

# Using Filters and Groups in GoldMine®

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**Updated By:** Karen Walldorf  
**Department:** Technical Support  
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# Using Filters and Groups in GoldMine®

## Introduction

GoldMine's filters and groups allow users to define criteria for searching based on selected field information. Applying a filter or group then temporarily "shrinks" the database, making it appear to contain only those contact records which match the *active* filter or group's criteria. When a filter or group is active, users scrolling through the database with either a Mouse or the Page Up/Page Down keys will only see those contact records that meet the filter or group's criteria; all other contact records are skipped and "filtered" from view.

GoldMine's filters and groups allow users to gain greater access to their databases. Filters and groups provide users with a way to work with more manageably sized or project-specific subsets of contact data. For example, filters and groups allow you to print reports containing only those contacts located in California or to globally replace/update a particular field for multiple contacts, such as when a new territory account manager is hired. Users can create filters and groups that compare multiple criteria. For instance, a single filter or group could evaluate records to determine which ones were created by a particular user, start with a 212 area code and have been contacted. The user can insert an "unlimited" number of expressions, however please note that there is a display limit of 254 characters, which includes spaces and quotation marks.

## Fundamental Differences between Filters and Groups

GoldMine's filters work dynamically. This means that each time a filter is activated, it searches the entire database to select the records matching the filter criteria. GoldMine's groups however, are static and not dynamic. Once they have been created, they do not search the database again for matching records upon activation. This means that after a group has been built, members are not assigned again until the group is rebuilt. Groups have the advantage of being indexed and work much quicker than filters, but will not update automatically when changes are made or records are added to the database. Groups also support a wider variety of methods to select from when selecting your search criteria. Filters have the advantage of being more accurate and up-to-date, but they work much slower and offer fewer options than groups.

## Filter Concepts

The key to creating an effective filter is a solid understanding of how filters work. Filters are based on *Boolean* expressions, which are logical statements that must be true or false. Take the following, sample expression:

**"The traffic light is red"**

This expression can be evaluated to only have two possible outcomes. It can either be red, or not red. If the traffic light is red, the expression is evaluated to be true. If the traffic light is not red (say, green), the expression is evaluated as false. When a filter is activated, i.e. applied to a database, every contact record is evaluated against the filter expression. If the record holds true

for the filter it is included in the filtered subset. If the record does not hold true, it is not considered part of the filtered subset and is hidden or “filtered” from view. Remember, expressions are basic; they are either TRUE or FALSE.

Now, let’s consider a more relevant GoldMine expression:

### “State is equal to "CA"”

When GoldMine evaluates this expression, it replaces “**State**” in the above expression with the data stored in the **State** field on each contact’s record. GoldMine then determines if the expression holds TRUE or FALSE. If the first three records encountered by the filter contained the following **State** data: *CA*, *CO*, and *NV*, GoldMine would determine the following:

Contact Name	Expression	Result
John Smith	"CA" is equal to "CA"	TRUE
Nancy Wilson	"CO" is equal to "CA"	FALSE
Robert Klein	"NV" is equal to "CA"	FALSE

Only one record of the three, John Smith, would be selected for the resulting subset.

All expressions consist of two parts: *operators* and *operands*. To understand, let’s revisit our earlier example:

### “The traffic light is red”

In this simple expression, the word “is” acts as the operator and the words “traffic light” and “red” act as operands. For the expression “**State is equal to "CA"”**, ‘is equal to’ is the operator and ‘State’ and ‘CA’ are the operands.

Operators determine the mode of comparison that determines whether or a statement is TRUE or FALSE in a particular instance. Operands act as the data to be compared and evaluated. For a filter to be created, at least three types of data must be selected: a GoldMine field (operand 1), an Operator, and a Value (operand 2).

