Search Builder

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Donor Management System

In your DMS Reports tab, you can access over 40 report templates to unlock deeper insights about your donor data, including the most commonly requested reports for Contacts, Contributions, Tax Receipts, Activities and more, to which you can then apply a series of filters for even further segmentation.

That said, if you're finding that the preset report templates just don't quite capture the information you need, you can instead take advantage of the DMS' **Search Builder tool** to create even **more customized reports,** with more complex filtering options.

This article will outline the main functionality of Search Builder and how you can use it to build a report from scratch.

What is Search Builder?

Search Builder is a powerful tool that allows you to build highly complex searches using almost all of the data points available in your DMS. Unlike the regular Reports tab, with Search Builder, you can apply elaborate conditioning to more closely filter your search results. You also have more flexibility in deciding how your search results display.

Considerations

- Due to its **complex functionality and distinct interface**, if using Search Builder to build a report entirely from scratch, we recommend assigning this task to your more technical staff members, and/or those with experience creating search queries using a CRM.
- At the moment, Search Builder reports do not save in your main DMS Reports tab. To save a Search Builder Report, simply **bookmark its exact URL**.
- Currently, Search Builder search results **display only in tabular format** and can't be visualized in another format (e.g., as a bar graph, pie chart, or line graph).

Accessing the Search Builder Tool

At the moment, you can access Search Builder directly through both your **Contacts and Contribution tabs.** You'll want to access the tool through one tab or the other depending on what **the main entity you wish to centre your search around** is.

So, for example, if your search focuses mainly on Contacts (e.g, you want to see all Contacts with Contributions/Activities/Tags), you can access the tool through the Contacts tab. On the other hand, if your search centres primarily around Contributions (i.e., you only need to see Contribution data), you can access it through your Contributions tab.

Note: Regardless of where you access Search Builder from, you can always **change the main entity** after accessing the tool.

Through the Contacts Tab

1. Visit your **Contacts tab.**

2. Under *Advanced Actions*, select *(Beta) Search Builder.*

Access to Search Builder via Contacts

3. You'll then be brought to the **Search Builder landing page** where you can begin to create your search.
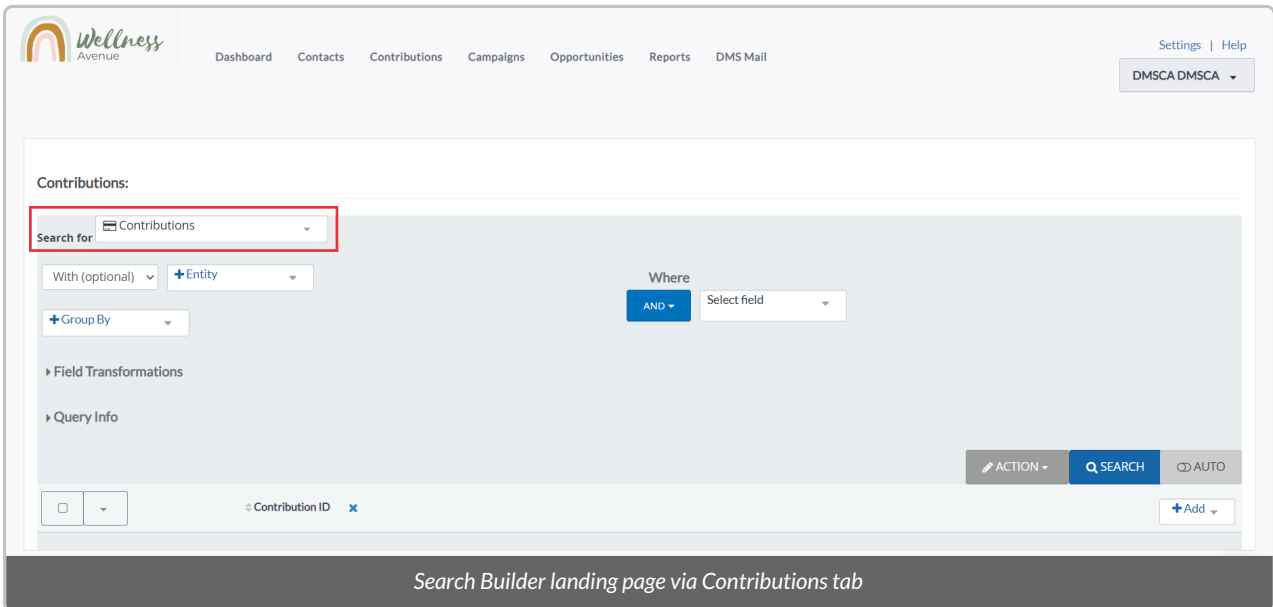

