

**LANSA**<sup>®</sup>

ADVANCED SOFTWARE MADE SIMPLE

ISSUE 38: 2009

# Review

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## Fusing the Windows and IBM i Worlds



**BCS** gets ongoing value from LANSAs  
**CHRISTUS Health** improves contract management  
**Cinram** fuses IBM i and Windows with LANSAs  
**Hillman** reduces the cost of implementing a price change  
**Agilysis** boosts popularity with move to Microsoft .NET  
**Robinson's** new ERP system offers a one-stop shop  
**Showcase:** Fusing the Windows and IBM i Worlds  
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## THE LANSA REVIEW

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# LANSA®

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# Bridging the Gap with Better Productivity



A WORD FROM PETE DRANEY  
Director and CEO

One of LANSA's unique strengths is that it comprises a set of development tools and services designed for building business applications that will operate on IBM i servers, on Windows .NET servers and, most importantly, on platforms made-up of a combination of both IBM i and Windows .NET servers with coupled resources from both.

We have branded this facility of LANSA "iFusion.net". iFusion.net can help companies deliver composite applications utilizing existing, and often 'siloe'd', programming resources from both the IBM i and Windows development teams. The new unified or 'fused' applications will present users with a modern and intuitive interface that supports the way they really work, greatly improving their productivity.

The Industry Showcase in this issue focuses on how LANSA has already been used in many projects to fuse the IBM i and Windows environments. The Architects Corner explains what iFusion.net is in more technical detail.

The Agilysys and Christus Health case studies in this issue both illustrate how LANSA-developed applications can be deployed across platforms.

Agilysys Lodging Management System® (LMS) powers many of the largest hotels in the world, including most of the mega-hotel-casinos in Las Vegas. Although extended with LANSA for online Web reservations, making it the world's first real-time, fully integrated Internet hotel booking system in 1997, the LMS RPG-based core modules could only be deployed to the IBM i. Agilysys decided to use Visual LANSA to redevelop the LMS and add the Microsoft .NET platform as an alternative to the IBM i. The new system is called Guest 360.

Tina Stehle, Senior Vice President & General Manager, Agilysys Hospitality Solutions Group, says, "I estimate LANSA helped us bring the Guest 360 solution to market 50 percent faster than we otherwise would have, saving more than a year; and, more importantly, improving quality and enabling the company to capture additional sales."

Christus Health, based in Dallas, USA, is a not-for-profit health system with 350

facilities. CHRISTUS Health uses e.essential Contract Guardian, a contract management solution from LANSA business partner Rippe & Kingston, and has deployed the LANSA browser-based solution on a Windows server, while other companies run the same solution on an IBM i server, or in a SaaS environment.

Thom Davidson from Rippe & Kingston explains his choice to use LANSA, "Platform and database independence are part and parcel of LANSA and LANSA's wizards assured us of development speed and consistency."

Body Corporate Services (BCS), a market leader in the Australian Strata Management industry, provides a good example of a company committed to the IBM i, but also deploying several Windows based systems. BCS's core Property Management System is a large LANSA-based application. Additionally, BCS uses LANSA Integrator to service back-end host functions into its WebSphere portals, as well as to integrate with several Windows and third party systems.

Michelle Stack, BCS's Information Systems Manager, is positive about LANSA's role in the success of BCS, and relates, "With a small development team and using the LANSA tools, we can build and maintain our own property management system and its integration points with other systems."

The other case studies in this issue include: **Cinram Logistics UK**, a division of the world's largest provider of pre-recorded multimedia products, is using RAMP to modernize its distribution system and provide tight integration with MS Office. **Robinson Manufacturing Company**, a supplier of apparel, is using LANSA to redevelop their core manufacturing and distribution system. **The Hillman Group**, supplies 21,000 retailers with over 55,000 small hardware items. Hillman reduced the cost of implementing a price change by over US\$850,000 by combining LANSA and hand-held technology, plus they use LANSA to feed three ERP systems across multiple platforms.

What all the companies in these case studies have in common is that they achieve a lot with a small and productive IT team.



# Announcing: The Wizard from Oz

## Software Development Made Simple (Again)

Since the release of what we affectionately call WAMs (Web Application Modules) for developing sophisticated browser-based applications, we have been only too well aware that, although WAMs might make the process easier, Web application development of real business applications is still no simple task.

Whilst those customers who have embraced the Visual LANSA Framework (VLF) for this task have been helped by VLF itself and its Code Assistants, those customers who have decided not to use VLF, have long been in need of more tools to assist them, if we were to continue to preach "LANSA, Advanced Software Made Simple".

### CRUD for Web Application Wizard

In June 2009, we released a new Wizard, called CRUD for Web, that will generate a secure transactional Web application over your DB2 database in minutes, rather than days.

The Create Read Update Delete (CRUD) data life cycle is at the heart of most dynamic Web applications.

CRUD for Web is a Visual LANSA template that uses a Wizard-style interface to lead the developer through a Q&A session. It then applies the input answers (or shipped defaults) to automatically generate a WAM for Searching, Creating, Reading, Updating and Deleting records from the chosen database.

The generated WAM is easily modified and enhanced using the Visual LANSA IDE (Integrated Development Environment). The Wizard also generates a rich browser user interface that can be customized with a WYSIWYG editor.

### How Does CRUD for Web Work?

CRUD for Web consists of two parts:

- **CRUD Wizard** – Q&A session that guides the developer in determining what files to use, the navigation through multiple files and the user interface look-and-feel requirements.
- **Program Generator** – Automatically produces all of the RDML required for the WAM application logic and all of the XML, XSL and HTML required for the user interface.

### Steps to Create a Web Application

It couldn't be simpler:

- Define the file in LANSA or make an existing file known to LANSA, if not already done.
- Add Virtual (formula) fields, Repository Rules and Relationships, if not already done.
- Run the Wizard – selecting the file(s) to use.
- Generate the Application.

### CRUD for Web Wizard Features

The Wizard allows you to specify various ways that the selected file can be searched and will create one Search Tabsheet for each search method. The default is to search by key(s) on the physical file and on each of the logical files.

The Wizard also allows you to generate a Drill Down from any Search Result list, provided you defined Access Routes for the primary file you select. (An Access Route describes the link between two files).

If you select the Drill Down option, the generated application will include a button for each row (record) displayed in the Search Result. Clicking the button will kick-off another WAM application linking to the file nominated by the Access Route and display the records with matching keys. The Drill Down function takes the place of the Search capability in the application to which you drill down.

In designing your WAM, the Wizard lets you choose an Overall Layout format and within that format it gives you a choice of color schemes, button styles and other layout options.

### Benefits of Using CRUD for Web

As well as significantly decreasing the time it takes to develop CRUD-style WAMs, CRUD for Web will promote consistency of coding, as developers use the generated best-practice WAM source code as the base for their Web application.

#### Quick win after purchase of LANSA

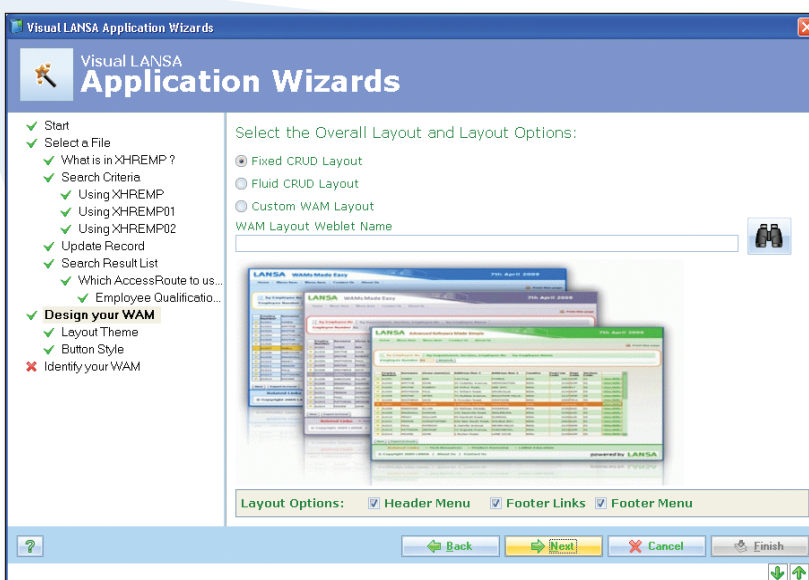
- First genuine LANSA Web-based application can be delivered to end users within a few days.

#### Best Practice Guide

- Developers can cut-and-paste from generated source code for use in future programs.

#### A new Training Channel for WAMs

- The WAM source code is well documented and demonstrates best practice for new LANSA developers.



The CRUD Wizard Q&A session guides the developer in determining what files to use, the navigation through multiple files and the interface look-and-feel requirements.

# BCS gets ongoing value from LANSA



Body Corporate Services (BCS), established over 30 years ago and with over 20 branches on the eastern seaboard of Australia, are pioneers in strata management. BCS uses LANSA to develop and maintain its core Property Management System, for integration with customer and staff WebSphere portals and several Windows systems, as well as for communication with third parties.

**Michelle Stack**, Manager Information Systems at BCS, says, "LANSA is of ongoing value to BCS, as its continued development keeps the product up with the latest technologies and trends. Just as important, LANSA also keeps true to its core promises, helping us to deliver accuracy, stability, security and fast development turnaround. I am very confident our LANSA and IBM i based PMS will remain a key factor in staying ahead of the competition."

## IT is a Differentiator

BCS provides a comprehensive range of services to facilitate the smooth running of strata plans, neighborhood and community title schemes, as well as company titles. The company's portfolio of property under management includes several thousand residential, commercial, resort and mixed use developments. BCS has over 30 years experience in the strata management industry in Australia and has recently started operations in Dubai and Bahrain.

Stack explains, "Every building we manage is equivalent to managing a small business, each with their own group of stake holders and their own set of accounts. We pay several hundred thousand invoices per year on behalf of our clients, collect levies from each lot

owner and process a huge number of banking transactions each day."

"Our size gives us the opportunity to out-value our competition, but that is by no means a reason to become complacent. We have to remain competitive and keep proving ourselves. Next to the quality of our staff, our IT systems are an essential factor in providing a differentiator."

In the early nineties BCS purchased an off-the-shelf strata management solution, but because of the large amount of modification that was required, its implementation was failing. Together with an IBM business partner, BCS developed its own LANSA-based custom Property Management System (PMS). The PMS was in production within six months and has been growing and evolving ever since.

Stack is positive that their PMS and the LANSA technology behind it are still the right choice, "Just under a year ago we had the PMS and our development tools reviewed by an independent firm. Our PMS, and the LANSA tools, certainly stood up well and the recommendation was that our system is well positioned for the future."

**"LANSA is of ongoing value as its keeps up with the latest technologies and trends."**

## Core Logic and Integration

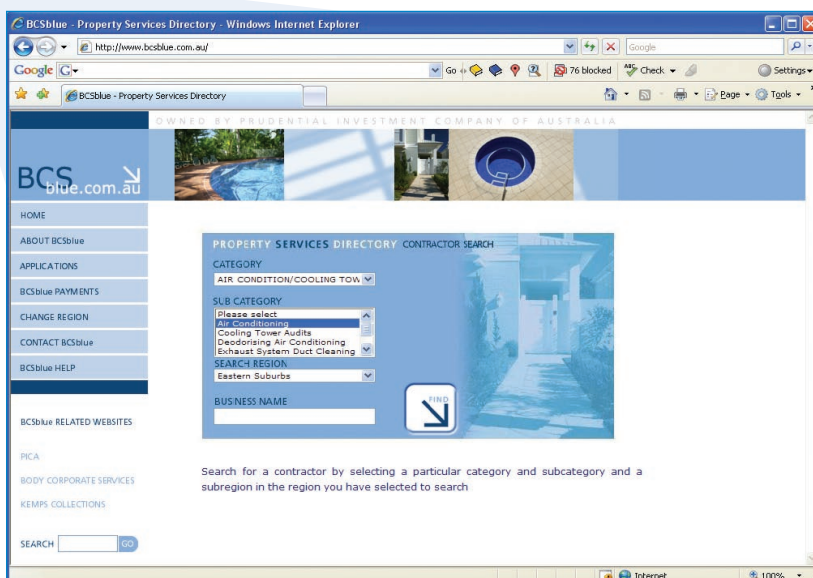
BCS's core PMS system consists of LANSA based modules for client maintenance, levy billing, accounting, taxation, financial reporting, banking, electricity billing and 'BCSblue', a property services and contractor management system. BCSblue has been extended to the Web for the general public also using LANSA.

Portfolio Managers access the PMS via a WebSphere intranet portal for managing general enquiries, planning meetings and voting, creating repairs and maintenance tasks and for a variety of other tasks.

Authorized clients, such as lot owners, can access BCS's 'Extranet' WebSphere portal to view their individual levies, buildings details, plan documents and repair requests. They can also change their contact details and view the contact details of other parties associated with their property. Strata committee members have access to additional information, such as the balance of bank accounts and current insurance details.

