

Hairpin Data Updates

Automate the boring stuff!

Hairpin Export and Import

Automate the boring stuff!



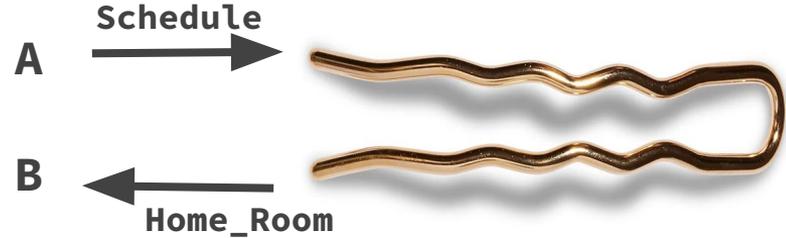
Hairpin?

Refers to exporting data from one area and immediately re-importing it to another area

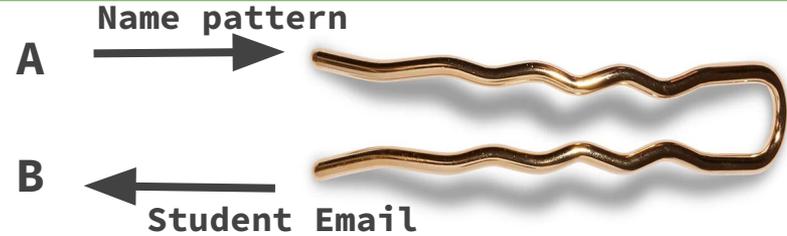


What would be helpful to automate?

- Home_Room



- Student Email



- Global ID



Homeroom

List Schedule



Exp	Trm	Crs-Sec	Course Name	Teacher
1(A)	24-25	HR-54	Homeroom	Fullmer, Beverley B
2(A)	24-25	EL501-54	5th Grade English	Fullmer, Beverley B
3(A)	24-25	EL502-54	5th Grade Math	Fullmer, Beverley B
4(A)	24-25	EL503-54	5th Grade Social Studies	
5(A)	24-25	EL504-54	5th Grade Science	
6(A)	24-25	EL2000-54	Art	
7(A)	24-25	EL1000-54	General Music	
8(A)	24-25	EL3000-54	Physical Education	

Modify Info



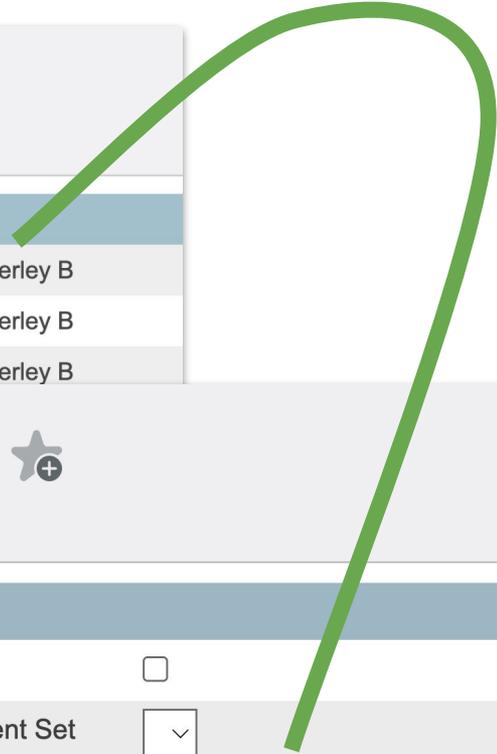
Modify Info

Family rep

Graduation Requirement Set

Home Room

Fullmer



The "bend" - temporary storage location →



- Local File System of the server
 - Also works for hosted customers, even without direct access
 - AutoSends and Data Export Manager exports are saved to:
C:\Program Files\PowerSchool\data\external\autosend
 - AutoComms and Scheduled Data Imports start in:
C:\Program Files\PowerSchool\data\external\autocomm
 - When importing, you can reference **../autosend/filename** to pick up files saved by AutoSend or Scheduled Exports
 - When exporting, you can reference **../autocomm/filename** to save files to the folder expected by AutoComm or Scheduled Imports
 - Different for servers setup with a shared resource folder.
- You can also use an SFTP share if your school has one available and setup in Remote Connection Manager

Export - Use period_info

- [Community Article ID 12594](#)
- Always note the correct expression on a student's schedule

