



Anark Core™

Platform Overview

AUTOMATED 3D CAD TRANSFORMATION

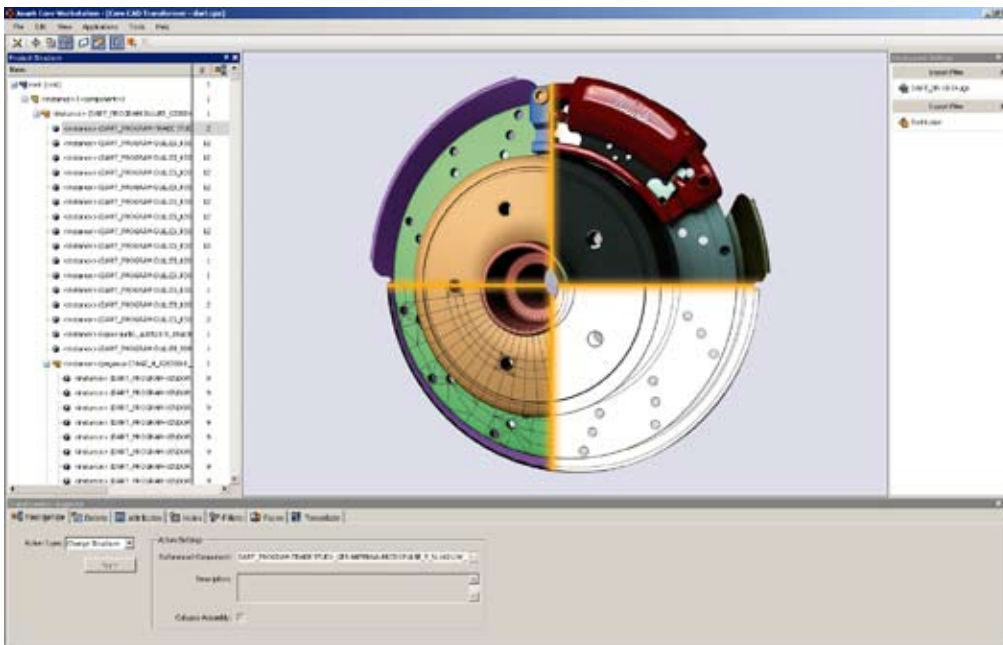
The Anark Core Platform is a robust software solution that quickly and easily transforms 3D product design data for use throughout design, engineering, and support organizations.

Unlike conventional CAD tools and translators, Anark Core enables users to automate the process of modifying 3D product geometry and export model data into high-precision B-rep and lightweight mesh formats. The system creates “recipes” that can be re-applied automatically to revised product design data, saving countless hours of expensive and labor-intensive repetition.

Automatically Prepare 3D CAD Data

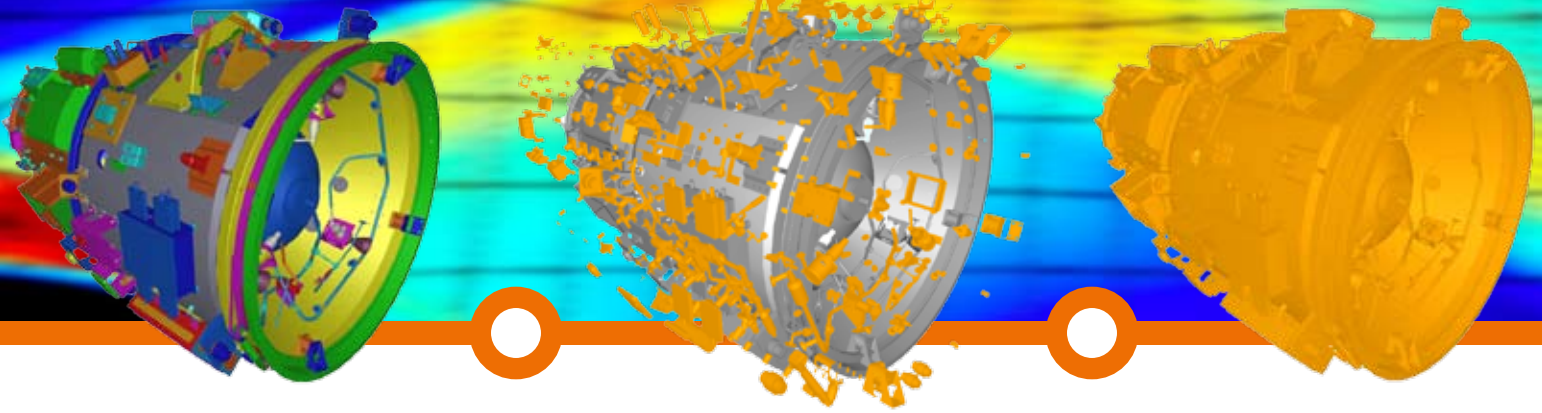
Anark Core dramatically reduces tedious and repetitive conversion and preparation tasks by recording all feature-suppression, part removal, and translation actions performed on the CAD assembly.

