ACFA Intellect

Castle Integration Module Configuration and Operation Manual

Last update 07/10/2022

Table of contents

1 List of terms used in Castle Integration Module Configuration and Operation Manual

Access – movement of people, means of transport and other objects into (out of) premises, buildings, zones and territories.

Executive devices – turnstiles, gates, barriers or doors equipped with electromagnetic or electromechanical locks. Controller manages executive devices and gets information about their state.

Client – computer connected to *Castle* server over TCP/IP protocol. *Intellect* Server is the *Castle* server's Client.

Castle client – computer with installed *Castle ACS* software, connected to *Castle* server over TCP/IP protocol.

Controller – an electronic device that is LSI microprocessor board in the metal case. It is connected to RS485 or Ethernet, readers, sensors and executive devices.

Castle server - computer with installed *Castle ACS* server software.

Access control system (ACS) – hardware-software system performing the access control functions.

Readers – electronic devices for entering human-memorable PINs with the keypad or for reading PINs from the system's security tokens.

Access point – a point where access control is performed. An access point may be a door, a turnstile, a gate or a barrier equipped with a reader, an electromechanical lock or other access control devices.

Intellect Server – computer with installed *Intellect* software (**Server** configuration).

2 Introduction into Castle Integration Module Configuration and Operation Manual

On the page:

2.1 Purpose of the Document

Configuration and operation manual for Castle integration module is a reference and information guide meant for *Castle* configuration specialists and operators. This module is a part of *ACFA Intellect* software package.

The guide provides:

1. general information about *Castle* module;
2. information about how to configure *Castle* module;
3. information about how to use *Castle* module.

2.2 General information about Castle integration module

Castle integration module is the *ACFA Intellect* component. It performs the following functions:

1. Configuring *Castle* ACS (manufactured by PromAvtomatika , LLC);
2. Ensuring interaction between *Castle* ACS and *ACFA Intellect* (monitoring, control).

Note.

For more information about *Castle ACS*, please refer to official documentation for this system.

Before configuring *Castle* integration module, do the following:

1. Install *Castle* ACS hardware on the object under security surveillance;
2. Configure access points of *Castle* ACS using the *Castle* Client (see reference documentation about *Castle* ACS).

3 Supported hardware and licensing of the Castle integration module

Manufacturer	Castle Creations 540 North Rogers Road Olathe, Kansas 66062
Integration type	Soft-soft
Equipment connection	RS-232, USB, Ethernet

Supported equipment

Equipment	Purpose	Feature
EP4	Access controller	7000 keys 500 time zones 40000 events Connection interface: Ethernet Readers interface: Wiegand-26, Dallas Touch Memory
EP2	Access controller	7000 keys 500 time zones 40000 events Connection interface: Ethernet Readers interface: Wiegand-26, Dallas Touch Memory
PRO4	Access controller	7000 keys 500 time zones 40000 events Connection interface: RS-485 Readers interface: Wiegand-26, Dallas Touch Memory
EP	Access controller	7000 keys 500 time zones 40000 events Connection interface: Ethernet Readers interface: Wiegand-26, Dallas Touch Memory
PRO	Access controller	7000 keys 500 time zones 40000 events Connection interface: RS-485 Readers interface: Wiegand-26, Dallas Touch Memory
ES	Access controller	96000 keys 30000 time zones 400000 events Connection interface: Ethernet Readers interface: Wiegand-26, Dallas Touch Memory
RS	Access controller	96000 keys 30000 time zones 400000 events Connection interface: RS-485 Readers interface: Wiegand-26, Dallas Touch Memory

Protection
1 IP-address (Castle Server). Castle Server requires the Hasp protection key.

4 Configuring Castle integration module

4.1 Configuration procedure for Castle integration module

Here is the configuration procedure for *Castle* integration module:

1. Configuring the Castle server connection to ACFA Intellect;
2. Synchronization and management of Castle ACS configuration;
3. Configuring the Castle server connection to ACFA Intellect.