Search Builder landing page via Contacts tab

Through the Contributions Tab

1. Visit your **Contributions tab.**

2. Under *Advanced Actions*, select *(Beta) Search Builder.*
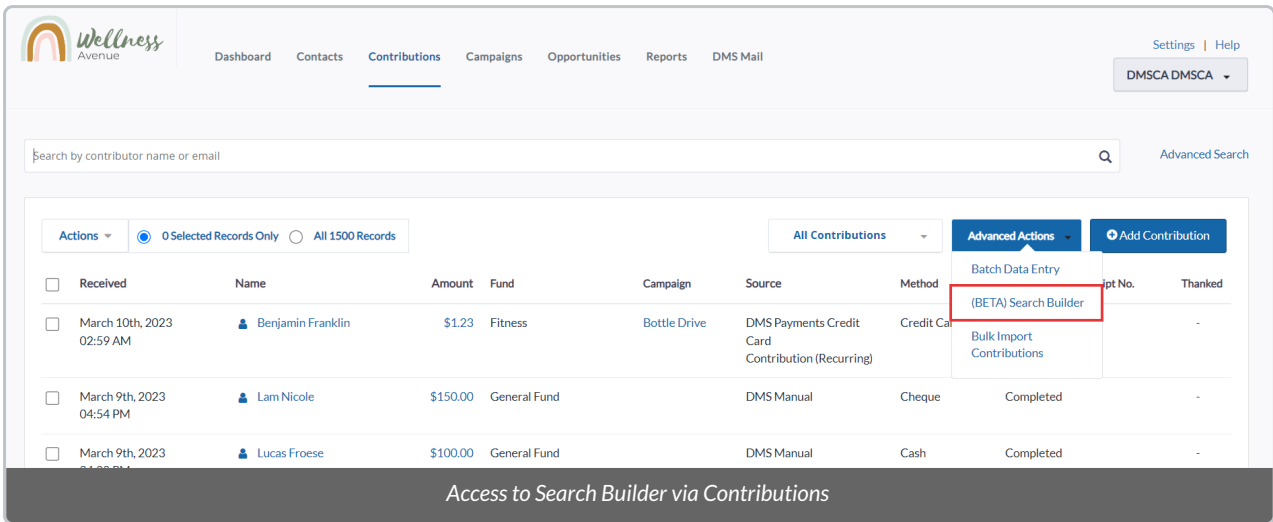
Access to Search Builder via Contributions

3. You'll then be brought to the **Search Builder landing page** where you can begin to create your search.


Search Builder landing page via Contributions tab

Navigating the Search Builder Components

Before you begin building your Search Builder report, it's useful to understand some of the key terms you'll see on the Search Builder page, and how they relate to your DMS.

Entity

An *entity* is any "thing" you want to search within the DMS. In most cases, you'll be searching for **one of two main entities**: **Contacts or Contributions.** Your main entity will depend on whether you've accessed the tool from the Contacts tab or from the Contributions tab. But as a reminder, you can always change the main entity after accessing the tool.

You can then add multiple **sub-entities** to your search. For example, if you'd like to see all (1) *Contacts* (main entity) with (2) *Tags* (sub-entity).


