

# Dutch university gets top marks for cybersecurity

Bitdefender blocks all malware and file-less infections, improves system uptime and performance, and frees IT from time-consuming security administration



## THE CHALLENGE

Keeping a security solution updated across an organization should be the easy part. It's fending off constantly evolving cyberthreats that often is the bigger challenge. For HAN, protection against advanced attacks, security administration, and performance were issues when it used McAfee security solutions.

Not only did McAfee miss infections, but also during updates, HAN's thousands of workstations and servers were frequently disabled or the updates missed certain systems altogether, causing them to lack the required level of protection. As McAfee was downloading and applying updates and performing antimalware scanning, workstation and server performance became sluggish and often resulted in hours of downtime for staff, faculty and students.

To alleviate these issues, HAN initially evaluated Bitdefender and Trend Micro and decided on Bitdefender GravityZone to protect both its physical and virtual environments. Recently, the company evaluated and tested Fortinet, Palo Alto Networks and Bitdefender GravityZone Elite. Again, Bitdefender came out on top.

Johan Vorsterman van Oijen, Technical Project Lead, HAN, explains, "We were impressed with GravityZone Elite's machine learning and sandbox analysis capabilities to help us detect and keep out advanced threats, such as file-less and zero-day attacks. In our testing of various security solutions, GravityZone delivered the best malware detection rate of 100 percent. We also liked the ability to offload scanning so there was no performance impact on our servers. Plus, GravityZone's integration with VMware vCenter Server helped us simplify security management by automating numerous security-related tasks."

## THE SOLUTION

Today, HAN depends on GravityZone Elite to protect the infrastructure that includes 1,900 physical Windows laptops, as well as a VMware-based deployment encompassing 1,350 non-persistent virtual desktops and Windows and Linux virtual servers. HAN also plans to extend Bitdefender protection to applications running in a Microsoft Azure cloud that is under development. Nearly 450 applications run in the environment, such as SolidWorks, Autodesk, and Office 365.



Hogeschool van Arnhem en Nijmegen (HAN) is one of the five largest universities of applied sciences in the Netherlands. With campuses in Arnhem and Nijmegen, HAN offers high-quality, practice-based education to more than 30,000 students.

### Industry

Higher Education

### Headquarters

Arnhem and Nijmegen, Netherlands

### Employees

3,600 (IT staff, 90)

### Results

- Increased detection and blocking of malware and other threats to 100 percent
- Improved performance of workstations and virtual desktops, resulting in less overhead and better application response times
- Decreased monthly security-related trouble requests to nearly zero
- Reduced average weekly time spent managing security from hours to minutes
- Provisioned new workstations and servers in minutes versus hours

## THE RESULTS

With Bitdefender at the helm, HAN detects and thwarts 100 percent of threats attempting to enter the environment—compared to ninety percent previously.

Vorsterman van Oijen especially appreciates that GravityZone Elite incorporates multiple levels of advanced, next-generation technologies. These layers include Sandbox Analyzer, an endpoint-integrated sandbox to examine suspicious files, detonate payloads, and report malicious intent to administrators; HyperDetect tunable machine learning; and advanced behavioral analysis and anti-exploit techniques.

“GravityZone Elite has been a real asset,” says Vorsterman van Oijen. “When we see something suspicious, we send it to Sandbox Analyzer and it tells us if the file should be white listed.”

System performance for workstations and virtual desktops also has dramatically improved since GravityZone was deployed. In fact, IT used to receive approximately ten trouble requests from end-users regarding security-caused performance issues on average per month. Today, such requests have been eliminated.

Vorsterman van Oijen explains, “Scanning and security-database updates take a lot of system resources. So, offloading them to a dedicated server means that there is no performance slowdown when GravityZone is doing updates or scans. This improves work satisfaction and productivity of our users.”

Managing security has been streamlined with GravityZone as it allows HAN administrators to handle all security-related tasks for virtual and physical machines from a single console.

Plus, GravityZone’s native management integration with VMware vCenter Server automates provisioning of security tools, assignment of appropriate security policies at scale, and security-license recovery from decommissioned virtual desktops. Adding new workstations or servers, as well as distributing updates take minutes today compared to hours with the previous solution.

As further evidence of GravityZone’s ease of administration, the average time HAN IT spends managing security has decreased to two hours a week instead of many hours before.

“Everything is easier to manage and better protected with GravityZone from a security standpoint,” states Vorsterman van Oijen. “We keep out the malware and no longer have downtime and performance issues caused by security. It’s been a very successful project for the university.”

*“Everything is easier to manage and better protected with GravityZone from a security standpoint. We keep out the malware and no longer have downtime and performance issues related to security. It’s been a very successful project for the university.”*

— Johan Vorsterman van Oijen,  
TechnicalProject Lead, HAN

### Bitdefender Footprint

- GravityZone Elite Security
- GravityZone On-Premises Management Console

### IT Environment

- Autodesk
- Linux
- Microsoft Azure
- Microsoft Windows
- SolidWorks 3D CAD
- VMware