



BioInfoRx, Inc. 510 Charmany Drive, Madison, WI, 53719

608.467.4936

info@bioinforx.com

USER MANUAL

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Introduction to BxItems

What is BxItems?

<u>Items</u> - Anything that can be described in words or files. Examples include office supplies, research reagents, specimens and samples, regular files, gene sequences, research articles, images, videos, and even hyperlinks.

<u>Containers</u> - Anything that items can be put in, both physically or theoretically. For example, a freezer can have many racks and boxes, a box can have 10 by 10 grids and store small tubes, "My lab members" can have a list of group members (name, office location, e-mails, and so on), "My publications" can have a list of research articles, "My favorite websites" can have a list of website URLs.

BxItems™ is a cloud-based information system that:

- tracks many types of item information (name, barcode, vendor, quantity, storage ...)
- organizes items into containers
- provides convenient tools for data entry and editing, searching, relocation, and sharing.

BxItems is a secure web-based system for managing containers, items and sample locations inside your facility. This storage and materials management tool provides a flexible virtual image of your storage system. It not only tracks items on hand but also lists open spaces to help place new arrivals. Conveniently check for all the required materials for an experiment right from your computer.

BxItems tracks container item information with barcode labels! Containers, samples and results are easy to locate and track with greater accuracy. With BxItems, you will know the location of every container, item and sample in the laboratory or department! The system allows laboratories to organize items easily and efficiently by scanning or entering a barcode to retrieve complete item details and history.

BxItems helps control inventory tracking with a check in and check out system. When you check out a container, reagent or item, you can record the amount left in the container for tracking reordering and usage measurements.

Key Features

• Easily create a storage hierarchy with BxItems

Virtually model your storage facilities or model your process flow through your Lab regardless of their complexity. Our inventory control tracking system allows as many levels as needed. Start at the facility site level and progress from building down to individual sample tubes.

Complete visibility

Locate stored items easily on screen with a visual hierarchy tree view and integrated search tools. Quickly browse containers and know if you have all the resources needed before you start an experiment.

- BxItems provides an easy and affordable way of container tracking.

 BxItems supports barcode inventory management. Each Item and container has a unique barcode. You can easily track what is on hand and where it is stored.
- BxItems helps control inventory tracking with a check in and check out system.

When you check out a container or item, you can record the amount left in the container for tracking reordering and usage measurements.

Export data

BxItems' export tool provides a table view of the materials' data.

Intrinsic group-based functionality

Laboratory group members can use the system to coordinate their material usage. BxItems encourages laboratory collaboration through a whole suite of online tools to increase the quality of your research and results.

Barcode-powered Item Tracking with BxItems

BxItems management system tracks container and sample information with barcode labels! Using barcodes is common in large, complex inventory and tracking systems. It is standard in the BxItems inventory control and tracking system. Our tracking system allows laboratories easy and efficient management of their items and samples by scanning or entering a barcode to retrieve the complete item details and history. With BxItems, you will know the location of every container, item and sample in the laboratory!

- BxItems provides an easy and affordable way of container tracking. Our system supports barcode inventory management. Our online tracking system is compatible with many of the popular brands of barcode scanners. These scanners are affordable, easy to use and require little upkeep. Ask us about how we can supply you with 100% BxItems compatible hand scanners today.
- Use the barcode to track items.

Every location and every item stored has a unique barcode for inventory tracking. Container and sample tracking is simple and more accurate. You can easily control what is on hand and where it is stored. Our barcode tracking system lets you track the amount that is used, and by whom.

- Retrieve container or item information quickly.
 - Scan the barcode or enter the identity code to quickly retrieve all the recorded information in our sample tracking system. Our tracking software reduces the amount of time in the freezer. This will help keep your samples at a more stable temperature and reduce spoilage.
- **Update container or item information easily.**Permissions can be set to control unauthorized editing or deletion. Our tracking management system protects the integrity of your data.
- BxItems helps control inventory tracking with a check in and check out system.

