Safety in the cloud

WMS: Cloud vs. in-house security
Picture this: you are the director of operations for a busy retail warehouse. It’s peak season, and although you and your team are just about meeting your targets and keeping the leadership team satisfied, the tiniest disruption could cause huge ramifications for the entire business.

One day you arrive at work to find there’s been a huge problem. Overnight, there was an error on your server, which hosts your typically steadfast WMS platform. It was hacked and contains ransomware, but your in-house staff couldn’t protect it correctly, and now the entire operation has ground to a halt. Your picking and packing process relies on that WMS working, which means you can’t deliver until the problem is solved.

It’s nobody’s fault, and it will get fixed. But it will take time. A few shifts’ worth, maybe more. Now, thousands of your customers will experience delays, and your SLA won’t be hit.

Sadly, the best you can hope for in that situation is an understanding board and minimal disruptions with careful damage control. But, if you’re proactive in preventing similar disruptions in the future, it could lead to a stronger, consistently reliable WMS, and more secure and efficient operations moving forward.

IT security has come a very long way in recent years, so far in fact that the problem detailed above is fast becoming a problem of the past. And it’s all thanks to one thing: the cloud.

Of course, some warehouses still elect to have an in-house server. But is that enough to ensure your business’ infrastructure remains secure and reliable?

“Installing and running your software on-premises can be risky, especially if you don’t have the resources to carry out a successful implementation. That’s why so many warehousing organizations leverage our expertise.”

Scott Brask
Vice President of Cloud and Security Operations for Körber
The challenges of WMS security

What is WMS security?
A secure and reliable WMS is the lifeblood of a healthy warehouse operation, much like the supply chain is the lifeblood of a healthy business. A well-secured system will ultimately protect your operations, and your business, from downtime. Without this security, a breach or a simple failure to correctly update could have a major impact on your productivity, and possibly your organization’s reputation.

The biggest challenges

Compliance
Regulatory compliance is an ongoing challenge for modern warehouses, and their wider organizations. Not only does your software need to be deployed correctly, and do what you need it to do, it must also guarantee the relevant compliance.

Example: North America
Publicly-trading companies listed in the stock exchange must comply with the Sarbanes-Oxley Act, which protects the public from fraudulent or flawed corporate practices. IT teams must produce the data for an accurate SOX report, allowing for operational certainty and consistency and good practice.

User authentication
One-size-fits-all access is an outdated and dangerous business practice. Defining who and what has access to a complex system is essential for the smooth, and safe, running of any organization. To be effective, it must contain multi-level authentication, various levels of control and ultimately be user-friendly.

Safeguarding
Cybercrime comes in many forms, and is now one the biggest threats to businesses. IT teams will spend huge amounts of their time fending off attacks – but even the most robust and well-trained teams can’t stop everything.

Cyber criminals are constantly adapting. You must make sure your system is secure, up to date and encrypted. This will protect your business from the possibility of an attack getting past your team, causing a breach of data security, and potential downtime.

Business continuity
Managing and maintaining digital infrastructure is a complex task which poses many challenges. These can distract a company from its core operations, including distribution and other supply chain practices, which are essential for revenue. When these distractions happen, as is common with “owned” in-house systems, revenue suffers.
In-house vs. cloud-based servers

A server is a computer, or device, on a network. It is where an organization hosts its digital infrastructure, such as applications, file sharing, email and other software platforms — including the WMS.

**In-house**

An in-house server physically sits within the business premises itself, or within the wider organizational network. As it belongs to you, it is tailored entirely to your business’ needs.

**Cloud-based**

A cloud server, or a virtual server, is built, hosted and delivered via the internet. This means it can be accessed remotely, with all data backed up within it.

