COMPANY PROFILE

Elysium is an interoperability solution provider in 3D data exchange area with unique and advanced geometry healing and optimization technology.
**TECHNOLOGY PROFILE**

**CAD & PMI**

- 20+ CAD formats with sophisticated geometry healing.
- PMI for V5, 3DEX, NX, Creo, SW, STEP, JT, …

**Geometry Optimization**

- Assembly
- 1 solid
- Geometry Simplification, Solid Enveloping, Mid-surface Creation, Reverse Engineering

**PDM**

- Teamcenter, 3DEXPERIENCE, Windchill, Aras
- PLM XML, XPDMXML, AP242 BOM XML

**Validation**

- Assembly Structure, Geometry, Attributes, PMI Report in 3DPDF/3DHTML format
FLEXIBLE CUSTOMIZATION

Elysium provides customization capability which enables to edit any information during data exchange between source and target systems.
AP242 BUSINESS OBJECT MODEL XML

Elysium supports data exchange with STEP AP242 BO Model XML

- Use cases
  - OEM<->OEM, OEM<->Supplier, Dept.<->Dept.
  - PDM<->PDM, PDM<->CAD

- Current capabilities of Elysium translator
  - AP242 IS and TC
  - Bidirectional translation
  - Monolithic and nested XML formats
  - JT/STEP are supported as part references
  - User-defined attributes
  - Validation properties
  - Multi-processing for part translation

ISO TS 10303-3001:2014
**CURRENT CAPABILITIES & FUTURE PLAN**

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Elysium will expand STEP translation and validation capabilities according to industry demands in LOTAR/MBD/MBE.

(*1) GVP is supported.
(*2) Color, transparency and invisibility of child component (1 level below instance) is supported. Styles of multi-level below instance is not yet supported.
PMI TRANSLATION

• Capability to write and read PMI in STEP is supported
  • For CATIA V5, NX, Creo and SW
  • Graphic PMI at part level
  • Semantic PMI at part level
  • Graphic PMI at assembly level (New)

• Supported functionalities
  • Text Notes / Datums / Datum Targets / Dimensions / Tolerances
  • Basic Saved Views / Simple Section Views
  • Linking PMI Presentation to Representation
  • Linking PMI with Geometry
  • PMI Validation Properties
PMI VALIDATION

- Validation between source CAD and its derivative STEP can be performed for the following functionalities
  - Assembly Structure / Geometry / Attributes
  - PMI Type / Name / Color / Related Elements
  - Graphic PMI / Bounding Box
  - Assembly Graphic PMI (New)
  - Saved Views / Section Views
  - PMI Semantic Info (Improved)

- Validation results are stored in 3D PDF/3D HTML format

- Validation between two STEP files can also be performed
LOTAR COMPLIANT 3D PMI

• Elysium provides LOTAR compliant solution for 3D PMI.
  • Closely working with CAx-IF, LOTAR, AFNeT, PDES and prostep.
  • Minimal requirements supported.

• Elysium will continue to support and enhance LOTAR functionality

Recommended procedures for archiving for LOTAR
CONCLUSION

STEP AP242

Automation

Methods & rules

Communication