

ES3 Web Management System

User's Manual

EDFacts Shared State Solution



ESP Solutions Group

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Change History Log

Date	Pages	Summary of Changes	Version	Authorized By
20-Apr-2014	All	Initial Draft	v1.0	Steven King
02-Jun-2014		Added EDFacts Work Flow section, rearranged sections to follow work flow organization, and added sections for the new file due dates and file creation status reports	v1.01	Steven King
26-Feb-2015		Added descriptions of new features in version 1.1 <ul style="list-style-type: none"> • Updated all screen shots to exclude the menu on the left so we don't have to update every screen shot as we add new features to the menu • Added SEA Directory Edit functionality • Added New LEA/School functionality • Added Export Staged Data functionality <ul style="list-style-type: none"> ○ Added root export folder to State Configuration screen • Added USED Validation reporting • Added Refresh button to SSIS Process Log page 	v1.1	Steven King
27-June-2016		Update the Welcome Screen and Main Menu screen shot. Figure 2	V1.1	Kathleen Browning

Table of Contents

Table of Contents	i
Table of Figures	ii
Introduction	1
EDFacts Work Flow	4
Staging Data Review and Edit.....	5
SEA Directory	5
Chief Info.....	6
SEA Characteristics.....	6
LEA and/or Charter Authorizer Basic Info.....	6
LEA Grades Offered	8
LEA Characteristics	8
School Directory	9
School Grades Offered	10
School Characteristics.....	11
Export Staged Data	11
System Configuration.....	13
State Code Set Translation	14
State Configuration	15
State Characteristics.....	16
Submission File Characteristics.....	17
SSIS Package Execution.....	18
Selecting a Package to Execute.....	18
Run-Time SSIS Package Configuration.....	19
Package Scheduling Results	20
Validation.....	21
Invalid Staging Records	21
USED Validation Reporting.....	22
System Monitoring and Management.....	24
SQL Agent Job Status.....	24
SQL Agent Job Details.....	27
SSIS Package Task Logs.....	28
Email Log Review	30
Submission File Due Dates	30
Submission File Creation Status.....	31
Submission File Creation History	33

Table of Figures

Figure 1: System Architecture Overview.....	1
Figure 2: Welcome Screen and Main Menu.....	2
Figure 3: EDFacts Work Flow Diagram.....	4
Figure 4: Data Review and Edit menu.....	5
Figure 5: State Education Agency Basic Info screen.....	5
Figure 6: SEA Chief School Officer Info screen.....	6
Figure 7: SEA Characteristics screen.....	6
Figure 8: LEA and/or Charter Authorizer Basic Info screen.....	6
Figure 9: Agency Type Drop Down Menu.....	7
Figure 10: Welcome Screen Link for Full-screen Reports.....	7
Figure 11: Add New LEA screen.....	7
Figure 12: LEA Grades Offered.....	8
Figure 13: LEA Characteristics Screen.....	8
Figure 14: School Basic Info Screen.....	9
Figure 15: Add New School screen.....	10
Figure 16: School Grades Offered Screen.....	10
Figure 17: School Characteristics Screen.....	11
Figure 18: Staging Table Contents Data Flow diagram.....	12
Figure 19: Export Staged Data screen.....	12
Figure 20: Export Staged Data results screen.....	13
Figure 21: Code Set Translation Edit screen.....	14
Figure 22: State Configuration Edit Screen.....	15
Figure 23: State Characteristics Edit Screen.....	16
Figure 24: Submission File Characteristics Screen.....	17
Figure 25: SSIS Package Execution menu.....	19
Figure 26: SSIS Package Runtime Configuration Screen.....	20
Figure 27: Package Execution Start Result Screen.....	20
Figure 28: Invalid Staging Records.....	22
Figure 29: USED Validation Reporting screen.....	22
Figure 30: USED Validation Results report.....	23
Figure 31: SQL Agent Job Status screen.....	25
Figure 32: SQL Agent Job Status screen footer.....	25
Figure 33: SQL Agent Job Details Screen.....	27
Figure 34: Typical Submission Package SSIS Control Flow.....	28
Figure 35: SSIS Package Process Log Screen.....	29
Figure 36: Email Log Review Screen.....	30
Figure 37: Submission File Due Dates.....	31
Figure 38: Submission File Creation Status.....	32
Figure 39: Submission File History Screen.....	33

Introduction

The EDFacts Shared State Solution (ES3) is a collaborative effort amongst states to coordinate and collaboratively build a common approach to building EDFacts files. ESP Solutions Group is the managing partner for the effort.

All states have to create files in a specified format for submission to the US Department of Education (ED). ES3 is a common approach for creating those files that attempts to maximize the shared code across states and to encapsulate state specific modifications and customizations.

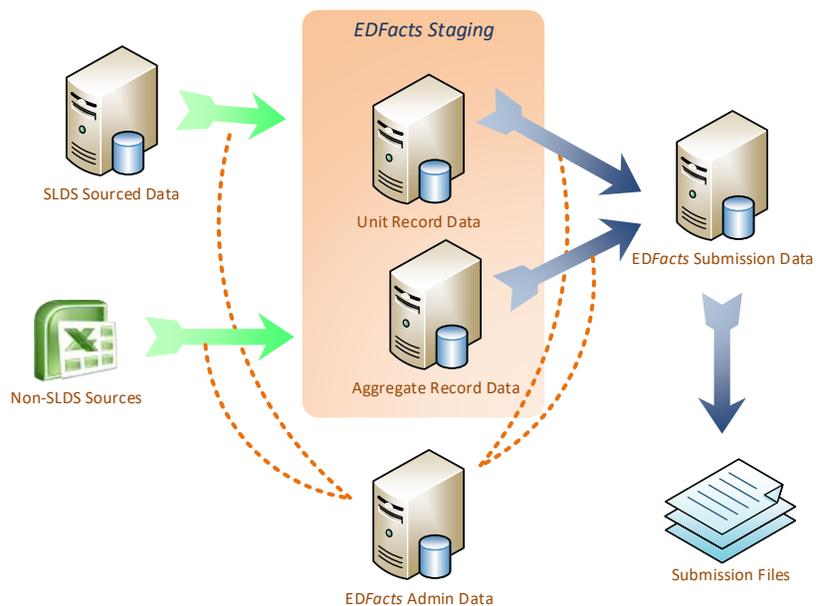


Figure 1: System Architecture Overview

The solution relies on the standard Microsoft SQL Server stack of applications.

State source data is read into a staging set of tables – the central box above and the left hand green arrows. The arrows in this diagram represent SQL Server Integration Services (SSIS) packages that perform the necessary Extract-Transform-Load (ETL) processes. These ETL processes are customized by necessity for each state partner.

The data are then moved to an EDFacts repository in the EDFacts format and the EDFacts submission files are generated and saved to a network folder. The right hand blue arrow represent these SSIS ETL processes. These procedures are the same for all the state partners.

A set of tables in the EDFacts Admin Data repository hold state specific characteristics and customization data.

This document describes how to use the web management application that is built to allow an EDFacts Coordinator and designated program staff to manage this system.

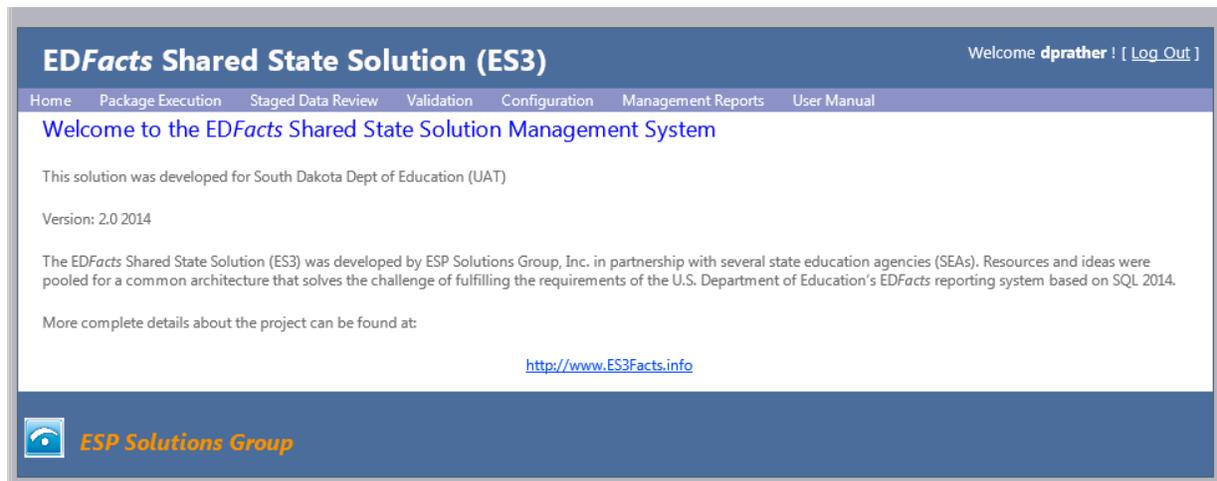


Figure 2: Welcome Screen and Main Menu

The ES3 Web Management System application provides five high level functions as shown by the top level menu options.

- **SSIS Package Execution** – This allows a user to select, configure, and then execute one of the ETL processes (colored arrows from figure 1) in the system.
- **Staging Data Review and Edit** – This version of the Web Management System allows a user to add, review and edit SEA, LEA and School directory information and characteristics. This menu also has an option for exporting data from any of the ES3 staging tables to tab delimited files for review.
- **Validation** – these options access data validation reports. There is a report of staging records found to be invalid at the time a submission file creation was attempted.

This version also begins the roll-out of the implementation of the USED validation and business rules.

