

eschbach

A CLOUD STRATEGY IS CRITICAL TO YOUR SUCCESS

Why You Should Bring Cloud
Benefits To Your Plant



www.shiftconnector.com

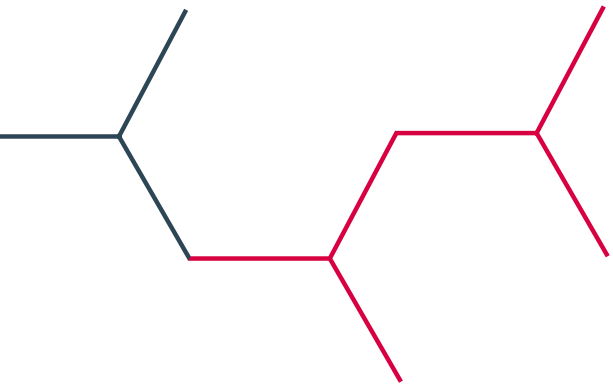
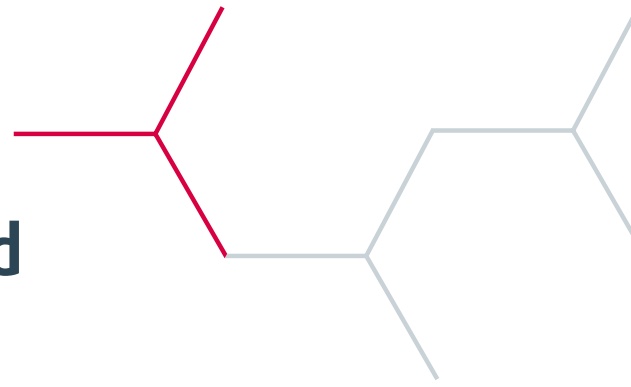


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Digital Transformation With Shiftconnector® Cloud



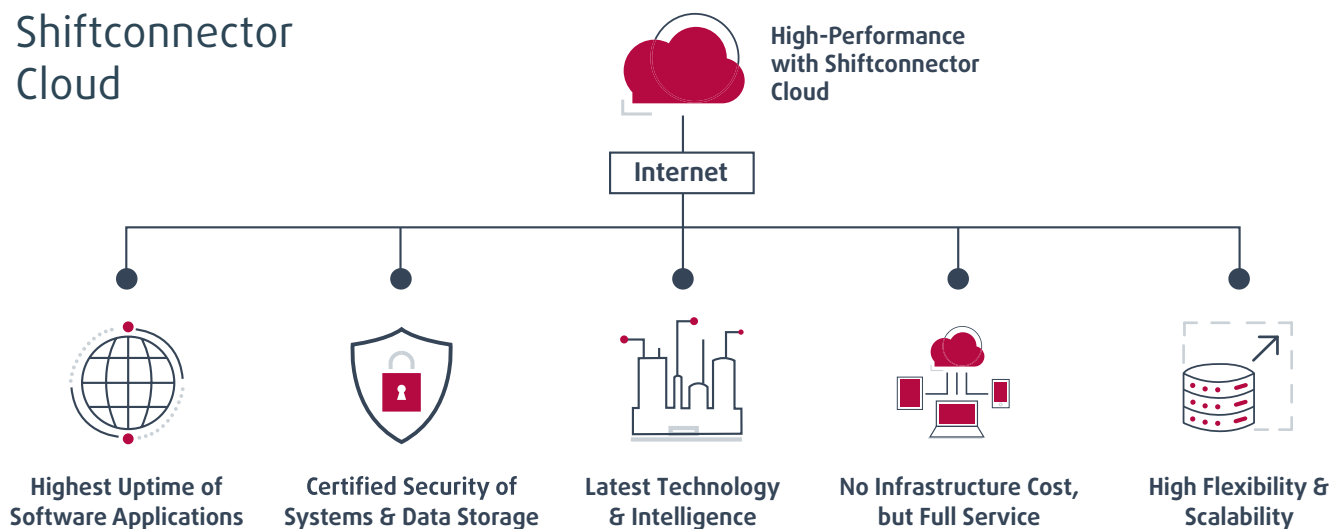
Many plants are not using and sharing process-relevant data and information well, and it affects the entire manufacturing operation. With the right solution, shift teams can unlock value through innovation, cost optimization and efficiency. In addition to IT executives, many CEOs, CDOs and CFOs of financially strong companies now see cloud computing as a driver for future plant operations. A cloud solution is one that gives your data and systems environments with the highest possible uptime – wherever and whenever it’s needed.

