ACFA Intellect - Axxon Next Bridge Settings Guide

Introduction to ACFA Intellect - Axxon Next Bridge Settings Guide

On the page:

Purpose of document

ACFA Intellect - Axxon Next bridge settings guide provides comprehensive setup guidance for *Intellect* and *Axxon Next* ope rators.

This guide contains:

1. general information on a bridge between *ACFA Intellect* and *Axxon Next*;
2. information on how to configure a bridge between *ACFA Intellect* and *Axxon Next*;
3. information on how to configure a parser to process XML packages received from the bridge between *ACFA Intellect* and *Axxon Next*.

General information on a bridge between ACFA Intellect and Axxon Next

There is a mechanism of getting text titles in *Axxon Next*. It is used in POS devices. Information on how to configure and use this mechanism is given in *Axxon Next* documentation the latest version of which can be found in AxxonSoft documentation repository. In *Axxon Next* titles are overlaid on video and stored to the database. Search by titles can also be performed.

Note. **XML PROTOCOL** terminal type is to be selected when configuring titles in *Axxon Next*.

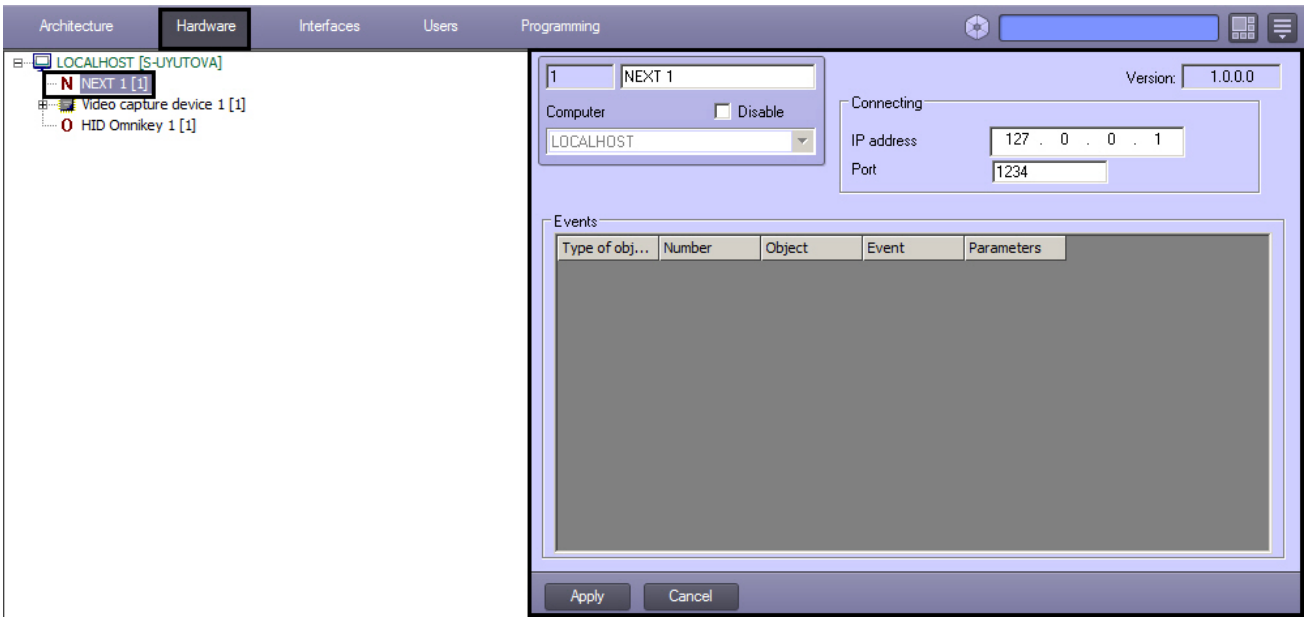
The **NEXT** object is a part of *ACFA Intellect*. It catches any events from selected objects created in the *ACFA Intellect* equip ment tree and sends them to *Axxon Next*.

Note. To use a bridge between *ACFA Intellect* and *Axxon Next* select the **Next bridge** component in the **Applied software** group when installing *ACFA Intellect*. The details on how to install ACFA Intellect are given in ACFA Intellect Installation Guide.

