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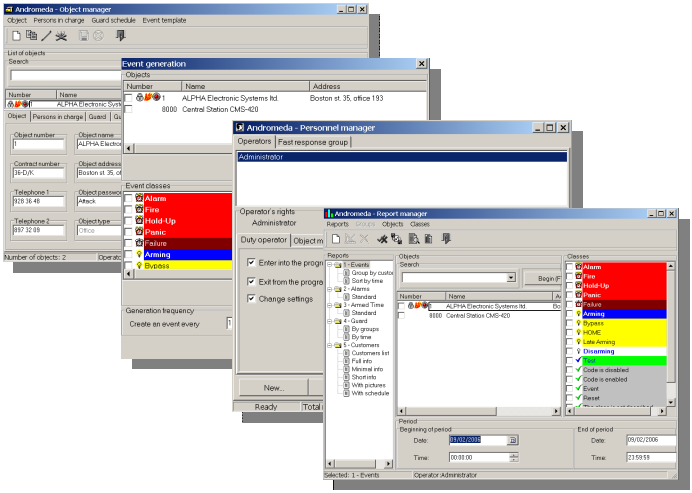
ANDROMEDA

Integrated Alarm Monitoring System v2.7

Installation & User Guide



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Please read this manual in its entirety before attempting to program or operate your system. Should you misunderstand any part of this manual, please contact the supplier or installer of this system.

You can contact us at:

PIMA Electronic Systems Ltd.

5 Hatzoref Street, Holon 58856, Israel http://www.pima-alarms.com

SAFETY INSTRUCTIONS

Your CAPTAIN-i alarm system has been registered in accordance with EN60950 and its rules. EN 60950 requires us to advise you the following information:

1. In this alarm system exists hazards of fire and electric shock. To reduce the risk of fire or electric shock, do not expose this alarm system to rain or moisture. Pay attention: Telephone cords could be a good conductor for lightings energy.
2. Do not open the door of the alarm system. Dangerous high voltages are present inside of the enclosure. Refer servicing to qualified personnel only.
3. This alarm system should be used with AC 230V50Hz, protected by anti electric shock breaker. To prevent electric shocks and fire hazards, do NOT use any other power source.
4. Do not spill liquid of any kind onto the unit. If liquid is accidentally spilled onto the unit, immediately consult a qualified service.
5. Install this product in a protected location where no one can trip over any line or power cord. Protect cords from damage or abrasion.
6. Disconnect all sources of power supply before proceeding with the installation. Pay attention: do not install low voltage wires near by AC power wires they should be separated.
7. Connect the AC transformer output to the terminal block on the control panel as marked.
8. Connect the AC line cord to line power terminals as marked. (GND; N; L)

Contact us:

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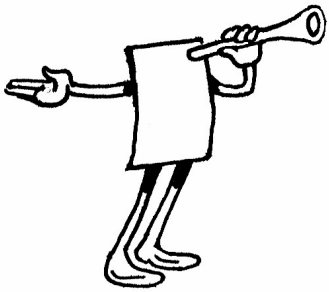

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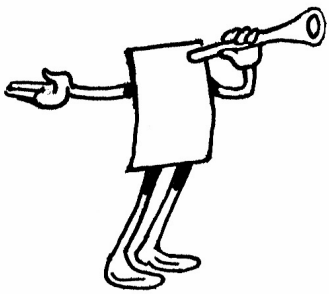

Introduction

Thank you for your purchase of the Andromeda Integrated Alarm Monitoring System.

The Andromeda software has been developed by C.Nord Science, Technology & Commerce Firm (ST&C) Limited Liability Company (LLC) for the integrated Andromeda® alarm transfer system. The software is designed for operation under the control of Microsoft Windows 98/NT/2000/XP/2003 operating systems.

This document was designed to assist you in installing and operating the Andromeda Integrated Alarm Monitoring System.

Using This Document

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Please read this manual in its entirety before attempting to program or operate your system. For any further inquiries, please contact Pima's support department at: support@pima-alarms.com.

Symbols

The following words and symbols mark special messages throughout this manual:

NOTE:

Text set off this manner presents commentary or interesting points of information.

IMPORTANT!

Text set off this manner presents clarifying information or specific instructions.

Example:

Text set off this manner presents an example of a specific function or instruction.

Instructions to follow.

`Specific Item:` Text displayed in this manner (Courier Bold) presents a specific button, menu item, or file name related to the application.

System Features

The following system features are to be noted:

- The Andromeda software is divided into independent functional parts (modules), each designed for solving a specific problem. It protects each module against failure of another module and installs each module on any individual network computer.
- The Andromeda software is designed for networks supporting TCP/IP protocol. All changes made in the system from network computers will immediately apply to all software modules operating in the network.
- Operator's rights are determined in specific action in modules, allowing both individual and group access levels, For example, it is possible to restrict the operator's access both to the whole Object Manager module and to an editing function of the object security schedule.

- Equipment from CMS can be received and handled from control panels (hubs, object units) with built-in communicators (digital message transmission units – specialized modems). Accordingly, a duty system operator has comprehensive information on the object state (set under guard, relived of guard, alarm, etc.) and the technical condition of equipment (the storage battery is discharged, the power supply voltage of 220 V is missing, a telephone line is faulty, etc.). The operator on duty has comprehensive information about a customer's protection status (i.e., customer's Alarm System state, alarms, open/closed zones, etc.) as well as information about the competence of the equipment on site (i.e., low battery, phone line is out of order, etc.).

What's in the Package?

The Andromeda Integrated Alarm Monitoring System software package include the following:

- A compact disk containing the following:
  - Distribution kit of the working version of Andromeda software, Version 2.7.
  - Distribution kit of the demonstration version of Andromeda software, Version 2.7.
  - Distribution kit of drivers for the electronic protection key.
- An electronic protection key to be installed on a computer parallel port.
- HASP (Hardware Against Software Piracy) licensing dongle.

System Requirements

Operating System

- Minimum operating system: Microsoft Windows 98/ME
- Recommended operating system: Microsoft Windows XP or Microsoft Windows Server 2003

Hardware

- Minimum hardware configuration:
  - Processor Intel® Pentium® III 1000 MHz
  - RAM 128 Mb,
  - 17" SVGA monitor,
  - Sound card
- Recommended configuration:
  - Processor Intel® Pentium® IV 2.4 GHz
  - RAM 512 Mb
  - 19" SVGA monitor
  - Sound card
  - Network card for software operation in the network

HASP

The Andromeda Integrated Alarm Monitoring System v2.1 software is copy protected by a dongle (HASP).

The HASP protection key is used to license all the network workstations sharing the software (i.e., the maximum number of physical network computers that share the software). In addition, without the protection key, no information shall be collected.

The HASP included with standard configuration has a license for up to three workstations sharing the Andromeda software. If more workstations are required, please contact sales@pima-alarms.com.

Electronic protection key

The Andromeda software, Version 2.7, is protected against unauthorized copying by a HASP electronic protection key. Before using the Andromeda software, it is necessary to connect the electronic key to a parallel of the computer and run installation of its driver.

Installation

Selecting Operating System

As it was already mentioned, it is recommended to run the Andromeda software under the control of the Microsoft Windows XP or Microsoft Windows Server 2003 operating system. And it is recommended to use NTFS as a file system.

Configuring Computer Disk Subsystem

In order to secure the data storage reliability and system performance enhancement, it is recommended to install two hard disks on the computer where the full installation of the Andromeda software will be performed. In doing so, the operating system and executable files of the Andromeda software should be installed on one hard disk and the database (DB) directory and the Paradox NET DIR directory should be located on the other hard disk. In the event of such installation of two hard disks being impossible, it is recommended to divide the only hard disk into two partitions and locate the operating system on one partition and data directories of the Andromeda software on the other.

In addition, irrespective of the disk subsystem configuration, it is considered obligatorily to arrange a backup copying to another storage device or network resource so that a backup copy of the Andromeda software should be created on another data storage device.

Before proceeding to installation of the Andromeda software, it is recommended to read the following help sections:

- Version upgrade
- Installation of the electronic protection key driver

- ✦ Preparation for installation on a network workstation
- ✦ Installation program
- ✦ Possible problems during installation

HASP Installation

IMPORTANT!

The HASP, software license key, should be installed on a workstation connected to the Event Source computer and intended to run the Event Manager module (the server in a network architecture).

Installing the HASP dongle

1,2,3...

1 Identify the computer that shall run the Event Manager module.

2 Identify the parallel port (25 pin female connector at the rear of the computer).

3 Connect the HASP to the computer's parallel port and fasten it firmly.

NOTE:

If a printer cable is connected, remove it, connect the HASP to the computer's port and then reconnect the printer cable to the HASP.

Installing the HASP drivers

1,2,3...

To install the HASP drivers, run the installation program (**HDD32.EXE**) found on the Software CD. The program can be found in:
`<CD drive>:\HASP\HDD32.EXE`

Upgrading from a Previous Version

IMPORTANT!

This version **cannot** be used to upgrade from Andromeda DOS version!

When upgrading from a previous version, the following should be done prior to installing the new version:

1 Save the database of the previous Andromeda version.
- Copy all files in the *C:\Program Files\Andromeda\DB* directory to a backup directory of your choice.

2 Uninstall the previous Andromeda version:
- **`Start`** → **`Settings`** → **`Control Panel`**
- Select Add/Remove Programs
- Locate Andromeda on the install list. Select it
- Press the **`Add/Remove`** button and confirm complete deletion including all components.

3 When done, manually check and delete the directory of the previous Andromeda version

4 After the previous version has been removed, install the new Andromeda Integrated Alarm Monitoring System software, version 2.1 (see *New Installation* in the following paragraph).

5 After rebooting, delete all database files installed with the new software version (i.e., all files in the directory *C:\Program Files\Andromeda\DB*).

6 Copy the saved database files, from the previous version, to the new Andromeda software database directory.

7 Start the *Database Wizard* utility (**`Start`** → **`Programs`** → **`Andromeda`** → **`Database Wizard`**) to convert the old database format to the new one, used by Andromeda v2.1 software.

The new version of Andromeda is now ready for operation.

Installing Electronic Protection Key Driver

The electronic protection key for the Andromeda software shall be connected to a parallel port of the computer, on which Event Manager module will be running. No electronic protection key is required for network workstations.

In order to provide interaction with the protection key, it is necessary to install its driver. The installation of the electronic protection key driver is carried out by starting the installation program for the electronic protection key driver (HDD32.EXE), which is located in the Hasp subdirectory on the compact disk being supplied.

New Installation

Installing on a Single Computer

For operating the Andromeda software, it is essential for the TCP/IP protocol to run on the computer.

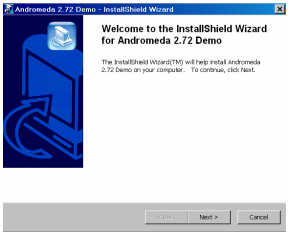
The Program Install directory and Program Group items location can be changed from the default during the installation.

To install Andromeda Integrated Alarm Monitoring System on a single computer:

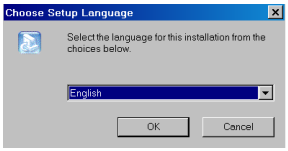
1,2,3...

1 To install the Andromeda Integrated Alarm Monitoring System software, run the installation program (**`Setup.EXE`**) found on the Software CD. The setup program can be found in:
`<CD drive>:\Andromeda\2.1\SETUP.EXE`

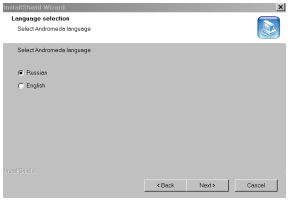
2 Follow the on screen instructions:



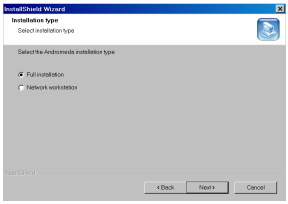
Stage 1: Press Next to install software



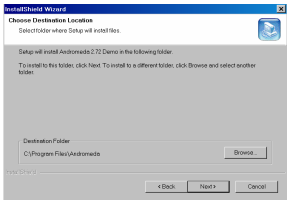
Stage 2: Setup Language: Use drop-down menu to pick English or Russian, Then press Next



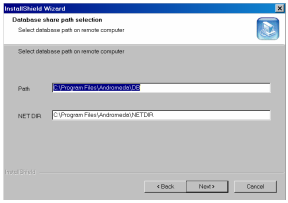
Stage 3: ANDROMEDA Language: Mark desired language, then press Next



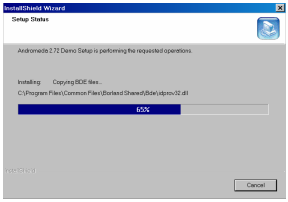
Stage 4: Mark Full Installation, then press Next



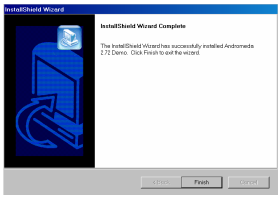
Stage 5: Choose destination location. Use Browse to change location. When finished press Next



Stage 6: Select database on remote computer (Path and NET DIR), then press Next



Stage 7: Wait until setup complete



Stage 8: Click Finish. Installation complete.

3 When installation is done, restart the computer.

IMPORTANT!

If the Andromeda software is installed on a computer running MS Windows 98, the Remote Network Access should not be installed on this computer and removed if installed.

NOTE:

Running the Event Manager and the Operator on Duty concurrently is not possible due to the OS limitations.

Installing on a Network Computer/Workstation

Preparation for installation on a network workstation

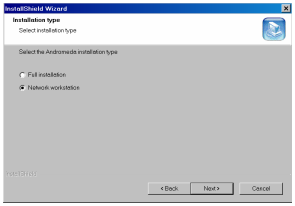
Whatever paradoxical it can seem, but all the preparation for installation of the Andromeda software on network workstations is carried out on the same computer, on which the full installation of the Andromeda software has been performed and the Event Manager module is to be run and to which the receiving equipment of the central station is connected. It is just this computer that will act as a server; in the event of the Andromeda software – as a database server.

NOTE:

The sequence of actions and the directory properties window are given above for the Windows© XP operating system within a peer-to-peer network. If the Andromeda operation is planned in a network with a domain, it is necessary to apply to the administrator in order to arrange general access to the Andromeda directory. The essence of actions remains the same, i.e. it is necessary to provide general (full) access to the directory, which subdirectories are the database directory and the Paradox NET DIR directory.

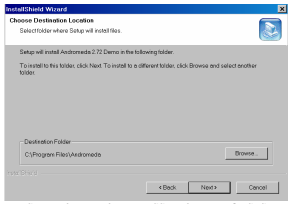
1,2,3...

Follow stages 1-3 in previous section, then



Stage 4:

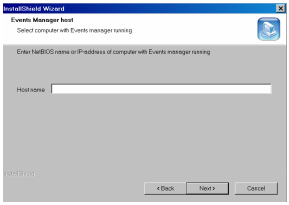
Mark Network workstation, then press Next



Selecting installation folder

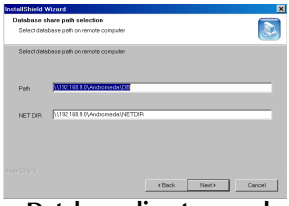
Stage 5: The preparation for the network works station installation should be started at the moment of installation of the full version of the Andromeda software. If the operation of the Andromeda software is planned, it is recommended to specify as the database directory and the Paradox NET DIR directory

the subdirectories of a separately created directory, desirably on another hard disk partition or on a separate hard disk rather than subdirectories of the directory of installation of the Andromeda software executable files. So, for example, it is desirable to install the Andromeda software executable files into the following directory: C:\Program Files\Andromeda.



Stage 6:

Enter Host name



Database directory and Paradox NET DIR directory

Stage 7:

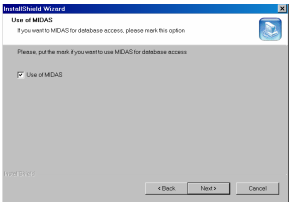
Specify a directory D:\Andromeda\DB as the database directory and a directory D:\Andromeda\NETDIR as the Paradox NET DIR directory.

If these directories do not exist, the installation program will create them. Then it is necessary to provide access to the D:\Andromeda directory over the network. To this end, one should take the following steps:

- ✦ Open the Properties window of this directory.

- Go to the Access page.
- Mark the item Open general access to this folder.
- Specify the name of common resource, i.e. Andromeda.
- Mark the item Enable change of files over the network.

Upon performance of these actions, the Andromeda directory, which subdirectories are the database directory and the Paradox NET DIR directory, will be accessible over the network.



Stage 8:

Tick the box if you wish the use of MAIDS.

The essence of MIDAS technology is that the modules, which directly perform operations with database files – let us call them DB access modules – are started and run on the

same computer, on which the database is kept. And the Andromeda software modules implementing the user interface interact with the DB access modules by means of the Microsoft DCOM technology. So MIDAS is a technology of distributed access to the database based on DCOM.

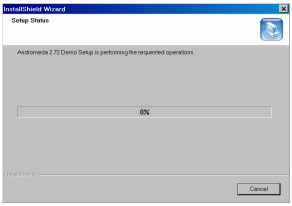
The use of MIDAS technology at the operation of Andromeda software in the network leads to a considerable enhancement of performance of network workstations but at the same time makes increased requirements for the computer acting as a database server and, in addition, requires its additional setup.

It should be noted that the use of MIDAS does not exclude a direct interaction with the database. In other words, in some cases being, however, sufficiently rare, the Andromeda software modules perform a call to database files over the network. So even with the use of MIDAS it is necessary to provide general access over the network to the database directory and to the Paradox NET DIR directory.

The setup being performed on the computer acting as a database server consists of the fact that it is necessary to enable the use of Andromeda modules performing access to the database as DCOM-servers for those users that will work with Andromeda modules on network workstations. The best thing would be if these users will preliminarily be combined into a group, as management of a group of users is considerably more effective.

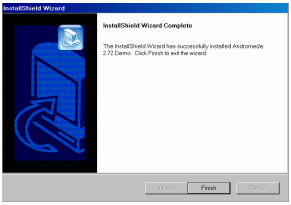
NOTE:

Unlike full installation, the Event Manager and the Database Wizard modules are not installed during the installation on a network workstation, as it is recommended to start these modules on the computer, on which the Andromeda software database is located.



