

MorphoManager

BioBridge Universal Quick Start Guide



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Introduction

BioBridge is an enrollment and synchronization middleware that overlays enrollment and demographic synchronization between MorphoManager and third party data sources. The infrastructure is extensible and supports interfacing to multiple third party systems (one at a time) by the implementation of an interface. BioBridge is not dependent on the underlying technology platform required for integration.

Support

Please contact your installer for additional support.

Setting up BioBridge

The following areas of MorphoManager need to be configured as part of the Universal BioBridge setup:

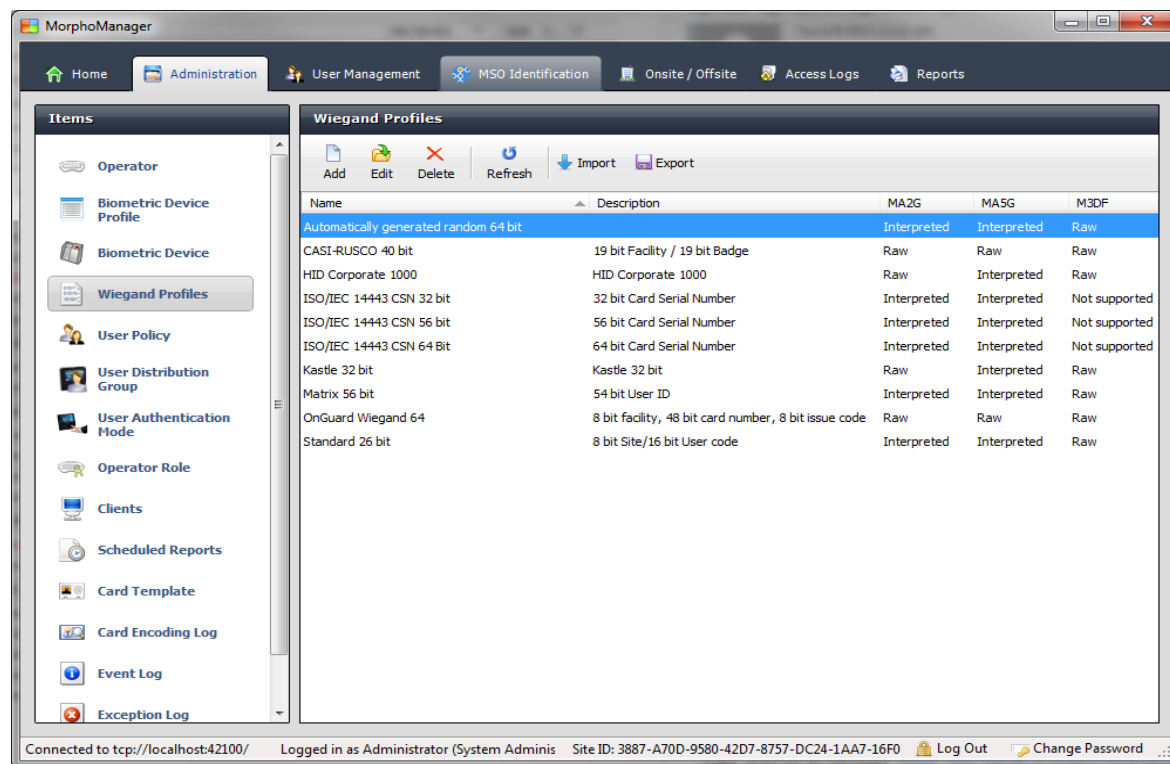
1. Wiegand Profiles
2. Biometric Device Profiles
3. Biometric Device
4. User Policy
5. User Distribution Group
6. BioBridge System Configuration

Wiegand Profiles

Wiegand Profiles define what information is output over the Wiegand Out interface of the Morpho Biometric Devices when a user is identified. This is most typically used in conjunction with an Access Control System.

- From Administration tab select Wiegand Profile.
- Click **Add** button to create a custom Wiegand profile.

The Wiegand formatting used can vary from system to system, but some common formats are listed below.



