

Version 25



Trapeze

Enterprise Asset Management

Data Loader

Reference Guide

Trade Secret | May 2025

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Technical Support

Trapeze provides several ways to connect with the Customer Care team. Please provide detailed information to the representative. If you are reporting an issue by e-mail, include any error messages, screen shots of your problem, and steps to replicate the issue.

Customer Care is available Monday through Friday, 8:00 a.m. to 8:00 p.m., Eastern Standard Time.

Toll-Free Telephone: 1-877-411-8727

E-mail: cc@trapezegroup.com

FTP Site: <https://ftp.trapezegroup.com/>

Web Site: <https://collaborate.trapezegroup.com>

The website provides access to Trapeze Collaborate which offers resources to implement and operate the software, search knowledge, participate in communities, log/track service requests, sign-up for release alerts, view product health recommendations, and download updates or documentation. For secure access to Collaborate, contact Customer Care through the website or by calling the number above.

Product Compatibility

Refer to the latest [Product Compatibility](#) information on Trapeze Collaborate for requirements including operating system information, databases, Crystal reports, network protocol, HTTP servers and browsers that are supported.

Data Loader – Reference Guide

May 2025

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1. Overview

The Data Loader is a console application designed to provide a simple and automated way to load large amounts of data from an XML spreadsheet into the asset management software.

This document is intended to be used as a general guide for new users of the Data Loader component. Users should be aware that the application undergoes continual improvement, and some of the functionality and training steps indicated in this guide may differ slightly from the actual user's experience based on application configuration and the organization's workflow preferences.



This tool can be obtained from the EAM- Releases folder on <ftp.trapezgroup.com>.

2. Preparing Data for Loading

Data can be loaded to most screens/tables in the database using the console.

 The Data Loader is designed to load only data that the screen allows. It will not bypass any security logic or work around application logic. You will only be able to load fields and data as you would on the screens. If data is loaded that is not supported by the rights and screen, you will receive standard screen validation messages within the logs.

Before loading, the data needs to be organized into a formatted XML spreadsheet. The XML template is built by defining the screen through which data will be loaded and the individual database controls that will receive data.

Number Format Changes

The Data Loader handles improperly formatted numeric values (such as dates, \$ signs, commas, and parentheses as needed) to match the correct application needs.

For example:

- If Excel has a value such as \$1,230.00, the Data Loader loads data into the asset management application as 1230.
- A negative value such as (1,456) or -1,456 will get loaded into the system as -1456.
- Date formats are formatted to MM/DD/YYYY.

If the Data Loader encounters data that has been entered incorrectly, it displays an error for that entry. For example:

For example:

- An entry such as \$1,456,00 will throw an error since the Data Loader does not know if
 - The second comma should be a period for \$1,456.00
 - The entry is missing an extra digit to make it a valid price such as \$1,456,000

Identifying the Database Control Information

The XML Load Template requires specific information about where the individual data elements will be placed. This is referred to as the database control information. There are four ways to gather the database control information:

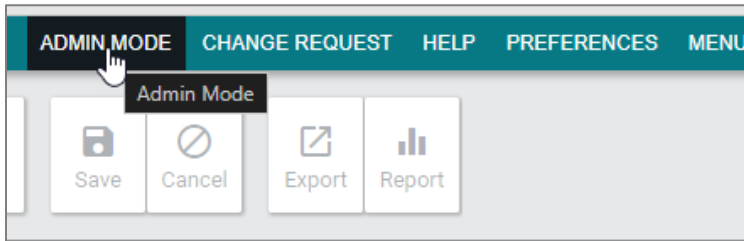
1. Use Admin Mode in the Enterprise Portal.

2. Use the web application to query the individual field control elements for the data elements to be loaded.
3. Use the key of screens/tables reports available within the web application (does not include group row fields).

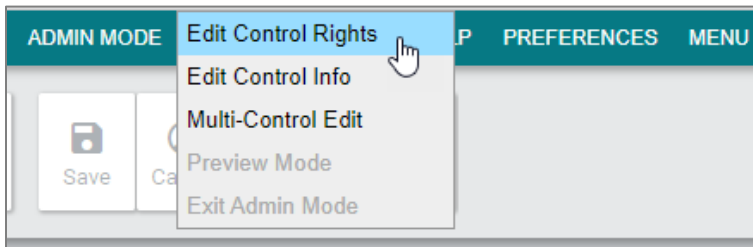
Using Enterprise Portal Admin Mode to Query Information

Navigate to the Enterprise Portal as and Administrator, then do the following:

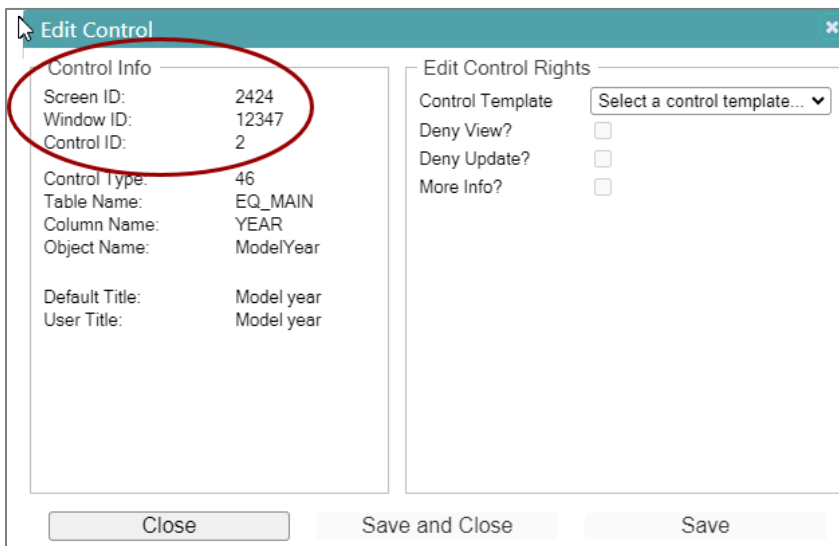
1. Click **Admin Mode**.



2. Click **Edit Control Rights**.



3. Shift click on desired field to view information.
4. Hold the **Shift** button and click on a label.



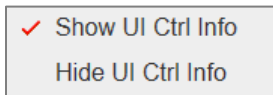
A dialog box displays the Screen ID, Window ID, Control Order, and other control information.

5. Click **OK**.

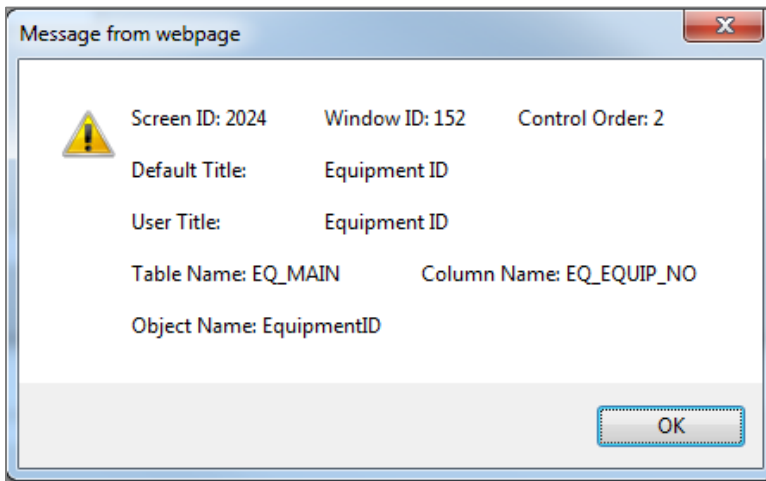
Using Web Application to Query Information

From the web application interface you can enable the ability to show the UI control information. This allows you to click on each field individually to obtain the needed information. This approach is useful for data being loaded to smaller screens and tables.