Stage 9:

Wait until installation completes. Please note this process might take a few seconds until it begins.



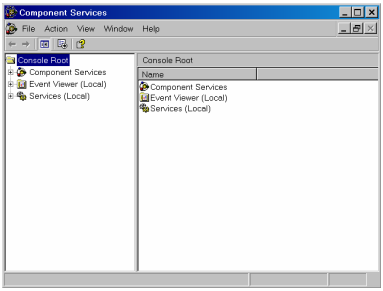
Stage 10:

Click Finish to complete installation.

Setting Up DCOM

Method 1

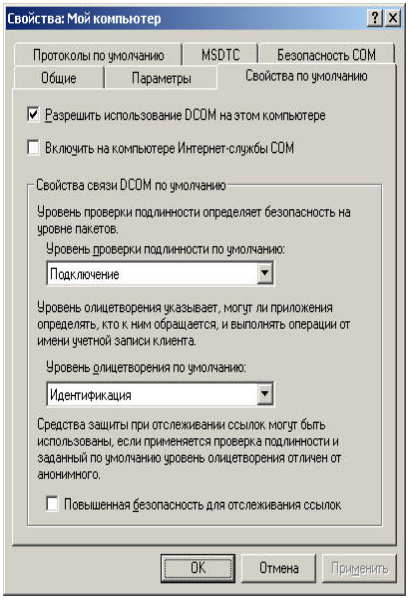
To setup DCOM in the Windows© XP operating system:



Fitting up of Component service

Stage 1:

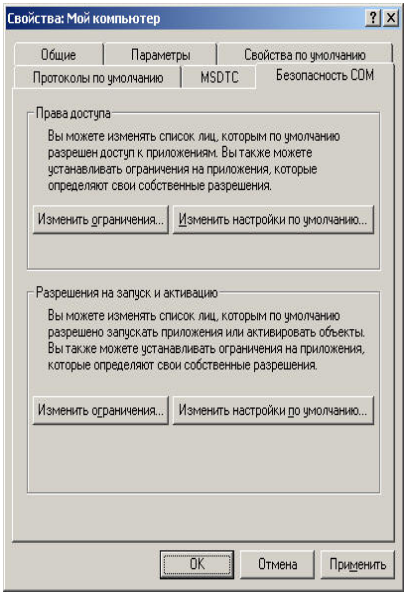
Click start>Control Panel>Administrative Tools>Component Services



Properties: My Computer, Default properties

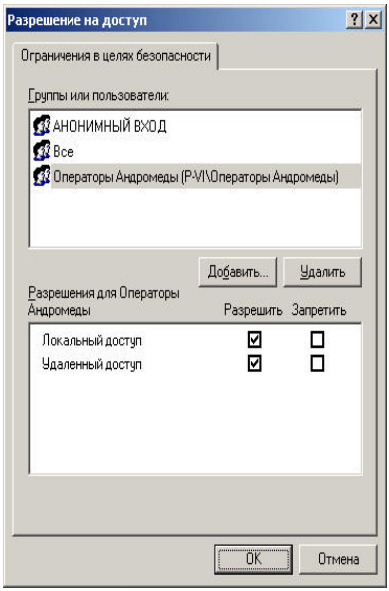
Stage 2:

Go to My Computer icon > Click the right mouse>Select Properties > Default properties>check the "Enable the use of DCOM on this computer" box

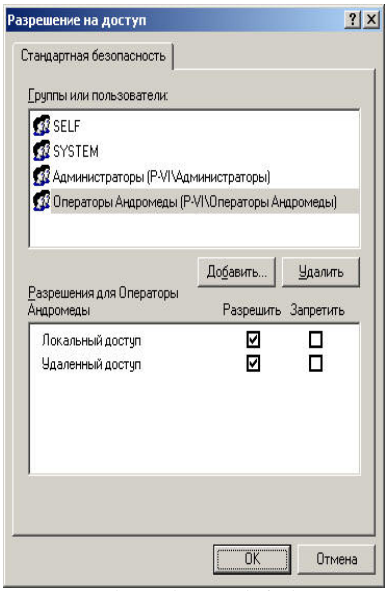


Properties: My Computer, COM security

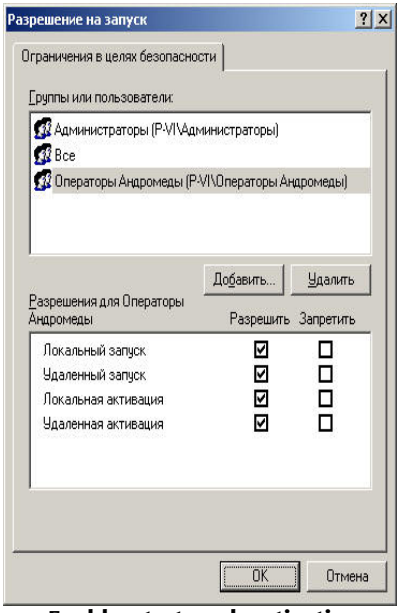
Then Go to COM security tab> Change restrictions> Change default settings keys on the COM security tab, both in the Access rights section and in the Enable start and activation.



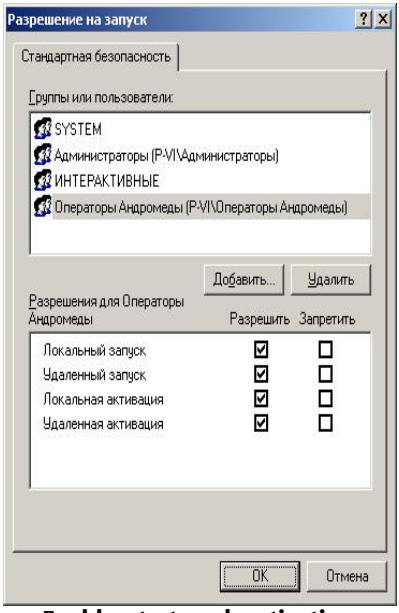
Access rights: Change restrictions



Access rights: Change default settings



Enable start and activation. Change restrictions



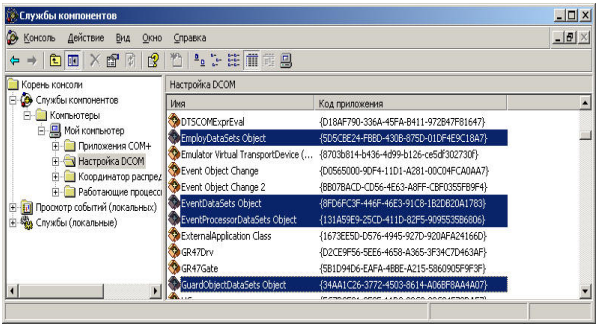
Enable start and activation. Change default settings

In this screen, grant the rights for access, start and activation of DCOM-modules on the given computer to the group of users operating the Andromeda software on network workstations.

Method 2

Though **Method 1** is faster to setup, it is potentially dangerous, as members of the Andromeda Users group get access to and permission for starting not only Andromeda modules implementing access to the database but also all DCOM-modules on the given computer. They will be able to perform actions only within the framework of their own rights on the given computer.

This problem can be solved without changing neither the **limitations**, no **default settings** on the **COM security** tab and enable the access, start and activation individually for the following DCOM components:

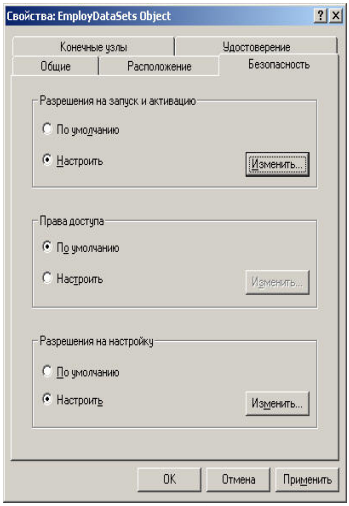


Components services: Andromeda DCOM components implementing access to the database

- **EmployDataSets Object**
- **EventDataSets Object**
- **EventProcessorDataSets Object**
- **GuardObjectDataSets Object**

Step 1:

Select a component, for example, **EmployDataSets Object**. Make a right mouse click on it; select the **Properties** item in the pop-up menu and go to the **Security** tab in the appeared window.

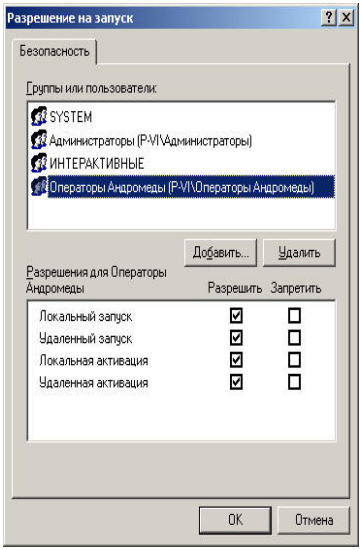


Properties: EmployDataSets Object, Security

Step 2:

In **Enable start and activation>** Select **Setup>Click on Change** key.

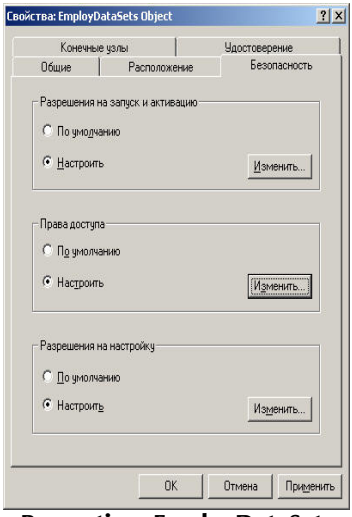
In this window, give permissions to the Andromeda Operators group members



Enable start

Step 3:

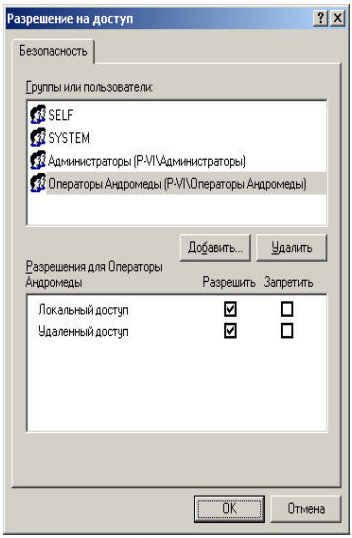
Repeat operations for the **Access rights** section. Select the **Setup** item.



Properties: EmployDataSets Object, Security

Step 4:

The **Change** key becomes accessible, click on it. > give permissions to the Andromeda Operators group members:



Enable access

Step 5:

Similar settings should be configured for the remaining three Andromeda components implementing access to the database.

Troubleshooting

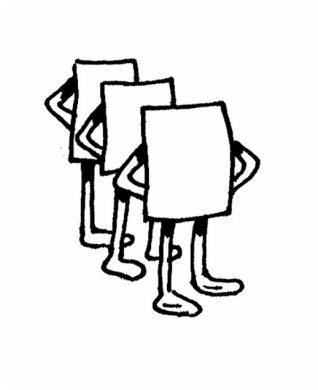
BDE installation

BDE, Version 5.1 is supplied within the complete set of Andromeda software. As a rule, BDE installation is passing without any problems, if no BDE is installed on the computer. If any software using BDE during operation has already been installed on the computer, then it will be quite possible that the Andromeda software installation program will not manage to correctly update the BDE version or crease a database alias being used by the Andromeda software. In such situations, the following can be recommended:

- Before installation of the Andromeda software installation, it is necessary to remove any software using BDE (including, of course, the previous versions of the Andromeda software).
- Perform the Andromeda software installation.
- If necessary, perform installation of other software using BDE.

Other problems

For any further installation problems, please contact PIMA support department at: support@pima-alarms.com.



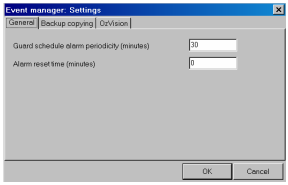
Handlers Setup

Event Manager Handler

Setup

The Event Manager: Setup window is designed for modifying various Event Manager module parameters.

"General" Properties Tab



On the General properties page, one can set time intervals concerning object guard and being controlled by the Event Manager module.

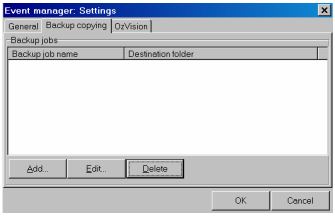
Periodicity of guard schedule alarms (minutes):

It is the time interval of generating system events with the codes of XB and XC. System events with the given codes are created in the event of the object guard schedule and object long-term guard being violated respectively.

Time of restoration after an alarm (minutes)

It is the time of waiting for the alarm reset.

"Backup Copying" Properties Tab



The Backup copying properties page is designed for backup copying job management.

The existing backup copying jobs are displayed in the list. By means of the **Add**… key, one can create a new backup copying job. The **Modify**… key serves for modifying properties of the existing backup copying job. By means of the **Delete** key, one can delete a backup copying job.

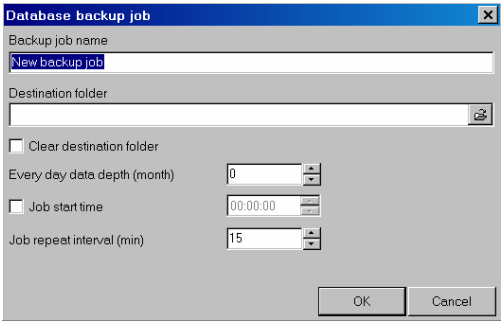
Detailed Explanation

The Andromeda software enables database backup copies as follows:

The Andromeda software data can be divided into two different parts. These parts are different both by their capacity and by the significance of data being contained therein. The first part containing system data is a description of objects, event templates, operator lists, etc. The second part containing daily data consists of the events being received and the operator actions. Daily data are stored in database files, which are created every day. The names of these files contain figures corresponding to the date of their creation.

All system data will be subject to obligatory backup copying. As to daily data, the volume of such data is to be prescribed, i.e. when setting up the backup copying it is necessary to specify a time interval, over which the daily data will be included into backup copying. In the process of backup copying, database files are placed into a ZIP format archive. The archive file name shall contain information on the daily data volume as well as on the time and date of creation of the given backup copy. When setting up the backup copying, it is necessary to specify a directory, into which the archive with backup copy data will be placed. In addition, the backup copy setup implies specifying the interval of time, in which the backup copying will be carried out.

A set of parameters describing the backup copying procedure is called a **backup copying job.**



Job name

It is an arbitrary line to be specified by the user. It is used in displaying the job in the backup copying list.

Destination folder

It is the folder (directory), into which the archive with backup copying job data will be placed. The destination folder will also be displayed in the backup copying job list.

Clear destination folder

In the event of the given parameter being set, all the files being in the destination folder will be deleted before copying of the backup copying data archive. It is expedient to set this parameter for jobs being periodically executable with a small repetition interval.

Volume of daily data (months)

It is the time interval (number of months), over which the daily data will be included into backup copying. It is necessary to note that data for the current day are always included into backup copying. So the value of this parameter implies the number of months including the current one, i.e. of the value of 0 is specified, then it means that only current day data will be included into backup copying; if the value of 1 is specified, then it means that daily data for the current month will be included into backup copying; if the value of 2 is specified, then it means that daily data for the current and previous months will be included into backup copying, etc. However it is recommended to create backup copying jobs, including a large volume of daily data. The execution of backup copying jobs influences on the system performance

on the whole; therefore, it is recommended to provide that the whole volume of data to be subject to periodic backup copying should not exceed 60-70 megabytes.

Execution beginning time

The time of starting a backup copying job for execution. If this parameter is not specified, then the backup copying job will be executed periodically at a time interval specified by the **Repetition interval** parameter to be counted from the starting time of the Event manager module. However if the **Execution beginning time** is specified, then the backup copying job execution will be performed according to a schedule counted from the execution beginning time specified.

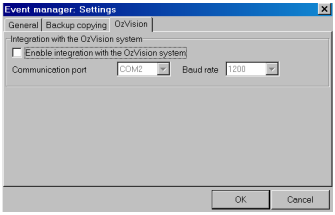
Repetition interval (minutes)

It is the period of repetition of the start of backup copying job. If the zero value is specified for the Repetition interval parameter, then the backup copying job will be performed once a day (24h), at the time specified by the **Execution beginning** time parameter.

It should be noted that the direct creation of backup copies is carried out by the Database Wizard module – the icon corresponding to this module appears in the taskbar system area during the execution of backup copying jobs. In this case, management of the Database Wizard module is performed by means of command line parameters. So there is a possibility of creating automatic backup copying jobs by means of other job schedulers.

The backup copy file name is created according to the following mask: ABDP-YYYYMMDD-HHNN.ZIP where DP is the backup copy data volume, YYYYMMDD denotes the year, month and day and HHNN corresponds to the hour and minutes of the backup copy creation.

OzVision Properties Tab



On the OzVision properties page, one can specify parameters of integration with the OzVision system.

Event Handlers

The purpose of the event handling procedures is to automate the system operation. The procedure allows organizing a specialized event handling without operator's participation. It simplifies the operator's work and reduces the human factor influence. The procedure is arranged by means of special program components to be connected to the Event Manager, which are called event handlers. The event handlers can solve various automated processing problems for the events being received: simple event count, monitoring of time intervals between events, perform the event filtration or modification, carry out the service or system re-translation. Combining of handlers allows solving a broad spectrum of problems amenable to algorithmisation.

The Andromeda software, Version 2.7 comprises the following event handlers:

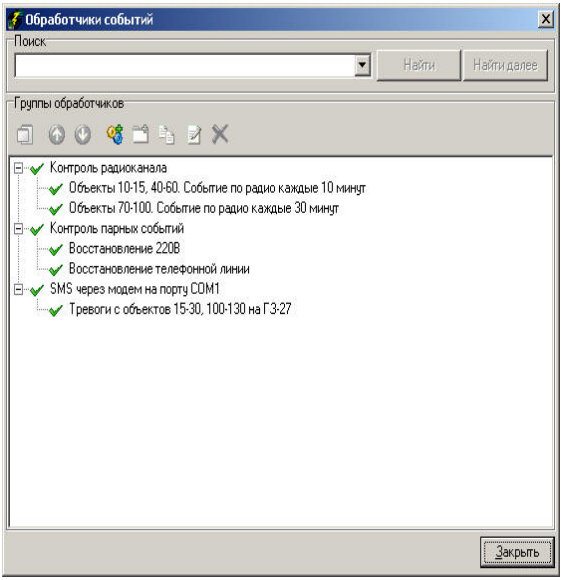
- **Event monitoring** – this handler carries out monitoring of the periodic reception of events.
- **Event chain monitoring** – this handler carries out monitoring the arrival of the event sequence.
- **SMS re-translator** – this handler transfers information in the form of SMS about the messages received.

