

# **PowerScheduler Load Process User Guide**

---

PowerSchool  
Student Information System

**Released June 2016**

Document Owner: Documentation Services

This edition applies to Release 10 of the PowerSchool software and to all subsequent releases and modifications until otherwise indicated in new editions or updates.

The data and names used to illustrate the reports and screen images may include names of individuals, companies, brands, and products. All of the data and names are fictitious; any similarities to actual names are entirely coincidental.

PowerSchool is a trademark, in the U.S. and/or other countries, of PowerSchool Group, LLC or its affiliate(s).

Copyright © 2005-2016 PowerSchool Group LLC and/or its affiliate(s). All rights reserved.

All trademarks are either owned or licensed by PowerSchool Group LLC and/or its affiliates.

# Table of Contents

- Preface .....4
- Introduction .....5
  - Load Process: Schedule Setup.....7
  - Load Process: Course Information .....15
  - Load Process: Prepare Staff and Students.....18
  - Other Scheduling Functions .....20
  - Load Process: Load Constraints .....29
    - Define Load Constraints.....29
    - Load Process: Load Students.....34
  - Import Student Schedules .....36
  - Analyze the Results .....36
  - Load Results Log .....37
  - Load Process: Post-Load Options .....38
    - Reload Students .....39
    - Manually Adjust Student Schedules .....40
    - Update Selections .....44
- Commit the Master Schedule .....47
  - When to Commit the Master Schedule .....47
  - Load Process: Print Schedules and Rosters.....48

## 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

Complete the PowerScheduler Load Process if you already have a master schedule and only need to load student schedules. It is relevant for schools that meet any of the following criteria:

- Built a master schedule manually
- Copied a previous year's master schedule
- Plan to copy a previous year's master schedule

The process of loading only student schedules includes preparing to load, loading, and committing schedules. This process assumes that you have entered student course requests but not done any other preparation for preparing to build a master schedule.

Because every situation is different, there is some flexibility as to which steps an individual school will need to perform. It is important to understand each step and know how to make adjustments when necessary. Do not perform a step if you are not sure that you should.

The load process includes the following steps:

**Auto Scheduler Setup:** Must be performed as the first step in the process. Use the Auto Scheduler Setup function to create a scheduling scenario. The scheduling scenario is the basic framework for your schedule before sections and students are added. The scenario includes the terms, periods, days, and courses for the schedule. It is strongly recommended to run the function at every school in the District, regardless of whether each school uses PowerScheduler.

**[Set Schedule Year:](#)** Must be performed as the second step in the process. Use the Set Schedule Year function to associate your scenario with the Years & Terms created using the Auto Scheduler Setup.

**[Copy Master Schedule:](#)** Must be performed as the third step in the process. Use the Copy Master Schedule function to copy the schedule from a previous school year. This function copies sections into the schedule, including all associated settings, such as expression, room, teacher, and term.

**Parameters:** The following required parameters are set up when using Auto Scheduler Setup: Catalogs, Days, Periods, and Years & Terms.

**[Load Constraints:](#)** Define load constraints, if appropriate.

**[New Courses:](#)** After creating courses, associate them to the course catalog on the live-side, then associate the courses to catalog in PowerScheduler.

**Rooms:** Create the appropriate rooms for the schedule. Rooms are associated with sections when copying the master schedule. However, you may still need to create them for the current scenario. The master schedule and rooms are directly related; if rooms are not valid, sections will not display in the master schedule.

**Teacher Scheduling Preferences:** Populate the required teacher scheduling fields, which are Schedule This Teacher and Maximum Consecutive Periods.

**[Student Scheduling Preferences:](#)** Populate the required student scheduling fields, which are Next School, Next Year Grade, and Schedule This Student.

**Course Requests:** It is necessary to setup new courses and student scheduling preferences before entering student course requests. Student course requests must be entered before loading.

**Review Master Schedule:** Review the Master Schedule and make any final manual modifications.

**[Load Validation:](#)** Once the schedule is complete and students have entered requests, validate the load. When validating, the PowerScheduler engine performs the load function without actually creating any student schedules. Review any errors or warnings in the Load Results Log.

**[Load:](#)** When a load validation does not return any errors, run a load.

**[Import Results:](#)** To view student schedules in PowerScheduler, it is necessary to import the results. If you are satisfied with the details in the Load Results Log, then import the results to transfer the data into PowerScheduler.

**[Reports:](#)** PowerScheduler includes a group of reports designed for analyzing data after loading.

**[Re-Load:](#)** If you need to make changes that affect student schedules, such as courses, sections, or load constraints, it is possible to run the load again. Re-loading changes all student schedules that were previously imported. To preserve changes, perform the reschedule process.

**[Manually Schedule:](#)** Though PowerScheduler strives to create ideal schedules, it may be necessary to make manual modifications. Re-loading after making manual modifications changes all student schedules. To preserve changes, perform the reschedule process.

**[Reschedule:](#)** To load schedules for a specific group of students, select the group of students and choose the **Reschedule the selected [x] students** option.

**[Commit the Schedule:](#)** Before committing the schedule, verify that there is a current backup of your PowerSchool data. Also, verify that the End-of-Year (EOY) process has not been performed. Then, commit the schedule for the next school year. It is possible to replace student schedules, sections, or both.

## Load Process: Schedule Setup

When loading student schedules, you must first define the school year, terms, and days that school is in session. Then, create a build scenario into which you can copy an existing master schedule. Finally, verify that these setup procedures are performed correctly.

**Note:** It is strongly recommended that you use the Automatic Scheduler Setup function to create the scenario instead of manually defining years and terms.

If you did not build your own master schedule, you can copy an existing master schedule to use as the foundation for your new master schedule. For more information, see [Copy the Master Schedule](#). To delete a master schedule, see [How to Delete the Master Schedule](#).

### How to Define a Schedule Year and Terms

For scheduling purposes, you need to define the upcoming school year and its associated terms. If you are working with a copy of a previous year's master schedule, the terms will remain the same as they were in that schedule.

**Note:** It is strongly recommended that you use the Automatic Scheduler Setup function to create the scenario instead of manually defining years and terms.

It is important to enter the terms sequentially. For example, first create the school year, then semesters, and finally quarters.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Scheduling Setup, choose **Years & Terms** from the PowerScheduler menu. The Schedule Years & Terms page appears.
3. Click **New**. The Create New Schedule School Year page appears.
4. Use the following table to enter information in the fields:

Field	Description
Name of School Year	Enter the name of the school year, such as 2008-2009.
Abbreviation	Enter an abbreviation for the school year, such as 08-09.
First Day of School	Enter the first day of school for this academic year in MM/DD/YYYY format, such as 09/02/2009.

Last Day of School	Enter the last day of school for this academic year in MM/DD/YYYY format, such as 6/5/2010.
--------------------	---

5. Click **Submit**. The Schedule Years & Terms page displays the schedule year.
6. Click **Edit Terms** in the row of the appropriate schedule year.
7. On the Term Setup page, click **New**. The Edit Schedule Term page appears.

**Note:** Enter the terms sequentially. That is, if your school has terms of two semesters and four quarters, enter them in this order: Year, Semester 1, Semester 2, and then Quarter 1, Quarter 2, Quarter 3, and Quarter 4.

8. Use the following table to enter information in the fields:

Field	Description
Name of Term	Enter the name of this term, such as Semester 1.
Abbreviation	Enter an abbreviation for this term, starting with a letter, such as S1.
First Day of Term	Enter the first day of this term in MM/DD/YYYY format.
Last Day of Term	Enter the last day of this term in MM/DD/YYYY format.
What portion of the school year does this term represent?	Use the pop-up menu to choose the fraction that this term represents within the school year. If your school year consists of four terms, choose <b>1/2</b> . If this term represents the whole school year, choose <b>Full year</b> .
Import File Term #	Enter an import file term number so that the system can align terms when it imports the master schedule. For example, if your school uses semester and quarter classes, you might state in the import file that all sections of S1 are identified by the number S10203. Enter the same number in this field to map the date.

