Intrepid II System Integration Module Setup and User Guide

Last update 15/01/2020

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1 List of Terms used in Intrepid II System Integration Module Setup and User Guide

Intellect Server - a computer with installed **Server** configuration of the *Intellect* software package.

Perimeter Intrusion Detection System (PID) - a software and hardware suite designed for monitoring perimeter intrusions.

Intrepid II System PID - a PID which combines *Intrepid* systems of second generation.

2 Introduction into Intrepid II System Integration Module Setup and User Guide

On the page:

2.1 Purpose and Structure of the Guide

The *Intrepid II System* Module Settings Guide is a reference manual designed for *Intrepid II System* Module users. This module functions as a part of perimeter intrusion detection system based on the *ACFA Intellect* software package.

This Guide presents the following materials:

1. General information about the *Intrepid II System* integration module;
2. Configuration of the *Intrepid II System* integration module;
3. Working with the *Intrepid II System* integration module.

2.2 General information about the Intrepid II System integration module

The *Intrepid II System* integration module is a component of an *ACFA Intellect* software package. This module enables interaction between *ACFA Intellect* and the *Intrepid II System* perimeter protection system (manufactured by Southwest Microwave, Inc.).

The following controllers are integrated with the *ACFA Intellect* software package:

1. *MicroPoint II*;
2. *MicroTrack II*;
3. *MicroWave 330*;
4. *AIM II* ;
5. *ROM II -16;*
6. *ROM II - 8*.

Note:

For detailed information about the Intrepid II System cable perimeter protection system, consult the manufacturer's documentation.

Before configuring the *Intrepid II System* software module, do the following:

1. Install the *Intrepid II System PID* hardware at the secure facility.
2. Connect the *Intrepid II System PID* to the Server.

3 Intrepid II System integration: supported hardware and licensing

Manufacturer	Southwest Microwave, Inc.9055 South McKemy StreetTempe, Arizona 85284 USA Telephone: +1 (480) 783-0201 Fax: +1 (480) 783-0401
Integration type	Low-level protocol
Equipment connection	RS-232

Supported equipment

Equipment	Function	Features
Intrepid MicroPoint II (up to 4 processing units)		
PM II	Processing module	Number of zones: 2 Max.length of the zone: 200 meters Intrusion identification - within 3 meters
LU II	Link unit	PM combination (up to 8)
TU II	Terminator unit	Matching cable
AIM II	Alarm input module	Number of inputs: 8
ROM 8	Relay module	Number of relays: 8
ROM 16	Relay output module	Number of relays: 16
MicroWave 330	Processing module (radioray sensor)	Effective distance until 457 m / 244 m (CE)
Intrepid MicroTrack II (up to 4 processing units)		
MTP II	MicroTrack Processor	Number of zones: 2 Max.length of the zone: 210 meters Intrusion identification - within 3 meters
MTT	MicroTrack termination kit	Matching cable
MTI	MicroTrack in line termination	Matching cable
RCM II	Relay control module	Number of relays: 8 Number of inputs: 8
MicroWave 330	Processing module (radioray sensor)	Effective distance until 457 m / 244 m (CE)

Protection

1 COM port. Up to 4 processing modules (PM II or MTP II correspondingly).

4 Configuring the Intrepid II System Integration module

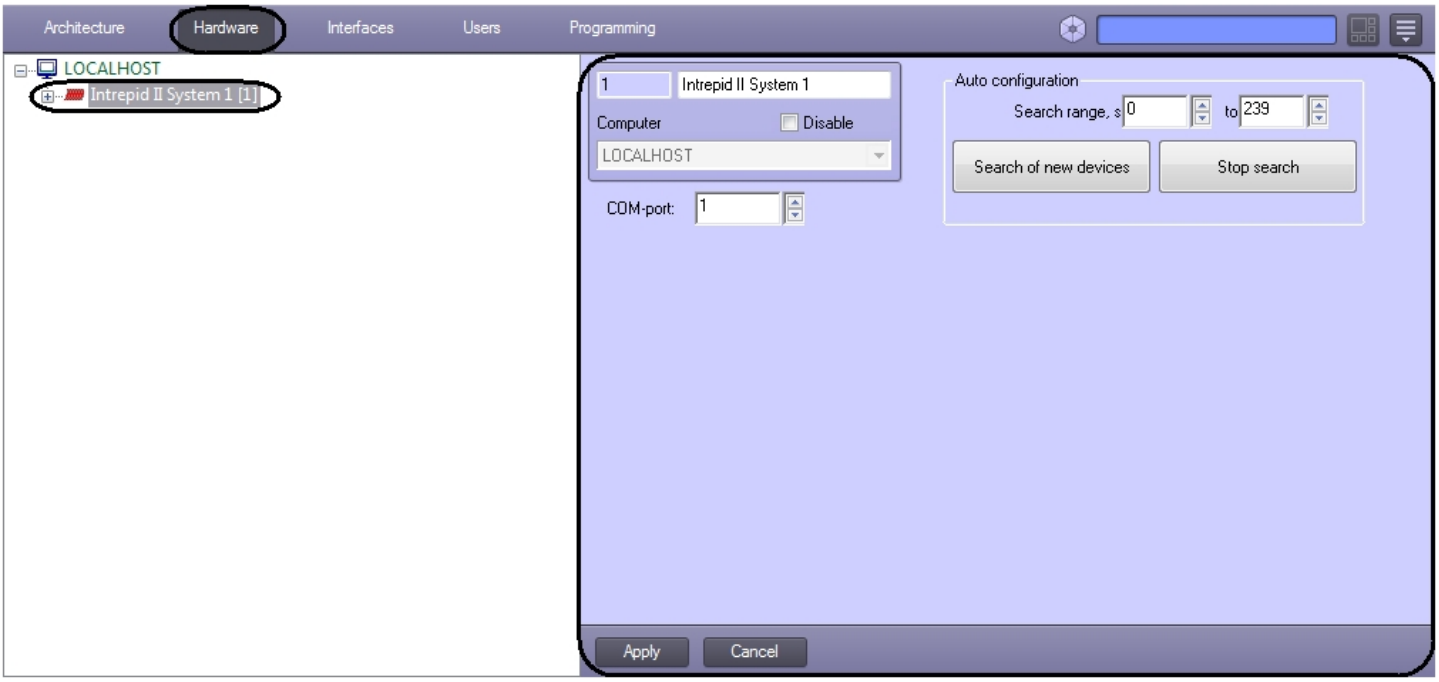
4.1 Steps to configure the Intrepid II System integration module

To configure the *Intrepid II System* integration module, do the following:

1. Configure *Intrepid II System*'s connection to the Server.
2. Auto creating the objects tree.
3. Configure *Intrepid II System* controllers.
4. Configure *Intrepid II System* controller devices.

