

EasyLobby SVM 10.0 / JCI P2000 Integration Setup Guide

I. System Requirements

This version of the EasyLobby / JCI P2000 integration has been developed for EasyLobby version 10.0 and JCI P2000 version 3.x and 4.x. This integration solution requires that you have the JCI MIS Interface product installed and licensed.

II. Install the P2000 Access Control System

Install the JCI P2000 Access Control product using the manufacturer's installation instructions.

III. Install the EasyLobby SVM 10.0 Database Server

To use this integration, you must install the EasyLobby 10.0 database on SQL Server (the integration is not currently supported on Oracle or local Access databases). The EasyLobby database can be installed on the same server as the P2000 server or on a different server. If on the same server, both databases can reside in the same SQL Server instance or different instances. If on different servers, both servers must have network connectivity.

If you have already installed the EasyLobby 10.0 database on SQL Server, you can skip this section and proceed to the next section below.

For complete database setup instructions, please read the database setup documentation file *EasyLobby Database Setup.pdf*, found in the **Documentation** folder of your EasyLobby Product CD.

Once you have installed the EasyLobby 10.0 database, you can proceed with the installation instructions starting with the next section below.

IV. Install the EasyLobby / JCI P2000 Integration Solution

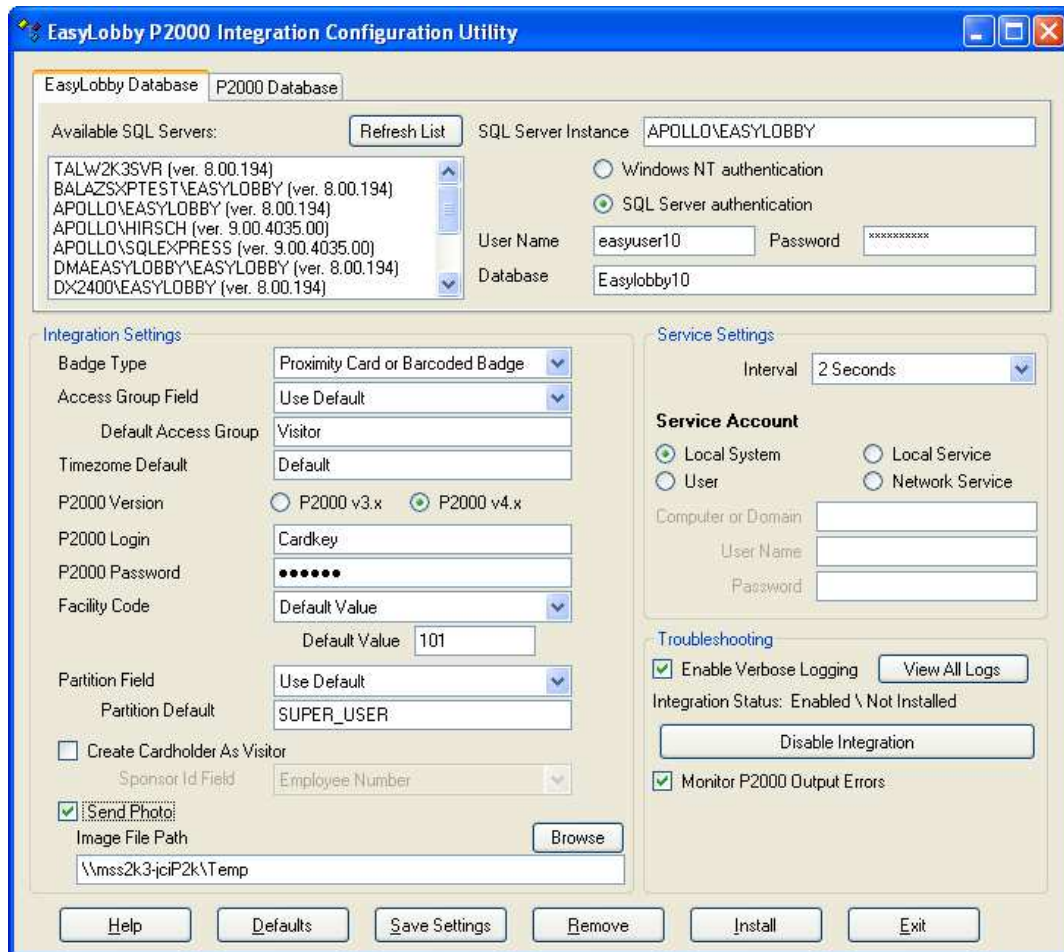
Your EasyLobby Product CD includes a folder called *JCI P2000* that contains the integration installer. Run the installer program *Setup.exe* file from this folder. You may install the integration on the EasyLobby database server or on another Windows system.