eschbach helps production teams work securely and smart with an innovative Plant Process Management solution. Over the past 20 years, the multifunctional software Shiftconnector has empowered the chemical and pharmaceutical industries. With a real-time view on

workflows and tasks and excellent interface connectivity, Shiftconnector has already established itself in 28 countries and 25 languages. Available exclusively as an on-premise solution since 2005, eschbach has adapted to the increasing demand for cloud offerings and has offered Shiftconnector as software-as-a-service (SaaS) since 2015.

Shiftconnector as cloud-based solution offers promising opportunities: Thanks to open source, companies can work even more securely, reliably, collaboratively, and scalable at any time. Instead of creating and maintaining data centers themselves, companies are using cloud computing to access web services. The trend is moving to the cloud and the potential of Shiftconnector cloud is covered in this whitepaper.

Shiftconnector Cloud





Why A Cloud Strategy Is Important For Your It Team

Rapid Implementation With A Private Cloud Environment

Technology is progressing faster than the world can keep pace. That's why Shiftconnector is being designed from the ground up to be one step ahead. With a cloud solution, software and all data can be updated and even installed quickly. All updates are immediately visible. Your team is always working with the latest technology.

Secured Data And Infrastructure

With an on-prem solution, all security measures and software updates are carried out in-house. At eschbach, professional security experts are available around the clock to help companies protect their data. Different security layers make Shiftconnector cloud a strong and powerful platform:

Virtual Private Cloud

Renowned companies already secure their infrastructure with certified data centers and quality management by eschbach within their virtual private cloud. A public cloud can be accessed by individuals or different groups of customers. For example, a particular software is used by several companies in the same industry. In contrast to the public cloud, the private cloud hosted by eschbach is understood to be a service that is not accessible to the public but is operated through a multi-firewall-protected network and is made available to the selected group of users only.



ISO 27001 Data Center

With the Shiftconnector SaaS solution, experts take care of data security and integrity including encrypted data transfer. ISO certificates for information security and quality management, with an own cloud virtualization code stack, in ISO-certified data centers with a high tier make Shiftconnector cloud secure.

Multi-tenant Architecture

Multi-tenancy architectures can do without virtualization because they themselves have the ability to serve multiple users completely separately. Therefore, they can be operated with the same hardware and system environment for all users.

Data Encryption

The first step in data theft is to find out where the data is. An On-Prem solution means that data is stored in-house. eschbach relies on many servers in different locations, making location tracking difficult to nearly impossible. Separate browser can be seen as additional security layer.

Client Controlled User Group

Password-protected logins ensure secure login to a web-based platform from a laptop, tablet, or smartphone.

Backup and Monitoring

With a traditional application deployment, companies are responsible for backing up data on a regular basis themselves. With SaaS above-mentioned expertise is responsible for data backups as well. Regular checks, monitoring and audits round off the advantages.

This shows how expertise can be used across company boundaries – without endangering the integrity of the company-own data.



What Is Included In The Software-As-A-Service-Package?

