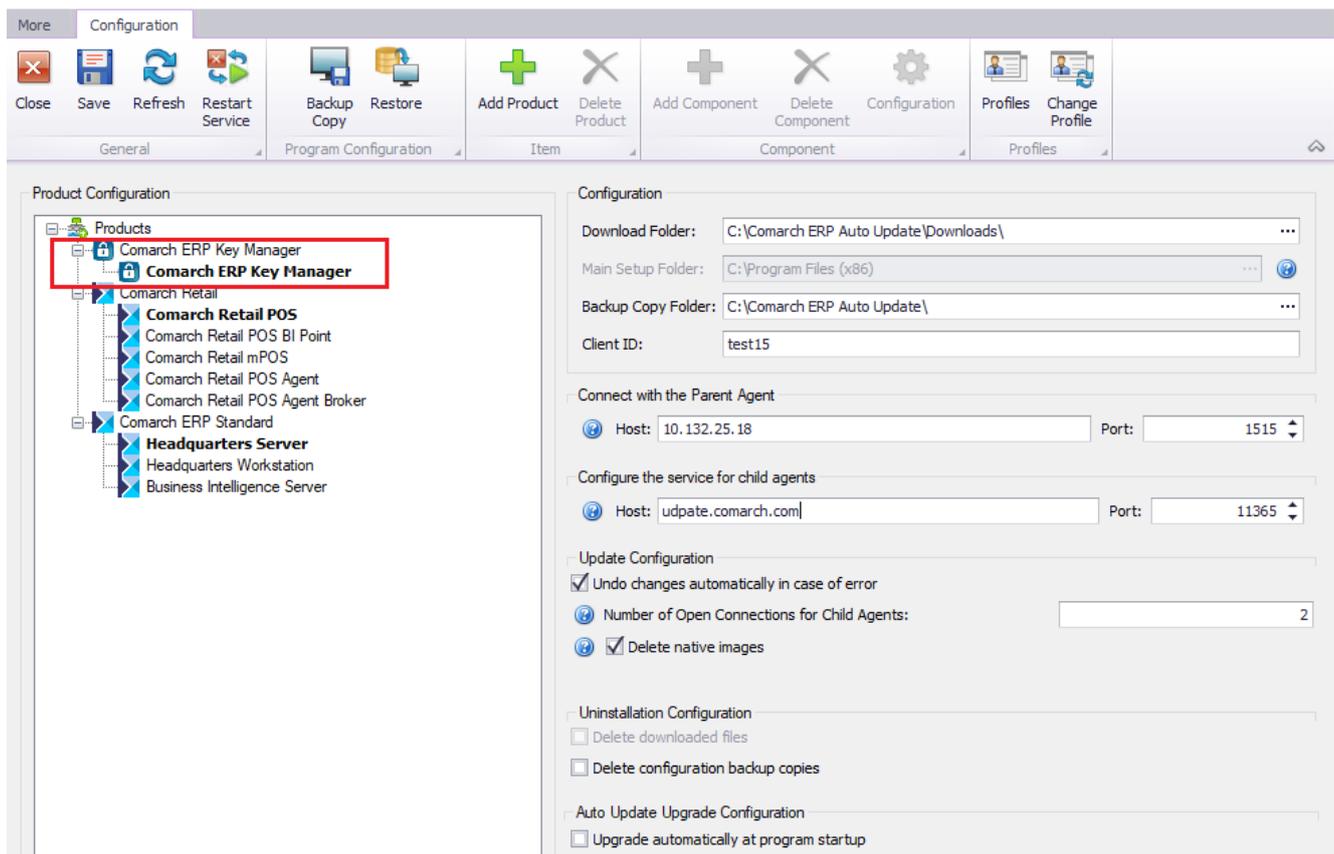


Installation and configuration of Key Manager

Key Manager is installed on a server on which SQL sever is installed, on Comarch ERP Auto Update main profile.



Comarch ERP Auto Update configuration window with selected product Comarch ERP Key Manager

Comarch ERP Auto Update configuration window with selected Comarch ERP Key Manager

After adding Comarch ERP Key Manager product and component, it is necessary to configurate them. The following fields must be filled in:

- Local name of the database server instance, on which the component is to be installed, along with logon credentials of the user with administrative privileges,
- Customer ID, PIN, license key number,

- Optionally, e-mail address for receiving notifications whenever the key loses connection to Comarch server.

