

Innovation and Sustainability

CADENAS feat. Siemens VAI MT

Dimitrios Tsolakis
Business Manager CADENAS

Siemens VAI Metals Technologies GmbH
A Siemens Industry Business
Order Management
MT OM EN ET

Table of contents



Metal Technologies overview



Lifecycle CADENAS – Teamcenter – NX – SAP



Next Steps - Parts Management 20xx

Organization - Four Sectors cover the global trends



Industry	Industry Automation 	Drive Technologies 	Customer Services 	Metals Technologies ¹⁾ 		
	Infra-structure & Cities	Rail Systems 	Mobility and Logistics 	Low and Medium Voltage 	Smart Grid 	Building Technologies
Energy		Fossil Power Generation 	Wind Power 	Solar & Hydro 	Power Transmission 	Oil & Gas
	Health-care	Imaging & Therapy 	Clinical Products 	Diagnostics 	Customer Solutions 	






1) Sector-led Business Unit 2) IPO planned

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Metals Technologies – Full liner from ironmaking to the finished product



Industry Sector – Business Unit Metals Technologies

Ironmaking (MT IR)	Steel Plants, Minimills & Env. Techn. (MT SM)	Casting & Rolling (MT C&R)	Electrics/ Automation (MT EA)	Metallurgical Services (MT MS)
				
<ul style="list-style-type: none"> ▪ Agglomeration ▪ Blast Furnace ▪ Smelting / Direct Reduction 	<ul style="list-style-type: none"> ▪ LD (BOF) ▪ Converter Plants ▪ Electric Steelmaking ▪ Long Rolling ▪ Environmental Technology 	<ul style="list-style-type: none"> ▪ Continuous Casting ▪ Endless Strip Production ▪ Hot and Cold Mills ▪ Aluminium mills ▪ Strip Processing 	<ul style="list-style-type: none"> ▪ EA for Steel Plants ▪ EA for Casting & Rolling ▪ EA Modernization – Packages & Products ▪ Electrical Services 	<ul style="list-style-type: none"> ▪ Spares & Components Sales ▪ Maintenance & Repair