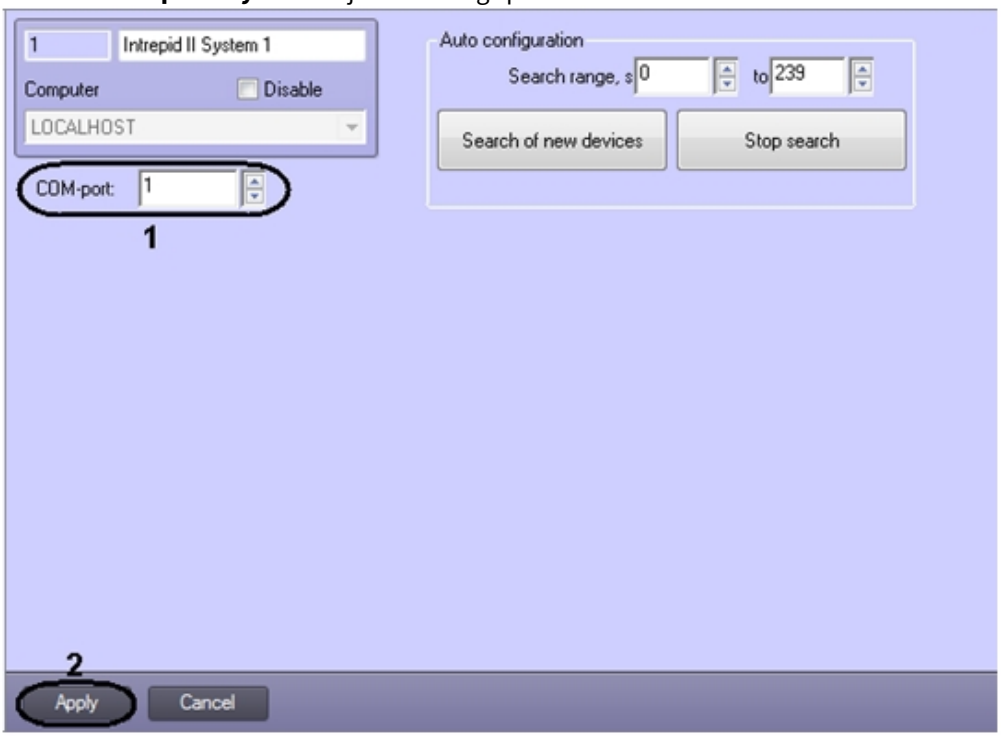
4.2 Configuring Intrepid II System's connection to the Server

To configure *Intrepid II System* connection in *ACFA Intellect*, use the settings panel of the relevant **Intrepid II System** object. This object is created based on the **Computer** object on the **Hardware** tab of the **System Settings** dialog window.



To configure the *Intrepid II System*'s connection to the Server, do the following:

1. Go to the **Intrepid II System** object's settings panel.



2. In the **COM-port:** field enter the number of the COM port for the *Intrepid II System* connection using the **up - down** buttons (**1**).
3. Click **Apply** button (**2**).

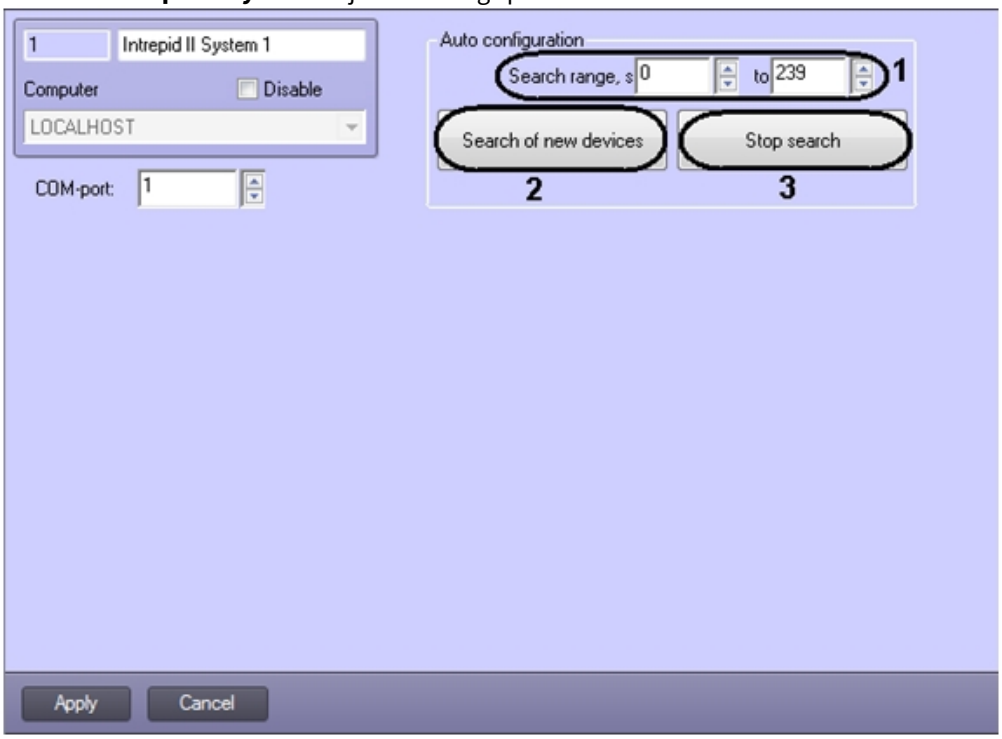
Configuration of *Intrepid II Systems*'s connection to the Server is completed.

4.3 Auto creating of Intrepid II System objects tree

Search and registration of connected *Intrepid II System* controllers in the *ACFA Intellect* software package is performed while auto creating the objects tree.

To auto create the *Intrepid II System* object tree, do the following:

1. Go to the **Intrepid II System** object's settings panel.



2. Enter the range of hardware addresses of connected devices in the **Search range, s** fields (**1**).
3. Click the **Search of new devices** button (**2**).

> **Note.**
>
> To stop the search click the **Stop search** button (**3**).

Connected controllers will be added to the objects tree of the *ACFA Intellect* software package.

Auto creating of objects tree is completed.

