MorphoAccess SIGMA Lite Integration Module Configuration and Operation Guide

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Table of contents

1 Introduction to MorphoAccess SIGMA Lite Integration Module Configuration and Operation Guide....3
1.1 The purpose of this Guide....3
1.2 General information on the MorphoAccess SIGMA Lite module....3
2 Hardware compatibility and licensing of the MorphoAccess SIGMA Lite module....4
3 Configuring the MorphoAccess SIGMA Lite integration module....5
3.1 Configuring the MorphoAccess SIGMA Lite connection....5
3.2 Managing the MorphoAccess SIGMA Lite configuration....5
3.3 User control configuration of the MorphoAccess SIGMA Lite....6
3.4 Selecting the MorphoAccess SIGMA Lite operation mode....7
3.4.1 Configuring the MorphoAccess SIGMA Lite controller in GPIO mode....8
3.4.2 Configuring the MorphoAccess SIGMA Lite controller in SDAC mode....9
3.5 Configuring the MorphoAccess SIGMA Lite regions....10
3.6 Configuring the MorphoAccess SIGMA Lite tampering protection....11
4 MorphoAccess SIGMA Lite integration module operation....13
4.1 General information on MorphoAccess SIGMA Lite module operation....13
4.2 Managing the MorphoAccess SIGMA Lite controller....13
4.3 Creating a fingerprint template in the Access Manager module using the MorphoAccess SIGMA Lite controller....14

1 Introduction to MorphoAccess SIGMA Lite Integration Module Configuration and Operation Guide

На странице:

- The purpose of this Guide
- General information on the MorphoAccess SIGMA Lite module

1.1 The purpose of this Guide

The *MorphoAccess SIGMA Lite Integration Module Configuration and Operation Guide* is a reference guide for *MorphoAccess SIGMA Lite* module configuration specialists. This module is a part of the access control system (ACS) which is based on the *ACFA Intellect* software.

This Guide contains information about the following topics:

1. general information on the *MorphoAccess SIGMA Lite* module;
2. configuring the *MorphoAccess SIGMA Lite* module;
3. operating the *MorphoAccess SIGMA Lite* module.

1.2 General information on the MorphoAccess SIGMA Lite module

The *MorphoAccess SIGMA Lite* module is a part of the access control system (ACS) which is based on the *ACFA Intellect* software. It is designed for the following functions:

1. configuration of the *MorphoAccess SIGMA Lite* reader (manufactured by *IDEMIA*);
2. interoperability between the *MorphoAccess SIGMA Lite* controller and the *ACFA Intellect* software for monitoring and management.

> **Note**
> For detailed information on the *MorphoAccess SIGMA Lite* ACS, you can refer to the the manufacturer's guides.

Before you start configuring the *MorphoAccess SIGMA Lite* module, do the following:

1. install the *MorphoAccess SIGMA Lite* controller onsite (refer to the official *MorphoAccess SIGMA Lite* manual);
2. connect the *MorphoAccess SIGMA Lite* to the *Intellect* Server (refer to the official *MorphoAccess SIGMA Lite* manual).

2 Hardware compatibility and licensing of the MorphoAccess SIGMA Lite module

Manufacturer	IDEMIA 2 Place Samuel de Champlain 92400Courbevoie France +33 (0)1 73 60 20 20 info@idemia.com
Integration Type	SDK
Hardware connections	Ethernet

Hardware compatibility

Equipment	Purpose	Features
MorphoAccess SIGMA Lite	Biometric controller	Verification speed: 1:10,000 user IDs per second Up to 30,000 templates are supported Up to 250,000 users are supported Up to 1,000,000 events are supported Supported proximity card formats: Prox, iClass or MIFARE / DESFire / NFC Communication protocol: Ethernet

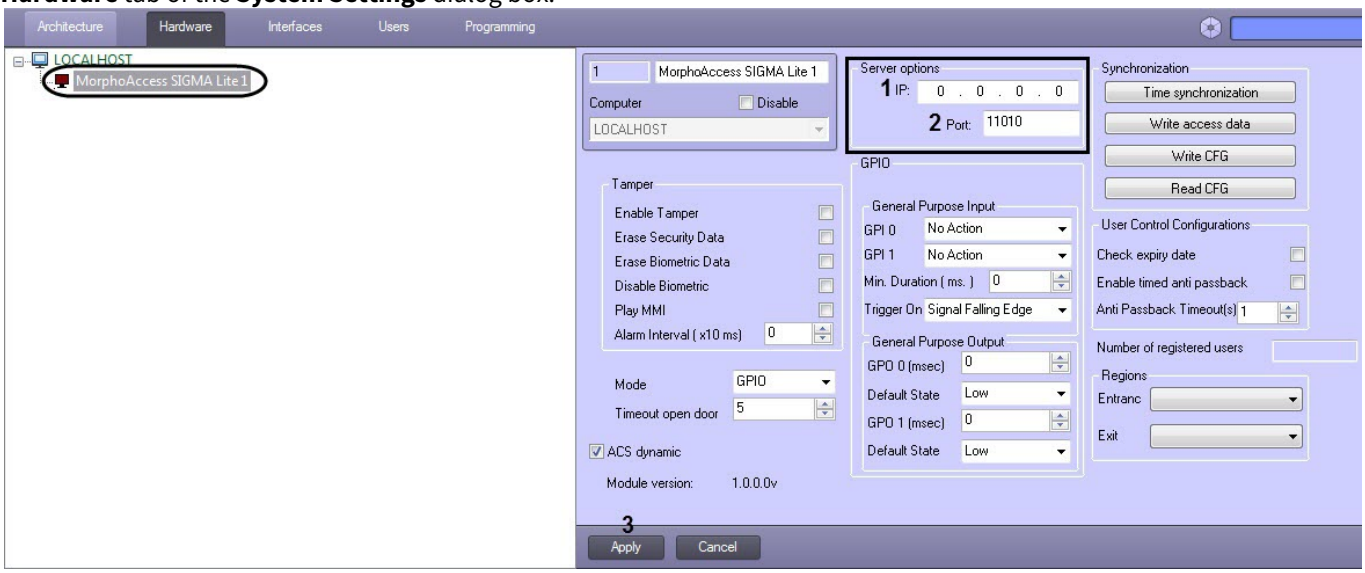
Software Licensing
Per controller.

3 Configuring the MorphoAccess SIGMA Lite integration module

3.1 Configuring the MorphoAccess SIGMA Lite connection

Configuring the *MorphoAccess SIGMA Lite* controller connection is as follows:

1. Go to the **MorphoAccess SIGMA Lite** object settings panel, which is created on the basis of the **Computer** object on the **Hardware** tab of the **System Settings** dialog box.



