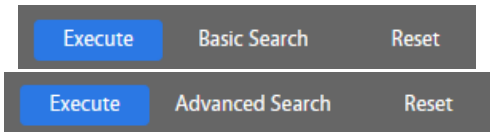
Queries

Queries are how you can find a record you need to update or review. Queries can also be used to see how many records has a similar attribute. (Show me all Work Order for a specific building. Show me all Purchase Orders to a specific vendor.) The power of the query screen can only be understood by working with it. This guide will show you to basics, but to truly understand the power of queries you need to work with them.

Note: This guide will use the Work Order query screen for examples, but the principles are the same on all query screens.

1. A query screen has three buttons:



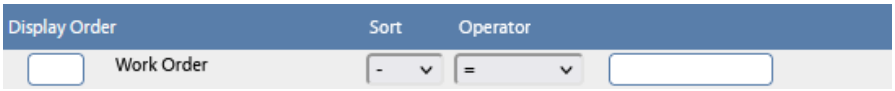
   a. Execute – Runs the query

   b. Basic Search/Advanced Search – This is a toggle. The button will show which option you will go to by clicking it. NOT which option you are on.

   c. Reset – Resets the entire query screen. This is useful when your search results appear to be wrong. You can click Reset and start over knowing all fields have been reset to their default settings.

> *Note: Basic vs. Advanced Search – Basic search gives the user a limited number of options for searching, but this is often sufficient for most users. Advanced Search gives the user access to more query options to do more complex queries. By default, all users start with Basic Search as the default option. Your System Administrator can change your default for you.*

2. Query elements

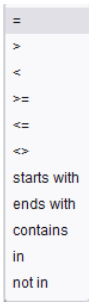


   a. Each data element on the search screen has four boxes associated with is:

      i. Display Order – By default each query will display a set of predetermined fields. These can be overridden by placing numbers in this box. Once a number is placed, only the elements with numbers will be displayed. The order they are displayed in is determined by the numbers in the boxes. When using this feature is it best to start with numbers like 10, 20, 30, etc. to allow other elements to be added in between without having to renumber other fields. Consecutive numbers are not required.

      ii. Sort – Has three options, blank (a dash) for not sorted, Asc for ascending and Des for descending.

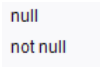
      iii. Operator – There is a standard list of operators that most elements use:



The logical operators (=, >, <, >=, <=, <>) work as expected. "Starts with" and "Ends with" work by looking for the value at the beginning or end of the data element. "Contains" just looks for the value anywhere in the data element. "In" and "not in" let you build a list of values and then the query will include records where the data element is either in (or not in) the list.

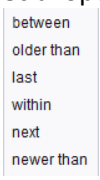
Note: Queries do not work like Google, Yahoo, and other search engines where you can use multiple words and get results match one or more of the words you typed in.

Other Operators:



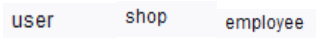
With some data elements you can look to see if the element is empty ("null") or has something, anything, in it ("not null").

Date elements also have special operators:



These operators only work with dates and allow the query to use the characteristics of dates to pull records in a more focused manner.

Special operators:

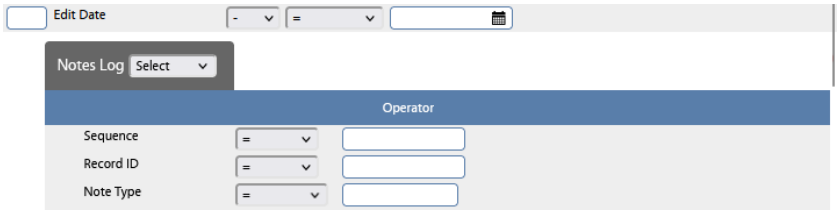


There are three special operators – user, shop and employee. These are the same as using the equals sign (=) and either the persons User Security Role ID (user), the Shop listed on their User Security record (shop) or their Employee Profile ID (employee). Most often these operators will be used with new WorkDesk queries to make them easier to share across the units.

