

Assignment 2: Hands-on Practice with the Curator Tool



Revision Date

Thursday, July 10, 2013

This exercise should be completed *soon after* attending the introductory GRIN-Global session.

Thank you in advance for taking the time to participate in the training and to make it a truly effective learning opportunity.

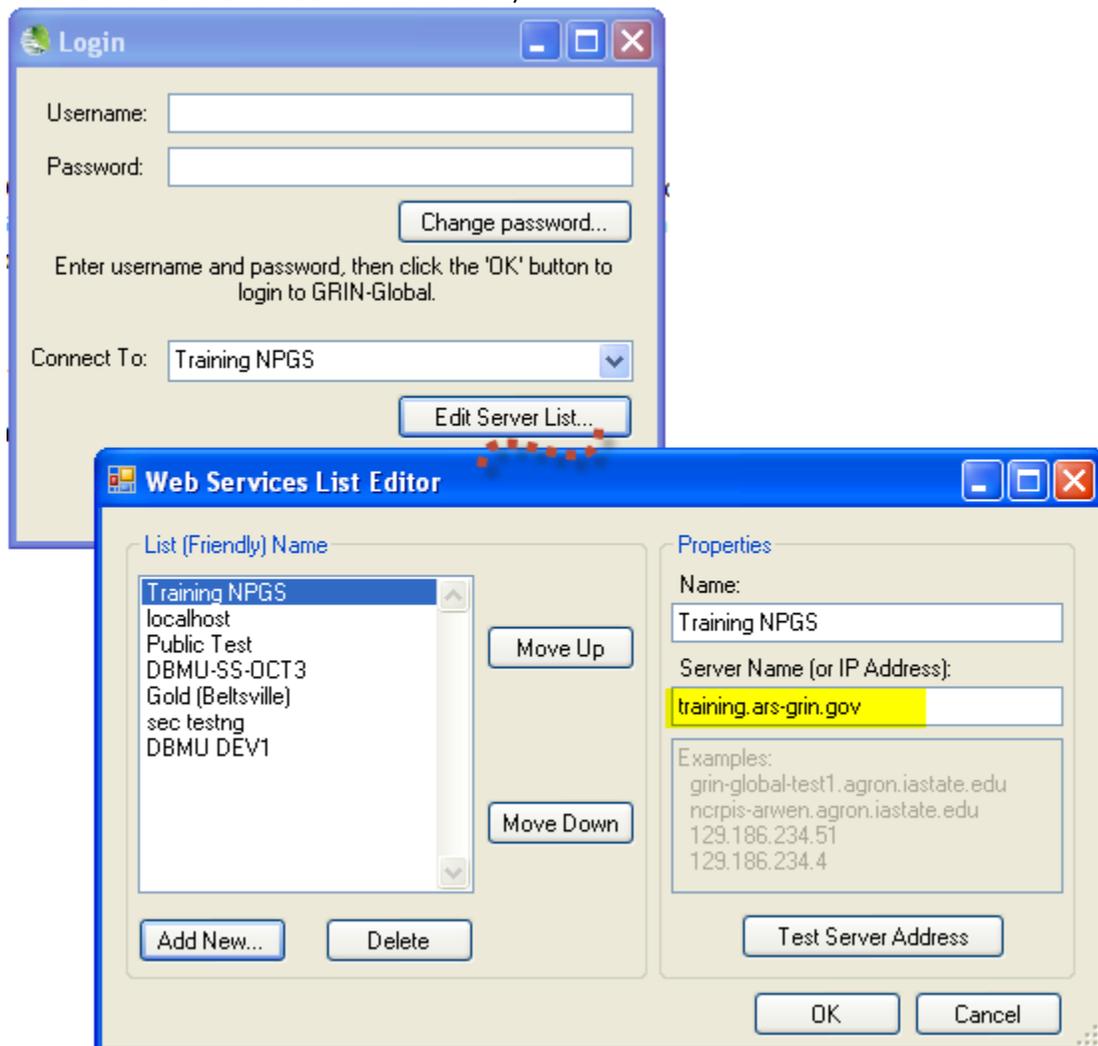
--Marty Reisinger and the rest of the GRIN-Global Development Team

1. Log in

During training, the GRIN-Global Username is the same as your GRIN ID. If your GRIN ID was **mrduck**, it is still **mrduck** in GRIN-Global. However, in GRIN-Global, the password is also initially set to match your *GRIN ID*, not your current GRIN *password*. You are welcome to change your password (use the **Change password...** button on the **Login** window, but please remember it.)

In a networked environment

For our training, the server is **training.ars-grin.gov**. (If you have not pointed to this yet, you will need to click on the Edit Server List button.)



