reinstallation or reconfiguration. If the versions are not identical, the original version will be uninstalled and a new application version will be installed. Then you will also be asked whether the configuration files should be removed or the whole application with a new, empty database should be installed.

Now the **2N® Lift8 Communicator Setup Wizard** has been launched. Follow the wizard instructions. Then select the installation location for the **2N® Lift8 Communicator** . **C: \Program Files (x86)\2N TELEKOMUNIKACE\2N Lift8** is used by default. Now the application will ask you to enable transmission of system data and software use surveys to help the 2N TELEKOMUNIKACE a.s. company improve the software quality, availability and performance. No confidential data shall be sent. You can participate in this effort voluntarily and cancel sending statistic data any time. Confirm or decline this cooperation and click Next to continue.

Select whether the application should be installed for the currently logged-in user or all the PC users. The wizard is ready to install the **2N® Lift8 Communicator**. Confirm user account administration notification to the Windows system if necessary. Another Start item and the application shortcut icon will be added automatically. Once installed, the application will start automatically.

Alternatively, use the command line for installation: select the installer file and define the manner and location parameters. See below for command explanation.

Command	Description
/VERYSILENT	Installation runs on the background, no installer.
/DIR="C:\..."	Set the installation location.
/LOG=file_name.txt	Create an installation course log to be displayed in the installer.
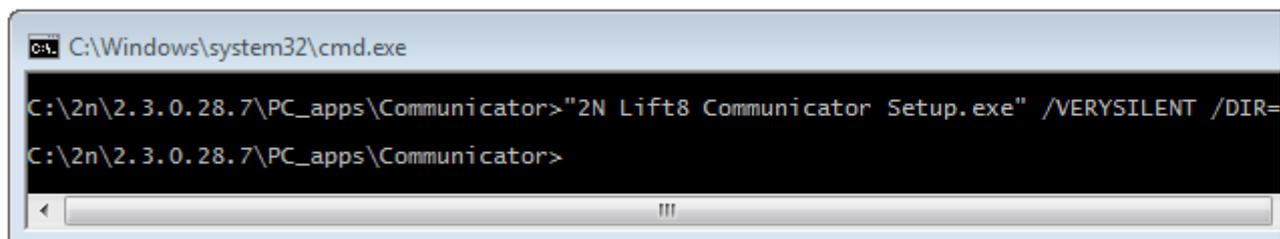
```
C:\Windows\system32\cmd.exe

C:\2n\2.3.0.28.7\PC_apps\Communicator>"2N Lift8 Communicator Setup.exe" /VERYSILENT /DIR=

C:\2n\2.3.0.28.7\PC_apps\Communicator>
```

Application Installation Command

⚠ **Caution**

- Make sure that the command line is started by admin. If it is started by a user, the editor authenticating window will pop up.

⊘ **Warning**

- There is an installer change in version 2.2.0. The installer is unable to remove the original application versions (up to 2.1.x) correctly and an installation error may occur. To avoid this, remove the original applications manually if you use versions lower than 2.2.0.

- Use the Start/Control panels/Programs/Uninstall program Windows menu to remove the application (this path applies to Windows 7 but can probably be used for other systems too). Select the application to be removed and click the right button to uninstall the program from your PC. Finally, you will be asked whether you really want to delete the existing configuration files. If you click NO, your configuration will be preserved.

> **ⓘ Note**
>
> - The **2N® Lift8 Communicator** installation requires **150 MB** of free disk space at least.

Now the **2N® Lift8 Communicator** is ready for use. Click on the shortcut item on the desktop (see the figure below) or select the Start item to start the application.

2N® Lift8 Communicator Icon

After the application is launched, a splashscreen gets displayed informing you of the application manufacturer and current version. Start it to display the basic login screen and Log in to server menu. There is a **2N® Lift8 Server** login form in the centre of the application, which remembers the last logged-in user. If you are the first user of the application, enter your login data as communicated to you by your **2N® Lift8** administrator. It is easy to set the connection: enter the server IP address if you establish connection to a LAN or public network server. Use the DNS server if available. Enter the listening port selected during the **2N® Lift8 Server** installation into the Port parameter. The default port value is 7008. Ensure that the data via this port pass the firewall and NAT in your LAN. SIP Port defines the port from which RTP packets (audio) are sent to the PBX. Use the default automatic port setting unless expressly necessary to use another port because of the firewall or network settings, for example. Contact your LAN administrator to verify the settings. Select Remember password to save the currently saved password for next launch. Refer to the figure below for possible settings.
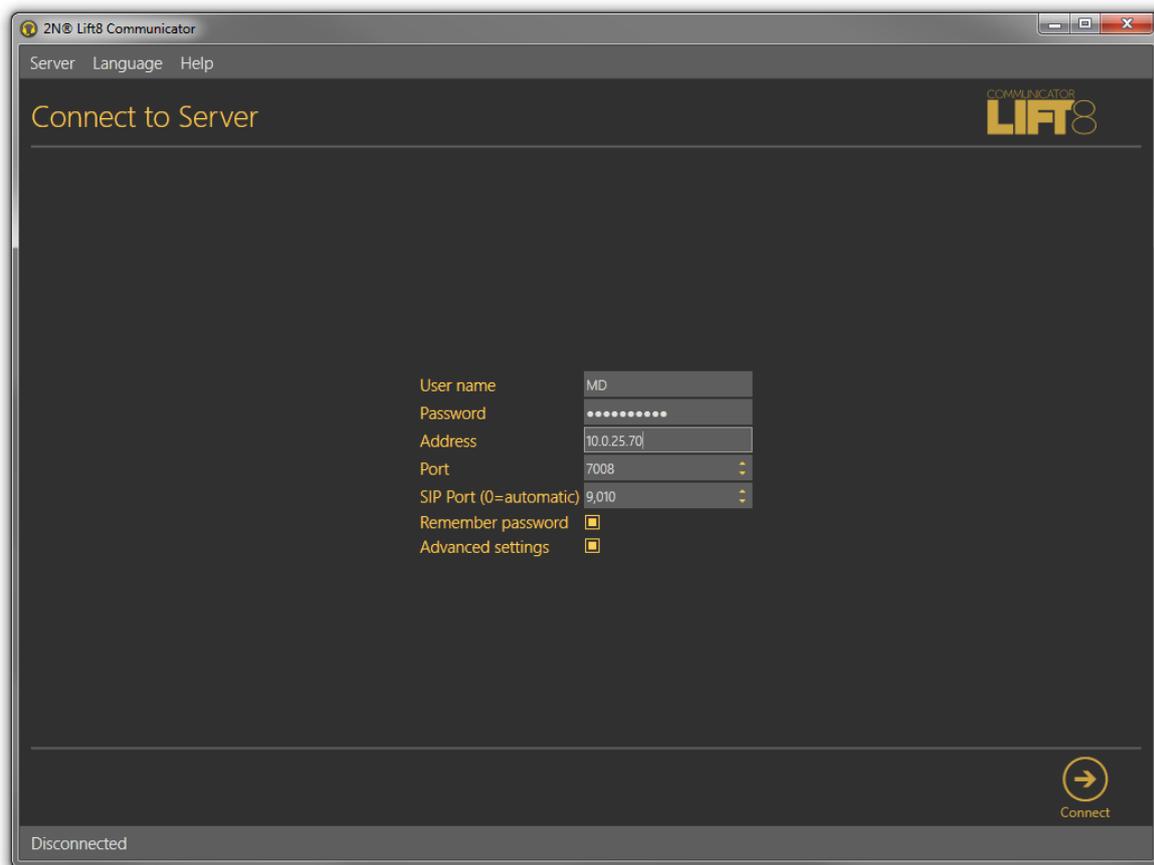
Login Screen

Now click Connect to selected server to log in to the 2N® Lift8 Server.

> ⊘ **Tip**
>
> - Server login may take some time if you have an extensive database as the application has to download all the current tables. Be patient please and wait for completion.

ⓘ Note

- Recommended hardware requirements

| OS	Microsoft Windows 10, Microsoft Windows 8 / 8.1 CZ, Microsoft Windows 7 SP1 CZ, Microsoft Windows Vista SP2 CZ
CPU	Equivalent Intel Quad Core i7 3.4 GHz
RAM	16 GB
HDD	500 GB
LAN	Gigabit Ethernet (**GLAN**)
Other	- **Dedicated Sound card** (Very important!) - Dedicated Graphics card

⚠ Caution

- The **2N$^®$ Lift8 Communicator** provides different access rights to information and menus to users with different roles. It means that a dispatcher may access different information than a technician, for example.
- The default port settings after server installation is as follows:
  - Port: 7008

ⓘ Warning

- If a problem with non-compatible version of .NET occurs during installation, you should download new version of .NETFX4.0 from www. 2n.cz . You can use this link from the online manual.
- Minimum operating system requirements: **Windows Vista**, **Windows 7**, **Windows 8**

1.2 Introduction to Application

In this subsection, we will show you the application menu layout and basic controls.

Unlike the 2N$^®$ Lift8 Service Tool and 2N$^®$ Lift8 Control Panel, the application has just one menu level. The first screen upon start includes the Intercoms menu, which provides an overview of all the intercoms assigned to the logged-in user. The horizontal Main menu helps you choose whether to view assigned intercoms or supervise the alarm call history. You can also display the database of the 2N$^®$ Lift8 users including their phone numbers.
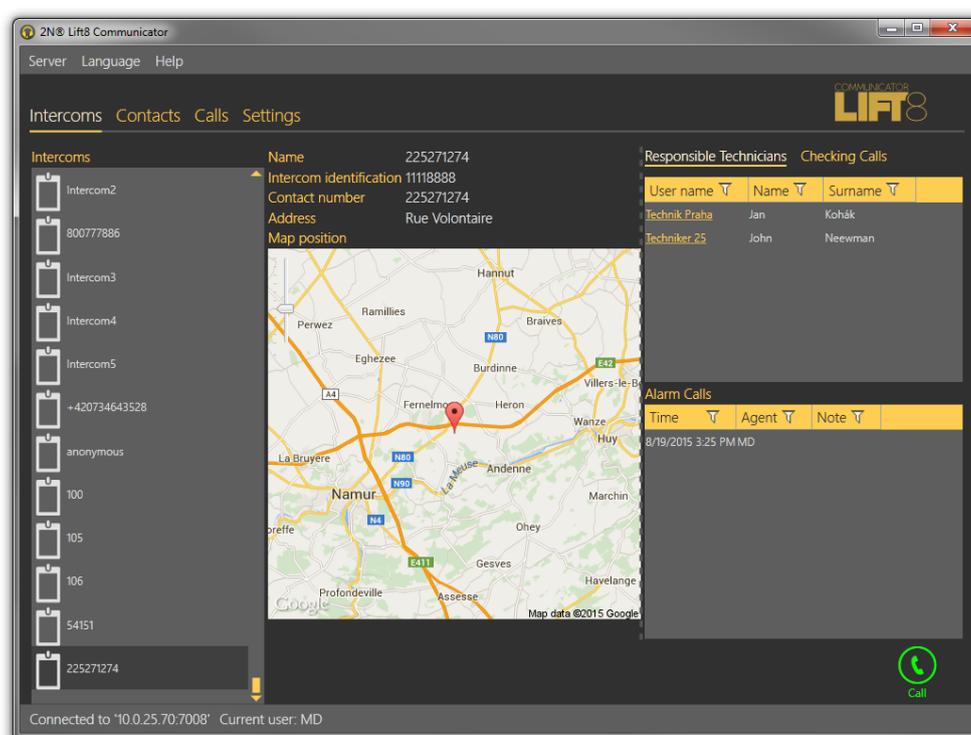
2N$^®$ Lift8 Communicator Window

The main menu contains three pop-up menus. The **Server** menu helps you disconnect from the server or terminate the application. You will always be warned before logout or termination against data loss. The Setting submenu includes a Statistics window: confirm the request to enable transmission of your system data and software use surveys to help the 2N TELEKOMUNIKACE a.s. company improve the software quality, availability and performance within the applicable law. You can participate in this cooperation voluntarily and cancel your prior approval any time. Select the language mutation in the **Language** menu: CZ and EN are available so far. The **Help** menu provides information on the product manufacturer and version.
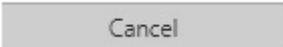
> ℹ **Note**
>
> - The language change will not be executed until the application restart.

The Status line displays connection information. From the left: 'Connected to' includes the name of the server to which you are currently connected and the server listening port behind a colon. 'Current user' displays the currently logged-in user.

Find the calling control buttons in the right-hand bottom corner, which may be different in different menus. The table below describes all the buttons available in the application.

Basic Controls

(→) Connect	**Connect** is used for user login to the selected server.
(☎) Call	**Call** is used for calling the currently selected intercom or user.
(→) Transfer	**Transfer** helps transfer a confirmed call to another system user, responsible technician, for example.
(☎↓) Hang up	**Hang up** helps you terminate an active call or reject an incoming call during ringing.
(💾) Save	**Save** helps you return from the Incoming/Outgoing call window after call hangup and termination and save modified notes.
(☎) Pick up	**Pick up** helps you answer an incoming call.

Cancel	**Cancel** helps terminate data transmission via the P100 and CPC protocols before call connection.
1 2 3 4 5 6 7 8 9 * 0 #	**Keypad** is used for call control via DTMF. When pressed, each button sends the assigned DTMF character into the call. This function helps you confirm calls or program the CU.
Get new image	**Get new image** helps you download a preview from the camera connected to the selected camera module in the lift cabin.
Rotation to left	**Rotation to left** turns the image left by 90°.
Rotation to right	**Rotation to right** turns the image right by 90°.

1.3 Use

The **2N® Lift8 Communicator** application is used by dispatchers and technicians for intercom and **CU** communication. Every user with a login and SIP line created in the **2N® Lift8 Control Panel** may log in to the application. If the user SIP line is not registered, the user will not be able to log in.

> ⚠ **Caution**
>
> - Telephoning is the main function of the application. If the user SIP line cannot be registered, the user will not be able to log in. In that case, ask your system administrator to check the SIP line settings in the **2N® Lift8 Control Panel** or **SIP Proxy,** your LAN settings and your PC firewall if necessary.

> ⓘ **Note**
>
> - Every user may process any incoming call to its line but make outgoing calls only to the intercom/technician numbers included in the database.

Application at Relax

When the user logs in the application is at relax and in the case of an incoming /outgoing call it gets into one of the other two states. You return to this window whenever you terminate the call with the Save button.

Intercoms

The left section of the **Intercoms** menu provides a list of all the intercoms that are assigned for administration to the currently logged-in Dispatcher or Technician by the Administrator. Click on the intercom name to display more information: Name, Intercom identification, Contact number and Address if available. If the address is completed, the intercom Location on map is displayed too. Use the slider in the left-hand upper corner of the map to zoom in/out. Click Call to call any intercom on the list. You will be forwarded to the Outgoing call window.
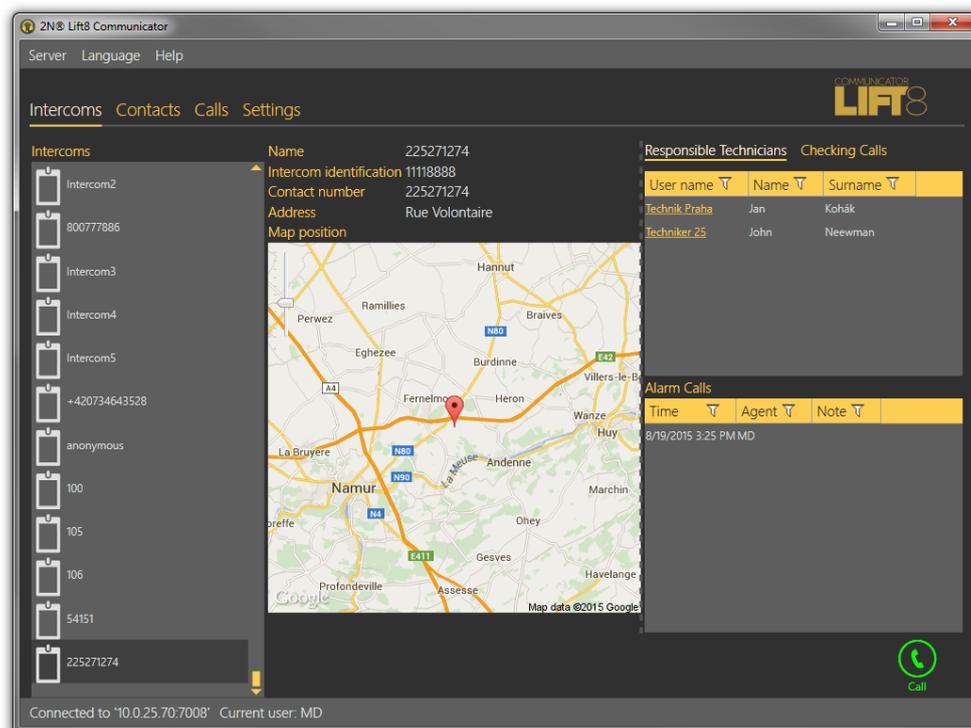
Intercoms Menu

There are three tables to the right. Two of them are directly visible, the third has to be switched on by clicking the Checking call heading. Filtration in columns works in all of the tables; refer to the Calls below. The Responsible technicians table displays the technicians responsible for the intercom administration and helps quickly select and send the appropriate technician.


⊘ **Tip**

- Each technician is displayed as a link for simplification. Click on the link to get to the Contacts menu and call the technician immediately.

⚠ **Caution**

- For the purpose hereof, Technician means the 2N® Lift8 user that is assigned the Technician user role. The other users (Admin, Operator or Own role) are not displayed in this table.

The Alarm calls table displays a list of alarm calls from the given intercom including the call date/time (Timestamp), call-processing Agent and Note added during the alarm call. The Checking call table shows all check calls from the given intercom since intercom addition to the database according to the server archives deletion setting. Each record includes its date/time and result.

Error states detected by the server can be displayed in the middle section depending on the intercom configuration: rescue modes, battery error states, jammed button or audio test failures. If so, the intercom display will be as follows.
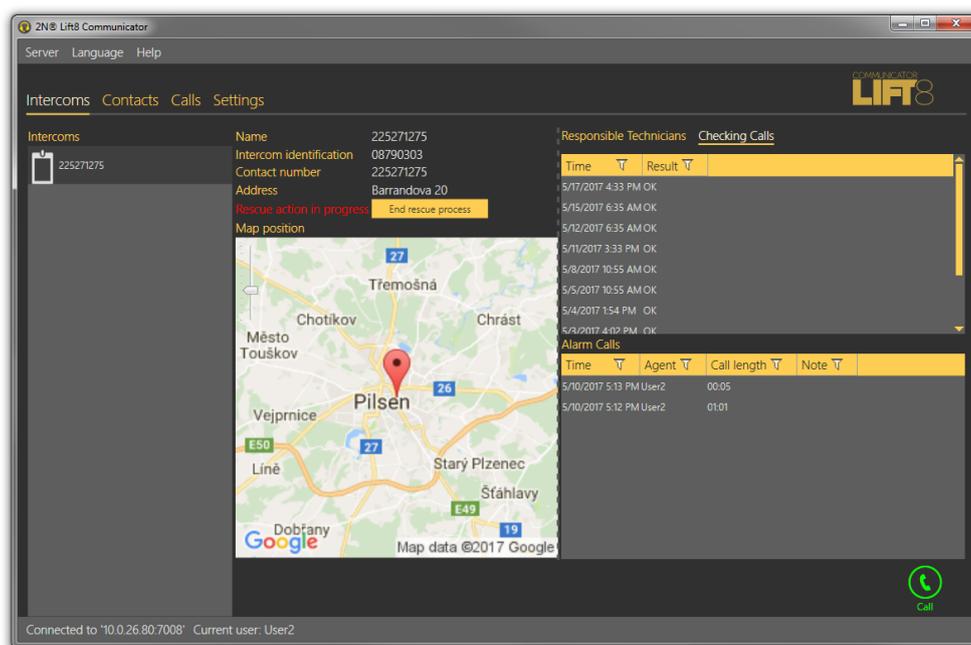
Intercoms Menu – Intercom Error State

Contacts

The left section of the **Contacts** menu displays a list of all users configured in the 2N®

Lift8 system. Click a user to open its card. The following information is displayed in the middle of the window: Username, Firstname, Surname, Contact number and Role, which helps you identify the contact: Dispatcher or Technician. If the user is assigned a contact number, just click Call to set up a call to this user. This opens the Outgoing call window and the call will be made. See below for details on outgoing calls. If the call cannot be set up, you will get a voice message.
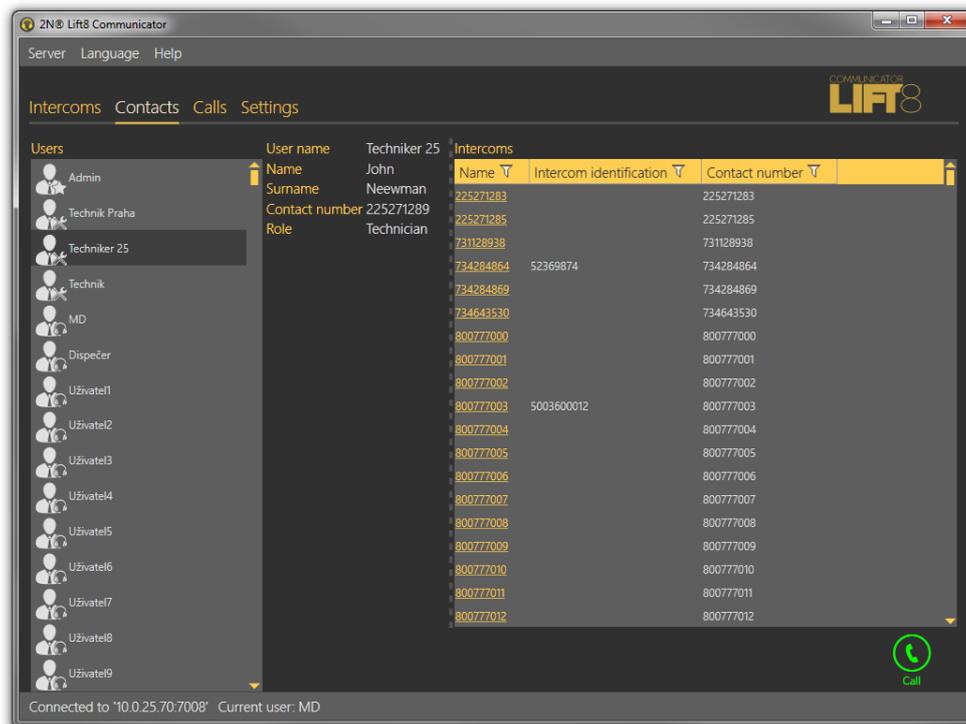
Contacts Menu

There is an Intercoms table to the right. The table displays a list of all intercoms assigned to the given user (Dispatcher/Technician/Admin/Own) and includes Name, Intercom identification and Contact number for each intercom assigned. Use filtration for convenient searching; see below.

> ⊘ **Tip**
>
> - Each intercom is displayed as a link for simplification. Click on the link to get to the Intercoms menu and call the intercom immediately, view the check and alarm call history and locate the intercom if necessary.

