

Time to Retire Your Legacy Integration Middleware?



CHALLENGE:

Legacy middleware has a monolithic architecture, proprietary components, complex operating environments, and expensive licensing. A dated integration style greatly slows development by forcing integration through specialized software and staff.

SOLUTION:

To bridge this gap, organizations are tapping Container-based Microservices architectures to facilitate building agile business systems – systems that allow your business to change quickly, to build new functionality, to experiment, and to be more prepared to address disruptions.

BENEFITS:

- Faster innovation and time-to-value due to improved developer productivity and DevOps-style infrastructure management
- Lighter-weight architecture that can be deployed across different platforms, including cloud deployments
- Lower cost and risk with the acquisition cost a fraction of proprietary software, particularly when factoring in the wide availability of open source software (OSS)

UNPLUG THAT ESB

Integration has been an enterprise challenge for a very long time. In order to create the new products, applications, and services that organizations need to confront the digital revolution, you have to connect systems, data, and devices. There's no way around it. Enterprises struggled with point-to-point integrations, which created a spaghetti-like mess of code, and then, for many years, companies found a better integration solution with ESBs (Enterprise Service Bus) and an ESB integration approach.

ESB integration helped clear out the spaghetti mess created by masses of point-to-point integrations by providing a more simple, well defined, “pluggable” system that scaled well. In addition, ESB integration provided a way to leverage your existing systems and expose them to new applications.

But times change, and technology evolves, and for today's complex enterprise technological architectures – with their hybrid infrastructures and rapidly exploding number of endpoints – ESB integration is no longer adequate. ESB integration presents both technical and organizational challenges, reducing organizations' integration capabilities' effectiveness.

Organizations need to look beyond ESBs and consider a more containerized and decentralized approach to integration architecture. Here are the top 4 challenges with your current ESB-led approach:

- ESB integration cannot keep up with the pace and scale of modern innovation
- ESBs were not designed for the cloud
- ESB integration encourages a monolithic architecture with high cost
- ESB integration presents organizational challenges

JUMPSTART YOUR MIGRATION

ESB MIGRATION TO MICROSERVICES, CONTAINERS & DEVOPS (MCD)

A well-planned and executed integration migration will result in a modern platform to meet business needs for agility, and produce cost savings when compared to dated proprietary software.

Opticca's **Middleware Platform Migration Solution** is a comprehensive four phase engagement that will build the business case, plan for the migration and ultimately put you on the correct architecture path for integration success.

WHY MIGRATE

While many legacy enterprise service bus (ESB) vendors now support cloud features, they remain expensive and cumbersome in cloud deployments. Purchasing additional cloud integration tools is an option, but not necessarily a good one. With this approach, you end up with multiple integration tools and you'll need to re-work your integrations as you move applications to/from the cloud. This can prevent your business from taking advantage of cloud and SaaS applications.

Since these legacy integrations are mission critical and key to future success, it's necessary to take a proven approach to migration that reduces costs and risk by including the following steps:

- Assessment and business case
- Discovery and future state
- Architecture construction
- Development & testing
- Deployment management

MIGRATION BEST PRACTICES

INTEGRATION MIGRATION ASSESSMENT AND BUSINESS CASE

Migrating to a new integration platform should begin by assessing the current state of integration and capturing requirements from each integration to be migrated.

The assessment process gathers data needed for elaboration in the following steps. At this point, a clearer understanding of costs, benefits, risks, and timelines will be established.

PROCESS DISCOVERY AND DEFINING FUTURE STATE ARCHITECTURE

Collaboratively establishing the target integration platform, migration path, standards, and strategy through a series of interviews and analysis sessions.

Timing, effort, required skill set, training plan, and hand-over to ensure legacy functionality remains while providing a new platform to support new development.

NEW ARCHITECTURE CONSTRUCTION

The goal of the migration is not a simple lift-and-shift but improved architecture to establish a new platform for integration.

New architecture is achieved through installation and configuration of the Container and Orchestration Platform allowing immediate environment provisioning, deployment, and platform management to augment and facilitate DevOps, Microservices, and Container initiatives. Migration path will include the installation and configuration of various open-source technology tools to support CI/CD, pipeline deployment, environment provisioning, automation, Source Control, and other areas that support new DevOps, Microservices, and Container initiatives.

