MorphoManager

BioBridge

Paxton Net2 WebAPI

Quick Start Guide

IDEMIA
augmented identity

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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.

BioBridge supports the following version/s of Paxton Net2 WebAPI:

- 6.02.8928.4090

Support

Please contact your installer for additional support.

Setting up BioBridge

The following areas of MorphoManager will need to be configured as part of Paxton Net2 BioBridge setup:

- Wiegand Profiles
- Biometric Device Configuration
- Biometric Device
- User Configuration
- User Distribution Group
- 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 pre-configured in MorphoManager

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

Biometric Device Configuration

The Biometric Device Configuration 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 Configuration.
- Click **Add** button to create a new Biometric Device Configuration.

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 Configuration 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 Configuration 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 Configuration.

- 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.

User Configuration

User polices are used to apply access rights and rules to all members of the group.
To Configure BioBridge, MorphoManager's User Configuration 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 Configuration.
- Click **Add** button to create a new User Configuration.

If you plan on using a Wiegand Profile, you will need to set it here in order for the users enrolled in this User Configuration 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 Configuration section of this guide.

The default User Configuration 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 Configuration 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 Configuration 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.
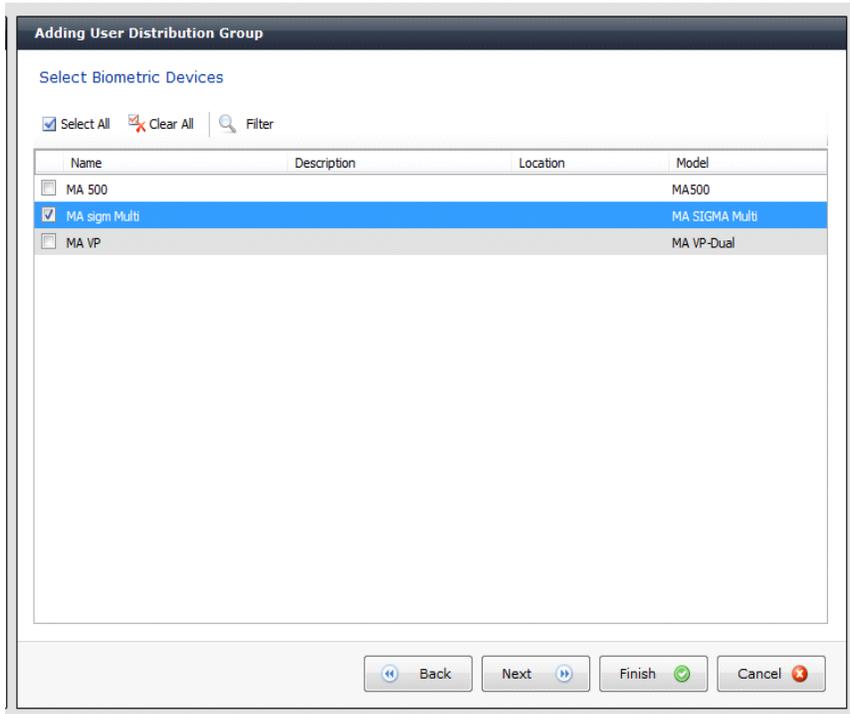
BioBridge System Configuration

The last step in the process is to configure BioBridge specifications to Net2 WebAPI.