Search Builder main entity and sub-entity
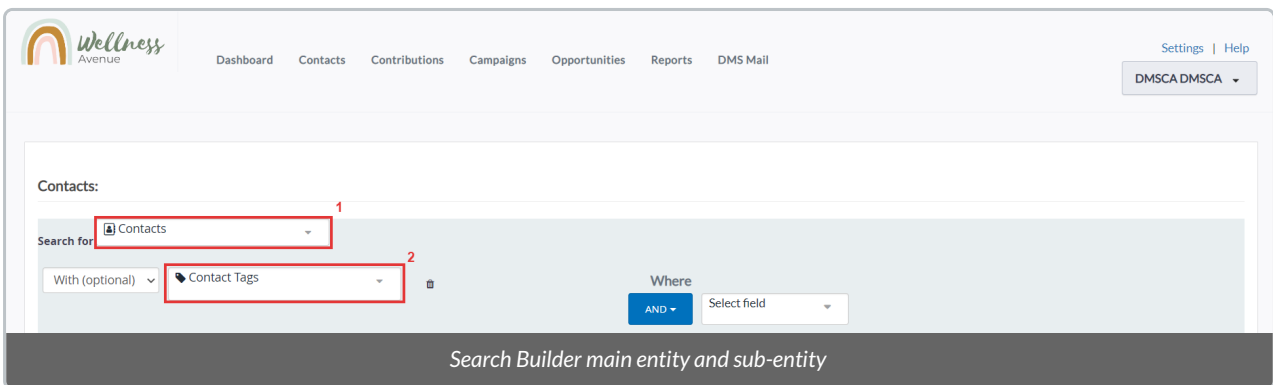
Important: The **main and sub-entities** that you choose here will **dictate which fields you'll be able to filter by and view** in the rest of your search. So, if you need to see a certain filter or column in your report, it's a good rule to add it as a main or sub-entity first.

E.g., If you're searching for *Contacts* (main entity) with *Tags* (sub-entity) and *Emails* (sub-entity), you'll then be able to choose from a series of filters/columns relating specifically to *Contacts*, *Tags*, and *Emails* (see Columns section below for more details).

Where

The *Where* section is where you define the **criteria/conditions/filters** that relate to your chosen entity/ies, and which will help to narrow your search. As a reminder, the main and sub-entities you chose previously will dictate which *Where* fields you can filter by (see section above: *Entity*).
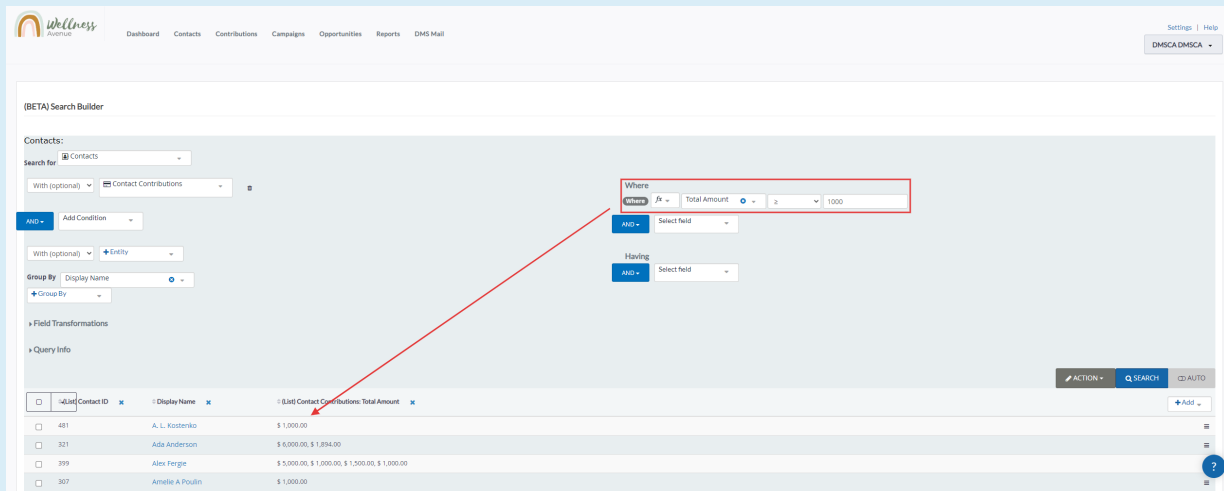

