The Core LIMS

A State of the Art, Web-Based Laboratory Information Management System

CORE INFORMATICS DELIVERS FLEXIBLE, CUSTOMIZED WEB-BASED LABORATORY INFORMATION MANAGEMENT SYSTEMS (LIMS) TO CLIENTS IN A WIDE VARIETY OF INDUSTRIES.

The Core LIMS secures the future value of an organization's data by properly archiving each and every data point it collects. The system increases the efficiency of scientific processes by allowing users to collect and analyze data in a networked, real-time environment through a dynamic intuitive interface.

Core's customized software gives companies a strategic advantage by enabling them to efficiently collect and analyze data according to their business rules and processes. What Core ultimately delivers is a custom LIMS solution; not a shrink-wrapped product.

Core Informatics' team of LIMS professionals average over ten years of LIMS development experience, with extensive backgrounds in biotechnology, management, IT, and science. Core Informatics' success has been built on its unique ability to communicate with scientists, managers and information technologists, and to understand their respective needs. Core Informatics puts its knowledge and experience to work to deliver customized and cost effective LIMS solutions.

Call 866-823-0337

The Core ELN (Electronic Lab Notebook)

100% Web-Based Enterprise Wide Data Management

Core Informatics' Electronic Lab Notebook Software (The Core ELN) has become an integral part of many R&D laboratories' plans for data management. While improving operational efficiency, encouraging teamwork and securing intellectual property, the Core ELN provides value throughout the organization. The Core ELN stands out amongst the multitude of other ELN products, as most ELN software tends to be point solutions focusing on the needs of only a single laboratory.

The Core ELN from Core Informatics provides organizations with the opportunity to manage all aspects of their research data in a single Enterprise ELN. As part of the 100% Web Based architecture of the Core LIMS, the Core ELN is part of a single enterprise wide data management system that will unify all electronic record keeping with object level event logging and tight security controls and versioning.

Data silos and integration issues created by traditional ELN can now be avoided, providing the opportunity for significant savings in time and money. The Core ELN is the most configurable product available in the market today providing the opportunity to track information about any laboratory procedure or task. With flexibility limited only by your imagination, all of your enterprise data can be managed in a single platform.

Contact Core Informatics today to schedule a demo of the Core ELN.

Call 866-823-0337

The Core LIMS Enterprise Solution

A full product license freely distributable to an unlimited number of end users.

Annual or perpetual licenses available.

ENTERPRISE SOLUTION

An Enterprise LIMS from Core Informatics is more than an innovative and technologically advanced data management system. The LIMS is critically important to its users' data quality and operational efficiency.

Core's approach to Enterprise LIMS development focuses on creating tight integration with the users' laboratory workflows and instrumentation. Core Informatics works with a client to determine what their labs need, builds a customized LIMS solution, and then installs and configures it to run on the client's hardware. Core's Enterprise LIMS is run over a company's intranet with no client-side installations, making the system easy to maintain and upgrade.

Core will build custom integrations between its LIMS and a customer's operative enterprise software packages such as ERP, MRP, CRM, AIS, etc. This kind of customization leverages existing expertise, as well as capital investment in third party tools.

Labs choose Core Informatics as their LIMS provider because they realize the strategic advantage Core's customer-centric approach and powerful software provide them.

Call 866-823-0337

The Core LIMS Hosted Solution

A full product license freely distributable to a limited number of end users.

Licensed annually

HOSTED SOLUTION

Core Informatics understands that small or start-up organizations have different needs than larger companies. A hosted LIMS solution provides a strong alternative to traditional Enterprise software installations. It enables a company to experience the value of a customized LIMS at a price it can afford.

The hosted LIMS can be made available over the Internet to any employees or partners with valid permissions. Core's systems are entirely web-based and require no software installation on the client machine.

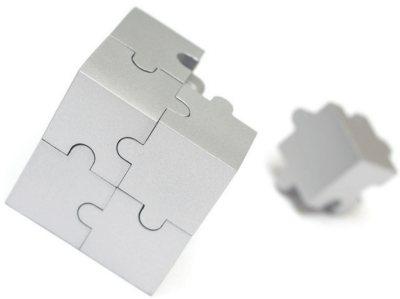
When a client chooses the hosted solution, Core becomes their data center. The support, maintenance, backup and recovery for the system hardware and software are Core's responsibility; no IT staff is required. All data is secured by Core's data center partners against any contingency.

