

# Middleware Survey'09

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<p><b>1) What is the name of your company's middleware product?</b></p>	<p>4medica Laboratory Suite (Lab*/Path*)</p>	<p>LabDAQ MiddleWare</p>	<p>JResultNet Interface Engine Software</p>	<p>JavaLin interfaces</p>
<p><b>2) When did your first middleware installation go live?</b></p>	<p>23,000+ installations 1998</p>	<p>39 installations June 2008</p>	<p>2,000+ installations 1984</p>	<p>2,500+ installations 1984</p>
<p><b>3) When was the most recent upgrade?</b></p>	<p>2009</p>	<p>September 2009</p>	<p>2009</p>	<p>2009</p>
<p><b>4) Does your middleware interface with:</b></p>	<p> <input type="checkbox"/> bedside/handheld ID devices?  <input type="checkbox"/> blood banking systems?  <input checked="" type="checkbox"/> central data repositories?  <input checked="" type="checkbox"/> electronic medical records?  <input checked="" type="checkbox"/> hospital information systems?  <input checked="" type="checkbox"/> laboratory automation systems?  <input checked="" type="checkbox"/> laboratory information systems?  <input type="checkbox"/> microbiology systems?  <input checked="" type="checkbox"/> pharmacy systems?  <input checked="" type="checkbox"/> physician office management systems?  <input type="checkbox"/> point-of-care testing instruments?  <input type="checkbox"/> public health surveillance systems/registries?  <input checked="" type="checkbox"/> reference laboratories?  <input checked="" type="checkbox"/> reporting systems (administrative/financial/compliance/QA)?  <input checked="" type="checkbox"/> specimen-tracking systems?  <input type="checkbox"/> stand-alone automated instruments?  <input type="checkbox"/> other?                 </p>	<p> <input type="checkbox"/> bedside/handheld ID devices?  <input type="checkbox"/> blood banking systems?  <input type="checkbox"/> central data repositories?  <input checked="" type="checkbox"/> electronic medical records?  <input checked="" type="checkbox"/> hospital information systems?  <input type="checkbox"/> laboratory automation systems?  <input type="checkbox"/> laboratory information systems?  <input type="checkbox"/> microbiology systems?  <input type="checkbox"/> pharmacy systems?  <input type="checkbox"/> physician office management systems?  <input checked="" type="checkbox"/> point-of-care testing instruments?  <input type="checkbox"/> public health surveillance systems/registries?  <input checked="" type="checkbox"/> reference laboratories?  <input type="checkbox"/> reporting systems (administrative/financial/compliance/QA)?  <input type="checkbox"/> specimen-tracking systems?  <input checked="" type="checkbox"/> stand-alone automated instruments?  <input type="checkbox"/> other?                 </p>	<p> <input type="checkbox"/> bedside/handheld ID devices?  <input checked="" type="checkbox"/> blood banking systems?  <input checked="" type="checkbox"/> central data repositories?  <input checked="" type="checkbox"/> electronic medical records?  <input checked="" type="checkbox"/> hospital information systems?  <input checked="" type="checkbox"/> laboratory automation systems?  <input checked="" type="checkbox"/> laboratory information systems?  <input checked="" type="checkbox"/> microbiology systems?  <input type="checkbox"/> pharmacy systems?  <input checked="" type="checkbox"/> physician office management systems?  <input checked="" type="checkbox"/> point-of-care testing instruments?  <input checked="" type="checkbox"/> public health surveillance systems/registries?  <input checked="" type="checkbox"/> reference laboratories?  <input checked="" type="checkbox"/> reporting systems (administrative/financial/compliance/QA)?  <input checked="" type="checkbox"/> specimen-tracking systems?  <input checked="" type="checkbox"/> stand-alone automated instruments?  <input type="checkbox"/> other?                 </p>	<p> <input type="checkbox"/> bedside/handheld ID devices?  <input checked="" type="checkbox"/> blood banking systems?  <input checked="" type="checkbox"/> central data repositories?  <input checked="" type="checkbox"/> electronic medical records?  <input checked="" type="checkbox"/> hospital information systems?  <input checked="" type="checkbox"/> laboratory automation systems?  <input checked="" type="checkbox"/> laboratory information systems?  <input checked="" type="checkbox"/> microbiology systems?  <input type="checkbox"/> pharmacy systems?  <input checked="" type="checkbox"/> physician office management systems?  <input checked="" type="checkbox"/> point-of-care testing instruments?  <input checked="" type="checkbox"/> public health surveillance systems/registries?  <input checked="" type="checkbox"/> reference laboratories?  <input checked="" type="checkbox"/> reporting systems (administrative/financial/compliance/QA)?  <input checked="" type="checkbox"/> specimen-tracking systems?  <input checked="" type="checkbox"/> stand-alone automated instruments?  <input type="checkbox"/> other?                 </p>
<p><b>5) What are the three most important needs/LIS gaps that your middleware can fill?</b></p>	<p>Complete integration with LIS and EMR/PMS/HIS systems; secure Web-based service leveraging existing hardware and reducing costs; 2D bar code automation with container IDs, auto print functionality.</p>	<p>LabDAQ MiddleWare is designed to provide waived analyzers with EMR connectivity. LabDAQ MiddleWare will connect to the waived analyzers and send data from the analyzers to LabDAQ MiddleWare. LabDAQ MiddleWare will then send the data from the waived analyzers to the EMR.</p>	<p>JResultNet increases efficiency and improves operations through rules-based processing, easily constructed using Dawning's new rules-development kit; provides real-time QC analysis; and facilitates compliance and regulation with extensive audit and correction action logs.</p>	<p>JavaLin interfaces are used for individual or remote instrument interfaces, removing the need for a terminal server; and acts as a Linux-based gateway device to secure sensitive instruments on a large network.</p>
<p><b>6) What is your pricing structure?</b></p>	<p>4medica costs include implementation fees based on customer configuration and recurring fees, which can be configured as a transaction model or subscription model.</p>	<p>The base price of LabDAQ MiddleWare is \$5,400 and includes two unidirectional waived analyzer interfaces, demographic and results interface to the EMR, computer, printer, and day on-site.</p>	<p>Dawning's pricing is scaled per middleware solution ranging from single-instrument connections to multiple-instrument enterprise solutions.</p>	<p>Dawning's pricing is scaled per middleware solution ranging from single-instrument connections to multiple-instrument enterprise solutions.</p>
<p><b>7) How are new users trained?</b></p>	<p>4medica offers training in a "train the trainer" approach to enable a key hospital and laboratory staff member to become the resident expert and provide in-services for the new physicians as needed.</p>	<p>Antek provides on-site training to set up the system and connect the analyzers. Personnel are not required to leave the facility for training.</p>	<p>Comprehensive documentation and training materials; on-site, Web-based, and classroom-style training services. Dawning also offers a number of free training seminars.</p>	<p>In addition to providing comprehensive documentation, we offer on-site, Web-based, and classroom-style training services.</p>
<p><b>8) In addition to traditional technical support, what resources are available to help users resolve questions?</b></p>	<p>4medica's support team is available by phone and e-mail 24/7. Online assistance is also available within the application.</p>	<p>There is an online user group with training videos and an open forum for users to ask questions of other LabDAQ users. Web-based training is also available.</p>	<p>Free troubleshooting training seminars, extensive documentation, and access to our knowledge base.</p>	<p>Dawning offers users troubleshooting training seminars, extensive documentation, and access to our knowledge base.</p>
<p><b>9) Describe how your middleware differs from competing products.</b></p>	<p>Unique, easy to use, intuitive user interface; complete integration with practice systems, ePrescribe, inpatient integration, radiology, dictation, and more; registration to billing systems, simplified pricing structure; flexible configurations.</p>	<p>LabDAQ MiddleWare has an existing library of more than 400 analyzer interfaces and numerous EMR interfaces. Users will also have the ability to easily enter non-instrumented lab results, which will export to the EMR software.</p>	<p>JResultNet is hardware independent, OS independent, and uses Java-based object-oriented programming. JResultNet offers users unique tools such as the new RDK, basic data mining search engine, and the Dawning DataMiner™.</p>	<p>The JavaLin offers flexible protocols, a large library of applications, Web services, and others without a PC manager required. Dawning's Java Instrument Driver Module Library contains over 1,000 instrument applications.</p>

