Andromeda Security Center 3.4

Operation manual Version 1.3

Introduction

The "Security Center" software is designed to run under control of Microsoft Windows XP/Vista/7 operations systems. The server part of the "Security Center" software is recommended to run under control of Microsoft Windows Server 2003/2008 operational systems. It is necessary to note the following features of the "Security Center" software:

- It consists of independent functional parts (modules) each one of which is designed to fulfill specific task. This on the one hand, permits to protect each module against possible failure of any other to the utmost level and, on the other hand, allows each module to be installed in a separate computer in a network.
- It is oriented to work in a network which supports TCP/IP protocol. Thus any changes made in the system on any network computer are immediately applied to all software modules working in this network.
- Operator rights are determined in relation to particular action in specific software module. Thus, the levels of operator access to both entire program and its separate components are implemented. For example, operator access both to entire Object Manager module and to the function of object security schedule editing only can be limited.

Receiving equipment of a central station makes possible to pick up and process events from control panels (hubs, object blocks) having built-in communicators (digital message transfer units – specialized modems). Depending on the control panel type, its functional and service capabilities, particular information about object status can be received from this panel. Most of control panels can transmit wide range of information. For example, these can be user data who performed arming or disarming; place (zone number) of alarm or failure (open or short-circuit); partial arming with indication of disarmed zones, etc. Due to this a feature duty operator of the complex has the most comprehensive information both about object status (armed, disarmed, alarm, etc.) and about equipment technical condition (battery discharged, missing 220V, telephone line failure, etc.)

Hardware system requirements

- Minimum configuration: Intel® Pentium IV 2.4 GHz processor, RAM 2 Gb, 17" SVGA monitor, audio card, USB port for electronic security key installation.

- Recommended configuration: Intel® Core i5 2.4 GHz processor, RAM 4Gb, 19" SVGA monitor, audio and network card for software operating in network, USB port for electronic security key installation.

Operational system requirements

The following operational systems are supported:

- Microsoft Windows XP
- Microsoft Windows Vista
- Microsoft Windows 7
- Microsoft Windows Server 2003
- Microsoft Windows Server 2008

The "Security Center" software, version 3.4 is designed to be operated both with 32-bit versions and with 64-bit versions of mentioned operational systems. Before the installation of the "Security Center" it is recommended to update operational system with the last of service packs offered by "Microsoft" company.

Electronic security key

The "Security Center" software is protected against illegal copying by an electronic security key. Prior to use the "Security Center" you should connect an electronic key to USB port of a computer and perform its driver installation.

Distribution kit

The "Security Center" software is delivered in the following kit:

- CD containing:
  - Distributive of the "Security Center" full version, intended for installation the "Security Center" on a new computer where this software has not been installed previously.
  - Distributive of the "Security Center" Service Pack, intended for upgrading already installed the "Security Center" software (or "Andromeda 2.8" software) to the "Security Center" version 3.3.
  - Distributive of electronic security key drivers.
- The electronic security key installed in USB port of a computer.

Installation

Operational system selection

It is recommended to run the "Security Center" software under Microsoft Windows 7 operational system.

If the "Security Center" software is supposed to be used in a network, then the server part of the "Security Center" software installation (complete installation) is preferably to be executed on the computer running Microsoft Windows Server 2008 operational system.

Using NTFS as a file system would be the best choice.

It is strongly recommended to update running an operational system by installation of the last service packs offered by Microsoft.

Configuration of computer's hard drive subsystem

To provide reliability of information storage and to increase system performance it is recommended to mount two hard disks in a computer in which full installation of the "Security Center" software will be executed. In this process, an operational system and executable files of the "Security Center" should be installed on one hard disk and database directory – on the other. If there is no possibility to mount two hard disks it is recommended to split a single hard disk into two sections and accommodate an operational system in one of them, and the "Security Center" database directory – in the other.

Additionally, irrespective of a disk subsystem configuration, it is necessary to set up the procedure of the "Security Center" software database backup so that backup copy would be created on an additional hard drive or network resource – physically other information storage device.

Additional requirements

Before "Security Center" installation, please, make sure that "Andromeda Liberty" software or "Andromeda" software with version that is lower than 2.8 are not installed on your computer. If you find one of the above mentioned software, it is necessary to delete it before "Security Center" installation.

To install the "Security Center" it is necessary to have "Microsoft Internet Explorer", version 8.0 or higher, software running in a computer. Also, it is recommended the following components and programs being available in the system:

- Windows Installer, version 3.1 or higher.

- Microsoft Data Access Components (MDAC), version 2.8 or higher.
- Microsoft .NET Framework, version 2.0

Prior to starting the installation of the "Security Center" you should make sure that all hardware requirements and operational system requirements are fulfilled.

Installation program

During the installation of the "Security Center" you should specify values for several installation parameters.

Immediately after the installation program start-up it is necessary to specify the installation program user interface language.

Then you will need to choose a language of the "Security Center" software user interface from the following list:

- English
- Hebrew
- Spanish
- Russian
- Turkish

Be attentive: it is impossible to change the selected value after the installation. If a mistake is made during the user interface language selection then in order to correct it you will need to remove the "Security Center" software and install it once again.

Then the installation program will offer you to specify directory which will contain executable files of the "Security Center".

After this you need to choose the type of workstation to which the installation is executed:

- **Full installation** should be chosen in case when a computer will execute the role of server: it will store the "Security Center" software database and also it will receive events. In addition, the full installation should be chosen in case when this is the only computer which will run the "Security Center" software.

  Microsoft SQL Server and the "Security Center" database will be installed on a computer during the full installation. Additionally, the "Event Manager" module will be installed on a computer. This module receives and processes events.

- **Installation on network workstation** should be chosen in case when it is necessary to arrange a workstation in local computer network. At the network workstation, virtually all program functions are available for an operator. The exception is constituted by the number of service operations such as modification of the "Event Manager" settings and backup procedures management.

  When the installation on network workstation is executed it will be necessary to specify a computer on which the full installation has been preliminary executed.

Full installation During the full installation, it will be necessary to specify directory where the "Security Center" software database will be stored.

To increase performance of the "Security Center" software it is recommended to place database files on a separate hard disk or at least in a separate section of the hard disk. By default the installation program prompts to install database files in a disk section other than a system section.

Also it will be needed to specify the necessity of BDE installation. BDE subsystem ("Borland Database Engine") was used by the "Andromeda" software, versions 1.0 - 2.76, as well as the "Andromeda Liberty" software to organize access to database. "Security Center" software uses BDE subsystem when importing data from databases of mentioned programs only. If it is not necessary to import information from databases of the "Andromeda" software, versions 2.6 - 2.76 or the "Andromeda Liberty" then BDE subsystem installation is not required.

When the full installation has been performed the named instance of Microsoft SQL Server 2005 Express Edition software appears on a computer. The instance name is "ANDROMEDA". To perform the full installation it is necessary that a computer does not contain the instance of Microsoft SQL Server with such name.

Installation on network workstation When the "Security Center" software is installed on a network workstation it is necessary to specify the instance of Microsoft SQL Server software which is used to store database. The instance of Microsoft SQL Server software is installed during the full installation of the "Security Center". The name of instance being installed is ANDROMEDA. Thus, it is necessary to select from the list the string such as <computer name>/ANDROMEDA, where <computer name> is the name of a computer, on which the full installation of the "Security Center" software has been performed.

If the installation program could not find in local network the instance of Microsoft SQL Server software, which is used to store database of the "Security Center" we recommend to specify a computer name and an instance name manually.

Hereafter the installation program will require to enter the name or IP address of a computer on which the "Event Manager" module is started. In most cases this is the same computer which is used as the "Security Center" software server.

Connection with the "Event Manager" module is required for the rest of the "Security Center" software modules in order to exchange information and synchronize actions. Problems during installation

If any problems have arisen during the installation of the "Security Center" software you should contact technical support service of "C.Nord" by telephone +7 (812) 327-16-36, by fax +7 (812) 327-16-33 or e-mail support@cnord.ru.

When you refer to technical support service you should specify the "Security Center" software version being installed and describe an arisen problem.

