



MVCI Server at Daimler AG

At the end of an evaluation phase lasting over a year, Daimler AG decided to integrate ODX together with an ASAM MCD-3D server in the diagnostic process chain. The supplier Daimler chose was SOFTING.

Requirements

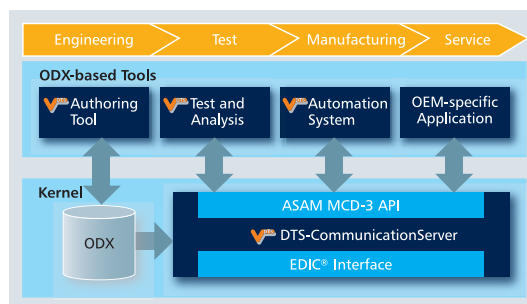
The server's main job is to support ODX v2.2 and the standard MCD-3D v3.0. This not only involves the provision of the functionalities familiar from previous standards, but also in particular the new functionalities "Variant Coding" and "Functional Diagnostics". The system runs under Windows XP, Windows 7 and Linux.

Data format

The ODX data is converted to a binary runtime format for use in test systems. This not only optimizes performance and size, but in addition offers the necessary security thanks to encryption and password protection. Conversion takes place using a special transformer application. To support migration, the CBF data used in the past can still be used so that ECUs can be migrated to the new data format in stages.

Hardware interfaces

The VCIs used primarily are eCOM as well as SDconnect from I+ME Actia. They are connected to the MVCI server via the standardized D-PDU API interface. Various other D-PDU API VCIs, CANcardXL and a number of J2534 interfaces are also supported.



Contents

MVCI server at Daimler AG	Page 1
SOFTING news ticker	Page 2
Daimler AG is using Monaco	Page 2
TestCUBE ₂	Page 3
Windows 7	Page 3
New hardware: eCOM	Page 3
OTX Editor	Page 4
A major step ... DTS8	Page 4

Events

September 14 - 16, 2011
Automotive Testing Expo
China 2011

October 12 - 13, 2011
Electronics in Vehicles
Baden-Baden

October 25 - 27, 2011
Automotive Testing Expo
North America 2011

News

SMT (SOFTING Measurement Technology)
www.softing.com/smt

SOFTING news ticker

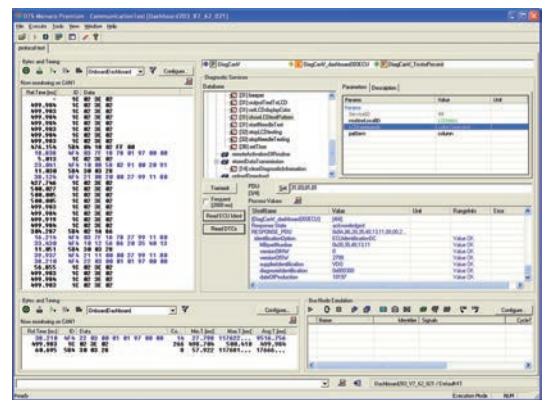
In 2010 and in the first half of 2011, the Automotive Division of SOFTING AG (consisting of SOFTING Automotive Electronics GmbH, SOFTING Projekt Service GmbH and hard & soft GmbH) reported very positive results. The company has not only been able to take up where it left off in terms of success before the dry spell hit in 2009 but has also extended its partner network even further. In particular, a partnership in the area of Measurement Technology has been established with Porsche AG in the current business year and the company has also established a sales partnership with the Swedish CAN expert, Kvaser AB.

Daimler AG is using DTS Monaco!

Daimler AG is currently moving over from a proprietary diagnostic format (CBF) to the ISO data format ODX2.2. In the tool sector, the company wants to use products readily available on the market that are based on the current ISO standards. This is why Daimler AG stipulated the following as requirements of a future development tester:

- ODX2.2 - ISO data format
- MCD-3D v3.0 - the coming ISO Server API
- OTX - ISO standard for diagnostic sequences.