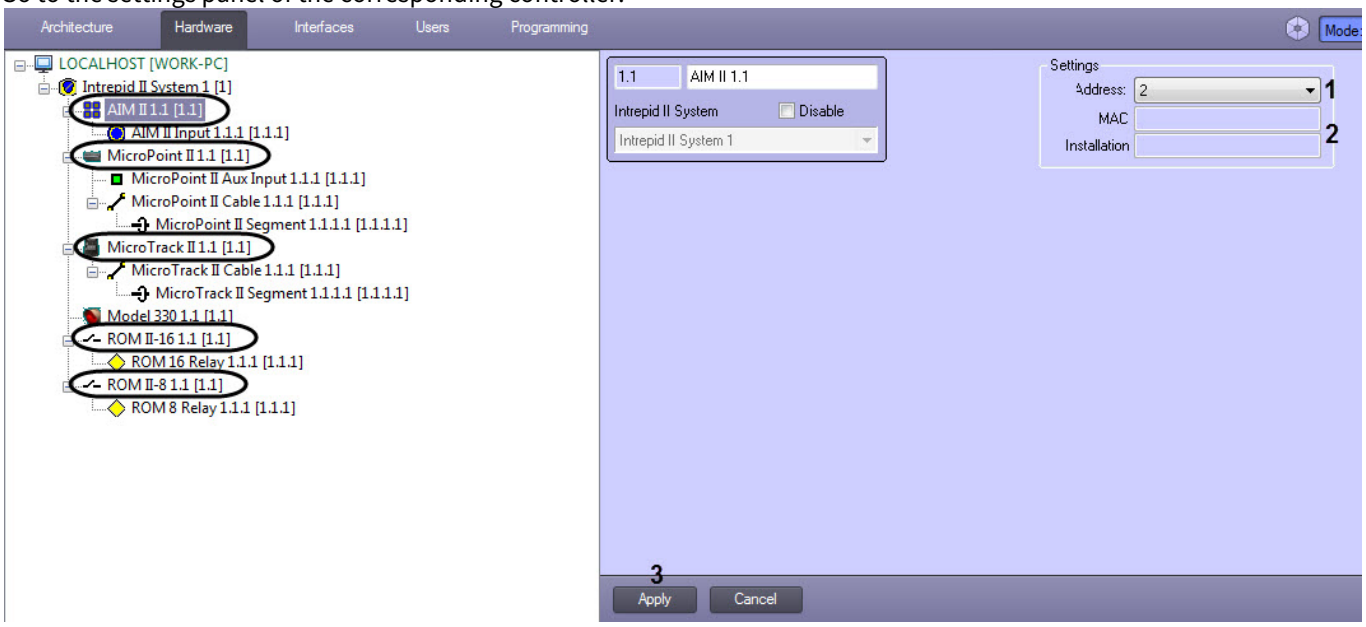
4.4 Configure the Intrepid II System controllers

Configuring the *Intrepid II System* controllers is performed on the settings panel of the corresponding object.

Controllers are created on the basis of the **Intrepid II System** object automatically while creating the object tree (see the Auto creating of Intrepid II System objects tree section). All controllers are configured similarly.

To configure the *Intrepid II System* controllers, do the following:

1. Go to the settings panel of the corresponding controller.



2. The value specified while auto creating the objects tree is set In the **Address:** drop-down list (**1**). It is possible to change this address. To change the controller address, do the following:
    a. Select the new value from the drop-down list.
    b. Click **Apply** button (**3**).
3. Information about the controller is specified in the **MAC address** and **Installation name** fields. Check the accuracy of controller address if these fields are empty (**2**).

Configuring of the *Intrepid II System* controllers is completed.

4.5 Configure the MicroPoint II controller hardware

4.5.1 Procedure of configuring the MicroPoint II controller hardware

To configure the *MicroPoint II* controller hardware, do the following:

1. Configure the *MicroPoint II* cable.
2. Configure the *MicroPoint II* segment.
3. Configure the *MicroPoint II* input.

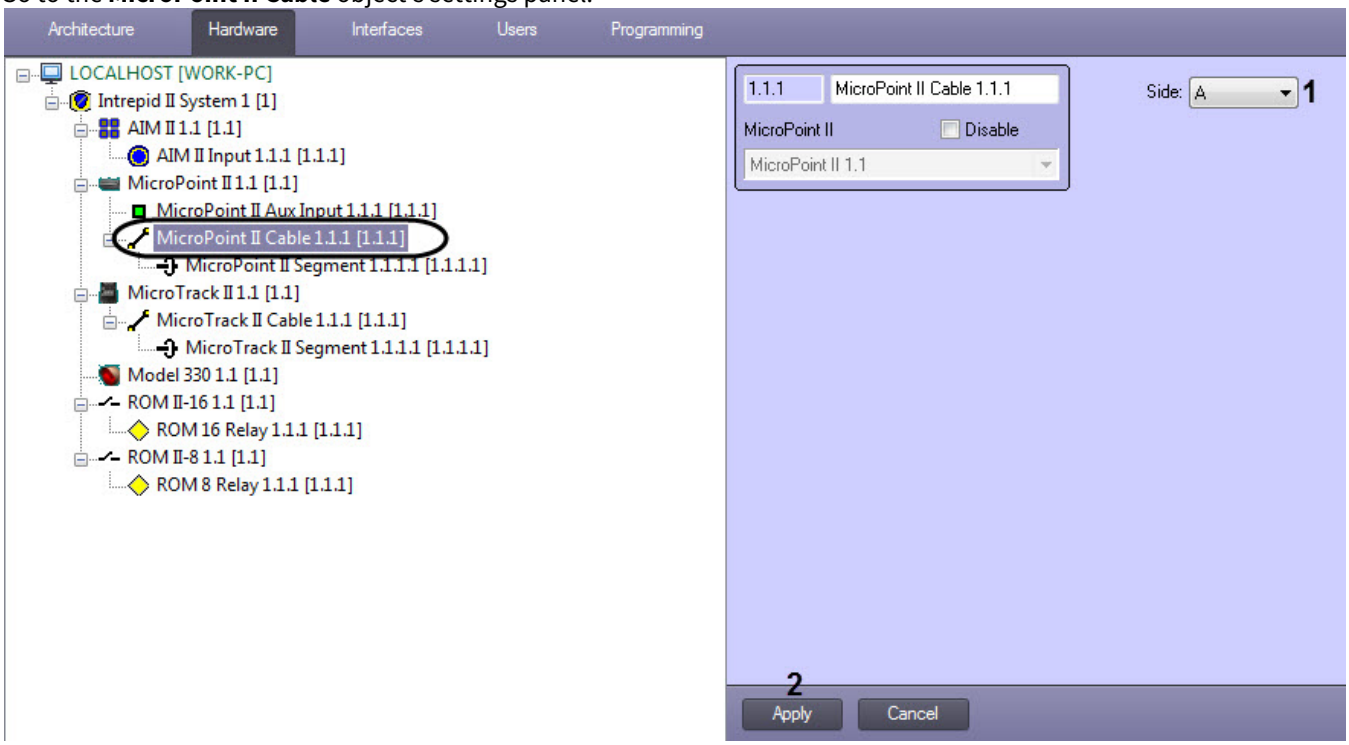
4.5.2 Configure the MicroPoint II cable

To configure the *MicroPoint II* cable go to the settings panel of the **MicroPoint II Cable** object. This object is created on the basis of the **MicroPoint II** object on the **Hardware** tab of the **System settings** dialog window.

