Query and Export Guide

03/21/2013 Blackbaud CRM 3.0 Query and Export US

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QueryExport-2013

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Query

Queries are used to group records that meet a set of criteria you define. There are two types of query: ad-hoc and smart. Ad-hoc queries can include numerous output fields and enable you to browse through a specific set of records. Smart queries perform complex calculations that would be difficult to achieve using ad-hoc queries, and are based on templates included in the program. Additionally, the program features a third mechanism to group records — selections.

Selections can be created from either type of query and include only record IDs. In many cases, you may create an ad-hoc query solely as a means of creating an accompanying selection. Although selections include no information about the records other than IDs, you can still pick a set of output fields in the query. This enables you to view a sampling of records so you can feel comfortable that the criteria you selected are accurate and the process will work on the records you intend. In this case, again only 500 of the actual query results display, enough to provide you confidence in your query results. Selections are designed to be used by the program in various features and are optimized for processing speed.

Queries are used to group records that meet a set of criteria you define. Ad-hoc queries can include numerous output fields and enable you to browse through a specific set of records. In addition to ad-hoc queries, you can group records using selections. Selections include only record IDs, and are designed to be used by the program in various features and are optimized for processing speed.

Ad-Hoc Queries

With queries, you can select, group, and list records that meet a set of conditions you define. Ad-hoc queries are based on source views and serve two main purposes. They are a quick way to see data filtered to your needs and they enable you to produce selections for use in other processes throughout the program. Selections are a

named set of IDs for the same record type. For more information, see Source Views on page 2 and Selections on page 29.

To quickly check data, you may get all the information you need from the output fields you select in an ad-hoc query. Or you may want to drill into an actual record for more detailed data. In this case, when you only want to explore your data — rather than feed this list of records into some other process — the program presents the first 500 of the actual query results (rather than all of them) because it is not intended as a means to visit each record individually in a large result set.

When you use query to produce a selection to be used by some other process, you produce only a set of IDs. In many cases, you may create an ad-hoc query solely as a means to create an accompanying selection. Although selections include no information about the records other than IDs, you can still pick a set of output fields in the query. This enables you to view a sampling of records so you can feel comfortable that the criteria you selected are accurate and the process will work on the records you intend. In this case, again only 500 records appear in the actual query results, enough to provide you confidence in your query results.

Note: Query results are restricted to 500 records. If your results exceed the 500 record limit, you can export your results to an outside application, such as Microsoft *Excel*, and view all results. For more information, see Export Queries on page 33.

For more information, see Create Ad-Hoc Queries on page 3.

Source Views

When you create queries it is important to understand the idea of source views. All queries are based on an initial source view. When you select a specific source view, you instruct the program to select that particular type of record for inclusion in the query. Source views determine the field categories available to include in a query. The record type on which a query is based determines where the query is available and how it is used in the program. The selection of the source view can be considered the first step to narrow the information available for your query.

Most source views for queries are self explanatory: a constituent query is used to query constituent records; an application user query is used to query application users. Choose a source view based on the type of information you want to find. For example, to send an appeal to all alumni, use a constituent query. To determine how many donations are associated with that appeal, use a revenue query. However, some source views are more complex and require additional information.

Constituents (with Household Information Rolled Up)

The constituent query view named “Constituents (with household information rolled up)” is a constituent query of individuals, organizations, groups, and households that rolls up household members and information into a household view. Most information rolls up into a household summary view when a household exists—that is, household member giving shows for the household, not its individual members. Some information, such as household modeling and propensity, cannot be aggregated, so the household view presents the maximum values instead.

Revenue information may be counted multiple times when gifts are given by individuals who join and leave households. For example, Jill Jones (an individual with no household record) gives a gift. She marries and gives another gift (as an individual with a household). At this point, both gifts would roll up under the Jill and Dave Thompson Household in the query. If Jill leaves the household, a new query of constituent giving would show Jill Jones with her individual giving, along with the Jill and Dave Thompson Household with Jill's same gifts. Any of Jill's future giving will not roll up to her former household in this query.

To see individual constituents, such as for event invitations or to compare individual donors, use the Constituents query. To compare households to individual constituents without households and see the revenue

or recognition credit information consolidated at the household level, use the Constituents (with household information rolled up) query.

Create Ad-Hoc Queries

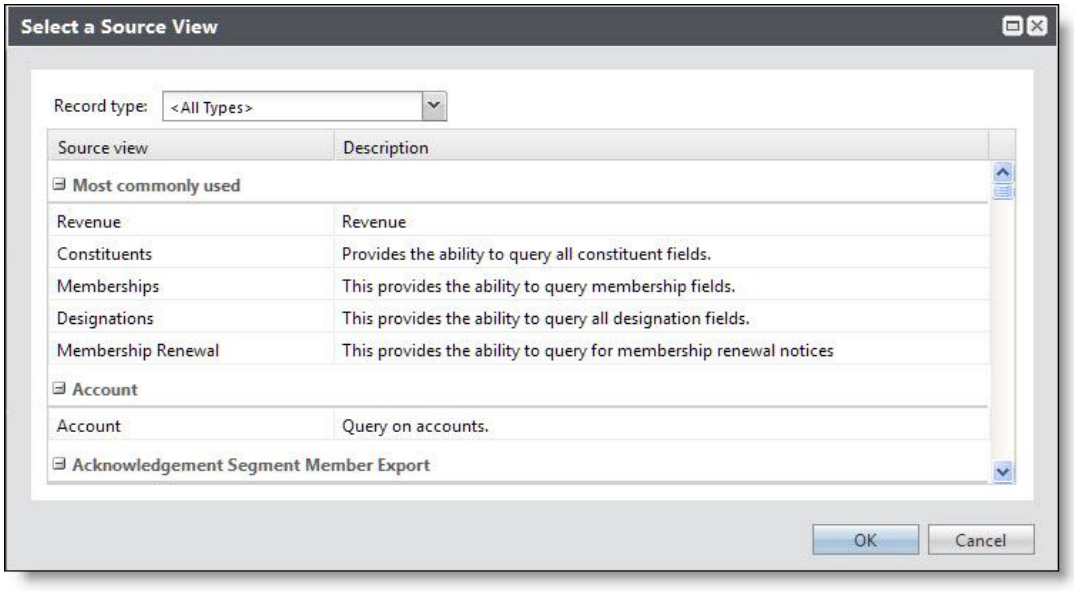
When you create an ad-hoc query, you must first select the source view from which to create the query. The source view determines the type of records the query includes. You can then specify output fields and filter criteria for the query. To group a query with other similar queries, you can assign it a query category. When you view ad-hoc queries, you can use criteria such as type or category to limit how many queries appear.

Tip: To learn how to create an export definition, you can review the information in this section, as the steps are the same. However, the query filters and results do not apply to export definitions.

Create an ad-hoc query

Query results are restricted to 500 records. If your results exceed 500 records, you can export your results to another application such as Microsoft *Excel* to view all results. For information, see Export Queries on page 33.

1. From *Analysis*, click **Query**. The Query page appears.
2. On the Queries tab, click **Add** on the action bar and select **Ad-hoc query**. The Select a Source View screen appears.

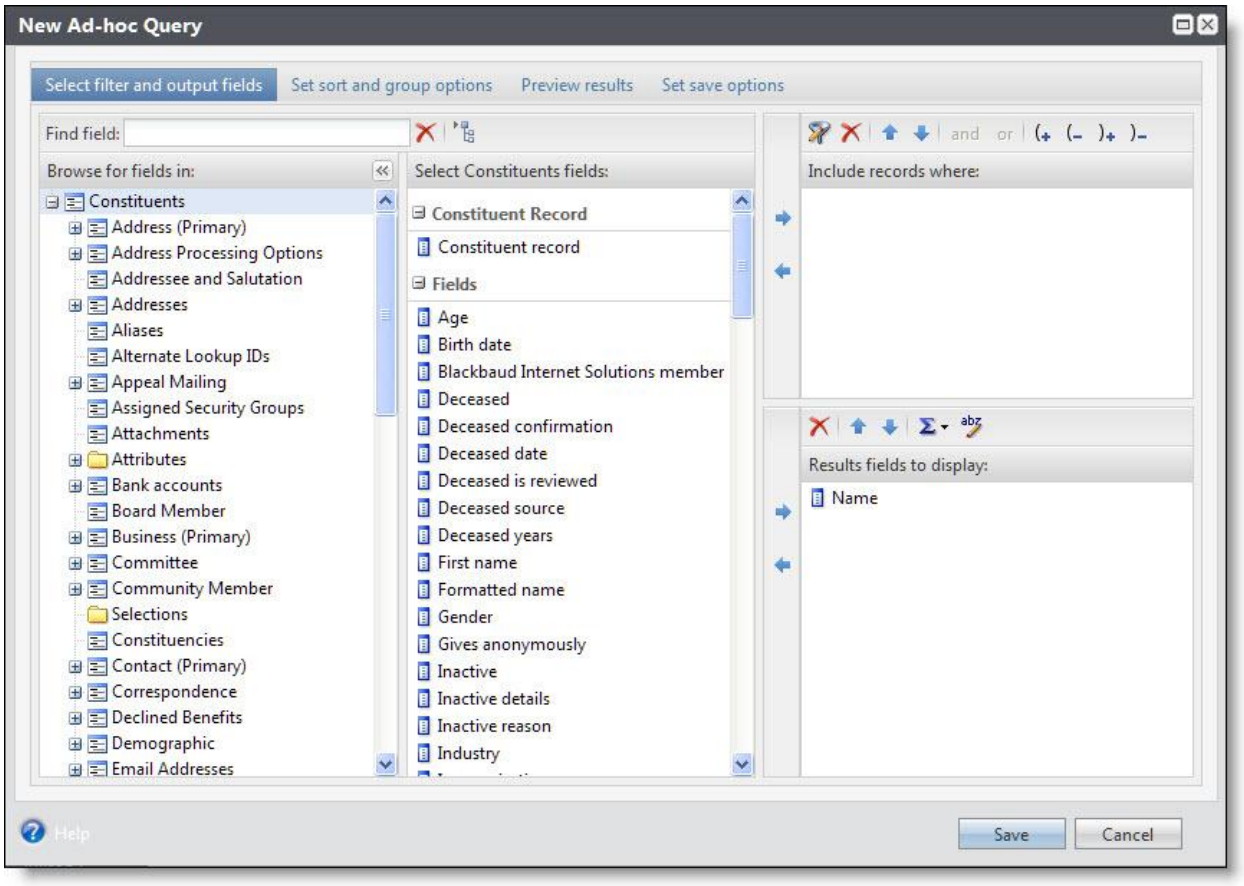


3. Select the source view that contains the type of records to include in the query. For information about source views, see Source Views on page 2.
4. Click **OK**. The New Ad-hoc Query screen appears.
5. On the Select filter and output fields tab, select the fields for each record to include in the query output and the criteria to determine which records appear in that output. For information about the items on this tab, see Select the filters and output fields on page 4.
6. On the Set sort and group options tab, specify the sort fields and their order, and filter on aggregate values. For information about the items on this tab, see Set the sort and group options on page 5.

7. On the Preview results tab, browse through the results of the query. For information about this tab, see Preview the results on page 6.
8. On the Set save options tab, specify the properties of the query and then click **Save**. For information about this tab, see Query Properties on page 25.

Select the filters and output fields

1. When you create a new ad-hoc query, after you select a source view, the New Ad-hoc Query screen appears, open to the Select filter and output fields tab.



Under **Browse for fields in**, the tables available for the selected type of query appear. To view a table's available fields, expand the table's node. If you hide the field explorer, select the table from the dropdown at the top of the screen.

Tip: To quickly find a field, in the **Find field** field, enter the field's name and click **Search up**. Under **Find results**, the fields that meet the search criteria appear. To clear the search criteria and results, click **Clear find criteria**.

In addition to available tables, under any selections that are available for use as output fields or filters for this type of query appear. When you use a selection for this purpose, only the records included in the selection appear in the output or are filtered from the query results.

In the middle pane, titled based on the selected source view, the fields and system fields for the selected table appear. All fields from the selected source view are available.

2. To specify output fields for the query, select them in the middle pane and drag them under **Result fields to display**. These fields correspond to the information to view in the query results and appear as column headings on the query's Results tab.

   You must select at least one output field.

Note: Depending on the source view of the query, some fields may automatically appear under **Result fields to display**. You can remove these default fields from the output as necessary.

3. When you select an output field and click **Summarize**, you can select to view a calculation of the field results rather than the actual contents of the field. For example, if you select a date field as an output and assign a minimum date, all records included in the query must satisfy the minimum date requirement.

   The calculation options available depend on the selected field. For information, see Summarize Query Output on page 12.

Note: To save a selection based on an ad-hoc query, the query must contain either no summary fields or the primary key field of the query view along with the summary field. For information about how to save queries as selections, see Create Selections from Queries on page 27.

4. To edit the label of an output field for the header row of an export, select the field under **Results fields to display**, click **Change column header**, and enter how to display the field name in the export header.
5. Under **Include records where**, select the criteria fields and enter operators to determine which records to include in the query.

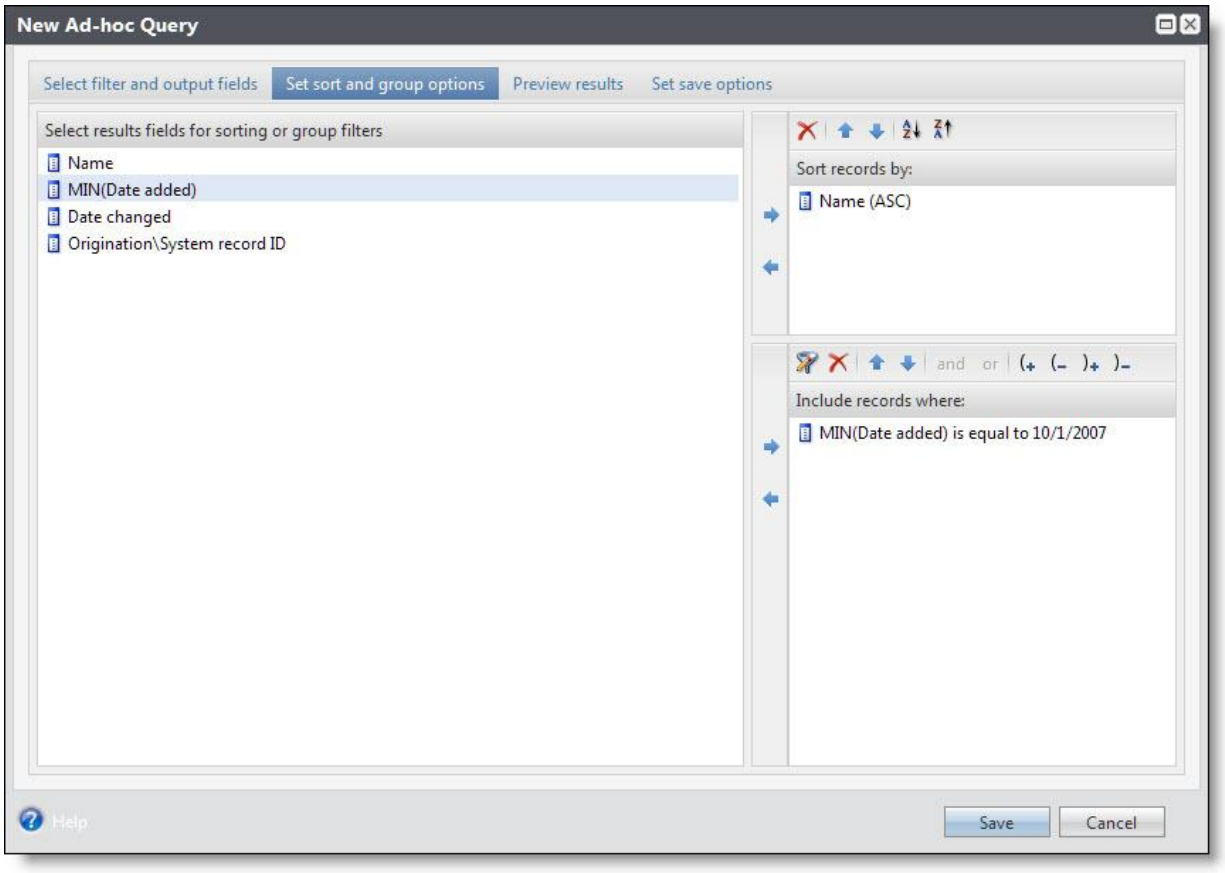
   For example, to create an individual query to find the names of everyone with a home telephone number, you can use the criteria field and operator of Phone Type "equals" Home to group all records with a value in this field. For information about the available combining operators, see Query Criteria Operators on page 13.

   For information about how to compare values of output fields, see Compare Output Field Values on page 18.
6. To specify a sort order for the query results or filter on aggregate values, select the Set sort and group options tab. For information about the items on this tab, see Set the sort and group options on page 5.

   Otherwise, select the Set save options tab and specify the properties of the query. For information about the items on this tab, see Query Properties on page 25.

Set the sort and group options

1. To specify a sort order for the query results or filter on aggregate values, select the Set sort and group options tab.



2. Under **Select results fields for sorting or group filters**, the output fields selected on the Select filter and output fields tab appear. Select the fields to sort by and drag them under **Sort records by**.

   Under **Sort records by**, you include the fields to sort by and select whether to sort in ascending or descending order.

   Sort fields are optional. For example, to create a query to list the name and home telephone number of individuals, you can select an ascending sorting order by last name of the individual.

3. Under **Include records where**, filter on aggregate values of filter fields. For example, to return the names and date added information for all system administrators added to the system on as of a specific date:

   a. On the Select filter and output fields tab, select the Date added field and apply the MIN option.

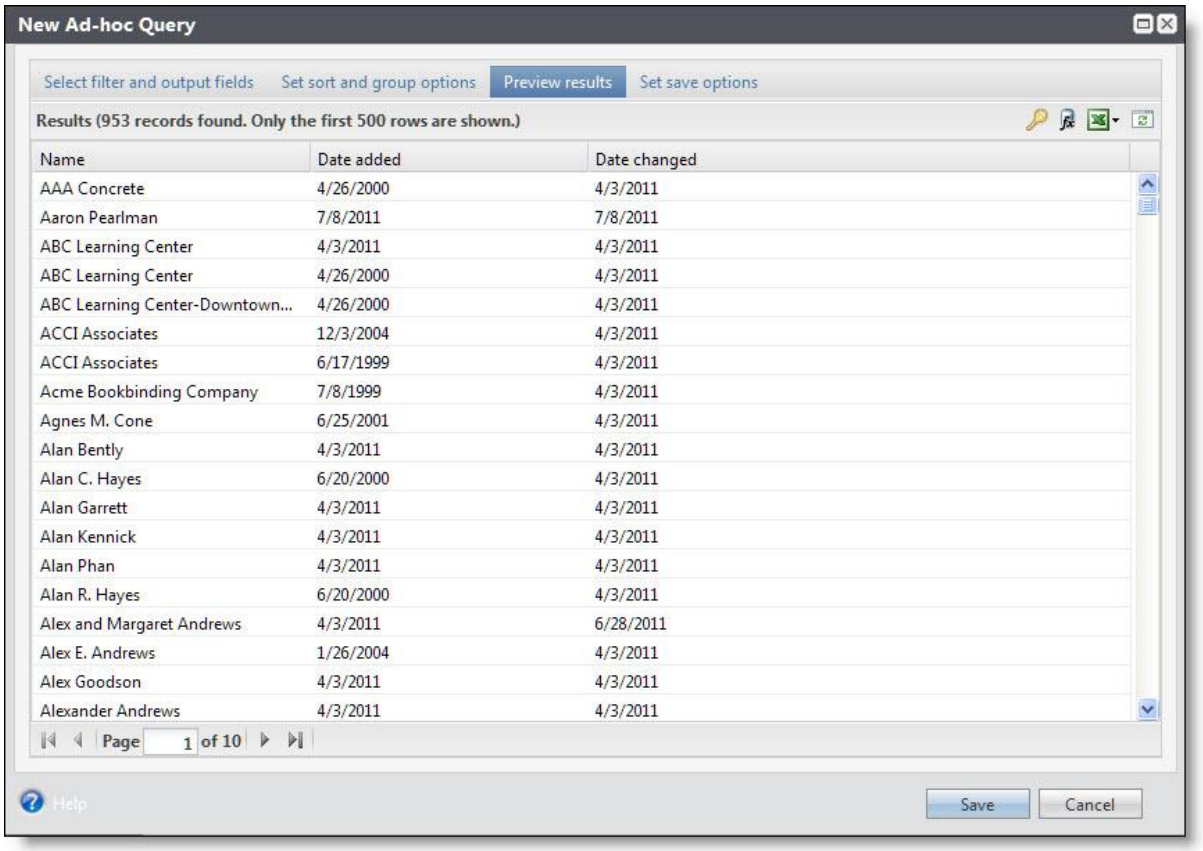
   b. On the Set sort and group options tab, drag MIN (Date added) under **Include records where** and enter the date to use as criteria.

4. To browse the query results, select the Preview results tab. For information about the items on this tab, see Preview the results on page 6.

   Otherwise, select the Set save options tab and specify the properties of the query. For information about the items on this tab, see Query Properties on page 25.

Preview the results

1. To browse the query results, select the Preview results tab.



This tab displays the records included in the query so you can quickly browse and ensure the criteria and output appear as intended. Since this tab is intended for you to verify your query criteria, not as a means to view every record included in the results, only the first 500 rows of results appear.

Note: If your results exceed 500 records, you can export your results to another application such as Microsoft *Excel* to view all results. For information, see Export Queries on page 33.

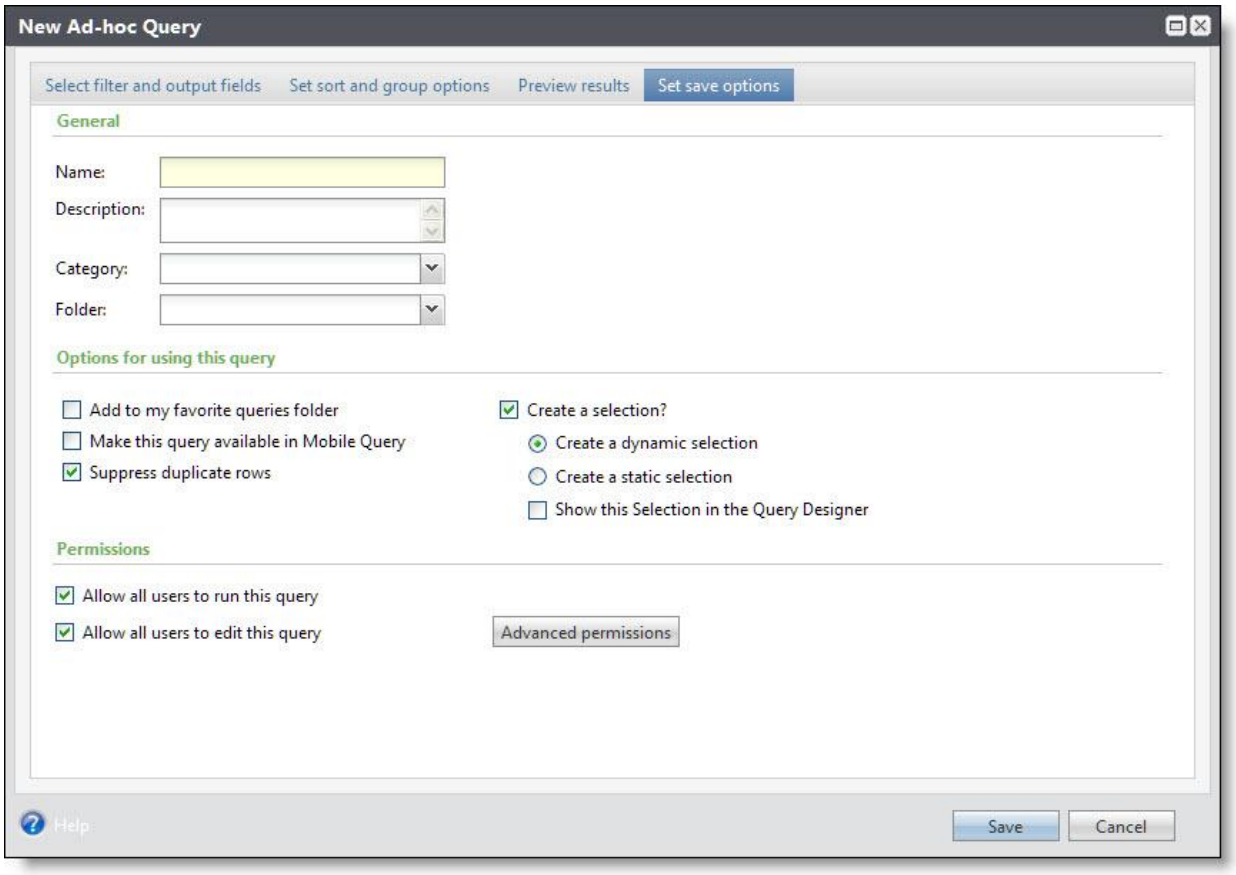
To view the query ID for each record, click **Show ID column**. The **QUERYRECID** column appears.

To view the Structured Query Language (SQL) command used to generate the query, click **View SQL**. The SQL command appears so you can review or copy and paste into another application as necessary. To close the SQL window, click its X.

2. Adjust your settings on the other tabs as necessary. Otherwise, select the Set save options tab and specify the properties of the query. For information about the items on this tab, see Query Properties on page 25.

Set the save options

1. To specify the properties of the query, select the Set save options tab.



2. Enter a unique name and description to help identify the query.
3. Specify the properties of the query as necessary. For information about the items on this tab, see Query Properties on page 25.
4. Click **Save**. You return to the Query page.

