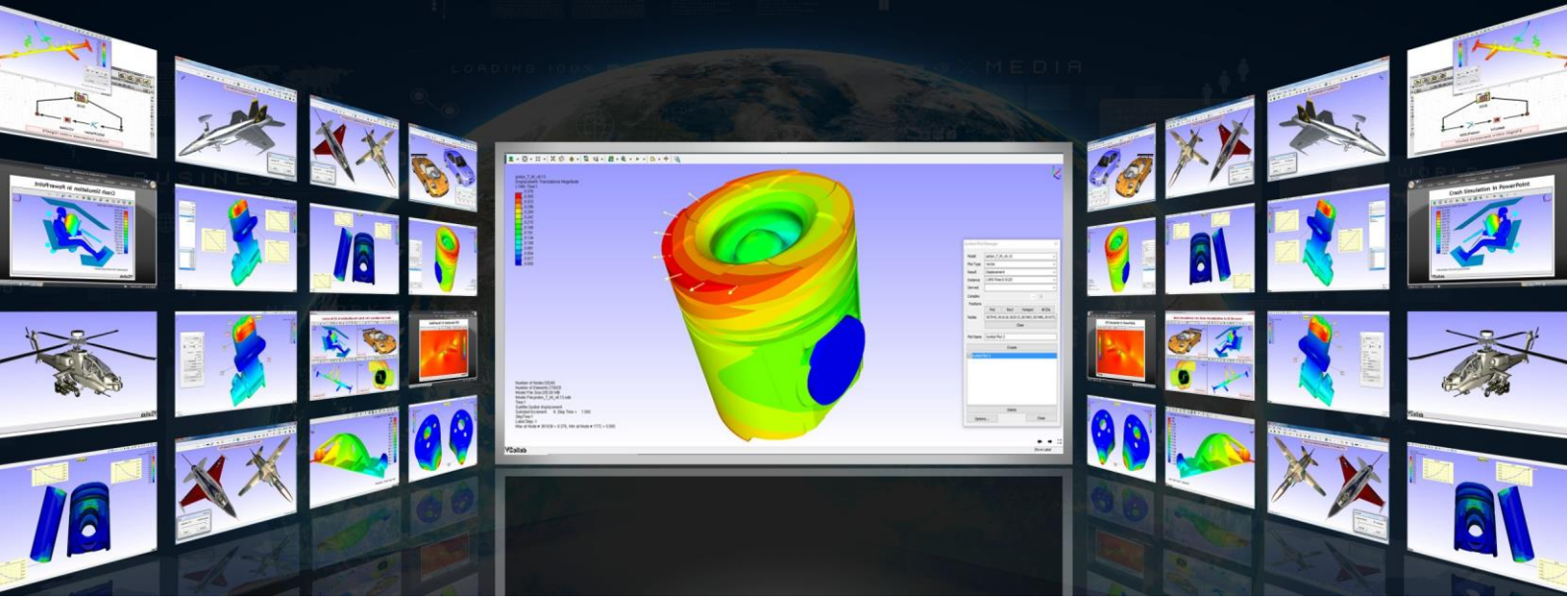

Smart Transform -
Simulation Data into Intelligent Simulation Information

Founded in 2000, Visual Collaboration Technologies is a Global Software Solutions Company headquartered in Troy, Michigan with a worldwide distribution network and offices in Texas (USA) as well as Bangalore (India). VCollab Software Solutions developed by Visual Collaboration Technologies has been smart transforming the design decision making process for major product development companies across the world.

Guided by the Automotive and Aerospace industry experts, the right technology partnerships with leading CAE/ MDO/SDM/SLM/PLM vendors and with diverse experience in the CAD/CAE/PLM/SDM/SPDM disciplines; the VCollab team understands challenges faced with respect to CAE/Simulation Data. The VCollab team has devised solutions to Smartly Transform Simulation Data into Intelligent Simulation Information, leading to improvement in the efficiency of the CAE/Simulation Information based decision making process. VCollab's mission is to make Simulation Information easily accessible for design decisions, whenever needed by diverse users in the product development process.

Fortune 500 companies across the globe trusts VCollab 3D Visual Collaboration Solutions to solve problems associated with product performance/simulation data - By providing cutting edge CAE software solutions and services as well as consulting, outsourcing and solution customization services.

VCollab 3D Visual
Collaboration Solutions for CAE

VCollab software powered by the CAX file format is an easy, effective and comprehensive visualization and data reduction solution to improve engineering collaboration.

