

Leading the Charge in Material Management Innovation with O3 and AVEVA ERM API Integration



Overview

One of O3's Enterprise clients, a leading Engineering, Procurement, and Construction (EPC) firm, has successfully built and implemented a critical API integration between O3's digital project management platform and [AVEVA ERM](#) to improve material management and work packaging processes.

Laying the Foundation for Seamless Data Exchange

With O3's easy-to-use features and comprehensive API documentation, the client was able to develop the integration autonomously, starting with the core data exchange between O3 and AVEVA ERM. O3 is used to create Installation Work Packages (IWPs) that include essential details such as the material list, planned execution dates, and priorities. This information is sent seamlessly to AVEVA ERM, which then responds with critical material availability details.

This foundational API integration allows the client to:

- Ensure IWPs are accurately planned based on real-time material availability
- Identify potential material constraints before execution
- Reduce delays caused by material shortages

The two-way data exchange between O3 and AVEVA ERM provides updates that enable project teams to make informed decisions about whether work packages are ready to be executed.

Dynamic Material Allocation

Once the foundational data exchange was in place, the client introduced advanced functionalities to further optimize their material management processes. The API integration now includes the exchange of:

Purchase Orders (POs) and respective line items including:

- Required On Site (ROS) date for materials
- Expected delivery date of materials to the site
- Quantity of material ordered and delivered

Material Allocation at the IWP Level:

- Forecast receipt dates
- Actual receipt dates

BENEFITS

With the comprehensive two-way flow of critical information, the client can perform Dynamic Material Allocation based on priority, enabling projects teams to:

- ✔ Ensure high-priority IWPs receive materials first
- ✔ Adjust work schedules dynamically based on material availability
- ✔ Minimize downtime and idle time for construction crews

Material Constraints Auto Closure

In addition to streamlining material allocation, material constraints can now be automatically cleared through O3, which significantly accelerated the project timeline and reduced overhead. This automation ensures that once a material constraint is resolved (e.g., once materials are available or a delivery is confirmed), the associated material constraint of a work package can be automatically closed.

By automatically closing out material constraints when they are resolved, the client can:

- Save time by eliminating manual follow-ups and adjustments
- Reduce unnecessary delays caused by lingering material issues
- Enhance workflow efficiency, allowing the team to focus on tasks that are ready for execution
- Lower administrative costs related to tracking and resolving material shortages