As an organization becomes more established, Core Informatics can export all of its LIMS data and load it into an Enterprise LIMS located at the company's facility. Core will provide a data management solution to match any budget and set of user requirements.

Call 866-823-0337

Your approach is different, Shouldn't your software be?

The Core LIMS can be customized to meet any lab's requirements.



LIMS CUSTOMIZATION

As former lab scientists, Core Informatics appreciates that every laboratory is unique. In order for the Core LIMS to adapt to fit the processes of a company, it was built to be different too. Core Informatics believes that lab should not have to change its processes to fit a LIMS; the LIMS should fit the lab.

Flexible Design

Core Informatics manages customization better than any other LIMS vendor because of the flexibility in the component-based design of the Core software. While each Core LIMS implementation is based on the same underlying application, each is customized to match the workflows and needs of the enviroment it is deployed to.

System Development

Core's approach to the software development process also results in superior customization management. From documenting every data inflow and outflow to be captured by the system, to building relationships with the stakeholders and users of the system, the Core project team learns every customer's business objectives. The team understands, and is able to meet, each client's specific goals and requirements.

Instrument & Systems Integration

Core is instrument independent and will create custom integration with any instrument. The Core team will also create custom integration for its LIMS with any enterprise software applications (ERP, PIMS, AIS, etc.) an organization may own. Core helps protect the value of its clients' previous investments, while adding the advanced functionalities of a LIMS.

A Customized Solution

The Core customization process adds on average only 10-15% in price and 3 – 6 weeks in delivery. The results of this relatively small increase in time and cost have made all the difference to customers. What Core ultimately delivers is the client's custom LIMS system, not just another generic LIMS product.

WEB-BASED ARCHITECTURE

THE CORE LIMS WAS BUILT AS A WEB-BASED JAVA J2EE APPLICATION FROM THE START. IT TRULY LEVERAGES THE POWER OF THE INTERNET TO MAKE BUSINESSES MORE PROFITABLE THROUGH INCREASED EFFICIENCY AND REDUCED OPERATIONAL COSTS.

Accessibility

Core's LIMS becomes available to everyone in an organization who is authorized to use it immediately upon installation. The system requires no client software installation and is accessible from any web browser. Companies can choose to make their data is accessible from any location in the world with a connection to the Internet, increasing the efficiency of collaboration and communication between end-users of the LIMS. Partners or customers may be granted permissions to access the system with limited functionality if desired.

Security & Reliability

Data security and integrity are increased with a web-based system. The Core LIMS takes advantage of the request-response paradigm of the web to audit every mouse click, to ensure a full history of each employee's user sessions. Web-based LIMS are also more reliable as they are less susceptible to the viruses and hardware failures that can plague client-side applications.

Maintainability

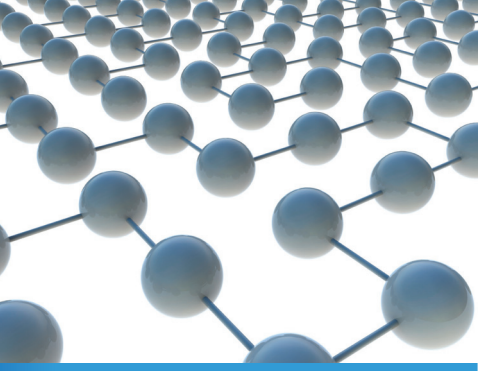
System maintenance and upgrades are improved with web-based systems. Since nothing is installed on the client machines, maintenance and upgrades only take place once and are immediately effective across the organization. Core's system is scalable and can be maintained even if a company expands. Core Informatics provides support and maintenance services to their clients that lack the IT resources to do so themselves.

Flexibility

Web-based programs are flexible because they are cross-platform compatible. There is no need to change hardware or operating systems to take advantage of a web-based LIMS. Memory requirements for clients are small as the program runs through the browser and some processing can be done server-side. IT support for the system is significantly reduced, and may even be eliminated completely, depending on whether a customer chooses Core's Enterprise, Hosted, or Appliance solution.