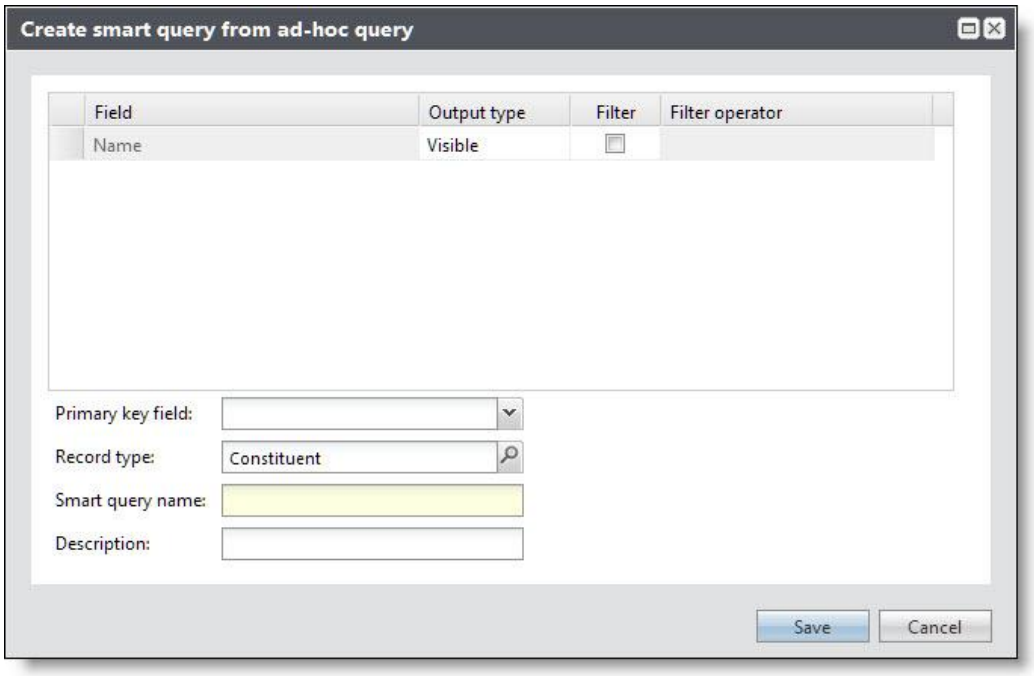
Create Smart Queries from Ad-hoc Queries

After you create an ad-hoc query, you can create a smart query definition from the results. You can then create new smart queries based on this definition. For information about smart queries, see Smart Queries on page 18.

Note: If the ad-hoc query on which you based your smart query definition changes, the change does not appear in the smart query. You must update the smart query separately.

Create a smart query from an ad-hoc query

1. From *Analysis*, click **Query**. The Query page appears.
2. On the Queries tab, select the ad-hoc query to use to create a smart query.
3. On the action bar, click **Create** and select **Smart query**. The Create smart query from ad-hoc query screen appears.



Under **Field**, each output field selected for the ad-hoc query appears.

4. From the **Output type** column, select whether to include, exclude, or hide the output field in the smart query definition.
5. To apply criteria to limit the results in the smart query, select **Filter** and choose a filter in the **Filter operator** column.

   When you create a smart query based on this query definition, each field you select to filter appears on the Parameters tab of the Smart Query screen with the selected filter operator. For example, if you include Account Number with a filter operator of Not Equal To, the Parameters tab displays an **Account Number not equal to** field. You can specify which parameter this number should not equal in the query results.
6. In the **Primary key field** field, select an output field as the primary key for the query.
7. In the **Record type** field, select a record type to associate with the smart query. You can search for the query definition based on the record type you select.

Warning: For the query to appear in a smart query search, the query's primary key must be a record ID. From the ad-hoc query, add the appropriate record ID as an output field. You can then select the record ID from the smart query's **Primary key** field. The record type associated with the record ID automatically appears in the **Record type** field.

8. Enter a unique name and description to help identify the new smart query.
9. Click **Save**. You return to the Query page.

   To view the smart query definition you created, select **Add a smart query** under **Tasks**. Your smart query definition appears under the selected record type category.

Create Report from Ad-hoc Queries

After you create an ad-hoc query, you can create a report from the results. You can then select report options to further define the context and layout of the report.

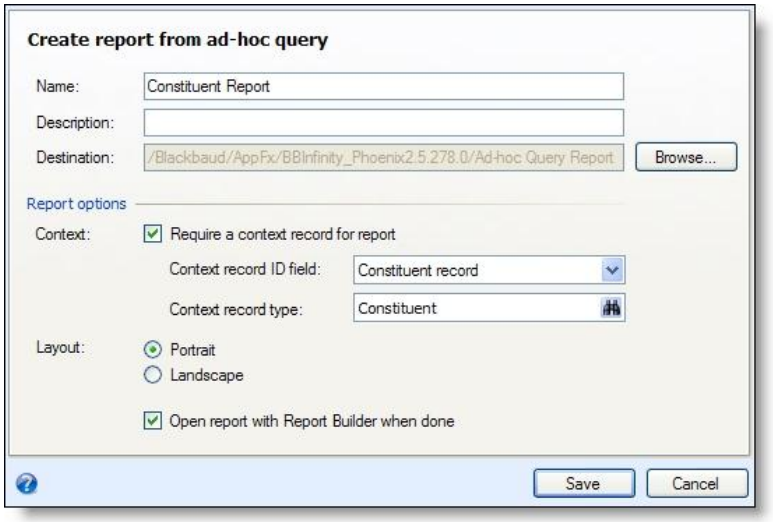
Once you save a report, you can work with the report through Report Explorer in *Analysis* or Shell Design in *Administration*.

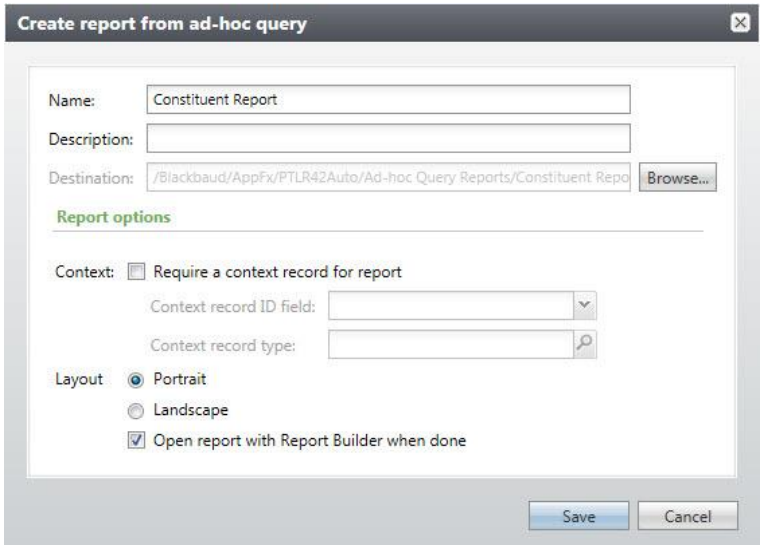
From Report Explorer, you can edit existing reports or create new ones. Once you create an ad-hoc query report, you can create a link on a specific page to the report. For example, if you create a report and base it on the context record type of Constituent, you can right-click the report in Report Explorer and select **Add Report to Page**. The Add Report to Page screen appears where you can specify a caption, the page from which you want to view the report, and the context ID parameter. For information about Report Explorer, see the Manage Reports chapter of the *Reports Guide* or the Reports section of the help file.

You can add, edit, and delete ad-hoc query reports from the Ad-hoc Query Reports tab of the Shell Design page in *Administration*. For more information about working with ad-hoc query reports through Shell Design, see the Shell Design chapter of the *Page Designer Guide* or the Page Designer section of the help file.

Create a report from an ad-hoc query

1. From the Ad-hoc query screen, select **File**, **Create Report**. The Create report from ad-hoc query screen appears.
2. From the Query page, in the **Queries** grid, select the ad-hoc query and click **Create**, **Report**. The Create report from ad-hoc query screen appears.





3. In the **Name** and **Description** fields, enter a name and description to help identify the report.
4. In the **Destination** field, click the **Browse** button to access the Choose Report Folder screen. From this screen, select a folder destination for your ad-hoc query report.

   The Choose Report Folder screen displays the available folder options in Report Explorer. You can select an existing folder or create a new one.
5. To filter and base the report on a specific field, mark **Require a context record for report**.
6. In the **Context record ID** field, select an output field as the primary filter field for the query.

   Each output field you selected for the ad-hoc query appears in the **Context record ID field**.
7. In the **Context record type** field, select a record type to associate with the report. You can search for the record type based on the context record you select.
8. Select to view your report in **Portrait** or **Landscape** format.
9. To edit and customize your report using Report Builder version 2.0 or higher, mark **Open report with Report Builder when done**.

   If you do not select this checkbox, the program generates the report but you do not have the ability to customize as you would with Report Builder 2.0 (or higher).

Note: To customize an ad-hoc query report, you can access your report in Report Builder 2.0 (or higher) through Report Explorer, the Shell Design page, or from the query report.

10. Click **Save**. You return to the Ad-hoc Query screen.

    The ad-hoc query report displays results associated with the site or sites accessible by the user running the query.

Note: You can edit existing reports and create new reports from Report Explorer in *Analysis*. You can also add, edit, and delete ad-hoc query reports from the Ad-hoc Query Reports tab of the Shell Design page in *Administration*.

Edit Ad-hoc Queries

You can edit the properties and criteria of a saved ad-hoc query. If you created a selection based on the query, any changes to the query also impact that selection.

Edit an ad-hoc query

1. From *Analysis*, click **Query**. The Query page appears.
2. On the Queries tab, select an ad-hoc query and click **Edit**. The query screen appears. The options on this screen are the same as when you create the query. For information about the items on this screen, see Create Ad-Hoc Queries on page 3.
3. Click **Edit**. The Edit Ad-hoc Query screen appears. The options on this screen are the same as those on the New Ad-hoc Query screen. For information about the items on this screen, see Create Ad-Hoc Queries on page 3.
4. To edit the query properties, select the Set save options tab. For information about the items on this tab, see Set Query Save Options on page 26.
5. Click **Save**. You return to the Query page.

Summarize Query Output

When you add or edit an ad-hoc query and select a field under **Result fields to display** on the Select filter and output fields tab, the **Summarize** button enables you to view a calculation of the field results rather than the actual contents of the field.

Query is a way to group records; it is not a reporting tool. As such, the output fields identify records included in the query. If a field with a one-to-many relationship is selected under **Include records where** or **Result fields to display**, the record may appear multiple times in the query: once for each time the record satisfies the selected criteria. This allows you to check your query to ensure you get the expected results.

For example, you may query to find everyone who has donated gifts to your organization this year.

- Filter criteria: Revenue\Application Details\Type equals “Gift” AND Revenue\Application Details\Revenue Details\Date equals “This calendar year”
- Output Fields: Name AND Revenue\Application Details\Amount

If you include these fields, the output displays a unique row in the query for each gift. For your purposes, these may be considered duplicates. For instance, if a donor made five gifts, his name appears five times with the amount of each gift listed separately.

The **Summarize** button's functions - Count, Sum, Average, Min, Max - can help prevent these duplicates.

If you use the SUM function for the amount, the donor appears once in the query with his gift revenue summarized. If you add a second amount field for the output and use the COUNT function for it, the donor appears once in the query and the second amount COUNT field would be “5,” the total number of gifts from the donor this year.

Some summary function scenarios include:

- COUNT: For number or amount fields, the COUNT function is the total number of records included.
- SUM: For number or amount fields, the SUM function is the combined total of the numbers.
- AVG: For number or amount fields, the AVG function is the average of the numbers included.

- MAX: For date fields, the MAX function displays the maximum or latest date. For number or amount fields, MAX displays the largest number.
- MIN: For date fields, the MIN function displays the minimum or oldest date. For number or amount fields, MIN displays the lowest number.

Note: Query results are restricted to 500 records. If your results exceed the 500-record limit, you can export your results to an outside application, such as Microsoft *Excel*, and view all results. For more information, see Export Queries on page 33.

Delete Ad-hoc Queries

When you delete an ad-hoc query, if you specified to create a selection based on that query, it too is deleted. If a query (or selection based on that query) is in use anywhere in the program as part of a process or otherwise, the query cannot be deleted. If you attempt to delete a query that is in use, a message appears to inform you that the operation is not allowed.

Delete an ad-hoc query

1. From *Analysis*, click **Query**. The Query page appears.
2. On the Queries tab, select the ad-hoc query and click **Delete**. A confirmation message appears.
3. Click **Yes**. You return to the Query page.

Create Data List

From an ad-hoc query, you can create a data list of the query results. If the query contains a date field in the output, you can also base an RSS feed or email alerts on the data list. To create a data list from an ad-hoc query, click **Create**, **Data list** on the **Queries** grid toolbar on the Query page. Once created, you can add the data list and RSS feed to other pages if you have the proper administrative rights. For more information, see the Shell Design information in the *Page Designer* documentation.

Search for Ad-hoc Queries

You can use the Ad-hoc Query Search to locate an ad-hoc query. You can search by name or by the type of records included in the query results.

Use Selections in Queries

When you create an ad-hoc query, selections that have already been created for that record type can be used to create output fields and as filters for the query.

If you select “Exists In <Selection Name>?” when you create an ad-hoc query, you can further refine the criteria based on a previously existing selection and prevent the need to recreate filter criteria that the selection already includes.

Query Criteria Operators

When you define a query, you establish a set of conditions each record must meet to be included in it. To establish these requirements, apply the criteria operators to the fields you select to use as filter fields for the

query output.

Note: You can use wildcard characters with the criteria operators to further refine your search. For more information, see Wildcard Characters on page 17.

Equal to

(This is the Drop-down text)

When you select this condition, the records selected must have the exact value defined. For example, if you choose City "is equal to" Portsmouth, only records with the exact entry of Portsmouth as the city are selected.

Not Equal To

Note: The **Include blanks** checkbox appears for the criteria operators of Not Equal To, Not One Of, Less Than, Less Than or Equal To, Not Between, Not Like, and Does Not Contain. To include records with no entry for the selected field, select this checkbox. If the checkbox is not selected, records with no entry for the field do not appear in the results. From *Administration*, you can use the **Enable/Disable Default Blank Query Criteria** configuration task select whether to select **Include blanks** by default.

When you select this condition, the records selected must not have the exact value defined.

For some fields, the **Only return records that do not have a value equal to the selected value** checkbox appears. To not return records associated with the value selected for the field, regardless of whether the record is associated with additional values for the field, select this checkbox. For example, if Robert Hernandez has multiple constituencies of Board Member, Volunteer, and Alumnus, and you select Constituency is Not Equal To Alumnus, the results will not include Robert's Alumnus constituency record or any other constituency records for Robert.

If you do not select the checkbox, the results do not include records associated with Alumnus, but does include records for Robert's additional constituencies.

One Of

When you select this condition, the records selected must have one of the values defined.

For some fields, the **Only return records that match all selected values** checkbox appears. To return only records that match all the values defined, select this checkbox. For example, Robert Hernandez has multiple constituencies of Board Member, Volunteer, and Alumnus. You select Constituency is "One Of" Alumnus or Volunteer and select the **Only return records that match all selected values** checkbox. Returned results will include all constituencies for Robert as well as any other constituents associated with both the Alumnus and Volunteer constituencies.

If you do not select the checkbox, the program returns constituent records associated with either Alumnus or Volunteer or both. The constituent does not have to be associated with both constituencies, but must be associated with at least one of the constituencies. Returned results will include all constituencies for Robert as well as any other constituents who meet the criteria.

Not One Of

When you select this condition, the records selected must not have any of the values defined.

Less Than

When you select this condition, the records selected must have an entry less than the value defined. For example, if you select Date added "is less than" 01/01/2008, only those records with a Date added before 01/01/2008 are selected. Records with a Date added of 01/01/2008 or later are not included.

With the Less Than operator only, all null values for a field are considered the same as the valid blank value for that field's type. A blank value is always considered less than any other possible value for that field type. For example, a query with the criteria Birth Date is less than 01/01/1985 returns any record with a birth date before

01/01/1985 and any record without a birth date (a blank birth date field). To exclude blanks, add a second filter to specify “AND Birth Date is not blank.”

An example that includes null values would be a constituent query with the criteria Constituency Code Date From is less than 01/01/2008. This query returns records that meet any of these conditions:

- has a date from less than 01/01/2008
- has a constituency code with a blank date from
- does not have a constituency code at all

Because there is no constituency code, a null value is returned for the Date From. Because all null values are considered the same as blank values, and a blank value is always considered less than any other possible value for that field type, records without a constituency code are returned. To exclude people without constituency codes, you must explicitly exclude these records.

Less Than Or Equal To

When you select this condition, the records selected must have an entry less than or equal to the value defined. For example, if you select Date added “is less than or equal to” 01/01/2008, only records with a Date added of 01/01/2008 or earlier are selected. This operator includes records with the value you selected, in this case 01/01/2008.

Greater Than

When you select this condition, the records selected must have an entry greater than the value defined. For example, if you select Date added “is greater than” 01/01/2008, only records with Date added information after 01/01/2008 are selected. Records with a Date added of 01/01/2008 or earlier are not included.

Greater Than Or Equal To

When you select this condition, the records selected must have an entry greater than or equal to the value defined. For example, if you select Date added “is greater than or equal to” 01/01/2008, only records with Date added information of 01/01/2008 or later are selected. This operator includes the value you selected, in this case 01/01/2008.

Between

When you select this condition, the records selected must fall within the value range defined. This condition is inclusive. For example, if you select Date added “is between” 01/01/2008 and 01/01/2009, records with Date added information between 01/01/2008 and 01/01/2009 are included, as well as records with Dates added of 01/01/2008 and 01/01/2009.

Not Between

When you select this condition, the records selected must not fall within the value range defined. This operator is exclusive. For example, if you select Date added “is not between” 01/01/2008 and 01/01/2009, only records with Date added information before 01/01/2008 and after 01/01/2009 are included. Dates equal to 01/01/2008 and 01/01/2009 are not included.

Like

When you select this condition, the records selected must be spelled like the value defined. With this condition, you can use the “_” and “%” wildcard characters to replace characters in a field.

Not Like

When you select this condition, the records selected must not be spelled like the value defined. With this condition, you can use wildcard characters to replace characters in a field.

Begins With

When you select this condition, the records selected must have an entry that begins with the value defined. For example, if you select Last name “begins with” Bell, only records whose last name begin with “Bell," such as Bell, Bellmont, or Bellingham, are included. With this condition, you can use wildcard characters to replace characters in a field.

Does Not Begin With

When you select this condition, the records selected must not have an entry that begins with the value defined. For example, if you select phone number “does not begin with” 800, only records without numbers that begin with 800 are selected. With this condition, you can use wildcard characters to replace characters in a field.

Blank

When you select this condition, the records selected must have no entry in the selected field. For example, if you select City is “blank,” the results include records with no city specified on the address.

Not Blank

When you select this condition, the records selected must have an entry in the selected field. For example, if you select Country “is not blank,” the results include all records with countries entered.

Contains

When you select this condition, the records selected must contain the value defined anywhere in the selected field. For example, if you select City “contains” York, the results include any records with “York” anywhere in the **City** field, such as York, York City, and New York. With this condition, you can use wildcard characters to replace characters in a field.

Does Not Contain

When you select this condition, the records selected must not have the value defined anywhere in the selected field. For example, if you select City “does not contain” London, the results include any records without London anywhere in the **City** field. London, New London, and Londonderry are not included. With this condition, you can use wildcard characters to replace characters in a field.

Under

The “under” operator is used to filter data stored hierarchically. When you select this condition, the results include all records that are children of the selected parent field.

For example, in an appeal query, when you filter by Site record and select “under” as the operator, the results include all child sites of the parent site. When you select **Include current hierarchy**, the parent site also appears in your results. In the **Value** field, you can search for the parent site.

Not Under

The “not under” operator is used to filter data stored hierarchically. When you select this condition, the results include all records that are not children of the selected parent field.

For example, in an appeal query, when you filter by Site record and select “not under” as the operator, the results include all sites in the hierarchy except the selected parent's child sites. When you select **Include current hierarchy node**, the parent site also appears in your results, but its child sites are still excluded. In the **Value** field, you can search for the parent site.

Sounds Like

When you select this condition, the records selected must sound like the value defined. For example, if you select Last name "sounds like" Smith, the results include all records with Smith and names that sound similar, such as Smyth. With this condition, you can use the “_” and “%” wildcard characters to replace characters in a field.

Query Combining Operators

With combining operators, you can combine two separate sets of filtering criteria to narrow your query even further. Combining operators are characters that provide a link between selected criteria and define the records included in the query.

and

To indicate that records must meet both criteria to be selected, select the second of the criteria and click **and**. For example, if you use the field criteria City “equals” Cambridge AND Country “equals” United Kingdom, the query excludes records with addresses in Cambridge, Massachusetts, in the United States. The records selected must meet both criteria to appear in the results. The default combining operator used in a query is **and**.

or

To indicate records can meet either criteria to be selected, select the second of the criteria and click **or**. For example, if you use the field criteria County “equals” Norfolk OR Suffolk, the query includes all records with addresses in either Norfolk and Suffolk.

Parentheses ( )

Use parentheses to make two pieces of a criteria a whole. For example, if you use State “equals” Texas AND (City “equals” Dallas OR City “equals” Fort Worth), the records selected must first have Texas as a value in the **State** field, and must also have either Dallas or Fort Worth in the **City** field. In this case, records must meet the first criteria and at least one of the criteria within the parentheses.

Wildcard Characters

Some criteria operators enable you to use special characters or a series of characters to define conditions that a record must meet to be selected. These special characters are called “wildcards.” Wildcards are extremely helpful when you are unsure how to spell a name or suspect something may be misspelled. Below is a list of wildcard characters and examples of how they are used.

Question Mark (?) or Underscore (_)

Use the question mark or the underscore symbol to replace a character. When you include a question mark within a word, you search for every possible spelling of the word with the question mark in that specific spot. You can use multiple question marks within a word. For example, to locate any records with a last name like Smith or Smyth, you can use the criteria Last name “is like” Sm?th. The program selects all records whose last name fits the pattern specified.

Asterisk (*) or Percent (%)

Use the asterisk or percent sign to replace a series of characters. For example, to locate all constituents with a last name like Johnson, you can enter the criteria Last name “like” John*. The program selects all records with a last name that starts with “John”, such as Johnson, Johnssen, and Johnston.

Brackets ([ ])

Use brackets to query for a range of characters or to locate several characters. For example, use the criteria Last name “begins with” [A-C] to locate all records with a last name that begins with A through C. When you use the brackets with a comma between characters, you search for records with the specific values listed. For example, if you select the criteria Last name “begins with” [A,C,F], the program selects all records with last names beginning with A, C, and F and skips those with last names that begin with B, D, and E.

Compare Output Field Values

You can compare output fields of the same data type. For example, you can create a query that selects constituents whose Last Gift Amount equals their Largest Gift Amount.

To do this, add the Last Gift Amount and Largest Gift Amount smart fields under **Result fields to display**, and add the Last Gift Amount field under **Include records where**. On the criteria screen, select the criteria operator, such as "Equal to". Select **Output Field** and then select the Largest Gift Amount field. When you return to the query, "Last Gift Amount is equal to Largest Gift Amount" appears under **Include records where**.

On the Sort/Group Filters tab, you can compare COUNT, SUM, AVG, MIN, or MAX values of filter fields. For example, you can compare the SUM of planned gifts payments to the SUM of pledge payments.

Smart Queries

Smart queries are designed to enable you to easily create a query that is not ad-hoc, but that groups records based on specific criteria such as SYBUNT (constituents who gave Some Year But Unfortunately Not This year). Constructing an ad-hoc query to group donors who have given a gift at some time, but not this year, would be challenging; however, using the provided smart query definition or template, you enter information in a few fields (or accept the defaults) and the query is created for you. Additionally, the query is optimized for maximum processing speed and performance.

Smart queries can be used for the same purposes as ad-hoc queries: casual browsing of records or generating a selection for use in other processes.

For more information on the types of smart queries, see Smart Query Definitions on page 18.

For more information on how to create smart queries, see Create Smart Queries on page 24.

Smart Query Definitions

Using the provided smart query definitions or templates, you can enter information in a few fields (or accept the defaults) and a smart query is created for you. The results can be saved as a selection for use in other processes, such as when generating correspondence.

For more information on how to create smart queries, see Create Smart Queries on page 24.

Constituents Associated with Tributes Smart Query

The Constituents Associated with Tributes smart query enables you to browse a list of constituent records that are associated with tributes.

On the Parameters tab, you can specify the tribute association type—whether you want to see acknowledees, tributees, or both. You can also select a tribute type or default designation. If you want this smart query to be based on a certain group of constituents, you can specify a constituent selection to use. You can also specify a particular tribute letter.

After this query processes, the Results tab displays the constituent records that meet the criteria, along with primary address information and tribute details. The results can be saved as a selection for use in other processes, such as when generating correspondence.

For more information on how to create smart queries, see Create Smart Queries on page 24.

Constituents by Address Smart Query

The Constituents by Address smart query enables you to browse a list of constituents whose address meet specified criteria. The address criteria from which you can create the smart query are County, City, State, ZIP/Postal code.

On the Parameters tab, you can specify which address criteria to use. After you select the address criteria to use, you can specify the counties, cities, states, or ZIP/postal codes from which to match with your constituents.

After this query process, the Results tab displays the constituent records that meet the criteria, along with primary address information and lookup ID. The results can be saved as a selection for use in other processes.

You can use the results of this query process to create eligibility for discounts. You might, for example, create a discount that is only available to patrons who live in a certain city or are residents of a certain state.

For more information about how to create smart queries, see Create Smart Queries on page 24.

Constituents by Last Interaction Smart Query

The Constituent by Last Interaction smart query enables you to browse a list of constituents with a last recorded interaction during a specified time period.

On the Parameters tab, you can specify a constituent selection to use. You can also specify the time range for the last interaction, such as greater than or less than a certain number of days, weeks, months, or years ago. You can limit the results to a certain interaction category.

After this query processes, the Results tab displays the constituents who fit the criteria, including their primary address information; the date, owner of, and category of the interaction; and a calculation of how much time has elapsed since the interaction.

The results can be saved as a selection for use in other processes, such as when generating appeal mailings or other types of correspondence. You might, for example, try to reengage donors who have no interactions recorded in the last 3 years.

For more information on how to create smart queries, see Create Smart Queries on page 24.

Constituent by Last Revenue Smart Query

The Constituent by Last Revenue smart query enables you to browse a list of constituents with a last recorded revenue during a specified time period.

On the Parameters tab, you can specify a constituent or revenue selection to use. You can also specify the time range for the last revenue, such as greater than or less than a certain number of days, weeks, months, or years ago.

After this query processes, the Results tab displays the constituents who fit the criteria, including their primary address information; the revenue date and amount; and a calculation of how much time has elapsed since the revenue was recorded.

The results can be saved as a selection for use in other processes, such as when generating appeal mailings or other types of correspondence. You might, for example, try to reengage donors who have not given a gift in the last 3 years.

For more information on how to create smart queries, see Create Smart Queries on page 24.

Constituent Selection Browse Smart Query

The Constituent Selection Browse smart query enables you to browse the records included in any Constituent selection, whether created by an ad-hoc query, another smart query, or a business process. You can specify an

existing constituent selection as the basis for this smart query.

On the Parameters tab, select the constituent selection to use. After this query processes, the Results tab displays the constituents in that selection, including primary address information.

The results can be saved as a selection for use in other processes, such as when generating correspondence.

For more information on how to create smart queries, see Create Smart Queries on page 24.

Donor Anniversary List Smart Query

The Donor Anniversary List smart query enables you to browse a list of constituents who gave a gift on a specific date or within a specified date range.

