

TECHNICAL BULLETIN

Converting to PowerSchool SMS 8.0

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This document describes the conversions that will take place during the upgrade from Chancery SMS to PowerSchool SMS 8.0 and the actions districts should perform before or after the upgrade to help ensure the conversion has minimal impact to district and school data.

Important: We strongly recommend that you run the PowerSchool SMS 8.0 upgrade in a test environment before upgrading your production system.

Compatibility views

PowerSchool SMS 8.0 provides compatibility views for the enhanced contact and enrollment functionality, and for calculating grade level, homeroom and home school.

A compatibility view is a SQL Server view that has the same properties – names, data types, and so on – as the original table for which it provides compatibility. Additionally, the view will return the same data in the columns as the original table; this means that the programming code that was accessing the table and its columns will continue to work as originally designed. **Note:** Compatibility views should be considered read-only; that is, the views will return data but cannot be an object of update, insert or delete statements.

See [Table 1] for the list of compatibility views in PowerSchool SMS 8.0.

Important: Pearson will support compatibility views for the enhanced PowerSchool SMS functionality for the 2012-2013 school year; however, because some modified data relationships cannot be made backwards-compatible with compatibility views, in the following instances, custom reports will need to be changed after upgrading to PowerSchool SMS 8.0:

- Custom reports that use DA views and the *SchoolStudent-StudentStatus* schema relationship to return data will need to be rewritten to use the new *SchoolStudent-StudentSchoolEnrollment-StudentStatus* relationship [see *Enrollment conversion*, p. 5].
- Custom reports that use DA views and Custom Data Management (CDM) Basic Tables to return data will need to be rewritten to use the new schemas.

Note: We highly recommend that you rewrite these reports based on stored procedures, rather than based on DA views.

TABLE 1: COMPATIBILITY VIEWS

Contact compatibility views	Enrollment/Demographics compatibility views
CSL_CNT_PHONE_NUMBER	CSL_STD_DEMO_SCHOOL
CSL_CNT_STUDENT_CONTACT	CSL_STD_DEMO_DISTRICT
CSL_CNT_STUDENT_SIS_MAP	CSL_SMS_STD_DEMO_SCHOOL_CHG
CSL_CNT_SPECIAL_DOCUMENT	CSL_SMS_STD_HOME_SCHOOL_CHG
CSL_STD_COMM_NUMBER_CSIS	CSL_STD_STATUS CDM
CSL_CNT_CONTACT	CSL_STD_STATUS CDM_TN

Run utility to identify triggers affected by data conversion

Tables have been altered in PowerSchool SMS 8.0 to support changes in the contact and registration/enrollment features. Your current SMS system may contain custom triggers that must be disabled or dropped prior to the upgrade to PowerSchool SMS 8.0. Pearson provides a utility to help you identify potential issues with these custom triggers. This utility also identifies other issues, such as with customizations and calendar overlaps.

Action required: Review instructions for downloading and running the [PowerSchool 8.0 Prep Validator](https://powersource.pearsonschools.com/article/66111) (https://powersource.pearsonschools.com/article/66111). Download and run the utility in a test environment to identify any changes that may be required in your production environment.

When: Before the upgrade.

Where: In a test environment.

Contacts conversion

Conversion of 2-line addresses to 5-field addresses

When your district upgrades to PowerSchool SMS 8.0, contact addresses are converted from 2-line address format to 5-field address format. This conversion will help ensure that contact addresses and address formats are consistent.

Action recommended: Download and run the [ConvertContactAddresses80](https://powersource.pearsonschools.com/f/7389) (https://powersource.pearsonschools.com/f/7389) SQL script to identify and clean up duplicate contact records.

For further information about this script, please see the [PowerSchool SMS Contact Address Conversion Script Technical Bulletin](#). **Note:** Because it is not possible to cover every address scenario for every district, it is likely that your district will be required to perform some manual address updates after running this script. If you would like the script modified to suit your district's specific needs, please contact Pearson services at 1-800-999-9931, extension 2 for a quote.

When: Before the upgrade.

Where: In a test/production environment (see the technical bulletin above for details).

Merging duplicate student contact records

During the upgrade, PowerSchool SMS 8.0 presents three options for matching and merging duplicate student contact records. Based on your selection, the system combines each student's duplicate contacts into one contact record. **Note:** All legacy tables remain intact.

The system considers the contact with the most recently updated information as the "primary" contact and identifies potential duplicates of this contact in descending order of last updated. The Matching process is not case sensitive.

The student's relationship to potential duplicate contacts is always considered. If phone and address match the primary contact but the relationship to the student is different, this is not considered a match. For example, if two of the student's contacts share exactly the same name, phone, and address but for one contact the relationship to the student is "grandmother" and for the other the relationship is "mother", the contact records are not considered duplicates.

