Chapter 4: Inventory Manager

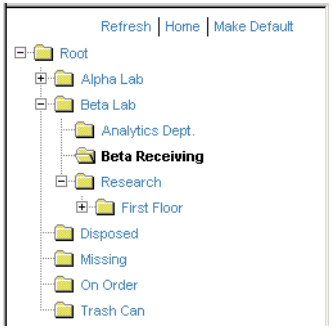
Overview

Inventory Manager is a ChemOffice WebServer based application designed to manage the reagent tracking needs of chemical and pharmaceutical research centers. The system manages data associated with both commercially procured and internally produced chemical substances from their procurement or initial production through their depletion and disposal.

The three primary entities in the system are *Locations*, *Containers*, and *Substances*.

Location

An inventory *Location* represents a physical location where one or more *Containers* may be stored. Locations can be nested within other locations to produce a hierarchy. The location hierarchy is represented as nested folders on a tree control analogous to that found in the Windows file explorer. Following is an example of a typical location tree:



For a complete list of attributes see “Record Fields” on page 321.

Container

An inventory *Container* represents a physical container capable of storing chemical substances. While a Container may physically contain a complex mixture of chemical substances, the Inventory Manager only allows for the assignment of a single (primary) chemical structure to each *Container*. Additional text fields are available to track other chemical contents such as the solvent, or other (secondary) chemical substances associated with the Container. Typical containers include: bottle, vial, tube, cylinder, box, etc...

For a complete list of attributes see “Record Fields” on page 321.

Substance

An inventory *Substance* represents a single pure chemical entity which can be expressed as a two dimensional chemical structure drawing. The system maintains its own internal chemical structure database containing unique substances that can be associated with inventory *Containers*. highly advanced duplicate checking is incorporated in the system. A single *Substance* may be associated with each inventory *Container*. Aside from structure and name, substances can be identified via unique registry numbers such as CAS or ACX ID.

If the Inventory Manager is integrated with the Registration System and/or ChemACX, substances found in either system can also be associated with an inventory container.

For a complete list of attributes see “Record Fields” on page 321.

Searching Inventory Manager

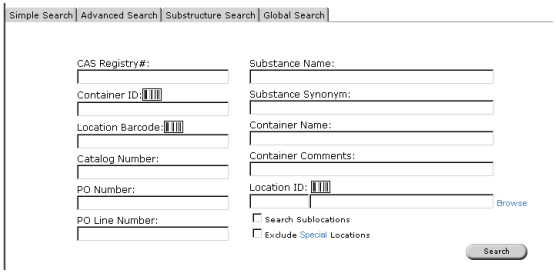
Searching is the easiest way to find particular substances or containers in Inventory Manager. The system allows for combined chemical and text searches of all attributes associated with a *Container*. Several search forms are available to accommodate the search preferences of different users. For example, the *Substructure Search* form which allows searches based on chemical structure, substance name, CAS number and other attributes is particularly well suited for use by chemists. Similarly, the *Advanced Search* form which exposes fields such as container and location barcode is particularly well suited for use by stock room or receiving room personnel.

The *Global Search* form allows the user to search over the Inventory Manager, Registration System, and ChemACX databases simultaneously if all three applications are installed on the server.

Four distinct search forms are available from the homepage of the Inventory Manager through the use of tabs. Click on the tab indicating the type of search you would like to perform, and enter your search parameters.

Simple Search

The simple search option allows searching through the use of CAS number, Container barcode, Location Barcode, Catalog number, PO number, Substance Name, Substance Synonym , Container Name, Container Comments , and Location ID .



How to search:

1. Enter the desired information to search for. For more information about entering search criteria, see “Searching ChemOffice WebServer Applications” on page 4.
2. Select the **Search Sublocations** checkbox if you want to search all sublocations of the chosen location.
3. Select the **Exclude Special Locations** checkbox if you want to exclude special locations.
4. Click Search in the toolbar.

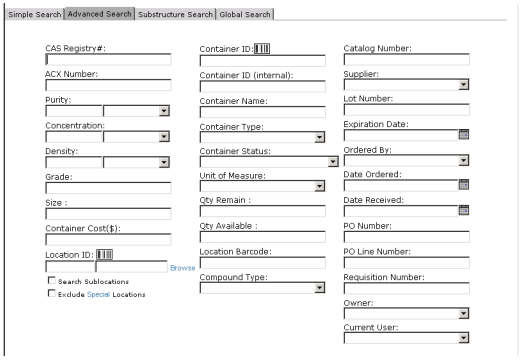
A list of containers matching your search parameters is returned. Clicking on one of the containers will allow you to view, the location of the container (left frame), container information (upper right frame), and the contents of the container (lower right frame).

Advanced Search

The advanced search option allows searching through the use of CAS number, ACX number, Purity, Concentration, Density, Grade, Size, Container Cost, Location ID , Container ID (barcode), Container ID (internal), Container Name,

Container Type, Container Status, Unit of Measure, Qty Remain, Qty Available, Location Barcode, Catalog number, Supplier, Lot Number, Expiration Date, Date Ordered, Date Received, PO Number, Owner ID , Current User ID, and Compound Type.

This search concentrates more on container properties as opposed to substance properties.



How to search:

1. Enter the desired information to search for. For more information about entering search criteria, see “Searching ChemOffice WebServer Applications” on page 4.

   Additional fields may appear on this search form. Any additional fields have been defined for your site. Please see you system administrator for more details.

2. Select the **Search Sublocations** checkbox if you want to search all sublocations of the chosen location.

3. Select the **Exclude Special Locations** checkbox if you want to exclude special locations.

4. Click Search in the toolbar.

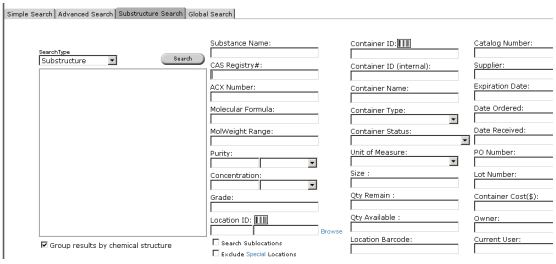
A list of containers matching your search parameters is returned. Clicking on one of the containers will allow you to view, the location of the container (left frame), container information (upper right frame), and the contents of the container (lower right frame). Please see “Container Management” on page 66 for more information.

Substructure Search

The substructure search option allows searching through the use of all of the attributes in the Advanced Search in addition to Substance Name, Molecular Formula, MolWeight Range, and of course, Substructure.

To allow you to draw your substructure, a ChemDraw Plugin will open along with this search tab. For more information about using the ChemDraw Plugin, see Drawing Chemical Structures in the ChemDraw User's Guide.

Additionally, the structure drawn can be searched for assuming it to be a Substructure, the Exact Structure, or with Tanimoto Similarity. Select the correct type under Search Type.



How to search:

1. Enter the desired information to search for. For more information about searching, see “Searching ChemOffice WebServer Applications” on page 4.

2. Select the **Search Sublocations** checkbox if you want to search all sublocations of the chosen location.

3. Select the **Exclude Special Locations** checkbox if you want to exclude special locations.

4. Select the **Group results by chemical structure** checkbox if you want results grouped by chemical structure.
5. Click **Search** in the toolbar.

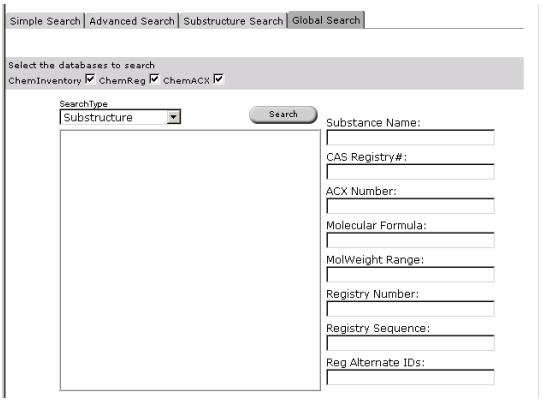
A list of substances matching your search parameters is returned. Clicking on the details button of one of the substances will allow you to view, all of the inventory containers that contain that substance. For information about Searching for substances and their properties, see“Searching for a Substance” on page 64.

Deselecting the "Group results by chemical structure search box" will lead directly to a list of containers matching the search criteria (bypassing the substance grouping).

Global Search

The Global Search form allows users to search over the Registration System, ChemACX, or both, simultaneously with an Inventory Manager search. When results are returned, Inventory, Registration, and ACX results remain separate, but the application indicates if the retrieved substance is found in any inventory containers.

The global search option allows searching through the use of Substance Name, CAS number, ACX number, Molecular Formula, MolWeight Range, Registry Number, Registry Sequence, Reg Alternate IDs, and Substructure.



How to search:

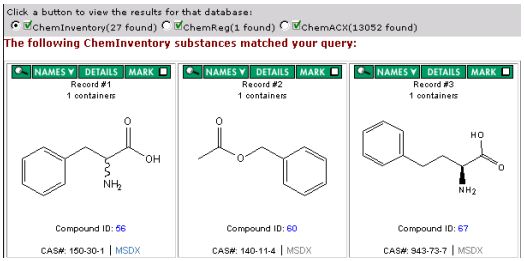
1. Select the checkboxes next to the applications you would like to search over.
2. Enter the desired information to search for. For more information about entering search criteria, see “Searching ChemOffice WebServer Applications” on page 4.

   Additional fields may appear on this search form. Any additional fields have been defined for your site. Please see you system administrator for more details.
3. Click Search in the toolbar.
   A list of substances matching your search parameters is returned.
4. Click on the radio button next to the appropriate application to see results retrieved from that application. For more information, please see “Viewing Results from a Global Search” on page 61.

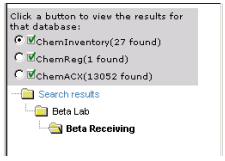
Viewing Results from a Global Search

Search results from a global search are split into three lists, one for each application. To access results from an application, select the radio button next to the application's name. Results are initially listed by substance. To view the results by container, click the **Details** button for a substance. The Details button is only active if there is an associated container.

Browse Results by Substance



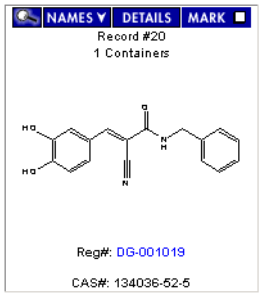
Browse Results by Container



To retrieve Registration System or ChemACX data for a substance, click the linked Registration number or ACX number respectively.

Global Search - Registration System Substances

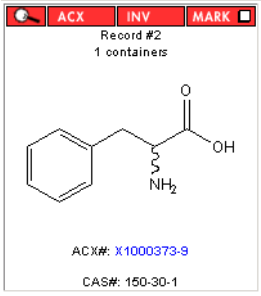
Inventory result records for Registration System substances use a blue color scheme to identify themselves. These substances are linked directly to the Registration System to allow the user to retrieve Registration data from Inventory Manager.



