AVEVA

How CosaTron uses AVEVA™ Data Hub, formerly OSIsoft Cloud Services, to collect and display air quality

CosaTron - www.cosatron.com
Industry - Facilities and infrastrucutre

Challenge

- Real-time, remote monitoring of indoor air quality sensors.

Solution

- CosaTron uses AVEVA Data Hub to collect the real-time data required to monitor, manage, analyze, and visualize data collected from indoor air quality sensors.

Results

- CosaTron performs analysis of data and provides high-value, remote air quality monitoring services for building owners and facilities managers, allowing clients to see air quality displays in real time on site.

The COVID-19 pandemic brought air quality into the spotlight in a big way. As people contemplate returning to offices, schools, and other public spaces, they want reassurance that those spaces are safe, and the air is free of virus-carrying particles. CosaTron manufactures indoor air quality systems but did not have a way to remotely monitor or analyze data from its clients' facilities. The company used AVEVA Data Hub (formerly OSIsoft Cloud Services) as part of a connected services agreement to offer a new remote air quality monitoring service to its clients. CosaTron gained the ability to compare historical data with real-time for deeper analysis of indoor air quality trends over time. After a successful pilot phase, CosaTron is now poised to include AVEVA Data Hub as part of its monitoring service to clients to provide them with indisputable evidence of indoor air quality.
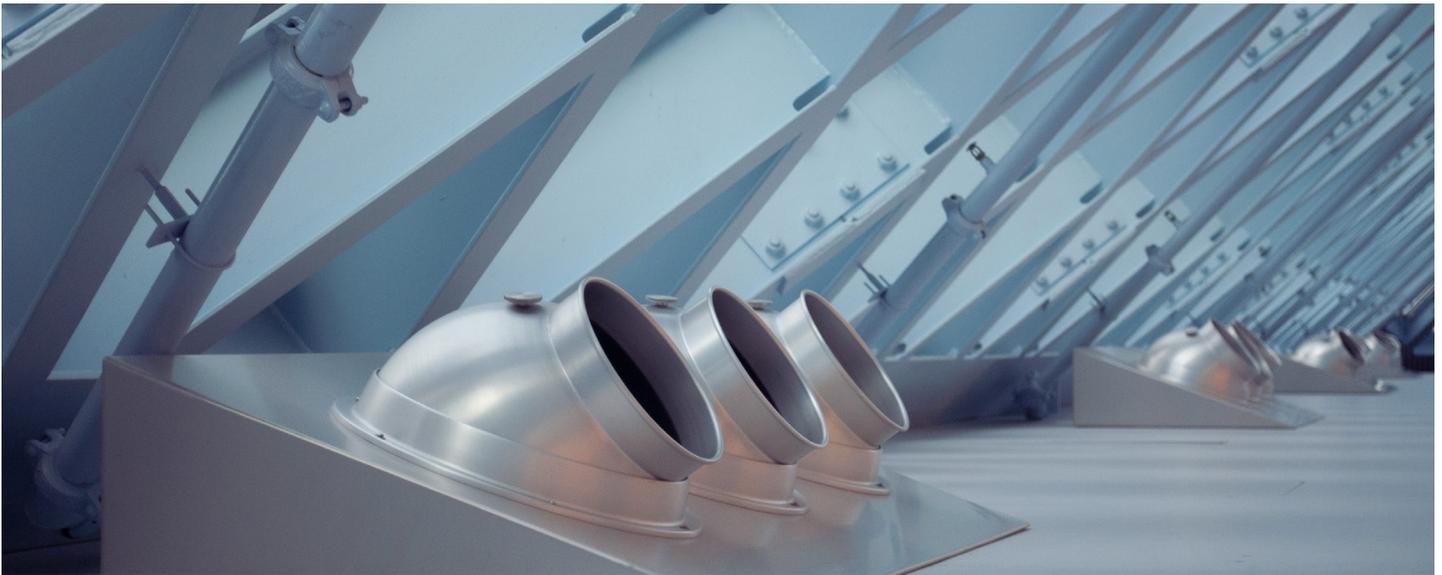
Visualizing the invisible

CosaTron systems operate in thousands of facilities ranging from the Grand Ole Opry in Nashville to the National Library of Japan in Tokyo. The company has sold the same proven technology since 1958, and with the COVID-19 pandemic explosion in 2020, real-time monitoring of indoor air quality became critical to ensure the safety of occupants. As a result, CosaTron created a remote monitoring service to show its clients just how effective its services are, so clients can breathe easy when it comes to air quality.

