Understanding Level 0 Errors

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Overview

Level 0 is a web based application hosted by Regional Information Centers (RICs) and Level 1 Operators. The Level 0 application provides Local Education Agencies (LEAs) with the ability to import (or manually enter) and validate student and staff data against New York State (NYS) data collection formatting and business rules. This mini guide will highlight the types of validation errors an LEA may encounter in the Level 0 application when importing, verifying, and exporting their data, as they prepare it for submission to the Student Information Repository System (SIRS).

Please note that throughout this document we will use the term template. Currently SIRS uses over twenty eScholar* templates, each providing the structure for appropriate data formatting in the warehouse. All data is submitted in specific template format and all business rules follow the guidelines of the templates. The templates currently available in Level 0 are:

ASSESSMENT ACC MOD FACT	ASSESSMENT FACT	ATTENDANCE CODES
CONTACT	COURSE	DAY CALENDAR
LOCATION MARKING PERIOD	PROGRAM FACT	SCHOOL ENTRY EXIT
SPECIAL EDUCATION EVENTS	SPECIAL EDUCATION SNAPSHOT	STAFF ASSIGNMENT
STAFF EVALUATION RATING	STAFF SNAPSHOT	STAFF STUDENT COURSE
STAFF TENURE	STUDENT CLASS GRADE DETAIL	STUDENT CONTACT FACT
STUDENT CREDIT GPA	STUDENT DAILY ATTENDANCE	STUDENT LITE

* eScholar – a NYSED contracted vendor who provides a comprehensive data warehouse structure for P-12 and postsecondary students & staff

It is important to note that there is a template hierarchy that must be used when importing data into Level 0. If the hierarchy is not followed it will result in several additional errors. For example Student Demographic, also known as Student Lite, data must be imported (or entered) prior to any other student data. Likewise, Staff Snapshot data must be imported (or entered) prior to any other staff data.

Understanding the Basic Error Number/Error Message Format

Before we attempt to understand any error messages you may encounter in Level 0, it is important to understand the parts of the displayed message(s). In order to do that, it is necessary to become familiar with the template configurations and the abbreviations assigned to them. A summary of templates, along with a complete list of associated business rules, integrity checks, key/required fields, error type, error number, and error checks/messages can be found in the "Level 0 and Level 0 Historical (L0H) Validation Checks and Error Messages" documentation at http://www.p12.nysed.gov/irs/vendors/validation-rules.pdf.

The example below shows two template abbreviations (DM and EE) and a range of error numbers associated with each template. Over twenty templates are currently being collected and edited in Level 0 prior to submission to SIRS.

- **DM1000s for Student Lite/Demographic**
- **EE2000s for School Entry Exit/Enrollment**

Most errors are displayed with an error number and associated error message. The following is an example of a basic error.

- **EE2004 Exit Date is earlier than Entry Date [invalid data displayed here]**

The first 2 characters refer to the template being checked and 4 digit numbers signifies the number assigned to that particular error message.

Let's break it down:

- **EE** refers to School Entry Exit/Enrollment template
- **2004** is the number assigned to this error message
- **Exit Date is earlier than Entry Date** is the message associated with the template-error combination
- **[invalid data displayed here]** identifies the data in your record that is incorrect or invalid

Now that you know how to read the message the next step will be interpreting and solving the error. In the example above, since this is an EE (School Entry Exit) message it appears that a School Entry Exit enrollment record is being imported or entered where the:

1. Exit Date could be incorrect; or
2. Entry Date could be incorrect

More about error resolution will be discussed in the section: Error Resolution Examples

Understanding Level 0 Errors

Level 0 Error Types

1. General

There are four different types of Level 0 errors each having varying degrees of complexity:

IMPORT	WARN/FATAL/HARD	EXPORT	INFORMATIONAL

Import and Fatal errors must be resolved before you can move your data to the next level of the data warehouse. Information or Warning errors allow you to move your data; however, the data should be reviewed for necessary corrections prior to finalizing your submission to SIRS.

To locate errors, select the Reports dropdown menu found on the main screen.

Reports
- Demographics
- Enrollment
- Program Fact
- Assessment
- SE Snapshot
- SE Event
- Grade Detail
- Credit GPA
- Staff/Stu/Crse
- Accommodation
- Daily Attendance
- Day Calendar
- Student Contact
- Contact
- Dashboard Rpt
- Information Rpt
- Staff Assignment
- Staff Evaluation
- Staff Tenure

You can select a specific template to view Import Errors and/or run Warn/Fatal/Hard errors (i.e. Demographics, Enrollment, etc.)

