Turbo-Charge Salesforce.com with Cloud Integration

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Introduction

Fueled by today's fiercely competitive business environment, IT managers must deliver rapid, innovative and low-cost solutions. Companies are adopting cloud-based applications to address these challenges. This new style of computing provides applications, data, and IT resources to users as services delivered over the network and in this case the application delivered as a service is also known as Software as a Service (SaaS).

Salesforce.com's cloud offerings, including Sales Cloud, Service Cloud, Collaboration Cloud and Custom Cloud, are an attractive alternative to complex, traditional on-premise solutions because they allow organizations to meet changing business needs very quickly. IT managers benefit from resource efficiency, simplicity and minimal setup time. Furthermore, subscription pricing means fewer budgetary issues get in the way of procuring a new application. It's no surprise that Salesforce.com's offerings are spreading rapidly across the business world today.

Deploying cloud-based applications does not come without its challenges, however. IT managers need critical business information to be accessible throughout the implementation process. In many midsize and large companies, this information exists in highly customized on-premise backend systems such as Enterprise Resource Planning (ERP) and financial applications. In order to realize the full benefit of Salesforce.com's cloud offerings, this challenge must be addressed.

According to recent studies by Forrester Research and Gartner, application integration, along with security, are the main reasons why IT executives resist cloud-based applications. This paper highlights how application integration can help turbo charge your cloud experience, in particular, Salesforce.com, and explores three integration approaches to solve these challenges, including a new category of next-generation cloud integration platforms.

Salesforce.com and the Growth of Cloud Computing

Moving to cloud-based applications minimizes the pain of "owned and operated" applications. The complexities, time, and costs associated with implementing these on-premise solutions are well known. Most companies would prefer a simpler, faster, and lower cost solution for managing customer interactions and are attracted to Salesforce.com for the advantages it provides to IT departments and business users:

- **Rapid implementation.** Since there is no software to physically deploy with salesforce.com, there is less demand on IT resources and this enables faster implementation. Adding users to the application is as simple as assigning a user ID and password for each person, so they can be up and running quickly.
- **Ease-of-use.** By delivering comprehensive functionality in a simple, familiar browser-based interface, Salesforce.com's offerings are intuitive for users and require minimal training.
- **Low IT impact.** Salesforce.com's offerings are less of a burden for IT but still deliver high business impact. The solution doesn't require new IT infrastructure to get started, and on-going management and maintenance require fewer IT resources than traditional "owned and operated" applications.
- **Subscription pricing.** Salesforce.com offerings have a much lower upfront cost because companies subscribe to the service by paying a monthly fee based on the number of users. This

makes the solution very easy to scale as a company grows.

- **Easy to customize.** Customizations, workflows, and preferences in Salesforce.com offerings are performed through configuration, not coding. Changes are easy because the application can be reconfigured whenever business needs or processes change. Despite these attractive benefits, many Salesforce.com implementations require integration to get up and running optimally. For example, getting started with Salesforce CRM is so easy that users tend to expect instant access to all of their business information about customers, contacts, leads, opportunities, and more. Many are disillusioned if this doesn't happen. Although cloud-based applications like Salesforce CRM make seeing immediate results fairly simple, integration with other business systems is critical to realize their full value and increase user adoption.

Integration: The Last Barrier to Cloud Computing

Companies adopting Salesforce.com's cloud offerings view application integration as the critical component to harmonize business processes across their hybrid application landscape. With integration, business users of a cloud application can maximize their productivity by gaining access to critical information unlocked from other systems and made available in real-time. And by maximizing user productivity, a company is able to dramatically increase the economic value of their investment. Some examples of cloud integration scenarios for Salesforce.com customers include:

- Data migration from legacy systems to Sales Cloud, Service Cloud, Collaboration Cloud and new Custom Cloud applications
- 360-degree view of customer information between Sales Cloud and on-premise ERP applications
- Order, invoice and payment visibility from ERP to Sales Cloud
- Lead-to-opportunity integration between Sales Cloud and other marketing automation systems
- Support cases and incident tracking data synchronization between Service Cloud and other legacy applications
- RMA tracking and warranty information synchronization between Service Cloud and other legacy applications

- Real-time event feeds from hundreds of legacy applications to Chatter
- Connecting Custom Cloud applications with homegrown applications and with business partner solutions

Since cloud applications offer similar benefits to all customers, any advantages gained at one company are just as easily available to its competitors. Cloud applications by themselves provide little differentiation unless they are integrated with a company's back-end applications to streamline core business processes. Retaining this differentiation and making the enormous quantity of corporate data available to the newer, more cost-effective cloud systems brings the issue of application integration to the forefront. Application integration has become the loyalty application for cloud providers; the more integrated they are with the rest of their customers' enterprise applications, the more valuable they are to their customers.

