

PDM Workbench NX for Aras Innovator

T-Systems PLM Applications

T Systems

Let's power
higher performance



T-Systems PLM Solutions

Our Partners

Aras Corp.



- Aras Business Partner
- Aras Solution Partner
- Reseller Agreement

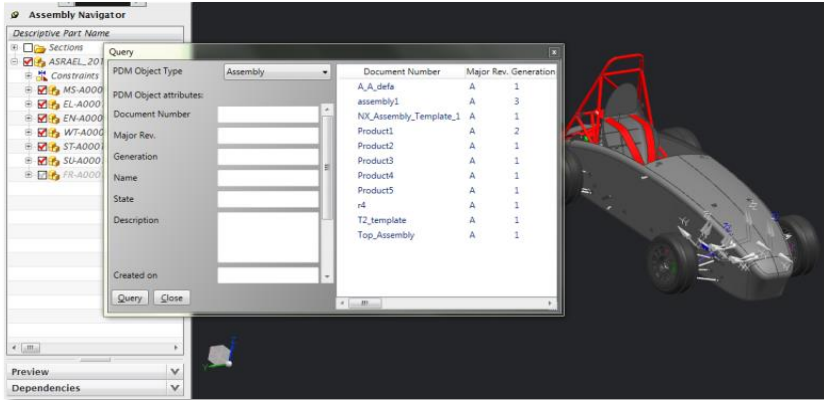
Siemens PLM Software



- Development Partnership
- Reseller Agreement for CMI
- Service Agreement
- JT Open Partner

PDM Workbench NX for Aras Innovator

The immersive PDM Integration for Siemens NX



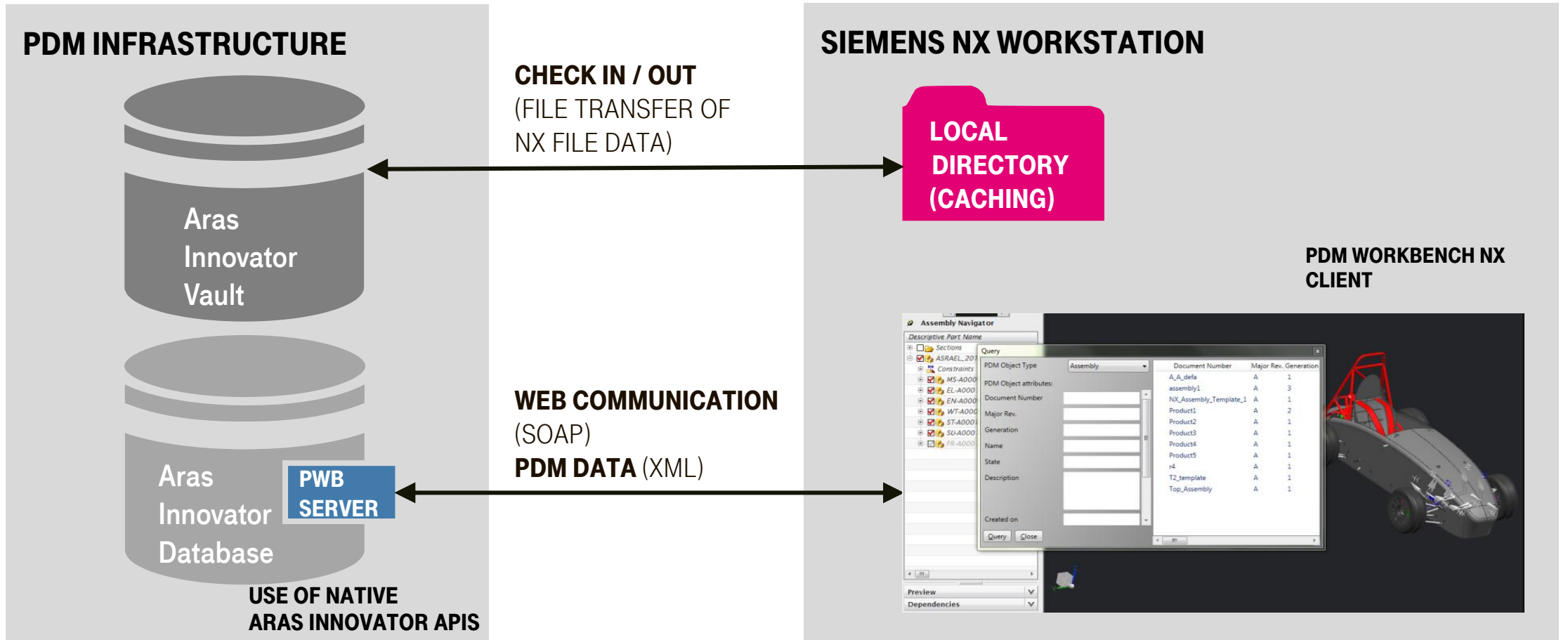
PDM Workbench integrates
Siemens NX into Aras Innovator

