Live presentation CMI Release 8 including CATIA V5
Competence Unit EDM/G

Steffen Maier
Project Manager CU EDM/G

T-Systems
debis Systemhaus Industry GmbH

steffen.maier@t-systems.de

····· T ··· Systems ·

Contents

T··Systems

Features of CMI V8

- **CATIA V4 integration**
  - ⇨ Handling of CATIA Models (incl. Support of splitted Models)
  - ⇨ Handling of multiple level assemblies
    - ◆ Additional transformation functionality
    - ◆ Support of multiple occurrences
  - ⇨ Update of title blocks in drawing frames (incl. management of Plot-files)
  - ⇨ 4DNavigator integration

- **Support of Citrix ThinClient technology**
  - ⇨ Additional module (add-on to CATIA V4 integration)

- **Software-Kernel for CATIA V5 integration**
  - ⇨ Proof of concept enables development of customer specific solutions
  - ⇨ Parallel support of CATIA V4 and V5
  - ⇨ Handling of single Models and multiple level assemblies

· · · · · · T · · Systems ·

Technical aspects
1st Step of CATIA V5 integration

- **Based on CATIA V5 scripting language**
  - ⇨ Solution only available for UNIX (incompatible with Windows NT)
  - ⇨ No access to CATIA V5 User Interface
  - ⇨ Scripting language approach suffers from instability
  - ⇨ Future release planned based on stable CAA2 APIs

- **Support of CATPart files; CATProduct files are not stored in Metaphase**
 - ⇨ Virtual assemblies in CATIA V5
  - ⇨ Full support of Metaphase configuration management without conflicts
  - ⇨ Constraints are not stored in Metaphase (but can be used for positioning)
  - ⇨ Future release planned to support CATProduct files (incl. Constraints)

Future
2nd Step of CATIA V5 integration

- **Based on CAA2 APIs offered by development framework**
  - ⇨ Solution available for UNIX and Windows NT
  - ⇨ Full integration in terms of User Interface

- **Support of CATProduct files**
  - ⇨ Handling of CATIA V5 Constraints
  - ⇨ Metaphase configures the product structure

- **Enhanced functionality**
  - ⇨ Creation of assemblies and single models in Metaphase from within CATIA V5
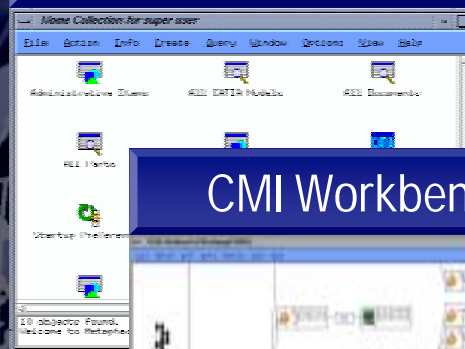 - ⇨ Support of additional CATIA V5 file types (e.g. CATDrawings)
  - ⇨ ...

