

**TEXAS STUDENT DATA SYSTEM**  
**Field Coordination**  
**Network**  
**Update - Validation Tool**

November 21, 2013

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## **AGENDA**

### **I. Overview**

### **II. Download and Install**

### **III. File Preparation**

### **IV. Validation Process**

### **V. Tips, Troubleshooting, & Resources**

### **VI. Questions?**

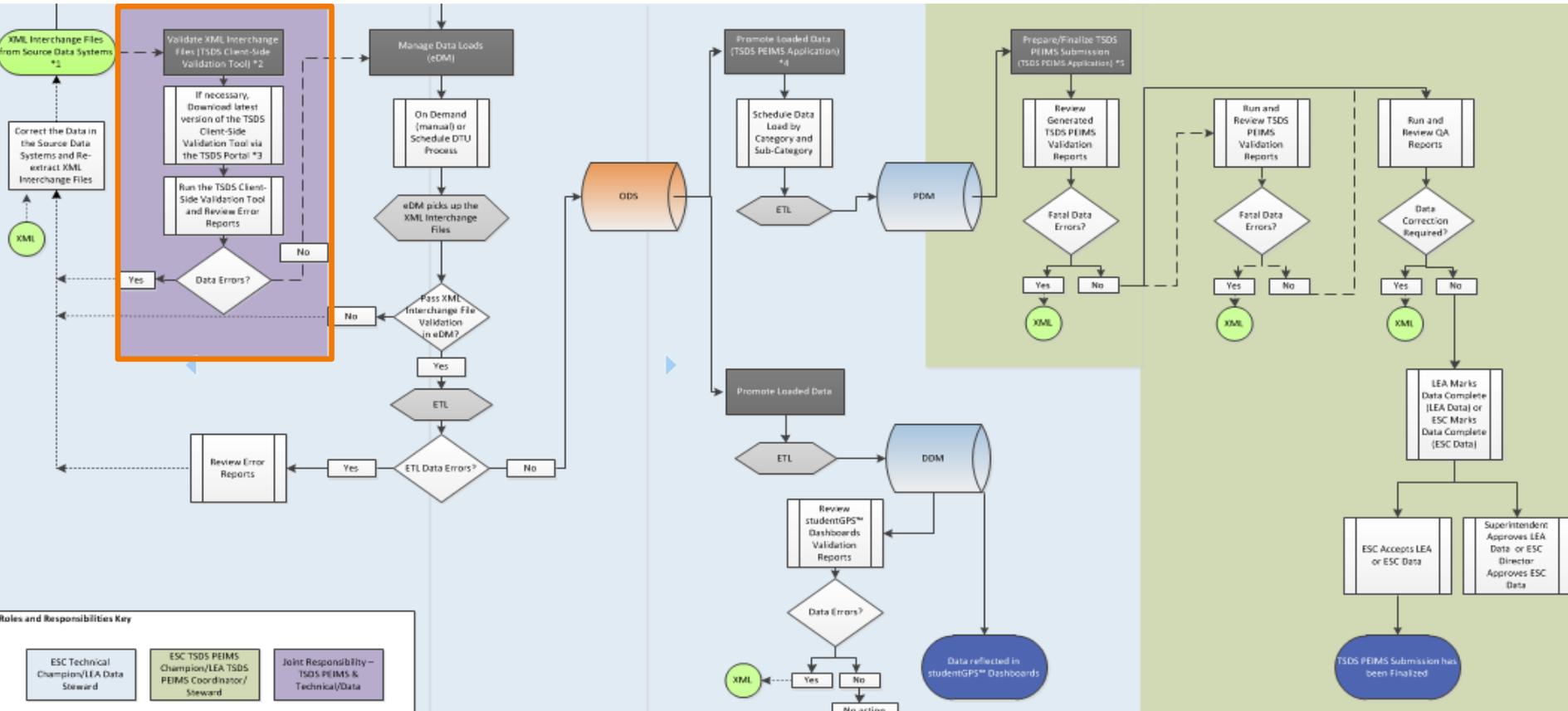


# Overview



# TSDS High Level Process Map

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# Client-Side Validation Tool Overview

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- A standalone tool available to campuses, LEAs and ESCs to validate XML interchange files against TEDS standards before submitting them
- Designed to identify data errors prior to uploading TSDS data to the ODS, providing more time to work on extracts and data quality issues
- Checks the structure of the XML interchange files and performs some business rule checks



**Download & Install**



# tsds Before Installation

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- To avoid installation problems, make sure:
  - ▣ You have access to the TSDS Portal
  - ▣ Your local system meets the minimum requirements to handle the download and installation (posted on the TSDS website at:  
[http://www.tea.state.tx.us/TSDS/Technical\\_Resources/Technical\\_Contents/Validation\\_Tool/](http://www.tea.state.tx.us/TSDS/Technical_Resources/Technical_Contents/Validation_Tool/)

# tsds Log In to the TSDS Portal

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Log in to the TSDS Portal using your TEAL user name and password, and select **Texas Student Data System Portal** from the list of applications

