

**Introducing
ENOVIA SmarTeam, Navision and
PARTsolutions in the CAD Construction at
MLOG Logistics**

Cadenas Industry Forum

24.02.2010

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Agenda

1. Introducing **MLOG** Logistics GmbH
2. Demands
3. Project Progress
4. Experiences

Our Company History

MLOG Logistics GmbH in Heilbronn – Quality from Tradition:

- 1922 Founding of the Erwin Mehne GmbH, Heilbronn (Steel Construction)
 - 1968 Construction of first automated high rack warehouse
 - 1974 Foundation of MAN Storage and Systems Engineering in Munich (Software development and project management)
 - 1990 Takeover of Mehne GmbH by MAN AG and consolidation of Mehne GmbH and MAN Storage and Systems Engineering into **MAN Logistics GmbH**
 - 2005 Independent enterprise **MLOG Logistics GmbH** (Management buy-out)
-

Our Company Profile

Legal form: GmbH

Registration court:

Municipal Court Heilbronn HRB 594

Address: **MLOG Logistics GmbH**
Wilhelm-Maybach-Straße 2
74196 Neuenstadt

Employees: ca. 250

Turnover: ca. 70 million €



Stefan Seidl
CEO

Our Old Headquarters Based in Heilbronn

28.09.2009

The last shelf access equipments that were produced in Heilbronn are being delivered!



These are the highest shelf access equipments that have ever been constructed in one piece.
Total height: 43,5 m!

Our New Headquarters Based in Neuenstadt

We moved!!!



Laying the foundation stone
on 25.09.08

Administration area:
Production area:

4.800 sq. m
11.400 sq. m



Our Business Areas

Automatic stock flow and material flow systems

Own construction of shelf
access equipment and
conveyor technique



New applications



Modernization



Service



Excerpt of 800 References

Consumer Goods / Commerce / Foodstuffs:



Pharmaceuticals / Chemical Industry / Medicine:



Capital Goods / Plant Construction



Logistics Service Providers / Automotive Industry:



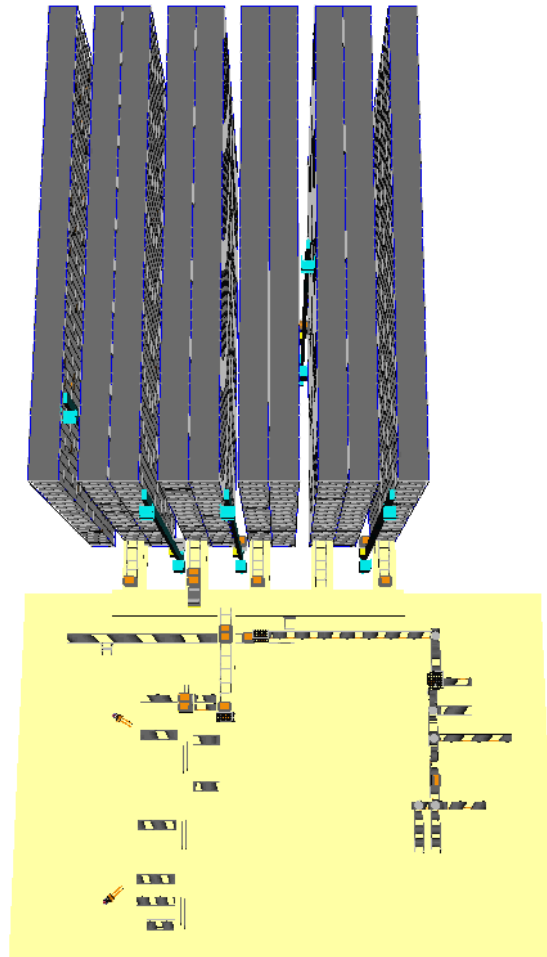
Product Pallet



M
LOG



General Contractor for...