The first exercises, 2- 5, should be a quick review for you – the full step-by-step directions were intentionally omitted. If you need detailed steps, review the previous assignment. Or, better yet, refer to the online Curator Tool User Guide. (The GG Training wiki page has a permanent link CT User Guide has a link to the CT User Guide on: <http://www.grin-global.org/index.php/Training>.) The NPGS webinar series page (http://www.ars-grin.gov/npgs/gringlobal/webpages/NPGS_training_links.html) also has a link to the CT User Guide.

2. (Review) Search for sample records to review

Practice doing a basic Search – find some existing records in the database. Type **Rubus** in the search **Taxon** QBE cell; click the **Search Now!** button. The records will be displayed in the **Search** window's grid.

Feel free to experiment and use a taxon that you are familiar with or work with. Remember that this database is a copy of what was in GRIN.

Here is one that I did for **Helianthus***

The screenshot shows the GRIN-Global Search v1.0.7.0 interface. The search query is "@accession.taxonomy_species_id IN (27922, 27923, 27924, 27925, 27926, 27927, 27928, 27929, 27930, 27931, 27932, 27933, 27934, 27935, 27936, 27937, 27938, 27939, 27940, 27941, 27942, 27943, 27944, 27945, 27946, 70328, 70329, 70330, 104276, 104277, 104278, 104280, 104281, 104282, 104283, 104284, 104285, 104286, 104287, 104288, 104289, 104290, 104291, 104292, 104293, 104294, 104295, 104296, 104297, 104298, 104299, 104300, 104305, 104306, 104307, 104308, 104309, 104310, 104312, 104313, 104314, 104315, 104316, 104317)". The search results are displayed in a table with columns: Accession ID, Accession Prefix, Accession Number, Taxon, Accession Name, Origin, and Maintenance Site. The table shows several rows of data for Helianthus species. A red box highlights the "Show All Columns" checkbox, which is currently unchecked. A red box also highlights the "Showing rows: 5342 of 5342" status bar. A red box highlights the "Search Now!" button. A red box highlights the "Limit: 10000" dropdown menu. A red box highlights the "Find:" section with radio buttons for "Accessions", "Inventory", "Orders", and "Cooperators". A red box highlights the "Matching" section with radio buttons for "Any Word", "All Words", and "List of Items". A red box highlights the "Add To Query" and "Clear Query" buttons. A red box highlights the "Show only rows with this data" button in the row filter menu. A red box highlights the "Hide rows with this data" button in the row filter menu. A red box highlights the "Reset row filter" button in the row filter menu. A red box highlights the "Connected to: http://training.ars-grin.gov/GRINGlobal/GUI.aspx" status bar.

Accession ID	Accession Prefix	Accession Number	Taxon	Accession Name	Origin	Maintenance Site
14259...	PI	531058	Helianthus petiolaris sub...	2011	United States, N...	NC7
14259...	PI	531059	Helianthus pumilus			NC7
14259...	PI	531060	Helianthus pauciflorus			NC7
14260...	PI	531069	Helianthus annuus			NC7
14260...	PI	531070	Helianthus annuus			NC7
14260...	PI	531071	Helianthus annuus	RHA 358	United States, N...	NC7
14260...	PI	531072	Helianthus annuus	RHA 359	United States, N...	NC7

Several things to point out:

- **Show All Columns** – as shown, it is currently unchecked (not selected). So the columns that are displayed are the same columns displayed in the Curator Tool. In webinar 1, I showed how you can select and deselect columns, using the column choose tab in the CT.

- Filter (**Show only rows with this data**)– to display a subset of the Retrieved Records

Practice **filtering** the records, to display a subset of those found by the initial search query. Right-click on a cell containing data on which you intend to filter; select **Show only rows with this data**. The bottom, left corner of the grid, will indicate how many records are now being displayed:

16423...	PI	638224
17831...	PI	657879

Showing rows: 17 of 1000

- Also, adjust the **Limit** when necessary. The default is 1000 records. Shown here, I have increased the upper limit to 10,000.

GRIN-Global Search v1.0.7.0

Basic Query ***** Under Construction *****

Search Now! Limit: 10000

Find: Accessions Inventory Orders Cooperators

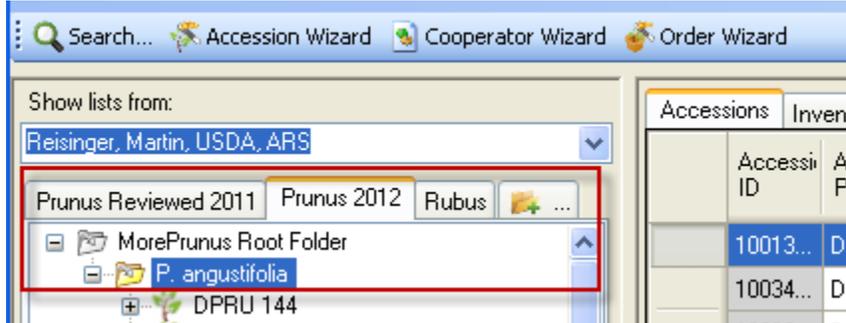
4. Build a few Lists in the Curator Tool.