Setup

The possibility of modifying the event handler settings is determined by the operator rights, which are specified in the Personnel Manager module.

Handlers of the same type are combined into groups. Handlers cannot exist outside groups. A new handler can be added to an existing group or a new group should be created for it. Combining into groups allows to easily managing several handlers of the same type at once. For example, include, exclude or hide unchangeable handlers.

The **Event handlers** window is designed for event handler management.



Handler groups act as nodes of the handler tree.

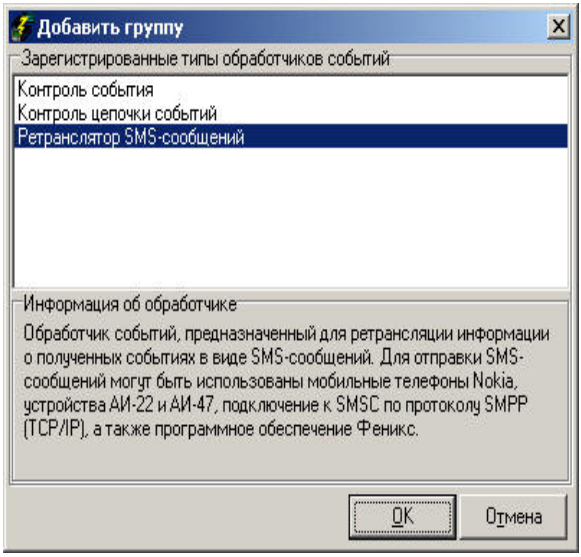
The handler list management is carried out by means of the following control keys:

 Display hidden groups or not. It is necessary to note that this key is only active if there are hidden groups in the handler list.

 Shift a handler or a group forward in the event handling queue. The event handling is performed sequentially according to the handler list. The shift of a handler or a group modifies the operation execution sequence.

 Shift a handler or a group backward in the event handling queue.

 Add a handler group into the list. For the group being added, it is necessary to determine the type of handlers, which will comprise the group.



 Add a handler into the current group.

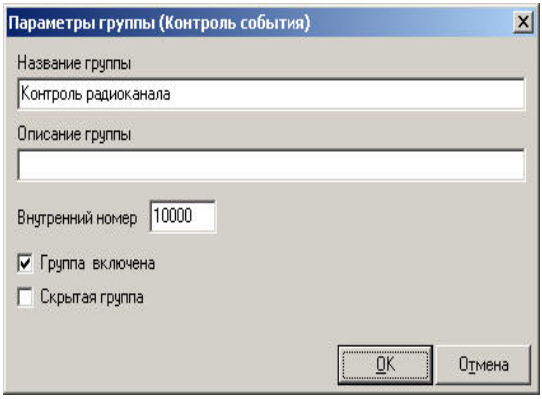
 Add a copy of the current group or add a copy of the current handler into the group. The copy will be added to the end of list with the same properties as the original.

 Modify parameters of the current group or handler.

 Delete the current group or handler.

Setup Common Group and Event Handler Parameters

General Handler Group Parameters



Group name

It is the handler group name to be specified by the user.

Group description

It is additional information about the group to be specified by the user.

Internal number

It is the object number being used for generating special service messages. By default, the internal number is succeeded by handlers being included into the group. If necessary, it can be modified for each handler.

Group is enabled

It is a switch designed for enabling or disabling a group. A group being enabled participates in the process of handling of the events being received. If a group is disabled, then no events are transferred to the group. As a consequence, all handlers included into the group will also take no part in the handling process, irrespective of the status of their own enable/disable switch.

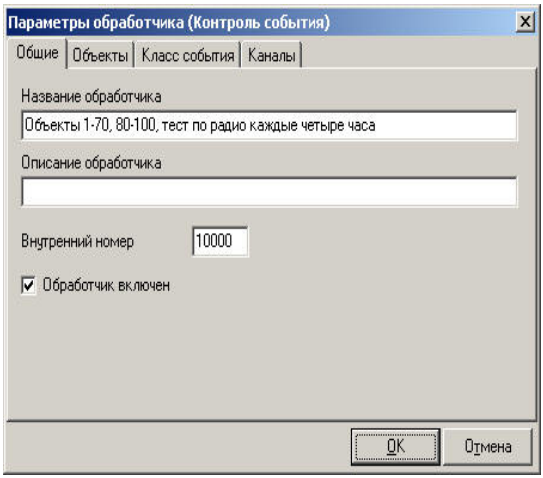
Hidden group

It is a switch, which setting allows to hide a group from the handler list. This feature can be useful for groups being modified rarely.

Event handler parameters

Event handlers have a number of parameters determining their functioning, which are common for all handlers. In particular, the general parameters include a list of objects, events from which are subject to handling as well as a list of channel types, over which the events being handled should be received. The pages of properties designed for modifying such parameters are described below.

Common Tab



Handler name

It is the handler name to be specified by the user.

Handler description

It is an additional information about the handler to be specified by the user.

Internal number

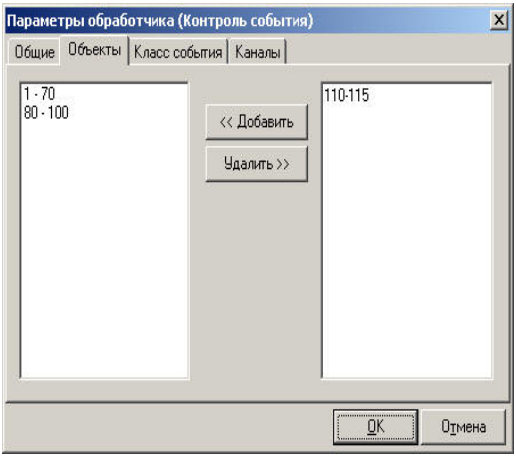
It is the object number being used for generating special service messages. By default, the internal number is succeeded by handlers being included into the group. If necessary, it can be modified.

Handler is enabled

It is a switch designed for enabling or disabling a handler. A handler being enabled participates in the process of handling of the events being received. If a handler is disabled, then no events are transferred to it.

Objects Tab

On this page, the numbers and number intervals are specified for objects, from which events will be processed by the given handler.



<< Add

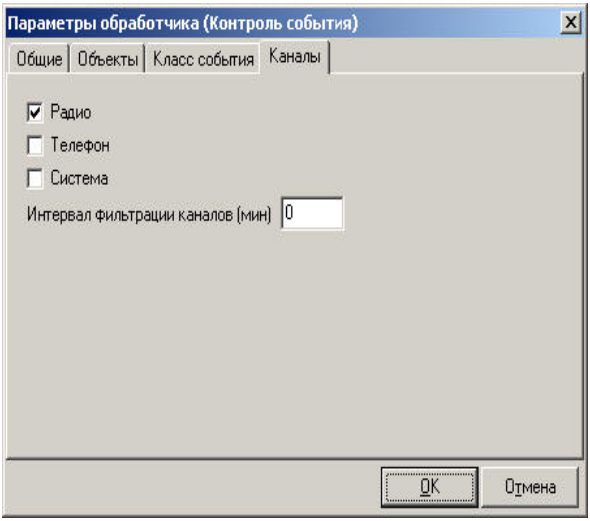
By means of this key, you can add a number, a list of numbers or an interval of object numbers to the list of object numbers from the list on the right. In order to enter a list of numbers, the numbers should be separated by a comma, for example: 35, 57, 78. In order to enter an interval of numbers, it is necessary to specify the beginning and the end of interval using a hyphen, for example: 100-200. It is allowed to enter solitary numbers, lists and intervals at the same time in an arbitrary order, for example: 75, 100-200, 235, 238, 12-15.

Delete >>

By means of this key, you can delete a number or an interval of numbers from the list of object numbers being handled.

Reception Channels Tab

During the setup of handlers, you can specify, over which data transmission channel the events to be subject to processing should be received. In other words, the handler can receive and process events received over the radio but ignore events received on the telephone.



Radio

It is a switch enabling handling of events received over the radio.

Telephone

It is a switch enabling handling of events received on the telephone.

System

It is a switch enabling handling of events created by the Andromeda software itself (including also by event handlers) or Pandora software components.

Channel filtration interval (minutes)

It is the interval, during which the events with the same code received from the same object but over different communication cannels (radio/telephone) will be filtered. This function can be useful for service repeaters, as for them it is often important to

transfer just the fact of reception of a certain event and a repeated transmission of the same information but received over another channel is redundant.

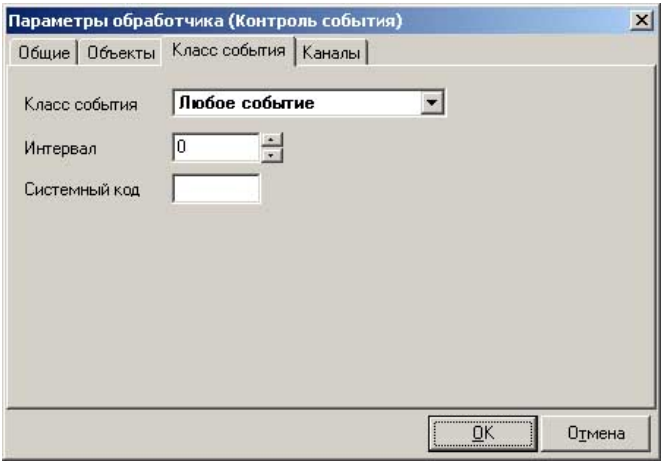
Event Monitoring Handler

This handler carries out monitoring of periodic reception of an event from the given class and generation of a system event in case of its absence.

Setup

The handler supports the modification of general parameters, list of objects and event reception channels, i.e. they can be modified using general properties pages.

The class of an event being expected, the interval of its periodic arrival and the code of a system event, which will be created in case of the interval of waiting being exceeded, can be modified using the **Event class** page.



The handler waits for the reception of event during the corresponding time interval over the selected channels from the given objects. In case of absence of an event, a system event will be generated with the corresponding code.

Range of Application

The handler can be used for solving problems of the following type:

"Guard control"

The guard control problem is often reduced to a simple monitoring of periodic reception of the given event. In doing so, in spite of the fact that the event reception sequence is not monitored, one can perform the guard control even on a complicated route due to selecting event reception intervals.

"Automatic test control"

Unlike the object reference time implying the arrival of any event from the object over any communication channel, one can monitor the periodic arrival of a specific event, with indicating the communication channel, over which this event should be received.

Example for using Event monitoring handler

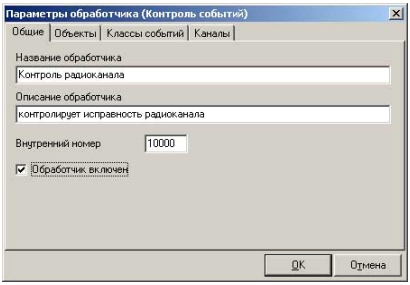
Assume that there is a problem to monitor the serviceability of a radio channel from the object No. 100 (or from several objects); the monitoring should be performed once in every six hours. It means that the data transmission channel is operating and events from the object being transmitted over it will not be lost. As a reference, the reception of an event with the "Test" class is used. If the required event from the object has not arrived for the time specified, then there is a ground to believe that the radio channel is not serviceable. Consequently, it is necessary to warn the operator so that he/she should take corresponding measures.

It should be noted that the event arrival could be monitored by the operator. But it will be worth doing if there are several such objects. When it is a matter of hundreds or thousands of objects, then it becomes problematic. However, the Event monitoring handler will easily cope with the problem. It excluded any human factor influence on the event handling.

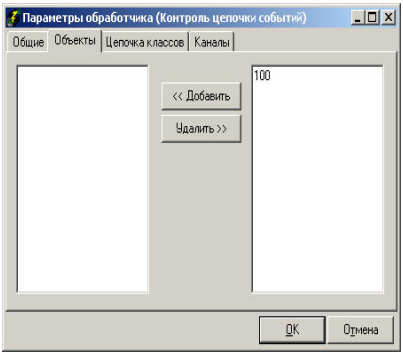
We have four monitoring parameters: interval of monitoring, object number, event class, reception channel.

In order to set up the above-mentioned parameters and enable the Event monitoring, it is necessary to perform the following operations:

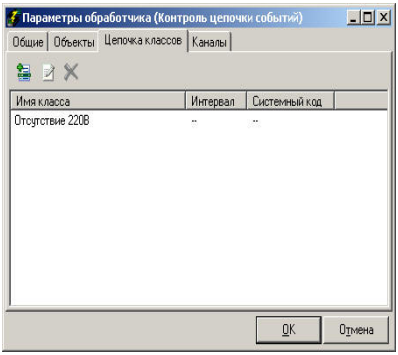
1. Create an Event monitoring handler. To this end, it is necessary to create a group with the "Event monitoring" type or add a handler into the existing group with the corresponding type (see Event handling).
2. Fill in the necessary fields on the "General" tab. The "Internal number" field is filled in by default. You need not modify it.



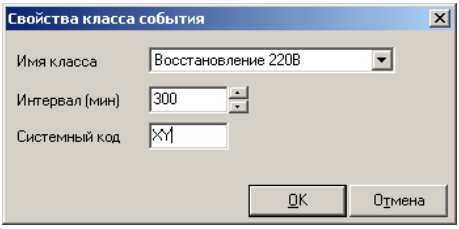
3 Specify the object number in Andromeda – 100. Also, you can specify the numbers of other objects for monitoring – 101, 102, 103, 104, 110, 200. Press the "Add" key. The numbers entered in the right field wick be added to the left field.

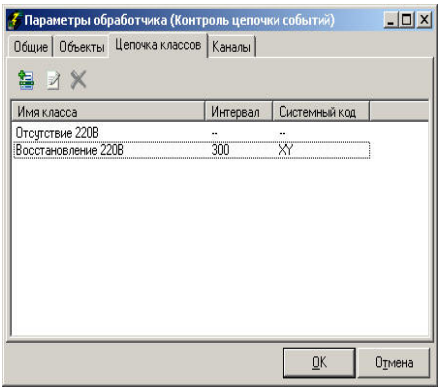


4 Add the class of the 1st expected event – "Absence of 220 V". For the first event in the chain, only its class is to be specified.

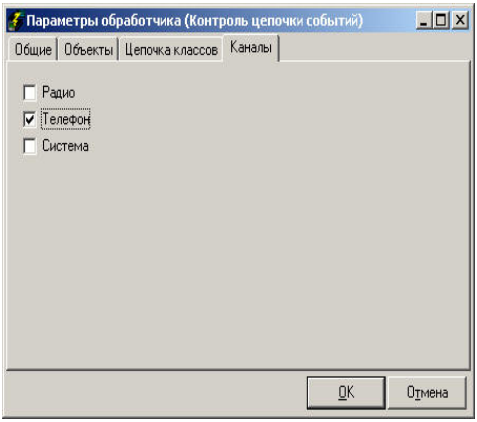


5 Add the class of the 2nd expected event – "Restoration of 220 V". For the second event (and all subsequent events) in the chain, it is necessary to specify the maximal time of waiting for this event – 5 hours (300 – in minutes), and the system code of XY to be generated. The event with such code will mean an alarm relating to the storage battery discharge.





6 Select "Telephone" as the message reception channel. If the task were to monitor all or other communication channels, then one would make the corresponding selection.



Now all the required parameters are determined. It is necessary to verify if the handler or the group, to which it belongs, is enabled. If necessary, enable it. The handler will begin tracking all the events coming from the object (objects) over the telephone channel. If an "Absence of 220 V" class event comes during this period of time, then the handler will begin counting five hours. If during this period of time a "Restoration of 220 V" class event has come, then it means that the system has been restored normally.

Otherwise, if the expected event has not been received upon expiration of five hours, then a message will be generated with the XY code, on which basis one can make a conclusion on backup power supply at the object.

SMS Message Repeater Handler

The SMS message repeater handler is designed for transferring information about the event being received in the form of an SMS message.

The SMS message repeater handler group has a number of settings being common for handler groups.

The SMS message repeater handler group has individual settings as compared to other types of handler groups, as the use of a certain transceiver is determined just for such group. In other words, all SMS message repeater handlers use the message sending channel, which is determined for the group, to which they belong.

The transmission of SMS messages is carried out by means of special program components called SMS Transceivers. The following SMS Transceivers are supplied within the complete set of delivery of Andromeda software, Version 2.7:

- SMS Transceiver via GR-47 modem;

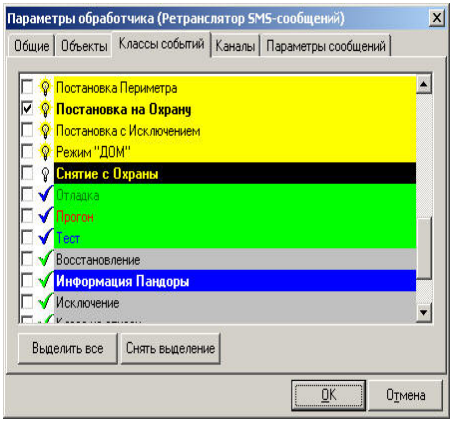
- SMS Transceiver via Nokia phones;
- SMS Transceiver via Phoenix software;
- SMS Transceiver (SMPP protocol via TCP/IP);
- SMS Transceiver via GM-22 modem.

The information about such events, a format and an address, to which it will be sent, is determined in SMS message repeater handlers belonging to the group.

The handler maintains changes of common parameters, list of objects and event reception channels: they can be modified using the general properties page.

Event Classes

The classes of events to be subject to repetition are determined on the Event class page.



In the list of classes determined in the Andromeda software, it is necessary to check those classes of events, which reception information should be repeated in the form of SMS messages.

Message Parameters

The addressee number, coding and format of messages to be sent are specified on the Message parameters page.

