



Consider 8 Before You Integrate

An Evaluation of “Free” Versus “For Fee” ESBs

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EXECUTIVE SUMMARY

Today, many organizations are looking for integration solutions to help connect existing disparate IT assets so they can become more agile to meet changing business needs. They are also looking for integration solutions when trying to power mobile and cloud initiatives. When adopting such a solution, they are sometimes lured into “free” versus “for fee” Enterprise Service Bus (ESB) offerings, the former often associated with Open Source Software (OSS). But as any open-source vendor will tell you, open source is free as in “free choice” but not free as in “free drinks”!

Since open-source ESB is perceived as being free—there are no upfront costs for license fees—and some companies are attracted to the ability to modify code to suit their requirements, it is considered a viable alternative to a commercial ESB solution. However, much of the excitement around an open-source ESB is isolated to specific user scenarios, and there are many factors to consider before investing in such a solution.

Small vendors, and most open-source ESB vendors are small, are an easy target for acquisitions. This can have two potential negative effects. First, the roadmap and the control of the OSS changes when ownership changes. This can have a major impact on your organization if your IT team depends on this software for critical projects. Second, in an acquisition scenario, there is no guarantee that the acquiring company will continue to support the OSS. The company could very easily shelve the solution for business and strategic reasons.

For instance, in April 2012, Progress Software Corporation announced plans to divest its non-core product lines, including open-source provider FuseSource®.¹ Following this, Red Hat® agreed to acquire FuseSource as well. The decision may have left many customers wondering if they should continue to adopt FuseSource. The roadmap of FuseSource will remain unclear for quite some time. The future of the solution will also be muddied considering that Red Hat has its own competing solutions as well.

Even MuleSoft™, an open-source provider of integration platforms, chose to offer its customers a commercial messaging application rather than Apache Active MQ™ due to its scalability and reliability concerns from end-users.²

Choosing an integration solution for your business is a costly, time-consuming and strategically critical decision. Although an open-source ESB may appear attractive at first glance, there are often hidden costs, business risks and unpredictable outcomes when your integration solution is not factored into the overall business strategy.

While open-source ESB may be perceived as free, the benefits of free license fees are quickly overshadowed by the costs to hire specialists to implement and support the software. In addition, because acquiring open-source software is easy at the developer level, leadership is not always included in the decision. As a result, such short-term solutions don't always support the organization's strategic expansion plans. On top of that, open-source ESB solutions are mostly a loose set of components that are not completely integrated out-of-the-box. The software also lacks support across other integration areas, particularly messaging, B2B and Service-Oriented Architecture (SOA) governance requirements. Finally, open-source ESB solutions lag the market overall in support of mobile and cloud applications.

The promise of free license fees, open code that can be altered to meet specific needs and freedom from vendor lock-in makes OSS ESBs attractive to some companies. However, for every perceived benefit, there are many inherent drawbacks. To determine which solution is best for your organization, consider both the benefits and drawbacks of each solution.

EIGHT POINTS TO CONSIDER BEFORE YOU INTEGRATE WITH AN OPEN-SOURCE ESB

Keep these eight points in mind when choosing between open-source ESBs and commercial ESBs for integration.

1. Open is not free

While cost is the most-frequently cited reason for implementing OSS ESBs, most IT decision-makers concur that OSS ESBs are not truly free. Open-source solutions offer “free choice” rather than free licensing. But the free choice to do whatever the organization wants comes at a cost. The benefits of free license fees are quickly overshadowed by the costs to hire specialists—whether in-house or consultants—to get the software up and running and for ongoing administrative and support costs. In addition, open-source integration software is difficult to configure and customize. Developers have to manipulate large XML files and write complex code to support relatively straightforward business requirements. Because of this, OSS ESB customers have to hire experienced developers who are comfortable working in open-source environments. Although the situation varies from application to application, determining the true cost of implementing and administering OSS ESB also depends on:

- An available pool of resources that have been trained on the system
- Tools that enable administrators to manage multiple systems
- The number of upgrades and patches issued by the OSS ESB vendor

In the end, open-source ESB has a significant Total Cost of Ownership (TCO) and its ROI is generally not higher than that of commercial ESBs. In fact, if not carefully managed, open-source ESB projects can quickly stretch any IT budget.

2. Plan for long-term growth

Investing in an integration solution can be costly and time-consuming. Companies must be certain their solution supports long-term expansion plans for at least the next decade, providing a sound infrastructure for B2B, SOA governance, Business Process Management (BPM) and Business Activity Monitoring (BAM). Organizations also must be certain that both the technical and business demands of the effort are managed properly.

