Dynamic Folders

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TOC

The content for the ***Overview*** and ***Methods for Creating Dynamic Folders*** sections is also covered in the CT User Guide. This document contains additional content: ***Making Dynamic Folders More Readable*** and ***Dynamic Folder Examples***. These sections were only included here to reduce the overall size of the User Guide and to provide a source of examples that will be updated frequently.

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Overview

(Feature Added in Curator Tool 1.8.3)
Beginning with Curator Tool version 1.8.3, there is a second folder type – dynamic. What makes a folder dynamic? A dynamic folder contains embedded search criteria. Records that meet the folder's criteria are dynamically displayed in the datagrid. A dynamic folder is a hybrid – it is a folder, but it is also a query (search).

(***examples***)

Static Folders
The original folder type – a static folder –points to specific records in the database. The static folder was created at a point in time. If records similar to the records in the list have been added to the database, the static folder does not automatically know about these new records. You would need to manually search the database using your original search criteria and then drag the newly found records to the CT list.

Dynamic Folders: Advantages
Dynamic folders have an advantage that static folders do not have: a dynamic folder searches the database to ensure the list is current. (Under what conditions a dynamic folder refreshes is explained in detail later.) Another advantage of setting up a dynamic folder is that the folder retains your search criteria; it eliminates the steps of accessing the search tool and dragging desired records into the Curator Tool.

Static Folders: Advantages
So why use a static folder? First, they are simpler in some respect. Secondly, often you will want to review specific records, and only those records.

Listed below are a few examples of when each folder type is preferable:

Situation	Folder Type
Keep track of a list of constant records which you are working on from one day to the next	Static
List of orders processed on a specific day	Static
Maintain a list of all accessions for a specific Taxon	Dynamic
Review a subset of a site's inventory based on a certain criterion	Dynamic
Track orders based on specific criteria	Dynamic

Methods for Creating Dynamic Folders

There are several methods for creating a dynamic folder. Each starts similarly: In the Curator Tool , create an empty folder.

Method 1

Switch to the Search Tool; create a query. *Drag the code* in the large text box (generated by the QBE) onto the empty folder in the Curator Tool.

Method 2

While still in the Curator Tool, right-click on the empty folder. Select **Properties** from the menu. Switch to the Search Tool; create a query. *Copy* the code in the large text box (generated by the QBE) into the **Dynamic Folder Search Criteria** box in the Curator Tool.

Method 3

In this method, use the query criteria of an existing dynamic folder as the basis for the new dynamic folder. Edit the new folder's criteria as desired.

Resolve To

While the first two methods above are similar, they exhibit two distinct behaviors. In *Method 1*, the active radio button in the **Find** frame (**Default** or the selected choice from the dropdown menu) will activate the corresponding button in the folder's **Resolve To** properties. If *Method 2* is chosen, the folder's **Default** radio button will be selected. (Later you can change which button is selected.)

The "Default"' behavior means that the dataview will look to see if the dataview supports the IDs in this order:

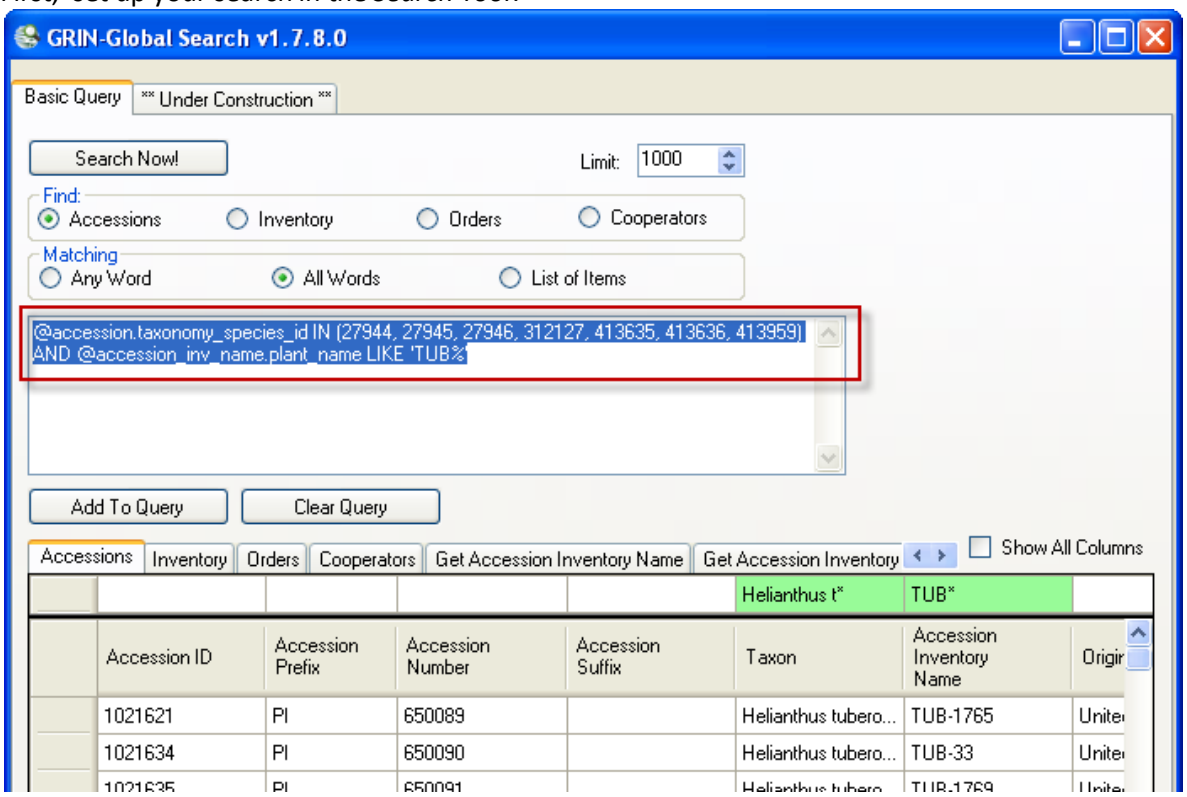
- Accession_IDs
- Inventory_IDs
- Order_Request_IDs
- Cooperator_IDs