The Dashboard Report provides an overview and summary of all templates (data types) and a count of errors associated with each template

Information Reports check for potential problems or errors of omission

Level 0 Error Types

2. Integrity Checks

Often when attempting to resolve an error, you will need to refer to the Level 0 documentation. Built into this documentation are not only error messages but also applicable integrity checks for each field, within the templates, to assist in the statement of the business rule(s) that apply to the specific field. An **integrity check is not an error** but rather a detailed account of the business rule that will guide you through a better understanding of the error if you should receive it.

If we look at the integrity check, in the documentation, for the student ID on the School Entry Exit/Enrollment template, we will see several requirements, including one that states:

- a corresponding student ID must be found in the Level 0 valid demographic records for the selected district and school year

Notice this integrity check relates back to the hierarchy discussed earlier. A student must be identified with a valid Student ID in the Student Lite/Demographic template before Level 0 will accept a record for that student in the Entry Exit/Enrollment template. Throughout this mini guide we will discuss the importance of understanding the business rules that comprise the integrity checks, as well as understanding the actual error.

Level 0 Error Types

3. Import Errors

Normally data is extracted from your School Management source systems in the eScholar template format and then imported into Level 0. Your Regional Information Center or Level 1 Operator can assist you with these procedures. This extracted data must follow the NYSED specified comma delimited text file format.

In addition to the file format, school year is extremely important. Level 0 identifies records by school year, therefore, files that are not in the correct format or not for the selected school year will not import.

The example below shows the error **(DM1004)** and message you would receive if you try to import demographic records with a different school year from the one you selected in the application. This school year mismatch is an error that immediately stops the import process.

Import/Validation Messages:

> DM1004: There are records in this file that contain the following school year: (2014-06-30). At the top of this page you selected (2015-06-30) as the school year for this import file. Please adjust your import file or select a different school year.

Each template has "key" fields to determine unique records. If there are multiple records with identical "key" fields in an import file they are considered to be duplicates. Duplicate records are "skipped" during the import process.

When records are "skipped" the error message does not have a corresponding error number. In the example below, 2 records for the same student ID (same name, District & School year) were in the import file and 1 record was skipped as shown in the example. This situation should be reviewed in the source system to ensure accuracy in the data:

Import/Validation Messages:

Total Imported rows read: 1780
Blank Student ID Records found: 0
Blank Request Sequence Records found: 0
Total Duplicate Key rows skipped: 1 **Please see detail of records not imported at bottom of page.**
Total Error count: 0
Total Error rows: 0
Total Valid rows saved: 0
Total Imported rows with no changes from previous loads: 1780

Download information shown below to: ◉ .txt file ○ .csv file   [Download]

Detail of records not imported. (If you want to capture this information, Download before you leave this screen)

Data Type:	Last Name:	First Name:	Import Message:
Demographics	Bullock	Sandra	Duplicate key records found: Student ID - 000002347.

Import Errors, Continued

Other "duplicates" that could occur during the import process might be when the same student ID is used for two different students or possibly the same student, where the student name is reported differently. This type of error is rare and usually only occurs when there is more than one source system for the data being reported:

Import/Validation Messages:

Total Imported rows read: 1780
Blank Student ID Records found: 0
Blank Request Sequence Records found: 0
Total Duplicate Key rows skipped: 1. (See Dist. Dup. IDs report for more info)
Total Error count: 0
Total Error rows: 0
Total Valid rows saved: 1
Total Imported rows with no changes from previous loads: 1779

Demographics Report Choices: Run Verification Rpt

- Dist. Import Errors (Error Rpt #1)
- Import Log
- Dist(s) Summary
- Blank Fields
- Dist. School Summary
- Lock History
- Dist. Upload Log Dates
- View Verif. Errors (Error Rpt #2)
- Dist. Dup. IDs
- Unlock History

Duplicate IDs found in the last import file.

Duplicate ID:	Student 1 Last Name:	Student 1 First Name:	Student 1 Location:	Student 2 Last Name:	Student 2 First Name:	Student 2 Location:
000002312	BENNY	JACK	Elementary One	BENNY	JOHN	Elementary Two

Once your data has imported successfully there may still be import errors waiting for you to resolve. Field level data integrity checks are done during the electronic data import process and any data that doesn't conform to the NYSED data reporting business rules will return an import error number and message.