1. Right click on the system logo in the upper left hand corner.
2. Select the option to Show UI CTRL INFO.



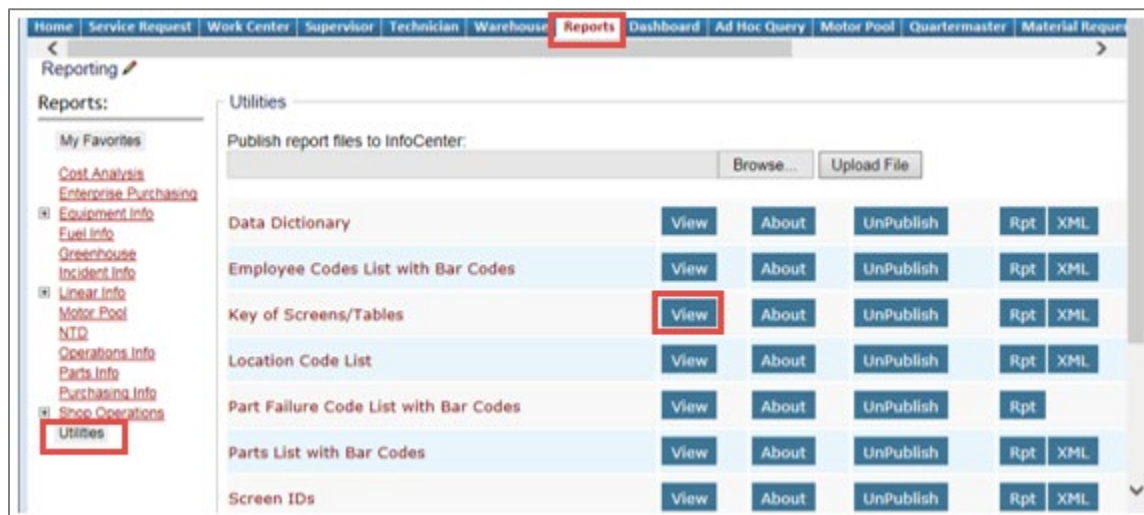
3. You will receive a confirmation message that the UI control information is enabled. Click **OK**.
4. With the UI Display mode enabled, use the Enterprise Portal (Web Screen) to open the screen to which you want to load information.
5. While holding the shift key, use the left mouse button to click on the desired field.
6. The field control information will be displayed in a pop-up window.



While UI Mode is enabled, the user will not be able to manually enter data and save it. Once the necessary information is gathered, the SHOW UI CTRL INFO will need to be set back to HIDE UI CTRL INFO.

Using the Key of Screens/Tables Report

The Key of Screens/Tables report provides a breakdown of each screen within the application and the field control information for each table, including the reference to the database table and the column name behind each input field on the screen.



1. Open the listing of available reports from the **Reports Tab**.
2. Select the **Utilities** report directory.
3. Click the **View** button associated with the **Key Of Screens/Tables** button.
4. Enter the 4-digit screen number you wish to load data against.
5. If you do not know the screen ID, click the search button and you can search by the screen **Description** to retrieve the **Screen ID** value.
6. Once you have the correct screen ID, click the **Show Report** button.

The screen report will display, and will enable you to determine the correct field control information for each data element to be loaded to the database.

Key of Screens/Tables**Screen: (2424) Asset Primary Information**

Control Order	Control Name	Table	Column	Column Width
Tab: (12346) Shared Info				
10	Asset type			0
1	Equipment ID			0
2	Equipment ID	EQ_MAIN	EQ_EQUIP_NO	20
3	Year-manufacturer-model			36
4	Row ID	EQ_MAIN	row_id	6
5	Equipment ID - additional data	EQ_MAIN_ADDL	EQ_EQUIP_NO	12
6	Asset type	EQ_MAIN	asset_type	10
7	New equipment unit		EQUIP_WIZARD	20
8	Equipment ID - fuel settings	EQ_FUELSET	EQ_equip_no	12
9	Equipment ID - capital data	EQ_CAPITAL	EQ_equip_no	12
Tab: (12347) Basic Info				
1	Model year			0
2	Model year	EQ_MAIN	YEAR	2
3	Manufacturer ID			0
4	Manufacturer ID	EQ_MAIN	manufacturer	15
5	Manufacturer name		D_MANUFACTURER	30
6	Model ID			0
7	Model ID	EQ_MAIN	model	15
8	Model name		D_MODEL	30
9	Equipment type			0
10	Equipment type	EQ_MAIN	EQTYP_EQUIP_TYPE	30
11	Equipment type description		D_EQTYP_EQUIP_TYPE	30

In this example, the needed information for the Equipment ID is:

Screen ID: 2424

Tab: 12346

Field: 2

3. Dataload Generator Report

The Dataload Generator Report reduces the need to create dataload files from scratch. Running this report is the preferred approach for creating dataload files. It is located under the utility folder in the Reporting Portal.

The only parameter required to run the report is the Screen ID which can be manually entered or selected from the choicelist.

When you run the report, you will see instructions on how to export the XML file. This file can be opened using Excel to make it easier to be populated. The XML file retrieves the screen structure (fields [Window/Control ID]) and a comment row with the field description followed with the maximum text length supported.

This report has been created to make the process of creating the XML Template easier. The manual process for building the XML template can be found in the following sections of this guide.

4. Building the XML Template

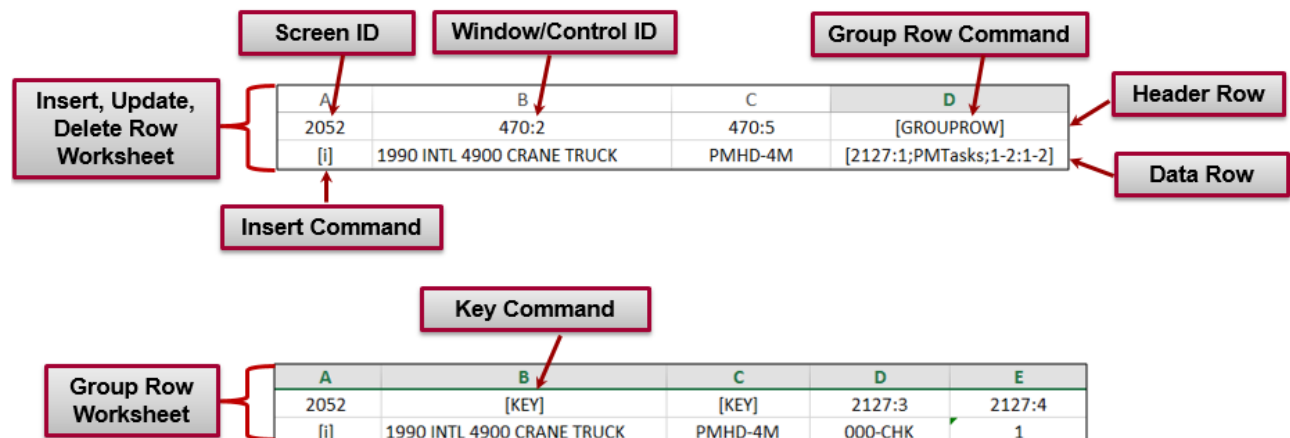
The XML Load Template requires specific information about where the individual data elements will be placed. This is referred to as the database control information and includes a Screen ID, Window ID, Control ID and Group Control ID (group rows only).