- Click the linked Reg# to view the record for this substance in the Registration System
- Click **Names** to view a list of alternate IDs for the substance.
- Click **Details** to view containers with this substance
- Click **Mark** to mark the record. For more information about marked records, please see "Marking and Unmarking Records" on page 14.

Global Search - ChemACX Substances

Inventory result records for ChemACX substances use a red color scheme to identify themselves. These substances are linked directly to ChemACX to allow the user to retrieve ACX data from Inventory Manager.



- Click the linked ACX# to view the record in ChemACX
- Click **ACX** to view the record in ChemACX
- Click **Inv** to view containers with this substance

- Click **Mark** to mark the record. For more information about marked records, please see“Marking and Unmarking Records” on page 14.

Plate Search

The plate search option allows searching through the use of Substructure, Substance Name, CAS Number, ACX Number, Molecular Formula, MolWeight Range, Purity, Concentration, Solvent, Location ID, Plate Barcode, Plate ID (internal), Plate Name, Plate Type, Plate Status, Unit of Measure, Qty Remaining, Qty Initial, Molar Amount, Supplier Name, Supplier Shipment Code, Supplier Shipment Number, Supplier Shipment Date, Date Created, Plate Format, Library, Plate Group, and Freeze/Thaw Cycles.

How to search:

1. Enter the desired information to search for. For more information about entering search criteria, see“Searching ChemOffice WebServer Applications” on page 4.
2. Select the **Search Sublocations** checkbox if you want to search all sublocations of the chosen location.
3. Select the **Exclude Special Locations** checkbox if you want to exclude special locations.
4. Click **Search** in the toolbar.

   A list of plates matching your search parameters is returned. Clicking on one of the plates will allow you to view, the location of the plate (left frame), plate information (upper right frame), and the contents of the plate (lower right frame).

Substance Management

The substance management area of Inventory Manager is available in the uppermost toolbar of the homepage.

This area allows users to search for substances by substructure, registration numbers, and other physical properties. Although similar to the types of searches found on the homepage, this area concentrates on the searchable aspects of substances and returns a table of substances as opposed to containers.

If you have the appropriate privileges, in addition to allowing you to search for substances previously entered, this area also gives you the opportunity to add a new substance to the database. This option is available after entering the substance management area and clicking on Add Mode.

Creating a New Substance

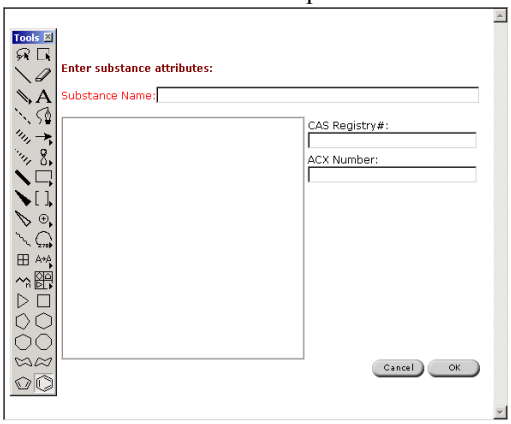
To see if you have the appropriate privileges to create a new substance, see roles and privileges.

The "New Substance" form is available in the Substance Management area of Inventory Manager. To reach this form, do the following:

1. From the homepage, click Manage Substances.
2. Click **Add Mode**.

   This form is also available from the New Container Substance Tab.

Please see “Record Fields” on page 321, for more information about a particular field.



How to create a new substance:

1. Enter information about the new substance. For more information about individual fields, please see “Record Fields” on page 321.

   NOTE: *More fields may appear in your form. These forms are customized for your site. Please see your system administrator for more details.*

2. Click **Add Record** in the toolbar.

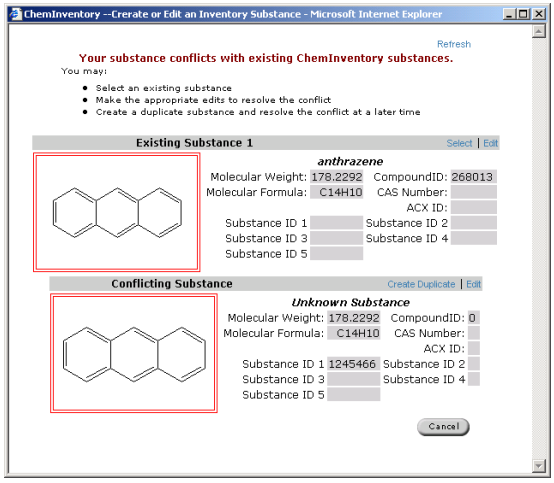
   If a conflict is recognized in the system (i.e. the same structure or Substance Name), the Conflict Resolution page (see “Conflict Resolution - Select” on page 63 for more information) appears. Otherwise, the substance is added.

3. Click **OK**.

New Substance Conflict Resolution

The New Substance Conflict Resolution is used to flag and correct duplicates in the system. After creating a new substance in Inventory Manager, the Conflict Resolution page appears if there is a conflict in any unique fields. Unique fields are defined by the system administrator, but by default are substructure, Substance name, CAS number and ACX number. This only checks conflicts within Inventory Manager, not with Registration System and ChemACX.

If a conflict is found, a page like this one appears:



The conflicting field is highlighted in red. In the example above, the existing substance and the conflicting substance (which is being added) share the same substructure.

From here, the user has three options:

- Select an existing substance.
- Edit the conflicting substance or the existing substance so there is no longer a conflict.
- Create a duplicate substance and resolve the conflict later.

Conflict Resolution - Select

The option to select an existing substance and abort the new substance creation, is only available if the user is currently creating a new container. This option is not available from the Substance Management area of the application.

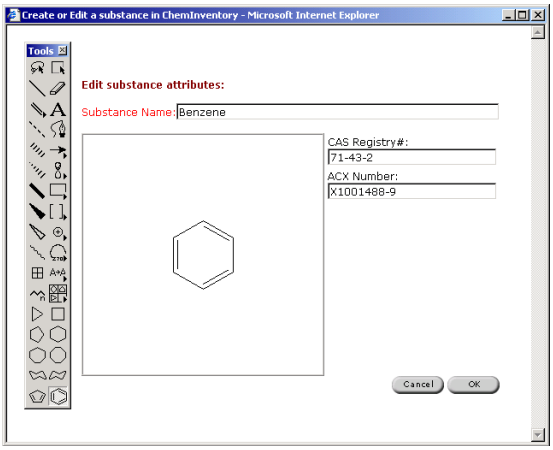
To select one of the existing substances rather then adding a new substance, click **Select** in the grey header bar above the substance you would like to select. You will be returned to continue creating a new container with the substance inserted.

Conflict Resolution - Edit

To edit the duplicate substance or an existing substance:

1. Click **Edit** in the grey header bar above the appropriate substance.

   The substance record appears.



2. Edit the appropriate fields.
3. Click **OK**.

Conflict Resolution - Create Duplicate

The option to create a duplicate by adding the new substance regardless of the conflict, is only available if the user is currently creating a new container. This option is not available from the Substance Management area of the application.

To create the duplicate, click **Create Duplicate** in the grey header bar above the conflicting substance. You will be returned to continue creating a new container with the substance inserted.

Creating a duplicate is not recommended, but is an option. To later search for all duplicates in the system, select System Duplicates from the Compound Type listbox in the Advanced Search form.

Creating Inventory Substances from Registration System and ChemACX

Inventory substances can be crested from both the Registration System and ChemACX. If this option is not available from your instance of the Registration System or ChemACX, please see your system administrator.

Please see the User's Guide for the appropriate application for instructions in using these functions.

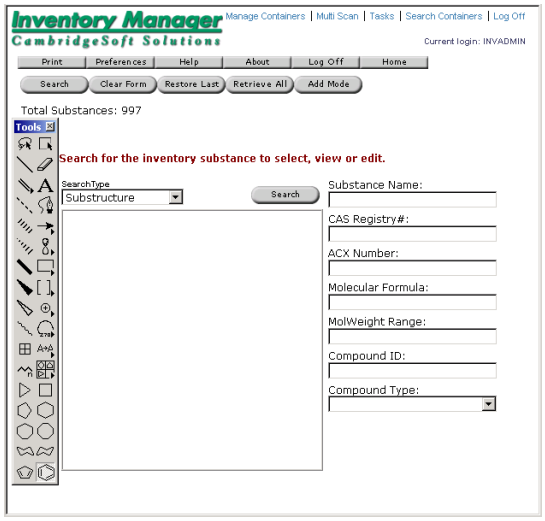
Searching for a Substance

A form made to make finding a substances easier is available in the Substance Management area of Inventory Manager. To reach this form, simply click Manage Substances from the homepage.

This form is also available when clicking on the Select Substance Link in the New Container Substance Tab. For more feminization, please see "New Container Substance Tab Form" on page 65.

This form is a simplified version of the Substructure Search form found on the homepage. The following attributes are available to search under from this page: Substructure, Substance Name, CAS number, ACX number, Molecular Formula, MolWeight Range, Compound ID, and Compound Type.

Please see “Record Fields” on page 321 for more information about a particular field.



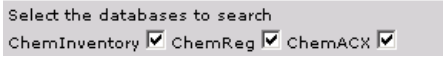
How to search:

1. Enter the desired information to search for. For more information about searching, see “Searching ChemOffice WebServer Applications” on page 4.
2. Click **Search** in the toolbar.

   A list of substances matching your search parameters is returned. Clicking on the details button of one of the substances will allow you to view, all of the entered properties of the given substance.

New Container Substance Tab Form

If accessed through the New Container Substance Tab, the following bar appears at the top of the form:



The bar allows the user to search over all three applications simultaneously. For more information about global searches, please see “Global Search” on page 60.

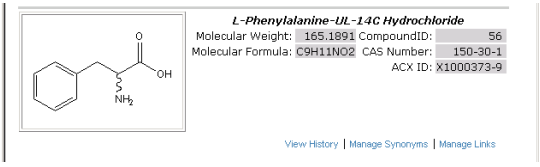
After the search is performed, select the Details button for the correct substance, and click **OK** to insert the substance in your new container.

Editing a Substance's Details

To edit a substance:

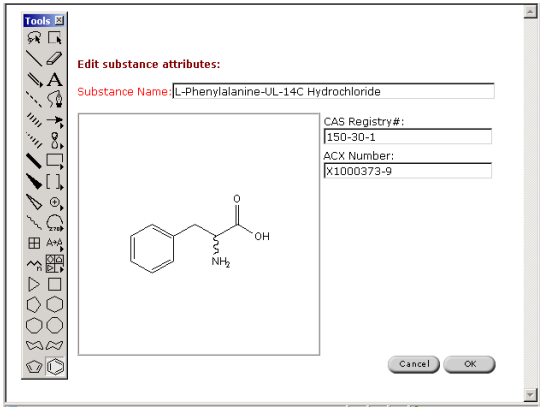
1. Perform a search and click on the **Details** button for the substance.

