Enterprise Data Interface

Introduction

Enterprise Data Interface imports Cardholder details from an external source file or database into Gallagher Command Centre.

Interfaces can be configured to add, update or remove Cardholders in Command Centre. In order to configure an interface, fields from the source file must be mapped to relative fields in Command Centre. Once configured, an interface can be run either manually (at any time) or based on a schedule.

Licensing

Scheduled EDI is a licenced feature of Command Centre.

A Secondary option is available in the form of a Customisation called Bookable Resources. Bookable Resources allows the booking or resources such as Classrooms with their associated features, i.e. air conditioning and lighting, to be imported from an external Databases (Booking Management System) or file. A system commonly interfaced with, in this way is Syllabus Plus. Bookable Resources require different Licence entries to EDI and they are:

[Limits]

Bookable Resource=X – X is the number of items that the licence allows you to create

[Features]

EDI-BookingDatabase=1 – This entry is required if the import using EDI is from a Database

EDI-BookingFile=1 – This entry is required if the import is using EDI is from a File

[Customisations]

BookableResource=1

Operator Privileges

EDI is not covered in the "Advanced User" privilege and as such requires two additional privileges to be added to any Operator Group that wishes to perform this action, they are:

 "Edit Enterprise Data Interface" – Allows the Operator to create, edit and delete Enterprise Data Interfaces

And

 "Run Enterprise Data Interface" – Allows the Operator to manually request Enterprise Data Interfaces to start processing

No other privileges will enable the EDI features.

OThe Run as Operator

When an interface is run, it is run under an Operator's name. This Operator is referred to as the "Run as Operator". All actions performed by the interface are logged under this Operator's name.

The Run as Operator will require the following privileges:

- Edit Cardholders to create/edit cardholders
- Edit Cardholder Notes to create/edit cardholder notes
- Delete Cardholders to delete cardholders
- Modify Access Control to set cardholder access groups
- View Site to view competencies
- Edit Enterprise Data Interface

The nature and the use of this Operator is going to vary, depending on each sites requirements but generally it is better to have an Operator that will not change i.e. A generic Operator such as 'EDI' or 'Import' for example.

That way the importing of information is not associated to a specific person.

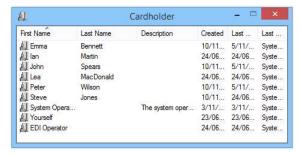
Creating the Run as Operator

Introduction

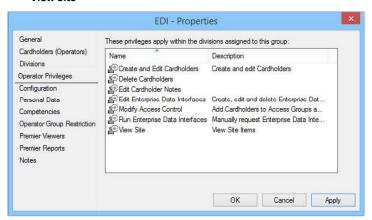
Universities can use EDI in two different ways, one as a Cardholder import and the other as a Bookable Resources import. The standard version of EDI is a Cardholder import and that is what we are going to be configuring in this scenario. EDI can be an essential part of the enrolment process for Students, importing large volumes of data quickly and easily. Once the initial setup is completed it is simply a case of creating a new source file, assuming the configured options will not change.

O Procedure

- 1. From the Menu bar click Manage...Cardholders
- 2. Right click New...Cardholder
- 3. Named...EDI Operator



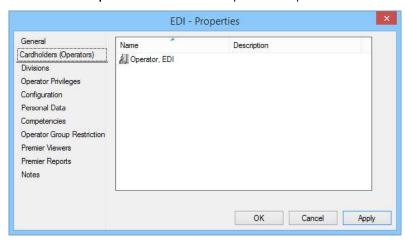
- 4. Create a New Operator Group called EDI
- 5. Add the following Operator Privileges to the EDI Operator Group
- Create and Edit Cardholders
- Delete Cardholders
- Edit Cardholder Notes
- Edit Enterprise Data Interface
- Modify Access Control
- Run Enterprise Data Interfaces
- View Site



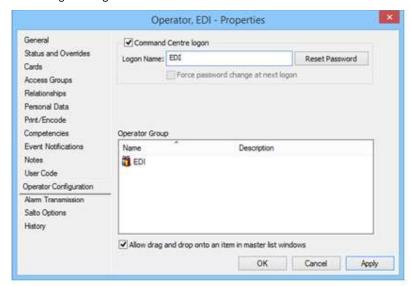
Note

If the Operator Group has permissions across multiple Divisions, ensure that they configured correctly.