Despite this critical need, application integration continues to be a big hurdle for cloud adoption. Why has cloud application integration been so challenging? The answer lies in the fact that traditional choices have been incomplete.

Traditional Choices for Cloud Integration

Traditionally, companies had the following choices for solving cloud integration challenges:

- **Use on-demand integration tools.** On-demand integration tools have the required functionality to complete simple cloud-to-cloud integration scenarios. However, they lack the sophisticated capability that is required to integrate with complex on-premise applications that have been extensively customized and to harmonize integration processes across this hybrid application landscape. As a result, they have mainly been adopted by small companies that need low-cost integration options.
- **Implement on-premise software platforms (traditional middleware solutions).** The on-premise middleware platforms evolved to meet integration needs in large enterprises. They provide sophisticated functionality to solve business process management (BPM); extract, transform, and
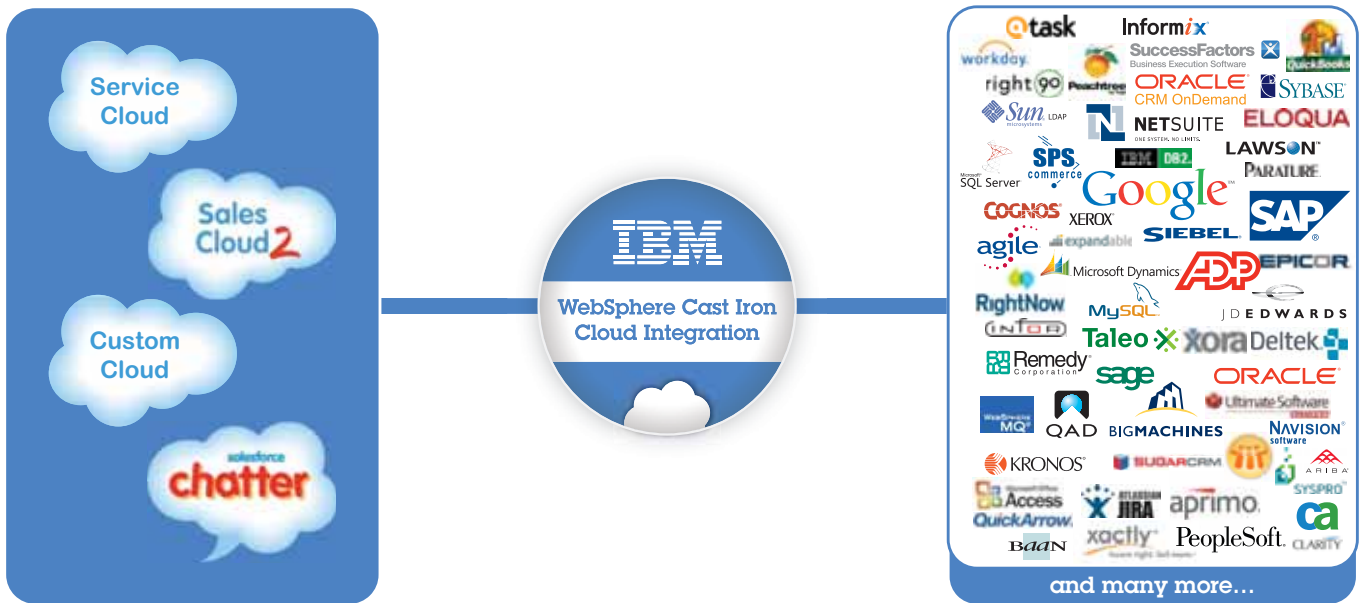
Figure 1: Salesforce.com Connectivity to Enterprise Applications

load (ETL); and Enterprise Application Integration (EAI) problems. This rich functionality makes these platforms a great fit for complex on-premise integration and service oriented architecture (SOA) projects. However, companies are seeking solutions that are built from the ground up for cloud integration projects, providing the speed and simplicity that is expected from cloud deployments.

- **Write custom code.** Because the other options did not fit well, many companies have opted to develop custom code for integration. While custom code provides an immediate fix at a seemingly lower cost, companies quickly realize that maintaining custom code is a labor-intensive and time-consuming process and that the "hidden costs" go well beyond the initial coding. Custom code also requires specialized skills that most IT organizations lack or cannot obtain easily. Finally, custom code requires up-front investments in time and resources that delay the benefits of using cloud applications.