The screenshot shows the MorphoManager web application interface. The 'Administration' tab is selected, and the 'Wiegand Profiles' section is active. The interface includes a navigation menu on the left with options like Operator, Biometric Device Profile, Biometric Device, Wiegand Profiles, User Policy, User Distribution Group, User Authentication Mode, Operator Role, Clients, Scheduled Reports, Card Template, Card Encoding Log, Event Log, and Exception Log. The main content area displays a table of Wiegand Profiles with columns for Name, Description, MA2G, MA5G, and M3DF. The table lists various profiles such as 'Automatically generated random 64 bit', 'CASI-RUSCO 40 bit', 'HID Corporate 1000', and 'Standard 26 bit'. The status for each profile is indicated in the MA2G, MA5G, and M3DF columns.

Name	Description	MA2G	MA5G	M3DF
Automatically generated random 64 bit		Interpreted	Interpreted	Raw
CASI-RUSCO 40 bit	19 bit Facility / 19 bit Badge	Raw	Raw	Raw
HID Corporate 1000	HID Corporate 1000	Raw	Interpreted	Raw
ISO/IEC 14443 CSN 32 bit	32 bit Card Serial Number	Interpreted	Interpreted	Not supported
ISO/IEC 14443 CSN 56 bit	56 bit Card Serial Number	Interpreted	Interpreted	Not supported
ISO/IEC 14443 CSN 64 Bit	64 bit Card Serial Number	Interpreted	Interpreted	Not supported
Kastle 32 bit	Kastle 32 bit	Raw	Interpreted	Raw
Matrix 56 bit	54 bit User ID	Interpreted	Interpreted	Raw
OnGuard Wiegand 64	8 bit facility, 48 bit card number, 8 bit issue code	Raw	Raw	Raw
Standard 26 bit	8 bit Site/16 bit User code	Interpreted	Interpreted	Raw



The actual setting of the Wiegand Profile from this list will be done at the User Policy and Biometric Device Profile Level. Please refer to those sections for further details.

Biometric Device Profile

The Biometric Device Profile will define common settings and parameters for one or more biometric devices. This profile can be applied when adding units into the system from the Biometric Device section of Administration.

- From Administration tab select Biometric Device Profile.
- Click **Add** button to create a new Biometric Device Profile.

The screenshot shows the MorphoManager web interface. The 'Administration' tab is active, and the 'Biometric Device Profile' option is selected in the left-hand 'Items' menu. The main window is titled 'Adding Biometric Device Profile' and contains the following fields and options:

- Name:** A text input field.
- Description:** A text input field.
- Configuration Mode:** A dropdown menu set to 'Express'.
- Realtime logging enabled:** An unchecked checkbox.
- Log retrieval interval:** A text input field with '300' and '(seconds)'.
- Display name encoding code page:** A dropdown menu set to 'Western Europe (Default) (ISO-8859-1)' with a note: '(Applicable to MA500 series only)'. Below this is a note: '(MA 100, MA J, MA 500, MA VP, MA Sigma, MA Sigma Lite, MA Sigma Lite+, and MorphoWave only. Only applicable to new user adds or rebuild)'. There is also a note: '(MA 100, MA J, MA 500, MA VP, MA Sigma, MA Sigma Lite, MA Sigma Lite+, and MorphoWave only. Only applicable to new user adds or rebuild)'.
- Duplicate check on biometrics:** An unchecked checkbox.
- MorphoAccess heartbeat interval:** A text input field with '30' and '(seconds)'.
- MA Sigma, MA Sigma Lite, MA Sigma Lite+ Only Settings:**
 - Allow Remote Enrollment:** An unchecked checkbox.
 - Default User Policy for Remote Enrollment:** A dropdown menu set to 'Default'.

At the bottom of the form are buttons for 'Back', 'Next', 'Finish', and 'Cancel'. The status bar at the bottom indicates the user is logged in as Administrator (System Admin) and provides site ID and options for 'Log Out' and 'Change Password'.

In order to create the most basic profile utilizing biometrics stored on the devices that can be used, simply give the profile a name and click **Finish**. Please reference the MorphoManager User Manual for more detail on all the various properties that can be assigned to a Biometric Device Profile including the use of smartcards.