On the Parameters tab, you can select a constituent or revenue selection to use. You can also specify a date or date range for the anniversary, as well as a total amount given. If you want to limit the results of the query to a smaller number of records, you can select to include only a top number or percentage of donors.

Note: The **Top percent of donors** parameter does not take the **Total amount given** parameter into account. The **Top percent of donors** parameter is always based on the time period specified, along with the specified designation, appeal, and constituent selection parameters. Therefore, if you enter both a **Total amount given** and a **Top percent of donors**, the results will first calculate the top percentage and then, of those constituents, show the one who meet the total amount given parameters.

After this query processes, the Results tab displays the constituents in that selection, including primary address information as well as the amount and date of the revenue transaction. The results can be saved as a selection for use in other processes, such as when generating appeal mailings or membership renewals.

For more information on how to create smart queries, see Create Smart Queries on page 24.

Donor List Smart Query

The Donor List smart query enables you to browse a list of constituents who gave a gift. On the Parameters tab, you can specify a designation, campaign, or appeal to use. If you want this smart query to be based on a certain group of constituents, you can specify a constituent selection to use. You can also specify a time period or a total amount given. If you want to limit the results to a smaller number, you can select to include only a top number or percentage of donors.

Note: The **Top percent of donors** parameter does not take the **Total amount given** parameter into account. The **Top percent of donors** parameter is always based on the time period specified, along with the specified designation, campaign, appeal, and constituent selection parameters. Therefore, if you enter both a **Total amount given** and a **Top percent of donors**, the results will first calculate the top percentage and then, of those constituents, show the one who meet the total amount given parameters.

After this query processes, the Results tab displays the constituent records that meet the criteria. The results can be saved as a selection for use in other processes, such as when generating correspondence.

For more information on how to create smart queries, see Create Smart Queries on page 24.

Event Registrant Attendance Smart Query

The Event Registrant Attendance smart query enables you to browse a list of constituents who registered for past events. On the Parameters tab, select whether to view the registrants for a specific event or any event on a specific date or within a specific time period such as last year. You can also select whether to include only registrants who attended the event.

After this query processes, the Results tab displays the constituent records that meet the criteria. You can save the results as a selection for use in other processes, such as when you generate event invitations.

For information about how to create smart queries, see Create Smart Queries on page 24.

Global Pledge Write-Off Smart Query

The Global Pledge Write-Off smart query enables to you browse a list of pledges you want to write off based on parameters you set such as all unpaid pledges, or those due by a certain date or of a certain maximum amount.

On the Parameters tab, you can select which pledges to include: all unpaid pledges, unpaid pledges by a certain date, or unpaid pledges with a certain balance. After this query processes, the Results tab displays the unpaid pledges that meet the criteria.

The results can be saved as a selection for use in other processes, such as **Global pledge write-off** in *Revenue*.

For more information on how to create smart queries, see Create Smart Queries on page 24.

LYBUNT Constituents Smart Query

There are two LYBUNT Constituents smart queries: one based on actual revenue and one based on recognition credit. The LYBUNT smart queries enable you to browse a list of constituents who gave a gift — or received recognition credit for a gift — Last Year But Unfortunately Not This year.

On the Parameters tab, you can define what dates to use for this year and last year to use in the LYBUNT comparison. If you want this smart query to be based on a certain group of constituents, you can specify a constituent selection to use.

After this query processes, the Results tab displays the constituent records that meet the criteria. The results can be saved as a selection for use in other processes, such as when generating correspondence.

For more information on how to create smart queries, see Create Smart Queries on page 24.

Member Smart Query

The Member smart query enables to you browse a list of members based on parameters you set such as membership program or level, membership type, membership status, or months before or after xpiration.

On the Parameters tab, select the parameters to use in the query. After this query processes, the Results tab displays the members that meet the criteria.

The results can be saved as a selection for use in other processes, such as sending membership renewal notices or membership upgrade appeals.

For more information on how to create smart queries, see Create Smart Queries on page 24.

Membership Mailing Preference Smart Query

The Membership Mailing Preference smart query enables to you browse a list of members based on membership program and mailing preference.

On the Parameters tab, select the parameters to use in the query. After this query processes, the Results tab displays the members that meet the criteria.

The results can be saved as a selection for use in other processes, such as sending membership renewal notices or membership upgrade appeals.

For more information on how to create smart queries, see Create Smart Queries on page 24.

Membership Smart Query

The Membership smart query enables to you browse a list of memberships based on parameters you set such as membership program or level, membership type, membership status, or months before or after xpiration.

On the Parameters tab, select the parameters to use in the query. After this query processes, the Results tab displays the memberships that meet the criteria.

The results can be saved as a selection for use in other processes, such as sending membership renewal notices or membership upgrade appeals.

For more information on how to create smart queries, see Create Smart Queries on page 24.

Multi-level Event Registrants Smart Query

The Multi-level Event Registrants smart query offers streamlined registrant information for any event within a multi-level event. For example, your organization is hosting the 2011 Alumni Reunion Weekend. The event includes three supporting events: a tailgate, a family picnic, and a formal gala, and you want to view registrants for events associated with the entire multi-level event. In the **Event** field on the Parameters tab of the smart query, you select "2011 Alumni Reunion Weekend." In the **Registrants** field, you can select a registrant selection query to narrow your search results. For example, you can include a selection of host registrants or registrants with an outstanding balance.

After this query processes, the Results tab displays the registrant records that meet the criteria. Since each registrant record in your selection is attached to a constituent ID, when a specific registrant selection is used in an event hierarchy, the program uses the constituent ID to search the event hierarchy and produce a unique list of registrants in your output. You can save the results as a selection for use in other processes, such as when you generate event invitations.

For more information on how to create smart queries, see Create Smart Queries on page 24.

Organization Positions Smart Query

The Organization Positions smart query enables you to browse a list of constituents who are associated with a particular organization team, as defined in **Manage organization hierarchy** in *Administration*. You can use this smart query to help evaluate the fundraising performance of teams.

On the Parameters tab, you can select which team or branch of the organization to include. After this query processes, the Results tab displays the selected positions, assigned fundraisers and business units, as well as the dates of the fundraiser assignments.

The results can be saved as a selection for use in other processes, such as when viewing the opportunity pyramid in *Prospects*.

For more information on how to create smart queries, see Create Smart Queries on page 24.

Potential Matching Gifts Smart Query

The Potential Matching Gifts smart query enables you to identify gifts from constituents who have a relationship to a matching gift organization. You can use the smart query to send correspondence to constituents who meet the criteria.

On the Parameters tab, you can base this smart query on a selection of individuals or organizations. You can also specify a date range. After this query processes, the Results tab displays the constituent records that meet the criteria.

The results can be saved as a selection for use in other processes, such as when generating correspondence.

For more information on how to create smart queries, see Create Smart Queries on page 24.

Revenue Dynamics Smart Query

The Revenue Dynamics smart query provides a list of constituents based on their revenue activity during two separate time periods.

On the Parameters tab, you can enter the start and end dates of the two time periods to include in the comparison. Under **Status**, you can select the status of the constituents to include in the list, based on the comparison of their activity during the two time periods.

New

Constituents with a revenue transaction during the later period, but not prior to the later period.

Recaptured

Constituents with a revenue transaction during the later period and prior to, but not during, the earlier period.

Upgraded

Constituents with revenue transactions during both periods, but with a larger revenue amount during the later period than the earlier period.

Same

Constituents with revenue transactions during both periods, with an equal revenue amount during each period.

Downgrade

Constituents with revenue transactions during both periods, but with a larger revenue amount during the earlier period than the later period.

Lapsed new

Constituents with a revenue transaction during the earlier period, but not prior to the earlier period nor during the later period.

Lapsed repeat

Constituents with a revenue transaction during and prior to the earlier period, but not during the later period.

Under **Revenue filters**, you can select the types of revenue transactions to include in the activity comparison. You can also select to include only transactions toward specific designations or campaigns.

After this query processes, the Results tab displays the constituent records that meet the criteria and their revenue amounts during each time period.

You can save the results as a constituent selection for use in other processes, such as a mailing.

For information on how to create smart queries, see Create Smart Queries on page 24.

Sponsorship Delinquency Smart Query

The Sponsorship Delinquency smart query enables to you browse a list of delinquent sponsorships based on parameters you set such as program, payment frequency, past due amount, or number of missed installments.

On the Parameters tab, you can select which sponsorships to include. After this query processes, the Results tab displays the sponsorships that meet the criteria.

The results can be saved as a selection for use in other processes, such as sponsorship pledge reminders or write offs.

Note: The **Past due amount** field includes options for all active currencies. To see the amount past due in a specific currency, select the currency from the drop-down menu. The currency drop-down menu appears only when the multi-currency option is turned on.

For more information on how to create smart queries, see Create Smart Queries on page 24.

SYBUNT Constituents Smart Query

There are two SYBUNT Constituents smart queries: one based on actual revenue and one based on recognition credit. The SYBUNT smart queries enable you to browse a list of constituents who gave a gift—or received recognition credit for a gift—Some Year But Unfortunately Not This year.

On the Parameters tab, you can define what dates to use for this year in the SYBUNT comparison. If you want this smart query to be based on a certain group of constituents, you can specify a constituent selection to use.

After this query processes, the Results tab displays the constituent records that meet the criteria. The results can be saved as a selection for use in other processes, such as when generating correspondence.

For more information on how to create smart queries, see Create Smart Queries on page 24.

Create Smart Queries

When you create a smart query, you must first select the definition from which to create the query. The definition determines the type of records included in the query. You can then define parameters specific to the selected smart query definition.

Create a smart query

1. From *Analysis*, click **Query**. The Query page appears.
2. On the Queries tab, click **Add** and select **Smart query**. The Select a Smart Query Definition screen appears.
3. Select the definition of the type of smart query instance to create. For information about the parameters for a smart query definition, see Smart Query Definitions on page 18.
4. Click **OK**. The New Smart Query screen appears.
5. On the Parameters tab, specify the criteria of the records to include in the query results.
6. To view the query results and ensure the criteria and output appear as intended, select the Results tab.
7. Adjust your parameters as necessary.
8. On the Set save options tab, enter a unique name and description to help identify the query and specify the query's properties. For information about the items on this tab, see Query Properties on page 25.
9. Click **Save**. You return to the Query page.

Edit a Smart Query

You can edit the parameters or view the results of a saved smart query.

Edit a smart query

1. From *Analysis*, click **Query**. The Query page appears.
2. On the Queries tab, select the smart query to edit.
3. On the action bar, click **Edit**. The query appears. The items on this screen are the same as the New Smart Query screen. For information about the items on this screen, see Create Smart Queries on page 24.
4. Edit the query parameters as necessary.
5. Click **Save**. You return to the Query page.

Delete a Smart Query

If a query, or selection based on the query, is used anywhere in the program, such as part of a process, you cannot delete the query.

Delete a smart query

1. From *Analysis*, click **Query**. The Query page appears.
2. On the Queries tab, select the smart query and click **Delete**. A confirmation message appears.
3. Click **Yes**. You return to the Query page.

Search for Smart Queries

You can use the Smart Query Instance Search to locate a smart query. You can search by name or by the type of records included in the smart query results.

With Smart Query Browse, you can view a list of smart query definitions, rather than a list of all smart queries. For more information, see Smart Query Definitions on page 18.

Query Properties

When you save a new query, or view an existing query's properties, you can provide a description and specify whether a selection should be created based on the query. You can view and edit properties for both ad-hoc queries and smart queries. For ad-hoc queries, the Query Properties screen includes four tabs — General, Options, Query permissions, and Record processing. For smart queries, only the General and Options tabs appear.

Set query properties

1. When you add or edit the query, select the Set save options tab.
2. Enter a unique name and description to help identify the query.
3. To group the query with similar queries, select its category and the folder in which to save the query.
4. Select whether to add the query to your **Favorites** folder.
5. To enable users to access the query through a mobile device, select **Make this query available in Mobile Query**.

6. To exclude any duplicate rows from the results of an ad-hoc query, select **Suppress duplicate rows**. For information about the suppression of duplicate rows, see Suppress Duplicates in Ad-hoc Query Results on page 29.
7. To make the query results available from ***Blackbaud Internet Solutions*** REST API, select **Enable query for CMS REST API**.

Warning: This checkbox provides access to the query's results when you use ***Blackbaud Internet Solutions*** REST API. When you edit a query with the checkbox selected, any change to it affects your website. For example, the website reflects the security rights of the last user to save the query. If that user has rights to view A and C in query results but not B, website users can only view A and C. If that user has rights to view A, B, and C in query results, website users can also view all three. For more information about ***Blackbaud Internet Solutions*** REST API, see the SDK / API Guide.

8. To restrict use of the query to a specific site at your organization, in the **Site** field, select the site to use the query.
9. Select whether to create a selection from the query results. For information about how to create a selection from the query, see Create Selections from Queries on page 27.
10. Select whether other users can access and modify the query. To assign permissions by system role, click **Advanced permissions**. For information about how to assign advanced permissions, see Assign System Role Permissions to a Query on page 28.
11. Click **Save**. You return to the Query page.

Set Query Save Options

For an ad-hoc query, the Query Properties screen includes four tabs: General, Options, Query permissions, and Record processing. For a smart query, the screen includes only the General and Options tabs.

The General tab includes read-only reference information about the query. The table below explains items on the other tabs of the Query Properties screen. The items on the Query Properties screen are the same as the Save query as screen.

Screen Item	Description
Name	Enter a unique name to help identify the query.
Description	To help further identify the query, enter a description. For example, explain the criteria used to create the query.
Category	To group the query with other similar queries, select its category.
Site	To restrict use of the query to only a specific site at your organization, select the site to use the query.
Folder	If you use folders to organize your queries, select the folder in which to save the query. When you select a folder, the default query permissions from the folder apply to the query. If you select a folder but then edit the selection to "none" before you save the query, the default permissions from the original folder no longer apply to the query. With a selection of "none," all system roles can modify the query.
Add to my favorite queries folder	To add the query to your Favorites folder, select this checkbox. We recommend you add queries you access often to your Favorites folder.
Make this query available in Mobile Query	To access the query and its results from a mobile device, select this checkbox.

Screen Item	Description
Create a selection	To access the query results as a selection throughout the program, select this checkbox. For information about how to create a selection from a query, see Create Selections from Queries on page 27.
Create a dynamic selection	If you select **Create a selection**, this option is enabled. To create a selection that includes any records that meet the criteria each time it is run, select this option. For example, if due to a data entry error a record does not meet the minimum date selection when the query is first run, if the selection is dynamic and the error is corrected, the selection includes the record the next time it runs.
Create a static selection	If you select **Create a selection**, this option is enabled. To create a selection that always includes the same records each time it is used, select this option. The selection contains the same records until it is refreshed manually or during an automated process.
Show this selection in the Query Designer	If you select **Create a selection**, this checkbox is enabled. Select whether users can use the selection outside of the program in the Microsoft *SQL Server Reporting Services Query Designer*. If you select the checkbox, the selection appears in the Selections folder of the Field Explorer in *Query Designer*.
Allow other users to modify this query	For a smart query, this checkbox appears on the Options tab. To allow all users to run and edit the query, select this checkbox.
Advanced permissions	For a smart query, this button appears on the Options tab. For an ad-hoc query, it appears on the Query permissions tab. To assign query permissions by system role, click this button. For information about how to assign query permissions, see Assign System Role Permissions to a Query on page 28.
Allow all users to run this query	For an ad-hoc query, this checkbox appears on the Query permissions tab. To allow all users to run the query, select this checkbox.
Allow all users to edit this query	For an ad-hoc query, this checkbox appears on the Query permissions tab. To allow all users to edit the query, select this checkbox.
Suppress duplicate rows	For an ad-hoc query, this checkbox appears on the Record processing tab. To suppress duplicate records in the query results, select this checkbox. When you select this checkbox, rows that contain identical data do not appear on the query results. Duplicate rows may still appear, however, for one-to-many fields in results. For example, if you select to output a constituent's phone number in the results, the rows do not necessarily contain the same data and are not considered duplicates. One row could contain the constituent's home phone number, while the second row could contain the cell phone number.

Create Selections from Queries

When you specify the properties of a query, you can select whether to create a selection from its results for use in other areas of the program. When you select to create a selection, you can select whether users can access the selection in the Query Designer to create output fields and filters for other queries.

To create a selection from a query, you must select whether to create a dynamic or static selection.

- **Dynamic** - A dynamic selection automatically refreshes each time it is used. When a dynamic selection runs, the program searches the database for any new records that meet the criteria of the selection and adds them to the results. For example, you can use a dynamic selection to track system administrators assigned in the application. Every time the selection runs any recently added administrators are included, even if they did not meet the criteria when the selection was run previously.
- **Static** - A static selection is like a snapshot of your database at the time it first runs. Only the records included when the selection is first run are included when the selection is used. The selection includes these same

records until it is refreshed manually or during an automated process. For example, you can use a static selection to track system administrators assigned in the application; however, each time the selection is used, it does not include any recently added administrators, even if they meet the selection criteria.

Note: You cannot save a selection based on an ad-hoc query that contains summary output fields unless it also contains the primary key field of the query view. For example, for a constituent query, the primary key field is the **Constituent record** field. The use of summary fields can cause the output to not contain unique values (a primary key), such as when you select the average age among all constituents. Therefore, to create a selection from a query, you must explicitly include the primary key field in the query. If the primary key is not included, the **Create a selection** checkbox is disabled.

Create a selection from a query

1. When you add or edit the query, select the Set save options tab.
2. Select **Create a selection**.
3. Select whether to create a dynamic or static selection.
4. To use the selection outside of the program in the Microsoft *SQL Server Reporting Services Query Designer*, select **Show this selection in the Query Designer**. If you select this checkbox, the selection appears in the Selections folder of the Field Explorer in *Query Designer*.
5. Click **Save**. You return to the query.

Assign System Role Permissions to a Query

When you specify the properties of a query or the default query permissions for a folder, you can select whether users can run or edit the query. For more specific security rights, you can assign advanced permissions by system role. For a smart query, you assign permissions to access and manage the query together. For an ad-hoc query, you can assign permissions to run or edit the query separately.

After you grant rights to run or edit a query for selected roles, the **Allow all users to run this query** and **Allow all users to edit this query** checkboxes or the **Allow other users to modify this query** checkbox are disabled on the Query Properties screen.

For users without rights to edit an ad-hoc query, the **Edit** task on the Query page is disabled when they select the query.

For users without rights to modify a smart query, the query does not appear on the Query page.

Assign query permissions by system role

1. When you add or edit the query, select the Set save options tab.
2. Click **Advanced permissions**. The Assign query permissions screen appears.
3. Select whether to assign query permissions for all application users or only those in specific system roles. If you select **Selected roles**, under **System roles**, manage the rights for each role. To grant rights to a system role, select the role and click **Grant**. To deny rights, click **Deny**. To undo a selection, click **Clear**.

Note: For an ad-hoc query, you can only grant edit rights for system roles with rights to run the query. On the Edit query tab, you cannot select **All roles** unless all roles are granted rights to run the query.

4. Click **OK**. You return to the Query Properties screen.

   After you assign advanced permissions, text appears to describe the defined permissions. To edit the permissions, click **Advanced permissions**.

Suppress Duplicates in Ad-hoc Query Results

There are several ways to prevent duplicate information in query results. For example, when you first create the query, use the correct source view. For information about source views, see Source Views on page 2.

To eliminate as many duplicates in query results as possible, follow these steps.

- Limit the number of output fields in the query. Specifically, limit the number of one-to-many fields such as **Transaction type** or **Phone number**. For example, if you include **Phone number** in the output, and a constituent has multiple phone numbers, each number appears on a separate row in the query results. However, when you save the query and use it to generate labels, the constituent's name appears only once.
- Increase the number of filters in the query. For example, when you filter **Number**, also filter **Phone type** to limit the phone number to a specific type.
- For a query that does not contain one-to-many fields, configure the query's properties to suppress duplicate rows.

▸ Suppress duplicate rows in an ad-hoc query

To remove rows that matching data from the results of an ad-hoc query, you can configure the query's properties to suppress duplicate rows. If the query's output includes one-to-many fields, however, duplicate rows may still appear. For example, if you select to output a constituent's phone number in the results, the rows do not necessarily contain the same data and are not considered duplicates, so one row for a constituent could contain the home phone number, while the second row for the constituent contains the cell phone number. To delete or hide duplicates, you can also use the query in a report or export the query to Microsoft *Excel*.

1. From *Analysis*, click **Query**. The Query page appears.
2. On the Queries tab, select the ad-hoc query with the duplicate rows to suppress and click **Properties**. The Query Properties screen appears.
3. Click **Edit**. The Edit Ad-hoc Query screen appears.
4. On the Set save options tab, select **Suppress duplicate rows**.
5. Click **Save**. You return to the Query page.

Selections

A selection is a named set of IDs of the same record type. It has a name and description and is often used as input into a process or report as a means to specify which set of records should be acted on by that process. For example, the "Acknowledge Revenue" process accepts a selection as a parameter and acknowledges previously unacknowledged gifts only for records included in that selection. Because selections consist only of IDs (rather than output fields), they are optimized for peak processing speed.

A selection is a named set of IDs of the same record type. It has a name and description, and is often used as input into a process or report as a means to specify which set of records should be acted on by that process. For example, you can use selections on the Inclusions and Exclusions tabs of a mailing to determine which records are included or excluded from the mailing. Because selections consist only of IDs (rather than output fields), they are optimized for peak processing speed.

A selection can be either static or dynamic. A static selection is a fixed set of IDs that does not change. For example, if a record that originally met the criteria of the query on which the selection is based changes so that it does not currently meet the criteria, the record ID is still included in the selection each time it is processed. The same records are included in the selection until it is refreshed manually or during an automated process. A

dynamic selection analyzes membership each time it is used in a function, so records may be added or removed from it each time it runs.

Many processes not only use selections as parameters, they also produce selections as output. In almost every process, it produces a static selection, because the intent of the selection is to capture the records that the process acted on for that run of the process. Because you would not want that list of records to change even if the records themselves may change later, the selection is static. For example, a common use of this function is when a static selection of exceptions for a process is produced. This selection enables you to rerun the process and use the exception selection as input back into the process.

There are several ways to create a selection.

- An ad-hoc query can be used to create a selection. The selection can be either static or dynamic and will contain the IDs of the rows that meet the query criteria. In many cases you may create an ad-hoc query for the sole reason of creating a selection based on the query. For example, on the Selection search screen, when you click **Add**, you actually create a query on which a selection is based. For more information, see Query Properties on page 25.
- A smart query instance can be used to create a selection. The selection can be either static or dynamic and will contain the IDs of the rows that meet the query criteria. For more information, see Smart Queries on page 18.
- Throughout the program, a business process may prompt you to create a selection, or the program may automatically create a selection as part of a process. These selections have a query type of Other. For information about how to edit or set the active status of these selections, see Manage Selections with a Query Type of Other on page 31.
- You can merge two selections of the same type together. For example, you can merge two constituent selections to create a selection of recipients for a communication. For information about how to merge selections, see Merge Two Selections on page 31.

Selection Search by Record Type

To analyze a specific record type, you can search for a selection associated with the record type. With the Selection Search by record type, you can search by **Name**, **Record Type**, and **Format**.

Search for a selection by record type

1. On the Selection Search by record type screen, enter the name of the selection to find. You can enter a partial name or individual letter in these fields. Also, the search process is not case sensitive, so you can enter rfm, Rfm, and RFM and get the same results.

   You can leave the fields blank and search all your selections for the selected record type, but if the program locates over 100 records, only the first 100 will appear under **Results**.
2. In the **Format** field, select whether the selection you are searching for is dynamic or static.
3. Click **Search**. The program searches your database and displays any selections meeting your search criteria. Depending on how limited or detailed your criteria are, the program may find one record or many records.
4. Under **Results**, select the selection to access.
5. Click **Select**. The selection appears in the report or other function for which you access it.

Manage Selections with a Query Type of Other

Throughout the program, a business process may prompt you to create a selection, such as a static output selection from a batch or communication. The program may also automatically create a selection as part of a process. These system-defined selections have a query type of Other. From the Selections tab of the Query page, you can edit the detail information of these selections, such as name or description. You can also manage the active status of these selections, such as to prevent its use with a communication or business process.

Edit a Selection with a Query Type of Other

From the Query page, you can edit the detail information of a system-defined selection as necessary. For example, you can edit its name or description to help users easily identify the selection.

Edit the detail information of a selection

1. From *Analysis*, click **Query**. The Query page appears.
2. On the Selections tab, select the criteria of the selection to edit and click **Apply**. At a minimum, you must select **Include other** to display editable selections in the grid.
3. Under **Selections**, select the selection to edit. The selection must have a query type of Other.
4. Click **Edit**. The Edit selection screen appears.
5. To help identify the selection, edit its name or description as necessary.
6. To use the selection in the Microsoft *SQL Server Reporting Services Query Designer*, select **Show this selection in the query designer**. If you select this checkbox, the selection appears in the Selections folder of the Field Explorer in *Query Designer*.
7. Select whether the selection is active. If you select **Active**, users can use the selection, such as with a process.
8. Click **Save**. You return to the Selections tab.

Set the Active Status of a Selection with a Query Type of Other

To prevent the use of a selection with a query type of Other, such as with future communications or business processes, you can mark the selection as inactive. Inactive selections remain in the database but do not appear in selection search results, such as when users choose a selection for a process. To mark a selection as inactive from the Query page, select it on the Selections tab and click **Mark inactive** on the action bar. When a message appears to ask whether to mark the selection as inactive, click **Yes**.

After you mark a selection with a query type of Other as inactive, you can mark it as active from the Selections tab on the Query page to resume its use. To view inactive selections on the Selections tab, select **Show inactive** and click **Apply** on the action bar. To mark an inactive selection as active, select it under **Selections** and click **Mark active** on the action bar. When a message appears to ask whether to mark the selection as active, click **Yes**.