When you check out a sample or item, you can record the amount left in the container for tracking, reordering and usage measurements. The check in and check out is barcode compatible too. You can scan all the items you need and when you are done, you can check out or check in all the items on your list. We will also check to make sure that the items you check out are not spoiled or in use by someone else.

Inventory Tracking with BxItems

It is simple to view and manage your containers and items online. The tree view helps you quickly see your entire inventory. The dynamic menu makes our online inventory system intuitive and easy to use. Item tracking and viewing is just as simple with our table view and box view.

BxItems provides a hierarchy tree view of storage containers.

Each container in the tree is a live link: click on the container to see what is stored there. This could be a building, a workbench in your laboratory or a step in a multi-step process. You can easily mix and match locations and steps for maximum control and management of your inventory. Each container can be of a custom type. Users can simply relocate the containers through drag-and-drop right on the tree view. With our system you have full control of your inventory online without custom programming.

BxItems' simple dynamic menu is easy to use!

With such detailed control of your inventory, you might think that the controls are just as complicated. Actually, there are many intuitive shortcuts to make our online inventory tracking system even more simple to use. The dynamic menu shows you what you can do next. Your time in the lab should be spent on research not learning how to navigate your inventory control and tracking system.

Full search item management.

Buying in large quantities means savings but also tracking usage and knowing what is on hand can be difficult to verify visually. BxItems allows you to do a full search of all items on site or items in a lab, freezer, or process step. You can see what is there and even export them out to a file for your records. Inventory control becomes simple, just search for items that are low and print it out. Items are listed with as much detail or as little detail as you need. When you click on the item you can view the full details about the item.

Convenient 'Storage Box' view.

Many small items are kept in boxes, drawers, or cabinets with many small containers or cells to hold your inventory. Take control of all these small and easily lost items in your laboratory. BxItems offers a fast and simple to use 'Box' storage view for tracking your samples. You can move samples around online in the virtual box with a simple drag and drop. This view gives you a convenient visual management of your inventory when getting items out or when putting items away.

Section 1: Tour of BxItems Main Screen

The BxItems Main Screen Has Three Major Areas:

My Group Items

Container Tree

Top containers

My Group Items

From the Group Items Area, you can add, look up, check in, check out, or import items. Click on any link to perform an action.

My Group Items Hide This Panel

```
Add Items • Look Up • Check In • Check Out • Relocate
```

Summary Screen

The summary screen shows the total number of items, Stored Items, Unstored Items, Expiring Items, Expired Items, and Low Quantity Items. All hyperlinks will direc you to the main items page.

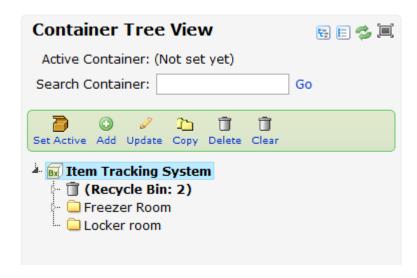


» Advanced Item Tools » Import » From BxOrders



Container Tree

The Container tree is for setting up your containers and storage areas for storing your items.



The container tree can have several layers, starting with the largest area and subdividing into smaller storage areas.

Top containers and Unstored Items

The right hand side of the BxItems Main Screen previews your top containers and any Unstored Items.



Section 2

Adding New Items

Add Items Using the Add items function



To add NEW items, use the "Add Items" function (checking in more of the same item will be reviewed later).

Clicking on the "More" Link will reveal more categories to enter.

