



RiDUET

CONTEXT & INSIGHT THROUGH
ROBUST OPERATIONAL ANALYTICS.

Downtime Tracking

Asset Management

Operational Insights

OEE



Stop Guessing. Start Tracking.



RtDUET

Downtime at your plant is like a shot to the heart. Your operation can't afford any loss in production. Keep your assets running and drive production.

RtTech provides manufacturing companies with the tools required to help reduce operational waste and uncover hidden opportunities for process improvement.

When equipped with the power of real-time data, you are able to be proactive in decreasing downtime events by targeting and eliminating the root-causes of equipment failure.

Decrease downtime and increase output. We all know that more output equals more profit.

OWN YOUR OPERATIONS.

Extended functionality for users of the AVEVA® PI System®.

It's time to decrease downtime and maximize output with operational analytics.

- DOWNTIME TRACKING
- ASSET PERFORMANCE MANAGEMENT
- OPERATIONAL INSIGHT
- OVERALL EQUIPMENT EFFECTIVENESS

10% +

Average reported increase in Asset Availability



BUILT ON AVEVA PI TECHNOLOGY
Leverage your investment in AVEVA PI to deliver quantifiable results.



OPERATIONAL INSIGHT
Uncover root causes of downtime and inefficiencies in your critical operations.



KPI CALCULATION ENGINE
Calculates 24 standard KPIs including OEE, Utilization, and MTBF using simple as well as complex triggers.

Analytics at every level of operations.

DOWNTIME TRACKING

Stop guessing.
Start tracking.

Clients tell us that prior to RtDUET they had short downtime events that were completely missed. Even insignificant events add up to significant productivity loss. Downtime is usually tied to equipment failures or breakdowns, but it includes any unplanned event that stops or slows down a line.

Track downtime and slowdowns using RtDUET's operator-friendly event dashboard. After an event is captured - classify, split, or have a supervisor verify. Concerned about certain type or length of downtime? Set an automatic alert.

ASSET PERFORMANCE MANAGEMENT

Maximize asset performance.

Using operational data to better predict maintenance and reduce unplanned downtime isn't new. What's new is the technology behind RtDUET, an application for asset management.

Manual data collection by operators that aren't always interested and spreadsheets calculated at month-end is not enough anymore. Automated analytics with a calculation engine that generates KPIs in real-time puts information in your hands to maximize asset utilization.



OPERATIONAL INSIGHT

Find the underlying cause.

The line goes down. One operator classifies the downtime cause as 'hot fan' while another writes 'fan stopped'. Even if both reasons are recorded, it's impossible to aggregate the data to pinpoint the cause.

The first step to finding the root cause is standardized reason codes which are set-up easily within RtDUET's configuration toolkit. Root cause analysis and Maintenance and Reliability KPIs pinpoint top reasons for downtime, potential equipment failures and a maintenance plan to extend equipment life and delay costly Capital Expenditure.

