



DLCPM Enterprise 2018

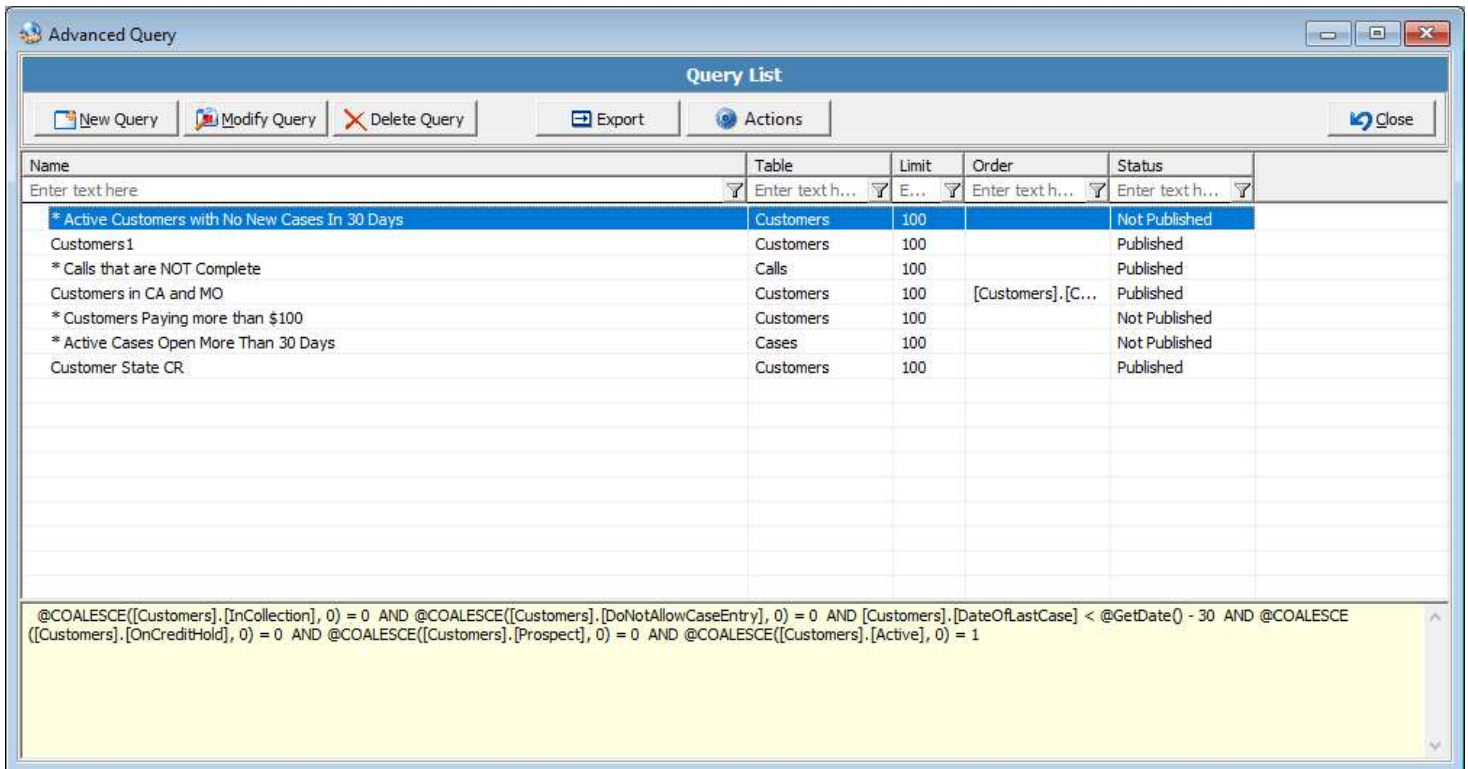
# Advanced Query Builder & Export User Guide

# Contents

What is Advanced Query?.....	1
Query fields Overview.....	3
Advanced Query Builder .....	5
Creating a query.....	5
Query Preview & Publish .....	9
Query Security.....	11
What is Advanced Export?.....	12
Creating an Export Template .....	12
Query Examples .....	15
Example #1: Find Customers whose current balance is over \$1000.00 .....	15
Example #2: Find cases that have not been invoiced .....	16
Example #3: Find cases that have not been invoiced, that have a specified task. ....	17

## What is Advanced Query?

DLCPM has always provided a large number of built-in filter queries for Customers and Cases. As the laboratory industry evolves, laboratories may need more advanced queries for data mining and export purposes. Laboratories also may need to have the ability to create queries for all data available to analyze in the system. DLCPM now offers the option Advanced Query Builder with a 'User friendly' interface to allow users to create custom queries. This feature provides the flexibility to provide a large number of data sources such as Calls, Catalogs, Campaigns, Sales, and a number of other available data.



