JAGGAER ONE

22.2 RELEASE NOTES

FOR RESEARCH MATERIAL MANAGEMENT

16 DECEMBER 2022

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WELCOME

The **JAGGAER Research Material Management (RMM) 22.2 Product Release** is available on **16 December 2022.**

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 22.2

RMM Bioreagents – Expanded Search and Request

Bioreagent Search and Request is a feature of an RMM add-on Module, **RMM BIOREAGENTS,** introduced in RMM 22.1. In that release, JAGGAER partnered with CiteAb, providers of one of the industry's most advanced and highest quality biological data sources, to bring commercial antibodies, proteins, biochemicals and other biological reagents to RMM. The JAGGAER-CiteAb collaboration enables researchers to use CiteAb's award-winning experiential data and search capabilities to find products most likely to enhance their research results. Integration with RMM enables a simple and compliant purchase, leveraging core ePro investments, by matching results from CiteAb to preferred supplier catalog items from JAGGAER Hosted Catalogs, or streamlining type-in items when a matching preferred supplier product cannot be found.

In RMM 22.2, CiteAb product matching is extended to two additional sources: RMM inventory and eMolecules. As they have done with chemical building blocks, eMolecules focuses on hard-to-source antibodies and other bioreagent classes, offering an option to significantly increase CiteAb product match rate without the need to add additional JAGGAER Hosted Catalog suppliers. eMolecules tiers reflect the actual lead time to acquire products.

As with Hosted Catalog matching, RMM compares the CiteAb provided product information to inventory and eMolecules product information, and only returns items likely to be a match for products selected in CiteAb.

Note that RMM Bioreagents is turned off by default. Please contact RMM support to have it enabled.

Advanced Access Management for Higher Education

Based on feedback from major international research universities, RMM 22.2 introduces new capabilities to manage and streamline administration for access to research materials. These capabilities enable organizations to fully and easily implement the complex matrixed relationships of ownership and authority found especially in Higher Education, and also found in some commercial research.

Principal Investigators (PI) can now own one or more projects and have the option to approve purchase requests related to the project or to reserve PI-associated inventory, regardless of its location or even campus.

In addition:

- Researchers who work with one or more PIs can be granted access to any of the PI's inventory, or only to inventory associated with specific projects
- Request approval authority can be limited to the PI associated with the request, and
- A PI's Delegates can perform permitted actions on behalf of the PI, including managing PI/Project membership and approving request associated with the PI's projects.

In addition to managing access based on PI/Project association, organizations (departments) can also identify Lab Managers who manage access and inventory for the physical labs associated with a department:

- Rooms can be associated to organizations (departments) at any level of hierarchy
- Access can be granted to researchers in any sub-organization, (sub-department), or only specific sub-organizations (sub-departments)
- A lab manager can oversee inventory in an organization's (department's) physical labs, across multiple campuses if necessary

In addition to, and supporting these capabilities:

- The "My sites" access model expands on the "related sites" concept to enable granting individuals' access to additional specified sites as needed for the scope of each person's responsibility
- Container search criteria have been enhanced to enable searching by PI or by Organization (Department)-Room association.
- New users in multi-site clients can be restricted to selecting their primary room from a designated site

APIs

RMM APIs have been improved and enhanced:

- A new **Container Search API** enhances access to container details
- **API documentation** is now published in Swagger to improve access and usability
- A dedicated API User simplifies identifying actions performed via the API

Other Enhanced Capabilities in RMM 22.2

Some of the other enhancements in RMM 22.2 include

Waste Management capabilities introduced in RMM 22.1 have been enhanced to enable:

- Completion of pick-up requests using the RMM Inventory app on supported hand-held computer devices
- Viewing of Waste Item history
- Manually set Picked Up and Transfer to Accumulation Dates

Structure Search now supports search by a list of SMILE Strings.

A new **Stockroom Analytics** report identifies **Fast-Moving Items**, with unusual demand patterns for management attention.

User Profiles, introduced in RMM 22.1 to streamline User Interface and Preference configuration for new users, can now be assigned via the RMM Data Loader.

Inventory Reconciliation Statistics are now maintained when performing a partial reconciliation or reconciliation at a sub-location level.

RMM BIOREAGENTS - EXPANDED SEARCH AND REQUEST

Bioreagent Search and Request is a feature of an RMM add-on Module, **RMM BIOREAGENTS,** introduced in RMM 22.1. In that release, JAGGAER partnered with CiteAb, providers of one of the industry's most advanced and highest quality bioreagent data sources, to bring commercial antibodies, proteins, biochemicals and other biological reagents to RMM.

NOTE: BEGINNING WITH THE RMM 22.2 RELEASE, RMM BIOREAGENTS WILL REQUIRE A SUBSCRIPTION. PLEASE CONTACT RMM SUPPORT FOR FURTHER INFORMATION ON ENABLING BIOREAGENTS.

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 | Search and Request | Bioreagent Searching

EXPANDED BIOREAGENT SEARCH AND REQUEST

In RMM 22.2, CiteAb product matching is extended to two additional sources: RMM inventory (labs and storerooms) and eMolecules. As with Hosted Catalog matching, RMM compares the CiteAb provided product information to inventory and eMolecules product information, and only returns items likely to be a match for products selected in CiteAb.

Bioreagent – Search Labs and Storerooms

On the Bioreagent Searching page, RMM will now search labs and storerooms for items that match the items returned from CiteAb. The Bioreagent Searching page will display the CiteAb products along with matching Hosted Catalog, inventory and eMolecules items.

The Bioreagent Searching page shows a count of the number of products returned from CiteAb to RMM. For each product, descriptive information returned from CiteAb is displayed along with the count of results from the Hosted Catalogs, labs, storerooms and eMolecules that match the CiteAb product (shown below).
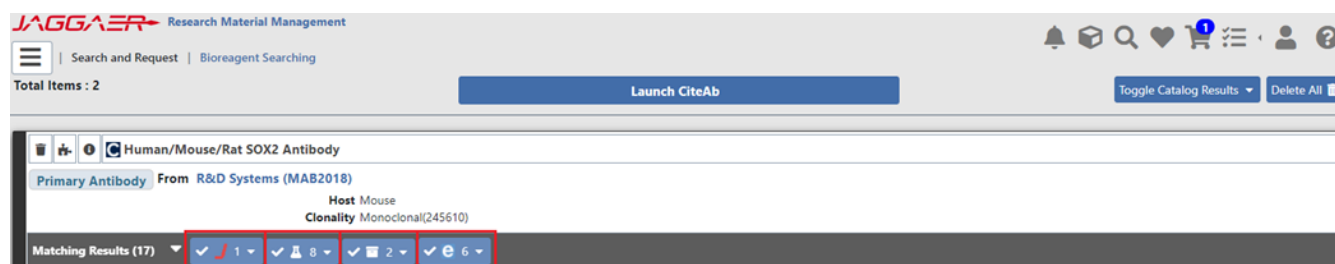
After CiteAb has returned a list of products to RMM, for each CiteAb Product, RMM searches the catalog number and manufacturer part number of the containers in labs and storerooms using the catalog number returned from CiteAb. Example: CiteAb returns "ABC" as the catalog number. RMM searches for inventory containers could return containers with a catalog number or manufacturer part number of "ABC-5mg" or "ABC-100mg". The search is case insensitive.

RMM calculates a match score for returned inventory items, and inventory items must be awarded a minimum score to be considered a match. A maximum of 20 matching results are displayed for each CiteAb item from each source (ex: 20 from labs 20 from storerooms, 20 from Hosted Catalog,and 20 from eMolecules. For more details on the match scoring process, please read the Matching Catalog and Inventory Items to CiteAb Items later in this document.

The Matching Results section header displays the number of total items returned for the CiteAb product and the number of items for each source (shown below).
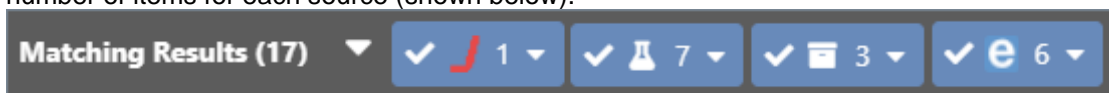
Bioreagent Searching − Matching Results displayed

Clicking the 'Matching Results' portion of the section header (highlighted below) will hide the results from all sources for the CiteAb product.

Clicking will re-display all results.

As with the 'Matching Results', each source can be toggled on to show results or toggled off to hide results from a particular source or sources.