2. In the **IP** field (**1**) specify the IP address to connect to the *MorphoAccess SIGMA Lite* controller.
3. In the **Port** field (**2**) specify the port to connect to the *MorphoAccess SIGMA Lite* controller.
4. Click the **Apply** button (**3**) to apply the changes.

Configuring the *MorphoAccess SIGMA Lite* controller connection is complete.

3.2 Managing the MorphoAccess SIGMA Lite configuration

The *MorphoAccess SIGMA Lite* controller configuration is managed as follows:

1. Go to the **MorphoAccess SIGMA Lite** object settings panel.

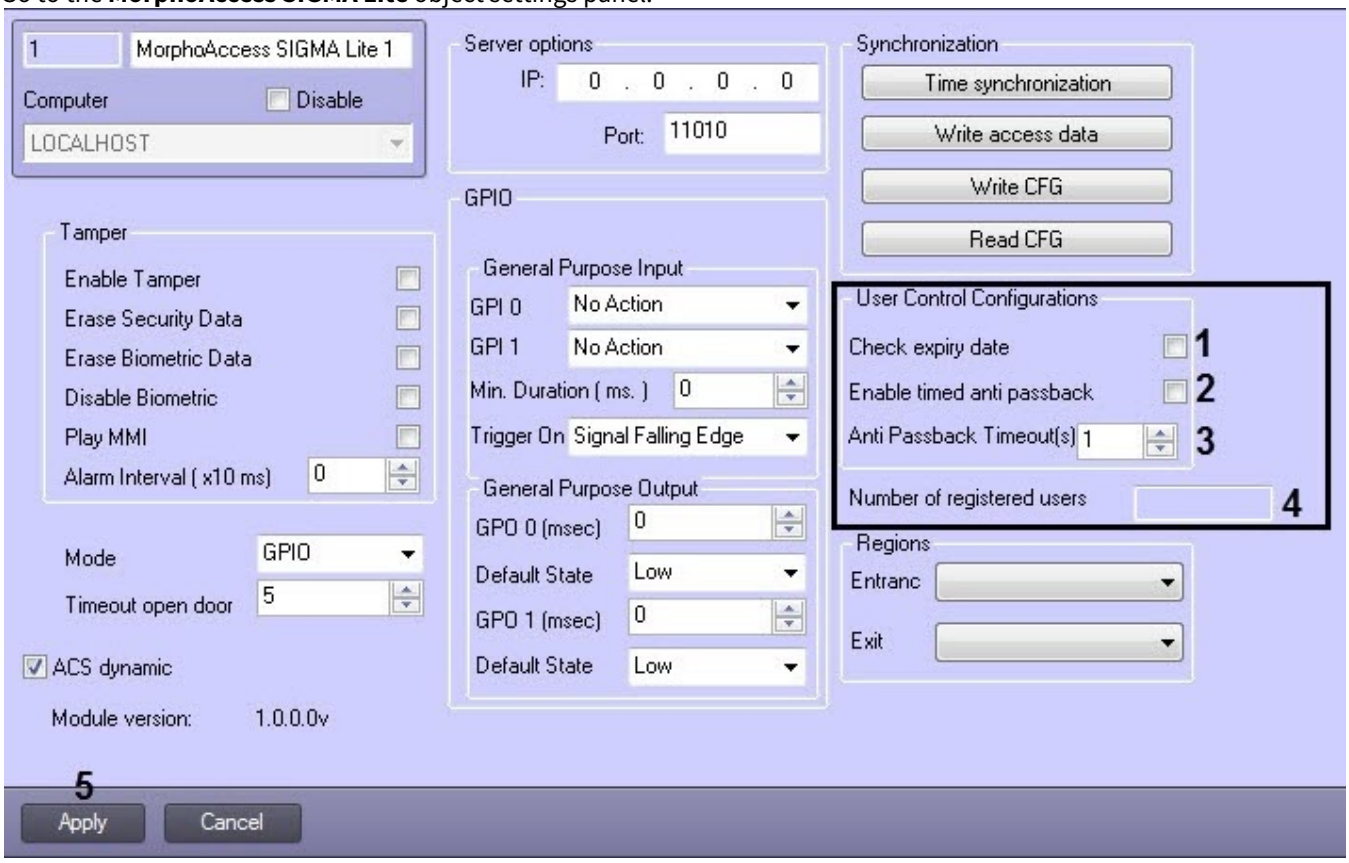
2. Click the **Time synchronization** button (**1**) to synchronize the controller and the Server time.
3. Click the **Write access data** button (**2**) to write the *Access Manager* module data to the *MorphoAccess SIGMA Lite* controller.
4. Click the **Write CFG** button (**3**) to write the current configuration to the *MorphoAccess SIGMA Lite* controller.
5. Click the **Read CFG** button (**4**) to read the current configuration from the *MorphoAccess SIGMA Lite* controller.
6. Set the **ACS dynamic** checkbox (**5**) to enable the dynamic parameter forwarding. When the *ACFA Intellect* configuration is changed via the *Access Manager* module, the changes are automatically transferred to the *MorphoAccess SIGMA Lite* controller. If it is not necessary to automatically transfer the changes, then unset this checkbox.
7. Click **Apply** (**6**) to apply the changes.

The management of the *MorphoAccess SIGMA Lite* controller configuration is complete.

3.3 User control configuration of the MorphoAccess SIGMA Lite

The user control configuration is set up as follows:

1. Go to the **MorphoAccess SIGMA Lite** object settings panel.



2. Set the **Check expiry date** checkbox (**1**) if it is necessary to check the user account expiration date during the authentication.
3. Set the **Enable timed anti passback** checkbox (**2**) if it is necessary to enable the antipassback. The access will be allowed after the time specified in the **Anti Passback Timeout(s)** field (**3**) runs out.
4. In the **Anti Passback Timeout(s)** field (**3**), specify the time in seconds. If the antipassback is enabled, the access will be allowed after the specified time runs out.
5. Click **Apply** (**5**) to apply the changes.