   A page appears displaying all retrieved details for the appropriate record.



2. Click **Edit Mode**.

   The record appears in Edit Mode.



3. Enter or edit the appropriate information.
4. Click **OK**.

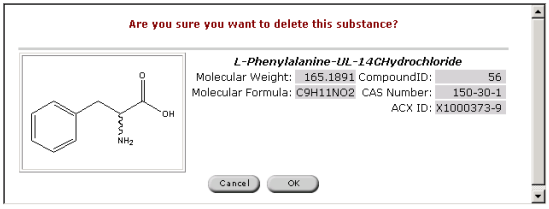
NOTE: *If a duplicate for any required field is found in the system, the conflict resolution page appears. Please see “New Substance Conflict Resolution” on page 63 for more information*

Delete a Substance

To delete a substance:

1. Perform a search and click on the **Details** button for the substance.
2. Click **Delete Record**.

   A page appears asking for confirmation.

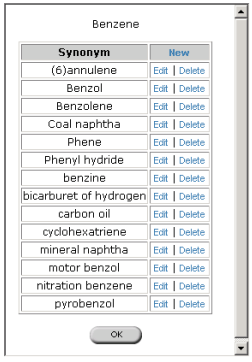


3. Click **OK**.

Synonym Management

The synonym management area of Inventory Manager is available as part of substance management. To access this section, please take the following steps:

1. From the Substance Management area, access the search form.
2. Perform a search for the appropriate substance.
3. While in list view, click the **Details** button for the substance.
4. Click on the Manage Synonyms link.



   The Synonym Management window opens.

This area allows you to add new synonyms for a substance, edit the synonyms which are already listed, or delete a synonym from the list.

After accessing the Synonym Management window, to add a new synonym:

1. Click **New**.

   A text field allowing the addition for a synonym appears.

2. Enter a synonym.
3. Click **OK**.

To edit a synonym:

1. Click **Edit** next to the synonym to be edited.
2. Edit the name of the synonym.
3. Click **OK**.

To delete a synonym:

1. Click **Delete** next to the appropriate synonym.
2. If you want to delete this synonym from the list, Click **OK**.

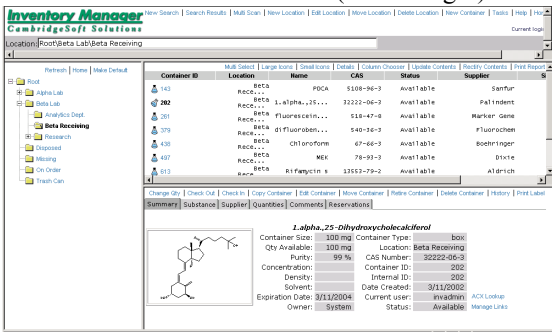
Container Management

The container management area of Inventory Manager is available in the uppermost toolbar of the homepage.

This area is split into 4 frames, shown below:

- Current Location Frame (top)
- Location Tree Frame (left)
- Container List Frame (top right)

- Container Contents Frame (bottom right)



Location Management

A location is defined as any "place" that a container can be stored. This includes a shelf, a refrigerator, or even a particular laboratory. Different facilities can decide how best to organize locations. For more information about locations, please see “Location Tree Frame” on page 68.

Current Location Frame

The location text box indicates the currently selected inventory location. Actions performed via the links on this frame apply to the currently selected location. In addition, you may enter a locationID value into the location box to rapidly access a location on the tree. A barcode reader may be used to enter a locationID value into this box, further expediting navigation to a given location.

The following controls and functions are available within the current location frame:

Available to all users:

Function	Description
New Search	Returns to *Search Mode* screen. The last search form selected by the user will be automatically preselected.
Search Results	Returns to last hit list viewed while on *Search Mode*. If no search has been performed the link brings up the search default search form.
Help	Opens the Inventory Manager User's Guide.
Home	Brings the user back to the global login homepage.
Log Off	Logs the current user off.

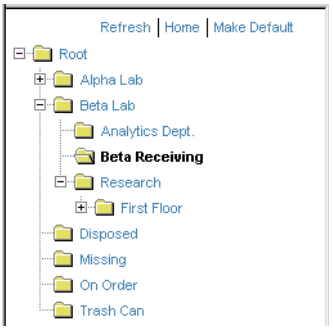
Available to only some users:

Function	Description
New Location	Creates a new inventory *Location* at the currently selected location
Edit Location	Allows setting of the following *Location* attributes: location name, location type, location barcode and location description.

Function	Description
Move Location	Allows moving a location to a different node on the location tree. Enter a location id value or use the browse link to select the destination locations. All containers and sub locations will follow with the moved location.
Delete Location	Deletes the currently selected location. A location must be empty before it can be deleted.
New Container	Creates a new container in the currently selected location. There are five required parameters to create a new container: Location ID, Container Type, Unit of Measure, Container Size, and Initial Amount. The container name and barcode fields will default to an auto generated container id value. Other container attributes can be completed by populating additional tabs on this dialog.
Order Container	Allows the user to enter an order for a container not currently in the Inventory system.
Tasks	Opens a new window listing administrative tasks available.

Location Tree Frame

The location tree control allows navigation of the *Location* hierarchy. Click on the +/- symbols to expand/contract location folders. Click on the location name to display its contents on the container list frame. The refresh link at the top right of the page repopulates the tree from the latest available location data and returns it to its fully contracted position.



Manipulating Locations

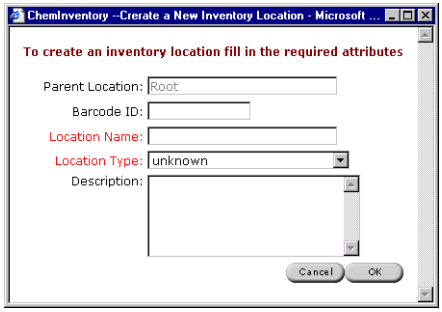
A number of functions are available in the current location frame of the container management area of Inventory Manager:

- New Location
- Edit Location
- Move Location
- Delete Location
- Default Location

Creating a New Location

To see if you have the appropriate privileges to create a new location, see “Role Dependencies” on page 332 and “Privileges” on page 333.

Containers are located in different places throughout a facility. The types of locations necessary in your inventory system is highly dependent upon your setup.



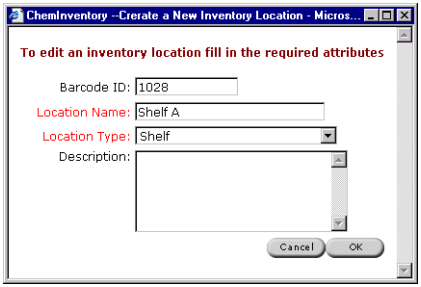
In order to create a new location:

1. From the homepage, click **Manage Containers**.
2. Use the location tree to select where the new location should be created.
3. Click **New Location** in the Current Location Frame.
4. Enter the desired information in the window that opens. For more information about a particular field, see, “Record Fields” on page 321.
5. Click **OK.**

Editing a Location

To see if you have the appropriate privileges to edit a location, see “Role Dependencies” on page 332 and “Privileges” on page 333.

After a location is created, its properties may change. For example, when a particular laboratory was initially arranged, a number of containers were placed on a shelf. As the laboratory grew, it was necessary to move the containers to a cabinet. In order to change the location type in your inventory system, you don't have to create a new location, you can edit the existing location.



In order to change the properties of a particular location:

1. From the homepage, click **Manage Containers**.
2. Browse to the location to be edited in the Location Tree Frame.
3. Click **Edit Location** in the Current Location Frame.

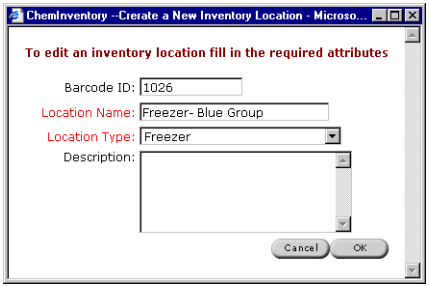
   Make sure the information listed in the window that opens is for the correct location.
4. Enter the desired new information in the window. For more information about a particular field, see, “Record Fields” on page 321.
5. Click **OK**.

Moving a Location

To see if you have the appropriate privileges to move a location, see “Role Dependencies” on page 332 and “Privileges” on page 333.

After a location is created, it may be necessary to move the location to somewhere else in the tree. For example, a refrigerator may have been located in a lab on the first floor, but is being moved to a lab on the third floor. Of course all of the containers inside

the fridge are moved along with it. It is easy to move a location along with all of it's contents in the Chemical Inventory system.



In order to move a location:

1. From the homepage, click **Manage Containers**.
2. Browse to the location to be moved in the Location Tree Frame.
3. Click **Move Location** in the Current Location Frame.

   Make sure the information listed in the window that opens is for the correct location.
4. Enter the new destination for the location to be moved. For more information about a particular field, see, “Record Fields” on page 321.
5. Click **OK**

Deleting a Location

To see if you have the appropriate privileges to delete a location, see “Role Dependencies” on page 332 and “Privileges” on page 333.

If a location needs to be removed from the inventory system, you should use the delete location tool. If the location is merely being moved, see “Moving a Location” on page 69.

In order to change the properties of a particular location:

1. From the homepage, click **Manage Containers**.
2. Browse to the location to be deleted in the Location Tree Frame.

   A location can only be deleted if it is empty, so make sure there are no containers in the location to be deleted.
3. Click **Delete Location** in the Current Location Frame.

NOTE: *You can not undo the deleting of a location.*

Saving a Default Location

The location tree frame allows the user to save a default location. If a default location is chosen, each time the user accesses the Container Management section, the default location will be opened in the location tree frame.

To save a default location, please do the following:

1. From the **Container Management** section, browse to the location to be saved as the default in the **Location Tree Frame**.
2. Open that location by double clicking on the folder icon next to the location name.

   The default location window appears.

3. Click **OK**.

Creating a New Container

To see if you have the appropriate privileges to create a new container, see “Role Dependencies” on page 332 and “Privileges” on page 333.

The "New Container" form is available in the Container Management area of Inventory Manager. To reach this form, do the following:

1. From the homepage, click **Manage Containers**.
2. Click **New Container** in the Current Location frame.

   A window with multiple tabs labeled Required, Substance, Supplier, Contents, Optional, Owner, Comments, and Other (name may vary) opens.

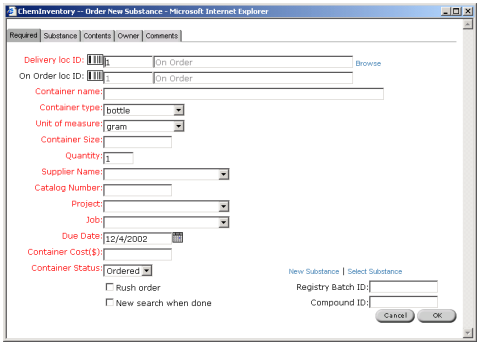
How to create a new container:

1. Enter information about the new container.
2. Click **OK** in the toolbar.

Order Container

Users can enter an order for a container that has not yet been created as part of the Inventory system by clicking on the **Order Container** link. If the container is already in the Inventory system and you would like to reorder the same container, please see “Reorder Container” on page 71.