If you plan on using a Wiegand Profile, you will need to set the Wiegand Profile for the Biometric Device(s) here. The Wiegand Profile you choose for your devices must marry to the one being utilized for your users set in the User Group section of this guide.

Biometric Device(s)

A Biometric Device is the device used to verify users and allow access to doors. They record a log of every attempt to gain access. MorphoManager is used to manage user's access to Biometric Devices.

- From Administration tab select Biometric Device.
- Click **Add** button to create a new Biometric Device.
- Enter the details for the device including the Hardware Family the device falls into, the IP address, and the Biometric Device Profile.

Items

Operator

Biometric Device Profile

Biometric Device

Wiegand Profiles

User Policy

User Distribution Group

User Authentication Mode

Operator Role

Clients

Scheduled Reports

Card Template

Card Encoding Log

Event Log

Exception Log

Adding Biometric Device

Enter the details for this Biometric Device

Name:

Description:

Location:

Asset ID:

Export Value:

Time Zone: (UTC-05:00) Eastern Time (US & Canada) ▼

Hardware Family: ▼

Serial Number:

IMEI Number:

Hostname/IP Address:

Port:

Biometric Device Profile: ▼

Include in Time & Attendance Exports:

Change User Onsite / Offsite Status:

Onsite Key: No Key ▼

Offsite Key: No Key ▼

Back Next Finish Cancel

- Once the required details are entered click **Finish**.
- Below is a screenshot of how the Biometric Device Screen looks after the configuration and the devices are online.

Items

Operator

Biometric Device Profile

Biometric Device

Wiegand Profiles

User Policy

User Distribution Group

User Authentication Mode

Operator Role

Clients

Scheduled Reports

Card Template

Card Encoding Log

Event Log

Exception Log

Biometric Device

Add Edit Delete Refresh Get Logs Set Date/Time Rebuild Set Offline

Name	Description	Location	Biometric D...	Status	Tasks
MA sigm Multi			Default	Online	0

Details Logs Queued Tasks (0) Failed Tasks (0) Hide Details

MA sigm Multi

Description: MA SIGMA Multi

Hardware Type: MA SIGMA Multi

Serial Number: 1431SMS0000243

Firmware version: 1.3.2

Hostname/IP Address: 10.10.214.11:11010

User Slots: 0 / 3000

Time Zone: (UTC-05:00) Eastern Time (US Canada)

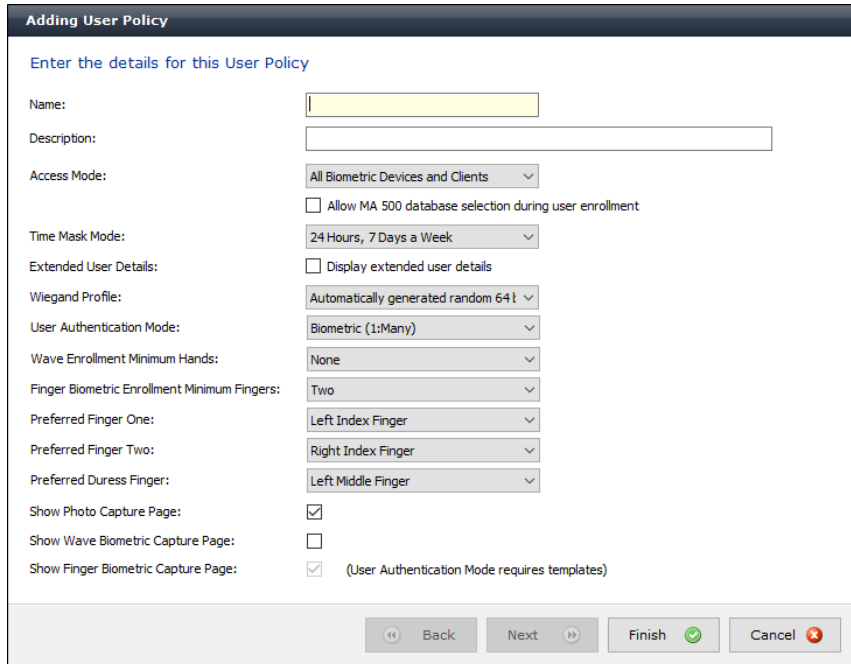
Device Status: Online

User Policy

User policies are used to apply access rights and rules to all members of the group.