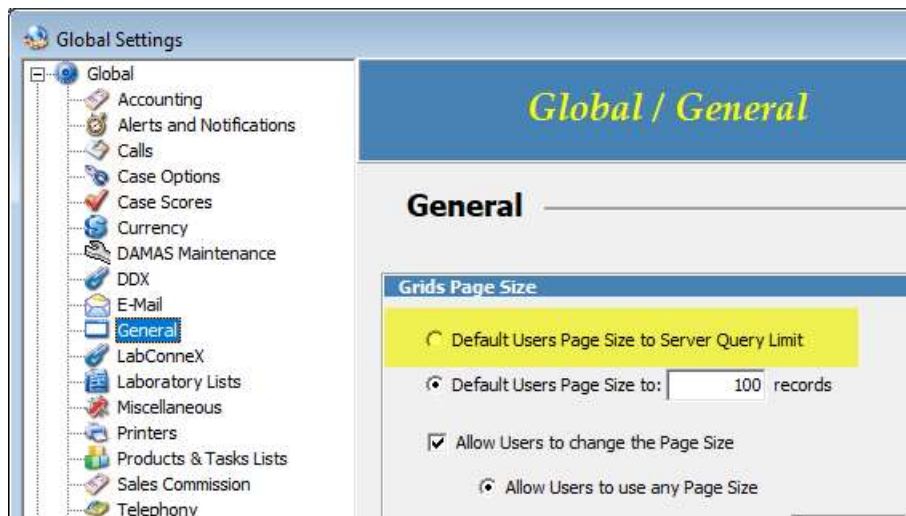
1. New Query
2. Modify Query
3. Delete Query
4. **Export:** export a query's output to either CSV or XLS
  - If the query is not published, you will be prompted to publish the query prior to exporting.
  - When attempting to export you will be asked to select an export template. If you do not have any existing export templates, they can be created by going to **Tools > Advanced Export** in the menu bar. Please reference the section in this guide for [Advanced Export](#).
5. **Actions**
  - Publish a query for use throughout DLCPM
  - Un-publish a query
  - Duplicate a query

## Query fields Overview

You will see the following fields in the Query editor window:



- **Query Name**
- **Query Limit** – This field controls the number of records per page displayed when previewing queries, and when using published queries throughout the application. In order for the query limit to take effect, the following Global Setting option must be set: Global Settings > General > Grid Page Size – Default Users Page Size to Server Query Limit. With this option set, all other queries will default to 100 records per page.



- **Table** – This drop down is used to select a table in the database from which you will be querying. This is also referred to as the BASE table.
- **Order Expression** – This field can be used to set a specific order in which the data will be displayed

- **Add Expression** - This option is used to select a set of fields and values to narrow down the results to a specific data set
- **Edit**
- **Delete**
- **Add Advanced Expression** – This option allows you to manually type in a set of values to narrow down the results to a specific data set

Please note – This feature is not recommended if you are not familiar with the syntax used in writing advanced expressions. MTS Support Team does not provide training on how to use the appropriate syntax for the advanced expression option.

- **Add Group** – This option allows you to group a set of expressions within another expression
- **Preview Query** – Quick preview of a query and its results

# Advanced Query Builder

(Tools at the top of the toolbar > Advanced Query)

## Creating a query

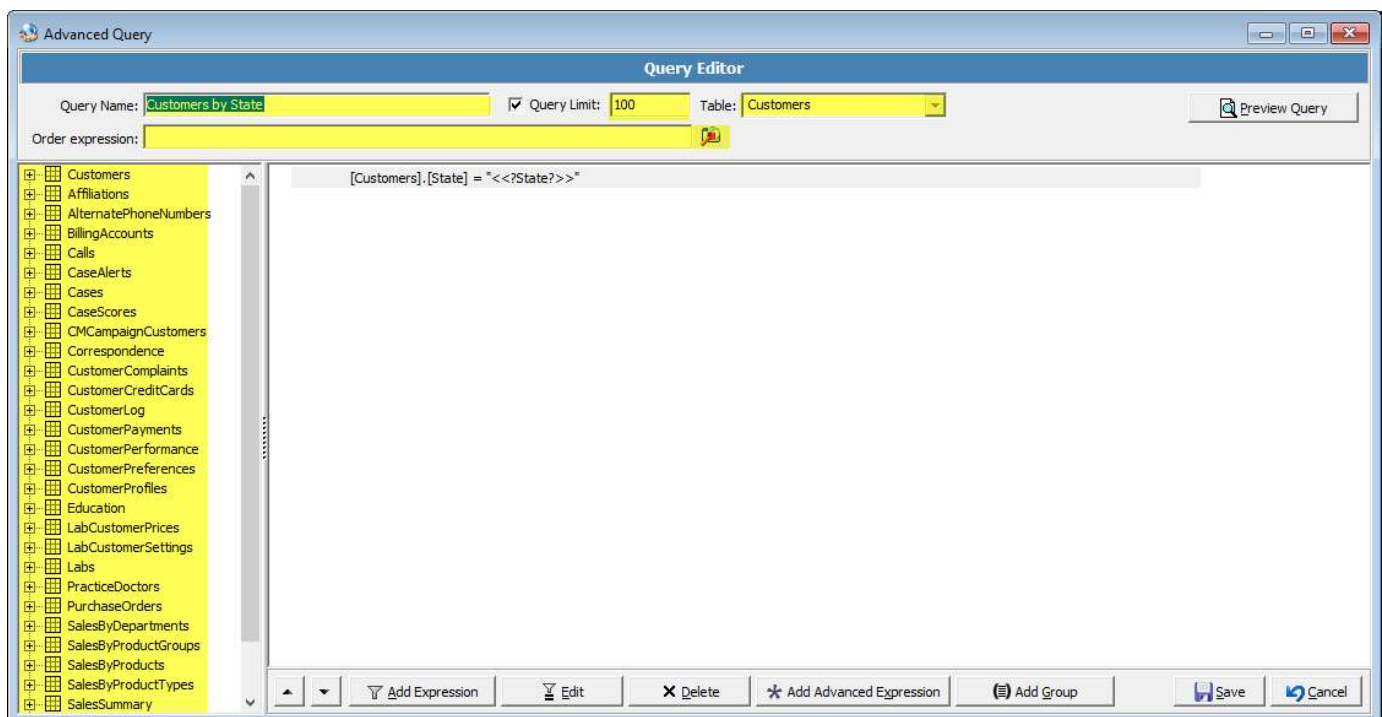
In the Advanced Query window, select the option for New Query and define the Query name.

Next you will want to add a query limit to set the max number of results that will be returned.