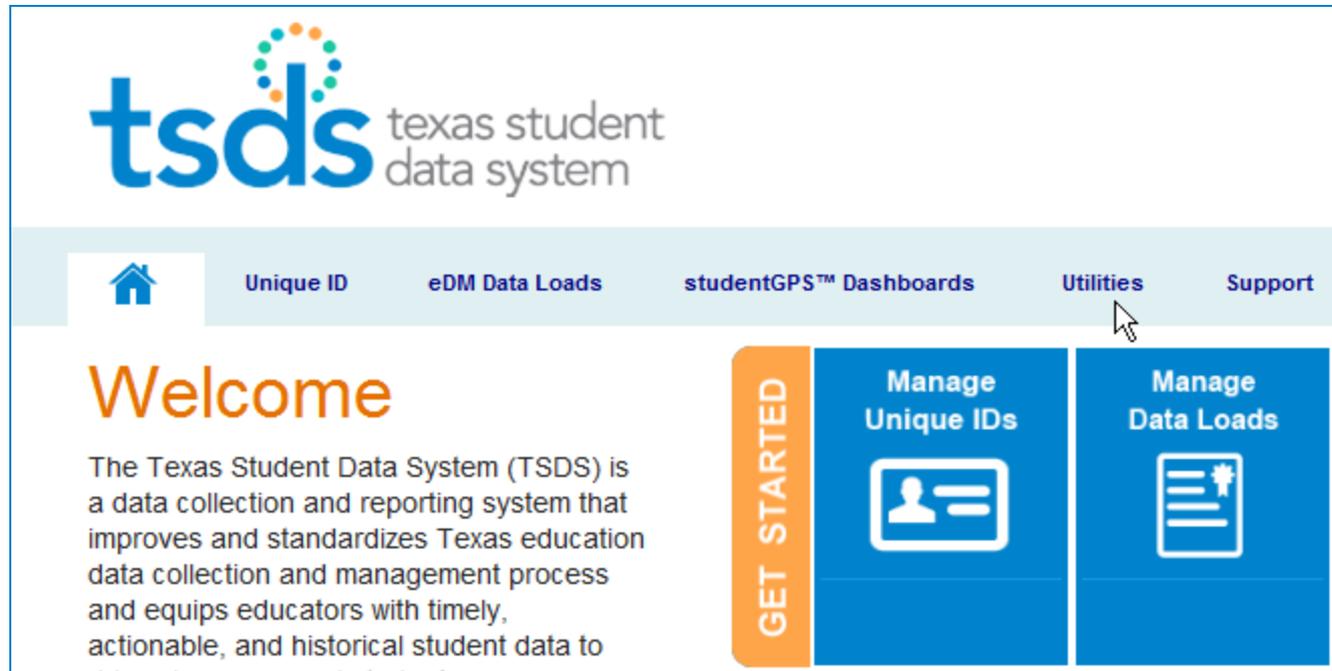
The image shows two overlapping screenshots from the Texas Education Agency (TEA) website. The background screenshot is the TEAL login page, titled "TEXAS EDUCATION AGENCY" and "TEA Login (TEAL)". It features a Texas state outline with a star, a login form with "Username:" and "Password:" fields, a "Login" button, and a "Request New User Account" link. A notice states: "NOTICE: TEA Web Applications will not be available each Sunday morning from 5:00am to 2:00pm due to routine maintenance. Please do not access your applications during this time period. You could lose data." Below the login form is a link for "Online User Training".

The foreground screenshot is the "Agency" dashboard for a user named "Welcome, Lisa McNicholas". It has a navigation bar with "Applications" highlighted. The main content area lists the "Texas Student Data System Portal" application. Below the application name, it says "Texas Student Data System Portal" and provides a link for "Add/Modify Access". The roles associated with this application are listed as: "TEA - Statewide Data Initiatives/PEIMS Roles: Uniq-ID LEA, PEIMS Data Submitter, PEIMS Data Sched/Loader, PEIMS Data Completer, PEIMS Data Approver, PEIMS Data Acceptor, ODS Data Loader, TSDS studentGPS Dashboards, TSDS studentGPS Dashboards Configurator".

# tsds Portal - Utilities

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- In the Portal, click the **Utilities** link.



The screenshot shows the TSDS Portal interface. At the top left is the TSDS logo with the text "texas student data system". Below the logo is a navigation bar with a home icon and links for "Unique ID", "eDM Data Loads", "studentGPS™ Dashboards", "Utilities", and "Support". A mouse cursor is hovering over the "Utilities" link. Below the navigation bar, there is a "Welcome" section with a paragraph of text: "The Texas Student Data System (TSDS) is a data collection and reporting system that improves and standardizes Texas education data collection and management process and equips educators with timely, actionable, and historical student data to". To the right of the welcome text is a "GET STARTED" vertical banner. Below the banner are two blue buttons: "Manage Unique IDs" with a person icon and "Manage Data Loads" with a document icon.

- Click to download the validation tool and begin the installation process.

### Download Utilities

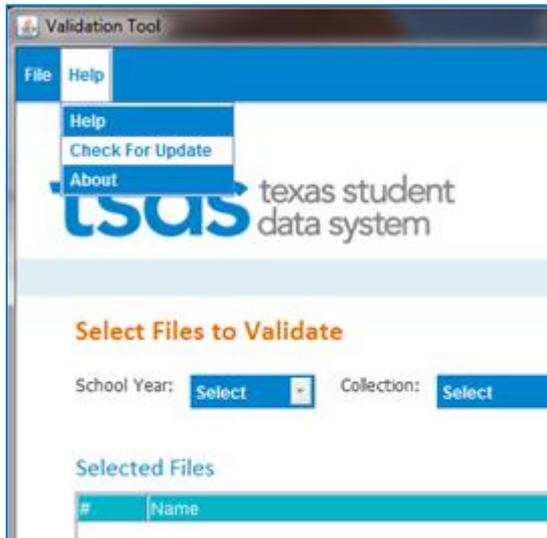


Validation Tool

#### Validation Tool

The new validation tool helps identify data errors prior to loading, enhancing data quality in the long-term and saving time during data submission.

[Download Validation Tool](#)



- Receive automatic notification when a newer version of the Validation Tool is available
- Or select **Check for Update** from menu



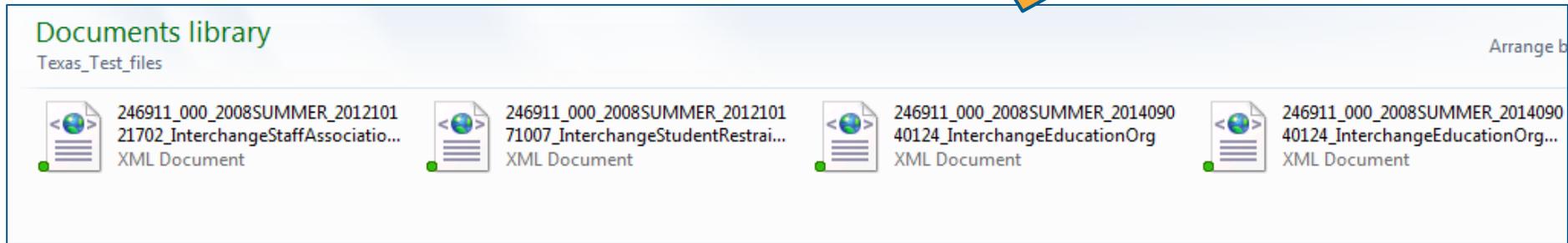
# File Preparation

- ❑ The TSDS system is configured to accept zip files with individual XML Interchange Files – cannot accept zip files with *folders* of XML Interchange Files

