



Troubleshooting in Data Pipeline

File Uploads - Student Interchange

When uploading interchange files within the Data Pipeline system, there are specific formats that each file must pass to successfully process within the system. Each interchange file, specifically our Student Interchange files: Student Demographic, Student School Association and Graduation Guidelines, will have a designated format expectation depending on the school year. To locate the file layouts (and templates), navigate to the [Student Interchange webpage](#). These file formats can/will change from year to year. Student Information Systems should be up to date with each school year export and that formatted file. So, what do you do when the files do not process in Data Pipeline?

Note: If you are using Data Pipeline's Format Checker screen, shown below, it will only check the file's first line of data. For example, if you are uploading an Excel file, it will only check line 2 in your file. This tool should only be used to verify if you are on the right track with the format, but never to verify if the file will upload or not in Data Pipeline.

1. Log into Data Pipeline
2. Select File Upload
3. Select Format Checker
4. Fill out prompts.
5. Select Upload

The Results column will indicate if the first row of data (excluding the header row) passed the format for each data element.

Data Element Name	Original Length From File	Result
District Code	4	Pass
Sasid	10	Pass
Lasid	10	Pass
First Name Student	6	Pass
Middle Name Student	6	Pass
Last Name Student	6	Pass
Gender Student	2	Pass
Birth Date Student	8	Pass
Ethnicity Student	1	Pass
Race Indian Student	1	Pass
Race Asian Student	1	Pass
Race Black Student	1	Pass

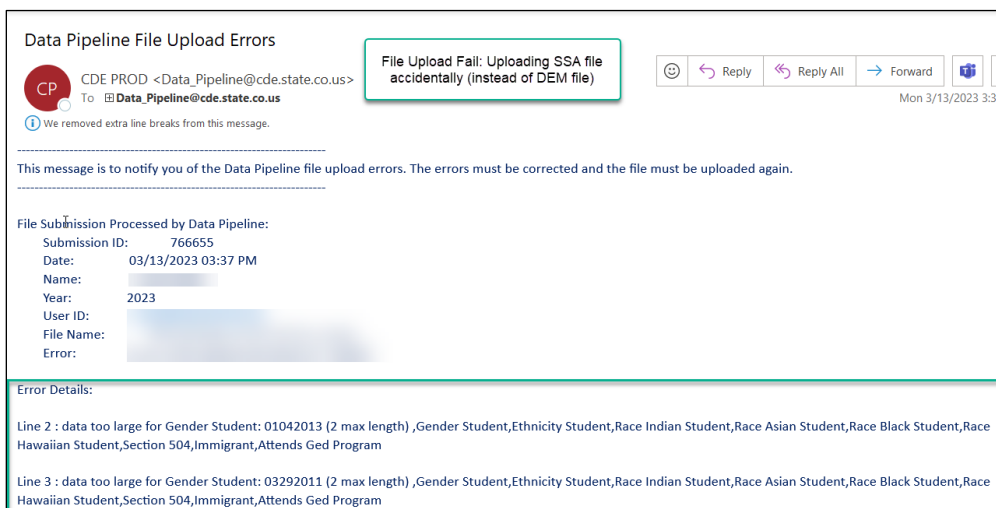


First Check: Look at the Email that was sent from Data Pipeline

Upon uploading a Student Interchange file to Data Pipeline, you should receive two emails. The first email will indicate if there are any RITS (Record Integration Tracking System) errors that relate to the file. This first email checks all data related to RITS – SASID, First Name, Middle Name, Last Name, Date of Birth, Gender. The second email will check the rest of the data elements in the file. The email with either indicate where in the file failed or will indicate an “Internal Database Error”. Below are common emails that you may encounter when uploading Student Interchange Files:

Problem: This first failed file indicates where in the file failed, line 2, line 3, etc. When you see many errors (could be thousands, depending on the record count) related to the data being too large for the specific data element, that normally means you accidentally uploaded the wrong file. For this example, below, the district accidentally uploaded a Student School Association file instead of a Student Demographic file. Data Pipeline expected the format of a Student Demographic file but received a Student School Association File instead upon upload. The Date of Birth field is appearing in the Gender field’s contents, exceeding the 2 character field.

Solution: Upload a Student Demographic file and verify that the file that you are uploading is the correct file (matches the prompt screen selection in Data Pipeline).