Telephone number

It is the telephone number, to which SMS messages will be sent. The telephone number is specified in the full (international) or short format depending upon operational regimes of the cellular communication operator's gateway. In general, it is recommended to use the international telephone number format.

Coding

The message coding determines the Cyrillic coding method:

- UCS2 (Cyrillic) – in the message being transmitted, the Cyrillic will be transferred "as is".
- Translit – in the message being transmitted, the Cyrillic letters will be replaced by Latin alphabet letters.

In selecting the coding method for the messages transferred, it is necessary to take into account a number of factors;

- Whether the cellular phone supports the display of Russian letters, If no, it is necessary to use transliteration.
- In using the UCS2 coding, the length of the message being transferred is limited by 70 characters. In using the transliteration, the length of the message can be up to 160 characters.
- SMS centres of some cellular communication operators perform a forced transliteration (substitution of Latin letters for Russian letters)). If it the case, then there is no sense of using the UCS2 coding (see the previous item). At the same time, SMS centres of some other cellular communication operators allow to disable the forced transliteration of the message in its handling at the SMS centre. For more details, contact the technical support service of the cellular communication operator.

Validity interval (minutes)

It is the interval, during which an SMS message is considered valid. This parameter is taken into account when sending the SMS message – it is just within this period of time the SMS repeater will try to send the SMS message to the addressee. In addition, the value of this parameter is inserted into the SMS message itself: if the subscriber is outside the network zone of action, it is just the value of this parameter that will be taken into account by the mobile communication operator for determining the time of storage of the SMS message on the server.

Message format

It is the field designed for entering the formatting line, by means of which the messages to be sent will be created. The format line can contain an arbitrary text. The names of special format variables begin from and end with the "%" character, which guarantees their originality.

Variables

Special variables are used for inserting the event information into the message being sent. By pressing the Variable key, one can select a variable and insert it into the format line.

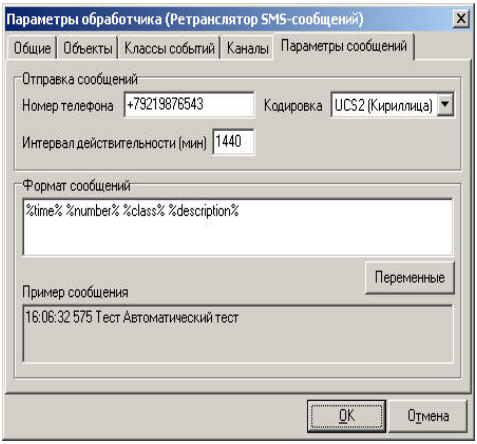
An example of message

It is the field, in which the message generated by means of the format line mentioned above is displayed.

SMS Transceiver via GM-22 modem

This transceiver carries out the transfer of SMS messages via an Ericsson GM-22 GSM-modem. As a rule, the Ericsson GM-22 GSM-modem is supplied within a complete set of an interface adaptor AI-22 including also a cable for connecting the modem to a serial port, a GSM antenna and a power unit.

Parameters of the handler group device: SMS Transceiver via GM-22 modem



Serial port

It is the number of serial port, to which the GM-22 GSM-modem is connected.

Data transmission rate

It is the rate, at which the data exchange with the modem over the serial port will be performed. By default, this value equals to 9600 for a GM-22 GSM-modem.

PIN code

It is the PIN code of the SIM card installed in the GM-22 GSM-modem. It is possible to use a SIM card with the PIN code being released. In this case, the value of this parameter must be left empty.

Address of the SMS centre

It is the address of the service centre for the delivery of SMS messages. It shall be provided by the mobile communication operator. The address of the SMS message delivery centre should be specified in the international format. There is no need of specifying the “+” character.

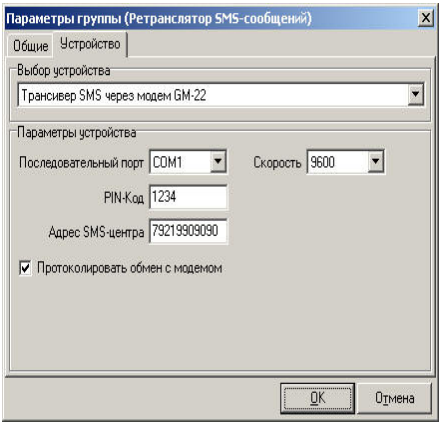
Logging of the exchange with the modem

If this function is enabled, then a file of COMX-YYYYMMDD.log (X is the serial port number, YYYYMMDD is the file creation date) will be generated in the Andromeda software log directory, into which the whole exchange with the modem will be written. It is recommended to use this functions if there are problems with sending of SMS messages.

SMS Transceiver via GR-47 modem

This transceiver carries out the transfer of SMS messages via a SonyEricsson GR-47 GSM-modem. As a rule, the SonyEricsson GR-47 GSM-modem is supplied within a complete set of an interface adaptor AI-47 including also a cable for connecting the modem to a serial port, a GSM antenna and a power unit.

Parameters of the handler group device: SMS Transceiver via GR-47



Serial port

It is the number of serial port, to which the GR-47 GSM-modem is connected.

Data transmission rate

It is the rate, at which the data exchange with the modem over the serial port will be performed. By default, this value equals to 9600 for a GR-47 GSM-modem.

PIN code

It is the PIN code of the SIM card installed in the GR-47 GSM-modem. It is possible to use a SIM card with the PIN code being released. In this case, the value of this parameter must be left empty.

Address of the SMS centre

It is the address of the service centre for the delivery of SMS messages. It shall be provided by the mobile communication operator. The address of the SMS message delivery centre should be specified in the international format. There is no need of specifying the "+" character.

Logging of the exchange with the modem

If this function is enabled, then a file of COMX-YYYYMMDD.log (X is the serial port number, YYYYMMDD is the file creation date) will be generated in the Andromeda software log directory, into which the whole exchange with the modem will be written. It is recommended to use this function if there are problems with sending of SMS messages.

SMS Transceiver via Nokia telephones

This transceiver carries out the transfer of SMS messages via Nokia mobile phones.

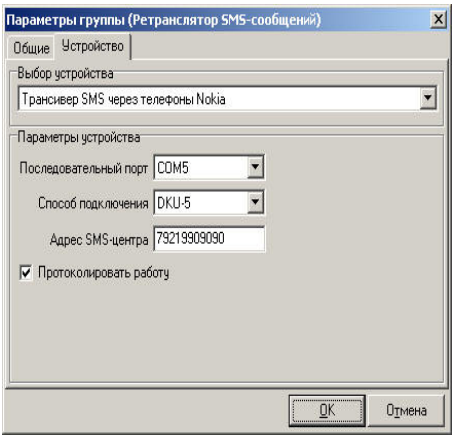
The following telephone models are supported: 1100, 1220, 1260, 1261, 2100, 2270, 2275, 2280, 2285, 2300, 2600, 2650, 3100, 3105, 3108, 3200, 3205, 3210, 3220, 3300, 3310, 3320, 3330, 3350, 3360, 3390, 3395, 3410, 3510, 3510i, 3520, 3530, 3560, 3570, 3585, 3585i, 3586, 3586i, 3587i, 3588i, 3589i, 3590, 3595, 3610, 5100, 5110, 5130, 5140, 5190, 5210, 5510, 6100, 6108, 6110, 6130, 6150, 6190, 6200, 6210, 6220, 6225, 6230, 6250, 6310, 6310i, 6320, 6340, 6340i, 6360, 6370, 6385, 6500, 6510, 6560, 6585, 6590, 6610, 6610i, 6650, 6651, 6800, 6810, 6820, 7110, 7160, 7190, 7200, 7210, 7250, 7250i, 7260, 7600, 8210, 8250, 8290, 8310, 8390, 8810, 8850, 8855, 8890, 8910, 8910i.

The following methods are supported for connecting mobile phones to the computer:

- DAU-9P – a compatible cable (F-Bus regime);
- DLR-3 cable (for the following models: 6210, 6250, 7110, 7190, 6310, 6310i);
- An infrared port;
- Bluetooth (for the following models: 6310i with the wearing version of 5.50 and higher, 8910i);

✦ DKU-5 cable.

Parameters of the handler group device: SMS Transceiver via Nokia telephones



Serial port

It is the number of serial port, to which the Nokia mobile phone is connected.

Method of connection

It the method, by means of which the connection of the Nokia mobile phone to the computer has been performed.

Address of the SMS centre

It is the address of the service centre for the delivery of SMS messages. It shall be provided by the mobile communication operator. The address of the SMS message delivery centre should be specified in the international format. There is no need of specifying the "+" character.

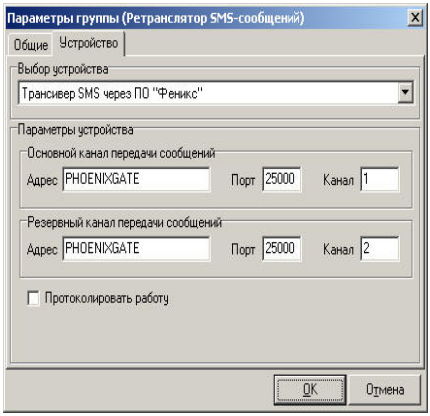
Logging of the operation

If this function is enabled, then a file of NokiaCOMX-YYYYMMDD.log (X is the serial port number, YYYYMMDD is the file creation date) will be generated in the Andromeda software log directory, into which the log of interaction with the telephone driver will be written. It is recommended to use this function if there are problems with sending of SMS messages.

SMS Transceiver via Phoenix software

This transceiver carries out the transfer of SMS messages via the Phoenix software, which is a part of the Andromeda-MS software complex and is designed for organising a pool of channels for receiving and sending SMS messages. The connection to the Phoenix software is carried out over the network supporting the TCP/IP protocol.

Parameters of the handler group device: SMS Transceiver via Phoenix software



Address

It is the name of computer, on which the Phoenix software is running and to which the connection will be carried out.

Port

It is the Phoenix software port, to which the connection will be performed. By default, the value of the Phoenix software port is 25000.

Channel

It is the number of channel for the delivery of SMS messages to the Phoenix software, which will be used for sending SMS messages. The delivery channels are described in more details in the Phoenix software documentation.

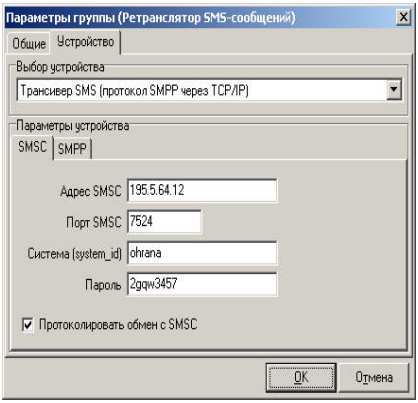
Logging of the operation

If this function is enabled, then a file of PhoenixYYYYMMDD.log (YYYYMMDD is the file creation date) will be generated in the Andromeda software log directory, into which the log of exchange with the Phoenix software will be written. It is recommended to use this function if there are problems with sending of SMS messages.

SMS Transceiver (SMPP protocol via TCP/IP)

This transceiver carries out the transfer of SMS messages by means of a direct connection to the SMS server of the mobile communication operator (SMSC) over the SMPP protocol, version 3.4. The connection is performed over a network supporting the TCP/IP protocol.

Parameters of the handler group device: SMS Transceiver (SMPP protocol via TCP/IP)



Parameters of connection to SMSC

SMSC address

It is the IP address or DNS name of the mobile communication operator's SMS server computer, to which the connection is performed.

SMSC port

It is the port of the mobile communication operator's SMS server, to which the connection is performed.

System (system_id)

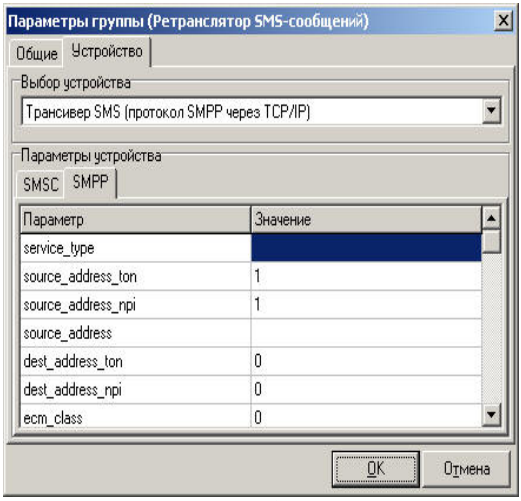
It is the name (login) of the system, which performs the connection. The information provided by the mobile communication operator at the organisation of connection.

Password

It is the password of the system, which performs the connection. The information provided by the mobile communication operator at the organisation of connection.

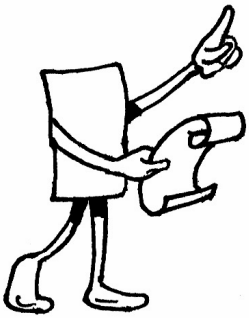
Logging of the exchange with SMSC

If this function is enabled, then a file of SMPP-AAA-BBB-CCC-EEE-YYYYMMDD.log (AAA-BBB-CCC-EEE – IP address of SMSC (AAA.BBB.CCC.EEE), YYYYMMDD is the file creation date), into which the SMSC exchange protocol will be written. It is recommended to use this function if there are problems with sending of SMS messages.



SMPP protocol parameters

In some cases, in sending SMS messages it is necessary to modify the parameters being used by default (PDU SUBMIT_SM, transmission session). The names of all parameters correspond to the fields in PDU SUBMIT_SM, the detailed description of parameters and their formats can be found in the specification for SMPP protocol.

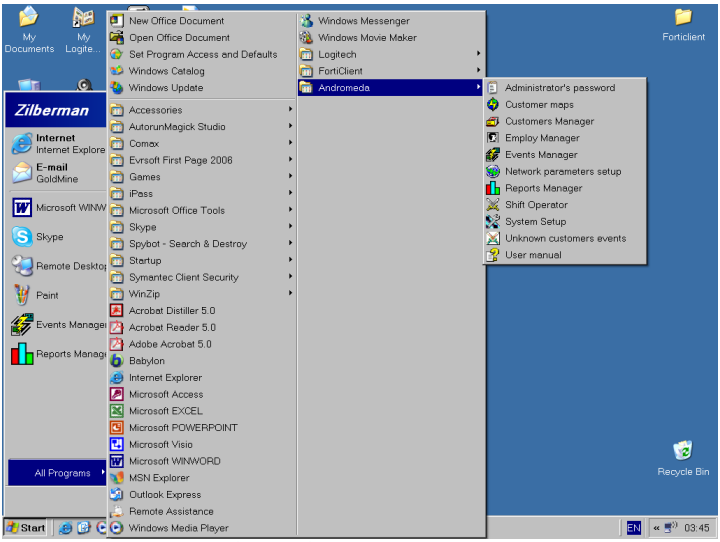


Modules and Utilities

The Andromeda Integrated Alarm Monitoring System includes eight modules and tools as described below.

Detailed description, with setup information, of the Andromeda modules is given in the next chapter.

The Andromeda modules can be launched from the **Start** → **Programs** → **Andromeda** menu in windows (see **Error! Reference source not found.**). It also can be automatically started every time the workstation is booted. This is done by copying the requested module link into the Windows Startup program group.



Andromeda Programs Group

Administrator Password

When starting the Andromeda Modules, a login screen is displayed. A user name (should be selected from the dropdown list) and a password must be entered to access these modules (see Figure 1). Users are managed with the Employee Manager Module (page 66).

NOTE:

The system is installed with a default user and password: **Administrator** with password "**222222**".

IMPORTANT!

It is highly recommended to change the Administrator password, create a new user with administrator privileges, and use it and **not** the default Administrator user.

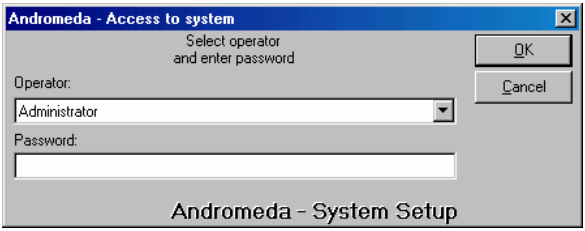


Figure 1 - System Access Screen

System Setup Module

The System Setup module includes six tabs (see Figure 2) for setting-up major system configuration parameters. The tabs are:

- Event templates (see page 54)
- Customer types (see page 57)
- Event classes (see page 58)
- Alarm reactions (see page 59)
- Alarm cancels (see page 60)
- Extra customers fields (see page 61)

Event Templates Tab

With the Event Templates tab, different sets of event codes (used by Alarm systems) are created, modified, and deleted. These Event Templates are related to customers when set-up with the Customer Manager module (see page 61).

Upon installation, Andromeda system includes a set of typical PIMA event templates. New event templates for each type of Alarm System can be managed.

The top window lists the various templates names and their description. The bottom window lists the various events' codes, classes, and description (see Figure 2).

The customer's Alarm System transmits an event to the Decoder/Receiver PC card (SENTINEL) that in turn, transmits an appropriate event code to the Andromeda (i.e., the Event Manager). These event codes are Alarm System Specific and listed in the bottom window. Each event, in the window, includes a code (two alphanumeric digits), the event class (an alarm, fire, failure, etc. from a predefined event classes list), and the event description (free text).

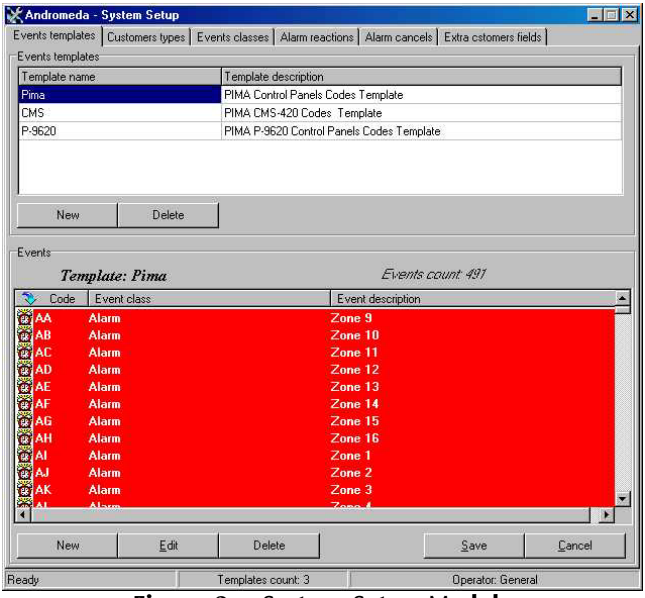


Figure 2 - System Setup Module

Managing Templates

1,2,3...