More Configuration Comarch ERP Key Manager Configuration

Close Save

General

SQL Server Instance

Instance: localhost

SQL Login: admin

Password: ●●●●●●●●●●

Test Connection

Key Details

Client ID: 111223

PIN: 1234

Key Number: 5000005788

Virtual Key Administrator

E-mail Address:

Notify if the key loses contact to Comarch servers

Key Manager configuration window

During the installation, the following actions are performed:

- Installation of HASP key drivers
- Configuration of database server
- Addition of exception to firewall in order to enable working over the network
- Installation of *Managing Keys of Comarch ERP products* (ComarchML) service
- Installation of the application Key Manager Monitor

Key Manager Monitor

The Key manager consists of the monitor application (ComarchMLTray). This is the application which is responsible for displaying the padlock icon at the right bottom corner of the screen. The Monitor is run from the level of the Key Manager installation directory. By default, its:

C:\Program Files (x86)\Comarch ERP Key Manager\Key Manager\ComarchMLTray.exe



Monitor
icon

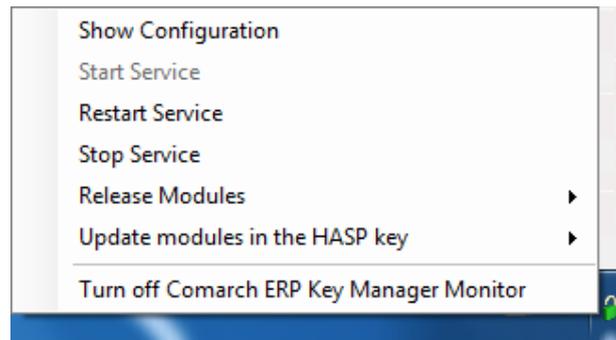
A green color of the padlock icon informs about the proper status which allows using the latest software versions for the purchased modules.

A yellow color of the padlock icon informs that the program is beyond warranty. It is possible to work using only the versions, which production dates are earlier than the expiration dates of the purchased modules. It is recommended to extend the warranty validity.

A red color of the padlock icon informs about lack of information about available modules or stopped service *Managing Keys of Comarch ERP products (ComarchML)*. Comarch applications can be run only in DEMO mode.

Upon right-clicking the padlock icon, the following options

are available:



Available Key Manager Monitor options

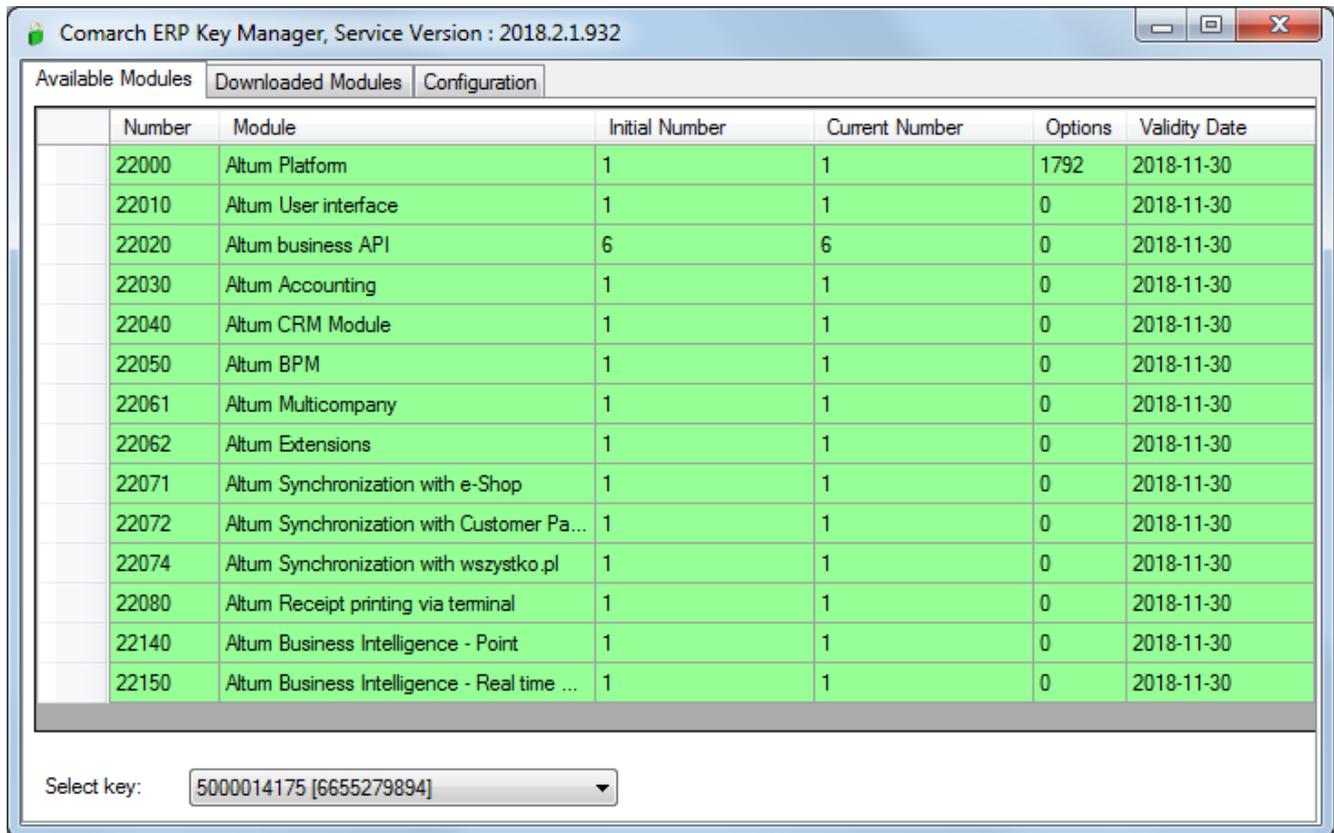
- **Show Configuration** – displays the application window
- **Start Service** – starts the service ComarchML
- **Restart Service** – restarts the service ComarchML
- **Stop Service** – stops the service Comarch ML
- **Release Modules** – logs out particular users from the service and hence releases the downloaded modules the for selected keys
- **Update modules in the HASP key** – updating of modules in HASP keys (programming of a HASP key attached to the computer)
- **Turn off Comarch ERP Key Manager Monitor** – deactivates the padlock icon

Moreover, double-clicking on the green (or yellow) padlock icon will open Comarch ERP Key Manager application window, which is tantamount to selecting the option [**Show Configuration**]. Clicking the option [**Show Configuration**] opens the application window which is composed of three tabs:

- Available Modules
- Downloaded Modules
- Configuration

The tab *Available Modules* presents a list of available modules from the modules activated in Comarch (virtual key). The same information is also available on the

Website <http://localhost:5150>. The number of the Key Manager version is visible in the window header.



The screenshot shows the 'Comarch ERP Key Manager, Service Version : 2018.2.1.932' window. It features three tabs: 'Available Modules', 'Downloaded Modules', and 'Configuration'. The 'Available Modules' tab is active, displaying a table with the following columns: Number, Module, Initial Number, Current Number, Options, and Validity Date. The table lists 15 modules, all with a validity date of 2018-11-30. At the bottom, there is a 'Select key:' dropdown menu showing the value '5000014175 [6655279894]'.

Number	Module	Initial Number	Current Number	Options	Validity Date
22000	Altum Platform	1	1	1792	2018-11-30
22010	Altum User interface	1	1	0	2018-11-30
22020	Altum business API	6	6	0	2018-11-30
22030	Altum Accounting	1	1	0	2018-11-30
22040	Altum CRM Module	1	1	0	2018-11-30
22050	Altum BPM	1	1	0	2018-11-30
22061	Altum Multicompany	1	1	0	2018-11-30
22062	Altum Extensions	1	1	0	2018-11-30
22071	Altum Synchronization with e-Shop	1	1	0	2018-11-30
22072	Altum Synchronization with Customer Pa...	1	1	0	2018-11-30
22074	Altum Synchronization with wszystko.pl	1	1	0	2018-11-30
22080	Altum Receipt printing via terminal	1	1	0	2018-11-30
22140	Altum Business Intelligence - Point	1	1	0	2018-11-30
22150	Altum Business Intelligence - Real time ...	1	1	0	2018-11-30