If you refer by e-mail we recommend to attach to your letter the archive containing files:

- `C:\Andromeda_Install.log`. This file contains the "Security Center" installation program activity.
- Log. files from `C:\Andromeda` Log folder. Files in this folder contain activity log of the "Security Center" modules.
- Files from `C:\Program Files\Microsoft SQL Server\90\SetupBootstrap\LOG folder`. Files in this folder and its subfolders contain activity logs of Microsoft SQL Server program installation.

The listed files do not contain personal data or any confidential information.

Getting Started

"Security Center" editions

"Andromeda Security Center" is supplied in various editions.

A100 and A600 These "Security Center" editions are designed to be operated with central surveillance units manufactured by Altonika Company.

"A100" and "A600" editions allow to use only those event sources, which are designed to receive events from these units.

When you order "Security Center", editions "A100" and "A600", it is necessary to specify number of event sources from "Lonta-202" or "RS-200". The number should correspond to number of units, which are supposed to be connected to "Security Center".

Among themselves the editions differ the maximum possible number of serviced objects: no more than 100 objects for edition “A100” and no more than 600 objects for edition “A600”.

If while operating “Security Center”, edition “A100” or “A600” either the other central surveillance unit is required to connect or the number of serviced objects will exceed 600 pieces it is necessary to update the edition of “Security Center” to one of the standard.

Standard editions Standard editions of the “Security Center” software differ the maximum possible number of serviced objects: 250, 500, 750, 1000, 1500, 2000 and so on. There is no restrictions on usage of event sources, but event sources from central surveillance unit of other firms are purchased separately.

Purpose of modules

The “Andromeda Security Center” software consists of modules each one of which is designed to fulfill specific tasks.

The “Event manager” module serves to receive events from receiving equipment of a central station as well as directly from certain types of field equipment, e.g. via GPRS and Ethernet communication channels.

In addition, it is just the “**Event Manager**” module where automated event processing takes place: event chains control, sending SMS messages and transmitting events to other systems. It is necessary to note that the “Event Manager” is the interlink for all other modules of the “Security Center”: it should be started the first as it is the one via which other modules exchange information about new events, actions of operators and other changes which have taken place during module.

Using the “**Object Manager**” module new objects are created and descriptions of existing objects are changed.

The “**Duty Operator**” module is used by operator to process events. The main module functions are monitoring of operational status of objects, viewing the last received events, recording operator actions in response to alarms received from objects.

The “**Maps of Objects**” module is designed to create object approach schemes, floor plans and arrangement of security lines. Also, the “Maps of Objects” module is used to display object alarm loops on the floor plan when responding to alarm.

The list of “Security Center” operators as well as their rights in each of modules is established in the “**Personnel Manager**” module. In the same module, you can modify the list of response guards as well as the list of local network computers which run network workstations of the “Security Center”.

The "**Database Wizard**" is designed to fulfill the following operations:

- database verification and error correction
- database backing-up
- restore database from backup copy
- data import from the "Andromeda" software database, the "Andromeda Liberty" software, the "Guardian" software and the "CSM32" software.
- data export from the "Security Center" database for using in other programs

In the module "**System setting**" you can modify reference guides which are used for the description of objects: list of event templates, event classes and actions connected with them, object types and list of additional properties.

The graphic object plan including the distribution of sensors as well as schemes of approaches to an object can be created or modified using "**Maps of Objects**" module.

First startup

To proceed to work you should start the "Event Manager" module and set up event sources – the special module components which serve to receive events from equipment of a central station. Event sources setting is performed in the "Event Sources" window. To get access to this module you should select item "Event Sources..." from the "Event Manager" module menu (right-click the icon in the system field of the taskbar).

If the "Security Center" is installed for familiarization purposes then to create events from objects you can use "Emulate events..." from menu of the "Event Manager".

After the "Event Manager" has been started you can proceed to work with other modules. You should enter objects into the system using the "Object Manager" and monitor events being received and respond to alarms using the "Duty Operator".

Data import

The "Andromeda Security Center" contains the function to perform import of information about objects from databases of the following programs:

- Andromeda, versions 2.0 - 2.76

- Andromeda Liberty
- Guardian
- CSM32

If prior to the "Security Center" any software from above mentioned list was used, then for comfortable changeover to using the "Security Center" you can import object descriptions from a database of these programs.

If it is intended to import data from the "Andromeda", versions 2.0 - 2.76, or the "Andromeda Liberty" software then during installation of the "Security Center" you should specify the necessity to install BDE as this very subsystem is used to access to these programs data.

Data import is performed using Database Wizard module. In case of importing data of the "Andromeda", versions 2.0 - 2.76, or the "Andromeda Liberty" software all files from database folder will be required. When there is backup copy in ZIP format you need to extract files from the archive in any folder on a computer hard drive.

Event Manager

The "Event Manager" module is designed to receive events from receiving equipment of a central station as well as directly from certain types of field equipment, e.g. via GPRS and Ethernet communication channels.

The result of processing the received events by "Event Manager" module consists in events which form the basis of the "Security Center" operation.

In the "Event Manager" the automated event processing takes place: event chains control, sending SMS messages and transmitting events to other systems.

The "Event Manager" is the interlink for all other modules of the "Security Center": it should be started the first as it is the one via which other modules exchange information about new events, actions of operators and other changes which have taken place during module. After module starting, in the system field of Windows task bar the icon appears which informs about the module operation. When any event is received the icon color changes, and if you move the cursor onto the icon the information about last event time and total number of events from module starting appears.

Right-click on module icon results in the menu displaying.

Module settings

You can get access to settings if you select "Setting..." item in the module menu. The "**Frequency of security schedule alarms**" parameter sets

the interval of system events with ZZXB and ZZXC codes generating. System events with these codes are generated when the daily object security schedule is violated and long-term object security is violated respectively. Setting of security schedule as well as setting of long-term security of object is performed individually for each object in the "Object Manager" module.

The "**Interval of repeated events filtration**" parameter sets the interval within which the second and succeeding equal events received via different communication channels will be considered being repeated. The repeated events are processed in the "Security Center" modules in a special way. For instance in the "Duty Operator" module, they are not displayed in the general list of received events. But they can be included in the display of events from the object tab. In addition, the repeated events are not included in event reports unless such necessity is specified intentionally. Recommended value for this parameter is 60 seconds.

"**Test events filtration**" can be turned off using homonymous parameter. When filtration is turned on the test events are processed in the same manner as the repeated events: they are not displayed in the "Duty Operator" module and in the event reports.

It is essential to understand that the repeated and test events constitute 75 to 95 percents of total number of events received by the "Security Center". Consequently repeated and test events filtering mechanism permits to release the "Security Center" operators from necessity to process useless information. For the same reason events filtration positively influence the performance of the "Security Center" modules. It is not recommended to turn off repeated and test events filtration without strong reasons.

Backup The "Backup" tab of the "Event Manager" module settings window is intended for management of backup tasks.

There are two different types of the "Security Center" database backup copies: operative and full.

- Full database copy contains all information being stored in the database at the moment of copying including received events, operator actions and sent SMS messages for all time of software running.
- Data amount in the operative copy is much less: in this copy the events, operator actions and SMS messages for the last month only are stored.

In general, it is recommended to use operative copying for backup tasks. Full backup is recommended to be executed manually or using tasks of Windows scheduler.

For each backup task several destination folders can be specified: after backup copy of data has been created it will be copied in each of these folders. In

this process the number of the "Security Center" database backup copy files in each destination folder will be supervised. If during backup copy creation it is determined that the number of backup copy files is greater than specified by the "Number of files in the destination folder" parameter then the oldest file of backup copy is deleted.

In addition to the backup interval, which sets the frequency of executing the backup task you can set the start time for a task executing. In such manner you can arrange a backing up once a day or start a periodic backing up each day at the same time.

More detailed information about backing up can be found in the respective section of description of Database Wizard module one of the purposes of which is creation of the "Security Center" database backup copies.

Event sources

The main purpose of the "Event manager" module is to receive events from receiving equipment of a central station as well as directly from certain types of field equipment, e.g. via GPRS and Ethernet communication channels. Variety of methods and protocols for annotations transmission is supported using special components of the "Event Manager" module which are called sources of events.

You can get access to event sources settings by selection of the "Event sources..." item in the module menu.

The "Security Center" software, version 3.3, contains the following sources of events:

Event source from PimaGuard It is designed to receive events via serial port or Ethernet from "Mcard for MS-DOS", "Pima NetSoft" and "PimaGuard for Windows" software in the "Andromeda" protocol.

