

Success Story | Data Backup | Silent Bricks

Municipality of Gennepe

The rise in cyberattacks also affects municipalities and other public authorities. Hackers attempt to gain access to IT infrastructure in order to deploy ransomware on municipal IT systems and demand a ransom. The Municipality of Gennepe was therefore looking for robust protection

against cyberattacks to prevent damage or at least limit it as much as possible. The solution had to follow the recommendations of the Association of Netherlands Municipalities and ideally integrate with the existing Veeam backup infrastructure.



"It is great that the system is so scalable. If you get more data, you simply add another Silent Brick."

Roel Janssen
Technical Information Adviser
Municipality of Gennepe

All photos:
Municipality of Gennepe |
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Municipality of Gennep relies on an air gap with Silent Bricks:

"The air gap is immediately clear. That provides certainty"

Following a cyberattack on the Municipality of Hof van Twente the previous year, the Association of Netherlands Municipalities, VNG, advised municipalities to create secure air-gapped backups. The Municipality of Gennep took up the challenge and asked supplier Avensius about the available options. Roel Janssen and Gerrie Gossens of the Municipality of Gennep, together with Daan Lieshout of Avensius, share their story.

Gerrie Gossens is a systems administrator at the Municipality of Gennep. After the events in Hof van Twente, where hackers gained control of the entire system, he and his colleague Roel Janssen, Technical Information Adviser, realised that action was needed. "You can invest a great deal of money and effort in keeping hackers out and things can still go wrong, often because of human error. We wanted a secure backup that hackers could not reach, so that a cyberattack or other disaster would not leave us completely empty-handed." This view was reinforced by the VNG's recommendation.

Exploring the options

The municipality therefore began looking for a storage system with an air gap, a physical separation between the network and storage that prevents hackers from reaching the backup through the system. Several options were considered. "We looked at tape storage, but it proved too labour-intensive and too slow, aside from several technical obstacles. We eventually arrived at Silent Bricks. Everyone at the Municipality of Gennep can see that removing a Silent Brick from the system literally creates an air gap. Silent Bricks also require very few actions and are easy to use. It is not rocket science."

The link with Veeam was also important. Gerrie Gossens explains: "Our foundation is Veeam Backup, which creates a backup at the main site in the evening. A copy is then written to the disaster recovery site. After those two jobs, a third job uses the backups to feed a replica system with the same data. We have now expanded this setup with an air-gapped backup system connected to Veeam."

Different solutions

Following the VNG's recommendation, the Municipality of Gennep approached Avensius, its long-standing IT partner, for advice. Daan Lieshout explains: "There are several solutions to this problem. You can transfer your data to an external cloud service or a secure Linux server, but all these solutions remain connected by a cable. Although writing data to a hardened Linux server is almost impossible to hack, the Municipality of Gennep was right not to accept 'almost'. They wanted certainty that their data was safe."





Integration

There are several ways to use Silent Bricks and write data through Veeam software. Daan Lieshout explains: "We tested these options to find the most efficient method requiring the fewest actions. We looked for the simplest route from Veeam. The result is that every two days, two Silent Bricks can be loaded into the system and the backup is created with just a few clicks. This achieves the objective: an air-gapped backup. Remember that this backup is your final lifeline. Even in the event of a disaster, you want to be up and running again as quickly as possible after a restore, using minimal equipment and as few actions as possible. This setup makes that possible. It is almost plug and play."

Certainty

Gennep considered several factors when selecting the system. Roel Janssen explains: "This was the most comprehensive and secure option. The air gap is immediately clear, which gave us certainty. In the event of a disaster, we can restore the system relatively quickly. Very few actions and little equipment are required. After implementation, there were a few moments of fine-tuning and adjustment, but everything went smoothly and the system is performing to our complete satisfaction."

"That is reassuring," Gerrie Gossens adds. "The municipality had to approve the investment and management naturally wants to see results. You hope you will never need to use such a backup, but you still need to have it."

The Municipality of Gennep's IT staff swap the Silent Bricks every two days, and creating the backup takes only a few minutes. Gennep has five Silent Bricks in total. Each Silent Brick has a capacity of 24 TB. Because redundancy is built into each Silent Brick, several disks can fail without any consequences, resulting in an effective capacity of 16 TB per Brick. Each Silent Brick can therefore easily store Gennep's entire environment.

The five Silent Bricks are used to store backups from Monday to Friday and are rotated each week. Additional Silent Bricks can be added to retain extra weekly or monthly backups. Roel concludes: "It is reassuring that the system is highly scalable. If your data volume grows, you simply add another Silent Brick."

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Roel Janssen, Technical Information Adviser
and Gerrie Gossens, Systems Administrator

Take action!

Many municipalities have yet to arrange secure and reliable data storage properly. Getting started with Silent Bricks is simple, and the system is easy to use. It is also a one-time purchase for a system designed to last no less than ten years.



Challenges

The rise in cyberattacks also affects municipalities and other public authorities. Hackers attempt to gain access to IT infrastructure in order to deploy ransomware on municipal IT systems and demand a ransom. The Municipality of Genneep was therefore looking for robust protection against cyberattacks to prevent damage or at least limit it as much as possible. The solution had to follow the recommendations of the Association of Netherlands Municipalities and ideally integrate with the existing Veeam backup infrastructure.

Solution

1 Silent Brick system with
1x Drive G2000 Pro
5x Silent Brick 16/24 TB

Sector

Public sector / Municipality

Application

Veeam Backup & Replication

Partner

Avensus