The first match wins. If no matches are found nothing is returned.

Tip

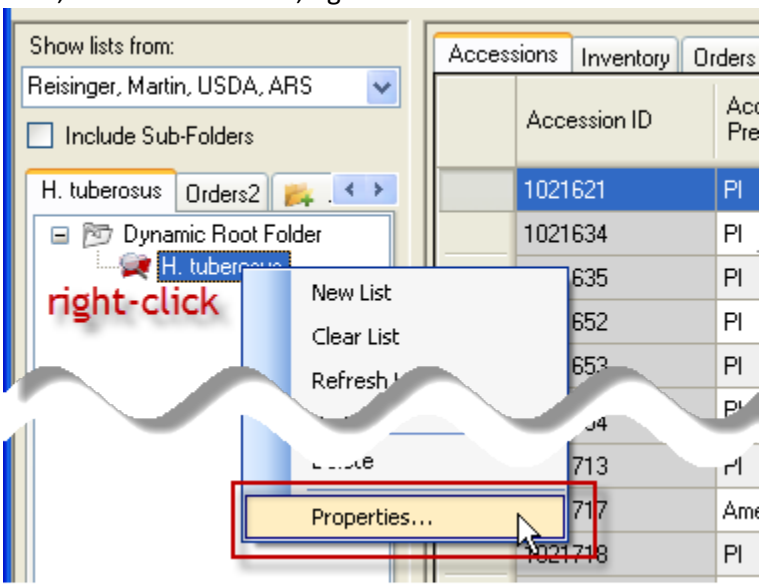
Method 1 is recommended if you are not sure about the expected results.

First, set up your search in the *Search Tool*:

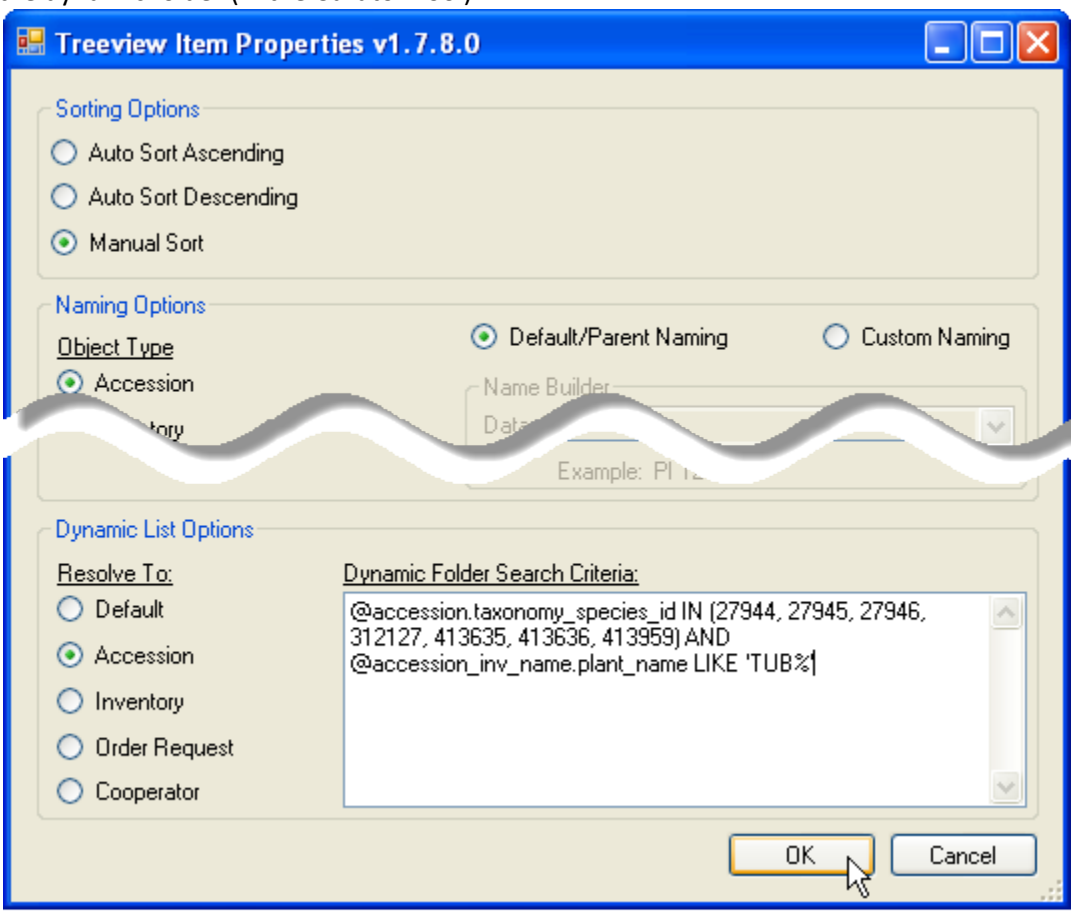


Next, to create a dynamic folder, assuming the results were satisfactory and what you expected, copy the search text from the Search Tool.

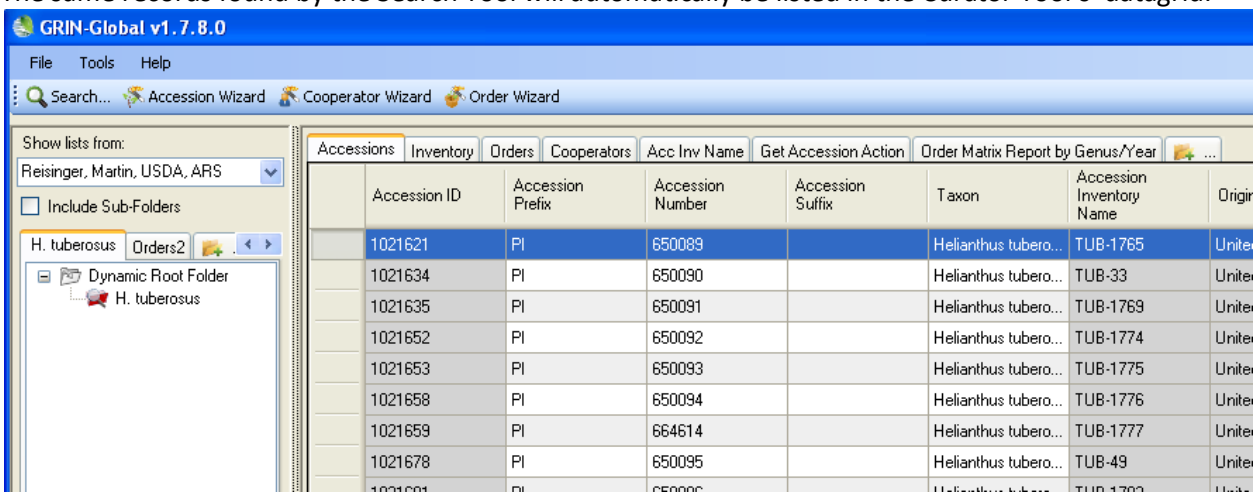
Then, in the Curator Tool, right-click on the folder that is to become a dynamic folder; select **Properties**:



Then copy the generated criteria from the Search Tool's large text box into the **Search Criteria** box of the dynamic folder (in the Curator Tool):



The same records found by the Search Tool will automatically be listed in the Curator Tool's datagrid:



If any new records are added to the GRIN-Global database that meet the folder's criteria, the records will be displayed when the dynamic folder is the active folder and has been refreshed. You can refresh a

dynamic folder by right-clicking and selecting the **Refresh List** command, or by switching to another tab and then back to the tab with the dynamic folder.