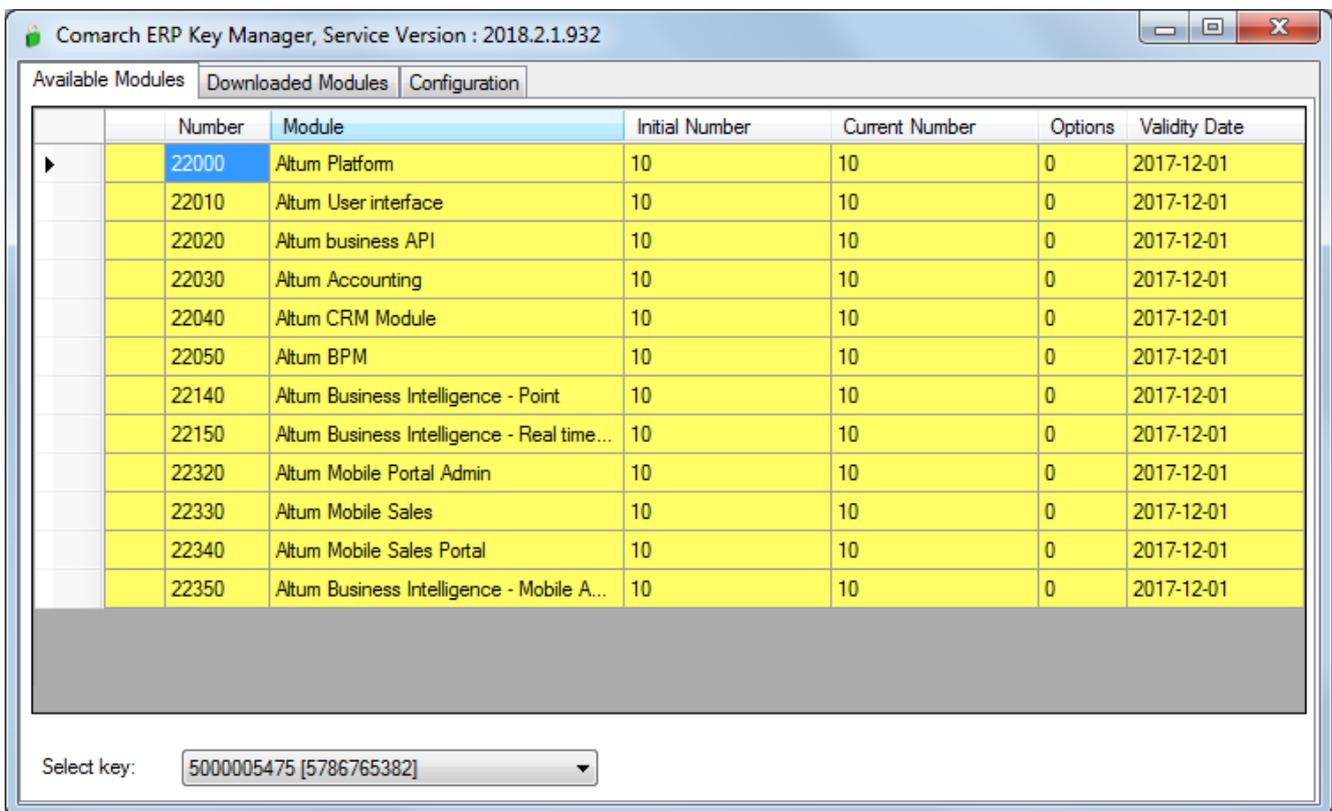
Key Manager window

The window is composed of the following columns:

- **Number**– numerical identification of a license module
- **Module** – module name
- **Initial Number** – number of modules available on a key
- **Current Number**– number of free modules remaining on a key
- **Options** – information whether module contains additional options (e.g., EDI data exchange)
- **Validity Date** – module expiration date

The color of the listed modules informs whether a given module is valid or whether its warranty has expired. The modules with a valid warranty are displayed as green (validity date is later or equal to the current date), whereas the modules beyond warranty are displayed as yellow (validity date is earlier than the current date).

If there more than one key has been added to the Key Manager, an additional field *Select Key* appears, which allows for switching between the added keys.