Quickly and Easily Prepare Use-Case Specific CAD Models



Anark Core’s simple yet powerful interface enables CAD and non-CAD users to be productive with little training or ramp-up. Use Anark Core to quickly and easily prepare use-case specific CAD models for:

- OEM-Supplier Data Exchange
- Product Visualization/Simulation
- Technical Illustration
- CAE, Analysis and Simulation



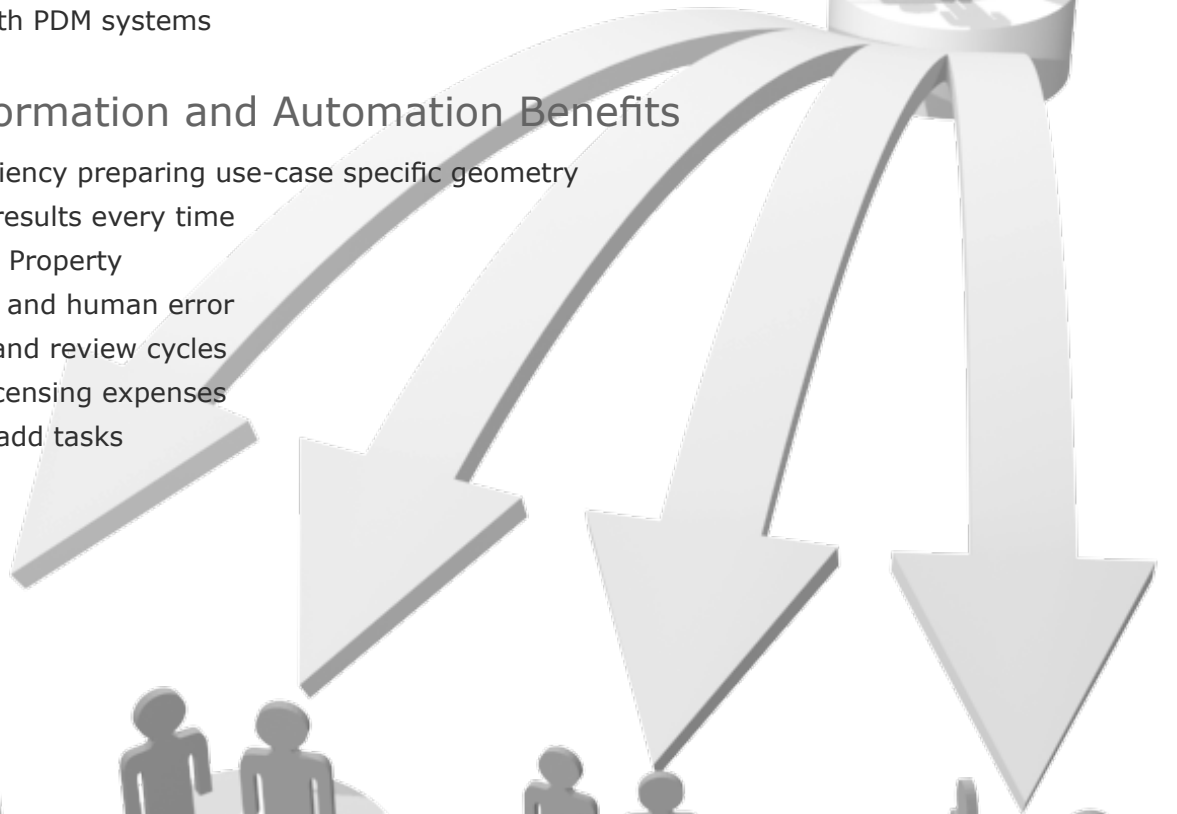
Integrate CAD Transformation Into Your Business Process