Benefits of Web-Based LIMS

- Reduce costs
- Increase efficiency
- Use anytime, anywhere
- Real-time access to data
- Increase collaboration
- Increase communication
- Data security and integrity
- Ease of deployment
- Ease of upgrades
- Ease of maintenance
- No client-side installations
- Platform independence
- Cross-platform compatibility



Core LIMS Features

- Inventory Management
- Project Management
- Electronic Document Management
- Lab Automation & Integration
- Automated Data Capture & Reduction
- Chemistry (Cheminformatics)
- Molecular Biology/Cell Culture (Bioinformatics)
- Animal Study Management
- Animal Facility Management
- Sample Login & Visualization
- Laboratory SOP Enforcement
- In-Vitro Data Management
- Workflow Management
- Prioritization Queues
- Sample Preparation
- Customized Reporting

COMPONENT-BASED ARCHITECTURE

THE COMPONENT-BASED ARCHITECTURE OF THE CORE LIMS MAKES THE SYSTEM COST EFFECTIVE, CUSTOMIZABLE, AND EASY TO DEPLOY. CUSTOMERS SELECT FROM A LIST OF COMPONENTS TO CREATE A FLEXIBLE SYSTEM TO MEET THEIR NEEDS, WHICH CAN BE UPGRADED, MAINTAINED, AND EXPANDED EASILY IN THE FUTURE. CUSTOMERS PURCHASE ONLY THE COMPONENTS NECESSARY TO PROVIDE THE FUNCTIONALITY FOR THEIR EXISTING DATA MANAGEMENT NEEDS.

Flexibility

Core Informatics integrates and customizes the customer's chosen components to fit their laboratories' workflows and processes. The system is easily maintained and upgraded because customizations are made only to the component that requires them, and does not require re-programming of the entire system.

The wide variety of components offered by the Core LIMS contribute to the system's flexibility. It can be applied to almost any laboratory situation, regardless of industry, because of the openness of its object and procedural definitions within the components. Clients have the ability to extend the systems functionality as their needs evolve over time.

Time to Deploy

The Core LIMS was designed and built with customization in mind. As a result the system can be deployed to clients in about 6 to 10 weeks from the completion of a functional specification. This time is primarily spent on the customization of the program to fit a client's workflows and needs.

Scalability

Core's LIMS was built to be scalable by leveraging the flexibility provided by its component-based architecture. As a company grows, technology changes, or new assays are developed, Core's clients always have the option to add components or functionality on to their system. Core's components integrate with each other seamlessly and can be adjusted and configured as needed.

Core Informatics Software is Flexible

Create any type of object
Define objects with any attributes
Experience a configurable dynamic interface

Enterprise Data Management limited only by your imagination

CONFIGURABILITY

Core Informatics understands that every research organization is different. Core's software is designed to be highly flexible and configurable to meet the needs of scientists who face ever changing requirements, procedures, technologies and standards.

While any aspect of Core's software can be customized, most of the unique needs of their customers is addressed through simple configuration. The difference between customization and configurability is that configuration does not require any alterations to either the underlying software application or database architecture. Configurability is provided by end users, and while it does not change the actual coding of the application, it does change its functionality so that it is easier and more efficient to use.

Through Core's Admin Panel users with granted access can define any type of object to match their requirements. These objects can include any number of attributes, and the application will use this information to automatically build a dynamic interface to match the user's specifications.

This functionality is extremely powerful and unmatched within the industry. It provides organizations with the opportunity to collect every single aspect of their research in a single enterprise wide application.

Call 866-823-0337

Core LIMS & Core ELN "Run-anywhere"

Any Web Browser
Any Operating System
Any Relational Database

PLATFORM INDEPENDENCE

The Core LIMS system is written entirely in Java, and takes full advantage of the features inherent in object-oriented programming such as inheritance, polymorphism, and abstraction. This is how Core Informatics is able to develop and deploy customized data reduction routines and business rule classes quickly.

