

Is it possible to make my lab even more productive?



**ADVIA CentraLink Data Management System**  
Streamline your workflow with a patient-focused approach

Answers for life.

**SIEMENS**

# ADVIA CentraLink Data Management System: Your Single Interface for Patient and QC Data Management

The ADVIA CentraLink® data management system from Siemens Healthcare Diagnostics is a lab networking solution that seamlessly integrates and consolidates patient and quality control data from multiple, connected instruments. As a proven performer in high volume, automated or non-automated hospital and commercial labs, ADVIA CentraLink streamlines processes and automates patient and QC data management, optimizing workflow and improving lab efficiency and productivity with minimized effort from you and your staff.

## **Consolidation Streamlines Workflow**

The ADVIA CentraLink data management system is the single communication link between your laboratory information system (LIS), instruments, ADVIA Automation system(s), and multiple users within the central laboratory or across multiple laboratory locations. It provides a consolidated environment for the efficient management of information from multiple laboratory instrument systems and/or sites with access from any client workstation. In an automation environment, the ADVIA CentraLink data management system facilitates network communication between your LIS, ADVIA WorkCell®, ADVIA® LabCell®, or VersaCell™

automation systems, and instruments connected to the track to assure uninterrupted sample process efficiency.

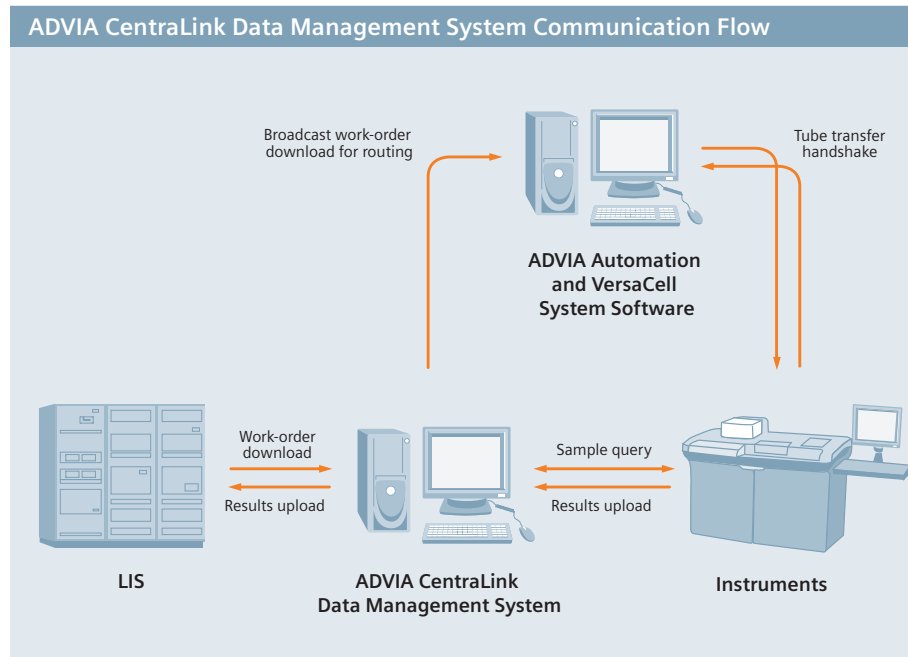
In a non-automation environment, the ADVIA CentraLink data management system delivers multi-system data management consolidation, via a single network communication between your LIS and the connected instruments.

In both scenarios, the ADVIA CentraLink data management system improves workflow and efficiency, consistency in turnaround times delivered by your laboratory, and helps to ensure patient safety.

“ADVIA CentraLink Ranks #1 in Overall Product and Training Satisfaction among middleware systems used by Central Labs in hospitals.”\*

### Seamless Integration for You and Your Staff

The ADVIA CentraLink data management system utilizes a Windows-based operating system with user-friendly applications and intuitive navigation, so it's easy to learn and incorporate into your laboratory. With bi-directional query capability, it is also process efficient in managing sample status and location from one centralized area. The ADVIA CentraLink data management system's greatly expanded capacity stores up to 40 million active patient results and up to 32 instrument connections, making it easy to add more instrument connections when growth and expansion are needed.