...the realization of
automatic stock
flow and material
flow systems

MLOG Storage Systems

Regalbediengeräte

MSINGLE

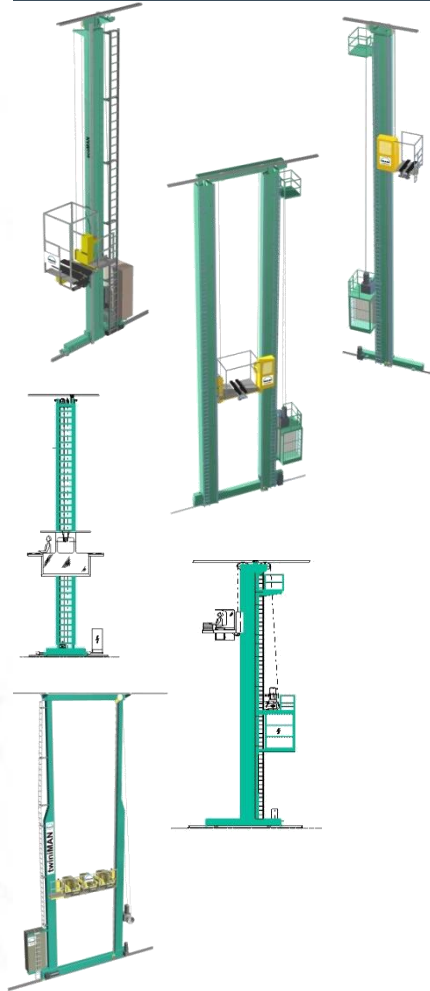
MTWIN

MPICK

MORDER

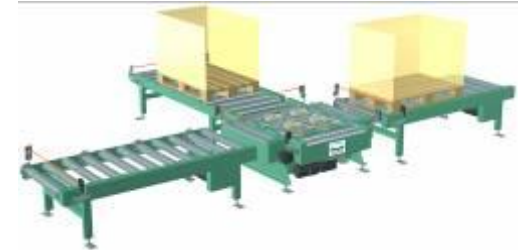
MMINI

MTWINI



Fördertechnik

MCONVEYOR



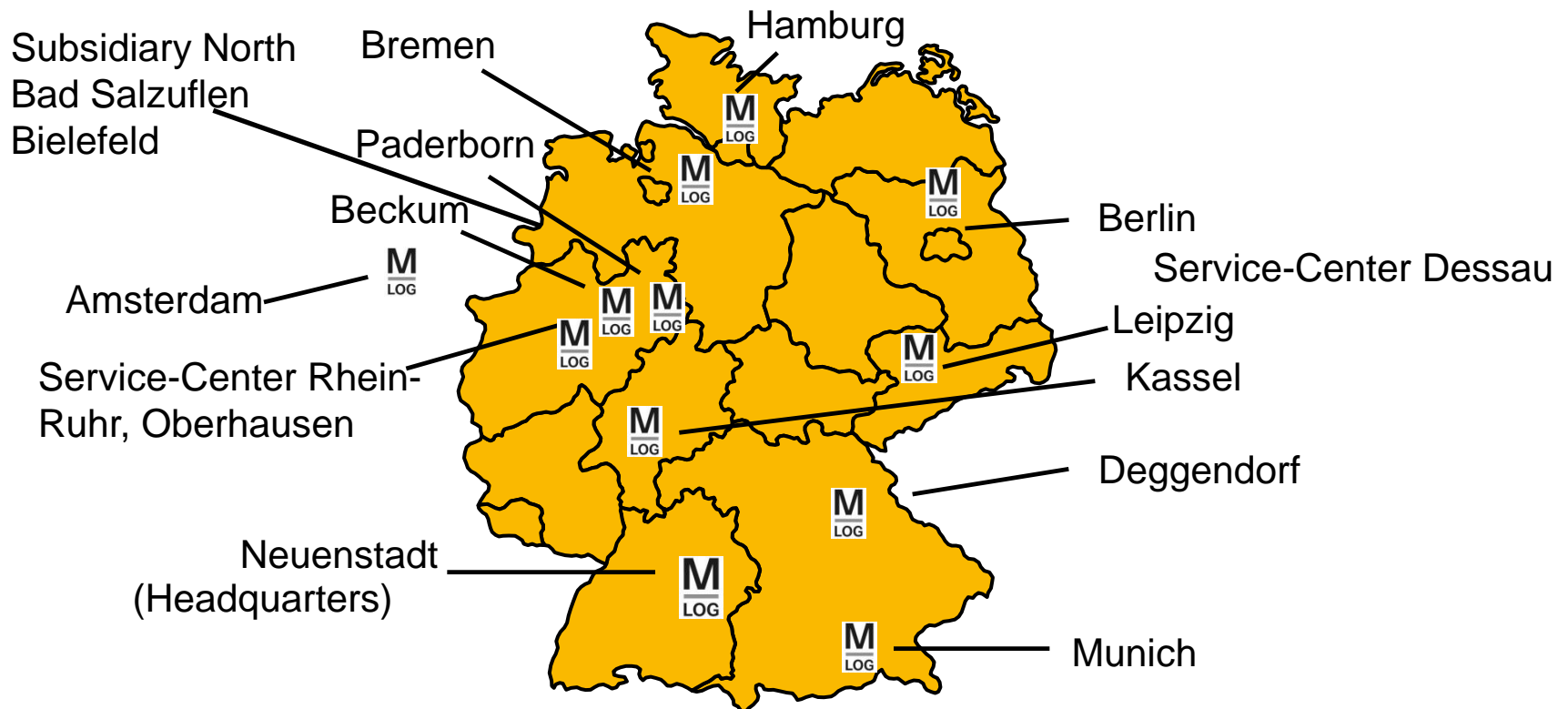
Kompaktlager

MCOMPACT

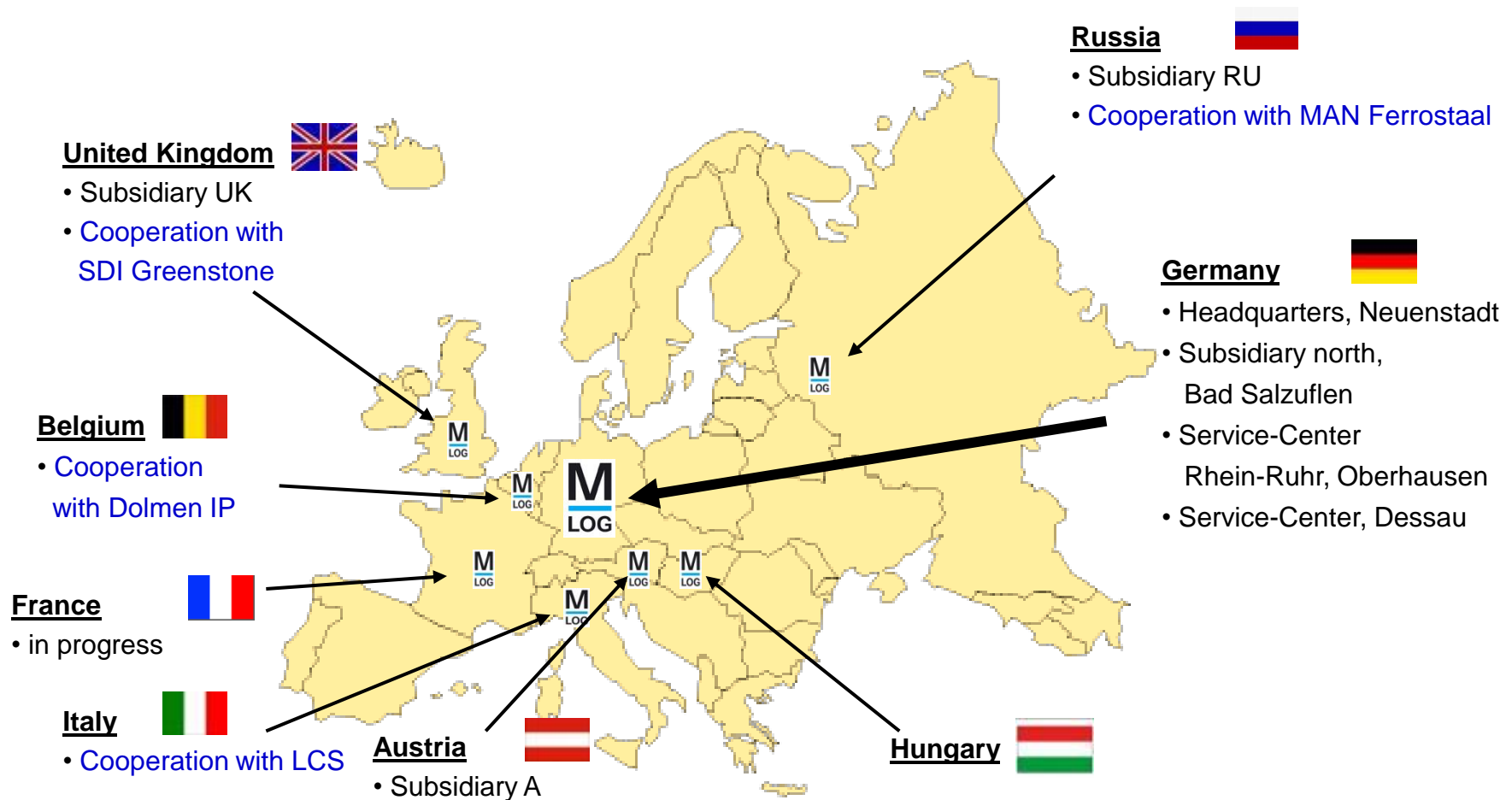


Service Points in Germany

With staff qualified in safety provisions and DIN EN 528 / 619, always trained in safety and technology