9. Click **Submit**. The Term Setup page appears.

## How to Define Days

Define the number of days in the schedule. A day (or "cycle") is the number of repeating days that make up a schedule.

**Note:** A schedule day or cycle is NOT the same as a calendar day.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Scheduling Setup, choose **Days** from the PowerScheduler menu. The Edit Days page appears.
3. Use the following table to enter information in the fields:

Field	Description
Name	Enter the name of the day.
Abbreviation	Enter an abbreviation for the day name.

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

## How to Create a Build Scenario

You need to create a build scenario. First, define the basic build information, such as the number of terms, days, and periods in your master schedule. Then, define load optimization parameters to determine the minimum and maximum number of possibilities the system evaluates while loading student schedules with courses.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Scheduling Setup, choose **Scenarios** from the PowerScheduler menu. The Scenarios page appears.
3. Click **New**. The Edit Build Scenario page appears.
4. Use the following table to enter information in the Build Information fields:

Field	Description
[Scenario type]	<p>Select the <b>Load Only</b> option if you already have a schedule, such as through the process of either importing or copying, and only want to load students.</p> <p><b>Note:</b> If creating a <b>Build and Load</b> scenario, see <i>Build Scenarios</i>.</p>
Build Name	<p>Enter a name for this build scenario. If you are creating several scenarios, use descriptive names so that you can easily distinguish among them.</p>
Active Build	<p>If you are creating only one build scenario, select the checkbox. If you are creating more than one build scenario, select the checkbox for the one you want the system to use to build your master schedule.</p> <p><b>Note:</b> You will only be able to edit the course catalog that is associated with the build marked as active.</p>
Build Description	<p>Enter a description of this scenario.</p>
Terms	<ol style="list-style-type: none"> <li>1. Click <b>Associate</b> to select the number of schedule terms you want this scenario to include. The Schedule Term Setup page appears.</li> <li>2. Select the checkboxes in the rows that represent the number of schedule terms you want this scenario to include. For example, if you plan to build a two-semester master schedule, select the checkbox next to the row that includes Semester 1 and Semester 2.</li> <li>3. Click <b>Submit</b>.</li> </ol>
Periods	<p>From the pop-up menu, choose the number of periods per day for this build scenario. For example, if you are building a block schedule, you might choose 4. If you are building a regular schedule, you might choose 7.</p>

Days	Choose from the pop-up menu the number of days for this build scenario.
Course Catalog	Use the pop-up menu to choose the course catalog you want the system to use to build this schedule. If this is your first time creating a master schedule, do not select a catalog. The system will automatically generate a course catalog, which you can modify. For more information, see <i>Course Catalogs</i> .

5. Use the following table to enter information in the Build Optimizations and Load Optimizations fields:

Field	Description
Percent of schedule combinations to evaluate for each course	<p>Change this value only if you encounter problems with the amount of time the system is using to build the master schedule. The default value of this field is 10.</p> <p>For example, if you enter <b>25</b>, the system evaluates one-quarter of the possible schedule combinations for each course. If you enter <b>75</b>, the system evaluates three-quarters of the possible schedule combinations for each course.</p>
Minimum number of schedule combinations to evaluate for each course	<p>Change this value only if you encounter problems with the amount of time the system is using to build the master schedule. The default value of this field is 10,000.</p> <p>For courses with few possible combinations to begin with, use a higher number to prevent the system from attempting too few schedule combinations and not being able to fit the course into the schedule.</p>
Percent of schedule combinations to evaluate for each student	<p>Change this value only if you encounter problems with the amount of time the system is using to load the master schedule. The default value of this field is 10.</p> <p>For example, if you enter <b>25</b>, the system evaluates one-quarter of the possible schedule combinations for each student. If you enter</p>

	<b>75</b> , the system evaluates three-quarters of the possible schedule combinations for each student.
Minimum number of schedule combinations to evaluate before skipping	Change this value only if you encounter problems with the amount of time the system is using to load the master schedule. The default value of this field is 10,000.  Enter a high number to force the system to sample a minimum number of student schedule course possibilities.

**Note:** You can also set build optimizations for a particular course by adding a Course Optimize constraint. This type of constraint takes precedence over the build optimizations you set here. For more information, see *Build Constraints*.

6. Use the following table to enter information in the Best Schedule Weights fields:

Field	Description
Student conflicts	To have the system give more weight to student conflicts than section balance when confronted with a conflict while building the master schedule, enter a larger number in this field than in the Section balance field. The default value of this field is 50.  <b>Note:</b> The numbers in both of these fields must add up to 100.
Section balance	To have the system give more weight to section balance than student conflicts when confronted with a conflict while building the master schedule, enter a larger number in this field than in the Student conflicts field. The default value of this field is 50.  <b>Note:</b> The numbers in both of these fields must add up to 100.
Total	The total of the weighting values appears. This number must be 100.

7. Click **Submit**. The Scenarios page appears.

## How to Verify Periods

After [copying the master schedule](#), verify the periods for your schedule and [verify the scenario](#).

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Scheduling Setup, choose **Periods** from the PowerScheduler menu. The Periods page appears.
3. Verify that the period information is correct.

**Note:** If you edit the information, click **Submit**.

## How to Verify the Scenario

After you verify the accuracy of your master schedule, make sure that the details of the scenario you created are accurate.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Scheduling Setup, choose **Scenarios** from the PowerScheduler menu. The Scenarios page appears.
3. Click the name of the build scenario you want to use to build your master schedule. The Edit Build Scenario page appears.
4. Verify that the data in the following fields are correct: Build Name, Terms, Periods, Days, and Course Catalog. Make modifications, if necessary.
5. Click **Associate** next to the Terms field. The Schedule Term Setup page appears.
6. Select the checkboxes in the rows that represent the number of schedule terms you want this scenario to include. For example, if you plan to build a two-semester master schedule, select the checkbox in the row of Semester 1 and Semester 2.
7. Click **Submit**.
8. On the Edit Build Scenario page, enter comments in the Build Description field to describe this scenario.
9. Click **Submit** to save any changes. The Scenarios page appears.

## How to Move a Course Section

You probably need to make minor changes to the master schedule you built or copied. For example, you might know from past experience that a particular course section should convene during a different period, or maybe a new teacher will replace one who is retiring.

Delete any courses that are not part of next year's master schedule or that you schedule manually, such as before- or after-school sections. Also, keep in mind that the loading process often runs smoother if you do not include teacher aid, work release, study hall, independent study, or preparation courses in your master schedule.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Schedule, choose **Sections** from the PowerScheduler menu. The sections menu appears.
3. Click the course for the section you want to move. The course information page appears.
4. Click the section number. The Edit Section page appears.
5. Use the following table to enter information in the specified fields:

Field	Description
Term	Choose from the pop-up menu the term in which this section meets.
Schedule	<p>Select the checkboxes for the periods for the appropriate days on which this section is taught. This creates the schedule expression that appears next to the section on several pages.</p> <p>The expression must tell the scheduling engine exactly how to schedule the section. For example, your school has a two-day schedule that includes periods 1, 1A, and 1B. A course held during Period 1 meets both A day and B day. A course held during Period 1A meets first period on A day, and a course held during Period 1B meets first period on B day. In this scenario, you would select the A and B checkboxes in the Period 1 row.</p>
Teacher	Choose a teacher from the pop-up menu.
Room	Enter the room name or number in which this section is taught.

6. Click **Submit**. The course information page appears.

## Load Process: Course Information

Automatically generate information into fields on the Course Information page based on the current master schedule. Then, verify the information and set scheduling preferences for each course.

### How to Auto Generate Course Information

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Tools, choose **Functions** from the PowerScheduler menu. The Scheduling Functions page appears.
3. Click **Auto Generate Course Information**. The Auto Generate Course Info page appears.
4. Select the checkbox to verify that you want to generate course information for the fields.
5. Click **Submit**. The Changes Recorded page appears.