Problem: The second failed file is caused by certain records containing data too large for the specific data element. It appears that the students on lines 2, 338 and 396 within the Student Demographic file all have -1 in the Ethnicity Student field. The Ethnicity student field only accepts a 1 character length. The - (negative) is causing the file to fail for these three records.

Solution: Open the file you are currently submitting to Data Pipeline and navigate to the lines indicated in the Error Details statement. Update these student’s records in your Student Information System, specifically the Ethnicity Student field. Extract your Student Demographic file with the updated information and reupload into Data Pipeline.



Data Pipeline File Upload Errors

CP CDE PROD <Data_Pipeline@cde.state.co.us>
To Data_Pipeline@cde.state.co.us

File Upload Fail: Data Elements Causing File to Fail

Mon 3/13/2023

We removed extra line breaks from this message.

This message is to notify you of the Data Pipeline file upload errors. The errors must be corrected and the file must be uploaded again.

File Submission Processed by Data Pipeline:
Submission ID: 766516
Date: 03/13/2023 09:34 AM
Name: [REDACTED]
Year: 2023
User ID: [REDACTED]
File Name: [REDACTED]
Error: [REDACTED]

Error Details:
Line 2 : data too large for Ethnicity Student: -1 (1 max length) , Line 338 : data too large for Ethnicity Student: -1 (1 max length) , Line 396 : data too large for Ethnicity Student: -1 (1 max length) ,

Problem: The third failed file is flagging our “Internal Database Error”. This usually occurs when our system cannot pinpoint exactly what is failing in the file.

Solution: Jump down to the next step, below, and do a manual dive into the file.

Data Pipeline File Upload Errors

CP CDE PROD <Data_Pipeline@cde.state.co.us>
To Data_Pipeline@cde.state.co.us

File Upload Fail: Internal Database Error (could not pinpoint all errors)

Thu 3/9

We removed extra line breaks from this message.

This message is to notify you of the Data Pipeline file upload errors. The errors must be corrected and the file must be uploaded again.

File Submission Processed by Data Pipeline:
Submission ID: 766198
Date: 03/09/2023 10:10 AM
Name: [REDACTED]
Year: 2023
User ID: [REDACTED]
File Name: [REDACTED]
Error: [REDACTED]

Error Details:
Internal Database Error occurred please contact CDE.

Second Check: Verify Data Elements Are in Order on File

Problem: At times, data elements are removed or added to interchange files from one year to the next and are not removed from the Student Information System extracts. These fields will be exported from the Student Information System and cause the file to fail. First and foremost, download the file layout on the [Student Interchange webpage](#). **Note:** Be sure to download the school year matching the file you are currently working on.

The Student Demographic File is shown below as an example:

The data elements listed in order on the file layout.
 Note: If there are any changes to the file layout, there will be highlights (for additions) and redlines (for subtractions).

Name of Field	Field Length	Text Start Position	Text End Position
School District/BOCES Code*	4	1	4
Student's State ID (SASID)*	10	5	14
Local ID (LASID)	10	15	24
Student's First Name*	30	25	59
Last updated: 03/31/2022			
ge iron: 021- 2			
Name of Field	Field Length	Text Start Position	Text End Position
Student's Middle Name	30	60	89
Student's Last Name*	30	90	124
Student's Gender*	2	125	126
Student's Date of Birth*	8	127	134
Student's Ethnicity: Hispanic or Latino*	1	135	135
Student's Race: American Indian or Alaska Native*	1	136	136
Student's Race: Asian*	1	137	137
Student's Race: Black or African American*	1	138	138
Student's Race: White*	1	139	139

Solution: Open the file you are attempting to submit to Data Pipeline that is failing and check to that the data elements are in order. The data elements are normally indicated in the top row of your file.

Third Check: Check Data within File (Filtering)

Problem: If your data elements appear to be in order, then the most common reason for file failure are the data within the file causing the file to not load. Filtering allows you to quickly look through each data element quickly to verify the contents of that element. First, download the file layout on the [Student Interchange webpage](#).

Note: Be sure to download the school year matching the file you are currently working on.

