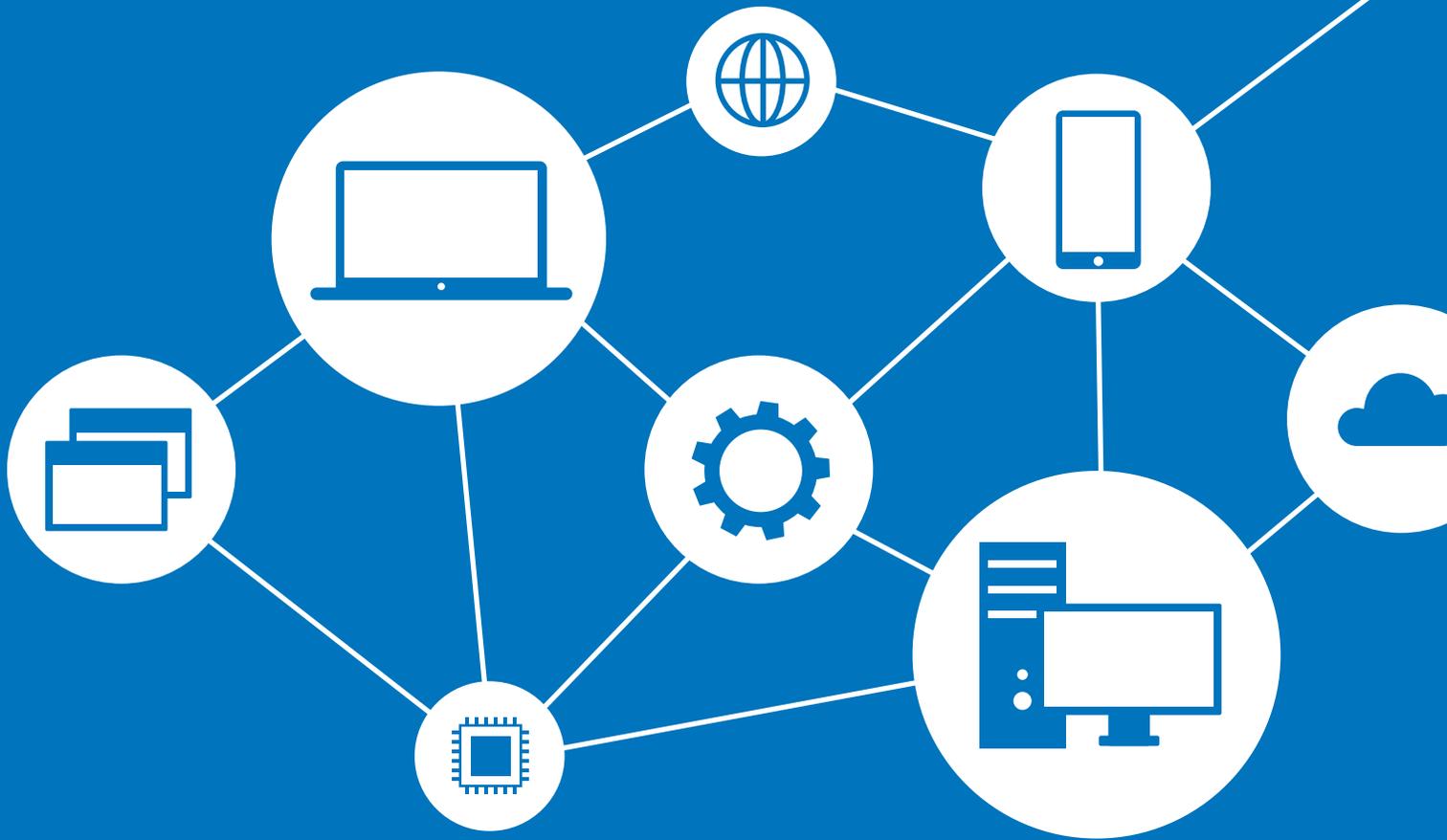


The Path to Success with a Hybrid Integration Platform (HIP): Meeting Digital Demands by Merging Old and New Integration Patterns

Based on real user reviews of SEEBURGER on IT Central Station

2020



ABSTRACT

Enterprises value standardized Hybrid Integration Platforms (HIPs) that can support multiple integration patterns, including APIs. However, their implementation is still challenging. Many critical systems were not created with application integration in mind. New cloud applications, IoT, Blockchain, and digital transformation projects place a great deal of stress on APIs and file-based interfaces. Solving these problems takes a HIP that is stable and scalable as well as flexible and configurable — with a single point of control and visibility. This paper, based on real user reviews of SEEBURGER on IT Central Station, looks at how a HIP can meet these criteria, and others, to enable an ever-evolving set of requirements for enterprise application integration.

