

Integrated product development for the automotive industry

A unified product environment across programs







The challenge

Today, more than ever before, automotive suppliers are being challenged with shorter lead times, increased competition, QS9000 and TS16949 standards compliance, and winning and keeping new business. To win new business suppliers must deliver products faster, drive down product cost, provide higher quality products and invest increasingly more resources into product development and innovation. All of this must be done while reducing expenses and increasing return on investment (ROI). Previous methods of managing information will not support today's more challenging OEM requirements. The company that survives in this climate will need to streamline business processes, improve access to information and optimize all aspects of product development.

The Multi-CAD conundrum

The automotive supplier community has long battled with the need to support various CAD systems. These various CAD systems do not share information easily. Translators such as IGES and STEP have been developed to pass partial information between unlike systems. Experts spend many hours 'fixing' these models from other CAD systems to create usable information.

Required tools

Competing in this environment requires integration among the many facets of product development. Information must be constantly updated and shared with others to enable rapid innovation during early phases of the design process. The ability to quickly test scenarios using previous designs and rapidly modify them to create innovative solutions that support QS9000 and TS16949 standards will separate those who can compete from those who cannot. The ability to integrate multiple CAD formats into the design process provides an even greater ability to beat competitors to market with innovative, cost-effective, high quality solutions.

The smart solution

SMARTEAM^{**} and ENOVIA^{**} DMU is a family of products that supports information management and provides the ability to collaborate with others regardless of CAD format. These tools not only manage disparate CAD and engineering data but support collaboration with others who can see the product take shape without complex translation procedures.

For the first time, information can be managed no matter where it originates. This powerful combination of products supports extended lifecycle collaboration and provides powerful tools on Microsoft^{**} Windows^{**} platforms that can be easily deployed across the extended enterprise.

Managing information

At most companies today there is no limit to the amount of information that is generated during a typical project. Much of this information resides in various incompatible formats, including: various CAD systems, spreadsheets, personal computer discs, and numerous proprietary programmes. None of this information is easily available for the next project. There is also no way to search among all of this information to find the best solutions. Often data is managed by more than one system with no integration. Easy access to all relevant information early in the design process will support innovation, increase quality, and lead to a competitive advantage and increased market share.

The solution

Full data management and data sharing between incompatible CAD systems has never been possible – until now!

With ENOVIA DMU and SMARTEAM, a comprehensive solution exists, for the first time, to manage all CAD data in one seamless environment.

With the powerful combination of SMARTEAM and ENOVIA DMU, information is managed and accessed in one place no matter where it originated. The powerful collaboration capabilities of ENOVIA DMU provides concurrent input to the design from more people earlier in the design process. These tools connect all facets of the business together into one seamless revenue-generating machine.

The SMARTEAM component

SMARTEAM provides a comprehensive suite of tools to manage information in any format. SMARTEAM products put you in control of your engineering solutions by driving engineering data across the extended enterprise through seamless cross-platform data exchange. These tools provide an easy way for suppliers to demonstrate compliance with QS9000 and TS16949 standards.

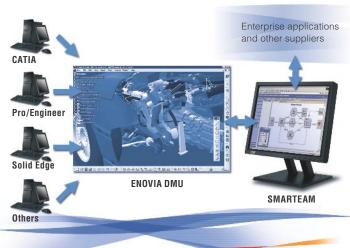
At the heart of each SMARTEAM environment is a secure vault where all product information is securely stored. Access through a basic Web browser makes the information easily available to all who need it. Integrated workflows and access to bills of material enable sharing of this information throughout the design process. Information in various formats can be viewed and evaluated by more people earlier and workflow processes can be integrated with other suppliers and partners. Access to information increases the opportunity for innovation and improves the quality of finished goods. Collaboration is easier and more effective for more people with SMARTEAM.

