

Short Manual

Intellect v.4.7.6 SP2 module Unipos

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1. Software Installation

1) Download the setup directory “Интеллект Базовая версия” v.4.7.6 SP2 from www.itv.ru site :

The download link is: <http://www.itv.ru/support/downloads/intellect.php> .

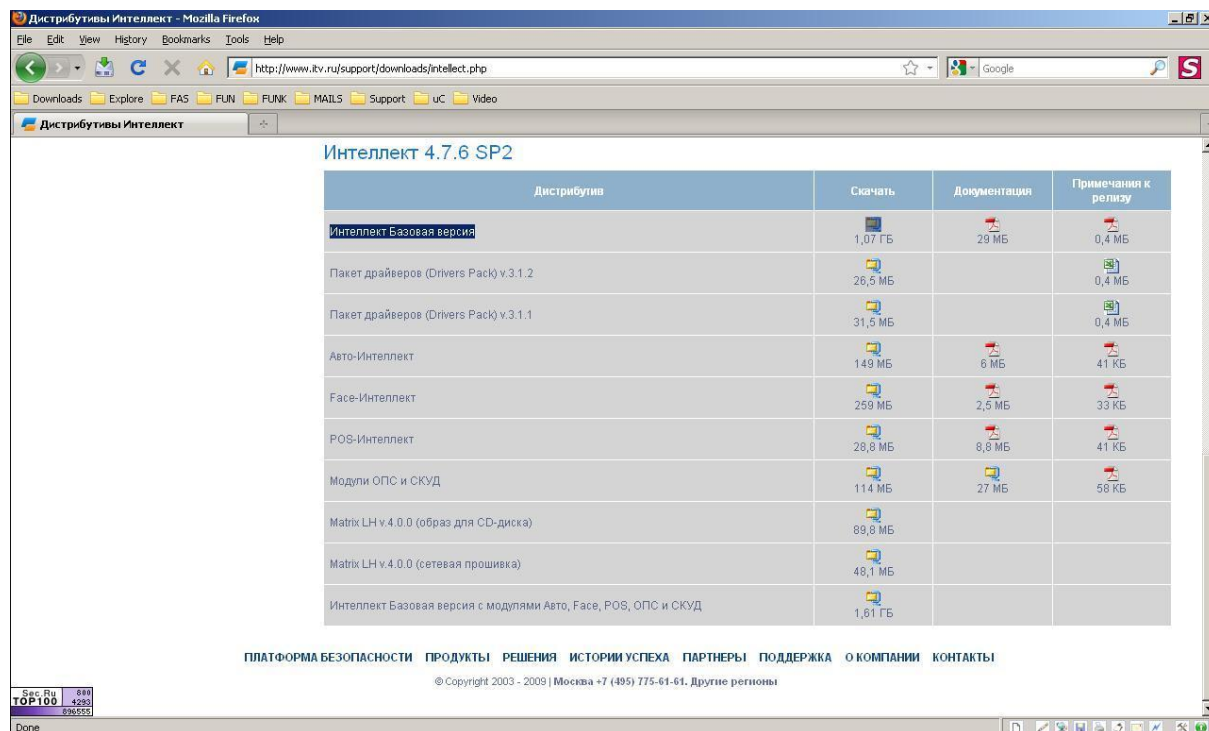


fig. 1
Software Download

2) After you extract the downloaded archive, start the setup wizard from file "setup.exe".

2.1) License agreement

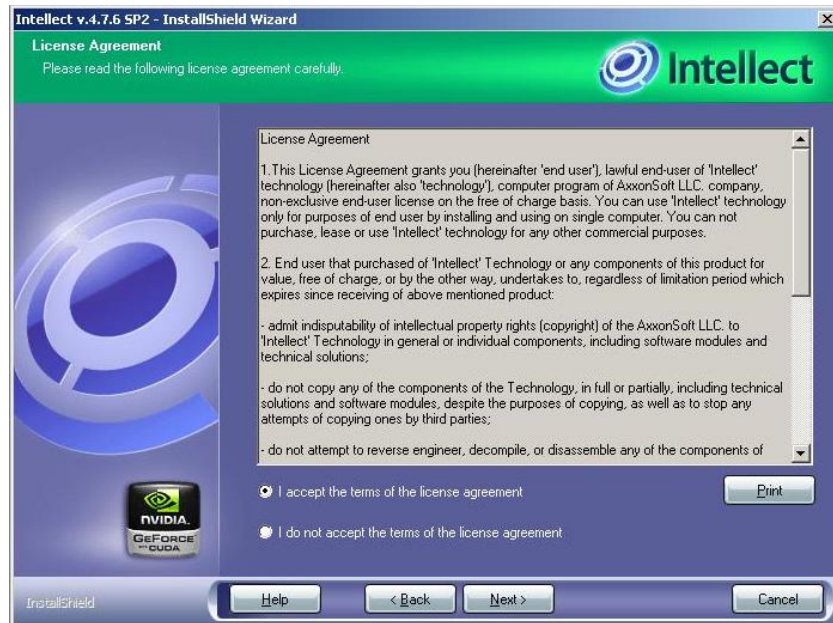


fig. 2
Installation steps

This dialog box offers you to accept the license agreement regarding the use of INTELLECT technology. To print out the License Agreement, click Print. Read through the terms and conditions, confirm your consent choosing "I accept the terms of the licence agreement" and click Next, otherwise cancel further installation of the software.

2.2) Setting installation directory



fig. 3

Installation steps

At this stage, the folder where INTELLECT software components will be installed is selected. Installation Wizard by default prompts to install the software from the root directory of the installation disk into the Intellect folder at C:\Program Files\Intellect. If due to whatever reason, the offered option is unacceptable, click Change and enter the folder name and the path thereto.

2.3) Choosing installation mode



fig. 4
Installation steps

At this stage, select the type of INTELLECT software installation.

“*Server site*” is INTELLECT software to be installed on the server PC, which will be used to process video and audio information and manage all system components.

“*Client site*” is used for video and audio data processing and management of certain system components. This is used for remote operation workstations which do not support system administration (create, delete, set system objects etc.) as well as do not support local database maintenance.

“*Remote Administrator site*” is used for video and audio data processing and management of all system components. The *remote administration workstation* is installed on the PCs designed for system administration, which have no pre-installed video input cards.

Therefore if you install the Intellect SW on the PC which will communicate with the UniPOS IFS7000 system and will act as a server you choose *Server Site*. If you use the computer as a remote workstation (remote observer of the server), choose either *Client* or *Remote Administrator Site* depending on the purpose.

To confirm the selected item, click Next.

2.4) Setting path to key file



fig. 5
Installation steps

Enter a path to the key file. By default, the key file is located on the CD in the **Key** folder. Where appropriate, the path to the key file may also be selected using **Browse**. *Leave the field blank, if the key file needs to be copied at a later stage. Check if the path to the key file is correct, and to confirm it, click **Next**.

*** If you have a license version of the Intellect SW then you will receive a dongle and intellect.sec file in the installation DVD. If you receive the key file at a later stage (but not with the installation DVD) then you must copy the intellect.sec file in the program directory (for example “c:\program files\Intellect” folder), install the dongle drivers and put the dongle in the USB port of the PC.**

2.5) Installing Intellect as a service



fig. 6
Installation steps

At this stage, define whether the Intellect software should be launched before the user is authorized by the windows OS “automatically” or you will start the application after that “manually”. To select “automatic” startup mode you can check the box “Install Intellect as a service”.

2.6) Microsoft SQL Server Server 2005 Express should be installed on this step.

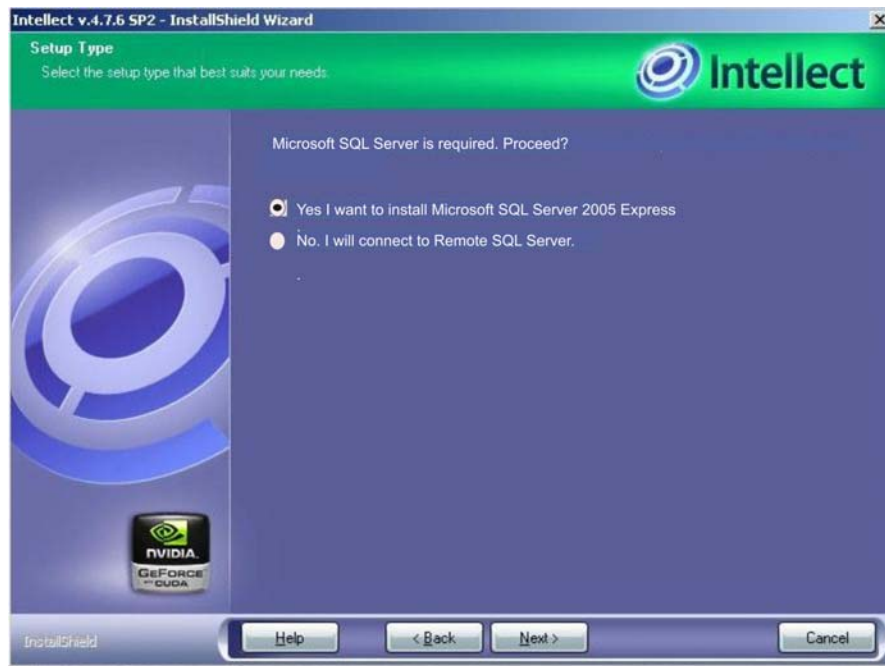


fig. 7
Installation steps

2.7) MS SQL server selection and configuration



fig. 8
Installation steps

This stage prompts to select Microsoft SQL database server and define the authorization method and parameters for connecting to the server.

If SQL-server installed on this(local) PC should be used, select **“local\SQLEXPRESS”** (which is set by default).

If SQL server authorization uses a user name (login) and password registered in the Windows OS accounts on the PC, on which **INTELLECT** software is installed, it is necessary to select "**WINDOWS AUTHENTICATION**" connection mode to the SQL server (which is set by default).

2.8) Naming your databases



fig. 9
Installation steps

At this stage names are assigned to the titles database and the database of the Microsoft SQL Server configuration.

Enter the name of the database used by the POS control subsystem in the Input titles database name field. By default, the database of the POS control subsystem uses the name **Titles**.

In the Input configuration database name field, enter the name of the database, where configuration of the distributed digital video surveillance system will be stored.

By default, this database uses the name **Intellect**.

2.9) Drivers installation



fig. 10
Installation steps

Video capture drivers are installed only if you will use video capture cards for video surveillance.

Guardant dongle driver is installed if you have a license version of the Intellect SW, so that you will use USB dongle in the future.

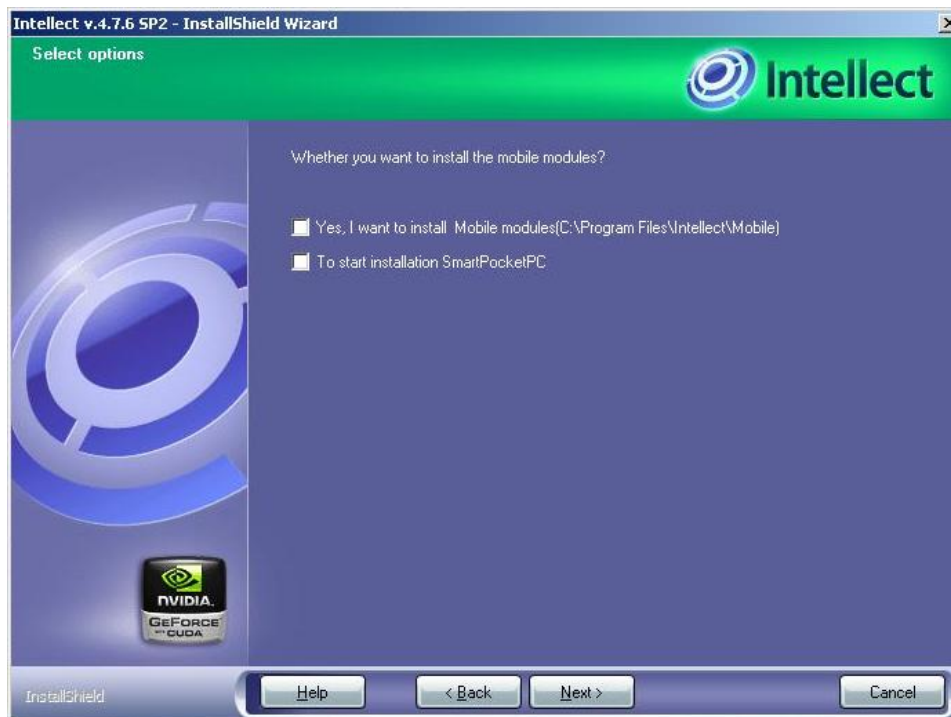


fig. 11
Installation steps

These drivers are not necessary to be installed.

For more information about the other steps of the Intellect core setup process you can use the “Install_help_rus.chm“ or “Install_help_en.chm“ file from the help directory of the install folder :

“Intellect.v.4.7.6_SP2_Installer\help\ru\Install_help_rus.chm”.

“Intellect.v.4.7.6_SP2_Installer\help\en\Install_help_en.chm”

3) After successfully installing the Intellect v.4.7.6 SP2 you must download and install the UniPOS module. The download link is :

<http://www.itv.ru/support/downloads/intellect.php>

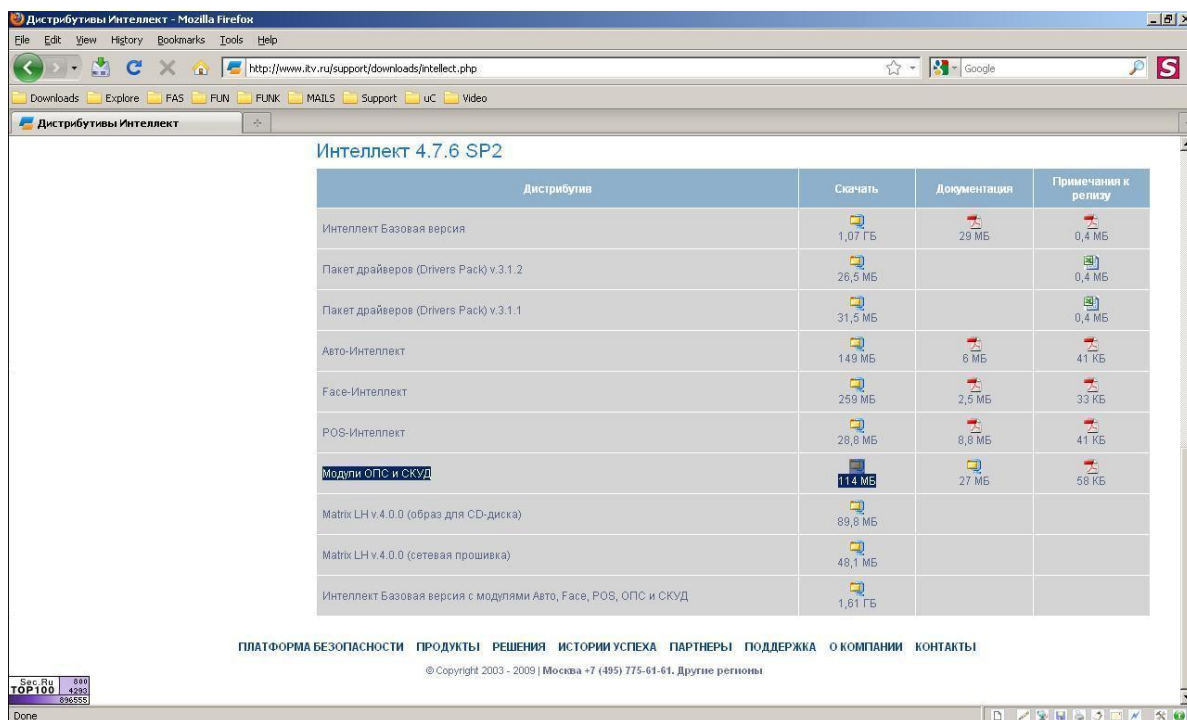


fig. 12
Installation steps

In the downloaded installation file are included UniPOS and other manufacturer “drivers”. You must start the "setup.exe" file from the archive and then you can choose to install only the UniPOS “drivers” (fig. 13). In this way you will make the Intellect core to be compatible with UniPOS Fire Alarm System IFS7000.

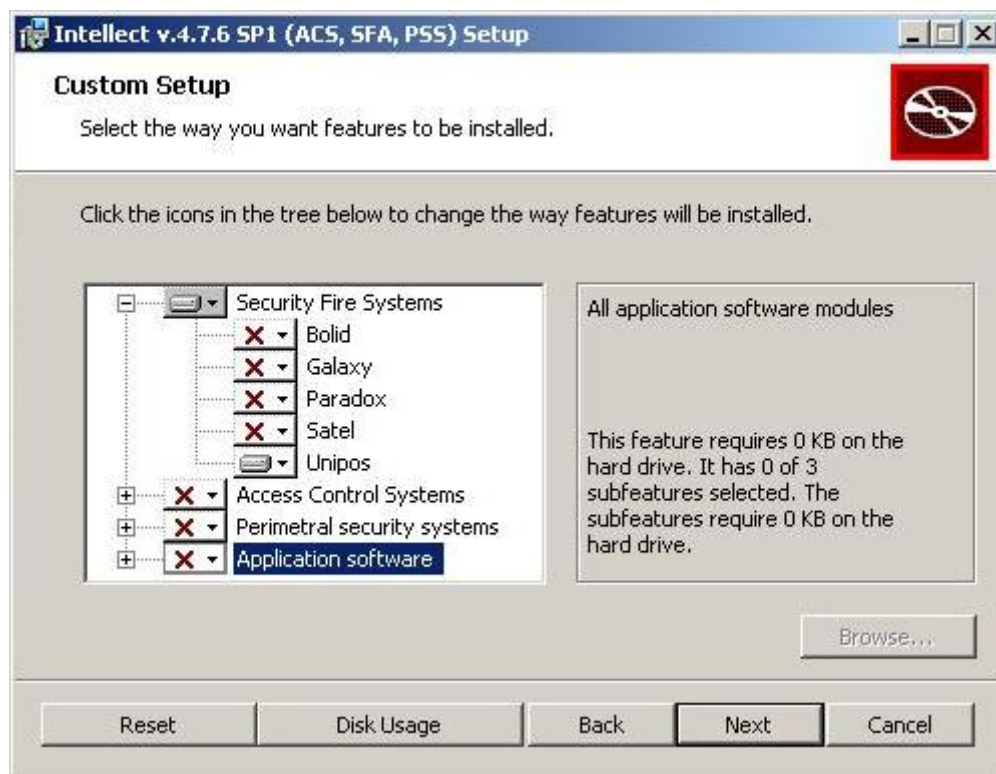


fig. 13
Installation steps

2. Hardware Configuration

Possible Network Configurations:

1) Hardware Configuration N# 1:

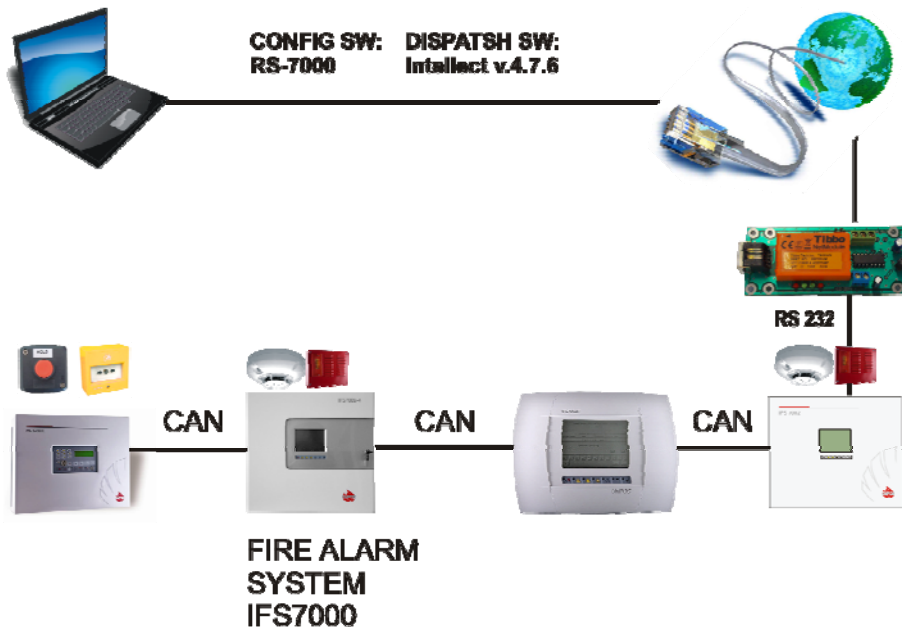


fig.10
Hardware configuration 1

2) Hardware Configuration N# 2:

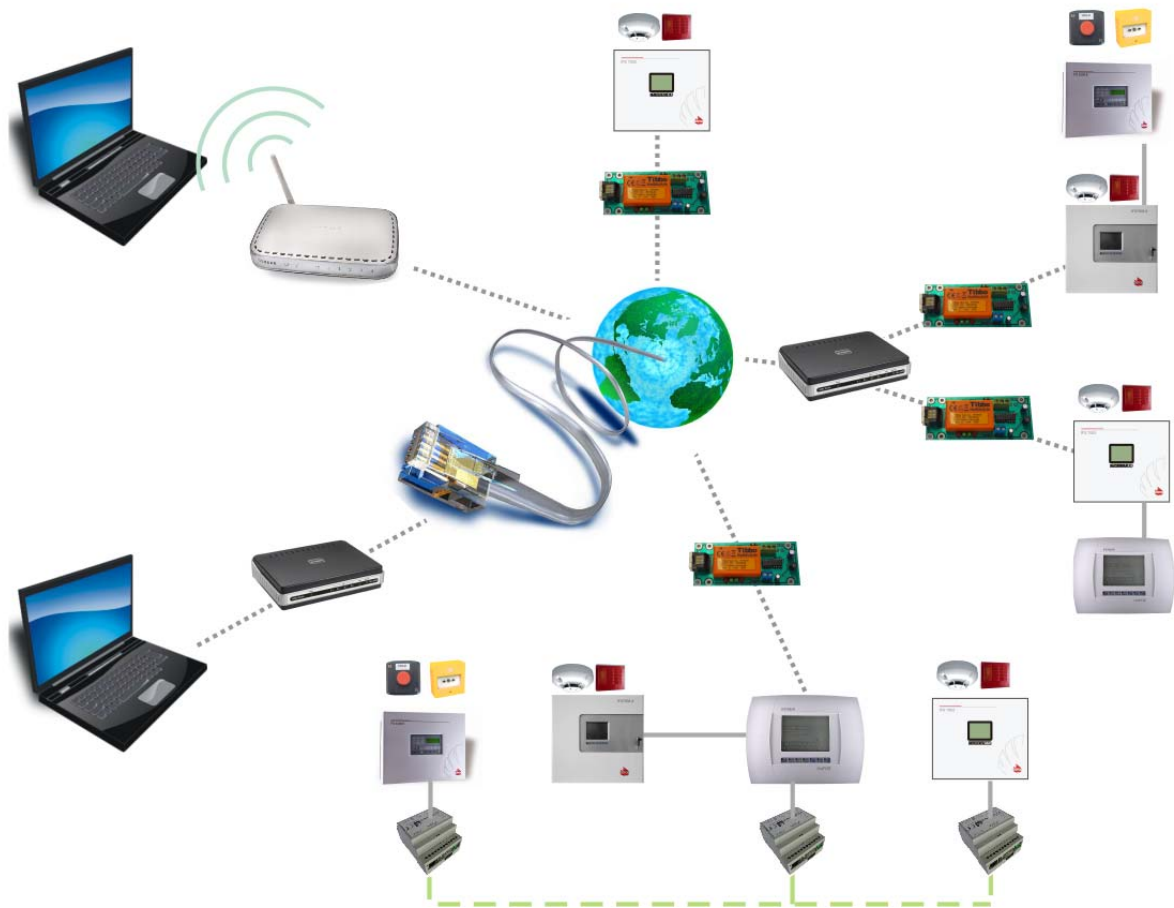


fig.11
Hardware configuration 2

In this type of hardware configuration each IFS7000 system communicates with the Intellect Dispatch SW through the TCP/IP protocol. All you need is to have one TCP/IP to RS232 converter module for *each* IFS700 system (UniPOS offers such converter module in its product range) and to configure virtual COM ports in the PC for *each* converter module.