## AND & OR

As previously noted, filters may be made up of multiple expressions in order to search for contacts that fit more than one specific criteria. To find all contacts in the 310 area code, which also have 90260 zip codes, the filter expression would look similar to the following:

### “Phone1 begins with "(310)" AND Zip is equal to "90260"”

The “AND” tells GoldMine that both expressions must be evaluated as TRUE for the record to be included in the filter’s subset. Note that “AND” is limiting, meaning that the expression takes a subset of the entire contact set and limits the group further. In the example above, our first expression limits the entire contact set down to only the contacts whose phone numbers begin

with (310). The second expression further reduces the number of contacts that match the criteria to only those who also have the zip code '90260'.

To find any contacts in the 310 area code, **or** any contacts that have a 90260 zip code, the filter expression would look similar to the following:

**“Phone1 begins with "(310)" OR Zip is equal to "90260"”**

The “OR” tells GoldMine that at least one of the expressions must be evaluated as TRUE for the record to be included in the filter’s subset. Unlike ‘AND’, ‘OR’ broadens the criteria necessary for a contact record to be included in the filtered subset.

Using “AND” and “OR” is very helpful in creating filters, but a filter that includes multiple expressions can be somewhat confusing. When a filter contains two or more expressions and “AND” is used, *all* of the expressions must be evaluated as TRUE for a record to fit the filter’s criteria. With “OR”, any one of the expressions-- and only one -- must be evaluated as TRUE for a record to be included in the filtered data subset.

<b>Expression1</b>	<b>AND/OR</b>	<b>Expression2</b>		<b>Filter Result</b>
TRUE	AND	TRUE	=	TRUE
TRUE	AND	FALSE	=	FALSE
FALSE	AND	FALSE	=	FALSE
TRUE	OR	TRUE	=	TRUE
TRUE	OR	FALSE	=	TRUE
FALSE	OR	FALSE	=	FALSE

Let’s return to the example contact data that we used earlier with some additional data available.

<b>Contact Name</b>	<b>Phone1</b>	<b>Zip</b>
John Smith	(310) 444-5555	90260
Nancy Wilson	(303) 222-3333	90260
Robert Klein	(310) 111-7777	31240

So, in evaluating the expression, **“Phone1 begins with "(310)" AND Zip is equal to "90260"”**, for the data given above, the only contact record that would be included in the filter would be ‘John Smith’.

If we evaluate the expression, **“Phone1 begins with "(310)" OR Zip is equal to "90260"”**, all three contacts would be included in the filter because they each meet one of the two possible criteria. More specifically John Smith proves TRUE for both expressions, Nancy Wilson proves TRUE for the expression ‘Zip is equal to 90260’ even if her phone number does not begin with (310), and finally, Robert Klein proves TRUE for the expression ‘Phone1 begins with (310)’ even if his zip code, 31240, is not equal to ‘90260’.

## Complex AND/OR Expressions

AND/OR expressions can become quite complex and will require the user to be aware of how the computer will evaluate the expression logically to produce the filtered results.

If a filter is used to select all contacts living in Texas, AND that have the last name of Perot, OR all contacts living in Arkansas, AND that have the last name of Clinton, an expression similar to the following might be entered into GoldMine, and logically INCORRECT:

**“State is equal to "TX" AND Last Name is equal to "Perot" OR State is equal to "AR" AND LastName is equal to "Clinton"”**

To see why, let’s examine how GoldMine evaluates this expression for a given contact record:

	<b>State is equal to "TX"</b>	must be TRUE to be selected
<i>And</i>		
	<b>Last Name is equal to "Perot"</b>	must be TRUE to be selected
<i>Or</i>		
	<b>State is equal to "AR"</b>	must be TRUE or FALSE to be selected
<i>And</i>		
	<b>LastName is equal to "Clinton"</b>	must be TRUE to be selected

Observe that there are 4 expressions to this filter. GoldMine reads expressions from left to right, evaluating each criteria as it goes along. Based on this, for a given record to match the filter’s multiple criteria, 3 of the expressions evaluated as TRUE. For the example above, this expression becomes invalid because the **Last Name** field value for any one contact cannot be both "Perot" and "Clinton", therefore...