Key Manager window

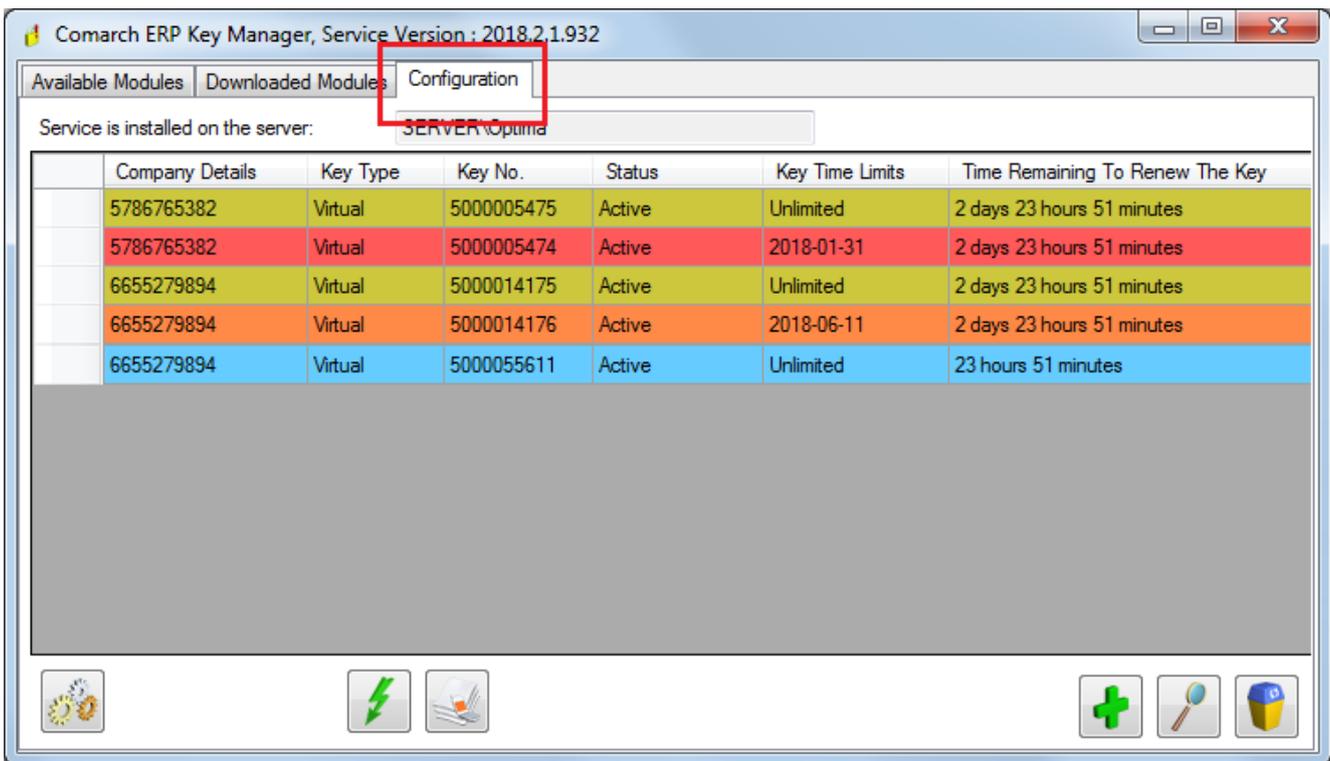
Tab *Downloaded Modules* provides information about the modules downloaded by the application, which use the Key Manager. Information about a user, who downloaded a given module, is provided in the column *Logged In Users*. If Comarch ERP Standard is run several times on the same computer, each of those startups is displayed in tab *Downloaded Modules*, however, each unique module will be downloaded from the sever only once. In case of connections via terminal, such operation takes place within one connection. Running Comarch ERP Standard when another connection is initiated to the same server (but from a different session) will download a separate set of modules.

Downloaded modules, which are not refreshed by application for a certain time with the help of the parameter: *Time to release inactive module* (by default, it is set to 1800 s), are

removed from the list of downloaded modules and the number of available modules is updated.

- **Refresh (F5)** – allows for updating the view
- **Delete** – deletes all the downloaded modules for a selected user. The exception are modules *per device* (e.g., Comarch Retail POS application) which are assigned permanently. Once downloaded modules are not released after logging out of the application. Also restarting of a service does not release a module which was assigned to an ID sent by a device. Such module can be reset by calling Comarch Customer Service.

