

## Overview

This Quick Start document explains how to configure integration between Suprema BioEntry readers and Millennium Xtra.

### NOTE

The Biometric integration is a licensed option that must be purchased and enabled in the software before it can be configured.



The following readers are supported in Millennium Xtra and also in Millennium Expert/Enterprise.

- BioEntry Plus
- BioEntry W - Outdoor use (Supports Power over Ethernet - PoE)
- USB BioMini - Must be connected to a USB port on the Millennium Xtra Server.

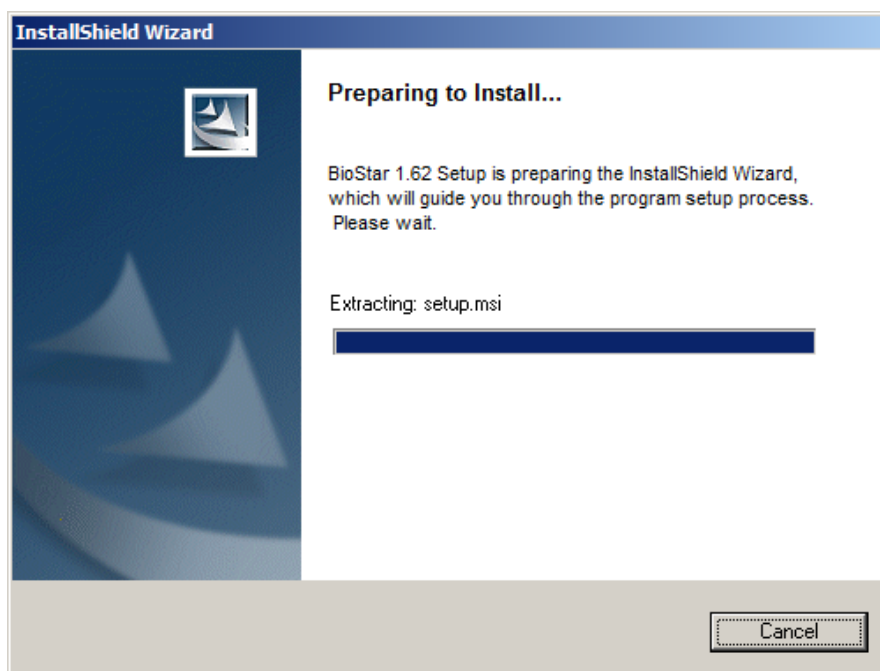
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## Install BioStar 1.62

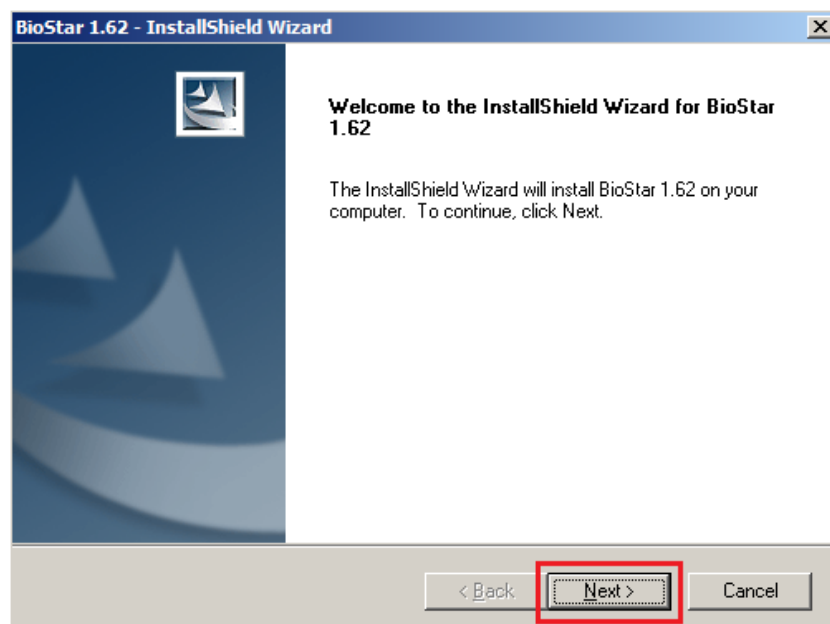
1. On the BioStar installation disk, double-click the file *BioStar 1.62 Setup.exe*.

Figure 1: Install Wizard



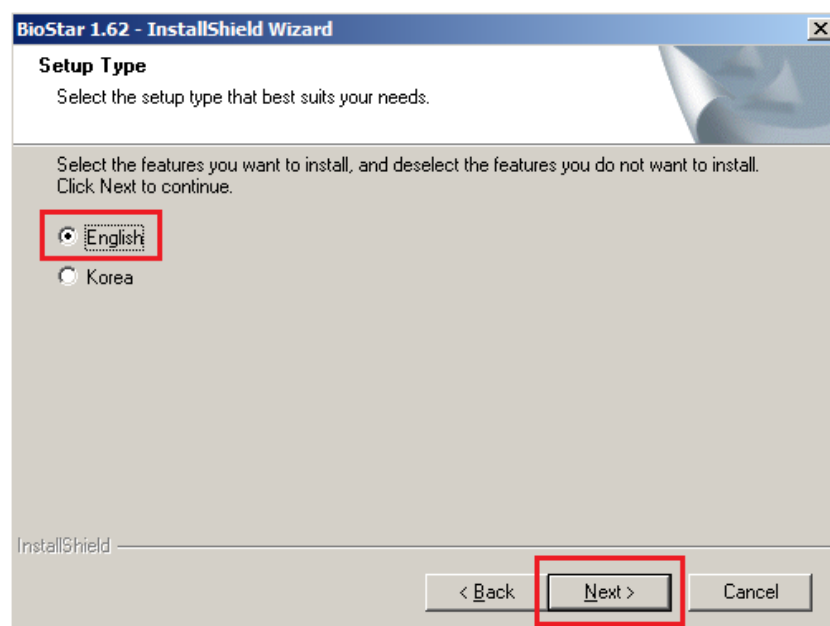
2. A **Welcome** screen is displayed. Click **Next** to start the software installation:

Figure 2: Welcome



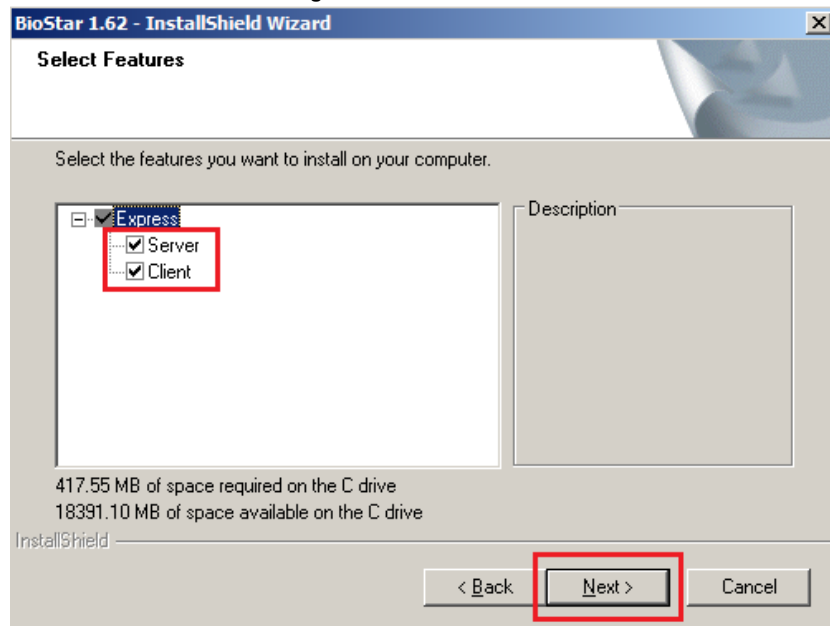
3. **Setup Type** screen is displayed. Select **English** and click **Next**:

**Figure 3:** Setup Type



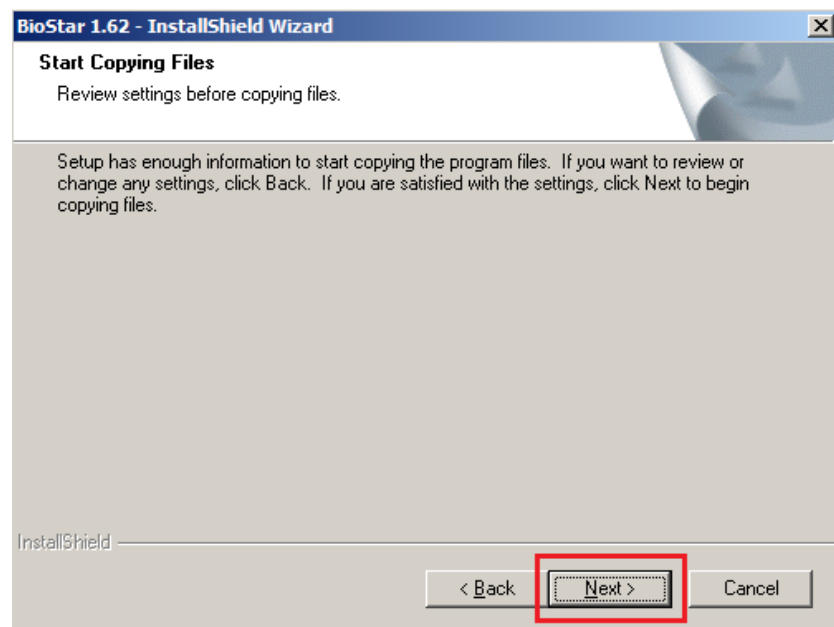
4. **Select Features** screen is displayed. Ensure that both **Server** and **Client** are selected and click **Next**:

