



Standard

Software Solutions



# SimData Manager

CAE Data and Process Management for  
Simulation and Virtual Engineering Analysis

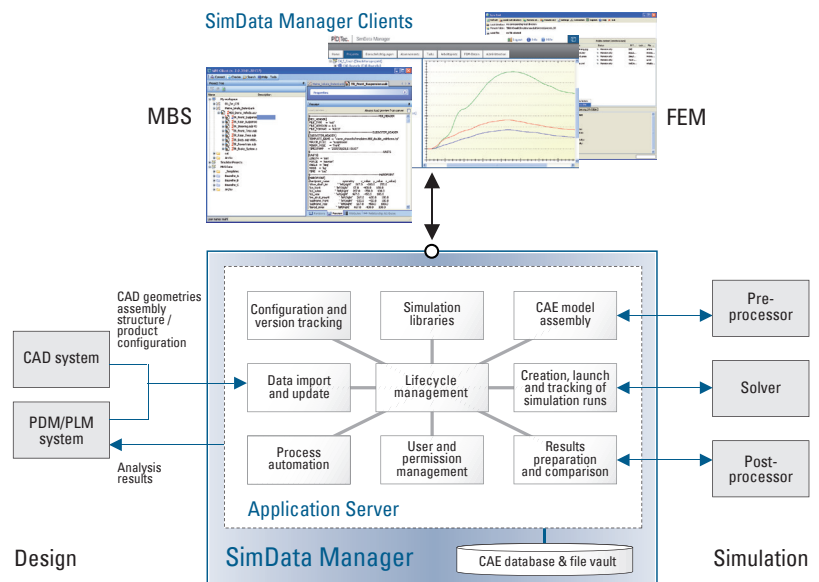
## Mastering the challenges of the CAE process chain

Your engineering analysts expect CAE data management solutions to provide consistent, direct and total access to the data they need to perform analyses – from new or modified CAD models coming out of the design department to new versions of simulation models.

SimData Manager can help you efficiently and systematically administer simulation- relevant data along the entire CAE process chain. That way, you can easily keep up with the growing number of different simulations. And thanks to SimData Manager's unified end-to-end data repository, you can exploit synergies across analytical disciplines as well.

### Application Highlights

- Traceability of base CAD geometries back from simulation data
- Linking of CAE and CAD structures
- Scripting interface to automate process operations
- Easy integration of CAE tools (Altair HyperWorks, Ansa, Medina, etc.)
- Customizable queries and reports with Excel export capability
- Version control and change history of data
- Notification of changes
- Batch interface for file check-in and check-out via command line
- Report engine for generating reports
- Visualization and comparison of analysis results
- Customizable export and import mechanism
- Seamless HPC integration (Altair PBS Works, LSF, SGE, etc.)



With SimData Manager, you can trace CAD geometries back from the simulation models (FE assemblies, etc.) and analyses – there is no need to manually maintain dependencies. You will always know what geometries were used to build the simulation models and obtain the analysis results. By applying this knowledge to new geometries, you can reduce the time and effort needed to collect and prepare data.



## Transparent CAE data management to maximize user acceptance

SimData Manager's intuitive user interface makes it easy to access simulation-relevant data and results. Global elements that are used across projects - such as barriers, load cases, crash-test dummies and material data - are shared and maintained centrally in libraries, while data modifications and simulation results are tracked and documented in SimData Manager.

The open, dynamic scripting interface can be used to effortlessly control the simulation process and the CAE tools involved in it. This lets it automate existing workflows. A prime example: automatically replacing "includes" in analyses. Powerful reporting features can automate much time-consuming work. That translates into lower costs and greater analyst satisfaction and acceptance.

SimData Manager's powerful automation features adapt to you and your processes on the file system – not the other way around. You will enjoy all the benefits of integrated CAE data management without having to re-engineer your processes. That makes SimData Manager easy and inexpensive to deploy.

The web-based technology of SimData Manager allows integration of CAE service providers with no extra effort. In cases where online access is not available, the highly customizable import/export engine enables a smooth and traceable information exchange.

As a result, SimData Manager ensures process reliability, efficiency and transparency along the entire CAE process chain.

### Benefits

- Improve quality and transparency of analysis processes
- Make analysis results instantly transparent
- Perform more analyses while maintaining process compliance
- Meet procurement and pilot release milestones with engineering analysis
- Lower the cost of finding information, assembling models and preparing reports
- Evaluate and interpret simulation results efficiently
- Leverage synergies across analytical disciplines with a unified data repository
- Easily integrate third-party CAE service providers
- Enjoy painless deployment and rapid roll-out at your organization