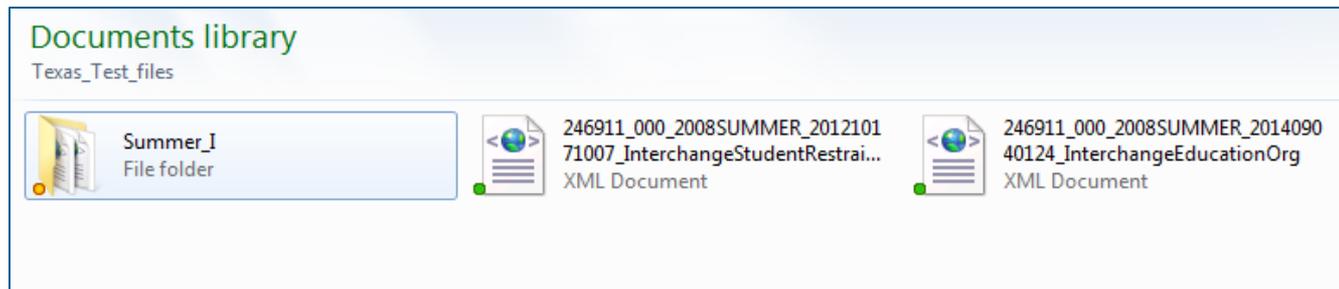
# tsds Eliminate Folders

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- This set of files OK to zip and submit:



- This can't be zipped and submitted due to the folder:



- The XML Interchange file name must meet the TEDS naming convention or will be removed from the list
  - ▣ Manually correct the name if needed
  - ▣ Notify the vendor to correct the file name standard in future extractions



# Naming Convention Elements

- For an interchange file to be processed correctly:
  - ▣ The correct organization and data collection must be identifiable
  - ▣ There must be an underscore ( \_ ) between each element in the file name

Description	District Code	-	Campus ID	-	Collection Code	-	Timestamp	-	Interchange
Position	1-6	7	8-10	11	12-20	21	22-33	34	35*
Length	6		3		9		12		*



# Naming Convention Definitions

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Title Element	Description
District Code	The District (LEA) Code for which the data is being uploaded
Campus ID	The Campus ID if it is campus data otherwise “000” for district data
Collection Code	A character string that identifies the data collection. The first four characters of the Collection Code will be the ending year of the school year. The next four characters of the collection code will indicate the type of the data submitted.

Title Element	Description
Collection Code	<p>These values currently are:</p> <ul style="list-style-type: none"> <li>• “FALL1” which represents the PEIMS Fall First Submission</li> <li>• “FALL2” which represents the PEIMS Fall Resubmission</li> <li>• “FALL3” which represents the PEIMS Fall Working Collection</li> <li>• “MDYR1” which represents the PEIMS Mid-Year First Submission</li> <li>• “MDYR2” which represents the PEIMS Mid-Year Resubmission</li> <li>• “MDYR3” which represents the PEIMS Mid-Year Working Collection</li> <li>• “SUMR1” which represents the PEIMS Summer First Submission</li> <li>• “SUMR2” which represents the PEIMS Summer Resubmission</li> <li>• “SUMR3” which represents the PEIMS Summer Working Collection</li> <li>• “EXYR1” which represents the PEIMS Extended-Year First Submission</li> <li>• “EXYR2” which represents the PEIMS Extended-Year Resubmission</li> <li>• “EXYR3” which represents the PEIMS Extended-Year Working Collection</li> <li>• “TSDS” which represents data submissions including studentGPS™ data</li> </ul>



# Naming Convention Definitions

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Title Element	Description
Timestamp	The timestamp is a date in YYYYMMDDHHMM format (e.g. 201406021015). The Timestamp shall be a system generated value at the time the data is extracted.
Interchange	The interchange is the name of the interchange being submitted



# Naming Convention Sample

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- The correct naming convention follows the format of these examples:

## Samples

### Sample 1 Definition:

2013-2014 Fall First Submission Collection Staff Association Interchange for Region XIII

### Sample 1 Name:

227950\_000\_2014FALL1\_201310271015\_InterchangeStaffAssociationExtension.xml

### Sample 2 Definition:

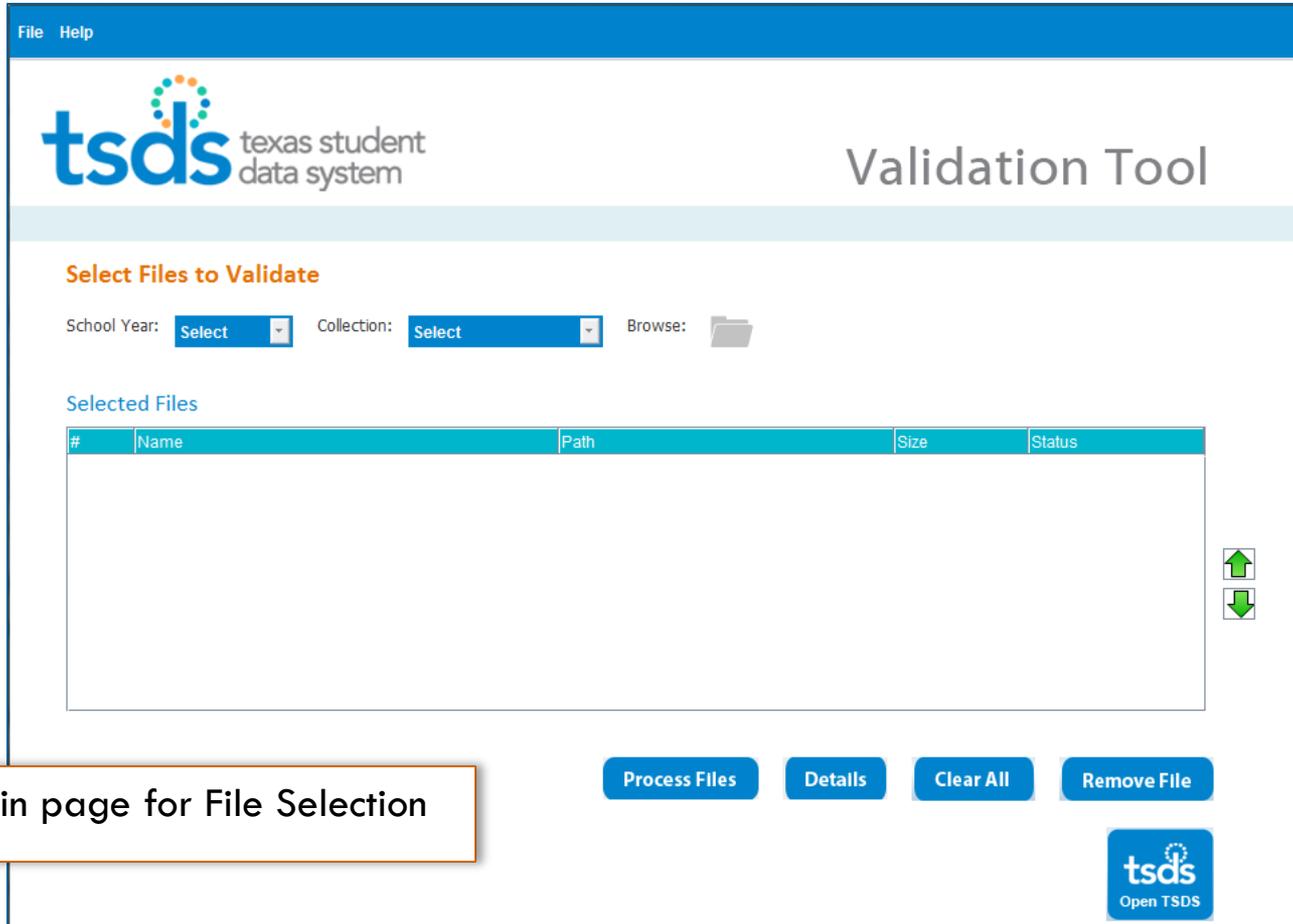
2013-2014 Fall First Submission Collection Student Interchange for Austin ISD

