Pre-Migration Data Validation Guide

PowerSchool
Student Information System

Contents

Introduction

Database extensions will be replacing state-specific legacy custom fields, providing real database extensions and solving the issues with legacy custom fields currently stored in custom CLOBs (character large object).

Prior to using database extensions, state-specific legacy custom fields will be mapped to state-specific database extensions and the data migrated within the application. This allows current state-specific functionality, including reports and custom pages, to continue to work and pull data from the new database extension fields without having to re-create custom pages or reports.

Data migration is a one-time, irreversible process. Data types may not properly convert during the migration if the source data is not in the proper format. The Pre-Migration Validation tool checks if state-specific legacy custom field data will convert correctly to the extended field data type, and allows you to correct any data type issues prior to migration.

Additional Resources

See the following resources for more information on PowerSchool and the Pre-Migration Data Validation process.

PowerSchool User Guides

The *System Administrator User Guide* is available on [PowerSource](https://support.powerschool.com/article/72516) (https:// support.powerschool.com/article/72516). The Database Extensions and Custom Field Migration section of this guide provides detailed information for database extensions and the custom field migration process.

The *Import and Export User Guide* is available on [PowerSource](https://support.powerschool.com/article/72561) (https:// support.powerschool.com/article/72561). This guide provides information for the import and export process. This process can be used to correct validation errors.

Your State Reporting Guide and State Reporting Setup Guide are available under your State/Province on [PowerSource](https://support.powerschool.com/dir/47) (https:// support.powerschool.com/dir/47). These guides provide information about state-specific fields and field values.

PowerSchool Online Help

For more information on using PowerSchool and working with PowerSchool screens and fields, click the Help link on any page in PowerSchool to access the online help.

PowerSource

Visit PowerSource, the PowerSchool customer portal https://support.powerschool.com to view or download:

- PowerSchool user guides and Knowledgebase articles
- State reporting guides and Knowledgebase articles
- PowerSchool training videos
- PowerSchool and state reporting forums
- PowerSchool training calendar and class locations
- Online technical support

Note: A user name and password are required to access PowerSource.

Pre-Migration Data Validation

Overview

The Pre-Migration Data Validation tool allows you to preview and correct any data type issues associated with your state-specific legacy custom field migration prior to running the migration process. If the data in a custom field is not in the same format as the expected data type of the extended field, the data may not properly migrate. The errors received in the Pre-Migration Data Validation process are the same that you would receive in the PowerSchool logs if you run the migration without correcting the data.

Note: You must be running PowerSchool 8.3 or higher to validate and migrate state-specific fields.

The basic steps to the Pre-Migration Data Validation are:

1. Run Pre-Migration Validation on a specified state-specific field set.
2. Correct validation errors.
3. Re-run data validation to verify corrections.

Once you have corrected the validation errors, you can migrate your data.

Note: Pre-Migration Data Validation only works for state-specific fields.

How to Run Pre-Migration Validation

Note: You must run the Pre-Migration Validation at least once prior to running the custom field migration for state-specific fields.

1. Sign in at the District Office.
2. On the Start Page, choose **System** under Setup in the main menu. The System Administrator page appears.
3. Under Data Management, click **Page and Data Management**. The Page and Data Management page appears.
4. Under Database Management, click **Custom Field Data Migration**. The Custom Field Data Migration page appears.
5. Click the **Migration Readiness Check** button.

    Important Note: Prior to running the migration, you must re-run the Migration Readiness Check (Step 1). This is a known issue that will be addressed in a future release.

    For more information on the migration process, see the Database Extensions and Custom Field Migration section of the *System Administrator User Guide* available on PowerSource.

6. Choose the state-specific field set you want to validate from the pop-up menu.

7. Click **Validate State Data**. The Pre-Migration Validation page appears.

    Note: Click **Refresh** to update the status of the validation.

    a. If the field set has no validation errors, a confirmation message appears.

    b. If the field set has validation errors, the error records appear. See ***Pre-Migration Validation Results*** for more information.

Pre-Migration Validation Page Layout

Your validation results appear on the Pre-Migration Validation page. This page displays your validation errors for the specified state-specific data set and allows you to either export your errors, or fix them on the page.