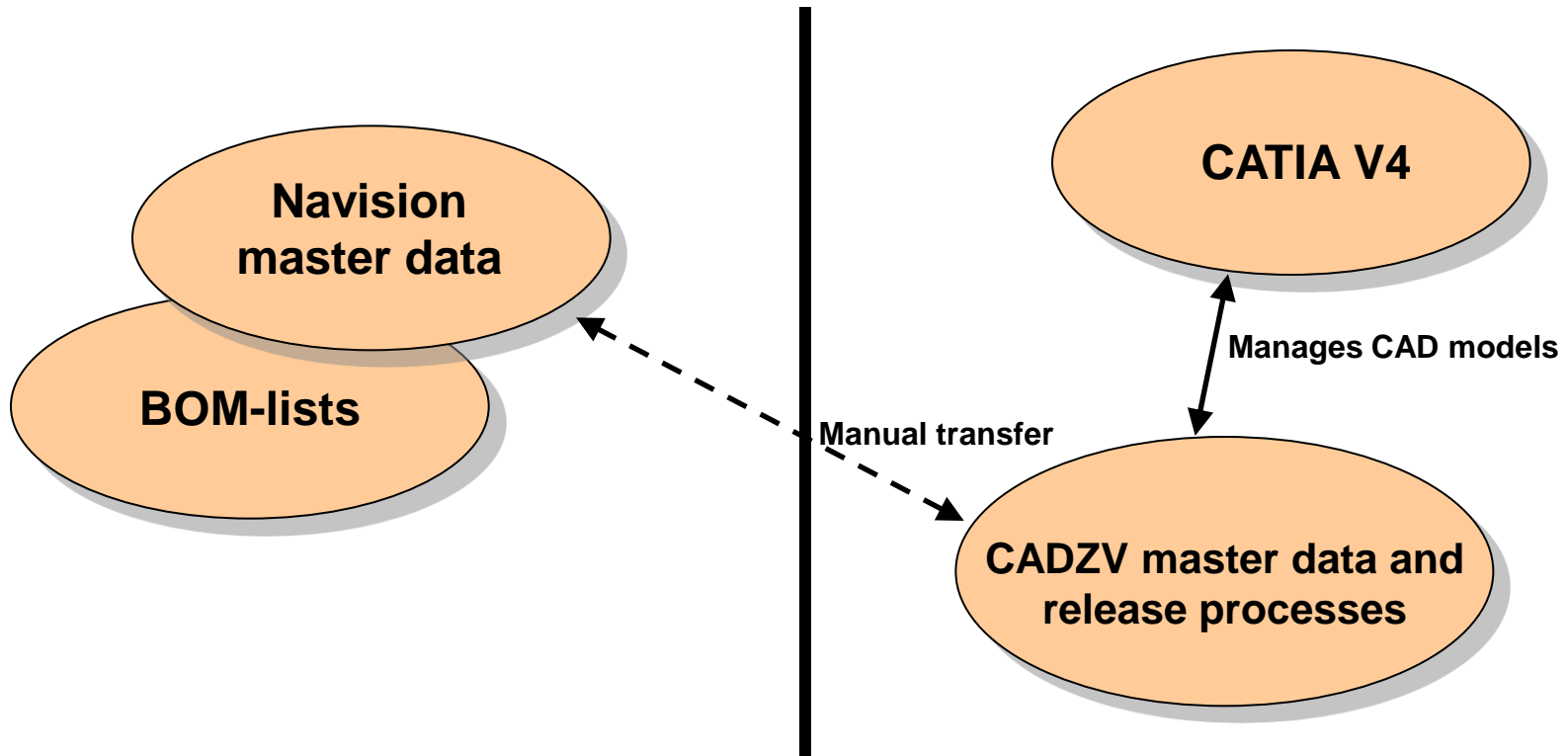


Internationalization – Status in September 2009



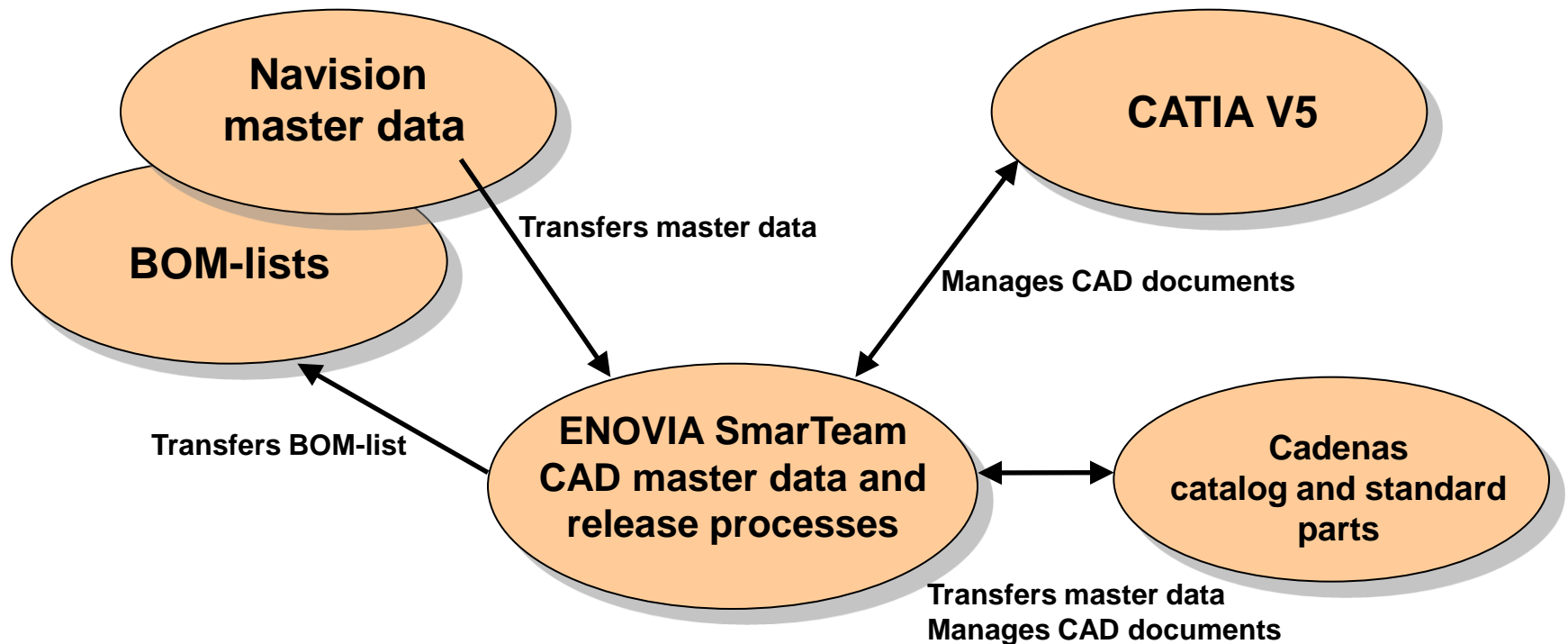
MLOG Master Data and CAD Management

Status before introduction of ENOVIA SmarTeam

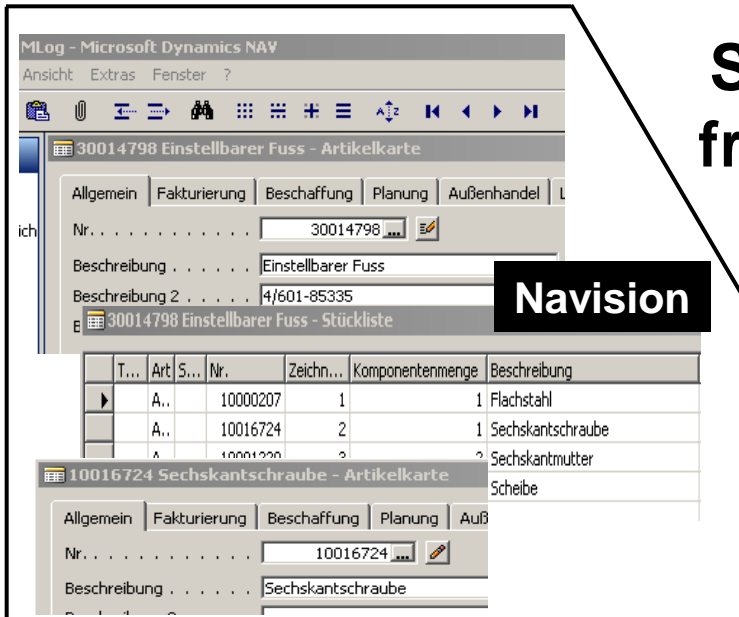


MLOG Master Data and CAD Management

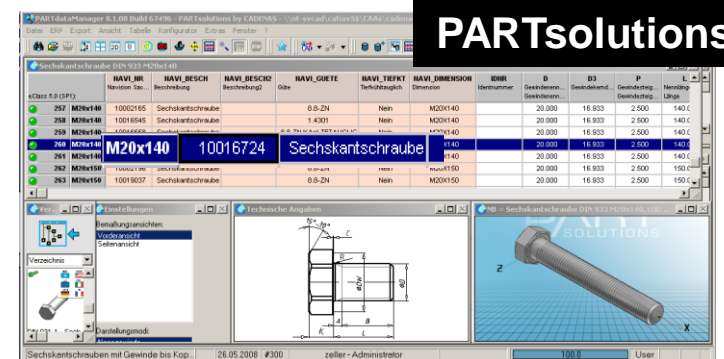
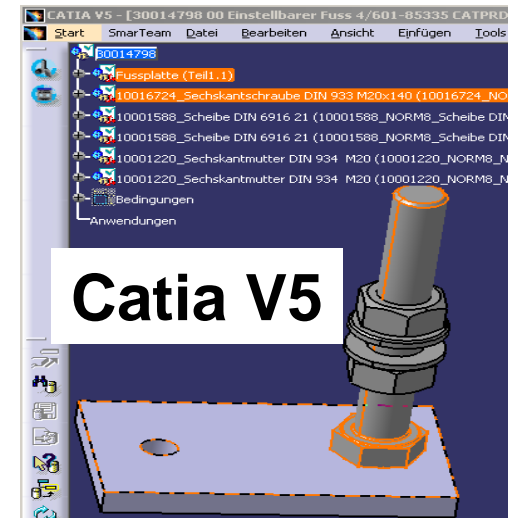
Status with introduction of ENOVIA SmarTeam



MLOG Master Data and CAD Management



Screenshots from practice

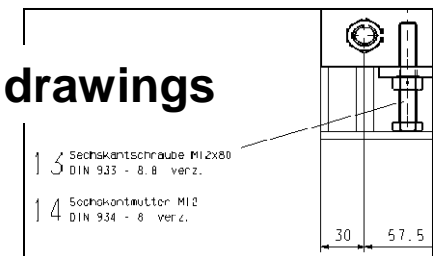


General Demands:

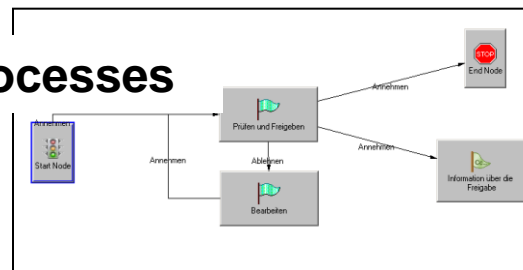
- **Hardware conversion from Unix to Windows**
 - **Convert from Catia V4 to Catia V5 during running operation**
 - **Replacement for Catia V4 module AEC**
 - **Replacement for management tool CADZV through ENOVIA SmarTeam**
 - **Matching master data from Navision**
 - **Integrating catalog and standard parts**
 - **Adding the standard and catalog parts to master data from Navision**
 - **Easy to handle software, little training time needed**
-

Demands ENOVIA SmarTeam:

- Review management, conflict control, proper CAD integration
- Stock data (CADZV) transfer and management
- Partial takeover of master data from Navision
- Generating BOM-lists
- Transfer BOM-list to Navision
- Position number assignment with part naming on drawings



- Workflow for release processes



- CENIT AG

- Support**
- Project management**
- Walkthrough**
 - Infrastructure**
 - CATIA and ENOVIA SmarTeam software with IBM**
 - CADENAS software including linking to NAVISION**
 - Installation including backup concept, system tests, and administration training**
 - Administration tool FLEXplus**
 - Training**
 - Methodology**
 - Customizing ENOVIA SmarTeam**
 - Integrating ENOVIA SmarTeam/CADENAS/NAVISON with support from CADENAS**
 - Takeover of stock data**

Connecting PARTsolutions to ENOVIA SmarTeam and Navision (technical vantage point)