Refreshing a Dynamic Folder

If any new records are added to the GRIN-Global database that meet the folder's criteria, the records will be displayed when the dynamic folder is the active folder and has been refreshed. You can refresh a dynamic folder by invoking any of the following methods:

- right-click on the folder and select the **Refresh List** command
- switch to another tab and then back to the tab with the dynamic folder
- switch to another user and return back to the original user
- click the **Refresh Data** button in the right panel
- press F5
- start the CT

Making Dynamic Folders More Readable

Use Text rather than Primary Key Numbers

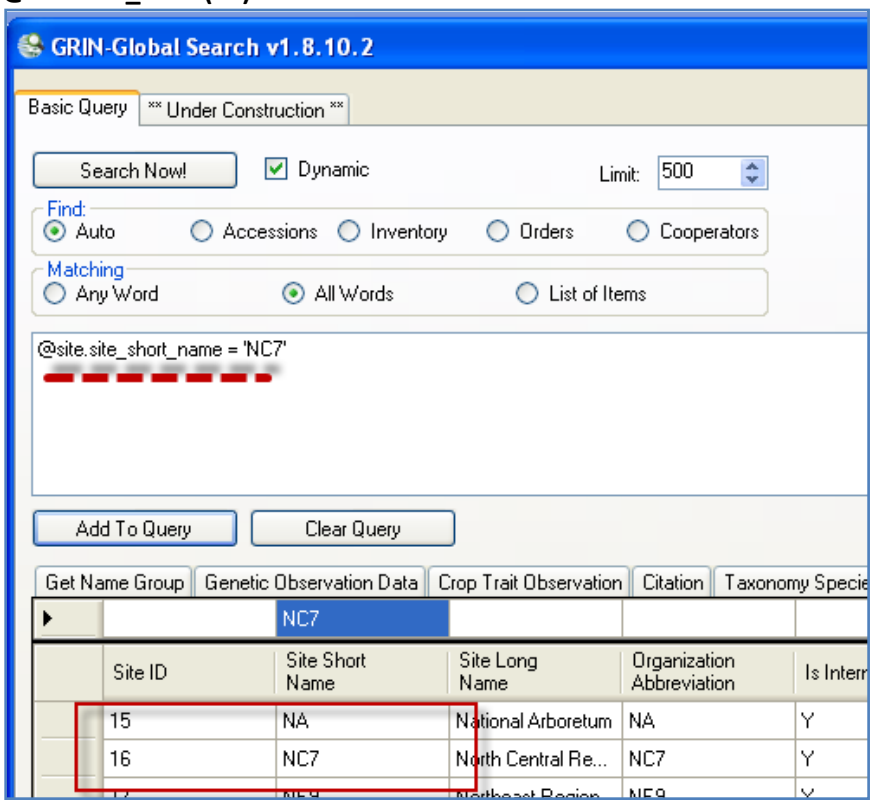
Tip

Try to have the dynamic folder criteria use text values as much as possible and avoid using the primary key numbers. (When the code looks similar to "**@accession.taxonomy_species_id IN (27512, 27513, 27514),**" it is using primary key numbers. You can usually replace that with text alternatives by using tables in which the data is stored.

For example:

@order_request.ordered_date LIKE '%2013%' AND
@site.site_id IN (16) AND
@order_request.order_type_code = 'DI' AND
@order_request.completed_date IS NULL

It is difficult to know what **@site.site_id IN (16) is** really indicating. What site is represented by "16?" Use the **Site** dataview to search for your Site by its name; you can then use that generated code for the **@site.site_id IN (16)** code.



Here is the new code:

@order_request.ordered_date LIKE '%2013%' AND
@site.site_short_name = 'NC7' AND
@order_request.order_type_code = 'DI' AND
@order_request.completed_date IS NULL

Later, if you want to search for orders for a different site, you can exchange the NC7 with the value of another site. For example, **S9**:

@site.site_short_name = 'S9' AND

Second Text Example: Specifying the Taxon and the Geography

The following dynamic folder works fine, but when reviewing the code, it is difficult to know what species the **27923** is referring to, or what the geography_id **1041** is referring to.

```
@accession.taxonomy_species_id IN (27923)
AND @accession_source.geography_id IN (1041)
AND @accession_source.is_origin = 'Y'
```

If we display the Accession dataview, we can deduce the species _id of 27923 is Helianthus annuus and the geography_id value 1041 must be referring to United States, South Dakota:

Accessions | Inventory | Orders | Cooperators | Accession Inventory Name | Accession Source | Accession Source Cooperator | ...

