



# Anark Core™

## Features and Capabilities

### 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.

#### Automatically Prepare 3D CAD Data

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

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. Transformation recipes can be re-applied automatically to revised product design data, saving countless hours of expensive and labor-intensive repetition.

#### Produce Use-Case Specific CAD Models

##### CAE, Analysis and Simulation

Heal sliver faces, repair model tolerances, produce outer mold lines, remove unnecessary parts, and suppress features.

##### OEM-Supplier Data Exchange

Remove sensitive features and perform basic CAD translation for form, fit, and function testing; restructure product assemblies to create vendor specific BOM's.

##### Product Visualization

Produce mesh models suitable for design review or product renderings.

##### Technical Illustration

Create lightweight product geometry suitable for documentation applications.

##### Import Formats

SolidWorks®  
ACIS®  
Inventor®  
CATIA® V4, V5  
CATIA® V5 visualization data  
Pro/ENGINEER®  
NX®  
VDA-FS  
Parasolid®  
STEP  
IGES

##### Export B-reps

CATIA® V4, V5  
ACIS®  
VDA-FS  
Parasolid®  
STEP  
IGES

##### Export Mesh

DWF  
COLLADA  
X3D  
VRML

#### Top Reasons to Buy Anark Core

##### Restructure Product Assemblies

Simple, drag-and-drop editing of product structure to facilitate the creation of multiple product representations from original assembly data—such as vendor specific BOMs, or visualization and simulation-ready hierarchies.

##### Replace Referenced Geometry

Automatically replace thousands of rivets, screws, or other hardware with low-detail geometry.

##### Transform Popular CAD Formats

Now import and convert assemblies and B-rep geometry from SolidWorks®, Inventor®, and ACIS® formats. Import and convert visualization assemblies and geometry from CATIA® V5 CATPRODUCT, CATPART, and CGR files into multiple lightweight mesh formats.

##### Remove Unnecessary Parts and Faces

Quickly and easily remove B-rep face geometry to produce inner- and outer-mold-line representations for visualization, simulation, and OEM-supplier data exchange.

##### Memory Optimizations

Load larger and more complex assemblies.

##### More Powerful Web Services

New Core CAD Transformer Service enables PDM servers to fully automate Anark Core Server for change-list-driven transformation of CAD geometry (requires integration with PDM system).

#### System Requirements

Intel Pentium 4, Xeon® or AMD Athlon processor, 2 GHz or better  
NVIDIA GeForce 7 Series Graphics card, Quadro FX 1500, or better  
2-4 GB RAM  
5+ GB free disk space  
Microsoft Windows® XP Professional 32 bit  
Microsoft .NET 2.0 (installed if not present)

#### Schedule an Evaluation

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Function	Benefit
Easy to learn, intuitive interface	<ul style="list-style-type: none"><li>• Usable by both engineers and non-engineers</li><li>• Minimal training required</li></ul>
Precise geometry representation	<ul style="list-style-type: none"><li>• Allows editing and export of manufacture-quality B-rep models</li><li>• Automatically heals product geometry on import</li></ul>
Unique part/geometry selection tools	<ul style="list-style-type: none"><li>• Perform transformations on hundreds or thousands of parts in one operation</li></ul>
Non-destructive workflow	<ul style="list-style-type: none"><li>• Add or remove actions while preserving original underlying product structure and geometry</li></ul>
Import and export high-precision B-rep models	<ul style="list-style-type: none"><li>• Enables 3D CAD data sharing between multiple vendor formats and applications</li><li>• Transform 3D CAD geometry for multiple use-cases while retaining precision</li></ul>
Export high-resolution or lightweight mesh files	<ul style="list-style-type: none"><li>• Export mesh into COLLADA, VRML, X3D, and DWF for use in simulation, visualization, or documentation applications</li></ul>
Recipe-based automation	<ul style="list-style-type: none"><li>• Anark Core Workstation creates transformation recipes for every operation performed</li><li>• Uniquely identifies product data to enable automated transformations even as designs change</li><li>• Recipes can be applied repeatedly within Anark Core Workstation or deployed for large-volume automation within Anark Core Server</li></ul>
Anark Core Scheduler	<ul style="list-style-type: none"><li>• Define and schedule automation jobs with easy to use calendar interface</li><li>• Save automation schedules to shared scheduled database</li></ul>
Anark Core Server Scalable Architecture	<ul style="list-style-type: none"><li>• Scales with multi-processor, clustered environments</li><li>• Multi-threaded, multi-core aware yields true symmetric multiprocessing</li></ul>
Standards-based Services-Oriented Architecture	<ul style="list-style-type: none"><li>• Integrate Anark Core Server with PLM or other enterprise systems using SOAP over HTTP/HTTPS protocols</li><li>• Allows PDM and ECM systems to initiate CAD geometry transformation - enabling just-in-time delivery of data based on established business processes</li><li>• CAD Transformer web service allows for change-list driven automated CAD transformation</li></ul>

