History, present and future of our CAD integration

Competence Unit EDM/G

Dr. Thomas Wendel Senior Unit Manager CU EDM/G

T-Systems debis Systemhaus Industry GmbH

thomas.wendel@t-systems.de



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Our history (CAD Integration Projects)

Present activities in CAD integration

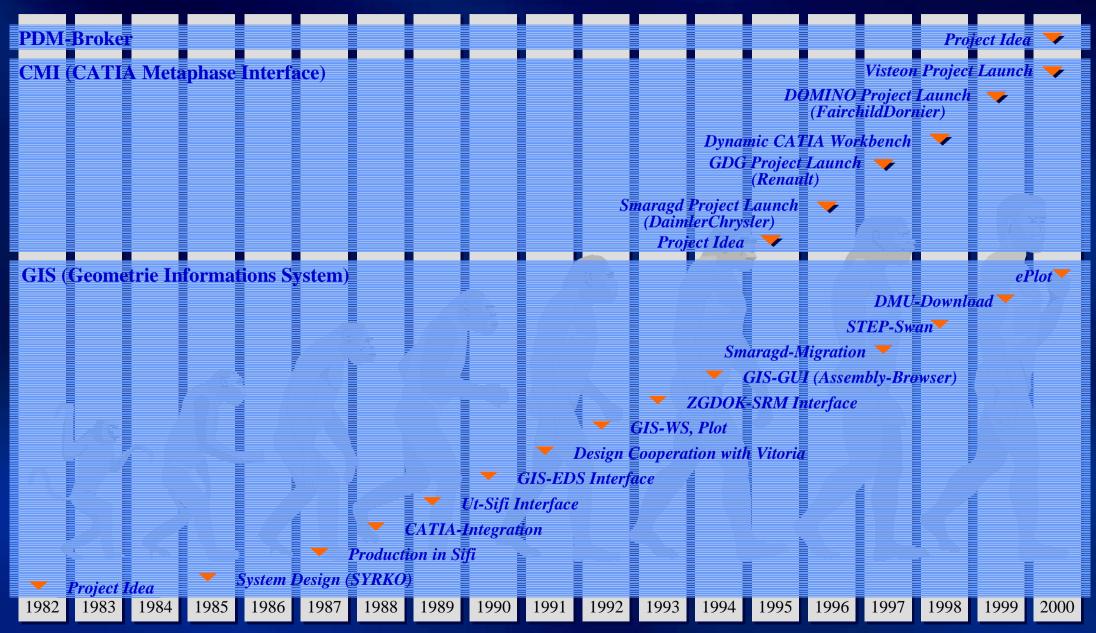
Our customers and projects

CAD integration in the future



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Our History (CAD Integration Projects)







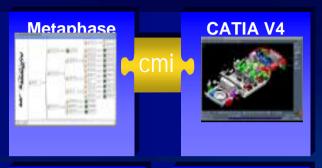


Present activities in CAD integration

- Extend existing CMI functionality

 - □ Customer specific CATIA V5 Integration
- Implementation of PDM-Broker
 - ⇒ Flexibility

 - □ Integration of standard products
- Enhance partnerships
 - ⇒ SDRC (partnership since 1995)
 - ⇒ SmartSolutions (contract in closing phase)
 - ⇒ Dassault (CAA2-contract in discussion)





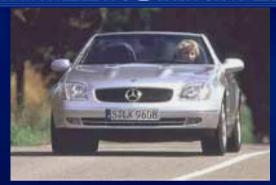


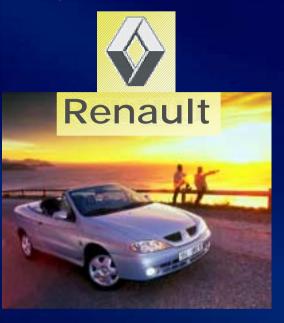




Our Customers (Examples)

DaimlerChrysler











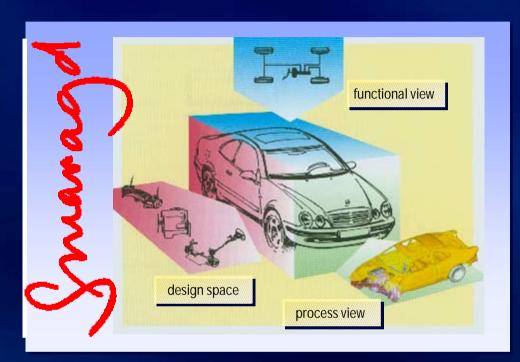




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Geometry data management with Smaragd



Advantages for DaimlerChrysler:

- Worldwide informations for product and top geometry data
- Basis for Digital Mockup / Digital Car
- Improved quality at the product development process

SMARAGD is the EDM-System of DaimlerChrysler to manage product and top geometry data(based on METAPHASE)

- Delivery of all documents concerning each part or component
- Geometry data management and search
- Association of geometry to the BOM
- Worldwide access and data exchange with various access rights

SMARAGD is the follow-on to GIS host and provides functional enhancements, e.g. the integration of different applications and significantly improves support of the product development process

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CATIA-METAPHASE-INTEGRATION (CMI) at RENAULT S.A.



Advantages for Renault:

- Flexible partner for SW features to be realized
- Support on-site and in native language
- Integrated PDM CAD solution with high performance
- High level automotive process know how

Development, Implementation, Customization and on-site support of the METAPHASE PDM project GDT.