Calls

The **Calls** menu provides a table of all alarm, incoming, missed and outgoing calls from all the intercoms and users configured in the 2N® Lift8 system received by the 2N® Lift8 Server from intercom addition until now according to the server archives deletion setting. Click the filter button at each column to use filtration for call history search. See below for details. The first column or icon defines the call state. Let us explain this function using the filtration settings where you can choose the call state to be displayed.
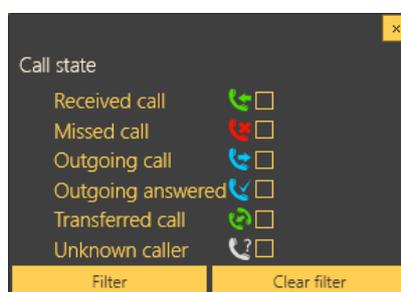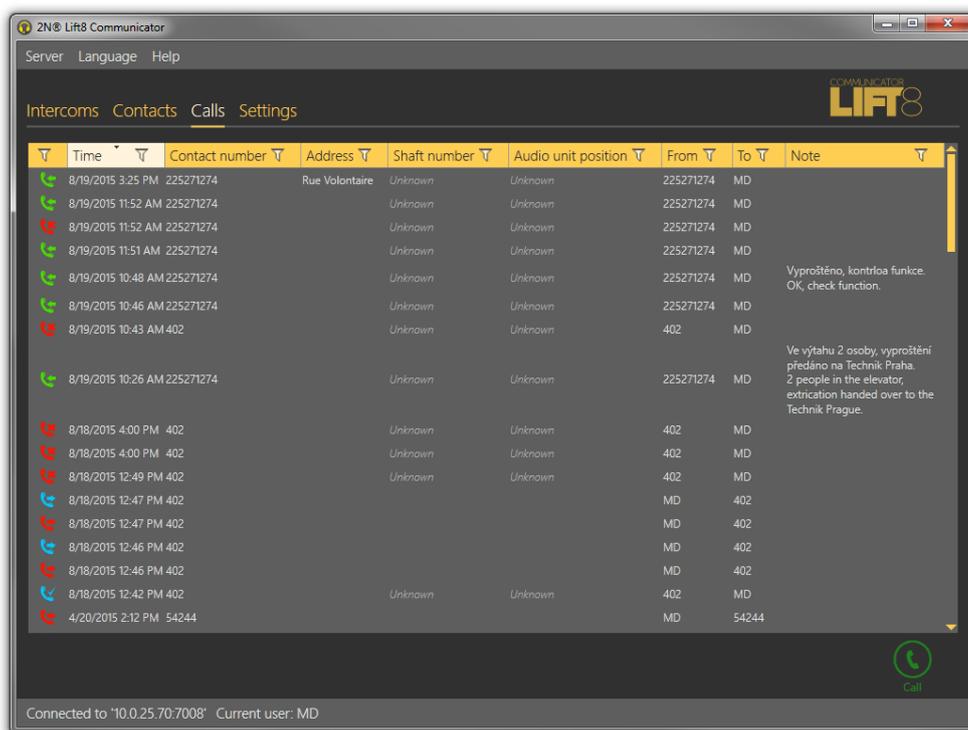

Call State Filtration

From left to right: The first icon symbols a processed incoming alarm call. The second icon indicates a missed call, which occurs whenever the dispatcher fails, for any reasons, to answer an incoming call in time and ringing was terminated. The third icon signals an outgoing call to another dispatcher, technician or intercom from which, however, the last missed call did not come. The fourth icon symbols an outgoing call to upon a missed call, which occurs whenever the dispatcher fails, for any reason, to answer an incoming call in time and ringing is terminated. The dispatcher is notified and calls the intercom (Audio Unit) that initiated the alarm call. Such a call is then considered a correctly processed alarm call. The next icon, Transferred call, is

recorded whenever the dispatcher transfers a confirmed alarm call to another dispatcher or technician. The last icon, Unknown caller, gets displayed whenever the dispatcher is called from a number that is not included in the 2N® Lift8 system: unknown call, telemarketing, automatic call, error call, etc.

Furthermore, the table includes the Timestamp, Contact number, intercom Address, Shaft number, Audio unit position, call-processing Agent/Dispatcher and Note added during the call.

Calls Menu

Click the filter button at each column to use filtration for call search and combine the filters to find the required data quickly. Click the funnel symbol in the selected column to activate the filter. Activation is indicated by a colour change of the funnel symbol; see the figure below.
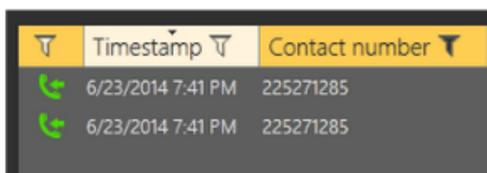

Left – Inactive Filter, Right – Active Filter

Each column with the funnel symbol includes filter settings; see the figure below. The Contains function finds the searched string in all the column items and returns all the occurrences. Enter a text into the string field and click Filter to activate the filter and find all the searched items in the column. Use another filter to make your search more precise and efficient. Having completed filtering, click Delete filter in the used columns to delete all the active filters. If you did not delete the setting, the filtration settings would keep active even upon the CU logout and you would obtain filtration results instead of complete information in your next search.

> ⊘ **Tip**
>
> - You can also delete the configured filters via the context menu under the right mouse button or by clicking "Alt + r".
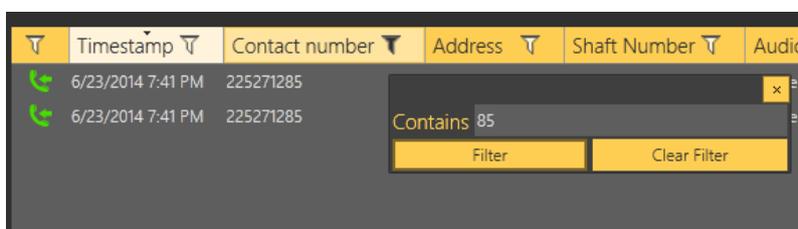

Filtration Setting Result

If the Dispatcher fails to answer or process an incoming call in time, the queued call is terminated but will not get lost. The user is notified as follows: the call is logged as a missed call and the Calls menu changes into Alarm calls in the main menu and the count of missed (non-processed) calls is included in the brackets. See the figure below,
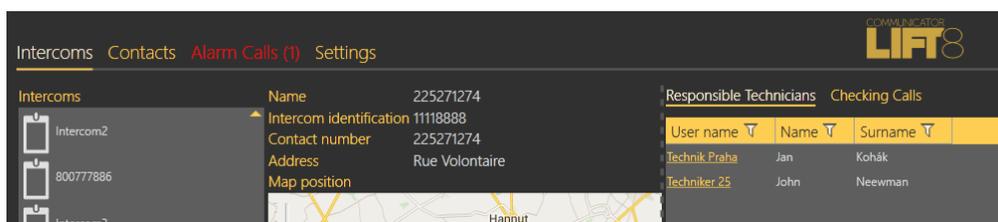
Display of Missed Alarm Calls

Settings

The **Settings** menu helps optimise the intensity of the received/transmitted audio signal. Although your operating system settings should be sufficient for a smooth function of the application, you can make additional microphone and speaker settings here if necessary. Select an input or output device in your PC in a pop-up menu and set the required volume using a slider.
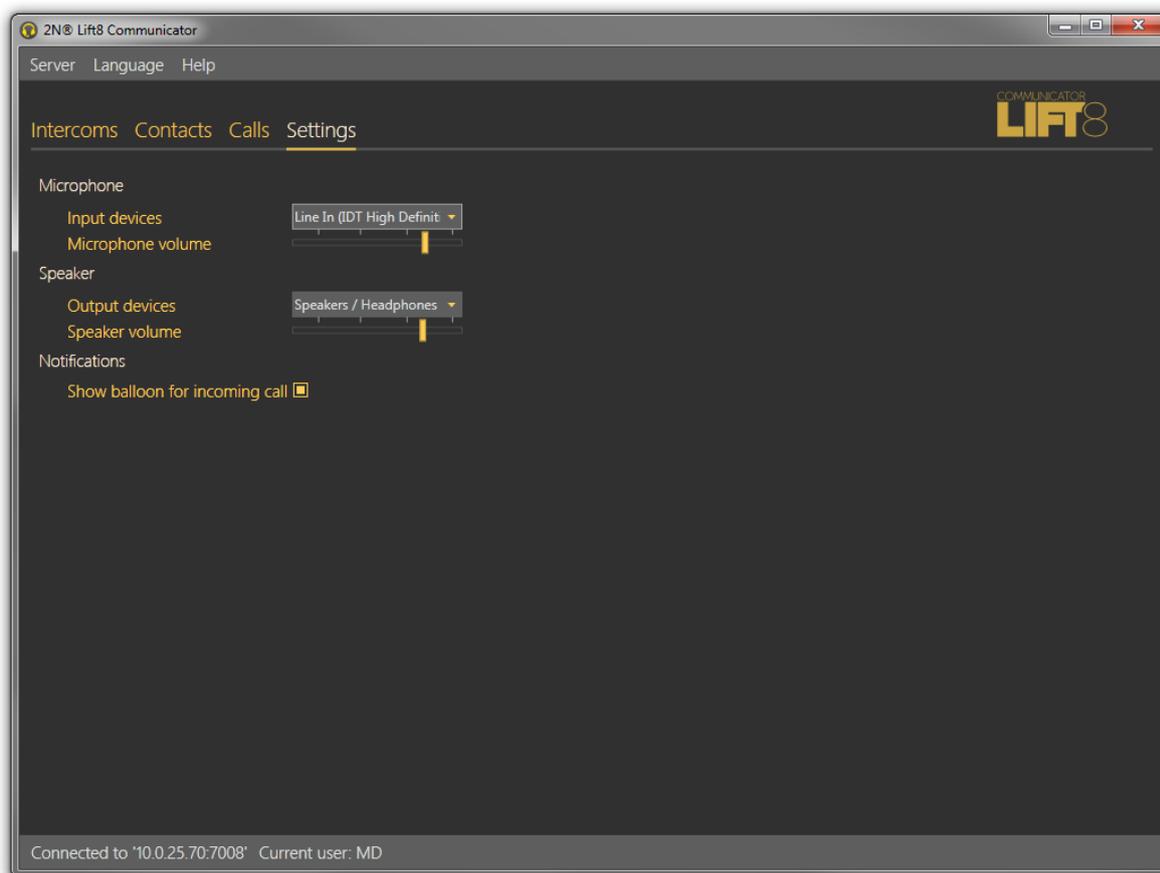

Settings Menu

The checkbox in the Notifications section enables/disables the display of automatic information balloon notifying an incoming call. If you do not want to use the information balloon, disable it here or using a checkbox in the balloon.

Incoming/Outgoing Calls

Every incoming call to a dispatcher/technician number is signalled with an automatic switch to the Incoming calls window and pop-up of an Incoming call window in the

left-hand bottom corner of the screen. This is useful when the 2N® Lift8 Communicator

display is hidden under another application as the Incoming call window is always on

the top. An incoming call from an intercom is also signalled acoustically by a ringing tone in the speakers/headsets. Press Pick up to answer the call or Hang up to reject the call. Use the checkbox to disable the information balloon function.
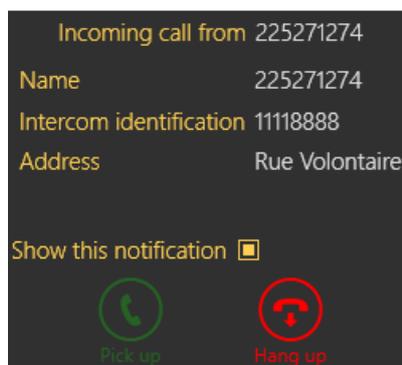
Incoming Call Pop-Up Window

> ⊘ **Tip**
>
> - No matter where you pick up the call (whether in the application or the pop-up window), the system always behaves identically.

The Incoming call window opens (see below) whenever a call is received. If Automatic confirmation is enabled, the respective DTMF character will be sent. If CPC/P100 confirmation is selected, an appropriate communication will take place before the call. Its state and progress will be signalled with a progress bar. When the communication is terminated, the call will be confirmed automatically and the Incoming call window will get displayed. Click Cancel to skip this step. If there is an active camera in the lift and loading images from the camera is enabled for this **CU**, the camera image will be transmitted before the Incoming call windows opens. This step is signalled with a progress bar again. Click Cancel to skip this step.

See the figure below for the Incoming call window. The upper part displays the currently speaking intercom name and phone number and one of the following Application states to the right:

- **Ringing**… – the selected outgoing/incoming call is just ringing.
- **Speaking**… – the call was answered by both the subscribers and is in progress.
- **Call terminated** – the call was terminated correctly.
- **Call rejected** – the outgoing call was rejected by the counterparty.
- **Missed call** – the incoming call was not served. Ringing stopped before the dispatcher answered the call.

The left-hand part of the screen provides information on the given intercom: Name, Intercom identification, Contact number and Address. Use the keypad below these items to control the Speaking call: confirm the call with DTMF or dial the required shaft number. A calling technician can use the keypad for the CU voice menu control. Press a button to send the particular DTMF character into the call. If the intercom address is completed, the intercom location is displayed on the map below the keypad. Use the slider in the left-hand upper corner to zoom in/out. If the lift cabin is equipped with a camera, you can view the cabin image displayed below the map. Click on this miniature to display the Camera window to view more image details and evaluate the cabin situation more precisely. Click the Get new image button to load a new, more recent image. A progress bar signals transmission and the image will get displayed if transmitted successfully. Click the cross to quit the Camera window.

> ⊘ **Tip**
>
> - If the Camera window or image transmission is active, the call will not be terminated automatically as the Duration parameter is ignored. It is because high-resolution image transmissions take a rather long time and the time limit might be too low in this case.
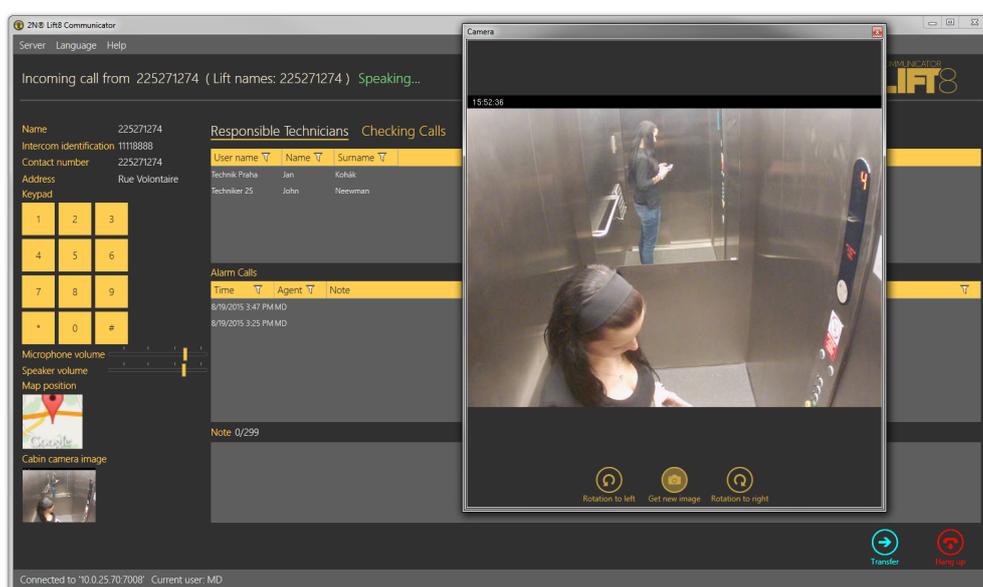
Incoming Calls

There are three tables to the right like in the Intercoms menu. Use the column filters for search; refer to the call describing subsections. The Responsible technicians table displays the technicians responsible for the intercom administration and helps quickly select and send the appropriate technician. The Alarm calls table displays a list of alarm calls from the given intercom including the call date/time (Timestamp), call-

processing Agent and Note added during the alarm call. The Checking calls table shows all check calls from the given intercom since intercom addition to the database according to the server archives deletion setting. Each record includes its date/time and result.

The last item of the screen is Note where a note can be added anytime while the intercom card is displayed in this window, i.e. after ringing, during the call and after the call end. If you press Save, you will lose the editing option and return to the application relax state and the note will be added to the Alarm calls table. The maximum note length is 300 characters. Find the count of used/total characters per note next to the Note heading.

> ⓘ **Note**
>
> - The Outgoing call window provides identical formats and functions as the Incoming call window.

Click Transfer to transfer an active call to one of the Available dispatchers/technicians, i.e. those who are online logged in to the 2N® **Lift8** system; see the figure below.
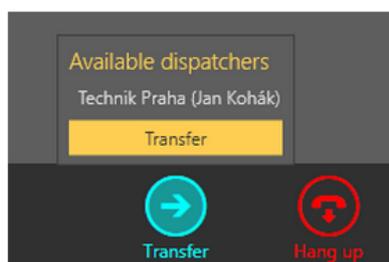
Available Dispatchers

Click on the dispatcher's name to select the dispatcher. Then push the yellow Transfer button to terminate your call and forward it to the selected destination. This type of transfer is called call transfer with hang-up, i.e. your call is terminated, the caller gets the ringing tone again and this call will alert the dispatcher's line selected by you.

2. 2N® Lift8 Server

Here is what you can find in this section:

- 2.1 Installation and Licensing
- 2.2 Use

Refer to the **2N**® **Lift8** product pages at **www.2n.cz**, download section, for the latest FW version.

2.1 Installation and Licensing

The **2N® Lift8 Server** is an application necessary for a correct operation of the **2N® Lift8 Central Unit**, **2N® Lift8 Control Panel** and **2N® Lift8 Communicator.** Its purpose is to mediate communication between these devices and user interfaces.

> ⚠ **Caution**
>
> - Be sure to install the **2N® Lift8 Server** on a PC with Internet connection or in a LAN which includes a SIP Proxy to make check and alarm calls properly. While configuring the system, you can select the RTP ports to be redirected to your LAN via NAT.

> ⊘ **Warning**
>
> - CHANGE OF CHARACTER SET
>
> - If you use the **2N® Lift8 Server,** it is necessary to upgrade the database before passing to version 2.2.0 and higher. It is because the character sets have changed in the server and characters with diacritics would be imported incorrectly without upgrade. Upgrade is performed automatically during installation: the installer evaluates the database state and upgrades it if necessary.
>
> - Remember that it would be impossible to import earlier databases correctly unless upgraded during installation. Their character sets would not match the server sets and diacritic characters would be corrupted without upgrade.
>
> - Be sure to remove an earlier server version from the system before installing the new version 2.2.0 to avoid server installation errors. It is because version 2.2.0 is equipped with improved installers that are able to perform database upgrade in a more efficient way.
>
> - Use the Start/Control panels/Programs/Uninstall program Windows menu to remove the application (this path applies to Windows 7 but can probably be used for other systems too). Select the application to be removed and click the right button to uninstall the program from your PC. Finally, you will be asked whether you really want to delete the existing configuration files. If you click NO, your configuration will be preserved.

Installation

After the application is launched, the installation program will scan your PC for another 2N® Lift8 Server version and ask you whether or not to uninstall the currently available version if any. If you deny, the installation wizard will be terminated. If you agree, the original version will be uninstalled. Then you will be asked whether the configuration files should be removed too. If you select no, the existing configuration will be retained and the application will only be updated. Now the 2N® Lift8 Server Setup Wizard has been launched. Follow the wizard instructions. Select the 2N® Lift8 Server installation location: **C:\Program Files (x86)\2N TELEKOMUNIKACE\2N Lift8\Server** is used by default.

The default port for communication with other applications is 7008 and can be changed if necessary. Make sure that the port is accessible from the LAN (see the Note above) and correctly set in all the applications. Now the wizard is ready to install your 2N® Lift8 Server. It displays an overview of the settings. Check them carefully as you will not be able to modify them after installation unless you re-install the application! If you detect an error, press Back to return to the error window. If all the parameters are OK, click Install to install the 2N® Lift8 Server. The 2N® Lift8 Server service will be launched automatically after installation. If, for any reason, the automatic launch failed, start the service manually. Now your 2N® Lift8 Server is ready for use.

Command	Description
/VERYSILENT	Installation runs on the background, no installer is available to the user.
/DIR="C:\..."	Set the installation location.
/LOG=file_name.txt	Create an installation course log (to be displayed in the installer directory).

⚠️ **Caution**

- Make sure that the command line is run by the administrator. If run by a user, the issuer authentication window pops up.

- If an earlier server version is installed, the uninstallation window pops up even if the installation is VERYSILENT.

ⓘ **Note**

- The **2N® Lift8 Server** installation requires **250 MB** of free disk space at least.

- Further **2N® Lift8 Server** setting modifications can be done via the **2N® Lift8 Control Panel**.

> ⓘ **Note**
>
> - Recommended hardware requirements
>
> | OS | Microsoft Windows 10, Microsoft Windows 8 / 8.1 CZ, Microsoft Windows 7 SP1 CZ, Microsoft Windows Vista SP2 CZ,

 Microsoft Windows Server 2012 (R2) Standard, Microsoft Windows Server 2008 R2 SP1 Standard, Microsoft Windows Server 2016 Standard Evaluation |
> | --- | --- |
> | CPU | Equivalent Intel Quad Core i7 3,4 GHz |
> | RAM | 16 GB |
> | HDD | 500 GB |
> | LAN | Gigabit Ethernet (**GLAN**) |
> | Other | - **Dedicated Sound card** (Very important!)
- Dedicated Graphics card |

> ⓘ **Warning**
>
> - If a problem with non-compatible version of .NET occurs during installation, you should download new version of .NETFX4.0 from www. 2n.cz . From online manual you can use this link .
> - Minimum operating system requirements: **Windows Vista**, **Windows 7**, **Windows 8**

# Licensing

All the 2N® Lift8 Server functions are subject to licence. Upon your first PC installation of the application, you will get a trial licence for 800-hour operation and 50-user and 50-lift (CU) connection.

> ⚠️ **Caution**
>
> - Every 2N® Lift8 Server restart increments the hour counter by 1.

The 2N® Lift8 Licence Tool is installed together with the server. Having launched the application, you can see the installed server version, ID and status and other server service data as well as the currently installed licence and the count of exhausted licence hours. See the figure below.
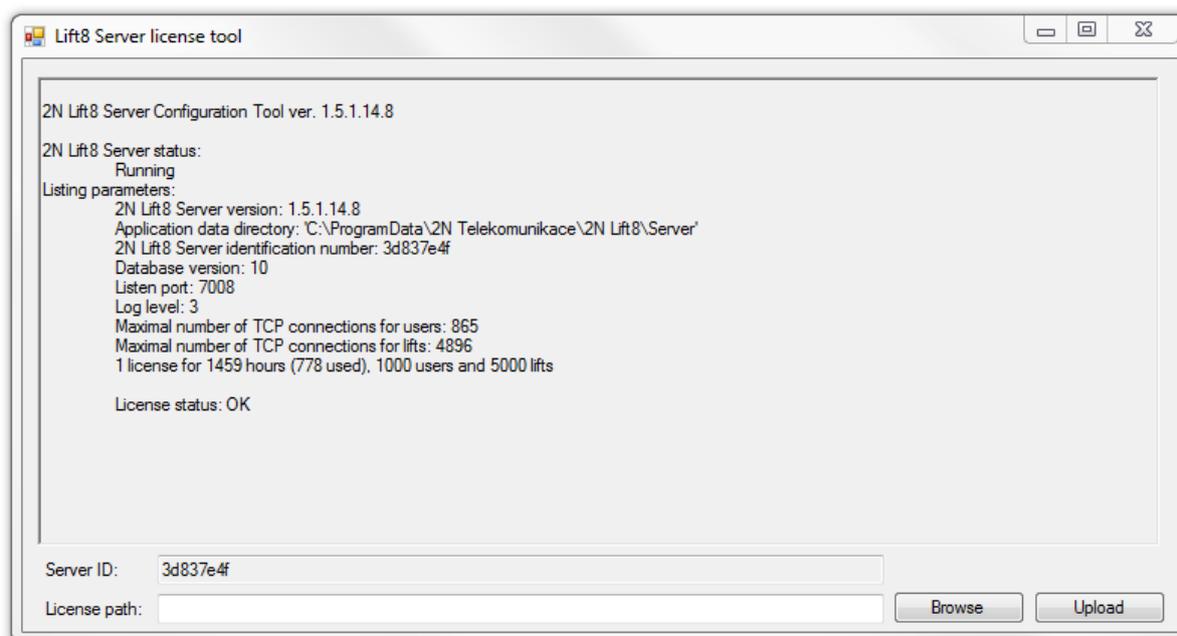
2N® Lift8 Licence Tool

A unique server ID is generated during installation and displayed in the Server ID parameter. The identifier is selected upon launch and you just copy it to use it. Send this code together with your licence requirements to sales@2n.cz to get an extended licence.