3. System Dispatching

3.1. Create *dispatching* objects

After the operator has successfully installed and configured the IFS7000 system/s (name of each address point, zones, CAN parameters etc.), next step is to download the configuration of the system/s. In this point is described how to implement this step:

- 1) Enter system settings:



fig.12
System settings

After you start the Intellect application you can enter in “System settings” mode from the top right corner of your computer display.

- 2) Create UniPOS object:

Warning:

*Creating an object or object settings changing must be confirmed using the button “**Apply**”.*

The „UniPOS” object is created from “System settings → Hardware” tab (fig. 13).

If you have to communicate with more than one IFS7000 system (fig.11) then it is necessary to create UniPOS object for each addressable system.

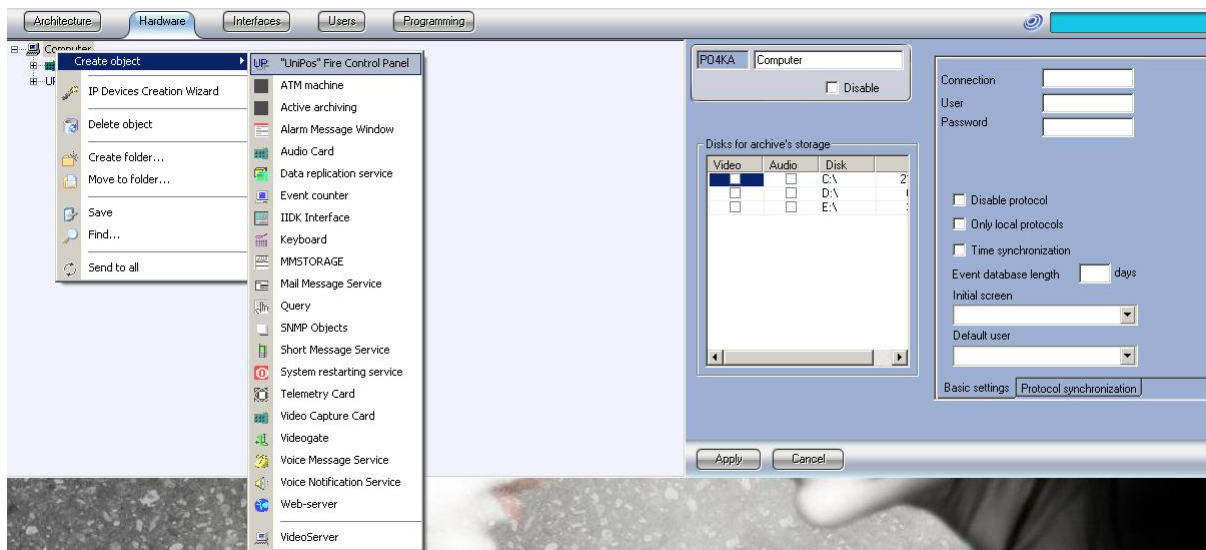


fig.13
Create UniPOS object

Then the object settings must be:

COM:

*the number of computer RS port if HW configuration 1 (fig.10) is chosen **OR** the number of a computer virtual RS port if HW configuration 2 (fig.11) is chosen*

Speed: 2400

Addressing range:

The address of the panel for RS232 communication must be in the range of the addresses. (on default in IFS7002 the network address is 1234).

The "Network address" of IFS7002 can be checked from menu :

Setup → Panel parameters → Network

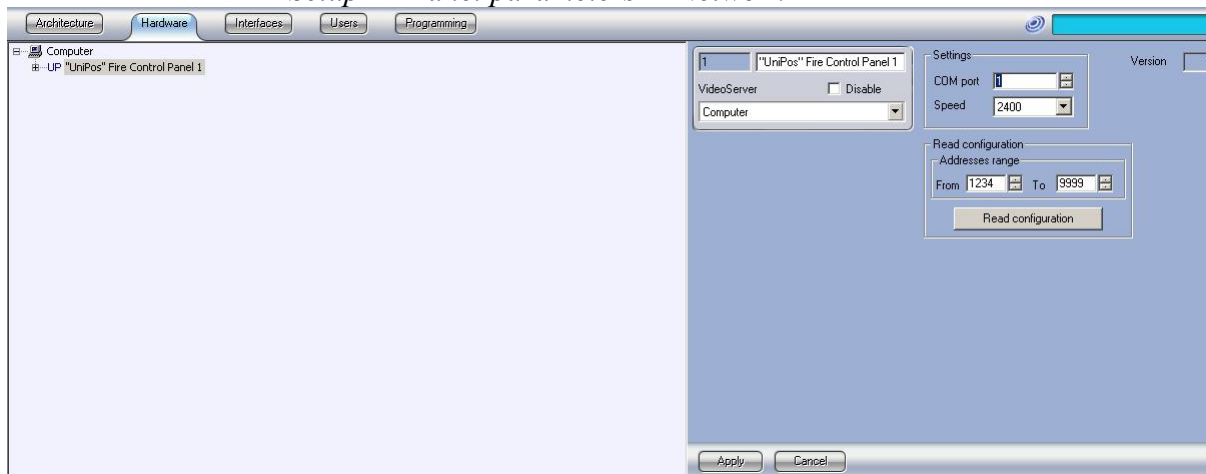


fig.14
UniPOS object settings

If the parameters described above are correct you can download the system configuration from button “Read configuration”.

In this way the panel configuration will be downloaded automatically.

3.2. Graphical interface

Next step after you have successfully downloaded all hardware objects (which match exactly the real configuration of the system) is to create the graphical interface of the buildings and place the already created objects on the maps.

The steps are:

1) From the “System settings → Interfaces” tab create the “Screen” object using the button “Apply”. The result of this action is shown on fig. 16.

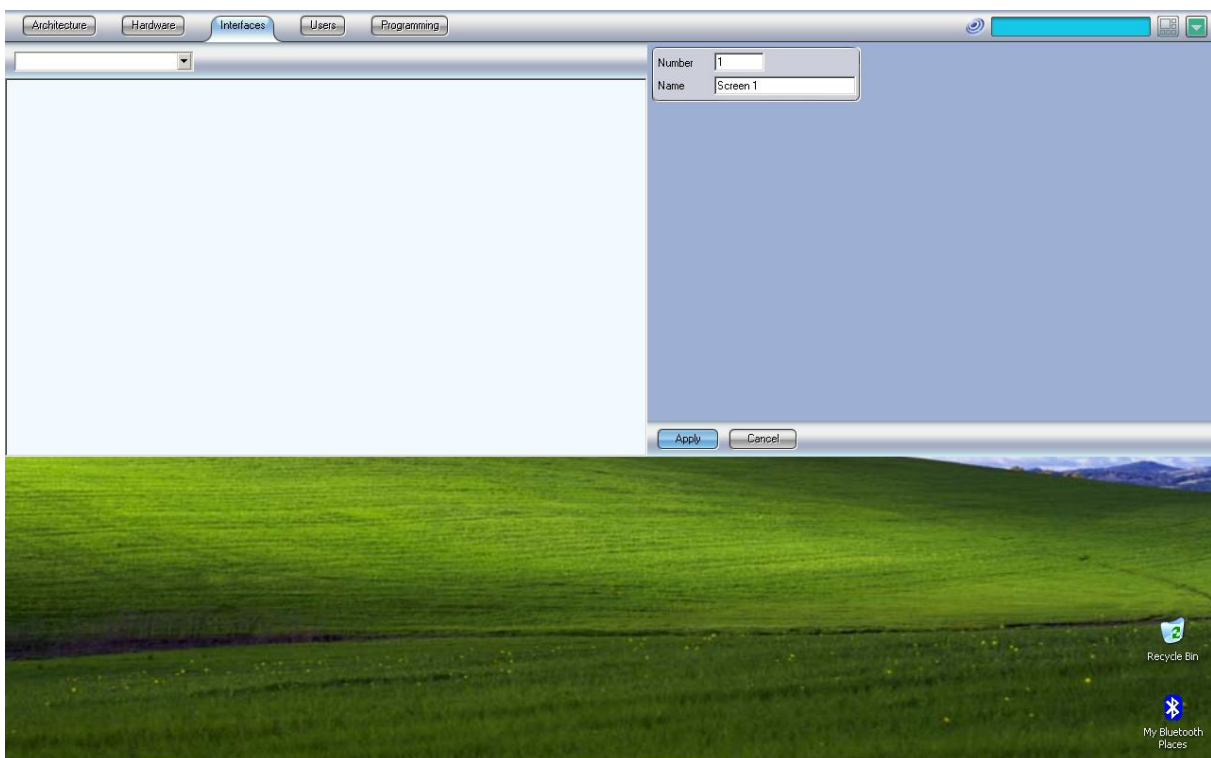


fig.15
Screen Object

2) After we have created the screen object we have to activate it. This is done by checking the box from the list “Computers” (fig. 16). In this way we match the created object with the computer display.

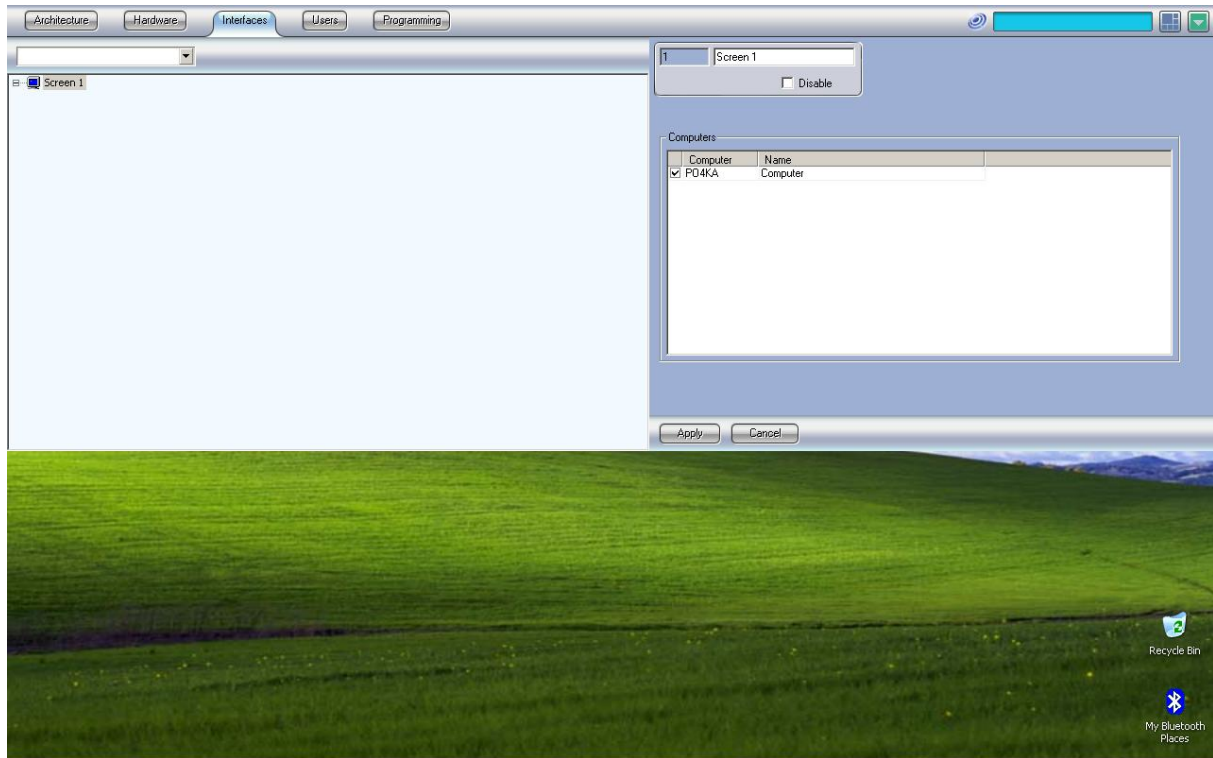


fig.16
Activate Screen

3) After you have created and activated the screen next step is to create a map (fig. 17). The position and size of the map are set from the map “Settings” (fig. 18). Width and Height are in percents.

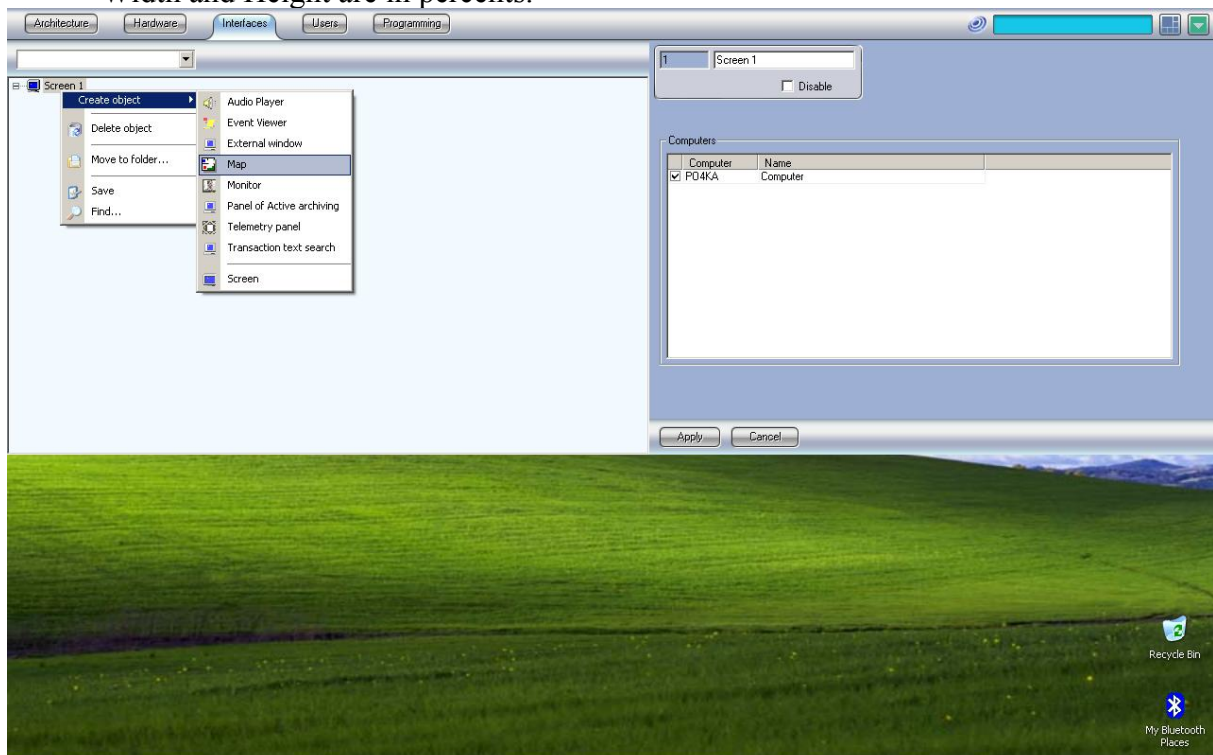


fig.17
Map Object

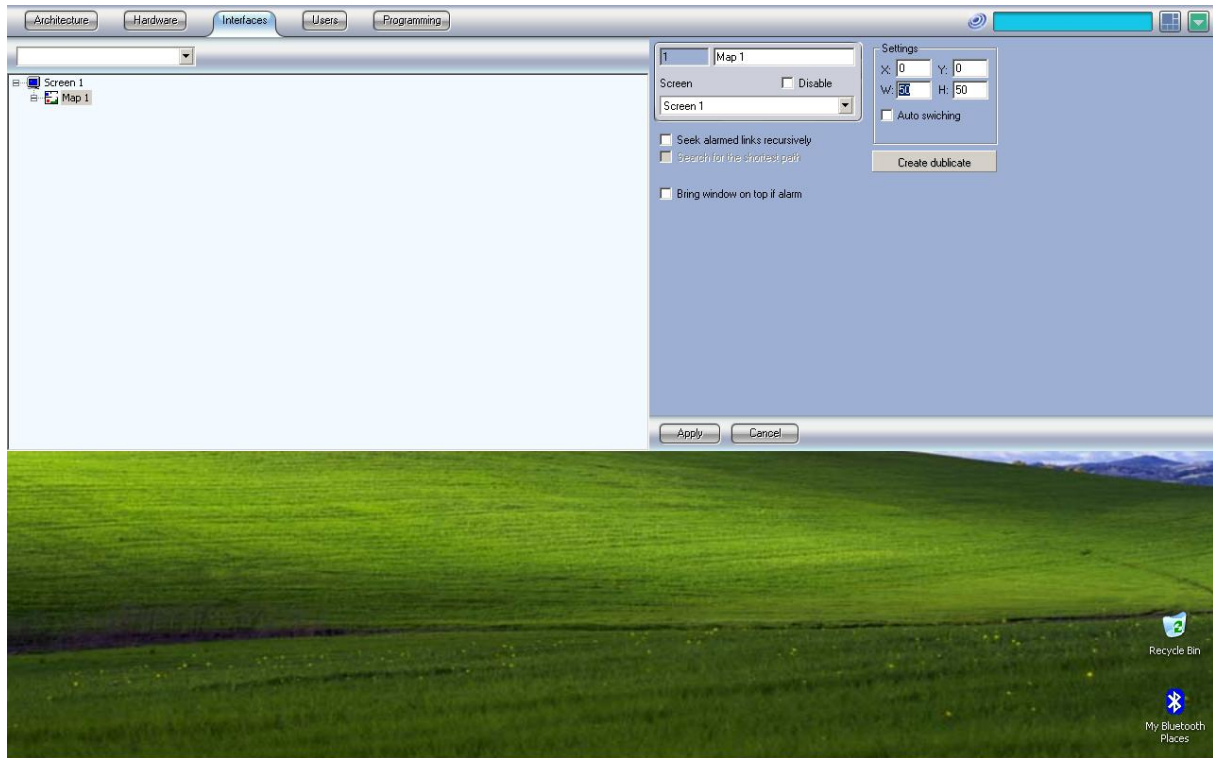


fig.18
Size Map

- 3) Each map consists of layers. Each layer includes a draft of the building. On the layer you can place devices, zones and links with the other layers on the map. All the settings of the layer can be edited from button “Edit selected layer” (fig.20).

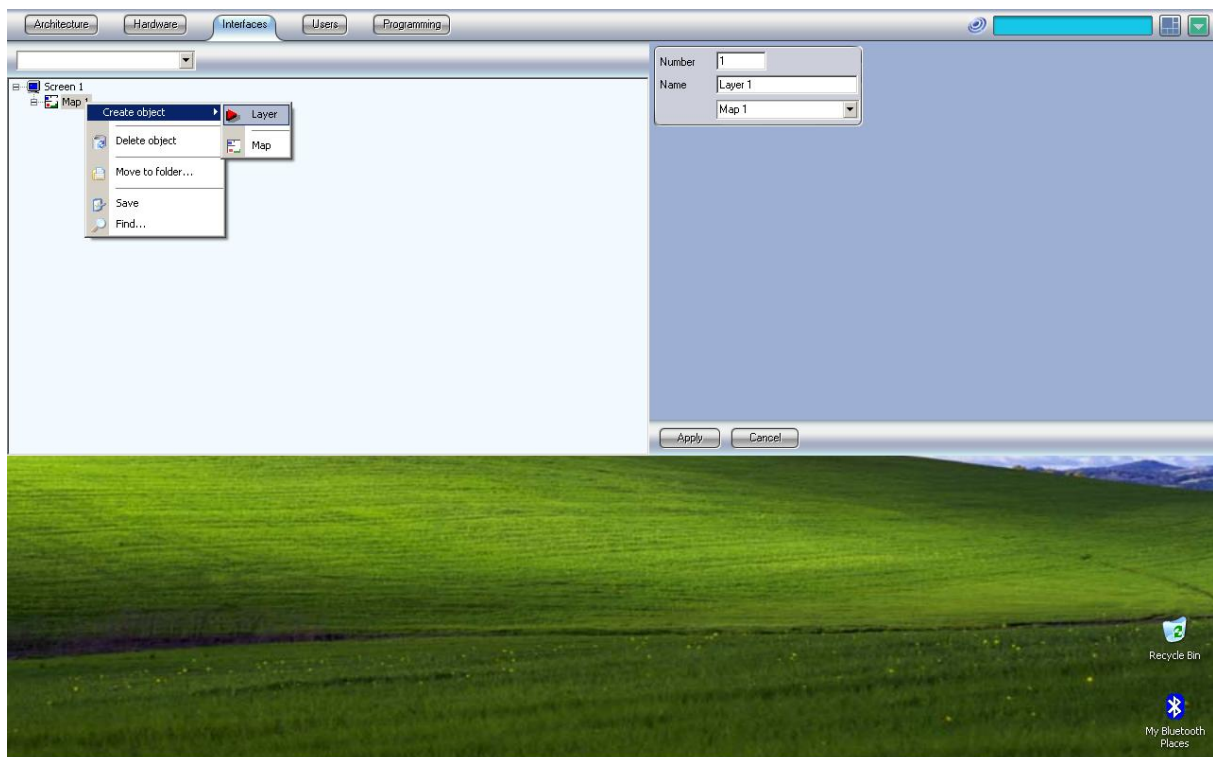


fig.19
Layer Object

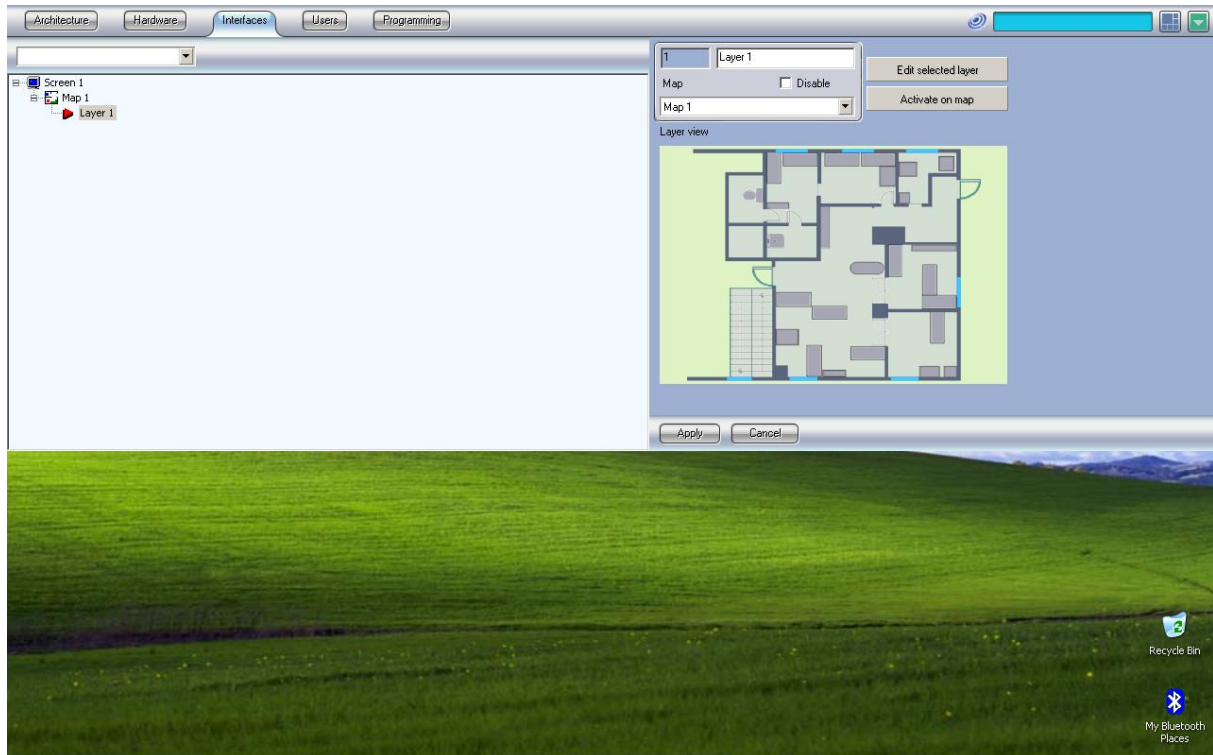


fig.20
Layer Edit button

5) From menu “Map → General settings “you can load the appropriate draft (fig. 21). The files that can be applied for image are of different types - .bmp, .gif, .jpg etc. and the size of the image are regulated from “Real width” and “Real height”.

