



APS Administrator.CR

Credit system management in APS systems

(Extending program module for APS Administrator)

Installation and user's guide



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2 Product description, installation

2.1 Product description

The *APS Administrator.CR* program module extends the *APS Administrator* program package with management of the credit system. *APS Administrator.CR* It is designed for comfort management of users and their credit and operators' credit sales evaluation. The product is (as well as *APS Administrator*) designed for multiuser usage in LAN environment.

2.2 Minimal operation conditions

The complete *APS Administrator* program package must be correctly installed before the extending module can be used.

APS Administrator.CR requires the *ACS.ONLINE* and *CR* licenses stored in the system controller, when it is used in the *APS 400* system; when used in the *APS mini Plus* system, each reader used for in the credit system must be equipped with the *MLO* and *MCR* licenses.

The program requires *APS400nAdministrator* database with minimal version *52* and the system must be used in *online* operating mode.

2.3 Software installation, data safety and backup

The program is installed using its installer.

Using the *APS Administrator.CR* extending module does not cancel the option to use any other extending module for *APS Administrator* program package.

Due to the integration of *APS Administrator.CR* software extension data structures into the basic *APS400nAdministrator* database, same rules for security and backups are applied. More information about this concern can be found in *APS Administrator* user's guide.

3 Program configuration

Before the standard operation of the *APS Administrator.CR* program can start, it is required to perform a series of settings first. These settings are done in the basic *APS Administrator* program.

The user has to log in with administrator's rights into the system. It is necessary for setting operating parameters of the extending module *APS Administrator.CR (Global (APS Administrator) – User is administrator)*.

3.1 Setting user's account and access groups

The management of users is carried out in program *APS Administrator* (according to the step by step manual). The *APS Administrator.CR* program is designated for basic management of the credit system.

Link for step by step manual:

<http://www.techfass.cz/step-by-step-guides-en.html>

3.2 Module definition and users of credit system

Modules, which should be involved in the credit system, have to be defined in program *APS Administrator*:

- *Configuration > System > Systems modules > Properties of reader > Subtract credit in online mode.*

It is further required to set users, who should have their access determined by their credit. In basic settings, credit is required from all users in the system. It is necessary to set an exception for users who should have access without credit in the *APS Administrator* program.

- *Personal card > Credit > Exclude person from credit system.*

3.2.1 Setting administrators and operators accounts

Definition of the user with administrator or operator account: *APS Administrator: > Personal card > Login and authorization.*

- *Operator of credit system module:* The user is allowed to manage user + User is operator of the credit system module.
- *Administrator of credit system module:* The user is allowed to manage user + User is administrator of the credit system module.
- *Administrator:* The user is administrator of the Credit system module

4 Working in program

4.1 Program main window

The main window of the program (*pic. 1*) is divided into several parts. The program always displays the last used module on start.

The screenshot shows the main window of the APS 400 program. At the top, there is a menu bar with icons for File, Refresh, Settings, Online, Archive, Users, Operators, Presence, Pause, and Exit A. Below the menu bar is a table with the following columns: Date, Time, User, Operation, Change, Operator, and Note. The table contains a list of credit operations with various statuses and change values.