CONTENTS

Page 1. **Introduction**

Page 2. **The State of Enterprise Application Integration**

Page 3. **What It Will Take to Get from Here to There**

Flexible and Configurable, with a Single Point of Control

Cloud-ready

Transfer and Transform Files in Any Format

Legacy Compatible

Ease of Integration with SAP and Other Systems

Automation

Stability

Scalability

Page 10. **Conclusion**

INTRODUCTION

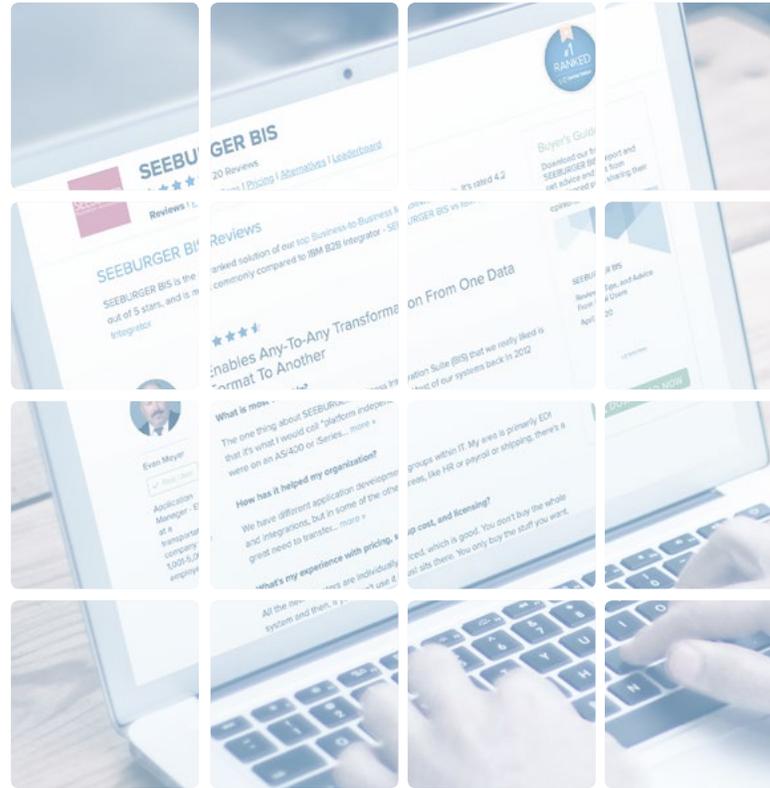
The value of a standardized Hybrid Integration Platform (HIP) supporting multiple integration patterns, including application programming interfaces (APIs), is now essentially beyond question. Implementing and managing a HIP, however, is not so simple. The majority of existing critical business systems, like ERPs, were not built to interface easily with a mix of legacy and modern (i.e. cloud) applications. Yet, as serious companies move to improve, modernize, and consolidate critical business processes, their legacy applications need to work with leading edge infrastructures.

Adding new cloud applications, IoT, Blockchain, and the like, all with their own unique mix of APIs, as well as file-based interfaces, creates a lot of heavy lifting. This paper explores what it will take for a HIP to get the job done and achieve the desired state of stable, scalable, and secure integration. Based on real user reviews of the SEEBURGER solution on IT Central Station, it looks at the need for a HIP to be flexible and configurable, with a single point of control and visibility, along with an “any-to-any” file transfer capability.

Except where noted, the people cited in this paper work at organizations with more than 10,000 employees.

