



Ed-Fi[®] Validation Tool

Getting Started Guide

Validation Tool 1.1

July 2014

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For the latest information about the Ed-Fi Alliance visit our website at www.ed-fi.org.



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Introduction

This document introduces the Ed-Fi® Validation Tool and provides a step-by-step guide for how to create and run validation tests.

Audience

This document is for technical professionals who work with educational data, and in particular, the creation of XML data files that conform to the Ed-Fi data standard, usually exported from source data systems such as Student Information Systems and assessment products.

Prerequisites

To gain the most benefit from this information, the reader should already be familiar with the following knowledge areas:

- The Ed-Fi solution, see www.ed-fi.org
- Extensible Markup Language (XML), see www.w3.org/XML
- XML Schema (XSD), see [en.wikipedia.org/wiki/XML_Schema_\(W3C\)](http://en.wikipedia.org/wiki/XML_Schema_(W3C))
- For more information about these topics, see the preceding links.

The Ed-Fi Validation Tool is designed to be used from a computer running Windows 7 or higher or Mac OS with the latest version one of the following browsers: Internet Explorer®, Firefox® or Google Chrome™.

Overview

The Ed-Fi Validation Tool enables Ed-Fi adopters to run validation checks against Ed-Fi data exchanges that have been created according to the Ed-Fi data standard and Ed-Fi standard interchange schemas.

In order to begin using the validation tool you need to register a user account at <https://validate.ed-fi.org>. Once registered, you can begin to create and run test sets by selecting an appropriate version of the Ed-Fi schema and a validation use case that matches your particular data set, uploading test XML data files and executing the validation step. The result of a validation test run is returned as a *PASS* or *FAIL*, and detailed information is provided regarding warnings or errors encountered during the validation.

For more information about the Ed-Fi data model and interchange schemas, see the *Ed-Fi Unifying Data Model* and *Ed-Fi Standard Interchange Schemas Overview* documents at <http://www.ed-fi.org/tech-docs>.

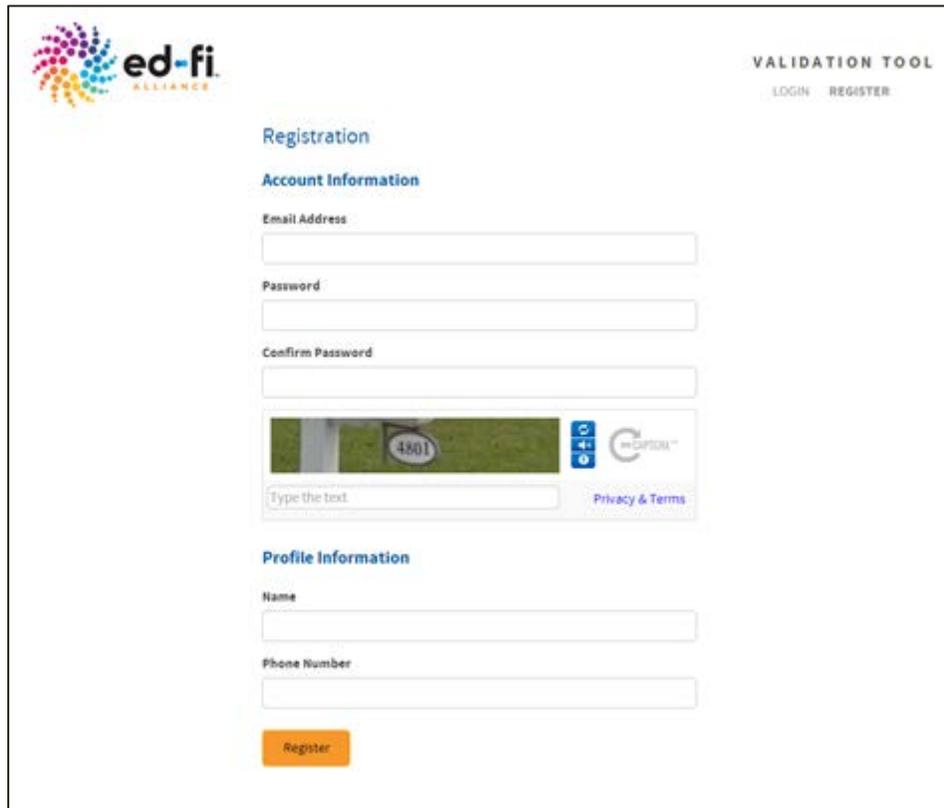
Using the Validation Tool

This section provides a step-by-step guide to using the Ed-Fi validation tool.