Note: The Cost Analysis has some operators that are specific to it that are not covered here.

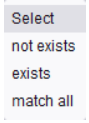
iv. Value (unlabeled) – This is the value used by the operator to determine if a record will be included in the query results or not.

3. A query screen might have multiple tables involved. The primary table is listed first. After that each additional table will have its own heading bar.



If the header is indented, the table is subordinate to the table above it. An example on the Work Order query screen is that there are two "Notes Log" headers. One is subordinate to the Work Order and the other is subordinate to the Phase.

a. Each header (other than the first one) has a drop down:



b. The default value is Select. With Select any criteria selected from this section acts just like the criteria in the first section. The other three selections have the following behaviors:

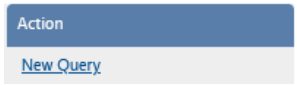
1. Not exists – The only records returned will be those where there is not record from this subordinate table. For example, when searching for Work Orders and you select "not exists" for the Notes Log you will get Works Order without any notes.
2. Exists – This is the opposite of "not exists". So, for the example above the search will return any Work Order that has a Notes Log record.
3. Match all – With "match all" select, only records where all the records on this subordinate table are selected will be returned. An example of this would be for a Work Order query where the Phase is set to "match all" and a Shop is selected. The only Work Orders returned will be ones where ALL the Phases have that specific shop.

c. Some subordinate tables cannot be displayed in the query results. These tables will be missing the Display Order and Sort boxes. If these boxes are present, then the data from these tables can be displayed as part of the query results.

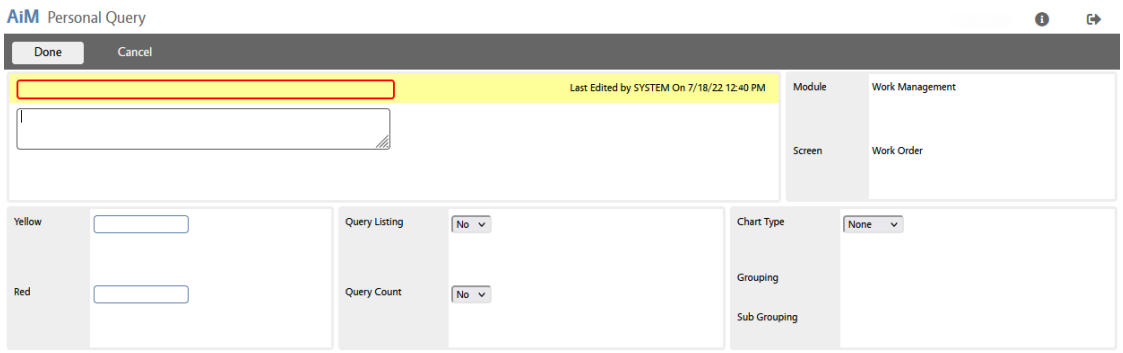
Note: Subordinate tables will either have the Display Order and Sort options, or the selection dropdown discussed above, it will not have both.

4. Queries can be built and saved for future use. Queries you have already created can also be edited and either replace the original query or saved as a completely new query. All your queries can be accessed through the Query menu. (See **OV Navigation**.)