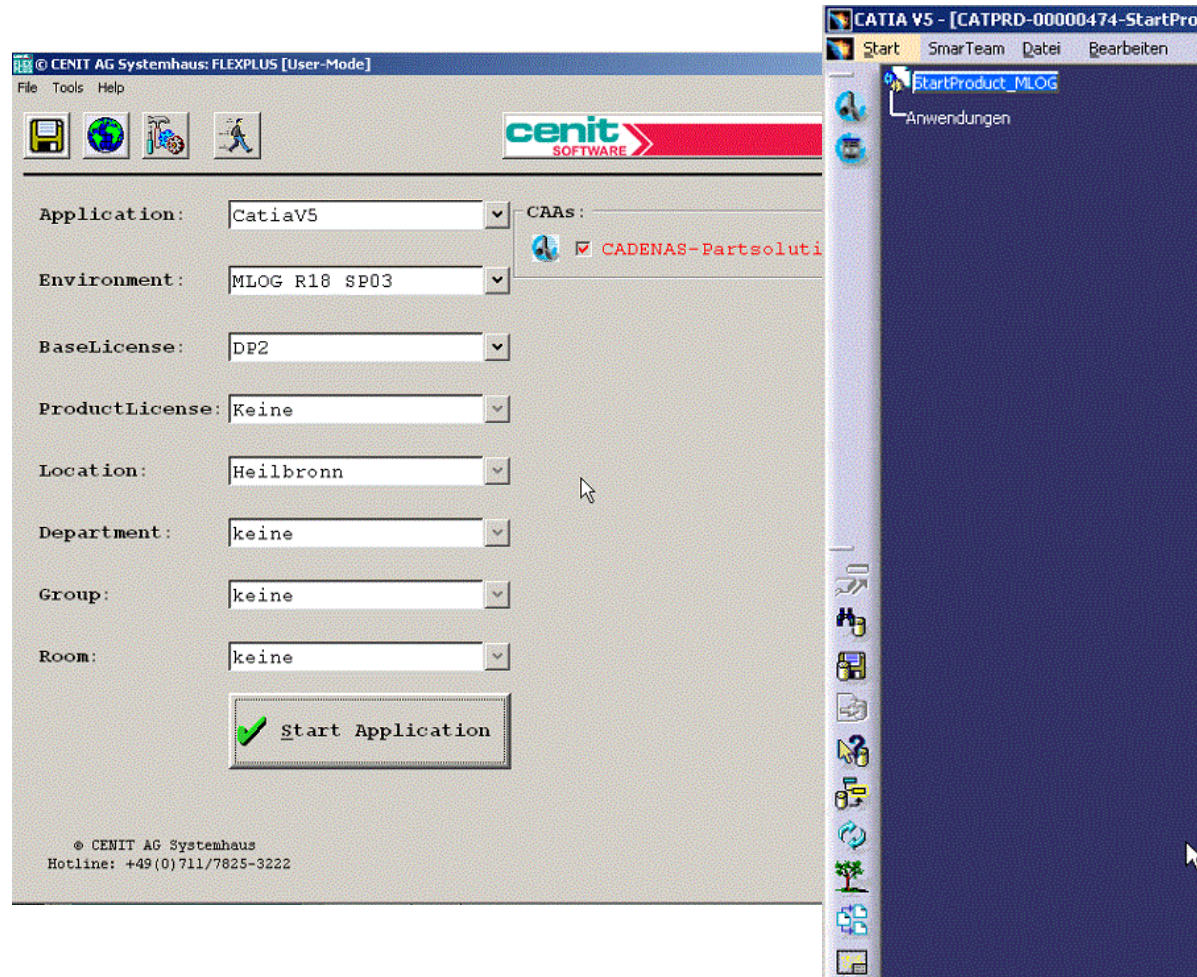


- Client Installation
- Infrastructure (hardware requirements)
- Workflow / process for new application of part number
- Synchronization with Navision

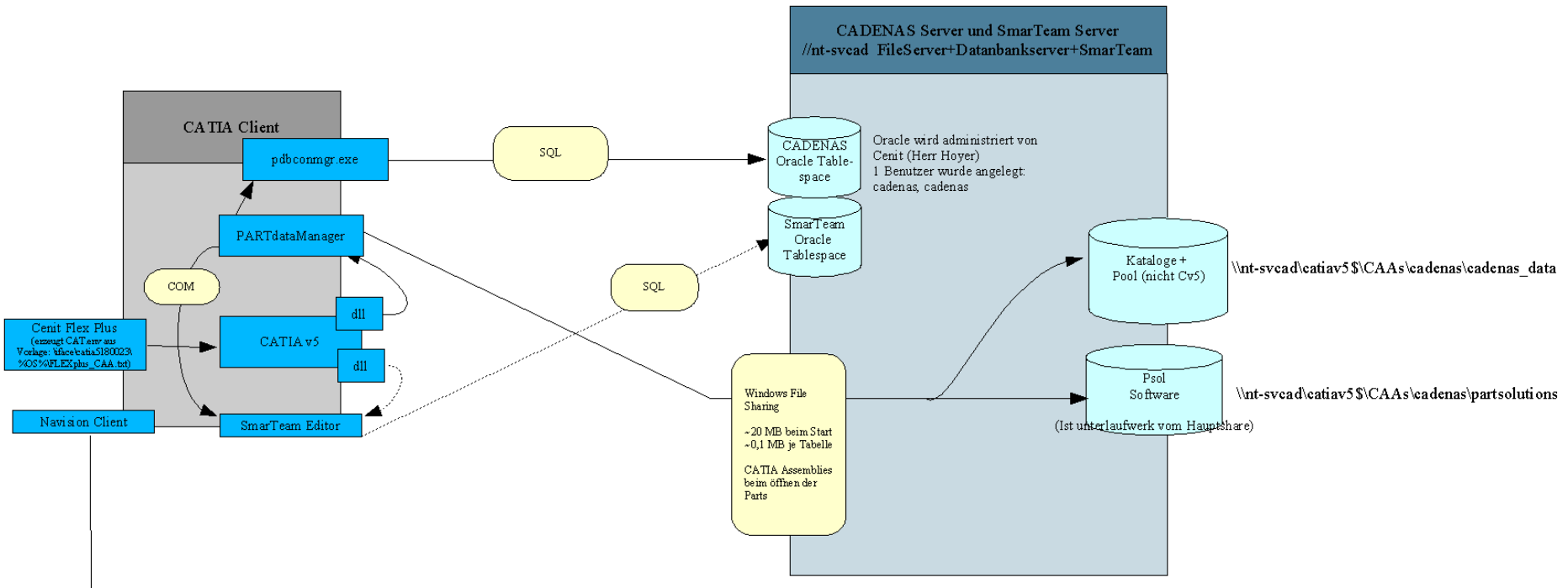


Client Installation

- Start occurs via cenit FLEXPLUS
- 32 / 64 bit environment is selected during Start.
- The respective PARTsolutions plug-in is then loaded in addition. (CATIA environment)
- PARTsolutions runs on the client, does not need to be installed however (!)