Registering an account

In order to begin using the validation tool you need to register with the site:

1. Navigate to <https://validate.ed-fi.org> and select the “*Register*” link.



The screenshot shows the registration page for the Ed-Fi Validation Tool. The page features the Ed-Fi Alliance logo in the top left corner and the text "VALIDATION TOOL" in the top right corner, with "LOGIN" and "REGISTER" links below it. The main heading is "Registration". Underneath, there is a section for "Account Information" with three input fields: "Email Address", "Password", and "Confirm Password". Below these fields is a CAPTCHA challenge showing a road sign with the number "4801" and a "Type the text" input field. To the right of the CAPTCHA are icons for social media and a "CAPTCHA" logo. A "Privacy & Terms" link is also present. Below the CAPTCHA is a section for "Profile Information" with two input fields: "Name" and "Phone Number". At the bottom of the form is an orange "Register" button.

Figure 1 Registering an Account

2. Enter the information requested in the form and click on the “*Register*” button.

3. This action will send an email to the email address you provided on the form with a link to activate your account. Open the email and click on the link to activate your registration.

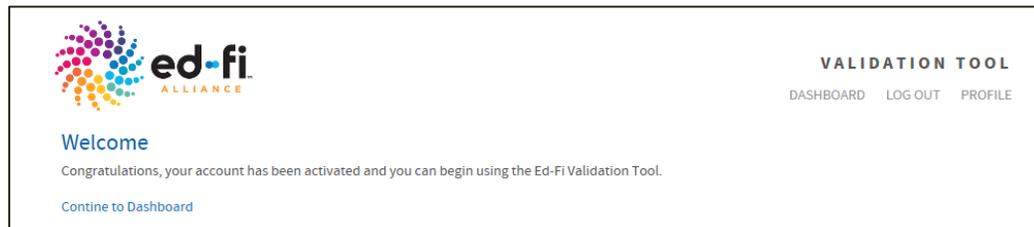


Figure 2 Activating an Account

4. Your account should now be activated and you can navigate to the validation tool dashboard to begin testing.

Creating and Running a Test

Running a validation test consists of selecting the appropriate Ed-Fi schema version and a validation use case, uploading one or more XML test data files, and executing the test:

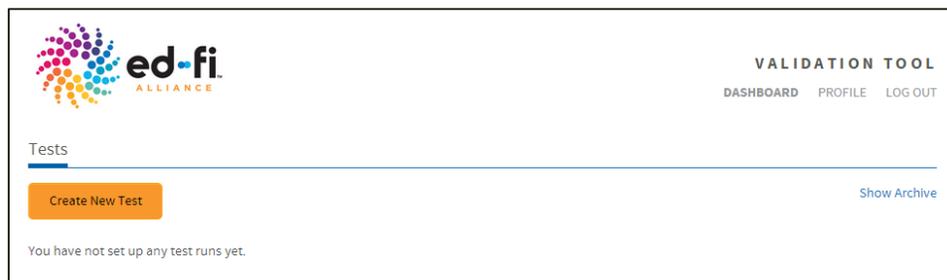


Figure 3 Validation Tool Dashboard

1. Navigate to <https://validate.ed-fi.org> and login if necessary.
2. Select the *Create New Test* button.

3. Each time you create a test you will be presented with a data privacy agreement page that you need to acknowledge before uploading data¹. Select *Continue* to proceed.