- **System Configuration** – These options allow a user to review and modify the state specific characteristics and customizations needed for system operation.
- **System Monitoring and Management** – These options allow a user to review reports on what actions have been taken and the results of those actions

The ES3 Web Management System is a .NET Web Forms application installed on a state internal web server. System log-in procedures and security can be integrated with existing state web application environments. Thus, access to the application and the log-in process required varies by state.

EDFacts Work Flow

The figure below shows the basic EDFacts file creation workflow.

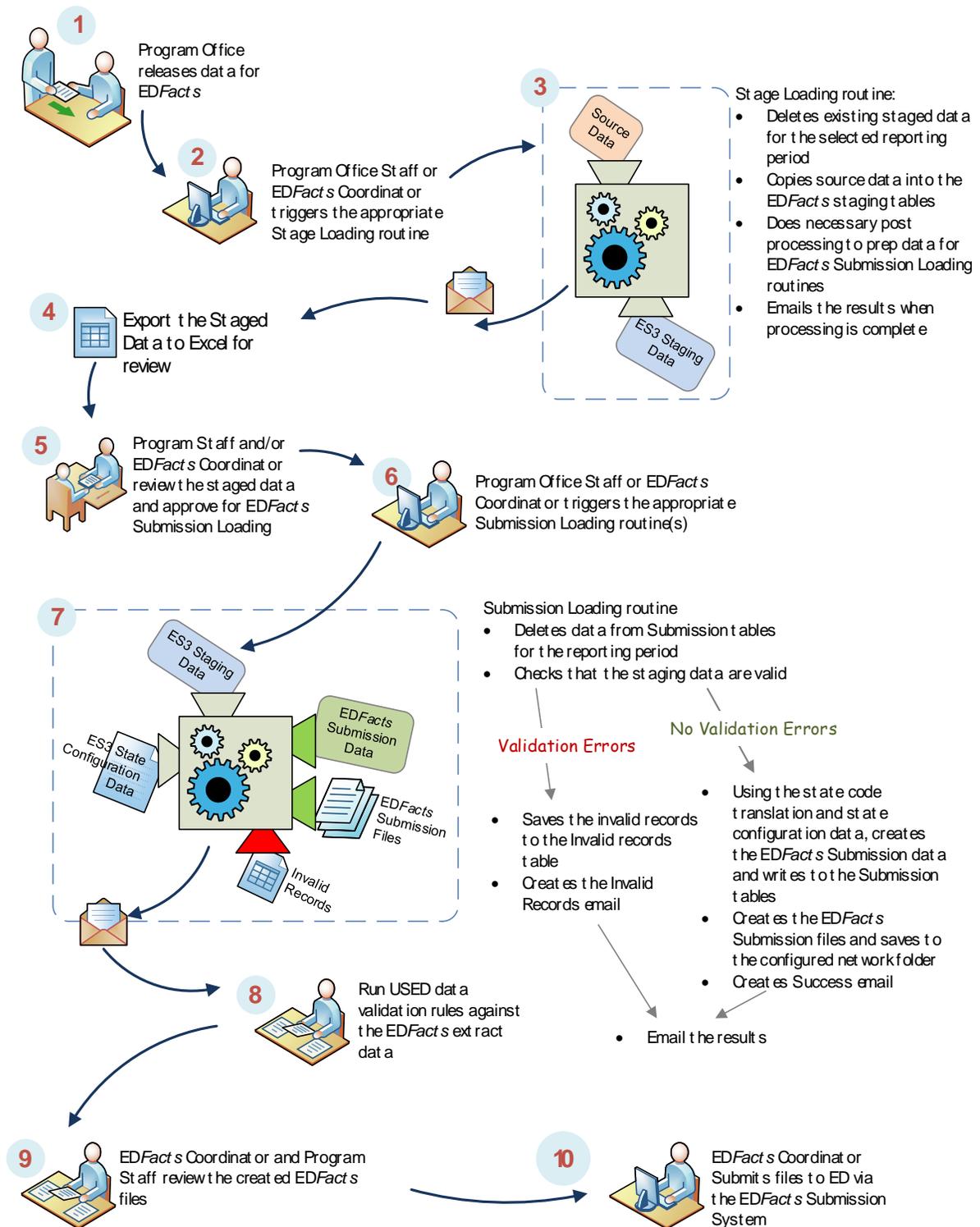


Figure 3: EDFacts Work Flow Diagram

Staging Data Review and Edit

ES3 is designed to build the EDFacts files from staging tables that have a common structure for all the states. There are some fields that may be added to the staging table that are specific for a state, that are used during the staging process to populate or update the fields that are common.

The application now has a feature allowing users to export staged data to Excel for review. State EDFacts data selection and business rules are applied during the staging process. This export allows states to review what records have been selected and how they will be used for reporting to EDFacts.

SEA, LEA, and School Directory tables can be edited directly by the ES3 application. The LEA and School directories are the first files submitted for an EDFacts reporting cycle. The data are central to the submission file creation process for many of the files.

Directory information for the SEA, LEAs and Schools is broken into three sections: general and contact information, grades offered, and additional characteristics. Each has its own data review and edit screen accessible from the main menu.

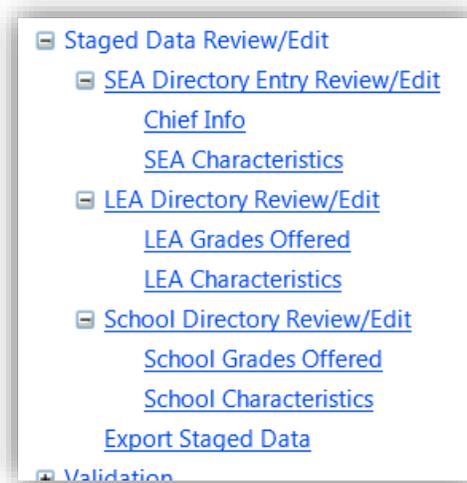


Figure 4: Data Review and Edit menu

SEA Directory



Figure 5: State Education Agency Basic Info screen

Chief Info



Figure 6: SEA Chief School Officer Info screen

SEA Characteristics



Figure 7: SEA Characteristics screen

LEA and/or Charter Authorizer Basic Info

The main LEA and/or Charter Authorizer Review/Edit link brings up the LEA and/or Charter Authorizer Basic Info screen.

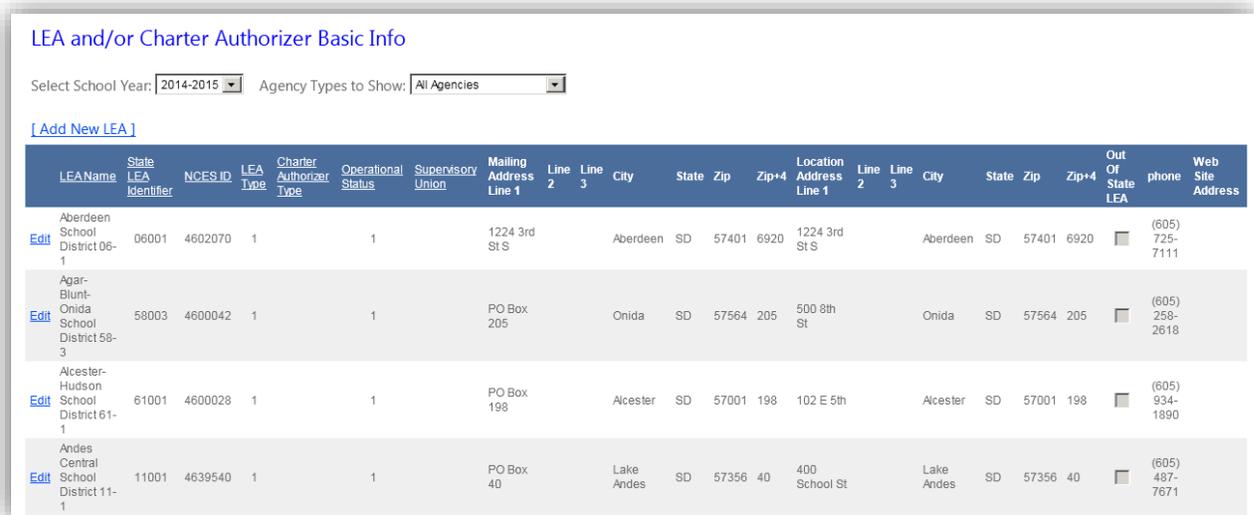


Figure 8: LEA and/or Charter Authorizer Basic Info screen

This screen shows the basic identification and contact information for LEAs and Charter Authorizers in the state.

Charter Authorizers are new for the 2013-2014 school year, but the information needed for file 190 is similar to the directory information required on LEAs in file 029. ES3 stores the data for both of these files in the LEADirectory staging table.

A user selects the school year (reporting period) that they wish to review from the school year pick list.

A user can review All Agencies, LEAs Only, or the Charter Authorizers Only.

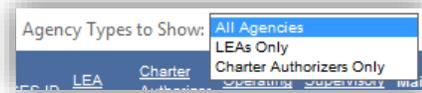


Figure 9: Agency Type Drop Down Menu

Clicking on the [Edit](#) link at the far left of any line allows the user to edit the individual fields for the selected agency. The link [Edit](#) changes to two links [Update](#) [Cancel](#). When the revised data for an agency are corrected, click [Update](#) to save the changes, or click [Cancel](#) to discard any edits.

Click any of the underlined column titles to sort the agency records by that value.

Use the [ES3 Home](#) link at the left on the title bar to return to the Welcome screen and main menu.



Figure 10: Welcome Screen Link for Full-screen Reports

A screenshot of a web form titled "Add New LEA". The form contains the following fields: "Select School Year:" with a dropdown menu showing "2014-2015"; "State LEA Identifier" with a text input field; and "LEA Name" with a larger text input field. At the bottom of the form, there are two blue links: "Add New LEA" and "Cancel New LEA".