**#1 Steelmaking & Casting – #1 Electrics/Automation –
#2 Rolling & Processing – #2 Ironmaking**

Metals Technologies

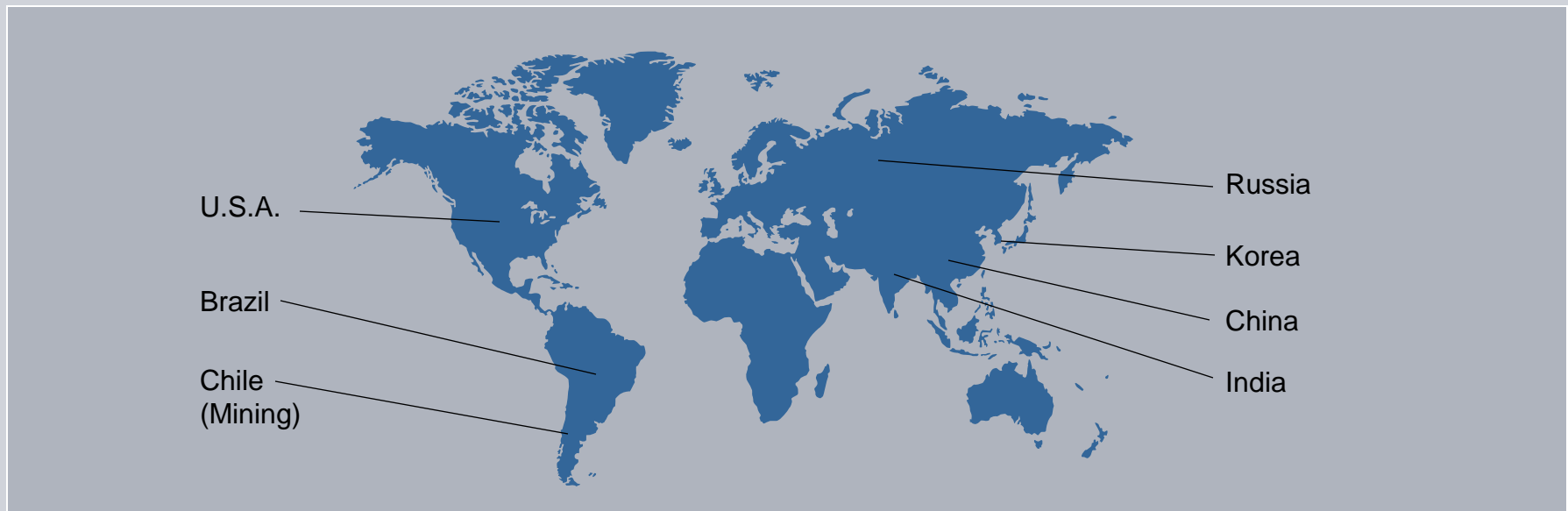
Expertise to serve our customers



Metals Technologies competence centers

- MT Linz (HQ)
- MT E/A (Erlangen)
- MT U.K.
- MT France
- MT Germany
- MT Italy
- MT U.S.A. (Worcester)

Supported by Siemens regional companies in 50 countries worldwide, for example:



Know-how available wherever required by our customers

Global Key Decissions by MT Management

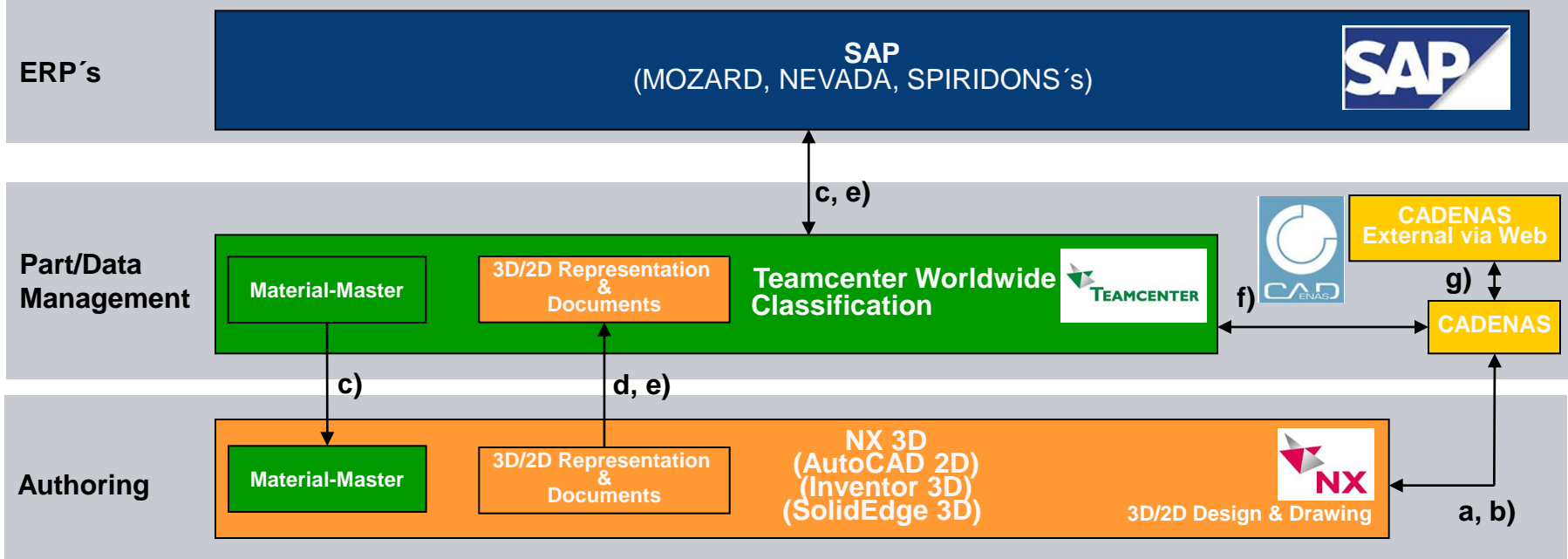
- PARTsolutions of CADENAS is the one and only worldwide source for using and managing of Standard Parts
- Every Standard Part required out of the Business Segments MT Global must have a representation in PARTsolutions of CADENAS
- MMC (Material Master Center) is managing the concept of „Preferred Standard Parts“ worldwide