It is the most advanced source for receiving events from a central station receiving equipment from Pima company. In case when support of the latest capabilities of a central station receiving equipment, as well as protocols and events transmission channels is required this very event source should be used.

When source from PimaGuard is used in the mode of receiving events via Ethernet, we recommend to use separate instance of event source for each instance of transmitting software.

Event source via TCP/IP It is designed to receive events via network supporting TCP/IP protocol form the following equipment manufactured by C-Nord company:

- GSM transmitters: TP-100GSM and TP-100GSM II – via GPRS channel

- panic button “Button” – via GPRS channel
- “Cepheus” extender – via Ethernet channel

When this event source is used usually dedicated IP address in the Internet is required. Additionally, it is recommended to connect different types of equipment to different instances of event source, and when the “Cepheus” extender is connected the best variant is to use a separate instance of event source for each extender.

Event source via GSM It is designed to receive events via SMS and CSD channels of GSM from the following equipment: * panic button “PT-300” manufactured by GemTek company – via SMS channel * panic button the “Button” manufactured by “C-Nord” company – via CSD channel * It is necessary to note that to use source of events via GSM you should connect to the computer SonyEricsson GT-47, Siemens MC35 GSM modem or a modem compatible with them with respect to command system.

Event source from Sur-Gard It is designed to receive events through serial port from receiving equipment of Sur-Gard central stations manufactured by DSC company up to System III including.

As data transmission format used by Sur-Gard central stations is actually a standard, this event source can be used to receive events from equipment and software from wide variety of manufacturers: “Ritm”, “Proxima”, Jablotron and others.

Event source from RC4000 It is designed to receive events through serial port from RC4000 central surveillance unit manufactured by Visonic company.

If you are using RC4000 unit together with CSM32 software and want to change over to the “Security Center” software, you should know that there is possibility to perform automatic data import from CSM32 software. More detailed information about this function can be found in the “Database Wizard’ module using which data import is performed.

Multiprotocol event source It is designed to receive events through serial port from SilentKnight 9500 central surveillance unit (manufactured by Honeywell company) and RCI4000/RCI5000/DTRCI5000 units (manufactured by KP Electronics company). Additionally this event source supports data receiving in some other commonly used protocols, e.g. in Ademco 685 protocol.

Settings of event sources

If event source is designed to receive data via serial port you should choose the port to which a central station equipment is connected and specify its parameters (speed, parity, number of data bits, etc).

If event source is designed to receive data via network supporting TCP/IP protocol then it will be necessary to specify network interface and port at which the source will wait for reception of incoming connections as source parameters.

The "Internal Number" of event source is needed for its identification both by the "Security Center" and by user. First, number of event source is used to determine from which source a particular event has been received. Secondly, in case when an event source informs a user about anything the event created by it for this purpose will have the same object number as internal number of component.

We strongly recommend to create in the "Security Center" the objects with numbers that match to the internal numbers of event sources being used. This will permit to control origin of errors occurring during event sources operation and also to obtain service information about operation of sources.

The "Event Source control time" permits to automatically track the fact of events reception by source and inform an operator about the problems risen during reception. In case when by any reason the event source has received no events within the interval specified by this parameter the system event with "ZZXH" code and object number corresponding to the internal number of event source is created.

Using the "Shift of object numbers" positive integer summand can be set which will be added to object number for each event received by event source.

The "Shift of object numbers" is recommended to use in case when several central surveillance units (including different units) is to be connected to one instance of the "Security Center". By specifying different shifts of object numbers for different event sources you can avoid the problem with overlapping the same numbers of different objects working for different units. For example, two Lonta-202 units are connected to the "Security Center". The ranges of object numbers which can be connected to units are the same - 1 to 600. But if you set the shift of object numbers for one event source equal to 1000 and for the other - 2000, then within the "Security Center" we will work with 1001-1600 objects for one unit and with 2001-2600 objects for the other.

The "Shift of channel numbers" is the parameter that sets positive integer summand which will be automatically added to receive channel number.

If zero value of channel number shift is set then for events received by event source the channel number will be used which is transmitted by receiving equipment of a central station or the first channel number if the equipment does not transmit channel number. By setting different shifts of channel numbers for

different event sources you can recognize event sources (and units connected to them) for received events.

The “Shift of channel number” is of special interest when several identical event sources are used because types and numbers of communication channels used by these sources will surely coincide.

The “Type of receiving channel” and the “Number of receiving channel” permits to clearly specify the parameters corresponding them by value in case when they can’t be uniquely identified. For example, The “Event source via TCP/IP” can receive events both from TP-100GSM transmitters via GPRS channel and from “Cepheus” extenders via Ethernet channel. Event source cannot identify communication channel which is used during transmission. Therefore when setting an event source it is necessary to specify clearly the type of communication channel which is used during transmission (GPRS if the source is intended to receive events from TP-100GSM or Ethernet if the source is receiving data from “Cepheus”. Additionally, if several such event sources are used then to differ which source has received the event it is necessary to specify different numbers of receiving channels for them.

The “Reinititilazation Interval” parameter permits to force reinitialization of equipment (e.g. GSM modem) connected to event source.

Using the “Exchange Registration” function the data exchange protocol between event source and receiving equipment of central station or control panel can be saved on hard disk. This information can be necessary during causation of exchange problems. We do not recommend to switch on the exchange registration independently without request from technical support service of Research-and-engineering and profit corporation C-Nord company.

Event handlers

After the “Event Manager” has received event from the central surveillance unit or control panel it performs its decoding and description according to event template preset for the object from which the event has been received. The event received as a result event decoding can be automatically processed in the “Event Manager” module using special module components which are called event handlers.

In the set with the “Security Center”, version 3.3, software the following event handlers are delivered:

Event Control This handler performs a control of a periodic reception of an event of the specified class and generation of a system event in case of its absence. The handler can be used to fulfill the following tasks:

- "Guard Control". The task of guard control often consists in a simple control of periodic receiving the specified event. In this process notwithstanding that the sequence of event reception is not checked it is possible to carry out security guards control even on a complicate route via selection of event reception intervals.
- "Control of Automatic Tests". Contrary to an object control time implying arrival of any event via any communication channel, a periodic arrival of a specific event can be controlled and also a communication channel via which this event should be received can be specified.

Control of Events Chain This handler is intended to monitor time sequence (chain) of received events and generation of system messages in case of its violation.

The handler is designed to fulfill such tasks as:

- "Control of Paired Events". For instance, the control of 220V restore or other faults at site. Using the "Events Chain Control" handler short-term faults can be distinguished from fatal ones, for instance, the objects can be identified where electric power is missing too long.
- "Guard Control". Use of this handler permits to control a guard's movement along a route with regard to correct sequence of walk.

Entering through Alarm The "Entering through Alarm" handler permits to suspend alarm event processing by the "Event Manager" module and wait for removal from guard which can be received immediately after an alarm.

Purpose of this event handler is to release a duty operator from necessity to respond to obviously false alarms which happen while removing objects from guard.

This handler should be applied to such objects where guarding tactics excluding entrance delay is used. Use of this handler is also justified for all objects where personnel error while taking off from guarding is possible.

SMS Transmitter This handler permits to arrange transmission of information about received messages to a mobile phone as SMS messages.

To send SMS messages the handler can use GSM modem which should be connected to a computer or direct connection to SMS server of cellular operator via TCP/IP network.

Using SMS Extender handler optional service can be rendered to guarding enterprise clients, e.g. informing responsible persons about events of object putting under and taking off from guarding.

Additionally, using this handler alarms can be transmitted directly to guard's mobile phone in parallel to a duty operator work.

Use of this handle can also significantly simplify commissioning of equipment on connected objects. If you allocate a personal object number to an engineer which number should be used during testing equipment on the object, and switch on SMS-forwarding for events received from this object to the engineer's mobile phone then the engineer will be able to set up equipment without assistance of unit's duty operators.

Pandora Net The main task of the "Pandora net" handler is to arrange information exchange between independent instances of the "Security Center" software. Events, operator actions and object descriptions can be transmitted from one "Security Center" to another.

Any channel supporting TCP/IP protocol can be used as data communications channel. There is possibility to describe in details the amount of information which will be transmitted. You can specify numbers and number intervals of objects from which events will be transmitted, specify event classes to be transmitted, select operator actions to be transmitted. Mutual data transmission (cross-transmission) is possible.