Once installed, there will be a program group in **Start | Programs | EasyLobby 10.0 | P2000 Integration**. This group contains links to the documentation, configuration utility and uninstall program. The configuration utility is described in the next section below.

The program group also includes a **Start** menu group with submenu items that allow you to install, start, stop and uninstall the service part of the integration.

V. Configure the Integration

This solution comes with a utility that helps you configure and install the integration hook into your EasyLobby database. To run this utility, choose the command **Start | Programs | EasyLobby 10.0 | P2000 Integration | Configuration Utility**. The utility has a single screen interface as shown in the graphic below. The individual settings are described in the sections following.



EasyLobby Database and P2000 Database Tabs

Use the controls in these two tabs to specify the connectivity information for the EasyLobby and P2000 databases, respectively. Upon launching the configuration tool, the *Available SQL Servers* list in both tabs will be populated with all the discoverable SQL server instances on the network.

Refresh List – Click this button to re-populate the list of available SQL servers.

Available SQL Servers – The .NET framework allows automatic discovery of available SQL Servers on your local network. Click on the server instance from the list in order to use that instance as the database server selection that hosts the EasyLobby database. If you don't

see the server which hosts the EasyLobby database on the list it is because the server is either inaccessible or has been configured to be hidden for automatic discovery. If the later is the case you need to type the server (and instance if not the default instance) name in the *SQL Server Instance* textbox. A typical P2000 installation uses the default instance of SQL Server. Typically the sysadmin account *sa* for the P2000 database has a password of *master*.

SQL Server Instance – Specifies the SQL Server instance in which the database has been installed. Clicking on an item from the Available SQL Servers list automatically populates this field. You may type the name of a SQL Server instance if it does not appear on the list. This field takes the form of “COMPUTER_NAME\INSTANCE_NAME”, or in the case of a default instance it is simply “COMPUTER_NAME”. If you need to specify a custom port, you may enter it after the instance name followed by a comma, e.g. “SERVER\EASYLOBBY,1434” or “SERVER,9876”.

Authentication type – Specify the type of authentication you wish to use. By default, EasyLobby database uses SQL authentication with user *easyuser10* and password *door10maN+*. If you change this credential set at the time of installing the database, you need to specify the alternate credentials here. If you use NT authentication, please make sure that the account you specify in the *Service Credentials* section is part of the SQL Server’s security schema and has *db_owner* property set for the EasyLobby database. If you specify Local System as the service user and also using a remote SQL Server with NT authentication type, the integration may not be able authenticate correctly. For more information on how the various built-in NT user accounts authenticate with SQL Server when using NT Authentication authentication type, please refer to the corresponding documentation from Microsoft.

User Name – Specify the username to use with SQL Server authentication type (by default *easyuser10* for EasyLobby, *sa* for P2000).

Password – Specify the password to use with SQL Server authentication type (by default *door10maN+* for EasyLobby, *master* for P2000).

Database – Specify the name of the EasyLobby database (by default *EasyLobby10* for EasyLobby).