The State of Enterprise Application Integration

Enterprise Application Integration is not a new area of IT. Computer scientists have been grappling with the challenges inherent in connecting one system with another since at least the early 1960s. However, despite any number of ingenious solutions, the application integration process was a cumbersome, costly affair until the advent of the standards-based approaches like SOAP web services in the early 2000s. The real breakthrough came, however, with the development of RESTful APIs. With this technology, it became possible to develop today's APIs—capable of connecting virtually any enterprise application with any other app or data source.



Remarkable as the API revolution has been, however, few enterprises have achieved the level and quality of integration they seek. Obstacles remain in place for successful API implementation. Despite the addition of API-compatible features, legacy applications can still be difficult to integrate. Digital transformation initiatives, with their emphasis on speed and mobility, further stress the integration process. With these realities in mind, it's possible to conclude that the state of enterprise application integration is favorable, but it will take today's new generation of APIs to get large organizations to a place of easy, fast, and cost-effective application integration.

What It Will Take to Get from Here to There

IT Central Station members have weighed in on what it will take to move from today’s promising but slow and stressful integration environment to a more fluid and faster-moving future state. Getting from here to there, so to speak, means working with stable, scalable HIPs that are flexible and configurable with a single point of control and visibility. The HIPs also need to meet very stringent compliance and security audits. The HIP must be legacy-compatible and cloud-ready. It should securely transfer files on an “any-to-any” basis, and easily integrate with any application supporting a critical business process.



Flexible and Configurable, with a Single Point of Control

Flexibility and configurability stand out as qualities users want in a HIP. For example, an [Enterprise & Tech Ops Hosting Services Manager](#) at a pharma/biotech company had previously relied on an Enterprise Service Bus (ESB) for integration. The ESB, as he explained, “required us to write code and then go through the process. It would take five to seven days for our development team to do the code, test it, and then promote it.” In contrast, as he put it, “SEEBURGER Business Integration Suite (BIS)

MFT solution is really configuration-driven. We can configure the SEEBURGER solution much more easily, instead of writing code.”

He added, “It is also flexible when it comes to adding integrations. We have created some frameworks and we are able to utilize those frameworks very quickly.” In particular, his team had a requirement for transferring data to Amazon S3 buckets, but they lacked a solution for large data transfers to S3. He said, “We worked with SEEBURGER and created a framework solution and now, using that solution, we can configure the transfer in an hour or two and enable it to go to existing or new S3 buckets.”

A [Director](#) at Mylan, a pharma/biotech company, echoed this sentiment. He said, “The solution is flexible when it comes to adding integrations. It is much easier to use than the other tools we have to move the files.” An [SAP Global EDI Lead](#) at a construction company similarly noted, “It is flexible when adding integrations. We have a cloud-based service. When adding integrations, it is a single point of access.”

A unified system and single point of control are also advantageous, according to SEEBURGER users. Figure 1 shows a reference architecture for this potentiality. As an [Integration Team Lead](#) at Wincanton, a logistics company, commented, “We now have everything on a single system, which is nice. We got rid of a lot of the legacy.”

“
The solution is flexible when it comes to adding integrations. It is much easier to use than the other tools we have to move the files.

An [EDI Competency Manager for North America](#) at a retailer felt that his solution increased his team’s efficiency by providing a single tool that can support B2B/EDI, EAI, and/or ERP integration requirements. He estimated that the unified system has increased the level of efficiency in his company’s operations by 30 to 40 percent because, as he said, “Everything is on one tool, supporting many people at the same time, worldwide.”

