

WHITE PAPER

Future-Proof Your Cloud Integration: Three Trends You Must Understand

snapLogic®

Introduction

By lowering costs, shortening schedules, and making tremendous on-demand processing power available to enterprises of all sizes, cloud computing is transforming the way businesses operate. Unfortunately, many of the benefits of these exciting new capabilities have been blunted by the age-old challenges of integrating information among disparate systems. This headache is especially acute given the widely dispersed nature of cloud-based applications, as well as their need to communicate with on-premise systems.

Fortunately, the seasoned technology visionaries at SnapLogic have created a fresh approach that streamlines and simplifies how data is orchestrated among systems, regardless of their location or data type. In this paper, we'll introduce SnapLogic's groundbreaking techniques that overcome previously insurmountable impediments to coordinating information among on-premise as well as remote applications. We'll also describe how SnapLogic's strategy lets customers focus on innovation, rather than integration.

This paper is written for IT leadership, line-of-business executives, and anyone faced with the difficult task of tying data together from two or more disparate applications.

Three Trends You Must Understand

When you consider how easy it is to try, buy, and deploy new cloud-based applications, it might be difficult to appreciate why cloud computing introduces its own set of unique information consolidation obstacles. Let's look at three trends you must understand in order to future-proof your cloud integration.

1. Cloud computing = more applications and applications providers

Until fairly recently, there were significant barriers to starting a technology firm. However, commodity hardware, open source software, and inexpensive, high-speed Internet access have obliterated these obstacles. Users and administrators now have a much wider selection of best-of-breed, highly specialized applications, frequently delivered as Software as a Service (SaaS). Examples of these new offerings range from travel and expense management, human resources, marketing automation, and commission tracking, to name just a few. Unfortunately, in the race to deploy and benefit from these new solutions, significantly less due diligence is being performed. This is especially true regarding how these new technologies will be connected with existing applications.

Ironically, while SaaS is associated with more rapid implementations and lower expenses, it also tends to render previous integration techniques obsolete, for two primary reasons: your data is stored offsite, and SaaS vendors generally don't provide access to the underlying database.



Thousands of SaaS Vendors

2. Cloud computing = more application delivery platforms, accessed from anywhere

In the past, most software solutions were either written by internal personnel, or were packaged applications. In either case, this software was easily categorized, hosted on-site, and accessed during normal business hours by users in their offices or over a secure virtual private network, using PCs or workstations.

The situation today is far more complex. As we just described, there are now many more types of applications in the IT portfolio. Some are hosted on-site, while others are cloud-based. To make matters more challenging, users interact with these solutions via a diverse collection of new devices such as smartphones and tablets. Furthermore, they've come to expect access to real-time information from anywhere, at any time.

To maximize the value of your investments, you'll want to synchronize data across all applications, regardless of where they reside.



24/7 Delivery of Apps to Desktops, Laptops, Tablets, & Mobile Devices

3. Cloud computing = more sources of complex data

Along with new classes of data from social networking and mobile devices, today's IT organizations must also attempt to digest information from numerous, disparate sources including:

- Internal applications
- Cloud-based solutions
- Externally purchased data
- Industry-specific statistics
- Government-supplied information

While the number of data sources continues to multiply, the sheer amount of information under management is ballooning even faster. Internally hosted, inexpensive and scalable infrastructure such as servers, processors, databases, and so on make it cost-effective to capture and analyze prodigious amounts of new data. To derive business value and remain competitive with your rivals, it's critical that this new information be put to work as effectively as possible. However, as we'll see next, traditional integration technologies are unable to cope with today's new realities.

Why Client/Server Integration Techniques Don't Work Anymore

In the past, IT organizations employed a variety of techniques to integrate applications within the four walls of their datacenter. These have ranged from relatively ad-hoc strategies such as one-off, hand-coded integration scripts all the way up to centralized, robust technologies such as enterprise service buses. Regardless of the chosen approach, the end results were usually costly, distracting from core business operations, and difficult to scale.