The Student Demographic File is shown below, again, as an example:

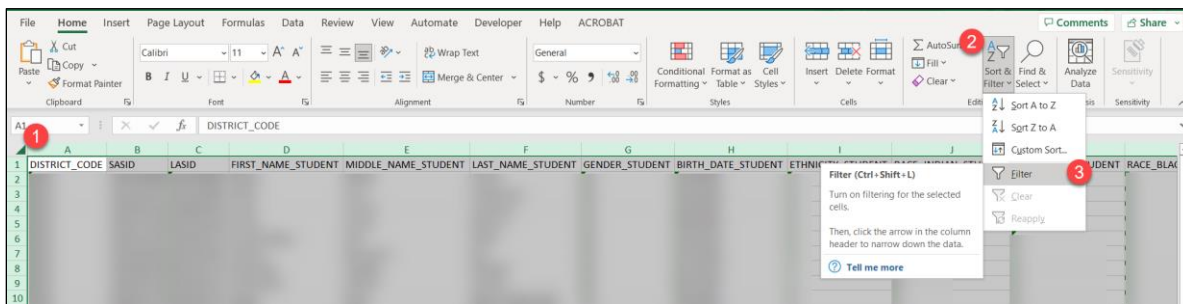
Field Length: The number of characters the element should be.
Text, CSV, Excel Information: Depending on the file you are trying to upload, this is where the data should be kept.
Examples: This is what the data element should look like within your file (associated with the Field Length).

Field	Field Length	Text Start Position	Text End Position	CSV order	Excel Column	Examples	Remarks
School District/BOCES Code*	4	1	4	1	A2	0000	
Student's State ID (SASID)*	10	5	14	2	B2	0000000000	
Local ID (LASID)	10	15	24	3	C2	0000000000	
Student's First Name*	30	25	59	4	D2	Valid name	
Last updated: 03/31/2022							
ge iron: 021- 2							
Name of Field	Field Length	Text Start Position	Text End Position	CSV order	Excel Column	Examples	Remarks
Student's Middle Name	30	60	89	5	E2	Valid name	
Student's Last Name*	30	90	124	6	F2	Valid name	
Student's Gender*	2	125	126	7	G2	01,02	
Student's Date of Birth*	8	127	134	8	H2	12312013, 08152008	Format is MMDDYYYY
Student's Ethnicity: Hispanic or Latino*	1	135	135	9	I2	0	Changed to yes-1 or no-0
Student's Race: American Indian or Alaska Native*	1	136	136	10	J2	0	Changed to yes-1 or no-0
Student's Race: Asian*	1	137	137	11	K2	0	Changed to yes-1 or no-0
Student's Race: Black or African American*	1	138	138	12	L2	0	Changed to yes-1 or no-0
Student's Race: White*	1	139	139	13	M2	0	Changed to yes-1 or no-0

The Field Length is the number of characters, lengthwise, that the element should be. For example, all School District/BOCES Codes should be 4 characters in length. The Text Start Position, Text End Position, CSV Order and Excel Column are information about where the data should be kept depending on the type of file you are uploading. For example, the School District/BOCES Code in Excel should start in A2 (skipping the first row because that is a header row). Examples are what the data should look like related to the Field Length. For instance, 0000 is the example for School District/BOCES Code. 0880 is the District Code for Denver Public Schools, summing to 4 characters in length. Another common example is when there are alpha characters within a numeric only field, i.e., SASID 123456789a. This is another common occurrence to look out for if your file failed to load into Data Pipeline.

Solution: Open the file you are attempting to submit to Data Pipeline that is failing. The example below utilizes Excel:

1. Select the green arrow on the top left corner of your data to select all data (this verifies that you will be enabling the filter function for all data).
2. Select Sort & Filter on the Home tab.
3. Select Filter.