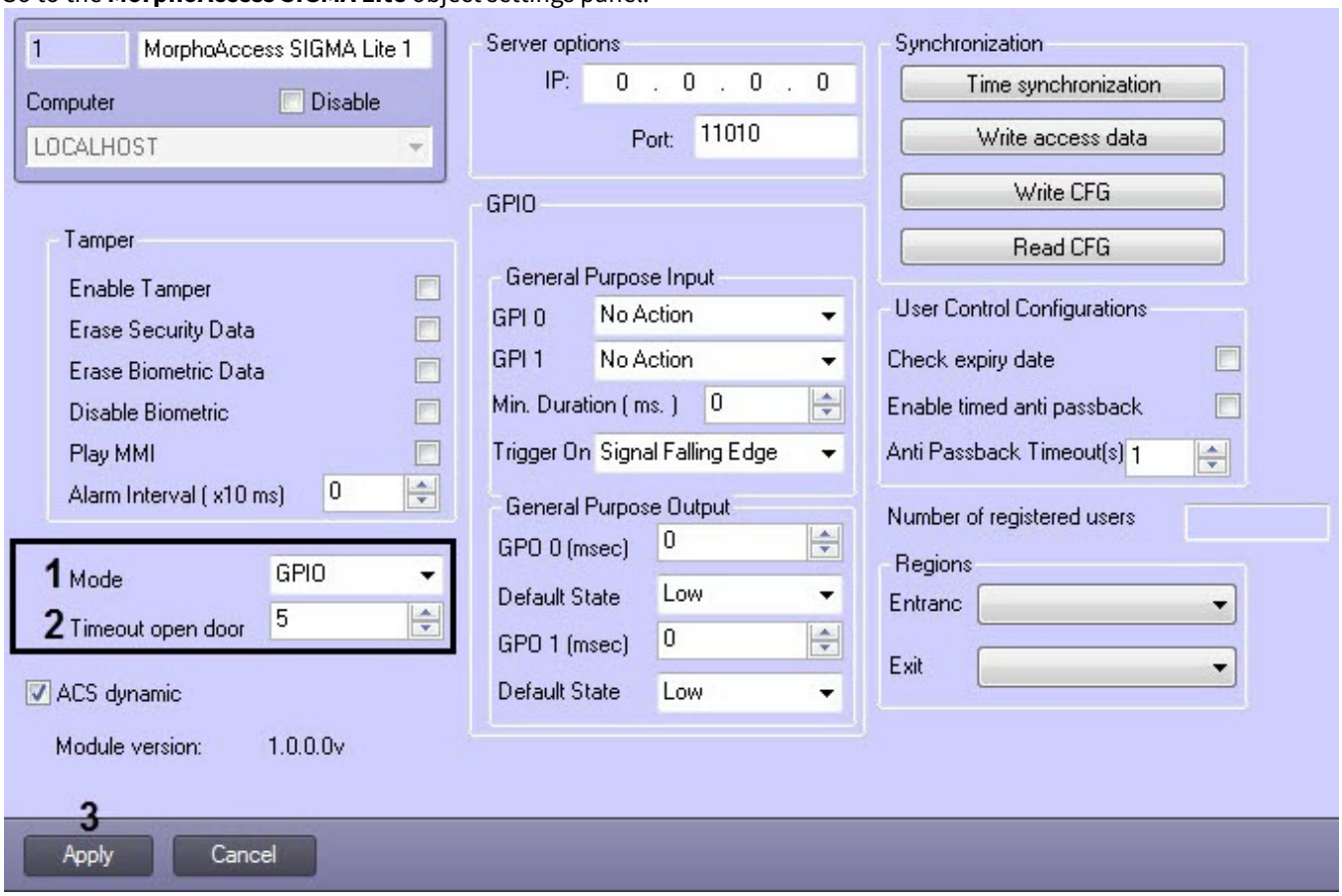
> **Note**
> The **Number of registered users** field (**4**) displays the number of current registered users.

Setting up the user control configuration of the *MorphoAccess SIGMA Lite* controller is complete.

3.4 Selecting the MorphoAccess SIGMA Lite operation mode

The *MorphoAccess SIGMA Lite* controller mode is selected as follows:

1. Go to the **MorphoAccess SIGMA Lite** object settings panel.



2. In the **Mode** drop-down list (**1**), select the operation mode:
   - **GPIO** is a general purpose input/output (for details about setting up this operation mode, see Configuring the MorphoAccess SIGMA Lite controller in GPIO mode).
   - **SDAC** is a single door access control (for details about setting up this operation mode, see Configuring the MorphoAccess SIGMA Lite controller in SDAC mode).
3. In the **Timeout open door** field (**2**), enter the time in seconds within which the door will be opened after user authentication.
4. Click **Apply** (**3**) to apply the changes.

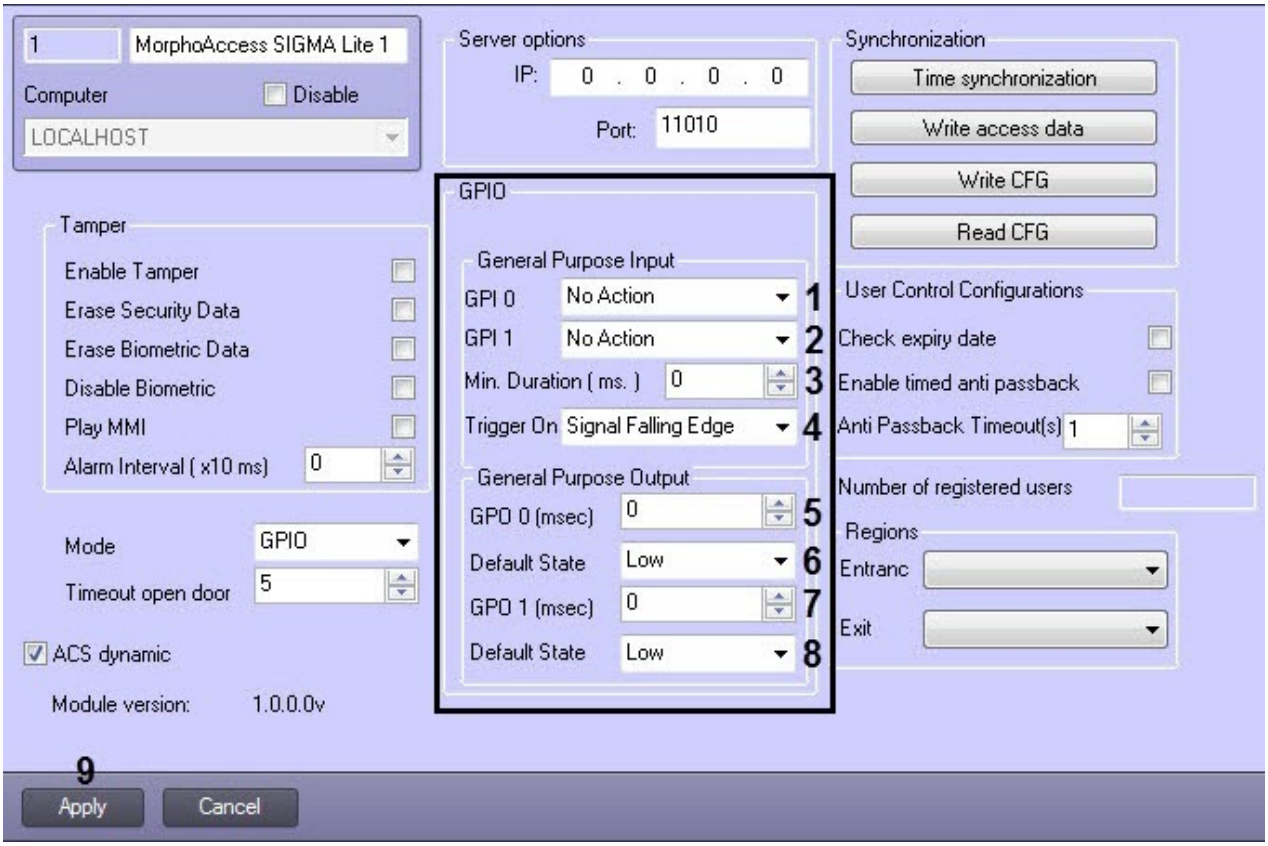
Selecting the *MorphoAccess SIGMA Lite* controller mode is complete.