Integration Settings

Badge Type – Set the type of visitor badges used in the integration. Set to **Proximity Cards** if you are issuing proximity cards for your visitors. The integration uses the *Prox Card* field from the *Badge* tab on the EasyLobby visitor form as the card number to send to P2000. We recommend using a USB prox card reader with EasyLobby to eliminate human error when entering the prox card number. These products are available for purchase from EasyLobby.

The **Barcoded Badges** setting sends the *Custom Id* field from the *Badge* tab on the EasyLobby visitor form as the card number to P2000. This is the identifier that gets encoded and printed as the barcode on printed badges from EasyLobby SVM. By default EasyLobby

automatically generates Custom Ids. You can also set a specific range of numbers for EasyLobby to use for Custom Id generation. Use the **Edit | Program Options** menu command, *Defaults* tab, *Custom Id* sub-tab.

The third setting, **Proximity Card or Barcoded Badge**, allows both fields to provide the card number for P2000. With this setting, if the *Prox Card* field is not blank, its value will be used for the tag number. Otherwise the *Custom Id* field value will be used.

Access Group Field – Specify what field from EasyLobby should be used to supply the name of the access group in P2000 for the visitor. Note that access group name must match an existing access group in P2000 in order for that visitor's card to be granted access rights. The following selections are provided.

- Use Default** – Use the value in Default Visitor Access Group field for all visitors
- Visitor Category** – Use the value from the category dropdown on the visitor form
- Visitor Clearance** – Use the value from the clearance dropdown on the visitor form
- Visitor User Defined 1** – Use the value from the visitor user defined 1 field
- Employee Company** – Use the company of the employee being visited
- Employee Category** – Use the category of the employee being visited
- Employee Department** – Use the department of the employee being visited
- Employee User Defined 1** – Use the user defined 1 value of the employee being visited

Default Access Group – Specify the name of the access group to be used for all visitors when sent to P2000 as cardholders. Only used when **Use Default** is selected.

Timezone Default – Enter the name of a P2000 timezone to assign to each visitor that is sent to P2000. This name must match a timezone name in the P2000 system.

P2000 Version – Indicate the version of P2000 you are using.

P2000 Login – Enter the name of a valid P2000 user account.

P2000 Password – Enter the name of the password for the P2000 user account.

Facility Code – This selection indicates how the integration should supply the facility code for the card to P2000.

- Default Value** – Use the value in the *Default Value* field as facility code for all visitors
- First n Digits of Badge Number** – Uses the first n digits of the card number as the facility code, as specified in the EasyLobby *Prox Card* or *Custom Id* field.
- EasyLobby Site Id** – Use the Site Id of the current site as the facility code. Site Id is set in EasyLobby in the **Edit | Sites** command

Default Value – If **Facility Code** is set to *Default Value*, this will be the facility code number. Enter a facility code number that is valid for P2000. Set this to 0 to indicate no facility code.

Partition Field – This selection indicates how the integration should generate the partition name for P2000 integration.

Use Default – Use the value in *Partition Default* field for all visitors

Site Name – Use the site name for the site where visitor is checking in

Visitor Category – Use the value from the category dropdown on the visitor form

Visitor Clearance – Use the value from the clearance dropdown on the visitor form

Visitor User Defined 1 – Use the value from the visitor user defined 1 field

Employee Company – Use the company of the employee being visited

Employee Category – Use the category of the employee being visited

Employee Department – Use the department of the employee being visited

Employee User Defined 1 – Use the user defined 1 value of the employee being visited

Partition Default – If the **Partition Field** is set to *Use Default*, this value will always be used as the partition.

Note: The JCI MIS interface will create an input and an output table in the JCI database for each partition defined in P2000. The default partition is called SUPER_USER. Thus, this partition will have two tables called SUPER_USER_INPUT and SUPER_USER_OUTPUT. If you have another partition, for example RESTAURANT, there will be additional tables called RESTAURANT_INPUT and RESTAURANT_OUTPUT.

