



Attendance

Reporting Manual

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Section 1: Overview & Phases

The purpose of the Attendance Snapshot (ATS) is to collect student-level attendance information for PK-12th grade students during a school year. This includes demographic information and student's entry and exit from public schools within a district and how long they attended that school or district. The data from this collection is used to derive attendance rates, truancy rates, and chronically absent status.

General Information

Snapshot data collections compile data from specific source files. Typically, the source files are called interchange files. The ATS snapshot is made up of two primary student interchange files with supporting information in specific circumstances from additional interchange files. The primary student interchange files are the Student Demographic (DEM) and Student School Association (SSA) files. These files come together to fill in the data fields of the ATS snapshot along with additional CDE internal data sources. If a change is needed to a data field on the ATS snapshot, the change must be made in the interchange file that feeds that data field. Then, a new snapshot is created to refresh the data in the snapshot to reflect the change on the interchange file.

At least one ATS record should be included for every student, grades PK-12, that was counted in membership at any time between July 1 and June 30 of the reported school year that has at least 10.0 Total Possible Attendance Days. This includes students that left a school/district during that time. Only students who are attending an educational program operated by the reporting school district (pupil attendance information 01 through 08) are included in the ATS snapshot. Any resident students attending an educational program that is not operated by the reporting district who are included on the district's SSA enrollment file (pupil attendance information 24-33) are by default excluded from the ATS snapshot based upon the snapshot criteria. [Review the full set of ATS snapshot criteria on the Attendance Snapshot Layout and Definitions posted on the Attendance website.](#)

Source Interchange Files

Interchange files are the source of the data used in a data snapshot. The Attendance snapshot extracts specific data elements from the files below when an ATS snapshot is created or updated. The snapshot also reflects data fields that are internally calculated within the CDE Data Pipeline system. This extracted information is combined into a new file layout reflecting the specified ATS snapshot data elements. Data is **not** automatically added to or removed from the ATS snapshot. You cannot edit ATS snapshot data directly. [Review the ATS File Layout and Definitions posted on the Attendance website for a complete list of data elements included in the Attendance Snapshot along with notes regarding the source file for the specific data element.](#)

Student Demographic (DEM)

Every student must have one record on the DEM file. Student records from the DEM file are joined to the ATS snapshot by SASID, District Code, and School year. The demographic file captures attributes of a student while they are in a district that are true regardless of the student's enrollment in a specific school, grade, or program in the district. [Review the posted Student Demographic file layout on the Student Interchange website for specific definitions of data fields and codes that comprise this file.](#)

Note: Only 'untagged' student demographic records are used for the ATS Collection. Any records with the 'OCT' or 'DEC' tag will be ignored upon creation of an ATS snapshot.

Student School Association (SSA)

Every student must have at least one record on the SSA file but may have multiple records based upon the student's enrollment history during the school year. The SSA file captures enrollment information about the school(s) a student

attends in a district throughout the school year, including details specific to that enrollment record. Student records on the SSA file must meet the following criteria to be included in the ATS snapshot.

- Primary School = 1 (yes) **AND**
- School Code is a valid public school **AND**
- Pupil Attendance Information is between 01 and 08 (Group A records only) **AND**
- Grade Level is not '002' infant **AND**
- Total Possible Attendance Days is greater than or equal to 10.0

[Review the posted Student School Association file layout on the Student Interchange website for specific definitions of data fields and codes that comprise this file.](#)

Note: Only 'untagged' student school association records are used for the ATS Collection. Any records with the 'OCT' or 'DEC' tag will be ignored upon creation of an ATS snapshot.

Special Education Interchange

Students indicated as eligible for special education services at any point during the school year are indicated as special education students on the ATS snapshot. This status is based upon records in the Special Education interchange, specifically the Participation file. Districts and Administrative Units work together to maintain the special education interchange files throughout the year as part of required special education reporting. If a district has questions about a student indicated as a special education student on their ATS snapshot, they should reach out to their special education department and/or administrative unit. [Review the posted special education interchange file layouts on the Special Education IEP Interchange website for specific definitions of data fields and codes that comprise these files along with more information about when these files are necessary.](#)

Business Rules: Errors and Warnings

Business rules are the list of errors and warnings that are checked when a file is uploaded, or a snapshot created, for a specific data collection. They help ensure data accuracy by alerting you to common coding irregularities. ATS business rules are focused on ensuring that attendance data is accurately represented for each student. Whereas student interchange business rules (file specific) address common data irregularities that apply to the several data collections that utilize the student interchange files.

