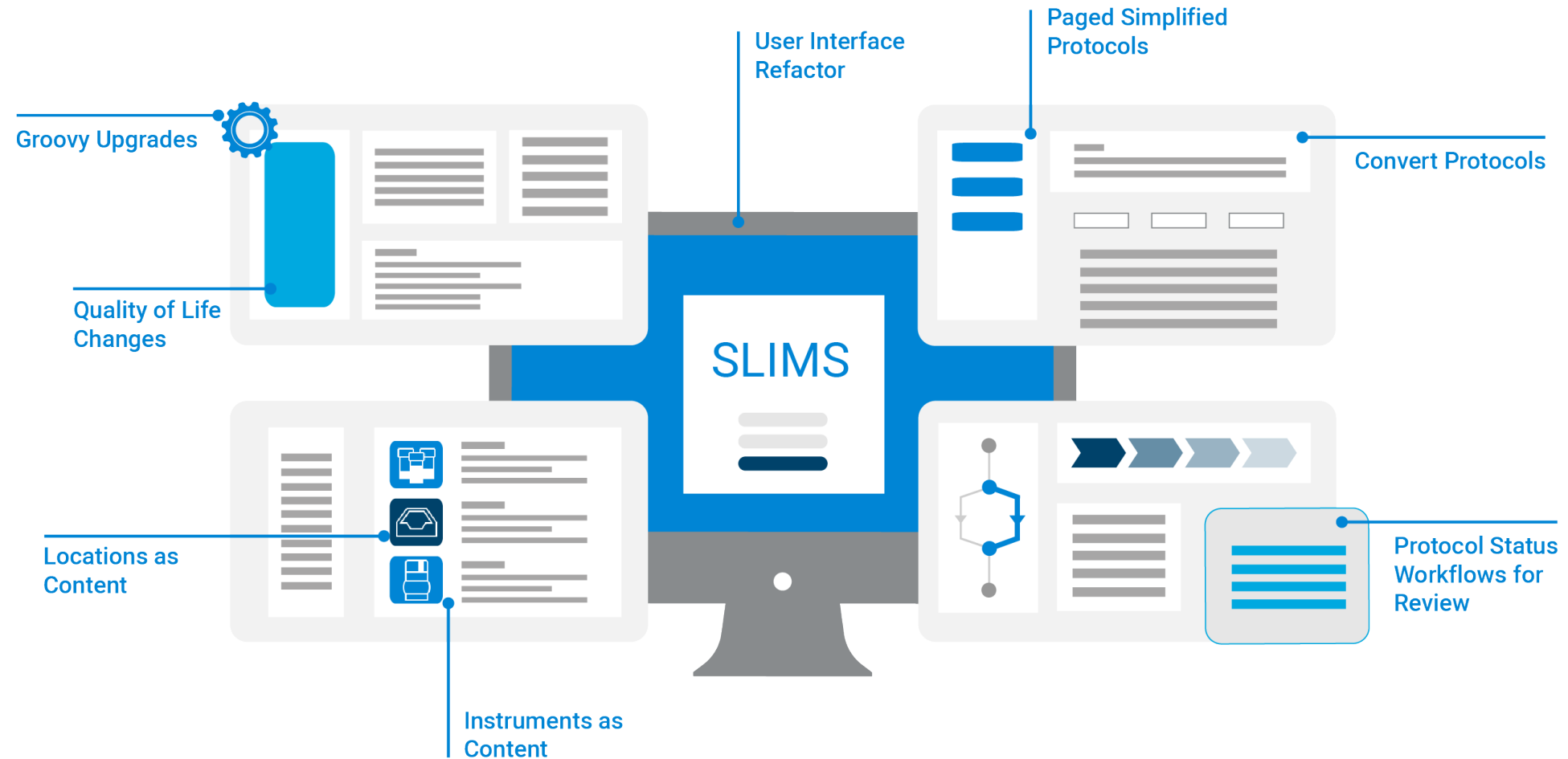


# Agilent SLIMS

## Feature Highlights for SLIMS 7.2

Rev. 7.20

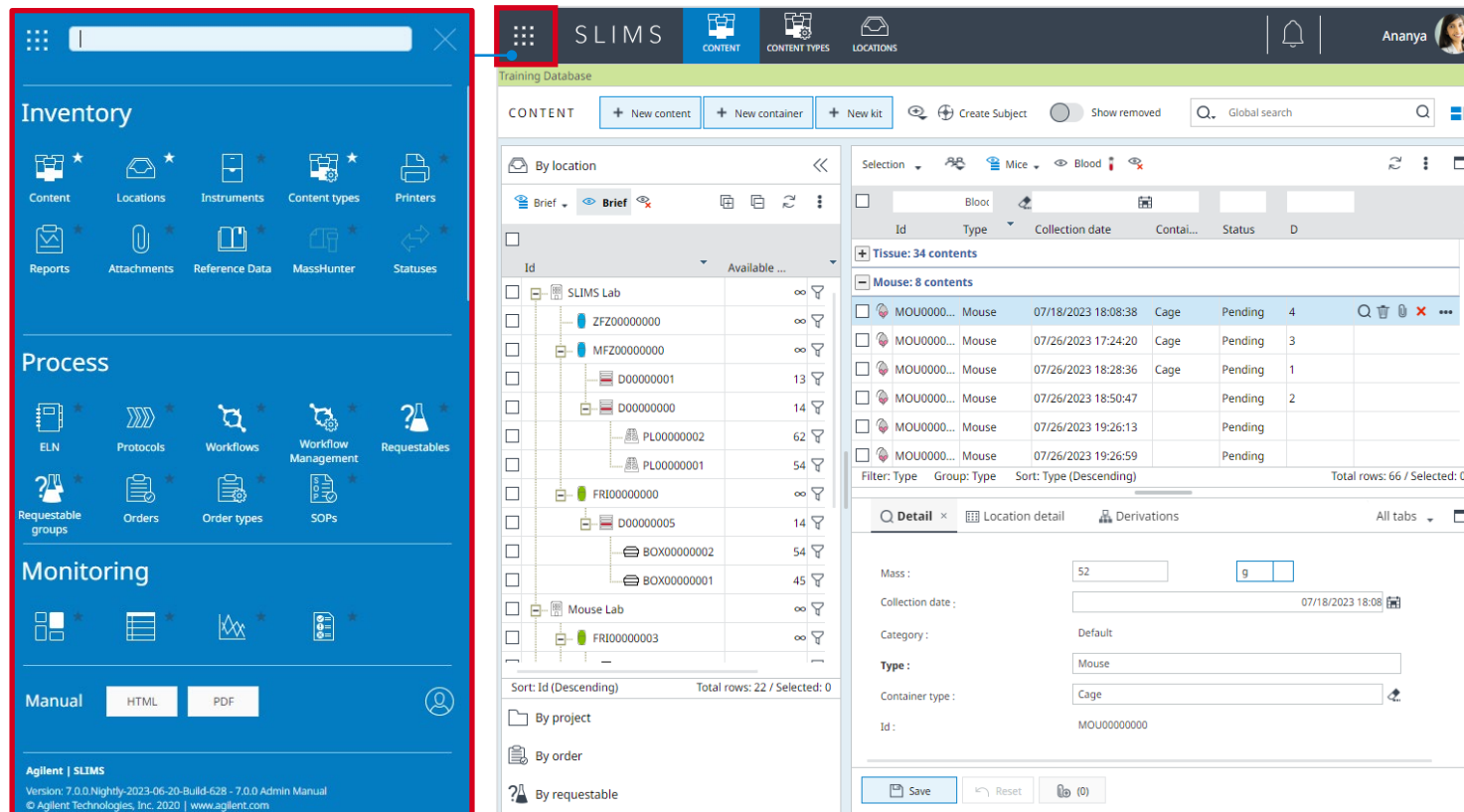
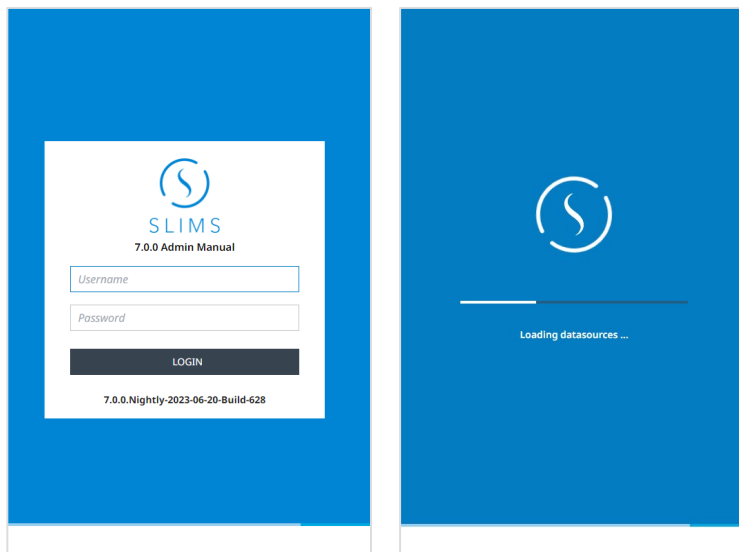
# Agilent SLIMS 7.0b Feature Highlights



# SLIMS User Interface Refactored

The look and feel of SLIMS was updated with this release to fit in with Agilent software visual identity. These changes do not affect behavior, but change the appearance in these main areas:

- Login page, fields, loading screen
- SLIMS main menu
- Top Bar
- Buttons and grids throughout
- All modules



# Locations are now Content

Locations are now defined in the Content Types module. This allows locations to have results and be tracked in workflows and ELN more easily.

There is a Locations category by default that has the “Can be used as a Location” field enabled. This category stores the location content types that were migrated from 6.9.

Locations retain their features including:

- Location tree is organized in the Locations module
- They have a manual or automatically generated barcode
- Defined by an ID and may use the barcode as ID
- Have short id to use in the location path
- Have the chosen number of rows/columns or are positionless
- May have alphabetic or numeric row/column names

Location tree created in the Locations module

The screenshot displays the SLIMS interface. The top navigation bar includes 'CONTENT', 'CONTENT TYPES', and 'LOCATIONS'. The 'CONTENT' tab is active, showing a 'Training Database' section with buttons for '+ New content', '+ New container', and '+ New kit'. Below this, a 'By location' view shows a tree structure with locations like 'SLIMS Lab', 'FR100', 'DRA00000000', 'DRA00000001', 'NFRE00', and 'DRA00000002'. A table on the right shows details for 'Mouse' locations, including 'MOU00000000' and 'MOU00000001', both with a mass of 30 g and status 'Available'. The bottom right shows a 'Detail' view for a location, with fields for 'Category' (Default) and 'Type' (Mouse).

Type	Id	Mass	Volume	Status
+ Blood: 3 contents				
+ Brain: 1 content				
- Mouse: 2 contents				
Mouse	MOU00000000	30 g		Available
Mouse	MOU00000001	30 g		Available

Id	Filled	Ava...
SLIMS Lab	3	∞ +
FR100	2/16	14 +
DRA00000000	4	∞ +
DRA00000001	0	∞ +
NFRE00	2/16	14 +
DRA00000002	0	∞ +

# Instruments are now Content

Instruments are now defined in the Content Types module. They take advantage of contents' ability to gather results and be sent to workflows.

There is an Instruments category by default that has the "Can be used as an Instrument" field enabled. This category stores the instrument content types migrated from 6.9.

Instruments retain most of their features including:

- Instruments are created in the Instruments module
- Can be in a location
- Simplified (and Default) protocols can require instruments and have restrictions on instrument content types
- OpenLab CDS and NGS packages were updated to work with these changes
- Calibration is tracked with a calibration expiration date field
- Statuses on the Default Content Status Workflow can be set to disallow linking in a protocol run

Instruments with custom fields for calibration tracking

The screenshot displays the SLIMS (Sample Library Information Management System) interface. The top navigation bar includes icons for ORDERS, CONTENT, SCAN, ELN, ATTACHMENTS, and a user profile for Ananya. The main section is titled "INSTRUMENTS" and features a "+ New" button. Below this is a table listing instruments, categorized by type: Liquid Handler, Sequencer, Generic Instrument, and Balance. Each row shows the instrument's name, ID, calibration expiry date, and status. A detailed view on the right shows the "Detail" tab for a selected instrument, displaying fields for Category, Type, Id, Barcode, Calibration Expiry, Status, Location, Location path, Located at row, Located at column, and Created by. The "Save" button is visible at the bottom of the detail view.