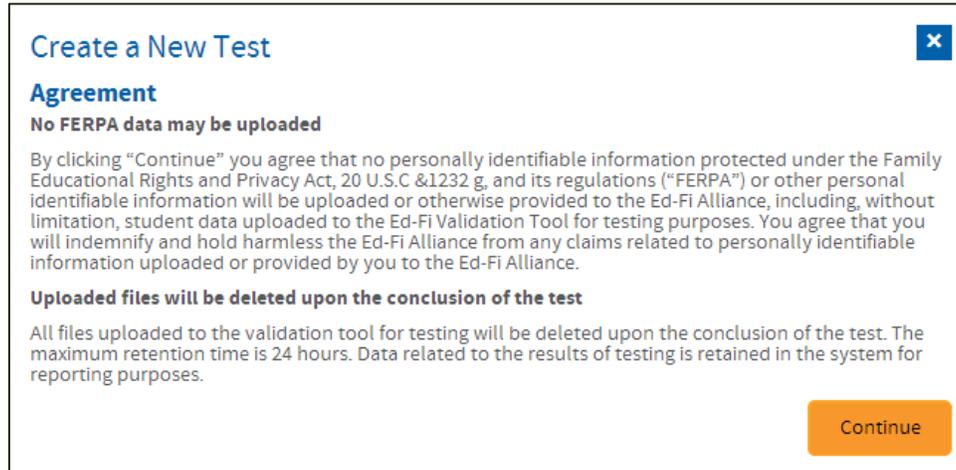


Figure 4 Data Upload Agreement

4. Follow the instructions in the 3-step *New Test* wizard:
 - *Step 1 - Test Details*

¹ This step is necessary to ensure that no personally identifiable information protected under the Family Educational Rights and Privacy Act (FERPA) or other personal information is uploaded to the Ed-Fi Validation Tool.

Create a New Test ×

Step 1 of 3 - Test Details

Give your test a name (it doesn't have to be unique) *

Select a version of the Ed-Fi standard to validate against

Ed-Fi Version 1.1 ▼

Select a validation use case *

SampleStudentAssessments ▼

Validation Use Case Description

Interchange Schemas	Validation Rules
Assessment Metadata Interchange Student Assessment Interchange	Student Assessment Defined Metadata Reference Check

Continue

Figure 5 New Test Wizard – Step 1

- Provide the information requested for the test:
 - Give your test a name (it doesn't have to be unique).
 - Select a version of the Ed-Fi Standard to validate against.
 - Select a validation use case.
- Once you have selected the Ed-Fi schema version and a validation use case, information regarding what is being validated is displayed:
 - *Validation Use Case Description*: Provides a description of the validation use case.
 - *Interchange Schemas*: Identifies the Ed-Fi interchange schemas that are expected to be included in the set of test data files to be uploaded.

- *Validation Rules*: Displays a list of validation rules that are applied to the validation use case in addition to schema validation.
- Click on the Continue button to proceed.
- *Step 2 - Upload Files*

Create a New Test ×

Step 2 of 3 - Upload Files

Name	Core Schema	Validation Use Case
Test 1	Ed-Fi Version 1.1	SampleStudentAssessments

[\[+ More Info\]](#)

Add Files

i Each test is limited to a total of 20 files, each no larger than 150 MB.

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Figure 6 New Test Wizard – Step 2

- Click on the *Add Files* button to upload XML test files.
- You can upload one or more files. The validation tool places restrictions on the size of individual files and number of files that can be uploaded for each test². At a minimum, upload at least one file for each interchange schema listed in the validation use case.
- When you have uploaded all the test files, click on the *Continue* button to proceed to the next step. You can also click the *Back* button at any time if you want to change information entered in Step 1.
- *Step 3 – Review and Confirm*

² The first release of the validation tool restricts the size of individual test files to 150 MB each and the total number of files per test to 20. These restrictions may be adjusted in future releases of the tool.