Primarily the event handler is used for creating distributed monitoring systems when several central surveillance units are integrated and it is necessary to collect operative information in the certain control center.

Object Manager

"Object Manager" module is designed to manage description of objects available in the "Security Center" software.

Object

In the "Object" tab you can specify basic descriptive information about an object: number, name, address, phone numbers, etc.

Parts

"Parts" tab allows you save information about sections (areas) into which an object is divided and what equipment is used to arrange sections of an object.

The list of equipment installed in the section can be modified in the "System Setup" module – in the "Fields of Objects" tab, "*Object part equipment" field.

It should be noted that the description of sections at objects mechanism allows you to fulfill the following tasks :

- Parts identified by their serial numbers. This is actual for panels which support function of loops integrating into independent sections and for which the “Contact ID protocol” is “native”.
- Areas identified by object numbers. This option is necessary for panels which do not use the “Contact ID protocol” to transmit information to monitoring center but support loops integration into independent areas each one of which has its own number of object.
- Objects which use different numbers when working over different communication channels. Such situation is possible in case when additional communicators (e.g. radio transmitters) are installed at already equipped objects but numbers of objects at which they are installed are already used in radio channel. In this case you can program a panel in such a way that different object numbers would be used by phone and by radio by means of having these numbers been described as object sections.

Zones

In the “Zones” tab you can give detailed description of object security lines including information about equipment being used and membership of loops in the object sections.

The list of equipment installed in a loop can be modified in the “System Setting” module – in the “Fields of Objects” tab, “Object zone equipment” field.

Information about zones is very important part of object description as it is used when generating descriptions of events received form an object. Thus, if event about alarm in the loop number one is received from an object then the description of loop number one from an object card is inserted in the event description which would be created for handling by the “Security Center” operator.

Persons in charge

The “Persons in charge” is designed for entering information about persons in charge of an object: names, addresses, phone numbers. We recommend you to include in the persons in charge list the users who possess personal code of object putting under and taking off from guarding, and additionally, user code number programmed in the panel should correspond to a responsible person number. In this case (as with loops) the information about user who has executed putting under or taking off from guarding will be included in the description of an event handled by the “Security Center” operator.

Security

In the "Security" you can modify parameters connected with rules and mode of object security. **Place under long-term arm**. The field is designed to switch on long-term security mode of object and to specify operating time of this mode. The long-term security mode is intended to control situations when object for some reasons is to be (or should be) under guard for a long time.

Control of long-term security of object is implemented as follows: * at start time of long-term security the fact of putting object under guard is checked. * if the object is not under guard system event with ZZXC code is created. In case when the object continues to be not under guard the system event with ZZXC code is repeated at intervals specified in the "Event Manager' settings. * If during the interval specified as long-term security time the object is removed from guard the system event with ZZXE code is created, after which long-term security cycle accordingly begins again with generation of system event with ZZXC code and with waiting for object arming.

Turn off Object. The field is intended to turn off an object starting from some time. If the object is turned off the events which have been received from it are processed as follows:

- First, when these events are received the "Duty Operator" turns off accompanying sound. I.e., all events continue to be displayed, events with class types of "Arming" and "Disarming" continue to change object status but there is no sound when events from this object are received.
- Secondly, when events with the "Alarm" class type are received the system (specifically – Event Manager) creates cancellation for them. In other words, if an object is turned off, and an alarm comes from it then in addition to lack of alarm sound this alarm is also automatically cancelled.

Automatically Turn on Object. In case when an object is turned off this property permits to turn it on automatically at specified time.

Control time

The "Control Time" tab is designed to manage one of the most important object performance control parameters.

Object control time identifies time interval during which any event should be received from the object. Any event means that an event may be received over any of communication channels (e.g. radio, phone), and may be system event. In case when no event is received during interval system event with ZZXA code is created.

Object control time setting can be made so that all communication channels used by object will be tracked separately.

Security schedule

In the "Security Schedule" tab you can specify for each day of week time periods when an object has to be under guard and also turn on control of this rule by the "Security Center".

Template of events

"Template of Events" is intended for modification of events codes template which is used in the description of events received form an object, for turning off alarm events and for modification of properties for an specific event code for a given object.

It should be noted that quality of event templates provided with new versions of the "Security Center" is constantly improved therefore we recommend to use the latest versions of event templates in the describing objects.

In order to replace outdated event template with its latest version you can use event template replacement function implemented in the "System Setting" module.

In the "Template of Events" tab you can modify a description of any event. However you should understand that performed modifications will concern the given object only and will not be represented in basic template of event codes or any other object. Due to the fact that it is highly difficult to track modifications of event template for an object we recommend not to practice them without critical necessity.

By its significance turning off alarm event is very similar to turning off an object with only difference that it relates to one event code only. When turned off event is received there is no event accompanying sound in the "Duty Operator" module, and the "Event Manager" creates automatic cancellation for given alarm. It is necessary to emphasize that in contrast to alarm cancellation for turned off an object, alarm cancellation for turned off event will cancel only this event; object guarding continues in the full scope excluding an event code that has been turned off.

It is possible to turn off an event for limited time interval only which is specified when turning off is executed. On the expiry of this interval the event will be automatically turned on. Turned off event can be turned on at any moment manually.

All operations for event turning off/on are accompanied by creation of system events. So, when event is turned off system event with ZZXM code is created, when event is automatically turned on the system event with ZZXN code is created, and when event is turned on by an operator (manual turn on) system event with ZZXO code is created.

System events generation permits to track clearly the operations for turning off events.

Additional characteristics

In the "Additional Characteristics" tab you can specify values of additional characteristics of objects (user fields). Field list management is implemented in the "System Setting". module.

In case when value for some additional object characteristic is not defined its value can be left empty. When additional characteristics are displayed in the object card only those with specified values are present in the list of characteristics.

Altonika

The tab "Altonika" is intended to adjust the parameters of object which are specific for Altonika equipment.

Equipment type For correct operation of algorithms of "Security Center" signal processing it is necessary to specify the correct system type of the equipment used on object: "Lonta-202" or "RS-200". In case the object has an equipment of other system, it is necessary to specify type "Another".

Signal levels For object on which system "Lonta-202" equipment is used it is possible to change value for trigger levels of the signal accepted from object. If the signal level, accepted from object, becomes less than value set in the field "Warning level" the system event with code ZZXV will be created.

If the signal level, accepted from object, is less than value set in the field "Alarm level" the system event with code ZZXU will be created. By means of system events with codes ZZXV and ZZXU it is possible to control automatically level of signal, accepted from objects, drawing of attention of the operator only to those objects where his interference is required.

It is necessary to mark that in the module "Duty operator" function of review of accepted signal level is accessible for objects on which system "Lonta-202" equipment is installed. At an object card there is a bookmark which allows to display signal level in the form of the diagram or in the form of the table of values.

The transmitter In the situation when some object devices are connected to one radio transmitter of system "Lonta-202", for identification of such devices it is necessary to specify object transmitter number in the field "Object number",

and number of category which corresponds to the device in the field “Category number” .

The values specified in fields “Object number” and “Category number” have priority in relation to standard numbers of “Security Center” objects: at reception of events first the values entered on a bookmark of “Altonika” are viewed and only then – values of objects’ numbers.

System Setup

The “System Setting” module is intended for modification of the “Security Center” service reference guides properties, for instance, event templates or object types.

Event classes

In the “Security Center” software, the events being created are divided into the several types:

- Alarm
- Warning
- Arming
- Disarming
- Defect
- Reconstitution
- Elimination
- Test
- Others
- Reset

The type of event determines method of its handling. Thus events of the “Alarm” type require compulsory actions by an operator called response to alarm. Additionally, the alarms response to which is not started or not finished change current status of objects. When responding to events of the “Arming” or the “Disarming” type, object status also changes.

The list of event types is predefined and can’t be changed by user. To combine events in groups and manage them classes of events are intended. The class of event determines its type. In this case you can create several classes of the

"Alarm" type and define for each class individual lists of alarm responses and their cancellations.

In the "Event classes" tab you can edit the list of event classes being used. The event class determines appearance of event in the list of received events of the "Duty Operator" module. Color, style of type, background color – all these event class properties can be changed in the "System Setup" module.

