

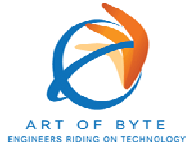


ART OF BYTE
ENGINEERS RIDING ON TECHNOLOGY

Mechanical Design

**CATIA – Mechanical Design Configuration
(MD1)**

CATIA V5

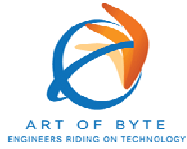


Mechanical Design

CATIA - Mechanical Design 1 Configuration (MD1)

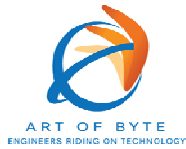
Configuration overview

Provides the tools needed to perform 3D part and assembly design and the generation of production drawings. In addition, it includes integrated real-time rendering capabilities and supports data exchange using common industry standards, including the CADAM drawing data format.



CATIA - Mechanical Design 1 Configuration (MD1) Product List

Real Time Rendering	RT1
CATIA - Assembly Design	AS1
CATIA - Part Design	PD1
CATIA - Wireframe & Surface	WS1
CATIA - Generative Drafting	GD1
CATIA - Interactive Drafting	ID1
CATIA - Object Manager	CO1
CATIA - CADAM Interface	CC1
CATIA - IGES INTERFACE	IG1
CATIA - V4 Integration	V41



Real Time Rendering

Enable designers to leverage technological material specifications to produce realistic renderings of their model.

Product overview

Real Time Rendering (RT1) Enables designers to leverage technological material specifications to produce realistic renderings of their model. Texture can be created from scratch, modified from imported digital images, or selected from the included library. Associativity is maintained between the material library and the material applied to the parts. Materials can be applied through a specification-driven approach or through simple selection. Real-time display computations quickly convert models to realistic renderings.

CATIA - Assembly Design

Define mechanical assembly constraints, automatically position parts and checks assembly consistency.

Product overview

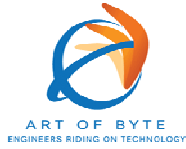
CATIA - Assembly Design 1 (AS1) is a P1 product for managing assemblies in a highly productive way. It gives the user the ability to design in assembly context with a user-control associativity, to perform concurrent engineering between the design of the assembly and the design of individual components through a hierarchical assemblies using a top-down or bottom-up approach. Assembly Design 1 establishes mechanical assembly constraints using mouse movements or graphical commands to easily and intuitively snap parts into position. Through a manual/automatic update choice, the designer can reorder the product structure, drags dynamically parts into position and makes collision and clearance checks. A productive work is provided through a catalog access for standard parts or assemblies, the access of advanced and powerful assemblies' features, automatic exploded view generation and automated BOM generation. Assembly Designers get great time reduction and increased quality. Introducing an intuitive user interface, common user interface across NT and UNIX, offering productivity, ease of use, and low training costs.

CATIA - Part Design

Design parts in a highly productive and intuitive environment

Product overview

CATIA - Part Design 1 (PD1) product for CATIA-P1 offers a new generation CATIA product for part design with one interface on NT and UNIX. The "smart-solid" design kernel



combines feature based design with the flexibility of Boolean approach, offering a highly productive, intuitive solution enabling multiple design methodologies./CATIA - Part Design 1 (PD1) product can used with other CATIA V5 applications such as: Assembly Design, Generative Drafting, Wireframe & Surface.

CATIA - Wireframe & Surface

Create in-context wireframe construction elements and basic surfaces

Product overview

CATIA - Wireframe & Surface 1 (WS1) is used to create wireframe construction elements during the preliminary design phase. It can also enrich existing 3D mechanical part design with wireframe and basic surface features. Its feature-based approach contributes to a productive and intuitive design environment where design methodologies and specifications can be captured and reused.

CATIA - Generative Drafting

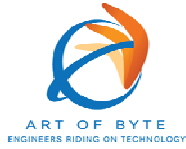
Generate drawings from 3D part and assembly designs.