Pre-Migration Validation Results

If your field set has validation errors, the error records appear with the following fields:

Field Name	Description
Error Category	The category associated with the validation error. See the ***Appendix*** for more information.
Error Message	Additional information about the validation error. See the ***Appendix*** for more information.
Custom Field	The name of the source custom field.
Database Extension	The name of the database extension table.
Extended Field	The name of the database extended field.
Source Value	The source data from the custom field.
Destination Value	The value that will be entered into the extended field during the migration process.
Destination Data Type	The data type for the database extended field.
Destination Length	If applicable, the length of the extended field.
DCID	The source record's unique identifier.
Table specific metadata field	Provides identifying information about the record with the validation error. See the ***Appendix*** for more information.
Table specific metadata field	Provides identifying information about the record with the validation error. See the ***Appendix*** for more information.

Field Name	Description
Table specific metadata field	Provides identifying information about the record with the validation error. See the ***Appendix*** for more information.
Status	The status of the error record. This value only changes if you use the Pencil icon to update the error value. • New – The record has not been updated on the Pre-Migration Validation page. • Updated – The record has been updated on the Pre-Migration Validation page.
Action	Contains a Pencil icon that you can use to correct the specified error. For more information on how to use the Pencil, see ***How to Correct Validation Error Records***.

Filter

Using the Filter section, you can filter your results based on table, status, and/or error categories.

- Table - If the field set has multiple tables in it, the tables will be listed in the Table pop-up menu. Select a table name to filter the results.

- Status - The Status field only changes when you use the Pencil tool. Select a Status to filter the results. For more information on Status, see ***How to Correct Validation Error Records***.

- Error Category - You can filter by the error categories of Extra Data, Invalid, or Other. Select an Error Category to filter the results. For more information on error categories, see the ***Appendix***.

Sort

- You can sort the validation results by any column except Action. Click the name of a column to sort in ascending order. Click the column name again to sort in descending order.

Export

Using the export function, you can export the validation error records into a .csv format.

- Click **Export all # records**. This will export your validation error records.

Note: Filters modify the number of records visible. If you have filtered your data, you will only export the filtered records.

Correcting Validation Errors

Validation errors are generated when the format of the source data value does not match the format of the destination data value. If your source data value is not in the proper format, your data may not convert properly. For more information about appropriate field values, see your *State Reporting Setup Guide* or the setup section of your *State Reporting Guide*, located under your State/Province on [PowerSource](#).

You can correct validation errors using the following methods:

- Edit records on the Pre-Migration Validation page.
- Export validation error records from the Pre-Migration Validation page and import the changes back into PowerSchool.
- Update the errors using the appropriate PowerSchool pages.

How to Correct Validation Error Records

1. On the Pre-Migration Validation page, click the **Pencil** icon next to the record that you want to correct. A pop-up appears.

2. Enter the new **Destination Value** into the pop-up. This will change the value in the custom field.

   Note: The data you enter will be validated against the Destination Data Type. Data validation only validates for data type and length.

Destination Data Type	Validation Description
String	• The length of characters entered field must be less than or equal to the Destination Length. • If you attempt to enter more characters than allowed, you are prohibited from entering additional characters.
Integer	• The numeric value entered must be valid.
Double	• The numeric value entered must be valid. • Allows decimal points.

Destination Data Type	Validation Description

Boolean	• The value entered must be one of the following:
	    • 0
	    • 1
	    • T
	    • F
	    • True
	    • False
	    • Y
	    • N
	    • Yes
	    • No

Date	• The date value entered must be a valid date format.

3. Click **Save.**

After you have edited a record, the status of the record changes to Updated. This status indicates that you have edited the record; it is not an indicator that the field value is valid. Re-validate the data to verify that the records are now valid and ready for migration. See ***Re-validating Data*** for more information.

How to Export Validation Errors

• On the Pre-Migration Validation page, click **Export all # records**.

Note: Exporting from the Pre-Migration Validation page exports all validation error records, or filtered validation errors. If you wish to export a select group of records outside of the available filters, select the records in PowerSchool and follow the Import and Export process, see the *Import and Export User Guide* available on PowerSource.

Note: Currently data may only be imported into Students, Teachers, Sections, and Courses. For more information about importing and import limitations, see the *Import and Export User Guide* available on PowerSource.

How to Correct Validation Errors on PowerSchool Pages

• Navigate to the appropriate page(s) in PowerSchool and modify the data for selected records. For more information, see your *State Reporting Guide*, located under your State/Province on PowerSource.