Type	Id	Calibration Expiry	Status
<b>Liquid Handler: 2 instruments</b>			
Liquid Handler	Hamilton	08/29/2023	Maintenance
Liquid Handler	Tecan	11/30/2023	Available
<b>Sequencer: 2 instruments</b>			
Sequencer	HiSeq	10/31/2023	Available
Sequencer	MiSeq	09/13/2023	Available
<b>Generic Instrument: 1 instrument</b>			
Generic Instru...	INS00	11/15/2023	Available
<b>Balance: 2 instruments</b>			
Balance	Mettler Toledo	10/31/2023	Available
Balance	Sartorius	10/31/2023	Available

Group: Type Total rows: 7

**Detail** History

Category : Instrument

Type : Liquid Handler

Id : Tecan

Barcode : LH1

Calibration Expiry : 11/30/2023

Status : Available

Location :

Location path :

Located at row :

Located at column :

Created by : admin

Save Reset (0)

# Simplified Protocols Have Pages

The Simplified Protocols and Protocols modules are consolidated. Both types are now set up in the Protocols module for ELN, or Workflow Management for Workflows.

Simplified protocols have pages like a lab notebook and each page is made of blocks. This makes long protocols easier to organize and use.

There are checks in place to ensure pages are constructed in a logical way. Simplified protocols are the easiest to design and most nimble to use. They retain most of their features:

- Tags (moved to the header)
- Complete blocks or pages out of order (in ELN)
- Add blocks before/between/after other blocks at will unless restricted
- Use a protocol status workflow at the page level to determine status transitions\*

\*New feature described on another slide

Multiple pages shown on the left in an experiment run

The screenshot shows the SLIMS interface with the following components:

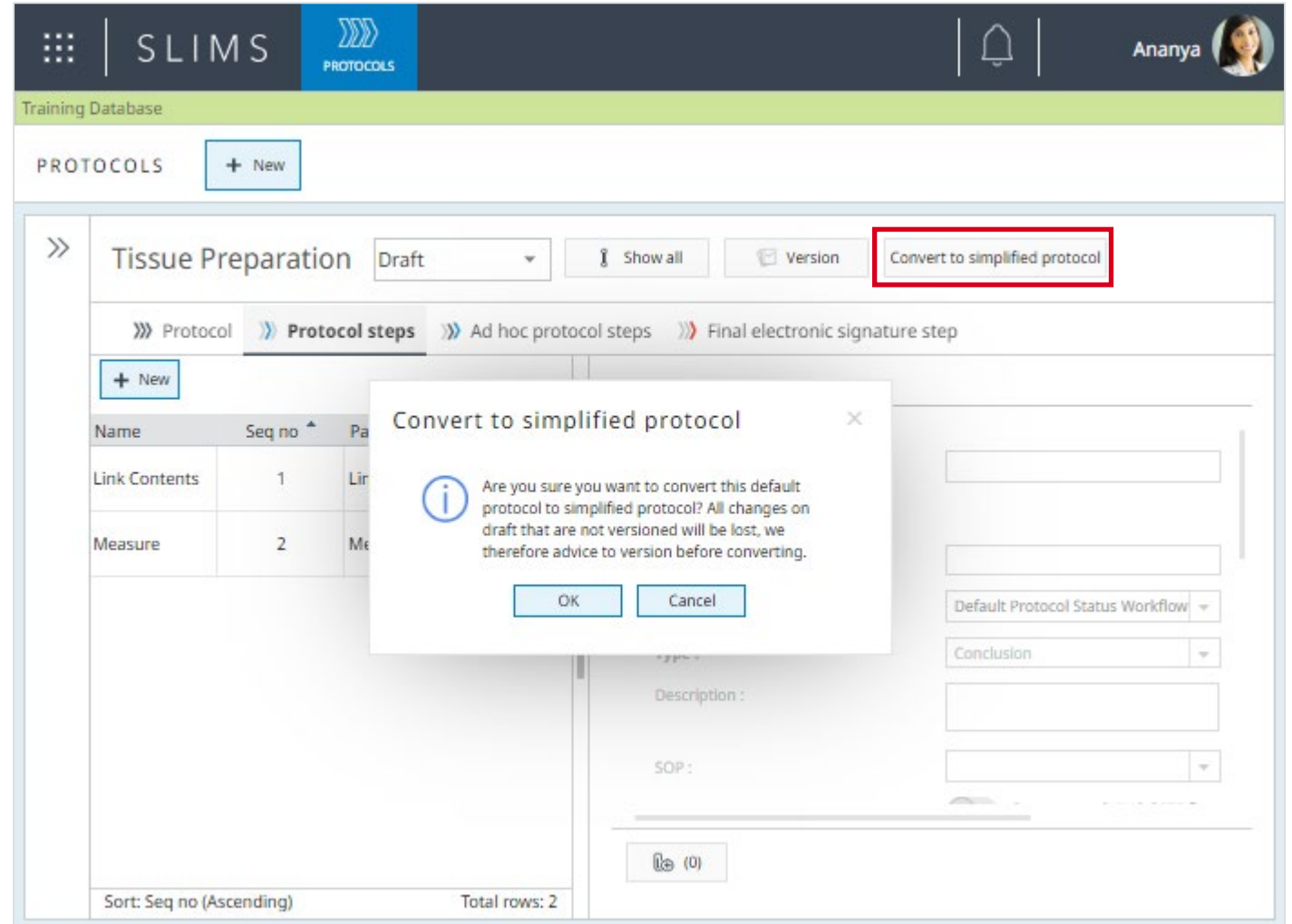
- Header:** SLIMS logo, navigation icons for CONTENT, WORKFLOWS, PROTOCOLS, and ELN. User profile: Ananya.
- Breadcrumbs:** ELECTRONIC LAB NOTES > ELN > Mouse Tissue Staining > Test to delete > 2023-08-16 21:05:37 EDT. Search bar: Type to add tags... In records.
- Left Sidebar:** Navigation pane showing 'Back', 'Recently worked on', and a list of pages:
  - Default page (In progress)
  - Page 2 (Not started)
- Main Content Area:**
  - Default page:** A section header with a close button.
  - Tissues:** A table with columns: Type, Id, Status, D. Data rows show three tissue entries with IDs TIS00000000, TIS00000001, and TIS00000002, all with a status of 'Pending'.
  - Link Reagents:** A table with columns: Type, Id, Reagent Ex..., Volume, Status. Data rows show 'Eosin Y' (EOY00000009) and 'Gill Hematoxylin' (HEG00000002), both with a volume of 100 ml and status of 'Pending'.
  - Eosin Staining Procedure:** A section with links for 'Reagents for H&E Staining', 'INSTRUCTION MANUAL', and 'QUICK-REFERENCE PROTOCOL'. A note states: 'For Research Use Only. Not for use in diagnostic procedures.'
- Footer:** 'Total rows: 2 / Selected: 0' and 'In progress' status with a 'Finish' button.

# Default to Simplified Protocol Conversion

Simplified protocols are being improved to replace default protocols across SLIMS. You can now convert default protocols into simplified protocols to take advantage of their easier setup and page style use. Simplified protocols can be reverted back to their default protocol builds for peace of mind. The pre-converted version is copied onto the draft.

SLIMS checks for unsupported situations and warns if the conversion would not be possible.

- Only default protocols can be converted
- Dynamic results cannot be converted
- Link Location or Variant Observation step types cannot be converted
- Protocol step cannot require instruments, add flags, or have mix rules



# Protocol Status Workflows

SLIMS 7 comes with a default protocol status workflow that manages the existing Back, Next, and Finish buttons in a workflow or ELN run. This change opens up review status workflow behavior.

Closed runs can be reviewed by turning on the In Review, Amending, and Amending Review statuses.

The statuses appear as buttons in workflow protocol runs and ELN experiment runs. Status transitions can be modified to:

- Provide review and amendment buttons depending on the user's role
- Offer or require comments
- Require e-signature

Page is undergoing amendment and can be reviewed or closed

The screenshot displays the SLIMS 7 interface. At the top, there's a navigation bar with 'SLIMS' and icons for 'STATUS WORKFLOWS', 'PROTOCOLS', and 'WORKFLOWS'. The 'WORKFLOWS' icon is highlighted. Below this is a 'Training Database' section. The main area shows a workflow titled 'Sample and Stain Preparat...' with a search bar and an 'Assigned to' dropdown. A modal window titled 'Run: 2023-09-19 16:11:36 EDT' is open, showing a table of samples. The table has columns for Type, Barcode, Collection date, Mass, Volume, Status, and D. The samples are listed as Blood, Brain, and Tissue. At the bottom of the modal, there are three buttons: 'Amending', 'Review', and 'Close'. The 'Close' button is highlighted with a red box.

Type	Barcode	Collection date	Mass	Volume	Status	D
Blood	BLO00000006	09/19/2023 16:11:58		50 ml	Available	
Blood	BLO00000007	09/19/2023 16:11:58		50 ml	Available	
Blood	BLO00000008	09/19/2023 16:11:59		50 ml	Available	
Brain	BRA00000002	09/19/2023 16:11:56	3 mg		Available	
Tissue	TIS00000006	09/19/2023 16:11:57	25 mg		Available	
Tissue	TIS00000007	09/19/2023 16:11:57	25 mg		Available	
Tissue	TIS00000008	09/19/2023 16:11:57	25 mg		Available	



# Quality of Life Changes

## Multiple Sessions Per User Lab Setting

Administrators can choose whether users are allowed to be logged in on multiple devices or browsers at a time or not.

For example, Administrators might want increased security in lab environments with shared equipment.

When the new lab setting “Multiple sessions per user allowed” is:

- Enabled: users can be logged in on multiple browsers or devices at one time
- Disabled: Users are logged out of prior sessions when they log in on a new device or browser

Browser 1 – Automatically logged out

Browser 2 – New active browser

The screenshot displays the SLIMS 7.0.0 Admin Manual interface. On the left, there is a login form with fields for 'Username' and 'Password', a 'LOGIN' button, and the version '7.0.0'. The main area on the right is titled 'LAB SETTINGS' and contains a table of settings. The 'Multiple sessions per user allowed' setting is highlighted in blue and is currently set to 'No' (indicated by an unchecked checkbox). Other settings include 'Pedigree enabled', 'Electronic Lab Notes: 3 lab Settings', 'Automatically finish protocol steps when results are filled', 'Variants enabled', 'Default simple protocol', 'Global search: 2 lab Settings', 'Include text fields in global search', 'Text match method for global search', 'Users: 3 lab Settings', 'Session timeout (minutes)', 'Group access rights fields together', 'API: 2 lab Settings', 'SLIMS Python-api allowed urls and flow-ids', 'BaseSpace access token', 'Macros: 1 lab Setting', 'Show value specification during macro execution', 'SLIMSShare: 2 lab Settings', and 'SLIMSShare server'. The bottom right corner indicates 'Total rows: 40'.

Keyword	Value
Pedigree enabled	<input type="checkbox"/>
Electronic Lab Notes: 3 lab Settings	
Automatically finish protocol steps when results are filled	<input type="checkbox"/>
Variants enabled	<input type="checkbox"/>
Default simple protocol	<input type="checkbox"/>
Global search: 2 lab Settings	
Include text fields in global search	<input checked="" type="checkbox"/>
Text match method for global search	Contains
Users: 3 lab Settings	
Session timeout (minutes)	60
Group access rights fields together	<input checked="" type="checkbox"/>
Multiple sessions per user allowed	<input type="checkbox"/>
API: 2 lab Settings	
SLIMS Python-api allowed urls and flow-ids (url -> flowid,url1 -> flowid2,url2 ->...)	
BaseSpace access token	
Macros: 1 lab Setting	
Show value specification during macro execution	<input checked="" type="checkbox"/>
SLIMSShare: 2 lab Settings	
SLIMSShare server	https://slimsshare.slims.agilent.com/slimsshare/

# Quality of Life Changes

## Edit Reference Data Records Inline

Users with the necessary permissions can now edit reference data records inline. This might be desired in case there are typos in reference data record values.