Having received the licence file, start the 2N® **Lift8 Licence Tool** and enter the path to this file into the Licence path parameter. Click Upload to add the licence to the server directory and restart the server to update the licence data. The licence status will change into OK. The last row, Listing parameters, will display such licensed server parameters as the count of users or terminals. Now set the licensed values for use via the MaxLifts and MaxUsers parameters in the l8-config program. Refer to the next subsection for details.

> ⚠ **Caution**
>
> - Set the MaxLifts and MaxUser TCP connections manually to make a licence with a higher count of these connection work properly.

> ⓘ **Warning**
>
> - Make sure while using the application that the server ID has not changed. This identifier is also generated from the MAC address of the primary network car d. If you install or launch the VPN software or the primary network card changes, the server ID will change. As a result, the existing licence will become invalid and you will not be able to log in to the server!

2.2 Use

The **2N® Lift8 Server** application updates a lift database where all the lift check and alarm calls are recorded. The database also includes a list of authorised users, which, depending on their user roles, can connect to the server, change configuration settings and/or process incoming alarm calls via the **2N® Lift8 Control Panel** and **2N® Lift8 Communicator**.

The **2N® Lift8 Server** integrates a SIP station which can be assigned up to 8 independent accounts and process up to 32 parallel calls. A proprietary protocol communicating on TCP/UDP port 7008 is used for the server – application communication. Port 7008 is set by default during installation and can be changed.

The **2N® Lift8 Server** also includes a storage manager, which helps you map a storage of any size for building plans and firmware for central unit upgrades. The application also keeps a database of and evaluates check calls. The lift that fails to meet the set limits will be marked in the database. Refer to Section 7, **2N® Lift8 Control Panel**, for setting details.

> ⚠ **Caution**
>
> - **Important!** A default user with administrator login is created during the **2N® Lift8 Server** installation to get connected to the server and configure the other users. The default user uses the following login data:
> - Name: Admin
> - Password: 2n

> ⚠ **Caution**
>
> - The default listening port of the server is **7008**.

The terminal application l8-config.exe is used for server administration and launched in the command row that controls the **2N® Lift8 Server**. Use this program to set all the server parameters, stop/start the server and export/import the server database.
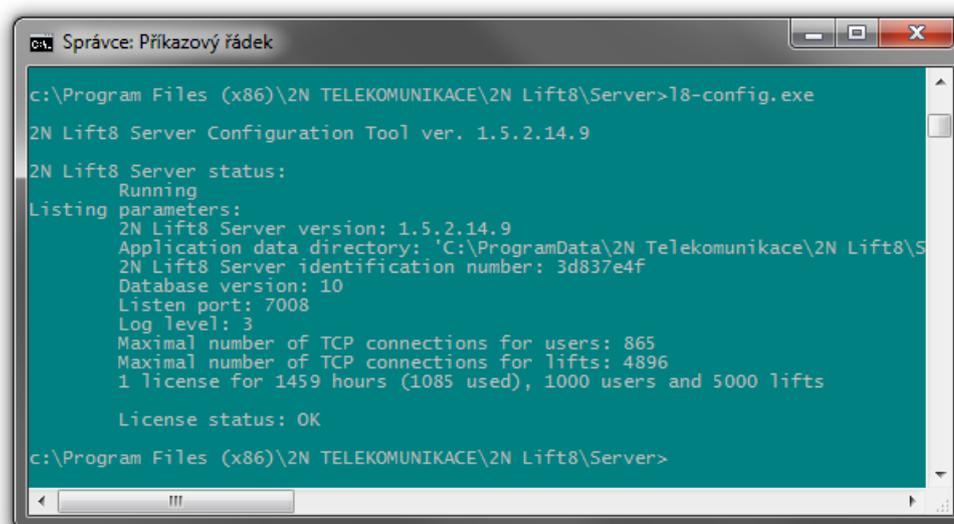
> **⚠ Caution**
>
> - Database export/import can only be executed securely using this program.
> - Copying of database files 'config.db' between the servers is not recommended as data may get lost during this operation.

> **⊘ Tip**
>
> - The application is launched in the command row. The common path to the program in all WINDOWS XP, Vista and 7 versions is as follows:
> - c:\Program Files\2N TELEKOMUNIKACE\2N Lift8\Server\l8-config.exe

If l8-config.exe is launched without any parameter, the program will write out all available information on the server as follows:

l8-config.exe

Database Export/Import

You can export the database under normal operational conditions. When the program is launched, a copy of the current database is made for the exporting purpose to avoid database overwriting and modifications during export. Start the l8-config program with the –cExportDatabase parameter with the following command to execute export:

```
C:\Program Files\2N TELEKOMUNIKACE\2N Lift8\Server\l8-config.exe –
cExportDatabase
```

The program creates a new file, db-20120221095921–export.xml, for example. The number in the filename specifies the current export date and time in the YYYYMMDDhhmmss format.

Being saved into a user data folder, the database may be different in different systems.

> ⓘ **Note**
>
> - Typical location for WINDOWS XP: **C:\Documents and Settings\All Users\Application data\2NTELEKOMUNIKACE\2N Lift8\Server\db-20120221095921–export.xml**.
>
> - Typical location for WINDOWS Vista and 7: **C:\ProgramData\ 2NTELEKOMUNIKACE\ 2N Lift8\Server\db-20130221095921–export.xml**.

Database import may only be executed when the server is stopped. If the server is running, the program identifies any importing attempt as an error. Enter the following command to stop the server:

```
C:\Program Files\2N   TELEKOMUNIKACE\ 2N Lift8\Server\l8-config.exe –
cStopServer
```

Then enter the –cImportDatabase parameter and the file path to import the database:

```
C:\Program Files\2N TELEKOMUNIKACE\ 2N Lift8\Server\l8-config.exe –
cImportDatabase "C:\ProgramData\2N TELEKOMUNIKACE\ 2N Lift8\Server\db-
20130221095921–export.xml"
```

Now all the database tables start being exported sequentially. Every successful table import is confirmed.

> ⚠️ **Caution**
>
> - The path to the exported database file must always be given in inverted commas. If no path is found, the current database will be deleted and replaced with a new, empty one.

> ⓘ **Note**
>
> - If the database includes a high number of users and terminals, the table import will take a few minutes.

Restart the server after every successful database import using the following command:

```
C:\Program Files\2N  TELEKOMUNIKACE\ 2N Lift8\Server\l8-config.exe -
cStartServer
```

Setting Options

The l8-config program provides numerous server settings; see the long list below.

> ⊘ **Tip**
>
> - The parameters are set as program parameters: program name<space>program parameter.

General Commands

```
-l
```

- writes out all the parameters.

```
--help or -h
```

- displays Help.

```
--version or -V
```

- writes out the program version.

```
-d <data directory>
```

- sets the server data directory.

Parameter Get Commands

```
-gListenPort
```

- writes out the server listening port.

```
-gLicensesNumber
```

- gets the number of installed licences

```
-gProductStatisticsEnable
```

- displays the server statistics sending option: 1 = enabled, 0 = disabled.

Parameter Set Commands

```
-sListenPort <listen_port>
```

- sets the server listening port.

```
-sProductStatisticsEnable
```

- sets the server statistics sending: 1 = enabled, 0 = disabled.

```
-sLogLevel <log_level>
```

- sets the server logging level (1–5).

```
-sMaxUser <max_user_tcp_conn>
```

- sets the maximum count of users to be connected to the server at the same time. The maximum count is based on the licence.

```
-sMaxLift <max_lift_tcp_conn>
```

- sets the maximum count of lifts to be connected to the server at the same time. The maximum count is based on the licence.

```
-sResetAdmin
```

- resets the Admin password to default '2n'.

Server Commands

```
-cStartServer
```

- starts the l8 server.

```
-cStopServer
```

- stops the l8 server.

```
-cRestartServer
```

- restarts the l8 server.

```
-cExportDatabase
```

- exports the database to an XML file.

```
-cImportDatabase <XML_file>
```

- imports the database from an XML file. Make sure that the server has been stopped to avoid operation failure.

3. 2N® Lift8 Control Panel

2N® **Lift8 Control Panel** is an application is used for easy intercom administration and, thanks to the administrator approach, user and user group administration. Users can be assigned access rights to new intercom settings and administration. The application displays the check and alarm call databases and helps you set the SIP lines to process the intercom check calls and create storages for building plans and central unit firmware.

Here is what you can find in this section:

- 3.1 Installation and Login
- 3.2 Introduction to Application
- 3.3 Use

Refer to the **2N** ® **Lift8** product pages at **www.2n.cz**, download section, for the latest FW version.

3.1 Installation and Login

After the application is launched, the installation program will scan your PC for another 2N® Lift8 Control Panel version and ask you to uninstall the currently available version if identical with the new one. Use the system Control Panel Add or Remove programs to uninstall the existing product version for reinstallation or reconfiguration. If the versions are not identical, the original version will be uninstalled and a new application version will be installed. Then you will also be asked whether the configuration files should be removed or the whole application with a new, empty database should be installed.

Now the 2N® Lift8 Control Panel Setup Wizard has been launched. Follow the wizard instructions. Then select the installation location for the 2N® Lift8 Control Panel. C:\Program Files (x86)\2N TELEKOMUNIKACE\2N Lift8\ is used by default. Now the application will ask you to enable transmission of system data and software use surveys to help the 2N TELEKOMUNIKACE a.s. company improve the software quality, availability and performance. No confidential data shall be sent. You can participate in this effort voluntarily and cancel sending statistic data any time. Confirm or decline this cooperation and click Next to continue.

Select whether the application should be installed for the currently logged-in user or all the PC users. The wizard is ready to install the 2N® Lift8 Control Panel. Confirm user account administration notification to the Windows system if necessary. Another Start item and the application shortcut icon will be added automatically. Once installed, the application will start automatically.

Alternatively, use the command line for installation: select the installer file and define the manner and location parameters. See below for command explanation.

Command	Description
/VERYSILENT	Installation runs on the background, no installer is open to the user.
/DIR="C:\..."	Set the installation location.
/LOG=file_name.txt	Create an installation course log to be displayed in the installer directory.

```
C:\Windows\system32\cmd.exe

C:\2n\2.3.0.28.7\PC_apps\ControlPanel>"2N Lift8 ControlPanel Setup.exe" /VERYSILENT /DIR=
C:\2n\2.3.0.28.7\PC_apps\ControlPanel>
```

Application Installation Command

> ⚠️ **Caution**
>
> - Make sure that the command line is started by admin. If it is started by a user, the editor authenticating window will pop up.

> 🛑 **Warning**
>
> - There is an installer change in version 2.2.0. The installer is unable to remove the original application versions (up to 2.1.x) correctly and an installation error may occur. To avoid this, remove the original applications manually if you use versions lower than 2.2.0.
> - Use the Start/Control panels/Programs/Uninstall program Windows menu to remove the application (this path applies to Windows 7 but can probably be used for other systems too). Select the application to be removed and click the right button to uninstall the program from your PC. Finally, you will be asked whether you really want to delete the existing configuration files. If you click NO, your configuration will be preserved.

> ⓘ **Note**
>
> - The **2N® Lift8 Control Panel** installation requires **650 MB** of free disk space at least.

Now the **2N® Lift8 Control Panel** is ready for use. Click on the shortcut item on the desktop (see the figure below) or select the Start item to start the application.

2N® Lift8 Control Panel Icon

After the application is launched, a splashscreen gets displayed informing you of the application manufacturer and current version. Start it to display the basic login screen and Log in to server menu. The last used connection is displayed for quick access. Select the Show advanced settings checkbox to display the list of all available connections to the **2N® Lift8 Servers** in a clear tree structure to the left. If you have installed the application for the first time, the default connection will be created automatically. This connection cannot be removed. If you use one and the same PC for your **2N® Lift8 Control Panel** and server, you can make use of these pre-settings and click the Connect icon. The **2N® Lift8 Control Panel** will log in to the local server. You need not use the pre-set values but can create a connection of your own using the New server and New group buttons. Create a tree structure of your own and save the settings by login to the server. Select a connection and push Delete selected to remove a connection. It is easy to set the connection: all you have to do is enter the connection name and insert the local loop address 127.0.0.1 or the localhost text (only if the server is running locally) in the server address. Enter the IP address of the LAN or public network server to get connected to another server. Use the DNS server if available. Enter the listening port selected during the **2N® Lift8 Server** installation into the Port parameter. The default port value is 7008. Contact your LAN administrator to verify the settings. Refer to the figure below for possible settings.
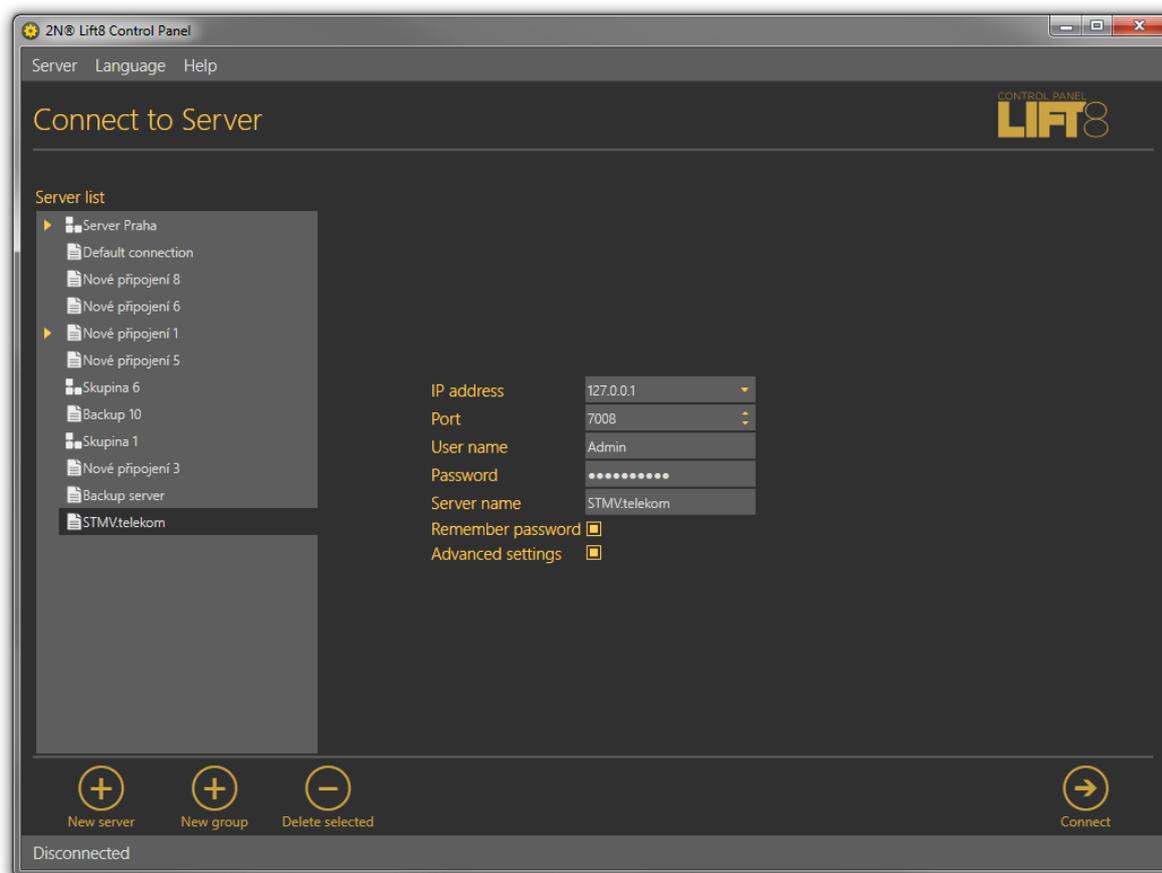
Server Connection Screen

Now select the server connection and press Connect or double-click the selected server with the left button. The application will execute login to the 2N® Lift8 Server.

> ⊘ **Tip**
>
> • Server login may take some time if you have an extensive database as the application has to download all the current tables. Be patient please and wait for completion.

> ℹ️ **Note**
>
> - Recommended hardware requirements
>
> | OS | Microsoft Windows 10,
 Microsoft Windows 8 / 8.1 CZ, Microsoft Windows 7 SP1 CZ, Microsoft Windows Vista SP2 CZ |
> |---|---|
> | CPU | Equivalent Intel Quad Core i7 3.4 GHz |
> | RAM | 16 GB |
> | HDD | 500 GB |
> | LAN | Gigabit Ethernet (**GLAN**) |
> | Other | **Dedicated Sound card** (Very important!) Dedicated Graphics card |

> ⚠️ **Caution**
>
> - **Important!** A default user with administrator login is created during the 2N® **Lift8 Server** installation to get connected to the server and configure the other users. The default user uses the following login data:
> - Name: Admin
> - Password: 2n
> - Port: 7008

> ⚠ **Warning**
>
> - If a problem with non-compatible version of .NET occurs during installation, you should download new version of .NETFX4.0 from **www. 2n.cz** . You can use this link from the online manual.
>
> - Minimum operating system requirements: **Windows Vista**, **Windows 7**, **Windows 8**

3.2 Introduction to Application

In this subsection, we will show you the application menu layout and basic controls. The application is divided into three menu levels. The first screen upon start includes Configuration / Intercoms; see the figure below, which displays the first menu levels.

The horizontal Main menu helps you select whether to configure the 2N® Lift8 system or supervise the history of check and alarm calls. The vertical menus help you select the area to be administered. The third menu level, if meaningful, gets displayed horizontally behind the intercom/user list in the right-hand upper corner and includes a list of user/intercom card forms that have to be completed or display a list of calls for the given intercom.
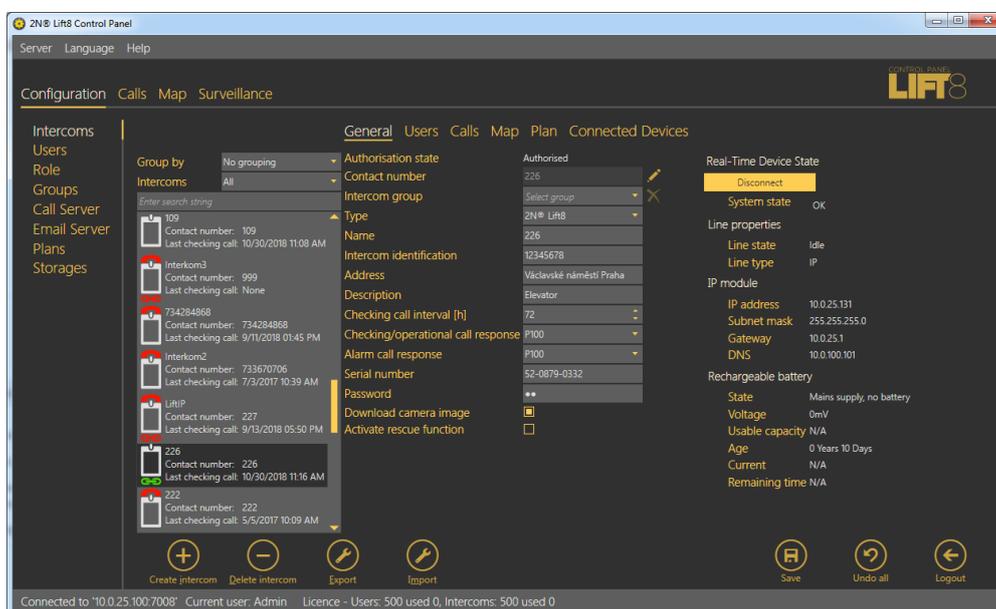
2N® Lift8 Control Panel Window

The main menu contains three pop-up menus. The **Server** menu helps you disconnect from the server or terminate the application. You will always be warned before logout or termination against data loss. The Setting submenu includes a Statistics window: confirm the request to enable transmission of your system data and software use surveys to help the 2N TELEKOMUNIKACE a.s. company improve the software quality, availability and performance within the applicable law. You can participate in this cooperation voluntarily and cancel your prior approval any time. Select the language mutation in the **Language** menu: CZ and EN are available so far. The **Help** menu provides information on the product manufacturer and version.

> **ⓘ Note**
>
> - The language change will not be executed until the application restart.

The Status line displays connection information. From the left: 'Connected to' includes the name of the server to which you are currently connected, 'IP' specifies the IP address of the server to which you are currently connected and the server listening port, and 'Current user' displays the currently logged in user. In case you are logged in as Administrator, licence information is also displayed on users and intercoms: the maximum count of server-licensed objects and their current use. See the figure above. Find the Logout button in the right-hand bottom corner and various important control buttons in the lower part of the application. The table below describes all the buttons available in the application.

Basic Controls

(+) New server	**New server** helps you create a new connection in the login screen.
(+) New group	**New group** helps you create a new server connection group in the login screen.
(−) Delete selected	**Delete selected** deletes the currently selected objects from the list in the login screen.
(→) Connect	**Connect** is used for user login to the selected server.
(←) Logout	**Logout** is used for user logout.
💾 Save	**Save** is a common button for saving new objects into the database. The button has three states: inactive – all changes are saved, flashing – changes have been made in the database and should be saved, and red – changes cannot be saved as the validator disapproved some of the parameters (marked with a distinct red frame).
↺ Undo all	**Undo** helps undo all changes made since the last saving.

⊕ Create Intercom	**Create Intercom** helps you add an intercom card to the database by adding a central unit.
⊖ Delete	**Remove** helps you remove objects from configuration.
⊕ Create Role	**Create role** adds a user role to the server configuration.
⊕ Create User	**Create user card** adds a user in the Configuration/Users menu.
⊕ Create group	**Create group** helps you create a new group of users/intercoms depending on which menu view is currently switched on.
⊕ Add plan	**Add plan** helps you add a building plan to the selected storage.
⊖ Remove plan	**Remove plan** helps you remove the selected plan.
⇄ Change plan	**Change plan** updates the plan stored by storing a new map under the same name.