### Sample 2 Name:

227901\_000\_2014FALL1\_201310271015\_InterchangeStudentExtension.xml



# Validation Process



The screenshot shows the 'Validation Tool' interface. At the top left is the 'tsds' logo and 'texas student data system' text. To the right is the title 'Validation Tool'. Below this is a section titled 'Select Files to Validate'. It contains two dropdown menus for 'School Year' and 'Collection', both currently set to 'Select', and a 'Browse:' button with a folder icon. Below these is a table titled 'Selected Files' with columns for '#', 'Name', 'Path', 'Size', and 'Status'. The table is currently empty. To the right of the table are two green arrow icons, one pointing up and one pointing down. At the bottom of the interface are four buttons: 'Process Files', 'Details', 'Clear All', and 'Remove File'. In the bottom right corner is a 'tsds Open TSDS' logo.

 Main page for File Selection

File Help



## Validation Tool

**Select Files to Validate**

School Year: Select Collection: Select Browse: 

Selected Files

#	Name	Path	Size	Status
	Select			
	2011-2012			
	2012-2013			
	2013-2014			
	2014-2015			


Process Files
Details
Clear All
Remove File



Open TSDS

Select School Year from the list

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File Help



texas student data system

## Validation Tool

**Select Files to Validate**

School Year:  Collection:  Browse: 