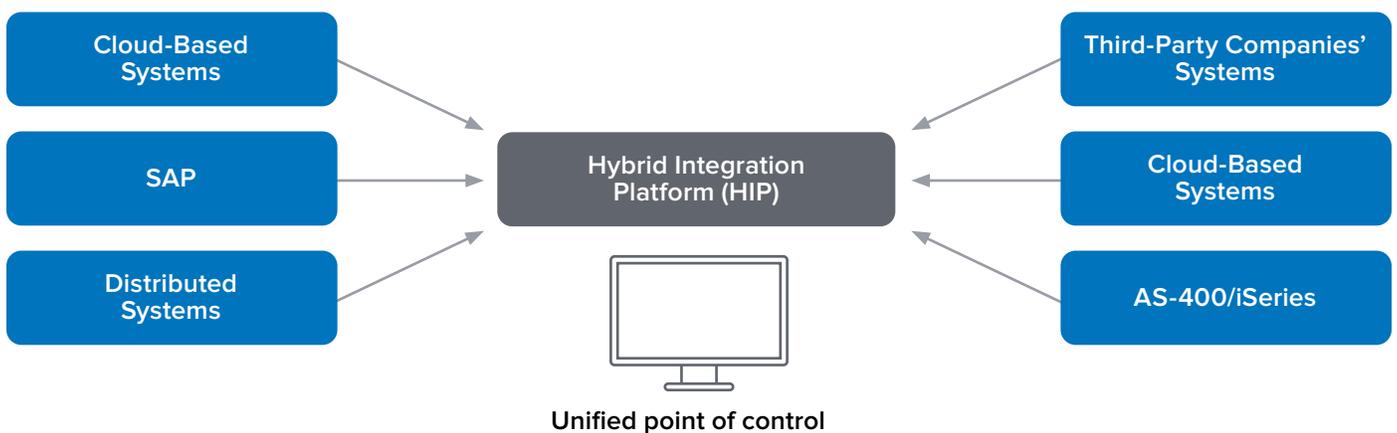


Figure 1 - A simple reference architecture for a HIP, showing how it links a variety of old and new systems.

Cloud-ready

As enterprise applications migrate, usually in stages, to the cloud, the HIPs they rely on for integration should ideally be ready to function in the cloud. For instance, a [Corporate Director of IT](#) at Flexfab, a transportation company with more than 500 employees, is moving to the cloud to achieve global scale. While he is satisfied with his on-premises HIP, he explained “that’s not where my company’s growth is.” Rather, he said, “We want to use this same solution in Asia and not have something different feeding the factories there, so that’s why we are moving to the cloud offering.”



We are able to do faster delivery and it’s much more robust, handling large files really well. And it does bring cost savings.

“It’s the only gateway between our client systems and any internally-hosted or cloud-hosted systems,” said an [Integration Specialist](#) at a logistics company. He then added, “It helps in communications. SEEBURGER Business Integration Suite (BIS) acts as an interface between them.” For an [EDI Manager](#) at a transportation company with more than 5,000 employees, cloud capabilities were beneficial because they enabled flexible growth plans. He said, “SEEBURGER provides the flexibility to start small and pay as you grow especially with their new cloud offerings.”

Transfer and Transform Files in Any Format

Application integration often involves data transformation. It’s an understandable need,

given that separate systems, often developed years apart or at different companies, may use different data formats. For this reason, users consider the ability to transform file formats and transfer them between systems to be an essential feature. An [Application Manager - EDI](#) at a transportation company with over 1,000 employees acknowledged the value of SEEBURGER in this regard, saying that the solution “Enables any-to-any transformation from one data format to another.”

He described the capability in more detail by saying, “It doesn’t matter if you want to take a CSV file or an XML file or a flat file or a PDF file or a structured EDI file; you can transform it from one format to another.” Figure 2 shows what this looks like. This helped his organization because, as he noted, “We deal with a lot of different databases and structures in our company. We don’t have a single system. We used to have a lot of problems trying to integrate our different locations. This has allowed us to seamlessly integrate our different database products together.”

Other notable comments on file transfer and transformation included:

- “We are able to do faster delivery and it’s much more robust, handling large files really well. And it does bring cost savings. We use it mostly for data integration. We use a module from SEEBURGER called Managed File Transfer or MFT. We move about 30,000 to 50,000 files in a week in our company. The files are moved intracompany but they also move between our company and our external partners.” - [Enterprise & Tech Ops Hosting Svcs](#) manager at a pharma/biotech company
- “SEEBURGER Business Integration Suite (BIS) has been good at communicating between two applications, changing formats and using the required protocols. Some might have

applications which are very old and they can't do more than FTP or SFTP. With SEEBURGER Business Integration Suite (BIS) we've got that flexibility. We can have one site communicating in an old FTP or SFTP style, or via file transfer. And with other applications, we could have API or a web service call or some other protocol used to send information. SEEBURGER Business Integration Suite (BIS) acts as an intermediary between them.” - [Integration Specialist](#) at a logistics company

“

This has allowed us to seamlessly integrate our different database products together.