Create Cardholder As Visitor – When checked, the visitors will be sent to P2000 as the *Visitor* type. Since the P2000 MIS Interface requires that the *Sponsor Id* be provided when the cardholder is a *Visitor* type, you must specify the *Sponsor Id* field mapping from EasyLobby to P2000.

Sponsor Id Field – When **Create Cardholder As Visitor** is checked, this setting specifies the EasyLobby employee field that the integration will use to identify the sponsor of the Visitor in the P2000 system. This field must contain a value that matches the **ID** field in P2000. For each visitor in EasyLobby, the Employee selection indicates the host for that visitor. The ID number is gotten from the specified field of that employee record. If no employee is specified for a visitor, or the employee record does not have an Id value or the Id value does not match a cardholder in P2000, the visitor will not be sent to P2000.

Employee Number – Use the Employee Number field as the Sponsor Id

Employee Id – Use the Employee Id field (SSN column in database)

Employee User Defined 1 – Use the Employee User Defined 1 field

Employee User Defined 2 – Use the Employee User Defined 2 field

Employee User Defined 3 – Use the Employee User Defined 3 field

Employee User Defined 4 – Use the Employee User Defined 4 field

Employee User Defined 5 – Use the Employee User Defined 5 field

Employee User Defined 6 – Use the Employee User Defined 6 field

Send Photo – When checked, the integration will send the visitor photo from the first photo field to P2000. If checked, you must specify the folder where the photo file will be written.

Image File Path – Specified the folder where the visitor image will be written. Click the **Browse** button to browse the file system and select a folder to use.

Service Settings

Interval – Enter the interval, the service will check every interval to see if there are new records to be processed through to P2000.

Service Account

You must specify the built-in account or supply the credentials to a Windows account that is used to run the *EasyLobby P2000 Integration Service* service.

Local System – Has local admin permission, acts as the computer on the network

Local Service – limited rights on the local system, anonymous credentials on the network

Network Service – limited rights on the local system, acts as the computer on the network

User – Run the service with a local or domain account whose credentials are given below

Computer or Domain – Enter the name of the local system if running the service with a local user account. Enter the name of the Domain if using a domain account.

User Name – Enter the account name of a local or domain account. In addition to the rights specified in the previous paragraph this account must have read and write privileges to the machine registry. Account must have “Log on as a service” permission. See section VIII below for specific details for setting this permission.

Password – Enter the password for the Windows account specified.

Troubleshooting

Enable Verbose Logging – If you observe that the integration is not working as desired it may prove helpful to enable the verbose logging option of the integration. A log table in the EasyLobby database is used for the purpose of logging messages generated by the integration. When verbose logging is enabled many status messages about the integration’s execution in general are logged. Error messages are always logged regardless of the verbose logging setting. **Warning:** verbose logging can easily create hundreds of thousands of log messages in a couple of days, which can clutter the database and potentially introduce performance issues. Please make sure that if you decide to enable verbose logging you only do so for the time of troubleshooting a problem and then promptly disable it once troubleshooting is done.