1 Exact match on first and last name and exact match on either phone or address

- The system merges a student's contacts when the contacts have exactly the same first and last name AND either exactly the same phone number OR exactly the same address.
 - Phone number is an exact match when at least one phone number for a student's contact has a 3 digit area code AND 3 digit exchange AND 4 digit suffix (for example, 604 555 5555) that is identical to those of another of the student's contacts. **Note:** if the area code for both contacts is missing, this is still considered a match; however, if only one contact's phone number has a missing area code this is not considered a match (for example if both contact numbers are 555-1234, it's a match but if one contact number is 604-555-1234 and the other is 555-1234, this is not considered a match). Phone numbers that contain grouped zeros, such as 000 000 0000 or 604-541-0000 are not matched. Formatting is ignored, as are all other digits such as country code and extension.
 - With addresses, the zip code determines whether a student's contacts are duplicates. If the entire address matches between contacts but the zip code is missing in either or both, this is considered a match; however, if the entire address matches but the zip codes do not, this is not considered a match. City, state, county, area, and country are ignored.

- 2 Near match on first name, exact match on last name and exact match on either phone or address
 - The system merges a student's contacts when the contacts have nearly the same first name (that is, the spelling of the first names is similar, for example, Jon/John) AND exactly the same last name AND either the same phone number OR the same address. (See [1] above for a description of phone and address exact match criteria.)
- 3 Near match on first and last name and exact match on either phone or address
 - The system merges a student's contacts when the contacts have nearly the same first and last name (that is, the spelling of both first and last names is similar) AND either exactly the same phone number OR exactly the same address. (See [1] above for a description of phone and address exact match criteria.)

Action recommended: Attempt to get the best percentage of merged contacts by trying each option in your test environment before upgrading your production system. You can view the results by running the SQL query `Select * from PDS.MergedContactList` which will show you which contacts were considered duplicates. **Note:** It is not a requirement that every duplicate contact record be merged before you upgrade your production system to PowerSchool SMS 8.0.

When: Before the upgrade.

Where: In a test environment.

cTools contact data conversion

During the upgrade to PowerSchool SMS 8.0, the system moves existing custom cTools contact data into a new pre-defined cTools extension schema called *Person*, which is within a new feature area called *Contact*. The corresponding page name in cTools is "Person".

Action recommended/required: None

Managing contact customizations and custom reports

Through the 2012-2013 school year, Pearson will provide compatibility views for the pre-8.0 *Contacts* schema (with the exception of **Phone location** field in `CSL_CNT_CONTACT`, which will always be "N/A" in version 8.0). **Important:** If you change the structure of the cTools tables the compatibility views provided will no longer be usable.

The contact compatibility views share the same names as the legacy Contact tables:

`CSL_CNT_PHONE_NUMBER`

`CSL_CNT_STUDENT_CONTACT`

`CSL_CNT_STUDENT_SIS_MAP`

`CSL_CNT_SPECIAL_DOCUMENT`

`CSL_STD_COMM_NUMBER_CSIS`

`CSL_CNT_CONTACT` (**Note:** Replace the *CAN_PICKUP* and *Password* columns from this table with the corresponding *CanPickUpStudent* and *PickUpPassCode* columns in the `StudentContactPerson` schema)

Action required: Before the end of the 2012-2013 school year, ensure contact customizations, extracts, and reports are updated to point to the new *Person* schema.

When: After the upgrade.

Where: In the production environment.

Family Management

Prior to PowerSchool SMS 8.0, siblings and contacts could be linked to a family through Family Management. With version 8.0, siblings as well as contacts are now managed on the Contacts List page.

There is a SQL script available from PowerSource that districts using the Family Management feature can run after the upgrade. This *SMS80_Sibling Convert* script will bring over a student's contacts and siblings from his or her Family Unit and populate the Contacts and Siblings lists in the student's Contact record. The script also generates a list of affected students.

Action required: Districts using Family Management can download the *SMS80_Sibling Convert* script [here](https://powersource.pearsonschools.com/d/66080) (https://powersource.pearsonschools.com/d/66080). After running the script, review the affected students.

When: After the upgrade.

Where: In a test environment, then in production.

Enrollment conversion

New enrollment extension schemas

PowerSchool SMS 8.0 provides a new cTools *Enrollment* feature area that has three pre-defined extension schemas:

- StudentSchoolEnrollment
- StudentStatusEnrollment
- StudentStatusWithdrawal

Custom Data Management (CDM) status code conversion

During the upgrade, the system moves data created in CDM into one of the above new enrollment extension schemas. The fields that were created with CDM display on the new student enrollment and student status pages:

- Student School Enrollment
- Student Status (Enrollment)
- Student Status (Withdrawal)

CDM status code types *Entry*, *Re-entry*, and *Withdrawal* are converted during the upgrade; however, the status code type *N/A* is not.