Figure 4: Select Features



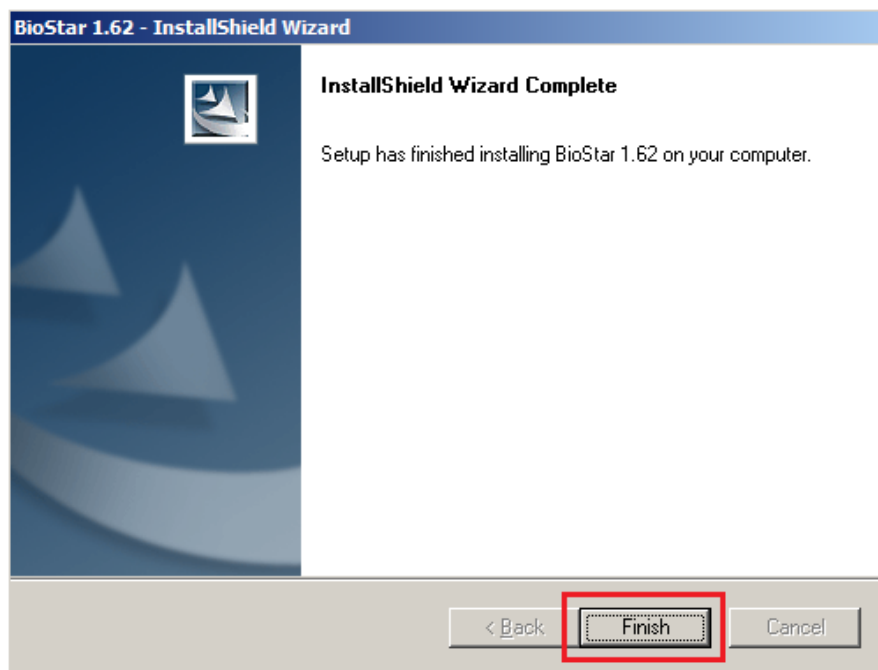
5. On the **Start Copying Files** screen, click **Next** to begin the installation process:

Figure 5: Start Copying Files



6. Allow the BioStar software, including SQL Server, to install. Once the software installation is complete. Click **Finish**:

**Figure 6:** Install Complete

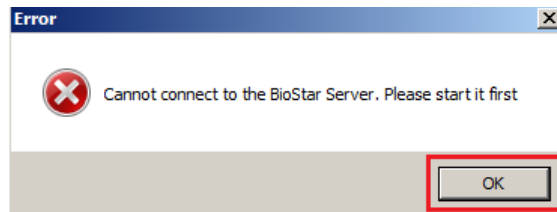


## BioStar Server Configuration

### Execute BioStar Server Config

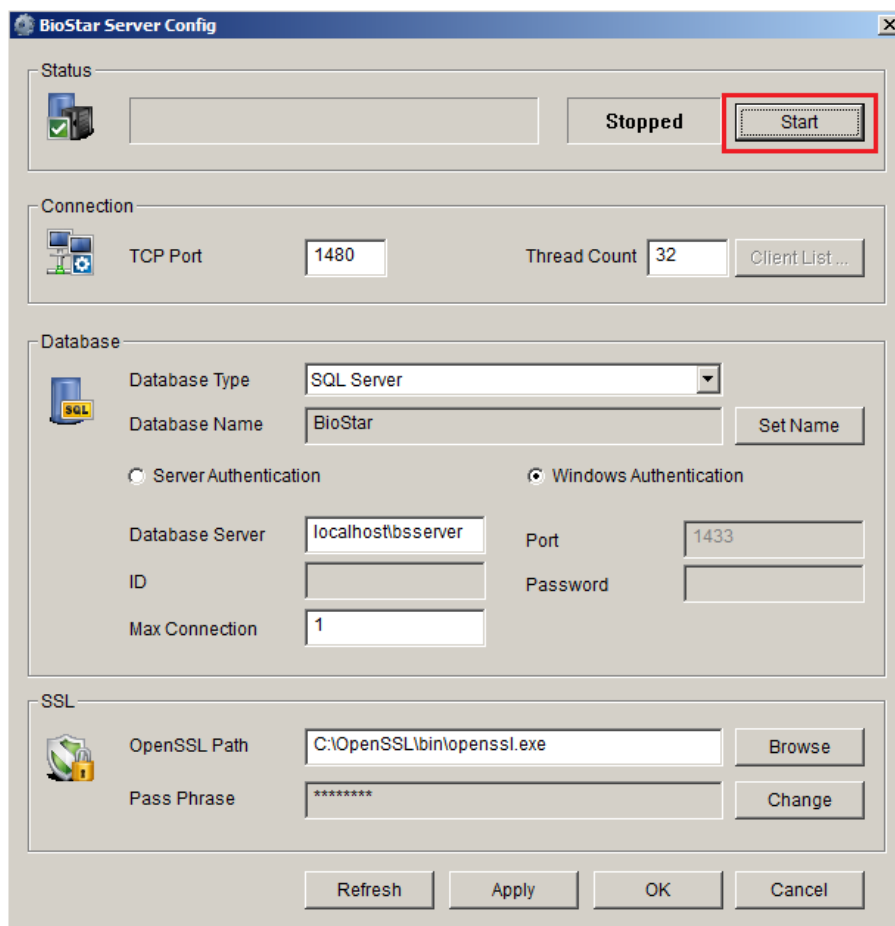
1. **Start > All Programs > BioStar 1.62 > Server > BioStar Server Config.**
2. An error message stating **Cannot Connect** may be displayed. Click **OK**:

Figure 7: Possible Cannot Connect Message



3. The **BioStar Server Config** screen will be displayed. If this is the first time running BioStar, the **Status** will likely indicate **Stopped**. Click **Start**:

Figure 8: BioStar Server Configuration



4. Verify that the **Status** indicates **Running**. Click **OK** to continue:

Figure 9: BioStar Server Running?

The image shows the 'BioStar Server Config' window. The 'Status' section at the top indicates the server is 'Running', with the text 'BioStar Server V1.62 [192.100.0.135]' and a 'Running' button highlighted with a red box. Below this, the 'Connection' section shows 'TCP Port' as 1480 and 'Thread Count' as 32. The 'Database' section is configured for 'SQL Server' with 'Database Name' as 'BioStar' and 'Database Server' as 'localhost\bsserver'. It also shows 'Port' as 1433 and 'Max Connection' as 1. The 'SSL' section shows the 'OpenSSL Path' as 'C:\OpenSSL\bin\openssl.exe' and a masked 'Pass Phrase'. At the bottom, the 'OK' button is highlighted with a red box, along with 'Refresh', 'Apply', and 'Cancel' buttons.

**BioStar Server Config**

**Status**

BioStar Server V1.62 [192.100.0.135] **Running** Stop

**Connection**

TCP Port 1480 Thread Count 32 Client List ...

**Database**

Database Type SQL Server  
Database Name BioStar Set Name  
☐ Server Authentication ☒ Windows Authentication  
Database Server localhost\bsserver Port 1433  
ID Password  
Max Connection 1

**SSL**

OpenSSL Path C:\OpenSSL\bin\openssl.exe Browse  
Pass Phrase \*\*\*\*\* Change

Refresh Apply **OK** Cancel

## Connect and Power the Readers

### Power the BioEntry Readers

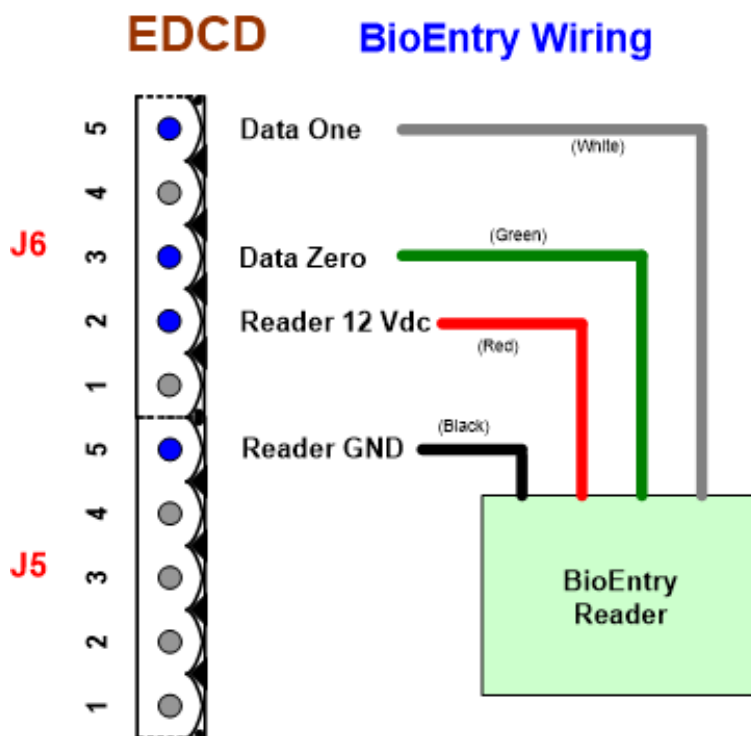
- BioEntry Readers can be powered from external 12 VDC supplies.
- BioEntry W Readers can also be powered by PoE injectors or switches.
- USB BioMini Readers are powered by a USB Type A port.

