ABB Ability™ Manufacturing Operations Management
Process and Production Intelligence 3.1.3 Technical Facts

ABB AbilityTM Manufacturing Operations Management (MOM) Services is an ISA-95 Level 3 plant data access and information system which ties any plant's data, from disparate sources, into one information infrastructure. This information infrastructure collects, stores and analyzes relevant data, building a sound foundation for users to make effective decisions.

Solution

ABB Ability Manufacturing Operations Management (MOM) Services consists of common services and four modules: User Experience (UX), Reporting, Connectivity and Data Storage. MOM also hosts a wide variety of software applications to support decision makers to make the right decisions at the right time. Applications can easily be added when new needs are identified associated with new standards, regulations, or business objectives. Additionally, with the Software Development Kit (SDK) MOM also provides a cost-effective platform allowing application developers to take full advantage of all standard common services functionality and world-class UX.

Key benefits

- **Managed Complexity** - Thanks to ABB Ability Manufacturing Operations Management, a large amount of industrial data will be stored, combined, and translated into meaningful informatio based on the intelligent information infrastructure. This enables companies to meet demands for the highest levels of quality, precision and accuracy in output by supplying information that can be trusted to support in making the most important operational decisions for a plant.

- **Control system independent** - The reliable, high capacity, cyber-secure platform enables integration of any data according to open industry standards. MOM will allow industries to collaborate across systems and networks in the production process and to react faster to changing market requirements.
- **Easy to expand** - The MOM platform also hosts different industrial productivity software applications. This enables users to adopt and expand quickly and easily by adding new relevant industrial software applications as requirements from different operational excellence programs or business objectives change.
- **Cost-effective software life cycles** - With a life cycle separated from the control system, ABB Ability Manufacturing Operations Management Software offers a very cost-effective IT/OT integration. Industrial productivity software applications can be added whenever needed. The underlying control systems life cycle does not impact this agility to add new software products and solutions as new requirements occur.

Tech Facts

ABB Ability™ Manufacturing Operations Management - Process and Production Intelligence

	Server	Data Collector Node
Operating Systems	Windows Server 2019/ Windows Server 2016	Windows Server 2019/2016 ((Windowns 10 Pro/Enterprise))
Virtualization	VMware ESXi/MS Hyper-V	VMware ESXi/MS Hyper-V
Redundancy	High availability	Yes
Max no of tags	150 000	20 000 (6 000)
Max update rate	20 000 changes/second	5000 changes/second (500)
Events rate	400 events/second	400 events/second
Control system connect	OPC DA (v 2.05A), A&E (v1.0), HDA (v 1.2), UA (v 1.0), 800xA Native Connect (system extension)	
Databases and interfaces	History (real time data) and MS SQL Server 2016/2019, ODBC, OPC DA (v 2.05A), HDA (v 1.2) and OPC UA (v 1.0)	
Data formats	Float, integer, boolean, string	
Built in calculations	Minimum, Maximum, Aggregates (Hour, Day, Week, Month, Year)	
Calculations language	.NET (C#) templates	
Reporting	Report workflow app as native part of MOM Services. MS Excel add-in. Support for 3:rd party report packages through ODBC.	
Clients	Windows (click once installation) for Windows 7,8.1 Pro and 10 Pro/Enterprise - Launchpad with native MOM Applications e.g. Trends, Events and Reporting	
Apps development framework	.NET (C#) template projects, interface documentation, application package and deployment guidelines	

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