Zenseact accelerates self-driving innovation by saving 150 hours per month on backup management with Veeam and Kasten K10 by Veeam



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Johan Jansson,Scrum Master and Service Owner,Zenseact

The business challenge

Autonomous vehicles promise to change societies around the world forever. For the companies bringing this vision to life, high performance computing is key to tackling the huge engineering challenges involved.

"Zenseact was established with a single mission: develop the software that makes autonomous driving possible, reliable and safe," said Johan Jansson, Scrum Master and Service Owner at Zenseact. "We are a mix of engineers, software and hardware developers and IT specialists, making technology central to everything we do. If our technology stops working, so do we."

In the data-intensive environment at Zenseact, employees are continually building new software and services, which must be backed up to avoid losing progress. In the event that IT systems go down, the company aims to bounce back rapidly with minimal recovery time objective (RTO) and recovery point objective (RPO), to avoid delays to its product launch targets.

"The autonomous driving sector is growing fast, as we get closer to the point where the technology has matured enough for broad adoption," said Jansson. "To ensure we stay at the forefront of the sector, we cannot afford delays. Moving fast is central to the Zenseact mission, so we're always looking for ways to do things more efficiently."

To streamline development processes and optimize use of resources, Zenseact is moving to a containerized approach. In parallel, the company's IT team aimed to augment its backup capabilities to ensure that its evolving environment was fully protected.

Industry

Automotive

Company



Zenseact exists to make safe and intelligent mobility a reality for everyone, everywhere. It does this by creating innovative automotive software, with the ultimate goal of developing self-driving solutions that enable end-customers to feel so safe and relaxed that they reach a 'zen' state of mind. Headquartered in Gothenburg, Sweden, Zenseact also has an office in Shanghai, China, with an international team of employees from 55 countries.



"Containerization enables us to reduce our overheads compared to straightforward virtualization," said Jansson. "It allows us to dynamically allocate resources and scale horizontally to cope with unpredictable workload. As we embarked on our containerization journey, we wanted to ensure that we could also back up this new part of our environment easily and reliably, fully integrated with our other existing workloads."

The Veeam solution

For four years, Zenseact has relied on Veeam® Availability Suite™ as its backup, recovery and monitoring solution. The company is currently protecting approximately 400 mission-critical virtual machines (VMs) using Veeam technology. For faster backups with minimal impact on system performance and maximum business continuity, Zenseact parallelizes and distributes its data protection workload using Veeam backup proxies.

"Veeam has long been our backup and replication technology of choice – it has proved itself again and again," said Jansson. "We selected Veeam Availability Suite for its rich feature set, flexibility and scalability. The solution aligns with our agile mindset and best practices. For example, the Instant VM Recovery feature helps us to save time when we need to restore data and services quickly. Veeam enables us to move fast to deliver new capabilities to our customers – because we know we can always roll our systems back quickly and easily."

To find the best data protection solution for containerized workloads, Zenseact evaluated five different offerings. Ultimately, the company selected Kasten K1O, which is purpose-built for Kubernetes.

"Our goal is to provide both freedom and safety to our developers, so they may perform to their full potential while keeping risk low," said Jansson. "Kasten K10 was the most capable of meeting these objectives. It's the most stable, simple to use and reliable to work with of available offerings in the market today. It includes many features out of the box that we would have had to build ourselves if we'd have chosen another option."

The Zenseact team hit the ground running with Kasten K10, quickly becoming familiar with the interface and setting up backup policies for containers. Today, the company's 500 developers can automatically include backups when they set up a new project and easily making changes at a later date.

"By combining Kasten K10 with Red Hat Ansible Tower, we're providing self-service features for backups," said Jansson. "Now, when a developer creates a project, they select from a list of backup policies that are then automatically applied. In this way, we're giving our developers flexibility while keeping management simple. We can also restore data very quickly, which is another capability that we're planning to roll out as a self-service function soon."

Zenseact is gradually moving workloads from VMs to containers, using Veeam technology to ensure that data is protected end-to-end across its IT environment. Using Veeam Availability Suite, the team can optimize configurations to accelerate backup throughput. To maximize backup performance, Zenseact closely integrated Veeam Backup & Replication with its Dell EMC Data Domain storage systems, taking advantage of Data Domain Boost technology and streamlined deduplication features.

Challenge

Zenseact is at the forefront of the market for autonomous vehicle software. To retain its position at the leading edge, the company maintains a rapid pace of innovation, driven by data-intensive IT. To reduce the risk of interruptions and delays to operations, Zenseact must be able to recover data quickly and effectively in the event of a disaster, making backup processes crucial for the company. As Zenseact began to adopt containerization to further accelerate development, it also aimed to update its backup capabilities to better protect the new environments.

Region

Europe

Solution

Veeam Availability Suite Kasten K10 by Veeam

Results

- Saves 150 hours per month on backup management, which can instead be redirected to innovative development work
- Applies backup policy automatically, helping to reduce the risk of data loss in a recovery scenario
- Reduces risk by providing futureproof backup capabilities that evolve alongside the Zenseact product roadmap



"Kasten becoming part of Veeam is a great advantage for us," said Jansson. "We're assured of the long-term roadmap for the solutions, and we've built a collaborative relationship with the Veeam and Kasten team. As we work towards our ambition of safe, accessible self-driving cars, we're using Veeam and Kasten technology to ensure our developers always have the data they need for innovation."

The results

- Saves 150 hours per month on backup management, which can instead be diverted to innovative development work
 Both developers and IT specialists at Zenseact save time thanks to Veeam and Kasten K10 technology, enabling them to work more productively.
- Applies backup policies automatically, reducing the risk of data loss in a recovery scenario
 - "By combining Kasten K10 and Veeam Availability Suite, we prevent the IT team being a bottleneck when it comes to backups," said Jansson. "The time we're saving will contribute to shorter time-to-market, and policy automation will cut the risk of a data-loss incident delaying our product development process."
- Reduces risk by providing future-proof backup capabilities that evolve alongside the Zenseact roadmap
 - "Together, Kasten K10 and Veeam Availability Suite are supporting our strategic transition to containerized workloads," said Jansson. "We're committed to using the solutions long-term and feel confident they will evolve alongside us. Already, we've seen the positive impact on upcoming functionality it's great to be part of making Zenseact products better for all customers."

About Veeam Software

Veeam® is the leader in backup, recovery and data management solutions that deliver Modern Data Protection. The company provides a single platform for Cloud, Virtual, Physical, SaaS and Kubernetes environments. Veeam customers are confident their apps and data are protected and always available with the most simple, flexible, reliable and powerful platform in the industry. Veeam protects over 400,000 customers worldwide, including 82% of the Fortune 500 and 69% of the Global 2,000. Veeam's global ecosystem includes 35,000+ technology partners, resellers and service providers, and alliance partners and has offices in more than 30 countries. To learn more, visit www.veeam.com or follow Veeam on LinkedIn @veeam-software and Twitter @veeam.

