

DDE and DDA in PowerSchool

Direct Database Export

Direct Database Access (DDA), also called Universal Search & Modify (USM), is one of the most versatile functions of your PowerSchool system. Use DDA to search and match data in all of the internal tables on your PowerSchool server.

Note: Depending on your security settings, you may not be able to perform all functions.

PowerSchool data is stored in a relational database of tables. Each table contains an unlimited number of fields. When you use DDA, you directly access a table in the relational database.

Use PowerSchool's Direct Database Export (DDE) page when you need to create an export file or report that contains records from the tables. Use another application, such as a spreadsheet application, to view or organize the records. Unlike using the Export Using Template page, you can match and export data from two related tables.

You do not have to access DDA to export data from it. You can export DDA data while you are logged in to PowerSchool. When you export data from DDA, the system creates an independent export file that you can open or update using any application you want.

For example, assume you want to export all ninth graders and their current grades to a software application in which you can create a pie graph. Use the DDE function to match the records in the student table to the current grades table; then, export both tables of data, open the export file in a spreadsheet application, and create the graph.

Note: For detailed information about PowerTeacher gradebook administration and setup, see the *Enable PowerTeacher for a Selection of Teachers* section in the *PowerTeacher Gradebook Administrator Installation and Setup Guide* available on [PowerSource](#).

How to Select Records for Export-List View

View a list of all records in a selected table or search for specific records in a table. You can also limit the export to records for all schools on your system or for just one school. For example, export student data about California residents in fourth grade or above who attend all schools on the system.

1. On the start page, choose **System** from the main menu. The System Administrator page appears.
2. Click **Direct Database Export**. The Direct Database Export (DDE) page appears.
3. 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. Note: See http://[your.school.address]/admin/home?ac=structure

	for a complete list of PowerSchool tables and fields.
Select all [x] records in this table	<p>To indicate the records to use in the export, do one of the following:</p> <ul style="list-style-type: none"> ○ Click Select all [number of] records in this table to select all records and skip to Step 10. ○ Identify search criteria in the Search Students fields by continuing to the next step. <p>Note: Search for students either on the Search Students page before beginning this procedure or on the Direct Database Export page. Repeat steps 5-7 to use the second search field on the Direct Database Export page, or repeat steps 5-9 to narrow the search results even further.</p>
Search Students	<p>Choose a field from the first pop-up menu.</p> <p>Choose an operator from the second pop-up menu:</p> <ul style="list-style-type: none"> ○ Equals (=) ○ Less than (<) ○ Greater than (>) ○ Less than or equal to (<=) ○ Greater than or equal to (>=) ○ Does not equal (#) ○ Contains (contains) ○ Does not contain (!Contain) <p>Enter the value for the field in the last field.</p>
Search only in records belonging to [school name]	Select the checkbox to filter your school's records in the search.

4. Click **Search within the current [number of selected] records only**. The Direct Database Export (DDE) page displays the new number of current records in selection.
5. Click **List View** to make sure you selected the records you want to export. The List Records: [Table name] page appears with the fields separated by five periods.

Note: Click the field value to link to the Display Record page.

How to Select Records for Export-Table View

View a report in a table format of all records in a selected table, or search for specific records in a table. You can also limit the export to records for all schools on your system or just one school. For example, export student data about California residents in fourth grade or above who attend all schools on the system.

To modify the format of the table view, see [How to Format the DDE Table View](#).

1. On the start page, choose **System** from the main menu. The System Administrator page appears.
2. Click **Direct Database Export**. The Direct Database Export (DDE) page

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

Field	Description
Current Table	<p>Choose the table from which you want to export records from the pop-up menu.</p> <p>Note: See http://[your.school.address]/admin/home?ac=structure for a complete list of PowerSchool tables and fields.</p>
Select all [x] records in this table	<p>To indicate the records to use in the export, do one of the following:</p> <ul style="list-style-type: none"> ○ Click Select all [number of] records in this table to select all records and skip to Step 10. ○ Identify search criteria in the Search Students fields by continuing to the next step. <p>Note: Search for students either on the Search Students page before beginning this procedure or on the Direct Database Export page. Repeat steps 5-7 to use the second search field on the Direct Database Export page, or repeat steps 5-9 to narrow the search results even further.</p>
Search Students	<p>Choose a field from the first pop-up menu.</p> <p>Choose an operator from the second pop-up menu:</p> <ul style="list-style-type: none"> ○ Equals (=) ○ Less than (<) ○ Greater than (>) ○ Less than or equal to (<=) ○ Greater than or equal to (>=) ○ Does not equal (#) ○ Contains (contains) ○ Does not contain (!Contain) <p>Enter the value for the field in the last field.</p>
Search only in records belonging to [school name]	<p>Select the checkbox to filter your school's records in the search.</p>

4. Click **Search within the current [# of selected] records only**. The Direct Database Export (DDE) page displays the new number of current records in selection.
5. Click **Table View** to make sure you selected the records you want to export. The List Records: [Table name] page appears with the records in a table format.

