# Troubleshooting in Data Pipeline
## Common Issues

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# 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, Graduation Guidelines, and Adjustment, 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's exports and that formatted file. So, what do you do when the files do not process in Data Pipeline?

## First Check: Look at the Email 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 will 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.
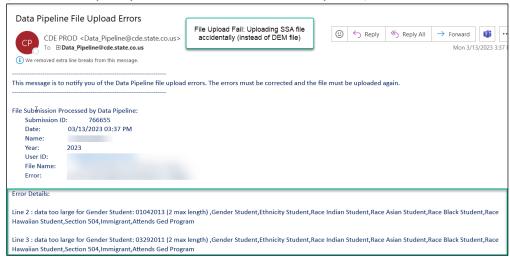
*Note: Each email example is located under the Problem and Solution.*

## Problem #1

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 #1

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).
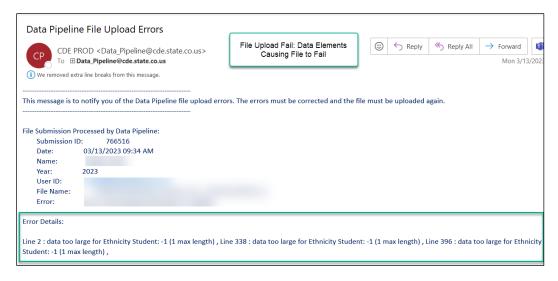


## Problem #2

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 #2

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.
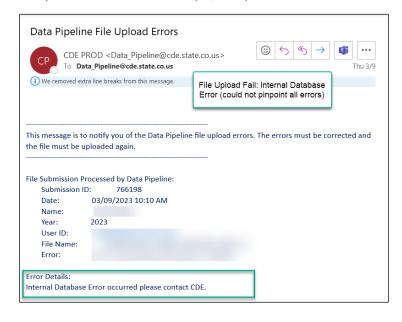


## Problem #3

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 #3

Jump down to the next step (Verify Data Elements are in Order), below, and do a manual dive into the file.
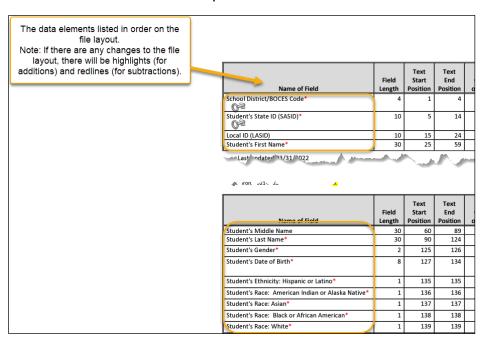
## Second Check: Verify Data Elements Are in Order on File

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.

### Problem

The data elements are out of order, thus causing the data fields to not line up with the field length expectations. 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 | |

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| 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.
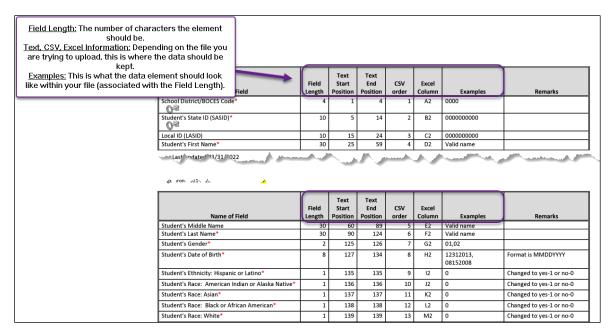
## Third Check: Check Data within File (Filtering)

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.

### Problem

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 | |

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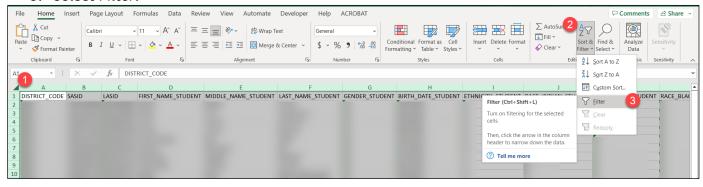| Name of Field | Field Length | Text Start Position | Text End Position | CSV order | Excel Column | Examples | Remarks |
|---|---|---|---|---|---|---|---|
| Student's Middle Name | 30 | 60 | 89 | 5 | E2 | Valid name | |
| Student's Last Name* | 30 | 90 | 124 | 6 | F2 | Valid name | |
| Student's Gender* | 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 the School District/BOCES Code. 0880 is the District Code for Denver Public Schools, summing up 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).
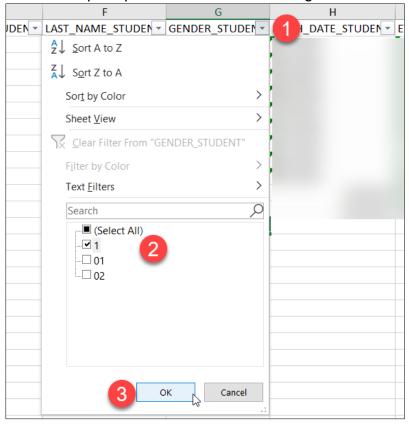2. Select Sort & Filter on the Home tab.
3. Select Filter.



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

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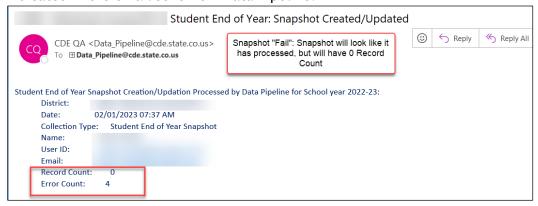    a.  This will pull up the student that is causing the file to fail.



## 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
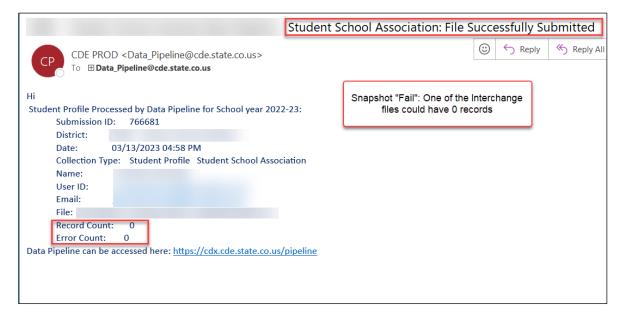
indicated in the email sent from Data Pipeline:



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

We will need to go back to our Student Interchange files for all these various checks because Student Interchange Files are our source information. The source files are the common error we see for a snapshot failure.

### 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 been successfully processed. This type of file prevents records from being 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 prevent 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 the 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

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.
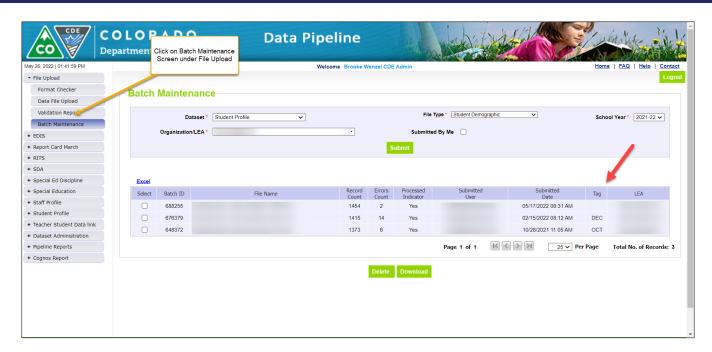
## Problem

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

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.