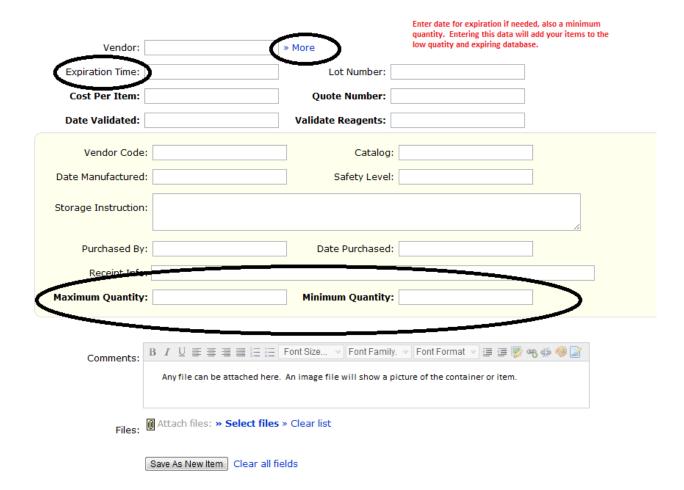
Record New Items & BxItems Browse

Type:		
Name:		» More
Quantity:	1	
Unit:	Each » More	
Vendor:		» More
Expiration Time:		Lot Number:
Cost Per Item:		Quote Number:
Date Validated:		Validate Reagents:
Comments:	$\mathbf{B}\ I\ \ \underline{\mathbb{U}}\ \equiv\ \equiv\ \equiv\ \underline{\mathbb{H}}\ \underline{\mathbb{H}}$	Font Size 🔻 Font Family. 🔻 Font Format 🔻 運 👺 🤏 🦚 🧆
Files:	Attach files: » Select files	» Clear list
	Save As New Item Clear all fi	ields

To add your items, enter as much data as you need. You do not need to fill in every category, but Name and Type are required.

The example below shows the third area with the "More" revealed.

Be sure to save your new item!

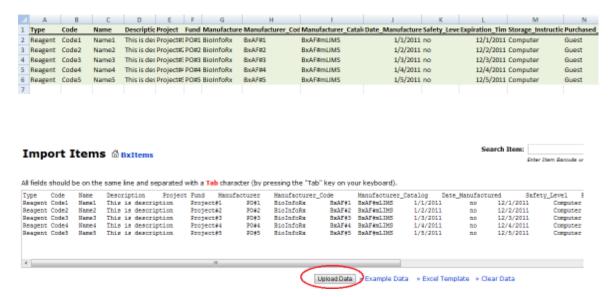


Add Items Using the Import Tool

Items may also be imported from Excel. Use the BxItems Import tool to import new items.



Download the Excel Template and enter your items under the correct heading. You may leave cells blank, but do not delete headings. Copy and Paste your data including headers into the import box, and import.



Your imported items will be stored in a temporary container. You may move items from the temporary container to unstored, or you may move them from the temporary container to another container (See Section 7 for relocating items). You may delete the temporary container when the items have been moved out (see Section 3: Deleting containers).

Section 3: The Container Tree

Setting Up Containers and Sub Containers

Use a Top-Down system, beginning with your largest area.

Tier 1: Your Lab Name

1. Select "Item Tracking system" for the highest level and click "Add."



2. Fill in container information. Since this is the largest container, it holds both sub-containers and grids. The lab itself doesn't have designated storage grids. Attach a photo if you wish, to help aid in locating rooms, closets, freezers, etc.

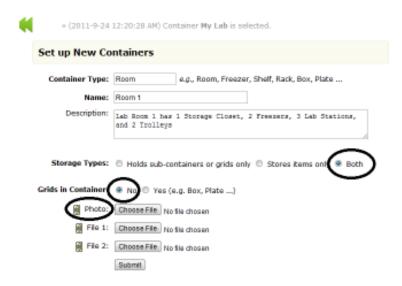


Tier 2: Room Within a Lab

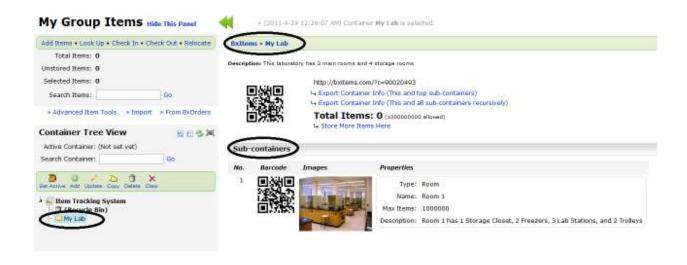
1. Select "Your lab name" for the next level and click "Add."