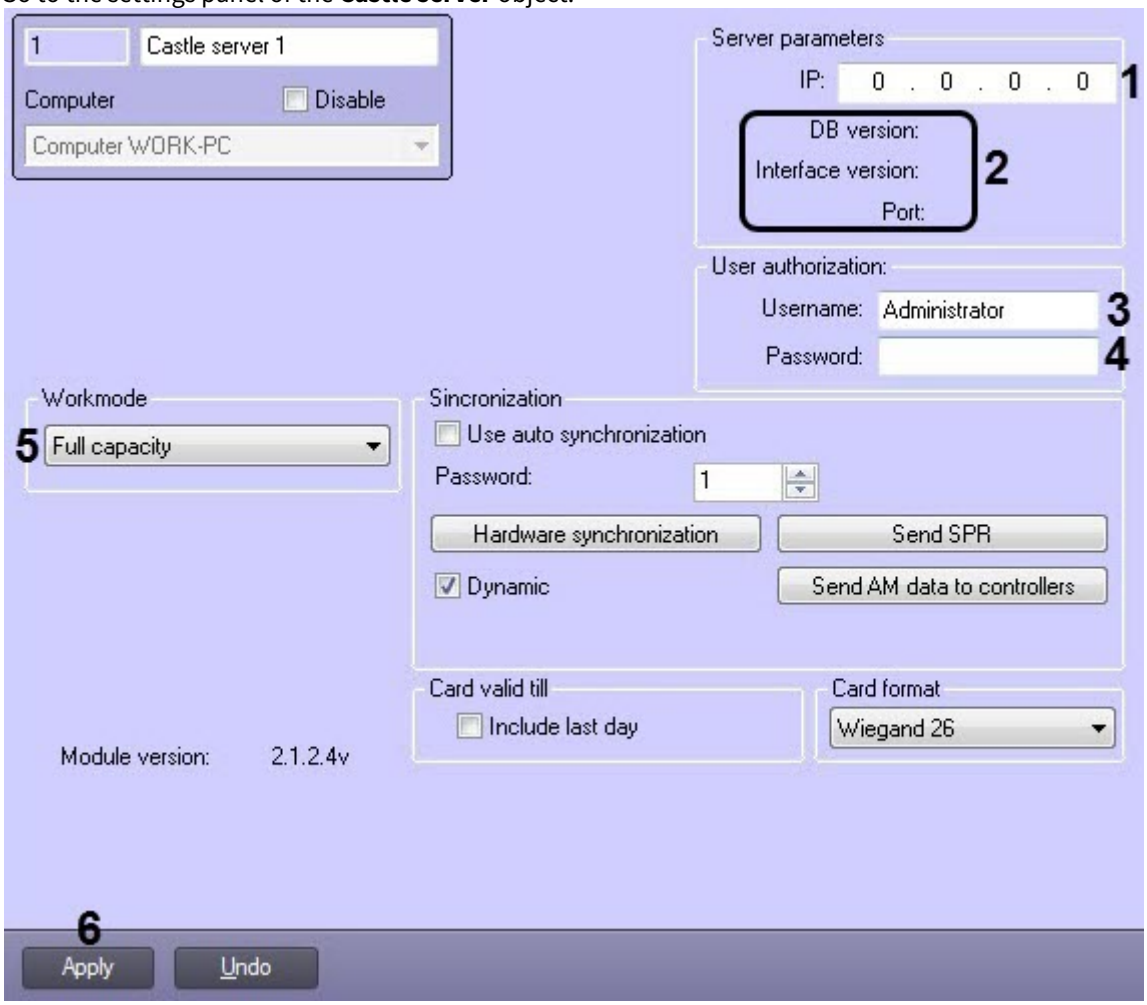
4.2 Configuring the Castle Server

The *Castle* Server is configured on the settings panel of the **Castle server** object. This object is created on the basis of the **Computer** object on the **Hardware** tab of the **System Settings** dialog box.

4.2.1 Configuring the Castle server connection to ACFA Intellect

To configure the *Castle* server connection to *ACFA Intellect*, do the following:

1. Go to the settings panel of the **Castle server** object.



   In the **Server parameters** field (**1**), enter the IP address of the *Castle* server.

   > **Note.**
   >
   > The following information is displayed in the area (**2**):
   > - **DB version** – the version of *Castle* ACS database;
   > - **Interface version** – the version of the data exchange protocol between *Castle* server and *ACFA Intellect*;
   > - **Port** - the port used for the *Castle* server-*ACFA Intellect* connection.

2. In the **Synchronization** (**3**) and **Username** (**4**) fields, enter the username and password, respectively, used to login to the *Castle* ACS Client software (see the official reference documentation for the Castle ACS).