The remote monitoring display solved one part of CosaTron's business need, but its leadership realized that monitoring indoor air quality was not effective if building owners and occupants could not have immediate access to air quality themselves to take corrective action. Solving this part of the puzzle would require capturing the data and displaying it in a user-friendly way and in real time. Real-time results were key because air quality constantly changes as people come and go, and outside air mixes with indoor air. "Good air quality is difficult to see," said Michael Orcutt, Vice President of sales and engineering at CosaTron. "Thanks to AVEVA Data Hub, we can now show empirical proof that we are effectively cleaning the air and compare to what the air quality was in a given space before we went in."

Data-driven peace of mind

The company considered several options for storing and visualizing data and quickly settled on AVEVA Data Hub as a subscription-based service because it offered flexibility and unlimited potential. This will give CosaTron the ability to remotely monitor and display air quality data for its clients in multiple formats depending on their needs. For example, parents walking into a school might see a smiley face to indicate good air quality and a safe environment for their children, while an office building owner might need a more detailed view to determine which office suites are safe for occupancy. Furthermore, with the ability to capture historical air quality information, AVEVA Data Hub will enable CosaTron to provide recommendations to their customers based on advanced analytic insights.

AVEVA Data Hub meets all these needs and continually updates data visualizations as air quality changes, allowing stakeholders to react quickly and make changes if air contaminants are detected. There's no limit to the amount of data collected and it's all timestamped, which allows long-term analysis of air quality trends that will hopefully lead to better preventative measures and mitigation strategies. "People want to gain confidence when they return to the workspace— proof that the building owners and facilities are doing everything they can to clean the air," Orcutt said. "That is why we wanted to use AVEVA Data Hub to share the data."

Ready for prime time

CosaTron and the the experts at AVEVA worked quickly to deploy AVEVA Data Hub to monitor air quality in a collaboration that served as a proof of concept for both teams. AVEVA™PI System™ experts now have proof that AVEVA Data Hub can be used for this purpose, while CosaTron has a turnkey solution it can deliver to its clients. After months of testing and evaluation, the air quality monitors are now ready to be deployed to all types of businesses.

Because of COVID-19, the necessity of monitoring for safe air quality is here to stay. With more than 50 years in the business, CosaTron brings an array of products that are positioned to meet a variety of business needs. Using AVEVA Data Hub helped the company quickly adapt its products and services to meet changing market demands and provide peace of mind to people around the world.

Data science • Remote monitoring • Partner applications • Connected community

AVEVA Data Hub

PI Server • Edge Data Store (EDS) • Remote assets

The cloud-native platform enables remote monitoring, data sharing, and data analysis services for connected services customers and equipment providers.
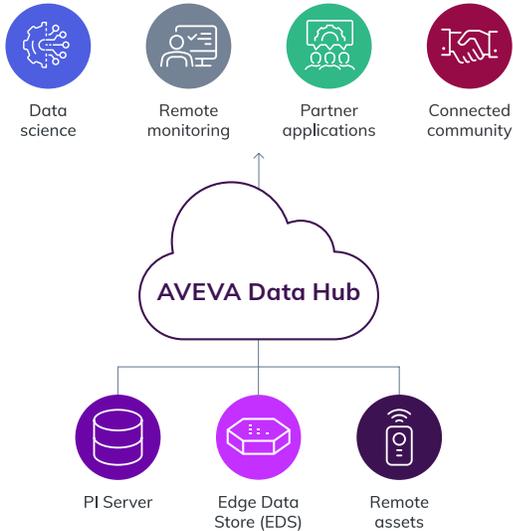
"People want to gain confidence when they return to the workspace—proof that the owners are doing everything they can to clean the air, and that is why we wanted to use AVEVA Data Hub to show the data."
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Michael Orcutt,
Vice President of Sales and Engineering, CosaTron

For more information about CosaTron and AVEVA Data Hub,
watch the full interview on Radio PI here.

OSIsoft is now part of AVEVA

AVEVA

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