2. Enter your information. Since this is a room, it holds sub-containers and items. The room itself doesn't have designated storage grids. Attach a photo if you wish, to help aid in locating rooms, closets, freezers, etc.

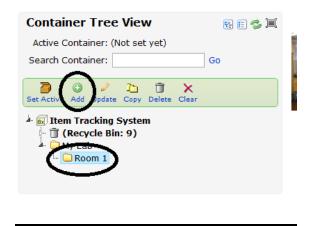


Note that as you build your tree, BxItems will track it for you.

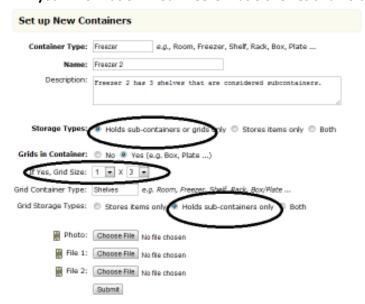


Tier 3: Add a Freezer or Other Storage Location

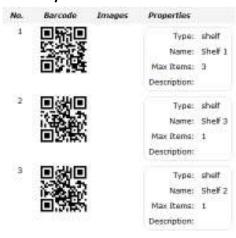
1. Select "Your room name" for the next level and click "Add."



2. Fill In your information. Your freezer has 3 shelves and holds sub-containers only.



Note that your freezer now shows three shelves in the container view.

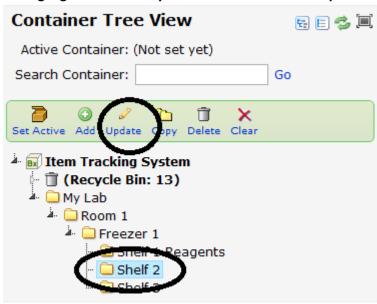




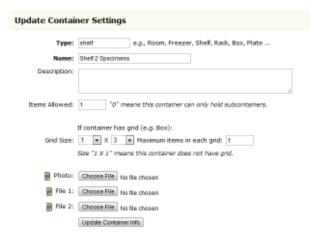
Edit Containers

You can re-name your freezer shelves to specify their use. WARNING: Changing the name of a container will remove its subcontainers. Be sure that there are no subcontainers when editing. After the container is edited, new subcontainers can be added.

Highlight on the item you wish to edit and click "update." (shelf 2 is the example).

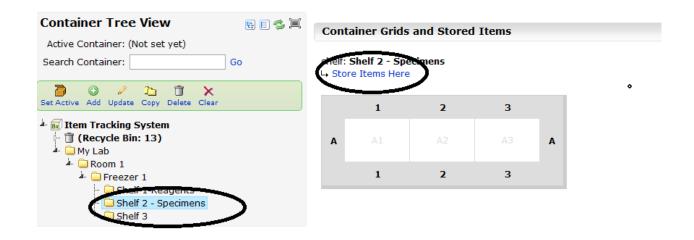


1. Update any necessary information (name of shelf, number of items allowed on shelf, grid size)



Store Items in a Container

You can now add items to your shelves in the freezer. Begin with the shelf you wish to add items to and click "store items here." You will be allowed to add as many items as you specified for each grid.



You may now begin moving unstored items to grids on the shelf. Simply drag and drop, and click "save" when finished.



Additional subcontainers, such as boxes, can be added to the shelf. Indicate "stores subcontainers ony" when creating shelves.