T··Systems
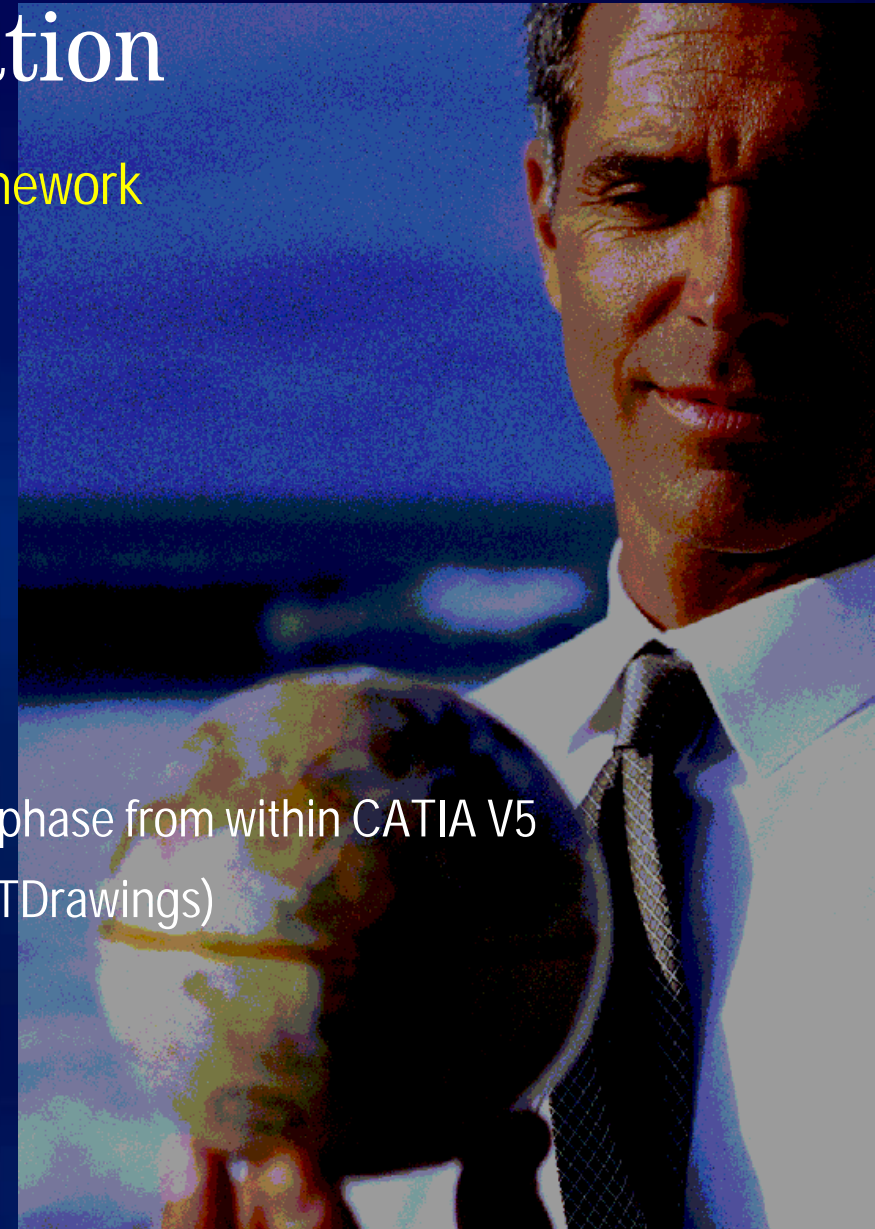
Examplary environment
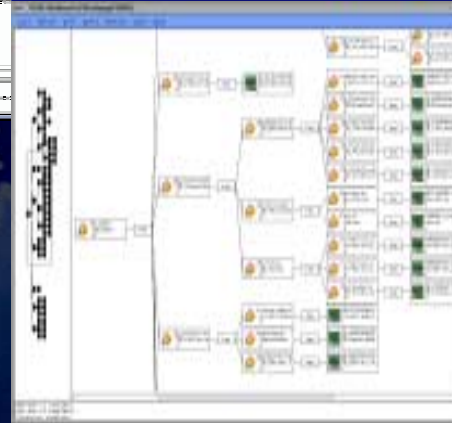
Leinfelden
User Meeting