Editing a typo in Details pop-up

The screenshot displays the SLIMS (Spectral Library Identification and Management System) interface. The top navigation bar includes 'CONTENT', 'REFERENCE DATA', and 'FIELDS' tabs. The 'REFERENCE DATA' tab is active, showing a table of reference data records. A red box highlights the 'Details' pop-up window, which is used for editing a specific record. The pop-up contains fields for 'Name', 'Unique identifier', 'Reference Data Type', 'Created by', and 'Created on'. The 'Name' field is currently set to 'QC Lab'. A red box also highlights the 'Customer' field in the main interface, which is set to 'QQLab'. A blue arrow points from the 'Customer' field to the 'Details' pop-up, indicating the flow of data or the context of the edit.

Type	Id	S...
Mouse	MOU00000000	A...
Mouse	MOU00000001	A...

Details

Name: QC Lab

Unique identifier: rdrc\_customers\_qc\_lab

Reference Data Type: Customers

Created by: ananya

Created on: 10/21/2022 12:14

Save & close Reset (0) Close

# Quality of Life Changes

## Sorting is Possible on Function Columns

Administrators can add columns to grid templates. Those columns can be used to count values or generate the mean instead of just display the record values.

This change allows columns that use the count or mean functions to be sorted.

Sorting Added to Custom Column

The screenshot shows the SLIMS interface with a 'GRIDS' section. A grid displays data with columns: Type, Id, Test, and Value. A custom column 'Count in Grids' is visible on the left. A modal titled 'Edit view: Default' is open, showing the 'Sort' tab. The modal allows sorting by 'Value' in 'Ascending' order. The grid data is as follows:

Type	Id	Test	Value
Brain	BRA00000000	Weight (solid)	3.25 mg
Mouse	MOU00000000	Weight (solid)	32 g
Mouse			

# Quality of Life Changes

## Restrict Macros by Category

Administrators can restrict macros to certain content types or categories now. The “Only for selected content types” dropdown displays a list of both and indicates what they are.

Content Types and Categories in Restrictions list

The screenshot shows the SLIMS MACROS configuration interface. The top navigation bar includes the SLIMS logo, a MACROS icon, a notification bell, and the user profile 'Ananya'. The main header is 'Training Database'. Below it, the 'MACROS' section has a '+ New' button. The interface is divided into two main panels: 'Macro' and 'Macro steps'. The 'Macro' panel contains various configuration options, including 'Content types', 'Number of Executions', 'Last execution date', 'Created by', 'Created on', and 'Modified by'. The 'Content types' dropdown is open, showing a list of content types and categories. The list is organized into three columns: 'Name', 'Description', and 'Level'. The 'Level' column indicates whether the item is a 'Category' or a 'Content type'. The 'Content types' dropdown is highlighted with a red box. The 'Macro steps' panel shows a list of steps with checkboxes for 'Auto close the popup window when the macro is finished successfully', 'Auto start execution of the macro', 'Only for selected roles', and 'Only for selected content types'. The 'Only for selected content types' checkbox is checked. At the bottom, there are buttons for 'Save', 'Reset', and 'Cancel', along with a status message 'There are unsaved changes'.

Name	Description	Level
Content type...		Category
Content type...		Category
Content type...		Category
Content type...		Category
-20°C Freezer		Content t...
0°C Freezer		Content t...
20°C Fridge		Content t...

# Quality of Life Changes

## Remove Unused Custom Statuses

Statuses created on custom status workflows can now be permanently removed if they have never been used on a record.

Removing the "Not Ready" Status

SLIMS

CONTENT

REFERENCE DATA

FIELDS

STATUS WORKFLOWS

STATUS WORKFLOWS

New status workflow

Custom content wf

Hide inactive

Status Workflows

Statuses

Status transitions

New status

Name	Seq no	Active	
Ready	10	<input checked="" type="checkbox"/>	
Not Ready	20	<input checked="" type="checkbox"/>	<div><div></div><div></div><div></div></div>

Name :

Not Ready

Unique identifier :

stts\_custom\_content\_wf\_not\_ready

Seq no :

20

Description :

Confirm remove

!

Are you sure you want to remove the chosen Status record?

OKCancel

☐

An electronic signature is required to edit records with this status

☐

Offer the user to enter a comment /reason for change when editing records with this status

☐

Comment /reason for change is required when editing

☐

Records with this status can be versioned

☒

Active

Created by :

ananya

Created on :

06/27/2023 18:52

Save

Reset

(0)

Total rows: 2

# Quality of Life Changes

## Entities in Store Module can be Filtered

In the Store module, a pop-up displays all the entities that are imported with a package. The headers for the grid in the pop-up can now be filtered.

If you plan to partially import a package, this makes it easier to find the entities by name or table and import the ones you select.





# Quality of Life Changes

## Groovy: Filter by User Rights/Groups

The authenticatedUser filter can be added to an expression for dynamic choice fields on the content table such as products.

This allows field expressions to be created that filter out the products or field values based on who the user is, and even what group they're in, filtering on either the group name or group pk.

Groovy returning the group pk and name of the current user

The screenshot displays the SLIMS application interface. On the left, a 'Value expression console: 'MH Type' Field' window is open, showing a log of Groovy execution for a picklist. The log includes timestamps, debug messages about starting and ending execution, and an info message showing the result: [520]. Below the log is a 'Clear' button. The main interface shows a 'Locations' table with columns: Type, Id, Barcode, Status, and Location path. The table is filtered to show 'freezer: 2 contents' and 'drawer: 4 contents'. Below the table, there are tabs for 'Detail', 'Location detail', and 'Derivations'. The 'Detail' tab is active, showing a form for 'MH Type' with a dropdown menu. The dropdown menu is open, showing options: 'Sample', 'Blank', and 'Injection', each with an 'Active' checkbox. The 'Sample' and 'Blank' options are checked. Below the dropdown is a '+ Create new record' button. The user 'Ananya' is logged in, as indicated in the top right corner.

Value expression console: 'MH Type' Field

```
2023-06-26 16:01:03,054 DEBUG - Starting execution (33eac14e) of groovy fieldKey-Content.cntn_cf_fk_mhType-picklist
2023-06-26 16:01:03,056 INFO - [520]
2023-06-26 16:01:03,058 INFO - [USA]
2023-06-26 16:01:03,059 DEBUG - Ending execution (33eac14e) of groovy fieldKey-Content.cntn_cf_fk_mhType-picklist (took 5 ms).
```

Clear

Locations

Type	Id	Barcode	Status	Location path
freezer: 2 contents				
freezer	-20°C Freezer	FRZ0002	Available	SITE01[1,1]
freezer	0°C Freezer	FRZ0003	Available	SITE01[1,2]
drawer: 4 contents				
drawer	DR000000	DR000000	Available	SITE01/-20°C Free...
drawer	DR000001	DR000001	Available	SITE01/-20°C Free...
drawer	DR000002	DR000002	Available	SITE01/-20°C Free...

Filter: Can be used as a location Group: Type Total rows: 11 / Selected: 0

Detail Location detail Derivations All tabs

MH Type :

Collection date :

Category :

Type :

Id :

Short Id :

Save Reset (0)

Name	Active
Sample	<input checked="" type="checkbox"/>
Blank	<input checked="" type="checkbox"/>
Injection	<input checked="" type="checkbox"/>

+ Create new record



# Quality of Life Changes

## Groovy: Use differencesMap in Rules

differencesMap is available to be used on conditional value expression rules and status rules. This allows rules to easily check what fields are being updated and to what values.

Groovy provides error that prevents updating lot number

The screenshot displays the SLIMS application interface. The top navigation bar includes 'CONTENT', 'FIELDS', and 'RULES' tabs. The main content area is divided into two panels. The left panel, titled 'By location', shows a table with columns 'Id', 'Type', 'Fill...', and 'Av...'. It contains one row with 'SITE01' as the location. The right panel, titled 'Detail', shows a form for 'Location detail'. The form includes fields for 'Collection date', 'Category', 'Lot Number', 'Type', 'Id', 'Short Id', 'Barcode', 'Product', and 'Status'. The 'Lot Number' field is highlighted with a red border and contains the value '1016'. A red error message box is overlaid on the 'Lot Number' field, stating: 'This content field cannot be updated in status Available.' The 'Status' field is also highlighted with a red border and contains the value 'Available'. At the bottom of the form, there are buttons for 'Save', 'Reset', and 'Cancel', along with a status indicator 'There are unsaved changes'.

Collection date	Category	Type	Id	Short Id	Status	D
06/26/2023 16:29:15	Default	sample	1_0001		Available	
06/26/2023 16:29:16	Default	sample	1_0002		Available	
06/26/2023 16:29:16	Default	sample	1_0003		Available	
06/01/2023 14:28:00	Location	drawer	00000000		Available	

Total rows: 14 / Selected: 0

Detail × Location detail Derivations All tabs

Collection date : 06/26/2023 16:29

Category : Default

Lot Number : 1016

Type : sample

Id : 1\_0

Short Id :

Barcode : 00000002

Product :

Status : Available

Save Reset Cancel (0) There are unsaved changes

# Agilent SLIMS 7.1b Feature Highlights



# Sample Scheduler in Simplified Protocols

Use Simplified Protocols to connect to Sample Scheduler in a Workflow or ELN. Gain the user-friendly benefits of simplified protocols with two new block types:

- Submit Sample Scheduler – Design a grid template to map Sample Scheduler concepts into SLIMS concepts, define the submit status, and offer an optional sequence template.
- Complete Sample Scheduler Sequence – Map system suitability samples, blanks, and calibration standards to contents in SLIMS. Assist the user with an auto-complete SLIMS GATE flow.

Sample Scheduler default protocols can even be converted to get the streamlined block-style user experience of simplified protocols.

*\*Requires authentication with OpenLab Shared Services, Sample Scheduler for OpenLab installation, OpenLab CDS installation, and the CDS package via the Package Browser module.*

**A Sample Scheduler simplified protocol run**

Run: 2024-02-28 09:47:48 CET

Sample preparation Calibration preparation Run sequence

Sequence

28/02/2024 09:48

Select an instrument: Urea6.8

Select an OpenLab project: UreaWorkflow

Select a sequence template: UreaWF\_SeqTemplate\_2.stx

	Analysis status	Barcode	Inj Volume	Type	Acq. method	Proc. method
<input type="checkbox"/>	Sequence not created	00000836	1	Sample	Urea_6.8_AM1.amx	UreaUSP_Feb2020.pmx
<input type="checkbox"/>	Sequence not created	00000837	1	Sample	Urea_6.8_AM1.amx	UreaUSP_Feb2020.pmx

Sequence status:

Create Sequence

< Back In progress Review > Finish

# Location Blocks in Simplified Protocols

Link Location blocks are now available in simplified protocols to make it easier to view contents in plates during a run.

Locations can be linked manually by users, but the block can be set up to automatically link the locations for the contents linked to the associated content block.

Location details can be viewed by expanding the linked locations. Users can select one or more locations and perform actions via the selection menu. Selected locations can be unlinked, moved, and exported from the protocol run.

Contents in the location can be selected, and an arrow displays the direction in which the user selected them. Actions from relevant action blocks can be taken on selected contents.

Selected locations in a link location block

>>

Scan location to link

Link locations

Selection

Type

☐

Tissue

☐

Tissue

☐

Tissue

Action

Export

Unlink

Move

Status

Mass

D

Available

4 mg

Available

4 mg

Available

4 mg

T1S00000003

Location Status

Locations

07/29/2024 18:01

PLA00000002 : PLA00000002

1

2

3

4

5

6

7

8

9

10

11

12

A

T1S00000001

T1S00000002

T1S00000003

T1S00000004

T1S00000005

T1S00000006

T1S00000007

T1S00000008

T1S00000009

T1S00000012

T1S00000013

T1S00000014

B

T1S00000015

T1S00000016

T1S00000017

T1S00000018

T1S00000019

T1S00000020

T1S00000021

T1S00000022

T1S00000023

T1S00000024

T1S00000025

T1S00000026

C

T1S00000027

T1S00000028

T1S00000029

T1S00000030

T1S00000031

In progress

Finish

# Location Details and Plate Visualization

The grid display on the Location Details tab has been improved to be more readable.

