

# OpenLayer

## “The Vision”

By Vijai Garg

Cloud? What is cloud? Currently there are as many definitions of cloud computing as there are vendors and analyst. The most common denominator is the Internet.

Today; businesses are often caught between the Internet (cloud friendly) and their trusted legacy (client server) systems. Increasingly they are finding there is a pressure to provide their legacy system’s information and transaction capabilities conveniently over the web for use by their customers and agents. Currently, cloud solutions are focused on a small fraction of a company's needs. The current state of Cloud Computing is focused on only about one-third of business needs, developed in recent past. The other two-third of business processes live in legacy client-server applications. Businesses rely on their client-server applications to run the company, but increasingly this information is also needed on the web. Trying to meet these opposing needs is like changing the tires of a vehicle which will blow if it slows down.

Most modernization solutions offered today in the market are services based, complimented by a series of software tools to allow them to “rip & replace” and augment existing applications. The route from legacy to cloud is crowded by many working hands trying to understand current business processes, reverse engineer, and rewrite these business processes, but does not include innovative or creative solutions. Currently the adopted approach of “rip and replace” replaces the maturity (translated stability) of the business process and brings it down to the infancy level. OpenLayer is a new and different approach which transforms legacy client server business applications to cloud friendly applications by providing an unbound user interface and interaction. The resulting transformed system performs as if the original architecture was designed as a Cloud Friendly system without ever having to touch the original code.



Each application and portal has different challenges

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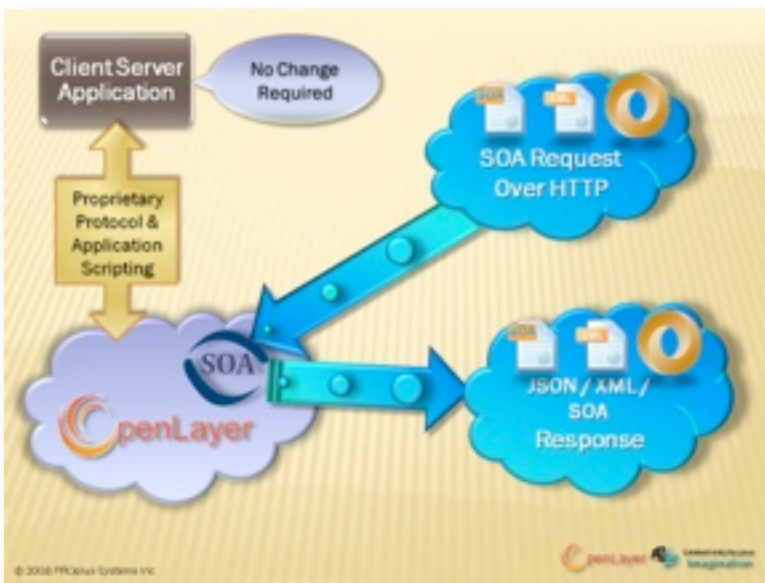
and technology requirements. The real question is; how do we achieve bidirectional collaboration across these applications and portals without heavily investing time and resource into each of these applications? To have the best of both worlds, turn these applications into a Business Logic server and transform the fully baked UI to a UI server. This will enable us to get information from the application instead of the more commonly adopted approach of working with raw data and reapplying the business rules.

OpenLayer is decoupled from any single application or portal. Rather, it serves as universal mechanism for accessing any application or service through any device. It also is the user interface for SOA, allowing IT departments to invoke and universally deploy composite applications from any source inside the enterprise or out in the cloud. As OpenLayer is a true UI server, interfaces with Rich Internet Applications (RIA) and will allow fully functional, cross-platform interfaces no longer handicapped by the limitations of browsers.

The architecture of OpenLayer brings us closer to the User Interface dream of a Universal Client. OpenLayer serves as a universal access point. It provides the ability of a unified user interface and interaction across a multitude of applications along with a wish list of integrating the web 2.0 technologies and the vision of its characteristics. OpenLayer enables you to grow your network as new technologies are introduced. For example, OpenLayer presents an unbound user interface of dissimilar applications to the user by concealing the traditional inhibitors to easy integration and interaction; the user does not have to keep flipping between applications. Information collected from various diversified applications is presented to the user in a unified user interface and the same information can be updated back to more than one application, thus keeping the data of these applications in sync. Thus applications can be exploited by users in a variety of fashions to embrace the true web 2.0 / 3.0 characteristic, the cloud. In today's world, the need for a software environment that encompasses the Services Oriented Architecture (SOA) cannot be ignored. SOA governance is not optional – it is imperative. SOA should not be treated as an IT issue only. SOA works to merge the business and IT

environment. Thus IT becomes part of corporate governance instead of a support infrastructure.

Analysts predict that SOA business will grow to the tune of 150 billion. It is also a fact that most of the enterprise trusted legacy applications are either not compliant or require tremendous amount of rewrite to meet the needs of SOA. OpenLayer brings existing trusted legacy applications screen interface to SOA compliance. With OpenLayer, organizations do not have to develop SOA compliant solutions and then develop a user interface to cater to it. OpenLayer reverses this process and uses the existing interface of the applications and transforms these to become SOA compliant.