CATIA Workstation
Local Metaphase and
CATIA installation

Metaphase

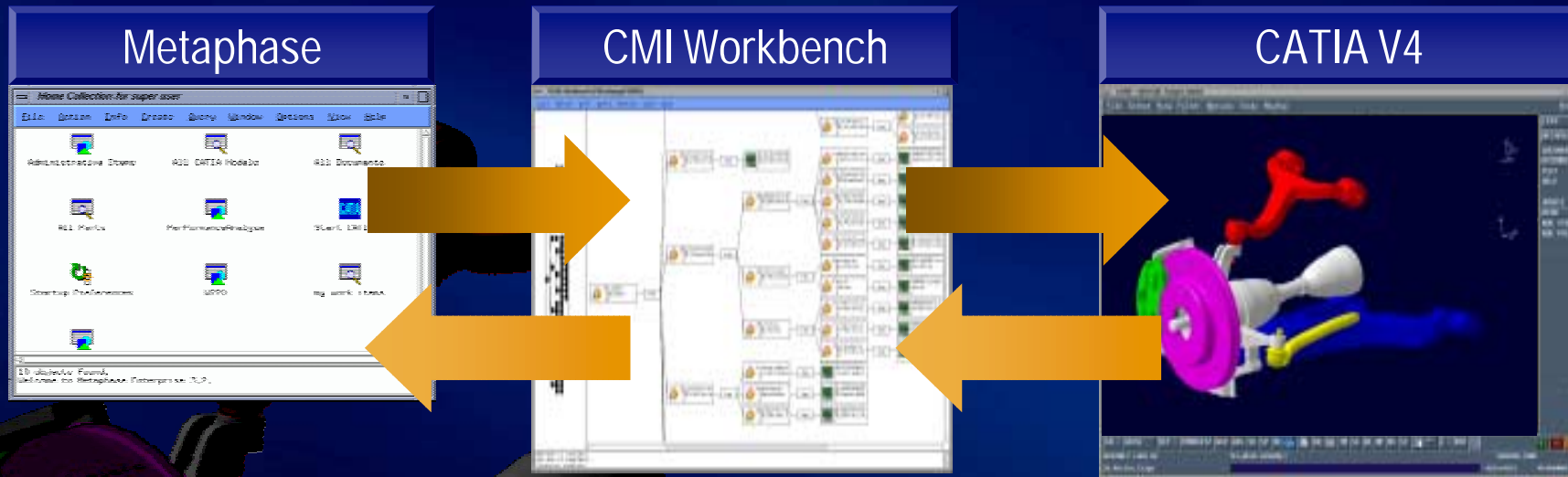CMI Workbench

CATIA V4

CATIA V5
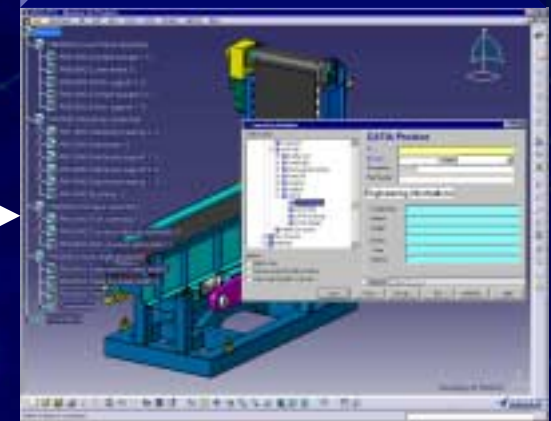
Demonstration scenario A
CATIA V4 Interoperability

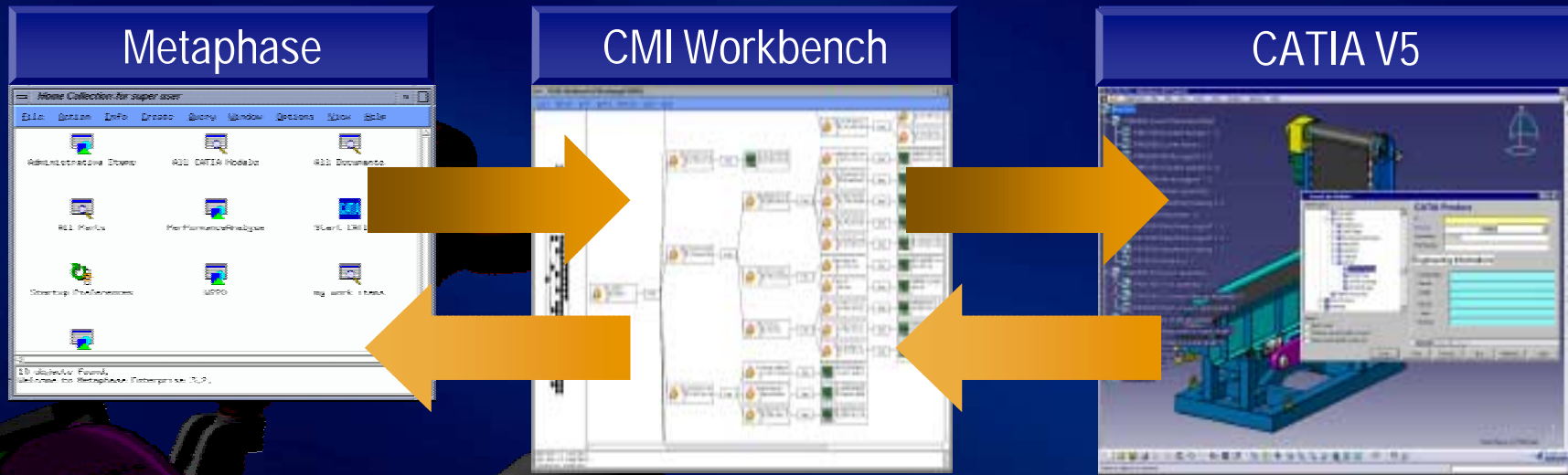**Metaphase** → **CMI Workbench** → **CATIA V4**