Project Scope

- Setup Use Cases Standard Parts (MMC)
- Evaluation Preferred Standard Parts (MMC)
- Harmonization Standard Parts on Locations (MMC)
- Purchineering - Missing suppliers in CADENAS
- Intetgration in CAD System(s), TC, SAP´s, ZKDB and Rodiks (IT/MMC)
- Rollout: Installation/Setup Global Network-System CADENAS (IT)
- Training and Support (IT)
- Migration (MMC/IT)

IT-Landscape

Metals Technologies



CADENAS is a combination of subjects

	Data Type	Data source*	Data usage**
a)	Catalogs	CADENAS	Teamcenter
b)	GeoSearch Fingerprint/Meta	CADENAS	Teamcenter
c)	Material-Master	SAP/Teamcenter	SAP
d)	3D/2D Representation	NX (AC, SE, INV)	Teamcenter
e)	Several Structures/Documents***	Authoring tools	Teamcenter
f)	Engineering site Catalogs	CADENAS	Teamcenter
g)	External Engineering	CADENAS	Teamcenter

*** (Bill of Material, Material-List, ISO, Drawing, Specification, Data Sheet, ...)

*Data source systems (Authoring tools): Data entered and changed
 **Data usage systems (view only): Data enter and change not possible

Assignment of Tasks

Tasks CADENAS Rollout

MMC

- Terminology „Standard Parts“
- Terminology „Preferred Parts“
- Define Central Rules for St.Parts
- Define „Global Use Cases“
- Handling Requirements of the BS
- Analyse Inventory Standard Parts on Location
- Document Inventory Standard Parts
- Find Synergistics Effects (Duplicates)
- Handling for parts reductions in MM
- Define with Local MMC the range of Preferred Parts for initial fill
- Analyse „Missing Suppliere Parts“ Worldwide
- Coordination build up missing standard parts in CADENAS
- Support Pilots/Rollouts Worldwide
- Coordination eClass on standard parts
- Support Local MMC's
- Coordination of possible Migrations
- Build up Know How in area CADENAS

TeamCenter

- Define FDS for integration of CADENAS in TC
- Coordination integration of CADENAS in TC (CoreTeam)
- Handling Requirements from BS
- Handling Open Issues out of Pilots
- Handling Open Issues out of Rollouts
- Coordination integration CADENAS in CAD Systems with TC
- Define Engineerig Guide Lines for using CADENAS
- Handling Change Requests
- Handling Bug Fixing
- Build up Know-How in area CADENAS

Migration

- Coordination build up missing standard parts in CADENAS format
- Build up missing parts must be done in BS