Most business rules are related to a specific student's information, but some indicate a data inconsistency that applies to all data within a data field. These are sometimes referred to as 'snapshot level' or 'collection level' errors/warnings. For example, a warning triggers if no students are indicated as being Free/Reduced lunch eligible. This might indicate missing information for many students instead of just one student as it is unlikely (though not impossible) that no students within the district are Free/Reduced Lunch eligible within a given year.

Warnings

Warnings indicate possible data inconsistencies/coding issues. It is beneficial to review warnings to ensure data accurately reflects a student's educational history. A snapshot can be submitted even if warnings are present. During the ATS collection it is common for warnings to indicate a district's aggregate demographic information or instructional program information could be inaccurate.

Errors

Errors must be addressed to submit data for a given data collection such as Attendance. Errors on student interchange files will prevent a student's records from being pulled into the ATS snapshot since one of the criteria for this collection

is that the record is error free at the interchange level. Errors can be addressed by updating the related data field and reuploading your interchange files or by requesting a reporting exception.

Reporting Exceptions

Reporting Exceptions, or ‘exceptions’ refer to overriding Data Pipeline errors. CDE occasionally overrides these business rule errors because, although errors are legitimate, the case needs to be corrected to accurately reflect the student’s educational history. This occurs under unique circumstances when a student’s educational history does not follow the anticipated coding patterns outlined in the business rules for an interchange file or snapshot. The student’s coding must fall within the parameters of the data collection for an exception to be granted.

Most reporting exceptions are requested using an exception request template, found on the [ATS website](#).

Identity Management Roles

ATS data respondents must be assigned permissions to both the Attendance collection and the Student Interchange collection in Identity Management (IdM) to complete the collection. Your district’s Local Access Manager (LAM) assigns accounts/privileges in IdM for your district. [LAMs, see the IdM website for access management instructions.](#)

Application	Collection	User Role	Access Level	Notes
Pipeline	Student Interchange	LEA User	Upload and edit records for the DEM & SSA files.	Required for ATS data respondents.
Pipeline	Attendance	LEA User	Create Snapshot	Users with this role can complete the majority of the ATS collection but will need support from a LEA Approver for a few steps.
Pipeline	Attendance	LEA Approver	Create Snapshot, submit snapshot, download sign-off form	At least one person in the district must have this role.
Pipeline	Any	LEA Viewer	View CEDAR/COGNOS reports related to the assigned collection – cannot edit data.	Useful role for district staff who need access to collection related CEDAR/COGNOS reports for data validation but are not actively completing the data collection.

*Note: A user may only have **one** role per collection in IdM. Users assigned to more than one collection role will not be able to login to Data Pipeline correctly because the user roles are competing and will lock up their account.*

Regular Phase

Overview

The ‘Regular Phase’ is the primary data collection and clean-up phase for the ATS snapshot. The Regular Phase begins when the snapshot opens in April and ends in mid-July. [See the collection timeline posted on the Attendance website for specific dates and interim deadlines.](#)

LEAs should expect to meet the interim deadlines throughout this phase. Interim deadlines are designed to help LEAs stay on track for this collection as it includes a large amount of data and spans a longer reporting period than many other CDE collections.

Steps

1. Upload Student Interchange Files (DEM, SSA)

- a. Upload Special Education IEP interchange files if the district has Special Education students.
2. Resolve interchange errors.
 - a. Records with errors on the DEM or SSA files will not pull into the ATS snapshot.
3. Create an ATS snapshot.
4. Resolve ATS Snapshot errors.
 - a. Update corresponding student interchange file data to correct ATS snapshot errors.
5. Repeat steps 1 through 4 as needed.
 - a. Request reporting exceptions if needed.
6. Validate ATS data using CEDAR/COGNOS reports.
7. Submit error-free ATS snapshot by the July deadline.
 - a. ATS~LEA Approver role in Identity Management (IdM) required.

Final Review and Data Release

Final Review

LEAs have a very short final review window after the Regular Phase ends before the collection is closed. During these final review dates the ATS Collection Lead will also perform a final review of data, reaching out to individual LEAs if a discrepancy that must be addressed is found.

Superintendent Verification (Sign-Off) Form

To complete the ATS collection districts must submit a signed Superintendent Verification Form, commonly known as the 'Sign-Off' form. This form signifies that your district has verified its attendance rates and certifies that the Attendance information for your district is accurate and complete to the best of your knowledge. If a district updates their data after submitting their verification form a new form will be required with a signature dated after the last update occurred. This most commonly occurs if a district finds a last-minute update during the final review dates.

