Address Management
User Guide

PowerSchool 8.x
Student Information System

Contents

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

With the introduction of Address Management, PowerSchool now provides a tool for address validation and boundary management. Address Management improves efficiency and accuracy in managing your address data, using cutting edge technology through visual representation of the address and boundary.

Address Validation

Address validation is the process by which an address is authenticated by an external address validation service, Google Maps. Google Maps determines if the address is valid based on whether the address can be found in its mapping database and if the address is of address level accuracy, one to which mail can be delivered, with the exception of post office boxes. If an address is valid, a geocode is associated with the address, and recorded in the student's database record. If the address is not valid, the areas of uncertainty associated with it and/or alternate addresses are identified.

Address validation can be performed for a selection of students or interactively for an individual student. Performing address validation for an individual student can be done using the student's Addresses page or the General Demographics page, as well as during the enroll a new student process.

Boundary Validation

Boundary validation is the process by which an address is identified as being inside or outside a given boundary. Boundaries are defined by the PowerSchool administrator for districts of residence and schools and stored in the PowerSchool database.

Boundary validation can be performed for a selection of students or interactively for an individual student. Performing boundary validation for an individual student can be done when performing the address validation process using the student's Addresses page or the General Demographics page, as well as during the enroll a new student process. The relationship of a student's address geocode to defined boundaries is indicated as "in" bounds or "out" of bounds on the interactive Address Validation page.

Quick Start

To get started immediately, perform the following tasks to set up and begin using Address Management:

- *Enable Address Management*
- *Set Page-Level Permissions*
- *Define District Boundaries*
- *Define School Boundaries*
- *Import Records*
- *Perform Batch Address Validation*
- *Perform Interactive Address Validation*
- *Perform Batch Boundary Validation*

Address Management Administration

Enable Address Management

By default, Address Management is disabled. PowerSchool provides the initial key and server needed to render Address Management operational. You can either use PowerSchool's free geocoding proxy server, which shares a rate limit between all customers, or you can purchase an enterprise key from Google, which processes up to 10 requests per second dedicated to your site. For more information, visit Google at **http://code.google.com/apis/maps/signup.html**. Once Address Management is enabled, Address Management functionality appears throughout PowerSchool.

Note: To disable Address Management, see *Disable Address Management*.

How to Enable Address Management

1. On the start page, choose **District** under Setup in the main menu. The District Setup page appears.
2. Under Plugins, click **3rd Party Configuration**. The 3rd Party Configuration page appears.
3. Use the following table to enter information in the fields:

Field	Description
Geocoding Adapter	Choose one of the following from the pop-up menu: • **Disabled** to disable batch validation. This is the default setting. • **Google Maps — Requires Key** to enable batch validation using your Google Maps Enterprise key. • **Geocoding via Pearson Proxy Key** to enable batch validation using PowerSchool's free Google Maps enterprise key.
Google Maps Key	If you chose **Google Maps — Requires Key** as your **Geocoding Adapter**, enter your own key. **Note:** If you chose **Geocoding via Pearson Proxy** as your **Geocoding Adapter**, this field is not applicable.
Pearson Proxy URL	If you chose **Geocoding via Pearson Proxy** as your **Geocoding Adapter**, this field should be set to **http://gbp.pearsonschoolsystems.com/pearson-proxy-service/services/AddressValidatorProxyService?wsdl**. **Note:** If you chose **Google Maps — Requires Key** as your **Geocoding Adapter**, this field is not applicable.

Field	Description
Mapping Adapter	Choose one of the following from the pop-up menu: • **Disabled** to disable interactive map validation. This is the default setting. • **Google Maps** to enable interactive map validation.
Google Maps URL	If you chose **Google Maps** as your **Mapping Adapter,** this field should be set to **http://gp.pearsonschoolsystems.com/cgi-bin/googleMapsJSAPI_Proxy.cgi**. However, you may provide your own server by entering your server information**.** **Note:** If you chose **Disabled** as your **Mapping Adapter**, this field is not applicable.

