Ed-Fi® Validation Tool

Getting Started Guide

Validation Tool 1.1

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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)

- 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.

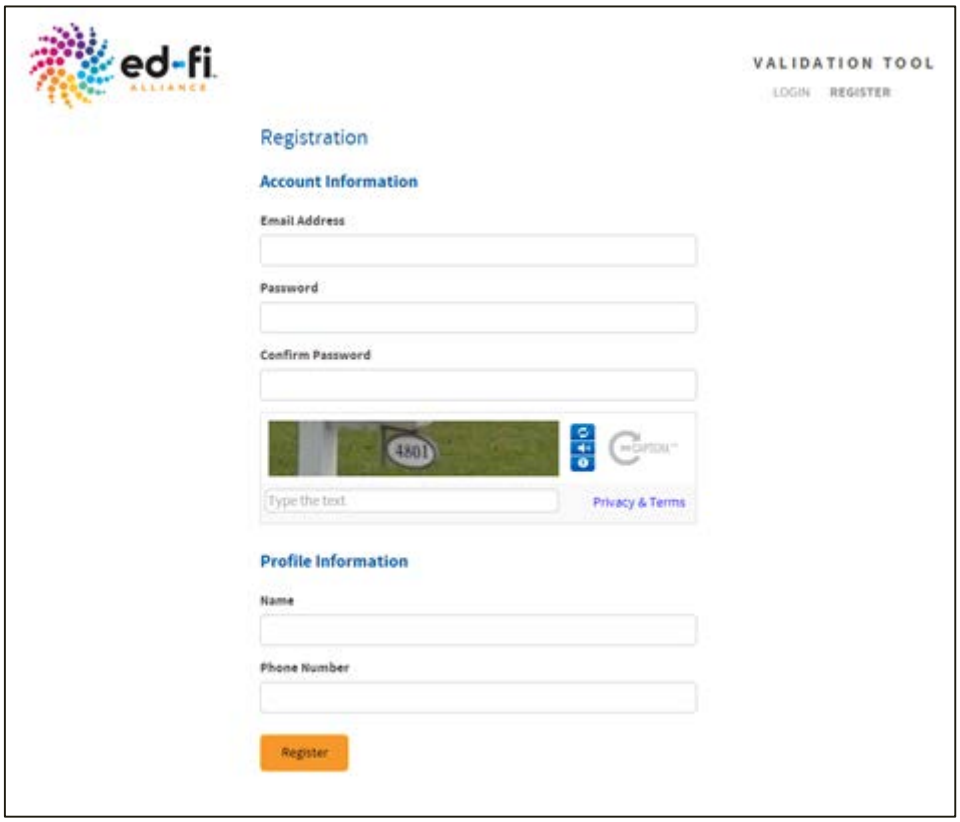

Figure 1 Registering an Account

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.

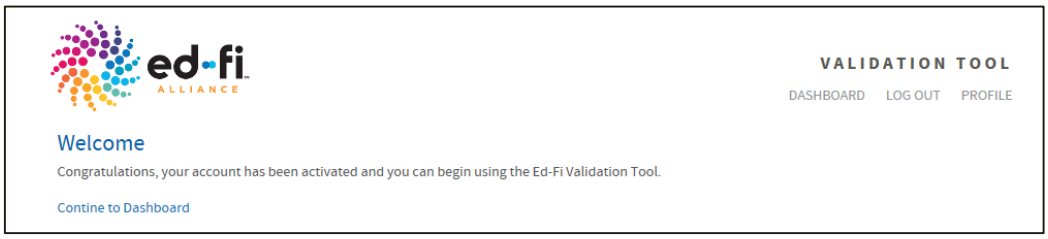

Figure 2 Activating an Account

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:

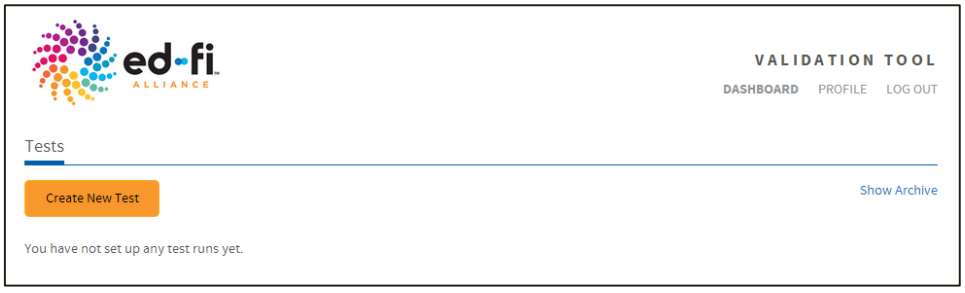

Figure 3 Validation Tool Dashboard

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 data[1]. Select *Continue* to proceed.

