

Cloud Security: A Brief Journey through the Revolutionary Technology

Vanderbilt cloud solutions such as ACT365 and SPC Connect are proving extremely popular choices for security installers due to the simple mantra of the cloud – adaptability and flexibility. Although the cloud is one of the most heavily talked about topics in the industry right now, the concept has existed for many years, decades even.

In the early 1960's, an American computer scientist named John McCarthy developed the notion of time-sharing. This initial thought process ultimately kick-started the pattern development that would lead to today's polished version of cloud-sharing - the development of mobile internet devices helping to normalize McCarthy's utopian technology vision.

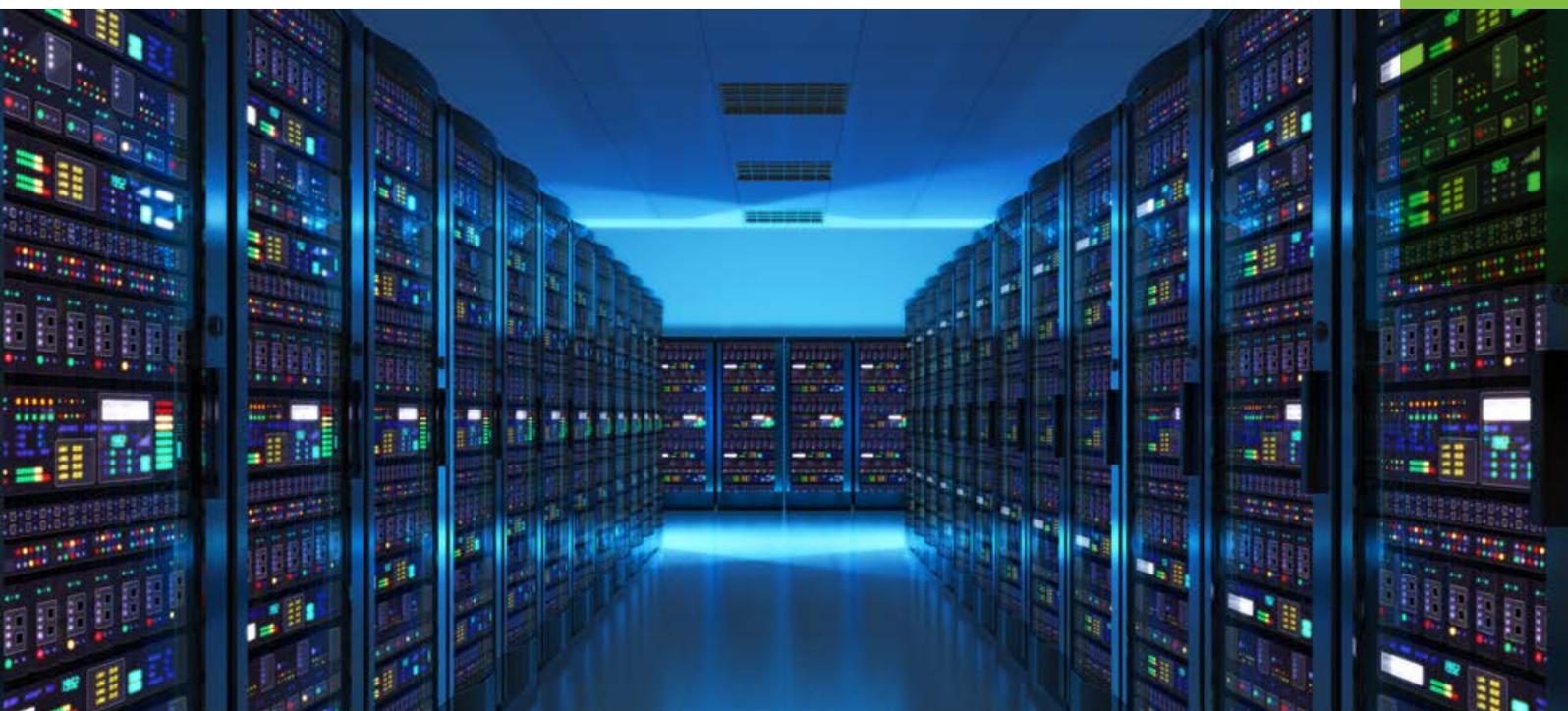
Today, the cloud forms a massive part of the overall IT landscape, and per IDC's latest Worldwide Quarterly cloud IT Infrastructure Tracker, spending on IT infrastructure for these environments will grow at a 12.5 percent annual growth rate (CAGR) to \$57.8 billion by 2020.

Consumer demand is largely steering the drive toward the cloud in everyday activities. Things such as verifying a bank balance, booking a flight, or checking emails are all now second nature to us through the cloud. This rapid integration of the cloud into everyday life is helping to normalize the platform and ease data security concerns customers previously had.