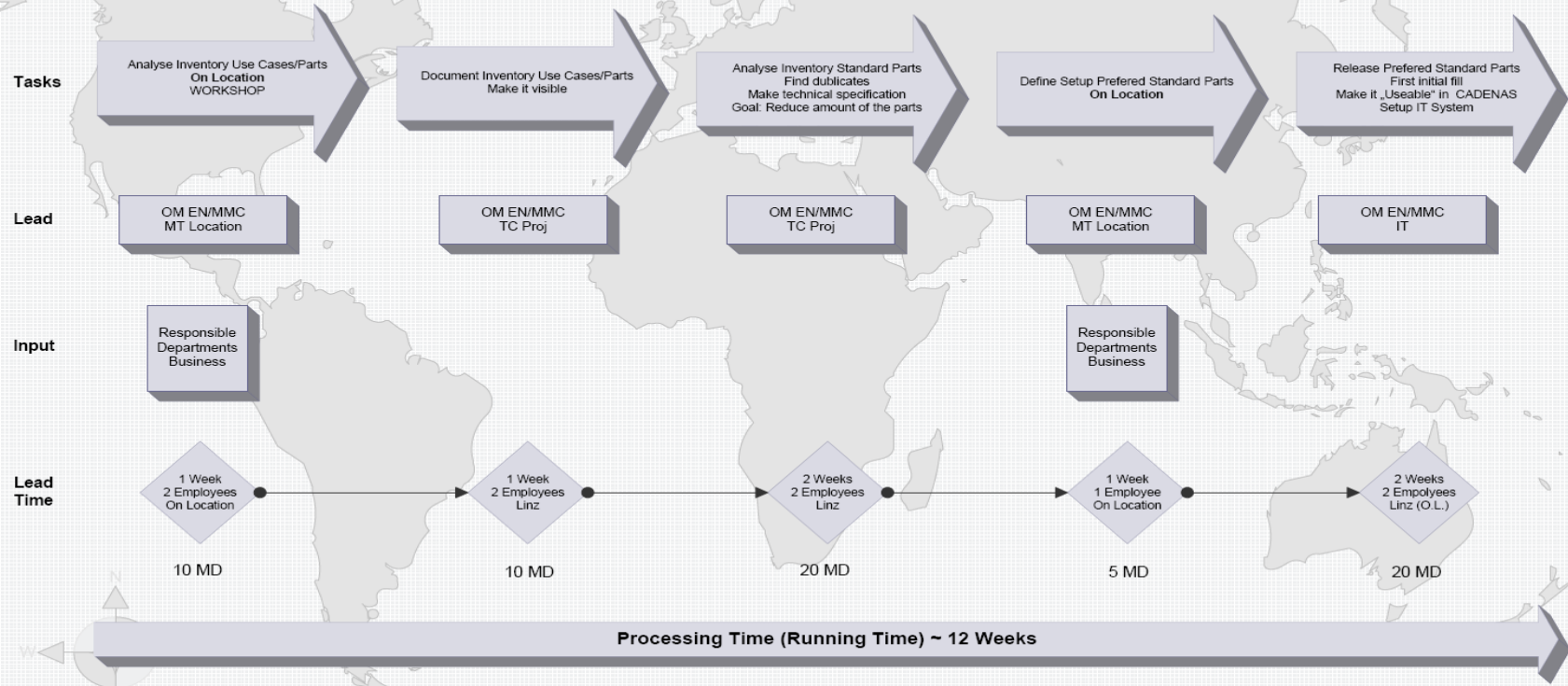
IT

- Implementation of the work results (MMC, TeamCenter, Migration) in the IT Network Systems
- Coordination of the Licence Requests Worldwide
- Training and Support
- Bug Fixing
- Build up Know-How in area CADENAS
- Coordination of the Worldwide Rollout in IT Area

