



U.S. DEPARTMENT OF EDUCATION

***EDFacts* SY 2016–17
Business Rules Guide
Introduction**

Version 13.0

December 2016

This document was produced under U.S. Department of Education Contract No. ED-PEP-14-O-5013 with Applied Engineering Management Corporation. Brandon Scott served as the contracting officer's representative. No official endorsement by the U.S. Department of Education of any product, commodity, service or enterprise mentioned in this publication is intended or should be inferred.

U.S. Department of Education

John B. King, Jr.
Secretary

Institute of Education Sciences

Ruth Neild
Deputy Director for Policy and Research
Delegated Duties of the Director

National Center for Education Statistics

Peggy G. Carr
Acting Commissioner

Administrative Data Division

Ross Santy
Associate Commissioner

December 2016

This technical guide is in the public domain. Authorization to reproduce it in whole or in part is granted. While permission to reprint this publication is not necessary, the citation should be: Business Rules Guide 13.0 (2016), U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved [date] from <http://www2.ed.gov/about/inits/ed/edfacts/business-rules-guide.html>.

On request, this publication is available in alternate formats, such as Braille, large print, or computer diskette. For more information, please contact the Department's Alternate Format Center at (202) 260-0852 or (202) 260-0818.

DOCUMENT CONTROL

DOCUMENT INFORMATION

Title:	EDFacts SY 2016–17 Business Rules Guide
Revision:	Version 13.0
Issue Date:	December 2016
Security Level:	Unclassified – For Official Use Only
Filename:	EDFacts SY 2016–17 Business Rules Guide.doc

DOCUMENT HISTORY

Version Number	Date	Summary of Change
1.0		Version 1.0 or related updates (i.e., 1.1, 1.2, etc.) of this guide are used for SYs 2003–04 and 2004–05.
2.0		Version 2.0 or related updates (i.e., 2.1, 2.2, etc.) of this guide are used for SY 2005–06.
3.0		Version 3.0 or related updates (i.e., 3.1, 3.2, etc.) of this guide are used for SY 2006–07.
4.0		Version 4.0 or related updates (i.e., 4.1, 4.2, etc.) of this guide are used for SY 2007–08.
5.0		Version 5.0 or related updates (i.e., 5.1, 5.2, etc.) of this guide are used for SY 2008–09.
6.0		Version 6.0 or related updates (i.e., 6.1, 6.2, etc.) of this guide are used for SY 2009–10.
7.0		Version 7.0 or related updates (i.e., 7.1, 7.2, etc.) of this guide are used for SY 2010–11.
8.0		Version 8.0 or related updates (i.e., 8.1, 8.2, etc.) of this guide are used for SY 2011–12.
9.0	December 2012	Version 9.0 or related updates (i.e., 9.1, 9.2, etc.) of this guide are used for SY 2012–13.
10.0	November 2013	Version 10.0 or related updates (i.e., 10.1, 10.2, etc.) of this guide are used for SY 2013–14.
11.0	December 2014	Version 11.0 or related updates (i.e., 11.1, 11.2, etc.) of this guide are used for SY 2014–15.
12.0	December 2015	Version 12.0 or related updates (i.e., 12.1, 12.2, etc.) of this guide are used for SY 2015–16.
13.0	December 2016	Version 13.0 or related updates (i.e., 13.1, 13.2, etc.) of this guide are used for SY 2016–17.

RELEASE AUTHORIZATION

Role	Responsible Individual
Author	Robert Stillwell / December 2016
QA	
Release Authority	

PREFACE

EDFacts is a collaborative effort of the U.S. Department of Education (ED), state education agencies (SEAs) and industry partners to centralize state-reported K through 12 educational performance data into one federally coordinated data repository located in ED. The purposes of *EDFacts* are to:

- Place the use of robust, timely performance data at the core of educational decision making and policymaking
- Reduce state and district burden and streamline data practices
- Improve state data capabilities by providing resources and technical assistance
- Provide data for planning, policy and management and the federal, state and local levels.