- The XML spreadsheet template can be used for loading data to a screen without group row controls or to a primary screen and embedded group controls at the same time.
- File format must be XML Spreadsheet 2003 (*.XML).
- Text format should be used for all cells.
- All formatting within the XML spreadsheet should be removed using "Clear Formats" within Excel.
- The XML template is built by defining the screen through which the data will be loaded and the individual table columns to receive data.

The following is a sample layout of a XML template.



The Group Row and Key commands will be explained later in this document.



Commands

Commands are specified at the beginning of each upload row to tell the Data Loader what to do with the row. All commands must be defined inside brackets []. When updating or deleting data, the number after the colon (column A does not count) identifies the column in the spreadsheet on which the batch will filter.

	A	B	C	D	E	F	G	
1	2024	152:2	152:6	153:2	153:4	153:7	153:10	153:13
2	[i]	EQID	ASSET	2000	FORD	L7500	TRUCK-99-L7500	2000 FORD

Action commands

[i] Insert: Insert the data into the specified screen

[u:#] Update (modify): Update using value from specified column to uniquely identify records. Any existing column number can be used.

[d:#] Delete: Delete using value from a specified column to uniquely identify records. Any existing column can be used. In the above example, [d:2] would use Column 2 (C) to identify the records to be deleted.

[ui:#] Update/Insert: The tool will filter on the column in the spreadsheet and update the record. If the record does not exist, the row will be inserted.



The Data Loader supports using values from multiple columns to update [u], update and insert [ui] or delete [d]. The columns must be delimited by a -. For example, [u:1-2-3] means that columns 1, 2 and 3 will be used as the key.

The first row in each batch upload must include the screen that the file will be uploaded to and the fields that will be inserted into the database.

	A	B	C	D	E	F	G	
1	2024	152:2	152:6	153:2	153:4	153:7	153:10	153:13
2	[i]	EQID	ASSET	2000	FORD	L7500	TRUCK-99-L7500	2000 FORD

In some cases the user may have included a row(s) at the top of the spreadsheet to assist with identifying the data in the column. This must be removed before uploading.

In addition, all formatting (i.e. colors) must be removed. This can be done on the Edit section of the Home tab in Excel.

[C] or [c]: This command can be used in the action (left-most column) in any row of a Data Loader file. When used, the row is considered a comment, and the row is skipped during processing. This is useful for entering a row of field names.

Building the XML Template - Insert

Loading data to a single screen requires the creation of a single work sheet within an XML spreadsheet document.

The following is an example of a data load template to be used with the Fleet Equipment screen followed by an explanation of the values on the spreadsheet.

	A	B	C	D	E	F	G	
1	2024	152:2	152:6	153:2	153:4	153:7	153:10	153:13
2	[i]	EQID	ASSET	2000	FORD	L7500	TRUCK-99-L7500	2000 FORD / STERLING

Header Row (Row 1):

Column A – The Screen ID of the screen you are trying to update. In the example above 2024 is a screen ID for the FLEET EQUIPMENT screen.

Columns B and beyond – Enter the Window and Control IDs of the fields to be updated. Use Window ID:Control ID format. In the example above 152:2 indicates that we are updating control with Window ID = 152 and Control ID = 2 (Equipment ID).

Rows 2 and Beyond:

Column A – Enter the INSERT [i], UPDATE [u:#], UPDATE-INSERT [ui:#] or DELETE [d:#] command depending on the action you would like to perform. All commands must be defined inside square brackets. In the example above, [i] indicates the INSERT command.

Columns B and beyond – Enter values for the controls defined in the header row. In the example above EQID is a value for controls 152:2 (Equipment ID).

Building the XML Template – Update

Updating data only requires the creation of a single work sheet within an XML Spreadsheet document.

	A	B	C
1	2013	67:2	68:2
2	[u:1]	Bills Glass 2	Bills Glass on Appleway

Header Row (Row 1):

Column A - The Screen ID of the screen you are trying to update. In the example above 2013 is a Screen ID for the Vendor Primary Information screen.

Columns B and beyond – The Tab and Control IDs of the fields to be updated. In the example above 67:2 indicates that we are filtering on Tab ID = 67 and Control ID = 2 (Vendor ID). Tab ID/Control ID 68:2 (Vendor Name) will be updated.

Rows 2 and beyond:

Column A – The [u:1] example above indicates update command. The 1 is the column number to be filtered on. Column A is not counted so [u:1] will look at column B for the filter.

Columns B and beyond - Enter values for the controls defined in the header row. In the example above "Bills Glass 2" is a value for controls 67:2 (Vendor ID).

Building the XML Template – Delete

	A	B
1	2013	67:2
2	[d:1]	Bills Glass 2

Header Row (Row 1):

Column A - The Screen ID of the screen you are trying to delete. In the example above 2013 is a Screen ID for the Vendor Primary Information screen.

Columns B and beyond – The Tab and Control IDs for the deletion. In the example above 67:2 indicates that we are filtering on Tab ID = 67 and Control ID = 2 (Vendor ID).

Rows 2 and beyond:

Column A – The [d:1] example above indicates delete command. The 1 is the column number on which to be filtered. Column A is not counted so [d:1] will look at column B (1) for the filter.

Columns B and beyond - Enter values for the controls defined in the header row. In the example above "Bills Glass 2" is a value for controls 67:2 (Vendor ID).

Inserting Group Rows with No Header

When a screen has a header row that acts as a placeholder but does not have any 'real' data, you will only need to load group rows without loading any header information.

Row	
1	

Internal Fuel Ticket Entry				
Internal fuel tickets				
Row	Equipment ID	Transaction date	License number	Year - Manufacturer - Model - Meter readings
1	KGCAR1	01/22/2015 13:41		1753 NEW FLYER C40LF==Meters: 1-707 MILES; 2-170 MILES==2001 NEW F
2	KGCAR1	01/22/2015 13:35		1753 NEW FLYER C40LF==Meters: 1-707 MILES; 2-170 MILES==2001 NEW F
3	KGCAR1	01/22/2015 13:35		1753 NEW FLYER C40LF==Meters: 1-707 MILES; 2-170 MILES==2001 NEW F
4	KGCAR1	01/22/2015 13:23		1753 NEW FLYER C40LF==Meters: 1-707 MILES; 2-170 MILES==2001 NEW F
5	KGCAR1	01/22/2015 13:21		1753 NEW FLYER C40LF==Meters: 1-707 MILES; 2-170 MILES==2001 NEW F
6	KGCAR1	01/22/2015 13:18		1753 NEW FLYER C40LF==Meters: 1-707 MILES; 2-170 MILES==2001 NEW F
7	KGCAR1	01/22/2015 10:58		1753 NEW FLYER C40LF==Meters: 1-10008 MILES; 2-10008 MILES==2001 N
8	KGCAR1	01/22/2015 10:57		1753 NEW FLYER C40LF==Meters: 1-10008 MILES; 2-10008 MILES==2001 N
9	KGCAR1	01/22/2015 10:49		1753 NEW FLYER C40LF==Meters: 1-10008 MILES; 2-10008 MILES==2001 N
10		07/22/2014 08:10		
11		07/22/2014 07:55		
12	AUTO001	07/17/2014 16:47		2011 HONDA CIVIC==Meters: 1-47288 MILES; 2-0 NONE==AUTOMATION

This is accomplished by using the [KEY] header command in the main spreadsheet and mapping it to any relevant group rows.