Lab and Storeroom Result Fields

The information displayed for inventory is the same information currently returned in RMM Source Search for inventory items, including container flex fields. Note that a user can configure what flex fields to return in a Source Search. This same configuration is used for items returned via bioreagent searching

Each lab and storeroom result for a CiteAb product will show (where available):

- Location
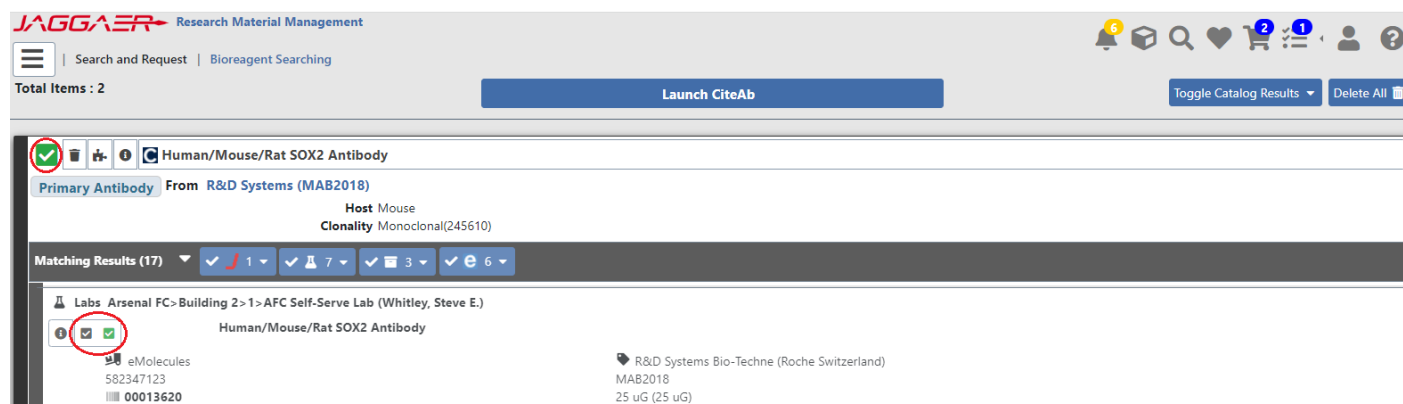- Container Label Name
- Supplier

- Catalog Number

- Bar Code

- Brand Name

- Manufacturer Part Number

- Unit/Amount

- Flex fields

Inventory Result Actions

For each inventory item, a researcher can 'View Container' (   ).

Depending on the configuration of the lab or storeroom, selecting the 'Add to Shopping Cart' icon (   ) places the item in the shopping cart or selecting the 'Add to To Do List' icon (   ) places the item on the user's To Do List.

Once an inventory item for a CiteAb product has been placed in the Shopping Cart or on the To Do List, the icon for the selected inventory item is updated, as is the CiteAb product (shown below).

Bioreagent Searching – Inventory Results

eMolecules Match Results

As with Hosted Catalog and inventory items, after CiteAb has returned a list of products to RMM, for each CiteAb Product, RMM searches eMolecules. As with the other searches, RMM calculates a match score for returned eMolecules items, and these items must be awarded a minimum score to be considered a match. Unlike Hosted Catalog and inventory items, the number of matching eMolecules results can exceed 20 results.

eMolecules returns unique SKUs (qty/price) that can match the same catalog item at different prices. To avoid the arbitrary exclusion of valid matches from the results when the 20-item limit is exceeded, RMM bioreagent searching returns all matches to that single catalog item even if that catalog items' number of SKUs causes the number of matching results to exceed 20. For example, if a CiteAb product returns 3 matches from eMolecules (matches A, B, and C in order of highest to lowest match score) and A has 10 unique prices, B has 15 prices, and C has 3 prices, the results shown to the user will be the 10 from A **and** the 15 from B but because A+B is more

than 20, none of the **C** SKU's will be displayed for the user. However, if the CiteAb product returns 30 matches from eMolecules but each match has 1 single catalog item and 1 price, then only 20 matches will be displayed from eMolecules on that CiteAb product's matching results.

For more details on the match scoring process, please read the Matching Catalog and Inventory Items to CiteAb Items later in this document.

eMolecules Result Fields
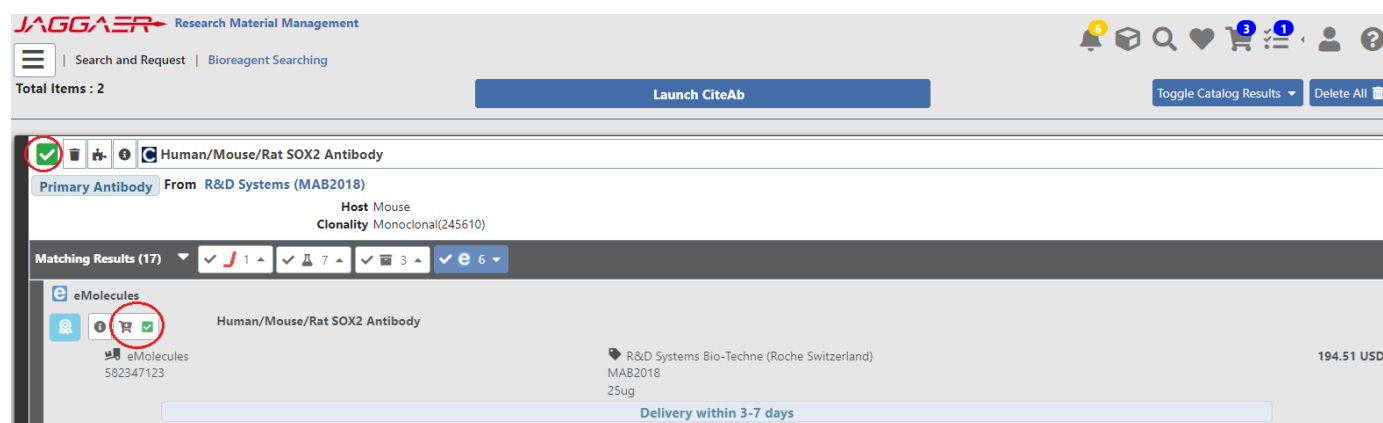
Each eMolecules result for a CiteAb product will show (where available):

- Product Name
- Supplier
- Catalog Number
- Brand Name
- Manufacturer Part Number
- Unit / Amount
- Price and Currency
- Shipping speed / description

eMolecules Result Actions

For each eMolecules item, a researcher can 'View Details' (   ), or add the item to the shopping cart
(   ) .

Once an eMolecules item has been placed in the Shopping Cart, the shopping cart icon for the selected eMolecules item is updated, as is the CiteAb product (shown below).

Bioreagent Searching – eMolecules Catalog Results

Matching Catalog and Inventory Items to CiteAb Items

CiteAb products are matched to Hosted Catalog Items, eMoclecules Catalog Items, and Inventory items based on reaching a similarity threshold. The similarity calculation (SC) differs depending on the information provided by the supplier on the item. Items that have a SC below the threshold will not be displayed. For those items above the threshold, the twenty items with the top SC will be displayed in descending order of match score.

JAGGAER expects that match scoring will be adjusted and refined based on experience with the Search and Request feature in production use and based on client feedback.

In the following scoring calculation description:

- Brand Name refers to Hosted Catalog Brand Name, eMolecules Brand Name, or Container Brand
- Manufacturer Part # refers to Hosted Catalog Manufacturer Part #, eMolecules Manufacturer Part #, or Container Manufacturer Part #
- *Catalog #* refers to Hosted Catalog #, eMolecules Catalog #, or Container Catalog #
- *Supplier* refers to Hosted Catalog Supplier, eMolecules Supplier, or Container Supplier
- *Product Name* refers to Hosted Catalog Product Name, eMolecules Product Name, or Container Label Name

If a Hosted Catalog Item, eMolecules Catalog Item, or Container has a Brand and Manufacturer Part number, the SC is performed by the following comparisons.
- CiteAb Supplier to Brand Name   (SC up to 25%)
- CiteAb Supplier Catalog # to Manufacturer Part #   (SC up to 12%)
  - Manufacturer Part # is given a higher similarity contribution if there is a match between CiteAb Supplier Name and Brand Name.
- CiteAb Supplier Catalog # to *Catalog #*   (SC up to 12%)
  - *Catalog #* is given a higher similarity contribution if there is a match between CiteAb Supplier Name and Brand Name.
- CiteAb Product Name to *Product Name*   (SC up to 38%)
  - Non-exact Product Name matches are weighted as more similar if there is a match between CiteAb Supplier Name and Brand Name.

If a Hosted Catalog Item, eMolecules Catalog Item, or Container does not have a Brand and Manufacturer Part #, the similarity calculation is performed by comparing:
- CiteAb Supplier to *Supplier*   (SC up to 25%)
- CiteAb Supplier Catalog # to *Catalog #*   (SC up to 42%)
  - *Catalog #* is given a higher SC if there is a match between CiteAb Supplier Name and *Supplier*.
- CiteAb Product Name to *Product Name*   (SC up to 42%)
  - Non-exact Product Name matches are weighted as more similar if there is a match between CiteAb Supplier Name and *Supplier*.

The following table summarizes the above description

CiteAb Product	Catalog or Inventory Item	Match Weight with Brand	Match Weight without Brand
Supplier Name	Brand Name	Up to 25%**	N/A
Supplier Name	Supplier (Vendor) Name	0%	Up to 25%**
Catalog Number	Manufacturer Part Number	Up to 38%	N/A
Catalog Number	Catalog Number	Up to 12%	Up to 42%
Product Name	Product Name	Up to 38%	Up to 42%

ADVANCED ACCESS MANAGEMENT FOR HIGHER EDUCATION

RMM 22.2 introduces new capabilities to manage and streamline administration for access to research materials. These new capabilities enable organizations to fully and easily implement the complex matrixed relationships of ownership and authority found especially in Higher Education, and also in some commercial research.

PRINCIPAL INVESTIGATOR

Overview

RMM 22.2 introduces the concept of **Principal Investigator** (PI) to RMM. Principal Investigator (PI) refers to the individual responsible for the preparation, conduct and administration of research grants, cooperative agreements, etc.