- “In our landscape, we have a lot of AS/400s or iSeries, and SEEBURGER Business Integration Suite (BIS) has a file service listener that allows data to seamlessly be transferred between the SEEBURGER solution and the AS/400. That was a very big part of it.” - [Application Manager - EDI](#) at a transportation company with over 1,000 employees

Legacy Compatible

IT Central Station members emphasized the importance of legacy compatibility for a HIP. This may seem obvious. Application integration frequently involves legacy systems, but the realities of integration often show that legacy integration takes more work than it should. An [IT Director, Business Applications Technical Services and Integration](#) at Arysza, a manufacturing company, set the context for dialogue on this issue when he said, “Previously, we had different tools going through different systems with multiple EDI providers, like IBM. This brought all our providers together, so everything goes through SEEBURGER Business Integration Suite (BIS) now; it provides one point for all the solution providers.”

Mapping capabilities stand out as especially salient, with Flexfab’s [Corporate Director of IT](#) remarking, “It seems to be a very powerful mapping tool and we haven’t found that it can’t do what we need it to do in the EDI world, and that world is quite daunting when you think of all these customers, these OEMs, with

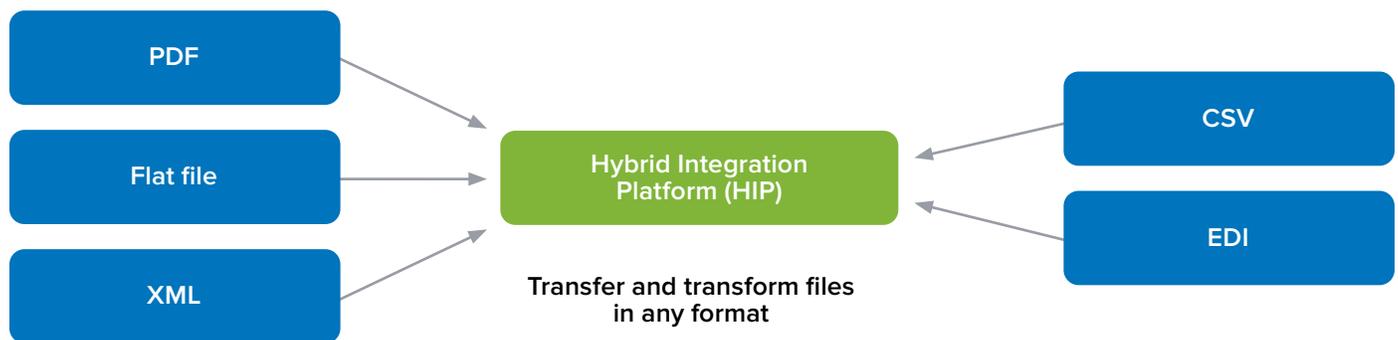


Figure 2 - An illustration of a HIP's ability to transfer and transform files in any format

legacy systems that have unique requirements. SEEBURGER Business Integration Suite (BIS) mapper can handle it because it's very powerful with logic built in."



It seems to be a very powerful mapping tool... with legacy systems that have unique requirements.

This user's workload involves BIS functioning as an EDI translator for 60 to 75 customers. These are large OEMs [Original Equipment Manufacturers] which have between five and 15 different sites each. To set the scale, he shared that every site could be a \$100 million to \$200 million company with its own computer system, its own EDI. "In essence, our 60 to 75 customers are really several hundred customers, all sending different EDI data to us," he said.

"We had a project where we needed to have a consolidated sales history from all of our regions loaded into a third-party product that runs an SQL database," said the [Application Manager - EDI](#). He added, "Of course, all our legacy systems are in the iSeries or AS/400. What we were able to do, since they didn't really integrate directly with an SQL database, was to have them generate CSV files and SEEBURGER Business Integration Suite (BIS) was able to pick them up from their respective host systems, translate them, and load them to the SQL database records. It was quite easy and we didn't have to spend a bunch of money trying to add an Oracle Database or some other database that we really didn't need."

