Technical Information Paper

How to export cardholder details from Gallagher Command Centre

Introduction

This paper describes a method export cardholder details and images from Gallagher Command Centre.

Prerequisites

It is assumed the reader is familiar with Gallagher Command Centre and has an reasonable understand of XML structure.

Note: A 64-bit OS is assumed.

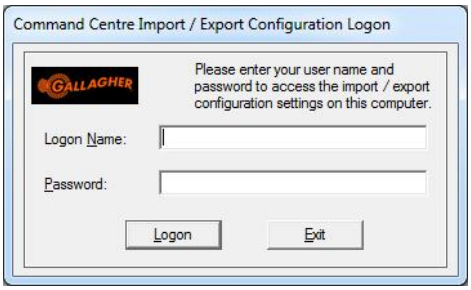
Configuring the CCFT Data Manager

The Data Manager is an application which is used by the import/export scripts to logon to Command Centre.

1. Create an operator in Command Centre with the following minimum priviledges.
    I. Edit Cardholder
    II. Modify Access Control
    III. Edit Cardholder Notes
    IV. Delete Cardholders
    V. View Cardholders

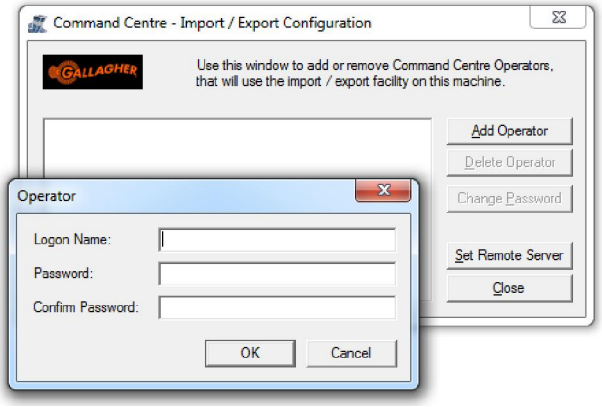
    The XML export process will use this operator to identify itself when exporting data. For the purpose of this document, the operator name will be ‘xml’ and the password will be ‘xml’.

2. Launch the 'CCFTDataManager.exe' from 'C:\Program Files (x86)\Gallagher\Command Centre\Bin'.



3. Create a logon name and confirm password if this is the first time this has been run on this server. Otherwise just enter name and password. Note: This logon name and password are not aligned with the operating system or Command Centre.

4. Click Add Operator and add the operator and password created in step 1., ie 'xml', 'xml'



5. Click 'Set Remove Server' and enter the name of the Command Centre PC. Once this process has been completed, close the DataManager

Configuring the Coordinator script file – 'coordinator.js'

This script file can be launched manually or by an external third party application. It coordinates the import/export of data

1. The file is located in 'C:\Program Files (x86)\Gallagher\Command Centre\Import_Export\Scripts'.
2. Make a backup copy of the file.
3. Open the file with Notepad. Note: Do not double-click the file else it will attempt to run the script.
4. Scroll down approximately 35 lines to 'var loginName = 'bsmith' and change this to the operator created previously, ie. 'xml'. Save and exit.

   Example: var loginName = "xml";

Create the export script

Script files are used to filter the cardholders which are to be exported. They are in the form of an XPath Query which is an industry standard function. There are many tutuorials on the Internet; http://www.w3schools.com/XPath/

The export script file can be given any name but must have an extention of .xml

The export script files are placed in 'C:\Program Files (x86)\Gallagher\Command Centre\Import_Export\Incoming\Search'.

When the coordinator file is run, it will iterate through each file in this directory and execute the queries.

The resulting output files will be placed in 'C:\Program Files (x86)\Gallagher\Command Centre\Import_Export\Outgoing\Cardholder'.

This directory will contain a CSV file with the details of the exported cardholders. The contents of the CSV file are defined by the 'C:\Program Files (x86)\Gallagher\Command Centre\Import_Export\Maps\CardholderXML2CSVMap.xml' map file.

The CSV file will have the following name format; ExportScriptFileName**radxxxxx**.csv

The ‘radxxxxx’ will contain a unique number each time a script file is run.

