

3DEXPERIENCE CONFERENCE

SEPTEMBER 14-15, 2022 | DARMSTADT, GERMANY

3DEXPERIENCE Integration to SAP ECC and SAP S/4HANA



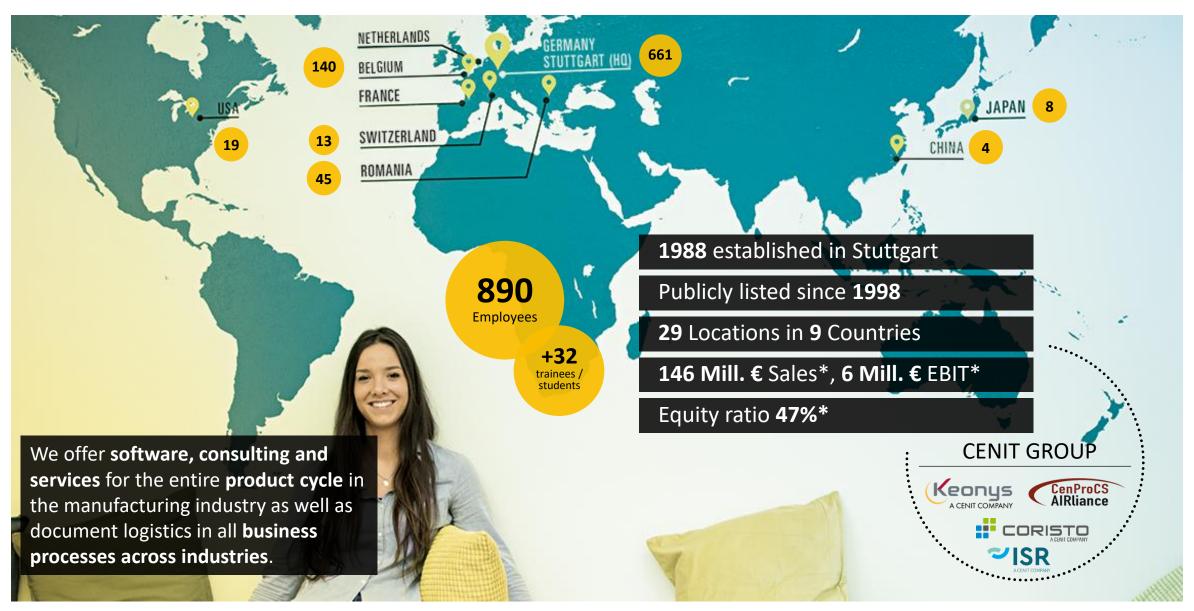
Karsten Horn
Solution Manager
3DEXPERIENCE-SAP Integration
CENIT AG



Horst Jürgen Hollmann
Senior Account Executive
SAP Solutions
CENIT AG

CENIT AT A GLANCE







- DESIGN WITHIN THE DIGITAL SUPPLY CHAIN
- VALUE OPPORTUNITIES WITH INTEGRATION
- SOLUTION OVERVIEW
- BUSINESS PROCESSES & CAPABILITIES
- INDUSTRY EXPERIENCE
- SUMMARY



TO CAPTURE THE VALUE AT STAKE, IT IS TODAY MORE IMPORTANT THAN EVER TO CREATE AN END-TO-END DIGITAL THREAD ACROSS THE VALUE CHAIN.

Our Mission: Deliver an integrated Digital Thread Feed Consume **Extended Enterprise... Product Teams... Digital Product** ...consumes product data and ...feed the digital thread with Model provides data back Feed Consume product data

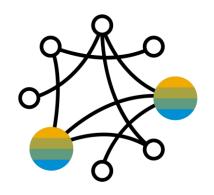
A single digital thread that integrates all the real-time information, feedback, performance, and data for a product from inception to sunset.



THE SOLUTION PORTFOLIO WITH S/4HANA, SAP ECC AND SAP INTEGRATION PORTFOLIO FOR PLM PROVIDE END-TO-END PROCESSES REQUIRED TO DEVELOP THE DIGITAL THREAD.

Solution Portfolio







systems for design and manufacturing information provided by PLM vendors such as 3DEXPERIENCE,

PTC Windchill and Teamcenter.

SAP Integration portfolio for PLM to enable integrated processes **from Design to**Operate. Connecting external PLM systems to SAP S/4HANA or SAP ECC.

S/4HANA & ECC Core as the system of record and downstream business process integration.