- Grid UI has been refreshed
- Selection mode: Drag to select multiple positions at once. Choose whether to select in a box shape, select by row, or select by column.
- Rearrange mode: Toggle on to drag and drop contents to new positions, or to swap contents with each other in the location.
- Block/unblock positions
- View the contents or locations inside the selected location, or view other contents in the same location as the selected content
- Select single or multiple contents and access actions in the selection menu.
- Refresh the grid, print, or export to Excel

**The Location Details of a plate**

The screenshot displays the 'Location Details' interface. On the left, a table lists contents with columns for Type, Id, and Status. The table shows 14 rows of 'Blood' contents with IDs BL0000 through BL0014. The status varies between 'Pending' and 'Available'. On the right, the 'Location detail' tab is active, showing 'Location ID: BOX04' and 'Viewed content ID: BL0005'. Below this, a 'Display field' dropdown is set to 'Id, Type', and the 'Selection mode' is set to 'Row'. A 'Rearrange location' button is visible. The main part of the right panel is a 5x5 grid representing a plate. The grid has columns numbered 1 to 5 and rows lettered A to E. The grid cells contain either content IDs (e.g., BL0000, BL0005) or the word 'Blocked'. A blue selection box highlights the row B, columns 1 to 3. At the bottom of the interface, a filter bar shows 'Filter: Type, Id' and 'Total rows: 14 / Selected: 0'.

Type	Id	Status
Blood	BL0000	Pending
Blood	BL0002	Available
Blood	BL0003	Available
Blood	BL0004	Available
Blood	BL0005	Available
Blood	BL0006	Available
Blood	BL0007	Available
Blood	BL0008	Pending
Blood	BL0009	Pending
Blood	BL0010	Pending
Blood	BL0011	Pending
Blood	BL0012	Pending
Blood	BL0013	Pending
Blood	BL0014	Pending

Location ID: BOX04 Viewed content ID: BL0005

Display field: Id, Type Selection mode: Row Show viewed content: ☒ Position ☐ Inside

Rearrange location Selection

	1	2	3	4	5
A	BL0000 Blood	Blocked	BL0002 Blood	BL0003 Blood	BL0004 Blood
B	BL0005 Blood	BL0006 Blood	BL0007 Blood		
C					
D		Blocked	Blocked		
E					

Filter: Type, Id Total rows: 14 / Selected: 0

# SLIMS Share Redesign

SLIMS Share was redesigned to give super users more insight into the package that synchronizes a validation SLIMS with their production SLIMS.

There is one General package with all the tested main entities in the validation instance. The selected entities persist in the right grid so super users no longer need to create multiple packages.

When exporting the package to synchronize with the production instance, SLIMS validates the entities in the package. The super user is notified of any missing dependencies and can choose what to include or exclude from the package. The result is one package that should be importable on any SLIMS instance.

Ad Hoc packages can be created by expert users who are familiar with main entity dependencies. This allows small out-of-sync packages to be created for one-off changes that need to be in production ahead of time.

## Validated Reagent content types in the package

SLIMS SHARE Export package to SLIMS Share Export package to file General package

Create package Import package Installed packages

Available main entities

<input type="checkbox"/>	Name	Unique Identifier	Table	Active
<input type="checkbox"/>	-20°C Freezer	cntp_20_c_freezer	ContentType	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Default	cntp_default	ContentType	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Brain	cntp_brain	ContentType	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Kits	cntp_kits	ContentType	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Data Bank	cntp_data_bank	ContentType	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Agilent RNA Analysi...	cntp_agilent_rna_a...	ContentType	<input checked="" type="checkbox"/>
<input type="checkbox"/>	0°C Freezer	cntp_0_c_freezer	ContentType	<input checked="" type="checkbox"/>
<input type="checkbox"/>	20°C Fridge	cntp_20_c_fridge	ContentType	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Water	cntp_water	ContentType	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Liquid Handler	cntp_liquid_handler	ContentType	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Plate	cntp_plate	ContentType	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Small Plate	cntp_small_plate	ContentType	<input checked="" type="checkbox"/>

Sort: Table (Ascending) Total rows: 521 / Selected: 1

Main entities in package

<input type="checkbox"/>	Name	Table	Added by	Added on
<input type="checkbox"/>	Microfluidic Chips	ContentType	ananya	02/28/2024 22:37:40
<input type="checkbox"/>	Gill's Hematoxylin	ContentType	ananya	02/28/2024 22:37:40
<input type="checkbox"/>	Eosin Phloxine	ContentType	ananya	02/28/2024 22:37:44
<input type="checkbox"/>	Eosin Y	ContentType	ananya	02/28/2024 22:37:44

Sort: Table (Ascending) Total rows: 4 / Selected: 0

# Quality of Life

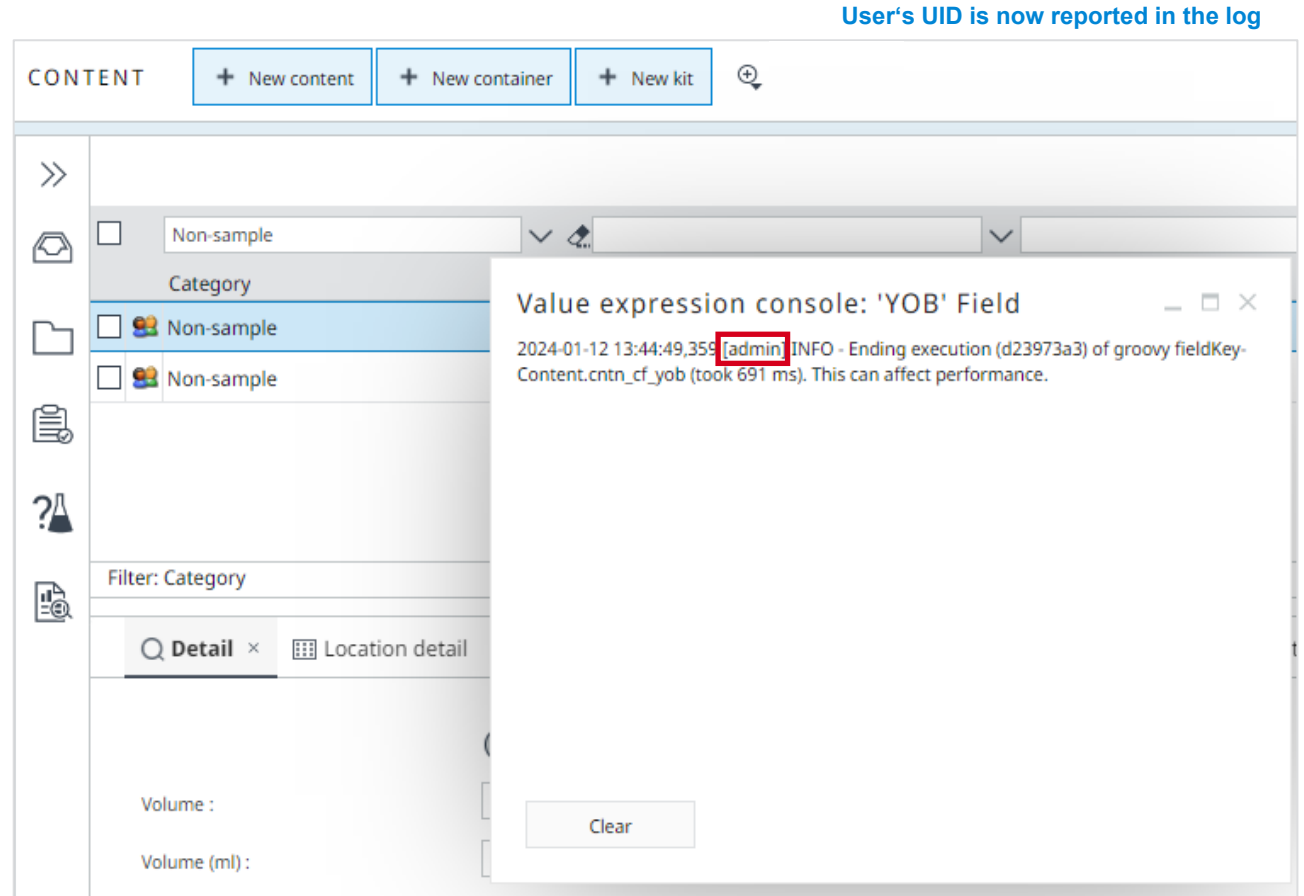
## ID of Users is Recorded in Expression Logs

It is easy to tell who initiated an action, like updating sample data that triggers a Groovy expression. Now, the unique identifier of the user who started it in the SLIMS interface is shown in the log.

The user is captured in logs for:

- Groovy executions
- SLIMS GATE Flows

User's UID is now reported in the log



The screenshot displays the SLIMS interface with a 'CONTENT' header and buttons for '+ New content', '+ New container', and '+ New kit'. A sidebar on the left contains navigation icons. The main area shows a table with columns for 'Category' and 'Non-sample'. A 'Value expression console: 'YOB' Field' dialog is open, showing a log entry: '2024-01-12 13:44:49,359 [admin] INFO - Ending execution (d23973a3) of groovy fieldKey-Content.cntn\_cf\_yob (took 691 ms). This can affect performance.' The user ID 'admin' is highlighted with a red box. A 'Clear' button is visible at the bottom of the console.

# Quality of Life

## Macro UI Improvements

The pop-up users see when executing macros was optimized to focus on the most useful information. The UI is simpler, and the position of buttons was adjusted.

The Scan module was also improved to gain the same benefits.

Create mouse and derive blood macro in action

Create all mouse

Executing Create content action ...

Show feedb...

+ 1. Create content

Amount

Amount : 1

Address

Location : ☒ Specify new location ☐ Use previously created location

Location : BOX02: 17

or scan location barcode : scan barcode OR type barcode and press Enter

Content detail

2. Derive content

Continue



# Quality of Life

## Restrict Content Events

Content event types and flags can now be restricted by content types and category. This way, events are filtered so only the applicable ones are shown for a content.

For example, only the checks on temperature are present for fridge contents.

Baseline is restricted to Subject contents

SLIMS

CONTENT

CONTENT EVENT TYPES

Training Database

CONTENT

+ New content

+ New container

+ New kit

Show removed

Global search

Subj

Id

Status

Subject

SUB00000000

Pending

Location detail

Derivations

Events

Studies

All tabs

Also show events of

contents affected by selected content

Study

Content event t...

Height

Weight

Headache Study: 1 content event

Headache Study

Baseline Headache

63

130

Case report form tem...

Hgb

WBC

Intake

15

7

Case report form template

Recheck

Filter: Type

Total rows: 1 / Selected: 0

Total rows: 1 / Selected: 0

# Quality of Life

## Hide Irrelevant Action Buttons

The actions users can take on contents depends on their content type definition. Actions that aren't possible for a content are hidden / unavailable, so users don't mistakenly try to take an impossible action.

With reagent and blood selected, the only action in common is "Derive"

CONTENT + New content + New container + New kit Show removed

>>

Selection ▾

Derive

	Category	Type	Id	Status	Collection date	
<input type="checkbox"/>	Default	Blood	BL0004	Available	02/08/2024 15:36:31	
<input type="checkbox"/>	Default	Blood	BL0005	Available	02/08/2024 15:36:32	
<input checked="" type="checkbox"/>	Default	Blood	BL0006	Available	02/08/2024 15:36:32	
<input checked="" type="checkbox"/>	Default	Blood	BL0007	Available	02/08/2024 15:36:32	
<input checked="" type="checkbox"/>	Reagents	Eosin Phloxine	EOP00000000	Available	02/08/2024 15:41:30	
<input type="checkbox"/>	Reagents	Eosin Y	EOY00000000	Available	02/08/2024 15:41:49	
<input type="checkbox"/>	Reagents	Gill's Hematoxylin	HEG00000000	Available	02/08/2024 15:42:15	

Filter: contentBySavedSelectionPk

Total rows: 11 / Selected: 3

When only blood is selected, all the blood actions are present

	Category	Type	Id	Status
<input type="checkbox"/>	Default	Blood	BL0000	Available
<input type="checkbox"/>	Default	Blood	BL0001	
<input type="checkbox"/>	Default	Blood	BL0002	
<input type="checkbox"/>	Default	Blood	BL0003	
<input type="checkbox"/>	Default	Blood	BL0004	

Open detail

Derive

Aliquot

Dilute

# Quality of Life

## Restrict Category in Simplified Protocols

Contents linked to simplified protocols for ELN and workflows can now be restricted by category, not just by content type. Restriction by category combines with other options.