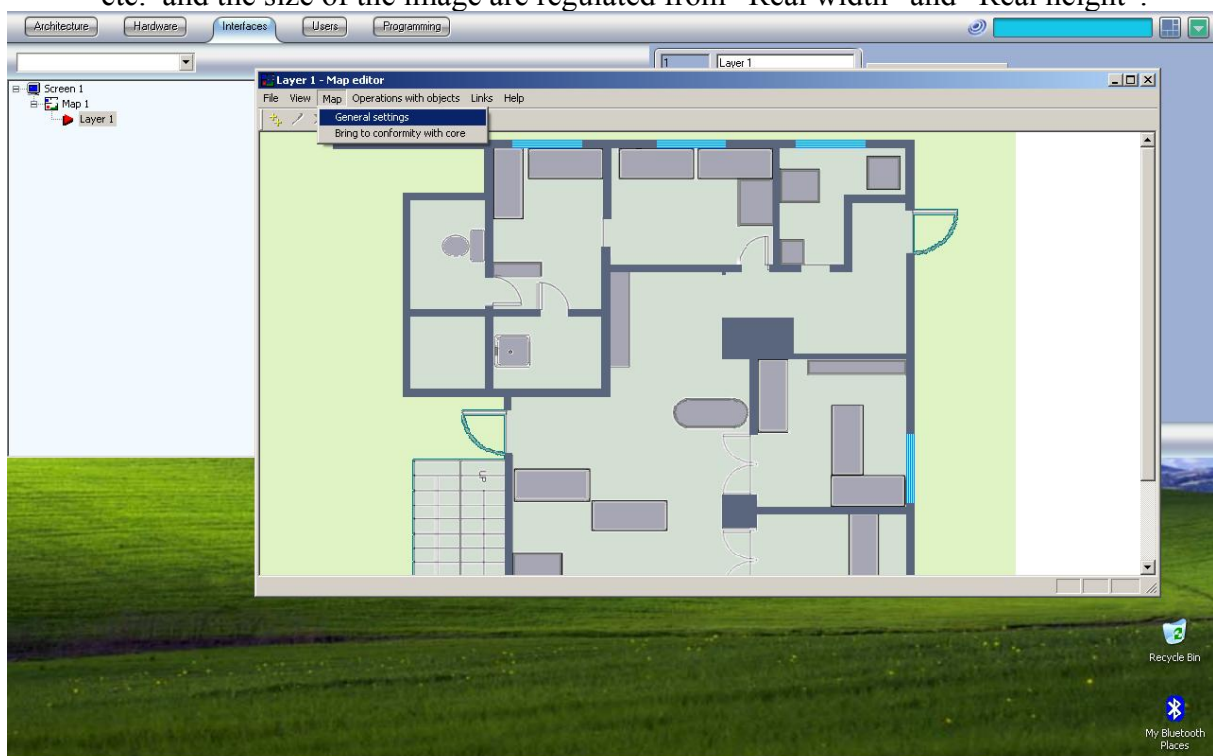


fig.21
Layer General Settings

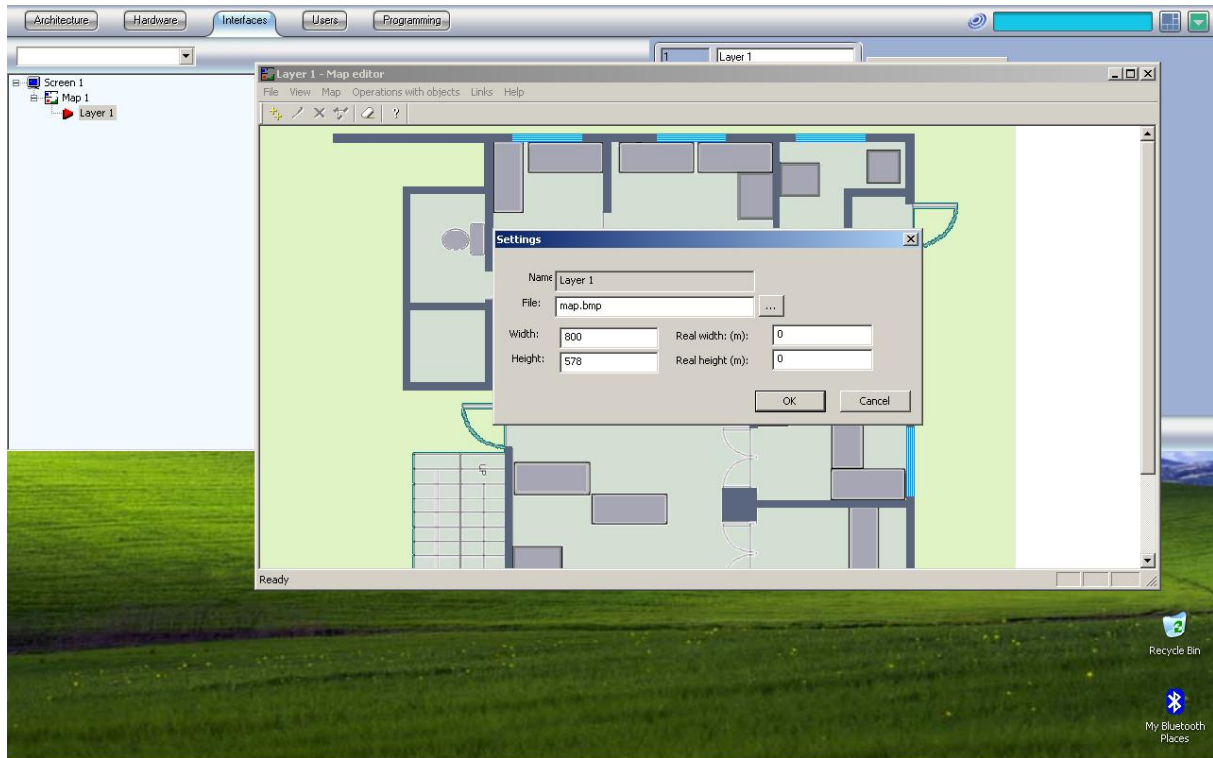


fig.22
Layer General Settings Edit

6) The fire alarm panels and devices can be positioned from menu “Operations with objects → New object” (fig. 23). Then the window “New object” appears (fig. 24).

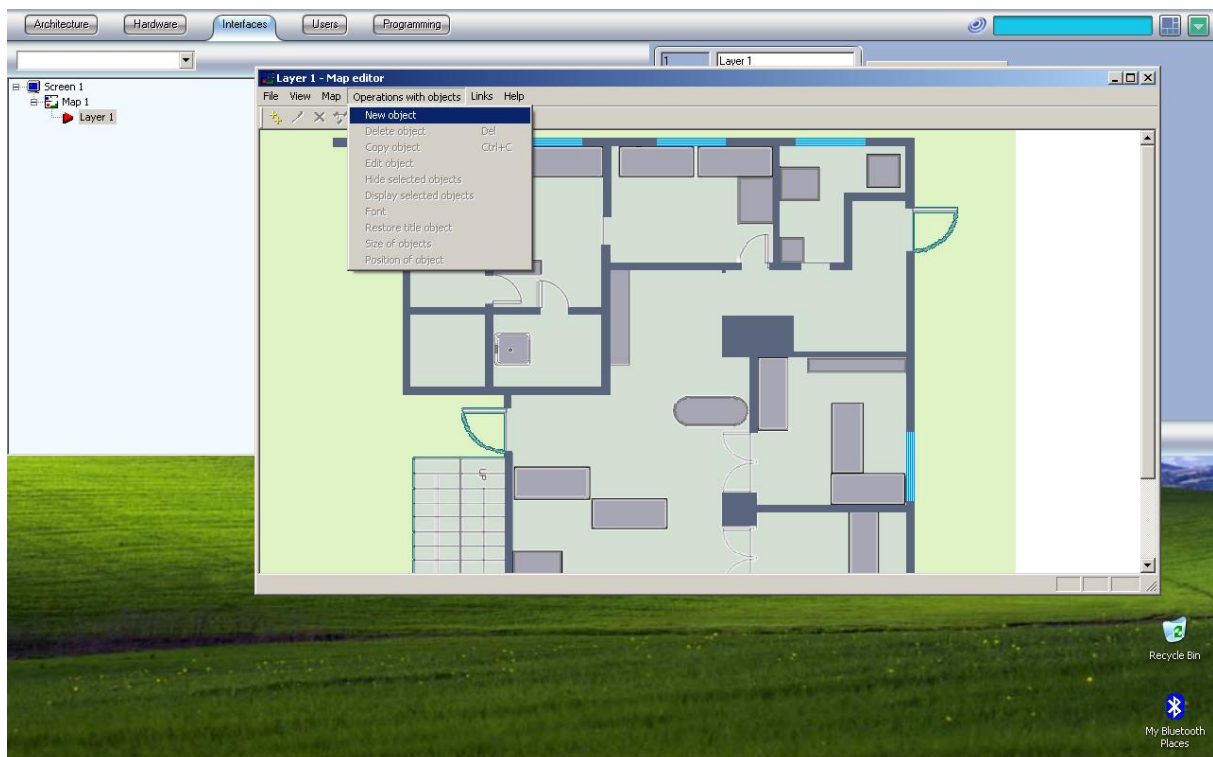


fig.23
Layer New Object

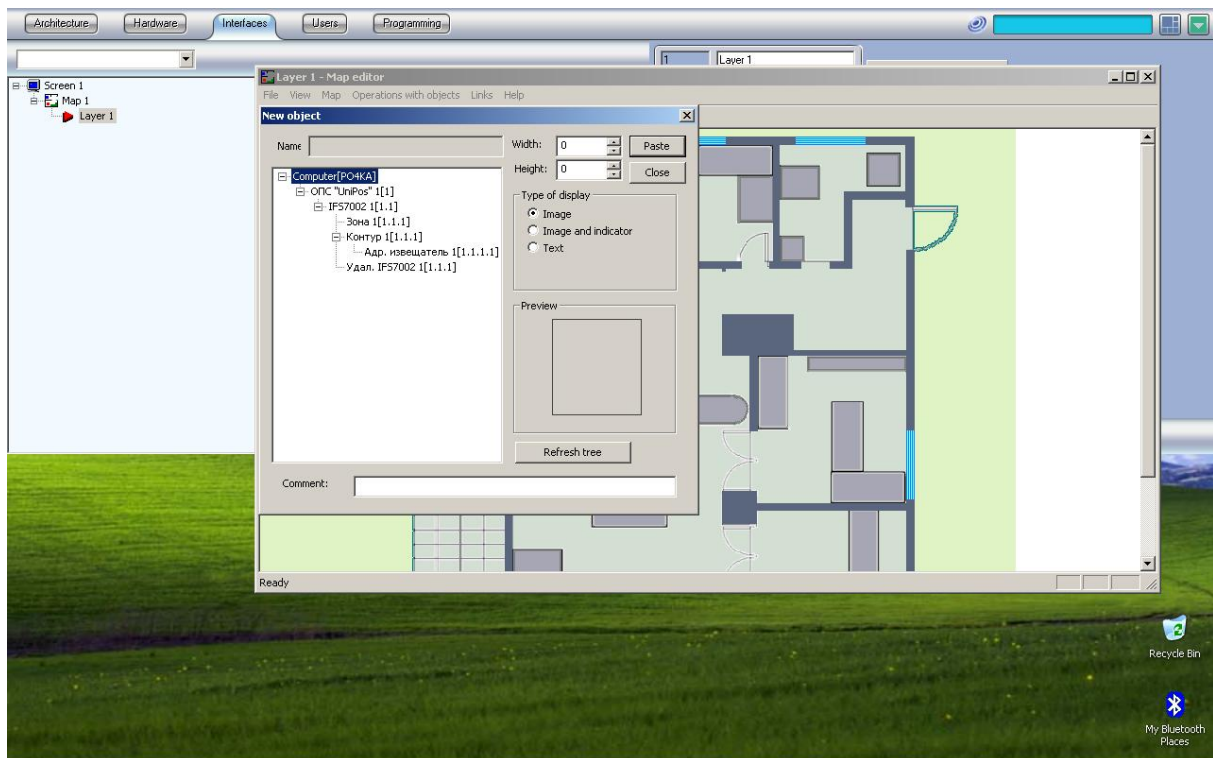


fig.24
Layer New Object Add

7) If you want to make a connection with other layers of the map this can be done from menu “Links → Add link with layers” (fig. 25). Then the window “Link with layer appears” (fig. 26).

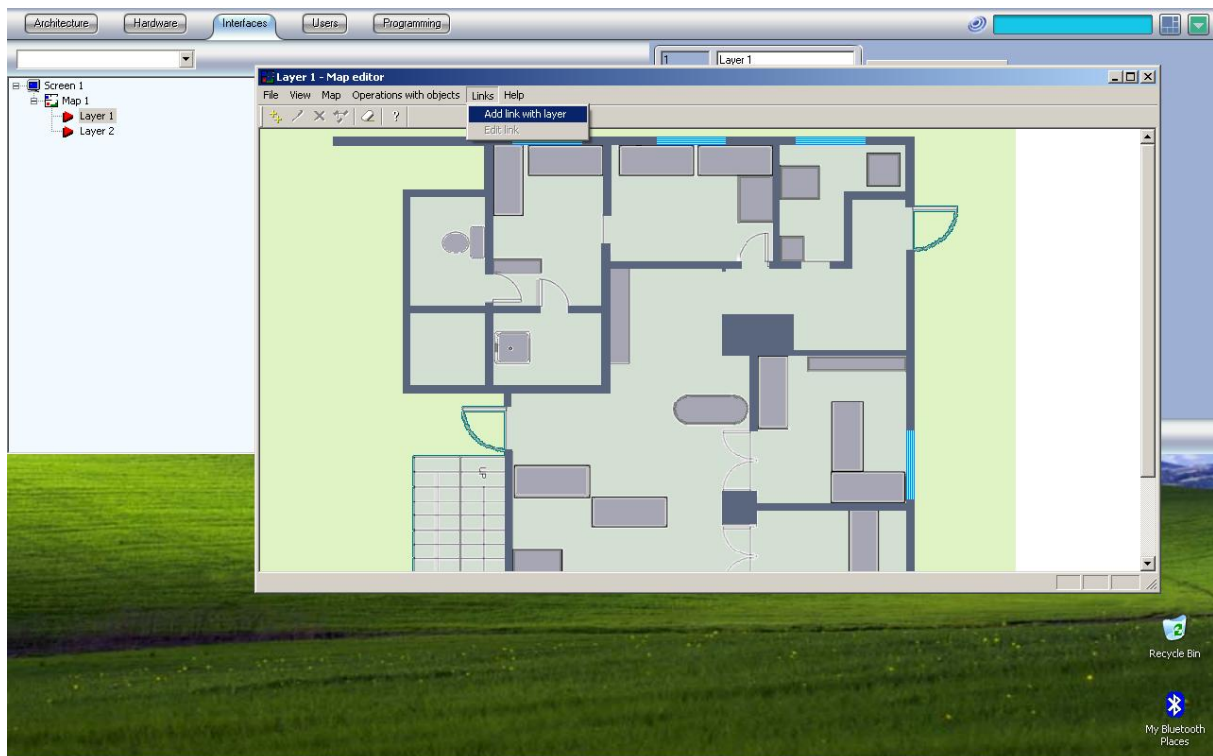


fig.25
Link with layer menu

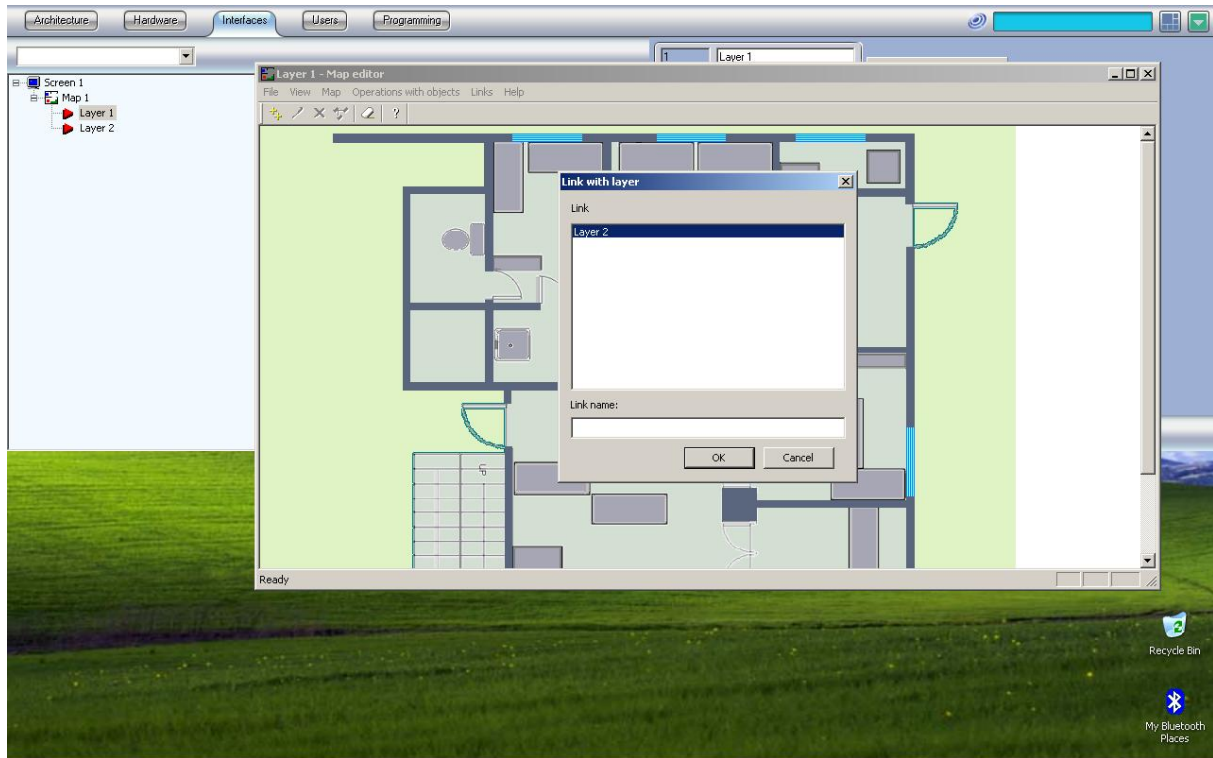


fig.26
Link with layer edit

8) It is possible to make a logical classification of the layers using folders (fig. 27). This is done with right click of the mouse on “Map 1” and submenu “create folder”. To move a layer to a folder the user should right click on the layer and use the “move to folder” submenu.

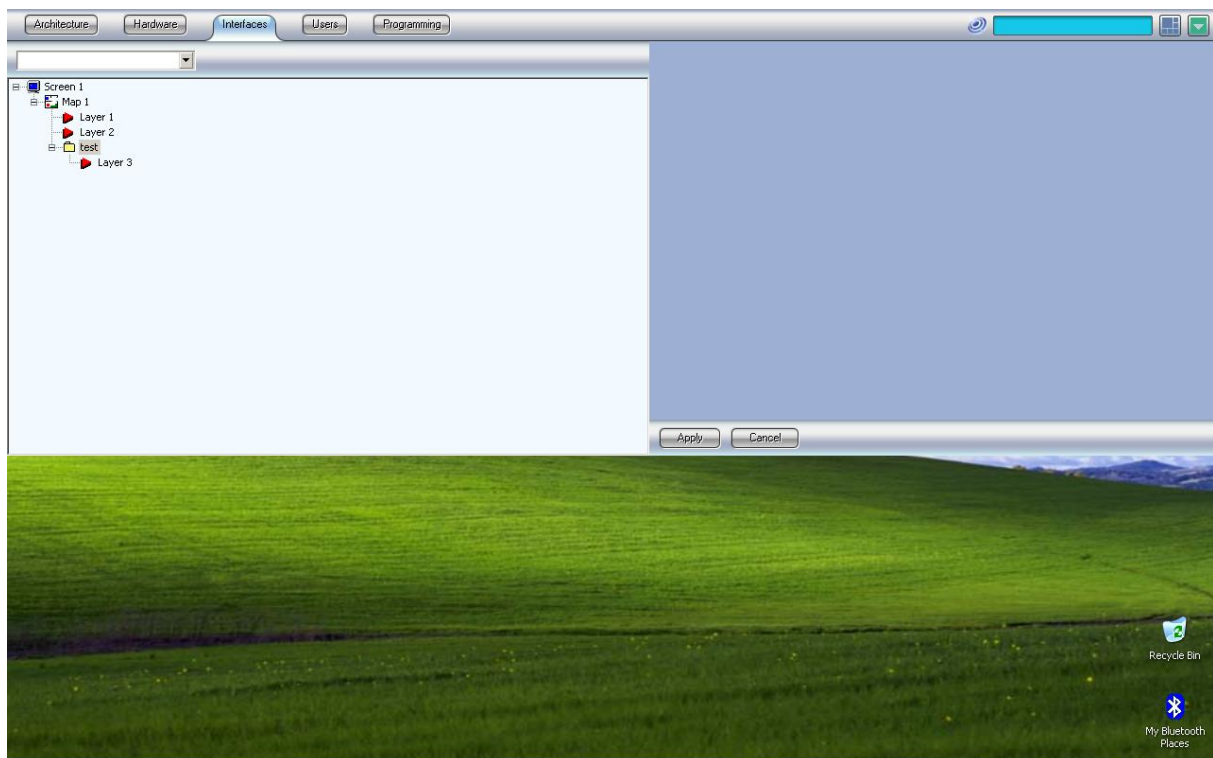


fig.27
Layers in folder

3.3. Example

Here is described an example configuration of a panel IFS7002: seven Address points in Loop 1 and Fire Detector Address 3 in Zone 1.

The purpose of the example is the user to get familiar with the graphical interface of the dispatch software.

Configuration:

As a result of the steps described in point 3.1 the user should have the result pictured on fig. 28.

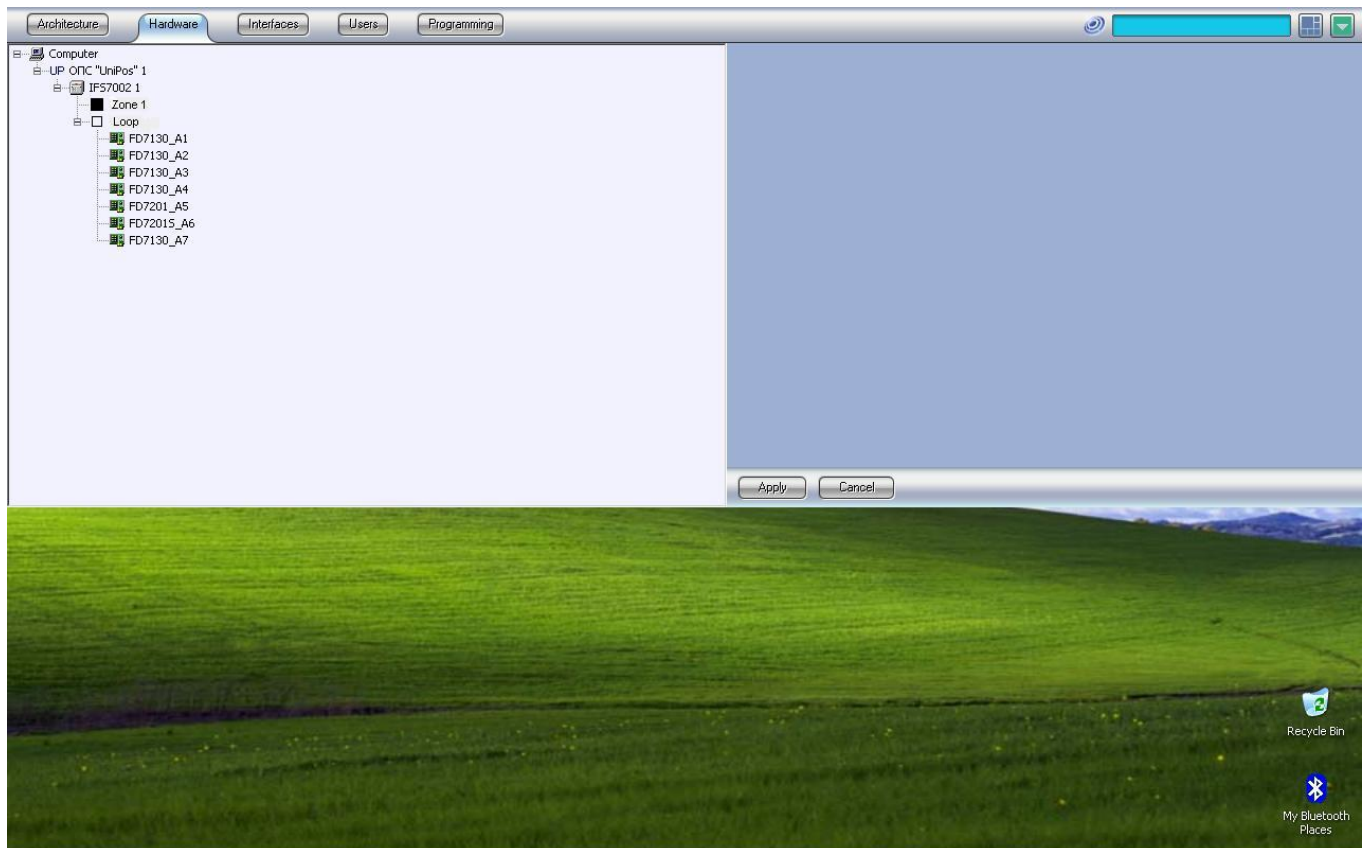


fig.28
Hardware Configuration

As a result of the steps described in point 3.2 the user should have the result pictured on fig. 29. The map is consisted of two layers (fig. 30 and fig. 31) with a links with layers. On layer 1 are placed the panel IFS7002, Zone 1 and Fire Detectors while on layer 2 we have placed an Adaptor FD7201S and one Detector FD7130.