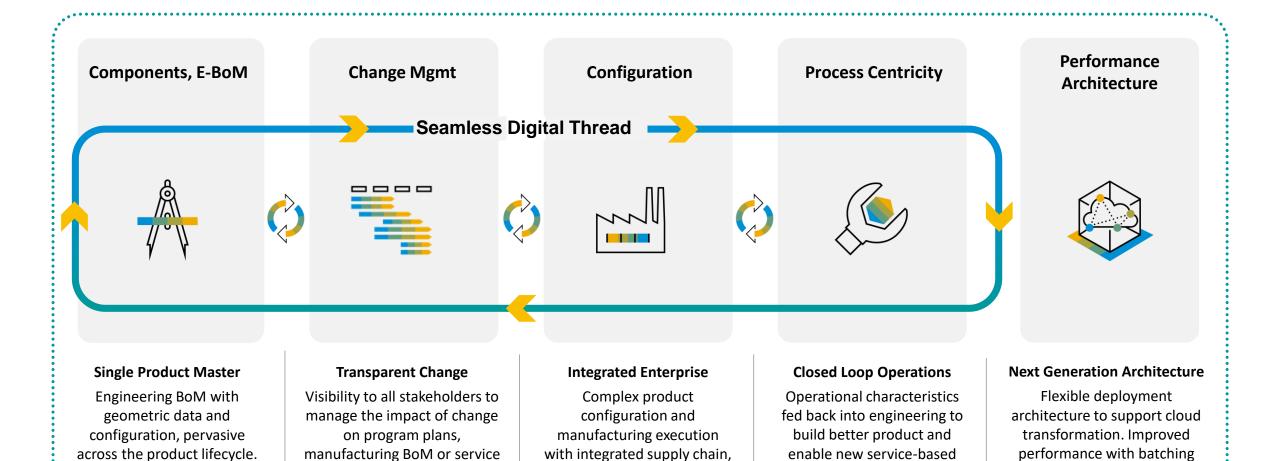


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DIGITAL PRODUCT DATA AND ITS CONTINUITY IS KEY TO A FASTER TIME TO MARKET

BoMs.





and logistics.

business models.

and parallelism.

... AND REQUIRES TO OVERCOME THE TYPICAL ROAD BLOCKS



Customer Challenges



High TCI/TCO

Every integration is based on project work. No standard integration on the market based on pre-defined scenarios.

Commonality

Many companies have more than one design system or PLM system they need to integrate.

Lack of process integration

Focus on master data exchange only.

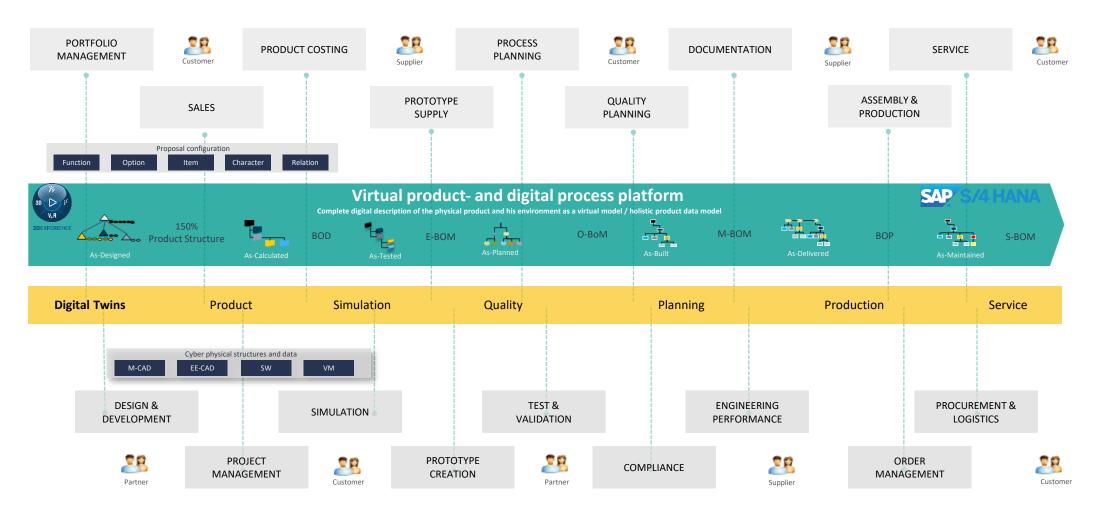
Process integration capabilities not
yet leveraged.

Resilient integration

Integrations built on old technology stack and are not cloud ready or scalable.