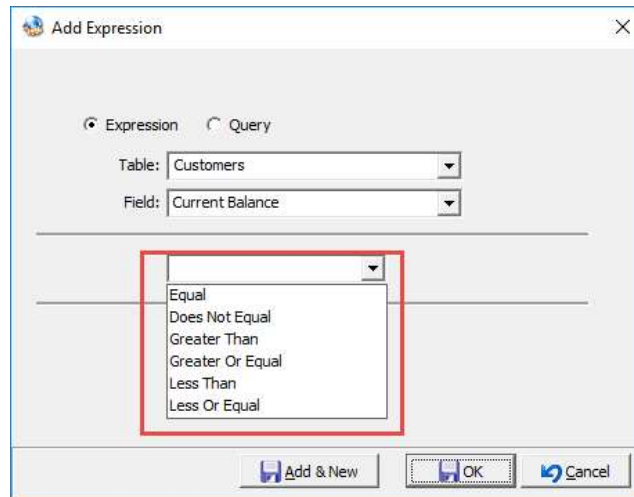
After the query name and limit has been set, you will want to select a base table from which the query will be pulling data from. For example, you are able to choose from: Customers, Calls, Cases, Products and many more.

Once a base table is selected, you may use the tree view located on the left-hand pane to create expressions by double clicking from the tree view or by using the Add Expression option.

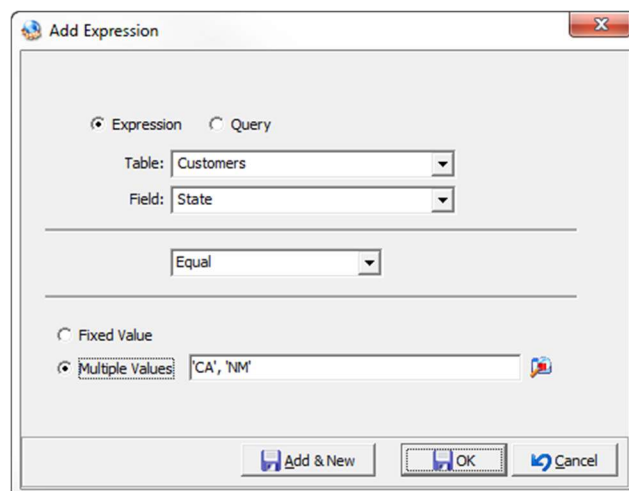
**Please note:** Depending on the base table selected, you may see different set of tables shown in the screenshot below.



You may select to add an expression either by double clicking from the left-hand pane or by selecting the Add Expression option from advanced query. You will also need to select an option in the blank drop down menu as shown below. The available options you may select from the this drop down menu depends on the base table selected.

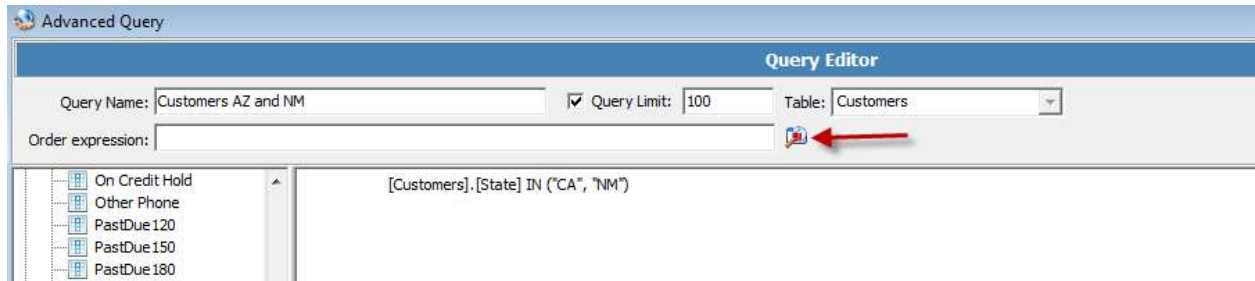


When a value is selected, you can choose either a fixed value or multiple values. These will be the values that the query will look for and will either pull or not pull data depending on the drop down selected referenced above. The fixed value will allow for you to select one value whereas the selection for multiple values will allow for you to set more than one value. When all properties are configured, select OK to save.

