Into the cloud... Based on a true story

# Hosted Private Cloud: flexibility and reliability for traffic spikes











Scalability to fit customer needs at a transparent price Maintenance operations and non-disruptive updates



## The background

#### Reliable and flexible resource provisioning for the best customer experience at all times

When users come into contact with popular and renowned brands like Ravensburger, they expect a compelling and consistent online presence — especially for the company's website and online store. A positive buyer experience is essential. As an international group with more than 2,100 employees worldwide, Ravensburger needs to rely on its cloud infrastructure so that customers around the world can access its e-commerce platform and brand universes, day and night.

Reliability and high availability are, therefore, essential to guarantee this customer experience. This is especially the case as Christmas approaches, when annual traffic spikes require more cloud resources. In order to reliably provide basic resources like computing power, RAM and hard disk storage as well as the additional network features required, OVHcloud has set up the Hosted Private Cloud for Ravensburger as a Software-Defined Datacentre (SDDC). The result is measurably higher reliability, performance and speed, with less administrative effort — which in turn offers further flexibility for scaling the computing power.

Ravensburger uses the Hosted Private Cloud solution to guarantee basic resources like computing power, RAM and the network features required for its infrastructure to work properly. The SDDC solution offers reliability, performance and speed while minimising administrative overhead, and offering high flexibility to scale the computing power.





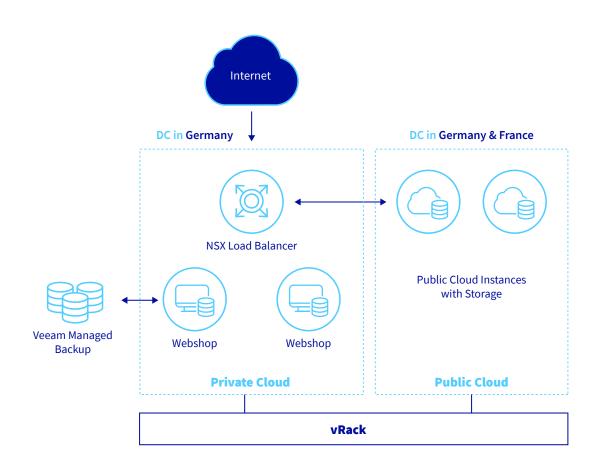
## The challenge

#### Flexible deployment and future-proof scalability

With its distinct blue triangle logo, Ravensburger is a quality brand appreciated by consumers for its jigsaw puzzles, games and recreational products. Ravensburger has established itself as a European market leader, and now represents evolving games that have come from a long tradition.

Ravensburger's e-commerce platform and its range of brand universes now complete the company's online offering. The cloud infrastructure must guarantee that visitors from all over the world can access their websites at any time.

In addition to this, the challenges specific to the toy industry include peak demand, particularly as Christmas approaches. As a result, advanced cloud resources are required to give customers the online shopping experience they are used to. To absorb traffic spikes easily without having to maintain the resources required at all times, a cloud solution was required — allowing for high provisioning flexibility and future-proof scalability, at a transparent price. At the same time, quick implementation was essential for the company to avoid a double load during the toy industry's peak season, which focuses on a very short period of time.





## The solution

#### Software-Defined Datacentre (SDDC) for maximum performance and flexibility

OVHcloud has set up the Hosted Private Cloud as an SDDC for the Ravensburger company. It provides basic resources like computing power (CPU), RAM and hard disk space (storage) as well as the additional network features required, such as routing, load balancing and firewall.

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> Sascha Spitzl, Head of IT infrastructure, Data Management & Security at Ravensburger AG