In tab Configuration you can find the name of SQL server on which the Key Manager service is installed and a list of all the keys connected to the Key Manager.



Key Manager window with selected Configuration tab

The window is composed of the following columns:

- **Company Details** – tax identification number of the company, which owns the key

- **Key Type** – virtual or HASP
- **Key No.**
- **Status** – information about the current status of a given key
- **Time Remaining To Renew The Key** – maximum time remaining before the cyclic connection to Comarch servers.

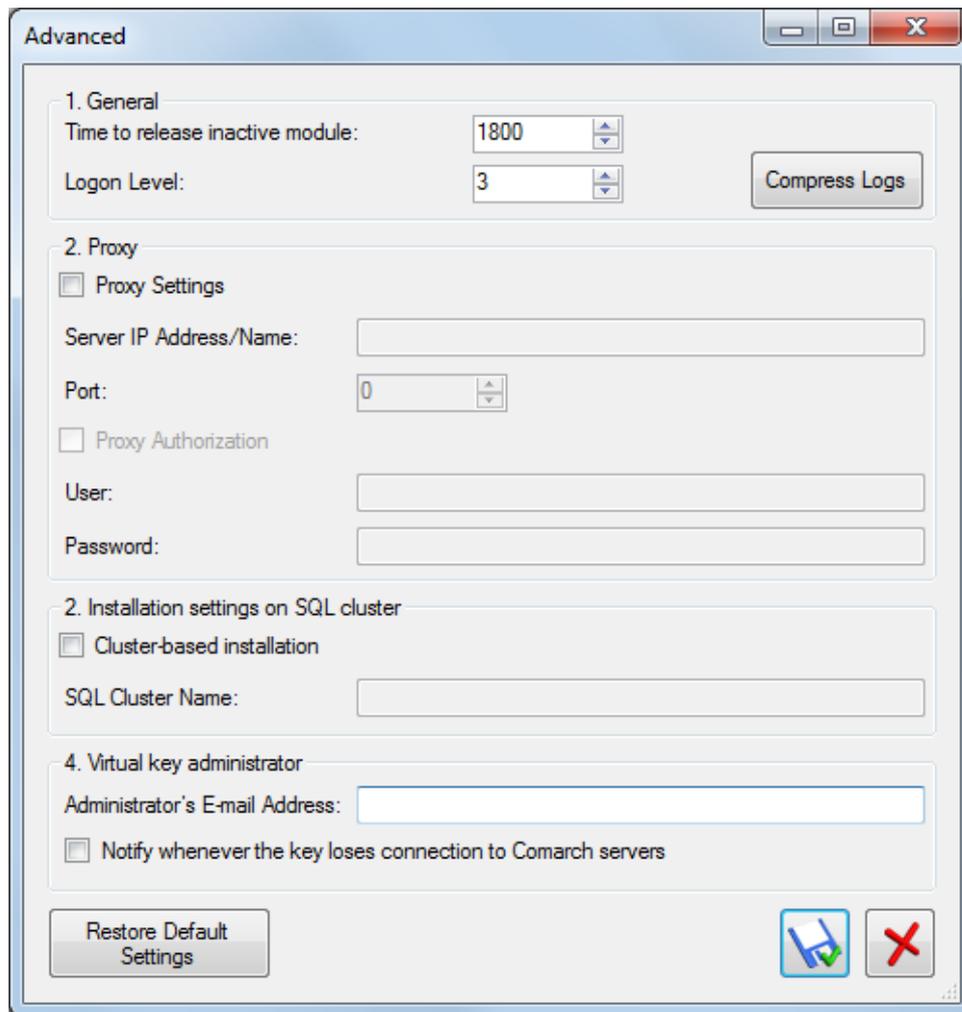
If at least one of the keys on the list is time-limited (regardless of modules' expiration dates), then the date of this time limit is displayed in an additional column *Key Time Limitation*. The other keys on the list, which do not have this restriction, are labeled as: *Unlimited* If key time limitation date is exceeded, then color of such a key changes to red and the numbers of all the modules connected to that key are reset. In such case retrieving a license module and working in the Comarch ERP Standard system is not possible.