Accession ID	Accession Prefix	Accession Number	Accessi Suffix	Taxon	Name	Origin
1021562	PI	597890		Helianthus annuus	ANN-1749	United States, South Dakota
1021563	PI	597891		Helianthus annuus	ANN-1750	United States, South Dakota
1021569	PI	597892		Helianthus annuus	ANN-1751	United States, South Dakota
1021570	PI	597893		Helianthus annuus	ANN-1756	United States, South Dakota
1021574	PI	597894		Helianthus annuus	ANN-1752	United States, South Dakota
1021588	PI	597899		Helianthus annuus	ANN-1758	United States, South Dakota
1021593	PI	597900		Helianthus annuus	ANN-1759	United States, South Dakota

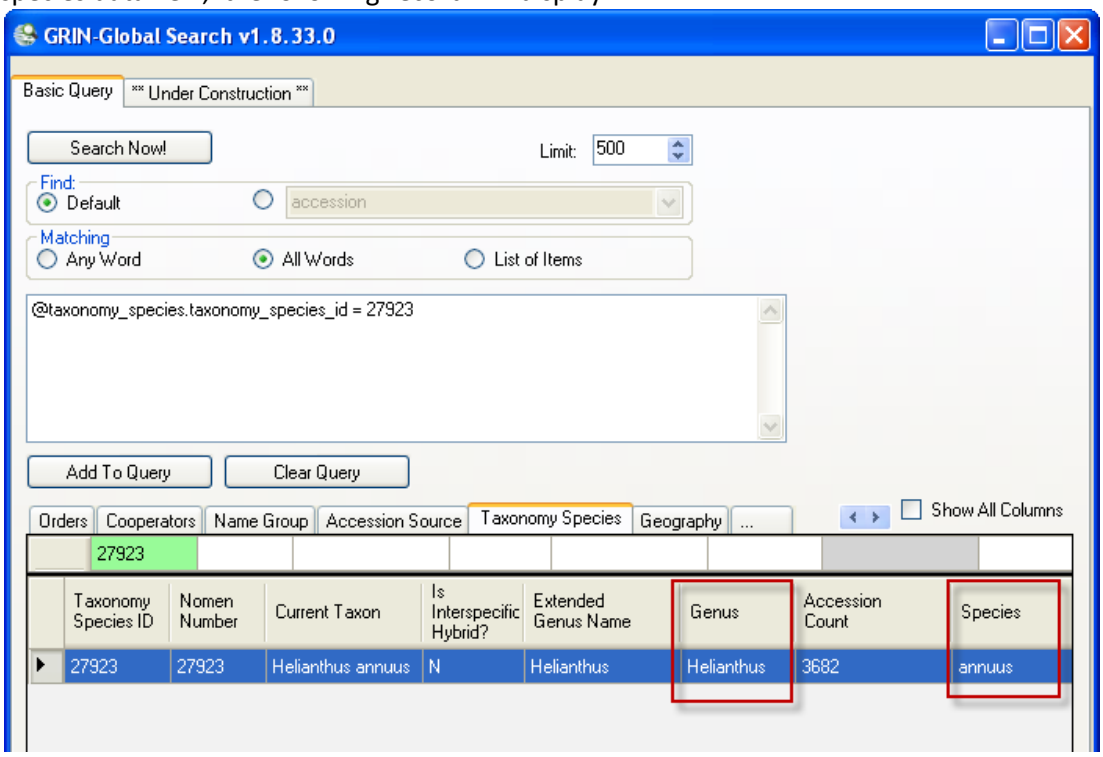
If we display the Accession Source dataview, we can confirm that the geography_id value 1041 is referring to United States, South Dakota:

Accessions | Inventory | Orders | Cooperators | Accession Inventory Name | Accession Source | Accession Source Cooperator | ...