DEVELOPMENT AND TESTING

It is often not sufficient to do a one-for-one functional migration to get the desired shift in integration architecture.

The development approach to get the desired shift in integration architecture includes designing, developing, testing, and migrating the legacy services onto the new target platform. This exercise is based on the analysis derived during the assessment.

Deployment scripting and automation are part of the overall development effort. Slow deployment times defeats the speed gains made through architecture improvement.

DEPLOYMENT MANAGEMENT

The benefits of post-deployment managed support ensure business continuity.

A key element of Opticca's migration deployment management process is the measurement and reporting of program health. We achieve this through a series of Opticca-standard reports and templates and then customize these as necessary based on specific client needs.

FEATURES AND BENEFITS

The ROI of Microservices, Containers and DevOps (MCD) can be monstrous, no matter a company's industry. Given that cloud-scale applications are delivering the actual services customers are purchasing means delivering high quality, real-time user experiences is critical, and engineering, QA and operations teams require iterative and independent development processes in order to keep up. By using a modern application software design and development process such as Container-based Microservices and DevOps approach, companies and their IT teams can produce new software capabilities and services more efficiently, while also continually testing and detecting for user experience irregularities before they ever run the risk of impacting a company's customers or brand reputation.

- **Faster Delivery of Features and Changes.** Automating testing provides developers with faster feedback, and automating integration incorporates developers' changes more quickly into the code base.
- **Greater Efficiency.** Automating testing and integration, developers no longer spend big chunks of their day waiting for machines to be configured or code to be integrated.
- **Better Quality Code and Faster Recovery from Failures.** Developers stay involved and on the hook throughout the life cycle of a feature or an application, resulting in better-quality code. Fewer fixes are required because developers look for and eliminate potential problems as they write code. When failures do occur, bugs are more easily traced to their source because developers are working with smaller chunks of code. Meanwhile, human error is reduced by all the automation that MCD brings to the software life cycle. As a result, companies can deliver fixes fast.

SUMMARY

Business agility is arguably the most important objective for companies today. **Agility means speed and flexibility**, whether it's deploying new cloud apps, executing a merger or acquisition, introducing new mobile apps, or rolling out a new product or service. Integration is crucial to those and many other initiatives.

That's really what's driving demand for the modern platform. Companies are unwilling to tolerate both the time and cost of traditional middleware solutions, which require large integration teams to document requirements, map integrations, code connections, and migrate data over the course of months and months. In fact, today's companies cannot survive that kind of long-drawn-out project speed — not if they hope to maintain a competitive edge amid digital disruption in fast-moving markets.

Interestingly, we're seeing **MCD** helping much more than just IT. It's bringing significant benefits to operational business performance. Companies are able to drive revenue, reduce costs and increase customer satisfaction through the ability to access, integrate and orchestrate data across a connected business. Meanwhile, these **MCD** adopters eliminate the many pain points of legacy middleware.

Make no mistake. Legacy integration middleware was built well. The code and the core of what the technology does are sound. It's been backbone technology that has helped companies integrate and access data for many years, but the sun is setting on that legacy middleware, fast!

Companies no longer need on-premise integration — not when **MCD** does everything and much more that legacy technology does. And it does so at far greater speeds and much lower cost, providing companies the agility essential in helping today's modern connected businesses survive & thrive.

NEXT STEPS

To learn more about Opticca Consulting and our **Middleware Platform Migration Solution**, please contact your Opticca representative or visit www.opticca.com.



ABOUT OPTICCA

Opticca Consulting delivers revolutionary platforms that enable our clients to outperform their competition. We help our clients speed up application development and deliver value faster than ever before by adopting architectures using DevOps, Containers and Microservices, as well as supporting Automation and CI/CD pipelines. Our extensive partner network helps us drive collaboration and leverage technology independence. We've built a team of passionate technologists who truly care about achieving quality outcomes, building lasting relationships, and delivering on what we promise – every client is a reference. For more information, visit: www.opticca.com



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