Backfill Management
User Guide

PowerSchool
Student Information System

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Preface

Use this guide to assist you while navigating PowerSchool. This guide is based on the PowerSchool online help, which you can also use to learn the PowerSchool Student Information System (SIS) and to serve as a reference.

The PowerSchool online help is updated as PowerSchool is updated. Not all versions of the PowerSchool online help are available in a printable guide. For the most up-to-date information, click Help on any page in PowerSchool.

Referenced Sections

This guide is based on the PowerSchool online help, and may include references to sections that are not contained within the guide. See the PowerSchool online help for the referenced section.

Security Permissions

Depending on your security permissions, only certain procedures may be available to you.

Navigation

This guide uses the > symbol to move down a menu path. If instructed to "Click **File > New > Window**," begin by clicking **File** on the menu bar. Then, click **New** and **Window**. The option noted after the > symbol will always be on the menu that results from your previous selection.

Notes

It is easy to identify notes because they are prefaced by the text "**Note:**."

Introduction

Backfill is a process that specifically supports the California's Alternative Education Program for Continuation Education. For more information about California's Alternative Education Program (CA AEP), visit [PowerSource](#).

Backfilling maximizes the number of attendance hours that can be claimed for state funding by taking excess hours from a school week and applying those hours to a prior week in which the maximum hours were not achieved. There is a set number of hours per week that can be used towards ADA funding. Once this maximum is reached the state allows any additional hours to be used in previous weeks in which a student did not attend for the maximum. Hours can only be backfilled to previous weeks. Hours cannot be used for future weeks. There are numerous rules regarding backfilling and how hours can be claimed.

Backfill can be applied when attendance is taken by enabling Realtime Backfill. Backfill can also run as a separate process using Backfill Management. For more information, see *Manage Backfill*.

Setup Backfill

Before you can begin using backfilling, you must perform the following setup items:

- Enable Backfill
- Configure Backfill Preferences

Enable Backfill Management

By default, Backfill is not enabled. Once Backfill is enabled, Backfill functionality appears throughout PowerSchool, including:

- Access to the Backfill Management page.
- Certain aggregation necessary to support backfill will occur whenever attendance is recorded in the system
- Three additional attendance categories, Unexcused Absences, Excused Absences, and Suspensions will be created, if they are not already existing, that are necessary to support backfill reports.

How to Enable Backfill Management

1. On the start page, choose **School** under Setup in the main menu. The School Setup page appears.
2. Under Attendance, click **Backfill Preferences**. The Attendance Backfill Preferences page appears.
3. Select the **CA Continuation School Backfill Enabled** checkbox to enable Backfill Management.
4. Specify backfill preferences. For field descriptions, see *Configure Backfill Preferences*.
5. Click **Submit**. The Changes Recorded page appears.

Configure Backfill Preferences

Once you have enabled Backfill, you can then configure backfill preferences to indicate how you want backfilling to be processed.

How to Specify Backfill Preferences

1. On the start page, choose **School** under Setup in the main menu. The School Setup page appears.

2. Under Attendance, click **Backfill Preferences**. The Attendance Backfill Preferences page appears.
3. Use the following table to enter information in the Reporting section:

Field	Description
Realtime Backfill Enabled	Enabling Realtime Backfill results in backfill being applied whenever attendance is recorded in the system. Each time attendance and submitted for a student the system will determine if the maximum number of course attendance hours that can be claimed for funding has been exceeded. If there are excess hours the system will determine whether any prior weeks did not reach the maximum hours and the excess hours will be applied to those prior short weeks. Realtime backfill may result in a slight degradation of performance when taking attendance. The alternative to enabling Realtime Backfill is to run a separate backfill process on a regular basis. Enabling Realtime Backfill can save time and extra steps when it comes time to report ADA. Select the checkbox to enable Realtime Backfill. Alternatively, deselect the checkbox to disable Realtime Backfill.
Program to Backfill	Continuation Education students must be enrolled into the Continuation Education program. For more information, see *Schools*. The system determines who is eligible for backfill according to those students who are enrolled in the program identified here. Additionally, the system determines which sections are eligible for backfill according to which sections are assigned to the Continuation Education program. For more information, see *Sections*. Choose the program defined for "Continuation Education" you want to backfill from the pop-up menu.
Target Hours per Day in Week	The system must know the maximum number of hours per week that can be claimed toward ADA funding. The number of hours is based on a five day in-session school week and is currently 15 hours. The maximum hours are proportional to the number of in-session school days for the week, which results in three hours per day.