Merge Two Selections

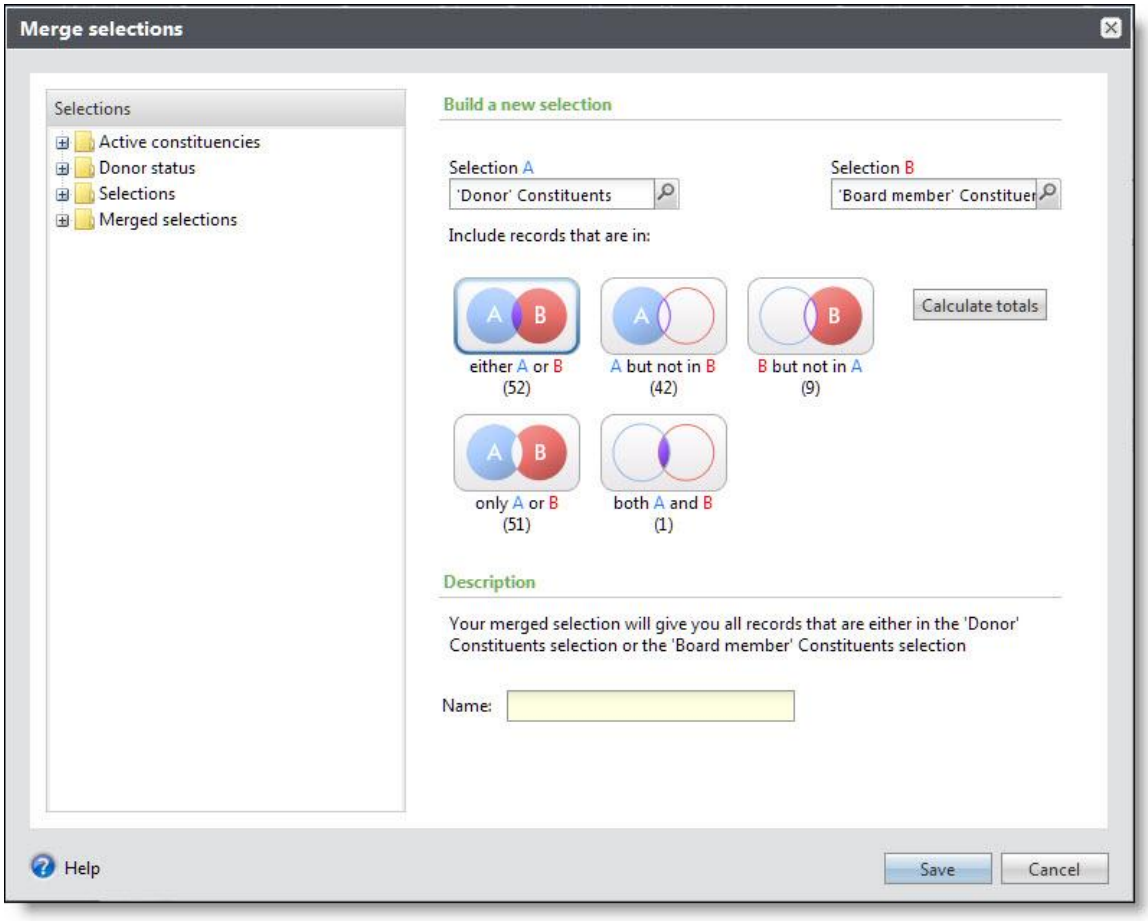
You can merge two selections together to create a new selection. For example, you can merge two constituent selections to create a selection of recipients for a communication. To help you visualize the selections and how their records relate to one another, the program provides a Venn diagram to represent each merge option.

When you build a merged selection, you select the merge option to use based on the records to include in the new selection.

Note: A Venn diagram depicts two circles — one for each selection used to build the merged selection — that overlap in the middle. The middle section of the diagram, where the circles overlap, represents the records that appear in both selections. The outer sections represent the records that appear in each respective selection but not the other.

Create a merged selection from two selections

1. From *Analysis*, click **Query**. The Query page appears.
2. Under **Tasks**, click **Merge selections**. The Selection Record Type Search screen appears.
3. Search for and select the type of selections to merge for the new selection. The Merge selections screen appears.



4. Under **Selections**, the tree-view displays selections based on constituency and donor status; constituent selections from *Query*; and previously merged selections. Select and drag the two selections to merge to the **Selection A** and **Selection B** fields, or search for and select the selections to merge.
5. To view the total records that appear in the possible merge options, click **Calculate totals**. Under each option, the sum of its records appears.
6. For **Include records that are in**, click the merge option to use. Under **Description**, an explanation of the records included in the selected option appears.

7. In the **Name** field, enter a unique name to help identify the merged selection.
8. Click **Save**. You return to the Query page.

Copy an Existing Query

To create a query that uses settings similar to another query, to save time, you can create a copy of the existing query and use this copy to start your new query, rather than from scratch. The **Copy** functionality works even with locked queries.

With copied queries, the current user is the owner of any new query created from the copy process. In addition, if the copy is generated from a locked query, the new query is unlocked. As for security, the **Copy** functionality mirrors the system security of the **Add** functionality, so users with rights to add queries also have rights to copy queries.

Copy a query

1. From *Analysis*, click **Query**. The Query page appears.
2. On the Queries tab, select a query and click **Copy**. The Copy of screen appears. The items on this screen are the same as when you add or edit a query.
3. Click **Copy**. The Copy Ad-hoc Query screen appears. The items on this screen are the same as when you add or edit a query.
4. Edit the criteria, output, and properties as necessary for the new query.

Export Queries

From the Query page, you can create an export process based on a query to export its results for use in another software application. You can also download a query's results as a comma-separated values (*.csv) file or spreadsheet, such as for use in Microsoft *Excel*.

Note: Query results are restricted to 500 records. If your results exceed the 500 record limit, you can save your query and create an export of your results to use in an outside application, such as Microsoft *Excel*.

Export query results (for queries with more than 500 records)

1. From *Analysis*, click **Query**. The Query page appears.
2. On the Queries tab, select the query with the results to export and click **Create**, **Export**. The Add export process screen appears.
3. Enter a unique name and description to help identify the export process.
4. To restrict the export process to a specific site at your organization, in the **Site** field, select the site to use the process.
5. Click **Save**. The Export page appears, where you manage the export process. For more information, see Export Process Status Page on page 52.

Download query results to a comma-separated values file or spreadsheet

1. From *Analysis*, click **Query**. The Query page appears.

2. On the Queries tab, click the name of the query with the results to download. The query results page appears.
3. Under **Results**, click **Export** and select the format of the file to download.
   - To manage the results in a comma-separated values file, select **Download to CSV**.
   - To manage the results in a spreadsheet file, such as for Microsoft *Excel*, select **Download to XLSX**.

   Your browser downloads the file in the selected format.
4. Open or save the file as necessary.

Browse Query Results

From the results page of a query, or from the Query page, you can browse the results of as one or more specific pages in the program.

Warning: When you select certain page types to browse records by, the program may display a message "The specified record does not exist for this page." This occurs when the program cannot determine which pages are appropriate for which records until you open the page for that record. If you receive this message, use another page type to browse the query records.

Browse query records

1. From *Analysis*, click **Query**. The Query page appears.
2. On the Queries tab, select the query to browse and click **Browse**. The Choose page definition screen appears and lists the pages you can use to view the records. Each page displays different information about a record.
3. Select the page to use to view the records and click **OK**. The selected page appears, with a grid of all the records in the query.
4. Click **Previous record** or **Next record** to browse through records. To use a different page to view the records, in the **View record with** field, select the page to use.

View Query Results

To view the results of a query, click its name on the Queries page. On the results page, you can click to process the query and view its results. From this page, you can also edit the query and browse or export its results.

Note: Query results are restricted to 500 records. If your results exceed the 500 record limit, you can save your query and create an export of your results to use in an outside application, such as Microsoft *Excel*.

Organize Queries

To easily search for and maintain your queries, you can use query categories or folders for increased organization. You can use query categories to easily group queries.

Query Categories

You can use categories to group your queries for convenience. For example, you can sort and view queries by category on the main Query page. You can add and manage the entries in the **Category** code table from *Administration*. You can add a category to an ad-hoc query when you first save the query or from the Query Properties screen.

Create a query category

1. From *Administration*, click **Code tables**. The Code Tables page appears.
2. Under **Query**, click **Query Category**. The Query Category Table Entries Screen appears.
3. Add or manage entries for the Query Category code table as necessary.

   To add a category, click **Add**. On the New Table Entry screen, enter a description of the new category and click **Save**. When users select a category for a query, the new category appears as an option.

Manage Query Folders

You can use the **Manage query folders** task on the Query page to organize your queries using a folder hierarchy. For example, you can create multiple folders and sub-folders and drag and drop existing queries into the folders. You can add, edit, and delete query folders at any time based on your organizational needs.

Use the up and down arrows to move folders and queries up or down in your treeview. Use the right and left arrows to move queries into a folder or out of a folder. When you move queries using these arrows, you can move them into sub-folders or onto the top level, depending on how your folder structure is organized. A query that lives at the top level does not live in a folder.

Note: With the **Manage query folders** task, you can only add, edit, or delete query folders. You cannot add, edit, or delete queries. To work with queries, select a query on the Query page and use the actions listed on the action bar.

When you save a query, you can use the **Folder** field on the Save query as screen to group your query in a folder. All existing folders appear as choices in the **Folder** field. You cannot, however, create a new folder directly from this field.

The **Folder** field also appears on the Query Properties screen where you can select an existing folder in which to group your query.

Create and manage a query folder

1. From *Analysis*, click **Query**. The Query page appears.
2. Under **Tasks**, click **Manage query folders**. The Add and configure query folders screen appears and displays existing query folders at the top level.
3. Manage the query folders as necessary.
   - To add a query folder and begin a hierarchical folder structure, click **Add** on the toolbar. On the Add a folder screen, enter a unique name to help identify the folder and click **Save**. On the Add and configure query folders screen, the new folder appears under **Query folders**.
   - To arrange the order of multiple folders or move a query or folder into another folder, select the item to move and click the arrows on the toolbar or drag and drop the item as necessary. You can

move queries into a folder or onto the top level. A query that lives at the top level does not live in a folder.

After you add a query or folder to a folder, a plus sign (+) appears next to the folder to indicate that it contains nested items. As you add queries and sub-folders to folders, your list takes on more of a tree-view appearance.

Note: To move an entire folder, use the arrows in the toolbar. When you move an entire folder, all its nested folders and queries also move. The nested structure of the items you move is maintained.

- To edit or delete a folder, select it under **Query folders** and click **Edit** or **Delete** on the toolbar. You cannot delete a folder that contains queries and sub-folders.

Warning: You cannot add, edit, or delete queries from the tree-view.

- To assign query folder permissions, click **Permissions** on the toolbar. The Assign folder permissions screen appears.

Warning: After you assign permissions, you must click **OK** on the Assign folder permissions screen and click **Save** on the Add and configure folder screen to save your permissions.

For information about folder permissions, see Assign Folder Permissions Screen on page 37.

4. Click **Save**. You return to the Query page. On the Queries tab, your folder and query structure appears.

Assign Query Folder Permissions

To manage access to query folders, you can assign query folder permissions and set default permissions for sub-folders within a folder. You can allow users to run and edit queries within a folder as well as new queries you add to the folder. You can also set query permissions for existing queries in a folder and set default permissions for any query added to the folder.

Assign query folder permissions

1. From *Analysis*, click **Query**. The Query page appears.
2. On the Queries tab, select a folder and click **Assign permissions**. The Assign folder permissions screen appears.

Tip: To assign folder permissions from the Add and configure folders screen, select a folder and click **Permissions**.

3. Select whether to apply the folder permissions and default query permissions set as defaults to all sub-folders within the folder.
4. On the Folder permissions tab, select whether to grant folder rights to users in all system roles or only those in specific system roles. If you select **Selected roles**, under **System roles**, manage the rights for each role. To grant rights to a system role, select the role and click **Grant**. To deny rights, click **Deny**. To undo a selection, click **Clear**.
5. Select the Default query permissions tab.
6. The program automatically applies the selected query permissions to any new queries added to the folder. To also apply the permissions to queries that already exist in the folder, select **Apply default query permissions to existing queries**.

   When you select **Apply default query permissions to existing queries**, the query permissions set apply as defaults and override the permissions configured for the queries currently within the selected folder.

From an individual query, you can edit the permissions as necessary. For information about how to edit query permissions, see Query Properties on page 25.

7. Select the default permissions for queries saved in the folder.
   a. Under **Ad-hoc queries**, select whether all users can run or edit ad-hoc queries saved in the folder.
   b. Under **Smart queries**, select whether all users can access and modify smart queries saved in the folder.
   c. To assign permissions for ad-hoc or smart queries by system role, click **Advanced permissions**. For information about how to assign advanced permissions, see Assign System Role Permissions to a Query on page 28.
8. Click **OK**. You return to the Query page.

Assign Folder Permissions Screen

The table below explains items on the Assign folder permissions screen. For information about how to access this screen, see Assign Query Folder Permissions on page 36.

Screen Item	Description
Folder	This read-only field displays the folder name.
Apply the following as default permissions to all subfolders	To apply the selected folder permissions as the default permissions to all subfolders in the folder, select this checkbox. If you select this checkbox, the default query permissions also apply to all queries in the selected folder and subfolders.
This folder is available to	Select whether to grant folder rights to application users in all system roles or only those in selected roles. If you select **Selected roles**, under **System roles**, select the rights to apply to each role. To grant rights, select **Grant**. To deny rights, select **Deny**. To undo a selection, select **Clear**. To quickly grant, deny, or clear rights, select a system role and double-click your mouse.
Apply default query permissions to existing queries	The program automatically applies the selected default query permissions to any new queries saved to the folder. To also apply the default permissions to queries that already exist in the folder, select this checkbox. If you select this checkbox, you can still edit the permissions for a query in the folder as necessary. For information about how to edit query permissions, see Query Properties on page 25.
Allow all users to run this query	To allow all users to run ad-hoc queries in the folder, select this checkbox.
Allow all users to edit this query	To allow all users to edit ad-hoc queries in the folder, select this checkbox.
Allow other users to modify this query	To allow all users to manage queries in the folder, select this checkbox.
Advanced permissions	To assign permissions for queries in the folder by system role, click this button. For information about how to assign advanced permissions, see Assign System Role Permissions to a Query on page 28.

Export

When you export data from the program, you extract information from the database and send it to another place, mainly another software application. For example, you may want to take information from the program into a spreadsheet program for further analysis. In *Export*, you select the query of records to export and specify the format to use for the exported data. You can also schedule an export process to run at the time most convenient for your organization, such as overnight.

Export Page

On the Export page, you manage the export processes in your database. To view the Export page, go to *Administration* and select **Export**.

Under **Export processes**, information about the export processes in the database appears. This information includes the name and description of the export process and the name and type of the query exported. You enter this information when you add the export process to the database. Depending on your security rights and system role, you can perform various tasks to manage the export processes in the database from the action bar. To update the information that appears in the grid, click **Refresh List**.

View an Export Process Status Page

When you create an export process, the program automatically creates a status record of the process. On the export process status page, you can view these status records and the information entered to create the process. You can also view information about the most recent operation of the process, a history of the process, and any job schedules created for the process. You can access an export process status page directly from the Export page. In the **Export processes** grid, select the export process to view and click **Go to export process**. The status page for the selected export process appears. For more information about the items on the status page, see Export Process Status Page on page 52.

Run an Export Process

Once you add an export process to the database, you can run the process to extract its data from the database and create the export file. You can run an export process directly from the Export page. In the **Export processes** grid, select the export process to run and click **Start export**. The program uses the data in the selected query and stores the information in an export file. The export process status page appears and displays the status of the process. When the export process finishes, the **Status** field on the Recent status tab displays Completed. From the export process status page, you can download the information stored in the export file to an output comma-

separated value (*.csv) file. For more information about the items on the status page, see Export Process Status Page on page 52.

Note: You can also start the export process from its status page. Select **Tasks**, **Start process** from the menu bar or click **Start process** under **Tasks**. For information about the status page, see Export Process Status Page on page 52.

Add Export Processes

The export process helps you extract data from the program to use in other applications. For example, you may want to export data to send to a mailing house to update addresses. Once you create an export process, you can edit and reuse it as you update your data. When you add an export process, you assign it a name and description to help identify it and select the query to export.

Add an export process

1. From *Administration*, select **Export**. The Export page appears.
2. On the action bar of the **Export processes** grid, click **Add**. The Add export process screen appears. For information about the items on this screen, see Add Export Process Screen on page 40.

Note: To access the Add export process screen from the Export page, you can also select **Tasks**, **Add an export process** from the menu bar or click **Add an export process** under **Tasks**.

3. Enter a unique name and description to help identify the export process.
4. You can restrict the use of the process to a specific site in your organization. When you select a site, only users associated with the site can access the process. To allow users of all sites to access the process, select “All sites.”
5. In the **Export type** field, select whether to export the output of an ad-hoc query or a smart query instance. You can also select to export a query based on an export definition.
    - An Ad-hoc query can include numerous output fields and enables you to browse through a specific set of records.
    - A Smart query instance performs complex calculations that are difficult to achieve with an ad-hoc query. A smart query instance is based on templates included in the program or on your own SQL statements.

Note: For information about ad-hoc queries and smart query instances, see Query on page 1.

    - An export definition defines fields to export. When you use this export type, you select a query to export. The export outputs data from the query based on the definition. For information about export definitions, see Create Export Definitions on page 44.
6. If you select “Ad-hoc query”, the **Ad-hoc query** field appears. If you select “Smart query instance”, the **Smart query instance** field appears. If you select “Export definition”, the **Selection** and **Export definition** fields appear.
7. Click **Save**. You return to the Export page. Under **Export processes**, the new export process appears.

Add Export Process Screen

The table below explains the items on the Add export process screen. For information about how to access this screen, see Add Export Processes on page 40.

Screen Item	Description
Name	Enter a unique name to help identify the export process. For example, for an export of constituents who are married, enter “Married constituents”. You can enter up to 100 characters in this field.
Description	Enter a more detailed description of what data is included in the export. For example, “All constituents with a Marital status of Married”. You can enter up to 255 characters in this field.
Site	Select the site that uses this process. If the process is available to users associated with any site, select “All sites.”
Export type	Select whether to export the output of an ad-hoc query, a smart query instance, or an export definition. An Ad-hoc query can include numerous output fields and enables you to browse through a specific set of records. A Smart query instance performs complex calculations that are difficult to achieve with an Ad-hoc query. A smart query instance is based on templates included in the program or on your own SQL statements. If you are unsure of which query type to select, consult your IT Administrator. An export definition defines fields to export. When you use this export type, you select a query to export. The export outputs data from the query based on the definition.
Ad-hoc query	If, in the **Export type** field, you select “Ad-hoc query”, this field appears. Click the binoculars and use the Ad-hoc Query Search screen to search for the query to use. If necessary, you can add the query from the Ad-hoc Query Search screen. To update the selected ad-hoc query, click **Edit query**. The Query screen appears so you can update the query as necessary.
Smart query instance	If, in the **Export type** field, you select “Smart query instance”, this field appears. Click the binoculars and use the Smart Query Instance Search screen to search for the query to use. If necessary, you can add the query from the Smart Query Instance Search screen. To update the selected ad-hoc query, click **Edit query**. The Query screen appears so you can update the query as necessary.

Edit an Export Process

Once you create an export process, you can update it to alter its results. When you edit the export process, you can also edit the query to extract additional information.

Edit an export process

1. From *Administration*, select **Export**. The Export page appears.
2. Under **Export processes**, select the export process to edit and click **Edit**. The Edit export process screen appears. The items on this screen are the same as on the Add export process screen. For information about the items on this screen, see Add Export Process Screen on page 40.

Note: You can also access the Edit export screen from the status page of the export process. Select **Tasks**, **Edit process** from the menu bar or click **Edit process** under **Tasks**. For information about the status page, see Export Process Status Page on page 52.

3. Update the information as necessary.
4. To commit your changes to the database, click **Save**. You return to the Export page.

Set the Format Options of an Export Process

The query used for an export process determines the output fields and information generated when you download the output file. The format options determine how the exported data appears in the output file. On the Edit export format screen, you determine how the program formats the data in the output file.

Set the format options of an export process

1. On the Export page, select the export process with the format to set in the **Export Processes** grid.
2. Click **Set format options**. The Edit export format screen appears.

Note: You can also set the format options from the status page of the export process. Select **Tasks**, **Set format options** from the menu bar or click **Set format options** under **Tasks**. For information about the status page, see Export Process Status Page on page 52.

3. On the Currency tab, specify the general options, such as the currency symbol and the number of digits after the decimal.

   Under **Additional options for CSV output**, select the digit grouping symbol and the decimal symbol. These format options apply only to CSV output. Output in XLSX format uses the settings on the user's workstation for the digit grouping symbol and the decimal symbol. The **Example** field displays how currency data appears with the entered options.
4. Select the Date and Time tab.
5. Under **Date format**, **Fuzzy date format**, and **Month/day format**, select or enter how the various types of dates should appear in the exported data. The **Example** field displays how a date appears in the specified format.

   The information in the CSV is formatted as specified. For example, if you open the CSV file in a text editor, you can see dates in the date format you specified. However, if you open the CSV file in *Excel*, *Excel* tries to recognize what the different fields and values represent and format them according to your system date settings, which may not match the date format you specified.

Note: A “fuzzy date” is an incomplete date. For example, a fuzzy birth date of a constituent may include the month and year, but not the day.

Date Specifier	Description	Example
d	Numerical day of the month, single digit	4
dd	Numerical day of the month, double digit	04
ddd	Abbreviated day name	Tue
dddd	Full day name	Tuesday
M	Numerical month, single digit	7
MM	Numerical month, double digit	07
MMM	Abbreviated month name	Jul
MMMM	Full month name	July
yy	Year, two digits	80
yyyy	Year, four digits	1980

6. In the **Hour/minute format** frame, select how times should appear in the exported data. Select or enter the format from the drop-down list, or enter time specifiers to specify the format. The **Example** field displays how a time appears in the specified format.

Note: You cannot include seconds or timezone offsets in the format of the exported time data.

Date Specifier	Description	Example
hh	Hour, two digits, in a 12-hour cycle	11
HH	Hour, two digits, in a 24-hour cycle	23
mm	Minute, two digits, 00 to 59	17
tt	*Ante meridiem* (AM) or *post meridiem* (PM)	PM

7. Click **Save**. You return to the Export page.

Edit Export Format Screen

The table below explains the items on the Edit export format screen. For information about how to access this screen, see Set the Format Options of an Export Process on page 42.

Screen Item	Description
Currency symbol	On the Currency tab, enter the monetary symbol, such as a "$," a "£," or a "" sign, to display to indicate a currency value.
Number of digits after decimal	Enter the number of digits to display after the decimal in currency values. You can select to display between "0" and "4" decimal places.
Digit grouping symbol	Under **Additional options for CSV output**, enter the punctuation, such as a comma, to include in currency values to indicate the 1000s separator.
Decimal symbol	Under **Additional options for CSV output**, enter the punctuation, such as a period, to include in currency values to indicate the decimal separator between dollars and cents. ***Note:*** These format options apply only to CSV output. Output in XLSX format uses the settings on the user's workstation for the digit grouping symbol and the decimal symbol.
Date format	On the Date and Time tab, specify the format to use to display complete dates in the exported data. You can select the format from the drop-down list or enter date specifiers to create a new format. ***Note:*** The information in the CSV is formatted as specified. For example, if you open the CSV file in a text editor, you can see dates in the date format you specified. However, if you open the CSV file in *Excel*, *Excel* tries to recognize what the different fields and values represent and format them according to your system date settings, which may not match the date format you specified.
Fuzzy date format	Specify the format to use to display incomplete, or fuzzy, dates in the exported data. You can select the format from the drop-down list or enter date specifiers to create a new format.
Month/day format	Specify the format to use to display dates that include only the month and day in the exported data. You can select the format from the drop-down list or enter date specifiers to create a new format.
Hour/minute format	Specify the format to use to display times in the exported data. You can select the format from the drop-down list or enter time specifiers to create a new format. You cannot include seconds or timezone offsets in the format.

Create Export Definitions

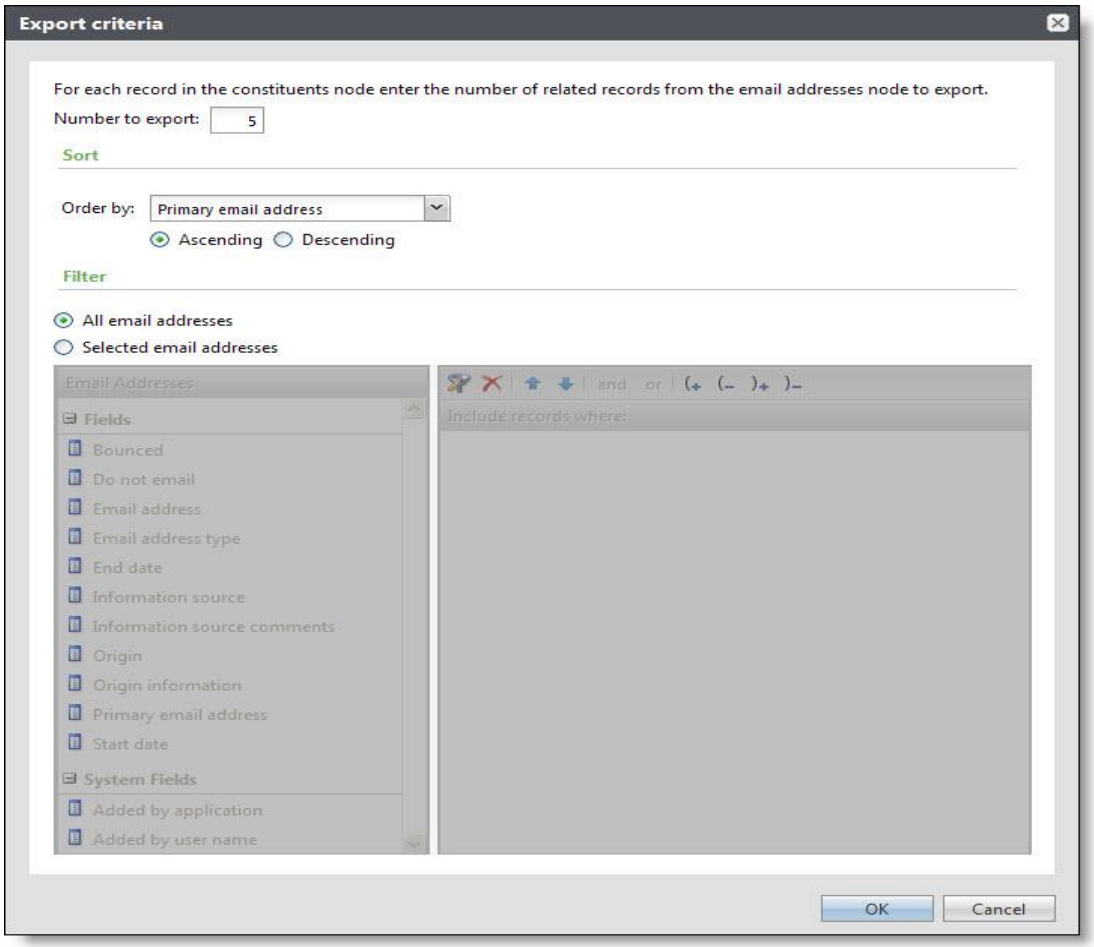
An export definition defines the fields for an export. You cannot export data directly from a definition. You must create an export process to output data from a selection based on the export definition. When you create an export, you select an export type. If you select “Export definition”, the **Selection** and **Export definition** fields appear. You can pick the selection of records to export and pick the export definition to determine what fields to include in the output.

