How to Tackle Core, Back-end System Challenges using APIs & Microservices

Reduce backlog and release digital services faster with automated, microservices-based API integration and management

How to Tackle Core, Back-end System Challenges using APIs & Microservices

Allow your back-end systems to automatically embrace the power of the API through a modern microservices approach

In today's digital world, consumers expect instant access to information and services – if they don't get it, they move on. For established companies, keeping up with customer expectations can be extremely challenging, especially when they have a mix of back-end technologies that aren't fully compatible with web, cloud or mobile technology.

Many organizations have created APIs to extend their backend systems, but the process is lengthy and not easily scalable. Despite offering APIs and some digital services, organizations still aren't truly operating in a streamlined digital way.

As organizations look to the future with an eye on microservices, the question is "do you want to create your next hundred APIs the way you created your last 100? How can you design and run microservice APIs quickly – and manage them with traditional ESBs and API management tools?"

The Dual Nature of IT

Today, most organizations are working with a highly divided IT environment – simultaneously running a mix of traditional systems (ERP applications, mainframes, databases) and data center workloads alongside their modern digital and cloud solutions. While traditional systems may be the workhorses of an organization, companies still need to give customers and employees anytime, anywhere access to the information and services they support. This naturally means a shift towards mobile, cloud and web environments. As the gap between "old school and modern" IT solutions

Leveraging Open APIs

In modern IT systems and cloud environments, APIs have eliminated many of the interoperability problems found in traditional and legacy systems. Being portable, they ensure connectivity across multiple applications and most cloud solutions now use standards-based APIs to ensure that all developers can quickly write integrations in just a few steps.

As important, as organizations look toward microservices, it is essential that their APIs are also microserviceenabled and can be easily managed.

Unfortunately, most of a company's traditional IT systems – ERP systems, mainframes, and databases – don't offer APIs or a true microservices approach.

Instead, efforts to create APIs and microservices often do not make a company truly digital and may even add to layers of complexity.

OpenLegacy solves these concerns. We offer microservice-enabled API creation, integration and management to quickly extend your core systems as digital services for the web, mobile or cloud.

- Integration work tends to be done on a project by project basis and uses customer coding or complex middleware schemes that are very expensive and time consuming.

- There is no consistency or adherence to standards in the process which means that the integration work isn't portable and cannot be reused across multiple applications.

- There is a fundamental lack of understanding and shared skill sets between the managers of traditional and modern IT systems which further aggravates the gap between these two computing paradigms.

widens, organizations are finding themselves hampered by their IT investments and left searching for a roadmap to next-gen computing.

Considering the risk and expense associated with replacing core business applications and data center workloads, most organizations are trying to leave existing systems intact and make them accessible via integrations with cloud-based applications. This immediately solves a company's mobility issues and provides a cost-effective solution for increased user access to core systems. However, to date, this idea has often failed to provide the kind of rapid transformation organizations need for a variety of reasons:

Most organizations have started creating application programming interfaces (APIs) to solve traditional integration challenges. However, manually creating each API still requires developers with specialized skills to tackle each architectural layer, thus adding to complexity and project delays.

Clearly, a transformation path built on makeshift workarounds or manual efforts cannot survive for long. Organizations need to craft a strong, repeatable strategy that can work for all IT assets – be they old school or modern. For bi-modal environments, CIOs need a stable, reliable, standards- based solution for working with large, robust infrastructures that can be deployed quickly to ensure agility and rapid delivery of real results for the business.

Automatically & quickly create microservices APIs

At OpenLegacy, we believe the answer to speed, simplicity and security is automating API creation, testing, deployment, analytics and management with API software built specifically for core back-end systems.

OpenLegacy is the industry's first authentic, microservce-based API integration and management platform designed to extend core (legacy) systems to quickly create mobile, web and cloud solutions. To help companies rapidly generate business value, OpenLegacy automates the entire process, reducing projects that previously took months to just days. Unlike closed, 'black box' options, OpenLegacy offers a comprehensive, easy-to-use solution that lets developers customize all the layers of the code at every stage of the integration project.

1. OpenLegacy Connectors analyze IT assets – be it a mainframe application or a data center workload

– extracting strong-type metadata that is used to create a standard Java Object.

2. If needed, developers can use OpenLegacy's graphical user interface to easily edit the Java Object's metadata for a custom solution.

3. OpenLegacy provides ready-made Target Accelerators, or templates, for quickly building ready-made Web and mobile applications. Developers can choose to automatically transform the Java Objects into web or mobile applications, REST APIs, or SOA web services.