- As Connector:
cares about **data** and **files**
- As Integration:
cares about **processes**

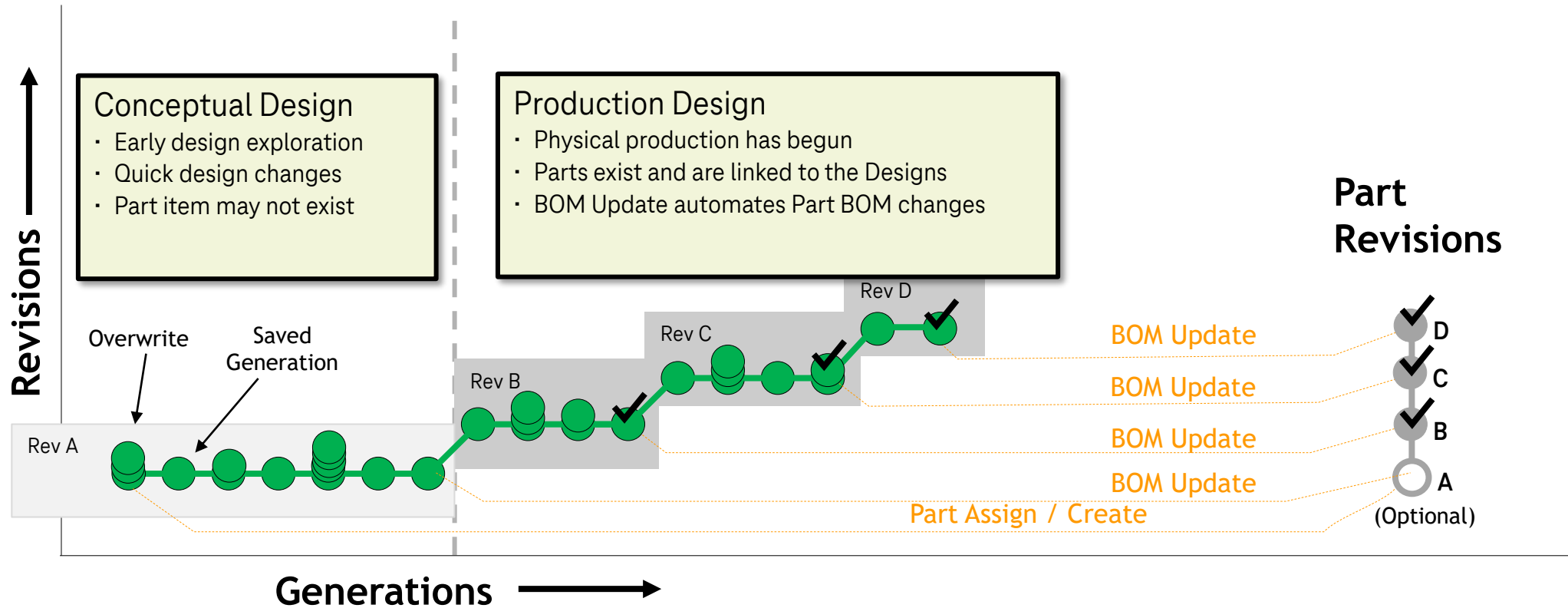
To ease the data management of NX data the connector enables the use of a lightweight PDM system directly within the NX user interface. The connector is dedicated for displaying and manipulating PDM data and enables the designer to take full advantage of PDM capabilities supporting collaborative product development, all within the NX environment the designer is familiar with.