Date	Time	User	Operation	Change	Operator	Note
20.07.2015	16:25:56	Bartůňková ()	Credit sold by operator	+1	Administrator ()	
20.07.2015	09:35:25	Sobol ()	Credit operations lock		Administrator ()	Operator 2
16.07.2015	13:32:08	Bartůňková ()	Credit operations lock		Administrator ()	
16.07.2015	13:32:02	Bartůňková ()	Credit sold by operator	+4	Administrator ()	
16.07.2015	13:30:25	Bartůňková ()	Credit operations lock		Administrator ()	
16.07.2015	12:07:12	Bartůňková ()	Credit operation cancelled	-2	Administrator ()	
16.07.2015	12:07:07	Bartůňková ()	Credit sold by operator	+2	Administrator ()	
16.07.2015	11:55:35	Bartůňková ()	Credit operation cancelled	+1	Administrator ()	
15.07.2015	14:06:06	Sovář ()	Access denied - insufficient credit			
15.07.2015	14:06:00	Operátor ()	Credit used by system event	-1		
15.07.2015	14:05:57	Bartůňková ()	Credit used by system event	-1		
15.07.2015	14:05:46	Forbes ()	Credit used by system event	-1		
15.07.2015	14:05:40	Dvořák ()	Credit used by system event	-1		
15.07.2015	13:59:30	Sobol ()	Credit use entered by operator	-1	Administrator ()	Průchod vchodem A
15.07.2015	13:57:49	Sobol ()	Credit sold by operator	+6	Administrator ()	
15.07.2015	09:35:18	Bartůňková ()	Credit operations lock		Administrator ()	
14.07.2015	15:02:52	Novák ()	Access denied - insufficient credit			
14.07.2015	11:13:14	Sobol ()	Credit operations lock		Administrator ()	
14.07.2015	11:10:16	Sobol ()	Credit use entered by operator	-1	Administrator ()	

Pic. 1: Main window of the program

4.2 Users rights

It is required to define user's rights in *APS Administrator* program for operations in *APS Administrator:CR* program.

Personal card > Login and Authorization > Credit system

- **Operator:** The user with operator's rights can manage credit operations of the users, but he has not accessible **Operators** module, which evaluate operator's work.
- **Administrator:** The user with Administrator's rights has accessible all modules for complete management of the credit system.

4.3 Control panel

The *Control* panel is placed on top of the window and contains buttons for basic functions of the program and launches system functions.

4.3.1 File button

- *Save*: Save data from current module in specified format.
- *Print*: Print data from current module.
- *Exit*: Exit program (Alt + F4).

4.3.2 Refresh button

The button *Refresh* updates data displayed in the module (*Online*, *Archive*, *Users*, *Operators* or *Presence*).

4.3.3 Settings button

- *Help*: Shows program help.
- *About*: Shows program description.
- *Options*: Shows program setting.
 - *Environment*: Enables the choose language, the number of rows in the operations table and the ability to choose in which order are the shown operations displayed.
 - *Microreader*: Allows to define the use of microreader in the program. The correct setting of *ID Microserver 2* program is required.

Change server: Allows redefining the connection to the SQL Server. (The program will shut down automatically, it is necessary to run the program again)

- In the *Database server dialog*, at the *SQL server* tab, you are able to enter the connection string to the SQL server (typically (*local*)) in the *Available servers list* or to choose from previously connected databases.
- The button *Test* checks connection to the server.

Database server dialog will be displayed when the *APS Administrator.CR* program starts for the first time.

5 Program module

5.1 Online

Module *Online* shows current credit operations in program (Pic. 2).

- **Refresh:** Refresh current view.
- **Pause/Continue:** This button is used to pause/continue displaying online events (newest actions are listed retroactively after pressing the button).

Date	Time	User	Operation	Change	Operator	Note
20.07.2015	16:25:56	Bartůňková ()	Credit sold by operator	+1	Administrator ()	
20.07.2015	09:35:25	Sobol ()	Credit operations lock		Administrator ()	Operator 2
16.07.2015	13:32:08	Bartůňková ()	Credit operations lock		Administrator ()	
16.07.2015	13:32:02	Bartůňková ()	Credit sold by operator	+4	Administrator ()	
16.07.2015	13:30:25	Bartůňková ()	Credit operations lock		Administrator ()	
16.07.2015	12:07:12	Bartůňková ()	Credit operation cancelled	-2	Administrator ()	
16.07.2015	12:07:07	Bartůňková ()	Credit sold by operator	+2	Administrator ()	
16.07.2015	11:55:35	Bartůňková ()	Credit operation cancelled	+1	Administrator ()	
15.07.2015	14:06:06	Sovák ()	Access denied - insufficient credit			
15.07.2015	14:06:00	Operátor ()	Credit used by system event	-1		
15.07.2015	14:05:57	Bartůňková ()	Credit used by system event	-1		
15.07.2015	14:05:46	Forbes ()	Credit used by system event	-1		
15.07.2015	14:05:40	Dvořák ()	Credit used by system event	-1		
15.07.2015	13:59:30	Sobol ()	Credit use entered by operator	-1	Administrator ()	Průchod vchodem A
15.07.2015	13:57:49	Sobol ()	Credit sold by operator	+6	Administrator ()	
15.07.2015	09:35:18	Bartůňková ()	Credit operations lock		Administrator ()	
14.07.2015	15:02:52	Novák ()	Access denied - insufficient credit			
14.07.2015	11:13:14	Sobol ()	Credit operations lock		Administrator ()	
14.07.2015	11:10:16	Sobol ()	Credit use entered by operator	-1	Administrator ()	