Figure 11: Add New LEA screen

LEA Grades Offered

Selecting LEA Grades Offered from the main menu brings up the following screen.

EDFacts Shared State Solution (ES3)
ES3 Home

LEA Grades Offered

Select School Year: 2013-2014

State LEA Identifier	LEA Name	PK	KG	1	2	3	4	5	6	7	8	9	10	11	12	13	AE	UG
Edit 048927	ACADEMY FOR INTEGRATED ARTS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Edit 001090	ADAIR CO. R-I	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Edit 001092	ADAIR CO. R-II	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Edit 007123	ADRIAN R-III	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>													
Edit 103129	ADVANCE R-IV	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>													
Edit 096098	AFFTON 101	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>													
Edit 038046	ALBANY R-III	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>													
Edit 048909	ALLEN VILLAGE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Edit 048902	ALTA VISTA CHARTER SCH.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Edit 079078	ALTENBURG 48	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
Edit 075087	ALTON R-IV	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Edit 093120	APPLETON CITY R-II	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 12: LEA Grades Offered

This screen shows all the LEAs for the selected school year. It has a check for each grades offered by that LEA. Click the [Edit](#) button to make changes.

Click the underlined title text at the top of the State LEA Identifier column, or the LEA Name column to sort the agencies by the selected column.

LEA Characteristics

ES3 uses the LEADirectory staging table to hold information beyond that required for 029 or 039. We've already seen this table is also used for 190 – Charter Authorizers. The LEA Characteristics screen shows other characteristics that are stored and referenced in this staging table.

LEA Characteristics

Select School Year: 2014-2015

State LEA Identifier	LEA Name	Charter LEA Status	Title III Subgrantee?	Title III Consortia Name	REAP Alternative Funding	McKinney-Vento Subgrantee?	AYP Status	Alternate Approach Status	LEP Language Progress (AMAO I)	LEP/ELP Attainment (AMAO II)	LEP Academic Achievement (AMAO III)	Parental Involvement Reservation
Edit 06001	Aberdeen School District 06-1		<input type="checkbox"/>		NA	<input type="checkbox"/>	NOTREQ	NA	METAMAOLEP	METAMAOLEP	MET	15000
Edit 58003	Agar-Blunt-Onida School District 58-3		<input type="checkbox"/>			<input type="checkbox"/>						
Edit 61001	Alcester-Hudson School District 61-1		<input type="checkbox"/>			<input type="checkbox"/>						
Edit 11001	Andes Central School District 11-1		<input checked="" type="checkbox"/>			<input type="checkbox"/>						

Figure 13: LEA Characteristics Screen

Many of these characteristics may only apply to a handful of LEAs, McKinney-Vento Sub-grantee, for example. This screen makes it easy to quickly edit that handful of records.

School Directory

The main School Directory edit screen includes the core identification and contact information on schools.

By default, the screen comes up showing the most current school year and all districts. Users can use the "Select District (LEA)" drop down to restrict the school list to a specific LEA.

School Basic Info

Select School Year: 2014-2015

Select District (LEA): Agar-Blunt-Onida School District 58-3 (58003)

[Add New School]

School Name	State LEA Identifier	State School Identifier	NCES LEA ID	NCES School ID	School Type	Operational Status	Mailing Address Line 1	Line 2	Line 3	City	State	Zip	Zip+4	Location Address Line 1	Line 2	Line 3	City	State	Zip	Zip+4	Out Of State School	phone	Web Site Address
Edit Blunt Elementary - 03	58003	03	4600042	00855	1	1	PO Box 207			Blunt	SD	57522	0207	202 W Butte St			Blunt	SD	57522	0207	<input type="checkbox"/>	(605) 952-6297	
Edit Onida Elementary - 04	58003	04	4600042	00655	1	1	PO Box 205			Onida	SD	57564	0205	500 8th St			Onida	SD	57564	0205	<input type="checkbox"/>	(605) 258-2617	
Edit Sully Buttes High School - 07	58003	07	4600042	00656	1	1	PO Box 205			Onida	SD	57564	0205	500 8th St			Onida	SD	57564	0205	<input type="checkbox"/>	(605) 258-2618	
Edit Sully Buttes Jr. High - 06	58003	06	4600042	00939	1	1	PO Box 205			Onida	SD	57564	0205	500 8th St			Onida	SD	57564	0205	<input type="checkbox"/>	(605) 258-2618	

Figure 14: School Basic Info Screen

This screen behaves in a fashion similar to the LEA and/ Charter Authorizer Basic Info screen: click underlined column heads to sort by that column, use the [Edit](#) button to edit a particular record, and use the [ES3 Home](#) link to return to the Welcome screen.

Add New School

Select School Year:

Select District (LEA):

State School Identifier:

School Name:

[Add New School](#) [Cancel New School](#)

	State LEA Identifier	State School Identifier	School Name
Delete	58003	03	Blunt Elementary - 03
Delete	58003	04	Onida Elementary - 04
Delete	58003	07	Sully Buttes High School - 07
Delete	58003	06	Sully Buttes Jr. High - 06

Figure 15: Add New School screen

School Grades Offered

The School Grades Offered menu option leads to the following screen

EDFacts Shared State Solution (ES3) Welcome st

ES3 Home

School Grades Offered

Select School Year:

Select District (LEA):

	State LEA Identifier	State School Identifier	School Name	School Number	PK	KG	1	2	3	4	5	6	7	8	9	10	11	12	13	AE	UG	Serves No Grade	
Edit	020006	4020020006	BELAIR ELEM.	020006-4020020006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
Edit	020006	4025020006	CALLAWAY HILLS ELEM.	020006-4025020006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
Edit	020006	4030020006	CEDAR HILL ELEM.	020006-4030020006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
Edit	020006	4050020006	CLARENCE LAWSON ELEM.	020006-4050020006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
Edit	020006	4040020006	EAST ELEM.	020006-4040020006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
Edit	020006	1050020006	JEFFERSON CITY HIGH	020006-1050020006	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 16: School Grades Offered Screen

Use the Select School Year drop down to select a specific school year. Use the Select District (LEA) drop down to select a specific LEA. Click any of the underlined column titles to sort the list by that column. Use the [Edit](#) button to edit the grades offered for a specific school.

When editing the grades offered for a particular school, the checkbox in the Serves No Grade column is disabled. This column gets set depending on if any of the other checkboxes are checked. That is, if no specific grade column is checked, then Serves No Grade becomes checked. Checking any specific grade for a school will result in the Serves No Grade column for that school becoming unchecked.

School Characteristics

Selecting the School Characteristics menu option displays the following screen.

State LEA Identifier	State School Identifier	School Name	Charter?	Primary Charter Authorizer	Additional Charter Authorizer	Filed GFSR Report	Improvement Status	Magnet?	MEP Funds Merged with Title I?	National School Lunch Program Status	Persistently Dangerous?	Persistently Lowest Achieving?	Poverty Quartile	Reconstituted?	Shared Time?	SG School?	Title I Eligible Program	Title I Program	Truant Count	Virtual?	Include in EDFacts?
Edit 58003	03	Blunt Elementary - 03	<input type="checkbox"/>				NOTPRFOC	<input type="checkbox"/>	<input type="checkbox"/>	NSLPWOPRO	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	TAS	N		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Edit 58003	04	Onida Elementary - 04	<input type="checkbox"/>				NOTPRFOC	<input type="checkbox"/>	<input type="checkbox"/>	NSLPWOPRO	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	TAS	TAS		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Edit 58003	07	Sully Buttes High School - 07	<input type="checkbox"/>				NOTPRFOC	<input type="checkbox"/>	<input type="checkbox"/>	NSLPWOPRO	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	TAS	N		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Edit 58003	06	Sully Buttes Jr. High - 06	<input type="checkbox"/>				REWARD	<input type="checkbox"/>	<input type="checkbox"/>	NSLPWOPRO	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	TAS	N		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Figure 17: School Characteristics Screen

ES3 stores school information in a `SchoolDirectory` staging table. As with the LEA information, there are additional school characteristics in this table beyond those needed for the EDFacts directory submissions. The School Characteristics screen gives access to those additional fields.

Export Staged Data

The ES3 process, as noted above, is a two stage process: data are first staged into a set of ES3 staging tables, and then, secondly, are put into the EDFacts 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 common fields – that way the Submission Package procedures can be common for 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.

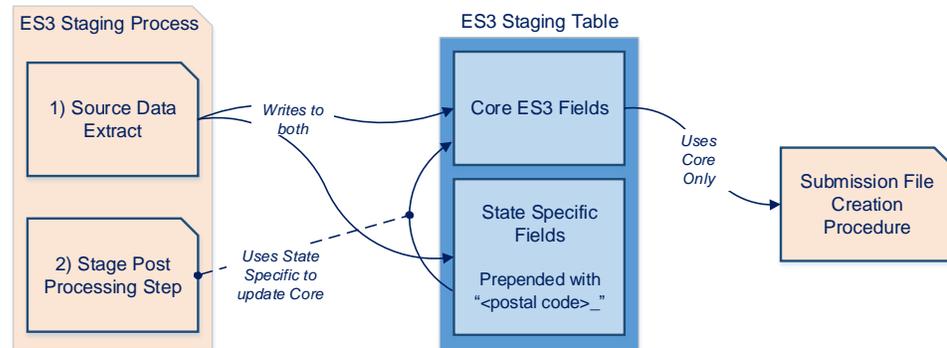


Figure 18: Staging Table Contents Data Flow diagram

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 Unit_StudentDemographics 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.

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.

Selecting the Export Staged Data menu option brings up the following screen:



Figure 19: Export Staged Data screen

The Staging table pick list is generated “on the fly” from any tables in the EDFacts_Staging schema. The Reporting Period pick list is chosen from the reporting period defined in the State Configuration screen. The Export Location value comes from the “Export Directory Root Path” location on the State Configuration screen for the selected reporting period.

