How Veolia Water Technologies is driving innovation and sustainable operational improvements in the Cloud

Company name - Veolia Water Technologies  
Industry - Water & Waste Water

**Goals**
- Connect engineering teams spread across 5 continents
- Enhance operational insight and efficiency
- Contribute to Veolia’s strategic goals of sustainable next-gen water operations and being the benchmark in ecological transformation
- Unify the company’s engineering data on one shared platform

**Challenges**
- Reduce IT involvement and day-to-day provisioning and deployment of software to support various business units
- Standardize over 260 engineering global engineering accounts on the same environment
- Unify disparate data, with all engineering tools on a shared platform and common database with 24-hour access around the globe
- Connect engineering teams and best practices

**AVEVA Solution**
- AVEVA™ Unified Engineering in the cloud - AVEVA™ E3D Design, AVEVA™ Diagrams, AVEVA™ P&ID, AVEVA™ Electrical & Instrumentation, AVEVA™ Asset Visualization
- AVEVA™ Connect

**Results**
- 20% improvement in IT agility and freeing up of resources
- Increased efficiency and collaboration unifying multi-discipline engineers on a single, cloud based data-centric platform
- Improved visibility and maintenance of engineering data across the asset lifecycle
- Enhanced project transparency and status tracking, driving improvements in business agility and efficiency
- Blueprint for operational excellence and standardization being rolled out across the globe
Focus on sustainability and innovation at Veolia group

Veolia group is the global leader in optimized resource management and aims to be the benchmark company for ecological transformation. With nearly 179,000 employees worldwide, the group provides water, waste and energy management solutions contributing to the sustainable development of communities and industries around the world.

Impact 2023, Veolia group’s four-year strategic program, is aligned with their mission to ‘resource the world’ while helping deliver on their ambition of being the standard in ecological transformation. The program’s pillars are focused on multi-faceted performance, developing operations inline with specialist expertise, reinventing core business activities and imagining innovative solutions for tomorrow. Through its three complementary business activities, Veolia helps to develop access to resources, preserve available resources, and to replenish them. In 2019 alone the group supplied over 98 million people with drinking water and 67 million people with wastewater services and converted 50 million metric tons of waste; while driving efficiency across Veolia’s water operations and creating value for its customers.

Veolia Water Technologies is a Veolia subsidiary which provides the complete range of services required to design, deliver, maintain, and upgrade water and wastewater treatment facilities and systems for industrial clients and public authorities. The company’s extensive portfolio of technologies features solutions such as online diagnostics, evaporation and crystallization solutions, energy-producing sludge treatment, state-of-the-art desalination, laboratory-grade water and mobile water services. By optimizing both processes and monitoring, Veolia Water Technologies helps clients reduce their water footprint while generating considerable savings in energy and chemical consumption.

With over 260 engineering accounts connected across five continents, Veolia Water Technologies sought a next-generation engineering platform as a foundation to drive business agility and collaboration across teams. Additionally, in the company’s most active markets, customers required solutions that spanned engineering and operations, calling for Veolia Water Technologies to rapidly deploy new software applications and upskill their workforce around the world.

“AVEVA’s cloud-based and data-centric engineering enables our teams all around the world to work remotely, yet together, on one platform that spans all of our engineering data. It is fundamental for our staff to work in a collaborative way, in real-time, all along the design and build phases. Efficient access to data is key to boost operational performance and achieve our strategic objectives.”

– Thomas Cheylan, Projects Performance Director, Veolia Water Technologies
Next-gen global engineering in the cloud

Following a competitive tender, Veolia Water Technologies identified AVEVA’s engineering solutions that span the entire project lifecycle and are available in a common cloud platform via AVEVA Connect, as the ideal enabler for their remote and distributed teams.

AVEVA is a long-time strategic technology partner to Veolia Water Technologies with AVEVA Unified Engineering deployed in hundreds of on-premises sites worldwide. Using AVEVA Connect, Veolia can now leverage its existing investment and applications to connect and empower project teams, unlock efficiency, and enable flexibility to scale up or adapt software usage for customer projects on a global basis.