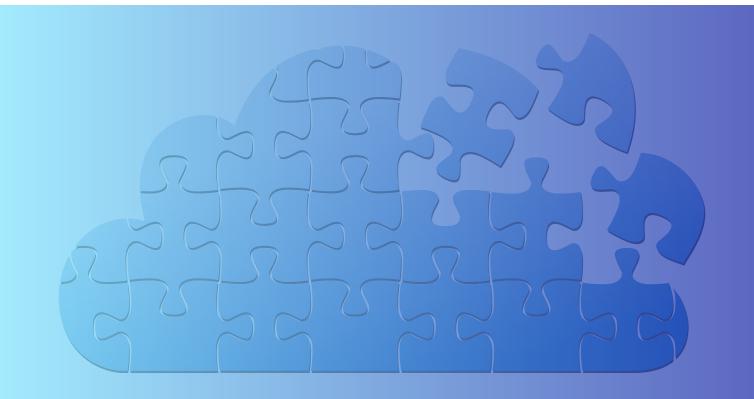
The SDDC solution is based on VMware. In addition to the VMware Enterprise licence, it also includes NSX, which delivers network features as virtual services in the Hosted Private Cloud network. To ensure that these advanced features do not affect the Hosted Private Cloud resource pool, they are provided via a high-availability cluster. The SDDC series, relaunched in 2020, uses Intel<sup>®</sup> Xeon<sup>®</sup> scalable second-generation processors. Instances and workloads run on the SDDC/Hosted Private Cloud physical hosts. The entire Hosted Private Cloud vSAN series, i.e. the hosts with integrated NVMe storage, is equipped with dual CPUs that have two Intel<sup>®</sup> Xeon<sup>®</sup> Gold CPUs each.

Instances and workloads run on the SDDC/Hosted Private Cloud physical hosts. In each situation, at least one host is always available, and "empty" as a node to guarantee the highest availability. No active processes run on this node. If one of the other hosts goes down, all processes can be transferred to this failover host without any deployment time, to restore the target state of the cloud instance experiencing a failure. This allows the team to replace the defective machine in the background, while maintaining a free failover host in the Hosted Private Cloud. To avoid data loss, disk storage is replicated multiple times through a LeClerc cluster, where dedicated storage capacity is provided.



To enable long-term Hosted Private Cloud development and scalability, additional host servers (nodes) — with different specifications for special tasks, such as more storage capacity — and other failover hosts can be added at any time. Individual hosts can be removed once load peaks have passed, to avoid provisioning unnecessary and expensive resources when demand is lower. For example, as Christmas approaches, additional hosts can be added to primarily manage front-end web servers for customers — and ensure a positive shopping experience. Once the Christmas period passes, the hosts will be freed up again, and the servers will be brought back to normal operation.

Failover hosts can also perform maintenance and update jobs without affecting cloud instances. They do this by patching them one by one, and moving instances smoothly to hosts that are already maintained. By building its own servers, OVHcloud can offer a unique development, assembly and maintenance service, in addition to providing configurations tailored to a specific application. Operating our own datacentres in a secure network also guarantees a high level of security in the event of failure, to ensure service continuity for customers worldwide.





### The result

#### Scalable Hosted Private Cloud with reliability and high performance

With the Software-Defined Datacentre, Ravensburger can rely entirely on its cloud infrastructure to offer its customers a reliable and consistent experience worldwide, across all of its online offerings. This integrated security, high-availability design allows the brand to perform maintenance and updates without affecting instances, through the use of failover hosts. Furthermore, the Hosted Private Cloud can be flexibly adapted to current requirements in order to easily manage access peaks, and preserve resources when access is low. This was tested for the first time during the implementation period in spring 2020. While many consumers were spending more time at home due to the COVID-19 pandemic, visits to the Ravensburger website quickly reached an unexpected peak for this time of year. By moving various components to the new cloud infrastructure at an early stage, they could get a first positive hands-on experience during traffic spikes.

"As an international group that operates mainly on a seasonal basis, availability and flexibility are extremely important to us. The easily scalable cloud and flexible contract duration were the main reasons we chose the Hosted Private Cloud by OVHcloud. The ability to add ESX instances in one click and complement an environment with Public Cloud resources — with vRacks if necessary — was also a deciding factor from a technical point of view. It means that we can react very quickly to changing load conditions."

> Sascha Spitzl, Head of IT infrastructure, Data Management & Security at Ravensburger AG

OVHcloud is a global, hyper-scale cloud provider that offers businesses industry-leading performance and value. Founded in 1999, the group manages and maintains 30 datacentres across four continents, deploys their own fibre-optic global network and controls the entire hosting chain. Relying on their own infrastructures, OVHcloud offers simple and powerful solutions and tools that put technology at the service of business, and revolutionise the way that our more than one million customers around the world work. Respect for individuals, freedom and equal opportunities for access to new technology have always been firmly rooted principles of the company. "Innovation for freedom".

