23.2 RELEASE NOTES

FOR RESEARCH MATERIAL MANAGEMENT

15 DECEMBER 2023

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WELCOME

The **JAGGAER Research Material Management (RMM) 23.2 Product Release** is available on **15 December 2023.**

This document will help you:

- Understand the impacts of new features on your end-users, approvers, administrators, and other individuals using the system
- Understand any changes required on your part to enable a feature of the system
- Provide a starting point of "where to go" to learn more about the features and functionality discussed in this document.

HIGHLIGHTS OF RELEASE 23.2

RMM Bioreagents – Feature Extensions

RMM 23.2 continues the evolution of **RMM BIOREAGENTS,** JAGGAER's novel and comprehensive add-on capability for selecting, acquiring, storing, and using commercial bioreagents to improve research results and save time and cost.

RMM 23.2 introduces **ALIQUOTING** for bioreagent containers, integrated with storage boxes. This feature enables aliquoting and storage of bioreagent vials from sources into child containers. The ability to view parent-child genealogy to easily look across multiple generations of child containers is available via the new Container Dispense Lineage functionality.

Other enhancements in this release include box-position history, display of box and positions on pick lists and enhanced material edit for bioreagent attributes.

RMM BIOREAGENTS REQUIRES A SUBSCRIPTION. PLEASE CONTACT RMM SUPPORT FOR FURTHER INFORMATION ON ENABLING BIOREAGENTS.

Container Dispense Lineage

Provides a view of parent-child genealogy to easily look across multiple generations of child containers originating from the same source. Children containers can be created via either the new bioreagent aliquoting functionality or the existing storeroom dispense functionality.

Enhanced Compliance Data and Chemwatch Integration

RMM 23.2 features an update in RMM's compliance data model to support **GHS version 9**. Key changes associated with this update include:

- New Hazard classifications for "Chemicals Under Pressure", "Desensitized Explosives", "Aspiration Hazard", and "Hazard to the Ozone Layer"
- Refinement of Acute Toxicity hazard ratings to differentiate Oral, Dermal, and/or Inhalation toxicity, so that one material can also be classified with multiple Acute Toxicity ratings

- Refinement of Sensitization hazard ratings to differentiate skin and respiratory sensitization, so that one material can also be classified with multiple sensitization ratings
- Differentiation of Acute and Chronic Aquatic Environment hazards

Ratings within hazard classifications are also updated to reflect the current rating values. The upgrade to RMM 23.2 will map old-to-new versions of existing GHS hazard ratings where applicable. Chemwatch integrations are being correspondingly updated to reflect these changes.

Chemwatch integration is also being enhanced to:

- Enable the Chemwatch "Delta Synchronization" process for documents in the client's folder, to update SDS document links and indexed attributes on associated RMM materials when they are updated by Chemwatch
- Enable manual retry (i.e., after data modification/correction or acquisition of documents by Chemwatch), for items not successfully matched to Chemwatch documents on the initial attempt

Stockroom Intelligence Enhancements

- A **new intelligent Home Page widget** will enhance the ability to identify and respond to **Fast Moving Items**. All stockroom inventory items will have a detail page showing item demand and inventory trends and recommended stocking adjustments, with the opportunity to adjust stocking parameters or initiate a one-time replenishment.

Source Search Improvements

Enhancements to Source Search result set and filtering enables:

- **One-click filtering** for a streamlined user experience
- **Harmonized Quantity Display and Filtering**, will automatically convert diverse package size information in Hosted Catalog search results to harmonized mass (g) and volume (mL) units and enable easy filtering to only those catalog results with the desired quantity
- Highlighting of designated **Green** products

Other Enhanced Capabilities

Several enhancements have been introduced with RMM 23.2 to simplify and improve the use of RMM:

- Container Search has been enhanced to enable streamlined search of containers "I own" and containers in the user's preferred search locations
- Container History tracking has been enhanced to track changes to most container fields, including flex fields, and the history display has been enhanced to by displaying history in a dedicated page
- Home Page messaging and alerts have been improved

RMM BIOREAGENTS – FEATURE EXTENSIONS

RMM 23.2 continues the evolution of **RMM BIOREAGENTS,** JAGGAER's novel and comprehensive add-on capability for selecting, acquiring, storing, and using commercial bioreagents to improve research results and save time and cost.

RMM 23.2 introduces **Aliquoting** for bioreagent containers, integrated with storage boxes. This feature enables aliquoting and storage of bioreagent vials from sources.

This section details the new enhancements introduced in RMM 23.2 for RMM Bioreagents.

NOTE: THE "RMM BIOREAGENTS" FUNCTIONALITY DESCRIBED THROUGHOUT THIS SECTION REQUIRES A SUBSCRIPTION. PLEASE CONTACT RMM SUPPORT FOR INFORMATION ON ENABLING BIOREAGENTS.

ALIQUOT FOR BIOREAGENT CONTAINERS

CUSTOMER IMPACT

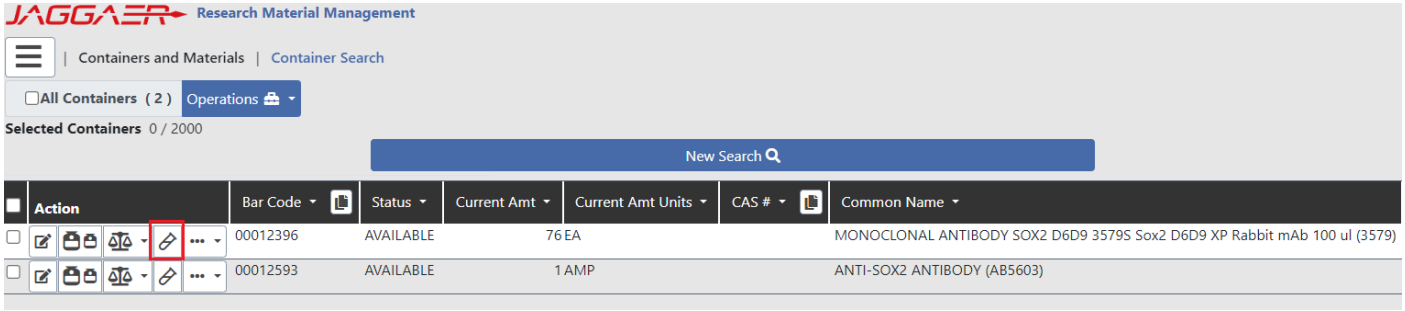
- Feature Activation: This feature is **Off** by default.
- New Permissions related to this Feature: **Container Aliquot**
- New Notifications related to this Feature: **None**

USER IMPACT

This feature is intended for use by: Researchers and Administrators

Accessed Via: RMM | Containers and Materials | Container Search | Create Aliquots

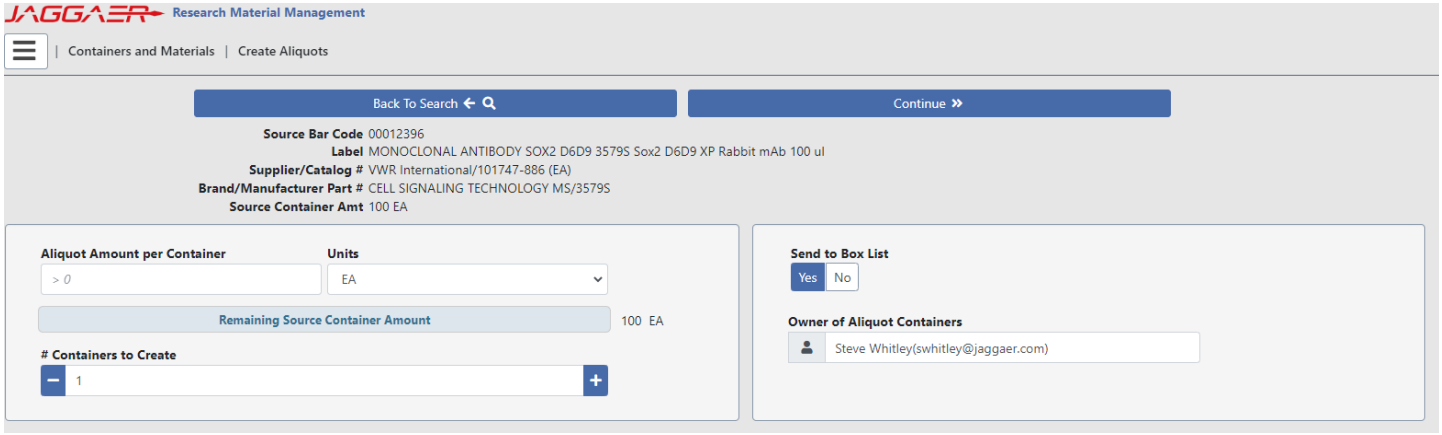
Researchers and administrators with the new **Container Aliquot** permission can aliquot from containers using the new **Create Aliquots** ( ) line-item menu option (shown below) on the Container Search results page.



Container Search Results – Create Aliquots

Create Aliquots

Selecting the new **Create Aliquots** ( ) line-item menu option, opens the **Create Aliquots** page (shown below).

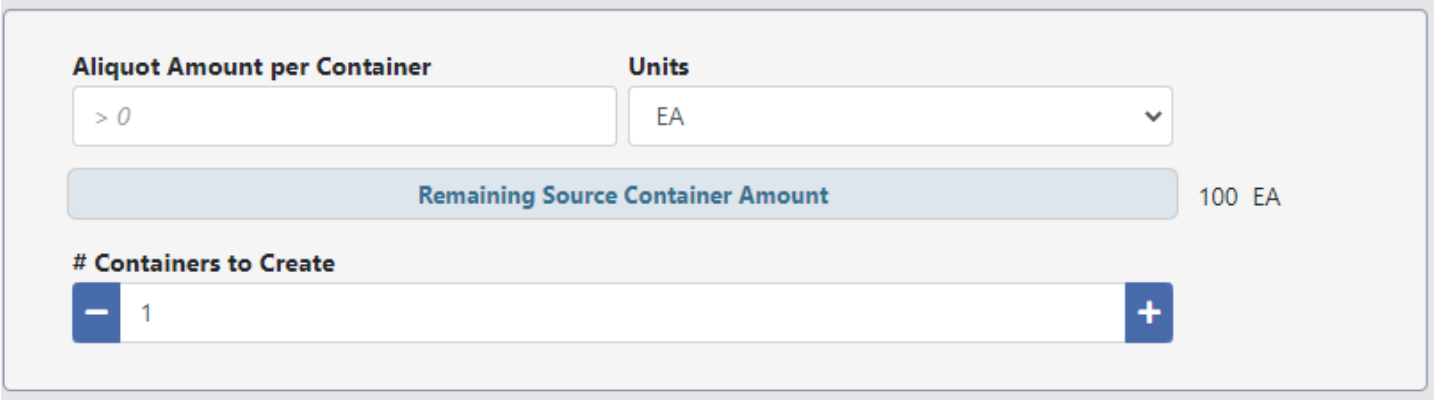


Create Aliquots – Page 1

The initial Create Aliquots page displays the following information for the source container:

- Source Bar Code
- Label (container label name)
- Supplier / Catalog #
- Brand / Manufacturer Part #
- Source Container Amount (prior to aliquoting)

The left bottom panel (shown below) allows the researcher to determine the number of destination containers to create and the amount to aliquot into each destination container.



Create Aliquots – Details 1

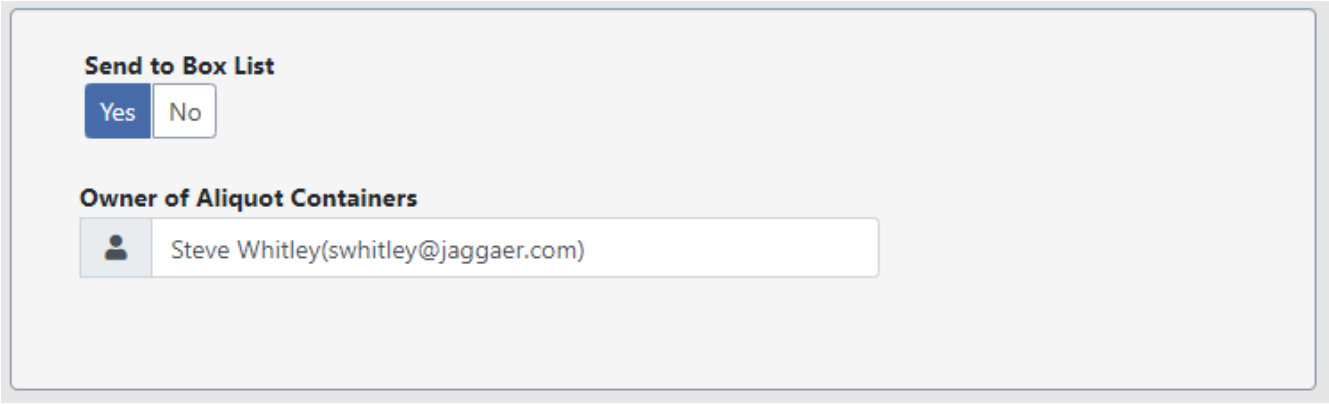
Field	Description
Aliquot Amount per Container	The amount to aliquot into each container from the source container

Units	• The Units will default to the unit of the source container.
	• The selected unit must be the same unit type (either mass or volume) as the source container unit **type.**
	  • A source container with a mass unit cannot aliquot into a container with a volume unit
	  • A source container with a volume unit cannot aliquot into a container with a mass unit

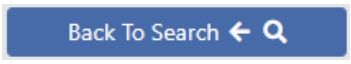
Remaining Source Container Amount	The Source Container Amount minus the aliquot total amount (number of containers * container aliquot amount). If the target aliquots amount exceeds the amount of the source container, the user cannot proceed until this is corrected.
# Containers to Create	Number of target containers to be created.

The right bottom panel (shown below) allows the researcher to automatically send the created destination containers to the RMM Box List page for positional box storage determination.

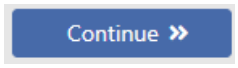
Additionally, the researcher can select the owner of the created destination containers. This will default to the logged-in user.



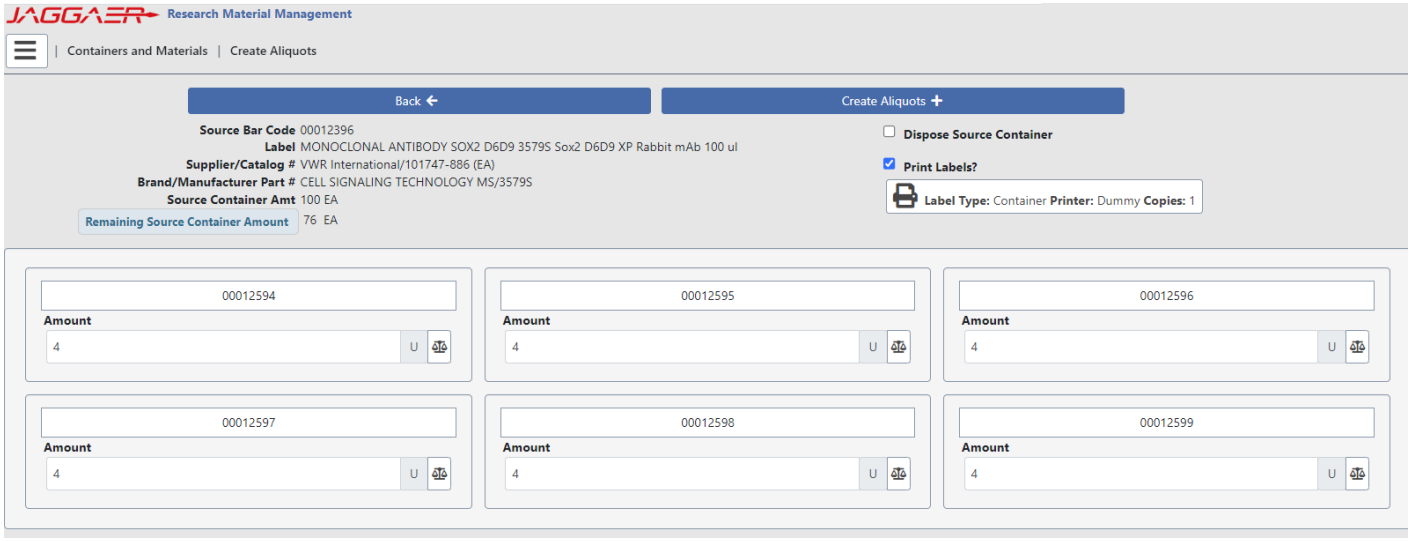
Create Aliquots – Details 2

Selecting the 

button returns the researcher to the Container Search Results page without aliquoting from the source container to the destination container(s).

Selecting the 

button takes the researcher to the subsequent aliquot page (shown below).



Create Aliquots – Page 2

This next Create Aliquots page displays the source container information as well as the amount remaining in the source container after aliquoting.

All destination containers to be created are displayed. The containers are created in the same location/ sub-location as the source container. Users can change amounts to aliquot different amounts for each destination container. The total amount cannot exceed the source container amount.

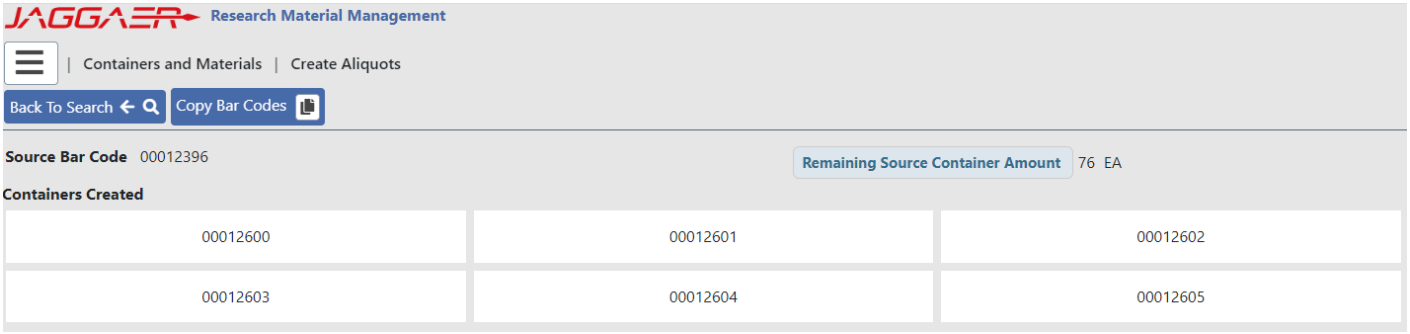
For containers with a **mass unit type,** the researcher can use the Balance ( ) button.

The **Dispose Source Container** selection gives the researcher the option of disposing of the source container in RMM after the aliquot is completed. Please note, the '**Dispose Source Container**' option does **not** require the researcher to have the RMM permission for container disposal. Any **RMM Container Rules Engine** rules governing the disposal of containers are **not** checked prior to source container disposal.

Researchers have the option to print container bar code labels for the destination source containers. The use of pre-printed bar codes is also supported for the container aliquot process.

Selecting the **Back** button returns the researcher to the previous aliquot page without creating the target container(s) from the source container.

Selecting the **Create Aliquots** button takes the researcher to the final aliquot page (shown below).



Create Aliquots – Page 3

The final page provides the researcher with a summary of the aliquot process which just occurred, displaying:

- Source Bar Code
- Remaining Source Container Amount
- Bar codes of created destination containers

Selecting the

button returns the researcher to the Container Search Results page.

Selecting the

button copies the target bar codes to the researcher's clipboard for use in subsequent searches or operations.

Note on the Creation of Child Containers

When a container is aliquoted, the following fields are copied to the child container:

- Owner
- Use and Storage Locations
- Purity
- Lot #
- Storage Code
- Expiration Date
- Container Flex Fields
- Supplier Info (Supplier, Catalog #, Brand, Manufacturer Part #)
- Reservation/Project
- Attachments

Date Created, Room Acquired, and Site Acquired are set to today's date.

Disposed, Last Inventoried, Last Test, Next Test, and Opened dates are all set to null.

BIOREAGENTS MATERIAL ATTRIBUTES

In previous releases, the CiteAb-provided attributes that were captured and associated to a material were viewable, but not editable, in the View Material and Edit Material pages.

With RMM 23.2, the functionality has been expanded, allowing users to both add and edit bioreagent type attributes.

CUSTOMER IMPACT

- Feature Activation: This feature is **Off** by default.
- New Permissions related to this Feature: **None**
- New Notifications related to this Feature: **None**

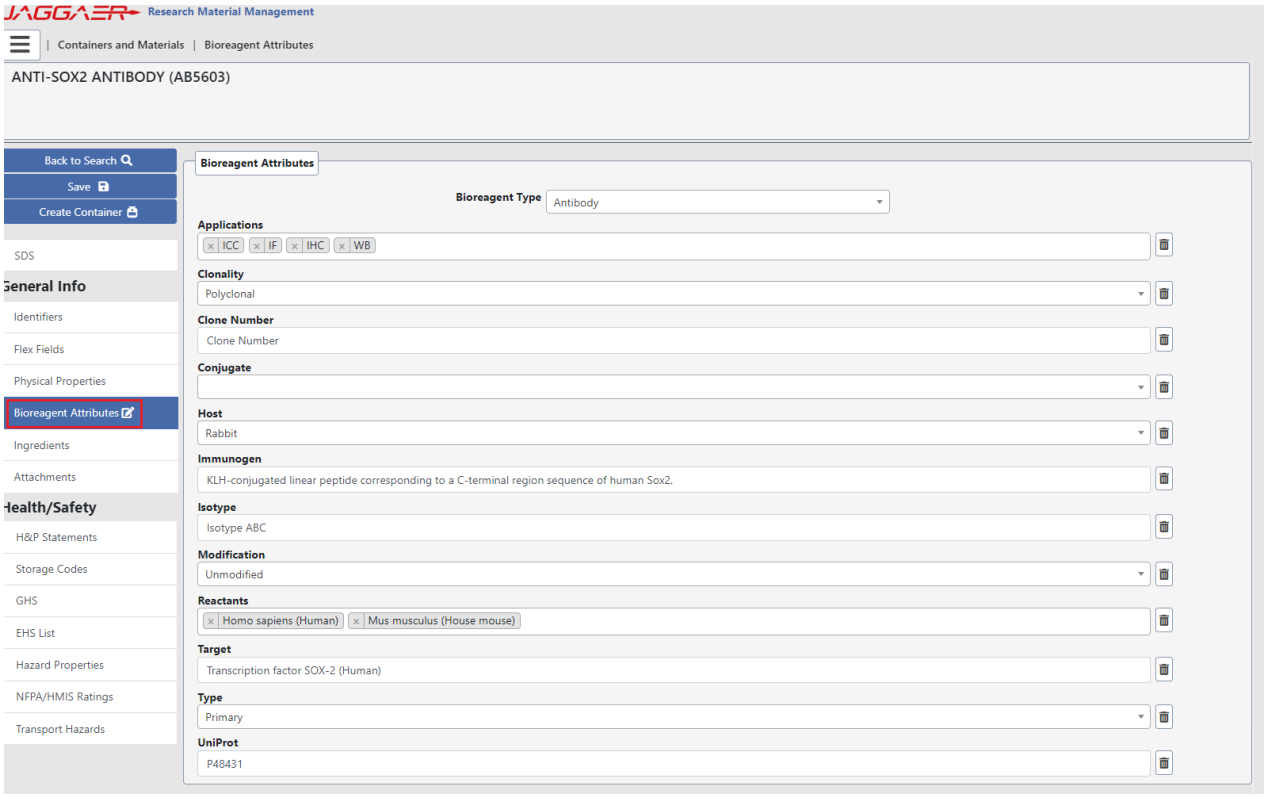
USER IMPACT

This feature is intended for use by: Researchers

Accessed Via: RMM | Containers and Materials | Material Search | Edit Material

The Edit Material window (shown below) has been enhanced to provide the ability to:

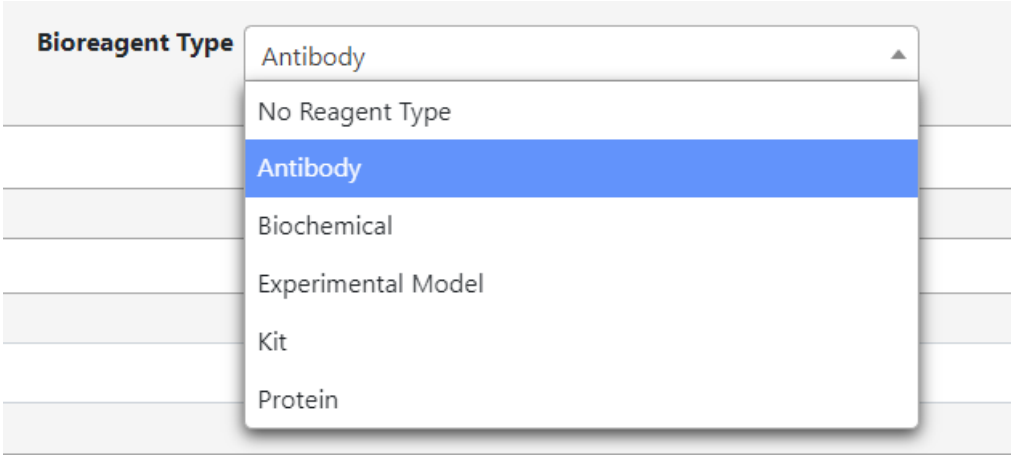
- Associate an RMM material to a particular Bioreagent Type
- Edit the bioreagent type associated with an RMM material
- Edit the bioreagent attributes of a material



Material Edit – Bioreagent Attributes section

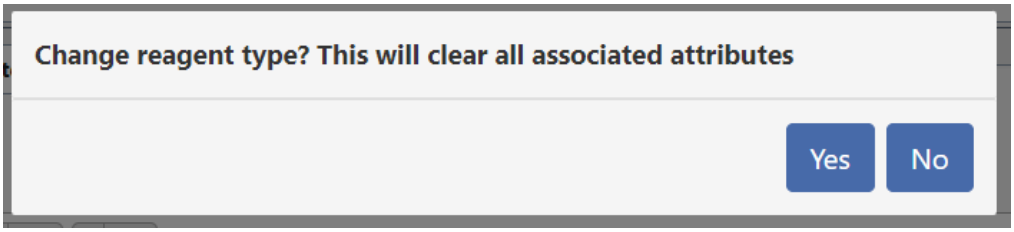
The Bioreagent Attributes section of the Edit Material page displays all the possible attributes for a given bioreagent type within RMM.