Applying a Where filter to Tags
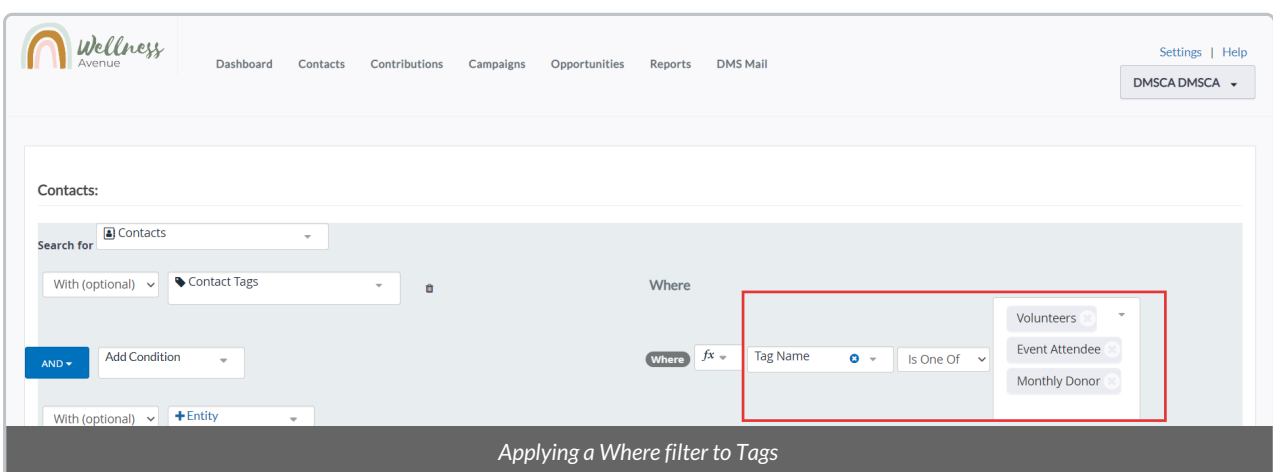
Important: *Where* filters **apply only to individual results,** and not to results as an aggregate.

For example, when applying a condition to the *Where* field ***Total amount***, your results will only show those Contributions where the **total amount of any one individual transaction meets** the set criteria**,** as opposed to

the total amount of all transactions a Contact may have made.

In other words, in the example below, our search results will only list a Contact's individual Contributions which are greater than or equal to "1000". So, even if a Contact had also made numerous donations under $1000, they won't appear in our result list for that Contact:

This can be problematic if what you're actually looking to see is a list of all donations made by a Contact where the **sum of these donations** is greater than or equal to a certain amount. To do this, you'll need to use the *Having* section instead (see below).

Columns

With Search Builder, you're able to decide what columns you want to see in your report, and move them around as needed once selected.

Reminder: In order to be available for selection in the *Add+* menu, your desired columns must **first be added as an entity or sub-entity** (see section above: *Entity*).

E.g., If you're searching for *Contacts* (main entity) with *Tags* (sub-entity) and *Emails* (sub-entity), you'll then be able to choose from a series of columns relating specifically to *Contacts, Tags,* and *Emails* from the *Add+ menu.*

Add report columns

Group By

Group by allows you to sort your search results by a specific characteristic and will help you **ensure uniqueness** in your search results (e.g., to make sure your results display only once per Contact).

You can group your results by whichever field is most relevant to your search such as by *Contact Name*, by *Fund Designation*, by *Campaign*, by *Payment Method*, by *Is Recurring* and more.