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1) What is the name of your company's middleware product?

Instrument Manager (IM)

FFlex eLink

MediCopia

Lab Manager LIS  
WELFORD chart notes EMR

2) When did your first middleware installation go live?

5,000+ installations  
1993

8 installations  
January 2008

100+ installations  
1996

100+ installations  
1992

3) When was the most recent upgrade?

May 2009

June 2009

December 2008

September 2009

4) Does your middleware interface with:

- bedside/handheld ID devices?
- blood banking systems?
- central data repositories?
- electronic medical records?
- hospital information systems?
- laboratory automation systems?
- laboratory information systems?
- microbiology systems?
- pharmacy systems?
- physician office management systems?
- point-of-care testing instruments?
- public health surveillance systems/registries?
- reference laboratories?
- reporting systems (administrative/financial/compliance/QA)?
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5) What are the three most important needs/LIS gaps that your middleware can fill?

It provides solutions for autoverification from an easy rules-development environment to complete turnkey systems for multiple disciplines of the lab.

FFlex eLink is a cost-effective solution for small waived labs without an LIS providing a direct interface with EMR and EHR systems. Multiple FFlex eLink systems can be linked across multiple sites with a single EMR/EHR system interface.

MediCopia enhances patient safety by eliminating preanalytical specimen labeling errors, improving workflow, and offering fast turnaround.

Interfacing is one of the most important capabilities, whether its lab analyzers, other EMRs, other LIS, or just about anything with HL7 capabilities. These will pass through the MEDCOM proprietary translator or "Formatter" software.

6) What is your pricing structure?

A perpetual license, a base system, and purchase modules for specific functionality. Licenses for connectivity for instruments purchased individually and repurposed at no charge for new instruments.

FFlex eLink pricing includes software, installation, training, and support. Instrument interfaces are a low flat fee regardless of the instrument.