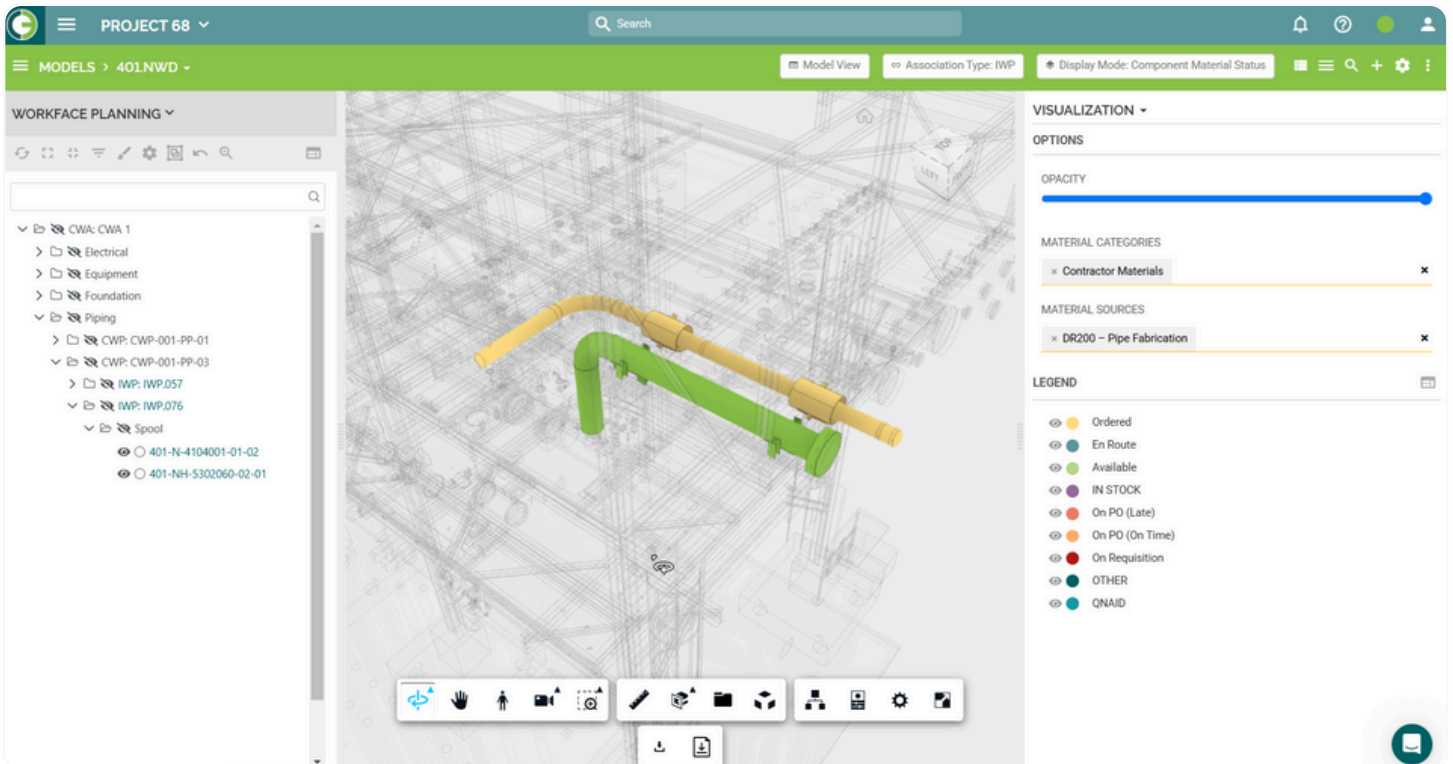
BUSINESS IMPACT

The integration between O3 and AVEVA ERM delivers significant benefits to the client, including:

- ✔ Improved IWP planning accuracy
- ✔ Reduced material-related delays
- ✔ Enhanced collaboration across procurement, engineering, and construction teams
- ✔ Increased efficiency in handling material constraints and adjustments

By leveraging this integration, the client is transforming their material management process into a proactive, data-driven system that supports their overall Advanced Work Packaging (AWP) strategy.

The seamless flow of information between O3 and AVEVA ERM ensures that work packages are executed on time, with the right materials in place—a key factor in driving project success.



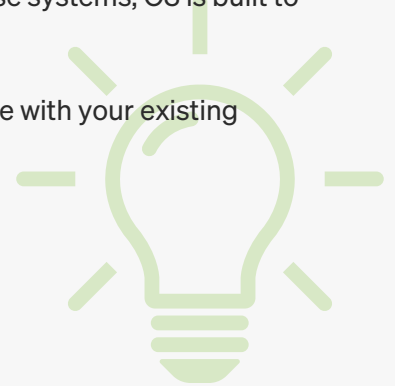
Unlocking Innovation with O3's Integration Capabilities

This success story is just one example of how O3's innovative platform can seamlessly integrate with other systems to optimize workflows and improve project outcomes. With comprehensive API documentation and easy-to-use features, clients are empowered to take charge of and implement integrations that matter most to their business. O3's ability to pull and push data in real time makes it a powerful tool for managing construction projects of all sizes. Whether it's enhancing material management, improving work packaging, or integrating with multiple enterprise systems, O3 is built to drive success through connectivity and innovation.

Interested in learning more? Request a demo today to see how O3 can integrate with your existing systems to improve project execution and drive real-world results!

[Request a Demo](#)

[Learn More](#) ↗



ABOUT O3

Empowering the Future of Construction With Agile Solutions

O3 Solutions was founded to address the critical challenges in modern construction—visibility, outdated manual processes, lack of standardization, and the need to meet ever-increasing expectations.

We envision a world where construction thrives through streamlined, Agile project management. Our vision is to create a future where every project team—from site planners to executives—at every project stage—from early project planning through commissioning and startup—collaborates effortlessly, empowered by technology that enhances agility, transparency, and efficiency.

O3 Solutions provides a digital project management platform purpose-built for capital projects. Driven by industry best practices, including Advanced Work Packaging (AWP), Agile, and Lean methodologies, O3 helps teams of all kinds achieve measurable success from early phase planning through execution, systems completion, and start up.