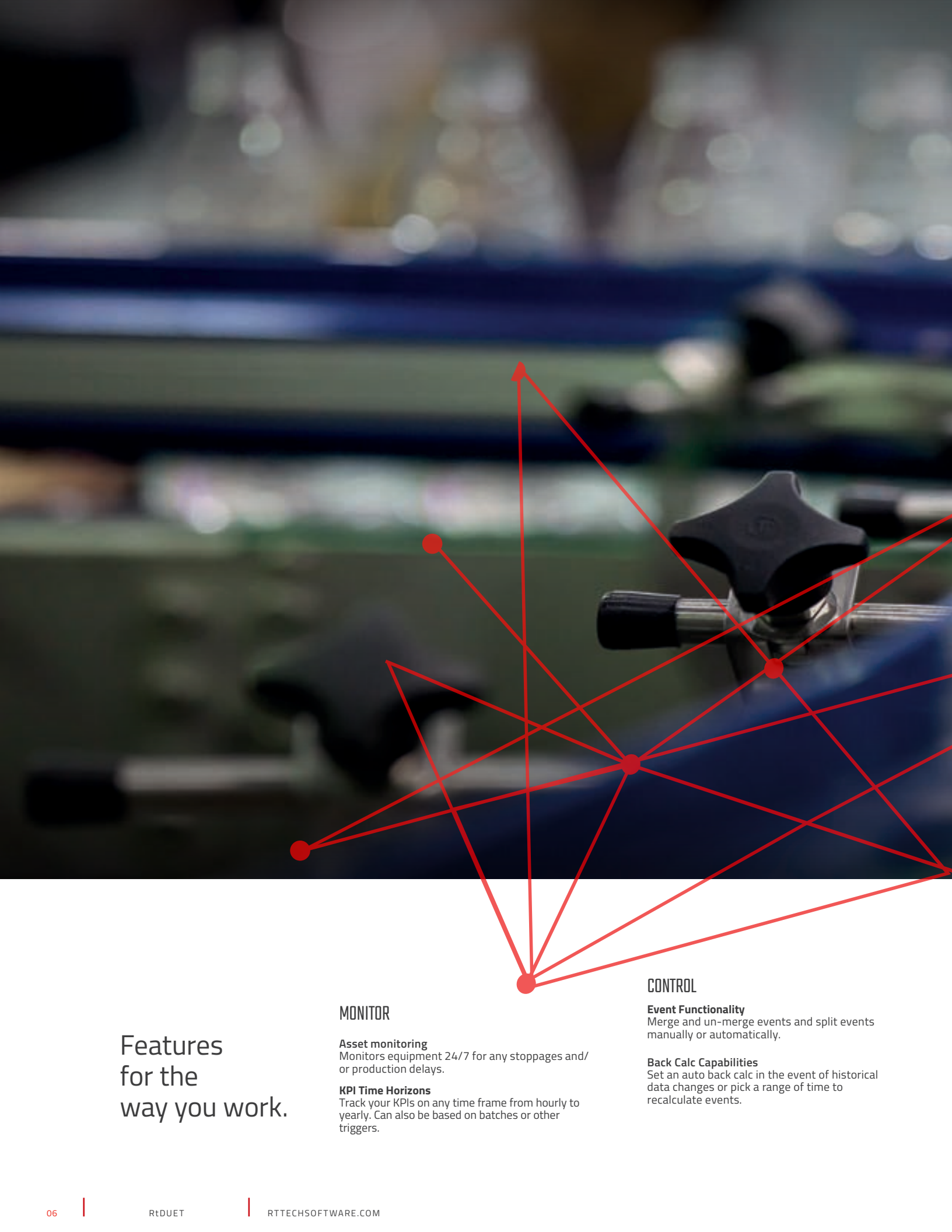
OVERALL EQUIPMENT EFFECTIVENESS

Push OEE to the limit.

It's not uncommon to see 40-50% as an Overall Equipment Effectiveness (OEE) baseline when starting an asset management project.

The upside is that gains can easily be obtained once RtDUET detects root causes for downtime and bottlenecks are spotted. React with the right corrective actions like planning production to group products with less set-up time or eliminating poor quality material causing mis-feeds. If you knew the problems in your process, could you tackle 2 or 3 issues per week to increase OEE and Availability by 20%?





Features for the way you work.

MONITOR

Asset monitoring

Monitors equipment 24/7 for any stoppages and/or production delays.

KPI Time Horizons

Track your KPIs on any time frame from hourly to yearly. Can also be based on batches or other triggers.

CONTROL

Event Functionality

Merge and un-merge events and split events manually or automatically.

Back Calc Capabilities

Set an auto back calc in the event of historical data changes or pick a range of time to recalculate events.



GET DOWNTIME VISIBILITY.
RID THE BOTTLENECKS.
MONITOR EQUIPMENT HEALTH.
SHARE PERFORMANCE KPIs.
MAX PROFIT WITH MORE OUTPUT.
IMPROVE DATA ACCURACY.
LOWER MAINTENANCE COSTS.

ANALYZE

Auto-classified downtime
Downtime events can be automatically classified when events meet predetermined criteria.

VISUALIZE

KPI dashboard
Real-time visualization of production performance.

Information timeline
Events displayed chronologically to analyze asset performance and repairs.

Web-based interface
Reports and dashboard are accessible anytime via secure web application.

INFORM

Operational Insight
Contextualized data is formatted to easily prioritize high-cost pain points and detect root cause.

Out-of-the-box configurable reports
Configure reports to reflect 24 KPI calculations in a clear, concise manner.

Automated KPI calculation engine
Calculates 24 standard KPIs including OEE, Utilization, MTBF using simple, as well as, complex triggers.

Utilize Existing PI Tools
Leverage the existing PI tool set including PI Vision and Datalink.