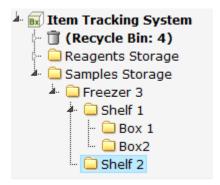
Manipulating Containers

Relocating Containers

Containers can be moved easily in the tree view by using drag and drop. Open your tree and select a container to move with your mouse, and drag it into the desired location. When you begin dragging your item, it will have a small red X. When your mouse reaches the desired location, you will see a green checkmark, and the item can be dropped.

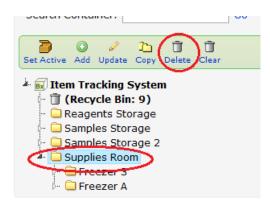


Box 1 will now be on shelf 1.



Deleting Containers

Containers may be deleted at any time. Move all items out (see section 7) before deleting a container. Select the container you wish to delete, and click on "delete." The container will be moved to the recycle bin until it is permanently deleted.



Section 4: Browse and Search items

Browse Items

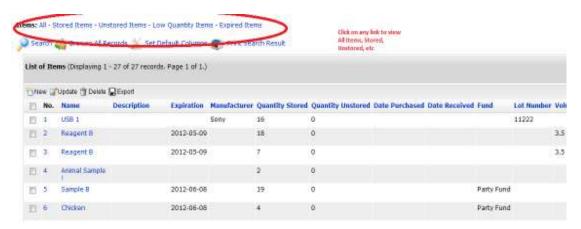
To view, browse, and search your items in a list format, click on your "Total Items" Link and you will be directed to the browse/search items screen.

My Group Items Hide This Panel



All columns in Browse view are sortable. Click on any column header to sort.

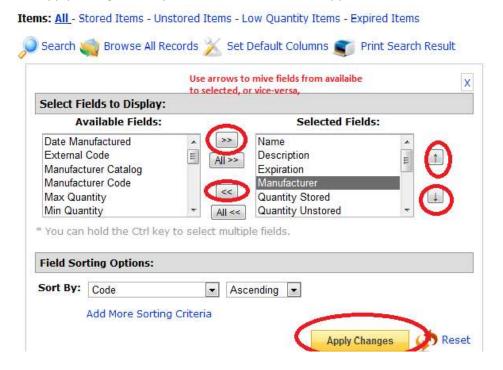
Click on any link to view all items, stored or unstored items, low quantity items, etc.



Set Default Columns

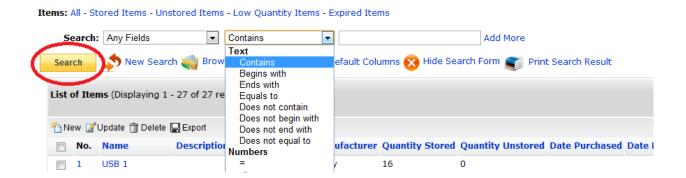
You can select the order of the column view, as well as the default columns you would like displayed.

- 1. Choose "Set Default Columns"
- 2. Move Available Fields to Selected Fields to add more; move Selected Fields to Available Fields to remove columns.
- 3. Move fields up or down in Selected Fields to change the order.
- 4. Click "Apply Changes" and your new column view will appear.

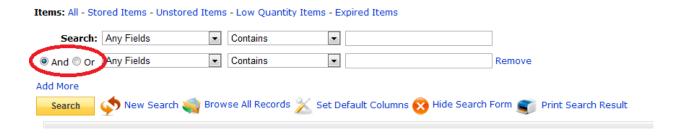


Search Items

Search for Items using the Search function.



You can search any fields, or choose a specific field from the pull-down menu. You may also choose an operator from the second pull down menu. If you need to narrow or expand your search, select "add More" and use **or** to expand, or **and** to narrow.



Section 5: Check Items in and Out

Items can be checked in or out using barcodes (see Section 8 for printing barcodes), or by navigating to the item and selecting "check in" or "Check Out." You will need to have a 1-D Barcode scanner attached to your computer for standard barcode reading, or, you can scan 2-D barcodes using a QR reader on your Internet-Enabled touch pad with a camera. BxItems will keep track of the number of checked out items.

