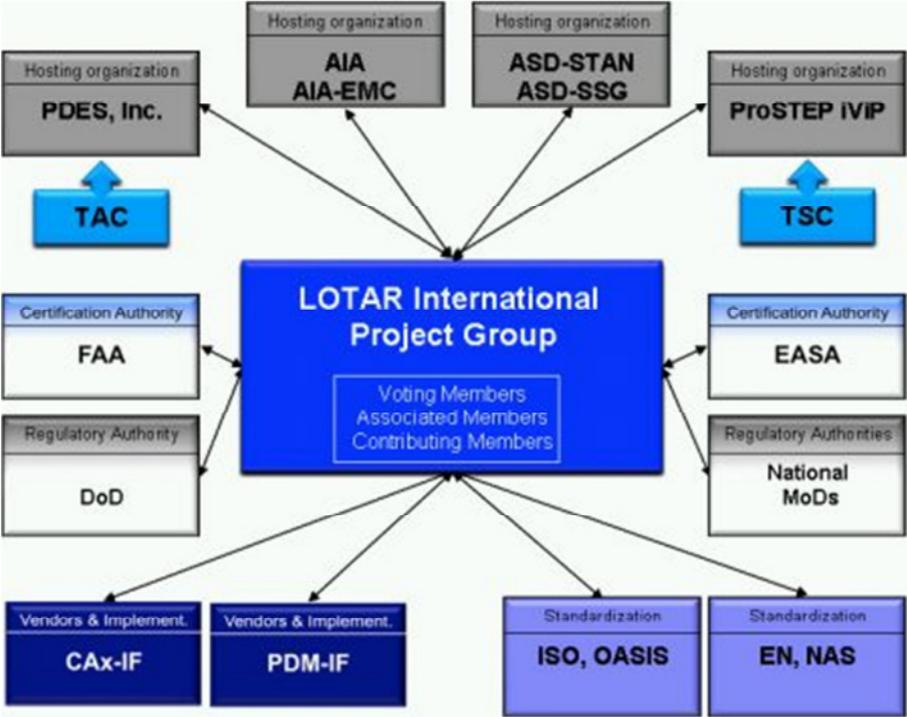


CT CoreTechnologie (CT) a provider of 3D CAD conversion software 3D Evolution, 3D Analyzer and 3D_Kernel_IO is an active member of the LOTAR International (Long Term Archiving & Retention) consortium CT is committed to creating the required standard within its products. This project is led by CT developers located in Lyon France. “The objective of LOTAR International <http://www.lotar-international.org> is to develop standards for long-term archiving (LTA) of digital data, such as 3D CAD and PDM data. These standards will define auditable archiving and retrieval processes.”The picture below gives an overview of the external relationships of LOTAR.



Source: LOTAR

LOTAR International consortium members include leading OEMs and suppliers in the aerospace and defense industry under the joint auspices of ASD-STAN, AIA, PDES Inc. <http://www.pdesinc.org> and the ProSTEP AP242iViP Association. The PDES is an international standard has assisted in the LOTAR process of development and implementation of standards in the interoperability space. Thus, assisting in the validation of those vendor in the interoperability space that are a part of the consortium commitment. The main objective is to develop, publish and maintain a standard to allow the archiving and retrieval of digital products and technical information, including CAD and PDM. Member companies, around the globe, include Airbus, BAE Systems, Boeing, Dassault Aviation, Cassidian, Embraer, Eurocopter, Goodrich, Gulfstream, IAI, Lockheed Martin, SAFRAN, Sandia and Spirit just to name a few. Lotar International also has the support of associations such as: ASD-STAN (Aerospace and Defence Industries Association of Europe for Standardization), AIA(Aerospace Industries Association of America), PDESInc., and ProSTEP AP242iViPAssociation.

CT CoreTechnologies is contributing to define the validation protocol for the development of the STEP AP242standard.Thisstandardwill allow the users of 3D Evolution to translate the 3D CAD models to the STEP AP242 standard with PMI and GD&T data to be read and re-used throughout its lifecycle, without the need of the CAD applications regardless of changes in computer applications used at the origin of its creation. The standard aims to expand and be applicable to other industries such as the

automotive and shipbuilding industries. Geometric validation properties are used to verify product conformity with the STEP AP242 standard. According to the website of the International Organization for Standardization (ISO), the STEP AP242 standard seems the most favorable solution because "it provides a mechanism that is capable of describing product data throughout the life cycle of a product, independent from any particular system. The nature of this description makes it suitable not only for neutral file exchange, but also as a basis for implementing and sharing product databases and archiving."

3D_Evolutionvalidation tool for STEP AP242 files in relation with GVP, which allows, based only on geometric properties, validation of the STEP AP242 file import. To contribute to interoperability's tests and improving the exchange of STEP AP242 files CT is a contributing member of the CAX-IF and helps to develop new features provided by version of the STEP AP242 standard. The CAX-IF has round table discussions every six months with its contributing members that provide benchmark data and results for the standards that are set by LOTAR. "Each participant creates the CAD model and translates it into STEP Part 21 file format. The STEP file is checked to ensure that it is syntactically, structurally, and semantically, correct. If the file meets these criteria, it is "vaulted", and an e-mail notification is sent out to the rest of the participants telling them the file has been approved for post-processing." In addition of these developments are to improve the exchange in the following ways:

- Algorithm compression /decompression to facilitate exchanges
- Insertion of tessellated geometry to simplify data
- Validation of Geometric Properties in order to validate the import / export STEP AP242

As CT looks at its roadmap, the LOTAR, PEDIS and CADx-If will continue to assist our customers in its requirement for long term data retention.