- Refine filter: Also restrict to the content types in the selected category
- Require content: If enabled, at least one content of a type in the category must be linked
- Track usage: Categories with an amount field applied to all their content types can have usage options enabled in the simplified protocol block.

## Restrict by category in a link content block

PROTOCOLS [+ New](#)

>> Tissue Stains Draft Show all Version

>>> Protocol >> Pages and Blocks

[+ New Page](#)

Name	Type
Linking	Page
Tissues	Link content

Block info

Type : Link content

Link as : Output

☒ Allow block to be removed

☐ Collapse block by default

☐ Restrict and specify extra options about macros

☐ No specification ☒ Restrict content types ☐ Track usages ☐ Track usages and restrict

Name	Description	Required	Level
Default		<input type="checkbox"/>	Category
Tissue		<input type="checkbox"/>	Content type

☐ Allow linking of expired/uncalibrated contents

Attachment 1 : [Edit](#)

Attachment 2 : [Edit](#)

Attachment 3 : [Edit](#)

Created by : ananya

Created on : 01/31/2024 13:46

# Quality of Life

## Use UID for URL Links to Records

URL links can be generated to go directly to specific records in SLIMS using their GUID or UID. This allows links to be generated for Orders, Contents, Protocol Runs, or Protocol Run Steps even before a GUID is assigned.

Users can paste the URL into their browser or click on the URL link from an automatically generated email or notification. The link takes them directly to the content, order, protocol run, or protocol run step.

Click link to go to record, or paste it to a colleague

The screenshot displays the SLIMS web application interface. The top navigation bar includes the SLIMS logo and tabs for CONTENT, ORDERS, and RULES. The user's name, Ananya, is visible in the top right corner. The main content area is divided into two panels. The left panel, titled 'Training Database', shows the 'ORDERS' section with a '+ New' button and a table of orders. The table has columns for Order type, Barcode, Status, and Created on. The right panel, titled 'SLIMS GATE status (0 running)', shows a notification for an updated order. A red box highlights the notification text: 'Order updated' and 'Order with barcode 0000000002 has been updated'. A blue arrow points from this notification to a browser window at the bottom. The browser window shows the URL: <http://localhost:8080/slims/Slims.html?initialModule=order&barCo>. The browser window also displays the SLIMS interface, showing the 'Order detail' section with fields for Barcode, Order type, Project, Certificate of analysis, and Planned on date. The 'ORDERS' table in the browser window shows the same data as the main interface, with the order having barcode 0000000002 highlighted.

Order type	Barcode	Status	Created on
Default order type	0000000000	Pending	02/02/2024 20:32:53
Default order type	0000000001	Pending	02/02/2024 20:51:12
Default order type	0000000002	Pending	02/02/2024 21:01:09

Type	Id	Status
Mouse	MOU000...	Available
Mouse	MOU000...	Available

# Quality of Life

## Additional Fluent Groovy API Functions

The library of API functions was expanded for Fluent Groovy.

- You can start a query from many more tables
- You can use unique identifiers for filtering instead of a pk
- You can filter for a collection of values or UIDs which will be interpreted as a “one of” filter
- Query and Link methods were added for working with versioned records in Draft or Published statuses.

No Screenshot Available



# Agilent SLIMS 7.2 Feature Highlights



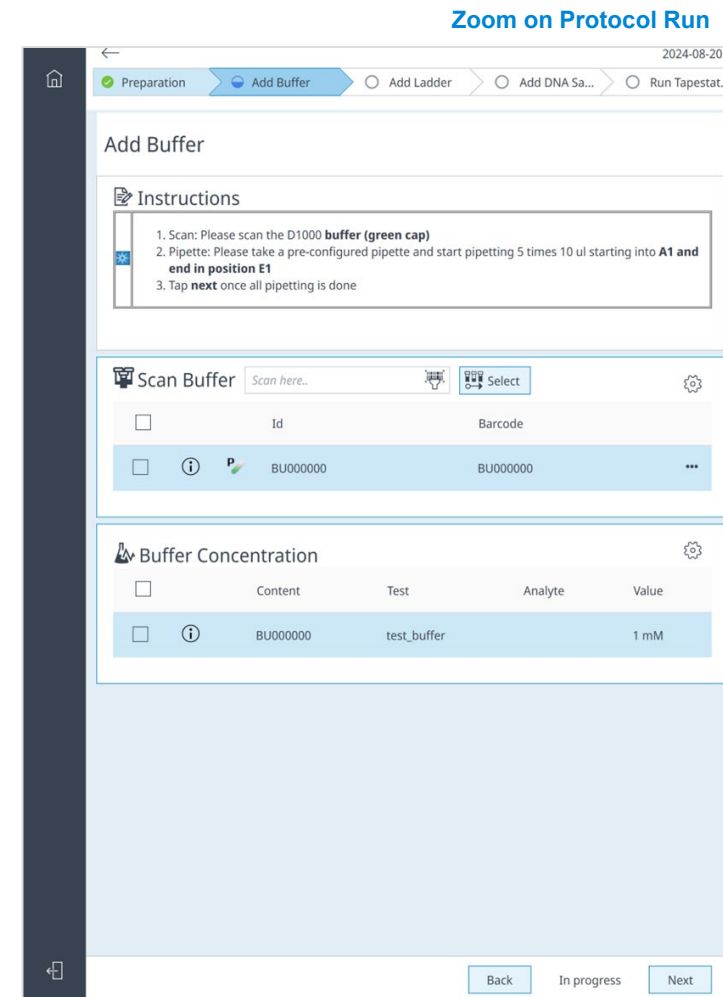
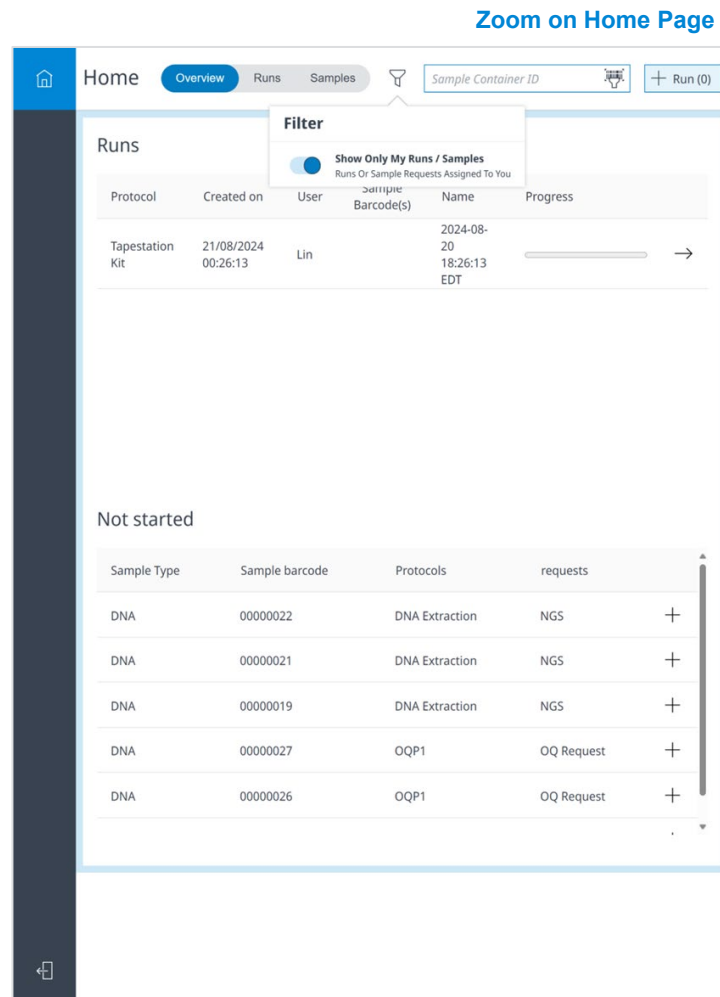
# Bench UI for Touch Screens

A web-based interface for the Agilent tablet, Bench UI allows users to run protocols for ELN and workflows on supported touch-screen devices. Tablets can be used to process a subset of protocols at the bench.

Technicians can use it for day-to-day sample management and protocol executions, and managers can review protocol pages.

All the setup is done in SLIMS beforehand to keep it simple to run for the user. Only simplified protocols are supported, but most of the block types can be used:

- Link Content
- Result
- Attachment
- Note
- Grid Template
- Action
- Form
- Custom: Submit Sample Scheduler



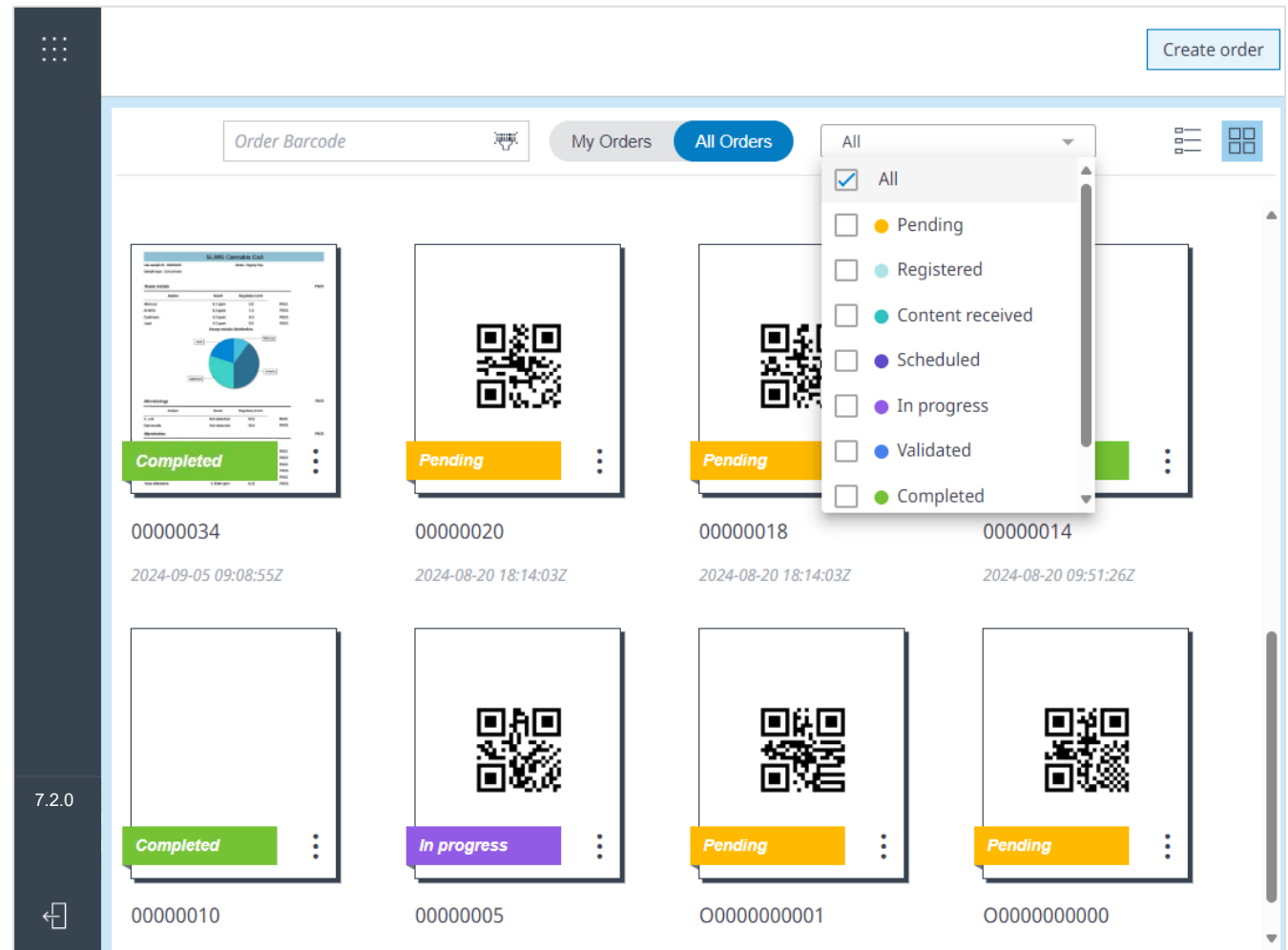
# Requester Portal for Lab Orders

The Requester Portal is an add-on for SLIMS that gives customers a simple interface to create orders for your lab.