- Supports PDM capabilities like query, check out/in, update, create, lock of PDM and CAD data
- Can be configured to any customer data model
- CAD specific PDM functionality in NX enabling design engineers to stay within NX only
- Allows access to the PDM system from every client machine where the Connector is running

PDM Workbench for Aras Innovator Architecture Overview



CAD Document Structure Mode Unified Part / CAD Change Process



PDM Workbench NX for Aras Innovator Live Demo

Authentication (People & Organization)

- Login / logout

Accessing PDM and CAD data

- Query and expand

Collaborative Engineering

- Lock / unlock

Creating and modifying data

- File templates, Geometry update, structure synchronization

Aras Innovator PDM Integration

- Workflow and Lifecycle: Promote, Release, Revise

PDM Workbench NX for Aras Innovator Roadmap

Part support

Support of “empty” PDM structures

PDM Workbench NX for Aras Innovator License Model and Commercial Aspects

T-Systems offers a flexible license model

- Concurrent Licenses can freely float in the network allowing flexible usage of the licenses.
- License prices are discounted based on the total installation number.
- Subscription model offers maximum flexibility.
- Subscriptions can be purchased to discounted prices by combining purchase packages.

PDM Workbench NX for Aras Innovator

Functional Highlights

- Extends Aras Innovator with a comprehensive structure editor embedded in Siemens NX
 - Display and modify Aras Innovator Attributes
 - Color coded access rights
- Context menu within NX Assembly Navigator: Lock/Unlock, Show Aras Properties, ...
- Embedded Aras PDM Client in Siemens NX (no need to switch between Aras Thin Client and NX)
- Direct Integration with the Aras Part structure ☒ enhancements planned

PDM Workbench NX for Aras Innovator Support (I/II)

Direct support by T-Systems by 2nd level hotline:

- Analyze use cases of customers
- Best practice
- Customization support
- Fix pack releases
- Point of contact for customer requirements

Continuously developed product:

- Support of the three latest Siemens NX releases beginning with NX 9
- Support of the latest 2 Aras Innovator releases including Service Packs
- Two PDM Workbench NX releases per year

PDM Workbench NX for Aras Innovator Support (II/II)

3-days Installation Support Package is available:

- Installation and configuration of an Aras Innovator environment.
- Import and validation of the Aras Innovator CAD data model.
- Basic configuration of T-Systems' PDM Workbench NX.
- Initial test of the environment.
- Introduction into the environment and the methodology of Aras Innovator and the PDM Workbench NX.

References (CATIA Only)

PDM Workbench for Aras Innovator

References Overview



PDM Workbench for Aras Innovator

Key References (I/II)



F.X. Meiller

Munich, Germany (Headquarter);
CATIA V5-6R2015; Aras Innovator 11 SP8
80 PDM Workbench Licenses



Magna / GETRAG

Cologne, Untergruppenbach, Germany; Goteborg, Sweden; China
CATIA V5; Aras Innovator 11
250 PDM Workbench Licenses



BAE Systems Sweden (before Hägglunds)

Örnsköldsvik, Sweden; CATIA V5
Aras Innovator 11 SP11
120 PDM Workbench Licenses

PDM Workbench for Aras Innovator

Key References (II/II)



