



OPERATIONAL MODERNIZATION GUIDE

A practical guide to operational visibility

How industrial organizations are unifying people, processes, and technology to gain real-time visibility and simplify operations from a single asset to a connected enterprise.



Have your operations outgrown your current tools?

Most industrial operations continue to evolve. Teams are upgrading equipment, adding data systems, and expanding operations across multiple sites. But the tools and systems supporting them were not built to work together as operations grow.

More systems. More software. More silos. More manual effort to connect them. And a growing gap between what is happening on the plant floor and what decision-makers can clearly see and act on.

Catch problems while there is still time to take action.



From yesterday's data to today's decisions

Energy spikes. Equipment degradation. Shift-to-shift variability. These problems do not announce themselves. They accumulate quietly and surface in reports that are hours or days old by the time anyone reviews them. Operations teams are making decisions based on yesterday's data, after the opportunity to act has already passed.



Grow the operation. Not the overhead

Every new site, new line, or new user brings another license to manage, another system to integrate, and more complexity to coordinate. What should feel like growth starts to feel like overhead. The bigger the operation gets, the harder it becomes to run it consistently, and the harder it is to see value from each new investment.



Modernize at your own pace

Large-scale replacements carry large-scale risk. Teams that have lived through failed or delayed software rollouts do not forget. The instinct is to wait for the right moment, the right budget, and the right assurance that operations will not be disrupted. That moment rarely comes, and delays only make progress harder.

2-5%

Unexplained energy spikes can represent 2-5% of annual energy spend costs that are preventable if they're visible during the shift, not after it.

28%

AVEVA holds 28% global market share in HMI/SCADA. No vendor works with more industrial organizations navigating this challenge.

The challenge is not that operations are too complex to modernize. It is that older approaches often add complexity instead of removing it. Modernization should make operations simpler, not harder.

A different approach

AVEVA Operations Control is an industrial software subscription that connects your operations from a single asset on the plant floor to a centralized, real-time view across multiple sites, without requiring you to replace everything you already have.

The approach is simple: start where your operations are today. Build from there. Scale when you are ready. At every stage, your teams gain real-time visibility into operations, shared operational context for better collaboration and knowledge sharing, timely reporting, and AI-powered tools to help identify and address issues earlier.



EDGE

**Local visibility,
immediate value.**

Built for frontline teams that need real-time monitoring and control at the asset, equipment, or line level. Start small with a foundation built to scale.



SUPERVISORY

**A unified view of
your plant.**

Centralized management of distributed operations in a single, unified plant view. Standardize processes across departments, reduce variability across shifts, and give operations, maintenance, and engineering a shared view of performance.



ENTERPRISE

**Visibility across the
entire operation.**

Coordinate and manage performance across regions or a global enterprise, with cross-site visibility, stronger collaboration between operations and IT, and advanced analytics with AI that help senior leaders drive greater consistency at scale.

Truly unlimited

Unlike traditional operations software, AVEVA Operations Control does not have limits on IO, tags, or servers. Access expands with your operation, making it easier to grow without added complexity.

**Wherever your operations are today,
there's a place to start and a clear
path forward.**

Where are you today?

Modernizing your operations does not look the same for every organization. Some teams are working to get better visibility out of a single site. Others are trying to bring consistency across complex multi-site operations. Every operation is at a different stage. What matters is choosing a platform that fits where you are today without limiting your future growth.



Start simple. Scale confidently.



Edge - local visibility

You might recognize this:

Your teams monitor and control operations at the asset or line level. Data lives locally. Decisions are made on the floor. Getting visibility beyond a single machine or cell is harder than it should be, and connecting local data to the broader operation can feel out of reach.

What AVEVA Operations Control delivers at this stage:

Real-time asset-level visibility with no IO or tag limits. Purpose-built AI to help identify potential issues and suggest solutions. Mobile-enabled operators with role-based views, supported by a localized historian and IIoT connectivity, all on a purpose-built foundation designed to scale.



Supervisory - plant-wide coordination

You might recognize this:

You have data, but it is disconnected. Different systems, different views, and different versions of what is happening on the floor. Operations, maintenance, and engineering are not working from the same picture. Decisions take longer, anomalies persist, and manual reporting consumes time that should go elsewhere.

What AVEVA Operations Control delivers at this stage:

A unified plant model that brings distributed SCADA into a single operational view. Standardized operations across departments. Live anomaly detection that helps teams catch issues early, before they disrupt operations. Automated shift reporting and compliance documentation built into the workflow. A unified view that supports faster decisions and more consistent execution.



Enterprise - multi-site coordination

You might recognize this:

Individual sites run well, but connecting them is a different challenge. KPIs vary by location. Best practices do not travel. A decision made at one plant can take weeks to reach another. You need consistent performance at scale, with stronger coordination between operations and IT to support it.

What AVEVA Operations Control delivers at this stage:

Enterprise-wide coordination and performance management across sites and regions. Shared operational context with stakeholders, OEMs, and enterprise systems. Advanced analytics and AI that help teams improve consistency, predict failures, respond earlier, optimize energy use, and scale improvement across the operation.

A simple test for any operations platform

Ask what happens when your operation adds a site, a user, or a use case. If the honest answer involves new costs, new contracts, or new conversations, the platform is working against you. The same principle applies to how access, identity, and compliance are managed across your teams.