> **Note.**
>
> The MicroPoint II controller supports two loops (A, B). If more loops are created they will be ignored by system.

To configure the *MicroPoint II* cable, do the following:

1. Go to the **MicroPoint II Cable** object's settings panel.



2. From the **Side:** drop-down list select the ID of *MicroPoint* II cable (**1**).
3. To save settings in the *ACFA Intellect* software package click the **Apply** button.

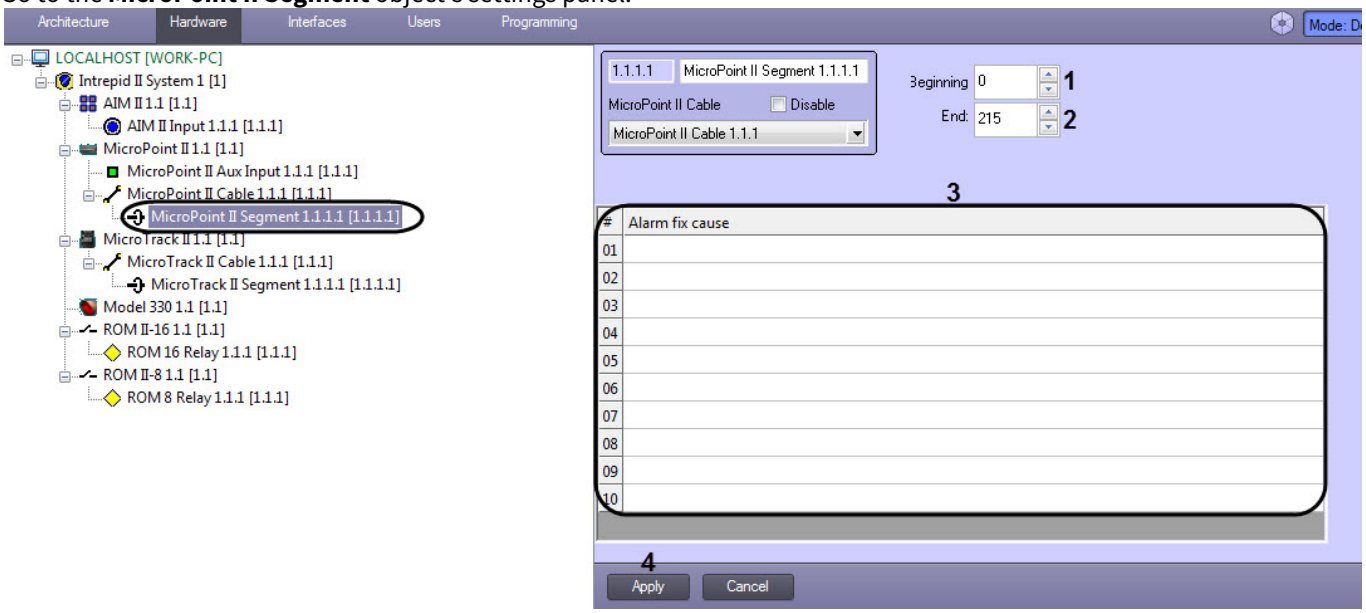
Configuring of the *MicroPoint II* cable is completed.

4.5.3 Configure the MicroPoint II control segment

To configure the *MicroPoint II* control segment go to the settings panel of the **MicroPoint II Segment** object. This object is created on the basis of the **MicroPoint II** object on the **Hardware** tab of the **System settings** dialog window.

To configure the *MicroPoint II* control segment, do the following:

1. Go to the **MicroPoint II Segment** object's settings panel.



2. In the **Beginning:** field using **up-down** buttons enter the number of subcell corresponding to the key point in which the control segment started (**1**).

3. In the **End:** field using up-down buttons enter the number of subcell corresponding to the key point in which the control segment finished (**2**).

> **Note.**
>
> The range of values of **Beginning** and **End** fields is from 0 to 215. It is not recommended to cross control segments.

> **Attention!**
>
> Value in the **End** field should not exceed the value in the **Beginning** field.

4. Click **Apply** button.

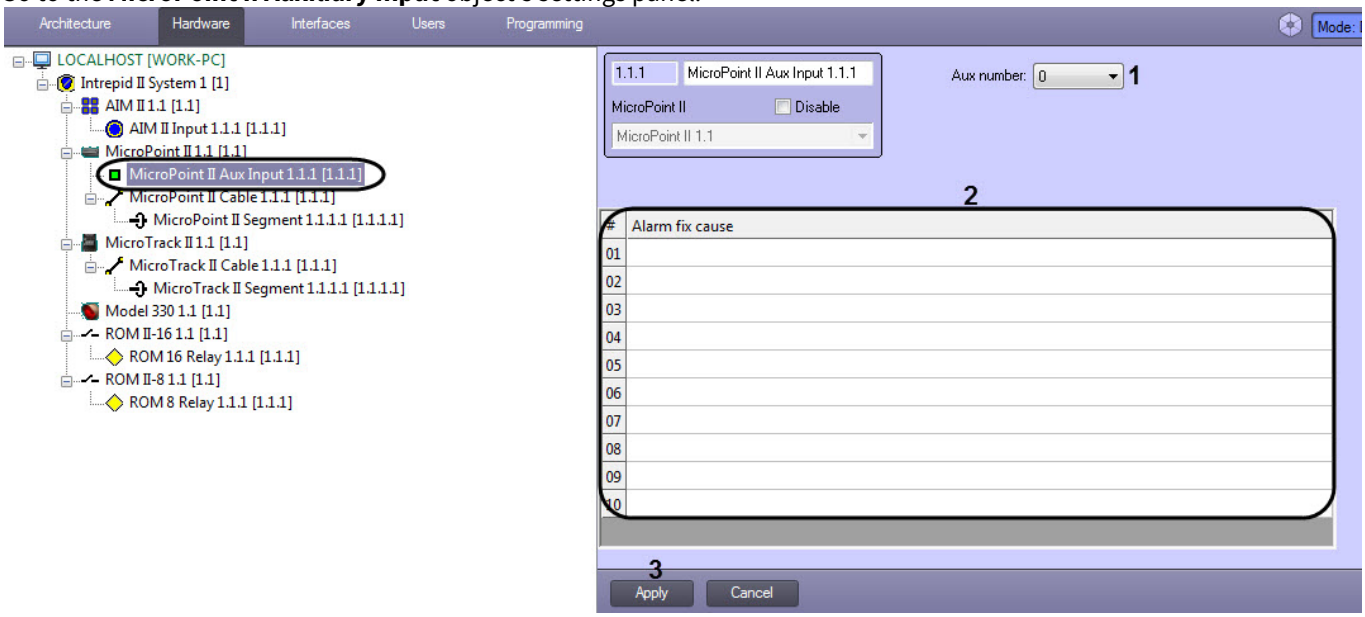
Configuring the MicroPoint II control segment is completed.