Pic. 2: The Online module

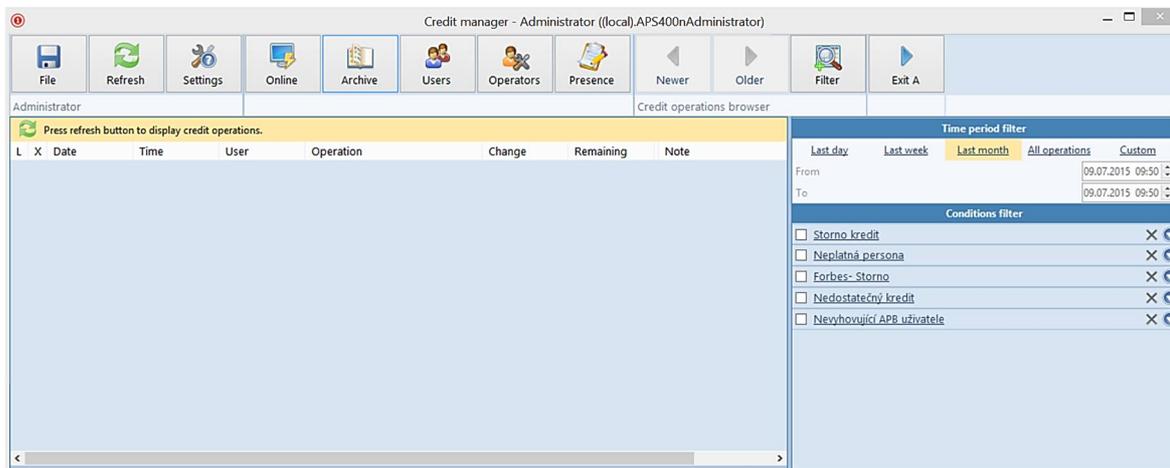
5.1.1 Description of the columns in the module

The table of the *Online* module contains following columns:

- **Date:** Shows the date of the current operation.
- **Time:** Shows the time of the current operation.
- **User:** Shows the bound with current operation.
- **Operation:** Shows the type of operation.
- **Change:** Shows the user's credit change.
- **Operator:** Shows which Operator performed the operation.
- **Note:** Shows the text note linked with operation.

5.2 Archive

The *Archive* module shows operations of the credit system. It is possible to filter previous operations in the archive according to time period and user conditions (*Pic. 3*).



Pic. 3: The Archive module

5.2.1 Description of the columns in the module

The table of the *Archive* module contains the following columns:

- **Column L:** Shows which operations are locked by the operator. The locked operations are marked by a lock icon.

It is not possible to cancel a locked operation.

- **Column X:** Shows which operations are canceled by the operator. The canceled operations are marked by a cross icon.
- **Date:** Shows the date of the relevant operation.
- **Time:** Shows the time of the relevant operation.
- **Users:** Shows the bound with current operation.
- **Operation:** Shows the type of operation.
- **Change:** Shows the change in a user's credit.
- **Remaining:** Shows the user's credit balance after an operation.
- **Operator:** Shows which operator performed the operation.
- **Note:** Shows information about the system and the reader where the operation took place, or a personal operation note.