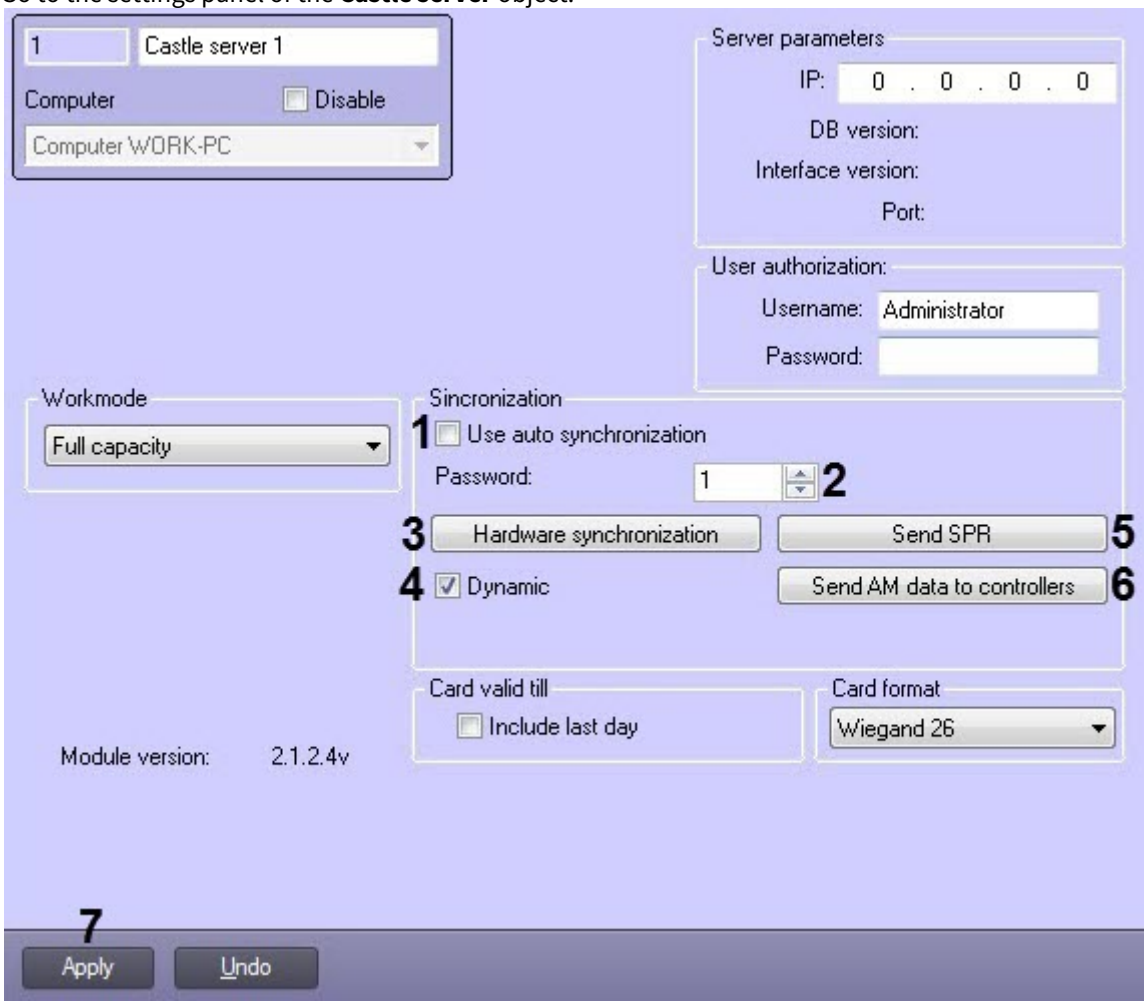
3. From the **Workmode** drop-down list (**5**), select the operation mode of the *Castle* server:
   - **Full capacity** – configuration, management and monitoring are available.
   - **Monitoring** – only management and monitoring are available. Also, the Synchronization and management of Castle ACS configuration and Configuring the Castle user access cards will be unavailable.
4. Click the **Apply** button to save the changes (**6**).

The *Castle* server connection to *ACFA Intellect* is now configured.

4.2.2 Synchronization and management of Castle ACS configuration

To synchronize and manage the *Castle* ACS configuration, do the following:

1. Go to the settings panel of the **Castle server** object.



2. Set the **Use auto synchronization** checkbox (**1**) if it is necessary to send data from the *Access Manager* module to the *Castle* server after a specified time period.
3. In the **Password** field (**2**), enter the time period in hours after which the data of the *Access Manager* module will be sent to the *Castle* server.

> **Note**
>
> The time period count starts from the moment the *Castle* integration module is launched.

4. Click the **Hardware synchronization** button (**3**) to read the *Castle* ACS configuration stored on the *Castle* server and to build the corresponding object tree in the *ACFA-Intellect* software package.
5. Set the **Dynamic** checkbox (**4**) if it is necessary to automatically send the changed data of the *Access Manager* module to the *Castle* server.