Header Spreadsheet

C2	:		[238:1;Sheet2;1:1]
	A	B	C
1	2041	[KEY]	[GROUPROW]
2	[i]	test	[238:1;Sheet2;1:1]
3			

Group Row Spreadsheet

	A	B	C	D	E	F
1	2041	[KEY]	238:2	238:3	238:13	
2	[i]	test	00002	12/27/2015 08:00	22	
3						
4						

[KEY] column values are only used to map data between main and group row spreadsheets and will not be loaded.

Since we don't have any 'real' data in the main spreadsheet, the data loader will start loading group rows.

Using Multiple Fields for Update or Delete

In some cases there may be a need to filter on more than one field in a load. The process is the same as an update or a delete template with a change in the command. Examples of multiple fields can be illustrated with the Class/Task screen where both Class ID and Task ID are needed for filtering.

	A	B	C	D
1	2052	470:2	470:5	
2	[d:1-2]	AWEC	01	
3				

Header Row (Row 1):

Column A - The Screen ID of the screen you are trying to update. In the example above 2052 is the Screen ID for the Class/Task Information screen.

Columns B and beyond – The Tab and Control IDs of the fields to be updated. In the example above, column B(1) = 470:2 indicates Tab ID = 470 and Control ID = 2 (Equipment Class ID). Column C(2) = 470:5 indicates Tab ID = 470, Control ID = 5 (Task ID).

Rows 2 and beyond:

Column A – The [d:1-2] example above indicates delete command. The 1-2 are the column numbers to be filtered on. Column A is not counted so [d:1-2] will look at column B (1) and C (2) for the filter.

Columns B and beyond - Enter values for the controls defined in the header row. In the example above “AWEC” is a value for control 470:2 (Equipment Class ID) and “01” is the value for 470:5 (Task ID).

5. Building the XML Template – Group Rows

Group rows are rows that exist on any screen where multiple rows can be inserted. The example below shows an asset record that has multiple fuel/fluid types with which it is associated.

Group row templates can be used to import both master and related group row data (ex: import equipment info, then fuel group rows) in one batch instead of two.

Row #	Delete	Fuel/fluid type	Description	Capacity
1	☐	N	COMPRESSED NATURAL GAS	160.00
2	☐	ATE	AUTO TRANS FLUID	20.00

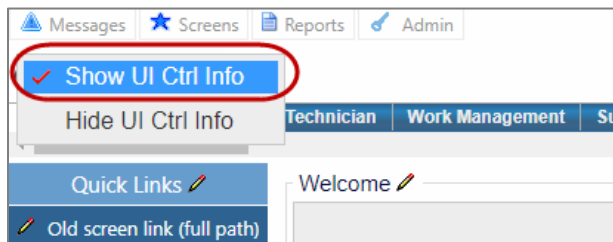
The group row template consists of two Excel worksheets (usually in one file).

- The “master” worksheet where the format is similar to an insert xml, with an additional GROUPROW command.
- A “group row” worksheet that includes the data to insert into the group rows and the KEY to use to link the data from the “master” worksheet.

Before creating a group row, include the command you will need to determine the group_control_ID. This is currently only available in the GUI.

To start UI mode:

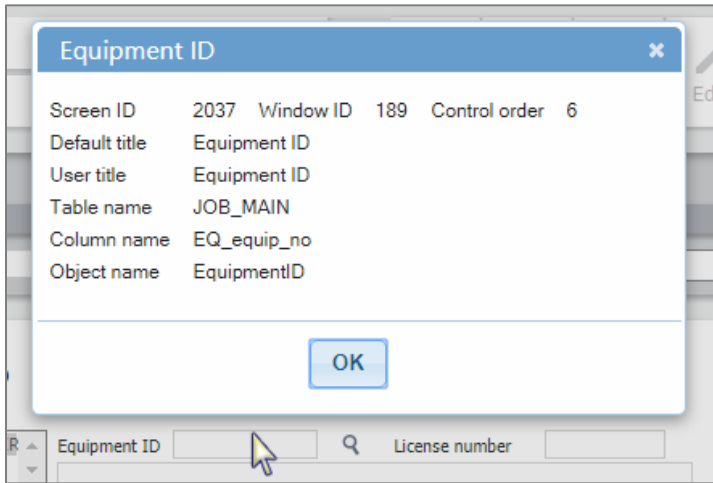
1. In the Web Modules, right-click the logo in the upper-left corner.
2. Click **Show UI Ctrl Info**.



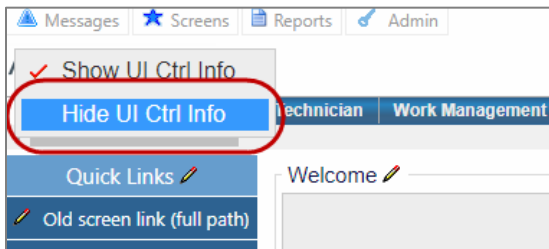
The UI Ctrl mode is enabled.

3. Open the screen with the UI control information you need.
4. Hold **Shift** and then click the field you need.

A pop-in displays the Screen ID, Window ID, Control Order, Default Title, User Title, Table Name, Column Name, and Object Name.



5. Click **OK** to close the pop-in.
6. To turn off the UI controls, right-click on the logo in the Web Modules.
7. Click on Hide UI Ctrl Info.



Updating a Group Row

In some cases there may be a need to update an already inserted group row. In the following example, a Class/Task Part Required row will be updated with a new quantity.

1. Create the first worksheet with a “u:” or “ui:” command. The ui:1-2 command below filters on Class/Task 33 and A (columns 1 and 2).

2052	470:2	470:5	[GROUPROW]	[GROUPROW]
[ui:1-2]	33	A	[475:5;parts;1-2:1-2]	[2127:1;checklist;1-2:1-2]

2. Create the second worksheet. The ui:3-4 command below filters on the part ID (645000) and part suffix (0). When executed, the quantity of 1 will be updated for Class 33, Task A and Part 645000-0.

2052	[KEY]	[KEY]	475:7	475:8	475:9
[ui:3-4]	33	A	645000	0	1

Group Row Commands

Header Commands

[GROUP ROW]: Used in the master worksheet to identify the location of the keys in the group row worksheet

A	B	C	D
2052	470:2	470:5	[GROUPROW]
[i]	1990 INTL 4900 CRANE TRUCK	PMHD-4M	[2127:1;PMTasks;1-2:1-2]

[KEY]: Used in the group row worksheet to specify the location of one or more items to filter on in the master worksheet. Can be more than one key. In this case there are two keys to filter on from the Class/Task Information screen: Equipment Class ID and Task ID.