Selected Files

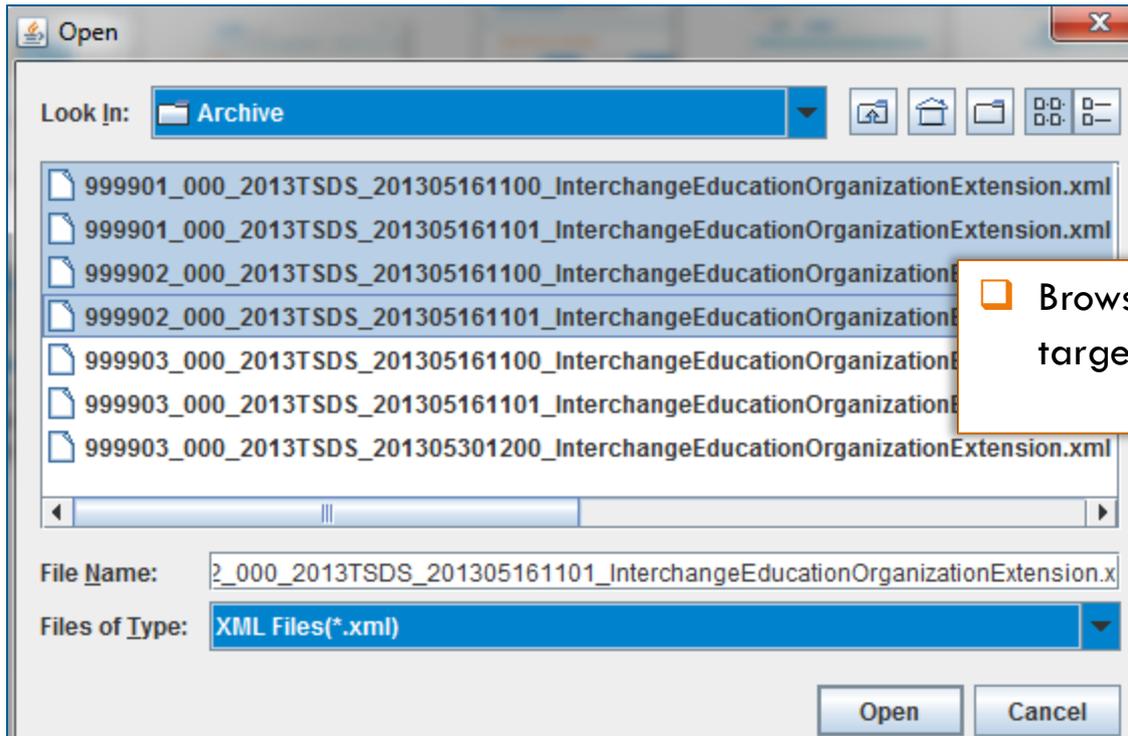
#	Name	Path	Size	Status

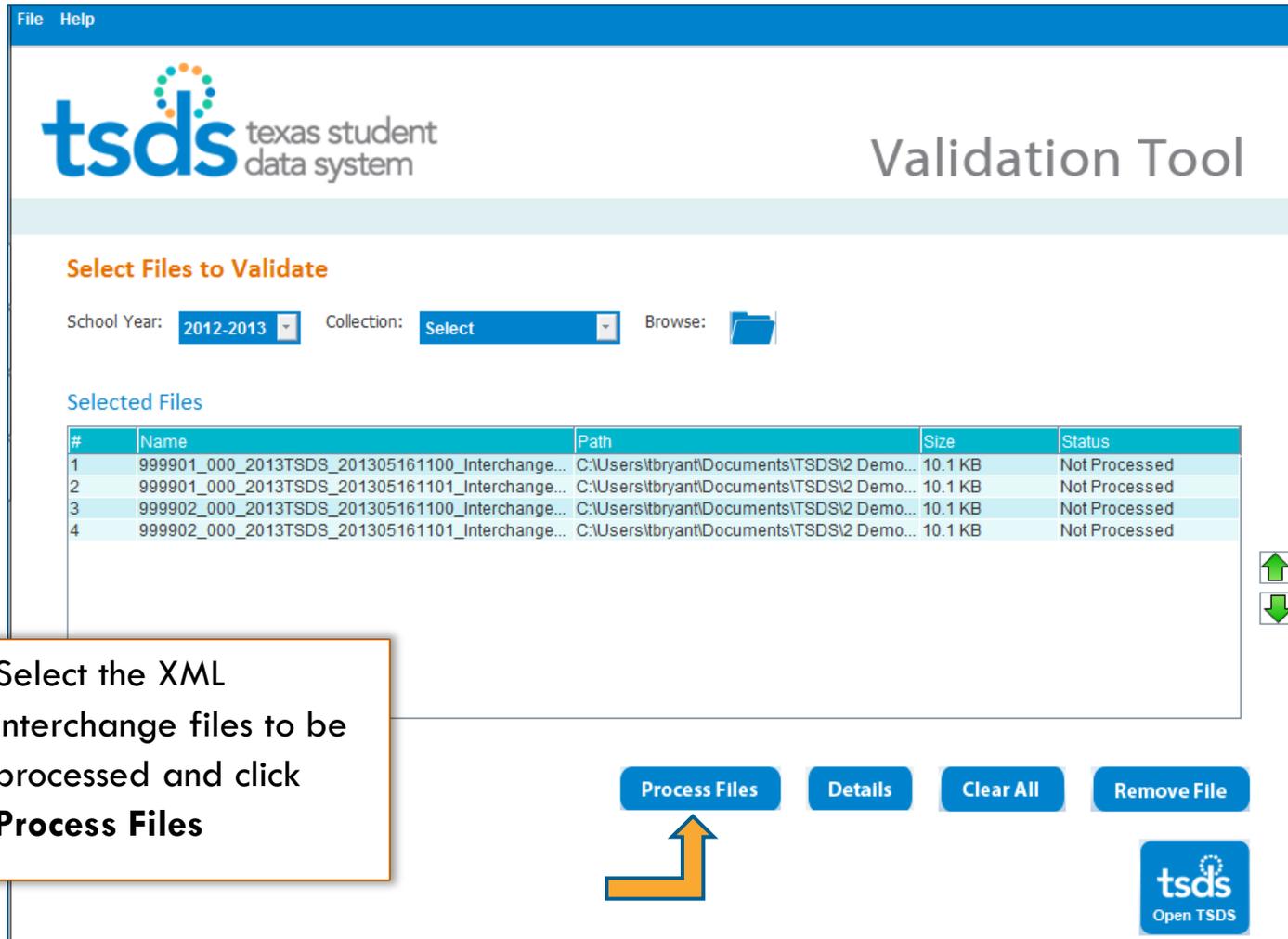



Open TSDS

Select the appropriate Collection



Browse to locate the target file



The screenshot shows the 'Validation Tool' interface. At the top, there is a header with the 'tsds' logo and 'texas student data system' text. Below this, the title 'Validation Tool' is displayed. A section titled 'Select Files to Validate' contains a 'School Year' dropdown set to '2012-2013', a 'Collection' dropdown set to 'Select', and a 'Browse' button with a folder icon. Below this is a 'Selected Files' section containing a table with 4 rows of file information. At the bottom of the interface are buttons for 'Process Files', 'Details', 'Clear All', and 'Remove File'. A callout box on the left points to the 'Process Files' button.

**Select Files to Validate**

School Year:  Collection:  Browse: 

**Selected Files**

#	Name	Path	Size	Status
1	999901_000_2013TSDS_201305161100_Interchange...	C:\Users\bryant\Documents\TSDS\2 Demo...	10.1 KB	Not Processed
2	999901_000_2013TSDS_201305161101_Interchange...	C:\Users\bryant\Documents\TSDS\2 Demo...	10.1 KB	Not Processed
3	999902_000_2013TSDS_201305161100_Interchange...	C:\Users\bryant\Documents\TSDS\2 Demo...	10.1 KB	Not Processed
4	999902_000_2013TSDS_201305161101_Interchange...	C:\Users\bryant\Documents\TSDS\2 Demo...	10.1 KB	Not Processed

**Process Files** **Details** **Clear All** **Remove File**



Select the XML Interchange files to be processed and click **Process Files**

- The TSDS Client-Side Validation Tool confirms that:
  - ▣ The XML Interchange Files adhere to the collection specific validation package rules
  - ▣ The data in the interchange file complies with the TEDS Section 3

- TEDS Section 3 checks include:
  - Data length
  - Required field
  - Data type
  - Complex type

- TEDS Section 4 Checks provides the description of code tables, including:
  - Code Value
  - Translation