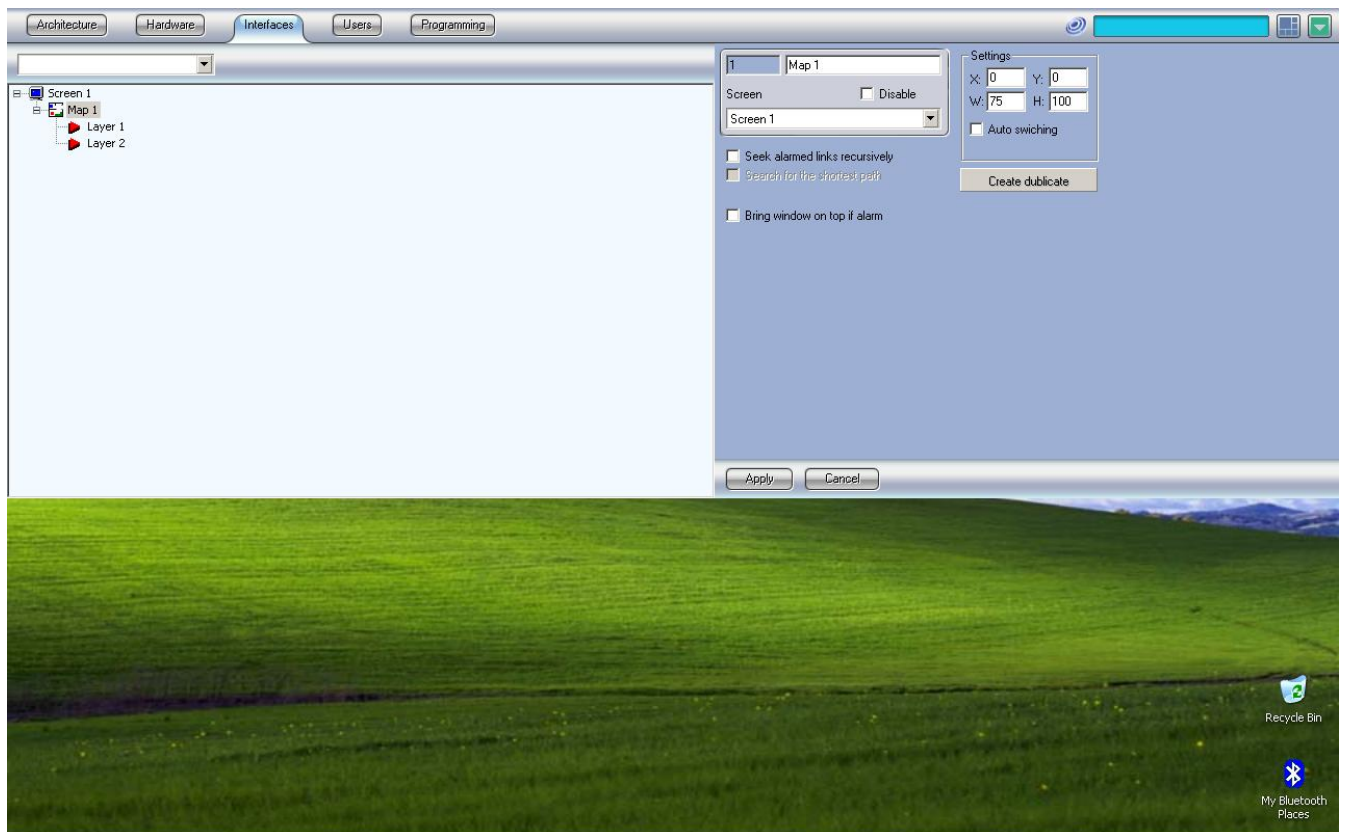


fig.29
Map Configuration

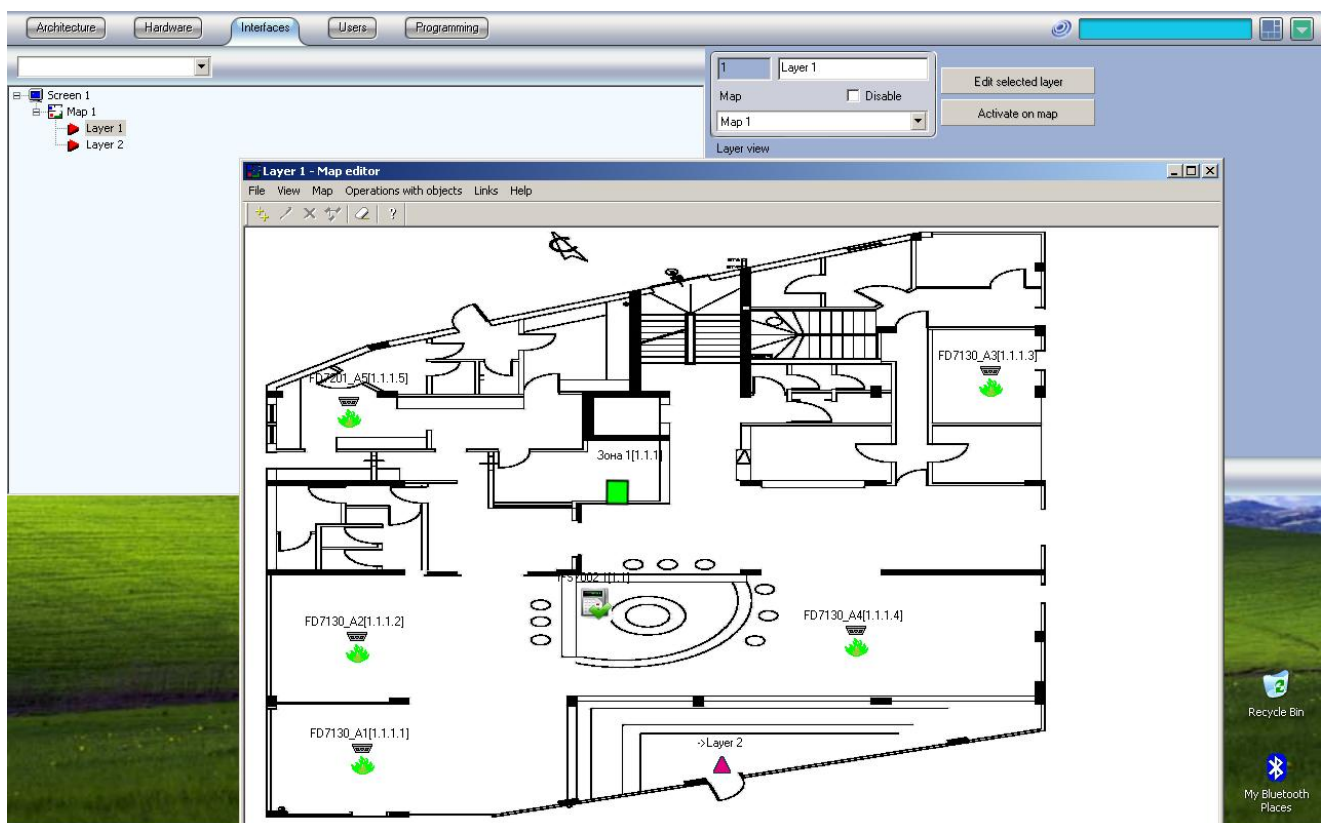


fig.30
Layer 1

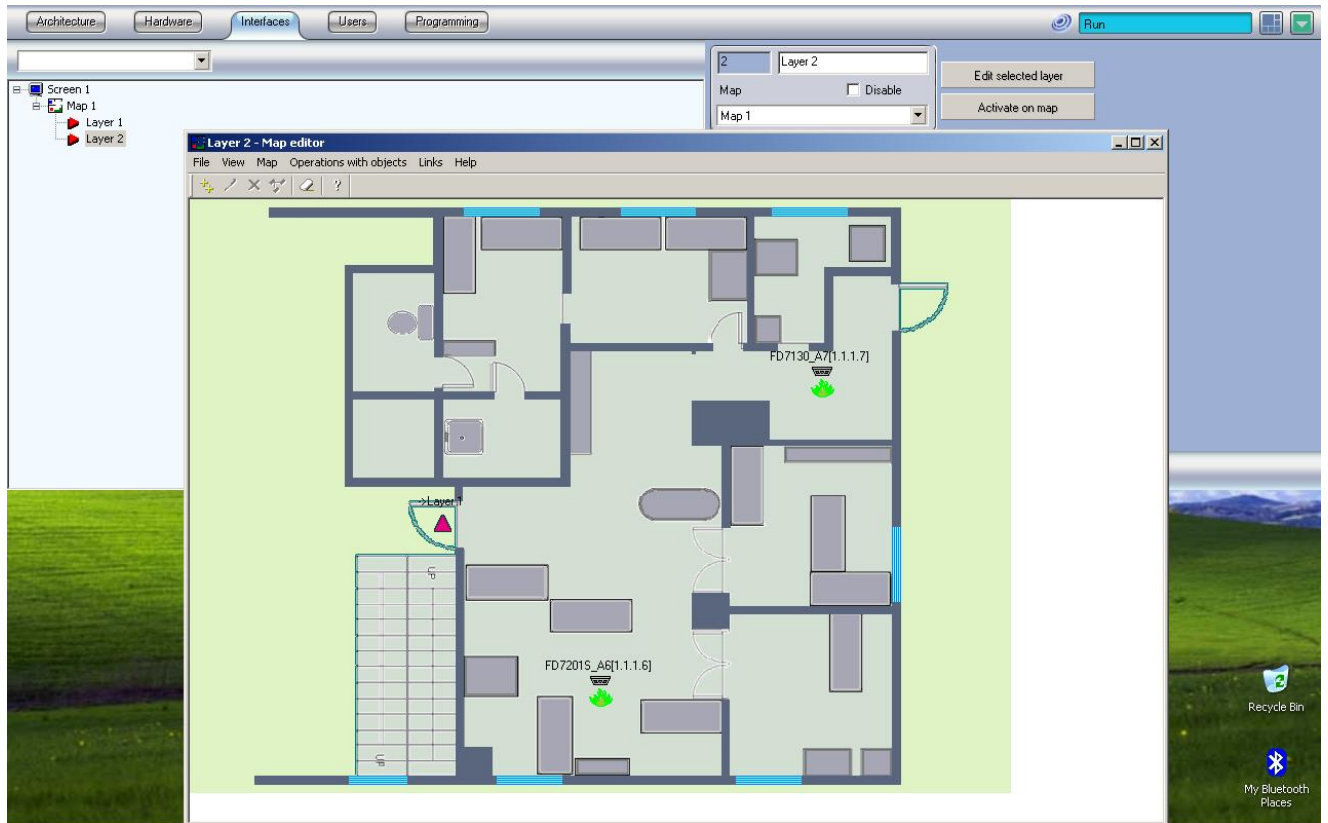


fig.31
Layer 2

Events:

On fig. 32 we have a fire detector address 4 in fire. The user can send command to the panel with right-click on the panel, zone or fire detector device and choose an action. On the top of the menu with the commands the user can read the status of the panel. Each zone and address device status and commands can be accessed also with right click on the point (fig. 38). When we have a fire on one layer the link to this layer is flashing (fig. 33).



fig.32
Fire in the hole



fig.33
Removed fire detector

When we have fault removed fire detector the indication on the layer is on fig. 34.

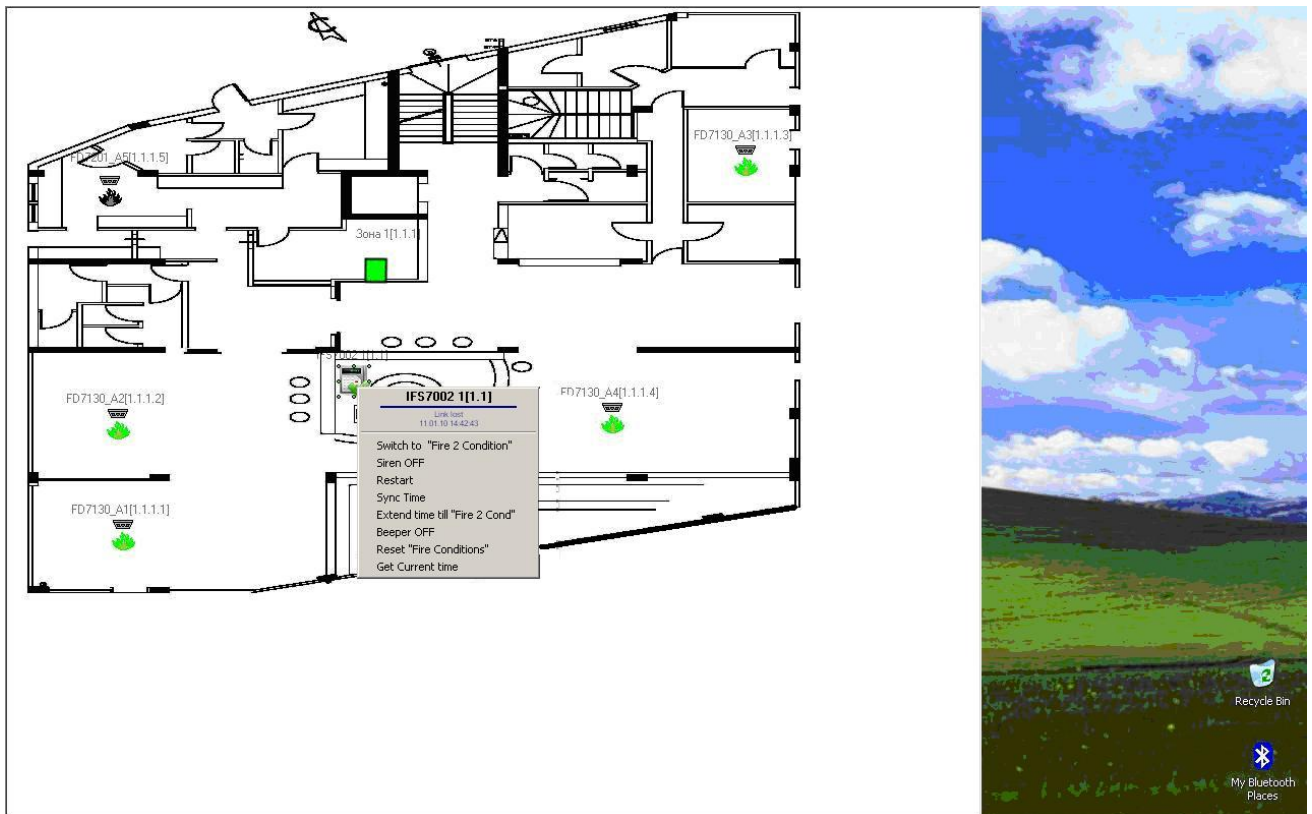


fig.34
Removed fire detector

When the fire is in a zone the indication is pictured on fig. 35 (the zone is in red).

When the fault removed fire detector is in a zone the indication is pictured on fig. 36(the zone is in yellow).

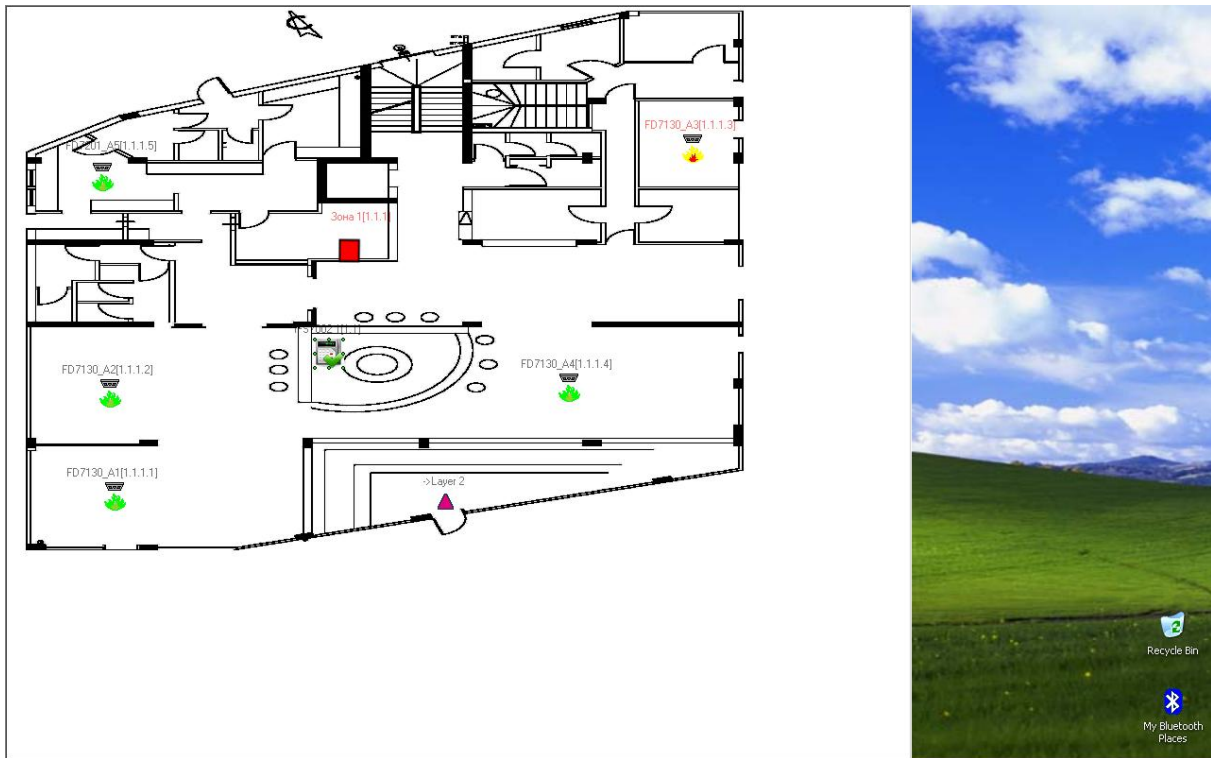


fig.35
Zone in fire

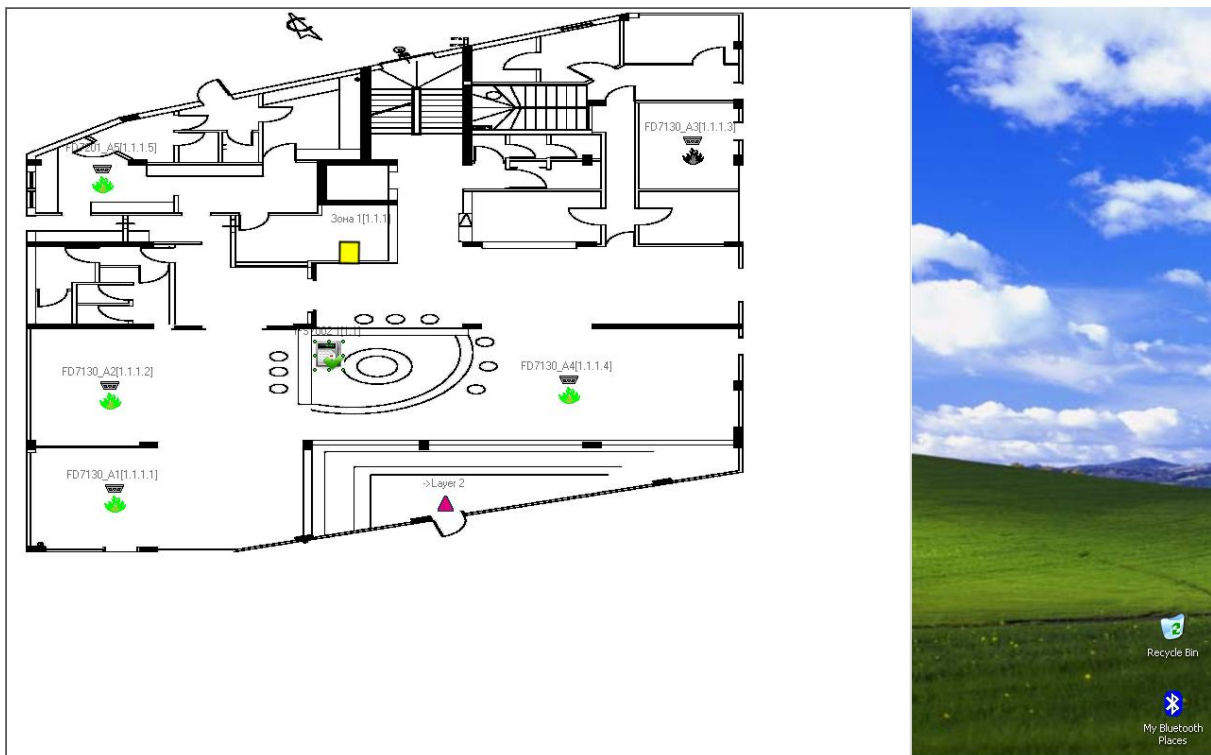


fig.36
Zone in fault

A fault in accumulator is pictured on fig. 37.