These procedures are generally inefficient when it comes to cloud-based applications. First, as we stated earlier, most SaaS vendors do not provide direct access to their underlying databases. Direct interaction with relational data had been the predominant model for traditional on-premise enterprise application integration implementations. Instead, interactions with SaaS-based data are usually achieved via published application programming interfaces (APIs).

Secondly, when companies were integrating just a few massive enterprise applications such as Siebel, SAP and PeopleSoft, there were fewer potential integration points. Today's environment mandates a new approach.

For example, even a relatively simple portfolio of five key solutions represents 10 potentially complex bi-directional integrations. Things get much more challenging when more applications are in the mix. With a portfolio of 20 applications, the number of potential two-way integrations is now 190. To tie three systems together, 20 applications equals 1,140 possible combinations. Figure 1 illustrates the exponential growth of integration possibilities as the number of applications and data sources climb.

Finally, user assumptions and demands are constantly advancing: as we described earlier, they want real-time access to data, on the device of their choice, wherever they may be.

Implementation cycles are shorter now as well. Users expect instant gratification: they know that setting up a SaaS solution can be accomplished in a few minutes, so waiting six months for integration is no longer acceptable. A recent InformationWeek/SnapLogic poll demonstrates just how important integration is to business agility.

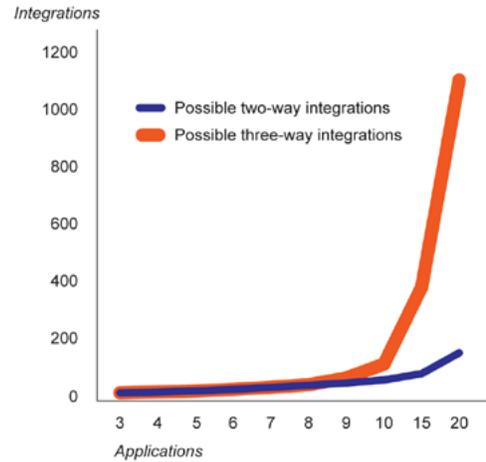
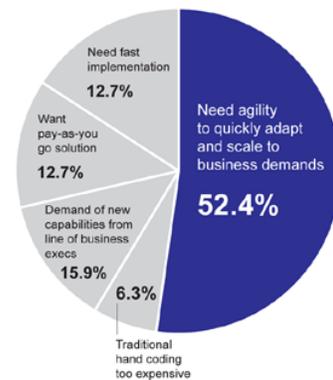


Figure 1: The Number of Potential Integrations Among Applications



InformationWeek/SnapLogic Poll: What are Your Primary Drivers to Employing a Cloud Integration Solution?

SnapLogic: Integration Designed with the Cloud in Mind

As the Founder and former CEO of Informatica, one of the most successful integration technology providers, Gaurav Dhillon realized that earlier techniques for orchestrating data simply wouldn't work in the modern cloud computing era. This epiphany led him to found SnapLogic, which has created a complete product set designed for the realities of today's IT landscape. SnapLogic's technology provides highly scalable, standards-based integration for software that's hosted internally as well as in the cloud. It decouples integration from applications, and blends a robust technical architecture with a revolutionary business model.

“Traditional approaches to integration are no longer adequate when you have literally dozens of SaaS applications, all needing to talk to each other. If every change, customization or refinement becomes a project, we can't keep up. SnapLogic changes all that—elevating us out of code level and putting the power directly into our hands”

— Mark Brennan
 Director, Business Applications
 Pandora

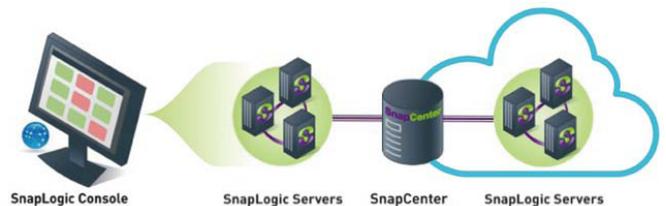
Technology Innovation Combined with the Massive Scalability of the Web

Instead of rehashing the same types of hard-coded, brittle, and costly adapters that have been in use for decades, SnapLogic introduces the concept of Snaps: application and language-neutral connectors that abstract away much of the complexity previously contained in adapters. The result is that Snaps are far simpler to develop and deploy, which has led to a thriving ecosystem that we'll soon describe.