	By default, this field is set to three hours. If you need to change this value, enter the new value in this field.
Maximum Work Experience Hours per Day in Week	California rules for eligible ADA hours state that only ten hours of work experience can be claimed toward funding in a given five-day school week. This breaks down into two hours per day thus a week with only three in-session days can only claim six work experience hours towards ADA. The system takes this into account when performing backfill as well as during the reporting of ADA for continuation education.
	By default, this field is set to two hours. If you need to change this value, enter the new value in this field.
Backfill Start Date	This field is used to let the system know how far back it should look when investigating for weeks that need backfill hours to achieve the maximum that can be claimed for ADA. This date should be changed whenever reports are produced, especially auditing reports or P1, P2 and P3 reports for the state, so that the backfill process does not change attendance for weeks that have already been reported.
	By default, this field is set to the beginning of the school year. If you need to changes this value, enter the beginning date of the date range to scan using the format mm/dd/yyyy or mm-dd-yyyy. If you do not use this format, an alert appears.
	Note: It is recommended that the backfill start date be set to the beginning of each reporting period, ensuring that the backfill start date is synchronized with the actual reporting periods.
Backfill End Date	This field is used to let the system know the date on which backfill will no longer be applied. Using a date prior to the current system date effectively disables backfill for any attendance taken after the end date. Typically, this field is left blank to indicate the current date or is set to the end of the school year.
	Enter the ending date of the date range to scan using the format mm/dd/yyyy or mm-dd-yyyy. If you do not use this format, an alert appears. Otherwise, leave blank to indicate today's date.

	Note: If entering a backfill end date, it is recommended that the backfill end date be set to the ending of each reporting period, ensuring that the backfill end date is synchronized with the actual reporting periods.

4. Click **Submit**. The Changes Recorded page appears.

Disable Backfill Management

Once you have enabled Backfill, it may become necessary to disable it. If Backfill is disabled, Backfill functionality no longer appears throughout PowerSchool.

How to Disable Backfill Management

1. On the start page, choose **School** under Setup in the main menu. The School Setup page appears.
2. Under Attendance, click **Backfill Preferences**. The Attendance Backfill Preferences page appears.
3. Deselect the **CA Continuation School Backfill Enabled** checkbox to disable Backfill Management.
4. Click **Submit**. The Changes Recorded page appears.

Manage Backfill

You can run Backfill as a separate process using Backfill Management. There are certain situations that can occur during Realtime Backfill that mandate using Backfill Management. Specifically, attendance being changed for a week in which backfill was already applied or student's being withdrawn from classes in the middle of the week can result in backfill calculations being incorrect. The proper way to ensure that the calculations are correct and that all backfill has been applied for the backfill period is to run the Validate Backfill function. This function performs these three tasks:

- Corrects any miscalculations that may have occurred due to attendance changes made to weeks that already had backfill applied.
- Corrects any orphaned backfilled records caused by student's withdrawing from classes or withdrawing from the continuation education program.
- Performs the backfill process for any students who may not have had backfilled applied. This typically occurs if the option for Realtime Backfill has not been enabled in the school's attendance preferences page.

The Backfill process must be run whether or not Realtime Backfill has been enabled to ensure that calculations have been correctly applied for all students. The process performs quickly if Realtime Backfill is enabled, since only exception students are recalculated. If Realtime Backfill is not enabled or has not been used during the backfill period, the backfill process calculates backfill for each student who has enrolled in the continuation education program during the backfill period.

When running the Backfill process, you have two options. The first option is to run the Validate Backfill function, which runs all three tasks of clearing backfill, regenerating attendance aggregation, and running backfill in succession for all students in the selected school. The second option is to run the three tasks separately, which allows you to run the process for all or a selected group of students to perform corrections and problem diagnosis.

Note: Backfill should be run prior to running the California's Alternative Education reports, see the *California State Reporting Attendance and Membership Report Guide* available on [PowerSource](#).

Option 1 – One-Step Backfill Process

- [Verify Term](#) (optional)
- [Verify Backfill Preferences](#) (optional)
- [Validate Backfill](#)
- [Monitor the Backfill Process](#) (optional)

- [View Backfill Details](#) (optional)

Option 2 – Three-Step Backfill Process

- [Verify Term](#) (optional)
- [Verify Backfill Preferences](#) (optional)
- [Select Students](#)
- [Clear Backfill](#)
- [Regenerate Attendance Aggregation](#)
- [Run Backfill](#)
- [Monitor the Backfill Process](#) (optional)
- [View Backfill Details](#) (optional)

Verify Term

Be sure you have selected the term in which you want to work.

Note: The school year of the currently selected term is used to determine which backfill start and end date to use when performing backfill functions. The actual term is not factored into this calculation.

How to Verify the Term

1. On the start page, note the term that appears in the navigation toolbar at the top of the page.
2. Verify the term is correct.
3. Select a different term, if needed:
   - Click **Term**. The Term pop-up menu appears.
   - Choose the term from the **Change To** pop-up menu. The navigation toolbar displays the name of the selected term.