### How to Verify and Complete Course Information

If you use the auto-generate course information function, the system enters the following information for each course:

- Number of sections offered
- Valid terms
- Terms per year
- Periods per meeting
- Periods per cycle
- Frequency
- Is This Course a Lab
- Lab Periods per meeting
- Lab Frequency
- Maximum enrollment
- Schedule this course
- Build type
- Load priority
- Load type
- Balance priority

Verify and adjust these values. Then, enter course scheduling preferences for each course on the Course Information page.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Resources, choose **Courses** from the PowerScheduler menu. The Courses page appears.
3. Click the name of the course you want to work with from the courses menu.
4. Do one of the following:
  - Choose **Preferences** from the pop-up menu.
  - Click the **Preferences** tab.

The Course Information page appears.

5. Select either the **Allow Student Repeats in the Same Term** or **Allow Student Repeats in Different Terms** checkbox.
6. Use the following table to adjust any values in the Load Options section of the page:

Field	Description
Load Priority	<p>Enter a numerical value of 1 to 99 (1 being the highest priority) to prioritize in which course the system should schedule a student when a conflict between two of the student's requests arises. You can enter the same load priority number for several courses. For example, enter a load priority of <b>10</b> for all academic courses to ensure that students are loaded into these courses first, <b>20</b> for academic electives, and <b>30</b> for non-academic electives.</p> <p><b>Note:</b> If this course has a Section Link constraint associated with it, you may want to give it the highest load priority to prevent the section link from being broken.</p>
Load Type	<p>Choose from the pop-up menu whether this is an academic, elective, or alternate course. The system uses this classification to balance the types of courses in which the student is scheduled during a schedule term.</p> <p>For example, if your school's scheduling terms are semesters, the system does not schedule the student in all elective courses the first semester and all academic courses the second semester.</p>

Balance Priority	<p>Use this pop-up menu to set a secondary priority for the course when loading student schedules. The primary priority is determined by the Load Priority field.</p> <p>The following settings create an additional priority. For example, if you choose Grade from the pop-up menu, the system not only attempts to keep an equal number of students in each section, but also an equal number from all grade levels. The default setting for loading students into the master schedule is Section. Use the pop-up menu to choose one of the following options to ensure a balance of students in each section (optional):</p> <ul style="list-style-type: none"> <li>• <b>Section:</b> When loading students into sections, the system always attempts to keep an even number of students among sections.</li> <li>• <b>Gender:</b> Balanced number of males and females in each section.</li> <li>• <b>Grade:</b> Balanced number of students from each grade level within each section.</li> <li>• <b>EthnicCode:</b> Balanced number of students with different ethnic codes within each section.</li> <li>• <b>House:</b> Balanced number of members from each house within each section.</li> </ul>
Use Pre-Established Teams	Select the checkbox if you want the system to reference teams when scheduling students into this course.
Close Section After Max	Select the checkbox if you want the system to stop scheduling students in a section of this course after the enrollment reaches the number you defined in the Maximum Enrollment field.
Use Section Types	Select the checkbox if you want the system to schedule the course according to section types.

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

## Load Process: Prepare Staff and Students

Prepare staff and student records before loading the master schedule.

### How to Prepare Staff

You must verify that you selected the Use for Scheduling checkbox for each teacher on the Staff Scheduling Preferences page in the active or "live" side of PowerSchool. You can use the Set Staff Field Value function to select the checkbox for all teachers at the same time.

1. On the start page, choose **Staff** under People in the main menu. The Search Staff page appears.
2. Select the group of staff members.
3. Click **Functions**. The Group Staff Functions page appears.
4. Click **Set Staff Field Value**. The Teacher Field Value page appears.
5. Use the following table to enter information in the fields:

Field	Description
Field to Change	Enter the name of the field to be changed. Enter <b>Sched_Scheduled</b> to prepare teachers for scheduling. <b>Note:</b> To view a list of field codes, click <b>Fields</b> .
New Field Value	Enter the new value of the field. Enter <b>true</b> to prepare teachers for scheduling. Put quotation marks around any values that do not perform calculations, such as constant characters or a string of characters.
Clear Field Value	Select the checkbox to remove existing values for that field.
Do not overwrite existing data	Select the checkbox if you do not want the system to overwrite any existing field values.

6. Click **Submit**. The Field Value page appears.
7. Click **Submit** to confirm. Now you can perform a search to find the group with the changed value.

### How to Prepare Students

Confirm that the appropriate students are available in your database for scheduling. Before the system can load students into the master schedule, you must enter detailed scheduling information for each student.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Resources, choose **Students** from the PowerScheduler menu. The Scheduling page appears.
3. Select students for scheduling. For detailed information, see *Schedule Search and Select*.
4. Click the name of the student you want to work with from the students menu.
5. Do one of the following:
  - Choose **Preferences** from the pop-up menu.
  - Click the **Preferences** tab.

The Edit Scheduling Preferences page appears.

6. Use the following table to enter information below the Required Settings header:

Field	Description
Next Year Grade	Enter the student's next year grade level.
Priority	<p>Enter a number to indicate the order in which the system should schedule this student during the load process.</p> <p>You can assign scheduling priorities to students for the system to follow when loading student schedules. Students can share the same priority.</p> <p>For example, if there are more requests than available spots, you might want the system to schedule graduating seniors first because it is their last chance to take the courses they request. If this is the case, assign all twelfth graders a priority of <b>10</b>, all eleventh graders a priority of <b>20</b>, all tenth graders a priority of <b>30</b>, and all ninth graders a priority of <b>40</b>.</p> <p><b>Note:</b> The lower the number, the higher the priority.</p>

Schedule This Student	<p>Select the checkbox to include the student in the scheduling process.</p> <p>If you forget to select the checkbox for a student who has made course requests, the system will be unable to schedule that student.</p> <p>Not only do you have to select to include the appropriate students, but also you must exclude graduating students by deselecting the checkbox.</p>
Year of Graduation	<p>Enter the student's year of graduation.</p> <p><b>Note:</b> You do not have to enter a year of graduation for students who are graduating this year.</p>
Next School Indicator	<p>Choose the school the student will attend next year from the pop-up menu.</p> <p>Choose <b>Graduated School</b> for students who are graduating this year.</p>

7. Click **Submit**.

## Other Scheduling Functions

Use the links on the Scheduling Functions page to run processes related to the master schedule. For scheduling functions not listed in this section, see the following sections:

- *Calculate Target Number of Sections to Offer*
- *Duplicate Scenarios*
- *Expression Mapping, used when Importing the Master Schedule*
- [Update Selections](#), including the processes *Unlock Previously Scheduled Courses*, *How to Set the Next Year Grade Field for an Entire Grade Level*, *How to Schedule All of Next Year's Students*, and *How to Assign a Group of Students to a Building, House, or Team*.

## How to Auto Generate Course Information

Automatically generate information into the fields on the Course Information page based on the current master schedule.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Tools, choose **Functions** from the PowerScheduler menu. The Scheduling Functions page appears.
3. Click **Auto Generate Course Information**. The Auto-Fill Course Info page appears.
4. Select the checkbox to verify that you want to generate course information for the fields.
5. Click **Submit**. The Changes Recorded page appears.

## How to Auto Generate Rooms

Automatically generate rooms from the existing master schedule to use in the new build.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Tools, choose **Functions** from the PowerScheduler menu. The Scheduling Functions page appears.
3. Click **Auto Generate Rooms**. The Generate Rooms page appears.
4. Select the checkbox to verify that you want to copy the existing rooms into the current build.
5. Click **Submit**. The Changes Recorded page appears.

## How to Auto Generate Teacher Assignments

Automatically generate teacher assignments from the existing master schedule. To verify that these assignments display the correct terms, number of assignments, and other information, run the *Teacher Assignments by Teacher Report*.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Tools, choose **Functions** from the PowerScheduler menu. The Scheduling Functions page appears.
3. Click **Auto Generate Teacher Assignments**. The Generate Teacher Assignments page appears.
4. Select the checkbox to generate teacher assignments using the existing master schedule.
5. Click **Submit**. The Changes Recorded page appears.

