



Salesforce

Integration

Introduction to Salesforce.com Integration

Connecting Salesforce.com to an existing enterprise application is a common and frequently performed task. And with the flexibility that the Salesforce platform provides, there are a range of options available to best meet the type of integration required. Choosing a solution for a specific project is typically a function of the business process being implemented and what technology infrastructure is preferred (or already in use).

The term "integration" can legitimately be used to describe an array of use cases and requirements. This paper focuses on the common "enterprise integration" or "system-to-system integration" scenarios that involve connecting a company's front-office CRM systems to its back-office accounting and ERP counterparts. In planning these types of integrations, note that the technology and design patterns will likely vary considerably.

Key Consideration with Salesforce.com Integration –

- The design of and technology used in an integration are dependent on the type of business process being integrated
- It is useful to understand the business process, data transformation and application connectivity requirements for integration before choosing specific implementation technologies
- Key salesforce.com features, including Web Links, custom objects, and building Web applications are often used in creating powerful and successful integrations

Integration with other Applications

Outlook Integration/ Lotus Notes/ Google Apps

Sales reps and managers love the Sales Cloud because it works with the other applications they already use every day. Whether your company uses Microsoft Outlook, Lotus Notes, or Google Apps, you and your teams won't have to change the way you work. The Sales Cloud and your favorite apps are joined together so you can simply work smarter. You can synchronize Salesforce CRM with your Microsoft Outlook address books, calendars, and even email to dramatically improve productivity and organization-wide visibility. You can even embed Salesforce CRM directly into Outlook for those who prefer working in Outlook. Thanks to streamlined navigation, you can quickly perform tasks or find what you need in Salesforce CRM right from your mobile device. From pop-up reminders to customizable layouts, Salesforce CRM makes it easy to do more on the go.

CTI Integration

Salesforce.com's Call Center Edition enables an organization to integrate their telephony solution to Salesforce.com to perform routine call center functions such as screen pops, call transfers, outbound dialing etc. Salesforce.com provides a toolkit to partners such as Cisco, Genesys, Envoy, and Skype allowing those partners to build a seamless CTI interface within the Salesforce.com web experience.

Mobile Integration

From free Mobile Lite access to the full version, the Sales Cloud's mobile capabilities keep you connected even when you're on the road. With instant access on your handheld device, you can log calls, respond to hot leads, and access vital information like opportunities and dashboards whether you're in a customer's lobby or the back of a cab. View our mobile overview or watch demos for popular devices: Blackberry or iPhone.

BUSINESS PROCESSES

As varied and unique as the business processes between Salesforce and ERP/account systems appear, they can almost always fall into one of the following three categories. Note that while all are common, most enterprises do not implement all three; choosing, instead, to implement only those most relevant to their requirements.

Account Master:

The first and most commonly implemented process, account master describes how systems share a notion of the account and related contacts. As the account is the core unit for both CRM and ERP activity, having a shared reference to an account between systems is the cornerstone of most integrations. Typically, the ERP/accounting system serves as the "master" for existing customer accounts, whereas non-customer "prospect" accounts are maintained only in Salesforce.com, with a separate process to promote them to customers when appropriate. A similar process exists for sharing product data between systems, although this is only necessary if a common product master is also required. Understanding if and how Salesforce.com product features will be used in an implementation is key to determining if this latter integration is necessary, and also has effects on the order integration design.

Order Integration:

In contrast to account master, information in the order integration process flows from Salesforce.com to the ERP system, and is typically triggered when a sale is completed or a new deal won. This process describes how those deals are converted into orders, which can then be used for billing, accounting, and collection as part of a company's back-office operations. A key consideration in this process is how those orders are configured and entered; some companies have simple requirements that allow orders to automatically flow from Salesforce.com to ERP, while others with more complex products require an "order configure" or entry step. Related to this issue is how and if Salesforce.com's product and price book features are used; if so, this naturally represents an additional integration consideration.

Billing and Account Status:

This process describes how information from ERP systems is made available within Salesforce.com, typically to provide a view of the data to sales and support users. By completing this integration, companies can provide a complete view of account activity across CRM and ERP systems—including, for instance, customer contact history with billing and order information in a single location. As such, information from the ERP system is typically treated as "read only," and either copied into an Salesforce custom object (which is, in turn, related to the account) or made available from an account screen via a Web link that pulls the information on demand from the back-office system. The former model, where the data is stored in Salesforce.com, has the benefit of allowing full reporting and dashboard access to the information directly from the Salesforce.com user interface for free—without any additional integration work.

Methods for Enterprise Integration TECHNOLOGY

As a Web-services-based API, Salesforce supports a wide array of technology options, allowing companies to use the tools and skills of their choice in implementing integrations. Understanding the basic categories of technologies is useful in selecting the most appropriate choice for a given use case and company.

Pre-Built Connectors

Some partners, sforce & eBridge, offer pre-built integration solutions between Salesforce.com and popular accounting packages, such as QuickBooks or Great Plains. For companies with "off the shelf" accounting solutions, this option may be the simplest. Salesforce.com sales engineers can provide details on the list of support partners and associated packages.

ETL – (tools)

A common approach is to use an ETL (Extraction, Transformation, and Loading) tool to perform a batch migration of data between Salesforce.com and the target system. These tools (one example is Data Junction) typically provide connectors to both systems, as well as the facility to map and transform data between them. As a result, ETL-based solutions typically require little to no programming and can be setup to move specified sets of data on a regular basis.

Point-to-Point Custom Applications (Webservice)

Since Salesforce supports a broad range of languages and platforms-including any that support SOAP-many customers prefer to create custom applications that perform the ETL function programmatically. Typically developed in Java, .NET, or Perl, these solutions benefit from having direct access to the Web services API, and thus can provide greater control over the integration process-helping out in such ways as polling only for changed records. Additionally, this control allows for more complex integration tasks, such as additional lookups or data cleansing, to be accommodated more easily than is possible with many ETL solutions.

EAI

For companies with existing EAI solutions or message-based integration strategies, using a complete EAI solution like those provided by TIBCO and WebMethods can provide the full set of integration capabilities-including connectors, monitoring, and transformation-required of sophisticated use cases. In addition to connecting to any EAI solution that supports SOAP, a Salesforce.com TIBCO Integration Server is available as packaged software and services offering.