



## Overview

PerkinElmer offers a web based inventory tracking application called Inventory Enterprise. The following is a series of frequently asked questions regarding this tool.

Inventory Enterprise can be combined with other PerkinElmer applications such as E-Notebook/BioAssay, Registration System, and ChemACX Database, although some details of these components are not discussed here.

## Inventory Tracking

**Q Is the system able to print out barcodes for all managed containers?**

**A** Yes. Barcodes can be printed from any browser using either barcode printers or standard laser or inkjet printers.

**Q Is the system able to check out reagent containers to individual users?**

**A** Yes. Check out can be defined as a change of location, change of current user, or a combination of both.

**Q Is the system able to check out reagent containers?**

**A** Yes. Users can browse, search, or scan a barcode to locate and check out the desired container. Multiple containers can be selected and checked out at once by either checking boxes or scanning barcodes.

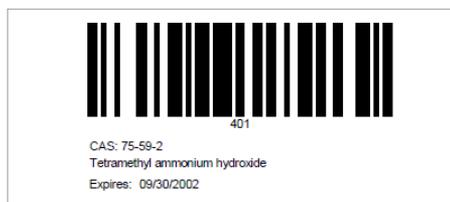


Figure 1. Inventory allows printing of configurable barcodes for all containers.

Container ID	Location	Name	CAS	Solvent	Substance	Req Number	RegBatchID
102	Beta Race...	FOCA	5109-99-3		Pyridoxal...		
202	Beta Race...	1,10Pha...25...	3222-09-3		1,10Pha...25-DH...		
261	Beta Race...	Nitroben...	119-41-8		FLUORESCEN SODIUM		
379	Beta Race...	dMucoben...	540-36-3		1,4-OHFLUOROBEN...		
439	Beta Race...	Chloroform	67-66-3		Chloroform		
497	Beta Race...	HPC	79-09-3		Methyl ethyl se...		
613	Beta Race...	Rifamycin x	13553-79-2		Rifamycin x		
672	Beta Race...	Litharylate...	1350-30-1		Litharylate...		
711	Beta Race...	Lead suboxide	1335-24-6		Lead suboxide		
770	Beta Race...	Tramadol...	67-78-7		Tramadolone d...		

Summary	Substance	Supplier	Quantities	Comments	Reservations	EH&S
<b>Tramadolone diacetate</b>						
Container Size:	300 mg	Container Type:	vial			
Qty Available:	499 mg	Location:	Beta Receiving			
Reg Batch ID:		Purity:				
CAS Number:	67-78-7	Concentration:				
Container ID:	770	Density:				
Internal ID:	770	Solvent:				
Date Created:	03/12/2002	Expiration Date:	03/12/2004			
Date Certified:		Date Approved:				
Current User:	BMUG2001	Owner:	System			
Status:	Available-Parent Container:					
Family:	770	Description:				
Container Admin:		Location Type:				

Figure 2. Summary information is available for all containers during navigation, including EH&S information if present.

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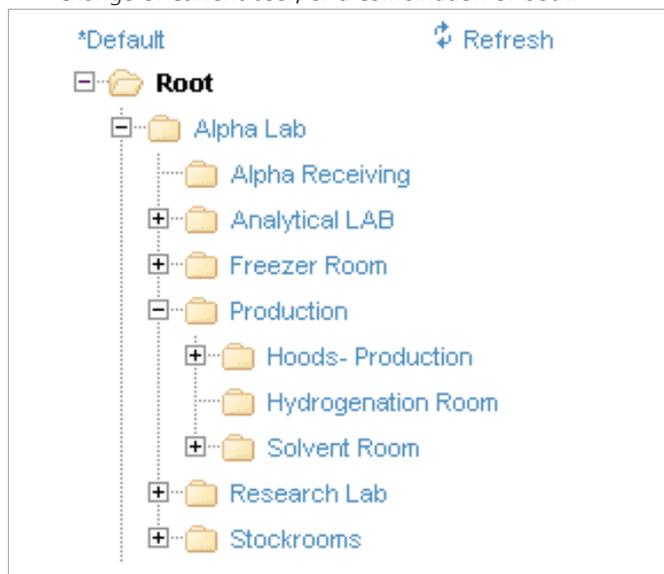


Figure 3. The location tree hierarchy permits free and simple navigation for users with proper access.

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**Q** Is the system able to allow checking out reagent containers with a portable device

Figure 4. Conflict management logic prevents the submission of duplicates unnoticed.

**Q** Is the system able to update the reagent quantity left in a container based on original tare (record original weight of bottle and keep track of what is left by weighing when returned)?

**A** Containers can be tracked by weight. Initial tare weight, current weight, and net weight can all be updated for the container.

**Q** Does the system allow a user to view a log of inventory transactions for any reagent, including registration, check-ins and check-outs?

**A** Yes. All transactions to key tables are logged to audit trail tables. An audit trail report tool is provided to help locate specific transactions and summarize system usage patterns.