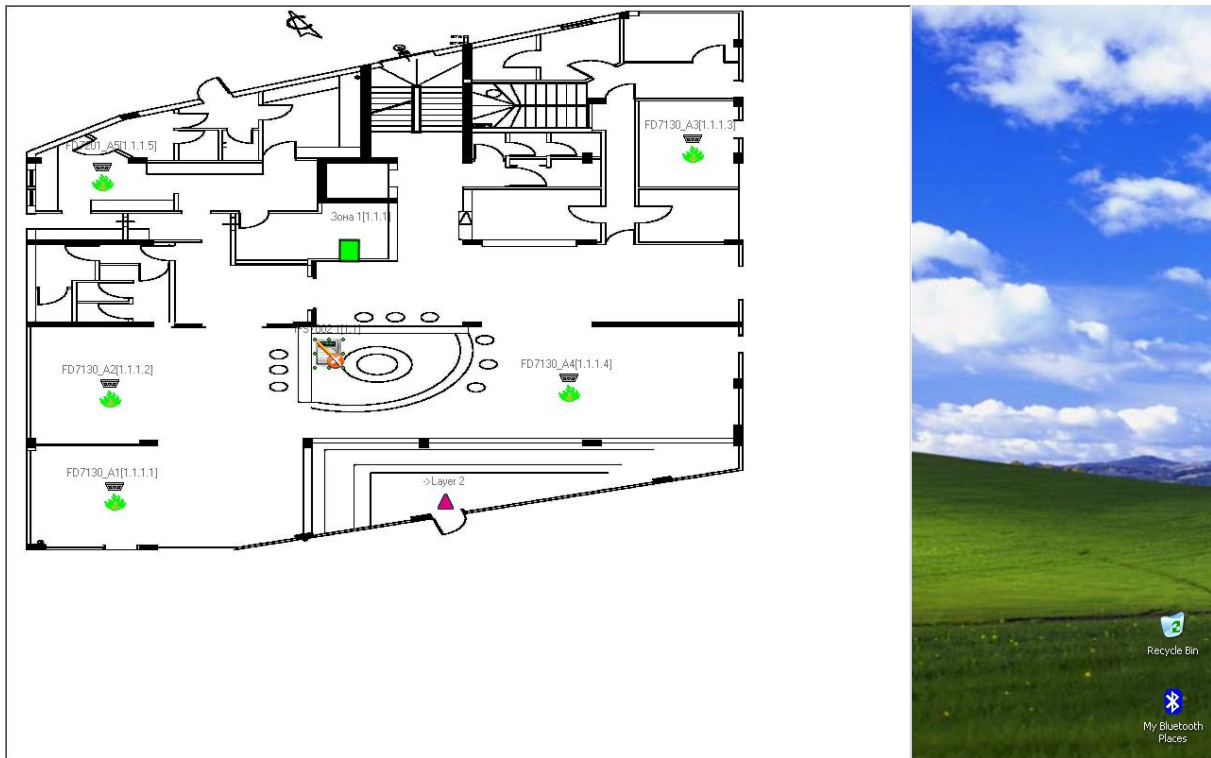


fig.37
Fault removed accumulator



fig.38
Address point status

4. Event triggering

Using the Intellect v.4.7.6 the user is able to:

4.1) Manage a real time archive of the events

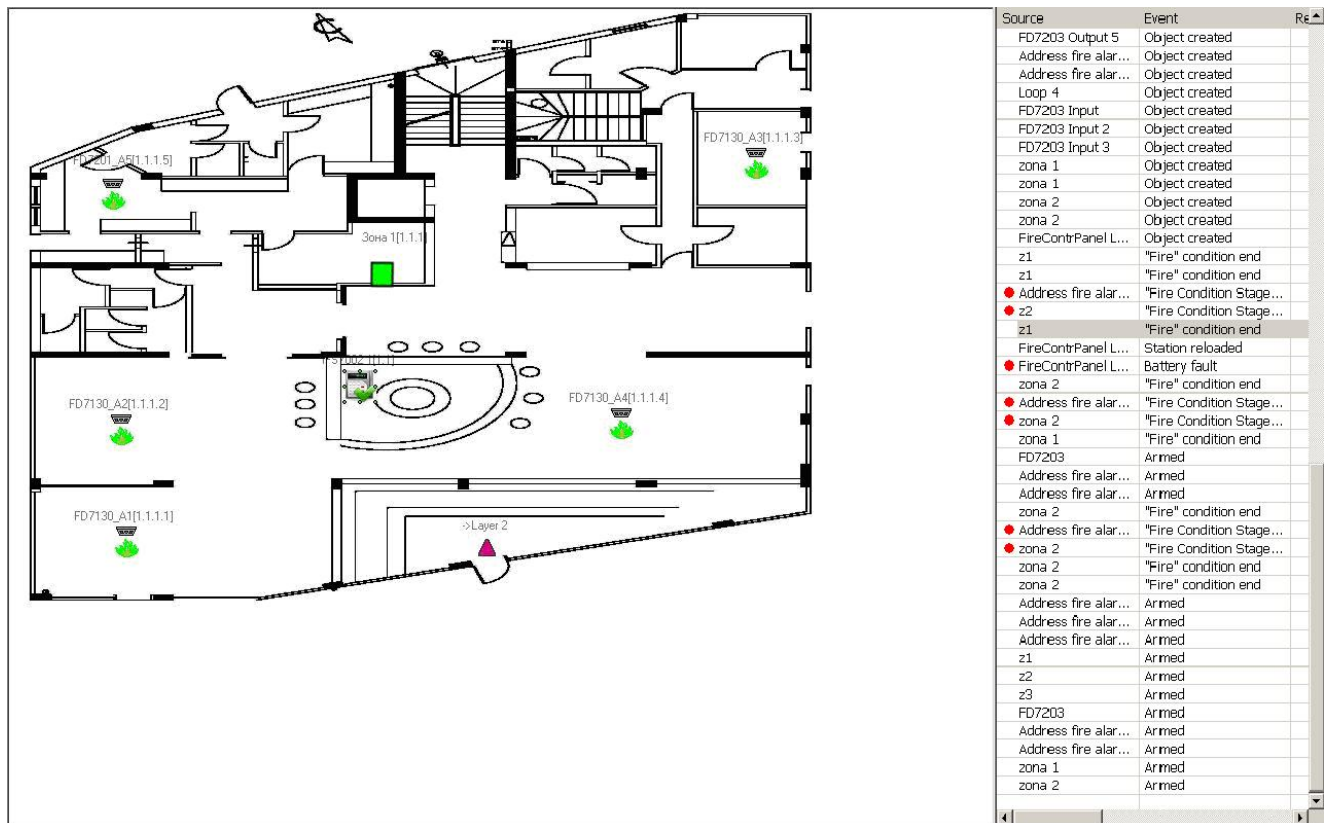


fig. 39
Real time archive

The real time archive can also be printed:

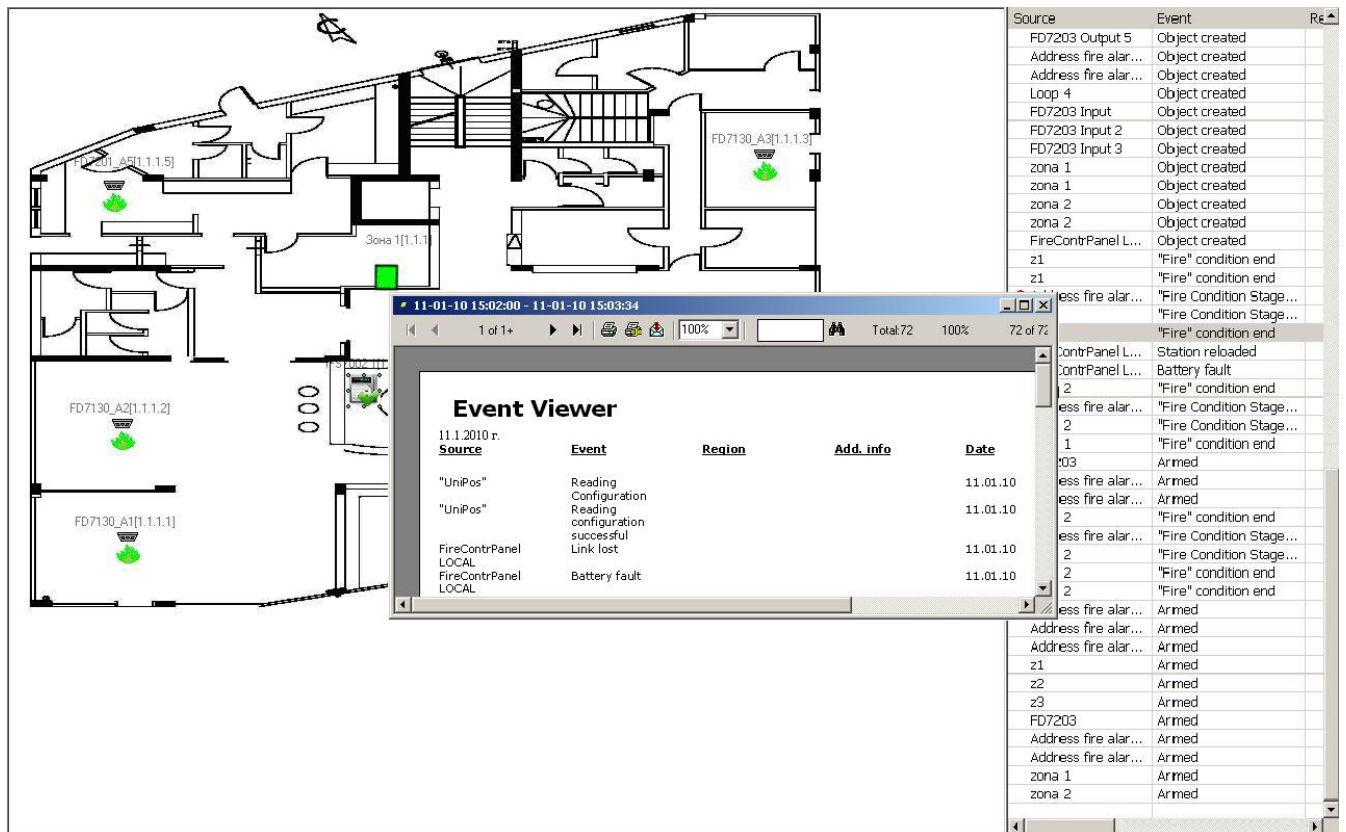


fig. 40

Print option of a real time archive

- 1) From menu "System settings → Interfaces → Event viewer" (fig.41) the "Event viewer" object is created;

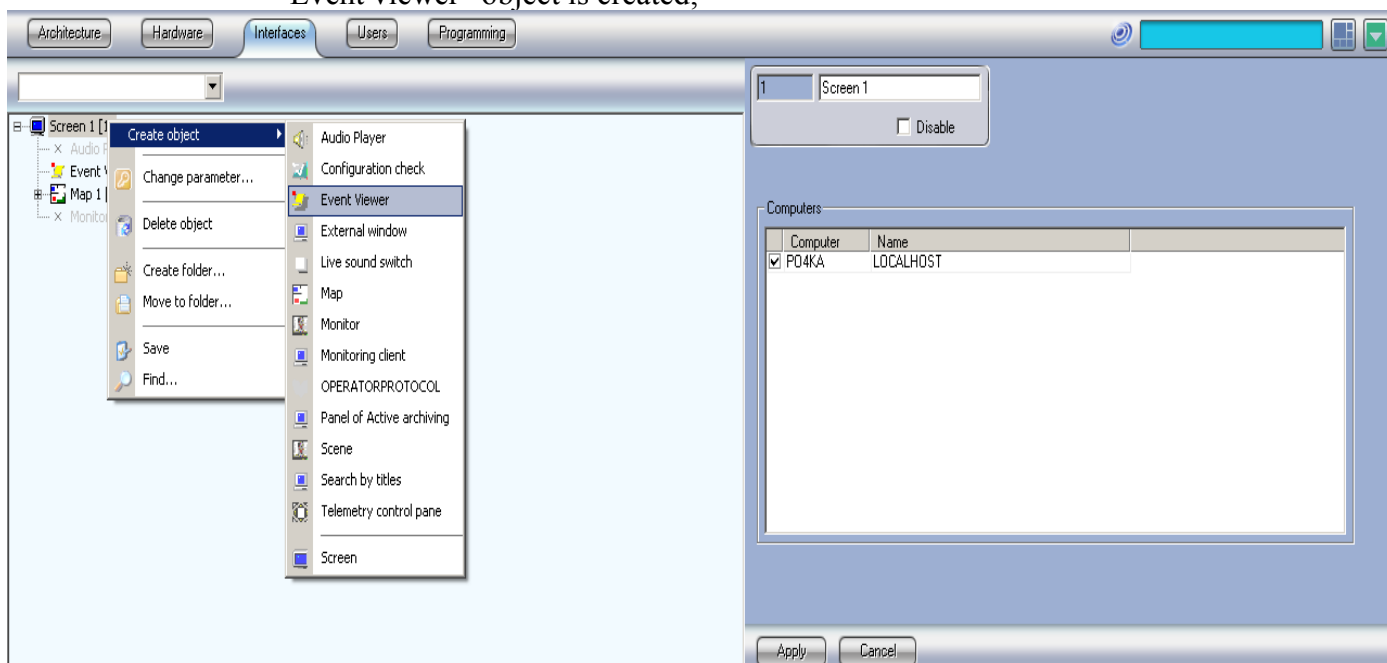


fig. 41

How to create the "Event viewer" object

- 2) From the settings area of the "Event viewer" object parameters you can locate the coordinates and size of the event viewer object on the display of your PC.

The “X:” and “Y:” coordinates set the start point of the event viewer on the display. For example:

- “X:0, Y:0” is the top left corner of your display;
- “X:100, Y:100” is the bottom right corner of your display;
- “X:0, Y:100” is the bottom left corner of your display;
- “X:100, Y:0” is the top right corner of your display;

The “W:” and “H:” parameters set the Width and Height of the event viewer on the display. For example:

- “X:0, Y:0, W:100, H:100” means that the event viewer will occupy all your display;
- “X:0, Y:0, W:50, H:100” means that the event viewer will occupy the left half of your display;
- “X:50, Y:0, W:50, H:100” means that the event viewer will occupy the right half of your display;
- “X: 0, Y:60, W:100, H:36” means that the event viewer will occupy the bottom part of your display, i.e. about the bottom 40% of your display;

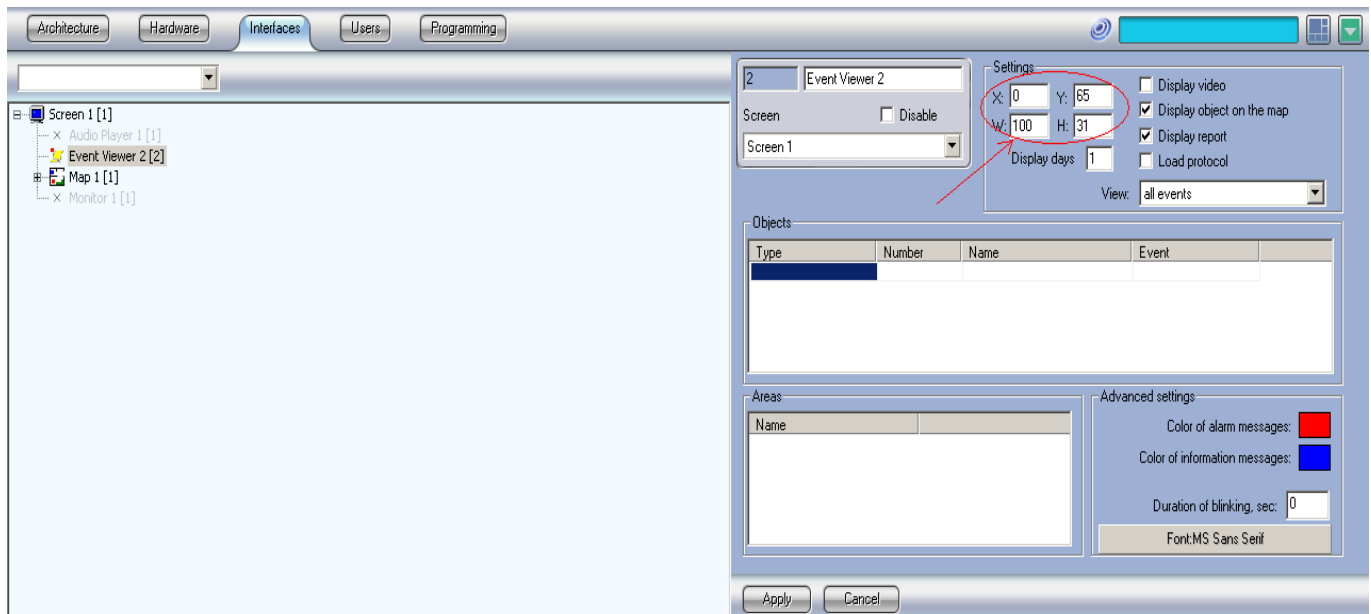


fig. 42

Size of the “Event viewer” object on the display

3) Additional parameters of the event viewer:

- “Display object on the map” – when this parameter is checked this means that you enable the feature to receive information on demand - where is located the object causing the fault or the fire condition. To receive this info you need to press with right-click on the event and to press “show on the map” (fig. 43);

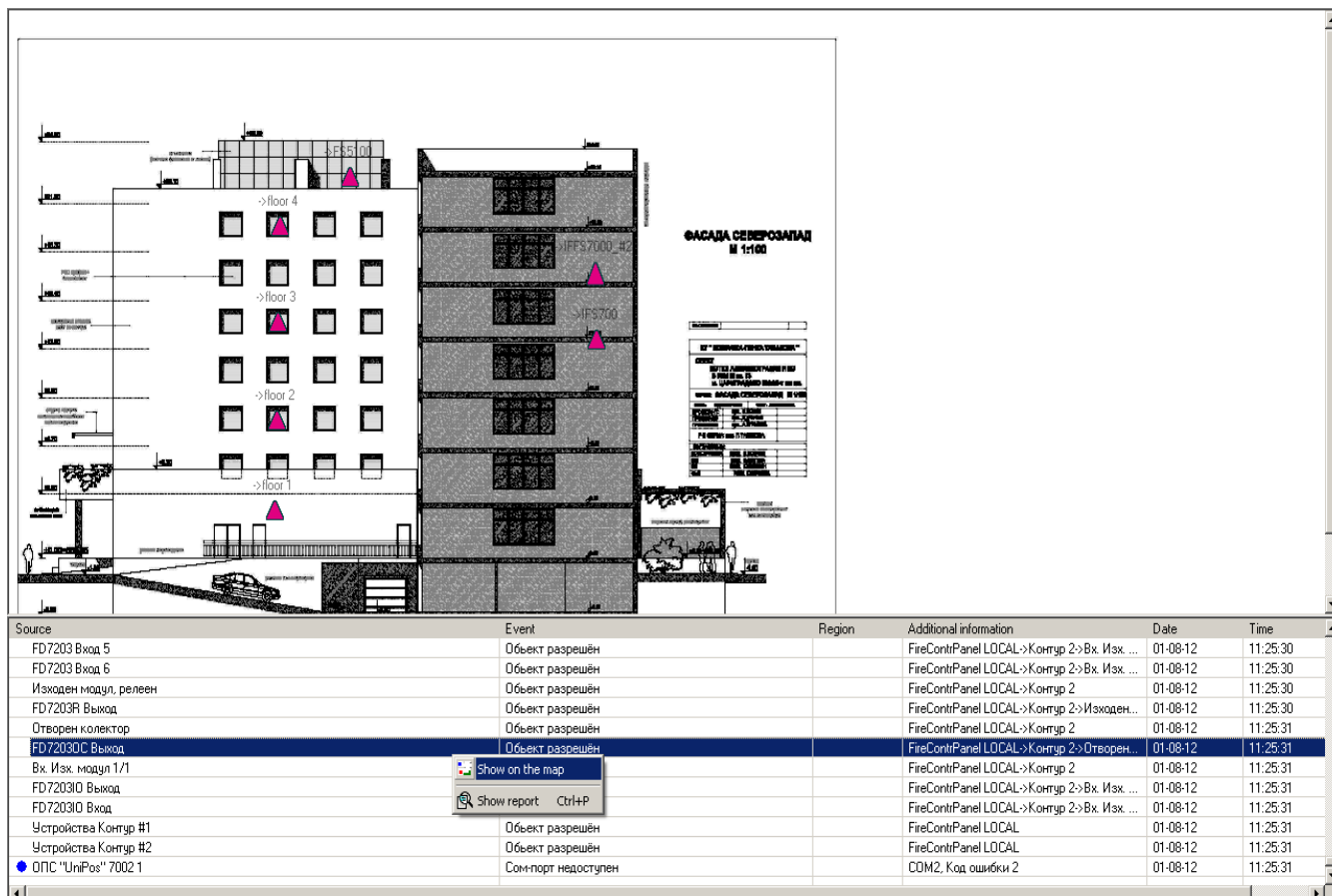


fig. 43

“Show object on the map” & “Show report” features

- “Display report” - when this parameter is checked this means that you enable the feature to be able to print the content of the event viewer with right-click on the event viewer and press “Show report” (fig. 43);
- “Display days” – this parameter sets how many days will be stored in the list of events of the event viewer;

4.2) An event to trigger action in the UniPOS module

The user is able to set event-cause effect scenarios.
There are several manners to program such scenarios:

- Using “Macros” program module – this is the most user-friendly manner (fig. 44);
- Use “Scripts” program module (fig.45);

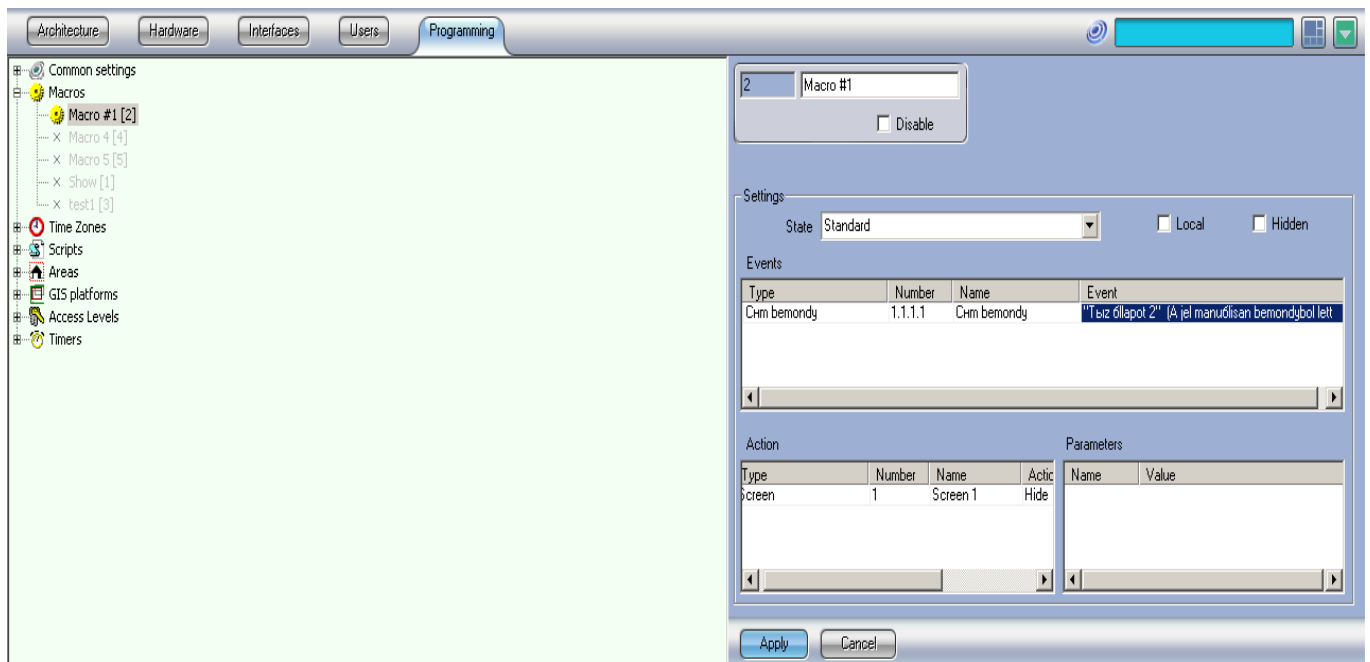


fig. 44
“Macros” features

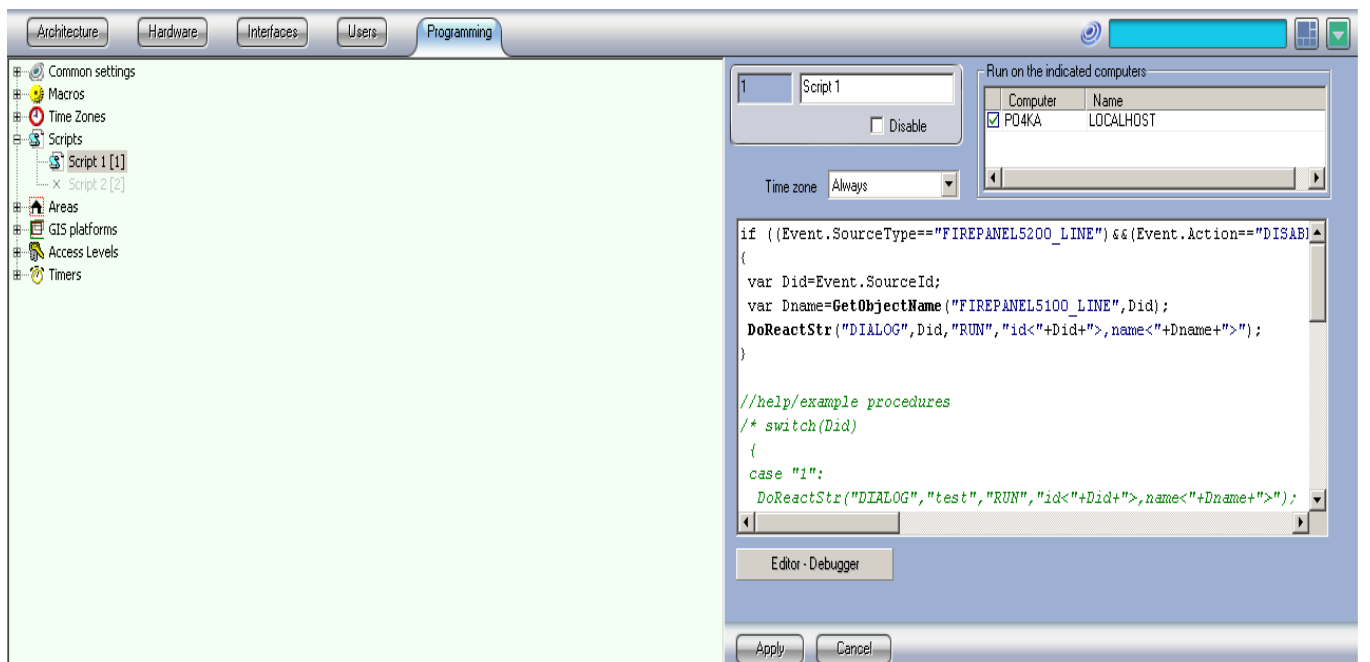


fig. 45
“Scripts” features

1) Example of a Macros functionality;
The task of this example will be to have a sound indication and pop-up of the map in case of a fire event;

- Create the “Audio player” object in the Interface tab (fig. 46);