For example, if the file containing the XPath query was called ‘ExportImages-.xml’, the exported CSV file would be called ‘ExportImages-radxxxxx.csv.

Any image files which are exported will have the following format;

'ExportFileScriptName' 'FileID'' FTItemID of Cardholder' 'FTItemID of Image Type (ie Photo)'

Example: ExportImages-radxxxxx00000003670000000359.jpg.

In this example, the '0000000367' is the FTItemID of Cardholder and the '0000000359' is FTItemID of Image Type (ie Photo)'

If the cardholder has two images, i.e. photo and signature then two files will be exported.

XPath query examples

You can use Notepad to create the files and save them with the .xml extension.

Export all Cardholders

```
<?xml version="1.0"?>
<Search xmlns="x-schema:C:\Program Files (x86)\Gallagher\Command
Centre\Import_Export\Schemas\search.xdr"
Type="Cardholders">
   <Query>Cardholder</Query>
   <PersonalData IncludeImages='1' ImageFormat="JPEG"/>
</Search>
```

This query will export all cardholders with all of their associated images. To only export the cardholder details, change; `IncludeImages='0'`.

Note: If the card database is large, the export may take some time. As an example, a test export of 22,500 cardholders, each with two images took 4hrs and 40 minutes.

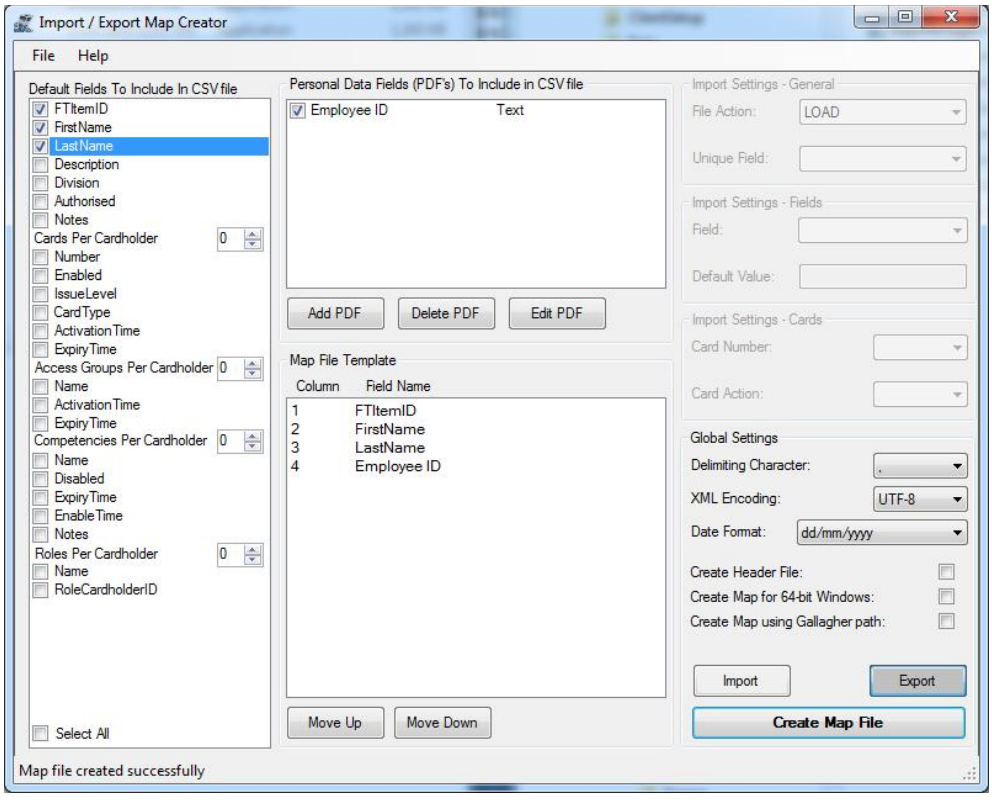
Filter by Cardholder

This query will export the details and images for all cardholders with the first name of John.

```
<?xml version="1.0"?>
<Search xmlns="x-schema:C:\Program Files (x86)\Gallagher\Command
Centre\Import_Export\Schemas\search.xdr"
Type="Cardholders">
   <Query>Cardholder[/FirstName = 'John']</Query>
   <PersonalData IncludeImages='1' ImageFormat="JPEG"/>
</Search>
```

By default, all details for the cardholder will be exported, such as Name, Division, Access Groups etc. It is possible to defined which fields are required using the 'Import/Export Map File Creator' which can be located in the Command Centre installation files in '\Utilities\Import Export\Map file creator'. This utility will create a map file to your requirements.