4.5.4 Configure the MicroPoint II input

To configure the *MicroPoint II* input go to the settings panel of the **MicroPoint II Aux Input** object. This object is created on the basis of the **MicroPoint II** object on the **Hardware** tab of the **System settings** dialog window.

To configure the *MicroPoint II* input, do the following:

1. Go to the **MicroPoint II Auxiliary Input** object's settings panel.



2. Select the input number from the **Aux number:** drop-down list (**1**).
3. To save settings in the *ACFA Intellect* software package click **Apply** button.

Configuring the *MicroPoint II* input is completed.

4.6 Configure the MicroTrack II controller hardware

4.6.1 Procedure of configuring the MicroTrack II controller hardware

To configure the *MicroTrack II* controller hardware, do the following:

1. Configure the *MicroTrack II* cable.
2. Configure the *MicroTrack II* segment.

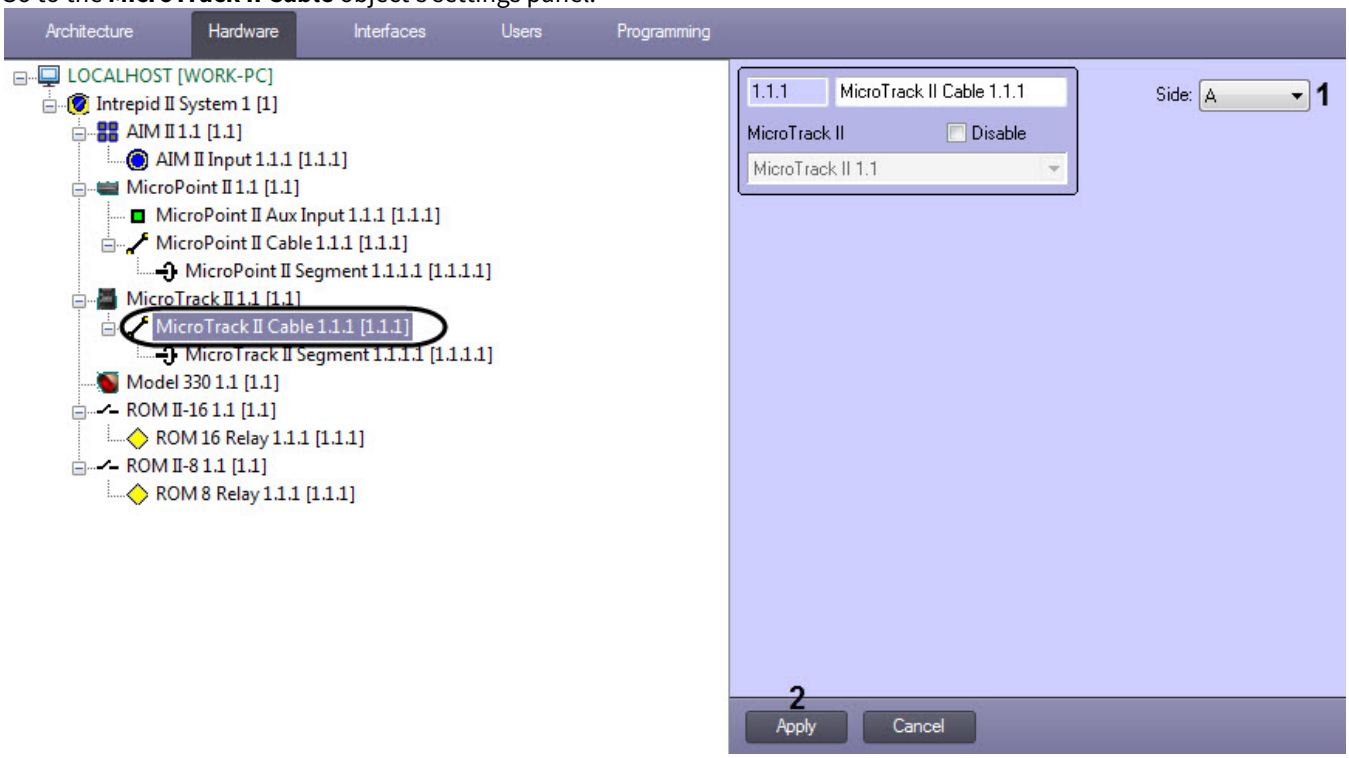
4.6.2 Configure the MicroTrack II cable

To configure the *MicroTrack II cable* go to the settings panel of the **MicroTrack II Cable** object. This object is created on the basis of the **MicroTrack II** object on the **Hardware** tab of the **System settings** dialog window.

> **Note.**
>
> The MicroTrack II controller supports two loops (A, B). If more loops are created they will be ignored by system.

To configure the *MicroTrack II* cable, do the following:

1. Go to the **MicroTrack II Cable** object's settings panel.



2. From the **Side:** drop-down list select the ID of *MicroTrack* II cable ().
3. To save settings in the *ACFA Intellect* software package click the **Apply** button.

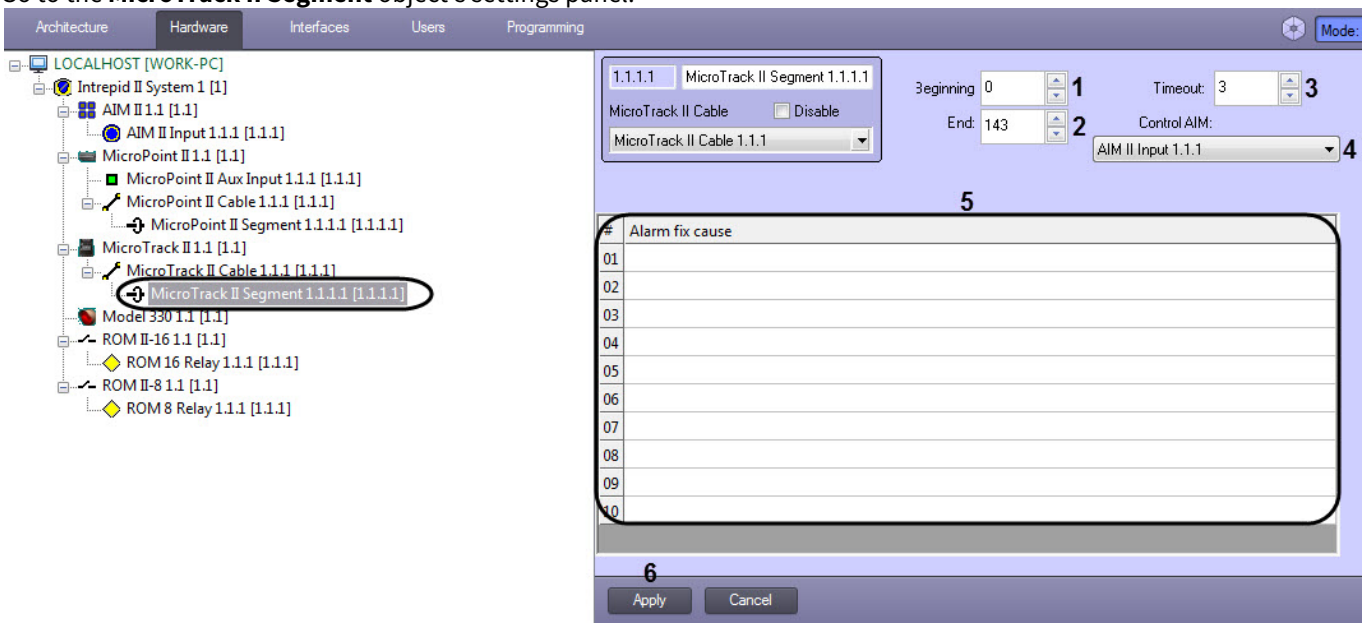
Configuring of the *MicroTrack II* cable is completed.