- To create a new blank Template, press the top **New** button. Select **Empty Template** and press the **OK** button (see Figure 3).
- To create a new template based on an existing one, select the basis template in the list and press the New button. Select From Template <name> and press the OK button (see Figure 3).

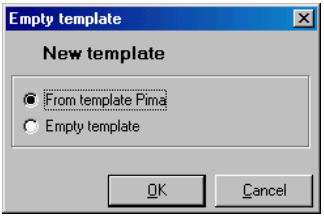


Figure 3 - New Template

- To delete a Template, select the Template to delete and press the **Delete** button.
- To modify a template name and/or description, select the template and write on a new name or description.

IMPORTANT!

To apply any change to the system settings, press the ***Save*** button. To discard any change since the last save, press the ***Cancel*** button.

Managing Events in Template

1,2,3...

- To create a new Event, press the bottom **New** button. Fill in the event Code; select a class from the drop-down list, and type a description to the event (e.g., Alarm zone 1). Press the **OK** button (see Figure 4).

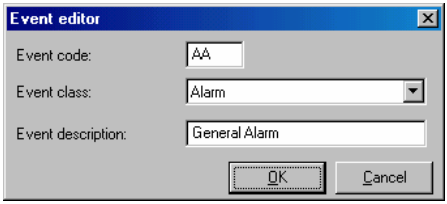


Figure 4 - New Event

- To delete an Event, press the bottom **`Delete`** button.
- To modify an Event, press the bottom **`Edit`** button.

NOTE:

Only the Event's class and description can be modified. To change an Event code, delete it and create a new one.

System Events

The following table lists System Events. In addition to events transferred directly from the Customer Alarm System, there are events created by the Andromeda system. These events can be (and usually are) specified for each template.

Code	Class type	Description	Notes
XA	Alarm	Control event not received	Regeneration interval is equal to the control time
XB	Alarm	Alarm System was not armed when should according to the Arm Schedule*	Grace time is set in Event Manager
XC	Alarm	Alarm System was not armed as should according to Guard scheduling (Long Arm)*	Grace time is set in Event Manager
XD	Alarm	Alarm System was disarmed prematurely (Long Arm)*	Event is generated once
XE	Alarm	Alarm System was disarmed prematurely according to the Arm Schedule*	Event is generated once
XF	Arm	Arm event by the Shift Operator	
XG	Disarm	Disarm event by the Shift Operator	
XH	Alarm	An internal event generated for the Andromeda system (customer #8000) when waiting interval is exceeded	Regeneration interval is set in the Event Manager (Central Station Control Time)

NOTE:

The Events Manager can generate a system event (i.e., XA to XG codes) for any customer based on settings. To correctly interpret events, they must be described and defined in the events template for each specific customer.

Customer Types Tab

This tab manages the list of customer types. These customer types are related to customers when set-up with the Customer Manager module (see page 61). Customer types are made for convenience purposes when arranging lists of customers, e.g., when creating reports.

* See Customer Manager module on page 61

Managing Customer Types

1,2,3...

- To create a new Customer Type, press the **`New`** button. Enter the Customer Type description.
- To delete a Customer Type, select it and press the **`Delete`** button.
- To modify a Customer Type, select it and write a new description.

IMPORTANT!

To apply any change to the system settings, press the **`Save`** button. To discard any change since the last save, press the **`Cancel`** button.

Event Classes Tab

An Event Class is a group of events linked by one or several common criteria. There are six types of the event classes that define the reaction of Andromeda system to the registration of event with a given class type:

- **Alarm**: These type of events require an action from the Shift Operator. These types of classes can be set with Alarm Reactions and Alarm Cancels. Furthermore, events of this class type change the customer's status, displayed in the Shift Operator module.
- **Warning**: These events are of a general warning type.
- **Arm**: These types of events are used to track the customer's Alarm System status. Furthermore, events of this class type change the customer's status, displayed in the Shift Operator module.
- **Disarm**: These types of events are used to track the customer's Alarm System status. Furthermore, events of this class type change the customer's status, displayed in the Shift Operator module.
- **Test**: These types of events are used to track tests made to the customer's Alarm System.
- **Other**: These types of events are used to track event types that were not classified and do not require any special reaction and/or processing.

Managing Event Classes

1,2,3...

- To create a new Event Class, press the **New** button.
  Enter the Event Class description, select its type from the list bellow, set-up the text format (i.e., style and size), and associate a sound to the class.

NOTE:

Each event class can be associated with a different sound (WAV file format) to enable the Shift Operator distinguish between events more easily.

- If an 'Alarm' class type was selected, select the appropriate Alarm Reactions and Alarm Cancels from the two near columns.
- To delete an Event Class, select it and press the **Delete** button.
- To modify an Event Class, select it, write a new description, and/or select a different type, and/or different style, and/or different sound file, and/or different reaction/cancel (with Alarm class type only).

IMPORTANT!

To apply any change to the system settings, press the **Save** button. To discard any change since the last save, press the **Cancel** button.

Alarm Reactions Tab

The Alarm Reactions list includes possible actions that can be taken by the Shift Operator as a response to an Alarm.

NOTE:

The Alarm Reaction list items are only available to events of class type 'Alarm'.

The Action Type is specified for each Alarm Reaction item. Action types cannot be modified and include:

- **Send Guard**: Enables the Shift Operator to select one or several vacant guards and send them to a Customer with an Alarm event.
- **Arrive Guard**: Enables the Shift Operator to identify the guards that arrived to a customer as a result of an alarm event.
- **Cancel Guard**: Enables the Shift Operator to cancel one or several guard calls to a customer.

- **Additional comments**: Enables the Shift Operator to type-in free text (i.e., comments) related to an alarm event.
- **Other**: Action of this type is of an informative character (e.g., Noting a call made to a customer, calling rescue forces, etc.).

Managing Alarm Reactions

1,2,3...

- To create a new Alarm Reaction list item, press the **New** button. Enter the Alarm Reaction description and select its type from the list on the right.
- To delete an Alarm Cancel list item, select it and press the **Delete** button.
- To modify an Alarm Cancel list item, select it, write a new description, and/or select a different type from the list on the right.

IMPORTANT!

To apply any change to the system settings, press the **Save** button. To discard any change since the last save, press the **Cancel** button.

Alarm Cancels Tab

The Alarm Cancellation list includes possible reasons for canceling an alarm state (i.e., false alarm, wrong arm, test, etc.). These reasons are available to the Shift Operator when processing alarm events.

NOTE:

The Alarm Cancellation list items are only available to events of class type 'Alarm'.

Managing Alarm Cancels:

1,2,3...

- To create a new Alarm Cancel list item, press the **New** button. Enter the Alarm Cancel description.
- To delete an Alarm Cancel list item, select it and press the **Delete** button.
- To modify an Alarm Cancel list item, select it and write a new description.

IMPORTANT!

To apply any change to the system settings, press the **Save** button. To discard any change since the last save, press the **Cancel** button.

Extra Customer Fields Tab

With this tab, additional information fields for a customer can be managed. These fields can take the format of free text or value list (in which case values has to be entered).

Managing Extra Customer Fields

1,2,3...

- To create a new Customer Field, press the left **New** button. Enter the Customer Field description and select its type (i.e., **text** OR **value list**).
- If a Value List type was selected, press the right (now enabled) **New** button to enter list items for this field.
- To delete a Customer Field, select it and press the left **Delete** button.
- To modify a Customer Field, select it and write a new description.
- To modify an existing field list, select the Customer Field and add, remove, or modify items in the list on the right.

IMPORTANT!

To apply any change to the system settings, press the **Save** button. To discard any change since the last save, press the **Cancel** button.

Customer Manager Module

The Customer Manager module is used to manage all customers related information (e.g., address, key people, arm scheduling, etc.). The main window includes several elements (see Figure 5). The elements are as follows (from top to bottom):

- Menu (see page 62)

- Toolbar (see page 62)
- Search Box (see page 63)
- Customers list (see page 64)
- Customer parameters (see page 64) - include six tabs:
  - Customer
  - Door Keys
  - Guard
  - Arm Schedule
  - Event Template
  - Extra Info

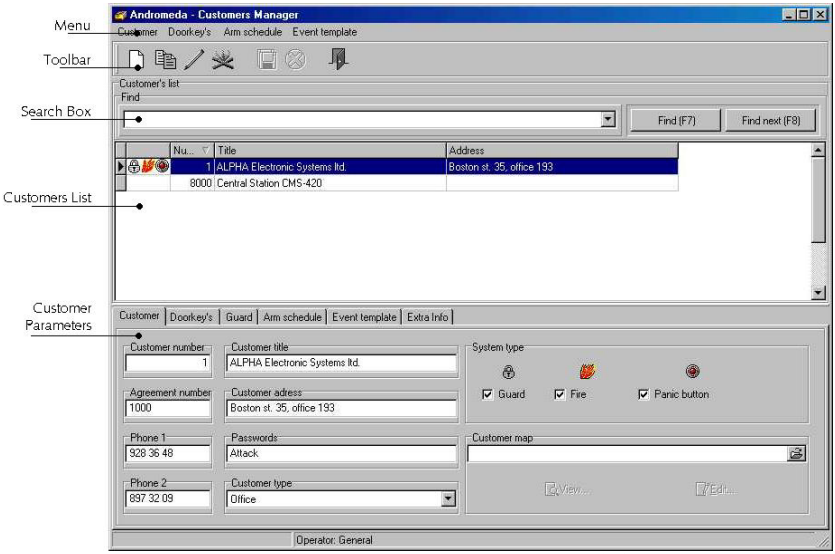


Figure 5 - Customer Manager Module

The Menu

The Menu is designed to help users that wish to navigate the Customer Manager screens, using the keyboard. All menu items can be activated by using a combination of the ALT key plus the first letter of the menu item (e.g., to create a new customer, type ALT + C followed by N).

The Toolbar

The Toolbar includes the following tools:

New: Use this tool to create a new customer. When creating a new customer, he has to be given a new ID. The ID can be manually assigned (see Figure 6) or the system default number can be used.

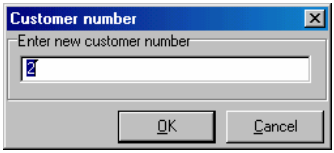


Figure 6 - New Customer's Number

NOTE:

Customer's number is set only once and cannot be modified. It is freed when a customer is deleted.

Copy: Use this tool to copy an existing customer and use it as a template when creating a new customer. A customer number has to be given, as with the 'New' tool (see Figure 6).

Edit: Use this tool to modify any of the customer's parameters.

Save Changes: Use this tool to save any changes made to the customer's parameters.

Discard Changes: Use this tool to discard any change made to the customer's parameters since the last save.

Delete: Use this tool to delete a customer record.

Exit: Use this tool to exit the module.

The Search Box

The Search box is used to search a specific customer in the Customer list. The search shall look for the string, typed in the search box, in all customers' title field.

To start the search, press the **Find** button or the F7. To repeat the search to the next occurrence, press the **Find Next** button or the F8.

The Customer List

The customer list includes a complete list of all customers in the database. When a customer record is selected (its line is highlighted), all displayed parameters and fields relate to him.

Managing a customer record is done through one of the menu, toolbar, and/or parameter tabs.

The Customer Parameter Tabs

NOTE:

Modifying an existing customer parameters and fields is possible only when the **Edit Button** (in the toolbar) is pressed or the **Edit** option from the **Customer** menu is selected.

Customer Tab

This tab includes general information about the customer (e.g., name, address, telephone number, etc.), system type, and Customer Map link (on managing customer maps see the Customer Map tool on page 96).

NOTE:

Each customer record has up to three icons representing the system type as selected (checked) in the Customer Tab.

Door Keys Tab

This tab includes a list of key people and they can be reached (i.e., telephone number and address).

The order in which these key people appear in the list can be controlled with the **UP** (▲) and **DOWN** (▼) buttons.

Guard Tab

This tab includes two settings that can change the system response to customer's arm and disarm events:

The first is the Long Arm mode. When this mode is set, the system is instructed to disregard the Arm Schedule and assume the Alarm System is starting a long arm period. This mode is framed within start and end date & times.

At the beginning of the Long Arm period, if the customer does not arm the system (within the grace time as been set with the Event Manager), a system event **XC** shall be generated. If the system is disarmed within the Long Arm period, a system event **XE** shall be generated.

The second is used to disable a customer starting at the assigned date & time. During the time a customer is disabled, events from his Alarm System are disregarded.

The Control Time parameter is used to set the time gaps between Alarm System's events. The Andromeda system shall expect at least one event (e.g., system test, arm, disarm, etc.) within the Control Time that been set. When set to zero (0), the system shall not check for events.

NOTE:

This parameter checks that the Alarm System is 'alive' and is useful with sensitive sites.

If a Control time is set and the customer's Alarm System does not send any event during that time, a system event **XA** shall be generated.

Arm Schedule Tab

This tab is used to set the expected day periods for the Alarm System to be armed and/or disarmed (this usually correlate with the customer's working hours). Any number of periods can be set for each day.

At the beginning of the Arm period, if the customer does not arm the system (within the grace time as been set with the Event Manager), a system event **XB** shall be generated. If the system is disarmed within the Arm period, a system event **XD** shall be generated.

NOTE:

There is no need to setup Arm Schedules with residential customers.

To stop sending these events (i.e., XB and XD), disable the Arm Schedule monitoring by un-checking the **`Control Schedule`** option.

NOTE:

When Arm Scheduling is disabled, arm and disarm events will continue to be recorded in the database.

Event Template Tab

This tab is used to set the customer's related event templates. Usually this is done by selecting a predefined template (managed with the System Setup module – see Event Templates on page 54) from the drop-down list. When selecting a template from the list, all predefined event codes will show in the list. Event codes can be added to the list to customize the customer's Alarm System. Template codes can be edited but not deleted.

NOTES:

If there is a need to create unique event codes for some customers, it can be done by creating an Empty Template (with the System Setup module) and customizing it for each customer.

The codes added to the list are unique for each customer and have no effect on the related Event Template and other customers.

Extra Info Tab

This tab is used to enter additional information about a customer. The fields are as programmed in the System Setup module (see Extra Customer Fields on page 61).

Employee Manager Module

The Employee Manager module main window includes two tabs (see Figure 7). The first tab is for managing the Andromeda system operators and the second tab is for managing guards.

IMPORTANT!

It is highly recommended to change the Administrator password, create a new user with administrator privileges, and use it and **not** the default Administrator user.

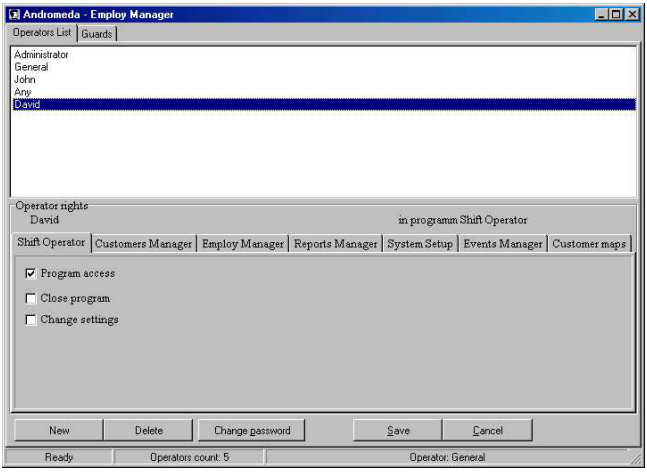


Figure 7 - Employee Manager Module

IMPORTANT!

The Administrator is the system default user and cannot be deleted. Changing the Administrator password is possible only when logging-in as Administrator.

The password can be any character and should be 6 to 10 characters long.

The password is case sensitive. A good password should include a combination of upper and lower case letters together with numbers.

Managing Users

1,2,3...

- Select the **`Operators List`** tab.
- To create a new user, press the **`New`** button, select **`Clear List`** and press the **`OK`** button (see Figure 8).
- To create a new user with administrator privilege list, press the New button, select Like Administrator and press the OK button (see Figure 8).

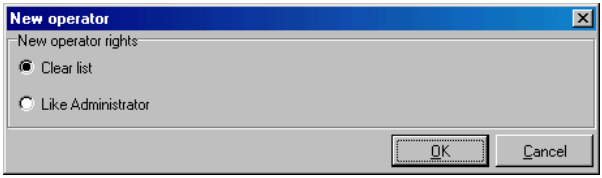


Figure 8 - New User

After confirming the creation of a new user, a new password has to be assigned (see Figure 9).

- To delete a user, select a user to delete and press the **Delete** button.
- To change a user's password, select a user and press the **Change Password** button. Enter the old password, the new password, and again the new password to confirm it (see Figure 9).

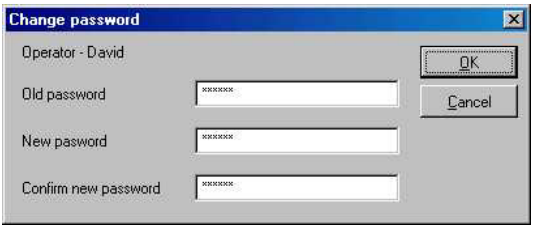


Figure 9 - Change Password

- To modify a user name, select the user and write on a new name or description.
- To modify user privileges with the different system modules, select the user and select the appropriate module tab. Check the checkboxes within the modules that the user should have access to and the options with each of the module tabs.

Example:

In Figure 7, the selected user has access to the Shift Operator module (i.e., he/she can run it) but cannot close it or change any settings.

IMPORTANT!

To apply any change to the system settings, press the ***Save*** button. To discard any change since the last save, press the ***Cancel*** button.

Managing Guards

- Select the **Guards** tab.
- To create a new guard, press the **New** button (see Figure 10).