> **Tip:** If you need to be able to **click through to** Contact profiles from your search results, we recommend **grouping by** *Display name.*
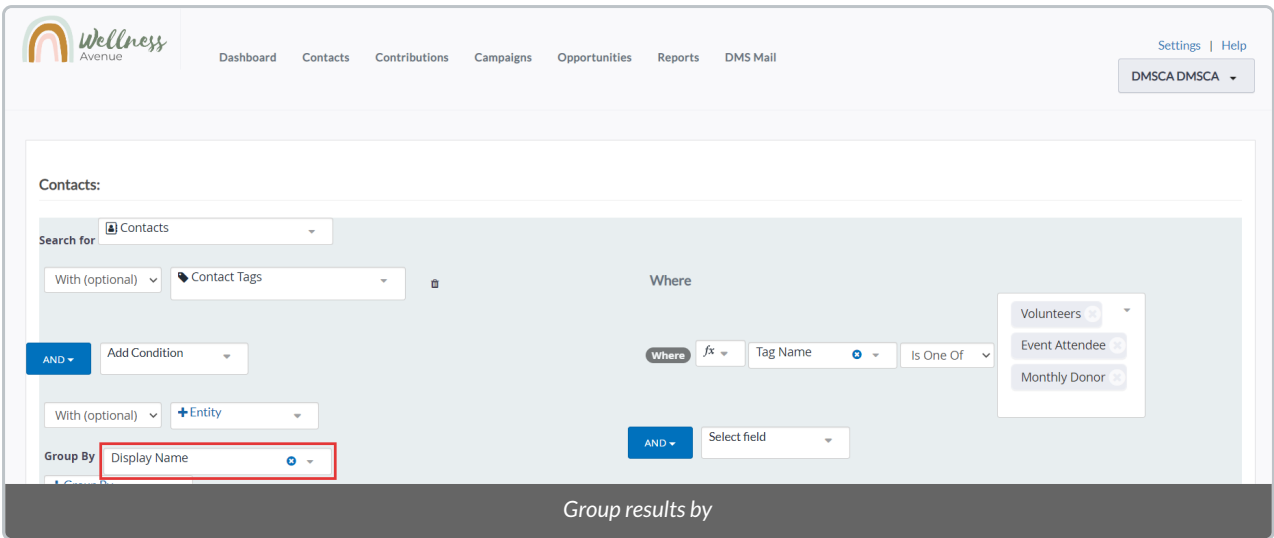
Group results by

> **Note**: At the moment, it's not possible to group search results by *Date.*

Field Transformations

By default, search results will always show as a list. But, ***Field Transformations*** allow you to transform a specific column's results so that you can view them in a different format. And, each column can have a different *Field Transformation* applied to it.

For example, in one column you may want to see an itemized**list of your results** (e.g., a *list of all* Tags associated with a Contact); alternatively, in another column, you may prefer to see a **count of your results** (e.g., *how many* Tags are associated with a Contact).

Field Transformations
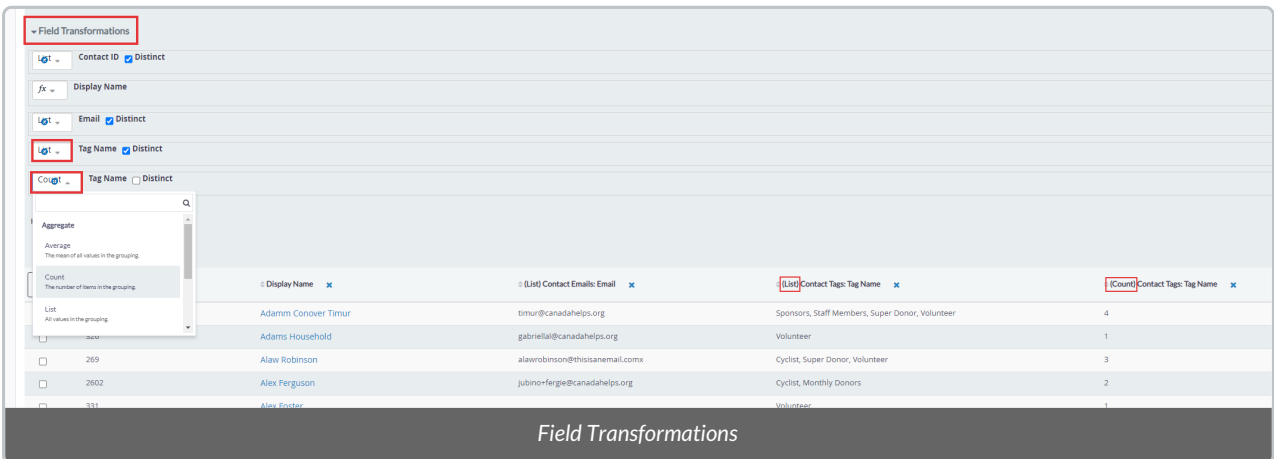
Having

After selecting what you'd like to *Group By*, the ***Having*** section will appear below your ***Where*** section. ***Having*** allows you to define the **criteria/conditions/filters** on the specific columns that you've selected, after applying groupings

and transformations to these columns.

As a reminder, while *Where* filters apply only to individual results, ***Having* filters will apply to aggregate results**.