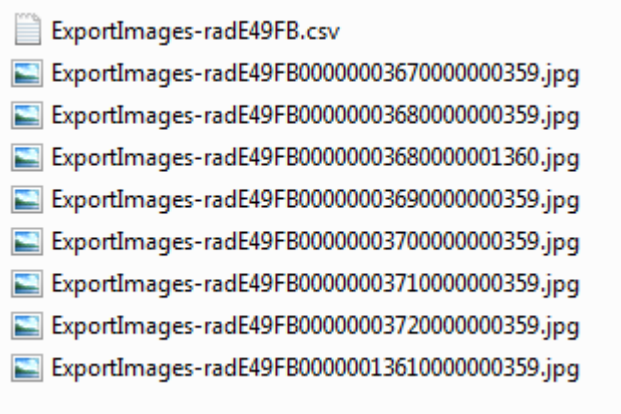
The screen shot show the utility used to create an export map file which will only export the FirstName, Last Name, FT Item ID and Employee ID.



Save the file to 'C:\Program Files (x86)\Gallagher\Command Centre\Import_Export\Maps\CardholderXML2CSVMap.xml'. **Make a copy of the original first**.

Run the **coordinator.js** file.

Directory listing for 'C:\Program Files (x86)\Gallagher\Command Centre\Import_Export\Outgoing\Cardholder';



The resulting CSV file will have the format; FTItemID, FirstName, LastName, Employee ID

```
1,System Operator,,
367,Peter,Wilson,GGL12376
368,Ian,Martin,GGL45788
369,Lea,MacDonald,GGL58922
370,John,Spears,GGL45333
371,Emma,Bennett,GGL90082
372,Steve,Jones,GGL54343
1361,John,Plant,GGL56444
```

Checking the results

To check the import/export was successful, all the results will be located in the following folders:

Exported Data in XML format can be found in:

'C:\Program Files (x86)\Gallagher\Command Centre\Import_Export\Output\Successfully_Translated'

Exported Data in CSV format can be found in:

'C:\Program Files (x86)\Gallagher\Command Centre\Import_Export\Outgoing\Cardholder'

Images related to Exported data can be found in:

'C:\Program Files (x86)\Gallagher\Command Centre\Import_Export\Outgoing\Cardholder'

If there are any problems, or any further information is required, the following information is useful:

Logs for the scripts run can be found in:

'C:\Program Files (x86)\Gallagher\Command Centre\Import_Export\Output\Logs'

If the file was successfully translated it can be found in:

'C:\Program Files (x86)\Gallagher\Command Centre\Import_Export\Output\Successfully_Translated'

If the file was unsuccessfully processed it can be found in:

'C:\Program Files (x86)\Gallagher\Command Centre\Import_Export\Unsuccessfully_Processed'

If the file was unsuccessfully translated it can befound in:

'C:\Program Files (x86)\Gallagher\Command Centre\Import_Export\Unsuccessfully_Translated'

If the file is of a format that is unsupported, it will be moved to:

'C:\Program Files (x86)\Gallagher\Command Centre\Import_Export\Output\Unsupported_File'

To rerun a particular import or export you need to drag it back into the appropriate "Incoming\" folder, and rerun Coordinator.js.

Cleaning up

When the script finishes (whether it is successful or unsuccessful) files will be created in some of the sub folders of the ‘C:\Program Files (x86)\Gallagher\Command Centre\Import_Export\Output' folder. These should be periodically deleted, to prevent the folder filling up. Also, any unwanted exported data should be removed from the ‘C:\Program Files (x86)\Gallagher\Command Centre\Import_Export\Outgoing\Cardholder' folder.

XPath Query examples

The fields in the queries work with either quotes or apostrophes, e.g.

[/**FirstName = "Peter"** or [/**FirstName = 'Peter'** will work.