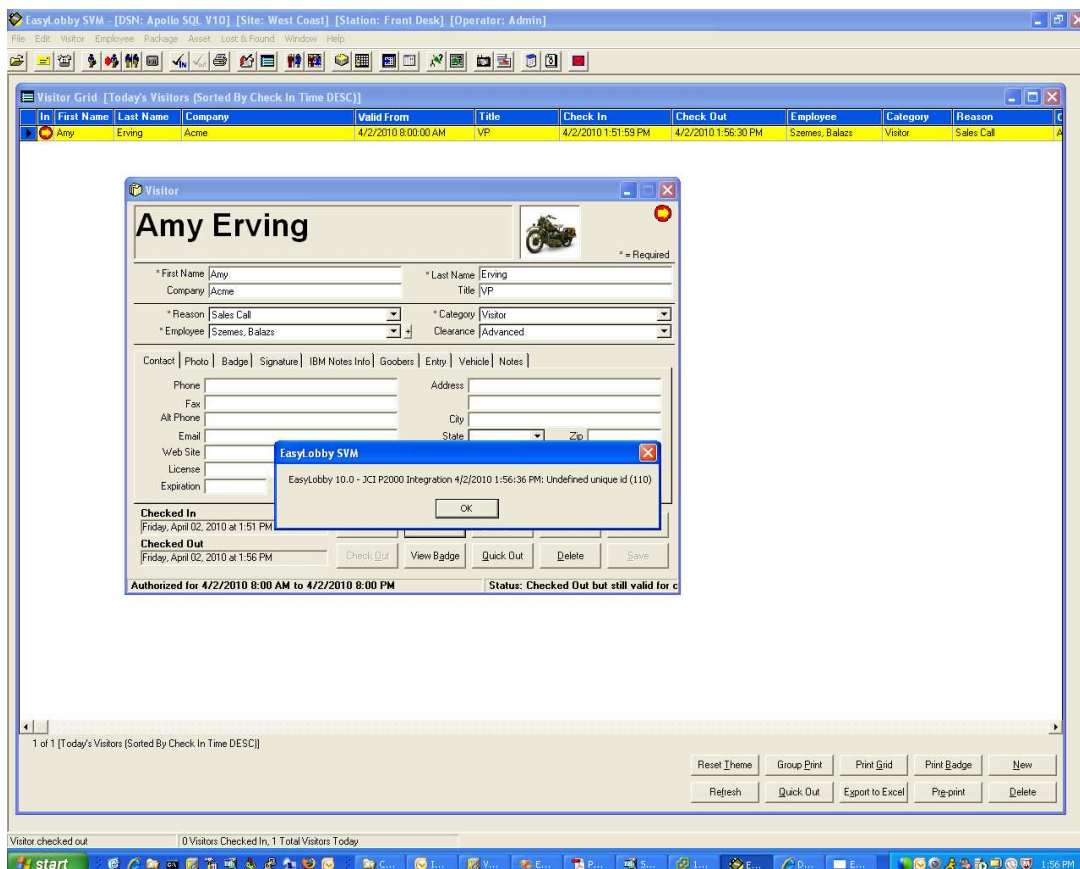
View All Logs – Launches a log monitor window which displays verbose log messages as well as errors.

Integration Status monitor – Displays the current status of the integration database hook and also the status of the integration service itself. If the configuration utility is unable to

connect to the EasyLobby database an error message will be displayed. As soon as all the database settings are entered correctly, the first part of the status reads “Not installed”, “Enabled” or “Disabled”. The second part reads “Not installed”, “Running” or “Stopped”.

Integration Enable/Disable button – This button allows you to temporarily suspend the integration (perhaps for troubleshooting reasons). Pressing this button will not affect the integration service in any way. When the integration is disabled this way, records still accumulate in the integration transaction tables, but are not processed until the database hook is re-enabled. This button is disabled when the integration hook cannot be detected in the database specified in the *EasyLobby Database* section.

Monitor P2000 Output Errors – When checked, the integration will monitor the P2000 output table (SUPER_USER_OUTPUT or equivalent) for results and errors. Errors will be logged to the *IntegrationLog* table in the *EasyLobby10* database and also to the *Windows Application Event Log*. In **EasyLobby SVM**, you can enable integration error reporting with the **Edit | Program Options** command, *Defaults* tab, *General* sub-tab, *Access Control Integration* section. When enabled, errors received back from the P2000 system will be reported to the operator. An example is shown in the screen shot below.



Utility Buttons

Help – Displays the help file.

Defaults – Resets all the settings on the current form to the factory settings. Note that these settings will not be saved unless you click the "Save Settings" button.

Save Settings – Saves all the current settings to the SQL trigger file and to the registry.

Remove – Removes the integration from the EasyLobby database and stops and uninstalls the “EasyLobby P2000 Integration Service” service.

Install – Saves the current settings and installs the integration hook into the EasyLobby database. It also installs and starts the “EasyLobby P2000 Integration Service” service on the local system.