When the [Export] button is selected, the system reads the layout of the selected table and generates a header record from the column names. Then the system reads the data from the selected table for the selected reporting period/school year, and writes them out to the file.



Figure 20: Export Staged Data results screen

When complete, the screen will update with the number of records written and the location of the generated file.

The file name is the same as the selected table name with a “.tab” extension. If a file exists with that name, it will be overwritten. That is, a second export of data will erase a prior export. If you want to save or archive a particular export set, then simply move or rename the file before exporting again.

The number of lines written is a count of the header record and the count of data records. Therefore, it is always one more than the actual record count. If the line written value is 1, then there was no data in the table for the selected reporting period – only the header record was written.

To facilitate the usefulness of staging data to program staff for review and auditing, the staging tables retain the state code values. The translation to EDFacts codes occurs during the Submission file creation process. Data in the staging tables, and thus in the exported data file, should look familiar to program staff.

System Configuration

In order for the solution to work across multiple states easily, a significant effort has gone into extracting state customizations and configuration information into database tables. By making changes to those tables, the system is easily modified for a new state or school year.

There are four tables that hold all the configuration data:

- **StateCodeTranslation** – for each EDFacts option set and school year, this table holds the state codes and the EDFacts code to which it needs to translate.
- **StateConfig** – this table has a record for each school year and holds basic information about the state, such as the state name, state FIPS code, state

postal code, and the root folder where that school year's submission files should be stored.

- **StateCharacteristics** – this table holds any special flags or data that individual submission packages may require – typically information that state used EMAPS to tell ED. For example, the maximum age the state allows districts to classify special ed students with the DD disability.
- **SubmissionFileCharacteristics** – this table holds information on each of the submission files including the sub-folder to use for storing the submission files, and an optional password to use on the email attachments for that file

Each of these tables has a review and edit screen accessible from the main menu under the Configuration heading.

State Code Set Translation

The Code Set Translation option brings up the following screen

The screenshot shows the 'Code Set Management' interface. At the top, there is a title 'Code Set Management'. Below the title, there are two dropdown menus: 'Select a Reporting Period:' with '2014-2015' selected, and 'Select a code set:' with 'Disability Category' selected. Below these is a table with three columns: 'State Code', 'EDFacts Code', and 'Description'. Each row in the table has a blue link 'Edit Delete' to the left of the 'State Code' column. At the bottom of the table, there is a blue link 'New Code Value'.

	State Code	EDFacts Code	Description
Edit Delete	X	<ignore>	Not Applicable
Edit Delete	560	AUT	Autism
Edit Delete	500	DB	Deaf-Blindness
Edit Delete	570	DD	Developmental Delay
Edit Delete	505	EMN	Emotional Disturbance
Edit Delete	515	HI	Hearing Impairments
Edit Delete	545	HI	Deafness
Edit Delete	530	MD	Multiple Disabilities
Edit Delete	510	MR	Intellectual Disability
Edit Delete	555	OHI	Other Health Impairments
Edit Delete	535	OI	Orthopedic Impairments
Edit Delete	525	SLD	Specific Learning Disabilities
Edit Delete	550	SLI	Speech or Language Impairments
Edit Delete	565	TBI	Traumatic Brain Injury
Edit Delete	540	V	Visual Impairments

Figure 21: Code Set Translation Edit screen

A particular code set can be found by selecting a school year and then the option set to review.

The list of current translations is shown in the table. In this example, that state codes for "Disability Category" are shown with the EDFacts equivalents.

Multiple state codes may translate to the same EDFacts code. Sometimes a state has code set values which are outside the EDFacts code set domain. In these cases, set the EDFacts code to the value “<ignore>”.

This translation process allows ES3 to stage data with state codes, but have a uniform cross-state ETL process for generating the EDFacts Submission data. Staging data with state codes, facilitates easier stage data audit and review by state program staff.

State Configuration

Selecting the State Configuration option brings up the following screen.

		Reporting Period	State Name	Postal Code	FIPS Code	Agency Number	Submission File Directory Root	Export Directory Root Path	EMail Message From Line	Create and Attach Zips to Emails
Edit	Delete	2014-2015	South Dakota	SD	46	01	\\fileServer\edfacts\ES3Files\2014-2015	\\fileServer\edfacts\Export\2014-2015	EDFacts@state.sd.us	<input type="checkbox"/>
Edit	Delete	2013-2014	South Dakota	SD	46	01	\\fileServer\edfacts\ES3Files\2013-2014	\\fileServer\edfacts\Export\2013-2014	EDFacts@state.sd.us	<input type="checkbox"/>
Edit	Delete	2012-2013	South Dakota	SD	46	01	\\fileServer\edfacts\ES3Files\2012-2013	\\fileServer\edfacts\Export\2012-2013	EDFacts@state.sd.us	<input type="checkbox"/>
Edit	Delete	2011-2012	South Dakota	SD	46	01	\\fileServer\edfacts\ES3Files\2011-2012	\\fileServer\edfacts\Export\2011-2012	EDFacts@state.sd.us	<input type="checkbox"/>

[New State Configuration](#)

Figure 22: State Configuration Edit Screen

There is one record for each year in which the ES3 is in operation. Each record holds core state information such as the state name and postal code.

Each record also stores the full path to root folder where submission files for that school year are saved. This should be a path that is understood by the ETL package system account on the SSIS repository server (typically the database server).

In this example, a folder on the database server's C: drive is specified – that is not common nor recommended. UNC paths can be used and may be more reliable.

Lastly, these records store the “From:” email address that should be used in all the emails that the system generates. Each of the SSIS packages finish by generating and sending an email that summarizes the processing results. This entry tells those processes what email account should be used on the From: line of the emails. This account must have rights to send email through the email server that is used by the ES3.

State Characteristics

Selecting the State Characteristics menu option brings up the following screen.

	Name	Value
Edit Delete	Aggregate PK Title I Overrides Unit Records	Yes
Edit Delete	Alt Path to Certification Exists: SE Teachers	No
Edit Delete	Alt Path to Certification Exists: Teachers	Yes
Edit Delete	Alt Path to Certification Exists: Title III Teachers	No
Edit Delete	CTE Disability Status Codeset	Disability Status (Only)
Edit Delete	CTE Tech Prep	No
Edit Delete	Homeless Data May Have Duplicates	No
Edit Delete	isCharterAllowed	No
Edit Delete	isUngradedAllowed	No
Edit Delete	Max DD Age Permitted	5
Edit Delete	MEDICAL an option for ELP Assessment	No
Edit Delete	Migrant School Year End Date	12-Aug-2014
Edit Delete	Migrant School Year Start Date	13-Aug-2013
Edit Delete	Min SE Exit Age GHS	14
Edit Delete	Min SE Exit Age RMA	18
Edit Delete	NCLB AYP Waiver State	Yes
Edit Delete	Report 5-yr Graduation Cohort	No
Edit Delete	Report 6-yr Graduation Cohort	No
Edit Delete	Secondary Displaced Homemaker	No

[New State Characteristic](#)

Figure 23: State Characteristics Edit Screen

Users can select the school year of interest; these characteristics can have different values in different school years.

The characteristics are name-value pairs that some of the SSIS packages reference as part of their processing. The names used are unique for a given school year. The packages that reference state characteristics are looking for specific names; that is, spelling is important.

The values also have specific ranges or data types that SSIS will expect. This screen does not have any data validation nor verification. Changes should be made with caution.

Submission File Characteristics

Selecting the Submission File Characteristics option from the main menu brings up the following screen.

	Specification	report Level	header Record FileName	header Record FileType	data Record Table Name	file Subdirectory	zip File Password	invalid Records FileName
Edit Delete	S002	LEA	CWDBLIDEA	LEA CHILDREN WITH DISABILITIES	IDEADISAB	S002		Invalid S002 Records
Edit Delete	S002	SCH	CWDBLIDEA	SCHOOL CHILDREN WITH DISABILITIES	IDEADISAB	S002		Invalid S002 Records
Edit Delete	S002	SEA	CWDBLIDEA	SEA CHILDREN WITH DISABILITIES	IDEADISAB	S002		Invalid S002 Records

[New Submission File](#)

Figure 24: Submission File Characteristics Screen

Users can select specific school years, and optionally specific submission numbers.

Each submission should have a row in this table. That is, if a submission is reported at all three levels – SEA, LEA and School – then there will be three records in this table.

The first five columns have the data specified in the EDFacts submission documentation and should not require modification.

The last three columns store:

- File Subdirectory – the subdirectory into which this submission file should be saved. This subdirectory is relative to the root directory specified the state configuration for the given school year.
- Zip file password – if the zip file for this submission should be password protected, then the password to use. Leaving this field blank means “don’t password protect” the zip file.
- Invalid Records File Name – if during the submission file creation process validation errors were detected, then what name should go on the file that will store those errors. This file will be save into the subdirectory specified above. Typical validation errors include staged records where a state code cannot be found in the code set translation, or a necessary code set is missing altogether.

SSIS Package Execution

SSIS Package Execution is the core function of the ES3. The ES3 Web Management System gives a user the capability of:

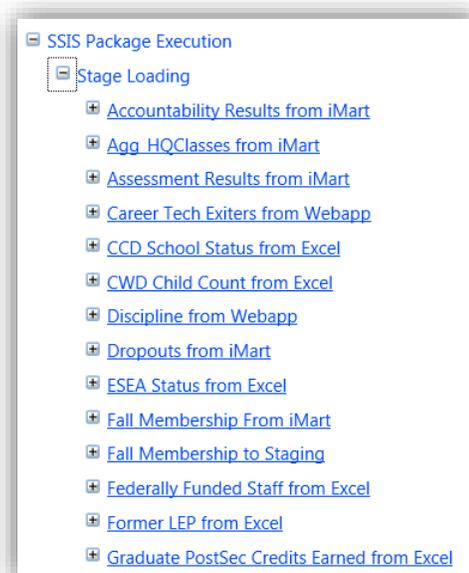
- 1) seeing what SSIS packages have been deployed to the package store
- 2) selecting a package for execution
- 3) setting runtime configuration values
- 4) executing the package

Traditionally, SSIS ETL processes are built to either run on a regular recurring schedule or built for database administrators to run for within database management tools. The ES3 Web Management System lets *EDFacts* coordinators and selected program staff run these without requiring them to have expensive tools nor learn their operation.