A user with the Principal Investigator designation can own an RMM Project and can manage access to containers based on Principal Investigator and project association. A Principal Investigator can:

- Access all inventory (containers) associated with any of their projects, regardless of any other restrictions
- Grant or revoke access to their project's inventory
- Grant or reject request item approvals for inventory associated to their projects

A Principal Investigator may also have **Delegates**. A Delegate is user associated to the Principal Investigator. A user designated as a Delegate has the authority to act on behalf of a Principal Investigator in certain situations. Dependent upon the permissions assigned to the user, an RMM Delegate can:

- Manage the users assigned to the Principal Investigator's Project(s)
- Manage the users assigned to the Principal Investigator
- Grant or reject request item approvals associated with their Principal Investigator's project

A Delegate can be associated to one or more Principal Investigators.

Principal Investigator Designation

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: Administration | People | People Search | Edit Person

The Edit Person page (shown below) has been updated to allow users to be designated as a Principal Investigator. Note: Currently A person can only be assigned the PI designation via the Edit Person page – not via APIs or the RMM Data Loader.

Edit Person Page

If a person has been designated as a Principal Investigator and they have people assigned to them or own projects, they cannot be changed to **not** be a Principal Investigator until those relationships have been resolved.

Principal Investigator - Assign Users

CUSTOMER IMPACT

- Feature Activation: This feature is **Off** by default
- New Permissions related to this Feature: **People Assign People to My Principal Investigator**

    People Assign People to All Principal Investigators
- New Notifications related to this Feature: **None**

USER IMPACT

This feature is intended for use by: Principal Investigators and their Delegates

Accessed Via: Administration | People | Assign Users to Principal Investigator

An RMM user can be associated to one or more Principal Investigators.

- Users associated with a PI can access project-restricted inventory in any project owned by the PI, including in other organization (department) restricted labs
- Unless authorized, users associated with a Principal Investigator do not see list-controlled or user reserved containers

Users with at least one of the new permissions, *People Assign People to My Principal Investigator* or *People Assign People to All Principal Investigators,* can access the Assign Users to Principal Investigator window (shown below).   On upgrade, the *People Assign People to All Principal Investigators* permission will be assigned to any user with the *People Manage Projects and Assign People* permission.

Assign Users to Principal Investigator Page

The information displayed on the Assign Users to Principal Investigators page is determined by the permission of the user accessing the page.

Users with the *People Assign People to All Principal Investigators* permission will see all principal investigators. Users with the *People Assign People to My Principal Investigator* permission will see only those Principal

Investigators who are either the logged in user or for which the logged in user is a **Delegate**. Both active and inactive Principal Investigators are displayed.

For each Principal Investigator, the Name and Active Status of the Principal Investigator will be displayed on the left side of the page.   When a user clicks on a Principal Investigator, the name of the users assigned to the selected Principal Investigator as well as the users **Delegate** status will be displayed on the right side of the page.

Assign User to PI

To associate a user to a Principal Investigator, search for a user to assign via the standard RMM people selector widget. The available users for selection is constrained by the logged-in user's My Sites / All Sites designation.
Selecting the **Assign User to PI +** button adds the user to the list of Assigned Users displayed on the right-side of the page.

A history record is written for the user when they are assigned to or removed from a Principal Investigator. A history record **is not** written for the Principal Investigator when users are assigned to them.

Unassign Users from PI

To disassociate users from a Principal Investigator, select the Principal Investigator from the left-side of the page. All users currently associated with the Principal Investigator are displayed on the right-side of the page. Selecting the user(s) and the **Unassign Users from PI ✕** button will remove the user(s) from Principal Investigator. A history record will be written for the user to reflect that they were removed from the Principal Investigator. A history record **is not** written for the Principal Investigator when users are removed from them.

Delegate Status

A user that has been assigned to a Principal Investigator can be designated as a Delegate.

To grant a user Delegate status, select the user(s) and click the **Grant Users Delegate Status ⚲** button will display the **⚲ Delegate** badge to clearly identify the user as a Delegate.

To remove the Delegate designation, choose the user(s) with the Delegate status and select the **Remove Users Delegate Status ⚲ˣ** button.

A history record is written for the user when they are assigned Delegate status and/or when Delegate status is revoked.

Changes to add/remove people from a Principal Investigator and to grant/revoke delegate status are saved automatically.

Principal Investigator – Projects

CUSTOMER IMPACT

- Feature Activation: This feature is **Off** by default
- New Permissions related to this Feature: **People Manage My Projects and Assign People**
- New Notifications related to this Feature: **None**

USER IMPACT

This feature is intended for use by: Principal Investigators and Delegates

Accessed Via: Administration | People | Projects

In RMM 22.2, Projects can, if desired, be owned by a Principal Investigator. A Principal Investigator can own one or more projects. Principal Investigators have the option to approve purchase requests related to the project or to reserve Principal Investigator-associated inventory, regardless of its location or even its campus.

When a project is created or edited, a principal investigator may be associated to the project. Only users designated as Principal Investigators are available to be selected as the principal investigator for a project. All users associated with a PI automatically have access to inventory reserved for any of the PI's projects. *It is only necessary to associate users directly to a project if you want to limit their access to only the inventory reserved for that specific project.*

On the Projects page (shown below) if a Principal Investigator is assigned to the project, the Projects page will display the Principal Investigator on the left-hand side of the Projects page. On the right-hand side, in addition to any users assigned directly to the Project, RMM will display all users assigned to the Principal Investigator as well as the Delegate status of the user.

Projects Page – Principal Investigator

In the above example, there are five users assigned directly to the project. Additionally, there are two users listed who are assigned to the project's Principal Investigator. While not directly assigned to the project, these users have the same access to project-reserved inventory as those users directly assigned to the project.

Users associated with the Principal Investigator:

- Can access project-restricted containers in any project owned by the Principal Investigator
- Cannot see List-Controlled or Owner-reserved containers if they are not separately authorized

Project Access Rules

When accessing the Projects page, the following rules apply:

- A user with the **People Manage All Projects and Assign People** permission
  - Can see **all** projects
  - Can create new projects and assign them to a Principal Investigator
- A user with the **People Manage My Projects and Assign People** permission
  - Can **only** see projects which they are the Principal Investigator, or they are the Delegate for the Principal Investigator that owns the project
  - Can create new projects and assign them to a Principal Investigator. Please note, once a user with this permission creates a project and assigns it to a Principal Investigator, they will not be able to see or edit this project once they leave the Projects page – unless they are Principal Investigator or their Delegate
- A user with neither permission cannot access the Projects page

Container Access and Projects

A container may be assigned to a project, reserved for a project, or neither assigned nor reserved for a project. If the container is **reserved** for a project, in container search and source search, the container will be accessible if the logged in user is

- Associated to the project OR
- PI of the project OR
- Users (including Delegates) assigned to the PI

The above assumes that the container is not restricted by any other means (such as in a List-Controlled room). For a detailed description of all container accessibility rules in RMM 22.2.0, please read the Container Accessibility Rules section.

Principal Investigator - Container 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 and Administrators

Accessed Via: RMM | Containers and Materials | Container Search

With the introduction of Principal Investigator (PI), Container Search (shown below) has been enhanced to allow a user to search by Principal Investigator. When searching by Principal Investigator, only containers that are associated to projects owned by the selected PI and for which the user has access will be returned. (Please read the Container Accessibility Rules section for details on access to containers).

Container Search Page

A new section, Project/PI (highlighted in the above picture) has been added to the Container Search criteria.

Previously, the Project container search criterion was only visible if an installation had any Projects created. Project and Principal Investigator container search criteria are now always available.

Principal Investigator – Approvals

Overview

In previous releases, each Approval Type (e.g., New Material, Type In) could be designated to be approved by 1) anyone with the relevant approval type permission or 2) anyone with the relevant permission **AND** who belongs to the same organization as the creator of the shopping cart.

RMM 22.2 introduces **Principal Investigator**, as an additional "approved by" to the existing "Permission Only" and "Organization". The Principal Investigator "approved by" enables request approval authority to be limited to the Principal Investigator, or their Delegates, associated with the request.

The following table details what occurs for each Approved By.

Approved By	Approver
Permission Only	All users with the relevant approval permission can approve the item
Organization	The item can only be approved by users with the relevant approval permission AND with an approval organization that matches the exact organization assigned to the shopping car item.
Principal Investigator	If a Shopping Cart item is associated with a Project that has a Principal Investigator, only a user with the relevant permission who is either the Principal Investigator for the project or their Delegate, can approve the item. Note that this applies when the cart item is associated to a project, regardless of whether it is reserved for the project.

The existing Configure Approvals page has been modified to allow the user to select "Principal Investigator" as an Approved By option.

RMM supports 12-RMM standard approval types and 10-additional, client-specific, approval types. While the standard and client-specific approval types may be approved by permission or organization, only the standard approvals may be approved by Principal Investigator. While the Configure Approvals page does allow to configure client-specific approval types for approval by Principal Investigator, this will have no effect on client-specific approvals.

Notifications

If an approval type is configured to require approval by a Principal Investigator, when a project with a Principal Investigator is specified for a Shopping Cart, the Principal Investigator, and their Delegates, with permission for at least one of the approvals required by the Shopping Cart - will **always** receive the notification **regardless** of site. The My Sites / All Sites component of RMM is not considered for Principal Investigator approvals.