A	B	C	D	E
2052	[KEY]	[KEY]	2127:3	2127:4
[i]	1990 INTL 4900 CRANE TRUCK	PMHD-4M	000-CHK	1

[DIALOG_RESPONSE]: Allows a user to action on dialogs and warnings. Possible values include ok or cancel. Default response will be used if command is not defined or if a value other than “ok” or “cancel” is specified.

Group Row Include Command

The Group Row Include command is used to link the master sheet and the group row sheet. This batch is to upload PM task group rows into the Class/Task screen.

A	B	C	D
2052	470:2	470:5	[GROUPROW]
[i]	1990 INTL 4900 CRANE TRUCK	PMHD-4M	[2127:1;PMTasks;1-2:1-2]

The structure of the group row include command is:

TAB_ID:GROUP_CONTROL_ID;GROUP_ROW_FILE_LOCATION;RELATIONSHIP

Now that the group control ID has been noted, the following example describes the structure of a group row include command.

A	B	C	D	E
2052	[KEY]	[KEY]	2127:3	2127:4
[i]	1990 INTL 4900 CRANE TRUCK	PMHD-4M	000-CHK	1

2127:1: **Tab_ID:Group_Control_ID** – Parts required tab on the Class/Task Information screen and the group control ID

PMTasks: **Group_Row_File_Location** – The name of the Excel group row worksheet (Excel defaults to Sheet2, Sheet3, etc.)

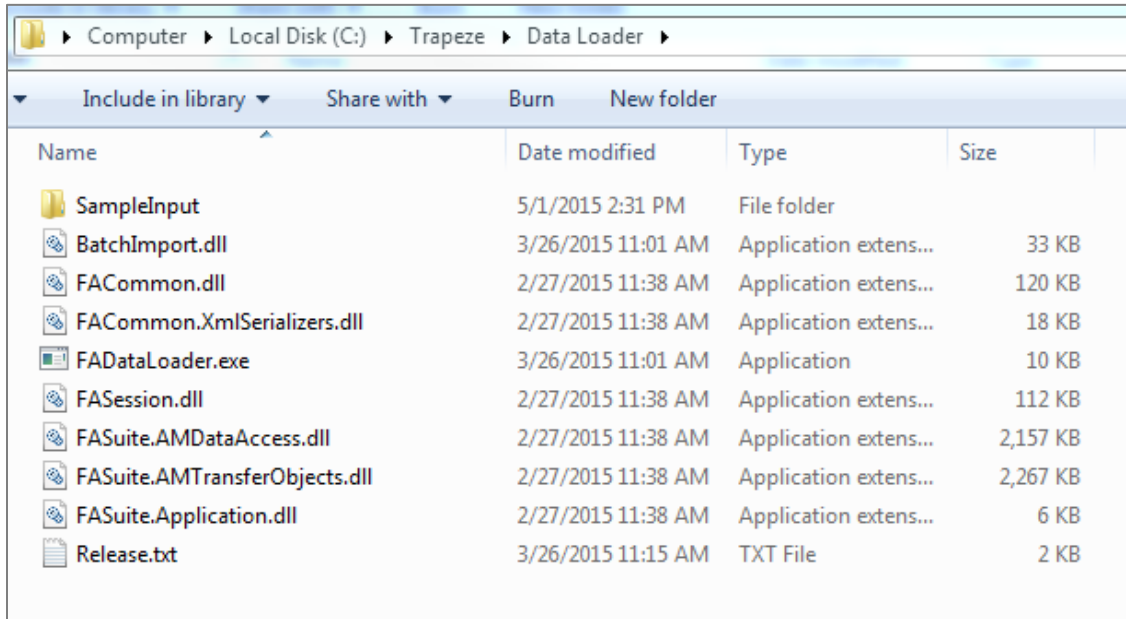
1-2;1-2: **Relationship** – The first 1-2 is to specify the columns to link to in the master worksheet. The second 1-2 is to specify the columns to link to in the group row worksheet. So, using the first numbers of each (1 and 1), the batch will look at columns B and B (remember, the first column does not count) to match the Equipment Task ID (1900 INTL 4900 CRANE TRUCK) and will look at the second numbers (2 and 2 or columns C and C) to match the Task ID (PMHD-4M).

 The naming and case of the Group Row in the Main Worksheet must exactly match the naming and case of the Group Row worksheet in order to execute properly.

6. Data Loader Setup

Once the XML template is ready, the data can be loaded to the application and database.

The Data Loader is a console based data load tool. It does not require installation of software, but does require the saving of the appropriate executable file and .DLL files to the disk of the computer to be used for data loading.



Name	Date modified	Type	Size
SampleInput	5/1/2015 2:31 PM	File folder	
BatchImport.dll	3/26/2015 11:01 AM	Application extens...	33 KB
FACCommon.dll	2/27/2015 11:38 AM	Application extens...	120 KB
FACCommon.XmlSerializers.dll	2/27/2015 11:38 AM	Application extens...	18 KB
FADDataLoader.exe	3/26/2015 11:01 AM	Application	10 KB
FASession.dll	2/27/2015 11:38 AM	Application extens...	112 KB
FASuite.AMDataAccess.dll	2/27/2015 11:38 AM	Application extens...	2,157 KB
FASuite.AMTransferObjects.dll	2/27/2015 11:38 AM	Application extens...	2,267 KB
FASuite.Application.dll	2/27/2015 11:38 AM	Application extens...	6 KB
Release.txt	3/26/2015 11:15 AM	TXT File	2 KB

Shortcut and Syntax

The Data Loader utilizes command line parameters to tell the program:

- Where the Data Loader executable resides
- How many processes to run
- What XML template to run
- Where the log files will be created
- The application IP address or named server and the port
- What user name and password will be used to execute the file

The layout of the command string is as follows:

FADData Loader.exe -n "Number of Processes" -i "Input File" -l "Log Directory" -a "App Connection String" -u "App User" -p "Password"

 It is essential that the command syntax be input correctly. Do not copy from this document as the characters might not apply and may cause unexpected results.

Certain components of the syntax are required and other components are optional.

Required:

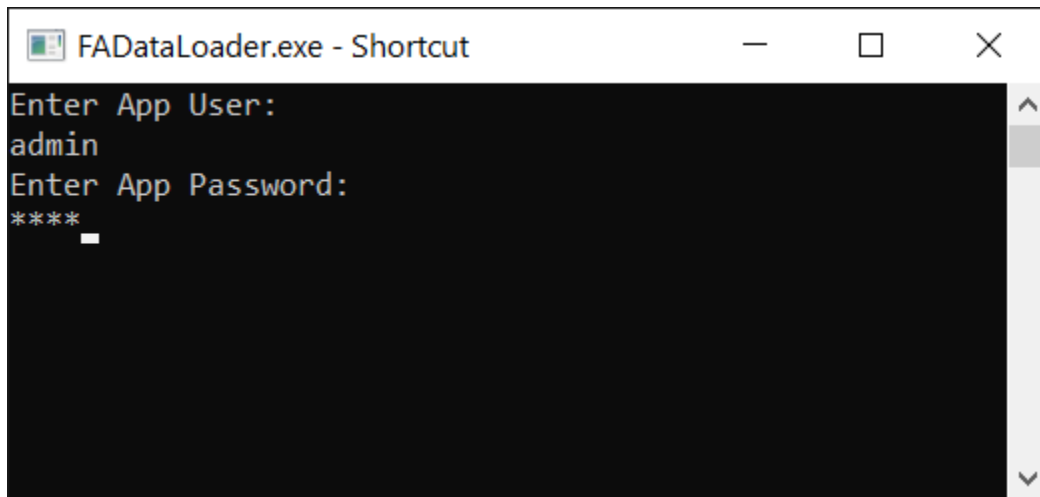
-i = "Input File" – Path to XML spreadsheet that contains EAM object definitions and actions. If no file path is specified (for example. C:\Import\2377 - External Data Mapping.xml), the app assumes the file is located in the same folder with the FADData Loader.exe file.