Read the Curator Tool User Guide *Lists Overview* section for background information on lists. Curator Tool users build and maintain lists to point to and manage specific database records which interest them. Also refer to the section *Maintaining Lists to Organize Your Data* for detailed instructions on creating, naming, and managing lists.

-or-

Review the video <http://www.ars-grin.gov/npgs/gringlobal/videos/lists.swf> to see how it's done. Note that this video is a bit out of date, so there will be some minor differences. For example, the Search button was moved to the top left corner of the screen.

Build several lists and build them on more than one tab. The following example shows three tabs: “Prunus Reviewed 2011,” “Prunus 2012,” and “Rubus.”



Any lists that you create are yours. As you use GG, you will find many reasons for building lists to track groups of records. Think of how you currently organize your emails. Some people have one large Inbox, where they store every email that comes to them, whereas others have many folders in which they “squirrel away” emails to meet their unique needs. (I think squirrel away is a very appropriate “verb.”) In any case, lists can be setup for any purpose.

Lists can be shared. Currently, GG is designed to allow sharing of lists by users in the same site. Other sharing options will most likely evolve. Also, we will discuss a new type of list in our next lesson.

5. Copy Records from the Search Tool to the Curator Tool

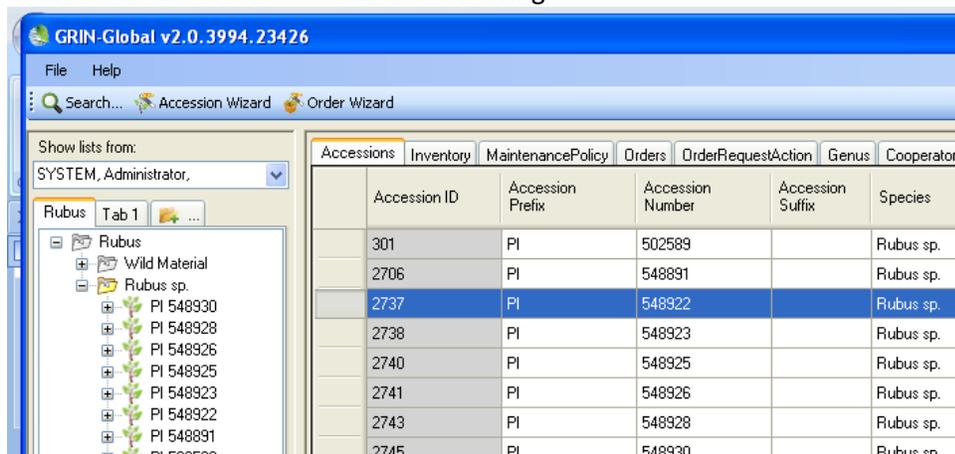
This step requires some manual dexterity!

If you haven’t watched the video referenced in step 4, <http://www.ars-grin.gov/npgs/gringlobal/videos/lists.swf> do that now. This video shows how to build lists and copy data from the results of a successful search.

Use the Search Tool to find records that meet some criteria of yours. To keep it simple for now, you might consider just searching Accessions records and searching for accessions of a specific species. However, feel free to experiment with your searches. We will be covering search issues extensively in the second webinar.

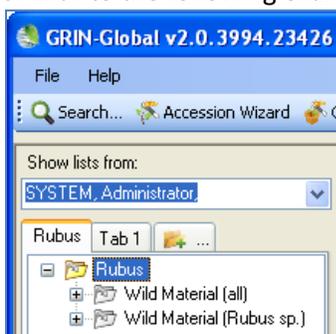
In the following example, I am working with Rubus records. You can do the same, or you are invited to work with records that are familiar to you.

The result should look similar to the following:



Accessions	Inventory	MaintenancePolicy	Orders	OrderRequestAction	Genus	Cooperator
	Accession ID	Accession Prefix	Accession Number	Accession Suffix	Species	
	301	PI	502589		Rubus sp.	
	2706	PI	548891		Rubus sp.	
	2737	PI	548922		Rubus sp.	
	2738	PI	548923		Rubus sp.	
	2740	PI	548925		Rubus sp.	
	2741	PI	548926		Rubus sp.	
	2743	PI	548928		Rubus sp.	
	2745	PI	548930		Rubus sp.	

So now you have two lists under Rubus. Rename the two lists to better reflect their actual contents, similar to the following example:



6. Practice Renaming Lists and Moving Items from One List to Another

Lists are extremely versatile and personal. You create and modify lists to manage and track your data to meet your specific workflow needs.

In the List panel, create a new list.