Note: Click the field value to link to the Modify Record page.

How to Format the DDE Table View

1. On the start page, choose **System** from the main menu. The System Administrator page appears.
2. Click **Direct Database Export**. The Direct Database Export (DDE) page appears.
3. Click **Table View Setup**. The DDA/DDE Table View Setup page appears.
4. Use the following table to enter information in the fields:

Field	Description
Maximum number of records per page	Enter the maximum number of records you want to appear on each page of the table.
Maximum number of fields per table	Enter the maximum number of fields you want the table to display.
Maximum number of character per field	Enter the maximum number of characters each field in the table can display.
Use font tag	Select the checkbox to apply font formats. Otherwise, deselect the checkbox.
Format data	Select the checkbox if you want the system to format the data within the table. Otherwise, deselect the checkbox.
Use Gridlines	Select the checkbox if you want the table to separate each field of data with gridlines. Otherwise, deselect the checkbox.
Alternate colors	Select the checkbox if you want the table to display each row of data in a different color. Otherwise, deselect the checkbox.
Use Cell padding	Enter a number to indicate how much padding you want each cell of the table to contain around the text. Most users enter a number between 1 and 3 .

5. Click **Submit**. The Direct Database Export (DDE) page appears.

How to Match Selections for Export

Match the records you searched for and selected in one table to records in another table to gather and select information so you can view what you need. For example, match records in the Students table to records in the CC (current grades) table.

Note: You cannot match tables that do not have a relationship or shared field. For example, you cannot match the Students table to the Teachers table.

1. On the start page, choose **System** from the main menu. The System Administrator page appears.
2. Click **Direct Database Export**. The Direct Database Export (DDE) page appears.
3. Choose one of the tables to match from the Current Table pop-up menu.
4. Click **Select all [#] records in this table**. The Direct Database Export (DDE) page displays the new number of current records in selection.
5. Click **Match Selection**. The Match USM Selection page appears.
6. Choose the second table to match from the pop-up menu.
7. Click **Proceed to match selection**. The Direct Database Export page displays

the total number of records between the two matched tables that you can export. To export the selected records, see [How to Export Records](#).

How to Export Records

Before exporting records, you must first select the records using the Direct Database Export function.

1. On the start page, choose **System** from the main menu. The System Administrator page appears.
2. Click **Direct Database Export**. The Direct Database Export (DDE) page appears.
3. Select records for exporting. For more information, see [How to Select Records for Export-List View](#), [How to Select Records for Export-Table View](#), or [How to Match Selections for Export](#).
4. Click **Export Records**. The Export Records page appears.
5. Use the following table to enter information in the fields:

Field	Description
Fields	<p>Use the pop-up menu to choose the fields from which you want to export a copy of the data. After you choose each field, the system inserts the field name in the text box. Enter as many fields as needed. Only one field appears per line. Separate multiple fields with a hard return.</p> <p>To include fields from another table, manually enter the name of the table in brackets, then the field name in the field box. For example, to export fields from the Sections table and include teachers' names, enter [teachers]lastfirst.</p>
Field Delimiter	<p>A field delimiter separates fields (or "columns") in the exported data. Use the pop-up menu to choose how you want the system to separate each field in the export file:</p> <ul style="list-style-type: none"> <input type="radio"/> Tab <input type="radio"/> Comma <input type="radio"/> None <input type="radio"/> Other: Enter the delimiter in the blank field.
Record Delimiter	<p>A record delimiter separates records (or "rows") in the exported data. Use the pop-up menu to choose how you want the system to separate each record in the export file:</p> <ul style="list-style-type: none"> <input type="radio"/> CR: Carriage return <input type="radio"/> CRLF: Carriage return and line feed <input type="radio"/> LF: Line feed <input type="radio"/> Other: Enter the delimiter in the blank field.
Surround Fields	<p>Select the checkbox if you want the system to surround each field with quotation marks in the export file. Otherwise, deselect the checkbox.</p>
Column titles on	<p>Select the checkbox if you want the first row of the</p>

1st row	export file to have column titles indicating the fields included in each column. Otherwise, deselect the checkbox.
Sorting Records	<p>Determine the order of the records in the export file. Define a primary, secondary, and tertiary sort. In the first field in the Sort Field Name column, enter the field name by which you want to primarily sort the records in the file. Then, select one of the following to determine to sort records by this field in ascending or descending order:</p> <p><input type="radio"/> < (descending) <input type="radio"/> > (ascending)</p>

6. Click **Submit**. For Mac users, the results of the export appear. For Windows users, continue to the next step.
7. Choose **File > Save As....**
8. In the **Save** dialog, specify a name, location, and file type.
9. Click **Save**. Open the file using a spreadsheet or other application.

