CollabCAD is a Java based distributed 3D CAD/CAM Software System, which provides a total solution from Product Design, Numerical Control, Visualization, Simulation, Analysis to Content Management, Workflow and Office Automation. Plot Configurator, the 2D drafting module of CollabCAD, has the state-of-the-art facilities for generation of fabrication drawings.

CollabCAD runs on Linux and Windows and is available in both Stand Alone & Client-Server mode. The collaborative nature of CollabCAD enables multiple designers to work across a network and concurrently access the same design for viewing and modification.

**Advantages**

- Economical CAD Solutions
- Collaborative & Comprehensive
- Parametric & Feature Based Modeling
- Flexible & Easy to Use Database Connectivity
- Programmable Scripting Interface
- Powerful Reverse Engineering
- Slicing/Cross Sectioning
- Reflection Line Analysis
- Customizable User Interface
- Standard Data Exchange Formats
- BAR Code for ERP Solution
- Plot Configurator and BOM
- Visualization Module for VRML 3D worlds
- XML based Geometry Data Storage
- Content Management System & Work Flow
- Customizable ERP/ MRP/ SCM Module
- Interface to Finite Element Analysis

**Collaborative Design**

- Facilitates Rapid Product Visualization
- Drastically cuts down the time for
  - Requirement Specification
  - Modeling
  - Review and Analysis
- Dynamic Sharing of Designs across the Network
- Interactive Design environment enables multiple designers to work across a Network
- Concurrently access the same Design for Viewing and Modification
- Audio and Video Conferencing enables On-Line communication between participating Designers
Design & Drafting
- Build and Edit entities in Virtual 3D Space
- 2D Profile and free hand Sketching
- Plot Configurator
  - Generation of 2D Drawings
  - Dimensioning and Detailing

Surface Modeling
- Creation and Modification of Surface Entities
- Trimming and Lofting of Surfaces
- Surface Diagnostics
- Reflection Line Analysis for visual inspection using Zebra Stripes Mapping
- Reverse Engineering: Generate complex Surfaces and Curves from a set of Points obtained from Raw/Scanned Data

Solid Modeling
- Primitive Solids
- Slab, Revolution Solid, Sweep Solid
- Boolean operations, Mass and Section property calculations, Sectioning, Slicing
- Feature Based Part Modeling

Assembly
- Constraint based Parametric Profile Editing
- 3D Constraint Solver

3D Tolerance Analysis for Assembly and Manufacture Module
- Measured Points
- Linear & Angular Tolerance Dimensions
- Tolerance Analysis on created Loops
- Tolerance Synthesis

Visualization
- 3D Stereoscopic Viewing
- Browsing of 3D Worlds and Objects

Data Exchange
- CAD Data Exchange using International Standards
- Import - IGES/STEP/STL
- Export - IGES/STEP/VRML/STL

Database Link
- Creation of Standard Tables and Databases
- Attach Properties from DB tables to Geometric Entities
- Bar Code to Link the Designs to Non CAD utilities

Standard Parts Library
- Component Library Framework
- Create and Store Standard Parts/ Components
- Sharing of Library

Basic NC Operations
- Lathe - Roughing, Contouring, Drilling, Threading
- 3-Axis Surface Milling
- Point -to -Point Milling
- Supports ISO Standard Tool library

Customization
- Facilitates 3D CAD Modeling using Scripting
- XML based Tool Palette for User Customization
Product Lifecycle Management (PLM)

- Reduces the Efforts and Time required for obtaining the Data
- Minimizes Confusions and Repetition of Work
- Data related to a Component/Product maintained at a single accessible location
- Integrated Content Repository
- Archive/Retrieve the Designs and Engineering Documents
- Incorporates Security, Locking and Versioning of the Engineering Drawings and Documents
- Interface to a Workflow System
- Specify, Execute, Monitor Workflow
- Coordinate the Organizations flow of Work

FEA Module

- Supports Interoperability between CAD Modeling and Computation Software
- Interfaced with Salome (Pre & Post Processor)
- Meshing, Modifying and Analyzing Geometrical Structures
- Interfaced with Code-Aster (Finite Element Solver)
- Full range of Multiphysics Analysis and Modeling methods well beyond Thermo-Mechanical Calculations
- Applicable for Linear as well as Non-Linear Structures

Enterprise Resource Planning (ERP)

- No Additional Cost for Generic ERP
- Customizable as per Organization Requirements
- Reduces Operational Costs
- Improves Operational Efficiency
- Enhances Productivity
- More Flexibility
- Better Control of Processes
- Improves Communication
- Aids Collaboration
- Interface to MRP/CRM/SCM/e-Commerce Applications

System Requirement

<table>
<thead>
<tr>
<th>Component</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAM</td>
<td>1 GB (Minimum)</td>
</tr>
<tr>
<td>Free Disk Space</td>
<td>1 GB (Basic)</td>
</tr>
<tr>
<td></td>
<td>2 GB (Advanced)</td>
</tr>
<tr>
<td>Virtual Memory</td>
<td>800 MB to 1 GB</td>
</tr>
<tr>
<td>Graphics Card</td>
<td>OpenGL Supported Hardware Accelerated Graphics Adapter</td>
</tr>
<tr>
<td>System</td>
<td>Intel and AMD Based Systems</td>
</tr>
<tr>
<td>Operating System</td>
<td>Windows and Linux</td>
</tr>
</tbody>
</table>
# Distributors (Marketing, Support, Training)

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Contact Person</th>
<th>Phone Numbers</th>
</tr>
</thead>
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</tbody>
</table>

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