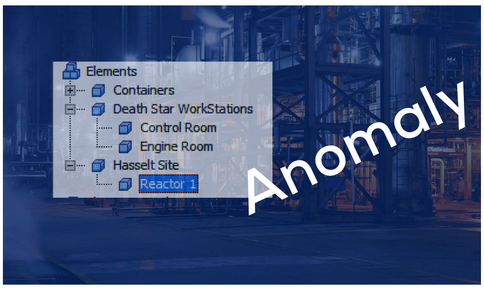
Self-service Continuous Analytics for OSIsoft PI Event Frames

OSIsoft PI Event Frames
Events are periods at which an important situation occurs impacting the production process. Examples of events with a start and end time are; asset downtime, scheduled maintenance, process excursions, sudden temperature drop, or any other event that is of importance to capture.

The OSIsoft PI System has a feature called **Event Frames**, that enables to capture critical events as context to time-series process and asset data. The event frames have a type, name, start time, end time and other event attributes that are useful for advanced analytics with TrendMiner.

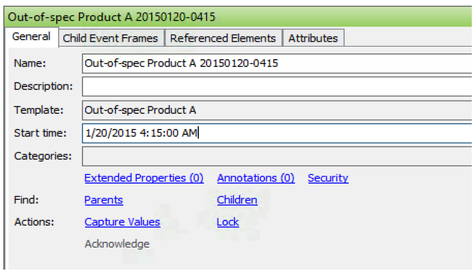
TrendMiner
TrendMiner's self-service analytics platform is based on a high speed search engine, advanced filter options and patented pattern recognition technology, to get you data-based insights that are actionable. TrendMiner speeds up your root cause analysis and helps you identify new areas for process and asset optimization.

With PI Event Frame integration, subject matter experts from continuous processes can now more easily get access to their event frames information in TrendMiner, click through to the related process information and kick-start their inspection and diagnosis of process anomalies.

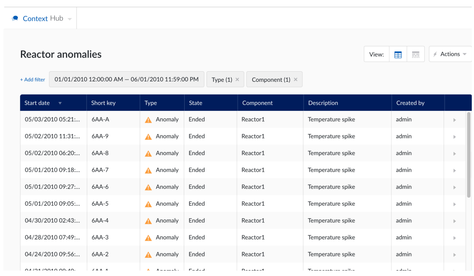


1 Anomaly in Reactor 1 operation is detected

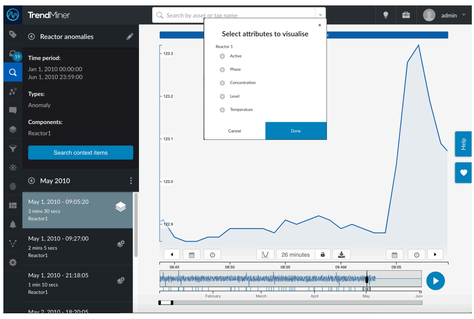
The Event Frame is created in the OSIsoft PI System 2

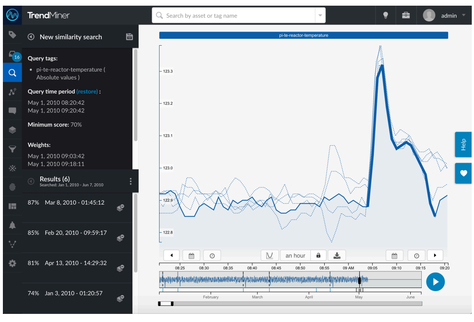


3 Event Frames are automatically synced to TrendMiner's ContextHub and appear in the relevant views.



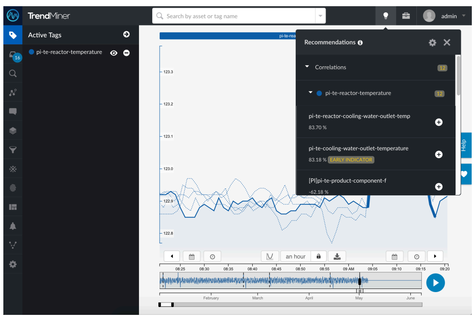
Visualise the Reactor Anomaly together with relevant process data in TrendMiner's TrendHub. 4

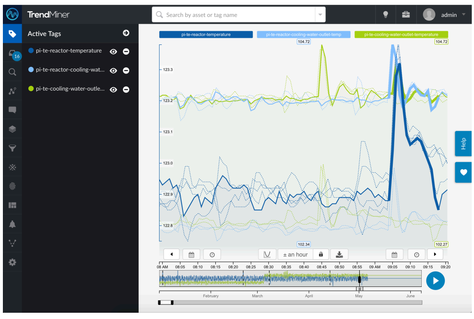




5 Use Similarity Search to find similar occurrences.

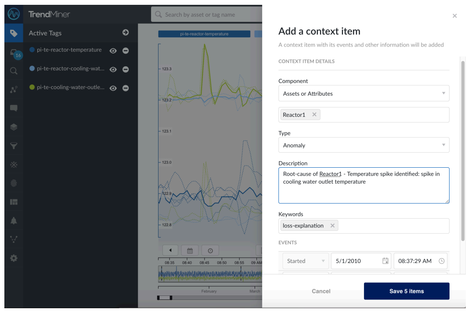
Use TrendMiner's Recommender Engine as your diagnostics assistant to suggest possible causes of this behaviour in the form other tags. 6
Notice the EARLY INDICATOR label





7 Add suggested tags to your chart to confirm the root-cause analysis.
Notice the spike in reactor-cooling-water-temp right in front of the reactor-temp spike, preceded by a spike in cooling-water-outlet-temp.

Share your knowledge about the identification of the root-cause with your co-workers 8



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