Data Release

Attendance/Truancy/Chronic Absenteeism rates generated by the ATS collection are embargoed until the official data release in August after the collection closes. Data respondents assigned the Attendance LEA User, LEA Approver, and LEA Viewer roles in IdM have access to the embargoed rate data through CEDAR/COGNOS reports. ***While the embargo is in place, these rates cannot be shared publicly.*** [See the ATS Collection Timeline for the specific planned release date for the current collection cycle.](#)

Section 2: Data Pipeline

File Upload

These steps can be used to upload any file into Data Pipeline, not just the two primary files needed to complete the ATS collection.

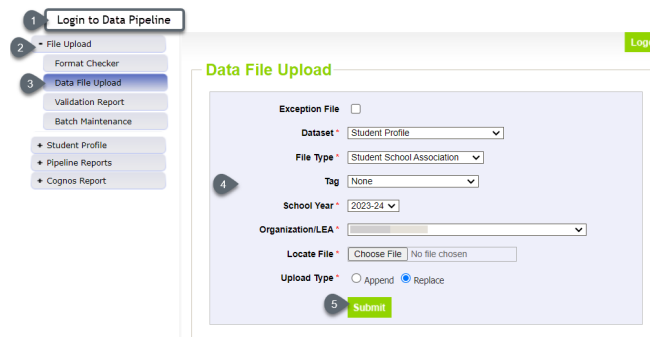
Data File Upload

The data file upload screen is where a LEA uploads the interchange files that are used to create the ATS snapshot. LEAs may upload files multiple times throughout the Attendance collection to address both interchange level errors/warnings and snapshot level errors/warnings. Most interchange files are extracted from a LEA's student information system reflecting updates to data in the student information system on a new file extract. LEAs are encouraged to use a naming convention for interchange files saved on their local system that includes the upload date so they can track changes made to these files throughout the collection.

Upon completing the file upload steps listed below, a message will be displayed across the top of the screen indicating a batch number or that there was an error uploading the file. Data Pipeline sends an email to data respondents once the file has been processed. This email will indicate the number of records uploaded into Data Pipeline and the number of errors related to this file upload. If you receive an email indicating a file upload error, double check the formatting of your file and try again. Alpha characters or symbols included in data fields that are numeric only is a common cause for file uploads to fail. This includes if an alpha character/symbol in a single data field for a single row of data.

Steps

1. Login to [Data Pipeline](#)
2. Select *File Upload*
3. Select *Data File Upload*
4. Complete the Dropdown menus, indicating the specific file you are uploading.
 - a. Dataset: (e.g., Student Profile)
 - b. File Type: (e.g., Student Demographic or Student School Association)
 - c. Tag: None (only files with a tag of none are used for the ATS collection)
 - d. School Year: ATS collection year (Note: Other years may be available, so please ensure you select the correct year)
 - e. Organization/LEA: Your district
 - f. File Name: Choose File → Select file from your computer
 - i. .csv, .xls, .xlsx (.xlsx is preferred)
 - ii. Spaces are not allowed in the file name
 - g. Upload Type = Append or Replace
 - i. Replace is recommended
5. Select *Submit*



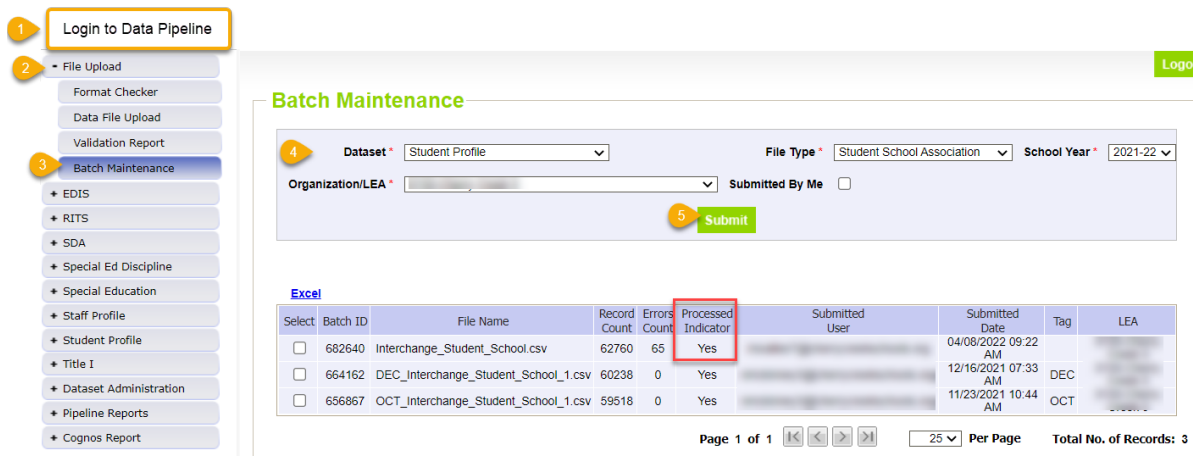
Batch Maintenance

This screen provides information regarding the status of a file upload and can be used to determine if a file has completed processing. If a file is taking a significant amount of time to process (an hour or more) and you have not received an automated email from Data Pipeline regarding the file, please contact the ATS collection lead for support.