Create a New Test ×

Step 3 of 3 - Review and Confirm

Name	Core Schema	Validation Use Case
Test 1	Ed-Fi Version 1.1	SampleStudentAssessments

[\[- Less Info\]](#)

Interchange Schemas	Validation Rules
Assessment Metadata Interchange Student Assessment Interchange	Student Assessment Defined Metadata Reference Check

Uploaded Files

1. _AssessmentMetadata-SAT.xml
2. _StudentAssessment-SAT.xml

Back
Start Test

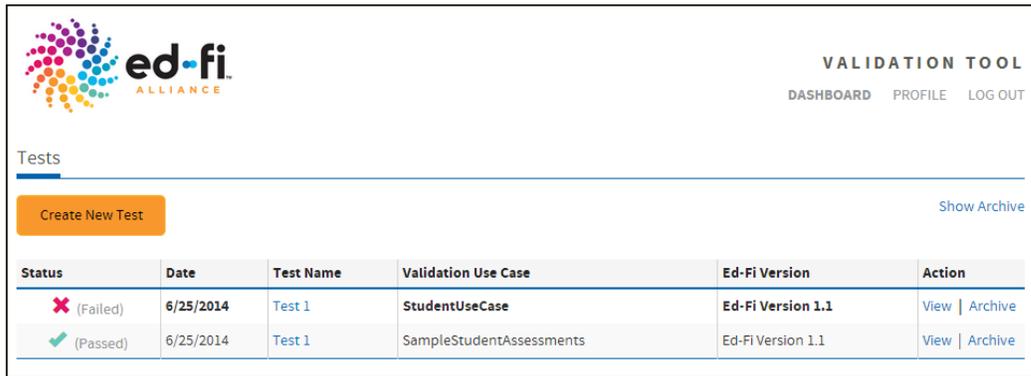
Figure 7 New Test Wizard – Step 3

- Confirm that you have uploaded all the files you want to include in this test. You can click on the *Back* button if you want to add or remove data files.
 - When you are ready to run the test select on the *Start Test* button.
5. The test will start running and you can view the status of the test in the dashboard view. Once a validation test run has been completed, the test results are logged while the data files are deleted from the server.

Viewing Test Results

Test Status

The status of a test that has been run, or is in the process of running, is displayed in the *Status* column of the test listing on the dashboard view.



The screenshot shows the Ed-Fi Validation Tool dashboard. At the top left is the ed-fi ALLIANCE logo. At the top right, it says "VALIDATION TOOL" with links for "DASHBOARD", "PROFILE", and "LOG OUT". Below the logo, the word "Tests" is displayed. There is an orange button labeled "Create New Test" and a link labeled "Show Archive". Below this is a table with the following data:

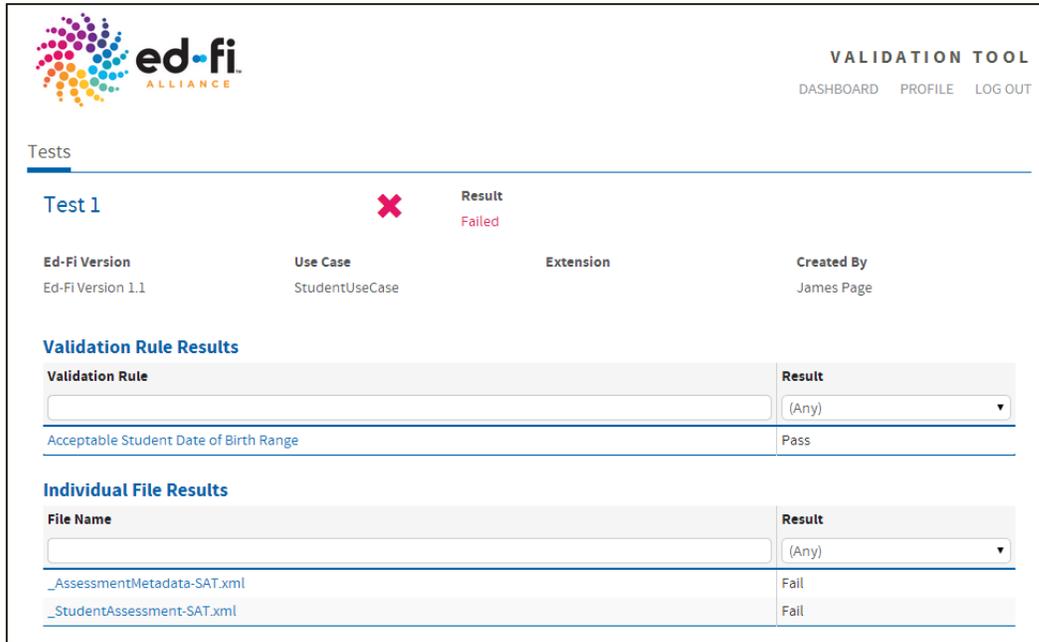
Status	Date	Test Name	Validation Use Case	Ed-Fi Version	Action
✘ (Failed)	6/25/2014	Test 1	StudentUseCase	Ed-Fi Version 1.1	View Archive
✔ (Passed)	6/25/2014	Test 1	SampleStudentAssessments	Ed-Fi Version 1.1	View Archive