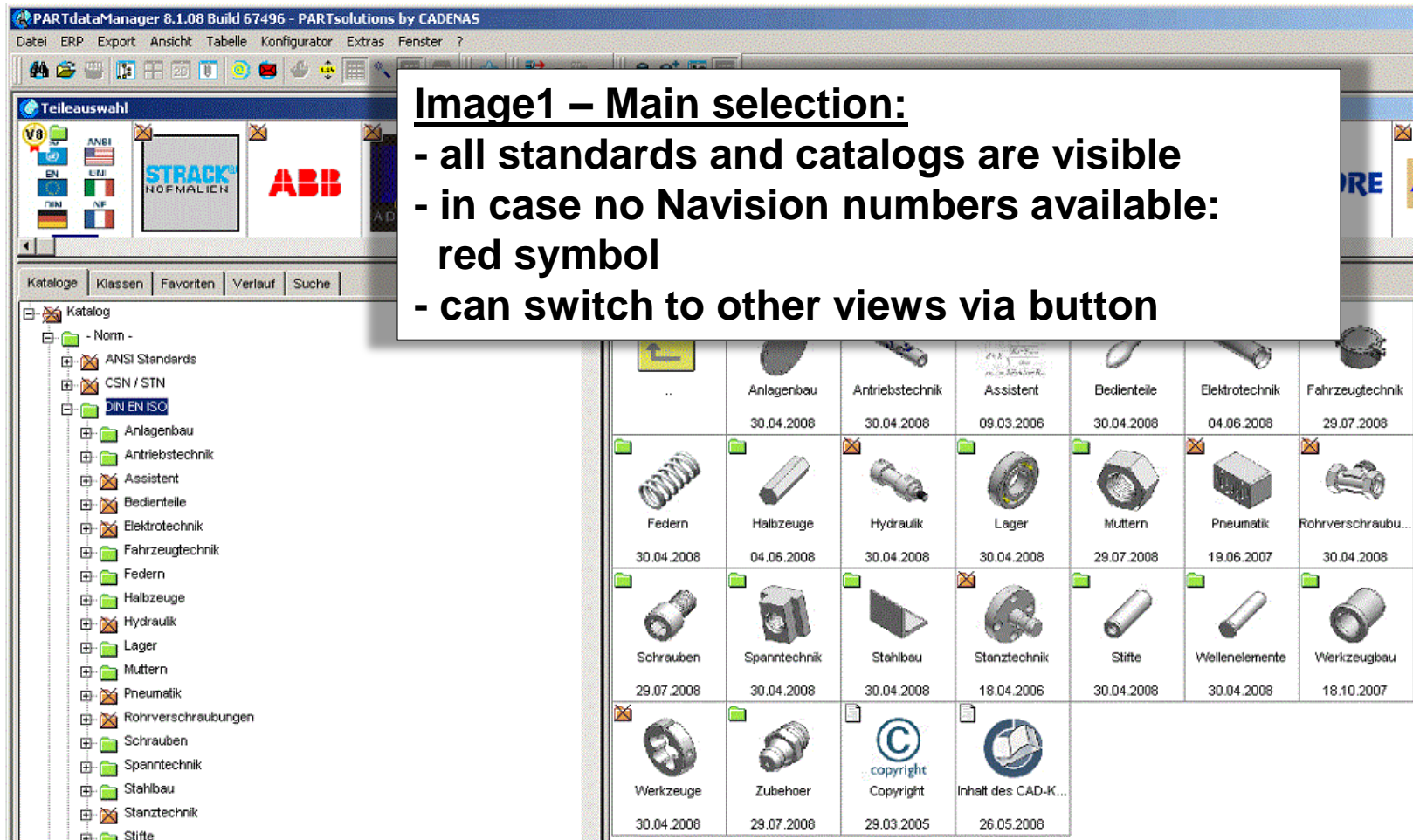
Infrastructure



- LinkDB located on Cenit database server (new instance)
- PARTsolutions programs and catalogs located on ENOVIA SmarTeam servers' file share

→ No new hardware → minimal running costs

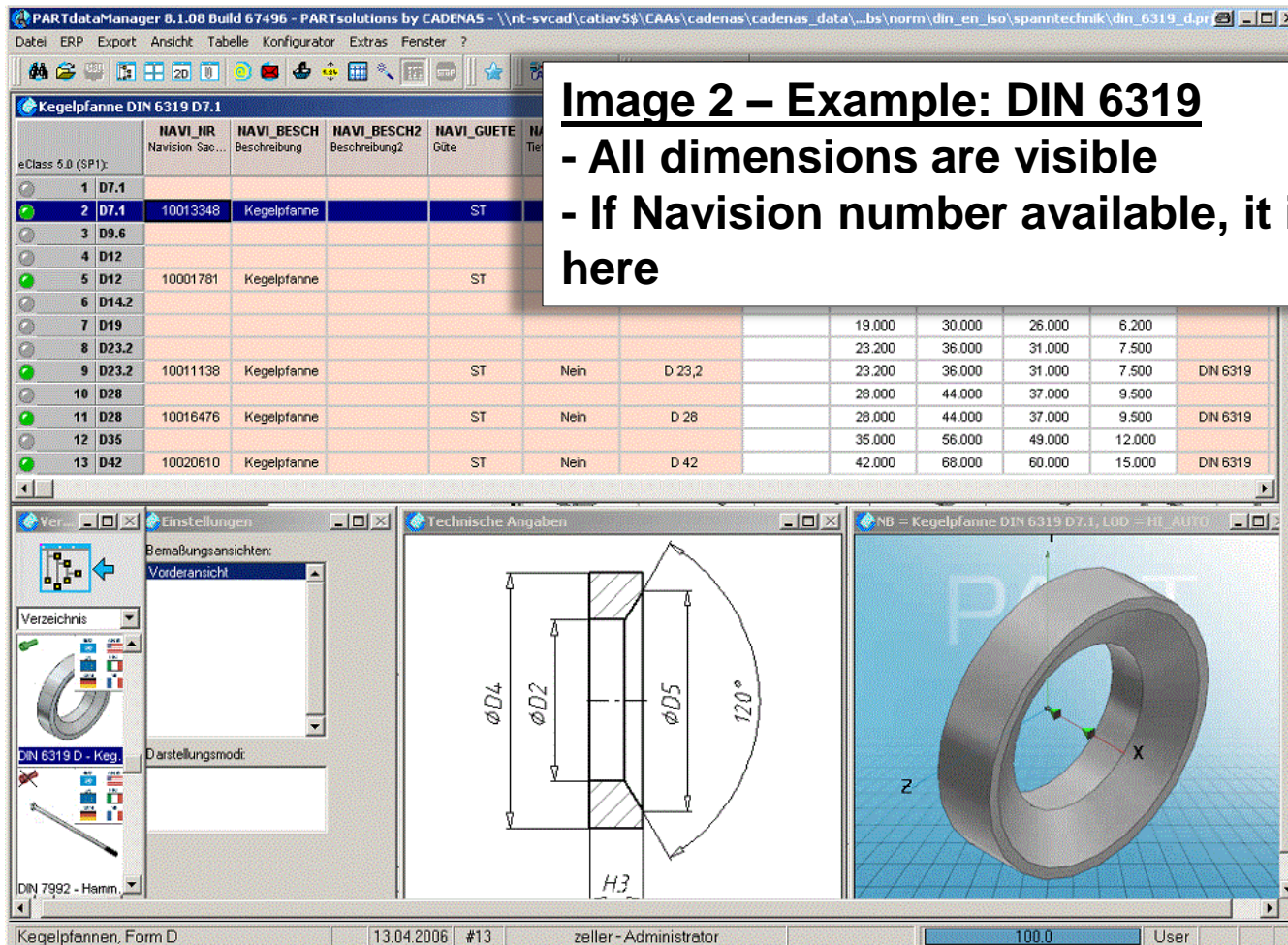
Process for New Application of a Part Number



Process for New Application of a Part Number

Image 2 – Example: DIN 6319

- All dimensions are visible
- If Navision number available, it is entered here



The screenshot displays the PARTdataManager software interface. The main window shows a table of parts with columns for NAVI_Nr, NAVI_BESCH, NAVI_BESCH2, NAVI_GUETE, and NAVI_Teile. The table lists various DIN 6319 parts, including D7.1, D9.6, D12, D14.2, D19, D23.2, D28, D35, and D42. The table also includes dimensions and material properties.