**Anthony Belz**, System Architect and Technical Lead at BCS, explains, "The WebSphere portal space is heavily supported by LANSA Integrator's Remote Function Invocation (RFI) service, which makes integration between Java and non-Java applications simple. Our back-end host functions are being serviced through LANSA Integrator to the portal. So, there is good modularity and reuse of code. In addition we use LANSA Integrator to exchange XML between applications."

LANSA Integrator also plays a roll in a large number of PMS integration points with third parties. These include integration with the



BCSblue offers a contractor search facility and uses LANSA Integrator to generate and send quote requests to contractors.



Australian Taxation Office for the preparation and filing of several thousand electronic tax statements every quarter. Integration with a mailhouse for outsourced printing and mailing of periodic statements to clients. Plus integration with debt collection agencies, insurance companies and banks.

Belz comments on the high level of banking integration, "Each building has its own bank account, and all accounts together generate thousands of transactions each day. Receipts flow automatically through the accounts receivable and general ledger and are matched with the levy. We have the same degree of automation on the creditor side. The investment made on our banking interfaces is very valuable."

Integration points between the PMS and other BCS internal systems using LANSA Integrator include: Billback, a package for cost recovery of photocopy costs and other client expenses; PDF and HTML cover page generation for RightFax electronic faxing; Integration with Redmap for electronic document management and integration with FinanceOne and Crystal Reports for reporting. All of these are Windows based packages.

LANSA Integrator is also used for generating and exchanging legal documents in PDF format and for quote requests to BCSblue contractors.

### Transparency and Visibility

"With a small development team and using the LANSA tools, we can build and maintain our own property management system and its integration points with other systems. Having the in-house skills and a productive development tool gives us the flexibility to quickly respond to requests of clients and portfolio managers, helping us to stay ahead of the competition," explains Stack.

To make sure the system is well documented, BCS uses LANSA iApplication Explorer (LiAE). LiAE provides an interactive online browser overview of all the fields, files, functions, processes and system variables used in an application, including pseudo code, making the system understandable for auditors and other non-developers.

BCS still sends, receives and stores many documents as paper rather than electronically, which is according to Stack mainly due to the industry's cautious uptake of technology.



*BCS has over 20 branch offices throughout the eastern states of Australia and manages residential, commercial, resort and mixed use developments.*

### "LANSA makes integration between Java and non-Java applications simple."

However, documents and invoices will soon be scanned, OCR-ed and managed in BCS's electronic document management system. "It will allow us to handle data entry and invoice processing much more efficiently, for example by giving our clients the option to approve their invoices online," says Stack.

The electronic management of documents forms part of a larger workflow management project, which will further streamline communication between clients, portfolio managers, administrative and compliance staff. Stack explains, "Our vision is that everything we do for our clients will be captured as an electronic work item. At the moment almost every question or request is written on a piece of paper, or being tracked through email. In the future we want to capture every item in our database and make it visible in a proper workflow environment, so it can be tracked online by all parties involved."

"One of the major competitive differentiators the PMS helps us to provide is transparency and increased interactive access for clients. Providing visibility so that clients can view at any time of the day what's going on in their

building is a major advantage and will help show the value of our service to our clients."

### Ongoing Value

Future directions for BCS system development include a move towards SOA, explains Belz. "We will expand our use of LANSA Integrator for any task that requires SOAP services and LANSA will play an important role in the workflow project, as well as in the integration with the Redmap document management system."

BCS's expansion to the Middle East brings along new requirements as well, such as offering the core PMS modules in a Software as a Service environment, possibly using LANSA's RAMP. Plus there will be additional integration points with local banks and regulatory authorities.

Asked for his overall opinion about LANSA, Belz concludes, "LANSA is a fine and competent development platform, partnered very well with the IBM i. LANSA's capabilities on the Windows platform are interesting for us as well. I can testify for LANSA's productivity claims and its easy integration with both WebSphere and Windows. Last but not least, we have a fairly large application and LANSA's documentation and impact analysis facilities are important to help us externalize application knowledge and expertise." ■

### COMPANY AND SYSTEM INFORMATION

- BCS, headquartered in Sydney, is the market leader in the Australian Body Corporate/Strata Management industry and has 350 staff at over 20 branch offices throughout the eastern states of Australia.
  - BCS's development team consists of one system architect, four analyst programmers and one business analyst.
- For more information visit [www.bcssm.com.au](http://www.bcssm.com.au)

# CHRISTUS Health improves contract management



CHRISTUS Health, ranked among the top ten Catholic health systems in the U.S., is comprised of almost 350 services and facilities. CHRISTUS Health uses e.essential™ Contract Guardian, a contract management solution from LANSA business partner Rippe & Kingston. Built with LANSA, the browser-based solution can be deployed across multiple platforms in-house, or on a SaaS basis. CHRISTUS Health has implemented the solution in a Windows environment at its Houston data center.

**Diana M. Holland**, Program Manager, Strategy and Innovation, Business/Financial Strategies with CHRISTUS Health's Information Management team, said "With Contract Guardian, the entire contract management process is more transparent, which allows us to build our operations on a process, rather than being dependent on individual people."

## Aiming for Unity

CHRISTUS Health is a Catholic, faith-based, not-for-profit health system comprised of almost 350 services and facilities, including 50 hospitals and long-term care facilities, 175 clinics and outpatient centers and dozens of other health ministries.

In 2004, CHRISTUS Health launched an initiative, called the Unity Project, to standardize clinical, business and financial processes across its facilities. As a first and major step, CHRISTUS Health hospitals moved, or are moving to, a single Healthcare Information System (HIS), namely, MEDITECH.

Holland explains, "Converting to a corporate wide HIS marked the beginning of our ability to establish standardized clinical and financial policies and procedures throughout all our

facilities. Concurrently, we are looking at standardizing other applications. Moving to a corporate wide contract management system is a priority, because it allows regions and facilities to collaborate and share information. It provides for a proactive approach to contract management and informed business decisions."

With that in mind, **James Lofton**, Process Analyst, Contracts/Insurance Administrative Services for CHRISTUS Health's Northern Louisiana region, set out in 2007 to identify a contract management solution.

Lofton explains, "Hospitals generally have between 800 to 1,600 contracts. The contracts are with physicians, suppliers and also include real estate dealings, insurance policies and any other agreements that need record keeping."

"I was looking for a more flexible solution to manage the growing volume and variety of contracts. The solution also needed to offer journaling of all activities around a contract. Rippe & Kingston's e.essential™ Contract Guardian solution stood out for its flexibility and ease-of-use. Most importantly, their solution was one of the few, if not the only, that offered journaling."

**"Contract Guardian enables us to instantly locate contracts."**

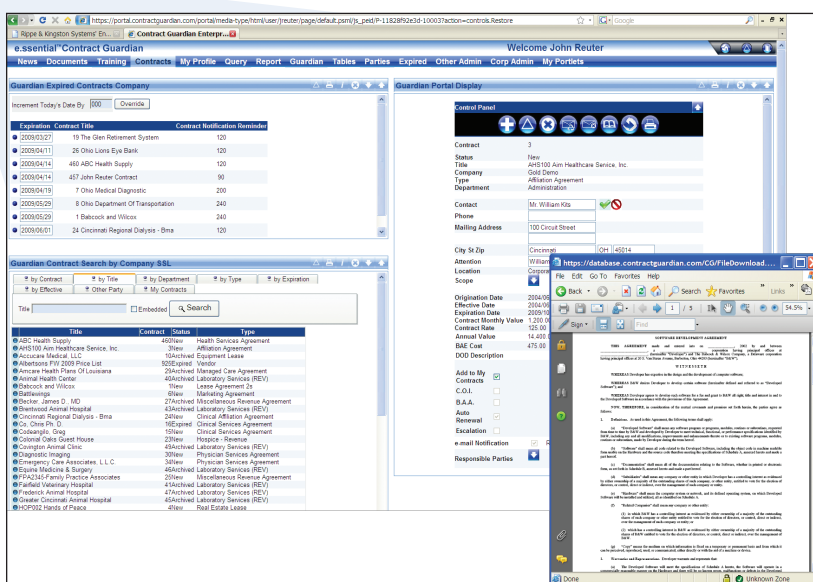
With training and implementation assistance from Rippe, Lofton implemented Contract Guardian successfully in the Northern Louisiana hospitals. During that initial pilot period, the solution was deployed in a SaaS environment hosted by Rippe. After a successful trial, the solution was rolled out to additional regions and deployed in-house on a Windows server at CHRISTUS Health's Houston data center.

## Contract Guardian

At CHRISTUS Health, a contract will for example, begin with a corporate supply chain manager negotiating the best possible agreement. All documents, images, email messages and meeting notes that are related to the agreement can be journaled in Contract Guardian and attached to the agreement.

Once the agreement is in place, the contract is assigned to the local contract managers at the hospitals in the regions it applies to. Local contract managers then assign the agreement to the relevant staff in their hospital. For example, if the agreement is with a supplier of syringes, all individuals who might purchase syringes are made aware of the contract.

"Contract Guardian enables us to instantly locate contracts through several search interfaces. It also includes a feature called My Contracts that allows you to bookmark contracts that require your focus. So, you don't even have to search. Plus it gives you the ability to create a to-do list using a calendar feature. The combination of the automatic bookmark feature within the contract and the fact it is a searchable PDF delivers dramatic time savings," Lofton explains. →



Contract Guardian enables users to instantly locate contracts through several search interfaces and view an image of the original contract document.



"Another feature that comes in particularly handy is that managers can reassign contracts temporarily to someone else. That way, nothing falls through the cracks when someone is on holiday or sick leave."

The solution also allows for an internal news area, which Lofton uses to post information about new features and out-of-office notifications.

### From an IT point of View

Contract Guardian is written in LANSAs and delivered to the user's desktop via a browser-based portal. The solution supports multiple platforms (Windows, System i, UNIX and Linux) and multiple databases running on those platforms.

Thom Davidson, senior partner at Rippe & Kingston, explains that at the design stage of Contract Guardian, in addition to business requirements, there were numerous technical requirements that had to be met. Such as: accessible from any location, fully secured, automated auditing capabilities, intuitive and consistent user interface, easy to deploy, platform- and database-independent and the ability to integrate with Microsoft Office and other applications.

"Rapid development and the ability to rapidly respond to any request with the confidence we could deliver, was also important. Those requirements made our decision relatively easy on what would do the job: Portal Technology combined with LANSAs."

"The LANSAs Web Application Modules (WAMs) are perfect for generating portlets. Platform and database independence are part and parcel of LANSAs and LANSAs's wizards assured us of development speed and consistency," concludes Davidson.

### Security and Accountability

"Contract Guardian's advanced search and bookmark facilities, together with journaling and other sophisticated features, help us minimize the risk of non-compliance and eliminate reliance on paper. We don't have to worry anymore about contracts being misfiled and we don't have to email or copy them," says Lofton.

Lofton finds that the journaling feature gives life to the contract, which is especially useful in situations where someone takes over an existing contract.



*CHRISTUS Health is committed to delivering high quality, compassionate healthcare throughout its 350 medical facilities in the United States and Mexico.*

### "Platform and database independence are part and parcel of LANSAs."

"Journals also give security because they cannot be deleted or altered after the fact," says Lofton. "If questions or disputes arise; I can go back to the journal. Contract Guardian provides accountability with its journaling, and enforces the correct procedures."

Holland comments, "Contract Guardian's ability to stop agreements from automatic renewal, provides for a potentially huge saving. The system gives prior warning about agreements that are about to expire. That gives us time to research, look around for alternatives and negotiate a better deal."

"Enterprise wide deployment will give us an insight into what contracts exist. We may find out, for example, that multiple regions have their own contract at different levels with the same vendor. In that case, it would be time to talk with that vendor and negotiate better pricing – maybe covering more regions. It also allows us to properly redistribute some costs, such as annual maintenance and support. It is contract management without walls."

"Having the most current contracts in place and the information available and

transparent do allow for improved purchasing decisions and strategic planning. It avoids ending up with disparate prices and allows for standardized product purchasing and use".

### Transparent Contract Management

To date, CHRISTUS Health has six regions signed up with a few more to follow. The corporate Legal and Risk Management department is close to utilizing the solution as well, with the main focus to go across all the facilities and determine what contracts are in place.

Holland explains, "Deployment is simple and only requires placing an icon on the users' desktops. Nothing else needs to be installed or maintained on the part of the client."

User training is equally simple. The solution comes with several recorded Webinars that visually demonstrate how to use the application. "Support and training have been wonderful, which is important, because you're not only buying a product, you also gain the ability to partner with the company."