Configuring a bridge between ACFA Intellect and Axxon Next

Setting procedure for a bridge between ACFA Intellect and Axxon Next

An object to transfer data from *ACFA Intellect* to *Axxon Next* is configured on the settings panel of the **NEXT** object created under the **Computer** object in the **Hardware** tab of the **System settings** dialog box in *Intellect.*



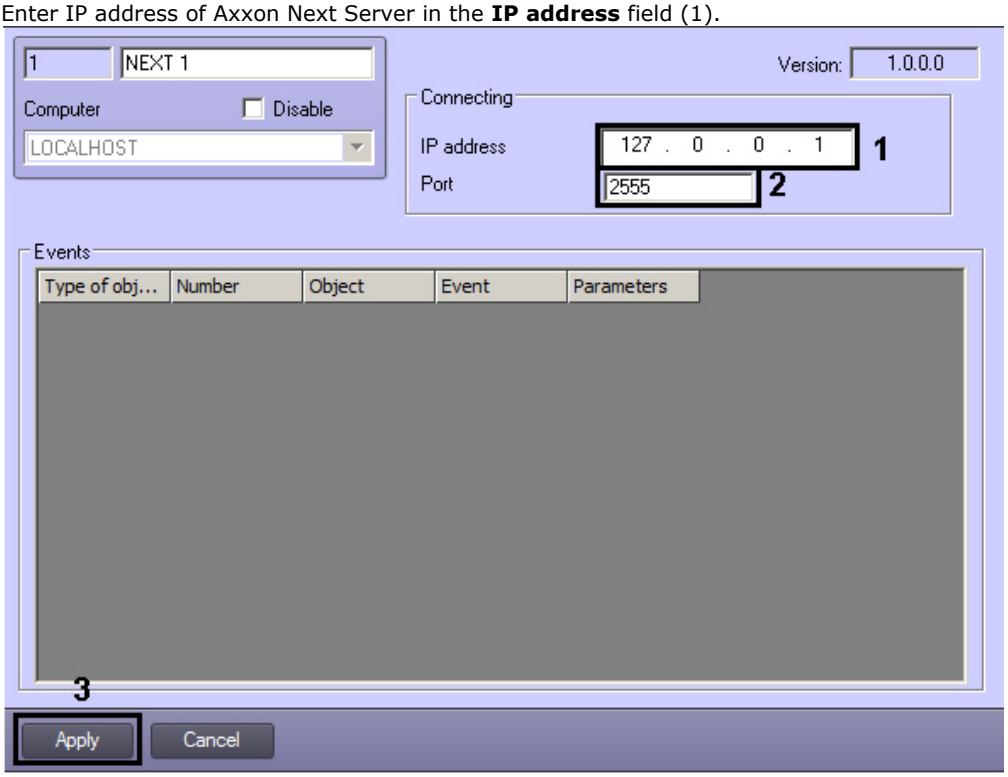
Configure the NEXT object as follows:

1. Configure connection to *Axxon Next* Server.
2. Select events to be sent to *Axxon Next* Server.

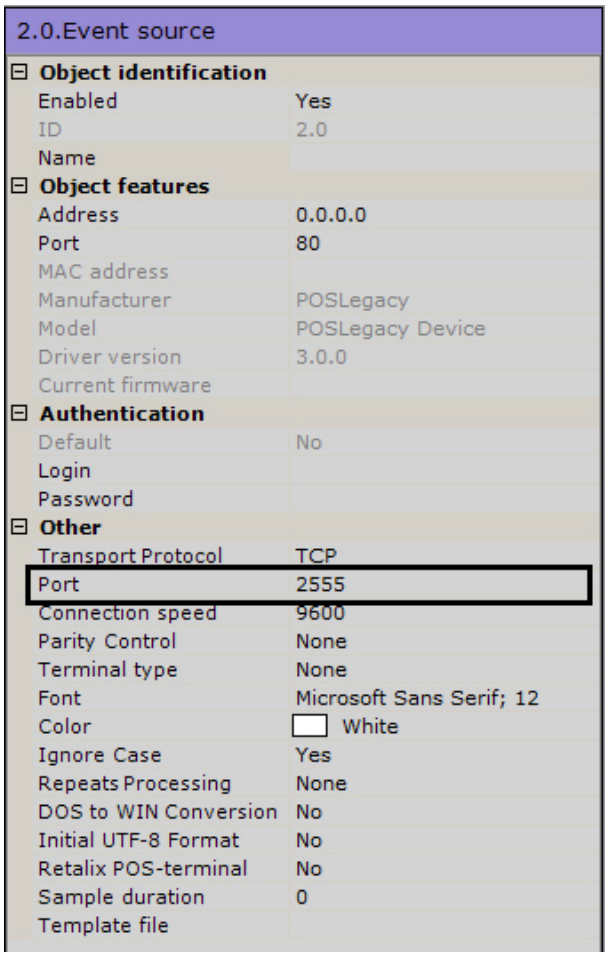
Configuring connection to Axxon Next Server