> **Attention!**
>
> To ensure the proper operation of *Castle* integration module, it is required that the **Dynamic** checkbox is always set.

> **Note**
>
> In order to speed up the autosync process, the following user sending logic is used.
> The users who have at the time of synchronization:
> - the card issue date, which has not yet come;
> - the card expiration date that has already passed;
> - access levels that are unrelated to the the controllers of this Castle server;

- or the **User locked** property

are not written to the controller.

6. Click the **Send SPR** button (**5**) to send the data from the *Access Manager* module to the *Castle* server.

> **Attention!**
>
> The *Castle* server connection to *ACFA-Intellect* should be configured prior to performing this action.

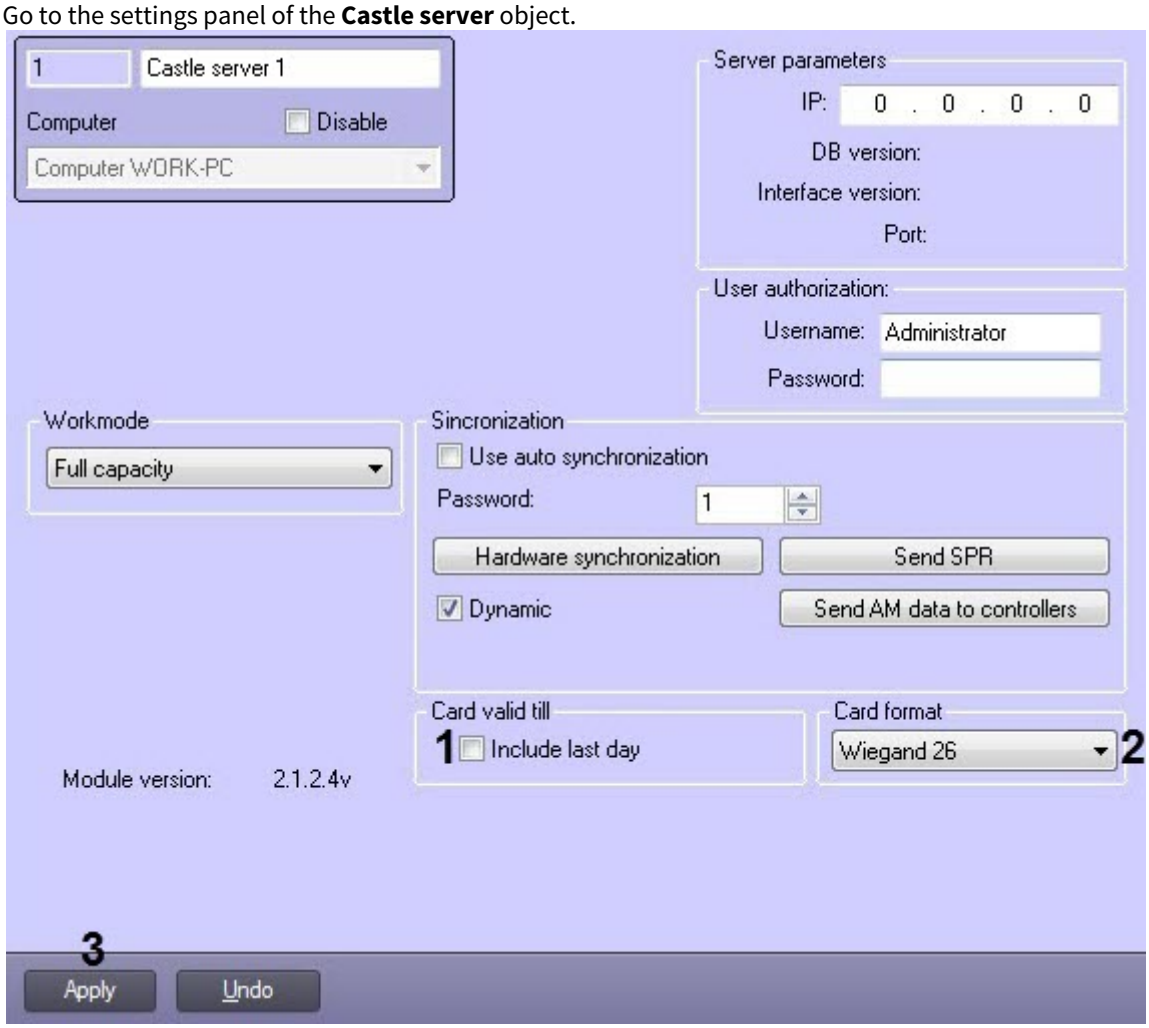
7. Click the **Send AM data to controllers** button (**6**) to send the previously sent data of the *Access Manager* module to the *Castle* controllers.
8. Click the **Apply** button (**7**).