6. Add the EDI Operator Cardholder to the Operator Group



- 7. Click Apply
- 8. Open up the EDI Operator Cardholder properties
- 9. Select the Operator Configuration tab
- 10. Change the Logon Name to EDI



- 11. Reset the Operator Password to Blank
- 12. Click OK

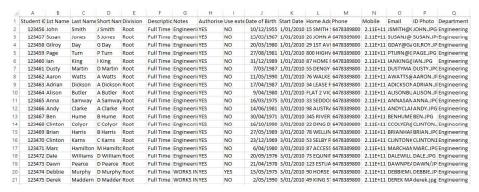


This is the Operator which will process all of the Data when an EDI is run. Any changes will be recorded under this Operator's details.

OThe Source File

The source file will contain the data you wish to add, update, or remove in Command Centre. This file generally originates from a third party database and should be formatted as a delimited or fixed width file.

The options for the delimiters are Comma, Tab or another character. Command Centre can also be configured to accept files with header rows.



Above is an example of a Comma delimited file with a header row.

There are 21 Cardholder Records in this file.

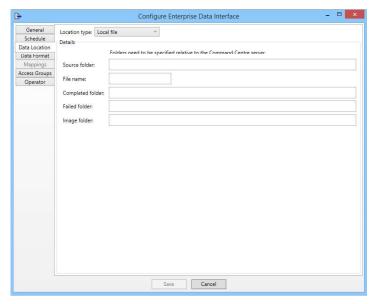
The fields along the top will be associated to a relative field in Command Centre so that the data comes across accurately.

The "Student ID" field is the unique identifier. A Unique ID field is required when importing the information into Command Centre as this is how the system references the Cardholders to associate the information to.

Information Only

© Enterprise Data Interface Folders

EDI requires a number of folders to be created on the Command Centre Server or a Network Share Location



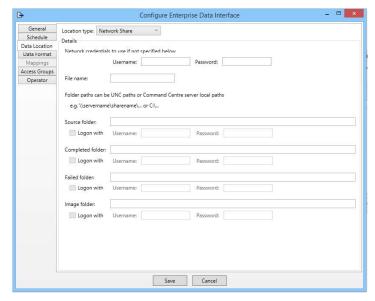
If you are using Local File Location, i.e. your folders are on the Command Centre Server, you will need to create the following Folders.

- Source Folder This is where the source data file will be retrieved when the EDI is running.
- Completed Folder The processed source data file will be moved to this folder and renamed when the EDI has completed.
- Failed Folder If EDI fails to process the Source Data File, the file will be moved to this folder.
- Image Folder EDI will look for matching Images in this folder when it is running.
- File Name This is the name of the Source File, this is case sensitive and must be correct for example "Import.csv".

A network location can also be used

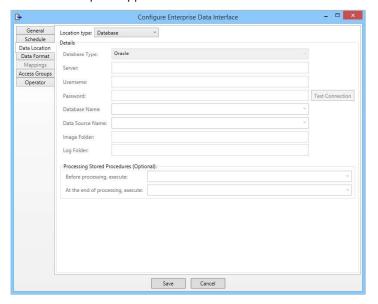
UNC Paths can be used in the following format:

\\server\sharename\filename



You will need to specify a User Name and Password for all folders either globally or individual Logons to each folder and ensure that you have access to the remote servers/folders with the correct file access permissions.