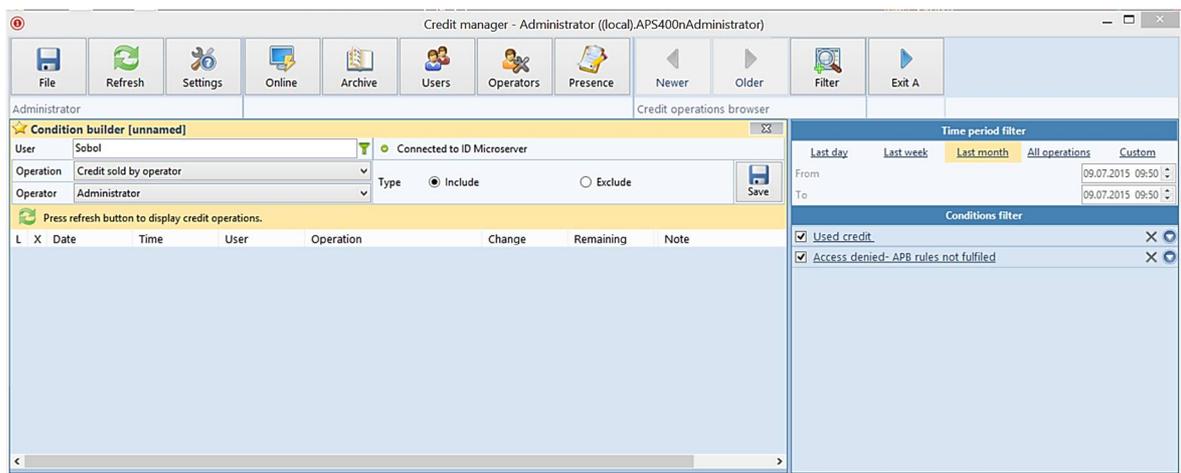
5.2.1 Time period filter

On the *Time period filter* panel it is possible to set time conditions to display credit operations in a given period.

- *Last day*: Shows all operations in the current day.
- *Last week*: Shows all operations in the current week.
- *Last month*: Shows all operations in the current month.
- *All operations*: Shows all operations in a defined period.

5.2.2 Conditions filter

Press the *Filter* button to define a filter with user conditions to select specific credit operations.



Pic. 4: Defined conditions filter

The filter can use following criteria:

- *Users*: Shows operations linked with a particular user. The search function can be performed manually or by scanning an ID using a microreader.
- *Operation*: Defines the operation type.
- *Operator*: Chooses the operator who created the operation.

A defined *Condition* can be used in two ways:

- *Include*: Only operations which meet the defined conditions are shown.
- *Exclude*: All operations, excluding those that meet the defined conditions, are shown.

A condition can be named and *saved*.

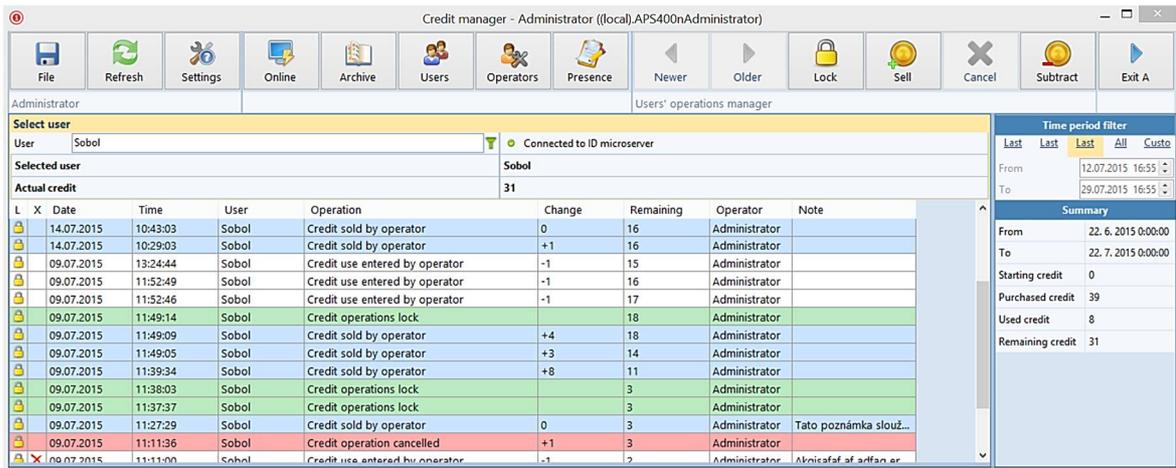
The *conditions* module shows saved conditions, according to which the credit system operations can be filtered (*Pic. 4*). The conditions can be activated by checking them and pressing the *Refresh* button.

