EasyLobby Integration in ProtegeGX

Application Note

ICTeSecurity**.**

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The ProtegeGX EasyLobby Integration is ideal for granting temporary access for visitors including customers, guests, tradespeople and contractors. Details are extracted from the Visitor Management System and used to grant access for the duration the visitor will be on site.

The ICT Data Sync Service imports user information from a CSV (Comma-Separated Values) or text file and creates users, stores information and assigns access levels. When information changes in the import file, the service updates its database to remove expired entries and update existing entries.

Users and access levels can be given start and expiry times, allowing you to manage bookings down to the minute.

Overview

The steps required to implement the EasyLobby integration in ProtegeGX are:

- Creating Custom Fields and Access Levels prior to beginning the import process
- Installing the ICT Data Sync Service
- Configuring the ICT Data Sync Service for Import

Prerequisites

This integration requires:

- An operational ProtegeGX system with software version 4.2.214 or higher
- An installation of the ICT Data Sync Service version 2.0.0.0 or higher
- A Data Sync license applied to the relevant Serial Number (SSN)
- SOAP Interface license applied to the relevant Serial Number (SSN)
- ProtegeGX SOAP Integration Service Version 1.5.0.19 or higher

    For information on how to install and configure the ProtegeGX SOAP Service, refer to the ProtegeGX SOAP Service Installation Guide

- A ProtegeGX Client Connection available for use by the service

Setting Up Prerequisites in ProtegeGX

Creating a Custom Field Tab in ProtegeGX

The Custom Field Tab feature enables you to add an additional tab displayed under a user record to hold Custom Fields.

1. Navigate to **Users | Custom Field Tabs** and click **Add**
2. Enter EasyLobby in the **Name** field and click **Save**

Creating Custom Fields in ProtegeGX

Custom Fields enable you to define your own data that is displayed under a user record. The import file may contain fields that do not exist in ProtegeGX, such as Company or Location. If you wish to import those fields, create Custom Fields for them.

1. Navigate to **Users | Custom Fields** and click **Add**
2. Enter a Name and click **Save**
3. Repeat steps one and two for all required Custom Fields
4. Multi-select all of the Custom Fields created and set the Tab to EasyLobby
5. Click Save

Creating Access Levels in ProtegeGX

This step is only required if your import file contains any Access Levels. Access Levels are used to control what users on site can do, where they can go, and when they can do these things.

1. Navigate to **Users | Access Levels** and click **Add**
2. In the Name field, enter the name of the Access Level and click **Save**

   Note that the name of the Access Level must match exactly that in the import file in terms of upper/lower case letters, spacing and spelling in order for the Access Level to be assigned correctly.

3. Repeat for every Access Level as required

Installing the ICT Data Sync Service

1. Run the supplied ICTDataSyncService.msi file to launch the install wizard. Click **Next** to continue
2. Select whether it is installed for Everyone who uses the PC, or just your user and click **Next** to install to the default location (C:\Program Files (x86)\Integrated Control Technology\Data Sync Service)

   If you are required to install the service in a different location, click **Browse** and navigate to the required file path
3. Click **Next** to begin the installation
4. Once the installation is complete, click **Close**

ICT Data Sync Service Configuration Tool

1. To run the ICT Data Sync Configuration Tool, double click on the ICT Data Sync Service shortcut on the desktop.

    Alternatively, navigate to the install location (if you accepted the defaults during installation, this will be C:\Program Files (x86)\Integrated Control Technology\Data Sync Service) and open the DataSyncServiceConfig.exe file

2. When opening the application for the first time, you will be presented with the following message:

    If you were previously using the ProtegeGX Data Sync Service (version 1.X.X) and wish to import the previous settings into the ICT Data Sync Service, click YES. Alternatively, if you wish to use the ICT Data Sync Service from new, click NO.

3. Click **NO** to continue to the configuration tool.

    If you are upgrading from the ProtegeGX Data Sync Service to the ICT Data Sync Service, refer to the ICT Data Sync Service Upgrade Guide available in the release package for more information on the Upgrade Tool.

Setting up the Data Sync Service for EasyLobby

The way the service is configured will depend on whether the EasyLobby import file is of a plain text format (.txt) or a CSV format (.csv).

