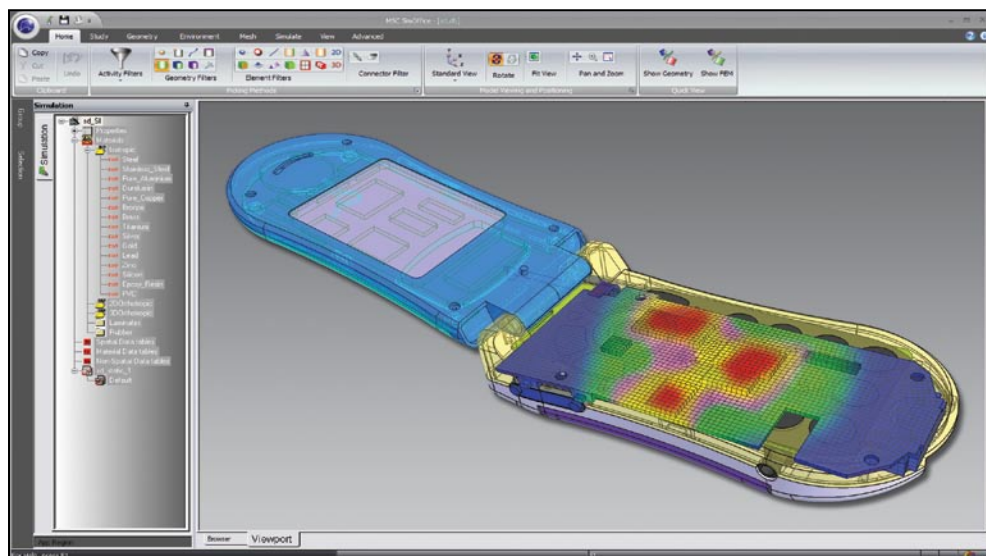


# SimOffice

## Engineering Simulation for People-Ready Business



### Overview

SimOffice is a powerful, yet easy-to-use simulation software application that helps engineers shorten the design cycle, lower costs and improve product quality. Through the integration of the industry's most widely used multidiscipline solver, MD Nastran, and an intuitive Windows-based graphical user interface, engineers and designers around the world can bring better products to market, faster by using computer simulation to verify designs and reduce physical prototyping.

SimOffice has been specifically developed for engineers who are responsible for designing, analyzing, and testing complex mechanical parts and systems. SimOffice improves productivity by giving engineers fast, reliable simulation capabilities in a desktop environment.

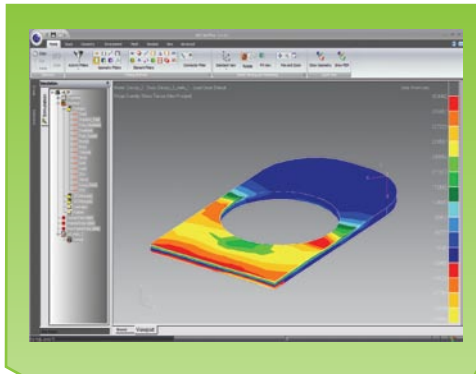
By easily creating and testing models in an intuitive Windows-based platform, manufacturing organizations can get better, more accurate design data early in the product development process, generate reports, quickly exchange critical product performance information and make more informed design decisions.

SimOffice features enhanced functionality which enables engineers to directly import and export 3D solid models from a variety of CAD systems such as CATIA, Parasolid, and ACIS, and exchange files with other FEA products, eliminating the time-consuming re-creation and clean up of models as they move between software packages.

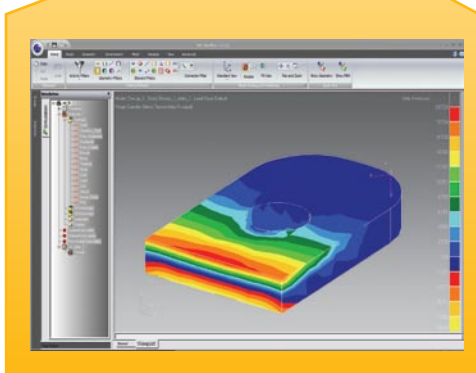
SimOffice is upwardly compatible with enterprise-level MD Nastran. This is critically important for engineers working in complex supply chains that revolve around knowledge and data sharing within their own organizations, and with both OEMs and suppliers. Upward compatibility is also important for engineers working in growing firms looking to upgrade to more sophisticated multidiscipline simulation solutions and need to leverage existing libraries of engineering models without impacting productivity and costs.