Steps

1. Login to [Data Pipeline](#)
2. Select *File Upload*
3. Select *Batch Maintenance*
4. Complete the Dropdown menus, indicating the specific file you are reviewing.
 - a. Dataset: (e.g., Student Profile)
 - b. File Type: (e.g., Student Demographic or Student School Association)
 - a. School Year: ATS collection year (Note: Other years may be available – select the desired year)

c. Organization/LEA: Your district

5. Select *Submit*


Batch Maintenance

Dataset: Student Profile | File Type: Student School Association | School Year: 2021-22

Organization/LEA: [] | Submitted By Me:

Submit

Excel

Select	Batch ID	File Name	Record Count	Errors Count	Processed Indicator	Submitted User	Submitted Date	Tag	LEA
<input type="checkbox"/>	682640	Interchange_Student_School.csv	62760	65	Yes		04/08/2022 09:22 AM		
<input type="checkbox"/>	664162	DEC_Interchange_Student_School_1.csv	60238	0	Yes		12/16/2021 07:33 AM	DEC	
<input type="checkbox"/>	656867	OCT_Interchange_Student_School_1.csv	59518	0	Yes		11/23/2021 10:44 AM	OCT	

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

Student Profile: Snapshot

During the Attendance collection, snapshots are 'created'. Once the collection closes snapshots can no longer be created or updated.

Create

Creating a snapshot triggers the data elements from the source files (DEM, SSA) to combine with any additional information (SPED Interchange) and internal information called 'internal flags' to create the Attendance snapshot file. This also triggers the Data Pipeline system to check all the business rules for the snapshot to look for errors and warnings (or clear errors/warnings based upon updated Student Interchange files).

Notes:

- Whenever a snapshot is created, all existing Attendance snapshot records are removed and replaced by new snapshot information.
- Once a snapshot is initiated, a message will display across the top of the screen indicating a snapshot creation has been triggered and is processing. You will receive a notification email from Data Pipeline once the snapshot has completed processing. If a snapshot creation is already in progress, you will receive a message asking you to try again later.

Snapshot creation triggered and processing. A notification email will be sent upon completion.

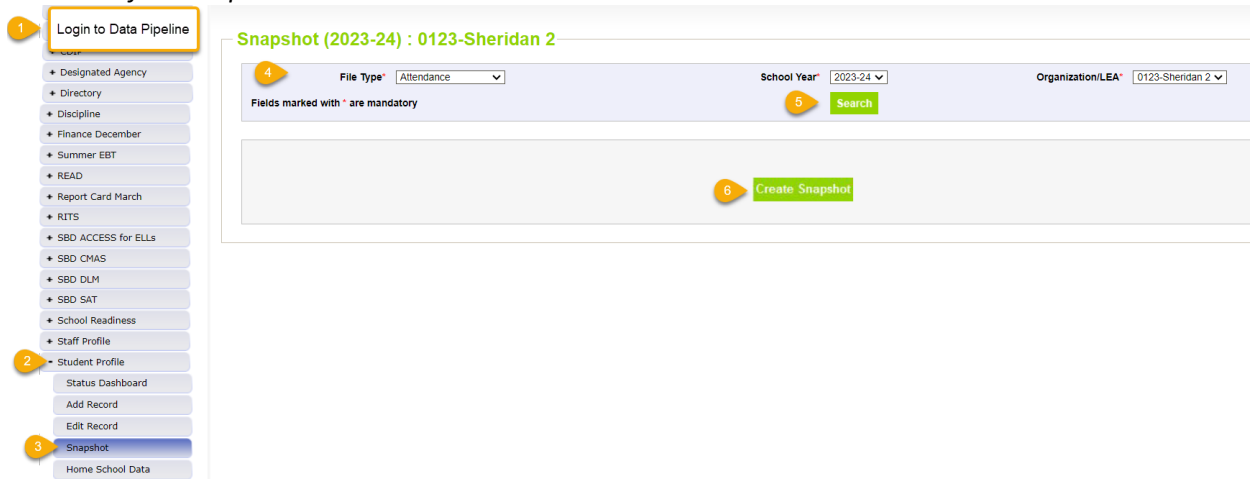
Snapshot create/update/validate already in progress. Please try again later.