Exp	Trm	Crs-Sec	Course Name
1(A)	24-25	HR-54	Homeroom

- `^(*period_info;1(A);teacher_name)`
- `^(*period_info;1(A);teacher_preferred_name)`
- `^(*period_info;1(A);teacher_i_{field_name})`
 - `^(*period_info;1(A);teacher_i_last_name)`

AutoSend

Field	Value
Name	Homeroom Export
Data to Send	Students
When to Execute	10:00 PM
Days to Execute	<input checked="" type="checkbox"/> Monday <input checked="" type="checkbox"/> Tuesday <input checked="" type="checkbox"/> Wednesday <input checked="" type="checkbox"/> Thursday <input checked="" type="checkbox"/> Friday <input checked="" type="checkbox"/> Saturday <input checked="" type="checkbox"/> Sunday
Turn Execution Off	<input type="checkbox"/>
Send Output to	Local (or network shared) File System
Path	homeroom.txt
Field Delimiter	Tab
Record Delimiter	CRLF
Sort Order	0
First record of file is "number_of_records=" *	<input type="checkbox"/>
Include "upload_type=" **	<input type="checkbox"/>
Attendance-Specific Settings:	<input checked="" type="radio"/> Send any attendance modified in last 24 hrs <input type="radio"/> Send attendance modified since last upload <input type="radio"/> Send attendance modified between these dates From <input type="text" value="0/0/0"/> To <input type="text" value="0/0/0"/> <input type="radio"/> Send all attendance to date
Student-Specific Settings:	All current students at the school are automatically sent.
E-Mail completion report to (Separate multiple addresses with commas)	<input type="text"/>
Fields to export:	student_number ^(*period_info;1(A);teacher_i_last_name)
Attendance Field list:	<input type="text"/>

- System Management > Data > AutoSend Records
- Fields/DATs to send:
 - student_number
 - ^(*period_info;1(A);teacher_i_last_name)
- Send output to "Local (or shared) File System"
 - AutoSends and Data Export Manager exports are saved to:
C:\Program Files\PowerSchool\data\external\autosend
- Path: specify a filename
 - example: homeroom.txt

AutoSend



Field	Value
Name	Homeroom Export 
Data to Send	Students
When to Execute	 10:00 PM
Days to Execute	<input checked="" type="checkbox"/> Monday <input checked="" type="checkbox"/> Tuesday <input checked="" type="checkbox"/> Wednesday <input checked="" type="checkbox"/> Thursday <input checked="" type="checkbox"/> Friday <input checked="" type="checkbox"/> Saturday <input checked="" type="checkbox"/> Sunday
Turn Execution Off	<input type="checkbox"/>
Send Output to	Local (or network shared) File System
Path	homeroom.txt
Field Delimiter	Tab
Record Delimiter	CRLF
Sort Order	0
First record of file is "number_of_records=" *	<input type="checkbox"/>
Include "upload_type=" **	<input type="checkbox"/>
Attendance-Specific Settings:	<input checked="" type="radio"/> Send any attendance modified in last 24 hrs <input type="radio"/> Send attendance modified since last upload <input type="radio"/> Send attendance modified between these dates From <input type="text" value="0/0/0"/>  To <input type="text" value="0/0/0"/>  <input type="radio"/> Send all attendance to date
Student-Specific Settings:	All current students at the school are automatically sent.
E-Mail completion report to (Separate multiple addresses with commas)	<input type="text"/>
Fields to export:	student_number
Attendance Field list:	^(^period_info;1(A);teacher_i_last_name)

AutoComm

- System Management > Data > AutoComm Records
- Schedule a few minutes after the export
- Path: ../autosend/homeroom.txt
- Update existing records... (checked)
- Import into
 - student_number
 - home_room

AutoComm Record

Field	Value
Name	Homeroom Import
Table to Import	Students
When to Execute	10:10 PM
Days to Execute	<input checked="" type="checkbox"/> Monday <input checked="" type="checkbox"/> Tuesday <input checked="" type="checkbox"/> Wednesday <input checked="" type="checkbox"/> Thursday <input checked="" type="checkbox"/> Friday <input checked="" type="checkbox"/> Saturday <input checked="" type="checkbox"/> Sunday
Turn Execution Off	<input type="checkbox"/>
Get Input From	Local (or network shared) File System
Path	../autosend/homeroom.txt
Field Delimiter	Tab
Record Delimiter	CRLF
Character Set	Mac Roman
Sort Order	
Synchronize Mode	<input type="checkbox"/> <div style="border: 1px solid orange; padding: 5px; margin-top: 5px;"><p>⚠ Select this checkbox only when PowerSchool SIS is not the source of truth for student data. • When enabled, any student not included in the import file will be transferred out.</p></div>
Update existing records with imported data (when applicable)	<input checked="" type="checkbox"/>
Mark students and their schedules inactive when their exit date is <= today.	<input type="checkbox"/>
First record of file is "number_of_records=" **	<input type="checkbox"/> (Recommended)
E-Mail completion report to (Separate multiple addresses with commas)	
PowerSchool fields to import into: Student field list	student_number home_room
Attendance Field list:	