From Administration, select System Configuration.
Select the BioBridge Tab in System Configuration.
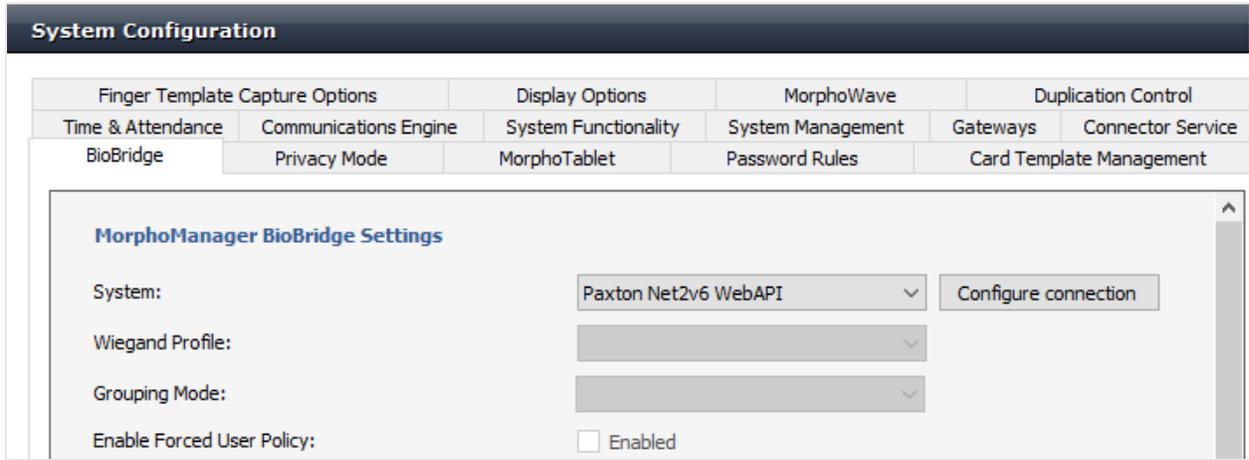
System: From the System drop down menu choose Net2 WebAPI and click the **Configure connection** button. A BioBridge connection box window will pop up. Fill in all the required fields and click OK.
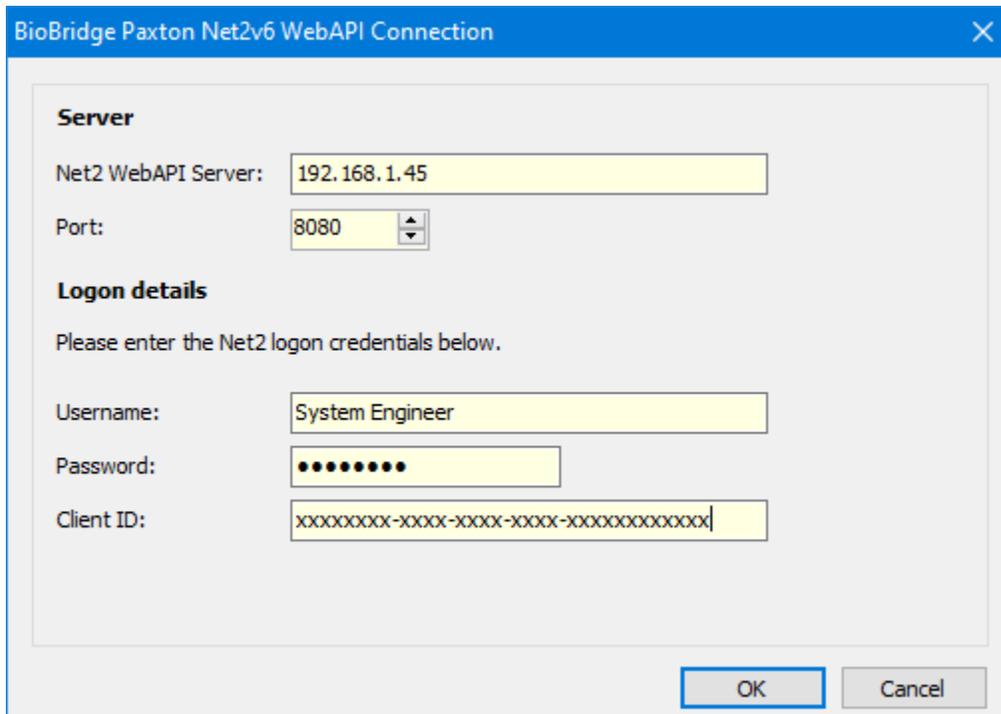
Client ID: This ID is the name of the *.lic file, which is obtained from Paxton for the purpose of using the WebAPI. Please contact Paxton if you need support regarding the license file.