If an approval type is configured to require approval of a Principal Investigator, but a project **without** a Principal Investigator is specified for a Shopping Cart, or no project is associated to the item, the approval is treated as a "Permission Only" approval. The notification will go to any user with permission for at least one of the approvals required by the Shopping Cart and who is at the site of the Shopping Cart creator / recipient.

View Approvers

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 | Review and Approve | View Approvers

With the introduction of the concept of approval by Principal Investigator, the RMM View Approvers page (shown below) has been modified. For an RMM request that requires the Approval Type **Principal Investigator** approval, user can easily see the Principal Investigators and their Delegates that have permission for the approval.

View Approvers Page

If the Approved By for the selected Approval Type is **Principal Investigator**, the "For Principal Investigator" widget is displayed, listing all active and inactive Principal Investigators and their Delegates that can approve the selected Approval Type. In the above example, the EHS Restricted 1 approval type requires the approval of a Principal Investigator (when the request is for a Project owned by a Principal Investigator). For the EHS Restricted 1 Approval Type, for the selected Principal Investigator, both the PI (Steve Whitley) and the Delegate (Researcher Whitley) can grant the approval.

If the user selects the blank option at the top of the "For Principal Investigator" drop down, they will see all users that have the permission to approval the specified approval type, regardless of Principal Investigator. These users would be able to approve items in which either 1) a project was not associated to the shopping cart or 2) an item was associated to the shopping cart but the project did not have a Principal Investigator.

Please note that the Principal Investigator and/or their Delegate will only be shown if they have the selected Approval Type permission.

View Open Approvals

CUSTOMER IMPACT

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

This feature is intended for use by: RMM Users with the Authority to Approve Items

Accessed Via: RMM | Review and Approve | Open Approval Items

With regards to the new "Approved By" Principal Investigator, the View Open Approvals page (pictured below) has been modified as detailed below.

Open Approvals Page

Item I Can Approve Filter

The View Open Approvals page has a filter to determine what items to display. The "Items I Can Approve" filter will now take Principal Investigator into consideration. If an item is designated to be approved by Principal Investigator, the "Items I Can Approve" will only show that item if the logged in use is the Principal Investigator, or their Delegates, associated to the approval.

View Possible Approvers

The RMM Open Approvals Items page always allowed a user to click a specific approval (e.g., [Controlled] above) for a given item to see who can grant the approval. When a user clicks on an approval that requires **Principal Investigator** approval, the modified "Possible Approvers" page (shown below) is displayed.

Possible Approvers			X
Approval Type New Material			
Principal Investigator Whitley, Steve E. (swhitley@jaggaer.com)			

Name	Phone	Email	Primary Location
Whitley, Researcher	610.492.0244	swhitley@jaggaer.com	Arsenal FC>Building 1>1>AFC101
Whitley, Steve E	610-492-0268	swhitley@jaggaer.com	Bermuda Beach>Building 1>1>A1102

Close ✕

Open Approval Items – Possible Approvers Page

In addition to showing the Approval Type, the following information is presented:

- Principal Investigator
- The Principal Investigator and their Delegates that have the necessary approval permissions

Lock

For items requiring Principal Investigator approval, the lock icon (🔒) will appear if the logged in user is neither the Principal Investigator associated to the approval nor one of their Delegates. The 🔒 will also appear for a user who is the Principal Investigator or their Delegates but who does not have permission to approve the item.

Principal Investigator - Additional Considerations

Shopping Cart – Checkout

During the Shopping Cart Checkout process, the projects available for selection by researchers takes into consideration new permissions and Principal Investigator designation and/or affiliation. For users with the **People Manage All Projects and Assign People** permission, all active projects are available. Otherwise, users can select from:

- All projects to which they are assigned
- All projects for which they are the Principal Investigator
- All projects for the Principal Investigator to whom they are assigned

Only active projects are available for selection.

Approvals Report

The "Approvals Report" (shown below) has been enhanced to accept Principal Investigator as a report criterion. Additionally, the Approvals Report has an additional column to show the Principal Investigator when one has been assigned to the approval.

Approvals Report							
Report Date: 29-NOV-2022							
Action Date: On or After 27-NOV-2022							
Approval Type: All							
Approval Status: All							
Approved/Rejected By: All							
Organization: All							
Principal Investigator: Steve E. Whitley							
Report Generated by: Steve E. Whitley							
Action Date	Approval Type	Approval Status	Approved/Rejected By	Organization	Principal Investigator	Shopping Cart Submitted Date	Shopping Cart
11/29/2022 16:15	New Substance	RMM Approval Open			Steve E. Whitley	11/29/2022 16:15	Whitley00000987
11/29/2022 16:15	New Substance	RMM Approval Open			Steve E. Whitley	11/29/2022 16:15	Whitley00000987
11/29/2022 16:15	New Substance	RMM Approval Open			Steve E. Whitley	11/29/2022 16:15	Whitley00000987

Approvals Report

ORGANIZATIONS (DEPARTMENTS)

Overview

RMM 22.2 enhancements provide operations staff greater flexibility and more control over which users have access to containers within inventory and how to best regulate that access, based on a user's location and organization association. Organizations can now identify Lab Managers who manage access and inventory for the physical labs associated with an organization (department).

The enhancements include the following:

- Rooms may now be associated to organizations. Only users associated to the lab's organization or its sub-organizations, may access the inventory in that lab.
- Lab Managers may now be associated to top level organizations. Lab Managers may access inventory in any labs assigned to the Lab Manager's organization or sub-organization.

The following example demonstrates how Organization and the Lab Manager designation impacts access to containers.

Organization Hierarchy	Rooms Assigned to Organization	Users Assigned to Organization	Lab Manager Assigned to Organization
Engineering	Room A	User 1	User 3
Engineering > Biomedical Engineering		User 2	
Engineering > Chemical Engineering	Room B		
Engineering > Mechanical Engineering	Room C		
No organization specified	Room D		

- User 1 can access containers in Room A Only
- User 2 can access containers in Room A Only
- User 1 and User 2 cannot access containers in Room B or C
- User 3 can access containers in Room A, B, & C
- Users 1,2, and 3 have access to Room D

As a general rule, to grant access to ALL users in a department and all of its sub-departments, you should assign the room to the highest organization level that applies to all users ("Engineering" in the example above). If you want to restrict a room's access only to users in a specific sub-department (and its sub-departments), then you should assign that specific sub-department to the room. ("Chemical Engineering" in the example above)

The "Users Assigned To Organization" column means that the organization is either the user's primary organization or is one of the user's accessible organizations. Please read the Organizations – User Organization Association for a detailed description of accessible organizations.

Note that the above example assumes that lab inventory is not restricted by any other means – such as being in a list controlled room. For details on all the ways in which inventory may be restricted please read the Container Accessibility Rules section.

Organizations – Room Assignments

Designating a Room's Organization

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: Operations Staff

Accessed Via: Administration | Locations | Manage All Locations

To provide greater ability to manage container access, RMM 22.2 introduces the ability to assign an organization – – to a room. Only users with access to that organization, or any of its sub-organizations, will be able to access the containers in that room.

A room is assigned an organization via the Manage All Locations Room page via the newly added organization widget – pictured below.

Organization Chemistry ⌄

The Organization widget lists all active organizations and sub-organizations.

Organizations – Viewing Associated Rooms

CUSTOMER IMPACT

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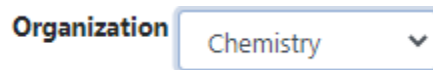- New Notifications related to this Feature: **None**

USER IMPACT

This feature is intended for use by: Operations Staff

Accessed Via: Administration | People | Organizations

Accessible from multiple points in RMM, the View Organization Rooms option provides a list of all rooms currently associated with a selected organization or sub-organization.

On the Organizations page (shown below), the number of rooms directly associated to the organization is displayed. In the example below, four rooms are directly associated to Biology, and two rooms are directly associated to Microbiology. To see the rooms associated with an organization, the user selects the organization or sub-organization from the Organizations tree structure and clicks on the ▐ View Organization Rooms **i** ▌ button. This will open the View Organizations Rooms page in a separate browser tab displaying all rooms associated to the organization or sub-organization.

Organizations Page

View Organization Rooms Page

Organizations - Lab Manager Designation

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: Operations Staff

Accessed Via: Administration | People | Organizations

The Organizations page, (shown below) from which users create and manage RMM Organizations, now allows a user to be designated as the Lab Manager for a **top-level** organization. A Lab Manager can oversee inventory in an organization's (department's) physical labs across multiple campuses if necessary. A Lab Manager cannot be associated to a sub-organization.

Organizations Page

To assign a Lab Manager to a top-level organization, select the organization and then click Edit organization. The Edit Organization window will then appear.

Edit Organizations Page

A new field, Lab Manager, allows the selection of any active RMM user (following My Sites / All Sites constraints) as the Lab Manager for an organization. Designation of a Lab Manager for an organization is optional and can be changed or removed.

When creating a new, top-level organization, selecting the **Add Organization +** button opens the Add Organization window where a Lab Manager can also be designated for the organization.

Organizations – User Organization Association

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 Operations Staff

Accessed Via: Administration | People | People Search | Edit Person

Previously, a user could be associated to an "Organization" (also known as Primary Organization), as well as "Additional organizations that the user could approve". Pictured below is the Person Edit page from RMM **22.1** showing these associations:

*Edit Person Page from RMM **22.1***

RMM 22.2 introduces an additional organization association – "Accessible Organizations". Pictured below is Edit Person page with the three organization associations.