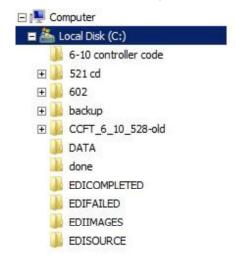
EDI also has the options to specify an import straight from a database – for further information and version compatibility please see the EDI release note



© Create Local File Locations on the Server

Procedure

- 1. Create a New Folder on your C:\Drive called EDISource
- 2. Create a New Folder on your C:\Drive called EDICompleted
- 3. Create a New Folder on your C:\Drive called EDIFailed
- 4. Create a New Folder on your C:\Drive called EDIImages



Ensure that the folders have read and write privileges.

The file paths will be as follows:

C:\EDISOURCE\ for the source file location

C:\EDICOMPLETED\ for the completed file location

C:\FAILED\ for the failed file location

C:\IMAGES\ for the Image Location

- 5. Copy your EDI Source data into the newly created EDISource Folder
- 6. Copy your EDI Source Images into the newly created **EDIImages** Folder



You need to copy source data and source images into these folders each time you want to run the EDI.

Information Only

Importing Images with EDI

Cardholder Images can be imported into Command Centre and could be a photo, logo or a scanned signature.

EDI imports Cardholder Images by matching the image name in the Source file with the Image name in the Image folder. If a match is successful the image is imported.

When an image is imported it is moved from the Image folder location to the Completed folder location. When it is moved to the Completed folder any other existing files that have the same name will be overwritten.

If the Source file specifies an image and the image is not in the Source folder, the Cardholder data will be updated, but the image will not be imported. A log file is created and alarm warnings will be displayed to inform the operators of any failure to import the data correctly.

- The Image file extension is also required to be specified.
- To cut down processing time only supply the required Cardholder images to the Image folder, not all Cardholders.
- When an image is imported it may be resized depending on the settings in the Image Personal Data properties.
- The same image cannot be added to all Cardholders, unless a new copy is renamed for each Cardholder.

Configuring Command Centre to Receive the Source Data

Before configuring EDI to run, you will need to ensure that Command Centre is configured to receive the source data.

This can include:

- Personal Data Fields.
- Access Groups.
- Cards.
- Competencies.
- Roles and Relationships.

Create/Configure Personal Data Fields

Introduction

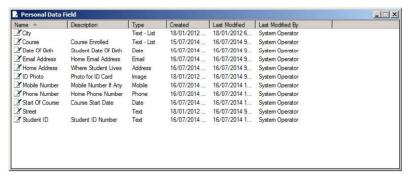
Personal Data Fields must be pre-existing in Command Centre so that data from the Source file can be mapped and imported correctly.

O Procedure

Create and Configure a Personal Data Field called Student ID and configure it to have Text
as the data type – Sort Order 1

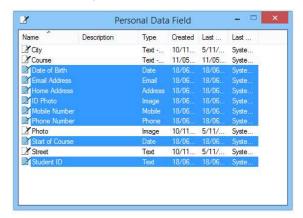
Unique Value

- Create and Configure a Personal Data Field called **Date of Birth** and configure that PDF to have **Date** as the data type – Sort Order 2
- Create and Configure a Personal Data Field called Start of Course and configure that PDF to have Date as the data type – Sort Order 3
- Create and Configure a Personal Data Field called Home Address and configure that PDF to have Address as the data type – Sort Order 4
- Create and Configure a Personal Data Field called **Phone Number** and configure that PDF to have **Phone** as the data type – Sort Order 5
- Create and Configure a Personal Data Field called Mobile Number and configure that PDF to have Mobile as the data type – Sort Order 6.
- Create and Configure a Personal Data Field called Email Address and configure that PDF to have Email as the data type – Sort Order 7
- Create and Configure a Personal Data Field called ID Photo and configure that PDF to have Image as the data type – Sort Order 8

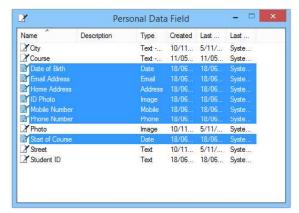


9. From the Menu bar click Manage...Access Groups

Drag & drop the newly created PDF's into the Engineering Year 1 and Engineering Year 2
 Access Groups