## How to Calculate Percent Schedules

Percentage calculations are triggered whenever a student's schedule changes through the scheduling engine or PowerScheduler functionality, such as manually changing a student's schedule. There are situations in which a student's schedule can be created without using these processes, such as by importing a schedule. You can use the Calculate Percent Schedules function to recalculate all students' percent scheduled numbers, including those students' schedules that were not created through other functions.

**Note:** This function always recalculates the entire set of students identified for scheduling.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Tools, choose **Functions** from the PowerScheduler menu. The Scheduling Functions page appears.
3. Click **Calculate Percent Schedules**. The Alert page appears, indicating that the percent schedules calculation completed.

## How to Copy the Master Schedule

Copy the current year's master schedule to another year. After copying the master schedule, do the following:

- [Regenerate bitmaps](#) from the Functions menu.
  - Align the active scenario to the imported master schedule in terms of years and terms, periods, and days. For more information, see *Build Scenarios*.
1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
  2. Under Tools, choose **Functions** from the PowerScheduler menu. The Scheduling Functions page appears.
  3. Click **Copy Master Schedule**. The Copy Master Schedule page appears.
  4. Choose the year from which you want to copy the master schedule from the School pop-up menu.
  5. Select the checkbox to proceed.
  6. Click **Submit**. The Changes Recorded page appears.

## How to Delete the Master Schedule

Delete the current year's master schedule.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.

2. Under Tools, choose **Functions** from the PowerScheduler menu. The Scheduling Functions page appears.
3. Click **Delete Master Schedule**. The Delete Master Schedule page appears.
4. Select the checkbox to proceed.
5. Click **Submit**. The Changes Recorded page appears.

## How to Move Previous Year Data

Use this function to delete all constraints, relationships, and teacher/course assignments for the current build and replace them with constraints, relationships, and teacher/course assignments from the selected build.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Tools, choose **Functions** from the PowerScheduler menu. The Scheduling Functions page appears.
3. Click **Move Previous Year Data**. The Move Previous Year Data page appears.
4. Choose the build that you want to use to overwrite the current build from the pop-up menus.
5. Select the confirmation checkbox to proceed.
6. Click **Submit**. The Changes Recorded page appears.

## How to Regenerate Bitmaps

Reset the bitmap from the expression for all sections and constraints in the current build. Regenerate bitmaps after importing any constraints that use an expression, such as preschedule, room free, teacher free, or course restrict constraints.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Tools, choose **Functions** from the PowerScheduler menu. The Scheduling Functions page appears.
3. Click **Regenerate Bitmaps**. The Expression to Bitmap page appears.
4. Select the checkbox to proceed.
5. Click **Submit**. The Scheduling Functions page appears.

## How to Reset Section Meetings

When section data has been imported or modified and the section meetings table does not refresh, the courses will not appear in matrix views or on manual enrollment pages. Force a refresh of the section meetings table.

The currently-selected school determines which school is affected. If you perform this function at the District level, all schools' Section\_Meeting records will be reset.

**Note:** For better performance, run this function outside of school hours.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Tools, choose **Functions** from the PowerScheduler menu. The Scheduling Functions page appears.
3. Click **Reset Section Meetings**.
4. Select the checkbox to reset all PowerScheduler section meetings values based on the current schedule expressions for the selected school.
5. Click **Submit**. The Scheduling Functions page appears.

### How to Reset Class Counts

Use this function to reset the number of students in each section for all courses in the current build.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Tools, choose **Functions** from the PowerScheduler menu. The Scheduling Functions page appears.
3. Click **Reset Class Counts**. The system resets the number of students in each section in the current build. The Scheduling Functions page appears.

### How to Reset Teacher Assignments

Use this function to reset the number of teacher assignments for all courses in the current course catalog.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Tools, choose **Functions** from the PowerScheduler menu. The Scheduling Functions page appears.
3. Click **Reset Teacher Assignments**. The Scheduling Functions page appears.

### How to Resolve Invalid Requests

Every year there may be students with invalid requests. Using this function, you can resolve the following types of invalid requests:

- Invalid School - The school ID in the request is different than the school the student is being scheduled for.
- Invalid Course - The course in the request is not a valid future year course requests due to one of the following reasons:
  - The course is not in the active course catalog in PowerScheduler.
  - The **Schedule This Course** checkbox is not selected. For more information, see *How to Define Scheduling Preferences*.
  - The course is not set as **Available** for the year to be scheduled. For more information, see *Edit Course Status* or *Edit Availability for Schools and Year*.

**Note:** This function does not check for the following types of invalid requests:

- Requests related to students who are not set to be scheduled.
  - Students set to be scheduled at another school that have a course request for the school you are running the function from.
  - Invalid requests based on unfulfilled prerequisites. For more information, see *Course Requests: Invalid Requests*.
  - Support identifying current year invalid requests.
1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
  2. Under Tools, choose **Functions** from the PowerScheduler menu. The Scheduling Functions page appears.
  3. Click **Resolve Invalid Requests**. The Resolve Invalid Requests page appears.
  4. If needed, click the **Filter** arrow to expand this section.

**Note:** Click the **Filter** arrow again to collapse this section.

5. Use the following table refine your search:

Field	Description
Search	Enter search criteria in the <b>Search</b> field.
Filter	<ol style="list-style-type: none"> <li>1. To filter by columns:           <ol style="list-style-type: none"> <li>a. Click <b>+</b>.</li> <li>b. From the first pop-up menu, choose one of the following:               <ul style="list-style-type: none"> <li>• <b>Course Name</b></li> <li>• <b>Course Number</b></li> </ul> </li> </ol> </li> </ol>

	<ul style="list-style-type: none"><li>• <b>Status</b></li><li>• <b>School</b></li><li>• <b>Student Name</b></li></ul> <p>c. Enter search criteria in the search field.</p> <p><b>Note:</b> Use a comma-separated list for multiple values.</p> <p>d. Click <b>Apply</b>. The page refreshes and display filtered results.</p> <p>2. To add another filter, click + and repeat Step 1.</p> <p><b>Note:</b> The + appears shaded if all filters have been added.</p> <p>3. To delete a filter, click - next the filter.</p> <p>4. Click <b>Apply</b>. The page refreshes and display filtered results.</p> <p><b>Note:</b> To remove all filter selections, click <b>Clear</b>.</p>
--	---

The following information appears:

**Note:** This function displays the first 1000 invalid requests. If there are more than 1000 invalid requests, resolve the initial list and run the function again.

**Note:** Click the name of a column to sort by that column in ascending order. Click again to sort in descending order. By default, students are sorted by Name and then Grade Level.

Field	Description
[Checkboxes]	<p>Do one of the following</p> <ul style="list-style-type: none"><li>• Select the checkbox in the header row to select all invalid requests. Alternately, if the checkbox is already selected, deselect the checkbox to remove the checkmarks from all invalid requests.</li><li>• Select the checkbox for each invalid request you want to work with.</li></ul>
Student Name	The last, first name of the student with the invalid request.

Course Name	The course name of the invalid request.
Course Number	The course number of the invalid request.
School	The school where the invalid request has been made.
Status	The status of the invalid request.