Synchronization and management of *Castle* ACS configuration are now complete.

4.2.3 Configuring the Castle user access cards

To configure the access cards for *Castle* users, do the following:

1. Go to the settings panel of the **Castle server** object.

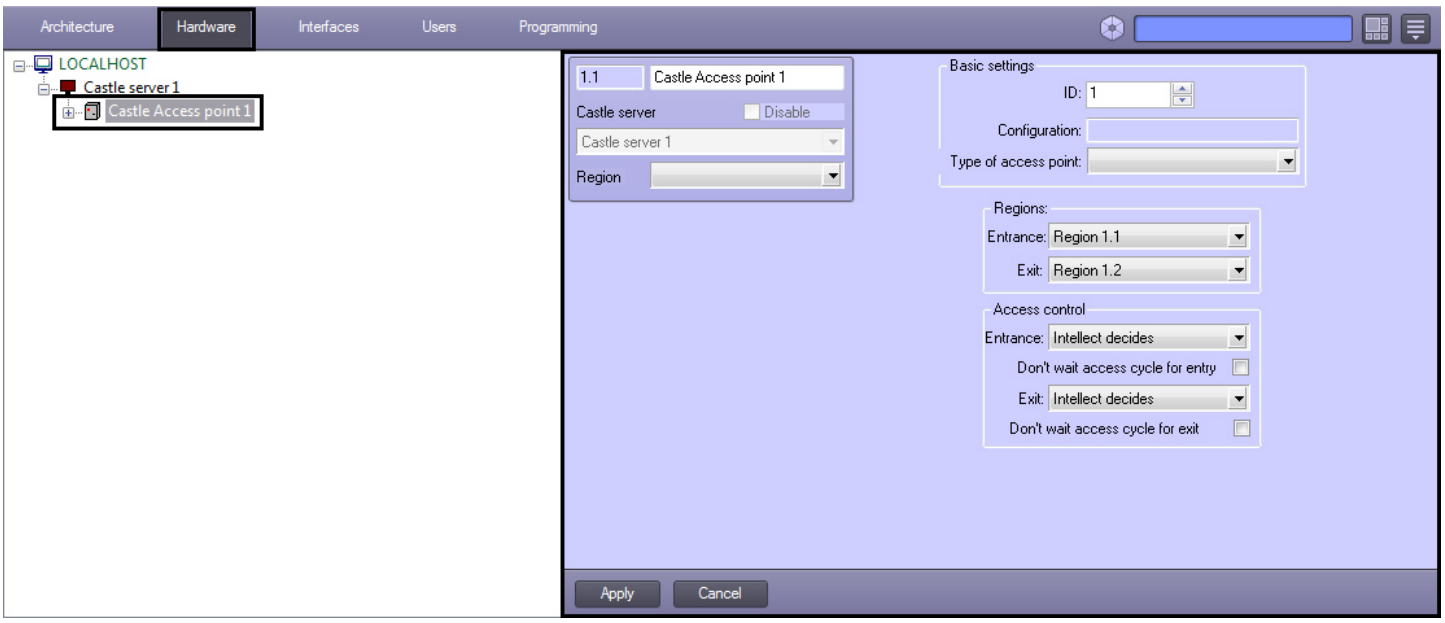


2. Set the **Include last day** checkbox (**1**) to grant users access on the day the access card expires (**Valid till** field, see Settings panel of the User object).
3. From the **Card format** drop-down list (**2**), select the access card data format: **Wiegand 26** or **Wiegand 34**.
4. Click **Apply** (**3**).

Configuring the access cards for the *Castle* users is completed.