- 11. Click OK
- 12. Drag & drop the newly created PDF's with the exception of Student ID into the **Engineering Lecturers** Access Group

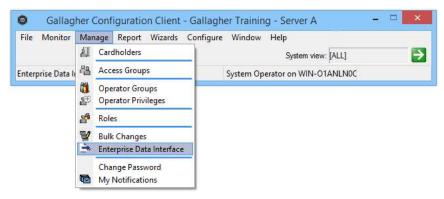


13. Click OK

©Creating an EDI Interface

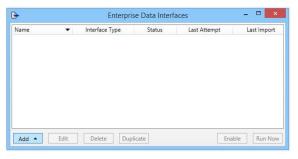
O Procedure

1. From the Menu bar click Manage...Enterprise Data Interface

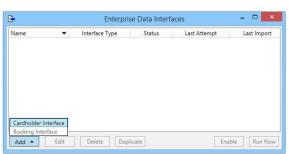


The window will show any EDI's that have previously been configured. The status of an interface is displayed in the Status Column of the window.

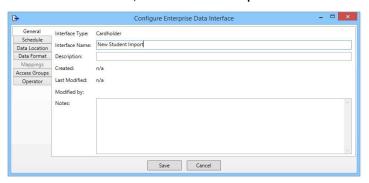
2. Click the Add button on the Enterprise Data Interface Screen



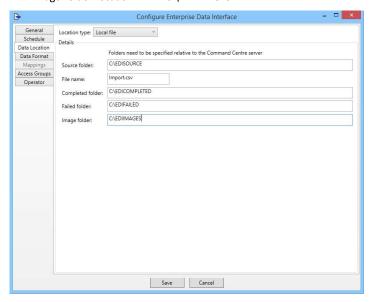
3. Click Cardholder Interface





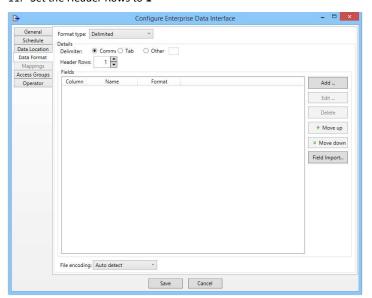


- 5. Select the Data Location tab
- Enter the Folder locations that were configured earlier and the Import Data Source file name
- Source Folder Location = C:\EDISOURCE
- File Name = Import.csv
- Completed Folder Location = C:\EDICOMPLETED
- Failed Folder Location = C:\EDIFAILED
- Image Folder Location = C:\EDIIMAGES

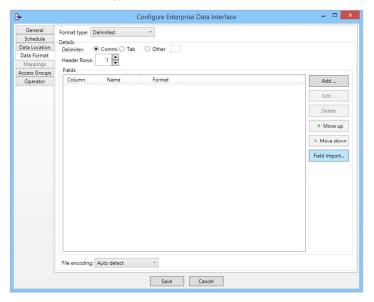


- 7. Click the Data Format tab
- 8. Set the Format type to **Delimited**
- 9. Click the Comma radio button to set the delimiter type
- 10. Leave the File Encoding set as **Auto Detect**

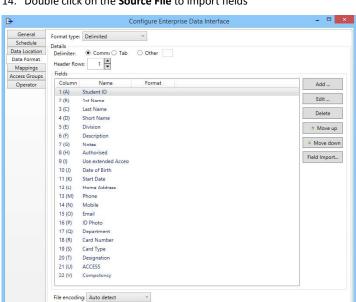
11. Set the Header Rows to 1



12. Click the Field Import Button



13. Browse to the Source File



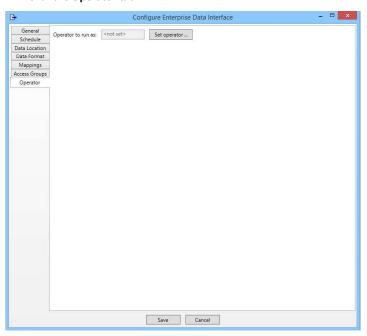
14. Double click on the Source File to import fields

The fields are listed in the order that they were created in the source file.

