

CUSTOMER CASE STUDY

AVEVA™ PI System™ helps Delfi ILS Solutions virtually train maritime crews

Delfi ILS Solutions Industry - Transportation

Goals

- Create a vessel specific training program for ship crews
- Provide real-time data from the ship's automation systems during training

Challenge

- With varied vessels in the fleet, the company could not use a one-size-fits-all approach
- Manuals could not provide the hands-on experience ship crews required

Results

- Crews are better able to operate vessels from day one using scalable, cost-effective training
- ShipView shows 3D simulations of assets connected to real-time data, which it uses to reproduce specific asset states or conditions

Solution

AVEVA PI System

Seafarers on cruise ships and military craft work long hours, often seven days a week, in demanding jobs. This work requires well-trained personnel familiar with the ship from the first day of operation. And because the crews change every year, it is imperative that they have access to a replicable, vessel-specific training program before they even set foot on the ship. Fincantieri, the fourth- largest shipbuilding group in the world, manufactures Carnival Cruise ships and military vessels.

Delfi ILS Solutions, the company's logistical arm, which handles crew training, needed a cost-effective way to educate watercraft and support ships' crews onshore. Given the unique needs of each vessel, a one-size-fits-all platform wasn't enough. To train crew, Delfi ILS introduced ShipView, a remote-training platform designed to transcend simple manuals. With AVEVA PI System, crews began learning via a fully immersive platform that provides valuable simulated operational and maintenance training.

A virtual resource library

ShipView operates much like Google Street View, giving crew members and onshore teams virtual access to a walk-through of detailed 3D images and videos mapped from the vessels.

Not only does ShipView show the construction of the ship, it also displays everything from piping and wiring, to critical assets, such as transmissions or engines. In addition, the program provides relevant materials – technical manuals, functional diagrams, parts catalogues, and other maintenance and operating videos – so that crew members have everything they need.

Going deeper with AVEVA PI System

While the teams enjoyed using ShipView, they required a more realistic view of the vessels and how they performed. To meet that need, they turned to AVEVA PI System to collect and monitor real-time data directly from the ship's automation system.

Delfi ILS implemented a complete AVEVA PI System, structured its data with the asset framework, and published real-time dashboards using AVEVA™ PI Vision™. Now, real-time graphics and visuals are available right inside ShipView. "With [AVEVA PI System] integration we also have the operating parameters inside," said Lorenzo de Francesco, a marine engineer at Delfi ILS. "It's really important for the crew to spot if a system works correctly or not."

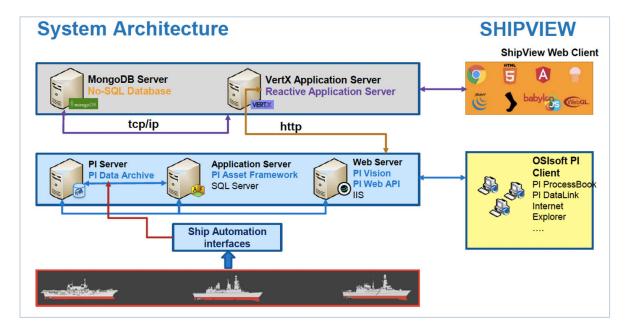
Today, ShipView can show 3D simulations of assets connected to real-time AVEVA PI System data. During training programs, the platform can use that data to reproduce specific asset states or conditions, allowing trainees to understand root causation and the effect of making any changes or repairs, all without ever touching a piece of onboard equipment.

Thanks to AVEVA PI System, ship crews are better prepared to operate vessels from day one. The solution allows Delfi ILS to use a single system, making it a much more scalable, cost-effective means of training its crew.

"With [AVEVA PI System], we are now able to show also the real-time monitoring parameters. We reduce the training cost at scale because you can train different crews with the same tool, and now we have only one system to do a more effective training."

Lorenzo de Francesco Marine Engineer, Delfi ILS Solutions





Delfi ILS integrated AVEVA PI System into its ShipView training platform to provide real-time data for the tool's 3D renderings of critical assets

Training for tomorrow

Currently, onboard maintenance crews use technical publications, photos, and diagrams to fix and maintain ships. With the help of real-time data from AVEVA PI System, Delfi ILS is planning to expand its use of ShipView into an all-in-one visualization tool that provides a fully interactive experience for its onboard maintenance staff.

Using ShipView, maintenance crews will have access to digital resources, videos, real-time AVEVA PI System data, and expanded onshore support – all within the 3D interface. These tools will give them a comprehensive view of asset behavior and allow crews to perform repairs and maintenance more quickly while boosting confidence in the accuracy of their work.

For more information about AVEVA PI System please click here.