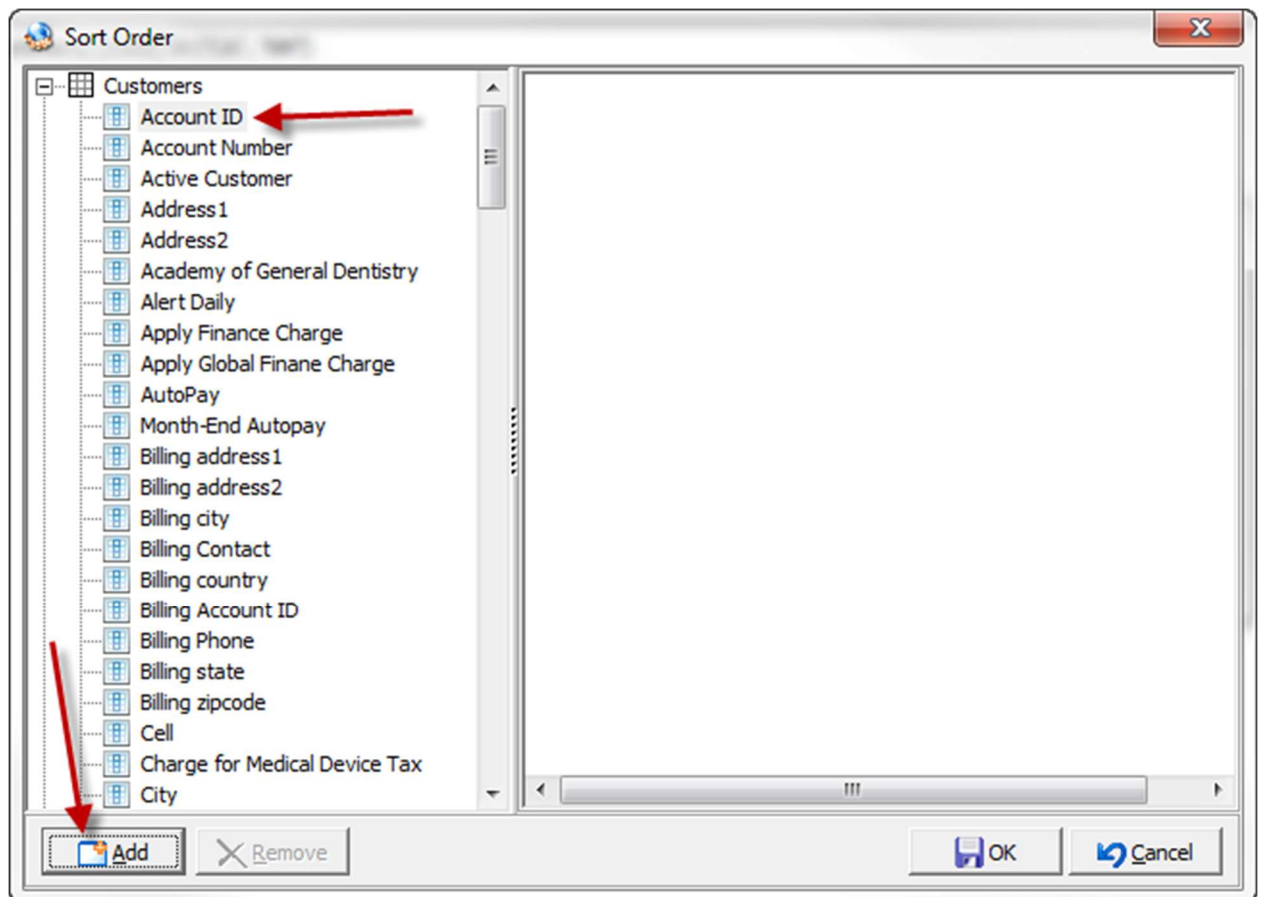




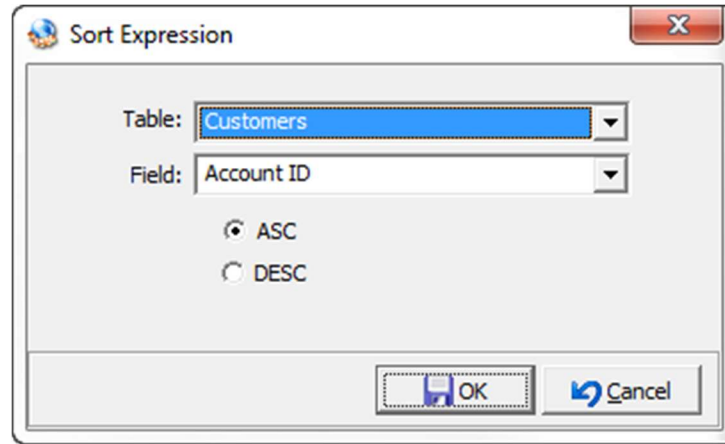
The order expression field may be used to sort a field in the query, in either ascending or descending order. To accomplish this, select the icon next to the Order expression field.



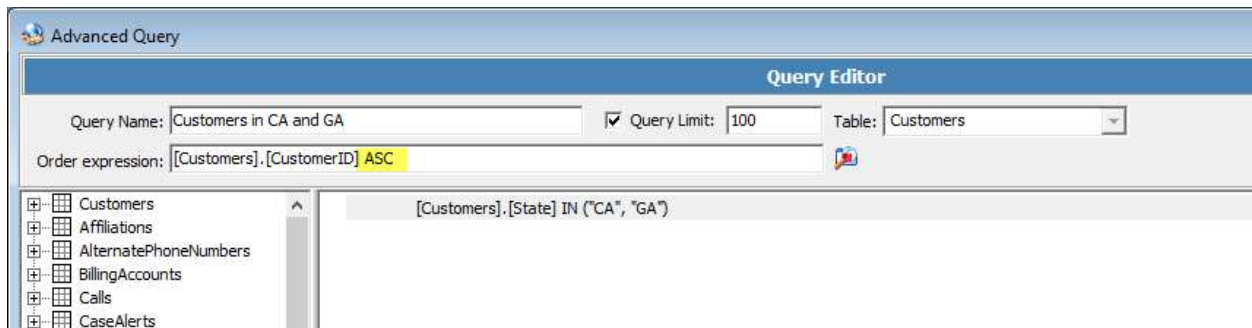
From here, you can select any order expressions.



After selecting Add, you will be able to select the sort order: Ascending (ASC) or Descending (DESC).

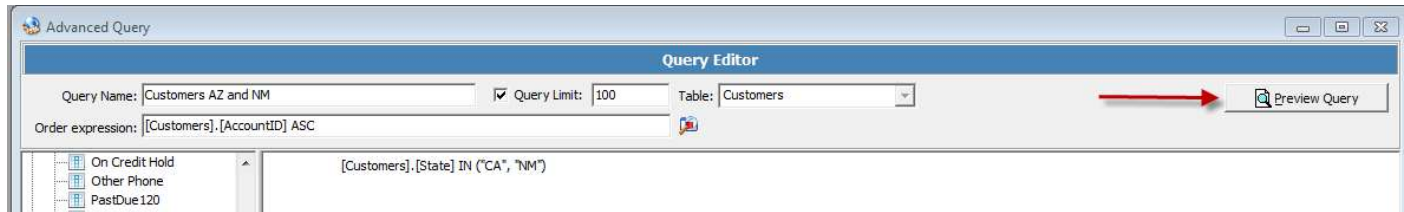


Once the sort expression has been added, the order expression will show in the field. The below example will order the results "Customers in CA & GA by Customer ID in Ascending order".