4. Click **Submit**. The Districts Setup page displays.

Set Page-Level Permissions

To ensure that only the staff whose job duties include Address Management can make changes to the Address Management pages, you can define which staff members can access those pages by setting permissions as the page level.

Note: For more information, see *Security Permissions.*

How to Enable Page Permissions Access

1. On the start page, choose **System** from the main menu.
2. Click **Security**. The Security page appears.
3. Click **Access to Page Permissions**. The Access to Page Permissions page appears.
4. Choose **On** from the **Turn modify permissions** pop-up menu.
5. Click **Submit**. The Security page appears.
6. Proceed to *How to Set Page-Level Permissions.*

How to Set Page-Level Permissions

1. Navigate to the Address Management page for which you want to define permissions.
2. Click **Modify access privileges for this page**. The Access Privileges page appears.
3. Select the option to determine the level of permissions:

   • **Group default**: Level determined as the group default on the Edit Group page for each group.
   • **None**: No access to the page.
   • **View-only**: Can read but not modify the information on the page.
   • **Full**: Can read and modify information on the page.

4. Click **Submit**. The page reappears.
5. Repeat Step 1 through Step 4 for each Address Management page for which you want to define permissions.
6. Proceed to *How to Disable Page Permissions Access.*

How to Disable Page Permissions Access

1. On the start page, choose **System** from the main menu.
2. Click **Security**. The Security page appears.
3. Click **Access to Page Permissions**. The Access to Page Permissions page appears.
4. Choose **Off** from the **Turn modify permissions** pop-up menu.
5. Click **Submit**. The Security page appears.

Define District Boundaries

Once Address Management is enabled, you can then define the geographical boundary for districts of residence. The geographical boundary is captured within a single encoded polyline. The encoded polyline is made up of sets of latitude/longitude pairs marking the boundary. The sets of latitude/longitude pairs are also known as points.

How to Create District Boundaries

1. On the start page, choose **District** under Setup in the main menu. The District Setup page appears.
2. Under District Information, click **Districts of Residence**. The Districts of Residence page appears.
3. Click **New** to create a new district of residence. The New District of Residence page appears.
4. Enter **District ID**, **District Name**, and **Sort Order** information as needed. For detailed information, see *District of Residence.*
5. Do one of the following:

   • If you have an encoded polyline from another system, you can enter it in the **Edit Boundary** text box and proceed to Step 8.
   • If you do not have an encoded polyline from another system, click **Edit Boundary**. The Boundary Definition pop-up window appears.

6. Use the following table to edit information in the fields:

Field	Description
Generate Boundary For	The name of the selected district or school.
Search	Identify the center of the boundary. Enter the address of the district or school and click **Search**. The map refreshes centered on the address.

Field	Description
Latitude	The latitude coordinates for each point on the map and in the Point List appear when selected.
Longitude	The longitude coordinates for each point on the map and in the Point List appear when selected.
Point List	For each point you add to the list, the latitude, longitude, and map level appears.
Add Point	Click on the map to place the point. You may drag the marker to adjust the location of the point. Once you are satisfied with the location of the marker, click to add as a point to the **Point List**. Repeat for each point of your boundary. **Note:** For basic map navigation controls, see *[Interactive Map]*.
Delete Selected Point	Select a point from the **Point List** and then click to delete the point.
Delete All Points	Click to delete all points from the **Point List**.
[Interactive Map]	Basic navigation controls include: • Click a point from the **Point List** to highlight it on the map. • Click and drag the map. • Click the appropriate arrow to move the view north, south, east or west. • Click **+** to zoom in on the center of the map. • Click **−** to zoom out. • Click **Map** to view street-level imagery. • Click **Sat** to view satellite imagery. • Click **Hyb** to view a combination of street-level and satellite imagery. **Note:** For additional information, see *Google Maps User Guide* at **http://maps.google.com/support/**.