Verify Backfill Preferences

Be sure backfill preferences are set accordingly.

How to Verify Backfill Preferences

1. On the start page, choose **School** under Setup in the main menu. The School Setup page appears.

2. Under Attendance, click **Backfill Preferences**. The Attendance Backfill Preferences page appears.
3. Verify preferences are set correctly.
4. Edit if needed. For field descriptions, see *Configure Backfill Preferences*.
5. Click **Submit**. The Changes Recorded page appears.

Select Students

When performing the three-step backfill process, either select a student or group of students you want to work with or use one of the student selection options on the Backfill Manage page.

Note: If you are performing the one-step backfill process, it is not necessary to make a student selection.

How to Select a Student of Group of Students

1. On the start page, search for and select a group of students. A list of students appears in the Current Student Selection section. For more information, see *Select a Group of Students*.
2. Click the **[Select Function]** arrow. The Group Functions pop-up menu appears.
3. Under Attendance, choose **Backfill Management**. The Manage Backfill page appears.

   Note: Alternatively, if you have a current selection of students, you can choose **Special Functions** under Functions in the main menu and then click **Groups Functions**.

4. To continue, see Step 4 of *Clear Backfill*.

How to Use the Student Selection Options

1. On the start page, search for and select a group of students. A list of students appears in the Current Student Selection section. For more information, see *Select a Group of Students*.
2. Click the **[Select Function]** arrow. The Group Functions pop-up menu appears.
3. Under Attendance, choose **Backfill Management**. The Manage Backfill page appears.

Note: Alternatively, if you have a current selection of students, you can choose **Special Functions** under Functions in the main menu and then click **Groups Functions**.

4. Do one of the following:
   - Click **Select Backfill Students** to select all students enrolled in the backfill program during the backfill interval.
   - Click **Select Backfill Exception Students** to select all students who have had attendance taken in a previously backfilled week.
5. To continue, see Step 4 of *Clear Backfill*.

Validate Backfill

Use the Validate Backfill function to ensure that backfill attendance has been correctly applied based on your attendance backfill preferences. Performing the Validate Backfill function runs all three tasks of clearing backfill, regenerating attendance aggregation, and running backfill in succession for all students in the selected school.

Note: If Realtime Backfill is enabled, only exception students are recalculated. If Realtime Backfill is not enabled or has not been used during the backfill period, Validate Backfill calculates backfill for each student who has enrolled in the continuation education program during the backfill period.

Note: it is not necessary to make a student selection when performing this procedure.

How to Validate Backfill

1. On the start page, search for and select a group of students. A list of students appears in the Current Student Selection section. For more information, see *Select a Group of Students*.
2. Click the **[Select Function]** arrow. The Group Functions pop-up menu appears.
3. Under Attendance, choose **Backfill Management**. The Manage Backfill page appears.

   Note: Alternatively, if you have a current selection of students, you can choose **Special Functions** under Functions in the main menu and then click **Groups Functions**.

4. Click **Validate Backfill**. The Validate Backfill page appears.
5. Select the checkbox to verify the command.
6. Click **Submit.** When the function is complete, the Backfill Details page appears. For more information, see *View Backfill Details*.

Clear Backfill

If you are performing the three-step backfill process, the first function to run after you have made your student selection is the Clear Backfill function to clear backfilled attendance for all selected students.

How to Clear Backfill

1. On the start page, search for and select a group of students. A list of students appears in the Current Student Selection section. For more information, see *Select a Group of Students*.
2. Click the **[Select Function]** arrow. The Group Functions pop-up menu appears.
3. Under Attendance, choose **Backfill Management**. The Manage Backfill page appears.

    Note: Alternatively, if you have a current selection of students, you can choose **Special Functions** under Functions in the main menu and then click **Groups Functions**.

4. Click **Clear Backfill**. The Clear Backfill page appears.
5. Select the **Select the checkbox to verify the command** checkbox.
6. Click **Submit**. When the function is complete, the Backfill Details page appears. For more information, see *View Backfill Details*.

Regenerate Attendance Aggregation

Once you have cleared backfilled attendance for all selected students, use the Regenerate Attendance Aggregation function to clear aggregated attendance for all selected students and regenerate that aggregation from stored Attendance records.

How to Regenerate Attendance Aggregation

1. On the start page, search for and select a group of students. A list of students appears in the Current Student Selection section. For more information, see *Select a Group of Students*.
2. Click the **[Select Function]** arrow. The Group Functions pop-up menu appears.
3. Under Attendance, choose **Backfill Management**. The Manage Backfill page appears.

> **Note:** Alternatively, if you have a current selection of students, you can choose **Special Functions** under Functions in the main menu and then click **Groups Functions**.

