

# Logilab ELN

A Generic Electronic Lab Notebook for laboratory  
& research teams



## Logilab ELN®

is Agaram Technologies' time-tested generic Electronic Lab Notebook (ELN) application to transform laboratories to perform their tasks in digital and paperless manner. It is used by laboratories conducting tests/experiments and Research in various disciplines like chemistry, biology, biotech, healthcare, life sciences, energy, agriculture, engineering, metallurgy, environmental etc., The ELN has specific functionality to help GxP regulated facilities.

# Logilab ELN generic design concept



## Labsheet or Notebook

Logilab ELN is designed to capture data in a spreadsheet like template called as Labsheet or lab notebook. Labsheets templates which can be designed by scientists by dragging and dropping generic fields into the Labsheet and creating a form like input template depending on the type of test, experiment or research task. This makes the ELN usable for any digital data capture application for lab personnel, research scientists, process and process research personnel.

Labsheets can be designed with data fields like text, numeric, drop-down list, date, time, formula, image, hyperlinks etc.,



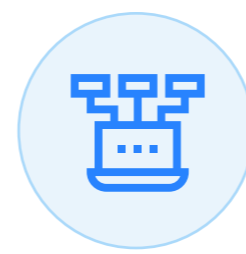
## GXP Controls

Labsheets are version and release-controlled. Also, Labsheets can be validated before capturing data, which is a mandatory requirement for regulated and GxP labs. Data captured within the lab sheets are stored in a central database with all data. Labsheets can be reviewed and approved based on workflow.



## Reporting

There is a powerful browser-based document editor available which can be used as a reporting engine. The document editor can import existing word documents to be used as a report templates, data captured within Labsheets can be automatically populated when generating template-based reports.



## Instrument Integration (option via Logilab SDMS)

When Logilab ELN is integrated with our SDMS, instrument data fields can be placed inside the ELN template.



## Simple, yet powerful Spreadsheet UI called Labsheets

Sheet can be designed using an Excel-like Interface. The results from the instrument output can be parsed and mapped to be populated in user-defined fields. Other fields related to the Material inventory, Equipment and general fields can also be used. The following are the salient features of Labsheets:

- ✓ Design, Review & Release of Labsheets for tests/ experiments
- ✓ Formula creation (like excel)
- ✓ Multi-sheet capability
- ✓ Creation of charts (based on sheet data)
- ✓ Import of excel sheets to quickly design templates
- ✓ Chemical Diagram functionality
- ✓ Integration of instruments (via SDMS)
- ✓ Switching of instruments
- ✓ Version control for Labsheets
- ✓ Validation of input
- ✓ Calculation across sheets/samples
- ✓ Link to multiple sheet
- ✓ Sheet Export

The screenshot displays the 'Sheet Creation' interface for a 'Formulation sheet'. The interface includes a sidebar with various instrument and equipment categories, a top navigation bar with 'NEW', 'OPEN', 'SAVE', and 'SAVE AS' options, and a main workspace with a spreadsheet grid. The spreadsheet is titled 'Formulation # 1' and contains the following data:

Formulation # 1										
Formulation code			Expt Code			Date				
[Order No]			[Manual Field]			[Current Date]				
Product Density (g/mL)					Batch Size (Kg)					
[Manual Field]					[Manual Field]					
Ing. Density	Ing. Cost	Expected wt% of Ingredient	Weight of Ingredients		Actual wt% of Ingredients	Cost Contribution		Quantity of Ingredient		
g/ml	Rs. / Kg	Weight to be taken, g	Actual weight taken, g	CC/Kg	% CC			(Kg)		
	34.00	84.178	84.178	[Water]	84.178	28.62	81.19	#VALUE!		
	25.00	0.2	0.2	[Curd]	0.2	0.05	0.14	81.33	#VALUE!	
						0.00	0.00		#VALUE!	
	30.00	1.36	1.36	[Mango Pulp]	1.36	0.41	1.16		#VALUE!	