RAID	RID	TABLE_NAME	ACTION	MODIFIED BY	COLUMN_NAME	OLD_VALUE	NEW_VALUE	TIMESTAMP
1209442	77261	inv_containers	UPDATE	gmorieux	QTY_REMAINING	57.04	54.990000000000005	04/30/2015 05:38:50
1209442	77261	inv_containers	UPDATE	gmorieux	QTY_AVAILABLE	57.04	54.990000000000005	04/30/2015 05:38:50
0	77265	inv_containers	INSERT	gmorieux	NULL	NULL	NULL	04/30/2015 05:37:58
0	77265	inv_containers	INSERT	gmorieux	NULL	NULL	NULL	04/30/2015 04:48:46
1209439	75922	inv_containers	UPDATE	gmorieux	QTY_REMAINING	196.253930175090922	195.401011274443844	04/30/2015 04:45:22
1209439	75922	inv_containers	UPDATE	gmorieux	QTY_AVAILABLE	196.253930175090922	195.401011274443844	04/30/2015 04:45:22
1209436	75922	inv_containers	UPDATE	gmorieux	QTY_REMAINING	197.106849075738	196.253930175090922	04/30/2015 04:29:28
1209436	75922	inv_containers	UPDATE	gmorieux	QTY_AVAILABLE	197.106849075738	196.253930175090922	04/30/2015 04:29:28

Figure 5. The reporting capabilities allow exporting and querying different information depending on needs.

**Q** Is the system able to lookup the location of a reagent by CAS#, container barcode, manufacturer and manufacturer catalog id?

**A** Yes. Any of over 40 container attributes can be used to locate a reagent. If the field is not configured, by default, 15 customizable fields are available to the user.

**Q** Is the system able to check for the existence of a reagent at the time that it is registered into the system?

**A** Yes. The system checks for duplicate structure, CAS Number, substance name, and optionally, additional user defined unique substance identifiers. A conflict resolution screen is provided to help the user or chemical administrator ensure proper substance assignments. The user is not required to resolve the conflict at registration time, and thus is not prevented from entering a substance because of conflicting identifiers. Conflicting records are flagged and can be resolved at a later time by qualified chemical registrars.

**Q** Is the system able to import current stockroom inventory information?

**A** Legacy data can be imported into the Inventory Enterprise Oracle schema. PerkinElmer has extensive experience and data migration tools to assist with such data import. Estimated 1-5 days services required dependent on quantity/quality of legacy data.

## Safety

**Q** Does the system allow a system administrator to add additional safety fields to the application, without programming, that can be recorded and displayed along side other safety fields?

**A** Customer defined fields can be used to track safety, hazard or any other desired container or substance attributes. Customer defined fields can be displayed along side standard fields, and can be used as search criteria.

Lead subacetate			
Container Size:	500 mg	Container Type:	vial
Qty Available:	499 mg	Location:	Beta Receiving
Reg Batch ID:		Purity:	
CAS Number:	1335-32-6	Concentration:	
Container ID:	711	Density:	
Internal ID:	711	Solvent:	
Date Created:	03/12/2002	Expiration Date:	03/12/2004
Date Certified:		Date Approved:	
Current User:	INVADMIN	Owner:	System
Status:	Available	Parent Container:	
Family:	711	Description:	
Container Admin:		Location Type:	

Figure 6. Detailed view of summary information for Lead subacetate container.

## Chemistry Support

**Q** Is the system able to display the two-dimensional chemical structure of any reagent?

**A** Yes. Structures are displayed within ChemDraw windows embedded in the browser. Structure data can be saved to a file, copied to the clipboard, zoomed, converted to alternate structure formats (MOL, SMILES), and analyzed for chemical composition from within the browser. ChemDraw also provides optimal display and print quality for two dimensional structures. Optionally structures can be displayed as gif images.

**Q** Is the system able to find reagents by a substructure search?

**A** Yes. The system supports exact, substructure and similarity searches with comprehensive query definition capabilities. Structure queries are drawn directly into ChemDraw windows embedded in the browser. All search preferences are user controlled and remembered by the browser.

Inventory Enterprise  
Browse | Manage Substances | Scan | Tasks | Home | Help | Log Off  
Current login: CSSADMIN

File History Queries Hit Lists Marked Hits Help  
Search Clear Form Cancel

Simple Search | Advanced Search | Substructure Search | Global Search | Plate Search

Select the databases to search  
Inventory Enterprise  Registration Enterprise

SearchType: Substructure  
Search

Substance Name:  
CAS Registry#:  
ACX Number:  
Catalog Number:  
Molecular Formula:  
MolWeight Range:  
Registry Number:  
Registry Sequence:  
Reg Alternate IDs:  
Full RegNumber:

Figure 7. Substructure search and full structure search is available, powered by ChemDraw.

