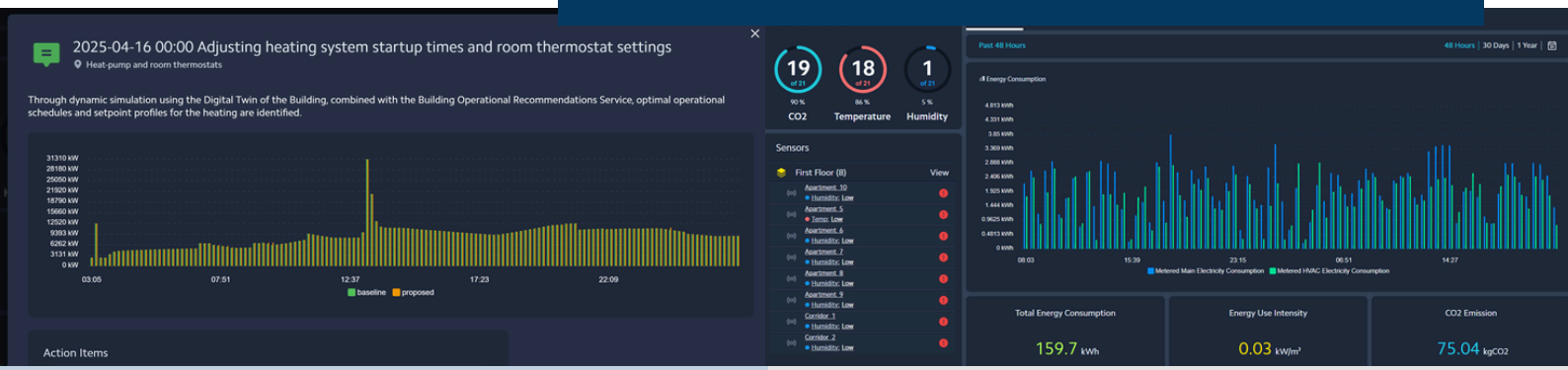
ENSNARE

OPERATIONAL DIGITAL TWIN



What is?

This digital replica of a building optimises energy performance and operations by analysing various technologies and services in use. It identifies the best energy configuration to improve efficiency and functionality throughout the building's lifecycle.

Challenge

Achieving optimal energy performance in buildings is challenging without near real-time, physics-based insights into system operations. Traditional building controls rely on manual or rule-based logic, limiting efficiency.

Solution

The Operational Digital Twin shifts the focus from traditional manual or rule-based controls with dynamic, data-driven approaches that optimise energy use, reduce carbon emissions, and enhance operational efficiency. It leverages advanced building physics-based modelling, powered by the industry-recognised Apache engine to continuously monitor systems and recommend the most effective energy strategies for a building.

Key Benefits

Optimised
building operational performance

CE reduction
Carbon emissions reduction

Techonologies
Integration with monitoring technologies

Analytics
User-friendly analytics

Control
Simple-control actions

Target Users

- Building managers

Next Steps

- Further testing of building optimisation and control as a continuous workflow.
- Integration of additional monitoring technologies and advanced data intelligence to expand the library of intelligent recommendations for enhanced building performance.
- Results will not be publicly available, but collaboration opportunities remain open upon request.

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