Data Target

The Data Target section enables you to configure the system that is using Data Sync.

*   **Target System**: Select ProtegeGX
*   **SOAP Server Address**: The address of the SOAP server. If you accepted the defaults while installing SOAP, this will be http://localhost:8030/ProtegeGXSOAPService/Service.svc
*   **Username**: The username of the Operator required to access the target system

    It is recommended that a ProtegeGX operator is added for importing from Data Sync. This ensures that you can easily identify the records that have been added / modified / deleted by the Data Sync. The **Show PIN numbers for Users** option MUST be enabled, if it is not, the Configuration Tool will warn you that this option must be enabled for data to be imported and updated successfully

*   **Password**: The password associated with the username in the above field
*   **Site**: This refers to the Site that the records are to be imported to. All Sites that have been added in ProtegeGX will be available in the dropdown

Sync Options

The Sync Options section enables you to configure how Data Sync synchronizes the selected import file.

*   **Resynchronize Every**: Data is synchronized repeatedly for the selected time interval. The service will restart over the selected time interval and monitor the import file(s) for any changes. If a change has been made, it will be synced to the target system
*   **Delete Import File When Complete**: When enabled, the import file is deleted once a successful import has been completed
*   **Import Expired Records**: When enabled, the record is imported to the target system even if the end date is in the past
*   **Delete Expired Records**: When enabled, the records imported by Data Sync that have expired (based on the end date in the import file) are deleted from the target system

Data Source (CSV)

This section outlines the setup required when the EasyLobby files are of CSV format.

- **Record to Sync:** Select Users from the dropdown
- **File Directory:** Defines the location of the import file(s). Click on the ellipses (...) button and navigate to the path where the import file(s) are located. Data Sync imports every file contained in the file directory. Each of the files must be of the same format e.g. contains the same number of columns with the same import fields
- **Import File:** When enabled, this option is used to import a single file. When disabled, all files in the directory will be imported
- **File Format:** Defines how the file is delimited
    - **Row:** You can determine which row delimiter to use by testing each of the options provided and selecting the one that correctly displays your data in the field mapping. Alternatively, if you have Notepad++ installed, you can easily identify the row delimiter. Open your import file in Notepad++ and navigate to **View | Show Symbol | Show All Characters**
    - **Column:** {Comma}
- **Text Qualifier:** If the import file contains a field with quotation marks surrounding the data, enable this option and select the type of quotation mark from the dropdown.
- If the import row has a header row, set **Start Import At Row 2**

Data Source (Text)

This section outlines the setup required when the EasyLobby files are of plain text format.

- **Record to Sync:** Select Users from the dropdown
- **File Directory:** Defines the location of the import file(s). Click on the ellipses button (...) and navigate to the path where the import file(s) are located. Data Sync imports every file contained in the file directory. Each of the files must be of the same format e.g. contains the same number of columns with the same import fields
- **Import File:** If EasyLobby has been configured to export checkout files (ending with the letter 'D') to the directory above, then this field requires a regular expression to skip these files. For example, if valid files are named ^IMP7070.TXT then the checkout files to be skipped will be named ^IMP7070D.TXT. Enter //\^IMP\d+.TXT// in the textbox to skip the checkout file during import

  Note: In this step the expression given is a particular regular expression for the example filename. If your files are named differently to the example, a different regular expression will be required. Contact ICT for technical support.

- **File Format:** Defines how the file is delimited
    - **Row:** <Blank>
    - **Column:** {CR}{LF}

  Once the delimiters have been correctly setup, the Data Mapping window will display column-by-column view of the data from the import file

- **Text Qualifier:** If the import file contains a field with quotation marks surrounding the data, enable this option and select the type of quotation mark from the dropdown

Field Mapping

The Field Mapping for CSV and Text files is very similar. This section runs through the steps required to map common import. If you are importing from a text file that has fields padded with additional characters, see section Pattern (Text Only) before proceeding.

Any rows in the import file that are to be skipped during the import process will remain visible in the Data Mapping. They will have a **Source Column** value automatically assigned but the **Target Field** will remain blank.