Edit Person Page for RMM 22.2

The following table describes each organization association.

RMM 22.2 Association	Description	New in RMM 22.2.0
Primary Organization	When a shopping cart is submitted, if an approval is generated and the approval's type is designated to be "Approved By Organization" then the approval is also tagged with the creator's primary organization, and must be acted on by a user with both the required permission and the required organization association. **When approving items** In PREVIOUS releases, when approving items tagged with an organization, a user (with the appropriate permission) could approve the item if the approval's organization was either • The logged in user's primary organization OR • One of the logged in user's "Organizations for which the user can approve" In the RMM 22.2 release, when approving items tagged with an organization, a user (with the appropriate permission) can approve the item only if the approval's organization is • One of the logged in user's "Organizations for which the user can approve" Note that on UPGRADE TO RMM 22.2, if the user has at least one approval permission, the user's primary organization will be copied to the user's "Organizations for which the user can approve"	No But please read description for functional change
Organizations for Which the User Can Approve	This was labeled "Additional organizations that user can approve" in previous releases. No functional change in this release, but please read the description of Primary Organization immediately above.	No
Accessible Organizations	A new concept for RMM 22.2, Accessible Organizations are organizations to which a user has container access. Note that the User's Primary organization will always appear in this list. Please read the Overview section for details on container access.	Yes

Primary Organization Selector

A user will continue to be assigned a single, "primary" organization via the Primary Organization widget (shown below).

Primary Organization widget

The Primary Organization widget has been enhanced to show the number of rooms currently assigned directly to a particular organization. In the above example, there are 3 rooms assigned to the Chemistry organization. Selecting the icon launches a page (shown below) displaying all rooms associated to the organization.

Site	Building	Floor	Room
Arsenal FC	Building 2	1	AFC Lab Supply Stockroom 2
Arsenal FC	Building 1	1	AFC Lab Supply Stockroom 1
Sweden	BLD 2	2	Sweden Receiving Location

View Organization Rooms Page

Note that the number of rooms and the rooms displayed do not include sub-organizations. Example: if "Organic Chemistry" was a sub-organization of "Chemistry", and "Organic Chemistry" had five rooms associated with it, those five rooms would not be included in the count nor displayed in the list of rooms for "Chemistry".

Accessible Organizations Selector

Accessible Organizations are organizations, in addition to a user's Primary Organization, to which a user has container access.

The Accessible Organizations widget (shown below) lists all organizations and sub-organizations – except for the users Primary Organization. A count of the number of rooms currently directly assigned to an organization is also shown.

Accessible Organizations widget

Selecting the **Add +** icon adds the selected organization to the list of Accessible Organizations (shown below). As with Primary Organizations, selecting the icon launches the page displaying all rooms associated to the selected organization.

Accessible Organizations – Edit Person Page

Accessible Organizations - Fields

For each organization listed as an Accessible Organization, the following is displayed:

- Accessible Organization – the name of the organization
- Organization Type – either "Primary" or "Added Organization"
- Rooms Associated – the number of rooms associated directly to the organization. This does not include rooms associated to any sub-organizations.

Accessible Organizations – Actions

The following icons/actions are available for Accessible Organizations:

 - identifies the user's Primary Organization, which cannot be deleted from the list of Accessible Organizations

 - removes the organization as an Accessible Organization for the user

 - launches the page displaying all rooms associated to the selected organization

Accessible Organizations – Notes

A user's Primary Organization is always automatically listed as an accessible organization. When changing a user's Primary Organization, the user is notified (shown below) that this will result in a change to the user's Accessible Organizations.

Accessible Organizations message – Edit Person Page

NOTE

RMM history records are generated for changes to a user's Primary organization and Accessible Organizations.

Organizations – Container 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 and Operations Staff

Accessed Via: RMM | Containers and Materials | Container Search

With the ability to associate a room to an organization or sub-organization, Container Search (shown below) has been enhanced to enable searching specifically by those rooms assigned to a given organization.
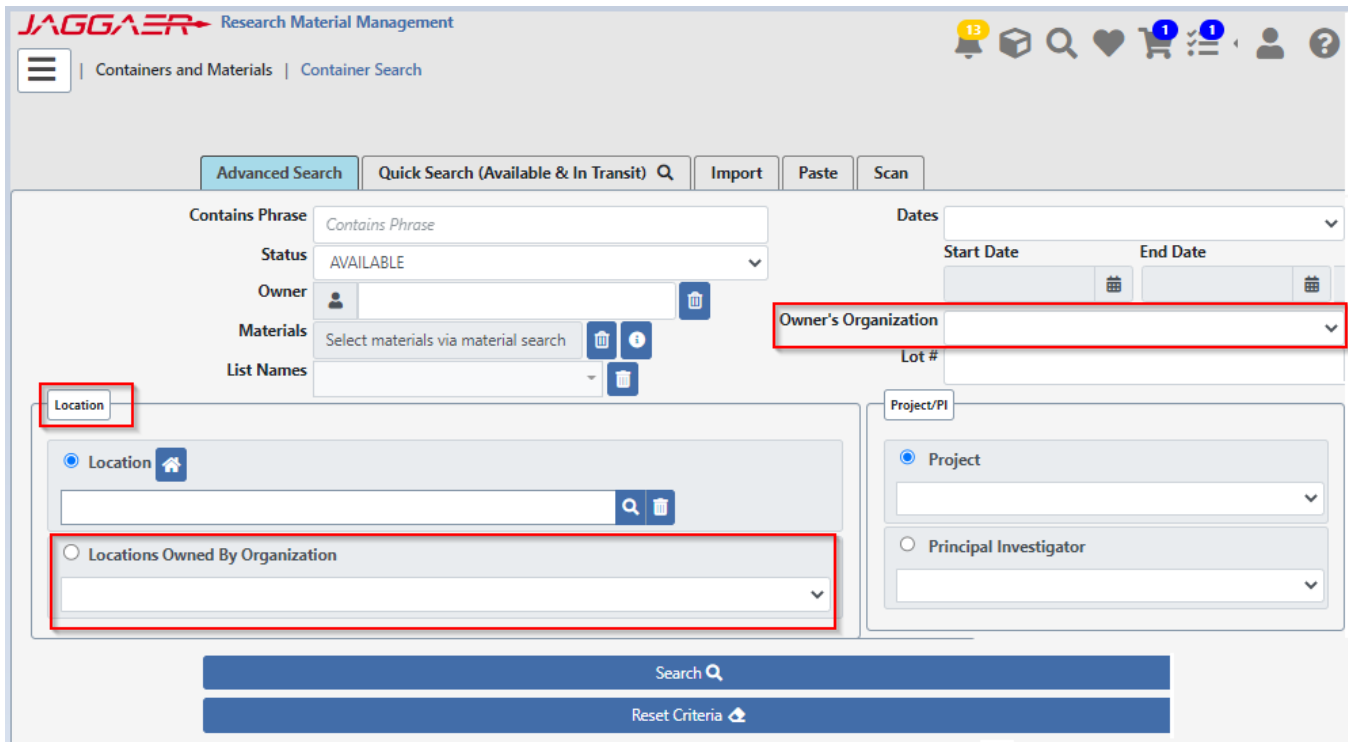
Container Search Page

Locations Owned By Organization

Previously, a user could search by a location(s). With RMM 22.2, a new widget, Locations Owned By Organization (shown above) has been added to the Container Search criteria. The Locations Owned By drop down will display only organizations (active and inactive) that have been associated to rooms. When performing the container search, if an organization has been selected via this widget, the search will only return containers in those rooms that are directly associated to the selected organization and which the user has ability to access.

Owner's Organization

This widget existed in previous releases, but was labeled "Organization". As in previous releases, if an organization is selected in this widget, container search will return only containers whose owner's primary organization matches the selected organization and which the user has ability to access.

CONTAINER ACCESSIBILITY RULES

As detailed in previous sections, RMM 22.2.0 introduces new container accessibility rules with regards to 1) Principal Investigators and 2) Organizations.

The following rules details **ALL** the rules within RMM which determine if a user can access a container via container search and source search.   The rules are evaluated in order. Once a rule evaluates as **TRUE**, no further rules are evaluated. If no rules evaluate to **TRUE**, then the user cannot access the container.

Rule	Rule returns TRUE if the following conditions are met
Rule 0 – Container Accessible to Everyone	The container is accessible to everyone if: • It is NOT reserved for Project AND • It is NOT reserved for Owner AND • It is NOT in a List Controlled room AND • It is NOT in a room that is associated to an organization
Rule 1 – View All Containers and Rooms Permission	The container is accessible to any user with the "View All Containers and Rooms" permission can access the container
Rule 2 – If the container is reserved for Owner	The container is accessible only to the owner of the container

Rule 3 – If a container is in a List Controlled room	The container is accessible if:
	• User has been explicitly assigned to the List Controlled room OR
	• Container in the List Controlled room is reserved for a project owned by a PI:
	  • Accessible by PI
	  • Accessible by PI's Delegates
	• List Controlled room is associated to an organization (department)
	  • Accessible by Lab Manager of the organization (department)

Rule 4 – If a container is not in a List Controlled room AND is reserved for a Project	The container is accessible to: • Users associated to the Project OR • The PI of the Project (if there is one) OR • Users (including Delegates) assigned to the PI
Rule 5 – If a container is in a room (not List Controlled) associated to a Department (organization)	The container is accessible to: • Any user associated to the room's organization or sub-organizations of the organization to which the room is associated OR • Lab Manager of the **top-level** organization (department)

Example 1: A container is reserved for a project and is in room that is not List Controlled and is not associated to an organization (department). The user does not have the "View All Containers and Rooms" permission but is the PI of the project. Rules 0,1,2,3 are **FALSE**, but Rule 4 is **TRUE**. Rule 5 is not evaluated. The user can access the container.