Setting the Mapping of Data between the Source File and Command Centre Data

O Procedure

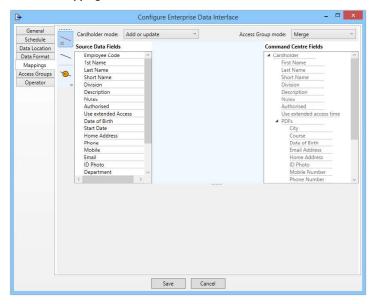
1. Click the Operator tab



- 2. Click Set operator...
- 3. Enter EDI as the Operator Name
- 4. Leave the Password blank (empty)
- 5. Click Save



6. Click Mappings



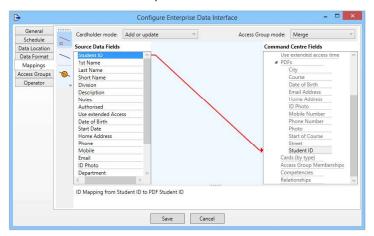
Listed on the left hand side of the screen are the Source File fields and on the Right Hand side of the screen are the corresponding Command Centre fields.

This screen is used to create data maps so that when the import is run the source data is mapped to the appropriate data fields in Command Centre.

- 7. Select Add or Update in the Cardholder Mode Field
- 8. Select Merge in the Access Group Mode Field
- Ensure that the Student ID is set to Text and configured as a Unique value in Command Centre
- 10. Click the ID Tool



- 11. Click on **Student ID** and hold down the left mouse button then drag the cursor over to the unique field in the Command Centre list which is **Student ID**
- 12. Release the mouse when you are over the Student ID PDF



A red line will be drawn on the Map showing the Link between the data fields.

The ID Mapping link drawn between the Source and Command Centre fields provides the system with a unique reference to both lists and the data is now linked together.

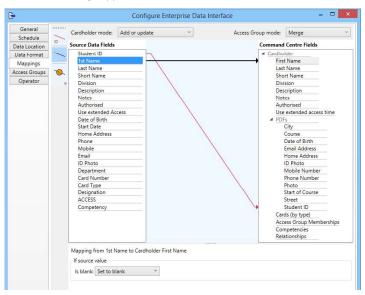
If you make a mistake the link can be deleted by highlighting it, right clicking then selecting delete or highlight the link and press delete on the keyboard.

You cannot map the ID to a field which is not set to unique text or numbers. The unique data fields in Command Centre show in bold and the mouse behaves differently if you hover over them.

13. Select the Direct Mapping Tool



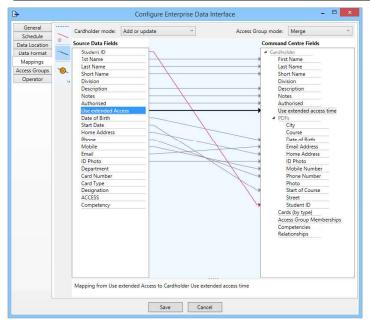
- 14. Map the 1st Name field in the Source data to the First Name in Command Centre
- 15. Hold down the **left mouse button** and drag the cursor over to the Command Centre field you wish to map to. Release the mouse button. A black line appears between the two fields and a message appears in the window below



This action then links the Source data with Command Centre, and when the import is run whatever is listed in the Source file will be imported into the Command Centre database.

16. Continue linking the following Source Fields to the Command Centre Fields

SOURCE DATA	COMMAND CENTRE DATA
Last Name	Last Name
Short Name	Short Name
Description	Description
Notes	Notes
Date of Birth	Date of Birth
Start Date	Start of Course
Home Address	Home Address
Phone	Phone Number
Mobile	Mobile Phone
Email	Email Address
ID Photo	ID Photo
Authorised	Authorised
Use Extended Access Time	Use Extended Access Time



Creating a Transformation Mapping

The creation of transformation mapping is similar to a direct mapping with the linking of fields. However, the Transformation Mappings also perform simple conversions to allow for easier importing.

