



U.S. DEPARTMENT OF EDUCATION

***EDFacts* SY 2008-09
Business Rules Guide
Introduction**

Version 5.0

January 2009

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U.S. Department of Education

Arne Duncan
Secretary

Office of Planning, Evaluation and Policy Development

Thomas Skelly
Acting Assistant Secretary

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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	January 2009	<ul style="list-style-type: none">• Changed format to an Introduction (MS Word document) and a MS Excel spreadsheet for the business rules that can be filtered and sorted.• Added new validation edits to check for the presence and accuracy of NCES IDs• Added new submission edits to check that the sum of the detail records, subtotals, and grand totals are equivalent for data groups submitted using the new seven racial and ethnic data values.

RELEASE AUTHORIZATION

Name	Signature / Date
Author	Pamela Hinman
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

The Education Data Exchange Network (EDEN) is a centralized, coordinated repository of state K through 12 education and performance data residing at the Department. EDEN includes: (1) the EDEN Submission System (ESS), an electronic data system capable of receiving data on more than 100 data groups at the state, district, and school levels and (2) the EDEN Survey Tool (EST), which collects data not currently collected through ESS.

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>.

- **EDEN 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.
- **EDEN 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.
- ***EDFacts* SEA Submission Plan** – a customized MS Excel workbook designed to assist SEAs in planning the submission of files for a specific school year.
- **FAQs** – lists answers to frequently asked questions (FAQs).
- ***EDFacts* Quarterly Newsletters** – contain information on relevant legislation, regulations, data collection information, training sessions, meetings and other events.
- ***EDFacts* 2009 Calendar** - provides important due dates and events pertaining to the *EDFacts* initiative.

In addition to the documents on the website, the following tools are available upon request from the PSC to assist in creating quality data submissions:

- ***EDFacts* Data Set Viewer** – a customized Access Database that allows users to review the data groups and categories used by *EDFacts*.
- **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.

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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 5.0 for SY 2008-09. For a list of prior school years' ESS edits, please reference the guide for the specific year.

2.0 ORGANIZATION AND USE OF THE BRG

Starting this year, the BRG is in two documents: an introductory Word document and an Microsoft Excel spreadsheet BRG. This introductory Word document provides information about using the BRG spreadsheet and understanding its terminology. The spreadsheet describes each business rule implemented in ESS release 5.0. It has one row per business rule. Once downloaded or copied to your site, the spreadsheet can be sorted, filtered, and can have new columns added to provide your staff with a more usable, tailored tool.

Although users can print the BRG, a more useful way to access the business rule information is to keep a 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.

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 format and 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 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 mimic those formerly conducted by NCES in support of the Common Core Data (CCD) collection. All of these errors apply to file N/X029.
- **General Edit.** The general edit column denotes if the edit applies generally to most file specifications or not. Because general edits apply to most 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.
- **Edit Type.** This column tells you if the result of the edit is an error or a warning. This was the “Must Be Corrected?” flag in prior BRGs. 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

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

corrected with a resubmission. If the data are determined to be correct, ED recommends that states use the explanation field of the data record to explain the data and what was done to verify that they are correct. *Note that explaining a warning will not remove it from the error report.*

- **Year to Year Change Edit.** The year to year change flag lets you know if prior year data is being compared to current year data.
- **Level (SEA, LEA, School).** The reporting level 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 only, 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 have multiple components. That is, they 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. The most likely source of the problem is provided in the appropriate error report within ESS.
- **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 source of the edit or the program 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 EDEN 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. The File Spec Used columns lists files N/X002 (Children with Disabilities, School Age) and N/X089 (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 N/X052 (Membership) because the edit compares the total IDEA 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 include the other file spec used columns in the sort.

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 7.6, 7.7, 7.8 and 7.9 of the SY 2008-09 *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 10 in the SY 2008-09 *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.

5.0 SPOTLIGHT ON NEW BUSINESS RULES

There are some edits that are new for ESS release 5.0. The great majority of the new business rules focus on:

- Checks for the presence and accuracy of NCES IDs and
- Checks that the sum of the detail records, subtotals, and grand totals are equivalent for data groups submitted using the new seven racial and ethnic data values.

To identify the new 5.0 edits, sort the Excel spreadsheet by the column 'First ESS Release'. This column will equal 'Release 5.0' for this column.



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