Holland concludes that now formal procedures are in place, it helps staff with their purchase decisions. "With Contract Guardian, the entire process is more transparent, which allows us to build our operations on a process, without depending on individual people." ■

### COMPANY AND SYSTEM INFORMATION

- Headquartered in Dallas, CHRISTUS Health is an international Catholic, faith-based, not-for-profit health system comprised of 350 facilities in Texas, Arkansas, Louisiana, Missouri, Georgia, Utah and Mexico. The system employs more than 28,000 Associates. CHRISTUS Health is listed among the top ten Catholic health systems in the U.S. For more information visit: [www.christushealth.org](http://www.christushealth.org)
- Rippe & Kingston, a LANSAs partner based in Cincinnati, Ohio, is an Information Technology firm that provides software solutions and services to clients around the world. Rippe & Kingston also has established partnerships with IBM, Microsoft and Avnet. For more information visit: [www.rippe.com](http://www.rippe.com) and [www.contractguardian.com](http://www.contractguardian.com)

# Cinram fuses IBM i and Windows with LANSA



Cinram Logistics UK, a division of the world's largest manufacturer and distributor of pre-recorded entertainment media, holds exclusive agreements with major movie studios, software and music publishers, including Warner Home Video, 20th Century Fox, MGM and EMI. Cinram uses RAMP from LANSA to gradually redevelop and modernize its Global Distribution System. The new composite application offers the underlying strength of the existing core system, in combination with intuitive graphical front-end applications and tight Microsoft Office integration.

**Tony Collins**, European Systems Development Manager at Cinram, says, "Functionally, our core distribution system successfully supports our business. Being able to bond with LANSA means we don't have to throw away the work we have done over the past 10 years. LANSA provides a very neat and cost-effective solution, allowing us to build further on the system we already had in place. It gives us a platform to take forward."

## Functionally Rich

Cinram International Inc. operates 23 major facilities that span nearly 13 million square feet. Worldwide Cinram has the capacity to manufacture 2.1 billion DVDs and 800 million CDs per year. Cinram Logistics UK (Cinram) has a 14 acre site in Aylesbury, from where it manages the order processing, warehousing, shipping, invoicing and returns processing for its clients.

Cinram uses an IBM i and a bespoke Global Distribution System (GDS) to support its operations in the UK, Germany, France and Benelux. The system supports 300 users and manages order fulfilment for multiple film and music studios to over 5,000 retailers

and wholesalers across Europe. Originally developed in the late nineties, the GDS sits on top of a JD Edwards ERP structure and has been customized to suit the specific business needs over many years.

"Although the system is functionally rich and robust, some users could not see past the limitations of the original green-screen interface," says Collins. The legacy look became a major source of dissatisfaction, especially for those clients that had previously worked in a SAP environment.

But clients were not the only drivers for modernization, explains Collins. "It is also about us moving forward by creating a modern and intuitive user interface."

Previously Collins had tried screen-scraping the GDS, but he was disappointed in the results. "We looked at a lot of GUI products and they did make the system look modern, but you still got a very clear sense that there was an AS/400 legacy system underneath," he explains.

"We were looking for a solution that felt like a real Windows environment and the LANSA RAMP solution fitted well. RAMP also gave us tight integration with MS Office and Windows in general, another big plus."

**"RAMP provides a very neat and cost-effective solution."**

## Five to One Consolidation

After an extensive feasibility study, Cinram proceeded with LANSA.

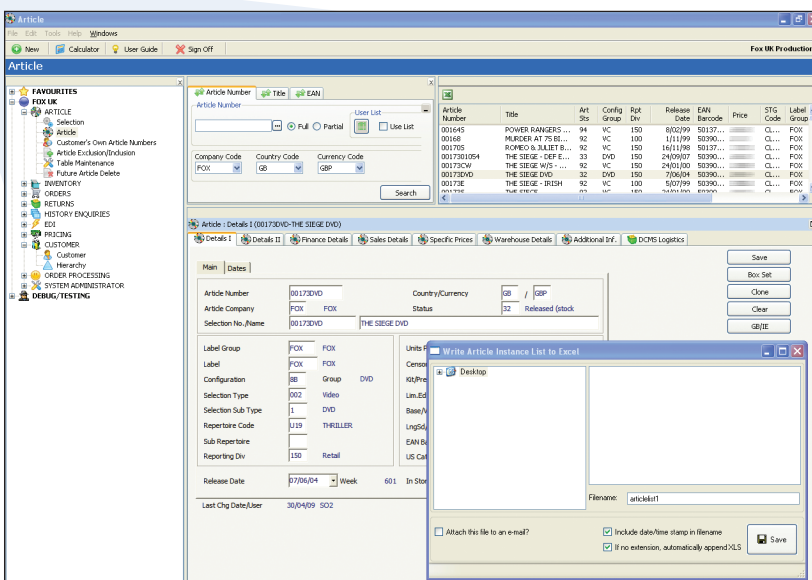
Clients were invited to join in the requirements specification and design stage of the project and Collins and his team went through a series of very detailed joint design sessions. "As a result of the formal and elaborate design approach, the project took longer than we'd anticipated, but we did get excellent results," says Collins.

"We spent quite some time brainstorming about how we could make the user interface more efficient. Tasks that previously required starting up five or six different programs, could often be consolidated to a single LANSA function."

Cinram started with the master file maintenance programs and then moved on to the order management, pricing, returns and EDI modules.

RAMP generates a framework with automated filters and tabs. Behind the tabs you can plug in a selection of screen translations, LANSA (re)developed applications and other new functionality. Many companies new to Windows development dip their toes carefully in the water and start with screen translations. But Cinram took the Windows development plunge right away and, using the 80/20 rule, redeveloped at least 20 percent of their programs.

"We really challenged ourselves and made a conscious decision that we didn't want to do a project and then find ourselves redeveloping it after six months," explains Collins. →



Users can extract any instance list of data from Cinram's distribution system to Microsoft Excel and they can populate a RAMP filter in the distribution system with data from Excel.



"There's a lot of power with the LANSAs customization, which we came to utilize more as we progressed through the project. As a result, the later modules were more sophisticated than the earlier ones. Our Returns Module is completely unrecognizable from its green-screen counterpart."

"The ratio of program consolidation (old to new) is nearly five to one, maybe even higher for the more recently RAMP-ed modules," estimates Collins. "You can do so much within one LANSAs business object, it was hard to grasp at first. We are really pleased with it."

Collins noticed, that although users are more productive, their first impression can be that the system is slower. "When you're working on a green-screen, your fingers are always busy and you're always thinking about which screen you're going to go to next. Whereas now, users just click on a single button and wait for the system to do the navigation for them."

The new system caters for tight integration with MS Office. For example, users can extract any instance list of data from the GDS to Excel and they can populate a RAMP filter in the GDS with data from Excel.

Collins used some consultancy in the early stages of the project, but for the most part he managed to do the project with his own team, the same developers who also maintain the RPG and JD Edward systems. The upside of this was that the developers had deep knowledge of the underlying GDS system, but it also slowed down the project because developers had to divide their time between new development and maintenance, as day-to-day business didn't stop for Cinram.

### Keep the Competitive Advantage

While Collins was aiming to give the GDS a Windows-style look-and-feel, he always felt that building further on the core system, rather than replacing it completely, was the correct approach.

"Changing to another ERP often means you have to change your business processes. We're happy with the way we work and we're happy with the functionality the core system offers. It is extremely customized for our business and a major contributing factor to our competitive advantage. Being able to bond with LANSAs means we don't have to throw away the good work we have done over the past 10 years."



The Cinram IT team, from left to right: Richard Walker, Adelaida Echeverri, Mark Wadsworth, Tony Collins, Marcus Woods, Phillip Grant.

### "RAMP offers a real Windows environment and tight integration with MS Office."

"LANSAs RAMP provides a very neat and cost-effective solution allowing us to build further on the system we already had in place and improve on it with better navigation, a productive Windows user interface, new functionality and MS Office integration," continues Collins.

Cinram's users now have the ability to move data from Excel into the LANSAs application and vice versa. For example, they can use an Excel spreadsheet with a subset of product codes as a filter in RAMP to return detailed information about those products into an instance list. They can then extract the instance list with detailed information back into another spreadsheet.

"This tight integration with Excel is available throughout the system," explains Collins. "It provides for a smooth workflow between all areas of business and saves a lot of time."

"The majority of the users that we're aiming this product at are already Windows users. The big advantage we achieved modernizing the system with LANSAs, is that going forward the system will be far more intuitive. Specifically

for people that are coming new into the business, the learning curve will be much shorter," continues Collins.

### A Platform to Take Forward

"Users have responded very positively," explains Collins. "They have been a fundamental part of design, so they feel they own the system."

Collins is planning to redevelop the user interfacing programs for all GDS modules and aims to run the next few projects in exactly the same way. Key groups of users have already been identified.

The system will be rolled out to Germany and the Benelux as well, with some customization to allow for territory specific functionality. For the time being the system is going to be rolled out in English, although Collins may make use of LANSAs multi-lingual features in the future.

"The real advantage is having a system that the users appreciate. We've only started scratching the surface with LANSAs, as we still have an awful lot of RPG programs to maintain. The great thing about LANSAs and RAMP, is that it gives us a platform to take forward," concludes Collins. ■

### COMPANY AND SYSTEM INFORMATION

- Cinram International Inc. is the world's largest provider of pre-recorded multimedia products and related logistics services. With facilities in North America and Europe, Cinram manufactures and distributes pre-recorded DVDs, audio CDs, and CD-ROMs for motion picture studios, music labels, publishers and computer software companies around the world. Cinram also provides distribution and logistics services to the telecommunications industry in North America and Europe through its wireless subsidiaries. Cinram operates 23 major facilities that span nearly 13 million square feet and employs approximately 17,000 people worldwide. For more information visit: [www.cinram.com](http://www.cinram.com)

# Hillman reduces the cost of implementing a price change



The Hillman Group, based in Cincinnati, Ohio, keeps over 21,000 retailers across the USA, Canada and Mexico stocked with an assortment of over 55,000 small, inexpensive but essential hardware items, such as fasteners, keys, signage & engraving products. Using LANSAs, Hillman has developed several solutions that help the company to synchronize item information, provide detailed statistics to customers as well as to reduce the cost of implementing a price change by over US\$850,000.

**Jim Honerkamp**, CIO at the Hillman Group, says, "Using LANSAs we have been able to develop solutions with our own team and at a fraction of the cost of some of the packaged solutions we evaluated. Especially in these times when IT departments have to show business savings, we have a lot to show. My goal is to implement technologies that are still relevant five years from now. Looking at LANSAs's 20 year history of continuous evolution, that's a pretty good bet."

## The Price Change Challenge

Hillman product lines are sold through traditional hardware stores, home centers, mass merchants, grocery and drug chains and even pet stores for Hillman's PetScribe engraving system.

Hillman attributes part of its success to providing its clients with individual attention. To provide this level of service, Hillman employs over 600 sales and field service representatives, who ensure through regular store visits that any questions get answered and that the product displays are well stocked and up-to-date with product and price information. IT plays a big role in helping the reps to do their job efficiently, recently even more so

with the introduction of an automated retail price change solution.

Hillman's customers range from small mom-and-pop stores to supercenters like Lowe's and Home Depot. As these customers have different pricing requirements, they can choose from six pricing levels. In addition there are 500 regional customer profiles that also influence the price.

**Kirk Townsley**, Application Development Manager at the Hillman Group, explains, "You can imagine that with 21,000 customers, 500 profiles and 55,000 products in various packaging sizes, we have a lot of data to manage. All the pricing is currently handled by our custom system."

Customers can choose the products they carry. So, even if two stores have the same profile, for example both being a medium sized hardware store in Florida, their display may contain different nuts, bolts and screws, organized in a different sequence. Displays range from 6 to 600 trays and each tray has a label that specifies the product, the price and the quantity in the pack.

**"With an initial outlay of \$245,000, we immediately saved over \$600,000."**

"We print all the labels for the stores, because we want the Hillman displays to look attractive and professional. The challenge we face is that every store has a unique display and their own retail pricing. With commodity prices fluctuating during 2008, we could foresee a price change that we had to apply across virtually all our fasteners."

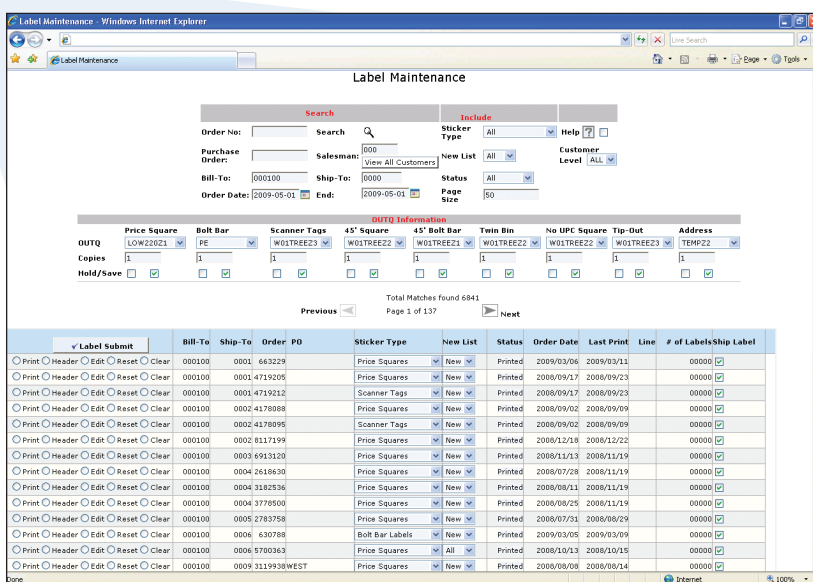
"In the past, applying a 'mass' price change was an inefficient process. We printed the price labels for all the products that may apply to a store, as we didn't know which exact products a store would carry. Our label room would print 10,000 or more complete sets of labels and have several sets on the shelf as well."