Providing integration with any of these traditional approaches substantially undermines the value of cloud applications and frustrates users who are expecting quick results. The poor fit between traditional integration approaches and the requirements of cloud computing has created the need for a new type of integration platform.

Next-Generation Cloud Integration Platforms: The Complete Solution

A new breed of next-generation cloud integration platforms

has emerged that provides everything that small, midsize, and large companies need to successfully integrate the hybrid world of public clouds, private clouds and on-premise applications (Figure 1). Rather than adopting temporary stop-gap solutions, companies can use a single robust platform, designed from the ground up to deliver everything needed for cloud and on-premise integration of any complexity.

Unlike traditional choices, these next-generation platforms deliver the following differentiating capabilities:

- Complete deployment flexibility
- Complete cloud integration scenarios
- Complete connectivity
- Complete reusability

Each capability is explained in the sections that follow.

Complete deployment flexibility

The cloud integration platform is a single product that offers the following form factors for deployment:

- A multi-tenant cloud-based integration service
- A physical appliance that can be installed and managed within a local data center
- A virtual appliance that can be installed on a customer's existing servers by using virtualization technology

All three deployment options (Figure 2) provide the same user experience for developing and managing the integrations, and users have the unmatched flexibility of seamlessly transitioning
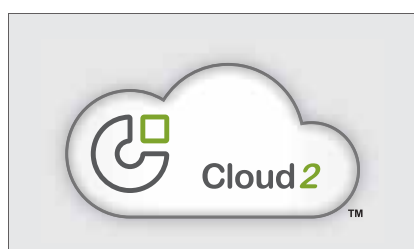
Integration-as-a-Service (IaaS)

Physical Integration Appliance

Virtual Integration Appliance

Figure 2: Deployment Options

between these options. The advantage to cloud customers is the ability to choose the right solution for their needs, rather than being limited by vendor offerings that often take a "one-size-fits-all" approach.

Complete cloud integration capabilities

The next-generation platform provides the following three capabilities in one solution:

- **Cloud data migration.** Data handling, using the platform's data cleansing and data migration capabilities, enables companies to expedite their adoption of Salesforce.com's cloud offerings. This approach to data integration enables companies to cleanse, enrich and migrate data from existing applications to Salesforce.com's cloud offerings in real time.
- **Cloud data synchronization.** The platform provides connectivity, workflow and transformation features, enabling companies to coordinate or orchestrate integration processes across multiple applications in real time. Now, Salesforce.com users can immediately view data that is hidden in other applications, minimize any duplicate entries and improve their decision making and productivity.
- **Cloud user interface (UI) mashups.** Often information from disparate sources must be brought together and displayed within the native user interface of a single application. For example, data from multiple cloud applications can be "mashed up" in Salesforce CRM to present a single unified view, without taking the data out of one application and putting it into another.

Complete connectivity

The cloud integration platform comes with built-in connectivity to all Salesforce.com cloud offerings, including Chatter. In addition, there is connectivity to hundreds of cloud, packaged and proprietary on-premise applications, including ERP, CRM, databases, web services and flat-files. The platform is completely self-contained and includes everything needed to complete integrations in a single solution. This progressive approach to integration makes no distinction between local

and remote applications because connectivity is established to the endpoints by using native application protocols. The advantage is that no additional adapters are required and there is nothing to install or change at the endpoints.

Complete reusability

The cloud integration platform includes hundreds of reusable Template Integration Processes (TIPs) (Figure 3) that are searchable with a single click in an online library. This online library contains templates for all of the most common cloud integration scenarios. These templates provide a question-and-answer-based wizard that walks users through a common integration scenario. For example, a TIP might ask for all of the information needed to transform an opportunity in a CRM system to an order in an ERP system. Customers and partners can create their own wizard-driven reusable templates with the point-and-click TIP Development Kit and make them instantly available to the entire user community.