**“Last Name is equal to “Perot””** must be TRUE to be selected  
**AND**  
**“Last Name is equal to “Clinton””** must be TRUE to be selected

...will not match a single contact record, and the filter will be returned empty.

## Using ( ) for Complex Expressions

However, by using “parentheses” to separate the expression pairs, GoldMine is able to evaluate the expression in two parts instead of four. Following is the edited expression using parentheses in order to clarify the CORRECT logic and return the correct filtered results.

**“(State is equal to "TX" and Last Name is equal to "Perot") or (State is equal to "AR" and LastName is equal to "Clinton")”**

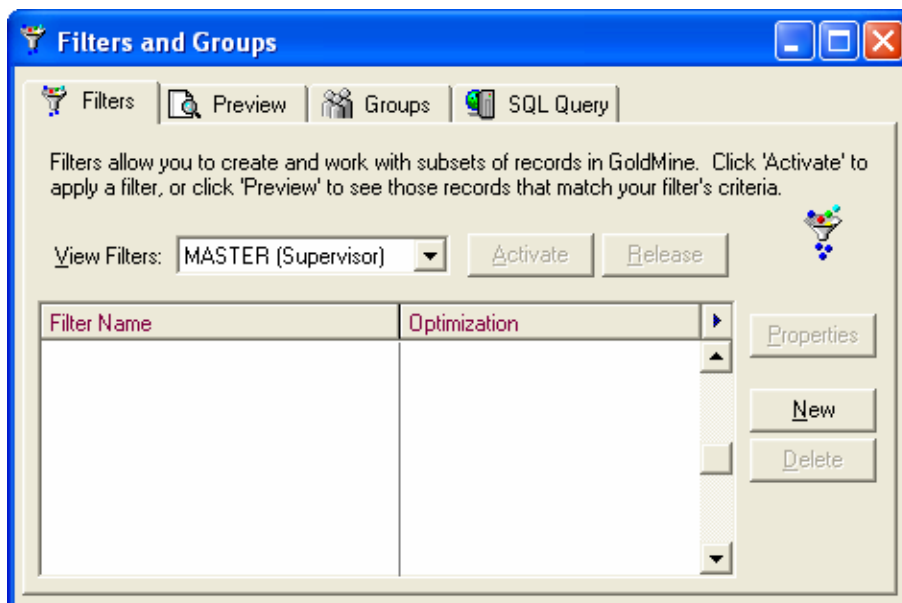
To see why, let’s examine how GoldMine evaluates this expression for a given contact record:

	(State is equal to "TX" AND Last Name is equal to "Perot")
<b>OR</b>	
	(State is equal to "AR" AND Last Name is equal to "Clinton")

GoldMine now uses and a user-defined *order of precedence* to logically compare records based on this two-part expression. If either expression is evaluated as TRUE, then GoldMine will select the record.

## Creating a Filter

To build a filter, select **Lookup>> Filters** from the Main Menu bar to bring up the following **Filters** dialog box:



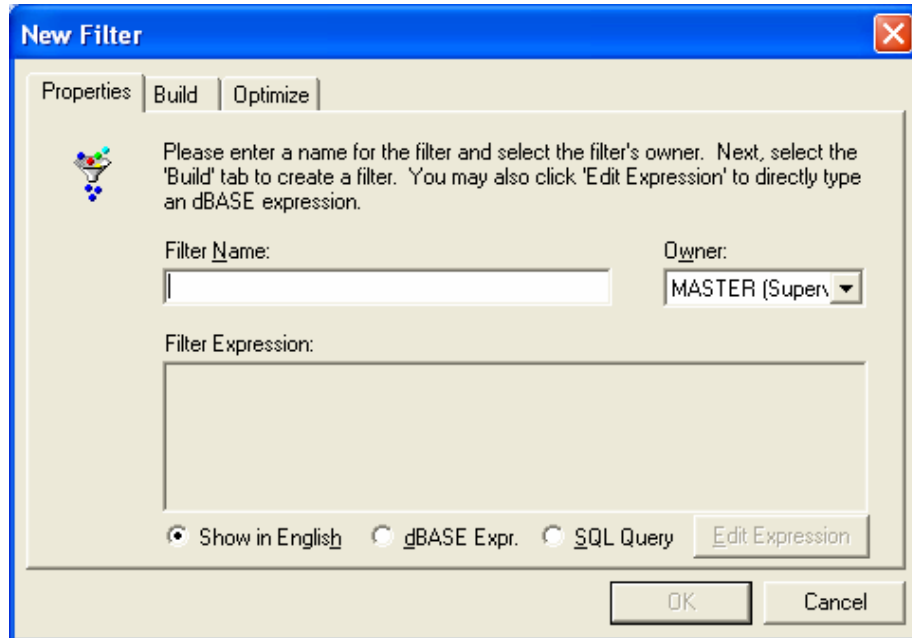
The following options are available from the **Filters** dialog box:

<b>New</b>	Create a new filter
<b>Properties</b>	Make changes to a pre-defined filter
<b>Delete</b>	Delete a filter
<b>Activate</b>	Activate the highlighted filter
<b>Release</b>	De-activate the filter, displaying all contact records. <i>*Unless a filter is active, this option is dimmed*</i>
<b>View Filters</b>	Show filters belonging to the specified username

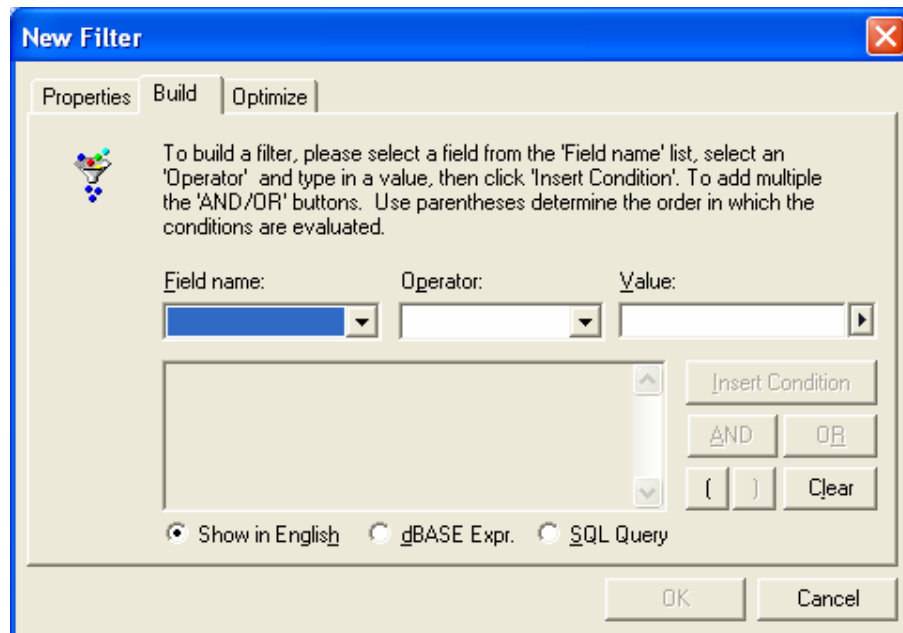
For this example, we will build a simple filter to search for records with the **Source** field equal to “Referral” and an area code equal to “(503)” or “(602)”. Note, to clarify the expression we will use parentheses to create a user-defined order of precedence.

To work through the example, use the contact file “DEMO” which is installed automatically with your GoldMine. Select **File>>Open File**, highlight the “DEMO” contact file and click on **OPEN**.

1. Select **Lookup>>Filters** and then click on **NEW** to bring up the **New Filter** dialog box.
2. Type in a descriptive name for the filter in the field.