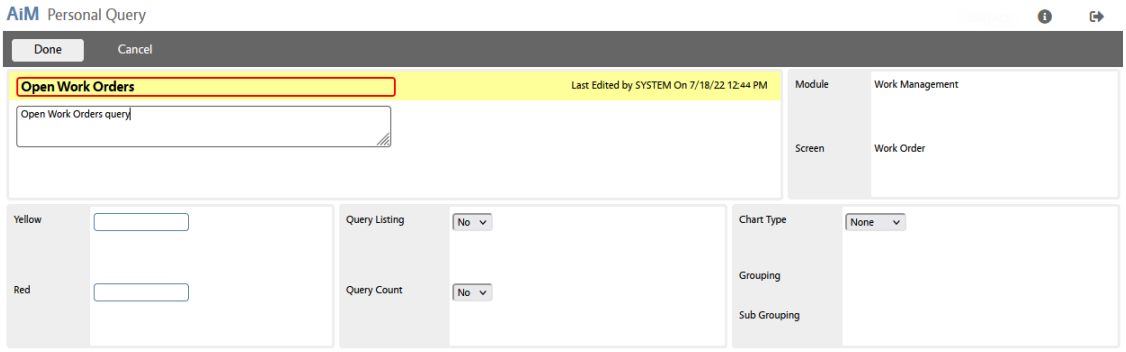
a. To create a new query, build the query and run it to make sure you are getting the results you want. Once the query is working as you want it to click New Query in the Action menu.



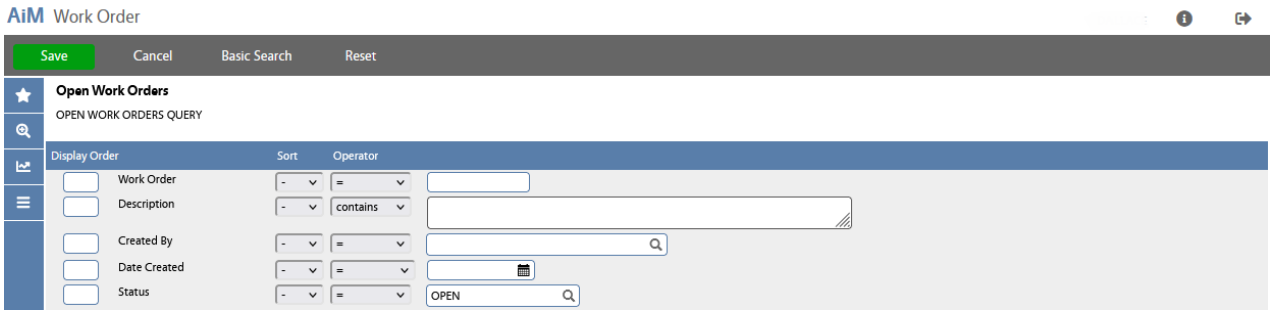
b. This will bring you to the Personal Query screen.



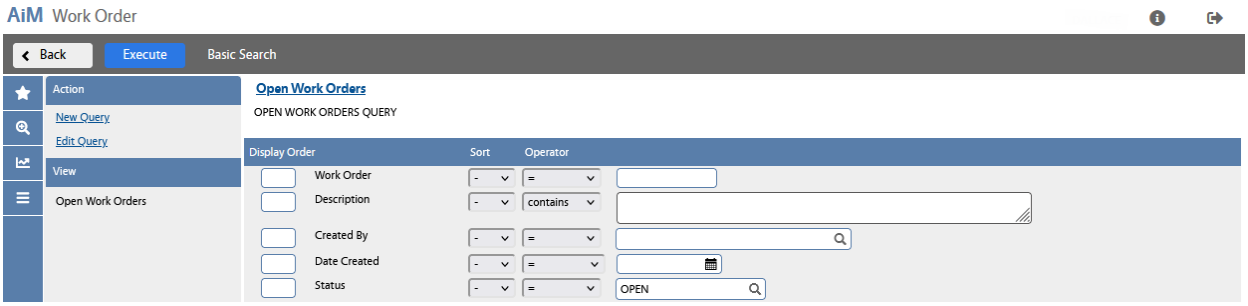
c. You must give the query a unique name in the red outlined box. You can add a description if it would be helpful. The other options are used when the query will part of a WorkDesk and beyond the scope of this guide.



d. Click Done



e. Click Save



f. To edit a screen, you can click the Edit Query hyperlink, make changes to the query and then click Save

g. To create a new query from an existing one, bring the query up and modify it. (The Edit Query option will go away.) When complete, click the New Query hyperlink.