Rather than mandating a closed environment and proprietary messaging structures, SnapLogic uses the same widely adopted communication techniques and open protocols – such as HTTP and Representational State Transfer (REST) interfaces – as the globally scalable World Wide Web. The SnapLogic solution is comprised of three primary components: SnapLogic Server, SnapLogic Designer, and SnapLogic SnapCenter. Let's look at each of these elements in more detail.

SnapLogic Server

Deployed on-premise or in the cloud, SnapLogic Server goes beyond traditional extract, transform, and load (ETL) capabilities by offering them as discoverable, callable, and reusable data services. It's able to integrate data from any source, including SaaS, on-premise, and Web-hosted databases and applications. Clustering and multi-threading, which lets multiple servers work together to accommodate parallel data flow executing requests, offers enormous scalability advantages.

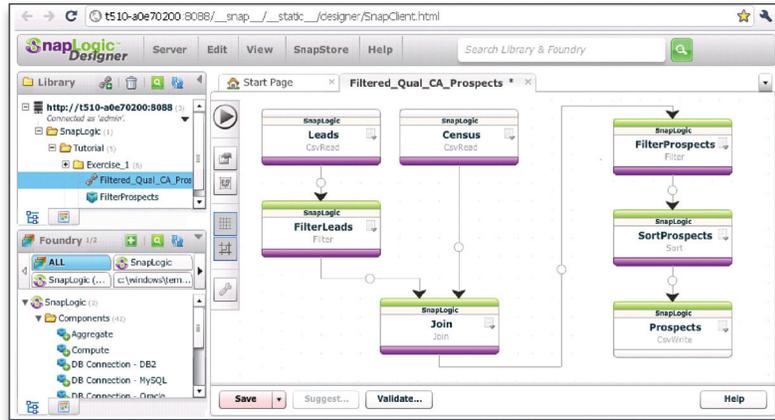


Flexible and Scalable Deployment. On-premise, in the cloud or both.

Despite all of this power, SnapLogic is designed for ease-of-use: most integrations can be handled without any coding whatsoever. For those scenarios that do mandate unique customization, SnapLogic offers an intuitive yet highly capable user interface, designed for maximum productivity.

SnapLogic Designer

By furnishing a rich, browser-based interface, SnapLogic Designer makes it possible for anyone to assemble integration pipelines using a familiar drag-and-drop approach. All pipelines can be previewed and executed directly from within the Designer. For developers needing lower-level access, SnapLogic Designer also presents a complete RESTful API. Finally, it's fully integrated with the SnapStore, making it easy to leverage pre-built integration components.



