

## ORACLE CLOUD HPC CUSTOMER CASE QUISTOR + SURF



# **Quistor** and **SURF** bring together technology, education and research

The digital landscape in education and research is expanding rapidly, and cloud platforms play a crucial role in this evolution. The innovative SURF Research Cloud, a platform for efficiently building virtual research environments, demonstrates the impact of a strong collaboration between technology providers and academic institutions. A consortium, consisting of SURF, Oracle, Quistor, Microsoft, and Bechtle, has paved the way for a new generation of research and education through a successful GÉANT tender. Scalability, accessibility, security, and cross-institutional collaboration are central to this endeavor.

SURF Research Cloud provides computing power from various cloud platforms to researchers, including Oracle Cloud. The computing power is billed in credits that researchers can purchase from SURF and then they decide how to allocate these credits within the platform. The integration with major cloud platforms, like that of Oracle, means that researchers gain access to the most advanced and latest technologies and hardware. Additionally, various concerns are addressed, as SURF takes care of payment systems and identity management, allowing research groups to access the platform without administrative hassle.





# The path to public Cloud and a €400K GÉANT funding

In the SURF cooperative, universities, colleges, education institutions, academic medical centers, and research organizations collaborate on the best ICT solutions for education and research. SURF Research Cloud already existed, operating from its own data centre since 2021 and experiencing rapid growth. Discussions with cloud providers were ongoing when Quistor proposed, in collaboration with Oracle, to apply through SURF for the EOSC Future grant to explore the possibility of obtaining funding.

The European Union allocates funding, facilitated by GÉANT in partnership with EOSC Future, to innovative projects in the research and education landscape, aiming to accelerate the adoption of cloud services.

Ivar Janmaat, manager of SURF Research Cloud, explains, "We liked the idea but wanted to make it cross-platform to maximize flexibility for our researchers. They need real choices. This led to a fruitful collaboration with Oracle, Quistor, Microsoft, and Bechtle." He continues, "Initiated by Quistor with support from Oracle, this application became a joint effort. We worked tirelessly to secure the funding of €400.000, and now we can reap the benefits. This will bring joy to many researchers."

### **Long-term Vision**

Janmaat is highly pleased with Quistor's demonstrated vision, proactivity, and decisiveness. "I applaud Quistor for taking such a bold step because it's a long-term strategy. It takes courage to embark on a two-year journey and invest so much time. I have respect for that, including their ability to defend this internally."

#### OUR MISSION IS TO FACILITATE CROSS-INSTITUTIONAL COLLABORATION IN RESEARCH AND BRING COMPUTATION TO THE DATA

Mark Verhorst, Sales Manager Cloud Benelux at Quistor, led the way in this project together with representatives from Bechtle, Microsoft, and Oracle, and responds to Ivar's comments. "I found the collaboration with SURF extremely positive. Throughout the application process and project execution, we genuinely focused on the solution: how can we make this appealing to universities, maintain it, and ensure scalability, so that all the merits of a public Cloud are highlighted without further limitations? I speak mainly for Quistor, but I can say it all went very smoothly, and with the expertise of Oracle and SURF, we were able to build a fully customized environment."

## The beginning is made

The platform is now live and SURF members can start utilizing it. A notable initial reference is a workshop on AI held at Utrecht University. Ivar explains, "We encountered an issue because they wanted to conduct the workshop with 30 machines running specific AI software, requiring graphics cards. It was challenging for us to allocate 30 graphics cards for such a workshop."

He continues, "With Oracle Cloud Infrastructure, we managed to arrange this, and it was a significant success. People were highly impressed with the performance of the systems, so we hope to do more of these things with Oracle in the future."

Ivar envisions a range of possibilities for the future, stating, "We see that our platform is suitable for both genuine research and classroom-style workshops or practical assignments. It's exciting. These are all new technologies and it's booming. Having an environment where people can work hands-on with them is truly wonderful."

# Price Performance as the Strength of Oracle Cloud Infrastructure

When asked about why Quistor enjoys collaborating with Oracle, Mark responds, "Oracle Cloud Infrastructure excels in price performance. They are not only cost-effective but also fast and reliable. They stand out in terms of the latest technologies, often at half the price of competitors. This allows researchers to analyze more data or train models longer within the same budget, leading to improved research outcomes."

EASY OF USE: RESEARCHERS ONLY CHOOSE THE APPLICATION AND DATASET THEY REQUIRE AND TO INVITE THE COLLABORATORS THEY WISH TO WORK WITH

Mark adds, "Oracle excels in performance, in part due to their ability to bypass the 'noisy neighbours' effect. They achieve this by not dividing CPU cores into vCores but by offering dedicated CPU cores. You always acquire a core with two threads. This ensures you never deal with a 'neighbour' who got there a bit earlier, limiting your performance to less than 100%. This significantly enhances the stability of the platform."

#### **ABOUT QUISTOR**

Founded in 2005, Quistor is known for its profound experience in JD Edwards, Oracle Infrastructure as a Service, Oracle Platform as a Service, Oracle Autonomous Data Warehouse and Oracle Analytics Cloud technology. The company's mission is to deliver outstanding Consultancy & Managed Services. Quistor currently serves over 250+ clients globally and staffs around 250 people with offices in the Netherlands, Spain, Czech Republic, France, Mexico, United Kingdom, and the Philippines.



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