Shiftconnector cloud offers a perfect, high-quality solution, because SaaS is a complete package. Fast system setup and maintenance, no on-site installation and convenient central administration speaks for SaaS. In this way, cloud working allows less attention to be paid to technical aspects and more to focus on core tasks. In doing so, companies save time and resources. The collective term XaaS stands for a whole range of things – referred to as „Anything-as-a-Service“. Various examples are listed below:

IaaS

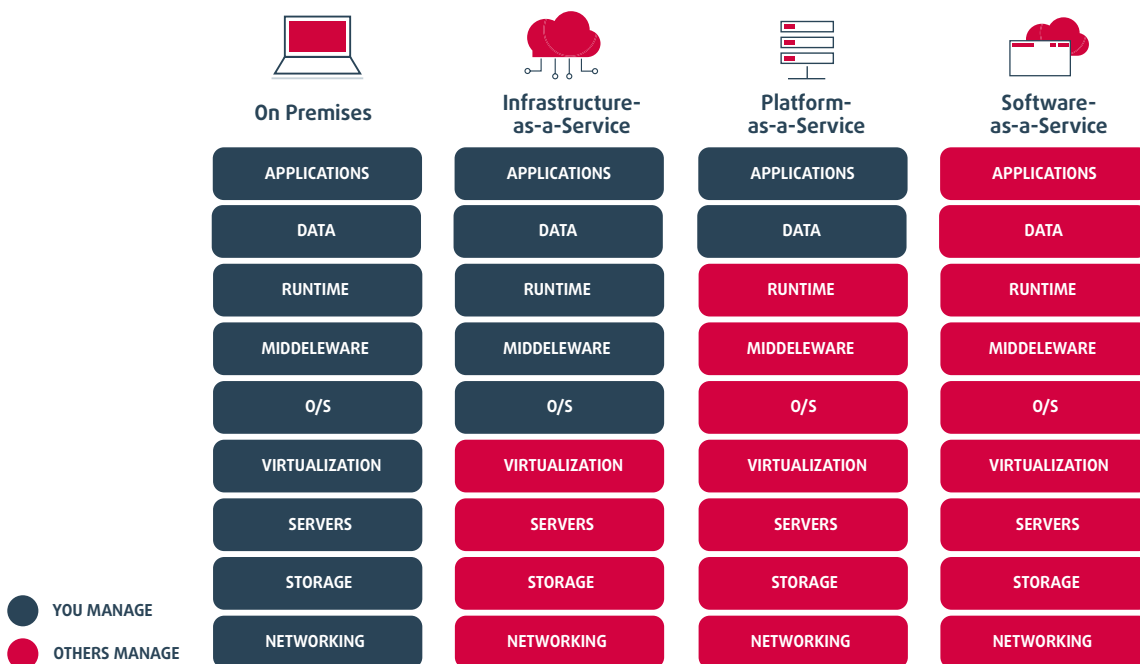
At the first level of the cloud – IaaS, also called cloud foundation – the end user can set up and manage the associated hardware himself. The corresponding know-how is a prerequisite. Only the infrastructure is provided by the hosting provider.

PaaS

At the PaaS level, application software and components are integrated by the hosting provider. Here, the service provider offers an interface to a software environment that is offered via cloud services. The end user can develop the software based on their own standards.

SaaS

SaaS, often known as service on demand, is the most common form of the cloud and is seen as the application layer of cloud computing. SaaS refers to a fully developed service where the end user does not have to buy or maintain the software. The software provider eschbach takes care of the installation, maintenance, management, and backup.



How You Can Drive Operations With A High-Performance Infrastructure

Best Uptime For Your Systems

Cloud-based software simplifies operations management by providing high uptime of process-relevant data. In the process industry, plants that operate continuously entail regular shift changes of personnel. Operators need to be able to access and expand on the same information and shift supervisors need to be able the plant status at any time and from any location. At the end, location-independent data exchange is of high importance for efficient and safe plant operations. With Shiftconnector cloud, companies benefit from an exceptional response time.

eschbach experiences that companies can access real-time data >99,9 % of the time, with no planned downtime for maintenance and upgrades.

Moreover, Shiftconnector cloud is not only user-friendly, but can be used on any device.