File Help



## Validation Tool

**Select Files to Validate**

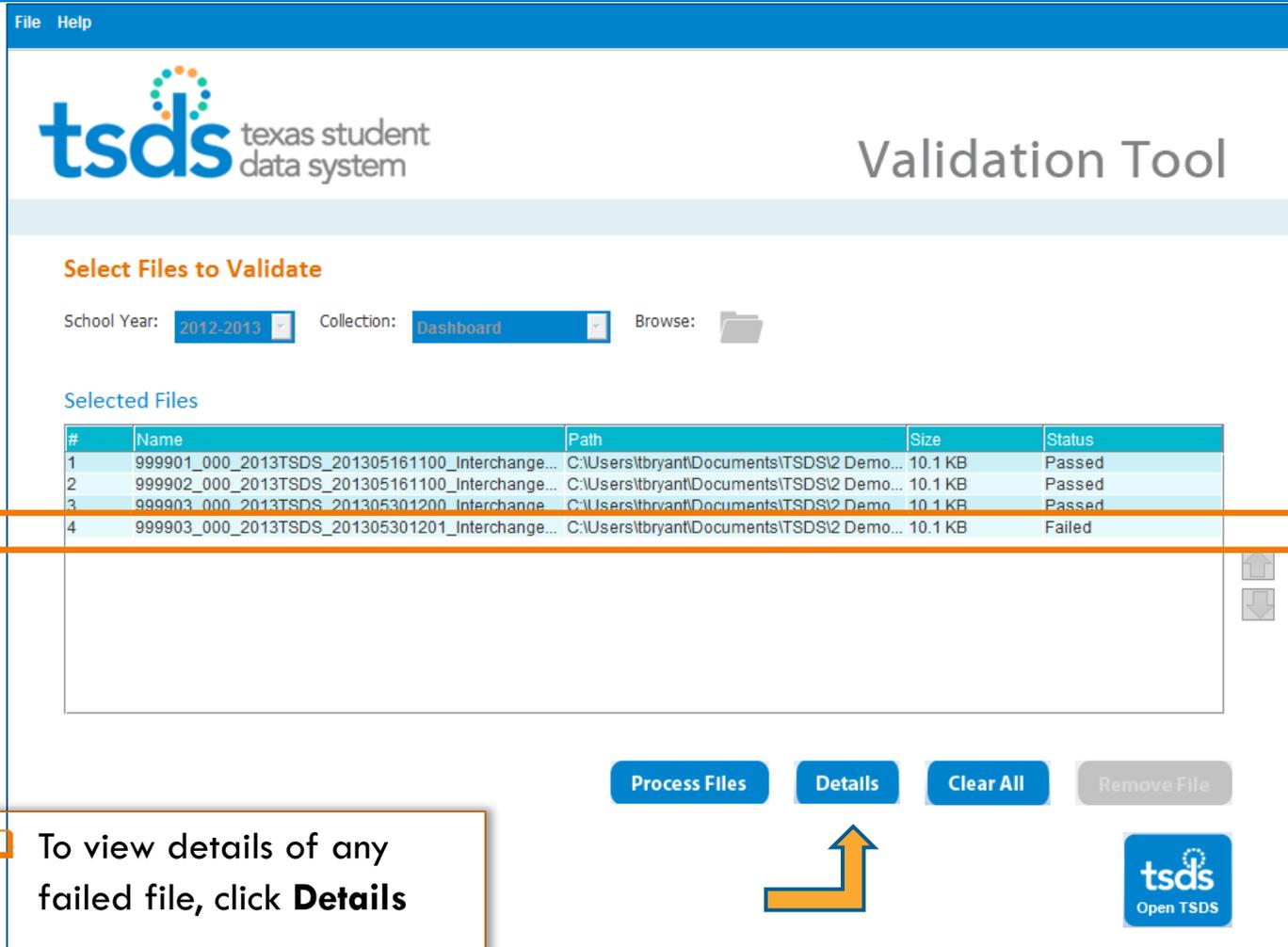
School Year:  Collection:  Browse: 

Selected Files

#	Name	Path	Size	Status
1	999901_000_2013TSDS_201305161100_Interchange...	C:\Users\lbryant\Documents\TSDS\2 Demo...	10.1 KB	Passed
2	999901_000_2013TSDS_201305161101_Interchange...	C:\Users\lbryant\Documents\TSDS\2 Demo...	10.1 KB	Passed
3	999902_000_2013TSDS_201305161100_Interchange...	C:\Users\lbryant\Documents\TSDS\2 Demo...	10.1 KB	Passed
4	999902_000_2013TSDS_201305161101_Interchange...	C:\Users\lbryant\Documents\TSDS\2 Demo...	10.1 KB	Passed



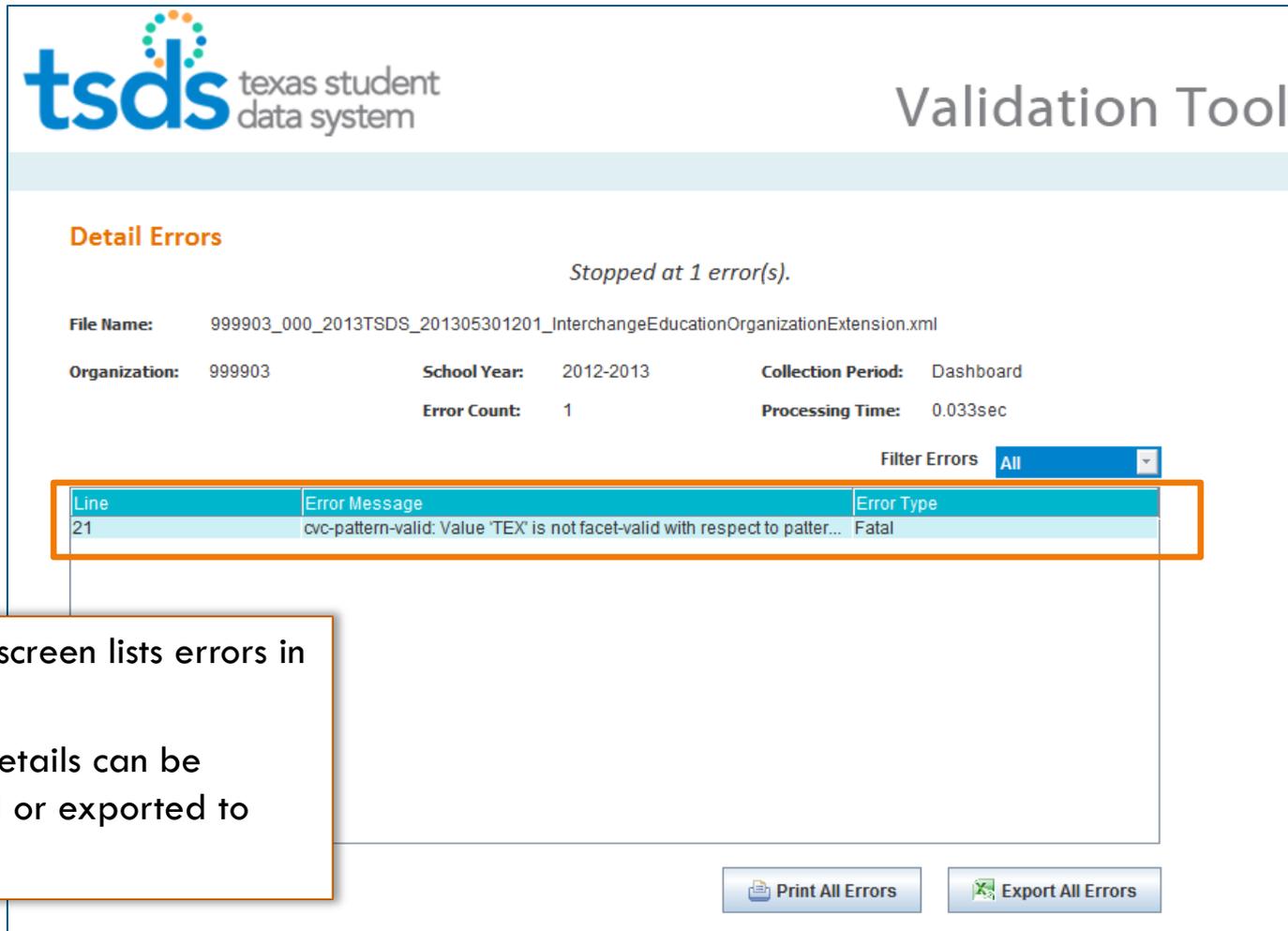
The Status column indicates *Passed* or *Failed* for each file