## Easy to use Input templates

Logilab ELN provides a user-friendly configurable MS-word-like editing Interface to create different types of templates. Since it is very easy to understand and use, it provides a better user experience and considerable time-saving for the user operations. It has the following capabilities:

- ✓ Create document type content
- ✓ Create office documents
- ✓ Create form type content
- ✓ Integrated to insert Result Tables from Test Data Sheets
- ✓ Create Report Template and merge Test Results from Completed ELN Sheets.
- ✓ Ability to restore, download and upload folders/files
- ✓ Tagging of Sheet Data
- ✓ Automatic placement of data inside document

ONLYOFFICE File Home Insert Layout Review Plugins BATCH PRODUCTION RECORD.docx

Calibri 12

Normal No Spacing Head Headir

ABC Pharmaceuticals  
1234, Pharma Road  
Timbuk 2, India

BATCH PRODUCTION RECORD

Product Name: Azadaractin Extraction and Purification Page 1/2

BPR No.:	Effective Date:	Supersedes:	Revision No.:
AZ/BPR-048	01/04/17	31/03/16	01

Reason for change: CC No. PR03/17-056 Master Production Record: AZ/MPR-158 rev: 02

Reference: AZ/BPR-038 rev.: 01

Batch No.: AZ2018/02/04 Date: 02-FEB-2018

Prepared By (QA coordinator / Production- In charge)	Checked By (Manager/ Production)	Reviewed By (Executive/ QA)	Approved By (Head QA)
Sign & Date	Sign & Date	Sign & Date	Sign & Date

Issuance no.:

Issued by & date:

Production authorized by: Manager  
Production

Sign & date:

Batch size: 100.0- 500.0 Kg

Standard output: \_\_\_\_\_ kg  
(Theoretical Yield)

Standard percentage yield: 75% to 85%

Actual output: \_\_\_\_\_ Kg  
(Ref.: -Step no.35C)

Actual percentage yield: \_\_\_\_\_ %

Date of commencement:

Date of completion:

Reviewed By: Executive / QA-Coordinator  
Production

Sign & Date:

Name:

Page 1 of 2 All changes saved English (United States) Zoom 100%



## Comprehensive security and control of operations – By User Management

Logilab SDMS has a full-fledged user access, roles and rights management system. It facilitates the following in terms of better security and control of operations.

- ✓ Configurable User and User group Rights
- ✓ Microsoft Active Directory (ADS) integration option
- ✓ Retire/ Activate Users
- ✓ Project Team configuration
- ✓ Password Policy configuration
- ✓ Session Lockout configuration
- ✓ Auto lock of user account

The screenshot shows the 'User Management' interface. The top navigation bar includes tabs for 'USER GROUP', 'USER MASTER', 'USER RIGHTS', 'PROJECT TEAM', 'ORDER WORKFLOW', 'ACTIVE USER', 'SHEET WORKFLOW', 'DOMAIN', and 'PASSWORD POLICY'. The 'USER GROUP' tab is selected. The main content area displays a table with the following data:

User Group Name	Status
Initiator	Active
Reviewer	Active
Approver	Active

At the bottom of the table, there is a pagination control showing '1' and '1 - 3 of 3 items'.



## Encyclopedic Tracking & Easy Troubleshooting – By Audit Trail

Logilab ELN has Audit trails module to ensure better tracking and easy troubleshooting by the way of following:

- ✓ Captures User Login/Logoff, Template creation, editing and versioning.
- ✓ Records the User, module name, action performed, Date & Time and comments
- ✓ Audit Trail Review & Archival functionalities
- ✓ Export of audit trail to spreadsheet
- ✓ Users can enter comments to capture relevant information

The screenshot displays the 'Audit Trail' interface. At the top, there are tabs for 'AUDIT TRAIL HISTORY', 'CFR SETTINGS', and 'AUDIT TRAIL CONFIGURATION'. Below the tabs, there are filters for 'User name' (All), 'Module name' (All), 'Audit Type' (All), and 'Records Duration' (Last 1 Year). There are buttons for 'FILTER', 'RESET', 'REVIEW HISTORY', 'REVIEW', 'CREATE ARCHIVE', 'OPEN ARCHIVE', and 'EXPORT'. The main table has columns: 'User Generated', 'Module Name', 'Actions', 'Transaction', 'Audit Type', 'Comments', and 'Review Status'. The table contains five rows of audit records.