Governance simplified

Centralized identity, entitlement, and audit visibility through CONNECT means your IT and compliance teams get the governance and transparency they need without the overhead of managing multiple systems or vendor relationships. One solution. One source of operational truth.



What changes when your operations are connected

The operational impact of AVEVA Operations Control is reflected in real customer outcomes. It shows up in faster decisions, problems caught before they cascade, and teams working from a shared version of the truth.



See it while it's happening

Operations teams gain live visibility into energy use, asset behavior, and process performance tied directly to specific equipment and operating conditions. When issues are visible during the shift, teams can respond before added cost, waste, or disruption builds.



Catch problems earlier

Early signs of equipment degradation, including changes in flow, vibration, temperature, or load, become visible sooner. AI-powered analysis of real-time and historical data helps teams predict failures before disruption, enabling a shift from reactive maintenance to planned interventions.



Make decisions with context

Real-time data is connected to operating conditions, asset state, and shift history. Teams don't just see that something has changed, they understand why, and what to do about it.



Start the shift with clarity

Teams begin the day with a shared operational picture instead of a backlog of unanswered questions. Operators can see what changed, what needs attention, and where intervention matters most.



Scale without rebuilding

New sites, new assets, and new users can be added without new infrastructure projects or repeated contract reviews. The same platform that runs a single asset or line can coordinate a multi-site enterprise.



Report with confidence

Shift reporting, compliance documentation, and audit trails are built into the workflow, not bolted on afterward. Regulatory requirements don't mean additional manual effort.

20%

improvement in OEE

50%

downtime

New Belgium Brewery improved Overall Equipment Effectiveness from 45% to 65% and cut downtime by 50% when using AVEVA Operations Control. Standardizing production and gaining real-time insight into previously invisible downtime events.

“Now we have a wonderful solution that people from all the levels—operations, maintenance, engineering, scientists—can access the data... from anywhere they are”

Sam Paul, Section Manager, Process Automation / SCADA Systems, Gwinnett County Department of Water Resources



Built for how operations actually grow

Traditional operations software was designed for a world where deployments were fixed and growth was predictable. You paid per tag, per server, per connection. Every new site or new use case often meant added complexity, unpredictable costs, and another round of approvals.

AVEVA Operations Control is structured differently. You buy by user, not by the size of the infrastructure. Within your chosen solution, access is unlimited, with no caps on IO, tags, clients, or servers.

Your operations can grow as needs expand across sites, teams, and systems without the added complexity that new contracts often require.

As you expand, you also gain access to CONNECT, the industrial intelligence platform included with every Operations Control subscription, extending operational data into AI-driven insights, secure data sharing, enterprise dashboards, and broader visibility across the business.

Traditional approach:	AVEVA Operations Control:	CONNECT
Pay per tag, per server, per connection	Buy by user. Access is unlimited within your package	AI applications that surface inefficiencies, anomalies, and optimization opportunities
Costs grow unexpectedly as operations expand	Predictable costs as your operations scale	Secure data sharing with partners, OEMs, and stakeholders
New sites and use cases mean starting over	New sites, assets, and users added without new infrastructure	Enterprise dashboards and cross-site analytics
Multiple licenses, contracts, and renewals to manage	One subscription with cross-product entitlements included	Generative AI to put the right knowledge in front of the right person, in seconds
Growth is limited by what the platform was originally sized for	The platform grows with your operation, not against it	A foundation for continuous operational improvement at scale

When your industrial software is truly unlimited, there are no limits to how your operations can grow.



The foundation for what comes next?

AVEVA Operations Control is engineered to grow with your operation, not just support where you are today. The platform architecture is designed for progression, the same subscription that delivers edge-level visibility can grow to coordinate an enterprise. Nothing needs to be replaced. Capabilities are added, not rebuilt.

As operations grow, the questions teams ask evolve. Real-time visibility is the first step. Using that visibility to predict failures, optimize energy use, standardize performance across sites, and coordinate across the enterprise is the next. AVEVA Operations Control supports both on the same platform.

CONNECT: The operational intelligence layer

Every AVEVA Operations Control subscription includes access to CONNECT, extending operational data into AI-driven insights, secure data sharing, and cross-site visibility when your teams are ready to use it.

With CONNECT, teams can:

- Access AI applications that identify inefficiencies, anomalies, and optimization opportunities
- Share operational data securely with partners, OEMs, and stakeholders
- Build cross-site visibility with enterprise dashboards and analytics
- Enable a virtual subject matter expert through generative AI, putting the right knowledge in front of the right person in seconds

The path from operational visibility to operational intelligence is not a new project. It is the natural next stage in your operational intelligence journey, built into the same platform and included within the same subscription.

AVEVA
Operations Control
(Edge)

AVEVA
Operations Control
(Supervisory)

AVEVA
Operations Control
(Enterprise)

CONNECT
+
Advanced Analytics

You don't have to have it all figured out on day one. The platform grows with you.



Ready to see what's possible?

Every operation is different. The right conversation begins with where you are today: your current systems, operational challenges, and what progress looks like for your team.

As a leader in industrial software, AVEVA brings decades of operational experience to every conversation. We understand the realities of modern operations and how they evolve over time.

Talk to us about where you are today and where you want to go next. We'll help you identify the next step with a practical path forward and a solution that grows with your operation.

Talk to an expert

To learn more, visit: aveva.com/en/products/advanced-analytics

To learn more about CONNECT, visit: aveva.com/en/connect-experience

AVEVA

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