



LABORATORY KNOWLEDGE. DELIVERED.™

LABVANTAGE® HIGHLIGHTS

LABVANTAGE OVERVIEW

LABVANTAGE® Highlights

LABVANTAGE Solutions, Inc., an innovative global provider of enterprise solutions tailored for leading laboratories, serves discovery, development, formulation, process research, raw material testing, and quality management laboratories across multiple industries. LABVANTAGE builds upon 30+ years of laboratory information management know-how and almost a decade of thin-client computing experience to deliver an enterprise LIMS platform that redefines and optimizes the way leading laboratories conduct business. LABVANTAGE, a zero-footprint laboratory information management suite, is tailored to manage an organization's critical laboratory information across its worldwide R&D pipeline and manufacturing supply chain to optimize productivity and more effectively share knowledge.

LABVANTAGE redefines the "S" in LIMS with the LABVANTAGE Suite, a zero-footprint and configurable-off-the-shelf (COTS) Laboratory Information Management Suite. LABVANTAGE takes you beyond the world of traditional LIMS by consolidating additional functionality typically found in multiple laboratory systems into one product platform across the global enterprise. LABVANTAGE is the best combination of functionality, flexibility, & technology in one solution.

With its combination of solutions-orientation and multilingual support, LABVANTAGE is the most complete and versatile, multi-site, and multilingual enterprise backbone for the laboratory enterprise. Built on a single platform, the suite brings you the leading combination of:

- Foremost Enterprise Functionality on a Single Platform
- Most Configurable-Off-The-Shelf LIMS
- Only True Zero-footprint Architecture Available

FOREMOST ENTERPRISE FUNCTIONALITY ON A SINGLE PLATFORM

The LABVANTAGE Suite helps laboratories increase productivity, lower operating costs, and improve quality. Organizations can model their business-specific workflows, seamlessly integrate with robots, analytical instruments, and business applications, and meet government regulations. Key advantages of having all your enterprise functionality on a single platform include:

Enhance Usability with Increased User Acceptance

LABVANTAGE's intuitive and state-of-the-art graphical user interface (GUI) encourages user acceptance. Whether the laboratory operation is a local or global collaboration, features such as LABVANTAGE's multilingual support and role-based secure access enhance the user's experience.

LABVANTAGE takes you beyond the world of traditional LIMS by consolidating additional functionality typically found in multiple laboratory systems into one product platform across the global enterprise:

- Enterprise-wide information management and tracking for any laboratory item, including samples, reagents, compounds, specifications, experiments, tasks, projects, studies, subjects, protocols, etc.
- Intuitive data entry from virtually any Internet or Intranet access device and easy integration to 3rd party instruments and systems;
- Workflow design and process automation through graphical user interfaces; and
- Compliance with internal standards and government regulations through programming rules and electronic signature.

LABVANTAGE OVERVIEW (CONT'D)

Simplify Knowledge Sharing with Consolidated Laboratory Data and Information

LABVANTAGE manages an organization's critical laboratory information across its worldwide R&D pipeline and manufacturing supply chain to optimize productivity and more effectively share knowledge. In other words, it enables enterprise-wide information management and tracking for any laboratory item.

Improve Productivity with Full Multilingual Support and Seamless App. & Instrument Integration

Automating manual processes saves time and reduces error. LABVANTAGE eliminates laboratory bottlenecks with its workflow automation functionality that's easy to configure and use. Other features, such as connections to 3rd party systems and simple instruments, ensure accuracy to maximize efficiency while minimizing cost. Using LABVANTAGE Connect™, even complex, bi-directional instruments can be connected directly to the LIMS, further improving accuracy and efficiency.

Enhance Enterprise Operation Performance with Real-time Decision Making

Combined or deployed as needed, the extensive array of reporting and analytics options offered with LABVANTAGE provide comprehensive, real-time data access, visibility, and report capabilities that ultimately arm the organization with the knowledge needed to make more informed critical decisions.

Ensure Compliance and Traceability to Maximize Quality Assurance

LABVANTAGE automates the documentation of compliance and deviation with laboratory SOP's, as well as other internal and external standards. And because many laboratories, both in and outside the United States, fall under the jurisdiction of the U.S. Food & Drug Administration (FDA), LABVANTAGE supports compliance with FDA regulations, as well as, other government and industry regulations.