➡️ Error 1 below: Many fields have "Look-up" tables for underline standardization:
- **Integrity check**: The current grade level must have data and must be found in the STUDENT_GRADE_LVL lookup table.
- A current grade level that is blank or that cannot be found in the STUDENT_GRADE_LVL lookup table will receive the following error:
  - **DM1010 Missing or Invalid Grade Level [invalid data displayed here]**
  -

➡️ Error 2 Below: Many fields also include error checks for reasonability, for example:
- **Integrity check**: A date of entry to Grade 9 that is less than or equal to the child's birthdate will receive the following error:
  - A date of entry to Grade 9 that is less than or equal to the students birthdate will receive the following error:
    - **DM1039 Grade 9 entry date is not later than birth date[invalid data displayed here]**

Demographics Report Choices: Run Verification Rpt

- Dist. Import Errors (Error Rpt #1)
- Import Log
- Dist(s) Summary
- Blank Fields
- Dist. School Summary
- Lock History
- Dist. Upload Log Dates
- View Verif. Errors (Error Rpt #2)
- Dist. Dup. IDs
- Unlock History

2 Demographic errors for district NY570302

Student ID:	Last Name:	First Name:	Loc. Code:	Loc. Name:	Errors:
000002347	Bullock	Sandra	0003		DM1010: Missing or Invalid Grade Level: 9
000002347	Bullock	Sandra	0003		DM1039: Grade 9 entry date is not later than birth date: 1996-07-01

Level 0 Error Types

4. Warn/Fatal/Hard Errors

Once your import errors are resolved, the next step is to run the verification reports. This must be done before data can be moved from Level 0 to Level 1 / Level 2. The **verification process** checks for other discrepancies in the data (i.e. overlapping dates, programs with missing dependent programs, etc.) and generates **Warning/Fatal** errors, which look like import errors only they are **prefixed with W/F**.

Each Level 0 Hosting site has the ability to set these checks to either a "**Warning**" (allows for L1 Data Prep file to be created) or "**Fatal**" (does not allow L1 Data Prep file to be created). Included in the "verification" check process are also errors that are considered to be **Hard** and are treated like Import errors. Hard errors will not be preceded with a "W/F" and they will need correction prior to creating a file to be sent on to other levels of the warehouse.

➡️ Each template will have a **Run Verification Rpt** to check for any applicable W/F and/or "Hard" errors.

Both a Warning/Fatal and a Hard error are shown in the example below:

➡️ The Warning/Fatal is denoted with a "W/F" between the error number (PS3081) and the error message.

➡️ The Hard error PS3089 does not have a "W/F" designation and must be fixed prior to moving data to the next levels of the data warehouse.

Program Service Report Choices: | Verify ALL Programs | **Run Verification Rpt**

| ○ Dist. Import Errors (Error Rpt #1) | ○ Dist(s) Summary | ○ Dist. School Summary | ○ Category Breakdown | ○ Import Log |
| ○ Dist. Upload Log Dates | ○ Lock History | ○ Waiting For Level 1 | ● View Verif. Errors (Error Rpt #2) | ○ Unlock History |

Choose Verification Rpt. Category

○ Disability	○ LEP Eligibility	○ LEP Programs	○ NCLB	○ Safety Net	○ 0198:Poverty
○ 0220:Alt. Assess	○ 0242:NYSESLAT	○ 0264:Sect. 504	○ Summer School Part.	○ 5753:Inter. Serv.	○ 5806:Red. Lunch
○ 5817:Free Lunch	○ 8272:Homeless Youth	○ 8261:Single Parent/Pregnant	○ CTE / Tech Prep	● UPK	○ Title 1 TAS
○ Prekindergarten Program	○ 2618::Inter-Dist. Transfer	○ 1232:SIFE	○ Higher Education		

Maroon = Category has Errors

196 verification error(s) for : UPK.

Student ID:	Student Last:	Student First:	Prog. Code:	Loc. Code:	Loc. Name:	Begin Date:	Error Msg:
002014161	Aaalast	Aaafirst	1309	0000	Central School	2014-08-14	PS3081: W/F - UPK setting and PK indicator programs must have an associated grade ordinal of PREKF or PREKH.
002014161	Aaalast	Aaafirst	1309	0000	Central School	2014-08-14	PS3089: All UPK setting codes must have a corresponding BEDS enrollment location of '0666', with the exception of 1309(District-operated).