\* U.S. Survey from *The Middleware Market Development Monitor™*, September, 2009

# Improved Process Efficiency in Your Lab

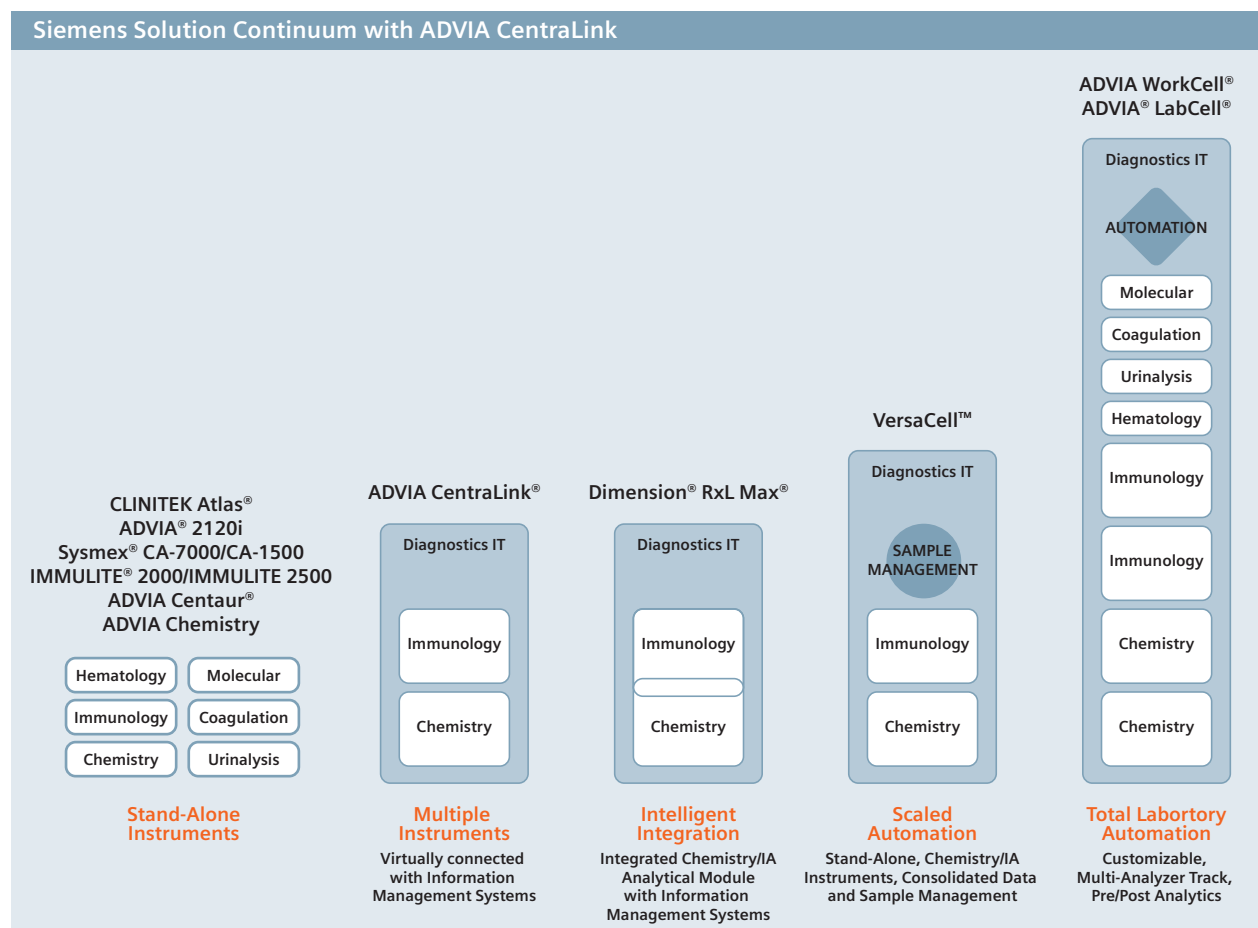
With streamlined data review, seamless multi-system data management, auto-verification tools, and patient-centered data consolidation, the ADVIA CentraLink data management system very quickly optimizes your lab's workflow.