- **Exchange data between Metaphase and CATIA V4**
  - ⇨ Query for assembly objects in database; drag& drop "Frontwheel" in Workbench
  - ⇨ Expand selective "Suspension" and "Brake" subassemblies in Workbench
  - ⇨ Mark subassembly "Suspension" in Workbench; transfer "Suspension" to CATIA V4
  - ⇨ Get Info about "Upper Traverse Control Arm" in CATIA V4
  - ⇨ Highlight "Lower Traverse Control Arm" in Workbench
  - ⇨ Transfer CATIA Model "Drawingframe" via Doubleclick from Metaphase to CATIA V4

T·· Systems

Demonstration scenario B
CATIA V4/ V5 Interoperability

Metaphase	CMI Workbench	CATIA V5

- **Exchange data between Metaphase and CATIA V4**
  - ⇨ Query for assembly objects in database; drag& drop "Frontwheel" in Workbench
  - ⇨ Expand "Frontwheel" assembly in Workbench; transfer "Frontwheel" to CATIA V4
  - ⇨ Change position of "Brake Disk" in CATIA V4; update position change in Metaphase
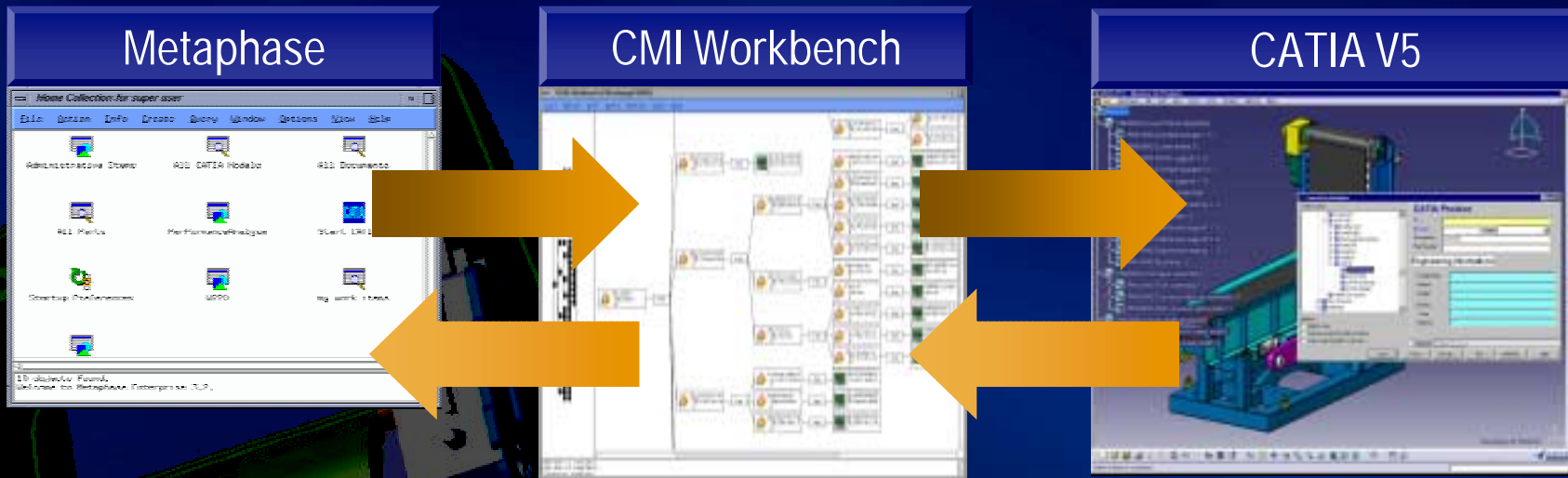
- **Exchange data between Metaphase and CATIA V5**
  - ⇨ Transfer "Frontwheel" (from same Workbench) to CATIA V5
  - ⇨ Analyze "Frontwheel" in DMU Navigator of CATIA V5

··· ·· T ·· Systems ·

Demonstration scenario C
CATIA V5 Interoperability

Metaphase	CMI Workbench	CATIA V5

- **Exchange data between Metaphase and CATIA V5**
  - ⇨ Query for "Hacksaw" example in Metaphase
  - ⇨ Drag& drop "Hacksaw" assembly in Workbench
  - ⇨ Switch "Display Models" toggle "On"
  - ⇨ Expand "Hacksaw" assembly in Workbench (including CATParts)
  - ⇨ Transfer of "Hacksaw" assembly to CATIA V5
  - ⇨ Modify geometry (add drilling to cabinet) in CATIA V5; update change in Metaphase
  - ⇨ Modify position in CATIA V5; update position change in Metaphase

· · · · · **T** · · **Systems** ·