Within the Bioreagent Attributes section, the Bioreagent Type drop-down selector (shown below), lists the bioreagent types available in your RMM installation.



Material Edit – Bioreagent Attributes section – Bioreagent Types

If a researcher changes the existing bioreagent type for a material, RMM will prompt the user (shown below) prior to altering the bioreagent type.



Material Edit – Bioreagent Type change

Please note, selecting 'Yes' to change the Bioreagent Type for a material **will remove *all* existing bioreagent attributes currently associated with the material. Once the Bioreagent Type is changed – and 'Yes' selected – all bioreagent attributes will be immediately removed from the material. This will occur even if the user never explicitly saves their material edits.**

The table below shows the possible bioreagent material attributes available for each bioreagent type.

Bioreagent Type	**Bioreagent Material Attributes**
Antibody	• Applications • Clonality • Clone Number • Conjugate • Host • Immunogen • Isotype • Modification

Bioreagent Type	Bioreagent Material Attributes
	• Reactants • Target • Type • UniProt
Biochemical	• Labels
Experimental Model	No attributes saved in RMM
Kit	No attributes saved in RMM
Protein	• Carrier Free • Expression System • Nature • Protein • Species • UniProt

Unlike when changing the Bioreagnt Type, after editing the bioreagent attributes, the changes must be saved to take effect.

BOX STORAGE HISTORY

Position Box Storage was introduced to RMM with the 23.1 release. While Box History, and the history of the containers added/ removed within a box was tracked in 23.1, it was not possible to view the history within RMM.

RMM 23.2 provides the ability for users to view both the Box History and the Box Position History for the containers within the box.

CUSTOMER IMPACT

- Feature Activation: This feature is **Off** by default.
- New Permissions related to this Feature: **None**
- New Notifications related to this Feature: **None**

USER IMPACT

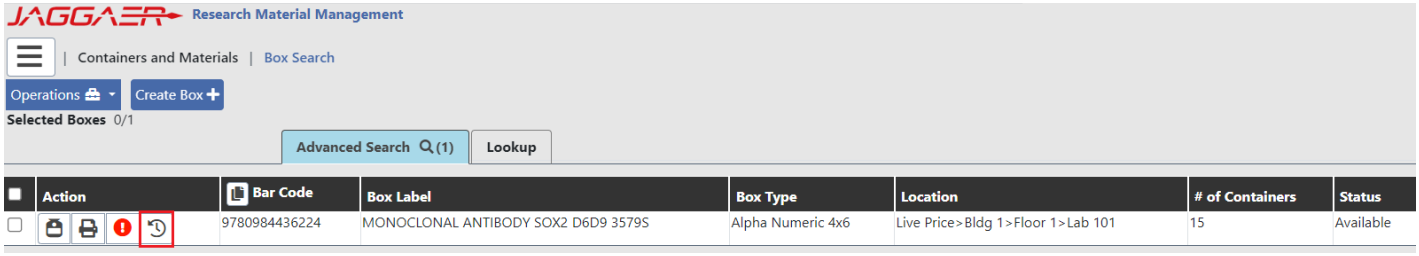
This feature is intended for use by: Researchers

Accessed Via: RMM | Containers and Materials | Box Search (**Box History**)

RMM | Containers and Materials | Box – Add/Remove Containers (**Position History**)

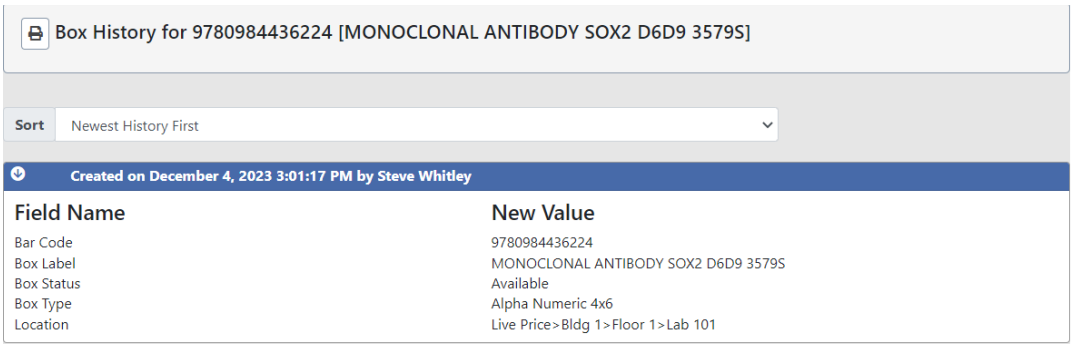
Box History

From the Box Search window (shown below), a user selects the line item button to view existing history.



Box Search – Box History select

RMM will open a new browser tab to display the Box History (shown below).



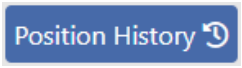
Box Search – Box History display

The Box History will display:

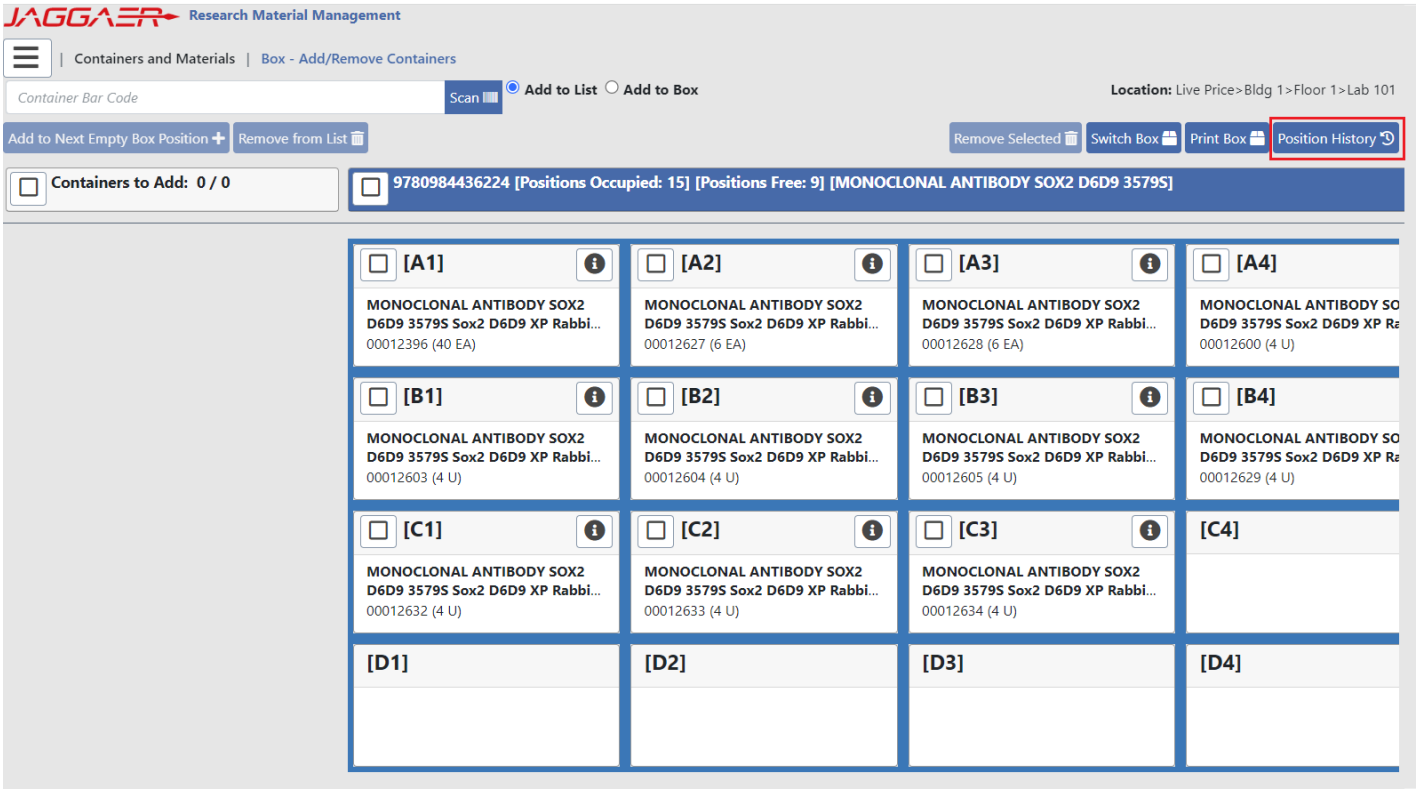
- Bar Code
- Box Label
- Box Status
- Box Type
- Location

As with other history pages within RMM, users can both print and sort the Box History.

Position History

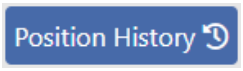
From the Box – Add/Remove Containers window (shown below), a user selects the 

button to generate a CSV report of the Box Position History.



Box – Add/Remove Containers - Position History

Box Position History Report

Selecting the 

button generates a CSV report (shown below) detailing the history of the contents of the box.

Box Position History For: 9780984436224 [MONOCLONAL ANTIBODY SOX2 D6D9 3579S]
Report Date: 05-DEC-2023
Report Generated by: Steve E. Whitley

Position	Event	Container	User	Date/Time
[D4]	Container Added	00012605	Steve E. Whitley	12/5/2023 9:42
[B3]	Container Removed	00012605	Steve E. Whitley	12/5/2023 9:41
[B4]	Container Added	00012629	Steve E. Whitley	12/4/2023 15:04
[B5]	Container Added	00012630	Steve E. Whitley	12/4/2023 15:04
[B6]	Container Added	00012631	Steve E. Whitley	12/4/2023 15:04
[C1]	Container Added	00012632	Steve E. Whitley	12/4/2023 15:04
[C2]	Container Added	00012633	Steve E. Whitley	12/4/2023 15:04
[C3]	Container Added	00012634	Steve E. Whitley	12/4/2023 15:04
[A2]	Container Added	00012627	Steve E. Whitley	12/4/2023 15:01
[A3]	Container Added	00012628	Steve E. Whitley	12/4/2023 15:01
[A4]	Container Added	00012600	Steve E. Whitley	12/4/2023 15:01
[A5]	Container Added	00012601	Steve E. Whitley	12/4/2023 15:01
[A6]	Container Added	00012602	Steve E. Whitley	12/4/2023 15:01
[B1]	Container Added	00012603	Steve E. Whitley	12/4/2023 15:01
[B2]	Container Added	00012604	Steve E. Whitley	12/4/2023 15:01
[B3]	Container Added	00012605	Steve E. Whitley	12/4/2023 15:01
[A1]	Container Added	00012396	Steve E. Whitley	12/4/2023 15:01

Box Position History Report

The Box Position History report fields are:

Field	Description
Position	Container position within the box, displayed in the format of the box
Event	Box history event. Possible values are: • Container Added • Container Removed
Container Barcode	RMM container bar code
User	User who performed the action
Date/Time	Date and time the action occurred

STOREROOM FULFILLMENT - PICK LIST REPORT

The storeroom fulfillment pick list report has been enhanced to include the box and position in which the container is located.

In the example below the bar code column shows that vial 00011417 is in box 120723 position A1

Storeroom Pick List Report

Store Room: Storeroom 102->Floor 1->Bldg 1->Eds Site 1

To Pick

Sub-Location	Bar Code	Dis-pense Re-quested	Substance Name	Amt	Supplier	Catalog #
	00011417 Box-120723/[A1]	N	Acetone	10 mL	Advanced ImmunoChemical Incorporated	

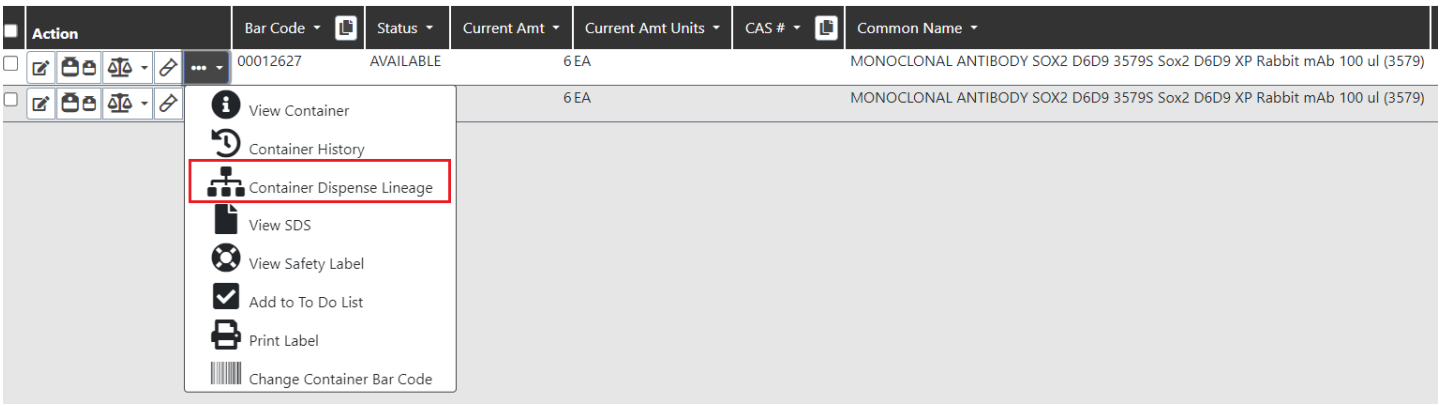
End of Report

Storeroom Pick List Report

CONTAINER DISPENSE LINEAGE

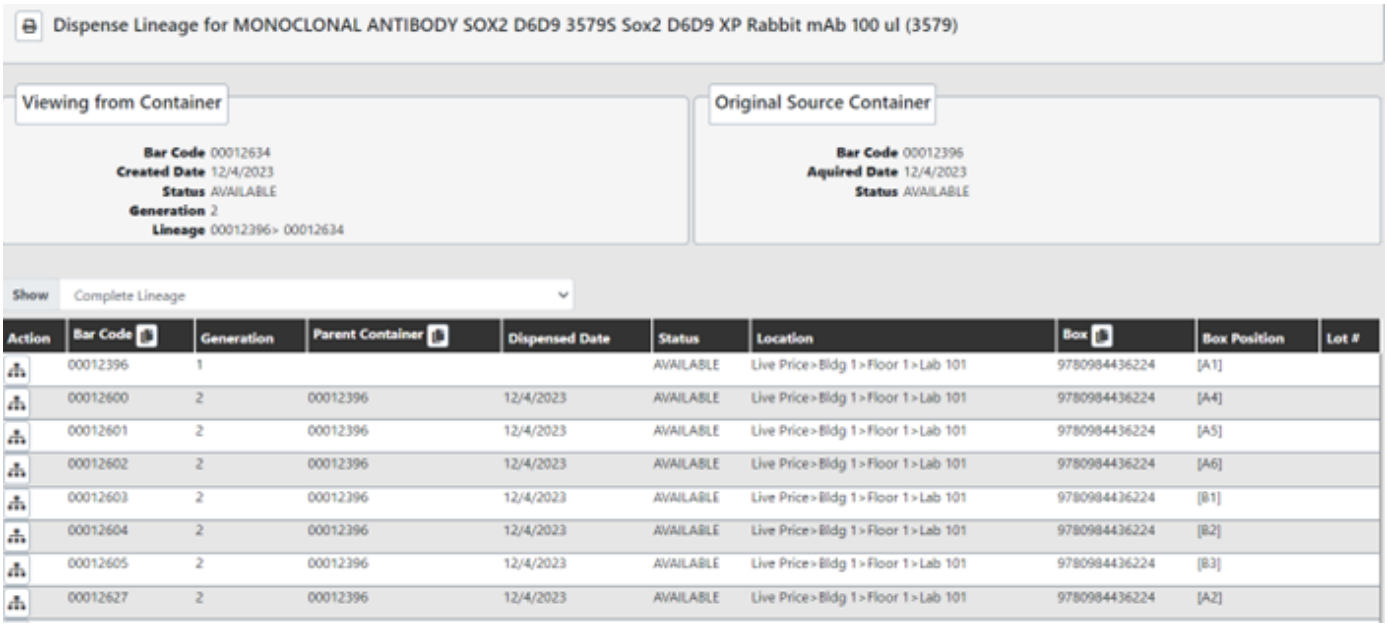
The new Container Dispense Lineage page provides a view of the lineage between Parent-Child containers as created via the new Aliquot operation, as well as the previously existing Storeroom Dispense functionality.

The Container Dispense Lineage page is accessed from the Container Search Results page, via a drop-down line-item menu option (shown below).



Container Search Results – Container Dispense Lineage

The new Container Lineage Page is shown below.



Container Lineage Page

The Container Lineage Page displays information for the selected container, information for the original source container, all containers that are descendants of the original source container, as well as all child containers created via aliquot or storeroom dispense from any children of the original source container.

An example of how this page is navigated is given at the end of this section.

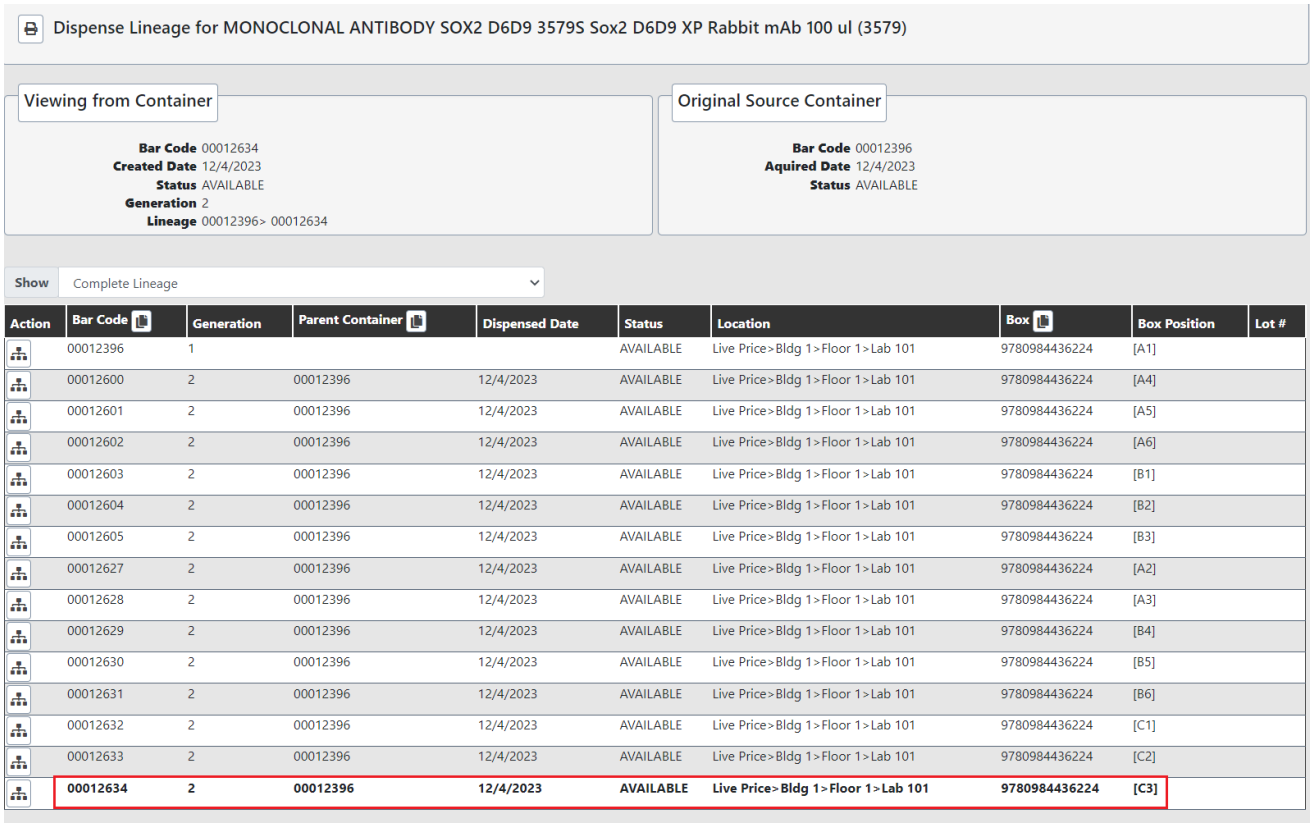
Container Dispense Lineage Header Information

The header section of the Container Lineage page displays:

Field / Section	Description
Header	The material name of the substance in the container
Viewing from Container	This is information about the container that was selected from the search results. • Bar Code • Created Date • Status • Generation – generation in which the container was created • Lineage – direct lineage of the container
Original Source Container	This is information on the original source container of the container currently being viewed. • Bar Code • Acquired Date • Status

Container Lineage Result Set Information

The grid section of the Container Lineage page is shown below.



Dispense Lineage for MONOCLONAL ANTIBODY SOX2 D6D9 3579S Sox2 D6D9 XP Rabbit mAb 100 ul (3579)

Viewing from Container

Bar Code 00012634
Created Date 12/4/2023
Status AVAILABLE
Generation 2
Lineage 00012396> 00012634

Original Source Container

Bar Code 00012396
Aquired Date 12/4/2023
Status AVAILABLE

Show: Complete Lineage

Action	Bar Code	Generation	Parent Container	Dispensed Date	Status	Location	Box	Box Position	Lot #
	00012396	1			AVAILABLE	Live Price>Bldg 1>Floor 1>Lab 101	9780984436224	[A1]	
	00012600	2	00012396	12/4/2023	AVAILABLE	Live Price>Bldg 1>Floor 1>Lab 101	9780984436224	[A4]	
	00012601	2	00012396	12/4/2023	AVAILABLE	Live Price>Bldg 1>Floor 1>Lab 101	9780984436224	[A5]	
	00012602	2	00012396	12/4/2023	AVAILABLE	Live Price>Bldg 1>Floor 1>Lab 101	9780984436224	[A6]	
	00012603	2	00012396	12/4/2023	AVAILABLE	Live Price>Bldg 1>Floor 1>Lab 101	9780984436224	[B1]	
	00012604	2	00012396	12/4/2023	AVAILABLE	Live Price>Bldg 1>Floor 1>Lab 101	9780984436224	[B2]	
	00012605	2	00012396	12/4/2023	AVAILABLE	Live Price>Bldg 1>Floor 1>Lab 101	9780984436224	[B3]	
	00012627	2	00012396	12/4/2023	AVAILABLE	Live Price>Bldg 1>Floor 1>Lab 101	9780984436224	[A2]	
	00012628	2	00012396	12/4/2023	AVAILABLE	Live Price>Bldg 1>Floor 1>Lab 101	9780984436224	[A3]	
	00012629	2	00012396	12/4/2023	AVAILABLE	Live Price>Bldg 1>Floor 1>Lab 101	9780984436224	[B4]	
	00012630	2	00012396	12/4/2023	AVAILABLE	Live Price>Bldg 1>Floor 1>Lab 101	9780984436224	[B5]	
	00012631	2	00012396	12/4/2023	AVAILABLE	Live Price>Bldg 1>Floor 1>Lab 101	9780984436224	[B6]	
	00012632	2	00012396	12/4/2023	AVAILABLE	Live Price>Bldg 1>Floor 1>Lab 101	9780984436224	[C1]	
	00012633	2	00012396	12/4/2023	AVAILABLE	Live Price>Bldg 1>Floor 1>Lab 101	9780984436224	[C2]	
	00012634	**2**	**00012396**	**12/4/2023**	**AVAILABLE**	**Live Price>Bldg 1>Floor 1>Lab 101**	**9780984436224**	**[C3]**	

Container Lineage page – result set grid

The detail section of the Container Lineage page provides the following:

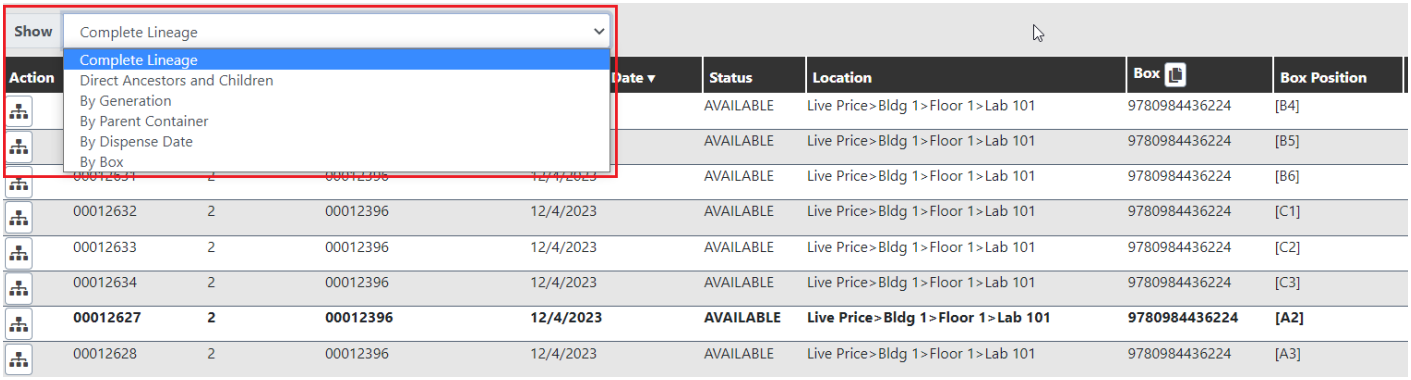
- Action ( ) button

  Available for each container listed in the result set, clicking the button next to a container [C], refreshes the Display Lineage page, with the “Viewing From Container” being set to the container [C] and by default showing Direct Ancestors and Children for the container [C]
- Bar Code
- Generation - number of the generation in which the container was created
- Parent Container - direct parent of the container
- Dispensed Date
- Status
- Location
- Box
- Box Position
- Lot #

The container for whom container lineage is displayed, remains highlighted within in the result set, independent of how the researcher may sort the Container Lineage data.

