CADfeature™

Translate complete design intent with features and associative drawings
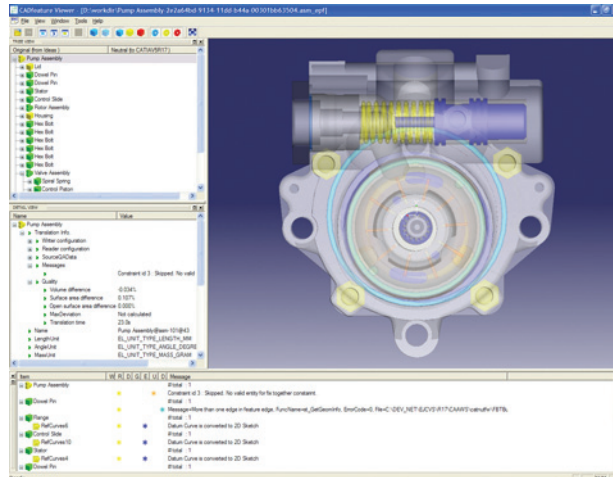
CADfeature's viewer presents visual and descriptive feedback on potential translation issues as well as the equality of results obtained from translation.

CADfeature is a high quality Feature Based Translation system that offers complete design intent transfer with the scalability to address an individuals needs, or the needs of an enterprise. CADfeature provides Process Management capabilities to control CAD remastering and healing workflows. CADfeature's robust quality checking and geometry verification capabilities ensure the highest quality data translation process, greatly reducing CAD remastering and migration costs.

CADfeature Design Content Extraction

CADfeature extracts 3D design intent via a plug-in that connects to a CAD system and records the building steps during a model replay operation. CADfeature will then open 2D drawing files to extract section cuts, views, perspectives, scale factors and associative links to the 3D part or assembly.

CADfeature also extracts mass properties from the origination CAD system and uses this data comparatively for post translation quality analysis.

Translation Options

Users may select various translation parameters to control:

› Extensive Translation Modes: Combinations of Feature, Boundary Representation, 2D Drawing, and Data Mining.
› Quality Check Options are configurable to control downstream processes.
› Easy metadata and attribute mapping.
› Automatically process one part or an entire directory of assemblies, parts, and drawings.
› Incremental Translation Control logs each part version translated and avoids retranslation of reused or common parts. This powerful capability greatly reduces translation time and effort for product families, common parts and assemblies.

Representative Feature Support:

Features supported and terminology varies between systems. Representative CAD Feature support includes:

› 2D Drawing Information such as: sheets, views, layout and scale factors.
› 3D Parametric Model Information such as: Assembly constraints, sketches with dimensions and geometric constraints, datums/reference geometry, boolean operations, extruded features, drafts, lofts, sweeps, rounds, fillets, chamfers, surface feature operators, holes, shells, transformations/patterns, system and user attributes and more.

ELYSIUM

www.elysiuminc.com
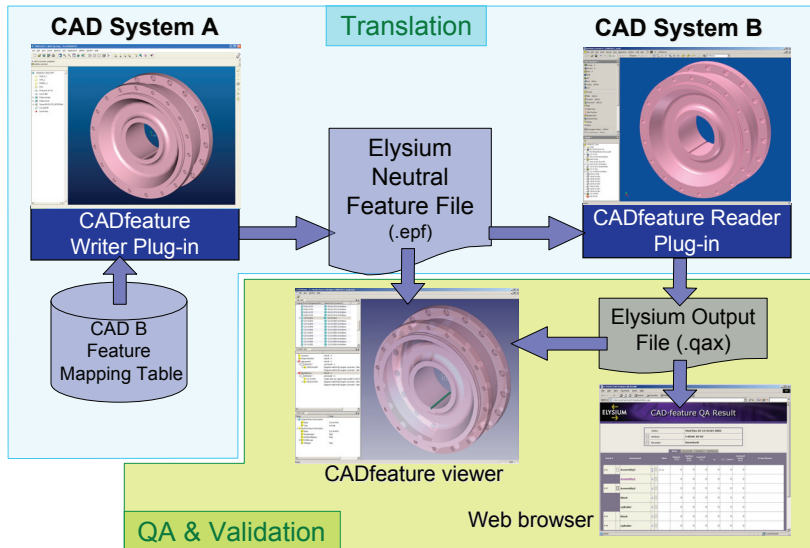
CADfeature™

CADfeature's translation framework provides fast and efficient meants to translate CAD data while capturing the original systems design intent through parametric features and history.

Process Management

CAD data translation from legacy systems can be a daunting and costly task. CADfeature's Process Manager organizes and simplifies the management of migration or translation workflows. The Process Manager automatically posts or routes translation results and repair task assignments, streamlining large enterprise migration processes.

Translation results are presented in 2 formats: textual xml for 3rd party extraction, storage and QA compliance, and graphical, for easy 3D visualization.

To ensure the highest quality results, CADfeature comparatively tracks: surface areas, volumes, centers of gravity, cloud-of-points and maximum deviations on entities and geometry.

CADfeature's viewer provides drill down capability for display of assemblies, parts, features and their properties, 2D sketches, and constraint definitions.

Supported CAD Platforms:

Dassault Systemes:
    CATIA V5, SolidWorks
AutoDesk:
    Inventor
PTC:
    Pro/ENGINEER Wildfire Series
Siemens PLM:
    I-DEAS NX, NX

Key Features:

Robust Feature Mapping between major CAD systems

› Data mining option to predict translation success/fail ratio prior to running actual translation.
› Standard parts mapping between systems with proper part/assembly orientation.
› Incremental translation part tracking to avoid duplicate part processing.
› Advanced quality checking routines report textual CAD quality data as well as visual models in a 3D viewer.
› Associative 2D drawing and layout translation with extensive QA reporting.
› Geometry verification tool to compare source to results from a translated file and also results from a remastered file.
› Direct PDM integration with Teamcenter Engineering.
› Elysium's robust B-rep processor as a fall-back translation mechanism.

About Elysium

Elysium develops and markets interoperability solutions for the global PLM market with thousands of customers worldwide and millions of files translated. Elysium currently supports data exchange among CATIA V4/V5, I-DEAS-NX, NX, Inventor, One Space Modeler, Pro/ENGINEER, and SolidWorks. Elysium was founded in 1984 in Hamamatsu, Japan, the site of its world headquarters. Its North America headquarters are located in Detroit, Michigan. With over 95 employees world-wide and a network of partners and distributors, Elysium has become the favored solution of many world-class companies for translating and checking 3D CAD/CAM and CAE models. Please visit our web sites: www.elysiuminc.com and www.elysium.co.jp

CADdoctor™, CADfeature™, CADporter™, and CADpdm™ are trademarks of Elysium Co., Ltd. and Elysium Inc. All other products are trademarks or registered trademarks of their respective companies.

Elysium Inc.

3000 Town Center, Suite 1330
Southfield, MI 48075 USA
Tel. +1-248-799-9800
Fax. +1-248-281-0672
Web: www.elysiuminc.com
Email: info@elysiuminc.com

ELYSIUM

www.elysiuminc.com