- In the following example, I created a *tab* which I titled **Prunus**;
- I renamed the first *folder* to **Prunus angustifolia**
- I searched for Accessions whose Taxon was **Prunus ang*** I then dragged the found records (38 at the time I did it) into the **Prunus angustifolia** folder.
- Then I created a second list, called **PI**, as a sub-folder to the **Prunus angustifolia** folder
- Practice moving, *one at a time*, only the **angustifolia** PIs (there are three) into this folder

Now you should essentially have two lists – one has most of the accessions, and the second list just has the accessions that have been assigned PI numbers.

Why did I do this? Because I wanted to review all of the **Prunus angustifolia** in the GG database and keep those with PI number in one list by themselves. Remember that how you build your lists is up to you. Some people keep their t-shirts in one drawer and their socks in another. Some teenagers simplify and just throw all their clothes on the floor... Each person organizes things in the way that works for

them.

The screenshot displays the GRIN-Global v1.7.7.0 application window. The title bar reads "GRIN-Global v1.7.7.0". The menu bar includes "File", "Tools", and "Help". Below the menu bar, there is a search bar and three wizard icons: "Accession Wizard", "Cooperator Wizard", and "Order Wizard".

The main interface is divided into two main sections. On the left, there is a tree view under the heading "Show lists from: Reisinger, Martin, USDA, ARS". The tree is expanded to show a folder named "Prunus". Under "Prunus", there are several sub-folders: "DPRU 1929" through "DPRU 3076", a folder named "PI", and three individual PI entries: "PI 662383", "PI 421528", and "PI 282949". A red dashed line points from the "PI 421528" entry in the tree to the "Data Editing" dialog box.

On the right, there is a data table with the following columns: "Accession ID", "Accession Prefix", "Accession Number", "Taxon", and "Accession Inventory Name". The table contains three rows of data:

Accession ID	Accession Prefix	Accession Number	Taxon	Accession Inventory Name
1565657	PI	421528	Prunus angustifolia	421528
1687015	PI	282949	Prunus angustifolia	Hutchens P
1882342	PI	662383	Prunus angustifolia	Chickasaw

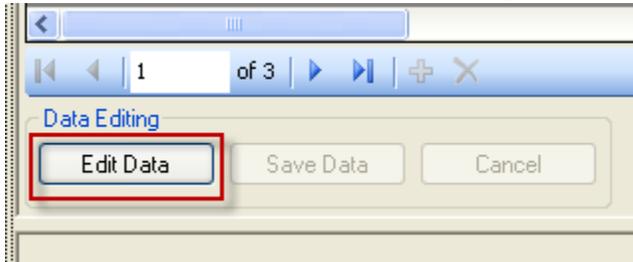
Below the table, there is a "Data Editing" dialog box with a "1 of 3" indicator and buttons for "Edit Data", "Save Data", and "Cancel".

At the bottom of the window, there is a status bar that reads "Showing rows: 3 of 3" and "Connected to: http://training.ars-grin.gov/GRINGlobal/GUI.aspx".

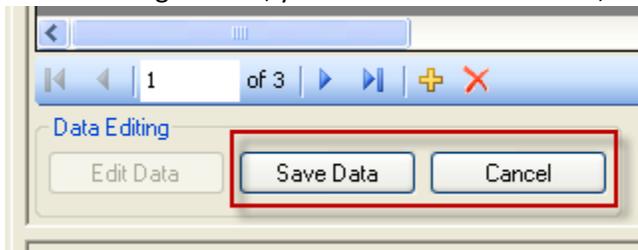
7. Edit a Record.

The data that is displayed is real data – whatever is displayed in the right data grid is the data stored in the GG database. If you recall from our discussion in the first webinar session, the tabs are called “dataview tabs.” These dataviews have been programmed to display data, sometimes from one table in the database, but generally the dataviews display data from multiple, related tables. The programmers created this dataview interface to make it easier for us to view and edit the data in the database.

Click the **Edit Data** button to enable editing.

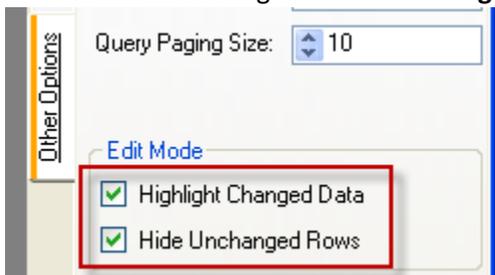


At that point, after you have clicked the **Edit Data** button, you are in edit mode. You can make changes to the existing records, you can insert new records, and you can delete records.



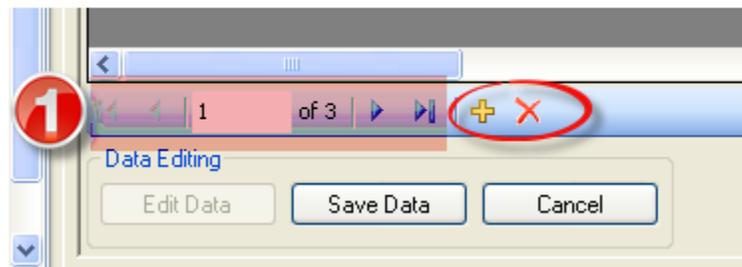
It should be obvious from the two buttons in the screen above, that you have two options when in Edit mode – you can save your changes, or cancel and return to display mode.