Container Lineage Filtering

Highlighted below, the Container Lineage page provides researchers with the ability to filter the container results by various options to better see only those containers in which they are primarily interested.



Container Lineage page - Filtering

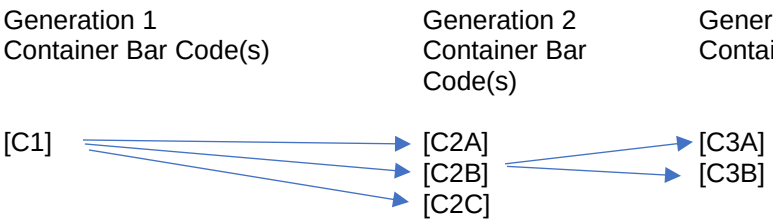
A researcher can filter the displayed information by the following.

Complete Lineage (default)	Complete lineage beginning at the original source container
Direct Ancestors and Children	1) Direct ancestors going back to the original source container **and** 2) Containers created directly from the container
By Generation	All containers created in the generation
By Parent Container	Allows user to pick a parent container. After the parent container is picked, all containers created directly from the selected parent container are displayed.
By Dispense Date	Date on which the containers were dispensed
By Box	Allows to filter by the box in which vials are located. This filter will only be visible if there is at least one container in the lineage that is in a box.

See example below for an illustration of “Complete Lineage”, “Direct Ancestors and Children, and “By Generation” filters.

Example

The following illustrates the functionality of the Dispense Lineage page. Assume [C1] aliquots into [C2A], [C2B]. and [C2C], and then [C2B] aliquots into [C3A] and [C3B]



If the user performed a source search for [C3A] and viewed Container Dispense Lineage, the Dispense Lineage page would be as follows with row containing [C3A] being highlighted.

Dispense Lineage for Eds Test Description 09-Dec-2015-A

Viewing from Container

Bar Code C3A
Created Date 12/7/2023
Status AVAILABLE
Generation 3
Lineage C1> C2B> C3A

Original Source Container

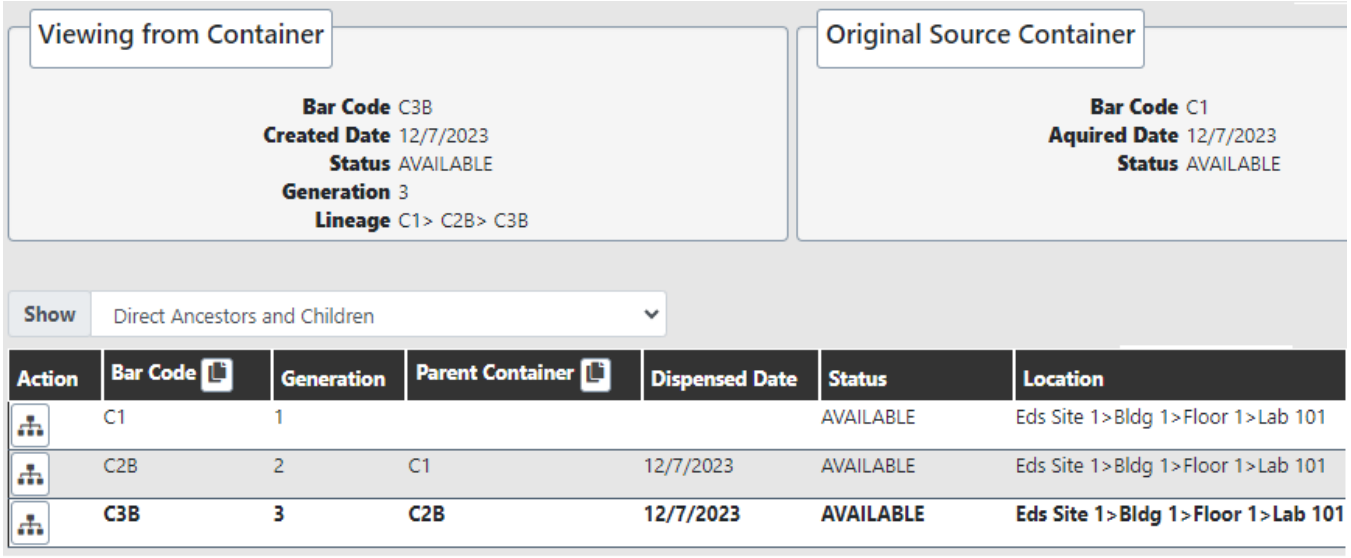
Bar Code C1
Aquired Date 12/7/2023
Status AVAILABLE

Show: Complete Lineage

Action	Bar Code	Generation	Parent Container	Dispensed Date	Status	Location
	C1	1			AVAILABLE	Eds Site 1>Bldg 1>Floor 1>Lab 101
	C2A	2	C1	12/7/2023	AVAILABLE	Eds Site 1>Bldg 1>Floor 1>Lab 101
	C2B	2	C1	12/7/2023	AVAILABLE	Eds Site 1>Bldg 1>Floor 1>Lab 101
	C2C	2	C1	12/7/2023	AVAILABLE	Eds Site 1>Bldg 1>Floor 1>Lab 101
	C3A	**3**	**C2B**	**12/7/2023**	**AVAILABLE**	**Eds Site 1>Bldg 1>Floor 1>Lab 101**
	C3B	3	C2B	12/7/2023	AVAILABLE	Eds Site 1>Bldg 1>Floor 1>Lab 101

Container Lineage page – example 1

Clicking on for [C3B], makes “[C3B]” the “Viewing From Container” and changes the filter to Direct Ancestors and Children.



Container Lineage page – example 2

The following table shows what information would appear on the Dispense Lineage Page, based on the container selected from source search:

				Containers Shown in Grid Based on these filters		
Container Selected on Source Search	**Original Source Container**	**Generation**	**Lineage**	**Complete Lineage**	**Director Ancestors and Children**	**By 3rd Generation**
[C1]	[C1]	1	[C1]	C1 C2A C2B C2C C3A C3B	C1 C2A C2B C2C	C3A C3B
[C2A]	[C1]	2	[C1] > {C2A]	C1 C2A C2B C2C C3A C3B	C1 C2A	C3A C3B
[C2B]	[C1]	2	[C1] > [C2B]	C1 C2A C2B C2C C3A C3B	C1 C2B C3A C3B	C3A C3B
[C3A]	[C1]	3	[C1]> [C2B]> [C3A]	C1 C2A C2B C2C C3A C3B	C1 C2B C3A	C3A C3B

CHEMWATCH INTEGRATION

RMM 23.1 introduced a new partnership with Chemwatch (licensed separately), a global leader in EHS and Regulatory content and services, related to content for health and safety and regulatory information about materials and the hazards associated with materials.

The Chemwatch full collection includes over 140 million vendor-specific SDS', supporting 48 languages and 82 countries. Chemwatch has also compiled their own "Gold" profiles, aggregating information across multiple suppliers, for over 250K chemicals. Chemwatch is a well-known provider globally and is particularly well-established in Higher Education.

RMM 23.1 introduced the following Chemwatch integration functionality:

- Obtain/Link Profile from Chemwatch
- Populate Existing RMM Material Profile
- Provide the ability for a user to manually reconcile a mismatch

RMM 23.2 continues to enhance the RMM/Chemwatch integration with the following new functionality:

- Enable the Chemwatch "Delta Synchronization"
    - Weekly background process for documents in the client's folder to update SDS document links & indexed attributes on associated RMM materials when they are updated by Chemwatch
    - If a Chemwatch material has been updated in the past week, RMM will sync to the latest document URL or data changes from Chemwatch to the material
- Ability to edit/ retry failed requests
- Provide new report "Materials and Suppliers With No Associated SDS Url Report"
    - Replaces "Materials and Suppliers With No Associated MSDS"

PLEASE READ THE "CHEMWATCH OVERVIEW" DOCUMENT FOR COMPLETE DETAILS ON THE RMM/CHEMWATCH INTEGRATION.

MATERIALS AND SUPPLIERS WITH NO ASSOCIATED SDS URL REPORT

The new “Materials and Suppliers With No Associated SDS Url Report” Report can be used with both Chemwatch and 3E integration. The report contains all Materials that have a request for an SDS from 3E or Chemwatch but have no SDS Url attached. This report replaces the “Materials and Suppliers With No Associated MSDS” report. The report

- Only returns SDS requests for the user’s Geographic Region
- Distinguishes between Supplier or Brand level where no SDS Url is present

The report contains the following columns:

Material Name	Name of the Material
SDS Url at Material Level	Values displayed • “Yes” – there is a SDS URL at the material level • “No” – there is no SDS URL at the material level
CAS #	Primary CAS # of material
MDL #	MDL # of material. If multiple MDL numbers are assigned to the material, it will display the last one alphabetically. Example: if the following MDL numbers are assigned to the material “MFCD00002103”, “MFCD00002104”, “MFCD00002105”, then “MFCD00002105” will be displayed.
Type	The Type column can be one of the following: • “Brand” – means a brand is displayed in the “Supplier/Brand” column. • “Supplier” – means a supplier is displayed in the “Supplier/Brand” column.
Supplier/Brand	The supplier or brand that does not have an SDS URL link associated to it. The Supplier/Brand column will list either a supplier or brand as indicated by the “Type” column.

Materials and Suppliers With No Associated SDS Url					
Material Name	SDS Url at Material Level	CAS #	MDL #	Type	Supplier/Brand
1,5-DIACETYLINDOLINE, 97%	No	16078-35-6		Brand	SIGMA ALDRICH-NOVARTIS ONLY MS
1-BUTANOL, CHROMASOLV PLUS, FOR HPLC, >&	Yes	71-36-3		Brand	Acros Organics
1-CHLOROBUTANE, REAGENTPLUS, 99%	Yes	109-69-3		Brand	Fisher Chemical
1-NITROSO-2-NAPHTHOL, 97%	Yes	131-91-9		Brand	Acros Organics
1-PENTANOL	Yes	71-41-0		Brand	Fisher Chemical
150ml Formaldehyde solution(37 wt%in H2O	No	50-00-0		Supplier	Advanced ChemTech
2,2'-Thiodiethanol	No	111-48-8		Brand	SIGMA-ALDRICH
2-(Diethylamino)ethanol	Yes	100-37-8		Brand	ALFA AESAR
2-(Diethylamino)ethanol	Yes	100-37-8		Brand	Oakwood Products, Inc.
2-BUTANOL	Yes	78-92-2		Brand	Fisher Chemical
2-IODOPROPANE-D7, 98 ATOM % D, CONTAINS	Yes	101927-33-7		Brand	Acros Organics
2-PYRROLIDINONE	Yes	616-45-5		Brand	Acros Organics
2-Phenoxyethanol, >=99%	Yes	122-99-6		Brand	Acros Organics
2-Propanol	Yes	67-63-0		Brand	Fisher Scientific
4-(4-Hydroxyphenyl)-2-butanone	Yes	5471-51-2		Brand	Acros Organics

Materials and Suppliers with no Associated SDS URL report - example

ENHANCED COMPLIANCE DATA

RMM 23.2 features an update in RMM's compliance data model to support **GHS version 9**. Key changes associated with this update include:

- New Hazard classifications for "Chemicals Under Pressure", "Desensitized Explosives", "Aspiration Hazard", and "Hazard to the Ozone Layer"
- Refinement of Acute Toxicity hazard ratings to differentiate Oral, Dermal, and/or Inhalation toxicity, so that one material can also be classified with multiple Acute Toxicity ratings
- Refinement of Sensitization hazard ratings to differentiate skin and respiratory sensitization, so that one material can also be classified with multiple sensitization ratings
- Differentiation of Acute and Chronic Aquatic Environment hazards

Chemwatch integrations are being correspondingly updated to reflect these changes.

The table below details how GHS hazards for materials will be remapped to new categories and values.

GHS Attribute for Material in 23.1.0	**Will be updated to this value in RMM 23.2.0**
Aquatic Hazard Chronic 1	Aquatic Hazard Chronic Category 1
Aquatic Hazard Acute 1	Aquatic Hazard Acute Category 1
Aquatic Hazard Chronic 2	Aquatic Hazard Chronic Category 2
Aquatic Hazard Yes	Aquatic Hazard Acute Yes
Aquatic Hazard Acute 2	Aquatic Hazard Acute Category 2
Aquatic Hazard Chronic 3	Aquatic Hazard Chronic Category 3
Aquatic Hazard Acute 3	Aquatic Hazard Acute Category 3
Aquatic Hazard Chronic 4	Aquatic Hazard Chronic Category 4
Aquatic Hazard No	Aquatic Hazard Acute No
Aquatic Hazard Unknown	Aquatic Hazard Acute Unknown
Explosives Unstable Explosive	Explosives Category 2A
Explosives Division 1.1	Explosives Category 2A
Explosives Division 1.2	Explosives Category 2A
Explosives Division 1.3	Explosives Category 2A
Explosives Yes	Explosives Category 2A
Explosives Division 1.4	Explosives Category 2A
Explosives Division 1.5	Explosives Category 2A
Explosives Division 1.6	Explosives Category 2A
FlammableGas Category 1	Flammable Gas Category1A, Flammable Gas
Sensitization Respiratory Category 1A	Sensitization Respiratory Category 1A
Sensitization Respiratory Category 1B	Sensitization Respiratory Category 1B
Sensitization Respiratory Category 1	Sensitization Respiratory Category 1
Sensitization Yes	Sensitization Skin Yes
Sensitization Skin Category 1A	Sensitization Skin Category 1A
Sensitization Skin Category 1B	Sensitization Skin Category 1B
Sensitization Skin Category 1	Sensitization Skin Category 1
Sensitization No	Sensitization Skin No
Sensitization Unknown	Sensitization Skin Unknown

STOCKROOM INTELLIGENCE ENHANCEMENTS

Previous releases of RMM included the Stockroom Analytics Replenishment and Demand report and Stockroom Analytics Fast Moving Items report which provided the ability for users to analyze and react to ordering trends occurring within their stockrooms. The Replenishment and Demand report calculated recommended Stockroom Replenishment parameters for Stockroom Inventory items – Economic Order Quantity (EOQ) and Reorder Point (ROP), based on actual demand and supplier performance experience. The Fast Moving Items report provided insight into stockroom inventory items where current demand is above average compared to historical averages.

The information found in these reports is now directly accessible in the RMM GUI – making it much easier for the user to view the analytics information and to take action by adjusting stocking parameters or initiating a one-time replenishment. The enhancements to stockroom analytics include the following:

New Home Page Widget

A new intelligent Home Page widget will enhance the ability to identify and respond to Fast Moving Items. Items listed will link to a new item detail page showing item demand and inventory trends and recommended stocking adjustments, with the opportunity to adjust stocking parameters or initiate a one-time replenishment. This new detailed page can also be accessed from stockroom inventory search.

New Charts with New Analytical Insights

Included on the new detail page is detailed analytical information as well as the following charts that will allow users to make informed decisions in adjusting stocking parameters:

- **Inventory Over/Under** - Daily value of an item's "Available" amount vs "Backordered" amount
- **Daily Units Requested** - Daily combined sum of total Stockroom Request or Kiosk Checkouts
- **Monthly Units Requested**- Monthly combined sum of total Stockroom Requests and Kiosk Checkouts

Note that the Stockroom Analytics Replenishment and Demand report and Stockroom Analytics Fast Moving Items report have been removed from RMM. However, all information that was available in those reports is accessible via the RMM GUI, including the ability to export the information to CSV files.

Enabling Stockroom Intelligence Enhancements

To enable the stockroom intelligence enhancements:

- Access the Stock Master Analytics page for a given stock master, set the configuration parameters, and set the Stock Master Analytics to ON. Details given in subsequence section.
- Access the Manage Stockroom Inventory Analytics Job and configure the job to run. Details given in subsequent section.

Note on permissions. During the upgrade, the new permissions needed to view the stockroom intelligence functions will be automatically assigned to existing roles. The administrator does not need to assign new permissions to roles. Permissions are detailed in subsequent sections.

STOCKROOM ANALYTICS - CONFIGURATION

CUSTOMER IMPACT

- Feature Activation: This feature is **Off** by default.
- New Permissions related to this Feature: **Stockroom Module Inventory Analytics**
  Stockroom Module Inventory Analytics Configuration
- New Notifications related to this Feature: **None**

USER IMPACT

This feature is intended for use by: Stockroom Administrators

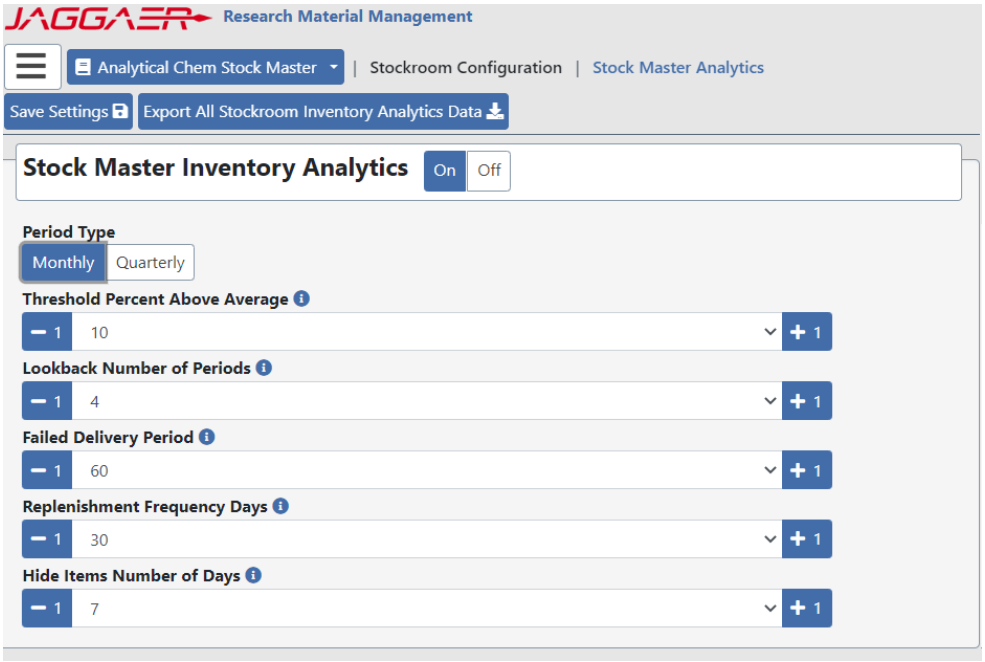
Accessed Via: Administration | Stockroom Configuration | Stock Master Analytics

The new Stock Master Analytics page (shown below) allows users with the new **Stockroom Module Inventory Analytics Configuration** permission to configure and view parameters used in the analysis of the stockroom data. Users with the new **Stockroom Module Inventory Analytics** permission will be able to view the page and current parameters but not change any parameter values.

On upgrade

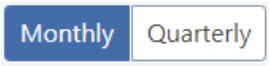
- **Stockroom Module Inventory Analytics Configuration** permission will be assigned to any role that currently has the Stockroom Module Stock Master permission.

- **Stockroom Module Inventory Analytics** permission will be assigned to any role that currently as the Stockroom Module Inventory Item Edit permission.



Stock Master Analytics Page - Details

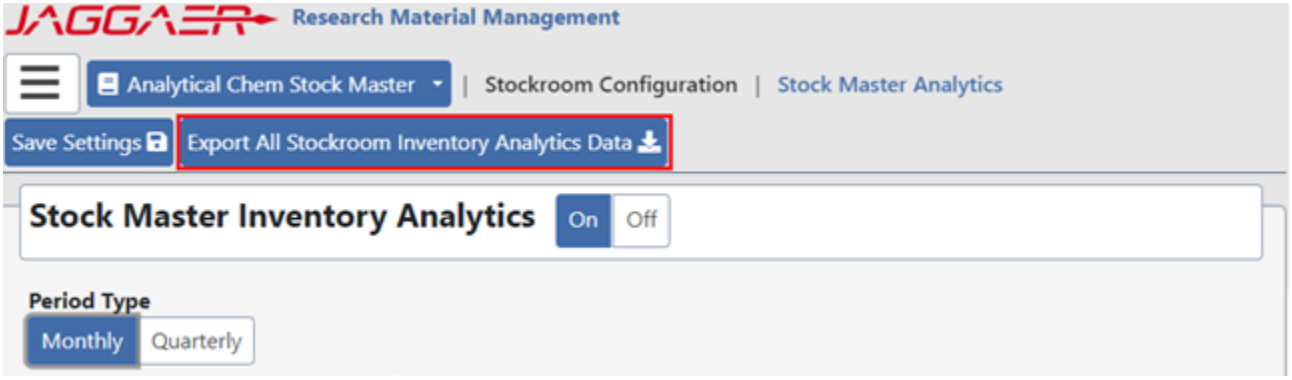
The following table details the available parameters for configuring Stock Master analytics. **All the fields are required and must be provided.**

Field	Description
On/Off switch 	Determines whether analytics data will be displayed. Default value is 'Off'. If set to 'Off', neither the 'Fast Moving' items widget on the home page nor the 'View Analytics' button on Stockroom Inventory Search will be visible. If this is set to on, the Stockroom Inventory Analytics **Job must also be configured to run** to gather the statics. See the Stockroom Inventory Analytics Job section for more information. Analytic data on the Stockroom Inventory Analytics page will only be displayed after the initial run of the Analytics job.
Period Type 	Stockroom analytic data can be calculated based on either monthly or quarterly data input. Default value is 'Monthly'
Threshold for Percent Above Average	Percent above average that the projected demand must be above to be defined as a 'Fast Moving Item'. Must be between 0 – 999. **Example:** If the average demand is 100, and projected demand is 115, the projected demand is 15 percent above average. If the 'Threshold for Percent Above Average' value is set to less than 15, the item will be included in the 'Fast Moving Items' widget and have a badge on the item's Stockroom Inventory Analytics page (both described later in the Release Notes).
Lookback Number of Periods	The number of months or quarters of past data should be used to calculate historical demand data. The current month or quarter is not included in this value. Must be between 1 – 99.
Failed Delivery Period	Number of calendar days [N] used to calculate stockroom replenishment items not received, or received more than [N] days after placing the request. Must be between 1 – 99.

Field	Description
	Default value is 60.
Replenishment Frequency Days	Number of calendar days between stockroom replenishment requests. Used to calculate the suggested Economic Order Quantity (EOQ). Must be between 1 – 999. Default value is 30.
Hide Items Number of Days	Number of days to hide a Stockroom Inventory Item from the 'Stockroom Inventory – Fast Moving Items Demand' widget when using the 'Hide from Fast Moving Items' action on the 'Stockroom Inventory Item Analytics' page (described later in the Release Notes). This is used to hide items from the Fast Moving Items widget with a 'Reviewed' date less than this value. Must be between 1 – 90.

Export Stockroom Inventory Analytics Data

Selecting the Export All Stockroom Inventory Analytics Data button (highlighted below) creates a CSV export file of all items for the user's Stock Master. This is accessible to users with either of the new **Stockroom Module Inventory Analytics Configuration** or **Stockroom Module Inventory Analytics** permissions.



Stock Master Analytics – Export Analytics Data

All data previously returned in the 'Stockroom Analytics Replenishments and Demand Report' and 'Stockroom Analytics Fast Moving Items Report' are available through this export. As such, both the 'Stockroom Analytics Replenishments and Demand Report' and 'Stockroom Analytics Fast Moving Items Report' have been discontinued with the RMM 23.2 release.