A stack of store labels would be four by four inches wide and two feet high, estimates Townsley. That volume required a UPS shipment to each store. The rep would put the new labels on the display at their next visit, a time consuming job, because the labels were printed in numeric sequence, while the display would be arranged differently. Eighty percent of the labels ended up in the paper recycle bin.

"We estimate that in the past every price change cost us US\$1 million in material, labor and shipping," says Townsley.

## A Massive Saving

In the new process, Hillman uses handheld technology to scan the display and upload the information to a LANSAs-based Customer Intelligence Repository (CIR). The CIR builds a planogram for each store that contains information about what items the store has



Hillman's sales reps have Web access to the new system which allows them to fine tune label orders for their stores.



on display and in which order. The reps have Web access to the CIR, allowing them to further fine tune the label orders for their stores, before releasing them to Hillman's label room for printing.

"Now, even when we are printing labels for an entire display, it will usually fit in a US Postal envelope," says Townsley. "A massive saving on shipping costs. Also, because applying an envelope with price labels doesn't seem such a daunting task, the customer often carries out the job themselves."

"We reduced the cost of implementing a price change by over \$850,000," says Townsley. "A large part of the saving is due to the reps spending nearly two hours less per store on applying labels. The one time project effort of scanning displays and setting up planograms took less than one hour per store, totaling to about \$200,000. We spent \$15,000 on handheld software and \$30,000 on other software and consulting. So, with an initial outlay of \$245,000, we immediately saved over \$600,000 on implementing our first price change in 2008."

Hillman's IT team spent two months on development and testing and two weeks (the regular rep visiting cycle) on collecting the planograms.

### The Bigger Picture

Hillman's Customer Intelligence Repository (CIR) builds further on what the company calls its iSPOT solution, short for Item Single Point of Truth.

Hillman runs three different ERP systems. The first is a bespoke RPG-based system called Cincinnati Custom System (CCS), which has been continuously refined over the past 20-years. It handles Hillman's order entry, part numbers and complex pricing calculations. Secondly there is a JD Edwards World system and thirdly a JD Edwards Enterprise One system, which Hillman has almost finalized migrating its World system to.

The first two systems run on the IBM i, while the latter runs on Linux with an Oracle database. Corporate reporting is done with WebFOCUS through an IBM WebSphere portal.

In 2005, Hillman installed LANSAs Data Sync Direct (DSD) solution to exchange item information via the Global Data Synchronization Network (GDSN). However, providing accurate item information wasn't simple. "Between our three ERP systems we



Hillman's in-store displays range from 6 to 600 trays and each tray has a label that specifies the product, the price and the quantity in the pack.

### "LANSA's cross platform capability is important to us."

had three different item descriptions and three different sets of attributes. We needed consistency," Townsley explains.

As a solution, instead of LANSAs DSD being fed item information by any of the three ERP systems, the DSD system was customized to become Hillman's main repository of item information – including images and packaging levels – to feed the CCS and JD Edwards systems, as well as the product catalog and GDSN.

Having very successfully put this Product Information Management system into place, Hillman then decided to use the same concept and LANSAs tools to create its CIR, which currently contains store attributes such as display planograms, geographic location, rep schedule and routing, an assortment wizard and customer part numbers.

"That's only the beginning," explains Townsley. "The CIR will also contain store-level inventory that the reps can scan with their handhelds. In combination with our own sales information, we will be able to provide our customers information about sales trends and consumer behavior that they may not get from their own systems. It allows us to

offer inventory management and assortment advice as a service to our customers. It could be a huge selling tool."

### More to Come

Hillman's development team is currently working on a solution to automate the credit process. Using handhelds reps already have the ability to place credit orders. What's going to be added is a LANSAs-based workflow application to put the controls in place to approve credit via the Web, explains Townsley, who expects a saving of \$250,000 per year from the workflow application.

Commenting on the ease of learning LANSAs and applying it into a Java environment, Townsley says, "I have an RPG developer in my team that had never worked with LANSAs before. After basic training and with some initial project assistance and mentoring he was soon up to speed and we have completed several projects since then on our own."

"Instead of having to hire Java experts, we are able, with our own staff and using LANSAs Integrator, to deploy RPG and other non-Java applications in our WebSphere portal environment. Currently we are in the planning stages of migrating LANSAs components onto a Linux/Oracle platform. LANSAs cross platform capability is important to us." ■

### COMPANY AND SYSTEM INFORMATION

- Founded in 1964, the Hillman Group is headquartered in Cincinnati, Ohio, and has more than 1,800 employees, including over 700 direct sales and service people. The company has 12 distribution centers across the U.S., Canada, and Mexico. Hillman has the leading market position in North America in fasteners (nuts, bolts, screws), keys, engraving and metal shapes. Hillman offers over 55,000 SKUs to more than 21,000 customers with over 35,000 ship-to locations. For more information visit: [www.hillmangroup.com](http://www.hillmangroup.com)

# Agilysys boosts popularity with move to Microsoft .NET

This article is based on a case study published by Microsoft Corporation.

Agilysys, Inc., a solution provider to the hospitality industry, sought to grow its market share, but the company's core software only ran on System i and Visual Basic, a drawback for customers on the Microsoft® .NET environment. Agilysys needed a cross-platform solution and chose LANSA. The new system provides complete functionality and offers customers improved agility and more features.

**Tina Stehle**, Senior Vice President & General Manager, Agilysys Hospitality Solutions Group, says, "Time to market was crucial, because the market had moved to Windows. Every additional day that it took us to deliver the solution was another day we lost potential sales. I estimate LANSA helped us bring the Guest 360 solution to market 50 percent faster than we otherwise would have, saving more than a year; and, more importantly, improving quality and enabling the company to capture additional sales."

## Business Needs

Agilysys provides one of the world's most popular integrated hotel and casino property management solutions. The company's Lodging Management System® (LMS) is a property management system that automates every aspect of hotel operations, from reservations to credit card processing. LMS is especially suitable for large-scale hospitality and gaming operations and powers many of the largest hotels in the world, including most of the mega-hotel-casinos in Las Vegas.

The original application was developed by IBM in the RPG language for deployment on the AS/400 – now the IBM i running on IBM Power Systems. In the 1990s, this was a sound

business decision, when the IBM midrange computer was a popular business alternative to the more expensive mainframe, and when more cost-effective choices, such as Windows Server®-based computers, were not as scalable as they are today.

Agilysys' hospitality solutions have been extended with LANSA-based Web extensions since 1997, when the LMS ResNet solution became the first real-time, fully integrated Internet hotel booking system in the world. LMS ResNet gave secure access to LMS DB2/400 data in real time, accessing the most up-to-date inventory availability, rating strategy, credit authorization and customer information needed to make a valid reservation. In 2000,

# Agilysys..



## GUEST360

LANSA was also used for a wireless solution that enabled hotel agents to check in and check out guests, process credit cards, print receipts and program room keys anywhere in or nearby the property. The solution helped reduce queues at the reception desk and provided guests the convenience of remote check-in and check-out.

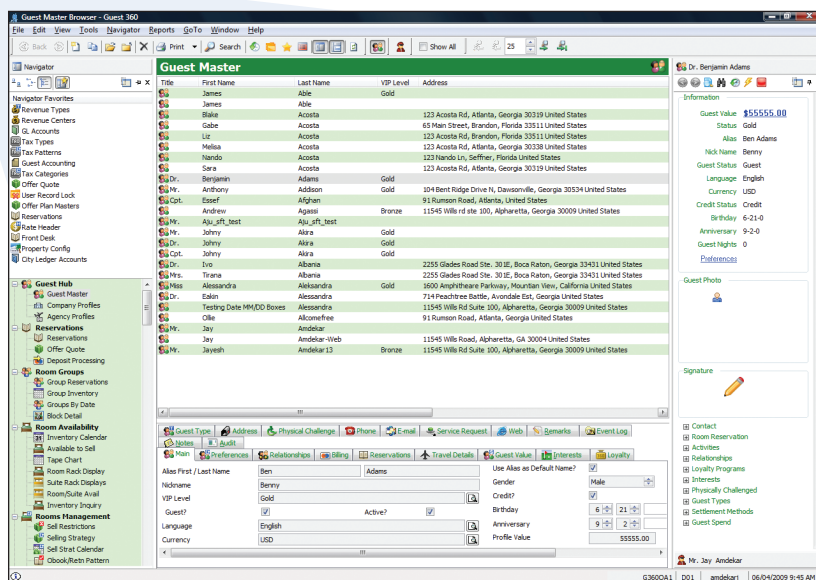
**"LANSA helped us bring the Guest 360 solution to market 50 percent faster."**

Although the LANSA-developed extensions could, theoretically, be deployed cross-platform, the RPG-based core LMS modules were limited to System i deployment.

In 2004, Agilysys acquired the LMS solution and the company that provided it. Agilysys saw the limitation of offering the solution only on the System i platform.

"We saw resistance to the System i," acknowledged Stehle, "Smaller properties weren't familiar with it and found it hard to embrace. The graphical interface that people expected was tough to deliver effectively on the System i. We were even having trouble finding top-notch professionals with System i backgrounds."

Agilysys began moving LMS to the J2EE environment to capitalize on in-house experience. "But we didn't see a cohesive story with Java, including broad integration with enterprise software and maximum productivity," says **Criss Chrestman**, Vice President, Software Development and Services, Agilysys Hospitality Solutions Group. "That's when we began to look at the Microsoft® .NET Framework. We realized that application development would be faster and easier, we could integrate with Microsoft desktop and server software and productivity tools, and we could create a services-oriented architecture (SOA) that would give customers maximum flexibility in how they used the solution." →



The Guest Hub in Guest 360 is a centralized repository for guest profiles, including history, itineraries, interests and preferences.

## The Solution

To develop its new generation of property management system called Guest 360™, Agilysys turned to LANSAs, a Microsoft Gold Certified Partner. The LANSAs development platform for .NET was the ideal choice for Agilysys.

"System i developers who know RPG code are being asked to move from a procedural language to the open object-oriented environment of .NET," says **Greg Best**, Vice President of Business Development, LANSAs. "It's a different world of event-driven programming and graphical user interface design. LANSAs makes it possible for RPG developers to take advantage of as much of their existing skill set as possible as they make that transition."

The rewrite of its hospitality software was the largest project Agilysys Hospitality Solutions Group had ever undertaken, and company executives were conscious of the need to reduce risk and ensure success.

"We wanted to come to market quickly, but we also needed to do it correctly," says Chrestman. "Our product is sophisticated, with more than 20 application areas and hundreds of modules. Our research showed that larger projects – those involving more than 100 years of developer time – had phenomenally high failure rates."

"We wanted to control that risk, so we chose productivity frameworks that held the project under 100 years without limiting functionality or sacrificing architectural sophistication. By using frameworks, you reduce project time. In the process, you also improve communication, quality and supportability. The new solution is built to scale to support the largest hotels in the world."

To further increase its chances for success, Agilysys adopted a series of best practices, including maximum reuse of code and functionality, speed of development and a flexible architecture. LANSAs provided functionality to facilitate reuse of code, as well as integration with Microsoft Web services and the Windows® Presentation Framework that also made up crucial parts of the new solution.



*Tina Stehle, Senior Vice President & General Manager, Agilysys Hospitality Solutions Group.*

## "Existing customers benefit from tight System i and .NET integration."

Guest 360 software is based on key functionality found in current Agilysys property management solutions, user recommendations and industry trends, such as guest-oriented reservation management. By capturing guest events, information and preferences, the system enables hotels to truly know their guests and realize a competitive advantage. The system's intuitive features move beyond traditional property management to assist in predicting guest preferences and making suggestions based on guest recognition.

The Guest 360 solution is now in production use, with a successful first implementation at a major new hotel in the southeastern United States.

## The Benefits

Using the .NET and LANSAs frameworks brought benefits to Agilysys even before the software made it into the hands of customers.

"Time to market was crucial, because the market had moved to Windows. Every additional day that it took us to deliver the solution was another day we lost potential sales," said Stehle. "I estimate LANSAs helped us bring the Guest 360 solution to market 50 percent faster than we otherwise would have, saving more than a year; and, more importantly, improving quality and enabling the company to capture additional sales."

"In every request for proposal we see, it's clear that customers are expecting to acquire a .NET solution," she says. "We don't want to miss an opportunity. Offering a .NET-based product and being able to bring it to market quickly means we've missed as few opportunities as possible."