The "write-once, run-anywhere" mantra of Java gives Core's customers the freedom to choose the operating platform they want to run their LIMS on. Core currently has customers running on Windows, Mac OSX, Linux, Unix and combinations of these platforms.

Core's software is database agnostic. The entire database layer of the Core LIMS is written in ANSI-SQL. This provides customers with the freedom to deploy the application on most widely used relational databases including Oracle, MySQL, DB2, SQL Server, Informix and PostgreSQL.

Core also uses other web technologies in order to provide exceptional levels of customer support and maintenance. These technologies include VPN, SSH, VNC and RDP for remotely accessing and updating client installations. Tools like WebEx provide clients with access to personalized online training services. These are the suite of technologies that make Core's approach to LIMS possible.

A COST EFFECTIVE SOLUTION

Core Informatics' ability to understand the needs of customers, and translate them into a customized LIMS, sets them apart from other LIMS providers. The Core LIMS can be delivered to its customers in about 6 to 10 weeks, allowing a return on investment to be realized quickly.

Platform Independence

The Core LIMS system is written entirely in Java, and takes full advantage of the features inherent in object-oriented programming such as inheritance, polymorphism, and abstraction. These features is what allows Core Informatics to develop and deploy customized data reduction routines and business rule classes quickly.

The "write-once, run-anywhere" nature of Java gives Core's customers the freedom to choose the operating platform they want to run their LIMS on. Core currently has customers running on Windows, Linux, Unix and combinations of those platforms.

The Core LIMS is database vendor independent. The entire database layer of the Core LIMS is written in ANSI-SQL. This provides customers with the freedom to deploy the application to run on Oracle, MySQL, DB2 and SQL Server.

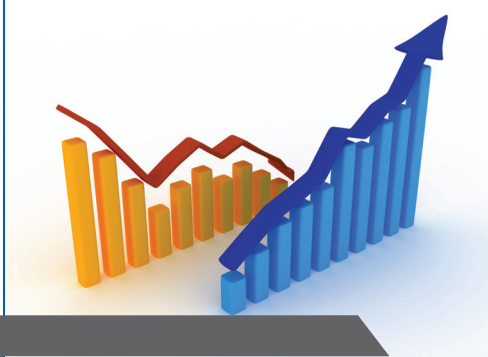
Future-Proof Investment

The Core LIMS is scalable and can grow with any business. It is also scalable in terms of scope. If a user needs more functionality in the future, more components can be added on seamlessly. Customers have the ability to define or tailor any object in the system, allowing the Core LIMS to track almost attribute that they can assign to an object.

Usability

Core's system has a short learning curve because of its straightforward navigability. A liberal amount of hyperlinks are used, so that any information is never more than a couple clicks away. By shortening the time users spend navigating the software, Core LIMS lowers its TCO. Time and money are saved by users' abilities to work remotely, collaborate and communicate more effectively, and have access to all the data they need from anywhere.

The Core LIMS is flexible, scalable, and easily used, deployed, and maintained. It is a cost effective solution for any budget.



Our Approach:

"Your satisfaction is most critical."

THE DEPLOYMENT PROCESS

Core Informatics believes that the key elements to managing a successful LIMS deployment are communication and flexibility. Each of these elements underscore our approach to the project management lifecycle.

Functional Requirements Gathering

When a project first begins, effective communication with the client is absolutely critical while Core Informatics gathers functional requirements. One of Core Informatics' great strengths is that each member of its project teams averages over ten years of experience in the industry, and speaks the client's language. Core is able to deliver a very thorough functional specification document that speaks to the needs of the client in their own terms. This process solidifies exactly what the client is going to get when the system goes live, so there are no surprises.

Customization, Installation & Configuration

As the customization, installation, and configuration phase of a LIMS deployment is entered, flexibility of the underlying system becomes the most critical element. Core Informatics' ability to move quickly from a functional specification document to a customized enterprise LIMS in about two months can only be accomplished because of the architecture of its underlying platform, the Core LIMS product. Installation of the system is simplified with its single-point of deployment for access through the Internet by the entire organization. The system can be configured by users after deployment to quickly meet their various demands.