Coordination Rollout CADENAS Worldwide

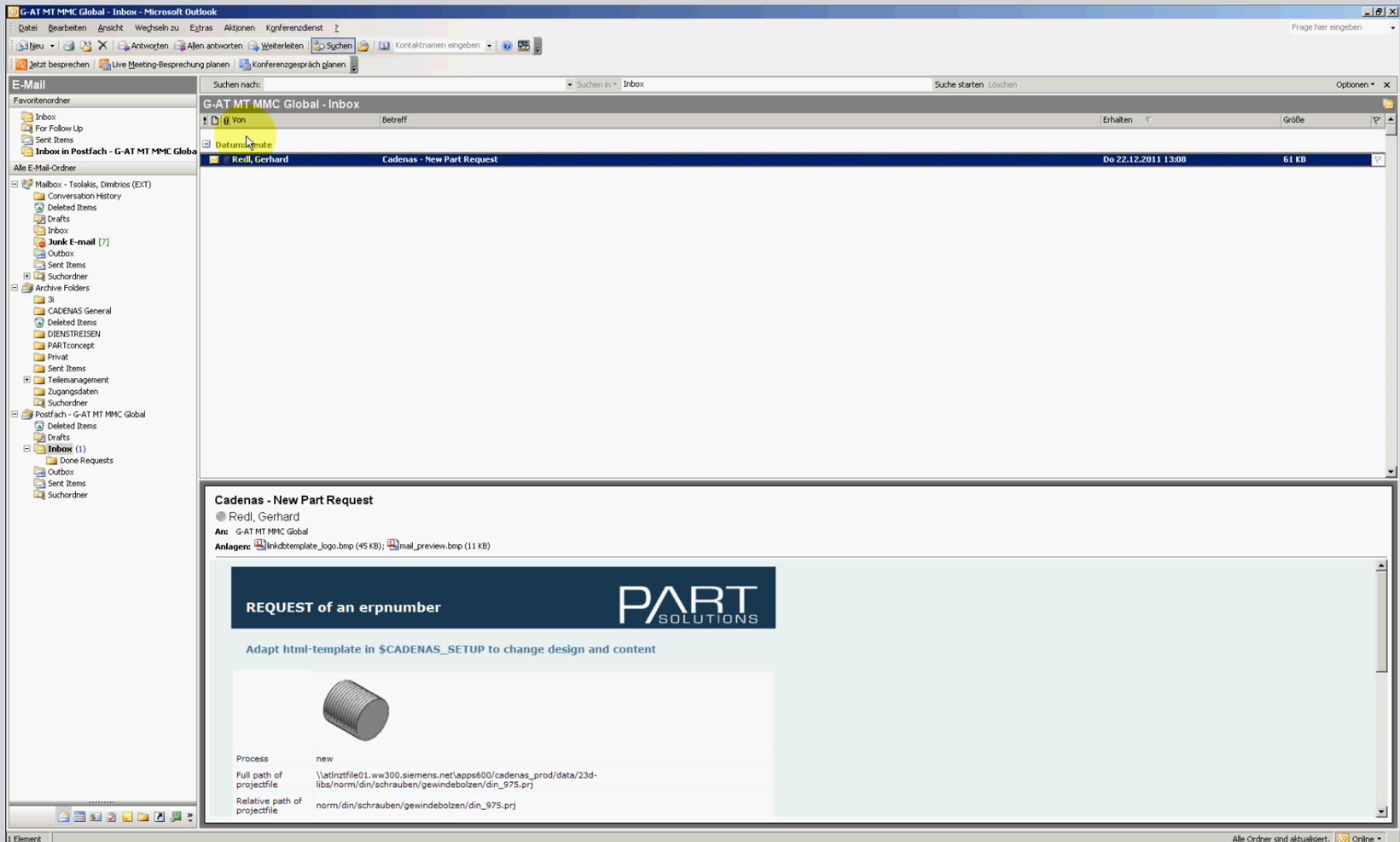
Roadmap Setup Preferred Standardparts

Setup Preferred Standardparts Rollout CADENAS PARTsolutions Template for One Location 20xx



Internal use only
14.11.2011
Dimitrios Tsoiaklis

Workflow – Enabling required Standardparts by MMC



Workflow - Using Standard Parts by Engineer





The screenshot displays the PARtdataManager 9.03 software interface. The main window shows a search results grid for the keyword 'Automotive engineering'. The grid contains 14 items, each with a thumbnail image, a name, and a date. The 'Automotive engineering' item is highlighted with a yellow circle. The left sidebar shows a tree view of catalogs, with 'ISO' expanded to show 'Washers' and 'Automotive engineering'. The bottom status bar shows the current date as 16.06.2011 and the user as 'User'.

Thumbnail	Name	Date
	Catalogs	
	...	
	Accessories	21.06.2011
	Automotive engineering	17.06.2011
	Bearings	21.06.2011
	Bolts	21.06.2011
	Hydraulic	21.06.2011
	Nuts	17.06.2011
	Pins	17.06.2011
	Plant manufacturi...	21.06.2011
	Pneumatic	17.06.2011
	Pressing techniqu...	17.06.2011
	Semi-manufactur...	17.06.2011
	Shaft parts	17.06.2011
	Tool manufacturi...	17.06.2011
	Tools	21.06.2011
	Tube fittings	21.06.2011

ISO Details:

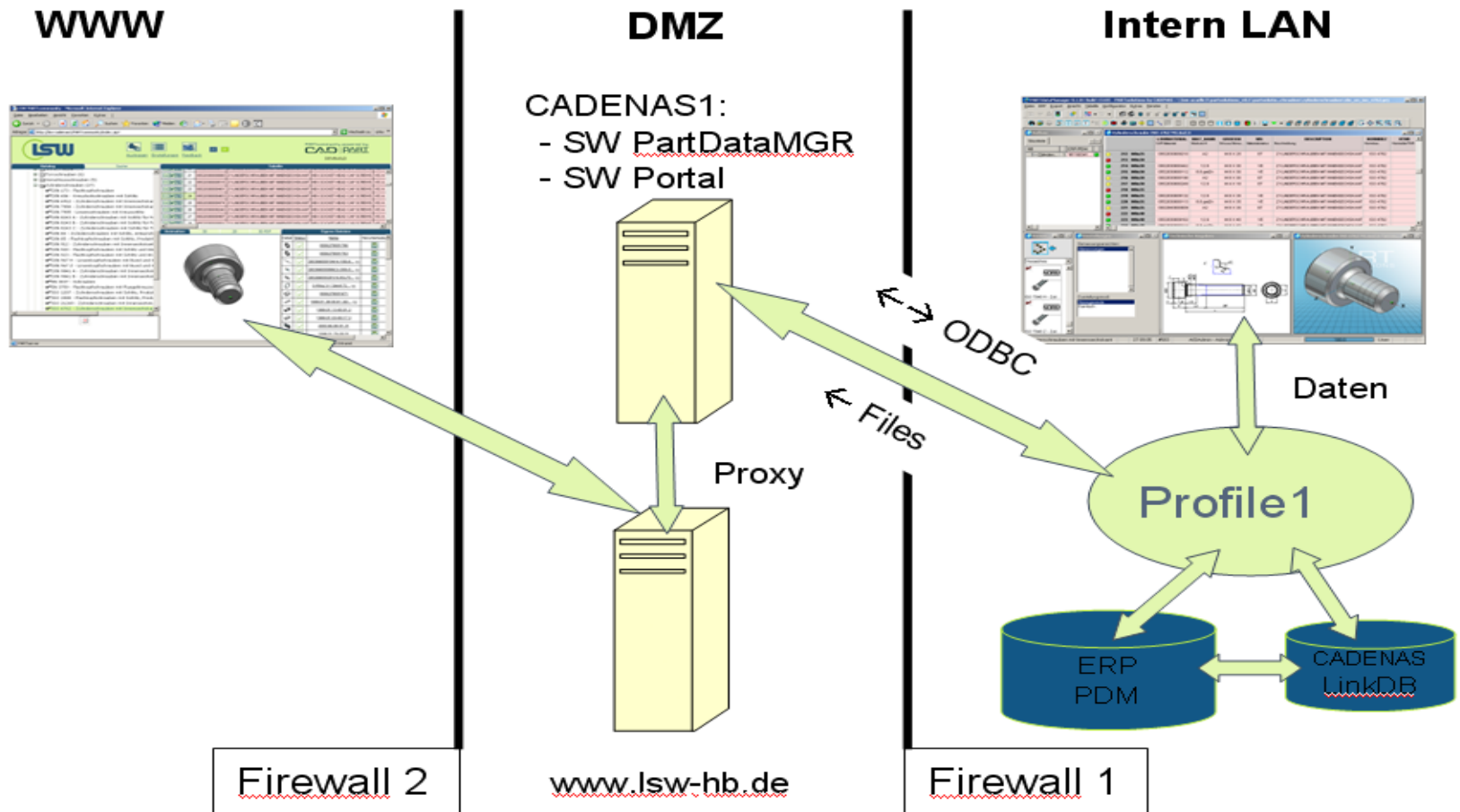
- Latest change: 21.06.2011 11:43:42
- Categories: Assembling Equipment, Fastening, Joining Technique, Standard Part
- Languages:
- Branch offices:

Next Steps – Purchineering – **HIGH PRIORITY**

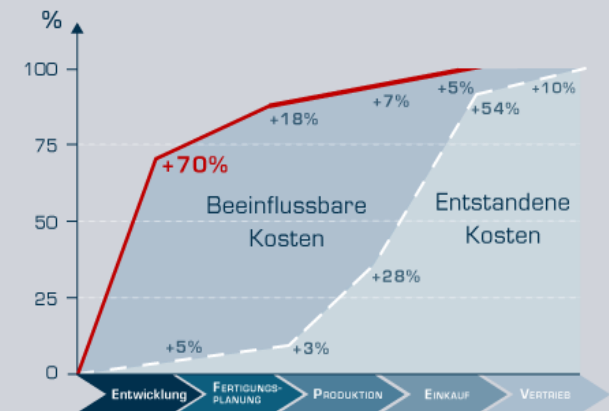
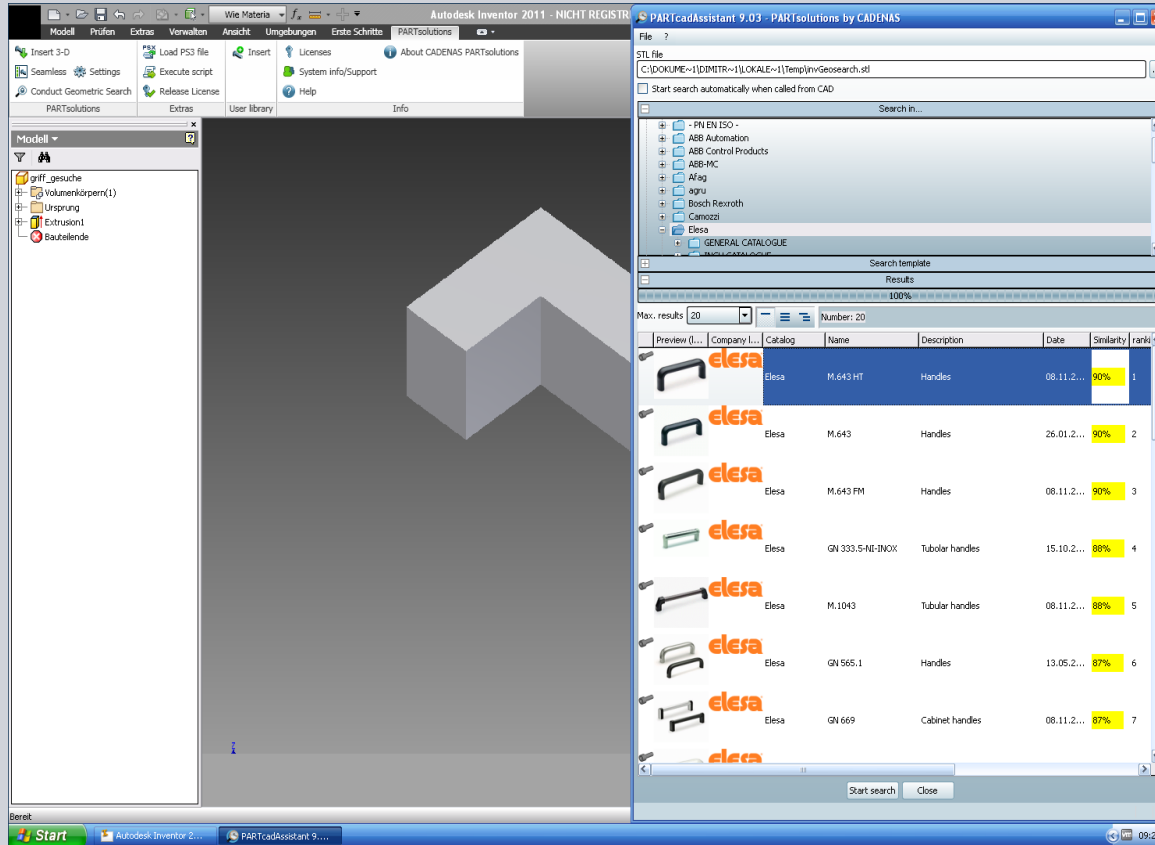
- Cooperate with the suppliers in order to let them provide their catalogues to Cadenas (included in frame contracts) 
- The catalogue parts will be designed by SVAI centrally (Engineering Center) with eCATALOGsolutions 
- Prepare the missing parts on location managed by SVAI Local MMC with eCATALOGsolutions 
- The single users (engineer) can temporary create them using in the available authoring tool(s) NX (SE, Inventor, ACAD) and substitute them later when the part is available in CADENAS format 

Next Steps – External Engineering

Systemskizze



Next Steps - 3D GeoSearch



Thank you for your attention!



Dimitrios Tsolakis

Siemens VAI Metals Technologies GmbH

A Siemens Industry Business

Order Management

MT OM EN ET

Turmstrasse 44

4031 Linz, Austria

Tel.: +43 (732) 6592-2394

Mobile: +43 (664) 88477686

<mailto:dimitrios.tsolakis@siemens.com>

<http://www.siemens-vai.com>