Example 2: A container is not reserved for a project, the user does not have the "View All Containers and Rooms" permission, and the container is in a List controlled room to which the user is NOT assigned. None of the rules evaluate to TRUE. The user does not have access to the container.

MY SITES/ALL SITES

The definition of My Sites (also known as "accessible sites") has been expanded in this release of RMM. In previous releases, My Sites was defined as the list of sites which included

- The site ("primary site") of the user's primary location AND
- Any sites related to the user primary site (set via the Manage All Locations Sites page.)

In RMM 22.2.0, an administrator, or a user with the proper permission, can explicitly assign additional sites to a user's My Sites list. These additional sites will be accessed wherever My Sites is currently accessed – such as in selectors (such as location selector), searches, and reports.

My Sites – User Preference

In the User Preference page (pictured below), the user can now see and modify the sites which are included in their My Sites list. To modify the list of My Sites, the user must have been granted the *Preference - All Sites/My Site* permission.

User Preferences Page

The My Sites Section displays the list of sites considered to be the user's My Sites. There are three types of sites that that make up My Sites:

- **Primary Location Site** – this is the site of the user's primary location. This site is always part of "My Sites" and cannot be removed from "My Sites". If the user's primary location is changed, the "My Sites" list will be updated to reflect this change.

- **Related Site** – via the Manage Location Sites page, sites can be related to other sites. The Related Site designation indicates that the listed site is related to the Primary Location Site. This site is always part of "My Sites" and cannot be removed from "My Sites". If the user's

primary location is changed, the list of Related Sites will be updated to reflect this change, and show the sites related to the user's new primary site.

- **Added Site** – sites explicitly added to the My Sites list by the user or system administrator.

Accessible Sites Widget and Adding Sites

As in previous release, if the user has the *Preference - All Sites/My Site* permission they will see the "Accessible Sites" widget (labeled "Search Sites" in previous releases). If the "Accessible Sites" widget is visible, then the user may add sites to the My Sites list. If the widget is not visible, then can view the sites (pictured below) but not add sites.

Roles	
⬆ Eds All Permission Roles	

My Sites	Site Type
West Chester	Primary Location Site
Media	Related Site
Oxbridge	Added Site
Philadelphia	Added Site

Adding/Remove Sites to My Sites

Sites may be added or removed to/from a user's My Sites list in the following ways

User Preference Page	Please read the My Sites – User Preference section above.
People Edit Page	Via the People Edit page. No new additional permissions required. An administrator can add/remove accessible sites for individual users. The widget used to add/remove sites is identical to the widget on the User Preference page.
People Operation – Assign Accessible Site	On the People Search page, there is new operation Assign Accessible Site which allows a user to assign an accessible site to a group of users.

This operation requires the new *People Assign People to Search Sites* permission. On upgrade this new permission will be assigned to any role that has the existing *People Assign People to Primary Location* permission.

Note that there is no way to remove an accessible site from a group of users. Sites may be removed from individual users via the People Edit page. |
| **Data Loader and Create Web Person Web Service** | When creating a person via the Data Loader or web service API, the person may be assigned one accessible site. |

Assignment of My Sites and Initial Log In

In previous releases of RMM, a new user could be assigned a primary room. This assignment was done via either People Create page, Data Loader, or create person web service.

If a user was not assigned a primary location, upon log in, they would be prompted to select a room from **ANY** site. (Note that the user must select a room to continue into RMM).

As described in the [Adding/Remove Sites to My Sites](#) section, a user may be assigned accessible sites via the People Edit page, People Operation – Assign Accessible Sites, Data Loader, or web service API. If a new user is not assigned a primary room, but is assigned one or more accessible sites, upon initial log in the user will be prompted to select a room only from their **accessible** sites. If a new user is not assigned a primary room or accessible sites, the user will be prompted to select a room from **ANY** site.

User Guide

When selecting an initial location via the User Preference page, the user may access a user guide via the (shown below) which will guide them through the location selection process.
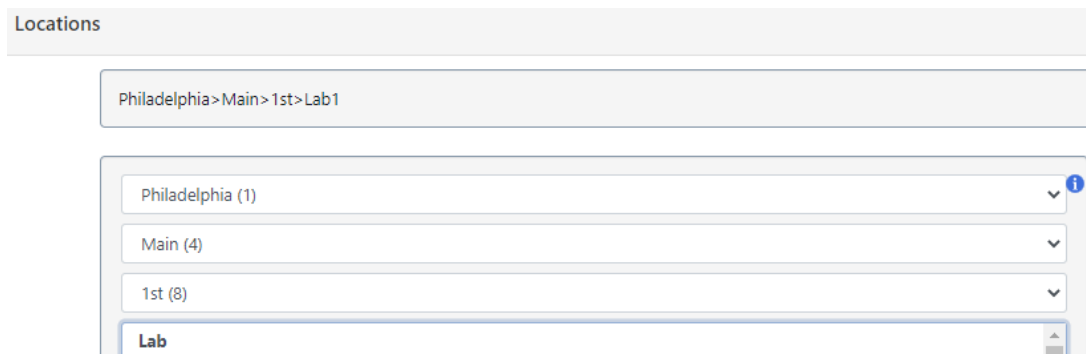
Below is a picture of one of the pages in this guide.
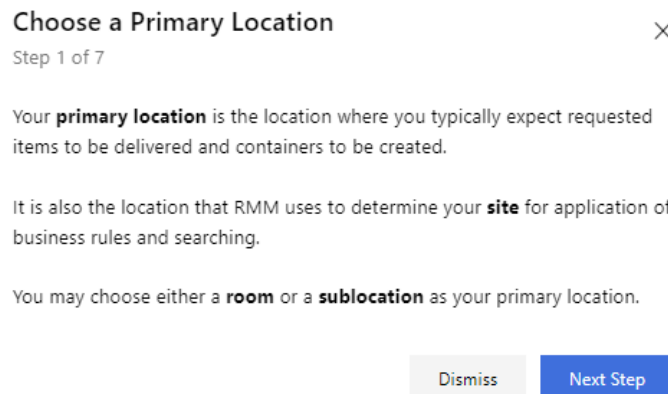
REST WEB SERVICES APIS

There have been several new enhancements to RMM REST Web services.

NEW CONTAINER SEARCH API

This release introduces a new API - the container search API. The API takes the following criteria:

- Container Status
- Owner
- List of Materials
- Dates: Create, Disposed, Expiration, Room Acquire, and Site Acquired
- List of Locations
- List of Bar Codes

The returned data contains more than forty fields detailing information for each container.

For a complete description of the Container Search API, please read the RMM Web Services document.

ENHANCED FUNCTIONALITY

When doing a source search for inventory containers, the LOT # of the container will now be returned. The value of LOT # may be found in the Reserved1 field of the source search results. Please note that LOT # is also returned in the new container search API.

IMPROVED AUDITING CAPABILITIES

Many API's create history records providing an audit trail of transactions. In previous releases, when a history record was generated by the API, the user of record was either "System Manager" or "JAGGER ADMIN". This release introduces a new user "JAGGAERAPI", which will be the user of record on the history records. This allows administrators and other users to clearly see that a transaction was create by the API. The "JAGGAERAPI" user is only used for auditing purposes and **cannot** be used to log into RMM.

Note that, as in previous releases, some API's allow the user of record to be specified. This is helpful when an API is initiated by an end user in a 3rd party system – such as a researcher performing a quantity update in a weighing system external to RMM. In the case of API's that allow a user to be specified, if a user is not specified the "JAGGAERAPI" will be considered the user of record.

PERFORMANCE MONITORING AND REGULATION

With this release RMM improves the monitoring of the number of and duration of API calls. While this information is not available to RMM end users, the monitoring will allow the RMM support team to obtain more insight into situations in which an extraordinary amount of API calls may significantly decrease the performance of the RMM application server.

In conjunction with enhanced monitoring, RMM can now regulate the number of API calls made in any minute to prevent RMM from becoming overwhelmed and degrading performance. Note RMM Support will communicate with the client if rate limits need to be imposed.

DOCUMENTATION

This release offers improved API documentation, including the use of Swagger. Swagger is a 3ʳᵈ party industry leader in providing tools that build, document, and test API's.

The RMM Web Services document has been greatly enhanced to provide detailed API information all in document, where before this information was found in several different documents.

DESUPPORTED API

The MoveContainerToUser web service, while still existing in this release, is no longer supported. Any integrations using this API need to be migrated to use the Container Transfer to Location and Owner API web service prior to the 23.1 release upgrade.

STOCKROOM

STOCKROOM INVENTORY ANALYTICS

A new report, Stockroom Analytics Fast Moving Items report, provides stockroom inventory item demand data for items where current projected demand is at or above average. The report generates data by quarter or by month.

Each row in the report provides the projected stockroom inventory item demand for the current month or quarter in addition to the average demand for that item in a month or quarter. The report is generated in CSV format only.