Traditional Collaboration VS VCollaboration

• Massive CAE simulation and results files are difficult to share, move, archive.	• VCollab extracts & reduces CAE simulation and results files up to 99%.
• Multiple CAE data formats require diverse codes to access simulations and results.	• One Portable CAX file format stores all CAE simulations and results.
• Complexity and range of tools, presents a challenge for engineering teams and decision makers to collaborate/review simulations and results.	• Teams easily share, review, and interact with 3D models and results across multiple sites, multiple enterprises, with one common VCollab Viewer.

VCollab

CAX to
Reduce Simulation
Results Files by
99%

The VCollab solution begins with CAX, the first common, portable file format for storing and sharing CAE data. Using a refined data-extraction and data-reduction process, VCollab creates CAX files that are up to 99% smaller than native CAE files.

One Format
Unifies
CAE Data

single solution that unifies the complex currently in use today. One VCollab viewer and one common file format let users access a myriad of different CAE simulations and results as well as share, store, and collaboratively review extremely large CAE files.

Clientele

Applied Materials, Coca-Cola, Delphi, Continental, Honeywell, Saint-Gobain, Boeing, Hamilton Sundstrand, Avio Aero, Siemens, Ricoh, Hitachi, FAW, Toyota, Mitsubishi Motors, Nissan, Trek, Brilliance, John Deere, Western Michigan University, GM, Suzuki

Business 2 Business Collaboration

- OEMs, Suppliers, and Service Providers use one standard, portable CAX file format for easy data transfer, access, and archiving.
- Decision makers review comprehensive datasets with one simple-to-use interface.
- VCollab enables superior visual communication to help CAE teams solve design & simulation problems faster.

Global Collaboration

- Technical and non-technical teams easily exchange CAX files and collaboratively review comprehensive product design and simulation data.
- CAX files support multiple analysis programs and enable CAE document and data collaboration.
- Data reviews improve using 3D CAE storyboards and live graphical manipulation.

Efficiency

- Reduces storage, transfer time & bandwidth requirements.
- Reduces wait times to access and review massive results files from remote servers.
- Enables easy collaboration between analysts and designers.
- Reduces labor-intensive CAE reporting processes.
- Maximizes interrogation of all CAE, CAD, and CAM data.
- Archives 3D dynamic reports with design, simulation, and results data.
- Supports SDM, SLM, PDM, PLM, MDO system integration.
- Reduces need for code-specific viewers.
- Leverages existing software and hardware investments.
- Leverages expertise of all engineering teams.

CAX Archive, VCollab Accessciency

CAX files are Ideal for storing comprehensive engineering reports with design, simulation, and results data. Minimal storage requirements are needed to archive reports. Viewing reports in 3D and accessing critical data is simple using a VCollab Viewer.

CAX File Size and Translation Time Examples

CAE Software	CAE Results File Size (MB)	CAX File Size (MB)	File Size Reduction	Time for Translation
ABAQUS	1436	163	88%	~ 7 Mins
MSC NASTRAN	289	46.4	84%	<1 Min
MSC MARC	243	23.9	90%	>1 Min
ANSYS	14000	92	99%	~35 Mins
LS DYNA	363	145	60%	<1.5 Min
FLUENT	347	13.1	96%	<1 Min

CAX File Size and Translation Time Examples with Extended Filtering

CAE Software	CAE Results File Size (MB)	CAX File Size (MB)	File Size Reduction	Time for Translation
ANSYS (10 Results)	1953	20.1	98.7%	~3 Min
ANSYS (10 Results)	1953	2.31	99.9%	~2 Sec

VCollab Software Integration Partners

VCollab supports commonly used codes including ABAQUS, NASTRAN, MSC, MARC, ANSYS, LSDYNA, FLUENT, STARCCM+, ENSIGHT, CGNS, FESAFE and others.

ANSYSEKM

Added to the ANSYS EKM solution for simulation-based process and data management challenges, VCollab facilitates automated metadata extraction for non-ANSYS simulations, CAE results compression, and advanced CAE results collaboration and viewing for a wide range of simulations.

CADFEM C.A.V.E

CADFEM's Compression and Visualization Engine integrates VCollab into an ANSYS Workbench application. C.A.V.E. gives customers a seamless workflow from solving to the output of significantly compressed and portable result files.

Phoenix Integration

Integrated into the PHX Analysis Library, VCollab facilitates automated metadata extraction, CAE results compression and advanced CAE results collaboration and viewing for a wide range of simulations.

JT Open

Read and write JT files from VCollab and enjoy interoperability between VCollab solutions and JT format.

Total CAE Portal

TotalCAE adds VCollab to its portal services to bring smaller CAE file sizes and increased file portability to end users.

VCollab

Visual Collaboration Technologies Inc. 100 West Big Beaver, #200, Troy, MI 48084
Tel: 248-835-6880 Fax: 248-498-6003 Visit: www.vcollab.com