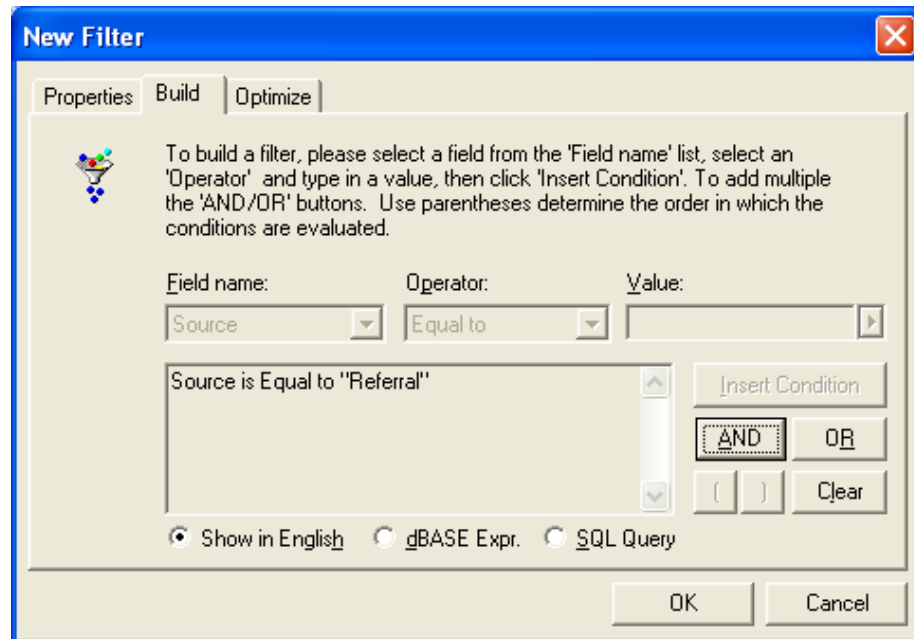


2. Next click on the **BUILD** tab to bring up the Expression Builder dialog box:



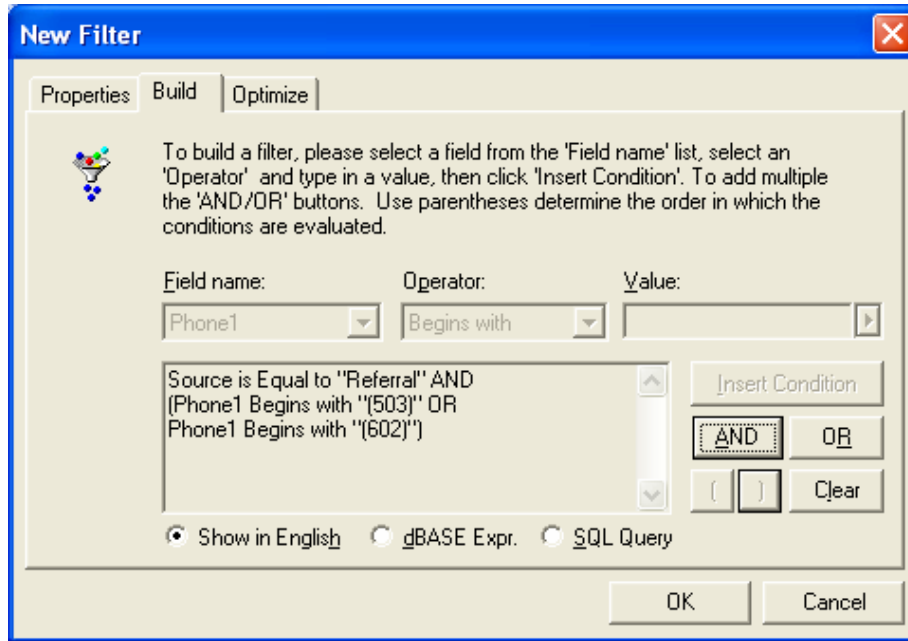
3. Select **Source** from the **Field name** pull down list.
4. Choose **Equal to** from the **Operator** pull down list.