Stockroom Inventory Items will be included in the report if they have:

- A stockroom request or a kiosk checkout within the lookback period
- Projected demand that is above the input "Threshold Above Average" value

The following table details the available criteria for the report.

Field	Function Field Type	Description
Stock Master	Dropdown	List of stock masters to which the logged in user is assigned.
Period Type	Dropdown	Whether data should be analyzed by month or by quarter. Default: Quarterly
Lookback Number of Periods (Default 8 Quarters or 12 Months)	Text Entry	How many quarters or months of past data should be used to calculate historical demand data. The current quarter or month is not included in this value. If not specified, - If Period Type is Quarterly, the criteria defaults to 8 - If Period Type is Monthly, the criteria defaults to 12
Threshold Percent Above Average (Default 10)	Text Entry	Percent above average that projected demand must be above to be included in the report. Example: If the average demand is 100 and projected demand is 115, the projected demand is "15% above average". This item will be included in the report if the "Threshold Percent Above Average" value is set less than or equal to 15. If not specified, the criteria defaults to 10.

Report Results

The report header includes the selected report criteria in addition to the following values:

Field	Description
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%

The columns in the report detail section are as follows:

Field	Description
Stock Master Item Name	Stock Master item name of the stockroom inventory item.
Stockroom	Stockroom in which the item resides.
Current Demand Units	Current number of units requested from stockroom requests or kiosk check outs in the current period.
Avg Demand Units	Average number of units requested or check out in the look back period.
Projected Total Demand Units this Period	Expected number of units requested or checked out in the current period. Example: assuming the report 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.
Current On Hand	Current stockroom inventory items on hand.
Replenishment Price/Unit	Supplier Price per stocking unit from the primary replenishment specification.

WASTE MANAGEMENT

The following enhancements have been made to Waste Management functionality.

DATES

Manual Setting of Dates

Users may now manually set the Transfer into Accumulation and Pick Up Dates

To manually set the Transfer into Accumulation and Pickup dates, the user selects one or more items from the waste item search results and select the Update Waste Item Dates operation (pictured below). . Users with access to the Waste Item Search page can perform this operation.
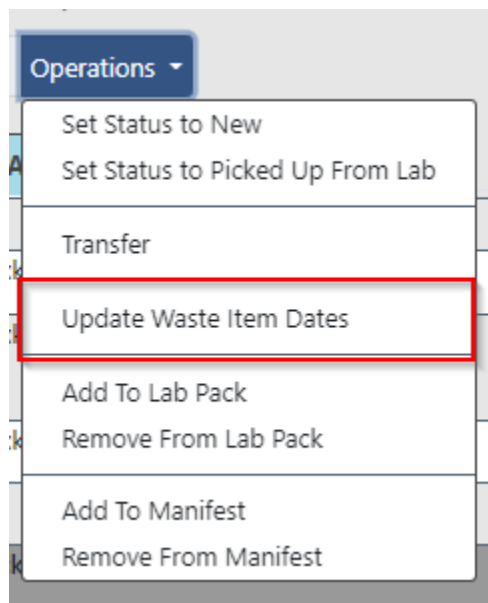
Update Waste Item Dates

Upon the selection of Update Waste Item Dates the Update Waste Item Dates window opens.

Update Waste Item Dates

The popup allows the user to specify the date type to be updated – either "Picked Up" or "Transfer to Accumulation Area". At the bottom of the popup there is a message indicating the condition under which dates can be set. These conditions are

- For Picked Up Date, item(s) must have been Picked Up and the selected Pick Up Date must be less than or equal to the current Transferred to Accumulation Date.

- For Transferred to Accumulation Date the item(s) must have status of "In Accumulation" or "Offsite". The selected Transferred to Accumulation Date must be greater than or equal to the current Picked Up Date and less than or equal to current Shipped Offsite Date.

The update dates operation will attempt to update each item selected. After completion of the operation the user will receive status messages showing the success or failure of the operation (example shown below). If messages indicate one or more items were not updated, the user must examine the dates on the selected items to see if they were updated.
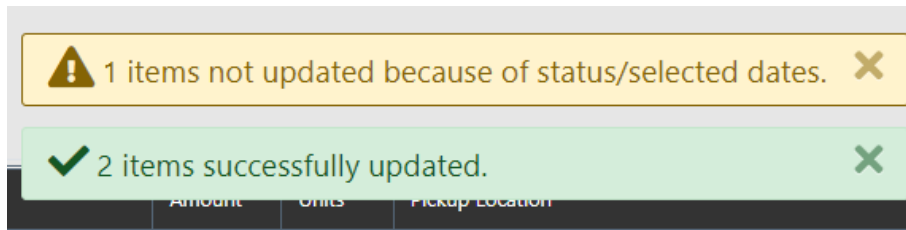
Status Messages for Date Operation

Additional Date Enhancements

The following are additional enhancements with respects to dates:

A new column, "Days Since Picked Up", has been added to the Waste Item Search results and the Waste Item report. The column gives the number of days from the current date since the status of the item was changed to Picked Up.

The "Days in Accumulation" column name has been renamed to "Days in Current Accumulation Room" on both the Waste Item Search Results page and the Waste Item report.

HISTORY

Since the introduction of Waste Management functionality, history of waste items has been tracked and could be accessed by RMM Support. However, in previous releases, the user could not view the history. Item history is now viewable via the history icon (highlighted below) on the Waste Item Search page.
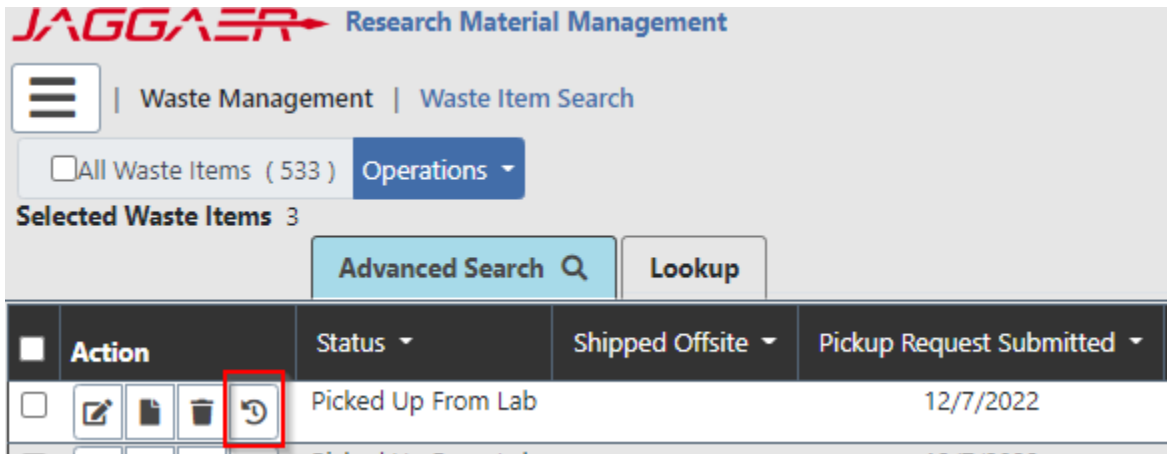
Waste Item Search Page with History Icon

When the history button is selected, the history for the item is displayed on a separate tab. An example of item history is shown below.
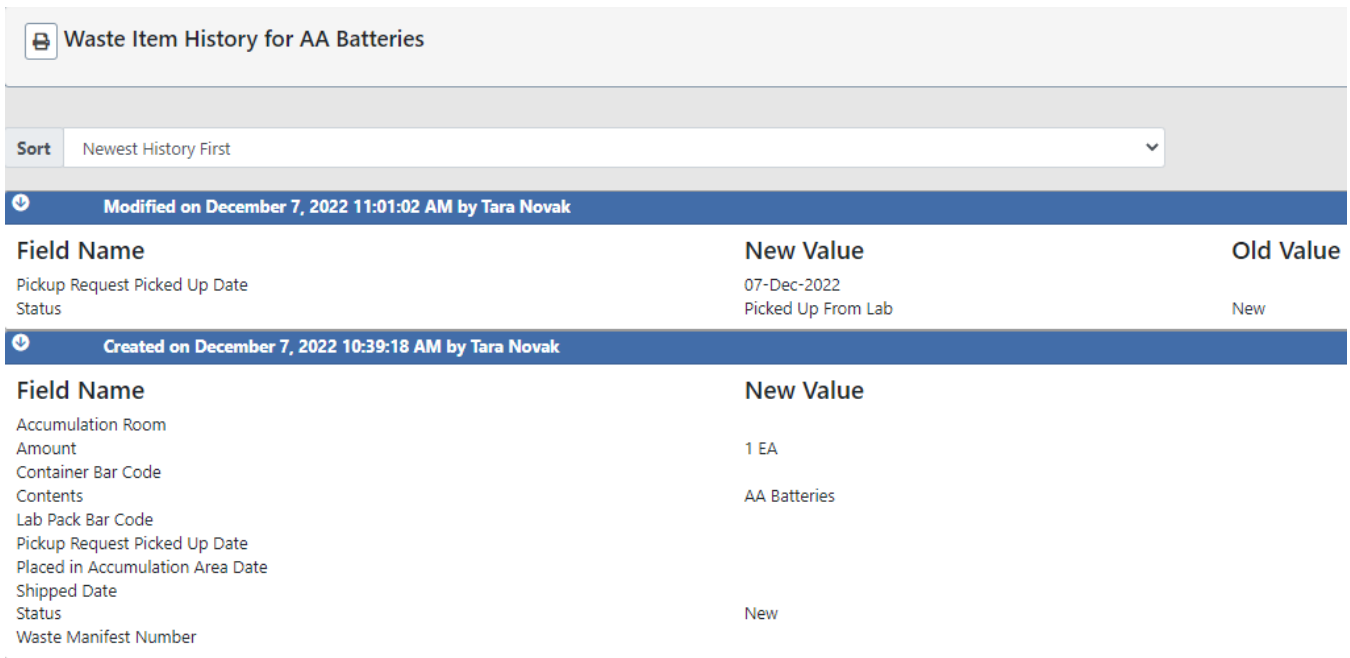
Waste Item History

Handheld Operations

Request for Waste Pick Up items may now be processed on Handheld Computers. Pick up requests may be processed either by Pick Up Request Number or by Pick Up Building.

