

calnt 0004 - Using the data search panel to perform a query that contains and-or logical operators

Question: How do I use the data search panel to perform a query that contains both "and" and "or" logical operators?

Topic: calIntegrator Usage

Release: calIntegrator 1.2 and above

Date entered: 03/23/2011

[Related Forum Posting](#)

Details about the Question

I want to run a query containing both "and" and "or" operators (see an example query below). However, I could not find the selection buttons to construct such a query. Is there any way around it?

```
Select:
all patients who are male AND their tumor subtypes = "Classical"
OR
all patients who are female
```

Answer

In the current design, the radio buttons for logical operators are at the end of the entire query, Therefore, users can only choose either "OR" or "AND" for the whole query. A more complex query as stated in the question requires the flexibility to select the logical operator at the end of each SQL predicate. This feature was not present in the current version.

One way to get around this in current version of calIntegrator is to execute the query in multiple steps. Refer to the steps that follow.

Step 1: Execute a query to select all patients who are male AND have tumor subtypes = "Classical."

(1) On the criteria tab, from the first drop down list, select Patient. (2) Click the Add button to add a new predicate. (3) From the Patient drop down lists, select GENDER equals MALE. (4) Click Add to add a new predicate. (5) From the Patient drop down lists, select Subtype equals Classical. (6) Select the logical operator "and". (7) Click the Run Query button.

The screenshot shows the 'Search TCGA Radiology calIntegrator' interface. The 'Criteria' tab is active, showing 'Define Query Criteria for: Unsaved Query'. Two predicates are listed: 'Patient GENDER equals MALE' and 'Patient Subtype equals Classical'. The logical operator 'and' is selected. Red callouts indicate the steps: 1. Select Patient, 2 & 4. Click to add a new predicate, 3. Select GENDER equals MALE, 5. Select Subtype equals Classical, 6. Select and, 7. Click to Run query.

The Query result: all male patient with tumor subtype = "Classical"

Step 2: Save the query results as a subject list.

(1) On the Query Results tab, click the Save Subject List button. (2) In the Save Subject List dialog, enter the name for the subject list, "male and classical" in the example. (3) Click the Save button in the dialog.

Search TCGA Radiology caIntegrator

Criteria Results Type Sorting Query Results Save query as...

Query Results for: Unsaved Query

101 items found, displaying 1 to 20. [First] [Prev] 1 2 3 4 5 6 [Next] [Last]

Select Image	Select Subject	Subject ID	Image Series Identifier	View in NBIA	Proportion Enhancing : Indeterminate	Proportion of Edema : None (0%)	Proportion nCET : 68%-95%	Enhancement Quality : Mark/Avid	Proportion Necrosis : Indeterminate
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	TCGA-08-0511	1.3.6.1.4.1.9328.50.46.17593665332101798172593290130795467196	NBIA					
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	TCGA-06-0148	1.3.6.1.4.1.9328.50.45.313532772378737807969414665313304894562	NBIA					
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	TCGA-08-0357	1.3.6.1.4.1.9328.50.46.150518978324016807085116615083694541923	NBIA					
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	TCGA-06-0127	1.3.6.1.4.1.9328.50.45.259655051884541446626109959917682877400	NBIA					
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	TCGA-02-0071	1.3.6.1.4.1.9328.50.46.1278296638732173152105689656819841005	NBIA					

Export To CSV Save Subject List Forward To NBIA Retrieve DICOM Images

2. Name the subject list.

3. Click to Save.

1. Click to bring up "Save Subject List" Window.

Step 3: Create a new query using the subject list as the first predicate.

(1) On the Criteria tab, Click the saved subject list, "male and classical" in the example. (2) Note that the first drop down list field and the saved list fields are populated.

Search TCGA Radiology caIntegrator

Criteria Results Type Sorting Query Results Save query as...

Define Query Criteria for: Unsaved Query

Saved List Add

Saved List in list (select one or more Subject Lists)

male and classical
maleandclassical
test
test2

or and

Run Query

2. Those fields will be automatically populated.

1. Click on the saved subject list "male and classical".

Step 4: Add "patient's GENDER = female" as the final predicate. Run the query.

(1) On the Criteria tab, from the first drop down list, select Patient. (2) Click the Add button to add a new predicate. (4,5,6) Select Patient GENDER equals FEMALE. (7) Select the logical operator "or". (8) Click the Run Query button.

TCGA Radiology calIntegrator

Search TCGA Radiology calIntegrator

Criteria Results Type Sorting Query Results Save query as...

Define Query Criteria for: Unsaved Query

1. Select "Patient"

2. Click to add a new predicate

3. Select

4. Select "GENDER"

5. Select

6. Select

7. Select

8. Click to run Query

Run Query

Final Query Results:

Patient Gender = "Male" AND Subtype = "Classical"
OR
Patient Gender = "Female"

Have a comment?

Please leave your comment in the [calIntegrator End User Forum](#).