BioEntry Readers can also be powered by a Millennium group Door Controller.

1. Connect power to the BioEntry reader(s).

### EDCD Connection

Figure 10: EDCD Wiring diagram





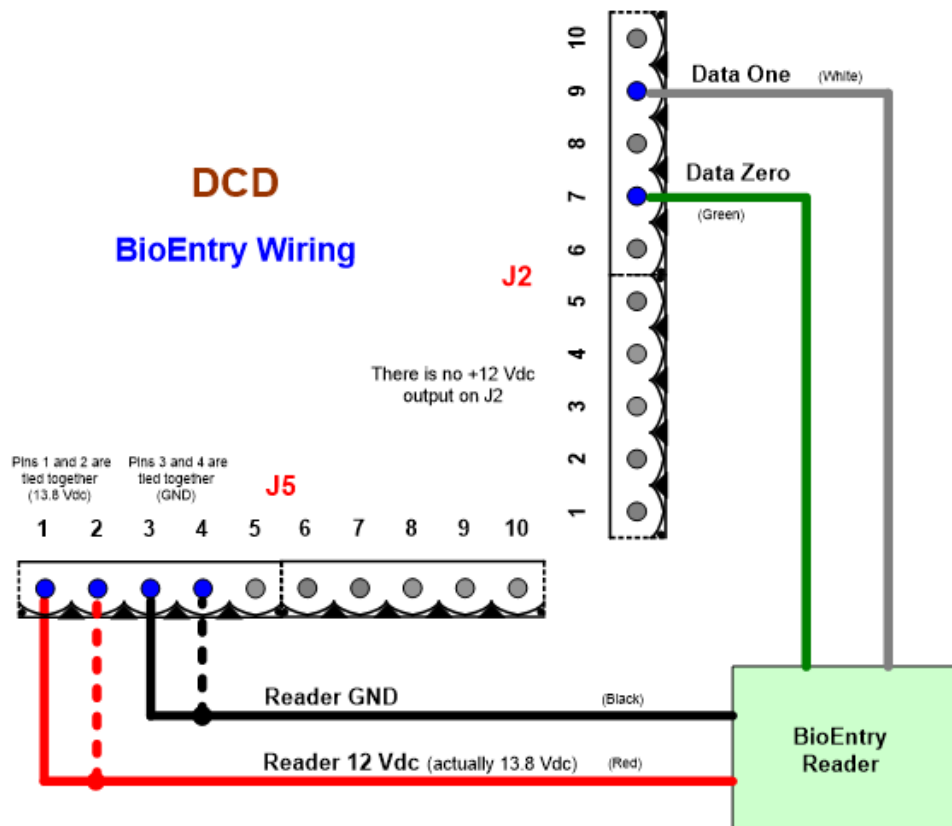
## DCD Connections

### NOTE

The BioEntry readers require a 12 VDC input @ 230 mA. The J2 Reader connector does not have a 12 VDC output. In order to power BioEntry readers from a DCD, the power must be supplied from the J5 connector instead of the J2 reader port.

- J5 pins 1 and 2 are tied together on the DCD, (+13.8 VDC). Use either pin. 13.8 VDC is used to charge a 12 V battery. The voltage is perfectly acceptable for the BioEntry 12 VDC requirement.
- J5 pins 3 and 4 are tied together on the DCD, (GND). Use either pin.

Figure 11: DCD Wiring diagram



### Connect the BioEntry to the network

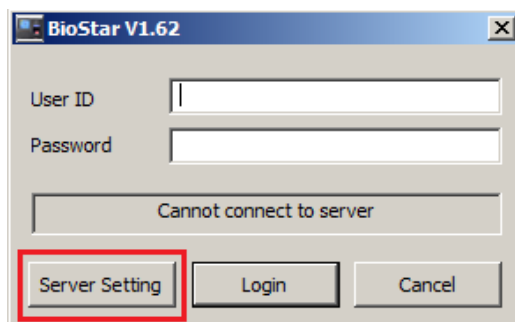
2. Connect the Suprema BioEntry readers to the same Local Area Network (LAN) as the computer on which you installed the Suprema BioStar software.

## Add Devices

### Connect to Server - Add new Administrator

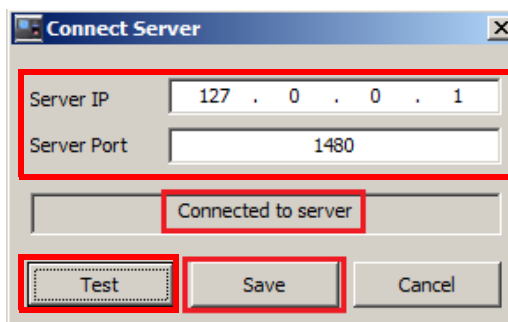
1. From the **Start** menu, select **Start > All Programs > BioStar 1.62 > BioStar V1.62**
2. A **BioStar V1.62** dialog box will be displayed. Click the **Server Setting** button:

Figure 12: Server Setting



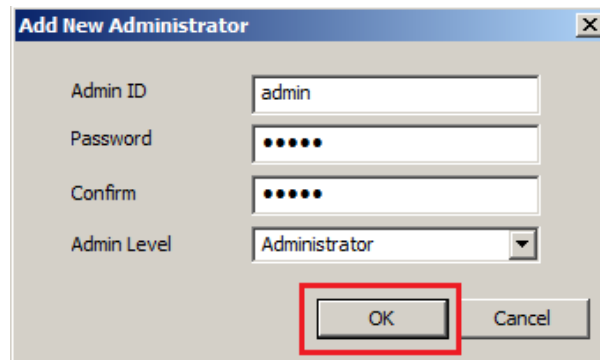
3. A **Connect Server** window will be displayed. Enter '*localhost*' **127.0.0.1** for the Server IP address. Leave the **Server Port** at the default setting of **1480**.
4. Click the **Test** button and verify *Connected to server* message is displayed.
5. Click **Save**:

Figure 13: IP and Port



6. An *Add New Administrator* window will appear. Enter an Admin ID and password (2 times). Click OK:

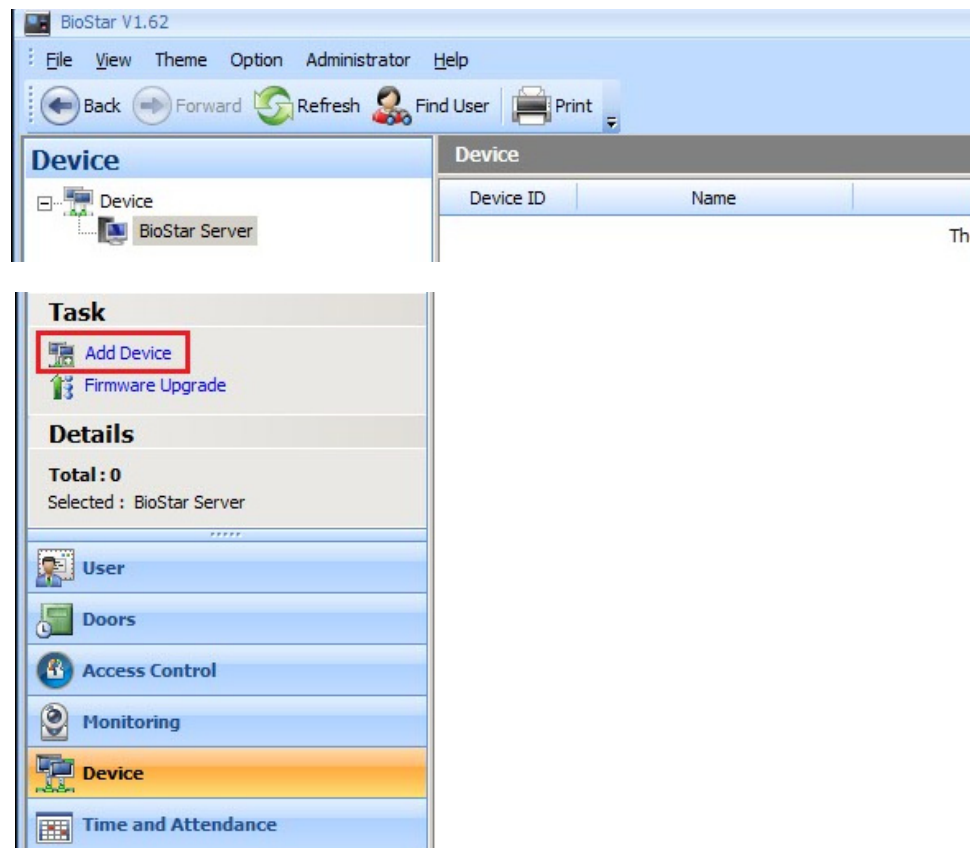
**Figure 14:** Add New Administrator



The image shows a dialog box titled "Add New Administrator". It contains four input fields: "Admin ID" with the text "admin", "Password" with five dots, "Confirm" with five dots, and "Admin Level" with a dropdown menu showing "Administrator". At the bottom right, there are two buttons: "OK" and "Cancel". The "OK" button is highlighted with a red rectangular box.