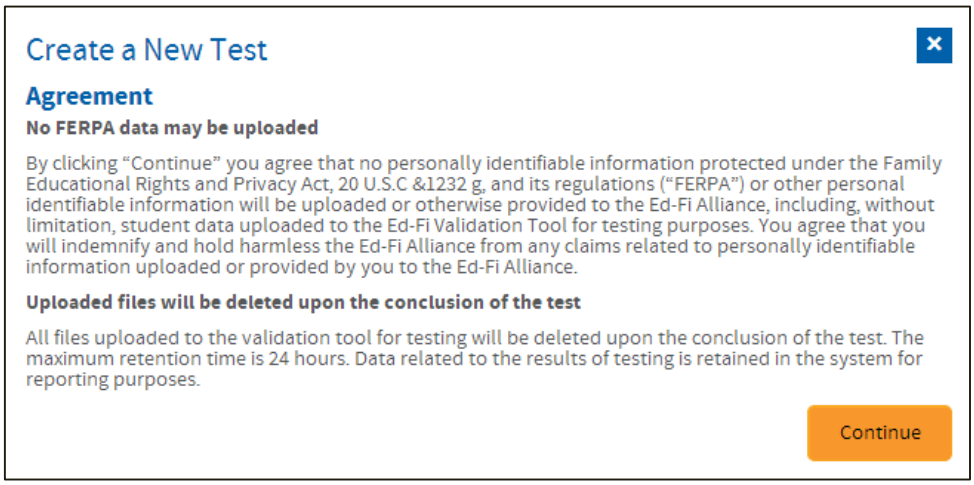

Figure 4 Data Upload Agreement

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.