3.4.1 Configuring the MorphoAccess SIGMA Lite controller in GPIO mode

The *MorphoAccess SIGMA Lite* controller operation in the GPIO mode (general purpose input/output) is configured as follows:

1. From the **GPI 0** drop-down list (**1**), select the actions required for the zero general purpose input in case of an event specified in the **Trigger On** field (**4**):
   a. **No Action** - no action is required.
   b. **Delete Template(s)** - erase all biometric templates.
   c. **Reboot Device** - reboot the controller.

d. **Alarm** - activate a sound alarm that lasts 5 seconds.



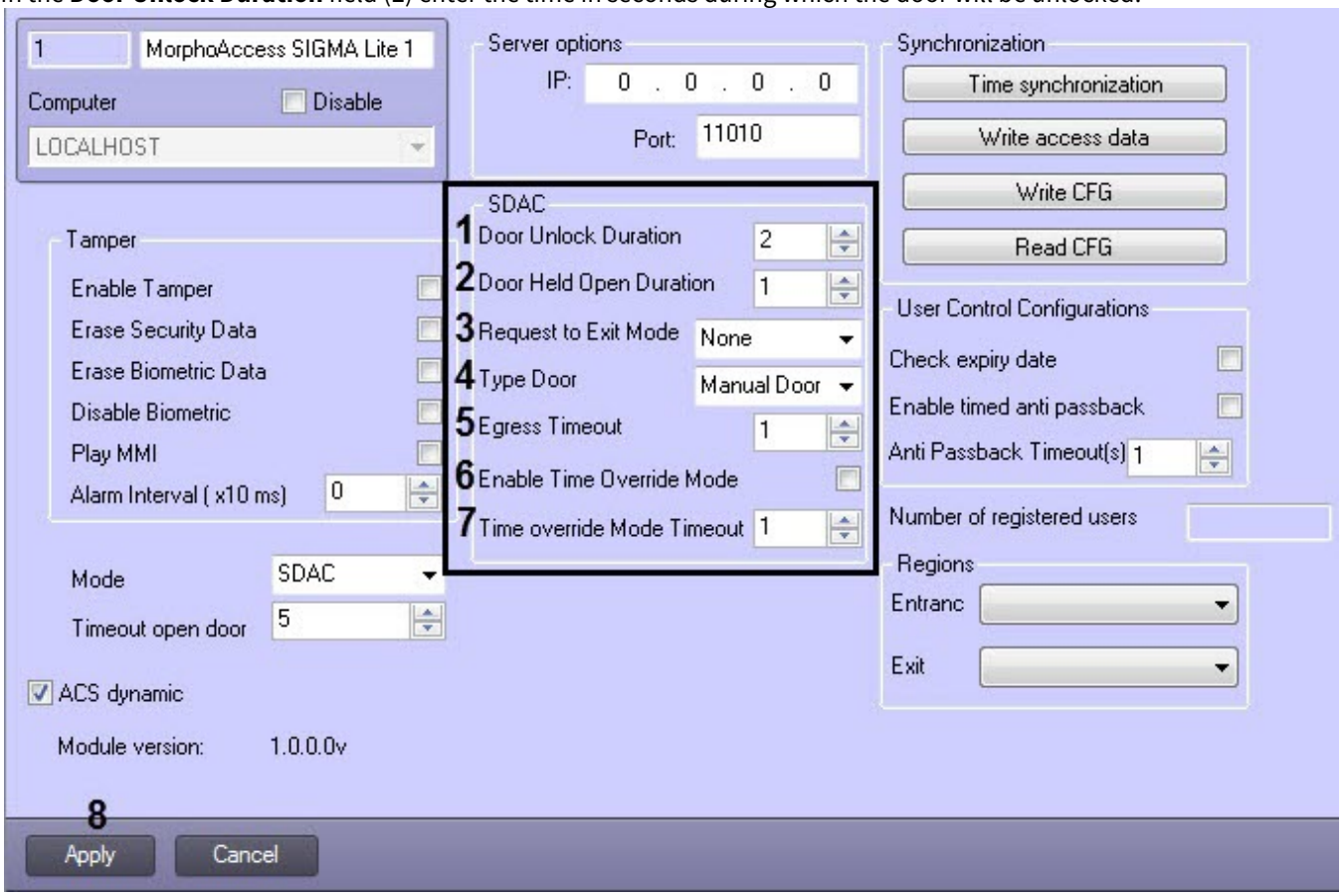
2. From the **GPI 1** drop-down list (**2**), select the actions required for the first general purpose input in case of an event specified in the **Trigger On** field (**4**):
   a. **No Action** - no action is required.
   b. **Delete Template(s)** - erase all biometric templates.
   c. **Reboot Device** - reboot the controller.
   d. **Alarm** - activate a sound alarm that lasts 5 seconds.
3. In the **Min. Duration (ms.)** field (**3**), enter the time in milliseconds, after which the actions specified in the **GPI 0** (**1**) and **GPI 1** (**2**) fields will be activated if the relay state does not change after the corresponding signal is given.
4. From the **Trigger On** drop-down list (**4**), select the event which triggers the actions specified in the **GPI 0** (**1**) and **GPI 1** (**2**) fields:
   a. **Signal Falling Edge** - the relay state switch from on to off.
   b. **Signal Rising Edge** - the relay state switch from off to on.
5. In the **GPO 0 (msec)** field (**5**), enter the time in milliseconds for the general purpose output, after which the output will be switched to the default state.
6. From the **Default State** drop-down list (**6**), select the zero output default state:
   a. **Low** - the output relay is off. When access is allowed, the relay status will be switched to **High** (the "on" state).
   b. **High** - the output relay is on. When access is allowed, the relay status will be switched to **Low** (the"off" state).
7. In the **GPO 1 (msec)** field (**7**), enter the time in milliseconds for the first general purpose output, after which the output will be switched to the default state.
8. From the **Default State** drop-down list (**8**), select the first output default state:
   a. **Low** - the output relay is off. When access is allowed, the relay status will be switched to **High** (the"on" state).
   b. **High** - the output relay is on. When access is allowed, the relay status will be switched to **Low** (the"off" state).
9. Click **Apply** (**9**) to apply the changes.