OVERALL EQUIPMENT EFFECTIVENESS

Why you need a real-time OEE system:

Without a real-time OEE solution, production managers must rely on manual downtime tracking and spreadsheets calculated at month-end.

With stale information and up to 5% hidden losses from undetected or poorly-estimated downtime events, informed decisions are near impossible.



The true value of OEE is in helping you and your operators make systematic improvements. Therefore everything you do with OEE, including the visual display of OEE data, should be designed with operators in mind and stated in whatever terms they most easily understand.

MORE ON OEE:

How do you minimize spreadsheets and reports to make OEE easier to track and improve?

Defining your operation's time usage codes standardize how each downtime event type affects the OEE calculation while reason codes standardize operator input of the cause or reason for downtime events.

OEE software can be configured so that each machine or asset displays only applicable reason codes making it easier for operators to select the correct code. With standard reason codes and root cause analysis, the root causes of low OEE scores are easier to identify and prioritize.

Want more on how to implement OEE at your plant?
Let us share what we know. Ask us for a copy of our OEE guide:



Data isn't very useful if you don't see it until tomorrow, or at next week's production meeting. A printout in the manager's office isn't nearly as helpful as having real-time data, with visual cues that are useful to you and your operators.





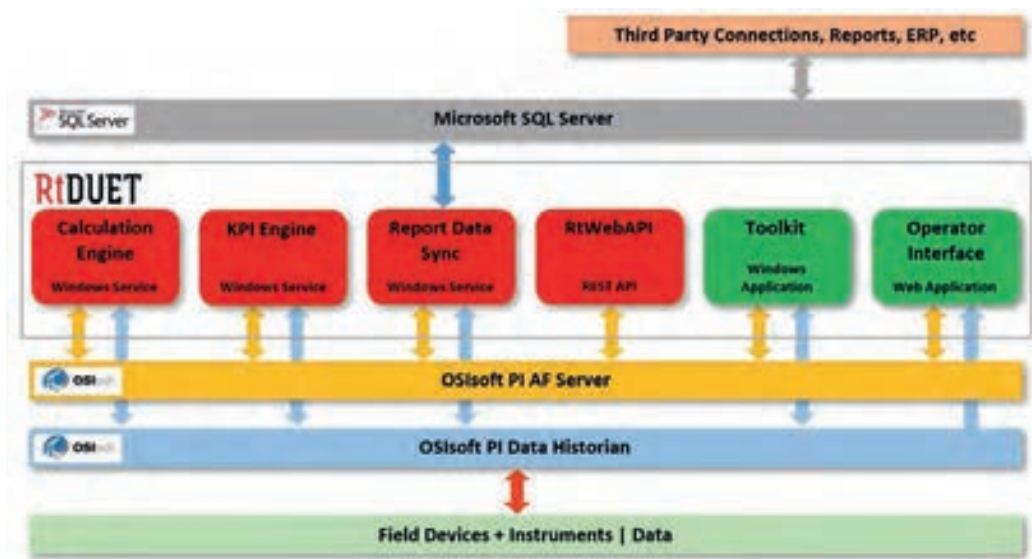
Designed for use with the AVEVA® PI System®.

SYSTEM ARCHITECTURE:

RtDUET provides extended functionality for users of the AVEVA® PI System®.

RtDUET also provides easy access to the underlying data records for downtime events and KPIs through advanced analytics. With simple out-of-the-box reporting and integration into on-site systems, accessing data can also be achieved through standard reporting tools such as Power BI, Tableau, and Excel.

RtDUET utilizes AVEVA® PI system® data from tags as trigger inputs to assets. The AVEVA® PI AF SDK® is utilized for configuration and storage of downtime and KPI records in the event frame subsystem as well as a database for reason tree, time usage configuration and asset hierarchy.



"RtTech stood out because they had good experience in industrial environments, (the solution) worked off the AVEVA® PI System® nicely and they were able to meet our timelines."

ANDREW COOPER, P. ENG
Energy Specialist, New Afton Mine
New Gold



Installations around the globe.

Our footprint spans across the globe, helping companies in 36+ countries get the most out of their manufacturing operations by maximizing productivity and reducing energy costs.

We'd love the opportunity to be your partner in operational improvement!

Stop Guessing. Start Tracking.

OSIsoft.

APPLICATION
PARTNER



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