

A hand holding a black and silver pen points to a technical drawing on a tablet. The drawing shows a cross-section of a mechanical part with various dimensions and lines. The background is a blurred office setting. A large pink graphic element is overlaid on the left side of the image.

# PDM Workbench NX for Aras Innovator

T-Systems PLM Applications

 **T Systems**

# T-Systems PLM Solutions

## Our Partners

### Aras Corp.



- Aras Business Partner
- Aras Solution Partner
- Reseller Agreement

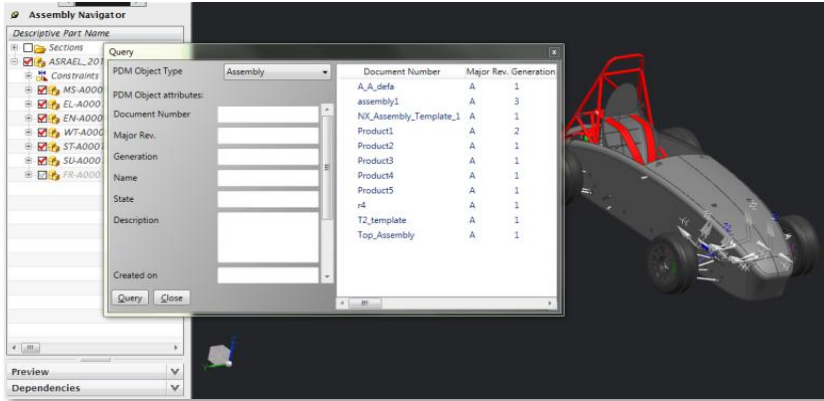
### Siemens PLM Software



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

# PDM Workbench NX for Aras Innovator

## The immersive PDM Integration for Siemens NX



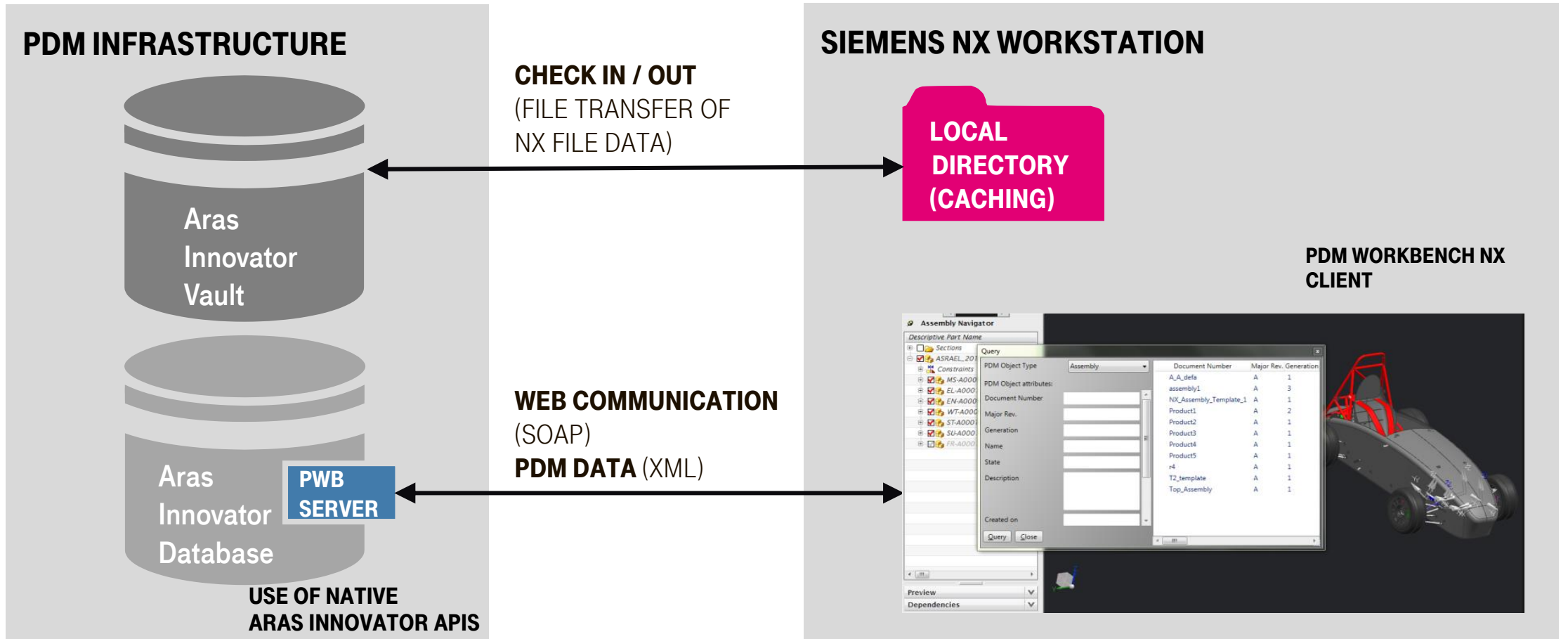
PDM Workbench integrates  
Siemens NX into Aras Innovator