Configuring the *MorphoAccess SIGMA Lite* controller in the GPIO mode is complete.

3.4.2 Configuring the MorphoAccess SIGMA Lite controller in SDAC mode

The *MorphoAccess SIGMA Lite* controller operation in the SDAC mode (single door access control) is configured as follows:

1. In the **Door Unlock Duration** field (**1**) enter the time in seconds during which the door will be unlocked.



2. In the **Door Held Open Duration** field (**2**) enter the time in seconds, during which the door should be closed. Otherwise, the **Hold Door** event will be generated.
3. From the **Request to Exit Mode** drop-down list (**3**) select the exit mode:
   a. **None** - not specified.
   b. **Push Button** - exit by the button pushing.
   c. **<Reserved>** - reserved mode.
4. From the **Type Door** drop-down list (**4**) select the door open mode:
   a. **Manual Door Open** - the door is opened manually.
   b. **Electric Door Open** - the door is opened automatically.
5. In the **Egress Timeout** field (**5**) enter the time in seconds, during which the door will remain opened if the **Push Button** exit mode and **Manual Door Open** door open mode are selected.

> **Примечание**
> The value in the **Egress Timeout** field should be within the range from 1 to 300 seconds.

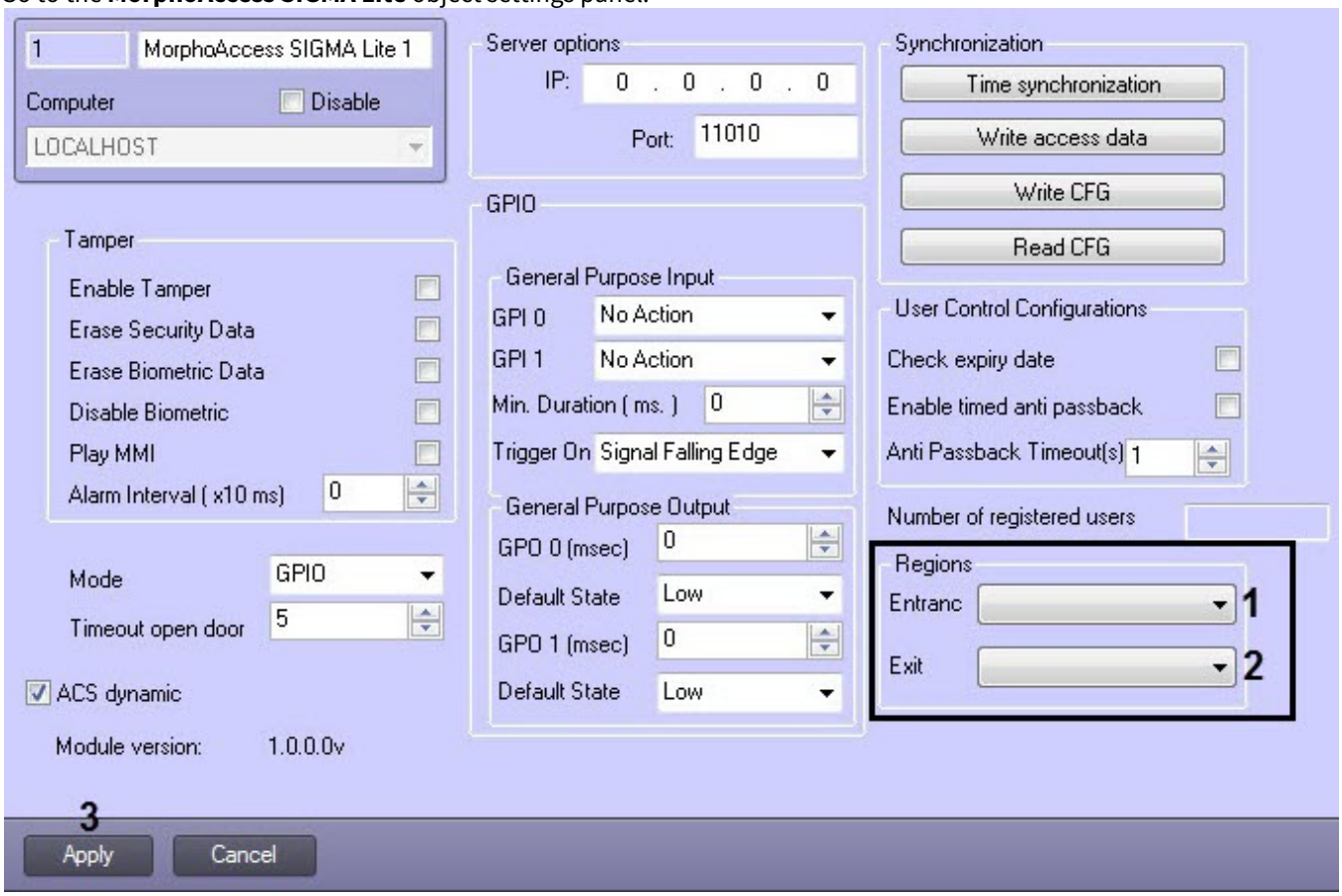
6. Set the **Enable Time Override Mode** checkbox (**6**), if it is necessary to enable the time override mode. This mode allows to open the door to a previously authorized user without any authentication within the time specified in the **Time override Mode Timeout** field (**7**).
7. In the **Time override Mode Timeout** field (**7**) enter the time in seconds, during which a previously authorized can open the door without any authentication.
8. Click **Apply** (**8**) to apply the changes.

Configuring the *MorphoAccess SIGMA Lite* controller in the SDAC mode is complete.