Configure connection to *Axxon Next* Server as follows:

1. Go to the **NEXT** settings panel.
2. Enter IP address of Axxon Next Server in the **IP address** field (1).



3. In the **Port** field enter the port number specified in *Axxon Next* when configuring the **Event source** object (2).



4. Click the **Apply** button to save the changes (3).

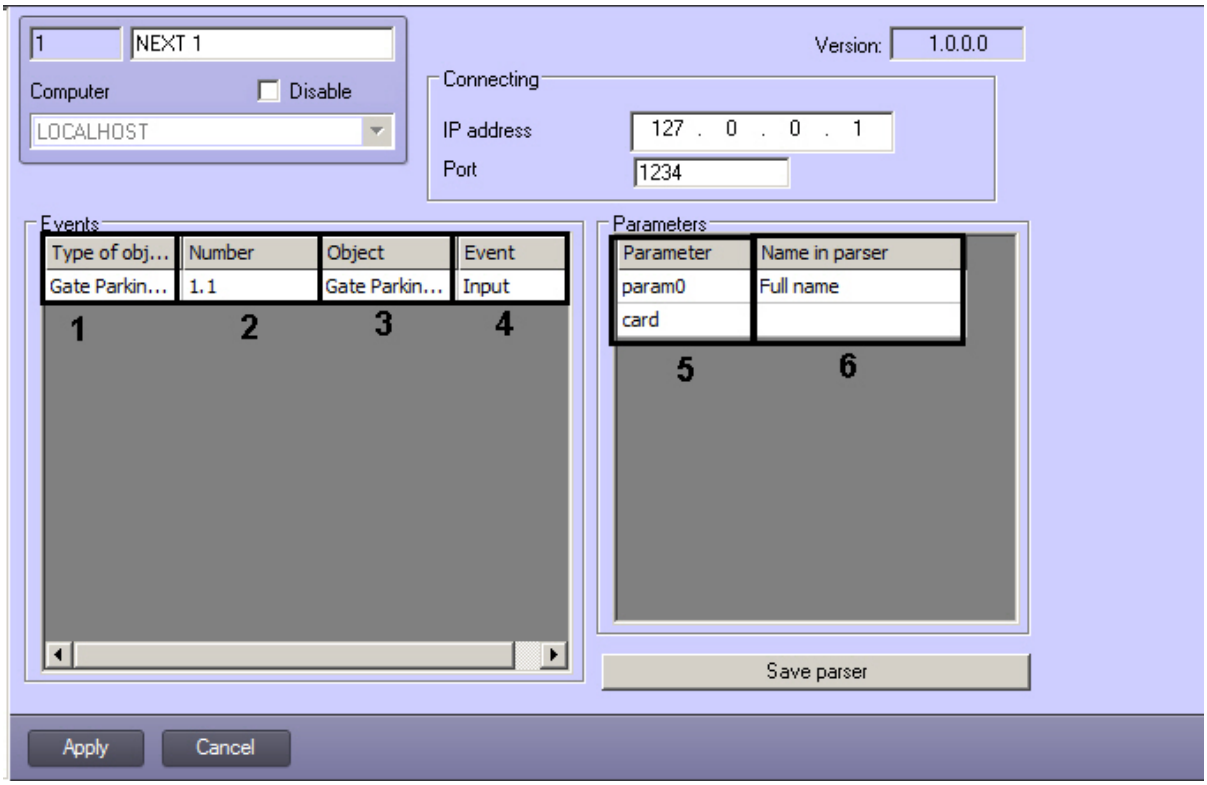
When the connection to *Axxon Next* Server is set there will be "Connection set" message in the Event viewer of *Intellect*.

Connection to *Axxon Next* Server is now configured.