Latest Technology

With a cloud-based software, companies are always at the cutting edge of technology and get updates, additional modules, and the best features securely from the cloud. And with the next update, further advantages become apparent. In cooperation with leading companies in the process industry, the required software can be continuously developed. Open paths enable benefits for cloud-native technologies, such as artificial intelligence (AI) and machine learning (ML). This shows that companies using Shiftconnector cloud are using the most modern and up-to-date technological standard.



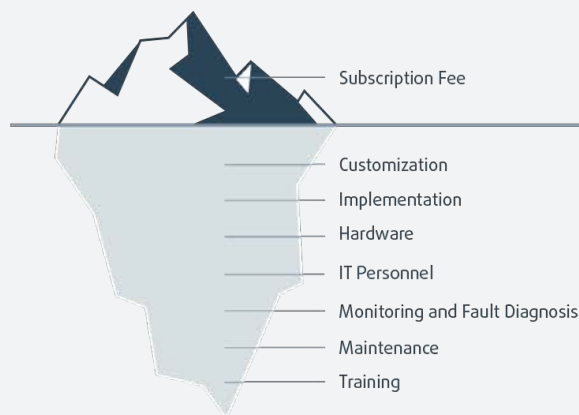
Why You Should Consider Cloud Strategies From An Economic Perspective

Total Cost Of Ownership

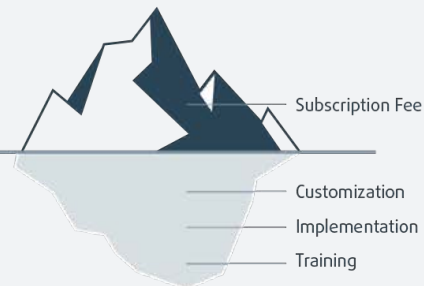
For many companies, the biggest immediate benefits of a cloud solution are from an economic perspective. Keeping IT up to date is always expensive. Relying on a cloud solution can lower costs compared to an On-Premise solutions. Companies do not have to invest

in the purchase of systems but can fall back on the resources of the provider. This is referred to as Total Cost of Ownership (TCO). Furthermore, the costs for the operation of the infrastructure are also reduced.

Total cost of ownership of an on-premise solution



Total cost of a cloud-based solution



A 24/7 shift operation requires, for example, computing capacities for logistics, data, etc. Instead of operating own servers or data centers, the use of cloud resources is a good

idea. In doing so, the costs for hardware and software licenses, as well as for expansions and updates of hardware and personnel are minimized.

Scalability

In addition to that, a cloud-platform enables greater flexibility to market fluctuations. Companies can adapt resources quickly and

flexibly to current requirements – without any extra work for their IT department.



Conclusion

From cost centers to value creators – technology now must lead the charge when it comes to efficient plant operations. Shiftconnector cloud can be a catalyst for your plant process management to encourage rapid innovation while securely supporting the stable, mission-critical core of the operations.

A cloud-based software solution is a guarantee for success in the process industry: Besides the scalability, the main advantages lie in the high uptime and data security. With a fully implemented and cloud-based plant process management system, production staff can optimally control plant operations. All outliers in production become visible in a real-time view of the work processes. The operator can evaluate plant statuses at any time and communicate across shifts and sites – this translates into a transparent, clear, and seamless high-performance infrastructure and excellent information exchange.

With a software solution that is highly efficient, up to date and draws on a secure real-time database, companies can take the leap into the next level of digital transformation.

Empower Plant Operations with Shiftconnector® Cloud!



eschbach

To learn more about eschbach and Shiftconnector[®], reach out to us below.



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About eschbach and Shiftconnector[®]

eschbach, headquartered in Bad Säckingen, Southern Germany, with a subsidiary in Boston, MA, USA, develops software for plant process management. Shiftconnector[®] provides a new level of team communication to ensure safety and improve plant effectiveness. The award-winning solution is trusted worldwide by leading manufacturing companies such as Bayer, DuPont, BASF and Roche. For more information visit eschbach.com.

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