THE RIGHT TECHNOLOGY AT THE RIGHT TIME

Scalable solution adapts to requirements and ensures problem-free working during the coronavirus pandemic

HZDR
HELMHOLTZ ZENTRUM
DRESDEN ROSSENDORF

Customer Profile
Helmholtz-Zentrum Dresden-Rossendorf is one of the largest research institutions in the German state of Saxony, focusing on the fields of energy, health and matter.

Challenge

- The institution's firewall technology originally used the Check Point open server landscape without appliances. This solution was no longer compatible with growing performance demands.
- Deliver a flexible security architecture that can scale instantly in an environment of growth
- Multiple systems for configuration & operation

Solution

- Check Point Quantum Maestro

Benefits

- Scalable solution grows with requirements
- Excellent stability and performance
- Thousands of employees can work on the system from home simultaneously
- Single unified system & single management view
- Zero downtime in failover

> "Introducing Check Point Maestro was the right step at the right time. In the spring, when all our staff began working from home, it was able to cope with the new demands effortlessly."
>
> — Dr. Uwe Konrad, Head of IT, Helmholtz-Zentrum Dresden-Rossendorf

Overview

Helmholtz-Zentrum Dresden-Rossendorf

Helmholtz-Zentrum Dresden-Rossendorf is one of the largest research institutions in the German state of Saxony. It is part of the Helmholtz Association of German Research Centers and works in the fields of energy, health and matter. It operates large-scale facilities with users all over the world and employs around 1,400 people. It has additional sites in Freiberg, Görlitz, Grenoble, Leipzig, and near Hamburg.

Business Challenges

Increasing demand made appliances necessary

When it first introduced firewall technology in the early 2000s, the Helmholtz-Zentrum Dresden-Rossendorf chose to use Check Point's open server landscape. The hardware came from the Helmholtz-Zentrum itself. "This was standard practice at the time. We initially chose not to use Check Point's appliances as we were satisfied with our existing solution and it fit with our hardware landscape, maintenance practices and expertise," explains Dr. Uwe Konrad, Head of IT at the Helmholtz-Zentrum Dresden-Rossendorf. But as performance demands increased, it became clear that certain features would no longer work. If the system came under heavy load, it would reduce the security level and allow traffic through without fully analysing it. The institution therefore began to consider installing Check Point appliances.

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Solution

Scalable solution is critical to success

The Helmholtz-Zentrum Dresden-Rossendorf decided on Check Point Maestro. "In the end we decided on Check Point because we had always been happy with its features and security systems. We had no major events. With Check Point Maestro, we got the scalable solution we need to grow with our requirements over the coming years," continues Dr. Konrad.

The institution installed two Maestro Hyperscale Orchestrators and two Quantum Security Gateways. At this point, no additional gateways have been required as the system has not yet reached its limits. As its capacity utilization grows, however, the number of gateways will need to be increased and can be done so easily. For security management and monitoring, the Helmholtz-Zentrum uses Check Point Smart Console R80.20.

Check Point Maestro was implemented for the institution in October 2019. "It was running well and stable during the first year of operation with cluster performance increased by HyperSyncTM technology," says Dr. Konrad. Due to the system's performance, the institution does not currently need to distribute traffic across certain gateways. The maximum throughput of the current configuration is about 10 Gigabytes. He believes that 100 Gigabytes is not too far away.

Benefits

Technology proves its worth in the pandemic

"Introducing Check Point Maestro was the right step at the right time. In spring, when all our staff began working from home, it was able to cope with the new demands effortlessly," explains Dr. Konrad, looking back at the start of the coronavirus pandemic. "The solution helped us and proved its worth during the pandemic." In order to enable staff to work from home, the institution simply had to increase the number of licenses. To accelerate the process, Check Point worked with the research institution to enable 800 employees to work from their mobile offices simultaneously. Their positive feedback confirmed that Check Point Maestro was the right solution. The facility's security reports also showed that while the number of attacks increased, the defence rate also improved. Attack scenarios and defence processes in the reports showed that the security gateway is working well. As a customer who had already been running a Check Point system, switching to Maestro was not particularly difficult," he adds.

Fine tuning of bandwidth management and quality of service is currently not necessary. However, in the long term, Dr. Konrad would like to see this kind of detailed management within the solution.

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