4.3 Configuring Castle ACS Access points

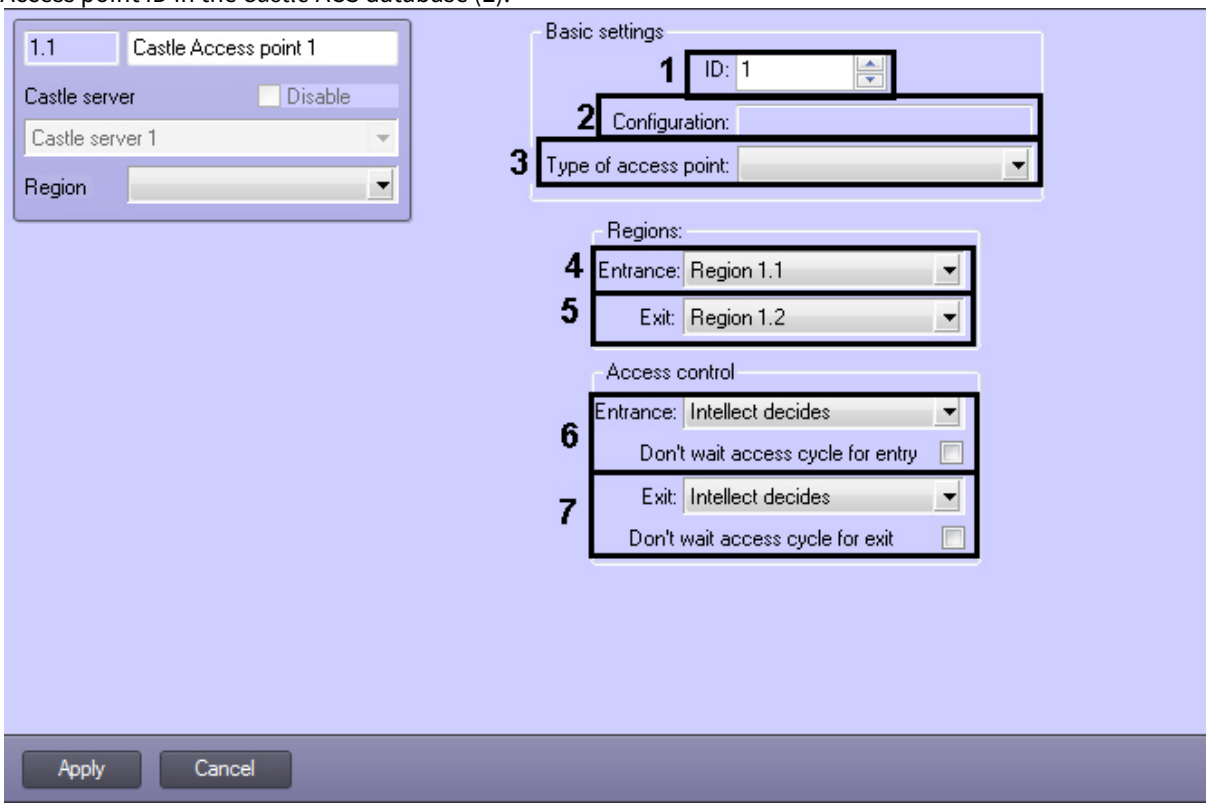
Castle ACS Access point is configured on the settings panel of the **Castle Access point** object. This object is created on the base of the **Castle server** object in the **Hardware** tab of the **System settings** dialog box.



The **Access point** object is registered automatically when reading *Castle ACS* configuration.

The following parameters are automatically specified when reading *Castle ACS* configuration:

1. Access point ID in the *Castle* ACS database (**1**).



2. Access point configuration (**2**).

Note.

> Access point configuration is set using the switch on the card of corresponding *Castle ACS* controller (see reference documentation about *Castle ACS*).

3. Access control mode (**3**).

Castle ACS access points are configured as follows:

1. In the **Entry** dropdown list select the **Region** object corresponding to the area on the side of exit from the access point (**4**).
2. In the **Exit** dropdown list select the **Region** object corresponding to the area on the side of entrance to the access point (**5**).
3. Set parameters of access control at entrance (**6**):
   a. In the **Entry** dropdown list select the one that will decide whether to give access or not and whether to register it or not – *Intellect* Server or operator;