Selecting a Package to Execute

ES3 ETL packages are deployed to an SSIS package repository on the *EDFacts* database server. As in a file system, this repository can be organized into folders and subfolders. All the ES3 packages are stored in an “EDFacts” folder in the repository. This prevents the ES3 Web Management System from exposing non-ES3 SSIS jobs.

When the plus sign to the left of SSIS Package Execution is selected, the web application displays the contents of the EDFacts folder.



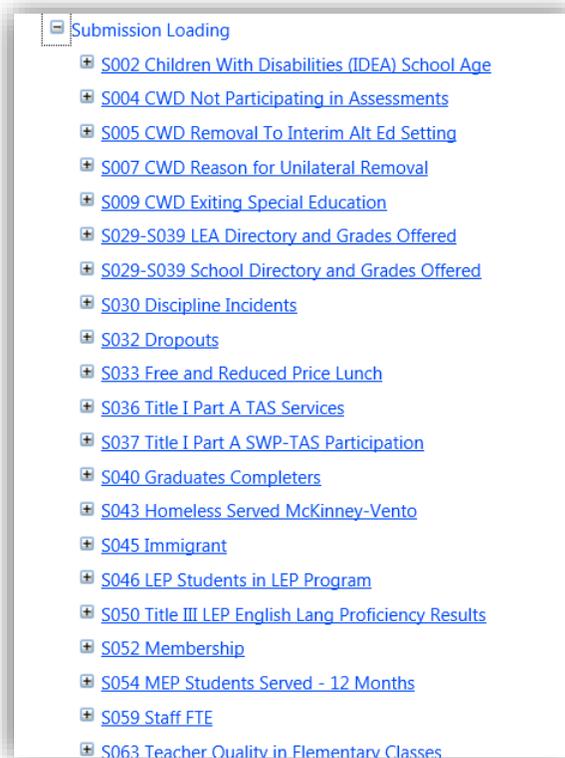


Figure 25: SSIS Package Execution menu

Packages that can be executed appear as underlined links. Folders that can be expanded are not underlined. These packages and folders are read “on the fly” so no application changes are required as new packages are deployed.

By default, the EDFacts folder contains a “Stage Loading” and a “Submission Loading” folders. All the ES3 packages are deployed into these two folders as appropriate. This folder structure can be modified, but the web app can deal with any organization scheme as long as “EDFacts” is the root folder for all ES3 SSIS packages.

In the example above, the two subfolders have been expanded to display their full contents. To run a package, simply click on its name.

Run-Time SSIS Package Configuration

When a package is stored, certain package variables are set to be editable at runtime. These settings are grouped into “package configurations.” When a

package is selected to be executed, the web app reads the package configuration and displays the editable settings.

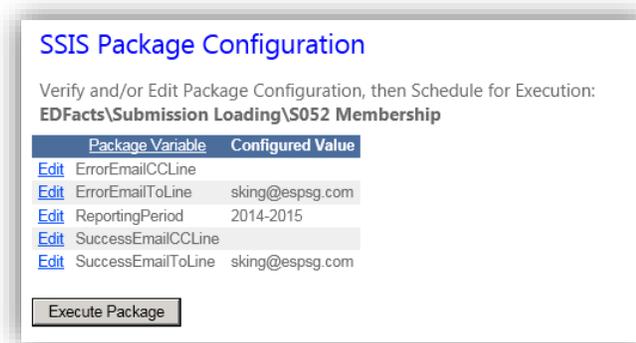


Figure 26: SSIS Package Runtime Configuration Screen

In this example, the package for the S052 Membership file has been selected.

Almost all of the submission file loading routines expose these five settings. There are four values for setting email recipients, and then the core setting for ReportingPeriod. In this case, the user had clicked the [Edit](#) link and is setting the value to '2013-2014'. When [Update](#) is clicked then that new value will be saved and used by the next execution of the S052 Membership package.

If the configuration settings are acceptable, then click the [Execute Package] button to start the process.

Package Scheduling Results

When the [Execute Package] button is clicked, the ES3 Web Management System does several things.

- 1) Create a SQL Server Agent job with the same name as the SSIS Package
- 2) Add 1 step to that job of running our SSIS Package
- 3) Set other settings to get the job ready
- 4) Schedule the job to run immediately

The result of these steps will be displayed on a screen like the following

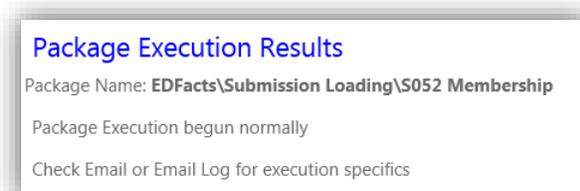


Figure 27: Package Execution Start Result Screen

It is important to note, this just means a job was successfully created and scheduled to run. It does not mean the package execution is complete nor that the job ran successfully.

If there was a problem in trying to create the SQL Agent job, then that information will be displayed on this screen.

Typical issues include things like trying to schedule a new job before a current job is complete.

The SSIS Package Execution Log monitoring and SQL Agent Job History screens are used to follow the actual package execution steps and results. These are explained in detail in the next section.

Validation

ES3 includes procedures that validate system data in relation to *EDFacts* requirements. There are two types of validations in ES3: Staging Data Validation and USED Validation.

Staging Data Validation occurs during the Submission File Creation process. This validation ensures that ES3 can translate staged data correctly to *EDFacts* format. For example, that a particular code in the staged data for a field is defined in the appropriate code set translation table. Records that fail this validation prevent a submission file from being generated by ES3.

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 the following day. This overnight turn-over can be frustrating at crunch –time. ES3 has begun the implementation of the USED business rules reporting, allowing a user to see relatively quickly what USED would be telling them tomorrow.

Invalid Staging Records

In the process of creating the submission files, the data in the staging tables are validated. Typically there are two types of tests, both related to the translation of codes from state options to those to be required by *EDFacts*.

As part of validation process, ES3 needs entries in the State Code Set Translation table for the various options. The first test is that the necessary code set tables exist. The second test is that the state codes in each record of the staged data have matching entries in the code set.

The screenshot shows a web interface titled "LEA and/or Charter Authorizer Basic Info". It has two dropdown menus: "Select a Reporting Period:" with "2013-2014" selected, and "Select a Submission File:" with "S002" selected. Below these is a table with two columns: "Error" and "Affected Record Count".

Error	Affected Record Count
Invalid option for [Educational Environment (IDEA) SA] of [<null>]	255
Invalid option for [LEP Status (Both)] of [<null>]	19

Figure 28: Invalid Staging Records

Use the pick lists to filter results. Users can filter by reporting period, submission file, and/or type of validation error found. Pick lists to the right depend on choices in pick lists to the left.

This report only includes records in the underlying invalid records table. That table is only populated as part of the Submission File loading routines.

That means, if you are looking for errors for a particular submission file, and the file is not listed in the "Submission File" pick list, then either you have not attempted to create the submission file, or no validation errors were found.

If validation errors are found, the submission files will NOT be created.

USED Validation Reporting

Note: Not all of the USED business rules have been implemented at this time. Only those rules that have been implemented can be applied, but the system is designed in such a way that as rules are implemented they will show up without the need for Web App updates.

The USED Validation Reporting process runs against the EDFacts Submission file data stored in the ES3 Submission File tables. That means, the submission file creation process must be run prior to running the USED Validation Reporting process.

When the USED Validation Reporting menu option is selected, a screen like the following appears.

The screenshot shows a web interface titled "USED Validation Reporting". It has two dropdown menus: "Select Submission File Validation to Run:" with "S002" selected, and "Select School Year:" with "2013-2014" selected. Below these is a button labeled "Execute Validation".

Figure 29: USED Validation Reporting screen

The list of Submission File numbers that are available is generated “on the fly” from validation stored procedures that have been deployed. That means as new submission file rule sets come on line, they will appear in this interface.

A rule set stored procedure consists of calls to the individual rule procedures that have been defined. Not all of the rules that USED applies to a given file have been written at this time, so rule set for a given file may not include all of the rules USED will apply.

The school year list come from the values defined in the State Configuration screen. It is possible to attempt to run rules for a file and year combination that have not yet been generated.

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.