- Data pipeline has a scheduled maintenance window every Tuesday afternoon at 5pm. If a snapshot is in process when the maintenance window opens sometimes it will get stuck. If you've noticed that the snapshot for your LEA takes an hour or more to process it is best to not create a snapshot after 4pm on a Tuesday and wait until Wednesday morning to create a snapshot. Reach out to the ATS collection lead if you believe your snapshot is stuck due to being in process when the maintenance window began on a Tuesday evening.

Steps

1. Login to [Data Pipeline](#)
2. Select *Student Profile*
3. Select *Snapshot*
4. Complete the drop-down menus
 - a. File Type: Attendance

- b. School Year: current school year
 - c. Organization/LEA: Your district
5. Select *Search*
 6. Select *Confirm Snapshot Creation*



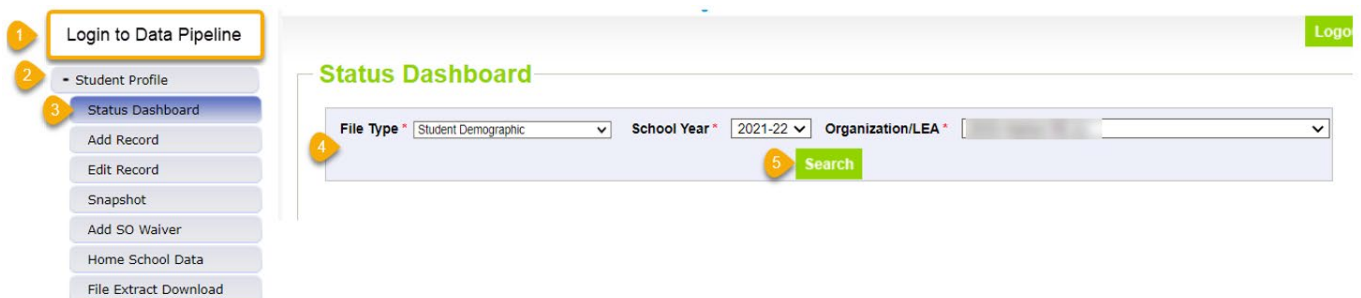
Student Profile: Additional Tools

Status Dashboard

The status dashboard shows the last date a file or snapshot was updated, the quantity of validation errors, and if data has been submitted (locked) for a collection. The status dashboard is also used by data respondents with the LEA Approver role for Attendance to submit data to CDE at the end of the collection. LEA Approvers download the Superintendent Verification (Sign-Off) form from this screen at the end of the collection phase.

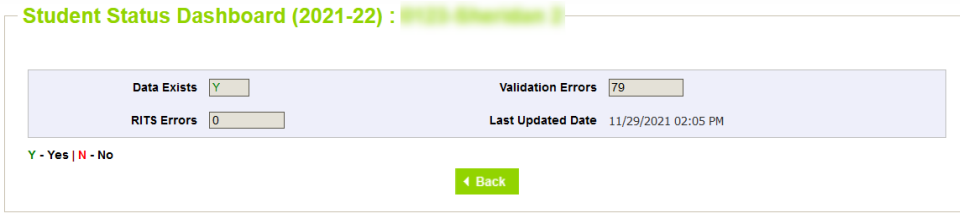
Steps

1. Login to [Data Pipeline](#)
2. Select *Student Profile*
3. Select *Status Dashboard*
4. Complete the drop-down menus
 - a. File Type: desired file (Student Demographic, Student School Association, Attendance)
 - b. School Year: current year
 - c. Organization/LEA: your district
5. Select *Search*