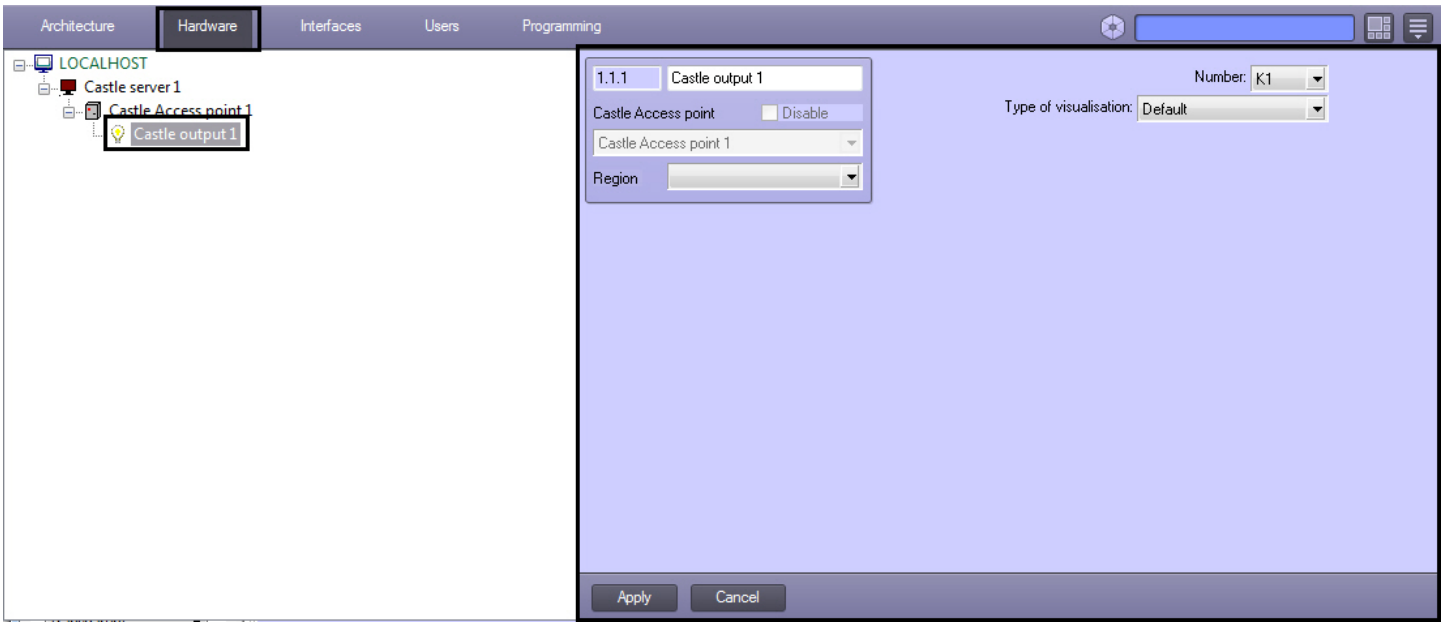
   > **Note.**
   >
   > To process the request operator is to create a **Event manager** interface object and configure it for the **Operator's query (Access granted)** event. For more information about this object and its functions, please refer to Event Manager Module Settings and Operation Guide.

   b. If it is considered that passing is performed just after placing the access card to the reader, then check the **Don't wait access cycle for exit** checkbox. If the passing is considered to be performed only after passing the access point (i.e. door sensor is triggered), uncheck this checkbox.
4. Set parameters of access control at exit (**7**). The parameters are the same as those of access control at entrance (see the previous item).
5. Click the **Apply** button to save all changes.
6. Repeat steps 1-9 for all required *Castle ACS* access points.

Castle ACS access points are now configured.

4.4 Configuring Castle ACS outputs

Castle ACS Output is configured on the settings panel of the **Castle output** object. This object is created on the base of the **Castle Access point** object in the **Hardware** tab of the **System settings** dialog box.



Configuring *Castle ACS* output is performed as follows:

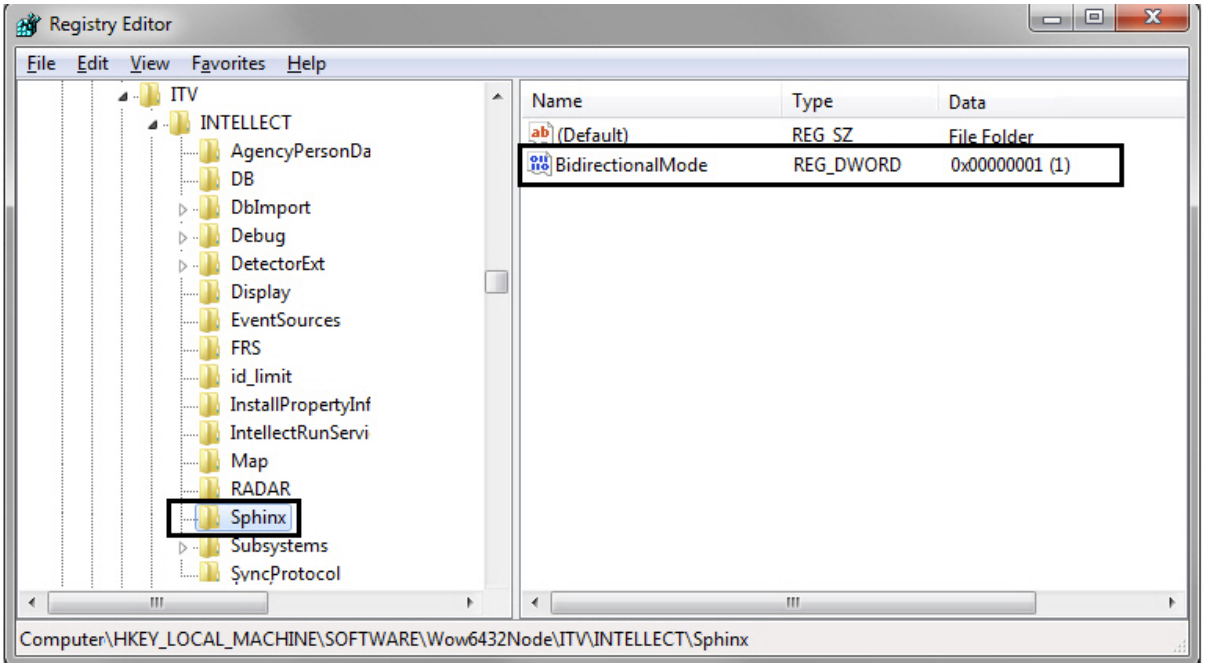
1. Go to the settings panel of the **Castle output** object.