USED Validation Results

Submission File: [S052](#) Reporting Period: [2012-2013](#) Validation Date Time: [3/4/2015 3:22 PM](#)

Severity	Rule	Description	Category Set	SEA	LEA Identifier	School Identifier	Additional Information
● Error	S052-R21	State count for [PK] and [AM7] is less than sum for same category submitted at school level.	1	SEA			Grade: PK RE: AM7 SEA Count: 480 Sum School Counts: 481
● Error	S052-R21	State count for [08] and [AS7] is less than sum for same category submitted at school level.	1	SEA			Grade: 08 RE: AS7 SEA Count: 162 Sum School Counts: 163
● Error	S052-R21	State count for [09] and [BL7] is less than sum for same category submitted at school level.	1	SEA			Grade: 09 RE: BL7 SEA Count: 285 Sum School Counts: 286
● Error	S052-R21	State count for [PK] and [HI7] is less than sum for same category submitted at school level.	1	SEA			Grade: PK RE: HI7 SEA Count: 244 Sum School Counts: 246
● Error	S052-R21	State count for [10] and [MU7] is less than sum for same category submitted at school level.	1	SEA			Grade: 10 RE: MU7 SEA Count: 132 Sum School Counts: 133
● Error	S052-R21	State count for [PK] and [WH7] is less than sum for same category submitted at school level.	1	SEA			Grade: PK RE: WH7 SEA Count: 2,476 Sum School Counts: 2,482
● Error	S052-R23	LEA Membership 0 or Missing, but School Membership > 0	T				
● Error	S052-R23	LEA Membership 0 or Missing, but School Membership > 0	T				
● Error	S052-R23	LEA Membership 0 or Missing, but School Membership > 0	T		40201		LEA Membership: 0 Sum of School Memberships: 96
● Error	S052-R23	LEA Membership 0 or Missing, but School Membership > 0	T		49203		LEA Membership: 0 Sum of School Memberships: 63
● Error	S052-R23	LEA Membership 0 or Missing, but School Membership > 0	T				
● Error	S052-R23	LEA Membership 0 or Missing, but School Membership > 0	T				
● Error	S052-R23	LEA Membership 0 or Missing, but School Membership > 0	T				
● Error	S052-R23	LEA Membership 0 or Missing, but School Membership > 0	T		61201		LEA Membership: 0 Sum of School Memberships: 8

Figure 30:USED Validation Results report

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 from 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 school level record
- **School Identifier:** the state school identifier if the offending record is an 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.

This is the current area getting most of our attention for extending ES3.

System Monitoring and Management

The ES3 Web Management System version 1 includes a set of system monitoring and management screens. These screens allow the EDFacts coordinator to keep tabs on the results and status of the various processes of ES3. It includes screens for reviewing:

- All the emails generated and sent by the SSIS procedures
- History review of the creation of EDFacts Submission Files
- Review of the complete logs of the SSIS package executions
- Status of the SQL Agent Jobs: history and detailed status results

Each is described in more detail below.

SQL Agent Job Status

The ES3 package execution routine functions by creating a SQL Agent Job named the same as the package name. That job has a single task of running the SSIS

package. The SQL Agent Job Status menu option brings up a screen like the following that shows all the EDFacts Jobs and the status of their last execution.

Run Status	Job Name	Start Date Time	End Date Time	Run Duration (hh:mm:ss)
Success	S089 Children with Disabilities (IDEA) Early Childhood	2/23/2015 5:08:12 PM	2/23/2015 5:08:14 PM	2
Success	S002 Children With Disabilities (IDEA) School Age	2/23/2015 5:01:00 PM	2/23/2015 5:01:02 PM	2
Success	CWD Child Count from Excel	2/23/2015 4:50:28 PM	2/23/2015 4:50:32 PM	4
Success	S030 Discipline Incidents	2/22/2015 10:16:58 AM	2/22/2015 10:17:01 AM	3
Success	Discipline from Webapp	2/22/2015 10:15:04 AM	2/22/2015 10:15:08 AM	4
Success	Fall Membership From iMart	2/18/2015 3:49:30 PM	2/18/2015 3:49:49 PM	19
Success	S176 State Interventions - Flexibility	2/18/2015 3:21:51 PM	2/18/2015 3:21:55 PM	4
Success	State Interventions from Excel	2/18/2015 3:12:18 PM	2/18/2015 3:12:20 PM	2
Success	Migrant Aggregate S192 from Excel	2/17/2015 9:24:59 AM	2/17/2015 9:25:03 AM	4
Success	Migrant Aggregate S121 from Excel	2/11/2015 3:34:49 PM	2/11/2015 3:34:51 PM	2
Success	S121 Migrant Students Eligible - 12 Months	2/10/2015 3:40:37 PM	2/10/2015 3:40:40 PM	3
Success	S182 N or D Transition Services	2/10/2015 3:01:19 PM	2/10/2015 3:01:22 PM	3
Success	S181 N or D Exited Program Outcomes	2/10/2015 2:52:45 PM	2/10/2015 2:52:48 PM	3

Figure 31: SQL Agent Job Status screen

The top of the screen shows the SQL agent jobs associated with ES3. By default the screen shows the most recent jobs first. Clicking a column title will sort the screen by that value.

There is a footer that describes the contents of the screen's report.

This table lists the SQL Server Agent jobs associated with the EDFacts Shared State Solution and the result of their last execution. Columns are:

- **Run Status:** the result from the last execution of the job. "Executing..." means the job was running at the last refresh of this page.
- **Package Name:** the name of the package included in the job
- **Start Date Time:** the date and time when the package began its execution
- **End Date Time:** the date and time when the package execution completed. This is blank if the package is still running
- **Duration:** How long the package took to run in <hours>:<minutes>:<seconds> format

Figure 32: SQL Agent Job Status screen footer

There is always only one job for a given package and by default we do not keep prior job execution history for these jobs.

When ES3 creates jobs, it assigns them to a SQL Agent Job Category of "EDFacts Shared Solution Jobs." This report only shows the status of jobs in that category. This prevents the status of other agent jobs from being exposed through this application.

This report shows the following information for all EDFacts Agent Jobs.

- **Run Status** – the final status for the Job. Statuses are either:
 - Success – the job ran as expected and finished without error

- Failed – some error occurred during execution and the job did not exit normally
- Executing – the job is still running
- **Job Name** – the name of the job, which will be the name of the package that it needs to run
- **Start Date Time** – the date and time at which the agent job began running. This is from the system clock on the server running the job
- **End Date Time** – the date and time at which the agent job completed running. This will be blank if the job is still running
- **Run Duration** – the hours, minutes, and seconds that the job ran from start to finish

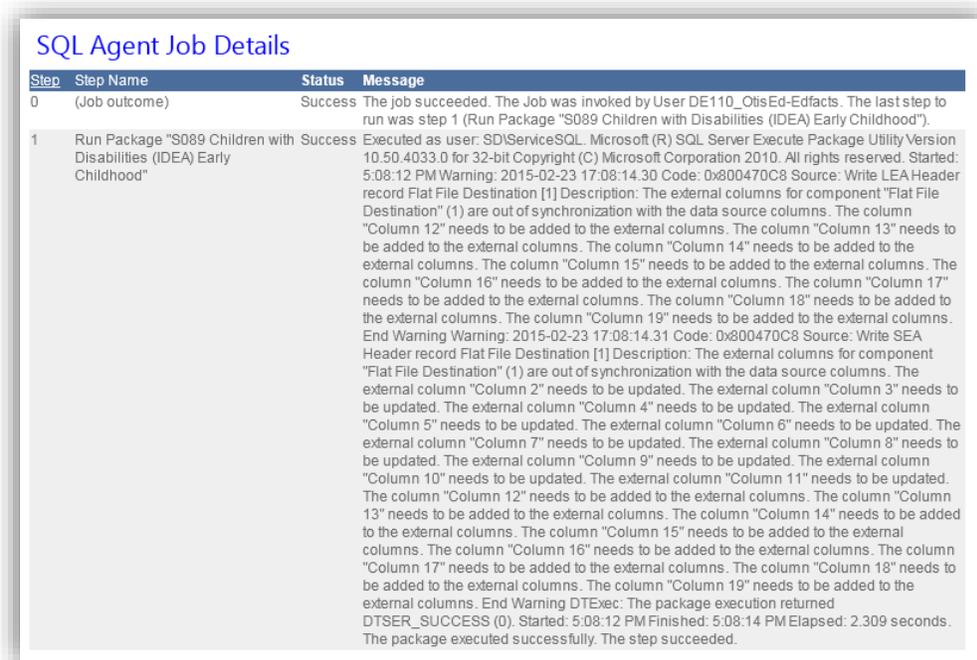
It is important to note that a job can finish successfully without creating submission files. If validation errors occur during the package execution, and the invalid records are identified and logged, the SSIS package execution will finish “successfully” and the agent job finish “successfully.” It is important to review the generated email and/or SSIS Package Execution Log to see the package results.

This screen automatically refreshes every 10 seconds. That means if a job is shown as “Executing...”, the screen will continue to update until the status changes to “Success” or “Failed”.

If a user clicks on a Job Name, then the SQL Agent Job Detail report is shown.

SQL Agent Job Details

SQL Agent Job Details, accessed by clicking a Job Name link on the SQL Agent Job Status screen, results in a report like the following.



Step	Step Name	Status	Message
0	(Job outcome)	Success	The job succeeded. The Job was invoked by User DE110_OtisEd-Edfacts. The last step to run was step 1 (Run Package "S089 Children with Disabilities (IDEA) Early Childhood").
1	Run Package "S089 Children with Disabilities (IDEA) Early Childhood"	Success	Executed as user: SD\ServiceSQL. Microsoft (R) SQL Server Execute Package Utility Version 10.50.4033.0 for 32-bit Copyright (C) Microsoft Corporation 2010. All rights reserved. Started: 5:08:12 PM Warning: 2015-02-23 17:08:14.30 Code: 0x800470C8 Source: Write LEA Header record Flat File Destination [1] Description: The external columns for component "Flat File Destination" (1) are out of synchronization with the data source columns. The column "Column 12" needs to be added to the external columns. The column "Column 13" needs to be added to the external columns. The column "Column 14" needs to be added to the external columns. The column "Column 15" needs to be added to the external columns. The column "Column 16" needs to be added to the external columns. The column "Column 17" needs to be added to the external columns. The column "Column 18" needs to be added to the external columns. The column "Column 19" needs to be added to the external columns. End Warning Warning: 2015-02-23 17:08:14.31 Code: 0x800470C8 Source: Write SEA Header record Flat File Destination [1] Description: The external columns for component "Flat File Destination" (1) are out of synchronization with the data source columns. The external column "Column 2" needs to be updated. The external column "Column 3" needs to be updated. The external column "Column 4" needs to be updated. The external column "Column 5" needs to be updated. The external column "Column 6" needs to be updated. The external column "Column 7" needs to be updated. The external column "Column 8" needs to be updated. The external column "Column 9" needs to be updated. The external column "Column 10" needs to be updated. The external column "Column 11" needs to be updated. The column "Column 12" needs to be added to the external columns. The column "Column 13" needs to be added to the external columns. The column "Column 14" needs to be added to the external columns. The column "Column 15" needs to be added to the external columns. The column "Column 16" needs to be added to the external columns. The column "Column 17" needs to be added to the external columns. The column "Column 18" needs to be added to the external columns. The column "Column 19" needs to be added to the external columns. End Warning DTEXec: The package execution returned DTSER_SUCCESS (0). Started: 5:08:12 PM Finished: 5:08:14 PM Elapsed: 2.309 seconds. The package executed successfully. The step succeeded.