To Configure BioBridge, MorphoManager's UserPolicy with an Access Mode "Per User" must be selected. This will create User Distribution Groups (groups of Biometric Devices) that can place the enrolled user into specific devices.

- From Administration tab select User Policy.
- Click **Add** button to create a new User Policy.



If you plan on using a Wiegand Profile, you will need to set it here in order for the users enrolled in this User Group to have a particular Wiegand Profile. The Wiegand Profile you choose for your users must marry to the one you utilize for your biometric access devices set in the Biometric Device Profile section of this guide.

The default User Policy will be set to utilize an authentication mode of Biometric (1: Many). To utilize another authentication mode (such as encoding smartcards) additional User Policies can be created.

Please reference the MorphoManager User Manual for more detail on all the various properties that can be assigned to a User Policy including Wiegand Profile, Finger Biometric Enrollment Minimum, Fingers, Access Modes and User Authentication Modes.

User Distribution Groups

User Distribution Groups are designed to distribute users onto groups of MA readers or MorphoManager Clients. In order to be utilized the user must be in a User Policy that has its Access Mode set to “Per User”. Then the User Distribution Groups will be selectable when creating (or editing) a user.

- From Administration tab select User Distribution Group.
- Click **Add** button to create a new User Distribution Group.

Below is the screenshot where group will only be placing users on one of the three devices installed on the system.

The screenshot displays the 'Adding User Distribution Group' window. The left sidebar shows the 'Items' menu with 'User Distribution Group' selected. The main content area is titled 'Adding User Distribution Group' and features a 'Select Biometric Devices' section. This section includes a table with the following data:

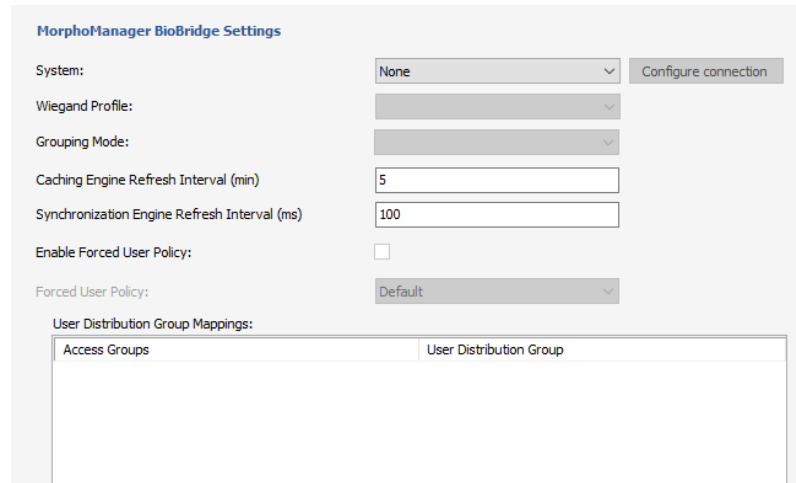
Name	Description	Location	Model
<input type="checkbox"/> MA 500			MA500
<input checked="" type="checkbox"/> MA sigm Multi			MA SIGMA Multi
<input type="checkbox"/> MA VP			MA VP-Dual

At the bottom of the window, there are four buttons: 'Back', 'Next', 'Finish', and 'Cancel'.

BioBridge System Configuration

The last step in the process is to configure BioBridge specifications to BioBridge Universal.

- From Administration, select System Configuration.
- Select the BioBridge Tab in System Configuration.