As shown in Figure 1, because open-source software (in general) is very easy to acquire, developers are often the primary decision-makers when it comes to choosing OSS, and many firms still do not have formal policies regarding OSS implementation. However, developers and leadership alike must be on-board to ensure that the OSS ESB solution is integrated into the overall business strategy and can support important long-term initiatives. Open-source ESBs may be convenient from an adoption standpoint. But customers have too much at stake to trust their key infrastructure to a solution that has significant risks and threats.

Consider 8 Before You Integrate

1. Open is not free
2. Plan for long-term growth
3. Out-of-the-box vs. extensive integration
4. Make support a priority
5. Factor in your B2B requirements
6. Consider your messaging requirements
7. Control the roadmap
8. Look to the cloud

Investing in an integration solution can be costly and time-consuming. Companies must be certain their solution supports long-term expansion plans for at least the next decade.

Open-source integration software is typically a set of loose components—components that are not well integrated out-of-the-box and require extensive integration during the actual implementation.

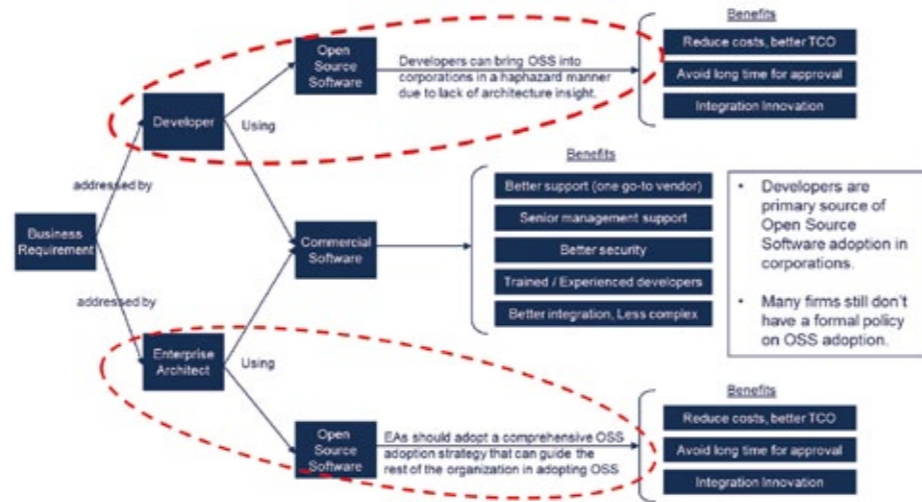


Figure 1: The OSS adoption decision-making process

Large corporations also often question an OSS ESB's ability to pass their stringent security and privacy requirements and scale to necessary requirements. It is widely known that OSS ESBs simply cannot match the scale and number of integration implementations of a commercial ESB solution. So, OSS ESBs usually target small companies or small projects (developer-based) at larger companies. In addition, companies must consider vendor viability. In a constantly changing industry, OSS ESB vendors may be acquired, merged or may fall to financial pressures, leaving customers with no continuity.

3. Out-of-the-box vs. extensive integration

Open-source integration software is typically a set of loose components—components that are not well integrated out-of-the-box and require extensive integration during the actual implementation. In addition, an OSS ESB provides limited options for scaling into BPM, BAM, B2B and SOA governance.

Another area to focus on strongly, in this regard, is to consider the depth of adapter offerings. Many OSS ESB vendors offer very limited adapters for packaged applications.³ This impacts developer productivity as the developer will have to write lots of custom code to leverage ERP functionality.

Unlike commercial solutions, in which the product components across these areas are pre-integrated, to get an OSS ESB implementation up and running, you'll need in-house experts or consultants to complete the installation and implement complex integrations.

4. Make support a priority

Most IT staff is already stretched thin. When it comes to OSS ESB, there are no proprietary software vendors maintaining code for companies who must install updates and upload new modules themselves. As a result, OSS integration customers are forced to harness the necessary support skills internally or via a support contract with a specific open-source ESB provider. With conflicting demands pulling staff in different directions, this doesn't always take priority. Without a support contract, companies run the risk of rapidly deteriorating software quality, patches that may not get installed, bugs that maybe left unfixed and, ultimately, an increase in overall TCO.

5. Factor in your B2B requirements

Integration needs are not always limited to internal applications and IT systems. Such needs can extend to entities, such as customers, suppliers and vendors, that are outside the company. In such a scenario, integration needs arise beyond the internal enterprise and, as a result, a B2B solution should be put in place that can work closely with their integration solution.

According to a major third-party industry analyst, open-source products lag the overall market in providing comprehensive support for a wide range of B2B standards. Most of the OSS vendors are narrowly focused on providing a limited services-based integration internally. But, as a growing enterprise, you will need the ability to bring external data seamlessly into your internal applications. This is only possible when your integration solution can easily support B2B standards and requirements as well.