- Multi-CAD native format translation
- Heal and repair geometry errors
- Restructure product assemblies
- Remove assemblies, parts, and features
- Export B-rep and tessellated formats
- Robust, intelligent automation
- SOA integration with PDM systems

3D CAD Transformation and Automation Benefits

- 6x increase in efficiency preparing use-case specific geometry
- Ensure consistent results every time
- Protect Intellectual Property
- Reduce labor costs and human error
- Accelerate design and review cycles
- Reduce software licensing expenses
- Reduce non-value add tasks

Design Engineering



Supply-Chain Partners



CAE, Analysis/Simulation

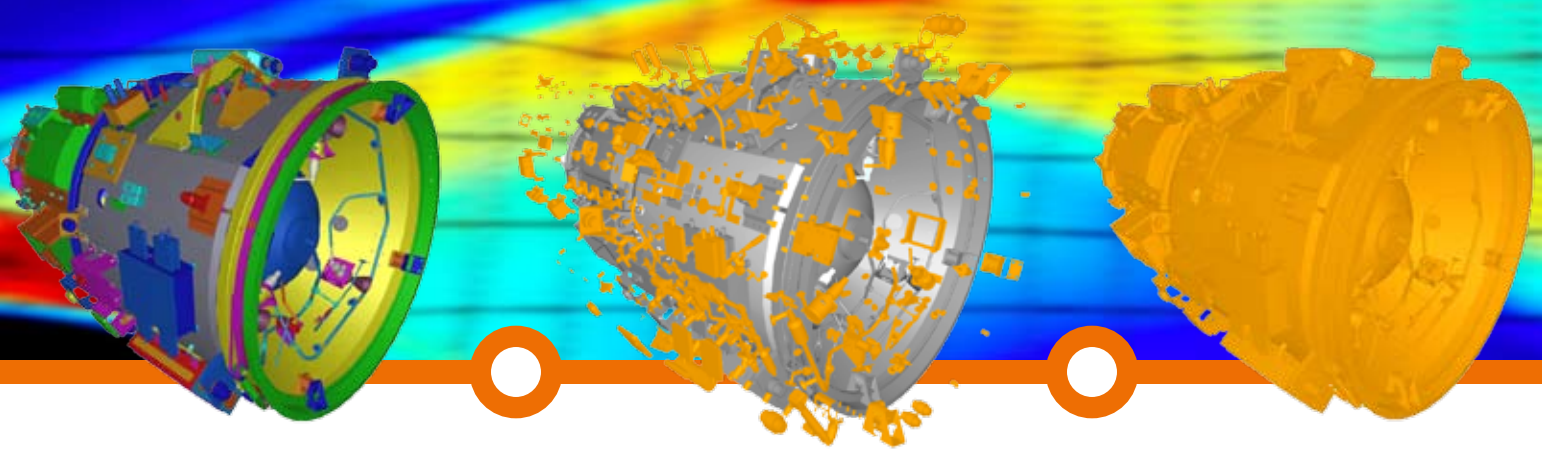


Technical Publications



Sales, Marketing





Repair, Prepare, and Simplify CAD Data For Each Use Case

Transform CAD Files with Anark Core

Transformation is a term used to describe the process of removing unnecessary parts, assemblies, features, or sensitive designs (IP) from CAD models to prepare the data for use in other design, review, simulation, visualization, or documentation applications. Anark Core allows users to remove parts, faces, holes, fillets, and other details while preserving the integrity and precision of the original part or model.

