Virtual Inventory – testing

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Comments
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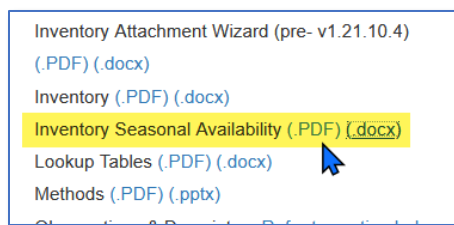
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Overview

Virtual Inventory involves several interrelated dataviews:

- Inventory
- Inventory Maintenance Policy (IMP)
- Inventory Maintenance Policy Season (IMPS)

 The IMPS in this test version now is being used to determine virtual inventory as well as its original purpose, the seasonal date range when inventory is available for public requesting.

Refer also to the Inventory and the Seasonal Availability guides. (Seasonal availability is currently implemented in GG.)
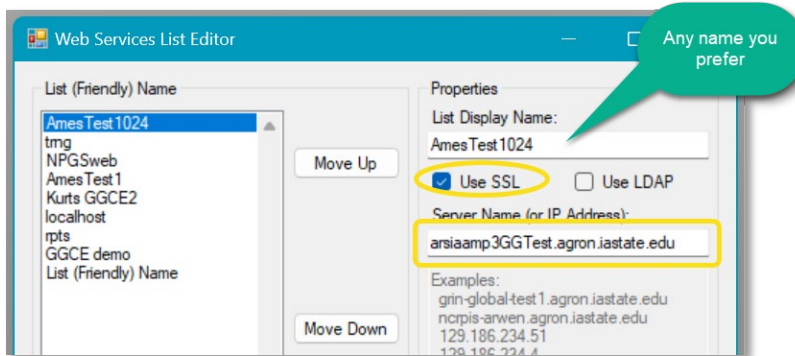

http://grin-global.org/docs/gg_inventory.docx

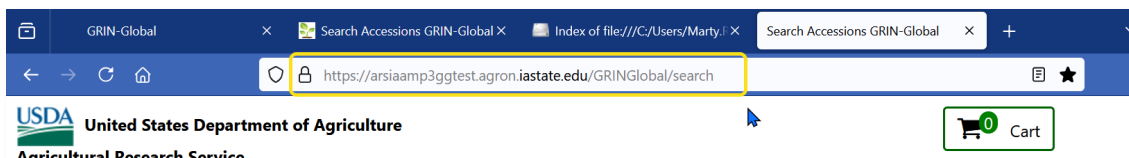http://grin-global.org/docs/gg_inventory_seasonal_availability.docx

Server Information – Requirements for Testing Seasonal and Virtual Inventory

The code and respective dataviews are being tested currently on a server in Ames. This means that:

- a separate Curator Tool (CT) account (& password) is required
- your CT must point to the server using the server's credentials:
  arsiaamp3ggtest.agron.iastate.edu

- when you log into this server, you will need to "Load All" – update all the lookup tables. ("Lookups" must be in synch with the records on the respective server.)
- email pete.cyr@usda.gov – the admin of this test server – to get a CT account
- The Public Website (PW) must point to the corresponding server:
  https://arsiaamp3ggtest.agron.iastate.edu/GRINGlobal/search

Login to the test server as described directly above.

Allow time – update your lookup tables – be patient.

At the present time, you cannot fully process the web request, that is, the request will be waiting for NRR approval!

Inventory Basics (without seasons)

Inventory records **are available only** when the two flag fields, **Is Default Inventory?** and **Is Available?**, are equal to "Y."

Some important GG basics to remember:
- all new inventory records require an IMP to be specified
- before creating an Inventory record, you must have an IMP. The first step in creating an inventory is planning – who will own the Inventory records? In this testing, create the IMP first – ensuring that you own the IMP and therefore the inventory records that are created that use that IMP.

If you use someone else's IMP when creating new inventory records, you will not be able to edit those inventory records unless the owner gives you permission.

- when a new Inventory record is created, it initially gets its default distribution quantity filled from the corresponding field in the IMP

Is Default Inventory? and **Is Available? c**hanged to Y // Y

						Get Site	Get Order Request	Accessions	Inventory	Inventory Maintenance Policy	INV Maint Policy Season	Get Cooperator	Get Inventory Viability	Get Web Order Request	Get Web

Invent Numb	Inventory Suffix	Inventory Type	Accession	Inventory Maintenance Policy	Inventory Maintenance Site	Is Default Inventory?	Is Auto Deducted?	Is Available?	Availability Status	Quantity On Hand	Quantity On Hand Units	Standard Distribution Form
1	MAR	**	RRG 1 MAR	SYSTEM	NC7	☐	☐	☐	No value specified		[Null]	[Null]
1	MAR	SD	RRG 1 MAR	RRG-NC7-SD10	NC7	☑	☐	☑	Available	2500.00000	count	SD