Check Items In or Out By Scanning a Barcode

1. Select "Check In ir Check Out Items" from the home screen.



2. Scan the barcode using your 1-d barcode scanner or 2-d barcode reader. Your cursor must be in the barcode box.

Item ID or Barcode:		Look Up	Scan the item barcode and the item information will list.	
Notes:				
	Check Out Items			

3. Once the item is scanned, all items containing that barcode will appear in the list.

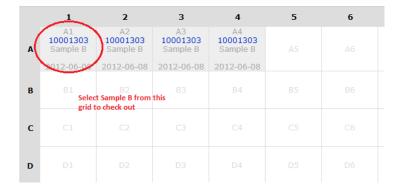
Check Out Items @ BxItems



Check Items In or Out Without Scanning a Barcode

If a barcode scanner is not available, items may also be checked in and out by navigating to the item you wish to check out and select the "Check In" or "Check Out Option.

Navigate to you r item using browse, search, or click on an item in its container.



Select the Option you would like, and you will then be directed to the regular check out screen.

Item Information △ Home



Actions: • Update or Copy • Check In • Check Out Relocate • Usage Summary

Total Quantity: 19

Batches: Time Added By Quantity Notes Container

Time Added Added By Quantity Notes Container 2012-06-01 11:28:16 » Room: Samples Storage » Freezer: Freezer 2012-06-01 11:28:17 1 » Room: Samples Storage » Freezer: Freezer 2012-06-01 11:28:17 1 » Room: Samples Storage » Freezer: Freezer 2012-06-01 11:28:17 1 » Room: Samples Storage » Freezer: Freezer 2012-05-16 13:04:12 1 » Room: Samples Storage » Freezer: Freezer 2012-05-16 13:04:12 » Room: Samples Storage » Freezer: Freezer

Section 6: Update and Copy Items

You can update existing items or add new items that are similar to already added items by using the Update or Copy Items function. Any item can be updated or saved as a new item.

Update or copy an item

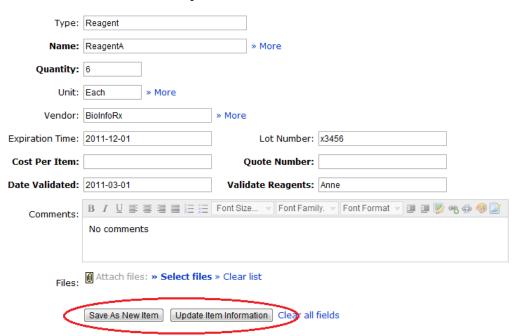
1. Navigate to the item you would like to update, and select "update or copy item."

Item Information △ Home



2. Enter your new information. To update an existing item, select "update," or you can save it as a new item.

Record New Items or Update Current Item & BxItems Browse



Edit Fields in an Existing Item

To edit any of the fields in an existing item, navigate to the item you wish to edit.

Item Information [™] Home



Actions: • Update or Copy • Check In • Check Out • Total Quantity: 6

otal Qualitity.

Batches:

 Time Added
 Added By
 Quantil

 2012-05-08 12:50:12
 1

 2012-06-12 15:03:22
 5

Tip: Click the highlighted value to edit.

Name: ReagentA

Barcode: Code1

Manufacturer: BioInfoRx

Catalog: BxAF#mLIMS
Click on the field to edit, enter information, and click "OK."

Date Validated: 2011-03-01 00:00:00

Expiration Time: 2011-12-01 00:00:00

Cost Per Item:
Quote Number:

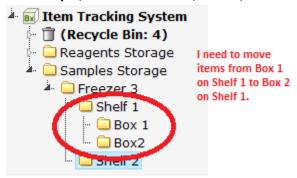
Validate Reagent: Anne

Section 7: Relocate Items

Relocating Items to a New Container Method 1

To relocate items to a new container, begin by opening up your container tree to view the containers you wish to move the items from and the container they are being moved to.