-l = "Log Directory" – Path to the directory where all log files will be stored

-a = "App Connection String" – Application connection string (for example, AppServer_Name:Port)

Optional:

-u = "App User" – This is the user account that the Data Loader tool will use to insert / update / delete the data in the load file. Note: this user must have insert/update/delete access to the screen that is being loaded – just as you would if you were interacting with the screen on the front end of the application. If you **do not** include this information in the command line, the tool will prompt you for EAM credentials upon execution:



-p = "Password" (empty by default) This is the password for the user account that was entered after the -u switch in the command line. Just as indicated above, if you **do not** include this information in the command line, the tool will prompt you for EAM credentials upon execution.

-n = "Number of Process Threads" (1 by default) - This is the "Number of Process Threads" the Data Loader will use when processing the dataload file (1 is the default). Generally, a larger number utilizes more resources, and therefore improves speed of the load. That said, it is a best practice to use enter a number **no higher** than the number of CPUs on the machine you are using to load the data from (e.g. if the machine has 4 CPUs, use **-n "4"**).

-d = "Yes" Duplicate Records Allowed – This switch tells the Data Loader that duplicate records are allowed to be updated / inserted (if allowed by the application business logic). For example, in the External Data Mapping screen, EAM supports entering more than one External ID record for each Internal ID record. The -d switch tells the Data Loader that these potential duplicate entries are okay to insert:

2377	11186:2	11187:2	11187:4	11187:6
--	INTERNAL ID (50)	EXTERNAL ID (50)	DATA TYPE (30)	MAPPING USE (30)
[I:1]	2000	0001	LOCATION	INTEGRATION
[I:1]	2000	0007	LOCATION	INTEGRATION
[I:1]	2000	0015	LOCATION	INTEGRATION
[I:1]	2000	0028	LOCATION	INTEGRATION
[I:1]	2000	0039	LOCATION	INTEGRATION

Below is a sample command string for loading vendor data to the vendor primary information screen followed by an explanation of the values.

FADData Loader.exe -n "5" -i "C:\Dev\SampleInput\Vendor.xml" -l "C:\Dev\Logs" -a "localhost:2000" -u "TEST" -p "TESTPassword"

-n "5" – Indicates that 5 parallel processes will run to load the data.

-i "C:\Dev\SampleInput\Vendor.xml" – Specifies the path location of the XML file to be loaded. It is important that the entire path for the file be included in the syntax.

-l "C:\Dev\Logs" – This is the full path location of the process log files. It is necessary for error logging should they occur during processing. Error logs are included in the Results File and can be written to any folder, but the folder must be created prior to running the process. This folder will be named by screen ID.

-a "localhost:2000" – Indicates the server location for the application. Both the server name and port information is required. It is the same location information used to connect the desktop client to the application server.

-u "TEST" – Specifies the user name of the person loading the data to the designated screen. The user must have appropriate access rights.

-p "TESTPassword" – Indicates the password of the user.

Creating a Shortcut to Run the Batch

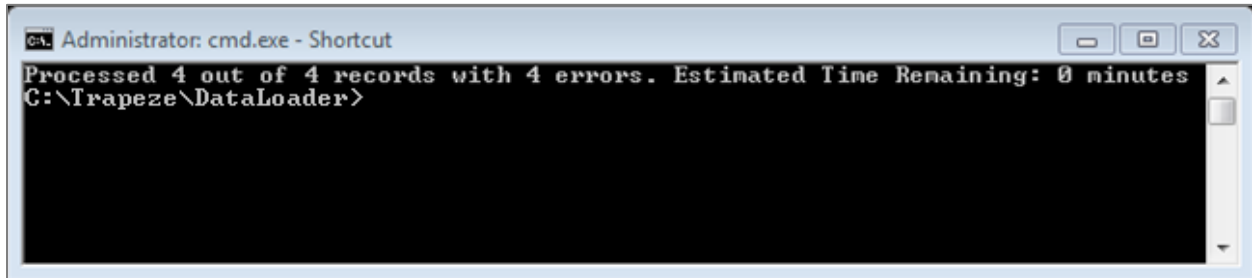
An alternate method is to create a shortcut to run the Data Loader. Use the following steps to create the shortcut.

1. Create a folder for all of the batch shortcuts.
2. Create a shortcut template to the FADData Loader.exe. Enter the command parameters and put in a placeholder to change the input file parameter (ex: Enter the file name here).
3. Create a shortcut for each template that will be batched. Change the input file parameter to the name of the input file.

7. Executing the Batch

Once the XML file has been closed, placed in the appropriate folder and the command syntax has been entered, click on the shortcut created in the previous section.

When the command is executed, the console will display the progress and provide an estimated time to complete.



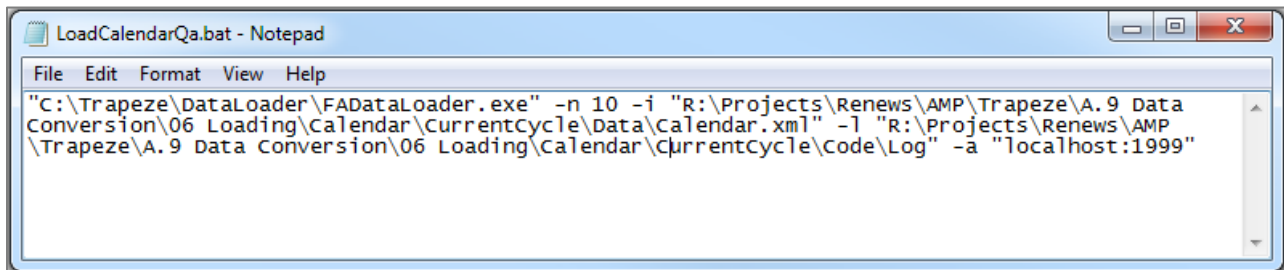
```
Administrator: cmd.exe - Shortcut
Processed 4 out of 4 records with 4 errors. Estimated Time Remaining: 0 minutes
C:\Trapeze\DataLoader>
```

 Closing the console will stop the process. To pick up where the batch stopped, execute the batch again. The tool will remember where it left off.

Facilitating Input

Batch Files

When preparing and executing the command line for the Data Loader, a text file can be used to build the Syntax and execute the text file as a batch.