Before editing any data, take a moment to select the **Highlight Changed Data** option (on the **Other Options** tab on the right) so that when editing, the Curator Tool will display different indicator colors. Consider also selecting the **Hide Unchanged Rows** option.



Edit the data in at least one or two of the *Rubus sp.* records (or whatever records you are working with).

You can move to a record by clicking on it or by using the navigation bar (shown to the right of the #1 in the graphic below). Note also the Add (+) and Delete (X) icons.



We briefly mentioned in session one that any cells that are gray are not editable in that dataview. You may however be able to edit that data in a different dataview. (More on that later.)

Keyboard Shortcuts

When in Edit mode, there are a couple of nifty keyboard shortcuts you can use. Rather than repeat all that text here, be sure to read the complete section *Creating and Editing Records* in the Curator Tool Guide. Teaser: there is a really nice keyboard shortcut which makes it possible to insert a new record and duplicate the data from the record immediately above it in the grid. There is another keyboard shortcut that duplicates the data from one cell to the cell directly below it.

*Remember that you are working with live data. You can always click the **Cancel** button when necessary.*

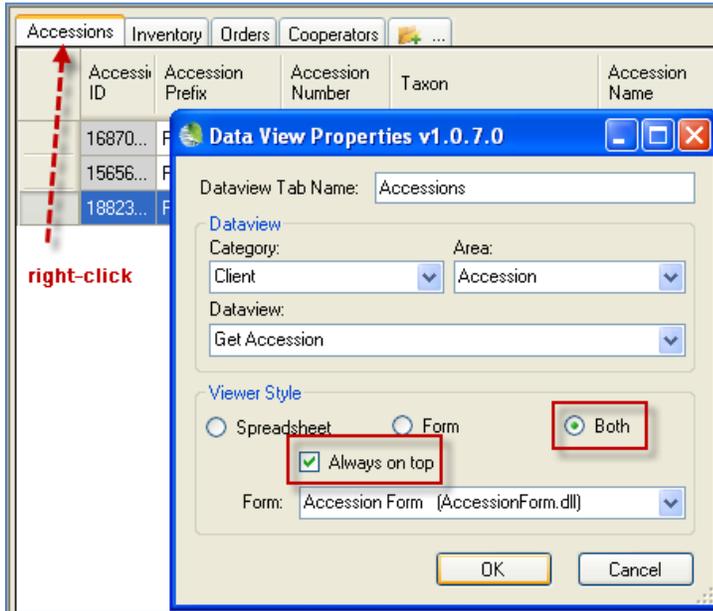
Save the changed record(s).

You have just permanently changed the records in the training database. In this case, the data are training records, so it's not a big deal if something happens to them. In the production system, we will have security enabled, so that records can be set up with specific permissions and ownership – we'll save that discussion for the 6th webinar session.

8. Switching from Grid to Form View

Currently there are several dataviews that can be viewed in the grid or as forms. The Accession dataview is one that can be viewed either way. Try it. Note: you cannot be in Edit mode when attempting to do

this.



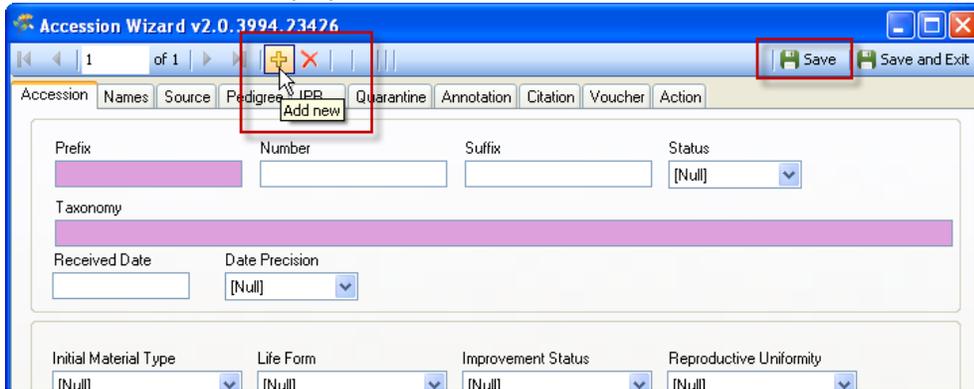
9. Create New Database Records using the Accession Wizard

In this exercise, you will create a new accession record, using the Curator Tool's Accession Wizard. Refer to the Curator Tool User Guide's *Accession Wizard Overview* section for background information.