Download plan	**Download plan** helps you save the selected plan to a local disk.
Export	**Export** helps you export the table in the currently displayed menu.
Import	**Import** helps you import the intercom or user table.
Pin view	**Pin view** is accessible in the Calls menu only and helps you 'tear' a screen away from the application and display it on another monitor, for example.
Load calls from archive	**Load calls from archive** helps you display all the server database calls. Both the current records and records moved to the archive are displayed.
Refresh intercoms	**Refresh intercoms** is available in the Map menu. Use this button to refresh the list of intercoms and their states.
Filter reset	**Filter reset** is available in the Map menu. Use the button to reset the filters to the default values.
Start surveillance	**Start surveillance** is used for switching on/activation and online status reading of data tunnels to the intercoms.

End surveillance	**End surveillance** is used for deactivation and ending of status reading of data tunnels to the intercoms.
Zoom in	**Zoom in** helps you magnify the scheme to be displayed.
Zoom out	**Zoom out** helps you shrink the scheme to be displayed.

3.3 Use

Configuration

Upon login, you get to the **Configuration** main menu where you can find almost all the 2N$^®$ Lift8 settings. The user may access the menus allowed by its role. The Administrator can administer the whole system without limitations: divide users into groups, assign the user roles, assign the users intercoms to be configured and monitored, set the Call server for intercom check calls and configure the storages for buildings plans. The **Surveillance** menu provides a view of all the configured lifts on the world map including their current states. Now let us explain what the menus are used for.

Intercoms

The **Intercoms** menu includes a database of the intercoms defined on the server. The intercom list to the left includes all the available intercoms. Click Group by to arrange the intercoms according to the contact number, database ID or type of authorisation (Authorised, Unauthorised and Unknown). Or, you can arrange the intercoms according to their functions. Click Intercoms to display either all the intercoms or just functional/non-functional intercoms. You can use the search function to find the required intercom: enter the intercom name (or a sequence of characters) into the search row. The function requires no confirmation and starts searching the database the moment you enter the first character. Add more characters to refine the filter until you find the required intercom.
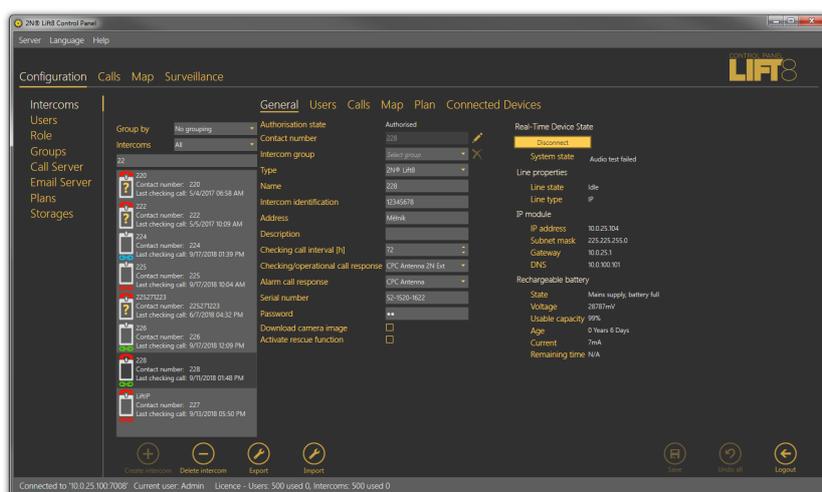
Intercoms Menu

The list in the figure above includes some information on the intercom. The icon at each intercom indicates the lift cabin and can have several functions and meanings, which can be combined (see the table below).

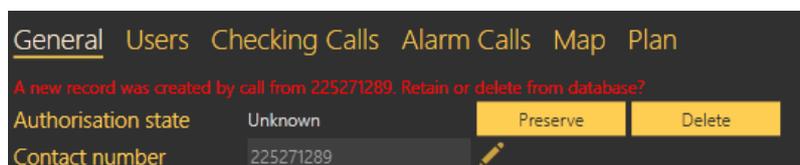|	
	A red handset above the icon indicates that the intercom failed to make a check call within the timeout and is thus marked as non-functional. When the intercom makes a correct check call, this state will disappear.
	A yellow handset above the icon signals that the intercom made a check call within the timeout but the first call was not accepted OK. This happens when the first call was terminated for some reason, but the following calls were OK. When the intercom makes correct check calls within the check call timeout, this state will disappear.
	A yellow question mark signals an intercom that was created by a check call but has not been confirmed by Administrator yet as a real intercom. Refer to the Intercom Creation subsection below for details.
	This symbols a functional intercom: 2N$^®$ SingleTalk, 2N$^®$ LiftNet, 2N$^®$ Helios or Unknown, probably supplied by another manufacturer and able to communicate with the 2N$^®$ Lift8 Server via CPC / P100.
	A functional 2N$^®$ Lift8 intercom. The red chain below the icon indicates the Disconnected state between the 2N$^®$ Server and the Central Unit.
	A functional 2N$^®$ Lift8 intercom. The blue chain below the icon indicates the Connection established state between the 2N$^®$ Server and the Central Unit.
	A functional 2N$^®$ Lift8 intercom. The green chain below the icon indicates the File transmission state between the 2N$^®$ Server and the Central Unit.

> **⊘ Tip**
>
> - The **2N® Lift8 Server** is able to work with the third party equipment via the standard communication protocols (CPC and P100) instead of proprietary protocols. Set the type to Unknown to communicate with such equipment.

Intercom Creation

Add an intercom to the database as follows:

The first way is to install a **CU** and configure it to call the number that the server uses for check calls. When the **CU** makes the first check call to the server, a new intercom card is created and basic information on the intercom is included: the telephone number used for the check call is filled in as the Name. The so-created intercom is marked as unauthorised to eliminate unintentional calls (telemarketing, e.g.). To authorise this intercom, use the Basic tab for this intercom in the **2N® Control Panel**, which informs you that a new record has been created by a call from number x and asks you whether you want to keep it in the database or delete it. Press Preserve to add the intercom to the database or Remove to delete the intercom from the database if unintentional (telemarketing, error).

General Users Checking Calls Alarm Calls Map Plan
A new record was created by call from 225271289. Retain or delete from database?
Authorisation state   Unknown | Preserve | | Delete |
Contact number   225271289   ✎

Authorisation of Intercom Created by Check Call

Complete more intercom card parameters for authorisation. See below for details (Intercoms).

> ⓘ **Note**
>
> - If the device that is making the check call for the first time supports the CPC or P100 protocol, you have to set this parameter manually. Calls from a number that is not included in the database are always served by the server by sending DTMF 5 and hang-up. If you want to use the above-mentioned protocols for check and alarm calls, set them manually.

The other intercom adding method is to create an intercom card in the database. Click on Create intercom card to open a window in which you can set the contact number for intercoms with one and the same phone number. Click on the combo box to add another intercom to a contact number included in the database.

> ⓘ **Note**
>
> - Multiple intercom functionality under one contact number is important where intercoms are connected to a gateway or PBX which identifies itself as a single external number.
> - If you assign multiple intercoms to one number, the evaluation logic will change depending on the check call response type:
>   - With confirmation 1 and 5, Receive and send 5 – the incoming check calls are counted. The system waits until the preset count of intercoms have called and then designates the whole set of intercoms under the given number as functional. If, however, one of the intercoms fails to call within the timeout, all the intercoms will be regarded as non-functional.
>   - CPC, P100 – identification must be set for each intercom under the given number. Each call is evaluated separately. If the number and Id match, the intercom is marked as functional.

> ⚠️ **Caution**
>
> - If the CPC or P100 protocol is set to multiple intercoms with one and the same number, complete the correct identification for each intercom. If the Id is wrong, the system will not evaluate the check calls correctly.

Confirm the number dialling to get into the General menu. Complete and save all necessary data as described in the Intercoms subsection below. As this intercom has not made a check call yet, it will be considered non-functional. Install it and make the first check call to make the intercom ready for use.

> ⚠ **Caution**
>
> - The intercom that fails to make a check call within the timeout will be marked as non-functional and remain so until the next correct check call. A non-functional intercom is visible to the technician for check.

> ⊘ **Tip**
>
> - **Name** and **Telephone number** are mandatory parameters for a new intercom. Complete these values to validate and save the intercom card. No more parameters are necessary for the function. **However, you are strongly advised to complete the whole intercom card correctly** to facilitate intercom search and dispatchers' and rescuers' work.

Each created intercom is added to the end of the table. Select an intercom for editing and configuration. You can use multiselect to change (delete, export) parameters for a higher number of intercoms: either hold Ctrl to select the objects or hold Shift to select the first and last objects thus selecting all the objects between them. All the changes or exports made over the selected intercoms will apply to all of them.

Intercoms

Select an intercom to open an extensive menu level with intercom identification forms, check call evaluations, maps and local plans of the building where the intercom is installed. Let us describe each of the forms.

General

The **General** form helps you configure general parameters for an intercom. The first row defines the Authorisation state of the selected intercom. All the intercoms added manually to the database or created automatically and confirmed as real intercoms are authorised. Contact number provides the **CU** identification. **2N$^®$ Lift8** makes check calls from this number and **2N$^®$ Lift8 Server** makes active check calls to this number: enter either a SIM card in the **CU**, number of the PSTN line to the intercom or number of the PBX/gateway behind which the intercom is located. Intercom group specifies the group to which the intercom is assigned. Select an item from the list to change the group. Press the cross symbol to remove an intercom from all the groups.

Type defines the type of device: **2N® LiftNet**, **2N® SingleTalk**, **2N® Lift8**, **2N® Lift1**, **2N® LiftIP** or **Unknown**. Refer to the Intercom Creation subsection above for details. Name defines the intercom name. Set a name equal to the contact number for an automatically created intercom. Intercom identification is primarily used by the CPC a P100 protocols for counterparty authorisation. As identification is not set automatically during creation, complete the value to make the two protocols work properly. In the case of check call rejection/confirmation with a DTMF character, this parameter is not checked off. Enter the address of the building in which the intercom is located into the Address field to display this information on the map used by Technician for repairs or Dispatcher for rescue team navigation. Fill in brief information on the intercom to be installed in the Description item: location, purpose, specific settings and so on.
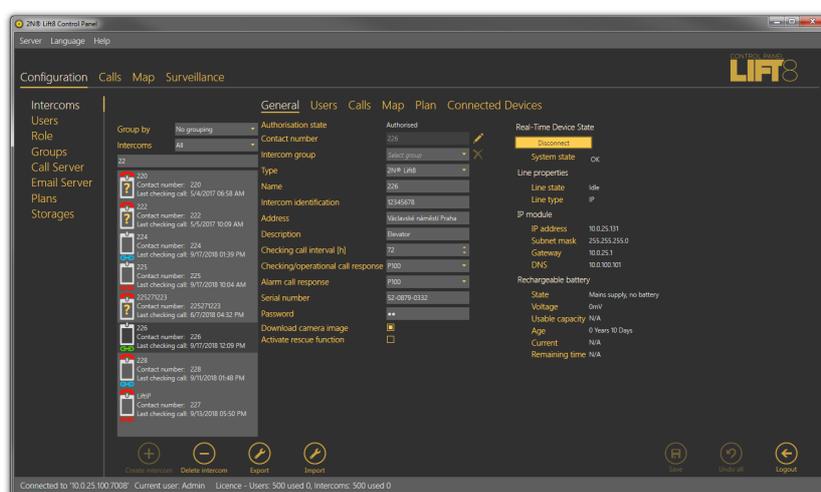
Intercoms – General Menu

The Checking call period specifies the timeout within which the intercom must call the **2N® Lift8 Server** or after which **2N® Lift8 Server** makes active check calls. The intercom can call the **2N® Lift8 Server** any time within this timeout, but having exceeded this value, it will be marked as defective. The non-functional status will be removed when another check or alarm call arrives in the server from this intercom. The default value of this parameter is 72 hours. The Alarm call response specifies the type of alarm call processing: **Normal call**, **Confirm with 1**, **CPC Antenna**, **CPC KONE** and **P100.** Similarly, the Check call response specifies the type of check call processing: **Reject**, **Accept and send 5**, **Confirm with 1 and 5**, **CPC Antenna**, **CPC Antenna 2N Ext**, **CPC KONE** and **P100.** Complete the serial number of your intercom in the Serial number field. Together with Password, this parameter is relevant for a correct function of the data tunnel. The default password is 2n. Click Save to confirm the setting. If you select the **2N® Helios** type, set the outgoing check call parameters

too: select Active check calls to enable active check calls for the selected intercom, complete First run to define the first check call and Next run to define the next check call to the intercom. Complete the Unsuccessful call repeat count to specify how many check call attempts are to be made before the system detects an error and executes the action set in the Call server. If the lift is equipped with a camera, enable loading images from the camera using a checkbox. This will be applied to incoming calls in the 2N® Lift8 Communicator.
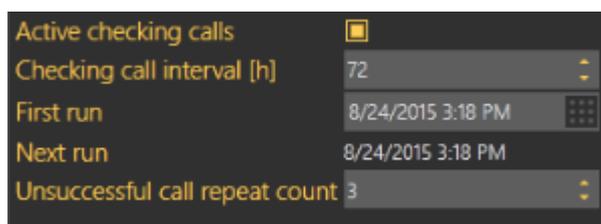
Extended Active Checking Call Settings

Where the lift is equipped with a camera, tick off the Download camera image option.

This becomes active in the incoming call in the 2N® Lift8 Communicator. Enable the rescue mode monitoring with the Activate rescue function checkbox. In case an alarm call is received from the intercom, the error message announcing that the rescue action is in progress will be displayed and transferred into the 2N® Lift8 Communicator. You can terminate this caution manually or by pressing the End rescue process button, or the rescue process will be terminated automatically after the incoming operational call has been evaluated.

> ⓘ **Note**
>
> There are two types of checking calls in **2N Helios**.
>
> - **Standard check call**, which waits until the intercom calls and then evaluates the call interval.
> - **Active check call**, in which the server itself dials the intercom as scheduled and evaluates the intercom response (pick-up/reject/no answer). For this purpose, the first Call server line is always used as it is assigned extended error call notification settings.
>
> **The active and standard check calls can work on a single server and the use of one type does not exclude the use of the other in any way.**

The list of intercom error states is displayed below the parameter list whenever a failure occurs. These states are only displayed for the intercoms that support sending of these states. Information is transmitted to the server via operational calls and CPC and P100 protocols. Like the rescue mode, these states can be ended using the application button or automatically by an operational call.
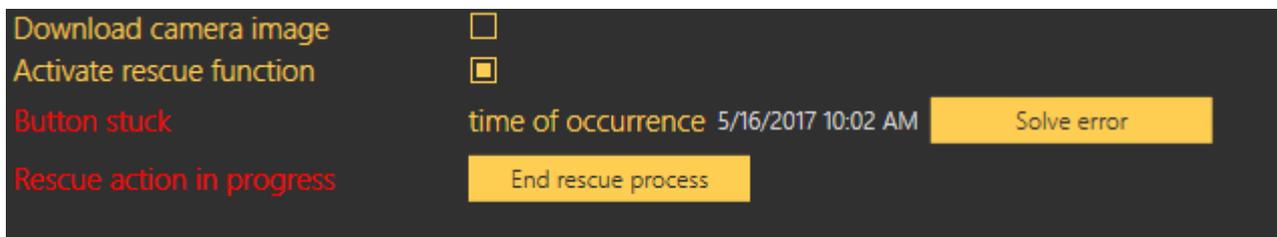
Error State Display

The following device states are monitored with the aid of operational calls.

State	Error
Battery failure	Sent if the battery capacity falls below a defined limit or the batteries are older than 2 years.
Stuck button	Sent whenever the Alarm button gets jammed due to a mechanical defect or sabotage.
Audio error	Sent whenever the audio unit audio test fails.
Rescue end	Enabled automatically whenever an alarm call comes in.

If the server data tunnel is supported, you can download the current device state from the server. Once the tunnel connection has been established, click Connect to set up an active connection via the tunnel and view the current device state like in the 2N® Lift8 ServiceTool. Click Disconnect to quit the device state monitoring mode.

> ⚠️ **Caution**
>
> - Data is transmitted between the intercom and server continuously while the connection is active. If the device is located in a limited traffic network (mobile data, e.g.), data transmission fees can be charged.

Users

The **Users** menu provides a list of all users with the right to view/administer the selected intercom. Administrator may administer all the system intercoms, users and roles regardless of group assignment. The list of Assigned users displays all the users authorised for the selected intercom. To add a user, select the user in the Not assigned users and move it to the Assigned users with the arrow. To delete a user, select the user in the Assigned users and move it to the Not assigned users with the arrow key. To search a user, enter the string to be searched into the field above the list and see the filtration result in the associated list immediately. Click Save to save the new settings.
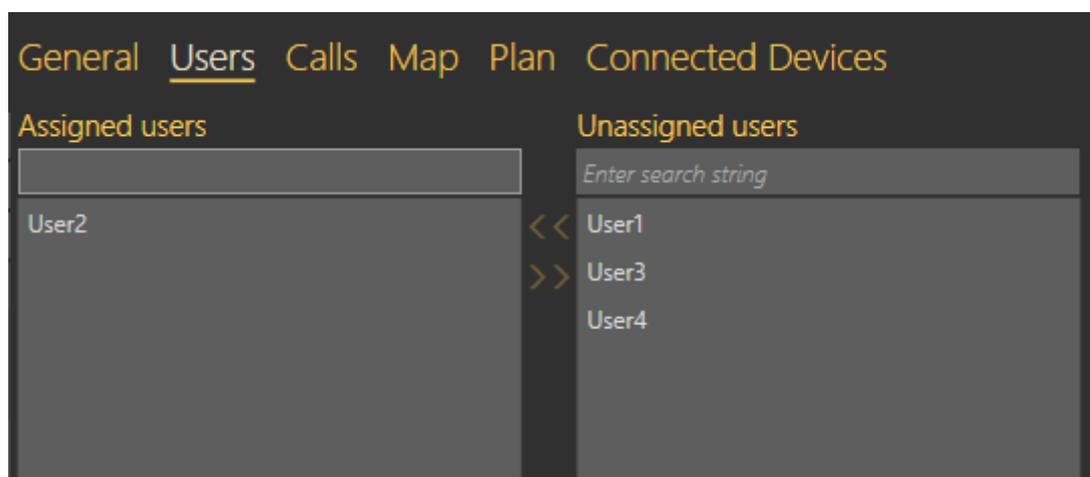
Intercoms – Users Menu

Calls

Find the list of active calls related to the given intercom in the Calls menu. There are three pop-up menus for checking, alarm and operational calls respectively. See below for details.

Checking Calls

The Checking Calls table includes a list of all checking calls that have been received by

the 2N® Lift8 Server since the intercom addition. Click the filter button at each column to use filtration for call history search. Refer to the Calls subsection for details. The table provides the following information: check call Timestamp, **CU** Contact number, Intercom identification if CPC/P100 was successfully used and check call Result string. See the figure below.
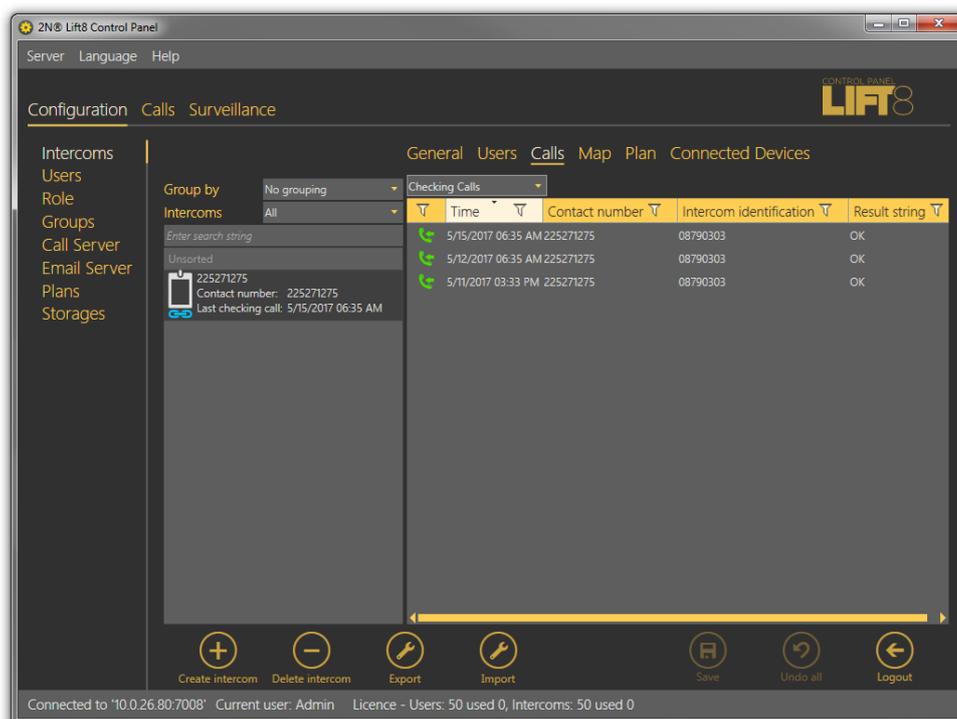
Intercoms – Calls – Checking Calls Menu

Alarm Calls

The Alarm Calls table includes a list of all alarm calls that have been received by the **2N ® Lift8 Server** since the intercom addition. Click the filter button at each column to use filtration for call history search. Refer to the Calls subsection for details. The table provides the following information: alarm call Timestamp, **CU** Contact number, Shaft number, Audio unit position, Intercom identification if CPC/P100 was successfully used and call-processing Agent name. The last column Note shows the note entered by the dispatcher during the alarm call.
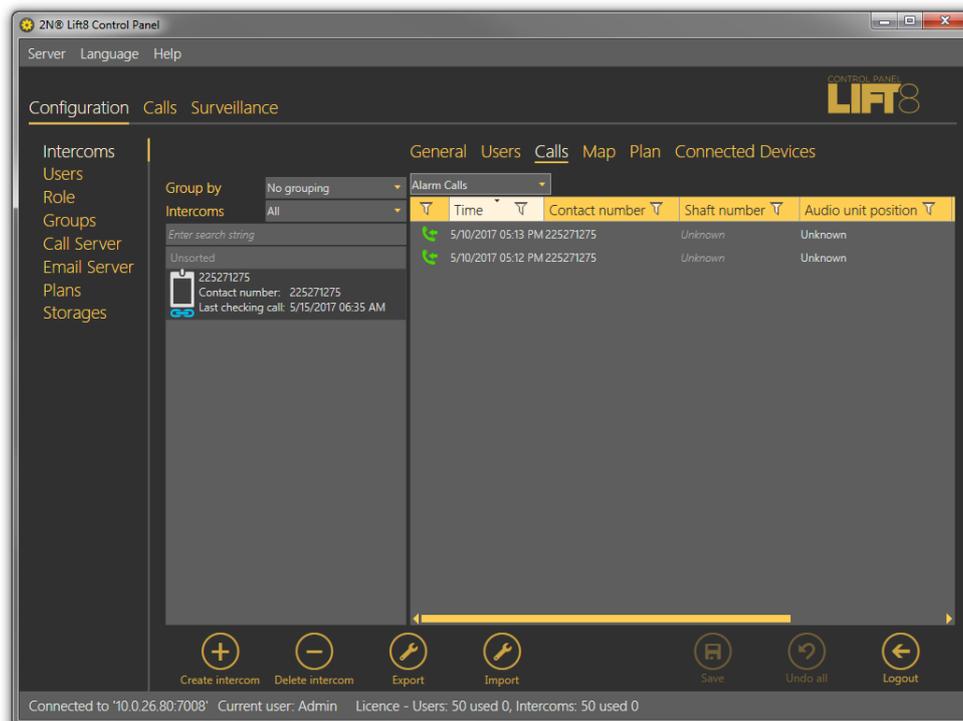
Intercoms –Calls – Alarm Calls Menu