Functions available in Configuration tab

Virtual keys available in the Key Manager require a cyclic connection to Comarch servers, which is executed every 2 hours in order to verify the availability of license modules on a key. The maximum time between subsequent connections is 72 hours.

The following options are available in *Configuration* tab:

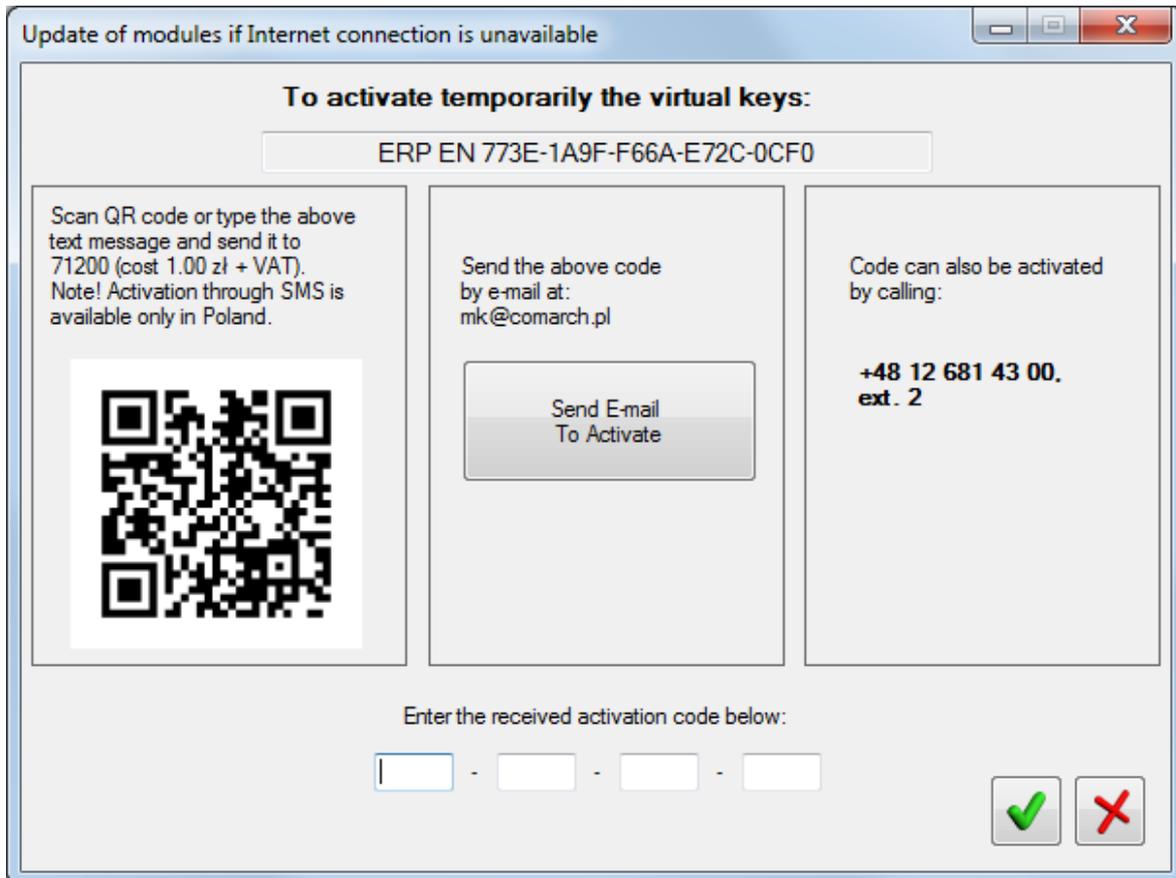
1. **Advanced** – opens an additional window with advanced configuration parameters



Advanced option window

- **Time to release inactive module** – this time is expressed in seconds and it determines the time after which the incorrectly released modules (for instance, as a result of forced application shutdown from the level of the Task Manager) are deleted. The minimum time is 7-seconds. By default, it is set to 1800 seconds
- **Logon Level** – determines the level of detail for saved logs: 0 – only exceptions, 1 – minor, 2 – average, 3 – major. This parameter is set to 0, by default
- **Compress Logs** – clicking on this button compresses all the Key Manager's logs and stores it in folder C:\Users\user\AppData\Local\Temp of Windows user.
- **Proxy Settings** – activates communication through a further defined proxy server
- **Server IP Address/Name** – IP address or name of the proxy server