The first step is to ensure that the **Accessions** tab is the active tab in the data grid. If it is, then click on the **Accession Wizard** button:



The accession wizard displays its own window:

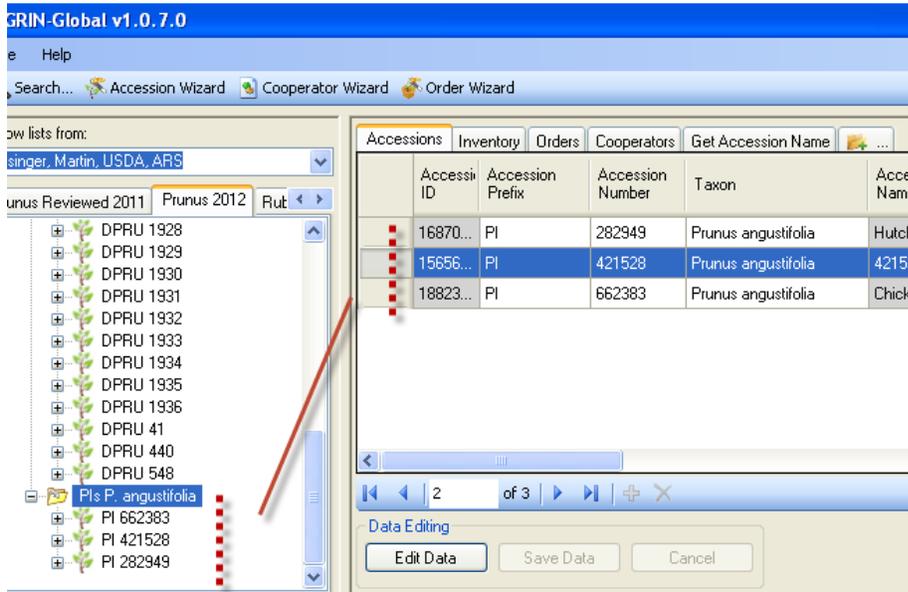


Click the **Add new** button to begin the inputting of a new accession. Create your own data for the fields. Remember that you must provide data for required fields, such as **Prefix** and **Taxonomy (Species)** which are denoted by a color. Fill in at least the first two screens (the **Accession** tab and the **Names** tab). Remember to use the **Save** button frequently. When you are finished, click the **Save and Exit** button in the upper right corner.

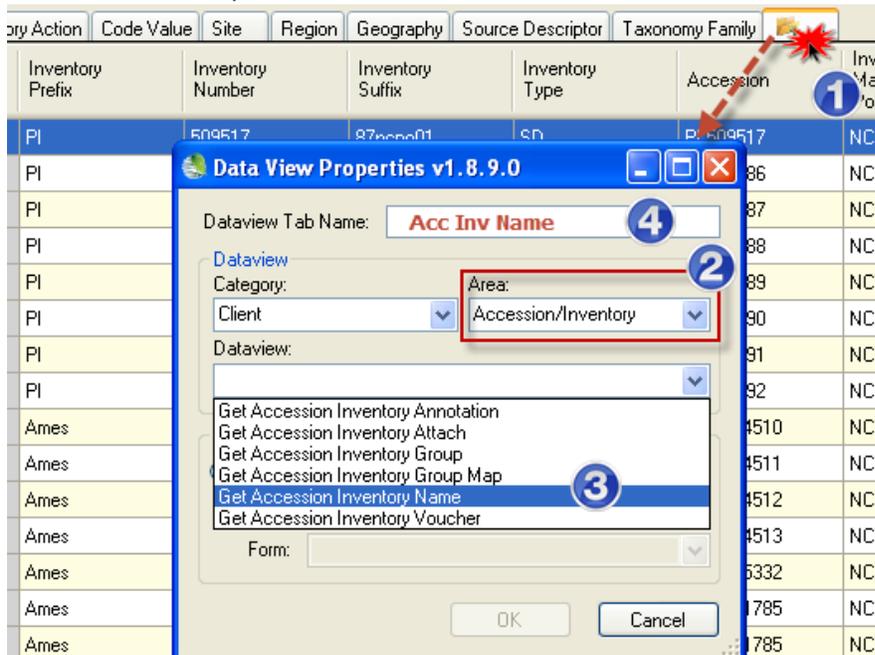
9. Explore Dataviews

Before completing this step, review the two sections on dataviews in the Curator Tool User Guide. An overview is in the *Database and GRIN-Global Basic Concepts* section; the steps for displaying dataviews are explained in the *Curator Tool Overview* section.

In this example, my bottom list is highlighted on the left. It only has three accession records in it; all are displayed in the grid on the right.



Now when I open another dataview, the **Get Accession Inventory Name** dataview, I will see the Accession-Inventory Name records associated with those Accessions.