NAVI_Nr	NAVI_BESCH	NAVI_BESCH2	NAVI_GUETE	NAVI_Teile	19.000	30.000	26.000	6.200	
1 D7.1									
2 D7.1	10013348	Kegelpfanne	ST						
3 D9.6									
4 D12									
5 D12	10001781	Kegelpfanne	ST						
6 D14.2									
7 D19									
8 D23.2					19.000	30.000	26.000	6.200	
9 D23.2	10011138	Kegelpfanne	ST	Nein	23.200	36.000	31.000	7.500	DIN 6319
10 D28					23.200	36.000	31.000	7.500	
11 D28	10016476	Kegelpfanne	ST	Nein	28.000	44.000	37.000	9.500	DIN 6319
12 D35					28.000	44.000	37.000	9.500	
13 D42	10020610	Kegelpfanne	ST	Nein	35.000	56.000	49.000	12.000	DIN 6319
					42.000	68.000	60.000	15.000	

The bottom left panel shows a 3D model of a ring with dimensions $\phi D4$, $\phi D2$, $\phi D5$, and 120° . The bottom right panel shows a 3D model of a ring with dimensions $\phi D4$, $\phi D2$, $\phi D5$, and 120° .

Process for New Application of a Part Number

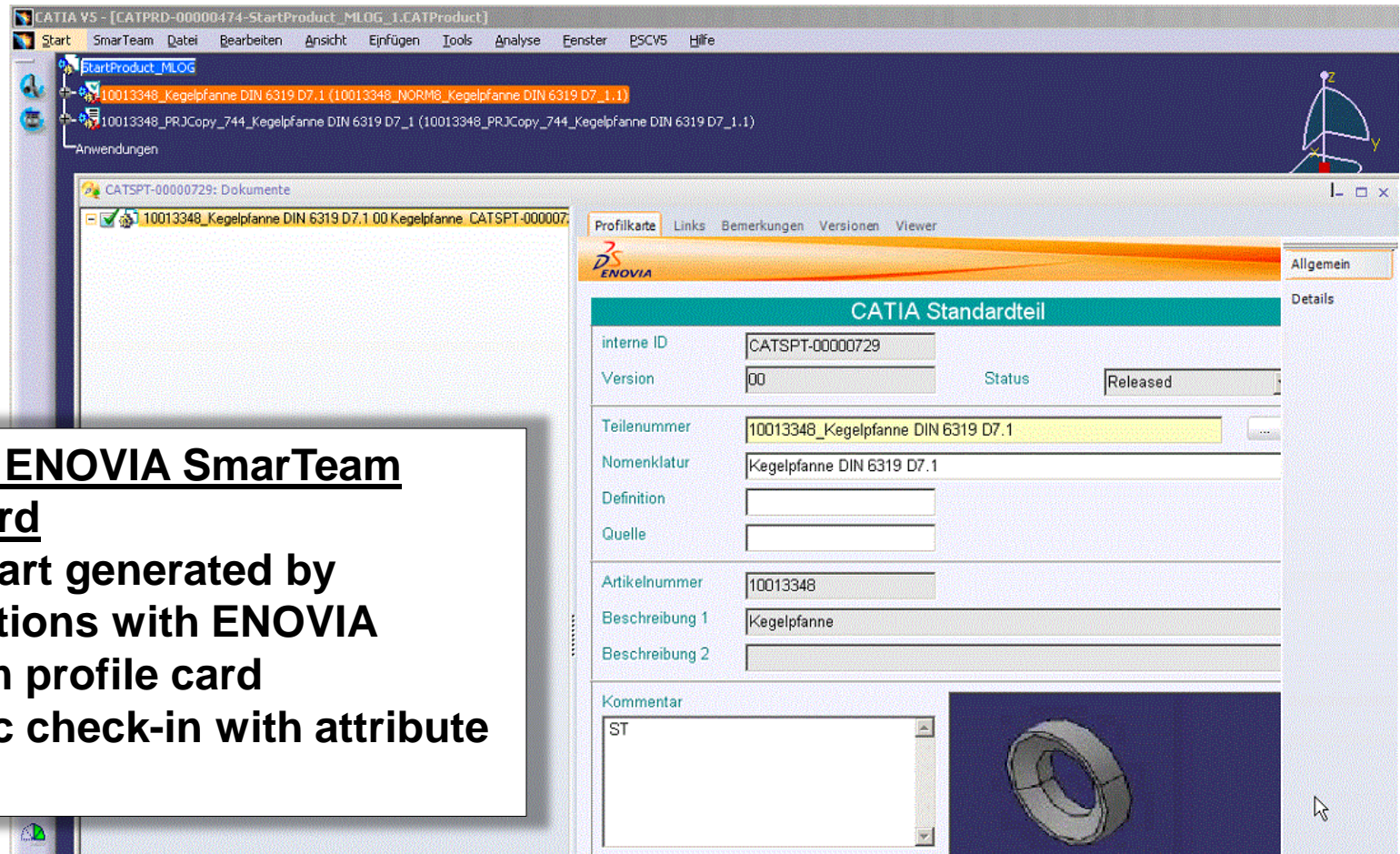


Image 3 – ENOVIA SmarTeam Profile Card
a CATIA part generated by PARTsolutions with ENOVIA SmarTeam profile card (automatic check-in with attribute transfer)

Process for New Application of a Part Number

ENOVIA SmarTeam Configuration

- Profile card read-only
(User cannot accidentally change standard part)
- All values were entered correctly by PARTsolutions during first use – including Navision number (BOM correct)
- Upon later use, this file is automatically loaded
- Special treatment concerning semi-finished parts:
only check-in / no release;
other ENOVIA SmarTeam classes
each export leads to a new file