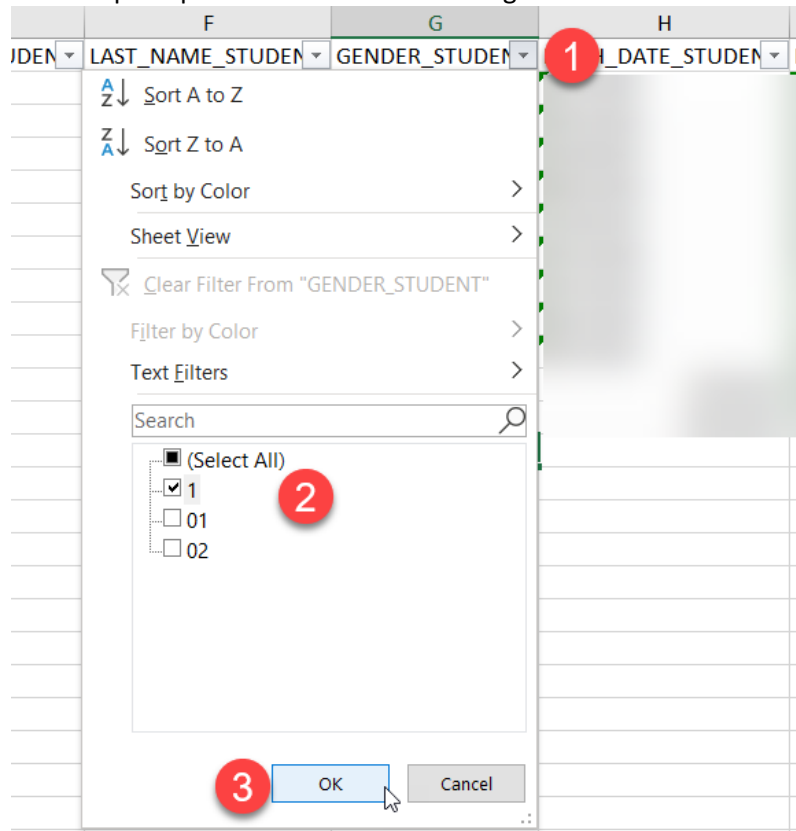
Once you complete the steps above, the header row fields should now have an arrow pointing down right beside the field name:

	A	B	C	D	E
1	DISTRICT_CODE	SASID	LASID	FIRST_NAME_STUDENT	MIDDLE_NAME_STUDENT

You will now click on each down arrow and look through to see if anything looks “out of the ordinary” for every single data element. For example, the Gender field looks like a student has a 1 character input, shown below:

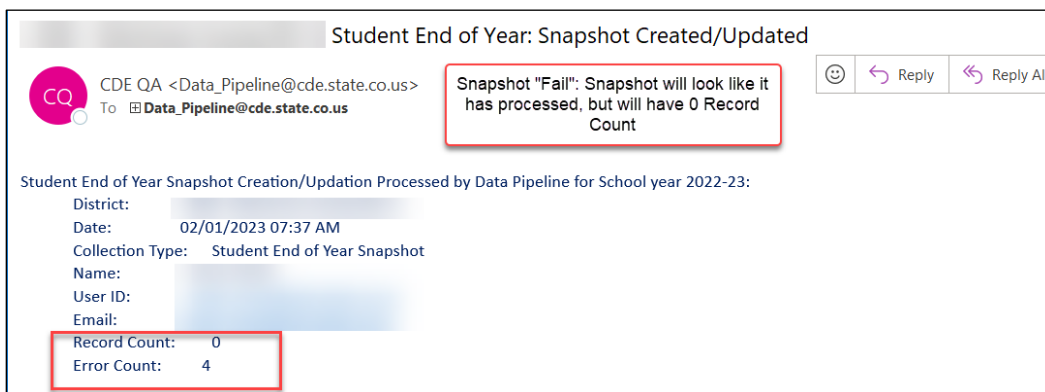
1. Select the Down Arrow next to the data field.
2. Select the data that appears incorrect, ‘1’ in the Gender data field since it isn’t 2 characters.
3. Select OK

a. This will pull up the student that is causing the file to fail



Snapshots

After uploading your Student Interchange files, it is now time to take a snapshot for the data collection you are working on. There are cases where you may see a “failed” snapshot attempt within your data set. The “failed” snapshot attempt is usually indicated by containing no records (0) within your data set. This will be indicated in the email sent from Data Pipeline:



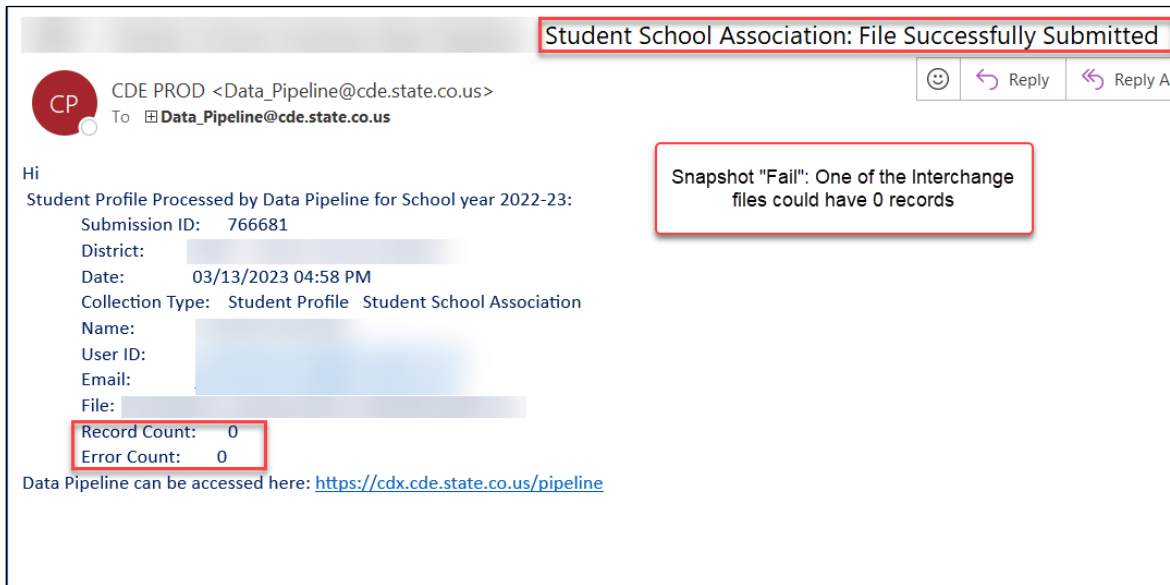
The snapshot will appear to have processed successfully, but no records will be present as indicated in the Record Count. This could be caused by various reasons, one of your Student Interchange files does not have



records within the file, one of your Student Interchange files failed to upload, or a potential tagging issue within the Student Interchange.

First Check: Check Data within Student Interchange Files (0 records in one of your Interchange Files)

Problem: Similarly, to our failed snapshot (0 records), our Student Interchange files can appear to have processed but do not have records within the file. This will be indicated by the email sent by Data Pipeline:



The Interchange file will appear to have processed successfully, but no records will be present as indicated in the Record Count. Note that the email will indicate that the file has successfully processed. This type of file prevents records to be included in our snapshots because of the file requirements that each snapshot rely on to have a complete data set.

Solution: Extract a new Student Interchange file from your Student Information System and verify date(s) of extract, and other prompts upon extract. These prompts could be preventing students from pulling into your file. Reupload the Student Interchange file in the Data Pipeline system and verify the file has processed AND it has records. Retake the snapshot and verify Record Count.

Second Check: Check if Student Interchange Files Processed

This second check within our Snapshot fail relates to our Student Interchange upload error. Please jump to section [File Uploads – Student Interchange](#) to fix the file(s) at the Interchange level.

