

Progress Your Pharma 4.0 Journey by Solving Industrial DataOps Challenges Frequently Asked Questions (FAQs)

FAQs from the webinar, "Progress Your Pharma 4.0 Journey by Solving Industrial DataOps Challenges".

Q: Does AspenTech Inmation[™] support compliance and data integrity?

A: AspenTech Inmation[™] is compliant with FDA 21 CFR Part 11 and EU Annex 11, Section 12. It has builtin role-based access, which is supported by Windows authentication. AspenTech Inmation also logs events and can provide an on-demand audit trail, reporting all changes within the system for internal or external audit.

To ensure data integrity, AspenTech Inmation uses authorization, authentication and encryption. It not only limits system access to authorized individuals, but also ensures data transferred between AspenTech Inmation components are encrypted. Additionally, it has a 'Relay Service' component, securely transferring OT data to the IT network.

Q: Can AspenTech Inmation support heterogeneous data integration from a variety of sources that are both internal and external to our company?

A: AspenTech Inmation is vendor agnostic. For a list of integrations visit <u>https://atdocs.inmation.com/home/index.html</u>. For products and/or vendor protocols not on this list, users can readily create advanced endpoints coded in the Lua scripting language. These scripts can be scaled throughout the enterprise and are centrally maintained alongside the other AspenTech Inmation components.

Q: How does AspenTech Inmation manage data contextualization?

A: Connector services can be used as edge computing appliances, contextualizing data, performing calculations or spawning entirely new objects which can be manipulated by the system. AspenTech Inmation offers several object data models on top of the database to assist in the contextualization of

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data, which flow from multiple sources in the platform. The IO model, KPI model and ISA-95 equipment model are the primary models.

Q: Which enterprise platforms and systems can connect with AspenTech Inmation to use data after it is ingested and transformed?

A: AspenTech Inmation acts as a data broker, using a WebAPI to egress data to a variety of enterprise applications used from the plant floor to the executive suite. It has a fully compliant OPC-UA server for third-party OPC-UA client connection. AspenTech Inmation also has an MQTT publisher and a built-in Kafka producer for data egress to cloud platforms like MS Azure or AWS.

Q: Is AspenTech Inmation an enabler for AI/ML initiatives?

A: Artificial Intelligence (AI) and machine learning (ML) require complete, reliable data to provide meaningful insights. AspenTech Inmation addresses industrial data connectivity, consolidation and contextulization challenges so that data can be used for AI and ML iniatives. By addressing these challenges, all data consumers—from data scientists, to process engineers, and business analysts—can spend less time finding and cleaning data, and more time analyzing it for impactful insights. Moreover, the ease of scalability allows learnings to be easily extended across production.

Q: How does AspenTech Inmation handle batches? Is context added within AspenTech Inmation for start time/end time, particularly when a system does not include these data?

A: Production events associated with Batch production are tracked in AspenTech Inmation using the Batch Tracker object. The Batch Tracker can create, archive and modify batch production records by tracking events and automatically contextualizing the data depending on its configuration. The Batch Tracker object will react to all production events and create the batch production record. For this capability, it is critical to identify the start and end point.

Q: For systems with older technology and/or manual processes, how does AspenTech Inmation maintain data integrity and usability during a transition?

A: AspenTech Inmation has native history transport functionality which enables users to schedule the movement of large historical time-series data sets. This transport can be either into the repository or a history sink, such as cloud repository or another data historian, without disrupting existing operations.

Q: How are data backed up? What happens if a network connection is lost?

A: AspenTech Inmation offers functionality to backup system image files. Additionally, MongoDB data can be used in the event of hardware failure or file corruption. Connector services, running on the same network as the OT platform, support 'store and forward' functionality; if a network connection is lost, data are buffered until the connection returns. The Connector service then schedules the data to be backfilled in the central repository. This local computing functionality also ensures deployed logic is executed even when not connected to the core system.



About Aspen Technology

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