The screenshot shows the 'Validation Tool' interface. At the top, there is a 'File Help' menu and the 'tsds texas student data system' logo. The main heading is 'Validation Tool'. Below this, there is a section 'Select Files to Validate' with dropdown menus for 'School Year' (set to 2012-2013) and 'Collection' (set to Dashboard), and a 'Browse' button. A table titled 'Selected Files' contains the following data:

#	Name	Path	Size	Status
1	999901_000_2013TSDS_201305161100_Interchange...	C:\Users\bryant\Documents\TSDS\2 Demo...	10.1 KB	Passed
2	999902_000_2013TSDS_201305161100_Interchange...	C:\Users\bryant\Documents\TSDS\2 Demo...	10.1 KB	Passed
3	999903_000_2013TSDS_201305301200_Interchange...	C:\Users\bryant\Documents\TSDS\2 Demo...	10.1 KB	Passed
4	999903_000_2013TSDS_201305301201_Interchange...	C:\Users\bryant\Documents\TSDS\2 Demo...	10.1 KB	Failed

Below the table are buttons for 'Process Files', 'Details', 'Clear All', and 'Remove File'. An orange arrow points from the 'Details' button to a callout box. The callout box contains the text: 'To view details of any failed file, click **Details**'.



**tsds** texas student data system

## Validation Tool

### Detail Errors

*Stopped at 1 error(s).*

**File Name:** 999903\_000\_2013TSDS\_201305301201\_InterchangeEducationOrganizationExtension.xml

**Organization:** 999903      **School Year:** 2012-2013      **Collection Period:** Dashboard

**Error Count:** 1      **Processing Time:** 0.033sec

Filter Errors: All

Line	Error Message	Error Type
21	cvc-pattern-valid: Value 'TEX' is not facet-valid with respect to patter...	Fatal

Print All Errors      Export All Errors

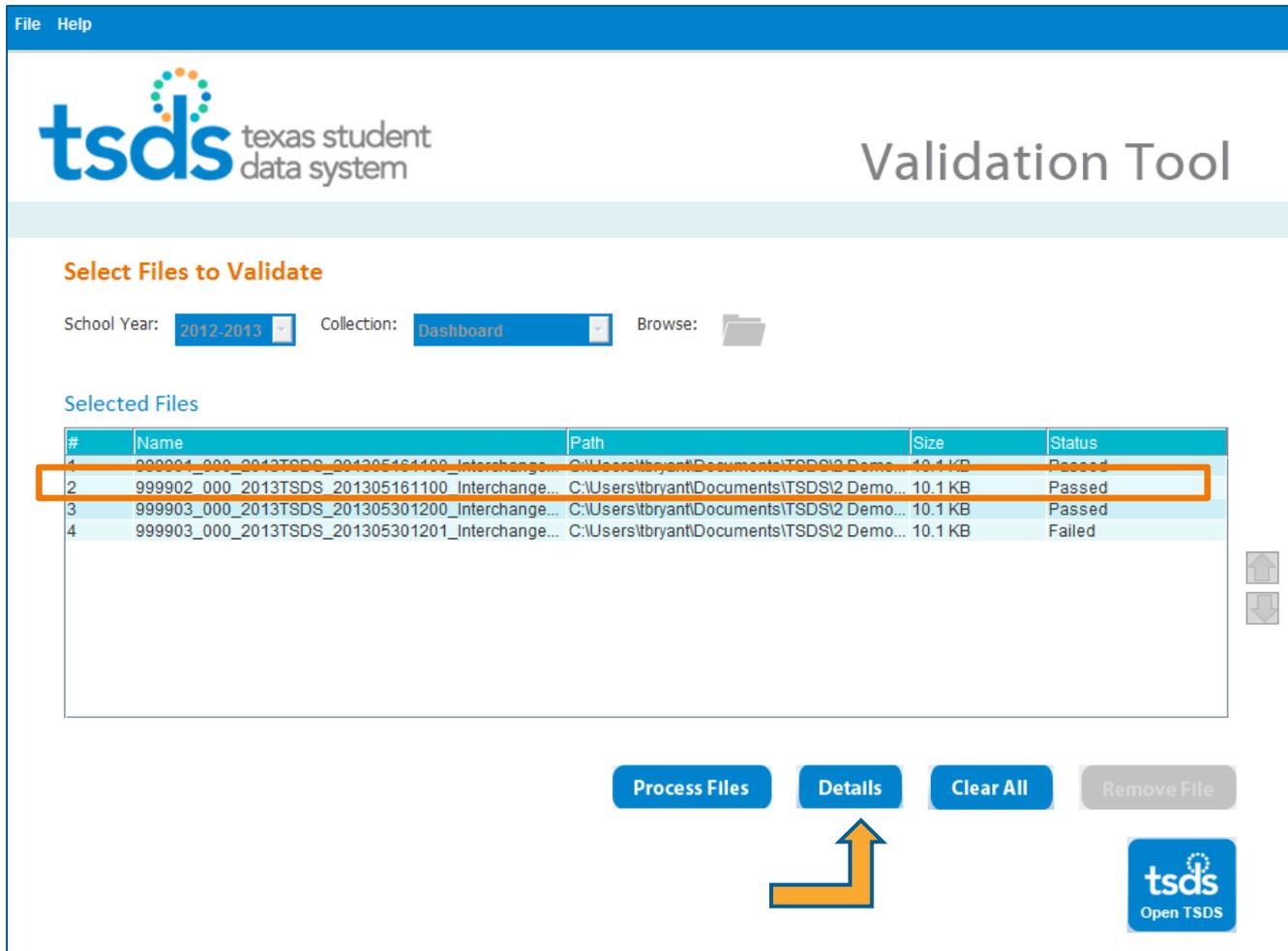
- ❑ A new screen lists errors in the file
- ❑ Error details can be printed or exported to Excel