When a user enters the Pickup Request number, all the items associated to that item will appear for further processing.

When a user enters the Pickup by Building, all the items waiting to be picked up are displayed for the selected building. The user then selects the individual items to be picked up.

A full description of this new Handheld Operation is described in the RMM HandHeld Application Guide For Mobile Computers.

OTHER ENHANCED CAPABILITIES IN RMM 22.2

This section lists other enhanced capabilities found in RMM 22.2

APPROVALS

There is now a new approval status – "Close Not Reviewed". This status indicates that no explicit action was taken on the approval but other approvals on the item were rejected.
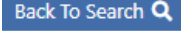
Following is an example of when this status would be applied.

- User U creates shopping cart item needing "New Material" and "Type In" item approval.
- User A has permission to grant "New Material" approval but **NOT** "Type In" item.
- User A rejects the item
- The status of the item is "Canceled"
- The status of the "New Material" approval on the item is "Rejected"
- The status of the "Type In" approval in previous releases would remain "Pending RMM Approval". In this release the status will be set to "Close Not Reviewed".

Note on Upgrade

During upgrade, for a given requisition item, if a requisition item has at least one approval with a status of "Rejected" and the status of any other approval linked to that item has a status "RMM Approval Open" or "External Approval Open" the upgrade process will automatically set the status for those approvals to "Closed Not Reviewed".

CONTAINER EDIT

On the Container Edit page, there is now a button that will return the user to the container search results.

HELD CARTS

A history record will be generated when a held cart is deleted. While this history is not accessible via RMM, it may be retrieved by contacting JAGGAER support.

INVENTORY RECONCILIATION

There have been two enhancements with regards to container inventory reconciliation.

Inventory Statistics

Inventory statistics are now available for

- Sub-location level (previously on available for room level)
- Partial Reconciliation (previously only available for full reconciliation)

Reconciliation Level

When doing a Container Inventory Reconciliation, the user can reconcile either at the room or sub-location level. In previous releases, the reconciliation level always defaulted to the room level. In this release, RMM can be configured to have the default either at the room or sub-location level. This configuration needs to be done by RMM Support. Please contact RMM Support to set this configuration.

Export

When exporting data from the Inventory Reconciliation page, the name of the user in addition to their ID will be exported.

RECEVING

Search Results

Three additional columns have been added to the Receiving Search Results and Receiving Work List. They are PO Line #, CAS #, and Other ID. The Other ID column is a structure identifier – such as MFCD #. The actual structure identifier that populates the Other ID is dependent on the source of the item.

Note that by default these columns are hidden but may be turned on via the Grid Preferences for the search and work list pages.

Notification

The following three fields have been added to the Receive Notification: CAS#, Other ID, and PO Line #. The Other ID field is a structure identifier – such as MFCD #. If the notification has been locally customized, these new fields will not automatically appear in the notification and must be manually added for them to appear.

PO Assignment

The PO Number and Line number may now be updated via the Edit Purchase Order number on the Receiving Work List (pictured below)
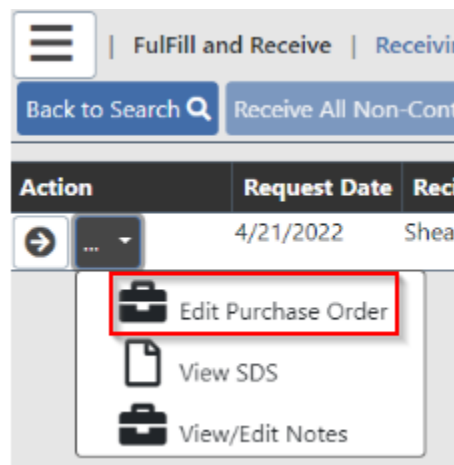
Previously once a PO was assigned it could not be edited. The new Edit Purchase Order function requires the existing *Receive Assign/Edit Purchase Order* permission, which is also the permission required to initially assign a purchase order. The *Receive Assign/Edit Purchase Order* permission was formerly named *Receive Assign Purchase Order.*

Note that a Purchase Order number cannot be assigned or edited once an item has been received full or received partial.

STRUCTURE SEARCH

Marvin JS

The version of Marvin JS used within RMM has been updated from 20.3.0 to 22.6.1. Note that Marvin JS is licensed separately from ChemAxon.

Search by SMILES

On the Structure Search page, users can now search by a list of SMILES via the SMILES tab. The user may import or paste a list of SMILES. The SMILES strings will be converted to mol files, and then an exact search will be done on those mol files.

When search by SMILES, a maximum of 50 SMILES may be searched for against the JAGGAER and eMolecules structure databases.
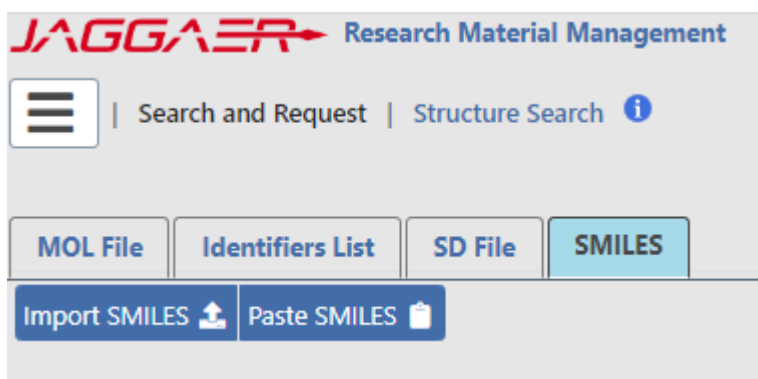
Search by SMLES tab

USER PROFILES

A user profile may be specified for a new user via the data loader on the People Create template. Previously a user profile could only be specified when creating a person via the Person Create/Edit page.

Note that neither the People Update data loader template nor the Create Person Web Service API supports the user profile attribute.

INFRASTRUCTURE

Lab Balance Component

RMM communicates with electronic balances (scales) by installing a communication component on computers that are connected to the electronic balances. New installations of this communication component require Oracle JRE 1.17 or OpenJDK 17. Current installations of the Lab Balance component are not required to upgrade this component, and if not upgraded, can continue to run Oracle JRE 1.8 or OpenJDK 8.

Remove Driver

The RMM Remote Driver is an optional module for RMM in a hosted environment which is deployed inside the client's firewall and allows hosted RMM to access structure databases and external catalogs located inside the client's firewall. Not all installations use the remote driver. New installations of the remote driver require Oracle JRE 1.17 or OpenJDK 17. Current installations are not required to upgrade the remote driver, and if not upgraded, can continue to run Oracle JRE 1.8 or OpenJDK 8.

CLIENT REPORTED ISSUES ADDRESSED

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

Function	Summary	Internal Tracking #	Sales Force #
Container Operation Changing Unit of Container	Changing the unit of a container via Container Search removed the container's storage code.	ERM-19193	02864704
Container Operation Transfer	When container with a status of "In Transit" was transferred into its current location, the status of the container is updated to "Available", but no container history record is generated. A history record will now be generated.	ERM-15981	02816364
Inventory Reconciliation	Inventory records at Sub Location Level were unable to be deleted.	ERM-18922	02699330 02789435
Inventory Reconciliation	When exporting reconciliation files, the data was combined with previous selections, even if those files were not selected at time of export.	ERM-19043	02760806
Material Edit	In material edit, aliases that contain the single quote character (`'`) could not be deleted.	ERM-17231	02821948
Material Edit	In material edit, saving a material would convert the material's formula to all upper case	ERM-18999	02732456
People Operation Assign User Profile	Via People Search, performing Assign User Profile for all users (not just all users on page) generated an error.	ERM-19265	02900962
Scan Operations and Scan Operations Kiosk	Scanning multiple containers took a significant amount of time	ERM-19098	02806256 02800022
Structure Display on Source Search	For channels other than labs, storerooms, stockrooms, Hosted Catalogs, or eMolecules, structures would not be displayed if the channel only had a proprietary id, and neither a CAS nor MFCD #	ERM-18904 ERM-19282	02456087
Structure Editor	Issues when using some features of the ChemDraw Version 21 structure editor	ERM-19188	02837004
User History	If an administrator changed any of the following information for User A via the People Edit page, and then User A changed the same information via the User Preferences page, people history would show that administrator made the change as opposed to the user: • Primary Location • Name • phone	ERM-19298	02908712

Function	Summary	Internal Tracking #	Sales Force #
	- email - User Profile - UserID - EmployeeID		