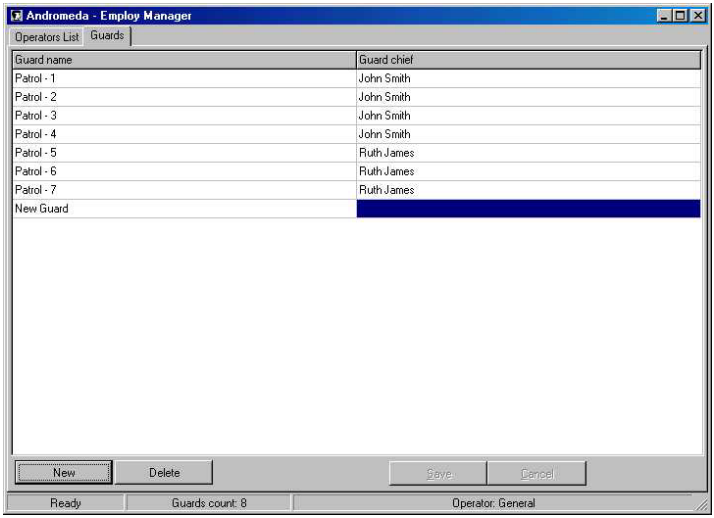


Figure 10 - Managing Guards

- To delete a guard, select a guard to delete and press the **`Delete`** button.
  - To modify a guard name, select it and write on a new name.
  - To modify a guard supervisor, select the supervisor name and write on a new one.

IMPORTANT!

To apply any change to the system settings, press the ***Save*** button. To discard any change since the last save, press the ***Cancel*** button.

Events Manager Module

The Events Manager module is designed to receive events from the Decoder/Receiver PC card (SENTINEL) via an RS-232 connection. After an event is received, it is written in the system database. A running Shift Operator module shall pick up this event, from the database, and display it on screen.

The Event Manager is the source for all events in the Andromeda System and that is what makes the computer, running this module, the Andromeda system server. All events are registered in the database buy the Event Manager. When other module (e.g., Shift Operator) generates an action, it communicates with the Event Manager that in response creates the appropriate event in the database.

The Events Manager is also performing the database backup.

IMPORTANT!

There can be only **one** Event Manager per running system.

After the module is started, an icon ( ) is displayed in the taskbar. Right clicking the taskbar icon shall pop-up a menu for the Event Manager settings (see Figure 11). When an event is received, the taskbar icon changes color. Placing the mouse pointer on the icon shall display information about the last event and the total number of events since the Event Manager started running (see Figure 12).

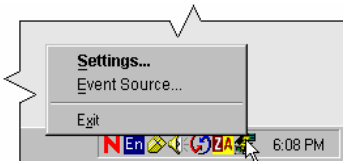


Figure 11 - Event Manager Pop-Up Menu

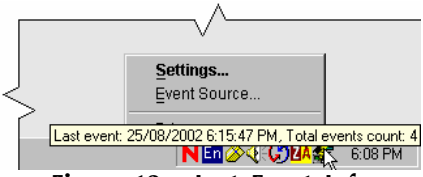


Figure 12 - Last Event Info

Event Source Management

The Event Source Management tool is designed to configure the type of Decoder/Receiver (i.e., the system's events source) used and how it is connected to the Andromeda Server (i.e., Event Manager computer).

1,2,3...

- Right click the **`Event Manager Icon`**.
- From the pop-up menu, select **`Event Source`**.
- Select a User and enter a password. The Event Source configuration window is displayed (see Figure 13).

NOTE:

Only a user that was configured to have access to this module and manage it can run this tool.

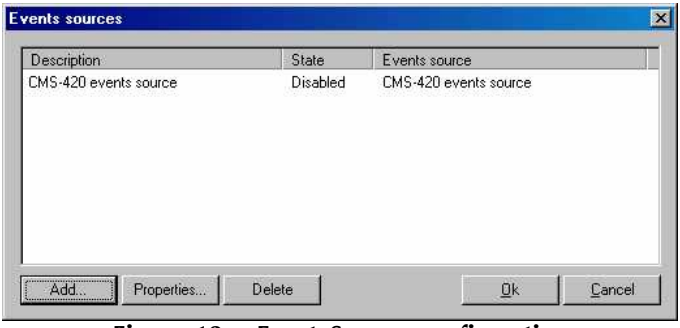


Figure 13 - Event Source configuration

- To view, modify, and enable/disable the Decoder/Receiver from the list, select it and press the **Properties** button (the CMS-420[1] is the system default). The properties screen is displayed (see Figure 14). The following can be modified:
  - Description,
  - The event source Internal Number,
  - Its status (i.e., Enabled or Disabled),
  - The COM-Port used to communicate with the Decoder/Receiver and the Central Station Control Time (second tab).

NOTE:

The Central Station Control Time is used to check the communication between the DCA device and the Event Manager module.

If an event is not received within the specified time, an **XH** (internal system alarm) event is generated, alerting on a communication fault.

To disable the test, set the Central Station Control Time to zero (0).

- To add a new Decoder/Receiver type to the list, press the **Add** button. A list of available Decoder/Receiver types is listed.
- Select the type of Decoder/Receiver you are using and press **OK**.
- Configure and enable the new Decoder/Receiver by pressing the **Properties** button.

[1] CMS-420 is another name for the SENTINEL card.

- If the type of Decoder/Receiver you are using is listed and enabled (i.e., the **Event Source Enabled** option is checked), press the **OK** button.

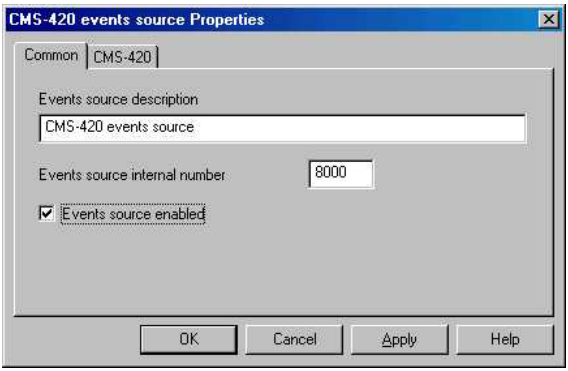


Figure 14 – Decoder/Receiver Properties

NOTE:

The Event Manager can receive events from more then one Decoder/Receiver device.

The Event Source Internal Number

The Event Source Internal Number is used by the Andromeda system as the event source ID. This ID is used to identify the source of an event as well as the customer number in cases where the event is internally generated (e.g., when an arm event is not received after an arm schedule wasn't met; see Arm Schedule Tab on page 65).

Event Manager Settings

The Event Manager settings tool is designed to configure the Arm grace time (see System Events on page 56) and the backup folders.

1,2,3...

- Right click the **Event Manager Icon**.
- From the pop-up menu, select **Settings**.
- Select a User and enter a password. The Event Source configuration window is displayed (see Figure 15).

NOTE:

Only a user that was configured to have access to this module and manage it can run this tool.

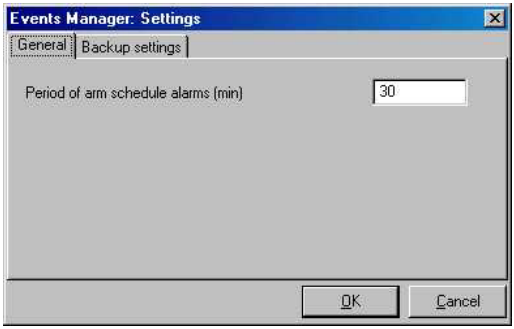


Figure 15 - Event Manager Settings

- In the **General** tab, set the Arm grace time (i.e., the time that elapsed starting as specified in the Arm Schedule without an Arm event). For more information see System Events on page 56 and The Customer Parameter Tabs on page 64.

NOTE:

When arm event is not received within the grace time, an **XB** or **XC** system events are generated according to the customer's Arm Scheduling.

Setting this value to zero (0) will disable the grace time.

- In the **Backup Settings** tab, set the backup folder(s) and the backup intervals.
  - Press the **Add** button to add a new backup folder to the list.
  - Select a folder to delete and press the **Delete** button to remove a backup folder from the list.

NOTE:

It is recommended to set the backup folder on a different Hard Drive but it can also be a different folder on the same Hard Drive.

The recommended backup interval time is five to 10 minutes (Do not set the backup interval to three minutes or less).

- Press the **OK** button to accept changes and exit the tool.
- Press **Cancel** to cancel the changes and exit.

Shift Operator Module

The Shift Operator is the Andromeda main module. It is designed to process events received from customers, collect information about Alarm Systems' status, processes alarms, etc. This module shall run on the Shift Operator's workstation.

The main window is divided into two halves. The upper half is for Customers' Status and the lower half is for Events (see Figure 16). The windows' size can be changed by moving the dividing line up or down.

When the module starts, a username and password are assigned. With a shift change, the **`Change Operator`** button should be pressed and a new user and password should be entered.

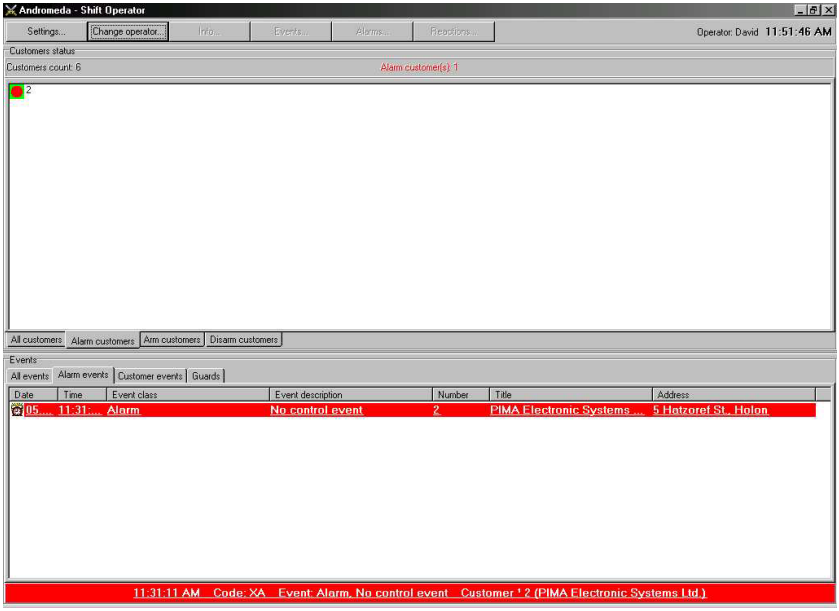


Figure 16 - Shift Operator

Settings

Press the **Setting** button to display the Shift Operator settings window (see Figure 17).

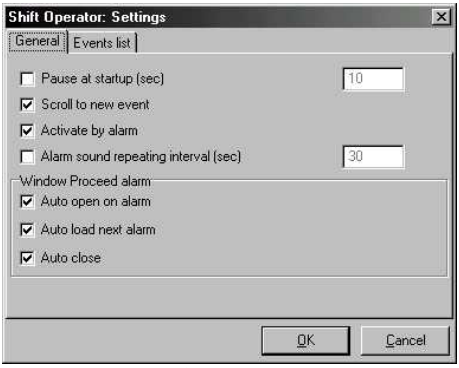


Figure 17 - Shift Operator Settings

The Shift Operator Settings window includes two tabs: General and Event List. The following is a description of the different settings.

General Tab

- **Pause at startup (sec):** This option sets a delay when the Shift Operator module starts. This parameter should be used when the Shift Operator and the Event Manager modules run on the same computer and start automatically after boot.
- **Scroll to new event:** When selected, the list in the event window (lower half) automatically scrolls to a new event whenever it is received. This is done so the new event can be seen by the shift operator.
- **Activate by alarm:** When selected, the window of the Shift Operator module shall jump to the front of the display whenever an alarm event is received.
- **Alarm sound repeating interval (sec):** This option sets the time intervals in which the Alarm Sound shall repeat itself (for unattended alarm events). If the option *Auto open on alarm* is set, the *Proceed Alarm* window will pop with every recurrence.
- **Auto open on alarm:** When selected, the *Proceed Alarm* window shall popup automatically if an alarm warning is received.
- **Auto load next alarm:** When selected, the *Proceed Alarm* window shall switch to the next alarm warning (if exist) immediately after the alarm has been attended or cancelled.

- **Auto close:** When selected, the *Proceed Alarm* window shall automatically close after the last alarm warning has been attended.

Events List Tab

With this tab, the events history display is controlled. The display can be set from a specified date or it shall be limited to a specified number of events.

- **Fixed start date:** When selected, the Events list shall display all events starting at the specified date.
  - **Maximum events count:** The maximum number of received events that shall be displayed in the Events list. When this value is set to zero (0) then all customers' events, starting with the specified date, shall be displayed.
- **Last Events:** When selected, the Events list shall display events as specified:
  - **Minimum interval (hours):** The system shall look back (in events history), as the specified number of hours to display events (per customer). This option cannot be set to zero (0).
  - **Maximum interval (hours):** If the *Minimum event count* criterion is not met then the system shall search the history as far (in hours) as specified with this option.

NOTE:

These options limit is checked by the system all the time and the display is updated accordingly.

  - **Minimum events count:** The minimum number of events (per customer) that shall be displayed. When criterion is not met, the system shall search the history as tar as specified with the *Maximum interval (hours)* option.
  - **Maximum event count:** The maximum number of events (per customer) that shall be displayed.

NOTE:

To disable the last three options, set them to zero (0).

Customers Status Window

The Customers Status window is designed to graphically display the status of connected customers.

At the top of the screen, the following is displayed: The total number of customers, the number of customers with alarms (attended and unattended), and the number of customers with armed systems.

Each customer is represented with an icon that changes according to the customer's status.

There are four different icons:

 Green	Customer's alarm system is disarmed
 Blue	Customer's alarm system is armed
 A red circle inside	An unattended alarm event
 A red square inside	An attended alarm.

At the bottom of the Customers Status window, four tabs allow a more focused view on customers' status. The four tabs are as follows:

- **All Customers:** This tab shall display all registered customers (i.e., customers entered with the Customer Manager module).
- **Alarm Customers:** This tab shall display only customers for which an alarm event has been received. Alarm can be either attended or unattended.
- **Arm Customers:** This tab shall display all customers with an armed Alarm System.
- **Disarm Customers:** This tab shall display all customers with a disarmed Alarm System.

With each view, the display can be in one of four formats: Large Icons, Small Icons, List, and Report. To change the view format, click inside the window with the mouse right button. At the popup menu, select **`View`** and the desired format (see Figure 18).

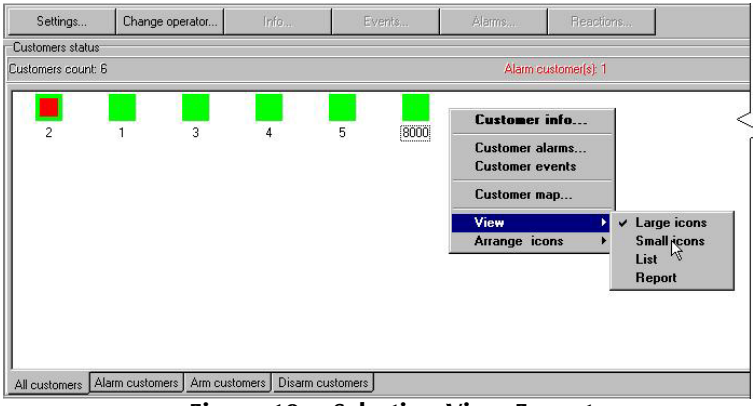


Figure 18 - Selecting View Format

Customers list can be sorted by their number or by status (i.e., alarm, arm, disarm). Sorting is done by selecting **`Arrange icons`** from the popup menu. When using the report view format, additional sorting can be done by pressing the fields name (i.e., number, title, and address).

Events Window

The Events window is designed to display events as registered with the Andromeda database. The events are displayed according to the rules set in the settings window (see Settings on page 74).

At the top of the Events window, four tabs allow a more focused view on events. The four tabs are as follows:

- **All Events:** This tab shall display all events in the range as specified in the setting window.
- **Alarm Events:** This tab shall display only unattended alarm events.
- **Customers Events:** This tab shall display all events of a selected customer (when using the pop-up menu).
- **Guards:** This tab shall display all listed guards and their status (e.g., Ready, Stay on customer, Moving to customer, etc.).

To view customer's alarms or customer's events, select a customer in the top window list, click it with the mouse right button, and select either **`Customer Alarms`** or **`Customer Events`** from the pop-up menu (see Figure 19).

In the Events window, the following fields are available:

- **Channel:** The type of communication channel by which the event was received (e.g., phone line, radio, system internal).
- **Date & Time:** The date and time of the event.

NOTE:

All events are registered in the database with date and time stamp collected from the computer running the Event Manager module. The Shift Operator workstation synchronizes its time with the Event Manager computer.

- **Code:** A two-digit code of the received event.
- Event Class: The event class (as set in the System Setup module).
- Event Description: The event description (as set in the System Setup module).

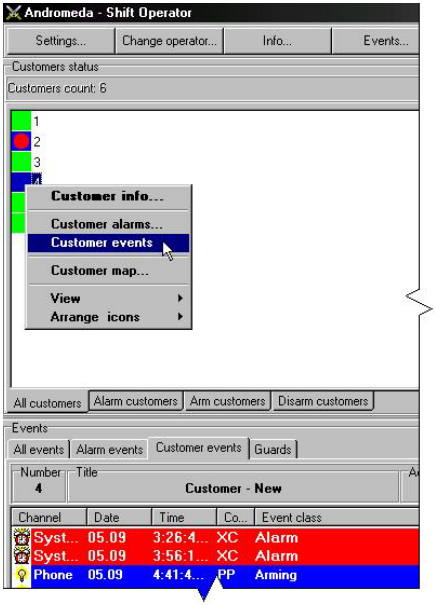


Figure 19 - Customer Events

- Number: The customer's number.
- Title: Customer's name (as set in the Customer Manager module).

NOTE:

The events can be sorted with each of the above fields. This is done by clicking the column heading of the field you wish to sort by.

Processing an Alarm

When an Alarm class event is received by the system, it is displayed as a red circle on the related customer's icon (top window) and as a new line (Alarm event) on all Event tabs (bottom window).

As soon as an alarm is being attended, the red circle in the customer's icon changes to red square. The red circle or red square disappears when an alarm is canceled (i.e., when all related activities are completed).

