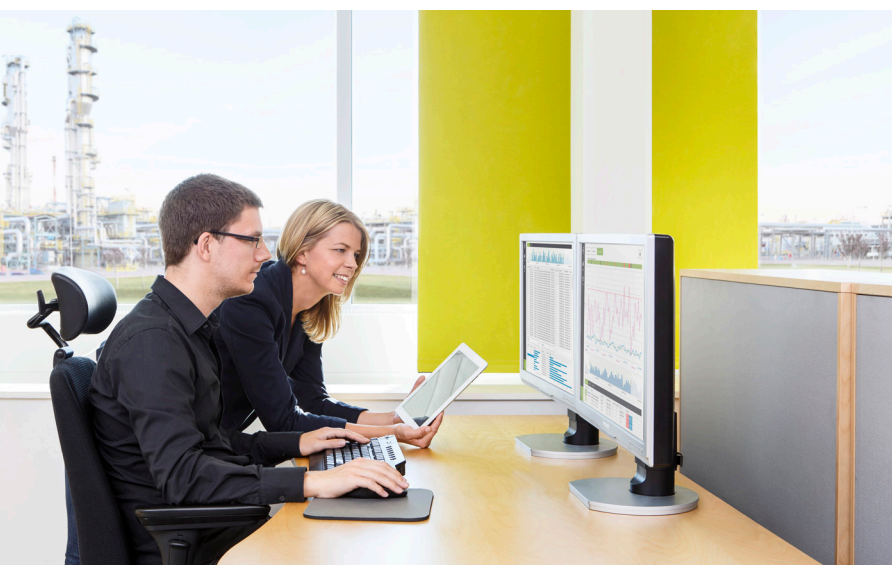


ABB Ability™ Manufacturing Operations Management Trends and Events Application



Automations systems continuously collect and store large amounts of process data such as process measurement and many different type of events. To get a complete picture of the process performance, it is essential to explore and understand this large amount of control system process data.

The ABB Ability™ Manufacturing Operations Management (MOM) Trends and Events Application allows users to explore and analyze this typical process data. The intelligent search engine ensures fast and easy access to the process data and the powerful trend and event views support detailed analysis of any combination of process data.

The solution

The Trends and Events Application supports different users such as process engineers to fast and easy access, view and analyze typical process data. The process data is stored with high performance and security in the MOM History database thus Trends and Events Application displays any process data regardless from which control system the data origins. The Trends and Events Application is easy to group and organize together with all other MOM Applications using the MOM Launchpad. This gives every users fast access to their trends and events views and nimble navigation to other MOM Applications for data analysis in different contexts.

When working with the trends part of the Trends and Events Application users can explore and analyze continues process data. History signals are easily

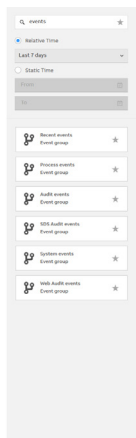
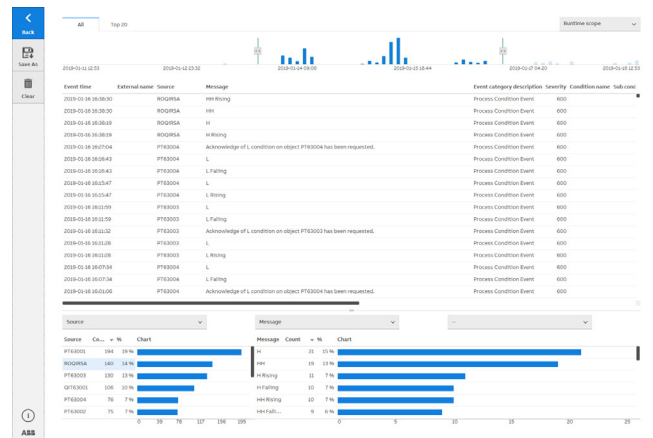
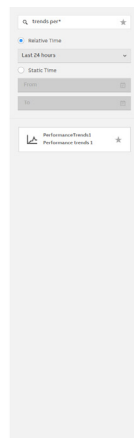
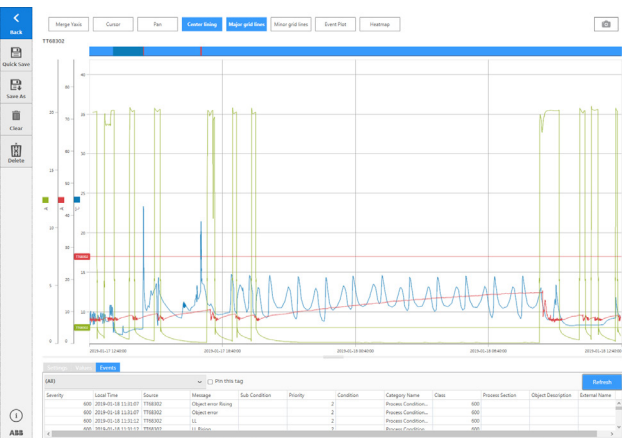
found using the search engine and trend displays are simply configured using drag and drop of any combination of trend signals. The Trend displays supports detailed trend analysis capabilities.

When working with the events part of the Trends and Events Application users can easily find and analyze all types of events stored in the History database. Events are displayed in an event grid with advanced filtering and search capabilities. Events statistics are available in the same view as the current selection of events thus creating an optimal environment for event analysis.

Key Benefits of Trends and Events Application

The Trends and Events Application supports users with:

- Fast and easy access and analysis of trend and event data regardless from which control system the data origins
- Comprehensive trend analysis tool including presentation of related events
- Easy to use and powerful event search and filtering including comprehensive event analysis
- Easy to export data to 3rd party analysis tools such as Microsoft® Excel®.



01

01 Trend analysis view in Trend and Events Application

02 Event analysis view in Trend and Events Application

How does it work?

Trend and Events runs as a native MOM Application and is launched from the Launchpad. Users add and organize their personal set of Trends and Events Applications together with all other MOM Applications using MOM Launchpad. When working with the trends part of the Trends and Events Application, users can perform detailed analysis of trend data stored in the History database. Users simply drag and drop trend tags within a given time frame, using the search engine, to add trend data to the trend display. The trend display supports zoom and pan, multiple x-axis and various presentation styles such as line, mountain, etc. For each trend center lining limits can be assigned. Deviation from these center line limits are displayed as specific heat maps or in the trend canvas. This allows users to get a good overview and easy detect deviations from these given limits. An event list displays all related events to the trend tags displayed in the trend display allowing users to analyze related events to current selection of trends. Trend displays can be saved and reused later.

When working with the Events analysis Application users simply drag and drop different events types within a given time frame, using the search engine, to populate the event grid. The event grid supports advanced filtering, grouping and search capabilities of the current selection of events and the layout is easy to customize to fit a particular use case. Statistical functions such as event frequency over time and

event distribution based on any selected event attribute are available and continuously updated in the same view. Thus creating an effective workflow to search, find, filter and analyze events. Event analysis views can be saved and reused later.

The MOM Trends and Events Application can be fully localized using standard ABB Ability Manufacturing Operations Management NLS (Native Language Support) capabilities.

Pre-requisites

Trends and events is a native application within ABB Ability Manufacturing Operations Management (MOM). With its common services and modules User Experience (UX), Reporting, Connectivity and Data Storage ABB Ability Manufacturing Operations Management is an ISA-95 Level 3 plant data access and information system which ties any plant data from disparate data sources into one single information infrastructure. MOM is also a platform that hosts different type of industrial productivity software applications, MOM Application. This enables MOM users to easy expand and add new relevant industrial software applications as requirements or business objectives change.