The ENOVIA Digital Mock-Up (DMU) component

With ENOVIA DMU, a comprehensive collaborative environment for multiple CAD systems is now available. This solution provides a simple environment where many CAD formats can be brought together for evaluation of space, fit, function, appearance, and annotations can be passed through the extended enterprise. Even more advanced analysis can be performed on these multi-CAD models, such as kinematics, clash analysis, ergonomics, serviceability, and high end visualisation. With ENOVIA DMU other disciplines in the enterprise can be included earlier in the design process: shop floor, technical documentation, sales and marketing, along with any other groups that need early access to design considerations.

Automotive suppliers who survive will be those that can manage information, support industry standards, and leverage information into an advantage that supports flexibility and innovation. This solution enables companies to tackle these challenges in a robust solution that is easy to use and implement.

Contact you Business Partner or an IBM representative today and let us show you how SMARTEAM and ENOVIA DMU can do this for you.



ENOVIA DMU and SMARTEAM collaboration



For more information about SMARTEAM and ENOVIA DMU contact your IBM Marketing Representative, IBM Business Partner, or call one of the numbers below:

AMERICAS

USA

Toll-free 1 800 395 3339 Canada (514) 938 6718 Argentina (54) 11 4319 6594 Brazil (55) 11 3050 5542 Mexico

(1) (52) 5 270 64 25

ASIA / PACIFIC

Australia	02 9842 9555
China	86 10 6539 1188 ext. 4774
Hong Kong	2825 7614
India	91 20 649724 / 649621
Indonesia	021 5238622
Japan	3 3808 8510
Korea	822 3781 7583
Malaysia	(603) 7720 2069
New Zealand	+64 9 359 8785
Philippines	2 819 2345
Singapore	65 320 1234
Taiwan	02 725 9493
Thailand	2 273 4406

Austria	1 211 45 2929
Belgium	2 225 2901
CEMA	+42 02 4929 1236
Czech Republic	27 213 1742
Denmark	45 233000
Egypt	539 2539
Finland	(0) 9 459 4151
France	01 49 05 70 64
Germany	01 805 426 766
Greece	1 688 14 76
Hungary	01 382 5500
Israel	(972) 3 697 8586
Italy	(39) 039 600 3767
Netherlands	020 513 3769
Norway	66 99 9361
Poland	22 878 6145
Portugal	21 7915005
Romania	21 224 1544
Russia	095 940 2000
Slovakia	02 4929 1203
Slovenia/Croatia	01 479 6676
South Africa	0860 788 788
Spain	(34) 91 397 66 11
Sweden	8 763 4394
Switzerland	58 333 53 70
Turkey	0212 317 1305
United Kingdom	0870 010 2510

IBM Eurocoordination

Product Lifecycle Management Tour Descartes La Defense 5 2, avenue Gambetta 92066 Paris La Defense Cedex France

The IBM home page can be found at **ibm.com**

IBM, the IBM logo and the e logo are registered trademarks of International Business Machines Corporation in the United States, other countries, or both.

- CATIA, ENOVIA and SMARTEAM are trademarks of Dassault Systèmes.
- Microsoft is a trademark of Microsoft Corporation in the United States, other countries, or both

Other company, product and service names may be trademarks, or service marks of others.

References in this publication to IBM products, programs or services do not imply that IBM intends to make these available in all countries in which IBM operates. Any reference to an IBM product, program or service is not intended to imply that only IBM's product, program or service may be used. Any functionally equivalent product, program or service may be used instead.

IBM hardware products are manufactured from new parts, or new and used parts. In some cases, the hardware product may not be new and may have been previously installed. Regardless, IBM warranty terms apply.

This publication is for general guidance only.

Photographs may show design models.

© Copyright IBM Corporation 2003 All Rights Reserved.

ibm.com/solutions/plm



The PLM e-newsletter delivers the latest information on PLM product announcements, events, customer success stories and more in your mailbox. Select your country and your language and subscribe at: ibm.com/solutions/plm/newsletter