The following window opens when the Order Container link is clicked:



The Substance, Contents, Owner, and Comments Tabs appear and react just as the tabs with the same name in the New Container window react.

The Required Tab in the Order Container window is also very similar to the New Container window. The Order Container Required Tab does not include all of the fields in that of the New Container Window. Additionally, there are two location IDs: one for the delivery location and one for the on order location.

For more information about a particular field, click on the field in the image above.

To order a container:

1. Click **Order Container** from the **Current Location Frame**.

   The Order Container window appears.
2. Enter the required information and any other information which is desired.
3. Click **OK**.

Reorder Container

Users can reorder any container in the inventory system, if the container is not already on order. If the container that you would like to order is not currently in the Inventory system, please see “Order Container” on page 71.

To reorder a container:

1. Click **Reorder Container**.

   The Reorder Container window appears.
2. Enter the required information and any other information which is desired. For more information about a particular field, see “Record Fields” on page 321.
3. Click **OK**.

Searching for a Container

There is more then one way to search for a particular container. If you have some information about the container, but don't know it's actual location, using one of the search forms is often the easiest way to locate one or more inventory *Containers*. The system allows for combined chemical and text searches of all attributes associated with a *Container*. A search form configured to return

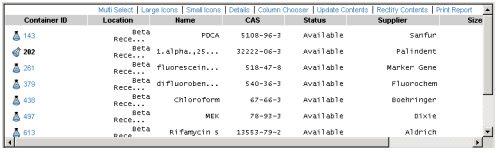
matching *Containers* will result in a hit list comprised of containers matching the search criteria. Containers matching the search criteria appear on the screen as a tabular report which can also be reproduced as a printable report. For more information about these search forms, see “Simple Search” on page 58, “Advanced Search” on page 58, or “Global Search” on page 60.

If you know the location of the container you are looking for, you can use the location tree to navigate through all inventory locations to find the container. The Location Tree is displayed in the Container Management area. For more information about the Location Tree and how to navigate it, see “Location Management” on page 67.

Viewing the Contents of a Container

After performing a search, or navigating through the location tree, a list of containers is displayed. For more information about searching for containers, see “Searching for a Container” on page 71.

Container List Frame



Both the container list frame, found in the upper right hand frame of the Container Management area, and the report displayed after container based search results, show a list of containers with some summary information.

Containers are sorted in descending order by container id, but can be resorted by clicking any of the column headers. The small triangle next to the column name indicates the sorting order. Sorting affects containers regardless of whether they are displayed on the current page.

Each container ID is preceded by a small flask. If the container information is open, the flask tips to the side. Click on one of the containers in the list to see the container details on the frame below.

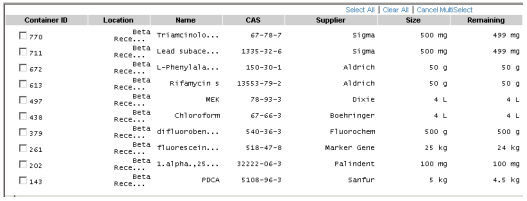
Multi Select

The Multi Select Link changes the container list frame to details view and places a checkbox next to each Container ID. This allows users to select more then one container and then perform one action on all of those containers at once.

For example, if you would like to move 3 containers to a new location:

1. Click **Multi Select**.

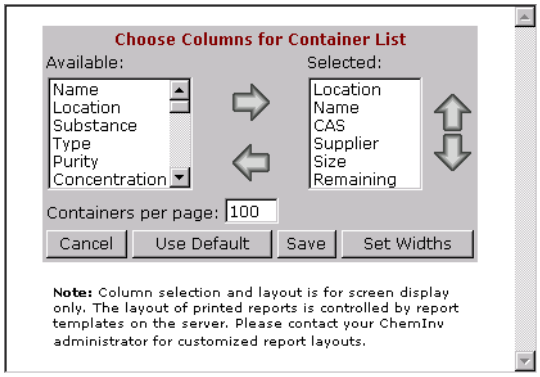
   The containers are listed in Details view with checkboxes next to each container id.



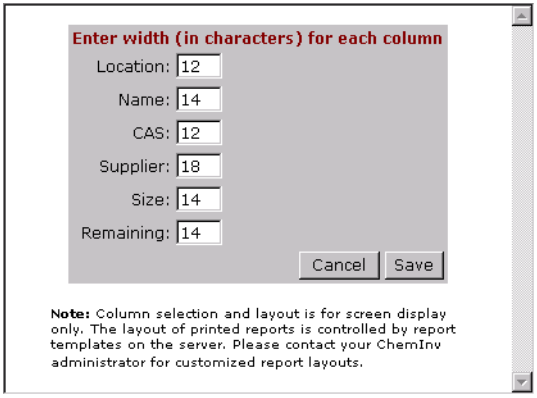
2. Select the checkbox next to any container you would like to move.
3. Click **Move Containers** in the Container Details Frame.

Column Chooser

The Column Chooser window allows the user to customize the appearance of result lists. It allows control over the selection, order, and width of columns to be displayed on screen as well as the number of containers displayed per page.



By clicking the **Set Widths** button, another window opens that allows the user to enter specific widths for each column.



Custom column settings are saved by the user's browser and remembered even after the browser has been closed. The settings available via the Column Chooser affect only the screen report. The appearance of printed reports is controlled by report templates managed by the application administrator. Multiple report templates can be associated with the screen report. Please contact the administrator if you need additional report templates produced.

Update Contents

At times, containers are moved and this is not updated in the inventory system. Update Containers helps users to easily update the system confirming that a container is actually where the system thinks it is.

The Update Contents link opens a window which helps users to keep the list of inventory containers in a particular location up to date. This tool is a casual way for users to confirm the existence of a particular container. If a particular container is not confirmed, no action is taken on that container. For a tool to correct any discrepancies in a location's contents, please see “Rectify Contents” on page 74.

Update contents accomplishes the following:

- confirms that containers are still where the system thought them to be
- moves containers unexpectedly found at that location to that location
- allows for unknown containers to be created at that location.

To update the contents of a location:

1. Open the appropriate location and click **Update Contents** in the **Container List Frame**.

   The Update Contents window opens.

2. Using a barcode scanner, or by manually selecting the checkboxes, select the container ID for each container that is being verified.
3. Click **OK**.

Rectify Contents

At times, containers are moved and this is not updated in the inventory system. Rectify Containers helps users to easily update the system confirming that a container is actually where the system thinks it is.

The Rectify Contents link opens a window which helps users to keep the list of inventory containers in a particular location up to date. This tool is a formal way to correct inventory discrepancies. That is, if a particular container is not confirmed, that container is moved to the Missing Location in Inventory Manager. Rectify Contents is meant to be used on a quarterly or biannual basis during official inventory reconciliation efforts. For a less formal tool which only verifies the existence of a container in a location, please see “Update Contents” on page 73.

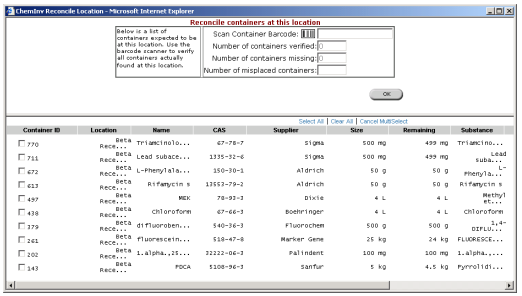
Rectify contents accomplishes the following:

- confirms that containers are still where the system thought them to be
- moves containers unexpectedly found at that location to that location
- allows for unknown containers to be created at that location.
- moves any containers that are not explicitly found to a missing location

To rectify the contents of a location:

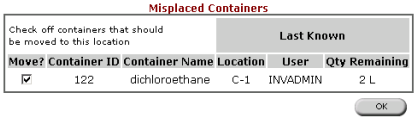
1. Open the appropriate location and click **Rectify Contents** in the **Container List Frame**.

   The Rectify Contents window opens.



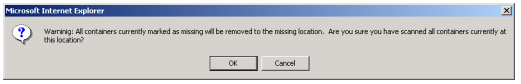
2. Using a barcode scanner, or by manually selecting the checkboxes, select the container ID for each container that is being verified.

NOTE: ***Note:*** *Any container IDs entered that are not currently in this inventory location, are listed in the upper frame.*



3. Select the checkbox next to any containers you would like moved to this location.
4. Click **OK**.

   The following message is displayed if there are containers listed which have not been verified:



5. Click **OK** if you would like containers which have not been verified moved to the Missing Location.

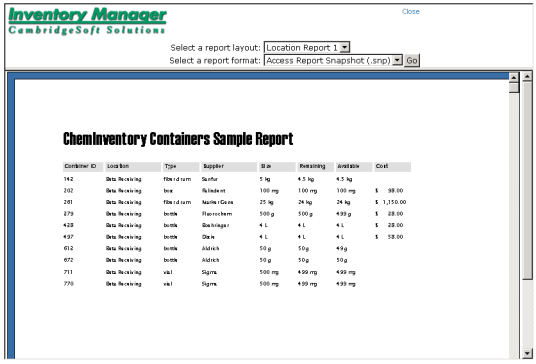
Print Report

The Print Report link, found in the far right of the frame, creates, displays, and gives the option to print a report containing information about the containers listed in the frame.

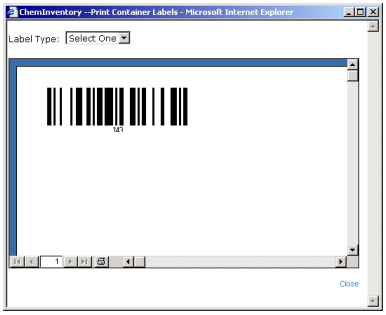
Reports can be printed from three places in Inventory Manager:

- the container list frame
- the container view frame
- the search results window.

All three of these reports are generated in the same way, but display different information. Reports are driven by report templates on the server. Typically the system administrator creates report templates with the appropriate layout and content to be printed. Please contact the administrator if you need additional reports created to satisfy your need. Different templates and formats can be accessed from the list boxes at the top of the report. Once a report is created on the server it can be printed from the browser by using the print icon button in the report viewer window.

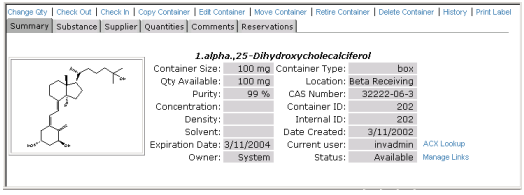


Because reports are printed according to previously created report templates, information in a report is not necessarily the same information displayed in the window or frame that you choose to print. For example, the Print Report link in the container list frame will generate a report about the containers listed in that frame, but the report template may not include the container's cost, while the container list frame displays the container cost.



