Into the cloud... based on a true story

# Handling the world's largest database of product prices and photos







2.4 billion photographs collected by Public Information servers



Over 35 billion photo comparisons and 200 million text comparisons daily



Over 250 million price change screen shots stored every 90 days in Object Storage platforms

## The context

Netrivals are one of the internet's most useful assets. They offer a data-driven, comprehensive view of the market through competitive pricing analysis. By monitoring 100s of millions of products and 10s of thousands of webpages, Netrivals help clients make better-informed pricing decisions. Netrivals merge their own collected data with client data – including sales, finance and CRM – to produce data-driven pricing guidance and advice. With 245 customers in 20 countries, Netrivals strategy is proven to boost customer sales and revenues.

Netrivals have been partnered with OVHcloud for just under a decade and utilise a wide range of its products and services. OVHcloud handle their high-computational requirements and flexibility needs. This is key in delivering Netrivals highly sought-after tools and services.



# The challenge

For Netrivals, computational requirements are key - from the number of transactions processed, to the amount of reads and writes on discs, and the level of public and private network traffic. By early 2006, the company's IT infrastructure was struggling to meet increased IT demands. Netrivals' on-premises infrastructure didn't offer enough performance or support to respond to their specific needs. They had insufficient server specifications, low CPU performance, and lacked public and private connectivity. Moreover, their providers fell short on delivering the required services at critical points, and only offered cloud alternatives at an unreasonable expense.

To meet the escalating demand for Netrivals services, the company would need infrastructure that was 100% scalable, without limitation. This would allow them to grow their data volumes without excessive cost increases. They would also need network stability and connectivity, as well as technical specifications that enabled them to offer a robust SaaS that was consumable from any location.

"OVHcloud has significantly changed the way netRivals can offer its SaaS service to its customers. Compared to other existing services, the savings are significantly higher, and the scalability is unlimited."

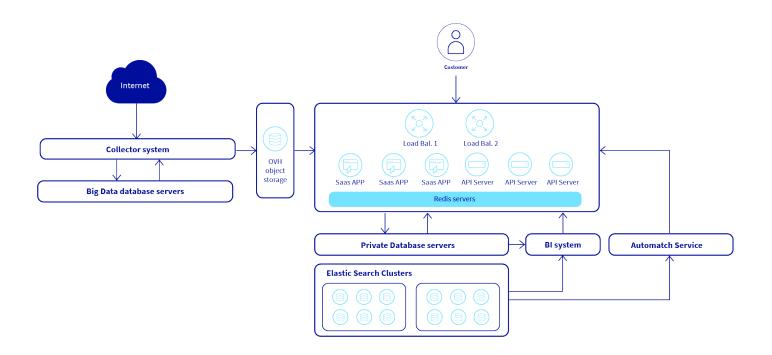




# The solution

In 2013, Netrivals began talks with OVHcloud, with several goals in mind. These goals included high availability, peak usage handling, and keeping costs low. To meet these targets, the IT experts at OVHcloud recommended Bare Metal Cloud, with its wide variation of Dedicated Servers and Object Storage.

"We started our collaboration with OVHcloud with only 5 servers. Today we have more than 40 dedicated servers, and we are prepared to continue expanding the infrastructure as our requirements change. We are confident that our relationship with OVHcloud will continue to grow stronger and more consistent, as they are continually releasing new features and improving server specifications, which opens up new possibilities for us, especially in terms of the number of services we offer."





### Netrivals' infrastructure setup:

- To handle the huge amount of data collected, Netrivals utilise dedicated data collection servers. These servers oversee the collection of data from the internet, which downloads thousands of pages per second and then processes and interprets this data in real-time. The servers offer the latest, high performance capacity thanks to their next-gen AMD EPYC processers.
- Central servers orchestrate data collection 24 hours a day carrying out data collection according to the needs of every Netrivals client.
- A large cluster of Public Information servers stores the information collected by the servers. This is where product data is stored, including price, stock, specific attributes, digital signatures and more than 2.4 billion photographs.
- Another large set of private server's host a private environment for Netrivals clients. They create exclusive infrastructure for clients who require more specific calculations, including clients who apply specific security rules.
- A range of servers with high-disc capacities carry out daily backups for 100% of the infrastructure.
- Netrivals employ a cluster of highly available Elasticsearch servers to carry out extremely high computational calculations, such as generating over 40 billion photo comparisons and over 200 million text comparisons per day.
- Object storage: Netrivals store all price change screen shots using OVHcloud's Object Storage Platform over 250 million items every 90 days.

