Advanced IQA

Presented by: **Keith Robertson**

Email: keith.robertson@mast-ict.com
DDI: +44 (0)20 8133 4752
Mobile: +44 (0)7810 545758
Web: www.mast-ict.com

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Introduction

Structure – The document system in iMIS is full of all sorts of files and folders and for my money looks very complex and full of stuff. You may know what the stuff is but it is still difficult to find what you want.

Remember this is your system and therefore you should meld it to fit your way of working. Creating folder to house important queries so that you can easily find them again. Nothing worse than hunting through the document system and then deciding it will be quicker to recreate that query you wrote the other day than spend more time trying to find it.

Grouping – Group like queries together, a good grouping would be web site queries. I would think all businesses have a number of queries which are used on their web site for things like directory listing of members. Put these somewhere safe so you can easily find them again and make modifications as required.

Security – A real tip this, when you upgrade to 15.2 iMIS resets all your IQA security to make them more secure. Administrators to full control. That means that all the queries I just talked about, public directory searches no longer work in your public web site.

IQA security in iMIS is the same as security for all other areas, Navigation, content all has the same options when it comes to securing them.

Using the Advanced options

Sources

Usually a query is based on a business object or group of BOs however there is no reason why a source for an IQA cannot be another IQA query, and potentially you can create standard “source‟ queries to assist your users in creating their own IQA’s. The Business Objects folder is simply in the iMIS Document System so finding any other IQAs you want to use is simply a matter of knowing where to look.

For example, if you create a query to define “Current Members‟ which includes your organisation specific rules/filters that determine only current members are included. When users wish to create a new query for members they can use the “Current Members‟ source query. No more confusion on what actually defines a current member, and different users using different rules.

Joins – types, reasons.

The nice thing about IQA is you don't have to know SQL code. Well that isn't exactly true, a little knowledge would be useful for example about joins.

Equal – basically the same as INNER JOIN a one-to-one relationship to join single instance tables when you expect there to be a record in every table. If this is not true in iMIS something is wrong with the database.

Not Equal – Would join tables where the fields are not the same.

Left Join – Full results from first table and results if they exists from second, a very useful join type.

Exists – Difficult to find examples of these in iMIS. Reference SQL and see what you come up with.

NOT Exists – Difficult to find examples of these in iMIS. Reference SQL and see what you come up with.

OR Exists – Difficult to find examples of these in iMIS. Reference SQL and see what you come up with.

OR NOT Exists – Difficult to find examples of these in iMIS. Reference SQL and see what you come up with.

While we are on joins, the following are generally ignored but worth a quick mention, they appear as options on the data sources page:

- Use FORCE ORDER option: Require SQL Server to join the tables in a query in the order you specify.

- Use NOLOCK locking hint: Require SQL Server to ignore record locks.

- Use join method for security enforcement: If enabled, when users run the query, iMIS checks to make sure they have permission to read every source within the query before displaying the results, whether the source is a business object, another query, or both. When disabled, iMIS does not check the security for every source and instead only enforces the security setting for the main query.

Filters

Filters refine a query. You can limit your results by eliminating duplicates, using comparisons, setting parameters, and using logical operators.

■ Tips for filters

□ If you installed iMIS on a case-sensitive SQL server, the filters you define are case-sensitive. You cannot define case-insensitive filters on queries when iMIS runs on a case-sensitive SQL Server.

□ Select the Require user to provide at least one value option when you want to require a value for every filter you define for a query.

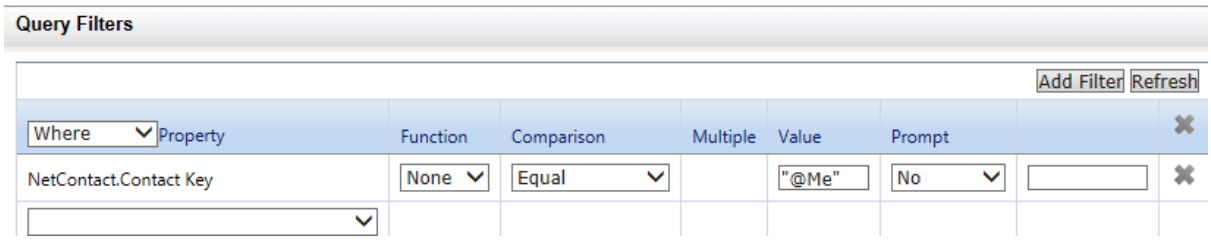
□ Selecting the Remove icon for a filter set removes both the filter set and all related filters from the query.