The enrollment conversion is based on the content of the `Legacy.TMP_EnrollmentConversionMetadata800` table. When the conversion is complete this table acts as a conversion log, capturing information about the conversion, along with explanations for any items that were not converted.

Managing enrollment customizations and custom reports

Pearson will provide compatibility views for the pre-8.0 CDM enrollment tables to ensure localization extracts and reports remain intact until districts can update them to use the new enrollment schemas. **Important:** If you change the structure of the cTools tables in PowerSchool SMS 8.0, these compatibility views will no longer be usable.

The compatibility views share the same names as the legacy table:

CSL_STD_DEMO_SCHOOL
CSL_STD_DEMO_DISTRICT
CSL_SMS_STD_DEMO_SCHOOL_CHG
CSL_STD_STATUS_CDM
CSL_STD_STATUS_TN

Action required:

- Because some relationships cannot be made backwards-compatible with compatibility views [see *Compatibility views*, p. 1], custom reports that use DA views and the *SchoolStudent-StudentStatus* schema relationship to return data will need to be rewritten to use the new *SchoolStudent-StudentSchoolEnrollment-StudentStatus* relationship.
- Custom reports that use DA views and Custom Data Management (CDM) Basic Tables to return data will need to be rewritten to use the new schemas.

Note: We highly recommend that you rewrite the reports based on stored procedures, rather than based on DA views.

When: After the upgrade.

Where: In the production environment.

- Before the end of the 2012-2013 school year, ensure enrollment customizations, extracts, and reports are updated to the new enrollment extension schemas [see *New enrollment extension schemas*, p. 5].

When: After the upgrade.

Where: In the production environment.

Student Demographics conversion

Custom Data Management (CDM) student demographics conversion

During the PowerSchool SMS 8.0 upgrade, CDM fields of type Yes/No and Option are converted to cTools constrained text fields, where the user must enter "Y" or "N".

After the conversion, Student Demographic CDM pages will continue to be listed under the Student Demographics menu but, rather than appearing in a dialog, they will appear like any other cTools page. The physical tables and fields will remain the same.

Action required: Some modified data relationships cannot be made backwards-compatible with compatibility views [see *Compatibility views*, p. 1]. Custom reports that use DA views and Custom Data Management (CDM) Basic Tables to return data will need to be rewritten to use the new schemas. **Note:** We highly recommend that you rewrite the reports based on stored procedures, rather than based on DA views.

When: After the upgrade.

Where: In the production environment.

Grade level conversion

In PowerSchool SMS 8.0, the student grade level is changed from a school-level property to a district-level property and is managed in the `StudentGradeLevel` schema.

In PowerSchool SMS 8.0, the student's grade level is determined by the student's current home school; therefore, in the case of multiple concurrent school enrollments, the student cannot be assigned different grade levels in different schools. All concurrent school enrollments for a student assume the student's home school grade level; the grade level for schools that are not the student's home school are read-only. If the student has no designation of home school and has different grade levels, the system uses the highest grade level. During the conversion, the system retains a history of grade level changes for each student, providing a time line of grade levels with effective dates. The grade level with an effective date that is on or before today is deemed the student's current grade level.

In PowerSchool SMS 8.0, grade level is calculated in the following compatibility view: `CSL_SMS_STD_DEMO_SCHOOL_CHG`

Action required: Before the end of the 2012-2013 school year, ensure customizations, extracts, and reports with student grade level are updated to point to *GradeLevel* in the `StudentGradeLevel` table.

When: After the upgrade.

Where: In the production environment

Home School conversion

In PowerSchool SMS 8.0, home school is a property of the enrollment feature, rather than a static property of a district student. You can manage home school history for each student through enrollment by setting a specific enrollment record to be the student's home school enrollment; this is saved into the

`CSL_SMS_STD_ENROLLMENT` table in the schema *StudentSchoolEnrollment*. **Tip:** To obtain a home school history from this table, filter the records by `IsMainEnrollment=1`, and then define `ReadOnlyMainStartDate` and `ReadOnlyMainEndDate` column values as the home school assignment intervals for the student.

The Home School compatibility view is `CSL_SMS_STD_HOME_SCHOOL_CHG` (calculated out of the `CSL_SMS_STD_ENROLLMENT` table).

Action required: Before the end of the 2012-2013 school year ensure customizations, extracts, and reports with home school data are updated to point to the schema *StudentSchoolEnrollment* and those with homeroom data point to the schema *StudentHomeroom*.

When: After the upgrade

Where: A production environment

Homeroom conversion

In PowerSchool SMS 8.0, Homeroom is calculated in the following compatibility view: `CSL_SMS_STD_DEMO_SCHOOL_CHG`.