Agilysys began to see increased interest in its product as soon as the new version was announced. "Every hospitality customer is looking for agility and the ability to meet new business demands quickly," says Chrestman. "The .NET Framework gives them those capabilities."

For example, Chrestman sees the move to .NET making it possible for the Guest 360 software to integrate with the full range of Microsoft Office solutions and extend to include mobile environments. Microsoft also gives customers flexibility where they often need it most – in the datacenter.

## Conclusion

"With the Guest 360 solution, we've assumed we have to fit into datacenter models that might arise over the next 20 years," says Chrestman. "The use of .NET and the SOA structure help guarantee that the software gives customers that flexibility."

"The Guest 360 solution and the LANSAs and .NET architecture behind it perform well in the high-volume transaction environments our customers generate. New customers may opt for a total Windows environment, while existing customers benefit from tight System i and .NET integration," concludes Chrestman. ■

## COMPANY AND SYSTEM INFORMATION

- The Agilysys case study above is based on a case study published by Microsoft Corporation at [www.microsoft.com/casestudies/casestudy.aspx?casestudyid=4000003867](http://www.microsoft.com/casestudies/casestudy.aspx?casestudyid=4000003867)
- Agilysys is a leading provider of innovative IT solutions to corporate and public-sector customers, with special expertise in select markets, including retail and hospitality. Headquartered in Cleveland, Agilysys operates extensively throughout North America, with additional sales and support offices in the United Kingdom and China. Agilysys employs more than 1,300 staff.
- Guest 360 software is developed with Visual LANSAs and Microsoft .NET Framework 3.5. Current server implementations include Microsoft Windows Server 2003 Enterprise Edition and System i. For more information visit: [www.agilysys.com/hospitality](http://www.agilysys.com/hospitality)



# Robinson's new ERP system offers a one-stop shop



Robinson Manufacturing Company, based in Dayton, Tennessee in the US, is a supplier of basic and fashion boxer underwear, loungewear and activewear to both the retail and wholesale markets. Robinson is using Visual LANSA to redevelop its core applications and also to offer a Web portal to its vendors where they can securely manipulate data, create shipments and print case labels.

**Fred Coulter**, Director of IT at Robinson, says, "Users now have a far more productive work environment. They have access to more information and the information is better organized. We are very customer focused and do our best to provide what the customer wants. LANSA provides a practical and flexible development environment in which we can meet customer and user requests."

## From UNIX to IBM i

Robinson Manufacturing was established in 1927 as an apparel manufacturer, starting with men's boxer shorts. Robinson Apparel® and Boxxerz® have become leading brands in the imprinted sportswear market, however the majority of the company's products are private label. Customers include major retailers and big-name sportswear and leisurewear brands.

Today the company imports as many products as it manufactures, so smooth communication with suppliers has become a top priority.

Robinson's in-house developed ERP system, UNIX-based and developed in FilePro, has been around for nearly two decades and was due for replacement, explains Coulter. "It was inflexible and hard to navigate for end users. Maintenance and user support were time

consuming and the system had become patchy over time. It wasn't suitable to extend to the Web for access by vendors, which was a high priority item on our agenda."

When Robinson implemented a Pick Ticket and Warehouse Management System in the late nineties (PkMS from Manhattan Associates), it happened to be running on the AS/400. The platform performed well and it made sense to move the company's ERP system to the same platform. Robinson investigated several packaged ERP solutions and even trialed one, but couldn't find a solution that was a close enough fit.

"We would have had to make a massive amount of modifications to make a packaged solution suitable for the way we run our business," explains **Mark Whitt**, Programming Supervisor. "But most importantly, with a

packaged solution we would never have the flexibility and control that comes with having an in-house developed solution."

The plans for a packaged ERP solution were abandoned and Robinson started investigating development tools instead. "Developing in RPG was out of the question," says Whitt. "We decided on LANSA because of its productivity and ability to run on multiple platforms. LANSA's Web capability was also far ahead of other tools and we saw immediately how we could put that to use."

**"Users now have a far more productive work environment."**

## Rich-client Windows and Web

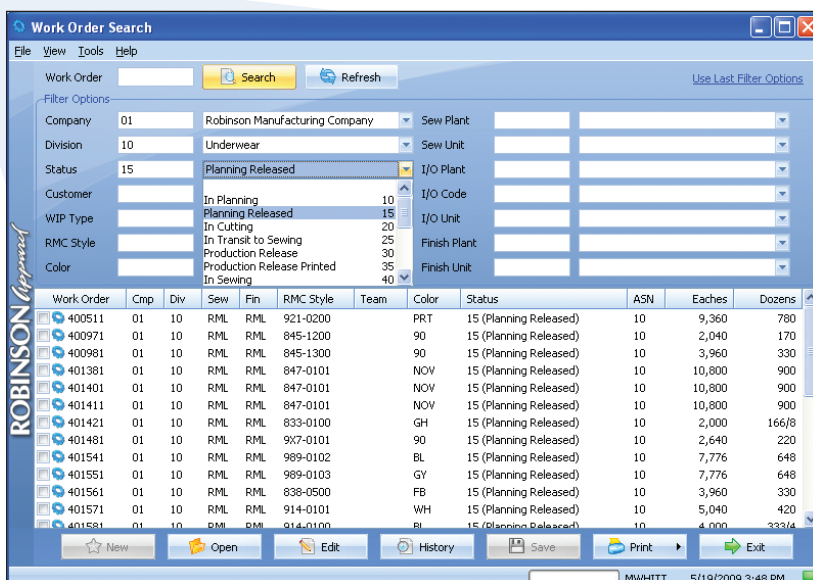
Robinson's first two LANSA developed modules consisted of a Work Order system and a Plant Management system.

Next came Robinson's first Web application, the Vendor Shipment Management System (VSMS). The VSMS provides suppliers with real-time access to purchase orders and lets them create and maintain shipments, shipping dates and cases. They can also print the shipping manifests and bar-coded case labels. Upon closing a shipment, the VSMS creates an Advance Shipment Notification in Robinson's ERP and PkMS systems. The VSMS has recently been extended with a quality-auditing module, allowing quality control staff to quickly locate and test the goods as soon as the shipment arrives.

"The VSMS gives complete visibility of vendor shipments right across our organization and provides all the necessary information for receiving them in our warehouse," explains Whitt.

Other LANSA-developed applications include Report Management, Time-and-Attendance, Finished Goods and a Garments Specification system.

Important master files have history time stamps, triggered by field level changes, keeping a log of changes made to a record. Most of Robinson's forms have a history-button built-in, making a record's modification log available to end users. It answers a lot of questions that would otherwise have to be dealt with by the IT team. →



Robinson's first LANSA developed modules consisted of a Work Order system and a Plant Management system.

All reports are developed in-house with LANSAs, mostly in PDF format because of images that are embedded. Users can also export data to Microsoft Excel.

"We are a big user of LANSAs's Repository for centrally defining triggers and business rules and also rely on its impact analysis and controlled check-in and check-out facilities to make managing group development easy," says Whitt.

Robinson uses Visual LANSAs for all new development and chose a rich-client Windows interface for internal users and a Web interface for vendors and other third party users. Being new to both the IBM i and to LANSAs, the learning curve was initially steep, admits Whitt. To ease the learning process, the first two modules were developed with help of LANSAs partner TssiGlobal, from Kentucky.

### Flexibility and Control

Kathy Griffin, Director of Research and Development, comments that even though the Garment Specification System (GSS) has only recently been launched, the apparel design team already experiences the benefits. "The data management and collaboration tools in the GSS enable us to better communicate internally and to be more integrated with sourcing, manufacturing and partners."

"Being able to link from product specification to quality assurance records and product history, provides us with better visibility of potential product issues, allowing us to take corrective action at an earlier stage of the manufacturing process," says Griffin.

"The biggest benefit from the users' standpoint is they have a one-stop shop for all the information they need," Whitt explains. "They can drill down into detailed information without having to start separate programs. Also, nearly all the applications allow users to export data in an organized way into Microsoft Excel or Word. We wrote the applications in a flexible way, so that users can filter data in as many ways as they want. Once the data is in Excel, they can produce their own sub-reports and analyze the data without assistance from IT."

"It's a huge benefit for us to be able to securely provide data and let users manipulate it the way they see fit, instead of them having to wait for IT to develop an application," says Whitt. "Even for the users who are not so



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Robinson Manufacturing was established in 1927 as an apparel manufacturer, starting with men's boxer shorts.

### "Using LANSAs's reusable components, there's no redundant programming."

PC knowledgeable, the filter programs make it easy to get exactly the data they want into Excel and formatted in the right way."

Users now have a far more productive work environment, according to Coulter. "They have access to more information and the information is better organized. We took the time to analyze and rearrange information and design the system in a flexible way that is custom fit for our organization."

"We are very customer focused and do our best to provide what the customer wants. For that we need a productive and flexible development environment and to be in control of our own solution." Coulter illustrates the benefits of this with a recent example, where Robinson made a special arrangement for a major customer to accommodate a change in the way their inventory is handled and at which point ownership is transferred. "It was a dramatic change in the way we do business with just this one customer, which affected ordering, billing and shipping. Using LANSAs and our own IT team we were able to deliver that change in just a few weeks."

### The Importance of System Design

Whitt and Coulter both point out that initial development took longer than planned, as they spent a lot of time and consideration on proper system design, creating common ancestor forms, building reusable components and becoming familiar with the GUI and the event-driven development paradigm.

"One of the reasons we selected LANSAs initially was its productivity, but the quality of the applications we create is now more important. When you do things right the first time, you only have to do them once," concludes Whitt. "Using LANSAs's reusable components, there's no redundant programming that you have to do over and over again. Also, the availability of components increases over time, making the development cycle faster for the more recent projects."

"The time you spend upfront is gained back later, so it's worth the effort," concludes Coulter. "The biggest time saving comes from the ease of supporting the new application. In the legacy system we found ourselves much of the time helping users with data extracts, researching system issues and answering questions that users should be able to deal with themselves. We have taken ourselves out of that loop and made it easy for our users to deal with the information on their own." ■

### COMPANY AND SYSTEM INFORMATION

- Robinson manufactures and markets underwear, loungewear and active wear in private label and under the Robinson Apparel® and Boxxerz® brands. The company's facilities in South Dayton, TN, consist of 120,000 square feet of floor space, housing its corporate and sales offices as well as one of its manufacturing facilities. Just across town are two distribution centers and a cutting facility, totaling 200,000 square feet. For more information visit: [www.robinsonmfg.com](http://www.robinsonmfg.com)
- Robinson uses two IBM i systems, one for its PkMS Warehouse Management System and one for its ERP system.
- Out of a development team of six full time developers, three are developing the new LANSAs system and three are maintaining the old system.

# Fusing the Windows and IBM i worlds

Heterogeneous IT environments are a fact of life and numerous organizations run mixed hardware and software systems. While many IT managers may feel pressured to make a decision to go either in the .NET and Windows direction, or the Java and IBM direction, LANSA customers have been at ease with this perceived duopoly since the early nineties, as they can deploy applications to IBM i servers, Microsoft Windows servers or blend the resources of both platforms together.

This article showcases examples of LANSA customers who have combined and integrated the IBM i and Windows platforms, deployed to both or transferred between the two, using a variety of methods.

## Integrated and Composite Applications

LANSA's first product to simplify IBM i and Windows integration, was a middleware product called LANSA Open. It was released in the early nineties and allowed Windows-based applications, such as Visual Basic, Delphi, Excel and our own Visual LANSA, to safely access DB2/400. Safely, because LANSA Open didn't just provide ODBC-like database access, it also protected the referential integrity and validity of data by enforcing repository defined business rules used by both IBM i and Windows applications.

Both LANSA Open and Visual LANSA have progressed over the years into a family of LANSA products that allow for faster database access, a more productive interface, tighter program-to-program connection using Web

services or direct calls, and a wider variety of business rules, triggers and other reusable components in its Repository. Today, many LANSA customers are deploying composite applications which include a mixture of .NET, LANSA and RPG/COBOL applications, that safely access data on Windows or IBM i and can integrate data from both in a single application.

**Chantiers Chibougamau**, based in Québec, Canada, has been manufacturing highly competitive wood products for over 40 years, custom engineered for consumers increasingly concerned about sustainable development.

Chantiers Chibougamau uses ScoopSoft, a solution for the wood products industry from LANSA Partner GFI Business Solutions. To enhance the efficiency of the interactions



INDUSTRY SHOWCASE  
by Marjanna Frank

between PC applications and the IBM i server with the ScoopSoft implementation, Chantiers Chibougamau purchased LANSA Open for .NET. This allows client applications developed in Visual Studio 2008 to access IBM i data much faster than before by using the server's functions.

Applications that use LANSA Open for .NET include a fuel distribution and a mass weighing solution. Further development will provide critical sales and accounting information to the company's management with in-house developed Web-based dashboards.