Support & Maintenance

Once the LIMS is deployed and the project moves into a support and maintenance mode, regular communication and system flexibility are equally essential. Core Informatics has years of experience managing system changes in industries with ever changing technologies and regulations. Because of the underlying flexibility of the Core LIMS, new functionality can be easily incorporated into client installations as needs change over time.

Partner with Core

During the specification, deployment, and training phases of the project, Core develops relationships with the scientific directors and end-users of the system. These relationships make Core's project team members approachable. Core Informatics is not just a vendor – we are your partner.

The Core LIMS helps labs to adhere to regulatory standards by tracking the data they need, as well as by providing users access to safety information.

DATA SECURITY & INTEGRITY

CORE INFORMATICS UNDERSTANDS THAT A LABORATORY'S GREATEST ASSET IS ITS DATA. THEY ALSO APPRECIATE THE BURDENS PLACED UPON DATA MANAGEMENT BY FEDERAL REGULATIONS LIKE GOOD LABORATORY PRACTICE (GLP) AND 21 CFR PART 11. THE CORE LIMS HELPS LABS TO COMPLY WITH THESE STANDARDS.

Audits

Each mouse click made in the Core LIMS is tracked, allowing the administrator to see who did what and when. Data Versioning can be applied to any object in the system. Samples can be tracked as they move to different locations within a lab or even to another lab entirely. Core's web-based software creates audit information that covers the organization as a whole, allowing users and managers to identify if and where an issue occurred, and who or what was responsible.

Version Control

The Core LIMS includes version control parameters which can be altered by a system administrator as needed. Record who has changed data or a document, what they did, when they did it, and why. The system tracks the original value and new value of what was changed. With Core's version control companies can trust in the integrity of their data.

Electronic Signatures & SSOs

Electronic signatures also help to ensure the integrity of a laboratory's data. They help labs to comply with regulations such as 21 CFR Part 11 and the GxP standards. Each user of the Core LIMS is assigned a single-sign-on (SSO) ID which the administrator uses to determine which functions and what data they can access. The SSO grants users access to all parts of the LIMS they are allowed to use, so they won't have to remember multiple IDs. It also functions as a user's electronic signature in combination with their password. Using an SSO increases the security of data, ensuring that only the people who are allowed to have access to it, do.

PROJECT & WORKFLOW MANAGEMENT

The project and workflow management component of the Core LIMS allows system administrators and project leaders to establish workflows that define how samples progress from one test or procedure to another. The Core LIMS Project Manager is a powerful tool which can assign prioritization requests to scientists or instrumentation automatically, based on end user defined criteria. Use the module to define consistent standards and criteria that cuts across departments and workflows to create a unified project. The module can also send email alerts and reports to users based on predefined thresholds or work needs.

The Project Manager streamlines the complicated process of project management, keeping scientists working on assays and generating data rather than trying to create timelines for projects. It also strengthens the integrity of an organization's data by ensuring that collaborators on a project are all using the same processes and decision criteria.

The Core LIMS captures the data, work, and sample flows of an organization. It records them for regulatory compliance, as well as for reuse in the future on similar projects. Methods and processes that are more efficient can be communicated to other members of the organization as protocols and reused. Core Informatics will customize the project management component to fit a client's business processes, leaving it open for further configuration as needed on a project to project basis by users from their organization.

Create consistency & efficiency across the organization with Project & Workflow Management for the Enterprise

Core Informatics has partnered with Tracking Solutions in order to provide superior inventory management capabilities to customers.

INVENTORY MANAGEMENT

Core Informatics has partnered with Tracking Solutions in order to provide customers with state of the art inventory tracking and management capabilities.

The Core LIMS can track customer inventory with barcodes or RFID technology. The system automatically prints barcode labels through products provided by Tracking Solutions'. When an item is scanned, the LIMS records its current location, and can display its chain of custody. Core's inventory management component lets users know where each item has been, when it was there and for how long, and who changed its location or state. The LIMS can display how many times an item has been freeze-thawed, its time out of the freezer, or any other information a lab may wish to track.