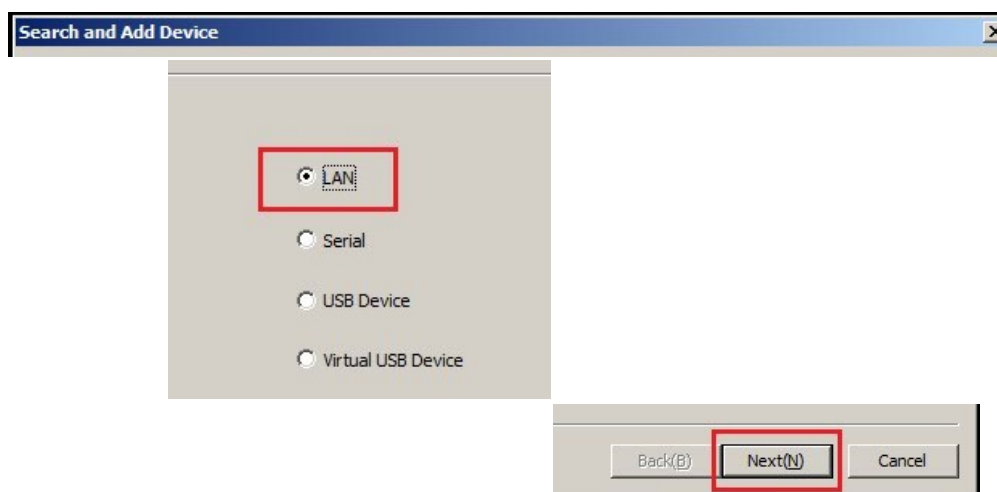
7. Login to the BioStar software with the new Administrator account.
8. In the left-pane of the BioStar software, click the Device tab. Click Add Device:

**Figure 15:** Add Device



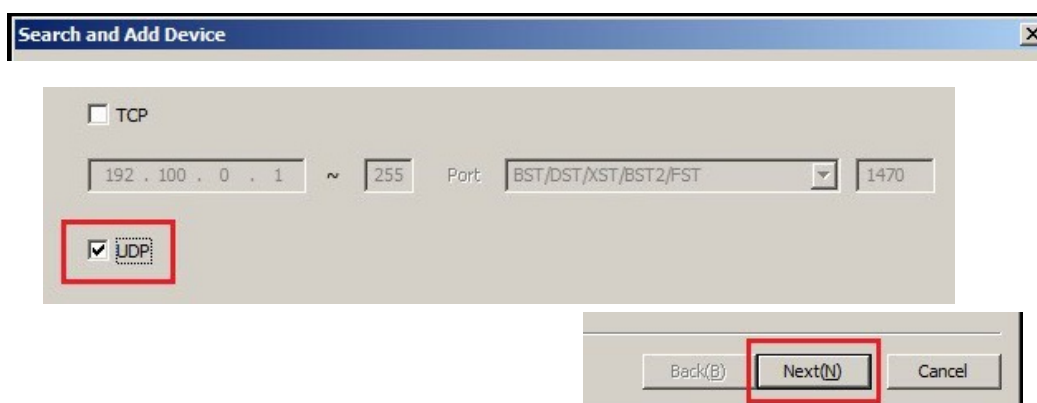
9. A *Search and Add Device* wizard screen will appear. Select *LAN* and click Next.

Figure 16: Select LAN



10. Select UDP and click Next.

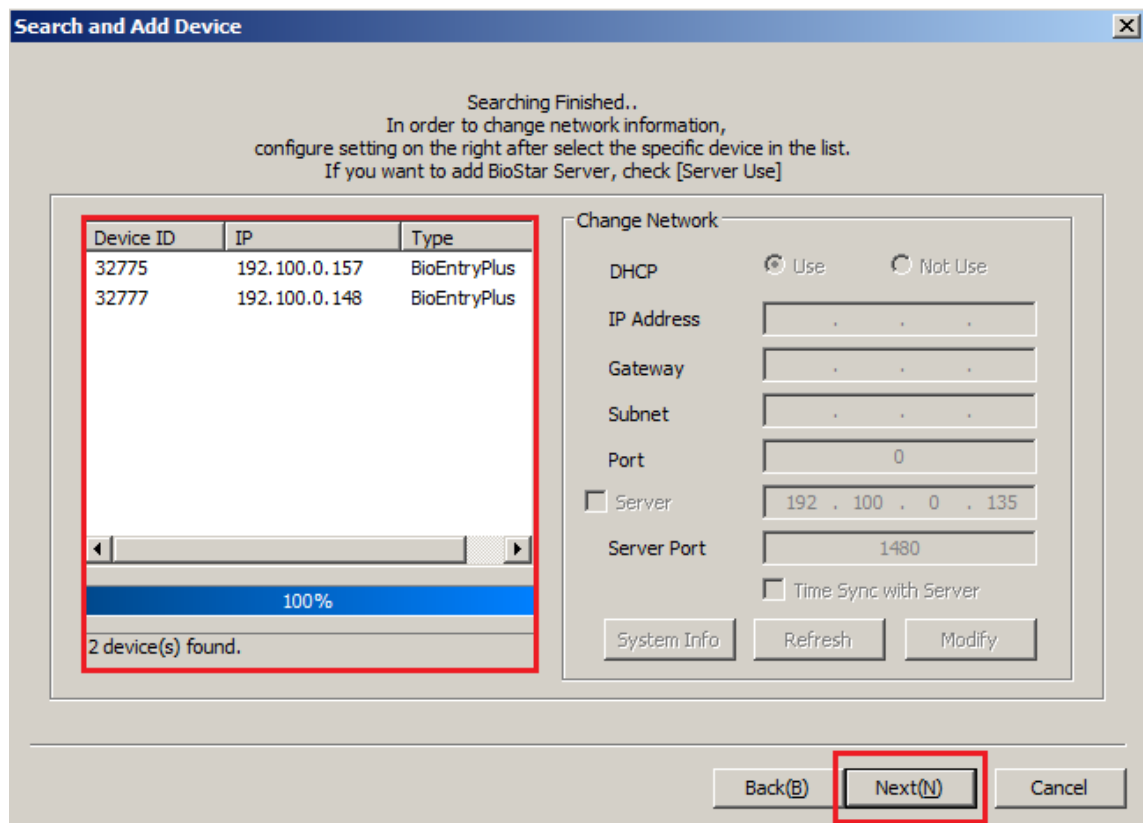
Figure 17: Assign UDP



11. The BioStar software will scan the network and detect any BioEntry readers that are installed on the LAN. Click Next to continue.

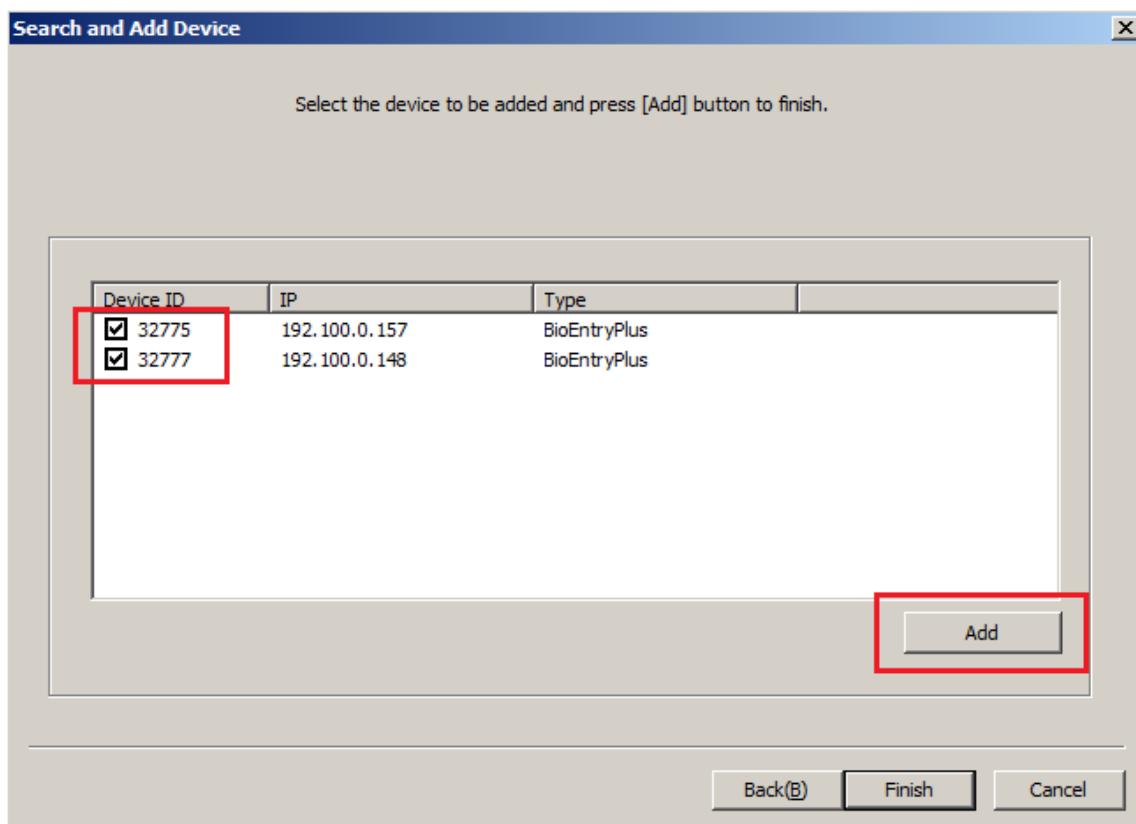
After connecting the EDCDs and configuring the Site in the software, the SCU Configurator will indicate the EDCDs as well as the ESCU.