Cloud Integration Platforms: Aligned with Salesforce.com

The ease of using the next-generation Cloud integration platforms matches the simplicity delivered by salesforce.com. Both eliminate the need to write any code, do not require installation or deployment of software and provide configuration capability. The benefits of this solution fit well with companies' expectations of a cloud-based application:

- **Integration in days.** The cloud platform's TIP library enables companies to integrate in days, instead of weeks or months. This aligns with the on-demand nature of Salesforce.com, as users can access critical business information quickly.
- **Thousands in cost savings.** The "configuration, not coding" design has helped a number of companies slash integration costs compared to traditional approaches. In addition, companies have reduced ERP licensing costs by eliminating the need for Salesforce.com users to login to back-office
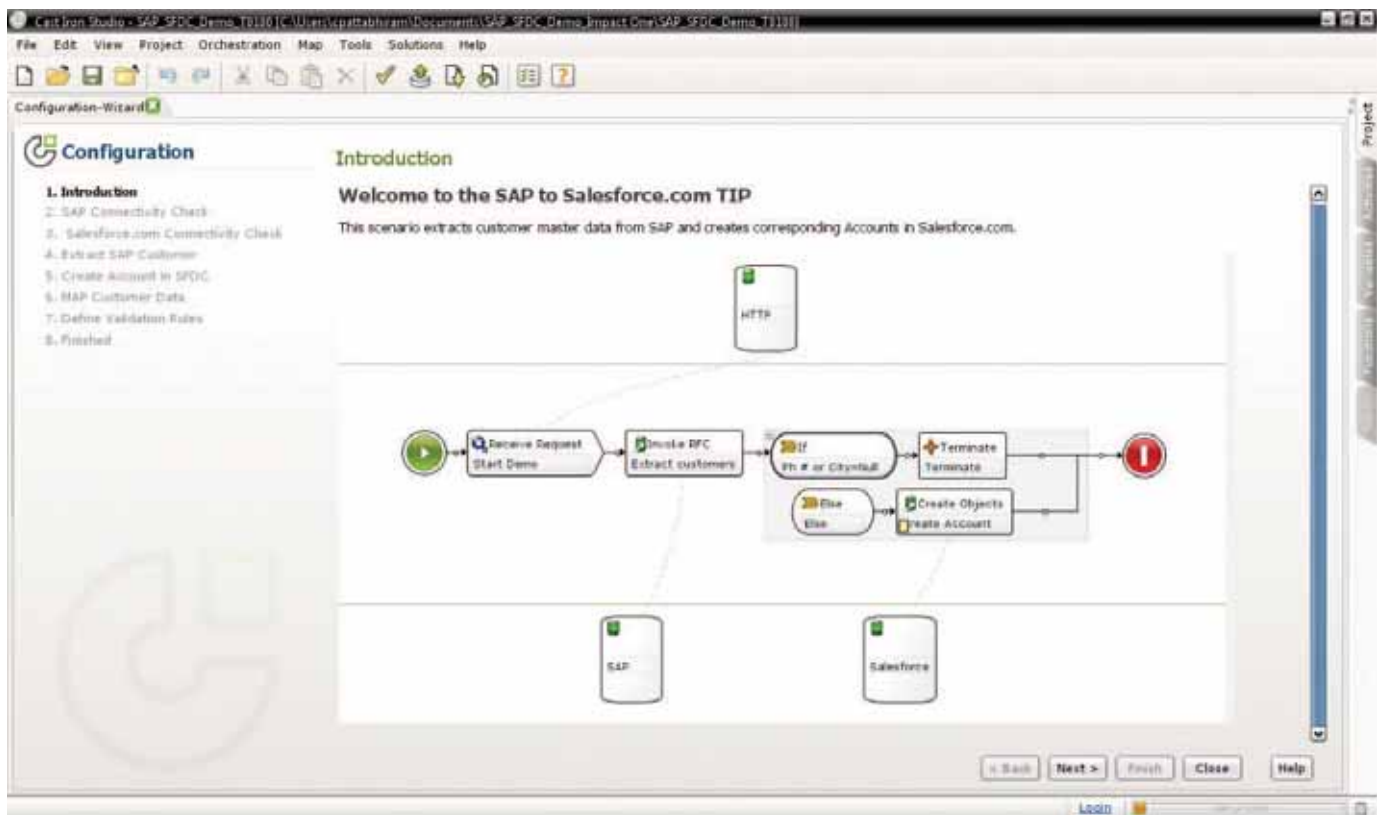
Figure 3: Example TIP

applications. Also due to the term licensing pricing options available, companies have slashed their upfront capital expenditure costs.

- **Low IT impact.** The cloud platform provides completely self-contained services delivered via either an on-premise appliance or the cloud with nothing else for IT to add or buy. Neither approach requires complex coordination or specialized IT skills for deployment. Ongoing management and maintenance of an appliance or cloud-based service imposes minimal to no requirements on IT.
- **Easy to change.** The cloud integration platform allows IT to change connectivity, revise transformations and modify workflows using point-and-click functions in a visual user interface. Easy changes enable integrations to better serve the evolving needs of the business.