✓ Popular

A recent survey carried out by software firm Advanced stated that 80% of businesses in the UK are still in favor of cloud adoption in the wake of global cyber-attacks like WannaCry.

One reason for this continued boom in popularity can be put down to the factors of convenience and simplicity. For instance, cloud solutions like Vanderbilt's ACT365 are ideal for small and mid-sized enterprises (SMEs) that have limited time and resources to focus on maintenance of in-house servers and hardware.



Take the example of a generic small business. Traditionally, their customer support, and office management solutions would have been managed by a big server hosted in a room at the workplace. When an update needed to be carried out, someone from IT would have to take the server down, install the update, and then manage that locally. If this business wished to expand and grow their enterprise, they would have to add more servers.

What the cloud achieves, is it puts that server into a virtual space. It is still physically running on a server somewhere, but it is now a managed service for customers. So, if a business is selling cupcakes, that can now be their priority and they won't have to worry about the management and maintenance of a large, physical machine in a dark room.

✔ Cost savings

If you take a step back and examine where the industry was ten years ago, this was the case for most companies. Any company in a decent sized building would have had a security manager, an IT manager, and an IT support manager. Now, with the cloud these are all external services that you no longer need dedicated bodies to manage.

This can lead to large cost savings with the eradication of expenses like installing, maintaining and upgrading on-premises IT infrastructure, versus the operational cost of a cloud service subscription. Moreover, as their business grows and they need to add more users, rather

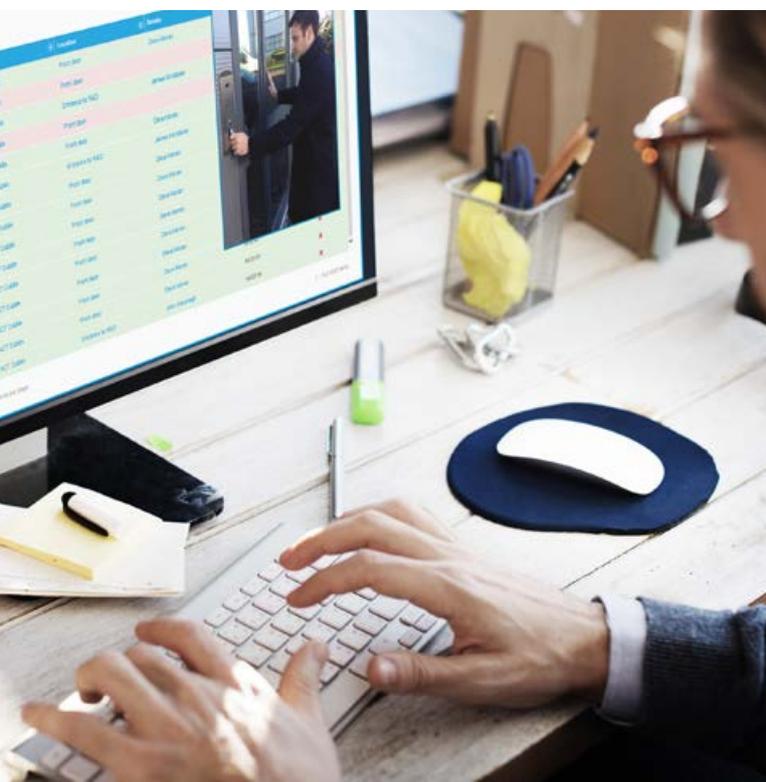


than investing in additional in-house server capacity and software licenses, they simply adjust their monthly cloud subscription as required.

Therefore, end users benefit from a system that can be maintained more efficiently and be easily reconfigured as their requirements change. Cloud-based security solutions from Vanderbilt also give users access to true and deep integration of core security functions such as access control, intrusion and video.

As an example, ACT365 allows users to remotely verify a building's visitor from real-time video images captured at the point of entry. Access can then be granted remotely with the click of a mouse button or tap on a smartphone screen. In the event of a forced door or an alarm activation, ACT365 gives users immediate recall and easy location of recorded footage of the incident, allowing them to review and respond to the situation accordingly. This eliminates the considerable time and effort required to match up times on disparate security systems and sift through masses of camera footage to locate an incident.

Where cloud services benefit Vanderbilt as a company, is the instant customer feedback it automatically generates. We can see what features are popular, which in turn tells us what people want and expect more of.





In the past, selling an installation disk provided no idea of how many panels it was being used on. But with software, subscription numbers can tell you, for example, that a specific piece of software is being used on 50 panels, therefore people obviously like it. At a basic level, this can start the conversation on how can we improve that software even more and make the customer's experience even better.

✓ Protection

However, you can't speak about the cloud without acknowledging some people's security concerns around the technology. As companies migrate more of their data and infrastructure to the cloud, naturally the question of cloud security rears its head.