**Q** Is the system able to find reagents by manufacturer and catalog id?

**A** Yes. Manufacturer catalog id is one of over 40 available query attributes.

**Q** Is the system able to find reagents by chemical name?

**A** Yes. Chemical name is one of over 40 attributes available. Additionally chemical names can be normalized so that minor syntactical differences such as dashes and commas, alternate spellings, and common typos are made irrelevant.

**Q** Is the system able to import and update reagent information, such as name, structure, molecular weight, manufacturer, manufacturer catalog id, and price?

**A** Yes. The system is fully integrated with ChemACX reagent sourcing database and Registration System. It also has an exposed application programming interface (API) that facilitates import of substances from other applications or data sources.

**Q** Is the system able to search for reagents in multiple databases?

**A** The system is configured to globally search over PerkinElmer's ChemACX, Registration System, and Inventory Enterprise Databases. Any other chemical database formatted as a ChemFinder file can be added to the global search list.

Record #20  
1 Containers  
INDIGO  
CAS#: 482-89-3

Record #2  
1 containers  
PSEUDOEPHEDRINE...  
AS#: 134-72-5

Record #2  
1 containers  
DL-3,4-Dihydroxyphenylalanine  
Compound ID: 801  
CAS#: 63-84-3

Figure 8. Global results from ChemACX, Inventory and Registration systems are available on search.

## Automated Purchase of Reagents

**Q** Is the system able to initiate a purchase request?

**A** Inventory Enterprise is integrated with the ChemACX database to automate the ordering process. When containers are ordered, they are placed in the On Order location until the container is actually received at the facility.

## Reporting

**Q** Is the system able to create a report that lists all the reagents that have been checked out and who checked them out?

**A** Ad hoc reports can be produced by downloading the results of any search. Given the comprehensive search functionality this provides an easy way to produce the majority of reports required by users. Printable reports can be downloaded in pdf, xls, rtf or snp formats.

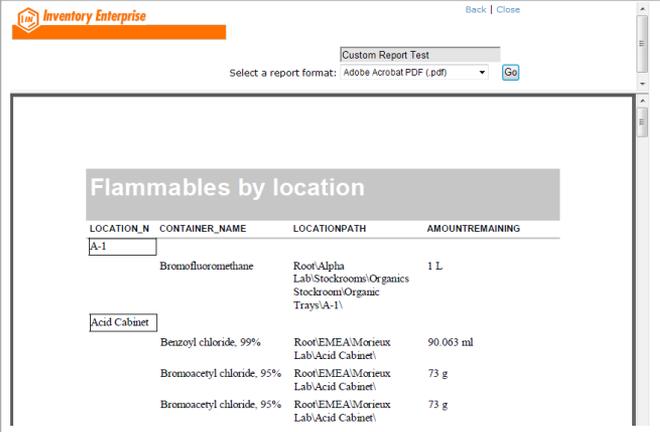
Multiple report templates can be stored on the server to modify the content and layout of the report.

**Q** Is the system able to create a report of all the reagents in a stockroom, including their specific location?

**A** All reagents in any location can be easily displayed on screen and printed to a report in four different formats. In addition the system provides a barcode scanner driven inventory reconciliation screen to help locate misplaced and unknown containers.

**Q** Can a user create custom reports?

**A** Yes. Custom reports can be designed using Microsoft Access reporting tools and delivered to the user's browser in pdf, xls, rtf or snp format. Access provides a user friendly and feature rich environment to design reports. Reports are executed by the Oracle server and data is formatted by Access. Service options are available for a PerkinElmer representative to assist you in creating custom reports for your needs.



LOCATION_N	CONTAINER_NAME	LOCATIONPATH	AMOUNTREMAINING
A-1	Bromoformomethane	Root\Alpha Lab\Stockroom\Organics Stockroom\Organic Trays\A-1\	1 L
Acid Cabinet	Benzoyl chloride, 99%	Root\EMEA\Morieux Lab\Acid Cabinet	90.063 ml
	Bromoacetyl chloride, 95%	Root\EMEA\Morieux Lab\Acid Cabinet	73 g
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Figure 9. On screen reporting is available for multiple out of the box report templates.

## Non-Functional Requirements

**Q** What is the maximum number of concurrent users the system can support?

**A** Maximum concurrent users are determined by hardware. PerkinElmer hosts various internet accessible chemical databases such as ChemFinder.com and ChemACX which use the same underlying technology as Inventory Enterprise.

**Q** Is the system able to import ChemACX and Registration System data into inventory containers?

**A** Yes. Both the ChemACX and Registration System databases are directly linked to Inventory Enterprise, allowing users to access and use the compound records in other applications from the Inventory Enterprise interface.

**Q** Does this system provide an API?

**A** Fully documented HTTP and Oracle Stored Procedure APIs are available.

**Q** Is there documentation for system database schema?

**A** The database schema, PL/SQL code and ASP code is unencrypted and accessible to customers.