Example Customer Use Cases

This section describes two customer examples using next-generation cloud integration platforms.

Example 1: Amerisource Bergen Specialty Group –

Fortune 500 distributor of pharmaceutical products

Amerisource Bergen Specialty Group, a large pharmaceutical products distributor, recently replaced various traditional systems with Salesforce.com as their CRM application for their call-center service representatives (CSRs).

The challenge was to empower all their CSRs with real-time information in Salesforce.com, enabling them to deliver a superior customer experience. They needed a solution that provided the CSRs with information about accounts payable and receivable, invoices, credit checks, order details and other data. This information existed in multiple back-office applications that had been consolidated using a data warehouse. Historically, the CSRs spent hours collecting this information by accessing multiple applications, which resulted in a significant loss of sales productivity.

The IT team's main challenge was to reduce dependency on expensive integration project personnel and shift higher skills to more strategic or innovative initiatives. Traditionally, the company relied on custom code to solve point-to-point integration problems, but found the approach to be non-scalable as their needs grew. The IT team conducted a comprehensive evaluation process and rejected proprietary
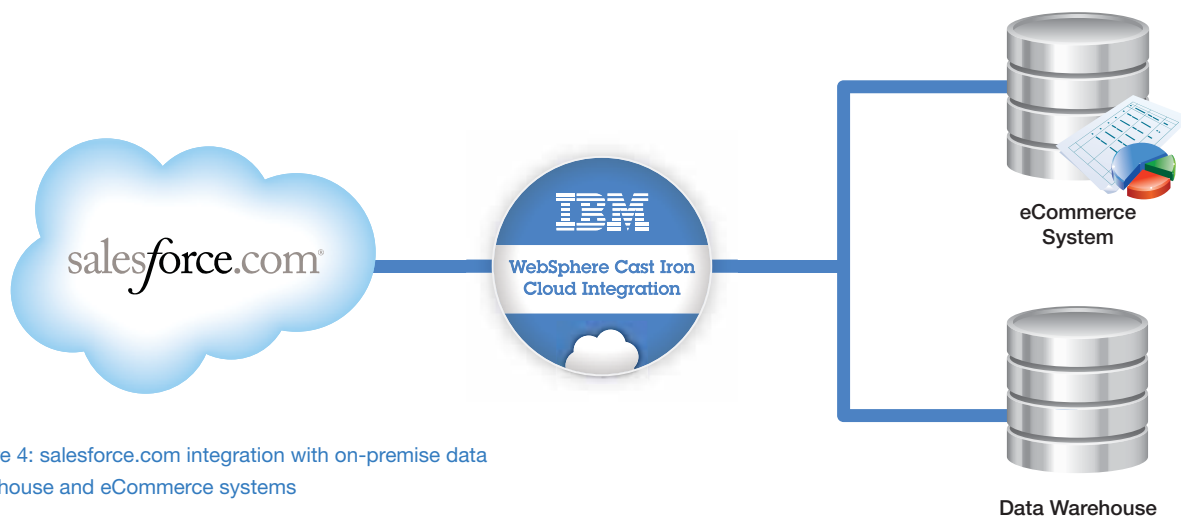
Figure 4: salesforce.com integration with on-premise data warehouse and eCommerce systems

on-premise ETL tools because of the coding complexity.

The IT team deployed a next-generation cloud integration platform to connect their SQL-based homegrown data warehouse with Salesforce in real time (Figure 4). This solution is used to create a real-time 360-degree view of customers. Account, credit and sales information is now sent to Salesforce.com from the data warehouse, and orders and quotes that are created in their e-commerce system are sent in real time to the data warehouse.

The entire integration solution was delivered in just 10 days. The company has reduced its development resources, resulting in an annual cost savings of 80% or $250,000. In addition, highly skilled resources are now assigned to innovation-oriented projects instead of integration projects. By providing

this single view of customers in Salesforce.com, the company was also able to significantly improve CSR productivity.

Example 2: Inverness Medical - A large manufacturer of consumer devices

Inverness Medical is a $2 billion manufacturer of consumer devices that has a wide range of cloud and on-premise applications, including solutions from SAP and JD Edwards. They chose Salesforce.com as their CRM platform with the goal of delivering a superior customer experience.