User accounts in SLIMS are authenticated to provide the desired level of access. In the portal, customers can:

- Create and edit their orders
- View orders in a tile or list format on the portal's dashboard
- Add samples and sample details to orders
- Add requests to order samples
- Access the finished certificate of analysis

Requester Portal Landing Page with Filter Open





# MassHunter Injection-Based Sample Sheets

Grid Templates were enhanced so generic sequence templates can be made that work with various MassHunters and other analytical equipment.

Once the grid template is configured according to the instructions, a sample sheet row is added to the Grid block for each content linked to the associated Link Content block.

Not all rows have to be associated to content to collect sample sheet field data. On the right, the Content ID and Sample volume come from content data, but the Sample ID, LIMS IDs, and Injection volume are only stored in the sample sheet.

Sample sheet rows can be reordered, removed, and edited (if the protocol page is in an editable status). Empty rows can be created to collect data about non-sample records like blanks, QC and calibration standards.

Zoom on Grid Template used as Sequence

The screenshot displays the SLIMS interface with the 'Water to Process' and 'Sequence' grids. The 'Sequence' grid is highlighted with a red box, showing columns for Content ID, Sample ID, Sequence Number, Sample Volume, LIMS ID1, LIMS ID2, and Injection Volume. The grid contains data for three samples: WAT-000041, WAT-000042, and WAT-000043.

Content ID	Sample ID	Sequence Number	Sample Volume	LIMS ID1	LIMS ID2	Injection Volume
WAT-000041	00000032	1	25 ml	1	1	10
WAT-000042	00000033	1	25 ml	2	2	10
		1		3	3	6
WAT-000043	00000034	2	25 ml	4	4	10
		3		5	5	6

# SLIMS Share Import Visibility

SLIMS Share is more informative about the changes that will occur when a package is imported.

Exporting a package:

A pop-up identifies missing entities and whether they are required or optional. Super users can make a more informed decision about what to bring and what to leave out.

Importing a package:

All SLIMS Store packages for your SLIMS version are handy without switching modules. The screen was repurposed to show the entity tree with what entities in the package are new and which will update existing entities in the instance. Clicking on an entity shows what will change to make validation easier.

Installing a package from SLIMS Store now takes the super user to the Share module to benefit from the same level of scrutiny before import.

Zoom on Import Package tab in SLIMS Share

The screenshot displays the 'Import Package' tab in the SLIMS Share interface. It features three main sections: 'Available packages', 'Main entities in package', and 'Entity modifications'.

**Available packages:** A table listing various packages with columns for ID, Name, SLIMS version, and Package version.

ID	Name	SLIMS version	Package version
777	generic content types...	7.0	1
778	basicContentFields	7.0	1
779	Catalytic activity	7.0	1
780	CFU_units	7.0	1
781	Pressure_units	7.0	1
782	LocationTypes	7.0	1
783	Molar concentration ...	7.0	1
784	Molar mass units	7.0	1
785	COUNTRIES	7.0	1
786	volumetric_flow_units...	7.0	1
787	Hide_default_fields	7.0	1

**Main entities in package:** A table showing the entities within the selected package, including Name, Unique id, Table, Pre-import status, and Active status.

Name	Unique id	Table	Pre-import su...	Active
✓ Blood	cntp_blood	ContentType	Updated entity	✓
✓ Mouse	cntp_mouse	ContentType	Updated entity	✓
✓ Tissue	cntp_tissue	ContentType	Updated entity	✓
✓ mouse		Icon	Updated entity	✓
✓ tissue		Icon	Updated entity	✓
> mouse		Icon	Updated entity	✓
> tubeRed		Icon	Updated entity	✓
> tissue		Icon	Updated entity	✓
> µg	µg	Unit		✓
> g	g	Unit		✓
> mg	mg	Unit		✓

**Entity modifications:** A table showing the changes to be made to existing entities, including Field, Old value, and New value.

Field	Old value	New value
cntp_icon	data_icons/tube-purple.png	data_icons/agltissue.png
cntp_active	false	true

# Rule Expansion to Enable Data Edition

Groovy expressions are being centralized into rules to minimize the need for managing value expressions across several SLIMS modules. Therefore, rule design has been updated to allow **conditional value expression rules** to modify data for records on which they're triggered.

Rules can now be:

- Described with the description field
- Restricted to fire on certain records (See Quality of Life slide “**Restrict Record Types for Rule Executions**”)
- Developed so their actions are different when triggered by a content-related macro step
- Given a sequence number to define the order in which they fire
- Given a timing
- Given permission to execute on creation, update, and/or removal of records.

Rule changes the value of "Is Liquid"

The screenshot displays the SLIMS Training Database interface. The main table lists blood samples with columns: Category, Type, Id, cntn\_sh..., Status, Collection date, and D. The table contains 26 rows, with the last row (Id: 00000039) highlighted. A red box highlights a rule execution console on the right side of the interface. The console shows a log entry: "2024-08-23 11:02:29,415 [ananya] INFO - Rule rule\_mark\_liquids changed field cntn\_cf\_isLiquid to value true". The console also shows a "Value expression console: 'Mark liquid...'" and a "Clear" button. The interface includes a top navigation bar with "SLIMS", "CONTENT", "FIELDS", and "RULES" tabs, and a user profile for "Ananya".

Category	Type	Id	cntn_sh...	Status	Collection date	D
Default	Blood	BL0007		Available		
Default	Blood	BL0008		Pending	03/18/2024 18:29:46	2
Default	Blood	BL0009		Pending	03/18/2024 18:29:46	2
Default	Blood	BL0010		Pending	03/18/2024 18:29:46	2
Default	Blood	BL0011		Pending	03/18/2024 18:29:46	2
Default	Blood	BL0012		Pending	03/18/2024 18:29:46	2
Default	Blood	BL0013		Pending		1
Default	Blood	BL0014		Pending		
Default	Blood	BLO00000...		Available	02/02/2024 22:48:38	
Default	Blood	BLO00000...		Available	02/02/2024 22:48:38	
Default	Blood	BLO00000...		Available	02/02/2024 22:48:38	
Default	Blood	BLO00000...		Available	02/02/2024 22:48:39	
Default	Blood	BLO00000...		Available	02/02/2024 22:48:39	
Default	Blood	BLO00000...		Available	02/02/2024 22:48:39	
Default	Blood	BLO00000...		Available	02/02/2024 22:48:39	
Default	Blood	BLO00000...		Available	02/02/2024 22:48:39	
Default	Blood	BLO00000...		Available	02/02/2024 22:48:39	
Default	Blood	BLO00000...		Available	02/02/2024 22:48:39	
Default	Blood	00000039		Pending	08/23/2024 15:02:29	


Filter: Type Total rows: 26 / Selected: 0

# Quality of Life

## Restrict Record Types for Rule Executions




Conditional value expression rules can now be designed to run only on certain categories, content types, order types, content event types, etc. Choosing the type narrows the scope of a rule so it only impacts the relevant records.

### A rule restricted to some content types

SLIMS
Ananya 

Training Database

RULES
[+ New](#)

Name	Type	
Check inde...	Mix	C...
Check inde...	Mix	C...
Wrong valu...	Conditional value expres...	C...   
DIN on TS C...	Result	R...
Mouse Mass	Result	R...
TS Concent...	Result	R...

**Name :**

**Unique identifier :**

Description :









Type : Conditional value expression

Table : Content

Rule evaluation unique identifier mask :

Content types :

☒ Only applicable for certain content types
 

Name	Description	Level	
 Ampule		 Content type	
 Aspirin		 Content type	
Content types of category: Default		 Category	

```

Insert
1 if (content.cntn_cf_notCiao == "ciao") {
2     error("cntn_cf_notCiao", "cntn_cf_notCiao cannot be 'ciao'")
3 }
    
```

Filter: Active Total rows: 6

[Save](#)
[Reset](#)
[!\[\]\(ec941fdd29b73e0381416f9456874bec\_img.jpg\) \(0\)](#)

There are unsaved changes

# Quality of Life

## Send Delayed Emails with Rules

Emails can be sent instantly to notify users about a change. However, delayed emails can now be sent with conditional value expression rules to wait until a whole transaction is finished before sending the email.

Delaying the email means if anything happens during the transaction that should prevent the email from sending, it is not sent.

*Additional methods were added to get paths to records. See the Technical Release Notes for details.*

New methods to delay emails

The screenshot shows the SLIMS Rules configuration interface. The top navigation bar includes 'SLIMS', 'CONTENT', 'RULES', and 'EMAIL TEMPLATES'. The 'RULES' tab is active, showing a table of rules. The 'Delayed email' rule is selected, and its configuration is displayed on the right. The 'Type' is 'Conditional value expression', and the 'Content' is 'triggerDelayedEmail("Delayed email")'. A red box highlights the 'triggerDelayedEmail' method in the 'Value expression' field. Below the main configuration, a list of available methods is shown, with 'triggerDelayedEmail' methods highlighted in blue.

Name	Type	Mode of evaluation	Table
Delayed email	Conditional value ...	Script specification	Content
Laura - fill in ...	Conditional value ...	Script specification	Sample sheet ...

Type: Conditional value expression  
Table: Content  
Rule evaluation unique identifier: RLVL#####  
Rule evaluation mask: Only applicable for certain content types

Value expression: triggerDelayedEmail("Delayed email")

Value expression sequence number: 0

Filter: Active

- triggerDelayedRecalculation(String entityName, Long entityPk)
- triggerDelayedSlimsGateFlow(String flowId)
- triggerDelayedSlimsGateFlow(String flowId, Map parameters)
- triggerDelayedSlimsGateFlow(String flowId, String entityName, Long entityPk)
- triggerDelayedSlimsGateFlow(String flowId, String entityName, Long entityPk, Map parameters)
- triggerDelayedEmail(String emailTemplateName)
- triggerDelayedEmail(String emailTemplateName, Map parameters)

# Quality of Life

## Scan to Run Macros in Action Blocks

Macros that need an input to perform an action, like derive and aliquot, now have three options for selecting the input.

**All** means the macro takes everything from the input block.

**Selected Samples** requires the user to choose samples in the input block that the macro will act on.

**Scan** provides a barcode scanning box so the user can scan or type barcodes to select records. If the scanned samples aren't in the protocol yet, they are linked to the input block, and the records derived from the macro actions are linked to the output block.

Macro with Scan Function

Training Database

ELECTRONIC LAB NOTES

ELN Content Status Waters Waters 1 Type to add tags...

Q In records

Back Recently worked on

+ Project + Note + Experiment

Name User Status

Waters 1 ananya In progress

Scan content to link + New Link contents Go to content

Water

Category	Type	Barcode	Status	Created on	Volume
Products	Water	00000040	Pending	09/19/2024 18:44:00	500 ml
Products	Water	00000041	Pending	09/19/2024 18:44:05	500 ml

Aliquot Water Samples

Scan and Derive Water : Scan barcode to start

Aliquots

Category	Type	Barcode	Status	Created on	Volume
Products	Water	00000042	Pending	09/19/2024 18:46:45	500 ml
Products	Water	00000043	Pending	09/19/2024 18:46:45	500 ml
Products	Water	00000044	Pending	09/19/2024 18:46:45	500 ml

Total rows: 1 / Selected: 0

In progress Finish

# Quality of Life

## Macro can Position Content in Link Location Block

Macros can be used in Simplified Protocols to let the user position content in a location by selection.

The user chooses a position in the location (a well in the plate) and runs the macro. The input contents are processed, and the output begins filling the location from the start point selected by the user.

Macro run on Position 3A Filled by Row

The screenshot shows the SLIMS software interface. The top navigation bar includes icons for SLIMS, MACROS, PROTOCOLS, and ELN. The main area is titled 'ELECTRONIC LAB NOTES' and shows a list of locations. A 'Water plate' window is open, displaying a 12x3 grid. A red box highlights the 'Place Water' button in the main area. Another red box highlights the output grid below it, which shows the results of the macro run.

	1	2	3	4	5	6	7	8	9	10	11	12
A												
B												
C												

	2	3	4	5	6	7	8	9

# Quality of Life

## Aggregated Results Evaluate After Contributing Results

Users only need to electronically sign once when filling all the results that make up an aggregated result. The status of the aggregated result gets updated once all its contributing results are entered, and any rule errors are provided.

