Proficy Manufacturing Data Cloud from GE Digital



Consolidate and transform manufacturing data across plants for cloud storage, analysis, and analytics

Today, manufacturers are losing the value of 70% of collected manufacturing data. With Proficy Manufacturing Data Cloud (Proficy MDC) from GE Digital, you can easily and quickly increase the derived value by reliably bringing enterprise-wide manufacturing data into the cloud and transforming it into a structured format for cross-plant storage, analysis, and analytics.

Proficy MDC helps you overcome the nonavailability of critical data from across plants in the larger manufacturing context for industrial data science and can speed process implementation up to 50%. Manufacturers gain a secure-by-design and reliable way to ingest data in near real time into the cloud as a central location, significantly reducing on-premise storage and maintenance costs.

Transform your enterprise-wide data into S95-based enterprise data sets, enabling a hybrid manufacturing cloud approach for reliable, real-time on-premise execution optimized with powerful cloud-based storage and analytics.

Outcomes

- Increase the value derived from your digital investments with global visibility
- Improve operations with a consolidated data model for enterprise-wide dashboarding, manufacturing big data analytics, and connection to other cloud-based solutions such as APM
- Easy and faster access to enterprise-wide data and cross-site analytics
- Decrease the on-premises database footprint for faster, more predictable on-premise performance and lower IT/infrastructure and maintenance costs
- Accelerate manufacturing data queries and reports on operational data (hot data) with faster performance
- Lower risk with secure-by-design cloud technology

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ASSET DATA

Real time feed of sensor data, measurements, etc.

ERP DATA

Financial impact of the manufacturing process

MFG DATA

Real time feed of manufacturing execution events

Proficy Manufacturing Data Cloud (MDC) enables the consolidation of three data sets required for process optimization and analytical applications.

O1 Transform and consolidate manufacturing data globally

Proficy MDC provides a reliable way to ingest manufacturing data into the cloud and transform it into a usable format with an S95-based contextual and aggregate data model. The transformed data models are accessible through easy-to-use and quick-response APIs. You can collect data across several facilities or sites for decision science, enterprise visibility, and comparisons across product lines and geographical locations.

Reduce storage costs and speed on-premise queries

By separating the storage of your historic and static data (cold data) from your required operational data (hot data), you can achieve two significant benefits. First, cold data storage costs and maintenance decrease with cloud server technology. Second, queries and reports on the hot data through an on-premise server are faster, helping to boost your operations agility.

Boost operations with cloudbased, self-serve analysis

Proficy MDC integrates data from multiple systems, creating an enterprise data set for reporting and analysis. You can make site-to-site, machine-to-machine, line-to-line, and other comparisons across your organization. Proficy MDC can move the data collected (both raw and contextual) to data lakes to pool data into a single location, making it easy and fast to create a context for manufacturing analytics and improve your operations.

1 Improve security with proven cloud technology

Proficy MDC ensures that your data is stored and managed in a secure-by-design way. Specifically built for manufacturing, the solution is fully managed with 24/7 monitoring.

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Features

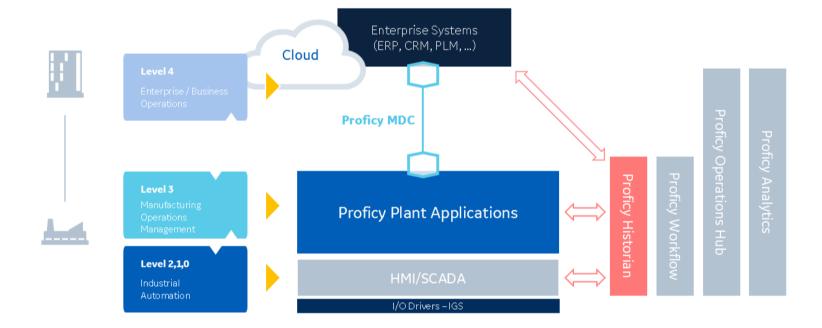
- Secure-by-design and reliable way to ingest data into a central cloud location
- Capture all Plant Applications data for cloud storage
- Automated ingestion of incremental data (no human intervention)
- Edge monitoring, remote configuration, and deployment
- Conversion to S95-based hierarchical, contextual and aggregate Manufacturing Data Model
- Access through REST API end points

Note: Proficy Manufacturing Data Cloud does not provide a user interface, visualization, analytics, or reporting tools. The REST APIs can be used as a data source for any third-party application that supports REST API as a data source.

Category	Data Model	Information Through REST API Endpoints
Hierarchy Model	Plant Model	S95-based plant model from enterprise-to-production units. The variable groups and the variable associated with the unit is also retrieved
Contexual Model	Production	Production event details
	Downtime	Downtime records
	Waste	Waste event records
	Quality / variables	Details of variables for both quality specifications and generic information along with the values

Increase the value derived from your manufacturing data while speeding operational data queries/reports and reducing cold data storage costs with Proficy Manufacturing Data Cloud.





More ways to Access Data

Cold, Warm and Hot data