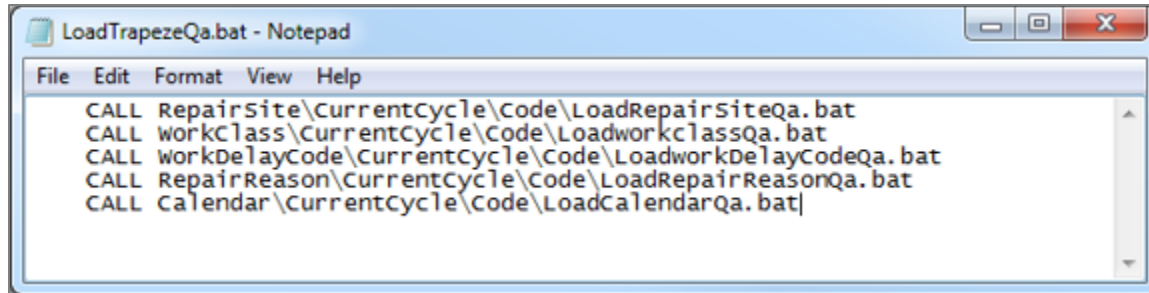
```
LoadCalendarQa.bat - Notepad
File Edit Format View Help
"C:\Trapeze\DataLoader\FADataloader.exe" -n 10 -i "R:\Projects\Renews\AMP\Trapeze\A.9 Data
Conversion\06 Loading\Calendar\CurrentCycle\Data\Calendar.xml" -l "R:\Projects\Renews\AMP
\Trapeze\A.9 Data Conversion\06 Loading\Calendar\CurrentCycle\Code\Log" -a "localhost:1999"
```

The above example enables the user to edit the command syntax using more traditional word processing tools, and to build a standard command file and then update for each XML spreadsheet to be processed.

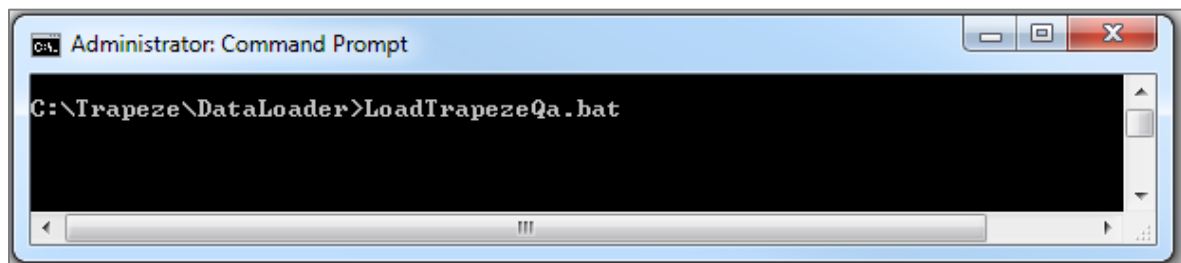
 When using this format it is advisable to use the full path for each element to provide flexibility on maintaining the input files and log files.

Batch Process

It is also possible to bundle the executing of your batch load XML files into a single batch process.



The above example enables the user to combine multiple files into a single load process. For example, if each of the individual XML files is in a separate file folder and you prepare a .BAT file for running the load files, the files can be called out individually via a combined batch process. The files will run following the syntax defined for each XML load process.



Execute the .BAT file with the grouped process at the command prompt in the console. The process will execute the individual commands and create individual log files.

Log Files and Error Messages

Generated File Locations

When a data load is executed the files will be placed in the following locations:

- **.xml** file is placed where determined by the user and specified in the command line
- **.err** file is created in the logs folder as specified in the command line
- **.results** and **.summary** files are created in the logs/[screenID] folder
- **.processed** file is placed where the **.xml** file resides

Error Files

When the command runs it will produce an error message should issues be found with the loading process. If the console quickly displays and goes away, or if the batch does not process as expected, a FADData Loader.err file will display in the log folder. Errors that display in the file can be problems with the content of the XML file, the file name, or other issues.

2006	7/6/2015 1:16 PM	File folder	
2134	7/6/2015 1:25 PM	File folder	
3030	7/6/2015 2:07 PM	File folder	
FADatLoader.err	7/6/2015 1:24 PM	ERR File	1 KB

FADatLoader.err - Notepad

```

File Edit Format View Help
07/06/2015 13:24:28 =====
Failed to retrieve ScreenID from c:\temp\temp\fadataloader15\test.xml - Could not find file 'c:\temp\temp\fadataloader15\test.xml'.

```

This file will be added to each time a loading error takes place by displaying the date and time of the error. Depending on what is trying to be accomplished, you may want to delete the error file so you can see the most current errors.

Log Files

Once a batch successfully executes, a folder will be created in the Logs folder. The name of the folder will be the screen ID that the batch was run against. In this example, screen 3030 (Custom List Values screen) was batched against and it was created in the location defined by the -l option (log folder).

2006	7/6/2015 1:16 PM	File folder	
2134	7/6/2015 1:25 PM	File folder	
3030	7/6/2015 2:07 PM	File folder	
FADatLoader.err	7/6/2015 1:24 PM	ERR File	1 KB

A Summary and Results file will be created during the batch. If the batch is executed multiple times, two new files will be created. The naming convention is:

<Filename>-<Screen ID>-<Year+Month+Day+Hour+Minutes+Seconds>

Below is an example of the *-**summary.txt** file which displays a count of records processed and errors. It also displays the processing time per thread (using the -n – number of process parameter) and the total execution time. The total execution time can assist new users in determining how long a load will take to execute.

VendorInsert-2013-20150430143054-Summary.txt - Notepad

```

File Edit Format View Help
04/30/2015 14:30:58 =====
Processed 3 out of 3 records with 0 errors. Total Execution Time: 0.04 minutes. Processing time per row per thread: 0.677994866666667 seconds

```

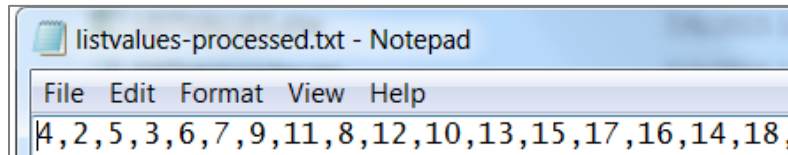
Below is an example of the ***-results.csv** file which shows a result for each row that is executed whether it was successful in loading or it errored. The file will either display the row as processed or will show an error code indicating there was a problem with the row.



The file will always start with Row ID 2 since the header row in the file is not counted.

	A	B	C	D	E	F	G	H	I	J
1	Timestamp	Row ID	Result							
2	4/30/2015 14:30	2	PROCESSED							
3	4/30/2015 14:30	3	PROCESSED							
4	4/30/2015 14:30	4	PROCESSED							
5	4/30/2015 14:35	5	Cannot add Vendor ID VEND3 -- already defined in database - PR-ERR: 1							
6										

In addition to the log files, a ***-processed.txt** file is also generated listing each row that was processed successfully. If a command is rerun, it will only address the rows that did not appear in the **-processed.txt** file. If you would like to execute the entire data set again, the **-processed.txt** file will need to be deleted. It is generally recommended not to change the contents of this file.



Reprocessing Errors

Once processed, errors with data can be fixed in the original Excel file and reprocessed. Since the batch tool has recorded the errors, it will bypass the successfully processed rows and only reprocess the error rows.

1. Open the original Excel file and the Results file.

A	B	C
Timestamp	Row ID	Result
7/6/2015 15:15	2	Cannot reference Manufacturer ID CHEVY -- not defined in database - PR-ERR: 2

	A	B	C
1	2024	152:2	153:4
2	[u:1]	INT SEDAN-1	CHEVY

2. Copy and insert the Row ID and Result column next to the primary key in the original file. In this example, the error is for Equipment ID INT SEDAN-1.