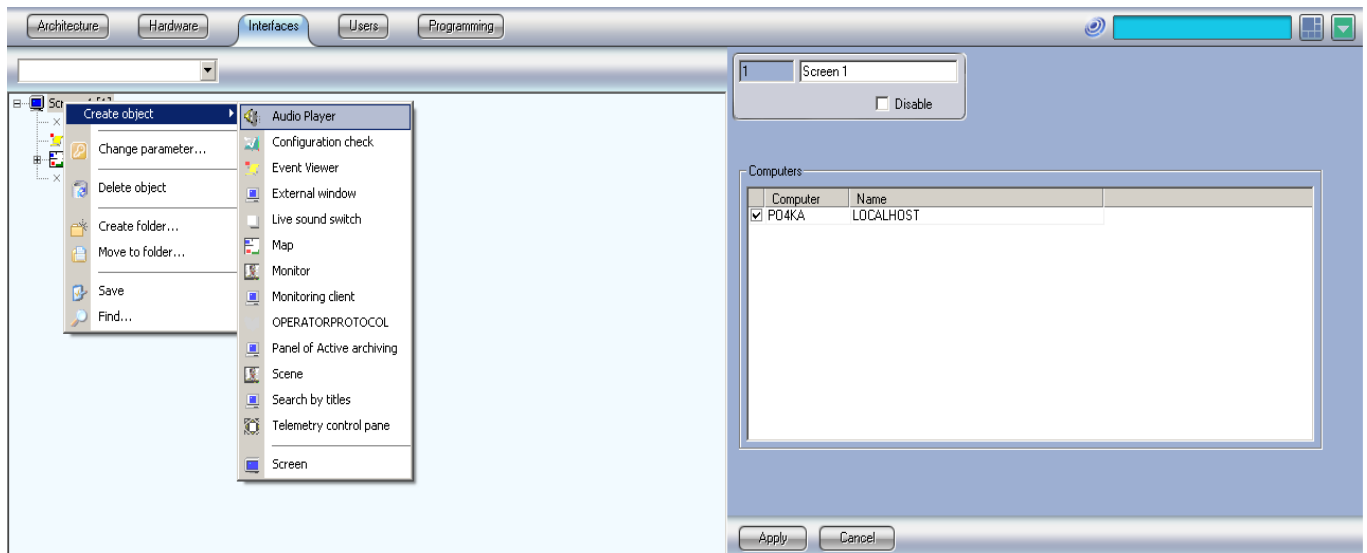


fig. 46
Create “Audio player” object

- Set the default audio card in the “device” parameter (fig. 47);

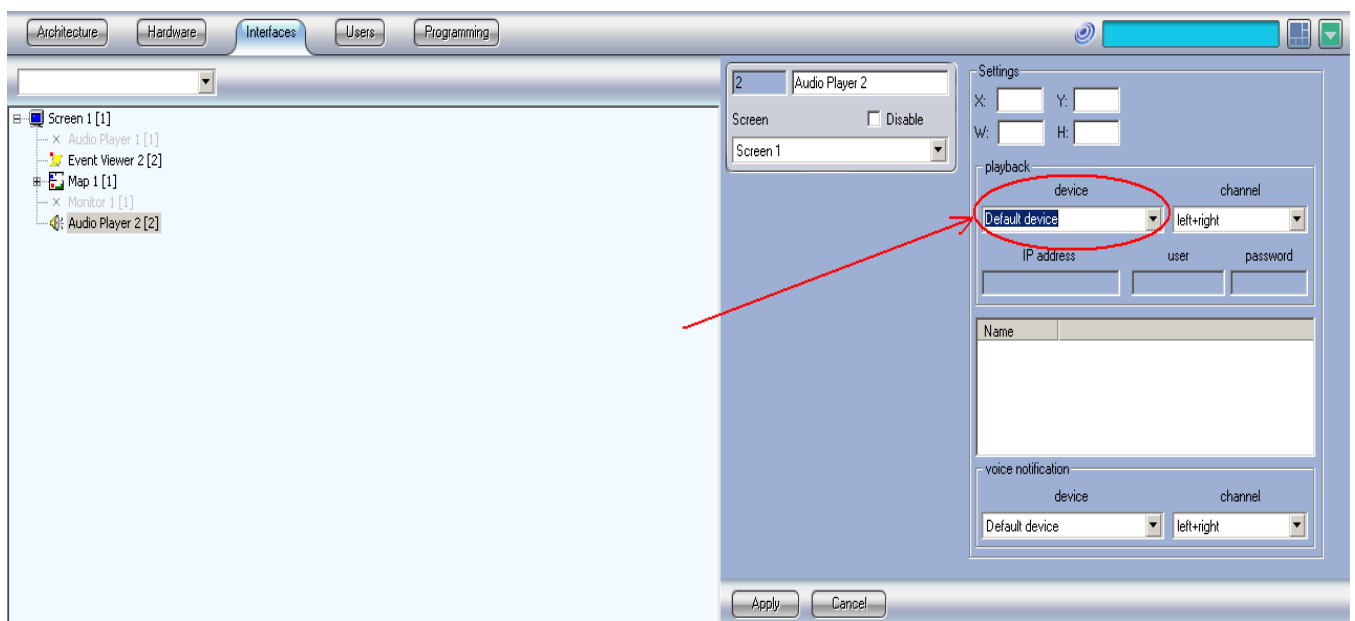


fig. 47
Set the “Audio player” object

- Create a Macro Object from the “System settings → Programming”. Set the “State” parameters to “Standard” value. In the event table the operator need to enter all the zones and for each zone it is necessary to set the “Fire” event (fig. 48).
!!! To create more rows in the table you need to press the Down arrow of the keyboard;

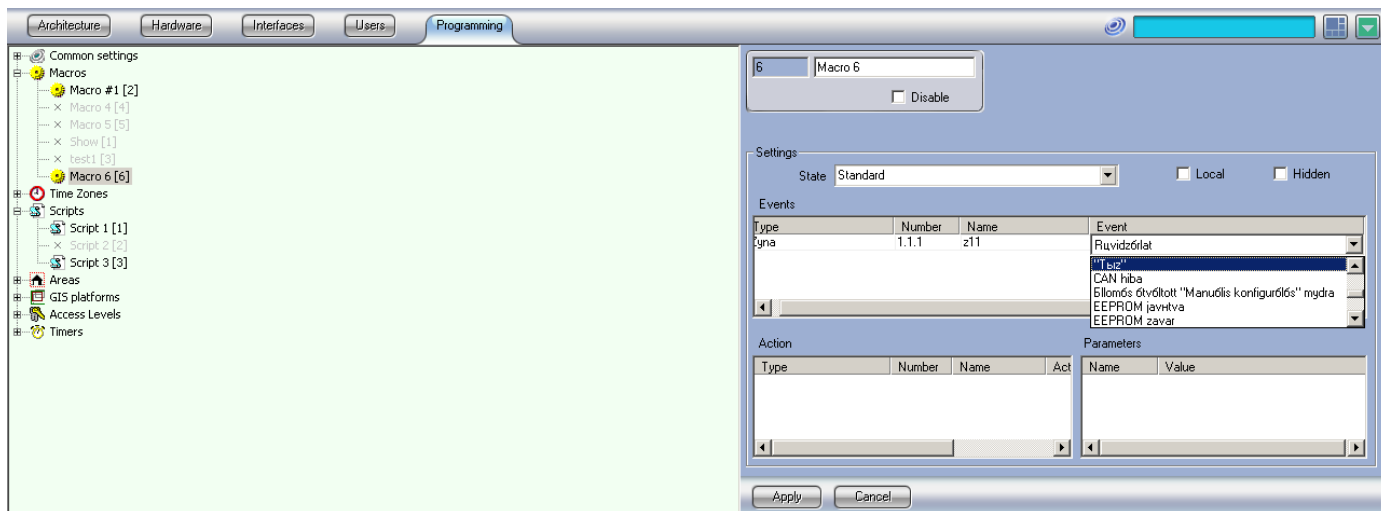
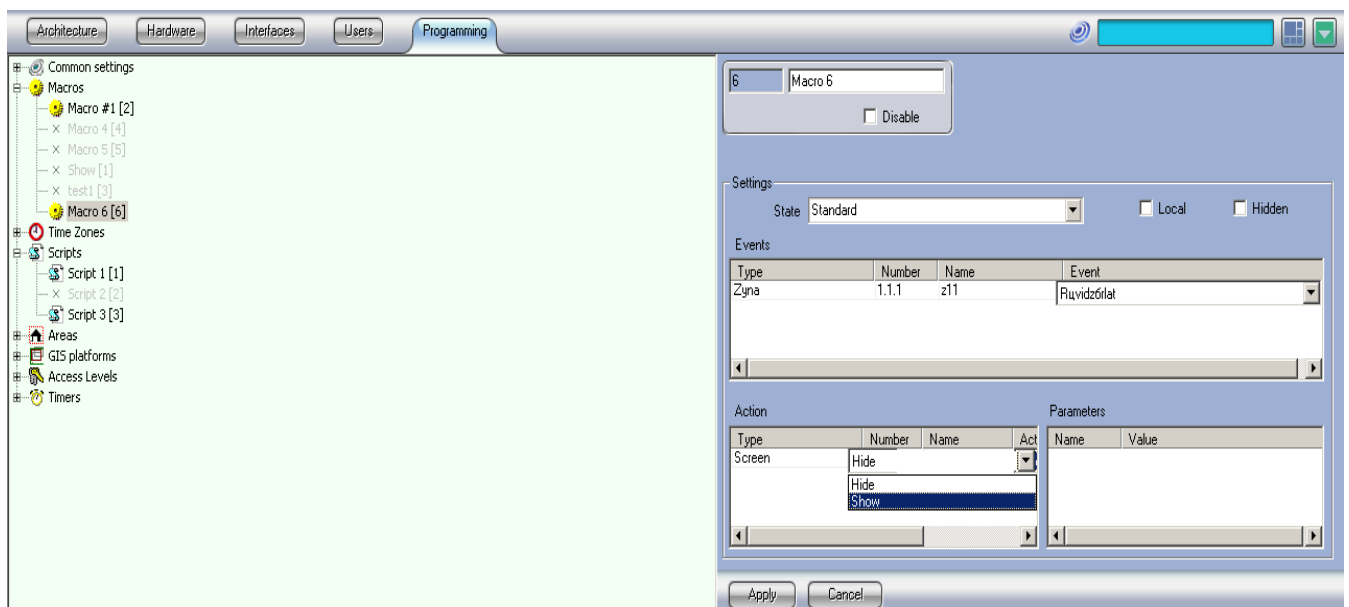


fig. 48
Set the “Macros” object

- In the “Action” table set the cause effect that should be triggered in case of the events in the event table. In our example we will program the “Screen” to “Show” and the “Audio player” to play a “.wav” file located in the “c:\” partition (the audio player recognizes only .wav format) (fig. 49);



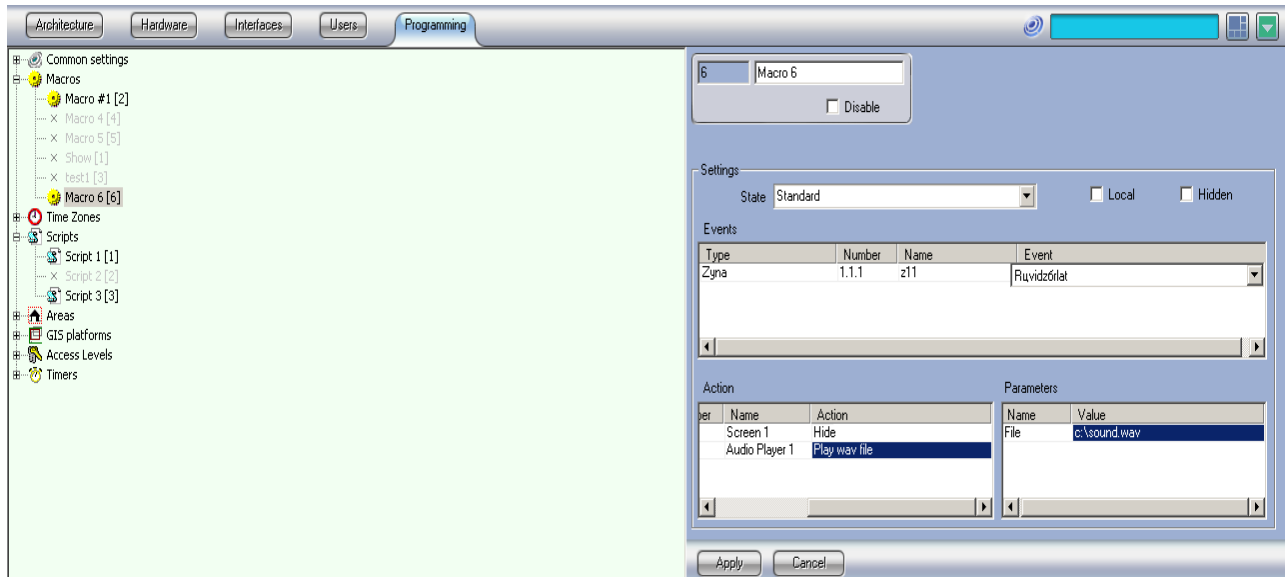


fig. 49
Set the “Macros” object

- If the requirement is the map object to automatically switch to the layer where the alarm event is present then it is necessary the “Autoswitch” parameter to be marked/check (fig. 50);

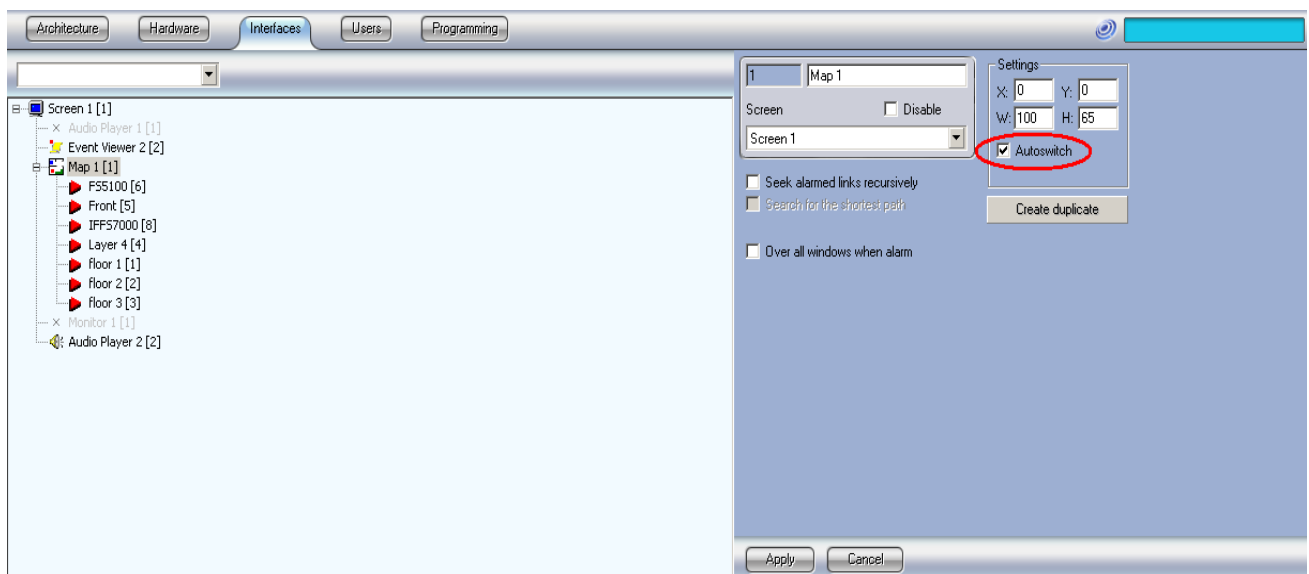


fig. 50
Set the “Map” object to locate
the alarm event on the layers

2) Example of a Script functionality;

The task in this example will be to have a pop-up message in case that there is fire event in the UniPOS module. For this purposes the following steps are required:

- Create a Script object from the “System settings → Program” tab (fig.51) – going to the Script module and press the “Apply” button;

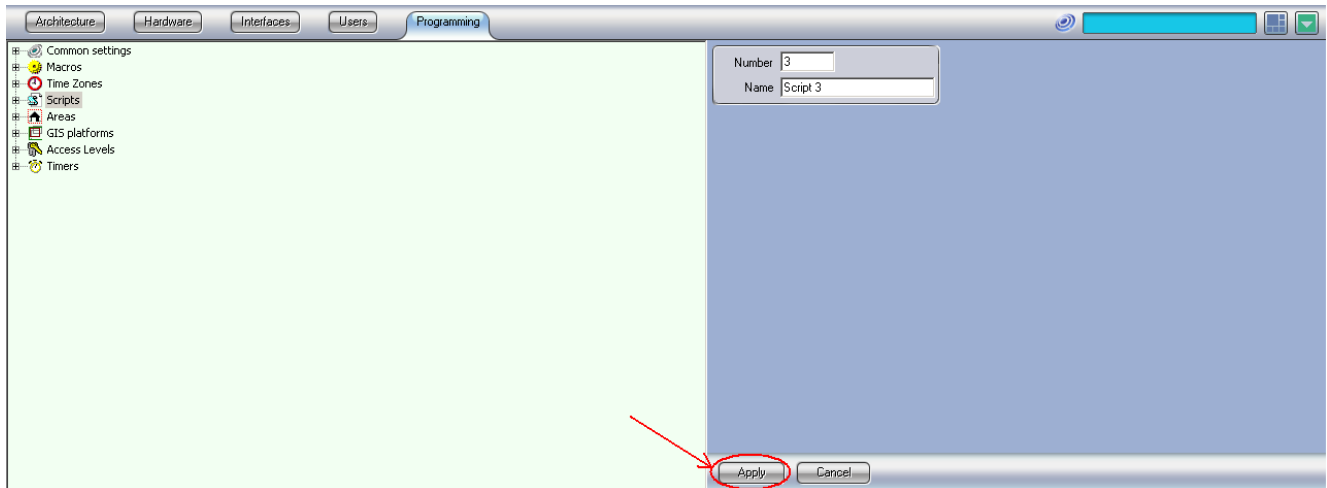


fig. 51
Create "Script" object

- Change the Scripts parameter "Time zone" change to "Always" (from the drop-down menu, fig. 52);

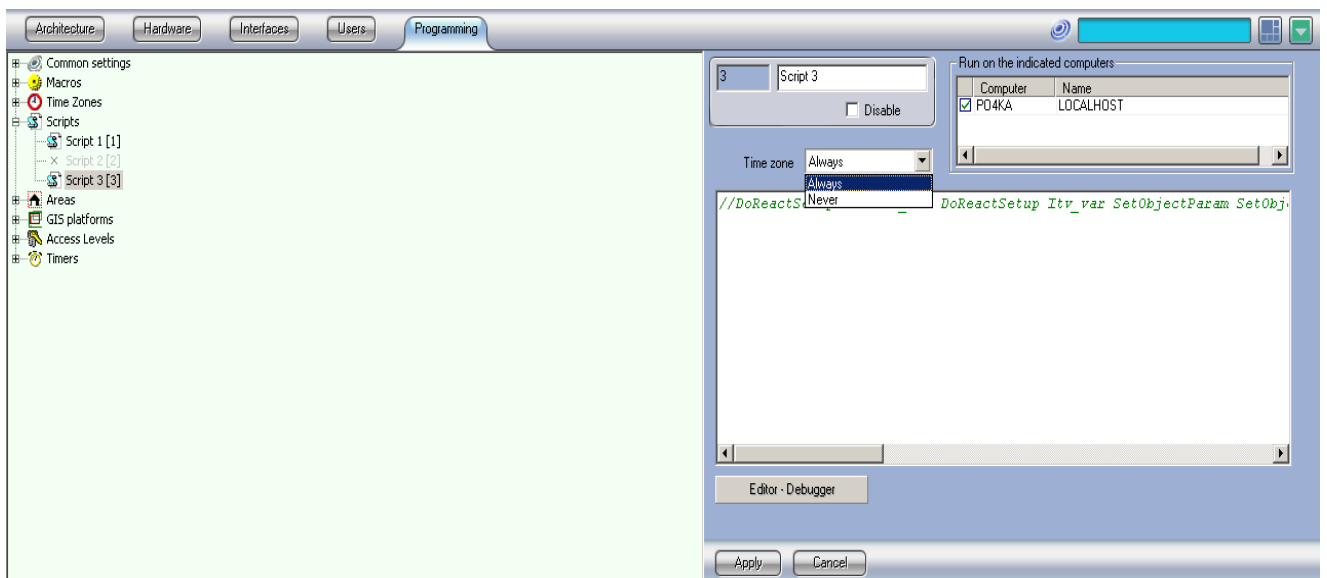


fig. 52
"Script" object

- Copy the script code above in the blank window of the script;

```

if
(Event.SourceType=="UNIPOS_FD71"&&(Event.Action=="FIRE1"||Event.Action=="FIRE2T"||Event.Action=="FIRE"))
{
var fdid=Event.SourceId;
var fdname=GetObjectName("UNIPOS_FD71",fdid);
DoReactStr("DIALOG","test","RUN","param<"+fdname+">");
}

```

- Press the "Apply" button – the final result is displayed on fig. 53;