4. All OpenLegacy outputs are delivered in standard formats so that developers can continue to customize the output code as needed.

The OpenLegacy Advantage

A DISRUPTIVE approach to enterprise application integration, opening a safe gateway between back-end applications – including legacy systems – and modern mobile, web and cloud solutions.

MICROSERVICES-based API creation, integration and management, enabling organizations to break-down application monoliths into smaller, easily managed applications and future-proof their investment.

An AGILE, proven approach to integration and therefore innovation. One that does not compromise their strong systems of record, and non-invasively integrates between the traditional systems on the back-end and the front-end applications.

EASY and FAST, two words not usually associated with application integration – especially in traditional IT environments. It includes GUI-driven tools that let developers create and implement microservicesenabled APIs without any background in old school programming languages like COBOL. However, basic Java programmers can quickly complete a proof of concept within a couple of days. A combination of automated tools and standard editors speeds up the process while keeping the developer in control.

A SCALABLE solution that supports many users and connections simultaneously. It is built to perform with high volumes using open, standard, industry tools like big-league, proven and scalable frameworks, such as Netflix. By comparison, proprietary software often offers 'black box' solutions to protect the vendor's intellectual property. This prevents users from controlling how the software works, adapting it to suit their needs and innovating, and being as scalable as the market requires.

Puts CREATIVE INNOVATION into the hands of enterprises, empowering them to win in the risk-free delivery of business-driven solutions with surprisingly low costs and fast turn-around time.

The OpenLegacy Approach

For decades, the founders and developers of Open-Legacy have led critical customer-enablement projects for large IT providers and with major vendors. They understand the complexity of enterprise integration issues because they have lived it, and proactively sought a way to improve on existing methods by liberating the business value locked within existing IT assets.

Today, OpenLegacy is revolutionizing the way digital services are built and managed by leaping over layers of architectural complexity with a tool based on open standards that any developer can use, without special skills or COBOL experience. APIs can then be used - and re-used - for third parties, partners, or internal initiatives. And the APIs contain all the necessary configurations and components to function as a small microservice in a larger microservices ecosystem.

Our approach is based on a unique way of looking at the problem. Instead of asking how to change, rewrite, convert or migrate IT infrastructures, OpenLegacy asked "How do we open up the backend systems to the consumer; preserve the investment; mitigate time, cost, security and risk; put control into the hands of the enterprise? How can we ensure that they can continuously take advantage of the newest ideas in computing and meet ever-growing requirements for digital services and innovations?"

"Within two days, OpenLegacy created APIs for standard CBS transactions, including payments and other financial products, compared to the previous 5-7 weeks using the prior API orchestration product and existing IT architecture."
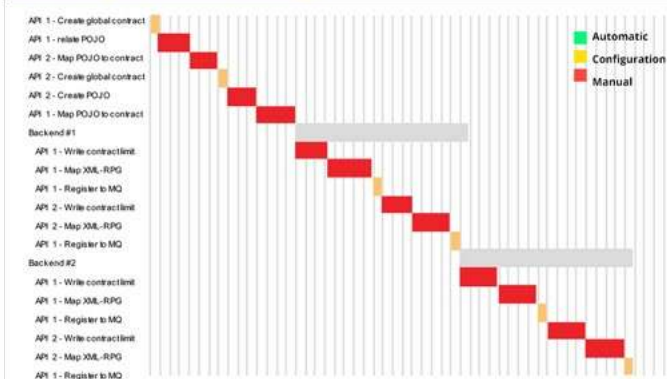
Bank Executive

The answer came down to developing tools that listen to and learn from the backend without making any changes to it. The non-intrusive approach created by OpenLegacy lets developers simply and safely use an agile methodology for accessing systems of record and integrating with systems of engagement such as mobile, web and cloud networks. The OpenLegacy solution is:

- Fast and easy with automatically generated APIs delivered in standards-based, open source formats; and graphical user interface tools to verify, customize and test them