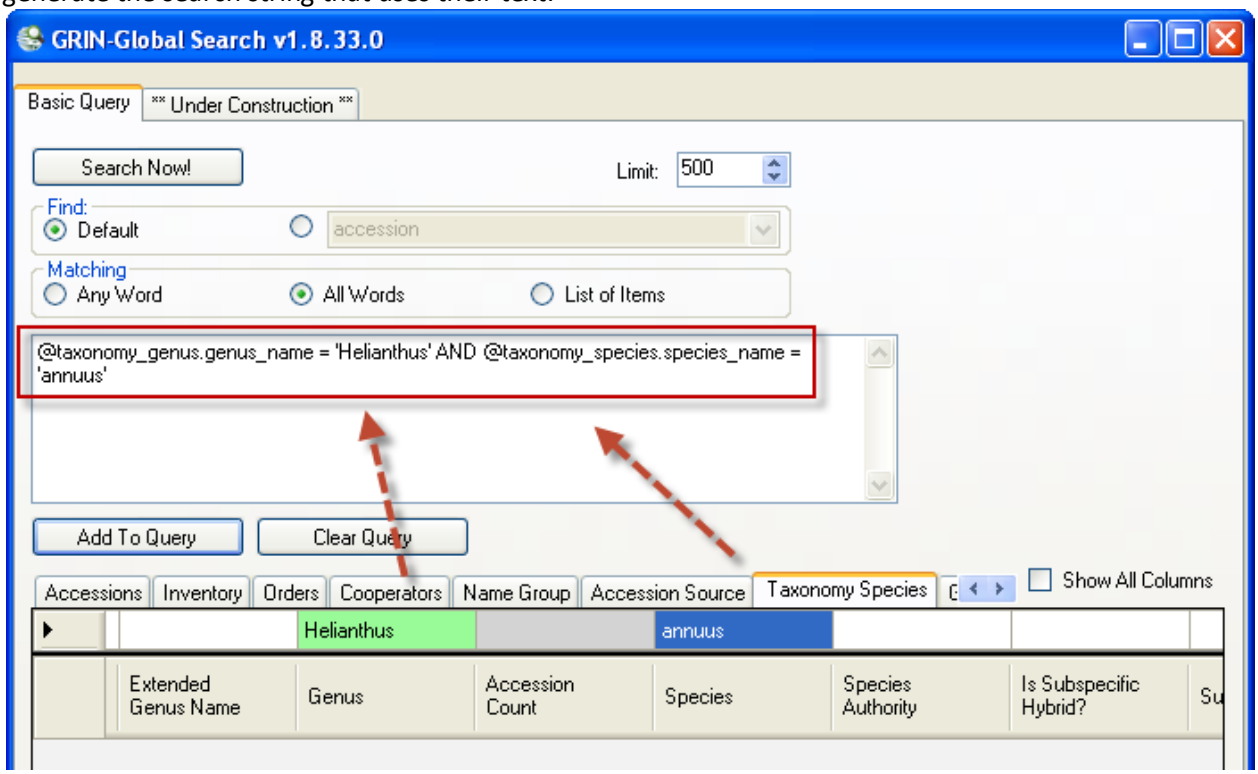
Accession Source ID	Accession	Source Type	Source Date	Source Date Format	Geography	Is Origin?
53633	PI 597891	Collection source event	09/17/1982	Complete date	United States, South Dakota	Y
53652	PI 435383	Collection source event			United States, South Dakota	Y
95263	PI 597890	Collection source event	09/17/1982	Complete date	United States, South Dakota	Y
95264	PI 597892	Collection source event	09/17/1982	Complete date	United States, South Dakota	Y
95265	PI 597893	Collection source event	09/17/1982	Complete date	United States, South Dakota	Y

If you want to make the Dynamic Folder easier to understand when you review its criteria some time later, you can use the ID values and substitute for them actual text strings, using the appropriate fields.

For example, starting with @accession.taxonomy_species_id IN (27923), if you search in the taxonomy species dataview, the following record will display:



Notice the two fields for Genus and Species. You can execute a new search and use their QBE cells to generate the search string that uses their text:



@taxonomy_genus.genus_name = 'Helianthus' AND
@taxonomy_species.species_name = 'annuus'

This search clause is essentially doing the same as

@accession.taxonomy_species_id IN (27923)

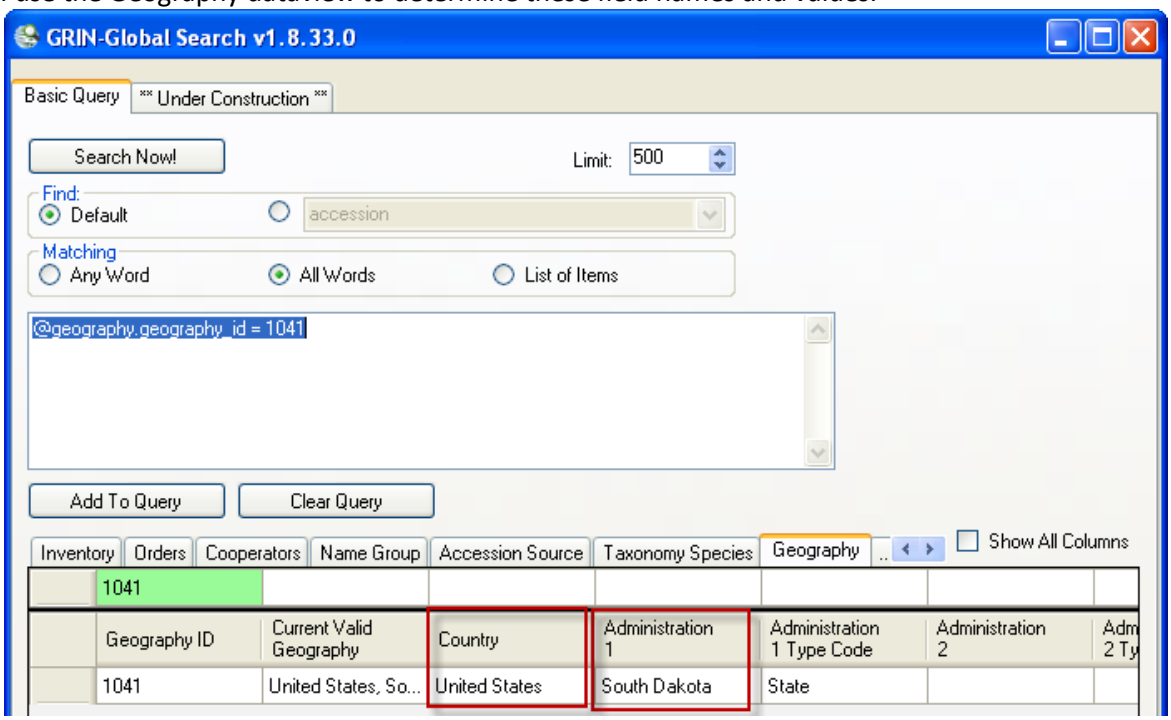
but the first statement is much easier to understand than the other.