**Figure 18:** Search and Add Device



12. Check the check boxes next to each of the BioEntry readers that you would like to configure and click Add.

**Figure 19:** Select Devices



13. The selected BioEntry readers will now appear within the BioStar software:

**Figure 20:** Selected Readers

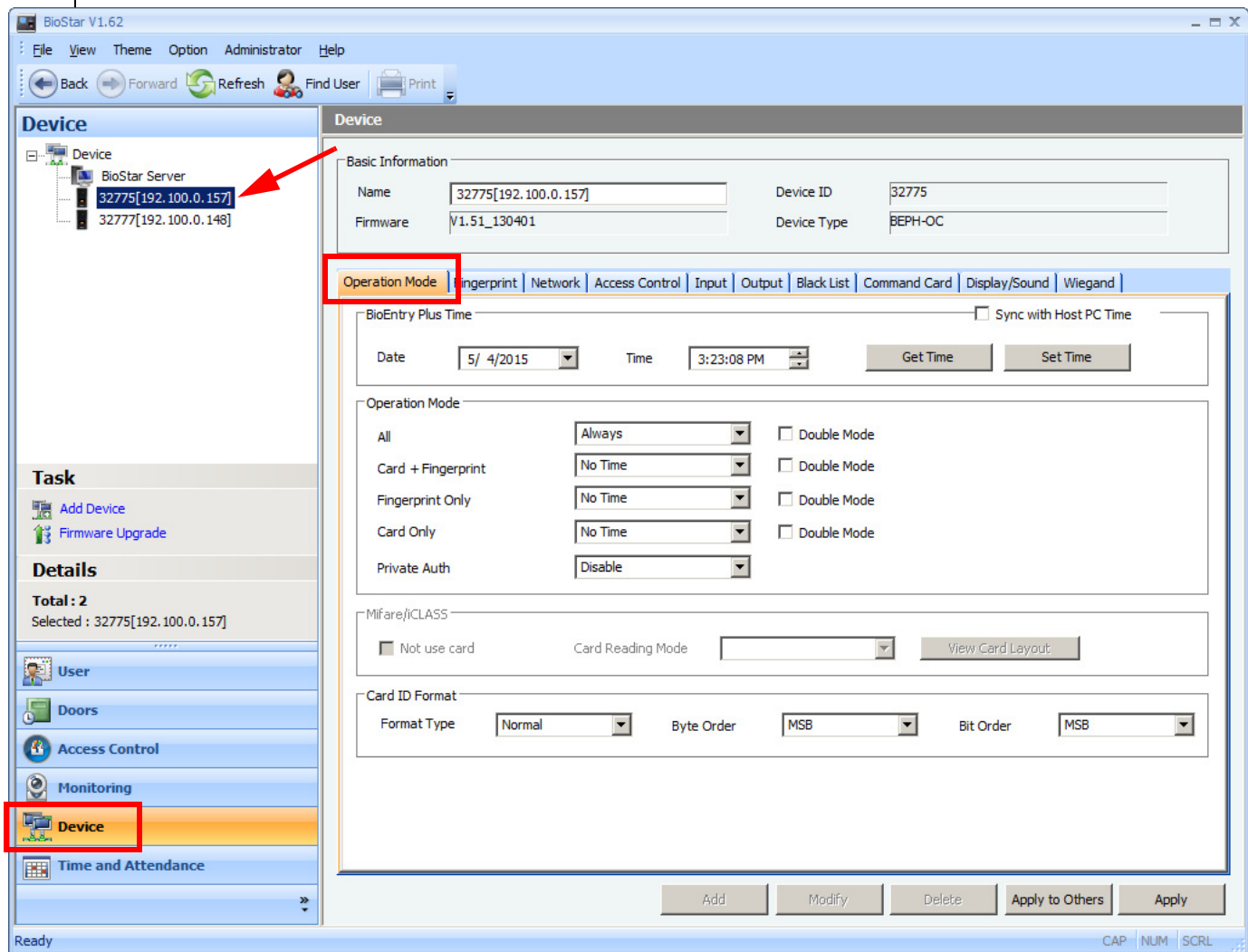
The screenshot displays the BioStar V1.62 software interface. The top menu bar includes File, View, Theme, Option, Administrator, and Help. Below the menu is a toolbar with Back, Forward, Refresh, Find User, and Print buttons. The main content area is divided into two sections. On the left, under the 'Device' tab, a tree view shows the 'BioStar Server' containing two devices: '32775[192.100.0.157]' and '32777[192.100.0.148]'. On the right, a table titled 'Device' lists the selected readers. The table has four columns: Device ID, Name, Type, and IP. It contains two rows of data. Below the table, a sidebar on the left contains a 'Task' section with 'Add Device' and 'Firmware Upgrade' buttons, a 'Details' section showing 'Total : 2' and 'Selected : Device', and a list of navigation options: User, Doors, Access Control, Monitoring, Device (highlighted with a red box), and Time and Attendance.

Device ID	Name	Type	IP
32775	32775[192.100.0.157]	BioEntryPlus	192.100.0.157
32777	32777[192.100.0.148]	BioEntryPlus	192.100.0.148

## Add Devices

14. In the Device box on the left pane, click the BioEntry reader you would like to configure. The current configuration will appear in the right pane, in the *Operation Mode* Tab.

**Figure 21:** Configure the Reader Operation Mode





15. Click on the *Network* tab to configure the network settings for the BioEntry reader.
16. Click the '*Not use DHCP*' radio button.
17. Configure the static *IP address*, *Subnet* and *Gateway* of the BioEntry reader. Leave the port at the default, 1471.
18. Click Apply.

Figure 22: Network Tab

The screenshot shows the BioStar V1.62 software interface. On the left, a sidebar contains a 'Device' list with two entries: '32775[192.100.0.157]' and '32777[192.100.0.148]'. Below this is a 'Task' section with 'Add Device' and 'Firmware Upgrade' buttons, and a 'Details' section showing 'Total : 2' and 'Selected : 32775[192.100.0.157]'. The main area is titled 'Device' and has several tabs: 'Operation Mode', 'Fingerprint', 'Network' (highlighted with a red box), 'Access Control', 'Input', 'Output', 'Black List', 'Command Card', 'Display/Sound', and 'Wiegand'. The 'Network' tab contains the following settings:

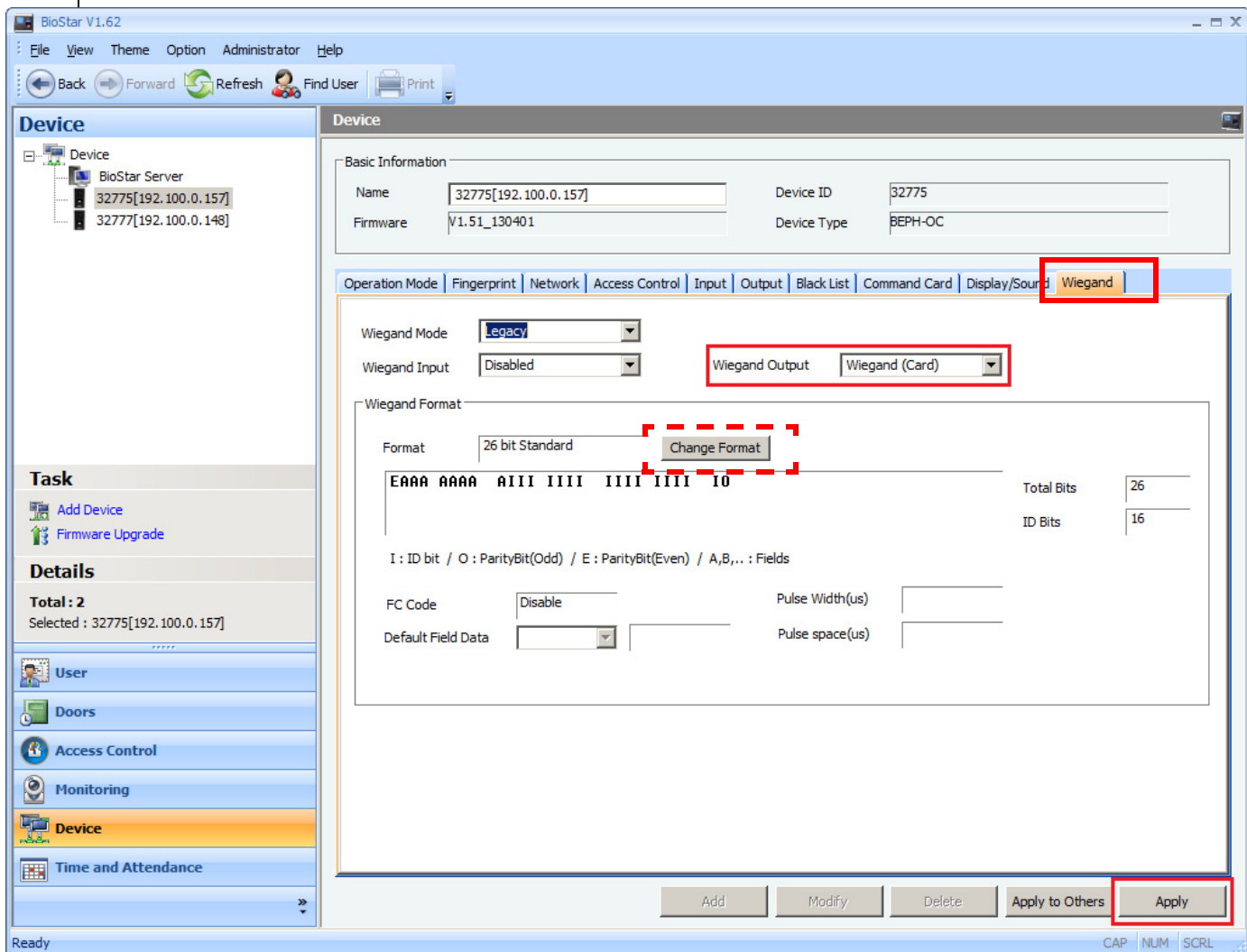
- [TCP/IP Setting]**
  - IP: ☐ Use DHCP ☒ Not use DHCP (indicated by a red arrow)
  - IP Address:  (highlighted with a red box)
  - Subnet:  (highlighted with a red box)
  - Gateway:  (highlighted with a red box)
  - port:  (indicated by a red arrow)
- Server**
  - ☐ Use ☒ Not Use
  - IP Address:  (disabled)
  - Server Port:
  - ☐ Time Sync with Server
- Support 100 Base-T**
  - ☐ Use ☒ Not Use
- [Serial Setting]**
  - RS485 Mode:  (dropdown menu)
  - Baudrate:  (dropdown menu)

At the bottom of the main area, there are buttons: 'Add', 'Modify', 'Delete', 'Apply to Others', and 'Apply' (highlighted with a red box). The status bar at the bottom shows 'Ready' and 'CAP NUM SCRL'.

## Add Devices

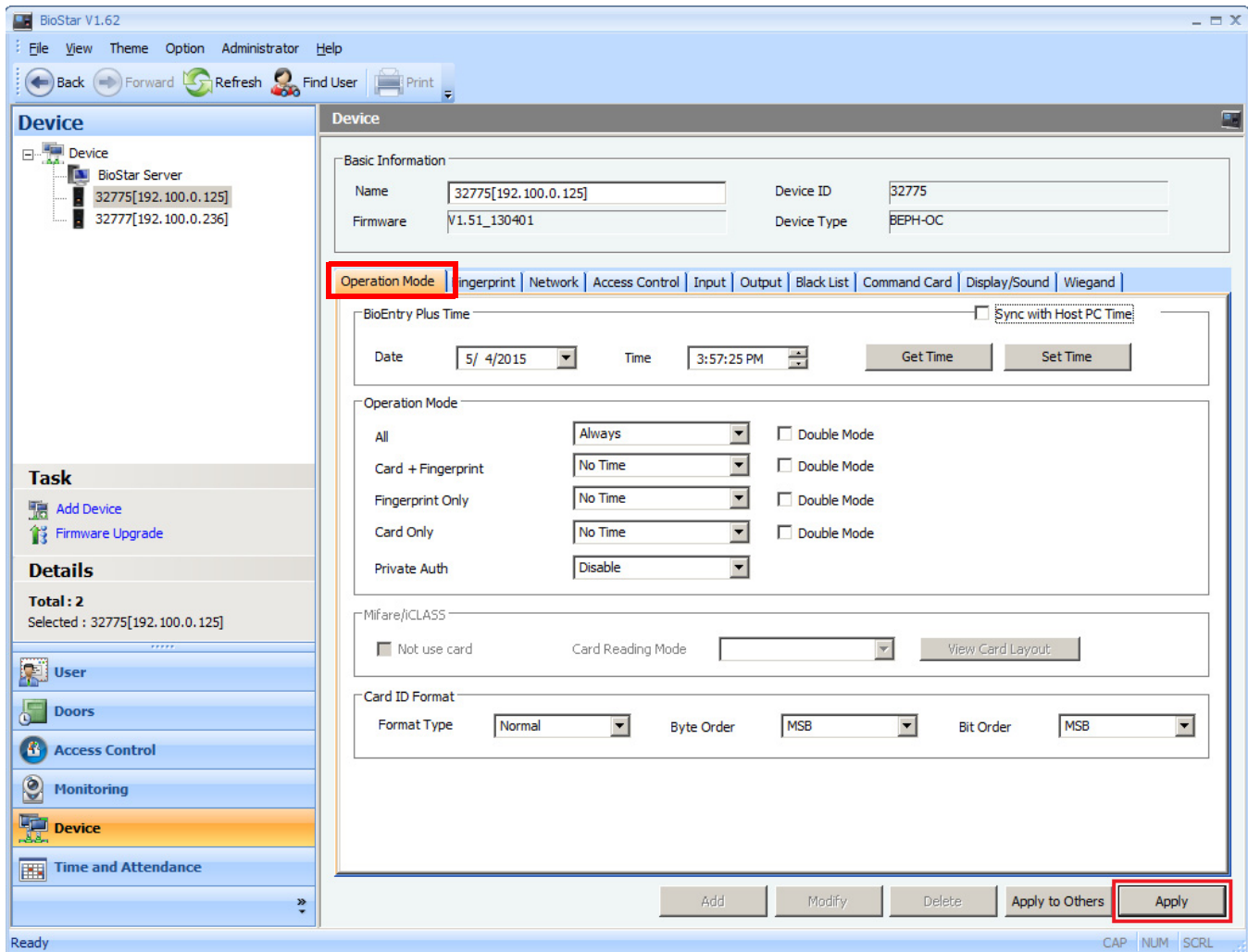
19. Click on the *Wiegand* tab.
  20. From the Wiegand Output enumerated list, select *Wiegand (Card)*.
  21. If using standard 26 bit Wiegand format, click Apply.
- If using any other format, select *Change Format* to configure it.

Figure 23: Wiegand Tab



22. Click on the **Operation Mode** tab. Select the desired Operation Mode(s) and the Time Zones for each mode.
23. Click Apply.

Figure 24: Operation Mode



24. This completes the configuration of the BioEntry readers in the BioStar software. In order for the Millennium Xtra software to be able to communicate with the readers, the readers must be manually removed from the BioStar software or the BioStar service must be stopped.
25. In the left pane of BioStar, right-click on each BioEntry reader and select Remove Device.

## Configure in Millennium Xtra

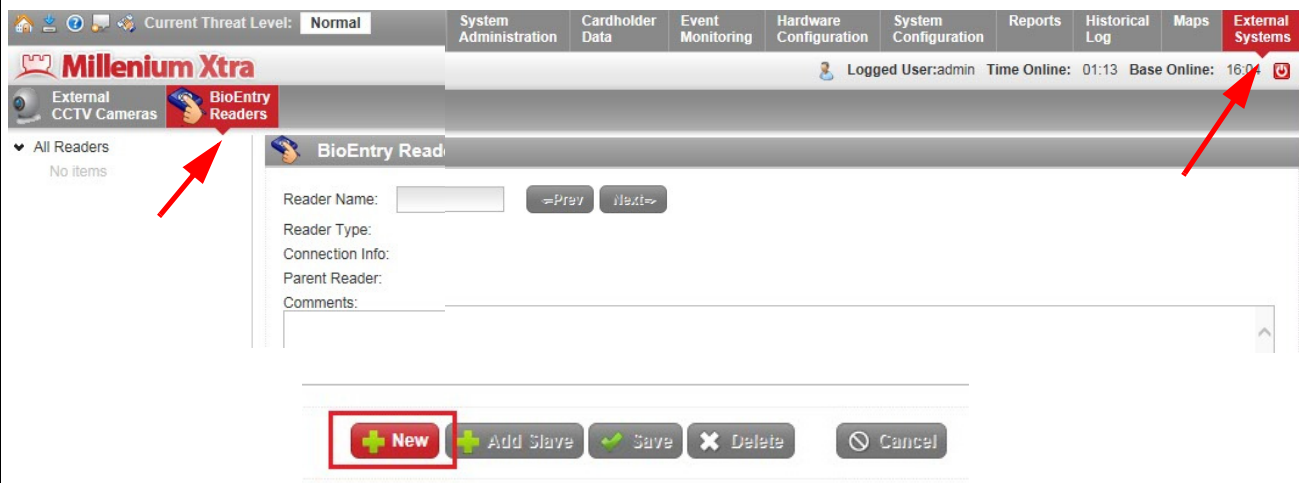
### Configuring the Integration in Millennium Xtra.