3.5 Configuring the MorphoAccess SIGMA Lite regions

The *MorphoAccess SIGMA Lite* controller regions are configured as follows:

1. Go to the **MorphoAccess SIGMA Lite** object settings panel.



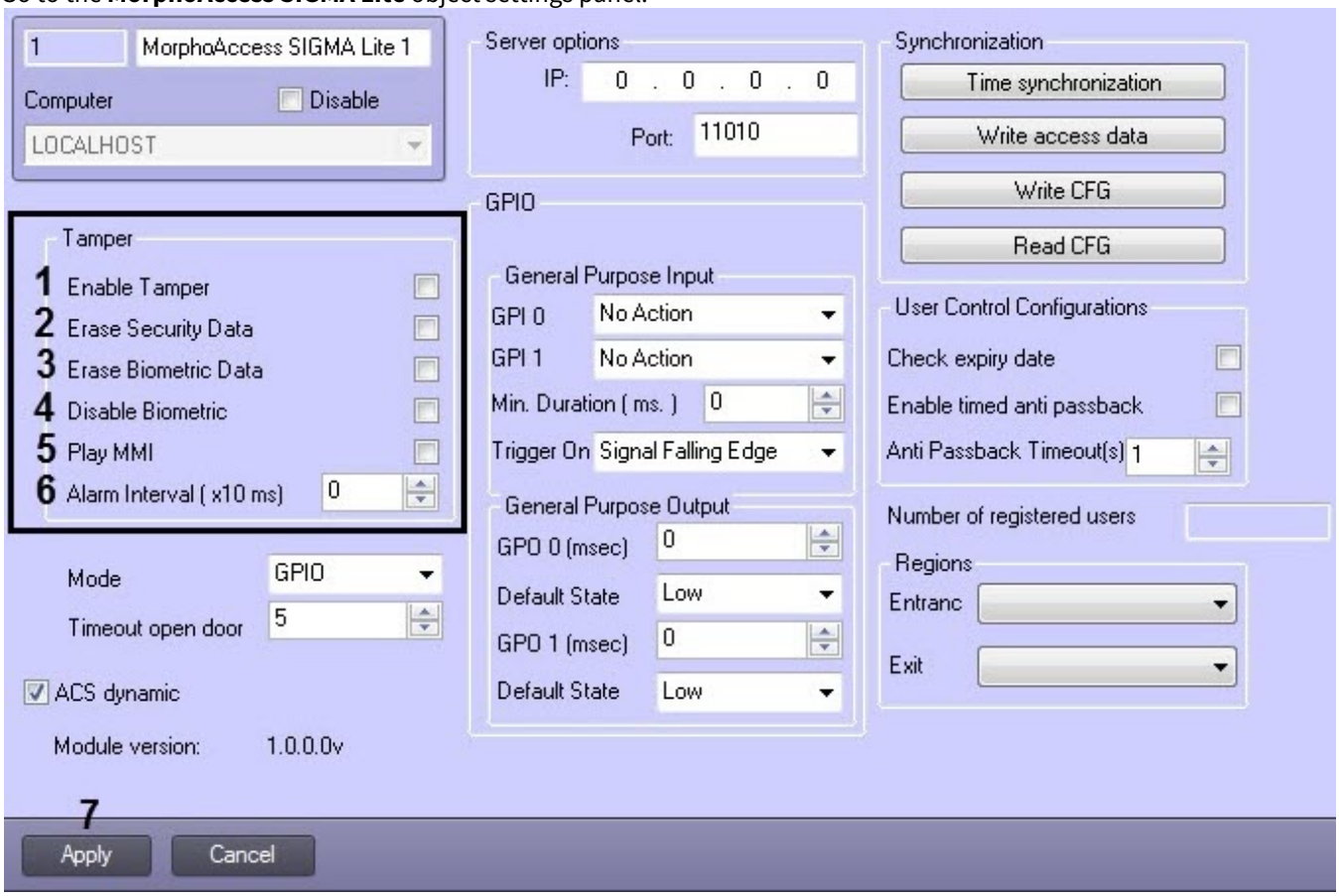
2. From the **Entrance** drop-down list (**1**) select the entrance region.
3. From the **Exit** drop-down list (**2**) select the exit region.
4. Click **Apply** (**3**) to apply the changes.

Configuring the *MorphoAccess SIGMA Lite* controller regions is complete.

3.6 Configuring the MorphoAccess SIGMA Lite tampering protection

The *MorphoAccess SIGMA Lite* controller tampering (unauthorized access) protection is configured as follows:

1. Go to the **MorphoAccess SIGMA Lite** object settings panel.



2. Set the **Enable Tamper** checkbox (**1**), if it is necessary to enable the tampering (unauthorized access) protection. If it is enabled, then the alarm will be triggered and the parameters set below will be activated in case of physical intervention in the controller housing (tampering).
3. Set the **Erase Security Data** checkbox (**2**), if it is necessary to delete all user access keys stored in all proximity cards and reset the controller to default values in case of tampering.
4. Set the **Erase Biometric Data** checkbox (**3**), if it is necessary to delete all user fingerprints and reset the controller to default values in case of tampering.
5. Set the **Disable Biometric** checkbox (**4**), if it is necessary to disable the biometric user authentication in case of tampering.
6. Set the **Play MMI** checkbox (**5**), if it is necessary to activate the audible alarm in case of tampering.
7. In the **Alarm Interval (x10 ms)** field (**6**) enter the time interval in milliseconds for sending the alarm event about the unauthorized access.
8. Click **Apply** (**7**) to apply the changes.

Configuring the *MorphoAccess SIGMA Lite* controller tampering (unauthorized access) protection is complete.

4 MorphoAccess SIGMA Lite integration module operation

4.1 General information on MorphoAccess SIGMA Lite module operation

The following interface objects are used for *MorphoAccess SIGMA Lite* integration module operation:

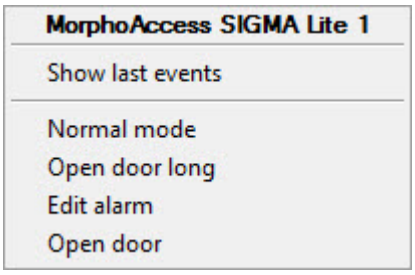
1. **Map**;
2. **Event Log**.
3. **Access Manager**.

For detailed description of configuring these interface objects, please refer to the Intellect PSIM Administrator's Guide.

For detailed description of using these interface objects, please refer to the Intellect PSIM Operator's Guide.

4.2 Managing the MorphoAccess SIGMA Lite controller

The *MorphoAccess SIGMA Lite* controller is managed in the **Map** interactive window using the **MorphoAccess SIGMA Lite** object functional menu:



The **MorphoAccess SIGMA Lite** object functional menu commands description is given in the table.

