



# **Maximizing Benefits from Software-as-a-Service via Seamless Integration with On-Premises Applications**

**White Paper**

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November 2007

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## Overview

Companies strapped for resources and struggling to find staff to assign to even the most mission-critical IT projects are proving to be extremely receptive to Software-as-a-Service (SaaS) as an attractive and efficient alternative to on-site enterprise applications, in particular for those applications that are not industry-specific. This is especially true for software typically selected at the departmental level because that's where the key benefits lie. As department after department makes independent software decisions, cross-company integration challenges that may lie ahead are hardly, if ever, considered.

Leading market analysts predict explosive growth in SaaS's future market share. [Gartner](#) predicts that SaaS will grow at a rate of 22.1 percent until 2010—more than twice the rate it predicts for the growth of the software market as a whole (9 percent). In fact, Gartner further predicts that small- and medium-sized businesses, in particular, will find SaaS an attractive option, based on their lack of sufficient staff resources.

[IDC](#), also, has surveyed SMBs on their use of SaaS and found strong growth potential in the market for 2008 alone. Predicting a 5.1 percent growth in SaaS adoption for small firms and a 15.2 percent growth for medium-sized firms, IBM actually believes that these numbers are understated.

Whatever the exact numbers are, however, they show a steady growth, with the attractiveness of paying for software as it is needed, rather than making a large, up-front investment in software purchase. Adopters also enjoy the ability to free existing staff from having to develop and maintain more

“generic” software in favor of redirecting their efforts to business-specific functions. These two benefits alone are the primary drivers.

Understanding the quickening adoption rate of SaaS is easy when one looks at the wealth of solutions offered today in many areas, such as human resources management (HRM), sales force automation (SFA), customer relationship management (CRM) and more. Sales force automation and on-demand CRM services, such as [Salesforce.com](https://www.salesforce.com) (SFDC) and [Siebel CRM On Demand](https://www.siebel.com), are building the demand for integration with on-premises back-end systems, such as enterprise resource planning systems (i.e. SAP, JD Edwards, etc.). The growth of these SaaS applications may well be a precursor of what is to come as it represents the quintessential prototype of an SaaS solution with wide appeal and a high rate of adoption even by multiple departments within a single company. What company (or department, for that matter)—regardless of industry—would not want to adopt a proven, off-the-shelf solution that can be quickly configured, with minimal investment and setup, to match its needs?

Businesses adopting SaaS see it as an opportunity to meet their business needs quickly, avoiding familiar IT constraints of bottlenecks and priorities. In addition, SaaS adopters also perceive that they have:

- saved money by avoiding expensive, up-front development costs
- experienced very fast implementation
- garnered immediate business value rather than waiting through a longer application development lifecycle
- increased their business agility

SaaS foregoes the traditional application model, leaving some in IT nervous and fearful that what has previously been their turf is now being challenged—and quite successfully—as department after department bypasses (or more likely didn't even think about consulting) IT in selecting the applications.

## **The Challenges to SaaS Implementation: Security and Integration**

Despite the benefits of SaaS, not all companies are rushing to implement such application models. And some who have implemented it are starting to reconsider its usage as its adoption spreads inside the organization. Industry analysts are in agreement about why: in the minds of potential users, the two biggest challenges to SaaS are security and integration — and to some extent, both of these concerns have validity. It is important to note, however, that even when a company (most likely the IT department) is voicing these concerns, adoption of SaaS applications is still happening at the departmental level, driven by the business users, often without the knowledge or oversight of IT. It is IT that is justifiably raising these concerns when viewing SaaS from the perspective of the entire organization.

There is no question that the increase in the number of on-demand applications today raises security issues. Putting a company's applications (and more to the point, the company's customer data) on a remote server at a vendor location can be worrisome. Yet it's important to realize that more and more, company ERP/CRM applications that integrate with external systems

and databases over the Internet are not much different in their security concerns.