7. Click **Accept** to accept the defined district boundary. The Boundary Definition pop-up window closes and the encoded polyline appears in the **Edit Boundary** text box.

   Note: Click **Cancel** to discard any changes.

8. Click **Submit**. The Districts of Residence page displays the new or updated district of residence.

How to Edit District Boundaries

1. On the start page, choose **District** under Setup in the main menu. The District Setup page appears.
2. Under District Information, click **Districts of Residence**. The Districts of Residence page appears.
3. Click the district of residence you want to edit. The Edit District of Residence page appears.
4. Enter **District ID**, **District Name**, and **Sort Order** information as needed. For detailed information, see *District of Residence*.
5. Do one of the following:

   - If you have an encoded polyline from another system, you can enter it in the **Edit Boundary** text box and proceed to Step 8.
   - If you do not have an encoded polyline from another system, click **Edit Boundary**. The Boundary Definition pop-up window appears.

6. Edit the information as needed. For field descriptions, see *How to Create District Boundaries*.
7. Click **Accept** to accept the defined district boundary. The Boundary Definition pop-up window closes and the encoded polyline appears in the **Edit Boundary** text box.

   Note: Click **Cancel** to discard any changes.

8. Click **Submit**. The Districts of Residence page displays the new or updated district of residence.

Define School Boundaries

Once you have defined the geographical boundary for your district, you can then define the geographical boundary for each of the schools within your district.

How to Define School Boundaries

1. On the start page, choose **School** under Setup the main menu. The School Setup page appears.
2. Under General, click **Boundary**. The School Boundary Definition page appears.
3. Click **Edit Boundary**. The Boundary Definition pop-up window appears.
4. Use the table in *How to Define District Boundaries* to enter information in the fields.
5. Click **Accept** to accept the defined school boundary. The Boundary Definition pop-up window closes.

   Note: Click **Cancel** to discard any changes.

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

Import and Export Records

To transfer Address Management data into and out of PowerSchool, you can use one of the many PowerSchool importing and exporting tools. For detailed information about importing and exporting records, see *Import and Export*.

How to Import Address Management Data

When importing data, you need to create an ASCII text file, preferably tab delimited. Do not use a colon or comma as the field delimiter. The import spreadsheet must include the following required fields: **Student_Number**, **First_Name**, **Last_Name**, **Geocode**, and/or **Mailing_Geocode**. The following format must be used when entering geocode information: Lat: [coordinate], Lng: [coordinate]. For example, Lat: 41.3800231, Lng: -111.0229216.

How to Export Address Management Data

When exporting data, enter the following required fields to be included on the exported spreadsheet: **Student_Number**, **First_Name**, **Last_Name**, **Geocode**, and/or **Mailing_Geocode**. Do not use a colon or comma as the **Field Delimiter**. Preferably, use a tab to separate each field in the export file.

Search for Students

To search for students based on geocode, you can use the **Search Students** function on the PowerSchool start page. Depending on the expression you enter, you can search for students with a geocode, students without a geocode, or a subset of either. The following table provides examples of search expressions using geocode. You may also use mailing_geocode. For more information, see *Student Search*.

How to Search for Students Using Geocode

1. On the start page, enter one of the following command syntaxes in the **Search Students** field:

Field	Description
geocode#""	All students where a value appears in **Geocode** field.
grade_level=9;geocode#""	All ninth grade students where a value appears in **Geocode** field.
grade_level=10;geocode#""	All tenth grade students where a value appears in **Geocode** field.
grade_level=11;geocode#""	All eleventh grade students where a value appears in **Geocode** field.
grade_level=12;geocode#""	All twelfth grade students where a value appears in **Geocode** field.