UNTANGLING THE COMPLEXITY OF DIGITAL PROCESS AND DATA CONTINUITY ALONG THE VALUE CHAIN





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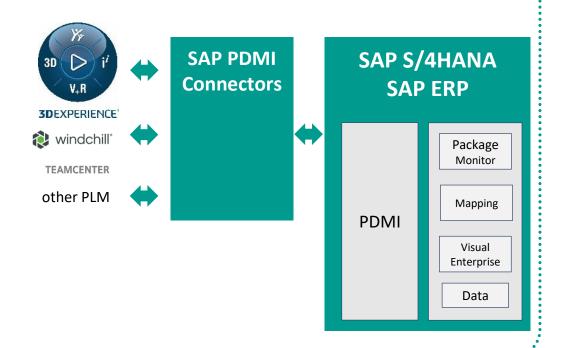
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SAP PRODUCT DATA MANAGEMENT INTEGRATION: A GAME CHANGER FOR MULTI-PLM SYSTEMS INTEGRATION



Business Outcomes

"PLM system integration is a game changer for the collaboration between engineering and the enterprise, offering *efficient*, *bidirectional digital product data flows*, embedded end-to-end and out of the box."



Highlights



Run cross system *end-to-end business processes* integrating all disciplines for the enterprise, aligned across PLM systems.



Directly embedded into PLM, the architecture enables performance and automatic process triggers based on workflow and events.



Leverage *a common mapping across multiple PLM Systems* providing access to data across applications.



Visualization technology enables 3D representations to be reused across platforms.



Use a reliable and *scalable solution* which supports high performance and efficient operations.

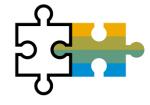


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Bundled Best Practices which will make you "Ready to"



Leverage the industry standard integration

instead of unmaintainable, custom integrations



Manage complexity

through gradually adopting key business processes



Take a phased, agile approach

based on rapid deployment packages with a defined scope and outcome

A PROVEN AND EFFICIENT PATH TO IMPLEMENT YOUR DIGITAL THREAD





Master Data Governance Product Release & Change Mgmt.

Product Variant & Configuration Mgmt.

Handover to Manufacturing Engineering

Target Cost & Footprint

Ready to Connect

- Automated synchronization of product master data
- Availability of relevant data in home application
- Support of core cross functional business processes

Ready to Orchestrate

- Cross platform enterprise release and change management
- Audit trail of product revisions
- Frontloading via impact analysis and bidirectional traceability

Ready to Configure

- Manage product variants and configurations
- Cross-functional visibility of design, manufacturing and sales variants
- Support end-to-end release and change process for variants

Ready to Manufacture

- Enable seamless manufacturing engineering processes
- Leverage high-end 3D manufacturing engineering
- Support down stream processes in classic and new environment

Ready to Calculate

- Orchestrate the product calculation process for cost and footprint across the platforms
- Continuous product control with simulation of product & production variants

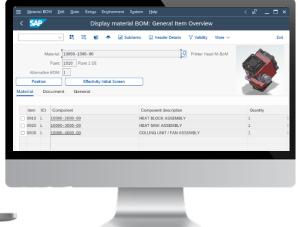
READY TO CONNECT ENABLES CONSISTENT, AUTOMATED AND MORE ACCURATE CROSS-PLATFORM COLLABORATION FOR PRODUCT MASTER DATA



Business Outcomes

As a *Product Manager*, I want to share product master data as *automated and fast* as possible to all stakeholders.





As the responsible *Purchasing Manager* I would like to have all relevant data at hand to work with my suppliers with sufficient time to meet our planned *start of production (SOP)*.

As *Sales Representative* I want to have access to the latest and approved product information to work with my clients.

Process Highlights



Product master data are readily available to all stakeholders and ease the collaboration for **seamless**, **end-to-end business processes**



Release product structures and their parts and **trigger** an automated, bi-directional **synchronization** between **3DEXPERIENCE** and **SAP**



Consistent BoM and master data representations across the enterprise platforms eliminate tedious and time consuming data reentry and validation



Intelligent data selection streamlines the master data synchronization with a *net change* approach



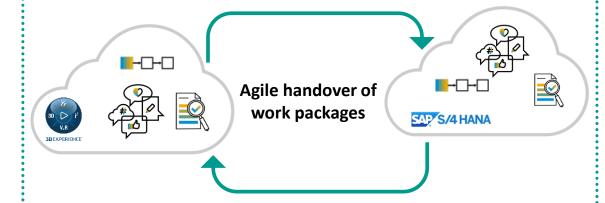
A seamless digital thread facilitates timely information access and *eliminates bottlenecks*

READY TO ORCHESTRATE ENABLES A SEAMLESS CROSS-PLATFORM RELEASE & CHANGE PROCESS COMBINED WITH A BUILT-IN, COMPREHENSIVE PROCESS MANAGEMENT



Business Outcomes

As a *development engineer*, I want to evaluate a change impact early and react proactively. I would like to get an overview of all change objects and documents from both systems, cross-platform.