Zoom on Aggregated Results

SLIMS

CONTENT

WORKFLOWS

ELN

Ananya

Training Database

WORKFLOWS Aspirin Testing

Q Search

Assigned to:

< Run: 2024-04-23 16:42:09 GMT

+ New + Add multiple

Results

Product Measurements 04/23/2024 12:42

Content	Test	Value	Aggregation method	Status
Mass: 8 results				
<input type="checkbox"/> ASP00000000	Mass	125 mg		Verified
<input type="checkbox"/> ASP00000000	Mass	120 mg		Verified
<input type="checkbox"/> ASP00000000	Mass	130 mg		Verified
<input type="checkbox"/> ASP00000000	Mass	130 mg	Maximum	Verified
<input type="checkbox"/> ASP00000000	Mass	125 mg	Mean	Verified
<input type="checkbox"/> ASP00000000	Mass	120 mg	Minimum	Verified
<input type="checkbox"/> ASP00000000	Mass	5 mg	Standard Deviation	Verified
<input type="checkbox"/> ASP00000000	Mass	375 mg	Sum	Verified

< Back

In progress

> Finish

Start (0)

Test the samples (1)

Finish (0)



# Quality of Life

## Default Choice of Unit in Simplified Protocols

Link Content blocks that track a content's usage now respect quantity fields with "Choice of unit" enabled. Administrators can choose the default unit for the quantity which makes it easier to create quantity fields and use fewer of them.

Since the unit is predefined for the user, they can't change it during the protocol run.

Choose unit in setup and the quantity with unit are used at runtime

The screenshot displays the SLIMS 7.2 interface. At the top, a navigation bar includes 'ELN', 'Stains', 'Prepare Stains', and 'Use Eosin'. A search bar on the right says 'Type to add tags...' and 'In records'. Below this is a 'Scan content to link' button and a '+ New' button. A 'Link contents' button is highlighted. A 'Go to content' button is also visible. A 'Stain Reagents' dropdown menu is open, showing a list of reagents. The 'Reagents' table is shown with columns: Type, Id, Status, Collection date, Reagent Expiry, and a 'Quantity' column. The 'Quantity' column is highlighted in blue. A red box highlights the 'Used Quantity' column, which shows '10 ml' and 'ananya'. A dropdown menu is open for the 'Quantity' column, showing a list of units: 'No specification', 'Restrict content types', 'Track usages', and 'Track usages and reagents'. The 'Track usages and reagents' option is selected. The dropdown menu also shows a list of units: 'ml', 'L', 'dm^3', 'l', 'microliter', 'Cubic meter', 'Milliliter', 'Liter', 'decimeter^3', and 'liter'. The 'ml' unit is selected.

Type	Id	Status	Collection date	Reagent Expiry	Quantity
Eosin Phloxine	EOP00000001	Pending	07/29/2024 22:02:21	10/17/2024	10 ml

Name	Descrip...	Re...	Us...	De...	Unit
Eosin Phlo...		<input type="checkbox"/>	<input type="checkbox"/>		10 ml
Eosin Y		<input type="checkbox"/>	<input type="checkbox"/>		10 ml

Abbreviation	Name
µl	microliter
m^3	Cubic meter
ml	Milliliter
L	Liter
dm^3	decimeter^3
l	liter

# Quality of Life

## More Macros Available in Dashboards

Macros that require input can now be used in Dashboards, not just creation macros.

The user has an input field to scan or input a barcode. When they do, the macro runs on the record.

Scan a barcode to run the macro

The screenshot displays the SLIMS DASHBOARDS interface. At the top, there's a navigation bar with 'SLIMS', 'CONTENT', and 'DASHBOARDS' tabs. The 'DASHBOARDS' tab is active. Below the navigation bar, there's a 'Training Database' section with a 'DASHBOARDS' filter set to 'Electronic Catalog' and a 'Hide inactive' toggle. A 'New' button is also present. To the right, there are 'Refresh', 'Edit', and 'Settings' buttons. The main content area is divided into two panels. The left panel, titled 'SOP for Water ...', contains a 'SOP for Water Tests' section with a table of objectives, scope, responsibility, and accountability. The right panel, titled 'SOP for Water Tests', contains a table with the following data:

1.0 Objective	To confirm process for testing water for reliable and accurate results.
2.0 Scope	This process is applicable for water testing equipment and workflows.
3.0 Responsibility	3.1 Doing: Technician 3.2 Reviewing: PI
4.0 Accountability	Head of the Department

Below the SOP section, there's a 'Reagents' section with a table of reagents. A red box highlights a 'Scan barcode to start' input field in the 'SOP for Water ...' panel. A blue line connects this input field to a 'Barcode' table in the 'Reagents' section. The 'Barcode' table has the following data:

Barcode
ATAB-00000000
BTAB-00000000
ITAB-00000000
ITAB-00000001

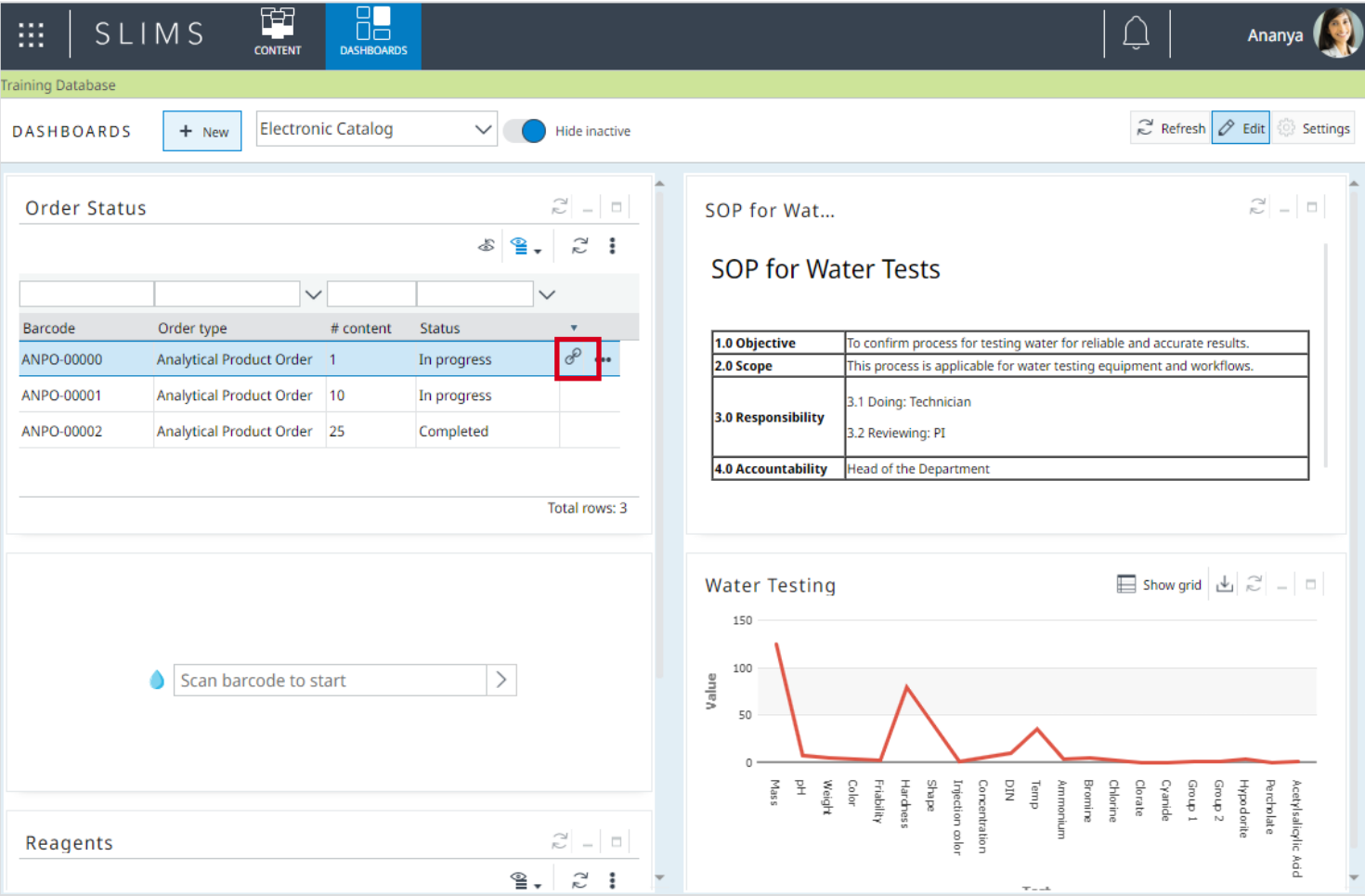
A red box also highlights a 'Aliquot Water Samples (1 records)' dialog box. This dialog box has a 'Done' button and a 'Show feedback' button. It contains a 'Purity' field set to '30', a 'Category' field set to 'Products', a 'Type' field set to 'Water', and a 'Trl' field set to 'WAT-000032'. A dropdown menu is open, showing '1. Aliquot content'. A 'Close' button is at the bottom right of the dialog box.

# Quality of Life

## “Link to Order” Action for Dashboard Grids

An icon can be added as a column in order grids for dashboards. When the user clicks the icon, they’re taken to the order in the Orders module.

[Link to go to the order](#)



The screenshot shows the SLIMS DASHBOARDS interface. The top navigation bar includes the SLIMS logo, 'CONTENT' and 'DASHBOARDS' tabs, a user profile for 'Ananya', and a 'Link to go to the order' button. The main content area is titled 'Training Database' and contains several sections:

- DASHBOARDS**: Includes a '+ New' button, a dropdown menu set to 'Electronic Catalog', a 'Hide inactive' toggle, and buttons for 'Refresh', 'Edit', and 'Settings'.
- Order Status**: A table with columns 'Barcode', 'Order type', '# content', and 'Status'. The first row (ANPO-00000) is highlighted, and a red box highlights a 'Link to Order' icon in the rightmost column of this row. Below the table, it says 'Total rows: 3'.
- SOP for Water Tests**: A table with four rows: '1.0 Objective', '2.0 Scope', '3.0 Responsibility', and '4.0 Accountability'.
- Water Testing**: A line graph showing 'Value' on the y-axis (0 to 150) against various parameters on the x-axis. The parameters are: Mass, pH, Weight, Color, Friability, Hardness, Shape, Injection color, Concentration, DIN, Temp, Ammonium, Bromine, Chlorine, Chlorate, Cyanide, Group 1, Hypodermic, Perchlorate, and Acetylsalicylic Acid.
- Reagents**: A section at the bottom with a 'Scan barcode to start' button.

# Quality of Life

## Widgets can be Copied

Graph and rich text widgets can be copied to make the design process faster.

Just supply a new name and the meta tree and columns or the text in the rich text box will be copied into a new widget design.

Zoom on copied widgets

SLIMS

DASHBOARDS

WIDGETS

Training Database

WIDGETS

+ New

Name	Type
Order Status Report	Graph
Order Status Report (Copy)	Graph
SOP for Water Tests	Rich text
SOP for Water Tests (Copy)	Rich text
Water Testing	Graph

Widget

Meta

Meta

Name	Join type	There exists at most one entry f...
Result (Result)	Left	
Content: To Conte...	Left	

Meta tree	Function	Field	Title	Seq no	Graph dataty...
Result		rslt_value	Value	0	Value
Result		rslt_fk_test	Test	1	Facet

Filter: Active

Total rows: 5

Total rows: 2

Total rows: 2

44

12/10/2024

Feature Highlights SLIMS 7.2

DE003136

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# Quality of Life

## “To Workflow” Action Available on Grids

In the Grids module, users with the right permission can use the “To workflow” action on content grids. The action is available after selecting one or more content.