6. Do one of the following:

Action	Description
To remove invalid requests	<ol style="list-style-type: none"> <li>1. Click <b>Delete Requests</b>.</li> <li>2. Click <b>Confirm Delete Requests</b>. A confirmation message appears.</li> </ol>
To resolve invalid requests due to an invalid school	Click <b>Change School</b> to resolve an invalid request due to the school ID in the request being different than the school the student is being scheduled for. A confirmation message appears indicating the school ID in the request has been changed to the school you are running the function from.
To resolve invalid requests due to an invalid course	<ol style="list-style-type: none"> <li>1. Click <b>Change Course</b>. The Select Course drawer appears.</li> <li>2. Enter search criteria in the <b>Search</b> field.</li> <li>3. To filter by columns:                             <ol style="list-style-type: none"> <li>a. Click <b>+</b>.</li> <li>b. From the first pop-up menu, choose one of the following:                                     <ul style="list-style-type: none"> <li>• <b>Course Name</b></li> <li>• <b>Course Number</b></li> <li>• <b>Department</b></li> </ul> </li> <li>c. Enter search criteria in the search field.</li> </ol> </li> </ol> <p><b>Note:</b> Use a comma-separated list for multiple values.</p>

	<p>d. Click <b>Apply</b>. The page refreshes and display filtered results.</p> <p>4. To add another filter, click <b>+</b> and repeat Step 1.</p> <p><b>Note:</b> The <b>+</b> appears shaded if all filters have been added.</p> <p>5. To delete a filter, click <b>-</b> next the filter.</p> <p>6. Click <b>Apply</b>. The page refreshes and display filtered results.</p> <p><b>Note:</b> To remove all filter selections, click <b>Clear</b>.</p> <p>7. Click <b>Submit</b>. The Select Courses drawer closes and a confirmation message appears.</p>
--	---

## How to Set the Schedule Year

Because course requests can be made for the current year or for other scheduling years, you must set the schedule year for student requests made in PowerScheduler, in the PowerSchool Student and Parent portal, or on the Requests Modify Future page in PowerSchool.

For example, set the scheduling year to **2015-2016** if you want students to enter course requests for the 2015-2016 year. In this case, the request Screen Setup function in PowerScheduler will apply to the 2015-2016 school year. The student's requests made through the Requests Modify Current page in PowerSchool will apply to the 2014-2015 school year. For more information about student course requests, see *Student Course Requests*.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Tools, choose **Functions** from the PowerScheduler menu. The Scheduling Functions page appears.
3. Click **Set Schedule Year**. The Set Schedule Year page appears.
4. Choose the schedule year from the pop-up menu.

**Note:** Only the years established on the Years & Terms page appear in the pop-up menu. To select a year that is not listed, you must first set up that scheduling year. For more information, see *Auto Scheduler Setup*.

5. Click **Submit**. The Scheduling page appears.

## How to Split Year-Long Classes

Use this function to split year-long classes into smaller terms. By creating year-long classes and then using this function to divide the class into smaller terms, you reduce the number of classes you need to set up.

**Note:** Perform this function only when you are ready to commit your master schedule.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Tools, choose **Functions** from the PowerScheduler menu. The Scheduling Functions page appears.
3. Click **Split Year-Long Classes**. The Split Year-Long Classes page appears.
4. Select the term segment into which you want to split year-long classes.
5. Select the checkbox to proceed.
6. Click **Submit**. The Changes Recorded page appears.

## Load Process: Load Constraints

Load constraints restrict the way the system loads students into courses. Define load constraints before performing a load. To compare results of a load with and without load constraints, first perform a load and then define load constraints.

PowerSchool contains six types of load constraints you can define. Use each one to constrain student schedules in a specific way. For example, use a Student Preference constraint to force a student to be scheduled in a particular teacher's section.

**Note:** Since constraints restrict student schedules, the more constraints you define, the less flexibility the system has to load students into courses and the less optimal the resulting schedule will be. It is always best to use the fewest number of constraints required to accomplish your scheduling goals.

To view a list of load constraints and the number of each that have been defined for your schedule, choose Load Constraints from the constraints menu.

For more information about load constraints, see [Define Load Constraints](#).

## Define Load Constraints

Set up constraints to force PowerScheduler to load student schedules in a particular way. You must build your master schedule before you can define load constraints.

**Note:** To view a list of load constraints and the number of each that have been defined for your schedule, choose Load Constraints from the constraints menu.

To edit or delete constraints, see *Work With Load Constraints*.

### How to Add a Balance Adjustment Constraint

Use a Balance Adjustment constraint to pre-load a course section with a certain number of reserved seats before adding the rest of the students. For example, use this constraint if you have a math class that needs five seats open for SPED students.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Scheduling Setup, choose **Constraints** from the PowerScheduler menu. The Constraints menu appears.
3. Under Load Constraints, choose **Balance Adjustment**. The Balance Adjustment Constraints page appears.
4. Click **New**. The Edit Balance Adjustment Constraint page appears.
5. Use the following table to enter information in the fields:

Field	Description
Course Number	Click <b>Associate</b> to select the name of the course you want to balance.
Section Number	Enter the section number of the selected course that you want to balance.
Teacher	Click <b>Associate</b> to select the name of the teacher who instructs this course section.
Number of Reserved Seats	Enter the number of seats to be held.

**Note:** You must either enter a section number or select a teacher.

6. Click **Submit**. The Balance Adjustment Constraints page appears.

### How to Add a Student/Student Avoid Constraint

Use a Student/Student Avoid constraint to specify that two selected students cannot be scheduled into any of the same course sections.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.

2. Under Scheduling Setup, choose **Constraints** from the PowerScheduler menu. The Constraints menu appears.
3. Under Load Constraints, choose **Student Avoid**. The Student/Student Avoid Constraints page appears.
4. Click **New**. The Edit Student/Student Avoid Constraint page appears.
5. Use the following table to enter information in the fields:

Field	Description
Student 1	Click <b>Associate</b> to select the name of one of the students you want to separate from one another.
Student 2	Click <b>Associate</b> to select the name of the other student.

6. Click **Submit**. The Student/Student Avoid Constraints page appears.

### How to Add a Student/Teacher Avoid Constraint

Use a Student/Teacher Avoid constraint to specify that this student and this teacher cannot be scheduled into any of the same course sections.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Scheduling Setup, choose **Constraints** from the PowerScheduler menu. The Constraints menu appears.
3. Under Load Constraints, choose **Teacher Avoid**. The Student/Teacher Avoid Constraints page appears.
4. Click **New**. The Edit Student/Teacher Avoid Constraint page appears.
5. Use the following table to enter information in the fields:

Field	Description
Student	Click <b>Associate</b> to select the name of the student you want to avoid scheduling with a selected teacher.
Teacher	Click <b>Associate</b> to select the name of the teacher you want to avoid scheduling with the selected student.

- 6. Click **Submit**. The Student/Teacher Avoid Constraints page appears.

**How to Add a Student Free Constraint**

Use a Student Free constraint to specify those periods when a student must be free, such as when taking a course at another school.

- 1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
- 2. Under Scheduling Setup, choose **Constraints** from the PowerScheduler menu. The Constraints menu appears.
- 3. Under Load Constraints, choose **Student Free**. The Student Free Constraints page appears.
- 4. Click **New**. The Edit Student Free Constraint page appears.
- 5. Use the following table to enter information in the fields:

Field	Description
Student	Click <b>Associate</b> to select the name of the student who needs to have a free periods.
Term	Choose from the pop-up menu the term in which this student needs free periods.
Schedule	Select the checkbox next to each period in each day that you want to schedule this student to have a free periods.

- 6. Click **Submit**. The Student Free Constraints page appears.

**How to Add a Section Link Constraint**

Use a Section Link constraint to specify that if students are enrolled in one course section, they must also be enrolled in another, specific course section.

- 1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
- 2. Under Scheduling Setup, choose **Constraints** from the PowerScheduler menu. The Constraints menu appears.

3. Under Load Constraints, choose **Section Link**. The Section Link Constraints page appears.
4. Click **New**. The Edit Section Link Constraint page appears.
5. Use the following table to enter information in the fields:

Field	Description
Course Number 1	Click <b>Associate</b> to select the name of one of the courses for which you want to link a section.
Section Number 1	Enter the section number of the course in the Course Number 1 field that you want to link to another course section.
Course Number 2	Click <b>Associate</b> to select the name of the other course for which you want to link a section.
Section Number 2	Enter the section number of the course in the Course Number 2 field that you want to link to the section in the Section Number 1 field.