The export contains the following fields:

Field Name	Description
Stock Master Item Name	Stock master item name
Stockroom	Stockroom name
Site	Stockroom site
Building	Stockroom floor
Floor	Product bar code
Primary Stocking Location	Primary stocking location
Secondary Stocking Location	Secondary stock location
Inventory Type	Inventory Type
Reorder Point	Current Reorder Point
EOQ	Current EOQ
Primary On Hand	Current on hand in primary location
Secondary On Hand	Current on hand in secondary location
Min Count	Min count currently set for item
Max Count	Max count `currently set for item
Custom 1	Custom 1
Custom 2	Custom 2
Suggested Reorder Point	**Suggested** reorder point (ROP) based on analysis of transactions for the item that occurred within the selected date range ROP is the Number of Units needed on hand during lead time period (time between the replenishment request submit date and received date) For more information on ROP and EOQ calculations see the Details Tab - Updates section.
Suggested EOQ	**Suggested** EOQ based on analysis of transactions for the item that occurred within the selected date range. EOQ is the Number of Units expected to be used between Replenishment Requests. For more information on ROP and EOQ calculations see the Details Tab - Updates section.
Number of Replenishment Requests	Number of replenishment requests for the stock master item in the last 365 days.
Average Stocking Units Ordered per Replenishment Request	Average number of stock units ordered per replenishment request in the last 365 days.

Good Deliveries	Number of replenishments received within N days in the last 365 days, with N being the specified failed delivery period.
Failed Deliveries	Number or replenishments not received or received after more than N days in the last 365 days, with N being the specified failed delivery period.
Average Lead Time (Days)	Average Lead Time for **Good Deliveries** (Lead Time = Time between submit date and first partial or first full receipt action)
Standard Deviation of Lead Time	Standard Deviation of Lead Time for **Good Deliveries**
Total Demand Units	Number of stock units requested or checked out from kiosks in the last 365 days.
Order Days	Number of days on which a stockroom item was 1) requested and/or 2) checked out from a kiosk for the specified item in the last 365 days.
Average Daily Demand	Average Demand Units per day in the last 365 days based on a calendar year
Working Daily Demand	Average Demand Units per day in the last 365 days based on a 260 day year (work days in a year).
Average Order Size	Annual Demand Units divided by Order Days.
Current Demand Units	Current number of units requested from stockroom requests or kiosk check outs in the current period.
Average Demand Units	Average number of units requested or check out in the look back period defined on the Stock Master Analytics Page.
Projected Total Demand Units the Period	Expected number of units requested or checked out in the current period. Example: assuming export is run on the 10th of the month. Up until the 10th, 12 items have been requested/checked out, with an additional 24 items expected to be requested/checked out for the remainder of the month. The value for the "Projected Total Demand Units this Period" is 36.
Projected Demand Units in Remaining Period	Expected number of units requested or checked out in the remaining portion of the current period. Using the example immediately above, the value for "Projected Demand Units in Remaining Period" would be 24.
Projected Demand Above Average (%)	Expected number of units requested or checked out in the current period compared to average. Example: assuming the "Avg Demand Units" was 27, and "Projected Total Demand Units this Period" was 36, then "Projected Demand Above Average (%) would be 33.
Replenishment Price/Unit	Price per stocking unit from the primary replenishment specification.
Current On Hand	Current stockroom inventory items on hand.

Current Period (Days)	Number of days into the current period (current quarter or current month). Example: 25 days
Current Period (%)	Percent of days into the current period (current quarter or current month). Example: 25 days into the current quarter Current Period % = 27.3%
Last Updated Date	Last Date/Time that the stockroom inventory analytics job ran for the item.

Update / View Configuration Properties

Users with the new **Stockroom Module Inventory Analytics Configuration** permission can update the configuration parameters by selecting the Save Settings button.

Users that have the **Stockroom Module Inventory Analytics** permission, but **do not** have the **Stockroom Module Inventory Analytics Configuration** permission can view, but not modify, the Stockroom Analytics configuration parameter (shown below).

Stock Master Analytics – read-only view

MANAGE STOCKROOM INVENTORY ANALYTICS JOB

CUSTOMER IMPACT

- Feature Activation: This feature is **Off** by default.
- New Permissions related to this Feature: **Stockroom Module Inventory Analytics Manage Job**
- New Notifications related to this Feature: **None**

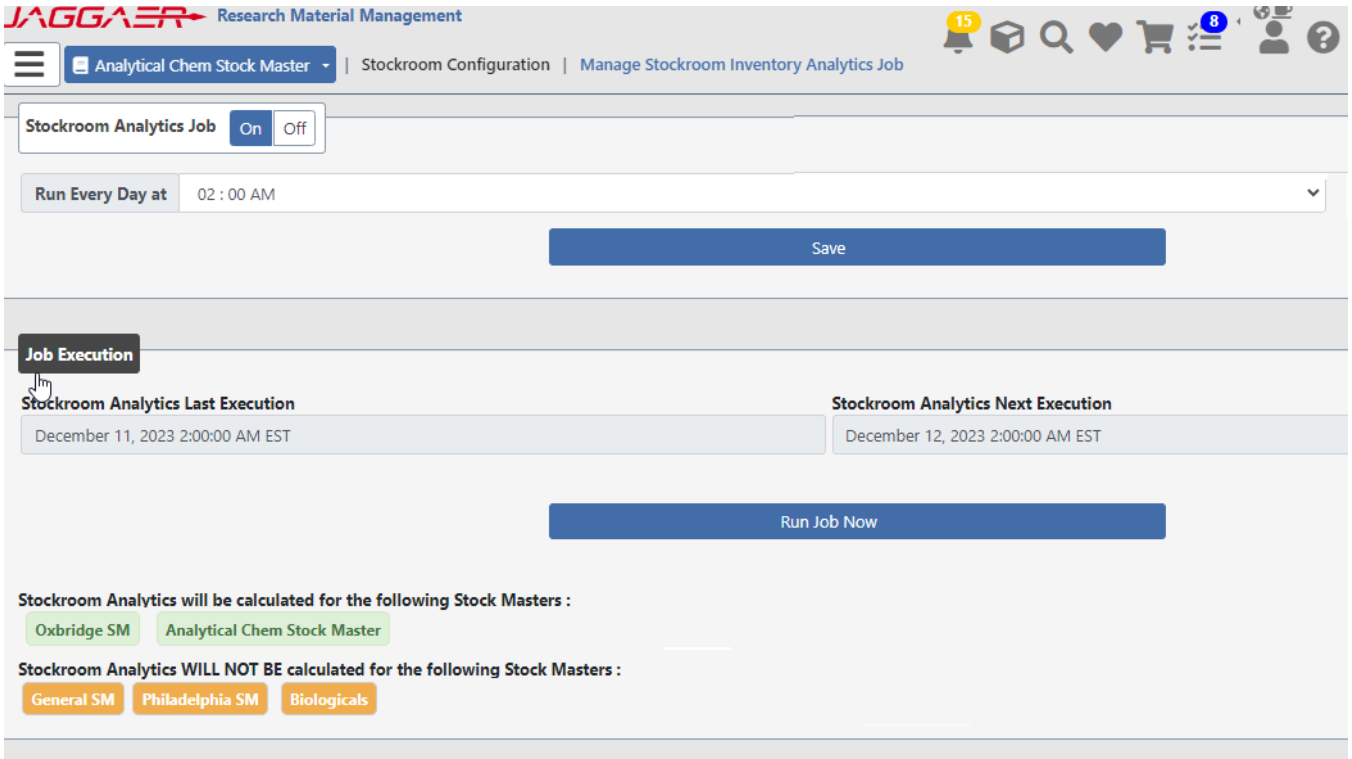
USER IMPACT

This feature is intended for use by: Stockroom Administrators

Accessed Via: Administration | Stockroom Configuration | Manage Stockroom Inventory Analytics Job

The analytical data displayed to the user on the Stockroom Inventory Analytics page and on the Fast Moving Items widget on the home page is calculated by the Stockroom Inventory Analytics job which runs once a day. The Manage Stockroom Inventory Analytics Job page allows the user to turn on/off the job, as well as set the time in which the job will run. To access this page (shown below) the user needs the new **Stockroom Module Inventory Analytics Manage Job** permission.

On upgrade the new **Stockroom Module Inventory Analytics Manage Job** permission will be assigned to any role that currently has the Stockroom Module Create Stock Master permission.



Manage Stockroom Inventory Analytics Job page

Notes on this page

Stock Masters

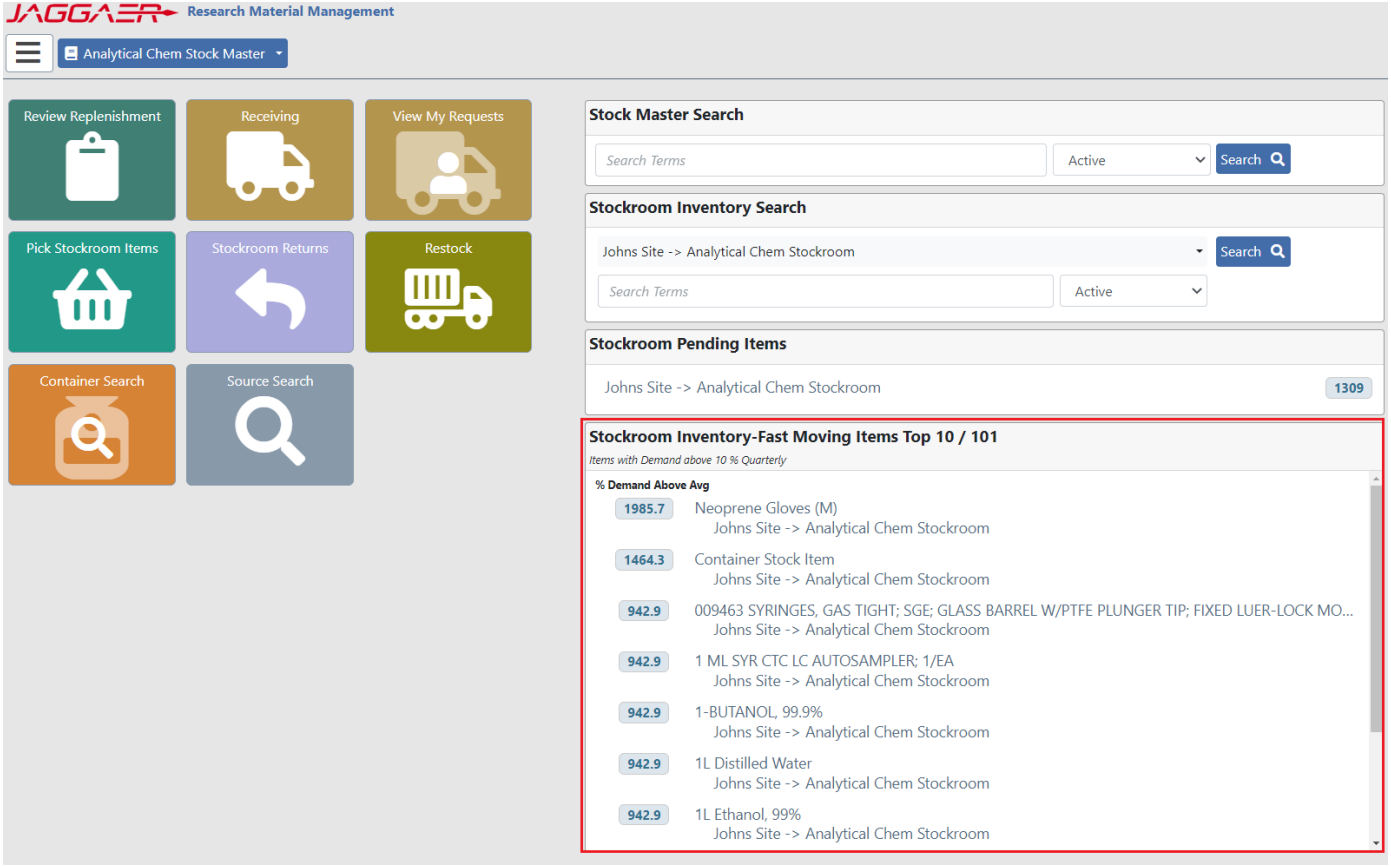
- The job **will** calculate analytics data for all stock masters listed in the “Stockroom Analytics will be calculated for the following Stock Masters“ section.
- The job will **not** calculate analytics data for the stock masters listed in the “Stockroom Analytics WILL NOT BE calculated for the following Stock Masters” section.
- To have stockroom analytic data calculated for a given stock master, go to the Stock Master Analytics page and set the Stock Master Inventory Analytics switch to on.

The job will run once a day at the time specified in the “Run Every Day at” drop down. The user may also run the job manually at any time to immediately update the Stockroom Analytics data by clicking the “Run Job Now” button, allowing users to update the data without waiting for the scheduled job to run.

Turning the job OFF will NOT hide the Stockroom Inventory Analytics page and on the Fast Moving Items home page widget. It will only stop calculating analytical data.

FAST MOVING STOCKROOM INVENTORY

The new, intelligent Stockroom Inventory Analytics Home Page widget (shown below) enhances the ability to identify and respond to **Fast Moving Items**. Items listed link to a new item detail page showing item demand and inventory trends and recommended stocking adjustments, with the opportunity to adjust stocking parameters or initiate a one-time replenishment request. This widget will only be visible if the user has the **Stockroom Module Inventory Analytics** permission.



Stockroom Inventory Analytics Home Page widget

Stockroom Inventory- Fast Moving Items Home Page Widget

Previously, RMM provided the 'Stockroom Analytics Fast Moving Items Report' which returned items that were defined as "Fast Moving" based on the report parameters.

The Stockroom Inventory Analytics Home Page widget uses the same calculations to return **Fast Moving Items** based on the parameters set on the **Stock Master Analytics** page. The ten **Fast Moving Items** with the highest demand percentage will be displayed in the widget.

The user must have the new **Stockroom Module Inventory Analytics** permission for the Stockroom Inventory Analytics Home Page widget to be available on the Home Page. During upgrade this permission will be assigned to all RMM roles which have the **Stockroom Module Inventory Item Edit** permission.

Stockroom Inventory Analytics Home Page Widget - Details

The following table details the elements of the Stockroom Inventory Analytics Home Page Widget.

Field	Description
Widget Title	Stockroom Inventory – Fast Moving Items Demand (Top 10/X). 'X' is the total number of fast moving items.
Widget Subtitle	Items with Demand above Y% for Current {Month/Quarter}. 'Y' is the 'Threshold for Percent Above Average' set on the Stock Master Inventory Analytics page. The Period Type selected on the Stock Master Inventory Analysis page (Monthly / Quarterly) is displayed here.
Widget Result Set Columns	The following information is displayed for each Stockroom Inventory Item in the result set: • % Demand Above Avg • Stock Master Item Name

Each row in the result set is a clickable hyperlink to open the Fast Moving Stockroom Inventory – Graphics and Actions page for the selected item (detailed below)

Stockroom Inventory Analytics Page

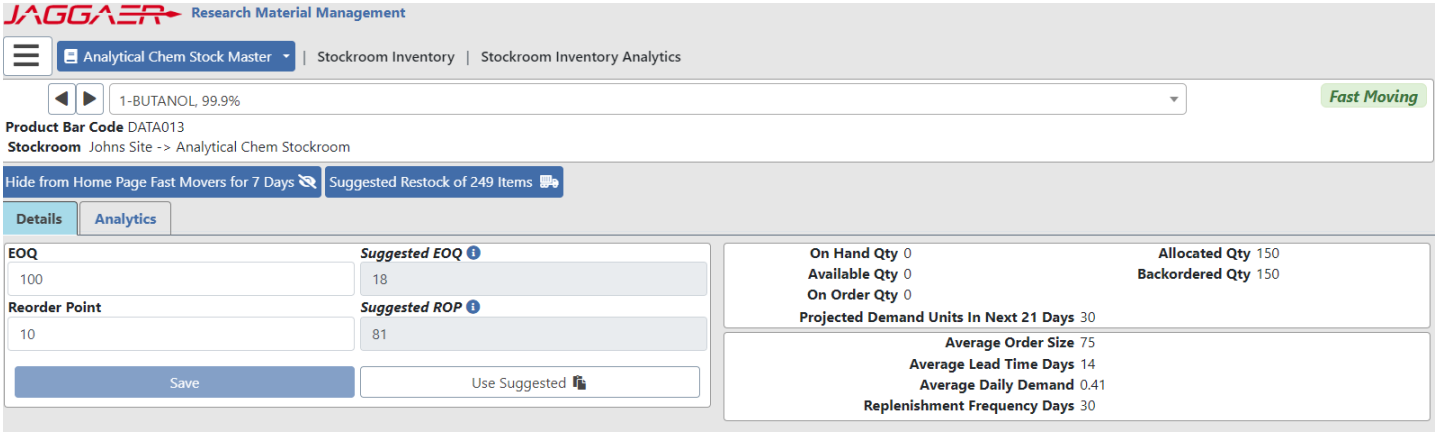
Previously, the 'Stockroom Analytics Replenishments and Demand Report' and the 'Stockroom Analytics Fast Moving Items Report' were accessible via the Schedule Report page.

The 'Stockroom Analytics Replenishments and Demand Report' report generated suggested economic order quantities (EOQ) and reorder points (ROP) and provided related data for stockroom inventory items. The data provided from the reports could be directly uploaded via the RMM Data Loader to update the Stockroom Inventory Items.

The 'Stockroom Analytics Fast Moving Items Report' returned Fast Moving Items and related data, which could be used to support tactical decisions to place restock requests or update Stockroom Inventory Item details.

The new Stockroom Inventory Analytics page incorporates the data generated through those reports to provide a stockroom administrator with actionable data they can use to tune their stockroom replenishment parameters within the Stockroom application.

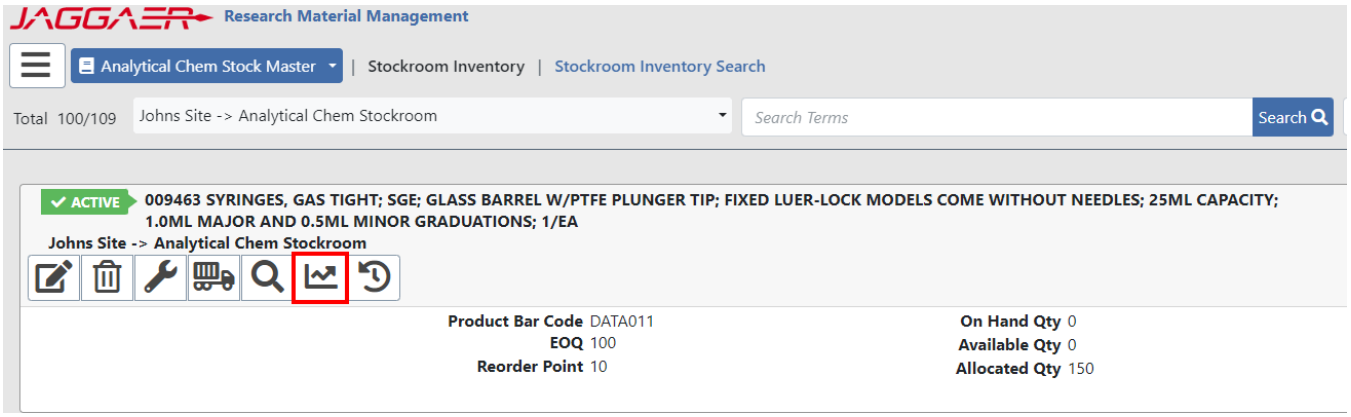
The Stockroom Inventory Analytics page (shown below), displays information for a selected stockroom inventory item.



Stockroom Inventory Analytics page – Details tab

The Stockroom Inventory Analytics page can be accessed from Stockroom Inventory Analytics Home Page Widget and the Stockroom Inventory Search page for users with the new **Stockroom Module Inventory Analytics** permission.

The "View Analytics" button takes the user to the Stockroom Inventory Analytics page for any item via Stockroom Inventory Search.

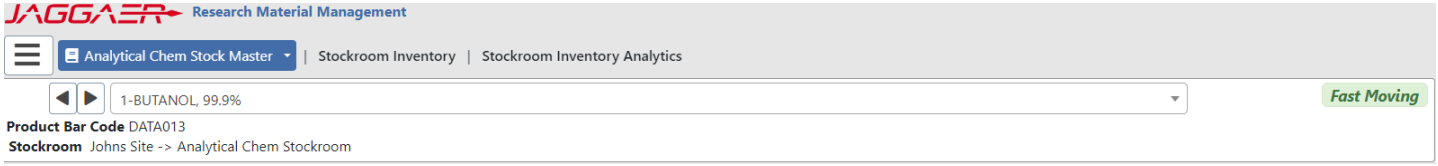


Stockroom Inventory Search -View Analytics

When the page is accessed by clicking on an item via the Home Page widget, users will have the ability to easily switch to the Stockroom Inventory Analytics page for any fast moving item.

HEADER INFORMATION (WHEN ACCESSED FROM HOME PAGE WIDGET)

The Header section of the Stockroom Inventory Analytics page, when accessed via the Stockroom Inventory Analytics Home Page widget is shown below.

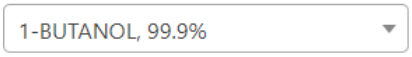


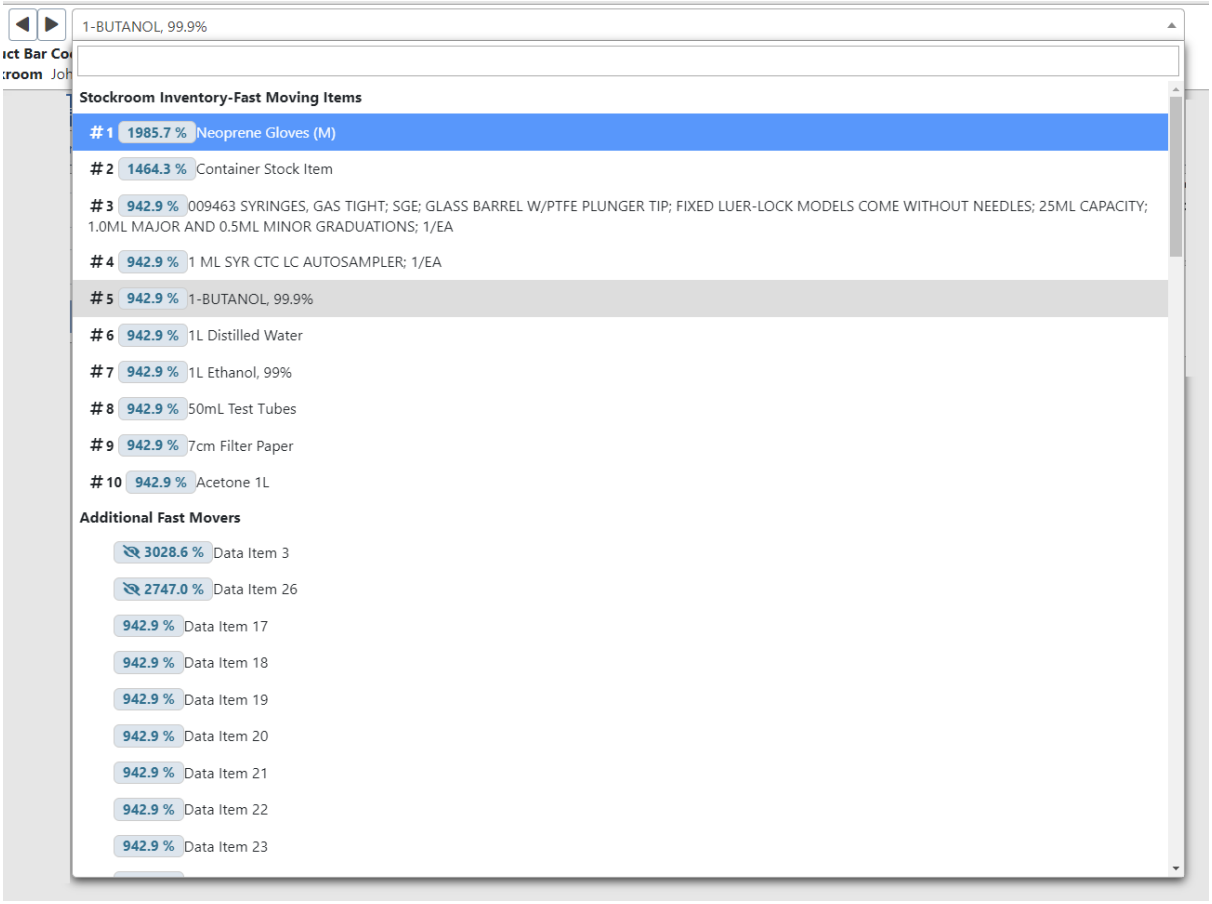
Stockroom Inventory Analytics page – Header section (Stockroom Inventory Analytics Home Page widget)

The Header section contains:

- Stock Master Item Name
- Product Bar Code
- Stockroom Name
- 'Fast Moving' item badge

Selecting either the or icon moves the user forward or backward, respectively, through the list of fast moving items.

The Stock Master Item Name field  is a dropdown listing of all the fast moving items for the stockroom. Selecting the dropdown displays all the fast moving items. A 'type ahead' search box is provided so users can easily find fast moving stockroom inventory items in the list.



Fast Moving Stockroom Inventory – Graphics and Actions page – dropdown selector

The dropdown list shows:

- Stockroom Inventory Fast Moving Items (the top 10 fastest moving stockroom inventory items)
- Additional Fast Movers (all other stockroom inventory items where the Percent Demand Above Average is greater than the Threshold Percent Above Average from the Stock Master Analysis configuration). In the 'Additional Fast Movers' section, a icon indicates that this item has been hidden from the top 10 fast moving items. Details on hidden items are given in subsequent sections.

Selecting a Stockroom Inventory Item from the list will display the information, details, and analytics for the item.