Menu command	Function performed
Normal mode	Standby mode
Open door long	The door is opened for some time
Edit alarm	The alarm is accepted
Open door	The door is opened

The **MorphoAccess SIGMA Lite** object can have the following states:

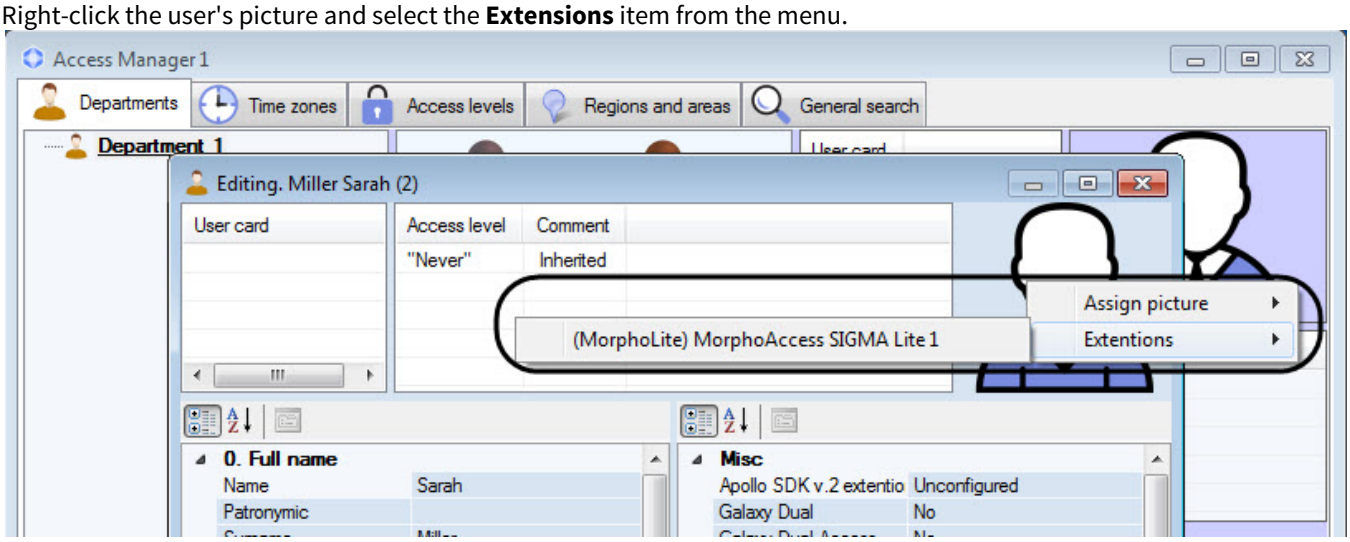
MorphoAccess SIGMA Lite 1[1] 	Connected
MorphoAccess SIGMA Lite 1[1] 	Disconnected
MorphoAccess SIGMA Lite 1[1] 	Tampered

MorphoAccess SIGMA Lite 1[1] 	Hold door
MorphoAccess SIGMA Lite 1[1] 	Open door

4.3 Creating a fingerprint template in the Access Manager module using the MorphoAccess SIGMA Lite controller

A fingerprint template is created in the *Access Manager* module using the *MorphoAccess SIGMA Lite* controller in the following way:

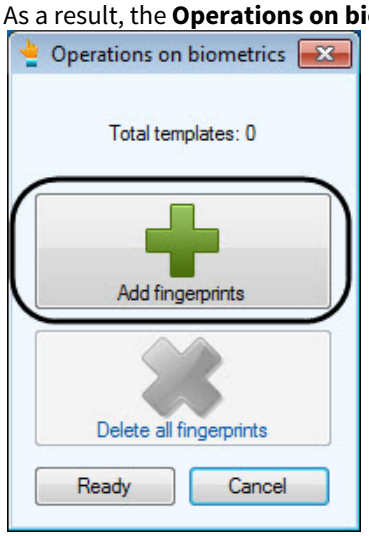
1. Open the **Access Manager** window (see Starting and stopping the Access Manager module).
2. Start editing the required user (see Going to user editing).
3. Right-click the user's picture and select the **Extensions** item from the menu.



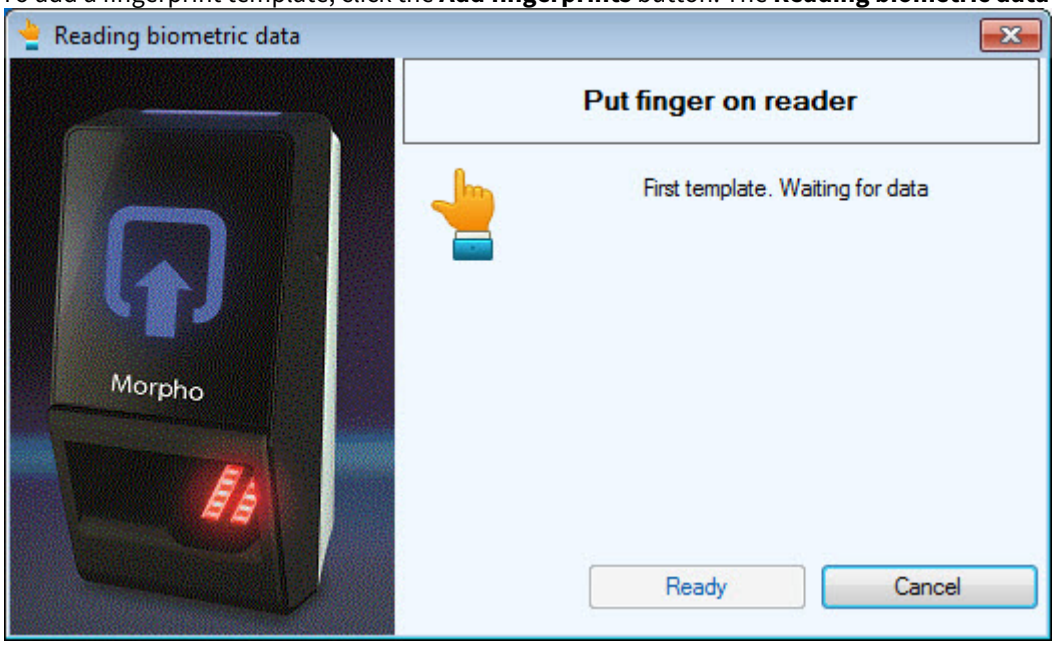
4. Select **(MorphoLite) MorphoAccess SIGMA Lite** to use this controller.

> **Note**
> In order for the required controller to be displayed in the **Extensions** list, it is necessary to pre-select it during the *Access Manager* module configuration - see Selecting control readers in the Access Manager.