EDFacts contains both a centralized, coordinated repository of state K through 12 education and performance data residing at the Department, and the *EDFacts* Submission System (ESS), an electronic data system capable of receiving data on more than 100 data groups at the state, district, and school levels.

The *EDFacts* Business Rules Guide is one of several resources available to *EDFacts* coordinators as they prepare and submit data files into ESS. Other available resources include the following documents on the *EDFacts* Web site—<http://www.ed.gov/edfacts>.

- ***EDFacts* Submission System Users Guide** – addresses the basic mechanics of system access and file transmission.
- ***EDFacts* Workbook** – provides information on how to submit files through the ESS for any given school year.
- ***EDFacts* Submission System Release Notes** – provide a description of the technical enhancements to each version of the ESS.
- **File / XML Specifications** – provide technical instructions for building the files that are submitted through the ESS. XML validation schemas (.xsd) and style sheets (.xsl) are also available.
- **FAQs** – lists answers to frequently asked questions (FAQs).

In addition to the documents on the website, the following tools are available upon request from the *EDFacts* Partner Support Center to assist in creating quality data submissions:

- **PSC File Format Checker (PSC Internal Tool)**— a tool available for states to check for non-XML format errors prior to submitting data to the ESS. XML validation schema (.xsd) provide a similar function for XML files.
- ***EDFacts* Metadata Repository (EMDR)** – a single repository providing access and management of metadata about the data sets in *EDFacts* systems. The EMDR replaces the *EDFacts* Data Set Viewer and can be used to review the data groups and categories used by *EDFacts*.

TABLE OF CONTENTS

Contents

1.0	SCOPE	1
2.0	ORGANIZATION AND USE OF THE BRG.....	1
3.0	DESCRIPTION OF SPREADSHEET COLUMNS....	2
4.0	SUBMISSION CONSTRAINTS	4

1.0 SCOPE

The *EDFacts* Business Rules Guide (BRG) helps state data providers prepare ESS submissions by providing a comprehensive list of the business rules that apply to each file submission. These business rules check the quality of data submitted to the system. In addition to helping users edit their data prior to submitting files, this guide is also a reference document to help states understand and correct any problems identified by the ESS.

This version of the BRG includes all edits enforced in ESS version 13.0 for SY 2016–17. For a list of prior school years' ESS edits, please reference the BRG for that specific year. The BRG only includes edits used in ESS.

2.0 ORGANIZATION AND USE OF THE BRG

The BRG is in two documents: an introductory Adobe PDF document and a Microsoft Excel spreadsheet. This introductory document provides information about using the BRG spreadsheet and understanding its terminology. The spreadsheet describes each business rule implemented in ESS release 13.0 with one row per business rule.

Although users can print the BRG, a more useful way to access the business rule information is to keep an electronic copy of the spreadsheet in an accessible location and use the Excel search and filter functions to locate specific business rule IDs or the rules associated with specific ESS files. Once downloaded or copied to your site, the spreadsheet can be sorted and filtered, and can have new columns added to provide your staff with a more usable, tailored tool.

3.0 DESCRIPTION OF SPREADSHEET COLUMNS

Below are the definitions of each column included in the spreadsheet portion of the guide.

- **Rule ID.** All business rules are assigned a unique ID number. You can use the Rule ID column to locate more information about edits triggered by a file submission. The letters at the start of the Rule ID indicate the type of edit.
 - Edits that start with “ER” are either format or validation edits.
 - Edits that start with an “M” are the edits that replaced CCD’s match checks.¹
 - Edits that start with an “S” are submission edits.
- **Error Type.** This column denotes the type of error that was found.
 - **Format and Validation Errors.** Format and validation errors both occur before the data are loaded into the staging database and are only reported through the Transmission Status Reports. Format errors occur when ESS cannot translate the file from its submitted format or cannot tell what format the file is in (xml, csv, txt, or tab). Validation errors usually identify invalid values when a permitted code set is provided.
 - **Submission Errors.** These errors occur once the data are in the staging database after the file has passed all format and validation edits. These errors ensure that submitted data meet or exceed an acceptable level of reasonability by checking the values entered in a field against other similar values in the same file or across files. They appear on the Submission Error Report and, for files that provide CCD data, on the Edit Reports.
 - **Match Errors.** These are a type of submission error and appear in the ESS Match Report (Submission Error Report page – Reports tab – Match Error Report row). They align with those formerly conducted by NCES in support of the Common Core Data (CCD) collection. All Match errors apply to file 029, Directory.
- **General Edit.** The general edit column denotes if the edit applies generally to more than one file specification. Because general edits apply to multiple files, these edits do not include a list of the associated file specifications. Examples of general edits are:
 - “ER-2 Format Error (Data is not in correct delimited (csv/tab) file format)” which applies to any csv or tab delimited file that comes in through ESS, and
 - “ER-37 Validation Error (The Category Code <value>, which was submitted for the reported <Table Type Name>, is not a Permitted Code)” applies to any file with specific permitted values.