O Procedure

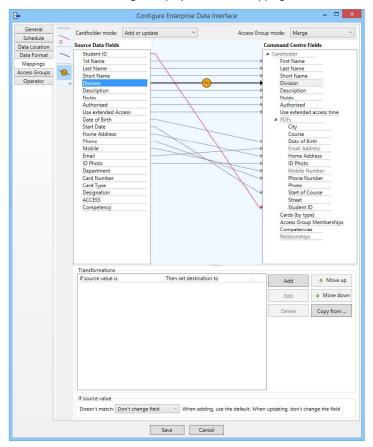
1. Select the Transformation mapping tool



- 2. Select the Division source field
- Hold down the left mouse button and drag the cursor over to the Command Centre field Division...Release the mouse button

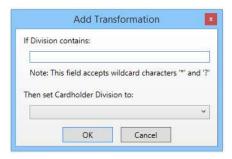
A black line and the transformation icon are shown between the two fields

4. The Transformation grid displays below the mapping area

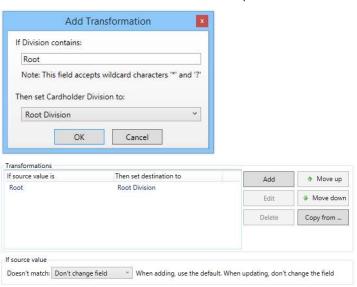


5. Click the Add button

Add Transformation window opens



- 6. Enter **Root** into the If Division contains field
- 7. From Then set the Cardholder Division to drop down list select Root Division

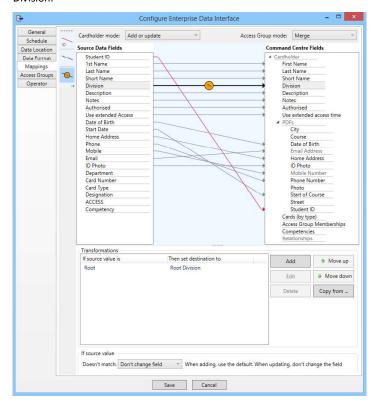


8. Click OK



Wildcards can be used - * and ? are acceptable wildcard characters.

When the EDI is run, the system will scan the Source file for a match and then map that data to Command Centre, converting from the word Root and adding the Cardholder to the Root Division.

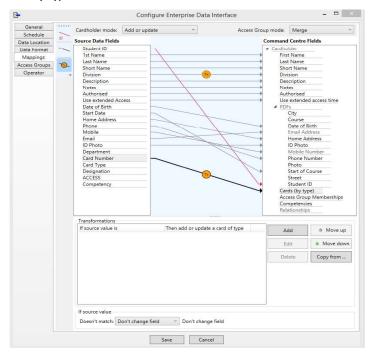


You can enter many transformations to the one link, so if your source file has different naming conventions they all can be transformed from the source value to the new Command Centre value.

Adding a Card Transformation

When a source value is transformed, it can be used to assign a card and define the cards properties. Alternatively, it can be used to modify the properties of a particular card type or the properties of all card types assigned to a Cardholder.

 Create a Transformation Mapping between the Card Number Source field and the Cards by Type field in the Command Centre fields



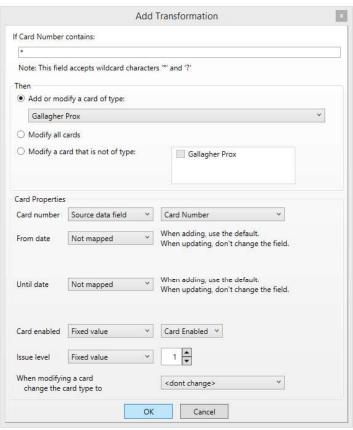
2. Click Add in the transformations area

The configuration has some required options - in that a card type needs to be specified, a card number allocated, from – until dates, card enablement, and issue level need to be defined.