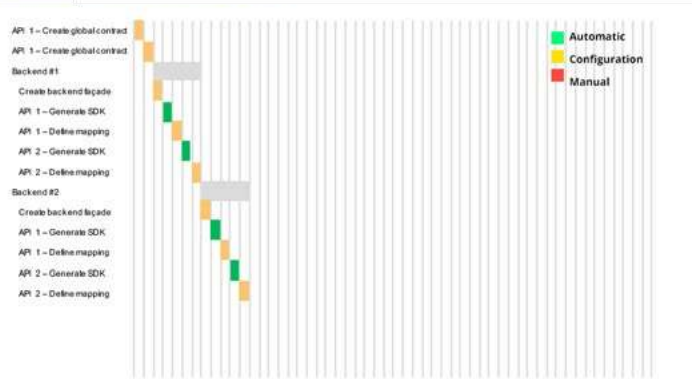## OpenLegacy Reduces Implementation Steps to Accelerate Your Time-to-Market

OpenLegacy Automates a Vastly Complex Process
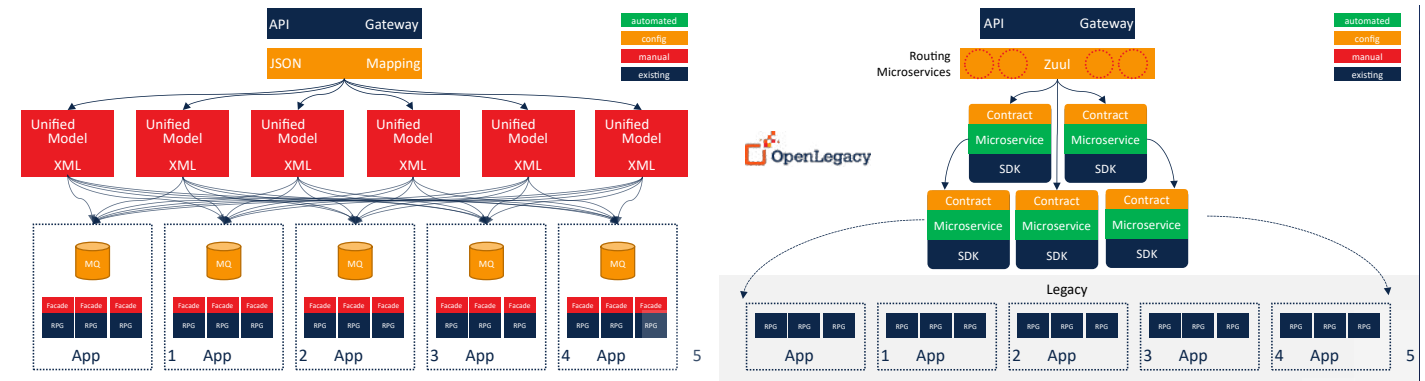
OpenLegacy simplifies and automates a complex process, removing manual steps.

- Flexible, with templates for creating mobile, web and cloud applications that comply with open standards and default templates that can be customized using standard tools

- Robust deployment with high availability and high capacity, supporting many users and connections simultaneously

Keeping up with evolving customer needs is faster, easier and more agile than ever before with OpenLegacy. By adopting an open solution that connects modern and traditional IT systems, OpenLegacy delivers business-driven solutions rapidly, effectively and affordably; putting control and innovation back in the hands of today's CIOs.

About OpenLegacy

OpenLegacy accelerates delivery of innovative digital services from legacy systems in days or weeks versus months. Our microservices-based API integration and management software reduces manual effort by automating API creation, simplifies the process by avoiding layers of complexity, and improves staff efficiency and API performance. Our software directly accesses and extends business logic to web, mobile our cloud innovations in the form of Java objects, REST APIs or SOAP. Most importantly, this process is not only fast, easy and secure, but also does not require special staff skills or changes to existing systems or architecture. Together, business and IT teams can quickly, easily and securely meet consumer, partner or employee demands for digital services without modernizing or replacing core systems. Learn why leading companies choose OpenLegacy at www.openlegacy.com.

OpenLegacy
OPEN INNOVATION

www.openlegacy.com
sales@openlegacy.com

Headquarters
11921 Freedom Drive,
Suite 550
Reston, Virginia, 20190

Chicago
541 N. Fairbanks Ct.
Suite 2200
Chicago, IL 60611

Dallas
Lewisville Vista Point North
405 State Hwy 121, Suite A250
Lewisville, TX 75067

Mexico
Av. Insurgentes Sur #730,
Col. Del Valle,
Delegación Benito Juárez,
Piso 2 México, DF. CP 03104

Israel
3 Mota Gur,
Olympia Park,
Petah Tikva, Israel

Switzerland
Rue Etienne
Dumont 1
Geneva, 1204
Switzerland

Hong Kong
18/F, 100QRC
100 Queen's Road
Central, Hong Kong