#### NOTE

Millennium Xtra must be at version 3.0.1.45 or higher and must be licensed for BioEntry readers.

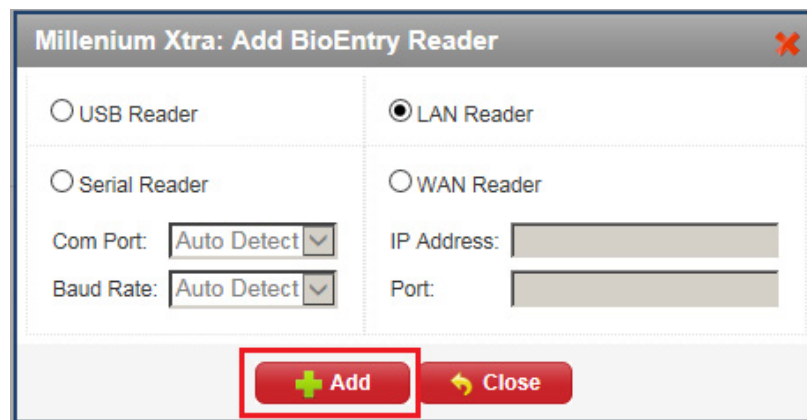
1. Login to the Millennium Xtra software and navigate to the *External Systems > BioEntry readers* screen.
2. Click the *New* button.

Figure 25: Millennium Xtra External Systems



3. Select the *LAN Reader* radio button and then click *Add*.

Figure 26: Add BioEntry Reader



- The Millennium Xtra software will scan the Local Area Network, detect and automatically add any BioEntry readers it finds. The BioEntry readers added to the system will be displayed in the left-pane. Millennium Group recommends to assign more meaningful names to the readers.

Figure 27: Scan and Add Readers

The screenshot displays the Millennium Xtra software interface. At the top, a navigation bar includes tabs for System Administration, Cardholder Data, Event Monitoring, Hardware Configuration, System Configuration, Reports, Historical Log, Maps, and External Systems. The 'External Systems' tab is active. Below the navigation bar, a status bar shows 'Logged User: admin', 'Time Online: 01:18', and 'Base Online: 16:09'. The main interface is divided into two panes. The left pane, titled 'All Readers', lists two BioEntry Plus readers: 'Bioentry Plus:32775[192.100.0.236]' and 'Bioentry Plus:32777[192.100.0.236]'. The right pane, titled 'BioEntry Readers', shows the configuration for the selected reader. It includes fields for 'Reader Name' (Bioentry Plus:32777[192.100.0.236]), 'Reader Type' (LAN), 'Connection Info' (IP Address: 192.100.0.236), and 'Parent Reader'. A large text area for 'Comments' is also present. At the bottom of the right pane, there are buttons for 'New', 'Add Slave', 'Save', 'Delete', and 'Cancel'.

5. Navigate to the *Hardware Configuration > Readers* screen.
6. Click *New* to create a new reader.
7. Assign a *Reader Name*, select the appropriate controller from the *Assigned to Controller* drop-down, and select the desired *Card Format* from the drop down.
8. Select *Wiegand* for *Reader Technology*.
9. Ensure that the *Online* radio button is selected.
10. Click *Save*.

Figure 28: Configure the Readers

Millennium Xtra

Current Threat Level: Normal

System Administration | Cardholder Data | Event Monitoring | **Hardware Configuration** | System Configuration | Reports | Historical Log | Maps | External Systems

Logged User: admin | Time Online: 00:07 | Base Online: 07:13

Sites | Controller Type Configuration | Controllers | Doors | Elevators | **Readers** | Inputs | RCD | Outputs | Elevator Cars | Card Formats

All Readers  
 Millennium  
 Site Controller  
 + BioEntry 32775  
 BioEntry 32777  
 Groups

**Reader Configuration**

Reader Name: BioEntry 32775  
 Assigned to Controller: Site Controller  
 Card Format: Wiegand 26 FC 1

☒ Online ☐ Offline

In Group:

**READER TECHNOLOGY**  
☐ None  
☒ Wiegand  
☐ Mag Strip  
☐ Marlok

**READER TYPE**  
☒ Door  
☐ Elevator

**ABA MODE**  
☒ Clock/Data  
☐ Clock/Data Inverted  
☐ 0/1

**WIEGAND MODE**  
☒ Normal  
☐ Insert

**KEYPAD COMBINATION**  
☐ Enabled  
☒ Disabled

Door Pin: 0

Pin Only Timezone: Never

Card Only Timezone: Never

Comments:

11. Navigate to the *Hardware Configuration > Doors* screen.
12. Click *New* to create a new door.
13. Assign a *Door Name*
14. Enter the rotary switch address of the EDCD/DCD in the *Number* field.
15. Select the appropriate controller from the *Assigned to Controller* drop-down.
16. Expand the *Reader & Lock/Device Type* heading and select the *BioEntry reader*.
17. Expand *First Relays* and configure as desired.
18. Click *Save*.

Figure 29: Configure Door

The screenshot displays the 'Configure Door' interface in Millennium Xtra. The top navigation bar includes tabs for System Administration, Cardholder Data, Event Monitoring, Hardware Configuration (selected), System Configuration, Reports, Historical Log, Maps, and External Systems. The left sidebar shows a tree view with 'All Doors', 'Millennium', 'Site Controller', 'BioEntry Door 1', and 'BioEntry Door 2' (selected). The main content area is titled 'Door Configuration' and contains the following elements:

- Door Name:** BioEntry Door 2
- Location:** (empty field)
- Number:** 1 (0-99)
- In Group:** (empty dropdown)
- Assigned to Controller:** Site Controller
- Access Levels:** (button)
- Anti-Passback (Show Details...):** (expanded section)
- Alarm Modes (Show Details...):** (expanded section)
- First Relays (Hide Details...):** (expanded section)
  - Relay Mode:** Valid User
  - Active Seconds:** 5 (0-255)
  - Active Timezone:** Always
  - Toggle Mode:** (checkbox)
  - Time Period for Toggle Mode:** Never
  - Allow REX to Activate Relay:** (checkbox)
  - Shunt (ignores) door contact for time specified for the relay. The shunt period will start:**
    - ☒ On Release
    - ☐ On Activation
- Reader & Lock/Device Type (Hide Details...):** (expanded section)
  - Reader:** BioEntry 32775
  - Lock/Device Type:** Other
- Assigned Inputs (Show Details...):** (expanded section)
- Second Relays (Show Details...):** (expanded section)
- REQUEST TO EXIT MESSAGE:**
  - Send request:** (checkbox)
  - Active Timezone:** Never
- Comments:** (text area)
- Buttons:** New, Copy, Save, Delete, Cancel, Help

19. Navigate to the *System Configuration > Access Levels* page. Create a new access level and add the BioEntry door(s) to it.
20. Save the *Access Level*.

Figure 30: System Configuration Access Levels

Access Level Configuration

Access Level Name: Biometric Doors Prev Next

Threat Level: Normal

Activation Date: 4/30/2015 Expiration Date: 1/1/9000

Doors Door Groups Elevator Floors

Search door by name:

Doors
BioEntry Door 1

Time Period
Never
Always
8-5pm Mon-Fri

Door	Time Period
BioEntry Door 1	Always
BioEntry Door 2	Always

Add Remove

New Copy Save Delete Cancel View Report Help



21. Navigate to the *Cardholder Data* screen.
22. Select the *Card Information* Tab.
23. Create a new card holder record. Provide a *First Name*, *Last Name* and *Employee ID*.
24. Assign an *Encoded Card Number* and the *Access Level* created in the previous step.
25. Select the *Card Format*. Ensure that the *Active* check box is checked.
26. Click Save.

Figure 31: Card Holder

The screenshot displays the Millennium Xtra interface for managing cardholders. The top navigation bar includes tabs for System Administration, **Cardholder Data**, Event Monitoring, Hardware Configuration, System Configuration, Reports, Historical Log, Maps, and External Systems. The left sidebar shows a tree view with 'Adams, John' selected under the 'A' category.

The main content area is titled 'Card Information' and contains the following fields and controls:

- General Information:** Last Name: Adams, First Name: John, Middle Initial: , Employee ID: 90C73034.
- Access Information:**
  - Printed Card No.:
  - Encoded Card No.: 38997 (with an 'Enroll Card Number' button).
  - Activation Date: 5/5/2015
  - Expiration Date: 5/5/2016
  - Facility Code: 50 (DCC controllers only)
  - Badge Type:
  - Card Class:
  - PIN:
  - Card Format: Wiegand 26 FC 1 (DCC or WaPac controllers only)
  - Issue Code: 0 (WaPac controllers only)
  - ☐ Disable card after 1 uses
- Access Levels:** Active ☒. Access Level 1: Biometric Doors, Access Level 2: ---No Access---, Access Level 3: ---No Access---, Access Level 4: ---No Access---, Access Level 5: ---No Access---, Access Level 6: ---No Access---. Buttons: Delete Card 1, Assign Key, More Access Levels, BioEntry.
- Buttons:** New, Copy, Save, Cancel, Delete, Batch Record Add, Cardholder Report, Cardholder Access Report, Access History, Help.

