Element Unify
Industrial Data Fabric

Dealing with multiple data sources is a daunting task for industrial organizations, as they have to manage equipment data, ERP and work orders, time series, events, documents, 3D models, lab and test data, images, simulators, P&ID, point cloud scans, and logs.

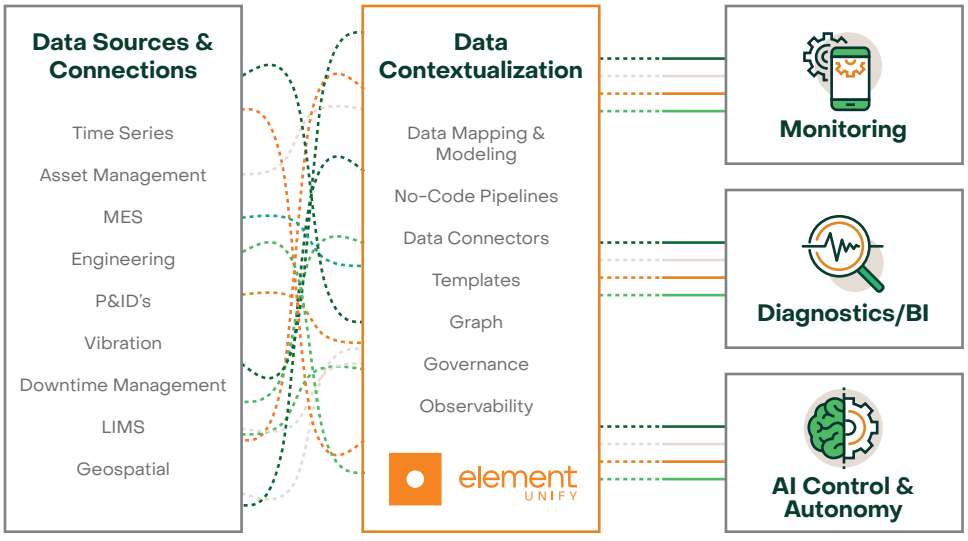
Putting all this data into a meaningful context for easy consumption is challenging and requires significant effort to organize and maintain.

Unifying Industrial Data

Industrial Data Fabric (IDF) is a way of relating raw data from multiple industrial data sources into formats associated with an entity so that it can be easily consumed by analytics and digital applications. By arranging the industrial data in the way that consumers want it, Industrial Data Fabric enables collaboration among stakeholders throughout the organization.

75%
reduction in project costs

No-code pipelines easily connect to operations data source systems for fast data transformation, reducing engineering time and effort



Element Unify enables a common data model to be utilized for multi-modal data processing that can be scaled across the entire enterprise as the number of industrial data-dependent use cases grows exponentially.

Data Fabric Architecture

Unify provides core data fabric functions for data processing, conditioning, synchronization, contextualization, persistence, access and governance. The architecture reduces code-first projects, makes structured data reusable for consumers and allows templates and pipelines to be recycled across similar projects, plants and processes.

4–8x

faster time to analytics

Shrink time to model operations data for a single plant from 6 months down to 3 weeks, delivering analytical use cases faster

With IDF, it is possible to effectively manage various formats, including machine identification, production order, materials used, worker information, and current date and time, which are combined with raw machine-generated data such as temperature, humidity, measurements, and vibration on a large scale.

The solution adopts a modeling approach that correlates data by machinery, process, and products, both at the edge and in the cloud, and presents it to the consuming applications. This approach allows for the definition of standard models and the establishment and management of integrations to provide data efficiently to business users and systems in a managed manner.

Element is a leading software-as-a-service (SaaS) provider in operations data management. Element Unify enables the Industrial Data Fabric architecture through a unified data model to empower people with access to operations data to make faster decisions that deliver financial impact. Element's customers represent over $750 billion in revenue, $500 billion in fixed assets and 450,000 employees.

Learn More
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