

# LANSA Open

## Rapid client/server for Windows

You can deliver any Windows interface your users demand, and maintain the security and high performance necessary for mission-critical applications. LANSAs Open combines the GUI builder of your preferred PC development tool with the speed of LANSAs middleware, the scalability of LANSAs applications, the maintainability of LANSAs Object Repository and the portability of LANSAs server technology.

### Technology for business advantage

The pace of technical change releases a constant flow of new tools and new ways for organizations to seize an advantage. Users switch from tool to tool as they strive for ever higher customer service.

You can accelerate your competitive advantage with LANSAs Open. On the server, use LANSAs Object Repository to centrally store business rules, data validations, error messages, referential integrity, database triggers and derived fields. LANSAs 4GL can create powerful portable server-based stored procedures.

You retain control of your business on your chosen server. You need less code on the client. All programs inherit from the LANSAs Object Repository and simply access the server via LANSAs Open's fast and scalable middleware. You can invoke LANSAs Windows middleware from any tool that can call a DLL.

### Windows and iSeries

Until now, the major challenge in successfully integrating client applications with the iSeries and AS/400 has been in achieving fast client-to-server transaction times. Developers face a difficult choice. The high productivity engines of many client tools require an ODBC/JDBC driver. But these drivers do not deliver the speed of native RPG

record-level access. Oracle developers prefer native drivers. iSeries and AS/400 developers need a native driver too.

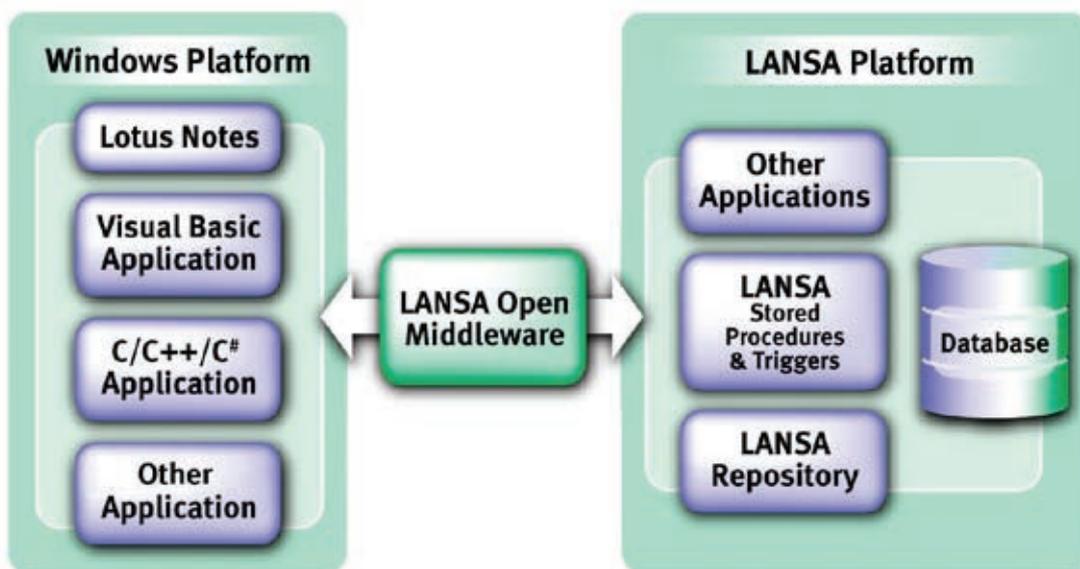
LANSAs open middleware provides superfast performance that rivals the speed of native RPG applications. Accelerate development with high productivity tools. Focus on user requirements and leave client/server complexity to LANSAs.

### The power and security of scalable server technology

LANSAs lets you take advantage of the power of your chosen server. Your existing staff knows your business well, but may not have time to learn the latest technologies.

LANSAs Open makes sure PC programmers cannot intentionally or unintentionally corrupt the server database. Changes to database or integrity rules will not affect the stability of client applications. By defining business rules on the server you reduce the code in the user interface making maintenance easier.

LANSAs architecture minimizes network data transfer, improving scalability. LANSAs Open makes it easy to create portable triggers and stored procedures on your server. Client applications request a result set only. The server performs complex application and database processing.



LANSAs active Object Repository enforces security and business rules for all client applications across multiple servers.

# LANSA Open for .NET

## Opening up the LANSAs Repository to Microsoft .NET Developers

LANSA Open for .NET opens up the productivity and discipline of the LANSAs Repository to .NET Framework developers. Shipped as a small and standardized .NET class library, it allows .NET applications to easily access LANSAs Repositories residing on System i and Windows servers.

### Why use LANSAs Open for .NET?

LANSA Open for .NET brings the scalability of LANSAs applications, the maintainability of LANSAs's object repository and the portability of LANSAs's server technology to the .NET Framework.

As .NET becomes a pervasive frontend for business applications, integrating the LANSAs Repository with .NET client applications offers an important strategic step towards improved Windows development productivity.