When you create export definitions, you specify the source view from which the export definition should be created. The source view determines the type of records the export includes.

You can use sites to group your export definitions. When you view export definitions, you can use the **Sites** filter to limit how many export definitions are shown. The fields and criteria that you select for the export definition determine which fields appear in the export and how they appear.

In export definitions, you can select one-to-many fields in addition to one-to-one export fields. A one-to-one export field contains one value in your database. For example, **Birth date** is a one-to-one export field because constituents have one birth date. A one-to-many export field contains several values in your database. For example, **Email address** is a one-to-many export field because constituents can have multiple email addresses.

The Criteria screen appears when you move a one-to-many export field to the **Selected fields and criteria** box.

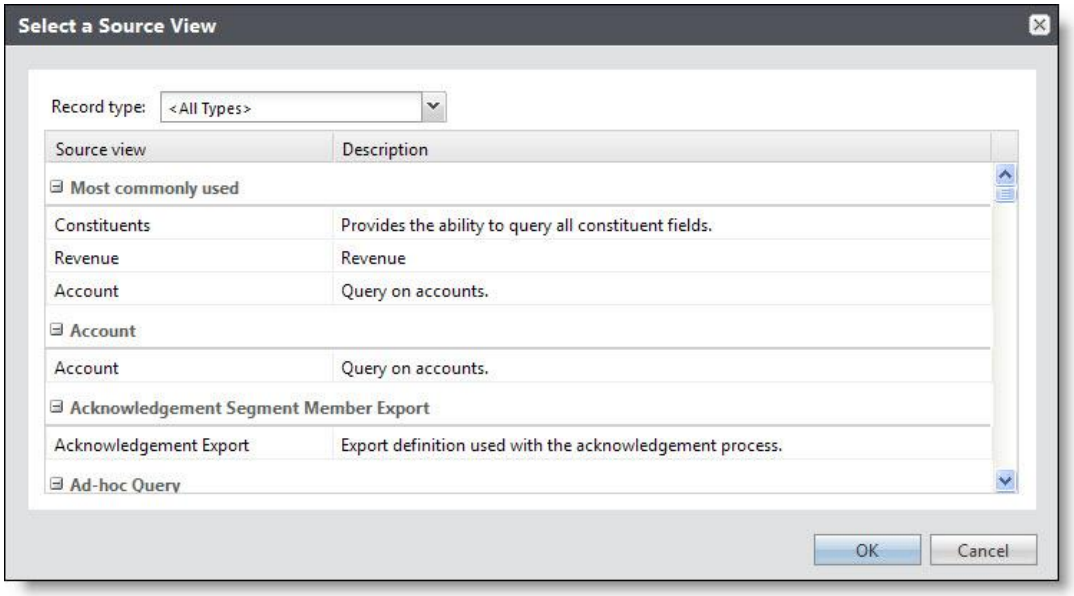


On this screen, you define how many instances of the field you want to export and the sort order for the field. Additional filter options appear to help you determine the data to export.

Create an export definition

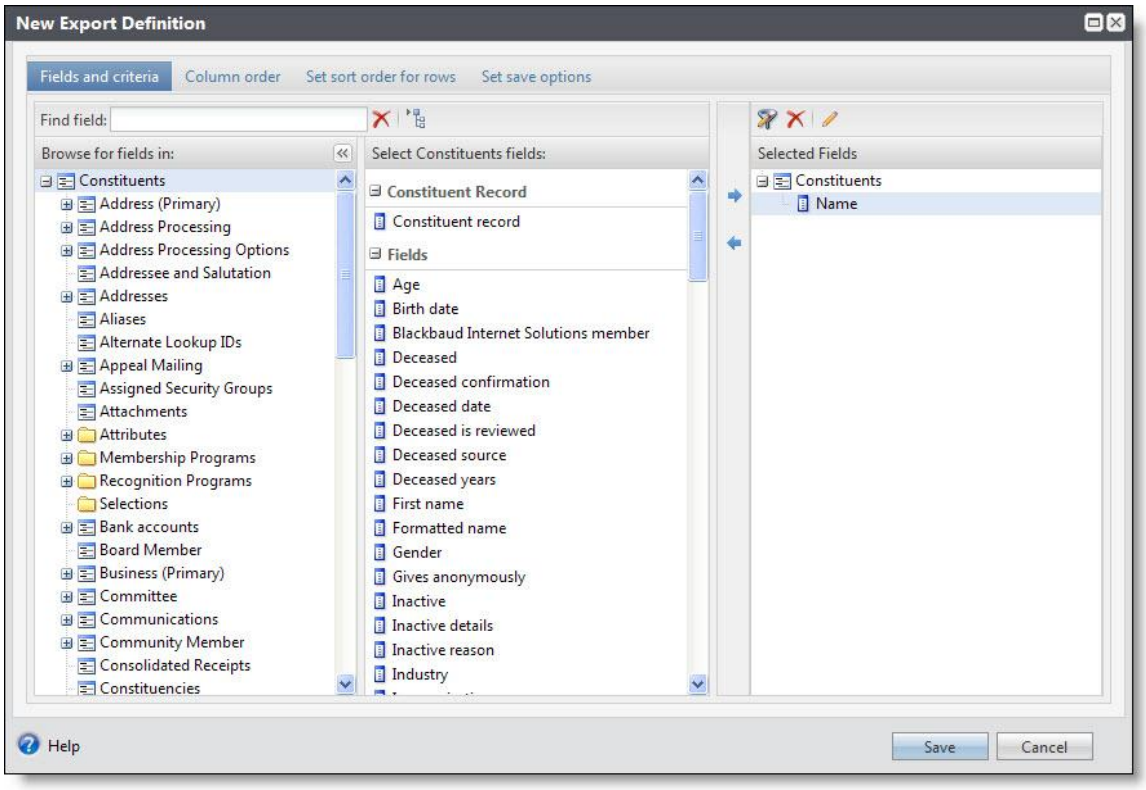
1. From *Administration*, click **Export definitions**. The Export Definitions page appears
2. Click **Add**. The Select a Source View screen appears.

Note: The Select a Source View onscreen text refers to queries. This is because the screen is shared with that feature.



On this screen you select the view containing the type of record you want to group in the export definition. For more information about source views, see Source Views on page 2.

3. Select the source view for the export definition and click **OK**. The New Export Definition screen appears, displaying the Fields and criteria tab.



4. Select the fields for each record in the export output.

   The **Field Explorer** pane shows the tables available for the selected type of export definition. You can expand a table to see its available fields. If you hide the field explorer, you can select a table from the dropdown at the top of the screen.

Tip: To quickly search and find a field, click **CTRL + F**. The **Find** field appears at the bottom of the **Field Explorer** pane. When you enter a field in the **Find** field and press Enter on your keyboard, the program searches through Field Explorer and displays applicable fields in the field list. Use your Enter button to scroll through the list to the next applicable field.

   In the middle pane, titled based on the Source View you selected, the Fields and System fields for the table you selected are available. All fields from the selected source view are available.

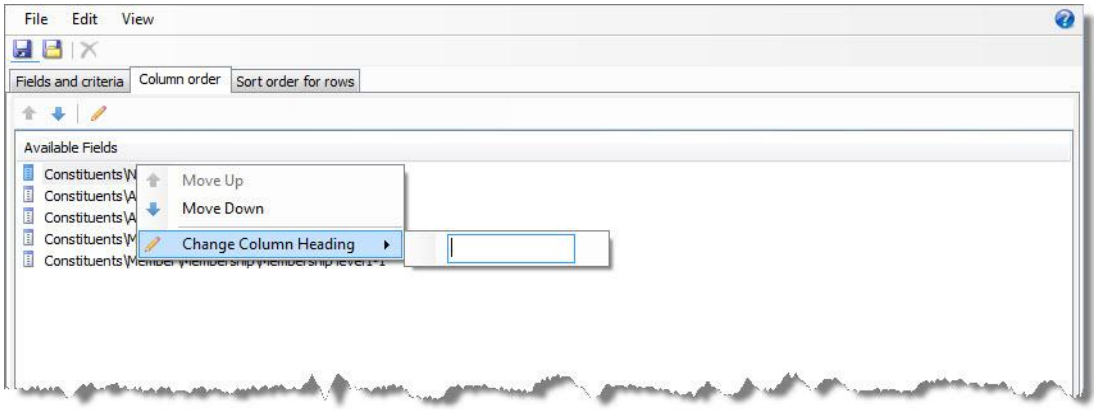
5. To specify output fields for the export, select them in the middle pane and drag them into the **Selected fields and criteria** frame. Selected fields correspond to the information you want to see in the export. These fields appear as column headings on the export output. You can rename the column headings if necessary. You must specify at least one output field.

   When you select a one-to-many field, the Criteria screen appears. For more information about how to set criteria for a one-to-many field, see Export Definitions Criteria on page 47. When you select a field from **Address Processing**, the Criteria for Address Processing screen appears. For more information about address processing, see Export Definitions Address Processing on page 49.

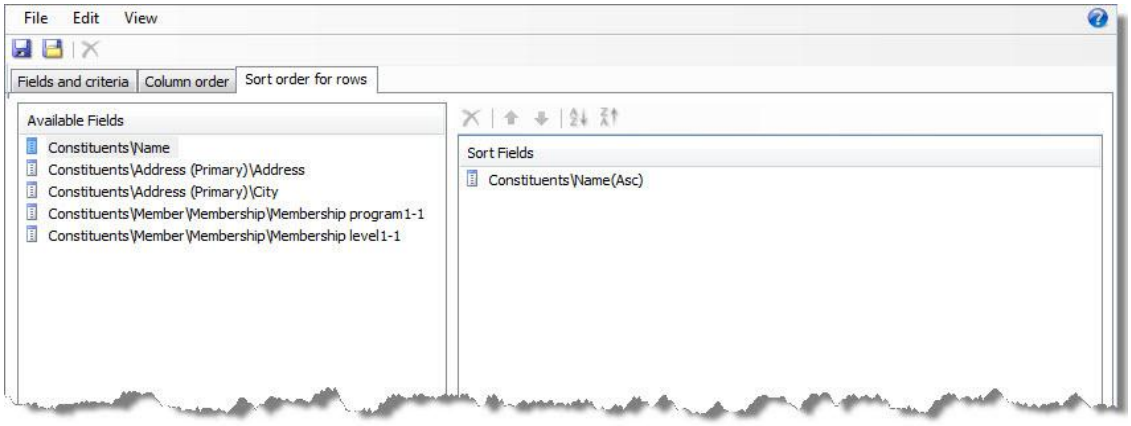
Note: Depending on the source view of the export definition, some fields may default into the **Selected Fields** frame. These are only defaults and you can remove them if necessary.

6. Select the Column order tab. From this tab you can reorder and rename column headings for the export file.

- To reorder the column names, use the up and down arrows.
- To change the column header name, right-click the field name and select **Change Column Heading.** Enter the new name in the field.



7. Select the Sort order for rows tab. From this tab you can specify a sort order for the export. The sort order helps ensure that mail merge documents, such as envelopes or labels, are in the necessary order.
   - To add a sort field, double-click or drag and drop a field from the **Available fields** pane.
   - To change the sort order, use the up and down arrows.
   - To reverse the sort order within a column, click the **Sort Ascending** or **Sort Descending** buttons.



8. When the export definition is complete, click **Save**. The Save Export Definition As screen appears. On this screen you can add a description about the export definition.

   You can also select which sites to associate with the export definition.

Export Definitions Criteria

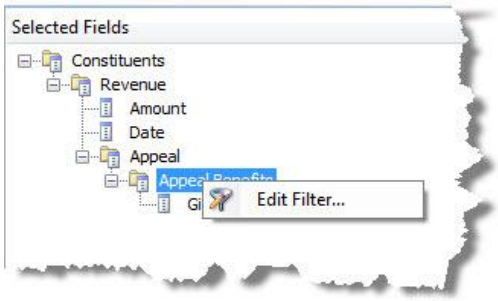
When you select a one-to-many field on the New Export Definition screen, the Export criteria screen appears. From this screen, you can select the number to export and define how the export sorts and filters the fields. When you select fields from **Address Processing**, the behavior is different. For information about address processing, see Export Definitions Address Processing on page 49.

Define criteria for one-to-many records

1. From the Export criteria screen, enter the number to export. This number refers to the node or record that contains the field. For example, for a Constituents export definition, if you select **Gift amount** from **Appeal benefits**, the number to export refers to **Appeal benefits** and not just to **Gift amount**.

   When you add another field to the same node in the **Selected fields and criteria** pane of the New Export Definition screen, the Export criteria screen does not appear again. To access the screen for that node, from the New Export Definition screen, right click the node and select **Edit Filter**.

   For an example about how to use export definitions criteria to filter results, see Filter Export Definition Criteria Example on page 48.



2. Under **Sort**, from **Order by**, select the field from which to sort the records. This sorts the one-to-many records for a line in the export output and not the all the lines in the output. For example, when you define the Appeal benefits for a Revenue export definition, if you sort by **Gift amount**, the addresses appear in order by gift amount on the output line for a revenue record.

   You can click to sort in ascending or descending order.

3. To filter by fields, under **Filter**, select **Selected <table>**.
4. Drag the field by which to filter to the **Filters** pane. The Apply Criteria screen appears.
5. From the Apply Criteria screen, select how to apply the criteria. For example, you can select “Less Than.”
6. From **Value**, enter the values for the criteria. For example, to apply criteria to **Gift amount**, where you selected “Less Than,” you can enter “1000.” The export definition will filter to include gift amounts less than $1,000.00.
7. Click **OK**. You return to the Export criteria screen.
8. Click **OK**. You return to the New Export Definition screen.

Filter Export Definition Criteria Example

In this example, the goal is to create and export definition to export all members in a membership program called “Animal Friends” that was previously created. The export includes member names, membership level, expiration date, and amount paid for the membership.

Filter export definition criteria example

1. From the export definition, select **Membership Level**, **Name**. You can double-click the field or drag it to **Selected fields** box.

   The Criteria for Membership screen appears. From this screen you can select to filter which membership information to include in the output.

2. Under **Filter**, select **Selected membership**.
3. From **Fields**, drag **Membership program** to **Filters**.

   The Apply Criteria to Membership program screen appears. From this screen you can specify how to filter Membership program.
4. From **Membership/Membership program**, select "Equal to."
5. From **Value**, enter "Animal Friends."

   An export based on this export definition will only output the Membership Level Name for the Animal Friends Membership Program.
6. Click **OK** for the each screen and save the export definition.

Export Definitions Address Processing

Address processing fields provide special criteria to help with mailings. When you select an Address Processing field from the New Export Definition screen, the Criteria for Address Processing screen appears. With Address Processing, you can you can specify how the export should select addresses and name formats from a constituent's record. For example, you can specify to select an individual's address based on address preferences with provisions for a first and second choice and how to handle when there are no mail preferences for the individual.

▶ **Define criteria for address processing**

1. From the Criteria for Address Processing screen, select the **Address format**. To define an option for this field, click the **Add** button in the field. To edit an option, select the option and click the **Edit** button.

   When you select to edit or add an option, the Add or Edit address processing options screen appears. For information about this screen, see Add Address Processing Options Screen on page 49.
2. Select the **Name format**. To define an option for this field, click the **Add** button in the field. To edit an option, select the option and click the **Edit** button.

   When you select to edit or add an option, the Add or Edit name format options screen appears. For information about this screen, see Add Name Format Options Screen on page 50.
3. Select the **Mail type**, for example, "Appeals."
4. Click **OK**. You return to the New Export Definition screen.

Add Address Processing Options Screen

Screen Item	Description
Name and **Description**	Enter a name and description for the option.
Site	Select the sites to which the option applies.
Individuals	From the Individuals tab, select whether to use an address based on the individual's mail preferences. If you select **Use individual's mail preferences, if specified**, select a first and second choice for mail preferences if there are no mail preferences specified for the individual. Select whether to use a seasonal address if there is one. If you select **Use seasonal address, if available**, select how to handle when no seasonal address is found.
Organizations	From the Organizations tab, select whether to use the organization's mail preference for the

Screen Item	Description
	criteria. If you select **Use organization's mail preferences, if specified**, select how to handle when no mail preferences are specified. If you select **Mail to contacts at the organization**: • From the Contact type grid, select the contact types to which to mail. • Select whether to mail to each contact found. • Select how to handle when no contact is found and if the organization contact also receives the mailing as an individual.
Households & Groups	From the Households & Groups tab, select whether to use an address based on the household or group's mail preferences. If you select **Use group's mail preferences, if specified**, select a first and second choice for mail preferences if there are no mail preferences specified for the household or group. Select whether to use a seasonal address if there is one. If you select **Use seasonal address, if available**, select how to handle when no seasonal address is found.

Add Name Format Options Screen

Screen Item	Description
Name and **Description**	Enter a name and description for the option.
Site	Select the sites to which the option applies.
Individuals	Under **Addressee**, select the addressee formats to use. To ensure a format is used if the selected formats are not on the individual's record, from **Otherwise, use this format**, select a format. Under **Salutation**, select the salutation formats to use. To ensure a format is used if the selected formats are not on the individual's record, from **Otherwise, use this format**, select a format.
Organizations	Under **Addressee**, select the addressee formats to use. To ensure a format is used if the selected formats are not on the organization's record, from **Otherwise, use this format**, select a format. Under **Salutation**, select whether to use the organization's name, contact, or other name in the salutation.
Households & groups	Under **Addressee**, select the addressee formats to use. To ensure a format is used if the selected formats are not on the group or household's record, from **Otherwise, use this format**, select a format. Under **Salutation**, select whether to use the household or group's name, primary member, or other name in the salutation.
Joint name formats	You can use joint name formats to combine information from two related constituents in a group or household. From Joint name formats tab, you can select to show refer to a constituent first as an addressee or in the salutation. For example, if you select **List the following constituent first when building the joint name format**, you can select to list the primary constituent from household first. If you want to use a selection, click **List constituents from the following selection first**. Then select how to handle when both constituents are found in the selection and if neither is found. Under Advanced name options, you can select to remove spouse names if the spouse does not qualify. You can also select to remove spouse names if the process will mail to both spouse names separately.

Export Definition Properties

To view or edit the properties for an export definition record, select **File**, **Properties** and the Export Definition Properties screen appears. On the General Tab, you can view system information such as who created the definition and last modified it. On the Options tab, you can edit the name and description for the export definition and select which sites may use it. Select **Allow definition to be used by other areas of the application** to make the definition available for other areas of the program. For example, if you select this option for a constituent export definition, the definition may be used for constituent letter templates. In other areas of the program, you can use the definition to display the exported information on a custom tab. Only users with the administrative rights should use the Allow definition to be used by other areas of the application option.

Export Definitions and Query Comparison

When you create an export process, you can select to use queries or export definitions as the export type. There are benefits with each. This comparison shows an example, an export process for name badge stickers, where a query is appropriate and a variation on the example where an export definition is a better choice.

A simple Constituents query may have **Name** and **Membership level** as output fields.

If a constituent has one membership with one level, there is one line of output for the constituent:

Name: Robert Hernandez, **Membership level**: General

If you add two membership levels to the constituent's membership, the results become three lines.

1. **Name**: Robert Hernandez, **Membership level**: General
2. **Name**: Robert Hernandez, **Membership level**: Distinguished
3. **Name**: Robert Hernandez, **Membership level**: Student

This query outputs three lines for one constituent because the relationship between the constituent and the membership levels is one-to-many. For one constituent, there can be many membership levels. In some cases, you might want to produce an output like this, where each line represents the constituent for a separate membership level.

With a query, you can filter, sort, and group these fields. For example, you can sort by **Name** to output each line for a specific constituent next to each other. One use for this output is, using Mail Merge in ***Microsoft Word*** or a similar program, to print badge labels for every constituent, with a separate label for each membership level stacked by order of constituents. In this case, Robert Hernandez would get three labels.

- Robert Hernandez: General
- Robert Hernandez: Distinguished
- Robert Hernandez: Student

At other times, it may be more useful for you to output all that information to a single line. For example, with export definitions, you can set criteria for the output for one-to-many fields. This enables you to place all the membership levels for the constituent on one line. You can create the export definition with the same fields as the query:

- **Name**
- Membership level

However, with export definitions, when you select a one-to-many field, a screen appears that lets you set criteria for the fields contained in that node. For this example, when you select "Membership level," the Criteria for

Membership screen appears. You can select how many membership records to export per constituent. In this example, “3” is selected.

With queries, you can view results from the Results tab or export the results. With export definitions, you can only export the results. Also, with export definitions, you must choose a selection from which to export. For this example, the selection is one for individual constituents.

The export of this export definition contains one line with the same information for Robert Hernandez. Here are the values for each field:

- **BUSINESSPROCESSOUTPUT_PKID**: 176
- **CONSTITUENTS_NAME**: Robert Hernandez
- **CONSTITUENTS_MEMBERSHIP_MEMBERSHIPLEVELNAME**: General
- **CONSTITUENTS_MEMBERSHIP_2_MEMBERSHIPLEVELNAME**: Distinguished
- **CONSTITUENTS_MEMBERSHIP_3_MEMBERSHIPLEVELNAME**: Student

You can use an output like this, along with Mail Merge in ***Microsoft Word*** or a similar program, to create one badge label per constituent that lists all of the membership levels. In this case, Robert Hernandez would get one badge label.

Robert Hernandez: General, Distinguished, Student

Export Process Status Page

Each export process in the database has a status page. On the export process status page, you can view the name, description, batch number, and account of the export process. You enter this information when you add the process to the database.

Each export process status page also includes information about the most recent operation of the process and historical data about the process. To help manage this information, each process status page contains multiple tabs.

For information about these tabs, see Tabs of a Process Page on page 54.

Depending on your security rights and system role, you can perform various tasks to manage the export process from its status page.

Generate a Windows Scripting File for an Export Process

A Windows Scripting File (.wsf) is an executable script file format for Windows that can incorporate VBScript (.vbs) routines and include XML elements. On the Export page, you can generate a *.wsf file of the process to use with another application. You can use Microsoft *Windows Task Scheduler* to schedule tasks to run the Windows Scripting File through the other application at a time that is most convenient to your organization. To create a *.wsf file of an export process, select the process in the **Export Processes** grid on the Export page and click **Generate WSF**. The Generate Business Process WSF File screen appears.

Note: You can also access the Generate Business Process WSF screen from the export process status page. On the export process status page, select **Tasks**, **Generate WSF** from the menu bar. For information about how to access the export process status page, see View an Export Process Status Page on page 39.

Schedule an Export Process Job

From the Export page, you can create a job schedule for an export process. When you create a job schedule for an export process, you specify the frequency and scheduled time of the occurrence. Using the job schedule and *SQL Server*, the program runs the process at the scheduled time and interval. To create a job schedule, select the export process in the **Export Processes** grid and click **Create job schedule** on the action bar. The Create job screen appears.

Note: You can also access the Create job screen from the export process status page. On the export process status page, select **Tasks**, **Create job schedule** from the menu bar. For information about how to access the export process status page, see View an Export Process Status Page on page 39.

Create Job Screen for an Export Process

The table below explains the items on the Create job screen. For information about how to access this screen, see Schedule an Export Process Job on page 53.

Screen Item	Description
Job name	Enter the name of the job schedule.
Schedule type	Selections for job frequency include: **-One time**: The scheduled process runs once, on the date and time specified in the **One-time occurrence** field. **-Daily**: The scheduled process runs on a daily basis. In the **Frequency** section, specify the number of days to lapse between each run of the job. In the **Daily frequency** section, specify a time for the process to run or specify that the process run repeatedly during a specific period of time. In the **Duration** section, specify the date that your process begins. If you want the process to run over a specific period of time, specify an optional **End date** or keep the default of **No end date**. **-Weekly**: The scheduled process runs on a weekly basis. In the **Frequency** section specify the number of weeks to lapse before the process runs, in addition to the day of the week for it to run. In the **Daily frequency** section, set a specific time for the process to run, or specify that the process run repeatedly during a specific period of time. In the **Duration** section, specify the date that your process begins. If you want the process to run over a specific period of time, specify an optional **End date** or keep the default of **No end date**. -**Monthly**: The scheduled process runs on a monthly basis. In the **Frequency** section, specify the number of months to lapse before the process runs, in addition to the day of the month for it to run. In the **Daily frequency** section, specify a specific time for the process to run or specify that the process run repeatedly during a specific period of time. In the **Duration** section, specify the date that your process begins. If you want the process to run over a specific period of time, specify an optional **End date** or keep the default of **No end date**. -**Start when SQL Server Agent service starts**: The scheduled job process runs when the *SQL Server Agent service* starts. This is useful if you use the *SQL Server Agent service* for other tasks. **-Start when the computer becomes idle**: The job runs when enough resources are available on the server. This is determined by the idle condition defined in the *SQL Server Agent* properties on the server.
Enabled	To suspend the scheduled process, unmark this checkbox. To make the process active, mark **Enabled**. By default, this checkbox is marked.
Date	Appears when you select One time in the **Schedule type** field. Use the date format

Screen Item	Description
	mm/dd/yyyy, or click the drop down arrow to select from a calendar.
Time	Appears when you select One time in the **Schedule type** field. Enter the date of the one-time occurrence.
Occurs every [ ] month(s)	Enabled when you select Daily, Weekly, or Monthly in the **Schedule type** field.
Days of the week	Appears when you select Weekly in the **Schedule type** field. Mark the checkbox beside the day of the week to run the job. You can select one or multiple days.
Day [ ] of the month	Appears when you select Monthly in the **Schedule type** field.
The [ ] [ ] of the month	Appears when you select Monthly in the **Schedule type** field. In the first field select First, Second, Third, Fourth, or Last. In the second field select a day of the week or Day, Weekday, or Weekend day. For example, to run a process the last Friday of every month, select Last in the first field and Friday in the second field.
Occurs once at [ ]	Enabled when you select Daily, Weekly, or Monthly in the **Schedule type** field.
Occurs every [ ] [ ]	Enabled when you select Daily, Weekly, or Monthly in the **Schedule type** field. To move the number by one, click the up and down arrow in the first field. In the second field, select Minutes or Hour. For example, to run this process in the morning and afternoon every day at work, enter 4 in the first field and select Hours in the second field.
Starting at and **Ending at**	Enabled when you select **Occurs every [ ] [ ]**. Using the example in the previous row, enter 8:00:00AM in the **Start at** field and 5:00:00PM in the **Ending at** field.
Start date	Enter the date for the job schedule to begin to process. Use the date format mm/dd/yyyy, or click the arrow to select from a calendar.
End date	Enter the date for the job schedule to end. For example, enter an end-of-year date. Use the date format mm/dd/yyyy, or click the arrow to select from a calendar. This option is disabled when **No end date** is selected.
No end date	If your job schedule does not have an end date, mark this option.