Selecting events to be sent to Axxon Next Server

Events to be sent to *Axxon Next* Server are selected as follows:

1. Go to the **NEXT** settings panel.
2. Left click in the table area.
3. Click the down button on the keyboard. As a result a new line is added to the table.
4. In the **Type of object** dropdown list select a type of the object previously created in the system in order to send its events to *Axxon Next* (1).



5. If events from a specific object of the selected type are to be sent, then select an ID of the required object in the **Number** dropdown list (2). If a number is not selected, then events from all objects of the selected type created in the system are sent.
   When the ID is selected the name of created object is automatically displayed in the **Object** field (3).
6. In the **Event** dropdown list select the event, coming from the object of the specified type that is to be sent to *Axxon Next* Server (4).
7. Select the required object string in the **Events** table and specify all parameters of the selected event are to be sent as follows:
   a. In the **Parameter** dropdown list select the name of parameter (5). Description of parameter which will display in captions in *Axxon Next* will be specified in the **Name in parser** column (6). It's possible to change this description if required.

      > **Attention!**
      > List of available parameters and their description depends on the settings – see Adding event parameters to ddi-file section.

   b. Enter the parameter name in the **Parameter** field and description in the **Name in parser** field manually (5). The method of finding out available parameters is given in the Event parameters in the Debug window section.
8. Repeat actions 2-7 for all required objects and events.
9. Click the **Apply** button to save the changes (6).

Events to be sent to *Axxon Next* Server are now selected.

Event parameters

Adding event parameters to ddi-file

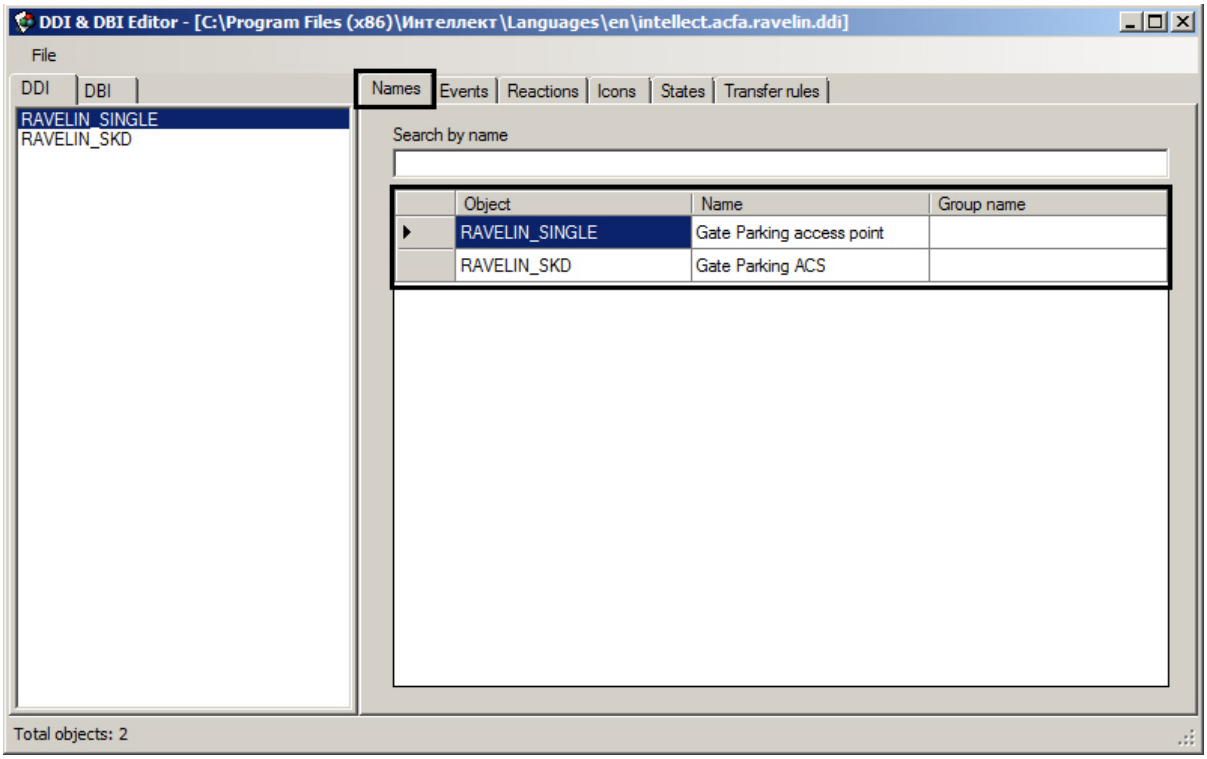
To add event parameters to ddi-file use the *System configuration* ddi.exe utility. Working with this utility is described in the *Intellect software package. Administrator's Guide*, latest version of which is available in AxxonSoft documentation repository.