AutoComm



Field	Value
Name	<input type="text" value="Homeroom Import"/>
Table to Import	<input type="text" value="Students"/>
When to Execute	<input type="text" value="10:10 PM"/>
Days to Execute	<input checked="" type="checkbox"/> Monday <input checked="" type="checkbox"/> Tuesday <input checked="" type="checkbox"/> Wednesday <input checked="" type="checkbox"/> Thursday <input checked="" type="checkbox"/> Friday <input checked="" type="checkbox"/> Saturday <input checked="" type="checkbox"/> Sunday
Turn Execution Off	<input type="checkbox"/>
Get Input From	<input type="text" value="Local (or network shared) File System"/>
Path	<input type="text" value="../autosend/homeroom.txt"/>
Field Delimiter	<input type="text" value="Tab"/>
Record Delimiter	<input type="text" value="CRLF"/>
Character Set	<input type="text" value="Mac Roman"/>
Sort Order	<input type="text"/>
Synchronize Mode	<input type="checkbox"/>
<div style="border: 1px solid orange; padding: 5px;"> <p> Select this checkbox only when PowerSchool SIS is not the source of truth for student data.</p> <p>When enabled, any student not included in the import file will be transferred out.</p> </div>	
Update existing records with imported data (when applicable)	<input checked="" type="checkbox"/>
Mark students and their schedules inactive when their exit date is <= today.	<input type="checkbox"/>
First record of file is "number_of_records=" **	<input type="checkbox"/> (Recommended)
E-Mail completion report to (Separate multiple addresses with commas)	<input type="text"/>
PowerSchool fields to import into:	student_number home_room
Student field list	
Attendance Field list:	<input type="text"/>

Student Email

First Initial + Last_Name + student_number +
'@powerschool.com'

OR

custom field



Email

Email Address

PowerQuery for Student Email

- See example Plugin for idea on using a PowerQuery to generate the student email
- It may be simpler to rely on student_web_id or a custom field if you can get that populated
- If student_web_id or custom field, can use AutoSend

Export

My Templates

Scheduled System Templates

✓ Template Loaded.

Select Columns to Export

Category

Additional Data Sets

Export From

PSUGCAL - Email Example

▼ STUDENTS

email

student_number

Sort	Field	Labels Used on Export	Remove
<input type="button" value="▲"/> <input type="button" value="▼"/>	STUDENTS.student_number	<input type="text" value="student_number"/>	<input type="button" value="−"/>
<input type="button" value="▲"/> <input type="button" value="▼"/>	STUDENTS.email	<input type="text" value="email"/>	<input type="button" value="−"/>

Next ▶

Export

My Templates

Scheduled System Templates

Select Columns to Export

Select/Edit Records from PSUGCAL - Email Example

Export Summary and Output Options

Export Summary

Records to Export: 721

Export Format

Export File Name:

Line Delimiter:

Field Delimiter:

Character Set:

Export Options

Include Column Headers:

Surround "field values" in Quotes:

[← Prev](#)

[Save Template](#)

[Export ▶](#)

Save Export Template



://psugcal.org

Name

Description

500 characters left

Fields

Field Name	Label
STUDENTS.student_number	student_number
STUDENTS.email	email

Save as New

Save

Cancel

Data Export Manager Templates

Export

My Templates

Scheduled System Templates

 By scheduling an export on this page of Customer Data from this institution's instance of PowerSchool SIS, you are expressly warranting that you have the authority from the applicable institution, the data controller of the Customer Data, to conduct this export. Moreover, you acknowledge and indemnify PowerSchool from any claim resulting from your action to export the data to another location. You assume all responsibility for the security of the Customer Data in the location where the Customer Data is to be exported. Finally, you acknowledge that PowerSchool will log your scheduling of the export from this page.