Available:

	Basic Info	Source Info	Show all columns	Show/hide columns	Show 10 rows	Excel					Search:	

Showing 1 to 1 of 1 entries   Previous   1   Next

☐	ACCESSION	NAME	TAXONOMY	ORIGIN	REPOSITORY	IMAGE	AVAILABILITY
	Search ACCESSION	Search NAM	Search TAXONOMY				
☐	RRG 1 MAR	RRG 1 MAR	*Humulus lupulus* L.		NC7		

Seasonal Inventory Basics

*Create Seasonal Dates within the **Inventory Maint Policy Season (IMPS)** dataview*
To establish seasonal dates, a "season" record must be created using the **Inventory Maint Policy Season (IMPS)** dataview. In turn, this season record requires an existing **Inventory Maintenance Policy (IMP)** record. To work properly, three records must be related:

- **Inventory**
- **Inventory Maintenance Policy**
- **Inventory Maint Policy Season**

Two field items in the three records relate:

1. The i*nventory* record's **Inventory Maintenance Policy** ties the inventory to the **IMPS.**
2. The i*nventory* record's **Standard Distribution Form** – must match the **IMPS Distribution Form**.

Multiple Inventory records: Seeds & Cuttings – and season availablity

The Public Website displays a shopping cart icon with an embedded + sign to indicate when multiple inventory items are available.

If the user selects by the accession (the left checkbox), when seeds are available they will be selected by default. In the example below, to select cuttings, the user must click on the cart icon and then select the cutting option.

✎ The exclamation marks in this example are off topic – nothing related to this multiple or seasonal inventory topic. What do they indicate? The accession's species is included in the **Taxonomy Regulation Map** table, indicating some state regulation should be considered when working with this species.

If you look at the CT and it appears that multiple inventory should be available:

Inventory ID	Inventory Prefix	Inventory Number	Invento Suffix	Inventory Type	Accession ▲	Inventory Maintenance Policy	Inventory Maintenan Site	Is Default Inventory?	Is Available?	Standard Distribution Form	Is Auto Deducte	Availability Status	Quantity On Hand	Quanti On Ha Units
5625392	M@R	3	RRG	**	M@R 3 RRG	SYSTEM	NC7	N	N		N	No value ...		
5625401	M@R	3	RRG	SD	M@R 3 RRG	M@R-SD	NC7	Y	Y	SD	N	Available		count
5625403	M@R	3	RRG	PL	M@R 3 RRG	M@R-BD	NC7	Y	Y	BD	N	Available		count

… but on the PW you only see one form available, you know then that there must be an associated **Inventory Maint Policy Season** (IMPS) connected to one of the **Inventory Maintenance Policy** (IMPs). I looked and looked at the CT above – only when I noticed the Out of Season message in the PW did I realize this:

The related IMPS for the above is:

Inventory Maint Policy Season ID	Inventory Maintenance Policy	Distribution Form	Standard Distribution Quantity	Unit of Distribution	Season Start Date Format	Season Start Date	Season End Date Format	Season End Date	is_virtual
45	M@R-BD	BD	4.00000		MM/dd	11/01	MM/dd	11/04	N

The **M@R-BD** IMP connected the inventory to the IMPS. The date when this screen was viewed was 11/7, hence out of season. This is not a virtual inventory, but physical – an inventory record exists as we see in the top image on this page.

Virtual Inventory

Inventory Maint Policy Season (IMPS)

This IMPS dataview was initially designed to accommodate a start and ending date for indicating the season when the inventory item was available (or not). As mentioned on page 2, three records are related together – the **Inventory** to the **Inventory Maintenance Policy** to the **Inventory Maint Policy Season.**

In this GG test version, in addition to the seasonal aspect, the IMPS can also be used to denote *virtual inventory* records. The general idea is that maybe, besides cuttings, leaves can also be requested, but only for a specific period. A living plant can of course have leaves, pollen, roots, etc. Most likely these various forms will not all be available at the same time. Also, the decision to distribute any of these items is dependent on the curator and site policies and staff constraints.

To use the *Virtual Inventory* feature, the accession must have one Physical inventory record with an IMP that has an associated **Inventory Maint Policy Season** (IMPS) .

For example, if you have a living plant. Create an inventory record for that plant. What is the typical Distribution form? Cuttings or Budwood? The Inventory record will denote that **Standard Distribution Form**.

The Virtual Inventory is then created within an IMPS that relates to the IMP. The IMPS denotes the virtual form that can be distributed during a set season.