Veolia Water Technologies identified three key drivers for moving to a cloud-based engineering platform:

- Reduce IT involvement and shift management of day-to-day provisioning and deployment of software to support the business units
- Standardize over 260 engineering global engineering accounts on the same environment
- Connect engineering best practices and data, with all engineering tools on shared cloud platforms and within a common database, to unlock engineering efficiency and 24-hr access around the globe

Cloud deployment in days

Within days of deploying AVEVA Connect, business units and teams across the world were collaborating in a common environment, using shared data and centralized skills and expertise to drive operational efficiencies and share best practice.

The company plans a phased deployment across its global sites including France, United Kingdom, India and Brazil, with complete cloud deployment for the group’s operations expected within the next 18 months.

The software suite includes cloud-based deployment of AVEVA Unified Engineering solutions, including AVEVA E3D Design, AVEVA Diagrams, AVEVA P&ID, AVEVA Electrical & Instrumentation, along with AVEVA’s Asset Visualization solution.

By adopting AVEVA’s data-centric EPC 4.0 strategy in the cloud, Veolia’s teams gained the ability to:

- Improve IT agility by 20% and free up resources
- Allow all discipline engineers to work on a single, data-centric platform
- Improve cross-team and organizational collaboration
- Enhance project transparency and status tracking
- Standardize for best-practice across the globe
- Maintain engineering data seamlessly across the asset lifecycle

The AVEVA Connect cloud platform provides teams with an engineering platform ratified by IT that puts the power in engineers’ hands to select and employ AVEVA tools independently.

Previously, engineering teams had to wait days to provision software and collaborate. With the cloud deployment, the process is reduced to a few minutes.
“In our experience, we found moving to AVEVA Connect was not a ‘Big Bang’ or a dramatic switch from how we used AVEVA software previously. Moreover, it did not require a major change in mindset to make it a success. AVEVA’s engineering software in the cloud is the evolution of how our teams will use Engineering software, and it will be transformative for our business.”

Serge Mascarell, Deputy CIO,
Veolia Water Technologies

Flexibility through Software-as-a-Service

AVEVA’s flexible SaaS solution offered immediate benefits to Veolia Water Technologies’ team with the AVEVA Flex subscription program helping Veolia identify immediate return on investment, which was especially important in times of fluctuating pricing and availability.

The AVEVA Flex commercial models provided complete commercial flexibility to Veolia Water Technologies, allowing teams to consume what they need, when they need it and at the scale that they require.

The group is able to benefit from upfront access to leading technologies and respond to evolving market demands quicker. Helping the group enhance business agility and efficiency while contributing to their innovation and transformation ambitions.

“By using data more proactively, we are able to boost operational performance and achieve our strategic objectives.”

Serge Mascarell, Deputy CIO,
Veolia Water Technologies

Cloud deployment and SaaS deliver early benefits

- The integrated solution helps the team to proactively address customer needs and respond with agility to changes in demand
- Engineers now have rapid, secure access to trusted project information – even when working remotely
- AVEVA’s software is tailored to each asset’s life-cycle stage and portfolio segment
- Services are designed to help Veolia Water Technologies realize maximum benefit from each product, using unified data to pinpoint opportunities for efficiency
- The AVEVA Connect cloud platform and SaaS approach provides Veolia’s team with greater technical and commercial flexibility to dial up and down relevant services throughout the lifecycle of their water purification portfolio

Next-generation engineering anytime, anywhere

With cloud-enabled products on AVEVA Connect, Veolia Water Technologies can improve data availability across its global team, enabling every engineer to benefit from flexible resources that they can adopt as required, without additional IT access or security concerns.

The cloud deployment further enables Veolia’s teams dispersed around the globe to provision and access shared software using a solution vetted and approved by their corporate IT department. The net result is improved engineering and operations agility with lower IT cost and maintenance while putting the power of the software in the hands of the engineering teams.

Veolia can now realize maximum benefit from each drop of water produced. Empowering their teams and harnessing their collective expertise with unified data to pinpoint opportunities for resource efficiency and energy savings while driving innovation and sustainable operational improvements.

“By using data more proactively, we are able to boost operational performance and achieve our strategic objectives.”

Serge Mascarell, Deputy CIO,
Veolia Water Technologies