NOTE:

The customer's icon shall show in all Customer Status tabs when an alarm event is related to it.

To process an alarm, double click the customer's icon or right click the customer icon and select **`Proceed Alarm`** from the pop-up menu. The Proceed Alarm window shall display (see Figure 20).

If *Auto open on alarm* option in the *Shift Operator Settings* window is enabled (see Settings on page 74), the Proceed Alarm window shall pop-up to the front of the screen.

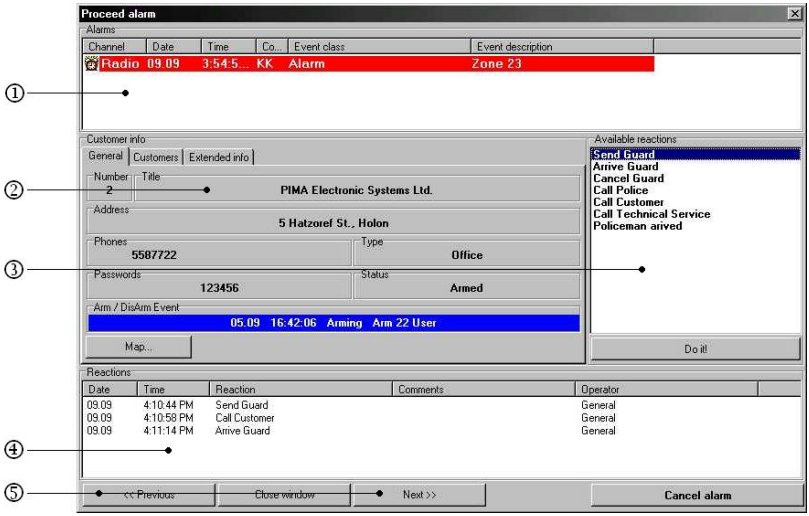


Figure 20 - Proceed Alarm window

The Proceed Alarm window has the following sections:

① **Alarms:** In this window, all the customer's alarm events are listed.

② **Customer Info:** This window display available information about the customer (as entered in the Customer Manager module). When a customer record is linked to a map (see Customer Maps Utility on page 96), pressing the **Map** button shall start the Customer Map module in view mode.

When the Customer Map is launched, it checks the status of all event codes (linked to zones). An alarmed zones icon changes and the zone rectangle in the map blinks (see page 97).

③ **Available Reactions:** This window lists the possible action that a shift operator can take as a response to the alarm event. These actions are set in the System Setup module on page 59.

④ **Reactions:** This window log all activities related to the alarm event (e.g., call customer, Call police, Send guard, etc.).

⑤ **Navigation Buttons:** **Previous** and **Next** buttons to previous and next customer with an appending alarm event, **Close Window** to close the Proceed Alarm window, and **Cancel Alarm** to cancel and finish an alarm event.

When reacting to an alarm, one of the possible actions (from the *Available Reactions* list) should be selected followed by pressing the **Do It** button. The action is then logged in the database and displayed in the Reaction section.

NOTE:

When different alarm classes are displayed for a specific customer, all defined possible actions shall display on the *Available Reactions* list.

When selecting guard related action, a list of available guards shall display (see Figure 21). The action is confirmed by selecting the guard from the list and pressing the **OK** button.

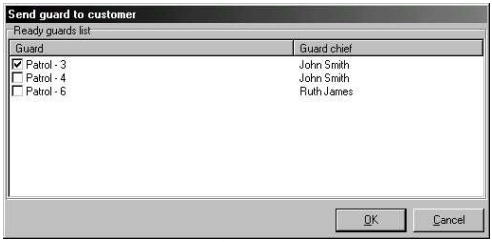


Figure 21 - Select Guard window

The selected guards status shall change and shall display in the Guards tab.

IMPORTANT!

An alarm cannot be cancelled as long as one, or more, guards are assigned to the customer and not marked as arrived or cancelled.

Canceling an Alarm

When all activities related to a specific alarm event are done, the **Cancel Alarm** button should be pressed. An *Alarm* Cancel window is displayed (see Figure 22) with a list of possible reasons to alarm cancellation (e.g., Wrong Arming, Test, Penetration, etc.). The list is set in the System Settings module.

Figure 22 - Alarm Cancel window

To record an alarm cancel reason, select it from the list and press the **OK** button.

Information Windows

Additional to the described above, there are also two information windows included with the Shift Operator module: Customer Info and Alarm Info.

There are two methods of accessing these windows: The first, clicking the right mouse button at any of the *Customer Status* tabs, shall pop-up a menu. Both info windows are selectable from this pop-up menu (see Figure 19): **`Customer Info`** and **`Customer Alarms`**.

NOTE:

If no customer is selected, the *Browse Customer* window is displayed and a customer to view can be selected from the list.

The second method is by double clicking a customer's icon. When a customer has no alarm event pending, the Customer Info window is displayed. When an alarm event is pending, the Alarm Info window is displayed.

Customer Info

The Customer Info window displays information about the customer. It includes three tabs: General, Customers, and Extended Info. The information is as entered in the Customer Manager module. With the General tab, there is also a **`Map`** button. This button is used to view the customer's location map (if generated with the Customer Map utility and linked with in the Customer Manager module).

The **`Browse Customer`** button opens the *Browse* Customer window where a different customer to view can be selected. The **`OK`** button closes the window.

Alarms Info

The Alarm Info window displays alarm events history with each customer or with all customers.

NOTE:

The top and bottom sections describe the alarm events while the middle section is the customer info.

The buttons **Previous** and **Next** allow navigation between the customer's alarm events (when the *Alarm by Customers* radio button is selected) or all alarm events (when the *All alarms* radio button is selected).

The bottom section displays the log for each alarm event.

Report Manager Module

The Reports Manager module was designed to create, view, print, and save different reports generated from Andromeda database. The report manager includes a set of predefined templates (e.g., received events, customer alarm events, shift operators' actions etc.). The Report Manager main window (see Figure 23) includes several elements. The elements are as follows (from top to bottom, left to right):

- Menu (see page 85)
- Toolbar (see page 85)
- Report Templates (see page 86)
- Customer Search Box (see page 89)
- Customers List / Guard List
- Event Classes (displayed only with the Events report set
- Report Period (does not display with Customer report set; see page 89)

The Menu, Toolbar, and Available Report Templates always appear in the window. The Customer List and the Customer Search Box always appear but can change their location in the window according to the selected report template. The last two elements appear (or not) according to the selected report template.

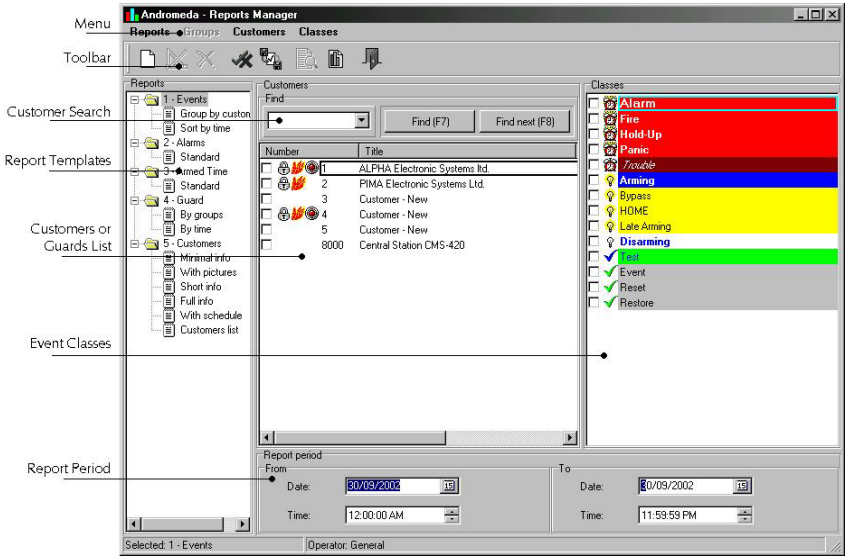


Figure 23 - Report Manager Main Window

The Menu

The Menu is designed to help users that wish to navigate the Report Manager screens, using the keyboard. All menu items can be activated by using a combination of the ALT key plus the first letter of the menu item (e.g., to create a new report, type ALT + R followed by N).

NOTE:

If, after pressing the menu first letter, the menu does not show, press the down arrow (↓) key.

The Toolbar

The Toolbar includes the following tools:

New: Use this tool to create a new Report Template. A template can only created when highlighting the related report set title (see Figure 26). The new report should be given a meaningful name. For editing the new report, see Editing a Report Template on page 90.

Edit: Use this tool to edit a Report Template. For a detailed description on Report Template editing, see Editing a Report Template on page 90.

Delete: Use this tool to delete a Report Template.

Preview: Use this tool to generate and preview a report. After the report is displayed, it can be saved, printed, and searched.

NOTE:

The Edit, Delete, and Preview buttons are enabled only when highlighting one of the Report Templates from the list (see Figure 26).

Select/Unselect: This tool shall drop-down a menu that controls which guard/customer/class shall be selected. The list items are enabled/disabled according to the selected report template. For detailed description on Selecting/Unselecting lists, see Selecting/Unselecting Guards, Selecting/Unselecting Customers, and Selecting/Unselecting Classes.

Load/Save Selection: This tool is used to save the created lists (manually or by using the filters) for later use. The tool is also used to load such saved lists and save time in preparing recurring reports.

Preview a saved report: This tool is used to preview a saved report generated with the Report Manager module. When pressing the tool, a Window's browse screen is displayed. Select the saved report to view and press **Open**. Saved reports can also be viewed with the Report Viewer (FrpView.EXE) see page 103.

Exit: Exit the Report Manager module.

Selecting/Unselecting Guards

1,2,3...

Guards can be either all selected or all unselected. For selecting only some of the guards, they need to be checked individually.

To select/unselect all the guards on the list, do one of the followings:

- From the Menu **Guards**, pick the option **Select all** or **Unselect all**;
- Press the **Select/Unselect** tool in the toolbar and pick the **Guards – Select all** or the **Guards – Unselect all** option;
- In the guard list pan, press the right mouse key and from the popup menu pick the **Select all** or the **Unselect all** option.

Selecting/Unselecting Customers

1,2,3...

Customers can be all selected or all unselected, as in the guards list, but in addition, a filter can be applied to selecting/unselecting specific customers. To apply the filter on the customer list, do one of the followings (a filter window shall be displayed – see Figure 24):

- From the Menu **Customers**, pick the option **Select** or **Unselect**;

- Press the **Select/Unselect** tool in the toolbar and pick the **Customers – Select** or the **Customer – Unselect** option;
- In the Customer list pan, press the right mouse key and from the popup menu pick the **Select** option.

Figure 24 - Customers Select/Unselect Filter

At the Select Customer Filter window, select the customer type(s) and System type(s) to be in the report, and select **OK**. All Customers that have the selected attribute and/or system type shall be selected in the list.

NOTE:

When the Unselect filter is run, all customers that have the selected attribute and/or system type shall be unselected in the list.

Selecting/Unselecting Classes 1,2,3...

Classes can be all selected or all unselected and in addition, a filter can be applied to selecting/unselecting specific classes (as in the customer list). To apply the filter on the customer list, do one of the followings (a filter window shall be displayed – see Figure 25):

- From the Menu **Classes**, pick the option **Select** or **Unselect**;
- Press the **Select/Unselect** tool in the toolbar and pick the **Classes – Select** or the **Classes – Unselect** option;
- In the classes list pan, press the right mouse key and from the popup menu pick the **Select** option.

Figure 25 - Classes Select/Unselect Filter

At the Select Classes Filter window, select the classes type(s) to be in the report, and select **OK**. All Classes of the selected type shall be selected in the list.

NOTE:

When the Unselect filter is run, all classes of the selected type shall be unselected in the list.

Report Templates

The available Report Templates are displayed in the list on the left pan of the Report Manager window. The list includes the Report sets (i.e., the report categories) and with each set, the available report templates (see Figure 26).

To create a new report, mark the required Report Template and press the **Preview** button in the toolbar OR, right click the required Report Template and select, from the pop-up menu, **Preview** (see Figure 26).

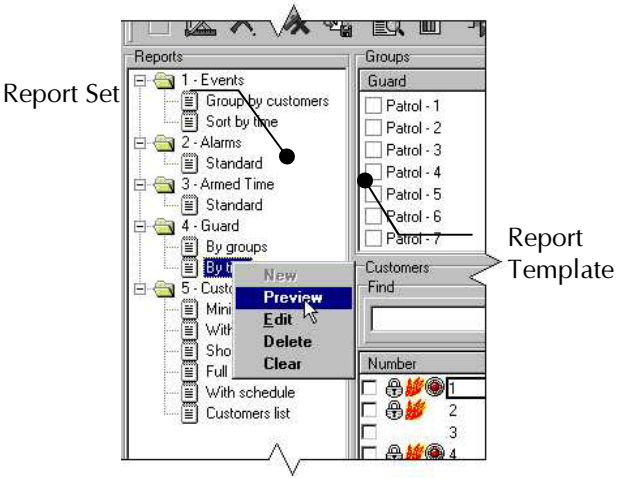


Figure 26 - Available Report Templates List

There are five different sets of reports:

- Events
- Alarms
- Armed Time
- Guards
- Customers.

The Search Box

The Search box is used to search a specific customer in the Customer list. The search shall look for the string, typed in the search box, in all customers' title field.

To start the search, press the **Find** button or the F7. To repeat the search to the next occurrence, press the **Find Next** button or the F8.

Report Period

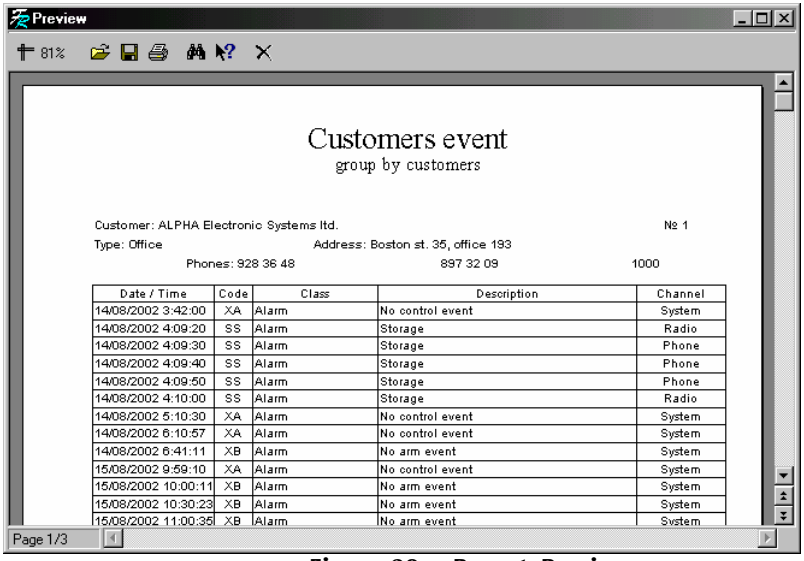
Each report (but the customer reports) is generated for a specific period. To specify the period, select the report Start and End time. Date can be entered manually or by picking a date from the calendar (press the 15 icon to display the calendar).

Viewing the Report

After a report is prepared (i.e., guards/customers/classes have been selected and a period is specified), the preview tool is pressed. If there is data that meat these criteria, the report is displayed (see Figure 28).

If there is no data that meat these criteria, a message is displayed (see Figure 27).

Figure 27 - No Events



Customers event
group by customers

Customer: ALPHA Electronic Systems ltd. № 1
Type: Office Address: Boston st. 35, office 193
Phones: 928 36 48 897 32 09 1000

Date / Time	Code	Class	Description	Channel
14/08/2002 3:42:00	XA	Alarm	No control event	System
14/08/2002 4:09:20	SS	Alarm	Storage	Radio
14/08/2002 4:09:30	SS	Alarm	Storage	Phone
14/08/2002 4:09:40	SS	Alarm	Storage	Phone
14/08/2002 4:09:50	SS	Alarm	Storage	Phone
14/08/2002 4:10:00	SS	Alarm	Storage	Radio
14/08/2002 5:10:30	XA	Alarm	No control event	System
14/08/2002 6:10:57	XA	Alarm	No control event	System
14/08/2002 6:41:11	XB	Alarm	No arm event	System
15/08/2002 9:59:10	XA	Alarm	No control event	System
15/08/2002 10:00:11	XB	Alarm	No arm event	System
15/08/2002 10:30:23	XB	Alarm	No arm event	System
15/08/2002 11:00:35	XB	Alarm	No arm event	System

Figure 28 - Report Preview

Editing a Report Template

Report Templates can be edited using a special tool (see Figure 29). The Fast Report tool can be used to modify and/or create new Report Templates.

- The source data used for the report tool and for generating reports, is stored in the **AndromedaTempDB** alias as Paradox tables.
- Tables **rEvents** and **rCustomers** are used for Events type reports.
- Tables **rAlarms**, **rEvents**, and **rCustomers** are used for Alarms type reports.
- Tables **rDay**, **rEvents**, **rInGuard**, and **rCustomers** are used for Arm Time type reports.
- Tables **rEvents**, **rGGrpAl**, **rGrSum**, and **rCustomers** are used for Guards type reports.
- Table **rCustomers** is used for Customers type reports.

IMPORTANT!

Use only the above tables when creating or modifying Report Templates.

The following string variables can be used with a Report Template:

- **Operator**: The name of the operator working with the module;
- **SelObjNums**: The list of selected customer numbers;
- **SelEvClassNums**: The list of selected event class numbers;
- **SelGrpNums**: The list of selected guards numbers;
- **DateStart**, **TimeStart**, **DateFinish**, and **TimeFinish**: The period for which the report should be generated.