Their diverse and disparate systems resulted in silos of information that forced their sales and technical service teams to access multiple systems for customer complaint data. They wanted to use salesforce.com as the single application to provide a seamless, 360-degree view of their customers and
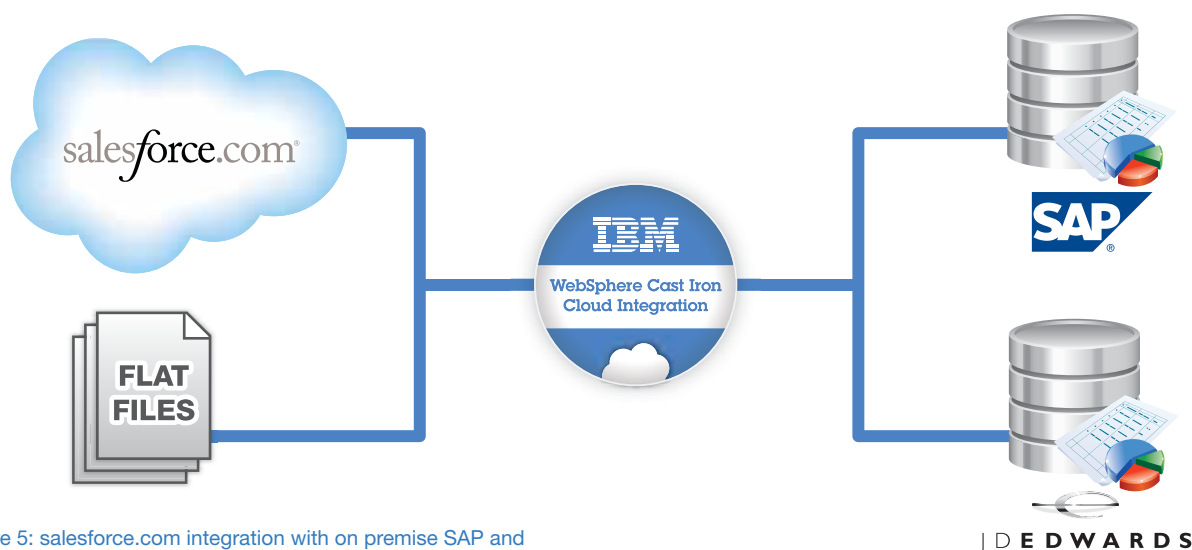

Figure 5: salesforce.com integration with on premise SAP and JD Edwards applications

maximize the productivity of their sales and technical service teams.

After rejecting traditional integration methods, they chose a next-generation cloud integration platform (Figure 5) and its "configuration, not coding" approach for real-time, bi-directional integration. Using the platform, they integrated Salesforce.com and on-premise systems including SAP, JD Edwards and flat-files. Now the technical service teams no longer have to log in and manually access the information in back-office ERP systems.

The first SAP to salesforce.com project was completed in only 10 days, and resulted in numerous cost savings and productivity improvements. Inverness Medical was able to save $100,000 per year by eliminating ERP licenses and an additional $30,000 per year in integration implementation costs. By providing real-time client case data, Inverness Medical realized an additional $95,000 per year in productivity improvements.

Conclusion

Unlike traditional on-premise applications, Salesforce.com's cloud offerings provide tremendous benefits, including rapid implementation, ease of use, low IT requirements, subscription pricing, flexibility and scalability. With the increasing adoption of cloud-based applications, integrating Salesforce.com's cloud offerings and back-end applications helps companies realize the full potential of their solutions.

Back-end systems, in which companies have made significant investments over time, provide key differentiation advantages. It is not practical to replicate this time and money invest-ment — in a new application. It is far simpler to provide a way for Salesforce.com's cloud offerings to access the information in existing backend systems and further leverage the investments made in those systems.

It's clear that IT environments in the future will include a mix of cloud-based and on-premise applications. Different companies will select various combinations of these systems to maintain true differentiation and be responsive to the needs of the business.

To realize the full benefit of cloud-based applications, integration must be dramatically simplified. Companies need a solution that can run anywhere, connect applications anywhere, be managed from anywhere, and require no specialist integration skills or IT infrastructure. These solutions must be easily configurable, flexible, and scalable — which means no coding. And, the integration solution must implement projects within days, not weeks or months.

Fortunately, next-generation cloud integration platforms provide these benefits today. By taking advantage of the simplicity and the comprehensiveness of these platforms, companies can obtain the full benefit of Salesforce.com in just days. For more information on these next-generation cloud integration platforms, please visit **www.castiron.com**.

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