eLabNext

eLabNext
Quick Start Guide

Version 2.0

January 2025

Quick Start Guide for eLabNext

The purpose of this Quick Start Guide is to guide you in setting up your new group on eLabNext and familiarize you with the system. If you are part of a larger organization that is considering eLabNext, refer to your internal eLabNext implementation project lead for further information about specific requirements set by your organization. Our user guide documentation is linked where appropriate; click on the links for specific instructions on configuration.

If you have questions at any stage, please do not hesitate to reach out to your dedicated Lab Digitalization Specialist or eLabNext's Customer Success team (support@elabnext.com).

General Setup Procedure

To ensure that your team can efficiently test all aspects of the eLabNext platform, we recommend configuring your trial group in three stages:

Stage A   Configuring eLabNext working environment

Stage B   Configuring LIMS and Sample Management functionalities

Stage C   Configuring ELN and Protocol Management functionalities

Watch our video content for a high-level overview of eLabNext's core features and read some of our clients' success stories to learn more about how they utilize eLabNext.

Video Tutorials:

- eLabNext - Setting up 2-Step Verification
- eLabJournal - Electronic Lab Notebook
- eLabJournal - Digital Signatures
- eLabInventory – Sample Types
- eLabInventory – Storage Locations
- eLabInventory – Sample Tracking
- eLabMarketplace - Add-Ons and Integrations

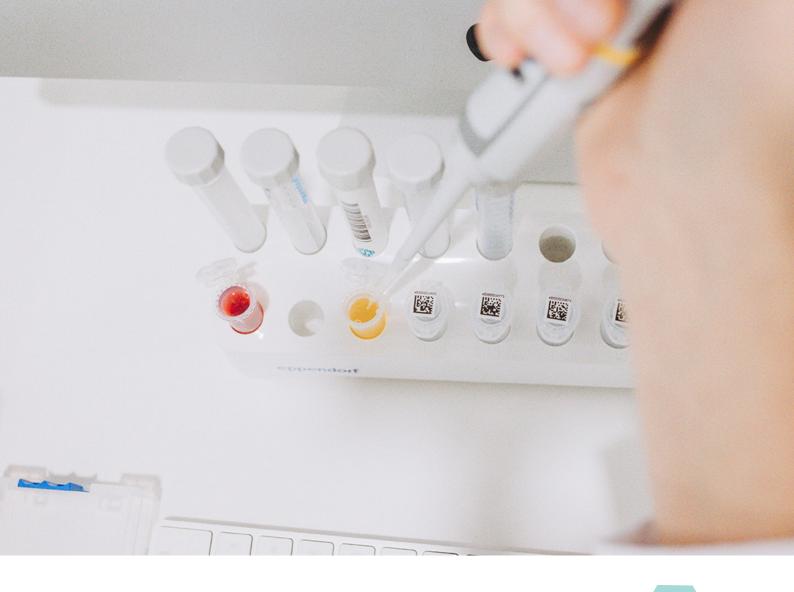**PDF and Video Case Studies:**

eLabNext Case Studies (Articles)
Biotech innovators benefit from connective software (nature.com)
CNBC Featured segment on Advancement in Technology with Ted Danson
eLabWebSeries #1: Case Study, testimonial (Integrated Genetics & BioPharma Research)
eLabWebSeries #2: Case Study, testimonial (Xsphera Biosciences)

☀ TIP

- For instructions on all eLabNext functionalities, refer to our comprehensive **eLabNext User Documentation.**

- To help organize your team's decision making process, refer to our **"All-Digital" Evaluation Checklist Whitepaper.**

Getting Started

Stage A: Configuring eLabNext working environment

1. Set up your group
   a. Invite 1-2 designated members to help you set up the infrastructure.
   b. Set the Roles and Permissions.
2. Go to My Account to check your personal settings.
   a. Enter the correct time zone and date-format on the General tab.
   b. **(Optional):** Install the Mobile App on your phone and use the Apps & Connections tab to complete linking your mobile device. Also, download and configure eLabSync and eLabWebEdit if using eLabJournal.
3. Review the add-ons available in the Marketplace and install any that are relevant to your workflow.
   a. If you are trialling label printing, Download eLabPrint and install the ZPL Label Printer or Fluics Label Printer Add-Ons. Contact your Lab Digitalization Specialist for more information.
   b. To extend the functionality of your inventory, Barcode Automation, Sample Import , Sample Update , and Lineage Tracking are just a few of the features you might want to install!

This initial setup should be sufficient for the proper evaluation of eLabNext.