6. Click **Submit**. The Section Link Constraints page appears.

### How to Add a Student Preference Constraint

Use a Student Preference constraint to schedule a student into a particular course section, term, or teacher.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Scheduling Setup, choose **Constraints** from the PowerScheduler menu. The Constraints menu appears.
3. Under Load Constraints, choose **Student Preference**. The Student Preference Constraints page appears.
4. Click **New**. The Edit Student Preference Constraint page appears.
5. Use the following table to enter information in the fields:

Field	Description
Student	Click <b>Associate</b> to select the name of the student you want to force to schedule in a specific course section.
Course Number	Click <b>Associate</b> to select the name of the course.
Term	Choose the term to which you want this constraint to apply from the pop-up menu (optional).
Section Number	Enter the section number of the course into which you want the student to be scheduled (optional).
Teacher	Click <b>Associate</b> to select the name of the teacher who instructs this course section (optional).

**Note:** Though the last three fields are optional, you must make a selection for at least one of the fields.

6. Click **Submit**. The Student Preference Constraints page appears.

## Load Process: Load Students

Once you have a satisfactory master schedule, you can begin fine-tuning student schedules by running a load.

Do not load students into your master schedule until you are satisfied with it. Loading will not have any impact on the structure of the schedule, just on the placement of students within it. Also, do not make manual adjustments to student schedules and then reload students; the system will overwrite all of the changes you made.

**Note:** It is recommended that you run the first load before you define any load constraints.

### How to Run a Load

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Processing, choose **Load** from the PowerScheduler menu. The Load Student Schedules Queue page appears.

3. Use the following table to enter information in the fields:

Field	Description
Load type	Select a type of load: <ul style="list-style-type: none"> <li>• <b>Load all students:</b> The system reschedules all students. Previously created student schedules or manually adjusted student schedules are deleted.</li> <li>• <b>Balance:</b> The system adjusts student schedules to help improve the balance of students among sections. There is no guarantee that students' schedules will not change.</li> <li>• <b>Reschedule the selected [x] students:</b> The system reschedules only students whose schedules have not been locked. You can select this option multiple times.</li> </ul>
Close sections at maximum	Select the checkbox to ensure that courses close at their maximum enrollment numbers. <p><b>Note:</b> Do not select the checkbox the first time you do a load. The build itself runs without considering section maximums, so this will let you determine if you can get a little better load percentage. Also, not closing sections at their maximums will help you focus on students with conflicts.</p>
Use global course substitutes	Select the checkbox to ensure that the system automatically inserts any global course substitutes after student course substitutes have been tried and rejected.
Use student course substitutes	Select the checkbox to ensure that the system automatically inserts student course substitutes in the order chosen, if needed.

4. Click **Execute**. The engine starts to run. For more information, see *Understand the PowerSchool Scheduler Page*.

To view details about the load, click **(Q)** next to Load in the PowerScheduler menu, then click **View** in the Load Log column on the Load Student Schedules Queue page. To view errors and messages produced by the load, click **View** in the Results Log column. For more information about the Results Log, see [Load Results Log](#). After

successfully loading schedules, import the results of the load. For more information about importing, see [Import Student Schedules](#).

## Import Student Schedules

After you load students into schedules, you must import the results to display student schedules in PowerSchool.

If you import schedules that have changed for a student or a group of students after the first import, only the schedules of the selected students will be overwritten. Students schedules that did not change since the last import are not affected.

### How to Import Student Schedules

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Processing, choose **(Q)** next to Load from the PowerScheduler menu. The Load Student Schedules Queue page appears.
3. Click **Import** in the appropriate row in the Results column. The Load Student Schedules Queue page appears.

## Analyze the Results

When the load finishes, percentages for students with requests, students without conflicts, and total requests satisfied appear on the main Scheduling page.

To display the Scheduling page, choose **PowerScheduler** under Applications in the main menu on the PowerSchool start page. The page displays the following information:

Field	Description
Build Scenario	The name of the build scenario. <b>Note:</b> Click the name of the scenario to view or edit its information.
Last Build	The most recent date you built the master schedule for a build scenario.

Last Load	The most recent date you loaded student schedules for a build scenario.
Students With Requests	The number of students for whom course requests were entered.
Requests Satisfied	The number of all primary student course requests satisfied.
Students Without Conflicts	The percentage of students without any conflicts in their schedules.
Status	Indicates if the build scenario is active or inactive.
%Scheduled	The percentage of requests successfully filled.
%Core Scheduled	The percentage of requests for core classes successfully filled.
%Requests Satisfied	The percentage of total requests including alternate requests that were filled.

## Load Results Log

Similar to the build results log, the load results log displays the names of students it cannot schedule. It also provides possible reasons the engine did not run properly and alerts you to any potential issues the engine finds.

### How to View the Load Results Log

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Processing, choose **(Q)** next to Load from the PowerScheduler menu. The Load Student Schedules Queue page appears.

**Note:** Use this page to import the student schedules after being loaded. For more information, see [Import Student Schedules](#).

3. Click **View** in the Results Log column of the appropriate row. The "Results Log for [school name]" page appears.

If the build stops because of validation errors, the results log displays details about these errors. There are three types of errors:

- Info: These messages are informational, such as "Course [x]: Rescheduled [x] students out of [x] (leaving [x] unscheduled)." These do not prevent a successful load.
- Warning: These are "red flag" messages, such as "The teacher's preferred room is not suitable for the course the teacher is teaching." These do not prevent a successful load.
- Error: These messages are validation errors that must be corrected in order for the engine to run, such as "Invalid valid term found in the Course file (does not match the term length)." These do prevent a successful load.

For more information about validation messages, see *Build Validation*.

## Load Process: Post-Load Options

After completing a load, you can do one or more of the following:

1. Accept the results of the load and begin manually adjusting student schedules. Select this option only if you are positive that the master schedule will not change and that student schedules are correct. Verify student schedules to make sure the master schedule is correct.
2. Resolve student conflicts by using or adding alternate course requests if you did not use them in the first load. If your schedule contains alternate student course requests but you did not allow the system to use them, rerun the load and select the substitutes options.
3. Manually adjust student course requests to allow better scheduling. For example, if a student has a course request that is impossible to meet, change it. Repeat this process until you are satisfied with the results.
4. Select the students you want to reschedule. Then, reload student schedules.

If you select option 2, 3, or 4 above, you may need to reload student schedules. For more information, see [Load Process: Load Students](#).

## Reload Students

After you make changes to student course requests, you may want to reload the affected students into the master schedule. For more information about rescheduling students, see *Run a Load*.

### How to Reload Students into the Master Schedule

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Search for and select the group of students you would like to reschedule.

**Note:** You must select the students before you reschedule.

3. Under Processing in the PowerScheduler menu, choose **Load** from the PowerScheduler menu. The Load Schedules page appears.

**Note:** By default, all student schedules are unlocked. Only the Reschedule option adjusts unlocked student schedules.

4. Select the **Reschedule the selected [x] students** option.
5. Click **Execute**. The Load Student Schedules (Step 2) page appears.
6. Use the following table to enter information in the fields:

Field	Description
Load type	Select the <b>Reschedule the selected [x] students</b> option.
Close sections at maximum	Select the checkbox to ensure that courses close at their maximum enrollment numbers.
Use global course substitutes	Select the checkbox to ensure that the system automatically inserts any global course substitutes after student course substitutes have been tried and rejected.
Use student course substitutes	Select the checkbox to ensure that the system automatically inserts student course substitutes in the order chosen, if needed.

7. Click **Execute**. The engine starts to run. For more information, see *Understand the PowerSchool Scheduler Page*.

## Manually Adjust Student Schedules

Manually adjust and fine-tune student schedules only if you are certain that the master schedule will not change and that student schedules are correct.

**Note:** Running a load will cause manual modifications to be lost. Instead, choose the Reschedule the selected [x] students option when loading. For more information, see *Run a Load*.