5. Type **Referral** in the **Value** field.
6. Click on the **Insert Condition** button to accept the first expression in the filter.



7. Click on the **AND** button.
8. The next part of the expression may be entered now and we will isolate this statement by using parentheses ( ).
9. Click the Open parentheses **(** button.
10. Select **Phone1** from the **Field Name** pull down list.
11. Choose **Begins With** from the **Operator** pull down list.
12. Type **(503)** in the **Value** field.
13. Click on the **Insert Condition** button once again.
14. Click on the **OR** button (because we want to include contacts that have either area code)
15. Select **Phone1** from the **Field Name** pull down list
16. Choose **Begins With** from the **Operator** pull down list.
17. Type **(602)** in the **Value** field.
18. Click on the **Insert Condition** button once again.
19. Select the Closed parentheses **)** button to end the expression.
20. The final expression should look similar to the screenshot on the next page.

Verify that the filter profile is correct by reading it using the Show in English selection, then click OK.



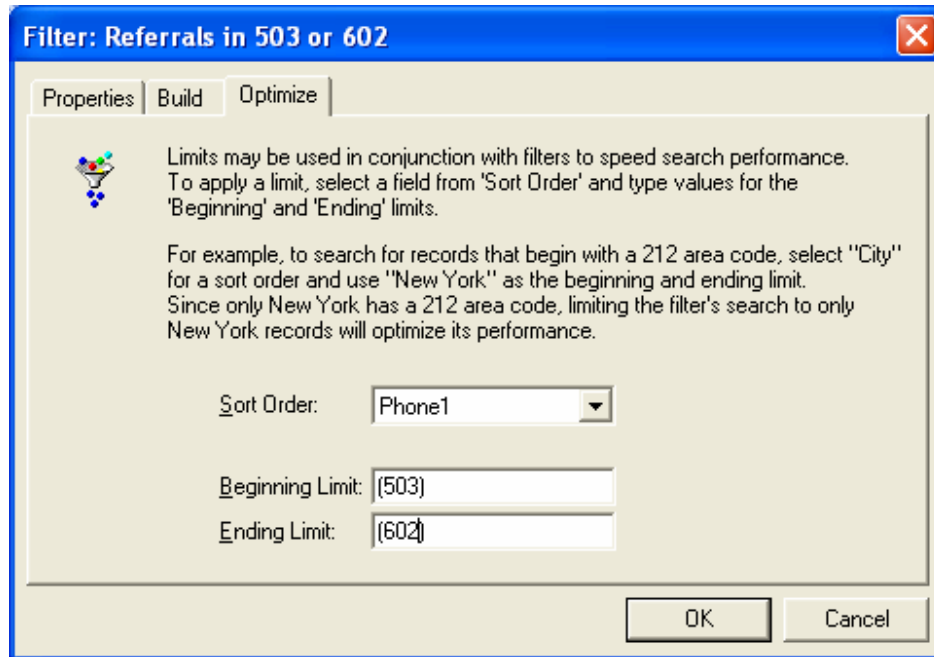
If you wish to use sort options, select the **Optimize** tab. Observe the **Sort Order**, **Top Limit** and **Bottom Limit** windows. Limits restrict the number of records in the database that a filter will have to evaluate, therefore significantly improving performance. Let's examine how this works:

GoldMine uses Sorts and Limits to logically group relevant records in the database together. Since we are testing for records with area codes that begin with “(503)” or “(602)” it makes sense to not even evaluate records with “310” or “917” area codes. Therefore we can limit our search to area codes that are between ‘503’ and ‘602’, using the field **Phone1**, an indexed field in GoldMine’s database and therefore one of the available **Sort Order** fields.

Remember, for our example the filter requires a record to begin with either “(503)” *or* “(602)” *and* to have “Referral” as the Source, so even if the Source is “Referral,” the contact will only be included in the filter if the area code meets the specified criteria. Applying a **Top Limit** of “602” and a **Bottom Limit** of “503” will force the filter to exclude from evaluation any records whose **Phone1** field values are alphanumerically “lower” than “503.” or “higher” than “602”. Please note the example below. Only those records marked with a \* would be evaluated. The “917” phone number will not be evaluated, since “917” is greater than “602”.