Changing Direct Database Export(DDE) to Direct Database Access(DDA)

NOTE: Not every PowerSchool user will have access to DDA. It depends which Group you are assigned to. If you feel you should be able to access DDA, please see the PowerSchool Administrator at your district to see if you can have access to DDA. Please remember that using DDA can be dangerous, and there is the potential to damage and/or delete data. If you are not comfortable using it, or have any questions or concerns, please contact MBA Support for assistance (1-800-258-0190, then dial 1, then 3 for PowerSchool Support).

From PowerSchool Start page, select System, Direct Database Export (DDE). After selecting a Table and records, if you need to modify or delete records, you can change the URL on this page by substituting **usm** for **dde** in the URL.

Example: DDE URL is: <http://ps1.mba-link.com/admin/tech/dde/home.html>

Back out the dde only, and type in usm, so the URL now becomes:

<http://ps1.mba-link.com/admin/tech/usm/home.html>

Your screen will change to Direct Database Access (DDA), or Universal Search and Modify (usm). You can now modify or delete data.

Note: If you navigate away from DDA, it will automatically be DDE when you return. You must change it to **usm** in the URL each time you navigate to Direct Database Export if you need Direct Database Access.

Accessing the Direct Database Access (DDA) Page from the Start page in PowerSchool

The Direct Database Access (DDA) page allows direct access to view tables and modify the records within them. DDA allows users to make modifications to fields that cannot be accessed via the PowerSchool interface.

Accessing DDA:

1. Log in to PowerSchool.
2. In the address bar of your browser, delete the portion of the URL after /admin/. For example, after logging in, if the URL in your address bar reads, "http://school.k12.us/admin/home.html", delete "home.html".
3. Append "tech/usm" to the end of the truncated URL. Continuing with the example above, your final URL would be "http://school.k12.us/admin/tech/usm".

4. Hit the Return key to go to the page.

Important: This PowerSchool URL should never be shared with persons who are not authorized technical contacts. Improper use of the DDA page can result in irrecoverable data loss.

How it Works: Match Selection

This article explains how to use the match selection function in Direct Database Export (DDE) or Direct Database Access (DDA). Match Selection allows a user to create a selection of records in one table by matching records with another selection in a related table.

Note: Match Selection cannot be used between all tables. In order to use the Match Selection function, a distinct primary key / foreign key relationship must exist between both tables. For example, the relationship between StoredGrades and Students is based off of the [StoredGrades]StudentID field (foreign key) and the [Students]ID field (primary key).

Example 1:

In this example, all current students will be matched with the CC table to get records for exporting. This can be useful for **MAP testing** information needed by school districts.

1. From the District, select **All** students.
2. Go to **System, Direct Database Export (DDE)**.
3. Choose from the table selection the **CC table**. Click on the **Search all records** to grab all CC (class enrollment) records.
4. Click on **Match Selection** and on the next screen choose the **Students table**.
5. Click on **Proceed to Match Selection**.
6. This will take you back to the DDE screen. Narrow your search to **TermID >= 1900** to get records for this school year only, and click on the bar to search **WITHIN** the records.
7. Choose **Export Records** and use these fields (you can copy and paste them):

****NOTE:** The numbers in the [] below are Table Numbers. The [2]Course_Name is pulling the Course_Name field from the Courses(2) table. The [5]LastFirst is pulling the LastFirst field from the Teachers(5) table. Any field with a [1] in front of it is referencing a field from the Students(1) table.

Expression
Course_Number
[2]Course_Name
TeacherID
[5]Last_Name
[5]First_Name
[1]Student_Number
[1]Last_Name
[1]First_Name
[1]Middle_Name
[1]DOB
[1]Gender
[1]Grade_Level
[1]Ethnicity

When the export is done, you can save it to your desktop, open with Excel, and sort as needed.

Example 2:

In this example, all current students will be matched with the Transportation table to export out **students' bus numbers and their medical alert text**

1. From the Start page, get a current selection of students.
2. Go to **System, Direct Database Export (DDE)**.
3. Choose from the table selection the **Transportation table**. Click on the **Search all records** to grab all the Transportation records
4. Click on **Match Selection**
5. Choose the **Students table** and click on **Proceed to Match Selection**
6. Click on **Export Records** and export out the following fields:

[1]lastfirst
[1]grade_level
BusNumber
[1]Alert_Medical

Example 3:

Using DDE to export out Fee Payments for a particular date

1. Get a current selection of students (click on All for all students on the Start Page)
2. Go to System>Direct Database Export (DDE)
3. Choose the **Fee_Transaction(147)** table
4. Click on **Search all xxxx records** in this table

5. If you want payments for a specific date, you can narrow your search by date range. Select the field:
 - a. Date = (today's date).
 - b. Or you could put in Date >= 9/1/2009, etc.
6. Click on Export Records
7. Use these fields:

[1]lastfirst
Date
Description
Amount
Payment_Method
[146]Fee_Type_Name

Click on Submit. Save on your Desktop and open in Excel.