Container labels are printed via the report writer as well. A label is considered a special kind of report which can include any of the attributes associated with a single container. The report writer is also able to encode any of the container attributes into a scannable barcode.

Container Details Frame



All container attributes are displayed within the *Container Details Frame*. Given the large number of attributes associated with a container, they are subdivided into tabs which group the attributes into more manageable subsets. The first tab includes a summary of the most essential container attributes including container name, container id, barcode, location etc... Other notable tabs include the substance tab, which summarizes the substance attributes and the supplier tab which brings together data related to the purchase of a chemical substance such supplier name, catalog number, lot number, container cost and purchase order number.

Split Container

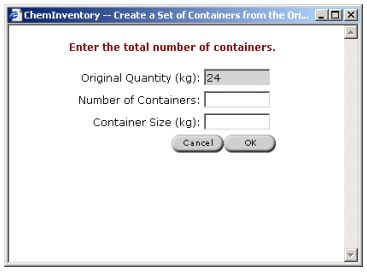
To see if you have the appropriate privileges to split a container, see roles and privileges.

The Split Container function splits contents of the current container into new containers, adding the specified number of new containers. The parent container will be removed (the container is now empty). Quantities in the new containers are updated automatically. When splitting a container, all of the contents must be used so the sum of the quantities of the new containers must equal the quantity of the original container.

To split a container:

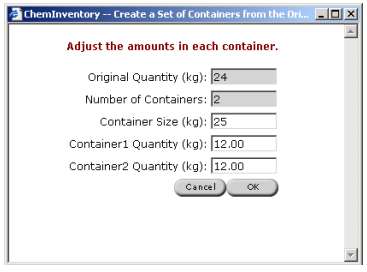
1. Click **Split Container**.

   The Split Container dialog appears.



2. Enter a value for each field. For more information about a field, click on the image above.
3. Click **OK**.

   A quantity field for each new container appears. Note: In the example below, the sum of Container1 Quantity and Container2 quantity must equal 24.



4. Make any changes necessary.
5. Click **OK**.

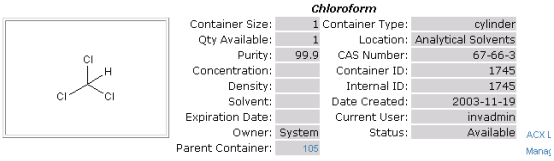
Merge Containers

To see if you have the appropriate privileges to merge containers, see roles and privileges.

The Merge Containers function merges two containers (which have the same parent ID) into one container. If a container has no parent ID, this function is not available.

To merge two containers (with the same parent ID):

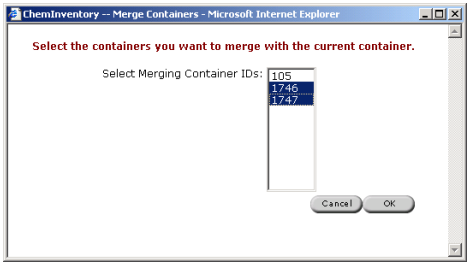
1. Open the first container in Details view.



2. Click **Merge Containers**.

   Note: The Merge Containers function is only available if the container has a Parent ID.

   The Merge Containers window appears.



3. Select the container to merge with the currently selected container. Only the containers with the same parent ID are listed.

Create Samples

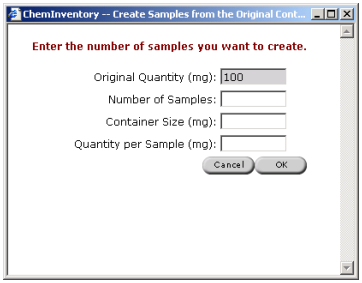
To see if you have the appropriate privileges to create samples, see roles and privileges.

The Create Samples function samples the current container and creates additional containers from that container with a specified quantity. The parent container will remain intact with any remaining quantity. Quantities in the new containers and the parent container are updated automatically.

To create samples of a container:

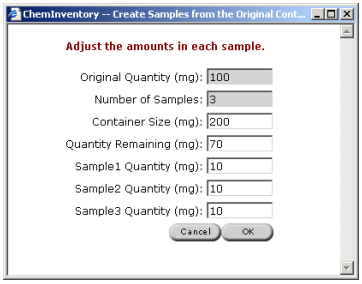
4. Click **Create Samples**.

   The Create Samples dialog appears.



5. Enter a value for each field. For more information about a field, click on the image above.
6. Click **OK**.

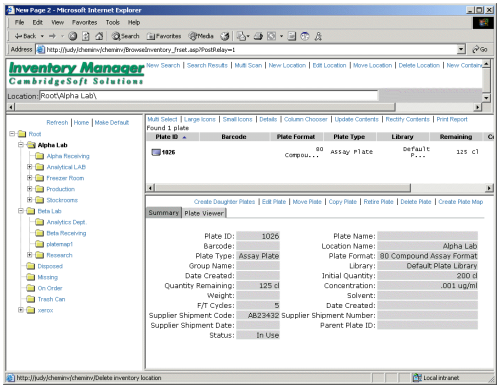
   The quantity remaining field is automatically populated and a quantity field for each new container appears.



7. Make any changes necessary.
8. Click **OK**.

Plate Inventory

Plates are held in locations, much like containers. For this reason, plates are browsed in the same way that any other container is browsed.



Plates are indicated as such in the Container List Frame with a plate icon. When a plate is opened, the Plate Contents Frame is displayed in the bottom right frame.

Plates and Containers can exist in the same location.

Creating New Plates

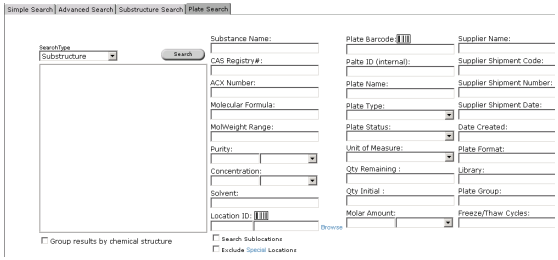
Inventory Manager does not contain the necessary tools to create new plates. Plates are created through the BioAssay HTS interface.

Please see the BioAssay HTS User's Guide for more details.

New Plates can be created from Plate Maps or by copying plates. Please see “Details Frame” on page 78 for more details.

Searching for a Plate

Plates are searched for under the plates tab on the search page. See “Plate Search” on page 62 for more information about the Plate Search Tab.



After performing the search, users are given a list of matching plates.

Viewing the Contents of a Plate

After performing a search, or navigating through the location tree, a list of containers and/or plates is displayed. For more information about searching for plates, see “Searching for a Plate” on page 78.

List Frame

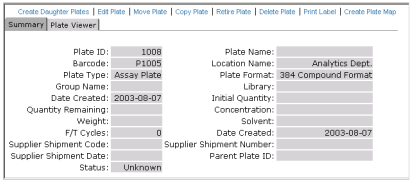
The container list frame lists plates much like it does containers. Plates are distinguished from containers by the plate icon.

Plates are sorted in descending order by plate id, but can be resorted by clicking any of the column headers. The small triangle next to the column name indicates the sorting order. Sorting affects plates regardless of whether they are displayed on the current page.

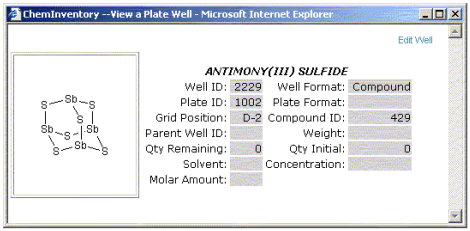
Click on one of the plates in the list to see the plate details on the frame below.

Details Frame

All plate attributes are displayed within the *Details Frame Summary Tab*. It lists all attributes for the plate, common to all wells, including plate ID, Barcode, Plate Type, Plate Name, Plate Format, etc...



The Plate Viewer Tab allows you to view the contents of the plate in a grid. Click on one of the wells to view the details for that well.

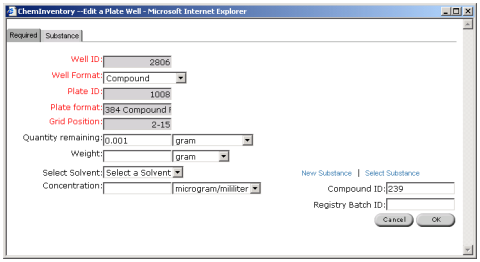


Edit Well

The contents of an individual well can be edited by clicking Edit Well (from the Plate Well View dialog). This gives users the option of editing the attributes of one well at a time. If you would like to edit all wells uniformly, please see “Edit Plate” on page 80.

To edit your well attributes:

1. Click **Edit Well**.



2. Enter the required information.

3. Enter any additional information.
4. Click **OK**.

Create Daughter Plates

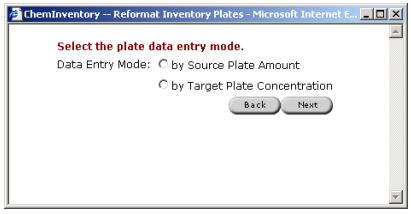
To see if you have the appropriate privileges to create daughter plates, see roles and privileges.

The Create Daughter Plates function allows a user to create any number of daughter plates from a parent as long as the parent plate contains enough contents to fulfill the request. That is, if you would like to create 6 daughter plates taking 10 ml of a substance from the source plate which only contains 10 ml, you will be denied.

To create daughter plates:

5. Search for or browse to the source plate.
6. Open the plate in the Details Frame.
7. Click **Create Daughter Plates**.

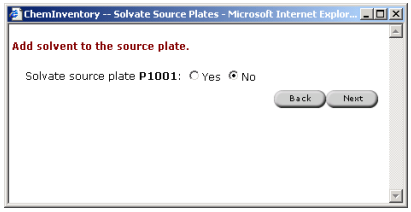
   The Create Daughter Plate dialog appears.