Wiegand Profile: Select the Wiegand format in use from the drop down menu.

Grouping Level Mode: This setting determines how MorphoManager should map Net2 users into MorphoManager User Distribution Groups.

> **Automatic:** This mode will automatically match Access Level groups from Net2 to the ones created in MorphoManager User Distribution Group if they have the same naming convention.
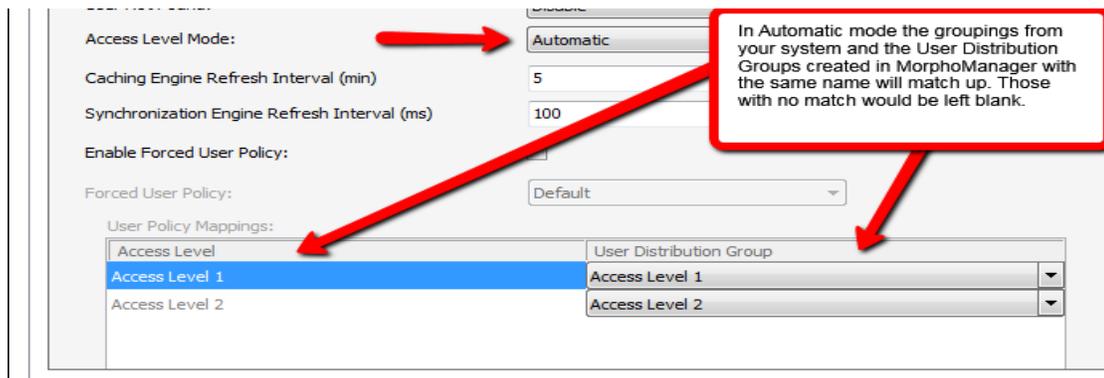
> **Manual:** If the Access Level grouping names of Net2 and the User Distribution Group(s) created in MorphoManager are not the same, then selecting which Net2 Access Level maps to which MorphoManager User Distribution Group can be done manually in the User Configuration Mappings.
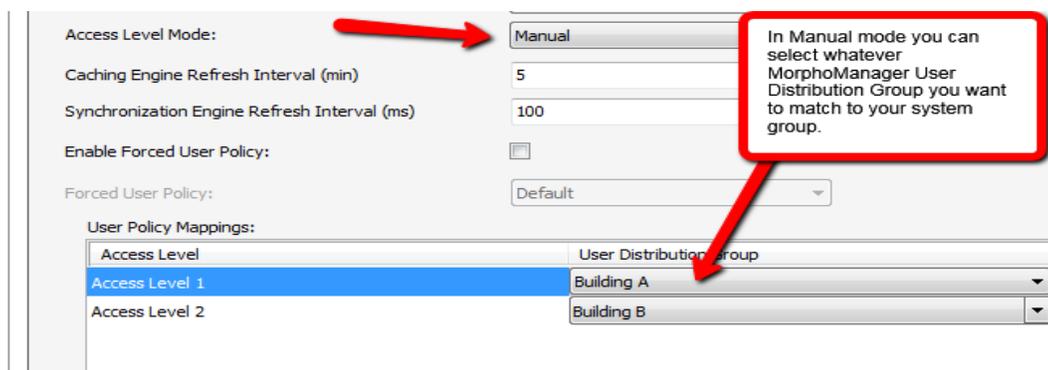
For basic setups, the below settings do not require any changes:

> **Enable Forced User Configuration**
> By activating this feature, you can select a User Configuration from the drop-down menu. The 3rd party user will automatically be placed in this User Configuration during the enrollment process started in the BioBridge Enrollment Client. The User Configuration selected here must be a "Per User" access mode policy.

User Synchronization Start Time and End Time
The user synchronization engine will only be permitted to run in this time frame.