Figure 33: SQL Agent Job Details Screen

This report show the results of a job's execution. The fields in the report are:

- **Step** – all the ES3 jobs have two steps: step 0 with the overall job status, and step 1 which is the SSIS package execution results.
- **Step Name** – The step name: either "(Job Outcome)" or our package name
- **Status** – The status results of pertinent job step: Success or Failed
- **Message** – the logged detailed results returned to the SQL agent by the job step. This information is useful for debugging when a package does not run as expected, but can otherwise be ignored.

SSIS Package Task Logs

SQL Server Integration Services ETL packages consist of a set of tasks that can be organized into “control flows.” All of the submission loading SSIS packages have a control flow similar to the following.

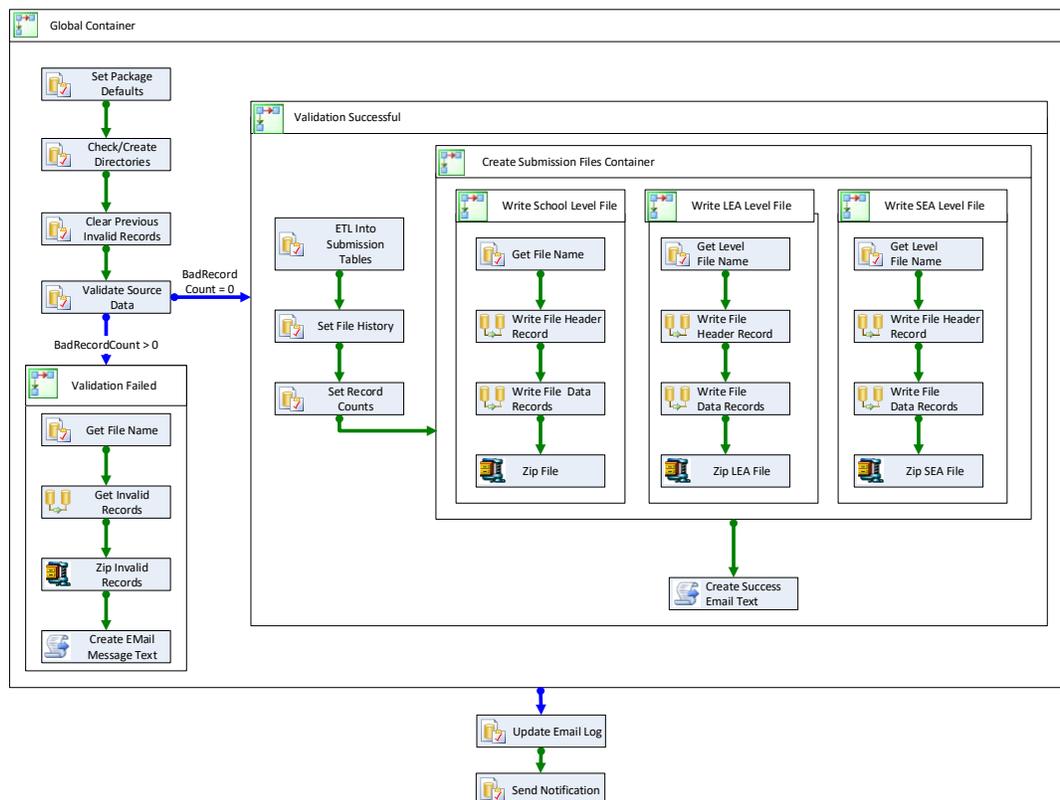


Figure 34: Typical Submission Package SSIS Control Flow

The flow begins at the upper left with “Set Package Defaults” and follows the appropriate arrows until “Send Notification.”

ES3 logs every time one of the labeled boxes start and stops. The SQL Package Execution Log menu option brings up a screen that allows a user to review that process log.

SSIS Process Log

Select a Package Name: Select an execution instance:

Process Log Entries

[Refresh](#)

Package Task Name	Start Time	End Time	Elapsed Time	task End Status
S030 Discipline Incidents	2/22/2015 10:16:59 AM	2/22/2015 10:17:00 AM	00:00:01.4200000	Success
Global Container	2/22/2015 10:16:59 AM	2/22/2015 10:17:00 AM	00:00:01.1400000	Success
Set Package Defaults	2/22/2015 10:16:59 AM	2/22/2015 10:16:59 AM	00:00:00.0330000	Success
Check-Create Directories	2/22/2015 10:16:59 AM	2/22/2015 10:16:59 AM	00:00:00.0500000	Success
Delete Previous Invalid Records from Log	2/22/2015 10:16:59 AM	2/22/2015 10:16:59 AM	00:00:00.2400000	Success
Validate Staging Data	2/22/2015 10:16:59 AM	2/22/2015 10:17:00 AM	00:00:00.2200000	Success
Validation Successful	2/22/2015 10:17:00 AM	2/22/2015 10:17:00 AM	00:00:00.5400000	Success
ETL Into Submission Tables	2/22/2015 10:17:00 AM	2/22/2015 10:17:00 AM	00:00:00.2030000	Success
Set File History	2/22/2015 10:17:00 AM	2/22/2015 10:17:00 AM	00:00:00.0400000	Success
Set Record Counts	2/22/2015 10:17:00 AM	2/22/2015 10:17:00 AM	00:00:00.0270000	Success
Create Submission Files Container	2/22/2015 10:17:00 AM	2/22/2015 10:17:00 AM	00:00:00.2130000	Success
Write SEA Level File	2/22/2015 10:17:00 AM	2/22/2015 10:17:00 AM	00:00:00.1870000	Success
Get SEA File Name1	2/22/2015 10:17:00 AM	2/22/2015 10:17:00 AM	00:00:00.0200000	Success
Write SEA Header record	2/22/2015 10:17:00 AM	2/22/2015 10:17:00 AM	00:00:00.0600000	Success
Write SEA Data Records	2/22/2015 10:17:00 AM	2/22/2015 10:17:00 AM	00:00:00.0470000	Success
Write School Level File	2/22/2015 10:17:00 AM	2/22/2015 10:17:00 AM	00:00:00.1670000	Success
Get School File Name1	2/22/2015 10:17:00 AM	2/22/2015 10:17:00 AM	00:00:00.0200000	Success
Write School Header record	2/22/2015 10:17:00 AM	2/22/2015 10:17:00 AM	00:00:00.0330000	Success
Write School Data Records	2/22/2015 10:17:00 AM	2/22/2015 10:17:00 AM	00:00:00.0470000	Success
Write LEA Level File	2/22/2015 10:17:00 AM	2/22/2015 10:17:00 AM	00:00:00.1800000	Success
Get LEA File Name1	2/22/2015 10:17:00 AM	2/22/2015 10:17:00 AM	00:00:00.0200000	Success
Write LEA Header record	2/22/2015 10:17:00 AM	2/22/2015 10:17:00 AM	00:00:00.0470000	Success
Write LEA Data Records	2/22/2015 10:17:00 AM	2/22/2015 10:17:00 AM	00:00:00.0500000	Success
Create Success EMail Message Text	2/22/2015 10:17:00 AM	2/22/2015 10:17:00 AM	00:00:00.0130000	Success
Update Email Log	2/22/2015 10:17:00 AM	2/22/2015 10:17:00 AM	00:00:00.0130000	Success
Send Notification	2/22/2015 10:17:00 AM	2/22/2015 10:17:00 AM	00:00:00.2300000	Success

Figure 35: SSIS Package Process Log Screen

As shown in the example above, the report has a drop down for the package name, and then a drop down showing every time the selected package was executed.

The body of the report shows the results of the selected execution. The report fields are:

- **Package Task Name** – The name of box in the package control flow diagram. As shown in the generic package, tasks can be grouped within a containing box. When this occurs, those tasks appear indented below the containing task name.
- **Start Time** – the date and time the task execution started
- **End Time** – the date and time the task execution ended
- **Elapsed Time** – the elapsed time from start to end in hours, minutes and seconds. The seconds are shown including seven decimal places

- **Task End Status** – the final status for the particular task: Success, Failed, or, if a task is still running, Incomplete.

Email Log Review

Each of the SSIS ETL packages concludes by sending an email with the status of the processing. The Email Log Review menu option shows a screen like the following.