To add event parameter, do the following:

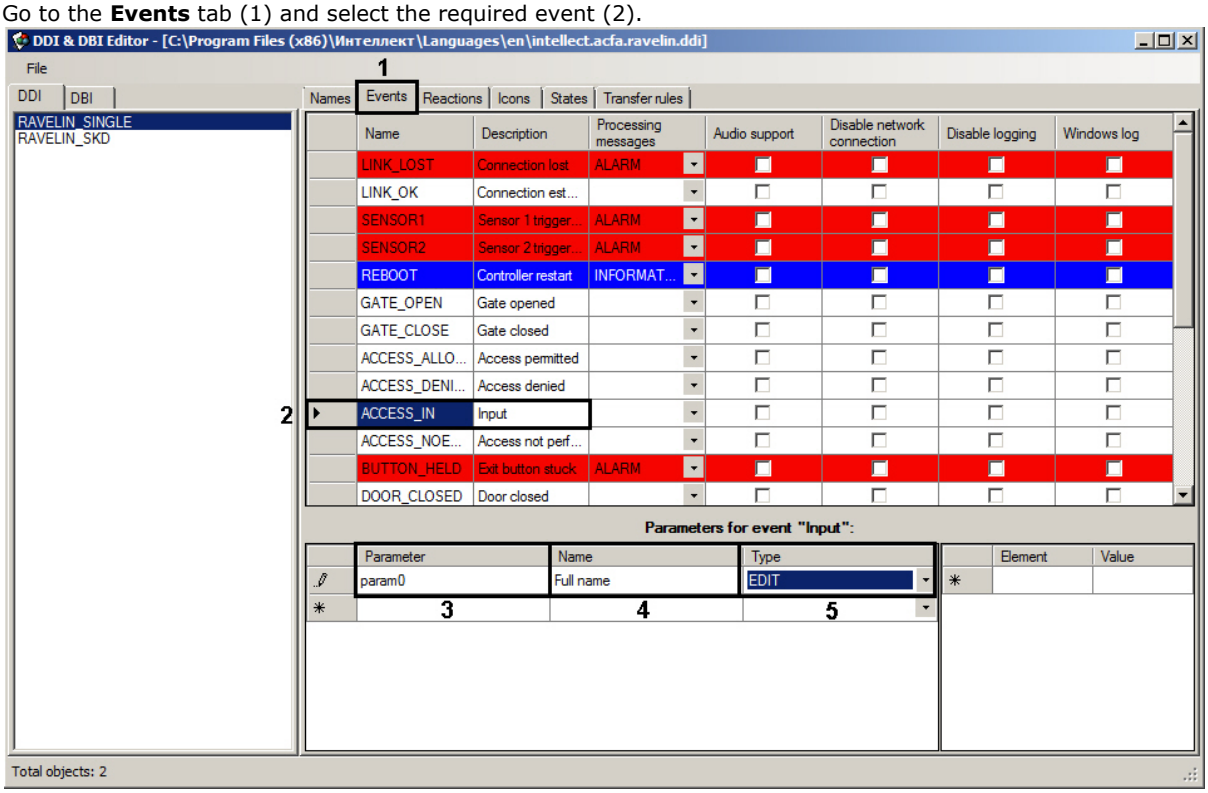
1. Shutdown the *ACFA-Intellect* software package.
2. Open the .ddi file corresponding to the required integration module of the *ACFA-Intellect* software using the ddi.exe utility.

   > **Note.**
   > Ddi files are located in the <*Intellect* software installation directory>\Languages\en folder.

