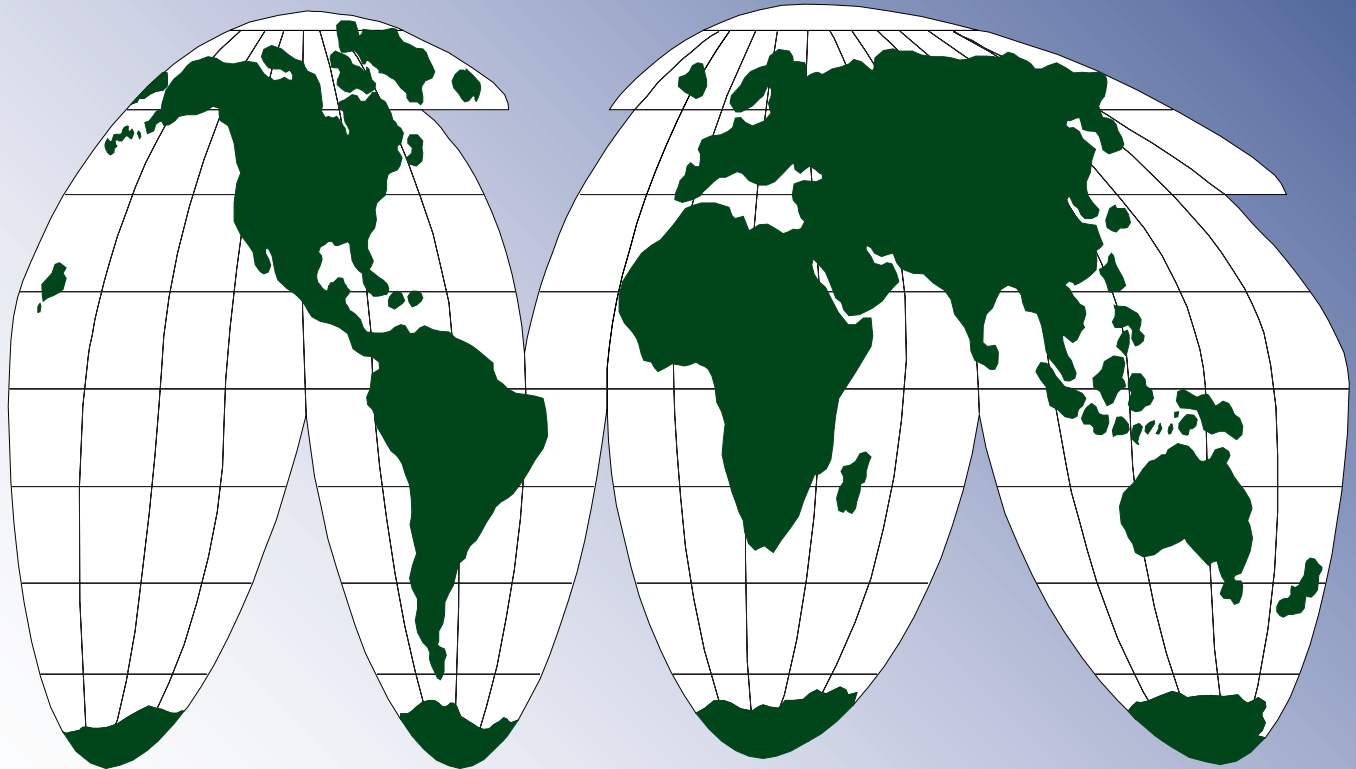


Digital Engineering Visualization



A



SASIG
strategic automotive product
data standards industry group

Publication



Digital Engineering Visualization



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The DEV SASIG initiative will allow the automotive industry worldwide to work toward global common Digital Engineering Visualization processes and standards. It will also provide a common voice in representing interoperability and functionality issues with DEV vendors, thus facilitating the global communication and sharing of engineering data.



Digital Engineering Visualization

FOREWORD

Tooling changes account for much of the waste in the product development cycle within the automotive industry. Such changes can be significantly reduced by utilizing currently available Digital Engineering Visualization tools to identify potential design changes early in the development cycle.

This document identifies what Digital Engineering Visualization technology is, and how it can be utilized. From within the Automotive OEM & Supplier membership, key players have made a concentrated effort to identify the tools and technologies that can significantly enhance the industry's ability to decrease its costs and time to market. The document also covers the who, when, where, and why of utilizing Digital Engineering Visualization tools.

Implementing the tools and processes outlined in this guideline will help enable global engineering collaboration and standards within the worldwide automotive industry.

Digital Engineering Visualization



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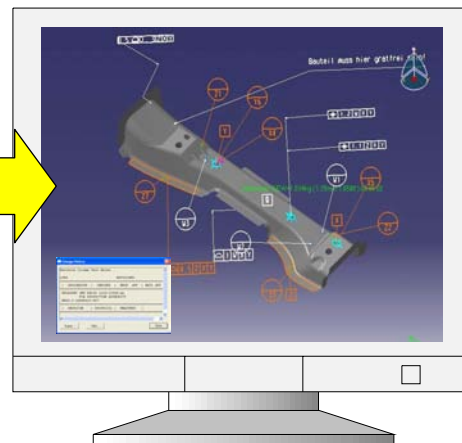
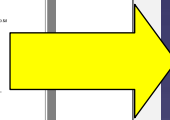
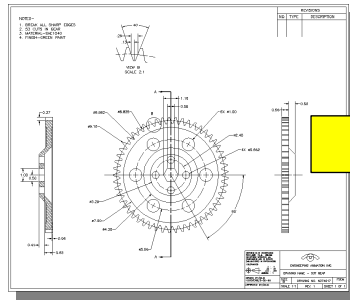


Digital Engineering Visualization

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Digital Engineering Visualization Workgroup



Today:
2D Drawing

Future:
3D Annotated Model

INTRODUCTION

The SASIG Digital Engineering Visualization work group has developed this document to assist those who are using, or thinking of using, Digital Engineering Visualization tools. The objective is to improve the communication of 2-Dimensional (2D) and 3-Dimensional (3D) engineering data throughout the extended enterprise.

The mission of the work group is to establish globally accepted practices, guidelines, technologies and standards that facilitate implementation of Digital Engineering Visualization, enabling collaboration within/between OEMs and suppliers.

Digital Engineering Visualization (DEV) is defined by the SASIG DEV work group as follows:

Processes/tools that allow non-CAD users access to 2D and 3D graphical engineering information including CAD, CAE, CAM, FEA and drawings (CAx). (Most non-graphical information is not considered in scope for this team, i.e., Word, Excel, PowerPoint, Outlook, etc.)

Visualization tools provide organizations a cost-effective method for viewing, interrogating, and marking up engineering data. This can be accomplished through the use of a PC as opposed to an engineering workstation and without the users having to learn complex CAD systems. Most visualization software packages are CAD-independent and allow users to view data originally created in different CAD systems.