As a *manufacturing manager*, I would like to identify costs at an early stage. I want to avoid missing components in production and unnecessary scrapping costs, duplicated warehousing and disruptions to the overall operating process.

Process Highlights



The *built-in process management* orchestrates team work across divisions and platforms



Cross-platform navigation of business objects directly from the work item of the users home application



The change impact analysis includes all objects and documents related to the proposed change without switching systems



The *collaboration* of 3DEXPERIENCE and SAP users is orchestrated through an agile, bi-directional handover of work packages



All implemented product changes create an *audit trail* with direct links and access to the relevant business objects from both systems

READY TO MANUFACTURE ENABLES CROSS PLATFORM COLLABORATION FOR AGILE MANUFACTURING ENGINEERING, PRODUCTION PLANNING AND OPERATIONS



Business Outcomes

As *Manufacturing Engineer*, I want to leverage my 3D process planning environment to define manufacturing processes and simulate assembly sequences without the need to switch between platforms.



As *Production Planner*, I want to have visibility to the latest engineering and manufacturing definitions to run MRP accurately, plan my SoP and the run-in of subsequent manufacturing changes.

As **Shop floor Operator**, I need up-to-date digital work instructions in conjunction with all necessary parts available at the right time.

Process Highlights



Manufacturing product structures (M-BoM) and process plans (Routings) are readily available to all stakeholders and ease the collaboration for seamless, end-to-end business processes



Manufacturing engineers have full *visibility to inventory levels* and *cost of items* that may influence their process planning decisions.



Seamless *3D visualization support* across PLM and ERP improves collaboration, process and manufacturing quality



Shorten the cycle time from the release of manufacturing processes to the start of production



The manufacturing integration *can be tailored to all major SAP solutions* like PEO, classic BoM and Routing, as well as iPPE

READY TO CONFIGURE ENABLES CONSISTENT USAGE OF PRODUCT VARIANT METHODOLOGIES AND CONFIGURATION MANAGEMENT CONCEPTS ACROSS PLATFORMS



Business Outcomes

As a *Product Architect*, I would like to define the product modularization and technical product variants and configurations in my 3D PLM environment .





As a *Product Manager*, I would like to plan product model variants and sales configurations to empower my sales organizations with competitive offerings.

As a *Sales Manager*, *Cost Controller*, *Manufacturing Engineer*, ... I want to use the configuration for my own processes.

Process Highlights



Leverage *proven methodologies* to manage cross platform product variants and configurations, bridging the gap induced by differences in the variant uses and semantics of the platforms.



Map and synchronize product variant structures, rules and dependencies between systems for well defined integration scenarios



True end-to-end support for product configurations from early product variant design to manufacturing and downstream processes such as supply chain logistics.



Gain a competitive advantage through *shorter cycle times* for bringing configurable products to market.



The variant and configuration integration *can be tailored to the major SAP solutions* like classic BoM with variant configuration, as well as iPPE

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MORE THAN 2 DECADES OF INDUSTRY PROCESS EXPERIENCE FOR AN INDUSTRY STANDARD



Why is CENIT your partner for the Digital Thread?



Two decades of industry-specific experience



Technical expert knowledge



Change management expertise

Gained through numerous customer projects from the *automotive, aerospace, consumer and industrial equipment* sector such as V-Zug, Riello, Lucid, Bobst, Neapco, Nurol Makina, Safran, Boeing, Lockheed Martin, Airbus,

Bell Textron, Deutsche Aircraft, Waldaschaff, Atlas Copco and Arburg.



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WE CREATE THE ONE PLATFORM USER EXPERIENCE FOR THE DIGITAL THREAD

Broad scope of integration

processes gives freedom to

use "best of both worlds"

for maximum benefit

Efficient implementation

driven by templates and

best practices

Ready-To packages for the

phased implementation

and future growth of your

platform usage





Quality



Efficiency



Costs



Traceability

Value Proposition

Industry standard integration product for secure implementation and maintenance

Scalable architecture supports all implementation sizes

Reliable consulting based on 20+ years industry experience with DS-SAP integration

Openness for service collaboration enables large scope projects

Tailored integration scope due to flexible solution configuration

Cloud and on-prem deployment due to state of the art technology

ARE YOU READY TO DISCOVER MORE?

Let's get in touch to explore options for your digital thread.







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