Figure 8 Test Run Listing

1. *Grey (Running)*: indicates that the test is still running.
2. *Green (Passed)*: indicates that the test successfully passed all the validation tests.
3. *Red (Failed)*: indicates that one or more validation tests failed. Click on “Test Name” for the relevant test to review the detailed results.

Test Results

Selecting a test that has run to completion provides a detailed view of the validation tests that were executed and a *Pass* or *Fail* result for each. You can select a specific validation test to get details on a failed test.



The screenshot shows the 'Validation Tool' interface. At the top right, there are navigation links for 'DASHBOARD', 'PROFILE', and 'LOG OUT'. The main content area is titled 'Tests' and displays a summary for 'Test 1' with a red 'X' icon and the status 'Result Failed'. Below this, a table lists test details:

Ed-Fi Version	Use Case	Extension	Created By
Ed-Fi Version 1.1	StudentUseCase		James Page

Below the test details, there are two sections for results:

Validation Rule Results

Validation Rule	Result
Acceptable Student Date of Birth Range	Pass

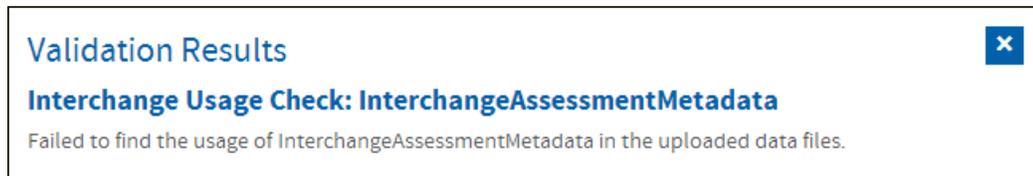
Individual File Results

File Name	Result
_AssessmentMetadata-SAT.xml	Fail
_StudentAssessment-SAT.xml	Fail

Figure 9 Test Run Results

Examples of validation failure messages:

- Figure 10 below shows an example of a validation rule error, where the test did not include one or more data files that reference the interchange schema called *InterchangeAssessmentMetadata*.



The screenshot shows a blue-bordered notification box with a close button (X) in the top right corner. The text inside reads:

Validation Results
Interchange Usage Check: InterchangeAssessmentMetadata
 Failed to find the usage of InterchangeAssessmentMetadata in the uploaded data files.

Figure 10 Validation Rule Error

- Figure 11 below shows an example of an XML data file with a schema validation error, where the XML data file includes an element that is not defined in the referenced Ed-Fi schema.

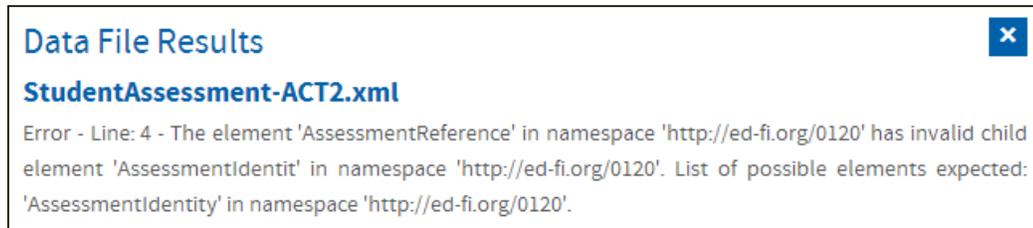


Figure 11 Data File Validation Error

For more information about what to do if your test data is failing one or more validation tests, please post questions and join the discussion at the public Ed-Fi discussion forum (<https://discussions.zoho.com/ed-fi>).