A consolidated display of patient data or QC from multiple instruments on one screen with color-coded alerts reduces tech time associated with results

validation and improves productivity. Enabling parallel automation and instrument communication with the LIS, the ADVIA CentraLink data management system delivers a work-order buffer for real-time instrument query to assure optimum sample process productivity. Auto-verification tools with expanded rules capabilities decrease TAT, and errors, while enhancing patient safety.

## Enhance and automate Infectious Disease testing in any size laboratory with Siemens flexible configuration support

ADVIA CentraLink improves efficiency and quality of infectious disease testing by expanding rules capabilities to include multiple result aspects and ability to consider instrument flags in rules for auto-verification. Connect automation (including VersaCell) to fully automate workflow for improved process efficiency in patient testing.



## Consistency Across Your Lab

Enhanced results management, rules-based management by exception, and a standardized approach create a consistent environment and help to deliver actionable information to your clinicians in a uniform timeframe.

ADVIA CentraLink enables labs to compare, review and edit patient results from multiple instruments or sites, implement laboratory specific auto-verification rules and manage quality control data from a single location.

### The ADVIA CentraLink data management system features:

- Automated data review and result release using laboratory-defined criteria (flagging, autoreflex, repeat, delta checks and reference ranges)
- Delta checking on both absolute and percentage basis
- View of QC data and comparison across contols, instruments, sites by method or by lot
- Flexible Westgard Rules application, configurable by assay or instrument
- Configurable number of decimals utilized for patient and QC results
- Configurable interval for automatic QC export (daily, weekly, monthly...)
- Calculation of patient moving averages, which can be incorporated into auto-verification
- Consolidated audit trails documenting changes to records by date and user
- ADVIA® 2120 cytogram and histogram support, as well as keypad for manual differential results entry

Test	Conc	Ref	Date/Time	Room	Instrument
CA	REV	7.0	10/16/2006 04:48	3-4-0	ADVIA 1550
CHDL	VAL	225	10/16/2006 04:48	200-240	ADVIA 1550
CHOL-T	VAL	1.2	10/16/2006 04:48	0.5-1.3	ADVIA 1550
COF	REV	111	7	2-20	ADVIA 1550
1 PhOS	REV	1.5	7	2-4.5	ADVIA 1550
MAO	VAL	2.1	7	1.6-2.6	ADVIA 1550
TPP	VAL	208	7	210-265	ADVIA 1550
LDH	REV	114	7	31-224	ADVIA 1550
FFR	REV	67	7	27-322	ADVIA 1550
PTI	REV	23.7	7	11.20-0	ADVIA 1550
WBC	VAL	796	7	200-1000	ADVIA 1550
RBC	VAL	44	7	0-20	ADVIA 1550
Hgb	VAL	15.5	7	14-18.3	ADVIA 1550
Ht	VAL	44.4	7	13-16.0	ADVIA 1550
PLT	VAL	125	7	21-11.7	ADVIA 1550
TRIG	VAL	1	7	0-10	ADVIA 1550
FFA	VAL	1.43	7	0.09-1.26	ADVIA 1550
T3	VAL	1.22	7	0.60-1.81	ADVIA 1550
T4	VAL	8.5	7	4.5-10.5	ADVIA 1550

Review & Edit

- Test name
- Test status
- Current result
- Previous run on same sample result
- Previous sample result for delta checking
- Normal range by age, sex, species
- Severity flags
- Instrument

Test	Instrument	Lot/Species	Assayed	C	S	Flags
ALB	ADVIA1550_1	61611	10/16/2006 08:22:33	3.0	0	
ALB	ADVIA1550_1	61611	10/16/2006 12:15:33	3.1	0	
ALB	ADVIA1550_1	61611	10/16/2006 16:05:33	3.2	0	
ALB	ADVIA1550_1	61611	10/16/2006 20:05:33	2.8	0	
ALB	ADVIA1550_1	61612	10/16/2006 08:00:33	5.7	5	
ALB	ADVIA1550_1	61612	10/16/2006 08:07:05	5.8	5	
ALB	ADVIA1550_1	61612	10/16/2006 08:15:33	5.7	5	
ALB	ADVIA1550_1	61612	10/16/2006 08:22:34	5.5	5	
ALB	ADVIA1550_1	61612	10/16/2006 08:30:22	5.1	5	
ALB	ADVIA1550_1	61612	10/16/2006 12:00:52	5.0	0	
ALB	ADVIA1550_1	61612	10/16/2006 16:30:43	4.8	0	
ALB	ADVIA1550_1	61612	10/16/2006 20:00:01	5.1	0	
ALB	ADVIA1550_1	61612	10/17/2006 08:10:10	5.2	0	
ALB	ADVIA1550_1	61612	10/17/2006 12:00:18	4.9	0	
ALB	ADVIA1550_1	61612	10/17/2006 16:30:26	5.1	0	
ALB	ADVIA1550_1	61612	10/17/2006 20:00:28	5.1	0	
ALB	ADVIA1550_1	61612	10/18/2006 08:30:45	4.9	0	
ALB	ADVIA1550_1	61612	10/18/2006 12:00:33	5.0	0	