5.3 Users

The *Users* module is used for the management of the users and their credit.

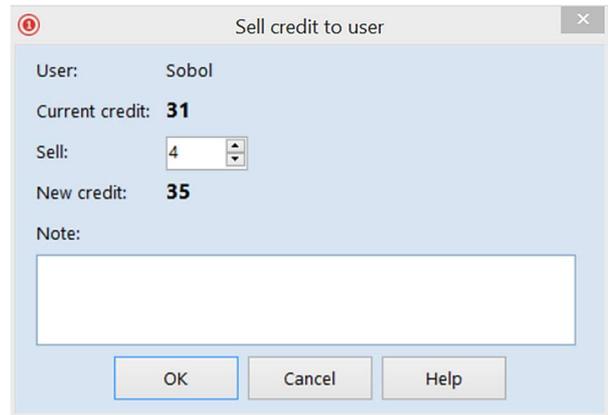
Select a user to access the credit management options first. After choosing the user, all of his recorded operation in a given time period will be shown and the buttons for credit operations will be accessible (Pic. 5).

If a *microreader* is connected, the user can be selected by scanning his ID.



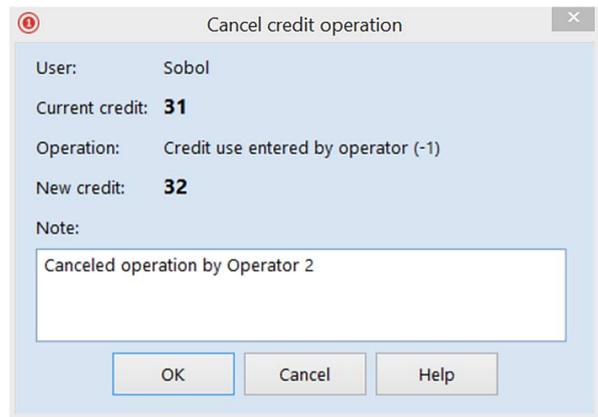
Pic. 5: Users module

Sell: This button is used to sell (add) credit to selected user. Any amount of credit can be sold and additional information to a particular operation can be added (Pic. 6).



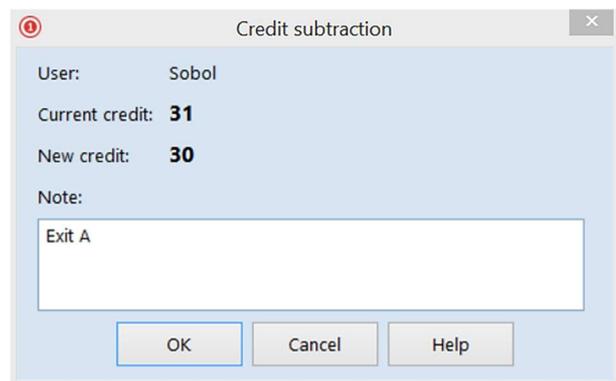
Pic. 6: Sell credit to user

Cancel: This button is used to cancel a credit operation. By canceling an operation, there will be a new operation created, negating the selected one. Locked or canceled operations cannot be canceled (Pic. 7).