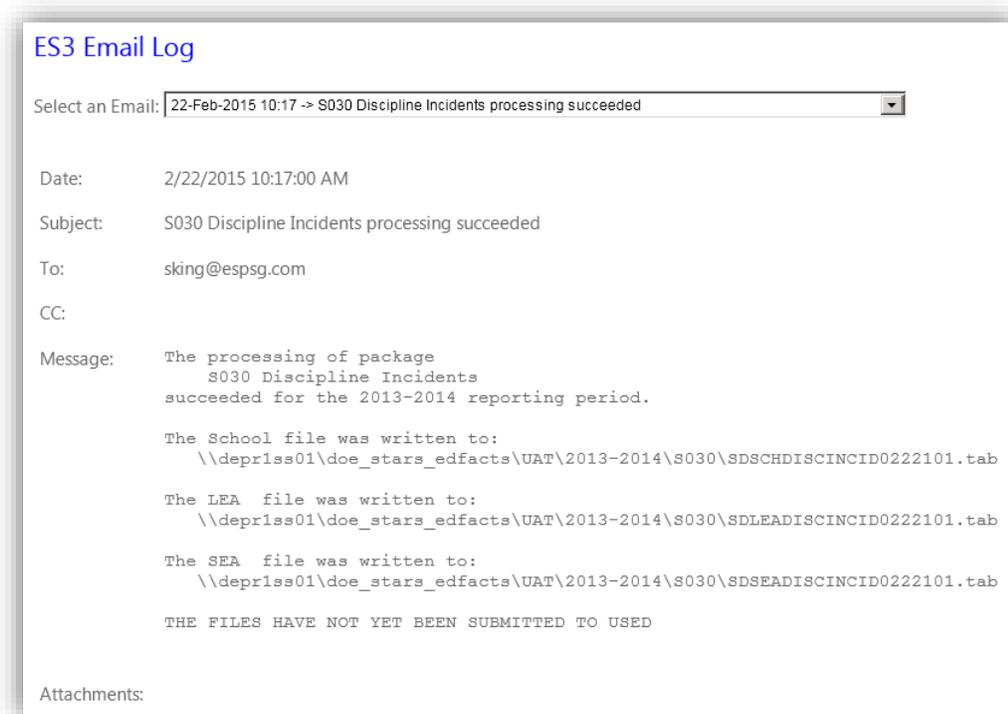


Figure 36: Email Log Review Screen

The “Select an Email” drop down shows all the emails generated by the system, sorted with the most current at the top of the list.

The next to last step in each package execution is to log these emails. That means even if the email sending fails due to email server issues, the package results summary still gets logged and can be reviewed here.

Submission File Due Dates

This screen shows the EDFacts collection calendar. The screen shows the reporting period, file number and name, due date, and the submission levels included.

EDFacts Submission File Due Dates

Select a Reporting Period: Files Due in the Next days

Edit	Reporting Period	Number	Name	Due Date	SEA	LEA	SCH	Not Reported by ES3
Edit	2013-2014	S030	Discipline Incidents	28 Feb 2015	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Edit	2014-2015	S033	Free and Reduced Price Lunch	31 Mar 2015	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Edit	2014-2015	S052	Membership	31 Mar 2015	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Edit	2014-2015	S129	CCD School	31 Mar 2015	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Edit	2014-2015	S176	State Interventions - Flexibility	31 Mar 2015	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Edit	2014-2015	S002	Children with Disabilities (IDEA) School-Age	01 Apr 2015	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Edit	2014-2015	S089	Children with Disabilities (IDEA) Early Childhood	01 Apr 2015	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Edit	2014-2015	S046	LEP Students in LEP Program	30 Apr 2015	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 37: Submission File Due Dates

The last column in the screen is for whether the particular file is to be created and tracked in ES3. For example, states that have flexibility waivers releasing them from the AYP requirements of NCLB, may not have to report files 128, 152, nor 153 that are related to tracking the consequences of not making AYP. Alternatively, states that don't have such waivers don't have to report files 171 – 174 since they have not identified flexibility subgroups.

The report can be filtered for a particular reporting period and/or files that are due in the next 30, 60, 90, 180, or 365 days.

Submission File Creation Status

The EDFacts submission file creation status tracks submission file creation against the EDFacts calendar.

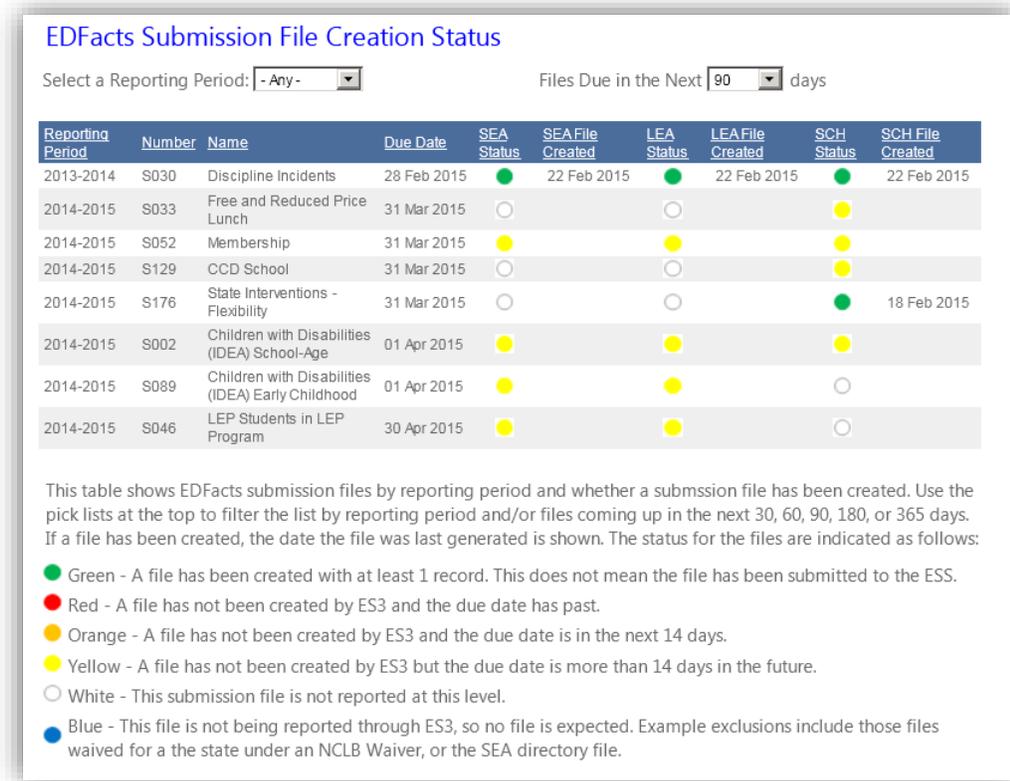


Figure 38: Submission File Creation Status

The report can be filtered by reporting period and/or files due in the next 30, 60, 90, 180, or 365 days.

For each of the reported files the report shows the reporting period, file number and name, and due date. Then for each report level, the report show the creation status and last file creation date, if any.

Report content can be sorted on any column by simply clicking the column header.

Report status is shown by the colored dots in the respective column report level column. The color and meaning for the dots is:

- Green dot – a file for the respective report level and reporting period has been created for that submission file number. The created file has more than on data record.

A green dot does not mean the file has been sent to the EDFacts Submission System, nor that the file has been accepted by the state.

- Red dot – a file for the respective level has not been created and the file due data is prior to today.
- Orange dot – a file for the respective level has not been created and the due date of the file is in the next 14 days.
- Yellow dot – a file for the respective level has not been created but the due date is more than 14 days away from today
- Blue dot – a file for the respective level is not planned to be created by ES3. This might be because the state is not required to submit the reference file, or that the state will report that particular file using a legacy process.
- White dot – EDFacts does not include this report level for the referenced submission file.

If a file has been created for the respective level, the date of the file creation is shown next to the colored dot.

Submission File Creation History

The ES3 submission loading packages store the EDFacts data in the EDFacts Submission tables and then create the submission files. We log the details of those created files in the SubmissionFileHistory table. The Submission File Creation History menu option brings up the following screen that reviews the file history.

Specification Number	Report Level	File Type	Last File Created	File Name	Identifier	Version ID	Record Count
S029_LEA	LEA	LEA DIRECTORY INFO	12/21/2014 3:27:08 PM	\\depr1ss01\doe_stars_edfacts\UAT\2014-2015\S029\SDLEADIRECTORY1221151.tab	21Dec14 1527	ServiceSQL	1221151 170
S029_SCH	SCH	SCHOOL DIRECTORY INFO	12/24/2014 1:47:05 PM	\\depr1ss01\doe_stars_edfacts\UAT\2014-2015\S029\SDSCHDIRIRECTORY1224132.tab	24Dec14 1347	ServiceSQL	1224132 699
S039	SCH	SCHOOL GRADES OFFERED	12/24/2014 1:47:05 PM	\\depr1ss01\doe_stars_edfacts\UAT\2014-2015\S039\SDSCHGRADESOFF1224132.tab	24Dec14 1347	ServiceSQL	1224132 3739
S130_SCH	SCH	SCHOOL NCLB SY START STATUS	1/15/2015 4:43:29 PM	\\depr1ss01\doe_stars_edfacts\UAT\2014-2015\S130\SDSCHSYRSTST0115161.tab	15Jan15 1643	ServiceSQL	0115161 699
S176	SCH	SCHOOL FLEXIBILITY INTERVENTION	2/18/2015 3:21:54 PM	\\depr1ss01\doe_stars_edfacts\UAT\2014-2015\S176\SDSCHFLEXINTRV0218151.tab	18Feb15 1521	ServiceSQL	0218151 227

Figure 39: Submission File History Screen

The user of this report selects the school year/reporting period of interest. This defaults to the most current school year.

By default all the submission files for the selected year are shown, but the user can select a specific submission file set, if desired.

This report shows the information included in the header record of each of the submission files. That information includes:

- **Specification Number** – the *EDFacts* file specification number
- **Report Level** – the level of the report: SEA, LEA or SCH
- **File Type** – The file type as specified in the file specifications documents
- **Last File Created** – The last date on which this file was created. ES3 logs all file creations, but this report only shows the most current
- **File Name** – The full file path to the submission file
- **Identifier** – The file identifier that was written to the header record
- **Version ID** – The “version” that was written to the header record
- **Record Count** – The number of data rows written in the file