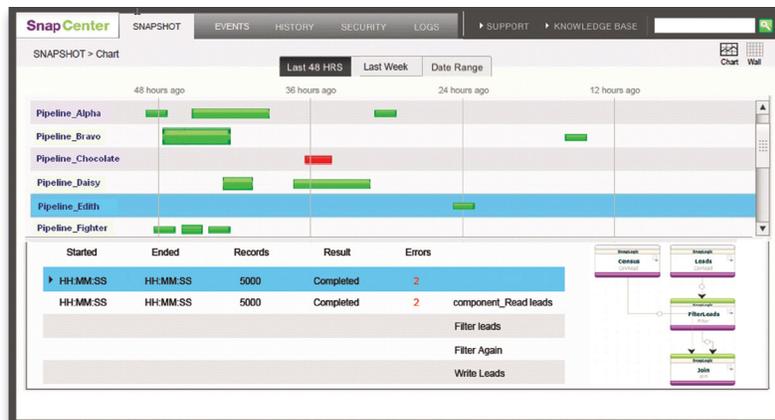
SnapLogic Designer Makes It Easy

SnapLogic SnapCenter and SnapLogic Console

SnapLogic's SnapCenter controls and monitors one or more integration pipelines and SnapLogic Servers. As the volume of your integrations increase, you might have one or more SnapLogic Servers on premise, but enjoy the capability to burst out to the public Cloud during peak times or for unexpected increases in demand. Thus, the solution scales like the Web.

In order to separate the design and monitoring roles, a separate operational and administrative view of SnapCenter is provided through the SnapLogic Console.

SnapLogic Console supplies a comprehensive picture of clustered servers, data flows and connections. Administrators are able to drill down and perform root cause analysis of any issues, greatly increasing their productivity.



SnapLogic Console

SnapStore – A transformational business model

Anyone who depends on a smartphone such as an iPhone or Android-based device can vouch for the pleasant, simplified process of acquiring and installing software on their phone. To make these excellent user experiences possible, Apple and other vendors have created central clearinghouses for value-add software. In the case of Apple, its App Store offers a massive selection of certified thirdparty applications that are innovative, affordably priced and guaranteed to run properly on the iPhone.

SnapLogic is the first technology vendor to embrace this concept for integration software. By signing up for SnapStore, third-party vendors are able to create and sell specialized Snaps that are validated and approved by SnapLogic. Snaps are 'sandboxed', which guarantees that they will not cause any side effects on other Snaps or the underlying operating system, thus significantly increasing both quality and buyer confidence. Customers can create their own private Snaps, buy Snaps from the SnapStore, and even customize Snaps to fit unique business requirements. Finally, by serving as a central integration clearinghouse, SnapStore is home to a growing number of best practices. SnapStore is a visionary method for designing and selling enterprise integration software. It recognizes that no single vendor can create all possible integration solutions. Instead, it offers financial incentives for third parties, such as developers, system integrators, and independent software vendors to create Snaps. This is a vastly more scalable practice than followed by proprietary, closed ecosystems. The SnapStore features nearly 100 Snaps supporting over one thousand connection combinations from 50 vendors, and new additions arrive each week.



A Selection of Snaps Available in the SnapStore

How Customers Benefit from SnapLogic

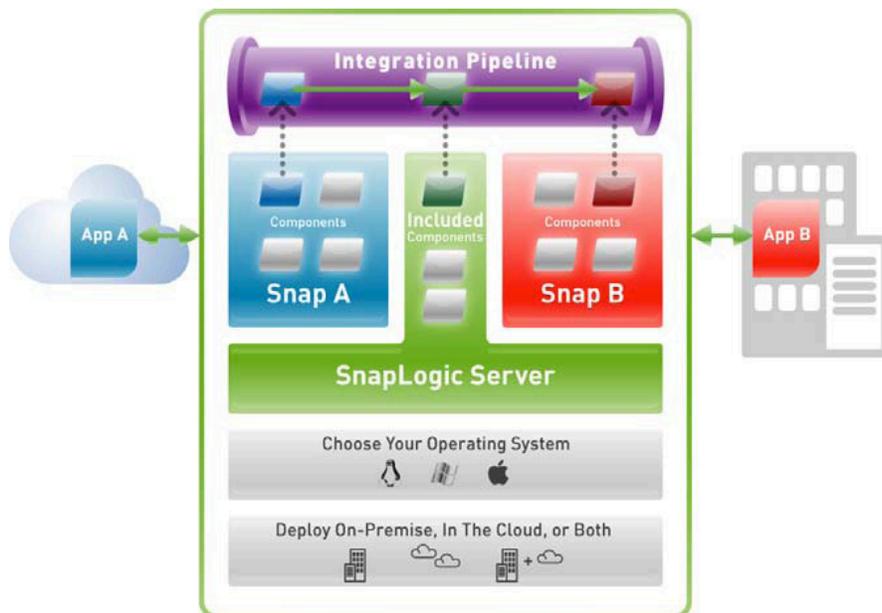
Now that we've examined SnapLogic's technical capabilities and groundbreaking business model, let's explore how you can leverage this technology to optimize your operations while reducing expenses. First, simply eliminating hand-coded integration will cut development and maintenance costs. This lets you concentrate expensive, scarce software development talent on your core line of business and competencies, rather than being distracted by extraneous responsibilities.