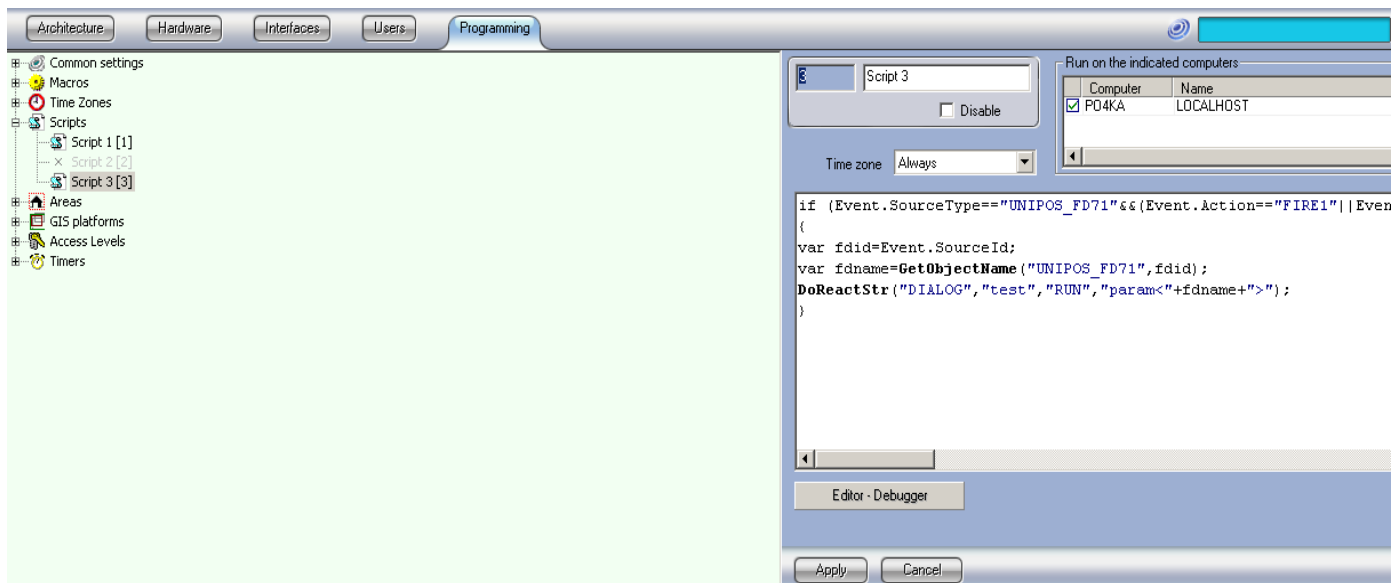
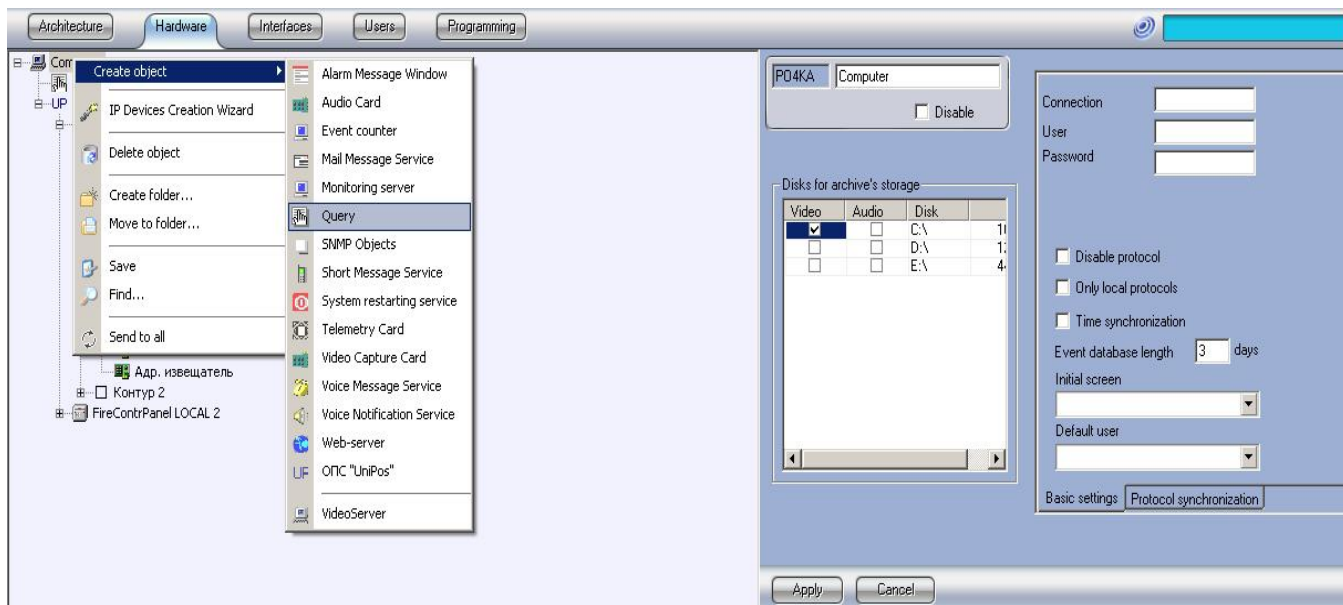
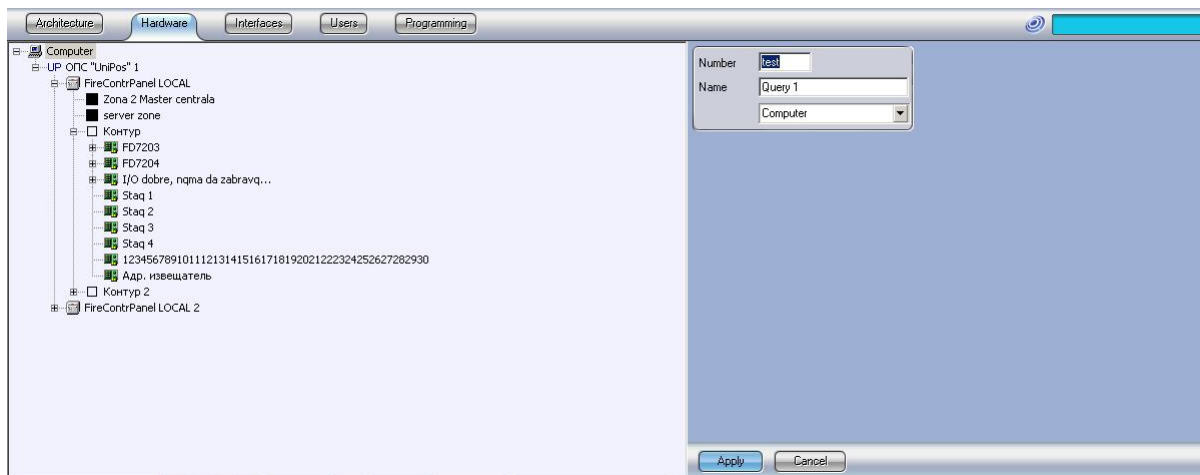


fig. 53
"Script" object

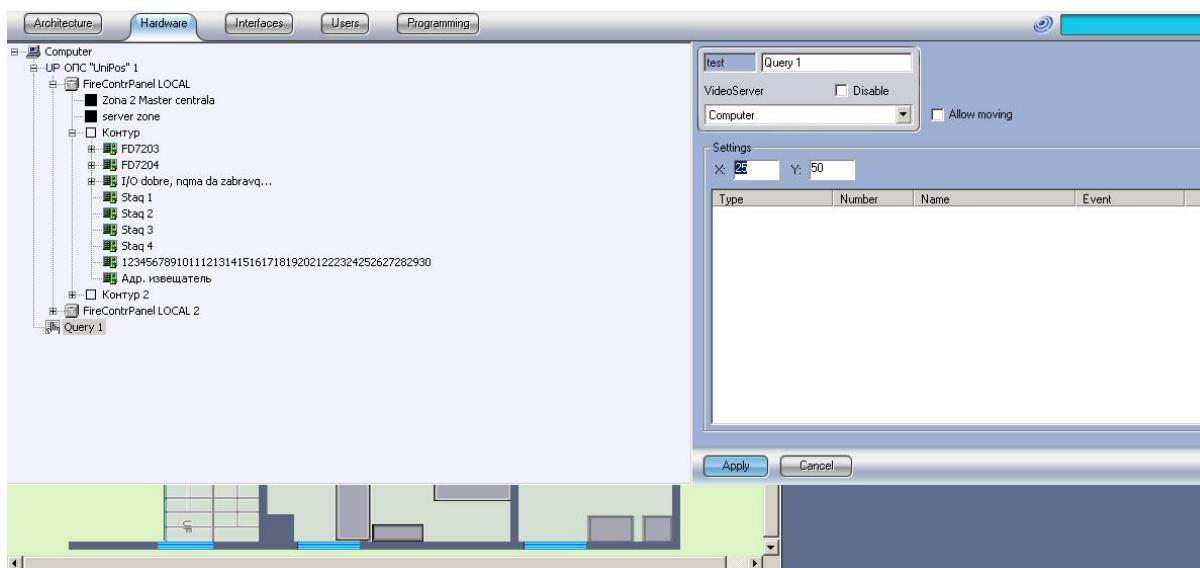
- Create Query object in the Hardware tab:
 - Point a Query object (fig. 54, step 1);
 - In the place "Number" write "test" (in small letters). Then press "Apply" button (fig. 54, step 2);
 - Point the "Query 1" object in the Hardware tab and enter coordinates X:25, Y:50 (fig. 54, step 3);
- Copy the "test.dlg" file in the folder C:\Program files\Intellect\program. This test.dlg file is designed using the "Arpedit.exe" Intellect tool. I can send it by e-mail to you if you require (*my e-mail is panayot@unipos-bg.net*);



Step 1



Step 2



Step 3

fig. 54
“Script” object

5. Back-up the configuration of the Intellect

The virtual objects created and programmed in the Intellect:

- “Hardware” tab /i.e. System settings → Hardware: UniPOS object, Video capture card, Query etc./;
 - “Interface” tab /i.e. System settings → Interface: Map layers, Audio player, Event viewer etc./;
 - “Users” tab /i.e. System settings → Users for limiting the user access to the resources of the Intellect/;
 - “Programming” tab /i.e. System settings → Programming: Macros, Scripts etc./;
- are saved in the SQL server database.

From the Intellect tool program “idb.exe” /Start → Intellect → Tools → idb.exe (Update DB)/ you are able to back-up the Intellect database used in the SQL Server using the “Create backup copy (MS SQL)” (fig. 55). You will be prompted to save the “.bak” file in an optional folder on your PC. (fig. 56);

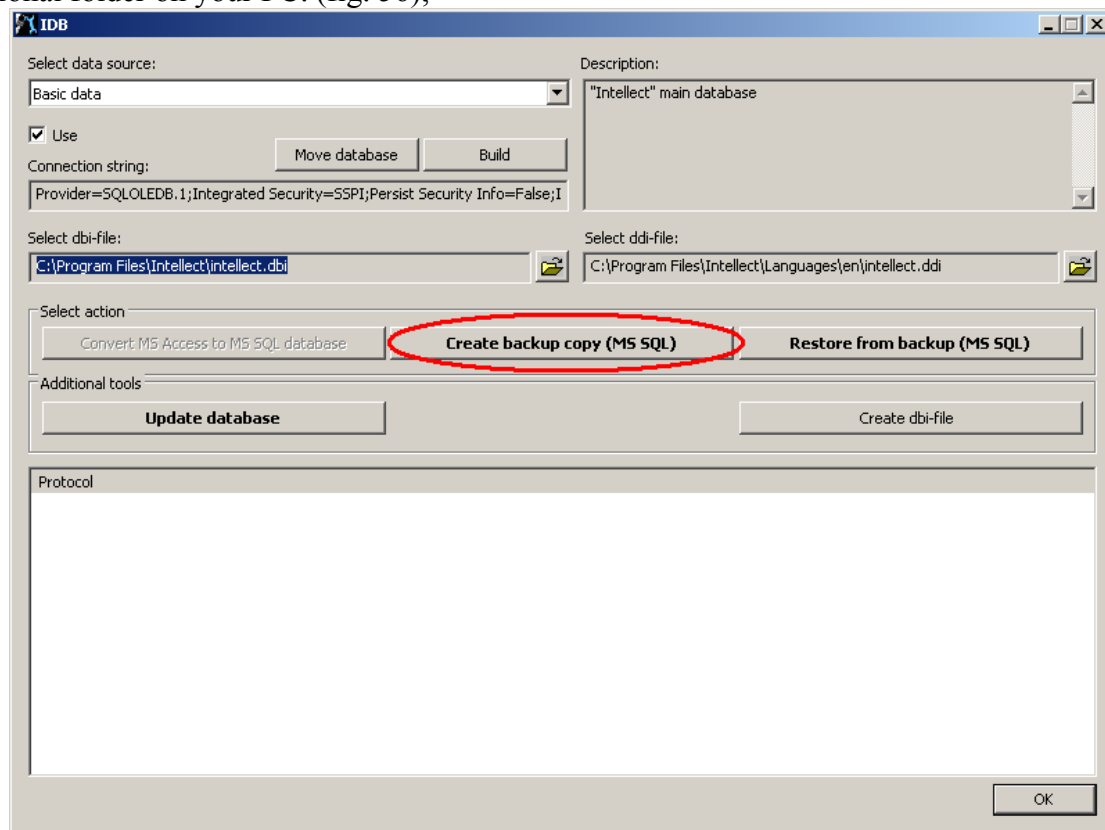


fig. 55
Create a back-up copy

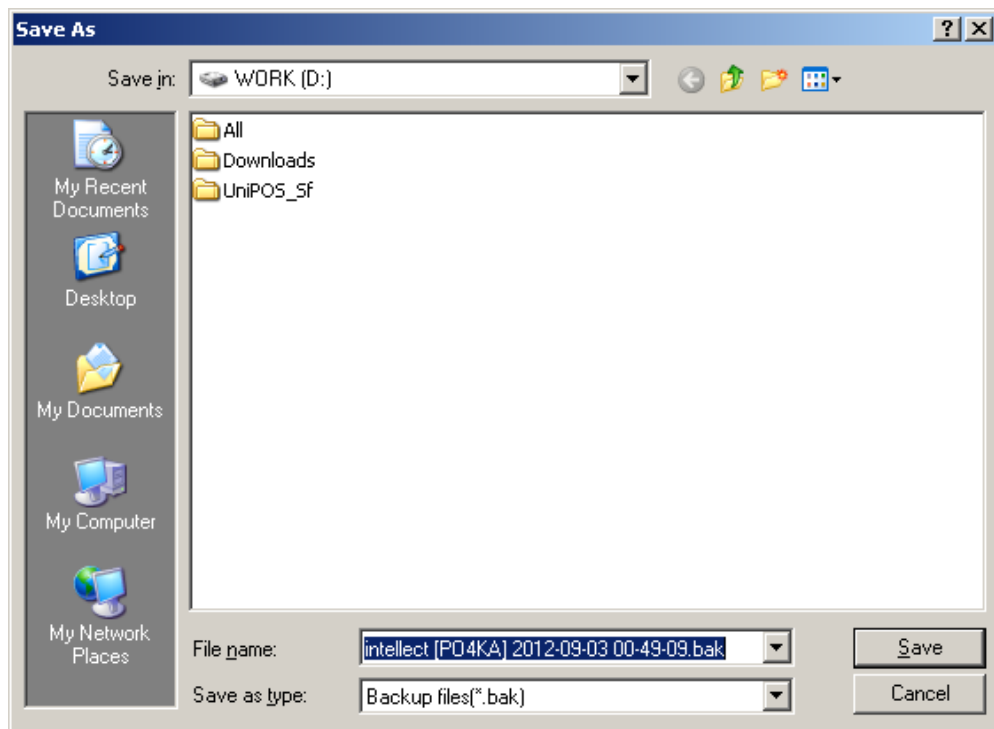


fig. 56
Save the .bak file on your PC

You can restore from the “.bak” file using the “Restore from backup (MS SQL)” button.

!!! The “.bak” file from one PC’s Intellect SQL server database can not be “copy → paste” to other PC Intellect SQL server.

6. User rights

6.1) Limit the Access to the System settings menu

In order to limit the access to the “System settings” menu without creating user rights you can set an access password from menu “System settings → Programming tab → Common settings → Administrator’s password” button (fig. 57). The pop-up window for edit/set/confirm the password appears (fig.57).

In case that you set a password limit to the “System settings” for the first time you have to leave the “Existing password” field blank.

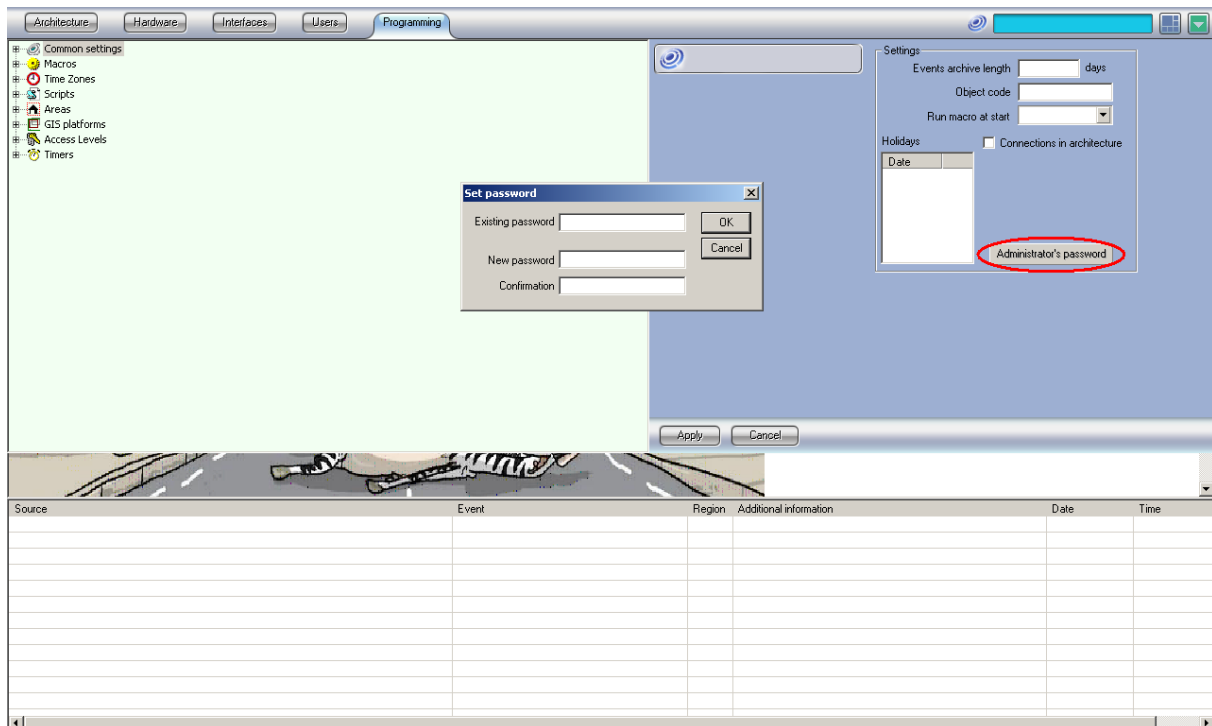


fig. 57
Set a “System settings” menu password

After you set the “New password” and “Confirmation” fields press OK. After you close the “System settings” menu and need to access it again then you will be prompted for a password in the top right corner (fig.58). After you enter the correct password then you will have access to the System settings menu.

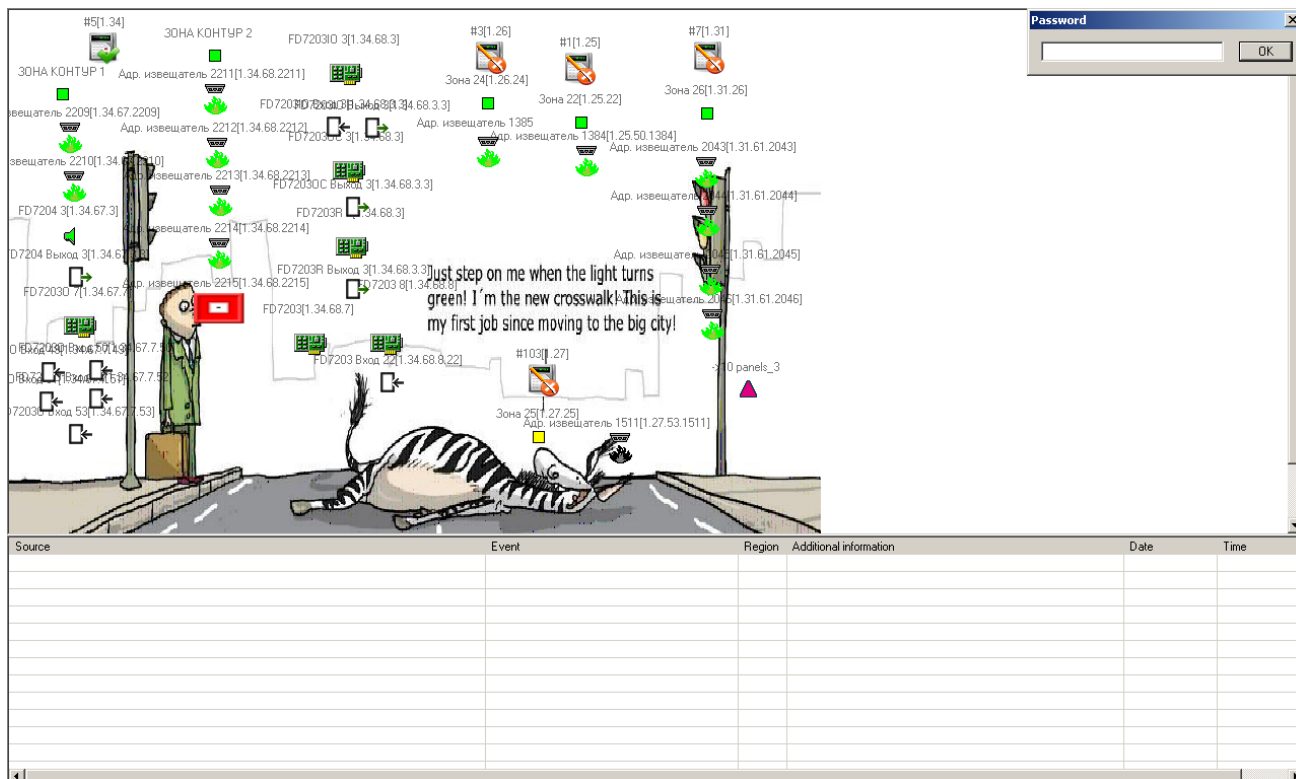


fig. 58
Set a “System settings” menu password

6.2) Create user rights

!!! You must register the administrator password (described in point 6.1) prior to registering the operators and granting the rights to them (described in point 6.2). This is a mandatory system requirement, otherwise it is possible to program a deadlock – limit the access to System settings so that you can never access them /and therefore need to reinstall the Intellect with a new DB/.

The steps to create different users and program their rights are as follow:

- Create a “Department” object (this is logical object, fig.59);

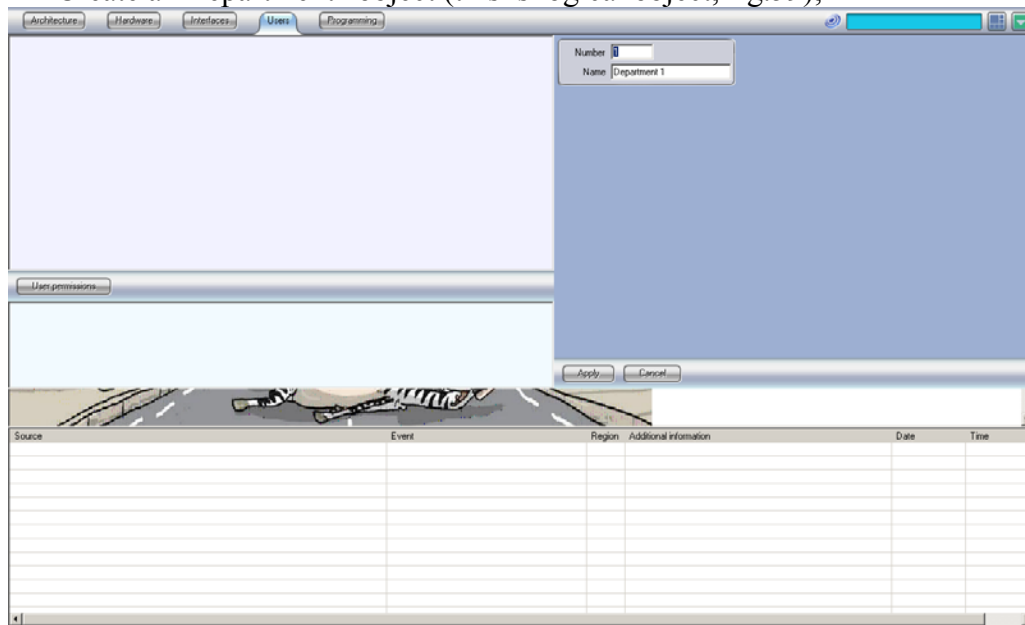


fig. 59
Set a “Department” object

- Create the “Users” object - from the “Department” object (fig. 60) you are able to set a “User” objects. You need to create as many user objects in your configuration as many users you need for your PC;

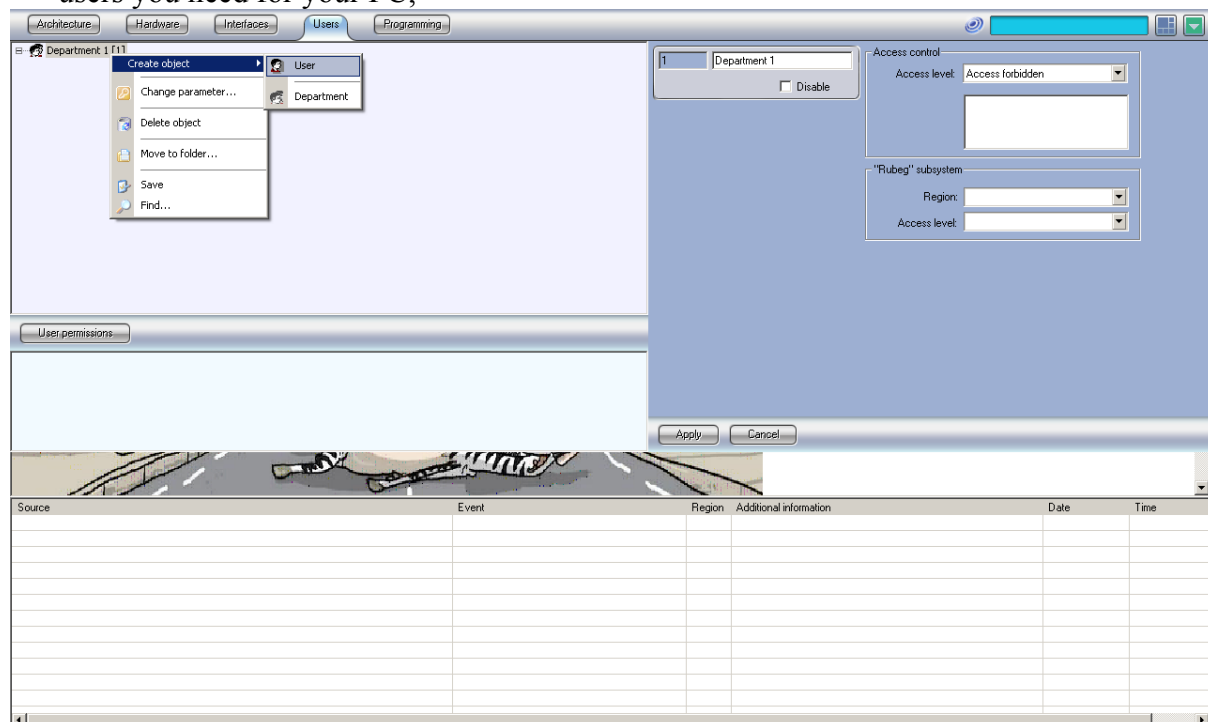


fig. 60
Set a “User” object

- Program “User rights” profiles – from the “User permissions” button you create different User permission profiles (fig.61);