Ease of Integration with SAP and Other Systems

The prevalence of SAP in the ERP space makes ease of integration with the SAP stack

an effectively non-negotiable quality for a HIP. In this vein, the transportation company's [EDI Manager](#) shared, "SEEBURGER is our connection with SAP to the rest of our system. So, it is one of our critical systems. It's number two after SAP." A [Business Analyst](#) at a small tech company likewise revealed, "For us, it's all been about the fact that, for the first time ever our two facilities can support each other. Before, we had completely separate systems. One was doing EDI and one wasn't, and our customers were trying to understand how we could be one company and not do things the same way."



The solution's capabilities in fulfilling our existing B2B integration requirements are brilliant.

After deploying SEEBURGER, she shared that "for the first time, we can start doing things the same way." In her case, the company started with its Canadian plant first and got it running. When the next plant came on, as she said, "We were just able to say in SAP, 'Here are some new ship-to's.' We didn't have to start re-testing with the customer. That saved a ton of work. Not needing to retest for the next facility, because the customer had accepted our first test, was very helpful." The [Integration Team Lead](#) at Wincanton simply stated, "The solution's capabilities in fulfilling our existing B2B integration requirements are brilliant. Among our multiple customers we connect to SAP systems, JDE, all the various ERPs that you can possibly get, Oracle procurement systems, etc."

Automation

Application integration, like so many areas of IT, is overly labor intensive. It strains already limited human resources. As a result, users want

solutions that can help by automating business processes that span multiple applications, as well as the application integration process itself. A [Head of IT](#) at a large pharma/biotech company shared his insights into how SEEBURGER's automation capabilities help his team achieve these types of objectives. He said, "We have an integrated ERP system which talks directly to the SEEBURGER systems. Therefore, we don't necessarily have any manual interaction since this is a completely automated system which talks to the SEEBURGER back-end systems."

“

...we don't necessarily have any manual interaction since this is a completely automated system which talks to the SEEBURGER back-end systems.

His use case involved financial/order transactions and confirmations in invoicing. He noted, "What would have been a manual process of transmitting data items around between us and third-parties has been automated. SEEBURGER handles the automation and mapping side of the communications. The automation, along with the efficiency around time and cost, has improved our organization. Around 20,000 messages a month have been automated. The automation is the most valuable feature. We have full EDI automation through SEEBURGER BIS, which has been the biggest win for us. It removes the complexity and makes the process straightforward."

Other IT Central Station members discussed the importance of automation:

- "ROI comes back to automation. We are releasing people within our own organization to go and do more high value work. This is difficult to quantify for third-parties. Overall, it's an

efficiency gain, which is the main driver behind return on investment." - [Head of IT](#) at a pharma/biotech company with over 200 employees

- "In terms of manpower, once we start to get some of these more automation processes in place, there could be a one or two headcount reduction in terms of the related tasks." - [Team Lead](#) at a transportation company
- "It has enabled digital business processes. It's the connection between our ERP system and the rest of the company. We were able to automate processing invoices digitally like an inbound invoice and FastPay payments. Beforehand, we would hand-deliver via email over 100 to 200 reports a day. Then we automated that through SEEBURGER in less than two weeks." - [EDI Manager](#) at a transportation company with more than 5,000 employees

Stability

HIPs sit in the middle of enterprise applications, so their stability is at a premium. They cannot be the source of disruption for the critical systems they connect. Users acknowledge the value of SEEBURGER in this regard. Mylan's [Director](#) said, "It is stable. We haven't faced any major issues since the implementation of this software." A [Systems Architect EDI/B2B](#) at a tech services company with more than 5,000 employees stated, "It is very stable. It has 99.9 percent uptime."

“

It is stable. We haven't faced any major issues since the implementation of this software.

"It's an extremely stable platform. It has no flakiness. We don't have to baby it," said a [Materials Management Team Lead](#) at a university.

The pharma [Enterprise & Tech Ops Hosting Svcs](#) revealed that they only have to restart the solution once a year at the most. “The solution is very robust and stable,” he said. The small tech company’s [Business Analyst](#) had a comparable observation, sharing that “In the year-and-a-half that we’ve been live, we’ve had one or two tiny blips. But you get the warning right away and you can reissue it. And it never repeats itself. Those are pretty good stats.”