Can filter on any field in your source data set. If you used Not Exists type joins your second tables fields do not appear. (It makes sense if you think about it)

Dynamic filters:

- Filter by ContactKey and UserKey properties of a business object (NetContact not CsContact):
    - "@LoggedInUser" and "@Me": Both filter by the currently logged in user.
    - "@SelectedUser" and "@SubjectContact": Filters by a selected contact, such as contacts selected through On-Behalf-Of or user impersonation. These variables also honor ContactKeys sent via URL parameters. For example, set NetContact.ContactKey equal to "@SelectedUser".
- Filter by ID:
    - “@SelectedID”: For authenticated users, this variable filters by a selected ID, such as contacts selected through On-Behalf-Of, user impersonation, or ID’s sent via URL parameters. For example, set CsContact.ID equal to “@SelectedID”.
- Filter by date properties:
    - @Date: Filters by the current date.
    - @Now: Filters by the current date and time.

N.B. The double quotes above are required in the filter fields, use just as shown.



Drop down lists appear in filters for “Value” when the Business Object references another query. You can create your own lists by creating a new query showing just the list you require and including that in the Business Object.

N.B. Always clone standard business object if you are going to modify them otherwise they will be overwritten during an upgrade.

Display

Advanced mode options for Display

In Advanced mode, the following options are available on the Display page:

■ Function: Allows the user to find Count and Min or Max on a field.

■ Alias: Creates a label name for the field to be displayed to users. The alias entered can contain special characters.

Use key_ or code_ as a prefix in the Alias field to hide columns under certain conditions:

- If you use code_ as a prefix, this field will always be hidden from the initial result set.
- If you use key_ as a prefix, this field will be hidden if the current column is not a GUID.

■ Link: You can add a link for each column listed in the Display tab so that the user can click on the link to go to a specified page for more details. See Linking IQA results for more information.

■ Subtotal: Specify whether the property should be subtotaled in the display. You can display query results in a hierarchical grid of summary rows and detail rows by using the Subtotal option. See Hierarchical grid display for more information. This is really a group by function!

Sorting

Add Ascending or Descending sorts as required.

IQA hyperlink, use to drill down on Customer, Event or other windows.

iMIS has developed this functionality and whereas in previous version you had to code the link into the query everything is now very straight forward.

1. Firstly create an IQA to select the records you want to access.
2. To make the ID column in the results screen clickable to select the customer, event or other window. Do one of the following in the alias (ID, Event, etc) field to make it clickable in the results list:

    a. For Contact queries, enter key_contact in the row that corresponds to the customer ID.
    b. For Prospect queries, enter key_prospect in the row that corresponds to the customer ID.
    c. For Order queries, enter key_order in the row that corresponds to the order number.
    d. For Event queries, enter key_event in the row that corresponds to the order number of the event registration.
    e. For Fundraising queries, enter key_FR in the row that corresponds to the transaction number.
3. Note also that as a side effect the IQA result list from the query will be loaded into the Results tab of the customer management window.
4. Any properties used to build links must be selected for display in the query (Display tab). However, you may not want a user to see values for all of the properties required to build the links. You can hide columns from a user by giving the property an Alias prefaced with code_. In the example screenshot above, the Full Name column uses the value of an ID property to build the links, but the ID property is hidden by giving it an Alias of code_ID.

"Not In" queries in IQA

You can create "Not In" queries in IQA, and run reports for the non existence of participation/activity etc. For example, run a query to list contacts not registered for an event. This is not possible in the Adhoc Search.

AS an example lets take the idea that we want to send an email to everyone in London who is not coming to our event.

We need the NetContact BO and CsRegistration as that gives us event registrations Because not everyone has a registration we need a left join here.

Query Sources

Source	Type	
NetContact	Business Object	
CsRegistration	Business Object	
Relations		
Description		
Custom (When NetContact.iMIS ID = CsRegistration.Ship To Id)	Left Join	

The trick here is the filter. We need everyone how has never been to an event

OR everyone who has been to an event but not our one.

Query Filters

Add Filter | Refresh

Where / Or	Property	Function	Comparison	Multiple	Value	Prompt
Where	NetContact.City	None	Equal		london	No
	NetContact.Country	None	Equal	☐	United Kingdom	No
	CsRegistration.Event Code	None	Empty			
Or	NetContact.City	None	Equal		london	No
	NetContact.Country	None	Equal	☐	United Kingdom	No
	CsRegistration.Event Code	None	Not Equal			Optional