"Our entire infrastructure of OVHcloud dedicated servers, from the infrastructure range, have the latest generation of AMD Epyc processors. This feature offers us a performance 3 times higher than any other solution available on the market."





As members of the Open Trusted Cloud program, Netrivals are the proud beneficiaries of OVHcloud data confidentiality guarantees, service availability promises, and regulatory best practices. Data protection is a fundamental pillar of OVHcloud's offering. Compliance with the CISPE European code of conduct, for example, means that Netrivals needn't worry about invasive policies such as the US Cloud Act. This means Netrivals can promise to protect their users and customers privacy, as well as the confidentiality of their data.

Netrivals are committed to service continuity, which is possible thanks to OVHcloud's highly available datacentres and SLA promises. The highly redundant, high-asset infrastructure features industry-leading availability and disaster recovery protocols. Continuous R&D and innovation at OVHcloud, along with the regular upgrading of equipment, helps ensure that Netrivals maintain ongoing availability and service integrity, no matter what.

Compliance and best practices are also at the core of Netrivals business promise. With OVHcloud, Netrivals can guarantee implementation processes and controls that align with international regulatory and industry best practices. OVHcloud offer ISO 27001, PCI DSS, HDS, TSP, CSA, ISO27017, ISO 27018 and CISPE compliance as well as Hosted Private Cloud infrastructure that holds ISO 27001, PCI DSS PSP, HDS, SOC I and II type 2 certifications and accreditations.

OVHcloud ensure that Netrivals infrastructure has the correct amount of distribution so that no single point of failure will impact their users and customers. All this, in combination with network firewall protection and industry-leading anti-DDoS protection, allows Netrivals to make security promises with confidence.

"Netrivals works to offer our customers the best support. In the same way, Netrivals works with OVHcloud with an Enterprise Support service to guarantee the continuity and restoration of the service in case of any incident that may occur. In this sense, it is necessary to work with a company with dedicated support resources that offer minimum response times to comply with our own SLA policies with our customer base."





## The result

OVHcloud's comprehensive infrastructure capabilities, coupled with a high-level service, has defined the relationship with Netivals. For Netrivals, the offering is more than just ideal – OVHcloud are essential to the functioning of Netrivals' operation, and therefore a necessary partner. In their relationship with OVHcloud, the company have grown year on year, both in the size of the product database and the scope of their SaaS dynamic pricing solution. Utilising OVHcloud resources, Netrivals' now have the world's largest database of products, prices, stock histories, and photos. Despite the very high computational volumes of the company's unique auto-match systems, Elasticsearch clusters built on OVHcloud infrastructure allow Netrivals to process more than 35 billion photo comparisons daily, as well as 200 million text comparisons.

"Compared to other available servers, both physical and in the cloud, the OVHcloud solution offers us exceptional features at a low cost. Given the sheer volume of data and transactions we have to do every second, replicating an infrastructure like Netrivals on a cloud service would drive costs up to 5 times the current cost."

OVHcloud is a global player and the leading European cloud provider operating 400,000 servers within its own 32 data centres across 4 continents. For 20 years, the Group has been leveraging an integrated model that provides full control of our value chain, from designing our servers to managing our data centres through to orchestrating our fibreoptic network. This unique approach enables OVHcloud to cover, independently, the full spectrum of use cases for our 1.6 million customers across 140 countries. OVHcloud now offers customers latest-generation solutions that combine high performance, predictable pricing and full data sovereignty to support their unfettered growth.