In addition to attributes responsible for events display it is possible to specify sound file which will be played when an event will be received.

For the event classes having the "Alarm" type lists of actions and cancellations are available which can be recorded by an operator when executing alarm response. It is important that you can determine not only the list of actions but also their sequence.

If the "Security Center" is operated long enough there is possibility that the list of event classes is contaminated. For example, there are duplicated classes in it or it contains information about classes which already are not used. Nevertheless, the "Security Center" prevents their deleting because there are events for which these classes are used in the descriptions. To solve this problem it is possible to replace duplicates or not used event classes with their actual analogs.

Templates of events

The same event occurred on object can be transmitted to the "Security Center" in different ways. Event format in which information about event will be received depends on type of transmitting equipment and communication channel.

The list of events which can be received after decoding events from objects is called the "Template of Events".

Template of Events is inherent characteristics of object. You can specify template of events which should be used for an object in the "Object Manager" module.

In the "Templates of Events" tab you can modify the list of templates used by the "Security Center". Additionally, you can modify the description of events contained in a template. When describing events it is recommended to use `%user%` and `%zone%` macros. If during the event decoding a macro is found in its description then in the description the value is inserted which corresponds to loop a name (`%zone%` macro) or a responsible person name (`%user%` macro). In this case loop or user number will be taken from the very event.

Information about loops and responsible persons on the object is very important. This information for an object can be entered in the "Object Manager" module.

The interesting feature of an event description in template consists in possibility to determine an event up to a channel over which it has been received. Hence,

the same event code received, for example, by phone or over GPRS can be described in different ways.

It should be noted that the quality of event templates provided with the new versions of the "Security Center" is constantly improved therefore we recommend to use the latest versions of event templates in the describing objects.

In order to specify another, more actual template for objects instead of outdated one you can implement event template replacement function.

Actions

The "Actions" tab is intended for modification of list of actions which an operator can record during the executing alarm response.

The following types of actions are defined in the "Security Center" software:

- **Send guard**. When recording action of this type an operator will need to specify response guard which has been sent to an object. If a guard has been sent to an object then an object alarm can be cancelled only after the guard arrival to an object or its call cancellation is recorded.
- **Guard arrival**. The action of the "Guard arrival" type is available for recording only after the send guard to an object has been recorded. When the recording action of the "Guard arrival" type an operator will have to select a guard which arrival he is recording.
- **Guard cancellation**. Guard cancellation recording is available only after its send to an object has been recorded.When recording guard cancellation an operator should select a guard which call cancellation he executes.
- **Operator comment**. Action of this type allows an operator to enter a user-defined text connected with process of alarm response. Actions of this type can be recorded in any step of alarm response. It is recommended to include an action of this type in the action lists for all alarms available in the "Security Center".
- **Other**. Actions of the "Other" type are for informational purposes only and used for quick recording the actions frequently used in the alarm response (call to a responsible person, police call, etc.) Actions of this type can be recorded in any step of alarm response. We recommend to refresh the list of actions of the "Other" type permanently in order they would correspond to current security policy. Recorded operator comments can be good source for new actions of the "Other" type.

The list of response guards used by the "Security Center" can be modified in the "Personnel Manager" module.

Cancellations of alarms

In the “Cancellations of alarms” you can edit the list of reasons recorded in the event of alarm cancellation.

The list of available alarm cancellations is closely connected with an object security policy being used and is of great importance for enterprise efficiency analysis.

The “Security Center” software contains several analytical reports which allow you to evaluate reasons for alarm cancellations including evaluation in relation to objects.

In order to make use of these reports you should maintain the list of alarm cancellations in current status, and orderly schedule the use of each cancellation in the operator’s instructions.

Types of objects

The “Type of objects” tab is designed to manage the list of object types. Object type is mandatory property of any object. Object type is used to simplify management (sorting, grouping) of objects list for example during object properties viewing or report generation. Object type can be specified in the “Object Manager” module.

Fields of objects

In the “Fields of Objects” tab you can modify the list of additional fields which will be available during filling-in the object card.

During generation of fields list you can define their sequence order in which they will be displayed in the object card. If values of any field represents the list of foregone values then you can fill-in this list by specifying corresponding type for the field. In this case the list of values does not limit the possibility to specify a value for the object field manually if necessary.

In the list of object fields there are two fields for which it is recommended to change the list of possible values only. These are the “Object Section Equipment” and the “Object Loop Equipment” fields. As it follows from their names, they are intended to simplify filling-in the values for Equipment field while editing sections and loops of objects in ## Personnel manager

In the “Personnel Manager” you can manage the list of operators and their rights in the “Security Center” modules, emergency response guards which are used in the “Security Center”, and the list of local network computers where operation of network workstations of the “Security center” is permitted.

Operators

The “Operators” tab is designed to modify the list software operators and their rights in the “Security Center” modules.

Operator rights are individual for each the “Security Center” module and depend on operations which can be executed in the module.

Prior to determination of operator rights in a module you should permit an operator to enter this module.

When creating a new operator you can give him the same rights as one of the existing operators has. To do this prior to creation of a new operator you should select from the list of operators the one whose rights you want to copy.

In the “Personnel Manager” module you may not edit a name and rights of the operator which has entered the module and the “Administrator” operator.

Present “Personnel Manager” operator and “Administrator” operator are only allowed to change password.

Guards

In the “Guards” you can modify the list of guards which are used in the “Security Center” software.

Computers

The “Computers” tab is designed to manage the list of computers where operation of network workstations of the “Security Center” software and objects accessible from these computers is permitted.

By default each computer where the “Security Center” software module is started is automatically enlisted. But when limitation permitting to run network workstations of the “Security Center” only on computers which are included in the list is switched on then you should manually add computers to the list.

If it is necessary you may define for each computer the list of object numbers which are permitted to be loaded by the “Security Center” modules running in this computer.

Maps of Objects

Using the “Maps of Objects” module you can create graphic schemes describing an object: a ground map with possible approach lines to an object, object photos, floor plans and so on.

Once a plan of object rooms has been developed you can place security lines scheme on it. In alarm response mode you can access the function of viewing alarm loops on object maps in the "Duty Operator" module.

"Maps of Objects" module does not contain built-in the graphic editor, thus we recommend you to create schemes using outside means. Ready-made images can be pasted in the map from the files of BMP or JPG format as a background picture. When you prepare background picture you should select its size and resolution with regard to possible printing the map of objects: no transformations are made, a background picture is printed according to its parameters.

Once a background picture for the map has been selected it is possible to place zones (signalization loops) on it. For each zone you can select location and dimensions as well as method of its displaying in active and inactive state.

After this you should associate the zone with a code of event which recording will mean the zone activation. Generally, an alarm code corresponding to the zone is selected as such code.

When file of alarm object maps is opened from the "Duty Operator" module the active map is the map where the zone for which alarm has been received is located. Additionally, an alarm zone can change visually displaying alternatively in passive and active state.

Also, you can specify associated file for the zone. When file of alarm object maps is opened associated file also opens by means provided in the operational system for its file type.

For example, if you specify a document containing important information about an object as associated file this document opens together with the map file.

If the "Security Center" software is running in network then a map file should be saved to folder readable for all network users. However you should remember that even if this folder is local for a computer where object maps are edited when you perform saving absolute path should be used.

When a new object map file is saved or when it is saved under an alternative name the "Object Map" field –its value can be viewed and changed in the "Object Manager" module - is automatically updated.

Duty Operator

"Duty Operator" is designed to monitor operative state of objects, view incoming events and record alarm response actions.

As with all other the "Security Center" modules, the "Duty Operator" module downloads only those objects which use is permitted in the computer where this module is running. You can preset number intervals of objects which can be used at specific network workstation in the "Personnel Manager" module.

Objects

Main window of the module is split into two horizontal parts. In the upper part of the module main window, object icons are displayed. Icon color represents current state of object. If it is blue the object is under guard, if it is green the object is removed from guard, if it is grey the object is turned off. Red circle or box means that there is an alarm for an object the response for which is not finished yet. In this case red circle means that no actions have been recorded for this alarm yet. Object icons are displayed in the tabs that group objects by the basic states.

You should remember that alarms received from turned off objects are processed by the system automatically, immediately upon receipt. Arming and disarming events which has been from turned off objects do not change their state. Thus, turned off object can't be alarming, armed or disarmed. It is always displayed as a grey icon.