3. Select the required object on the **Names** tab.

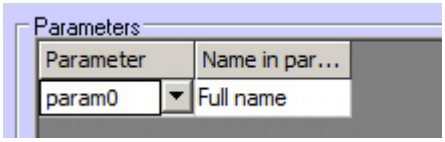


4. Go to the **Events** tab (1) and select the required event (2).



5. In the **Parameter** field enter the parameter name displaying in the Debug window (3) – see Event parameters in the Debug window section.
6. In the **Name** field enter the name of parameter in natural language form (4).
7. From the **Type** drop-down list select the parameter type: **EDIT** (text) *или* **COMBOBOX** (set of values) (5). If the **COMBOCOX** type is selected, specify available parameter values in the **Element** and **Value** columns.
8. Save changes in the .ddi file.
9. Start the *ACFA-Intellect* software package.

The added parameter will be available to select on the settings panel of the **NEXT** object when selecting the corresponding event in the **Events** column.



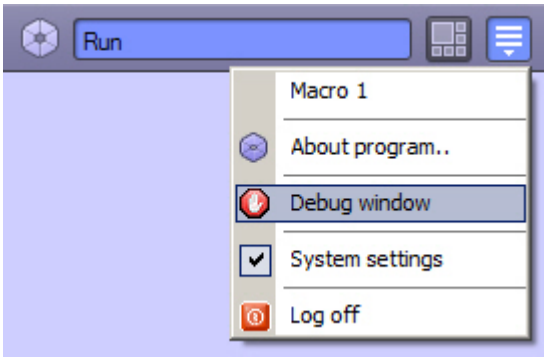
Attention!
Changed ddi-files will be overwritten when updating the *ACFA-Intellect* software. So create backup copies of changed ddi-files before updating the *ACFA-Intellect* software and place them to the <*Intellect* software installation directory>\Languages\En folder after updating.

Adding event parameters to the ddi-file is completed.

Event parameters in the Debug window

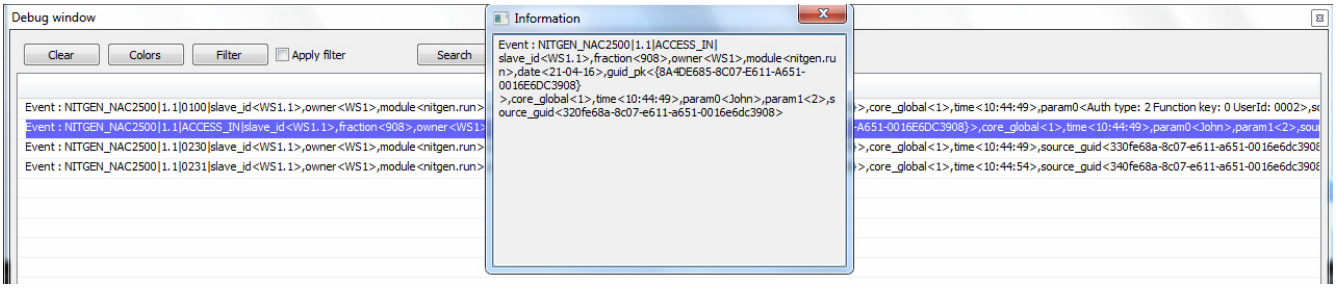
Available parameters of the required event can be found out using the Debug window in *Intellect* by creating a required event in the system. Information on how to use this window is given in Programming Guide (JScript). The latest version of this document is available in AxxonSoft documentation repository.

To open the Debug window select the **Debug window** item in the **Run** menu in *Intellect*.



After that create a required event, e.g. put the access card to the reader, trigger an alarm, etc. When the event is shown in the Debug window, right click on it. The available event parameters are shown in the appeared window.

Study an example of getting parameters of **ACCESS_IN** event from **NAC2500** object that is a part of *Nitgen* integration module.



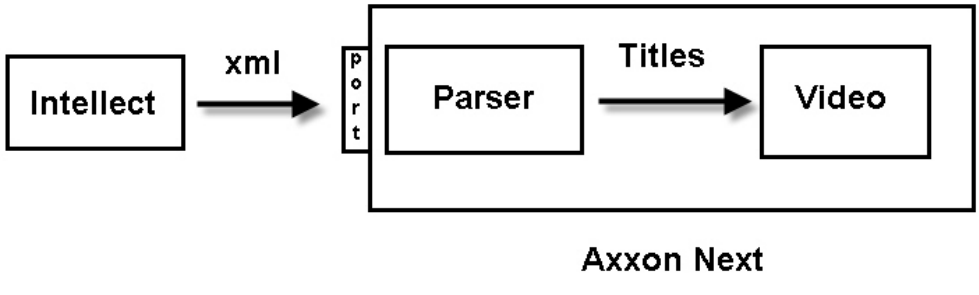
The following parameters can be extracted from this **Access_in** event:

1. param0 – name of the user to whom the access card is assigned.
2. param1 – ID of the user to whom the access card is assigned.