Delay between Each User Synchronization
The duration that the User Synchronization Engine will sleep between each user sync. Increase the delay time to use less system resources, but this will also extend the time it takes for all the users to be updated.

Allow User Sync While User Cached Is Refreshing
When enabled, the User Synchronization engine will run in parallel to the User Cache Refresh. This is very taxing on system resources. It is recommended to disable this setting when using large databases.

User Cache Refresh Schedule
The specified times when the user cache refresh may start. The ideal schedule would be 24/7, but this is not always possible with large databases.

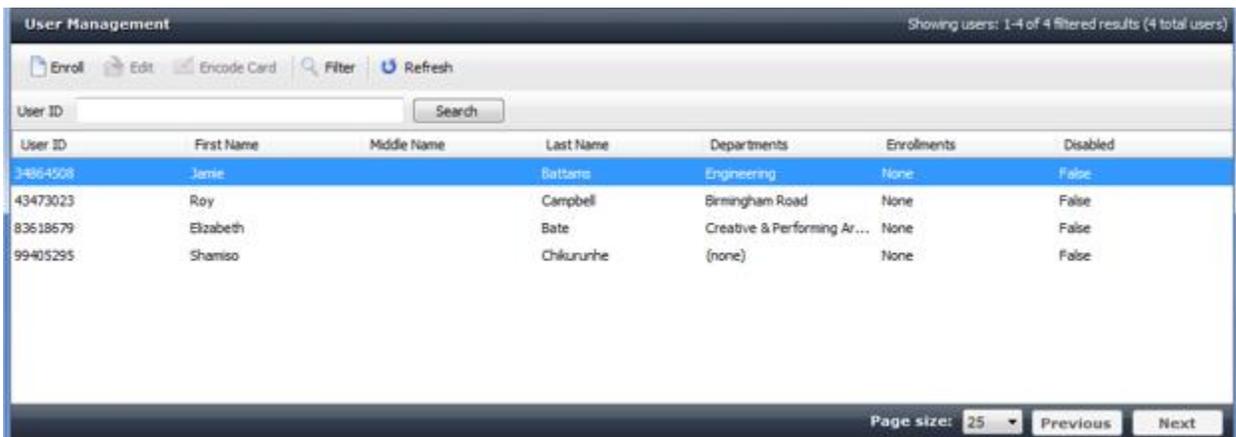# Using the BioBridge Enrollment Client

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 been configured, 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

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

- First Name
- Middle Name
- Last Name
- User ID
- Enabled/Disabled
- Departments

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 Paxton Net2 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:

- User ID
- First name
- Middle name
- Last name
- Departments– All of the Department 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.
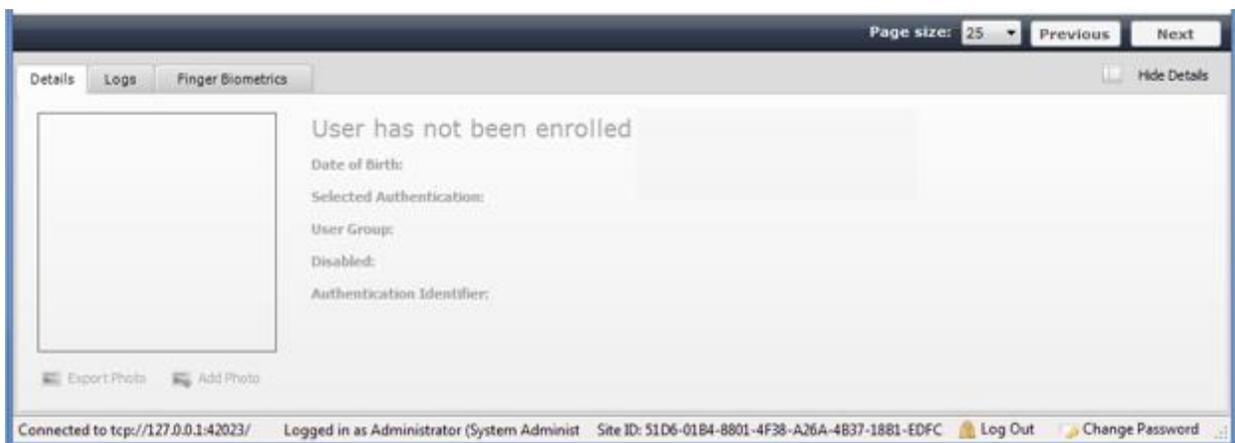
Embedded enrollment setup

In order to launch the enrollment process from within Paxton Net 2 the following steps will need to be completed *after* completing the "Setting up Biobridge" section of this guide.