Field	Description
geocode=""	All students where a value does not appear in **Geocode** field.
grade_level=9;geocode=""	All ninth grade students where a value does not appear in **Geocode** field.
grade_level=10;geocode=""	All tenth grade students where a value does not appear in **Geocode** field.
grade_level=11;geocode=""	All eleventh grade students where a value does not appear in **Geocode** field.
grade_level=12;geocode=""	All twelfth grade students where a value does not appear in **Geocode** field.

2. Click the **Search** icon. A list of all students matching the search criteria you entered appears in the Current Student Selection section.
3. Do one of the following:

   - To work with an individual student, click the name of the student whose record you want to work with. The page displays that student's record.
   - To work with the group of students, click the **[Select Function]** arrow and choose a function from the Group Functions pop-up menu. For more information about the Group Functions page, see *Work With Groups.*

Report Map Errors

Google Maps gets its map data from TeleAtlas. While TeleAtlas works with over 50,000 reliable resource world-wide to make over 10,000 map improvement updates each day, it's possible that you may find an error in the map data. To report a map error, visit Google's Fix an error on Google Maps page.

How to Report Map Errors

1. Open your Web browser.
2. Enter **www.google.com** and press RETURN (Mac) or ENTER (Windows). The Google home page appears.
3. Click **Maps** > **Help** > **Fix an error on Google Maps**. The Fix an error on Google Maps page appears.

   Note: To access the Fix an error on Google Maps page, you can also simply click **http://maps.google.com/support/bin/answer.py?hl=en&answer=98014**.

4. Click the link to the error that best describes the issue you are experiencing.
5. Follow instructions provided by Google.

Disable Address Management

Once you have enabled Address Management, later you may find it necessary to render it inoperative. If Address Management is disabled, certain Address Management functionality no longer appears throughout PowerSchool.

Note: To enable Address Management, see *Enable Address Management*.

How to Disable Address Management

1. On the start page, choose **District** under Setup in the main menu. The District Setup page appears.
2. Under Plugins, click **3rd Party Configuration**. The 3rd Party Configuration page appears.
3. Use the following table to enter information in the fields:

Field	Description
Geocoding Adapter	To disable batch validation, choose **Disabled** from the pop-up menu.
Mapping Adapter	To disable interactive map validation, choose **Disabled** from the pop-up menu.

4. Click **Submit**. The Districts Setup page displays.

Address Validation

Perform Batch Address Validation

The batch address validation process provides you with the ability to validate and update address information for multiple students all at one time.

The batch address validation process may be used to validate either the primary address or the mailing address of the selected students. When validating primary addresses, a geocode is generated and associated to the student's primary address. When validating mailing addresses, a geocode is generated and associated to the student's mailing address.

When performing the batch address validation process, an address, city, state, and zip code may be automatically updated if there is only one matching address that is of address level accuracy. If there is not an address meeting these criteria, a validation exception occurs and the address appears as an exception, providing you the opportunity to reconcile the discrepancy.

Note: This process may take several minutes to complete (or longer) depending on the selection size and your connection speed to the Internet.

How to Perform Batch Address Validation

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**.

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 Validation, choose **Batch Address Validation**. The Batch Address Validation page appears.
4. Use the following table to enter information in the fields:

Field	Description
Validate which students	Indicate which students you want to validate addresses for by choosing one of the following from the pop-up menu: • Choose **All Students** to perform the validation process for all students in the current school. • Choose **Current Selection** to perform the validation process for the selected set of students in the current school. **Note:** For performance reasons, it is recommended that you perform the validation process for a selected set of students rather than for all students.
Validate which	Indicate which addresses you want to validate by choosing