Product overview

Generative Drafting for CATIA-P1 is new-generation CATIA products which allows users to automatically generate associative drafting from 3D mechanical designs and assemblies produced with CATIA Version 5. When combined with Interactive Drafting, the Generative Drafting product 1 benefits both from integrated 2D interactive functionality and from a higher productive environment for drawings dress-up and annotation. Generative Drafting 1 product offers a flexible and scalable solution accommodating drawing generation requirements for sheetmetal, surface and hybrid parts or assemblies. A drawing creation assistant or "wizard" simplifies the generation of multiple-view drawings. 3D dimensions can be automatically generated. Designers are able to associate patterns with part material specifications and add post-generation annotations with standards-based dress-up features. Associativity of the drawings to the 3D master representation enables users to concurrently work on their designs and drawings.

CATIA - Interactive Drafting

Address 2D design and drawing production requirements.



Product overview

Interactive Drafting is a new generation CATIA product to address 2D design and drawing production requirements. It offers a highly productive, and intuitive, interactive drafting system. It also enriches Generative Drafting with both integrated 2D interactive functionality and with a productive environment for drawings dress-up and annotation.

CATIA - Object Manager

Provide a highly scalable and open platform for collaborative product development based on breath-taking technology and open industry standards.

Product overview

The Next Generation CATIA Solution Version 5 is built on a totally new scalable architecture that combines the best of the current CATIA technologies with new generation standards. It offers total single system image across Native Windows and UNIX environments, and an extensible environment capable of supporting all aspects of the Digital Enterprise, from Digital Mockup, Digital Manufacturing, to Digital Operation and Digital Plant definition. The Version 5 system architecture offers a unique scalability environment which gives to customers the choice of selecting the optimum set of solutions, given the CAD specialization of the intended users, the complexity of the project and corresponding functional requirements. The 3 possible choices are CATIA-P1, CATIA-P2 and CATIA P3 installations.

CATIA - CADAM Interface

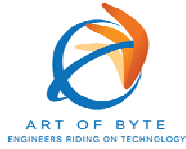
Share drafting information between the CATIA-CADAM Drafting and V5 drafting products.

Product overview

The product CATIA - CADAM Interface 1 (CC1) provides the user with an integrated capability to share 2D drafting information between CATIA CADAM Drafting (CCD) and V5 Drafting products. This integrated capability provides existing CCD users with the flexibility to easily integrate the V5 CATIA product portfolio into their environment, while maintaining their current practices and procedures based on their CCD product use.

CATIA - IGES INTERFACE

CATIA - IGES Interface 1 (IG1) helps users working in a heterogeneous CAD/CAM environment to exchange data through the neutral IGES format.



Product overview

CATIA - IGES Interface (IG1) helps users working in a heterogeneous CAD/CAM environment to exchange data in a neutral format. This utility supports IGES Version 5.3 and provides naming management to map IGES and CATIA identifiers. Users can perform reliable bi-directional 2D and 3D data exchange between dissimilar systems with direct and automated access to IGES files. CATIA - IGES Interface 1 (IG1) can process wire frame geometries, surfaces and trimmed surfaces, conic curves and color.

CATIA - V4 Integration

Help existing CATIA Version 4 customers take advantage of the advanced technologies of Version 5 while preserving their investment in V4 data.

Product overview

Dassault Systemes has an unprecedented track record in delivering upward compatible CATIA Solutions within a version life cycle and across major new versions. Thanks to a unique approach of gradual introduction of Next Generation software components within Version 4, started since V4R1.3, this new product line offers a smooth progression for current users of CATIA Solutions Version 4. Beyond the best of CATIA Version 4 Technologies brought forward in the new generation product line, CATIA - V4 Integration 1 (V41), which is part of every CATIA-P1 configuration, offers basic integration features which make seamless hybrid installations possible, involving both applications from CATIA Version 4 and applications from CATIA Version 5, while benefiting from data compatibility between the two product lines.