Order of Database Records Sorted by Phone1:	
(310)992-7000	
(503)999-9872	*
(573)333-2222	*
(602)555-1111	*
(808)567-4448	
(917)888-7777	

1. In our example, choose **Phone1** for the **Sort Order**.
2. Type **(503)** for the **Beginning Limit**.
3. Type **(602)** for the **Ending Limit**. (see screen shot below)
4. Click **OK** to return to the **Filters and Groups** menu.



## Working with Filters

Now that the filter has been added to the **Filters** dialog box browse window you may use it to search for the desired records.

1. Highlight the new filter and right click the mouse, select **Count** to see how many records match. If no records are found, and you are sure records exist that match the filter condition, double check your filter expression for validity.
2. You can also check that your filter is being built correctly by highlighting the new filter name in the **Filters** tab, clicking on the **Preview** tab and clicking on **Search All**. The display window should then populate with the contact names that meet the filter criteria.
3. Choose **Filters** tab, then **Activate** to apply the filter to the database. The Record Object's title bar will now have that filter's name in it.
4. Press Page Up or Page Down to scroll through the filtered records.

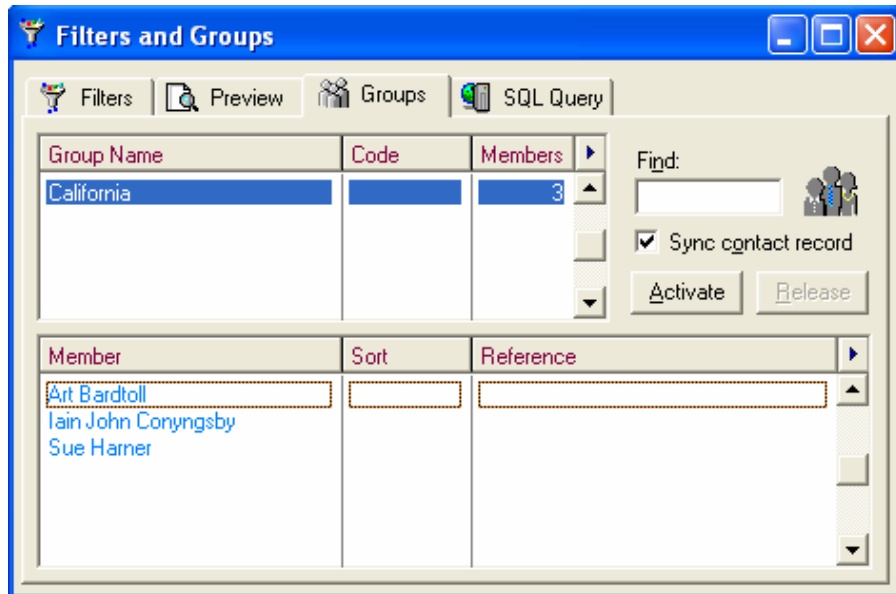
You could now perform a mail merge, a global replace, page between records, etc. and GoldMine would perform this action for the filtered records only.

**Note:** The Find Object, and Activity Object will continue to show all contact records.

## Creating a Group

Keep in mind that groups may be built from a filter. It is recommended that you build and test your filter before using it to create a group. Experience working with filters can simplify the group building process.

1. To build a group, select **View >> Contact Groups** from the Main Menu bar to bring up the **Filters and Groups** dialog box:



2. **Right-click** under the Group Name area to bring up the local pop-up menu. The following options are available. Note that if you right click on a group, all the options are available; clicking elsewhere will limit the available choices.