MOST CONFIGURABLE-OFF-THE-SHELF LIMS

Built into the latest versions of the software is a sophisticated configuration tool, LABVANTAGE Web Page Designer. The Web Page Designer offers important benefits including:

Tailor Your Solution with Configuration

The Web Page Designer allows system administrators to quickly change LABVANTAGE web pages and create new pages. This helps users reduce implementation time and expense, as well as ongoing maintenance costs, by enabling them to easily setup and change system architecture, database configuration, user administration, business process automation and end-user interface configurations. The Web Page Designer comes with an extensive library of page-types to jump-start configuration and system enhancements, as well as an extensive library of Wizard Tasks to improve end-user training and SOP adherence.

Eliminate the Reliance on High Cost Programming Resources with Easy-to-Use Features

The "Build vs. Buy" conundrum is common to organizations that are seeking a solution that is specifically tailored to their laboratory requirements but do not wish to spend considerable resources to build from scratch. LABVANTAGE is an ideal solution for laboratories in this situation because it provides an established and proven LIMS platform, with built-in configuration tools.

Reduce Validation Cost & Effort through a Property-Driven Configuration Tool

The Web Page Designer offers uncompromising solution design and enhancement, enabling the creation of property-driven, configurable pages that are inheritance-based. These pages are maintained with

LABVANTAGE OVERVIEW (CONT'D)

each upgrade throughout the life of the LABVANTAGE configuration, and any future changes can be easily made with only limited additional validation required.

ONLY TRUE ZERO-FOOTPRINT ARCHITECTURE AVAILABLE

While many LIMS solutions are just beginning to incorporate web-based designs, LABVANTAGE has pioneered zero-footprint LIMS, offering customers significant benefits, including:

Secure Enterprise-wide Access through a Browser, with no Plug-ins, Downloads or Applets

LABVANTAGE can be accessed from virtually any Internet-ready device with no plug-ins, downloads or applets. Access is role-based and password protected for security, complying with 21 CFR Part 11. The benefit of this type of solution is that users internal and external to the lab, as well as customers and vendors, can easily access the information they need and to which they have rights – anytime, from anywhere. High visibility to laboratory information increases enterprise-wide productivity, as well as the speed and effectiveness of decision-making.

Reduce Costs with a Single IT Platform to Deploy and Manage

The zero-footprint approach of LABVANTAGE creates an enterprise platform with a powerful, low-cost, low-maintenance information technology (IT) framework for today's competitive laboratory environment. With a zero-footprint LIMS, the system resides on a central application server and it is not necessary to install or validate software and ensuing upgrades on individual end users' PCs. This greatly increases the return on investment for your LIMS.

Enhance Reliability and Scalability through Clustering and Load Balancing

LABVANTAGE's scalable architecture enables organizations to enhance system performance and reliability through clustering and load balancing. Performance can be easily scaled by adding servers to the cluster, and clustering facilitates load balancing, a process that routes client requests to servers within the cluster. If one or more servers fail, client requests are automatically routed to other servers within the cluster so there is no break in service.

LABVANTAGE SOLUTION

LABVANTAGE provides pertinent laboratory information management solution features, along with robust functional modules and easy-to-use configuration capabilities, allowing the same solution to be tailored to the unique requirements of each laboratory around the world and across the organization's R&D pipeline and manufacturing supply chain.

The LABVANTAGE Solutions Matrix™ (side) charts the breadth and depth of the solutions that LABVANTAGE delivers with its flagship product suite, LABVANTAGE.

INDUSTRIES	Pharma & Bioscience							
	Health & Personal Care				Food & Beverage			
MARKETS	Contract Services				PetroChemicals			
	Diagnostic/Analytical	✓	✓	✓	✓	✓	✓	✓
Quality Management (QA/QC & PAT)	✓ (PAT)	✓ (PAT)	✓ (PAT)	✓ (PAT)	✓	✓	✓	✓
Raw Materials Testing	✓	✓	✓	✓	✓	✓	✓	✓
Formulation/Process Research	✓	✓	✓	✓	✓	✓	-	-
Development	✓ (Clin & PreClin)	✓ (Clin & PreClin)	✓ (Clin & PreClin)	✓ (Clin & PreClin)	✓	✓	-	-
Research/Discovery	✓	✓	✓	✓	✓	✓	-	-
MARKETS	Process Chemicals				Parts, Hardware & Equipment			
	Law Enforcement/National Security				Water			
INDUSTRIES								