Operational Calls

The Operational Calls table includes a list of all operational calls. The operational call is initiated by an action in the Central Unit, which calls the server and transfers the device state information via the CPC/P100 protocol. As a rule, the action transits into an error state and then, if everything is OK, to the OK state. The most recent actions are marked green or red in the table. It is because error messages (stuck button, e.g.) are marked red until the OK state message is received. Once received, the OK state remains green and the other states turn grey to indicate that the error situation has been solved successfully.
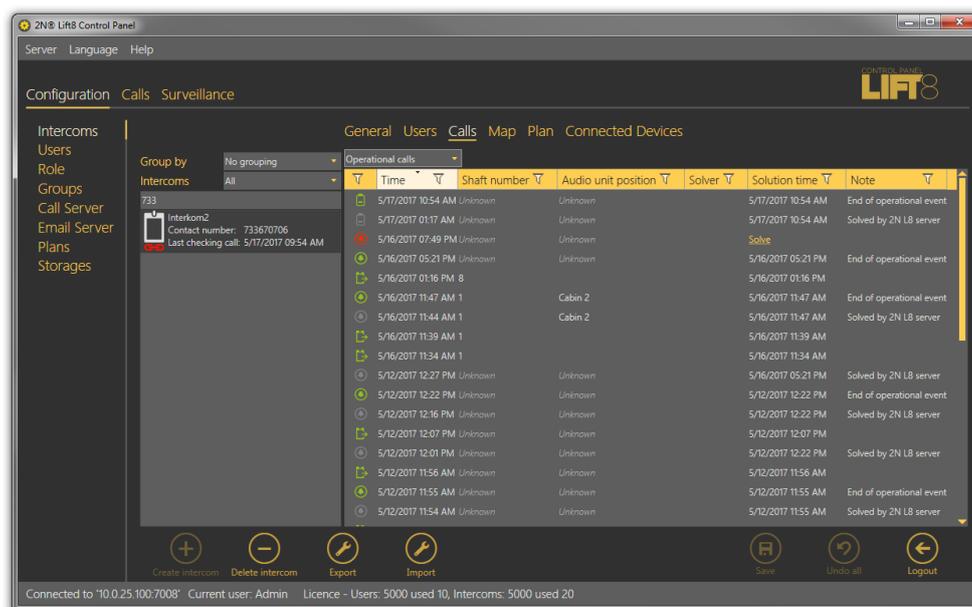
Intercoms – Calls – Operational Calls Menu

Map

If you filled in the intercom address in the General menu, the **Map** menu will display the intercom map position. Use the slider in the left-hand upper corner to zoom in and out. The intercom address is also displayed below the map. If the address is incorrect, change it here. The change will appear in the General menu too. Click Check address to set a new address and press Save to add the address to the database.
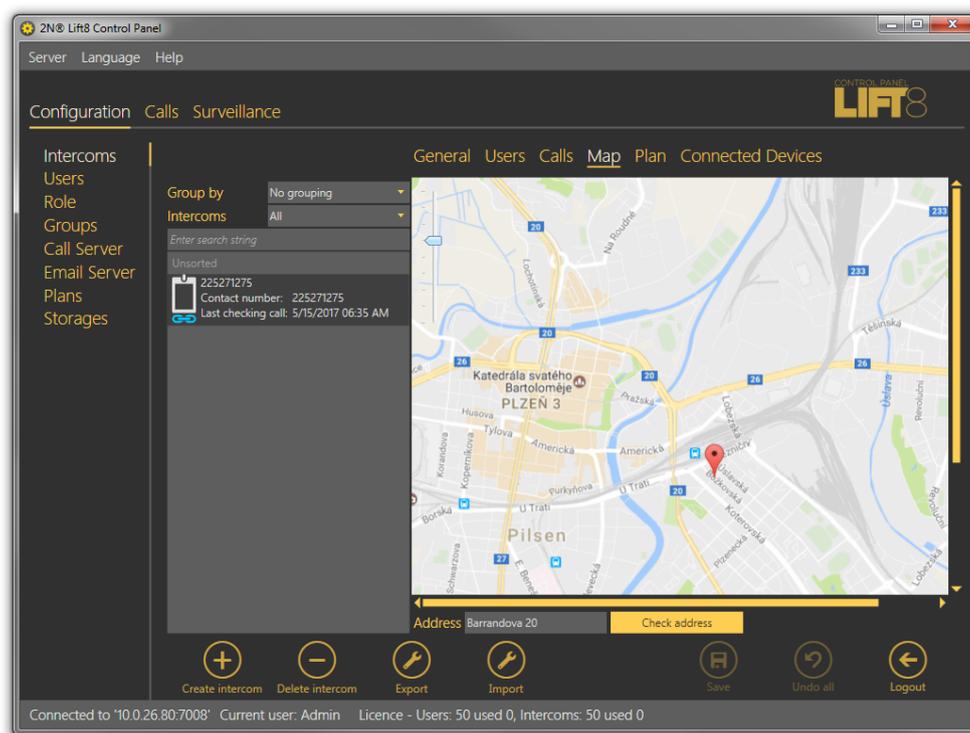
Intercoms – Map Menu

Plan

If you have set a storage, added a plan and set the plan in the General menu, the plan will appear in the **Local Plan** menu. Use the sliders to find the intercom location and move the intercom onto the map with the left button. See the intercom default position in the new plan in the left-hand upper corner. The plan also displays other intercoms in the building including colour states: orange indicates the intercom that is being configured, green means another functional intercom and red denotes a defective intercom that failed to make a check call within the timeout. A phone number is displayed for each intercom too. Select an option in the Available plans to change the intercom plan. Click Save to confirm the settings.
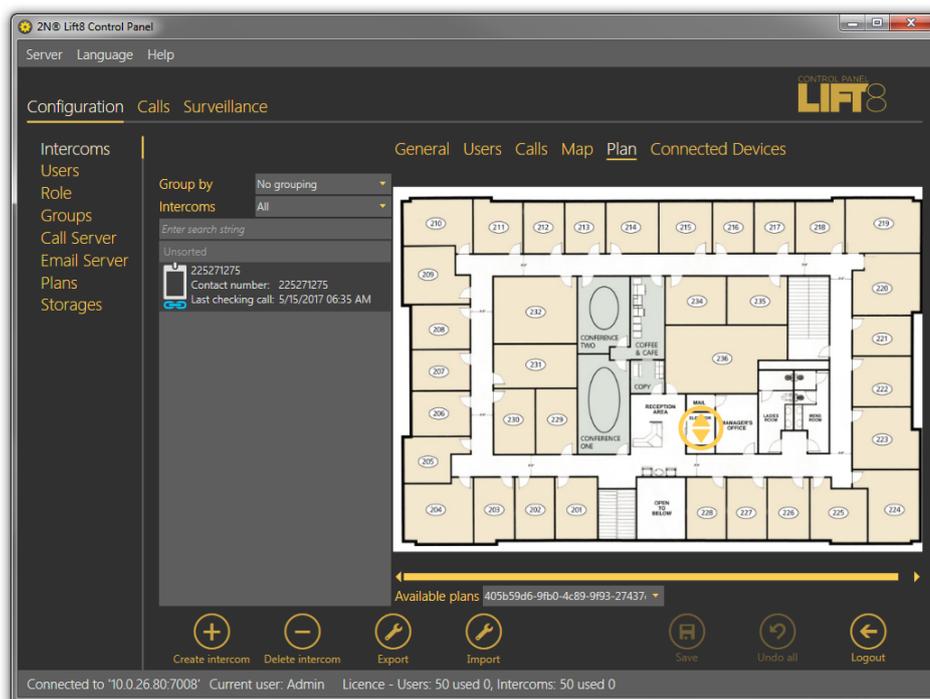
Intercoms – Local Plan Menu

Connected Devices

The Connected Devices menu is another part of the intercom monitoring service. The menu is displayed only if the intercom type is set to 2N® Lift8. The other types do not support device monitoring. If the Central Unit - server connection is active, press Get a scheme of connected devices to create a tunnel for the ControlPanel application to download the diagram of the devices currently connected to the CU and save it onto the PC disk. The connection remains active and the device diagram can be updated any time. At the same time, the current device state is activated on the General tab. Click Log out to close the tunnel connection. The last-downloaded diagram is then saved and displayed any time later in the application. The diagram of connected devices is similar to that in the ServiceTool application. Press the respective buttons in the lower part to print out the diagram as a text or image, or zoom in/out the view. Use the checkboxes to display extended information on the devices connected.
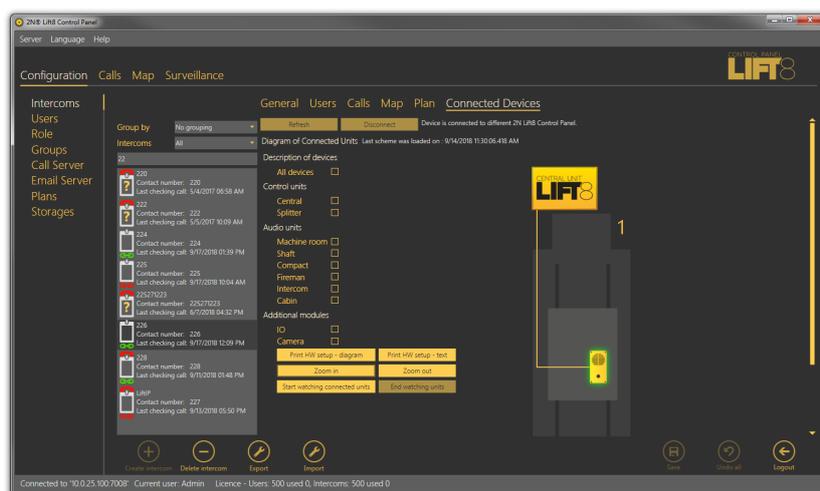
Intercoms – Connected Devices Menu

The unit watching buttons help you enable/disable the function. The system behaves like with the Reset button. All the units to be watched are green-highlighted and an error is detected and displayed if there is a loss of connection.

> ⚠️ **Caution**
>
> - Data is transmitted between the intercom and server continuously while the connection is active. If the device is located in a limited traffic network (mobile data, e.g.), data transmission fees can be charged.
> - The diagram downloads are saved on a working station with the ControlPanel application running instead of the server. Having logged in from another PC, you cannot see the diagram and have to download a diagram of your own.

Export

The table export function is available in the Intercoms – Users – Calls menu. To enable the function, click Export or use the context menu displayed with the right mouse button above the selected object or objects if multiselect is used in the Intercoms – Users menu. In the Calls menu, the export function is only available in the context menu and always exports the whole table for which export was activated. In the Intercoms – Users menu, you can only export selected objects via the context menu and if you want to export all the objects, click Export. Having pressed this button, you have additional checkbox options: select the items to be exported and click Export in the form to confirm your selection. If you choose export of assigned users, a list of the

users assigned to the selected object will be added to each table row. The same applies to the assigned intercoms. Now choose a location on your disc and click Save to save the exported data. See the figure below for the exporting forms from the two menus.
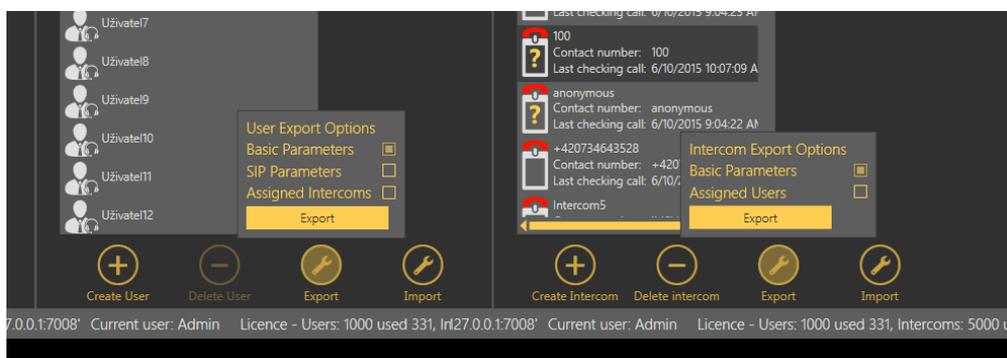
Intercom Table Export – Right, User Table Export – Left

Import

The table import function is available in the Intercoms – Users menu. Click Import to open an import window and select a disk location. Select the file to be imported and confirm your selection to import the file and display the lists of imported objects.

Users

The Users menu displays the whole user database defined on the server. The main common part of the menu provides the database searching function: enter the user name (or a sequence of characters) into the search row. The function requires no confirmation and starts searching the database the moment you enter the first character. Add more characters to refine the filter until you find the required user. Click Create user card to add a user to the end of the table. Each user has an icon that identifies its role (function).

	Administrator	Administrator is authorised to make all settings.
	Superuser	Superuser is only authorised to manage the intercoms and users in its group.
	Dispatcher	Dispatcher processes the assigned intercom alarm calls via the 2N® **Lift8 Communicator** application.
	Technician	Technician is entitled to view the assigned lift settings.
	User defined	User defined role.

Click Delete to remove a user. You can use multiselect to delete or select a higher number of users: either hold Ctrl to select the objects or hold Shift to select the first and last objects thus selecting all the objects between them. All the changes made over the selected objects will apply to all of them. Select a user to open an extensive (third) menu level with up to three forms. Let us describe each of the forms.

General

The Users – General menu helps you set personal information on the user: login username and password for the 2N® **Lift8** applications.

> ⓘ **Note**
>
> - Login Name and Password are the only mandatory parameters of this menu. **However, you are strongly advised to complete the whole user card correctly!**

The other parameters include Firstname and Surname, user function/job Description, Contact number for Technicians or user defined roles without access to the Communicator, Email, Company and Role. New users are created as Dispatchers by default. The following options are available: Administrator, Technician, Dispatcher or User defined role (refer to the Roles and Rights below). Click Save to add the parameters to the database.
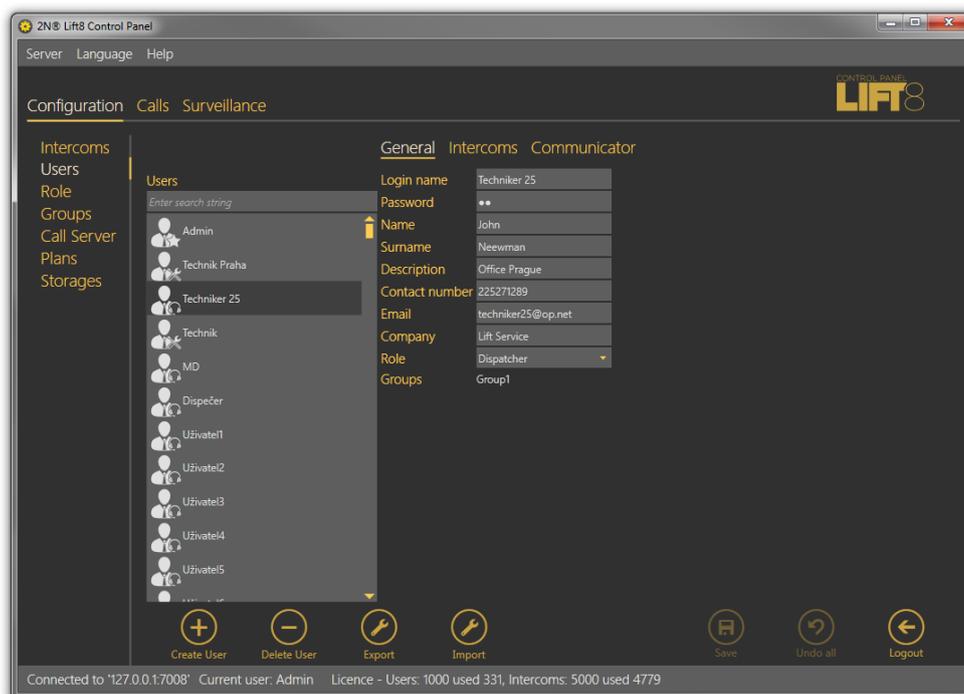
Users – General Menu

Intercoms

The **Intercoms** menu provides a list of intercoms that can be administered and monitored by the user. You can view the check call results and set some of the intercom parameters depending on your role. Administrator may administer all the system intercoms, users and roles regardless of group assignment. The list of Assigned intercoms displays all the intercoms authorised for the selected user. To add an intercom, select the intercom in the Not assigned intercoms and move it to the Assigned intercoms with the arrow. To delete an intercom, select the intercom in the Assigned intercoms and move it to the Not assigned intercoms with the arrow key. To search an intercom, enter the text or number to be searched into the field above the list and see the filtration result in the associated list immediately. Click Save to save the new settings.
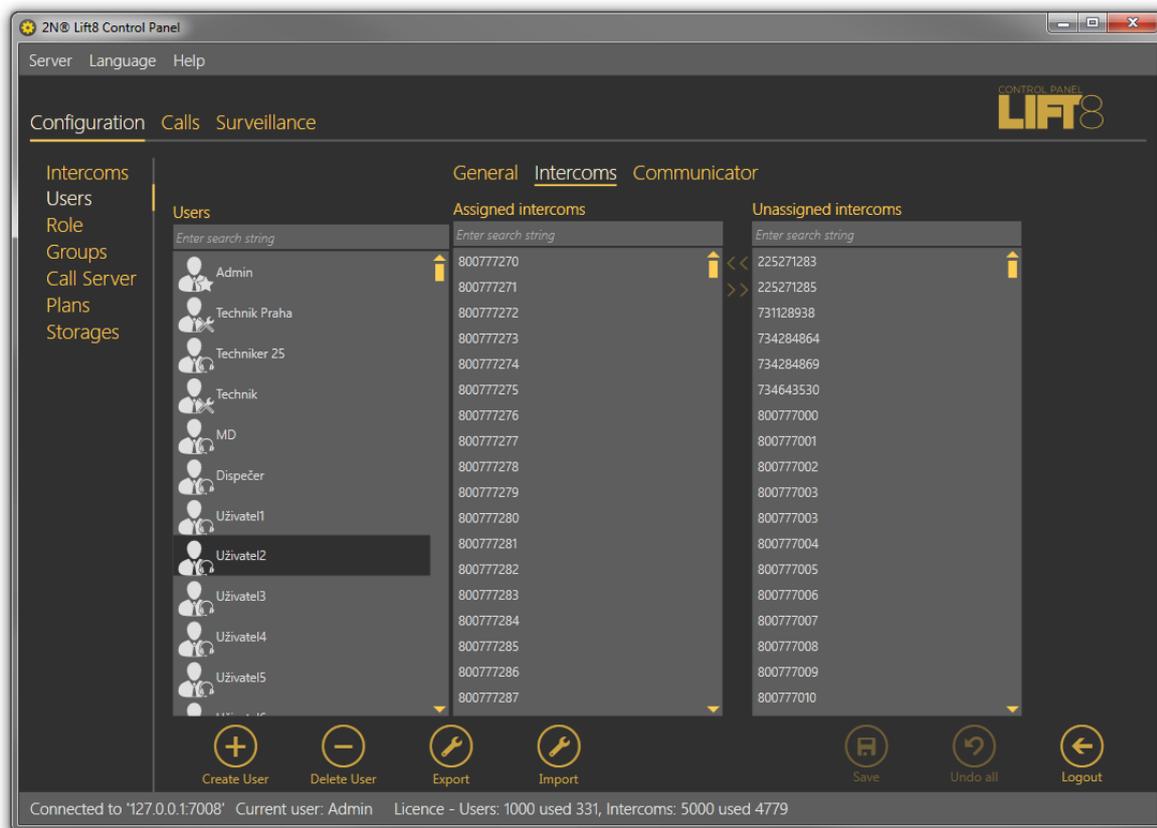
Users – Intercoms Menu

Communicator

Every user authorised to use the 2N® Lift8 Communicator must be assigned a SIP line,

i.e. an account registered with a SIP provider or the PBX used for login via the 2N®
Lift8 Communicator. When you log in to the application, your line will get registered

and you can process the calls coming to your line depending on the 2N® Lift8
configuration. An incoming alarm call will probably dial Dispatcher account number.

Dispatcher can then contact Technician if necessary. Refer to S.8, 2N® Lift8
Communicator, for details on these functions. Set the following SIP line parameters in
the Communicator menu: SIP server and Registrar server, i.e. the server via which the
SIP client will register and calls will be made. Enter the IP address/domain of the SIP
Proxy server: port 5060 is used by default. If your provider uses a different port, add
this port to the Domain parameter behind a colon as shown in the figure below. Set
the Domain to differentiate Proxies within a PBX, Username and provide/PBX SIP
account Password. Define how often the account shall register with the SIP Proxy in

the Registration expires parameter. Find the Local SIP port in the extended Stack settings, which is generated automatically by default but can be changed easily. Specify the protocol type to be used for packet transmission in the SIP transport: UDP, TCP or TLS. Select the RTP secure mode: Disabled means that the RTP stream will never be encrypted and SIP communication will only be secured. If you choose Optional, the RTP stream will be encrypted only if the opponent, i.e. the SIP Proxy server, requires so. Select Mandatory to make RTP transmissions secure every time. Click Save to confirm the settings.
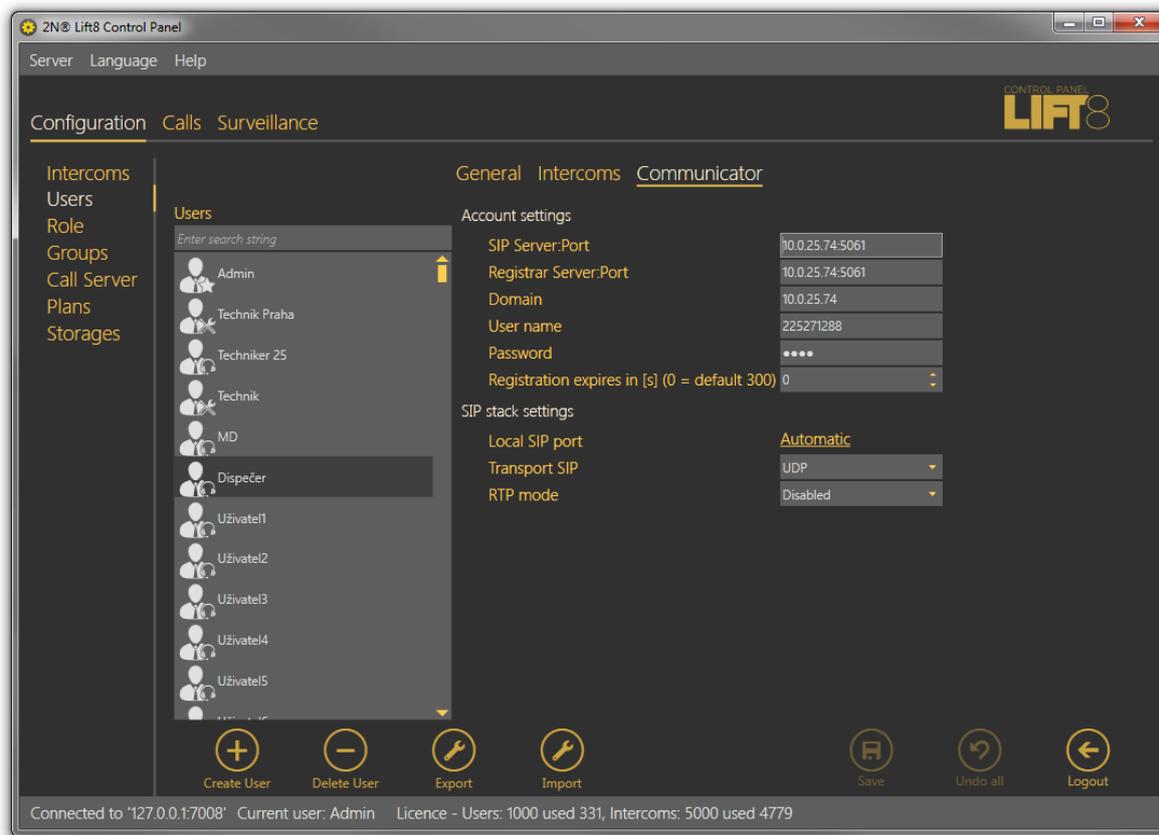
Users – Communicator Menu

> ⚠ **Caution**
>
> - Make sure that the SIP line is configured correctly to register your SIP line and log in to the 2N® Lift8 Communicator application.
>
> - Contact your network administrator for the SIP line settings.