Kawasaki Heavy Industries

Gifu, Japan
CATIA V5 R19; Aras Innovator 11 SP8
220 PDM Workbench Licenses



Leonardo Helicopters Division

Cascina Costa, Italy
CATIA V5 R22; Aras Innovator 11
50 PDM Workbench Licenses



Lear Corporation

Dearborn, United States, Spain, Germany
CATIA V5 R22, V5-6R2014, V5-6R2016; Aras Innovator 11 SP11
100 PDM Workbench Licenses

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F.X. Meiller Aras Innovator Migration Project



F.X.Meiller - Business Case

VPM to Aras Innovator migration project:

- Development of specific customer requirements
- Improved usability and performance
- Reduced maintenance costs for the PDM system
- Phase out of legacy UNIX/VPM server platforms



Locations

- Munich, Germany (Headquarter)
- Products: Dumpers, Elevator Doors
- Markets and customers: automotive and construction industry

Specific Requirements

- Enhanced query UI capabilities
- Promote and revise
- Customer specific:
 - Advanced search capabilities
 - Duplication of Parts and Drawings

Applications

- CATIA V5 R19
- Aras Innovator 11 SP8
- 80 PDM Workbench Licenses

T-Systems PLM Solutions Customer Reference Project @



GETRAG Ford Transmissions - Business Case

- Provision of PDM Workbench standard product
- Teamcenter Engineering to Aras Innovator migration project
- Multi-CAD Environment
- CAD-Data Exchange Solution
- Development of specific customer requirements
→ Functionality becomes part of standard product



Locations

- Cologne, Germany
- Goteborg, Sweden
- Untergruppenbach, Germany

Specific Requirements

- CAD Document Structures
- Single Sign On
- Thumbnails
- Steering of Generations

Applications

- CATIA V5
- Aras Innovator 9.3
- 250 PDM Workbench Licenses

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BAE Systems Aras Innovator CATIA V5 Integration Project

BAE Systems - Business Case

Replacement of home grown PDM system (PDA):

- Development of specific customer requirements
- CAD BOM alignment UI in CATIA
- Security concepts (ITAR)
- STEP import



Locations

- Örnsköldsvik, Sweden

Specific Requirements

- Q-Checker integration
- Alternative and derived CAD file management
- Customer specific:
 - Document and Part types
 - Type dependent expand

Applications

- CATIA V5 R24
- Aras Innovator 11
- 120 PDM Workbench Licenses

T-Systems PLM Solutions Customer Reference Project @



Kawasaki Heavy Industries - Business Case

Replacement of legacy Dassault Systèmes PDM system VPM:

- Development of specific customer requirements
- Support of migration with specific tools and PDM Workbench functionality
- For large scale airplane programs
- Large-scale assembly DMU



Locations

- Gifu, Japan

Specific Requirements

- Serial number filtering
- Compare Structure Tree
- Representation Type filter
- Support for migrated V4 documents
- Enhanced Query Functionality

Applications

- CATIA V5 R25
- Aras Innovator 11
- 220 PDM Workbench Licenses

T-Systems PLM Solutions Central eBOM project @



Leonardo Helicopters Division - Business Case

- Setup of a central Aras Innovator instance to manage configured product structures for a multitude of helicopter lines
- Transfer all relevant information for eBOM management from multiple sources into one system
- Potential for central cross-over (multi-line) part management
- Potential for multiple BOM management (pBOM, mBOM etc.)



Solution

- Data synchronization with COMPDM from Enovia VPM V4 to Aras Innovator (initial and delta) incl. configuration data, maintaining reference to source system
- Store customer orders persistently in Aras incl. history (interface to SAP)
- Synchronize parts, CAD models (CATIA V4/V5), documents, EO, effectivities and merge into single data model
- Detect MUL* structures and register MUL master in Aras
- Customization of CATIA V5 to Aras Innovator integration

Installation Base

- 3 helicopter programs, more to follow
- Potential rollout in Leonardo Group
- 50 PDM Workbench Licenses
- COMPDM to serve VPM to Aras data exchange

*MUL = multi-line components and structures

Thank you!

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