In-house LANSAs development groups can use LANSAs Open for .NET to share the benefits of the LANSAs Repository with other groups or departments that want to or are already using .NET development tools.

For LANSAs Solution Partners, LANSAs Open for .NET enables their existing LANSAs solutions to be customized by .NET developers. Their customers can use .NET development tools to extend or enhance a LANSAs-based solution without the need to understand or even be aware of the underlying LANSAs technology used to build the solution.

### Benefits of LANSAs Open for .NET

- Opens up the System i to .NET developers in a productive, safe and disciplined fashion.
- Productivity and discipline enforced by centrally stored business rules on the server with data validations, error messages, multilingual and DBCS support, referential integrity, database triggers and derived (virtual) fields.
- Faster and more secure than ODBC. Unlike basic table I/O applications, all client applications are automatically subjected to rigorous System i security checks, data validation and referential integrity checks.
- Secure encryption between Windows and the LANSAs Repository using industry standard DES or Twofish.
- Full .NET CLR 'verifiable'\* class library. LANSAs Open for .NET is not a class library frontend to a non-CLR compliant WIN32 application.

- No knowledge of LANSAs required by .NET developers.
- Small footprint. Deploy as a single DLL within your .NET applications.
- Standardized error handling, tracing and diagnostic capabilities.

### Getting Started is Easy

No knowledge of LANSAs is needed to use LANSAs Open for .NET. The industry standard class library is straightforward and is shipped with ready-to-run samples in both the C# and VB.NET languages. There is almost no learning curve for .NET developers.

If you already use Visual LANSAs, all you need is Microsoft Visual Studio, the LANSAs Open for .NET DLL and the online documentation. Nothing else is required.

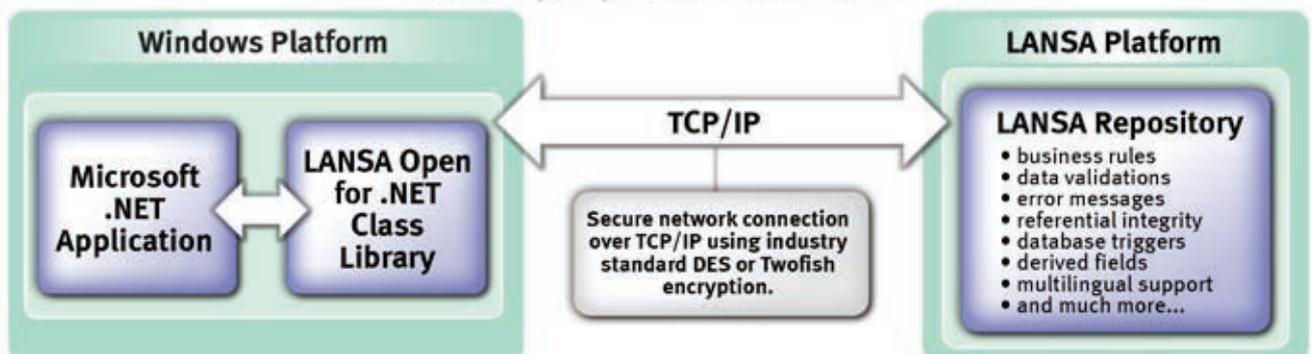
If you are not already a LANSAs development site, you will need to identify and train a LANSAs Repository Administrator to administer the LANSAs environment on the server. The rest of your .NET team only needs the LANSAs Open for .NET class library and documentation. Your whole team is now ready to start using LANSAs Open for .NET.

### About Microsoft .NET Framework

The Microsoft .NET Framework is a key Microsoft offering that aims to make it easier to develop Windows rich-client and Web applications. Applications can be coded in any .NET language, most commonly C# or VB.NET. The .NET Framework Base Class Library (BCL) covers a large range of programming needs, including user interface and database connectivity. The functions of the class library are used by developers who combine them with their own code.

Programs written for the .NET Framework execute in the Common Language Runtime (CLR), which provides the appearance of an application virtual machine, so developers do not need to consider specific server capabilities. It also handles security, memory management and exception handling. The BCL and the CLR together compose the .NET Framework.

### LANSA Open for .NET Architecture



LANSA Open for .NET is shipped as a small and standardized CLR verifiable\* .NET class library that does not require any other LANSAs software to be installed on the .NET client system. The LANSAs Open for .NET Class Library defines the LANSAs Repository interfaces that the .NET developers use to easily access LANSAs Repositories residing on System i and Windows servers.

**The Americas:**  
Headquarters – Chicago, USA  
Tel: +1 630 874 7000  
Email: info@lansa.com

**Europe:**  
Headquarters – London, UK  
Tel: +44 1727 790300  
Email: info@lansa.co.uk  
www.lansa.com

**Asia Pacific:**  
Headquarters – Sydney, Australia  
Tel: +61 2 8907 0200  
Email: info@lansa.com.au

**LANSA**  
ADVANCED SOFTWARE MADE SIMPLE