The three accessions had 5 related Name records:

The screenshot shows a software interface with a tree view on the left and a table on the right. The tree view lists various accessions, including DPRU 1928-1936, DPRU 41, DPRU 440, DPRU 548, and PI 662383, PI 421528, PI 282949. The table on the right has columns: Accession Name ID, Accession, Category, Accession Name, and Name Rank. The data in the table is as follows:

Accession Name ID	Accession	Category	Accession Name	Name Rank
912111	PI 421528	Cultivar name	421528	1010
913422	PI 421528	Site identifier	DPRU 1937	1080
1206080	PI 282949	Cultivar name	Hutchens Plum	1010
1603298	PI 662383	Developer identifier	Chickasaw plum	50
1603299	PI 662383	Other or unclassif...	Chisholm germpla...	1100

Sorting the Data

Practice sorting the records. When you right-click on a column heading, a sort menu displays:

The screenshot shows the same table as above, but with a sort menu open over the 'Accession Name' column. The menu options are: Sort Ascending, Sort Descending, No Sort, and Reset All Sorting. The 'Accession Name' column heading has a small upward-pointing triangle, indicating it is currently sorted ascending.

A sorted column will display a sort directional indicator in its heading:

A close-up of a column heading 'Accession Name' with a small upward-pointing triangle next to it. Below the heading, the following values are listed: 421528, Chickasaw plum, Chisholm germpla..., DPRU 1937, and Hutchens Plum. The 'Chickasaw plum' row is highlighted in blue.

10. Change the Naming Option for List Items

List items have a default way of being listed. For example, accession items are listed with the three component parts (prefix, number, and suffix) of the record's key:

Accessions	Inventory	MaintenancePolicy	Orders	OrderRequestAction	Ger
Accession ID	Accession Prefix	Accession Number	Accession Suffix	Species	
301	PI	502589	rei	Rubus sp.	
2706	PI	548891		Rubus sp.	
2737	PI	548922		Rubus sp.	
2738	PI	548923		Rubus sp.	
2740	PI	548925		Rubus sp.	
2741	PI	548926		Rubus sp.	

You can change the properties of a list so that the name can be virtually anything you want it to be. (Refer to the section *List Items' Custom Naming Feature* in the Curator Tool User Guide for a complete explanation of custom names for list items.)

Create a custom name for one of your Rubus lists to consist of the accession's **Number** and its **Taxon** fields:

Treeview Item Properties v2.0.3994.23426

Sorting Options

- Auto Sort Ascending
- Auto Sort Descending
- Manual Sort

Naming Options

Object Type

- Accession
- Inventory
- Order Request
- Cooperator
- Genus
- Geography
- Crop

Default/Parent Naming Custom Naming

Name Builder

Dataview: Get Accession

Field: [Empty]

Auto Add Spaces [Add]

{get_accession.accession_number_part2} + "" + {get_accession.taxonomy_species_id}

Example: PI 12345

[OK] [Cancel]

Your resulting list should be similar to the one below:

Accessions	Inventory	MaintenancePolicy	Orders	OrderRequestAction	Gen
Accession ID	Accession Prefix	Accession Number	Accession Suffix	Species	
301	PI	502589		Rubus sp.	
2706	PI	548891		Rubus sp.	
2737	PI	548922		Rubus sp.	
2738	PI	548923		Rubus sp.	
2740	PI	548925		Rubus sp.	
2741	PI	548926		Rubus sp.	
2743	PI	548928		Rubus sp.	
2745	PI	548930		Rubus sp.	

11. Optional Exercise: Import Sample Data (from another Source)

If you complete this optional exercise, you will have mastered a good portion of the basics of working with the Curator Tool interface.

Copy data from the transfer spreadsheet to the Curator Tool.

You can add many new records into GRIN-Global at one time. Basically, you drag and drop or copy the block of data from the spreadsheet into the Curator Tool Data Grid. Two things to remember:

- the Data Grid must be in Edit mode (click the **Edit** button if necessary)
- include the empty Accession ID column when adding new records. (If you were updating existing records, you would need to include the existing IDs. For now, we'll assume you adding new records.)

The user is dragging a block of cells from a spreadsheet into the Curator Tool. (The CT is in edit mode.)

The screenshot shows the GRIN-Global v1.0.7.0 interface. The main window displays a data grid with columns: Accession ID, Accession Prefix, Accession Number, Accession Suffix, and Taxon. The data grid is currently in edit mode, as indicated by the 'Data Editing' toolbar at the bottom. A spreadsheet is being imported into the data grid, with a dashed arrow indicating the source. The spreadsheet data is as follows:

Accession ID	Accession Prefix	Accession Number	Accession Suffix	Taxon
	PHVU	95001	mr2	Phaseolus vulgaris
	PHVU	95002	mr2	Phaseolus vulgaris
	PHVU	95003	mr2	Phaseolus vulgaris
	PHVU	95004	mr2	Phaseolus vulgaris
	PHVU	95005	mr2	Phaseolus vulgaris
	PHVU	95006	mr2	Phaseolus vulgaris
	PHVU	95007	mr2	Phaseolus vulgaris
	PHVU	95008	mr2	Phaseolus vulgaris
	PHVU	95009	mr2	Phaseolus vulgaris
	PHVU	95010	mr2	Phaseolus vulgaris
	PHVU	95011	mr2	Phaseolus vulgaris
	PHVU	95012	mr2	Phaseolus vulgaris

A thought bubble points to the 'Accession Suffix' column with the text: "use your initials or some recognizable short acronym for the suffix".