Level 0 Error Types

5. Information Errors

Information Errors are exactly that, messages for information and review that will assist you in identifying any "potential" problems that may exist in your data. Information errors are generated from the Information Reports section in Level 0. By selecting the template you wish to run from the dropdown choices, you will generate all information errors found relating to the selected template.

Information reports check for potential problems or errors of omission. They will not prevent any data from being moved forward to the other levels of the data warehouse. Examples of errors an Information Report generates are identifying missing enrollment, eligibility for a service based on another indicator being reported, and grade level comparisons to graduated status.

The example below was generated from running a Demographics Information Report.   Two errors were identified that should be reviewed and the data adjusted as necessary in your School Management source system.

Information Reports

These reports are only for your information. Any findings displayed in these reports only represent possible problems that should be researched. Nothing in these reports will ever prevent any data from being sent to Level 1. The 'Download All Records' button allows you to download all records for the selected data type for the current district and school year.

Select Data Type (capitalized types indicate active info checks exist):

[DEMOGRAPHICS ∨] [Run Report]   [Download All DEMOGRAPHICS Records] ● .txt file ○ .csv file

163 Demographic information error(s).

Student ID:	Last Name:	First Name:	Loc. Code:	Loc. Name:	Potential Problem?
002014161	Aaalast	Aaafirst	0001	Central School	DM1072: Missing enrollment record for selected school year.
002014161	Aaalast	Aaafirst	0001	Central School	DM1085: This Homeless student may be eligible for a FRPL program record(s) (5806 or 5817).

Level 0 Dashboard Report

The Dashboard report provides an overview and summary of all templates (data types) and a count of errors associated with each template. It includes Import and Warn/Fatal/Hard (Verification) error counts, along with other statistics associated with the template.

It's important to note that the Verification Error count is as of the last time that the
Run Verification Rpt button was selected for each data type. Use the Dashboard Report to not only identify error counts, but to also check the status of templates and to verify that you have record counts for templates you believe were imported.

Dashboard Summary

Data Type:	Import Errors:	Verif. Errors:	Valid Rec. Count:	Locked:	Last Import:	Last Update:	Last Upload:
Demographics	3	0	1332	NO	1/11/15 05:01 PM	1/12/15 10:55 AM	1/11/15 04:52 PM
Enrollment	264	0	1222	NO	9/16/14 09:01 AM	11/25/14 03:28 PM	None
Programs	183	276	2955	--	--	--	--
_Safety Net	12	0	21	NO	9/16/14 09:19 AM	1/12/15 09:17 AM	None
_CTE / Tech Prep	0	0	34	NO	9/16/14 09:19 AM	1/12/15 09:18 AM	None
_NCLB	91	0	1047	NO	9/16/14 09:19 AM	1/12/15 09:18 AM	None
_Type of Disability	12	8	242	NO	9/16/14 09:19 AM	1/12/15 09:17 AM	None
_0198::Poverty	12	0	681	NO	9/26/14 10:41 AM	1/12/15 09:18 AM	None
_0220::Alt. Assess.	2	1	11	NO	9/16/14 09:19 AM	1/12/15 09:17 AM	None
_0264::Section 504 Plan	14	0	57	NO	9/16/14 09:19 AM	1/12/15 09:17 AM	None
_5806::Reduced Lunch	4	0	138	NO	9/26/14 10:41 AM	1/12/15 01:42 PM	None
_5817::Free Lunch	8	0	576	NO	9/26/14 10:41 AM	1/12/15 09:18 AM	None
_UPK	14	141	75	NO	9/16/14 09:19 AM	1/12/15 01:45 PM	None
_Prekindergarten Program	14	126	73	NO	9/16/14 09:19 AM	1/12/15 01:45 PM	None
Assessment	1057	0	3	--	--	--	--
_NYSITELL	0	0	1	NO	1/8/15 12:59 PM	11/18/14 04:08 PM	None
_Regents	1057	0	2	NO	1/8/15 12:59 PM	11/26/14 10:01 AM	11/26/14 12:56 PM
Assessment Accommodation	0	NA	1	NO	1/9/15 10:33 AM	1/9/15 10:32 AM	1/9/15 10:32 AM
Staff/Stu/Crse	0	89	13237	--	--	--	--
_2015-01-26	0	0	944	NO	None	1/15/15 09:59 AM	None
_2015-04-14	0	0	658	NO	None	1/12/15 01:21 PM	None
_2015-04-22	0	0	661	NO	None	1/12/15 01:21 PM	None