Stage B: Configuring LIMS and Sample Management

Refer to the associated Supporting Document (Inventory Planning Template) provided by your Lab Digitization Specialist.

1. Set up your Storage Units
   • Create your Storage Unit Template, for each type (freezer, fridge, cabinet, shelf), and from the Inventory Browser, set up your layers/levels (Shelf, Tower, Rack, Sample box).
   • Once the storage unit template is created, you can duplicate it to set up multiple storage units in bulk.
2. Set up your Sample Types
   • For each Sample Type, create a template with the custom fields that you want to track.
3. Set up your Equipment
   • For Equipment, make sure to check off the validation feature. As with Storage Units, once one template is created, you can duplicate the layout and just change the Name/Type etc.

eLabNext

> ## ☀ TIP
> If you have legacy samples, supplies, equipment inventories you would like to migrate easily, reach out to your Lab Digitalization Specialist for assistance.
>
> ## ⚠ NOTE
> If you have opted for eLabInventory only, you can skip Stage C and proceed to Naming Convention Suggestions.

Stage C: Configuring ELN and Protocol Management

1. Set up 1 or 2 simple protocols to familiarize yourself with Protocol Management functionalities.
   a. Explore the Public Protocols for ideas on how to structure your protocols or considering using our new AI Protocol Generator.
   b. You can add or import your own protocols, or copy a public protocol.
   c. Add variables and formulas for a more streamlined approach to data collection.
   d. Contact your Lab Digitalization Specialist for list of supported maths methods in eLabProtocols.
2. Plan the hierarchy and collaborative nature of your lab before creating Projects, Studies or Experiments in eLabJournal.
   a. Within each Group:
      i. Project
         1. Study
            a. Experiment (Report)
   b. Project Group (ask us how you set up special Collaboration Groups)

At this point, feel free to request a follow-up meeting with your Lab Digitalization Specialist to discuss the next steps or ask any questions you may have.

eLabNext

Naming Conventions Suggestions

When establishing naming conventions, it's important to prioritize uniformity and long-term data organization. By combining numerical or alphabetical patterns with descriptive information, you can create a system that enhances searchability and safeguards your intellectual property for the future. Consider how your data will appear three years from now and aim for a naming system that remains effective over time. Encourage standardization through template-driven configuration and comprehensive end-user training.

For eLabInventory (Equipment and Storage Units):

- Location – Name – Description – Identifier: For example, "Rm 120 – ULT Freezer – Eppendorf CryoCube – AssetID:123."

- Description – Name – Content – Identifier: For example, "Centrifuge 02827 – Eppendorf 5810r – A."

- Name – Type – Department – Identifier: For instance, "HPLC – Agilent 1200 – Chem – 1."

Inventory Data Structure

Storage Unit

Compartment & Sub-compartment(s)

Samples

ULT Freezer

Flammables Cabinet

Mouse Cage Rack

Shelf

Shelf

Mouse Cage

Rack

Samples in a Box

Individual tubes

Drugs & Reagents
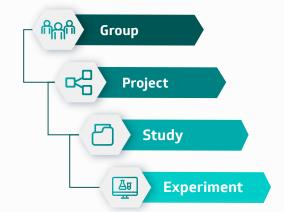
Hazardous Chemicals

Mice

eLabNext

> ## 💡 TIP
>
> When organizing items in eLabNext, it is beneficial to start with the room number, as this allows for sorting by location and ensures logical arrangement of equipment and storage units within the laboratory.

Example of Storage Unit, Compartment and Sample Type configuration

Electronic Lab Notebook
Experiment Data Structure

- Group
  - Project
    - Study
      - Experiment

> ## 💡 TIP
>
> When creating naming conventions for Projects and Studies, you can choose from a variety of strategies to ensure consistency. Some common approaches include focusing on the research topic, assay details, the name of the service/product being developed, drug/compound names, instrument names, grant IDs, and more.
>
> Utilize custom text and field attachments within Projects and Studies to capture important information relating to your research, e.g., grant codes, ethics approval numbers, material transfer agreements, etc.

For Experiments, consider incorporating elements from the Project/Study into the naming convention to maintain context:

- Date – Experiment Title – Experiment ID
- Initials – Kit # - Date
- Assay – Date – Initials

These approaches ensure that your data remains organized, searchable, and contextually relevant within eLabNext.

Permissions Set up

For labs with more than 5 team members, we strongly recommend implementing level-based permissions instead of role- or title-based permissions. This approach ensures a scalable and adaptable system, particularly as your team grows. The following example outlines the tiers of access for various features. It's essential to emphasize to your team that permissions are designed to establish clear and transparent divisions of responsibilities within your organization.