First Name, Last Name and Full Name

1. From the **Target Fields** window, select **FirstName**
2. Set the **Source Column** to the column in the import file that contains the user's first name

3. To add a Last Name, repeat step two for the **LastName Target Field**

4. To add a **Full Name**, repeat step two for the **Name Target Field**. Note that you do not have to import a full name. If you map only a first or last name, this will automatically be entered in the **Name** field in ProtegeGX. If you import both a first name and last name, these will be automatically appended together and entered into the **Name** field in ProtegeGX

Unique Field

The import MUST have a unique field.

1. From the Target Fields window, select **CustomField1**

2. Set the **Source Column** to the column in the import file that contains a unique value. This is most often a numeric value

User Start and Expiry Date

The section below outlines how to map the Start and End time for a user.

Assign the following:

1. From the **Target Fields** window, select the **StartDate** field and the **ExpiryDate** field

2. Set the **Source Column** to the column in the import file that contains the user start date. Repeat this step for the expiry date

3. For the **StartDate** field, open the **Advanced Data Configuration** window

4. Enable the **Date and Time Format** option, then select from the options provided in the dropdown. If the date/time format of your import data is not provided in the dropdown, you can enter this manually

5. Repeat steps 3 and 4 for the expiry date. If the **Delete Expired Records** option is being used, enable the **Use This Field for Expiry Date Check** option

6. Click **OK** to exit the **Advanced Data Configuration** window

7. Click **OK**

Access Levels

This section outlines how to map the access level name, expiry start and expiry end fields in the access levels tab for a user within ProtegeGX.

Adding an Access Level Only

Assign the following:

1. From the Target Fields window, select **UserAccessLevelGroupDataData**. The Source Column is automatically set to **Group** with the linked fields added

2. To assign the name of the access level, set the Source Column value for the **UserAccessLevel** field. This should correspond to the column in the import file where the access level name is located

3. For the **UserAccessLevel** field, open the Advanced Data Configuration window

4. Enable the **Use This Field as the Group Data Identifier** option

5. Enable the **Target Field Record Type** option and set the dropdown to **Access Levels**

6. Click **OK**

Multiple Access Levels

Follow the steps in the previous two sections, then follow the steps below to configure the import of multiple access levels for a user.

1. For the **UserAccessLevel** field, open the Advanced Data Configuration window

2. Set the **Grouping Type** field to Paired Data

3. In the **Pair Delimiter** field, enter the character that separates each access level within the import file

4. The **Original Value** field displays the access levels as they appear in the import file, and the resulting value field displays each access level separated by double pipe characters (||) indicating that Data Sync recognizes that there are multiple access levels being imported.

5. Repeat steps in the **Adding Start and End Dates** section if each access level has a different expiry start and expiry end date in the import file.

6. Click **OK**

If you do not need to import an expiry start or expiry end date for the access level, you can skip the following steps.

Adding Start and End Dates

Follow the steps below to import an expiry start and expiry end for the access level.

You must have both an expiry start and expiry end for the access level for a successful import. You cannot assign these individually.

1. To assign an expiry start and expiry end for the access level, assign a **Source Column** for the UserAccessLevelStart and the UserAccessLevelEnd fields. This should correspond to the columns in the import file where the expiry dates are located.

2. Open the **Advanced Data Configuration** window and assign the Date and Time Format of the import data.

3. For the **UserAccessLevelExpire** field, set the Source Column to **Not From Import File.**

4. Open the Advanced Data Configuration window set the Default Value to **true.**

Note: This field must be entered exactly as shown, there cannot be any capital letters in the word "true".

5. Click **OK.**

Facility Code / Card Number

This section outlines how to map the Facility Code and Card Number fields in ProtegeGX. In Data Sync, you are not required to assign both a Card Number and Facility Code for the import to succeed - assigning a Card Number without a Facility Code is valid.

1. From the **Target Fields** window, select the **UserCardNumberGroupDataData** field. The corresponding **Source Column** value automatically sets to **Group** and the linked fields are automatically added

2. To assign a card number, set the **Source Column** value for the **CardNumber** field. This should correspond to the column in the import file where the card number is located

3. For the **CardNumber** field, open the **Advanced Configuration** window.

4. Enable the **Use This Field as the Group Data Identifier** option.

   Repeat this step for the FamilyNumber if it is required. Alternatively, if the import file does not contain a facility code, you can set the Source Column to **Not from Import File** and assign a **Default Value** (in the Advanced window) as the facility code.