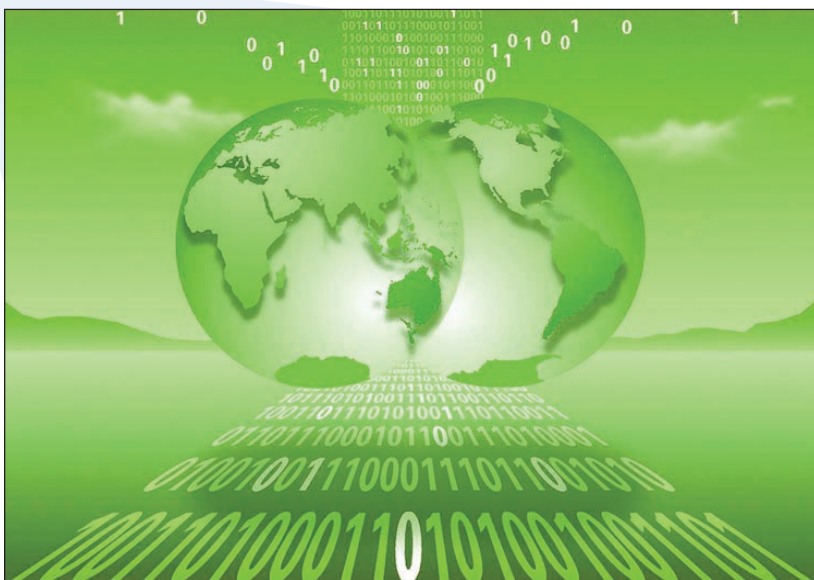
"We are impressed with the LANSA Open for .NET response time, specifically to access the ScoopSoft solution," says a representative from the Chantiers Chibougamau IT team.

**The Federated Group**, based in Mississauga, Ontario, Canada, provides a complete range of customs and logistics services across North America and around the world. Federated used Visual LANSA Framework to deliver a Windows rich-client Customer Management System (CMS) that integrates directly using LANSA's middleware with multiple IBM i back-end systems. The CMS is distributed to hundreds of users in over 50 locations using LANSA Just-in-Time deployment.

Nancy Riddell, IT Director at Federated, says, "Using LANSA triggers to update the existing databases saved us from having to customize over 400 programs and let us continue to use the existing customs, finance and freight systems without major modification. This approach lets us modernize and redevelop these systems at our own pace, with minimal disruption to the business."

"LANSA was the easiest route for our first Windows project. We specifically like the LANSA Repository and reusable components. You develop something once and reuse it in different areas of the application. Even business users can access repository defined descriptions, formulas and help text in their queries and reports."

**Hayhurst Elias Dudek Inc. (HED)**, one of the largest independently owned insurance brokers in Canada, specializes in providing unique and cost-effective insurance and risk management solutions. HED has a mixture



With LANSA you can combine and integrate or blend the resources of both the IBM i and Windows platforms into an integrated resource.



of LANSAs and .NET systems and Web sites, as well as legacy RPG applications, running on multiple Windows and IBM i servers. HED uses LANSAs to fuse these heterogeneous systems and move towards an SOA environment.

After having successfully redeveloped the front-end processing for several of its IBM i-based Insurance systems with Visual LANSAs, HED used the Visual LANSAs Framework to develop a Windows rich-client Customer Relationship Management (CRM) solution to keep track of prospect and customer activity.

The CRM solution lets users create and edit letters using Word templates and LANSAs functions that pull in DB2/400 data. It integrates with MS Outlook using ActiveX controls to automatically create email and calendar entries and trigger fax messages. The CRM also integrates with several third-party Web sites, for example for address validation and mapping. Integration with HED's .NET/SQL server-based Web site and TotalGuard quoting engine is handled with LANSAs Integrator developed Web services.

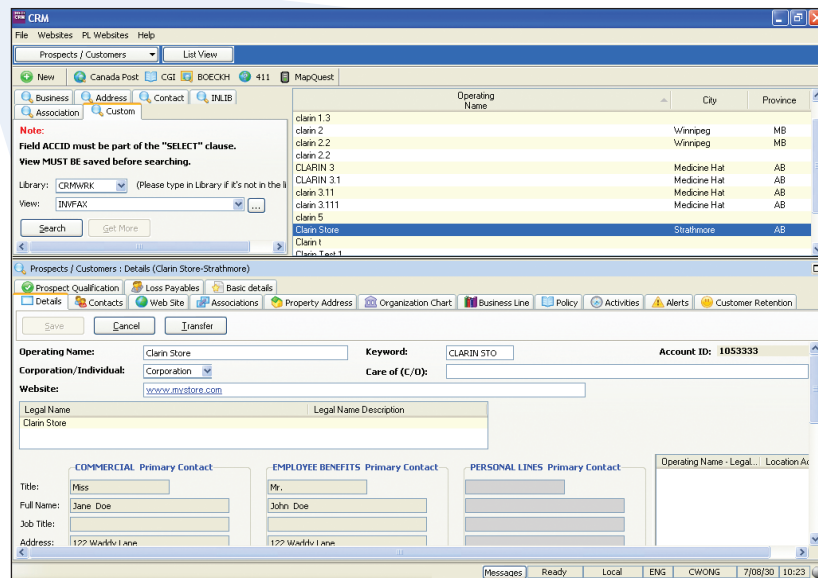
Brian Hynes, Vice President Information Technology and Business Systems at HED, says, "Tight integration between our IBM i systems, Microsoft Office and our .NET-based Web site helps to eliminate many redundant tasks, increase productivity and improve system performance."

"We are now looking at our systems from a holistic perspective. Our RPG and .NET developers are integrated with my LANSAs team and we are all moving towards an object-oriented mindset."

**Metropolitan Associates** is a residential real estate firm managing over 4,500 apartment homes in Southeast Wisconsin, USA. Metropolitan has redeveloped its 20-year old property management system with Visual LANSAs. The new system offers far more functionality, integration with Microsoft Office and other Windows applications using ActiveX, as well as a more attractive and productive GUI for their business users. All Visual LANSAs applications run from integrated Citrix servers on the company's IBM i, so there is no software to install or maintain on individual client PCs.

Jeff Dremel, Vice President Technology at Metropolitan Associates, says, "We make extensive use of Visual LANSAs's integration with ActiveX to talk to Word and Excel, allowing us to produce professional looking graphical statements, letters and reports on very affordable laser printers."

"I can now consider IBM i and Windows applications. The only caveat is we want to keep the data on the IBM i server, where we know it is safe. At the same time, LANSAs's ability to use ActiveX opens up hundreds of thousands



*HED used the Visual LANSAs Framework to develop a CRM solution to keep track of prospect and customer activity.*

of very affordable and very functional widgets and programs to pick from."

**National Envelope Corporation**, based in Uniondale, New York, is the largest envelope manufacturer in the world. The company operates facilities across the US and produces more than 180 million envelopes per day. National Envelope used Visual LANSAs Web Access Modules (WAMs) and LANSAs Integrator to create a system that provides browser-based access to order, production, inventory and shipment data gathered from four ERP applications (JD Edwards, Baan and two homegrown systems) and three databases (DB2/400, Informix and SQL Server).

Scott Steinacher, Web/Data Architect at National Envelope, says, "Users can request spreadsheets with a wide variety of selection criteria. Thanks to LANSAs Integrator's Excel services, columns contain true dates, numbers and so forth, and are professionally formatted with multiple fonts and colors. LANSAs Integrator's SMTP service then delivers the spreadsheets to the recipients via email. In addition, we use Integrator's SQL Server services to give users access to millions of PDF documents, including invoices and statements, that are in a Windows-based archive."

"Overall, LANSAs exploits the IBM i and Windows beautifully. It's really the best of both worlds – the ease-of-use of Windows coupled with the reliability, security, scalability and performance of the IBM i."

**The Principality of Andorra**, located in the eastern Pyrenees, between France and Spain is a small landlocked country with a population of 75,000. The Department of IT of the Government of Andorra (DIGA) is responsible for the data processing projects

of all government ministries and public organizations. DIGA's IT team of 34 people manages 20 IBM i servers and 50 Windows servers and supports 1,000 PC users. DIGA uses LANSAs for all of its critical applications, including finance, customs, economy, education and elections.

Miquel Haro, Manager IT Services at DIGA, says, "We first developed Visual Basic applications that used LANSAs Open to access the iSeries data. However, since 1998 we use Visual LANSAs for all Windows development, delivering a highly graphical user interface and exploiting ActiveX components to provide new capabilities, such as scanning drivers licenses and managing credit card payments."

"We also increasingly use LANSAs to provide the public with online Web access to government services and information."

"We improved developer productivity through the reuse of components defined in the LANSAs Repository. LANSAs's single language skill set, shared repository, support for multiple platforms and constant evolution are its main qualities."

**Truvo Belgium** is the market leader in local search and advertising and publishes the printed and online Golden and White Pages phone directories. Truvo uses LANSAs for its core IBM i Golden Pages information system and also to integrate a .NET sales application, used by over 400 sales representatives, via Web services. With the help of LANSAs Integrator, sales reps can download customer portfolios and, with input from the customer, build a number of new advertising scenarios. When the customer selects a scenario, the sales contract and advertisement specifications are created in the .NET application and uploaded

to the IBM i via a LANSA Web service, which parses it into the DB2 database for further processing by the back office systems. The graphics department then works on the advertisement based on the specifications and instructions that are kept on the IBM i. The actual graphical design is done on Macintosh computers and the resulting advertisement is stored on Truvo's UNIX server.

Gunter Gheysens, IT Development Manager at Truvo Belgium, says, "Using LANSA Integrator and Web services we can use best-of-breed systems in the back office, in the graphics department and on the sales rep's laptop and integrate them all seamlessly. The quick exchange of the sales contract and advertisement specifications has sped up fulfillment and helps support our customer-focused approach. LANSA's stability and performance are crucial in our demanding environment with massive databases and complex processes."

## Mashups with RAMP

A business mashup is a composite application where LANSA's RAMP (Rapid Application Modernization Process) can be used to assemble the mashup components. RAMP can isolate specific parts of a green-screen (5250) application, wrap and reface them, and then snap them into the mashup framework. RAMP mashups are particularly useful as a technique for modernizing legacy applications and integrating them with rich .NET, MS Office and Web applications. Mashups have the potential to cut across silos of applications to better support the way users actually work, increase productivity and reduce the support and training burden.

The ultimate destination is a platform independent solution where all legacy programs have been redeveloped. But most companies don't go all the way and apply the 80-20 rule, at least for their first project.

**Cinram Logistics UK**, a division of the world's largest manufacturer and distributor of pre-recorded entertainment media, holds exclusive agreements with major movie studios, software and music publishers, including Warner Home Video, 20th Century Fox, MGM and EMI. Cinram uses RAMP from LANSA to gradually redevelop and modernize its Global Distribution System (GDS). The new composite application offers the underlying strength of the existing core system, in combination with intuitive graphical front-end applications and tight Microsoft Office integration.

For example, users can export any instance list of data from the GDS to Excel and they can populate a RAMP filter in the GDS with data from Excel.

Tony Collins, European Systems Development Manager at Cinram, says, "Functionally, our core distribution system successfully supports our business. Being able to bond with LANSA means we don't have to throw away the work that we've done over the past 10 years. LANSA provides a very neat and cost-effective solution, allowing us to build further on the system we already had in place and improve on it with better navigation, a productive Windows user interface, new functionality and Microsoft Office integration."

**The Office of the Board of Studies New South Wales (OBOS)** is responsible for the content, distribution and logistics of syllabus

materials and the School Certificate and Higher School Certificate (HSC) examinations for New South Wales, the most populous state in Australia. LANSA has been at the heart of the OBOS' IT infrastructure since 1989. Now, still using LANSA, OBOS delivers many online services to schools, teachers, students and parents. These include the delivery of HSC results over the Web and the collection of over 1.2 million grades and assessments per year.

OBOS is using RAMP with Visual LANSA Framework for .NET (VLF.NET) to modernize their Marker Appointment System which manages the scheduling of examinations for over 140,000 students and appointments for 4,000 supervisors at 700 examination centers. It also manages the marking process, which involves over 8,000 teachers and 800 clerical assistants in 20 marking centers for a period of four weeks. The system is comprised of both green-screen and Web applications. RAMP has allowed OBOS to combine these two styles of applications into a seamless whole.

Mitra Bhar, Manager of IT at OBOS, says, "Over the last 10 years we developed all new functionality with LANSA for the Web. However, about 50 percent of our applications were built prior to that and are still green-screen. It never seemed economical to redevelop those. Now with RAMP and VLF.NET we can economically combine the legacy and Web developed applications in a single mashup framework with easy navigation and a productive browser interface."

For more examples of RAMP assembled composite applications visit: [www.lansa.com/builtwithlansa/modernization.htm](http://www.lansa.com/builtwithlansa/modernization.htm)

## A Choice of Platforms

LANSA's cross platform capabilities allow companies to develop IBM i and Windows applications (and Linux/UNIX as well) using a single set of skills. Not having to hire specialist .NET and IBM i developers is a major plus, as it helps organizations to keep their development team lean and benefit from better team communication. Moreover, not being locked into a platform provides peace of mind.