Query Options

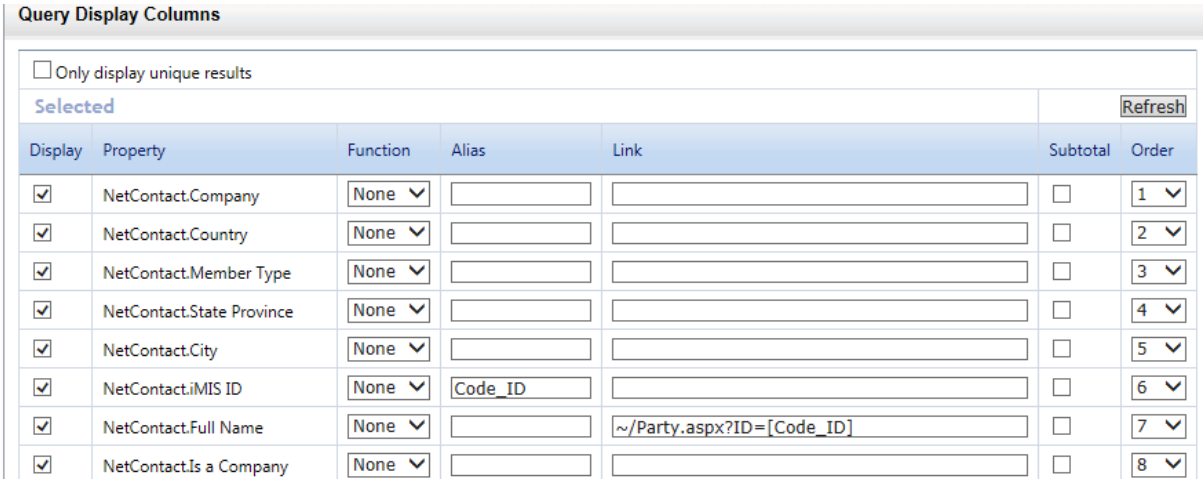
We added the OR Property above by clicking Filter. We still need to include the London, UK filters after the OR otherwise we would get everyone in our database who hadn't come to our event.

Display the fields you need. And there we are.

Live Linking

You can put a link to a navigation item or web page from within an IQA if you simply want to link to some other content. However the clever trick is making those links dynamic.

This really simple example shows a link the Party.aspx page



Query Display Columns

Only display unique results

Selected — Refresh

Display	Property	Function	Alias	Link	Subtotal	Order
☑	NetContact.Company	None			☐	1
☑	NetContact.Country	None			☐	2
☑	NetContact.Member Type	None			☐	3
☑	NetContact.State Province	None			☐	4
☑	NetContact.City	None			☐	5
☑	NetContact.iMIS ID	None	Code_ID		☐	6
☑	NetContact.Full Name	None		~/Party.aspx?ID=[Code_ID]	☐	7
☑	NetContact.Is a Company	None			☐	8

The following are options for this linkage.

a shortcut	~/MyShortcut
a content record	ContentCode=MyContentCode
a navigation item	NavigationCode=MyNavigationCode&URLParameter1Name=[PropertyName]
an ASPX page in your site	~/Webpage.aspx&URLParameterName=[AliasName]
a page dynamically populated based on the value of one or more URL parameters	~/MyShortcut&URLParameter1Name=[Alias Name]&URLParameter2Name=URLParam2Value

iMIS Docs has some great examples of the above.

Adding an IQA Query to iMIS Menu / Navigation.

This would be used to create a one click option to run the query from a navigation link within desktop.

There are really two ways of doing this. You can use iParts:

1. Create the query
2. Create a content record and add a Query Menu iPart to it.
3. Create a navigation item to point at the content record
4. Add the navigation item to the main menu structure for the iMIS desktop.

This works fine and does exactly what it says on the tin. However the drill into links we created earlier are not honoured in the iPart, basically it doesn't know where to go because it is just a web page so we need a different approach. This will work in iMIS20 so if you have 20 you do not need to read on.

But there is another way to do this and actually create something very funky indeed.

1. Create the IQA you want to add to the navigation.
2. Make sure you have a link with the key_contact alias included.
3. Create a navigation item where you want it to go in the desktop site.
4. If you have key_contact it should be in the Customers folder.
5. Now for the magic. ASI have included a file in the folder structure which is a template for running certain content items. The file path is ~/IMIS/ContentManagement/Template.aspx
6. Add this as the Content Link field.
7. Now for the URL Parameters you need to find two things:
    a. The DocumentVersionKey from the DocumentMain table
    b. The website HierarchyKey from the web site browser (The hkey value).
8. These need to be added into the URL parameters as follows.

    a. ContentCode=General.ExecuteQuery&iDocumentPath=$&iMode=Execute&iUniformKey=3d199796-3fbc-48a1-8472-ab0f56b825da&iOperation=Execute&iFolderHierarchyKey=ec62652f-85e7-48df-a3b3-521ac7916d1d&TemplateType=E&DocumentTypeCode=IQD&EmbeddedMode=True

9. You can get the DocumentVersionKey if you write a quick IQA based on the Document Business Object. Try that?
10. The iUniformKey is the DocumentVersionKey and the iFolderHierarchyKey is the hkey.

That's it, now you have a single click access the run IQAs that will allow you to drill into them on the desktop.

Resources

The following are great places to go for IQA help and inspiration

- http://docs.imis.com
- http://www.imiscommunity.com