



Cloud Computing 101

What Is the Cloud and Is Our Data Safe There?

Summary

The question, "Is data secure in the cloud?" brings up a more fundamental question: What is the cloud? "Cloud computing" refers to applications that you can access and use through the Internet, making data accessible anytime, anywhere, from any device with an Internet connection. For businesses, the cloud offers additional benefits including cost savings and increased productivity. So, with all the connectivity the cloud offers, how can you make sure your organization's data is safe? Ensure that your software vendors have critical safeguards in place, including protection of confidential information, different levels of user access, prompted password changing, mobile device security, and off-site data centers.

What Is the Cloud? And What's the Big Deal?

There's been a lot of talk about the "cloud," "cloud computing" and "cloud-based applications" and services. But what is the cloud?

CNN defines the cloud as "software and services that run on the Internet instead of your computer."¹ Instead of loading and running the software on your computer, cloud-based applications run off servers located across the globe that you access through the Internet. Additionally, the data you buy, upload, create or interact with through this software is also stored on these servers. Examples of cloud-based software (otherwise known as applications or "apps") include Netflix, Flickr, Dropbox, and Gmail.

Cloud Benefits

Cloud-based apps offer a unique advantage that computer-based software can't: the ability to access information anywhere using any device with an Internet connection.

For consumers, this type of flexibility means your data can travel with you without being device-dependent. As long as you have an Internet connection (and remember your passwords), you can access documents, photos, music, games, software and more. But cloud computing offers even bigger benefits to businesses, including cost savings and improved productivity.²

Cost Savings

At its best, cloud-based software offers businesses significant cost savings, especially when it comes to technology overhead and infrastructure.³

- ***Reduced cost of software purchase and licensing***

Instead of expecting a company to purchase the software (along with a license for every person in the company who would be using it), cloud-based apps offer more flexibility with subscription-based payments so companies can pay as needed (e.g., weekly, monthly, quarterly, annually) based on demand.

- ***Eliminated need for expensive hardware***

Larger companies purchasing internal servers must also configure, run, store, cool, back up and secure this hardware. Not only does the equipment cost money, but the organization also needs a specialist (or team of specialists) to ensure the servers are operating correctly so employees can use the software and access their data.

Cloud applications eliminate the need to invest in and maintain expensive hardware since the software vendor essentially plays the role of an IT team. It's their job to ensure their software and hardware are functioning optimally and your data is secure and available to you. And because many organizations (sometimes hundreds or thousands) are using the same software, these costs are shared.



Improved Productivity

Productivity gains can significantly impact an organization's bottom line. Cloud-based apps offer unique productivity advantages, including:

- ***Increased access anytime, anywhere***

Using cloud-based software, employees can access organization data anytime and anywhere, connecting mobile workers and multiple locations. Internally supporting a national—or global—workforce would be costly, but the nature of cloud applications has this type of versatility built in.

- ***Real-time information for proactive decision-making***

Shared information is a real advantage offered by cloud applications. With real-time information, project, budget and workforce decisions shift from reactive to proactive. If teams at a certain location are straining the budget with too much overtime, managers with up-to-the-second data access can quickly identify the problem and take immediate steps to fix the situation before it's too late.

Data Security—How Safe Is the Cloud?

Data can be safe in the cloud if your software vendor takes responsibility for protecting the data maintained on your behalf. To minimize the possibility of data hacking, the best cloud-based software limits access to confidential data and helps protect it from both external and internal threats.

When considering a cloud-based software vendor, look for configurable security features to help protect data both outside and inside the organization, such as:

- ***Protection of Sensitive Information***

Confidential information (such as employees' Social Security numbers, addresses, pay history or medical information) should be stored in a single software system (in the case of separate but integrated systems such as payroll and timekeeping systems) instead of available in multiple systems. This limits the opportunity for someone to inappropriately access this type of information accidentally—or on purpose.

- ***Restricted User Access***

Software functionality (such as reporting tools) must be restricted by user needs. This ensures employees access only the information they need for personal use or pertaining to their job functions. For instance, while a manager needs the ability to run reports and make administrative adjustments in the system, an employee likely won't need that type of functionality and should be restricted from accessing those tools.

- ***Prompted Password Changing***

Passwords are a simple but important part of security procedure. Applications prompting all users to change their password regularly (and encourage responsible password creation) reduce the risk of password hacking. Ideally, passwords will be changed every 30-60 days, and the application should have a system in place in case a password is lost or forgotten.



- **Mobile Device Security**

Mobile devices require additional security features to protect data. These can include time-out values that automatically log users out of the software after a specified period of time. Apps that “register” mobile devices guard against hackers attempting to access data on a device the system does not recognize. Additionally, apps that offer only basic features and functionality on mobile devices protect users if the device is lost or stolen.

- **Off-Site Data Centers**

As mentioned earlier, a unique benefit of cloud applications is the ability of organizations to avoid the costs of storing data locally since the software vendor handles data storage and security as part of the organization’s usage subscription. However, it’s important to realize that data must be physically stored somewhere, and the storage facility must have security measures in place to protect it. These include automated data backups, redundancy, and disaster recovery plans in the event of prolonged power outages, flooding, fire or other natural disasters.

Conclusion

Cloud applications offer unique business advantages including connectivity, cost savings and increased productivity, so a move to cloud-based software makes sense if the software vendor has critical safeguards in place to protect your organization’s data. These safeguards can include protection of confidential information, different levels of user access, prompted password changing, mobile device security, and off-site data centers to reduce potential internal and external data security threats.

About Attendance on Demand, Inc.

Attendance on Demand supports the labor management needs of thousands of companies and more than a half million employees across North America. Launched in 2006, Attendance on Demand is a rapidly deployed, cloud-based solution that minimizes a company’s risk and technology investment while providing advanced features for securely managing labor data—calculating pay rules, scheduling employees, budgeting labor, and automating recordkeeping for labor law compliance. With standard uptime over the industry average of 99.995% and above average customer retention rates, Attendance on Demand removes the worry of maintaining expensive infrastructure. An extensive North American distribution network helps organizations use Attendance on Demand to reduce labor expenses and improve decision-making.



To find out how Attendance on Demand can help your organization, call 800-465-9980 or visit www.attendanceondemand.com

References

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- 3 Ibid. [Delaney]