4.6.3 Configure the MicroTrack II control segment

To configure the *MicroTrack II* control segment go to the settings panel of the **MicroTrack II Segment** object. This object is created on the basis of the **MicroTrack II** object on the **Hardware** tab of the **System settings** dialog window.

To configure the *MicroTrack II* control segment, do the following:

1. Go to the **MicroTrack II Segment** object's settings panel.



2. In the **Beginning** field (**1**) using the **up-down** buttons enter the number of subcell corresponding to the key point in which the control segment started.
3. In the **End** field (**2**) using the **up-down** buttons enter the number of subcell corresponding to the key point in which the control segment finished.

> **Note.**
>
> The range of values of **Beginning** and **End** fields is from 0 to 215. It is not recommended for the control segments to overlap one another.

> **Attention!**
>
> Value in the **End** field should not exceed the value in the **Beginning** field.

4. In the **Timeout** field (**3**) set the interval, after which the alaram will be activated.
5. In the **Control AIM** field (**4**) select an *AIM* security detector, which the trigger the alarm at a given interval.
6. In the **Alarm fix cause** table (**5**) specify up to 10 alarm descriptions, one of which can be selected by an operator when processing the alarm of a *MicroPoint II* segment on the map.
7. Click **Apply** button (**6**).

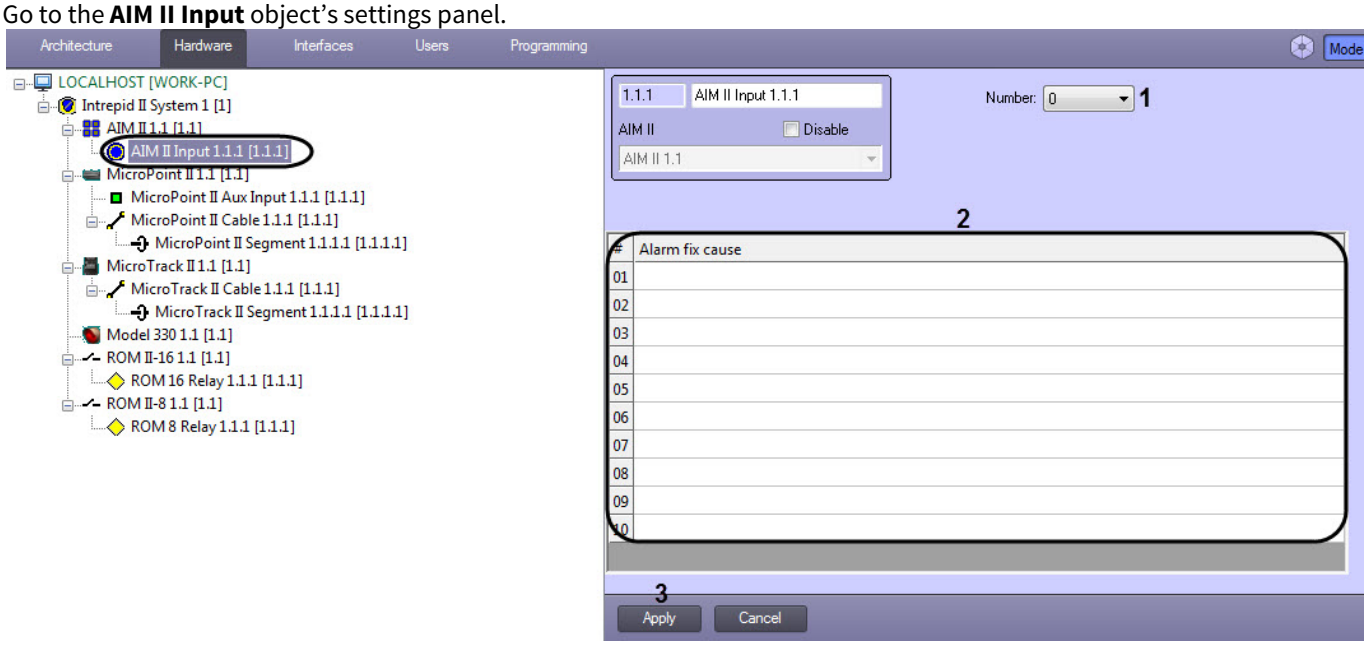
Configuring the *MicroTrack II* control segment is completed.

4.7 Configure alarm inputs of the AIM II controller

To configure the alarm inputs of the *AIM II* controller go to the settings panel of the **AIM II Input** object. This object is created in the basis of the **AIM II** object on the **Hardware** tab of the **System settings** dialog window.

To configure the alarm input of the *AIM II* controller, do the following:

1. Go to the **AIM II Input** object's settings panel.



2. From the **Entrance No:** drop-down list select the number of alarm input (**1**).
3. Click the **Apply** button (**2**).