HEADER INFORMATION (ACCESSED FROM STOCKROOM INVENTORY SEARCH)

The Header section of the Stockroom Inventory Analytics page, when accessed from the Stockroom Inventory Search page is shown below.

Stockroom Inventory Analytics page – Header section (Stockroom Inventory Search)

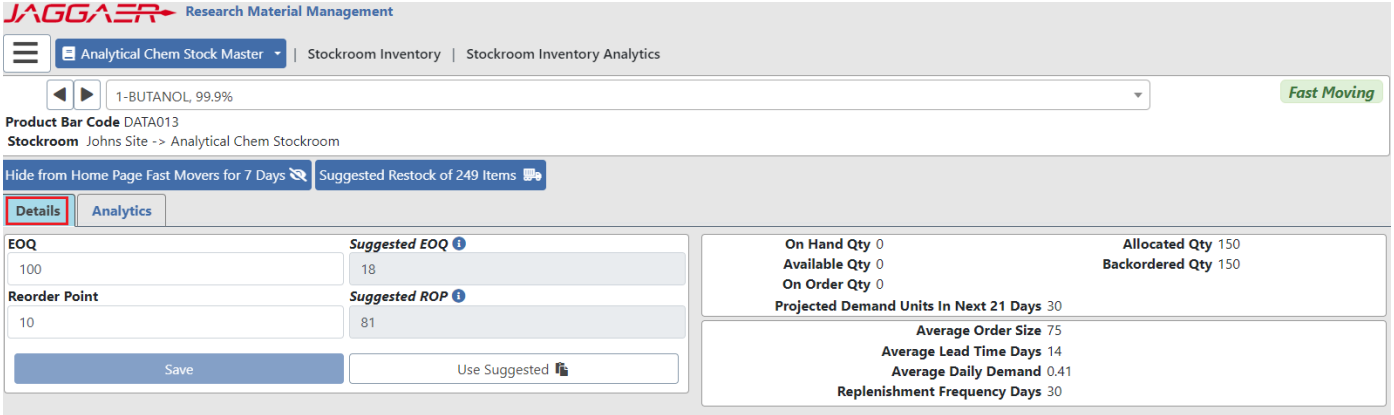
The Header section contains:

- Stock Master Item Name
- Product Bar Code
- Stockroom Name
- 'Fast Moving' item badge is displayed for Stockroom Inventory Items with a Percent Demand Above Average greater than the Threshold Percent Above Average from the Stock Master Analysis configuration.

Note that it does NOT have the widget listing all fast moving items.

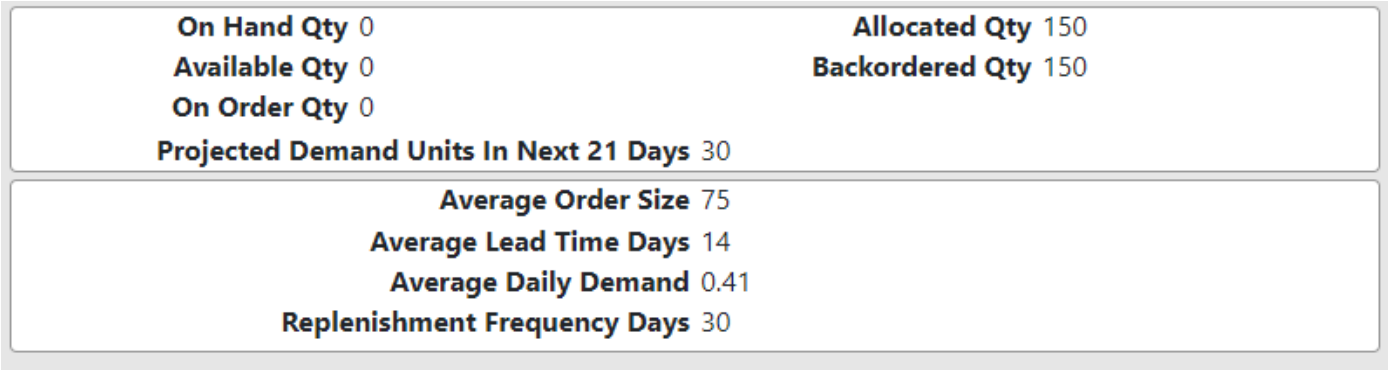
DETAILS TAB – DATA

The Details tab of the Stockroom Inventory Analytics page is shown below.



Stockroom Inventory Analytics page – Details section

The right-hand side of the Details section of the Stockroom Inventory Analytics page has two data panels (shown below) displaying the inventory and replenishment data for the selected item.



Stockroom Inventory Analytics page – Details section

The upper panel shows Stockroom Inventory data for the selected item:

- On Hand Qty
- Available Qty
- On Order Qty
- Allocated Qty
- Backordered Qty
- Projected Demand Units In Next X** Days

** X is the calculated number of days until the end of the current Period (end of current Month or end of current Quarter depending on the Stock Master Analytics Configuration).

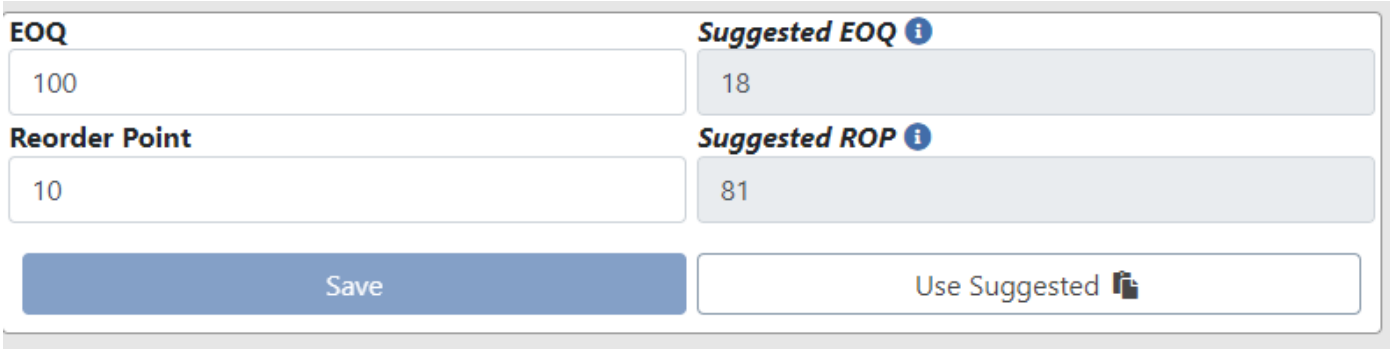
The lower panel shows replenishment data for the selected item (see definitions in the table describing the analytics export):

- Average Order Size
- Average Lead Time Days
- Average Daily Demand
- Replenishment Frequency Days

Note: The above data points represent the last 365 days.

DETAILS TAB – UPDATES

The lefthand side of the Details section of the Stockroom Inventory Analytics page is shown below.



Stockroom Inventory Analytics page – Details section

For the selected item, the left-side panel shows:

- Current EOQ
- Suggested EOQ
  - Suggested EOQ = (Replenishment Frequency + Average Lead Time) * Average Daily Demand
- Current Reorder Point (ROP)
- Suggested ROP
  - Suggested ROP = Average Order Size + (Average Lead Time * Average Daily Demand)

Selecting the

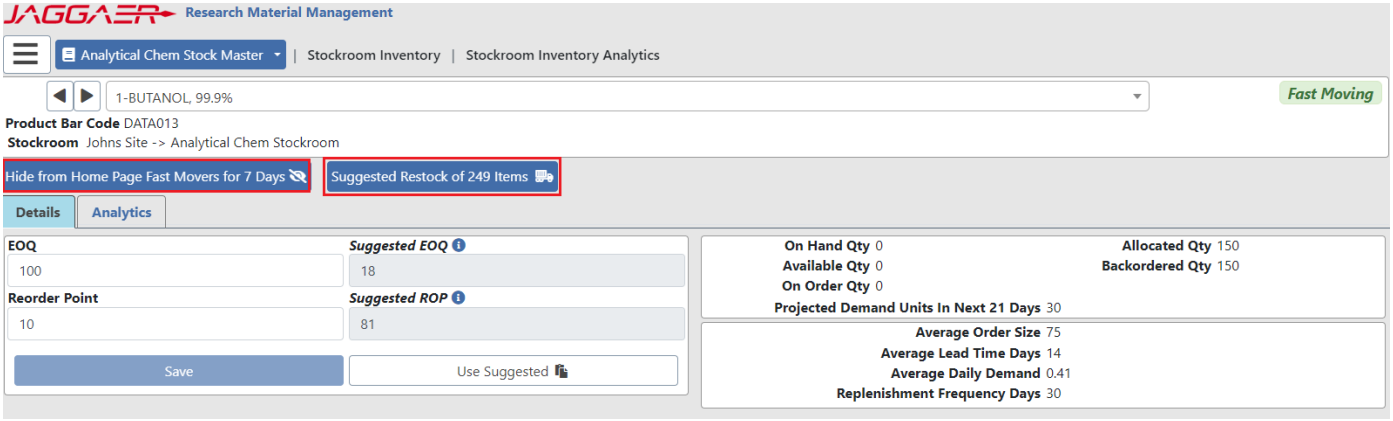
button replaces the current EOQ and Reorder Point values with the Suggested EOQ and Suggested ROP values. Users can also edit these fields as necessary.

Selecting the

button updates the EOQ and Reorder Point data for the selected Stockroom Inventory Item. **CLICKING THE "USE SUGGESTED" BUTTON DOES NOT AUTOMATICALLY SAVE THE VALUES.** The user must explicitly click the save button.

DETAILS TAB – ACTIONS

The Details tab of the Stockroom Inventory Analytics page is shown below, highlighting the two actions available to users from this page.



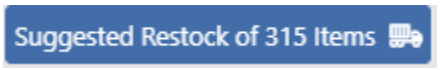
Stockroom Inventory Analytics page – Details section

ACTION - HIDE FROM HOME PAGE FAST MOVERS

If the selected item is 'Fast Moving', selecting the Hide from Home Page Fast Movers for 7 Days button will remove the item from the Top 10 list of fast moving items. The number of days that the item will remain hidden from the list of fast moving items is determined by the 'Hide Items Number of Days' from the Stock Master Analytics page.

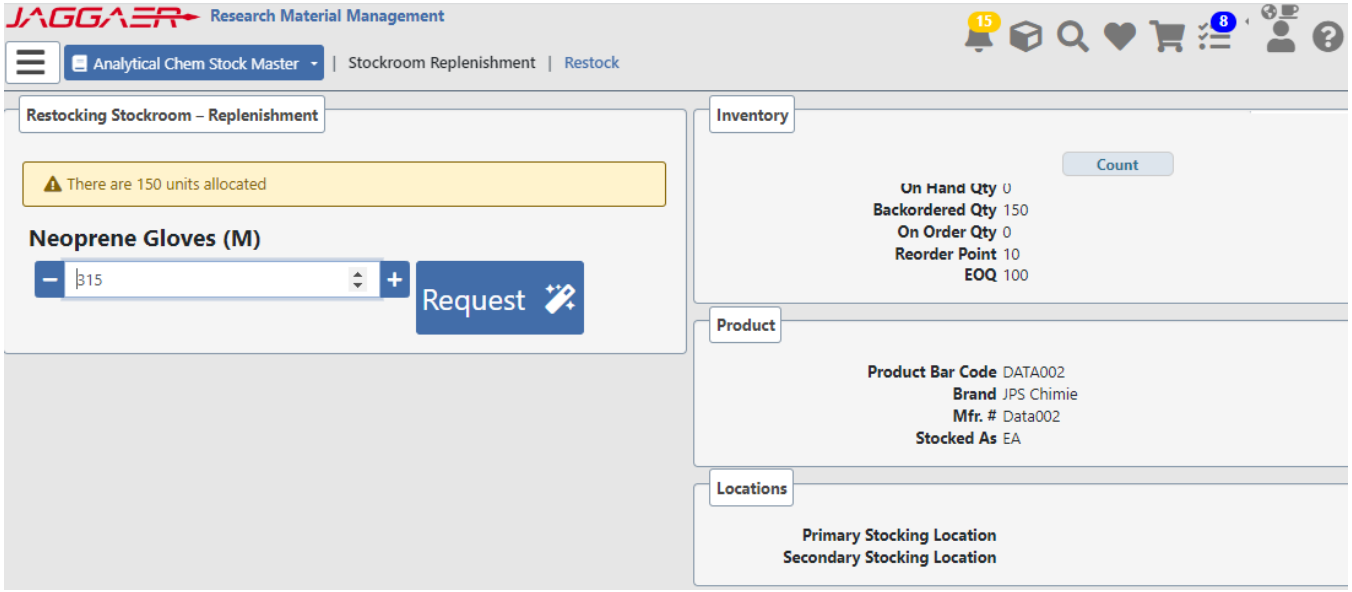
ACTION – SUGGESTED RESTOCK OF ITEMS

The suggest restock button displays the suggested restock quantity based on the stockroom analytic data. In the following example the suggested restock quantity is 315.



Restock button

Clicking on the Suggested Restock button takes the user to the restock page with restock quantity populated with the suggested restock quantity – as shown below. From there the user can click the Request button to create a restock request. Note that the user can also change the restock quantity, or not perform a restock.



Restock Page with Restock Quantity Set to Suggested Restock

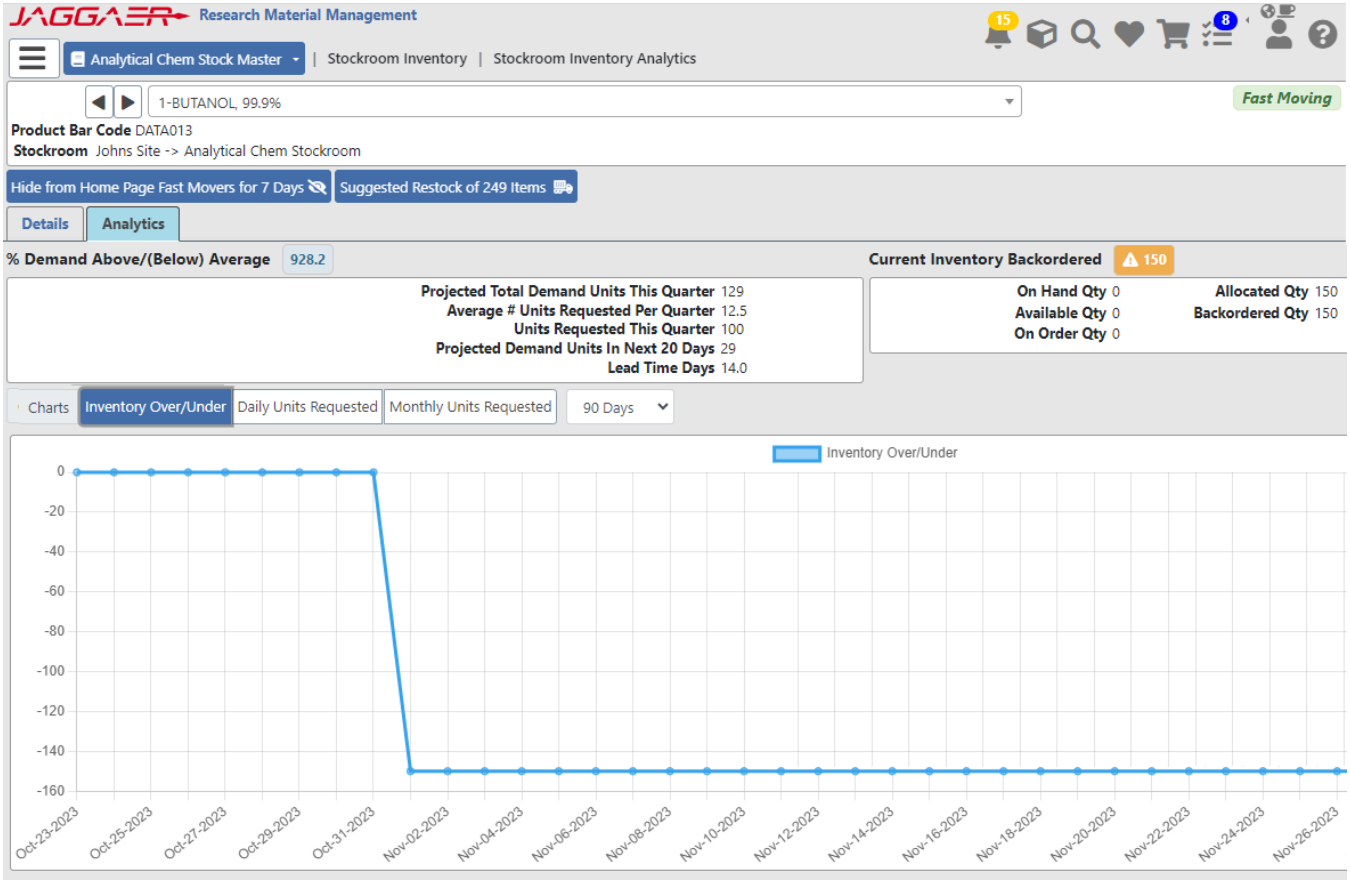
ANALYTICS TAB

The analytics tab of the Stockroom Inventory Analytics page allows user to access detailed information about the item as well as the following three charts.

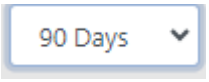
- **Inventory Over/Under** - Daily value of an item's "Available" amount vs "Backordered" amount. Inventory Over/Under data is only accumulated after the initial start of the Stockroom Inventory Analytics job. If the job is not run on a particular day, the value of over/under will be zero.

- **Daily Units Requested** - Daily combined sum of total Stockroom Request or Kiosk Checkouts.

- **Monthly Units Requested**- Monthly combined sum of total Stockroom Requests and Kiosk Checkouts.



Analytics Tab

When viewing the Inventory Over/Under and Daily Units Requested charts, the user can select the number of days for which the data points will be displayed. The number of days is accessible via the 

drop down and allows the user to select 30, 90, or 365 days. For the Monthly Units requested the user can select to view 1 year, 2 years, or 3 years of data.

Detail information on this page includes information found on the Detail tab as well as the following (for definitions of the following, please see the table describing the analytics export):

- % Demand/(Below) Average
- Current Inventory Backordered
- Projected Total Demand Units This Period*
- Average # Units Requested Per Period*
- Units Requested This Period*
- Projected Demand Units In Next X** Days
- Lead Time Days

* When Stock Master Analytics is configured to Monthly, Period will have the value of “Month”. When Stock Master Analytics is configured to Quarterly, Period will have the value of “Quarter”

** X is the calculated number of days until the end of the current Period (end of current Month or end of current Quarter depending on the Stock Master Analytics Configuration).

EASE OF USE – SOURCE SEARCH

Several enhancements have been introduced with RMM 23.2 to enhance the use of source search.

CUSTOMER IMPACT

- Feature Activation: This feature is **On** by default.
- New Permissions related to this Feature: **None**
- New Notifications related to this Feature: **None**

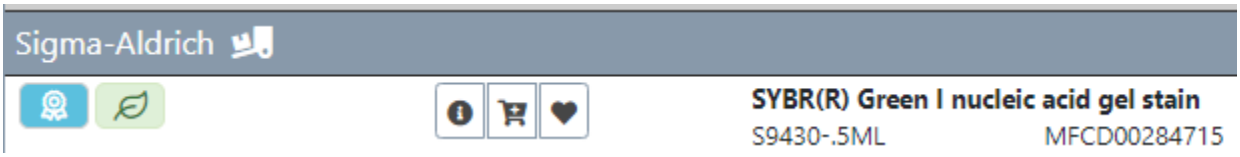
USER IMPACT

This feature is intended for use by: Researchers

Accessed Via: RMM | Search and Request | Source Search

GREEN ATTRIBUTE

Items returned in source search will now be displayed with the to indicate environmentally friendly items as shown in the example below:



Source Search result line item – Green indicator

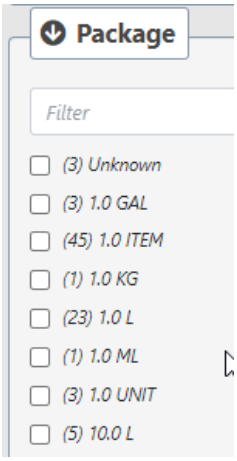
The user may also filter by the green indicator, to show only environmentally friendly items in the search results.

The green indicator will also be displayed for items return on Hosted Catalog Search for Stockroom page and Bioreagent Search product matching.

NORMALIZED AMOUNTS

Previously, when a researcher wanted to filter Source Search results based on the amount they needed, it involved choosing individual 'Package Amount' that would fall within that desired range. This also necessitated the user to consider different quantity units (such as the difference between "L" and "mL")

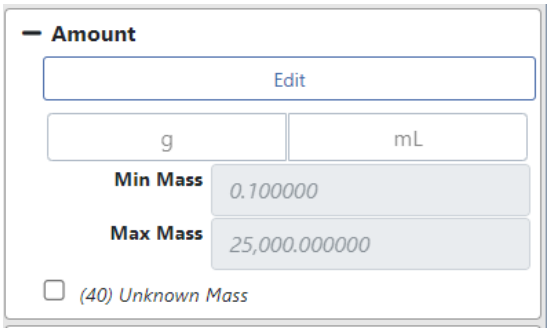
The following is an example of the package filter from previous releases.



Available Filters – previous releases

RMM 23.2 introduces the new normalized amount filter (shown below) which replaces the package filter. When source search results are now returned to RMM, the amounts are normalized to a mass amount (g) or volume amount (mL), and the filter is applied against these amounts. Note: the amounts as provided from the supplier are still displayed (ex: 500 mg), while the normalized amount (ex: .5 g) is not displayed.

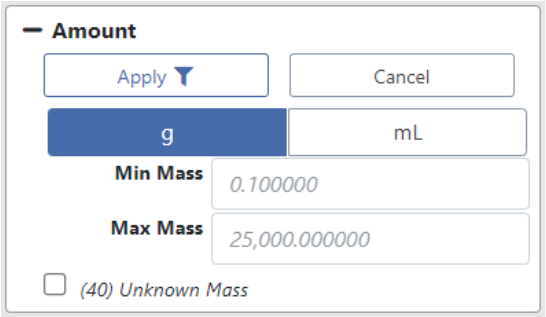
This filter eliminates the need to select individual package amounts, and the need for the user to do manual unit conversions. The user can filter by a minimum and maximum gram or mL amounts.



Available Filters – Amount

To filter by amount, the researcher first clicks the

button to enable editing (shown below).



Available Filters – Amount enabled

Mass, indicated by the g button, is the default option. To filter by a Volume amount, the researcher selects the mL button. After providing the amount value(s) criteria, the researcher can either apply the filter selection or cancel.

Note on Unknown Amounts

If a given item cannot be converted to a normalized amount, it will be flagged as “Unknown” (as shown in the above example) and will not be included in the filtered results.

The user may see the items that cannot be converted, by filtering based on the “Unknown value”.

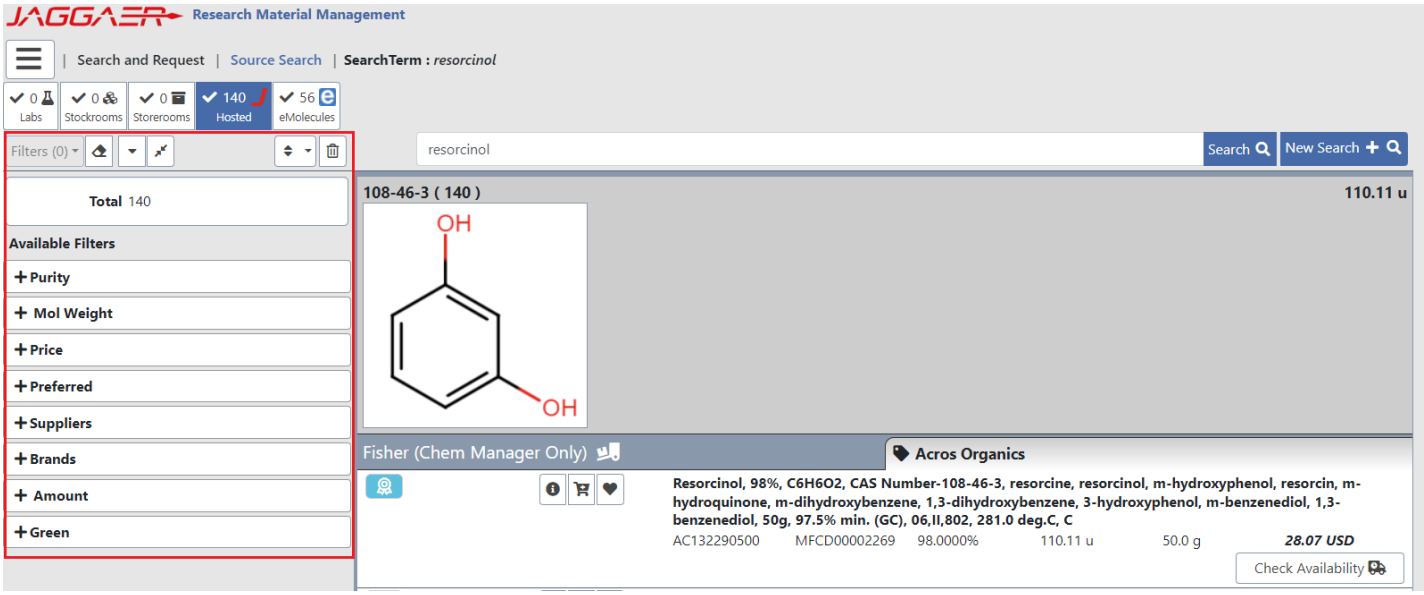
Sorting by Normalized Amount

In addition to filtering by normalized amount, the results can now be sorted by normalized amount, when in previous releases the user could only sort by package string.