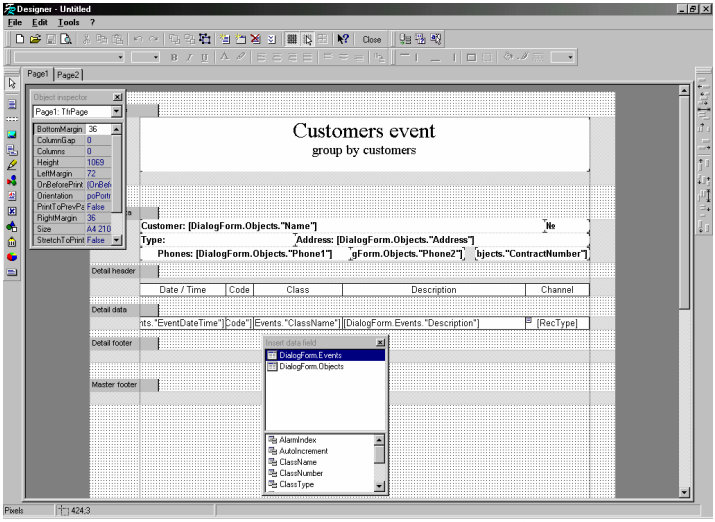


Figure 29 - Fast Report Tool

Table rEvents

The rEvents table includes information about events. The table fields are as follows:

AutoIncrement	System field
CustomerNumber	Customer number
EventDateTime	Event time and date
ReceiveType	Type of receiving channel
Code	Event code
ClassNumber	Event class number
ClassType	Class type
ClassName	Class name
Description	Event description
AlarmIndex	Alarm index in the additional table

The table has the following indexes:
AlrmIdx for the fields **AlarmIndex** and **ReceiveType**
ON_EDT for the fields **CustomerNumber** and **EventDateTime**.

Table rCustomers

The rCustomers table includes information about customers. The table fields are as follows:

Number	Customer number

EvTempNumber	Number of message standard template
ObjTypeNumber	Customer type number
IsArm, IsFire, IsPanic	System at the customer (guard, fire, panic button)
Name	Customer name
ContractNumber	Contract number
PassWrd	Password
Phone1	Customer phone
Phone2	Customer phone
Address	Customer address
SheduleEnable	Schedule control
LshedEnable	Long arm mode criterion
LshedStart	Long arm mode start
LshedStop	Long arm mode end
Disable	Customer disable flag
DtDisable	Disable time
AutoEnable	Auto arm mode criterion
DtAutoEnable	Auto disarm mode criterion
ControlType	Customer control time
ManualDisarm	Flag of possible arm/disarm by shift operator
MapFileName	File name with the customer map

Table rAlarms

The rAlarms table includes information about alarm events. The table fields are as follows:

AutoInc	System field
AlGrNumber	Index field for linking to rEvents master-table
DateTime	Time and date of alarm reception
Type	Number of the reaction type
GroupNumber	Guard number
OperatorNumber	Operator number
Comments	Comments
Operator	Operator name

The table has the following indexes:
AGN for the fields **AlGrNumber** and **DateTime**.

Table rDay

The rDay table includes information about Arm scheduling and Arm time. The table fields are as follows:

CustomerNumber	Customer number
EvGrpNumber	Number of event group for the current day
DtBegin	Guard day start
DtEnd	Guard day end
HoursOnGuard	Total time the customer was guarded during the current day

Table rInGuard

The rInGuard table includes information about Customer's Arm and Disarm events. The table fields are as follows:

AutoIncrement	System field
CustomerNumber	Customer number
EvGrpNumber	Index field for linking with table rDay
EvDateTime	Customer armed/disarmed date and time
Code	Event code
ClassName	Class type
Description	Event description

The table has the following indexes:
ON_EDT for the fields **EvGrpNumber**, **CustomerNumber**, and **EvDateTime**.

Table rGGrpAl

The rGGrpAl table includes information about Guards. The table fields are as follows:

AutoIncrement	System field
AlGrNumber	Index field for linking with rAlarms or rEvents table
DateTime	Event time
Type	Event type
Name	Event name
OperatorNumber	Operator number
Operator	Operator name
GroupNumber	Guard number
GroupName	Guard name
Chief	Group chief
Comments	Comments (the reason of guard cancellation can be specified in the comments)
GrSumIdx	Index field for linking with rGrSum table

The table has the following indexes:
AlGrNumDT for the fields **AlGrNumber** and **DateTime**
GrSumDT for the fields **GrSumIdx** and **DateTime**.

Table rGrSum

The rGrSum table includes information about Guards activities (e.g., time of arrival at the scene, time spent at customer, etc.). The table fields are as follows:

AutoIncrement	System field
AlGrNumber	Index field for linking with rAlarms or rEvents tables
GroupNumber	Guard number
GroupName	Guard name
ArriveTime	Time of guard arrival to the customer
InUseTime	Time the group was working by the specified call
CancelAction	The reason of call cancellation

The table has the following indexes:
AlGrNum for the fields **AlGrNumber** and **GroupNumber**
GrNum for the fields **GroupNumber** and **AlGrNumber**

Customer Maps Utility

The Customer Maps module was designed to create, edit, and view customer's site plan (map), including information on the different zones. The Customer Maps module can be executed as a stand-alone application to create and modify map files, or it can be launched from within one of Andromeda's modules (e.g., Shift Operator, Customer Manager).

The Customer Maps module can work in edit or view modes. This is determined by the user privileges as set with the Employee Manager module (see page 66) and module start conditions.

In the view mode, user can load and view the customer's maps and check the zones status by viewing the zone related file.

In the edit mode, user can perform all the above functions as well as creating new maps and modify existing ones.

The Customer Map main window (see Figure 30) includes several elements. The elements are as follows (from top to bottom, left to right):

- Menu (see page 96)
- Toolbar (see page 97)
- Zone Tree (see page 100)
- Map Layout (see page 100)

NOTE:

The Zone Tree and the Map Layout pans are available only after creating a new map or opening an existing map file.

The Menu

The Menu is designed to help users that wish to navigate the Customer Maps screens, using the keyboard. All menu items can be activated by using a combination of the ALT key plus the first letter of the menu item (e.g., to create a new map, type ALT + F followed by N).

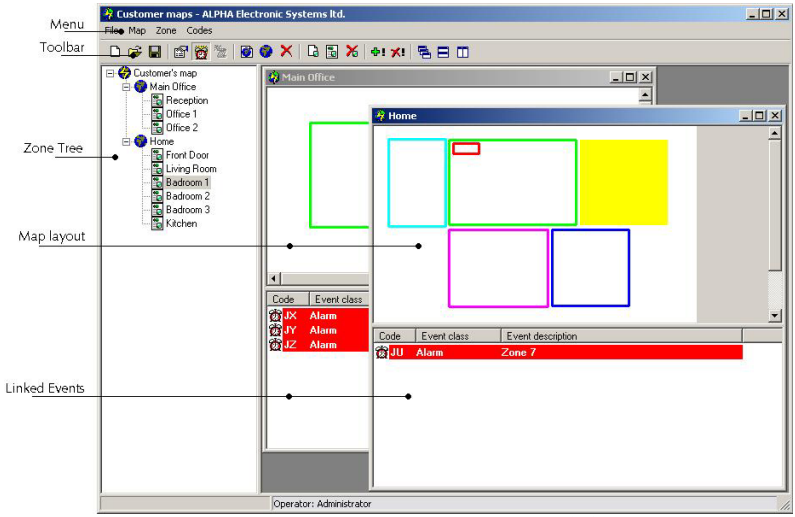


Figure 30 - Customer Maps Module

NOTE:

At the window's title, the name of the customer, whose map is being viewed/modified, is displayed.

The Toolbar

The Customer Map module can be open in View or Edit modes. When in View mode, only some of the tools are available. The Toolbar includes the following tools:

NOTE:

Tools that are available ONLY in the Edit mode are marked with an asterisk (*).

New *: Use this tool to create a new Customer Map. Each map is linked to an existing customer; when the New tool is pressed, the Browse Customer window is displayed (see Figure 31). A customer should be selected from the list, confirming by pressing the OK button.

Open: Use this tool to open an existing customer map file (i.e., file with the AMS extension) for viewing and managing.

Save *: Use this tool to save a customer map as an AMS file type.

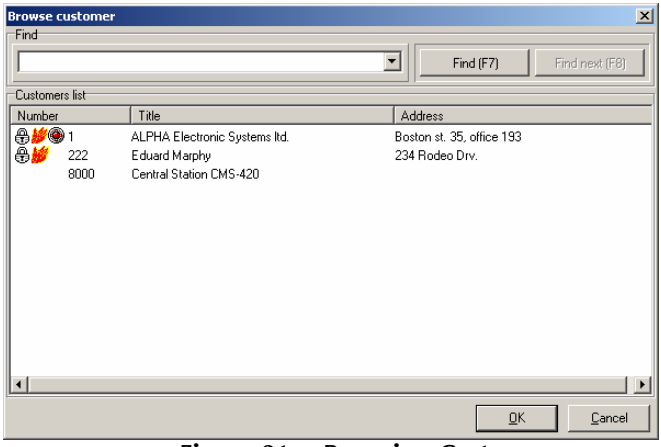


Figure 31 - Browsing Customer

Customer Info *: Use this tool to view the linked customer information (as entered in the Customer Manager module). This tool can also be used for assigning a different Customer Record to a map.

Check State: Use this tool to check the status of linked zones. If an event (with the specified code) is received for a zone, the zone icon shall change and the zone rectangle, in the map, shall blink.

View Linked File: Use this tool to view a file linked to a specific zone. Linked file can be any file (e.g., text file, Word document, customer premises picture, location detailed plan, etc.)

Add Map *: Use this tool to add a map to a customer. A customer map can include several maps (i.e., several floors in the same house).

Change Map Background *: Use this tool to create a background for the selected map. A background can be any supported image file (i.e., bitmap or JPEG).

NOTE:

The background can be the detailed scanned floor plan.

Delete Map *: Use this tool to delete a map from customer. Map deletion must be confirmed.

Add Zone *: Use this tool to add a zone to a Map. Each map includes different zones as they have been set at the customer's premises.

Modify Zone *: Use this tool to modify a selected zone. In the Zone properties window (see Figure 32) the following attributes can be edited:

- Zone Name
- Zone position (X, Y) and dimensions (W, H)
- Zone color and appearance when active (selected) and passive (not selected)
- File linked to zone.

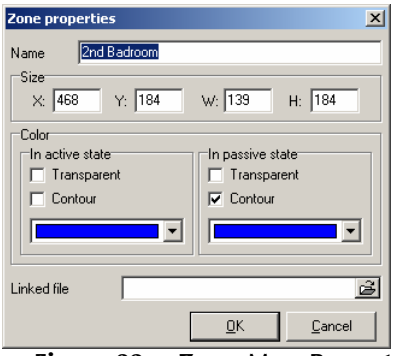


Figure 32 - Zone Map Properties

Delete Zone *: Use this tool to delete a zone from a Map. Zone deletion must be confirmed.

Adds Code: Use this tool to add an activating event(s) to a selected zone. When button is pressed, the Add Activating Event window is displayed (see Figure 33). The window includes a list of all available Event Classes according to the assigned template in the Customer Manager module.

Delete Code: Use this tool to delete an activating event(s) from a selected zone. Code deletion must be confirmed.

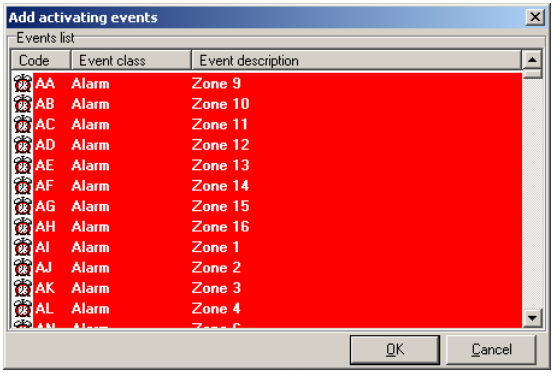


Figure 33 - Add Activating Events

Cascade: Use this tool to arrange maps in cascade.

Tile Vertically: Use this tool to tile maps horizontally.

Tile Vertically: Use this tool to tile maps vertically.

The Zone Tree

The Zone Tree displays the structure of the customer's site map. A customer can have several maps (e.g., first and second floor maps), and each map can have several zones linked to it. Map and zone names can be modified by right clicking it and selecting **Rename** from the pop-down menu.

Map Layout

The map layout window can include as many maps as the customer has. The maps can be arranged in cascade or tiled (horizontally or vertically).

Each map includes the different zones and each zone is linked to a specific activating event (see Figure 34). When selecting a zone in the Zone Tree, it become active and its linked Activating Event Codes are displayed, bellow the map. All other zones are inactive. When selecting the Map in the Zone Tree, all zones become inactive and **all** linked Activating Event Codes (from all the zones) are displayed bellow the map.

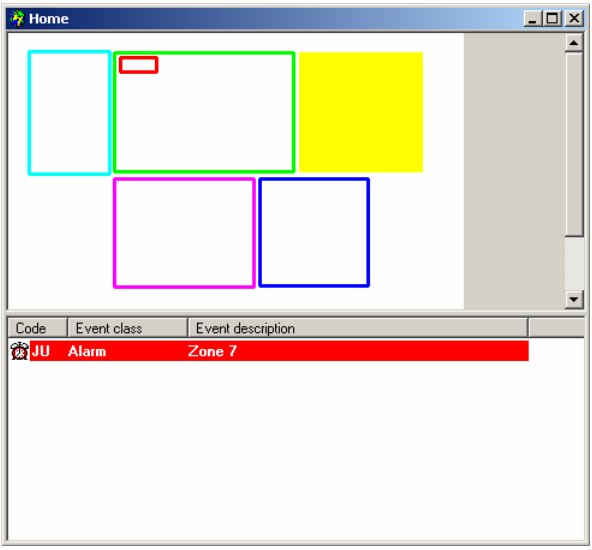


Figure 34 - Customer Map

The map window title is the map name as in the Zone Tree. When there is more then one map, selecting the map in the Zone Tree shall bring that map window to the front.

Database Wizard Utility

This module is designed to check the database integrity and perform database preventive procedures. When started, the Database Wizard resolves the Andromeda's database version and when necessary, converts the database tables.

The Database Wizard can fix database errors when encountered.

NOTE:

It is highly recommended to run the Database Wizard at least once every month as a preventive maintenance measure.

IMPORTANT!

Before running the Database Wizard, **ALL** Andromeda modules and/or tools **MUST** be closed (including the Event Manager and any Shift Operator event).

IMPORTANT!

When upgrading Andromeda from a previous version, it is essential to first run the Database Wizard before trying to run any of the modules (see Upgrading from a Previous Version on page 12).

Other Useful Utilities

The Andromeda setup installs three useful utilities: Network Parameters Setup, Reports Viewer, and Unknown Customers Event Viewer.

Network Parameters Setup (AndPCfg.EXE)

The first utility is used when installing on a network computer. It is used to set the server's (i.e., the Event Manager computer) IP address and port number (see also Installing on a Network Computer on page 15).

- Run the Andromeda Network Parameters setup tool (**`AndIPCfg.exe`**) located in *C:\Program Files\Andromeda* directory.
- Specify the name or IP Address of the Andromeda server (i.e., Event Manager workstation) and the port number (1000 in most setups). See Figure 35.

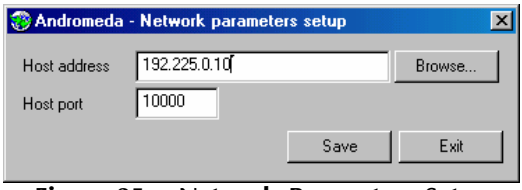


Figure 35 - Network Parameters Setup

The Andromeda software is designed to operate ONLY in a TCP/IP networks. When operating in a network, changes to the database are passed on to all relevant modules (e.g., if a customer's description is changed, the Customer Manager module sends a notification to the Event Manager that notifies the Shift Operator module).

The Events Manager module operates as a server. All other modules are connected to the server via TCP/IP at the designated port. All data exchange between modules is done via the Event Manager.

The Host address can be either the Event Manager computer's IP address or its name (as configured in the HOSTS file). He port number should be identical with all workstations on the network.

NOTE:

When installing on a single computer, the host address should be **`127.0.0.1`** or "**`localhost`**".

Report Viewer (FrpView.EXE)

The second utility is used to view saved reports. The Report Manager saves the reports in Andromeda internal format. To view and print saved reports, run the utility to open files with the FRP extension (Report Manager format).

- Run the Report Viewer (**`FrpView.exe`**) located in *C:\Program Files\Andromeda* directory.
- Select the FRP file to view (see Figure 36).
- Press **`Open`**.

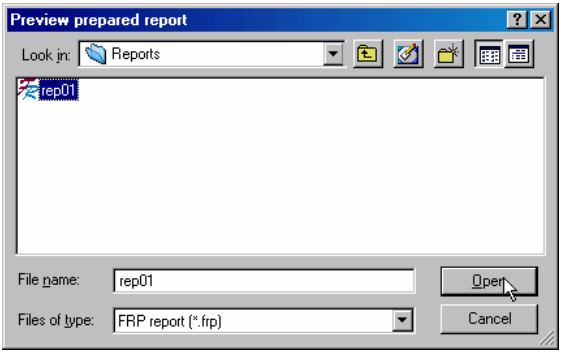


Figure 36 – Preview Saved Reports

Network Parameters Setup

The **Network operation setup** utility (AndIPCfg.exe) serves for setting of the Andromeda software parameters for network operation.

The term "network operation" literally means the following: information about any change occurring with the Andromeda software database will transfer to all modules being interesting in such information. For example, the description of am object has been changed. The Object Manager module will send a notification that information about a certain object has been changed. The Duty Operator module will get this notification and will update the description of the given module.

The Architecture of the Andromeda software operation in a network is as follows. The Event Manager module is a server, to which all other modules are connected using the TCP/IP protocol. In other words, the information exchange between modules running on different computers within the network is possible only provided that the Event Manager module is running.

For successful operation in a network, it is necessary to specify two parameters, i.e. name or IP address of the computer, on which the Event Manager module is running, and port, over which the connection is carried out:

Server address: It is the computer name or its IP address. The default value (locahost) means the current computer irrespective of its name or IP address.

NOTE:

Localhost's synonyms are the name of loopback and the IP address of 127.0.0.1 – any of these values will identify the current computer in the event where calls are performed locally (only within the limits of the given computer).

Server port: By means of the given parameter, one can indicate the number of port, to which the connection will be carried out. The default value of 1000 is recommended to change only if this port on the computer, on which the Event Manager module is started, is already used.

The start-up of the AndPCfg.exe utility and parameter setup for the network operation shall be performed on each computer, which will be used with the Andromeda software.