Process for New Application of a Part Number

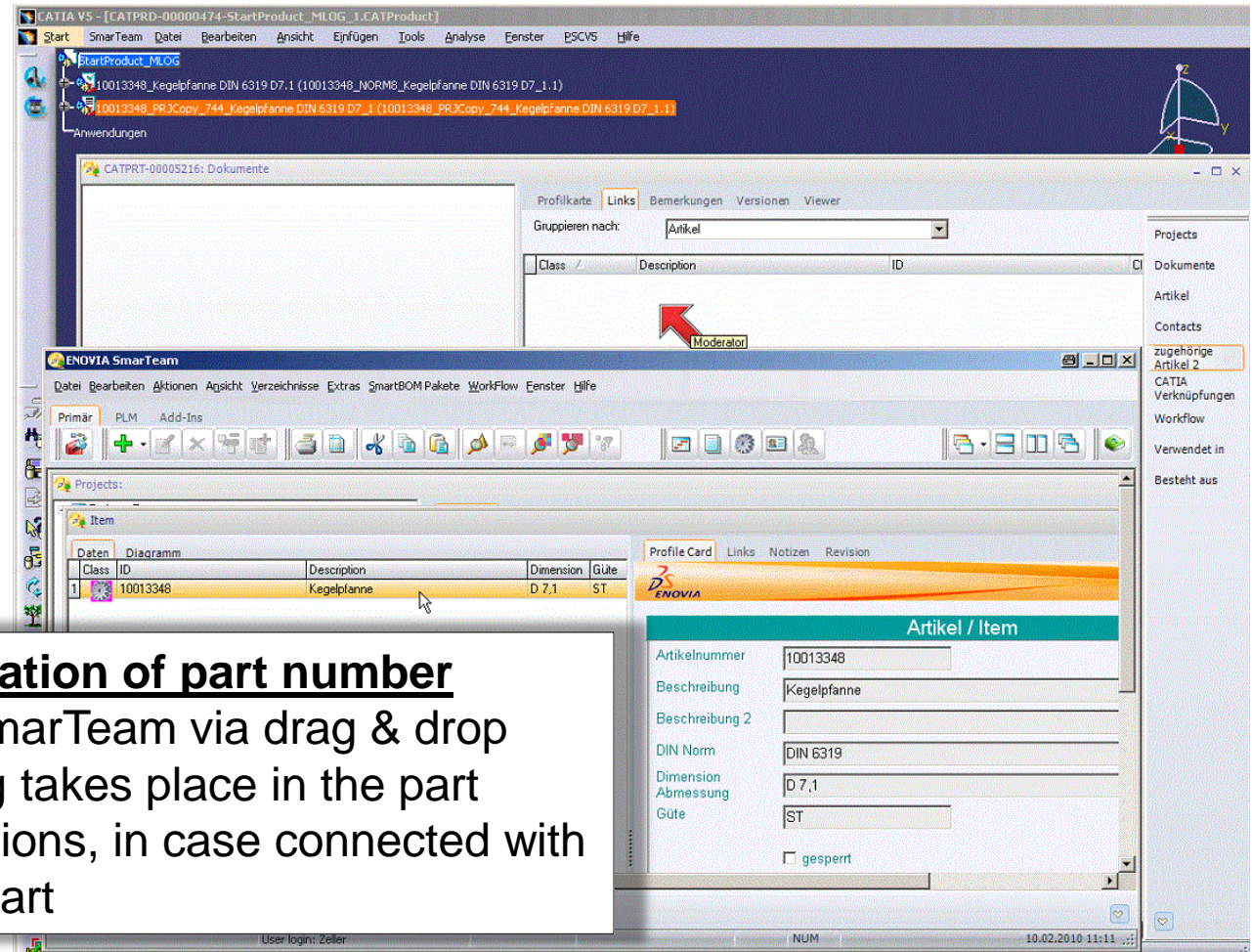
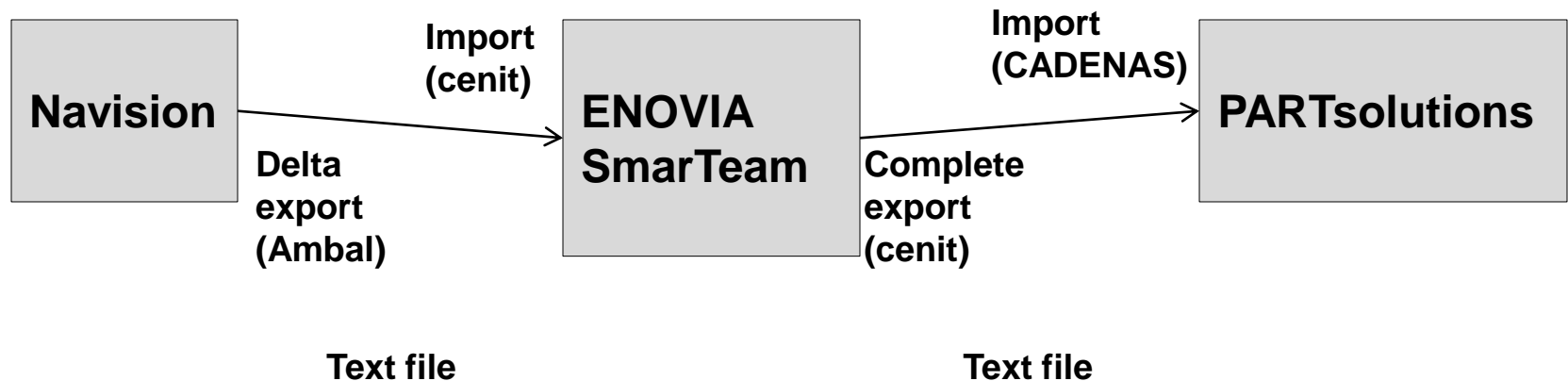


Image 4 – New application of part number

occurs in ENOVIA SmarTeam via drag & drop an automatic relaying takes place in the part number to PARTsolutions, in case connected with a standard/supplier part

Synchronization with Navision



Project Progress: Planning

Start May 2008

Catia:

Basic training key user: 10 days basic block I + II

**Specification workshops:
General and individual
methodology MLOG 10 days**

Basic training User 10 days basic block I + II

ENOVIA SmarTeam:

Introduction 2 days

PARTsolutions:

Introduction of PARTsolutions ½ day

Project Progress: Implementation

Planned training workshop times were adhered to

Hold-ups in planned time line:

**High workload at MLOG
(Key users involved in current orders)**

Vacation interferences MLOG / Cenit

Conversion of CADZV to ENOVIA SmarTeam:

End of April 2009

Complete conversion to Catia V5:

Beginning of September 2009

with the move of MLOG from headquarters in Heilbronn to Neuenstadt

Experiences:

PARTsolutions:

The problem of semi-finished products is solved with the special graphic export function

High acceptance rate among users

Operation unproblematic due to intuitive user interface

Budget planning: CADENAS 100% accurate

Experiences:

ENOVIA SmarTeam:

Demands require solid specifications

Complex demands of the user:

Linking with articles, BOM-list generation, release processes, this requires longer assistance through key users after introductory training

User friendliness:

many windows, at first confusing, adjustment period

(?still better than many other PDMs?)

without PDM System (such as, for example, SmarTeam), the CAD is not manageable at MLOG

Budget planning: Cenit 95% accurate, something was left over(!)

Thank You For Your Attention!

Questions???