**Geodis Wilson** in Australia and New Zealand belong to the Geodis Wilson group, one of the world's largest freight management companies, employing 5,500 people worldwide from a global network of offices and air/ocean hubs in over 50 countries.

After having used Visual LANSA to extend its COBOL and IBM i-based Freight Management System, Geodis Wilson used the same tool and development team to develop



Preparation of the printed guides is done on Truvo's System i. The directory data is pre-paginated with LANSA and delivered in XML format by LANSA Integrator to the printer.

its Warehouse Management System (WMS) from scratch. The Australian operation runs the WMS on Windows clients with an IBM i database, while the New Zealand operation runs the same WMS solution on a Windows NT server with a Microsoft SQL server database.

More recently Geodis developed a Visual LANSA application that provides customers with quotes based on CRM and shipment information kept on the IBM i server and, using LANSA Integrator, rating information from CargoWise, a packaged .NET application. Combining information from two different packages on two different platforms provides for a seamless experience for the user.

Geodis also makes extensive use of Visual LANSA and ActiveX to populate Excel spreadsheets, as part of its corporate reporting solution.

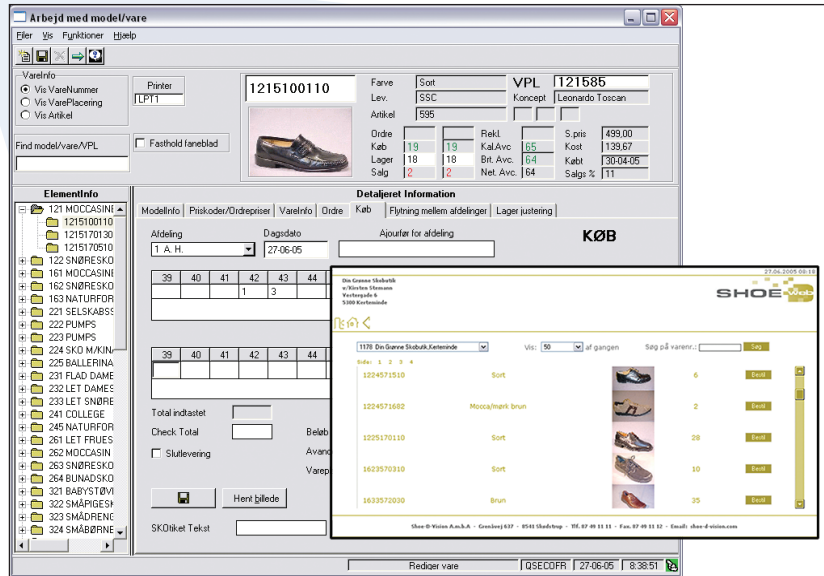
Trevor Gall, IT Manager Australia/New Zealand for Geodis Wilson, says, "We have a very small and productive team of developers who know our business and IT system inside out. We want to keep that knowledge in-house and don't want to introduce separate Windows, Web and integration technologies."

**The Royal Wagenborg group**, a global logistics provider based in the Netherlands, provides a wide range of services, including shipping, offshore supplies, passenger transport, stevedoring, warehousing and dispatch, crane rental, and international road transport.

Wagenborg Shipping uses LANSA to deliver solutions for Windows clients with a SQL Server database on board of its ships; Windows clients with central IBM i database access for its offices onshore; Web access for third parties; and XML data exchange with suppliers.

Kees Bonthond, IT Manager at the Royal Wagenborg group, says, "With a small team of seven developers we can deliver software in a short time frame. We started using LANSA several years ago and the transition to LANSA was smooth both for the older RPG/COBOL developers as well as for the younger Visual Basic developers. We now all have the same interchangeable LANSA skills."

**PGI Nonwovens BV (PGI)** in the Netherlands is part of Polymer Group Inc., a global supplier of engineered materials and one of the world's leading producers of nonwoven materials for medical, hygiene, wiping, industrial and specialty uses. PGI used Visual LANSA to automate over 30 production lines in its converting and manufacturing plants. The applications integrate in real time with PGI's PRMS ERP system and drive barcode scanners, printers and robotic devices for counting, packing and labelling products.



Shoe-D-Vision shop keepers don't have to re-enter any information as the SHOEit retail back-office and SHOEweb online ordering systems both integrate with the central ERP system.

Enrico van Dinten, IT Coordinator at PGI says, "We want to maintain a small IT team and use our skills for both Windows and IBM i development. After evaluating several development tools, LANSA came out on top because it offered Windows and IBM i deployment, as well as supporting client/server configurations."

"With the same small team we maintain our core IBM i RPG ERP system and have delivered a Windows-based workshop-floor solution that cost us far less money than if we had purchased a packaged solution, or outsourced development. Plus, we now have a 100 percent fit."

**Shoe-D-Vision**, with its head office in Århus, Denmark, is a cooperative of the Skoringen, Feet Me and Zjoos shoe retailers, with over 320 stores in Denmark and Norway.

Shoe-D-Vision used LANSA to build a Windows-based retail back office system called SHOEit, installed at almost 100 retail groups. Most SHOEit sites run on Windows 2003 servers with a SQL Server database, each with several point-of-sale systems connecting to it, as shop owners typically have between one to twenty stores in their group.

Asger Simonsen, IT Manager at Shoe-D-Vision, explains, "Currently we are installing Web servers at the shop owners, giving retail staff wireless PDA access to LANSA-managed inventory information in their group of stores and allowing them to register sales and special price offerings."

"Our central ERP system, also developed in LANSA, runs on an IBM i server and provides LANSA-based Web access to retailers

for stock inquiry, placing of orders and polling of interest for new shoe lines. The ERP integrates tightly with our archive systems, where we add over 100,000 digitally scanned purchase invoices every year. Shoe retailers have Web access to all accounts receivable information, including invoices and payment advice in PDF format."

"With a small team of two developers, including myself, plus five network support staff, LANSA lets us deliver and maintain a Windows system used by 320 shops, a central ERP system and a dynamic Web solution, all with a single tool set."

**LANSA Solution Partners** enjoy the fact that from a single set of LANSA source code, they can deploy their solution to several platforms and increase their market share. Some partners, especially the ones selling to small organizations, have seen their customer base change from 90 percent IBM i to 90 percent Windows. Advance computing, Sundata and Capitol Appraisal are examples of this. Our partners who sell to large companies often have a customer mix in which IBM i dominates.

**Conclusion**

LANSA provides a choice in how companies can develop, deploy and blend applications on IBM i and Windows, without having to hire platform specific development or integration specialists. Using LANSA, developers can mix-and-match .NET languages and solutions with RPG and COBOL. Solutions can be deployed to the most suitable platform, integrated in a single composite application and supported by a lean IT team. ■



# What is iFusion.net?

The iFusion.net software development platform combines IBM i and Microsoft Windows technologies to form a unified architecture that enables organizations to fuse their IBM i systems with Microsoft solutions like Office, SharePoint and SQL Server, or with applications built with the .NET framework. Achieving fusion means going beyond the limits of previous interoperability solutions – like calling programs, replicating databases or transferring files – to create true composite applications that deliver real-time enterprise data and functionality to people as they need it.

## Why do You Need iFusion.net?

Most companies operate a mixed IT environment that is complex to manage and constrains the responsiveness of the IT resources to changing business needs. CIOs need choice in how they build and deploy applications, but the choice is practical only when the IT resources can operate as a harmonized unit. iFusion.net offers a solution by combining the IBM i and Windows platforms into a fused consolidated whole, where you build applications on the most appropriate platform or distribute across both. With iFusion.net you can:

- Take the appropriate action faster when responding to changing business needs.
- Accommodate choice for development options, preferences and available skills.
- Preserve investment in the current assets – both people and applications.
- Combine the best of both the IBM i and Windows platforms.
- Build a flexible roadmap ranging from quick modernization to a full migration
- Enforce data integrity and security at every step.

iFusion.net is the industry's only complete

solution, addressing presentation, business logic and database issues from a single platform.

## Examples of iFusion.net Usage

There are many potential touch points between the IBM i system and Microsoft solutions. Some of the most commonly found scenarios include:

- Fusing an e-commerce Web site built using ASP.NET to an IBM i ERP system, thereby publishing up-to-the-second inventory and pricing information along with straight-through order processing.
- Amending live operational data on the IBM i database (DB2) directly from a Windows or Web-based dashboard, without having to launch a terminal session or toggle between multiple screens.
- Improving collaboration and workflow automation by combining tasks that require both Windows and IBM i functionality (including program logic, data queues and access to the IFS) inside a Microsoft SharePoint enterprise portal with support for single sign-on.



**ARCHITECTS CORNER**  
by Richard Lancaster

- Giving Visual Studio.NET developers the authority to perform create, read, update and delete actions on the core databases – without risk of jeopardizing data integrity or security.

## What Comprises iFusion.net?

iFusion.net comprises a set of development tools and services for building business applications that operate on IBM i or Windows servers, or that fuse resources from both platforms. The key components are:

- Visual application framework supporting rich-client and Web user interfaces.
- Data services layer to manage, retrieve and maintain data from multiple sources.
- Meta-data repository containing declarative rules and rule engine, separated from code.

## Visual Application Framework

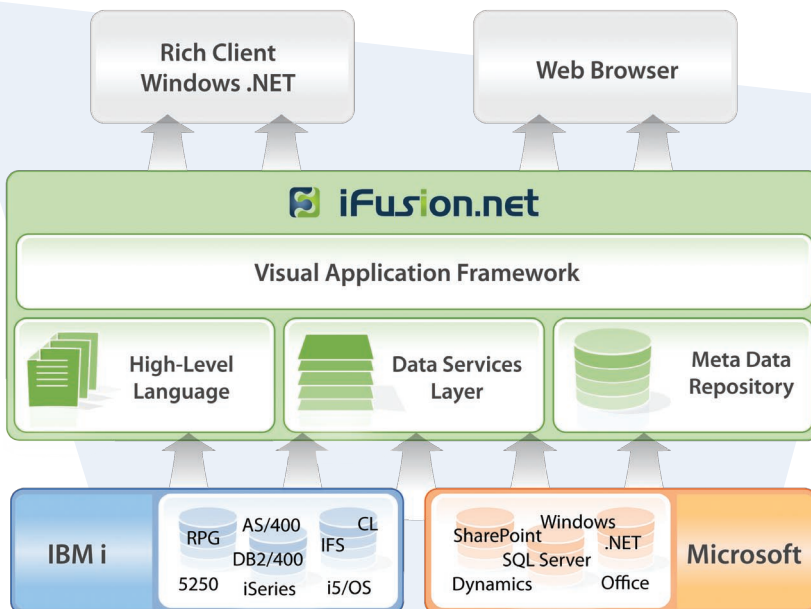
The framework is a tool for building composite applications (or mashups) that combine components from sources such as:

- IBM i DB2 databases
- Microsoft SQL Server databases
- Microsoft Office components
- Microsoft .NET applications
- Web Services
- Maps
- 5250 programs

The framework has a highly graphical user interface, similar in style to Microsoft Outlook. The object navigation pane presents the users with a list of applications and Business Objects, such as Customers, Items and Orders.

Once the user selects a Business Object, for example Customers, another pane provides a choice of filtering facilities, allowing the user to select a subset of Customers, for example, customers whose name starts with the letter B. The search results appear as an Instance List in another pane, from which the user can select a specific customer.

Finally, tabs such as Show Details, View Orders, View Invoices, Get Map are displayed, allowing the user to view data and take action



*iFusion.net conceptual architecture.*

across the selected instance of a Business Object and its related data, regardless of the source of that data.

### Data Services Layer

The data services layer manages database access, providing data access controls and data maintenance services for DB2/400 and SQL Server databases. The data management services enforce the business rules that reside in the meta-data repository, to govern the update actions on the data in the databases.

### Meta-data Repository

The meta-data repository contains application meta-data including validation rules, conditional rules and business logic. The rules are defined declaratively and can be changed without having to redeploy the applications. Defining the rules in the repository removes the need to code the rules in programs and provides a once, and only once definition of the meta-data.

### Transform Your Architecture

iFusion.net can transform your existing architecture into a flexible information management resource, with the ability to respond quickly to changing business needs.

The 5250 screens will move into a graphical user interface, or be replaced, for example, by new truly graphical programs built with iFusion.net or by Web services that collect data from other sources.

The transformation will migrate legacy systems into a modern architecture, with components ready for rewiring into new

applications. Business rules are defined declaratively and maintained outside the code. Developers will configure and orchestrate business processes rather than hard coding them in programs. Programs will work with business objects and do not need to understand the physical deployment of the objects. Business processes will interact with services that provide data through service wrappers that hide the complexity of the data and algorithms that make up the service.

There is no need for a "big bang" conversion from the existing architecture to the modern architecture. iFusion.net allows an incremental transformation, occurring as and when it makes business sense with only affected components needing to change.