Template Name	Description	Data Source	Actions
Global ID Export		PSUG CAL - Global ID Update	 
Student Email Export		PSUGCAL - Email Example	 

 Click a template name to load for export or editing.

Set Schedule - Student Email Export (copy)



<https://psugcal.org>

Schedule Active



Days to Execute

- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
- Sunday

When to Execute

 10:20 PM

Send Output To

PowerSchool Folder ▾

Path

Email Completion
Report To

Leave the path blank to accept the default /external/autosend/ folder location

Note that the filename is part of the previously defined template.

AutoSend

- System Management > Data > AutoSend Records
- Fields/DATs to send:
 - student_number
 - ~(decode;1;1;~(student_web_id)@powerschool.com;)
- Send output to "Local (or shared) File System"
- Path: specify a filename
 - example: studentemail.txt

AutoSend

AutoSend Record

Field	Value
Name	Student Email AGHS
Data to Send	Students
When to Execute	🕒 10:00 PM
Days to Execute	<input checked="" type="checkbox"/> Monday <input checked="" type="checkbox"/> Tuesday <input checked="" type="checkbox"/> Wednesday <input checked="" type="checkbox"/> Thursday <input checked="" type="checkbox"/> Friday <input checked="" type="checkbox"/> Saturday <input checked="" type="checkbox"/> Sunday
Turn Execution Off	<input type="checkbox"/>
Send Output to	Local (or network shared) File System
Path	studentemail.txt
Field Delimiter	Tab
Record Delimiter	CRLF
Sort Order	0
First record of file is "number_of_records=" *	<input type="checkbox"/>
Include "upload_type=" **	<input type="checkbox"/>
Attendance-Specific Settings:	<input checked="" type="radio"/> Send any attendance modified in last 24 hrs <input type="radio"/> Send attendance modified since last upload <input type="radio"/> Send attendance modified between these dates From <input type="text" value="0/0/0"/> 📅 To <input type="text" value="0/0/0"/> 📅 <input type="radio"/> Send all attendance to date
Student-Specific Settings:	All current students at the school are automatically sent.
E-Mail completion report to (Separate multiple addresses with commas)	<input type="text"/>
Fields to export: Attendance Field list:	student_number ~(decode;1;1;~(student_web_id@powerschool.com;)

Sample File

- You need a sample file to setup the import template.
- If using AutoSend, use Quick Export for setup with the same fields and DATs as in AutoSend.
- Uncheck the "Column titles on first row, because AutoSend won't include them.
- If using a PowerQuery, export a sample file from the template in DEM
- With a PowerQuery you can keep the column titles.

Data Import Manager

- Data and Reporting > Imports > Data Import Manager
- School Context matters, setup your import template at the right school level or more likely at District Office

Data Import Manager

Import

My Templates

Scheduled System Templates

 Database Extensions are currently accessible at the district level only

 Some or all categories and/or data sets may not be visible if you do not have an assigned role or your assigned role(s) do not permit access to any of the data sets.

Select Source and Target

Source: student.export (43).text

Import Into: 

Field Delimiter:  Character Set: 

Next 

Data Import Manager

Import

My Templates

Scheduled System Templates

 Database Extensions are currently accessible at the district level only

Select Source and Target *[student.export (43).text --> Student Email]*

Map Columns

Select Template

Import File Column

PowerSchool Field

14

Student_Number ▾

canderson14@powerschool.com

Email ▾

◀ Prev

Next ▶

Data Import Manager

Import

My Templates

Scheduled System Templates

 Database Extensions are currently accessible at the district level only

Select Source and Target [*student.export (43).text --> Student Email*]

Map Columns

Select Options

Check to exclude the first row (contains headers).

If a record in the import file matches an existing record in the database, how would you like that record processed?

Do not process record

Update existing record

◀ Prev

Save Template

Import ▶

My Templates

Data Import Manager Templates

Import My Templates Scheduled System Templates

Template	Description	Import Into	Actions
Student Email Import		student_email	 



 Click a template name to load for import or editing.

If the "Schedule Template" button does not appear, make sure the user has a role that allows setting up and running scheduled templates.

Permissions for Setting Up Scheduled Templates

Edit User Access Role

Definition

Change History

Import/Export/Edit

Enterprise Reporting



These access levels apply to importing, exporting, previewing, and editing with data export functions.