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

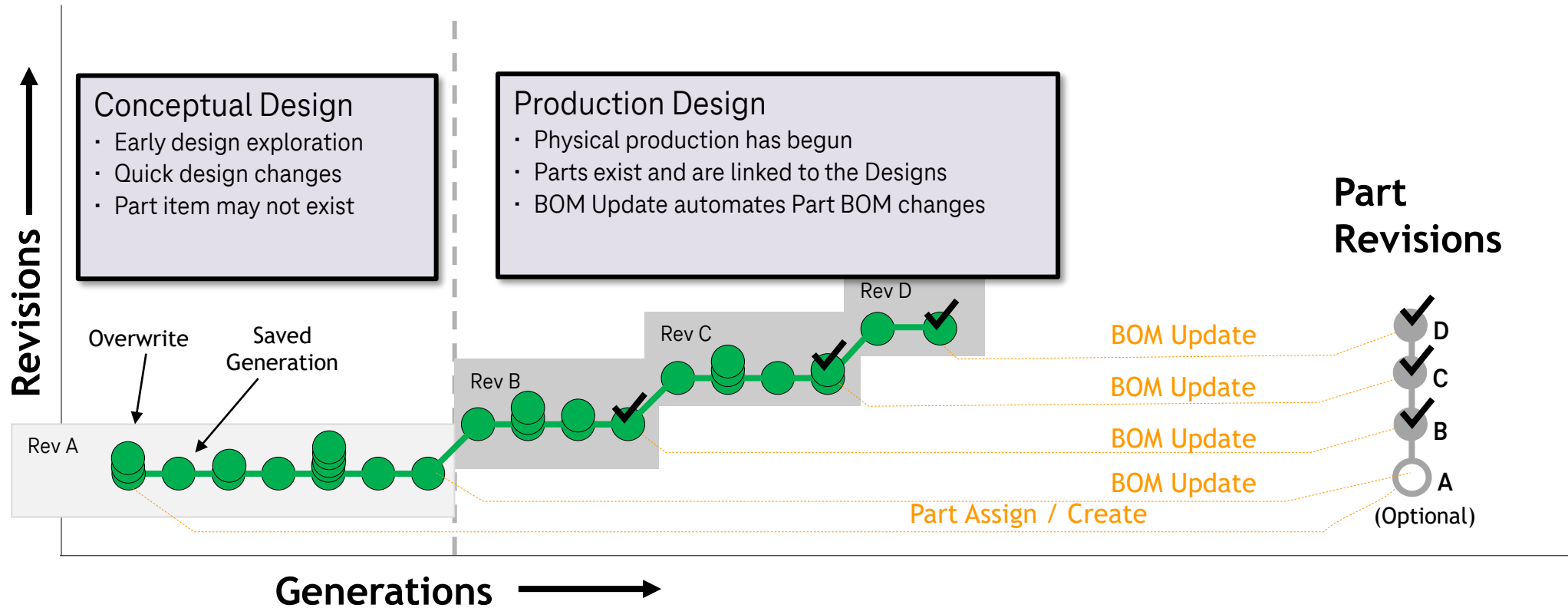
To ease the data management of NX data the connector enables the use of a lightweight PDM system directly within the NX user interface. The connector is dedicated for displaying and manipulating PDM data and enables the designer to take full advantage of PDM capabilities supporting collaborative product 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  
95 PDM Workbench Licenses



### CERN

Geneva/Switzerland  
CATIA V5; Aras Innovator 12  
300 PDM Workbench Licenses



### BAE Systems Sweden (before Hägglunds)

Örnsköldsvik/Sweden  
CATIA V5; Aras Innovator 11 SP11  
310 PDM Workbench Licenses

# PDM Workbench for Aras Innovator

## Key References (II/II)



### Kawasaki Heavy Industries

Gifu/Japan  
CATIA V5 R19; Aras Innovator 11 SP8  
240 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

# T-Systems PLM Solutions

## 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
- 95 PDM Workbench Licenses

# T-Systems PLM Solutions

## 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
- 310 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
- 240 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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PDM Workbench NX

<https://plm.t-systems.net/pdm-workbenchNX>