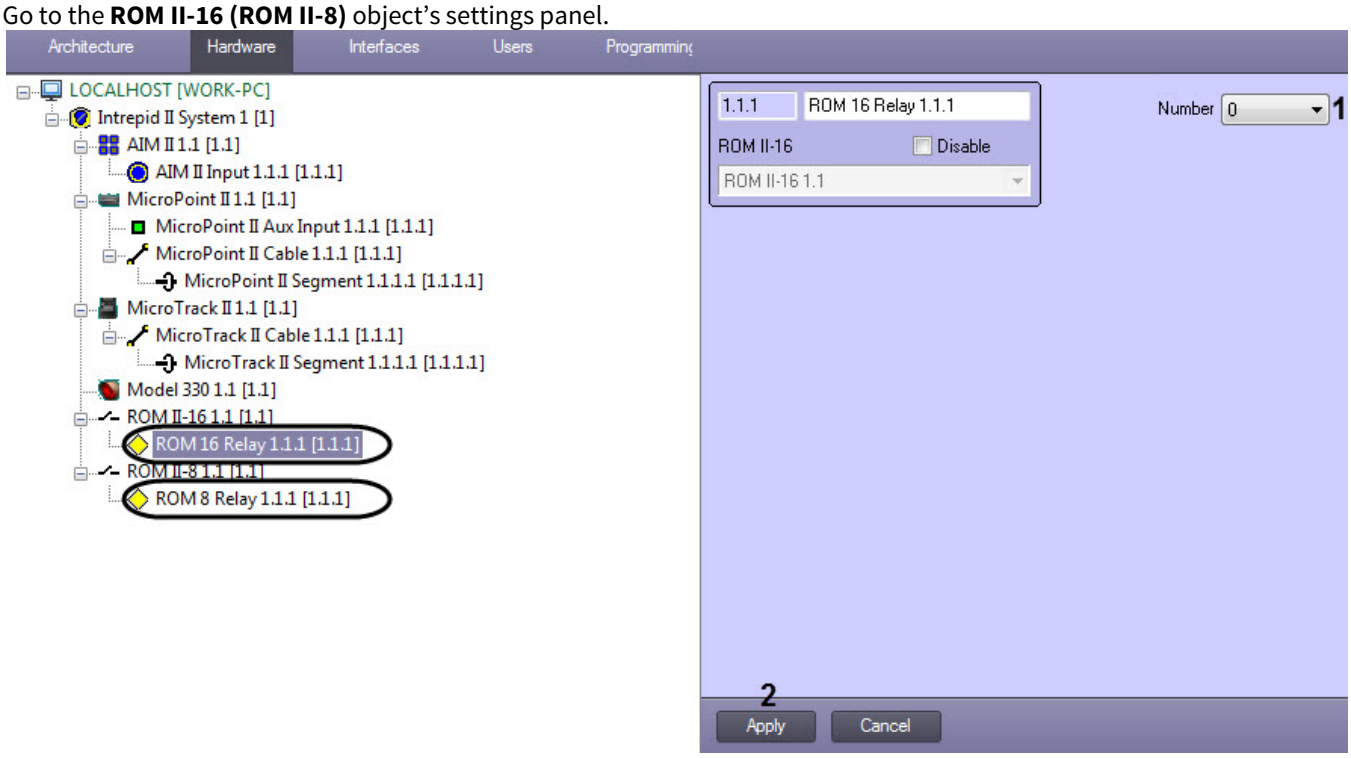
Configuring the alarm input is completed.

4.8 Configure relay output of the ROM II-16 (ROM II-8) controller

To configure the relay output of the *ROM II-16 (ROM II-8)* controller go to the settings panel of the **ROM 16 Relay (ROM 8 Relay)** object. This object is created on the basis of the **ROM II-16 (ROM II-8)** object on the **Hardware** tab of the **System settings** dialog window.

To configure the relay output of the **ROM II-16 (ROM II-8)** controller, do the following:

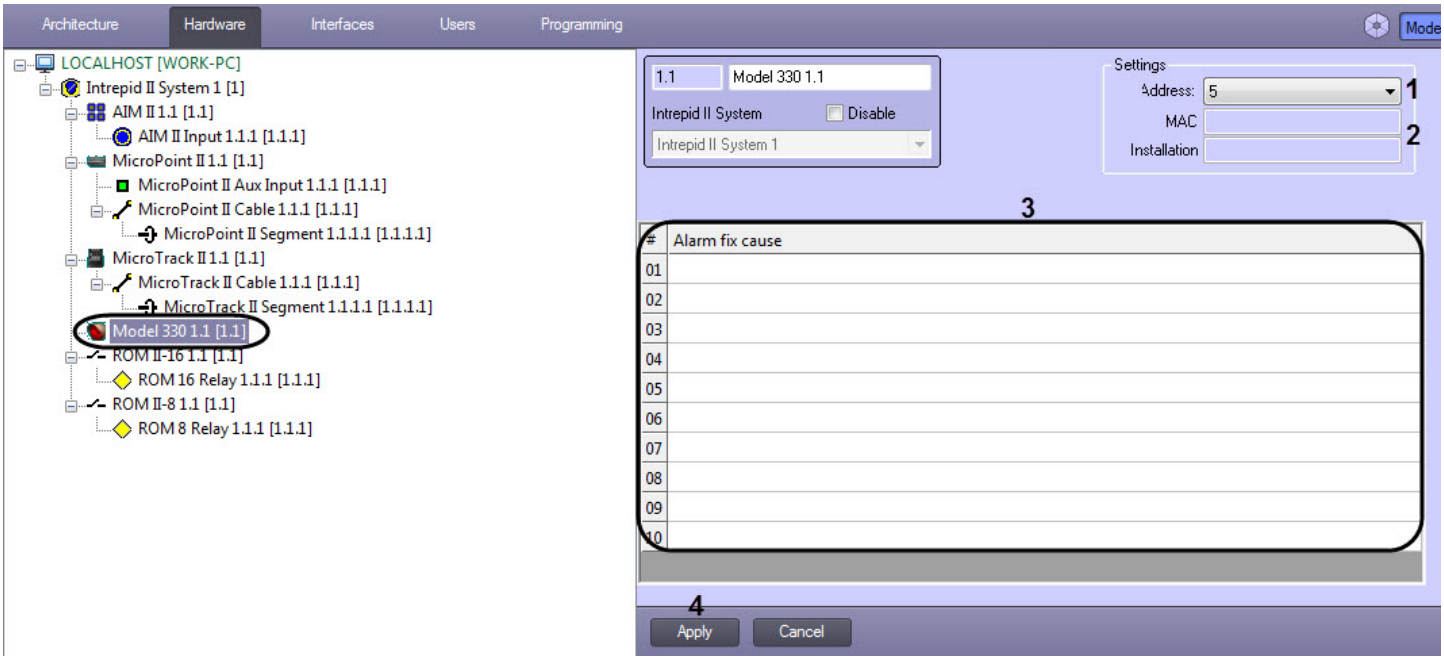
1. Go to the **ROM II-16 (ROM II-8)** object's settings panel.



2. From the **Exit No**: drop-down list select the number of relay output (**1**).
3. Click the **Apply** button (**2**).

Configuring the relay output is completed.