Moving beyond cost savings and efficiencies, SnapLogic's approach to integration makes new classes of previously unaffordable connections possible. This is brought about by SnapLogic's ease-of-use, the growing number of Snaps available in SnapStore, the flexibility that lets customers develop their own, application-specific Snaps, and the thriving ecosystem of certified third-party Snap providers.

As integration becomes more cost-effective, it's now possible to gain actionable insight by easily and affordably linking data between disparate applications. Let's explore three real-world scenarios that illustrate this concept in action.

Make better, more-cost effective marketing decisions: Cloud to on-premise integration

In this example, a retailer is able to correlate outbound publicity campaigns maintained in a cloudbased marketing solution with real-world sales results garnered from an on-premise point-of-sale package. Tying these two previously isolated systems together helps precisely quantify the results of marketing campaigns. This helps the organization make more intelligent marketing investments.



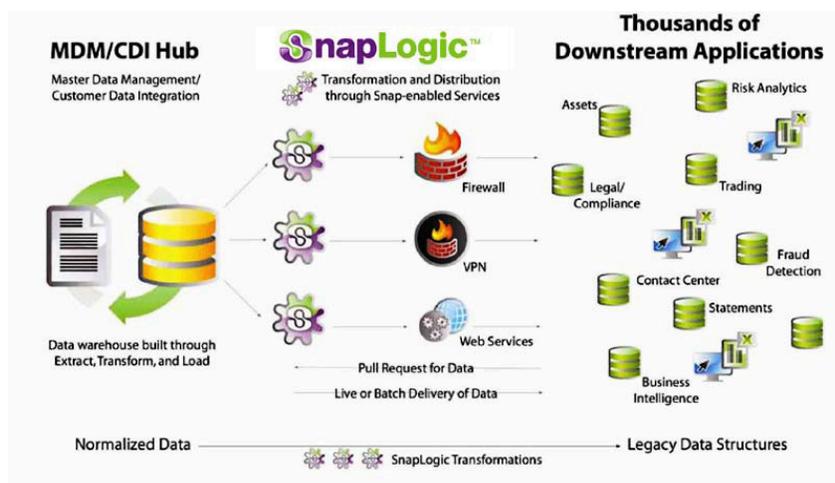
Create a 360 degree customer view: Cloud to cloud integration

Most enterprises continually strive to piece together a complete picture of their customers, an admirable effort made more challenging by the cloud - until now. In this scenario, a financial services organization has rolled out two SaaS applications from different vendors. The first solution offers trading services, while the second is a customer relationship management (CRM) package. With information fragmented between these two silos, it's extremely difficult to accurately address client inquiries, especially when time is of the essence. This discontinuity results in unhappy customers and lost revenue. Fortunately, by connecting these two externally hosted applications with an integration solution tailored for the cloud, it's much easier to instantly obtain a comprehensive client overview and thereby boost customer satisfaction.

Enable self-service data integration solutions: On-premise integration

Whether generated by incompatible application software, isolated information silos, or business activities such as mergers and acquisitions, duplicate data plagues most large enterprises. It wastes time and money, frustrates employees and customers, and often leads to incorrect decisions. Master Data Management/Customer Data Integration (MDM/CDI) is a proven technique for combatting this problem. It provides a 'single source of truth', which delivers benefits ranging from increased revenue to a more positive customer experience.