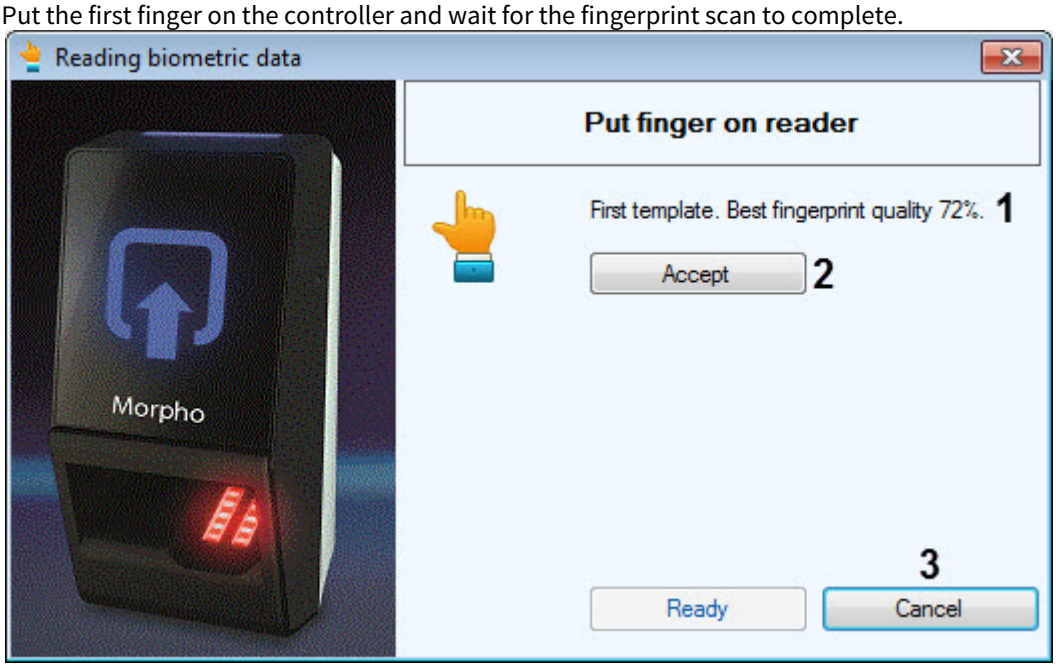
5. As a result, the **Operations on biometrics** dialog box will open.



6. To add a fingerprint template, click the **Add fingerprints** button. The **Reading biometric data** dialog box will open.

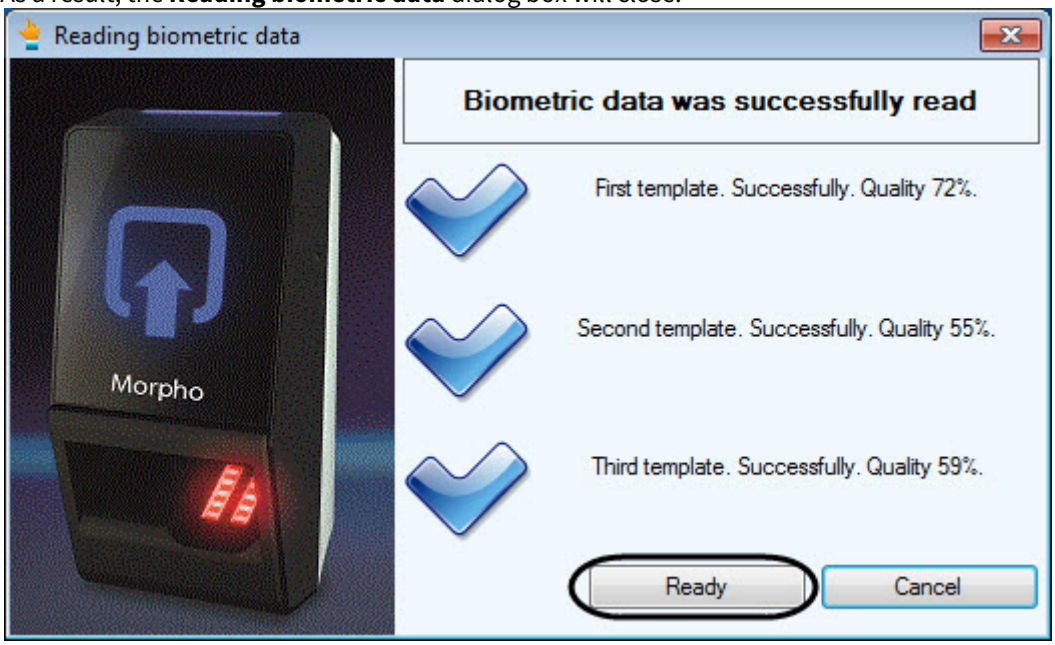


7. Put the first finger on the controller and wait for the fingerprint scan to complete.



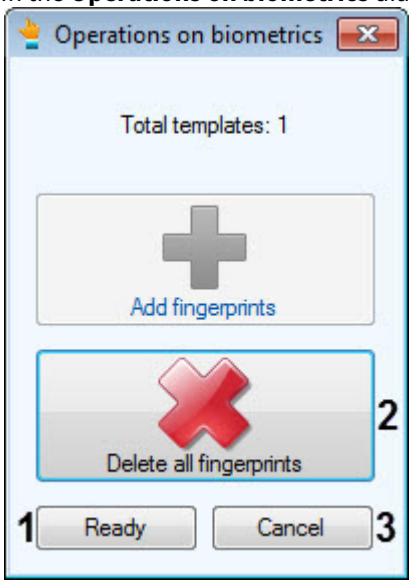
The quality of the first fingerprint will be displayed in the area (**1**). Click **Accept** (**2**) to continue scanning two more fingers.

8. In the same way, scan two more different fingers. To complete the fingerprint template creation, click the **Ready** button. As a result, the **Reading biometric data** dialog box will close.



> **Note**
> It is possibile to add only two more fingerprints. After you complete scanning two fingerprints, click **Ready**.

9. In the **Operations on biometrics** dialog box, click the **Ready** button (**1**) to complete the fingerprint template creation.



> **Note**
> To delete the created fingerprint template, click the **Delete all fingerprints** button (**2**).
> To cancel the fingerprint template creation and close the **Operations on biometrics** dialog box, click the **Cancel** button (**3**).

10. Save the changes in the *Access Manager* user editor to add the fingerprint template to the user account.

Creating the fingerprint template in the *Access Manager* module using the *MorphoAccess SIGMA Lite* controller is complete.