

## Highest Level of Network Security and Availability for a Fraction of the Effort

Barracuda CloudGen Firewalls enforce security and guarantee application availability for Vrije Universiteit Brussel



### Profile

- Vrije Universiteit Brussel (Brussels, Belgium) was founded in 1834
- Consists of eight faculties with 16,000 students and 3,300 administrative staff
- Health campus serves 800 students and 150 staff

### Challenge

- Secure network segmentation
- Needed the highest level of advanced threat protection and web security
- Required high-speed medical image transfer and online lecture streams without interruptions by less important network load
- Only two-and-a-half administrators could manage a security solution

### Solution

Barracuda CloudGen Firewalls (hardware and virtual editions)  
Barracuda Firewall Control Center

### Results

- Optimized bandwidth for critical applications
- Increased availability and stability of the WAN infrastructure
- Ultra-secure internet access for 800 students with Barracuda Advanced Threat Protection
- Effortless daily management and update procedures with centralized management

### About Vrije Universiteit Brussel

The Vrije Universiteit Brussel is a Dutch-speaking university located in Brussels, Belgium. It has four campuses: Brussels Humanities, Science and Engineering Campus (in Ixelles), Brussels Health Campus (in Jette), Brussels Technology Campus (in Anderlecht) and Brussels Photonics Campus (in Gooik).

The university is organized into eight faculties that accomplish the three central missions of the university: education, research, and service to the community. The faculties cover a broad range of fields of knowledge including natural sciences, classics, life sciences, social sciences, humanities, and engineering. The university provides bachelor, master, and doctoral education to about 8,000 undergraduate and 1,000 graduate students. It's also a strongly research-oriented institute, which has led to its top-182th position among universities worldwide. Brussels Health campus is housing the faculty of medicine and pharmacy (including biomedical sciences), the faculty of physical education and physiotherapy and an academic dental clinic.

Within the university, network is provided and maintained by VUBnet (University Network Department), uplinked to the BELNET grid. For specific educational and research projects in the Brussels Health campus, multiple LAN segments were created and then uplinked to the VUBnet infrastructure.

### Traffic Intelligence is essential

Digital medical imagery as provided MRI scans and microscopic tissue images for example, can easily exceed multiple gigabytes per scan; therefore, transferring many of these images across the network can be a challenge for network architecture. "This is when you realize that your network users are utilizing bandwidth with non-business related way more than expected," says John Kellen. With the application control and traffic shaping capabilities of Barracuda CloudGen Firewall, the IT team easily put several schemes in place on how traffic shall be handled and which data stream is more important than the other. Now, streaming traffic is provided with less bandwidth, allowing more bandwidth for critical traffic, like science and education related data.

*“Doing live streams out of the campus’ auditorium and not worrying about bandwidth assignment is priceless. Barracuda CloudGen Firewall traffic shaping never lets us down.”*

**John Kellen**

*IT Manager, Vrije Universiteit Brussel, Health Campus*

### About the Barracuda CloudGen Firewall

Barracuda CloudGen Firewalls feature advanced security capabilities, including integrated Intrusion Prevention (IPS), URL filtering and antivirus to identify and block evasion attempts that would trick traditional systems. Barracuda's security extends beyond a network to Barracuda's Advanced Threat Protection (ATP) cloud for both statistical and sandboxing analysis of zero-day and targeted threats that routinely bypass signature-based IPS and antivirus engines.

**FW**

Barracuda  
CloudGen Firewall

As for any modern educational organization, there is a demand for live streaming of lectures and events. Therefore, the health campus runs sophisticated video and audio equipment. Barracuda CloudGen Firewall's traffic shaping prioritizes these streams and reserves the maximum of bandwidth for this traffic to maintain high-quality streaming experience.

### Central Management is Key

Before moving to Barracuda, the health campus operated small business routers to segment the network. However, administration and enforcing security policies ended up being cumbersome. Now with Barracuda CloudGen Firewall, the small IT team of the Brussels health campus can easily segment the network, secure it with state-of-the-art firewall technology, optimize it with traffic intelligence capabilities and administration, and ensuring security compliance is a breeze.

Students and staff using the virtual desktop infrastructure benefit from Barracuda's Advanced Threat Protection (ATP) service. Barracuda ATP ensures that any download done via the VUBnet internet connection is safe and not infected with malware or ransomware. Clinical desktops, VDI client and server infrastructure used in the dental clinic are protected by both the strong firewall and Barracuda ATP.

### MSP is the way to go

By definition, small IT teams tend to be a "one-man band" with very packed calendars. There is hardly enough time to deal with day-to-day tasks much less a complex firewall deployment. Even though Kellen was highly interested in additional administration capabilities, the deployment wasn't big enough to invest in a stand-alone Barracuda Firewall Control Center. So, Kellen and his team decided to hire a Barracuda partner to handle the job.

With the multi-tenant capabilities the Barracuda Firewall Control Center offers, the small IT team is able to manage all security components deployed via one single interface. Additionally, If something major mishap—like a misconfiguration of the firewalls occurs or hardware needs to be replaced—it's very easy to switch back to the last working configuration.

*“With Barracuda CloudGen Firewall our students and our network are perfectly safe and you don't have to worry about threats like the recent ransomware outbreaks.”*

**John Kellen**

*IT Manager*

*Vrije Universiteit Brussel, Health Campus*

### About Barracuda Networks, Inc.

Barracuda simplifies IT with cloud-enabled solutions that empower customers to protect their networks, applications, and data, regardless of where they reside. These powerful, easy-to-use, and affordable solutions are trusted by more than 150,000 organisations worldwide and are delivered in appliance, virtual appliance, cloud, and hybrid deployments. Barracuda's customer-centric business model focuses on delivering high-value, subscription-based IT solutions that provide end-to-end network and data security. For additional information, please visit [barracuda.com](http://barracuda.com).

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