With an industry tradition of growth by M&A, banking enterprises are particularly vexed by duplicate data, leading many to implement MDM/CDI solutions. As shown below, SnapLogic enables MDM and CDI data to be easily consumed by downstream applications. Core IT teams can let line-of-business specialists serve themselves to create data integration solutions using live or batch fed data from MDM or CDI data warehouses.



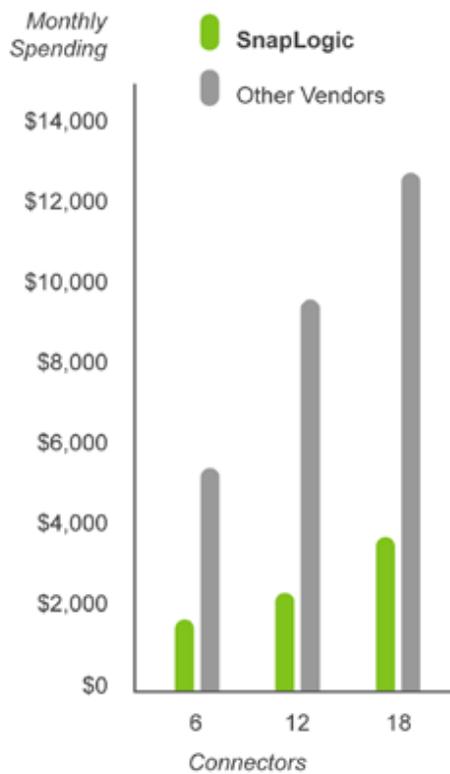
SnapLogic Providing Access to Master Data Management/Customer Data Integration

SnapLogic's Lower Total Cost of Ownership

As we've established throughout this paper, SnapLogic offers a collection of impeccable technical credentials and is uniquely positioned to address the integration challenges presented by the Cloud. Fortunately, SnapLogic also provides solid business justifications for selection as a strategic IT asset. SnapLogic's simple "all-you-can-connect" per server pricing encourages you to continue to connect your business.

"We liked SnapLogic's value model, which delivers the right blend of buy-and-own and pay as-you-go."

– Steven Mandelbaum
Managing Director
The Advisory Board Company



"Right-Sized" Integration for the Connector Problem

Conclusion

Cloud computing solutions are being adopted at an accelerating rate. This means that your organization will be forced to cope with ever-increasing integration complexity. You'll need to work with more applications than ever before, and many of these solutions will be delivered as SaaS. In addition to traditional software packages, you'll also need to contend with new classes of applications, such as mobile and social networking. Existing integration techniques simply won't scale to this new reality.

They were designed for a different era, and can't be easily retrofitted for today's situation. SnapLogic works with information wherever it resides: on-premise or in the cloud. Constructed on the flexible, scalable foundation of Snaps, it's designed with modern, distributed data sources in mind. An entire ecosystem has grown around the revolutionary SnapStore concept, which increases variety and quality, yet reduces cost. The end result is that you can spend more time on innovating, and less on integrating.

To see how SnapLogic can benefit your organization, download and install a 14-day free trial by visiting SnapLogic.com.

About SnapLogic

At SnapLogic, we are transforming how companies connect business applications, both on-premise and in the cloud. With SnapLogic, companies can connect any combination of applications and data sources while achieving a radical improvement in cost and performance over traditional integration solutions. SnapLogic Snaps — application-specific connectors — can be instantly downloaded from the SnapStore, the world's first online integration store. The SnapStore model allows developers, system integrators, and independent software vendors to build and sell purpose-built Snaps for both widely used and emerging applications. As an independent integration company, SnapLogic reduces vendor lock-in risk by providing open extensible solutions for all software, applications and infrastructure.

With SnapLogic, integration is a "Snap."