LABVANTAGE MODULE	FUNCTIONALITY	KEY BENEFITS
Reagent and Standards Management	Complete solution for the management, maintenance, and tracking of laboratory consumables	Standardizing formula creation and maintenance. Optimizes shipment, management, tracking control, and reordering of standard and laboratory created consumables.
Stability	Automating shelf-life testing and determination of product batch stability	Meeting requirements stipulated in 21 CFR 211 through ensuring products distributed to the public remain chemically and structurally unwavering
Advanced Storage and Logistics (ASL)	Inventory tracking and logistics management for samples, reagents, and any other items in the laboratory	Accurately tracking complex laboratory item acquisition, location, and disposition with robust custodial tracking
BioBanking	Centralized biological specimen data capture and tracking with heightened regulatory compliance	Addressing the unique challenges of specimen collection and banking for complete biorepository management
Corrective Action and Preventive Action (CAPA)	Monitoring quality control and assurance	Maintaining compliance with standards and regulatory guidelines
Clustering	Facilitating load balancing and scalability by enabling multiple nodes in a cluster	Achieving enhanced performance, scalability, and reliability
LABVANTAGE Enterprise Connector (LEC)	Certified integration of LABVANTAGE with SAP ERP system powered by SAP Netweaver™	Enabling real-time data transfer between LABVANTAGE and SAP to accelerate time-to-market and facilitate decision-making processes

A LABVANTAGE Solution is comprised of a combination of our LABVANTAGE Enterprise Platform, LABVANTAGE Modules, configuration through our Web Page Designer, and integration of 3rd party instruments & applications.

LABVANTAGE® HIGHLIGHTS

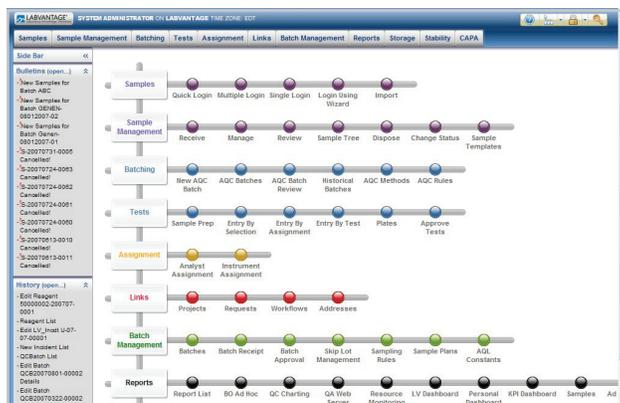
LABVANTAGE SOLUTION (CONT'D)

LABVANTAGE ENTERPRISE PLATFORM

At the core of every LABVANTAGE Solution is a sophisticated information management system. While many competitors continue to rely on browser plug-ins, operating system frameworks, and remote viewing software like Citrix, LABVANTAGE has been using a zero-footprint, 100% browser-based product for many years.

LABVANTAGE contains functionality required of laboratories spanning from R&D through manufacturing across multiple industry and market segments, including:

- Secure, zero-footprint, enterprise-wide access and visibility
- Extensive sample management with end-to-end traceability
- Enables compliance with 21 CFR Part 11, ERES, GxP, QSR, HIPAA, EUDDP, HACCP and other standards & government regulations
- Workflow automation to streamline business and decision processes
- Open architectural framework and Java application programming interface (API) for easy system integration with instruments & 3rd party applications
- Extensive reporting capabilities
- User-friendly graphical interface



LABVANTAGE MODULES

LABVANTAGE understands the challenges unique to today's laboratories and offers specific IT and end-user driven modules to address these different needs. The table below shows the key features and benefits of some of the modules that we offer.

UBIQUITOUS GLOBAL DEPLOYMENT

True multilingual support for user interface translation, time zones, regional settings, and date formatting coupled with Unicode support enables seamless multi-site and multi-language deployment and collaboration.

