

ProSTEP iViP/VDA JT Application Benchmark

6th JT Application Benchmark
SHORT REPORT



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1 Introduction

JT has become a widely used format for product visualization during the product development process. The ProSTEP iViP Association and the German Association of the Automotive Industry (VDA) have launched three JT-related projects in succession, which are being coordinated with each other: The ProSTEP iViP / VDA JT Workflow Forum, the ProSTEP iViP / VDA JT Application Benchmark and the ProSTEP iViP / VDA JT Implementor Forum. In August 2010, the ProSTEP iViP Association submitted the latest JT specification (version 9.5) to the ISO for standardization. JT 9.5 was published by ISO as ISO 14306:2012 in December, 2012.

As the latest in a row of six benchmarks, the JT Application Benchmark was carried out in 2015 to achieve an independent evaluation of the progress being made with regard to the development of JT translators. The object of testing was ISO 14306:2012 (JT 9.5). Additionally, the interoperability between JT and the STEP AP242 Business Object (BO) Model XML schema (published as ISO Standard ISO 10303-242:2014) was also part of the benchmark. Thus, this 6th benchmark covers results far beyond state-of-the-art technology.

The benchmark was managed by the JT Workflow Forum and JT Implementor Forum. Because the benchmark is an independent activity, it was financed directly by the two organizations, the ProSTEP iViP Association and the VDA, and not by the participating companies whose products were tested. It is a neutral comparison of trendsetting JT applications with regard to the selected test criteria. Therefore, the results of the benchmark cannot only be used to evaluate the application of JT in PLM environments, but also for improvement of the interoperability of the applications.

As such applications are undergoing a permanent development; the benchmark can only give a snapshot of the functions and qualities of the applications.

2 Approach

The JT Application Benchmark is a common activity of the ProSTEP iViP Association and the VDA. Goal of the benchmark is a neutral comparison of actual JT applications. Focal points of this 6th benchmark were the testing of CADJT and JT-CAD translators as well as testing the state of the art regarding the interaction of JT and STEP AP242 XML.

2.1 Four steps

Based on the Lessons Learned from previous benchmarks, the JT Workflow and JT Implementor Forum agreed on the following four-step approach:

1. The JT Workflow Forum clarifies the target intent for the benchmark and provides details on the expected outcome (e.g. the PMI style should be translated correctly).
2. The vendors make proposals for the JT file scope, configuration settings and evaluation approach which in their eyes will best fit the requirements.
3. A proof of concept / test run for the benchmark will be conducted, using the agreed-on settings and test models, with close involvement of the vendors.
4. If the test run is successful, the actual benchmark will be conducted.