

Is My EHS Data Safe in the Cloud?

When it comes to EHS software, there's an ongoing transition that began years ago. Companies are moving away from on premise systems to cloud-based solutions. That's because EHS professionals recognize the fact that cloud-based software enhances safety, productivity, and compliance.

And while EHS professionals understand the benefits of moving to the cloud, many of them have the same major question:

Is my EHS data safe in the cloud?

The answer is yes! In fact, cloud-based solutions can provide better data security than on premise systems.

Let's take a closer look at each of these options.

On-Premise Systems

Companies who haven't yet made the transition to cloud-based solutions might be hesitant to make the change. Often, it's because they're more comfortable sticking to something that they already know and trust.

But the truth is, the risks associated with familiar on premise EHS data systems are taken for granted.

- 1. Files on a network can be easily lost or destroyed.**
Even if you have your data backed up onto an external hard drive, there is still potential for loss. Natural events such as storms, fires, and other disasters can leave you without years' worth of important EHS data.
- 2. The weakest point in any IT security system is always going to be the people.**
Unfortunately, hackers are always improving their game. Phishing attacks can make it look like a familiar internal contact is requesting files or information emailed to them. Employees should be trained to recognize these types of attacks. But it still happens. And it leaves everyone in a vulnerable position when it does.
Additionally, EHS documents can easily be taken from an on premise system. The data can be transferred to a flash drive and carried out the door.
- 3. Locally installed systems are often outdated.**
On-premise systems often need to be manually updated or replaced. This can take time and may require multiple resources such as someone from your IT department.
There's also the concern of locally-stored data systems not keeping up with modern advancements in IT security. The amount of time, energy, and money that it takes to bring these systems up-to-date is often prohibitive.

In some cases, outdated systems can even create compatibility issues, leaving your EHS data and files disconnected from your other, more modern IT systems.

Cloud-Based Solutions

With cloud-based EHS software, all of your data is stored remotely by the service provider.

One of the added benefits of using the cloud is that all of your data can be kept and maintained in one place. No more having to rifle through stacks of paperwork or waste time finding the right spreadsheet. You can access your EHS data from a computer, tablet, or smartphone.

Security for cloud-based software is now considered much stricter than on-premise systems. Here are some of the primary reasons why data centers are able to keep your organization's information safe:

1. Customizable Access Protections

You have the ability to limit access to only those whose IP addresses are coming from your worksite. This serves as an additional barrier to unauthorized personnel attempting to access your EHS data.

You can also require two-factor authentication. This added layer of protection not only requires users to login with a username and password, but must also provide a code sent to them, most commonly via email or text message.

Each added layer of security contributes some friction to the overall system, so we work with our clients to determine which protection features will work best for them.

2. Certified Integrity

Wherever you store your data, whether it's on-site or in a third-party data center, you need to have confidence that the facility meets the highest security standards. Frontline's data centers are SSAE 16 certified. This means that we have policies and infrastructure in place to protect clients' data.

SSAE 16 certification evaluates data centers on the following criteria:

- The security of the service provider's system
- The processing integrity of this system
- The availability of this system
- The privacy of personal information that the service provider collects, retains, uses, discloses and disposes of for user entities
- The confidentiality of the information that the service provider's system processes or maintains for user entities

3. On-Site Physical Security

Professional data centers need to maintain an extremely high level of on-site physical security. An article from The Data Center Journal lists these common features of well-run data centers should follow:

- Low-key appearance
- Limited entry points
- Anti-passback and man-traps
- Layered door controls
- Parking lot entry control

In addition to the features listed above, Frontline's data centers have 24/7 onsite security staffing, CCTV surveillance, and biometric access controls, as well as standard safeguards like backup power and cooling for all equipment.

4. **Redundant Backup Systems**

You should expect any hosting provider to back up your data on a predetermined schedule, such as daily or weekly. Ideally, you would want them to go a step farther. Here at Frontline, we continuously mirror our client's entire application. That means all of your data is backed up in a second, redundant environment. In the unlikely event that the primary location is destroyed in some sort of major disaster (such as a hurricane), it'll have no effect on you whatsoever. Your application will automatically start running from the redundant source.

In addition to continuous mirroring, we also take daily and weekly backups of your data, which helps protect you from accidental data loss or destruction.

The Next Step

The thought of moving any of your organization's sensitive, mission-critical information to the cloud can be anxiety-inducing. Existing systems, which have in some cases been in place for decades, feel familiar and safe.

The reality is that malicious actors improve their techniques every year, especially when targeting outdated technology, and so any effective IT system has to evolve keep up.

Here at Frontline, our main focus is working with leading global companies in the chemical, oil & gas, manufacturing, and other regulated industries, and we understand that their data is as critical as their people and assets.