4. Click **Re-Aggregate Attendance**. The Regenerate Attendance Aggregation page appears.
5. Select the **Select the checkbox to verify the command** checkbox.
6. Click **Submit**. When the function is complete, the Backfill Details page appears. For more information, see *View Backfill Details*.

Run Backfill

Once you have cleared aggregated attendance for all selected students and regenerate that aggregation, use the Run Backfill function to backfill time attendance based on your attendance backfill preferences.

How to Run Backfill

1. On the start page, search for and select a group of students. A list of students appears in the Current Student Selection section. For more information, see *Select a Group of Students*.
2. Click the **[Select Function]** arrow. The Group Functions pop-up menu appears.
3. Under Attendance, choose **Backfill Management**. The Manage Backfill page appears.

   Note: Alternatively, if you have a current selection of students, you can choose **Special Functions** under Functions in the main menu and then click **Groups Functions**.

4. Click **Run Backfill**. The Run Backfill page appears.
5. Select the **Select the checkbox to verify the command** checkbox.
6. Click **Submit**. When the function is complete, the Backfill Details page appears. For more information, see *View Backfill Details*.

Monitor the Backfill Process

If you would like to monitor the Validate Backfill process, you can view the Process Status page.

How to Monitor the Backfill Process

1. On the start page, choose **System** under Setup in the main menu. The System Administrator page appears.
2. Under Server, click **System Settings**. The System Settings page appears.
3. Click **Server Statistics**. The Server Statistics page appears.
4. Scroll down to the **Handlers** section.
5. Click **Busy Handlers**. The Process Status page displays.

View Backfill Details

The View Backfill Details page provides an easy way to see the aggregated attendance minutes and how backfill has been applied for each student for each week in the current backfill date range.

How to View Backfill Details

1. On the start page, search for and select a group of students. A list of students appears in the Current Student Selection section. For more information, see *Select a Group of Students*.
2. Click the **[Select Function]** arrow. The Group Functions pop-up menu appears.
3. Under Attendance, choose **Backfill Management**. The Manage Backfill page appears.

   Note: Alternatively, if you have a current selection of students, you can choose **Special Functions** under Functions in the main menu and then click **Groups Functions**.

4. Click **View Backfill Details**. The View Backfill Details page displays the following information:

Field	Description
Backfill Week	Identifies the first day and the last day of the week for which aggregation is being shown. Aggregation occurs for every week within the backfill date range.
Days	Indicates the number of days within the week that were actual "in-session" school days. This is used to determine the maximum ADA

	that can be claimed and thus whether a week currently has excess hours or is short of hours.
Baseline CH	The total number of attendance minutes for the week that were entered through PowerSchool Meeting/Interval attendance or PowerTeacher attendance prior to any attendance minutes being used for or applied by the backfill process.
Baseline ISH	The total number of attendance minutes for the week that were entered through PowerSchool Time attendance and not marked as "Work Experience" prior to any attendance minutes being used for or applied by the backfill process.
Baseline WH	The total number of attendance minutes for the week that were entered through PowerSchool Time attendance and marked as "Work Experience" prior to any attendance minutes being used for or applied by the backfill process.
Baseline Total	The sum of the minutes reflected in Baseline CH, Baseline ISH, and Baseline WH.
Post-Backfill CH	The total number of minutes that were entered through PowerSchool Meeting/Interval attendance or PowerTeacher attendance, plus or minus any of these type of minutes that were either taken away or added by the backfill process.
Post-Backfill ISH	The total number of attendance minutes for the week that were entered through PowerSchool Time attendance and not marked as "Work Experience," plus or minus any of these type of minutes that were either taken away or added by the backfill process.
Post-Backfill WH	The total number of attendance minutes for the week that were entered through PowerSchool Time attendance and marked as "Work Experience," plus or minus any of these type of minutes that were either taken away or added by the backfill process.

Post-Backfill Total	The sum of the minutes reflected in Post-Backfill CH, Post-Backfill ISH, and Post-Backfill WH.
Categories - Ex	The total number of minutes entered using an attendance code assigned to the Excused Absences attendance code category
Categories - Ux	The total number of minutes entered using an attendance code assigned to the Unexcused Absences attendance code category.
Categories - S	The total number of minutes entered using an attendance code assigned to the Suspended Absences attendance code category.
Max Mins	The total possible apportionment for the week.
Backfill Type	identifies the type of backfill that was applied to the week by being subtracted from a subsequent week during the backfill process. The valid types are: • **CH** - Course Minutes • **ISH** - Independent Study Minutes • **WH** - Work Experience Minutes
Backfill Mins	The number of attendance minutes applied to the week by being subtracted from a subsequent week during the backfill process.
Backfill Week Date	The date of the week from which attendance minutes were subtracted and added to the current week during the backfill process.