¹ The match edit IDs are only used in the BRG and do not appear in the ESS match report.

- **Edit Type.** This column tells you if the result of the edit is an error or a warning. Errors must be corrected. Once the error is corrected, it will no longer appear on the error report. Warnings should be investigated. If the data are determined to be incorrect, they should be corrected with a resubmission. If the data are determined to be correct, no update is needed.
- **Year to Year Change Edit.** The year to year change flag lets you know if the edit compares prior year data to current year data.
- **Level (SEA, LEA, School).** The reporting level(s) to which the business rule applies - state education agency (SEA column), local education agency (LEA column), or school (School column). Some business rules apply to multiple levels. If, for instance, a business rule applies to the SEA file and the LEA file, both the SEA and LEA columns will contain the value “Yes”, but the School column will contain “No”.
- **Error Message.** This is the message text displayed on the ESS page or spreadsheet where the error or warning is provided.
- **Definition.** The detailed description of the business rule including illustrative examples, where appropriate. Note that some rules apply to more than one data element on a single file. For instance, a file can be flagged with error ER-28 when either the mailing street address or the city is invalid in a submitted file. The Definition and Edit Logic can help you determine when this is true.
- **Edit Logic.** The technical description of the business rule. This description includes the detailed logic employed in the business rule. Examples of values that display in this field include maximum values, checks for number of digits in a zip code, and comparisons of student counts.
- **Steward.** The U.S. Department of Education office responsible for the edit.
- **First ESS Release.** Identifies the ESS version that first included the edit. This field helps users identify new edits and edits that will be implemented in a future release.
- **File Spec Used #1, #2...#7.** Except for general edits, these columns identify the file(s) associated with the edit. Because some business rules draw on information from multiple *EDFacts* files, several columns are needed to provide this information. For example, submission error S002-R17--'Children with disabilities student count represents more than 25% of total LEA student population'—uses data from several files. For this edit the File Spec Used columns lists files 002 (Children with Disabilities, School Age) and 089 (Children with Disabilities, Early Childhood) because the edit applies to the total number of children with disabilities reported on both of these files. It also lists file 052 (Membership) because the edit compares the total IDEA student count to the LEA’s total student membership. Because edits sometimes use data from more than one file, sorting the spreadsheet by ‘File Spec Used 1’ will not always identify all the edits that apply to a specific file. Users should also perform the sort separately on each of the other file spec used columns.

4.0 SUBMISSION CONSTRAINTS

The *EDFacts* Workbook provides valuable information to help users troubleshoot problems with their ESS files. In conjunction with this BRG, the following sections of the workbook are particularly helpful for troubleshooting.

- **Correcting Errors.** Sections 6.6, 6.7, 6.8 and 6.9 of the SY 2016-17 *EDFacts* Workbook provide users with additional information about the submission process, and the cause and effect of the most common types of errors.
- **Directory Information.** Section 9 in the SY 2016-17 *EDFacts* Workbook provides a description of how the directories are structured as well as the official definitions of many of the directory elements. Since a substantial portion of the business rules apply to the directory file submissions, users will find this section particularly helpful.



The Department of Education’s mission is to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access.

www.ed.gov