Settings

Default Access Level



Export



Edit - Data Export Manager (DEM)



Import

User can set up and run scheduled system templates (Import and Export)



Scheduled System Templates

- Source: PowerSchool Folder
- Path: ../autosend/

Set Schedule - Student Email Import



Template Name	Student Email Import (cc)
Schedule Active	<input checked="" type="checkbox"/>
Days to Execute	<input checked="" type="checkbox"/> Monday <input checked="" type="checkbox"/> Tuesday <input checked="" type="checkbox"/> Wednesday <input checked="" type="checkbox"/> Thursday <input checked="" type="checkbox"/> Friday <input checked="" type="checkbox"/> Saturday <input checked="" type="checkbox"/> Sunday
When to Execute	<input type="text" value="🕒 10:30 PM"/>
Source	PowerSchool Folder ▾
Path	<input type="text" value="../autosend/"/>
File Name	<input type="text" value="studentemail.txt"/>
Email Completion Report To	<input type="text"/>

Cancel

Save

Global ID

- When you enable OIDC for students, a separate "Global ID" needs to be maintained.
- The Global ID is usually the same as the student email address.

Global ID

Email



Email Address

badair3@powerschool.com

Guardian and Student Account Access



Student Access Account

Enable Student Access



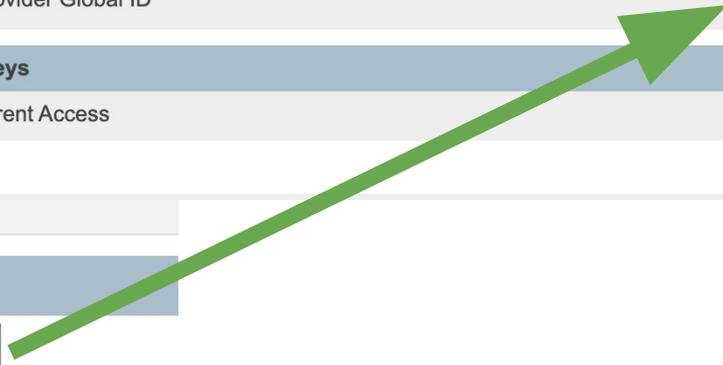
Identity Provider Global ID

Access Keys

Enable Parent Access



Access ID



Global ID

- Install the Global ID PowerQuery Plugin shared by PSUG CAL

Select Columns to Export

Category ▼

Export From ▼

- GLOBALID
 - 01_SSO_User_Type
 - 02_Student_DCID
 - 03_Global_Identifier

Sort	Field	Labels Used on Export	Remove
<input type="button" value="▲"/> <input type="button" value="▼"/>	GLOBALID.01_SSO_User_Type	<input type="text" value="GLOBALID.01_SSO_User_Type"/>	<input type="button" value="−"/>
<input type="button" value="▲"/> <input type="button" value="▼"/>	GLOBALID.02_Student_DCID	<input type="text" value="GLOBALID.02_Student_DCID"/>	<input type="button" value="−"/>
<input type="button" value="▲"/> <input type="button" value="▼"/>	GLOBALID.03_Global_Identifier	<input type="text" value="GLOBALID.03_Global_Identifier"/>	<input type="button" value="−"/>

Next 

Select Columns to Export

Category

Additional Data Sets

Export From

PSUG CAL - Global ID Update

GLOBALID

01_SSO_User_Type

02_Student_DCID

03_Global_Identifier

Sort	Field	Labels Used on Export	Remove
<input type="button" value="▲"/> <input type="button" value="▼"/>	GLOBALID.01_SSO_User_Type	<input type="text" value="SSO_User_Type"/>	<input type="button" value="−"/>
<input type="button" value="▲"/> <input type="button" value="▼"/>	GLOBALID.02_Student_DCID	<input type="text" value="Student_DCID"/>	<input type="button" value="−"/>
<input type="button" value="▲"/> <input type="button" value="▼"/>	GLOBALID.03_Global_Identifier	<input type="text" value="Global_Identifier"/>	<input type="button" value="−"/>

Next ▶

Data Export Manager

Export My Templates Scheduled System Templates

Select Columns to Export

Select/Edit Records from PSUG CAL - Global ID Update

Export Summary and Output Options

Export Summary

Records to Export: 1399

Export Format

Export File Name:

Line Delimiter: CR

Field Delimiter: Tab

Character Set: Mac Roman

Export Options

Include Column Headers:

Surround "field values" in Quotes:

[← Prev](#)

[Save Template](#)

[Export →](#)