User Generated	Module Name	Actions	Transaction	Audit Type	Comments	Review Status
<input type="checkbox"/>	Administrator	Audit Trail	View / Load 16/10/2020 16:52:39	System Generated	Request to load Audit trail configuration screen	
<input type="checkbox"/>	Administrator	Base Master	View / Load 16/10/2020 16:52:26	System Generated	Request to load Test Master screen	
<input type="checkbox"/>	Administrator	Domain	View / Load 16/10/2020 16:50:40	System Generated	Request to load Domain screen	
<input type="checkbox"/>	Administrator	Password Policy	View / Load 16/10/2020 16:50:40	System Generated	Request to load Password Policy	



## User-friendly Interface for Easy, Faster & Wider search

Logilab ELN's search functionality facilitates the user to search the data easily and faster using various search filter criteria. It has the following features:

- ✓ LIMS Task Order Synchronisation
- ✓ ELN Task Ordering
- ✓ Research Activity Ordering
- ✓ Filter by Date, Time, Order ID, Task, Project & Sample.
- ✓ View of pending and completed work
- ✓ Search & query data by fields inside the sheets
- ✓ View of Transaction History for each Order
- ✓ Export query results

The screenshot displays the Logilab ELN search interface. On the left is a blue sidebar with navigation icons and options: LIMS Task Order (with a 'Sync' button), ELN Task Order (selected), Research Activity Order, Manage Excel, and Sheet Evaluation. Below these are dropdown menus for 'Test code', 'Dental Implant', and 'Blaimed A', followed by a 'Sheet name:' field and a 'REGISTER' button.

The main content area features a search filter section with 'Filter by:' and date/time pickers, and a search input field. Below this is a table with the following data:

ORDER ID	TASK NAME	PROJECT	SAMPLE	COMPLETED DATE	ACTION
ELN1000016	Dairy Test	Dairy Products	Curd	Tue Sep 29 2020	OPEN

Below the table is a 'Transaction History' section with a scrollable list of events:

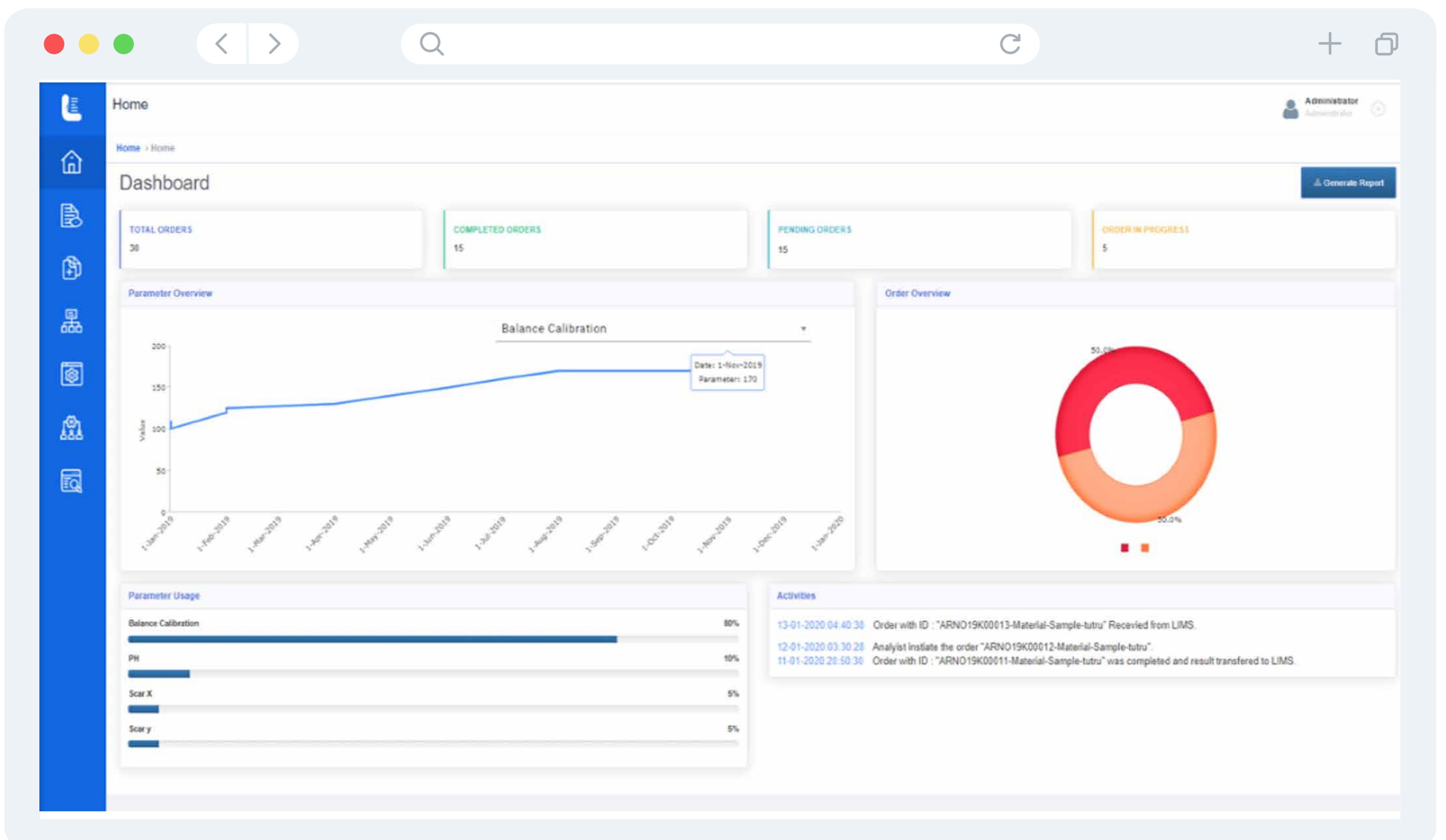
- Sep 29 12:42:45: OM01 modified the order ELN1000016
- Sep 29 12:42:3: OM01 modified the order ELN1000016
- Sep 29 8:50:37: OM01 created the order ELN1000016