When organizations are considering a move to the cloud, the primary question asked is this: does hosting our data in the cloud make our business more vulnerable to attack?

It goes without saying that all systems, whether cloud-based or traditional, are vulnerable to attack. Therefore, they should be regularly tested by third-party professional hackers to make sure they are secure. Vulnerability testing is a must, as, simply put, untested systems are unsecured systems.

Location also plays a key role in cloud security concerns. Whether the server is on your customer's premises, or in Microsoft Azure is not the main concern. The means of access to it is. Look at how the data is accessed, and look specifically at opportunities to breach. Open ports should be locked down. Networks and websites should be password protected. Necessary firewalls should be in place.

Again, this boils down to vulnerability as most of the data breaches develop around finding a weakness – not whether it is cloud-based or on-premises. Concerns about cloud security are the main obstacle to widespread conversion. But one of the best cures for that concern is cloud encryption.

✓ Added defense

The groundwork for many of the cloud's security worries is that organizations are ceding control of their data and depending on cloud service providers to preserve it for them. But cloud encryption delivers additional levels of defense, providing an effective antidote to this anxiety.

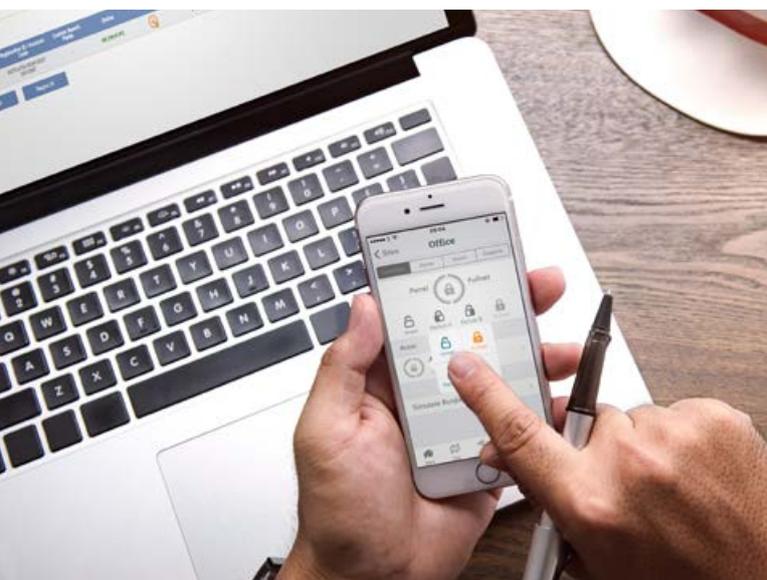
Vanderbilt understands the concerns around data integrity in the cloud, which is why it has ensured the highest standards of security are always maintained. For example, when using SPC Connect, Vanderbilt ensures the process is highly secure thanks to the implementation of the FlexC protocol. This uses AES 256-bit SSL encryption at server level – the same grade used by banks and hospitals.



By encrypting anything before you send it to the cloud, it adds an extra cushion of control and power over that data. It not only provides an added defensive structure around a company's information, but it also adds peace of mind to the equation when relaying this data to the cloud.

✔ Advantages

To finalize, the cloud offers major advantages to installers. By simply logging in via a username and password to Vanderbilt's cloud solutions like SPC Connect and ACT365, it's possible to remotely view status, set and unset a system, update firmware, carry out time synchronizations, backup configuration files, control devices, access an event log, and view cameras across single or multiple panels. You can also configure direct messaging by email, so in the event of an alarm, the installer is notified.



Panels can be added as they are installed, and this installer-focused solution permits specific tasks to be performed such as configuration management, troubleshooting, and regular maintenance. As well as being convenient, it saves massive amounts of time and money that would otherwise be spent traveling to and from site, while also enabling a swift resolution to any issues.



This deliverance of ultimate control is an important context. In the 21st century, with smartphone technology embedded into our everyday life, nothing is now more valuable than our time. Cloud technology hand delivers this invaluable commodity through its all access installer app for smartphones and tablets.

What is exciting about cloud solutions is their ability to unlock productivity. The cloud is dedicated to a simple mantra - adaptability and flexibility. Miles on the road eat up time. Cloud technology like Vanderbilt's ACT365 and SPC Connect helps ease this situation.

i About:

Vanderbilt is a global provider of security systems, operating efficiently in 95 countries. Vanderbilt designs, manufactures and distributes systems that safeguard environments and organizations of all sizes. Agility, adaptability, and dependability are distinctive marks of the Vanderbilt brand and these decisive traits satisfy a broad variety of customers' application needs across banking, education, healthcare, retail, and more. Our product lines include access control, intrusion and video. To learn more, please visit www.vanderbiltindustries.com, or follow us on **Twitter**, **Facebook** and **LinkedIn**.

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