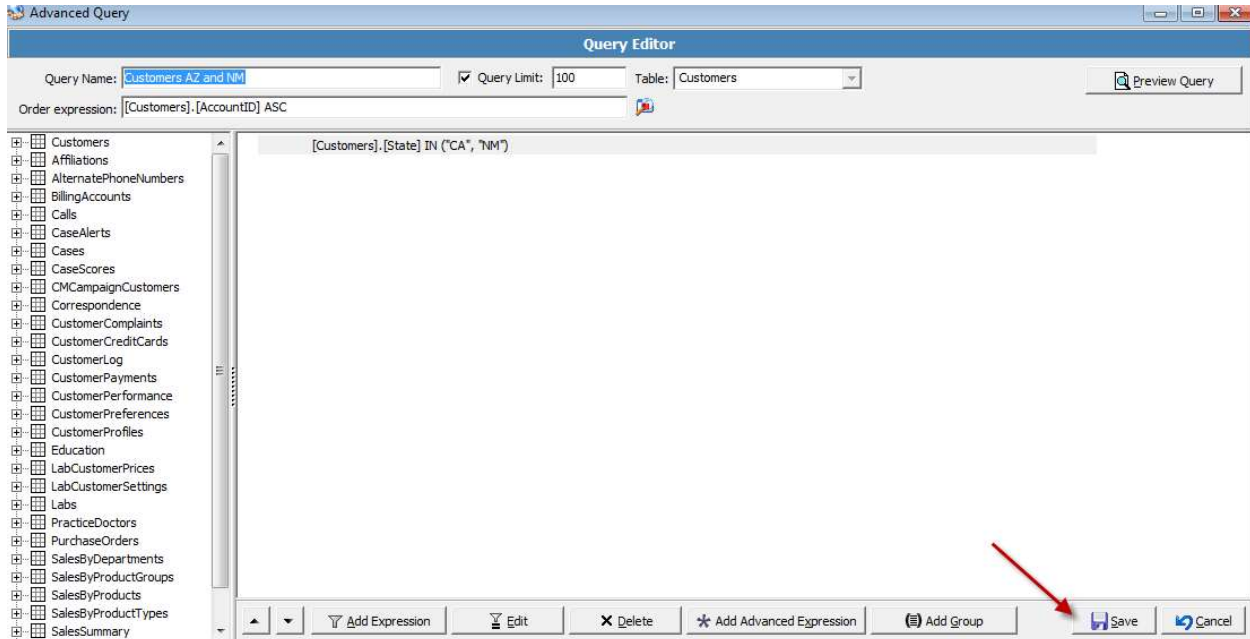


## Query Preview & Publish

In order to preview a query before publishing, you can select the option for Preview Query from the Advanced Query form.



After previewing the query, if you are satisfied with the results in the preview, select save to save the query.



To publish the query and make it available throughout the system, select the query, click actions and select Publish.



Once published, your query will be available in the query drop down menus throughout DLCPM where applicable. Selecting to Un-Publish a query will remove the query from all applicable drop down menu selections. For example, if the BASE table is Calls, then a published query will be found in the Calls Manager.

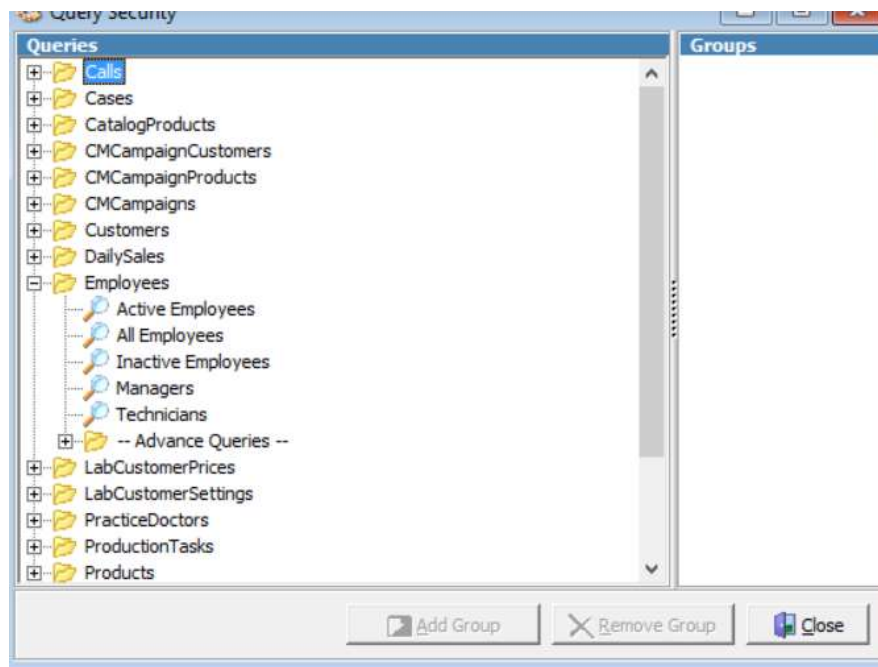
## Query Security

Administrators have the option to assign security to all queries including those created from the Advanced Query builder. This menu option is located under the Administrator Menu at the top of the toolbar called “Query Security”.



Advanced Queries are available under each base table denoted by the following text: “— Advanced Queries —”.

Only Administrators or users that have been assigned proper security will be able to access the Query Security menu to view the Advance Queries folder.



# What is Advanced Export?

*(Tools > Advanced Export)*

With the introduction of Advanced Queries, it has become necessary to provide a more robust Export feature. Unlike previous versions of DLCPM where users' export was restricted to a couple of data sources, this new option now provides the ability to create a template for many data sources and the desired columns to export. The data sources expand to many more tables to pull different types of data from.