After the “drop,” the Curator Tool should look similar to the following window:

Accession ID	Accession Prefix	Accession Number	Taxon	Accession Suffix	Accession Name	Origin	Maintenance Site
-1	PHVU	95001	Phaseolus vulgaris	mr2			-1
-2	PHVU	95002	Phaseolus vulgaris	mr2			-2
-3	PHVU	95003	Phaseolus vulgaris	mr2			-3
-4	PHVU	95004	Phaseolus vulgaris	mr2			-4
-5	PHVU	95005	Phaseolus vulgaris	mr2			-5
-6	PHVU	95006	Phaseolus vulgaris	mr2			-6
-7	PHVU	95007	Phaseolus vulgaris	mr2			-7
-8	PHVU	95008	Phaseolus vulgaris	mr2			-8
-9	PHVU	95009	Phaseolus vulgaris	mr2			-9
-10	PHVU	95010	Phaseolus vulgaris	mr2			-10
-11	PHVU	95011	Phaseolus vulgaris	mr2			-11
-12	PHVU	95012	Phaseolus vulgaris	mr2			-12

Notice that GRIN-Global temporarily assigned Accession IDs to the new records. The minus (-) signs indicate that the IDs are temporary; when the data is saved, permanent IDs are assigned.

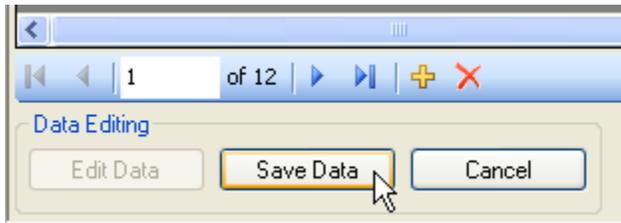
For sample data, there is a spreadsheet stored on the training wiki which can be downloaded as a template. [http://www.ars-grin.gov/npgs/gringlobal/training/transfer_phaseolus_npgs.xls]



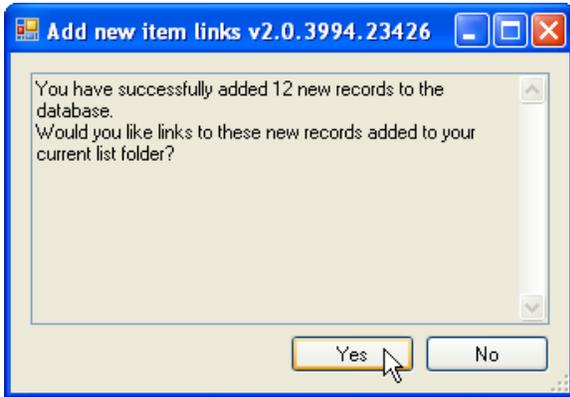
If you use that spreadsheet as your model, you should make the suffix something unique to you (since we are all sharing the same training database). If you want to really try something here, use your preferred taxon. If you aren't sure what taxonomy is in GG, start manually adding a single new record in the CT. In Edit mode, click in the **Taxon** field to determine what valid taxonomy are in the database:

The screenshot shows the Curator Tool interface with a 'Lookup Picker v1.0.7.0' dialog box open. The dialog box has a title bar with a globe icon and the text 'Lookup Picker v1.0.7.0'. Below the title bar, there is a hint: 'HINT: For big lists, use the text filter to shorten the list search.' and a 'Filter ->' text input field. A list of taxonomic names is displayed in a scrollable area, including: *Abelia biflora*, *Abelia chinensis*, *Abelia corymbosa*, *Abelia engleriana*, *Abelia floribunda*, *Abelia serrata*, *Abelia spathulata*, *Abelia triflora*, *Abelia umbellata*, *Abelia x grandiflora*, *Abeliophyllum distichum*, *Abelmoschus angulosus*, and *Abelmoschus esculentus*. To the right of the list, there is a section titled 'Show Only Choices Valid For This:' with a checked checkbox labeled 'is_accepted_name'. At the bottom of the dialog, there are three buttons: 'Refresh List', 'OK', and 'Cancel'. A red arrow points from the 'Taxon' field in the background table to the dialog box.

Save the imported data that is now in the Curator Tool; click the **Save Data** button:



You will be prompted to add the links to these records; click **Yes**.



Note: If you had clicked **No**, the records would be added to the GG database, but pointers would not be created under the current list in the List Panel (as shown below).