FILTERING

Significant improvements have been made to source search filtering (shown below), including the following:

- Immediate filtering on single select items
- Improvements to selection of multiple Items
- Ability to show/hide filters
- Ability to collapse filters



Source Search results page – New Filter abilities

Immediate Filtering on Single Select Items

When a researcher now selects a single filter criterion, the Source Search results are **IMMEDIATELY** filtered without the user having to explicitly click the filter icon.

Multiple Select

The way users filter by multiple values has been enhanced. The researcher now clicks the

button to enable multi-select.

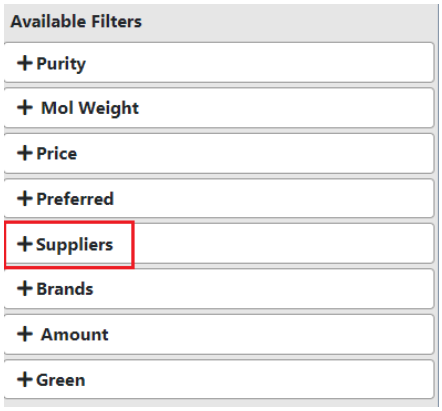
After selecting criteria, the researcher can either

or

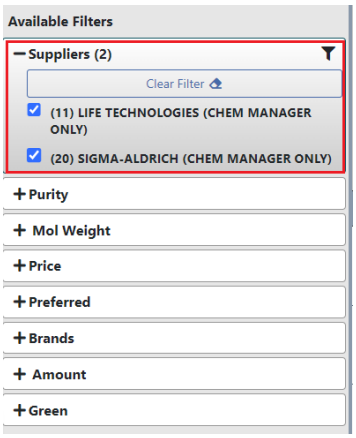
the filter selections.

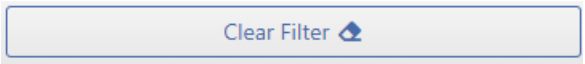
Once a filter has been applied, the selected filter moves to the top of the filter list of Available Filters (shown below) with filter criteria clearly displayed.

FILTER LIST BEFORE FILTERING



FILTER LIST AFTER FILTERING



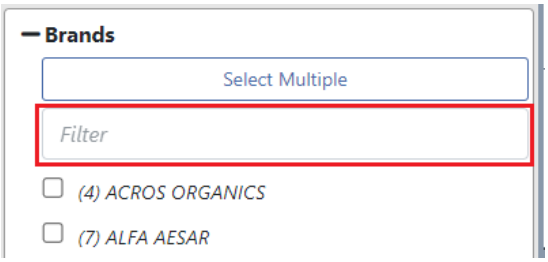
Once a filter has been applied, researchers can select the filter's 

icon to clear **that particular** filter. Researchers still have the ability to select 'Clear All Filters' (shown below) to remove all filtering.

Available Filters – Clear All Filters

Filter List

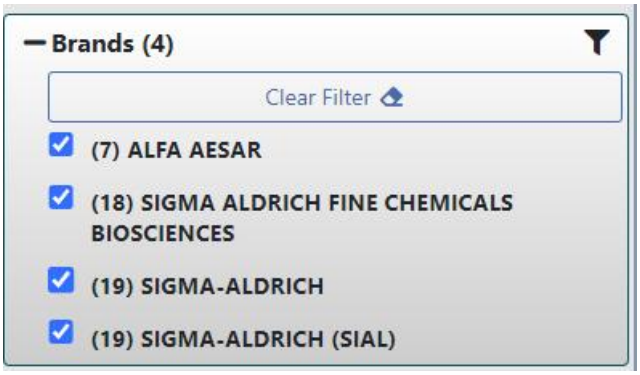
When an Available Filter for brands and supplies have more than 15 values (shown below), researchers can begin typing into the Filter field provided above the list of values to quickly select criteria.



Available Filters – Filter List

As with other filters, if the researcher uses the Filter List to find their criteria, selecting the criteria will immediately filter the Source Search results.

When there are multiple values of interest, researchers can opt for 'Select Multiple' and then use the Filter List to build a list of values for filtering. Once the filter is applied, researchers can clearly see each of the criterion from the Filter List (shown below).

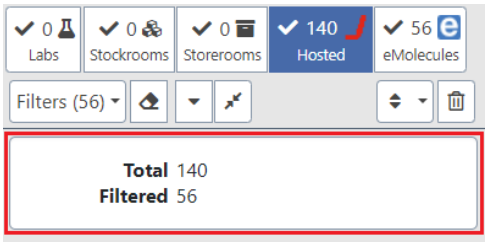


Available Filters – Filter List

Once the filter has been applied to the Source Search results, researchers can immediately update the Source Search results by de-selecting any of the values in the Filter List.

Filter Summary

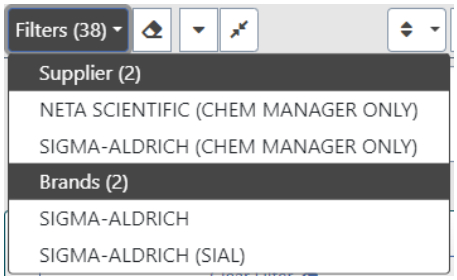
Shown below, the Filter Summary provides the researcher with a clear view of the Source Search results before and after filtering.



Available Filters – Filter Summary

As in previous releases, selecting the

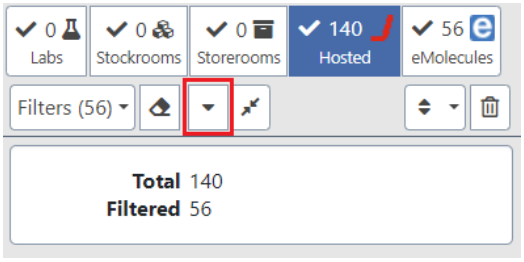
button displays current filter(s) being applied to the Source Search result set (shown below).



Available Filters – active filters

Show/Hide Filters

Selecting the new Show/Hide Filters icon (shown below) – hides the entire Filter List.

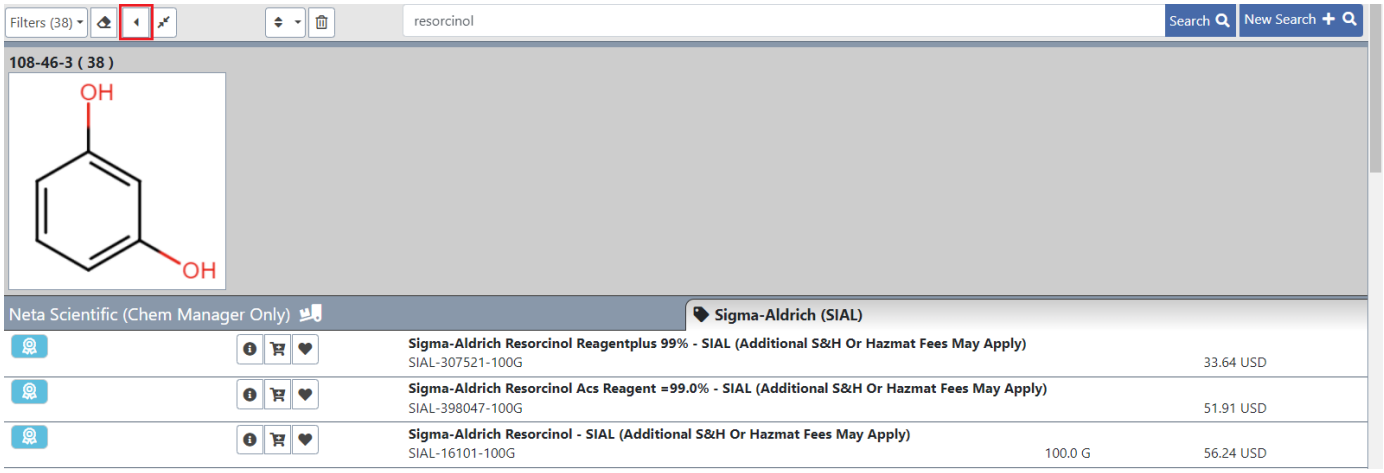


Filter Bar Area – Show/Hide Filters

When selected, the Show/Hide Filters icon changes ( ) to indicate that the active filters are currently hidden (also shown below).

Filter Bar Area – Show/Hide Filters

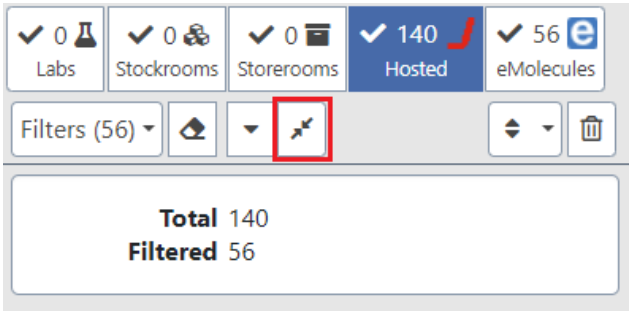
Shown below is the Source Search results page with the Filter List hidden, providing researchers with more real estate to review their search results.



Source Search results – Show/Hide Filters

Collapse Filters

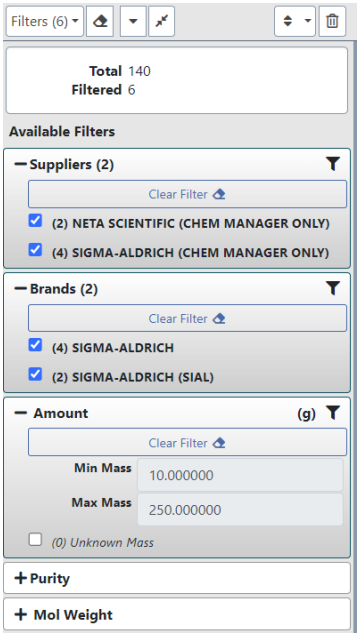
Selecting the new Collapse Filters icon (also shown below in the Filter Bar area) – returns all open Available Filter options to the initial, closed, state.



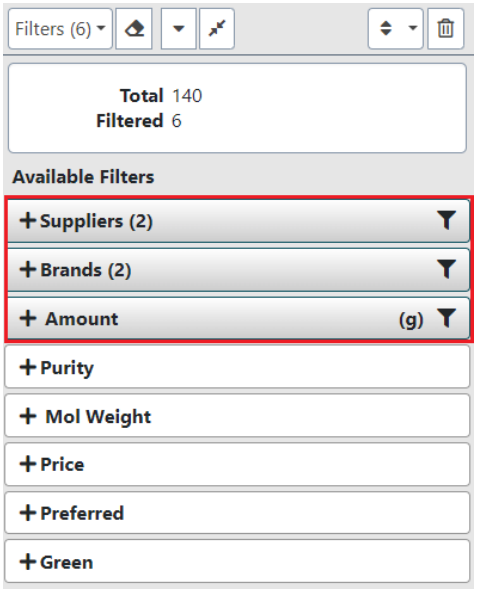
Filter Bar Area – Collapse Filters

Once selected, the Collapse Filters option returns the Filter List to a state shown below.

FILTER LIST – OPEN



FILTER LIST - COLLAPSED



The researcher can still see which filters are active as indicated by the icon and can select the icon to view the filter values being applied to the Source Search results.

CONTAINER SEARCH ENHANCEMENTS

CUSTOMER IMPACT

- Feature Activation: This feature is **On** by default.
- New Permissions related to this Feature: **None**
- New Notifications related to this Feature: **None**

USER IMPACT

This feature is intended for use by: Researchers and Administrators

Accessed Via: RMM | Containers and Materials | Container Search

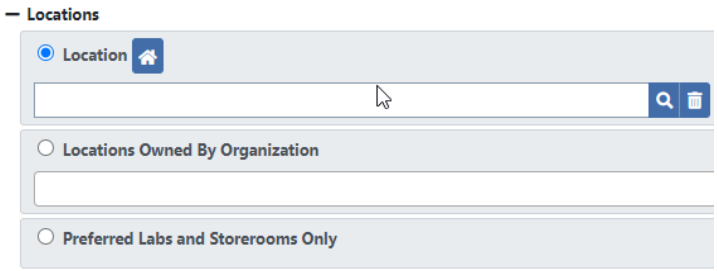
The RMM 23.2 release introduces a streamlined Container Search with new criteria, new layouts, and an improved workflow to enhance ease of use for both researchers and administrators.

NEW AND ENHANCED CRITERIA

This release introduces new and enhanced search criteria.

Search by Preferred Locations

Users can now search by their preferred labs and storerooms. The Advanced Search Locations panel is shown below.



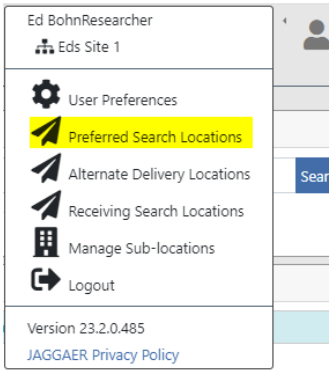
Container Search – Advanced Search tab – Locations panel

Users can provide criteria to search by **one** of the following:

- Location
- Locations Owned By Organization
- Preferred Labs and Storeroom Only (**NEW FUNCTIONALITY**)

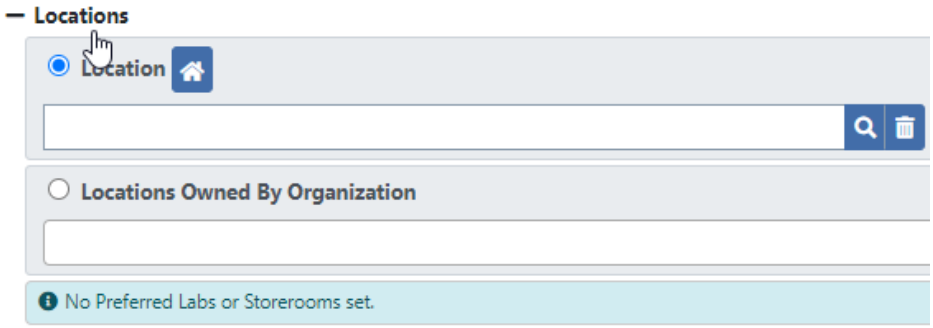
When "Preferred Labs and Storerooms Only" is selected, the container search will only search the user's preferred labs and storerooms.

As in previous releases the user sets their preferred locations via the user preference menu:



User Preferences – Preferred Search Locations

For RMM users with no selected Preferred Search Locations, the Locations panel will appear with the '**No Preferred Labs or Storerooms set.**' message as shown below.



Container Search – Advanced Search tab – Locations panel with no preferred locations

Quick Search For "My Containers"

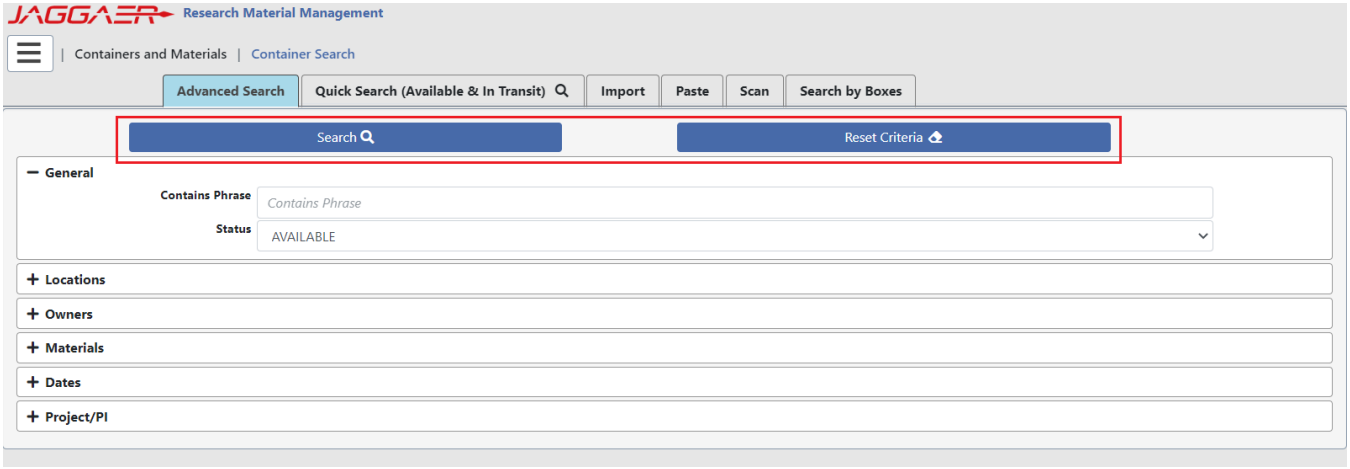
As in previous releases, users can search containers by specifying an owner. To help RMM users quickly find their own container inventory, the Owner search criteria (shown below) has been enhanced.

Container Search – Advanced Search tab – Owners panel

RMM users can click on the new Person icon to immediately populate the Owner search field with the logged-in user's information (first name, last name, e-mail address).

ADVANCED SEARCH CRITERIA LAYOUT

For the RMM 23.2 release, search criteria on the Advanced Search tab have been grouped together under collapsible panels (shown below). The buttons for initiating a search and resetting search criteria have moved from the bottom portion of the Advanced Search tab to a place of prominence at the top of the Advanced Search tab as shown below.



Container Search – Advanced Search tab

RMM will remember the expanded and collapsed state of each criteria panel for the logged-in user.

The following shows each panel (except Location panels which was shown previously) in its expanded state.

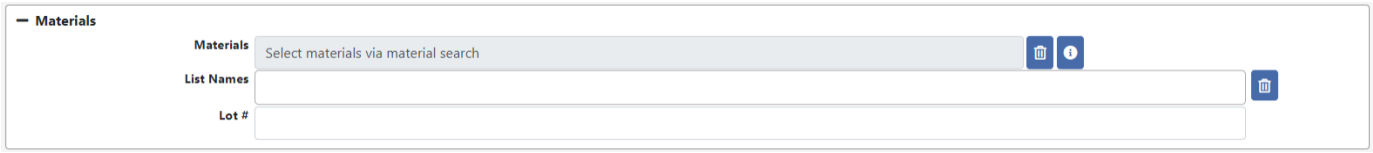
General Panel

Container Search – Advanced Search tab – General panel

Owners Panel

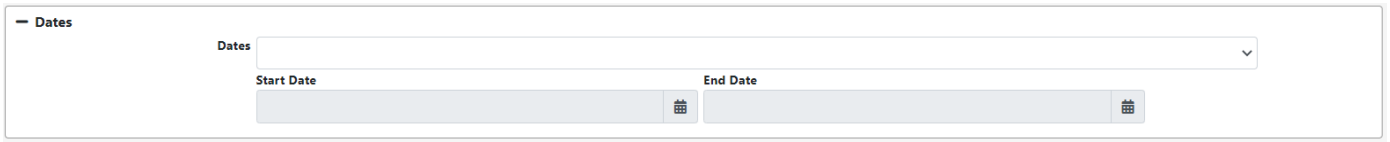
Container Search – Advanced Search tab – Owners panel

Materials Panel



Container Search – Advanced Search tab – Materials panel

Dates Panel

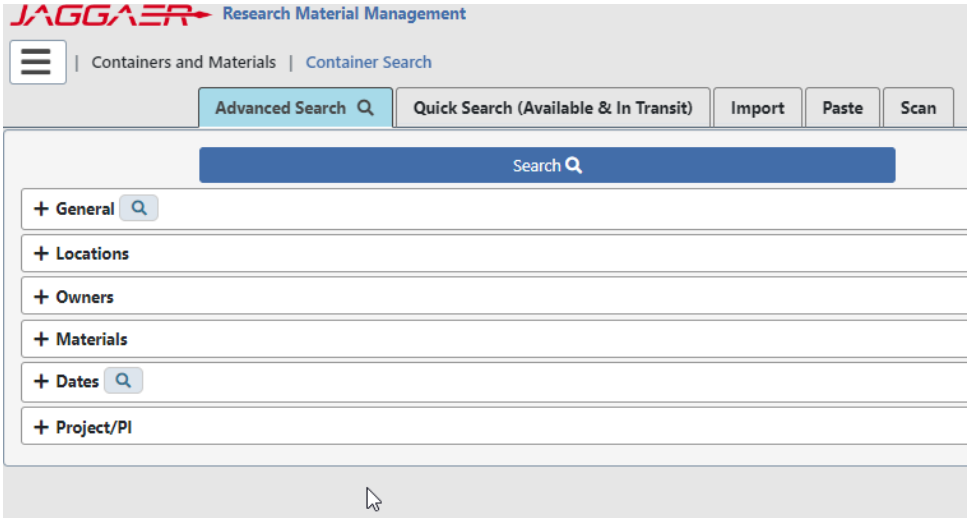


Container Search – Advanced Search tab – Date panel

Project/PI Panel

Container Search – Advanced Search tab – Project/PI panel

Note that when each panel will have the next to it which indicates the panel has criteria. In the example below, user has specified criteria in the General and Dates panels.



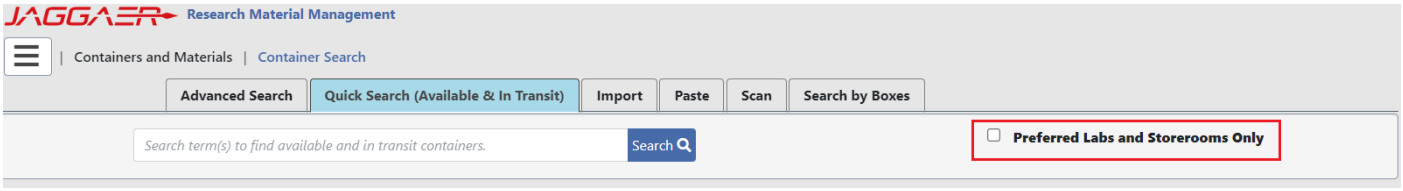
Container Search – Advanced Search tab - collapsed

QUICK SEARCH TAB CHANGES

Shown below is the Container Search – Quick Search tab. The underlying functionality is the same as in the RMM 23.1 release, except for the addition of the 'Preferred Labs and Storeroom Only' check box.

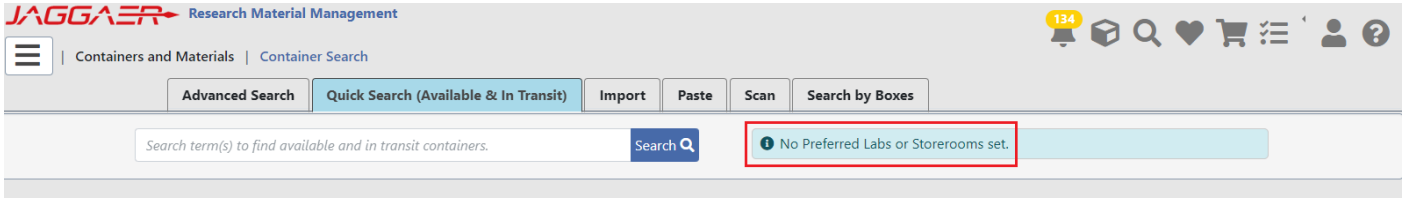
NEW FUNCTIONALITY

For RMM users who have selected Preferred Search Locations, the Quick Search tab will appear as shown below.



Container Search – Quick Search tab – with preferred locations

When the "Preferred Labs and Storerooms Only" check box is checked, RMM will only search the user's preferred labs and storerooms for the entered quick search criteria. For RMM users with no selected Preferred Search Locations, the Quick Search tab will appear with the '**No Preferred Labs or Storerooms set.**' message as shown below.



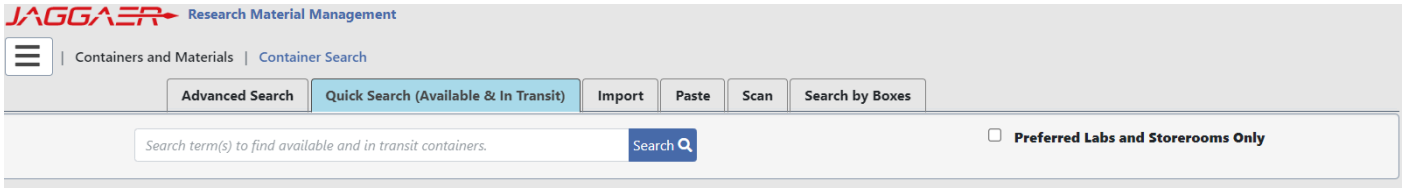
Container Search – Quick Search tab – with no preferred locations

CONTAINER SEARCH WORKFLOW CHANGES

Improvements have been made to the container search workflow in terms of the criteria tabs and presentation of results.