Details delineate –

- Row
- XML Interchange
- Corresponding TEDS element
- Error
- Message and the Error Type

Line	Error Message	Error Type
21	cvc-pattern-valid: Value 'TEX' is not facet-valid with respect to patter...	Fatal

- Error Types are *Fatal*, *Warning*, and *Special Warning*



File Help

**tsds** texas student data system

## Validation Tool

**Select Files to Validate**

School Year:  Collection:  Browse: 

**Selected Files**

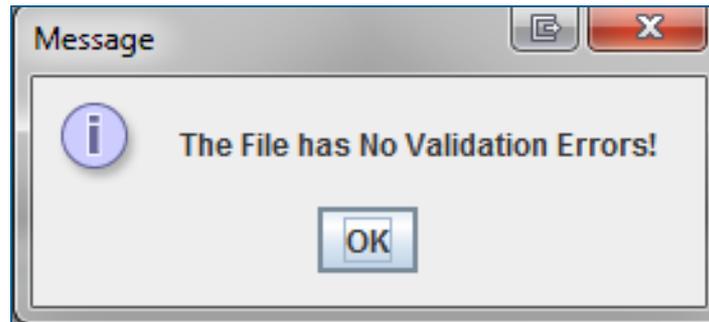
#	Name	Path	Size	Status
1	999901_000_2013TSDS_201305161100_Interchange...	C:\Users\bryant\Documents\TSDS\2 Demo...	10.1 KB	Passed
2	999902_000_2013TSDS_201305161100_Interchange...	C:\Users\bryant\Documents\TSDS\2 Demo...	10.1 KB	Passed
3	999903_000_2013TSDS_201305301200_Interchange...	C:\Users\bryant\Documents\TSDS\2 Demo...	10.1 KB	Passed
4	999903_000_2013TSDS_201305301201_Interchange...	C:\Users\bryant\Documents\TSDS\2 Demo...	10.1 KB	Failed

Process Files Details Clear All Remove File



any file Passed,

- A pop-up message indicates the selected file has no errors
- Click **OK** to exit the screen





# Tips, Troubleshooting, & Resources

- If you experience problems executing a download or version update, it can indicate:
  - ▣ The network is experiencing connectivity issues; you will need to retry the update later when connectivity has been restored.
  - ▣ There is not enough disk space; clear disk space and attempt the version update when disk space has been cleared.

- Verify there is enough disk space on the local machine. Remove unnecessary files to free up space.
- If the validation tool freezes the during the process:
  - Terminate the program and start the process again
  - If it freezes a second time on the same file, try a new file
  - If the new file succeeds, regenerate the original file from the source system and run it again

- Guided activity on how to run the Validation Process and check the Status of the XML Interchange Files:
  - [http://jukebox.esc13.net/teadeveloper02/TSDS\\_Sims/TSDS\\_Client\\_Side\\_Validation\\_Tool/TSDS\\_Client\\_Side\\_Validation\\_Tool.htm](http://jukebox.esc13.net/teadeveloper02/TSDS_Sims/TSDS_Client_Side_Validation_Tool/TSDS_Client_Side_Validation_Tool.htm)
- Client-Side Validation Tool Technical Resources from TSDS webpage:
  - [http://www.tea.state.tx.us/TSDS/Technical\\_Resources/Technical\\_Content/Validation\\_Tool/](http://www.tea.state.tx.us/TSDS/Technical_Resources/Technical_Content/Validation_Tool/)
- TEDS information on the TSDS Website:
  - [http://www.tea.state.tx.us/TSDS/TEDS/Texas\\_Education\\_Data\\_Standards/](http://www.tea.state.tx.us/TSDS/TEDS/Texas_Education_Data_Standards/)

Term	Definition
EDW (Education Data Warehouse)	This is the single data repository that feeds the PEIMS and the studentGPS collections
DTU (Data Transfer Utility)	The DTU is an FTP client that transfers files stored at the LEA to the eData Manager (eDM)
eDM (eData Manager)	The portal through which LEAs can manually submit data and monitor data submissions
ETL	ETL means Extract, Transform, Load. This refers to the process of moving data from one system to another (like SIS to ODS) and transforming the data to meet the requirements of the destination environment
ODS (Operational Data Store)	This is the actual data warehouse in the TSDS system
PDM (PEIMS Data Mart)	The PDM is the data mart that pulls data from the ODS and directly feeds the PEIMS application



## Key Terms (cont'd)

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Term	Definition
DDM (Dashboard Data Mart)	The DDM is the data mart that pulls data from the ODS and directly updates the studentGPS™ Dashboards
XML Interchange File	TEA uses XML Interchange Files as the vehicle to transfer data



About

studentGPS™  
Dashboards

State-  
Sponsored SIS

Education Data  
Warehouse

TPEIR Public  
Reports

TEDS Data  
Standards

Technical  
Resources

News  
& FAQs

Feedback

# Simple Solution. Brighter Futures.



MORE DATA



IMPROVED ID



NEW SAVINGS



EXPANDED REPORTS



BETTER PLANNING

Search



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# Questions?

[www.TexasStudentDataSystem.org](http://www.TexasStudentDataSystem.org)