Third Check: Check Tagged Files in Student Interchange

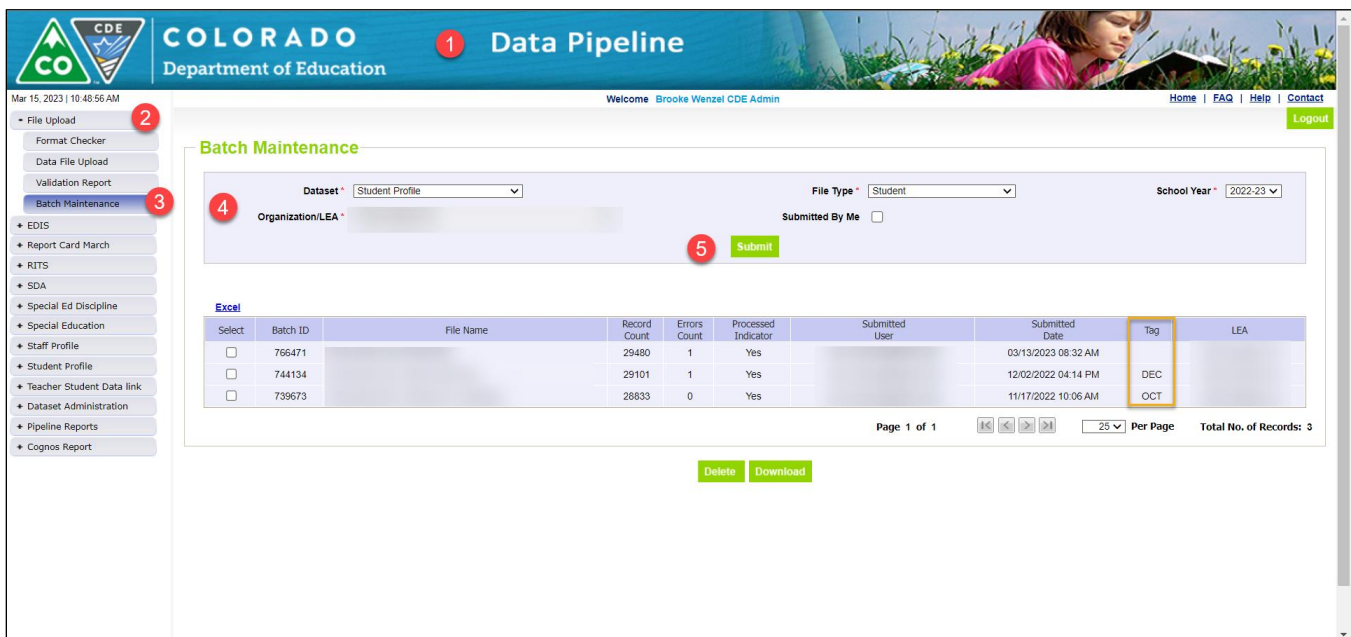
Note: This should not be an issue for a district that only uses untagged files. The third check directly relates to tagging Student Interchange Files. More information on tagging can be found [here](#) under Additional Resources. Tagging Student Interchange files is a process in which you mark a file upon upload that allows you to track information for a particular collection. The reason we offer a tagging option is because we have three, or more, collections that occur at the same time, Student October (as of October 1st), December Count (as of December 1st) and your current student values that pull into multiple snapshots. Tagging allows districts to store data for a collection and work on more recent data at the same time. For example, if a district wants to tag for Student

October (OCT), this information is accurate or timestamped as of October 1st. The district then could upload an untagged file with another timestamp as of November 5th for their current information.

Problem: If a district chooses to tag their Student Interchange files, they may have OCT Interchange files, DEC Interchange files and untagged interchange files. Tagged OCT Interchange files relate to our Student October Data Collection. Tagged DEC Interchange files relate to our December Count Collection. Untagged Interchange files relate to all other collections, Student End of Year, Attendance, etc. Problems occur when certain files are missing/incomplete upon taking a snapshot resulting in 0 records in your data.

Solution: If 0 records appear in a snapshot, that could mean that you are missing the tagged or untagged files. The best way to check to see if files have been tagged is within the Batch Maintenance screen under File Upload. The screen will have a list of all Student Demographic files uploaded (shown in our example), along with the record count, error count, whether it has processed or not, when it was processed and the tag on the file. Please note that if the Tag column is blank, that means there is no tag on the file. A screenshot of the Batch Maintenance screen is shown below:

1. Log into Data Pipeline
2. Select File Upload
3. Select Batch Maintenance
4. Fill out prompts.
5. Click Submit



Batch Maintenance

Dataset: Student Profile | File Type: Student | School Year: 2022-23

Organization/LEA: [Redacted] | Submitted By Me:

Submit

Select	Batch ID	File Name	Record Count	Errors Count	Processed Indicator	Submitted User	Submitted Date	Tag	LEA
<input type="checkbox"/>	766471	[Redacted]	29480	1	Yes	[Redacted]	03/13/2023 08:32 AM		
<input type="checkbox"/>	744134	[Redacted]	29101	1	Yes	[Redacted]	12/02/2022 04:14 PM	DEC	
<input type="checkbox"/>	739673	[Redacted]	28833	0	Yes	[Redacted]	11/17/2022 10:06 AM	OCT	

Page 1 of 1 | 25 Per Page | Total No. of Records: 3

Delete **Download**

For example, if you are receiving 0 records for a Student End of Year Snapshot, you must have untagged files for Student Demographic, Student School Association and Graduation Guidelines. Upload the missing file(s) into Data Pipeline and retake a snapshot. Another example would be if you are receiving 0 records for the Student October Snapshot and are selecting “tagged files” upon taking a Student October Snapshot. You must have a tagged (OCT) Student Demographic Interchange File and a tagged (OCT) Student School Association file.