Events

In the lower part of the "Duty Operator" main window, received events and guards are displayed.

Events are divided into three categories each one of which is displayed in the separate tab:

- **All events**. In this tab all events received from objects are displayed, excluding events which has been filtered out. More detailed description of filtering rules is given in the section on the "Personnel Manager" module.
- **Alarms**. In the "Alarms" tab alarm events for which response is not finished yet are displayed. As with the "All Alarms" tab, here only those events are displayed which have been filtered.
- **Events for object**. In this tab events for the selected object are displayed. If necessary, in this tab you can turn on displaying all events received from an object including filtered out events.

In the "Guards" tab, guards used by the "Security Center" as well as their current states are displayed.

Alarm response

If an alarm event for an object is recorded at the time when for the same object there is another event with unfinished response then these events are united in the group and further processed together. Just the same these events will be

displayed together both during responded alarms viewing and during the alarm reports generation in the “Report Manager” module.

In the alarm response window all alarms included in the response group are displayed . The list of actions and cancellations recordable by an operator contains all actions associated with event classes which are included in the response group.

Module settings

Access to the “Duty Operator” module settings is governed by rights which can be preset in the “Personnel Manager” module. Additionally, you can restrict an operator access to the module settings; also you can inhibit an operator to close the “Duty Operator” module. These restrictions can be useful not only for unexperienced operators but for all operating attendants because unintentional module closing or locking module main window by settings window can negatively affect process of alarm response.

General The Pause at start parameter sets a pause which will be hold by the “Duty Operator” module at start. The parameter can be useful if labels of the “Event Manager” and “Duty Operator” modules are located in the “Autoloading” or otherwise loaded automatically at the operational system start. To start the “Duty Operator” module requires running the “Event manager” module, and starting and full initialization of the latter can require some time.

If value for the “Scroll to new event” is set then at receipt of new events from objects, the list in the “All Events” window is automatically scrolled so that new event is visible. You can adjust a total number of events displayed in the “Duty Operator” module using the “Event display interval”. You should remember that the greater is display interval the longer will be the “Duty Operator” module initialization and the higher will be this module requirements to computer resources.

Alarm response If at receipt of a new alarm event it is necessary that “Duty Operator” module alerts operator you should set value for the “Activation at alarm” parameter.

In case when the “Duty Operator” module contains alarm for which no actions are recorded for too long time the “Repeat alarm sound at intervals” can be useful. If non-zero value is set for this parameter then in case of lack of actions at alarm during preset time the “Duty Operator” behaves as this alarm is newly received: it plays an alarm sound and opens an alarm response window if this is allowed for the alarm response window by the “Automatic opening” parameter.

“Automatic closing” and “Automatic change to next alarm” parameters determine an alarm response window behavior at the moment when a current alarm

response is finished. If the first parameter value is set the alarm response window is closed. If the second parameter value is set then the next by time of receipt alarm is loaded to alarm response window. If values are set for both parameters then first the attempt is done to load the next alarm and if it is not present the alarm response window is closed.

Hot keys In the "Hot keys" tab you can set key combinations on the keyboard for quick access to basic functions of the "Duty Operator" module.

It should be noted that hot keys for actions and cancellations are assigned automatically when a list is created. But using the "Do not use Alt for actions and cancellations" you can waive "Alt + digit" combination for quick recording actions or cancellations and use only digits. The "Add hot keys to headings" permits to display assigned to operations hot keys in the headings of buttons.

Dialing If a modem or any device supporting dialing control via TAPI interface is connected to a computer then in the "Dialing" tab you can specify the list of devices which the "Duty Operator" module can use for dialing.

Dialing begins from left-clicking any phone number of an object which is displayed in the object card.

If dialed number is busy the "Duty Operator" module may redial it if value for the "Redial if Line Is Busy" parameter is set.

Andromeda Persona The "Security Center" software may be used together with the "Andromeda Persona" software. Among other things, the object list of the "Security Center" can be loaded to the "Persona" whereupon these objects can be placed on the ground map.

Additionally, state changes of objects and guards can be transferred from the "Security Center" to the "Persona" so that the "Persona" could automatically display alarm objects on the map and also display the state of guards which are called to objects.

In the "Andromeda Persona" you can enable integration of the "Duty Operator" module with the "Andromeda Persona" software as well as permit automatic display of alarm objects and guard states in the "Persona".

Report Manager

The "Report Manager" module is designed to create reports on the operation of objects, the "Security Center" and security enterprise personnel.

In the module the "Report Manager" report forms a generator is built-in with the help of which you can modify existing reports or create new ones.

Event reports

When you create event reports you should remember about filtration algorithms which are used in events recording. More detailed information about event filtration is given in the section on the "Event Manager", here however we would like to note that filtered-out events may be included in the created reports if necessary.

All event reports (unless otherwise stated) are created with regard to the selected objects and event classes. Due to this the reports can be created to fulfill various tasks including specific for the particular security enterprise.

The first three event reports ("01 – Time Sorting", "02 – Object Sorting" and "03 – With Object Grouping") are designed to view received from the objects events in different representations. It should be noted that if for an object the sections with their own object numbers are created then events from these sections are represented in the event reports. In this case an object number of a section is shown in parenthesis after an object number.

Events from undeclared objects The "04 - Events from undeclared objects" report is designed to view events which the "Security Center" could not associate with any of existing objects. As with the "Events from Undeclared Objects" module, this report is intended to identify errors made during the object equipment programming or in the object description in the "Security Center". For this report (for natural reasons) objects and event classes selected during its creation do not matter.

Objects without events Purpose of the "05 – List of objects without events" report is dual. The simplest task is to get using it the list of objects from which not any event has been received within preset time interval. To do this you should select all objects in the object list, and all object classes in the event classes list.

More interesting task – to find, for example, all objects of the "Bank" type from which not any fault has been received within the last month. To do this you should select all objects of correct type and event classes of the "Fault" type. The report created with such parameters will contain only desired objects.

Time deviation With the help of the "06- By time deviation" you can verify correctness of automatic field test interval programming and correctness of filling in the "Control time" field in the object card. When a report is generated an average time interval between events from an object is calculated whereupon it is compared with object control time. If difference of values exceeds threshold preset during the report creation such object is highlighted in the list. Depending on algorithms used by the control panels to calculate time of creation for

the next automatic test, in the process of report creation all events with class type not the "Test" can be excluded.

Event class statistics The "07 – Statistics" report is necessary to calculate number of events of preset classes which have been received from an object within a period. Primarily, this report is useful for identification of objects with various faults. For example, if during a report creation you choose the "Fault 220V" event class, it is possible to calculate how many times within preset period there were problems with electrical power supply at object. To include in the report only such objects which really require attention you can preset during the report creation the minimum number of events of each of preset classes which needs to be obtained to include an object in the report.

It should be noted that to use this report effectively user should create individual classes for those events which monitoring is of interest for him.

Sent SMS Reports belonging to the "08 – Sent SMS" – "12 – SMS, grouping by objects" group are intended to control operation of the "SMS Extender" event hadler. With the help of these reports you can obtain information about SMS messages which have been created during handling object events as well as about time of delivery of these SMS messages to recipient.

Channel statistics Depending on settings with which the "13 – By communication channels" report will be created, this report allows you fulfill several tasks. First, it is possible to evaluate which channels are employed by an object and to what extent by means of calculating number of events received from this object over each of communication channels. Secondly, it is possible to evaluate loading of individual channel by calculating number of events received over this channel from all selected objects.

State statistics With the help of the "14 – Object state" report it is possible to calculate number and duration of situations when an object was in the certain state.

Each state of an object in the context of this report is described by two events: the first event signals that the object has changed to known state; when the second event is received it is considered that the object has exited this state. Good examples of object states are power supply fault or communication channel fault.

For example, when electric power supply is interrupted at site the event recording presence of fault is created, and once the fault has been eliminated the event of electric power supply restoration is created. If it is necessary to calculate how many times an object was in "electric power supply interruption" state, as well

as the total duration of this state of the object then during creation of this report you should specify classes of events corresponding to fault and restoration of electrical power supply.

States of interest for the "Security Center" users may be quite different. In order to use actively this report when working with the "Security Center" you should create individual classes for those events that record start and finish of .an object staying in the state of interest to a user.