6. Consider your messaging requirements

With the introduction of new delivery channels such as real-time Web, mobile and cloud, there is a need to provide messaging to deliver business data across a wide variety of delivery channels in a standards-based and reliable way. Businesses are looking to set up a low-latency messaging infrastructure that can support high-volume and high-speed requirements of modern supply chain, logistics and e-commerce applications. This has resulted in the emergence of universal messaging providers that support various messaging topologies (Publish/Subscribe, Peer-to-Peer, brokered, distributed) and platforms/protocols like MQTT and Web messaging in addition to Java® Message Service (JMS).

Open-source ESB providers don't provide best-of-breed "universal" messaging support across the various delivery channels and implementation topologies. OSS messaging software cannot support the high-speed and high-volume requirements posed by modern-day applications. As a matter of fact, MuleSoft, an open-source integration provider, used Software AG's webMethods Nirvana as the underlying messaging layer for Mule MQ.

Customers should consider their messaging requirements carefully before implementing messaging solutions with an open-source ESB.

7. Control the roadmap

Open-source integration software is built by a community of developers. As a result, individual OSS vendors have no control over the roadmap of the project. Since the open-source community does not necessarily have the same requirements and needs as the customer, the future of the product may or may not be in line with the customer's user requirements. Specifically, if the customer has key initiatives that need to be executed by a specific timeline, the unclear roadmap can be a major hindrance to IT delivery and performance.

8. Look to the cloud

Cloud-based models are becoming increasingly prevalent with the increase in adoption of Software as a Service (SaaS) in almost every company. Combine that fact with the increase in adoption of virtualized or private cloud-based models of integration solutions, there is a strong need for the ESB solution to run in scalable and high-performance mode in such environments.

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With the advent of such hosted cloud models, the cost differential between OSS ESB and commercial ESB applications will be further reduced. Because open-source ESB providers are smaller in size and do not support all integration categories, they will be forced to invest more heavily in supporting a cloud based model. As a result, they may end up passing on those investment costs directly to customers, further closing the gap in the cost differential between “free” open source ESB software and commercial ESB applications.

THE SOFTWARE AG WEBMETHODS ESB

Unlike open-source ESB solutions, Software AG has a robust enterprise application solution, based on the highly rated webMethods ESB, that also offers extensive roadmap planning and comprehensive support across all integration areas. Through our Prime methodology, Software AG provides out-of-the-box assets, including best practices, design and project deliverables that assist with identifying a strategy and accelerating implementation.

With more than 40 years of experience and dedication to a core suite of integration and BPM products, Software AG offers its customers applications that support long-term expansion plans. The solution offers additional benefits, including:

- Easy integration with any IT assets to streamline information exchange with any technology from any vendor, including ERP systems, databases, mainframes and legacy applications, SaaS platforms, Web services, JMS messaging systems and packaged apps
- Interoperability with any vendor, whether open source or commercial, enabling customers to safely tailor solutions to their strategic business needs
- Building-block-style architecture that is unparalleled in the industry, pre-integrating products across application integration, B2B, SOA governance and BPM
- Graphical development environment and pre-built adapters that result in high cost savings and faster time to market
- Global consulting support to facilitate implementation
- 24/7 basic and premium global support

CONCLUSION AND NEXT STEPS

Choosing the right integration solution for your business can have a significant positive impact on your success. And, because success in today’s market is closely tied to how quickly companies respond to change, your integration solution is the one that enables your IT team to quickly connect disparate IT systems and assure interoperability between cloud-based solutions and on-premise applications.

While open-source ESB solutions appear attractive at first glance, the long-term viability of providers is vital to the life of a solution. Today, even open-source vendors are reconsidering their strategies and partnering with commercial application providers to ensure reliability for their customers. In a constantly changing industry, open-source providers can be acquired; they can merge or dissolve due to financial pressures, leaving customers with no continuity. In addition, there are many unexpected costs and potential risks associated with an open-source integration solution. And, although the solution may be easy to obtain, it may not fit into your long-term business strategy.

When it comes to selecting a mission-critical solution that will impact virtually your entire business, it’s important to consider the benefits and drawbacks of your options. Keep the eight considerations outlined in this white paper in mind when choosing between open-source and commercial integration solutions.

To learn more about Software AG and our commercial ESB, talk to your Software AG representative or visit www.softwareag.com.

REFERENCES

¹ Progress Announces Strategic Plan to Increase Growth, Profitability and Shareholder Value, <http://www.progress.com/en/inthenews/progress-announces-s-58698.html>

² Worthington, David. (January 20, 2010). MuleSoft releases proprietary JMS server. <http://www.sdtimes.com/p/34068>

³ Gartner report: “Assess Open-Source ESB Vendors”, 1 Oct 2012



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