Example:

- Group Admins: Have all group-based action permissions assigned
- Level 5: Can perform all actions except **deleting** other **group members' items** (Samples, Experiments, Templates, Protocols etc.)
- Level 4: Can perform all actions except **deleting** their **own** or other **group members'** items
- Level 3: Can perform all actions except **editing other group members' items** and **deleting their own** or other **group members'** items
- Level 2: Can perform all actions except **editing or deleting** their **own** or other **group members'** items
- Level 1: **View-Only** Accessing (e.g., for training or audit purposes)

This approach ensures an organized and secure data management system while accommodating your lab's growth and evolving needs.

Post-Trial System Implementation Suggestions

1. Form a Key-User Group

When implementing platforms like eLabNext, their impact spans across various facets of your organization, involving research end-users, research managers, IT, legal, finance, and risk/compliance teams. Identifying key decision-makers in these areas and involving them in the consultation and selection process is crucial.

a. **Identify Key Users:** Start by pinpointing your Key Users, individuals who are enthusiastic about digitizing lab operations. Ensure that your Key User Group represents all stakeholders and research groups (end-users). In consultation with your Key Users, gather a list of company requirements that need to be addressed by eLabNext.

b. **Consult:** Arrange weekly stand-up meetings with your team (Key User Group) to evaluate system functionality, areas for improvements, and strategies to optimize workflows, both within eLabNext and in the physical lab setting (including laboratory laptops/tablets, label printers/scanners for system accessibility). Actively seek feedback from Key Users (and their end-users) regarding their experiences and any challenges faced. This feedback loop is invaluable for refining system configurations and addressing evolving needs. Report any concern to your Lab Digitalization Specialists.

c. **Standardize your Sample Types:** Collaborate with Key Users to define thet fields for each sample type in your laboratories. Sample types allow you to structure the way your end-users collect sample metadata and enhance compliance. Utilize custom fields, mandatory fields and input validation for each of your sample types as needed.

d. **Project, Study or Experiment:** Establish how your organization will structure experiment data, including nomenclature and minimum information required per item. Utilize Study/Experiment Templates and Protocols to streamline routine workflows.

e. **Decide on the rollout order and timeline for your Groups (Departments or Research Units):** We recommend a phased roll-out approach, beginning with lab groups that have the most migration-ready inventories. This gives other groups time to clean up their inventories in time for their respective rollout.

This initial phase fosters procedural standardization, establishes a general workflow, and promotes best practices for eLabNext before expanding its use to the broader team.

eLabNext

2. Have a Well Planned and Gradual Implementation

a. **Perform User-Acceptance Testing (Optional but Recommended):** Consider conducting User-Acceptance Testing (UAT) using the company requirements collected in the first phase, to ensure eLabNext meets your end-users needs and works smoothly in their specific laboratory environment before full implementation. This step helps identify and fix issues before they become operational problems. UAT also helps identify areas where customization may be required or planned.

b. **Create a Policy or Standard Operating Procedure:** Utilize this period to develop a policy or standard operating procedure for internal eLabNext usage within your company/lab. This document can be distributed to your colleagues Define roles and responsibilities, business continuity strategies, and audit procedures, in relation to the use of eLabNext.

c. **Phase the Rollout:** If your installation involves a medium to large user base (more than 10 users or 3 research groups), our expert recommendation is to phase in the roll-out to the rest of the company systematically. Adopt a staged approach, with a weekly cadence for consultation and feedback from the Key User Group.

This phased implementation approach ensures that you allocate sufficient resources and provide necessary support to your end-users throughout the roll-out process.

3. Internal Monitoring and Optimization

a. **Schedule eLabNext Stand-Up meetings :** As described in the earlier phases, maintain regular stand-up meetings with your Key User Group. These meetings serve as a valuable platform for gathering feedback and providing support. Consider inviting your eLabNext Lab Digitalization Specialist to enhance collaboration and address any emerging needs.

b. **Evaluate Performance Quarterly:** Beyond the initial eLabNext implementation and rollout, establish a quarterly schedule for stand-up meetings. These sessions are instrumental in maintaining system integrity, satisfying internal business requirements, and aligning with your optimization objectives.

c. **Collect Feedback from End-Users:** Continuously gather feedback from end-users to ensure that the system evolves in line with their needs and expectations. Incorporate user input into your optimization efforts to enhance the overall user experience.

By following these guidelines, you'll be well-equipped to monitor, maintain, and optimize your eLabNext implementation for sustained success.