Alarm reports

All alarm events recorded by the "Security Center" require mandatory response from an operator. If an alarm event for an object is recorded at the time when for the same object there is another event with unfinished response then these events are united in the group and further processed together. Alarm responses are executed in the "Duty Operator" module. During an alarm response an operator records in the "Security Center" any actions he has executed in response to alarm. When an operator has finished response he cancels an alarm while recording time and result of response.

Most of alarm reports during the creation permit to verify if it is necessary to include data on alarms for which there were no calls of guards. This is due to the fact that such alarms are considered as technological or false by many security enterprises. Therefore some reports should not contain such alarms, and other reports should contain such reports only. When an alarm report is created it is necessary to select objects and alarm event classes to be included in the report. If during the report creation it is important to select only those alarms for which certain actions have been recorded then you can directly specify necessary actions of operators.

Standard report and Report for operator The "01 – For Operator" report is intended for viewing alarms in which responses particular operator took part. And with the "02 – Standard" report you can view all recorded alarms and actions for them. Additionally, when creating this report you can output only those alarms for which there were no guard calls.

Alarm cancellation statistics When creating the "03 – By number of cancellations" report you can specify minimum number of cancellations which have been recorded within a period. If in this case you select some particular cancellation, for example, the "Equipment fault" and specify that number of such cancellations must be at least 5, then you can obtain report which contains all objects for which alarms were cancelled not less than 5 times with reason specification as the "Equipment fault".

The "03 – Cancellation statistics" report is designed to calculate number of selected cancellations recorded within the preset period. With the help of this

report you can see which reasons for alarm cancellations are recorded more often than others and to what extent. For instance, you can see what portion alarms take which were cancelled as false. In addition to counting total number of cancellations for all selected objects, the report makes possible to detail cancellations for objects in order to see at which objects more false alarms or alarms with guard calls.

Using the "03b – Summary for cancellations" report you can see one more variant of cancellations detailing for objects. The report is easier for viewing than previous one but there is one restriction – not more than four cancellations can be included in it. As with the previous one this report allows to make sure visually which objects attract attention in the general list by the causes of alarms taking place at them.

The "03c – Summary for cancellation with comment" report allows to select one reason for an alarm cancellation, count number of alarms which have been cancelled for this reason and additionally - to output all comments which have been recorded by operators when responding to these alarms. If an operator alarm response algorithm requires making comments when recording situations accompanying response then this report is very useful for the analysis of alarm causes and problems which appear when responding to them.

The last of summarized reports on the alarm cancellations – the "05 – Cancellations by days" – allows to select one reason for an alarm cancellation and count how many times this reason have been used in each day of selected period. In addition to this the report allows to select one additional object characteristic which will also be included in the report. Let us suppose that with the help of previous reports it has become clear that for a month there were many false alarms for an object. Using the "05 – Cancellations by days" report you can find out how these alarms were distributed among days of a month: weather they took place every day or during particular shifts of some persons.

Alarms and events The "04 – With events" report represents a combination of two reports – an event report and alarm report. When creating this report you can select not only events of the "Alarm" type but also other events. In this case events with the "Alarm" class type and actions that have been recorded during their execution really determine which objects are included in the report. Events with other class types will be included in the report after the standard alarm report will be created.

Events that have been received before and after an alarm can be useful for identification causes of alarm therefore this report most often is used just for this purpose.

Reports on guarding time

Purpose of this group of reports consists in providing information about time during which an object was under guard or in specifying weather an object was under guard in the prescribed time.

Time under guard The "01 – With Total Time" report allows to view daily arms and disarms of an object for time period during which an object was under guard as well as time during which an object should be guarded according to the guarding schedule.

When arms and disarms of objects are outputted forced filtration of these events is performed: if several arms have been received in sequence, only the first of them is included in the report. But if several disarms go in sequence only the last removal is included in the report. The time during which an object had to be under guard according to a schedule does not depend on whether the guarding schedule control is enabled or not. Thus even if the object guarding schedule is not controlled it in case can be used for comparison of supposed and actual time of an object being under guard.

With the help of the "02- In brief" report you can obtain simply sum of time during which an object was under guard within given period. This report can be useful in cases when payment for security services depends on time during which an object was under guard.

Security state There are rather common situations when it is necessary to find out the state of a particular object at definite day and time. To fulfill such task the "03 – Security state" report is designed. When you create the report you should select date, time and object security state of interest.

Guards reports

Analysis of guards operation makes possible to evaluate quality of rendered security services and fairness of guards. Moreover, by associating guard calls with objects you can distinguish objects to which response guards are called more often than to other objects and make certain organizational conclusions in regard to these objects.

Guards reports resembles alarm reports, but they are oriented to specificity associated with the guard operation – count of arrival time, average arrival time/ number of calls and so on. In order to make alarms and guards reports actually useful the alarm response procedure should be associated with actions and cancellation reasons of alarms which are recorded by operators. First, it is necessary to distinguish typical situations which causes alarms. Secondly, it is necessary to create actions and cancellations of alarms in response to these

situations. Thirdly, it is necessary to train an operator to identify typical situations, act in accordance with developed for them rules and record just those actions and cancellations which correspond to the emerged situation.

Guards operation The "01 – Guards operation" report is designed to output all alarms within the period for which calls of selected guards were recorded.

Visit statistics The next report – "02 – Visit statistics" represents main statistics associated with guards operation over a period: total number of guard calls, number of calls which were cancelled, time which guard employed in calls as well as average guard arrival time. The report can be useful for the evaluation of a guard workload as well as for identification of most and least loaded guards.

Average number of calls With the help of the "03 – Average number of calls" report it is possible to count total number of fast response teams calls to objects as well as average number of team calls to objects per month.

This report is used to identify objects to which teams are called most frequently.

Response time Purpose of the "04 – Response time" report is evaluation of time period from the alarm receiving till the call of guard and its arrival to the object. When creating the report you can specify the maximum allowable values of these intervals in order to include in the report only those alarms where these values have been exceeded.

Cancellation statistics As with the similar alarm report, the "05 – Cancellation statistics" allows to count number of recorded reasons for alarm cancellations for a period but in relation to the selected response groups.

Using this report you can evaluate how many alarms for which guard has been called were false and why they were false.

Object reports

Set of object reports is designed to create hardcopy for the basic data of the "Security Center": objects, operators, event templates event handlers.

Objects The "01 – List of objects", "02 – Minimal card", "03 – Short card" and "04 – Full card" reports are designed to view and print information about objects in different representations and different volume.

The "06 – Control time" report allows to output objects for which control time is within limits preset during the report creation. The report can be useful

for object ranking if control time for an object is set in accordance with its importance.

Operators Using the "05 – Operators" report you can print out the list of the "Security Center" software users and their rights in the modules.

Templates of events Various information about use of event templates can be obtained with the help of the "07 – List of Event templates". Depending on parameters which have been set during the report creation you can know which templates are used for objects and which templates are not used. For those templates which are used number of objects which are using them can be counted. If in addition to the list of event templates it is necessary to obtain descriptions of objects which are included in one or another template you can use the "08 – Codes of event templates".

Event handlers The "09 – SMS Transmitters" report is designed to view and print information about settings of the "SMS Extenders" event handlers. With the help of this report you can obtain information about all handlers that are used for selected objects or about only those of them for which particular number of recipient is specified.

Database Wizard

Purpose

The "Database Wizard" is designed to fulfill the following operations:

- database verification
- work with backup copies
- data import and export

Database verification

Database verification procedure is recommended to be executed not more rarely than monthly. During database verification the rest modules can continue their operation. Upon completion of verification it is recommended to restart the "Duty Operator" module

Database backup

Database backup can only be executed on the computer where full installation of the "Security Center" was performed.

Backup procedure does not have critical impact on the operation of other "Security Center" modules However during backup execution certain lowering of entire system performance is possible: this should be taken into account when selecting time for the backup operations.

When you create a database backup copy you should select the volume of information to be copied.

- Full database copy contains all information being stored in the database at the moment of copying including received events, operator actions and sent SMS messages for all time of software running.
- Data amount in the operating copy is much less: in this copy the events, operator actions and SMS messages for the last month only are stored.

On the basis of volume of saved during backup information it is recommended to execute full backup not more rarely than monthly, and an operative backup – not more rarely than daily.