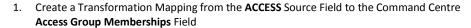
You also need to define if you are going to modify 1 card type or all card types.

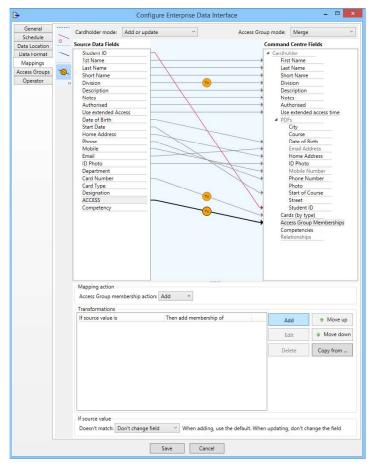
- 3. Enter * into the If Card Number contains
- 4. Select Add or Modify a card of type and from the drop down list select Gallagher Prox
- 5. From the Card Number drop down list select Source Data Field
- 6. From the Source date field drop down list select Card Number
- 7. From Date, is Not mapped
- 8. Until Date, is Not mapped
- 9. From the Card Enabled drop down list select Fixed Value
- 10. From the Card Enabled drop down list select Card Enabled
- 11. From the Issue Level drop down list select Fixed Value
- 12. Change the Issue Level to 1

13. Click OK

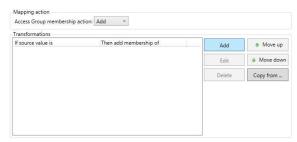


Adding Access Group Transformations





2. Click Add in the transformations area

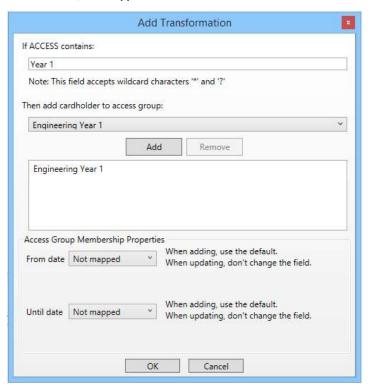


- Enter 'If ACCESS contains:' Year 1 'Then add cardholder to access group' Engineering Year
 Access Group
- 4. Click Add

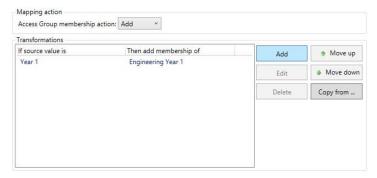
Engineering Year 1 will populate the window

5. From Date, Not Mapped

6. Until Date, Not Mapped



- 7. Click OK
- 8. Click Add in the Transformations area



- 9. Enter 'If Access Contains:' **Year 2** 'Then add cardholder to access group' **Engineering Year 2** Access Group
- 10. Click Add

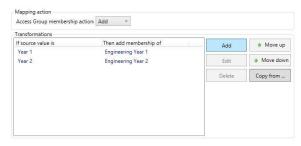
Engineering Year 2 will populate the window

11. From Date, Not Mapped

12. Until Date, Not Mapped



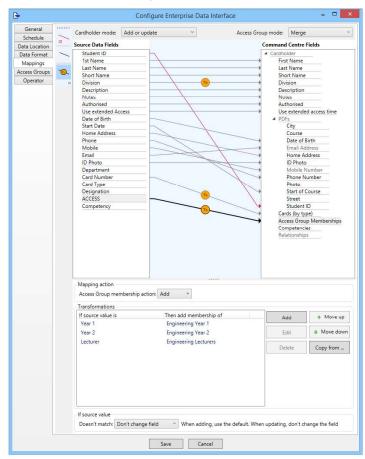
- 13. Click OK
- 14. Click Add in the Transformations area



- 15. Enter 'If Access contains:' **Lecturer** 'Then add cardholder to access group:' **Engineering Lecturers** Access Group
- 16. From Date Not Mapped
- 17. Until Date Not Mapped
- 18. Click OK
- 19. Click Save

Note

An until date could be specified that would remove the expired cardholders from this Access Group after the until date/time has expired.