Facility Code and Card Number as a Single Field

Take the following import data as an example, where each user has two cards:

`101,User 1,1:15;1:25`

`101,User 2,1:28;1:38`

Assign the following:

1. From the **Target Fields** window, select **UserCardNumberGroupDataData**. The corresponding **Source Column** value is set to Group and the linked fields are automatically added

2. To assign a card number, set the **Source Column** value for the **CardNumber** field. This should correspond to the column in the import file where the card data is located. As the card number and facility code are a single field in the import file, set the **Source Column** value for the **FamilyNumber** and **CardNumber** field to the same column.

3. Open the **Advanced Data Configuration** window for the **CardNumber** field

4. Set the Grouping Type to **Grouped Paired Data**

   - Set the **Group Delimiter** to a semicolon (;). In this example, we do not have more than one set of data so the group delimiter tells Data Sync that the next Facility Code: Card Number pair begins after the semicolon
   - Set the **Pair Delimiter** to a colon (:) - This tells Data Sync that the facility code and card number paired by a colon
   - Set the **Index** to **1**. This tells Data Sync that the card number is the second value in the pair

5. Click **OK**

6. You will see the **Result Value** field contains the card number only

7. Open the **Advanced Data Configuration** window for the **FamilyNumber** field

8. Set the **Grouping Type** to **Grouped Paired Data**

   - Set the **Group Delimiter** to a semicolon (,)
   - Set the **Pair Delimiter** to a colon (.)
   - Set the **Index** to **2**. This tells Data Sync that the card number is the second value in the pair

9. Click **OK**

Custom Fields

This section outlines how to map ProtegeGX custom fields. Any custom field you want to import to must already exist within ProtegeGX.

1. From the Target Fields window, select **UserCustomFieldGroupDataData**. The corresponding **Source Column** is set to Group and the linked fields are automatically added

2. To assign the custom field to which the data is going to be imported to, set the Source Column of the CustomFieldID to **Not From Import File**

3. Open the **Advanced Data Configuration** window for **CustomFieldID**

4. In the Default Value field, enter the name of the custom field. This name must exactly match the name of an existing custom field in ProtegeGX

5. Enable the **Target Field Record Type** option and set the dropdown to CustomFields

6. Enable the **Use This Field as the Group Data Identifier** option

7. Click **OK** to exit the Advanced Data Configuration window

8. To assign data from the import file to the custom field, set the Source Column value for the **CustomFieldTextData** field. This should correspond to the column in the import file where the custom field is located

Pattern (Text Only)

If you are importing data from plain text files, the fields may be setup similar to this:

```
F FName ^Test^^^
```

```
F LName ^EasyLobby User^^^
```

Then a Pattern must be applied to every field in order to remove the excess characters from the data.

For every Target Field that has a numeric value in the Source Column:

1. Click on the Advanced button

2. Enter \^(.*?)\^\^\^ in the Pattern field

In the Result Value column you should see that the excess characters have been removed.

Note that in step two, the expression given is a particular regular expression to strip characters from the example data. If your text file contains a different sequence of characters a different regular expression will be required. Contact ICT Support for help.

Starting the Import Process

Once you have completed the configuration, click **Start** from the bottom of the **ICT Data Sync Service Configuration Tool** window to begin the import process.

Event Viewer Error Messages

The Event Viewer provides three levels of logging.

- **Information:** Tells the user that some action has been started or completed. Requires no further action from the user
- **Warning:** Tells the user that there is an issue in the configuration and the data will still import, but it may not have imported correctly
- **Error:** Tells the user that something related to the import has failed and that it requires the user to correct the specified issue before the import can succeed

It is recommended that you check the Event Viewer to ensure that the data is being imported correctly.

For more information on particular error messages, see the ICT Data Sync Service Integration Guide.

Contact

Integrated Control Technology welcomes all feedback.

Please visit our website (http://www.ict.co) or use the contact information below.

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