

# ITI and Anark Partner to Deliver PDF-based Data Exchange and Validation for Model-Based Enterprise

## *CIMdata Commentary*

### *Key takeaways:*

- *The deployment of 3D model-based enterprise (MBE) processes is rapidly expanding across multiple industry verticals and the use of 3D PDF plays a central role in their effective implementation.*
- *Anark Corporation and International TechneGroup have formed a strategic partnership to provide users a production quality 3D PDF solution for 3D data and document publishing, including model-based definition (MBD), validation, and exchange through the integration of ITI's CADIQ and Anark Core technologies supported by their combined implementation expertise.*

The exchange of product design and manufacturing data between an OEM and its supply chain partners is critical to meeting a product's on-time and on-budget goals. Yet, the reality of packaging data for delivery often falls short in both content and quality, contributing to delays and cost overruns. Two leading solution providers have recently formed a partnership to deliver state of the art *data exchange* and validation to facilitate communication between product stakeholders based on the ISO standard data format, 3D PDF (ISO32000). Anark Corporation,<sup>1</sup> a leader in visual collaboration and MBE-enabled technical content publishing solutions, and International TechneGroup (ITI),<sup>2</sup> a leader in interoperability and validation solutions, have joined together to provide a comprehensive answer for product data sharing. CIMdata views this partnership as having great impact on the ability of end users to exchange and share product data.

## **3D PDF's Position in the industry**

Product developers need the ability to generate production-quality and complete technical data packages (TDPs)<sup>3</sup> that provide suppliers and downstream consumers with the detailed engineering and manufacturing information they require. Given the multi-CAD environments prevalent throughout the manufacturing supply chain, product data exchange is best served by an industry neutral, standard data format, such as 3D PDF. In addition, the capability of a PDF to contain multiple documents, including Microsoft Office files and dynamic, rich 3D data, allows a PDF to support the disparate data documents needed for TDP exchange across the virtual supply chain. The ability to consistently generate and package all necessary product data, including the 3D CAD model, is the key to a successful solution. In addition, Adobe's Acrobat Reader is ubiquitous throughout the industry and offers users the ability to read a PDF at no cost.

Anark contributes its automated, recipe-driven publishing platform, Anark Core, for transforming source data and publishing precise, high-fidelity 3D MBE documents and content to the partnership's solution. CIMdata believes the recipe-driven (or scripted) publishing approach offers users the important capability to consistently deliver appropriate data to their downstream partners. Scripting the generation of the data avoids human error that could result

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<sup>1</sup> See <http://www.anark.com/>

<sup>2</sup> See <http://www.iti-global.com/>

<sup>3</sup> For more information, see <http://www.navair.navy.mil/logistics/TechDataPack/index.html>

in a piece of information missing from the exchange and allows the authors to package the technical content differently for different consumers of the data.

For its part, ITI provides their industry-proven CAD validation solution, CADIQ, to the partnership. CADIQ is a vendor neutral CAD model validation tool that allows users to interactively test model geometry and product manufacturing information (PMI) for errors and undesirable variations. CIMdata highlights the importance of model validation before any data transfer occurs since our involvement in numerous collaboration projects always uncovers data imperfections as a blocking issue. Central to the partnership agreement, Anark and ITI will work closely to ensure their respective solutions and technologies are implemented in harmony in order to deliver a best-in-class process for their mutual customers.

## **Why Anark and ITI?**

There is a wealth of solutions in the industry that purport to provide data exchange services between product stakeholders. As expected, each solution varies in its ability to support the needs of its users. As third-party developers, Anark and ITI are in a position to evolve their solutions without any bias to a particular native CAD data format. Anark brings to the table years of experience in authoring and publishing high-fidelity technical data packages that support MBD content. ITI's reputation for excellence in data exchange and data translation is unquestionable. CIMdata believes the partnership of the two represents the potential for an industry changing solution that other developers will be challenged to match.

## **The User Challenges**

As product engineering and manufacturing continue to advance, product companies will face increased rivalry and the need to improve their processes to match the best-in-class practices within their industry. Given the broad swing toward MBE processes, those improvements will likely include the generation of MBD and PMI data sharing with their partners and supply chain. Any lingering workflows that require remodeling parts or assemblies because of the lack of design intent being properly shared will result in delays and added cost. Any errors in product model geometry that are not caught by model validation and are exchanged with downstream stakeholders will result in costly rework and will increase risks, confusion, and delays.

## **Moving Forward**

CIMdata welcomes the Anark/ITI partnership and looks forward to seeing their joint MBE solution positively impact the PLM market. With this solution CIMdata believes that data exchange has taken another step forward in capability to streamline data among product developers, their supply chain, and customers.

## **About CIMdata**

CIMdata, an independent worldwide firm, provides strategic management consulting to maximize an enterprise's ability to design and deliver innovative products and services through the application of Product Lifecycle Management (PLM). CIMdata provides world-class knowledge, expertise, and best-practice methods on PLM. CIMdata also offers research, subscription services, publications, and education through international conferences. To learn more about CIMdata's services, visit our website at <http://www.CIMdata.com> or contact CIMdata at: 3909 Research Park Drive, Ann Arbor, MI 48108, USA. Tel: +1 734.668.9922. Fax: +1 734.668.1957; or at Oogststraat 20, 6004 CV Weert, The Netherlands. Tel: +31 (0) 495.533.666.