Delete an Export Process

You can delete an export process from its status page. When you delete the export process, you delete only the process status record that contains which query was used and any format options you assigned to the output. We recommend you save a copy of the output file that contains the data extracted from your database. When you delete the export process, you can still use the output file in another software application.

Delete an export process record from the export process status page

1. Access the status page of the export process to delete. For information about how to access the status page, see View an Export Process Status Page on page 39.
2. Select **Tasks**, **Delete process** from the menu bar or click **Delete process** in the **Tasks** pane on the explorer bar. A confirmation message appears.
3. Click **Yes**. The Exports page appears. In the **Export Processes** grid, the process no longer appears.

Tabs of a Process Page

Each business process in the database has a status page. The process page contains information specific to the process. You enter this information when you add the process to the database. Each process page also includes information about the most recent instance of the process and historical data about the process. On some

process pages, you can manage the job schedules of the process. To help manage this information, each process page contains multiple tabs.

Recent Status Tab

On the Recent status tab, you view the details of the most recent instance of the process. These details include the status of the process; the start time, end time, and duration of the process; the person who last started the process; the name of the server most recently used to run the process; the total number of records processed; and how many of those records processed successfully and how many were exceptions.

History Tab

Each time you run a business process, the program generates a status record of the instance. On the History tab, you view historical status record information about each instance of the process. The information in the grid include the status and date of the instance.

On the History tab, you can limit the status records that appear in the grid. You can filter by the process status. If you filter the records that appear in the grid, it can reduce the amount of time it takes to find a process instance. For example, if you search for a instance that did not finish its operation, you can select to view only status records with a **Status** of Did not finish. To filter the records that appear in the grid, click the funnel in the action bar. The **Status** field and **Apply** button appear so you can select the status of the instances to appear in the grid. To update the information that appears, click **Refresh List** on the action bar.

Depending on your security rights and system role, you can delete a status record from the grid on the History tab.

Delete a Status Record from the History Tab of a Process Page

On the History tab of a process page, you can delete a specific status record. When you delete a status record, you delete the process and all of its history. Before you delete a process, we strongly recommend you back up your data. Unless you previously save the transmission file or prenotification authorization file, once you delete the process, you can no longer use its output file which contains the data extracted from your database.

Delete a status record from the History tab

1. On the process page, select the History tab.

Note: You can filter the status records that appear in the grid by the process status. If you filter the records in the grid, it can reduce the amount of time it takes to find an process instance. For example, if you search for a instance that completed its operation, you can select to view only status records with a **Status** of Completed. To filter the records that appear in the grid, click the funnel in the action bar. The **Status** field and **Apply** button appear so you can select the status of the instances to appear in the grid.

2. In the grid, select the status record to delete.
3. On the action bar, select **Delete**. A message appears to confirm the deletion of the status record.
4. Click **Yes**. You return to the History tab. The selected status record no longer appears.

Job Schedules Tab

On the Job schedules tab, you view the job schedules of the process in the database. The details in this grid include the name of the job, whether a job schedule is enabled, the frequency of the job schedule, the start date and time and end date and time of the scheduled jobs, and the dates the job schedule is added and last changed in the database. You enter this information when you set the job schedule of the process.

Depending on your security rights and system role, you can add, edit, and delete job schedules that appear on the Job schedules tab. To update the information that appears, click **Refresh List** on the action bar.

Create a job schedule

1. Select the process to schedule.
2. From the Job schedules tab click **Add** or from **Tasks** click **Create job schedule**. The Create job screen appears.
3. In the **Job name** field, enter a descriptive name for the scheduled process.
4. To suspend the scheduled process, unmark **Enabled**. To make the process active, mark **Enabled**. By default, this checkbox is marked.
5. In the **Schedule Type** field, select the desired frequency on which to run the process.
6. Make any necessary changes to the job's frequency and duration.
7. To save the changes, click **Save**.

Screen Item	Description
Job name	Enter the name of the job schedule.
Schedule type	Selections for job frequency include: **-One time**: The scheduled process runs once, on the date and time specified in the **One-time occurrence** field. **-Daily**: The scheduled process runs on a daily basis. In the **Frequency** section, specify the number of days to lapse between each run of the job. In the **Daily frequency** section, specify a time for the process to run or specify that the process run repeatedly during a specific period of time. In the **Duration** section, specify the date that your process begins. If you want the process to run over a specific period of time, specify an optional **End date** or keep the default of **No end date**. **-Weekly**: The scheduled process runs on a weekly basis. In the **Frequency** section specify the number of weeks to lapse before the process runs, in addition to the day of the week for it to run. In the **Daily frequency** section, set a specific time for the process to run, or specify that the process run repeatedly during a specific period of time. In the **Duration** section, specify the date that your process begins. If you want the process to run over a specific period of time, specify an optional **End date** or keep the default of **No end date**. -**Monthly**: The scheduled process runs on a monthly basis. In the **Frequency** section, specify the number of months to lapse before the process runs, in addition to the day of the month for it to run. In the **Daily frequency** section, specify a specific time for the process to run or specify that the process run repeatedly during a specific period of time. In the **Duration** section, specify the date that your process begins. If you want the process to run over a specific period of time, specify an optional **End date** or keep the default of **No end date**. -**Start when SQL Server Agent service starts**: The scheduled job process runs when the *SQL Server Agent service* starts. This is useful if you use the *SQL Server Agent service* for other tasks. **-Start when the computer becomes idle**: The job runs when enough resources are available on the server. This is determined by the idle condition defined in the *SQL Server Agent* properties on the server.
Enabled	To suspend the scheduled process, unmark this checkbox. To make the process active, mark **Enabled**. By default, this checkbox is marked.
Date	Appears when you select One time in the **Schedule type** field. Use the date format mm/dd/yyyy, or click the drop down arrow to select from a

Screen Item	Description
	calendar.
Time	Appears when you select One time in the **Schedule type** field. Enter the date of the one-time occurrence.
Occurs every [ ] month(s)	Enabled when you select Daily, Weekly, or Monthly in the **Schedule type** field.
Days of the week	Appears when you select Weekly in the **Schedule type** field. Mark the checkbox beside the day of the week to run the job. You can select one or multiple days.
Day [ ] of the month	Appears when you select Monthly in the **Schedule type** field.
The [ ] [ ] of the month	Appears when you select Monthly in the **Schedule type** field. In the first field select First, Second, Third, Fourth, or Last. In the second field select a day of the week or Day, Weekday, or Weekend day. For example, to run a process the last Friday of every month, select Last in the first field and Friday in the second field.
Occurs once at [ ]	Enabled when you select Daily, Weekly, or Monthly in the **Schedule type** field.
Occurs every [ ] [ ]	Enabled when you select Daily, Weekly, or Monthly in the **Schedule type** field. To move the number by one, click the up and down arrow in the first field. In the second field, select Minutes or Hour. For example, to run this process in the morning and afternoon every day at work, enter 4 in the first field and select Hours in the second field.
Starting at and **Ending at**	Enabled when you select **Occurs every [ ] [ ]**. Using the example in the previous row, enter 8:00:00AM in the **Start at** field and 5:00:00PM in the **Ending at** field.
Start date	Enter the date for the job schedule to begin to process. Use the date format mm/dd/yyyy, or click the arrow to select from a calendar.
End date	Enter the date for the job schedule to end. For example, enter an end-of-year date. Use the date format mm/dd/yyyy, or click the arrow to select from a calendar. This option is disabled when **No end date** is selected.
No end date	If your job schedule does not have an end date, mark this option.

Edit a Job Schedule

Once you create an job schedule for a process, you can update it as necessary, such as to adjust its frequency. You cannot edit the package selected to create the job schedule.

Edit a job schedule

1. On the Job schedules tab, select the job to edit.
2. On the action bar, click **Edit**. The Edit schedule screen appears.
3. Edit the information on the screen. For example, you could change the **Schedule Type** and specify a different frequency on which the process should run. The items on this screen are the same as those on the Create job screen. For more information about these items, see Create a job schedule on page 56.
4. Click **Save** to save the changes. You return to the Job schedules tab.

Delete a Job Schedule

On the Job schedules tab of a status page, you can delete a job schedule of the process. When you delete a job schedule, you delete the scheduled job and any changes made to it outside the program.

Delete a job schedule

1. On the Job schedules tab, select the job to delete.
2. On the action bar, click **Delete**. A confirmation message appears.
3. Click **Yes** to delete the job. You return to the Job schedules tab.

Download Export Output into a CSV File

Once you run an export process, you can download its output into a file for use in another application. For example, you may want to take data from the program and send it to a spreadsheet program for further analysis. When you download the output, the program generates and saves a comma-separated value (*.csv) file at a location you specify.

Tip: You can also download the export output into multiple files, based on the data exported. For example, you can download an export of constituent information into multiple files based on the states in which the constituents reside. For information about how to download multiple export files, see Download Export Output into Multiple Files on page 59.

Download the output into a single file

To download the output of a new export process, you must first run the process to export its data from the database. After you run the process, its status is Completed. For information about how to run an export process, see Run an Export Process on page 39.

1. On the status page of the export process, select the instance of the process to download.
   - To download the output of the most recent instance, select the Recent status tab. When the status of the process is Completed, **Download output** is enabled on the action bar.
   - To download the output of a previous instance, select the History tab. Under **History**, select the instance to download.
2. On the action bar, click **Download output** and select **Download to CSV**. The Save As screen appears.

Note: On the Save As screen, the **Save as type** field automatically displays “Comma separated value (*.csv)”. You cannot select to download another type of output file. In a comma-separated value (*.csv) file, each piece of data is separated by a comma. A *.csv file is also referred to as a “comma-delimited” or “ASCII” file.

3. Enter a name for the output file and map to the location to save the downloaded output file.
4. Click **Save**. The program downloads and saves the output file at the designated location. When the download finishes, a message appears to ask whether to open the output file.
5. To open the output file in the default application set to open a *.csv file such as Microsoft *Excel*, click **Yes**. To return to the export process status page, click **No**.

Download Export Output into an XLSX File

Once you run an export process, you can download its output into a file for use in another application. For example, you may want to take data from the program and send it to a spreadsheet program for further analysis. When you download the output, the program generates and saves a Microsoft ***Excel*** (*.xlsx) file at a location you specify.

Tip: You can also download the export output into multiple files, based on the data exported. For example, you can download an export of constituent information into multiple files based on the states in which the constituents reside. For information about how to download multiple export files, see Download Export Output into Multiple Files on page 59.

Download the output into an XLSX file

To download the output of a new export process, you must first run the process to export its data from the database. After you run the process, its status is Completed. For information about how to run an export process, see Run an Export Process on page 39.

1. On the status page of the export process, select the instance of the process to download.
   - To download the output of the most recent instance, select the Recent status tab. When the status of the process is Completed, **Download output** is enabled on the action bar.
   - To download the output of a previous instance, select the History tab. Under **History**, select the instance to download.
2. On the action bar, click **Download output** and select **Download to XLSX**. The Save As screen appears.

Note: On the Save As screen, the **Save as type** field automatically displays "Excel workbook (*.xlsx)". You cannot select to download another type of output file. In an ***Excel*** workbook (*.xlsx) file, data is stored in a variant of the Office Open XML format. You can open XLSX files with Microsoft ***Excel 2007*** or more recent versions. Other spreadsheet programs may support this format. For some older versions of ***Excel***, to open XLSX files, there is a compatibility pack available at Microsoft's Office website: http://office.microsoft.com.

3. Enter a name for the output file and map to the location to save the downloaded output file.
4. Click **Save**. The program downloads and saves the output file at the designated location. When the download finishes, a message appears to ask whether to open the output file.
5. To open the output file in the default application set to open a *.xlsx file such as Microsoft *Excel*, click **Yes**. To return to the export process status page, click **No**.

Download Export Output into Multiple Files

Once you run an export process, you can download its output into multiple files, based on the data in the output, for use in another application. For example, you can download an export of constituent information into multiple files based on the states in which the constituents reside. When you download the output, the program generates and saves comma-separated value (*.csv) or Microsoft ***Excel*** (*.xlsx) files at a location you specify.

Note: In a comma-separated value (*.csv) file, each piece of data is separated by a comma. A *.csv file is also referred to as a "comma-delimited" or "ASCII" file. In an ***Excel*** workbook (*.xlsx) file, data is stored in a variant of the Office Open XML format. You can open XLSX files with Microsoft ***Excel 2007*** or more recent versions. Other spreadsheet programs may support this format. For some older versions of ***Excel***, to open XLSX files, there is a compatibility pack available at Microsoft's Office website: http://office.microsoft.com

Download the output into multiple files

To download the output of a new export process, you must first run the process to export its data from the database. After you run the process, its status is Completed. For information about how to run an export process, see Run an Export Process on page 39.

1. On the status page of the export process, select the instance of the process to download.

- To download the output of the most recent instance, select the Recent status tab. When the status of the process is Completed, **Download output** is enabled on the action bar.
- To download the output of a previous instance, select the History tab. Under **History**, select the instance to download.

2. On the action bar, click **Download output** and select **Multiple files**. The Download multiple files screen appears.
3. On the Details tab, in the **Output path** field, click the folder icon. The Browse For Folder screen appears so you can map to the location to save the downloaded output files.
4. In the **Create one file per** field, select the output field on which to generate multiple files. For example, to download multiple files of constituent data based on the states in which the constituents reside, select to create one file per state.
5. In the Export format field, select whether to download as CSV (comma-separated value) or XSLX (***Excel*** workbook).

Tip: The program saves the output of each instance of the export process. To divide the export data in multiple ways, download the output multiple times with a different output field selected as the basis of the files generated.

6. When the program downloads multiple files, it generates file names based the values of the field selected in the **Create one file per** field. For example, if you download an output file for each state in constituent data, the program generates files named Alabama.csv, Alaska.csv, and so on.

   To help further identify the information in each output file, in the **File prefix** field, enter text to appear at the beginning of the file names generated for the export output. For example, enter "Constituents in -" to download files named Constituents in - Alabama.csv and Constituents in - Alaska.csv.
7. To view the names and record counts of the multiple files the program will download, select the Preview tab.
8. Click **Download**. The program downloads and saves the output files at the designated output path. When the download finishes, a message appears to ask whether to open the output path.
9. To open the output path to access the output files, click **Yes**. To return to the export process status page, click **No**.

Download Export Output into Grouped Files

Once you run an export process, you can download its output into grouped files, based on the data in the output, for use in another application. For example, you can download an export of constituent information into multiple files based on the states in which the constituents reside. When you download the output, the program generates and saves comma-separated value (*.csv) or Microsoft ***Excel*** (*.xlsx) files at a location you specify.

Note: In a comma-separated value (*.csv) file, each piece of data is separated by a comma. A *.csv file is also referred to as a "comma-delimited" or "ASCII" file. In an ***Excel*** workbook (*.xlsx) file, data is stored in a variant of the Office Open XML format. You can open XLSX files with Microsoft ***Excel 2007*** or more recent versions. Other spreadsheet programs may support this format. For some older versions of ***Excel***, to open XLSX files, there is a compatibility pack available at Microsoft's Office website: http://office.microsoft.com.

▶ Download the output into grouped files

To download the output of a new export process, you must first run the process to export its data from the database. After you run the process, its status is Completed. For information about how to run an export

process, see Run an Export Process on page 39.

1. On the status page of the export process, select the instance of the process to download.
   - To download the output of the most recent instance, select the Recent status tab. When the status of the process is Completed, **Download output** is enabled on the action bar.
   - To download the output of a previous instance, select the History tab. Under **History**, select the instance to download.
2. On the action bar, click **Download output** and select **Grouped files**. The Download grouped files screen appears.
3. On the Details tab, in the **Output path** field, click the folder icon. The Browse For Folder screen appears so you can map to the location to save the downloaded output files.
4. In the **Group by** field, select the export field to group the files by, for example, “Packages” or “Segment code.” *Note:* You cannot select an export field that has more than 500 distinct values.
5. Values for the selected **Group by** field appear in the left box of Group options. Select the checkbox for each value to include in the first group and then click right arrow to move those values to the right box. The Group file name screen appears.
6. In the **Name** field, enter a name for the grouped file and click **OK**. You return to the Download grouped files screen and the group appears in the box on the right.
7. Continue adding groups until all values on the left are included in a group on the right. To view the items included in a group, click the plus sign to expand the group.
8. In the Export format field, select whether to downlaod as CSV (comma separated value) or XSLX (***Excel*** workbook).
9. When the program downloads these files, it generates file names based the values of the field selected in the **Group by** field.
10. Click **Download**. The program downloads and saves the output files at the designated output path. When the download finishes, a message appears to ask whether to open the output path.
11. To open the output path to access the output files, click **Yes**. To return to the export process status page, click **No**.

Delete an Export Process Status Record

From the History tab of an export process status page, you can delete the record of an instance of the process. When you delete an instance, you delete its record and its history about the process. If you download and save the output of the instance before you delete the instance, you can still use the output files in another software application.

▸ Delete an instance of an export process

1. On the export process status page, select the History tab.

Tip: To reduce the amount of time it takes to find an instance, filter the **History** grid by the status of the instance to view. For example, to search for a instance that finished its operation, select to view only status records with a status of Completed. To filter the records that appear in the grid, click **Filter** on the action bar. In the **Status** field, select the status of instances to view and click **Apply**.

2. In the **History** grid, select the instance to delete and click **Delete**. A confirmation message appears.

3. Click **Yes**. You return to the History tab. In the **History** grid, the instance no longer appears.

Establish Permissions

You can control which system roles have access to a selected export. When a user assigned the specific role opens the program, only the exports to which they are granted permission appear.

Set user permissions

1. From the Export page, select the export for which you want to establish permissions.
2. Click the **Assign Permissions** button. The application defaults to allow all system roles access.
3. To allow only selected roles access:
    a. Select **Selected roles**. The System roles grid activates.
    b. Select a role.
    c. To grant access, click **Grant**. To deny access, click **Deny**. To clear all existing assignments, click **Clear**.
4. Click **Save** to save your assignments and close the Assign permissions screen.

Import Selections

From *Analysis*, you can create a process to automatically generate a selection of records based on the record IDs included in an import file. On the Import selections page, you can view and manage the processes your organization uses to create selections from import files. After you create an import selection process, you can manage the process and view detail information from its status page.

Manage Import Selections

From *Analysis*, you can create a process to automatically generate a selection of records based on the record IDs included in an import file. For example, you may export information about a large selection of constituents for research, such as to determine the constituents to include in a marketing effort. After you determine the constituents to include, you can then create a comma-separated value (*.csv) file of only those constituents. With the record IDs included in the *.csv file, you can create a selection of just those constituents to include in the marketing effort. On the Import selections page, you can view and manage the processes your organization uses to create selections from import files. To access this page from *Analysis*, click **Import selections**.

Under **Imported selections**, you can view the import selection processes your organization uses. For each process, you can view its name and description, the status of its most recent instance, and the type of record selection created with the process. To view additional information about a process such as about its recent status or its history, select the process in the grid and click **Go to import process** on the action bar. The status page for the process appears. For information about the items on the status page, see Import Selections Process Status Page on page 67.

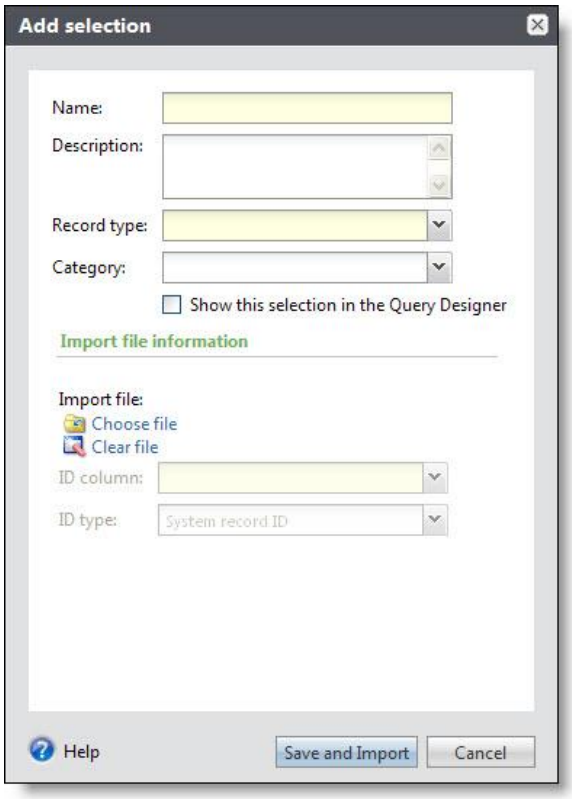
To reduce the amount of time it takes to find a process, you can filter the grid by criteria such as the process name, type, and category. You can also select to view only processes you own. To filter the processes that appear in the grid, click **Filter**, enter the criteria of the processes to view, and click **Apply**.

Add Import Selection Processes

You can create a process to automatically generate a selection of records based on the record IDs included in an import file. When you add an import selection process, you select the *.csv file of the records to include in the selection, the type of record ID to use, and which column of the file contains the record ID.

Add an import selection process

1. From *Analysis*, click **Import selections**. The Import selections page appears.
2. Under **Tasks**, click **Add an import selection**. The Add selection screen appears. For information about the items on this screen, see Add Selection Screen on page 65.



3. Enter a unique name and description to help identify the selection.
4. In the **Record type** field, select the type of records to include in the selection, such as Constituent or Revenue.
5. To group the selection with similar query selections, in the **Category** field, select the type of query in which to group the selection. Your organization configures the available query categories.
6. In the **Site** field, select the site at your organization to use the process and its selection. To not restrict the process to a specific site, select All sites.
7. To use the selection in *Query*, select **Show this Selection in the Query Designer**.
8. Under **Import file information**, browse to the *.csv file that contains the records to include in the selection.
9. In the **ID column** field, select which column of the import file contains the record ID to use to identify records in the selection.
10. For some record types, such as Constituent or Event, in the **ID type** field, you can select whether to use the system record or lookup ID. For the Constituent record type, you can also select "Alternate lookup ID" and select the type of alternate lookup ID to use.

    For other record types, the import uses the system record ID.
11. Click **Save and Import**. The program runs the process to import the *.csv file and generate a selection based on the selected record IDs.

    The status page for the process appears so you can view the status of the process and whether it completes successfully. For information about the items on the status page, see Import Selections Process Status Page on page 67.

Add Selection Screen

The table below explains the items on the Add selection screen. For information about how to access this screen, see Add Import Selection Processes on page 63.

Screen Item	Description
Name	Enter a unique name to help identify the import selection process and the selection it creates. After you add a process, you can use it to create a selection of the same type of records from a different import file.
Description	To help further identify the process, enter a description or explanation of the process. For example, explain the type of selection the process generates or when to use it.
Record type	Select the type of records to include in a selection created by the process. When you edit the process, this field is disabled.
Category	To group the selection with similar selections, select the type of query with which to group selections created by the process. Your organization configures the available categories.
Site	To restrict use of the process and its selection to a specific site at your organization, select the site to use the process. To allow all sites to use the process and its selection, select All sites.
Show this Selection in the Query Designer	To use the selections created by the process in *Query*, select this checkbox.
Import file	Browse to and select the import file that contains the records to include in the selection. The import file must be in a comma-separated values (*.csv) format.
ID column	After you select an import file, this field is enabled. Select which column of the selected import file contains the record ID to use to identify records in the selection.
ID type	For some record types, such as Constituent or Event, you can select whether to use the system record or lookup ID. For the Constituent record type, you can also select "Alternate lookup ID" and select the type of alternate lookup ID to use. Other record types only allow the system record ID as the identifier.

Edit an Import Selection Process

After you add an import selection process, you can edit its information as necessary. For example, you can select whether to use its selection in *Query*.

When you edit an import selection process, you can edit information about the process but not the record type or import file used with the process. For information about how to edit information about the import file, such as to import a new file to create a selection, see Import a Selection from an Import Selection Process on page 66.

Edit an import selection process

1. From *Analysis*, click **Import selections**. The Import selections page appears.
2. Under **Imported selections**, select the process to edit.

Note: To edit an import selection process from its status page, click **Edit process** under **Tasks**.

3. On the action bar, click **Edit**. The Edit selection screen appears. The items on this screen are the same as the Add selection screen. For information about the items on this screen, see Add Selection Screen on page 65.
4. Edit the information as necessary.
5. Click **Save**. You return to the Import selections page.

Delete an Import Selection Process

You can delete an import selection process and its selection, such as when your organization no longer uses it. If a selection is in use in the program, you cannot delete its import selection process.

Delete an import selection process

1. From *Analysis*, click **Import selections**. The Import selections page appears.
2. Under **Imported selections**, select the process to delete and click **Delete**. A confirmation message appears.

Note: To delete an import selection process from its status page, click **Delete** under **Tasks**.

3. Click **Yes**. You return to the Import selections page.

Import a Selection from an Import Selection Process

When you add an import selection process, you generate a selection of records from a selected import file. After you add a process, you can use it to generate another selection of the same name from different import files of the same record type. When you import a new selection, it overwrites the previous selection generated by the process.

Import a selection

1. From *Analysis*, click **Import selections**. The Import selections page appears.
2. Under **Imported selections**, select the process to use to import a selection and click **Import**. The Import selection screen appears.

Note: To import a selection from the status page of an import selection process, click **Start process** under **Tasks**.

3. Under **Import file information**, browse to the *.csv file that contains the records to include in the selection.
4. In the **ID column** field, select which column of the import file contains the record ID to use to identify records in the selection.
5. For some record types, such as Constituent or Event, in the **ID type** field, you can select whether to use the system record or lookup ID. For the Constituent record type, you can also select “Alternate lookup ID” and select the type of alternate lookup ID to use.

   For other record types, the import uses the system record ID.
6. Click **Start Import**. The program runs the process to import the *.csv file and generate a selection based on the selected record IDs.

   The status page for the process appears so you can view the status of the process and whether it completes successfully. For information about the items on the status page, see Import Selections Process Status Page on page 67.

Import Selections Process Status Page

When you add an import selections process, the program automatically creates a status page for the process. On the status page, you can view information about the instances of the process. To view the status page of a process, select it on the Import selections page and click **Go to import process**. From the status page, you can perform tasks to manage the import selections process.

- Import a Selection from an Import Selection Process on page 66
- Edit an Import Selection Process on page 65
- Delete an Import Selection Process on page 66

On the status page, you can view and manage information about the most recent instance and previous instances of the process. To help you navigate through the information, the status page contains multiple tabs.

Recent Status

On the Recent Status tab, you can view the details of the most recent instance of the process. These details include the status of the process; the start time, end time, and duration of the process; the person who last started the process; the name of the server most recently used to run the process; the total number of records processed; and how many records processed successfully and how many were exceptions.