Similarly, the following two statements are equivalent, but one is much easier (to a human) to understand:

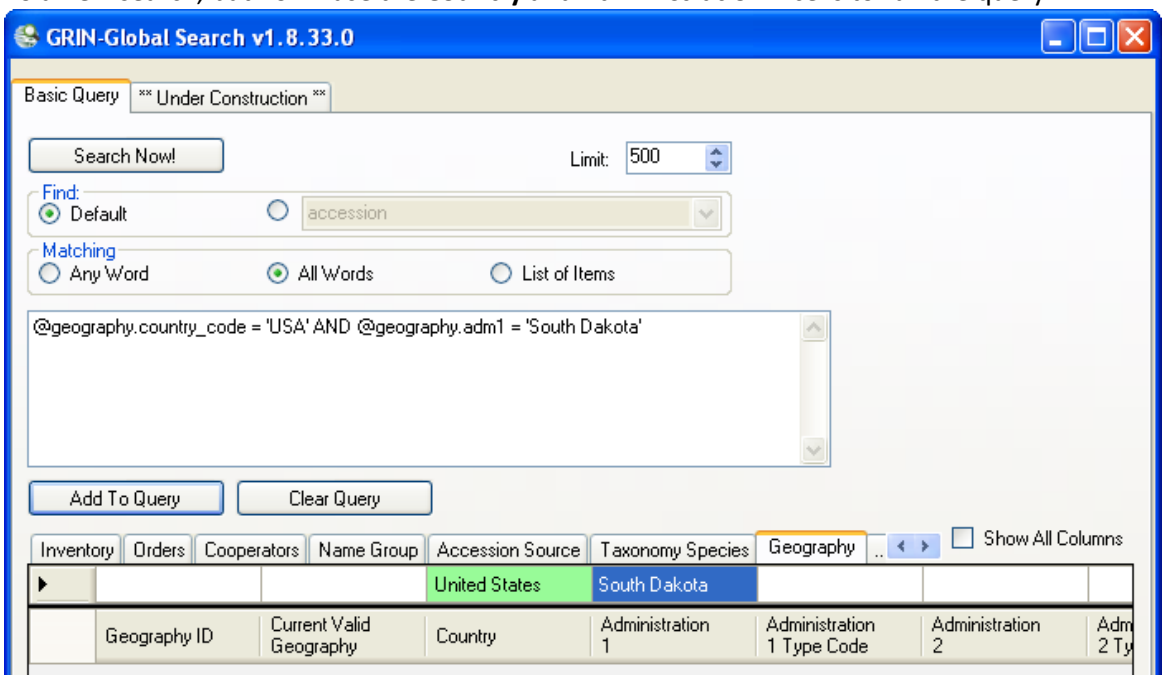
@geography.geography_id = 1041

vs. @geography.country_code = 'USA' AND @geography.adm1 = 'South Dakota'

I use the Geography dataview to determine these field names and values.



Do a new search, but now I use the **Country** and **Administration 1** cells to run the query:



The codes that is generated in the search text box

@geography.country_code = 'USA' AND @geography.adm1 = 'South Dakota'

is equal to

@geography.geography_id = 1041

Back to the original statement at the beginning of this topic; we had:

@accession.taxonomy_species_id IN (27923)
AND @accession_source.geography_id IN (1041)
AND @accession_source.is_origin = 'Y'

Now, using what we learned in the examples above, we can assemble a much easier-to-understand statement and store this in the Properties | Dynamic FolderSearch Criteria box:

@taxonomy_genus.genus_name = 'Helianthus'
AND @taxonomy_species.species_name = 'annuus'
AND @geography.country_code = 'USA'
AND @geography.adm1 = 'South Dakota'
AND @accession_source.is_origin = 'Y'