> ⚠ **Important warning - Upgrade System from ver. 1.5.x to ver. 1.6.x**
>
> If you have upgraded an existing database instead of installing a new version, the line settings will not work after upgrade! It is because essential function and configuration changes have been made since the last version and the database could not be transferred completely due to some differences. Thus, modify the configuration as follows to make the system work:
>
> - Keep the Username and Password as they can be transferred correctly.
> - Copy the Domain value from version 1.5 into two new parameters: SIP Server and Registrar server.
> - Modify the Domain parameter making sure that it does not include : a port and includes just address or domain name.
> - Set the Registration expiry and Time limit parameters as necessary.
> - Activate the line you have just configured.
> - Save the new settings.
>
> After such modification, you will be able to log in via the 2N$^®$ Lift8 Communicator and process calls in a standard manner.

Roles

The **Roles** menu specifies the user login types. The roles define the user rights in the **2N$^®$ Lift8** system. Three roles are available by default: Administrator, Technician and Dispatcher. These roles cannot be removed or edited. Click Create role to create a new role and assign access to the functions. See the table below for function details. Click Delete to remove a role. If a role disables a user to view or configure a menu, the menu will not be displayed to the user.
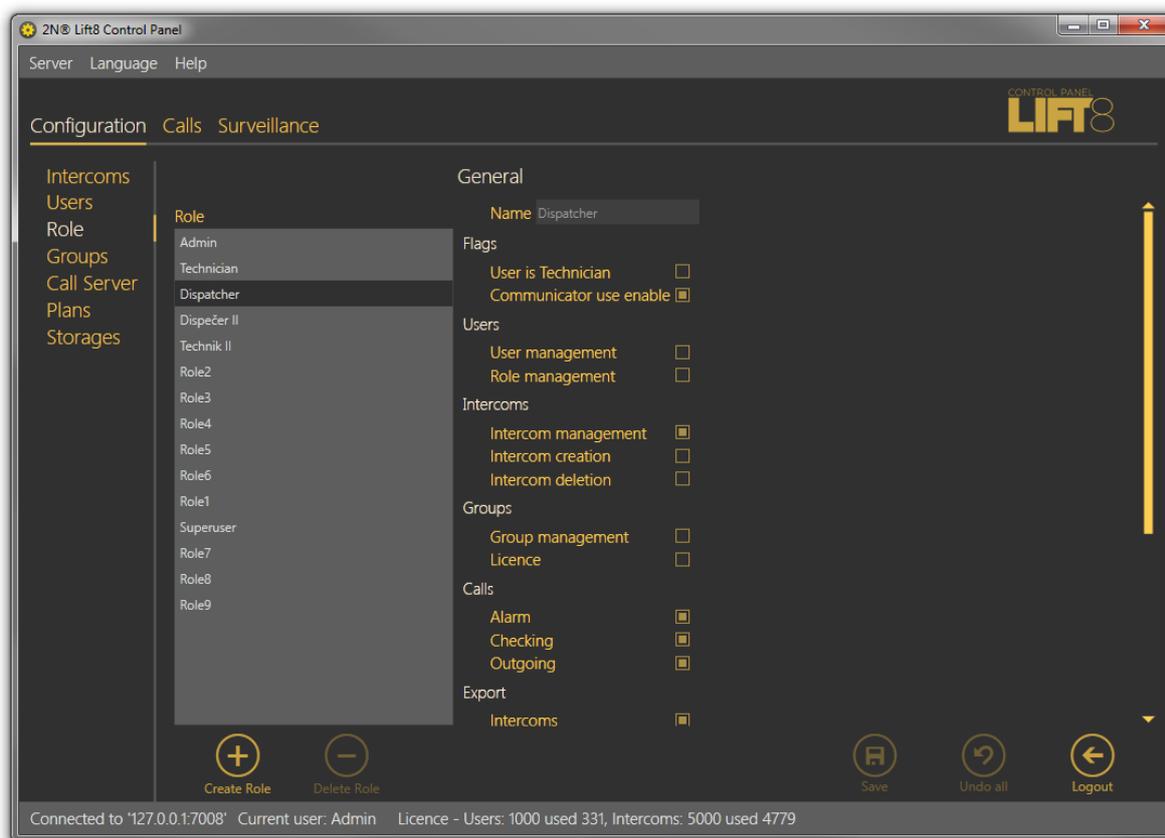
Roles Menu

> ⚠ **Caution**
>
> - If you are editing (updating) rights for an existing role, the user concerned will be logged out when the new parameters have been saved. You will be informed of this by a dialogue window with confirmation.

Parameter name	Meaning
Authorisation	
User is Technician	The user is included as Technician in the database and its assignment to the intercom in the 2N® Lift8 Communicator is displayed.

Parameter name	Meaning
Allowed to use Communicator	The user has access to the SIP line settings and may join the 2N® Lift8 Communicator application.
Users	
User administration	Helps create, delete and edit all users.
Role administration	Helps create, delete and administer user roles.
Intercoms	
Intercom administration	Helps administer intercom databases.
Intercom creation	Helps create a new intercom.
Intercom function display	Activates functional/non-functional intercom display.
Groups	
Group administration	Helps create, delete and edit user and intercom groups.
License	Allows assigning licenses to groups.
Calls	
Alarm	Displays the intercom alarm call database.
Check	Displays the intercom check call database.
Outgoing	Displays the dispatcher outgoing call database.
Export	
Intercom export	Helps export the intercom table.
User export	Helps export the user table.
Call export	Helps export the call table.

Parameter name	Meaning
Import	
Intercom import	Helps import the intercom table.
User import	Helps import the user table.
Surveillance	
Global map	Displays the Surveillance menu.
Others	
Call Server	Makes Call Server settings accessible to the user.
Plans	Makes plan list and settings accessible to the user.
Storages	Makes server storage creation accessible to the user.
Email server	Makes Email server settings and management accessible to the user.

Groups

The **Groups** menu helps you define intercom groups for easier configuration of multiple objects and separation of lift administering firms. The first option helps you configure all intercoms assigned to one group (in one building, e.g.) at one time. The other option helps you manage multiple companies on one server as separate groups. Administrator assigns intercoms and users to each group to be administered by the appropriate group Superusers.

- You can combine the two options to a certain extent. However, remember that the main structure users cannot see the group users and that there are some security risks due to extended user rights.

- If you define groups with own Administrator - Superuser rights, we recommend that the Administrators - Superusers themselves configure the users to be administered to eliminate potential problems in the future.

I ntercoms and users can only be added to a group by Administrator or Superuser. Now let us describe what you can configure in the Groups menu. There is a list of all objects called Intercom groups to the left. To find a group, enter the user name (or a sequence of characters) into the search row. The function requires no confirmation and starts searching the database the moment you enter the first character. Add more characters to refine the filter until you find the required group. Click Create group to create a new group and add it to the end of the list. Click Delete to remove a selected group. Click Save to confirm the settings.
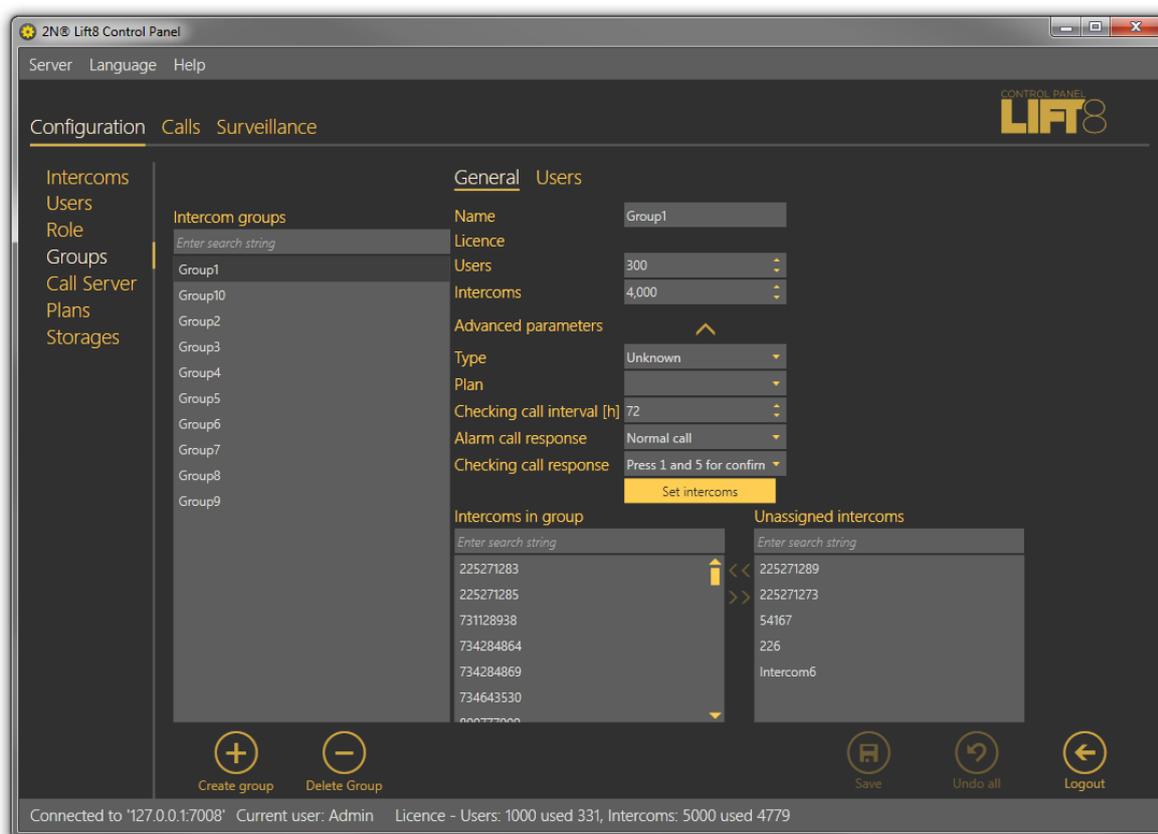
Groups Menu – General

General – Administrator

Rename a group in the Name parameter in the **Groups – General** menu. Specify the maximum count of licensed objects (intercoms and users) in the Licence parameter to be assigned to a group. Administrator finds the current use of licensed objects in the application status row. The other users cannot view this setting. Furthermore, you can assign intercoms to a group. You can see a list of all created intercoms not assigned to the currently displayed group to the right and a list of all intercoms assigned to the group to the left. You can use the searching function like in the group list. Select an intercom and click the appropriate arrow to move the intercom to/from a group. You can use multiselect for selection. Furthermore, the menu provides an extended setting, which helps you assign all the parameters at once to the given intercom group. Define the Type of device: **2N$^®$ LiftNet**, **2N$^®$ SingleTalk**, **2N$^®$ Lift8** or **Unknown**; refer to the Intercom Creation subsection above for details. Plan is the next parameter: enter the Address of the building where the intercom group is installed and intercom positions on the plan. This information will then be displayed on the map for Technicians or Dispatchers to repair the device or navigate the rescue team respectively. The Check call period defines the timeout for the intercom to check-call the **2N$^®$ Lift8 Server**. The intercom can call the **2N$^®$ Lift8 Server** any time within this timeout, but having exceeded this value, it will be marked as defective. The non-functional status will be removed when another check or alarm call arrives in the server from this intercom. The default value of this parameter is 72 hours. The Alarm call response specifies the type of alarm call processing: **Normal call**, **CPC Antenna**, **CPC KONE** and **P100.** Similarly, the Check call response specifies the type of check call processing: **Reject**, **Accept and send 5**, **Confirm with 1 a 5**, **CPC Antenna**, **CPC KONE** and **P100.** Click Set intercoms to confirm the settings and execute changes in all the intercoms assigned to the selected group.

> ⊘ **Tip**
>
> - Administrator is the only user authorised to set the licence parameters!
> - Advanced settings are not required. You can configure all or no parameters at your discretion.
> - The advanced parameter list is empty by default. If a parameter is identically set for all the intercoms, the parameter value will be displayed. If not, the field will remain empty.

Users – Administrator

The **Users** menu provides a list of users that are authorised to administer and monitor the intercoms in a group. Administrator may administer all the system intercoms, users and roles regardless of group assignment. All the users authorised for the selected group are displayed in the list of Assigned users and next to the intercoms. To add a user, select the user in the Not assigned users and move it to the Assigned users with the arrow. To delete a user, select the user in the Assigned users and move it to the Not assigned users with the arrow key. To search a user, enter the string to be searched into the field above the list and see the filtration result in the associated list immediately. Click Save to save the new settings.
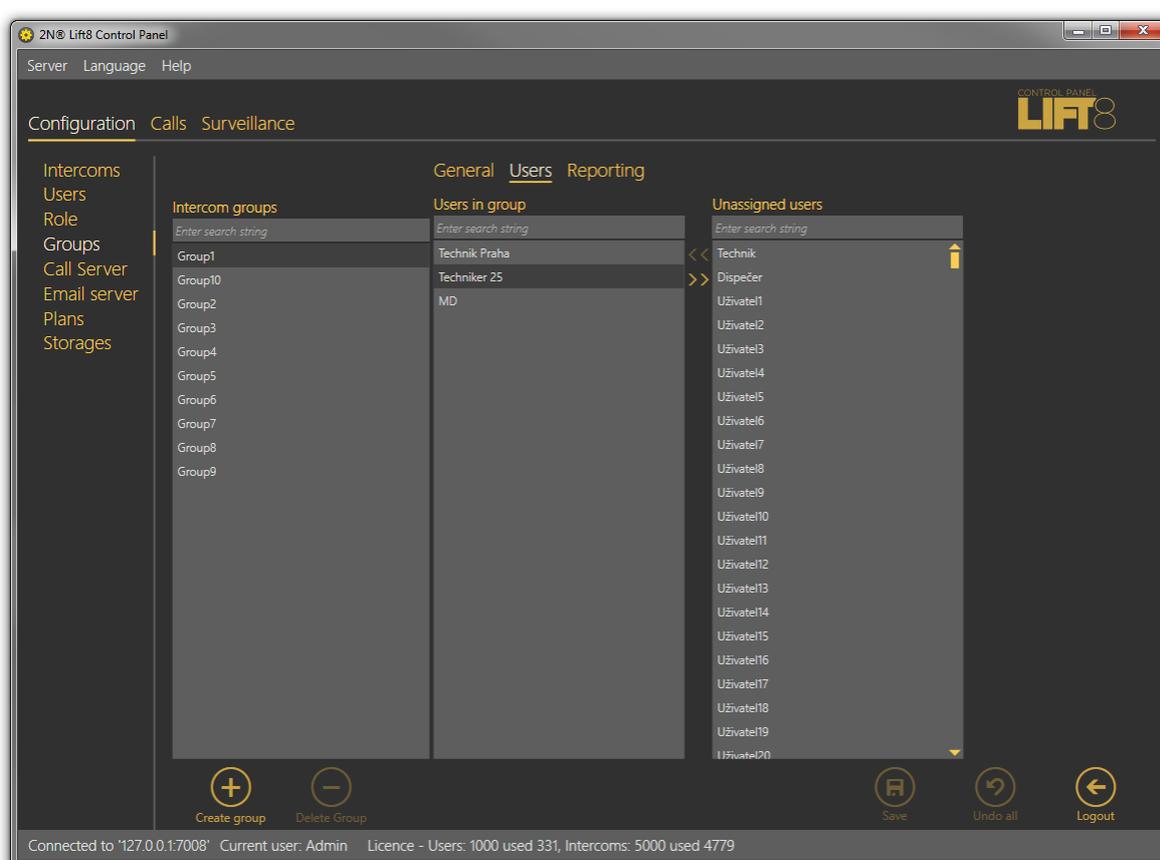
Groups – Users Menu

Reports – Administrator

The menu enables report sending. Selected users can send messages above the framework of general statistics sent by the Email server. The reports always refer to the group to which they are assigned and are only sent to the recipients included in the list. Make sure that a correct email is defined for every user on the list in the Users - Basic menu to allow for proper report sending.
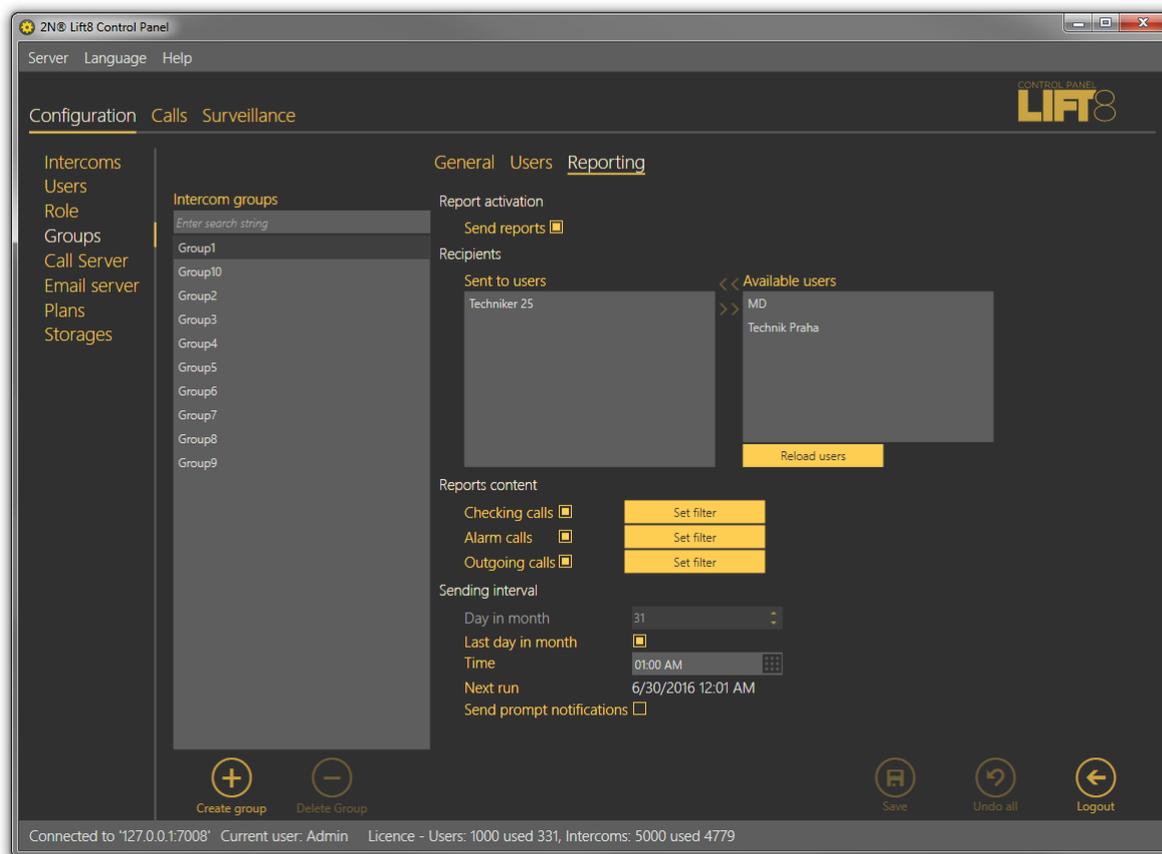
Groups - Reports Menu

Let us describe the menu controls now. Select Send reports in the Report activation section to enable report sending for the given group. Make sure that the outgoing server is configured in the Email server menu to make the function work properly. Otherwise, the reports will be set but not sent automatically. When reporting is enabled, the appropriate settings will be activated. Select a recipient from the list of Available users in the Recipients section and use the arrow to move it to the Send to users list. Remove the user analogously. The Available users only display the users that are assigned to the given group and whose email addresses are completed. Specify the reports to be sent in the Reports content section using the checkbox. Define the content of the email to be sent in the Email server – Report settings menu. Define the Sending interval for the reports: Next run will generate the time of your next report sending. Enable prompt notifications using the last checkbox to send information on a new situation immediately.

Superuser

Superuser is a system user that is assigned some Administrator rights. Superuser is assigned to a group, obeys the group setting rules and applies its rights only within the group assigned to it, thus substituting the Administrator function for the given group. Superuser is not allowed to create or delete a group, but may rename a group and add users and intercoms. Superuser never gets an intercom to a higher level without group assignment. This may be done by Administrator only. Moreover, Superuser is not allowed to set licences, but may monitor licences and ask Administrator for increasing licensed objects if necessary. Superuser can also add and edit plans in the group(s) assigned to it by Administrator.

> ⚠ **Caution**
>
> - Remember that Superuser assigned to no group has similar rights as Administrator in the whole database upon login. Therefore, be very careful while assigning groups to avoid security risk or data loss.

> ⊘ **Tip**
>
> - Adding a user or an intercom, Superuser is always asked about its group assignment. If Superuser is assigned to one group, the new object will be added to this group automatically. If Superuser is assigned more groups than one, a list of assigned groups will be displayed. Superuser sets the object name and selects a group for the object.
>
> - Group users may only view the objects (users, intercoms, plans) as specified by their rights.
>
> - Superuser cannot view the Local plans added by Admin. It can only view the plans assigned to its group added either by Superuser or any other user in the given group. Superuser cannot set and/or change any plan that is not assigned to the group. If, however, Administrator adds a plan, any user can display the plan in the intercom menu.

Call Server

The **Call server** helps you configure the SIP lines for the **CU** check calls. Configure up to 8 independent telephone lines. The first line is also intended for active check calls and can be configured via extended settings. Enter the SIP line parameters correctly

for a successful SIP Proxy server registration. Make sure that the lines and servers are configured correctly to make the Call server work properly. If you use VoIP, obtain the SIP line settings from your VoIP provider. If you have a SIP Proxy server of your own, contact your network administrator for correct settings.

> ⚠ **Caution**
>
> - Set the SIP lines in the 2N® **Lift8 Server!** Use the settings of the PC on which the server is installed instead of your PC settings. Your PC settings will be applied only if the server runs locally.