Pic. 7: Cancel credit operation

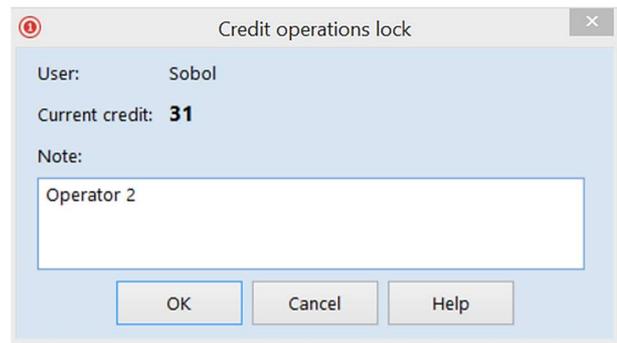
Subtract: This button is used for subtracting credit from the user's current balance. This function subtracts one credit per use (Pic. 8).



Pic. 8: Credit subtraction

The function allows an operator to subtract the credit from a user manually. The function is typically used when a user forgets his ID to identify himself on a reader, which standardly performs the subtract operation on its own.

Lock: This function is used to lock a user's credit operations. Locked operations cannot be canceled. (Pic. 9).



Pic. 9: Credit operations lock

5.3.1 Description of the columns in the module

The **Users** module contains the following columns:

- **Column L:** Shows which operations are locked by the operator. The locked operations are marked by a lock icon.

It is not possible to cancel a locked operation.

- **Column X:** Shows which operations are canceled by the operator. The canceled operations are marked by a cross icon.
- **Date:** Shows the date of the relevant operation.
- **Time:** Shows the time of the relevant operation.
- **Users:** Shows the bound with current operation.
- **Operation:** Shows the type of operation.
- **Change:** Shows the change in a user's credit.
- **Remaining:** Shows the credit balance after an operation.
- **Operator:** Shows which operator performed the operation.
- **Note:** Shows information about the system and the Reader, where the operation took place, or a personal operation note.

5.3.1 Time period filter

On the *Time period filter* panel it is possible to set time conditions and display credit operations in a given period.

- *Last day*: Shows all operations in the current day.
- *Last week*: Shows all operations in the current week.
- *Last month*: Shows all operations in the current month.
- *Current*: Shows all operations in a defined period.

5.3.2 Summary

On the *Summary* panel, all operations with a given user's credit in a set time period are shown. Canceled operations are not included in the summary.

- *Starting credit*: Shows the starting credit of a user in a given time period.
- *Purchased credit*: Shows purchased credit of a user in a given time period.
- *Used credit*: Shows used credit of a user in a given time period.
- *Remaining credit*: Shows the remaining credit of a user in a given time period.

5.4 Operators

The *Operators* module is used to evaluate the operations of operators and administrators in the credit system.

In the events window, all operations performed by the chosen operator or administrator in a given time period will be shown (Pic. 10).

L	X	Date	Time	User	Operation	Change	Remaining	Operator	Note
		20.07.2015	16:25:56	Bartůnková	Credit sold by operator	+1	8	Administrat...	
		20.07.2015	09:35:25	Sobol	Credit operations lock		31	Administrat...	Operator 2
		16.07.2015	13:32:08	Bartůnková	Credit operations lock		7	Administrat...	
		16.07.2015	13:32:02	Bartůnková	Credit sold by operator	+4	7	Administrat...	
		16.07.2015	13:30:25	Bartůnková	Credit operations lock		3	Administrat...	
		16.07.2015	12:07:12	Bartůnková	Credit operation cancelled	-2	3	Administrat...	
	X	16.07.2015	12:07:07	Bartůnková	Credit sold by operator	+2	5	Administrat...	
		16.07.2015	11:55:35	Bartůnková	Credit operation cancelled	+1	3	Administrat...	
		15.07.2015	13:59:30	Sobol	Credit use entered by operat...	-1	31	Administrat...	Průchod vch...
		15.07.2015	13:57:49	Sobol	Credit sold by operator	+6	32	Administrat...	
		15.07.2015	09:35:18	Bartůnková	Credit operations lock		3	Administrat...	