To store backup copies it is recommended to use one but better- several data mediums which are not physically connected with the disk subsystem of the computer where the "Security Center" database is stored. For example, it can be a separate hard drive, flesh drive or network resource. It should be noted that when adjusting backup you can specify several paths for backup copy saving.

In order to improve the entire system reliability the "Security Center" performs automatic backup. Operating copies of database are saved in the `ANDROMEDA DATA\SYSBACKUP` folder, interval of automatic backup copies creation is 24 hours.

Restore from backup

Database restore from the backup copy can be done only in the computer where the full installation of the "Security Center" software was executed.

Prior to proceeding to database restore from the backup copy it is necessary to stop the operation of all "Security Center" modules including the "Event Manager" module.

Database version from which restore is executed does not have any significance: immediately after restore the "Database Wizard" will verify version of restored data and execute updating if necessary.

In order to prevent the generation of events about the absence of the control event immediately after the database restore from the backup copy you should

specify when proceeding to restore the necessity to set current time for objects as time of the last event receiving.

Database restore is recommended to be executed in two steps: first to execute restore from the most resent full database copy and then – from the actual operating copy. Thus, in the first step entire existing history will be restored, and in the second step permanently changing information will be updated.

Upon completion both steps of the database restore from the backup copy it is recommended to verify the database. In this case you have to remember that database verification procedure does not disable other modules of the "Security Center", therefore, this procedure can be executed after starting the "Event Manager" and "Duty Operator".

Data Import

The "Security Center" software supports data import from the following sources:

- database of the "Andromeda" software, versions 2.0 - 2.76
- database of the "Andromeda Liberty" software
- database of the "Guardian" software
- database of the "CSM32" software

Data import can be done only in the computer where the full installation of the "Security Center" software was executed.

Prior to proceeding to data import it is necessary to stop the operation of all "Security Center" modules including the "Event Manager" module.

Import from "Andromeda", versions 2.0 - 2.76 and "Andromeda Liberty" If it is intended to import data from the "Andromeda", versions 2.0 - 2.76, or the "Andromeda Liberty" software then during installation of the "Security Center" you should specify the necessity to install BDE as this very subsystem is used to access to these programs data.

When executing data import from database of the "Andromeda" not only the description of objects and associated information can be transferred but also received events and operator actions.

If the database from which import is executed contains events for several years then import of events and operator actions can take rather long time. In this case it will be better to divide the procedure of import into two steps: first, import system information and events for the last month then start the "Event Manager" module and after having started to work with the "Security Center" import the rest events and operator actions.

Events and actions are always imported for entire month notwithstanding that in import settings you can set data for the exact day.

When importing from the “Andromeda”, versions 2.0 - 2.76 function of objects numbers shift is available. The substance of function consists in that to numbers of objects information about which is transferred to the “Security Center” a summand specified during the import procedure setting will be added.

When the shift is used and the import procedure is divided into two steps then shift settings must be specified both in the first and in the second step though in the second step only events and operator actions are transferred.

The shift of object numbers can be useful if several databases are integrated in one, for example, when several units are integrated.

In order to prevent the generation of events about the absence of the control event immediately after the data import you should specify when adjusting import the necessity to set current time for objects as time of the last event receiving.

Import from “Strazh” software If you intend to import object descriptions from “Strazh” software, then a computer must have Microsoft Access 2003 or later installed in it for a period of import execution.

You may install the “Security Center” into computer with the “Strazh” software, execute import and transfer the “Security Center” data using the backup copy.

When importing from the “Strazh” software it is necessary to specify the folder in which the database files if this software are located. If to the “Strazh” software was connected the “Lonta-202” (“RS-202”) station, then import execution two file are required - the“Guard.mdb” and “SurGuard_code.mdb”. If only the “RS-200” station was used, then to execute import the “Guard.mdb” file is enough.

In the settings of import operation from the “Strazh” software you can specify numbers or intervals of numbers of objects descriptions of which must be transferred to the “Security Center”. Thus, you can import descriptions of not all objects but only part of objects – only of required ones.

When executing import from the database of the “Strazh” software numbers of imported objects may be shifted. The substance of shift consists in that to numbers of objects information about which is transferred to the “Security Center” a summand specified during the import procedure setting will be added.

The same function is available in the setting event receive from the “RS-200” and “Lonta-202” units. Thus, by shifting object numbers you can arrange the “Security Center” software operation with several units from the same or different manufacturers.

When importing from the “Strazh” all features of description of objects used in this software are supported, including possibility to declare several objects as sections of one transmitter.

Import from "CSM32" If you intend to import the object descriptions from the "CSM32" software, then a computer must have Microsoft Access 2003 or later installed in it for a period of import execution.

You may install the "Security Center" into the computer with the "CSM32" software, execute import and transfer the "Security Center" data using the backup copy.

When importing from the "CSM32" software path to the "Main.mdb" file must be specified where the "CSM32" software data are stored.

To transfer as full as possible the description of objects it is necessary when setting import from the "CSM32" to specify mapping of event classes used in the "CSM32" to event class types of the "Security Center".

Data Export

The "Security Center" software supports the export of information about the objects to the text file with value separators.

When executing export it is necessary to select objects and fields (columns) the information about which will be written to the export file.

Also it is necessary to specify a name of file to which export will be executed as well as a symbol which will be used as the separator.

Command Line Parameters

Along with the graphic user interface the "Database Wizard" module has possibility of control using command line parameters.

This possibility can be useful in case when Windows scheduler with more developed capabilities than built in the "Event Manager" module scheduler is used as a task scheduler for the database backup copy creation or restore from the backup copy.

Database backup

```
AnDBWiz.exe
    /BACKUPDB
    /FOLDER:"Destination folder 1";"Destination folder 2"
    /TYPE:Type of backup copy
    /BACKUPCOUNT:Number of files in destination folder

/BACKUPDB
```

This parameter shows that the “Database Wizard” module must execute database backing-up. Settings of backing-up procedure are defined by succeeding it the parameters of the command line.

```
/FOLDER:"Destination folder 1";<"Destination folder 2">
```

One or more folders to which the database backup copy will be placed. At least one folder must be specified. Names of folders must be is enclosed in the quotations. If more than one folder is specified they must be separated by “semicolon” character. Use of absolute paths in the folder names is allowable.

```
/TYPE:Type of backup copy
```

The type of the backup copy to be created. “0” value for this parameter corresponds to the need to create the operating backup copy. “1” value means that the full backup copy of the database must be created. The parameter is not mandatory. If the parameter value is not set then the operating backup copy will be created.

```
/BACKUPCOUNT:Number of files in destination folder
```

This parameter defines maximum allowable number of database backup copy files in the destination folder. If during the backup copy creation it is determined that the number of backup copy files of the same type exceeds the maximum allowable number then the oldest file of the backup copy is deleted .

The parameter is not mandatory. If the parameter value is not set then 10 value is used for this parameter.

Database restore from backup copy

```
AnDBWiz.exe
    /RESTOREDB
    /FOLDER:"Source folder"
    /TYPE:Type of backup copy
```

```
/RESTOREDB
```

This parameter shows that the “Database Wizard” module must execute the database restore from the back-up copy. Settings of the database restore procedure are defined by succeeding them the parameters of the command line.

```
/FOLDER:"Source folder"
```

The folder which will be searched for the database backup copy and from which the restore will be done. If several backup copy files of the preset type is found in the specified folder then the restore is executed from the most newly created file.

`/TYPE:Type of backup copy`

The type of the backup copy from which the restore must be done. "0" value for this parameter corresponds to the need to recover from the operating backup copy. "1" value means that database must be recovered from the full backup copy. The parameter is not mandatory. If the parameter value is not set then restore will be executed from the operating backup copy.

Example of Command Line Parameters Use

```
AnDBWiz.exe
    /BACKUPDB
    /FOLDER:E:\Backup\Operational;\\Storage\Backup\Operational
    /BACKUPCOUNT:25
```

Above mentioned set of the command line parameters means that the "Database Wizard" module must create the operating database copy and copy it to the folders `E:\Backup\Operational` and `\\Storage\Backup\Operational`.

When copying the backup copy to the destination folder the "Database Wizard" module must verify that total number of the operating backup copy files in the destination folder does not exceed 24, and if there are more files then the oldest by time of the creation backup copy file must be deleted.