OpenLayer stands alone from any application and serves as a universal access point across the applications and beyond. It is a common user interface service that seamlessly shares and presents information and helps in coordinating these diversified essential applications. Companies that employ such solutions will be more flexible and agile and will find that they are ready to foster innovations in the user interface and user interaction (UI2) world.

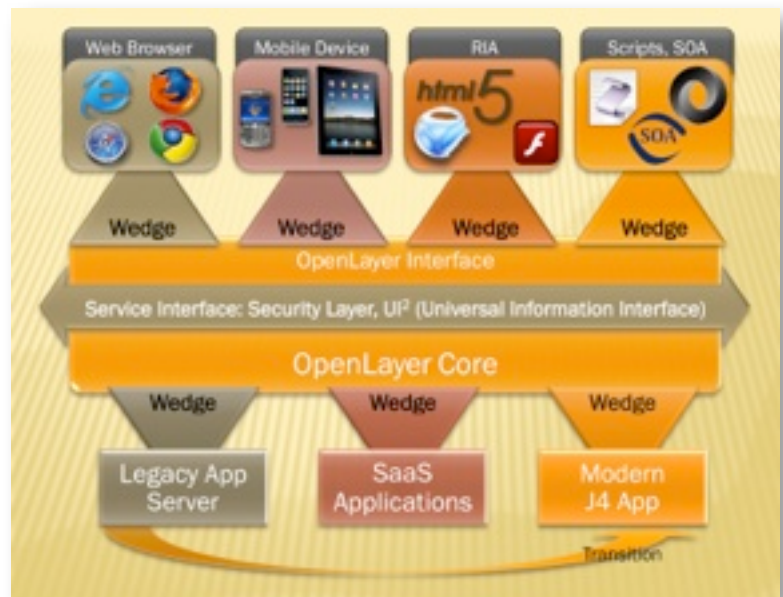
OpenLayer as an independent UI server can create a rich user interface for flexible user interaction. It provides a common user interface across applications as well being ready to adapt to existing and emerging technologies like AJAX, Flex, Silverlight, Laszlo, etc. In addition it provides a platform for weaving a rich, dynamic, flexible and natural user experience.

OpenLayer enables companies to provide a 360-degree view of business processes and information while working as a conduit among the trusted legacy applications. Thus all your business processes can be aligned and orchestrated into a fluid, dynamic software architecture.

OpenLayer acts as a single gateway to all applications and processes. Each process and application has their own set of authentication and authorization rules. All your security concerns can be implemented at this gateway instead of managing for each application and portal.

In a world drawing closer together where globalization is key, OpenLayer will provide the solution that can meet the globalization needs. You can translate and convert your base language applications into any language. All globalization sensitive components such as date, currency, and display (right to left etc) can be handled by the OpenLayer server and user interface device.

The philosophy of “Unbound Portal” has been a driving force in the architecture and development of OpenLayer. Such as 1) The need for access through an endless parade of new devices, whether online or offline. 2) The need for access through the current de facto interfaces, including established applications like ERP, CRM, and desktop standby e-mail and office productivity suites. 3) The existence in every company of several unavoidable portals as provided by established strategic vendors, forcing organizations to integrate, interoperate, or federate information and processes between portals. And 4) The need for an interface or environment that delivers and demonstrates the value of a services-oriented architecture (SOA), including composite applications, mash-ups, and the invocation of external web services.



OpenLayer provides the ultimate in user configurability and Service-Oriented Architecture to existing infrastructure and the mix of trusted applications. This will ultimately let users build their own mash-ups and composite applications. OpenLayer brings all forms of application collaboration together which has

been long unfulfilled need. Such a development would offer limitless new opportunities to engage the user in enterprise systems and processes. OpenLayer brings diversified business process to single user environmentIt has been a long hoped for and anticipated goal for IT departments, businesses, and individuals alike.

Clearly, OpenLayer provides the next-next-generation of user interface and interaction to your applications. OpenLayer can be configured to work with any client-server trusted legacy application, and does NOT require any change (or minimal changes may be needed in case of thick-client applications) in the core application or its underlying technology.

Today's business must focus on the technology vision that is aligned with their business needs while giving a solid return on investments. We need to start planning for the solutions that take the first steps to make this vision a reality without incurring the prohibitive costs. We must think hybrid and

incremental approach instead of replacing or upgrading. We also need to articulate the goals of each step in this journey towards SOA by analyzing increases in productivity and bottom line while decreasing the cost of such solutions.

Today's business environment is similar to the dot-com boom. There was a rush to embrace the Internet and get to the competitive edge. Businesses became preoccupied with it, instead of imagining the hybrid world. There are similarities to where we are today. We are in a rush to adopt the emerging technologies like SOA, cloud compliance, and unbound interfaces; and there is a misconception that businesses will change suddenly, ignoring the

fact that the best way to get there is gradual progress. Embracing of a new technology model requires change, but at an incremental pace.

OpenLayer is definitely a much more economic solution without sacrificing the reliability and quality of your time tested applications. It is a fast world out there; to survive, you must be faster.

Finally; OpenLayer is game changing when it comes to modernizing legacy business applications.

Think Hybrid! Evolutionary approach!! Revolutionary implications!!!

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