Pic. 10: The Operators module

All operations performed by an administrator/operator can be locked to preclude the cancellation of past operations. The *Lock* button will lock credit operations for all users, which the operator worked with in a given period.

5.4.1 Description of the columns in the module

The table of the *Operators* module contains the following columns:

- **Column L:** Shows which operations are locked by the operator. The locked operations are marked by a lock icon.

It is not possible to cancel a locked operation.

- **Column X:** Shows which operations are canceled by the operator. The canceled operations are marked by a cross icon.
- **Date:** Shows the date of the relevant operation.
- **Time:** Shows the time of the relevant operation.
- **Users:** Shows the bound with current operation.
- **Operation:** Shows the type of operation.
- **Change:** Shows the change in a user's credit.
- **Remaining:** Shows the credit balance after an operation.
- **Operator:** Shows which operator performed the operation.

- *Note*: Shows information about the system and the reader where the operation took place, or a personal operation note.

5.4.2 Time period filter

On the *Time period filter* panel it is possible to set time conditions to display credit operations in a given period.

- *Last day*: Shows all operations in the current day.
- *Last week*: Shows all operations in the current week.
- *Last month*: Shows all operations in the current month.
- *Custom*: Shows all operations in a defined period.

5.4.3 Summary

On the *Summary* panel, all operations with a given user's credit in a set time period are shown. Canceled operations are not part of the summary.

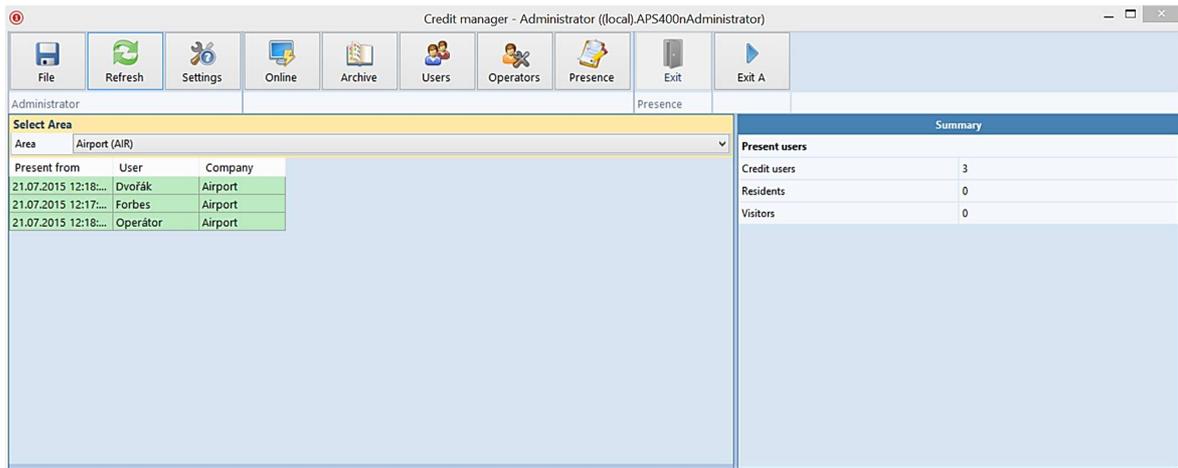
- *Brutto*: Shows the amount of all credit operation including the canceled ones for an operator in a given time period.
- *Canceled*: Shows the amount of canceled operations for an operator in a given time period.
- *Total*: Shows the difference between the total sold amount of credit and the total canceled credit for a given time period.

5.5 Presence

The *Presence* module is used for quick summary of the users present in the defined zone.

The *Presence* module allows selecting zones, which are defined in the *APS Administrator* program with *Display in the module APS Administrator.CR* option set. (Pic. 11).

Zones must be defined in the *APS Administrator* program (Configuration > Zones > New zone).



Pic. 11. The Presence module

The *Exit* button is used to remove a user from the zone.

The Exit button allows operators to release the users from the zones without loading user's ID.