Save Export Template



s://psugcal.org

Name

Description

500 characters left

Fields

Field Name	Label
GLOBALID.01_SSO_User_Type	SSO_User_Type
GLOBALID.02_Student_DCID	Student_DCID
GLOBALID.03_Global_Identifier	Global_Identifier

Save as New

Cancel

Data Export Manager Templates

Export

My Templates

Scheduled System Templates

✓ Schedule created successfully

 By scheduling an export on this page of Customer Data from this institution's instance of PowerSchool SIS, you are expressly warranting that you have the authority from the applicable institution, the data controller of the Customer Data, to conduct this export. Moreover, you acknowledge and indemnify PowerSchool from any claim resulting from your action to export the data to another location. You assume all responsibility for the security of the Customer Data in the location where the Customer Data is to be exported. Finally, you acknowledge that PowerSchool will log your scheduling of the export from this page.

Template Name	Description	Data Source	Actions
Global ID Export		PSUG CAL - Global ID Update	 
Student Email Export		PSUGCAL - Email Example	 

 Click a template name to load for export or editing.

Legend

Icons  - Time Entry (5 minute interval)

Set Schedule - Global ID Export



<https://psugcal.org>

Schedule Active

Days to Execute

- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
- Sunday

When to Execute

Send Output To

Path

Email Completion Report To

Data Import Manager

Import

My Templates

Scheduled System Templates

Select Source and Target *[globalid.txt --> SSO User Mapping]*

Source: globalid

Import Into:

Field Delimiter: Character Set:

Next

Data Import Manager

Import

My Templates

Scheduled System Templates

Select Source and Target *[globalid.txt --> SSO User Mapping]*

Map Columns

Select Template

Import File Column

PowerSchool Field

SSO_User_Type

SSO User Type ▾

Student_DCID

Student DCID ▾

Global_Identifier

Global Identifier ▾

◀ Prev

Next ▶

Data Import Manager

Import

My Templates

Scheduled System Templates

Select Source and Target *[globalid.txt --> SSO User Mapping]*

Map Columns

Select Options

Check to exclude the first row (contains headers).



◀ Prev

Save Template

Import ▶

Save Import Template



<https://psugcal.org>

Name

Global ID Import

Description

Empty text area for description.

500 characters left

Fields

SSO User Type

Student DCID

Global Identifier

Save as New

Cancel

Data Import Manager Templates

Import

My Templates

Scheduled System Templates

Template	Description	Import Into	Actions
Global ID Import		sso_mapped_users	 
Student Email Import		student_email	 

 Click a template name to load for import or editing.

Set Schedule - Global ID Import (copy)



<https://psugcal.org>

Template Name

Global ID Import (copy)

Schedule Active

Days to Execute

- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
- Sunday

When to Execute

 10:50 PM

Source

PowerSchool Folder ▾

Path

../autosend/

File Name

globalidentifier.txt

Email Completion
Report To

Checking status of Import

- Data and Reporting > Imports > Data Import Queue

Data Import Queue

Refresh 29 

Manual Import

Import Into	Import File	School	Start Date/Time	End Date/Time	Status	Delete
-------------	-------------	--------	-----------------	---------------	--------	--------

Scheduled Import

Import Into	Import File	School	Start Date/Time	End Date/Time	Status	Delete
SSO User Mapping	globalidentifier.txt	District Office	04/18/2025 02:35 AM	04/18/2025 02:37 AM	Complete with some failures	

Rows/Page

Import Results: globalidentifier.txt --> SSO User Mapping

Processed 1,400 out of 1,400 records

Failed: 115

Row # 	Reason
9	Duplicate global identifier and user type specified
26	Duplicate global identifier and user type specified
36	Duplicate global identifier and user type specified
57	Duplicate global identifier and user type specified
65	Duplicate global identifier and user type specified
68	Duplicate global identifier and user type specified
70	Duplicate global identifier and user type specified
71	Duplicate global identifier and user type specified
79	Duplicate global identifier and user type specified
84	Duplicate global identifier and user type specified
100	Duplicate global identifier and user type specified
102	Duplicate global identifier and user type specified
143	Duplicate global identifier and user type specified
153	Duplicate global identifier and user type specified

View 1 - 50 of 115

Imported: 1,285

Row # ↕	Result
1	Skipped
2	Insert
3	Insert
4	Insert
5	Insert
6	Insert
7	Insert
8	Insert
10	Insert
11	Insert
12	Insert
13	Insert
14	Insert
15	Insert

[Download Failed Records](#)