You can also manually enroll students in courses based on their course requests. For more information, see *How to Manually Schedule Students*.

**Note:** If you use the Balance Adjustment constraint to pre-load a section with a certain number of "placeholder students," you need to manually schedule students into those seats after loading the rest of the student schedules. For example, if you use this constraint in a section of a math course to hold five seats for Special Education students, you need to schedule those Special Education students into the math section after loading the other students' schedules.

## How to Enroll a Student in a Course

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Resources, choose **Students** from the PowerScheduler menu. The Scheduling page appears.
3. Select students for scheduling. For detailed information, see *Schedule Search and Select*.
4. Click the name of the student you want to work with from the students menu.
5. Do one of the following:
  - Choose **Schedule** from the pop-up menu.
  - Click the **Schedule** tab.

The Schedule page displays the percentage scheduled calculations for the student:

- % Scheduled - Percentage of requests successfully filled
- % Core Scheduled - Percentage of requests for core classes successfully filled
- % Primary Requests Satisfied - Percentage of primary requests (non-alternate requests) that were successfully filled

- % Total Requests Satisfied - Percentage of total requests including alternate requests that were filled

**Note:** To determine which student course requests have yet to be filled, see the "Unfilled Requests" section of the page.

6. Choose from the **Enroll** pop-up menu the period in which you want to enroll this student in a course. The Available Courses page appears.

**Note:** For information about the filter options, see [How to Filter Manual Schedule Options](#).

The page displays the following information:

Field	Description
Crs.Sec	The course and section number.
Course Name	The course name. Click a course name to automatically add it to the student's schedule.
Expression	The period and day combination.
Term	The selected term.
Teacher	The teacher's name.
Grade	The grade level.
Credit Type	The credit type, such as Math.
Cr Hrs	The number of credit hours earned by taking this course.
Enrollment	The number of students currently enrolled in this course during the selected period.

## How to Drop a Student From a Course

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Resources, choose **Students** from the PowerScheduler menu. The Scheduling page appears.
3. Select students for scheduling. For detailed information, see *Schedule Search and Select*.
4. Click the name of the student you want to work with from the students menu.
5. Do one of the following:
  - Choose **Schedule** from the pop-up menu.
  - Click the **Schedule** tab.

The Schedule page appears.

6. Click the **Drop** pop-up menu.
7. Choose the period in which you want to drop this student from a course. Period names in the menu match the periods on the page. For example, to drop a course that convenes during Period A2 in Semester 2, choose the second occurrence of A2. The Student's Schedule page appears.

**Note:** To simultaneously drop more than one course, select the checkboxes in the appropriate rows, and then click **Drop Classes**.

## How to Filter Manual Schedule Options

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Resources, choose **Students** from the PowerScheduler menu. The Scheduling page appears.
3. Select students for scheduling. For detailed information, see *Schedule Search and Select*.
4. Click the name of the student you want to work with from the students menu.
5. Do one of the following:
  - Choose **Schedule** from the pop-up menu.
  - Click the **Schedule** tab.

The Schedule page appears.

6. Choose from the **Enroll** pop-up menu the period in which you want to enroll this student in a course. The Available Period Courses page appears.

7. Select one or more of the following filters on the Available Period Courses page:

Field	Description
Period	Choose the period from the pop-up menu.
Term	Choose the term from the pop-up menu.
Teacher	Choose the teacher from the pop-up menu.
Day	Choose the day from the pop-up menu.
Grade	Choose the grade level from the pop-up menu.
Credit Type	Choose the credit type, such as MATH, from the pop-up menu.
Course	To jump to a particular course, enter the course number and press RETURN (Mac) or ENTER (Windows).
Show only classes with available seats	Select the checkbox to display only classes that have not reached the maximum enrollment.

**Note:** To enroll the student in a course, see [How to Enroll a Student in a Course](#).

### How to Mass Enroll a Group of Students in a Course

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Resources, choose **Students** from the PowerScheduler menu. The Scheduling page appears.
3. Select students for scheduling. For detailed information, see *Schedule Search and Select*.
4. On the Selected Students page, click **Functions**. The Scheduling Functions page appears.
5. Click **Schedule Mass Enroll**. The Mass Enroll page appears.
6. Use the following table to enter information in the fields:

Field	Description
Teacher	Choose the teacher from the pop-up menu. If you select the course by teacher, you must also indicate the appropriate period and day of the course section.
Period	Choose the period from the pop-up menu.
Day	Choose the day from the pop-up menu.
Term	Choose the term from the pop-up menu.
course.section	Alternatively, enter the course and section number. Separate the course and section numbers with a period and no spaces.

7. Click **Submit**. If the Mass Enroll - Dependent Sections page appears, the course has dependent sections.
8. Select one of the following option for the selected students:
  - **Enroll in [course name] and its dependent sections**
  - **Enroll in [course name] only**
9. Click **Submit**. The Changes Recorded page appears.

## Update Selections

Use the Update Selections function to update a group of selected records at one time. Update selections for procedures such as *Unlock Previously Scheduled Courses*, *How to Set the Next Year Grade Field for an Entire Grade Level*, *How to Schedule All of Next Year's Students*, and *How to Assign a Group of Students to a Building, House, or Team*. For general instructions, see [How to Update Selections](#).

## How to Update Selections

To change the records for a group of students, first select the student group. For examples of how to search for a group of students, see *How to Set the Next Year Grade Field for an Entire Grade Level*.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.

2. Under Tools, choose **Functions** from the PowerScheduler menu. The Scheduling Functions page appears.
3. Click **Update Selections**. The Update Selections page appears.
4. Use the following table to enter information in the fields:

Field	Description
Current Table	Choose the table from which you want to export records from the pop-up menu. <b>Note:</b> See <a href="http://your.school.address/admin/home?ac=structure">http://your.school.address/admin/home?ac=structure</a> for a complete list of PowerSchool tables and fields.
Select all [x] records in this table	To indicate the records to use in the export, either: <ul style="list-style-type: none"><li>• Click <b>Select all [X] records in this table</b> to select all records. Skip to Step 6.</li><li>• Identify search criteria in the Search fields by continuing to the next step.</li></ul>
Search Students	Choose a field from the first pop-up menu. Choose an operator from the second pop-up menu: <ul style="list-style-type: none"><li>• Equals (=)</li><li>• Less than (&lt;)</li><li>• Greater than (&gt;)</li><li>• Less than or equal to (&lt;=)</li><li>• Greater than or equal to (&gt;=)</li><li>• Does not equal (#)</li><li>• Contains (contains)</li><li>• Does not contain (!Contain)</li></ul> In the last field, enter the value for the field.

5. Click **Search within the current [# of selected] records only**. The Update Selections page displays the new number of current records in selection.
6. Do one of the following:
  - Click **List View** to view the selections.

- Click **Select Records by Hand** to narrow the selection. Press and hold COMMAND (Mac) or CONTROL (Windows) and click the selections you want to keep. Click **Submit**.
  - Click **Modify Records** and continue to the next step. The Modify Records page appears.
7. Choose from the pop-up menu the field to modify in the selected records.
  8. Enter the value for the field to modify in the selected records.
  9. Click **Modify Selected Records**. The system updates the records, and the Update Selections page appears.

## Commit the Master Schedule

When you have a satisfactory schedule and want to make it your master schedule for the next school year, you must commit it. Once a schedule is committed, it replaces any existing master schedule and becomes your current schedule.

You can commit the schedule as soon as the current academic year has ended, or you can wait until just before the next academic year begins. If your periods for the next academic year are set up exactly as they are for the current year, you can commit the schedule as soon as you are confident that you no longer need to build or load.

**Note:** If you use PowerScheduler to create a master schedule, you should commit your master schedule before running the End-of-Year Process. The End-of-Year process modifies each student's Next School Indicator and Next Year Grade. If PowerScheduler is used after running the End-of-Year process, it is likely that students will be scheduled for the wrong school or grade level.

For information about committing the master schedule, see [When to Commit the Master Schedule](#).