## Powerful but Easily configurable Dashboard

Logilab ELN provides easy-to-configure user-role-based dashboard which displays the information that are necessary for a specific user role to act upon. It also acts as a ready-reckoner to view the overall pending list and actions to be taken. Users can configure the trend chart of specific research test results/data logger that helps to make right decision without getting into the modules. It ensures focused and timely action and improving the service quality for the users. It has the following features:

- ✓ Quick overview of Orders for better monitoring
- ✓ Dashboards can be configured based on user roles – ensuring security and control
- ✓ Download Charts as report – user friendly operation
- ✓ Drill-down to transaction records – easy access to information
- ✓ Test/ Parameter based Charts – flexibility in usage
- ✓ Alerts helps users to take timely action





## Versatile and flexible instrument data handling – By Logilab SDMS Integration

Logilab ELN, when implemented by integrating with Logilab SDMS, can capture data from any analytical instruments that are pc-based and standalone instrument via RS232 & TCP/IP protocols. Its data capturing capabilities include the following:

- ✓ Auto-calculation of values by configuring formula
- ✓ Data can be auto-populated directly from instrument by integration with Logilab SDMS
- ✓ Data is Date/time stamped
- ✓ Multiple-users can work on templates
- ✓ Data collected is versioned (data integrity)
- ✓ Re-capture of data (both instruments and manual entry)
- ✓ Mark task completion
- ✓ Review/Approval based on Workflow

The screenshot shows a web application interface for 'Record for Daily Pipette Calibration'. The interface includes a header with 'Order ID: ELN2020C00039' and 'Task Name: Record for Daily Pipette Calibration'. Below the header are buttons for 'REFRESH', 'SAVE', 'LOCK', 'SUBMIT', and 'Version Latest'. The main content area is a spreadsheet-like table with columns A through M and rows 1 through 18. The table contains data for '1. Acceptance Criteria' and '2. Record'. The '1. Acceptance Criteria' section has a table with columns: Type, Criteria (g), Type, Criteria (g), Type, Criteria (g), Type, Criteria (g). The '2. Record' section has a table with columns: Category, Measurement Result, and Analyst.

Type	Criteria (g)	Type	Criteria (g)	Type	Criteria (g)	Type	Criteria (g)
P 2	0.0019 - 0.0021	P 2.5	0.0024 - 0.0026	P10	0.0098 - 0.0101	P 20	0.0197 - 0.0202
P 100	0.099 - 0.101	P 200	0.198 - 0.210	P 300	0.296 - 0.302	P 1000	0.987 - 1.006
P 1200	1.185 - 1.207	P 5000	4.937 - 5.029	P 10000	9.940 - 10.060		

Category	Measurement Result	Analyst
S/M/A+Volume	If 1st fail, Multi-channel	