### Capabilities

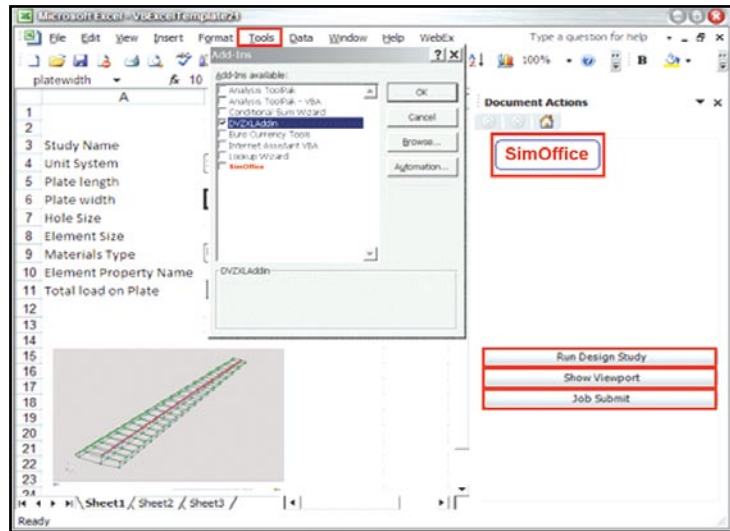
- General purpose, easy-to-use Windows finite element modeler packaged with MD Nastran enabled for the following types of analyses:
    - Linear Static
    - Linear Buckling
    - Normal Modes
    - Steady-state Heat Transfer
    - Dynamic Frequency Response
    - Laminate Analysis
  - Contact capabilities for Assemblies
  - Easier multipoint constraint (MPC) definition
  - Meshing
  - Post processing
    - Export to Excel
    - Create graphs
    - Export animations in MPEG format
  - Open platform
    - Seamless integration with Microsoft productivity and collaboration solutions
    - Direct access to a variety of CAD systems and standards including CATIA V4 & V5, Pro/ENGINEER, Unigraphics, IGES Parasolid, ACIS, STEP and FEMAP
    - Upward compatible with MD Nastran
    - Compatible with Patran database
  - Productivity modeling tools
    - Standard beam libraries
    - .Net Scripting enabled (default: Visual Basic)
    - Runs Patran session files
    - Runs existing Patran Command Language (PCL) scripts
- ### Benefits
- Shorten the design cycle, lower costs and improve product quality
  - Improve productivity through fast, reliable simulation in a Microsoft Windows desktop environment
  - Perform product performance simulation earlier in the product development process
  - Leverage existing investments in Microsoft Windows applications and infrastructure



Bracket Parameters	Design 1	Design 2	Design 3
Bracket Units	N-mm-sec	N-mm-sec	N-mm-sec
L1 - Bracket length	10.00	10.00	10.00
L2 - Hole center length	7.50	7.50	7.50
L3 - Bracket width	5.00	5.00	5.00
L4 - Bracket chamfer (width)	1.00	1.00	1.00
L5 - Bracket chamfer (length)	1.50	1.50	1.50
L6 = Bracket height	4.00	4.00	4.00
L7 = Mounting hole vertical offset	1.00	1.00	1.00
L8 = Mounting hole horizontal spacing	2.00	2.00	2.00
T1 - Bracket thickness	1.00	0.25	0.15
R1 - Bracket hole radius	1.00	2.00	2.15
R2 - Bracket inner bend radius	1.00	1.00	1.00
R3 - Chamfer blend radius (length)	2.00	2.00	2.00
R4 - Chamfer blend radius (width)	2.00	2.00	2.00
R5 - Mounting hole radius	0.50	0.50	0.50
Load1 - Total load on bracket	5000.00	5000.00	5000.00



Trade studies driven by Microsoft Excel



Execute Visual Basic scripts through an intuitive user interface

In addition, SimOffice arms engineers with fundamental analysis capabilities required to initiate and drive effective CAD designs. These fundamental analysis capabilities include linear statics, linear buckling, normal modes, heat transfer and dynamic frequency and transient response.

SimOffice is the only choice for organizations that need scalable, easy-to-use, Windows-based simulation software that can quickly evaluate conceptual designs and enable the engineer to visualize model responses to various environments.

While many firms still rely on expensive 'make and break' testing of physical prototypes, thousands of companies around the world have already benefited from the

ease-of-use and robust results of desktop multidiscipline simulation software like SimOffice. SimOffice is clearly an essential tool for any organization needing to reduce product development time and costs.

SimOffice is the first commercially available CAE desktop environment with seamless integration with Microsoft productivity and collaboration solutions to deliver leading edge user experience to the designer and the power user community. Engineers can use Excel spreadsheets to drive parametric design studies, seamlessly put results into Word documents, and share all of their simulation information using the collaboration capabilities of Microsoft Sharepoint and Microsoft Office Groove.



**Corporate**  
MSC.Software Corporation  
2 MacArthur Place  
Santa Ana, California 92707  
Telephone 714 540 8900

www.mscsoftware.com

**Europe, Middle East, Africa**  
MSC.Software GmbH  
Am Moosfeld 13  
81829 Munich, Germany  
Telephone 49 89 431 98 70

**Asia-Pacific**  
MSC.Software Japan LTD.  
Shinjuku First West 8F  
23-7 Nishi Shinjuku  
1-Chome, Shinjuku-Ku  
Tokyo, Japan 160-0023  
Telephone 81 3 6911 1200