



Engineering Software
Research and Development, Inc.

November 30, 2009

Valued Customer,

Release Announcement – StressCheck 9.0

We are pleased to deliver StressCheck Release 9.0. This software is for exclusive use of licensed installations of StressCheck. A summary of Release 9 enhancements is included in the Release Notes. A summary of incremental enhancements in Release 9.0 is listed below.

If you are already using StressCheck you will require an updated license to use StressCheck 9.0.

Additions have been made to the documentation for StressCheck 9 describing updated features of this release. See the updated Master Guide for details.

StressCheck 9.0 Installation with Older Versions

StressCheck 9.0 is designed to be installed as a replacement for StressCheck 8, however, both versions may be installed and executed concurrently. You are not required to uninstall StressCheck 8 before installing StressCheck 9.0. Consult the Installation Guide for details on installing multiple versions of StressCheck on your systems. There is a special shortcut provided that permits execution of StressCheck 8 after StressCheck 9 is installed.

Download StressCheck 9.0 Today

StressCheck 9.0 is being distributed via our web-site (www.esrd.com). If you do not yet have an account, you should apply for a username to access the Download web page on ESRD.com. If you have difficulty downloading StressCheck 9.0 from ESRD.com, you can order a DVD by sending a request to sales@esrd.com. DVDs for StressCheck 9.0 will be mailed only to those customers who order them. Please visit the Downloads page to obtain your copy of this much improved version of StressCheck.

StressCheck is regularly being improved and we encourage our customers to make frequent visits to our website (www.esrd.com) to be informed about the latest fixes and features added to StressCheck. You are encouraged to review the Downloads web page and to update your installation by downloading the latest version of StressCheck as it becomes available. The latest documentation is also made available in PDF format on the website.

Your feedback is critical to us to understand your needs. We encourage you to use ESRD's [Issue Tracking System](#) linked from our Support Web page as a means to communicate issues, feature requests, and questions. Alternatively, we encourage you to send email to support@esrd.com for the same purpose.

StressCheck 9.0 Enhancements

This release contains the following enhancements:

- significantly improved the robustness of StressCheck,
- significantly improved the solution speed for moderate and large size meshes,
- significantly increased the mesh size that StressCheck can solve for all supported solution types,
- improve the capability of solving local StressCheck models loaded or constrained by Nastran results of a global structural analysis,
- modernize product licensing and license management tools,
- create a new 64-bit StressCheck solver product that is called directly from the StressCheck user interface and can solve all supported solution types, and
- support pre-load buckling analysis where StressCheck can allow for the computation of eigenvalue buckling for one set of loads while keeping another set constant.

111 West Port Plaza, Suite 825
St. Louis, MO 63146

Tel: (314) 744-5021 Fax: (314) 744-5038 www.esrd.com

INSTALLING STRESSCHECK and the STRESSCHECK 64-bit SOLVER

Installing StressCheck products is simple and straight-forward. Download the ZIP file containing the installation package from ESRD.com, un-zip the contents to a temporary folder and run **DEFAULT.HTM** found in the top level folder in the installation package. When you are finished you can delete the installation package and the original ZIP file or back them up for safe keeping. **In order to use the 64-bit solver, you must first install StressCheck 9 on your 64-bit Windows system. Once complete, install the StressCheck 9 64-bit Solver on the same computer.** The same StressCheck installation package installs on either Windows XP or Vista 32-bit or 64-bit systems. The StressCheck 64-bit Solver will install only on 64-bit Windows systems. In the case of all StressCheck products, the installation instructions for Windows Vista are unique. Please follow the installation instructions in **DEFAULT.HTM** closely to ensure a proper installation.

VIDEO CARD REQUIREMENT

Your computer must have an OpenGL-compliant video card in order to run StressCheck 9 properly. StressCheck no longer supports software rendering that was used on 2D and low-end 3D video cards. Please confirm this before installing StressCheck 9.

HIGH PERFORMANCE WORKSTATIONS FOR FAST SOLUTIONS AND LARGE MODELS

Although it is not a minimum requirement, ESRD recommends that you install StressCheck 9 on a 64-bit, Intel multi-core computer with multiple CPUs. In order to solve very large problems you should reserve a 1Tb SATA disk drive with a SAS disk controller on which to store StressCheck datasets containing the scratch files. ESRD has solved linear static single-part models as large as 60M degrees of freedom on a DELL T7400 with two quad-core CPUs, 8Gb RAM, and a dedicated 1Tb SATA disk drive. If you have the recommended computer hardware, you can also expect StressCheck to solve very large meshes using multi-body contact and every other solution type StressCheck has previously supported.

WHAT CAN I EXPECT IF I DON'T HAVE A 64-BIT COMPUTER?

If you are not ready to upgrade your 32-bit Windows computer to a 64-bit High Performance Workstation, StressCheck 9 solves much faster and solves much larger models on Intel Duo-Core and Xeon processors than ever before, too. ESRD regularly tests these platforms with 2Gb of RAM and one or two core Intel processors. We have seen solution performance improvements of 3:1 to 10:1 in moderate mesh sizes on 32-bit computers with properly sized CPU, disk and RAM.

PURCHASING LICENSES FOR STRESSCHECK 64-BIT SOLVER

The new 64-bit solver is a new product offering from ESRD. If you wish to speak with our Business Development Director about evaluating or purchasing this product, please contact him at SALES@ESRD.COM. For support questions, please don't hesitate to contact SUPPORT@ESRD.COM.

We hope that you enjoy the significant performance improvements that have been made in StressCheck 9.

Sincerely,

The StressCheck Development Team