Scalability

HIPs also need to scale easily. They must keep up with growth across diverse systems. The [EDI Competency Manager North America](#) spoke to this need, saying, “The scalability is really good. That’s one of the biggest features. Depending on the size of your company, how much data you have or frequency, their solution can manage it. You can grow vertically or you can grow horizontally. It really depends on the business. They have the capabilities to grow and expand and handle all that architecture.”

A [Director of Application Development](#) at a retailer with more than 500 employees found BIS to be highly scalable. Since moving to

“

Depending on the size of your company, how much data you have or frequency, their solution can manage it.

Active-Active, they have not had to change their environment. The logistics [Integration Specialist](#) offered specifics, explaining that the SEEBURGER architecture includes an admin server and an adapter server so it is possible to add more servers by adding licenses to it. He said, “If we want to scale up, we just add a few more adapter engines into it; it’s just adding a virtual server and more functions to it. It’s not a big issue. Its scalability is very good at the moment. The software installation is not a big issue. So, once you install it, you can just attach it to the existing architecture.”

CONCLUSION

Companies must overcome barriers to effective application integration. A new generation of HIPs can make this happen through support for multiple integration patterns and APIs. To be dynamic and efficient, however, the HIP must be flexible and configurable. It has to offer a single point of control and visibility as well as an “any-to-any” file transfer capability. Stability and scalability are also important, as is the ability to automate integration processes. Being cloud- and SAP/ERP-ready and legacy compatible further bolster a HIP’s suitability for improving, modernizing, and consolidating critical business processes. With these factors in place, a modern HIP is poised to enable an enterprise achieve its ambitious goals for the cloud, digital transformation, mobility, and efficient business operations.

ABOUT IT CENTRAL STATION

User reviews, candid discussions, and more for enterprise technology professionals.

The Internet has completely changed the way we make buying decisions. We now use ratings and review sites to see what other real users think before we buy electronics, book a hotel, visit a doctor or choose a restaurant. But in the world of enterprise technology, most of the information online and in your inbox comes from vendors. What you really want is objective information from other users. IT Central Station provides technology professionals with a community platform to share information about enterprise solutions.

IT Central Station is committed to offering user-contributed information that is valuable, objective, and relevant. We validate all reviewers with a triple authentication process and protect your privacy by providing an environment where you can post anonymously and freely express your views. As a result, the community becomes a valuable resource, ensuring you get access to the right information and connect to the right people, whenever you need it.

www.itcentralstation.com

IT Central Station does not endorse or recommend any products or services. The views and opinions of reviewers quoted in this document, IT Central Station websites, and IT Central Station materials do not reflect the opinions of IT Central Station.

ABOUT SEEBURGER

The SEEBURGER BIS is purpose-built for “heavy lifting”. After all, we come from a long history of successful B2B/EDI implementations, where creating and maintaining standard connections for thousands of business partners and massive volumes of data is just another day at the office. As we have added functionality over the years, we have kept those heavy lifting roots in mind, so that our API capability is robust enough to support large volumes of partners and data but is still nimble enough to handle speedy innovation requirements.

Our flagship Business Integration Suite (BIS) is a German-engineered, single platform without any third-party patchwork code. This makes it unique in the way it provides a complete Hybrid Integration Platform, powering all your connections, on the ground or in the cloud, from traditional EDI and MFT to accelerating your digital business transformation via API. The value of a standardized Hybrid Integration Platform (HIP) supporting multiple integration patterns including application programming interfaces (APIs) is now essentially beyond question. Implementing and managing a HIP, however, is not so simple. The majority of existing critical business systems, like an ERP, were not built to interface easily with a mix of legacy and modern (i.e. cloud) applications. Yet, as serious companies move to improve, modernize and consolidate critical business processes their legacy applications need to work with leading edge infrastructures. Adding new cloud applications, IOT, and Blockchain, etc. with a mix of APIs as well as file-based interfaces creates a lot of heavy lifting. To get from here to there, so to speak, means working with stable, scalable Integration solutions that are flexible and configurable with a single point of control and visibility. They also need to meet very stringent compliance and security audits. It means being legacy compatible and cloud-ready, able to securely transfer files on an “any-to-any” basis and easily integrate with any application supporting a critical business process.