Select multiple content and use the action

SLIMS

CONTENT

GRIDS

Ananya

Training Database

GRIDS

To workflow

Export

Name

Reagents

Contents

DNA

Barcode

Type

Location

Mass

Volume

DNA00000000

DNA

PLA00000007

DNA00000001

DNA

PLA00000007

DNA00000002

DNA

PLA00000007

DNA00000003

DNA

PLA00000007

DNA00000004

DNA

PLA00000007

DNA00000005

DNA

PLA00000007

DNA00000006

DNA

PLA00000007

DNA00000007

DNA

PLA00000007

DNA00000008

DNA

PLA00000007

DNA00000009

DNA

PLA00000007

DNA00000010

DNA

PLA00000007

DNA00000011

DNA

PLA00000007

DNA00000012

DNA

PLA00000007

Total rows: 1

Filter: Type

Total rows: 203 / Selected: 6

45

12/10/2024

Feature Highlights SLIMS 7.2

DE003136

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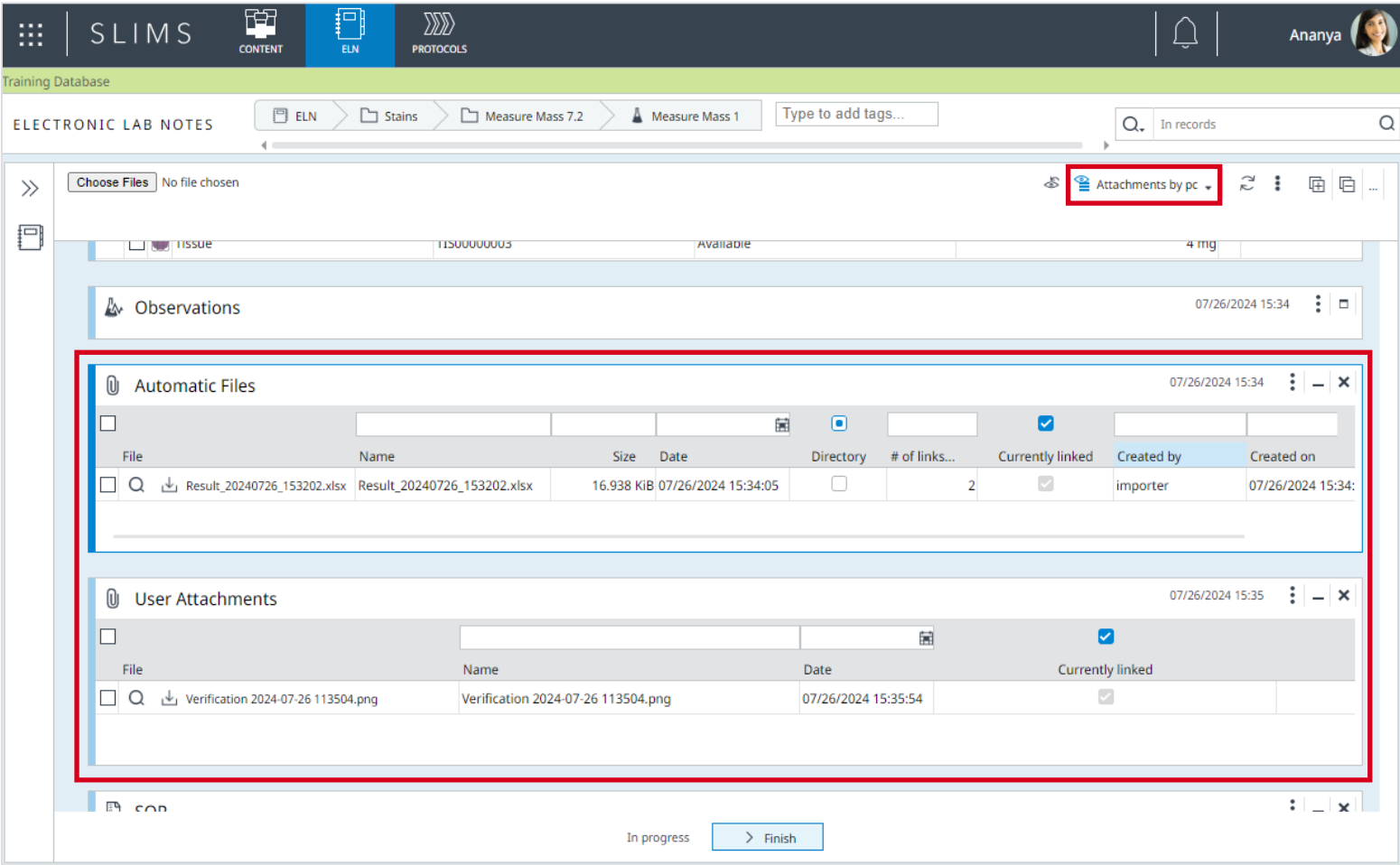
# Quality of Life

## Views Added to Attachment Blocks

Attachment blocks can now use views to arrange the columns and filter custom fields displayed in the block.

This change supports labs who want a different display of attachment data in different blocks. For example, attachment blocks for users versus attachment blocks that lab equipment uploads files to.

Two attachment blocks with different columns



# Quality of Life

## Dynamic Choice Field Enhancements

Dynamic choice fields can be set up with selection options for more tables. Barcode fields and unique identifiers can be entered or scanned to select records in a field, and requestable groups can be a target of the field.

This can be used to scan content or orders into fields with a barcode scanner and scan instrument barcodes into a protocol run.

Requestable group and order can be selected

The screenshot displays the SLIMS Training Database interface. The main table lists content items with columns for Type, Barcode, Status, To be Requested, Related to order, and Volume. A red box highlights the 'To be Requested' field in the table, which is 'Headache Aggregates (US)'. A detail view is open on the right, showing the same field and other details like Category, Related to order, Type, Id, Barcode, and Volume. A red box highlights the 'To be Requested' field in the detail view, which is 'Headache Aggregates (US)'. A second red box highlights the 'Type' field in the detail view, which is 'Saliva'. The interface includes a top navigation bar with 'SLIMS', 'CONTENT', and 'FIELDS' tabs, and a user profile 'Ananya'.

Type	Barcode	Status	To be Requested	Related to order	Volume
Saliva	SL00000000	Pending	Headache Aggregates (US)		100 ml
Saliva	SL00000002	Pending	Headache Aggregates (US)	ANO-00000	50 ml
Saliva	SL00000003	Pending	Headache EU	ANO-00001	50 ml
Saliva	SL00000004	Pending	Headache Aggregates (US)		50 ml
Saliva	SL00000005	Pending	Headache Aggregates (US)		50 ml
Saliva	SL00000006	Pending	Headache EU		50 ml
Saliva	SL00000007	Pending			50 ml
Saliva	SL00000008	Pending	Headache Aggregates (US)		50 ml
Saliva	SL00000009	Pending	Headache Aggregates (US)		50 ml
Saliva	SL00000010	Pending	Headache EU		50 ml
Saliva	SL00000011	Pending			50 ml

Detail view for selected record:

- To be Requested: Headache Aggregates (US)
- Category: Default
- Related to order: ANO-00001
- Type: Saliva
- Id: SL00000008
- Barcode: SL00000008
- Volume: 50 ml

# Quality of Life

## Sort Versionable Records Alphabetically

Records that are versioned show up in lists in several modules. In these lists, the records are now sorted alphabetically by name (and then version) to make them easier to find and select.

The lists are in modules:

- Orders: **Products** in Specifications to be Checked dropdown
- Stability Studies: **Stability Study Templates**
- Anywhere reports are generated: **Report Templates** in Report dropdown

Report Templates sorted by Name

The screenshot displays the SLIMS Training Database interface. At the top, there's a header with the SLIMS logo, navigation icons for CONTENT and FIELDS, and a user profile for Ananya. Below the header, a green bar indicates the 'Training Database' context. The main area is divided into two panels. The left panel shows a list of records with columns: Type, Barcode, Status, To be Requested, Related to order, and Volume. The records are sorted alphabetically by name. A context menu is open over the second record (SL00000002), showing options like Open detail, Derive, Move, Remove, Print labels, Copy, Add Usage, Content link, Edit mode, Report, More, and Show. The 'Report' option is highlighted, and a sub-menu is shown with 'Jasper Report', 'R Report', and 'Old reports'. The right panel shows the 'Detail' view for the selected record, displaying various fields like To be Requested, Category, Related to order, Type, Id, Barcode, Volume, Status, Location, Location path, Derivation count, Ingredient count, Mix count, Created by, Created on, Modified by, and Modified on. The 'Jasper Report' option is highlighted in the sub-menu.

Type	Barcode	Status	To be Requested	Related to order	Volume
Saliva	SL00000000	Pending	Headache Aggregates (US)		100 ml
Saliva	SL00000002	Pending	Headache Aggre		50 ml
Saliva	SL00000003	Pending	Headache EU		50 ml
Saliva	SL00000004	Pending	Headache Aggre		50 ml
Saliva	SL00000005	Pending	Headache Aggre		50 ml
Saliva	SL00000006	Pending	Headache EU		50 ml
Saliva	SL00000007	Pending			50 ml
Saliva	SL00000008	Pending	Headache Aggre		50 ml
Saliva	SL00000009	Pending	Headache Aggre		50 ml
Saliva	SL00000010	Pending	Headache EU		50 ml
Saliva	SL00000011	Pending			50 ml

Filter: Type

Detail x Location detail

To be Requested: Headache Aggregates (US)

Category: Default

Related to order: ANO-00000

Type: Saliva

Id: SL00000002

Barcode: SL00000002

Volume: 50 ml

Status: Pending

Location: NGS Lab

Location path: NGSL\_1

Derivation count: 0

Ingredient count: 0

Mix count: 0

Created by: ananya

Created on: 08/27/2024 22:17

Modified by: ananya

Modified on: 08/27/2024 22:19

Save Reset (0)



# Quality of Life

## Apply View Highlight to Rows

You can now apply Advanced Highlights to a whole row instead of needing to select specific fields.

If you select the fields, the highlighting will be applied to just those fields. If you leave “Select Fields” empty, then the highlight will apply to the whole grid row instead.

SLIMS

CONTENT

View highlight applied to rows

Ananya

Training Database

CONTENT

+ New content

+ New container

+ New kit

Aliquoting

Show removed

Global search

By location

Organizer

Id

Type

Ava...

SLIMS Lab

Site

Mouse Lab

Site

Cohort

Data ...

Water Lab

Site

NGS Lab

Site

Stability be...

Data ...

Total rows: 6 / Selected: 0

By project

By order

Blood

Category

Type

Id

cntn\_shortId

Status

Collection date

Volume

D

Default

Blood

00000014

Collected

06/25/2024 23:12:00

6 ml

Default

Blood

00000029

Pending

08/15/2024 20:58:53

200 ml

Default

Blood

00000030

Pending

08/15/2024 21:39:40

200 ml

Default

Blood

00000039

Pending

08/23/2024 15:02:29

50 ml

Default

Blood

BL0000

Pending

25 ml

Default

Blood

BL0002

Available

02/08/2024 15:36:31

25 ml

Default

Blood

BL0003

Available

02/08/2024 15:36:31

25 ml

Default

Blood

BL0004

Available

02/08/2024 15:36:31

25 ml

Default

Blood

BL0005

Available

02/08/2024 15:36:32

25 ml

Filter: Type

Total rows: 27 / Selected: 0

Detail

Location detail

Results

All tabs

Is liquid

Category :

Type :

Container type :

Id :

Barcode :

Save

Reset

(0)

Consequence

Text color :

Background color :

#FFCC99

Icon :

Select fields :

# Quality of Life

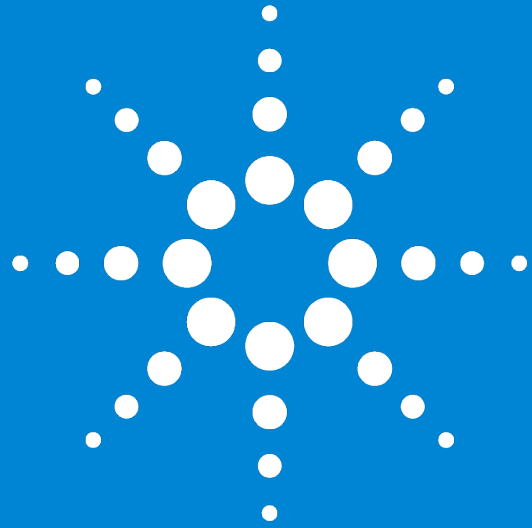
## Customization Support

The library of API functions was expanded for Fluent Groovy.

- You can get records via access rights
- You can get records via workflow protocol links
- Groovy expressions can be informed about macros that impact how they are executed.
- Complex filter operators for slimsgate.xml are now supported

More details are provided in the Technical Release Notes.





# Agilent

Trusted Answers