The screenshot shows the 'MorphoManager BioBridge Settings' configuration page. It includes several settings:

- System:** A dropdown menu currently set to 'None' and a 'Configure connection' button.
- Wiegand Profile:** A dropdown menu.
- Grouping Mode:** A dropdown menu.
- Caching Engine Refresh Interval (min):** A text input field containing the value '5'.
- Synchronization Engine Refresh Interval (ms):** A text input field containing the value '100'.
- Enable Forced User Policy:** An unchecked checkbox.
- Forced User Policy:** A dropdown menu set to 'Default'.
- User Distribution Group Mappings:** A table with two columns: 'Access Groups' and 'User Distribution Group'. The table is currently empty.

- **System:** From the System drop down menu choose BioBridge Universal and click the **Configure connection** button. A *BioBridge connection box* window will pop up. Fill in all the required fields and click OK.

BioBridge Universal Connection

Please select the provider in the dropdown list below.

Provider:

Use basic connection string

Server / Instance

Please enter the hostname/address and instance name (if applicable) of the SQL Server you would like to connect to:

SQL Server:

Database:

Logon details

Please select the authentication mechanism to use to connect to the SQL Instance:

Use Windows Integrated Security

Use SQL Server User & Password

Username:

Password:

Use advanced connection string

Connection string:

OK Cancel

Use the provider dropdown to select either SQL Server, MySQL, Access or Oracle depending on the database you are trying to connect to

Using the BioBridge Enrollment Client

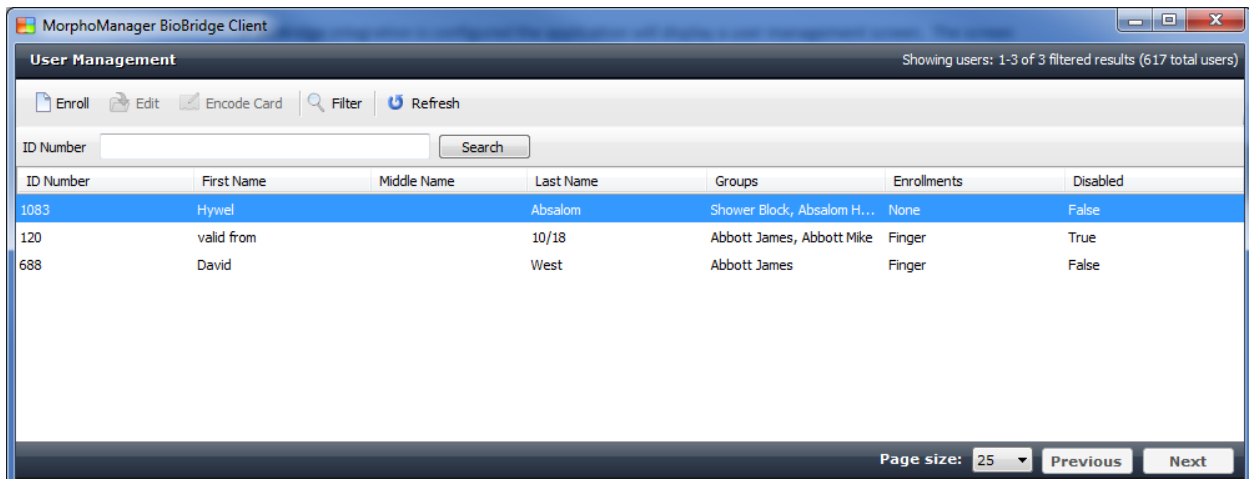
After configuring BioBridge you will now utilize the BioBridge Enrollment Client. This client will check if BioBridge Integration has been enabled and configured. If it has not, the application will display the message “BioBridge integration has not been enabled and configured” and you will need to go back to MorphoManager/Administration/System Configuration/BioBridge to configure it properly.

If BioBridge integration is configured the application will display a user management screen. The screen will consist of a toolbar and a data grid.

Toolbar

The toolbar will have the following items:

- Enroll
- Edit
- Encode Card
- Filter
- Refresh
- Search Field



Enroll

Enroll will start the enrollment of the selected user. The enrollment process will be derived from the standard MorphoManager user add/edit wizard with the following pages (For details on the enrollment process please see the User Management section of the MorphoManager User Manual):

- Authentication Type (Only if more than one mode is configured)
- 3D Face Selection
- 3D Face Enrollment
- Finger Selection
- Finger Enrollment

If a card based authentication method is configured the operator will be prompted if they want to encode a card.