The List of available lines displays all of the 8 lines to be configured. Each line includes identification and state parameters: Domain specifies the domain with which the line is registered, Active shows whether the line is currently on/off and Active calls counts the current calls via the line. If Active calls is zero, there is no active incoming /outgoing call on the line. The Active check call function is enabled for the first line.
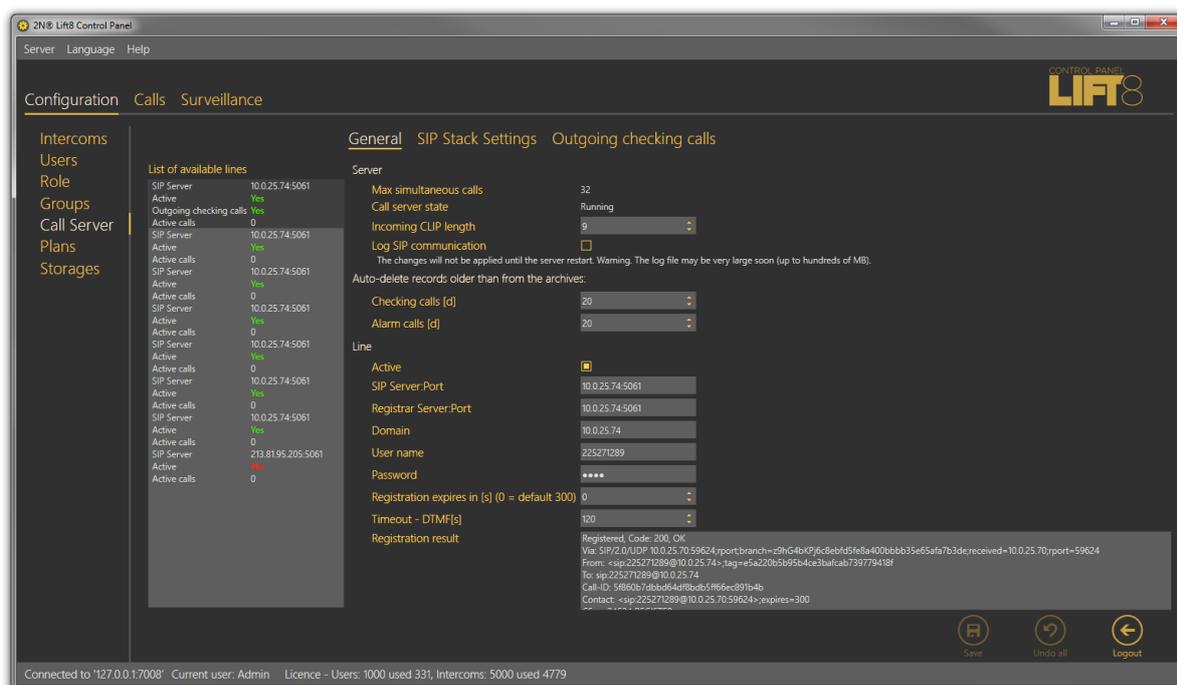
Call Server Menu

General

The **General** menu consists of two parts: **Server** for all the lines and **Line**. Server provides the current SIP server state information: Maximum simultaneous calls displays the maximum count of check calls to be processed by the server at the same

time. If more calls than as defined in the parameter arrives in the server at one moment, all the excess calls will be rejected. Call server state signals the current state of the server: Starting, Running, Waiting for reconfiguration and Error.

> ⚠️ **Caution**
>
> - If in a state other than **Running**, the Call Server rejects all calls coming to it, i.e. does not receive or process any check calls.

The Incoming clip length defines the typical length of incoming caller numbers. A longer number will be cut off to the set value before being saved into the database. Select Enable SIP communication logging to enable the trace which captures all server SIP communication and helps diagnose connection troubles. The parameter enable creates a pjsip.log file in the log directory for the logs captured. Enable the parameter to restart the server.

> ⚠️ **Caution**
>
> - Caution! Do not keep SIP communication logging enabled for too long to avoid extreme log file sizes (up to hundreds of MB) due to high frequency of incoming calls. Use this function for error diagnostics only.

Auto-Delete of Records from Archive Older Than

These two parameters monitor the age of the check and alarm call database records and delete the oldest ones to avoid an extreme growth of the database and rapid slowdown of the application and server operation. Set the parameters in days. The parameters work as follows.

An incoming check/alarm call is added to the primary call database, where the last three calls from each intercom are always stored. When another (fourth) call comes in, the oldest call will be moved automatically to the secondary call database for a user-defined period of time. When the user-defined interval elapses, the call will be deleted from the secondary database and stored nowhere on the server. This happens when the intercom works normally, the above-mentioned call is followed by another check call and the old record need not be stored any longer. If, however, no more calls come from the intercom, the last call will not be deleted, but stored as evidence of the last check call attempt. In practice, the database always stores three calls at least from each intercom phone number if accomplished. If the intercom never called more than once, there will be just one call in the database.

Line

Complete the line parameters, select Active and save the new settings to activate a new SIP line. This activates the Registration result and sends the registration packet. The registration result is then displayed and the identification in the list changes from No to Yes. See below for details.

Note

- Enter **SIP Server, Registrar server** and **Username** at least to configure a valid SIP line.

Select/unselect Active to activate/deactivate the selected line. Enter the SIP Proxy address into the SIP Server:Port field. The port is optional. If you set just the Proxy address, the default port 5060 is used. If you choose another port, add this port behind a colon. Enter the SIP Proxy address for login into the Registrar server parameter. The port is optional. If you set just the Proxy address, the default port 5060 is used. If you choose another port, add this port behind a colon. Domain specifies Proxies within one SIP server. Unless specified otherwise by your provider, the domain will be SIP or Registrar server, yet without a port. See the figure above. Complete the Username for your SIP Proxy server authentication and Password if the Proxy requires so. Registration expires after is an optional parameter. The default value is 300 s, but some servers may require a different value, which will not be changed. Set the Timeout – DTMF in seconds: 120 s is the default value. If no DTMF arrives within this timeout after answer, the call will be terminated. Registration result displays the SIP Proxy registration result. If unsuccessful. the registration packet will be resent. This parameter is updated automatically. When you click Save for

confirmation, the registration packet will be sent to the server immediately. If everything is OK, the following message header will be displayed in the Registration result: "Registered, Code: 200, OK". To deactivate an active line, select the line and unselect the Active checkbox. Click Save to confirm the setting.

> ⊘ **Tip**
>
> - Contact your network administrator or VoIP provider for correct SIP line settings.
> - If registration fails, you will find the error code (SIP error message) in the Registration result. If your registration data are correct, contact your network administrator.

> ⊘ **Important warning - Upgrade System from ver. 1.5.x to ver. 1.6.x**
>
> If you have upgraded an existing database instead of installing a new version, the call server will not work after upgrade! It is because essential function and configuration changes have been made since the last version and the database could not be transferred completely due to some differences. Thus, modify the configuration as follows to make the system work:
>
> - Keep the Username and Password as they can be transferred correctly.
> - Copy the Domain value from version 1.5 into two new parameters: SIP Server and Registrar server.
> - Modify the Domain parameter making sure that it does not include : a port and includes just address or domain name.
> - Set the Registration expiry and Time limit parameters as necessary.
> - Activate the line you have just configured.
> - Save the new settings.
>
> Go on like this with all the other lines. After such modification, the call server will start processing calls in a standard manner.

SIP Stack Settings

> ⚠️ **Caution**
>
> - The SIP stack settings are common for all the server lines and all the 2N®
>   **Lift8 Communicator** users. If TLS is enabled for dispatcher lines too, the application downloads the current security certificate from the server.
> - Remember that the lines that do not support TLS communication cannot get registered after TLS is enabled!

Set the SSL/TLS SIP communication and SRTP voice transmission parameters in this menu. These cryptographic protocols provide secure Internet communication and require a server-generated certificate to be used by clients for data verifications and subsequent encryption. Set the Local SIP port, which is generated automatically by default but can be changed easily. Specify the protocol type to be used for packet transmission in the SIP transport: UDP, TCP or TLS. Select the RTP secure mode: Disabled means that the RTP stream will never be encrypted and SIP communication will only be secured. If you choose Optional, the RTP stream will be encrypted only if the opponent, i.e. the SIP Proxy server, requires so. Select Mandatory to make RTP transmissions secure every time.

> ⓘ **Note**
>
> - Caution! If your SIP Proxy does not support the secured RTP transmission, no connection can be established in the Mandatory mode. Contact your provider or network administrator for configuration details.

Enter the security certificate obtained from your VoIP provider into the Certificate field. It is a certificate of the server, **i.er**. the device on which the SIP Proxy server is running. If you do not have a security certificate, ask your VoIP provider or LAN administrator for one.
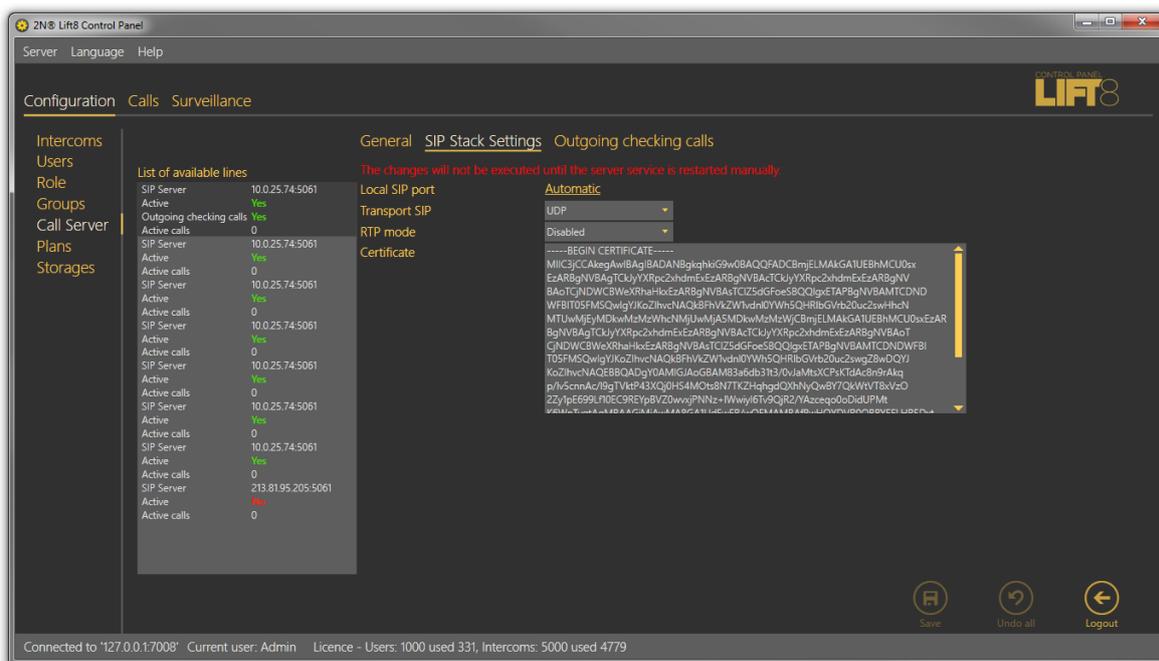
Call Server / SIP Stack Settings Menu

⚠ **Warning**

- All changes made in this menu will not be applied until the server is restarted manually! It is necessary to read the SSL libraries, which are not needed in common operations.

- Restart the server in the Services system menu or via the 2N® Lift8 l8-config.exe application. Refer to Subs. 6.2. for function details.

Outgoing Checking Calls

This menu is devoted to outgoing check calls and their settings. The following parameters are defined here: Unsuccessful call repeat count defines the count of calls to the intercom before an error is detected. Repeat call defines the interval between the attempts. Call duration sets the maximum call timeout after which the Call server hangs up automatically. You can define an Unsuccessful call message to be sent in case the intercom is inaccessible and marked as defective. You can insert the string % TEL_NUM in the message to provide the inaccessible intercom contact number.

Complete the Message recipient number including the correct dial-in if necessary. Maximum count of simultaneous outgoing calls specifies the count of calls to be processed by the server at the same time. Respect the capacity of your outgoing gateway while completing this parameter.
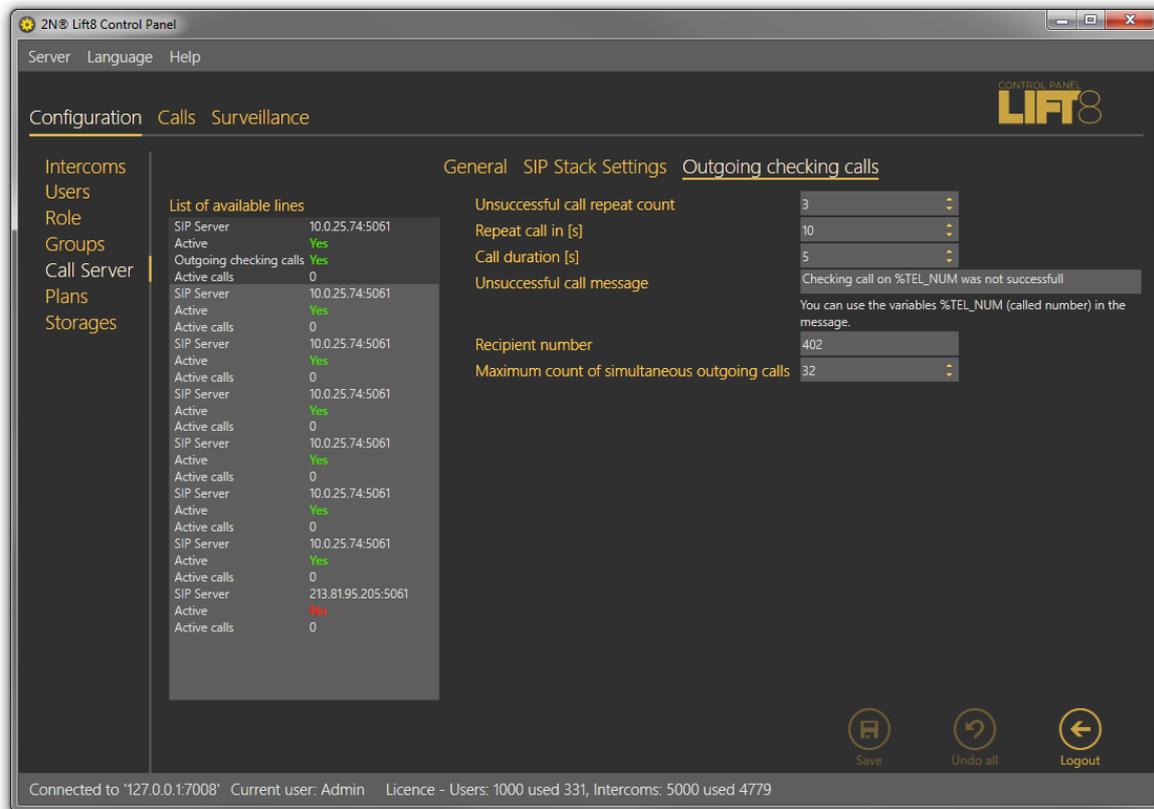
Outgoing Checking Calls Menu

> **⊘ Tip**
>
> - If your outgoing gateway has 4 channels, make sure that the Maximum amount of simultaneous outgoing calls does not exceed 4. Otherwise, the server would try to make more calls than the gateway is able to process and the excess calls would be rejected. The server would thus be marked as non-functional after several rejections.

Email Server

2N® Lift8 Server is equipped with an email client that provides connection to the SMTP server and helps send reports on intercom states. The menu has two parts: SMTP Server Settings, which helps you set the report sending account, and Report Settings for detailed report settings.

SMTP Server Settings

Address and Port are the first parameters of the menu. Set any SMTP server that supports insecure connection on port 25 as the Email server is not intended for encrypted SSL communication. Then complete the Security items – User name and Password for authentication – as communicated to you by your network administrator. Select the required functions in the Report activation section. Enable periodic reports to make the server generate and send a report automatically at a defined time on a selected day. Enable sending of prompt notifications to watch all the intercoms and send error state information immediately regardless of the periodic report interval. Email sending diagnostics helps you define a text and test email recipient of your own to test the correct client setting for SMTP email sending.
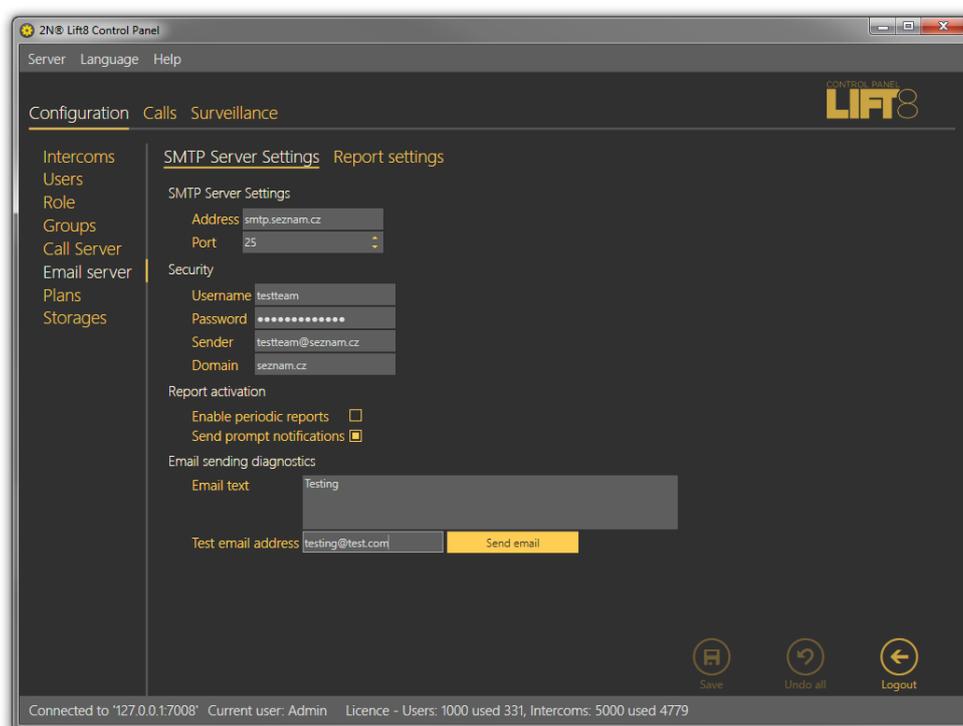
Email Server – SMTP Server Settings Menu

Report Settings

Define the content of the email reports to be sent. Four types of notifications are pre-defined here: checking, alarm and outgoing calls and prompt notifications. Set the contents of the three report types as follows: Select the report recipient email address or set groups on the provider's SMTP server for group/bulk sending. Then define the email subject and text (body). You can use a string to be replaced with the current intercom count or date. Refer to the list of supported strings below the report body. At present, the following strings are supported:

%DATE	Date and time
%INTERCOMS	Intercom count
%CHECKINGCALLS	Checking call count
%ALARMCALLS	Alarm call count
%OUTGCALLS	Outgoing call count

Set a filter for each report type: select the calls you are interested in (error or missed calls, for example). The filters are the same as in the Calls menu. If no filter is set, all calls are displayed. Enable prompt notifications and set the text of the report to be sent to distinguish prompt notifications from periodic reports. Prompt notifications are automatically sent to the email address completed for the given situation whenever a change occurs.

Email Server – Report Settings Menu

Define the Sending interval for periodic reports. Set a day in the month and time for the report to be generated and sent. Select the Last day in month to generate a report on the last day of the month regardless of the count of month days and define the hour.

Plans

The **Plans** menu helps you manage plans of the buildings in which the intercoms are installed. Assign the plans to the selected intercom and mark the intercom position in the Intercoms menu. This information will then be displayed to the 2N® Lift8 **Communicator** operators.
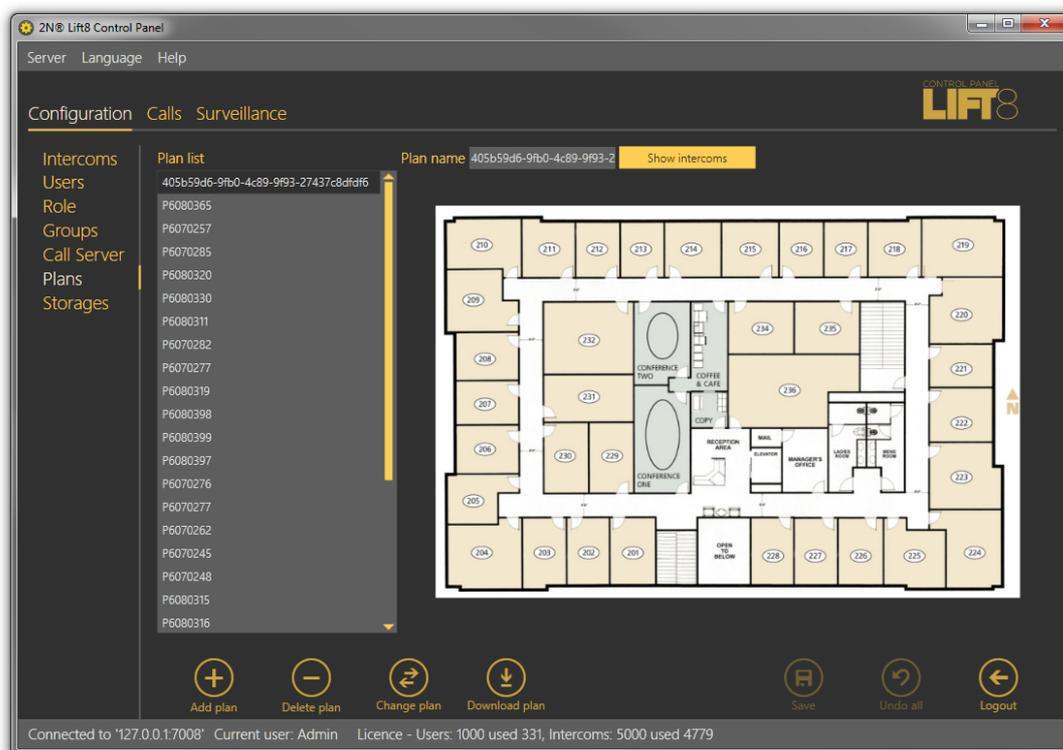
Plans Menu

Click Add plan to open a file browser and select the file to be added. Refer to the right part of the screen for the figure to be imported. Click Save to confirm the new plan.

Click on the plan to display the preview. Click Show intercoms next to the Plan name to view all the configured intercoms as an intercom symbol plus the phone number; see the figure above. Click Remove plan to delete a plan. Click Change plan to update a plan while keeping the plan name and the current intercom structure. Select Download plan to save the plan without the intercom positions onto a local disk.

> ⚠️ **Caution – exceeded maximum storage size**
>
> - Plans are saved sequentially. The error displayed always relates to the currently saved error-state plan, The other plans are queued for saving.
> - When the error is solved (by deleting of the 'defective' plan, e.g.), saving can go on as the Save button keeps active.