Adding the "Add User and Enroll Biometrics" button to Paxton

To add and configure the "Add User and Enroll Biometics" button so that it appears when creating a new user in Paxton Net 2, do the following:

- Go to the MorphoManager Client directory (default install of the MorphoManager Client will be C:\Program Files (x86)\Morpho\MorphoManager\Client).
- From the MorphoManager Client directory run the "ID1.MM.PaxtonNet2EnrollmentButton.exe"

| Name	Date modified	Type	Size
ID1.ESP4.MorphoManager.ClientService.exe	11/15/2017 3:11 PM	Application	233 KB
ID1.MM.AMAGSymmetryStub.exe	11/15/2017 3:12 PM	Application	12 KB
ID1.MM.ContinuumStub.exe	11/15/2017 3:11 PM	Application	21 KB
ID1.MM.PaxtonNet2EnrollmentButton.exe	11/15/2017 3:12 PM	Application	47 KB
ID1.MM.RandomBiometricDeviceRebuilderTool.exe	11/15/2017 3:11 PM	Application	14 KB
ID1.TraceConfiguration.exe	8/25/2017 3:36 PM	Application	10 KB

This will launch to the PC's System Tray. When this application is running, the "Add User and Enroll Biometrics" button will be available to use in Paxton Net2.

Options for the Enrollment Application

- Once the application is running in the System Tray, right click it and choose **Options.**
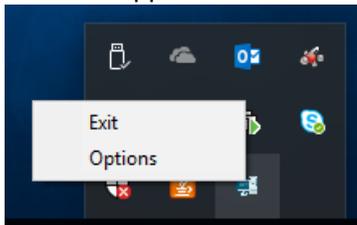
- From the Options menu select whether the application should start automatically each time the user logs into the PC. NOTE: This setting is per user login.
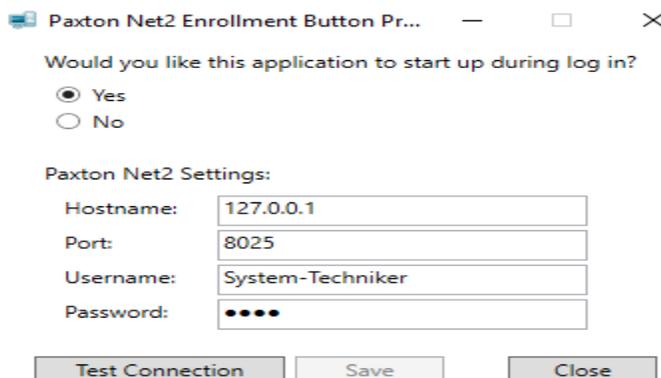
- From the Options menu the Paxton Net2 Connection Settings will also need to be configured and tested.

Enrolling a user into MorphoManager via Paxton Net2

With the enrollment application running as described above an "Add User and Enroll Biometrics" button will now appear in the Add User window for Paxton. Make sure that all of the pertinent information that is needed to create a user is present and click **Add User and Enroll Biometrics.** This includes First name, Last name, Department, Access level, Token number, and Token type. Please note that the same Token type must be used as was selected in the configuration of BioBridge earlier in the manual in order to enrol the user into MorphoManager.

Once the button is clicked, it will generate the user in Paxton Net2 and launch the enrollment process into MorhoManager as mentioned in the Using the BioBridge Enrollment Client section of this guide.