

Out-of-the-Box Application Integration: How Middleware is Reducing the Cost of Integration



Application Integration

TaskCentre[®]

The Leading Business Process Management (BPM) Solution

Company

Orbis Software

Executive Guide Subject

Application Integration

Business Goals

Achieving seamless application integration through a drag and drop technology.

The knowledge you will gain from this paper:

- ⇒ A brief history of application integration
- ⇒ What application integration represents
- ⇒ The methods of application integration
- ⇒ The benefits businesses can gain from application integration
- ⇒ An explanation of drag & drop application integration versus bespoke integration
- ⇒ The importance of workflow technologies in application integration projects
- ⇒ How the TaskCentre Business Process Management (BPM) Suite will reduce the time and costs required for application integration projects.

Introduction to integration

The software industry has experienced a great deal of change over the last decade and there is nothing more symbolic of this change than that of the rise of the packaged software application.

Today, you will find a vast array of 'off-the-shelf' ERP, CRM, SCM applications that address common data management, reporting and business transaction activities. The packaged software application has without doubt brought about greater structure to the management of businesses and the low cost of entry for these applications (when compared to bespoke application development projects) has stimulated wide scale, global adoption.

The benefits of utilising packaged software applications are well documented and indeed your organisation may well have deployed many of these solutions from one or more of the well known ERP or CRM vendors. Yet, like most things in life, there is a flip side to purchasing packaged software applications in that they cannot communicate with other business applications. For example, a given company may have opted for an ERP solution from one software vendor but deployed an industry focused CRM application from an alternative provider. In this instance, it is unlikely that communication will be possible between the two applications, which may manifest into problems or 'communication barriers' between departments.

In short, packaged software was a shortcut to providing each business department with the 'best fit' tools to do the job. But little thought was given to the joined up business processes. For example, a CRM operative will rarely have visibility of accounts being placed on hold within the ERP solution even though this information is critical to their job function. This 'information island' effect is now becoming a major headache for business managers looking to streamline end-to-end business processes.

To address the issue of information island and the impact they are having on business performance, this whitepaper provides an executive overview on what we understand application integration to be, the methods of integration, the business benefits of integrating your applications and the drag and drop

integration tools now available.

What is application integration?

Application Integration, or Enterprise Application Integration (EAI) as it is more commonly referred to, is the process of integrating two or more business applications through bespoke software development or now more commonly through middleware solutions.

Enterprise application integration projects are embarked upon to, ensure that applications are furnished with real-time data from unrelated applications, facilitate cross application workflow processes or to provide a common front end interface that enables users to interact with multiple applications simultaneously .

What are the methods of application integration?

Enterprise Application Integration (EAI) can take multiple forms and the approach taken by an integration solution provider can largely depend on both the applications that require integrating and the wider computing environment. However, common integration techniques can include:

- i) Directly via the application database (through the applications base tables, interface tables or stored procedures)
- ii) Integrating via an application's API
- iii) Through flat file (ASCII) import and export routines

Regardless of the method selected the application integration project will be achieved by either bespoke development or the use of a middleware application.

Bespoke development is seen by many in the software industry as an outdated approach to integration as hand coded integration does not allow for upgrades to the primary applications with which it is integrating. On the other hand, middleware solutions achieve application integration by loosely coupling applications together; therefore not restricting the upgrade path for the applications in question.

What are the benefits of application integration?

The primary business benefit of application integration is the removal of information islands from the organization. Visibility of business information is critical to effective decision-making and application integration removes the invisible fences that surround packaged applications.

The integration of applications effectively facilitates end-to-end business processes. The example given earlier in the paper which highlighted the importance of a CRM operative having visibility of an account being placed on hold within the ERP solution is just one isolated reason for the integration of business processes.

Integrated business processes also facilitate much higher levels of business process automation. Automating common business processes partially or completely can deliver significant cost savings for an organization. Indeed, many SMB or global organizations still devote much needed employee resources to the physical transition of information between departments and their respective systems.

In addition to the above, application integration plays a key role in enabling organizations to achieve the strategic goal of zero latency (no delay between an event and response) which to many is viewed as a critical factor for success in today's fast paced commercial environment.

One interesting and often overlooked benefit is the ability of application integration projects to maintain information integrity across multiple applications. Having accurate and highly visible information across departments and indeed business units can have a significant impact on the performance of an organization.

Drag and drop application integration?

The integration arena has historically been dominated by bespoke development and the ongoing maintenance of these projects. However, advancements in software application development has resulted in the availability of middleware applications that can automatically produce the integration script through a user simply dragging and dropping icons onto a graphic user interface (GUI).