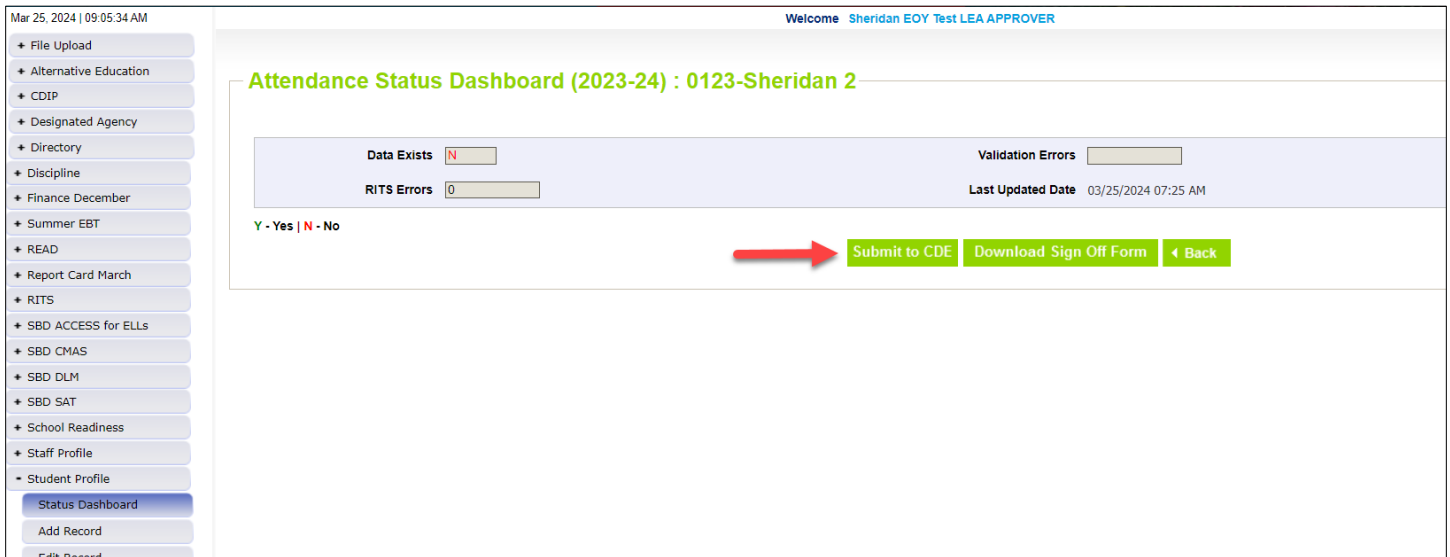
Sample Interchange File Status Dashboard Screen:

The last updated date on all student interchange files should be timestamped before the last updated date on the ATS snapshot.



Sample Attendance Snapshot Status Dashboard Screen:

There are several helpful pieces of information on this screen. A successful snapshot should show data exists = ‘Y’, a Last Updated Date with a date after the most recent interchange file upload, and a count of records. The validation errors field shows the number of errors that must be addressed during this phase. The overall status field shows if a snapshot is ‘P’ pending, ‘I’ in progress, or ‘S’ submitted.



Submit to CDE

Respondents with the LEA Approver must press the ‘submit to CDE’ button at the end of the Attendance collection to signify their district has error free snapshot data and has validated their data, completing the ATS collection. LEA Approvers can check that the snapshot has been submitted by reviewing the status dashboard screen, specifically looking for the ‘Overall Status’ to change to ‘S’ for submitted.



Download Sign-Off Form

Respondents with the LEA Approver must download the Superintendent Verification form using the Download Sign Off Form button on the status dashboard screen at the end of the ATS collection. This form is signed by the LEA’s superintendent and returned to the ATS collection lead via email. This form cannot be downloaded until the district’s data is error free.

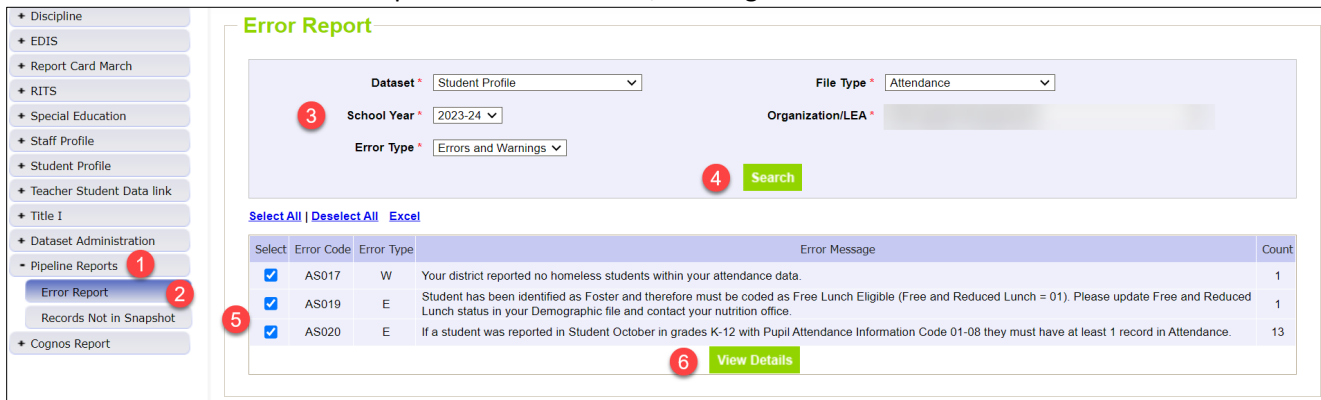


Pipeline Reports

The Data Pipeline error report is the preferred method for reviewing errors and warnings for an interchange file or the ATS snapshot. Using the pipeline error report LEAs can review a summary of all errors and warnings and a detailed list of students triggering specific business rules. Use the 'View Details' button at the bottom of the pipeline error report summary screen to view the detailed list of students triggering each error or warning. Both the summary screen and the detail error screens can be extracted as an excel document.

