

Catena-X data ecosystem U.S. expansion: AIAG hub at IMDS-AIAG 2024

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As supply chains globalize, so must the infrastructure supporting their efficiency, flexibility, and resilience. Emerging technologies like dataspace systems and data ecosystems—rooted in Europe’s emphasis on data privacy—are leading the way. To support this, Catena-X (CX) is partnering with the U.S.-based AIAG to establish a North American hub. Demonstrating “seeing is believing,” CX pioneers debuted the first live, cross-organizational data chain for secure scope-3 CO₂ emissions sharing, enabling Product Carbon Footprint calculations live at the 2024 IMDS-AIAG conference in Detroit.



Figure 1: Catena-X pioneers with AIAG at IMDS-AIAG 2024 Conference

Figure 1 depicts CX pioneers, bottom row from left: Andre Kremer (Ford: Supply Chain Manager Strategy & Business Operations, Global CX Lead), Thomas Roesch (ZF executive and interim CEO of Cofinity-X), Oliver Ganser (BMW: VP Digital Purchasing; in CX Association: Chairman of the Board), Alex Lenk (AWS: Auto & Manufacturing Solutions Architecture Lead EMEA). From top left: Prof. Dr. Chris Schlueter Langdon (Deutsche Telekom: Development Executive & Scientist; in CX Consortium: one of the 3 Product Managers; in CX Assoc: U.S. Ecosystem Dev Mgr), Shanawaz ‘Shaan’ Sheik (Flex: Director Automotive Sustainability; in CX Assoc: U.S. Ecosystem Dev Mgr), Jeff Schlageter (IBM: General Manager Global Auto & Manufacturing; in CX Assoc: Board Member for Internationalization), Kevin Piotrowski (AIAG: CTO).

AIAG named North American hub for Catena-X

The Automotive Industry Action Group (AIAG) has signed a Memorandum of Understanding (MoU) to serve as the North American hub for Catena-X to facilitate across its association members an open ecosystem aimed at creating a data-driven network for the automotive industry. The companies intend to formalize the agreement by year-end and prepare to launch the North American hub to automotive manufacturers and suppliers in early 2025. "With Catena-X, we are creating business value through multi-tier collaboration in a global and industry governed data ecosystem based on data sovereignty and trust [...] We enable automotive companies to optimize their business processes by seamlessly sharing data, choosing the solution of their choice, reducing costs and driving sustainable practices across the value chain," said Oliver Ganser, Chairman of the Board, Catena-X" (Catena-X 2024).



Figure 2: Live primary scope-3 CO2 emission data transfer on stage by Ford-Flex

Figure 2 shows, clockwise from the top left, Florian Jaeger (Siemens: Head of Carbon Assessment SiGREEN), Shaan guiding thru live demonstration (Flex: Director Automotive Sustainability; in CX Assoc: U.S. Ecosystem Dev Mgr), and bottom right, Thomas Roesch, hoping for the live show to succeed (ZF executive and interim CEO of Cofinity-X).

IMDS-AIAG announcement with first, live sustainability “killer-app”

Catena-X technology enables secure and trustworthy data sharing, facilitating cross-organizational data chains that go far beyond traditional 1:1 supplier relationships. This capability is critical for applications like primary supply chain or scope-3 data sharing, which are essential for accurate digital twins, for example. Following the adage "seeing is believing," select Catena-X pioneers demonstrated a live solution addressing the key sustainability challenge of Product Carbon Footprint (PCF) tracking—live on stage. Ford, Flex, Cofinity-X, SAP, and T-Systems International (TSI) showcased the expansion of pioneering data chain-building efforts first launched at CES 2024 ([link](#)). Ford successfully exchanged primary supply chain or scope-3 data with its tier-1 supplier, Flex ([Flex LinkedIn](#)).

This live demonstration showcased seamless data exchange across industry tiers and the interoperability of various PCF applications, including those from SAP and TSI:

- Entirely based on Catena-X certified technology
- Successfully executed across multiple supply chain tiers
- Demonstrated interoperability with each tier using different enablement services and PCF applications
- Completed in minutes via a browser-based, drag-and-drop graphical user interface, proving the simplicity and efficiency of CX-based products without requiring system integration.

Data security, privacy and Web3 technology

Catena-X addresses global supply chain challenges by combining (a) Europe's stringent data privacy and confidentiality regulations with (b) the advantages of novel Web3 technology:

- (a) Europe leads in data security, privacy, and confidentiality, driven by its regulatory framework and commitment to digital sovereignty. The EU's General Data Protection Regulation (GDPR) sets global standards for data privacy, while initiatives like Gaia-X advance secure, interoperable data ecosystems built on trust ([link](#)).
- (b) Web3 introduces distributed systems with key business benefits: scalability to meet growing demands, resilience through reduced risk of single points of failure, and improved efficiency by minimizing latency and optimizing resource use through proximity to data sources (see [Super-apps](#))

Catena-X data ecosystem development record in U.S.

This event advances Catena-X's global adoption strategy, led by Ecosystem Development Managers and tailored to the U.S. market. The following activities have been pivotal in shaping our journey to today's market success:

2024

- Dataspaces in Washington DC: [AcatechUSTrip2024](#)
- CES: Launch of a Ford-Flex live data chain for primary scope-3 product carbon footprint (PCF) tracking data; IBM's 2min [video](#); TSI [Insights story](#); Flex LinkedIn [post](#)

2023

- Dataspaces in US: [SmartManufacturing2023](#)
- International Manufacturing-X launch: [Greenville2023](#)
- Catena-X US pre-launch: [Austin2023](#)

2021

- Catena-X With GAIA-X: Will Data Space Be the Word of 2021? [Link](#)
- Deutsche Telekom, press release (2021-03-02), [link](#)

Important links

- What is a data ecosystem: [Dataspaces 101](#)
- First dataspace use cases: [Mobility super-apps](#) (Schlueter Langdon & Schweichhart 2022)

References

Catena-X. 2024. Automotive Industry Action Group Named North American Hub for Catena-X to Help Standardize Data Exchange. News story (2024-10-15), Catena-X Automotive Network e.V., Berlin, [link](#)

Schlueter Langdon, C., and K. Schweichhart. 2022. Dataspaces: First Applications in Mobility and Industry. In: Otto, B. et al. (eds.). Dataspaces – Part IV Solutions & Applications. Springer Nature, Switzerland: 493 - 511, [link](#)