4.9 MicroWave 330



5 Working with the Intrepid II System integration module

5.1 General information about working with the Intrepid II System integration module

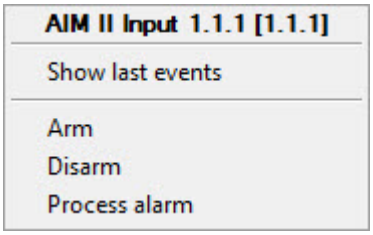
The following interface objects are used to work with the *Intrepid II System* integration module:

1. **Map;**
2. **Event viewer.**

Information about configuring these objects is presented in the Intellect Software Package: Administrator's Guide.

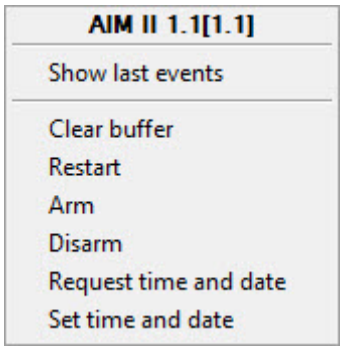
How to work with interface objects is described in detail in the Intellect Software Package: Operator's Guide.

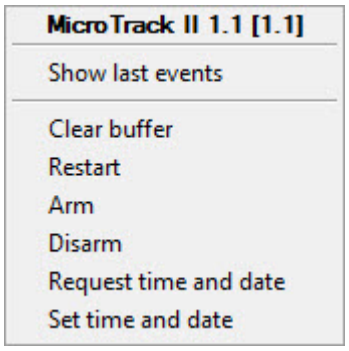
5.2 Managing AIM II Input

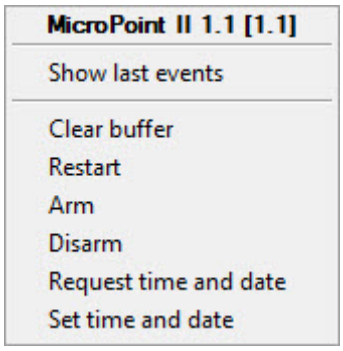


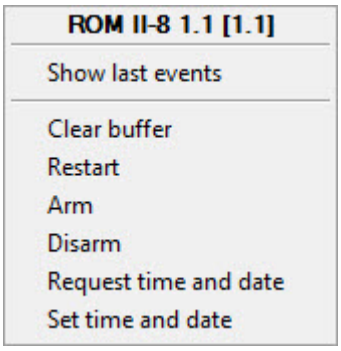
5.3 Managing Intrepid II System controllers

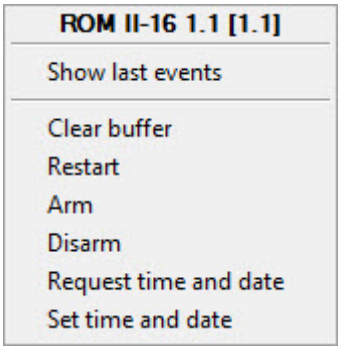
The *Intrepid II System* controllers are managed in the **Map** interactive window using the corresponding object's menu.









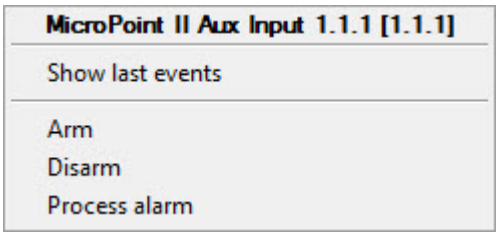


Description of Intrepid II System controller's menu commands is given in the table.

Menu item	Function performed
Clear buffer	Clear controller exchange buffer
Restart	Restart controller

Arm	Arm controller
Disarm	Disarm controller
Request time and date	Request time and date from controller
Set time and date	Send time and date of Server to controller

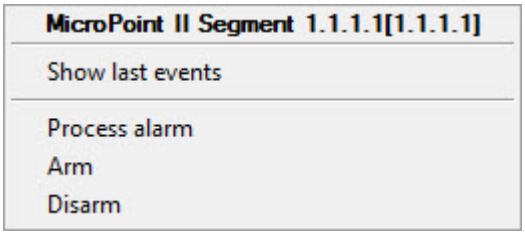
5.4 Managing MicroPoint II Aux Input

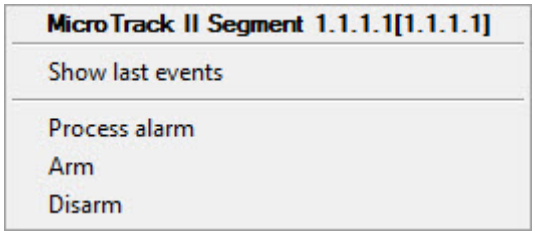


5.5 Managing MicroTrack II and MicroPoint II control segments

The *MicroTrack II* and *MicroPoint II* control segments are managed in the **Map** interactive window using the **MicroTrack II Segment** and **MicroPoint II Segment** objects functional menu.

> **Note**
>
> To display these objects on the map, use the **Line** display type.

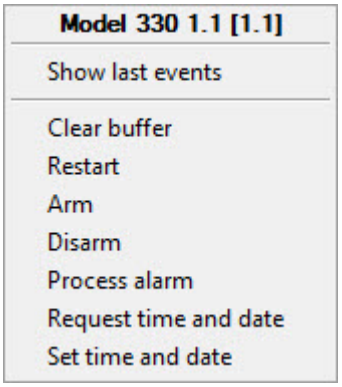




The description of the functional menu commands for the **MicroTrack II Segment** and **MicroPoint II Segment** objects is given in the table.

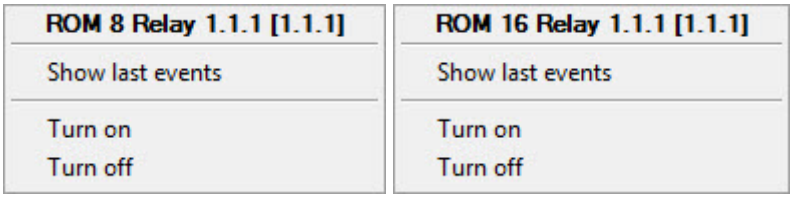
Menu item	**Function performed**
Process alarm	Starts the alarm processing process. After the alarm is processed, the control segment switches from alarm status to normal status. *Note 1. For alarm processing, it is necessary to specify at least one Alarm fix cause (see* Configure the MicroTrack II control segment*).* *Note 2. The* ***Process alarm*** *function menu item is available only if the control segment is in an alarm state.*
Arm	Arm control segment
Disarm	Disarm control segment

5.6 Managing MicroWave 330



5.7 Managing ROM 8 and ROM 16 relays

The *ROM 8* and *ROM 16* relays are managed in the **Map** interactive window using the **ROM 8** and **ROM 16** objects functional menu:



The description of the functional menu commands for the **ROM 8** and **ROM 16** objects is given in the table.

Menu item	Function performed
Turn on	The relay is turned on
Turn off	The relay is turned off