<b>Activate Group</b>	Activate the highlighted group
<b>Release Group</b>	De-activate the groups, displaying all database records. Unless a group is active, this option is dimmed
<b>Add New Member(s)...</b>	Build (rebuild) an existing group
<b>Select User</b>	Show groups belonging to other users of the system
<b>Find...</b>	Search the list for a specific name or set of characters
<b>Output to...</b>	Allows you to output the list information to the printer, word, excel or the clip board
<b>New...</b>	Create a new group
<b>Clone...</b>	Create an identical group from an already existing one
<b>Delete...</b>	Delete a group
<b>Edit...</b>	Make changes to a pre-defined group

For this example, we will build a group based on a filter, which you have already created above.

1. Select **View >>Contact Groups** and then right click, select **New...** to bring up the **Group Profile** dialog box:
2. At the **Group Name** window, type in a descriptive name for the group.
3. Select the checkbox labeled **Build the group**, then select **OK**. If you do not select this checkbox, no group will be built at this time.
4. This will bring you to the **Group Building Wizard**:



5. From the **Group Building Wizard** you may select any of the options shown in the screen shot above. Some options will appear grayed out depending upon status of tagged records, previewed records, etc.

<b>Filtered records</b>	Builds group using a pre-defined filter or allows manual entry of dBase/xBase expression.
<b>Previewed records</b>	Builds group on records previewed from <b>Preview</b> tab in <b>Filters/Groups</b> menu
<b>SQL Query records</b>	Builds group using the results of an SQL Query. This option will become available when an SQL Query is run.
<b>Tagged records</b>	Builds group based on records tagged (i.e. highlighted or selected from the contact search center)
<b>Search result</b>	Builds group based on search results obtained by selecting <b>Query&gt;&gt;Search</b>
<b>Scheduled calendar activities</b>	Builds group based on pending (uncompleted) calendar activities
<b>Completed history activities</b>	Builds group based on completed history activities
<b>Supplemental contact data</b>	Builds group based on Profiles, Other Contacts, Linked Documents, and Referrals

6. For this example, we will select the **Filtered records** option and select **Next**.
7. Now you are prompted for the filter you wish to use to build the group. Pull down and select the filter you desire. You may also select filters belonging to other users, as well as specify the **Build on expression** option if you wish to manually enter a dBase expression. The **Build Filter** button is available if you would like to build a brand new filter from here. (As outlined in the **Filters** section of this document.) Select **Next** to advance to the next screen.
8. Here you may specify a **Sort field** and a **Reference** field expression. These options are also available in most other types of groups you may build. GoldMine uses the **Sort field** to logically group relevant records in the database together. These search restrictions “limit” the actual number of records tested for a match, significantly improving performance. By specifying a **Reference** field expression, you can select what is displayed in the Reference field of the group listing when the group members are displayed. Putting a value in these fields is not necessary, however. Select **Next** when you are ready to continue.
9. Select **Finish** to build the group.

## Working with Groups

Now that the group has been added to the **Groups** dialog box browse window you may use it to search for the desired records.

1. Highlight a member and right click the mouse, here you may select **Sort** options, **Sync Record**, **View** options, **New member**, **Delete member**, and **Properties** options.

<b>Sort Members...</b>	Allows selection of sort criteria for member list
<b>Sync Contact</b>	Synchronizes record window with group member currently highlighted
<b>View</b>	Allows viewing by contact, company, or both
<b>Find</b>	Search the list for a specific name or set of characters
<b>Output to</b>	Allows you to output the list information to the printer, word, excel or the clip board
<b>New...</b>	Allows adding of a new member (current record displayed on screen)
<b>Delete...</b>	Allows deletion of highlighted group member
<b>Edit...</b>	Allows editing properties of group member

2. Select the **Activate** button, the filters/groups menu will now minimize to the lower left of your screen.
3. Press Page Up or Page Down to scroll through the specified group of records.

You could now perform a mail merge, a global replace, page between records, etc. and GoldMine would perform this action for the grouped records only.

**Note:** Find (Contact Search Center), Activity List and Calendar will continue to show all contact records.