### Key differences

**At a glance**

- Automatic data backup and recovery
- No costly physical updates required (all virtual)
- Modern as standard
- Secure as standard
- Competitive as standard
- Some have external support available

Updating the key components (including host systems, routers and switches) on an in-house server is a necessary but costly measure, with a level of ROI that must be satisfied. A cloud-based system doesn’t need these physical updates, which means it’s modern, secure and competitive as standard, without additional investment.
The solution

The Körber cloud-based WMS

Körber’s cloud WMS contains built-in business protection with comprehensive backup capabilities. This means that in the event of a system failure or another catastrophic event, the cloud will have backups of your data and systems ready for fast recovery.

But that’s not all. It also provides a solution to the biggest security challenges faced by any IT team.

Answering the challenges

Compliance
In a world of increasing regulations, a cloud-based WMS could produce compliance papers, including detail on what is covered and reported on IT security.

Safeguarding
A cloud-based solution is built exclusively to safeguard your supply chain operations, minimizing any loss of profit, through encryption and additional security features. The fact that it’s spread out across all sites adds to this high level of overall security, significantly reducing the chance of outages or cyber security incidents.

User authentication
A cloud WMS can integrate with IDPs (identity providers) using SAML-based (Security Assertion Markup Language) enabling the ability to use multi-factor authentications. This puts the power of who has access to what, and when, firmly in your hands, increasing your overall level of security.

Example: North America
The Körber cloud-based WMS automatically produces the organization’s SOC report, so it’s compliant with the Sarbanes-Oxley Act.

Business continuity
Distractions are a huge drain on productivity. The cloud takes many of those distractions away, which reduces downtime and maximizes yield across your warehouse.

“With cloud solutions, people in your business aren’t spending time worrying about your IT infrastructure, security and compliance. That time is much better spent optimizing operations and generating more productivity within the warehouse.”

Scott Brask
Vice President of Cloud and Security Operations for Körber
The future of WMS security

It’s clear that technology is driving the future of the supply chain, with the WMS at the forefront. As new technologies are rolled out, it’s important to have a system which can address new and evolving cyber security concerns, and seamlessly integrate with new technology as it appears on the market.

Businesses which fail to do this could see significant impacts in terms of productivity, revenue, customer satisfaction and reputation. Having a partner in tech that can rapidly address and respond to all of these things before they happen means your WMS, and your business, is automatically future-proofed.

Cloud-first

Körber embraced the cloud for WMS years before anyone else. Analysts predicted that 50% of all WMS sold would be in the cloud by 2020. We were well ahead of this curve, with 60% of our new systems set up in the cloud by 2018 and many existing clients migrating to the cloud.

Cloud team

A cloud-based WMS, such as Körber’s, benefits from external support as an extension of your own team. These are supply chain software experts who will keep your WMS running smoothly and securely in the background, while your internal IT team are allocated elsewhere. Our cloud team service includes:

- Seamless kickstart implementation
- 24/7 monitoring and alerts
- Assistance in meeting regulatory protocols and compliance
- Disaster recovery to improve business continuity plans

Supporting growth

Our cloud solutions mean our partners can focus on their operations. As a result, many have grown from 20–30 warehouse operatives to 400–500.

Expertise

We bring experts with a wealth of industry experience to the table. They are there to make sure our solutions are tailored exclusively to your business’ needs.

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60% of Körber’s new systems were cloud-based by 2018
Conclusion

Is an in-house server secure enough to carry your business forward into the future? While it may seem like a practical choice on the surface, it does come with inherent risks and responsibilities that a cloud-based one will mitigate as standard. The technology has come a long way, but these advances are reliant on the cloud to be completely modern, secure and competitive.

Körber can swiftly provide the solution to any distribution or supply chain need, including every challenge presented by IT security. We can even adapt to and solve issues, before they arise.

You will no longer fear coming into work to find out operations have halted entirely because of a minor server error, or breach. A cloud-based WMS means experts automatically maintaining your digital infrastructure so you can focus entirely on keeping operations, and revenue, moving.

The cloud truly is the safest place for your WMS to be. Could your business benefit from a secure and future-proofed WMS?
To get started contact Körber Cloud or visit: koerber-supplychain.com/supply-chain-solutions/supply-chain-software/cloud-wms