Container Search Menu – No Search Results

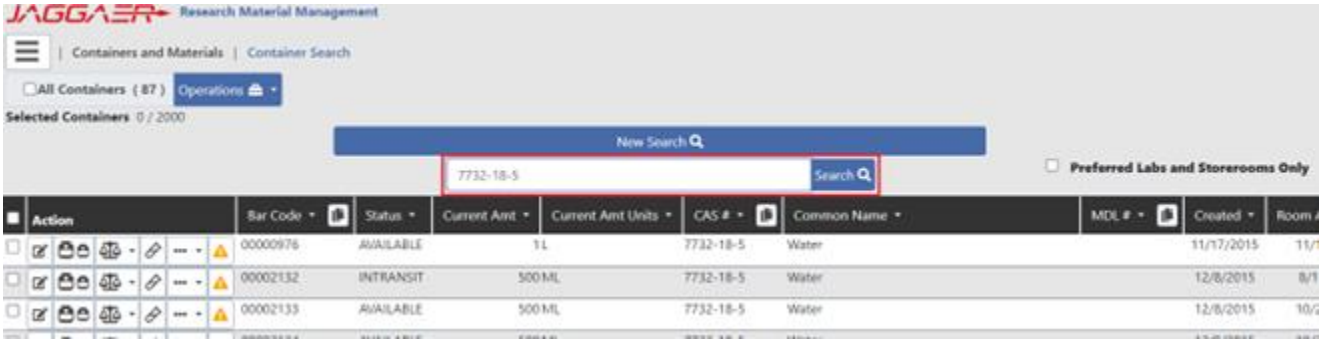
When a user accesses the Container Search page via the RMM menu or Home Page Tile, where a container search has not been executed as entrance to Container Search (i.e., via an RMM Home Page Quick Search), Container Search opens defaulted to the Quick Search tab. **This behavior has not changed.**



Container Search – Quick Search tab – with preferred locations

Container Search with Results - Quick Search

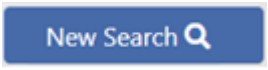
When Container Search has search results, the display will depend on how the container search was executed (i.e. which Container Search tab was used to provide the search criteria). When populated from Quick Search, either from the RMM Home Page or Container Quick Search, Container Search opens to the search results page (shown below).



Container Search – with search results (Quick Search)

The user has immediate access to the search results, as well as the ability to easily initiate another search. Container Search now provides a “quick container search” field (highlighted above) where a user can provide a new

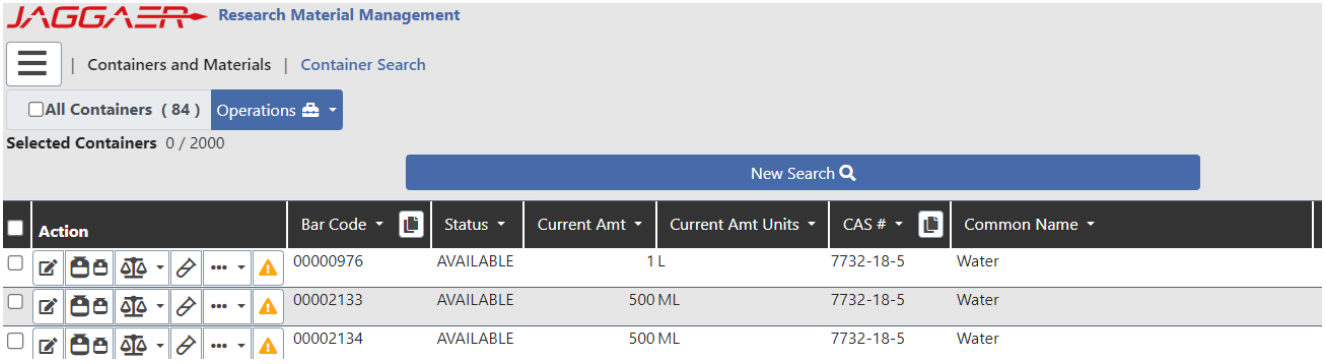
criterion for their next search without navigating to another search criteria page. The search criterion field is pre-populated with the criteria provided on the initial search.

Users also have the additional option of selecting the new 

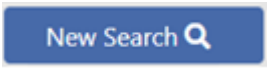
button to return to the Quick Search tab and clear the current search results.

Container Search with Results - Advanced Search tab

When a container search is executed from the Container Search – Advanced Search tab, has search results, the search results page will appear as shown below.



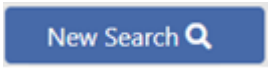
Container Search – with search results from Advanced Search

The 

button clears the search results and returns the user to the Advanced Search tab, maintaining the user's search criteria.

Container Search with Results - Import tab

When a container search is executed from the Container Search – Import tab, the search results page is the same as for the Advanced Search.

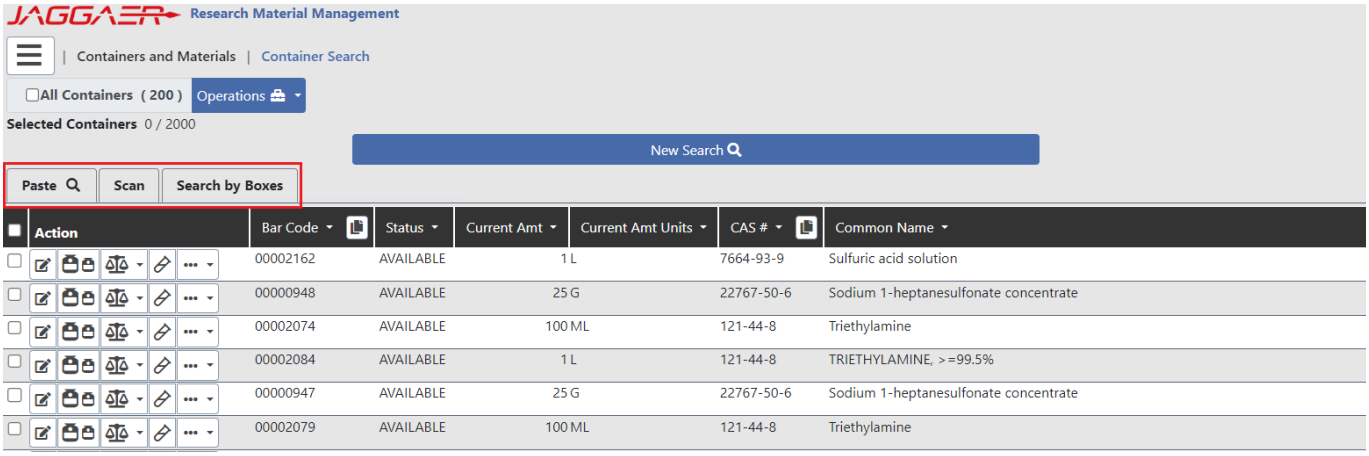
The 

button clears the search results and returns the user to the Import tab.

Container Search – Paste, Scan and Search By Boxes tabs

When a container search is executed from the Container Search – Paste, Scan or Search by Boxes tabs, the search results page will appear as shown below. The Paste, Scan and Search by Boxes tabs (highlighted below) are available to allow the user to continue add containers to their result set.

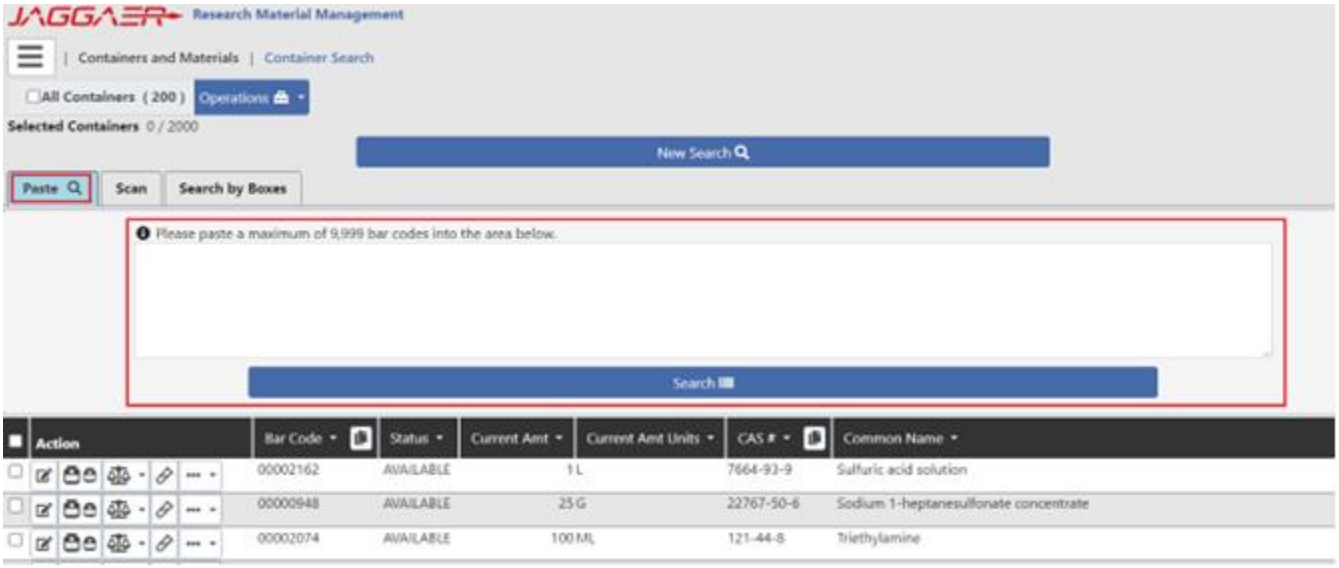
.



Container Search – with search results from Paste tab

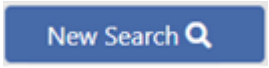
Selecting either the Paste, Scan or Search by Boxes tabs

opens the data entry screen for each, while still displaying the result set. Selecting a tab a second time closes the data entry screen and displays just the result set – while keeping the tabs available for additional input. Shown below is the paste data entry screen:



Container Search – with search results Paste tab - expanded

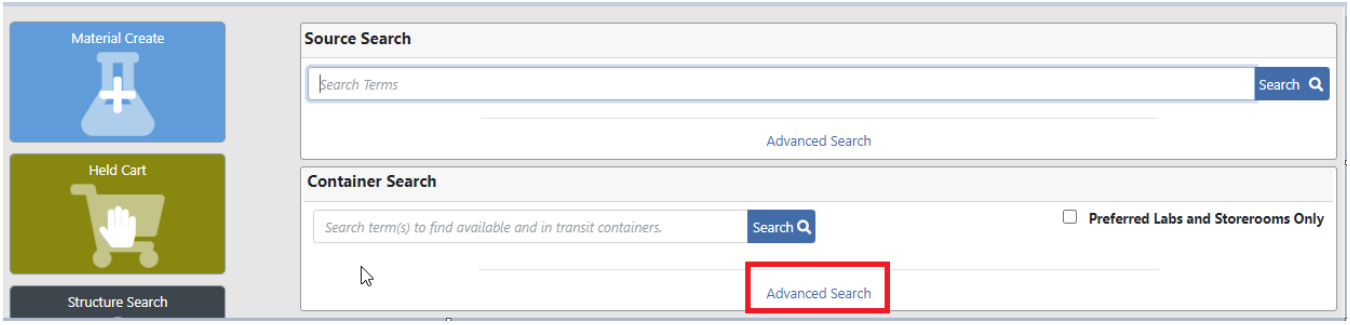
Additional containers retrieved by any of these methods will **APPEND** to the result set.

The 

button clears the search results and returns the user to the Paste tab.

ACCESSING ADVANCED SEARCH FROM HOME PAGE

The user may now access the Container Advanced Search directly from the Home Page by clicking on the new “Advanced Search” hyper link as pictured below.



Container Search – Home Page Advanced Search tab

STOCKROOM

REPLENISHMENT SPECIFICATIONS

CUSTOMER IMPACT

- Feature Activation: This feature is **On** by default.
- New Permissions related to this Feature: **None**
- New Notifications related to this Feature: **None**

USER IMPACT

This feature is intended for use by: Stockroom Administrators

Accessed Via: Various Stockroom Pages

Stockroom replenishment specifications have been enhanced to allow the specification of “UOM”.

In previous releases of RMM, for a given stock master item, stockroom replenishment specifications were unique by supplier and supplier catalog #. In 23.2.0, stockroom replenishment specifications are unique by supplier, supplier catalog #, and UOM. There may be multiple replenishment specifications for the same Supplier and supplier catalog # combination, but different UOMs, as shown in the example below.

ACETIC ACID 500ML

Supplier	Catalog #	Catalog UOM	Price	
Apollo Scientific Ltd.	WCSC123020141	EA	18.91	USD
Zeeland Chemicals, Inc.	CAT10OCT2023	CS	1,500.00	USD
Zeeland Chemicals, Inc.	CAT10OCT2023	PACK	98.00	USD
Zeeland Chemicals, Inc.	CAT10OCT2023	EA	75.00	USD

Stockroom Replenishment Specification list

The following functional areas have been enhanced to handle the UOM on stockroom replenishment specifications.

- Hosted Catalog Price Update
  - When hosted catalog price update is run, the replenishment specification’s UOM will be updated with UOM from hosted catalog based on SKU

- UOMs for replenishment specifications may be obtained when using the following functions
  - Hosted Catalog Search for Stockroom
  - Stock Master Items File from Hosted Catalog

- UOM may now be specified in the following data loader templates
  - Stock Master Item Create
  - Stock Replenishment

- The UOM specified on the replenishment specification will be returned to the purchasing system. Previously “EA” was always returned to the purchasing system.

OTHER ENHANCED CAPABILITIES

This section lists additional enhanced capabilities in the RMM 23.2 release.

CONTAINER HISTORY

CUSTOMER IMPACT

- Feature Activation: This feature is **On** by default.
- New Permissions related to this Feature: **None**
- New Notifications related to this Feature: **None**

USER IMPACT

This feature is intended for use by: Researchers and Administrators

Accessed Via: N/A

Container History – Track Additional Attributes / Events

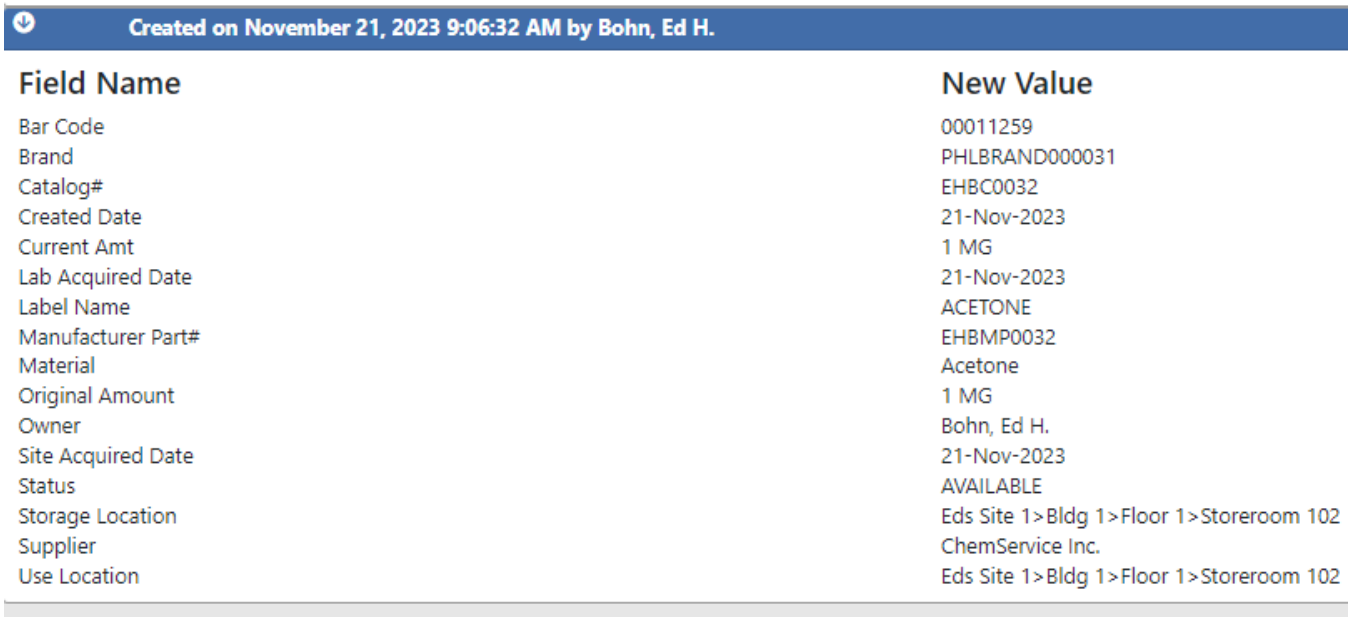
While in previous releases RMM tracked the history of certain container events, such as Reserve, Transfer or Dispose, it did not track history of many container attributes. Beginning with RMM 23.2, RMM will track the history of the ***additional*** attributes listed below.

Fields Added to Container History	Notes
Attachments	RMM will track when the attachment has changed – including the name of the attachment.
Automated Store Class	
Automated Store Type	
Automated Store Zone	
Bar Code	The ability to change the bar code for a container is new with RMM 23.2 and is detailed later in the Release Notes.
Brand	
Catalog Number	
Created Date	
Disposed Date	
Expiration Date	
Flex Fields	
Lab Acquired Date	
Label Name	
Last Inventoried Date	
Last Test Date	
Lot Number	
Manufacturer Part Number	
Next Test Date	

Fields Added to Container History	Notes
Open Date	
Original Amount	
Original Amount Units	
Original Radioactive Activity	
Original Radioactive Activity Date	
Original Standardized Amount	
Purity	
Site Acquired Date	
Storage Type	
Supplier	
Tare Weight	

Create Event History

Previously the “Create” container history event only showed the create date and the person who created the container. In this release, the “Create” event will show all the container attributes that have been set – as pictured below.



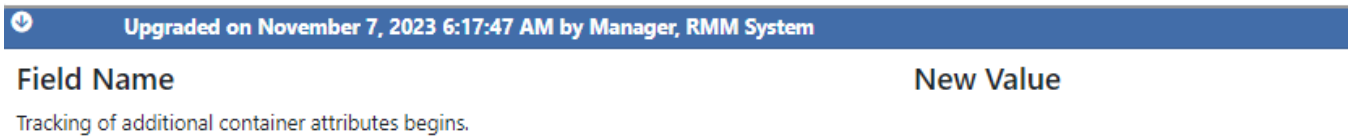
Created on November 21, 2023 9:06:32 AM by Bohn, Ed H.

Field Name	New Value
Bar Code	00011259
Brand	PHLBRAND000031
Catalog#	EHBC0032
Created Date	21-Nov-2023
Current Amt	1 MG
Lab Acquired Date	21-Nov-2023
Label Name	ACETONE
Manufacturer Part#	EHBMP0032
Material	Acetone
Original Amount	1 MG
Owner	Bohn, Ed H.
Site Acquired Date	21-Nov-2023
Status	AVAILABLE
Storage Location	Eds Site 1>Bldg 1>Floor 1>Storeroom 102
Supplier	ChemService Inc.
Use Location	Eds Site 1>Bldg 1>Floor 1>Storeroom 102

Container History – Create Record

Upgrade Note

The upgrade process will generate an “Upgrade” event for all containers that 1) are not disposed or 2) have been disposed in the past six months at the time of the upgrade. A sample of the event is shown as follows:



Upgraded on November 7, 2023 6:17:47 AM by Manager, RMM System

Field Name	New Value
Tracking of additional container attributes begins.	

Container History – Upgrade Record

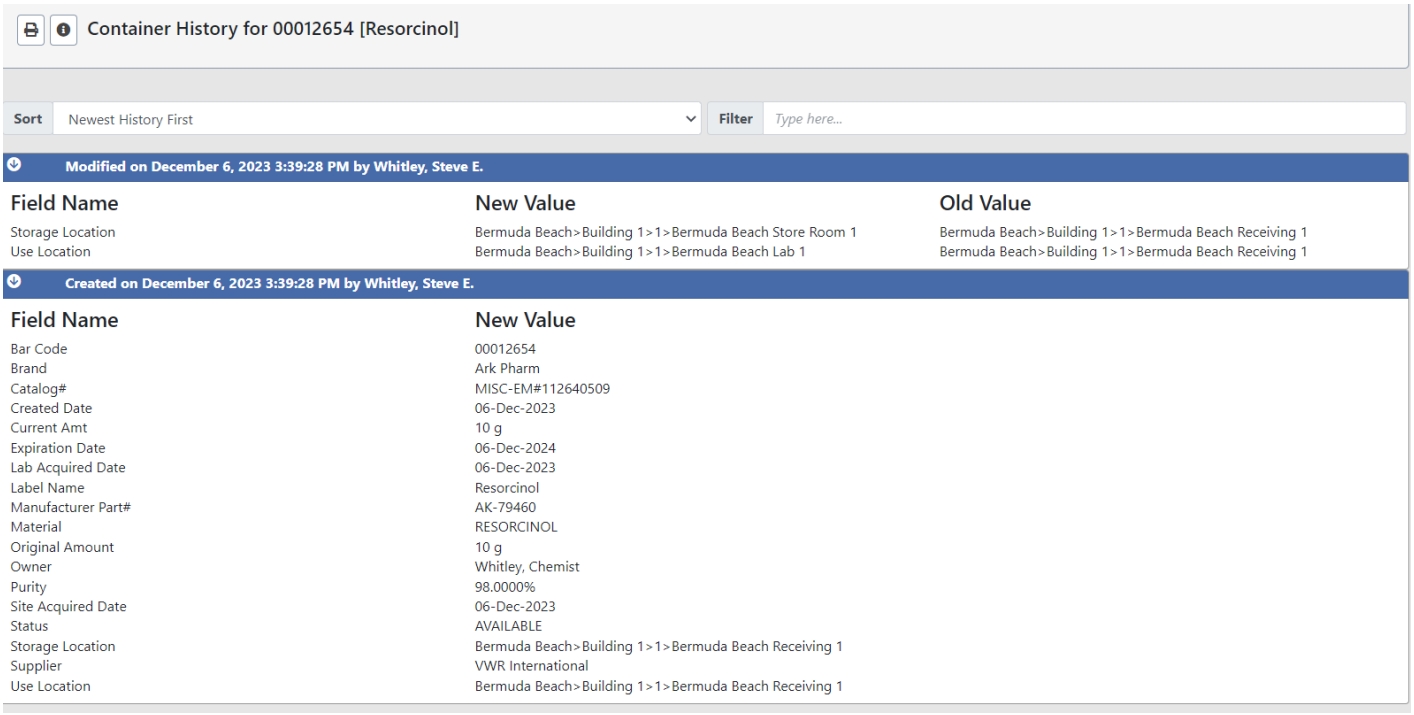
View History

Previously, container history was viewed in a panel within the View Container page. The display of container history has been enhanced to make the display of container history consistent with how history is displayed throughout RMM.

Shown below, the Container Search page enables a researcher to view the details of the container (View Container – is in previous releases) or to view the history of the container (Container History - **new**).

Container Search – Container History select

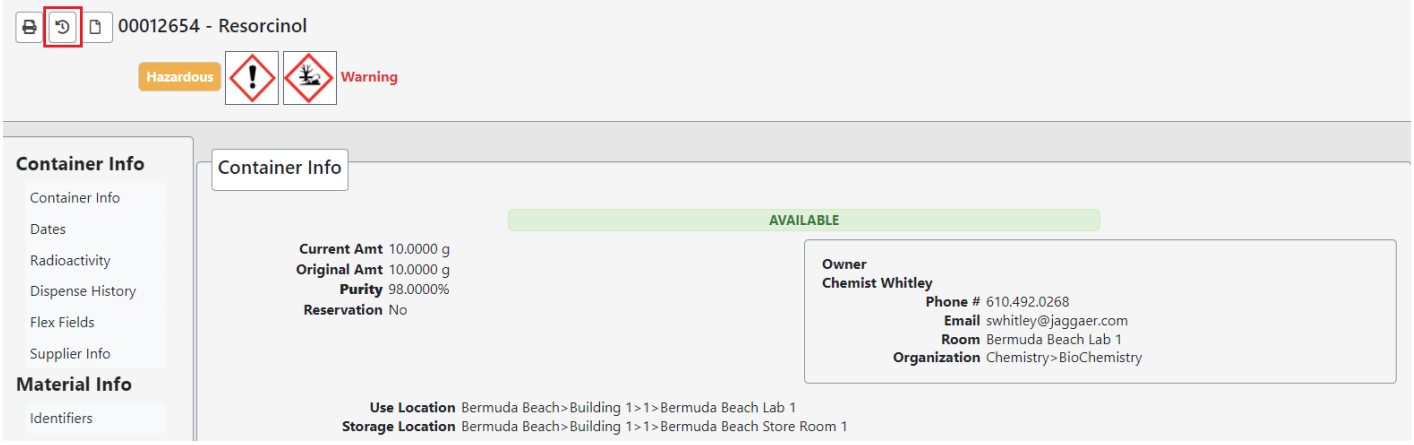
Selecting Container History from the dropdown menu will open a new browser tab displaying the container's history (shown below).



Container History display

From the Container History page, users can print the container history by selecting the icon. Selecting the icon replaces the Container History with the Container View page.

A user on the Container View page (shown below) can select the icon to toggle the view to a view of Container History.