2. The output number is automatically specified when reading *Castle ACS* configuration (**1**).
3. From the **Type of visualisation** drop-down list select the corresponding set of icons for the output (**2**).
4. Click **Apply**.

Castle ACS outputs are now configured.

4.5 Configuring of access partition for entrance and exit

To enable access partition, create the DWORD (32 bits) parameter with the BidirectionalMode name and value 1 in the HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\ITV\INTELLECT\Sphinx register section.



Access partition for entry and exit is performed using the time zone intervals in the *Visitor Management System* interface object. For the correct operation of the access partition, an even number of time intervals should be created for the time zone, where the odd time intervals are assigned to the entrance reader, and the even time intervals are assigned to the exit reader.

5 Working with Castle integration module

5.1 General information about how to use Castle integration module

The following interface objects are in use when working with *Castle* integration module:

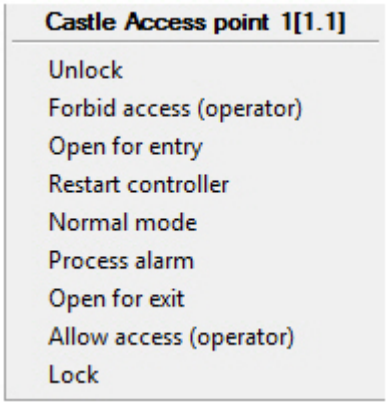
- **Map**.
- **Event Viewer**.

Information on how to configure these interface objects can be found in Intellect Software package: Administrator's Guide.

Information on how to work with these interface objects can be found in Intellect Software package: Operator's Guide.

5.2 Managing Castle access point

An access point is managed in the **Map** interactive dialog box using the feature menu of the Castle access point object.

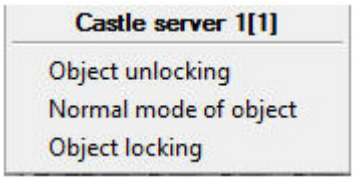


> **Note.**
>
> To call the feature menu of the object, right-click the object icon.

Description of feature menu of the **Castle** access point object is given in the table.

Menu command	Functionality
Lock	Access point is locked, there is no access
Normal mode	Access point is in the normal mode: access point is normally locked; it is unlocked when reading the key; after passing or when the specified time expires access point is automatically locked
Forbid access (operator)	Access is forbidden (after receiving access request)
Allow access (operator)	Access is allowed (after receiving access request)
Unlock	The lock is unlocked at the access point
Restart controller	Access point controller is restarted
Process alarm	Registration of alarm at the access point is confirmed

All access points can be managed using the feature menu of the **Castle server** object.

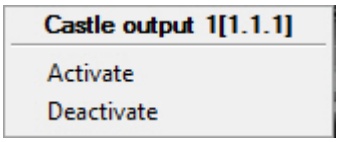


Description of feature menu of the **Castle** server object is given in the table.

Menu command	**Functionality**
Object locking	All access points are constantly locked
Object unlocking	All locks at access points are unlocked
Normal mode of object	All access points are in the normal mode

5.3 Managing Castle output

An output is managed in the **Map** interactive dialog box using the feature menu of the Castle output object.



Description of feature menu of the **Castle** output object is given in the table.

Menu command	**Functionality**
Activate	Output activation
Deactivate	Output deactivation