

## STRESSCHECK 10.2 RELEASE NOTES

DECEMBER 2015 (BUILD 21206)

All work files (SCW) and project files (SCP) created in StressCheck 10.1 are compatible with StressCheck 10.2. However, any file created in StressCheck 10.2 cannot be opened in StressCheck 10.1 due to file format changes incorporated into StressCheck 10.2 to support additional features and future enhancements.

### NEW FEATURES

#### GENERAL IMPROVEMENTS

In this release we have incorporated numerous updates to the Master Guide documentation and included all the topics covered by the Master Guide Addendum in a single document. Deprecated functionalities were removed from the documentation. Several COM improvements were introduced as well as updated formats for SCW & SCP files for improved performance.

#### NEW PROJECT LOG FUNCTIONALITY

The purpose of the Project Log window is to timestamp and log a description of all user activities performed in the StressCheck Input window and solution runtime information. In general any action performed while in the StressCheck Input window that creates, deletes, edits, moves, or replaces an object or record will now be logged. The log will report the action, the object, and the method used for the action along with the corresponding ID number if appropriate. Undo, DeLast and Copy operations are also shown in the log. Actions such as changing display of objects, views or post-processing operation will not be entered in the log, but all solution information will be logged.

#### GEOMETRY DISASSOCIATION

A disassociate button is now available in the StressCheck Input window of the Geometry tab to allow users to disassociate points, systems, and lines. Once an object has been disassociated it may be re-associated by pressing the Undo button. Refer to the Master Guide PDF-page 278 for more details.

#### MULTIPLE FASTENERS EXTRACTION

When selecting multiple fasteners for extraction under Results\Resultant StressCheck will produce two sets of results: one with a tabular output of each fastener resultant for each run, allowing the user to determine fastener load transfer by fastener ID #, and one with a summary for all fasteners for each run as done in previous releases. Refer to the Master Guide PDF-page 876 for more details.

**RESOLVED ISSUES**

- Several customer-reported issues with backward compatibility loading legacy StressCheck 9.2 input files and data sets were fixed.
- All customer-reported problems related to crack path analysis have been resolved.
- Several customer-reported issues with the use of TLAP loads have been identified and fixed.
- Repeating error messages were reduced to a single error message for certain instances of deleting material records or creating formula-loading.
- A condition in which h-discretization would cause bearing load to be applied incorrectly has been fixed.
- Issues with extraction of results along splines curves and issues with point extractions from multiple solutions have been fixed.
- Intrinsic functions update: The use of SPArea, SPVol and other StressCheck intrinsic functions (see Master Guide PDF-pages 75 & 568) in formula-loading have been updated to improve computational efficiency.
- Issues with body-imprint of curves have been fixed.
- Issues with solving multiple solution configurations have been fixed.
- Several customer-reported issues with blanking and unblanking of elements have been resolved

**STRESSCHECK SERVER INSTALLATION**

StressCheck 10.2 can be deployed to run registration-free. This allows users to run a 'server version' of StressCheck without any administrative privileges or registry modifications. StressCheck 10.2 can be deployed on a remote computer so that an engineer can mount the drive where the software is installed and run the application. The same installation file can be used to install StressCheck Professional 10.2 to a network drive or to a user's local machine.

See *StressCheck 10-2 Professional Server Installation Instructions.pdf* for additional details.