In other words, continuing with our previous example, you can use the Having section to see a list of all Contributions made by a Contact where the **sum of their Contributions** is greater than or equal to a certain amount (here "1000"). That way, you're seeing the **total amount ever donated** by any Contact who has given $1000 or more, and not just a list of their past Contributions over that amount:

Applying a Having filter on sum totals

Creating a Search Builder Report

Now that you understand the main parts of a Search Builder report, you're ready to build your desired search from scratch.

Example:

For the purposes of sending out a highly targeted email to donors who attended a past event, you want to build a report of all donors who have given **a total of $X or more** (e.g., $100) within a **certain time frame** (e.g., in the year 2022), and who have a specific **Tag assigned** to them (e.g., Casino Night).

Step 1: Decide your Main Entity

1. Because your main concern is to establish a list of *Contacts* that meet certain criteria, **the main entity will be Contacts.** So, visit your **Contacts tab.**

2. Under *Advanced Actions*, select *(Beta) Search Builder.*

Access to Search Builder via Contacts

3. On the **Search Builder landing page**, you can begin to create your search.


Main entity: Contacts

4. Because your secondary concern is to find all Contacts that have made donations, select *Contact Contributions* as your first **sub-entity**.

Contacts (main entity) with Contributions (sub-entity)
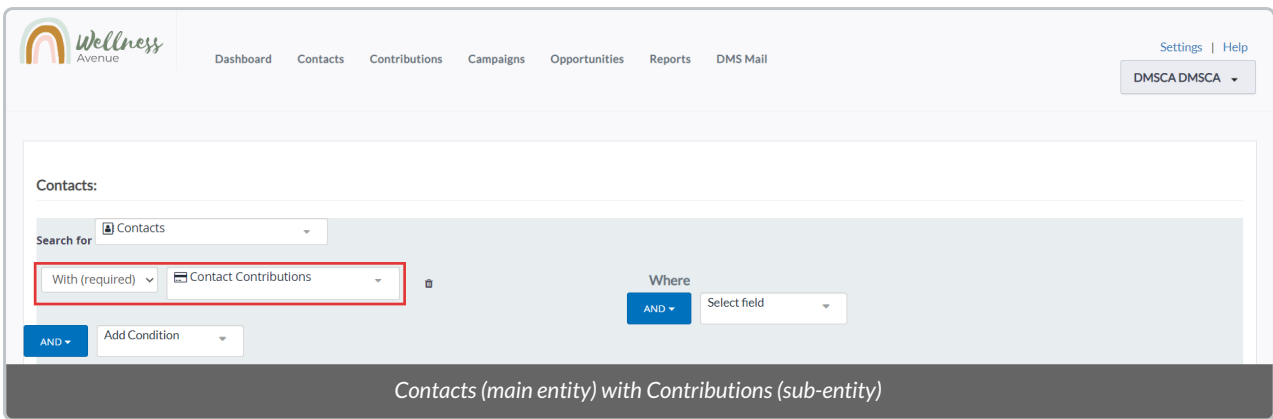
5. Lastly, because you're also concerned with finding all Contacts that have a specific Tag applied, select *Contact Tags* as your second **sub-entity**.