The pricing of MediCopia is very much influenced by the number of users. Software licenses can be based on the number of clients or on a site license.

We have pricing based on analyzer interfaces, whether Unidirectional or bidirectional and third-party interfaces, ranging from \$1,200 to \$8,500.

7) How are new users trained?

Basic training is included with installation of system. Standard and customized courses are available at our DI training facility, through new Web-based classes, or at the customer's location.

New users are trained online by our experienced staff. The user and trainer interact live and in real time for quick and easy training.

Lattice provides on-site train-the-trainer sessions conducted over a period of 3 to 5 days depending on the size of the implementation.

An installation engineer comes on-site for the install and training. Customers with third-party interfaces are trained via phone and remote takeover of the customer's system.

8) In addition to traditional technical support, what resources are available to help users resolve questions?

We provide extensive product documentation, online knowledge bases, a rules library, and Listserv resources to help resolve questions.

Web-based support ensures that our customers have immediate access to live support representatives so issues are quickly resolved.

Unlimited phone support during normal business hours plus 24/7 support for those institutions that require night and weekend support.

Customers can personally contact engineering staff for special requests or custom changes. The system is under warranty for a full year required by customers. Additional support is optional.

9) Describe how your middleware (not your company) differs from competing products.

It received FDA 510(k) clearance for the blood bank environment. One hundred percent of development is customer driven with two major releases on average per year.

FFlex eLink is a complete software solution that resides on your PC with no special box to purchase. FFlex eLink's versatile user interface allows for efficient review of results, age/gender-specific reference ranges, and rich result commenting.

MediCopia was the nation's first specimen-collection module developed in 1996. Since that time Lattice has introduced two additional product generations. It is easy to use, offers a tremendous amount of flexibility, and has the most complete feature set available.

We pride ourselves as being an interface company. Analyzer interfaces are completed in 45 minutes with proprietary "formatter software." Third-party interfaces are completed in weeks.

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<p>Roche Middleware Solutions (supplied by Data Innovations)</p>	<p>ADVIA Centralink® Networking Solution</p>	<p>EasyLink™ Informatics System</p>	<p>Sysmex WAM™ Clinical Decision Support Software</p>
<p>700 installations (US only) 1992</p>	<p>N/A December 2001</p>	<p>N/A February 2006</p>	<p>133 contracted installations; 98 in live productive use. February 2004</p>
<p>March 2009</p>	<p>September 2009</p>	<p>July 2009</p>	<p>October 2006</p>
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<p>Can perform as an LIS during LIS downtime. Programmable rerun, reflex, and serum indices checking; ability to connect to multiple systems, which can aid in the transition from one LIS to another.</p>	<p>Instrument port and data consolidation; advanced autoverification; customizable algorithms based on patient demographics; integrated QC.</p>	<p>Extensive audit trail, real-time data mining for custom reporting; stat, QC, system error, and connectivity alerts; enhanced autoverification with integrated and comprehensive QC package.</p>	<p>Rules engine for hematology with auto-validation ~85%. Multisite/multiLIS capabilities for complete enterprise solution. Displays and stores results, graphics, flags, and manual differential online for 2 years.</p>
<p>Middleware is priced based on features and number of connections.</p>	<p>The ADVIA Centralink system is licensed and priced according to the configuration.</p>	<p>The EasyLink™ Informatics System license supports up to eight instrument connections with unlimited access through hospital network PCs (25 concurrent users).</p>	<p>Sysmex WAM is configured/priced by hematology test volume, number of instruments, workstations, and multisite connections and automation complexity.</p>
<p>Roche provides a 2-hour Web-based introduction class, 2 days of on-site training, and 3 days of advanced operator training in a classroom setting.</p>	<p>Siemens provides custom on-site training for the ADVIA Centralink system. Comprehensive Web-based and CD-based training is also available.</p>	<p>Siemens provides custom on-site training. Comprehensive Web-based and classroom training is also available.</p>	<p>One week corporate training at Sysmex followed by on-site training during project implementation. Web-based eLearning Module for pretraining and CEU.</p>
<p>Dedicated, certified IT project managers; large field-based team for installation and configuration.</p>	<p>Educational seminar, audioconference, advanced IT support specialist, and ADVIA. Centralink networking solution user group.</p>	<p>Advanced IT support specialist with remote access, on-board context-sensitive help and training.</p>	<p>Service and support activities achieved via implementation of secure, remote monitoring system, SNCS.</p>
<p>Supports third-party connectivity; small IT footprint, 128 connections, and 100 concurrent users per server class; large team of certified IT project managers and installation specialists.</p>	<p>Top ranked in "overall satisfaction"; multidiscipline connectivity, multisite networking with broad autoverification capabilities; integrated QC package for Westgard rules and patient-moving average.</p>	<p>Browser-based networking connects instruments and sites across the network. Predefined and customizable rule sets, integrating QC rules. Remote diagnostics and automatic software update with alerts.</p>	<p>Sysmex WAM is designed for hematology; supports multiple LISs and multiple sites for true enterprisewide solution; permits standardization of rules and processes, improving quality/continuity of care.</p>