Field	Description
addresses	one of the following from the pop-up menu: • Choose **All Addresses** to perform the validation process for all addresses, including addresses that have been previously validated and have a geocode. • Choose **Addresses without geocodes** to perform the validation process for only those addresses that have not been previously validated and do not have a geocode. **Note:** For performance reasons, it is recommended that you perform the validation process for addresses that do not have geocodes rather than for all addresses.
Which address types	Indicate which address type you want to validate by choosing one of the following from the pop-up menu: • Choose **Primary** to perform the process for students' home address. • Choose **Mailing** to perform the process for students' mailing address.
Update City, State, Zip	Select the checkbox to automatically update the city, state, and zip code of each address with the city, state, and zip code information provided by the validation process, if only one address is returned by the validation service and that address is of address level accuracy. Alternatively, leave the checkbox blank if you do not want to automatically update the city, state, and zip code of each address with the city, state, and zip code information provided by the validation process. **Note:** This checkbox is applicable only when one address of address level accuracy exists.

5. Click **Submit**. The Batch Address Validation Results page displays a summary of the processed records and any validation exceptions, including the student's name, address, and error message. Possible error messages include:

   • Unknown location. Cannot find address.
   • Country level accuracy. Cannot find state.
   • State/Province level accuracy. Cannot find city.
   • County level accuracy. Cannot find street.
   • City level accuracy. Cannot find street.
   • Postal code level accuracy. Cannot find street.
   • Partial street level accuracy. Cannot find street number.
   • Intersection level accuracy. Cannot find street number.
   • Premise level accuracy. Invalid address.

Note: Premise level accuracy appears when only the name of a building or type of building, such as airport, can be found.

6. If an exception appears, click the **Name** of the student to view the student's General Demographics page where you can then reconcile the discrepancy.

Perform Interactive Address Validation

Interactive address validation allows you to view a student's home address or mailing address on a map, providing visual confirmation of the location. If more than one address is returned by the service, such as if the city or state fields were omitted, you are provided the opportunity to choose the correct one from a list of alternatives.

Note: Interactive address validation can also be performed when enrolling a new student. For detailed information, see *Enroll New Student*.

How to Perform Interactive Address Validation

1. On the start page, search for and select a student. For more information, see *Student Search*.
2. Do one of the following:

   - Under Information, choose **Addresses** from the student pages menu. The Addresses page appears.
   - Under Information, choose **Demographics** from the student pages menu. The General Demographics page appears.

3. Use the following table to enter Home Address information:

Field	Description
Street, Apt/Suite	Enter the street address in the first field, and apartment or suite number in the second field, if any.
City, State, Zip	Enter the city, state, and zip code for the street address.
Geocode	The latitude/longitude pair that represents the geographical location of the home address. This field is read-only and is automatically generated when the address is validated or imported.

4. Use the following table to enter Mailing Address information:

Field	Description
Copy From Home Address	If a student's mailing address is the same as their home address, click to duplicate the home address information in to the mailing address fields.

Field	Description
Street, Apt/Suite	Enter the street address in the first field, and apartment or suite number in the second field, if any.
City, State, Zip	Enter the city, state, and zip code for the street address.
Geocode	The latitude/longitude pair that represents the geographical location of the mailing address. This field is read-only and is automatically generated when the address is validated or imported.

5. Click **Validate** next to the address for which you want to perform address validation. The Address Validation pop-up window appears.
6. Use the following table to enter Address Validation information:

Field	Description
View Boundary	Indicate which boundary you want to view on the interactive map by choosing one of the following from the pop-up menu: • Choose **None Selected** if you do not want to view boundaries. By default, the pop-up menu is set this value. • Choose **Current School** to view the student's current school's boundaries. • Choose **Next School** to view the student's next school's boundaries. • Choose a district or school to view that district or school's boundaries. **Note:** This pop-up menu only appears when validating home addresses. Boundaries in the list appear prefixed by "in" bounds or "out" of bounds and may appear color-coded. Green indicates the address is inside the boundary. Red indicates the address is outside the boundary. Only districts or schools with defined boundaries appear in the pop-up menu. For more information, see *Define School Boundaries*.
Student Info	The student's **Name**, **Address Type**, **Selected Address** and **Geocode**, if any, appear. Before clicking **Accept**, you must select a valid address. This can either be the original address, if valid, or an alternative address. **Note:** Click **Cancel** to discard any changes and close the Address Validation pop-up window.
Original Address	The student's original address information appears.