Core can help labs decide which labels are appropriate and will stand up to their temperature and solvent resistance requirements. From -80°C to +500°F, to Liquid Nitrogen, Acetone Resistant, Pre-frozen, or Specialty Laser, Core's labeling options can fulfill our clients' needs.

The Core LIMS tracks full container-cell lineage and the history of preparation for samples. It allows users to identify which container a contaminate came from, and what other data was derived from containers in the same lineage.

Core's inventory management capabilities enables analysts to know where there is storage capacity, or what supplies the lab is running low on. The combination of Core's inventory management software with Tracking Solutions' labeling technology has created an invaluable tool for any laboratory.

CHEMINFORMATICS

The Chemistry component of the Core LIMS enables users to leverage the power of a cutting-edge cheminformatics platform from within the system. Functionality includes: compound registration, structure visualization and searching, calculated properties, in–silico reaction processing, user defined SAR tables, analytical chemistry integration, QA and QC.

Core Informatics has partnered with ChemAxon, a leader in providing cheminformatics software development platforms. The partnership has given users of the Core system capabilities for structure visualization and management, property prediction, virtual synthesis, screening and drug design. The ChemAxon partnership also adds advanced calculation capabilities to the Core LIMS (see side panel).

The use of the ChemAxon's JChem Base toolkit enables the Core LIMS to maintain registration integrity. Each molecule in a lab is registered with only one number, enhancing data integrity and eliminating confusion in communication regarding molecules.

Chemists can use the Core LIMS to perform exact match, substructure, and similarity searches. Scientists can search on biological activity, structure-based data, or both simultaneously. The Core system can be configured to automatically query and report data values to allow end-users to analyze data efficiently in custom SAR tables.

ChemAxon

Calculators

- Reduce costs
- Elemental Analysis Plugin
- IUPAC Naming Plugin
- pKa Plugin
- logP Plugin
- logD Plugin
- Charge Plugin
- Polarizability Plugin
- Tautomerization Plugin
- Resonance Plugin
- Stereoisomer Plugin
- Conformation
- Conformer Plugin
- Molecular Dynamics Plugin
- Geometry
- Topology Analysis Plugin
- Geometry Plugin
- Polar Surface Area Plugin, 2D
- Molecular Surface Area Plugin, 3D
- Hydrogen Bond Donor-Acceptor Plugin
- Huckel Analysis Plugin
- Refractivity Plugin

And more…

Labs can realize increased efficiency and grow their testing capacity using the Core system's automation capabilities.

AUTOMATED DATA CAPTURE

THE CORE LIMS AUTOMATED DATA CAPTURE FRAMEWORK IS FLEXIBLE AND INSTRUMENT INDEPENDENT. CORE CAN CREATE AN INTERFACE FOR ANY DATA GENERATING INSTRUMENT A LAB USES. INSTRUMENT INVESTMENTS WILL NEVER BE LOST OR INFLUENCED BY THE CORE LIMS.

Custom Integration

As part of the specification and rollout of a LIMS, the Core Informatics team works with the client to determine which analysis and instruments should be integrated directly. Core builds custom file parsers for each instrument in the lab, and custom data reduction algorithms that reflect how the customer would like their data analyzed and reported.

Future-Proof

The challenge for LIMS vendors is to provide a system that can easily evolve over time to support new technologies within the lab. Incorporating support within the LIMS for a new analysis or instrument is one of the most common requests that Core Informatics receives from its clients. Core can accomplish these tasks in a matter of days because of the flexibitlty built into the Core LIMS. The quick turnaround results in significant time savings to clients.

Data Exchange with Partners

Labs require tools that allow them to import and export data from the LIMS to exchange with partners or contractor organizations. Since there is little standardization in the industry with regard to data exchange, this is no easy task. Core Informatics can build customizations to a system to make this otherwise complex process very simple.

Capacity

The automatic collection of data increases efficiency and capacity. This is especially important in today's laboratory environment as the FDA's standards rise and audits increase. Organizations using the Core LIMS gain more opportunities to create revenues, and can increase the quality of the data collected for existing projects.

Immediate Availability

Once data is collected and validated, it is available to the entire organization. The time from data creation to use is short, letting scientists spend their time on strategic tasks rather than waiting for data to be generated and transcribed.