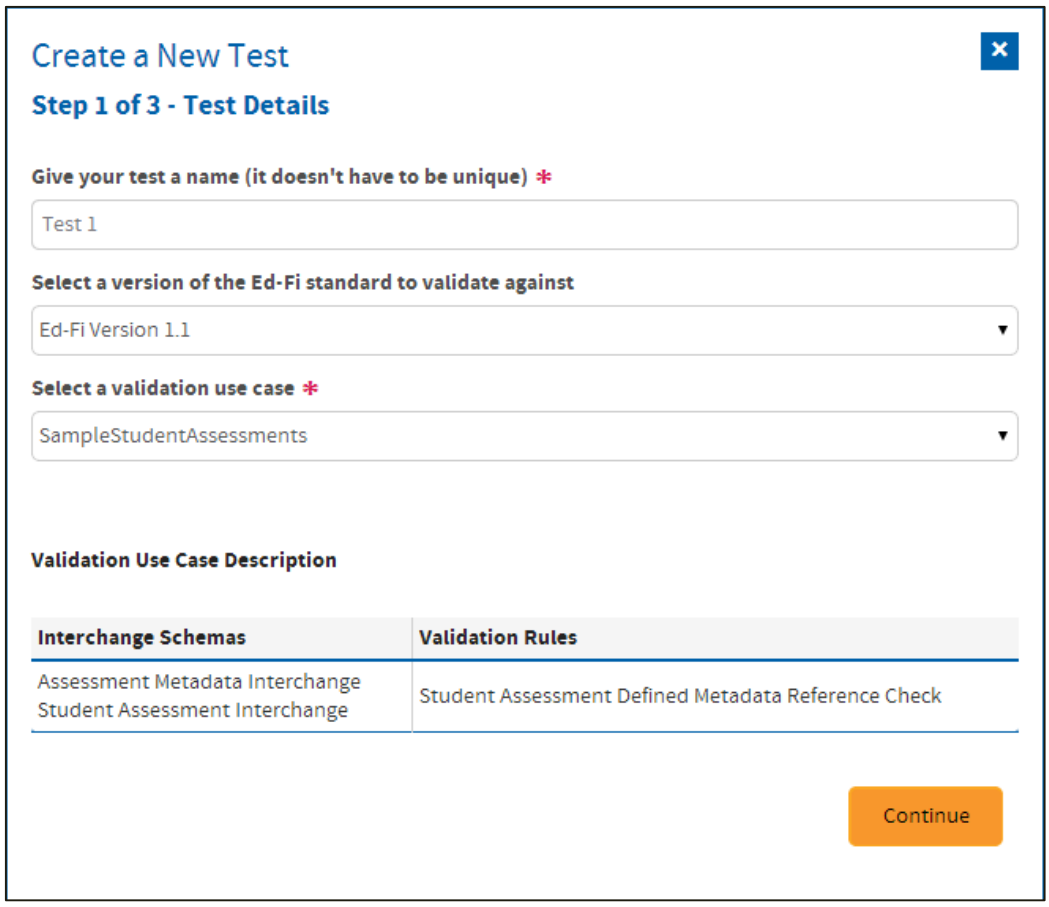

Figure 5 New Test Wizard – Step 1

- 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*

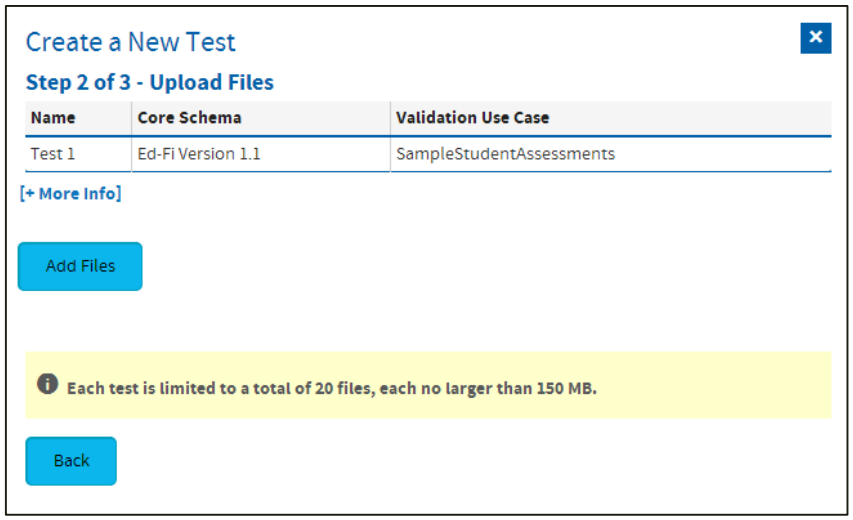

Figure 6 New Test Wizard – Step 2

- 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 test[2]. 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.

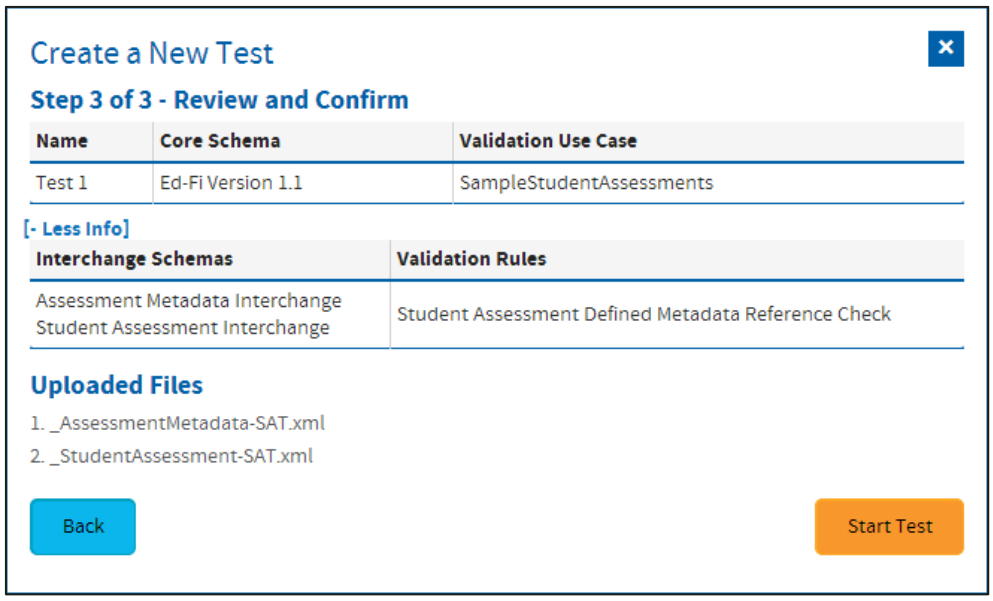

Figure 7 New Test Wizard – Step 3

- 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.