View QC Results

# Greater Focus on Patients and Service

As an integrated data management and laboratory process control tool, the ADVIA CentraLink data management system improves the quality of service your facility provides to your customers. Focus is brought back to where it needs to be – on the delivery of timely and accurate patient results.

The ADVIA CentraLink data management system gives you the opportunity to meet turnaround time goals more consistently. Better

manage patient samples and know where samples are located at all times in your laboratory by viewing the current location of your samples, priority, and status in CentraLink.

Enhanced security configurations and features, LIS contingency operations, such as order entry, and robust data storage capability – up to 30,000 samples per connected instrument – assure continued laboratory operation, even during LIS downtime, and peace of mind that patient data is protected and safe.

Additionally, multiple hardware options provide ADVIA CentraLink users a cost-effective way to match the performance system acquired to their data management needs. Available hardware selections scale to support up to 32 connections, higher speeds and memory, as well as redundant hard disc drives, and power supplies.

## Laboratory-Wide Integration Opportunities

Pursue connectivity to any combination of multiple chemistry, immunoassay, hematology, urinalysis, hemostasis, and molecular systems in an automated, partially automated, or non-automated configuration. The seamless integration of your analyzers and lab automation system with your LIS streamlines laboratory workflow, optimizes your instrument capabilities, improves overall process efficiency and minimizes the workload on staff.

By supporting up to two ADVIA automation systems with up to 32 different instrument connections and fifteen workstations, the ADVIA CentraLink solution enhances communication capabilities while supporting laboratory growth, helping you to gain even more process efficiency from a single LIS connection. Further operational savings can be captured with fewer interfaces to be maintained and consolidated management and validation of patient and QC data from any workstation location.

The ADVIA CentraLink data management system delivers true consolidation of patient and QC data management by integrating multiple instruments through a single server and single LIS connection, via interface support for the following Siemens Instruments:

- ADVIA® 120
- ADVIA® 2120i
- ADVIA® 1650 Chemistry System
- ADVIA® 1800 Chemistry System
- ADVIA® 2400 Chemistry System
- ADVIA® Autoslide Slide Maker Stainer
- ADVIA Centaur® Immunoassay System
- ADVIA Centaur® CP Immunoassay System
- ADVIA Centaur® XP Immunoassay System
- ADVIA® LabCell® Automation Solution
- ADVIA WorkCell® CDX Automation Solution

- CLINITEK Atlas® Automated Urine Chemistry Analyzer
- Dimension® EXL™ with LM Integrated Chemistry System\*\*
- Dimension® RxL Max® System
- Dimension Vista® 1500 Intelligent Lab System\*
- Dimension Vista® 500 Intelligent Lab System\*
- Dimension® Xpand® Plus System
- IMMULITE® 1000
- IMMULITE® 2000
- IMMULITE® 2000 XPI
- IMMULITE® 2500
- Sysmex® CA-7000 Systems\*\*
- Sysmex® CA-1500 Systems\*\*
- VersaCell™ System\*\*
- VERSANT® 440 Molecular System
- VERSANT® kPCR\*\*\*

For more information on ADVIA CentraLink, please visit [www.siemens.com/diagnostics-it](http://www.siemens.com/diagnostics-it)

\* In an ADVIA automation configuration; ADVIA CentraLink Version 13 required

\*\* ADVIA CentraLink Version 13 required

\*\*\* Not available for sale in the US

## The ADVIA CentraLink Data management System Technical Specifications

### Configuration\*

- Up to 15 user workstations; Up to 32 instruments; Up to 2 ADVIA Automation Systems