Steps

1. Select *Pipeline Reports*
2. Select *Error Report*
3. Complete the drop-down menus for the desired file/snapshot
 - a. Dataset: Student Profile
 - b. File Type: desired file/snapshot (Student Demographic, Student School Association, Attendance)
 - b. School Year: ATS collection year (Note: Other years may be available – select the desired year)
 - c. Organization/LEA: your district
 - d. Error Type: Desired type of Business Rules (Errors and Warnings recommended)
 - e. Tag: None (ATS does not use Tags)
4. Select *Search*
5. Use the check boxes on the left of each error/warning to select the ones you wish to view more details about
6. Click *View Details* to view more specifics on each error/warning



Error Report

Dataset * Student Profile File Type * Attendance

School Year * 2023-24 Organization/LEA *

Error Type * Errors and Warnings

Select All | Deselect All | Excel

Select	Error Code	Error Type	Error Message	Count
<input checked="" type="checkbox"/>	AS017	W	Your district reported no homeless students within your attendance data.	1
<input checked="" type="checkbox"/>	AS019	E	Student has been identified as Foster and therefore must be coded as Free Lunch Eligible (Free and Reduced Lunch = 01). Please update Free and Reduced Lunch status in your Demographic file and contact your nutrition office.	1
<input checked="" type="checkbox"/>	AS020	E	If a student was reported in Student October in grades K-12 with Pupil Attendance Information Code 01-08 they must have at least 1 record in Attendance.	13

View Details

Section 3: CEDAR/COGNOS

General

The Colorado Education Data Analysis and Reporting system (CEDAR) is a private, secure system which provides student level data to authorized users. Access to student-level data is limited to educators who have need for such data.

Often CEDAR is referred to as COGNOS since COGNOS is the software currently powering the Colorado Education Data Analysis and Reporting system (CEDAR).

Reports in CEDAR/COGNOS have multiple purposes. Some are used as operational reports to assist data respondents in looking up specific information on students, file/snapshot errors, and students missing from a snapshot due to profile errors. Other reports are used to validate data when finalizing a data collection. Many reports also provide districts with a preview of data that will be published based upon specific data collections. (i.e., attendance rates)

Accessing & Navigating CEDAR

Google Chrome is the preferred browser when working with CEDAR reports. If CEDAR is not loading properly in Chrome, clear the browser history/cookies/cache and try logging in again.

Access via Identity Management (IdM) webpage

1. [Go to the IdM webpage](#)
2. Select the CEDAR application link.
 - a. A new window will open
3. Select the 'Log in to CEDAR' button

Access via link in Data Pipeline

1. Login to [Data Pipeline](#)
2. Select the COGNOS Report button on the bottom of the navigation menu on the left.

Navigating CEDAR

[Please utilize the Attendance Cognos Reports Guide posted on the Attendance Website for more information about navigating and using CEDAR.](#)

Section 4: PII, Syncplicity and Data Uses

PII

Student Personally Identifiable Information (PII) includes, but is not limited to, information that is collected, maintained, generated, or inferred and that, alone or in combination, personally identifies an individual student or the student's parent(s) or family.

PII, as defined by federal law, also includes other information that, alone or in combination, is linked or linkable to a specific student that would allow a reasonable person in the school community, who does not have personal knowledge of the relevant circumstances, to identify the student with reasonable certainty; or information requested by a person who the educational agency or institution reasonably believes knows the identity of the student to whom the education record relates.

Some examples of PII collected by CDE may include, but are not limited to, the following list:

- A student's name
- A personal identifier such as a student ID number/SASID
- Student's date of birth
- Other demographic information
- Adequate documentation forms

Districts should always follow local policies when distributing secure files. This information must not be emailed.

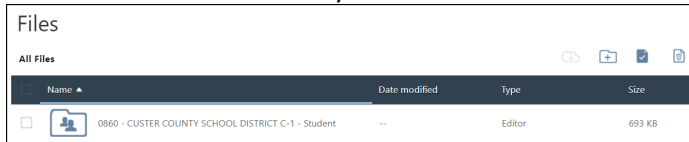
Syncplicity

Syncplicity is an online platform used for secure file sharing. Data Respondents with the LEA Approver or LEA User role for Attendance are given access to the Student Syncplicity folder for their district by the ATS Collection lead. This folder is used whenever data respondents and the ATS collection lead need to communicate regarding sensitive student data or personally identifiable information (PII). This information must not be emailed.