Thus, more and more, a company's "internal" systems are looking and acting more and more like Internet-based applications. The very same precautions that we implement to protect these internal systems—two-factor authentication, backup and recovery, high-availability, employment of standards—will be the same techniques that secure on-demand applications. In fact, the case has been made that large SaaS providers have more elaborate security, backup, recovery and high availability infrastructure and expertise than most mid-size companies can afford. With SaaS, security concerns are usually more a matter of using due diligence in evaluating the SaaS providers security standards compliance than it is of actually needing to implement additional security solutions before adopting an SaaS application.

But, while security concerns can, to a large extent, be allayed with some dispatch, integration is a different story.

Integration, and beyond that Business Process Management, is an even more important area for potential action when looking at SaaS. [Forrester Research](#) concurs that one of the reasons that some organizations give for not adopting SaaS is the difficulty that they have integrating the SaaS applications with their in-house applications, especially when real-time integration is necessary. While integration may not be much of a concern when choosing an SaaS application that will run stand-alone without touching the company's other systems or databases, taking a broader view of SaaS applications that will

become a strategic component of the corporation forces us to confront the integration challenge head-on.

In the case of on-demand CRM solutions, SaaS software can, and often does, run as a silo. In fact, in many cases this can be viewed as a set-back to the process-driven enterprise, working in opposition to the goals of enterprise architects and business process analysts. Using on-demand CRM as a stand-alone application, sales staff certainly enjoys many benefits, including a view of their daily work. But the sales manager will find it harder to combine the data the sales staff provides about their leads with the number of orders/invoices they enter in the order entry system of their ERP package.

Once a sales lead matures and turns into a sales opportunity, information about that opportunity has to be shared with accounting, internal sales, the implementation team, and more. If the affected systems are not integrated with on-demand CRM, the customer data, contact data, order status, etc. will not be enriched nor will they be in synch with the data in the on-demand system. At this point, SaaS begins to lose its charm in the same way that traditional departmental software did in the past—and it may even create a situation that was more complicated than before (if the IT department lacks familiarity with the kinds of integration solutions that can reduce or eliminate these problems).

Integration, then, is where the greater value lies: tying these pay-as-you-go solutions into the business infrastructure, having them work together with company databases and applications in a way that gives them significantly more power and scope. “Integration”, though, is a word that tends to scare



off many SaaS users and IT staff alike. Can an SaaS application be transformed from a tactical solution to an organization's core strategic asset without a lengthy and expensive integration process? Where would we find the resources to accomplish this? Wouldn't an effort like this deplete already constrained staff resources?

Just as important is the question of how the new breed of SaaS applications can be integrated with the decidedly old breed of applications—those old-but-not-retired mainframe, midrange and networked applications that often represent so much of the company's investment and information in existing applications.

## Embracing the Integration Challenge

While SaaS is sometimes considered to be an "IT-less" application solution, integration is conceived by many as one of the most difficult IT-based activities in today's systems environment. While one of the primary benefits of SaaS is its low up-front cost, the initial costs of integration projects using traditional integration tools threaten to outweigh the benefits before a project gets off the ground. How can we resolve these seeming dichotomies?

Those companies who have resisted an integration effort involving a SaaS application (because they thought it was too expensive or required too many resources or was too complex and required skill sets not available within the current employee base) should take another look at the integration software marketplace. There's good news—with products and solution accelerators

tailored specifically to SaaS and legacy integration and in line with the SaaS business model.

The state-of-the-art approach to integration is based on a service-oriented architecture (SOA). In fact, many modern SaaS applications offer some kind of an SOA-enabled interface that uses Web Services. Using similarly advanced SOA-based integration solutions, the challenge becomes much less daunting.

A major concern of those looking at making SaaS a strategic component of the company IT plan is the degree to which an integration project will be costly, risky or require a vast store of resources not available to most businesses. However, the integration process does not need to be long or costly. One should look for solutions that allow users to continue to use their on-premises applications with no change while seamlessly integrating to the SaaS applications.

## A Typical Scenario

Organizations are often running different applications such as on-demand ERP (i.e. SAP, JD Edwards), email systems (i.e. MS Exchange, Lotus Notes) and on-demand CRM (i.e. SFDC, Siebel On Demand) as individual and isolated islands. By bridging the islands with a pragmatic approach to integration, these organizations can share data and business processes across systems and bring combined added value to the organization.

To understand better the importance of integration in the SaaS environment, let's look at a typical scenario.