Edit

Opens the already enrolled user details for viewing or editing.

Encode Card

Encode card will display an animation of the card being presented to a SDI 011 and wait for the card encoding to complete or be cancelled.

Filter

The screenshot displays a web interface for filtering users. It is divided into several sections:

- User Details:** A form with input fields for First Name, Middle Name, Last Name, ID Number, and Date of Birth. Below these is a radio button group for 'Enabled' with options: Any (selected), Enabled, and Disabled.
- User Wiegand values:** A section with the text 'Not Applicable' and an empty input field.
- Groups:** A list of users with checkboxes. At the top are 'Select All' and 'Clear All' buttons. The list includes: Abbott James (checked and highlighted), Abbott Mike (checked), Absalom Hywel (checked), Acheson Kenneth (checked), Adam Jonathan (checked), and Adams Kerry (checked).
- Sort By:** Three dropdown menus for sorting: Primary (ID Number Ascending), Secondary (Last Name Ascending), and Tertiary (First Name Ascending).

Filter will show a popup inline form that allows filtering on the following items:

- First Name
- Last Name
- ID Number
- Enabled/Disabled
- Group

Refresh

Refresh will update the data currently being shown using the currently set filter conditions.

Search Field

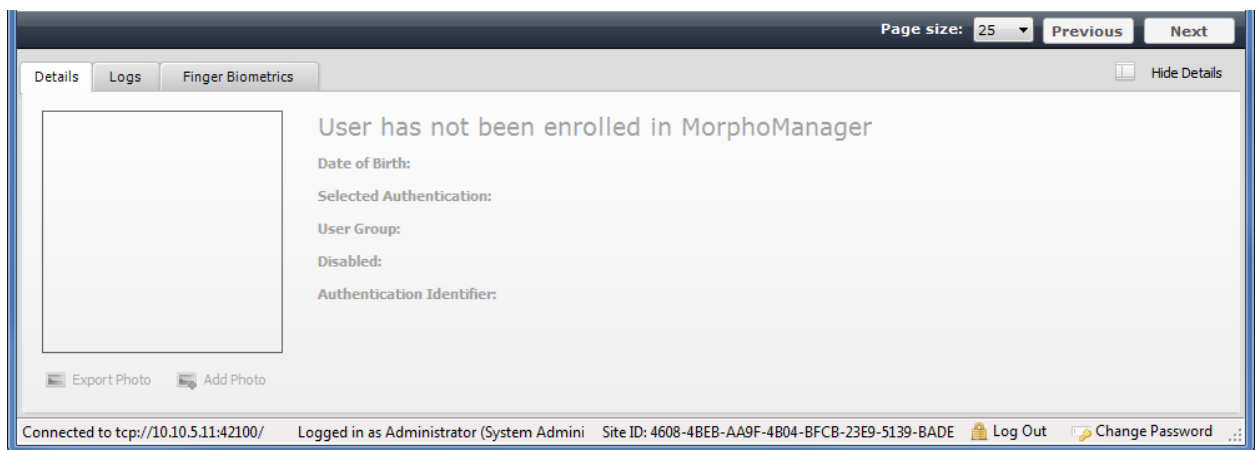
The Search Field can be used to find individual users quickly and/or to migrate users from the external system to the BioBridge Enrollment Client without waiting for a cache refresh.

Data Grid

The data shown in the data grid is a combination of your system and MorphoManager. Only users that exist in your system will be shown. A MorphoManager user does not exist until the user is enrolled. By default pagination is set for the first 25 BioBridge users to be shown. Operators may change the pagination to 25, 50, 100 & 250.

The data grid will have the following columns:

- ID Number
- First name
- Last name
- Groups – All of the groups that your user is a member of in your system.(Comma separated values)
- Enrollments (None, Finger, Finger & 3D Face, 3D Face) (Derived from linked MorphoManager User)
- Disabled- A value of either True or False will be present.



Enrolled user will show their MorphoManager details in the “Show Details” panel below the data grid. This area will be blank if the user has not been enrolled.