Exit – Quits the configuration application.

VI. Installing and Starting the Integration from the Configuration Utility

When you have completed configuring the integration, click the **Install** button to install and start the integration service. You may exit the configuration utility after the utility displays a message confirming that the service installation is completed. Press the **Remove** button to stop and remove the integration service.

A set of utility functions is provided in the sub-menus of the **Start | Programs | EasyLobby 10.0 | P2000 Integration | Service Utilities** menu item. You can install, start, stop and uninstall the service from these menu commands.

VII. P2000 Configuration Tasks

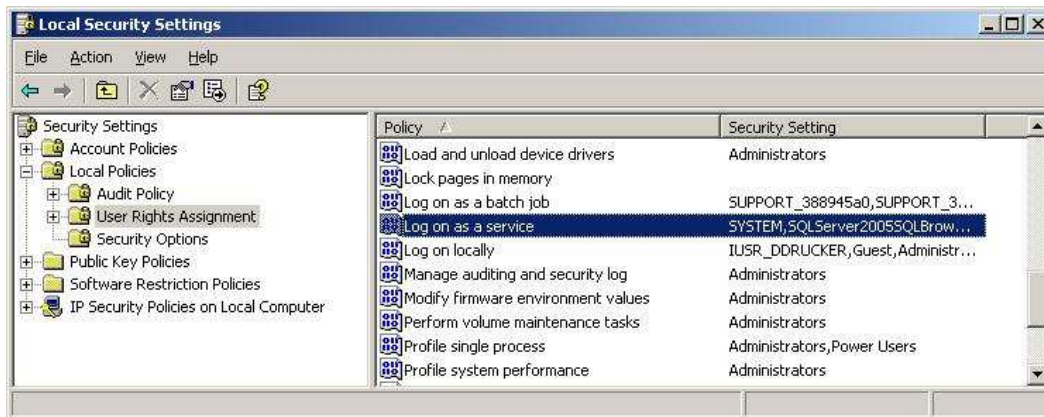
You must create the set of *Access Groups* that exactly match by name those that you will assign to visitors in the EasyLobby system. You must have a timezone that matches the integration timezone setting. Insure that the facility codes that you will assign to visitors are defined in P2000.

Insure that you have the proper partition name set in the integration configuration application. If you have only one partition (typically SUPER_USER), set the *Partition Field* dropdown to *Use Default* and enter the partition name in the *Partition Default* field.

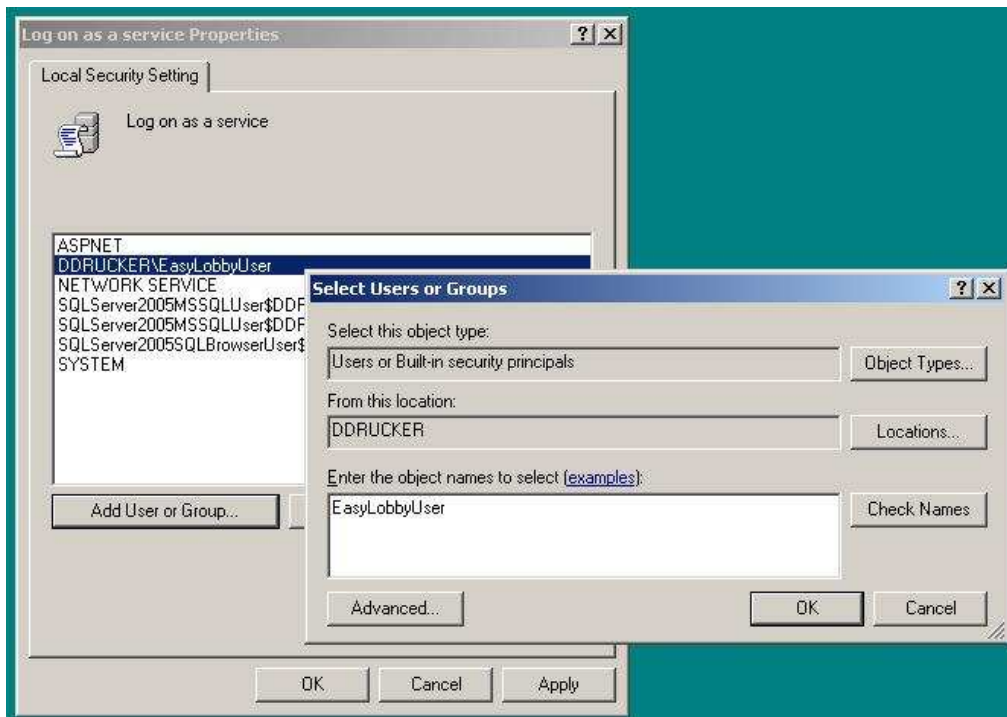
If you are supporting multiple partitions in P2000, you should set the *Partition Field* dropdown to specify how EasyLobby should get the partition name. One common way is to map the EasyLobby site name (**Edit | Sites**) to the partition name in P2000. You can also derive the partition name from other fields such as visitor Category or Clearance or Employee Category, Company or Department.