If the most recent instance of the process completed with exceptions, such as due to duplicate entries in the import file or an entry without a record ID, the process does not include the exception in the selection. From the Recent status tab, you can download the exceptions of the most recent instance of the process into a *.csv file. With this file, you can correct the data as necessary to successfully generate a selection. For information about how to generate this *.csv file, see Download Exceptions for an Import Selections Process on page 67.

Download Exceptions for an Import Selections Process

If the most recent instance of the process completed with exceptions, such as due to duplicate entries in the import file or an entry without a record ID, the process does not include the exception in the selection. From the status page of an import selection, you can download the exceptions of an instance of the process into a *.csv file. With this file, you can correct the data as necessary to successfully generate a selection.

Download import selection exceptions into a *.csv file

1. On the process status page, select the instance of the process with the exceptions to download.
   - To download exceptions of the most recent instance, select the Recent status tab.
   - To download exceptions of a previous instance, select the History tab and select the applicable instance.
2. On the action bar, click **Download exceptions**. The Save As screen appears.
3. Browse to the location at which to save the *.csv file, and enter its file name.
4. Click **Save**. The program downloads the exceptions into a *.csv file. When the program completes the download, a message appears to ask whether to open the file.
5. To open the file in its native program, such as Microsoft *Excel*, click **Yes**. Otherwise, click **No** to return to the status page.

History

Each time you run the process, the program generates a status page of the instance. On the History tab, you can view historical status page information about each instance of the process. The information in the grid includes the status of the instance; the start time, end time, and duration of the instance; the person who started the instance; the total number of records processed during the instance; and the server used to run the process for the instance.

To reduce the amount of time it takes to find an process instance, you can filter the status records that appear in the grid by the process status. For example, you can select to view only status records with a status of Completed. To filter the records that appear in the grid, click **Filter** on the action bar. The **Status** field and **Apply** button appear so you can select the status of the instances to appear in the grid.

From the grid, you can manage previous instances of the process as necessary.

Delete a Status Record of a Process Instance

On the History tab of a process status page, you can delete a specific status record of the process. When you delete a status record, you delete the process and all of its history.

Delete a status record from the History tab

1. On the process status page, select the History tab.
2. In the grid, select the status record to delete and click **Delete**. A confirmation message appears.
3. Click **Yes**. You return to the History tab. The selected status record no longer appears.

Getting Started with Query

Query is a powerful tool you can use to help filter and group records. But it can be a bit intimidating at first. Don't be afraid though! We put together this tutorial to help you get started. We also put together some lists of common query fields and filters. Ready? Set? Go!

Query: A Guided Tour

Before We Begin

With *Query*, you can group records according to whatever criteria you want. Before you even begin to build your query, you need to think about what records you want to see. Form a statement, such as "I want to see the names of all constituents who are members and have given a gift this month, listed alphabetically by last name" or "I want to see all the revenue that came in last month, grouped by date." Be as specific as possible. You can even write down your statement to help you when begin to build your query.

I want to see . . .

_____

_____

_____

For this guided tour, let's use "I want to see the names of all constituents who are members and have given a gift this month, listed alphabetically by last name."

Now that we have a clear idea of what records we want to group, let's take a quick look at smart queries and see if one fits our needs. Smart queries are predefined queries which you can use in place of many common, but

complicated, queries. For example, say we were looking for all constituents who gave last year but unfortunately not this year (LYBUNT). This query would take some time to build and it would be fairly complex. Instead, this is offered as a smart query—the LYBUNT smart query. Browse through the list of smart query definitions and see if there's one that suits your needs. For more information, see Smart Query Definitions on page 18. If there isn't one, we can build an ad-hoc query ourselves!

Now that we have our statement, let's start with the basics of query.

Query Basics

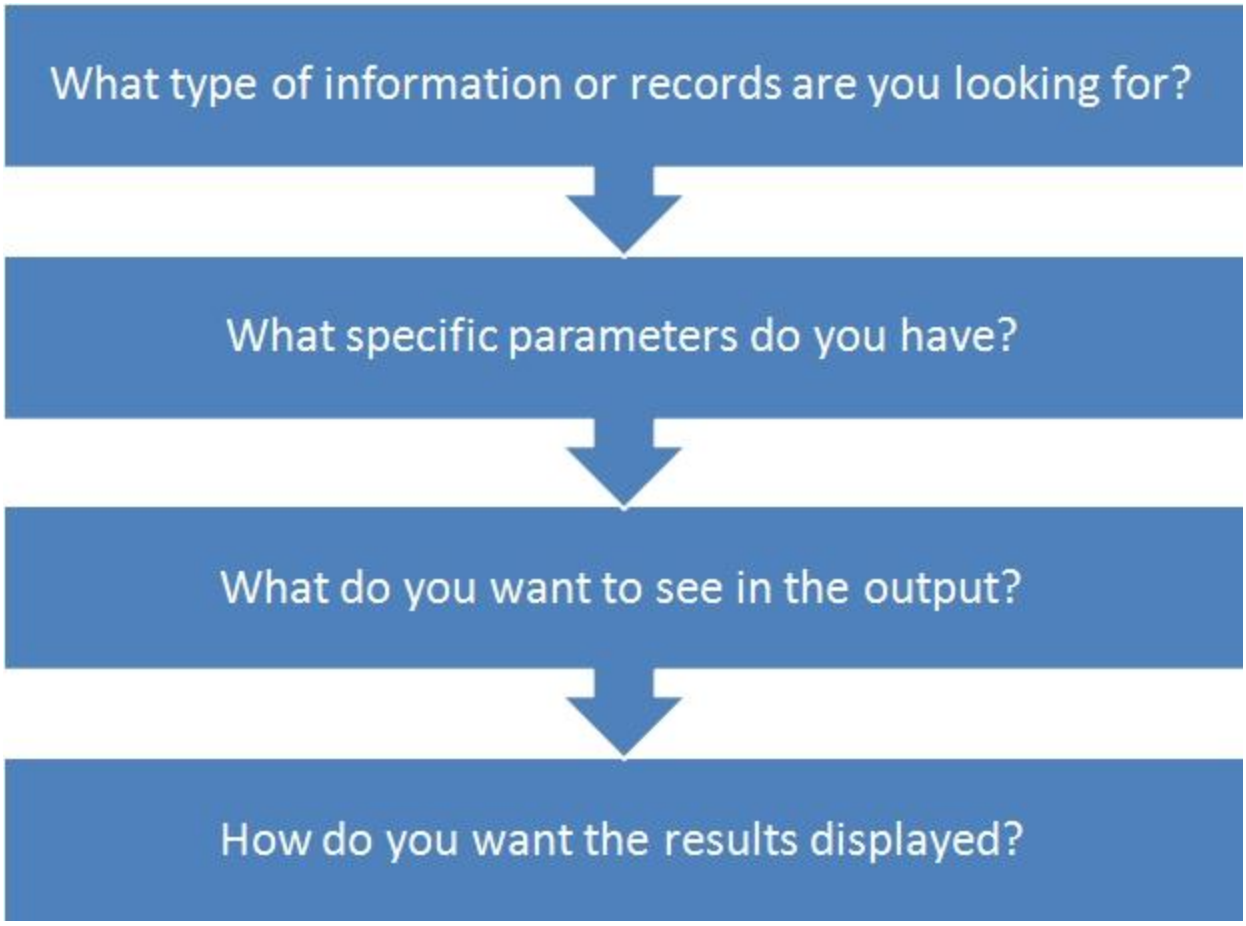
Queries are all about fields. Remember when you entered a birth date on the Personal tab of a constituent record? That's the Constituents: Birth date field in a query. There are definitely a LOT of fields available in *Query*. But *Query* really is just a list of all the fields on all the different types of records in the program. Ultimately, you just need to know where to look in the list. Noodles? Aisle 5 in the grocery store. Date of revenue for constituents? Constituents > Revenue: Date. We even put together a cheat sheet for you with some of the most common fields used in queries. Take a look at Common Query Fields on page 84. Even better, we put together a cheat sheet of common query filters.Check out Common Query Filters on page 86.

Remember, *Query* is a tool to group records; it's not a reporting tool. You should browse the results of your query to ensure you set up your query correctly!

Note: Query results are limited to 500 records. If your results exceed the 500-record limit, you can export your results to a program, such as Microsoft *Excel*, and view all the results. For more information, see Export Queries on page 33.

You might even see (or think you see) duplicates in the query results. What if you wanted to see all the constituents who gave money last month? If I gave twice last month, I'd appear twice unless you summarized the query output or did another neat trick to help suppress duplicates. See Suppress Duplicates in Ad-hoc Query Results on page 29 for ideas.

But let's get back to the basics. At the simplest level, a query answers four basic questions. These correspond to the four main components of a query: source view, filters, output, and sort/group options. When you answer these four questions in a query, you should have results that match your statement about the records you want to see.



To begin, we can break down our statement to see which parts match each of the four questions. I want to see . . . the names of all constituents who are members and have given a gift this month, listed alphabetically by last name.

The names

This tells us we want to see names in the results. This is the query's **Output**.

Of all constituents

This tells us that we need a constituent query, which means we'll use the Constituents **Source View** to create the query.

Who are members and have given a gift this month

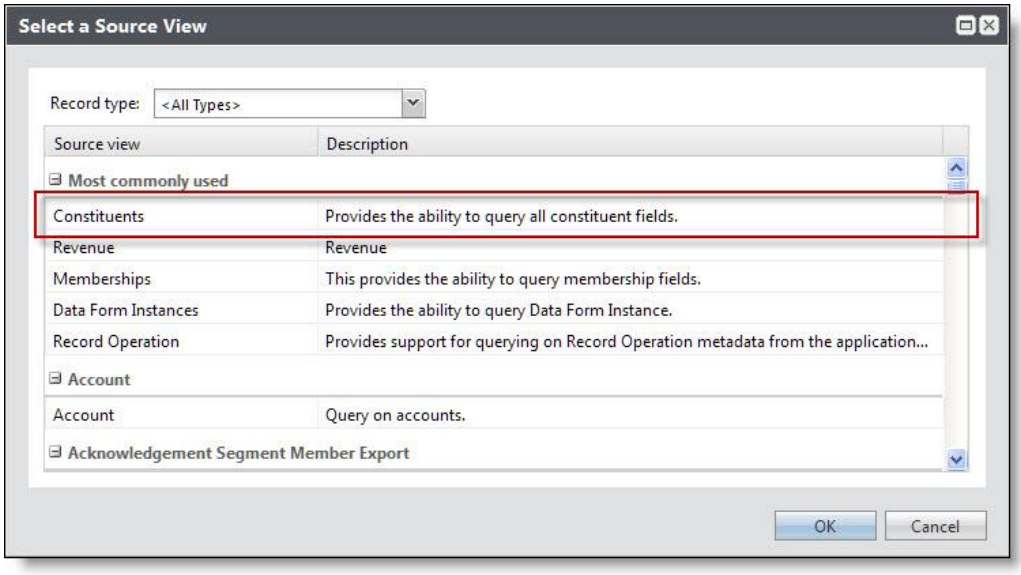
We want to see members, so we can use the constituency as a **Filter**. If the constituency is equal to member, we match on the first part. So let's look at the rest of it. "...and have given a gift this month" makes things a little more complicated. So we'll need another filter to find the gifts in that time frame.

Listed alphabetically by last name

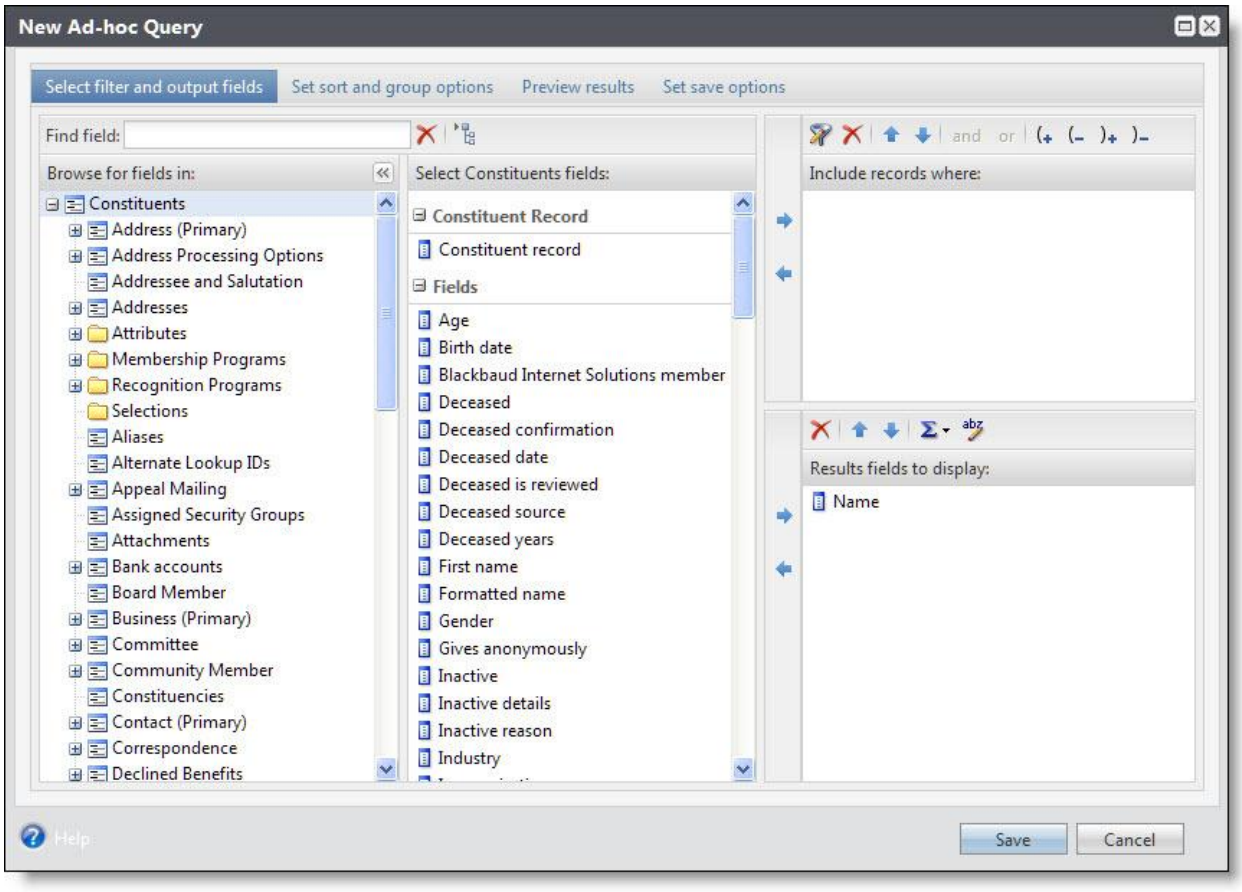
This tells us how we want to **Sort** the results.

Now let's look at each question individually so we can learn about the parts of the query and how we can build it.

The answer to this question lets us know which source view to pick for the query. Based on our statement "I want to see the names of all constituents who are members and have given a gift this month, listed alphabetically by last name," we can tell we need to use the Constituents source view.



With the Constituents source view, we will create a constituent query. But before we begin to build the query, let's review the terminology and basic layout of the query screen. In our case, we'll use the constituent query.



The query screen has four tabs. On the Select filter and output fields tab, you select your parameters. Parameters, criteria, filters all mean the same thing here: these are the pieces of our statement that help us narrow down the results to see only the specific things we want. In our case, that is the names of all constituents who are members and have given a gift this month, listed alphabetically by last name.

All of the fields available in query can be part of your parameters. Field names appear in the center column of the query screen. Under **Browse for fields in**, you see the field hierarchy that groups similar fields together into expandable nodes. For example, all of the fields associated with constituencies are grouped together under the Constituencies node. When you select **Constituencies** under **Browse for fields in**, these fields appear in the center column. Remember, it's all about fields.

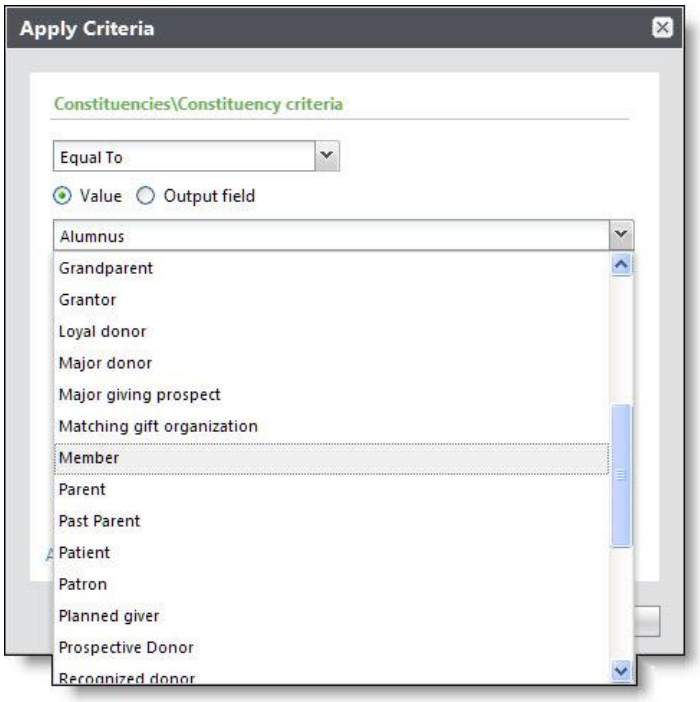
On the query screen, we can also see some filter options and some output options. We'll talk about the filter options next. And we'll get to the other tabs a little later!

The purpose of this question is to help determine the filters we'll need for our query. Which records do we want to include? Do we want to see only constituents who are major giving prospects? Or board members? Or

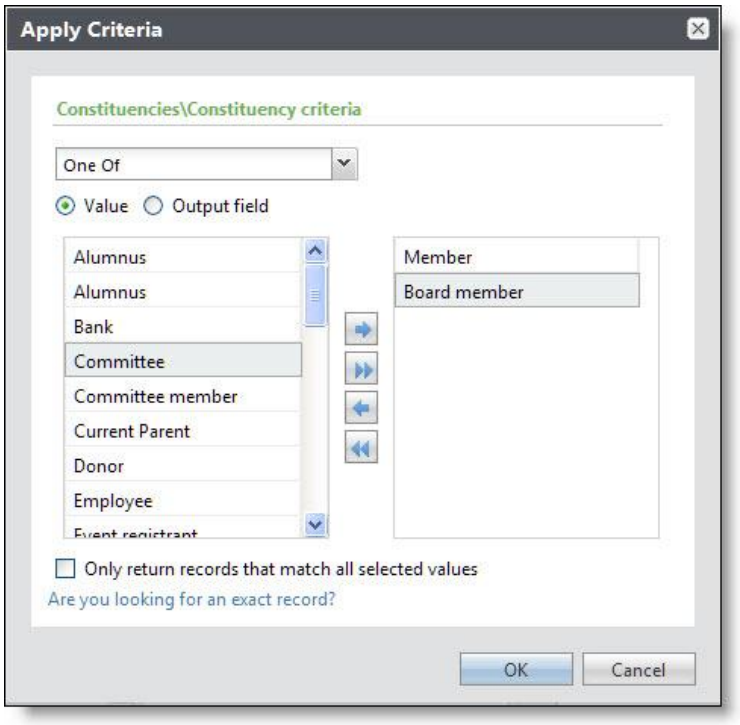
volunteers? Do we want to see only revenue given in the last month or year? In our case, we know we want to see members who have given a gift this month.

To set the filters, we need to know a little more about the filter options. After we select fields for the filters, we sometimes need to make additional decisions. For example, if we use a date field as a filter, we must decide whether we want to use today's date, a date range, or some other specific date.

Often, we need more than one filter. The filter options allow us to use different filters together. For our example, we need to use a couple of filters to show us members who have given us a gift this month. But to start us off, we need a filter to show constituency equal to member. To find the Constituency field, we need to select Constituencies in the Field Explorer. Then the Constituency field appears in the Field Viewer. After we drag the field into the Filters section, we can select the criteria operator and the values we want to use. So we would say: Constituency is Equal To Member, where "Constituency" is the field, "Equal To" is the criteria operator, and "Member" is the value to use.

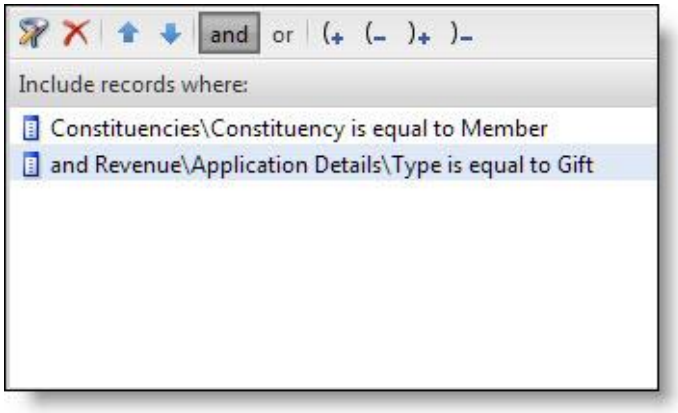


What if we wanted to see all members AND all board members? (Although we hope our board members are engaged enough to be members too!) We could select the criteria operator "One Of" instead of "Equal To," and then pick both "Member" and "Board member."

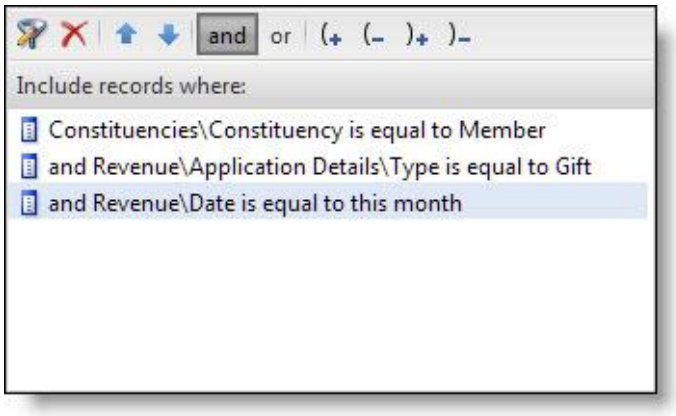


We also could have picked other criteria operators, such as "Not Equal To" or "Blank." You can experiment with them to get a feel for how each one works. For more information, see Query Criteria Operators on page 13.

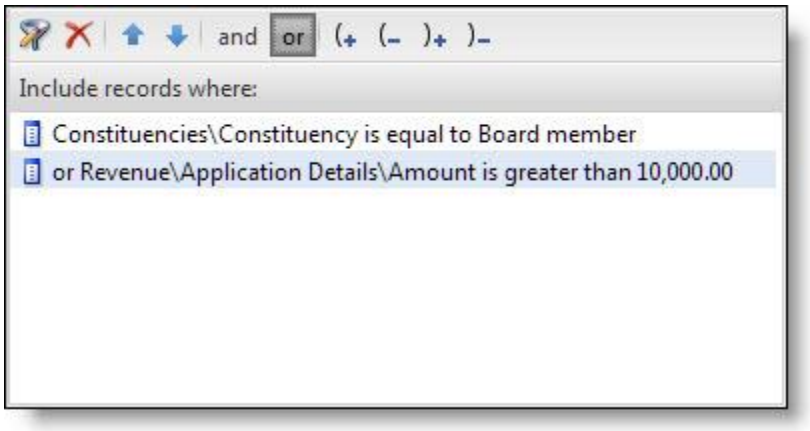
But that's just the first part! We need to get creative with filters and combine them in order to see members who have given a gift this month. Let's take the "given a gift" part of our statement. We're going to have to dig a little deeper in the Field Explorer to find this one. For gifts, we'll need to select Constituents > Revenue > Application Details: Type and set that filter equal to gift.



But we still have one more piece: this month. Now that one isn't too difficult. That's just the Constituents > Revenue: Date field. And we'll need to set that equal to this month!



Here are a few other examples of filters. Can you figure out what these filters mean?



Constituencies\Constituency is equal to Board member

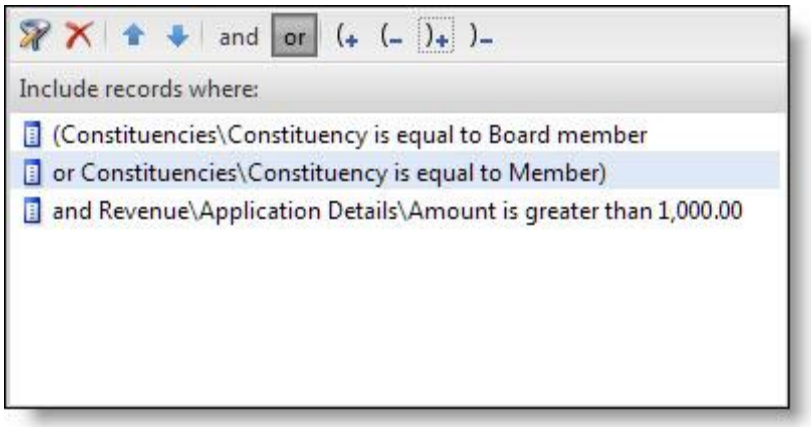
This first part tells us the constituency must equal "Board member."

Revenue\Application Details\Amount is greater than $10,000.00

The second part tells us the revenue amount must be greater than $10,000.

Did you notice the OR before the second one? That tells us the constituent can meet either criteria and still be included. You might have a board member who has given only $5,000 and you might have a major donor who has given $100,000—both would show up in the results. If we used AND instead of OR to connect the two, only board members who had given more than $10,000 would be included.

Ready for another challenge? What do you think these filters mean?

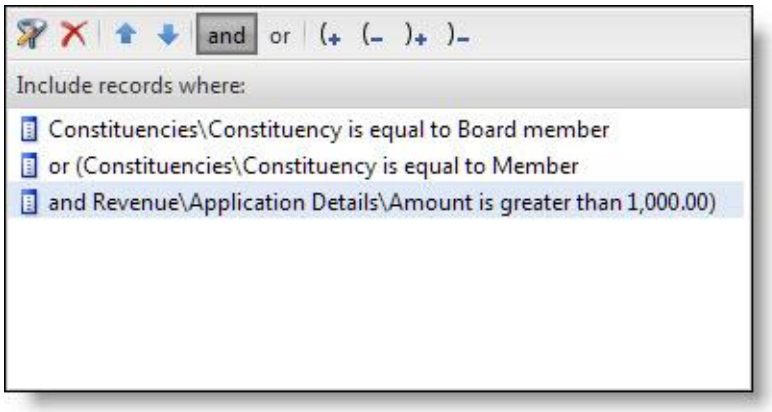


This one is definitely even more complex. It uses an OR, an AND, and parentheses. See if you pick the right answer!

- ❑ The constituents must be board members, regular members, and have given more than $1,000.
- ❑ The constituents must be board members, regular members, or have given more than $1,000.
- ❑ The constituents must be board members or regular members. And either way, they have to have given more than $1,000.