## When to Commit the Master Schedule

When your schedule is as good as it can possibly be and school is no longer in session, commit the master schedule. When you commit a master schedule, it replaces any existing master schedule for that school year.

To ensure that attendance is set up properly, your "live side" school year should be created before committing your schedule in PowerScheduler. Also, when committing a master schedule, course information, including credit hours, is retrieved from the district level in PowerSchool.

## How to Commit the Master Schedule

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Processing, choose **Commit**. The Commit Master Schedule page appears.
3. Select which schedules to copy:
  - **Sections Only:** Select this option to commit only sections.
  - **Student Schedules Only:** Select this option to commit only student schedules.
  - **Sections & Student Schedules:** Select this option to commit both sections and student schedules.
4. Click **Submit**. The Verify Commit Master Schedule page appears.

5. Click **Submit**. The Commit Master Schedule Warnings page displays if there are any conflicts or unavailable courses. If there are no conflicts or unavailable courses, skip to Step 6.

**Note:** Only school calendar conflicts are committed as part of the master schedule; unavailable courses are not.

6. If you are certain you want to commit, click **Submit** to proceed. The Changes Recorded page appears.

## Load Process: Print Schedules and Rosters

Print schedules and rosters either before or after you commit the master schedule.

### How to Print Student Schedules

Use the Student Schedule List report to view the number of courses scheduled by each student. You can also use this report to view each student's schedule. Print student and teacher schedules either before or after you commit your master schedule.

**Note:** You can also print student schedules using a report card template.

To run this report for a specific group of students, first select those students. Then, select the Use Selected Students checkbox on the Scheduling Reports page before clicking **Student Schedule List**.

1. On the start page, choose **PowerScheduler** under Applications in the main menu. The Scheduling page appears.
2. Under Tools, choose **Reports** from the PowerScheduler menu. The Scheduling Reports page appears.
3. Click **Student Schedule List**. The Student Classes Scheduled page displays the following information:

Field	Description
#	The numbered list of students.
Student	The student's name. Click the heading to sort the list by student name.

% Scheduled	The percentage of the student's course requests that were fulfilled. Click the heading to sort the list by percentage scheduled.
Classes Scheduled	The number of courses that have been scheduled for this student. Click the heading to sort the list by the number of classes scheduled. Click the number per student to view the student's Schedule page.

**How to Print Class Rosters (PDF)**

Generate a class roster as a PDF file for the current or previous terms. Print class rosters either before or after you commit your master schedule.

1. On the start page, choose **System Reports** under Reports in the main menu. The Reports page appears.
2. On the System tab, click **Class Rosters (PDF)**. The Class Rosters (PDF) page appears.
3. Use the following table to enter information in the fields:

Field	Description
Print rosters for	Select the teachers for which you want to generate a class roster. To select multiple teachers, press and hold COMMAND (Mac) or CONTROL (Windows) as you click each teacher's name.
Meetings	Indicate the meetings to be audited by selecting the appropriate checkboxes. To audit all meetings, deselect all of the checkboxes.
Include students who	Select an enrollment period option. Some options require you to enter a date or date range using the format mm/dd/yyyy or mm-dd-yyyy. If you do not use this format, an alert appears. If you submit the date with an incorrect format, the date field is submitted as a blank entry.
Heading font	Choose the heading font from the pop-up menu.

Size, line height, style	<p>Enter the heading font size and line height in points. One point equals 1/72 of an inch.</p> <p>Select the <b>Bold</b> checkbox to bold the heading. Select the <b>Italic</b> checkbox to italicize the heading. Select the <b>Underline</b> checkbox to underline the heading.</p>
Print heading on	<p>Choose an option from the pop-up menu to determine how you want the heading to print:</p> <ul style="list-style-type: none"> <li>• <b>First page of each class</b></li> <li>• <b>All pages</b></li> <li>• <b>Do not print heading</b></li> </ul>
Heading text	<p>Enter the content you want to appear in the heading. In addition to standard text, you can include HTML tags, PowerSchool fields and PowerSchool data codes.</p> <p>To insert a PowerSchool field into this field:</p> <ol style="list-style-type: none"> <li>1. Click <b>Fields</b> to view a list of PowerSchool fields. The Fields pop-up appears.</li> <li>2. To narrow the list of fields, enter one or more search terms in the <b>Filter</b> field. Otherwise, leave blank.</li> <li>3. Click the field you want to add. The Fields pop-up closes and the selected field appears.</li> </ol>
Column title font	<p>Choose the column title font from the pop-up menu.</p>
Size, line height, style	<p>Enter the column title font size and line height in points. One point equals 1/72 of an inch.</p> <p>Select the <b>Bold</b> checkbox to bold the column title. Select the <b>Italic</b> checkbox to italicize the column title. Select the <b>Underline</b> checkbox to underline the column title.</p>
Print column titles on	<p>Choose an option from the pop-up menu to determine how you want the column title to print:</p>

	<ul style="list-style-type: none"> <li>• <b>All pages</b></li> <li>• <b>First page of each class</b></li> <li>• <b>Do not print column titles</b></li> </ul>
Roster Font	Choose the roster listing font from the pop-up menu.
Size, line height, style	<p>Enter the roster listing font size and line height in points. One point equals 1/72 of an inch.</p> <p>Select the <b>Bold</b> checkbox to bold the roster listing. Select the <b>Italic</b> checkbox to italicize the roster listing. Select the <b>Underline</b> checkbox to underline the roster listing.</p>
Roster columns	<p>Enter the content to include in the student listings columns using the format field name \ column title \ column width \ alignment.</p> <p>To insert a PowerSchool field into this field:</p> <ol style="list-style-type: none"> <li>1. Click <b>Fields</b> to view a list of PowerSchool fields. The Fields pop-up appears.</li> <li>2. To narrow the list of fields, enter one or more search terms in the <b>Filter</b> field. Otherwise, leave blank.</li> <li>3. Click the field you want to add. The Fields pop-up closes and the selected field appears.</li> </ol>
Rule width	Enter the thickness in points of the vertical and horizontal lines on the report, as well as the outline of the entire report. One point equals 1/72 of an inch.
Cell padding	Enter the width of each cell and the amount of space from all sides of the cells to the text in points. One point equals 1/72 of an inch.
Page size	Choose from the pop-up menu the size of the paper on which you want to print this report. To enter a custom size, enter the horizontal and vertical page measurements in the Custom Size fields.

Margins	Enter the size of the margins in inches.
Orientation, Scale	Use the pop-up menu to choose the page layout. <b>Portrait</b> is a vertical page; <b>landscape</b> is a horizontal page. Scale is the finished size of the report. Fit more on a page by reducing it by a percentage, but remember to leave it as large as possible for easier viewing.
Watermark Text	To print text as a watermark on each page of the report, use the pop-up menu to either choose one of the standard phrases or choose <b>Custom</b> and enter the text you want to print as a watermark in the field.
Watermark mode	Use the pop-up menu to determine how you want the text to print. <b>Watermark</b> prints the text behind objects on the report, while <b>Overlay</b> prints the text over objects on the report.
When to print	<p>Select a time to run the report:</p> <ul style="list-style-type: none"> <li>• <b>ASAP:</b> Execute immediately.</li> <li>• <b>At Night:</b> Execute during the next evening.</li> <li>• <b>On Weekend:</b> Execute during the next weekend.</li> <li>• <b>On Specific Date/Time:</b> Execute on the date and time specified in the following fields using the format mm/dd/yyyy or mm-dd-yyyy. If you do not use this format, an alert appears. If you submit the date with an incorrect format, the date field is submitted as a blank entry.</li> </ul>

4. Click **Submit**. The report queue appears.
5. Click **View** once the report is completed.

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

The page displays a PDF file of the report. Thoroughly review it to verify that the formatting and content are correct. If the report provides the data you need and is formatted properly, print it from this page or save it to another application. For more information, see *Run, Print, and Save Reports*.