- Locations:
- Paris (development),
- France, Spain, ... (production)
- Number of seats:
- over 1000 CAD seats
- over 2500 PDM seats
- up to date 450 CMI licenses
- Applications:
- CATIA, IDEAS, EUCLID
- METAPHASE, CDM, VPM
- 4D NAV

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Engineering Data Management with DOMINO



DOMINO is the new EDM system of Fairchild Dornier used for the management of all data describing products as well as means of production.

- Configuration management
- Change management
- Life cycle management
- BOM management
- Document and geometry data management
- Data exchange with suppliers

Advantages for Fairchild Dornier:

- Information turntable for all data
- Increased product quality
- Decrease in development time by the product development process

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CAD integration in the future

- Establish T-Systems at the market according to the CC Mission
 - ⇒ "Enable Collaborative Product Development"
- Establish the new product "PDM-Broker" in the marketplace
 - ⇒ Flexibility (integration of PDM systems)
 - ⇒ Fast adaptability (following customer requirements)
 - □ Integration of standard products
- Enhancements in direction of ASP with the goal to
 - ⇒ provide cost transparency for the customer
 - ⇒ enable the outsourcing of administration activities
 - ⇒ allow easy connection of big and middle class business

Connect th

Appendix

Who we are

Our working concept

Our services along the working concept

Why customers use PDM/ EDM?

Typical project success factors!

Engineering Data and Document Management

CC EDM - Service Offering according to Applications

CC EDM as a strategic Partner with EDM/PDM-Projects



Who we are





We are ...

- organizational part of Competence Center EDM
- located in Stuttgart (Germany)
- about 35 staff members (and 35 external employees)
- Professionals in state-of-the-art EDM/PDM technology
- focused on the integration of CAD- and PDM-Systems



Our working concept











Vendor independent consulting

Specification support

Consulting on following topics:

Selection of relevant EDM/PDM-Systems

Integration of CAD-EDM Systems, DMU - Tools

Data modeling (e.g. according STEP)









Implementation specification

Customizing PDM-Software (esp. Metaphase)

Realizing Software with following technologies:

C, C++, JAVA, CORBA, Websphere

Metaphase, Windchill

Xpress (STEP-Like data mapping)









Maintenance of existing software

1st and 2nd Level Hotline

Training of new software systems

Coaching of customers at their locations

Creation of Online-Help

Application support









Communicate

Currently not offered from our competence unit

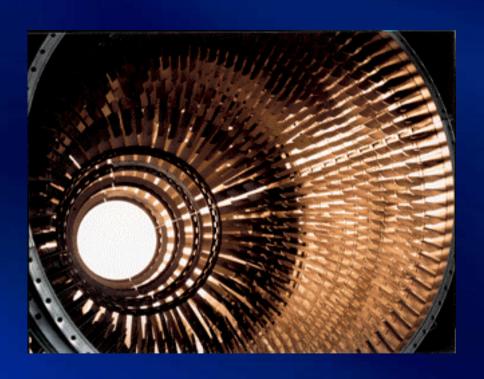
Available at other T-Systems units







Why Customers use PDM/EDM?



- Extend CAD data management
- Manage all kind of documents
- Integration of bill of material
- Realize digital mock up
- Connecting design groups

Typical project success factors!



- High acceptance of the PDM-System
- Serious calculation of time and costs
- Professional project management necessary
 - ⇒ partners / debis Systemhaus
- Co-operation with specialists
 - ⇒ specification
 - ⇒ customization
- Applications Management and User Help Desk

Engineering Data and Document Management

Product Test **Fnviron-Process** Geo-Docu-Manage-Structure mental Managemetry ment Solutions Mana-Manage-Management ment gement ment ment **EDM Services** Products and Projects Standard systems: Metaphase, MatrixOne, SAP-PDM, VPM/DM Standards (e.g. SGML, STEP)



CC EDM - Service Offering according to Applications

Product Development (Creation of a Product)

Production
(Handling of Orders)

Sales & Distr

We offer IT-Solutions for:

Engineering Data Management, resp. Product Data Management

Engineering Planning		eometry Data lanagement	F	Product Structure Management (Bill of Material)	Manufacturing of Prototyping	Life Cycle Engineering	
Engineering Controlling		Digital Mock Up		Configuration Management	Prototype and Test Management	Life Cycle Assessment	
Engineering Process Management	Г	CAD-EDM Integration		Analysis of Maturity	Measurement	Knowledge Management	
Engineering Change Management	П	EDM-EDM Integration		Parts and Variety Management	Type Approval (Homologation)	EDM-ERP Integration	
Engineering Supply Chain Mgmt.		Document Management		Inventory Management	Engineering Warehouse	Spare Part Documentation	1



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CC EDM as a strategic Partner with EDM/PDM-Projects

- The customer's goals are the basis for all activities
- We take the entire responsibility for the plan-, build- and run-phase according to the customer's desire
- We support all national and international locations of the customer
- Specialists are available for the various applications (CAD-Interfaces, bill of material, Document-Management, DMU and others)
- We use our experiences made with EDM/PDM major projects (Plan/Build/Run)(Benchmarking)
- CC EDM is a neutral supplier and cooperates with the main EDM/PDM system suppliers
- Know-how in a wide scope of branches (Automotive, Aeronautics, Aviation, Engineering, Electrical Industry...)