- **Port** – port used by the proxy server
 - **Proxy Authentication** – selecting of this parameter enables the option of providing authentication data on the proxy server
 - **User** – name of the user to be authenticated on the proxy server
 - **Password** – password of the user to be authenticated on the proxy server
 - **Cluster-based installation** – selecting this parameter activates the Key Manager in SQL cluster
 - **SQL cluster name** – names of a clustered SQL server service
 - **Administrator's e-mail address** – e-mail address to which important messages relating to Manager Key will be sent as well as notifications that a virtual key has lost connection with Comarch servers
 - **Notify whenever the key loses connection to Comarch servers** – by selecting this option, a notification will be sent to the e-mail address of virtual key Administrator in case one of the virtual keys connected in a given instance has not established connection to Comarch servers for at least 72 hours
 - **Restore Default Settings** – restores standard advanced settings
1. **Update Modules** – forces connection to Comarch servers and updates the view
 2. **Update modules if Internet connection is unavailable** – used in case there is no network connection, allows for activating modules for another 72 hours



Window for updating modules in case of no network connection

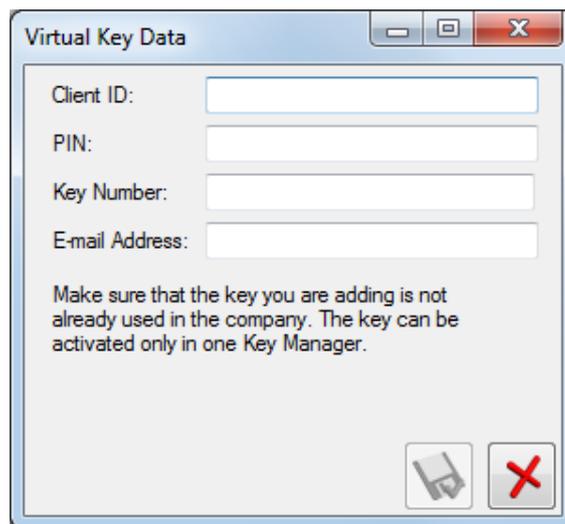
Such activation can be done in three ways:

- By sending a text message, as shown in the frame in the upper part of the window, to the number 7148 (the cost is 1 PLN + VAT) ERP PL Activation code. The letter case is not distinguished. The activation service via a text message is available in Poland only. The reply that is sent to a received text message contains an activation code, which must be typed into the empty fields at the bottom of the window. Moreover, instead of typing manually a text message, a QR code can be scanned with the help of the application. After this operation is performed, a relevant text message will be prepared and will be awaiting user's confirmation of sending it.
- By sending an e-mail message to the address: mk@comarch.pl. The message should include the entire activation code displayed in the frame, that is: ERP

language_code_activation_code. It is also possible to click on the button [**Send an e-mail to activate**], which will prepare a ready-to-send message. This function requires configuration of a default mail client in Windows system, where Key Manage is installed.

- By calling +48 12 681 4300 and providing the code from the frame to a consultant. An activation will then be generated on the basis of the provided code. The generated activation code must, next, be typed into the empty fields.

1. **Add** – adds a virtual key. To add a key, it is necessary to insert customer's ID, PIN (4 digits), key number (50000xxxxx) and e-mail address if it is not provided in the Key Manager configuration.



Virtual key data

1. **Edit** – this option allows for the edition of data relating to virtual key and it can be used only if the virtual key is not yet active.
2. **Delete** – deletes a virtual key. A deleted virtual key can be activated on a different computer. If there is no access to the Internet, it is possible to connect it on a different computer without the necessity of restarting it.

Transferring of a key to another computer

Transferring of a key to another computer requires execution of the following steps:

- deleting it from the first installation
- activating it later on a new computer after installing Comarch ERP Key Manager

Without deleting the virtual key from the primary computer, it will not be possible to activate it in the new environment.

If the computer, where the virtual key was activated, cannot be accessed or connected to the Internet, please contact Comarch Technical Assistance in order to have the settings of the virtual key being transferred reset.