If you picked the last one, you're right! The OR between the first two filters tells us the constituent can meet either criteria and still be included—you can be a board member or a regular member. The third one tells us constituents with either constituency must also have given more than $1,000.

Who wants extra credit? Try this one!

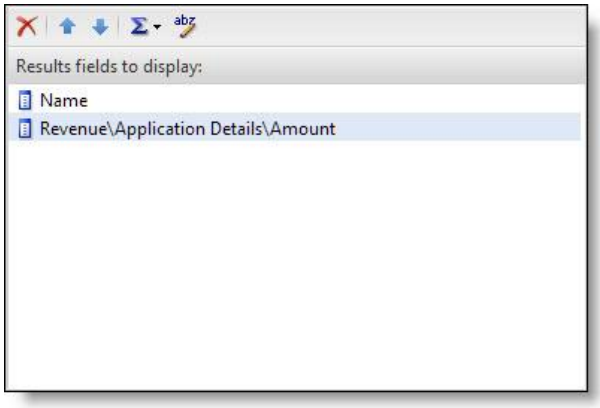


Did you notice the difference? This time we changed the position of the parentheses. So this means the constituent would have to be a board member OR the constituent could be a regular member who has given more than $1,000. The results would show all board members, regardless of how much they have given, and any regular members who have given more than $1,000. That's the power of the parentheses!

I think we've played enough with the filters for now, so let's keep going.

This question provides us with the output fields for our query. Which fields do we want the results to display? For example, if we include phone numbers in the output, do we also want to see if the numbers are marked "Do not call?" The fields we include in the Output Fields section will help us verify that our results match what we're trying to accomplish. That means we want to include enough fields for us to tell if we're really seeing "the names of all constituents who are members and have given a gift this month, listed alphabetically by last name." So at a minimum, we know we want name as an output field.

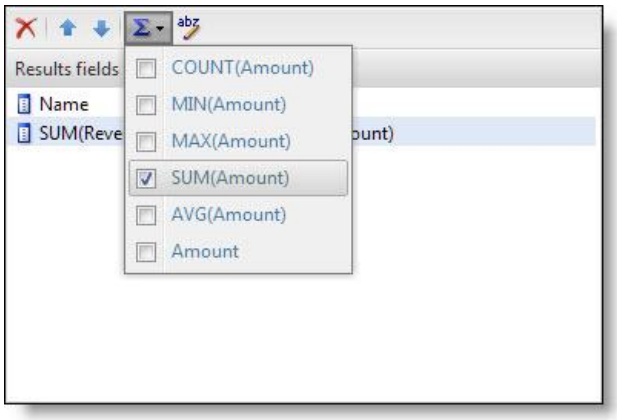
This one is pretty straightforward and, in fact, is the default output field for a constituent query! But what if we wanted to see the amount of the gift too? That means we'll need to add Constituents > Revenue/Application Details: Amount too.



But what happens if we're lucky enough for a member to have given us a couple of gifts this month? That constituent would show up twice in our results—once for each gift. So maybe what we really want to see is the total amount of all the gifts each member has given us this month. For that, we need our good friend, the **Summarize** button. We briefly mentioned the ability to summarize output in the Query Basics section, but let's take a closer look at how this works.

The **Summarize** button can do different things depending on the summarize function we select and the field we use it with. The results of the **Summarize** button are also impacted by the fields in our output.

For our amount field, we can click the Summar**ize** button and use the SUM function to show us a calculation of the field results rather than the actual contents of the field. So what does this really mean? If a member gave us two gifts this month—$50 and $100 (hey, it could happen!)—then we could summarize the amount so the results would include the member only one time, with gift amount combined as $150. Sound interesting? I thought so. So what we need to do is select the amount field in the Output Fields section, click the **Summarize** button, and select SUM (Amount).



It's almost like magic, having the revenue total like that! So let's keep that as part of our statement now.

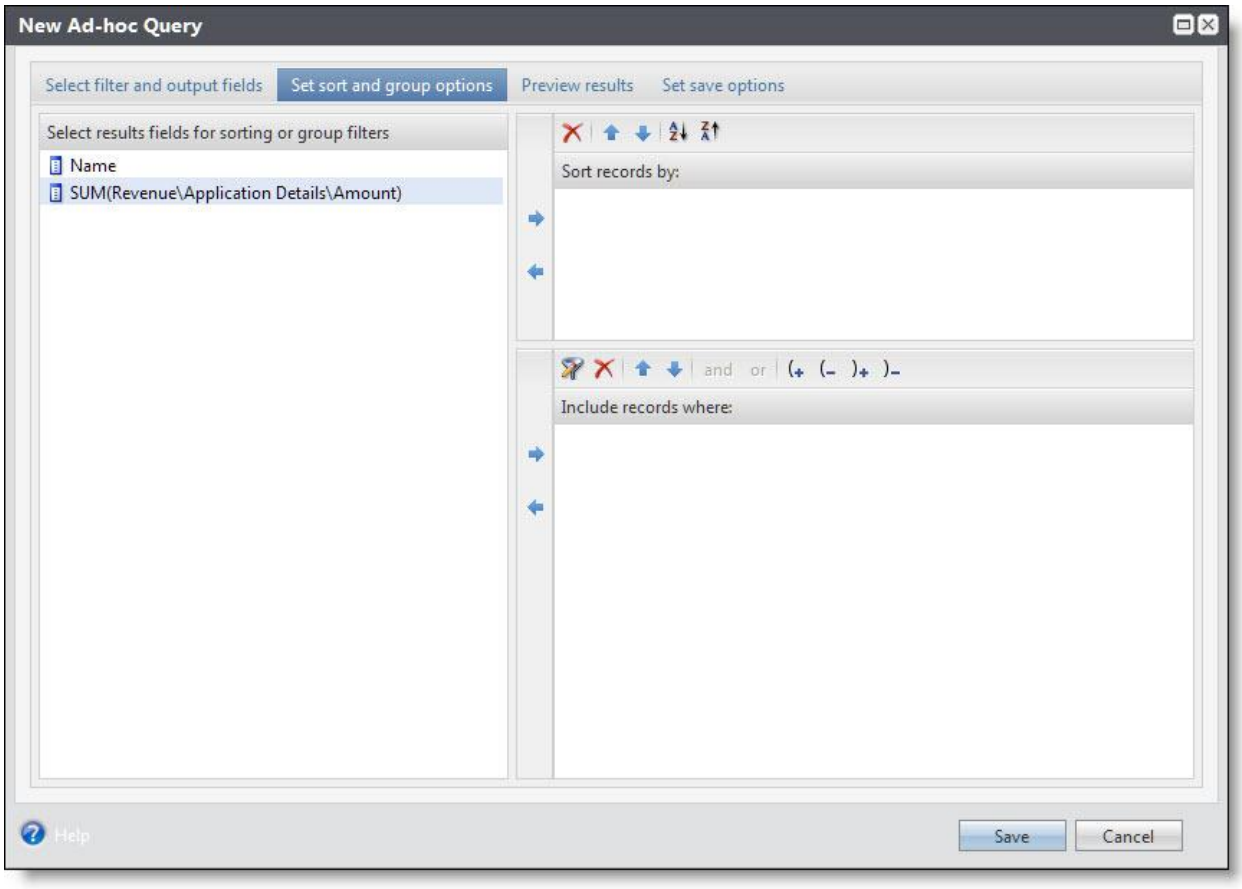
A word of caution: if we summarize the revenue amount for constituents but include a date field in the output, all of a sudden the game changes. Since the gift dates are probably different, the output of the two gifts (including date) is now unique and the revenue won't be summarized. But luckily, we don't need to include date as an output field since we're using the date "this month" in our filters.

The **Summarize** button definitely has a lot of power, so don't be afraid to use it!

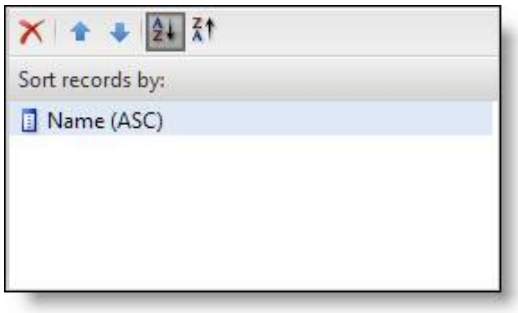
Had enough on output? Let's move on.

How do you want the results displayed? (Sort/Group)

This question provides us with the sort options for our query. Do we want to list constituents in alphabetical order? Do we want to list revenue by amount or by date? Let's look back at our statement: We wanted to see constituents in alphabetical order. So let's jump on over to the Set sort and group options tab and see what we can do!



We can sort our query results only by fields included in our output. If you don't see it under **Results fields to display** on the first tab, you won't see it on the Set sort and group options tab. So, under **Select results fields for sorting or group filters**, we have two choices: Name and SUM(Revenue\Amount). In our statement, we said we wanted to see members, listed alphabetically by last name. Can you figure that out?



That wasn't too bad. We wanted to sort by name in ascending order, which means A to Z. Coincidentally, that's the picture on the little button for the options in the Sort Fields section!

Note: Sometimes, we'll get to the Set sort and group options tab or even the Preview results tab and realize there's something missing, or we have a new idea about how we want to sort our results. So we might have to go back and add more fields to the output. Don't worry—it's not a big deal.

What if, instead of sorting alphabetically by member name, we wanted to sort by the date of the revenue? Guess we'll have to add the Constituents > Revenue: Date field to the output first. After we do that, we can drag the date field into the Sort Fields section instead of the name field. Now our results would be sorted by date, with the

oldest gift (still in this month!) first. But remember, if we include the date field in our output, the SUM (Revenue\Amount) function won't work to give us the totals.

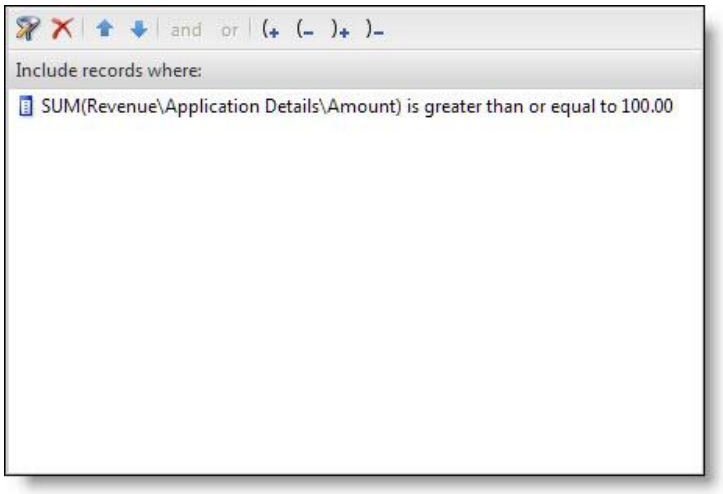
So we need to think carefully about what's more important. But keep in mind that queries are a way to group records. We can save the results of the query to use elsewhere in the program or even export the results to a spreadsheet.

But what about that **Include records where** section? That's not really like the **Sort records by** section, is it?

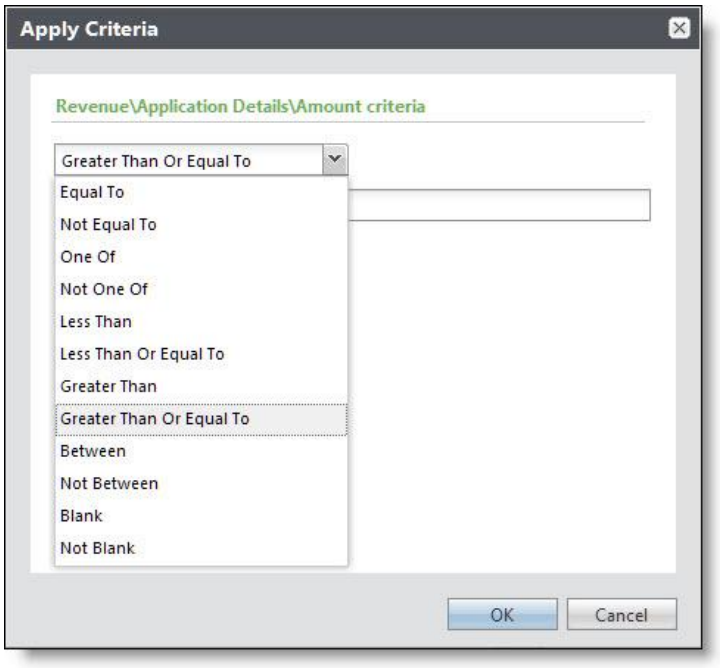
Nope, the **Include records where** section is a little different. This section is a way to extend the use of a summarized output field. Remember how we used the SUM function a few minutes ago for the output fields on the Select filter and oupt fields tab of our query? This gave us the total amount each member gave this month, instead of having each gift on a separate line.

But what happens if we wanted to summarize the giving, but then also extend that summarized information as yet another filter in our query? What if we wanted to see only the members who gave $100 or more this month? Stick with me here!

For that, we need to use the summarized amount field under **Include records where** on the Set sort and group options tab too.



Just like with regular filters, when we drag this field to the **Include records where** section, we get some additional options.



So we can then say that we want the total, summarized amount to be Greater Than Or Equal To $100.

Whew—that got a little crazy there at the end, didn't it? Let's pretend that didn't happen and go back to our nice, easier example. But let's keep that amount field summarized, like we talked about. That was pretty cool.

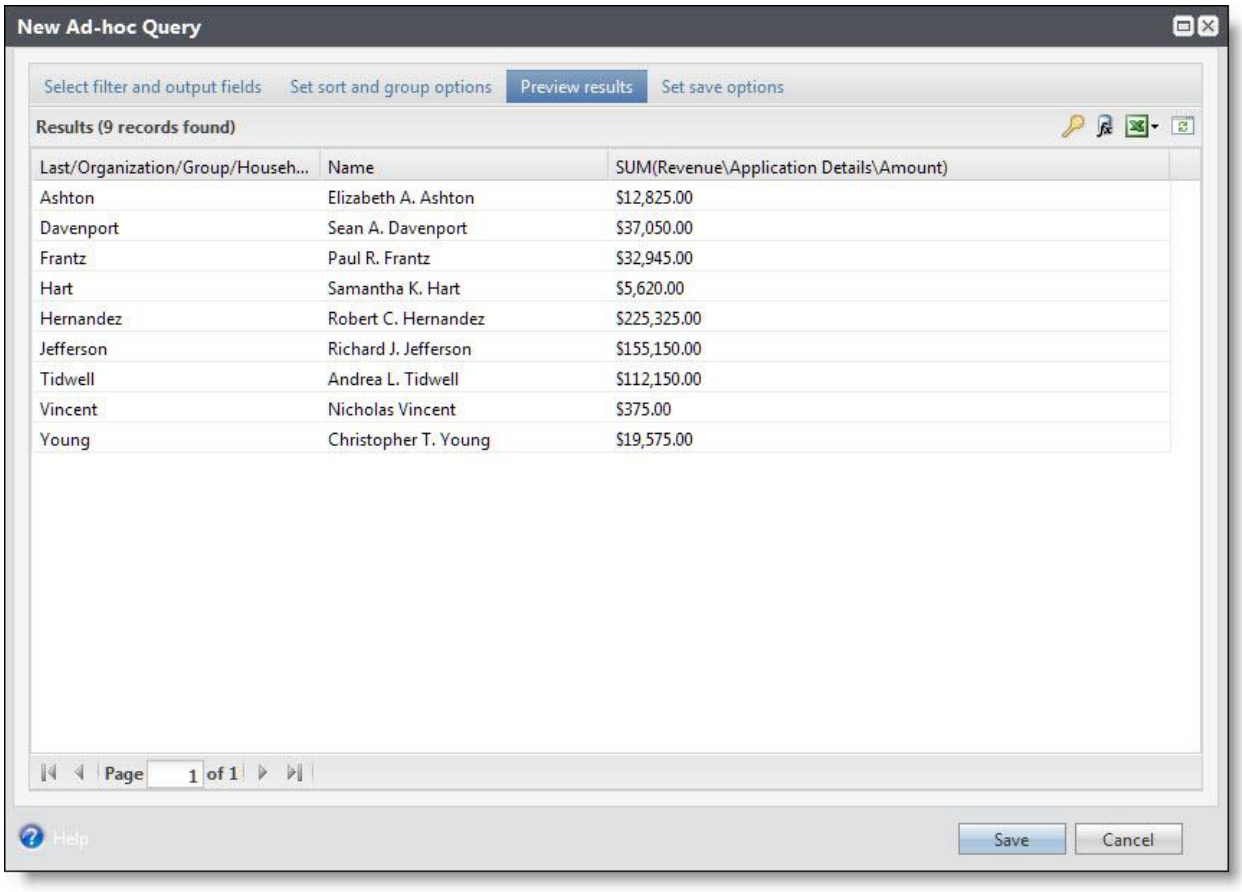
The Results!

Before we check our results, let's review our original statement (plus the one summarize modification we added, because that was just too cool). We want to see the names of all constituents who are members and have given a gift this month, listed alphabetically by last name. Plus we want to see the amount of their gifts this month summarized instead of seeing each gift separately. Sound good?

Now we can go to the Results tab to check to see if things look okay, but . . . wait! The names are sorted alphabetically, but by the whole name, not the last name! So we have Christopher Young before Elizabeth Ashton—not exactly what we were expecting.

Remember how we talked about getting to the end and realizing we need to take a step or two back to add other fields to the output or change the sort order to see exactly what we want? Well, that's where we are. No big deal.

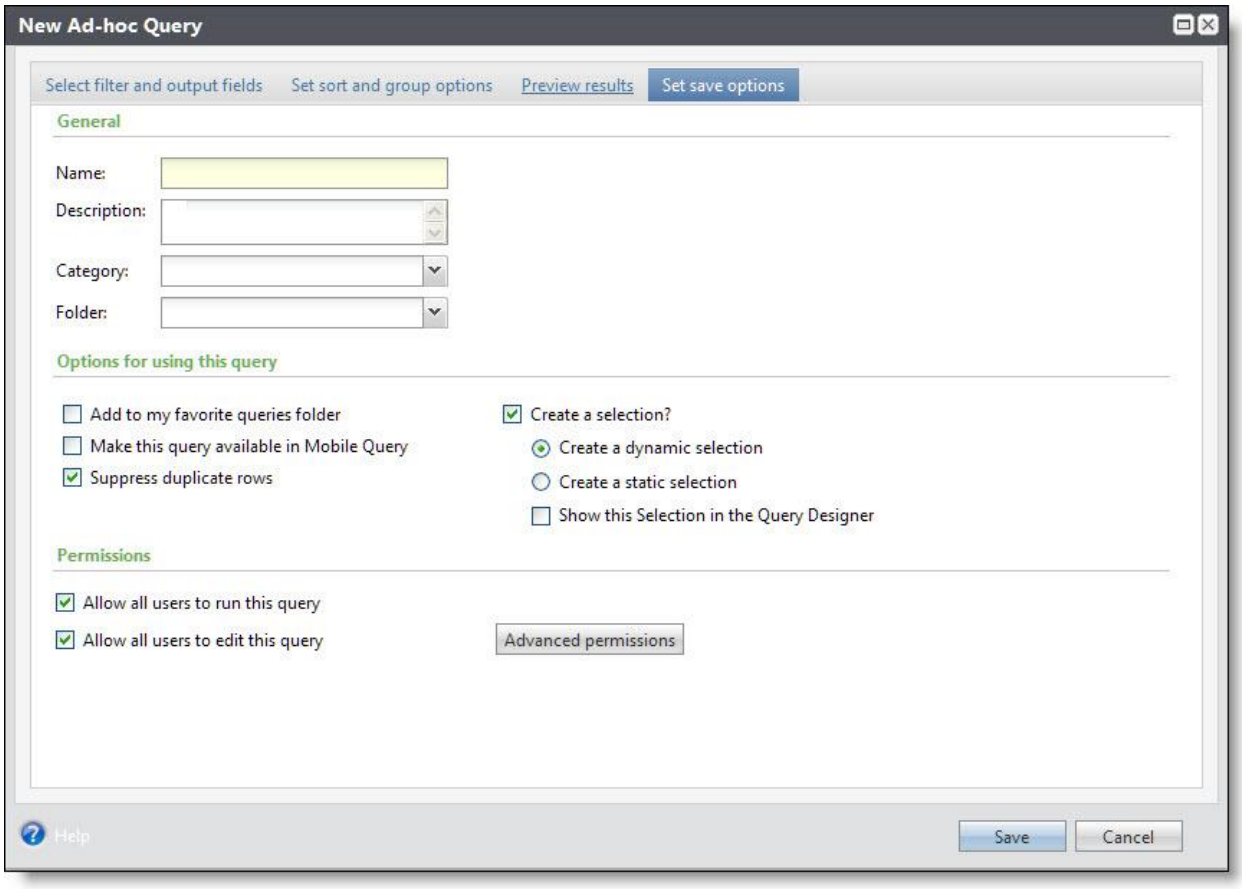
Let's jump back to the Select filter and output fields tab and add the last name to the **Results fields to display** section. We're looking for the Constituent: Last/Organization/Group/Household name field. That's a mouthful, but trust me; that'll get us the last name. Now we also need to go to the Set sort and group options tab to change our sort from the whole name to just the last name. Let's make those changes and take another look at the Preview results tab.



This looks great! It's just what we were expecting, which means we built our query correctly! Now we can let our membership director know about each of these loyal and generous members! If she wants to use query results elsewhere in the program, we can create a selection of the results for her. Because the selection is based on the record ID—of the constituents who are members in our case—a mailing process will have access to all the other information about the constituents, such as addresses. So we wouldn't need to include that information as output in the query. See Create Selections from Queries on page 27 for more information, including special rules for summarized fields!

Note: If we want to use our query results outside of the program, like in a spreadsheet, we can export the results. However, if we do this, we get exactly what shows up on the Preview results tab. If we summarized revenue, we'll have only the total and not each individual gift. If we didn't include a date field, then no date. Check out Export Queries on page 33 for information on how to export our results.

Now that we have the query squared away, let's give it a name and save it so we can find it again in the future. On the Set save options tab, we can name the query and describe its criteria and output. We can also assign it a category or folder to organize it with similar membership queries. Before we save the query, we can also select to create that selection for the membership director and select whether to allow other users to update the query.



Well, we made it through the tour. Bravo—job well done! We learned a lot about queries and filters along the way, so hopefully you're ready to dive in and start putting together your own queries!

"I want to see . . . "

Common Query Fields

With so many fields available in queries, it can be a challenge to find the ones you want. This section provides a quick reference for some of the most commonly used fields in *Query*.

The field name is at the end of each item. This is the actual name of the field on the Select filter and output fields of the query screen. This tab is where you see the field hierarchy that groups similar fields together into expandable nodes. For example, all of the fields associated with constituencies are grouped together under the Constituencies node. When you select Constituencies under **Browse for fields in**, these fields appear under **Select fields**.

Tip: To quickly locate a field, enter its name in the **Find field** field and click **Search up**. Under **Find Results**, all fields that meet the search criteria appear.

Constituent Query Fields

Constituency

Constituents > Constituencies: Constituency

Constituent record type

Constituents: Type

Email address

Constituents > Email Addresses: Email address

Membership level

Constituents > Membership > Membership Level: Name

Recognition level

Constituents > Recognition Programs > [specific recognition program name]: Recognition level

Revenue amount

Constituents > Revenue: Amount

Revenue amount by application/split

Constituents > Revenue > Application Details: Amount

Revenue appeal

Constituents > Revenue > Appeal: Appeal record

Revenue appeal mailing

Constituents > Revenue > Appeal > Appeal Mailing: Name

Revenue application

Constituents > Revenue > Application Details: Application

Revenue application type

Constituents > Revenue > Application Details: Type

Revenue date range

Constituents > Revenue: Date

Revenue designation

Constituents > Revenue > Application Details > Designation: Designation record

Tickets to a specific program

Constituents > Sales Orders > Sales Order Item > Sales Order Item Ticket > Program: Program record

Revenue Query Fields

Appeal

Revenue > Appeal: Appeal Record

Appeal mailing

Revenue > Appeal > Appeal Mailing: Name

Batch number

Revenue: Batch number

Designation

Revenue > Application Details > Designation: Designation Record

Revenue amount

Revenue: Amount

Revenue amount by application/split

Revenue > Application Details: Amount

Revenue date

Revenue: Date

Registrant Query Fields

Attended

Registrants: Attended

Registration paid

Registrants: Balance

Specific event

Registrants > Event: Event record

Common Query Filters

The field name after the colon is the field name found in the Field Viewer of the query screen. The others are the nodes or folder structure where the field is located in Field Explorer. Filters are shown in quotation marks, with filter values in brackets.

Constituent Query Filters

Constituents added to the database within a date range

Constituents > Date added “Between” [specific date range]

Constituents by constituency

Constituents > Constituencies: Constituency “Equal To” [specific constituency]

Constituents by date of revenue (range)

Constituents > Revenue: Date “Between” [specific date range]

Constituents by date of revenue (last month)

Constituents > Revenue: Date “Equal To” [Last month]

Constituents by membership level

Constituents > Membership > Membership Level: Name “Equal To” [specific membership level]

Constituents by revenue amount range

Constituents > Revenue: Amount “Between” [specific range]

Constituents by recognition level

Constituents > Recognition Programs > [specific recognition program name]: Recognition level “Equal To” [specific recognition level]

Constituents of record type

Constituents: Type “Equal To” [Individual/Organization/Group/Household]

Constituents who made a payment/pledge/recurring gift within a specific date range

Constituents > Revenue: Transaction type “Equal To” [Payment/Pledge/Recurring gift] AND Constituents > Revenue: Date “Between” [specific date range]

Constituents without email addresses

Email Addresses: Email address “Blank”

Revenue Query Filters

Revenue by appeal

Revenue > Appeal: Appeal record “Equal To” [specific appeal]

Revenue by appeal mailing

Revenue > Appeal > Appeal mailing: Name “Equal To” [specific appeal mailing]

Revenue by date range

Revenue: Date “Between” [specific date range]

Revenue by designation

Revenue > Application Details > Designation: Designation record “Equal To” [specific designation]

Revenue by specific batch number

Revenue: Batch number “Equal To” [specific batch number]

Revenue over a specific amount

Revenue: Amount “Greater Than” [specific amount]

Registrant Query Filters

Registrants for an event

Registrants > Event: Event record “Equal To” [specific event]

Registrants who did/did not attend an event

Registrants > Event: Event record “Equal To” [specific event] AND Registrants: Attended “Equal To” [Yes/No]

Registrants who did not pay for an event

Registrants > Event: Event record “Equal To” [specific event] AND Registrants: Balance “Greater Than” [0]

Registrants who paid for an event

Registrants > Event: Event record “Equal To” [specific event] AND Registrants: Balance “Equal To” [0]

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