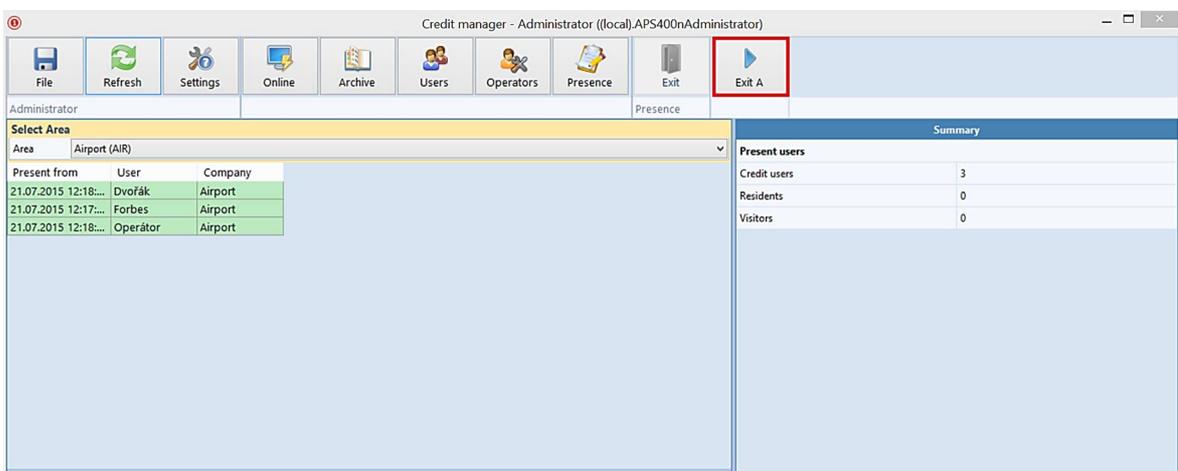
6 User functions

The buttons for executing user functions are used to execute system functions. The functions typically control the door opening, gates, driveway etc.

The typical usage of this function is for entrance of visitors which are not defined in the credit system, or when a user forgets his card.

If the user has a user function assigned, the function button appears in the upper right corner of the Control Panel (*Pic. 12*).

The user's function must be assigned in the *APS Administrator* program (Personal card > Functional button).



Pic. 12. The window with user function

7 Setting up server configuration file

In the folder with server configuration (*APS Server > Program > Open folder with configuration file*) open configuration file for the credit authorization *CreditAuthClass.config*, there are conditions for the online authorization at the given module.

The conditions can be defined only for registers' status at the APS 400 program.

```
<?xml version="1.0" encoding="utf-8"?>
<!-- APS 400 nServer.NET - CreditAuthClass configuration file -->
<configuration>
  <Conditions>
    <RegisterCondition Name="Register 1" AuthorizationSystemId="3"
AuthorizationModuleId="3" ConditionSystemId="3" RegisterId="1"
RequiredValue="1"/>
    <RegisterCondition Name="Register 2" AuthorizationSystemId="3"
AuthorizationModuleId="4" ConditionSystemId="3" RegisterId="2"
RequiredValue="1"/>
  </Conditions>
</configuration>
```

Example 1. Configuration file in XML format

7.1 Descriptions of the elements and attributes XML configuration file

The conditions are defined as elements of type *RegistrCondition*, which is nested into the *Conditions* element.

- *RegisterCondition*: The element, which defines conditions for the credit authorization.

Attributes of *RegisterCondition* element:

- *Name*: The name of conditions (arbitrary).
- *AuthorizationSystemId*: The ID of the system, where the identification appears.
- *AuthorizationModuleId*: The ID of the module in the system, where the identification appears. In this case on the reader's HW address.
- *ConditionSystemId*: The ID of the system, where is the register located and evaluated. In this case on the HW address of the system controller.
- *RegisterId*: The ID of the register defined in the script for the given system controller (serial number).
- *RequiredValue*: Required value of the register (the range of values is 0-255).

If there are several conditions for one reader defined, all of the conditions must be met for further ID validation (if there is any unfulfilled condition, identification is defined as *Invalid ID*).