## Creating an Export Template

To create a template for export, first you will want to select to Add a template. The add export template form will open and it is important to set a meaningful ID and Description accordingly. Before you are able to select for a query or campaign, you must select a specific table from the drop down menu.

Export Template

X

Template

ID:

Description:

Table:

• Export for Query:

• Export for Campaign:

Output File

File Name:  ...

• Excel (Requires MS Excel)

• CSV (Comma Delimited)

☐ Include field names

Columns to Export:

Column Name  
Enter text here

Select Columns

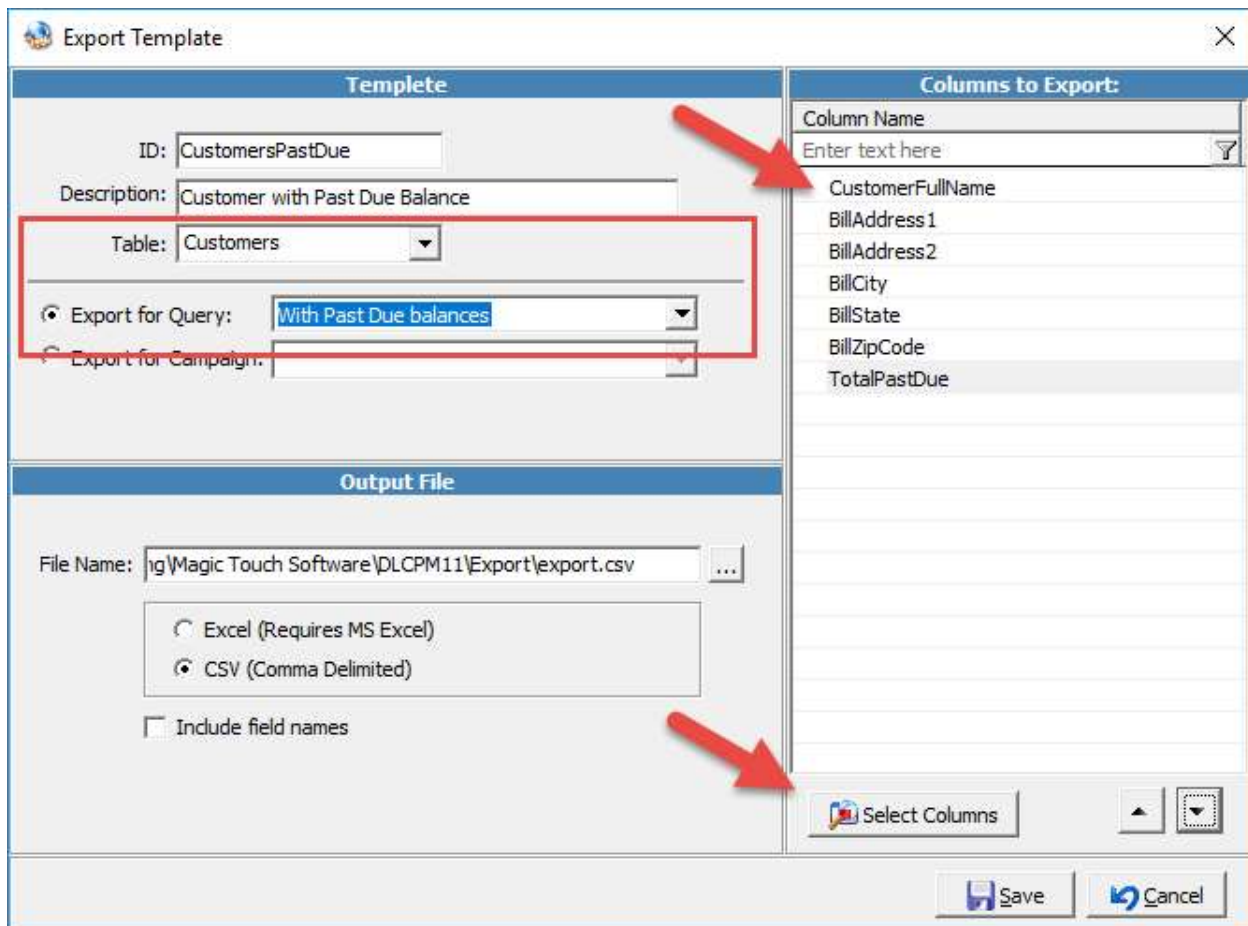
▲▼

Save

Cancel

There are two options which will allow for you to select from an existing filter query or select for a customer campaign. If you select the option for 'Export for Query', you may use an existing query that has been published from the Advanced Query Builder.

Once a query is selected, you may select which columns of information you can export. For example, you may select the following columns below to export customers with past due balances:



**Export Template**

**Template**

ID: CustomersPastDue

Description: Customer with Past Due Balance

Table: Customers

☒ Export for Query: With Past Due balances

☐ Export for Campaign:

**Output File**

File Name: g\Magic Touch Software\DLCPM11\Export\export.csv

☐ Excel (Requires MS Excel)

☒ CSV (Comma Delimited)

☐ Include field names

**Columns to Export:**

Column Name
Enter text here
CustomerFullName
BillAddress1
BillAddress2
BillCity
BillState
BillZipCode
TotalPastDue