	A	B	C	D	E
1	2024	Row ID	Result	152:2	153:4
2	[u:1]	2	Cannot reference Manufacturer ID CHEVY -- not defined in database - PR-ERR: 2	INT SEDAN-1	CHEVY

- Sort the Result column to display all similar errors. Fix the data in the appropriate columns.

	A	B	C	D	E
1	2024	Row ID	Result	152:2	153:4
2	[u:1]	2	Cannot reference Manufacturer ID CHEVY -- not defined in database - PR-ERR: 2	INT SEDAN-1	CHEVROLET

- After the data is fixed, re-sort the Row ID column back to its original state. Remove the Row ID and Result columns and save the file.

	A	B	C
1	2024	152:2	153:4
2	[u:1]	INT SEDAN-1	CHEVROLET

- Rerun the batch.

When all rows are successfully processed, the summary.txt file will display as follows. To rerun the file again, delete the processed.txt file.

Common Errors

Error	Type	Recommended Fix and More Information
Object reference not set to an instance of an object.	Unexpected	This error is a generic .NET framework exception that can occur for many reasons. It usually means that something unexpected has happened while parsing or loading data. Contact customer support if you receive this error.
Screen ID cannot be empty.	Expected	Screen ID is not defined in the spreadsheet.
Screen ID is not in correct format. Ensure that Screen ID is a number. Screen ID : {0}.	Expected	Ensure that the Screen ID is a number.
No data processed. Row contained only formatting.	Expected	No data processed. Row contained only formatting. This is informational only and there is nothing to fix.
Unable to open FA connection.	Expected	Unable to open Application connection. Ensure APP string/Port and credentials are correct.

Error	Type	Recommended Fix and More Information
Unable to find table node. Invalid data structure in XML document.	Unexpected	Unable to find the Table node in XML because it was not correctly formatted or the wrong file format was used.
Reference not found. Could not find worksheet: WORKSHEET_TAB_NAME	Expected	Referenced spreadsheet does not exist. Check for typos in the spreadsheet name and GROUPOW column that references this spreadsheet.
Failed to retrieve data from row X. Reason: Could not find file 'C:\Users\test\Desktop\FADData Loader\test.xml.'	Expected	Referenced spreadsheet does not exist. Check for typos in the spreadsheet name and GROUPOW column that references this spreadsheet.
Found more data cells than headers.	Expected	Row has more data cells than header cells. Remove extra data cells or add headers to all cells.
Failed to find screen. Screen ID : {0}.	Expected	Failed to find screen using SCREEN_ID from the spreadsheet. Ensure SCREEN_ID defined in the spreadsheet is correct and maps to one of the existing screens.
User screen rights do not allow access to screen. Screen ID : {0}.	Expected	Usage rights do not allow access to this screen. Grant rights to access this screen to the user.
User screen rights do not allow insert. Screen ID : {0}.	Expected	Usage rights do not allow insert to this screen. Grant rights to insert to this screen to the user.
User screen rights do not allow update. Screen ID : {0}.	Expected	Usage rights do not allow update to this screen. Grant rights to update to this screen to the user.
User screen rights do not allow deletion of data. Screen ID : {0}.	Expected	Usage rights do not allow deletion of data from this screen. Grant rights to delete from this screen to the user.
Rights do not allow update of field. Window ID : {0}, Control ID : {1}, Control Title : {2}.	Expected	Usage rights do not allow update of this field. Grant rights to update this field to the user.
Screen not in valid mode for insert. Screen ID : {0}.	Unexpected	This error is usually caused by a bug in the Data Loader. Contact customer care if you receive this error.
Screen not in valid mode for edit. Screen ID : {0}.	Unexpected	This error is usually caused by a bug in the Data Loader. Contact customer care if you receive this error.
Screen not in valid mode for delete. Screen ID : {0}.	Unexpected	This error is usually caused by a bug in the Data Loader. Contact customer care if you receive this error.

Error	Type	Recommended Fix and More Information
Screen not in valid mode for save. Screen ID : {0}.	Unexpected	This error is usually caused by a bug in the Data Loader. Contact customer care if you receive this error.
Input Value '{0}' is not one of the available options in the list control. Window ID: {1}, Control ID: {2}.	Expected	Value from the spreadsheet is not an option in list control.
Unable to find control. Window ID: {0}, Control ID: {1}.	Expected	Control does not exist. Check for typos or incorrect formatting.
Unable to find window. Window ID : {0}.	Expected	Window does not exist. Check for typos or incorrect formatting.
Invalid Screen ID. Screen ID : {0}.	Expected	Check for typos in Screen ID and ensure that Screen ID is a number.
Action Type is required for all rows.	Expected	At least one row is missing an action field ([i] or [ui:2], etc.)
Invalid Action Type used : {0}. Action Type must be: i, u, d, or ui.	Expected	Action type is not supported. Supported action types : i, u, d, ui.
Invalid Control ID entered in group row include statement : {0}. Control must be of type GRID. Control type of Control ID entered : {1}.	Expected	Group Row field references a control that is not a Grid control. Update Group Row statement to reference a Grid control.
Unsupported command was defined. Unable to determine command type from : {0}.	Expected	Unsupported command was specified in the spreadsheet.
Invalid format of Window ID and Control ID in header. Header: {0}. Please use: WinID:CtrlID	Expected	Invalid control ID format in the header. Use valid format.
Unable to parse Window ID. Invalid format of Window ID in Header: {0}.	Expected	Invalid control ID format in the header. Use valid format.
Unable to parse Control ID. Invalid format of Control ID in Header : {0}.	Expected	Invalid control ID format in the header. Use valid format.
Failed to process row {0} in group row worksheet : {1}. Reason : {2}	Expected	Failed to process a row from group file for a reason specified.

Error	Type	Recommended Fix and More Information
Found {0} group row(s) that match key.	Expected	More than one group row matches the key. Key is not unique. Define better group row key that will only match with one group row.
Failed to retrieve data from file row {0} in group row worksheet. Reason: {1}	Expected	Failed to read data from group row file for a reason specified.
Unable to parse WindowID:ControlID into 2 parts. Example format: 33:44.	Expected	Control ID is not correctly defined in the header or Group Row column.
Unable to parse WindowID:ControlID into 2 parts while processing WindowID:ControlID - {0}. Ensure that both IDs are numbers.	Expected	Control ID is not correctly defined in the header or Group Row column.
Unable to parse include key map into 2 parts. Example format: 1-2-3:1-2-3.	Expected	Group row mapping is not correctly defined in the Group Row column.
Unable to parse group row key map {0}. Number of primary keys does not match number of group row keys.	Expected	Missing primary or group row key in the Group Row column. Example: 1-2:1 (Incorrect), 1-2:1-3 (Correct).
Header for column {0} is missing.	Expected	At least one column does not have a header. Add header and reprocess.
Error while trying to process Action Type. Header for column {0} is missing.	Expected	Specified column does not have a header. Add header and reprocess.
Group row statement is improperly formatted. Invalid key mapping.	Expected	One of the rows in the Group Row column is incorrectly defined.
Invalid Action Type entered : {0}.	Expected	Invalid action type. Valid action types: i, u , ui , d.
Unable to parse Action: {0}. Expected 1 or 2 parts - {1} found.	Expected	U, D, and UI commands require two parts. For Example, U:1-2