For example, all items in Box 2, shelf 1, need to be moved to Box 1, Shelf 1.

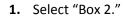


Step 1: Select the container you want to move the items to and set it as the active container.

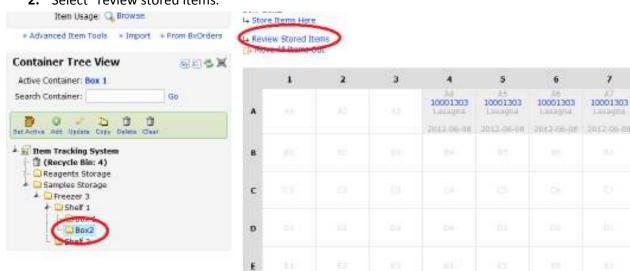
- 1. Select Box 1 (click to highlight)
- 2. Select "Set Active."
- 3. Active container will appear in blue.



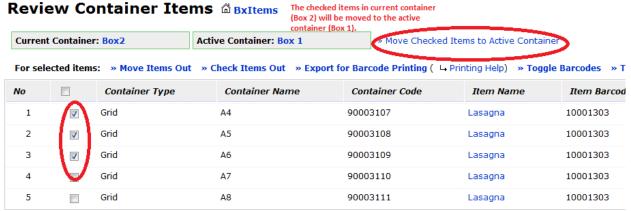
Step 2: Go to the container you wish to move the items from and view the items, select "review stored items."







A New screen will appear. Select the items you wish to move to the active container (Box 1).



Tip: Sort multiple columns simultaneously by holding down the shift key and clicking a second, third or even fourth column header!

Relocating Items to a new container Method 2

Items may also be relocated by scanning the barcode of the item.

1. From the home Screen, Select "Relocate."



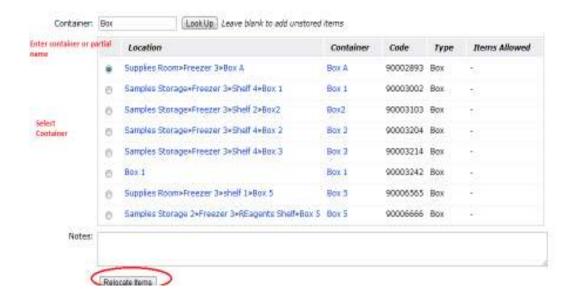
2. Scan the item ID to bring up the item to be relocated.

Relocate Items @ BxItems

Item ID or Barcode: 10001303



3. Look up the container you wish to move the item to. You can type in the first few letters of the container name and then select from suggested containers. When finished, click "Relocate."



Move All items Out to Unstored Status

All items are easily moved out of a container for later storage. This function will move all items in a container to unstored status.

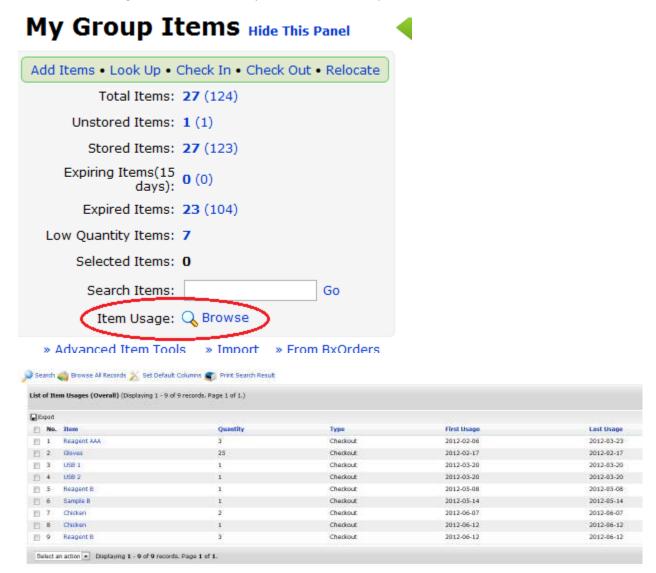
Navigate to the container you wish to empty in the container tree. You can move all items out from this area, or you can store more items if you wish.