Field	Description
Alternative Address	Determine which alternative address is the best match to the student's original address. You can use the interactive map to assist you in making that decision. Once you have determined which alternative address is the best match to the student's original address, do one of the following: • Select the **Full Update** option to update the address that appears in the Student Info section to this address, including street address, city, state, zip, and geocode. • Select the **Partial Update** option to only update the city, state, zip, and geocode of the address that appears in the Student Info section. **Note:** This option is useful if your school's policy includes standards for address components, such as use "Avenue" in lieu of "Ave."
[Interactive Map]	Use the interactive map to assist you determining which alternative address you want to select. The selected address appears as a marker on the map displaying address and geocode information. Basic navigation controls include: • Click the marker to view the Info window. • Click the map to close the Info window. • Click and drag the map. • Click the appropriate arrow to move the view north, south, east or west. • Click **+** to zoom in on the center of the map. • Click **—** to zoom out. • Click **Map** to view street-level imagery. • Click **Sat** to view satellite imagery. • Click **Hyb** to view a combination of street-level and satellite imagery. **Note:** For additional information, see *Google Maps User Guide* at **http://maps.google.com/support/**.

7. Once you have identified and selected the student address you want, click **Accept** to accept the address. Depending on which student page you were initially on, either the Addresses or General Demographics page appears.

   Note: Click **Cancel** to discard any changes.

8. Note the address information you selected now appears in the respective fields.
9. Click **Submit**. The Changes Recorded page appears.

Boundary Validation

Perform Batch Boundary Validation

The batch boundary validation process provides you with the ability to establish a set of students who fall within or outside of a given boundary. Once a set of students is identified, you can then perform a number of group functions with those students, such as setting the next school indicator or printing reports or form letters for a group of selected students..

Note: Boundary validation is based on a student's home, or primary, address.

How to Perform Batch Boundary Validation

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 Validation, choose **Batch Boundary Validation**. The Batch Boundary Validation 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. Use the following table to enter information in the fields:

Field	Description
Check boundary membership for which student	Indicate which students you want to validate boundaries for by choosing one of the following from the pop-up menu: • Choose **All Students** to perform the validation process for all students in the current school. • Choose **Current Selection** to perform the validation process for the selected set of students in the current school. **Note:** For performance reasons, it is recommended that you perform the validation process for a selected set of students rather than for all students.
Use which boundary	Choose the district or school from the pop-up menu for which you want to perform the boundary validation process. **Note:** Only districts or schools with defined boundaries appear in the pop-up menu.

Field	Description
Select students who are	Indicate which students you want the validation process to return as an updated selection by choosing one of the following from the pop-up menu: • Choose **Within the selected boundary** to return students who live within the boundary. • Choose **Outside the selected boundary** to include students who live outside of the boundary.

5. Click **Submit**. The Batch Boundary Validation Results page appears. The **View Current Selection** link appears indicating the number of students found within or outside the selected boundary.
6. To work with the group of students, click **View Current Selection**. The Student Selection page appears.

Definition of Terms

The following terms are used in reference to Address Management:

Address Level Accuracy

An address to which mail can be delivered, with the exception of post office boxes.

Boundary

A defined area on a map.

Encoded Polyline

A series of character codes identifying the sets of latitude/longitude pairs marking a boundary.

Geocode

The latitude/longitude pair that represents the geographical location of an address.

Home Address

The place where a student actually lives. Also known as primary address.

Mailing Address

The place where a student receives mail.

Marker

Object on the map that represents a point.

Point

Set of latitude/longitude pair on the map noted by marker.

Polylines

A collection of points.

Primary Address

The place where a student actually lives. Also know as home address.