Configuring parser

General information on transferring data from Intellect to Axxon Next

The data transfer using the **NEXT** object is shown below:



When selected events come to the system the **NEXT** object creates an XML package as described in Creating XML package on Intellect's side section and sends it to the IP address and port specified when configuring connection to *Axxon Next* Server.

The received XML package is processed by the parser (described in Creating a parser section) on *Axxon Next* Server. The titles resulting from processing are overlaid on video in *Axxon Next*.

Creating XML package on Intellect's side

The following event parameters are sent in XML:

1. Number of the object from which the event is received.
2. Type of the object from which the event is received.
3. Name of the object from which the event is received.
4. Event name.
5. Set event parameters (from 0 to N).

Each event is sending in separate TransactionBlock with unique FunctionNumber parameter. FunctionNumber is specified automatically and it's unique for each event among all NEXT objects in the system.

Low bound of a FunctionNumber values range is specified by FunctionNumberMinValue registry key in the HKEY_LOCAL_MACHINE\SOFTWARE\ITV\Intellect registry section.

Sent XML packages look like:

```
<TransactionBlock>

<TransactionDate>02.08.10</TransactionDate>

<TransactionTime>19:53:51</TransactionTime>

<FunctionNumber>1001</FunctionNumber>

<FunctionName>Intellect Event ACCESS_IN</FunctionName>

<ObjectId>1</ ObjectId >

<ObjectType>Perco reader</ ObjectType >

<ObjectName>Perco 1 reader</ ObjectName >

<EventName>Access by ID</ EventName >

<param1>0</param1>

<param0>0</param0>

</TransactionBlock>

<TransactionBlock>

<TransactionDate>02.08.10</TransactionDate>

<TransactionTime>19:54:51</TransactionTime>

<FunctionNumber>1002</FunctionNumber>

<FunctionName>Intellect Event ACCESS_DENIED</FunctionName>

<ObjectId>1</ ObjectId >

<ObjectType>Perco reader</ ObjectType >

<ObjectName>Perco 1 reader</ ObjectName >

<EventName>Access forbidden</ EventName >

<param1>0</param1>

<param0>0</param0>

</TransactionBlock>
```

Important!
The number and names of parameters can differ depending on the **NEXT** settings – see Selecting events to be sent to Axxon Next Server.