Container Info display

CONTAINER OPERATIONS

Change Container Bar Code

CUSTOMER IMPACT

- Feature Activation: This feature is **On** by default.
- New Permissions related to this Feature: **Container Bar Code Change**
- New Notifications related to this Feature: **None**

USER IMPACT

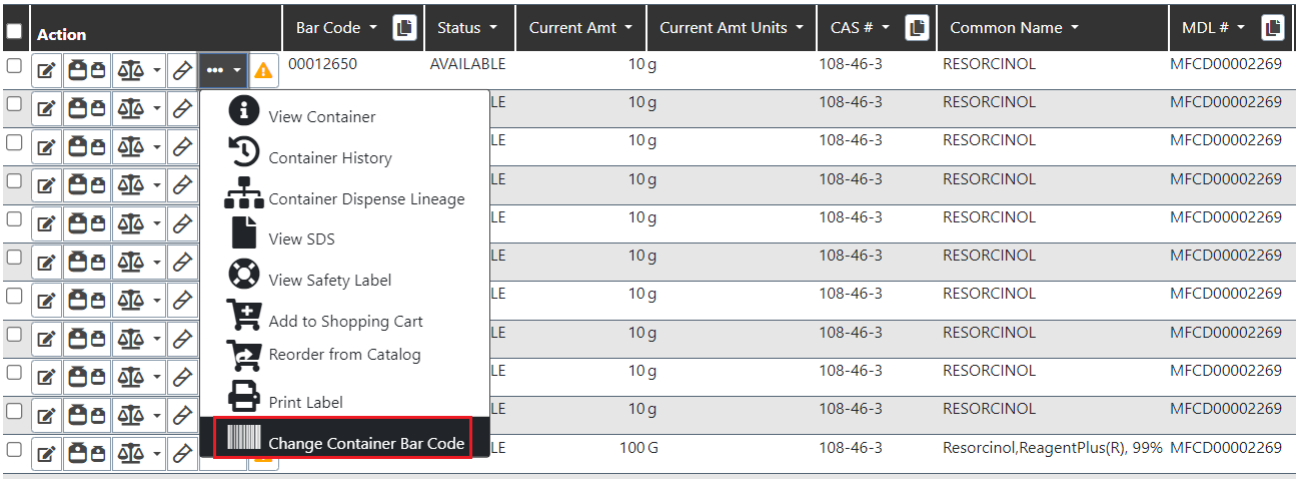
This feature is intended for use by: Researchers and Administrators

Accessed Via: RMM | Containers and Materials | Container Search

Container bar codes labels can fade over time and become unreadable. Bar code labels can fall off their containers. For RMM users employing pre-printed bar codes, the process for replacing a container's bar code label often required the creation of a new container.

Users with the new **Container Bar Code Change** permission can change the bar code for an existing RMM container, simplifying container administration and, importantly, maintaining a link between the container's old bar code and the newly assigned bar code in container history.

To change the bar code associated with a container, the user selects 'Change Container Bar Code' from the Container Search result set line-item dropdown menu (shown below).



Container Search – Change Container Bar Code select

On the Change Container Bar Code pop-up (shown below), the user provides the new bar code to be assigned to the container.

Change Container Bar Code pop-up window

When changing a container's bar code:

- New bar code cannot currently be associated to an RMM container (regardless of status)
- Bar codes that have been changed can be used again. (Ex: bar code [B1] has been changed to [B2]. [B1] can be used as a bar code at some future time).
- Container History record is generated for the bar code change

When the bar code to be replaced was created as the result of a request, as opposed to manually creating a container and assigning a bar code, the initial request details will be updated with the new container bar code.

Dispose and Dispose Empty Permissions

CUSTOMER IMPACT

- Feature Activation: This feature is **On** by default.
- New Permissions related to this Feature: **Container Dispose Empty**
- New Notifications related to this Feature: **None**

USER IMPACT

This feature is intended for use by: Researchers and Administrators

Accessed Via: RMM | Containers and Materials | Container Search

In previous releases, a user with the **Container Dispose** permission could perform both a Dispose and Dispose Empty operation. This release introduces a new permission, **Container Dispose Empty,** to provide greater flexibility for RMM clients to better manage their disposal operations. To perform a dispose empty operation users will need this new permission.

For RMM 23.2:

- Users with the **Container Dispose** permission will be able to dispose a container
- Users with the Container Dispose Empty permission will be able to dispose and empty a container
- Users with both permissions will be able to perform both operations
- On upgrade to 23.2, any RMM roles with the **Container Dispose** permission will be assigned the **Container Dispose Empty** permission.

HOME PAGE MESSAGE AREA

CUSTOMER IMPACT

- Feature Activation: This feature is **On** by default.
- New Permissions related to this Feature: **Home Page Message Board Edit**

  Home Page Message Board Remove Widget
- New Notifications related to this Feature: **None**

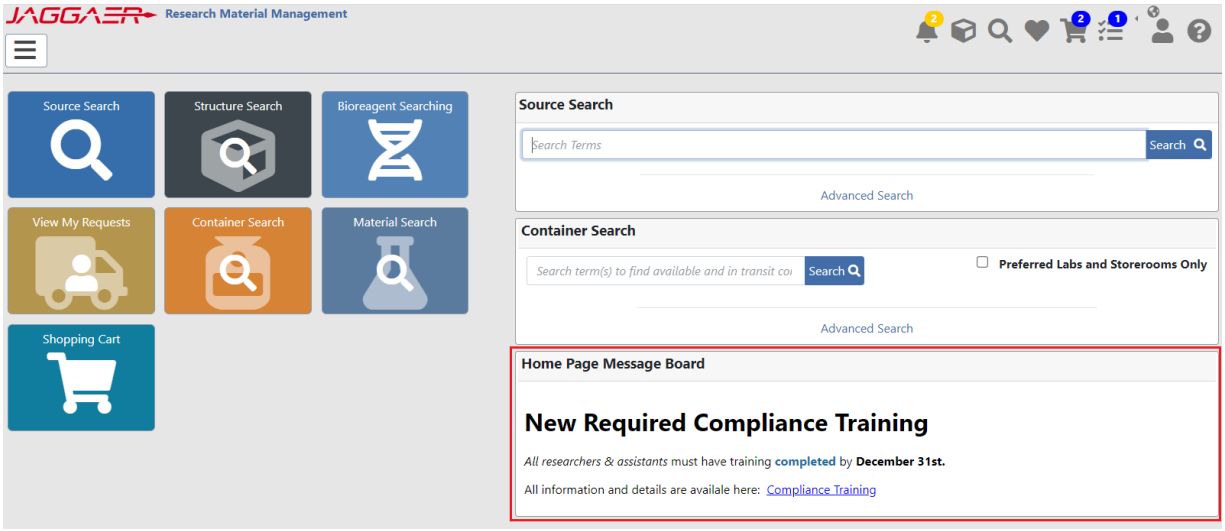
USER IMPACT

This feature is intended for use by: Administrators

Accessed Via: Administration | Configuration | Home Page Message Board

Organizations often need the ability to provide their RMM users with informational messages when they log into RMM. RMM currently provides functionality to broadcast an immediate message to users and also a pop-up message when users log into RMM. These messages are short and are not designed to display the type of messaging that an Administrator needs for important information and tips that could change on a recurring basis.

The new Home Page Message Board (shown below) provides Administrators with the ability to provide detailed information as well hyperlinks to required training, or other organization websites. The information in the message board may be formatted by specifying different colors and fonts.



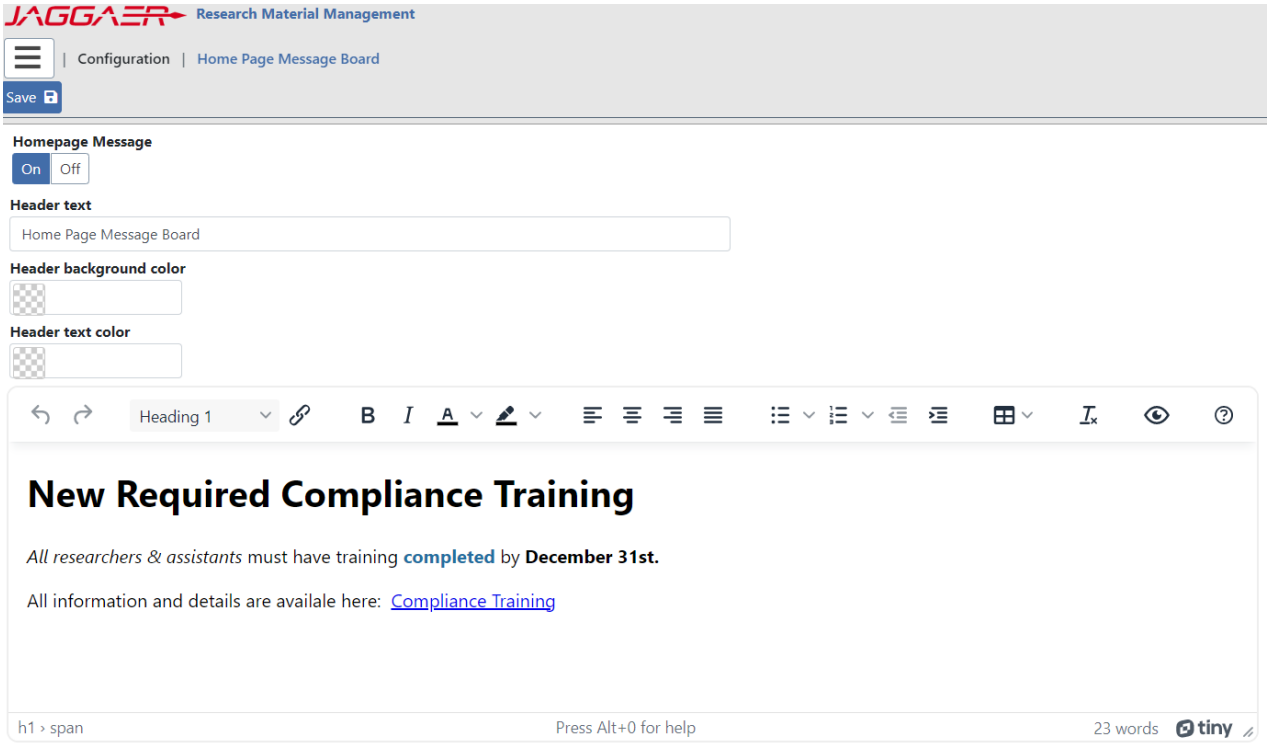
Home Page Message Board

Note that the broadcast message and login message are **STILL AVAILABLE** for use.

Because the Home Page Message Board widget is intended to communicate information to the client's RMM user community, it is intended to always be visible (if configured by the administrator). Users cannot remove the message board from their home page unless they have the new **Home Page Message Board Remove Widget** permission.

Home Page Message Board - Configuration

The Home Page Message Board configuration page (shown below) allows administrators with the new **Home Page Message Board Edit** permission to create and update the information displayed on the Home Page Message Board.



Home Page Message Board

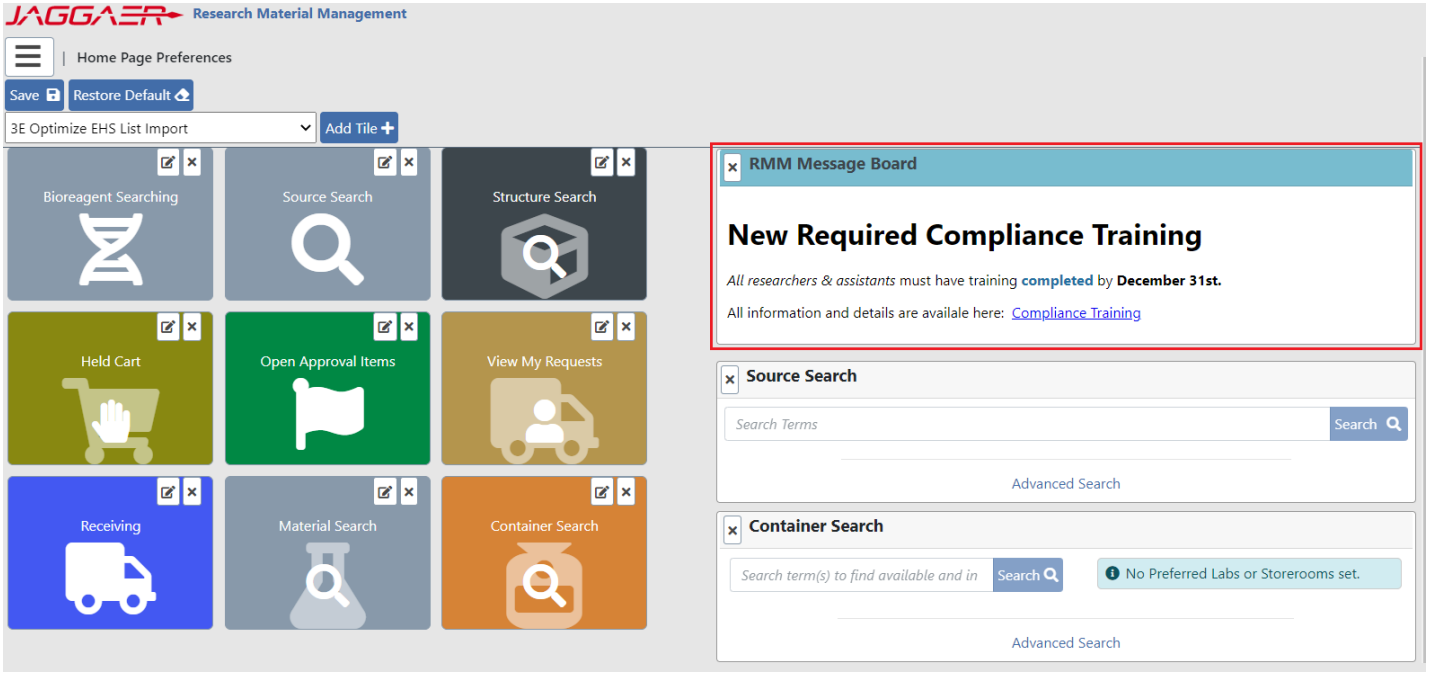
The following table details the available fields for Home Page Message Board configuration.

Field	Description
Homepage Message On Off	• Determines whether the Home Page message board is displayed • Defaults to 'On'
Header text	• Required field • Title that will be displayed on the Board • Defaults to 'Home Page Message Board' • Maximum of 100 characters
Header background color	Determines the background color for the message board title

Field	Description
Header text color	The color of the message board text
Message Body	Single text block form allows user to enter markdown or in-app rich text form. Toolbar allows users to bold, italicize, strikethrough, etc. the text, add bullet points, numbered lists, and hyperlinks. Maximum of 4000 characters

Home Page Preferences - Home Page Message Board Widget

As in previous releases, clicking on the icon in the lower, right-hand portion of the RMM Home Page opens the Home Page Configuration page (shown below).



Home Page Preferences – Home Page Message Board

RMM Home Page widgets, such as the Home Page Message Board widget, must be positioned along the right-hand side of the Home Page.

A user with the new **Home Page Message Board Remove Widget** permission can add or remove the Home Page Message Board widget from the Home Page and choose the position of the widget on the Home Page.

A user editing their Home Page Preferences without the **Home Page Message Board Remove Widget** permission can **reposition** the Home Page Message Board but they **cannot** remove the Home Page Message Board widget from the Home Page.

The placement of the new **Home Page Message Board Widget** may be configured as a part of a User Profile.

MERGE MATERIAL – PROCESSING CHANGES

CUSTOMER IMPACT

- Feature Activation: This feature is **On** by default.
- New Permissions related to this Feature: **None**
- New Notifications related to this Feature: **None**

USER IMPACT

This feature is intended for use by: Researchers and Administrators

Accessed Via: RMM | Containers and Materials | Material Search

The RMM Merge Material process provides users with the ability to combine redundant RMM materials into a single RMM material. The user selects the 'source' material, which is merged into the 'destination' material. After the merge, the 'source' material no longer exists, and all containers and requests associated with the 'source' material are associated with the 'destination' material.

In previous releases:

- The only attribute copied from the 'source' material to the 'destination' material was the Common Name. No other attributes associated with the 'source' material were merged.
- Users were prevented from merging materials that were linked to a third-party integration, such as 3E, Chemwatch, or Sigma

In this release

- All material identifiers will be attempted to be copied from the 'source' to 'destination'. See table below detailing when identifiers are copied.
- For RMM 23.2, RMM will allow the material merge to occur regardless of third-party material integrations.

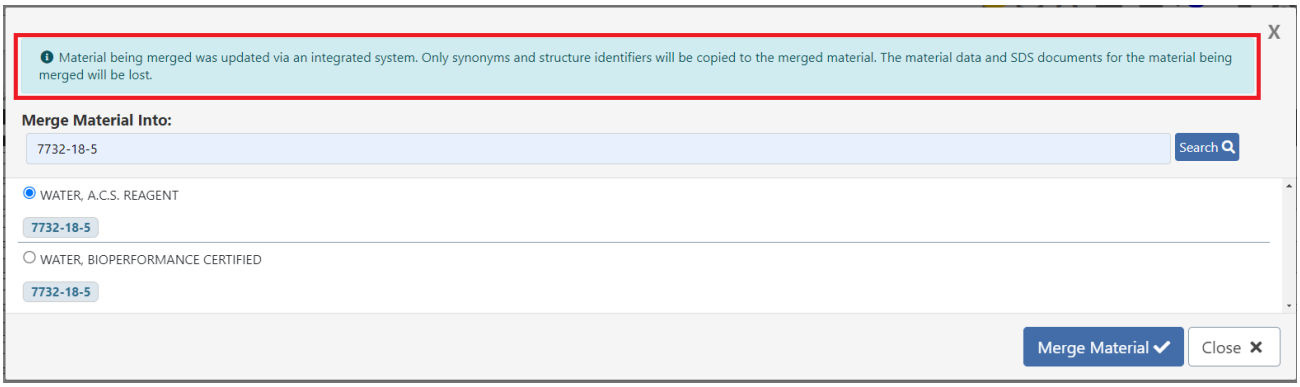
  Please note, while RMM no longer prevents the merging of materials linked to third-party material integrations, if the 'source' material has data and SDS documents populated from the material integration, this data will be lost.

The following table details the material data that will be copied from the source material into the destination material.

Source Synonym Type	Copied to Destination	Copied As Type
Alias	Always	Alias
Beilstein #	Always	Alias
CAS	If the destination material does not have a CAS or a Secondary CAS	CAS
Chemwatch #	Never	None
Common Name	Always	Alias
Company Number	Always	Alias
Customer Compound ID	If the destination material does not have a Customer Compound ID	Customer Compound ID
EC Number	Always	Alias
EINECS #	Always	Alias
Formula	Always	Alias
MDL PACKED NAME	Always	Alias
MDL #	If the destination material does not have an MDL #	MDL #
Secondary CAS	If the destination material does not have a CAS or a Secondary CAS	Secondary CAS
Sigma	Never	None
SKU ID	Always	Alias
Supplier Structure ID	If the destination material does not have a Supplier Structure ID	Supplier Structure ID
User	Always	Alias

Merge Material Process

After the user selects a source material to be merged into a destination material, RMM opens the Merge Material window (shown below).



Merge Material pop-up

The Merge Material pop-up will display a clear warning message to inform users that their selected source material is linked with a third-party material integration.

PEOPLE EDIT

CUSTOMER IMPACT

- Feature Activation: This feature is **On** by default.
- New Permissions related to this Feature: **People Edit Person - Update Any Role**
- New Notifications related to this Feature: **None**

USER IMPACT

This feature is intended for use by: Administrators

Accessed Via: RMM | People Search | Edit Person

With regards to the People Edit page, a new **permission** has been added, **People Edit Person - Update Any Role.** Previously any user that could access the Edit Person page could edit a person's roles. In this release, a user must also have the **People Edit Person - Update Any Role** permission to edit a person's role.

When creating a new person, the user will be able to assign the new person any role, even if they do not have the **People Edit Person - Update Any Role** permission**.**

This new permission only impacts people edit, and does not affect the following functions/permissions:

- People Assign People to Any Role
- People Assign People My Roles
- People Remove Any Role from People
- People Remove My Roles from People

On upgrade, the **People Edit Person - Update Any Role** permission will be assigned to any role that currently has the **People Edit Person** permission.

ROLES

CUSTOMER IMPACT

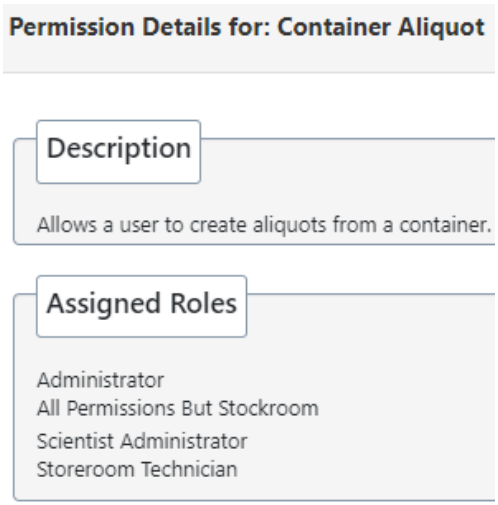
- Feature Activation: This feature is **On** by default.
- New Permissions related to this Feature: **None**
- New Notifications related to this Feature: **None**

USER IMPACT

This feature is intended for use by: Administrators

Accessed Via: RMM | Roles

When viewing a permission on the Roles page, the user can now see all roles to which a permission is assigned by clicking on the next to the permission. The following example shows roles assigned to the "Container Aliquot" permission. (Note that this is an example and is not indicative of the roles assigned to the permission in client systems).



Sample of Roles Assigned to Permission

DATA LOADER ENHANCEMENTS

The following list changes to the data loader templates. For complete details please read the RMM 23.2.0 Data Loader appendix.

New Templates

The following lists templates introduced in RMM 23.2.0,

Template	Description
Initialize Stockrooms	Initializes stockrooms. Previously stockrooms could only be initialized via the GUI. This template helps minimize the time needed to initialize stockrooms in installations that have large number of stockrooms.
Boxes Change Box Bar Code	Changes the bar code of boxes. The ability to change box bar codes is new functionality and is not available via the GUI.
Boxes Create	Creates boxes. Previously creating boxes could only occur through the GUI.
Boxes Create Containers	Creates containers in boxes. In previous releases the Containers Create template allowed containers to be placed into boxes. This new template simplifies the process of placing containers into boxes. Note the following: • This template does NOT have Site, Building, Floor, Room, Sublocation, Storage Site, Storage Building, Storage Floor, Storage Room, nor Storage Sublocation. The location of the container will be that of the box. The storage room of the container will be the storage room associated to the use room of the box. • Container bar code is not required. If not specified RMM will automatically generate one.
People Assign Projects/PI/Orgs	This template assigns people to projects or principal investigations (PI), as well as primary and accessible organizations. Within one row of the template a person may be assigned to 1) either a project or PI, 2) accessible organization and 3) primary organization.

Changes to Existing Templates

The following lists changes to existing templates.

Template	Description
Containers Create	• Renamed “Manufacturer” column header to “Brand” • Removed Box Bar Code and Position columns. To load containers into boxes, use the new Boxes Create Containers Template.
Stock Master Items Create	Added Catalog UOM column.
Stock Replenishment	Added Catalog UOM column.

WEB SERVICES

The following enhancements have been made to Web Services. Please read the RMM 23.2.0 Web Services document for full details.

- Create Project Web Service – creatorName has now been added to the Create Project web service
- Create Person – userProfile has been added to the Create Person web service

INFRASTRUCTURE NOTES

ANDROID SCANNER (MOBILE COMPUTER) LOGGING

Any logging events generated from Android Scanners (Mobile Computers), that previously went to the ERDServices.log file, will now go to the new ErdMobile.log file, which is dedicated to Android Scanner events.

SIEM LOGGING

In the previous release, JAGGAER introduced a new corporate standard for Security Information and Event Management (SIEM) logging of system access attempts and system modifications related to access. Our goal is to capture security-related events for the purposes of real-time and forensic analysis by both JAGGAER and third parties.

The RMM 23.2 release adds additional logging to further enhance security of JAGGAER applications.

CLIENT REPORTED ISSUES ADDRESSED

Following is the list of issues reported by clients which have been addressed in this release.

Function	Summary	Internal Tracking #	Client Case #
Approvals	Inactive users and RMM support users were appearing in the View Approvers Page and approval notifications were being sent to inactive users. Inactive and support users will no longer appear on the View Approvers page and inactive users will no longer receive notifications.	ERM-18996 ERM-18998 ERM-19785	02730383
Balance	Balances were sometimes inaccessible due to browser security policies.	ERM-19791	
Container History	Container history was not showing storage sub-location for various history events. For use locations, the sub-location was not shown for transfer operations.	ERM-18877	02673881
Container Search	The search button disappeared in Advanced Container Search	ERM-19589	
Favorites	Filter did not work on favorites.	ERM-19697	03212427
Favorites	From favorites, users could add items with no prices to the cart.	ERM-19865	03205811
Log In Message	When an administrator changed the RMM Log In message, after the RMM Application server was restarted the most recent message did not display.	ERM-19792	
Material Edit	The case of the common name could not be changed in material edit.	ERM-19803	03188200
Project Maintenance	When no PI was assigned to a project, if the user attempted to assign the same person twice to the project, on the 2nd attempt, they would get the following error “An error has occurred. Please have your administrator check the logs.” This also occurred when a user initially assigned a person to a project, then immediately attempted to assign them again. The above did not happen if a PI was assigned to a project.	ERM-19875	
Source Search	Filter function did not work on supplier names containing quotes	ERM-19837	03197770
User Preference	Under some conditions the user’s My Sites/All Sites preference was set to “All Sites” even if the user did not have permission to have “All Sites”. This occurred when a user with only “My Sites” permission, initially logged in, selected a location, but did not save the location.	ERM-19858	