

**Report on the sixth
STEP Processor Benchmark**

Part 2: PDM Data Exchange

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1 Introduction

The exchange of CAD model data using the neutral data exchange format according to the ISO 10303 standard [ISO], usually known as the STEP standard (**ST**andard for the **Ex**change of **P**roduct Model Data), has become popular in the last years. STEP processing is commonly supported by the major available CAD systems and the appropriate STEP processors have been tested and evaluated in previous ProSTEP Benchmarks [Xav99a], [Xav99b]. Recently not only the exchange of CAD model data, but also the exchange of CAD model *meta data* and general *product data* has become more and more interesting, especially within the automotive industry.

Although the PDM data exchange is still in the beginning, some of the major commercially available PDM systems have integrated STEP processors to support the automotive manufacturers' requirements of PDM data exchange within the cooperative engineering processes between the automotive manufacturers, suppliers and engineering service providers. The PDM STEP Processor Benchmark, as a part of the sixth ProSTEP Benchmark performed by the ProSTEP Association, gives a survey of the performance and the quality of these STEP processors with regard to the requirements of the PDM data exchange with the automotive manufacturers' in-house systems (target systems). The test procedure considers the import of delivered STEP files (post-processing) and the export of changed PDM data as a STEP files to be re-sent to the target system (pre-processing).

The participating commercial PDM systems are

- CADIM/EDB (Eigner + Partner AG): 2.3#4
- CIM DATABASE (Contact Software GmbH): 2.7.3, Processor 25.10.2000 (availability)
- ENOVIAvpm (Dassault Systèmes): VPM 1.3 - PTF 3
- SAP PLM module Automotive (SAP AG): Version 2.0 (DI4.6CI), Processor 1.00.05 (Released)

The target systems (test cases) are

- PRISMA (BMW Group AG)
- GIS (DaimlerChrysler AG)
- Smaragd (DaimlerChrysler AG)
- KVS (Volkswagen AG)

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