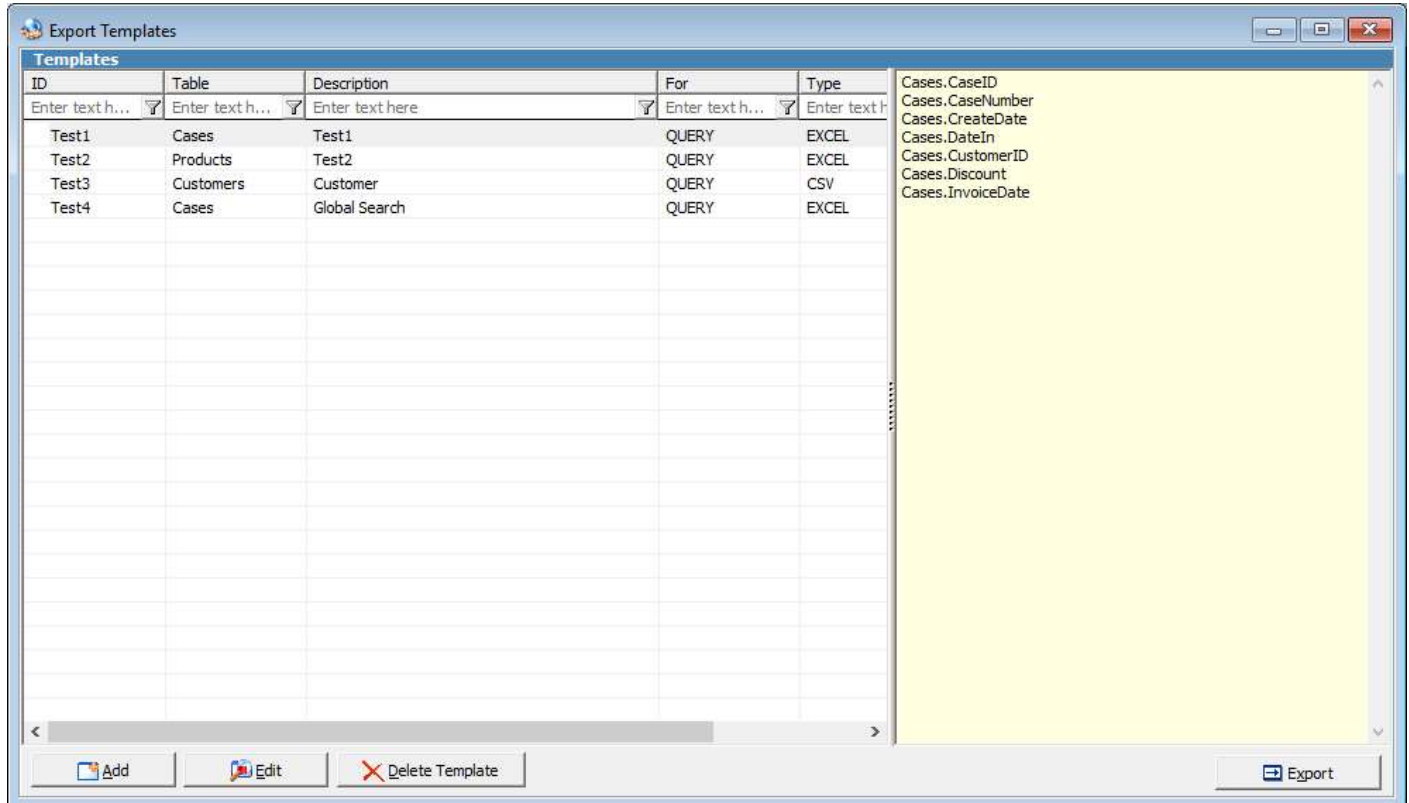
Select Columns

Save Cancel



Once the query or campaign is selected and the appropriate columns of data that you would like to export are configured, you may save the export template. Once a template is saved, it will display on the Export Templates form and users may run the export at any time moving forward.

Export templates that are saved will also display in the Export menu from Advanced Query.



The screenshot shows the 'Export Templates' window. It contains a table with the following data:

ID	Table	Description	For	Type
Test1	Cases	Test1	QUERY	EXCEL
Test2	Products	Test2	QUERY	EXCEL
Test3	Customers	Customer	QUERY	CSV
Test4	Cases	Global Search	QUERY	EXCEL

To the right of the table is a list of available fields for selection:

- Cases.CaseID
- Cases.CaseNumber
- Cases.CreateDate
- Cases.DateIn
- Cases.CustomerID
- Cases.Discount
- Cases.InvoiceDate

At the bottom of the window are buttons for 'Add', 'Edit', 'Delete Template', and 'Export'.

**Please note: The base table controls which export templates will display from the Export option in Advanced Query.**




## Query Examples

This section will list a step by step instruction on how to create three different advance queries. You may walk through these steps and create these queries in your own environment for future use.

### Example #1: Find Customers whose current balance is over \$1000.00

Creating this query:

1. Start a NEW QUERY.
2. Set Query name to: **Customers whose Balance is over \$1000**
3. Uncheck the Query limit, as this query should not have a limit of results.
4. Select the **Customers** table
5. Skip order expression for now.
6. On the left-hand window, expand **Customers** and scroll down to select *Current Balance*.
7. Once the expression window opens, change the 3<sup>rd</sup> dropdown to **Greater Than**.
8. Leave this at Fixed Value, and fill out the field so that it says 1000. (No \$ necessary)
9. Now, go back to the **Order expression** field on top. Select the explore icon 

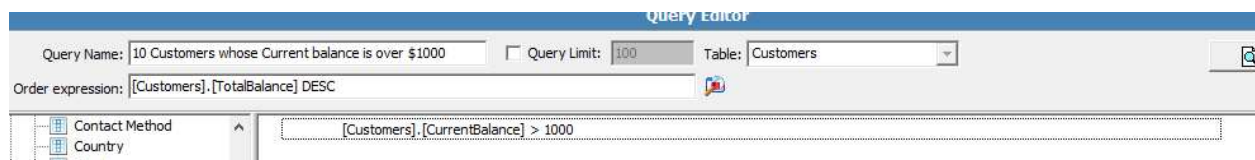
*This field is useful for sorting your information accordingly. In this particular example, lets sort by customers whose TOTAL balance, is higher.*

10. Expand **Customers** – scroll down until you find *Total Balance*
11. Double click *Total Balance*, or select the ADD button. Set it to DESC.