Contacts (main entity) with Contributions and Tags (sub-entities)
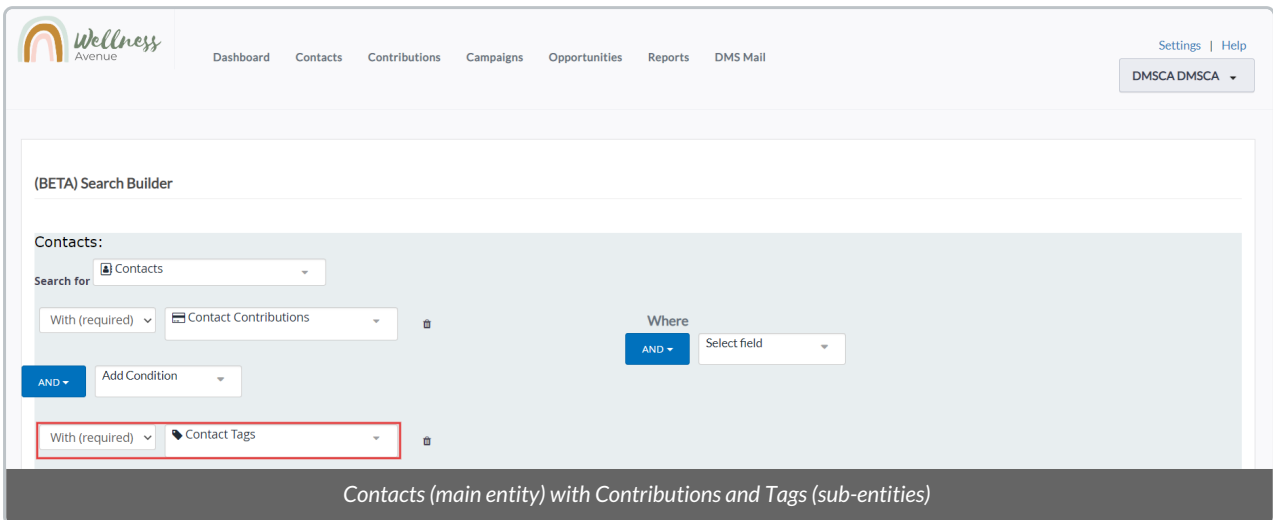
Step 2: Assign your 'Where' Conditions

6. Next, under **Where,** you can start to apply the desired filters to your main entity and sub-entities. For the first condition (i.e., donations made within the year 2022), select *Date Received* as the *Where* field, and apply the filter "Is Between" and the values "01/01/2022" and "12/31/2022".

Applying a 'Where' filter for 'Date Received'

7. For the second condition (i.e., donors tagged as "Casino Night"), select **Tag Name** as the *Where* field, and apply the filter is equal to ("=") and insert "Casino Night"

Apply a second 'Where' filter for 'Tag Name'

Tip: Don't worry, we'll apply our third and final search filter (i.e.,*who have donated over $100*) in the last step of creating our search (see below; Step 6: Apply any Having Filters)

Step 3: Choose your Report Columns

8. Select the **Add+** button to choose the columns you'd like to see in your report. You can then reorder or remove columns as needed.

Reminder: In order to be available for selection in the **Add+** menu, your desired columns must be **added as a**

Choose your columns

Step 4: Decide What to Group By

8. Next, decide what to group your search results by. Because we're most interested in Contacts as search results, we'll **group by** *Display name.*

Group by Display Name

Step 5: Transform Specific Fields

10. Once you've chosen your report columns, open the *Field Transformations* tab. Here, transform the way a specific column will display its results by selecting one of the drop down options beside its name (e.g., Average, List, Sum, Count).


Transform your fields

Step 6: Apply any 'Having' Filters

8. Finally, now that we've grouped by and transformed our fields, we can see the *Having* **section.** Here, we'll apply our third and last condition (i.e., donors who've given $100 or more in total).

> **Reminder:** for this last filter, because we're interested in seeing a *combined* donation amount and not the total amount of any *individual* transaction, we'll need to use the *Having* filter (instead of a simple *Where* filter).

Here, select the field *(Sum) Contact Contributions: Total Amount*, and then apply the filters greater than or equal to ("≥") and the value "100". This'll ensure that your search results show donors who have given a *total amount* of $100 or more, as opposed to those donors who had simply given any *individual* donation/s over $100.