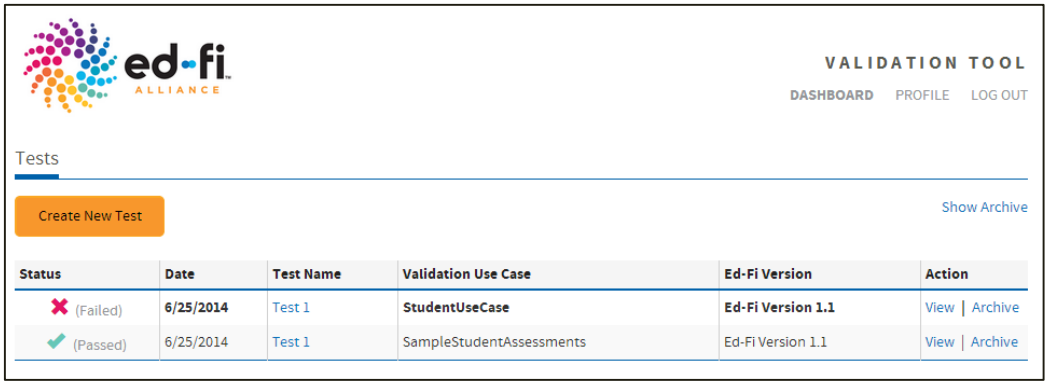

Figure 8 Test Run Listing

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 of 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.

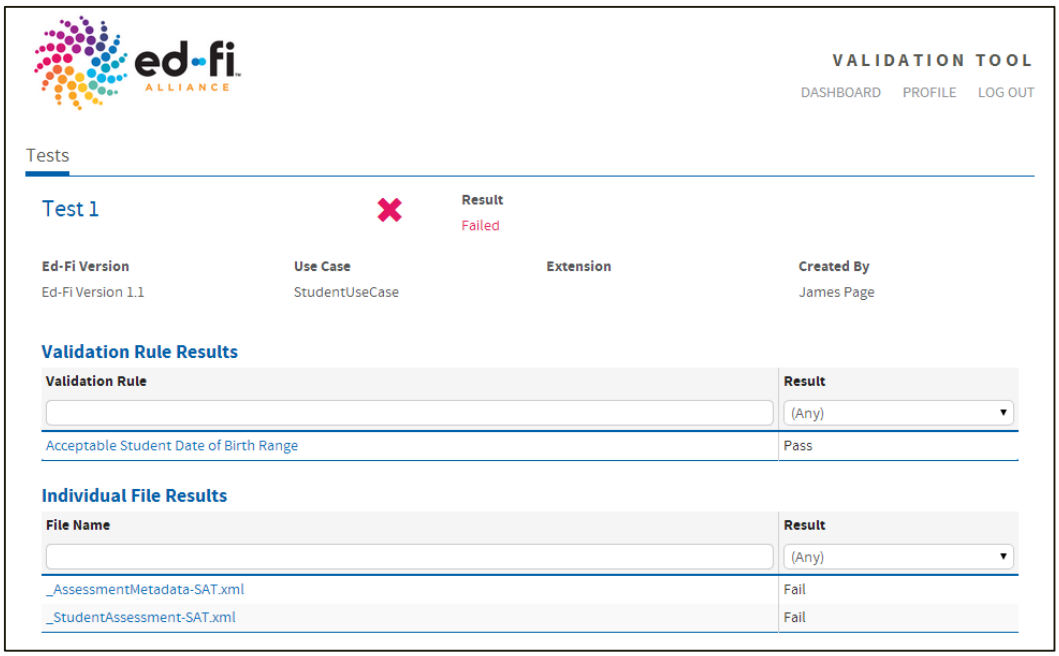

Figure 9 Test Run Results

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*.

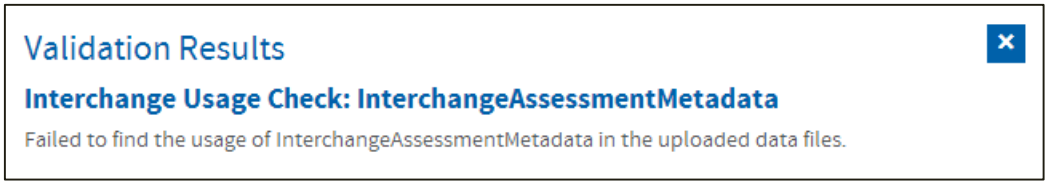

Figure 10 Validation Rule Error

- 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).