Storage

The **Storage** menu helps you configure all the storages necessary for the operation of the 2N® Lift8 system services. You can map the storage folders on a local disc, network discs and such additional memories as USB discs and memory cards.
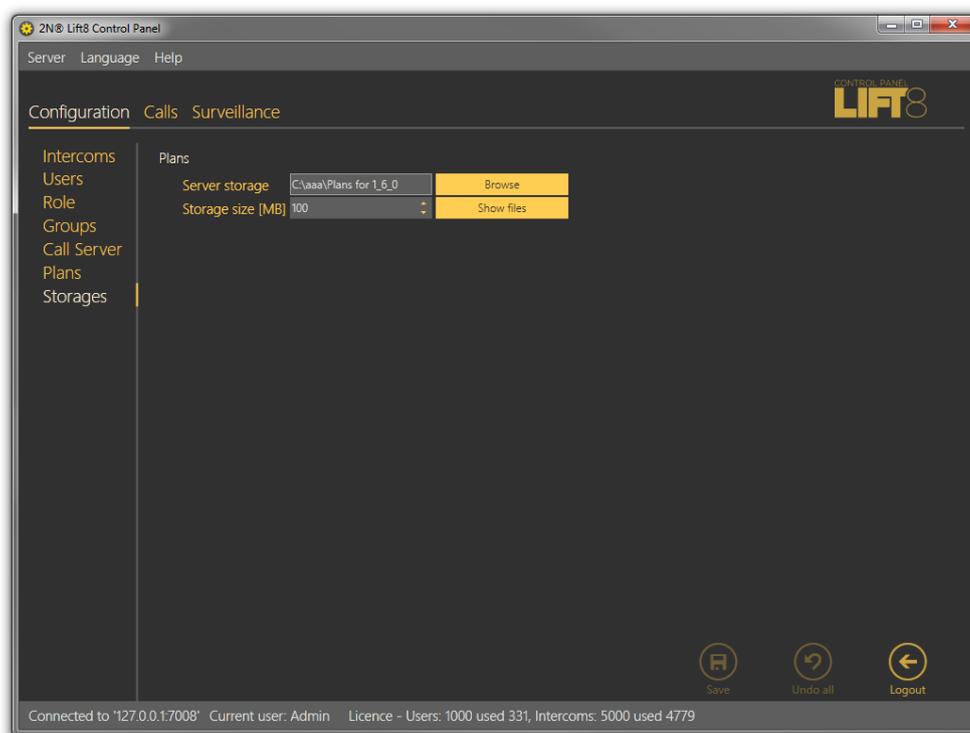
Storage Menu

You can map the path for plans: click Browse at the given storage to select the path to the folder to be used for storage. You can also create a new folder in the path selecting window. Now set the maximum Storage size (data space) within the whole logic storage (disc C, e.g.). Click Save for confirmation. From now on the storage will be active and used for data storing. Click Show files to view the files and plans stored on the disc. Their names correspond with the server database key. You can also see the file size and delete any file in this window.

> **✓ Tip**
>
> - The file name is encoded to eliminate building identification for security reasons.
> - Press F2 to rename a new folder.

> **⚠ Caution**
>
> - When the storage is full, no new plans can be added. Delete the old plans or set a higher storage capacity.

Calls

Calls is the other part of the main menu. This menu contains tables with check and alarm calls of all the intercoms and dispatcher and technician outgoing calls. The call history starts with the first server installation and the whole call database is always read, which facilitates call search. You can also use filtration to find the required call. Set a filter for each column and combine the filters to find the required data as soon as possible. Click the funnel symbol in the selected column to activate the filter. Activation is indicated by a colour change of the funnel symbol; see the figure below.

Left – Inactive Filter, Right – Active Filter

Each column with the funnel symbol includes specific filter settings; see the figure below. The Contains function finds the searched string in all the column items and returns all the occurrences. Enter a text into the string field and click Filter to activate the filter and find all the searched items in the column. Use another filter to make your search more precise and efficient. Having completed filtering, click Delete filter in the used columns to delete all the active filters.

> **✓ Tip**
>
> - You can also delete the filters via the contact menu displayed by clicking the right mouse button anywhere in the table or using Alt + r .
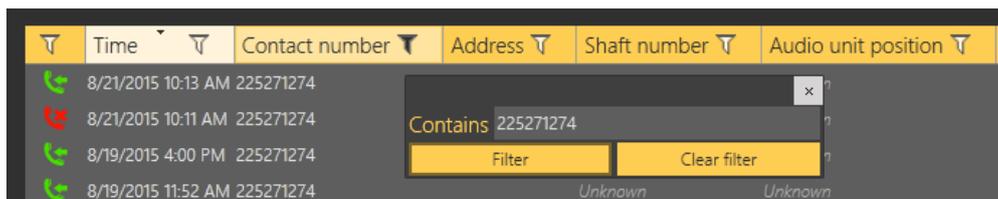
Filtration Setting Result

The first column of icons defines the call states. Column filtration can be used for explanation: choose which call state to filter. This information is available in all the three menus yet with different, specific meanings.
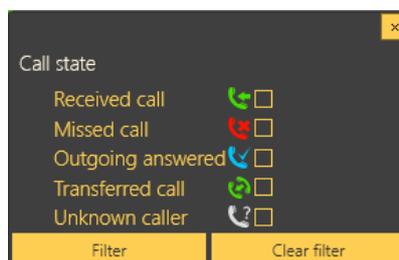

Alarm Call States

The states are described successively. Received call is the first state, which indicates a correctly processed incoming alarm call. The second icon, Missed call, means that the dispatcher failed to answer the call in time for any reason and ringing has been terminated. The Outgoing answered icon means that the dispatcher failed to answer the call in time for any reason and ringing has been terminated. The dispatcher is notified of this fact, calls the lift and gets connected to the alarm-initiating audio unit. This call is then evaluated as a correctly processed alarm call. Transferred call means that the dispatcher transfers a confirmed alarm call to another dispatcher or technician. The last state, Unknown caller, gets displayed whenever a completely unknown number is calling the server, i.e. the number is not included in the server configuration or is CLIR.
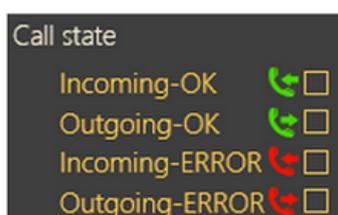
Checking Call States

The first state (top icon) is Incoming – OK, which signals a correctly processed incoming checking call and typically appears for rejected checking calls and checking calls with confirmation or via CPC and P100 whenever the communication is OK and the call is terminated correctly. Outgoing – OK appears for correctly made outgoing checking calls to the intercoms configured. Incoming – ERROR and Outgoing – ERROR mean that an error occurred during the call course and evaluation (CPC/P100 failure, e. g.).
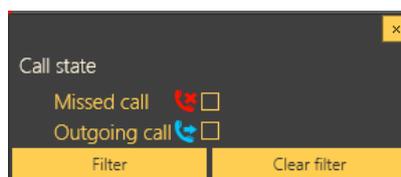
Outgoing Call States

The states are described successively. Missed call means that the dispatcher failed to answer the call in time for any reason and ringing has been terminated. The Outgoing answered icon means that the called person failed to answer the call in time for any reason and ringing has been terminated. The called party then calls the dispatcher itself and the call is evaluated as correctly processed.
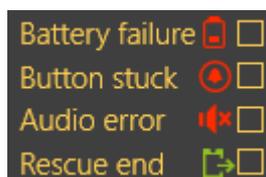
Operational Call States

The states are described successively. The first icon indicates a battery failure and is sent whenever the battery capacity is too low or the batteries are older than 2 years and need periodic replacement. Button stuck means that the Alarm button is jammed due to a mechanical defect or sabotage. Audio error means that the automatic audio unit audio test has failed due to a technical defect or sabotage (vandal damage to the microphone or speaker, e.g.), which disables proper communication with the control room. Rescue end signals that the cause of alarm has been repaired on site and the lift is fully functional again. In that case, the CU ends the rescue mode and calls the server to end the rescue mode too automatically.

The Calls menu is the only menu to include the Pin view button. Push the button to open the call history table in a new window. This allows you to view the call list on one monitor and configure other intercom and user parameters on the other; see the figure below.
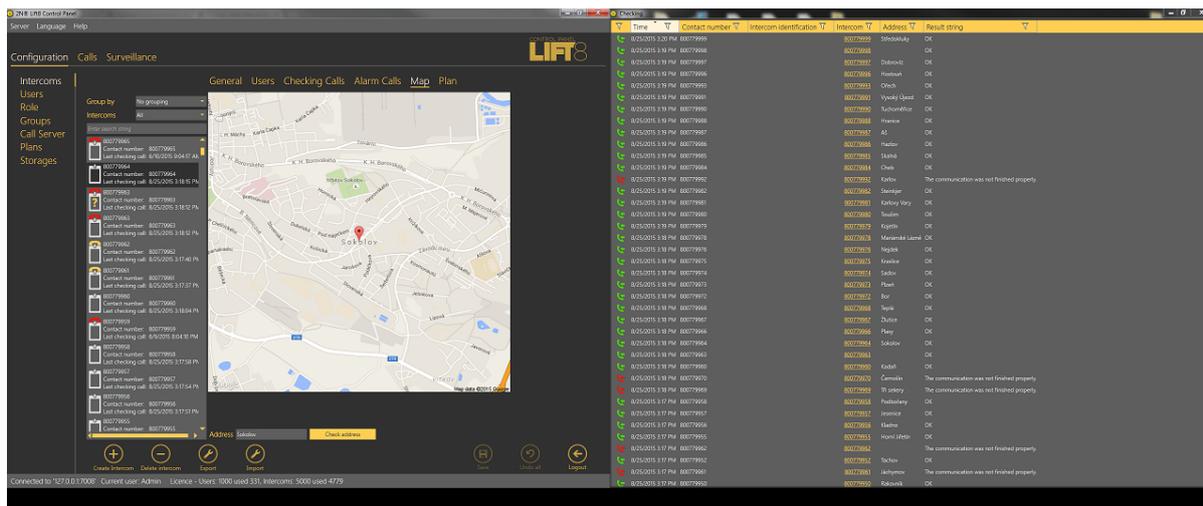
Pin View

Alarm Calls

The **Alarm** calls menu provides a table of all the alarm calls from all configured intercoms received by the **2N® Lift8 Server** from intercom addition until now. Click the filter button at each column to use filtration for call history search. See above for details. The table provides the following information: call state, Timestamp, Contact number, Address, Shaft number, Audio unit position, Intercom identification if CPC /P100 was successfully used, Opponent name and call-processing Agent/Dispatcher name. The last table column Note shows the note entered by the dispatcher during the alarm call. Click Load calls from archive to load the secondary call database as described in the Calls Server subsection above.
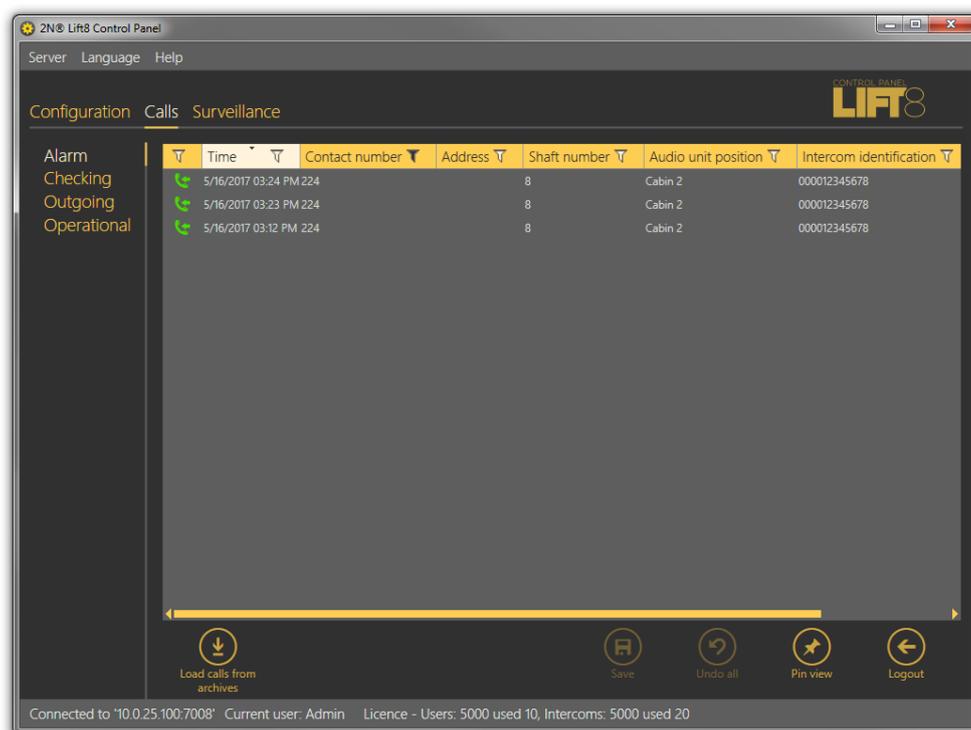
Calls – Alarm Menu

Checking Calls

The **Checking** calls menu provides a table of all the checking calls from all configured intercoms received by the 2N® Lift8 Server from intercom addition until now. Click the filter button at each column to use filtration for call history search. See above for details. The table provides the following information: call state, Timestamp, Contact number of the calling **CU**, Intercom identification if CPC/P100 was successfully used, Intercom name, Address and Result string. See the figure below. Click Load calls from archive to load the secondary call database as described in the Calls Server subsection above.
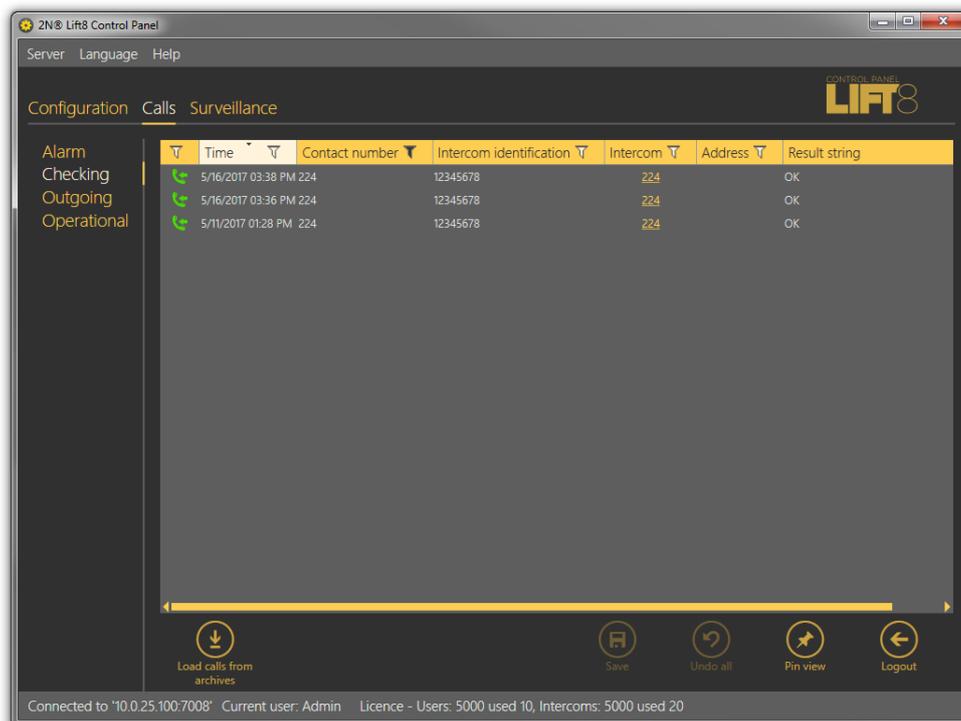
Calls – Checking Menu

Outgoing Calls

The **Outgoing** calls menu provides a table of all the outgoing calls from all users (Technicians and Dispatchers) received by the **2N**® **Lift8 Server** if made via the **2N**® **Lift8 Communicator**. Click the filter button at each column to use filtration for call history search. See above for details. The table provides the following information: call state, Timestamp, Contact number, intercom Address, Opponent number and call-processing Agent name. The last table column Note shows the note entered by Agent during the alarm call. Click Load calls from archive to load the secondary call database as described in the Calls Server subsection above.

Calls – Outgoing Menu

Operational Calls

The Operational Calls table includes all operational calls from all the intercoms recorded by the 2N® Lift8 Server. The condition is that the calls are made via a 2N® Lift device that supports this type of calls. Press the filter in the respective column to search the call history. See above for details. The table provides the following information: call state, call date and time, called number, intercom address and Id, intercom contact number and, if necessary, a note specifying the operational event ending type (automatically, by server). Thus, press the button to solve the error event in the Intercoms - General menu. Press Load calls from archive to load calls from the secondary database described in the Call Server subsection.
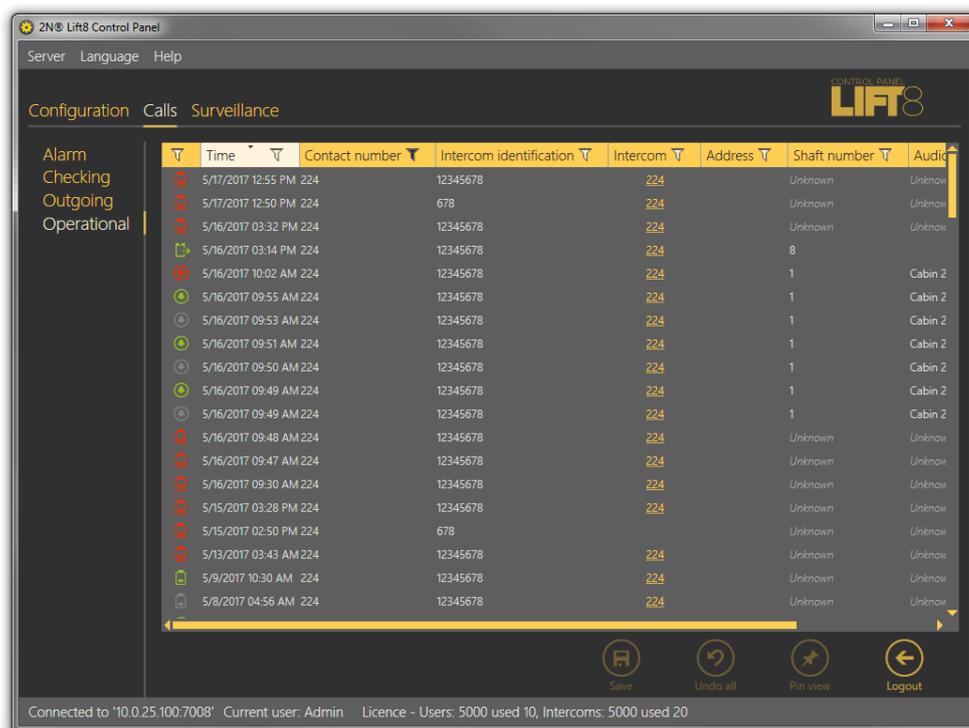
Calls – Operational Menu

Map

The Map menu helps you monitor the states of all intercoms configured in the system. It displays a list of all the intercoms that are assigned address, which is important for the world map location. A live map with groups of intercoms is displayed next to the list. Colours indicate the intercom state: green means that the intercom is functional, red signals a defective intercom due to a check call error, orange indicates that an intercom is OK now as the last check call was correct but the last but one check call was wrong and green reappears when a non-functional intercom makes a correct check call.
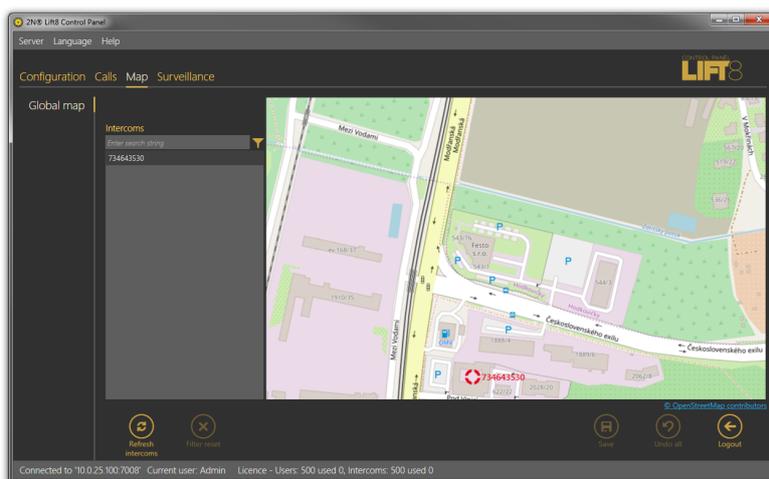
Map – Global Map Menu

Click on an intercom to focus on the currently selected intercom. Click on another intercom to centre this object. You can move and zoom in/out the map arbitrarily. You can use the search function to find the required intercom: enter the intercom name (or a sequence of characters) into the search row. The database search starts the moment you enter the first character. Add more characters to refine the filter until you find the required intercom. Click the Refresh intercoms button in the left-hand bottom corner to refresh all the intercoms on the map .
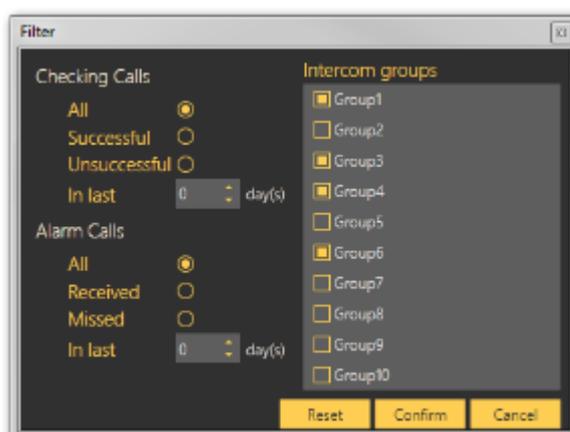

Map – Filtration Menu

Click the funnel symbol to display the intercom filtration window. Select a group of intercoms and click Confirm to display the intercom group to be searched. Use more filtering criteria to optimise your search: successful check or alarm calls or error check calls in the last x days (see above). All calls are displayed by default. The search result is shown in the Map menu – Global Map figure above.

Surveillance

The Surveillance menu displays and helps you monitor all of the configured 2N® Lift8

or 2N® LiftIP intercoms providing data tunnel communication. There are three possible intercom states: red indicates that the intercom is not connected to the Server or shows a problem, which is described in the hint under the cursor, blue means that the unit is server connection ready and green signals OK. Click the intercom field to move to the Basic/Intercom detail tab in the Intercoms menu.
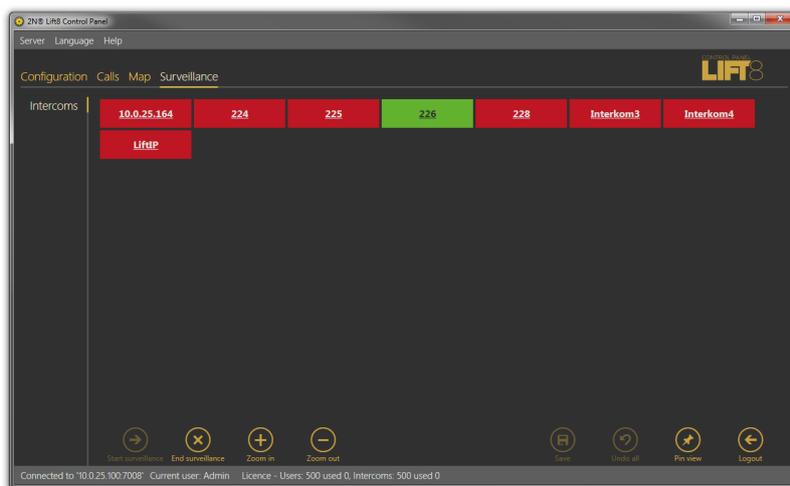
Surveillance Menu

Enter the menu to start watching the available intercoms. Click the Start / End watching buttons in the left bottom corner opf the screen to connect new intercoms or quit surveillance .

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v2.6.0