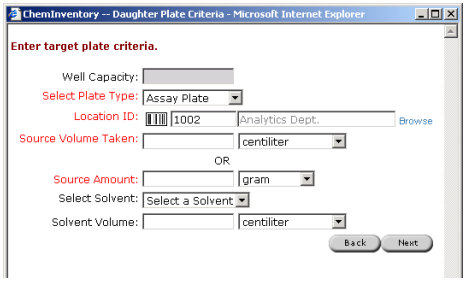
8. Select a radio button:
   - by Source Plate Amount - enter parameters based on what is taken from the source plate
   - by Target Plate Concentration - enter parameters based on the characteristics of the daughter plates
9. Click **Next**.

if by Source Plate Amount was chosen:

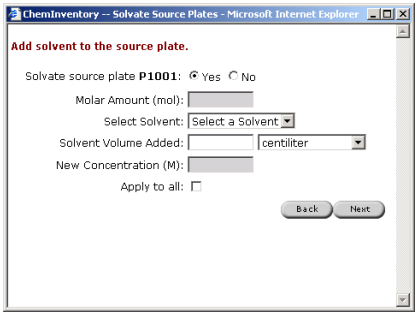
If by Source Plate Amount was chosen, the following screen appears:



1. Select Yes if a solvent will be added to the plate during daughtering.
2. Click Next.
   - **if No:**



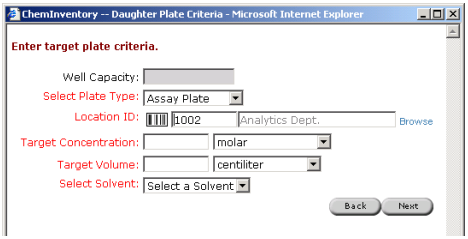
   - **if Yes:**



3. Enter the appropriate information.
4. Click **Next**.

if by Target Plate Concentration was chosen:

If by Target Plate Concentration was chosen, the following screen appears:



1. Enter the appropriate information.
2. Click Next.

Create Plate Map

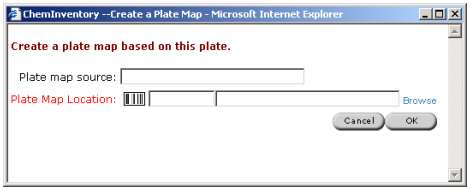
To see if you have the appropriate privileges to create plate maps, see roles and privileges.

The Create Plate Map function allows a user to create a plate map based on the selected plate. Plate maps are virtual representations of plates that are store the plate type, physical plate type, etc of the plate, but most importantly the substance information for each well. Plate maps can only be stored in special plate map locations. New plates can be created from a plate map.

To create a plate map:

1. Search for or browse the plate you wish to create a plate map from.
2. Open the plate in the Details Frame.
3. Click **Create Plate Map**.

The Create Plate Map dialog appears.



4. Enter the location for the new plate map.

> ***NOTE:*** *Plate maps are stored in Plate Map Locations. See* "Create a Plate Map Location" on page 80 *for more information about creating plate map locations.*

5. Click **OK**.

Create a Plate Map Location

Plate Maps are stored in special plate map locations. To create a plate map location:

6. Click **New Location**.
7. Enter the appropriate information.
8. Select Plate Map from the **Location Type** listbox.
9. Click **OK**.

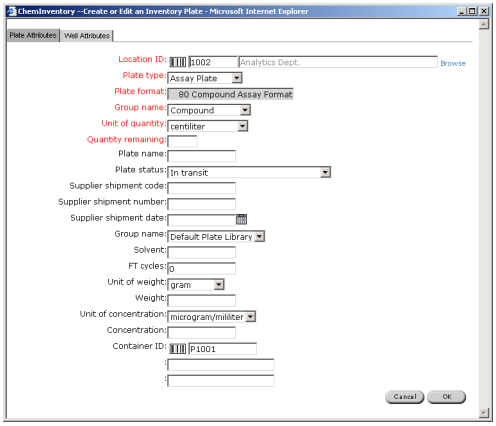
This new location is now ready to store plate maps created.

Edit Plate

To see if you have the appropriate privileges to edit a plate, see roles and privileges.

The Edit Plate function allows editing of plate and well attributes. Plates are initially created in BioAssay HTS so any attributes which can not be changed are greyed out (e.g. plate format).

NOTE: *Well attributes changed under this interface are applied to all of the wells in the plate.*



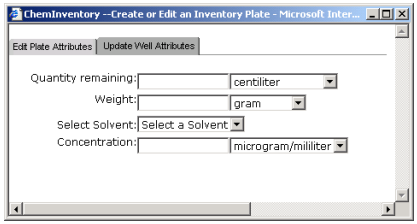
To edit a plate:

1. Search for or browse to the plate you wish to edit.
2. Open the plate in the Details Frame.
3. Click **Edit Plate**.
4. Make the appropriate edits to the given plate and well attributes. Click on the image above for a description of a particular field.
5. Click **OK**.

Well Attributes Tab

When editing a plate, users are able to update well attributes uniformly across the plate. To update well attributes:

1. Click the **Update Well Attributes** Tab.



2. Enter the desired information.
3. Click **OK**.

Move Plate

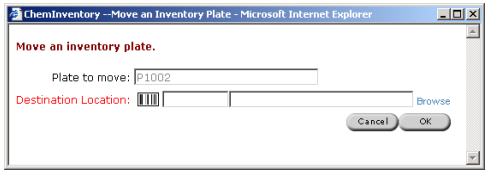
To see if you have the appropriate privileges to move a plate, see roles and privileges.

The Move Plate function allows a user to move a plate from one location to another.

To move a plate:

1. Search for or browse to the plate you wish to move.
2. Open the plate in the Details Frame.
3. Click **Move Plate**.

   The Move Plate dialog appears.



4. Enter the location you would like to move the selected plate to.
5. Click **OK**.

   The plate is moved to the new location.

Copy Plate

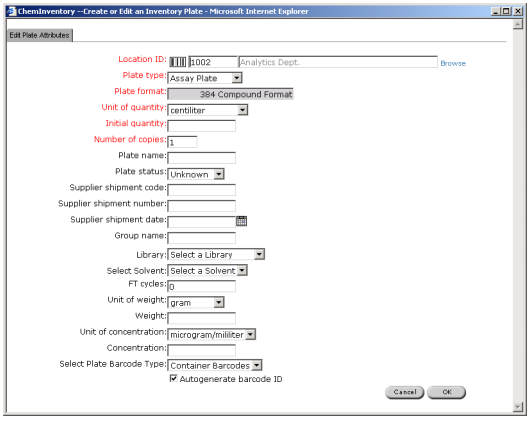
To see if you have the appropriate privileges to copy a plate, see roles and privileges.

The Copy Plate function allows a user to make a copy of an existing plate.

To copy a plate:

1. Search for or browse to the plate you wish to copy.
2. Open the plate in the Details Frame.
3. Click **Copy Plate**.

   The Copy Plate dialog appears.



4. Confirm the entered information.
5. Click **OK**.

   The plate is copied and a new plate is created in the specified location.

Retire Plate

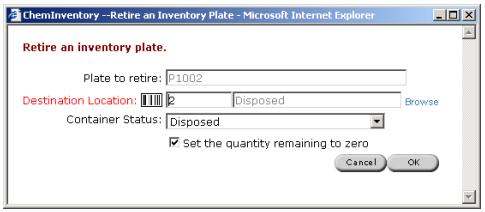
To see if you have the appropriate privileges to retire a plate, see roles and privileges.

The Retire Plate function allows retiring of a plate. Retiring is different than deleting because when a plate is retired the data is preserved, and the plate is placed in the Disposed location (unless specified otherwise), while when it is deleted, the data is lost permanently.

To retire a plate:

1. Search for or browse to the plate you wish to retire.
2. Open the plate in the Details Frame.
3. Click **Retire Plate**.

   The Retire Plate dialog appears.



4. Make any necessary changes.
5. Click **OK** to confirm you would like to retire the plate.

Delete Plate

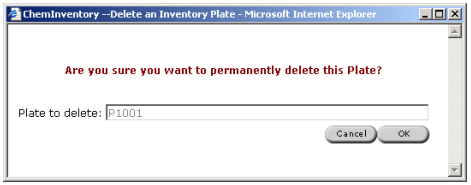
To see if you have the appropriate privileges to delete a plate, see roles and privileges.

The Delete Plate function allows deleting of plate and well attributes.

To delete a plate:

1. Search for or browse to the plate you wish to delete.
2. Open the plate in the Details Frame.
3. Click **Delete Plate**.

   The Delete Plate dialog appears.



4. Click **OK** to confirm you would like to delete the plate.

Administration

Inventory Manager provides an interface to some frequently used administrative tasks. This interface is not available to all users. If you feel you need access to this interface, please see your system administrator.

Inventory Tasks

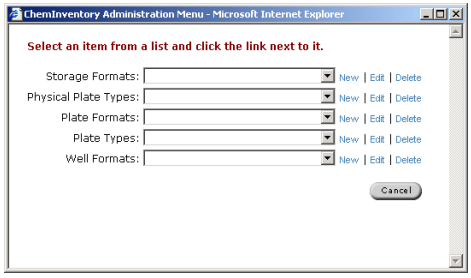
The following tasks are available to users with the correct administrative privileges. If you do not have access to something you need access to, please see your system administrator:

- Search
- New Location
- Edit Location
- Move Location
- Delete Location
- Plate Settings
- Change Password
- Manage Users
- Manager Roles
- Manage Requests
- Manage Tables
- Reconcile Location
- Analyze Audit Trail
- Custom Reports

Plate Settings

The plate settings Admin Task allow you to create, edit and delete plate settings for use when creating and reformatting plates. The settings include:

- Storage Formats
- Physical Plate Types
- Plate Formats
- Plate Types
- Well Formats



Create New

To create a new plate setting (regardless of type):

1. Click the **New** link to the right of the plate setting you would like to create.
2. Enter the desired information.

   Note: Fields highlighted in Red are required.
3. Click **OK**.

Edit

To edit a plate setting (regardless of type):

1. Select the plate setting you want to edit from the appropriate listbox.
2. Click the **Edit** link to the right of the plate setting you would like to edit.
3. Enter the desired information.

   Note: Fields highlighted in Red are required.
4. Click **OK**.

Delete

To delete a plate setting (regardless of type):

1. Select the plate setting you want to delete from the appropriate listbox.
2. Click the **Delete** link to the right of the plate setting you would like to delete.

3. Click **OK**.

Change Password

Users always have the option to change their password.

To change your password:

1. Click **Change Password**.

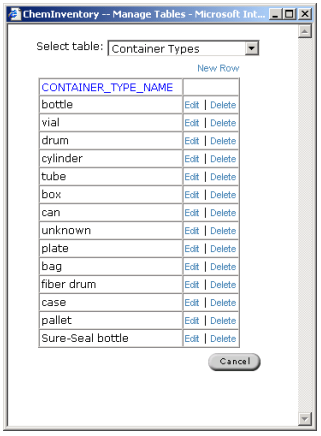
2. Enter the new password in the **New Password** textbox.
3. Enter the new password again in the **Confirm New Password** textbox.
4. Click **OK**.

Managing Users and Roles

Please see “Manage Users and Roles” on page 3 for more information concerning managing users and roles.

Manage Tables

The Manage Tables interface allows administrators to add, edit, and delete the contents of any table in Inventory Manager. This is especially helpful to add/change the choices in picklists throughout the Inventory Manager forms.



New Row

To create a new row in one of the Inventory Manager tables:

1. Select the table to add to from the **Select Table** listbox.

   The table appears.
2. Click the **New Row** link.
3. Enter the desired information.
4. Click **OK**.

   The row is added to the table.

Edit

To edit a row in one of the Inventory Manager tables:

1. Select the table which contains the row to be edited from the **Select Table** listbox.

   The table appears.

2. Click the **Edit** link to the right of the row to be edited.
3. Enter the desired information.
4. Click **OK**.

   The row is updated in the table.