COMPREHENSIVE REPORTING AND ANALYTICS-DRIVEN DECISION SUPPORT

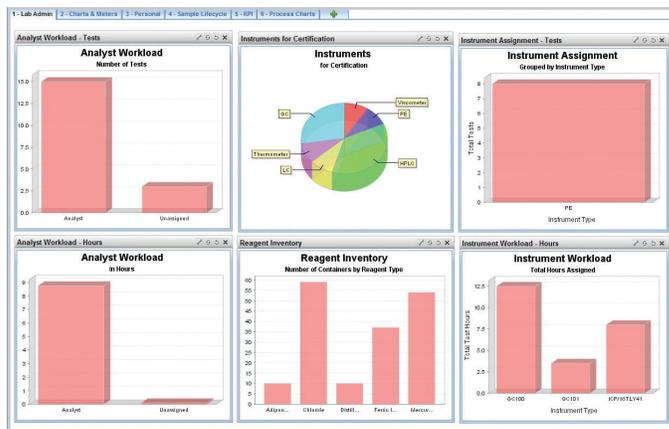
LABVANTAGE offers a number of embedded and integrated reporting and analytics options that can be deployed and securely accessed as needed by the appropriate user. The variety of options ensures that LABVANTAGE provides the most versatile and flexible options that deliver reporting and analytics out-of-the-box, while also providing integrative options for reporting and analytics applications you've already invested in.

Combined or deployed as needed, the extensive array of reporting and analytics options offered with LABVANTAGE provide comprehensive, real-time data access, visibility, and report capabilities that ultimately arm the organization with the knowledge needed to make more informed critical decisions.

LABVANTAGE SOLUTION (CONT'D)

LABVANTAGE® HIGHLIGHTS

- LABVANTAGE Dashboards - powerful business management tool provides an “at a glance” view of definable key performance indicators (KPIs).
- LABVANTAGE Ad-hoc Query Tool - real-time “in-application” data mining and analysis without the need for SQL programming.
- LABVANTAGE Reporting - seamlessly embedded, on-demand reporting and data visualization tools.
- LABVANTAGE Advanced Reporting – robust information and performance management tools powered by Business Objects™.
- LABVANTAGE Analytics - built-in visual charting for control charts and trend charts.
- LABVANTAGE Advanced Analytics - full-featured SPC charting and statistics powered by Northwest Analytical®.
- LABVANTAGE Operational Intelligence - real-time, workflow-driven, multi-source data integration, visualization, and analytics powered by LIMS View™.



MULTIPLE APPLICATION SERVER OPTIONS

Expansive support for industry-leading application servers including:

- IBM WebSphere®
- Oracle WebLogic®
- Red Hat JBoss®

INTEGRATION WITH 3RD PARTY INSTRUMENTS & APPLICATIONS

LABVANTAGE seamlessly integrates with external systems such as lab instrumentation, robotics, analytical tools, public and private database, ERP systems, and other business applications. This integration eliminates the need for unwieldy manually entry, saving time and reducing errors. Also, this promotes efficiency through information sharing, as well as through the continued use of crucial and familiar laboratory and enterprise information management and analysis tools.

SERVICES OVERVIEW

PROFESSIONAL SERVICES

Uniquely positioned to implement your software to your specifications and requirements, LABVANTAGE's Professional Services team combines global business and technical resources into a package of consulting, implementation, and development services. Our teams -- solution engineers, business analysts, and project managers -- understand your industry and requirements. Our skilled team goes beyond software delivery to facilitate deployment and knowledge transfer within your organization of our world-class LABVANTAGE solution.

CUSTOMER SUPPORT

LABVANTAGE offers a comprehensive support program to make sure customers keep getting the results they want, including:

- VantageCare: our 24/7 Customer Support website
- Phone support through local offices during regular business hours
- Emergency response time of within one working hour, during regular support hours
- Software installation support

TRAINING

Proper training is essential to employee productivity, and hands-on training is the best way to learn how to maximize the use of LABVANTAGE. LABVANTAGE offers training in our state-of-the-art training centers in Somerset, NJ, USA, High Wycombe, Buckinghamshire, UK, Monza, Italy and Kolkata, India, or can be scheduled on-site.

LABVANTAGE also offers a comprehensive eLearning program that enables customers to be trained on-demand at their own pace, location, and time. Certification exams are available for customers who wish to be certified for course completion.

SUMMARY

Successful organizations can no longer depend on one-dimensional systems. As a company's business grows, so must its systems and their functionality. The strategic vision for LABVANTAGE is that it is a solution that addresses an organization's information technology needs for a single, thin-client application that adequately meet its business requirements for enterprise laboratory information management. LABVANTAGE has and will continue to execute on that vision to further enhance LABVANTAGE, the industry leading thin-client and configurable-off-the shelf Laboratory Information Management Suite, beyond the world of traditional LIMS.

LABVANTAGE Brochure

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