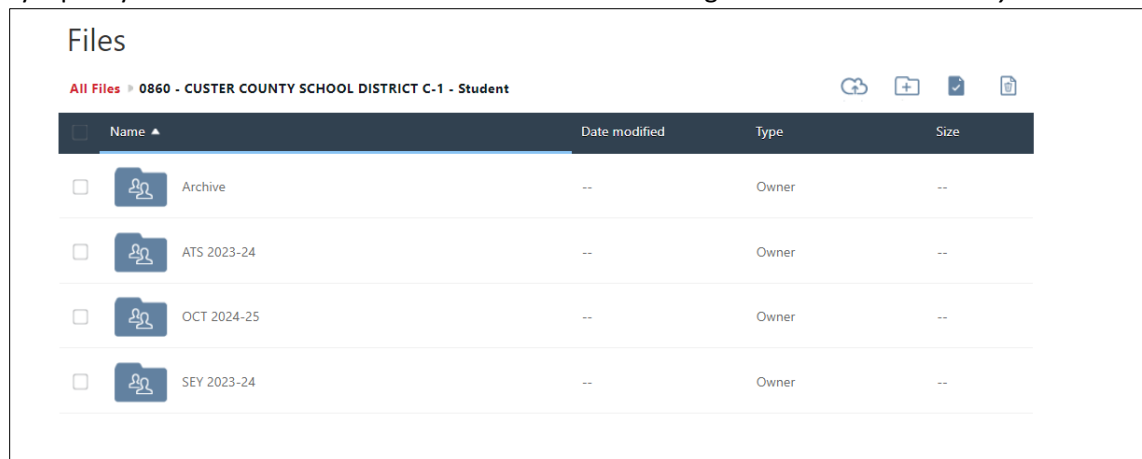
See the [Data Pipeline Syncplicity site](#) for general information regarding Syncplicity and the [Syncplicity External Users guide](#).


Steps

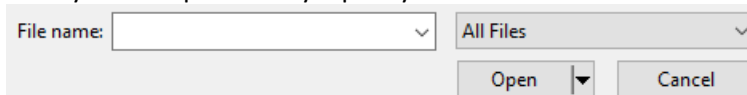
1. [Click here to access the Syncplicity website](#).
2. From the Files screen, scroll down to find your district's student folder. This folder will be named with the following naming convention: *District Number – District Name – Student*. Some data respondents will have multiple Syncplicity folders dependent on the data collections they are responsible for or other roles where they communicate PII with CDE staff. Be sure to select the Student folder when communicating with the ATS Collection lead because they will not have access to other folders.



3. Within this folder there are subfolders for each of the student collections that utilize the Student folder in Syncplicity. The ATS collection subfolder follows the naming convention *ATS school year*.



4. Click on a file to download a copy of that file to your local device or select the upload button  to upload a file from your computer to Syncplicity.



5. Email the Attendance@cde.state.co.us to inform the ATS Collection lead a document has been uploaded to Syncplicity. The ATS Collection lead does not get an automatic notification when a file is uploaded into Syncplicity.

ATS Data Use

ATS data has multiple uses including publicly reported rates, AEC SPFs, School Quality and Student Success (SQSS) indicator for ESSA identification, federal EdFacts reporting, legislative reports, and much more. [See the Mandatory Data Pipeline Collections Legislation and Uses document posted on the Data Pipeline Resources page for more information about the legislative mandates for required CDE data collections.](#)

Public Rates

The primary use of ATS data is publicly reported attendance, truancy, and chronically absent rates. These rates are posted on the Colorado Education Statistics website and utilized across many programs at CDE when reflecting upon student outcomes. See each specific rate website for information regarding the calculations used for each of these rates.

- [Attendance Statistics Website](#)

Accountability: Performance Frameworks

School and District Performance Frameworks for AECs utilize data from the ATS collection. [See the state accountability website for more information.](#)

Federal EdFacts

Attendance data is the source for our chronic absenteeism EdFacts file that Colorado submits to the U.S Department of Education. This includes data at the state, district, and school level for the total number of chronic absenteeism students in a particular category: Race, Disability, 504, EL, Homeless, FRL and Total.

Other

ATS data is used for many statutorily required reports. [These reports can be viewed on CDE's statutorily required reports website.](#) Other data uses for ATS include internal analysis designed to inform CDE program staff regarding specific programs, outcomes, and student populations to support data driven decision-making.