Availability

Form	Quantity	Note	Inventory	Cart
Cutting	7 count		M@R 7 RRG PL	🛒

Showing 1 to 1 of 1 entries

Out of Season

The item(s) is/are currently not available; request when available:
Leaves: November 01 - November 04

After the date has been changed to include the current date:

Site	Get Order Request	Accessions	Inventory	Inventory Maintenance Policy	INV Maint Policy Season	Get Cooperator	Get Inventory Viability	Get Web Order Request	Get W

Inventory Maint Policy Season ID	Inventory Maintenance Policy	Distribution Form	Standard Distribution Quantity	Unit of Distribution	Season Start Date Format	Season Start Date	Season End Date Format	Season End Date	is_virtual
46	M@R-LV	LV	50.00000	[Null]	MM/dd	11/01	MM/dd	11/25	✓

Availability

	Form	Quantity	Note	Inventory	Cart
☐	Cutting	7 count		M@R 7 RRG PL	🛒
☐	Leaves	50 count		M@R 7 RRG LV virtual	🛒

Showing 1 to 2 of 2 entries

While the leaves are very real, they do not need corresponding inventory records – hence the meaning of "virtual" as used in GRIN-Global.

The IMPS dataview was initially designed to denote an "availability season." The curator sets up a date range once, and does not need to edit each year, etc. On one IMPS record, the curator can adjust the season, such as when there is a "late spring," and the flowering (pollen) or the leafing may occur later than usual. By adjusting the one IMPS record to edit the season start and end dates, the season for all inventory records related to that IMPS, via the Inventory Maintenance Policy (IMP) will be adjusted accordingly.

In the current GG model, if an item, whether real or virtual, is being requested, and the current date is not within the IMPS' availability date range, the item cannot be requested. On the PW, a note to that effect will be displayed:

Setting up Multiple Virtual Inventory for the same *Accession*

You can set up multiple virtual inventory items referring back to the same Inventory Maintenance Policy (IMP). In the following example, these 5 **Inventory Maint Policy Season** (IMPS) records are linked to the IMP M**@R-virt-all**.

Inventory Maint Policy Season ID	Inventory Maintenance Policy	Distribution Form	Standard Distribution Quantity	Unit of Distribution	Season Start Date Format	Season Start Date	Season End Date Format	Season End Date	is_virtual
46	M@R-virt-all	LV	1.00000		MM/dd	11/01	MM/dd	11/25	Y
48	M@R-virt-all	PO	2.00000		MM/dd	11/01	MM/dd	11/25	Y
49	M@R-virt-all	FR	3.00000		MM/dd	11/01	MM/dd	11/25	Y
50	M@R-virt-all	RT	4.00000		MM/dd	11/01	MM/dd	11/25	Y
51	M@R-virt-all	CT (A)	5.00000		MM/dd	11/01	MM/dd	11/25	N (B)

Note that I am considering the **IMPS** cuttings (CT) record as my primary record – in the sense that this has a corresponding *physical* inventory record. The Inventory record is for a plant, it is not virtual (b) but its distribution form is cuttings (a). Seel also the image below.

In the image below, note also that the inventory record must have both flag fields equal to Y (b).

Inventory ID	Inventory Prefix	Inventory Number	Invento Suffix	Inventory Type	Accession	Inventory Maintenance Policy	Inventory Maintenan Site	Is Default Inventory?	Is Available?	Standard Distribution Form	Is Auto Deducted?	Availability Status	Quantity On Hand
5625395	M@R	6	RRG	**	M@R 6 RRG	SYSTEM	NC7	N	N		N	No value ...	
5625408	M@R	6	RRG	PL	M@R 6 RRG	M@R-virt-all	NC7	Y	Y (B)	CT (A)	N	Available	

All five forms are displayed as possibilities for requesting. Suppose though that you don't want the cuttings to be distributed. Simple enough – change the season (the date range) for the cuttings in the IMPS record. See next page.

Now the cuttings option is no longer displayed: (tested on 11/6)

Testing Steps

- Create two **Inventory Maintenance Policy** records one for distributing seeds, the second for budwood.

- Create an **Accession** record.

- Create two **Inventory** records for the same accession.
    a. One is seeds, the other is a plant. For the Seed item, the distribution form is Seeds. For the plant inventory item, the distribution form is Budwood.

- Test these inventory records to see if they are available on the Public Website. Ensure that the two Y/Y fields are working as expected. [The two flag fields, **Is Default Inventory?** and **Is Available?** must be equal to "Y" for the inventory to be available.]

- Create an **Inventory Maint Policy Season** record that uses the IMP name that was used for the *plant* inventory record. Set up a date range that includes the current date. Test by searching the PW.

- Then change the date range to exclude the current date. Test again; search the PW.

- Now for the *virtual inventory* testing. Create another IMPS record, using the same IMP name as you did in step 5, but use LV for the distribution form. Check the **is_virtual?** field.

  Include a date range, and run two tests – similar to before wrt the current date – one date range test includes the current date, the second date range test does not.

- Do another *virtual inventory* test, but this time set the distribution form to Cuttings.