### A Typical Scenario

A scenario we often see is where data from one or more IBM i-based ERP systems and data from a Windows-based Financial Management System (FMS), need to be consolidated into a single application for use by customer service operators. In addition, customer data that resides in these systems, needs to be managed from a single source.

Using iFusion.net, the solution would be to assemble a composite application that combines:

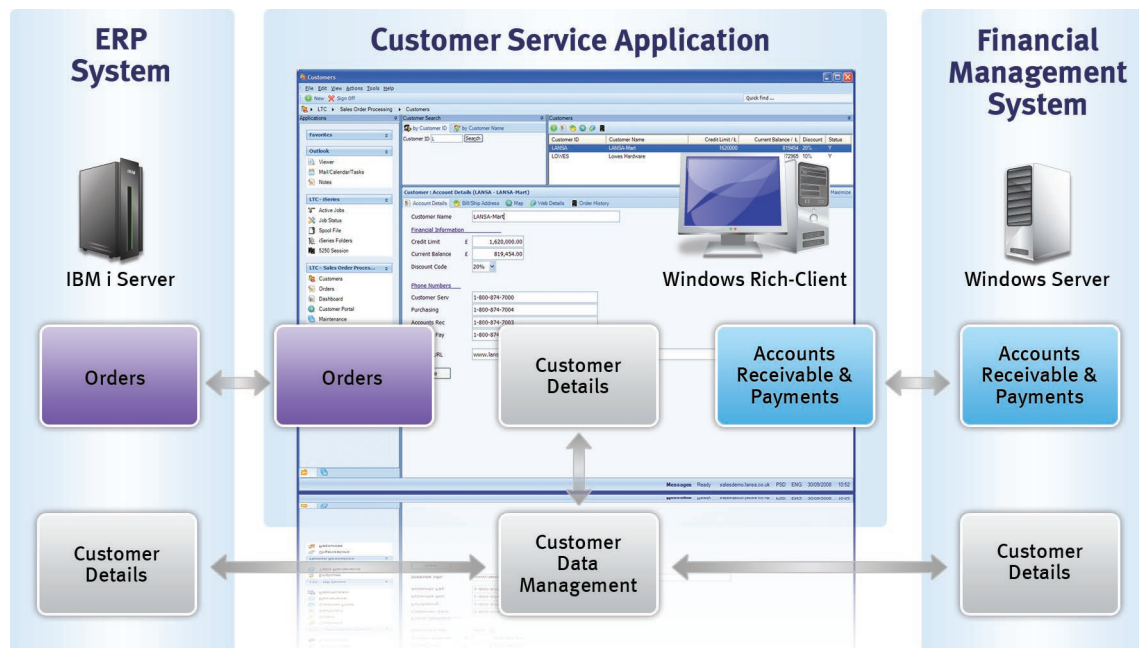
- A newly built rich-client Customer Service Management application (CSM) for maintaining customer information. Updated customer details are automatically and instantly updated to the ERP and FMS systems, using Web services.

- The CSM is built on the iFusion.net framework and contains filter/search facilities for locating customers by name, number or even order number.
- One of the tabs in the CSM gives access to orders. The CSM interfaces with the ERP system via the 5250 application orchestration tools in iFusion.net. The orchestration for orders is aware of the current customer number, manages the screen flow in the ERP, retrieves the relevant orders and presents the orders in a Windows GUI.
- Other tabs in the CSM give access to Accounts Receivable and Payments. The CSM uses Web services to retrieve this information in real-time from the Windows-based FMS.

The CSM hides the different platforms that support the ERP and FMS systems and provides seamless real-time secure access to both. Future extensions to (and replacements within) the CSM are simplified by the component style architecture. For example, the company could take the order entry process to the Web via an order form hosted in Microsoft Office SharePoint Server.

### Summary

iFusion.net offers a platform for developing information management systems that can adapt to changing business needs. Software designers work with tools that present a fused view of the IBM i and Windows platforms. Fusing the platforms is the key to building adaptable and agile software applications. ■



With iFusion.net tools you can build a composite application or business mashup.

# Introducing: aXes

## Automatically deploying your 5250 applications securely on the Web without changing a line of code

### Why We Purchased aXes

When we launched RAMP some years ago, we had already decided that we would not tie ourselves to one refacing tool and that, as soon as the time was right, we would commence the process of introducing one or more alternative refacing products into the RAMP portfolio.

Remember that refaced 5250 screens can be snapped into RAMP's Modernisation framework, next to redeveloped and new functionality.

The more we thought about it, the more we were drawn towards one that would "naturally" reface 5250 screens onto a Web browser, given that more and more of our RAMP customers were telling us that, in their opinion, Web enablement was an integral part of 5250 applications modernization.

Fortunately, one of the best solutions for native Web enablement of 5250 applications, aXes, was available to us and we jumped at the chance to acquire it.

### aXes Features and Advantages

**Zero Effort:** With aXes, we can now provide you with Web enablement for 5250 applications by automatically transforming the data stream into HTML and XML that the browser will use to build a graphical user interface.

**Zero Deployment:** All the transformation is done on the Server. There's nothing to install on the client, no ActiveX, no Java applets. Nothing.

**Zero Source Code Change:** aXes allows you to have browser-based access to all the 5250 applications you have developed in-house as well as the packaged applications that you have licensed, even where you do not have the source code.

**Zero System Security Issues:** aXes only uses the standard HTTP Ports into the IBM i and does not use or expose the Telnet port.

**Zero Loss Through Interruptions:** aXes has inherent resilience and reconnects your session after a network connection failure.

**Zero Performance Issues:** aXes incorporates an Application Server, which is fast (especially under high loads) with integrated Web site acceleration technology that uses less memory and advanced data compression.

**Zero Data Security Issues:** aXes uses the SSL protocol for data encryption to ensure that all aXes sessions are secure. Users are therefore able to work in a safe and protected environment while utilizing any IP network, public or private, without concerns about the security of applications and data.

**Zero Relicensing:** Staff can access the same Web pages in the office and on the road. Customers and partners can also access these applications securely over the Internet.

**Zero Maintenance:** Using a browser, users access a URL, eliminating the need to install or maintain anything on the individual desktops. When a new version is released, only the central server needs to be updated.

**Zero Lock-In:** When we conclude our first revamp of aXes, you will be able to access applications running on the IBM i from any browser. You will not be confined to Microsoft Internet Explorer. aXes will support other browsers like Firefox and Safari.

**Zero User Push-Back:** The revamp will also include the aXes visual design tool, which will let you customize your applications by adding behaviors such as calendars, dropdowns, checkboxes, buttons, charts, tab panels, hyperlinks, images, and a range of other GUI constructs.

### What Else Comes With aXes?

**aXes Data Explorer Server** provides an easy way to extract and publish DB2/400 data in a browser or to desktop applications like Microsoft Word and Excel. You can create your first query in minutes. And again, with zero client configuration and deployment.

**aXes Spool File Server** provides point-and-click access to output queues and spool files, with print-ready documents in PDF, XML, HTML, or text formats. The spooled output can be seamlessly integrated with desktop applications e.g. email, Excel, etc.

**aXes Server Administrator** gives your system administrator an online, zero client method of managing user sessions and checking server statistics. It provides helpdesk visibility to each user's screen experience via session 'parking' and 'shadowing', for ease of application and technical support.

### Free Download and Evaluation

Try the live aXes demonstration and download the free evaluation version at: [www.axeslive.com](http://www.axeslive.com) ■





# What people are talking about

This Bloggers corner provides an overview of some of topics that are written about in the wider LANSA and IT community, including Blogs, Twitter and LinkedIn discussions.

## Maxed Out

By Chris Maxcer from System iNetwork  
**IBM i First: Japan's IBM BPs and Vendors Rise Up**

There's been some interesting action brewing over in Japan – a group of 71 IBM Business Partners and ISVs have joined forces to promote and actively provide valuable solutions for IBM i, which the group says is "the miracle in computer history". The darker backstory, though, is that because IBM is now focusing on marketing software and services, the promotion of IBM's hardware-based solutions gets mostly ignored. And what gets ignored all too often?... IBM i.

To combat the problem, the partner community in Japan banded together to launch the IBM i Manifest initiative for the Japanese market. In an email note, Gordon Davies, vice president of Asia-Pacific for LANSA, alerted me to the effort. The initiative has three basic goals:

- to revitalize the IBM i market in Japan and increase the customer installed base
- to assure IBM i customer organizations, resellers and ISVs selling IBM i solutions that IBM i will not only survive, but more importantly, continue to prosper
- to inform the wider IT community of the unique value proposition of IBM i

The group has created a joint declaration, the "IBM i Manifest", and to put their money where their mouth is, so to speak, they reportedly published a full page ad in the Nikkei newspaper, which would have cost somewhere around \$100,000 in U.S. dollars.

Continued at: [http://blogs.systeminetwork.com/isnblogs/maxedout/2009/06/ibm\\_i\\_first\\_japans\\_ibm\\_bps\\_and.html](http://blogs.systeminetwork.com/isnblogs/maxedout/2009/06/ibm_i_first_japans_ibm_bps_and.html)

For more information on the IBM i Manifest initiative visit: [www.iforum.ne.jp](http://www.iforum.ne.jp) and click on IBM i Manifest – Joint Declaration by 71 IBM i Partners in Japan (English translation of the iManifest Declaration), to see the passion and the determination behind this initiative.

Also view the list of 71 members (including LANSA Japan) by clicking on IBM i Manifest – List of Members.

## LANSATalk

by Thom Davidson from Rippe & Kingston  
**LANSA & Cloud Computing**

There is no doubt that LANSA plays in the clouds and not the types with ice particles suspended in the atmosphere. It is my opinion that LANSA could dramatically expand their offering via the Cloud.

I define Cloud Computing as follows: Cloud computing is a general concept that incorporates software as a service (SaaS), Web 2.0 and other recent, well-known technology trends, in which the common theme is reliance on the Internet for satisfying the computing needs of the users.

The general structure of Cloud Computing can be broken up into four quadrants:

**Software as a Service (SaaS)** – Special-purpose software made available by a third party over the Internet, with a usage-based pricing model. Some call it "application as a service." A couple of examples are Salesforce.com and Zoho.

LANSA Role: A number of LANSA partners as well as LANSA themselves offer solutions using SaaS, including:

- ISYNC for synchronizing product information across trading partners
- Contract Guardian for managing contracts ([www.contractguardian.com](http://www.contractguardian.com))
- Preceda People an HR/payroll system ([www.neller.com.au](http://www.neller.com.au))
- P5 Health Plan Solutions ([www.p5ehs.com](http://www.p5ehs.com))
- Any IBM Power i (AS/400, iSeries & System i) solution can be delivered it in a SaaS paradigm using RAMP

**Infrastructure as a Service (IaaS)** – A service that provides the core computing resources and network fabric for cloud deployment. Rather than purchasing servers, software, data center space or network equipment, clients instead buy those resources as a fully outsourced service. Examples include Amazon's Elastic Compute Cloud, Rackspace Ghosting's Mosso service.

LANSA Role: I do not anticipate LANSA driving in this direction. However, don't be surprised if they will extend or add new partnerships to deliver this service.

**Platform as a Service (PaaS)** – An integrated software environment for which systems administrators and developers can build, test and deploy custom applications. The Google Apps Engine is a perfect illustration.

LANSA Role: When the true Web 2.0 is available to the masses... I believe we will see the complete development and system administration of LANSA applications delivered as a PaaS.

In fact, I would submit that LANSA is already doing it! In LANSA's eLearning (<https://elearning.lansa.com>) they are delivering a personal Virtual PC Environment with LANSA Product Suite already pre-configured and setup. It is like working on an independent workstation where you can maintain your own programs. Imagine: no more bothersome installations and upgrades.

**Core Cloud Services** – Stand-alone components built on cloud platforms that can be woven into cloud applications, such as billing, systems management and storage. Amazon's S3 and Microsoft BizTalk Services are cases in point.

LANSA Role: LANSA Composer delivers code-free Business Process Integration. Today it satisfies four key requirements of a business process integration solution:

- **Transport** – moving data between source and target
- **Transformation** – mapping data between many different formats
- **Process Orchestration** – sequential and conditional execution of process flows
- **Administration** – auditing, error-handling, logging, security and system operations

Now imagine this being offered as a Core Cloud Service. On the enterprise side it opens up some possibilities for easily connecting users across organizations taking advantage of the Internet, without having to invest in complex network infrastructure to securely connect the networks.

In Conclusion: What will LANSA in the Clouds mean to me? The primary benefits are easy/fast to deploy, pay for only what you use and reduced in-house infrastructure costs. Most customers will require competitive pricing, service level agreements, as well as the ability to move the cloud offering back on-premise. All of us in the LANSA community would benefit from a quick and dramatic growth in the adoption of the technology we know and love. LANSA and Cloud Computing is a marriage Made in Heaven!

Full article available at: [http://www.rippes.com/Resource\\_Library\\_Documents/LANSA\\_Cloud\\_Computing.pdf](http://www.rippes.com/Resource_Library_Documents/LANSA_Cloud_Computing.pdf) ■

# Power & Productivity



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