VIII. Service Log on Permission to the Integration Service Account

You must ensure that the account that you specify to run the *EasyLobby P2000 Integration Service* service has “Log on as a service” permission in Windows security settings. Run the *Control Panel*, open *Administrative Tools* and then open *Local Security Policy*. In the *Local Security Settings* window, open the *Local Policies* folder and select the *User Rights Assignment* folder as shown in the graphic below.



Right-click on the *Log on as a service* icon and choose *Properties*. Click the *Add User or Group...* button and enter the user or group that you want to use to run the EasyLobby Integration service. In this example we are using the local user account called *EasyLobbyUser*. Click *OK* to add the user or group.



IX. Operation of the Solution

The integration solution utilizes triggers in the EasyLobby10 database on the Visitor and Employee tables and a Windows service called “EasyLobby P2000 Integration Service”. This service is installed and started by the Install function of the configuration utility. If you look at the services control panel, you can see the service and its status.

When a visitor is checked in using EasyLobby SVM, the trigger in the EasyLobby10 database is executed which inserts a record in the **IntegrationTransactionData** and **IntegrationTransactionStatus** tables in the EasyLobby10 database. The *EasyLobby P2000 Integration Service* checks this table every interval (2 seconds by default) and processes any new records found. The service then creates the cardholders and cards in P2000.

The integration configuration utility stores most of its settings in the registry and some settings in the EasyLobby SQL database. For visitors, the card number will be taken from the **Prox Card No** field if using prox cards for the integration, or from the **Custom Id** field if using barcodes. The **ValidFrom** and **ValidTo** time specified for the visitor will be transferred to P2000 as the card’s activation and expiration dates. The prox card or barcode will only be valid between these dates/times.

When a visitor is checked out or deleted from EasyLobby SVM, the integration removes the cardholder record in P2000.

During normal operation of the “EasyLobby P2000 Integration Service” service, any errors that occur are logged to the **IntegrationLog** table in the EasyLobby10 database, with reference to the station whose operation generated the error message. You can view this log by running the configuration application and clicking the **View All Logs** button in the Troubleshooting section.

To troubleshoot the “EasyLobby P2000 Integration Service” service more thoroughly, you can run the configuration application and check the **Enable Verbose Logging** option. For this change to take effect you do not need to remove and reinstall the service one only needs to save the settings. Verbose log messages resulting from enabling this option are written to the log table. Warning: make sure to disable verbose logging once troubleshooting is completed, for this mode of operation can burden the database with many thousands of unnecessary messages. You can use the configuration utility’s log viewer window for deleting old log messages.

X. Technical Support

For more information or support on this solution, please contact EasyLobby, Inc. at support@easylobby.com or at 781-455-8558.