Customer A is running a blend of old and new applications including:

- On-premises ERP system
- An email and calendar application
- On-demand CRM system for sales force and marketing automation

Using a code-free business integration suite, such as [Magic Software's iBOLT™](#), Customer A can supply its sales reps with a 360-degree view of customer-facing processes through a comprehensive work environment that will enable straightforward work processes, eliminating errors and wasted time. Such a solution enables business analysts and architects to achieve full integration for their users in a matter of days with no need for coding. Data from the accounting system is easily retrieved, and services exposed from the legacy environment are wrapped as Web Services that enable synchronous, easy-to-use integration between on-demand CRM and Customer A's internal

systems. These services are then easily reused for any future interface with practically zero overhead.

A deeper look at Before/After snapshots shows a marked difference:

Prior to Integration	Results after Integration
<b>Operations issues</b>	
<ul style="list-style-type: none"> <li>Accounting data is not in synch with CRM data</li> <li>Users are updating data in different systems</li> <li>Invoices are sent to the wrong destinations</li> <li>Manually administered batch jobs are required</li> </ul>	<ul style="list-style-type: none"> <li>Automatic synchronization between CRM and ERP, with email workflow approval, is in place</li> <li>Changes are populated from one system to another</li> <li>Updates are executed in real-time without administrator intervention</li> <li>Sales staff and operations staff have common customer naming and language, and the manual updates, mistakes, and workflows are gone</li> <li>Sales and accounting audit checks run smoothly</li> </ul>
<b>Account Management Issues</b>	
<ul style="list-style-type: none"> <li>CRM users are not online with customers' current financial status and history</li> <li>Mistakes exist in account management processes and in the manual processes of gathering information</li> <li>General faults in sales automation</li> </ul>	<ul style="list-style-type: none"> <li>CRM users view the complete financial status and history of the customer within their on-demand CRM screens</li> <li>Sales reps are empowered while talking with the end customer</li> <li>CRM users can create sales processes based on financial data</li> </ul>
<b>Collaboration Issue</b>	
<ul style="list-style-type: none"> <li>The "all" process of the calendar is performed manually</li> <li>There are problems with the accuracy and concurrency of the calendars</li> <li>Email users are not part of the collaboration</li> </ul>	<ul style="list-style-type: none"> <li>All the calendars are synchronized online with internal users using their CRM interface</li> <li>External sales partners and field sales staff are coordinated</li> <li>Overlapping meetings are reduced to a minimum</li> </ul>

In short, this integration process:

- Enables a smooth sales operation, regardless of which back-office application was managing which activity.
- Allows re-use of existing systems without any change to the user experience.
- Cuts down on processing time and the amount of manual work required.
- Decreases errors, with a positive influence on both customer service and a decrease in operational costs.

## From Challenge to Reality

These are very challenging times for IT departments facing the task of bringing order to an increasingly chaotic enterprise software environment. While SaaS offers benefits to organizations that cannot be ignored, careful security considerations and deliberate integration approaches are required in order to ensure smooth-running business processes and consistent information flow across the organization.

Make no mistake. SaaS will play a major part in tomorrow's reality. And integration will not be an option for those who wish to keep pace – it will be an integral part of that reality. Fortunately, integration need not be difficult to achieve, even (or perhaps especially) for medium-sized businesses who until recently had no affordable integration alternatives.



## About Magic Software Enterprises

Magic Software Enterprises (NASDAQ: MGIC) has been a leader in enterprise application development, deployment and integration technology and solutions for more than two decades. The company's service-oriented platform is used by companies worldwide to develop, maintain, and deploy both legacy and new business solutions, while integrating these applications across both internal and external, heterogeneous environments. Magic Software's platform-independent methodology lets companies achieve agility by quickly assembling composite applications, allowing programmers to create services and architects and business analysts to orchestrate and reuse these services to enable business processes. Through partnerships with industry leaders such as IBM and SAP and more than 2500 ISVs worldwide, Magic Software technology is used by more than 1.5 million customers around the globe.

For more information on Magic Software Enterprises and its products and services, visit [www.magicsoftware.com](http://www.magicsoftware.com).