Level 1 Data Prep / Export

The Level 1 Data Prep /Export function of Level 0 provides you with a method to export records from Level 0, by template, and generate a file that will update the next level of the data warehouse (Level 1). During this process if you have unresolved Import errors or unresolved Warn/Fatal errors a message will display as in the example below.

Entry/Exit Enrollment Data Prep. for Level 1:

Verification Checks:

Perform a 2nd level of error checking. When Level 0 has it's W/F error level set to 'Fatal', entry/exit enrollment data can not be sent to Level 1 until this process has been completed with no errors.

Validate Now   View Error Report

Only 4 W/F errors found and the current W/F level is set to 'Warning' so you may still create the file for Level 1. Click on the 'View Errors' button to view these errors (Error Rpt # 2).

Check the box below and click the button to create export file

☐ By checking this box I (the District Admin.) assert that the Entry/Exit Enrollment data for this school district is ready for submission to the Level 1 database.

Note: Checking this box will lock the Enrollment data for this district. The data will be unlocked when the file for level 1 submission has been created, or by manually unchecking this check box.

Create File for Level 1 Submission

Data Prep. messages...

Because your Level 0 hosting site has set the Warn/Fatal indicator to Warning, you have the option of ignoring these errors and proceeding with the file creation.

Another option is to view and resolve the errors by clicking on the View Error Report button to display the errors, as in the example below.

Entry/Exit Enrollment Report Choices: Run Verification Rpt

| ○ Dist. Import Errors (Error Rpt #1) | ○ Dist(s) Summary | ○ Dist. School Summary | ○ Dist. Upload Log Dates | ○ Import Log |
| ○ Lock History | ○ View Verif. Errors (Error Rpt #2) | ○ Credential Counts | ○ Unlock History | |

4 verification error(s).

Student ID:	Student Last:	Student First:	Loc. Code:	Loc. Name:	Error Msg:
000007672	Roberts	Julia	0002	Addison HS	EE2034: W/F - Enrollment grade level is 9 - 12 and no grade 9 entry date in demographics record.
000011058	Short	Martin	0002	Addison HS	EE2034: W/F - Enrollment grade level is 9 - 12 and no grade 9 entry date in demographics record.
000010684	Cage	Nicholas	6666	UPK	EE2016: W/F - A state exit code of 782 requires the next School Entry/Exit record to have the same location, different grade, and later entry date.
000010886	Jackson	Lucas	6666	UPK	EE2051: W/F - A state exit code 8316 requires a corresponding 8294 or 0033 state entry code.

Error Resolution Examples

Here are two sample error messages and potential resolutions.

EE2107 No matching demographics record

Business rule / Integrity Check: A corresponding student ID must be found in the Level 0 valid demographic records for the selected district and school year.

For this error, since this is an EE (School Entry Exit) message it appears that a School Entry Exit enrollment record is being imported or entered where the student ID:

1. doesn't have an existing Demographic record in Level 0;   **or**
2. a demographic that matches the Student ID number has an error.

EE2034: W/F – Enrollment grade level is 9-12 and no grade 9 entry date in demographics record

Business rule / Integrity Check: A current School Entry Exit record, with the exception of 5905 entry, with a grade level that equates to a grade ordinal of 9th, 10th, 11th, 12th, and a grade 9 entry date that is blank will receive this error.

This is a Warn/Fatal error that was created when the verification report was run for the School Entry Exit template. There are 2 possible reasons this error was generated:

1. The grade level in the School Entry Record is incorrect;   **or**
2. The demographic record is missing the grade 9 entry date.

As you attempt to resolve errors please refer to the Level 0 documentation which is a summary of templates, along with a complete list of associated integrity check, business rules, and error checks/messages. The documentation titled "Level 0 and Level 0 Historical (L0H) Validation Checks and Error Messages" can be found at: http://www.p12.nysed.gov/irs/vendors/validation-rules.pdf. Also, if you need additional information or explanation about Integrity Checks please refer to that portion of this mini guide.