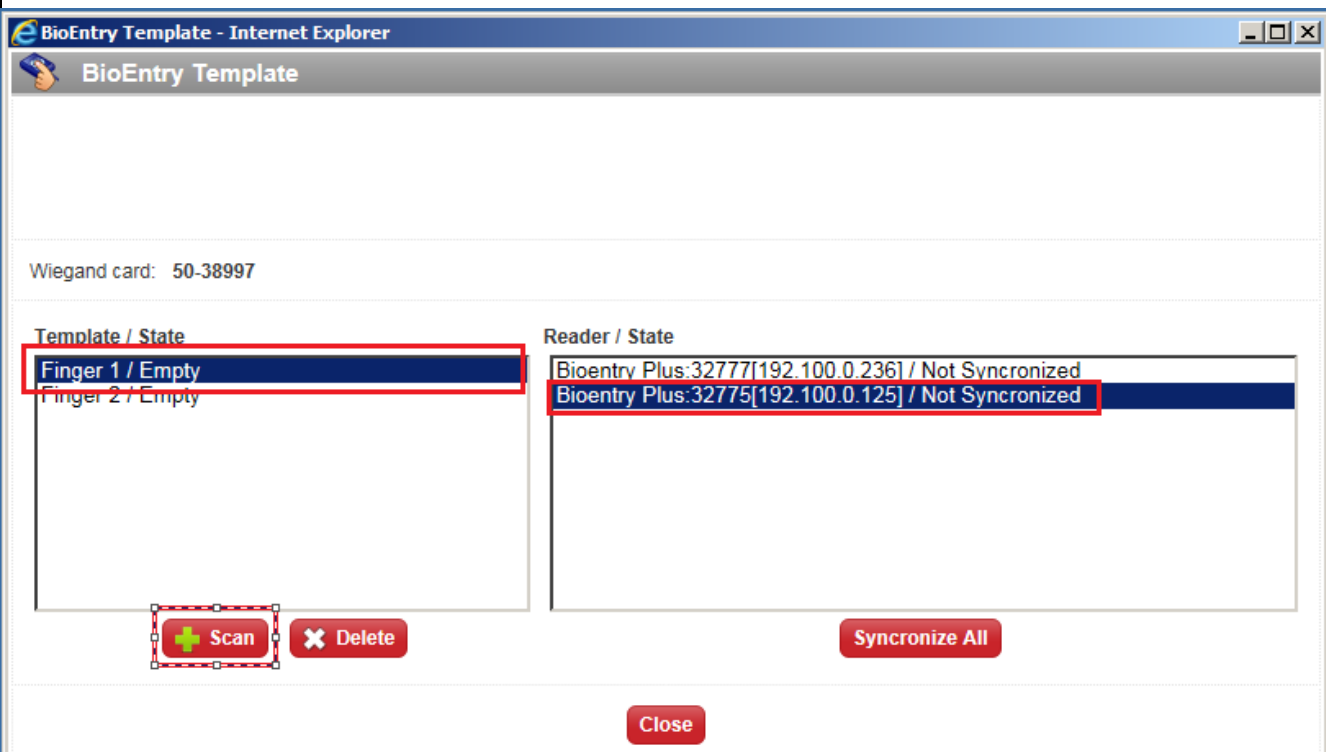
Annotations in the image include blue arrows pointing to the 'Encoded Card No.' field, the 'Card Format' dropdown, and the 'BioEntry' button. A blue box highlights the 'Save' button. A text box on the right states 'No image is available for this cardholder'.

## Enroll the Finger Print

### Scan and Enroll the Finger Print

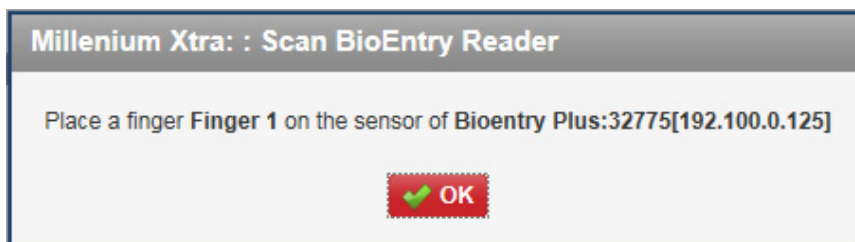
1. Click the *BioEntry* button. A *BioEntry Template* dialog box will be displayed.
2. From the left pane, select *Finger 1* or *Finger 2*.
3. From the right pane, select the *BioEntry* reader you wish to use to enroll the fingerprint.
4. Click *Scan*.

Figure 32: BioEntry Template



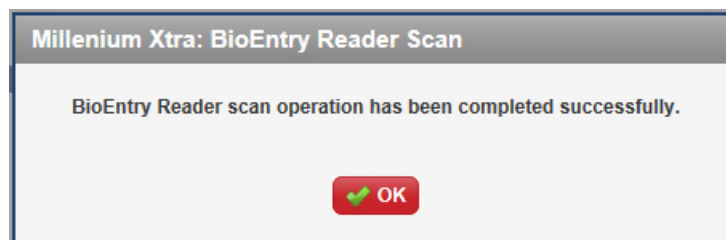
5. A prompt will be displayed asking the user to place the finger on the *BioEntry reader* that was selected.
6. Before clicking *OK*, please read the following:
  - When the *OK* button is pressed, the selected *BioEntry reader* will present a flashing amber LED.
  - Present the finger on the fingerprint sensor.
  - The *BioEntry reader* will indicate a successful fingerprint scan with an audible sound and a green LED.
  - The reader will then flash amber again and the same fingerprint must be scanned successfully a second time.
7. Click *OK* and proceed with the fingerprint enrollment process. The Millennium Xtra software should display a message indicating that the fingerprint has been successfully enrolled.

Figure 33: Scan Finger Print



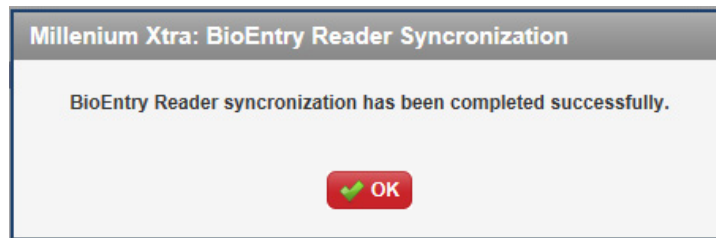
8. If the scanning process fails, please repeat until it completes successfully.

Figure 34: Scan Complete



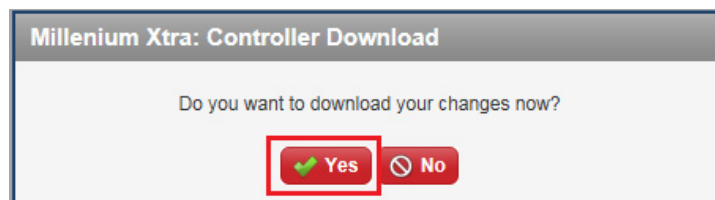
9. Click the *Synchronize All* button. This will synchronize the fingerprint that was just enrolled to all of the *BioEntry readers* in the system. Millennium Xtra will display a message indicating that the synchronization completed successfully.
10. Click *OK*.

Figure 35: Reader Synchronization



11. Click *Close* to return to the card holder record.
12. Click *Save* to save the card holder record.
13. Navigate to the *Event Monitoring* screen.
14. When prompted, *Do you want to download your changes now?*, click *Yes*.

Figure 36: Download Changes



15. Present the finger that was previously enrolled at the BioEntry reader.

If the card holder has been assigned access to more than one BioEntry door and the fingerprint has been synchronized to the BioEntry readers, the finger should now provide access at any BioEntry door.

**Figure 37:** Test Finger Print Entry

Current Threat Level: **Normal**

System Administration | Cardholder Data | **Event Monitoring** | Hardware Configuration | System Configuration | Reports | Historical Log

Millenium Xtra

Logged User: admin Time Online: 00:30 Bas

Events/Alarms Display | Cardholder's Data | Operator Control | Controller Download | Image Verification | Event Monitor Configuration

View Alarms (2) Enable Image Verification

Time	Category	Name	Status	Origin
5/5/2015 8:58:37 AM GMT -04:00	Cardholder	John Adams (Card #50-38997)	Admitted	BioEntry Door 1
5/5/2015 8:58:37 AM GMT -04:00	Door	BioEntry Door 1 (Card #50-38997)	Unlocked	John Adams
5/5/2015 8:58:33 AM GMT -04:00	Cardholder	John Adams (Card #50-38997)	Admitted	BioEntry Door 2
5/5/2015 8:58:33 AM GMT -04:00	Door	BioEntry Door 2 (Card #50-38997)	Unlocked	John Adams

## Assistance

### Contact Technical Support

Authorized Dealers can contact Technical Support by:

- Telephone 1-866-455-5222
- E-mail directly to **[tsupport@millennium-groupinc.com](mailto:tsupport@millennium-groupinc.com)**

### Millennium Group Web Sites

Our company website is **[www.millennium-groupinc.com](http://www.millennium-groupinc.com)**

A Tech Support portal is under construction with more documentation.  
(Customers can also open tickets directly from here.) **[support.millennium-groupinc.com](http://support.millennium-groupinc.com)**

BioStar Quick Start Installation Guide

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