In addition, support of CBF is seen as an advantage for the migration. DTS Monaco can fulfill all these requirements and is therefore being used today by Daimler AG as the company's new development tester.



Implementation

The new DTS Monaco was developed in close collaboration with the diagnostic center based on the tried-and-tested DTS7 Monaco. It is available in two versions: Monaco Expert and Monaco Enterprise. Monaco Expert offers full access to all application-oriented interfaces as well as the Daimler interfaces. Monaco Enterprise additionally makes it possible to configure interfaces and create OTX sequences. This is the version for administrators and diagnostic specialists. Monaco Expert on the other hand is the version for the diagnostic user who will only be using prescribed configurations.

Cases of application

Whenever diagnostics, measuring, flash programming and onboard analysis have to be available individually or parallel to one another - DTS Monaco is the perfect tool.

DTS Monaco supports you, for example, in the development of ECU software, in ECU tests,

ECU integration and the system test, when preparing test sequences in Manufacturing and Service as well as in the analysis of returns and in Quality Assurance.

Further information: www.softing.com/dts-monaco

Discontinuation

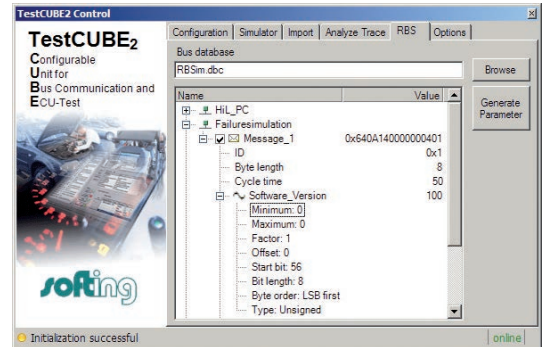
SOFTING is discontinuing with immediate effect the VCI Part A and Part Y including the relevant accessories (e.g. Part F) known as the CAESAR Interface as well as the DTS6 E-Tester Version currently still in use at Daimler.

TestCUBE₂

The latest TestCUBE₂ version enables residual bus simulation. TestCUBE₂ Control imports the communication matrix defined by the OEM in the form of a DBC file. Access takes place via the symbolic names (signals) or directly via the CAN Frame. The residual bus simulation can be stored permanently in the interface and can be run without a PC being connected – even alongside diagnostic simulation.

ODX creation

Creating a simulation from ODX data is just as easy as obtaining simulation data from CAN traces using the Trace Analyzer. Creation takes place using the ODX-Wizard of TestCUBE₂ Control. The diagnostic services are determined from within the ODX-Container; the responses are preset with default values. This makes simulation possible immediately. If required, the user can extend the diagnostic responses at symbolic level.



Further information: www.softing.com/testcube2

Windows 7

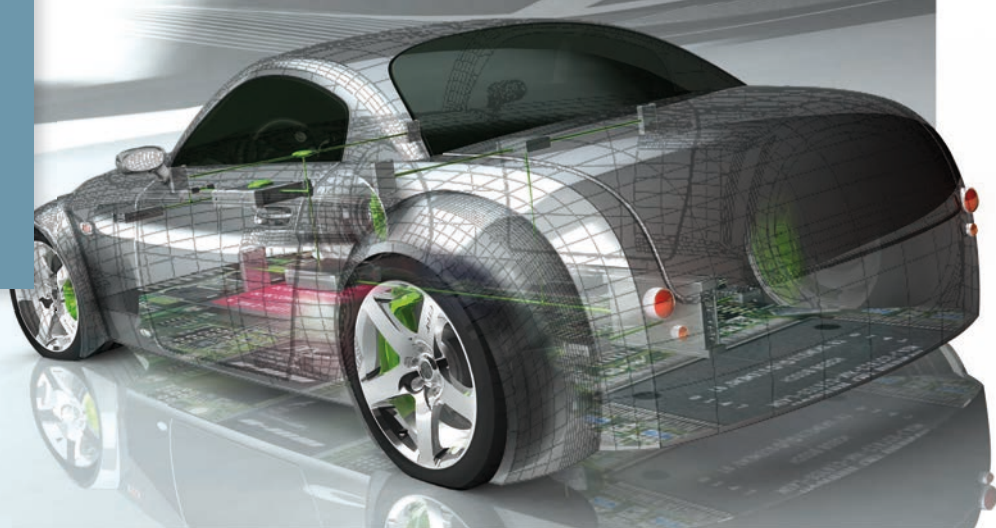
SOFTING – like many other manufacturers of commercial software – has not adapted its tools to the operating system Windows VISTA. This means that when migrating software to Windows 7, the new features incorporated in Windows VISTA also have to be taken into consideration. Users must pay special attention to the UAC (User Account Control). The UAC is a central mechanism for protecting a Windows 7 system from being tampered with by unauthorized personnel. A further feature that improves system security is the signing of programs and drivers. Driver packages shall be signed for the 32-bit operating system; signing is yet to take place for the 64-bit variant.

