ES3 UI Provides SEA Exceptional Control

Previous newsletters have talked about the ES3 Web Management Application. The application has been useful to EDFacts coordinators for the operation and configuration of ES3. The application has been used to trigger the SSIS packages that stage ES3 data and create the EDFacts Submission Files.



Screens are available within the application allowing EDFacts coordinators to fully manage the system. They can set data storage directory locations, set state configuration values, edit state characteristics (think EMAP settings), and set how state codes are to be translated to EDFacts values. The system allows users to trigger the ES3 SSIS package execution and to watch the results in real time.

Now that several states have been through the entire ED*Facts* submission cycle, and ES3 has all of the Submission File packages built, ESP has turned our attention to expanding the core features of the ES3 Web Management Application. Several new features and enhancements have been added including:

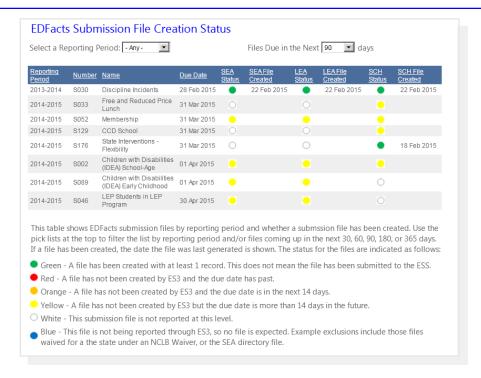
- Screens for tracking due dates and submission file creation history;
- Mechanisms for exporting staged data to Excel for review, audit, and archiving; and
- Initial implementation of USED business rules validation and reporting.

The ES3 Web Management Application provides an easy to use mechanism for managing EDFacts.

Submission File Creation Status

ES3 logs when our SSIS packages have been executed; we know when Submission Files have been created. It was fairly simple to connect that to the ED*Facts* calendar for a state to have a report that shows submission file creation status.

ES3 UI Continued



The time frame shown on the screen can be filtered to those due in the next 30, 60, 90, 180 days or left unfiltered. Likewise, it can be filtered for files from a specific reporting period. Colored dots and dates indicate the status of the creation of a specific file and level by ES3. This doesn't show which have been submitted to nor accepted by ESS, but is a great tool for tracking status.

Export of Staged Data to Excel

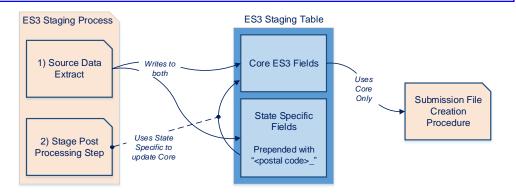
The ES3 process is a two-stage process: data are first staged into a set of ES3 staging tables, and then, secondly, are put into the ED*Facts* format.

State data selection rules and business rules for EDFacts are applied during the staging process. Most of the SSIS staging procedures are designed with a data selection step and then a post-processing step.

The staging tables consist of a core set of fields that are common across all the ES3 states. The Submission Package procedures only refer to those core staging table fields – that way the Submission Package procedures can be shared by all ES3 states.

It is often the case that we will add state-specific fields to a staging table. These fields are used during the post-processing step and may be used to assist in setting values of the "core" staging table fields.

ES3 UI Continued



For example, a state may have different "types" of student. The student type is used to determine where the student gets counted for membership. ES3 will stage the student type in a state-specific field at the end of the staging table, and then use that information during the post-processing to set the accountable LEA or accountable School field values. Post-processing may also use this information to determine whether the student gets counted at all: the staging table includeInSEA, includeInLEA, and includeInSCH field values. The post-processing procedure will often make notes about why a particular record was treated the way it was. These notes are extremely valuable to program managers for audit and review purposes.

Program staff need to know how ES3 handled the records in their program. This "Export Staged Data" capability allows staff to export the records from the ES3 staging tables so they can review which records got loaded and how they will be treated during the Submission File creation process.

The exported data can be archived along with the EDFacts submission files that were run from them. Excel provides a much easier and flexible tool set for program staff to use.

USFD Validation Rules

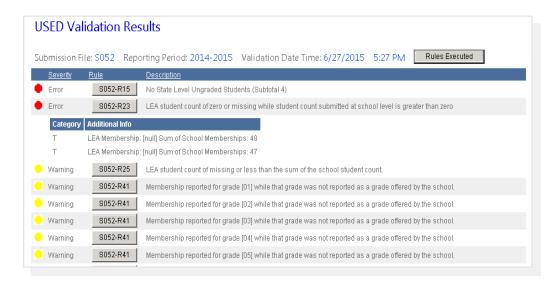
EDFacts coordinators are all well-aware that USED has their own set of business rules that they apply to submitted files each night – generating error reports for the following day. This overnight turn-around can be frustrating at crunch –times. ES3 has begun the implementation of the USED business rules reporting within the ES3 Web Management Application. That allows a user to get a preview of the errors they would get from USED and resolve those issues much earlier.

Not all of the USED business rules have been implemented yet, but ESP is focusing a good portion of their development effort in this area. The USED Validation Rules system has been designed so that new rule procedures can be rolled out without the need for changes to the deployed web applications. ESP only needs to be deployed new Stored Procedures, a fairly guick and painless process.

ES3 UI Continued



When the [Execute Validation] button is selected, then the system calls the stored procedure that runs the rules for that file. The results from the individual rules are stored in a table. At the end of processing, a report like the following is shown.



This report shows:

- Severity: The level of severity of the rule violated; error with a red dot or Warning with a yellow dot
- Rule Number: The USED rule number as found in the EDFacts Business Rules spreadsheet
- **Description**: The description of the problem, again form the EDFacts Business Rules spreadsheet
- Category Set: The category set/sub-total group in the file that is associated with the violation
- SEA: The text "SEA" if the offending record is a state level record
- LEA Identifier: The state identifier of the LEA if the offending record is an LEA-level or schoollevel record
- **School Identifier**: The state school identifier if the offending record is a school-level record. The LEA identifier will also be supplied to assist in finding the offending record in the submission file.
- Additional Information: We are making every effort to supply additional information for the
 violated rules that shows exactly what is wrong, why it is wrong, and in some cases what to do
 to correct the issue.