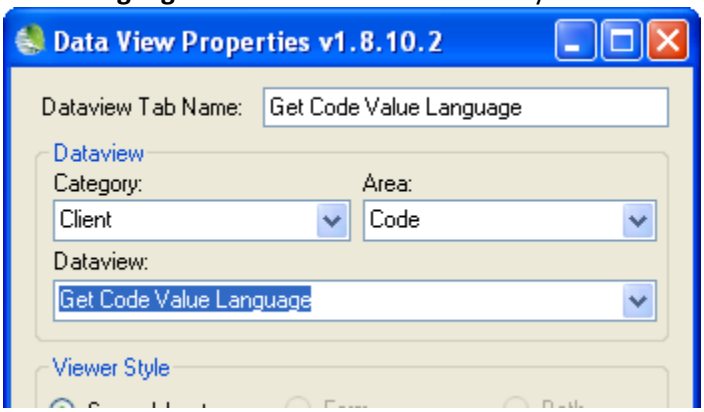
In the future, you can edit the folder properties and replace any of the text values to find the desired records.

Dynamic Folder Examples

Dynamic Folder Examples*

Purpose	Code
Quick way to find an inventory record (resolve to Inventory). Since the record is in the CT, you can then edit it (rather than search in the Search Tool and drag the record over to the CT).	@inventory.inventory_number_part1 = 'PI' AND @inventory.inventory_number_part2 = 600000
Find orders made in the year 2013 - for a site - distributed orders only - that are not complete (they do not have a date filled for the COMPLETED_DATE field. (resolve to Order Request)	@order_request.ordered_date LIKE '%2013%' AND @site.site_short_name = 'NC7' AND @order_request.order_type_code = 'DI' AND @order_request.completed_date IS NULL
Find the records whose species is 'Phalaris arundinacea' - the source type indicates records that were collected (as compared to developed or	@taxonomy_species.name = 'Phalaris arundinacea' AND @accession_source.source_type_code = 'COLLECTED' AND @geography.country_code = 'USA'
This search is looking for records at the NC7 site whose inventory availability status is low.	@taxonomy_genus.genus_name = 'Zea' AND @taxonomy_species.species_name = 'mays' AND @taxonomy_species.subspecies_name = 'mexicana' AND @site.site_short_name = 'NC7' AND @inventory.availability_status_code = 'LOW'

* When codes are involved, you need to know which codes are valid and can be included in the dynamic folder criteria. Perhaps the simplest way to find all of the existing codes at once is to open the **Get Code Value Language** dataview and then show only the records for your language.



Note that these queries were used with data in a database with data copied from GRIN. They are here to for illustration, but will need to be modified to match your data.

One Accession

@accession.accession_number_part1 = 'PI' AND
@accession.accession_number_part2 = 600000

Accession Range

(@accession.accession_number_part2 > 500000 AND @accession.accession_number_part2 < 500100)

Several Accessions

@accession.accession_number_part1 = IN ('PI' , 'CRIB') AND
@accession.accession_number_part2 > 500000

One Species

@taxonomy_species.name = 'Ribes cereum'

Born in the USA

@taxonomy_species.name = 'Helianthus tuberosus'
AND @accession_source.source_type_code = 'COLLECTED'
AND @geography.country_code = 'USA'

Collected -USA but not obvious

@accession_source.source_type_code = 'COLLECTED' AND @accession_source.geography_id IN (926, 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1012, 1013, 1014, 1015, 1016, 1017, 1018, 1019, 1020, 1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, 1030, 1031, 1032, 1033, 1034, 1035, 1036, 1037, 1038, 1039, 1040, 1041, 1042, 1043, 1044, 1045, 1046, 1047, 1048, 1049, 1050, 1051)
AND @accession_source.is_origin = 'Y' AND @accession.taxonomy_species_id IN (27512, 27513, 27514)

Looking for Origin

@accession.taxonomy_species_id IN (27923)
AND @accession_source.geography_id IN (1041)
AND @accession_source.is_origin = 'Y'

Pending Orders

@order_request.ordered_date LIKE '%2013%' AND
@site.site_short_name = 'S9' AND
@order_request.order_type_code = 'DI' AND
@order_request.completed_date IS NULL

Sorghum - KERCOLOR 2 4

@crop.name = 'SORGHUM'
AND @crop_trait.coded_name = 'KERCOLOR'
AND @crop_trait_code.code IN ('2', '4')

Looking for available inventory

@taxonomy_genus.genus_name = 'Zea' AND
@taxonomy_species.species_name = 'mays' AND
@taxonomy_species.subspecies_name = 'mexicana' AND
@site.site_short_name = 'NC7' AND
@inventory.availability_status_code = 'LOW'

Looking for low inventory

@inventory_maint_policy.maintenance_name LIKE 'NC7-maize.pop%' AND
@inventory.is_distributable = 'Y' AND
@inventory.is_available = 'Y' AND @inventory.availability_status_code = 'AVAIL' AND
@inventory.quantity_on_hand < 1500