Note: ASC = Ascending, while DESC = Descending.

12. Select OK, and OK once more in the Sort order window.
13. This should bring you back to the Advanced Query window.



**Your query should look like this.**



The screenshot shows the 'Query Editor' window. At the top, the 'Query Name' is '10 Customers whose Current balance is over \$1000'. The 'Query Limit' is set to 100. The 'Table' is 'Customers'. The 'Order expression' is '[Customers].[TotalBalance] DESC'. On the left, a tree view shows 'Contact Method' and 'Country'. The main area displays the query expression: '[Customers].[CurrentBalance] > 1000'.

## Example #2: Find cases that have not been invoiced

Creating this query:

1. Start a NEW QUERY.
2. Set Query name to: **Cases that have not been invoiced**
3. Uncheck the Query limit, as this query should not have a limit of results.
4. Select the **Cases** table
5. Skip order expression for now.
6. On the left-hand window, expand **Cases** and scroll down to select *Status*.
7. Once the expression window opens, change the 3<sup>rd</sup> dropdown to **Does Not Equal**.
8. Leave this at Fixed Value.
9. Select the explore icon 
10. Find the **Invoiced** Status, and select that. Select OK
11. Now, go back to the **Order expression** field on top. Select the explore icon 

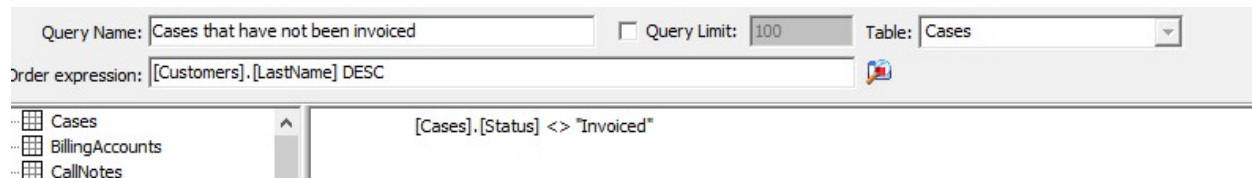
*This field is useful for sorting your information accordingly. In this particular example, lets sort by Customer LAST NAME.*

12. Expand **Customers** – scroll down until you find *Last Name*
13. Double click *Last Name*, or select the ADD button. Set it to DESC.

Note: ASC = Ascending, while DESC = Descending.

14. Select OK, and OK once more in the Sort order window.
15. This should bring you back to the Advanced Query window.

**Your query should look like this.**



Query Name: Cases that have not been invoiced    ☐ Query Limit: 100    Table: Cases

Order expression: [Customers].[LastName] DESC



Left pane: Cases, BillingAccounts, CallNotes

Right pane: [Cases].[Status] <> "Invoiced"

## Example #3: Find cases that have not been invoiced, that have a specified task.

Creating this query:

Start a NEW QUERY.

1. Set Query name to: **Un-invoiced cases with ? Task**
2. Uncheck the Query limit, as this query should not have a limit of results.
3. Select the **Cases** table
4. Skip order expression for now.
5. On the left-hand window, expand **Cases** and scroll down to select *Status*.
6. Once the Add expression window opens, change the 3<sup>rd</sup> dropdown to **Does Not Equal**.
7. Leave this at Fixed Value.
8. Select the explore icon 
9. Find the **Invoiced** Status, and select that. Select OK
10. Back on the left-hand window, expand **Case Tasks**
11. Scroll down until you find **Task**
12. Once the Add expression window opens, change the 3<sup>rd</sup> dropdown to **Ask for Value**
13. Now, go back to the **Order expression** field on top. Select the explore icon 

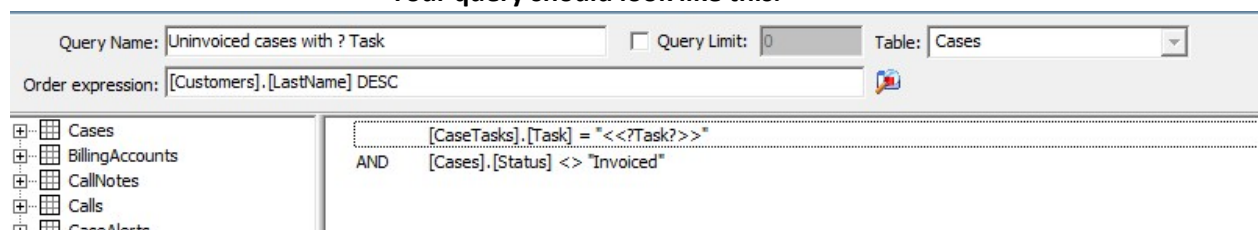
*This field is useful for sorting your information accordingly. In this particular example, lets sort by Customer LAST NAME.*

14. Expand **Customers** – scroll down until you find *Last Name*
15. Double click *Last Name*, or select the ADD button. Set it to DESC.

Note: ASC = Ascending, while DESC = Descending.

16. Select OK, and OK once more in the Sort order window.
17. This should bring you back to the Advanced Query window.

**Your query should look like this.**



Query Name: Uninvoiced cases with ? Task    ☐ Query Limit: 0    Table: Cases

Order expression: [Customers].[LastName] DESC

Left Pane:

- Cases
  - BillingAccounts
  - CallNotes
  - Calls
  - CaseAlerts

Right Pane:

```
[CaseTasks].[Task] = *<<?Task?>>*
```

AND

```
[Cases].[Status] <> "Invoiced"
```