Section 8: Usage Summary

BxItems will keep an audit trail of all of your checked out items. The Item Usage summary will show all items that have been checked out and their usage history.

Click on "Item Usage – Browse" to view your checkout history.

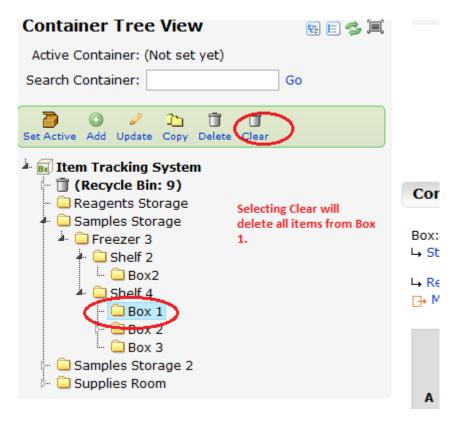


Section 9: Deleting Items

Items may be deleted from BxItems and will no longer be tracked in history, checkout, or usage. Deletion of items is semi-permanent, any deleted item can be retrieved if necessary.

Clearing a Container

To delete items by clearing a container, navigate to the container you wish to clear and use the "clear" button. This will clear all items in a container.



Are you sure you want to clear all stored items?

- Yes, clear all stored items in this container.
 - This container has sub-containers/grids.
- Yes, clear all stored items in all sub-containers/grids.

Submit

Select Items to Delete from Browse Items Screen

Navigate to the All items Screen, or search for your item. Check items to be deleted, and choose "Delete" from the pulldown menu at the bottom of the page.



Undelete Items

Any item cn be undeleted. From the Main Items Screen, Select "Show Deleted Records." Select items to undelete and click "undelete."

Items: All - Stored Items - Unstored Items - Low Quantity Items - Expired Items 🕽 Search 🦏 Browse All Records 族 Set Default Columns 🜒 Print Search Result List of Deleted Items (Displaying 1 - 10 of 10 records. Page 1 of 1.) 🎦 New 🕒 Show Active Records Undelete 🖫 Export No. Name **Quantity Stored** Description Expiration Manufacturer 1 Reagent AAA 2012-03-23 AAA Reagents Gloves 0 /3 Reagent AAA 2012-03-23 AAA Reagents 0 4 Reagent AAA 2012-04-04 AAA Reagents 0 0 5 Reagent AAA 2012-03-23 AAA Reagents USB 2 Sony 0 6 Reagent 4 0 7 0 8 sample 9 sample 0 sample 0 10 ▼ Displaying 1 - 10 of 10 records. Page 1 of 1. Select an action

Section 10: Exporting Items and Barcode Printing

Exporting Items

Items can be exported from the Main Items Screen. Search or browse for items to be exported, and click the Export Button. Items will be exported to Excel format.

Items: All - Stored Items - Unstored Items - Low Quantity Items - Expired Items 🧷 Browse All Records 族 Set Default Columns 客 Print Search Result List of Items (Displaying 1 - 27 of 27 records. Page 1 of 1.) New Wupdate Tollege Export No. Name **Expiration Manufacturer Quantity** Quantity Unstored Stored Sony 16 1 USB 1 0 2012-05-**2** Reagent B 17 1 0 New Reagent 2011-12-BioInfoRx 6 3 ReagentA 01 7 Reagent B 2012-05-0 **A** 09 5 Animal Sample 2 0

Barcode Printing

Any label printer can print barcodes from Excel files. Some may require software. Export the items to print barcodes, and print the barcode field (saving the file as csv is standard).

If you do not have specific software for printing barcodes, you can create them in your Excel file. You can use any add-in for Excel that will convert your barcode number to a barcode, or download the barcode font for Excel.