Cardholder field to query:

- First Name

```
<?xml version="1.0" encoding = "UTF-8"?>
<Search xmlns="x-schema:C:\Program Files (x86)\Gallagher\Command
Centre\Import_Export\Schemas\search.xdr"
Type = "Cardholders">
        <Query>Cardholder[/FirstName = "Peter"]</Query>
        <PersonalData IncludeImages="0"/>
</Search>
```

- Issue Level

```
<?xml version="1.0" encoding = "UTF-8"?>
<Search xmlns="x-schema:C:\Program Files (x86)\Gallagher\Command
Centre\Import_Export\Schemas\search.xdr"
Type = "Cardholders">
        <Query>Cardholder[/Card/IssueLevel = 2]</Query>
        <PersonalData IncludeImages="0"/>
</Search>
```

- Card Number

```
<?xml version="1.0" encoding = "UTF-8"?>
<Search xmlns="x-schema:C:\Program Files (x86)\Gallagher\Command
Centre\Import_Export\Schemas\search.xdr"
Type = "Cardholders">
        <Query>Cardholder[/Card/@Number = 1]</Query>
        <PersonalData IncludeImages="0"/>
</Search>
```

- Cardholder ID

This is the Unique ID used for XML import/exports. It is most commonly the Employee ID number.

```
<?xml version="1.0" encoding = "UTF-8"?>
<Search xmlns="x-schema:C:\Program Files (x86)\Gallagher\Command
Centre\Import_Export\Schemas\search.xdr"
Type = “Cardholders”>
        <Query>Cardholder[/@CardholderID="123-4567"]</Query>
        <PersonalData IncludeImages="0"/>
</Search>
```

- Personal Data Fields

```
<?xml version="1.0" encoding = "UTF-8"?>
<Search xmlns="x-schema:C:\Program Files (x86)\Gallagher\Command
Centre\Import_Export\Schemas\search.xdr"
 Type = “Cardholders”>
        <Query>Cardholder[/PersonalData/PDText = "Gallagher"]</Query>
        <PersonalData IncludeImages="0"/>
</Search>
```

```
<?xml version="1.0" encoding = "UTF-8"?>
<Search xmlns="x-schema:C:\Program Files (x86)\Gallagher\Command
Centre\Import_Export\Schemas\search.xdr"
Type = “Cardholders”>
        <Query>Cardholder[/PersonalData/PDInteger = 1234]</Query>
        <PersonalData IncludeImages="0"/>
</Search>
```

This example looks for specific data in specific fields:

```
<?xml version="1.0" encoding = "UTF-8"?>
<Search xmlns="x-schema:C:\Program Files (x86)\Gallagher\Command
Centre\Import_Export\Schemas\search.xdr"
Type = “Cardholders”>
        <Query>Cardholder[PersonalData[@Name = "Employee ID" and PDText = "123-4567" or PDText
        = "145-7654" or PDText = "434-5656"]]</Query>
        <PersonalData IncludeImages='0'/>
</Search>
```

- **Access Group**

```
<?xml version="1.0" encoding = "UTF-8"?>
<Search xmlns="x-schema:C:\Program Files (x86)\Gallagher\Command
Centre\Import_Export\Schemas\search.xdr"
        Type = “Cardholders”>
        <Query>Cardholder[/AccessGroup/@Name="Employee"]</Query>
        <PersonalData IncludeImages="0"/>
</Search>
```

Some more examples:

Cardholder[/FirstName="Bob"]

Cardholder[AccessGroup/@Name =("access_a" or "access_b")]

Cardholder[@CardholderID=8900001 or @CardholderID=8900006]

Cardholder[FirstName="Bob" and LastName = "Achilles"]

Cardholder[FirstName="Bob" and @CardholderID=8900001]

Cardholder[PersonalData[@Name ="addr" and PDText ="Sheridan"]]

Cardholder[Card[@Number=5 and CardType ="prox card"]]

Cardholder[Card[@Number=5 and Enabled = 1 and CardType ="prox card"]]

Cardholder[Card[@Number=5 and CardType ="prox card"] and AccessGroup/@Name ="access_a"]

Cardholder[PersonalData[@Name ="addr" and (PDText ="Sheridan" or PDText ="Silverdale")