### Communication

- Single or dual-channel LIS connection
- Downloads work orders to ADVIA WorkCell CDX System and ADVIA LabCell System
- Manages work order query from instruments
- Acts as a work order buffer for automation systems
- Uses multiple communication protocols (ASTM 1238, ASTM 1394, Spec 79 or HL7)

### Operating System

- Windows® 2000/Windows 2003

### User Interface

- Standard Windows navigation via drop-down menus and icons
- Configurable toolbars for quick data access—even across sites

### Order Entry

- Simplified order entry for LIS back-up
- Sample label printing

### Review and Edit

- Autovalidation options to: Review all; Review none; Review by exception
- Customizable options: Range – definable by age, sex, species; Delta checking;
- QC violations; Instrument flags; Automatic or manual upload of partially completed records
- Dispositioning options: Automatic or manual validation of results; Re-run, omit or edit results; Manual result entry; Keypad for manual differential result entry; Automatic or manual addition of comments; Automatic request for re-run, or reflex or setting of delete route on LAS for tests processed off-line
- Display: Configure the order of results display; View hematology cytograms from any workstation

### Quality Control

- By method; Lot or moving average; Instrument; Species
- Data display as results or Levey-Jennings plots
- Configurable Westgard rules by test or instrument (1-2s, 1-3s, 10-x, 2-2s, 4-1s, R-4s)

### Search/Enquiry

- By sample ID; Physician name or ID; Patient name or ID; Instrument

### Multilanguage Capabilities

- Each workstation can use English, French, German, Italian or Spanish

### Security

- Multiple standard and user-defined access levels
- Definable menu options for each access level
- Audit trail support to document changes

### Reporting

- Customizable report formats:
  - Report header
  - Report footer
  - Column headings
  - Test display order

### Data Storage\*

- Up to 30,000 samples per interfaced instrument
- Up to 960,000 active patient samples and up to 3.8 million active patient results
- Results for up to 30,000 QC samples per interfaced instrument

### Customization

- Flexibility via MISPL programming language

### Supported Interfaces

Additional interfaces may be available upon request

- |                         |                             |
|-------------------------|-----------------------------|
| • ADVIA® 120            | • Dimension Vista® 500      |
| • ADVIA® 1200           | • Dimension® Xpand® Plus    |
| • ADVIA® 1650           | • Diagnostica Stago® STA-R® |
| • ADVIA® 1800           | • IMMULITE®                 |
| • ADVIA® 2120i          | • IMMULITE® 1000            |
| • ADVIA® 2400           | • IMMULITE® 2000            |
| • ADVIA Centaur®        | • IMMULITE® 2000 XPi        |
| • ADVIA Centaur® CP     | • IMMULITE® 2500            |
| • ADVIA Centaur® XP     | • Sysmex® CA 7000           |
| • ADVIA® LabCell®       | • Sysmex® CA 1500           |
| • ADVIA WorkCell®       | • VersaCell™                |
| • Dimension® EXL™       | • VERSANT® 440              |
| • Dimension® RxL Max®   | • VERSANT® kPCR**           |
| • Dimension Vista® 1500 |                             |

\* Minimum ADVIA CentraLink version 12.0 required.

\*\*In development.

Siemens Healthcare Diagnostics, the leading clinical diagnostics company, is committed to providing clinicians with the vital information they need for the accurate diagnosis, treatment and monitoring of patients. Our comprehensive portfolio of performance-driven systems, unmatched menu offering and IT solutions, in conjunction with highly responsive service, is designed to streamline workflow, enhance operational efficiency and support improved patient care.

ADVIA, ADVIA Centaur, ADVIA CentraLink, ADVIA WorkCell, CLINITEK Atlas, Dimension, Dimension Vista, EXL, IMMULITE, LabCell, RxL Max, VersaCell, VERSANT, Xpand and all associated marks are trademarks of Siemens Healthcare Diagnostics Inc. All other trademarks and brands are the property of their respective owners.

Product availability may vary from country to country and is subject to varying regulatory requirements. Please contact your local representative for availability.

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