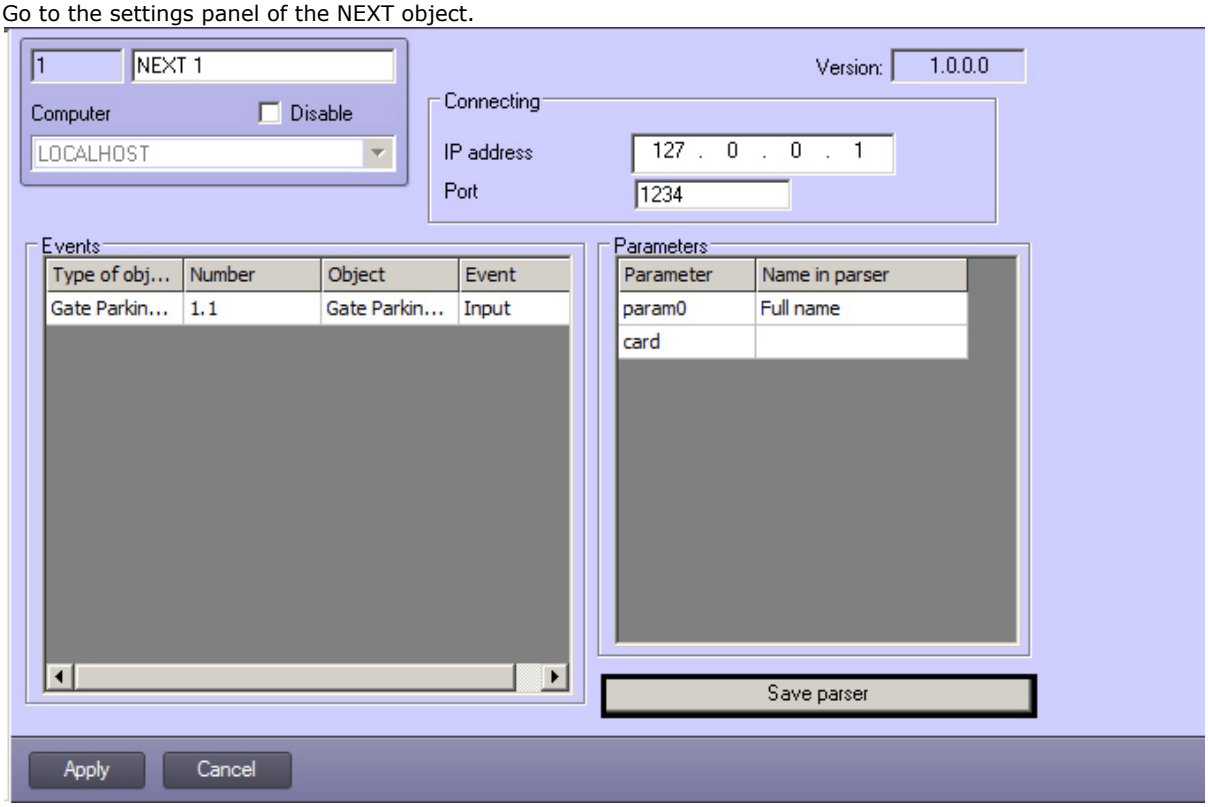
Creating a parser

A parser for XML packages sent by the **NEXT** object to *Axxon Next* Server is configured by the user on the side of *Axxon Next* Server. The information on the parser selection is given in *Axxon Next* documentation – see AxxonSoft documentation repository.

Parser is a text file. It can be created manually or generated automatically.

To save the automatically generated parser in the local ot network disk, do the following:

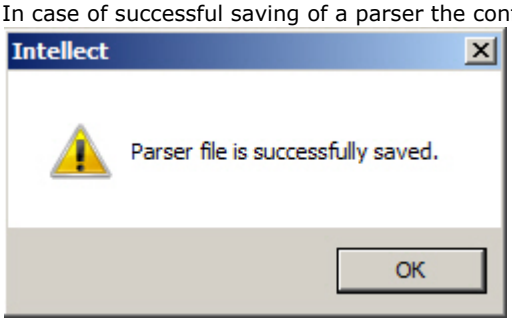
1. Go to the settings panel of the NEXT object.



2. Click the **Save parser** button.
3. In the opened standard dialog window select path for saving the parser file and specify its name.

> **Note.**
> As *Intellect* Server and *Axxon Next* Server usually locate on different computers, it's recommended to save parser on the network recource to which both servers can access. In this case it will be possible to select a parser name from the selected network folder when selecting a parser file on the *Axxon Next* Server.

4. In case of successful saving of a parser the confirmation window will display. Click **OK**.



In the parser text for each event the separate displaying rule is specified. Study the sample below:

```
[1001]
: < ObjectName >
: <TransactionDate>
: <TransactionTime>
: < EventName >
<Text 1, specified in the Parameters table>: <Parameter 1 specified in the Parameters table>
<Text 2, specified in the Parameters table>: <Parameter 2 specified in the Parameters table>
[1002]
: < ObjectName >
: <TransactionDate>
```

```
: <TransactionTime>

: < EventName >

<Text 3, specified in the Parameters table>: <Parameter 3 specified in the Parameters table>

<Text 4, specified in the Parameters table>: <Parameter 4 specified in the Parameters table>

[FUNCTIONNAME]

1001=Intellect event <Event name, e.g. ACCESS_IN>

1002=Intellect event <Event name, e.g. ACCESS_DENIED>
```

Note.
Object, Date, Time and Event words do not depend on type of events or parameters and always specified in the same way in the automatically generated parser.

Important!
The number and names of parameters can differ depending on the **NEXT** settings – see Selecting events to be sent to Axxon Next Server.

Note.
Additional information on how to create parsers for titles received from POS terminals is available in POS documentation – see the latest version of *POS Intellect* documentation in AxxonSoft documentation repository.