Delete

To delete a row in one of the Inventory Manager tables:

1. Select the table which contains the row to be deleted from the **Select Table** listbox.

   The table appears.
2. Click the **Delete** link to the right of the row to be deleted.
3. Enter the desired information.
4. Click **OK**.

   The row is deleted from the table.

Analyze Audit Trail

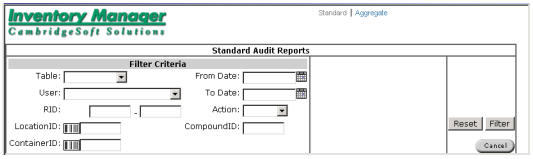
The Analyze Audit Trail tool allows users to filter and view actions taken on containers, locations, compounds, or links.

Standard Audit Report

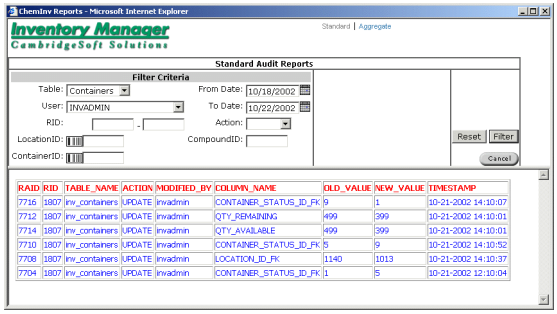
The Standard Audit Report allows users to filter by Table, User, RID, LocationID, ContianerID, Date, Action, or CompoundID.

To filter and display the report:

1. Click **Analyze Audit Trail** and make sure the Standard Link, in the upper frame, is chosen.



2. Enter your filter criteria.
   - Table - the name of table (Containers | Locations | Compounds | Links)
   - User - the user who performed the action
   - RID - the action ID number (entered as a range)
   - LocationID - the location ID
   - ContainerID - the container ID
   - From Date - actions made after this date
   - To Date - actions made before this date
   - Action - type of SQL action (Update | Delete | Insert)
   - CompoundID - the compound ID
3. Click **Filter**.



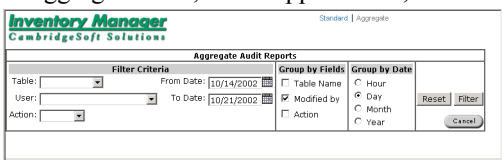
The results are displayed in the lower frame.

Aggregate Audit Report

The Aggregate Audit Report allows users to filter by Table, User, Date, or Action. This report does not give every step in the audit trail, like the Standard Report, but instead provides a summary of actions.

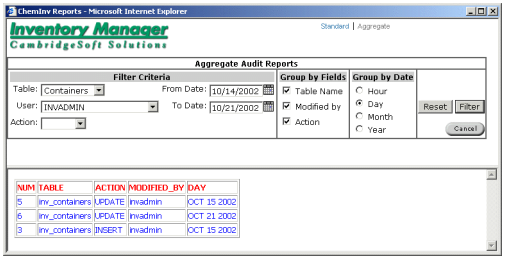
To filter and display the report:

1. Click Analyze Audit Trail and make sure the Aggregate Link, in the upper frame, is chosen.



2. Enter your filter criteria.
   - Table - the name of table (Containers | Locations | Compounds | Links)
   - User - the user who performed the action
   - From Date - actions made after this date
   - To Date - actions made before this date
   - Action - type of SQL action (Update | Delete | Insert)
3. Select Fields to display and group by selecting the checkboxes next to Table Name, Modified By, an Action.
4. Indicate how date dependant data should be grouped by selecting the appropriate radio button next to Hour, Day, Month or Year.
5. Click **Filter**.

   The results are displayed in the lower frame.

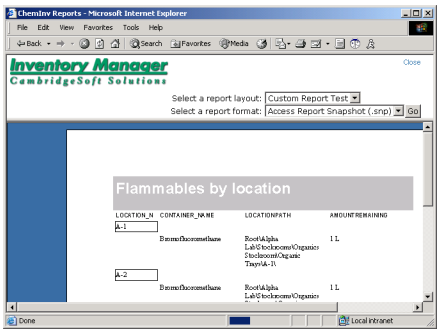


Custom Reports

System administrators have the option to create custom reports for Inventory Manager. These reports pull information from the Inventory Manager database and display it in a useful form.

To run a custom report:

1. Click **Custom Reports** (from the Tasks dialog).
2. Select the name of the report you would like to run form the **Report Layout** listbox.
3. Select a report format from the **Report Format** Listbox.
4. Click **Go**.



Inventory Manager Appendix A: Record Fields

When creating a new record, or searching for a record in the database, the web form displayed includes numerous fields. These fields are listed below with a brief description of what is contained in each field.

Substance/Batch Attributes

Field Name	Description
ACX number	The ACX Number is a unique identifier and registry number for substances in ChemACX, ChemFinder.Com, and submitted via Open Chemistry. ACX Numbers can also be extended to point to physical material, and may contain information relating to the vendor, quality, and package size.
CAS Registry Number	The CAS Registry Number is a unique accession number assigned by the Chemical Abstracts Service, a division of the American Chemical Society. Other than being guaranteed unique to a given compound, this number has no particular meaning. CAS Registry Numbers are assigned to every uniquely-identifiable substance.
Compound ID	The Compound ID number identifies the compound in the Chemical inventory database. It is automatically generated when a compound is entered into the Chemical Inventory system. This number is linked to a compound name and other information in the database.
Compound Type	This field is meant to hold the compound type.
Concentration	The concentration is a calculation which gives information about the amount of a substance in a mixture. The concentration can be entered in any of the following units: percent, moles, millimoles, normal, and parts per million. To indicate units, select the appropriate abbreviation (%, M, mmol, N, ppm respectively) in the list box directly to the right of the concentration text box.
Density	This field is meant to hold the density of the compound.

Field Name	Description
Grade	The grade is a way to categorize the certain attributes of the contents of a container.
Molecular Formula	The molecular formula is a method of describing a substance's makeup on an atomic level. This field is filled automatically after a substance is inserted into a form. If the user is searching, this field contains the molecular formula of a substance.
MolWeight Range	The molecular weight is a calculation reflecting the average mass of a molecule of a substance. This field is filled automatically after a substance is inserted into a form. If the user is searching, this field contains the molecular weight range of a substance.
Purity	The purity is a calculation reflecting how much of a mixture is purely the substance recorded. The purity can be entered in any of the following units: percent, moles, millimoles, normal, and parts per million. To indicate units, select the appropriate abbreviation (%, M, mmol, N, ppm respectively) in the listbox directly to the right of the concentration text box
Reg Alternate IDs	This field is meant to hold all of the registration alternate IDs for the compound.
Registry Batch	This field contains the registry batch ID. The registry batch ID is the registration + batch number identifier assigned by the Chemical Registration application. This number will allow you to relate compounds in the registry to inventory.
Registry Number	This field is meant to hold the registry number of the compound.
Registry Sequence	This field is meant to hold the registry sequence of the compound.
Solvent	A solvent is a substance capable of dissolving another substance. This field is intended to contain the name of the solvent for the substance.
Substance Name	This field is meant to list the name of the substance.
Substance Synonym	This field is meant to list the synonyms of the substance.
Substructure	This field contains the structure for, or a substructure of a substance. Drawing this structure is facilitated through the use of the ChemDraw plug-in which appears when drawing a structure is an option. For more information about drawing structures, see "Drawing Chemical Structures" in the ChemDraw manual.

Plate Attributes

Field Name	Description
Concentration	The concentration is a calculation which gives information about the amount of a substance in a mixture in a container of well. The concentration can be entered in any of the following units: percent, moles, millimoles, normal, and parts per million. To indicate units in a container, select the appropriate abbreviation (%, M, mmol, N, ppm respectively) in the list box directly to the right of the concentration text box (the unit of concentration).
F/T Cycles	This field is intended to contain the number of freeze thaw cycles for a plate. This number should be an integer amount.
Group Name	The name of the group that the plate belongs to.
Library	This field contains the name of the library that a plate is a part of.
Molar Amount	This field contains the number of moles of a compound in a well (in moles).
Plate Format	The Plate Format field is a text field which lists all of the plate formats defined when in edit mode. A plate format is defined as a format indicating the layout in a plate of the general contents of each well. That is a plate format indicated which wells contain a compound, positive control, negative control, or are left empty. Plate formats are defined in BioAssay HTS. For more information about defining additional plate formats, please see the BioAssay HTS user's guide.
Plate ID	The Plate ID number identifies the compound in the Inventory Manager database. It is automatically generated when a plate is created in Inventory Manager. This number is linked to a plate name and other information in the database. The parent plate ID is the ID of a plate's parent. A plate has a parent if it was derived from another plate (i.e. daughter plate).
Plate Name	This field is meant to list the name of the plate. This name can be anything that will allow a user to identify the plate and makes sense to the rest of the facility.

Field Name	Description
Plate Status	This field requires the user to choose a status describing the plate's current state. The following is the list to choose from: Available, Backordered Item, Cancelled, Discontinued Item, Disposed, Empty, In transit, In use, Items found, Missing, Missing during reconcile location, Moved during reconcile location, Not enough available, Order item submitted, Order pending, Ordered, Ordered Item with Registration Error, Received, Recognized at doc, Requested, Returned, To be returned, and Unknown.
Plate Type	This field requires the user to choose a plate type. The following is the default list to choose from: Assay Plate, Master Plate, Replicate Plate, Source Plate, and Working Plate
Solvent	A solvent is a substance capable of dissolving another substance. This field is intended to contain the name of the solvent for the substance.
Solvent Amount	This field requires the user to enter the amount of solvent put into the daughter plate. The units for the amount entered are selected from the listbox to the right of the Source Volume textbox.
Source Volume Taken	This field requires the user to enter a volume taken from the source plate to be put in the daughter plates being created. Units for the volume entered are selected from the listbox to the right of the Source Volume textbox.
Weight	This field contains the current weight of the plate.
Well Capacity	The Well Capacity field contains the maximum capacity of a well.

Container Attributes

Field Name	Description
Catalog Number	The Catalog Number is a number created by the supplier of a substance for ordering purposes.
Container Cost	This field holds information about the cost of the container. The number entered into this field is assumed to have dollars as its units.
Container ID (barcode)	This field provides a unique ID for a container that can be converted into a barcode with the Print Label function.
Container ID (internal)	This ID number is automatically generated when the container is entered into the inventory system. This number is used to identify the container in the Chemical Inventory database.
Container Name	This field is meant to list the name of the container. This name can be anything that will allow a user to identify the container and makes sense to the rest of the facility.
Container Size	This field records the size of a container in the units recorded in the Units of Measure field.
Container Status	This field requires the user to choose a status describing the container's current state. The following is the list to choose from: Available, Disposed, Empty, In transit, Missing, Order Pending, Ordered, Unknown.
Container Type	This field requires the user to choose a type describing the container's appearance. The following is the list to choose from: bag, bottle, box, can, case, cylinder, drum, fiber drum, palette, plate.
Date Ordered	This field is meant to contain the date a particular container was ordered. An icon that looks like a small calendar will display a calendar. When a date is clicked on from the calendar, that date is inserted into the field.
Date Produced	This field is meant to contain the date the contents of a container was produced. An icon that looks like a small calendar will display a calendar. When a date is clicked on from the calendar, that date is inserted into the field.
Date Received	This field is meant to contain the date a particular container was received. An icon that looks like a small calendar will display a calendar. When a date is clicked on from the calendar, that date is inserted into the field.