Re-validating Data

Once you have corrected your data, it is important to re-validate to verify that all the errors have been cleared and your data is ready for migration. You can re-validate using the following methods:

- Re-validate using Re-validate button on the Pre-Migration Validation page.

- Re-run the validation process from the Custom Field Migration page.

How to Re-validate on the Pre-Migration Validation Page

- Re-validate the data by clicking the **Re-Validate** button to verify that the records are now valid and ready for migration. Use this option when you are correcting data using the Pencil icon on the Pre-Migration Validation page. See ***How to Correct Validation Error Records*** for more information about how to use the Pencil icon.

How to Re-validate on the Custom Field Migration Page

- See ***How to Run Pre-Migration Validation***. Use this option when you navigate away from the Pre-Migration Validation page to correct validation errors.

Migration

After you have corrected the validation errors, you can proceed with the migration of your state-specific legacy custom field, starting with the Migration Readiness Check. For more information, see the Database Extensions and Custom Field Migration section of the *System Administrator User Guide* available on [PowerSource](#).

Important Note: Prior to running the migration, you must re-run the Migration Readiness Check (Step 1). This is a known issue that will be addressed in a future release.

You must run the Pre-Migration Validation at least once prior to running the custom field migration for state-specific fields. However, it is possible to migrate without correcting all the validation errors. If you choose to migrate without correcting all validation errors, you will need to verify that you understand the potential for data loss before proceeding with the migration.

Important Note: It strongly advised that you correct all errors prior to migrating. Running the migration with data errors increases your potential for data loss.

Appendix

Error Descriptions

The following tables contain details about validation error categories and messages.

Error Category	Error Description	Notes
Extra Data	Partially-captured field: Did not capture suffix of '[*value*]'	The length of the source data value exceeds the maximum character field length for the destination field. Change the source value so that it does not exceed the length defined for the destination field. Example: Partially-captured field: Did not capture suffix of "ited States" Change the source value so that it does not exceed the length defined for the destination field.
	Partially-captured field: Did not capture prefix of '[*value*]'	The length of the source data value exceeds the maximum character field length for the destination field. Change the source value so that it does not exceed the length defined for the destination field. Example: Partially-captured field: Did not capture suffix of "Uni" Change the source value so that it does not exceed the length defined for the destination field.

Error Category	Error Description	Notes
	Partially-captured field: Did not capture prefix of '[*value*]' or suffix of '[*value*]'	The length of the source data value exceeds the maximum character field length for the destination field. Change the source value so that it does not exceed the length defined for the destination field. Example: Partially-captured field: Did not capture suffix of "ited Sta" Change the source value so that it does not exceed the length defined for the destination field.
Invalid	Unable to capture field: Value '[*value*]' was ignored entirely!	Source value is an invalid data type for the destination field. Change the field value to the correct data type. Example: Unable to capture field: Value '2014-2015' was ignored entirely! Change the value of 2014-2015 to a valid date.
Other	Not used at this time.	

Table Specific Metadata Fields

The following fields appear in the validation results and provide identifying information about the record with the validation error. The fields that appear on the Pre-Migration Validation page depend upon the table to which the dataset links.

Table	Field	Description
Students	ID	The ID number generated by PowerSchool.
	LastFirst	The student's name.
	Student_Number	The student number assigned by the school.
Teachers	ID	The ID number generated by PowerSchool.
	SchoolID	The School_Number of the associated Schools record.
	LastFirst	The teacher's name.

Table	Field	Description
	Teacher_Number	The number assigned to the teacher.
Courses	ID	The ID number generated by PowerSchool.
	Course_Number	The course number.
	Course_Name	The name of the course.
Schools	ID	The ID number generated by PowerSchool.
	School_Number	The school number for all non-district level entities.
	Name	The name of the school.
Log	ID	The ID number generated by PowerSchool.
	StudentID	The internal number and ID of the associated Students record.
	Entry_Date	The date of the log.
	Subject	The title of the log.
Reenrollments	ID	The ID number generated by PowerSchool.
	StudentID	The internal number and ID of the associated Students record.
	SchoolID	The School_Number of the associated Schools record.
Sections	ID	The ID number generated by PowerSchool.
	Section_Number	The number for the section.
	SchoolID	The School_Number of the associated Schools record.
CC	ID	The ID number generated by PowerSchool.