Third and final filter: apply a Having filter
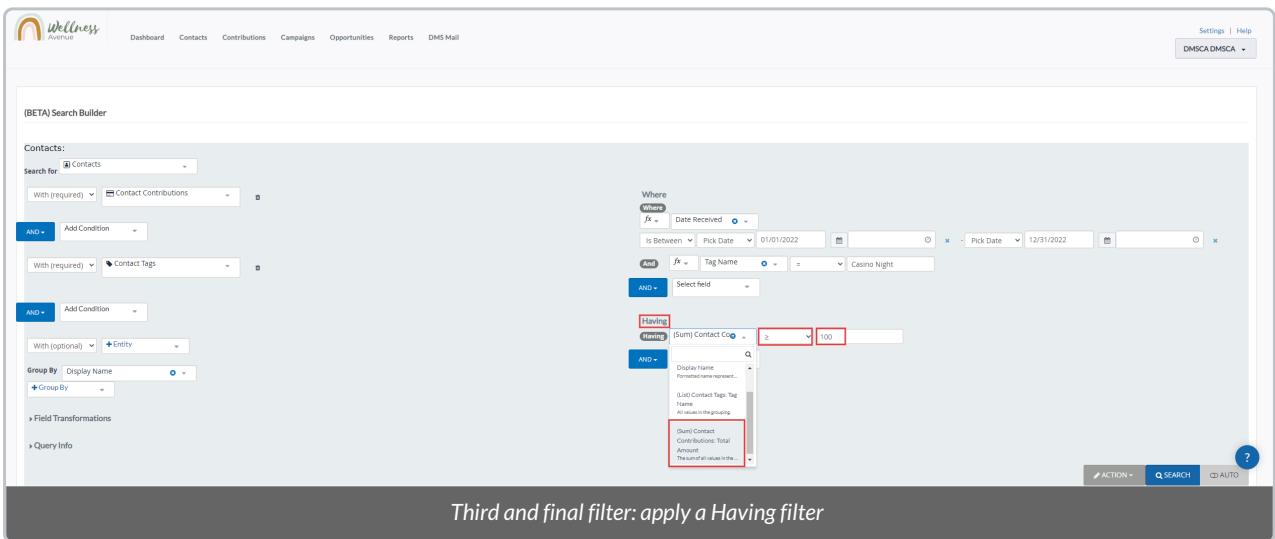
11. When you're ready to view your search results, select *Search.*

> **Tip:** You can also toggle on the "Auto" feature to automatically update your search results each time you make a change.

How-to Video

Need a walk-through of the steps above? Check out this short video tutorial on creating the above example report in Search Builder.

(Note: This video contains no audio.)

Your browser does not support HTML5 video.

Performing Actions on Search Results

Once you're satisfied with your Search Builder results, you can perform a series of actions on your search results which will appear listed along the bottom of your screen.

12. Select one or more of your search result rows.

Select your desired results

13. Select *Action* to see a list of the available actions you can perform on these results.

Note: The *Action* list will differ depending on the main entity selected (i.e., *Contacts* vs. *Contributions*)

Perform an action on your search results

Actions List for Contacts (Main Entity):

- **Add Contacts to Group:** Add the selected Contact/s to a new/existing (regular) Group.

- **Create Mail Merge:** Create a mail merge (i.e., printed document) to send to your selected Contact/s.

- **Dedupe- Merge 2 Contacts:** If only two Contacts are selected, merge them into a single Contact record.

- **Delete Contacts:** Delete the selected Contact/s.

- **Download Spreadsheet:** Download a spreadsheet of your search results (formats available: .CSV, .xlxs, .ods, .pdf).

- **Email- schedule/send via CanadaHelps> Mail:** Send a DMS Mail to your selected Contact/s.

- **Export Contacts:** Export the selected Contacts as a .CSV file (with the option to select the exact fields for export).

- **Print Mailing Labels:** Print Mailing Labels for the selected Contact/s.

- **Remove Contacts from Group:** Remove the selected Contact/s from an existing Group or Smart Group.

- **Send Regular Email:** Send a regular email to your selected Contact/s.

- **Tag-Add/Remove Tags:** Add or remove tags from your selected Contact/s.

- **Update Contacts:** Update the selected Contact/s with selected values (e.g., Do not email).

Tip: In our example scenario, we might be interested in adding all of these Contacts to a Group, which we can

Actions List for Contributions (Main Entity):

- *Delete Contributions:* delete the selected Contribution/s from your DMS (Note: This action is permanent).
- *Download Spreadsheet:* Download a spreadsheet of your search results (formats available: .CSV, .xlxs, .ods, .pdf).
- *Export Contributions:* Export the selected Contribution/s as a .CSV file (with the option to select the exact fields for export).
- *Send Thank You:* Send a Thank You (email or download) to the Contact/s associated with the selected Contribution/s.
- *Update Contributions:* Update certain aspects of the selected Contribution/s (e.g., campaign name).

What's Next?

Reminder:

At the moment, Search Builder reports don't save in your main DMS Reports tab. So, to save a Search Builder Report and come back to it anytime, simply **bookmark its exact URL**.

Clicking on the URL will bring you back to your report with all of your previously-selected columns/filters applied.