Field Name	Description
Destination	This field contains a location ID and is used when a location is being moved. The location ID in this field should be that of the new desired location.
Expiration Date	This field is meant to contain the expiration date for the contents of the container. An icon that looks like a small calendar will display a calendar. When a date is clicked on from the calendar, that date is inserted into the field.
Location Barcode	This field is meant to hold the barcode for a location.
Location Description	This field contains a description of where a location is, or attributes related to a location. **For example:** Description for Freezer B - a vertically standing freezer, free of refrigerator
Location ID	The Location ID number identifies the location in the Chemical inventory database. It is automatically generated when a location is entered into the Chemical Inventory system. This number is linked to a location name and other information in the database.
Location Name	This field is meant to list the name of the location. This name can be anything that will allow a user to identify the location and makes sense to the rest of the facility.
Location Type	This field requires the user to choose a type describing the location attributes. The following is the list to choose from: Bench, Bin, Box, Building, Cabinet, Company, Cylinder Storage, Disposal/Neutralization Room, Dry box, Freezer, GMP, Hood, Instrument Room, Laboratory, Pan, Receiving, Refrigerator, Safe, Shelf, Site, Solvent Cabinet, Solvent Room, Stock Room, Ultra-Freezer, Utility Room, unknown.
Lot Number	This field is meant to list the supplier's lot number.
Minimum Stock Threshold	This field indicates the minimum amount of a given substance that should be held in stock.
Maximum Stock Threshold	This field indicates the maximum amount of a given substance that should be held in stock.
Net Weight	This field is meant to hold the net weight measurement (in the field unit of weight field).

Field Name	Description
Number of Bottles	This field contains the number of containers that should be ordered, therefore created in the inventory system.
Number of Copies	This field indicates how many copies of a container should be made during the creation process.
PO Number	This field contains the purchase order number for the container.
PO Line Number	This field is meant to hold the PO Line number.
Quantity Available	This field contains the amount of a mixture available in a container. This field is also used to enter the initial amount under the Contents Tab when creating a new container. The units of the amount are the same as the units recorded in the units of measure field.
Quantity Remaining	This field contains the amount of a mixture remaining in a container. The units of the amount are the same as the units recorded in the units of measure field.
Requisition Number	This field contains the supplier's requisition number.
Reservation Date	This field is meant to contain the date a reservation is made for. A reservation can be made for a particular amount of the contents of a container. An icon that looks like a small calendar will display a calendar. When a date is clicked on from the calendar, that date is inserted into the field.
Reservation ID	This field is meant to contain the ID that is automatically generated when a reservation is made. A reservation can be made for a particular amount of the contents of a container. This ID number is linked to information about the reservation in the Chemical Inventory database.
Reservation Quantity	This field is meant to contain the amount a reservation is made for. A reservation can be made for a particular amount of the contents of a container.
Reservation Status	This field is meant to contain the status of a reservation. A reservation can be made for a particular amount of the contents of a container.
Reservation Type	This field is meant to contain the type of reservation entered. A reservation can be made for a particular amount of the contents of a container. The following is a list of options in the reservation type listbox: External Hole, Internal Hole, Sale Pending, Sold, Undeclared.

Field Name	Description
Supplier	This field is meant to contain the name of the supplier.
Supplier Code	This field requires the user to choose a status describing the plate's current state. The following is the list to choose from: Available, Backordered Item, Cancelled, Discontinued Item, Disposed, Empty, In transit, In use, Items found, Missing, Missing during reconcile location, Moved during reconcile location, Not enough available, Order item submitted, Order pending, Ordered, Ordered Item with Registration Error, Received, Recognized at doc, Requested, Returned, To be returned, and Unknown.
Supplier Date	This field is meant to contain the date that the supplier has provided for the container.
Supplier Number	This field is meant to contain the number that the supplier has provided for the container.
Tare Weight	This field is meant to hold the tare weight measurement (in the field unit of weight field).
Total Weight	This field is meant to hold the total weight measurement (in the field unit of weight field).
Unit of Concentration	This field is meant to hold the Unit of Concentration used to determine the amount of solvent when creating a daughter plate.
Unit of Quantity	This field is meant to hold the Unit of Quantity used for the quantity remaining and available.
Unit of Measure	This field is a list box that allows the user to choose a unit of measure for the container. This unit of measure is used as the units for all quantity measurements entered. The following is a list of options in the units of measure listbox: ampulle, cubic centimeter, cubic feet, cylinder, each, gallon, gram, kilogram, liter, microgram, microliter, milligram, milliliter, ounce, pack, pint, pound, quart.
Unit of Weight	This field is meant to hold the Unit of Weight used for the tare, net, and total weight measurements.

Other Attributes

Field Name	Description
Comments	This field is available for the user to enter information that hasn't already been entered in another field, or needs to be expanded on.
Current User ID	The listbox available lists all registered users of the Chemical Inventory system.
Job	The job for which the container is being ordered. The list of jobs is created according to the project which is selected.
Owner ID	The listbox available lists all registered users of the Chemical Inventory system. Select the appropriate user to be listed as the owner of the container.
Project	The project for which the container is being ordered. The project selected dyanamically changes the job options.
Reorder Reason	This field is meant to contain the reason a container is bing reordered.

Inventory Manager Appendix B: Functions in Container Details Frame

The following functions can be available from the Container Details Frame.

Function Name	Description
Change Qty	The Change Qty function allows the modification of the quantity of material remaining in the container. Quantities are measured in the predefined unit of measure associated with the container.
Check Out	The Check Out function is typically used when a user removes a container from a central storage location for subsequent use at a different location. The act of checking involves a change in container location plus a change in the current user responsible for the container.
Check In	The Check In function performs the reverse of the check out process. It is typically performed when a user returns a chemical container to its central storage location. The system remembers the location and user under which the container was created and uses them as the default values during the check in process.
Copy Container	The Copy Container function allows you to create one or more containers using a preexisting container as a starting template. Typically attributes such as lot number, container cost of expiration dates may need to be modified before the new container/s are created.
Reorder Container	The Reorder Container function places an order for the selected container, meaning a new container with the same attributes is created and placed in the On Order location.
Edit Container	The Edit Container function allows editing of all container attributes. You may switch between the various tabs to access all container attributes. Changes to the container are only committed to the database once the *Update Container* button is clicked.

Function Name	Description
Move Container	The Move Container function moves the currently selected container to a new location. The destination location id can be directly entered or scanned into the text box in the dialog, or the browse link can be used to select a location from the tree.
Delete Container	The Delete Container function deletes the currently selected container. The container is permanently removed from the system.
Retire Container	The Retire Container function retires the currently selected container. When a container is retired, it is not deleted, but is no longer in use.
Split Container	See “Split Container” on page 76
Merge Containers	See “Merge Containers” on page 76
Create Samples	See “Create Samples” on page 76
History	The Container History link uses the Audit Report window to display a container's history. Clicking on the **History** link will bring up the audit window and filters information to show any activity involving the current container.
Print Label	See “Print Report” on page 74

Inventory Manager Appendix C: Role Dependencies

Different users will use Chemical Inventory for different reasons. For this reason, when setting up new user accounts, your system administrator assigns certain roles to each individual. Some roles cannot access specific areas of Chemical Inventory, or cannot perform particular functions. This may be why some screenshots differ slightly from what you see, or why you are unable to access certain areas. Please see your system administrator if you have questions about your roles.

An individual role can contain a number of privileges. For example, although the BROWSER only has the privilege to read the contents of a container, INV_CHEMIST is allowed to Move and Edit the contents of a container as well. For a list of privileges associated with these roles, see “Privileges” on page 333.

The roles available are listed below:

Role Name	Oracle Role Name	Privileges
BROWSER	INV_BROWSER	Read Only
CHEMIST	INV_CHEMIST	Edit/Move Containers
RECEIVING	INV_RECEIVING	Create/Edit/Move Containers
FINANCE	INV_FINANCE	Create/Edit/Move Containers + Create/Move/Delete Locations
REGISTRAR	INV_REGISTRAR	Create/Edit/Delete inventory substances
ADMIN	INV_ADMIN	Full Access

Inventory Manager Appendix D: Privileges

The privileges associated with the available Chemical Inventory roles are listed below:

Privilege	Oracle Privilege Name	Roles Including Privilege
change the quantity in a container	INV_CHANGEQTY_CONTAINER	CHEMIST, FINANCE, ADMIN
check in a container	INV_CHECKOUT_CONTAINER	CHEMIST, ADMIN
check out a container	INV_CHECHKIN_CONTAINER	CHEMIST, ADMIN
reserve a container	INV_RESERVE_CONTAINER	CHEMIST, ADMIN
retire a container	INV_RETIRE_CONTAINER	CHEMIST, FINANCE, ADMIN
print a container's label	INV_PRINT_LABEL_CONTAINER	CHEMIST, FINANCE, RECIEVING, REGISTRAR, ADMIN
print a report	INV_PRINT_REPORT	CHEMIST, FINANCE, RECIEVING, REGISTRAR, ADMIN
create a new location	INV_CREATE_LOCATION	FINANCE, ADMIN
edit a location	INV_EDIT_LOCATION	FINANCE, ADMIN
move a location	INV_MOVE_LOCATION	FINANCE, ADMIN
delete a location	INV_DELETE_LOCATION	FINANCE, ADMIN
create a new container	INV_CREATE_CONTAINWER	FINANCE, RECIEVING, ADMIN
edit a container	INV_EDIT_CONTAINER	CHEMIST, FINANCE, RECIEVING, ADMIN
move a container	INV_MOVE_CONTAINER	CHEMIST, FINANCE, RECIEVING, ADMIN
delete a container	INV_DELETE_CONTAINER	CHEMIST, FINANCE, RECIEVING, ADMIN
add/edit/delete links	INV_MANAGE_LINKS	REGISTRAR, ADMIN
add/edit/delete substances	INV_MANAGE_SUBSTANCES	REGISTRAR, ADMIN

Privilege	Oracle Privilege Name	Roles Including Privilege
view audit trails	INV_VIEW_AUDIT_TRAIL	FINANCE, REGISTRAR, ADMIN
update a location	INV_UPDATE_LOCATION_CONTENTS	BROWSER
rectify a location	INV_RECTIFY_LOCATION_CONTENTS	ADMIN
order a container	INV_ORDER_CONTAINER	ADMIN
reorder a container	INV_REOREDER_CONTAINER	ADMIN
edit EH&S data	INV_EDIT_EHS_DATA	ADMIN