These advanced integration tools are often referred to as Business Process Management (BPM) Software Suites and are specifically designed to act as 'application glue' that can bind an unlimited number of software applications together.

Business Process Management (BPM) solutions ensure that integration projects are scalable, reliable and instantly accessible for both small and large modifications. Organisational agility is acknowledged as a key performance driver and more sophisticated BPM software applications are built with this purpose in mind.

Should application integration projects utilise workflow technology?

For many businesses integration still revolves solely around the integration of applications without the inclusion of workflow technologies. However, in recent years, organisations have been placing greater emphasis on data integrity and quality as data itself has come to be recognised as a business asset and a key driver of business performance.

It is this greater emphasis organisations are placing on data as a key business asset that has stimulated a rise in the use of workflow technologies within integration projects. Having the ability to include a 'human step' within a given integration process is a powerful way to assuring data integrity and quality and adds a level of control and intelligent intervention that could be hugely complex to code into any application.

It will come as no surprise that organisations that have deployed CRM applications were among the first to utilise workflow technologies within their integration projects as often the visibility of data quality is far higher than of that within other operational areas of an organisation.

A good illustration that demonstrates how integration projects can benefit from adding workflow steps to a process would be the automatic handling of web site enquiries. Many organisations utilise web forms on their web sites and some have begun to automate the handling of this data i.e. taking the data submitted from the web form and pushing this into the CRM application. However, these early-to-market integration tools did not incorporate workflow capabilities and,

subsequently, many businesses have suffered from inaccurate data being placed into their CRM database.

Through the inclusion of workflow steps within an integration process, employees and managers can authorise, decline, edit and contribute to a specific real-time integration process depending on the information presented to them. Having greater control over integration processes significantly increases data integrity and therefore improves the short, medium and long-term performance of the company.

TaskCentre BPM suite: Next generation application integration tool.

Application integration project times and costs have been dramatically reduced over the last decade. This is because IT decision-makers have moved away from bespoke development and are instead utilising next generation application BPM integration tools.

The TaskCentre Business Process Management (BPM) Suite is a market proven middleware application that enables organisations to address application integration requirements quickly and cost effectively. Documented case studies on this subject can be found on the Orbis Software 'Customers' web site page.

TaskCentre's drag and drop graphical user interface streamlines the application integration process by removing the need for software developers to manually produce a bespoke application to achieve integration.

Another significant advantage of using the TaskCentre Business Process Management (BPM) Suite to address integration projects is that the integration achieved is not 'rigid' or 'set in stone.' Historically, it was only possible to integrate applications through the use of bespoke development and this approach 'stored up' future costs as any further tweak or modification would often require the same software development team/company to make the alteration. This reliance on software developers has and continues to cost organisations vast and indeed unnecessary sums of money.

The extensible nature and control features of the TaskCentre Business Process Management (BPM) Suite also brings advantages to an integration project.

Most integration projects and their subsequent micro processes evolve over time and having an intuitive environment in which to view, manage and create new integration processes offers a significant commercial benefit for deploying the TaskCentre Business Process Management (BPM) Suite.

Conclusion

Bespoke software development and the extensive reliance on permanent or contract developers to maintain and enhance integration projects has been a costly but necessary burden for most organisation. However, the arrival of Business Process Management (BPM) Software and its drag and drop integration tools have revolutionised the application integration arena.

Businesses now have the luxury of being able to utilise BPM application to:

- ⇒ Decrease the cost of application integration
- ⇒ Significantly reduce cycle times for application integration projects
- ⇒ Eradicate company dependency on permanent and/or contractor/software development staff
- ⇒ Incrementally enhance and manage multiple integration projects from one intuitive graphical user environment.

If you are suffering the pains of application disconnect, considering an application integration project or just want to learn more about the TaskCentre BPM Suite, please contact your business partner to request a demonstration. Alternatively, please visit the Orbis Software web site for further information: www.orbis-software.com

About the Company | Orbis Software

Orbis Software provides the leading pure-play Business Process Management and Workflow solution, TaskCentre, enabling organisations to drive efficiency and reduce costs through collaborative process automation.

Founded in 1997, Orbis Software Ltd provides a scalable suite of applications to suit any size of organisation. There are more than 4000 organisations around the world already using Orbis products, including such names as Nasdaq, Telstar, BP, BDO Stoy Hayward, GE Capital Equipment, The Rank Group, Salomon Brothers, Zenith, BUPA, Jaguar, Lloyds TSB, and Rolls Royce.

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