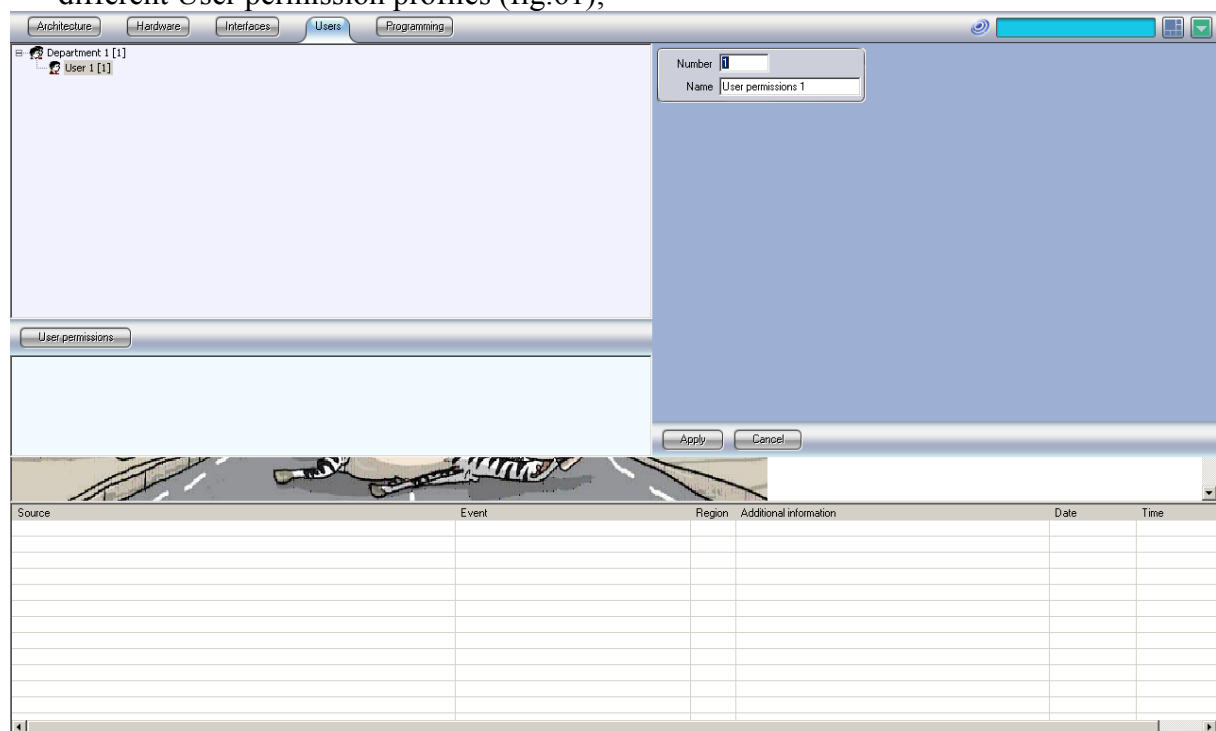


fig. 61
Set a “User rights” object

For each User permission profile you can program which tabs of the System settings menu will be accessible (fig.62). If the checkbox is marked then this tab will be accessible for the profile;

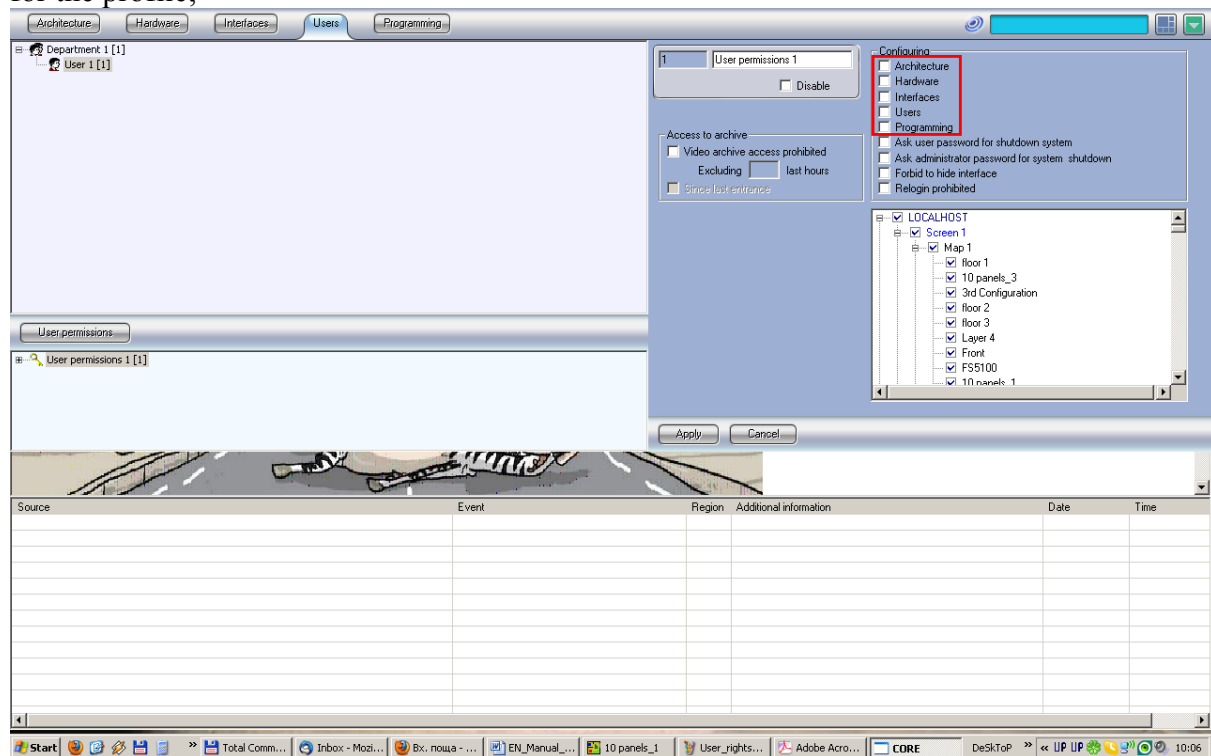


fig. 62

“User rights” access to the System settings Tabs

For each User permission profile you can program the shut down option (fig.63) – shut down is forbidden, allowed with a password /user or administrative/. If no of the options is marked then the user is able to log off without limits.

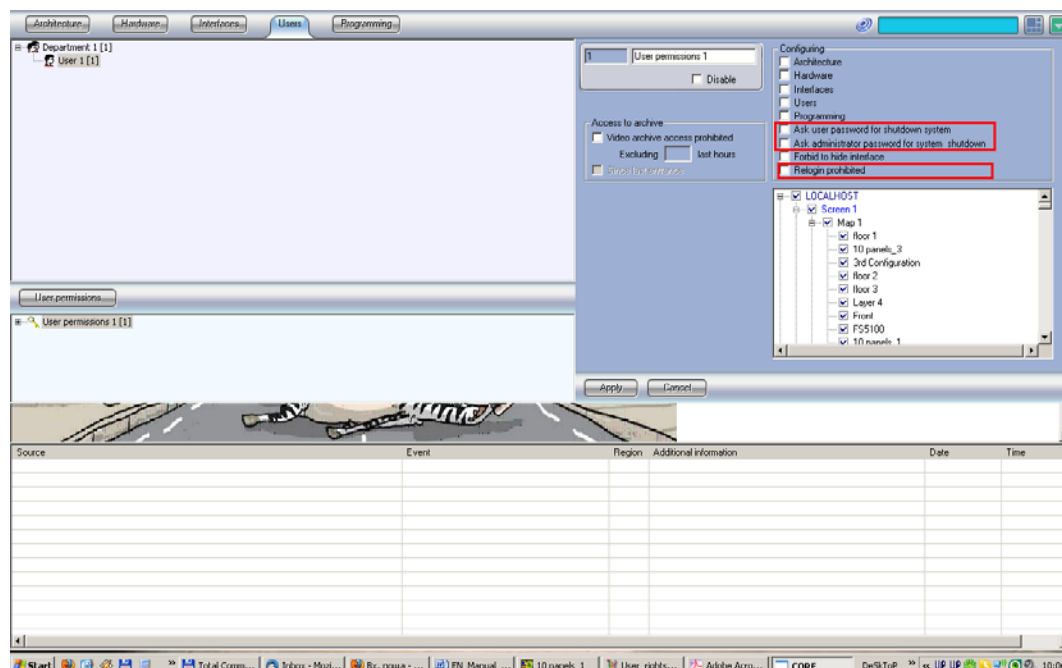
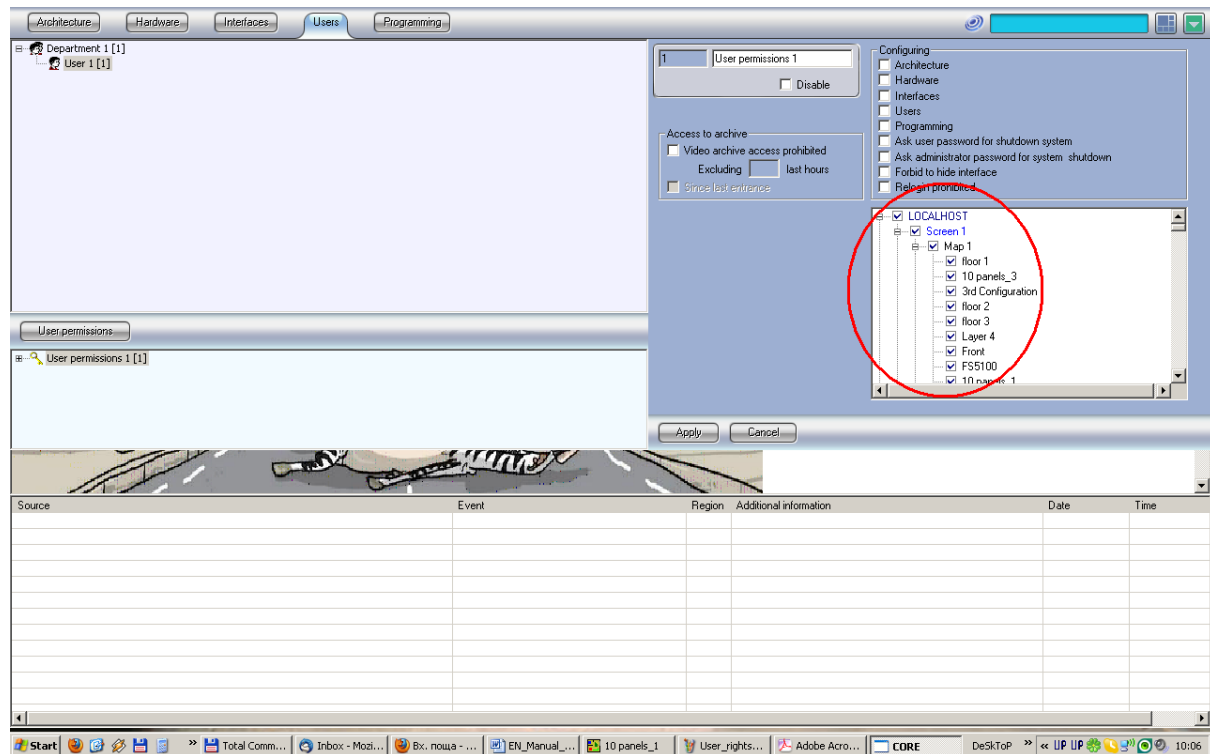


fig. 63

“User rights” access to the shut down

For each User permission profile you can program the access level to each of the hardware tab objects. By default all Hardware objects are with full access (blue mark - refer to the table of fig.64);



Type of mark	Right to administer	Right to control the object	Right to monitor the object
A blue mark <input checked="" type="checkbox"/>	Yes	Yes	Yes
A green mark <input type="checkbox"/>	No	Yes	Yes
An M mark <input type="checkbox"/>	No	No	Yes
A cross mark <input checked="" type="checkbox"/>	No	No	No

fig. 64
“User rights” access to the hardware resources

For each User permission profile you can limit the rights to hide the Interface components (fig.65). If the checkbox is marked then at least one Screen object allowed to the User will be open.

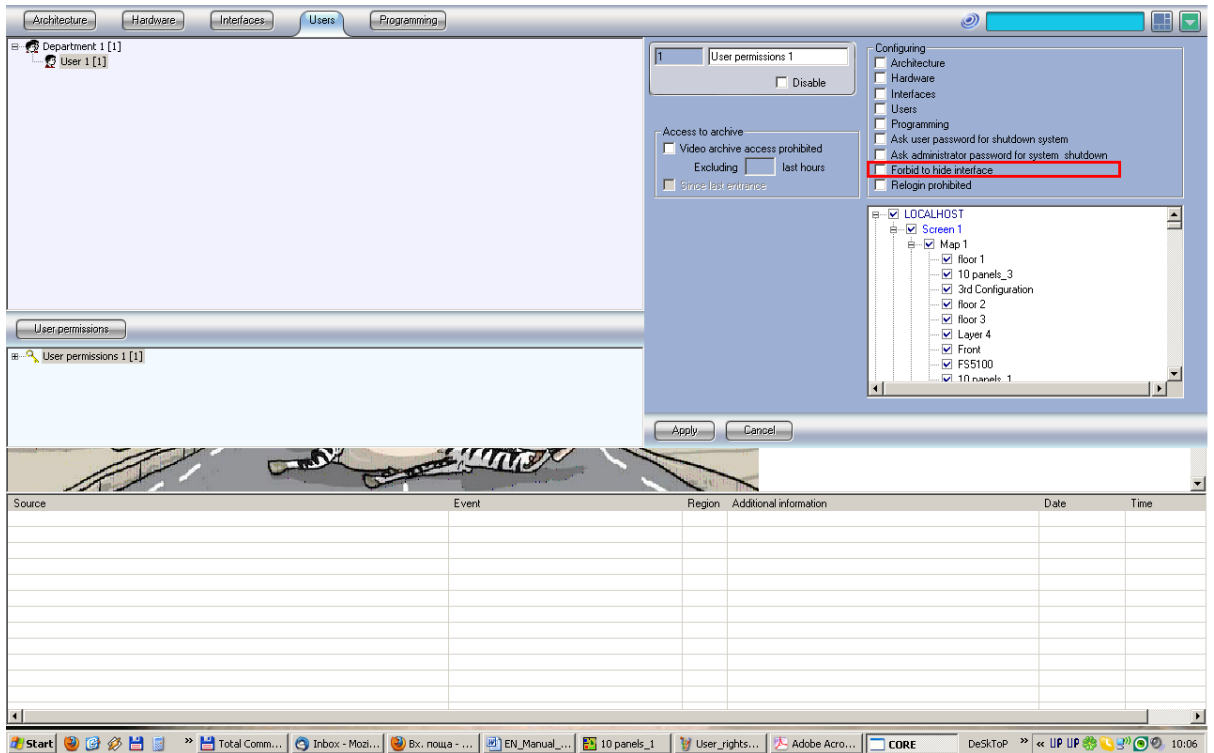


fig. 65

“User rights” access to the Interface resources

For each User permission profile you can limit to play the Video and Audio archive records from the surveillance monitor object (fig.66).

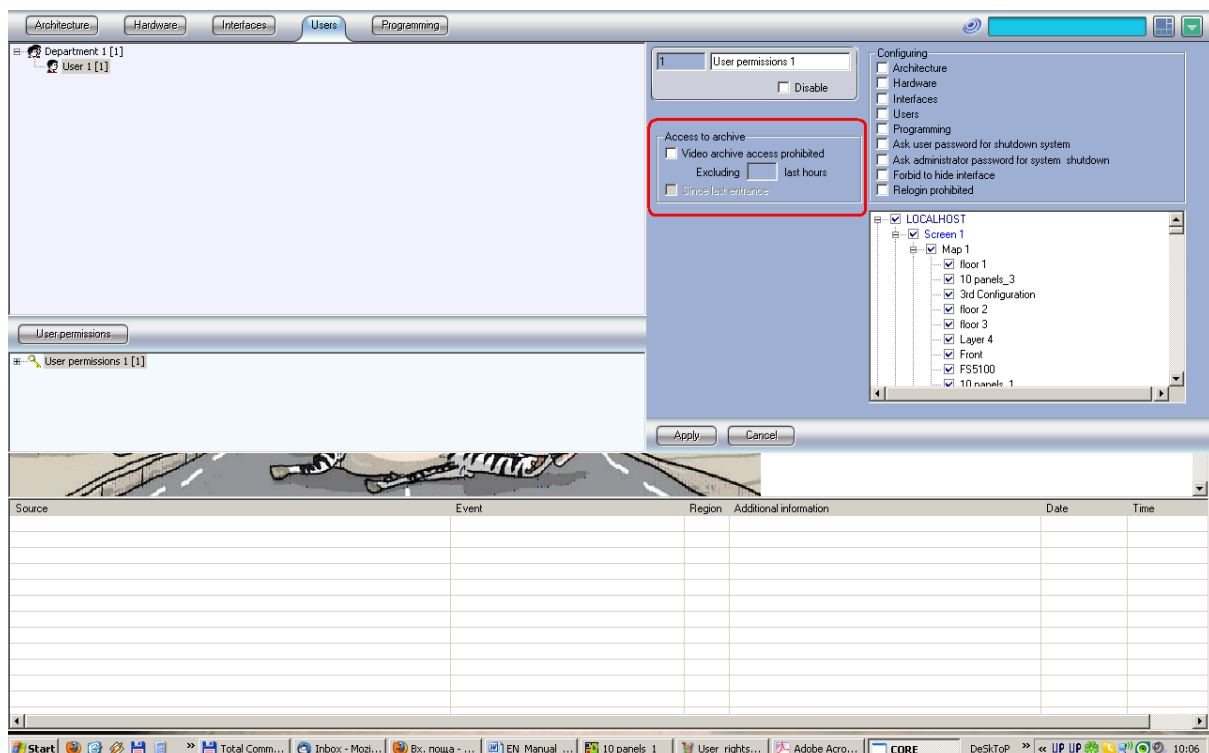


fig. 66

“User rights” access to the Video Archives

- Assign different users to the different “User rights” – for each “User permission” profile you can set the available Users form the “Department” object (fig.67);

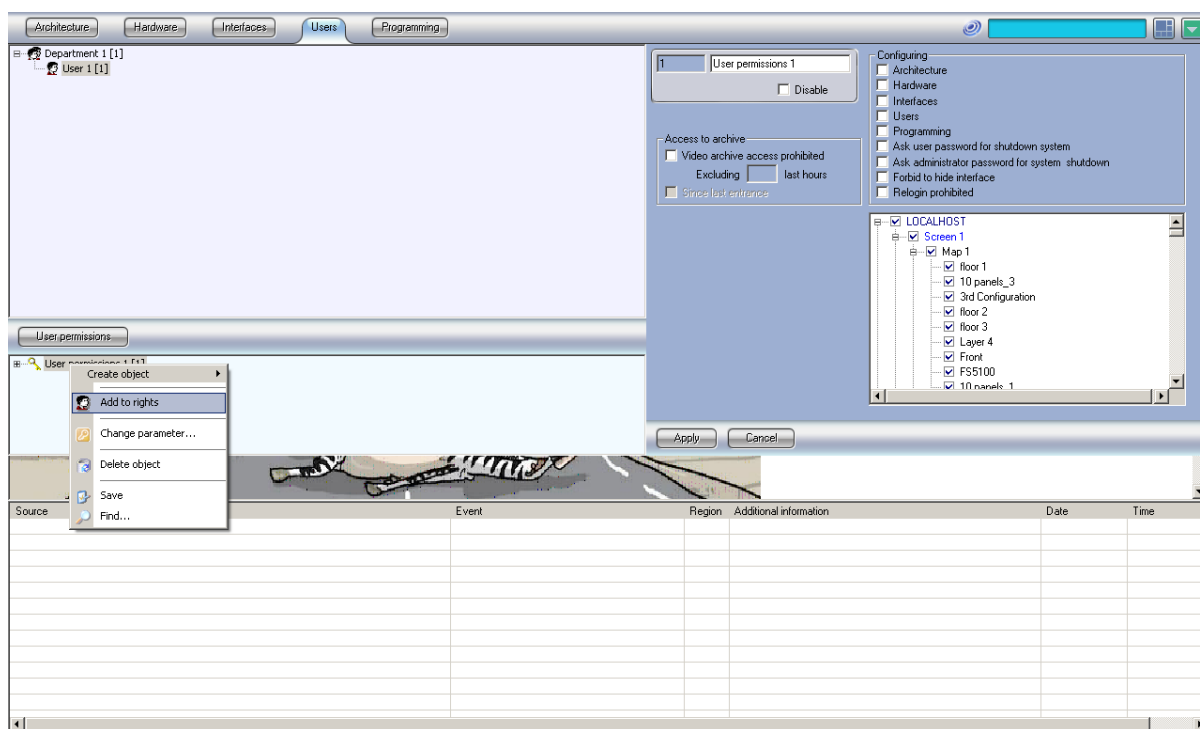


fig. 67
“Use” password set-up

For each User you need to set login information (fig. 68):

Login name;

Login password that needs to be confirmed;

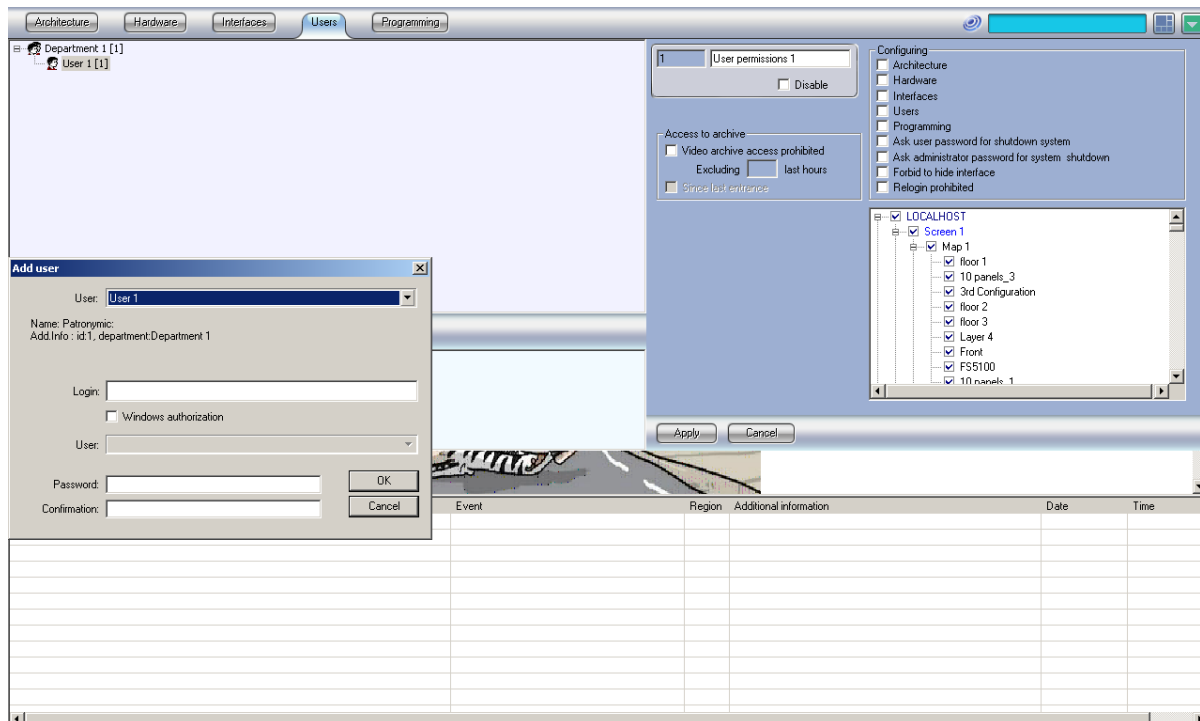


fig. 68
“Use” password set-up

To set an initial user you can program this option from the drop-down menu “System settings → Hardware tab → Computer → Default user”. The Initial user should be programmed before that from the “System settings → Users tab”.

In this way the Intellect system will be started without entering password. However the administrative, controlling and viewing will be limited according to the rights of the initial User.