Do It Once, Then Automate

Workflow in Anark Core is a simple 4 step process. Every action performed within an Anark Core Workstation project is saved to an XML-based recipe which can be applied to the source file repeatedly from within Anark Core Workstation.

- **Import:** Import CAD files from an array of leading CAD authoring tools.
- **Transform:** Restructure product hierarchy, remove unnecessary parts, assemblies, and other details.
- **Export:** Save high-precision B-rep and/or mesh files within a single recipe.
- **Automate:** Apply existing recipes to revised product designs quickly and easily.

Recipe-Based Automation

Anark Core automation recipes are XML files that contain a list of all actions that have been performed on imported CAD files. Anark's advanced automation technology uniquely identifies imported parts and assemblies to enable automated transformations even as designs are changed or modified.

By maintaining references to source files throughout the design iteration process, CAD designers have full latitude to either change the name of the component or add and change product geometry, without requiring modification of the original recipe.

For high-volume applications Anark Core Server can process recipes on user-defined schedules or when designs are changed or updated (requires integration with a PDM or ECM solution).

Use Case Overview

OEM-Supplier Data Exchange

Anark Core enables efficient data exchange between Suppliers and OEMs that don't share a common CAD design platform, or choose to use a variety of CAD solutions to solve their design challenges. Anark Core's recipe-based automation enables organizations to consistently remove sensitive or unnecessary geometry from design data before sharing with companies on the other side of the firewall. Simple, drag-and-drop editing of product structure facilitates the creation of multiple product representations from original assembly data—such as vendor specific BOM's. Whether integrated into a PDM solution or run independently, Anark Core can export manufacturing-quality solid geometry in industry leading formats like CATIA® V4 and V5, ACIS®, Parasolid®, VDA-FS, STEP, and IGES.

Product Visualization/Simulation

Product visualization applications stutter and drop frames when attempting to render large, complex parts and assemblies. Anark Core's unique de-features tools, rapid face, part, and assembly removal, and precise tessellation controls enable organizations to automate the creation of visualization-ready mesh optimized for real-time or raster rendering applications. By recording model preparation actions into a recipe, Anark Core can automatically produce B-rep shell geometry and mesh models for design-review and product visualization each time the design is revised.

Technical Illustration and Documentation

Modern technical documentation and illustration applications can import CAD assemblies and produce line drawings or shaded product illustration graphics. These applications bog down when unnecessary details or unwanted parts and features are present in the configuration. Anark Core automates the production of appropriately-detailed product geometry and removes unnecessary parts and features that aren't required for product support documentation. Integrating Anark Core into the PDM solution to automatically prepare CAD files for downstream applications enables documentation and support organizations to get started—and get finished—faster.

CAE, Analysis and Simulation

Most CAD software vendors only offer monolithic design, analysis, and simulation environments. For engineering teams that rely on an array of analysis and simulation solutions, Anark Core is the ideal choice for automatically creating water-tight B-rep geometry prepared specifically for CAE applications, saving considerable time spent recreating designs or preparing product geometry. Quickly remove unnecessary features such as holes and fillets, as well as remove B-rep face geometry to produce inner- and outer-mold-line representations. Integrate Anark Core into the design automation process to ensure that analysis and simulation engineers are using geometry derived from current designs.

Import Formats

CATIA V5 .CATProduct, .CATPart,
CATShape, .CGR
Catia V4 .model, .session, .exp
STEP .step, .stp
NX .prt
VDA .vda
IGES .iges, .igs
Pro/ENGINEER .prt, .asm, .xpr, .xas
ACIS .SAT
Inventor .ipt, .iam
Solidworks .SLDASM, .SLDPRT
Parasolid .x_t, .x_b

Export Formats

CATIA V5 .CATPart, .CATProduct
CATIA V4 .model
VDA .vda
Parasolid .x_t, .x_b
ACIS .SAT, .SAB
STEP .step
IGES .iges
Autodesk DWF .dwf
COLLADA .dae
X3D .x3d
VRML .wrl



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