In the above, the system will search the source file for matches under the Access Field and then add it to the appropriate access group.

If the Source file has Year 1, then they get Access to the Engineering Year 1 Access Group.

If the Source file has Year 2, then they get Access to the Engineering Year 2 Access Group.

If the Source file has Lecturer, then they get Access to the Engineering Lecturers Access Group.

You can save multiple EDI's but they must have different names.

© Running EDI Manually

Introduction

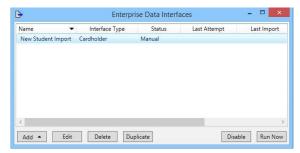
The EDI must be configured correctly before attempting to run and the status must be either Manual or Scheduled.

Check that you have the Source file in the correct location and that any images to be imported are also in the correct folders.

Backup your images and source data, as once the data is imported it will be removed from the Source folder(s) to the Completed folder – This is done in case the process fails and you need to re run the import.

- 1. Highlight New Student Import
- 2. Click Enable

Leave window open

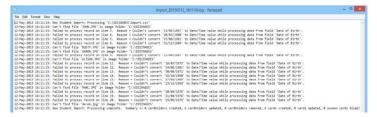


- 3. Open the Event Viewer (view events as data is imported)
- 4. Open Cardholders (view new Cardholders as they are imported into Command Centre)
- 5. Click Run Now

If all has been configured correctly the Cardholders will be imported along with PDF data and Access Groups. The Command Centre Event log will show each Cardholder being added along with any Access details. The event log will also show any errors and if the EDI failed to run.



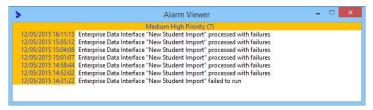
© Error Messages and Log Files



After EDI has run, a log file is created which will show any failures in the import process, so that the operator can go in manually and investigate any errors.

The original Source file is renamed and moved into the Completed folder.

A copy of the Source file may also be copied into the EDI Failed folder.



Alarms can also be generated when a failure occurs prompting the operator to find and resolve any errors.

PROBLEM	SOLUTIONS
When importing from a source file the import did not run.	Check the source folder to see if the source file is present.
	The source file name has been incorrectly entered on the Data Location tab, (e.g. the file extension has not been entered).
Unable to convert value. The value could not be imported, as it is not of the correct format.	The source file has not been defined correctly on the Data Format tab, (e.g. the data format has been defined as dd/MM/yyyy but the date in the source file is d/MM/yyyy. Define the date format as d/MM/yyyy. Dates with the double day digit will still be imported.
	The header row has been processed.
Enterprise Data Interface has been upgraded and the Gallagher Command Centre Services will not start after restoring a backup.	The sequence for restoring a backup is:
	Restore your Enterprise Data Interface backup.
	Exit and stop the Gallagher Command Centre Services.
	Uninstall Enterprise Data Interface.
	Reinstall Enterprise Data Interface (same or later version).
	Restart the Gallagher Command Centre Services.

	1
The interface has been scheduled to run on an interval and the "Ending at" time is the same as it is scheduled to run.	Check the Gallagher Command Centre Event Viewer to see if the interface has run.
A cardholder does not have the expected mapped value.	This may occur if you have mapped more than one source field to the cardholder field (this is not recommended). The last mapping made in the Edit Mappings window is used to add/update the cardholder field.
Operator does not have sufficient privilege.	The operator must be assigned the appropriate privileges in the required divisions to perform the actions specified by the import.
When importing from a database the import does not run.	Ensure the Windows Firewall on the database server allows incoming connections from the Command Centre server.
When importing bookings (for a Bookable Resource), and a booking is not imported, but the log states that the booking was successful imported.	Ensure that each booking record that is imported using the Booking Reference field uses a unique value. If a unique value is not used, the last booking record containing the Booking Reference will be the one that remains at the end of the import processing. All other booking records containing the same Booking Reference in the data set will not be imported.