SOFTING tools and Windows 7

SOFTING tools for Windows 7 can be operated on 32-bit and 64-bit operating systems. To ensure maximum compatibility between operation on the 32-bit and 64-bit operating system, software is implemented at the lowest level re drivers on the 64-bit operating system. The SOFTING tools remain 32-bit applications which means that all interfaces and data can still be used on both the 32-bit and 64-bit operating system. The SOFTING D-PDU API and the SOFTING PassThru software interface for Windows 7 have been available since April, TestCUBE₂ is also available. DTS is being launched in a version for Windows 7 in October; TestCASE is also due to follow in fall 2011.

New hardware: eCOM

SOFTING now also has just the right software to use with DTS8 Daimler packages: I+ME Actia eCOM. This interface is a handy USB-VCI with integrated galvanic isolation for all areas of implementation in Engineering, Manufacturing and Service. D-PDU API is used as the integration interface. The interface enables communication over ISO 15765 (Diag-CAN) and ISO 14229 (UDS) as CAN protocols, but also already features Diagnostics over Ethernet (DoIP). K-line and LIN are already under preparation. The VCI can be operated with 12 and 24 Volts and can thus be used for both cars and trucks.



OTX-Editor

OTX tool chain

The new ISO Standard 13209 includes a very promising opportunity for the automotive sector: the exchange of diagnostic sequences across divisions and tools. The independence of software tools is also a guarantee that any diagnostic sequences created can be reused.

In Engineering, SOFTING provides a full tool landscape for creating and maintaining OTX sequences. The integrated development environment contains an OTX-Editor, a Debugger, a Graphic Sequence Viewer and, last but not least, an OTX-Differ.

Editor and Debugger

The Editor is a development environment that in terms of setup and operation is like other familiar development environments. The sequences are created either as text or by drag & drop. The Debugger also offers all familiar functionalities (breakpoint, single step, ...).

Sequence Diagram Viewer and Differ

Text format is usually better than a graphic approach when it comes to the efficient creation of programs. When it comes to visualization, e.g. for team meetings etc, a graphic representation is easier to understand and can be discussed. These options are available with the Sequence Diagram Viewer.

The comparison of two files is often used to identify evolution phases or revision status in a source code or simplifies fault diagnosis. The OTX-Differ can be used as a stand-alone device or be integrated in Tortoise/Subversion.

Further information: www.softing.com/otx

A major step ... DTS8

The eighth full version of DTS is due to be launched at the start of 2012 – a true success story! The latest version will once again consist of the ODX data editor DTS Venice, the development tester DTS Monaco and the ASAM MCD-3D server DTS COS. Data will be supplied via ODX; CANdb data can be integrated for residual bus simulation and for measuring purposes. Test sequences will be edited and run in the new OTX standard. Various D-PDU API VCIs will be used as hardware interfaces; numerous CAN and J2534 interfaces are also possible. We will keep you posted on all developments.

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